FCC RF Test Report

APPLICANT	: Sonim Technologies, Inc.
EQUIPMENT	: Smartphone
BRAND NAME	: Sonim
MODEL NAME	: X802
FCC ID	: WYPS3111
STANDARD	: 47 CFR Part 27 Subpart Q
CLASSIFICATION	: PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S)	: Nov. 17, 2024 ~ Apr. 23, 2025

We, Sporton International Inc. (Kunshan), would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

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The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Kunshan), the test report shall not be reproduced except in full.

Jason Jia

Approved by: Jason Jia

ACCREDITED Cert #5145.02

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG4O2403U	Rev. 01	Initial issue of report	May 22, 2025
FG4O2403U	Rev. 02	Updated Conducted power for 5G NR n77/78 main PA This report is an updated version, replacing the report issued on May 22, 2025	Jun. 26, 2025

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	—	PASS	-
3.5	§27.50 (k)(4)	Peak-to-Average Ratio	<13dB	PASS	-
3.6	§27.50 (k)(3)	EIRP	EIRP < 1W (30dBm)	PASS	-
3.7	§2.1049	Occupied Bandwidth	—	PASS	-
3.8	§2.1051 §27.53 (n)(2)	Conducted Band Edge Measurement	-13dBm/MHz	PASS	-
3.9	§2.1051 §27.53 (n)(2)	Conducted Spurious Emission	-13dBm/MHz	PASS	-
3.10	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within the band	PASS	-
4.4	§2.1053 §27.53 (n)(2)	Radiated Spurious Emission	-13dBm/MHz	PASS	Under limit 30.16 dB at 6902.420 MHz

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section “Measurement Uncertainty”

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

1 General Description

1.1 Applicant

Sonim Technologies, Inc.
4445 Eastgate Mall,Suite200,San Diego,CA92121,USA

1.2 Manufacturer

Sonim Technologies, Inc.
4445 Eastgate Mall,Suite200,San Diego,CA92121,USA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Smartphone
Brand Name	Sonim
Model Name	X802
FCC ID	WYPS3111
HW Version	V1.0
SW Version	X80.0-01-14.0-42.18.00
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Product Specification of Equipment Under Test

Product Feature	
Tx/Rx Frequency	5G NR n77: 3450 MHz ~ 3550 MHz 5G NR n78: 3450 MHz ~ 3550 MHz
SCS	30kHz
Bandwidth	n77: 20 / 30 / 40 / 60 / 80 / 100MHz n78: 20 / 30 / 40 / 50 / 60 / 70 / 80 / 90 / 100MHz
Antenna Gain	**<Ant. 3>** 5G NR n77: -2.01 dBi 5G NR n78: -2.01 dBi **<Ant. 4>** 5G NR n77: -1.20 dBi 5G NR n78: -1.20 dBi **<Ant. 6>** 5G NR n77: -5.30 dBi 5G NR n78: -5.30 dBi **<Ant. 7>** 5G NR n77: -2.01 dBi 5G NR n78: -2.01 dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

Remark:

1. The maximum EIRP is calculated from max output power and max antenna gain, only the maximum EIRP is shown in the report, 5G NR n77/n78 for Antenna 4.
2. The device supports two PAs for 5G NR n77 (main PA, and other PA for NSA mode only), both the PAs are full tested.
3. 5G NR n77/n78 main PA support SA and NSA mode, according to the maximum power between SA and NSA mode, SA covers NSA mode for main PA.
4. 5G NR n77/n78 Single Carrier supports PC2 and UL MIMO mode supports PC2.
5. 5G NR n77/n78 supports UL MIMO mode for Ant.(3+7).
6. 5G NR n77/n78 UL_MIMO mode only supports CP-OFDM Modulation, the MIMO mode is completely uncorrelated, so the directional gain is selected the maximum gain among all antennas.
7. For UL MIMO mode, the conducted BE/Spurious are tested at single antenna port and add 10*log(N_{ANT}) according to KDB 662911 D01.
8. All the supported EN-DC combinations are verified conducted power, only the EN-DC combination with highest power are shown in the report.
9. The EN-DC mode combination could be referred to the product spec.

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Maximum EIRP Power and Emission Designator

5G NR n77 SA main PA		PI/2 BPSK / QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	3460.02 ~ 3540.00	0.3899	18M2G7D	0.2655	18M3W7D
30	3465.00 ~ 3534.99	0.4315	27M8G7D	0.2483	27M9W7D
40	3470.01 ~ 3529.98	0.4018	37M8G7D	0.2642	37M9W7D
60	3480.00 ~ 3519.99	0.3945	57M8G7D	0.2612	57M8W7D
80	3490.02 ~ 3510.00	0.3936	77M4G7D	0.2661	77M6W7D
100	3500.01	0.4036	97M4G7D	0.2831	97M6W7D

EN-DC_5A_n77A other PA		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	3460.02 ~ 3540.00	0.2742	18M2G7D	0.1667	18M2W7D
30	3465.00 ~ 3534.99	0.2917	27M8G7D	0.1820	27M9W7D
40	3470.01 ~ 3529.98	0.2818	37M8G7D	0.1738	37M9W7D
60	3480.00 ~ 3519.99	0.2864	57M9G7D	0.1758	57M8W7D
80	3490.02 ~ 3510.00	0.2931	77M6G7D	0.1879	77M5W7D
100	3500.01	0.2773	97M3G7D	0.1734	97M4W7D

5G NR n78 SA		PI/2 BPSK / QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	3460.02 ~ 3540.00	0.4159	18M2G7D	0.2748	18M3W7D
30	3465.00 ~ 3534.99	0.4256	27M8G7D	0.2812	27M9W7D
40	3470.01 ~ 3529.98	0.4295	37M8G7D	0.2748	37M9W7D
50	3475.02 ~ 3525.00	0.3963	47M5G7D	0.2773	47M5W7D
60	3480.00 ~ 3519.99	0.4046	57M8G7D	0.2729	57M8W7D
70	3485.01 ~ 3514.98	0.3926	67M5G7D	0.2773	67M5W7D
80	3490.02 ~ 3510.00	0.3899	77M4G7D	0.2838	77M6W7D
90	3495.00 ~ 3504.99	0.3882	87M6G7D	0.2649	87M8W7D
100	3500.01	0.4169	97M4G7D	0.2844	97M6W7D

5G NR n77 UL MIMO		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	3460.02 ~ 3540.00	0.2359	18M2G7D	0.1927	18M3W7D
30	3465.00 ~ 3534.99	0.2072	27M8G7D	0.1814	27M9W7D
40	3470.01 ~ 3529.98	0.2106	37M8G7D	0.1833	38M0W7D
60	3480.00 ~ 3519.99	0.1989	57M9G7D	0.1718	57M9W7D
80	3490.02 ~ 3510.00	0.1961	77M5G7D	0.1674	77M5W7D
100	3500.01	0.1843	97M3G7D	0.1643	97M5W7D

5G NR n78 UL MIMO		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	3460.02 ~ 3540.00	0.2323	18M2G7D	0.1891	18M3W7D
30	3465.00 ~ 3534.99	0.2061	27M8G7D	0.1814	27M9W7D
40	3470.01 ~ 3529.98	0.2056	37M8G7D	0.1795	38M0W7D
50	3475.02 ~ 3525.00	0.2034	47M4G7D	0.1809	47M5W7D
60	3480.00 ~ 3519.99	0.1949	57M9G7D	0.1692	57M9W7D
70	3485.01 ~ 3514.98	0.1919	67M5G7D	0.1648	67M6W7D
80	3490.02 ~ 3510.00	0.1948	77M5G7D	0.1648	77M5W7D
90	3495.00 ~ 3504.99	0.1773	87M6G7D	0.1520	87M5W7D
100	3500.01	0.1850	97M3G7D	0.1653	97M5W7D

Note:

1. 5G NR Band n77 overlaps the entire frequency range of Band n78, therefore the conducted test results of n77 provided in this report cover n78 except for Bandwidth of 50/70/90MHz.
2. All modulations have been tested, and only the worst test results of PSK & QAM are shown in the report.

1.7 Testing Site

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	TH01-KS	CN1257	314309

Sporton International Inc. (ShenZhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH01-SZ	CN1256	421272

Test data subcontracted: Radiated Spurious Emission test case in section 4.4 of this report

1.8 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH01-SZ	AUDIX	E3	6.2009-8-24

1.9 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR Part 27 Subpart Q
- ANSI C63.26-2015
- FCC KDB 971168 Power Meas License Digital Systems D01 v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

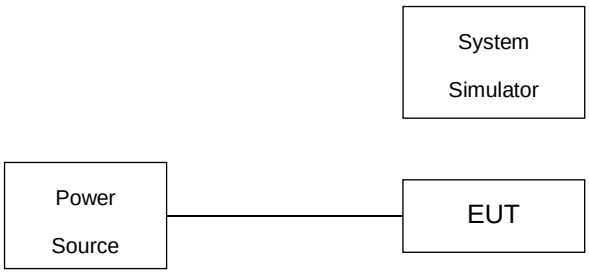
2.1 Test Mode

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

Test Items	5G NR	Bandwidth (MHz)										Modulation					RB #		Test Channel		
		10	20	30	40	50	60	70	80	90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256 QAM	1	Full	L	M	H
Max. Output Power	n77	-	v	v	v	-	v	-	v	-	v	v	v	v	v	v	v	v	v	v	v
	n78	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	n77	-	v			-		-		-		v	v				v	v		v	
	n78	-	v									v	v				v	v		v	
26dB and 99% Bandwidth	n77	-	v	v	v	-	v	-	v	-	v		v	v	v	v		v		v	
	n78	-				v		v		v			v	v	v	v		v		v	
Conducted Band Edge	n77	-	v			-	v	-		-	v	v	v				v	v	v		v
	n78	-				v		v		v		v	v				v	v	v		v
Conducted Spurious Emission	n77	-	v			-	v	-		-	v	v	v				v		v	v	v
	n78	-				v		v		v		v	v				v		v	v	v
Frequency Stability	n77	-	v			-		-		-			v					v		v	
	n78	-	v										v					v		v	
E.I.R.P	n77	-	v	v	v	-	v	-	v	-	v	v	v	v	v	v	v	v	v	v	v
	n78	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	n77	Worst Case																		v	
Note	1. The mark "**v** " means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. 4. Frequency Stability：Normal Voltage = 3.87V ；Low Voltage =3.65V. ；High Voltage =4.45V																				

2.2 Connection Diagram of Test System



This example is connection diagram of EUT test configurations.

. For detail, please refer to test mode configuration and setup photographs for each test item.

2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	Power Supply	GWINSTEK	PSS-2002	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
3.	NR Base Station	Anritsu	MT8000A	N/A	N/A	Unshielded, 1.8 m

2.4 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 6.5 dB and 20dB attenuator.

Example :

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

=6.5 + 20 = 26.5 (dB)

2.5 Frequency List of Low/Middle/High Channels

5G n77 Channel and Frequency List for SCS 30kHz				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
100	Channel	-	633334	-
	Frequency	-	3500.01	-
80	Channel	632668	633334	634000
	Frequency	3490.02	3500.01	3510
60	Channel	632000	633334	634666
	Frequency	3480	3500.01	3519.99
40	Channel	631334	633334	635332
	Frequency	3470.01	3500.01	3529.98
30	Channel	631000	633334	635666
	Frequency	3465	3500.01	3534.99
20	Channel	630668	633334	636000
	Frequency	3460.02	3500.01	3540

5G n78 Channel and Frequency List for SCS 30kHz				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
100	Channel	-	633334	-
	Frequency	-	3500.01	-
90	Channel	633000	633334	633666
	Frequency	3495	3500.01	3504.99
80	Channel	632668	633334	634000
	Frequency	3490.02	3500.01	3510
70	Channel	632334	633334	634332
	Frequency	3485.01	3500.01	3514.98
60	Channel	632000	633334	634666
	Frequency	3480	3500.01	3519.99
50	Channel	631668	633334	635000
	Frequency	3475.02	3500.01	3525
40	Channel	631334	633334	635332
	Frequency	3470.01	3500.01	3529.98
30	Channel	631000	633334	635666
	Frequency	3465	3500.01	3534.99
20	Channel	630668	633334	636000
	Frequency	3460.02	3500.01	3540

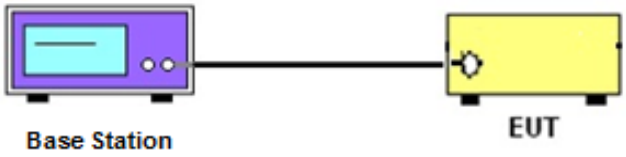
3 Conducted Test Items

3.1 Measuring Instruments

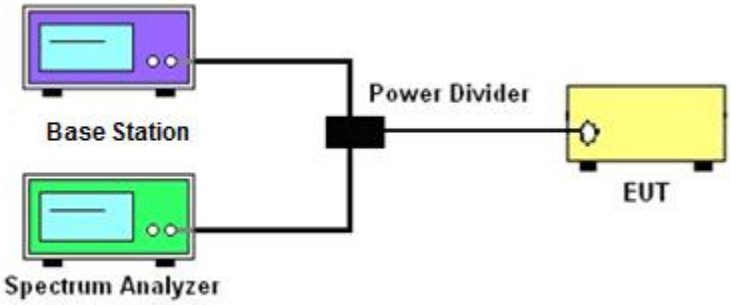
See list of measuring instruments of this test report.

