

ATEST REPORT

Report Number: R16238088-E9a

Applicant : Samsung Electronics Co., Ltd.
129, Samsung-ro, Yeongtong-gu, Suwon-si,
Gyeonggi-do, 16677, Rep. of Korea

Model : SM-F976U, SM-F976U1

FCC ID : A3LSMF976U

EUT Description : GSM/WCDMA/LTE/NR/SCS/NTN Phone + BT/BLE, DTS/UNII
a/b/g/n/ac/ax/be, UWB, WPT and NFC

Test Standard(s) : FCC 47 CFR PART 2, PART 27

Date Of Issue:
2026-05-13

Prepared by:
UL LLC
12 Laboratory Dr.
Durham, NC 27713 USA
TEL: (919) 549-1400



Revision History

Rev.	Issue Date	Revisions	Revised By
V1	2026-05-01	Initial Review	Noah Bennett
V2	2026-05-13	Corrected EIRP Typo(s)	Noah Bennett

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS	5
2. SUMMARY OF TEST RESULTS	6
3. TEST METHODOLOGY	6
4. FACILITIES AND ACCREDITATION	6
5. DECISION RULES AND MEASUREMENT UNCERTAINTY	7
5.1. METROLOGICAL TRACEABILITY	7
5.2. DECISION RULES	7
5.3. MEASUREMENT UNCERTAINTY	7
5.4. SAMPLE CALCULATION	7
6. EQUIPMENT UNDER TEST	8
6.1. DESCRIPTION OF EUT	8
6.2. MAXIMUM OUTPUT POWER	8
6.3. WORST-CASE CONFIGURATION AND MODE	9
6.4. DESCRIPTION OF TEST SETUP	10
7. TEST AND MEASUREMENT EQUIPMENT	11
8. CONDUCTED TEST RESULTS	15
8.1. OCCUPIED BANDWIDTH	15
8.1.1. 5G NR n77 (FCC Part 27 3450-3550MHz)	18
8.1.2. 5G NR n77 (FCC Part 27 3700-3980MHz)	21
8.2. EMISSION MASK AND ADJACENT CHANNEL POWER	24
8.2.1. 5G NR n77 (FCC Part 27 3450-3550MHz)	26
8.2.2. 5G NR n77 (FCC Part 27 3700-3980MHz)	34
8.3. OUT OF BAND EMISSIONS	42
8.3.1. 5G NR n77 (FCC Part 27 3450-3550MHz)	43
8.3.2. 5G NR n77 (FCC Part 27 3700-3980MHz)	44
8.4. FREQUENCY STABILITY	45
8.4.1. 5G NR n77 (BPSK 100MHz BANDWIDTH)	46
8.5. PEAK-TO-AVERAGE POWER RATIO	47
8.5.1. 5G NR n77 (FCC Part 27 3450-3550MHz)	48
8.5.2. 5G NR n77 (FCC Part 27 3700-3980MHz)	49
9. RADIATED TEST RESULTS	50

9.1.	EFFECTIVE RADIATED POWER ERP/EIRP	51
9.1.1.	5G NR n77 (FCC Part 27 3450-3550MHz)	53
9.1.1.	5G NR n77 (FCC Part 27 3700-3980MHz)	65
9.2.	FIELD STRENGTH OF SPURIOUS RADIATION	71
9.2.1.	5G NR n77 (FCC Part 27 3450-3550MHz)	74
9.2.2.	5G NR n77 (FCC Part 27 3700-3980MHz)	77
10.	SETUP PHOTOS.....	82

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Samsung Electronics Co Ltd
129, Samsung-ro, Yeongtong-gu, Suwon-si,
Gyeonggi-do, 16677, Rep. of Korea

EUT DESCRIPTION: GSM/WCDMA/LTE/NR/SCS/NTN Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax/be,
UWB, WPT and NFC

SERIAL NUMBERS: ZBK0208M, ZBD0487M, ZAT0031M, ZBK0219M, ZBK0213M, ZAQ0548M,
ZB30741M

SAMPLE RECEIVE DATE: 2026-03-09

DATE TESTED: 2026-03-11 to 2026-04-30

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC 47 CFR PART 2, PART 27	Complies

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

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

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

Approved & Released
For UL LLC By:

Prepared By:



Bob Delisi
Principal Engineer
Consumer, Medical and IT Segment
UL LLC



Noah Bennett
Engineer Project Associate
Consumer, Medical and IT Segment
UL LLC

2. SUMMARY OF TEST RESULTS

This report contains data provided by the customer which can impact the validity of results. UL LLC is only responsible for correctly integrating customer-provided data with measurements performed by UL LLC.

Requirement Description	Requirement Clause Number (FCC)	Result	Remarks
Equivalent Isotropic Radiated Power	27.50(k) (3), (j) (3)	Complies	-
Occupied Bandwidth	2.1049	Complies	-
Band Edge and Emission Mask	2.1051, 27.53(n), 27.53(l)	Complies	-
Out of Band Emissions	2.1051, 27.53(n), 27.53(l)	Complies	-
Frequency Stability	2.1055, 27.54	Complies	-
Peak-to-Average Ratio	27.50(k) (4), 27.50(j) (4)	Complies	-
Field Strength of Spurious Radiation	2.1051, 27.53(n), 27.53(l)	Complies	-

3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with the following.
FCC published lists of [measurement procedures](#) for compliance testing

- 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
- [FCC KDB 662911 D01](#): Multiple Transmitter Output

4. FACILITIES AND ACCREDITATION

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

	Address	ISED CABID	ISED Company Number	FCC Registration
☒	Building 2800 Suite Perimeter Park Dr. Suite B Morrisville, NC 27560, U.S.A.	US0067	27265	825374

5. DECISION RULES AND MEASUREMENT UNCERTAINTY

5.1. METROLOGICAL TRACEABILITY

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

5.2. DECISION RULES

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

5.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	U _{Lab}
Worst Case Radiated Disturbance, 9KHz to 30 MHz	2.52 dB
Worst Case Radiated Disturbance, 30 to 1000 MHz	4.88 dB
Worst Case Radiated Disturbance, 1000 to 18000 MHz	4.24 dB
Worst Case Radiated Disturbance, 18000 to 26000 MHz	4.37 dB
Worst Case Radiated Disturbance, 26000 to 40000 MHz	5.17 dB
Occupied Channel Bandwidth	±0.39 %
Temperature	±0.9 °C
Supply voltages	±0.45 %
Time	±0.02 %

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 EUT is a GSM/WCDMA/LTE/NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax/be UWB, WPT and NFC.

Model differences:

Representative Model	Difference	Derivative Model
		SM-F976U1
SM-F976U	Hardware	Same as SM-F976U
	Software	Different UI

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

Mode and Bands	Config 0	Config 1	SRS
5G NR n77/n78	ANT F	ANT C	ANT A/G

6.2. MAXIMUM OUTPUT POWER

EIRP/ERP TEST PROCEDURE

ANSI C63.26:2015
KDB 971168 D01 Section 5.2

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 tables below contain the highest of all configurations average conducted and peak EIRP output powers as follows:

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

Part 27								
EIRP Limit (W)		1.00						
Bandwidth (MHz)	Modulation	Low Frequency	Upper Frequency	EIRP Average	EIRP Average	99% BW (MHz)	99% BW (kHz)	Emission Designator
100.0	BPSK	3500.0	3500.0	25.74	0.375	96.516	96516	96M5G7W
	16QAM			24.00	0.251	96.796	96796	96M8D7W

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

Part 27								
EIRP Limit (W)		1.00						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	EIRP Average (dBm)	EIRP Average (W)	99% BW (MHz)	99% BW (kHz)	Emission Designator
50.0	16QAM	3725.0	3955.0	24.17	0.261	46.135	46135	46M1D7W
100.0	BPSK	3750.0	3930.0	25.14	0.327	96.818	96818	96M8G7W
	16QAM			24.03	0.253	96.892	96892	96M9D7W

6.3. WORST-CASE CONFIGURATION AND MODE

This report covers the following technologies:

- 5G NR n77/n78

FR1 n77 can cover FR1 n78, because it is a subset of FR1 n77 and they have the same output power.

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, BPSK were observed as the worst mode to 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 Section 9 were measured while 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
5G NR n77 (SISO)	Ant C

The EUT was investigated in three orthogonal orientations X/Y/Z with the EUT in a open, folded, and closed state on all available SISO antennas combinations to determine the worst-case orientation. The following table exhibits the worst-case orientation. The full tests of the EUT have made upon the orientations that shown in the table below.

Frequency Range	ANT F	ANT C	ANT A	ANT G	UL MIMO F+G
3300 – 3980 MHz	X, Open	X, Open	Z, Open	X, Open	X, Open

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

For simultaneous transmission of multiple channels in the 2.4GHz/5GHz 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.

6.4. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Power Adapter	Sony	XQZ-UC11-010-236-21	NA	NA

I/O CABLES

I/O Cable List						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	USB-C	1	USB-C	Shielded	<3m	Phone to power adapter

TEST SETUP

The EUT was connected to a base station simulator and set to transmit at max power for LTE and 5G NR testing

SETUP DIAGRAM

Please see R16238088-EP1 for Setup Diagrams and Setup Photos.

7. TEST AND MEASUREMENT EQUIPMENT

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

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

Equip. ID	Description	Manufacturer/Brand	Model Number	Last Cal.	Next Cal.
	30-1000 MHz				
90628	Hybrid Broadband Antenna	Sunol Sciences Corp.	JB3	2026-02-09	2028-02-09
	1-18 GHz				
206211	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2024-04-09	2026-04-30
	18-40 GHz				
204704	Horn Antenna, 18-26.5GHz	Com Power	AH-826	2025-07-15	2027-07-15
204705	Horn Antenna, 26-40GHz	Com Power	AH-640	2025-11-19	2027-11-19
	Gain-Loss Chains				
207638	Gain-loss string: 0.009-30MHz	Various	Various	2025-06-13	2026-06-13
207639	Gain-loss string: 25-1000MHz	Various	Various	2025-06-13	2026-06-13
207640	Gain-loss string: 1-18GHz	Various	Various	2025-06-13	2026-06-13
225795	Gain-loss string: 18-40GHz	Various	Various	2025-06-13	2026-06-13
	Receiver & Software				
197954	Spectrum Analyzer	Rohde & Schwarz	ESW44	2025-04-21	2026-04-30
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
	Additional Equipment used				
241204	Environmental Meter	Fisher Scientific	15-077-963	2025-08-05	2027-08-05
213025	Wideband Radio Communications Tester	Rohde and Schwarz	CMW500	N/A	N/A
208720	Wideband Radio Communications Tester	Rohde and Schwarz	CMW500	N/A	N/A
21725	Radio Communications Tester	Rohde and Schwarz	CMX500	2025-11-25	2026-11-25
212167	Wideband Radio Communications Tester	Anritsu	MT8821C	N/A	N/A
241199 (BRF018)*	3.3-4.2GHz notch filter, 2W, Fhigh = 18GHz	Micro-Tronics	BRM50732	2025-03-13	2026-03-31

NOTES:

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

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

Equip. ID	Description	Manufacturer/Brand	Model Number	Last Cal.	Next Cal.
	1-18 GHz				
86408	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2025-07-15	2027-07-15
	Gain-Loss Chains				
91977	Gain-loss string: 1-18GHz	Various	Various	2025-05-31	2026-05-31
	Receiver & Software				
197955	Spectrum Analyzer	Rohde & Schwarz	ESW44	2025-07-29	2026-07-29
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
	Additional Equipment used				
239540	Environmental Meter	Fisher Scientific	15-077-963	2025-08-05	2027-08-05
213025	Wideband Radio Communications Tester	Rohde and Schwarz	CMW500	N/A	N/A
241199 (BRF018)*	3.3-4.2GHz notch filter, 2W, Fhigh = 18GHz	Micro-Tronics	BRM50732	2025-03-13	2026-03-31

NOTES:

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

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

Equip. ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
	1-18 GHz				
88761	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2025-11-19	2027-11-19
	Gain-Loss Chains				
91979	Gain-loss string: 1-18GHz	Various	Various	2025-05-31	2026-05-31
	Receiver & Software				
206496	Spectrum Analyzer	Rohde & Schwarz	ESW44	2025-07-29	2026-07-29
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
	Additional Equipment used				
241205	Environmental Meter	Fisher Scientific	15-077-963	2025-08-05	2027-08-05

NOTES:

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

Wireless Conducted Measurement Equipment.

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
Additional Equipment used					
90411	Spectrum Analyzer MY54490314	Keysight Technologies	N9030A	2026-03-03	2027-03-03
90416	Spectrum Analyzer MY54490254	Keysight Technologies	N9030A	2025-07-31	2026-07-31
212967	Wideband Radio Communications Tester 170733	Rohde and Schwarz	CMW500	2026-02-13	2027-02-13
212166	Wideband Radio Communications Tester	Anritsu	MT8000A	2026-02-23	2027-02-23
262469	Humidity and Temperature Probe	Control Company	15-077-963	2025-04-28	2026-04-30
211055	Real-Time Peak Power Sensor	Boonton	RTP5000	2025-07-30	2026-07-30

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

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
Attenuators					
226569	2.92mm Coaxial 10dB Attenuator 40GHz	Fairview Microwave	SA4014-10	2025-09-02	2026-09-02
226554*	20dB Attenuator	CentricRF	C18S2-20	2025-03-19 2026-04-01	2026-03-31 2027-04-01
226552*	20dB Attenuator	CentricRF	C18S2-20	2025-03-19 2026-04-01	2026-03-31 2027-04-01
Cables					
246257	SMA Cable	Huber + Suhner	104PEA	2025-09-05	2026-09-05
Couplers					
238018*	Ultra-Wideband Directional Coupler 0.5-18GHz	Mini-Circuits	ZUDC10-183+	2025-04-48	2026-04-30

NOTES:

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

8. CONDUCTED TEST RESULTS

8.1. 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.

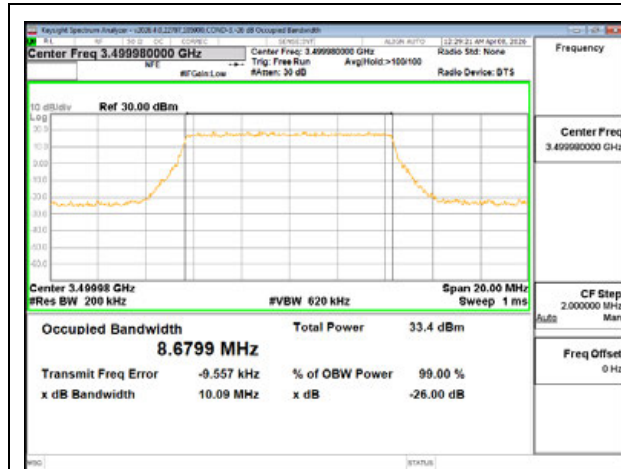
5G NR n77(FCC Part 27 3450-3550MHz)

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	8.6799	10.09
	10MHz, 16QAM			8.6623	10.10
	15MHz, BPSK	36/0		13.011	14.98
	15MHz, 16QAM			12.982	14.67
	20MHz, BPSK	50/0		18.000	19.88
	20MHz, 16QAM			18.010	19.99
	25MHz, BPSK	64/0		23.029	25.21
	25MHz, 16QAM			23.015	25.17
	30MHz, BPSK	75/0		27.012	29.22
	30MHz, 16QAM			27.002	29.22
	40MHz, BPSK	100/0		36.042	38.55
	40MHz, 16QAM			36.079	38.49
	50MHz, BPSK	128/0		46.093	49.00
	50MHz, 16QAM			46.135	48.90
	60MHz, BPSK	162/0		58.402	61.45
	60MHz, 16QAM			58.398	61.56
	70MHz, BPSK	180/0		64.915	68.67
	70MHz, 16QAM			65.000	68.33
	80MHz, BPSK	216/0		77.758	81.55
	80MHz, 16QAM			77.668	81.54
	90MHz, BPSK	243/0		87.202	91.49
	90MHz, 16QAM			87.260	91.71
	100MHz, BPSK	270/0		96.516	101.6
	100MHz, 16QAM			96.796	101.6
	100MHz, BPSK	1/1		0.65298	1.127

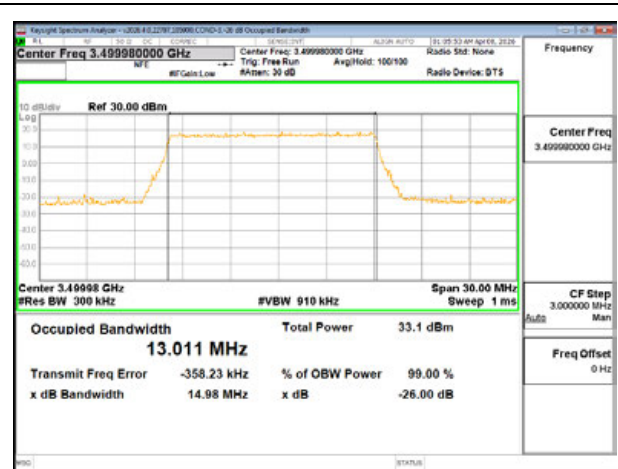
5G NR n77(FCC Part 27 3700-3980MHz)

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	8.6348	9.874
	10MHz, 16QAM			8.6507	9.774
	15MHz, BPSK	36/0		12.935	14.53
	15MHz, 16QAM			12.998	14.31
	20MHz, BPSK	50/0		17.981	19.64
	20MHz, 16QAM			17.957	19.43
	25MHz, BPSK	64/0		22.965	24.77
	25MHz, 16QAM			22.942	24.90
	30MHz, BPSK	75/0		26.920	28.78
	30MHz, 16QAM			26.877	28.90
	40MHz, BPSK	100/0		35.858	38.33
	40MHz, 16QAM			36.042	38.47
	50MHz, BPSK	128/0		45.816	48.85
	50MHz, 16QAM			45.904	48.47
	60MHz, BPSK	162/0		58.014	61.21
	60MHz, 16QAM			58.031	61.21
	70MHz, BPSK	180/0		64.627	67.87
	70MHz, 16QAM			64.634	68.11
	80MHz, BPSK	216/0		77.472	81.45
	80MHz, 16QAM			77.402	81.47
	90MHz, BPSK	243/0		87.139	91.49
	90MHz, 16QAM			87.063	91.27
	100MHz, BPSK	270/0		96.818	101.5
	100MHz, 16QAM			96.892	101.7
	100MHz, BPSK	1/1		0.63920	1.152

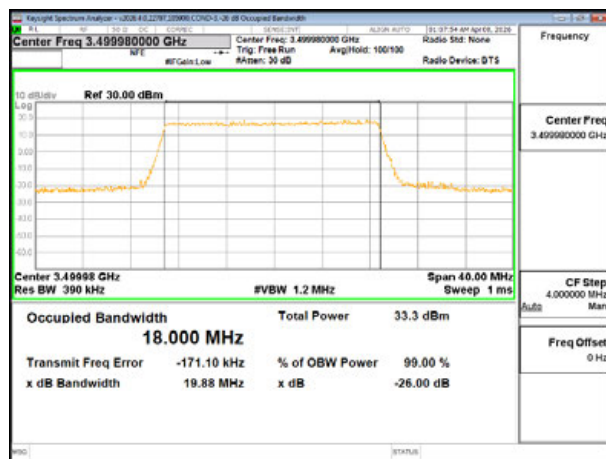
8.1.1. 5G NR n77 (FCC Part 27 3450-3550MHz)



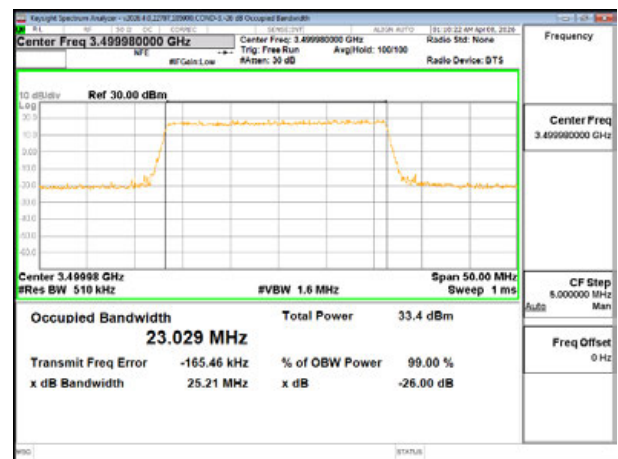
5G NR n77 10MHz BPSK Middle Channel RB24-0



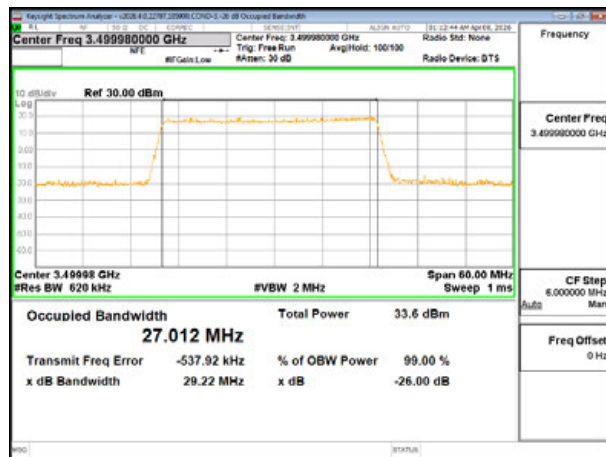
5G NR n77 15MHz BPSK Middle Channel RB36-0



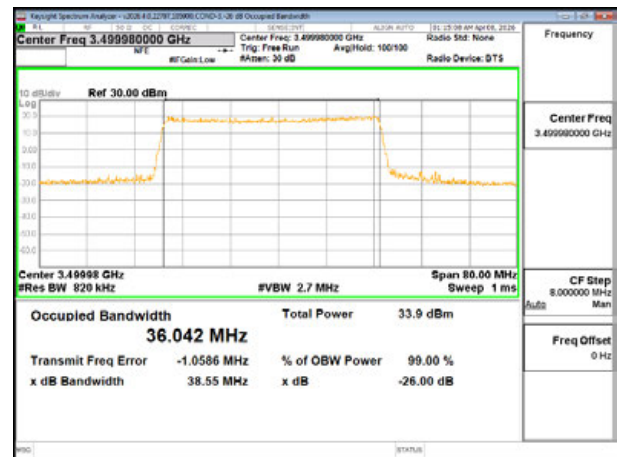
5G NR n77 20MHz BPSK Middle Channel RB50-0



