



# FCC RF Test Report

APPLICANT : Xiaomi Communications Co., Ltd.  
EQUIPMENT : Mobile Phone  
BRAND NAME : POCO  
MODEL NAME : 24122RKC7G  
FCC ID : 2AFZZRKC7G  
STANDARD : 47 CFR Part 27 Subpart Q  
CLASSIFICATION : PCS Licensed Transmitter Held to Ear (PCE)  
TEST DATE(S) : Oct. 04, 2024 ~ Oct. 18, 2024

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.

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

**Sporton International Inc. (Kunshan)**

No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300  
People's Republic of China



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## SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	—	Report Only	-
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	—	Report Only	-
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 36.08 dB at 10365.000 MHz

**Conformity Assessment Condition:**

- 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.
- 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

**Xiaomi Communications Co., Ltd.**

#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

## 1.2 Manufacturer

**Xiaomi Communications Co., Ltd.**

#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

## 1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Phone
Brand Name	POCO
Model Name	24122RKC7G
FCC ID	2AFZZRKC7G
IMEI Code	Conducted : 864775070041829/867475070041837 Radiation : 864775070053569/564775070043577
HW Version	13510011U
SW Version	Xiaomi HyperOS 2.0
EUT Stage	Identical Prototype

## 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/n78: 10 / 15 / 20 / 25 / 30 / 40 / 50 / 60 / 70 / 80 / 90 / 100MHz
Antenna Gain	<Ant. 1> 5G NR n77: -2.0 dBi 5G NR n78: -2.0 dBi <Ant. 6> 5G NR n77: -2.5 dBi 5G NR n78: -2.5 dBi <Ant. 7> 5G NR n77: -2.0 dBi 5G NR n78: -2.0 dBi <Ant. 8> 5G NR n77: -2.2 dBi 5G NR n78: -2.2 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 6.
2. The device supports n77/n78(1T4R) SRS resources on Ant.1/6/7/8, only the test data of worst Ant.6 is showed in the report according to the maximum power.
3. The device supports HPUE mode for 5G NR n77/n78.
4. 5G NR n78 support SA and NSA mode, n77 supports SA mode only. The whole testing has assessed SA mode for n77 by referring to the higher conducted power for conducted test items, , n78 covered by n77, and RSE added test for n78 NSA.
5. All the supported EN-DC combinations are verified conducted power, only the EN-DC combination with highest power are shown in the report.
6. 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		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)
10	3455.01 ~ 3544.98	0.3251	8M53G7D	0.2523	8M59W7D
15	3457.50 ~ 3542.49	0.2193	13M6G7D	0.2084	13M6W7D
20	3460.02 ~ 3540.00	0.3412	18M2G7D	0.2698	18M2W7D
25	3462.51 ~ 3537.48	0.2244	23M2G7D	0.2193	23M3W7D
30	3465.00 ~ 3534.99	0.3388	27M8G7D	0.2716	27M9W7D
40	3470.01 ~ 3529.98	0.3327	37M9G7D	0.2630	37M9W7D
50	3475.02 ~ 3525.00	0.3459	47M4G7D	0.2649	47M5W7D
60	3480.00 ~ 3519.99	0.3342	57M7G7D	0.2979	57M9W7D
70	3485.01 ~ 3514.98	0.3443	67M5G7D	0.2667	67M6W7D
80	3490.02 ~ 3510.00	0.3443	77M4G7D	0.2679	77M6W7D
90	3495.00 ~ 3504.99	0.3451	87M5G7D	0.2667	87M6W7D
100	3500.01	0.3483	97M4G7D	0.2667	97M4W7D

5G NR n78		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)
10	3455.01 ~ 3544.98	0.3251	8M53G7D	0.2553	8M59W7D
15	3457.50 ~ 3542.49	0.4315	13M6G7D	0.4285	13M6W7D
20	3460.02 ~ 3540.00	0.3304	18M2G7D	0.2564	18M2W7D
25	3462.51 ~ 3537.48	0.4634	23M2G7D	0.4315	23M3W7D
30	3465.00 ~ 3534.99	0.3381	27M8G7D	0.2624	27M9W7D
40	3470.01 ~ 3529.98	0.3334	37M9G7D	0.2576	37M9W7D
50	3475.02 ~ 3525.00	0.3373	47M4G7D	0.2588	47M5W7D
60	3480.00 ~ 3519.99	0.3296	57M7G7D	0.2667	57M9W7D
70	3485.01 ~ 3514.98	0.3396	67M5G7D	0.2553	67M6W7D
80	3490.02 ~ 3510.00	0.3412	77M4G7D	0.3266	77M6W7D
90	3495.00 ~ 3504.99	0.3443	87M5G7D	0.2704	87M6W7D
100	3500.01	0.3428	97M4G7D	0.2612	97M4W7D

**Note:**

1. 5G NR Band n77 overlaps the entire frequency range of Band n78, and n77 power > n78 power, therefore the conducted test results of n77 provided in this report cover n78.
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.

<b>Test Firm</b>	Sporton International Inc. (Kunshan)		
<b>Test Site Location</b>	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
<b>Test Site No.</b>	<b>Sporton Site No.</b>	<b>FCC Designation No.</b>	<b>FCC Test Firm Registration No.</b>
	03CH04-KS TH01-KS	CN1257	314309

## 1.8 Test Software

Item	Site	Manufacture	Name	Version
1.	TH01-KS	Tonscend	JS1120-3 test system China_210602	3.3.10
2.	03CH04-KS	AUDIX	E3	210616

## 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.

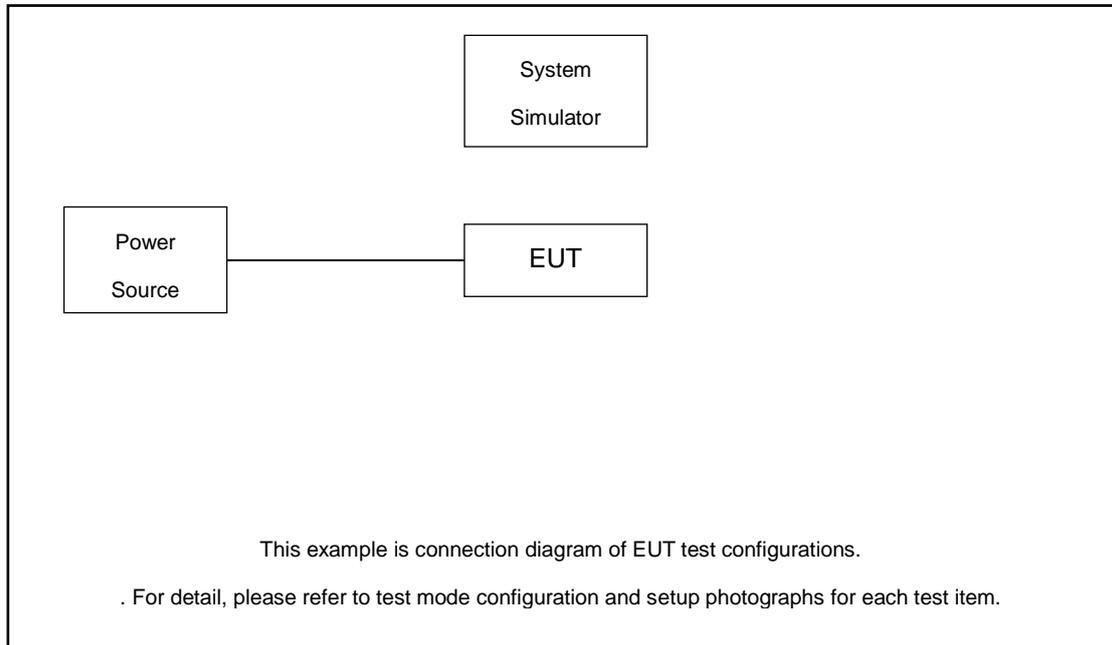
Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission. (Y Plane)

Test Cases	Band	Bandwidth (MHz)	Modulation	RB #	Test Channel
		eg. 5M, 10M, 15M, 20M	eg. PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB, Partial RB, Full RB	L/M/H
Max. Output Power	5G n77	10M, 15M, 20M, 25M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M	All Modulations	1RB, Full RB	L, M, H
	5G n78	10M, 15M, 20M, 25M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M	All Modulations	1RB, Full RB	L, M, H
Peak-to-Average Ratio	5G n77	20M	PI/2 BPSK, QPSK	1RB, Full RB	L, M, H
E.I.R.P	5G n77	10M, 15M, 20M, 25M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M	All Modulations	1RB, Full RB	L, M, H
	5G n78	10M, 15M, 20M, 25M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M	All Modulations	1RB, Full RB	L, M, H
26dB and 99% Bandwidth	5G n77	10M, 15M, 20M, 25M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M	QPSK, 16QAM, 64QAM, 256QAM	Full RB	M
Conducted Band Edge	5G n77	10M, 50M, 100M	PI/2 BPSK, QPSK	1RB, Full RB	L, H
Conducted Spurious Emission	5G n77	10M, 50M, 100M	PI/2 BPSK, QPSK	1RB	L, M, H
Frequency Stability	5G n77	20M	QPSK	Full RB	M
Radiated Spurious Emission	5G n77	Worst case from maximum power			M
	5G n78	Worst case from maximum power			M

**Note:**

- 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.
- Frequency Stability: Normal Voltage = 3.77V ; Low Voltage =3.5V.; High Voltage =4.2V.