3.2 Test Setup

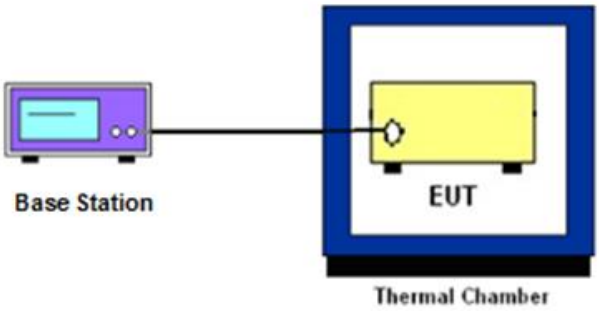
3.2.1 Conducted Output Power



3.2.2 Peak-to-Average Ratio, Occupied / 26dB Bandwidth, Band-Edge and Conducted Spurious Emission



3.2.3 Frequency Stability



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power Measurement

3.4.1 Description of the Conducted Output Power Measurement

A base station simulator was used to establish communication with the EUT. Its parameters were set to transmit the maximum power on the EUT. The measured power in the radio frequency on the transmitter output terminals shall be reported.

3.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter output port was connected to the system simulator.
3. Set EUT at maximum power through the system simulator.
4. Select lowest, middle, and highest channels for each band and different modulation.
5. Measure and record the power level from the system simulator.

3.5 Peak-to-Average Ratio

3.5.1 Description of the PAR Measurement

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. 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.

3.5.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2.3.4 (CCDF).
2. The EUT was connected to spectrum and system simulator via a power divider.
3. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
4. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
5. Record the deviation as Peak to Average Ratio.

3.6 EIRP

3.6.1 Description of EIRP Limit

§ 27.50 (k)(3)

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

3.6.2 Test Procedures

1. According to KDB 412172 D01 Power Approach,
2. EIRP = $P_T + G_T – L_C$, ERP = EIRP -2.15, where

   P_T = transmitter output power in dBm

   G_T = gain of the transmitting antenna in dBi

   L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

3.7 Occupied Bandwidth

3.7.1 Description of Occupied Bandwidth Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

3.7.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.4
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
4. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
5. Set the detection mode to peak, and the trace mode to max hold.
6. Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace. (this is the reference value)
7. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
8. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “–X dB down amplitude” determined in step 6. If a marker is below this “-X dB down amplitude” value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.
9. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

3.8 Conducted Band Edge Measurement

3.8.1 Description of Conducted Band Edge Measurement

§ 27.53 (n)(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 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.

3.8.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW ≥ 1% EBW but limited to a maximum of 200 kHz in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz and 5 MHz removed from the band edge, set RBW ≥ 500KHz.
6. Beyond the 5 MHz removed from the band edge, set RBW = 1MHz.
7. Set spectrum analyzer with RMS detector.
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
9. Checked that all the results comply with the emission limit line.

3.9 Conducted Spurious Emission Measurement

3.9.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges shall not exceed −13 dBm/MHz.

It is measured by means of a calibrated spectrum analyzer and scanned from 9 kHz up to a frequency including its 10th harmonic.

3.9.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
7. Set spectrum analyzer with RMS detector.
8. Taking the record of maximum spurious emission.
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
10. Checked that all the results comply with the emission limit line.

3.10 Frequency Stability Measurement

3.10.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block.

3.10.2 Test Procedures for Temperature Variation

1. The testing follows ANSI C63.26 section 5.6.4
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
4. With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

3.10.3 Test Procedures for Voltage Variation

1. The testing follows ANSI C63.26 section 5.6.5.
2. The EUT was placed in a temperature chamber at 20±5°C and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value for other than hand carried battery equipment.
4. For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.
5. The variation in frequency was measured for the worst case.

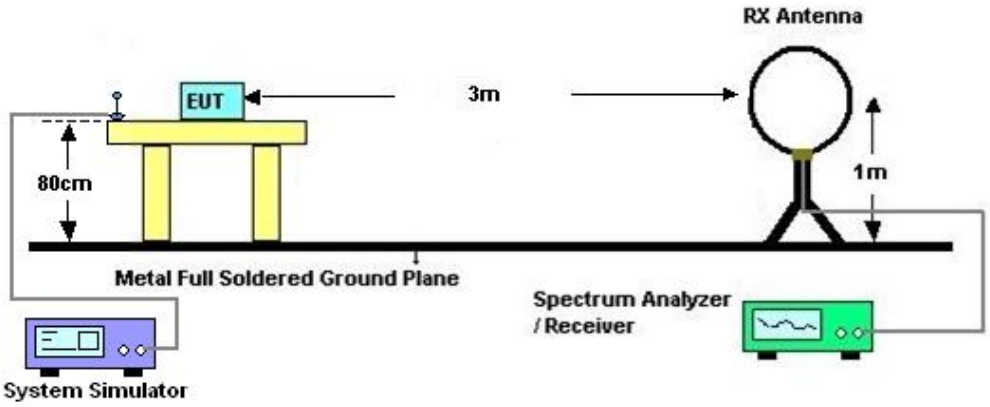
4 Radiated Test Items

4.1 Measuring Instruments

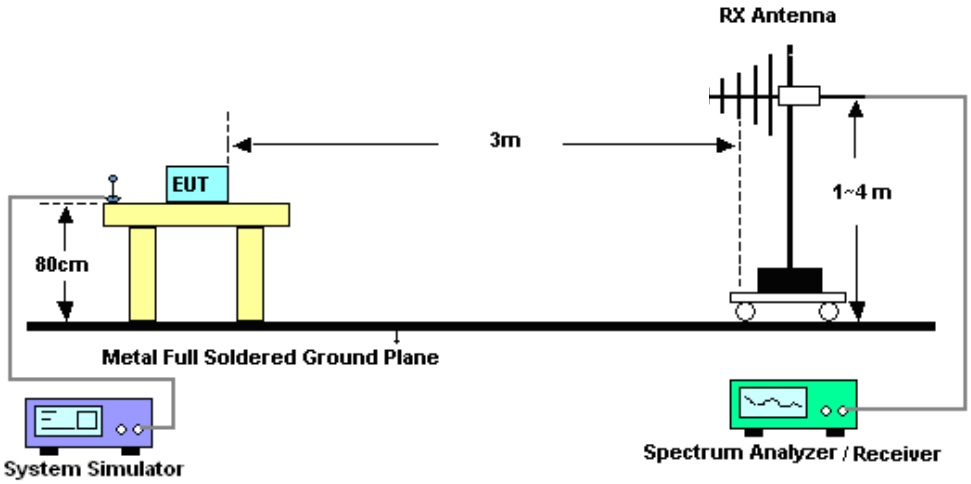
See list of measuring instruments of this test report.

4.2 Test Setup

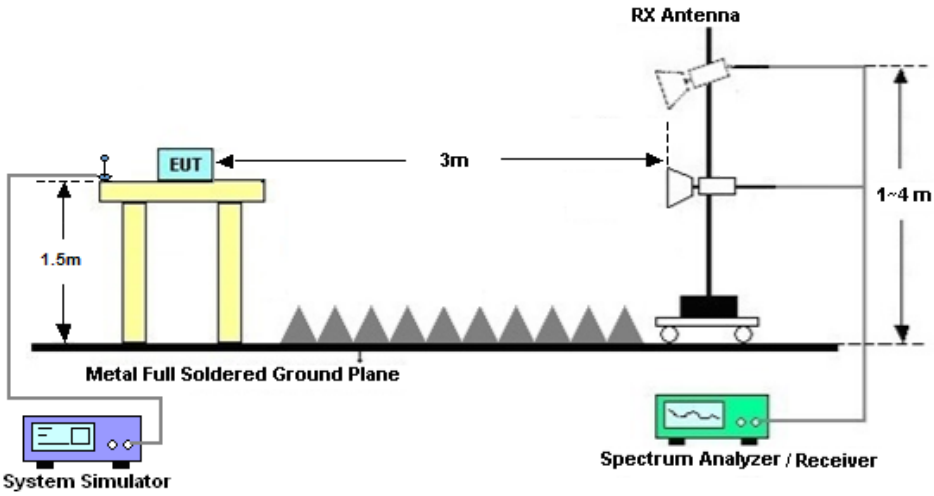
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3 Test Result of Radiated Test

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

Please refer to Appendix B.

4.4 Radiated Spurious Emission Measurement

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26. The power of any emission outside of the authorized operating frequency ranges shall not exceed −13 dBm/MHz.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
   EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
   ERP (dBm) = EIRP - 2.15
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 10, 2024	Nov. 17, 2024~ Apr. 23, 2025	Oct. 09, 2025	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	Nov. 17, 2024~ Apr. 23, 2025	NCR	Conducted (TH01-KS)
Temperature &humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 04, 2024	Nov. 17, 2024~ Apr. 23, 2025	Jul. 03, 2025	Conducted (TH01-KS)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 03, 2024	Feb. 10, 2025	Jul. 02, 2025	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2E	101141	9kHz~30MHz	Dec. 28, 2024	Feb. 10, 2025	Dec. 27, 2025	Radiation (03CH01-SZ)
HF Amplifier	KEYSIGHT	83017A	MY532701005	0.5GHz~26.5Ghz	Oct. 14, 2024	Feb. 10, 2025	Oct. 13, 2025	Radiation (03CH01-SZ
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Oct. 24, 2023	Feb. 10, 2025	Oct. 23, 2025	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 04, 2024	Feb. 10, 2025	Jul. 03, 2025	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 09, 2024	Feb. 10, 2025	Apr. 08, 2025	Radiation (03CH01-SZ)
LF Amplifier	EM Electronics	EM330	060788	20MHz-3GHz	Dec. 25, 2024	Feb. 10, 2025	Dec. 24, 2025	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	AMF-7D-00101800-30-10P-R	1943528	1GHz~18GHz	Oct. 14, 2024	Feb. 10, 2025	Oct. 13, 2025	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 03, 2024	Feb. 10, 2025	Jul. 02, 2025	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	Oct. 14, 2024	Feb. 10, 2025	Oct. 13, 2025	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Feb. 10, 2025	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Feb. 10, 2025	NCR	Radiation (03CH01-SZ)

NCR: No Calibration Required

6 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Spurious Emission & Bandedge	±2.22 dB
Occupied Channel Bandwidth	±0.1%
Conducted Power	±0.50 dB
Peak to Average Ratio	±0.90 dB
Frequency Stability	±0.04ppm

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.48 dB

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.53 dB

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.02 dB

---------- THE END ----------

Appendix A. Test Results of Conducted Test

Test Engineer :	Simle Wang	**Temperature :**	22~23℃
		Relative Humidity :	40~42%

Software Version: 23.06.1602

FR1 N77 Ant.4

Transmitter Conducted Output Power And EIRP, (G_T - L_C)= -1.2dBi

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	135@67	27.15	25.95	0.3936
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	26.72	25.52	0.3565
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@271	27.26	26.06	0.4036
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	135@67	26.4	25.2	0.3311
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@1	26	24.8	0.3020
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@271	26.29	25.09	0.3228
77	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	135@67	25.44	24.24	0.2655
77	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.98	23.78	0.2388
77	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@271	25.26	24.06	0.2547
77	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	135@67	24.01	22.81	0.1910
77	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	23.37	22.17	0.1648
77	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@271	23.64	22.44	0.1754
77	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	135@67	22.53	21.33	0.1358
77	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	21.96	20.76	0.1191
77	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@271	22.26	21.06	0.1276
77	30	100	633334	3500.01	CP-OFDM QPSK	137@68	24.72	23.52	0.2249
77	30	100	633334	3500.01	CP-OFDM QPSK	1@1	24.44	23.24	0.2109
77	30	100	633334	3500.01	CP-OFDM QPSK	1@271	24.71	23.51	0.2244
77	30	20	630668	3460.02	DFT-s-OFDM PI/2 BPSK	1@1	27.05	25.85	0.3846
77	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@1	26.04	24.84	0.3048
77	30	20	630668	3460.02	DFT-s-OFDM 16 QAM	1@1	25.15	23.95	0.2483
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.11	25.91	0.3899
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.07	24.87	0.3069
77	30	20	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.11	23.91	0.2460
77	30	20	636000	3540	DFT-s-OFDM PI/2 BPSK	1@1	26.9	25.7	0.3715
77	30	20	636000	3540	DFT-s-OFDM QPSK	1@1	25.84	24.64	0.2911
77	30	20	636000	3540	DFT-s-OFDM 16 QAM	1@1	24.88	23.68	0.2333
77	30	30	631000	3465	DFT-s-OFDM PI/2 BPSK	1@1	27.21	26.01	0.3990
77	30	30	631000	3465	DFT-s-OFDM QPSK	1@1	26.29	25.09	0.3228
77	30	30	631000	3465	DFT-s-OFDM 16 QAM	1@1	25.39	24.19	0.2624
77	30	30	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.55	26.35	0.4315
77	30	30	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.32	25.12	0.3251
77	30	30	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.42	24.22	0.2642
77	30	30	635666	3534.99	DFT-s-OFDM PI/2 BPSK	1@1	27.13	25.93	0.3917