5G NR n77 25MHz BPSK Middle Channel RB64-0

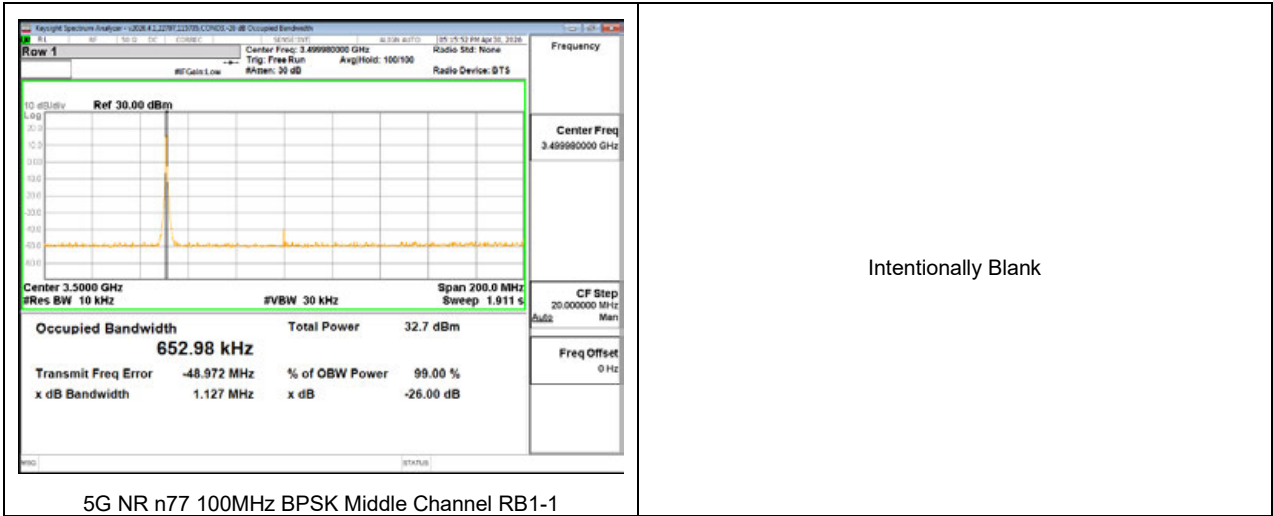


5G NR n77 30MHz BPSK Middle Channel RB75-0

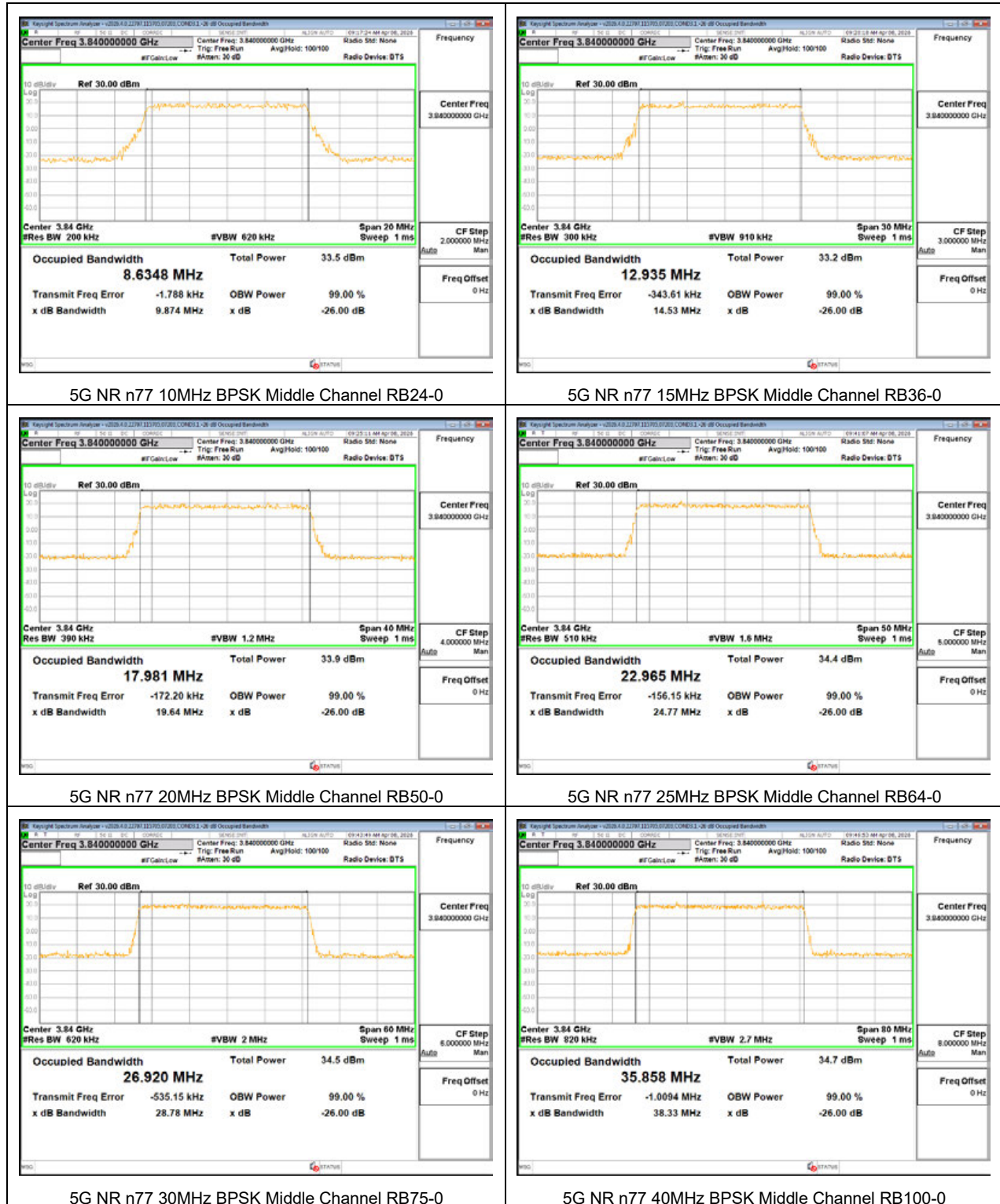


5G NR n77 40MHz BPSK Middle Channel RB100-0

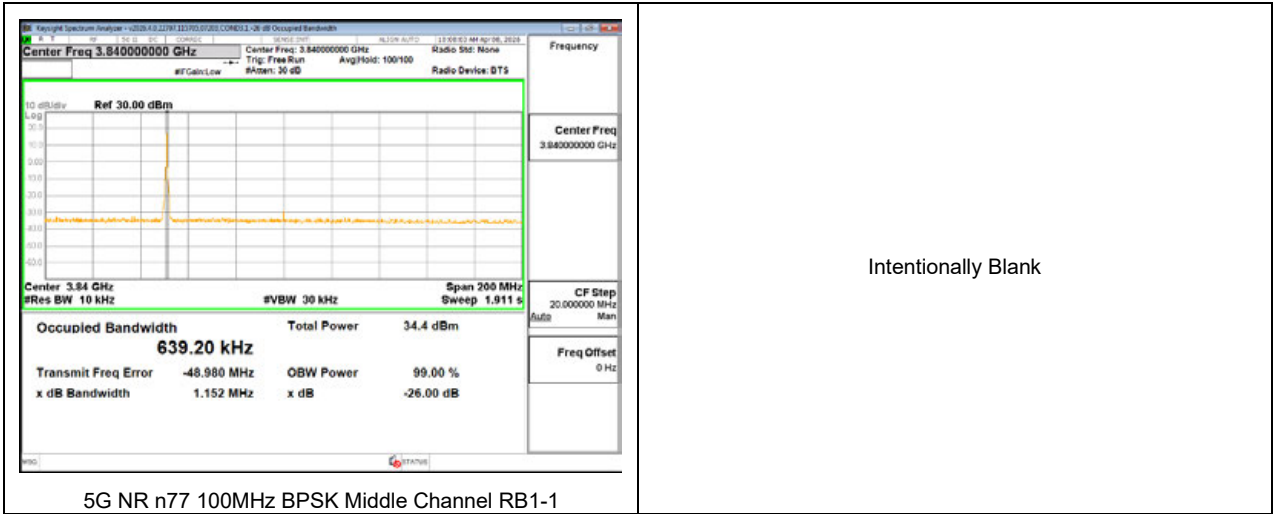




8.1.2. 5G NR n77 (FCC Part 27 3700-3980MHz)







8.2. EMISSION MASK AND ADJACENT CHANNEL POWER

LIMITS

FCC: §27.53

(n) 3.45 GHz Service. The following emission limits apply to stations transmitting in the 3450-3550 MHz band:

(2) For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with this paragraph (n)(2) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed, but limited to a maximum of 200 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz. 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.

FCC: §27.53

(l) 3.7 GHz Service. The following emission limits apply to stations transmitting in the 3700-3980 MHz band:

(2) For mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with this paragraph (l)(2) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be either one percent of the emission bandwidth of the fundamental emission of the transmitter or 350 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

TEST PROCEDURE

For Spectrum Emission Mask plots, the spectrum analyzer 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.

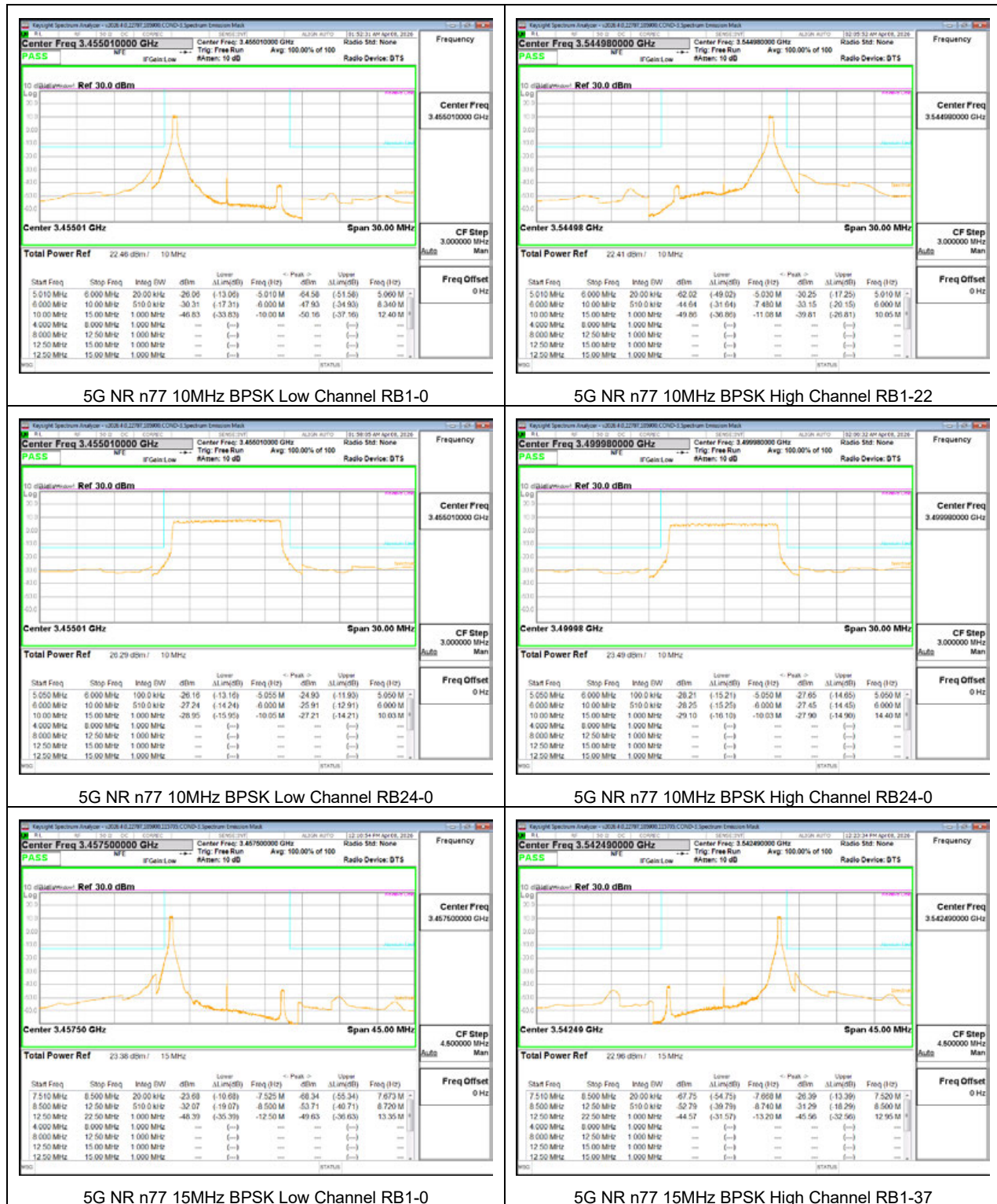
The transmitter output was connected to a base station simulator and configured to operate at maximum power. The band edge emissions were measured at the required operating frequencies in each band on the Spectrum Analyzer.

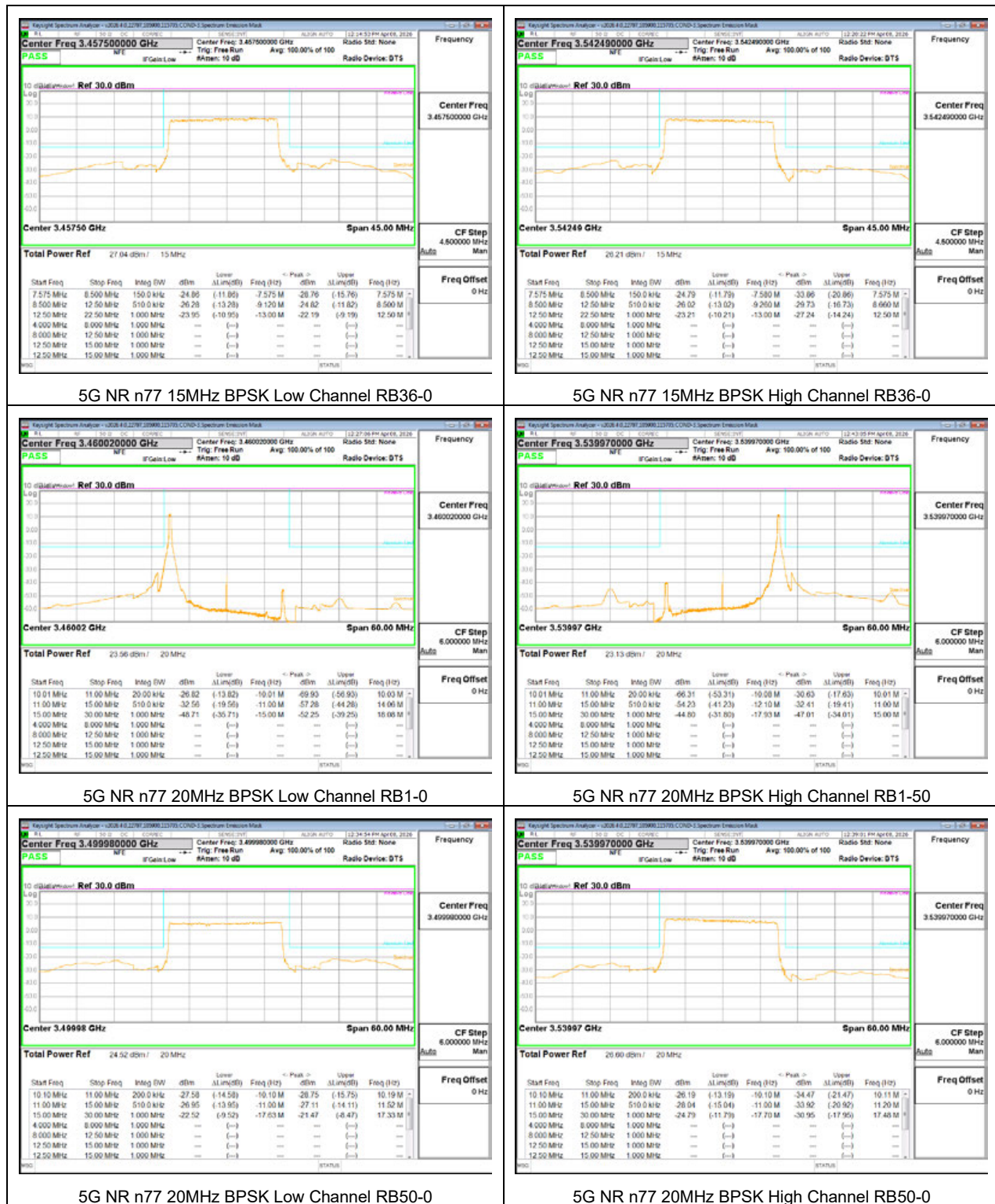
For each band edge measurement:

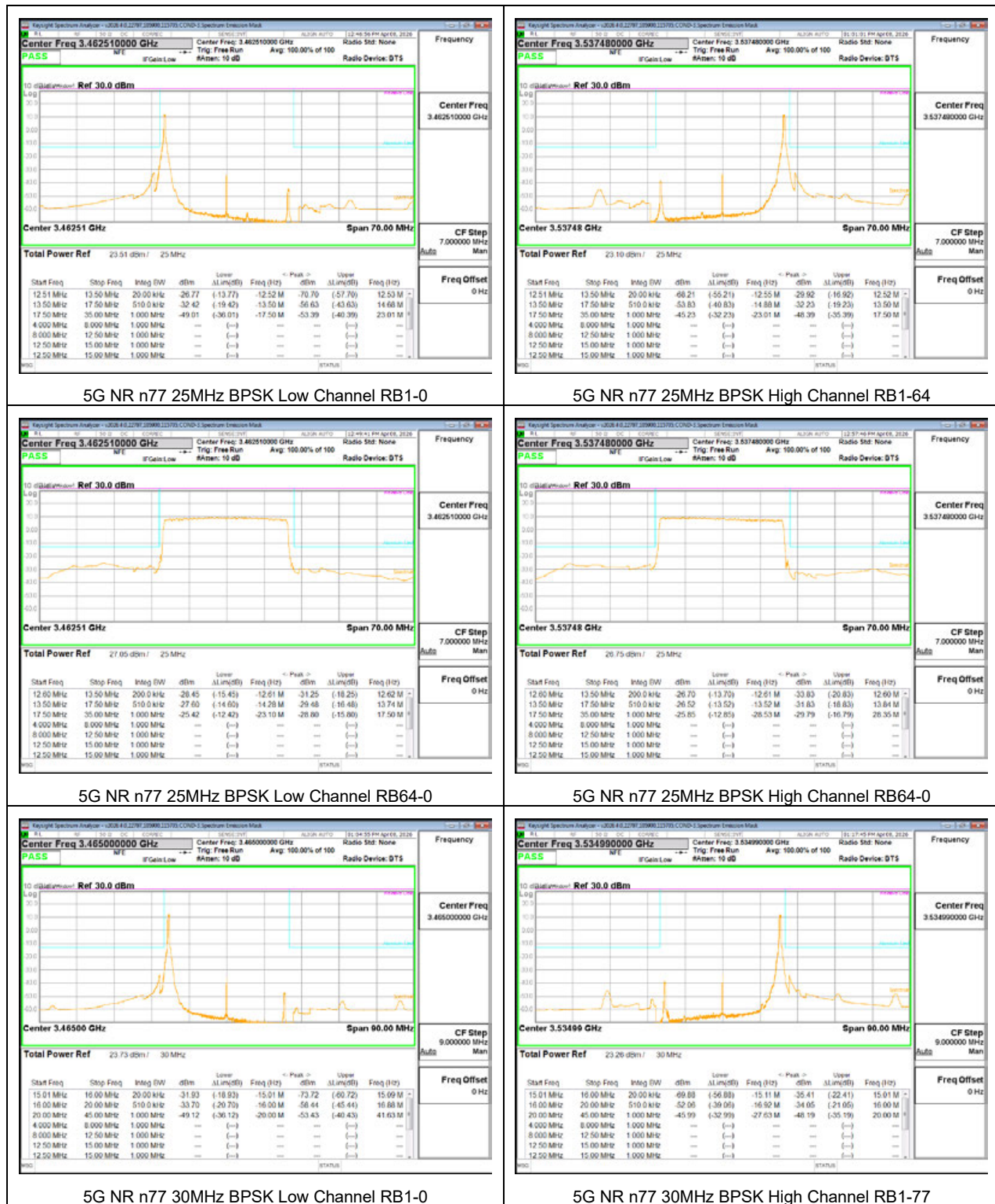
1. Set the spectrum analyzer span to include the block edge frequency.
2. Set a marker to point the corresponding band edge frequency in each test case.
3. Set display line at required limits.
4. Set resolution bandwidth to at least 1% of emission bandwidth.