## 2.2 Connection Diagram of Test System



## 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 9.46 dB and 20dB attenuator.

Example :

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

$$= 9.46 + 20 = 29.46 \text{ (dB)}$$

## 2.5 Frequency List of Low/Middle/High Channels

5G n77/n78 Channel and Frequency List				
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
25	Channel	630834	633334	635832
	Frequency	3462.51	3500.01	3537.48
20	Channel	630668	633334	636000
	Frequency	3460.02	3500.01	3540
15	Channel	630500	633334	636166
	Frequency	3457.5	3500.01	3542.49
10	Channel	630334	633334	636332
	Frequency	3455.01	3500.01	3544.98

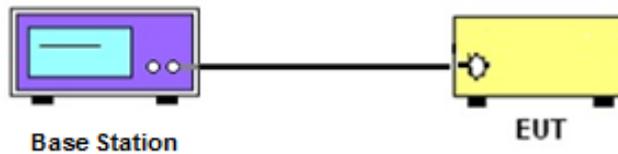
### 3 Conducted Test Items

#### 3.1 Measuring Instruments

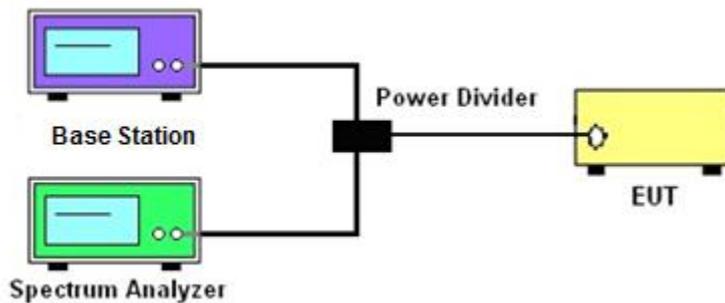
See list of measuring instruments of this test report.

#### 3.2 Test Setup

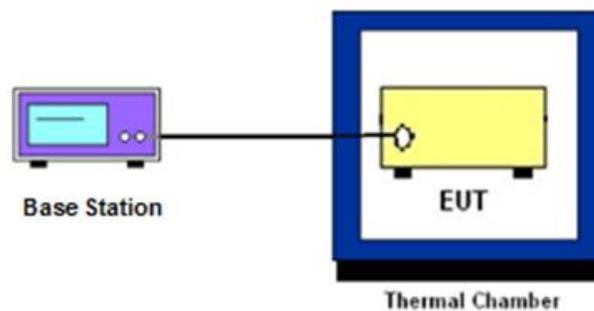
##### 3.2.1 Conducted Output Power



##### 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  $\geq 1\%$  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  $\geq 500$ KHz.
6. Beyond the 5 MHz removed from the band edge, set RBW = 1MHz.
7. Set spectrum analyzer with RMS detector.
8. Offset has included the duty factor for Band n77. Duty factor =  $10 \log (1/x)$ , where x is the measured duty cycle.
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.

## 3.9 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 10<sup>th</sup> 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. Offset has included the duty factor for Band n77. Duty factor =  $10 \log (1/x)$ , where x is the measured duty cycle.
9. Taking the record of maximum spurious emission.
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
11. 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  $-30^{\circ}\text{C}$  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  $10^{\circ}\text{C}$  step up to  $50^{\circ}\text{C}$ . 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  $20\pm 5^{\circ}\text{C}$  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.

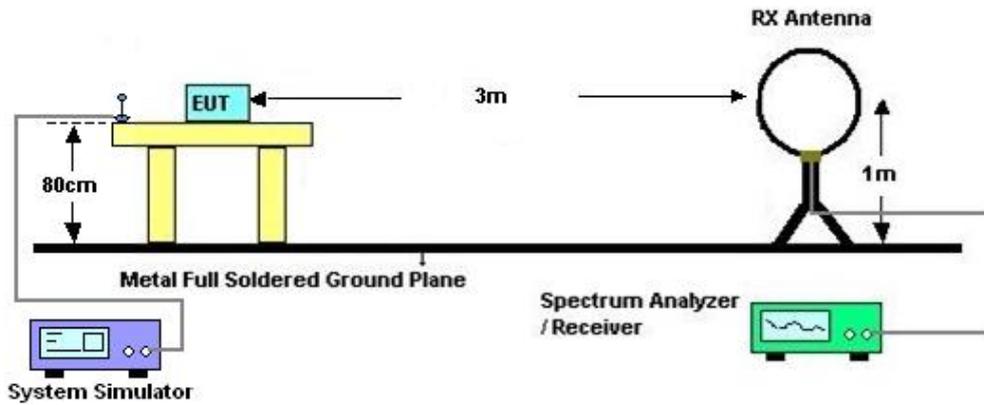
## 4 Radiated Test Items

### 4.1 Measuring Instruments

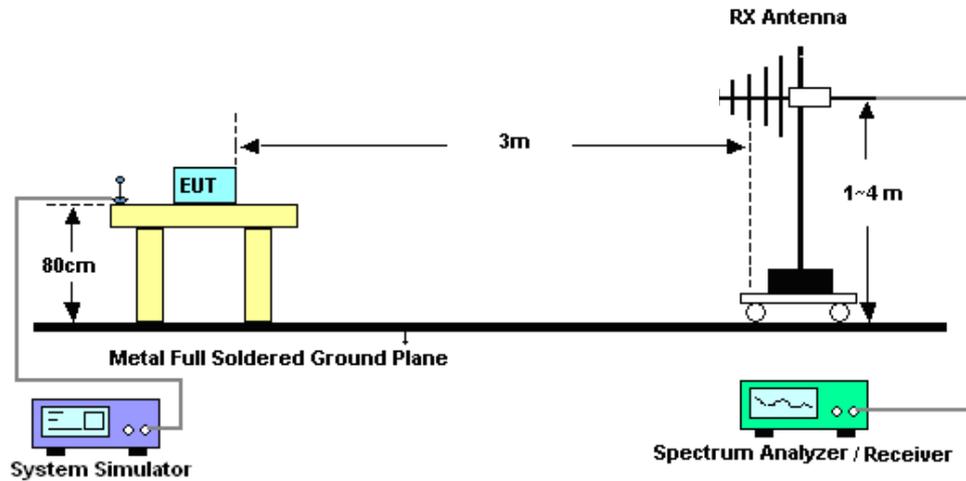
See list of measuring instruments of this test report.

### 4.2 Test Setup

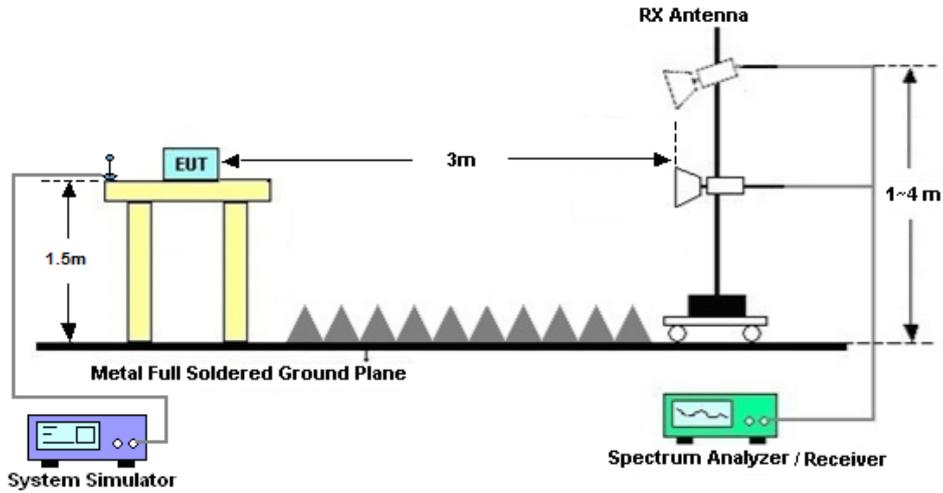
#### 4.2.1 For radiated test below 30MHz