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
77	30	30	635666	3534.99	DFT-s-OFDM QPSK	1@1	26.08	24.88	0.3076
77	30	30	635666	3534.99	DFT-s-OFDM 16 QAM	1@1	25.08	23.88	0.2443
77	30	40	631334	3470.01	DFT-s-OFDM PI/2 BPSK	1@1	27.15	25.95	0.3936
77	30	40	631334	3470.01	DFT-s-OFDM QPSK	1@1	26.18	24.98	0.3148
77	30	40	631334	3470.01	DFT-s-OFDM 16 QAM	1@1	25.28	24.08	0.2559
77	30	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.24	26.04	0.4018
77	30	40	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.26	25.06	0.3206
77	30	40	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.34	24.14	0.2594
77	30	40	635332	3529.98	DFT-s-OFDM PI/2 BPSK	1@1	27.12	25.92	0.3908
77	30	40	635332	3529.98	DFT-s-OFDM QPSK	1@1	26.27	25.07	0.3214
77	30	40	635332	3529.98	DFT-s-OFDM 16 QAM	1@1	25.37	24.17	0.2612
77	30	60	632000	3480	DFT-s-OFDM PI/2 BPSK	1@1	27.03	25.83	0.3828
77	30	60	632000	3480	DFT-s-OFDM QPSK	1@1	26.15	24.95	0.3126
77	30	60	632000	3480	DFT-s-OFDM 16 QAM	1@1	25.26	24.06	0.2547
77	30	60	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.16	25.96	0.3945
77	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.33	25.13	0.3258
77	30	60	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.45	24.25	0.2661
77	30	60	634666	3519.99	DFT-s-OFDM PI/2 BPSK	1@1	26.98	25.78	0.3784
77	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@1	26.08	24.88	0.3076
77	30	60	634666	3519.99	DFT-s-OFDM 16 QAM	1@1	25.17	23.97	0.2495
77	30	80	632668	3490.02	DFT-s-OFDM PI/2 BPSK	1@1	26.82	25.62	0.3648
77	30	80	632668	3490.02	DFT-s-OFDM QPSK	1@1	26.26	25.06	0.3206
77	30	80	632668	3490.02	DFT-s-OFDM 16 QAM	1@1	25.34	24.14	0.2594
77	30	80	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	26.91	25.71	0.3724
77	30	80	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.34	25.14	0.3266
77	30	80	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.34	24.14	0.2594
77	30	80	634000	3510	DFT-s-OFDM PI/2 BPSK	1@1	27.15	25.95	0.3936
77	30	80	634000	3510	DFT-s-OFDM QPSK	1@1	26.63	25.43	0.3491
77	30	80	634000	3510	DFT-s-OFDM 16 QAM	1@1	25.72	24.52	0.2831

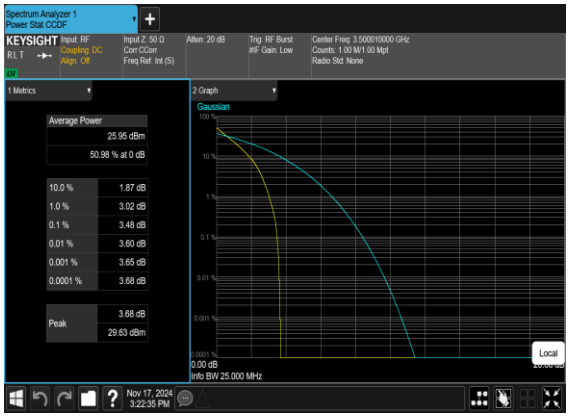
Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	0.0012	**PASS**	NV
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	0.0037	**PASS**	LV
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	0.0032	**PASS**	HV
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	-0.0016	**PASS**	-30℃
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	-0.0019	**PASS**	-20℃
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	0.0025	**PASS**	-10℃
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	0.0007	**PASS**	0℃
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	-0.0014	**PASS**	10℃
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	0.0022	**PASS**	20℃
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	0.0023	**PASS**	30℃
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	0.0018	**PASS**	40℃
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	0.0029	**PASS**	50℃

Peak to Average Ratio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	3.48	13	**PASS**
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@0	4.31	13	**PASS**
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	4.91	13	**PASS**
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@0	5.54	13	**PASS**

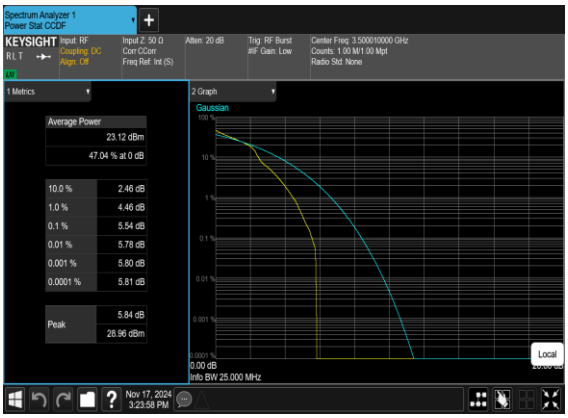
N77(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



N77(20M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_Mid_CH

N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH

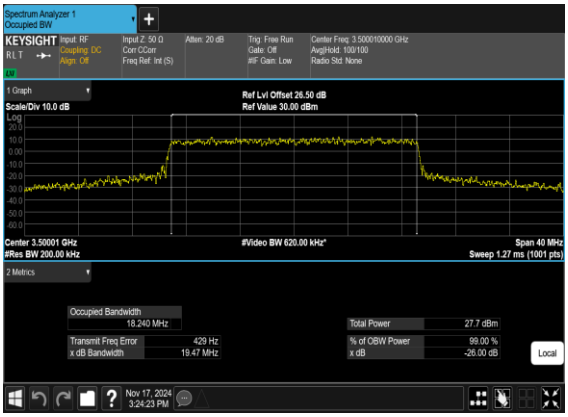


Occupied Bandwidth

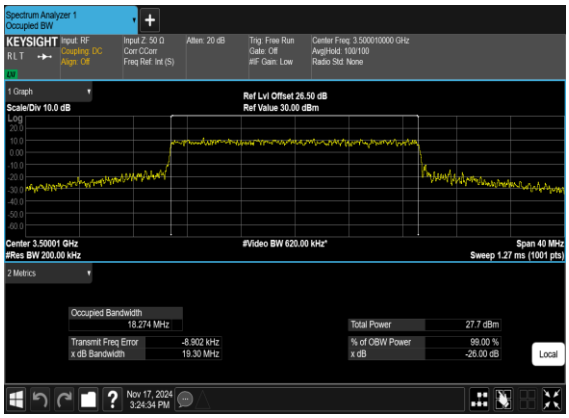
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB BW (MHz)
77	30	20	633334	3500.01	CP-OFDM QPSK	51@0	18.155	19.42
77	30	20	633334	3500.01	CP-OFDM 16 QAM	51@0	18.24	19.47
77	30	20	633334	3500.01	CP-OFDM 64 QAM	51@0	18.274	19.3
77	30	20	633334	3500.01	CP-OFDM 256 QAM	51@0	18.19	19.27
77	30	30	633334	3500.01	CP-OFDM QPSK	78@0	27.849	29.28
77	30	30	633334	3500.01	CP-OFDM 16 QAM	78@0	27.858	29.66
77	30	30	633334	3500.01	CP-OFDM 64 QAM	78@0	27.857	29.03
77	30	30	633334	3500.01	CP-OFDM 256 QAM	78@0	27.861	28.74
77	30	40	633334	3500.01	CP-OFDM QPSK	106@0	37.789	39.36
77	30	40	633334	3500.01	CP-OFDM 16 QAM	106@0	37.915	39.63
77	30	40	633334	3500.01	CP-OFDM 64 QAM	106@0	37.942	39.7
77	30	40	633334	3500.01	CP-OFDM 256 QAM	106@0	37.884	39.4
77	30	60	633334	3500.01	CP-OFDM QPSK	162@0	57.789	59.71
77	30	60	633334	3500.01	CP-OFDM 16 QAM	162@0	57.681	59.72
77	30	60	633334	3500.01	CP-OFDM 64 QAM	162@0	57.799	59.74
77	30	60	633334	3500.01	CP-OFDM 256 QAM	162@0	57.658	59.5
77	30	80	633334	3500.01	CP-OFDM QPSK	217@0	77.388	80.03
77	30	80	633334	3500.01	CP-OFDM 16 QAM	217@0	77.491	79.95
77	30	80	633334	3500.01	CP-OFDM 64 QAM	217@0	77.451	80.01
77	30	80	633334	3500.01	CP-OFDM 256 QAM	217@0	77.616	80.09
77	30	100	633334	3500.01	CP-OFDM QPSK	273@0	97.393	100.6
77	30	100	633334	3500.01	CP-OFDM 16 QAM	273@0	97.324	100.6
77	30	100	633334	3500.01	CP-OFDM 64 QAM	273@0	97.269	100.6
77	30	100	633334	3500.01	CP-OFDM 256 QAM	273@0	97.564	100.5

N77(20M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

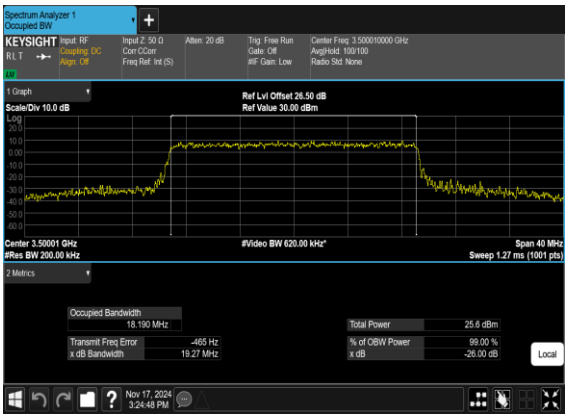
N77(20M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



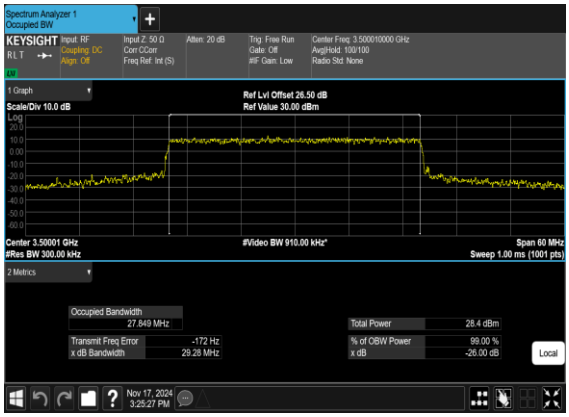
N77(20M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



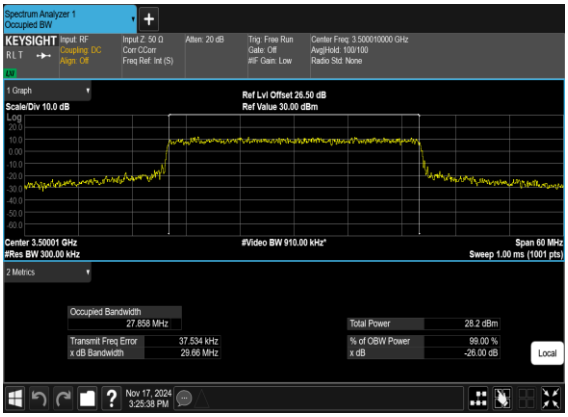
N77(20M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



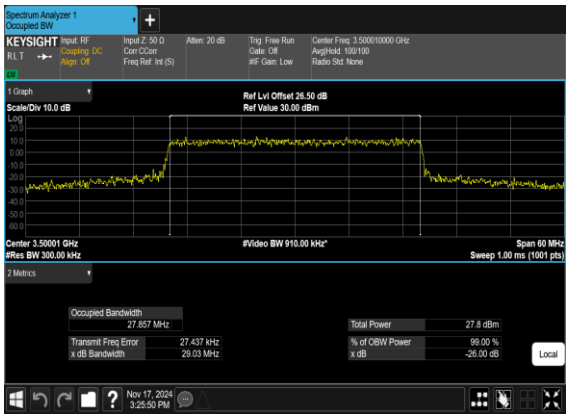
N77(30M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



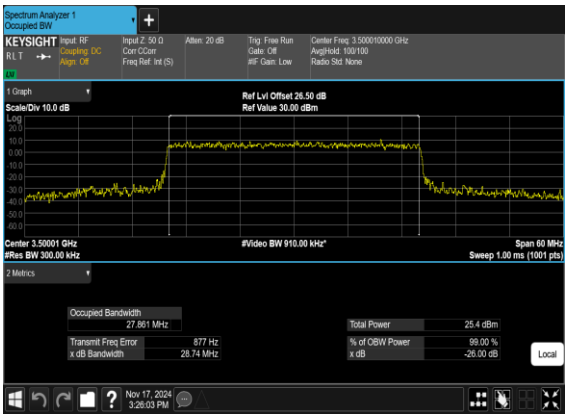
N77(30M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