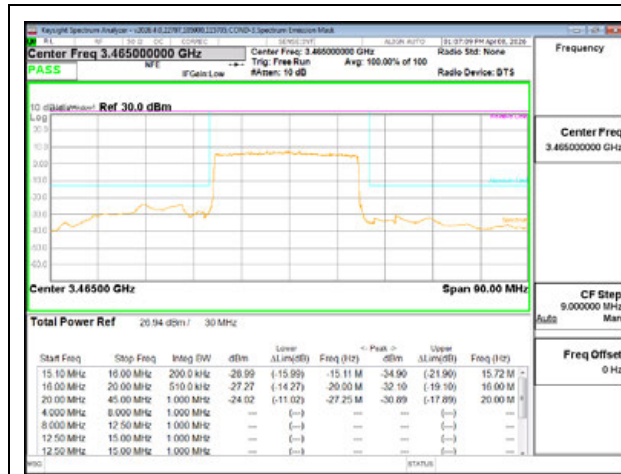
RESULTS

8.2.1. 5G NR n77 (FCC Part 27 3450-3550MHz)





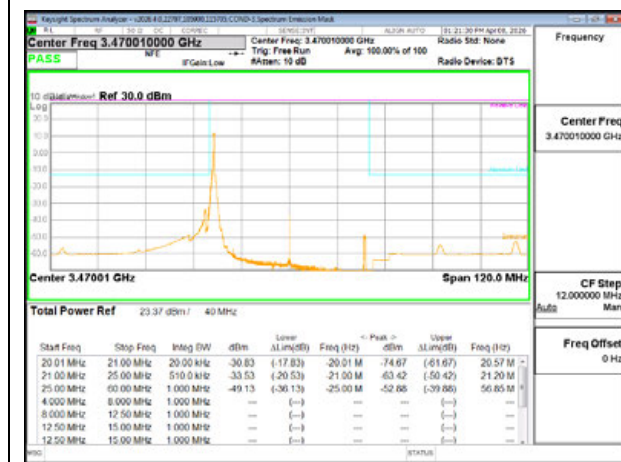




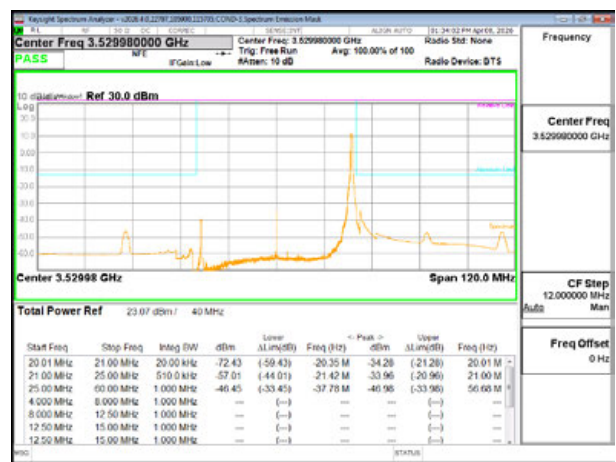
5G NR n77 30MHz BPSK Low Channel RB75-0



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



5G NR n77 40MHz BPSK Low Channel RB1-0



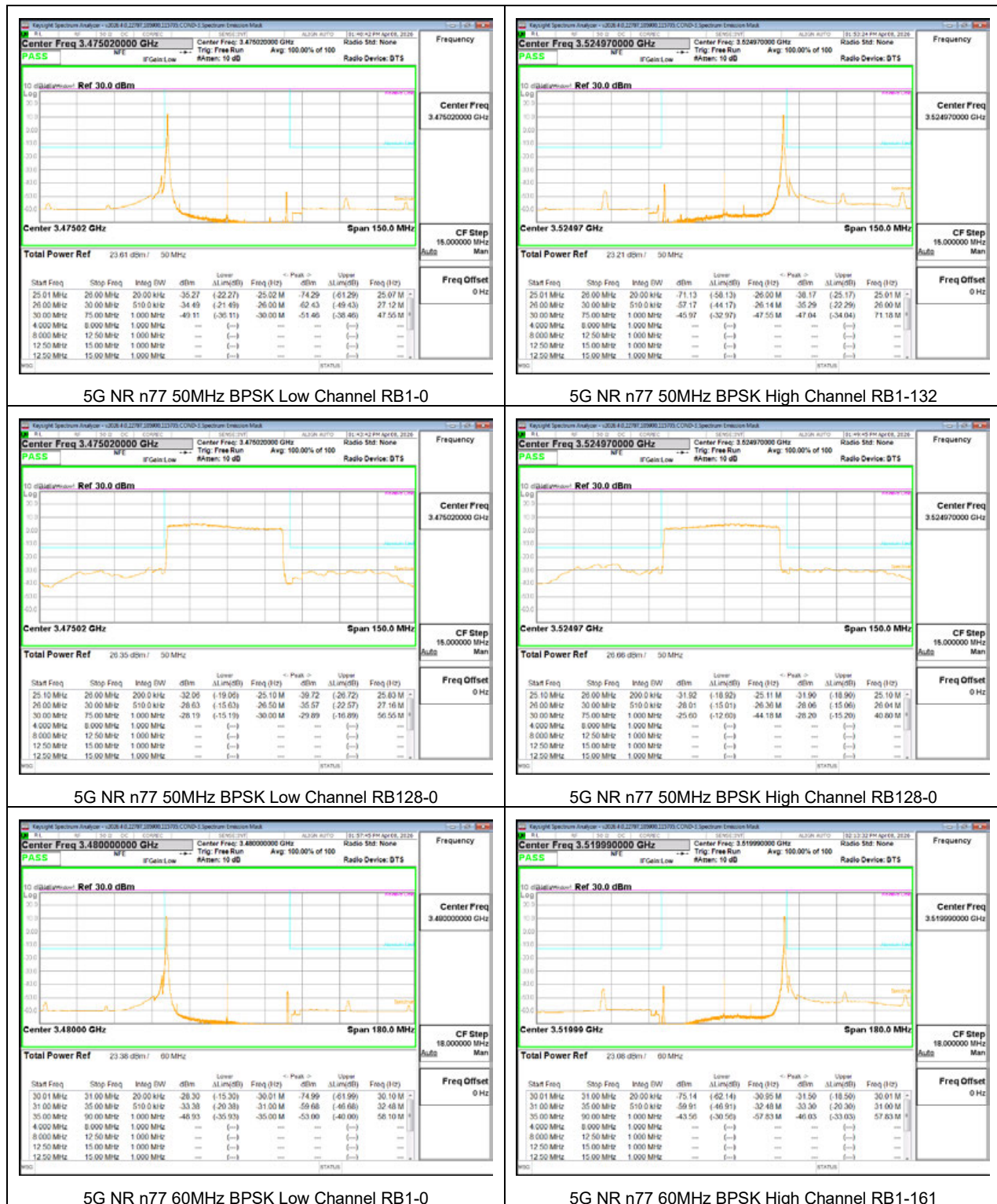
5G NR n77 40MHz BPSK High Channel RB1-105

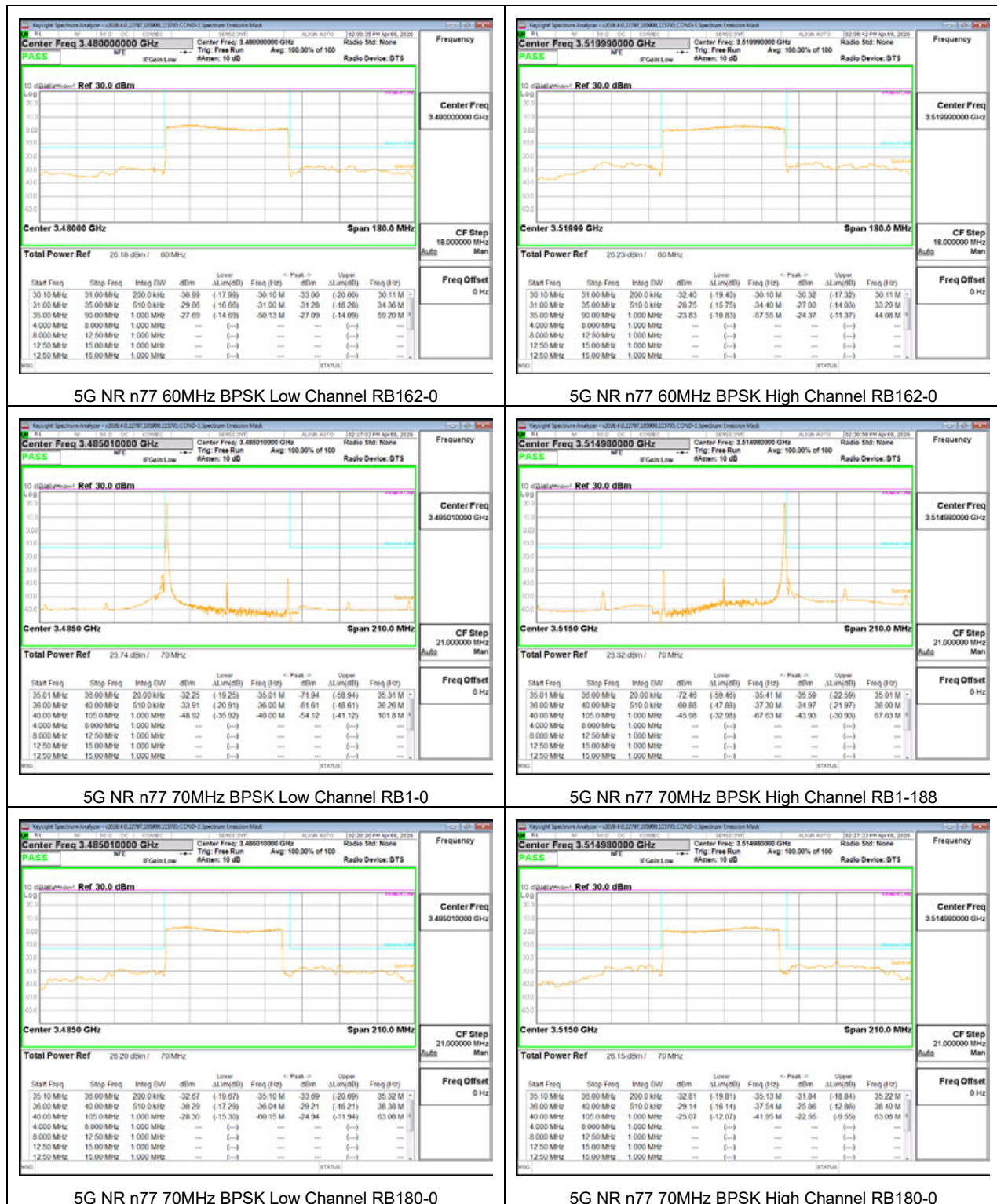


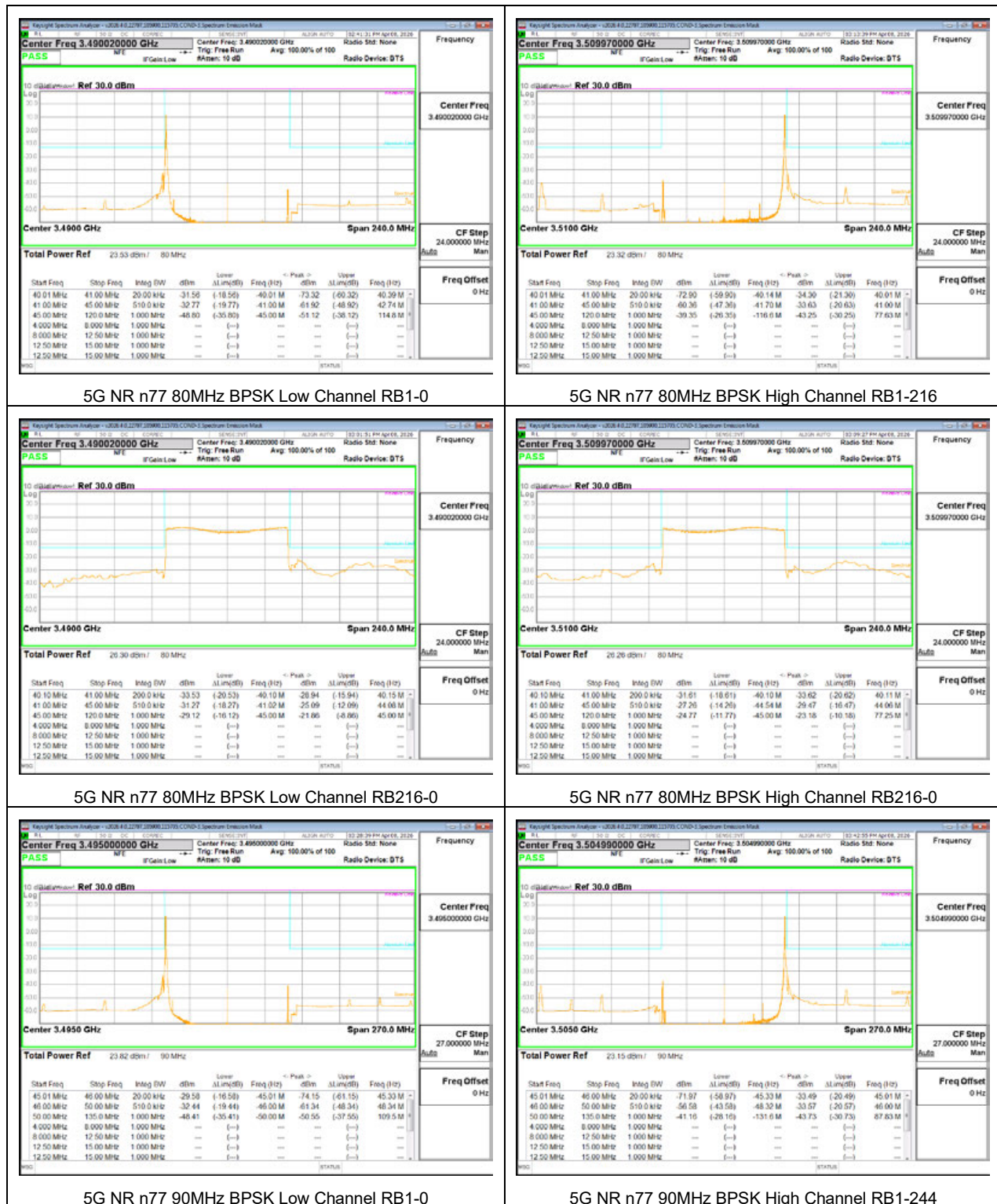
5G NR n77 40MHz BPSK Low Channel RB100-0

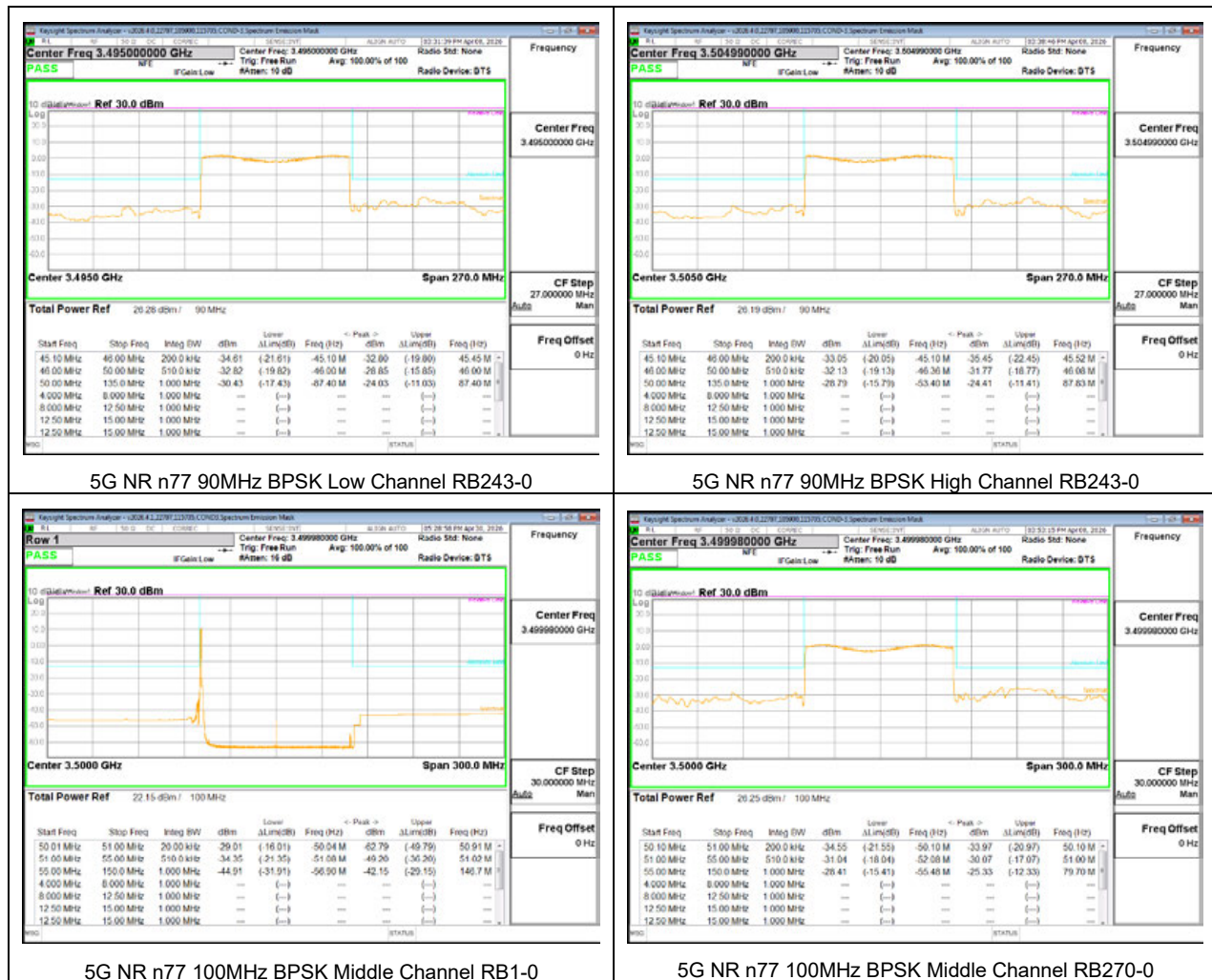


5G NR n77 40MHz BPSK High Channel RB100-0

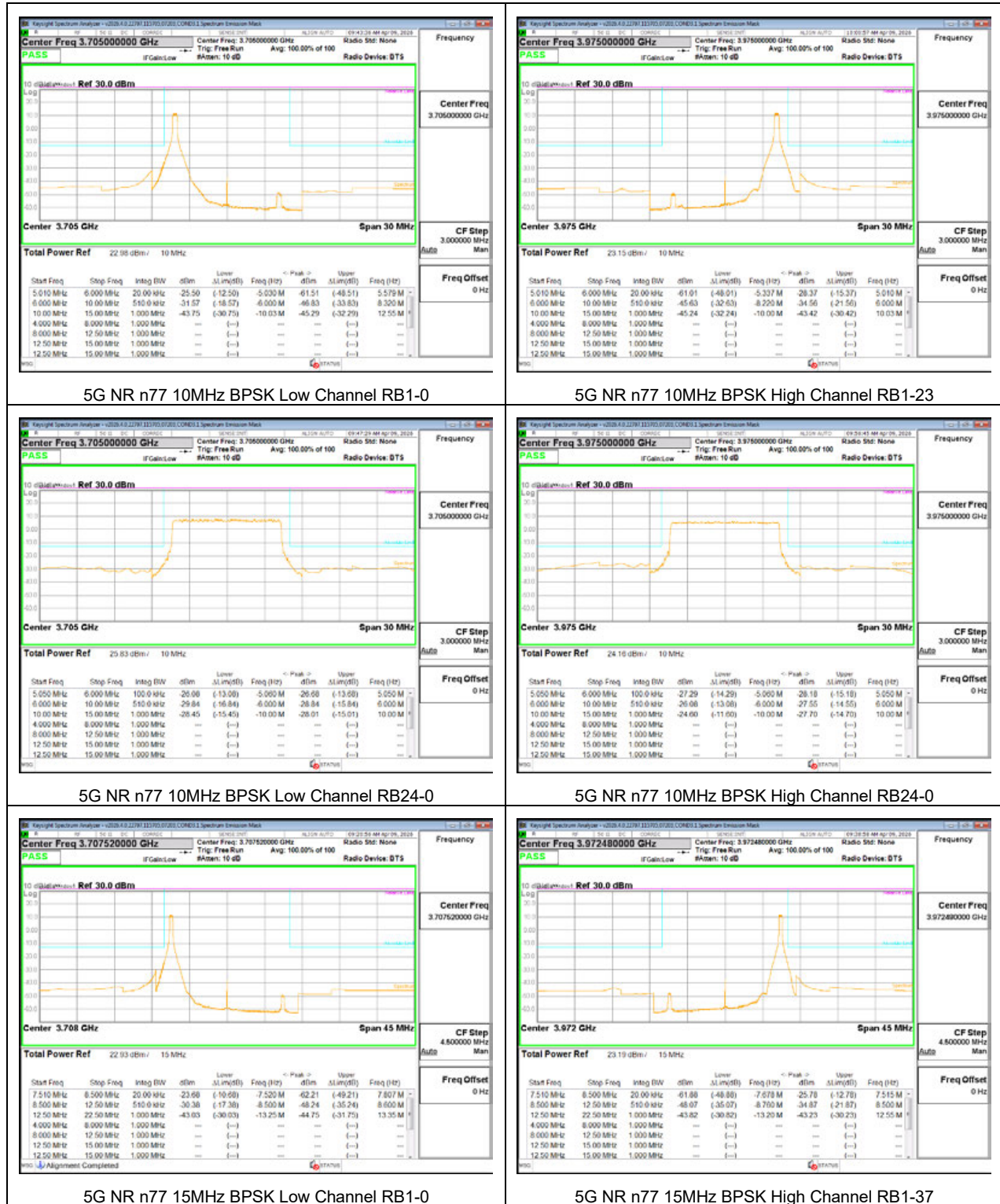


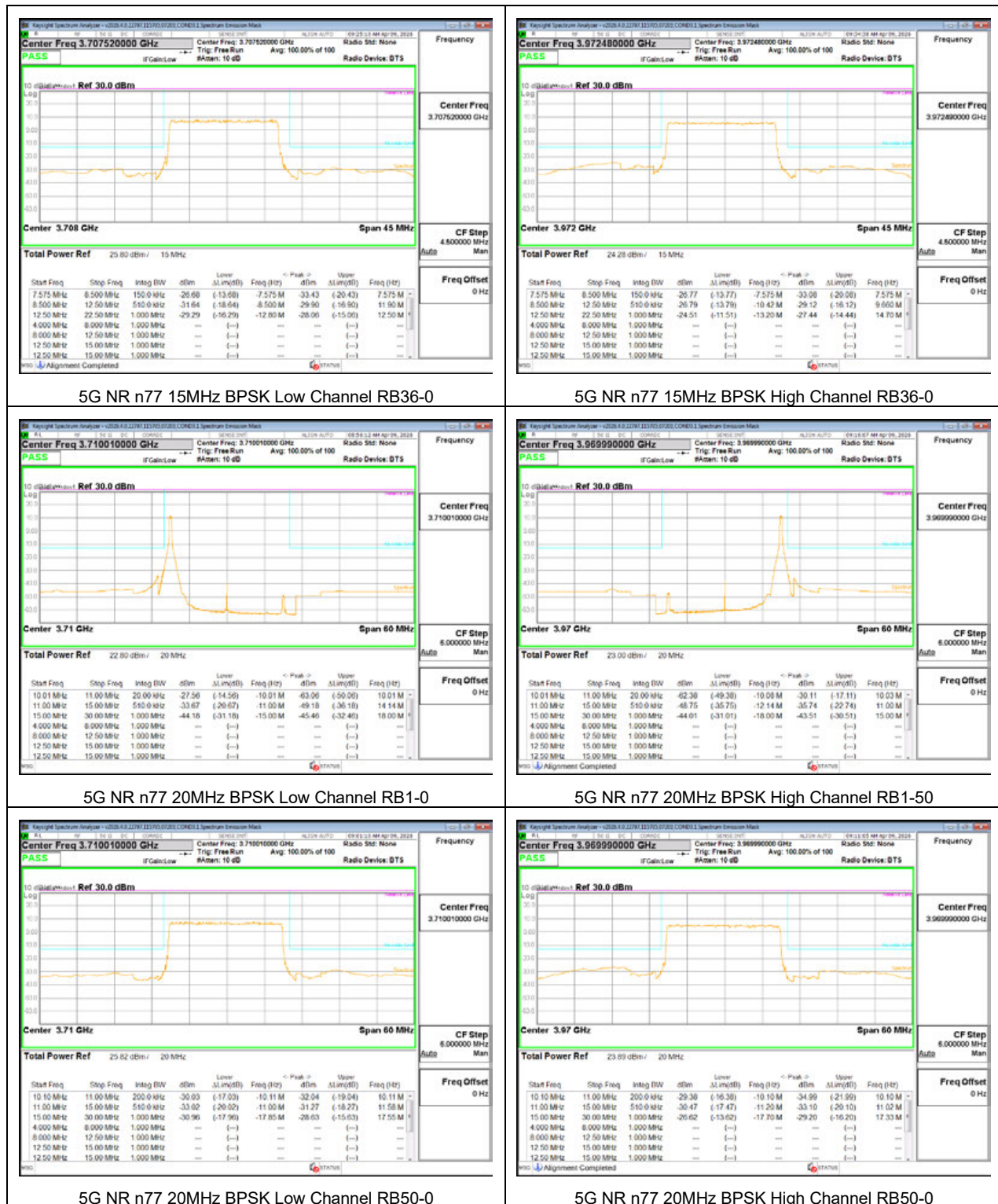






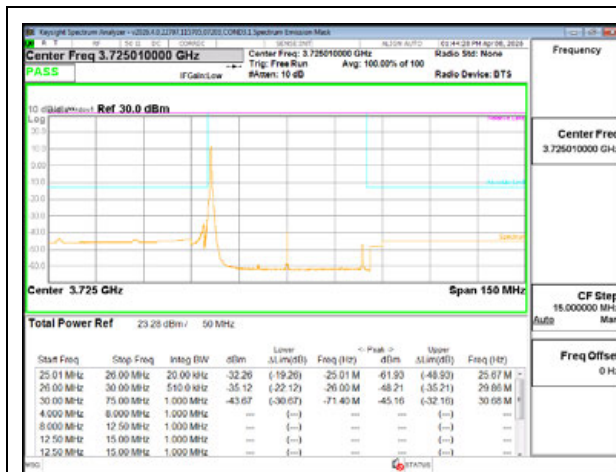
8.2.2. 5G NR n77 (FCC Part 27 3700-3980MHz)