#### 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.  
$$\text{EIRP (dBm)} = \text{S.G. Power} - \text{Tx Cable Loss} + \text{Tx Antenna Gain}$$
$$\text{ERP (dBm)} = \text{EIRP} - 2.15$$
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. 11, 2023	Oct. 04, 2024~ Oct. 09, 2024	Oct. 10, 2024	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	Oct. 04, 2024~ Oct. 09, 2024	NCR	Conducted (TH01-KS)
Temperature & humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 04, 2024	Oct. 04, 2024~ Oct. 09, 2024	Jul. 03, 2025	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55370528	10Hz-44G,MAX 30dB	Oct. 11, 2024	Oct. 18, 2024	Oct. 10, 2025	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 08, 2024	Oct. 18, 2024	Sep. 07, 2025	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	44483	30MHz-1GHz	Dec. 06, 2023	Oct. 18, 2024	Dec. 05, 2024	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00227860	1GHz~18GHz	Aug. 16, 2024	Oct. 18, 2024	Aug. 15, 2025	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 27, 2024	Oct. 18, 2024	Jan. 26, 2025	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	413740	9KHz-1GHz	Jan. 03, 2024	Oct. 18, 2024	Jan. 02, 2025	Radiation (03CH04-KS)
Amplifier	EM	EM18G40G A	060728	18~40GHz	Jan. 02, 2024	Oct. 18, 2024	Jan. 01, 2025	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18G A	060840	1Ghz-18Ghz	Oct. 10, 2024	Oct. 18, 2024	Oct. 09, 2025	Radiation (03CH04-KS)
Amplifier	EM	EM01G18G A	060892	1Ghz-18Ghz	Oct. 10, 2024	Oct. 18, 2024	Oct. 09, 2025	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Oct. 18, 2024	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Oct. 18, 2024	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Oct. 18, 2024	NCR	Radiation (03CH04-KS)

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

Conducted Spurious Emission & Bandedge	±2.22 dB
Occupied Channel Bandwidth	±0.1%
Conducted Power	±0.50 dB
Peak to Average Ratio	±0.46 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))	2.83 dB
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### Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.83 dB
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### Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.82 dB
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----- THE END -----



## **Appendix A. Test Results of Conducted Test**

<b>Test Engineer :</b>	Smile Wang	<b>Temperature :</b>	22~23°C
		<b>Relative Humidity :</b>	40~42%



Software Version: 23.06.1602

# FR1 N77(ANT6)

## Transmitter Conducted Output Power And EIRP, (GT - LC)=-2.5dBi

NR Band	SCS	Band Width	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	27.69	25.19	0.3304
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.92	25.42	0.3483
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@271	27.51	25.01	0.3170
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	135@67	27.54	25.04	0.3192
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@1	27.90	25.40	0.3467
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@271	27.48	24.98	0.3148
77	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	135@67	26.60	24.10	0.2570
77	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	26.76	24.26	0.2667
77	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@271	26.74	24.24	0.2655
77	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	135@67	25.21	22.71	0.1866
77	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	25.19	22.69	0.1858
77	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@271	24.69	22.19	0.1656
77	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	135@67	23.20	20.70	0.1175
77	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	23.36	20.86	0.1219
77	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@271	22.90	20.40	0.1096
77	30	100	633334	3500.01	CP-OFDM QPSK	137@68	26.01	23.51	0.2244
77	30	100	633334	3500.01	CP-OFDM QPSK	1@1	25.78	23.28	0.2128
77	30	100	633334	3500.01	CP-OFDM QPSK	1@271	26.06	23.56	0.2270
77	30	10	630334	3455.01	DFT-s-OFDM PI/2 BPSK	1@1	27.62	25.12	0.3251
77	30	10	630334	3455.01	DFT-s-OFDM QPSK	1@1	27.61	25.11	0.3243
77	30	10	630334	3455.01	DFT-s-OFDM 16 QAM	1@1	26.51	24.01	0.2518
77	30	10	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.48	24.98	0.3148
77	30	10	633334	3500.01	DFT-s-OFDM QPSK	1@1	27.54	25.04	0.3192
77	30	10	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	26.52	24.02	0.2523
77	30	10	636332	3544.98	DFT-s-OFDM PI/2 BPSK	1@1	27.45	24.95	0.3126
77	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@1	27.36	24.86	0.3062
77	30	10	636332	3544.98	DFT-s-OFDM 16 QAM	1@1	26.39	23.89	0.2449
77	30	15	630500	3457.5	DFT-s-OFDM PI/2 BPSK	1@1	25.91	23.41	0.2193
77	30	15	630500	3457.5	DFT-s-OFDM QPSK	1@1	25.80	23.30	0.2138
77	30	15	630500	3457.5	DFT-s-OFDM 16 QAM	1@1	25.69	23.19	0.2084
77	30	15	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.75	23.25	0.2113
77	30	15	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.68	23.18	0.2080
77	30	15	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.64	23.14	0.2061
77	30	15	636166	3542.49	DFT-s-OFDM PI/2 BPSK	1@1	25.51	23.01	0.2000
77	30	15	636166	3542.49	DFT-s-OFDM QPSK	1@1	25.44	22.94	0.1968
77	30	15	636166	3542.49	DFT-s-OFDM 16 QAM	1@1	25.42	22.92	0.1959
77	30	20	630668	3460.02	DFT-s-OFDM PI/2 BPSK	1@1	27.83	25.33	0.3412



77	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@1	27.70	25.20	0.3311
77	30	20	630668	3460.02	DFT-s-OFDM 16 QAM	1@1	26.77	24.27	0.2673
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.57	25.07	0.3214
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@1	27.55	25.05	0.3199
77	30	20	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	26.48	23.98	0.2500
77	30	20	636000	3540	DFT-s-OFDM PI/2 BPSK	1@1	27.43	24.93	0.3112
77	30	20	636000	3540	DFT-s-OFDM QPSK	1@1	27.39	24.89	0.3083
77	30	20	636000	3540	DFT-s-OFDM 16 QAM	1@1	26.81	24.31	0.2698
77	30	25	630834	3462.51	DFT-s-OFDM PI/2 BPSK	1@1	26.01	23.51	0.2244
77	30	25	630834	3462.51	DFT-s-OFDM QPSK	1@1	25.99	23.49	0.2234
77	30	25	630834	3462.51	DFT-s-OFDM 16 QAM	1@1	25.91	23.41	0.2193
77	30	25	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.83	23.33	0.2153
77	30	25	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.72	23.22	0.2099
77	30	25	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	25.67	23.17	0.2075
77	30	25	635832	3537.48	DFT-s-OFDM PI/2 BPSK	1@1	25.74	23.24	0.2109
77	30	25	635832	3537.48	DFT-s-OFDM QPSK	1@1	25.59	23.09	0.2037
77	30	25	635832	3537.48	DFT-s-OFDM 16 QAM	1@1	25.47	22.97	0.1982
77	30	30	631000	3465	DFT-s-OFDM PI/2 BPSK	1@1	27.80	25.30	0.3388
77	30	30	631000	3465	DFT-s-OFDM QPSK	1@1	27.72	25.22	0.3327
77	30	30	631000	3465	DFT-s-OFDM 16 QAM	1@1	26.68	24.18	0.2618
77	30	30	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.79	25.29	0.3381
77	30	30	633334	3500.01	DFT-s-OFDM QPSK	1@1	27.62	25.12	0.3251
77	30	30	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	26.84	24.34	0.2716
77	30	30	635666	3534.99	DFT-s-OFDM PI/2 BPSK	1@1	27.79	25.29	0.3381
77	30	30	635666	3534.99	DFT-s-OFDM QPSK	1@1	27.80	25.30	0.3388
77	30	30	635666	3534.99	DFT-s-OFDM 16 QAM	1@1	26.72	24.22	0.2642
77	30	40	631334	3470.01	DFT-s-OFDM PI/2 BPSK	1@1	27.72	25.22	0.3327
77	30	40	631334	3470.01	DFT-s-OFDM QPSK	1@1	27.66	25.16	0.3281
77	30	40	631334	3470.01	DFT-s-OFDM 16 QAM	1@1	26.70	24.20	0.2630
77	30	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.62	25.12	0.3251
77	30	40	633334	3500.01	DFT-s-OFDM QPSK	1@1	27.71	25.21	0.3319
77	30	40	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	26.45	23.95	0.2483
77	30	40	635332	3529.98	DFT-s-OFDM PI/2 BPSK	1@1	27.59	25.09	0.3228
77	30	40	635332	3529.98	DFT-s-OFDM QPSK	1@1	27.56	25.06	0.3206
77	30	40	635332	3529.98	DFT-s-OFDM 16 QAM	1@1	26.45	23.95	0.2483
77	30	50	631668	3475.02	DFT-s-OFDM PI/2 BPSK	1@1	27.80	25.30	0.3388
77	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@1	27.73	25.23	0.3334
77	30	50	631668	3475.02	DFT-s-OFDM 16 QAM	1@1	26.67	24.17	0.2612
77	30	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.89	25.39	0.3459
77	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@1	27.83	25.33	0.3412
77	30	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	26.73	24.23	0.2649
77	30	50	635000	3525	DFT-s-OFDM PI/2 BPSK	1@1	27.63	25.13	0.3258
77	30	50	635000	3525	DFT-s-OFDM QPSK	1@1	27.61	25.11	0.3243
77	30	50	635000	3525	DFT-s-OFDM 16 QAM	1@1	26.52	24.02	0.2523
77	30	60	632000	3480	DFT-s-OFDM PI/2 BPSK	1@1	27.74	25.24	0.3342