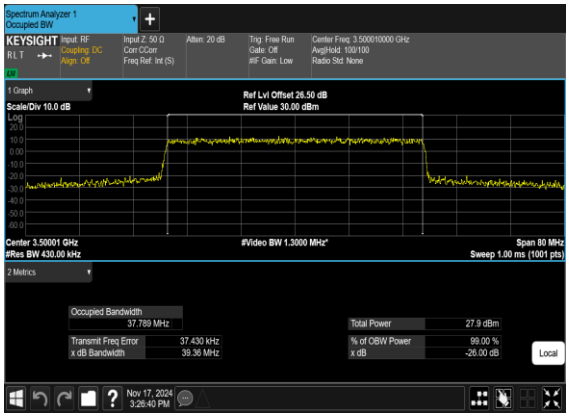
N77(30M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



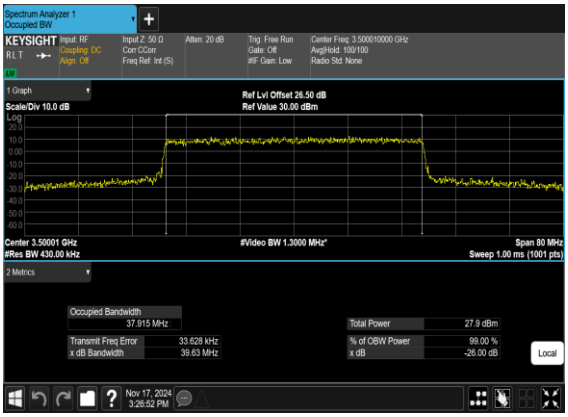
N77(30M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



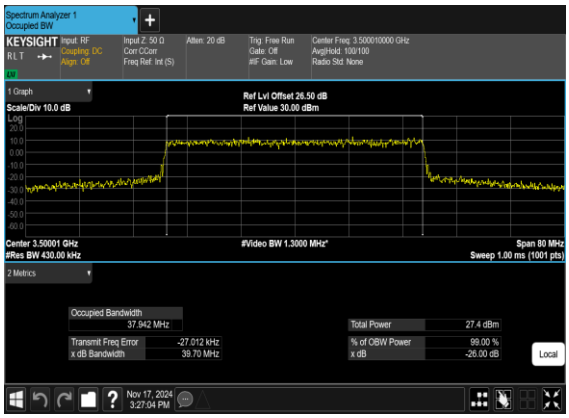
N77(40M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



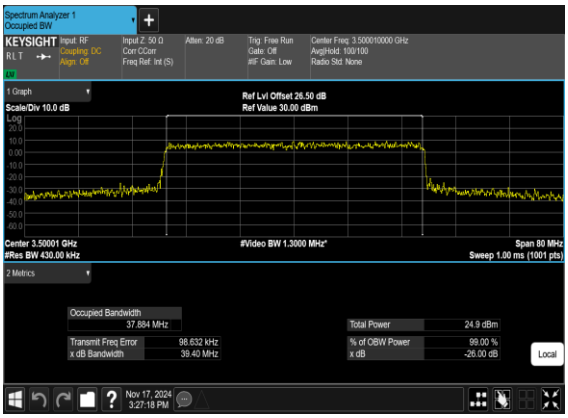
N77(40M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



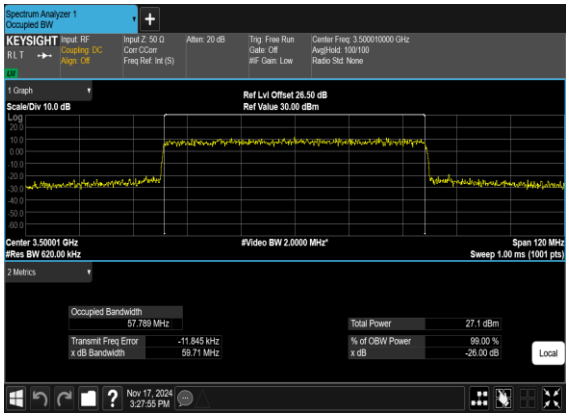
N77(40M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



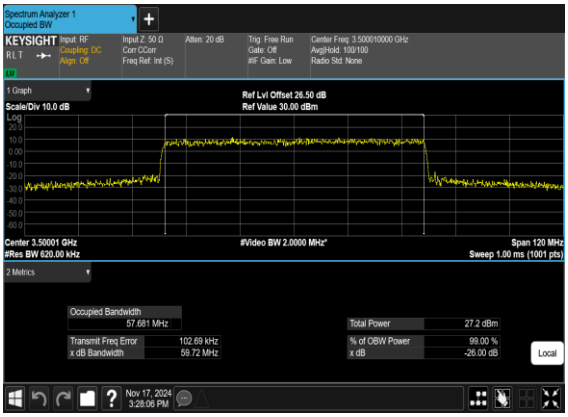
N77(40M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



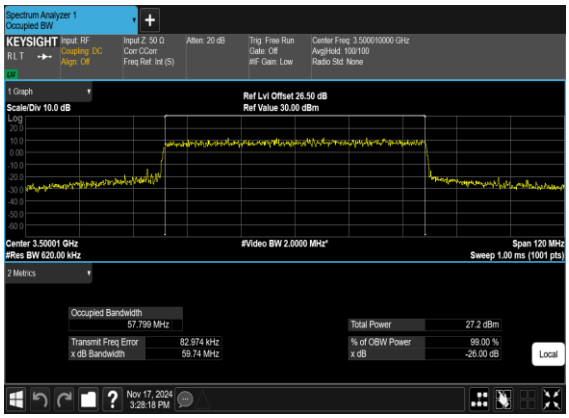
N77(60M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



N77(60M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

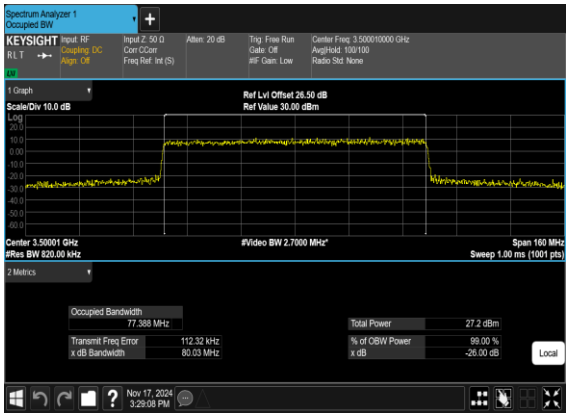


N77(60M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

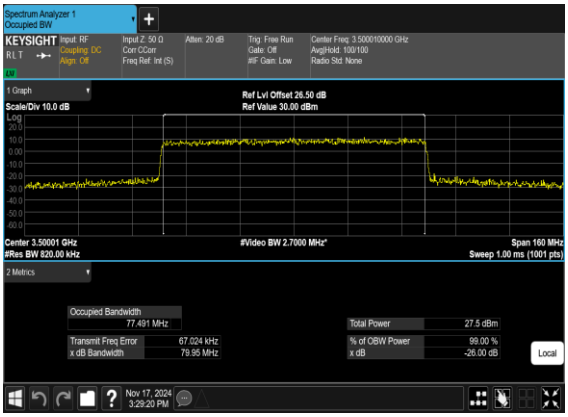


N77(60M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

N77(80M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

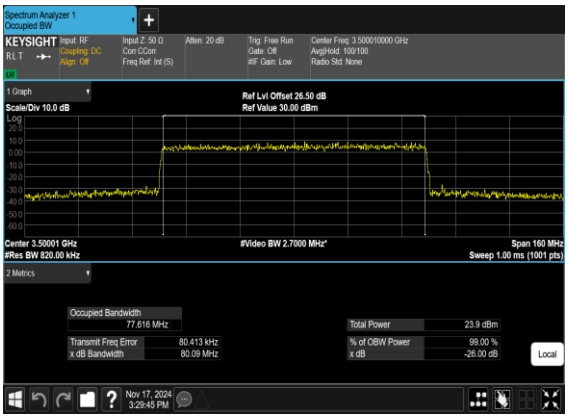


N77(80M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

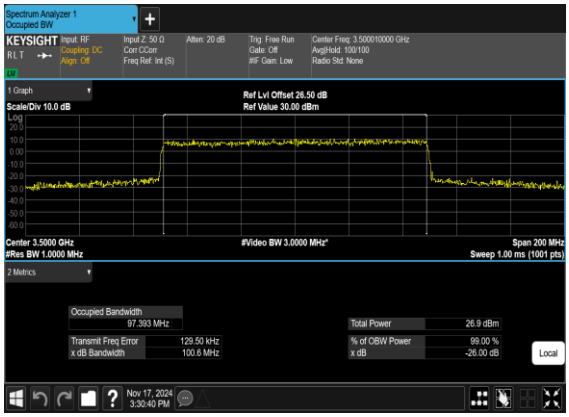


N77(80M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

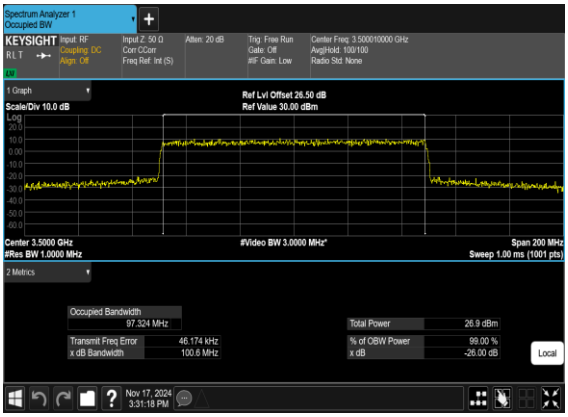
N77(80M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



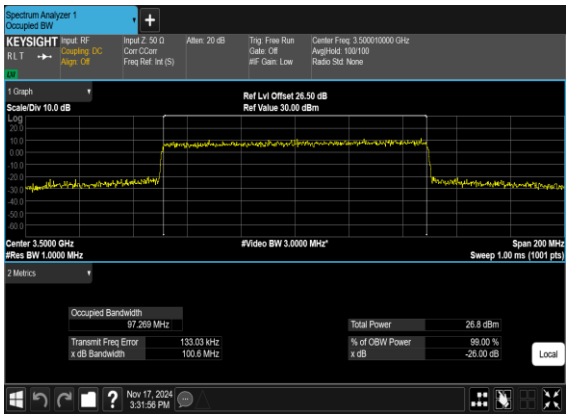
N77(100M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



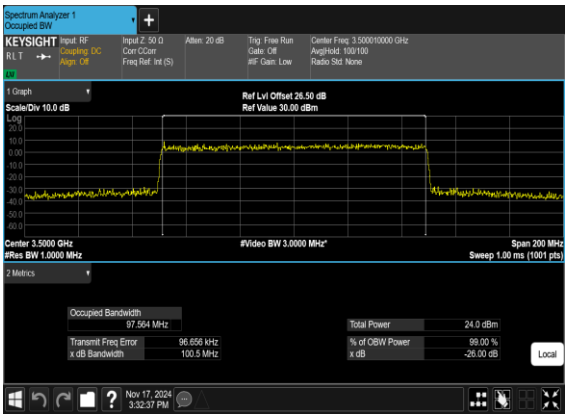
N77(100M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N77(100M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



N77(100M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

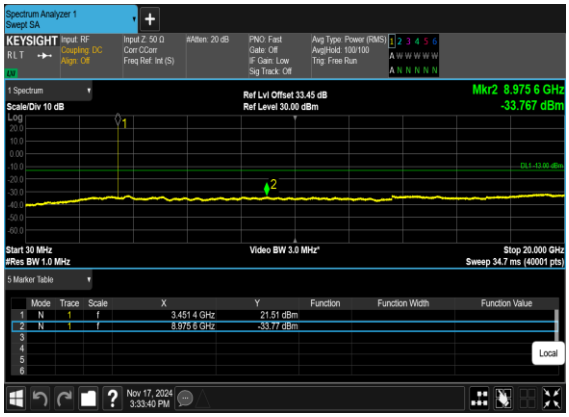


Conducted Spurious Emissions

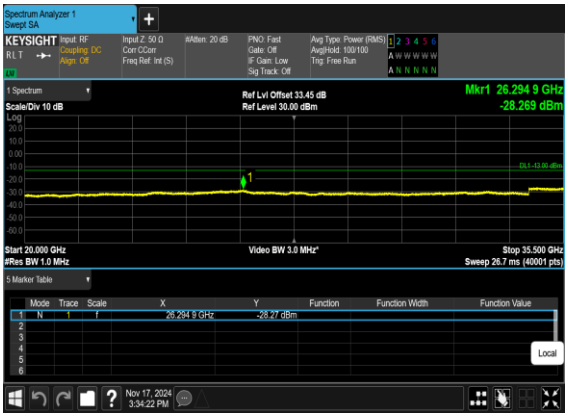
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
77	30	20	630668	3460.02	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	20	630668	3460.02	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	20	630668	3460.02	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	20	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	20	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	20	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	20	636000	3540.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	20	636000	3540.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	20	636000	3540.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	632000	3480.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	60	632000	3480.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**

77	30	60	632000	3480.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	60	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	60	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	634666	3519.99	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	60	634666	3519.99	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	60	634666	3519.99	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**