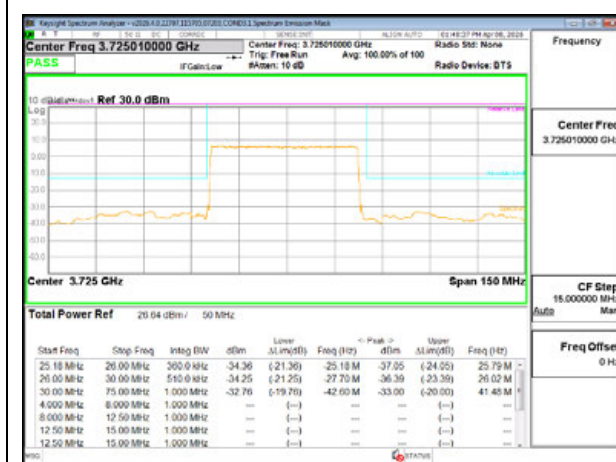




5G NR n77 50MHz BPSK Low Channel RB1-0



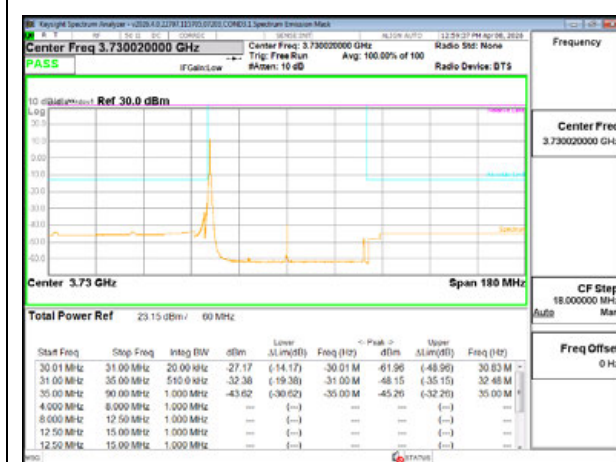
5G NR n77 50MHz BPSK High Channel RB1-132



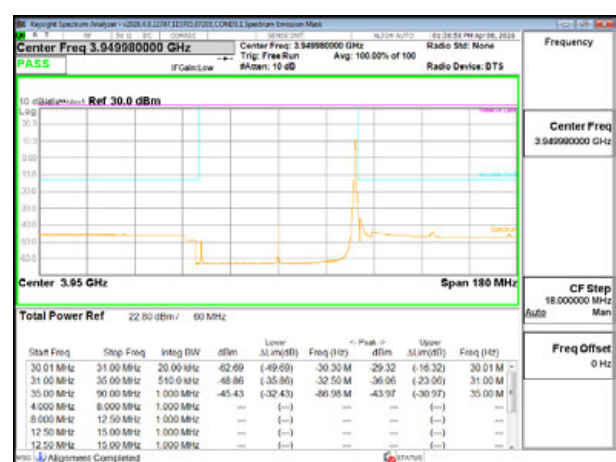
5G NR n77 50MHz BPSK Low Channel RB128-0



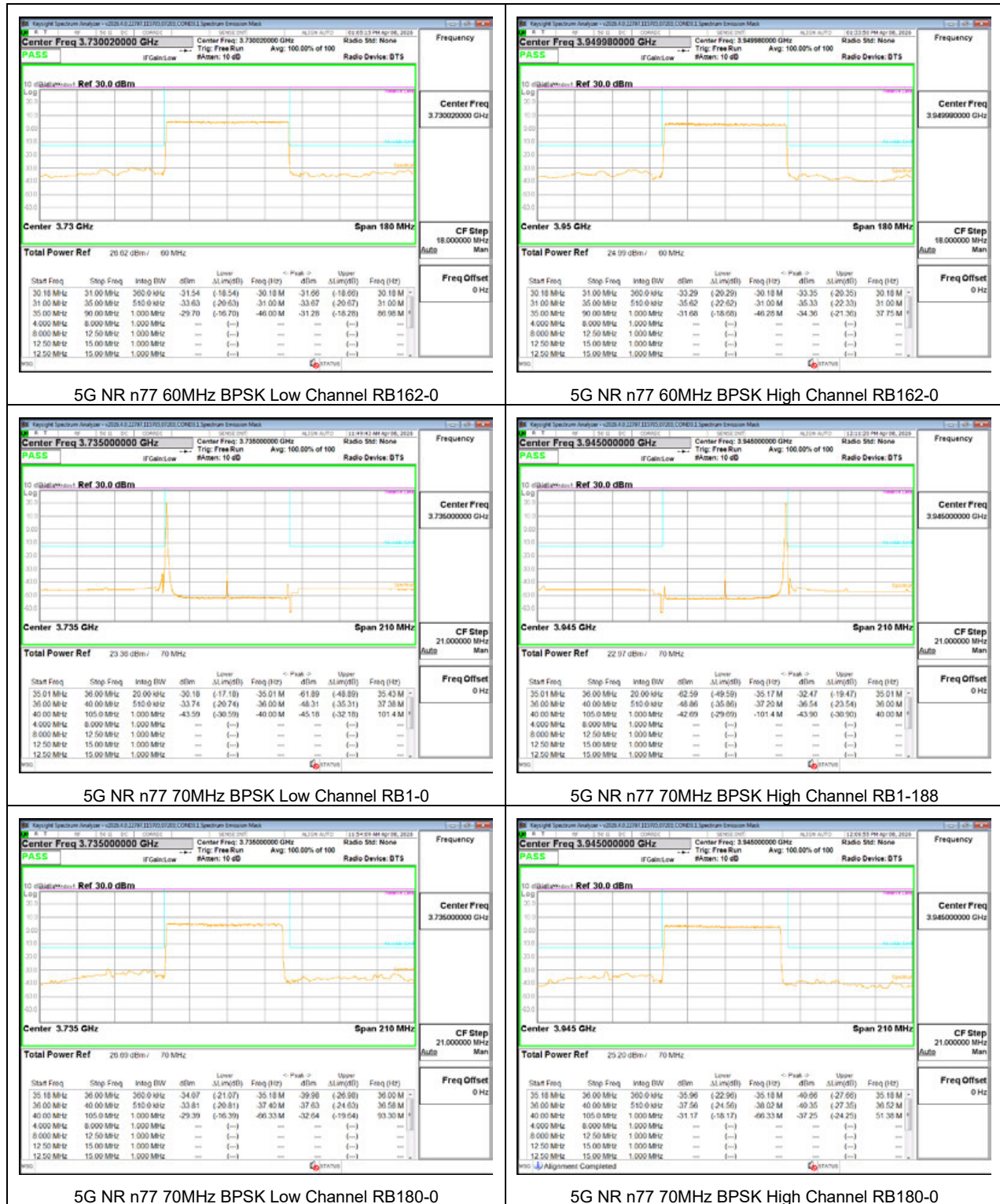
5G NR n77 50MHz BPSK High Channel RB128-0



5G NR n77 60MHz BPSK Low Channel RB1-0



5G NR n77 60MHz BPSK High Channel RB1-161







8.3. OUT OF BAND EMISSIONS

LIMITS

FCC: §27.53

Emission limits

(n) 3.45 GHz Service. The following emission limits apply to stations transmitting in the 3450-3550 MHz band:

(2) For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.

FCC: §27.53

Emission limits

(l) 3.7 GHz Service. The following emission limits apply to stations transmitting in the 3700-3980 MHz band:

(2) For mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.

TEST PROCEDURE

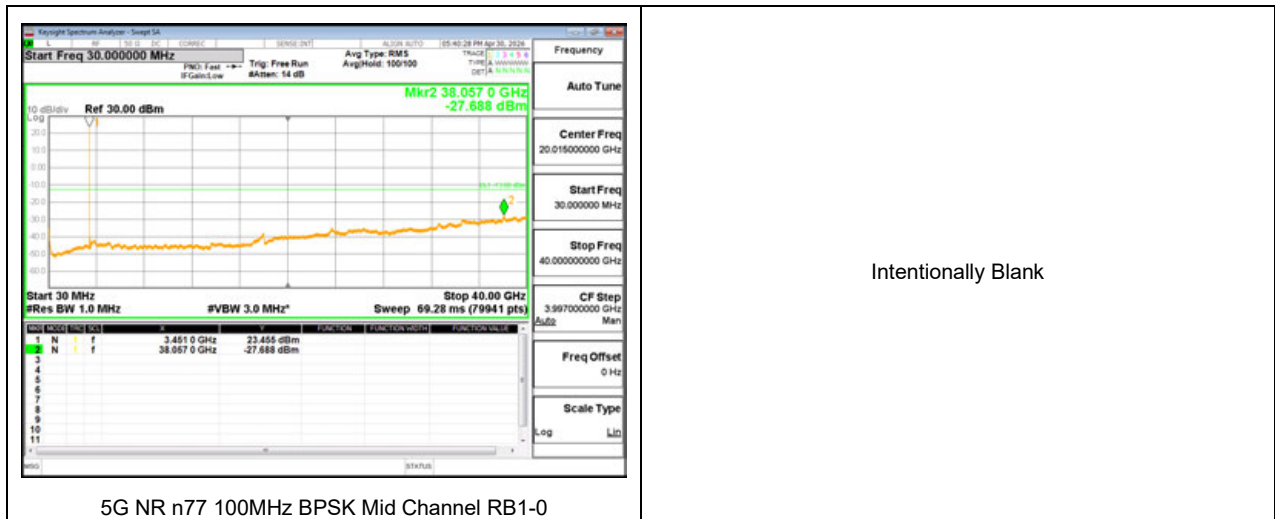
The RF output of the transmitter was connected to a spectrum analyzer through a calibrated coaxial cable. Sufficient scans were taken to show the out-of-band Emissions, if any, up to 10th harmonic. Multiple sweeps were recorded in maximum hold mode using a peak detector to ensure that the worst-case emissions were caught.

For each out of band emissions measurement:

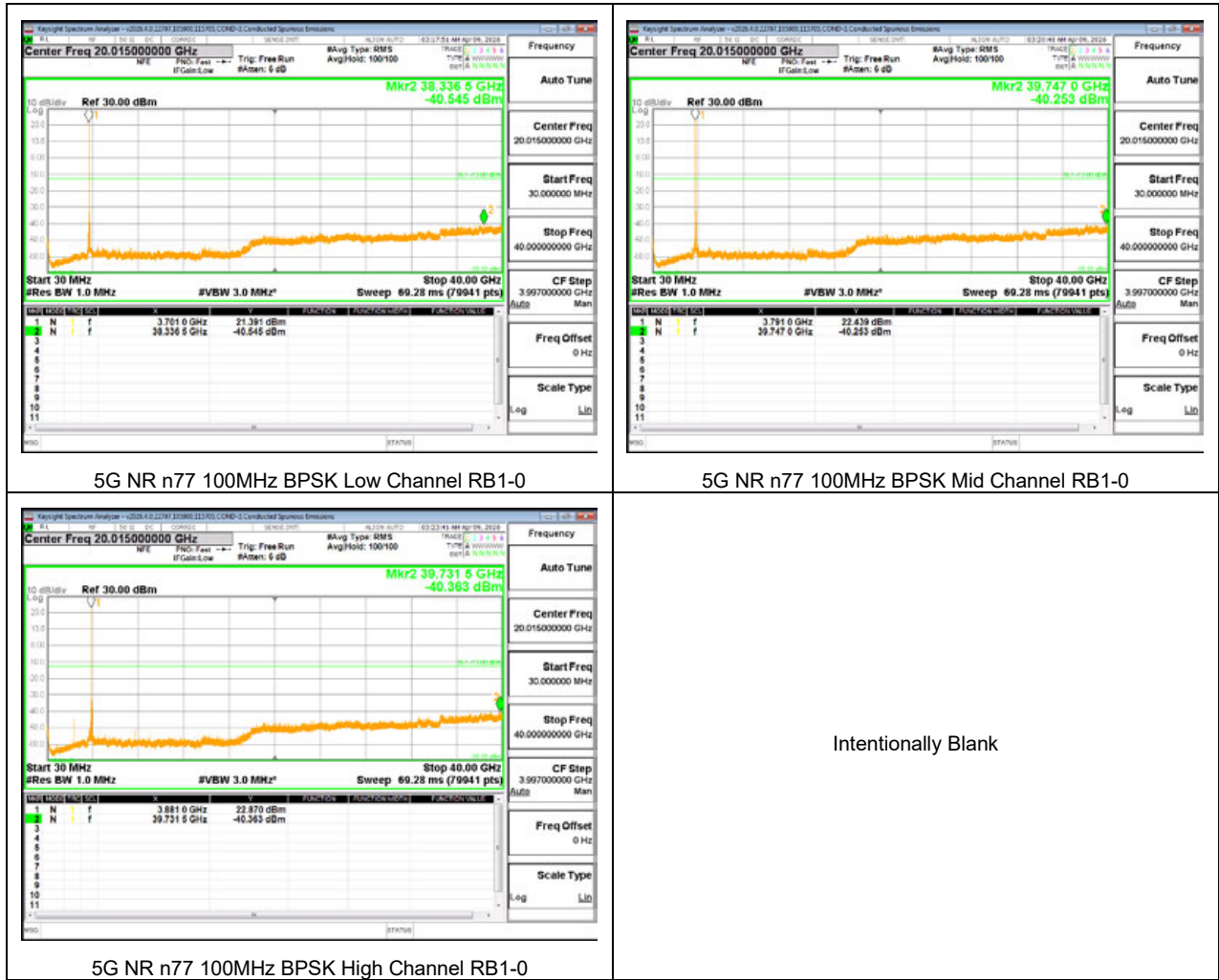
- Set display line at -13 dBm, -25dBm and -40dBm according to the band Limit
- Set RBW & VBW to 100 kHz for the measurement below 1 GHz, and 1 MHz for the measurement above 1 GHz.
(NOTE: Worst case set RBW/VBW to 1MHz/3MHz)

RESULTS

8.3.1. 5G NR n77 (FCC Part 27 3450-3550MHz)



8.3.2. 5G NR n77 (FCC Part 27 3700-3980MHz)



8.4. FREQUENCY STABILITY

LIMITS

FCC: §27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

TEST PROCEDURE

Use base station simulator with Frequency Error measurement capability.

- Temp. = -30°C to +50°C
- Voltage = (85% - 100%)

Normal, 3.89VDC

End Voltage, 3.69VDC

Frequency Stability vs Temperature:

The EUT is placed inside a temperature chamber. The temperature is set to 20°C and allowed to stabilize. After sufficient soak time, the transmitting frequency error is measured. The temperature is increased by 10 degrees, allowed to stabilize and soak, and then the measurement is repeated. This is repeated until +50°C is reached.

Frequency Stability vs Voltage:

The peak frequency error is recorded (worst-case).

RESULTS

See the following pages.

8.4.1. 5G NR n77 (BPSK 100MHz BANDWIDTH)

Test Engineer ID:		105900	Test Date:		2026-03-03 to 2026-04-09		
Band		77	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		3450	3900	Frequency Stability (ppm)		Within Authorized Frequency Block (Hz)	
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)				
Temperature	Voltage						
Normal (20°C)	Normal	3446.7250	3914.4000				
Extreme (50°C)		3446.7250	3914.4000	0.0076	0.000	Yes	
Extreme (40°C)		3446.7250	3914.4000	0.0068	0.000	Yes	
Extreme (30°C)		3446.7250	3914.4000	0.0132	0.000	Yes	
Extreme (10°C)		3446.7250	3914.4000	0.0083	0.000	Yes	
Extreme (0°C)		3446.7250	3914.4000	0.0005	0.000	Yes	
Extreme (-10°C)		3446.7250	3914.4000	-0.0028	0.000	Yes	
Extreme (-20°C)		3446.7250	3914.4000	-0.0013	0.000	Yes	
Extreme (-30°C)		3446.7250	3914.4000	-0.0025	0.000	Yes	
20°C	End Point Voltage	3446.7250	3914.4000	0.0023	0.000	Yes	

8.5. PEAK-TO-AVERAGE POWER RATIO

LIMITS

FCC: §27.50

(k) (4) In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

FCC: §27.50

(j) (4) In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

Test Method

The EUT was connected to a wideband power sensor for peak and average power.

RESULT

Antenna F was used to measure as the worst case; full resource block (FRB) for each bandwidth was used to measure as the worst case.

8.5.1. 5G NR n77 (FCC Part 27 3450-3550MHz)

Test Engineer ID:	105900/84740	Test Date:	2026-03-26 to 2026-03-27
--------------------------	--------------	-------------------	--------------------------

Band	Bandwidth (MHz)	Frequency (MHz)	RB Allocation	RB OffSet	Modulation	Conducted Power (dBm)		Peak-to-Average Power Ratio (dB)
						Peak	Average	
5G NR n77	10MHz	3500.0	24	0	BPSK	28.16	25.28	2.88
					16QAM	27.89	24.69	3.20
	15MHz		36	0	BPSK	28.91	25.06	3.85
					16QAM	28.17	24.02	4.15
	20MHz		50	0	BPSK	28.73	24.96	3.77
					16QAM	28.28	23.86	4.42
	25MHz		64	0	BPSK	28.95	25.07	3.88
					16QAM	28.24	24.07	4.17
	30MHz		75	0	BPSK	28.77	25.06	3.71
					16QAM	28.49	24.07	4.42
	40MHz		100	0	BPSK	28.65	25.04	3.61
					16QAM	28.71	24	4.71
	50MHz		128	0	BPSK	28.62	25.15	3.47
					16QAM	28.61	24.05	4.56
	60MHz		162	0	BPSK	27.83	24.9	2.93
					16QAM	27.42	23.8	3.62
	70MHz		180	0	BPSK	28.05	24.97	3.08
					16QAM	27.68	23.85	3.83
	80MHz		216	0	BPSK	28.04	24.93	3.11
					16QAM	28.01	23.9	4.11
	90MHz		243	0	BPSK	27.81	24.95	2.86
					16QAM	27.47	23.85	3.62
	100MHz		270	0	BPSK	27.96	25	2.96
					16QAM	27.04	23.96	3.08
Duty Cycle Correction Factor (dB) =								
Peak-to-Average Power Ratio= Peak Reading - Average Reading - Duty Cycle Correction Factor								

8.5.2. 5G NR n77 (FCC Part 27 3700-3980MHz)

Test Engineer ID:	105900/84740	Test Date:	2026-03-26 to 2026-03-27
-------------------	--------------	------------	--------------------------

Band	Bandwidth (MHz)	Frequency (MHz)	RB Allocation	RB OffSet	Modulation	Conducted Power (dBm)		Peak-to-Average Power Ratio (dB)
						Peak	Average	
5G NR n77	10MHz	3840.0	24	0	BPSK	29.01	27.08	1.93
					16QAM	28.17	26.40	1.77
	15MHz		36	0	BPSK	29.14	25.42	3.72
					16QAM	28.49	24.5	3.99
	20MHz		50	0	BPSK	28.46	25.24	3.22
					16QAM	29.00	24.2	4.80
	25MHz		64	0	BPSK	28.87	25.47	3.40
					16QAM	29.22	24.48	4.74
	30MHz		75	0	BPSK	28.99	25.48	3.51
					16QAM	28.74	24.49	4.25
	40MHz		100	0	BPSK	28.75	25.52	3.23
					16QAM	28.75	24.41	4.34
	50MHz		128	0	BPSK	28.85	25.39	3.46
					16QAM	28.97	24.48	4.49
	60MHz		162	0	BPSK	28.41	25.33	3.08
					16QAM	28.54	24.32	4.22
	70MHz		180	0	BPSK	28.61	25.32	3.29
					16QAM	28.60	24.24	4.36
	80MHz		216	0	BPSK	28.53	25.46	3.07
					16QAM	28.51	24.37	4.14
	90MHz		243	0	BPSK	27.95	25.34	2.61
					16QAM	28.28	24.34	3.94
	100MHz		270	0	BPSK	28.20	25.36	2.84
					16QAM	28.44	24.3	4.14
Duty Cycle Correction Factor (dB) =								
Peak-to-Average Power Ratio= Peak Reading - Average Reading - Duty Cycle Correction Factor								

9. RADIATED TEST RESULTS

Radiated measurement using the Field Strength Method

Using the test configuration shown in Figure 6 below, the radiated emissions is measured directly from the EUT and convert the measured field strength or received power to ERP or EIRP, as required, for comparison to the applicable limits. As stated in 5.5.1 of ANSI C63.26-2015, the field strength measurement method using a test site validated to the requirements of ANSI C63.4 is an alternative to the substitution measurement.