77	30	60	632000	3480	DFT-s-OFDM QPSK	1@1	27.64	25.14	0.3266
77	30	60	632000	3480	DFT-s-OFDM 16 QAM	1@1	27.24	24.74	0.2979
77	30	60	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.67	25.17	0.3289
77	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@1	27.68	25.18	0.3296
77	30	60	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	26.48	23.98	0.2500
77	30	60	634666	3519.99	DFT-s-OFDM PI/2 BPSK	1@1	27.60	25.10	0.3236
77	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@1	27.45	24.95	0.3126
77	30	60	634666	3519.99	DFT-s-OFDM 16 QAM	1@1	26.47	23.97	0.2495
77	30	70	632334	3485.01	DFT-s-OFDM PI/2 BPSK	1@1	27.75	25.25	0.3350
77	30	70	632334	3485.01	DFT-s-OFDM QPSK	1@1	27.70	25.20	0.3311
77	30	70	632334	3485.01	DFT-s-OFDM 16 QAM	1@1	26.57	24.07	0.2553
77	30	70	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.79	25.29	0.3381
77	30	70	633334	3500.01	DFT-s-OFDM QPSK	1@1	27.80	25.30	0.3388
77	30	70	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	26.69	24.19	0.2624
77	30	70	634332	3514.98	DFT-s-OFDM PI/2 BPSK	1@1	27.83	25.33	0.3412
77	30	70	634332	3514.98	DFT-s-OFDM QPSK	1@1	27.87	25.37	0.3443
77	30	70	634332	3514.98	DFT-s-OFDM 16 QAM	1@1	26.76	24.26	0.2667
77	30	80	632668	3490.02	DFT-s-OFDM PI/2 BPSK	1@1	27.87	25.37	0.3443
77	30	80	632668	3490.02	DFT-s-OFDM QPSK	1@1	27.80	25.30	0.3388
77	30	80	632668	3490.02	DFT-s-OFDM 16 QAM	1@1	26.53	24.03	0.2529
77	30	80	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.81	25.31	0.3396
77	30	80	633334	3500.01	DFT-s-OFDM QPSK	1@1	27.75	25.25	0.3350
77	30	80	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	26.78	24.28	0.2679
77	30	80	634000	3510	DFT-s-OFDM PI/2 BPSK	1@1	27.83	25.33	0.3412
77	30	80	634000	3510	DFT-s-OFDM QPSK	1@1	27.71	25.21	0.3319
77	30	80	634000	3510	DFT-s-OFDM 16 QAM	1@1	26.57	24.07	0.2553
77	30	90	633000	3495	DFT-s-OFDM PI/2 BPSK	1@1	27.83	25.33	0.3412
77	30	90	633000	3495	DFT-s-OFDM QPSK	1@1	27.85	25.35	0.3428
77	30	90	633000	3495	DFT-s-OFDM 16 QAM	1@1	26.65	24.15	0.2600
77	30	90	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	27.88	25.38	0.3451
77	30	90	633334	3500.01	DFT-s-OFDM QPSK	1@1	27.81	25.31	0.3396
77	30	90	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	26.76	24.26	0.2667
77	30	90	633666	3504.99	DFT-s-OFDM PI/2 BPSK	1@1	27.87	25.37	0.3443
77	30	90	633666	3504.99	DFT-s-OFDM QPSK	1@1	27.86	25.36	0.3436
77	30	90	633666	3504.99	DFT-s-OFDM 16 QAM	1@1	26.68	24.18	0.2618



### 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 QPSK	50@0	0.0037	PASS	NV
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	0.0012	PASS	LV
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	0.0014	PASS	HV
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.0027	PASS	-30°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	0.0034	PASS	-20°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.0031	PASS	-10°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.0015	PASS	0°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	0.0022	PASS	10°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.0029	PASS	20°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	0.0026	PASS	30°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.0031	PASS	40°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	0.0028	PASS	50°C



### Peak to Average Ratio

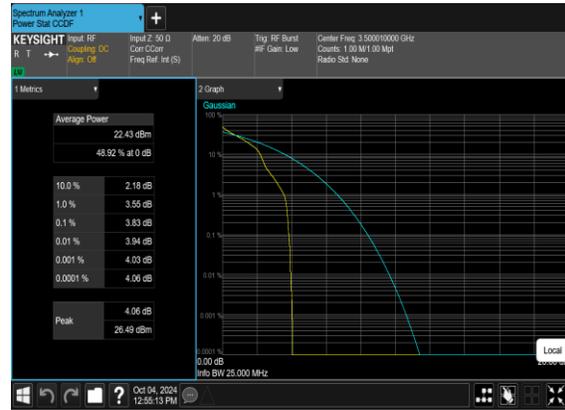
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	3.79	13	PASS
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@0	3.83	13	PASS
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	4.36	13	PASS
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@0	4.6	13	PASS



N77(20M)\_DFT-s-OFDM\_PI\_2-BPSK\_Outer\_Full\_Mid\_CH



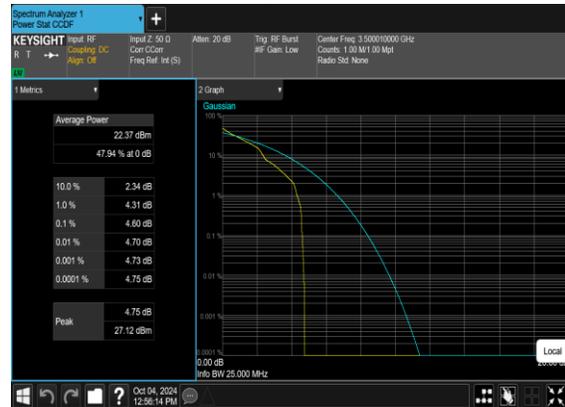
N77(20M)\_DFT-s-OFDM\_PI\_2-BPSK\_Edge\_1RB\_Left\_Mid\_CH



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	10	633334	3500.01	CP-OFDM QPSK	24@0	8.5304	9.629
77	30	10	633334	3500.01	CP-OFDM 16 QAM	24@0	8.588	9.408
77	30	10	633334	3500.01	CP-OFDM 64 QAM	24@0	8.5783	9.614
77	30	10	633334	3500.01	CP-OFDM 256 QAM	24@0	8.5832	9.295
77	30	15	633334	3500.01	CP-OFDM QPSK	38@0	13.586	14.82
77	30	15	633334	3500.01	CP-OFDM 16 QAM	38@0	13.573	14.56
77	30	15	633334	3500.01	CP-OFDM 64 QAM	38@0	13.587	14.71
77	30	15	633334	3500.01	CP-OFDM 256 QAM	38@0	13.548	14.72
77	30	20	633334	3500.01	CP-OFDM QPSK	51@0	18.238	19.3
77	30	20	633334	3500.01	CP-OFDM 16 QAM	51@0	18.183	19.52
77	30	20	633334	3500.01	CP-OFDM 64 QAM	51@0	18.184	19.19
77	30	20	633334	3500.01	CP-OFDM 256 QAM	51@0	18.162	19.83
77	30	25	633334	3500.01	CP-OFDM QPSK	65@0	23.233	24.62
77	30	25	633334	3500.01	CP-OFDM 16 QAM	65@0	23.275	24.53
77	30	25	633334	3500.01	CP-OFDM 64 QAM	65@0	23.182	24.15
77	30	25	633334	3500.01	CP-OFDM 256 QAM	65@0	23.206	24.38
77	30	30	633334	3500.01	CP-OFDM QPSK	78@0	27.848	29.3
77	30	30	633334	3500.01	CP-OFDM 16 QAM	78@0	27.893	29.25
77	30	30	633334	3500.01	CP-OFDM 64 QAM	78@0	27.841	29.3
77	30	30	633334	3500.01	CP-OFDM 256 QAM	78@0	27.926	28.9
77	30	40	633334	3500.01	CP-OFDM QPSK	106@0	37.946	39.4
77	30	40	633334	3500.01	CP-OFDM 16 QAM	106@0	37.886	39.63
77	30	40	633334	3500.01	CP-OFDM 64 QAM	106@0	37.76	39.24
77	30	40	633334	3500.01	CP-OFDM 256 QAM	106@0	37.824	39.44



77	30	50	633334	3500.01	CP-OFDM QPSK	133@0	47.417	49.25
77	30	50	633334	3500.01	CP-OFDM 16 QAM	133@0	47.462	49.1
77	30	50	633334	3500.01	CP-OFDM 64 QAM	133@0	47.547	49.04
77	30	50	633334	3500.01	CP-OFDM 256 QAM	133@0	47.434	49.38
77	30	60	633334	3500.01	CP-OFDM QPSK	162@0	57.686	60.02
77	30	60	633334	3500.01	CP-OFDM 16 QAM	162@0	57.759	60.09
77	30	60	633334	3500.01	CP-OFDM 64 QAM	162@0	57.849	59.69
77	30	60	633334	3500.01	CP-OFDM 256 QAM	162@0	57.857	59.79
77	30	70	633334	3500.01	CP-OFDM QPSK	189@0	67.458	69.86
77	30	70	633334	3500.01	CP-OFDM 16 QAM	189@0	67.345	69.87
77	30	70	633334	3500.01	CP-OFDM 64 QAM	189@0	67.531	69.8
77	30	70	633334	3500.01	CP-OFDM 256 QAM	189@0	67.594	69.73
77	30	80	633334	3500.01	CP-OFDM QPSK	217@0	77.446	79.95
77	30	80	633334	3500.01	CP-OFDM 16 QAM	217@0	77.648	80.08
77	30	80	633334	3500.01	CP-OFDM 64 QAM	217@0	77.473	80.23
77	30	80	633334	3500.01	CP-OFDM 256 QAM	217@0	77.372	80.07
77	30	90	633334	3500.01	CP-OFDM QPSK	245@0	87.496	90.3
77	30	90	633334	3500.01	CP-OFDM 16 QAM	245@0	87.344	90.21
77	30	90	633334	3500.01	CP-OFDM 64 QAM	245@0	87.344	90.45
77	30	90	633334	3500.01	CP-OFDM 256 QAM	245@0	87.649	90.41
77	30	100	633334	3500.01	CP-OFDM QPSK	273@0	97.433	100.8
77	30	100	633334	3500.01	CP-OFDM 16 QAM	273@0	97.365	100.6
77	30	100	633334	3500.01	CP-OFDM 64 QAM	273@0	97.29	100.7
77	30	100	633334	3500.01	CP-OFDM 256 QAM	273@0	97.422	100.5