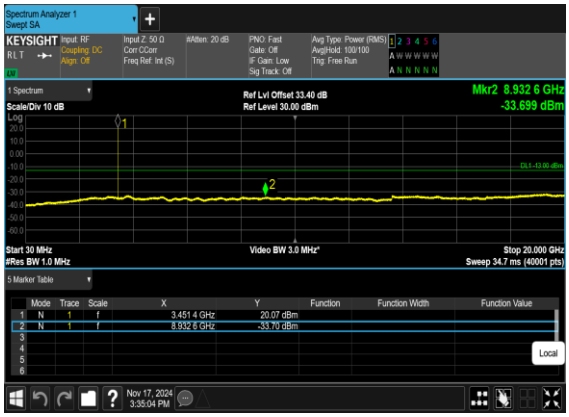
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



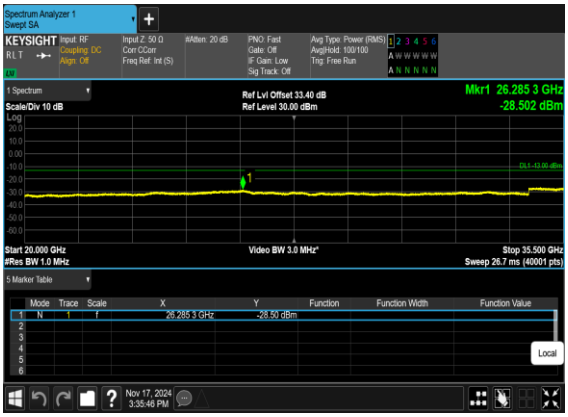
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



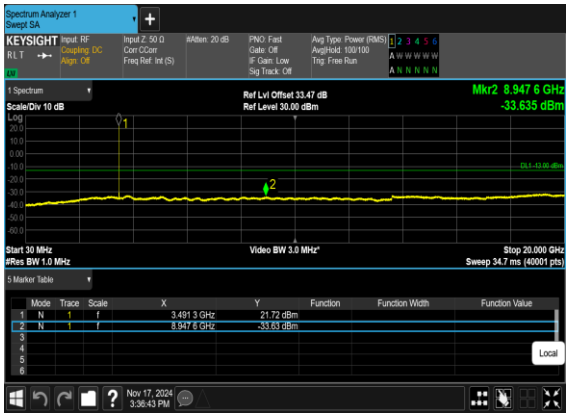
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



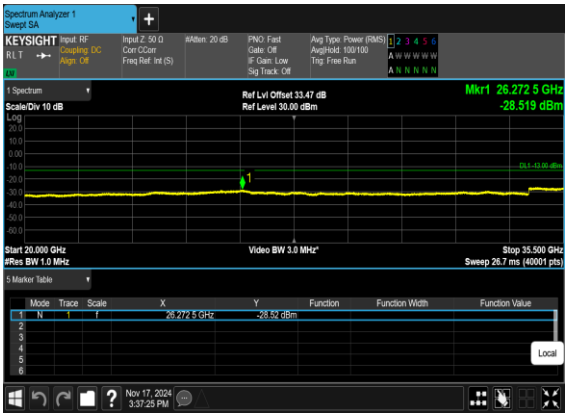
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



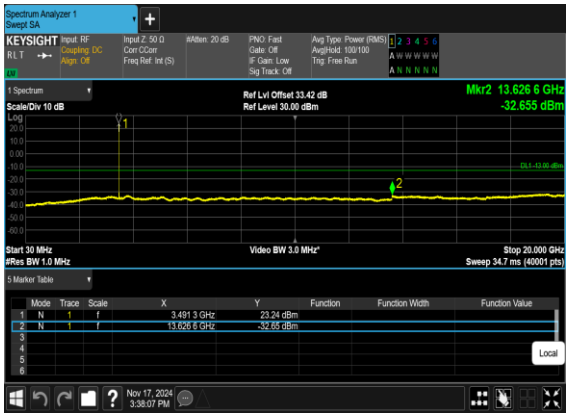
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



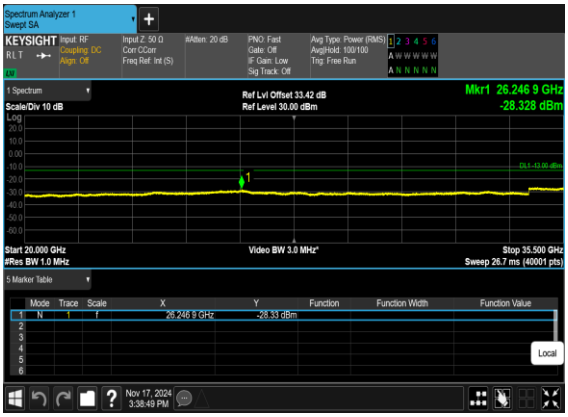
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



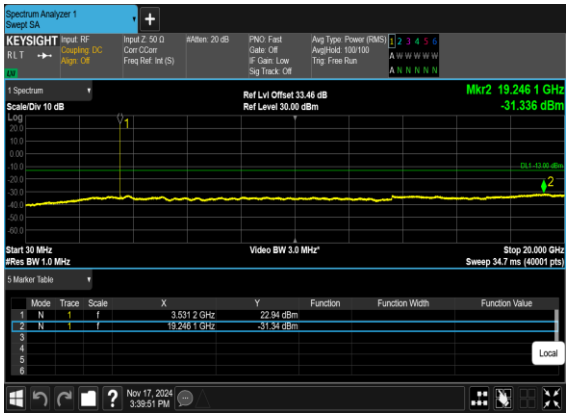
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



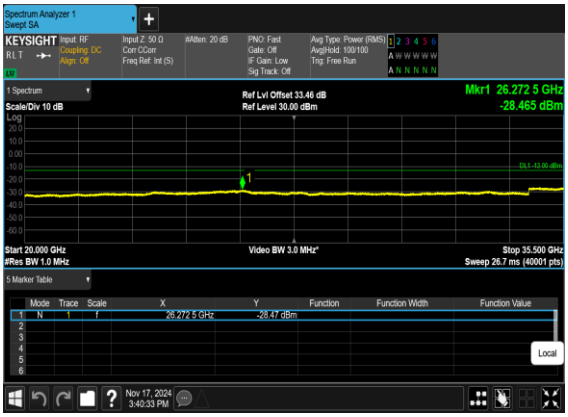
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



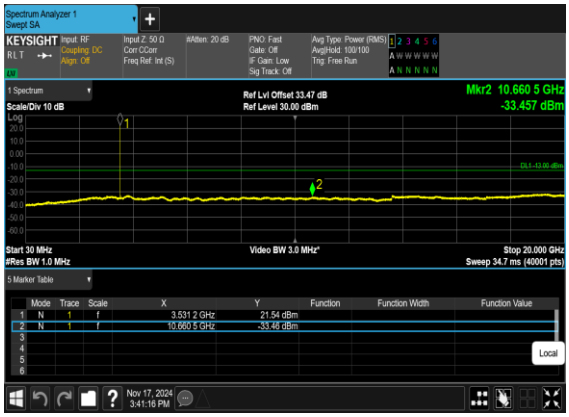
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



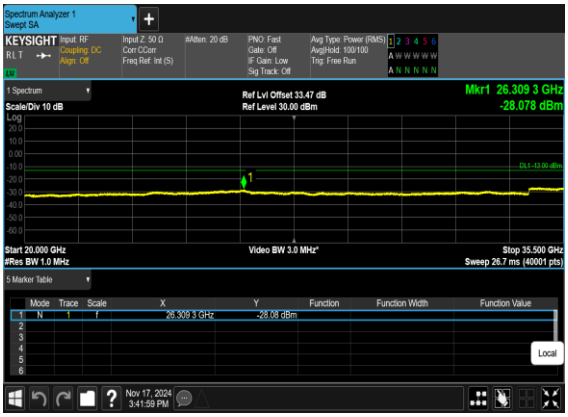
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



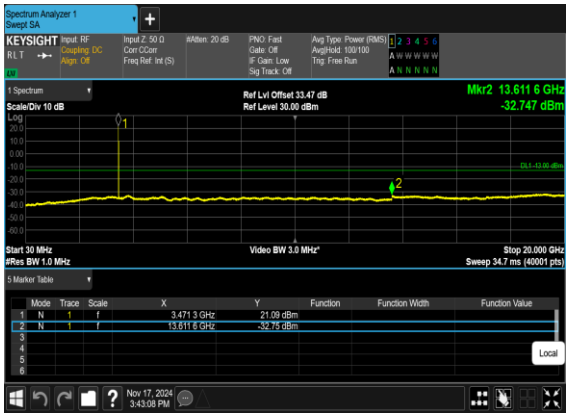
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



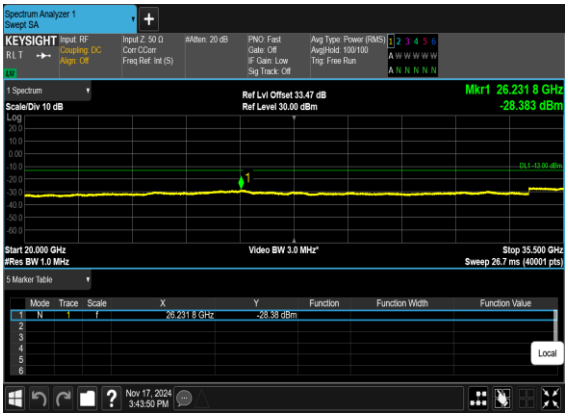
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



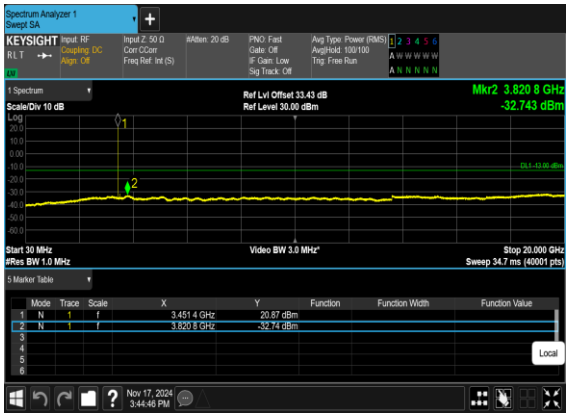
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



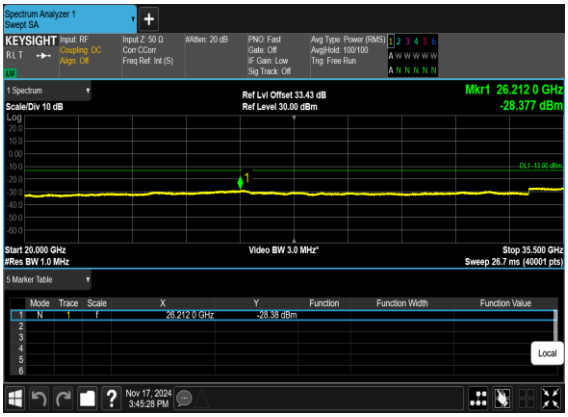
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



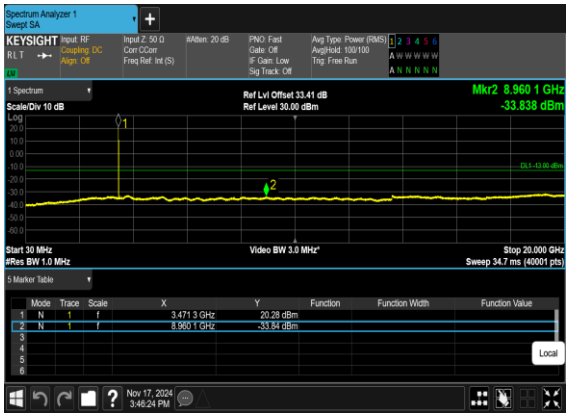
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



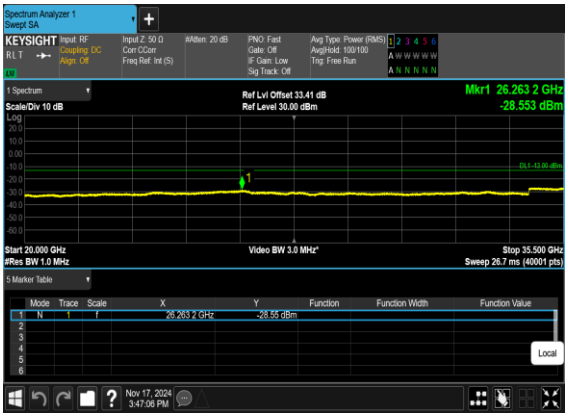
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



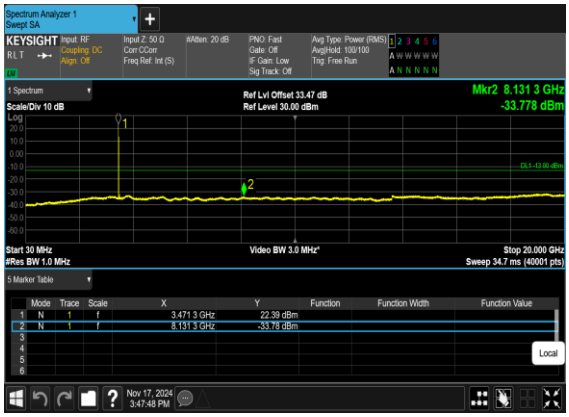
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