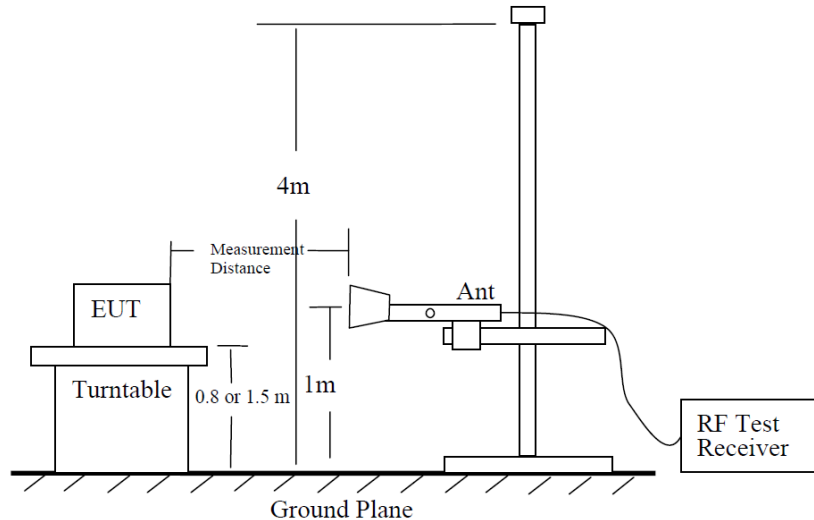


Figure 6—Test site-up for radiated ERP and/or EIRP measurements

Radiated Power Measurement Calculation According to ANSI C63.26-2015

- a) $E \text{ (dB}\mu\text{V/m)} = \text{Measured amplitude level (dB}\mu\text{V)} + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}$.
- b) $E \text{ (dB}\mu\text{V/m)} = \text{Measured amplitude level (dBm)} + 107 + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}$.
- c) $E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} - 20\log(D) + 104.8$; where D is the measurement distance (in the far field region) in m.
- d) $\text{EIRP (dBm)} = E \text{ (dB}\mu\text{V/m)} + 20\log(D) - 104.8$; where D is the measurement distance (in the far field region) in m.

So, from d)

The measuring distance is usually at 3m, then $20 \cdot \log(3) = 9.5424$

Then, $\text{EIRP (dBm)} = E \text{ (dB}\mu\text{V/m)} + 9.5424 - 104.8 = E \text{ (dB}\mu\text{V/m)} - 95.2576$

Note: Confidence check of each chamber is performed daily to see if any degradation from expected/normal reading reference data. Ambient check of each chamber is performed monthly.

9.1. EFFECTIVE RADIATED POWER ERP/EIRP

RULE PART(S)

FCC: §2.1046, §27.53

LIMITS

27.53(j) - (3) The following power requirements apply to stations transmitting in the 3700-3980 MHz band:

Mobile and portable stations are limited to 1 Watt EIRP. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

27.53(k) - (3) The following power requirements apply to stations transmitting in the 3450-3550 MHz band:

Mobile devices are limited to 1Watt (30 dBm) EIRP. Mobile devices operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

In addition, when the transmitter power is measured in terms of average value, the peak-to-average ratio of the power shall not exceed 13dB.

TEST PROCEDURE

ANSI C63.26:2015
KDB 971168 D01 Section 5.2

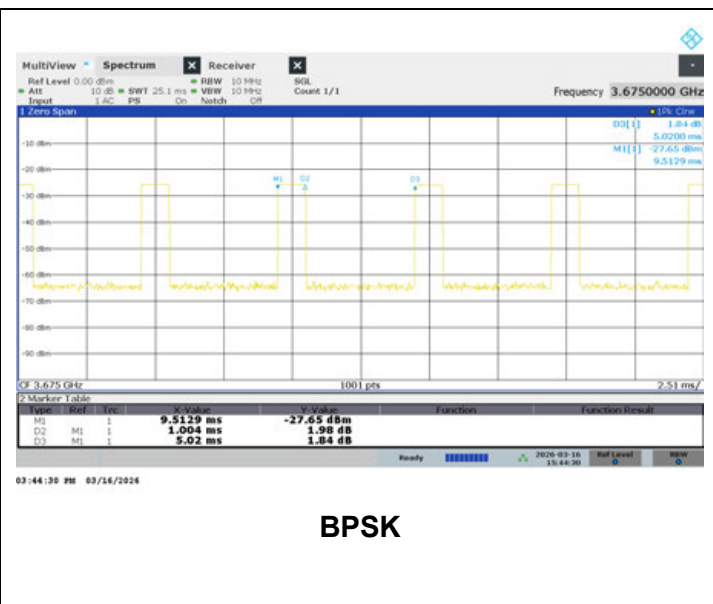
For average power measurements:

- a) Set span to at least 1.5 times the OBW;
- b) Set RBW = 1-5% of the OBW, not to exceed 1 MHz;
- c) Set VBW $\geq 3 \times$ RBW;
- d) Set number of points in sweep $\geq 2 \times$ span / RBW;
- e) Sweep time = auto-couple;
- f) Detector = RMS (power averaging);
- g) Use free run trigger If burst duty cycle ≥ 98 ;
- h) Add a duty cycle correction factor (10Log(DC) if burst duty cycle < 98 ;
- i) Trace average at least 100 traces in power averaging (i.e., RMS) mode.
- j) Compute the power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function.

TEST RESULTS

ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time B	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
Chain 0						
n77 - BPSK	1.004	5.020	0.200	20.00	6.99	0.996
n77 - 16QAM	0.979	4.995	0.196	19.60	7.08	1.022



Note: For SRS antennas, EUT was set to transmit at 100% Duty Cycle using Factory Test Mode commands. Therefore, no DCCF is added for these antennas/configs.

9.1.1. 5G NR n77 (FCC Part 27 3450-3550MHz)

5G NR n77 (CONFIG 0)

High Frequency Substitution Measurement
UL Morrisville Chamber 4

Company: RFSL
Project #: 16238088
Date: 2026-04-26 TO 2026-04-28
Test Engineer: 19289

Freq (MHz)	Band/Bandwidth	RB Size-Offset	Modulation (Of EUT)	EIRP (W)	EIRP _{DUT} (dBm)	Limit (dBm)	Margin (dB)
3454.980	n77 (78) / 10MHz FCC Block A (ANT F)	RB1-1	BPSK	0.210	23.22	30.00	-6.78
3499.980		RB1-12	BPSK	0.137	21.36	30.00	-8.64
3544.980		RB1-22	BPSK	0.139	21.42	30.00	-8.58
3454.980		RB1-1	16QAM	0.121	20.83	30.00	-9.17
3499.980		RB1-12	16QAM	0.110	20.40	30.00	-9.60
3544.980		RB1-22	16QAM	0.114	20.56	30.00	-9.44
3457.500	n77 (78) / 15MHz FCC Block A (ANT F)	RB1-1	BPSK	0.149	21.74	30.00	-8.26
3499.980		RB1-19	BPSK	0.157	21.97	30.00	-8.03
3542.490		RB1-36	BPSK	0.153	21.86	30.00	-8.14
3457.500		RB1-1	16QAM	0.113	20.53	30.00	-9.47
3499.980		RB1-19	16QAM	0.114	20.55	30.00	-9.45
3542.490		RB1-36	16QAM	0.115	20.59	30.00	-9.41
3459.990	n77 (78) / 20MHz FCC Block A (ANT F)	RB1-1	BPSK	0.151	21.79	30.00	-8.21
3499.980		RB1-25	BPSK	0.159	22.01	30.00	-7.99
3540.000		RB1-49	BPSK	0.153	21.86	30.00	-8.14
3459.990		RB1-1	16QAM	0.112	20.50	30.00	-9.50
3499.980		RB1-25	16QAM	0.114	20.58	30.00	-9.42
3540.000		RB1-49	16QAM	0.100	19.98	30.00	-10.02
3462.480	n77 (78) / 25MHz FCC Block A (ANT F)	RB1-1	BPSK	0.153	21.84	30.00	-8.16
3499.980		RB1-32	BPSK	0.162	22.09	30.00	-7.91
3537.480		RB1-63	BPSK	0.153	21.84	30.00	-8.16
3462.480		RB1-1	16QAM	0.116	20.66	30.00	-9.34
3499.980		RB1-32	16QAM	0.116	20.66	30.00	-9.34
3537.480		RB1-63	16QAM	0.113	20.53	30.00	-9.47
3465.000	n77 (78) / 30MHz FCC Block A (ANT F)	RB1-1	BPSK	0.152	21.81	30.00	-8.19
3499.980		RB1-39	BPSK	0.157	21.97	30.00	-8.03
3534.990		RB1-76	BPSK	0.156	21.92	30.00	-8.08
3465.000		RB1-1	16QAM	0.111	20.46	30.00	-9.54

3499.980		RB1-39	16QAM	0.118	20.72	30.00	-9.28
3534.990		RB1-76	16QAM	0.116	20.64	30.00	-9.36
3469.980	n77 (78) / 40MHz FCC Block A (ANT F)	RB1-1	BPSK	0.151	21.79	30.00	-8.21
3499.980		RB1-53	BPSK	0.157	21.97	30.00	-8.03
3529.980		RB1-104	BPSK	0.151	21.78	30.00	-8.22
3469.980		RB1-1	16QAM	0.111	20.45	30.00	-9.55
3499.980		RB1-53	16QAM	0.115	20.62	30.00	-9.38
3529.980		RB1-104	16QAM	0.112	20.49	30.00	-9.51
3474.990	n77 (78) / 50MHz FCC Block A (ANT F)	RB1-1	BPSK	0.155	21.91	30.00	-8.09
3499.980		RB1-66	BPSK	0.186	22.69	30.00	-7.31
3525.000		RB1-131	BPSK	0.155	21.89	30.00	-8.11
3474.990		RB1-1	16QAM	0.114	20.56	30.00	-9.44
3499.980		RB1-66	16QAM	0.117	20.68	30.00	-9.32
3525.000		RB1-131	16QAM	0.116	20.65	30.00	-9.35
3480.000	n77 (78) / 60MHz FCC Block A (ANT F)	RB1-1	BPSK	0.148	21.71	30.00	-8.29
3499.980		RB1-81	BPSK	0.155	21.90	30.00	-8.10
3519.990		RB1-160	BPSK	0.150	21.75	30.00	-8.25
3480.000		RB1-1	16QAM	0.109	20.39	30.00	-9.61
3499.980		RB1-81	16QAM	0.116	20.63	30.00	-9.37
3519.990		RB1-160	16QAM	0.113	20.52	30.00	-9.48
3484.980	n77 (78) / 70MHz FCC Block A (ANT F)	RB1-1	BPSK	0.152	21.83	30.00	-8.17
3499.980		RB1-94	BPSK	0.153	21.84	30.00	-8.16
3514.980		RB1-187	BPSK	0.156	21.94	30.00	-8.06
3484.980		RB1-1	16QAM	0.117	20.68	30.00	-9.32
3499.980		RB1-94	16QAM	0.114	20.56	30.00	-9.44
3514.980		RB1-187	16QAM	0.123	20.91	30.00	-9.09
3489.990	n77 (78) / 80MHz FCC Block A (ANT F)	RB1-1	BPSK	0.152	21.82	30.00	-8.18
3499.980		RB1-108	BPSK	0.153	21.85	30.00	-8.15
3510.000		RB1-215	BPSK	0.155	21.91	30.00	-8.09
3489.990		RB1-1	16QAM	0.111	20.47	30.00	-9.53
3499.980		RB1-108	16QAM	0.111	20.45	30.00	-9.55
3510.000		RB1-215	16QAM	0.119	20.77	30.00	-9.23
3495.000	n77(78)/90MHz FCC Block A (ANT F)	RB1-1	BPSK	0.154	21.88	30.00	-8.12
3499.980		RB1-122	BPSK	0.156	21.93	30.00	-8.07
3504.990		RB1-243	BPSK	0.157	21.97	30.00	-8.03
3495.000		RB1-1	16QAM	0.114	20.57	30.00	-9.43
3499.980		RB1-122	16QAM	0.111	20.46	30.00	-9.54
3504.990		RB1-243	16QAM	0.119	20.77	30.00	-9.23

3499.980	n77(78)/100MHz FCC Block A (ANT F)	RB1-1	BPSK	0.132	21.19	30.00	-8.81
3499.980		RB1-136	BPSK	0.154	21.87	30.00	-8.13
3499.980		RB1-271	BPSK	0.141	21.50	30.00	-8.50
3499.980		RB1-1	16QAM	0.100	20.01	30.00	-9.99
3499.980		RB1-136	16QAM	0.117	20.69	30.00	-9.31
3499.980		RB1-271	16QAM	0.109	20.36	30.00	-9.64

5G NR n77 (CONFIG 1)

High Frequency Substitution Measurement
UL Morrisville Chamber 4

Company: RFSL
Project #: 16238088
Date: 2026-04-26 TO 2026-04-28
Test Engineer: 19289

Freq (MHz)	Band/Bandwidth	RB Size-Offset	Modulation (Of EUT)	EIRP (W)	EIRP _{DUT} (dBm)	Limit (dBm)	Margin (dB)
3454.980	n77 (78) / 10MHz FCC Block A (ANT C)	RB1-1	BPSK	0.224	23.50	30.00	-6.50
3499.980		RB1-12	BPSK	0.228	23.58	30.00	-6.42
3544.980		RB1-22	BPSK	0.226	23.55	30.00	-6.45
3454.980		RB1-1	16QAM	0.159	22.01	30.00	-7.99
3499.980		RB1-12	16QAM	0.156	21.92	30.00	-8.08
3544.980		RB1-22	16QAM	0.162	22.09	30.00	-7.91
3457.500	n77 (78) / 15MHz FCC Block A (ANT C)	RB1-1	BPSK	0.222	23.46	30.00	-6.54
3499.980		RB1-19	BPSK	0.225	23.52	30.00	-6.48
3542.490		RB1-36	BPSK	0.225	23.53	30.00	-6.47
3457.500		RB1-1	16QAM	0.153	21.85	30.00	-8.15
3499.980		RB1-19	16QAM	0.157	21.95	30.00	-8.05
3542.490		RB1-36	16QAM	0.155	21.91	30.00	-8.09
3459.990	n77 (78) / 20MHz FCC Block A (ANT C)	RB1-1	BPSK	0.225	23.53	30.00	-6.47
3499.980		RB1-25	BPSK	0.224	23.50	30.00	-6.50
3540.000		RB1-49	BPSK	0.222	23.47	30.00	-6.53
3459.990		RB1-1	16QAM	0.153	21.84	30.00	-8.16
3499.980		RB1-25	16QAM	0.158	21.98	30.00	-8.02
3540.000		RB1-49	16QAM	0.154	21.88	30.00	-8.12
3462.480	n77 (78) / 25MHz FCC Block A (ANT C)	RB1-1	BPSK	0.228	23.57	30.00	-6.43
3499.980		RB1-32	BPSK	0.229	23.59	30.00	-6.41
3537.480		RB1-63	BPSK	0.226	23.55	30.00	-6.45
3462.480		RB1-1	16QAM	0.161	22.07	30.00	-7.93
3499.980		RB1-32	16QAM	0.160	22.04	30.00	-7.96
3537.480		RB1-63	16QAM	0.161	22.06	30.00	-7.94
3465.000	n77 (78) / 30MHz FCC Block A (ANT C)	RB1-1	BPSK	0.225	23.53	30.00	-6.47
3499.980		RB1-39	BPSK	0.221	23.44	30.00	-6.56
3534.990		RB1-76	BPSK	0.231	23.64	30.00	-6.36
3465.000		RB1-1	16QAM	0.159	22.01	30.00	-7.99

	3499.980		RB1-39	16QAM	0.153	21.85	30.00	-8.15
	3534.990		RB1-76	16QAM	0.163	22.12	30.00	-7.88
	3469.980	n77 (78) / 40MHz FCC Block A (ANT C)	RB1-1	BPSK	0.223	23.49	30.00	-6.51
	3499.980		RB1-53	BPSK	0.223	23.48	30.00	-6.52
	3529.980		RB1-104	BPSK	0.224	23.50	30.00	-6.50
	3469.980		RB1-1	16QAM	0.156	21.93	30.00	-8.07
	3499.980		RB1-53	16QAM	0.153	21.86	30.00	-8.14
	3529.980		RB1-104	16QAM	0.160	22.05	30.00	-7.95
	3474.990	n77 (78) / 50MHz FCC Block A (ANT C)	RB1-1	BPSK	0.224	23.50	30.00	-6.50
	3499.980		RB1-66	BPSK	0.232	23.66	30.00	-6.34
	3525.000		RB1-131	BPSK	0.229	23.59	30.00	-6.41
	3474.990		RB1-1	16QAM	0.163	22.12	30.00	-7.88
	3499.980		RB1-66	16QAM	0.158	21.99	30.00	-8.01
	3525.000		RB1-131	16QAM	0.165	22.17	30.00	-7.83
	3480.000	n77 (78) / 60MHz FCC Block A (ANT C)	RB1-1	BPSK	0.215	23.33	30.00	-6.67
	3499.980		RB1-81	BPSK	0.218	23.39	30.00	-6.61
	3519.990		RB1-160	BPSK	0.222	23.47	30.00	-6.53
	3480.000		RB1-1	16QAM	0.160	22.05	30.00	-7.95
	3499.980		RB1-81	16QAM	0.156	21.93	30.00	-8.07
	3519.990		RB1-160	16QAM	0.159	22.01	30.00	-7.99
	3484.980	n77 (78) / 70MHz FCC Block A (ANT C)	RB1-1	BPSK	0.221	23.45	30.00	-6.55
	3499.980		RB1-94	BPSK	0.216	23.35	30.00	-6.65
	3514.980		RB1-187	BPSK	0.230	23.62	30.00	-6.38
	3484.980		RB1-1	16QAM	0.162	22.09	30.00	-7.91
	3499.980		RB1-94	16QAM	0.145	21.61	30.00	-8.39
	3514.980		RB1-187	16QAM	0.172	22.36	30.00	-7.64
	3489.990	n77 (78) / 80MHz FCC Block A (ANT C)	RB1-1	BPSK	0.223	23.49	30.00	-6.51
	3499.980		RB1-108	BPSK	0.216	23.35	30.00	-6.65
	3510.000		RB1-215	BPSK	0.226	23.54	30.00	-6.46
	3489.990		RB1-1	16QAM	0.164	22.14	30.00	-7.86
	3499.980		RB1-108	16QAM	0.157	21.95	30.00	-8.05
	3510.000		RB1-215	16QAM	0.167	22.23	30.00	-7.77
	3495.000	n77(78)/90MHz FCC Block A (ANT C)	RB1-1	BPSK	0.228	23.57	30.00	-6.43
	3499.980		RB1-122	BPSK	0.223	23.49	30.00	-6.51
	3504.990		RB1-243	BPSK	0.231	23.64	30.00	-6.36
	3495.000		RB1-1	16QAM	0.164	22.14	30.00	-7.86
	3499.980		RB1-122	16QAM	0.143	21.54	30.00	-8.46
	3504.990		RB1-243	16QAM	0.163	22.11	30.00	-7.89

3499.980	n77(78)/100MHz FCC Block A (ANT C)	RB1-1	BPSK	0.183	22.63	30.00	-7.37
3499.980		RB1-136	BPSK	0.195	22.90	30.00	-7.10
3499.980		RB1-271	BPSK	0.229	23.60	30.00	-6.40
3499.980		RB1-1	16QAM	0.141	21.50	30.00	-8.50
3499.980		RB1-136	16QAM	0.151	21.80	30.00	-8.20
3499.980		RB1-271	16QAM	0.167	22.22	30.00	-7.78

5G NR n77 (SRS)

**High Frequency Substitution Measurement
UL Morrisville Chamber 4**

Company: RFSL
Project #: 16238088
Date: 2026-04-26 TO 2026-04-28
Test Engineer: 19289

Freq (MHz)	Band/Bandwidth	RB Size-Offset	Modulation (Of EUT)	EIRP (W)	EIRP _{DUT} (dBm)	Limit (dBm)	Margin (dB)
3454.980	n77 (78) / 10MHz FCC Block A (SRS ANT A)	RB1-1	BPSK	0.092	19.66	30.00	-10.34
3499.980		RB1-12	BPSK	0.097	19.86	30.00	-10.14
3544.980		RB1-22	BPSK	0.089	19.49	30.00	-10.51
3454.980		RB1-1	16QAM	0.069	18.36	30.00	-11.64
3499.980		RB1-12	16QAM	0.087	19.38	30.00	-10.62
3544.980		RB1-22	16QAM	0.073	18.66	30.00	-11.34
3457.500	n77 (78) / 15MHz FCC Block A (SRS ANT A)	RB1-1	BPSK	0.084	19.26	30.00	-10.74
3499.980		RB1-19	BPSK	0.100	20.00	30.00	-10.00
3542.490		RB1-36	BPSK	0.091	19.59	30.00	-10.41
3457.500		RB1-1	16QAM	0.065	18.16	30.00	-11.84
3499.980		RB1-19	16QAM	0.087	19.38	30.00	-10.62
3542.490		RB1-36	16QAM	0.072	18.56	30.00	-11.44
3459.990	n77 (78) / 20MHz FCC Block A (SRS ANT A)	RB1-1	BPSK	0.092	19.66	30.00	-10.34
3499.980		RB1-25	BPSK	0.097	19.89	30.00	-10.11
3540.000		RB1-49	BPSK	0.060	17.79	30.00	-12.21
3459.990		RB1-1	16QAM	0.067	18.26	30.00	-11.74
3499.980		RB1-25	16QAM	0.087	19.38	30.00	-10.62
3540.000		RB1-49	16QAM	0.049	16.86	30.00	-13.14
3462.480	n77 (78) / 25MHz FCC Block A (SRS ANT A)	RB1-1	BPSK	0.088	19.46	30.00	-10.54
3499.980		RB1-32	BPSK	0.099	19.95	30.00	-10.05
3537.480		RB1-63	BPSK	0.083	19.19	30.00	-10.81
3462.480		RB1-1	16QAM	0.067	18.26	30.00	-11.74
3499.980		RB1-32	16QAM	0.087	19.38	30.00	-10.62
3537.480		RB1-63	16QAM	0.072	18.56	30.00	-11.44
3465.000	n77 (78) / 30MHz FCC Block A (SRS ANT A)	RB1-1	BPSK	0.092	19.66	30.00	-10.34
3499.980		RB1-39	BPSK	0.098	19.91	30.00	-10.09
3534.990		RB1-76	BPSK	0.085	19.29	30.00	-10.71
3465.000		RB1-1	16QAM	0.067	18.26	30.00	-11.74