N77(10M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



N77(10M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



N77(10M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH



N77(10M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH





N77(15M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



N77(15M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



N77(15M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH

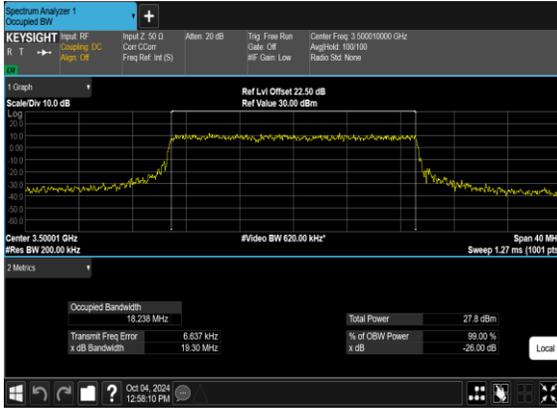


N77(15M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH





N77(20M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



N77(20M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



N77(20M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH



N77(20M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH





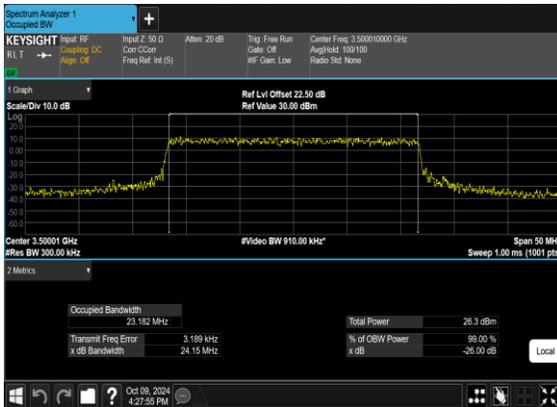
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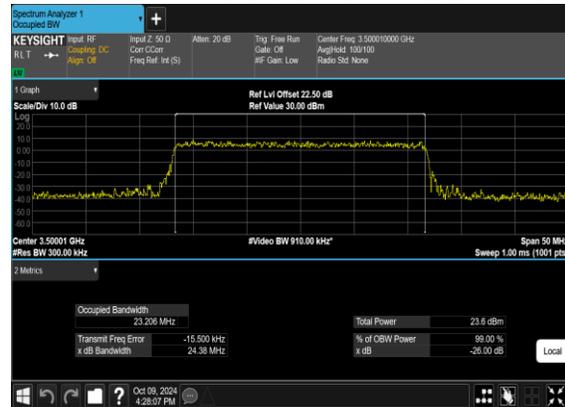
N77(25M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



N77(25M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH



N77(25M)\_CP-OFDM\_256QAM\_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





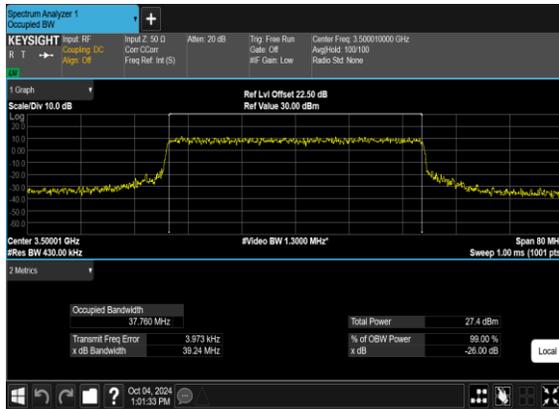
N77(40M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



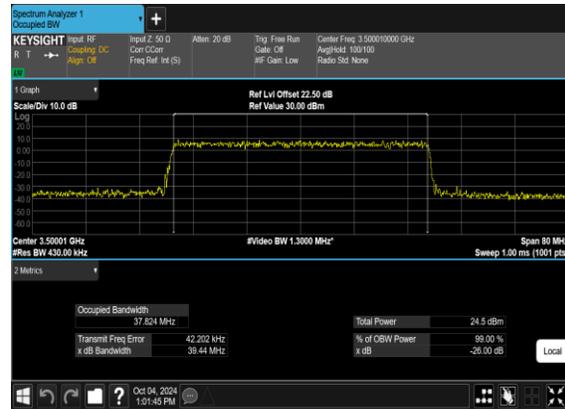
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N77(40M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH

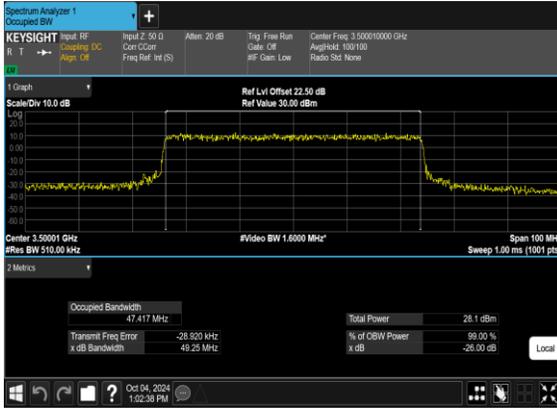


N77(40M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH





N77(50M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



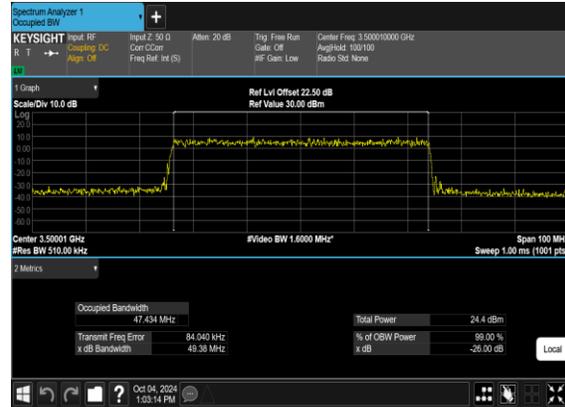
N77(50M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



N77(50M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH



N77(50M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH





N77(60M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



N77(60M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



N77(60M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH



N77(60M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH

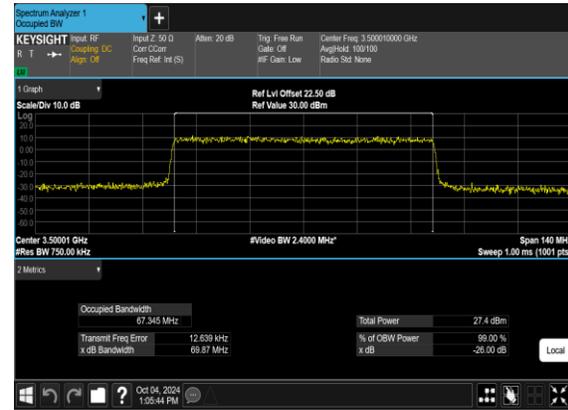




N77(70M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



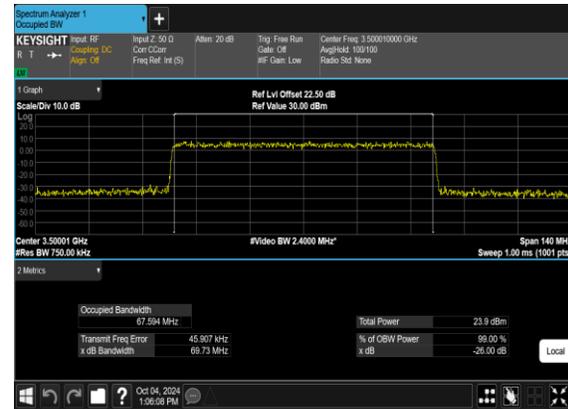
N77(70M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



N77(70M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH



N77(70M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH





N77(80M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



N77(80M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



N77(80M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH

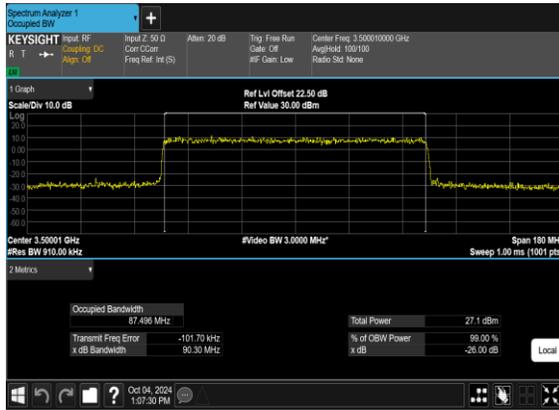


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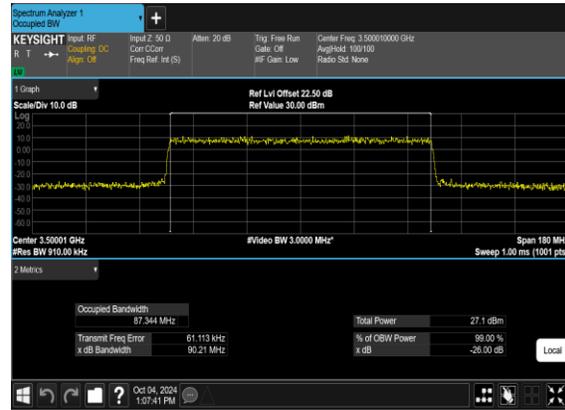




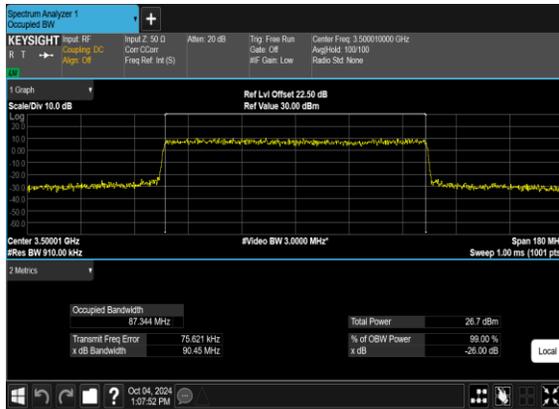
N77(90M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



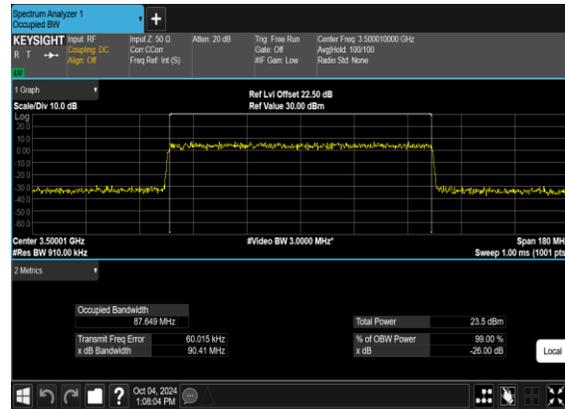
N77(90M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



N77(90M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH



N77(90M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH

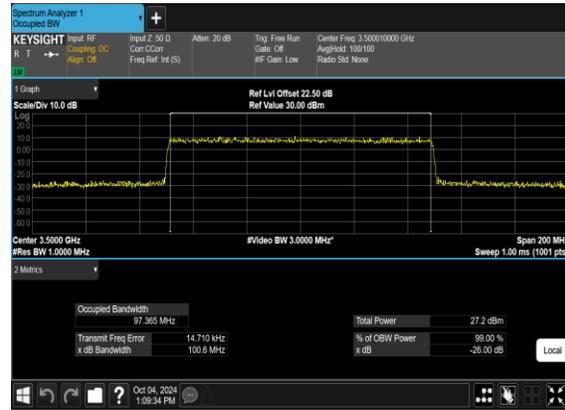




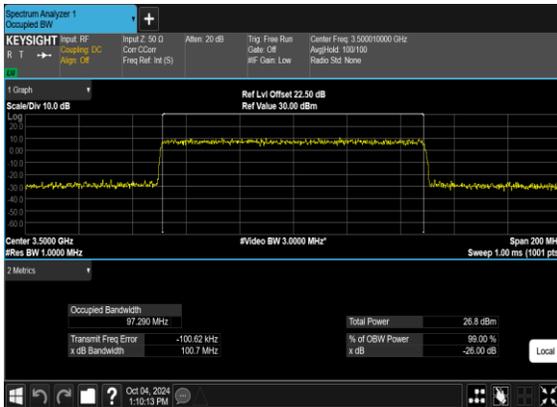
N77(100M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



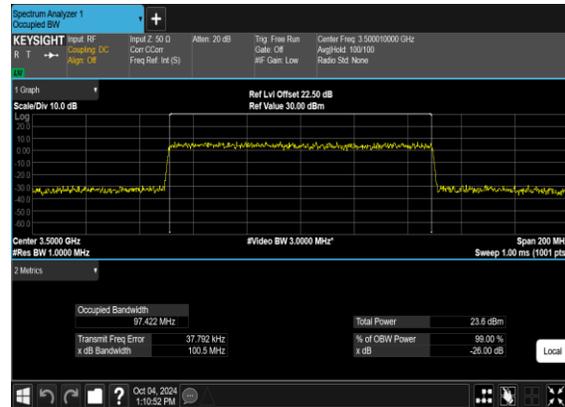
N77(100M)\_CP-OFDM\_16 QAM\_Outer\_Full\_Mid\_CH



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	10	630334	3455.01	DFT-s-OFDM BPSK	1@0	see graph	---
77	30	10	630334	3455.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	10	630334	3455.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	10	630334	3455.01	DFT-s-OFDM QPSK	1@0	see graph	---
77	30	10	630334	3455.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	10	630334	3455.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	10	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	---
77	30	10	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	10	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	10	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	---
77	30	10	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	10	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	10	636332	3544.98	DFT-s-OFDM BPSK	1@0	see graph	---
77	30	10	636332	3544.98	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	10	636332	3544.98	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@0	see graph	---
77	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	50	631668	3475.02	DFT-s-OFDM BPSK	1@0	see graph	---
77	30	50	631668	3475.02	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	50	631668	3475.02	DFT-s-OFDM BPSK	1@0	see graph	PASS



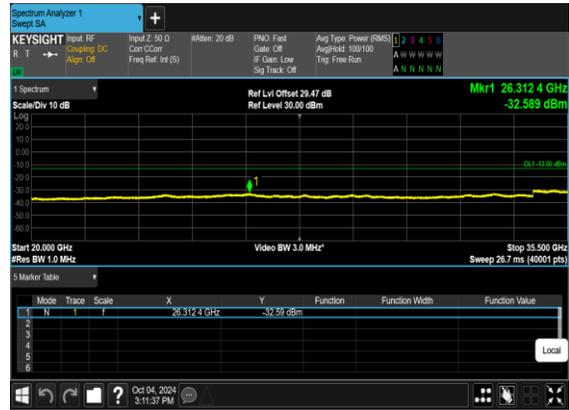
77	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@0	see graph	---
77	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	50	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	---
77	30	50	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	50	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	---
77	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	50	635000	3525.0	DFT-s-OFDM BPSK	1@0	see graph	---
77	30	50	635000	3525.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	50	635000	3525.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	50	635000	3525.0	DFT-s-OFDM QPSK	1@0	see graph	---
77	30	50	635000	3525.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	50	635000	3525.0	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



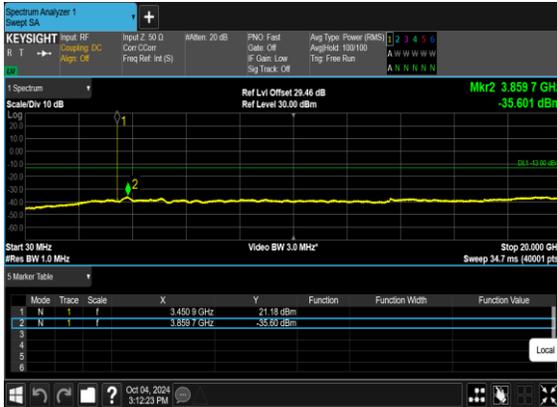
N77(10M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



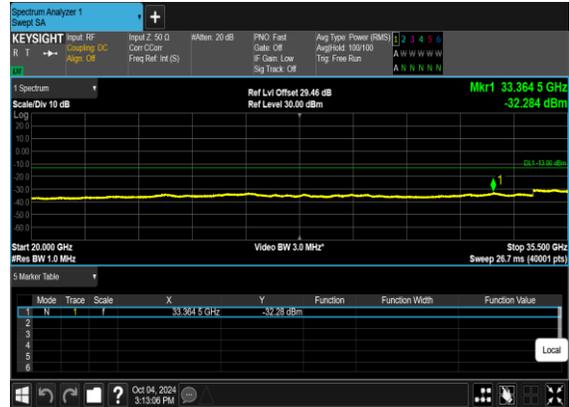
N77(10M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



N77(10M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH

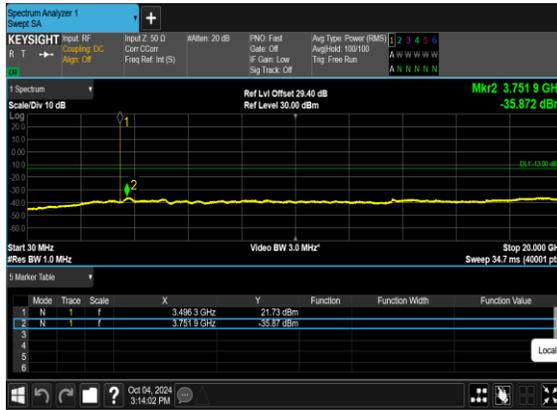


N77(10M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH

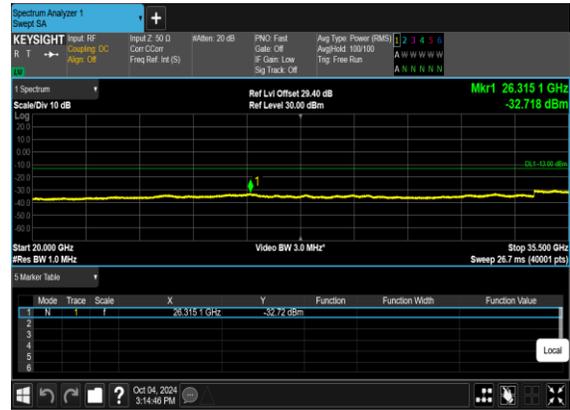




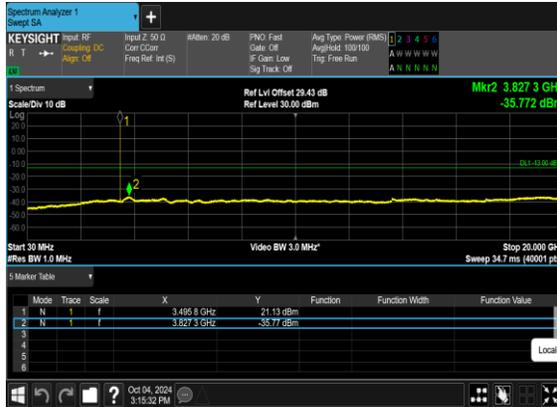
N77(10M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



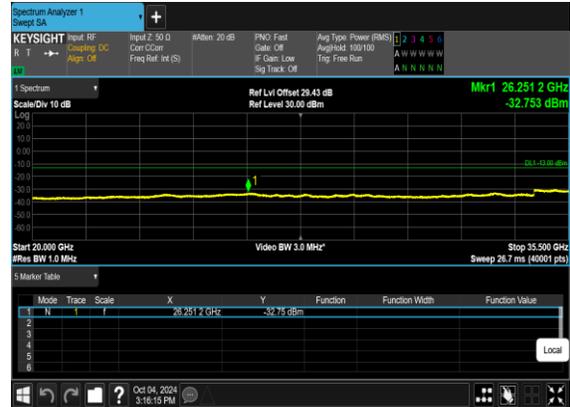
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N77(10M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH

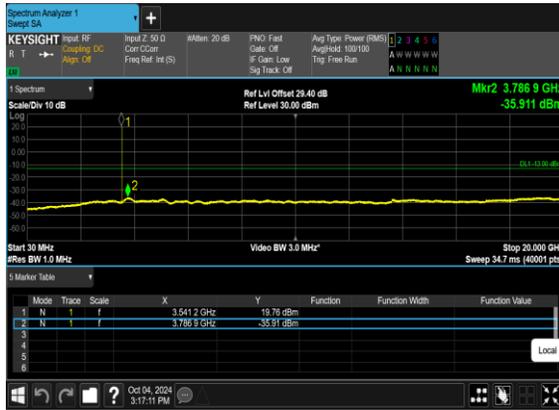


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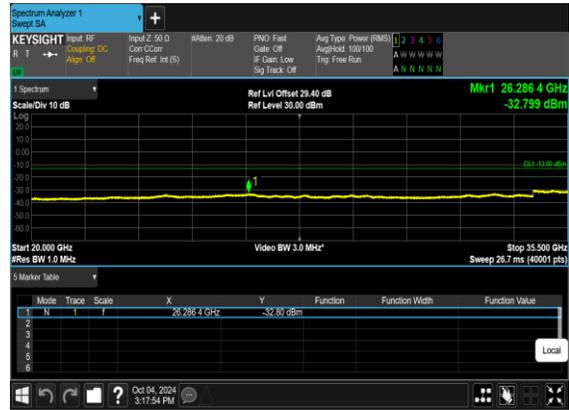




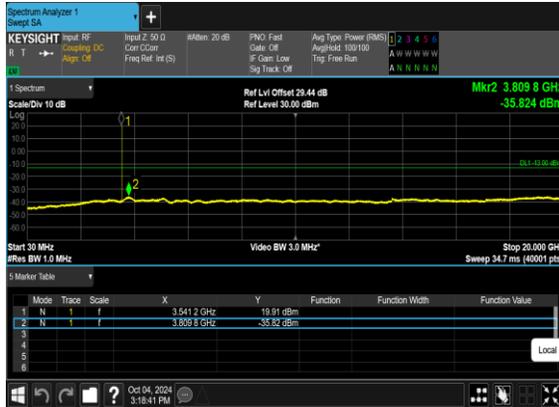
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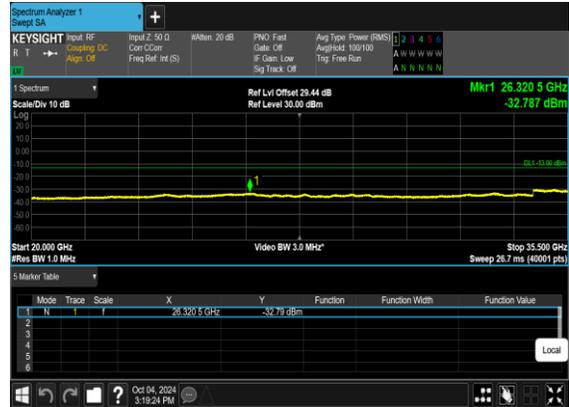
N77(10M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_High\_CH



N77(10M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH

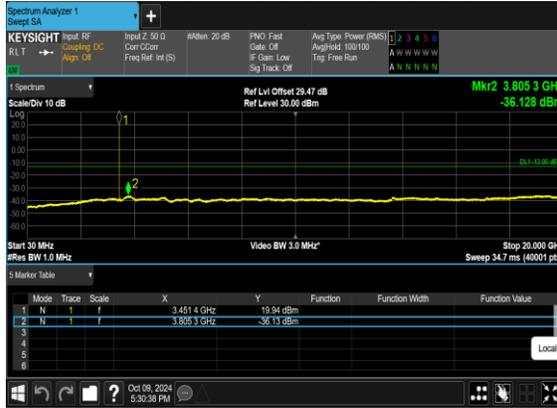


N77(10M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH

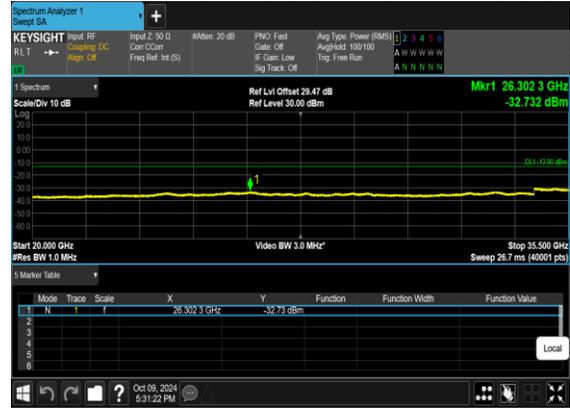




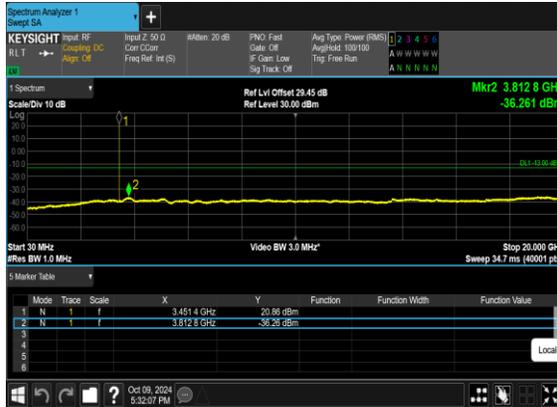
N77(50M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



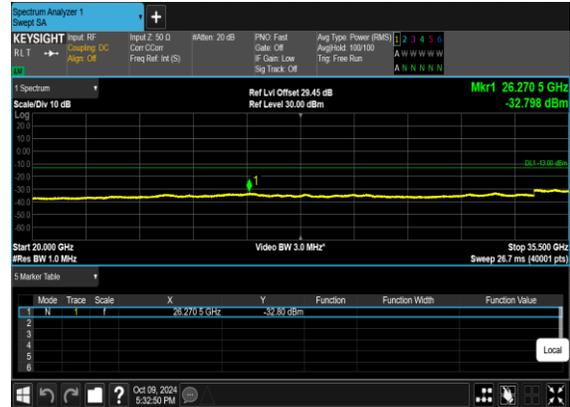
N77(50M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



N77(50M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH

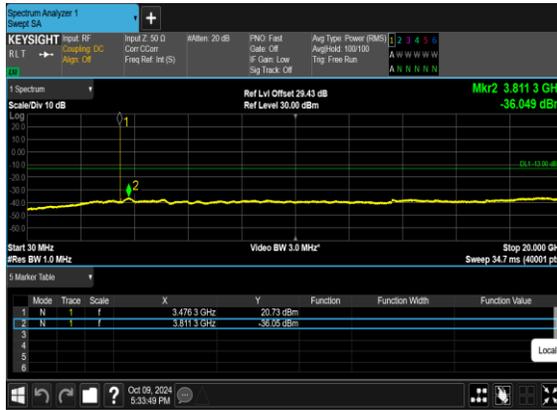


N77(50M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH

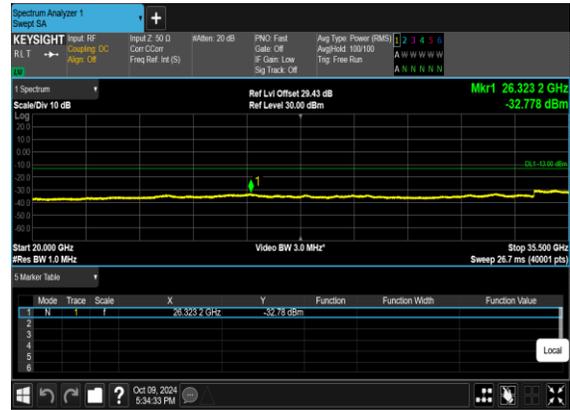




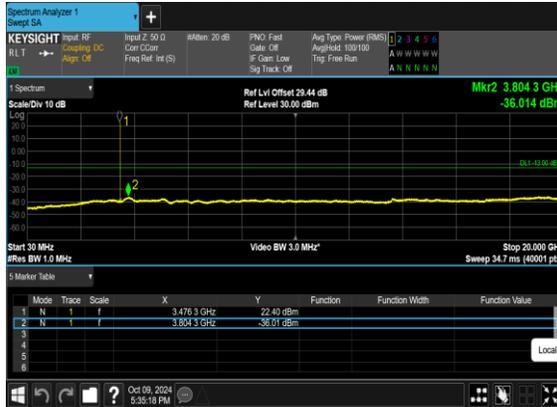
N77(50M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



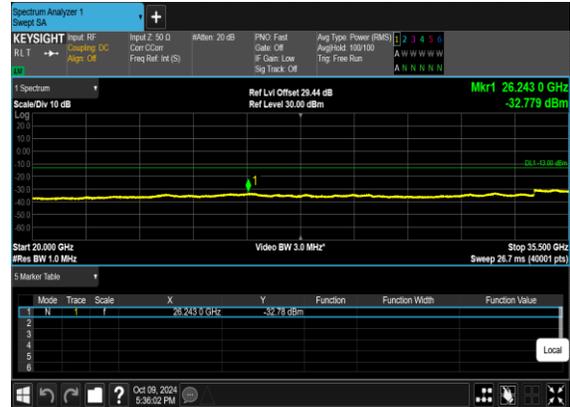
N77(50M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



N77(50M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH

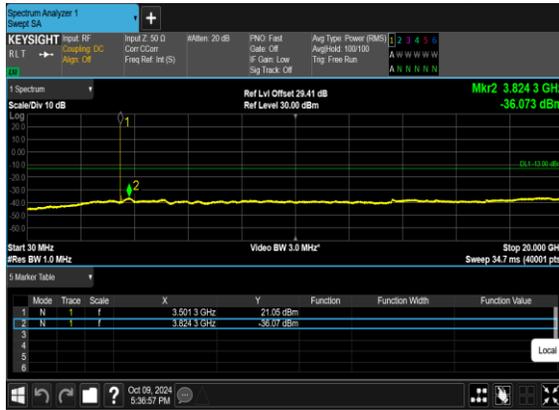


N77(50M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH

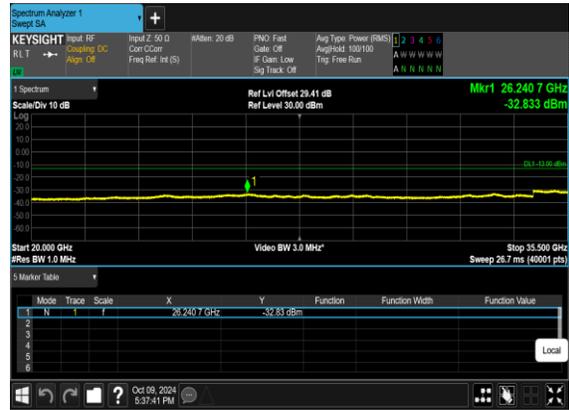




N77(50M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_High\_CH



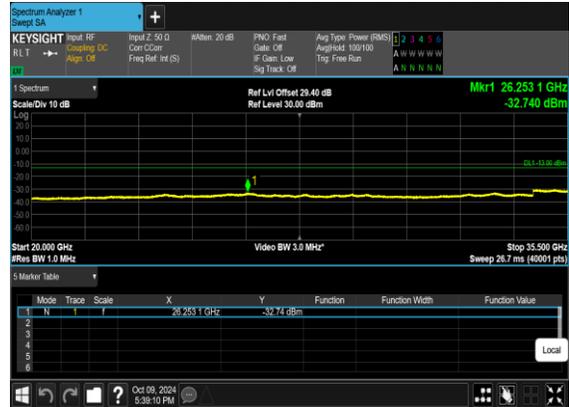
N77(50M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_High\_CH



N77(50M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH

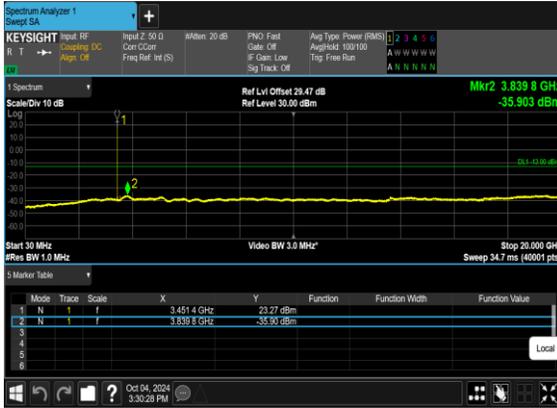


N77(50M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH





N77(100M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



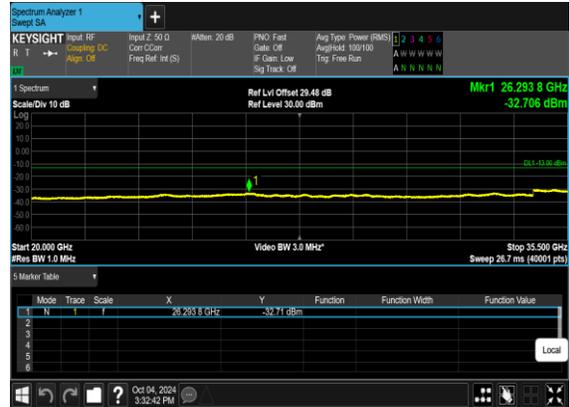
N77(100M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



N77(100M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



N77(100M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



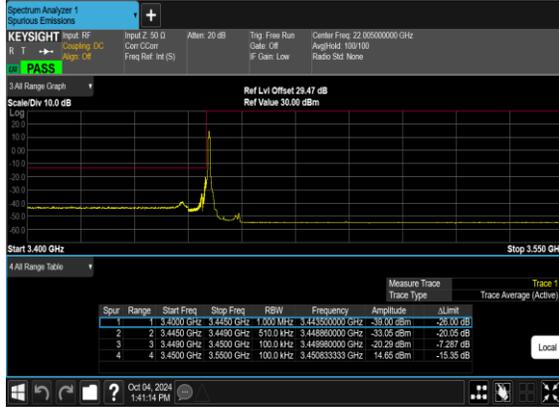


Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
77	30	10	630334	3455.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	10	630334	3455.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	10	630334	3455.01	DFT-s-OFDM BPSK	24@0	see graph	PASS
77	30	10	630334	3455.01	DFT-s-OFDM QPSK	24@0	see graph	PASS
77	30	10	636332	3544.98	DFT-s-OFDM BPSK	1@23	see graph	PASS
77	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@23	see graph	PASS
77	30	10	636332	3544.98	DFT-s-OFDM BPSK	24@0	see graph	PASS
77	30	10	636332	3544.98	DFT-s-OFDM QPSK	24@0	see graph	PASS
77	30	50	631668	3475.02	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	50	631668	3475.02	DFT-s-OFDM BPSK	128@0	see graph	PASS
77	30	50	631668	3475.02	DFT-s-OFDM QPSK	128@0	see graph	PASS
77	30	50	635000	3525.0	DFT-s-OFDM BPSK	1@132	see graph	PASS
77	30	50	635000	3525.0	DFT-s-OFDM QPSK	1@132	see graph	PASS
77	30	50	635000	3525.0	DFT-s-OFDM BPSK	128@0	see graph	PASS
77	30	50	635000	3525.0	DFT-s-OFDM QPSK	128@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(10M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



N77(10M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



N77(10M)\_DFT-s-OFDM\_BPSK\_Outer\_Full\_Low\_CH



N77(10M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Low\_CH





N77(10M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Right\_High\_CH



N77(10M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Right\_High\_CH



N77(10M)\_DFT-s-OFDM\_BPSK\_Outer\_Full\_High\_CH



N77(10M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_High\_CH