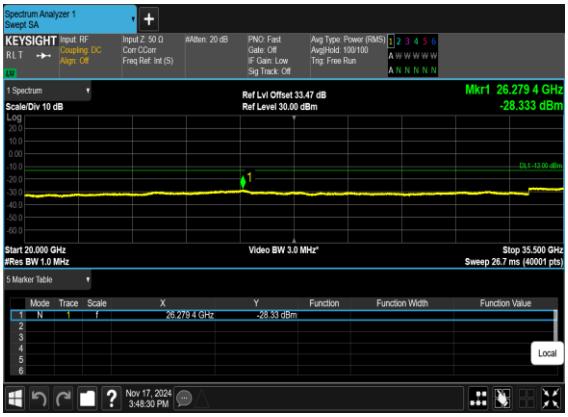
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



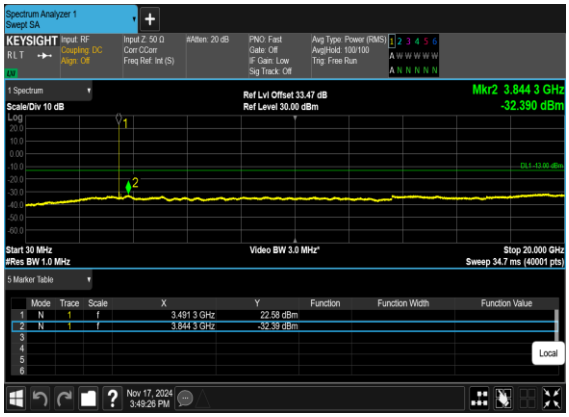
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



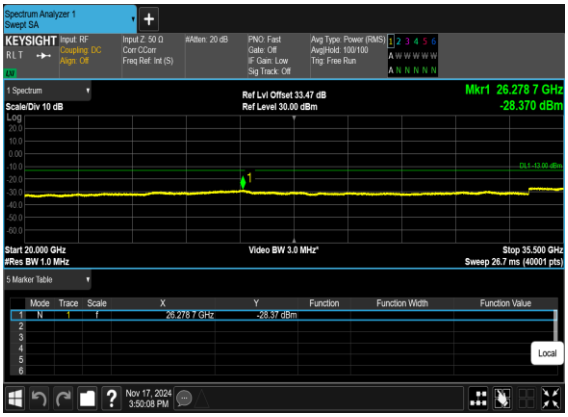
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



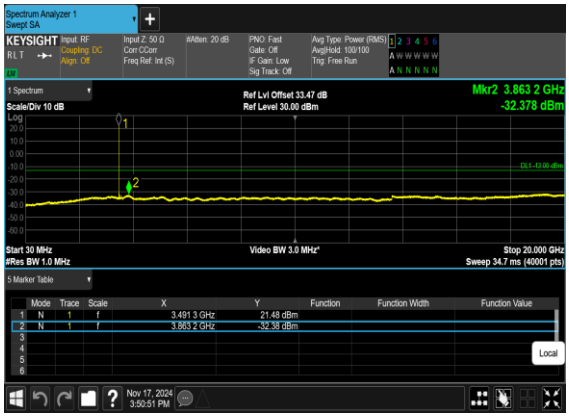
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



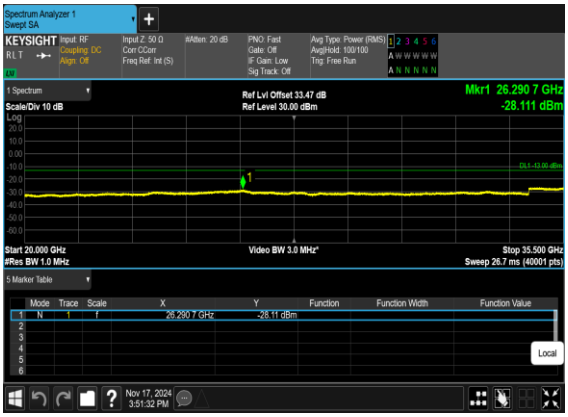
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



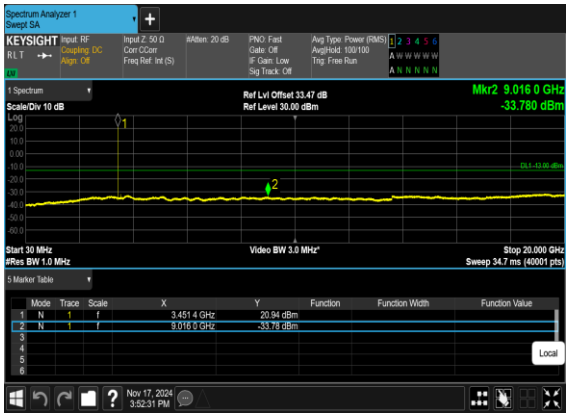
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



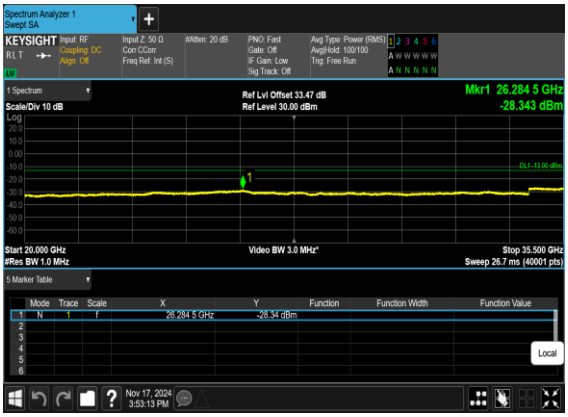
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



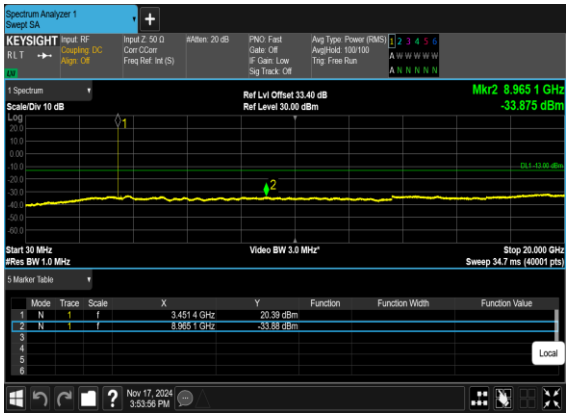
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



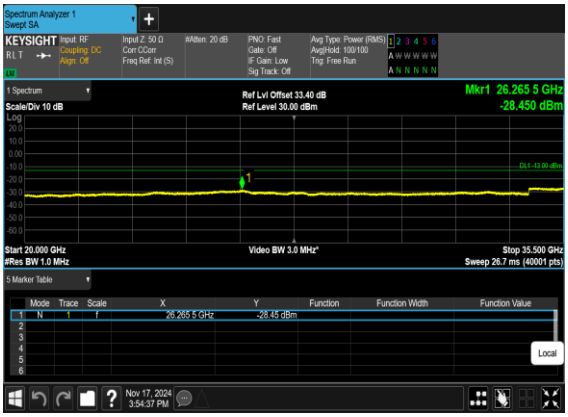
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



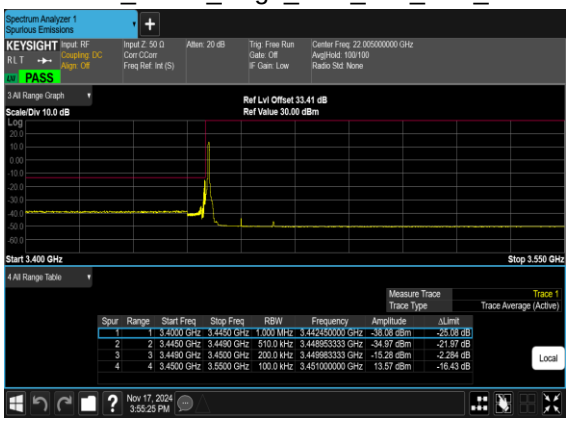
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



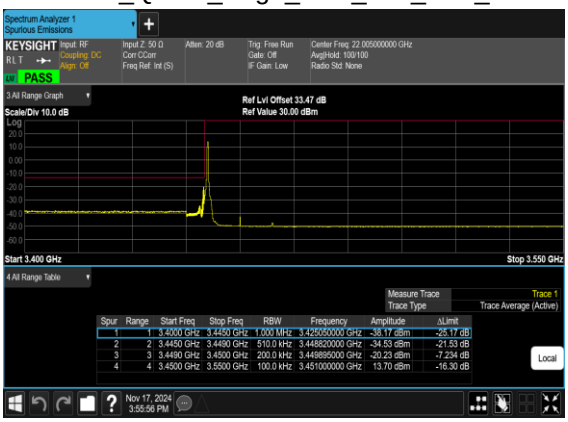
Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
77	30	20	630668	3460.02	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	20	630668	3460.02	DFT-s-OFDM BPSK	50@0	see graph	**PASS**
77	30	20	630668	3460.02	DFT-s-OFDM QPSK	50@0	see graph	**PASS**
77	30	20	636000	3540.0	DFT-s-OFDM BPSK	1@50	see graph	**PASS**
77	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@50	see graph	**PASS**
77	30	20	636000	3540.0	DFT-s-OFDM BPSK	50@0	see graph	**PASS**
77	30	20	636000	3540.0	DFT-s-OFDM QPSK	50@0	see graph	**PASS**
77	30	60	632000	3480.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	632000	3480.0	DFT-s-OFDM BPSK	162@0	see graph	**PASS**
77	30	60	632000	3480.0	DFT-s-OFDM QPSK	162@0	see graph	**PASS**
77	30	60	634666	3519.99	DFT-s-OFDM BPSK	1@161	see graph	**PASS**
77	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@161	see graph	**PASS**
77	30	60	634666	3519.99	DFT-s-OFDM BPSK	162@0	see graph	**PASS**
77	30	60	634666	3519.99	DFT-s-OFDM QPSK	162@0	see graph	**PASS**
77	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@272	see graph	**PASS**
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@272	see graph	**PASS**
77	30	100	633334	3500.01	DFT-s-OFDM BPSK	270@0	see graph	**PASS**
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	270@0	see graph	**PASS**

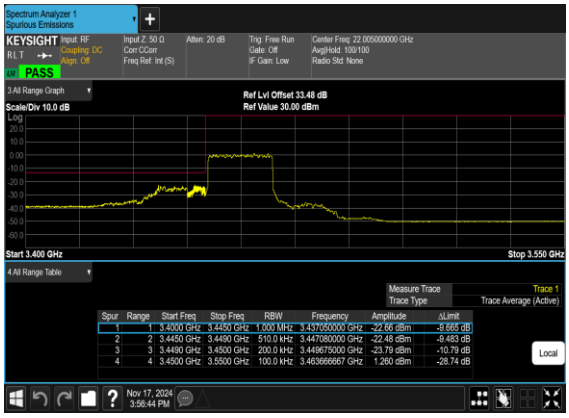
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



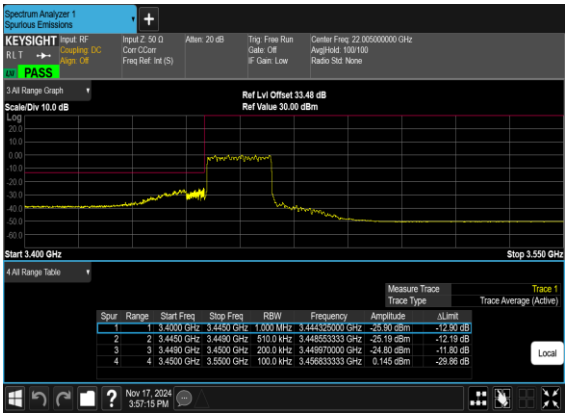
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



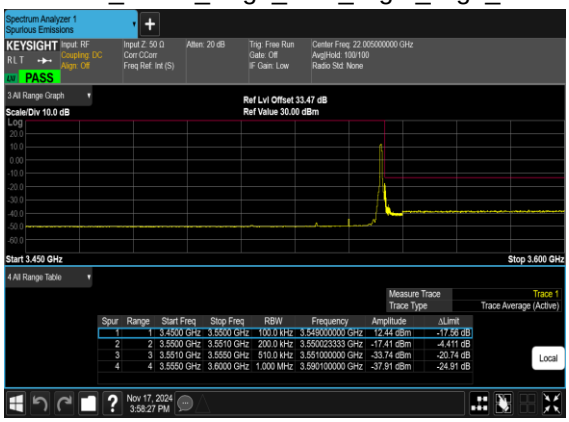
N77(20M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



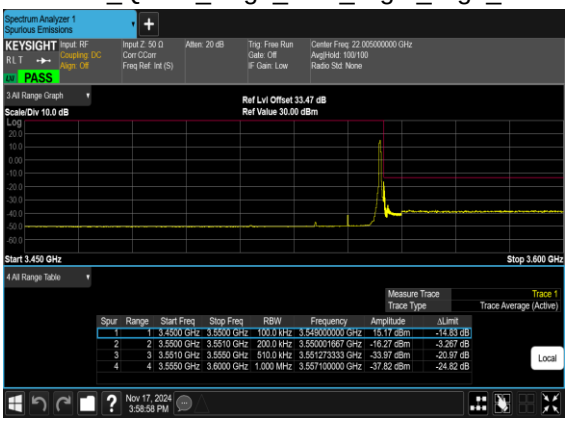
N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH

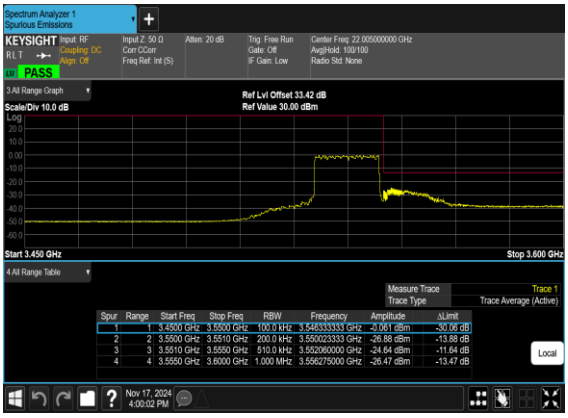


N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH

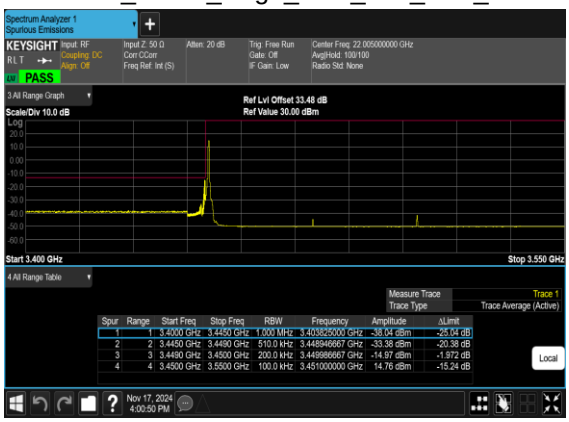


N77(20M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH

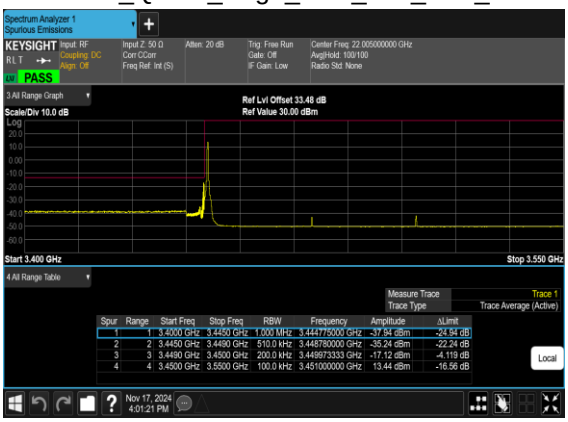
N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



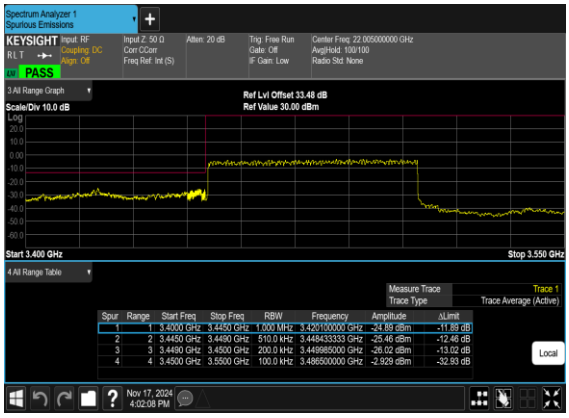
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



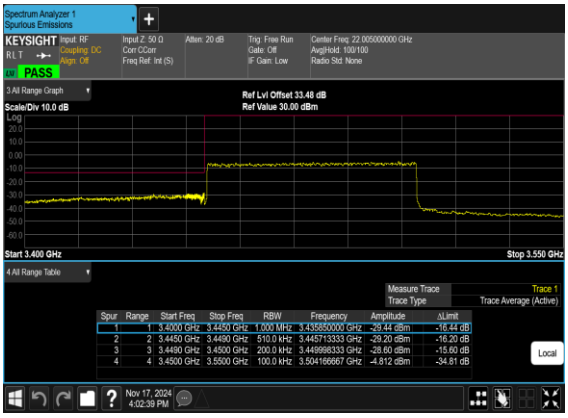
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



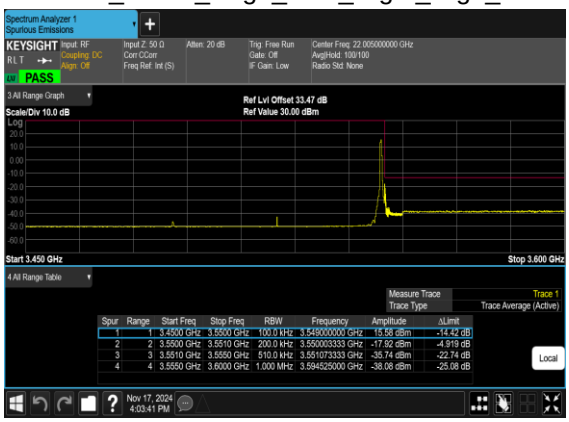
N77(60M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



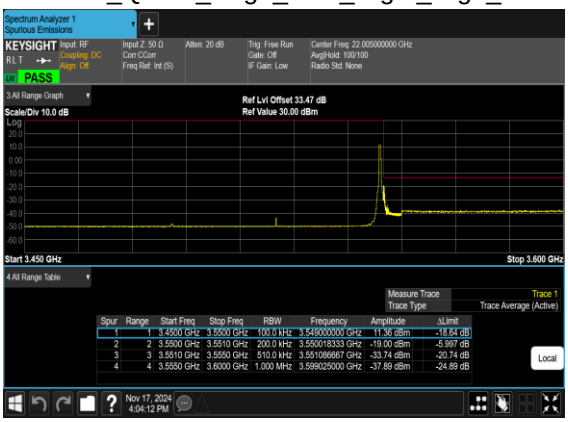
N77(60M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



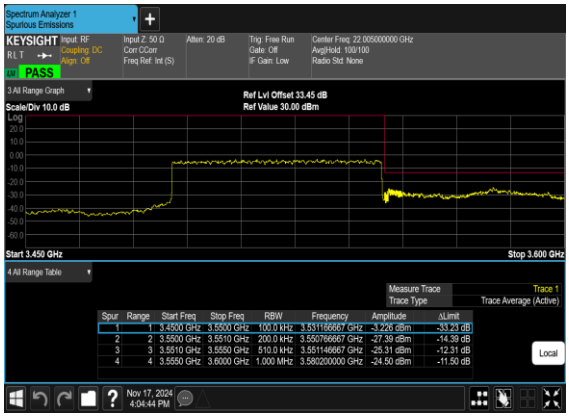
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



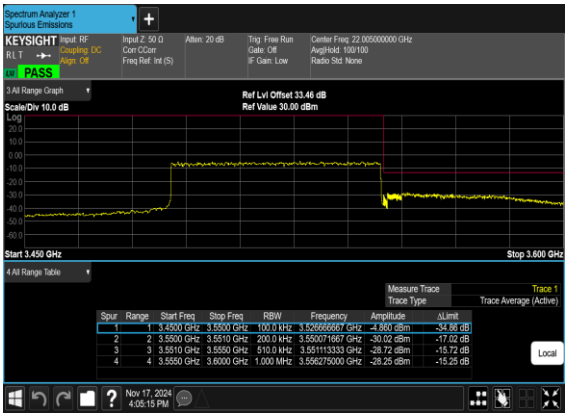
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



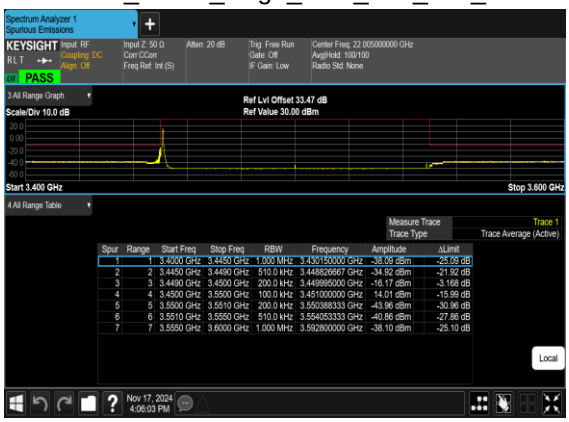
N77(60M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



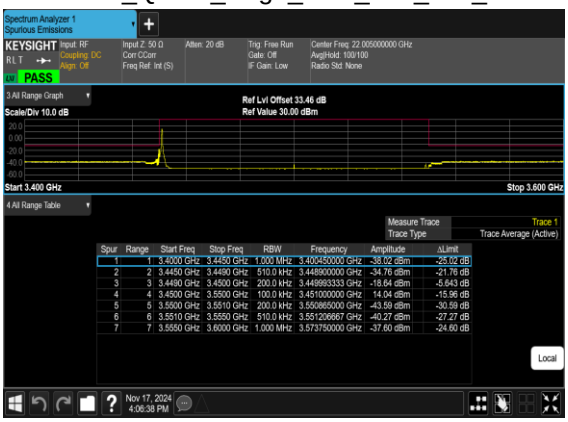
N77(60M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



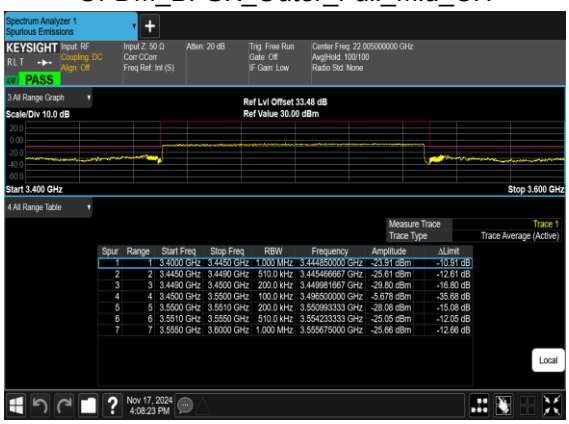
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



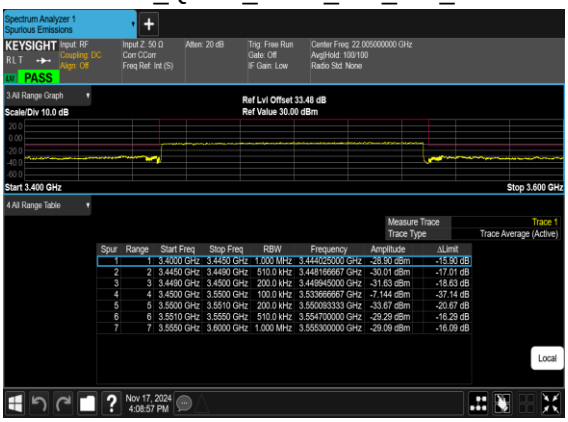
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_Mid_CH

N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_Mid_CH

N77(100M)_DFT-s-OFDM_BPSK_Outer_Full_Mid_CH



N77(100M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



Software Version: 23.06.1602

FR1 N78 Ant.4

Transmitter Conducted Output Power And EIRP, (G_T - L_C)= -1.2dBi

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
78	30	20	630668	3460.02	DFT-s-OFDM PI/2 BPSK	1@1	27.19	25.99	0.3972
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@1	26.32	25.12	0.3251
78	30	20	630668	3460.02	DFT-s-OFDM 16 QAM	1@1	25.44	24.24	0.2655
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.39	26.19	0.4159
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.52	25.32	0.3404
78	30	20	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.59	24.39	0.2748
78	30	20	636000	3540	DFT-s-OFDM PI/2 BPSK	1@1	27.22	26.02	0.3999
78	30	20	636000	3540	DFT-s-OFDM QPSK	1@1	26.2	25	0.3162
78	30	20	636000	3540	DFT-s-OFDM 16 QAM	1@1	25.23	24.03	0.2529
78	30	30	631000	3465	DFT-s-OFDM PI/2 BPSK	1@1	27.25	26.05	0.4027
78	30	30	631000	3465	DFT-s-OFDM QPSK	1@1	26.46	25.26	0.3357
78	30	30	631000	3465	DFT-s-OFDM 16 QAM	1@1	25.58	24.38	0.2742
78	30	30	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.43	26.23	0.4198
78	30	30	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.56	25.36	0.3436
78	30	30	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.69	24.49	0.2812
78	30	30	635666	3534.99	DFT-s-OFDM PI/2 BPSK	1@1	27.49	26.29	0.4256
78	30	30	635666	3534.99	DFT-s-OFDM QPSK	1@1	26.48	25.28	0.3373
78	30	30	635666	3534.99	DFT-s-OFDM 16 QAM	1@1	25.59	24.39	0.2748
78	30	40	631334	3470.01	DFT-s-OFDM PI/2 BPSK	1@1	27.35	26.15	0.4121
78	30	40	631334	3470.01	DFT-s-OFDM QPSK	1@1	26.39	25.19	0.3304
78	30	40	631334	3470.01	DFT-s-OFDM 16 QAM	1@1	25.43	24.23	0.2649
78	30	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.53	26.33	0.4295
78	30	40	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.53	25.33	0.3412
78	30	40	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.59	24.39	0.2748
78	30	40	635332	3529.98	DFT-s-OFDM PI/2 BPSK	1@1	27.45	26.25	0.4217
78	30	40	635332	3529.98	DFT-s-OFDM QPSK	1@1	26.5	25.3	0.3388
78	30	40	635332	3529.98	DFT-s-OFDM 16 QAM	1@1	25.55	24.35	0.2723
78	30	50	631668	3475.02	DFT-s-OFDM PI/2 BPSK	1@1	26.92	25.72	0.3733
78	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@1	26.29	25.09	0.3228
78	30	50	631668	3475.02	DFT-s-OFDM 16 QAM	1@1	25.41	24.21	0.2636
78	30	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	26.98	25.78	0.3784
78	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.63	25.43	0.3491
78	30	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.58	24.38	0.2742