	3499.980		RB1-39	16QAM	0.087	19.38	30.00	-10.62
	3534.990		RB1-76	16QAM	0.072	18.56	30.00	-11.44
	3469.980	n77 (78) / 40MHz FCC Block A (SRS ANT A)	RB1-1	BPSK	0.090	19.56	30.00	-10.44
	3499.980		RB1-53	BPSK	0.106	20.24	30.00	-9.76
	3529.980		RB1-104	BPSK	0.089	19.49	30.00	-10.51
	3469.980		RB1-1	16QAM	0.067	18.26	30.00	-11.74
	3499.980		RB1-53	16QAM	0.087	19.38	30.00	-10.62
	3529.980		RB1-104	16QAM	0.077	18.86	30.00	-11.14
	3474.990	n77 (78) / 50MHz FCC Block A (SRS ANT A)	RB1-1	BPSK	0.092	19.66	30.00	-10.34
	3499.980		RB1-66	BPSK	0.102	20.07	30.00	-9.93
	3525.000		RB1-131	BPSK	0.093	19.69	30.00	-10.31
	3474.990		RB1-1	16QAM	0.069	18.36	30.00	-11.64
	3499.980		RB1-66	16QAM	0.091	19.58	30.00	-10.42
	3525.000		RB1-131	16QAM	0.073	18.66	30.00	-11.34
	3480.000	n77 (78) / 60MHz FCC Block A (SRS ANT A)	RB1-1	BPSK	0.090	19.56	30.00	-10.44
	3499.980		RB1-81	BPSK	0.110	20.41	30.00	-9.59
	3519.990		RB1-160	BPSK	0.087	19.39	30.00	-10.61
	3480.000		RB1-1	16QAM	0.064	18.06	30.00	-11.94
	3499.980		RB1-81	16QAM	0.085	19.28	30.00	-10.72
	3519.990		RB1-160	16QAM	0.069	18.36	30.00	-11.64
	3484.980	n77 (78) / 70MHz FCC Block A (SRS ANT A)	RB1-1	BPSK	0.095	19.76	30.00	-10.24
	3499.980		RB1-94	BPSK	0.107	20.28	30.00	-9.72
	3514.980		RB1-187	BPSK	0.091	19.59	30.00	-10.41
	3484.980		RB1-1	16QAM	0.087	19.38	30.00	-10.62
	3499.980		RB1-94	16QAM	0.067	18.26	30.00	-11.74
	3514.980		RB1-187	16QAM	0.091	19.58	30.00	-10.42
	3489.990	n77 (78) / 80MHz FCC Block A (SRS ANT A)	RB1-1	BPSK	0.088	19.46	30.00	-10.54
	3499.980		RB1-108	BPSK	0.106	20.25	30.00	-9.75
	3510.000		RB1-215	BPSK	0.081	19.09	30.00	-10.91
	3489.990		RB1-1	16QAM	0.067	18.26	30.00	-11.74
	3499.980		RB1-108	16QAM	0.085	19.28	30.00	-10.72
	3510.000		RB1-215	16QAM	0.073	18.66	30.00	-11.34
	3495.000	n77(78)/90MHz FCC Block A (SRS ANT A)	RB1-1	BPSK	0.081	19.06	30.00	-10.94
	3499.980		RB1-122	BPSK	0.132	21.21	30.00	-8.79
	3504.990		RB1-243	BPSK	0.076	18.79	30.00	-11.21
	3495.000		RB1-1	16QAM	0.070	18.46	30.00	-11.54
	3499.980		RB1-122	16QAM	0.085	19.28	30.00	-10.72
	3504.990		RB1-243	16QAM	0.073	18.66	30.00	-11.34

3499.980	n77(78)/100MHz FCC Block A (SRS ANT A)	RB1-1	BPSK	0.082	19.16	30.00	-10.84
3499.980		RB1-136	BPSK	0.100	20.01	30.00	-9.99
3499.980		RB1-271	BPSK	0.083	19.19	30.00	-10.81
3499.980		RB1-1	16QAM	0.070	18.46	30.00	-11.54
3499.980		RB1-136	16QAM	0.087	19.38	30.00	-10.62
3499.980		RB1-271	16QAM	0.072	18.56	30.00	-11.44

CONFIG 0

**High Frequency Substitution Measurement
UL Morrisville Chamber 4**

Company: RFSL
Project #: 16238088
Date: 2026-04-26 TO 2026-04-28
Test Engineer: 19289

Freq (MHz)	Band/Bandwidth	RB Size-Offset	Modulation (Of EUT)	EIRP (W)	EIRP _{DUT} (dBm)	Limit (dBm)	Margin (dB)
3454.980	n77 (78) / 10MHz FCC Block A (SRS ANT G)	RB1-1	BPSK	0.139	21.45	30.00	-8.55
3499.980		RB1-12	BPSK	0.144	21.58	30.00	-8.42
3544.980		RB1-22	BPSK	0.148	21.71	30.00	-8.29
3454.980		RB1-1	16QAM	0.118	20.71	30.00	-9.29
3499.980		RB1-12	16QAM	0.116	20.65	30.00	-9.35
3544.980		RB1-22	16QAM	0.117	20.69	30.00	-9.31
3457.500	n77 (78) / 15MHz FCC Block A (SRS ANT G)	RB1-1	BPSK	0.146	21.64	30.00	-8.36
3499.980		RB1-19	BPSK	0.150	21.77	30.00	-8.23
3542.490		RB1-36	BPSK	0.150	21.77	30.00	-8.23
3457.500		RB1-1	16QAM	0.122	20.86	30.00	-9.14
3499.980		RB1-19	16QAM	0.117	20.68	30.00	-9.32
3542.490		RB1-36	16QAM	0.115	20.61	30.00	-9.39
3459.990	n77 (78) / 20MHz FCC Block A (SRS ANT G)	RB1-1	BPSK	0.149	21.72	30.00	-8.28
3499.980		RB1-25	BPSK	0.145	21.62	30.00	-8.38
3540.000		RB1-49	BPSK	0.150	21.76	30.00	-8.24
3459.990		RB1-1	16QAM	0.116	20.66	30.00	-9.34
3499.980		RB1-25	16QAM	0.117	20.67	30.00	-9.33
3540.000		RB1-49	16QAM	0.115	20.62	30.00	-9.38
3462.480	n77 (78) / 25MHz FCC Block A (SRS ANT G)	RB1-1	BPSK	0.123	20.89	30.00	-9.11
3499.980		RB1-32	BPSK	0.127	21.04	30.00	-8.96
3537.480		RB1-63	BPSK	0.150	21.77	30.00	-8.23
3462.480		RB1-1	16QAM	0.109	20.38	30.00	-9.62

	3499.980		RB1-32	16QAM	0.110	20.41	30.00	-9.59	
	3537.480		RB1-63	16QAM	0.116	20.66	30.00	-9.34	
	3465.000	n77 (78) / 30MHz FCC Block A (SRS ANT G)	RB1-1	BPSK	0.121	20.83	30.00	-9.17	
	3499.980		RB1-39	BPSK	0.135	21.29	30.00	-8.71	
	3534.990		RB1-76	BPSK	0.145	21.62	30.00	-8.38	
	3465.000		RB1-1	16QAM	0.099	19.97	30.00	-10.03	
	3499.980		RB1-39	16QAM	0.108	20.33	30.00	-9.67	
	3534.990		RB1-76	16QAM	0.115	20.59	30.00	-9.41	
	3469.980		RB1-1	BPSK	0.126	21.02	30.00	-8.98	
	3499.980	n77 (78) / 40MHz FCC Block A (SRS ANT G)	RB1-53	BPSK	0.132	21.21	30.00	-8.79	
	3529.980		RB1-104	BPSK	0.144	21.59	30.00	-8.41	
	3469.980		RB1-1	16QAM	0.100	19.99	30.00	-10.01	
	3499.980		RB1-53	16QAM	0.107	20.28	30.00	-9.72	
	3529.980		RB1-104	16QAM	0.113	20.52	30.00	-9.48	
	3474.990		RB1-1	BPSK	0.117	20.70	30.00	-9.30	
	3499.980	n77 (78) / 50MHz FCC Block A (SRS ANT G)	RB1-66	BPSK	0.134	21.26	30.00	-8.74	
	3525.000		RB1-131	BPSK	0.148	21.72	30.00	-8.28	
	3474.990		RB1-1	16QAM	0.084	19.26	30.00	-10.74	
	3499.980		RB1-66	16QAM	0.111	20.44	30.00	-9.56	
	3525.000		RB1-131	16QAM	0.116	20.65	30.00	-9.35	
	3480.000		RB1-1	BPSK	0.126	21.00	30.00	-9.00	
	3499.980	n77 (78) / 60MHz FCC Block A (SRS ANT G)	RB1-81	BPSK	0.132	21.19	30.00	-8.81	
	3519.990		RB1-160	BPSK	0.144	21.59	30.00	-8.41	
	3480.000		RB1-1	16QAM	0.107	20.29	30.00	-9.71	
	3499.980		RB1-81	16QAM	0.103	20.11	30.00	-9.89	
	3519.990		RB1-160	16QAM	0.113	20.55	30.00	-9.45	
	3484.980		RB1-1	BPSK	0.129	21.11	30.00	-8.89	
	3499.980	n77 (78) / 70MHz FCC Block A (SRS ANT G)	RB1-94	BPSK	0.134	21.27	30.00	-8.74	
	3514.980		RB1-187	BPSK	0.148	21.71	30.00	-8.29	
	3484.980		RB1-1	16QAM	0.102	20.09	30.00	-9.91	
	3499.980		RB1-94	16QAM	0.105	20.20	30.00	-9.80	
	3514.980		RB1-187	16QAM	0.115	20.60	30.00	-9.40	
	3489.990		RB1-1	BPSK	0.122	20.87	30.00	-9.13	
	3499.980	n77 (78) / 80MHz FCC Block A (SRS ANT G)	RB1-108	BPSK	0.133	21.23	30.00	-8.77	
	3510.000		RB1-215	BPSK	0.149	21.73	30.00	-8.27	
	3489.990		RB1-1	16QAM	0.103	20.14	30.00	-9.86	
	3499.980		RB1-108	16QAM	0.104	20.18	30.00	-9.82	
	3510.000		RB1-215	16QAM	0.115	20.62	30.00	-9.38	

3495.000	n77(78)/90MHz FCC Block A (SRS ANT G)	RB1-1	BPSK	0.125	20.97	30.00	-9.03
3499.980		RB1-122	BPSK	0.133	21.23	30.00	-8.77
3504.990		RB1-243	BPSK	0.149	21.74	30.00	-8.26
3495.000		RB1-1	16QAM	0.105	20.23	30.00	-9.77
3499.980		RB1-122	16QAM	0.106	20.27	30.00	-9.73
3504.990		RB1-243	16QAM	0.117	20.67	30.00	-9.33
3499.980	n77(78)/100MHz FCC Block A (SRS ANT G)	RB1-1	BPSK	0.087	19.41	30.00	-10.59
3499.980		RB1-136	BPSK	0.124	20.93	30.00	-9.07
3499.980		RB1-271	BPSK	0.150	21.75	30.00	-8.25
3499.980		RB1-1	16QAM	0.068	18.32	30.00	-11.68
3499.980		RB1-136	16QAM	0.095	19.78	30.00	-10.22
3499.980		RB1-271	16QAM	0.117	20.70	30.00	-9.30
CONFIG 1							

ULMIMO 5G NR n77 (ANT F+C)

High Frequency Substitution Measurement
UL Morrisville Chamber 4

Company: RFSL
Project #: 16238088
Date: 2026-04-26 TO 2026-04-28
Test Engineer: 19289

Freq (MHz)	Band/Bandwidth	RB Size-Offset	Modulation (Of EUT)	EIRP (W)	EIRP _{DUT} (dBm)	Limit (dBm)	Margin (dB)
3499.980	FR1 UL:-MIMO n77a 100MHz (ANT F+C)	RB1-1	BPSK	0.203	23.08	33.01	-9.93
3499.980		RB1-136	BPSK	0.305	24.84	33.01	-8.17
3499.980		RB1-271	BPSK	0.375	25.74	33.01	-7.27
3499.980		RB1-1	16QAM	0.159	22.02	33.01	-10.99
3499.980		RB1-136	16QAM	0.246	23.91	33.01	-9.10
3499.980		RB1-271	16QAM	0.251	24.00	33.01	-9.01

9.1.1. 5G NR n77 (FCC Part 27 3700-3980MHz)

UL Morrisville Chamber 4

Company: RFSL

Project #: 16238088

Date: 2026-04-26 TO 2026-04-28

Test Engineer: 19289

5G NR n77 (CONFIG 0)

Freq (MHz)	Band/Bandwidth	RB Size-Offset	Modulation (Of EUT)	EIRP (W)	EIRP _{out} (dBm)	Limit (dBm)	Margin (dB)
3705.000	n77 (78) / 10MHz FCC Block C (ANT F)	RB1-1	BPSK	0.269	24.30	30.00	-5.70
3840.000		RB1-12	BPSK	0.274	24.37	30.00	-5.63
3975.000		RB1-22	BPSK	0.280	24.47	30.00	-5.53
3705.000		RB1-1	16QAM	0.228	23.57	30.00	-6.43
3840.000		RB1-12	16QAM	0.234	23.70	30.00	-6.30
3975.000		RB1-22	16QAM	0.237	23.75	30.00	-6.25
3707.490	n77 (78) / 15MHz FCC Block C (ANT F)	RB1-1	BPSK	0.274	24.38	30.00	-5.62
3840.000		RB1-19	BPSK	0.286	24.56	30.00	-5.44
3972.480		RB1-36	BPSK	0.304	24.83	30.00	-5.17
3707.490		RB1-1	16QAM	0.218	23.39	30.00	-6.61
3840.000		RB1-19	16QAM	0.236	23.72	30.00	-6.28
3972.480		RB1-36	16QAM	0.251	23.99	30.00	-6.01
3709.980	n77 (78) / 20MHz FCC Block C (ANT F)	RB1-1	BPSK	0.268	24.28	30.00	-5.72
3840.000		RB1-25	BPSK	0.287	24.58	30.00	-5.42
3969.990		RB1-49	BPSK	0.296	24.71	30.00	-5.29
3709.980		RB1-1	16QAM	0.225	23.53	30.00	-6.47
3840.000		RB1-25	16QAM	0.243	23.85	30.00	-6.15
3969.990		RB1-49	16QAM	0.238	23.77	30.00	-6.23
3712.500	n77 (78) / 25MHz FCC Block C (ANT F)	RB1-1	BPSK	0.273	24.36	30.00	-5.64
3840.000		RB1-32	BPSK	0.297	24.73	30.00	-5.27
3967.500		RB1-63	BPSK	0.296	24.71	30.00	-5.29
3712.500		RB1-1	16QAM	0.224	23.51	30.00	-6.49
3840.000		RB1-32	16QAM	0.244	23.87	30.00	-6.13
3967.500		RB1-63	16QAM	0.256	24.08	30.00	-5.92
3714.990	n77 (78) / 30MHz FCC Block C (ANT F)	RB1-1	BPSK	0.272	24.34	30.00	-5.66
3840.000		RB1-39	BPSK	0.290	24.62	30.00	-5.38
3964.980		RB1-76	BPSK	0.304	24.83	30.00	-5.17
3714.990		RB1-1	16QAM	0.238	23.76	30.00	-6.24
3840.000		RB1-39	16QAM	0.245	23.90	30.00	-6.10
3964.980		RB1-76	16QAM	0.250	23.98	30.00	-6.02
3720.000	n77 (78) / 40MHz FCC Block C (ANT F)	RB1-1	BPSK	0.273	24.36	30.00	-5.64
3840.000		RB1-53	BPSK	0.290	24.63	30.00	-5.37
3960.000		RB1-104	BPSK	0.297	24.73	30.00	-5.27
3720.000		RB1-1	16QAM	0.226	23.55	30.00	-6.45
3840.000		RB1-53	16QAM	0.241	23.82	30.00	-6.18
3960.000		RB1-104	16QAM	0.252	24.01	30.00	-5.99
3724.980	n77 (78) / 50MHz FCC Block C (ANT F)	RB1-1	BPSK	0.281	24.48	30.00	-5.52
3840.000		RB1-66	BPSK	0.307	24.87	30.00	-5.13
3954.990		RB1-131	BPSK	0.314	24.97	30.00	-5.03
3724.980		RB1-1	16QAM	0.222	23.47	30.00	-6.53
3840.000		RB1-66	16QAM	0.261	24.17	30.00	-5.83
3954.990		RB1-131	16QAM	0.256	24.08	30.00	-5.92
3729.990	n77 (78) / 60MHz FCC Block C (ANT F)	RB1-1	BPSK	0.265	24.23	30.00	-5.77
3840.000		RB1-81	BPSK	0.290	24.62	30.00	-5.38
3949.980		RB1-160	BPSK	0.285	24.55	30.00	-5.45
3729.990		RB1-1	16QAM	0.215	23.33	30.00	-6.67
3840.000		RB1-81	16QAM	0.242	23.83	30.00	-6.17
3949.980		RB1-160	16QAM	0.239	23.79	30.00	-6.21
3735.000	n77 (78) / 70MHz FCC Block C (ANT F)	RB1-1	BPSK	0.269	24.30	30.00	-5.70
3840.000		RB1-94	BPSK	0.292	24.65	30.00	-5.35
3945.000		RB1-187	BPSK	0.299	24.75	30.00	-5.25
3735.000		RB1-1	16QAM	0.219	23.41	30.00	-6.59
3840.000		RB1-94	16QAM	0.235	23.71	30.00	-6.29
3945.000		RB1-187	16QAM	0.255	24.06	30.00	-5.94
3739.980	n77 (78) / 80MHz FCC Block C (ANT F)	RB1-1	BPSK	0.269	24.30	30.00	-5.70
3840.000		RB1-108	BPSK	0.286	24.57	30.00	-5.43
3939.990		RB1-215	BPSK	0.294	24.68	30.00	-5.32
3739.980		RB1-1	16QAM	0.210	23.22	30.00	-6.78
3840.000		RB1-108	16QAM	0.236	23.72	30.00	-6.28
3939.990		RB1-215	16QAM	0.233	23.68	30.00	-6.32
3744.990	n77(78)/90MHz FCC Block C (ANT F)	RB1-1	BPSK	0.279	24.45	30.00	-5.55
3840.000		RB1-122	BPSK	0.290	24.63	30.00	-5.37
3934.980		RB1-243	BPSK	0.301	24.78	30.00	-5.22
3744.990		RB1-1	16QAM	0.239	23.79	30.00	-6.21
3840.000		RB1-122	16QAM	0.236	23.73	30.00	-6.27
3934.980		RB1-243	16QAM	0.252	24.02	30.00	-5.98
3750.000	n77(78)/100MHz FCC Block C (ANT F)	RB1-1	BPSK	0.178	22.51	30.00	-7.49
3840.000		RB1-136	BPSK	0.256	24.09	30.00	-5.91
3930.000		RB1-271	BPSK	0.306	24.86	30.00	-5.14
3750.000		RB1-1	16QAM	0.131	21.17	30.00	-8.83
3840.000		RB1-136	16QAM	0.196	22.92	30.00	-7.08
3930.000		RB1-271	16QAM	0.248	23.94	30.00	-6.06

5G NR n77 (CONFIG 1)

Freq (MHz)	Band/Bandwidth	RB Size-Offset	Modulation (Of EUT)	EIRP (W)	EIRP _{out} (dBm)	Limit (dBm)	Margin (dB)
3705.000	n77 (78) / 10MHz FCC Block C (ANT C)	RB1-1	BPSK	0.193	22.85	30.00	-7.15
3840.000		RB1-12	BPSK	0.189	22.76	30.00	-7.24
3975.000		RB1-22	BPSK	0.191	22.82	30.00	-7.18
3705.000		RB1-1	16QAM	0.149	21.72	30.00	-8.28
3840.000		RB1-12	16QAM	0.150	21.76	30.00	-8.24
3975.000		RB1-22	16QAM	0.151	21.78	30.00	-8.22
3707.490	n77 (78) / 15MHz FCC Block C (ANT C)	RB1-1	BPSK	0.198	22.97	30.00	-7.03
3840.000		RB1-19	BPSK	0.196	22.92	30.00	-7.08
3972.480		RB1-36	BPSK	0.186	22.70	30.00	-7.30
3707.490		RB1-1	16QAM	0.158	21.98	30.00	-8.02
3840.000		RB1-19	16QAM	0.155	21.89	30.00	-8.11
3972.480		RB1-36	16QAM	0.157	21.96	30.00	-8.04
3709.980	n77 (78) / 20MHz FCC Block C (ANT C)	RB1-1	BPSK	0.198	22.97	30.00	-7.03
3840.000		RB1-25	BPSK	0.194	22.88	30.00	-7.12
3969.990		RB1-49	BPSK	0.180	22.56	30.00	-7.44
3709.980		RB1-1	16QAM	0.158	21.99	30.00	-8.01
3840.000		RB1-25	16QAM	0.160	22.05	30.00	-7.95
3969.990		RB1-49	16QAM	0.154	21.87	30.00	-8.13
3712.500	n77 (78) / 25MHz FCC Block C (ANT C)	RB1-1	BPSK	0.200	23.00	30.00	-7.00
3840.000		RB1-32	BPSK	0.200	23.00	30.00	-7.00
3967.500		RB1-63	BPSK	0.180	22.56	30.00	-7.44
3712.500		RB1-1	16QAM	0.161	22.07	30.00	-7.93
3840.000		RB1-32	16QAM	0.158	21.99	30.00	-8.01
3967.500		RB1-63	16QAM	0.155	21.90	30.00	-8.10
3714.990	n77 (78) / 30MHz FCC Block C (ANT C)	RB1-1	BPSK	0.202	23.06	30.00	-6.94
3840.000		RB1-39	BPSK	0.195	22.89	30.00	-7.11
3964.980		RB1-76	BPSK	0.187	22.73	30.00	-7.27
3714.990		RB1-1	16QAM	0.167	22.23	30.00	-7.77
3840.000		RB1-39	16QAM	0.164	22.16	30.00	-7.84
3964.980		RB1-76	16QAM	0.160	22.05	30.00	-7.95
3720.000	n77 (78) / 40MHz FCC Block C (ANT C)	RB1-1	BPSK	0.199	22.98	30.00	-7.02
3840.000		RB1-53	BPSK	0.197	22.94	30.00	-7.06
3960.000		RB1-104	BPSK	0.187	22.72	30.00	-7.28
3720.000		RB1-1	16QAM	0.157	21.97	30.00	-8.03
3840.000		RB1-53	16QAM	0.157	21.95	30.00	-8.05
3960.000		RB1-104	16QAM	0.159	22.02	30.00	-7.98
3724.980	n77 (78) / 50MHz FCC Block C (ANT C)	RB1-1	BPSK	0.203	23.08	30.00	-6.92
3840.000		RB1-66	BPSK	0.203	23.08	30.00	-6.92
3954.990		RB1-131	BPSK	0.195	22.91	30.00	-7.09
3724.980		RB1-1	16QAM	0.161	22.06	30.00	-7.94
3840.000		RB1-66	16QAM	0.167	22.23	30.00	-7.77
3954.990		RB1-131	16QAM	0.169	22.29	30.00	-7.71
3729.990	n77 (78) / 60MHz FCC Block C (ANT C)	RB1-1	BPSK	0.192	22.84	30.00	-7.16
3840.000		RB1-81	BPSK	0.192	22.83	30.00	-7.17
3949.980		RB1-160	BPSK	0.181	22.58	30.00	-7.42
3729.990		RB1-1	16QAM	0.157	21.95	30.00	-8.05
3840.000		RB1-81	16QAM	0.157	21.95	30.00	-8.05
3949.980		RB1-160	16QAM	0.147	21.68	30.00	-8.32
3735.000	n77 (78) / 70MHz FCC Block C (ANT C)	RB1-1	BPSK	0.199	22.99	30.00	-7.01
3840.000		RB1-94	BPSK	0.193	22.86	30.00	-7.14
3945.000		RB1-187	BPSK	0.188	22.75	30.00	-7.25
3735.000		RB1-1	16QAM	0.154	21.88	30.00	-8.12
3840.000		RB1-94	16QAM	0.154	21.88	30.00	-8.12
3945.000		RB1-187	16QAM	0.158	21.99	30.00	-8.01
3739.980	n77 (78) / 80MHz FCC Block C (ANT C)	RB1-1	BPSK	0.205	23.11	30.00	-6.89
3840.000		RB1-108	BPSK	0.195	22.89	30.00	-7.11
3939.990		RB1-215	BPSK	0.188	22.75	30.00	-7.25
3739.980		RB1-1	16QAM	0.169	22.28	30.00	-7.72
3840.000		RB1-108	16QAM	0.155	21.90	30.00	-8.10
3939.990		RB1-215	16QAM	0.148	21.69	30.00	-8.31
3744.990	n77(78)/90MHz FCC Block C (ANT C)	RB1-1	BPSK	0.206	23.13	30.00	-6.87
3840.000		RB1-122	BPSK	0.198	22.97	30.00	-7.03
3934.980		RB1-243	BPSK	0.188	22.75	30.00	-7.25
3744.990		RB1-1	16QAM	0.160	22.05	30.00	-7.95
3840.000		RB1-122	16QAM	0.152	21.81	30.00	-8.19
3934.980		RB1-243	16QAM	0.156	21.94	30.00	-8.06
3750.000	n77(78)/100MHz FCC Block C (ANT C)	BPSK	BPSK	0.207	23.16	30.00	-6.84
3840.000		BPSK	BPSK	0.193	22.86	30.00	-7.14
3930.000		BPSK	BPSK	0.106	20.26	30.00	-9.74
3750.000		RB1-1	16QAM	0.163	22.12	30.00	-7.88
3840.000		RB1-136	16QAM	0.153	21.86	30.00	-8.14
3930.000		RB1-271	16QAM	0.081	19.06	30.00	-10.94

5G NR n77 (SRS)

ag (MHz)	Band/Bandwidth	RB Size-Offset	Modulation (Of EUT)	EIRP (W)	EIRP _{OUT} (dBm)	Limit (dBm)	Margin (dB)
3705.000	n77 (78) / 10MHz FCC Block C (SRS ANT A)	RB1-1	BPSK	0.039	15.95	30.00	-14.05
3840.000		RB1-12	BPSK	0.069	18.41	30.00	-11.59
3975.000		RB1-22	BPSK	0.033	15.23	30.00	-14.77
3705.000		RB1-1	16QAM	0.033	15.22	30.00	-14.78
3840.000		RB1-12	16QAM	0.060	17.77	30.00	-12.23
3975.000		RB1-22	16QAM	0.029	14.68	30.00	-15.32
3707.490	n77 (78) / 15MHz FCC Block C (SRS ANT A)	RB1-1	BPSK	0.040	16.05	30.00	-13.95
3840.000		RB1-19	BPSK	0.076	18.78	30.00	-11.22
3972.480		RB1-36	BPSK	0.033	15.23	30.00	-14.77
3707.490		RB1-1	16QAM	0.033	15.22	30.00	-14.78
3840.000		RB1-19	16QAM	0.067	18.23	30.00	-11.77
3972.480		RB1-36	16QAM	0.029	14.68	30.00	-15.32
3709.980	n77 (78) / 20MHz FCC Block C (SRS ANT A)	RB1-1	BPSK	0.039	15.95	30.00	-14.05
3840.000		RB1-25	BPSK	0.078	18.91	30.00	-11.09
3969.990		RB1-49	BPSK	0.033	15.13	30.00	-14.87
3709.980		RB1-1	16QAM	0.032	15.02	30.00	-14.98
3840.000		RB1-25	16QAM	0.066	18.18	30.00	-11.82
3969.990		RB1-49	16QAM	0.029	14.58	30.00	-15.42
3712.500	n77 (78) / 25MHz FCC Block C (SRS ANT A)	RB1-1	BPSK	0.038	15.85	30.00	-14.15
3840.000		RB1-32	BPSK	0.076	18.78	30.00	-11.22
3967.500		RB1-63	BPSK	0.033	15.23	30.00	-14.77
3712.500		RB1-1	16QAM	0.033	15.12	30.00	-14.88
3840.000		RB1-32	16QAM	0.068	18.33	30.00	-11.67
3967.500		RB1-63	16QAM	0.033	15.18	30.00	-14.82
3714.990	n77 (78) / 30MHz FCC Block C (SRS ANT A)	RB1-1	BPSK	0.059	17.69	30.00	-12.31
3840.000		RB1-39	BPSK	0.076	18.83	30.00	-11.17
3964.980		RB1-76	BPSK	0.041	16.13	30.00	-13.87
3714.990		RB1-1	16QAM	0.049	16.93	30.00	-13.07
3840.000		RB1-39	16QAM	0.065	18.16	30.00	-11.84
3964.980		RB1-76	16QAM	0.035	15.48	30.00	-14.52
3720.000	n77 (78) / 40MHz FCC Block C (SRS ANT A)	RB1-1	BPSK	0.039	15.95	30.00	-14.05
3840.000		RB1-53	BPSK	0.045	16.49	30.00	-13.51
3960.000		RB1-104	BPSK	0.033	15.13	30.00	-14.87
3720.000		RB1-1	16QAM	0.033	15.22	30.00	-14.78
3840.000		RB1-53	16QAM	0.038	15.85	30.00	-14.15
3960.000		RB1-104	16QAM	0.029	14.58	30.00	-15.42
3724.980	n77 (78) / 50MHz FCC Block C (SRS ANT A)	RB1-1	BPSK	0.040	16.05	30.00	-13.95
3840.000		RB1-66	BPSK	0.077	18.86	30.00	-11.14
3954.990		RB1-131	BPSK	0.034	15.33	30.00	-14.67
3724.980		RB1-1	16QAM	0.033	15.22	30.00	-14.78
3840.000		RB1-66	16QAM	0.068	18.33	30.00	-11.67
3954.990		RB1-131	16QAM	0.030	14.78	30.00	-15.22
3729.990	n77 (78) / 60MHz FCC Block C (SRS ANT A)	RB1-1	BPSK	0.038	15.85	30.00	-14.15
3840.000		RB1-81	BPSK	0.043	16.29	30.00	-13.71
3949.980		RB1-160	BPSK	0.037	15.63	30.00	-14.37
3729.990		RB1-1	16QAM	0.033	15.12	30.00	-14.88
3840.000		RB1-81	16QAM	0.038	15.85	30.00	-14.15
3949.980		RB1-160	16QAM	0.032	15.08	30.00	-14.92
3735.000	n77 (78) / 70MHz FCC Block C (SRS ANT A)	RB1-1	BPSK	0.038	15.85	30.00	-14.15
3840.000		RB1-94	BPSK	0.044	16.39	30.00	-13.61
3945.000		RB1-187	BPSK	0.037	15.63	30.00	-14.37
3735.000		RB1-1	16QAM	0.032	15.02	30.00	-14.98
3840.000		RB1-94	16QAM	0.038	15.85	30.00	-14.15
3945.000		RB1-187	16QAM	0.029	14.68	30.00	-15.32
3739.980	n77 (78) / 80MHz FCC Block C (SRS ANT A)	RB1-1	BPSK	0.039	15.95	30.00	-14.05
3840.000		RB1-108	BPSK	0.043	16.29	30.00	-13.71
3939.990		RB1-215	BPSK	0.037	15.73	30.00	-14.27
3739.980		RB1-1	16QAM	0.033	15.12	30.00	-14.88
3840.000		RB1-108	16QAM	0.038	15.85	30.00	-14.15
3939.990		RB1-215	16QAM	0.032	15.08	30.00	-14.92
3744.990	n77(78)/90MHz FCC Block C (SRS ANT A)	RB1-1	BPSK	0.039	15.95	30.00	-14.05
3840.000		RB1-122	BPSK	0.044	16.39	30.00	-13.61
3934.980		RB1-243	BPSK	0.037	15.63	30.00	-14.37
3744.990		RB1-1	16QAM	0.033	15.12	30.00	-14.88
3840.000		RB1-122	16QAM	0.038	15.85	30.00	-14.15
3934.980		RB1-243	16QAM	0.033	15.18	30.00	-14.82
3750.000	n77(78)/100MHz FCC Block C (SRS ANT A)	BPSK	BPSK	0.039	15.95	30.00	-14.05
3840.000		BPSK	BPSK	0.043	16.29	30.00	-13.71
3930.000		BPSK	BPSK	0.037	15.73	30.00	-14.27
3750.000		RB1-1	16QAM	0.034	15.32	30.00	-14.68
3840.000		RB1-136	16QAM	0.037	15.65	30.00	-14.35
3930.000		RB1-271	16QAM	0.031	14.98	30.00	-15.02

Freq (MHz)	Band/Bandwidth	RB Size-Offset	Modulation (Of EUT)	EIRP (W)	EIRP _{DUT} (dBm)	Limit (dBm)	Margin (dB)
3705.000	n77 (78) / 10MHz FCC Block C (SRS ANT G)	RB1-1	BPSK	0.156	21.93	30.00	-8.07
3840.000		RB1-12	BPSK	0.172	22.35	30.00	-7.65
3975.000		RB1-22	BPSK	0.164	22.15	30.00	-7.85
3705.000		RB1-1	16QAM	0.117	20.67	30.00	-9.33
3840.000		RB1-12	16QAM	0.134	21.28	30.00	-8.72
3975.000	n77 (78) / 15MHz FCC Block C (SRS ANT G)	RB1-22	16QAM	0.132	21.20	30.00	-8.80
3707.490		RB1-1	BPSK	0.156	21.95	30.00	-8.06
3840.000		RB1-19	BPSK	0.167	22.24	30.00	-7.76
3972.480		RB1-36	BPSK	0.170	22.31	30.00	-7.69
3707.490		RB1-1	16QAM	0.116	20.63	30.00	-9.37
3840.000	n77 (78) / 20MHz FCC Block C (SRS ANT G)	RB1-19	16QAM	0.137	21.37	30.00	-8.63
3972.480		RB1-36	16QAM	0.144	21.58	30.00	-8.42
3709.980		RB1-1	BPSK	0.153	21.84	30.00	-8.16
3840.000		RB1-25	BPSK	0.163	22.13	30.00	-7.87
3969.990		RB1-49	BPSK	0.172	22.36	30.00	-7.64
3709.980	n77 (78) / 25MHz FCC Block C (SRS ANT G)	RB1-1	16QAM	0.114	20.59	30.00	-9.42
3840.000		RB1-25	16QAM	0.137	21.36	30.00	-8.64
3969.990		RB1-49	16QAM	0.133	21.25	30.00	-8.75
3712.500		RB1-1	BPSK	0.154	21.87	30.00	-8.13
3840.000		RB1-32	BPSK	0.163	22.13	30.00	-7.87
3967.500	n77 (78) / 30MHz FCC Block C (SRS ANT G)	RB1-63	BPSK	0.167	22.22	30.00	-7.78
3712.500		RB1-1	16QAM	0.114	20.55	30.00	-9.45
3840.000		RB1-32	16QAM	0.136	21.32	30.00	-8.68
3967.500		RB1-63	16QAM	0.143	21.55	30.00	-8.45
3714.990		RB1-1	BPSK	0.205	23.11	30.00	-6.89
3840.000	n77 (78) / 40MHz FCC Block C (SRS ANT G)	RB1-39	BPSK	0.162	22.08	30.00	-7.92
3964.980		RB1-76	BPSK	0.182	22.59	30.00	-7.41
3714.990		RB1-1	16QAM	0.164	22.14	30.00	-7.86
3840.000		RB1-39	16QAM	0.134	21.28	30.00	-8.72
3964.980		RB1-76	16QAM	0.137	21.36	30.00	-8.64
3720.000	n77 (78) / 50MHz FCC Block C (SRS ANT G)	RB1-1	BPSK	0.154	21.89	30.00	-8.12
3840.000		RB1-53	BPSK	0.180	22.55	30.00	-7.45
3960.000		RB1-104	BPSK	0.174	22.41	30.00	-7.59
3720.000		RB1-1	16QAM	0.115	20.59	30.00	-9.41
3840.000		RB1-53	16QAM	0.137	21.36	30.00	-8.64
3960.000	n77 (78) / 60MHz FCC Block C (SRS ANT G)	RB1-104	16QAM	0.137	21.35	30.00	-8.65
3724.980		RB1-1	BPSK	0.158	21.98	30.00	-8.03
3840.000		RB1-66	BPSK	0.173	22.39	30.00	-7.62
3954.990		RB1-131	BPSK	0.179	22.52	30.00	-7.48
3724.980		RB1-1	16QAM	0.117	20.68	30.00	-9.32
3840.000	n77 (78) / 70MHz FCC Block C (SRS ANT G)	RB1-66	16QAM	0.145	21.60	30.00	-8.40
3954.990		RB1-131	16QAM	0.141	21.51	30.00	-8.50
3729.990		RB1-1	BPSK	0.153	21.84	30.00	-8.16
3840.000		RB1-81	BPSK	0.178	22.52	30.00	-7.48
3949.980		RB1-160	BPSK	0.172	22.36	30.00	-7.64
3729.990	n77 (78) / 80MHz FCC Block C (SRS ANT G)	RB1-1	16QAM	0.112	20.51	30.00	-9.50
3840.000		RB1-81	16QAM	0.133	21.23	30.00	-8.77
3949.980		RB1-160	16QAM	0.136	21.33	30.00	-8.67
3735.000		RB1-1	BPSK	0.163	22.12	30.00	-7.88
3840.000		RB1-94	BPSK	0.176	22.46	30.00	-7.54
3945.000	n77 (78) / 90MHz FCC Block C (SRS ANT G)	RB1-187	BPSK	0.176	22.46	30.00	-7.54
3735.000		RB1-1	16QAM	0.114	20.57	30.00	-9.43
3840.000		RB1-94	16QAM	0.133	21.25	30.00	-8.75
3945.000		RB1-187	16QAM	0.136	21.32	30.00	-8.68
3739.980		RB1-1	BPSK	0.155	21.91	30.00	-8.09
3840.000	n77 (78) / 100MHz FCC Block C (SRS ANT G)	RB1-108	BPSK	0.175	22.43	30.00	-7.57
3939.990		RB1-215	BPSK	0.202	23.06	30.00	-6.94
3739.980		RB1-1	16QAM	0.115	20.59	30.00	-9.41
3840.000		RB1-108	16QAM	0.131	21.17	30.00	-8.83
3939.990		RB1-215	16QAM	0.160	22.03	30.00	-7.97
3744.990	n77(78)/90MHz FCC Block C (SRS ANT G)	RB1-1	BPSK	0.161	22.06	30.00	-7.94
3840.000		RB1-122	BPSK	0.177	22.48	30.00	-7.52
3934.980		RB1-243	BPSK	0.195	22.90	30.00	-7.10
3744.990		RB1-1	16QAM	0.119	20.76	30.00	-9.24
3840.000		RB1-122	16QAM	0.131	21.17	30.00	-8.83
3934.980	n77(78)/100MHz FCC Block C (SRS ANT G)	RB1-243	16QAM	0.147	21.67	30.00	-8.33
3750.000		BPSK	BPSK	0.133	21.25	30.00	-8.75
3840.000		BPSK	BPSK	0.175	22.44	30.00	-7.56
3930.000		BPSK	BPSK	0.207	23.15	30.00	-6.85
3750.000		RB1-1	16QAM	0.104	20.19	30.00	-9.81
3840.000	n77(78)/100MHz FCC Block C (SRS ANT G)	RB1-136	16QAM	0.133	21.24	30.00	-8.76
3930.000		RB1-271	16QAM	0.162	22.09	30.00	-7.91

5G NR UL MIMO n77

Freq (MHz)	Band/Bandwidth	RB Size-Offset	Modulation (Of EUT)	EIRP (W)	EIRP _{DUT} (dBm)	x`	Margin (dB)
3499.980	FR1 UL:-MIMO n77a 100MHz (ANT F+C)	RB1-1	BPSK	0.203	23.08	33.01	-9.93
3499.980		RB1-136	BPSK	0.305	24.84	33.01	-8.17
3499.980		RB1-271	BPSK	0.375	25.74	33.01	-7.27
3499.980		RB1-1	16QAM	0.159	22.02	33.01	-10.99
3499.980		RB1-136	16QAM	0.246	23.91	33.01	-9.10
3499.980		RB1-271	16QAM	0.251	24.00	33.01	-9.01

Freq (MHz)	Band/Bandwidth	RB Size-Offset	Modulation (Of EUT)	EIRP (W)	EIRP _{DUT} (dBm)	Limit (dBm)	Margin (dB)
3750.000	FR1 UL:-MIMO n77c 100MHz (ANT F+C)	RB1-1	BPSK	0.327	25.14	33.01	-7.87
3840.000		RB1-136	BPSK	0.307	24.87	33.01	-8.14
3930.000		RB1-271	BPSK	0.270	24.32	33.01	-8.69
3750.000		RB1-1	16QAM	0.253	24.03	33.01	-8.98
3840.000		RB1-136	16QAM	0.251	23.99	33.01	-9.02
3930.000		RB1-271	16QAM	0.214	23.30	33.01	-9.71

9.2. FIELD STRENGTH OF SPURIOUS RADIATION

LIMITS

FCC: §27.53

Emission limits

(n) 3.45 GHz Service. The following emission limits apply to stations transmitting in the 3450-3550 MHz band:

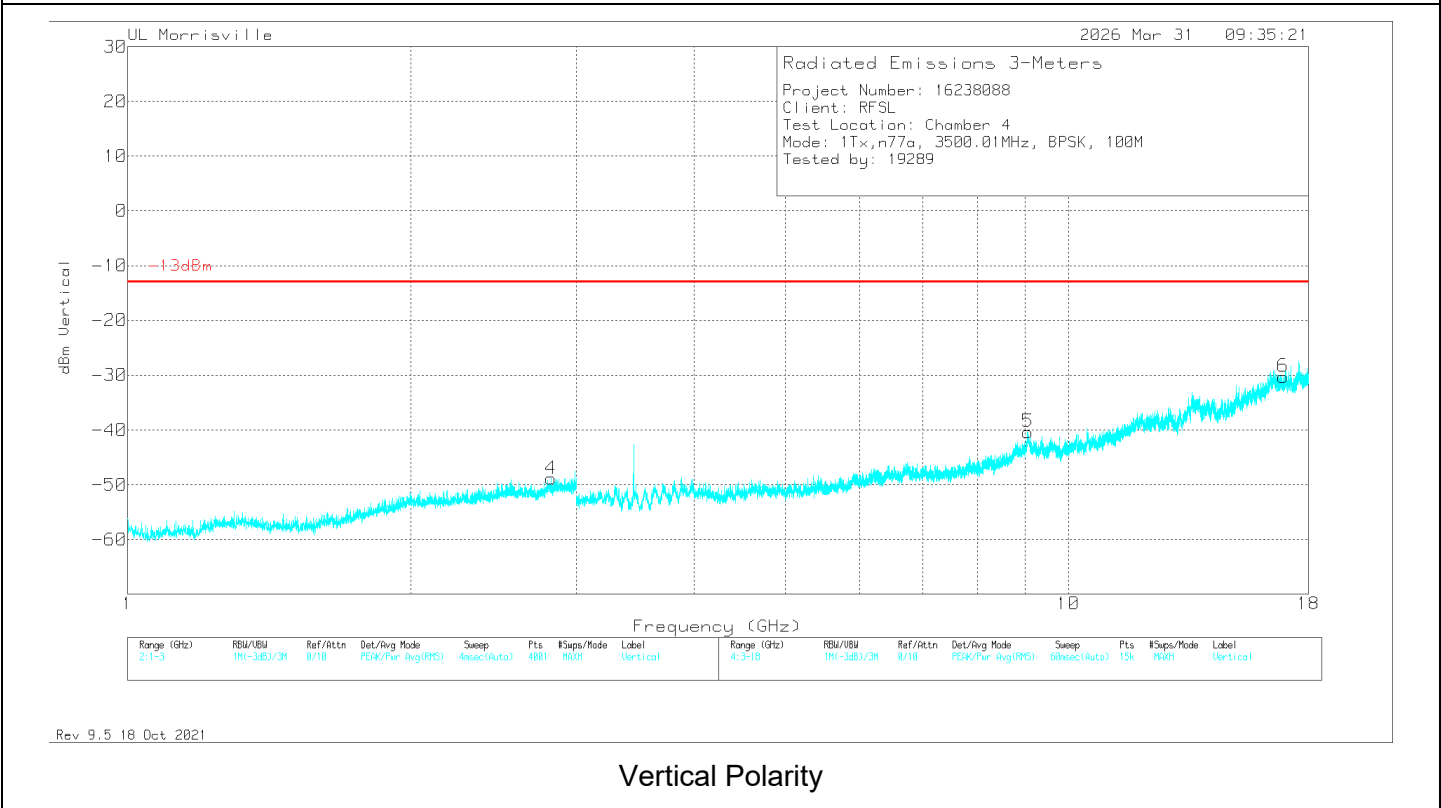
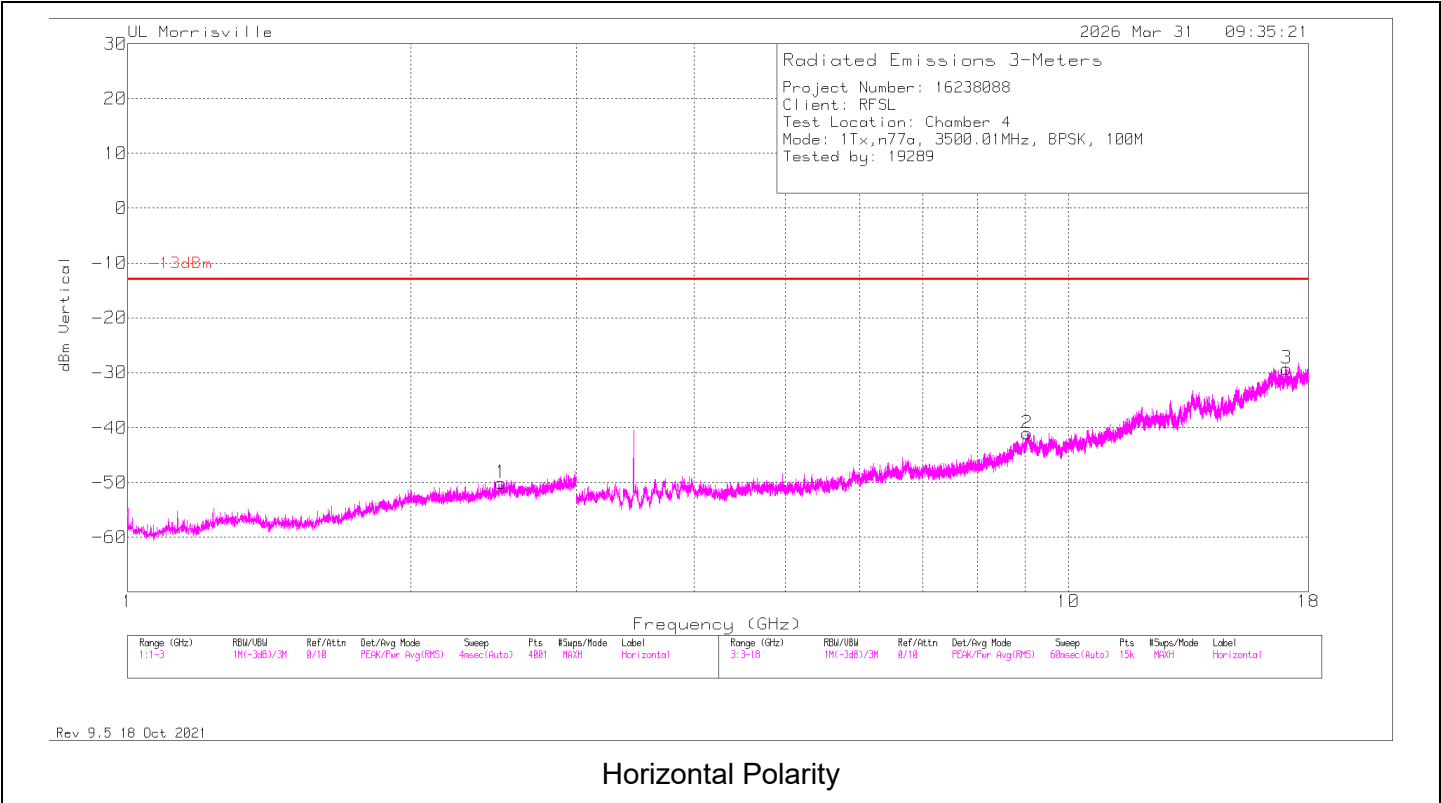
(2) For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.

FCC: §27.53

(l) 3.7 GHz Service. The following emission limits apply to stations transmitting in the 3700-3980 MHz band:

(2) For mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.

Example Plot



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	206211 (dB/m)	Gain/Loss (dB)	CF (dB)	Filter (dB)	Corrected Reading dBm	-13dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.497	-72.62	Pk	32.4	-22.4	11.8	.7	-50.12	-13	-37.12	0-360	100	H
4	2.821	-71.69	Pk	32.4	-21.9	11.8	.5	-48.89	-13	-35.89	0-360	200	V
2	9.036	-66.78	Pk	36	-23.3	11.8	1.2	-41.08	-13	-28.08	0-360	100	H
5	9.058	-66.35	Pk	36	-23.3	11.8	1.5	-40.35	-13	-27.35	0-360	300	V
6	16.909	-67.53	Pk	41.6	-17.4	11.8	1.3	-30.23	-13	-17.23	0-360	200	V
3	17.054	-66.56	Pk	41.4	-17.3	11.8	1.4	-29.26	-13	-16.26	0-360	100	H

TEST PROCEDURE

KDB 971168 D01 /D02

All tests above 1GHz were done with a Resolution Bandwidth of 1MHz, and a Video Bandwidth of 3MHz

RESULTS

9.2.1. 5G NR n77 (FCC Part 27 3450-3550MHz)

QPSK 5G NR n77 (100.0MHZ BANDWIDTH), Config 0

Date:	2026-03-31
Test Engineer:	19289
Configuration:	EUT Only
Mode:	FR1 N77 100MHz BPSK
Chamber #:	Chamber 4

Frequency (MHz)	Meter Reading (dBuV)	Det	206211 ACF (dB/m)	Gain/Loss (dB)	EIRP CF	Filter (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)	Polarity
Mid Channel, 3500.01MHz										
2.497	-72.62	Pk	32.4	-22.4	11.8	.7	-50.12	-13	-37.12	H
2.821	-71.69	Pk	32.4	-21.9	11.8	.5	-48.89	-13	-35.89	V
9.036	-66.78	Pk	36	-23.3	11.8	1.2	-41.08	-13	-28.08	H
9.058	-66.35	Pk	36	-23.3	11.8	1.5	-40.35	-13	-27.35	V
16.909	-67.53	Pk	41.6	-17.4	11.8	1.3	-30.23	-13	-17.23	V
17.054	-66.56	Pk	41.4	-17.3	11.8	1.4	-29.26	-13	-16.26	H

QPSK 5G NR n77 (100.0MHZ BANDWIDTH), Config 1)

Date:	2026-03-27
Test Engineer:	19289
Configuration:	EUT Only
Mode:	FR1 N77 100MHz BPSK
Chamber #:	Chamber 4

Frequency (MHz)	Meter Reading (dBuV)	Det	206211 ACF (dB/m)	Gain/Loss (dB)	EIRP CF	Filter (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)	Polarity
Mid Channel, 3500.01MHz										
5.973	-66.66	Pk	35.1	-28.4	11.8	.5	-47.66	-13	-34.66	V
6.284	-66.73	Pk	35.4	-28.2	11.8	.6	-47.13	-13	-34.13	H
9.073	-66.59	Pk	36	-23.5	11.8	1.6	-40.69	-13	-27.69	V
9.172	-66.08	Pk	36.2	-24.7	11.8	1	-41.78	-13	-28.78	H
16.42	-65.61	Pk	41.1	-17.6	11.8	1.3	-29.01	-13	-16.01	V
16.658	-67.42	Pk	41.5	-17.6	11.8	1.5	-30.22	-13	-17.22	H

SRS QPSK n77 (100.0MHZ BANDWIDTH, ANT A)

Date:	2026-03-27
Test Engineer:	84740/11993
Configuration:	EUT Only
Mode:	FR1 N77 100MHz BPSK
Chamber #:	Chamber 1

Frequency (MHz)	Meter Reading (dBuV)	Det	206211 ACF (dB/m)	Gain/Loss (dB)	EIRP CF	Filter (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)	Polarity
Mid Channel, 3500.01MHz										
5.153	-52.83	Pk	34.3	-43.8	11.8	.5	-50.03	-13	-37.03	H
6.059	-53.72	Pk	35.4	-41.7	11.8	.6	-47.62	-13	-34.62	V
9.656	-55.11	Pk	36.8	-39.9	11.8	.9	-45.51	-13	-32.51	H
9.682	-55.45	Pk	36.8	-40.3	11.8	.6	-46.55	-13	-33.55	V
17.707	-55.45	Pk	41	-35.3	11.8	1.2	-36.75	-13	-23.75	V
17.714	-55.71	Pk	41	-34.9	11.8	1.2	-36.61	-13	-23.61	H

SRS QPSK n77 (100.0MHZ BANDWIDTH, ANT G)

Date:	2026-03-30
Test Engineer:	84740/11993
Configuration:	EUT Only
Mode:	FR1 N77 100MHz BPSK
Chamber #:	Chamber 1

Frequency (MHz)	Meter Reading (dBuV)	Det	206211 ACF (dB/m)	Gain/Loss (dB)	EIRP CF	Filter (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)	Polarity
Mid Channel, 3500.01MHz										
2.8705	-72.45	Pk	32.3	-21.5	11.8	.6	-49.25	-13	-36.25	V
2.8725	-71.83	Pk	32.3	-21.5	11.8	.7	-48.53	-13	-35.53	H
9.042	-66.22	Pk	36	-23.3	11.8	1.3	-40.42	-13	-27.42	V
9.089	-66.06	Pk	36	-23.9	11.8	1.5	-40.66	-13	-27.66	H
17.58	-66.95	Pk	41.2	-15.4	11.8	1.2	-28.15	-13	-15.15	H
17.582	-66.09	Pk	41.2	-15.4	11.8	1.2	-27.29	-13	-14.29	V

UL MIMO QPSK 5G NR n77 (100.0MHZ BANDWIDTH, Config 1 ANT F + G)

Date:	2026-03-30
Test Engineer:	84740/11993
Configuration:	EUT Only
Mode:	FR1 N77 100MHz BPSK
Chamber #:	Chamber 1

Frequency (MHz)	Meter Reading (dBuV)	Det	206211 ACF (dB/m)	Gain/Loss (dB)	EIRP CF	Filter (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)	Polarity
Mid Channel, 3500.01MHz										
2.881	-71.17	Pk	32.3	-21.5	11.8	.7	-47.87	-13	-34.87	V
2.93	-71.78	Pk	32.5	-21.4	11.8	.6	-48.28	-13	-35.28	H
9.057	-66.46	Pk	36	-23.3	11.8	1.5	-40.46	-13	-27.46	H
9.059	-66.72	Pk	36	-23.3	11.8	1.5	-40.72	-13	-27.72	V
16.491	-65.43	Pk	41.2	-17.8	11.8	1.4	-28.83	-13	-15.83	H
17.576	-66.85	Pk	41.2	-15.3	11.8	1.2	-27.95	-13	-14.95	V

9.2.2. 5G NR n77 (FCC Part 27 3700-3980MHz)

QPSK 5G NR n77 (100.0MHZ BANDWIDTH), Config 0

Date:	2026-03-30
Test Engineer:	19289
Configuration:	EUT Only
Mode:	FR1 N77 100MHz BPSK
Chamber #:	Chamber 4

Frequency (MHz)	Meter Reading (dBuV)	Det	206211 ACF (dB/m)	Gain/Loss (dB)	EIRP CF	Filter (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)	Polarity
Low Channel, 3750MHz										
2.8715	-72.16	Pk	32.3	-21.5	11.8	.7	-48.86	-13	-35.86	H
2.886	-71.99	Pk	32.3	-21.4	11.8	.6	-48.69	-13	-35.69	V
9.07	-66.31	Pk	36	-23.5	11.8	1.6	-40.41	-13	-27.41	V
9.079	-66.43	Pk	36	-23.6	11.8	1.6	-40.63	-13	-27.63	H
17.556	-67.03	Pk	41.1	-16	11.8	1.2	-28.93	-13	-15.93	V
17.57	-66.61	Pk	41.1	-15.4	11.8	1.3	-27.81	-13	-14.81	H
Mid Channel, 3840MHz										
2.8075	-72.06	Pk	32.4	-21.4	11.8	.5	-48.76	-13	-35.76	H
2.876	-72.33	Pk	32.3	-21.6	11.8	.7	-49.13	-13	-36.13	V
9.013	-65.84	Pk	36	-23.9	11.8	.9	-41.04	-13	-28.04	H
9.049	-66.59	Pk	36	-23.3	11.8	1.4	-40.69	-13	-27.69	V
17.586	-67.39	Pk	41.2	-15.5	11.8	1.3	-28.59	-13	-15.59	V
17.608	-66.45	Pk	41.2	-16.2	11.8	1.3	-28.35	-13	-15.35	H
High Channel, 3930MHz										
2.32983	-61.87	Pk	31.9	-35.8	11.8	.5	-53.47	-13	-40.47	H
2.42163	-62.08	Pk	32.1	-35.5	11.8	.7	-52.98	-13	-39.98	V
10.94964	-66.47	Pk	37.7	-22.7	11.8	.7	-38.97	-13	-25.97	V
10.96868	-66.33	Pk	37.7	-22.8	11.8	.5	-39.13	-13	-26.13	H
17.03054	-66.48	Pk	41.4	-16.6	11.8	1.1	-28.78	-13	-15.78	V
17.93098	-65.69	Pk	41.1	-15.6	11.8	.7	-27.69	-13	-14.69	H

QPSK 5G NR n77 (100.0MHZ BANDWIDTH, Config 1)

Date:	20205-10-11
Test Engineer:	112113, 11993
Configuration:	EUT Only
Mode:	FR1 N77 100MHz BPSK
Chamber #:	Chamber 4

Frequency (MHz)	Meter Reading (dBuV)	Det	206211 ACF (dB/m)	Gain/Loss (dB)	EIRP CF	Filter (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)	Polarity
Low Channel, 3750MHz										
2.848	-72.38	Pk	32.3	-21.4	11.8	.6	-49.08	-13	-36.08	H
2.921	-72.06	Pk	32.5	-21.3	11.8	.6	-48.46	-13	-35.46	V
9.038	-66.33	Pk	36	-23.3	11.8	1.2	-40.63	-13	-27.63	V
9.116	-65.56	Pk	36.1	-24.2	11.8	1.2	-40.66	-13	-27.66	H
17.57	-67.09	Pk	41.1	-15.4	11.8	1.3	-28.29	-13	-15.29	V
17.584	-66.84	Pk	41.2	-15.4	11.8	1.2	-28.04	-13	-15.04	H
Mid Channel, 3840MHz										
2.0315	-71.17	Pk	31.7	-23.1	11.8	.7	-50.07	-13	-37.07	H
2.178	-72.62	Pk	31.6	-22.5	11.8	.7	-51.02	-13	-38.02	V
9.039	-66.69	Pk	36	-23.3	11.8	1.2	-40.99	-13	-27.99	V
9.081	-65.5	Pk	36	-23.6	11.8	1.6	-39.7	-13	-26.7	H
16.499	-66.54	Pk	41.2	-17.7	11.8	1.5	-29.74	-13	-16.74	V
16.509	-65.28	Pk	41.2	-17.4	11.8	1.6	-28.08	-13	-15.08	H
High Channel, 3930MHz										
2.0302	-61.87	Pk	31.7	-35.8	11.8	.3	-53.87	-13	-40.87	V
2.51215	-62.41	Pk	32.4	-35.7	11.8	.7	-53.21	-13	-40.21	H
8.97821	-66.31	Pk	36	-24.6	11.8	.6	-42.51	-13	-29.51	V
10.00955	-66.32	Pk	37.1	-24.3	11.8	.7	-41.02	-13	-28.02	H
17.04244	-65.99	Pk	41.4	-16.3	11.8	1.1	-27.99	-13	-14.99	H
17.62396	-66.2	Pk	41.2	-16.2	11.8	.8	-28.6	-13	-15.6	V

SRS QPSK n77 (100.0MHZ BANDWIDTH, Ant A)

Date:	2026-03-27
Test Engineer:	84740/11993
Configuration:	EUT Only
Mode:	FR1 N77 100MHz BPSK
Chamber #:	Chamber 4

Frequency (MHz)	Meter Reading (dBuV)	Det	206211 ACF (dB/m)	Gain/Loss (dB)	EIRP CF	Filter (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)	Polarity
Low Channel, 3750MHz										
2.688	-71.74	Pk	32	-21.6	11.8	.5	-49.04	-13	-36.04	H
2.7055	-71.83	Pk	31.7	-21.6	11.8	.6	-49.33	-13	-36.33	V
9.055	-66.26	Pk	36	-23.2	11.8	1.5	-40.16	-13	-27.16	H
9.089	-65.45	Pk	36	-23.9	11.8	1.5	-40.05	-13	-27.05	V
16.373	-65.11	Pk	41	-18.3	11.8	1.5	-29.11	-13	-16.11	V
16.519	-65.63	Pk	41.2	-17.3	11.8	1.5	-28.43	-13	-15.43	H
Mid Channel, 3840MHz										
2.858	-72.17	Pk	32.3	-21.6	11.8	.7	-48.97	-13	-35.97	V
2.9135	-71.56	Pk	32.4	-21.3	11.8	.6	-48.06	-13	-35.06	H
9.054	-67.06	Pk	36	-23.2	11.8	1.5	-40.96	-13	-27.96	V
9.06	-66.46	Pk	36	-23.3	11.8	1.6	-40.36	-13	-27.36	H
16.404	-64.89	Pk	41.1	-17.8	11.8	1.4	-28.39	-13	-15.39	H
17.041	-65.97	Pk	41.4	-16.7	11.8	1.4	-28.07	-13	-15.07	V
High Channel, 3930MHz										
7.11705	-67.19	Pk	35.5	-26.1	11.8	.7	-45.29	-13	-32.29	H
7.17338	-66.84	Pk	35.5	-26.8	11.8	.6	-45.74	-13	-32.74	V
13.5129	-63.7	Pk	38.7	-21.3	11.8	.7	-33.8	-13	-20.8	V
13.5732	-64.43	Pk	38.6	-21.3	11.8	.8	-34.53	-13	-21.53	H
16.46014	-66.82	Pk	41.1	-16.7	11.8	.9	-29.72	-13	-16.72	V
16.46331	-65.7	Pk	41.1	-16.7	11.8	.9	-28.6	-13	-15.6	H

SRS QPSK n77 (100.0MHZ BANDWIDTH, Ant G)

Date:	2026-03-27
Test Engineer:	84740/11993
Configuration:	EUT Only
Mode:	FR1 N77 100MHz BPSK
Chamber #:	Chamber 4

Frequency (MHz)	Meter Reading (dBuV)	Det	206211 ACF (dB/m)	Gain/Loss (dB)	EIRP CF	Filter (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)	Polarity
Low Channel, 3750MHz										
2.477	-71.06	Pk	32.3	-22.2	11.8	.7	-48.46	-13	-35.46	V
2.891	-72.12	Pk	32.3	-21.3	11.8	.6	-48.72	-13	-35.72	H
9.066	-66.53	Pk	36	-23.5	11.8	1.6	-40.63	-13	-27.63	H
9.072	-66.26	Pk	36	-23.5	11.8	1.6	-40.36	-13	-27.36	V
17.538	-67.14	Pk	41.1	-16	11.8	1.2	-29.04	-13	-16.04	V
17.574	-67.34	Pk	41.1	-15.3	11.8	1.2	-28.54	-13	-15.54	H
Mid Channel, 3840MHz										
2.88	-71.6	Pk	32.3	-21.5	11.8	.7	-48.3	-13	-35.3	V
2.939	-71.84	Pk	32.5	-21.3	11.8	.5	-48.34	-13	-35.34	H
9.06	-66.68	Pk	36	-23.3	11.8	1.6	-40.58	-13	-27.58	H
9.063	-66.38	Pk	36	-23.4	11.8	1.6	-40.38	-13	-27.38	V
16.511	-66.05	Pk	41.2	-17.4	11.8	1.5	-28.95	-13	-15.95	V
17.021	-66.66	Pk	41.5	-16.7	11.8	1.3	-28.76	-13	-15.76	H
High Channel, 3930MHz										
2.04933	-61.42	Pk	31.7	-35.6	11.8	.4	-53.12	-13	-40.12	H
2.2444	-62.26	Pk	31.6	-35.6	11.8	.5	-53.96	-13	-40.96	V
9.04089	-66.32	Pk	36	-24	11.8	.6	-41.92	-13	-28.92	H
9.44866	-65.53	Pk	36.5	-24.2	11.8	.6	-40.83	-13	-27.83	V
16.46172	-66.03	Pk	41.1	-16.7	11.8	.9	-28.93	-13	-15.93	H
17.52162	-65.19	Pk	41	-16.9	11.8	.9	-28.39	-13	-15.39	V

UL MIMO QPSK 5G NR n77 (100.0MHZ BANDWIDTH, Config 1 ANT F + G)

Date:	2026-04-02
Test Engineer:	84740/11993
Configuration:	EUT Only
Mode:	FR1 N77 100MHz BPSK
Chamber #:	Chamber 1

Frequency (MHz)	Meter Reading (dBuV)	Det	206211 ACF (dB/m)	Gain/Loss (dB)	EIRP CF	Filter (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)	Polarity
Low Channel, 3750MHz										
2.939	-72.79	Pk	32.5	-21.3	11.8	.5	-49.29	-13	-36.29	V
2.9525	-72	Pk	32.6	-21.2	11.8	.6	-48.2	-13	-35.2	H
9.036	-65.73	Pk	36	-23.3	11.8	1.2	-40.03	-13	-27.03	H
9.071	-64.46	Pk	36	-23.5	11.8	1.6	-38.56	-13	-25.56	V
17.582	-66.52	Pk	41.2	-15.4	11.8	1.2	-27.72	-13	-14.72	H
17.582	-67.27	Pk	41.2	-15.4	11.8	1.2	-28.47	-13	-15.47	V
Mid Channel, 3840MHz										
2.8315	-70.6	Pk	32.4	-21.8	11.8	.5	-47.7	-13	-34.7	V
2.848	-71.99	Pk	32.3	-21.4	11.8	.6	-48.69	-13	-35.69	H
9.059	-66.38	Pk	36	-23.3	11.8	1.5	-40.38	-13	-27.38	H
9.067	-66.4	Pk	36	-23.5	11.8	1.6	-40.5	-13	-27.5	V
17.619	-66.66	Pk	41.2	-16.4	11.8	1.3	-28.76	-13	-15.76	V
17.836	-66.79	Pk	41.2	-16.2	11.8	1.2	-28.79	-13	-15.79	H
High Channel, 3930MHz										
2.93163	-62.51	Pk	32.5	-35.1	11.8	1.9	-51.41	-13	-38.41	V
2.94438	-62.39	Pk	32.5	-34.9	11.8	1.9	-51.09	-13	-38.09	H
9.05041	-66.93	Pk	36	-24	11.8	.6	-42.53	-13	-29.53	V
9.07738	-66.72	Pk	36	-24.4	11.8	.7	-42.62	-13	-29.62	H
16.48235	-65.17	Pk	41.2	-16.9	11.8	.8	-28.27	-13	-15.27	H
16.49108	-66.97	Pk	41.2	-17	11.8	.8	-30.17	-13	-17.17	V

10. SETUP PHOTOS

Refer to R16238088-EP1 for setup photos.

END OF REPORT