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
78	30	50	635000	3525	DFT-s-OFDM PI/2 BPSK	1@1	27.18	25.98	0.3963
78	30	50	635000	3525	DFT-s-OFDM QPSK	1@1	26.6	25.4	0.3467
78	30	50	635000	3525	DFT-s-OFDM 16 QAM	1@1	25.63	24.43	0.2773
78	30	60	632000	3480	DFT-s-OFDM PI/2 BPSK	1@1	27.04	25.84	0.3837
78	30	60	632000	3480	DFT-s-OFDM QPSK	1@1	26.34	25.14	0.3266
78	30	60	632000	3480	DFT-s-OFDM 16 QAM	1@1	25.42	24.22	0.2642
78	30	60	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.27	26.07	0.4046
78	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.51	25.31	0.3396
78	30	60	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.56	24.36	0.2729
78	30	60	634666	3519.99	DFT-s-OFDM PI/2 BPSK	1@1	27.13	25.93	0.3917
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@1	26.38	25.18	0.3296
78	30	60	634666	3519.99	DFT-s-OFDM 16 QAM	1@1	25.47	24.27	0.2673
78	30	70	632334	3485.01	DFT-s-OFDM PI/2 BPSK	1@1	26.91	25.71	0.3724
78	30	70	632334	3485.01	DFT-s-OFDM QPSK	1@1	26.54	25.34	0.3420
78	30	70	632334	3485.01	DFT-s-OFDM 16 QAM	1@1	25.63	24.43	0.2773
78	30	70	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.14	25.94	0.3926
78	30	70	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.6	25.4	0.3467
78	30	70	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.59	24.39	0.2748
78	30	70	634332	3514.98	DFT-s-OFDM PI/2 BPSK	1@1	27.06	25.86	0.3855
78	30	70	634332	3514.98	DFT-s-OFDM QPSK	1@1	26.57	25.37	0.3443
78	30	70	634332	3514.98	DFT-s-OFDM 16 QAM	1@1	25.59	24.39	0.2748
78	30	80	632668	3490.02	DFT-s-OFDM PI/2 BPSK	1@1	26.86	25.66	0.3681
78	30	80	632668	3490.02	DFT-s-OFDM QPSK	1@1	26.46	25.26	0.3357
78	30	80	632668	3490.02	DFT-s-OFDM 16 QAM	1@1	25.41	24.21	0.2636
78	30	80	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.1	25.9	0.3890
78	30	80	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.4	25.2	0.3311
78	30	80	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.48	24.28	0.2679
78	30	80	634000	3510	DFT-s-OFDM PI/2 BPSK	1@1	27.11	25.91	0.3899
78	30	80	634000	3510	DFT-s-OFDM QPSK	1@1	26.7	25.5	0.3548
78	30	80	634000	3510	DFT-s-OFDM 16 QAM	1@1	25.73	24.53	0.2838
78	30	90	633000	3495	DFT-s-OFDM PI/2 BPSK	1@1	26.78	25.58	0.3614
78	30	90	633000	3495	DFT-s-OFDM QPSK	1@1	26.35	25.15	0.3273
78	30	90	633000	3495	DFT-s-OFDM 16 QAM	1@1	25.43	24.23	0.2649
78	30	90	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	26.87	25.67	0.3690
78	30	90	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.32	25.12	0.3251
78	30	90	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.42	24.22	0.2642
78	30	90	633666	3504.99	DFT-s-OFDM PI/2 BPSK	1@1	27.09	25.89	0.3882
78	30	90	633666	3504.99	DFT-s-OFDM QPSK	1@1	26.42	25.22	0.3327
78	30	90	633666	3504.99	DFT-s-OFDM 16 QAM	1@1	25.39	24.19	0.2624

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	135@67	27.13	25.93	0.3917
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	26.78	25.58	0.3614
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@271	27.4	26.2	0.4169
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	135@67	26.7	25.5	0.3548
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@1	26.11	24.91	0.3097
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@271	26.58	25.38	0.3451
78	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	135@67	25.74	24.54	0.2844
78	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.2	24	0.2512
78	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@271	25.57	24.37	0.2735
78	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	135@67	24.35	23.15	0.2065
78	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	23.59	22.39	0.1734
78	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@271	24.09	22.89	0.1945
78	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	135@67	22.72	21.52	0.1419
78	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	22.04	20.84	0.1213
78	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@271	22.59	21.39	0.1377
78	30	100	633334	3500.01	CP-OFDM QPSK	137@68	25.02	23.82	0.2410
78	30	100	633334	3500.01	CP-OFDM QPSK	1@1	24.52	23.32	0.2148
78	30	100	633334	3500.01	CP-OFDM QPSK	1@271	24.97	23.77	0.2382

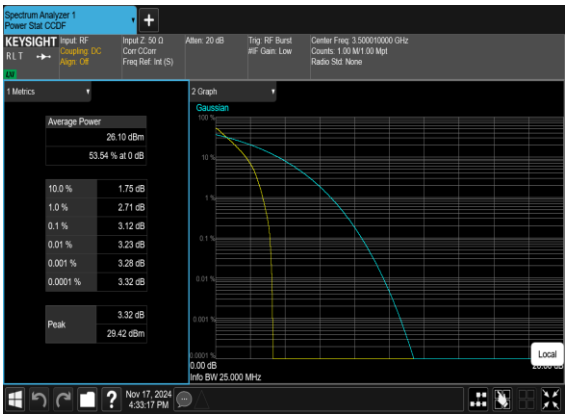
Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	0.0035	**PASS**	NV
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	-0.0034	**PASS**	LV
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	0.0022	**PASS**	HV
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	0.0014	**PASS**	-30℃
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	-0.0019	**PASS**	-20℃
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	0.0026	**PASS**	-10℃
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	0.0022	**PASS**	0℃
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	0.0037	**PASS**	10℃
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	0.0035	**PASS**	20℃
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	0.0022	**PASS**	30℃
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	-0.0017	**PASS**	40℃
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	0.0037	**PASS**	50℃

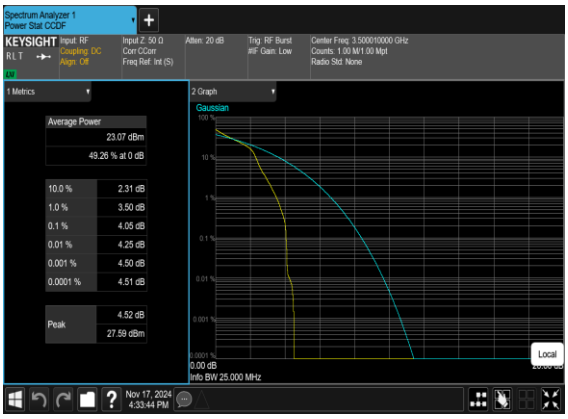
Peak to Average Ratio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	3.12	13	**PASS**
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@0	4.05	13	**PASS**
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	4.47	13	**PASS**
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@0	5.11	13	**PASS**

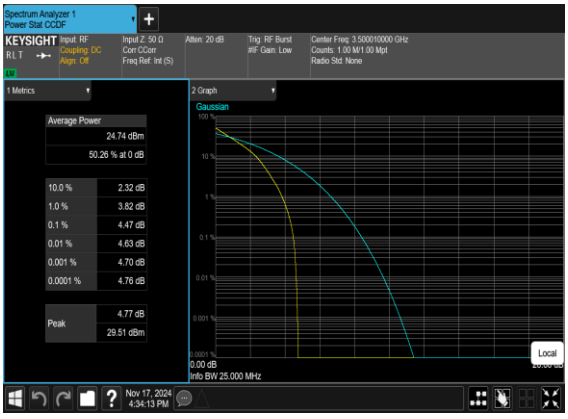
N78(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



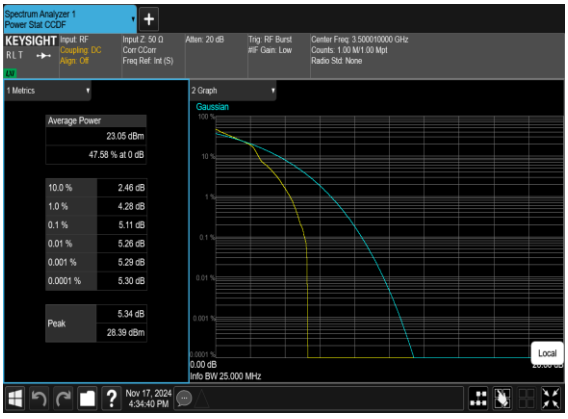
N78(20M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_Mid_CH



N78(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



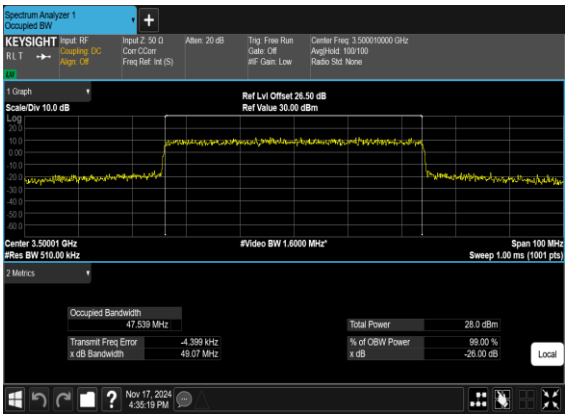
N78(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



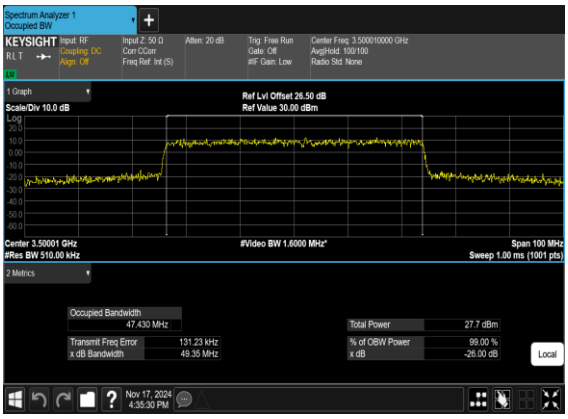
Occupied Bandwidth

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB BW (MHz)
78	30	50	633334	3500.01	CP-OFDM QPSK	133@0	47.539	49.07
78	30	50	633334	3500.01	CP-OFDM 16 QAM	133@0	47.43	49.35
78	30	50	633334	3500.01	CP-OFDM 64 QAM	133@0	47.466	51.52
78	30	50	633334	3500.01	CP-OFDM 256 QAM	133@0	47.487	49.05
78	30	70	633334	3500.01	CP-OFDM QPSK	189@0	67.536	72.68
78	30	70	633334	3500.01	CP-OFDM 16 QAM	189@0	67.504	69.79
78	30	70	633334	3500.01	CP-OFDM 64 QAM	189@0	67.314	69.77
78	30	70	633334	3500.01	CP-OFDM 256 QAM	189@0	67.524	69.7
78	30	90	633334	3500.01	CP-OFDM QPSK	245@0	87.607	90.2
78	30	90	633334	3500.01	CP-OFDM 16 QAM	245@0	87.49	90.2
78	30	90	633334	3500.01	CP-OFDM 64 QAM	245@0	87.759	90.32
78	30	90	633334	3500.01	CP-OFDM 256 QAM	245@0	87.357	90.28

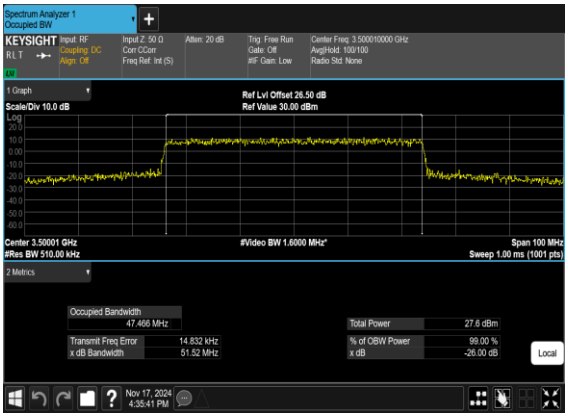
N78(50M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



N78(50M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N78(50M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



N78(50M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH