FCC RF Test Report

APPLICANT	:	iMozen Group INC.
EQUIPMENT	:	Handheld mobile computer
BRAND NAME	:	iMozen Group INC.
MODEL NAME	:	TC605AN
FCC ID	:	SPYTC605AN
STANDARD	:	47 CFR Part 2, 27 Subpart O (3700-3980MHz)
CLASSIFICATION	:	PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S)	:	Dec. 11, 2023 ~ Dec 28, 2023

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

ACCREDITED Cert #5145.02

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APPENDIX A. TEST RESULTS OF CONDUCTED TEST

APPENDIX B. TEST RESULTS OF RADIATED TEST

APPENDIX C. TEST SETUP PHOTOGRAPHS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG3N2109-02K	Rev. 01	Initial issue of report	Jan. 11, 2024

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	§27.50(j)(3)	Equivalent Isotropic Radiated Power (5G NR n77, n78)	EIRP < 1Watt		
3.5	§27.50(j)(4)	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	Reporting Only	PASS	-
3.7	§2.1051 §27.53(l)(2)	Conducted Band Edge Measurement (5G NR n77, n78)	< 43+10log10(P[Watts])	PASS	-
3.8	§2.1051 §27.53(l)(2)	Conducted Spurious Emission (5G NR n77, n78)	< 43+10log10(P[Watts])	PASS	-
3.9	§27.54	Frequency Stability Temperature & Voltage	Within Authorized Band	PASS	-
4.4	§2.1053 §27.53(l)(2)	Radiated Spurious Emission (5G NR n77, n78)	< $43+10\log_{10}$(P[Watts])	PASS	Under limit 41.79 dB at 11378.00 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

iMozen Group INC.
6 F., No. 288, Sec. 6, Civic Blvd., Xinyi Dist., Taipei City 110417, Taiwan (R.O.C.)

1.2 Manufacturer

iMozen Group INC.
6 F., No. 288, Sec. 6, Civic Blvd., Xinyi Dist., Taipei City 110417, Taiwan (R.O.C.)

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Handheld mobile computer
Brand Name	iMozen Group INC.
Model Name	TC605AN
FCC ID	SPYTC605AN
IMEI Code	Conducted : 352149450707620 Radiation : 352149450708743/352149450708750
HW Version	V4
SW Version	ST6919A_20231220121856
EUT Stage	Identical Prototype

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Frequency	5G NR n77: 3700 MHz ~ 3980 MHz 5G NR n78: 3700 MHz ~ 3800 MHz
SCS	30kHz
Bandwidth	n77: 20 / 30 / 40 / 60 / 80 /100MHz n78: 20 / 30 / 40 / 50 / 60 / 70 / 80 / 90 / 100MHz
Antenna Gain	**<Ant. 5>** 5G NR n77: 0.86 dBi 5G NR n78: 0.86 dBi **<Ant. 6>** 5G NR n77: -1.85 dBi 5G NR n78: -1.85 dBi **<Ant. 8>** 5G NR n77: 2.62 dBi 5G NR n78: 2.62 dBi **<Ant. 9>** 5G NR n77: 1.22 dBi 5G NR n78: 1.22 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 mode for Ant. 8, UL MIMO mode for Ant.(8+5).
2. 5G NR n77/n78 support UL MIMO mode for Ant(8+5), and only supports CP-OFDM Modulation, the MIMO mode is completely uncorrelated, so the directional gain is selected the maximum gain among all antennas.
3. 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.
4. 5G NR n77/n78 support SA and NSA mode. According to the maximum power between SA and NSA mode, SA covers NSA mode, and 5G NR n77 covers n78 for BW 20/30/40/60/80/100MHz, and full test BW 50/70/90MHz for n78.
5. The device supports HPUE(Power class 2) mode for 5G NR n77/n78.
6. All the supported EN-DC combinations are verified conducted power, only the EN-DC combination with highest power are shown in the report.
7. 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 and Emission Designator

5G NR n77 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	3710.01 ~ 3969.99	0.5781	18M2G7D	0.4550	18M3W7D
30	3715.02 ~ 3964.98	0.5888	27M8G7D	0.4603	27M9W7D
40	3720.00 ~ 3960.00	0.6095	37M9G7D	0.4667	37M9W7D
60	3730.02 ~ 3949.98	0.5534	57M9G7D	0.4295	57M9W7D
80	3740.01 ~ 3939.99	0.5433	77M5G7D	0.4207	77M4W7D
100	3750.00 ~ 3930.00	0.6281	97M5G7D	0.4909	97M6W7D

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	3710.01 ~ 3789.99	0.5843	18M2G7D	0.4529	18M3W7D
30	3715.02 ~ 3784.98	0.5916	27M8G7D	0.4539	27M9W7D
40	3720.00 ~ 3780.00	0.6012	37M9G7D	0.4613	37M9W7D
50	3725.01 ~ 3774.99	0.5559	47M4G7D	0.4395	47M5W7D
60	3730.02 ~ 3769.98	0.5458	57M9G7D	0.4236	57M9W7D
70	3735.00 ~ 3765.00	0.5572	67M5G7D	0.4276	67M7W7D
80	3740.01 ~ 3759.99	0.5458	77M5G7D	0.4236	77M4W7D
90	3745.02 ~ 3754.98	0.5754	87M4G7D	0.4467	87M6W7D
100	3750.00 ~ 3750.00	0.6124	97M5G7D	0.4207	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	3710.01 ~ 3969.99	0.4980	18M3G7D	0.4351	18M3W7D
30	3715.02 ~ 3964.98	0.5015	27M8G7D	0.4447	27M9W7D
40	3720.00 ~ 3960.00	0.4959	37M9G7D	0.4562	37M9W7D
60	3730.02 ~ 3949.98	0.4760	57M8G7D	0.4151	58M0W7D
80	3740.01 ~ 3939.99	0.4678	77M6G7D	0.4122	77M6W7D
100	3750.00 ~ 3930.00	0.5167	97M5G7D	0.4016	97M6W7D

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	3710.01 ~ 3789.99	0.4641	18M3G7D	0.4132	18M3W7D
30	3715.02 ~ 3784.98	0.4726	27M8G7D	0.4174	27M9W7D
40	3720.00 ~ 3780.00	0.4825	37M9G7D	0.4257	37M9W7D
50	3725.01 ~ 3774.99	0.4402	47M6G7D	0.3897	47M5W7D
60	3730.02 ~ 3769.98	0.4331	57M8G7D	0.3827	58M0W7D
70	3735.00 ~ 3765.00	0.4390	67M5G7D	0.3901	67M5W7D
80	3740.01 ~ 3759.99	0.4407	77M6G7D	0.3884	77M6W7D
90	3745.02 ~ 3754.98	0.4400	87M5G7D	0.3912	87M7W7D
100	3750.00 ~ 3750.00	0.4829	97M5G7D	0.3910	97M6W7D

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 except Bandwidth 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 Location

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.**
	03CH04-KS TH01-KS	CN1257	314309

1.8 Test Software

Item	Site	Manufacture	Name	Version
1.	TH01-KS	SPORTON	FCC_5GNR_China_2 01027	1.0
2.	03CH04-KS	AUDIX	E3	210616

1.9 Applicable Standards

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

- 47 CFR Part 2, 27
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

All test items were verified and recorded according to the standards and without any deviation during the test.

2 Test Configuration of Equipment Under Test

2.1 Test Mode

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

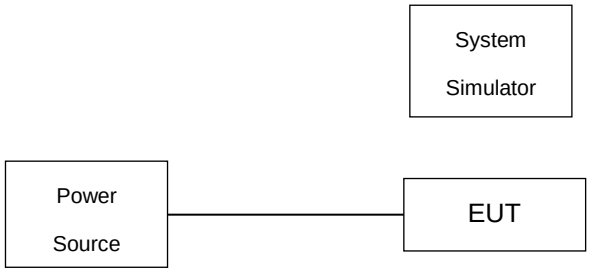
For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X plane) were recorded in this report.

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.

	X Plane	Y Plane	Z Plane
Orthogonal Planes of EUT			

Test Items	5G NR	Bandwidth (MHz)									Modulation					RB #			Test Channel		
		20	30	40	50	60	70	80	90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256 QAM	1	Partial	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	
	n78	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 =3.6V; High Voltage =4.2V.																				

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.	DC Power Supply	GW	GPS-3030D	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	MT8821C	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 16.9 dB and 10dB attenuator.

Example :

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

= 16.9 + 10 = 26.9 (dB)

2.5 Frequency List of Low/Middle/High Channels

5G n77 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	650000	656000	662000
	Frequency	3750	3840	3930
80	Channel	649334	656000	662666
	Frequency	3740.01	3840	3939.99
60	Channel	648668	656000	663332
	Frequency	3730.02	3840	3949.98
40	Channel	648000	656000	664000
	Frequency	3720	3840	3960
30	Channel	647668	656000	664332
	Frequency	3715.02	3840	3964.98
20	Channel	647334	656000	664666
	Frequency	3710.01	3840	3969.99

5G n78 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel		650000	
	Frequency		3750	
90	Channel	649668	650000	650332
	Frequency	3745.02	3750	3754.98
80	Channel	649334	650000	650666
	Frequency	3740.01	3750	3759.99
70	Channel	649000	650000	651000
	Frequency	3735	3750	3765
60	Channel	648668	650000	651332
	Frequency	3730.02	3750	3769.98
50	Channel	648334	650000	651666
	Frequency	3725.01	3750	3774.99
40	Channel	648000	650000	652000
	Frequency	3720	3750	3780
30	Channel	647668	650000	652332
	Frequency	3715.02	3750	3784.98
20	Channel	647334	650000	652666
	Frequency	3710.01	3750	3789.99

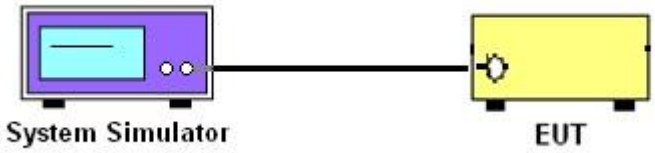
3 Conducted Test Items

3.1 Measuring Instruments

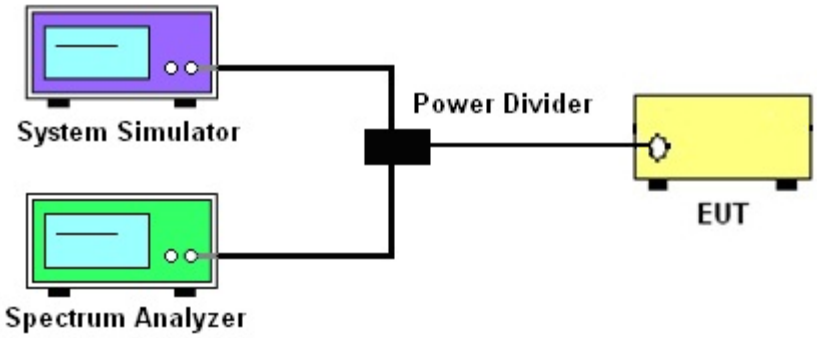
See list of measuring instruments of this test report.

3.2 Test Setup

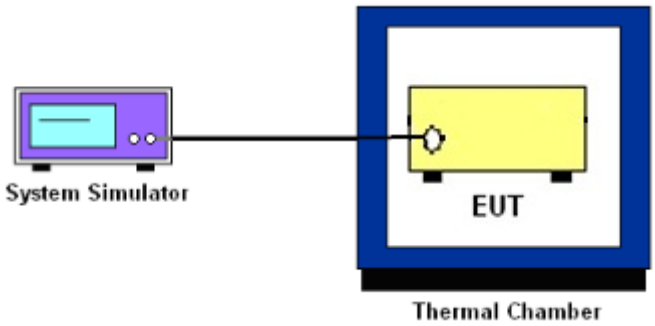
3.2.1 Conducted Output Power



3.2.2 Peak-to-Average Ratio, Occupied Bandwidth, Conducted 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 and EIRP

3.4.1 Description of the Conducted Output Power Measurement and EIRP Measurement

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

The EIRP of mobile transmitters must not exceed 1 Watts for 5G NR n77, n78.

According to KDB 412172 D01 Power Approach,

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

3.4.2 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 Occupied Bandwidth

3.6.1 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.

3.6.2 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.

3.7 Conducted Band Edge

3.7.1 Description of Conducted Band Edge Measurement

27.53(l)(2)

For mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz. Compliance with this paragraph is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be either one percent of the emission bandwidth of the fundamental emission of the transmitter or 350 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz.

3.7.2 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 in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used or a narrower RBW was used (generally limited to no less than 1% of the OBW) and the measured power was integrated over the full required measurement bandwidth.
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. Checked that all the results comply with the emission limit line.
   Example:
   The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
   = P(W)- [43 + 10log(P)] (dB)
   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB) = -13dBm.
9. When using the integration method, the starting frequency of the integration shall be centered at one-half of the RBW away from the band edge.

3.8 Conducted Spurious Emission

3.8.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10^{th} harmonic.

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 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. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.

3.9 Frequency Stability

3.9.1 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. The frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5ppm) of the center frequency.

3.9.2 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.

3.9.3 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.

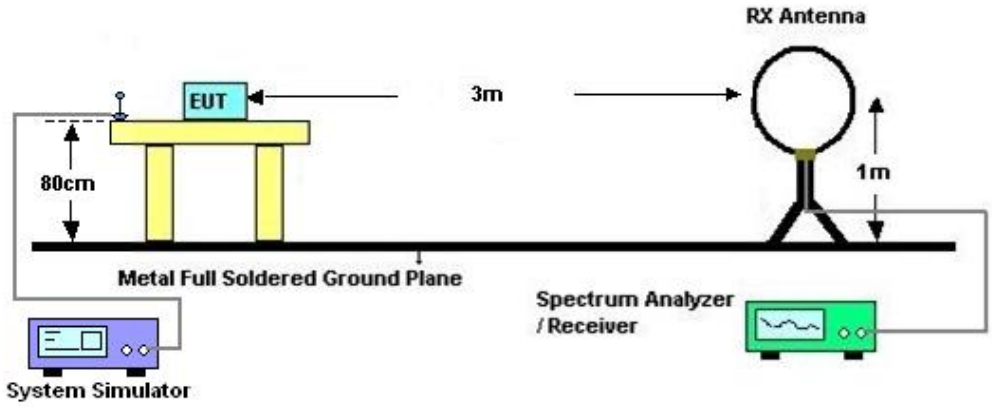
4 Radiated Test Items

4.1 Measuring Instruments

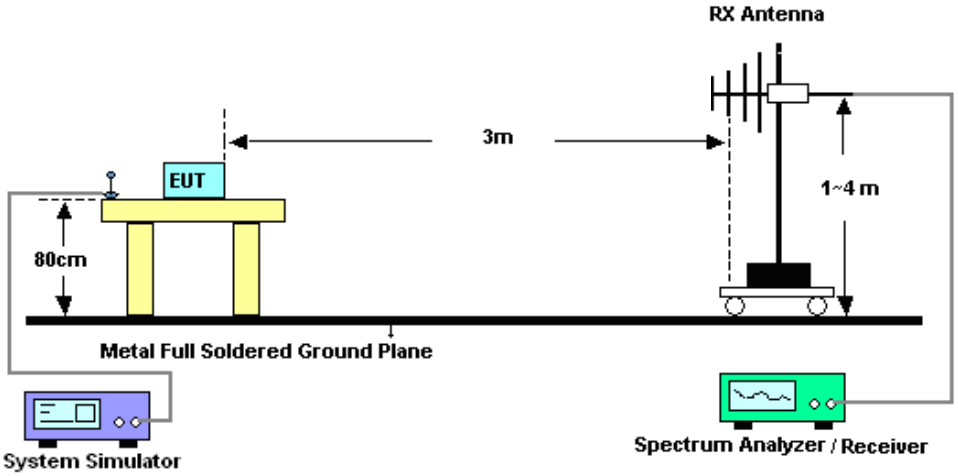
See list of measuring instruments of this test report.

4.2 Test Setup

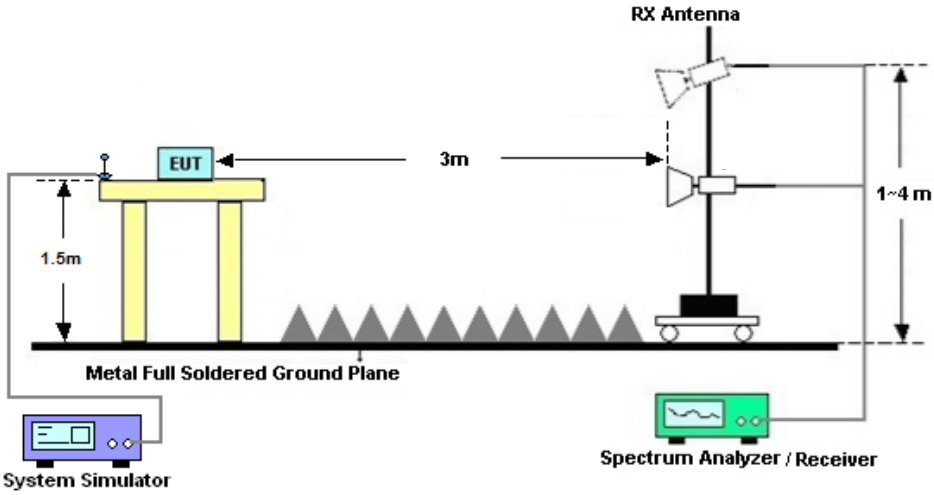
4.2.1 For radiated test below 30MHz



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

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 must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

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.
10. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.

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	Dec. 11, 2023~ Dec. 28, 2023	Oct. 10, 2024	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	Dec. 11, 2023~ Dec. 28, 2023	NCR	Conducted (TH01-KS)
Temperature & humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 06, 2023	Dec. 11, 2023~ Dec. 28, 2023	Jul. 05, 2024	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010B	MY57471079	10Hz-44G,MAX 30dB	Oct. 10, 2023	Dec. 19, 2023	Oct. 09, 2024	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 11 2023	Dec. 19, 2023	Sep. 10, 2024	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	Apr. 09, 2023	Dec. 19, 2023	Apr. 08, 2024	Radiation (03CH04-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	1284	1GHz~18GHz	Oct. 10, 2023	Dec. 19, 2023	Oct. 09, 2024	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 08, 2023	Dec. 19, 2023	Jan. 07, 2024	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	380827	9KHz-1GHz	Jul. 06, 2023	Dec. 19, 2023	Jul. 05, 2024	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40GGA	060728	18~40GHz	Jan. 05, 2023	Dec. 19, 2023	Jan. 04, 2024	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18GA	060840	1Ghz-18Ghz	Oct. 10, 2023	Dec. 19, 2023	Oct. 09, 2024	Radiation (03CH04-KS)
Amplifier	Agilent	8449B	3008A02370	1Ghz-18Ghz	Oct. 10, 2023	Dec. 19, 2023	Oct. 09, 2024	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Dec. 19, 2023	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Dec. 19, 2023	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Dec. 19, 2023	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	**±2.26 dB**
Occupied Channel Bandwidth	**±0.1%**
Conducted Power	**±0.46 dB**
Peak to Average Ratio	**±0.46 dB**
Frequency Stability	**±0.4 Hz**

Uncertainty of Radiated Emission Measurement (9 KHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.82**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.56**

Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.54**

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

Appendix A. Test Results of Conducted Test

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

Software Version: 23.06.1602

FR1 N77(ANT8)

Transmitter Conducted Output Power And EIRP,(G_T - L_C)=2.62dB

NR Band	SCS	BandWidth	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP(dBm)	EIRP(W)
77	30	20	647334	3710.01	DFT-s-OFDM PI/2 BPSK	1@1	25	27.62	0.5781
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@1	24.99	27.61	0.5768
77	30	20	647334	3710.01	DFT-s-OFDM 16 QAM	1@1	23.96	26.58	0.4550
77	30	20	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.93	27.55	0.5689
77	30	20	656000	3840	DFT-s-OFDM QPSK	1@1	24.9	27.52	0.5649
77	30	20	656000	3840	DFT-s-OFDM 16 QAM	1@1	23.72	26.34	0.4305
77	30	20	664666	3969.99	DFT-s-OFDM PI/2 BPSK	1@1	25	27.62	0.5781
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	1@1	24.97	27.59	0.5741
77	30	20	664666	3969.99	DFT-s-OFDM 16 QAM	1@1	23.88	26.5	0.4467
77	30	30	647668	3715.02	DFT-s-OFDM PI/2 BPSK	1@1	25.08	27.7	0.5888
77	30	30	647668	3715.02	DFT-s-OFDM QPSK	1@1	24.96	27.58	0.5728
77	30	30	647668	3715.02	DFT-s-OFDM 16 QAM	1@1	24.01	26.63	0.4603
77	30	30	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.92	27.54	0.5675
77	30	30	656000	3840	DFT-s-OFDM QPSK	1@1	24.9	27.52	0.5649
77	30	30	656000	3840	DFT-s-OFDM 16 QAM	1@1	23.82	26.44	0.4406
77	30	30	664332	3964.98	DFT-s-OFDM PI/2 BPSK	1@1	24.95	27.57	0.5715
77	30	30	664332	3964.98	DFT-s-OFDM QPSK	1@1	24.95	27.57	0.5715
77	30	30	664332	3964.98	DFT-s-OFDM 16 QAM	1@1	23.9	26.52	0.4487
77	30	40	648000	3720	DFT-s-OFDM PI/2 BPSK	1@1	25.23	27.85	0.6095
77	30	40	648000	3720	DFT-s-OFDM QPSK	1@1	25.11	27.73	0.5929
77	30	40	648000	3720	DFT-s-OFDM 16 QAM	1@1	24.07	26.69	0.4667
77	30	40	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	25.08	27.7	0.5888
77	30	40	656000	3840	DFT-s-OFDM QPSK	1@1	25.08	27.7	0.5888
77	30	40	656000	3840	DFT-s-OFDM 16 QAM	1@1	24	26.62	0.4592
77	30	40	664000	3960	DFT-s-OFDM PI/2 BPSK	1@1	24.98	27.6	0.5754
77	30	40	664000	3960	DFT-s-OFDM QPSK	1@1	25	27.62	0.5781
77	30	40	664000	3960	DFT-s-OFDM 16 QAM	1@1	23.87	26.49	0.4457
77	30	60	648668	3730.02	DFT-s-OFDM PI/2 BPSK	1@1	24.79	27.41	0.5508
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@1	24.79	27.41	0.5508
77	30	60	648668	3730.02	DFT-s-OFDM 16 QAM	1@1	23.69	26.31	0.4276

77	30	60	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.77	27.39	0.5483
77	30	60	656000	3840	DFT-s-OFDM QPSK	1@1	24.77	27.39	0.5483
77	30	60	656000	3840	DFT-s-OFDM 16 QAM	1@1	23.71	26.33	0.4295
77	30	60	663332	3949.98	DFT-s-OFDM PI/2 BPSK	1@1	24.81	27.43	0.5534
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	1@1	24.81	27.43	0.5534
77	30	60	663332	3949.98	DFT-s-OFDM 16 QAM	1@1	23.69	26.31	0.4276
77	30	80	649334	3740.01	DFT-s-OFDM PI/2 BPSK	1@1	24.69	27.31	0.5383
77	30	80	649334	3740.01	DFT-s-OFDM QPSK	1@1	24.69	27.31	0.5383
77	30	80	649334	3740.01	DFT-s-OFDM 16 QAM	1@1	23.59	26.21	0.4178
77	30	80	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.72	27.34	0.5420
77	30	80	656000	3840	DFT-s-OFDM QPSK	1@1	24.68	27.3	0.5370
77	30	80	656000	3840	DFT-s-OFDM 16 QAM	1@1	23.61	26.23	0.4198
77	30	80	662666	3939.99	DFT-s-OFDM PI/2 BPSK	1@1	24.69	27.31	0.5383
77	30	80	662666	3939.99	DFT-s-OFDM QPSK	1@1	24.73	27.35	0.5433
77	30	80	662666	3939.99	DFT-s-OFDM 16 QAM	1@1	23.62	26.24	0.4207
77	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	135@67	24.53	27.15	0.5188
77	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	24.73	27.35	0.5433
77	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	1@271	24.69	27.31	0.5383
77	30	100	650000	3750	DFT-s-OFDM QPSK	135@67	24.55	27.17	0.5212
77	30	100	650000	3750	DFT-s-OFDM QPSK	1@1	24.66	27.28	0.5346
77	30	100	650000	3750	DFT-s-OFDM QPSK	1@271	24.67	27.29	0.5358
77	30	100	650000	3750	DFT-s-OFDM 16 QAM	135@67	23.57	26.19	0.4159
77	30	100	650000	3750	DFT-s-OFDM 16 QAM	1@1	23.63	26.25	0.4217
77	30	100	650000	3750	DFT-s-OFDM 16 QAM	1@271	23.64	26.26	0.4227
77	30	100	650000	3750	DFT-s-OFDM 64 QAM	135@67	22.05	24.67	0.2931
77	30	100	650000	3750	DFT-s-OFDM 64 QAM	1@1	22	24.62	0.2897
77	30	100	650000	3750	DFT-s-OFDM 64 QAM	1@271	21.94	24.56	0.2858
77	30	100	650000	3750	DFT-s-OFDM 256 QAM	135@67	20.13	22.75	0.1884
77	30	100	650000	3750	DFT-s-OFDM 256 QAM	1@1	20.19	22.81	0.1910
77	30	100	650000	3750	DFT-s-OFDM 256 QAM	1@271	20.03	22.65	0.1841
77	30	100	650000	3750	CP-OFDM QPSK	137@68	23.12	25.74	0.3750
77	30	100	650000	3750	CP-OFDM QPSK	1@1	23.2	25.82	0.3819
77	30	100	650000	3750	CP-OFDM QPSK	1@271	23.2	25.82	0.3819
77	30	100	656000	3840	DFT-s-OFDM PI/2 BPSK	135@67	24.74	27.36	0.5445
77	30	100	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.78	27.4	0.5495
77	30	100	656000	3840	DFT-s-OFDM PI/2 BPSK	1@271	25.12	27.74	0.5943

77	30	100	656000	3840	DFT-s-OFDM QPSK	135@67	24.76	27.38	0.5470
77	30	100	656000	3840	DFT-s-OFDM QPSK	1@1	24.7	27.32	0.5395
77	30	100	656000	3840	DFT-s-OFDM QPSK	1@271	25.09	27.71	0.5902
77	30	100	656000	3840	DFT-s-OFDM 16 QAM	135@67	23.8	26.42	0.4385
77	30	100	656000	3840	DFT-s-OFDM 16 QAM	1@1	23.64	26.26	0.4227
77	30	100	656000	3840	DFT-s-OFDM 16 QAM	1@271	23.94	26.56	0.4529
77	30	100	656000	3840	DFT-s-OFDM 64 QAM	135@67	22.22	24.84	0.3048
77	30	100	656000	3840	DFT-s-OFDM 64 QAM	1@1	22.02	24.64	0.2911
77	30	100	656000	3840	DFT-s-OFDM 64 QAM	1@271	22.26	24.88	0.3076
77	30	100	656000	3840	DFT-s-OFDM 256 QAM	135@67	20.06	22.68	0.1854
77	30	100	656000	3840	DFT-s-OFDM 256 QAM	1@1	20.05	22.67	0.1849
77	30	100	656000	3840	DFT-s-OFDM 256 QAM	1@271	20.32	22.94	0.1968
77	30	100	656000	3840	CP-OFDM QPSK	137@68	23.26	25.88	0.3873
77	30	100	656000	3840	CP-OFDM QPSK	1@1	23.22	25.84	0.3837
77	30	100	656000	3840	CP-OFDM QPSK	1@271	23.48	26.1	0.4074
77	30	100	662000	3930	DFT-s-OFDM PI/2 BPSK	135@67	24.94	27.56	0.5702
77	30	100	662000	3930	DFT-s-OFDM PI/2 BPSK	1@1	25.01	27.63	0.5794
77	30	100	662000	3930	DFT-s-OFDM PI/2 BPSK	1@271	25.36	27.98	0.6281
77	30	100	662000	3930	DFT-s-OFDM QPSK	135@67	24.95	27.57	0.5715
77	30	100	662000	3930	DFT-s-OFDM QPSK	1@1	24.85	27.47	0.5585
77	30	100	662000	3930	DFT-s-OFDM QPSK	1@271	25.33	27.95	0.6237
77	30	100	662000	3930	DFT-s-OFDM 16 QAM	135@67	23.95	26.57	0.4539
77	30	100	662000	3930	DFT-s-OFDM 16 QAM	1@1	23.86	26.48	0.4446
77	30	100	662000	3930	DFT-s-OFDM 16 QAM	1@271	24.29	26.91	0.4909
77	30	100	662000	3930	DFT-s-OFDM 64 QAM	135@67	22.44	25.06	0.3206
77	30	100	662000	3930	DFT-s-OFDM 64 QAM	1@1	22.13	24.75	0.2985
77	30	100	662000	3930	DFT-s-OFDM 64 QAM	1@271	22.62	25.24	0.3342
77	30	100	662000	3930	DFT-s-OFDM 256 QAM	135@67	20.39	23.01	0.2000
77	30	100	662000	3930	DFT-s-OFDM 256 QAM	1@1	20.26	22.88	0.1941
77	30	100	662000	3930	DFT-s-OFDM 256 QAM	1@271	20.64	23.26	0.2118
77	30	100	662000	3930	CP-OFDM QPSK	137@68	23.42	26.04	0.4018
77	30	100	662000	3930	CP-OFDM QPSK	1@1	23.34	25.96	0.3945
77	30	100	662000	3930	CP-OFDM QPSK	1@271	23.8	26.42	0.4385

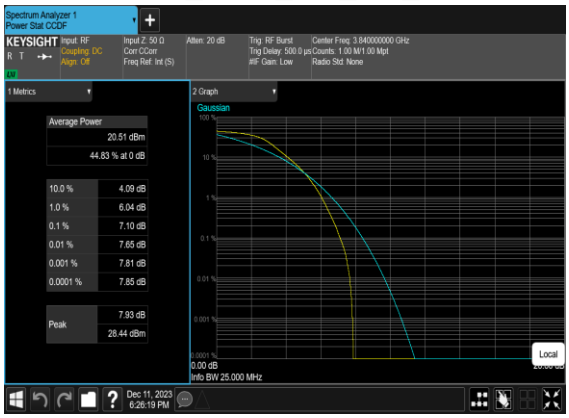
Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
77	30	20	656000	3840.0	DFT-s-OFDM QPS	50@0	-0.0023	**PASS**	NV
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	0.0011	**PASS**	LV
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	0.0012	**PASS**	HV
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	0.0013	**PASS**	-30℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	0.0019	**PASS**	-20℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	0.0029	**PASS**	-10℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	0.0035	**PASS**	0℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	0.0035	**PASS**	10℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.0031	**PASS**	20℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	0.0029	**PASS**	30℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.0024	**PASS**	40℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	0.0012	**PASS**	50℃

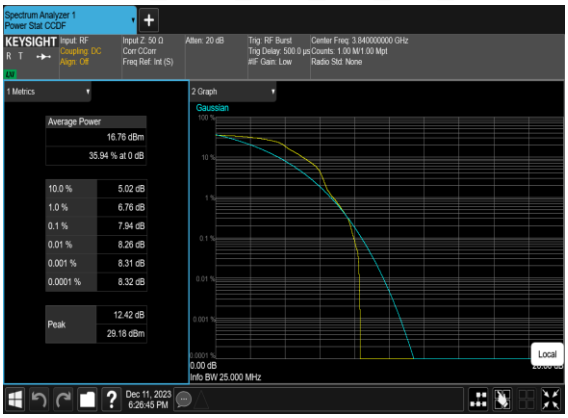
Peak to Average Ratio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
77	30	20	656000	3840.0	DFT-s-OFDM PI/2 BPSK	50@0	7.1	13	**PASS**
77	30	20	656000	3840.0	DFT-s-OFDM PI/2 BPSK	1@0	7.94	13	**PASS**
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	8.3	13	**PASS**
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	1@0	9.61	13	**PASS**

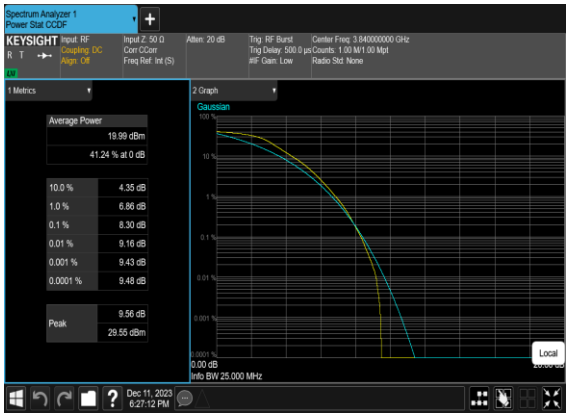
N77(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



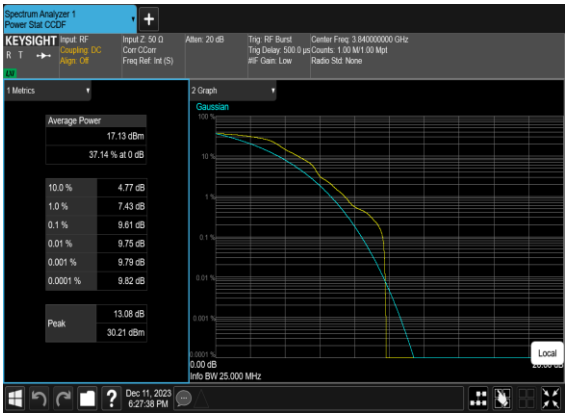
N77(20M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_Mid_CH



N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



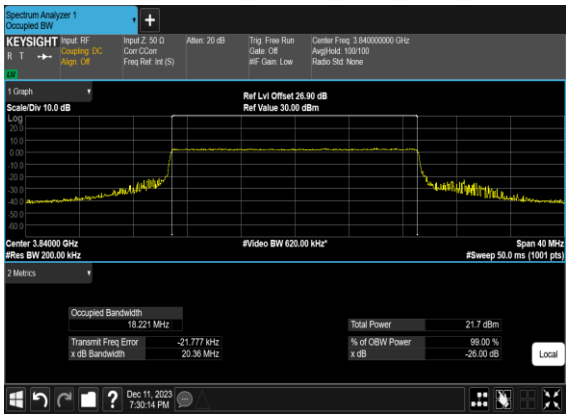
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



Occupied Bandwidth

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB BW (MHz)
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	18.221	20.36
77	30	20	656000	3840.0	CP-OFDM 16 QAM	51@0	18.141	20.89
77	30	20	656000	3840.0	CP-OFDM 64 QAM	51@0	18.201	19.3
77	30	20	656000	3840.0	CP-OFDM 256 QAM	51@0	18.269	20.41
77	30	30	656000	3840.0	CP-OFDM QPSK	78@0	27.75	29.1
77	30	30	656000	3840.0	CP-OFDM 16 QAM	78@0	27.803	29.44
77	30	30	656000	3840.0	CP-OFDM 64 QAM	78@0	27.801	29.15
77	30	30	656000	3840.0	CP-OFDM 256 QAM	78@0	27.886	30.83
77	30	40	656000	3840.0	CP-OFDM QPSK	106@0	37.858	39.64
77	30	40	656000	3840.0	CP-OFDM 16 QAM	106@0	37.937	40.58
77	30	40	656000	3840.0	CP-OFDM 64 QAM	106@0	37.753	39.68
77	30	40	656000	3840.0	CP-OFDM 256 QAM	106@0	37.835	40.48
77	30	60	656000	3840.0	CP-OFDM QPSK	162@0	57.938	59.72
77	30	60	656000	3840.0	CP-OFDM 16 QAM	162@0	57.807	60.02
77	30	60	656000	3840.0	CP-OFDM 64 QAM	162@0	57.915	60.23
77	30	60	656000	3840.0	CP-OFDM 256 QAM	162@0	57.866	59.91
77	30	80	656000	3840.0	CP-OFDM QPSK	217@0	77.525	79.96
77	30	80	656000	3840.0	CP-OFDM 16 QAM	217@0	77.438	80.01
77	30	80	656000	3840.0	CP-OFDM 64 QAM	217@0	77.379	80.25
77	30	80	656000	3840.0	CP-OFDM 256 QAM	217@0	77.409	79.94
77	30	100	656000	3840.0	CP-OFDM QPSK	273@0	97.502	100.4
77	30	100	656000	3840.0	CP-OFDM 16 QAM	273@0	97.501	100.6
77	30	100	656000	3840.0	CP-OFDM 64 QAM	273@0	97.46	100.3
77	30	100	656000	3840.0	CP-OFDM 256 QAM	273@0	97.645	100.4

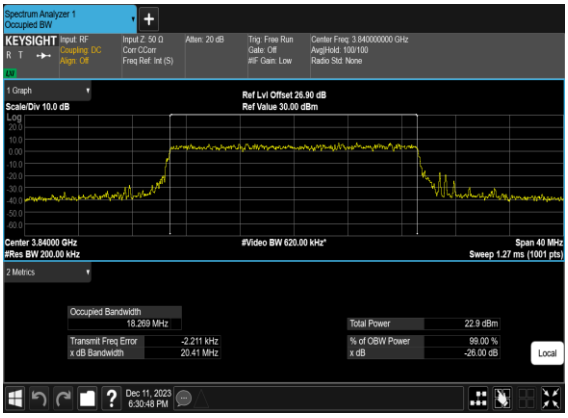
N77(20M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



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

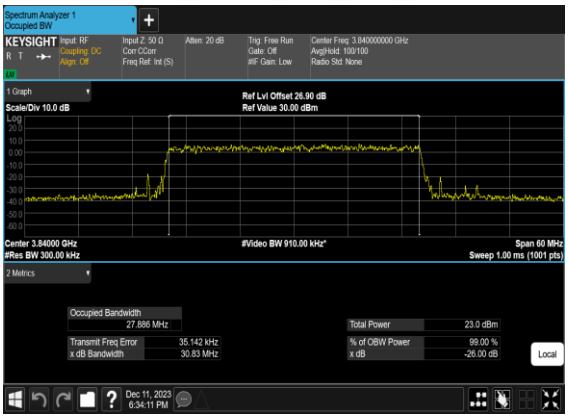


N77(30M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

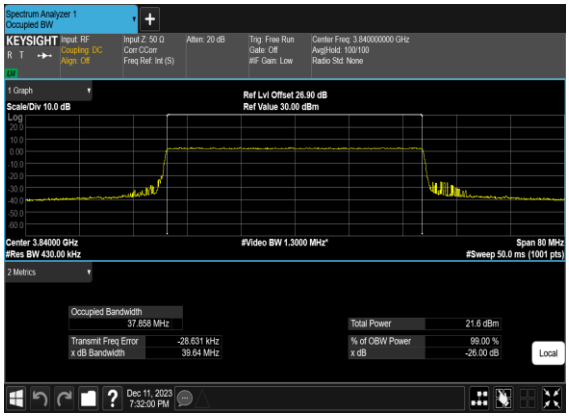
N77(30M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

N77(30M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

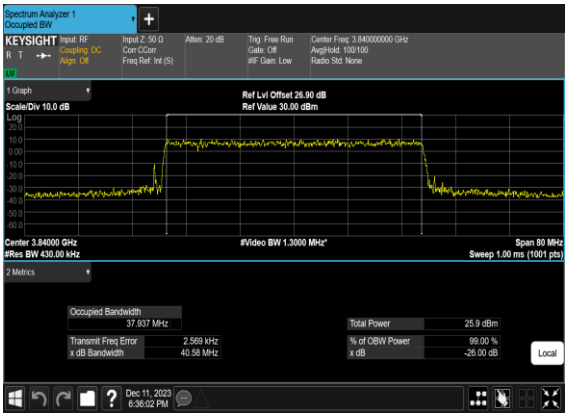
N77(30M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



N77(40M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

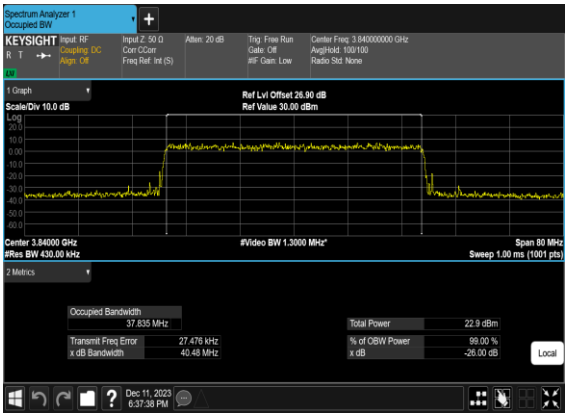


N77(40M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

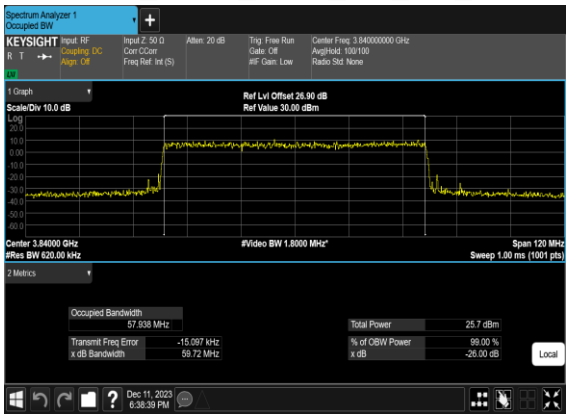


N77(40M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

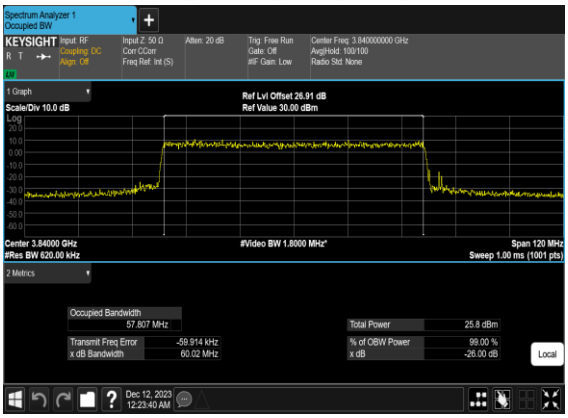
N77(40M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



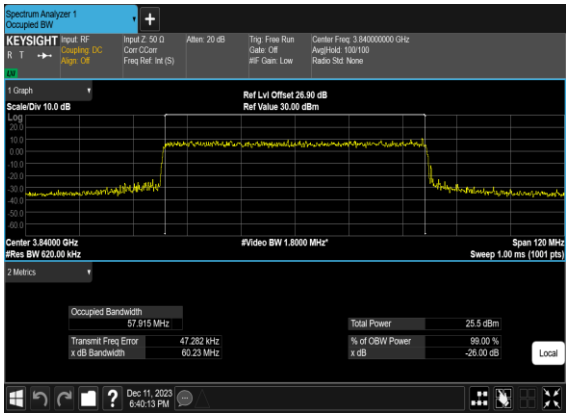
N77(60M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



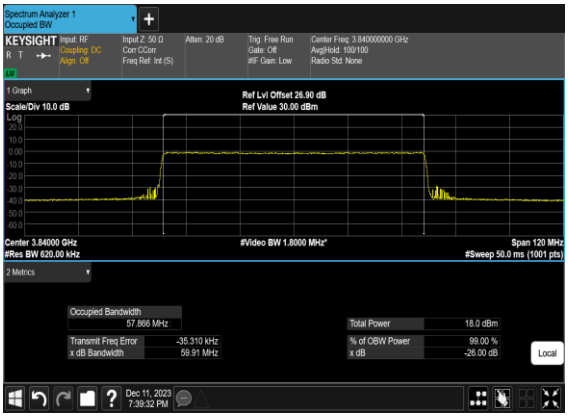
N77(60M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N77(60M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

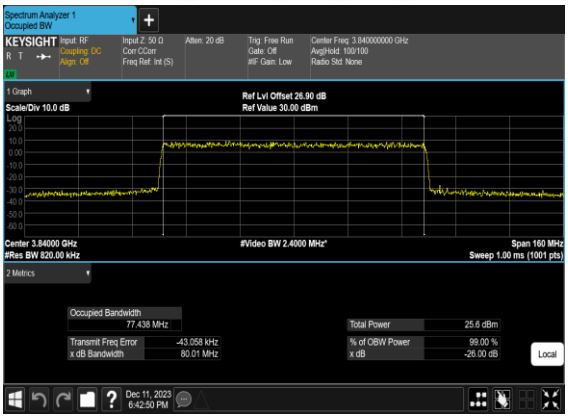


N77(60M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

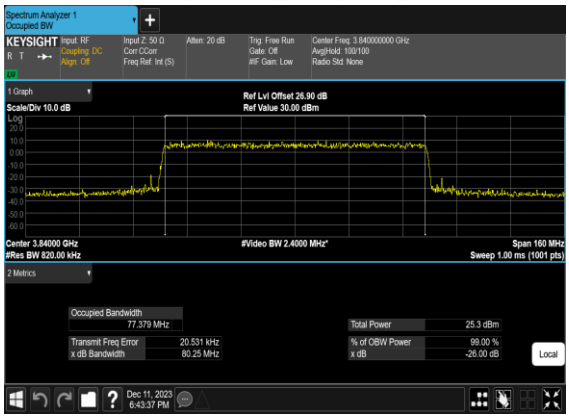


N77(80M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

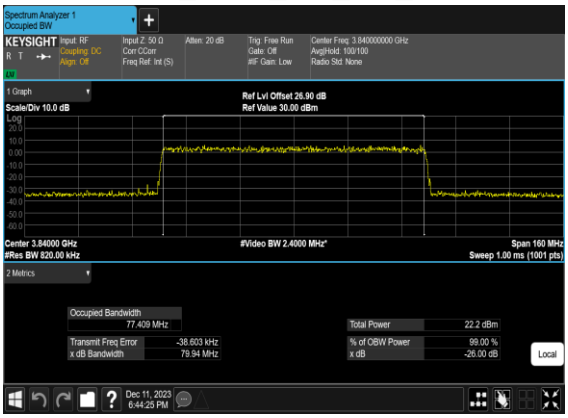
N77(80M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N77(80M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

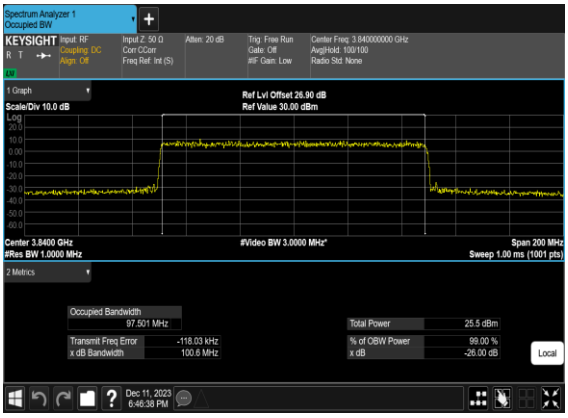


N77(80M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



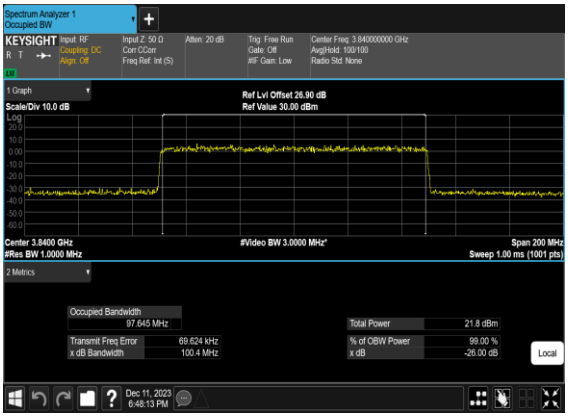
N77(100M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

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



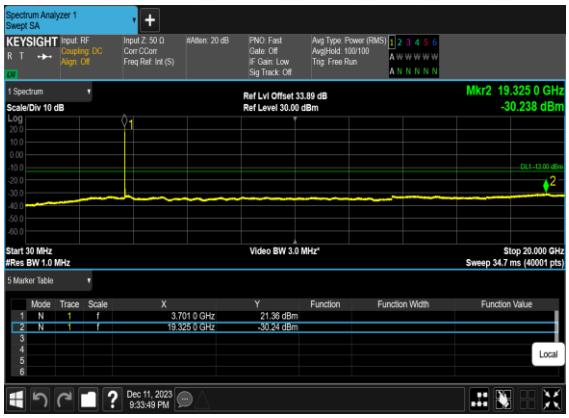
Conducted Spurious Emissions

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
77	30	20	647334	3710.01	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	20	647334	3710.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	20	647334	3710.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	20	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	20	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	20	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	20	664666	3969.99	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	20	664666	3969.99	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	20	664666	3969.99	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	648668	3730.02	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	60	648668	3730.02	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	60	648668	3730.02	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@0	see graph	**PASS**

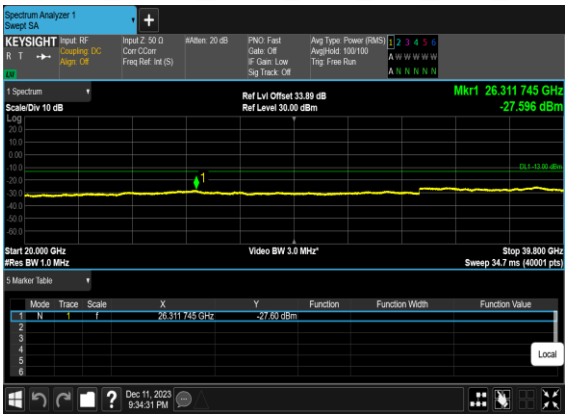
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	60	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	60	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	60	656000	3840.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	60	656000	3840.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	656000	3840.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	663332	3949.98	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	60	663332	3949.98	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	60	663332	3949.98	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	100	650000	3750.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	100	650000	3750.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	100	650000	3750.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	100	650000	3750.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	100	650000	3750.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	100	650000	3750.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	100	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	100	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	100	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	100	656000	3840.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	100	656000	3840.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**

77	30	100	656000	3840.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	100	662000	3930.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	100	662000	3930.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	100	662000	3930.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	100	662000	3930.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	100	662000	3930.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	100	662000	3930.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**

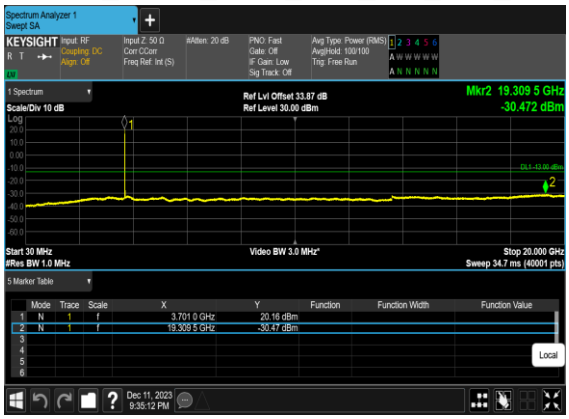
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



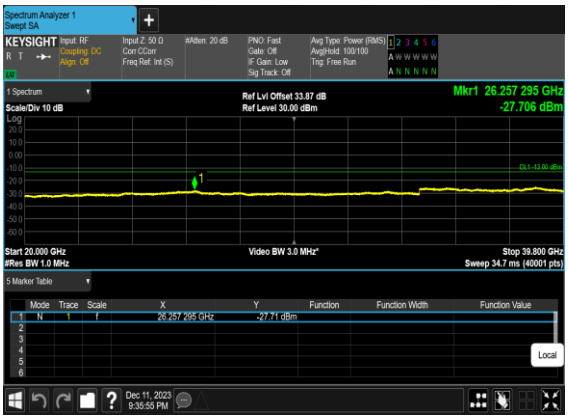
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



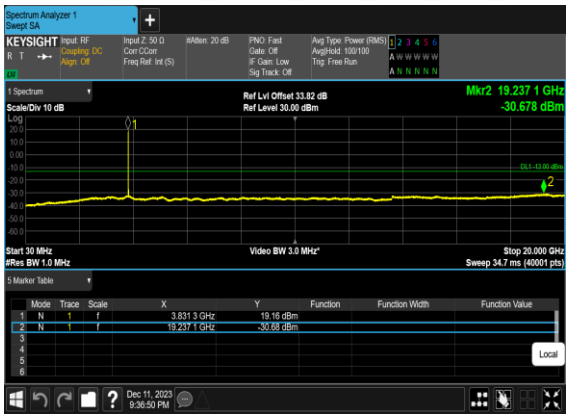
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



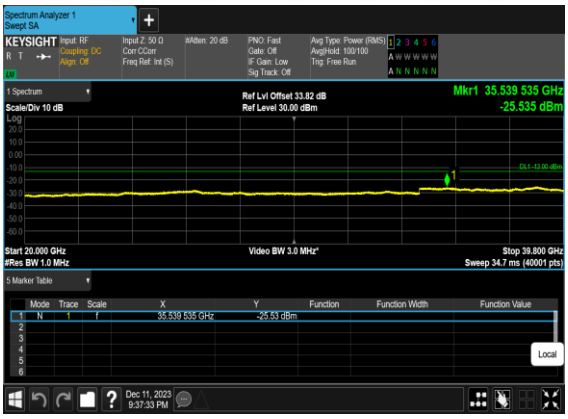
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



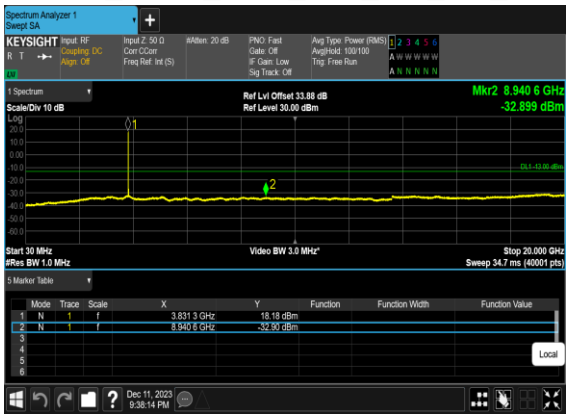
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



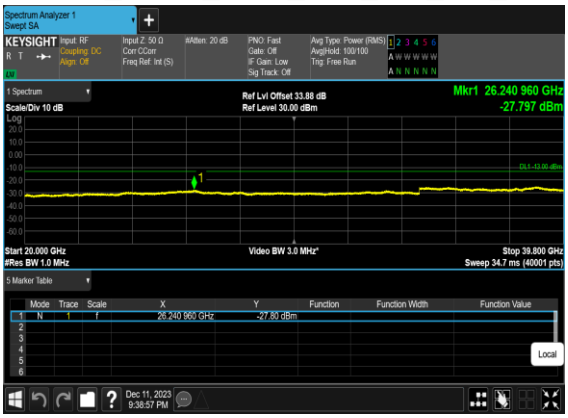
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



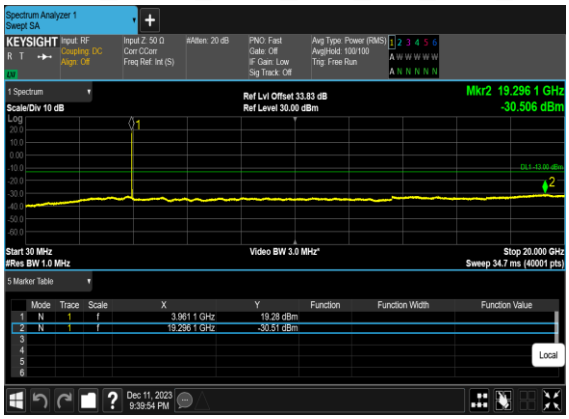
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



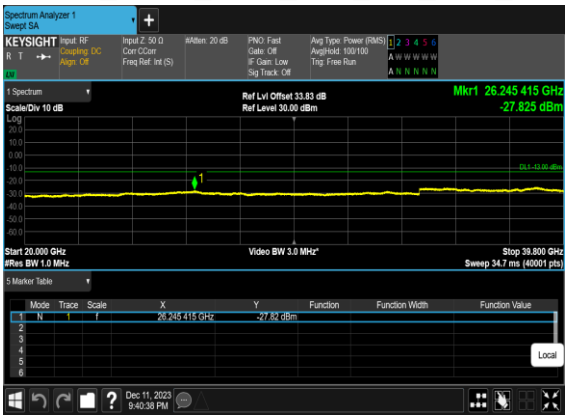
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



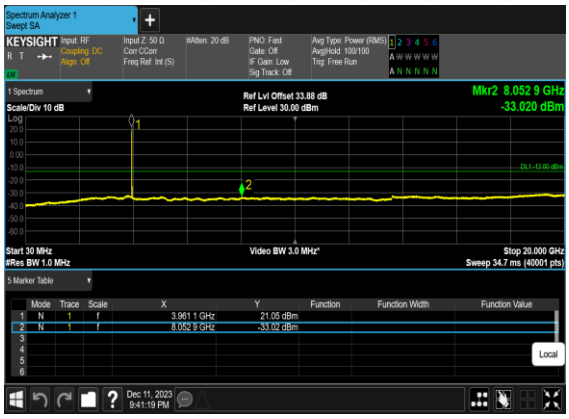
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



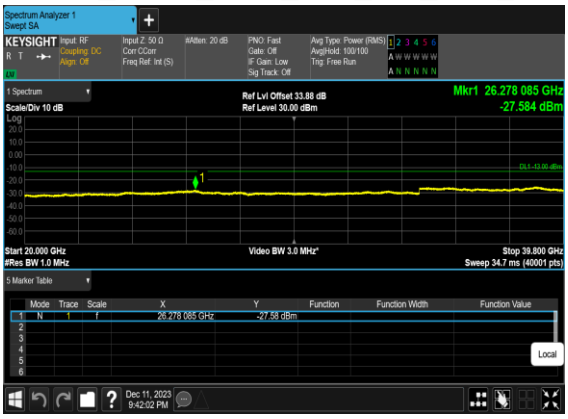
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



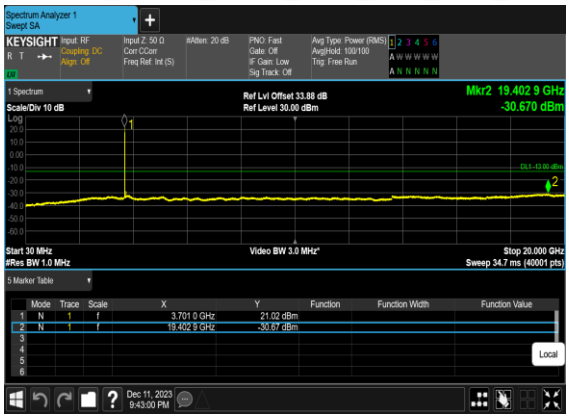
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



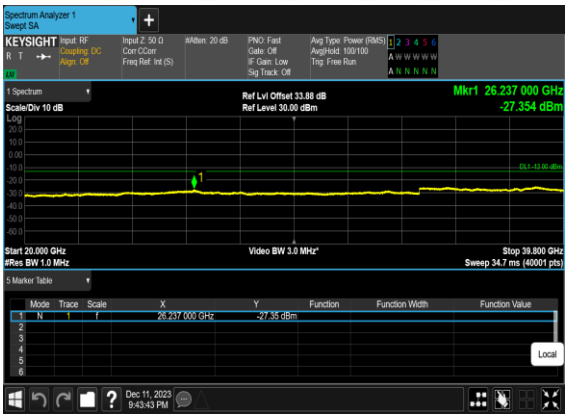
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



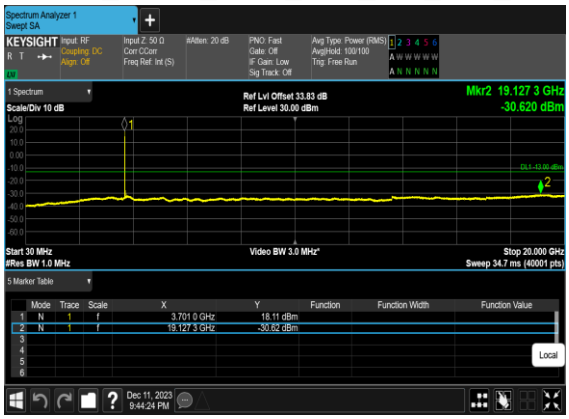
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



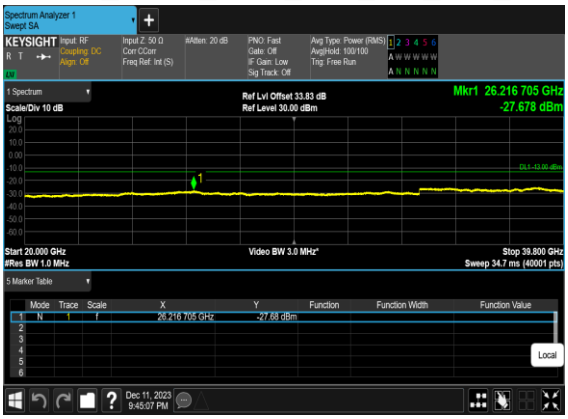
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



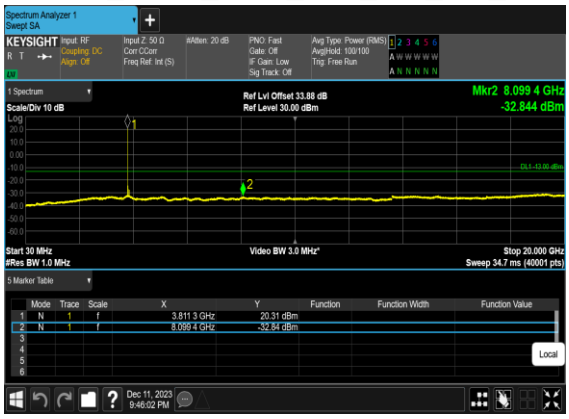
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



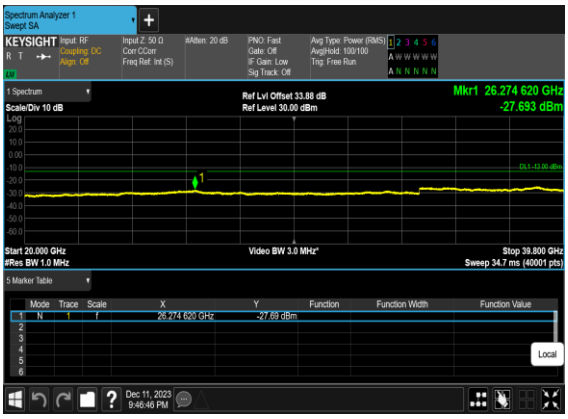
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



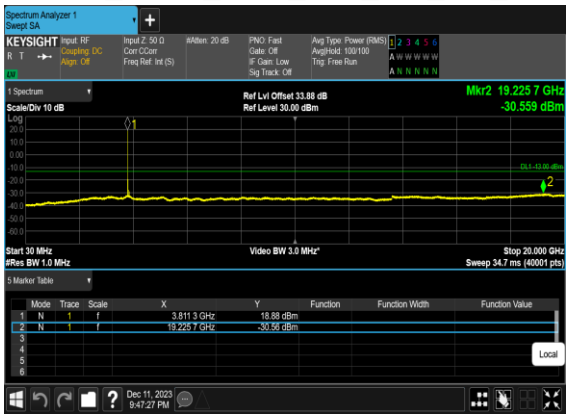
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



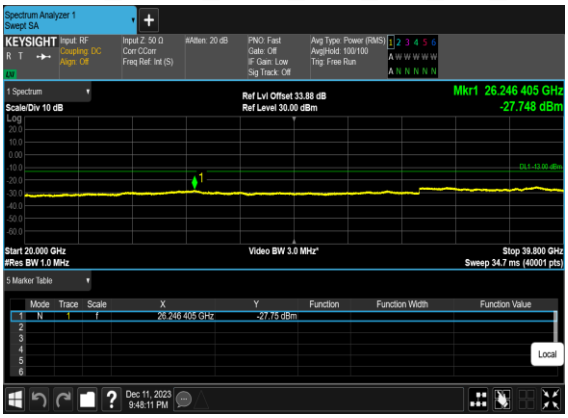
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



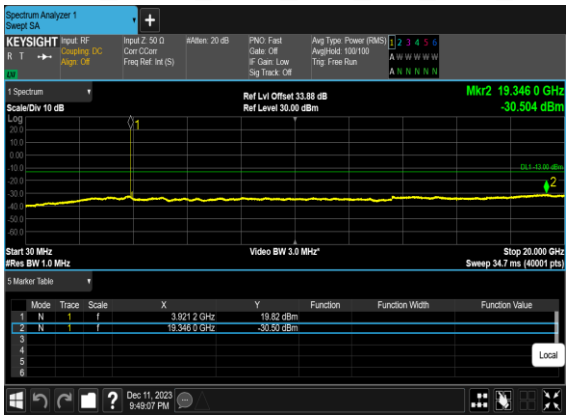
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



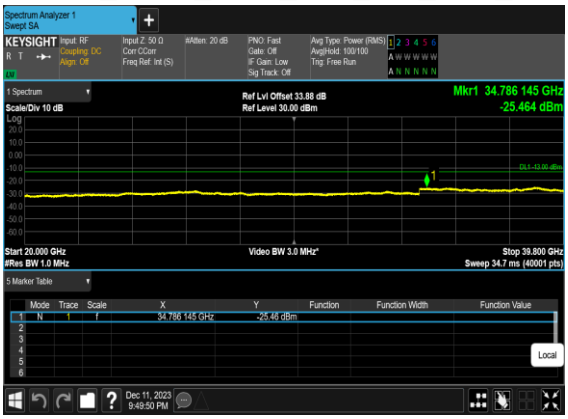
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



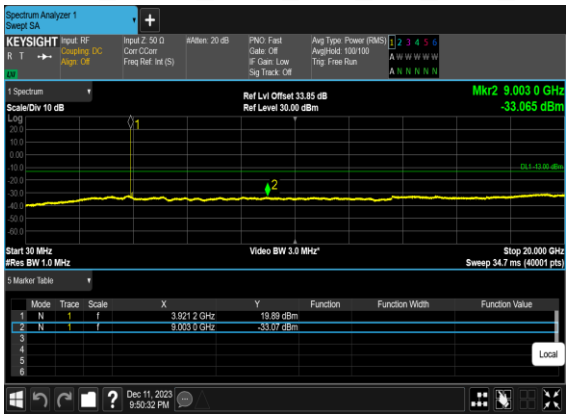
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



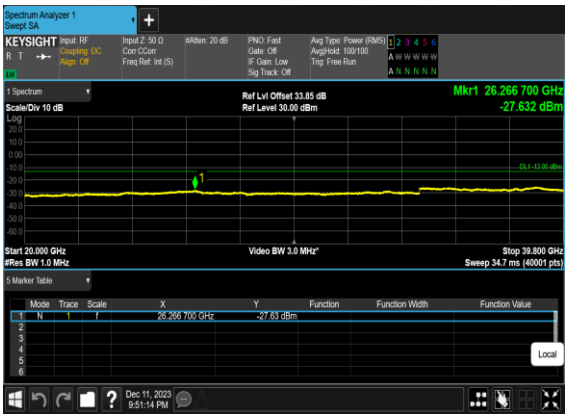
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



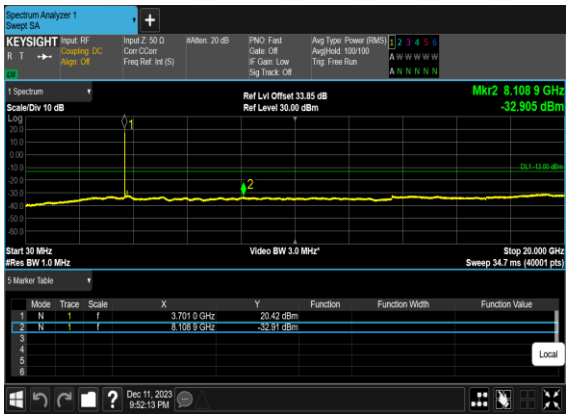
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



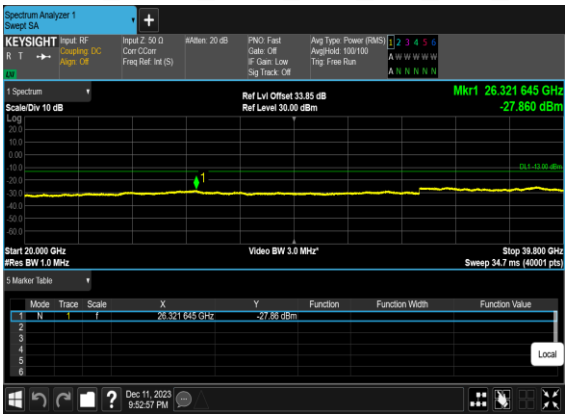
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



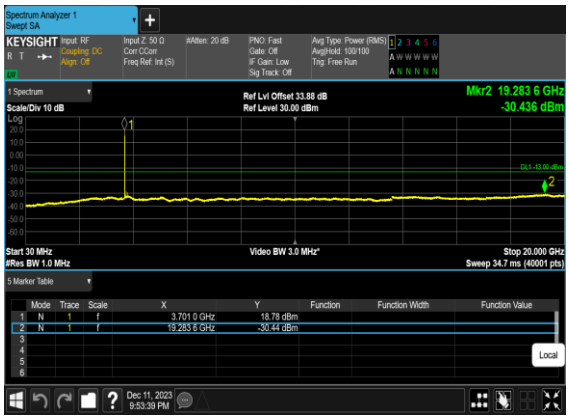
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



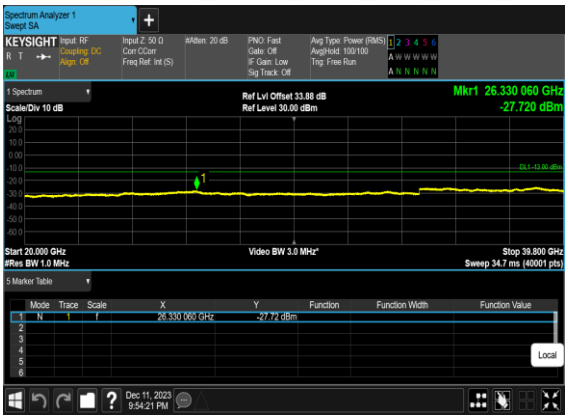
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



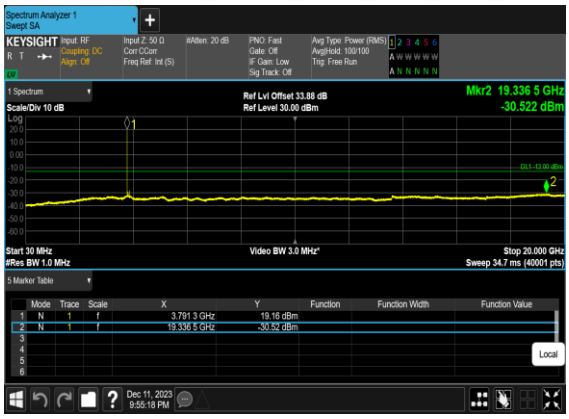
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



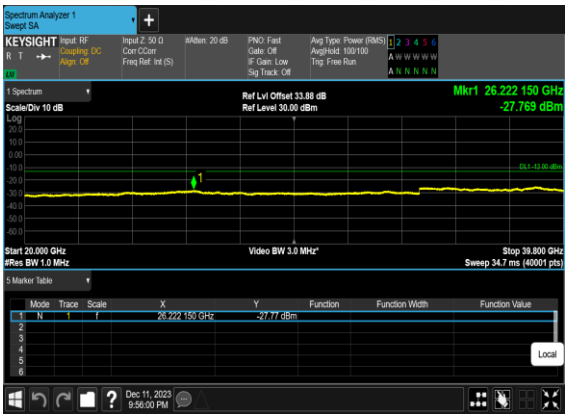
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



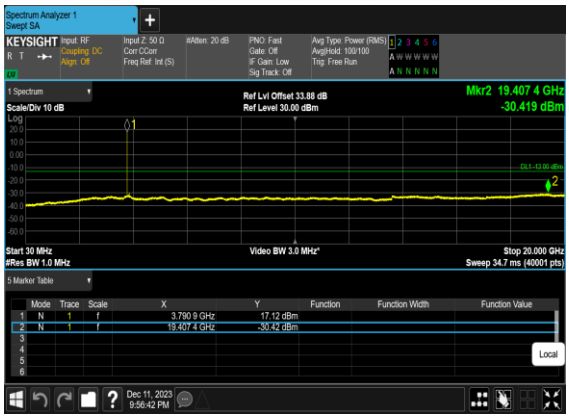
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



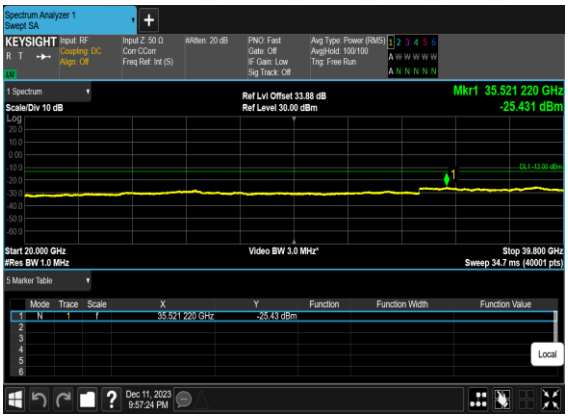
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



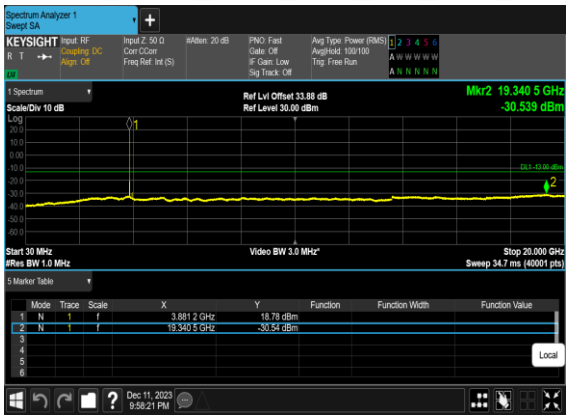
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



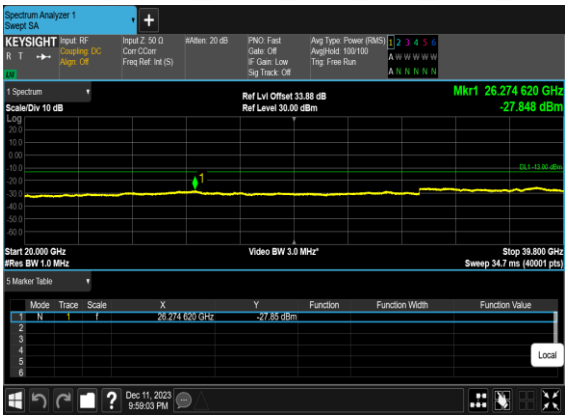
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



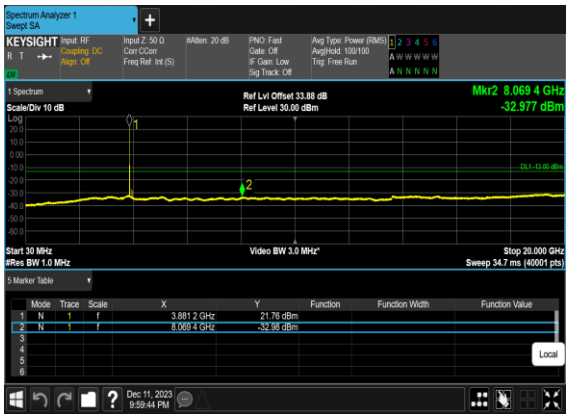
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



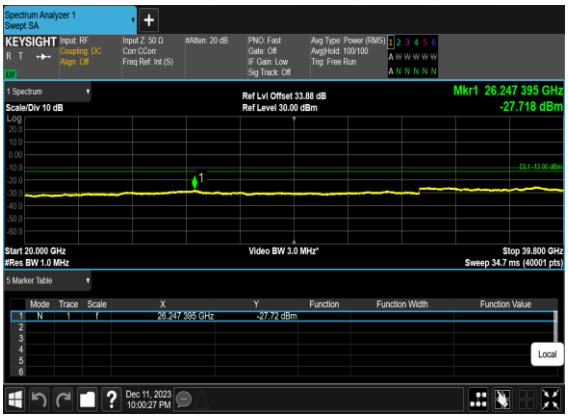
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH

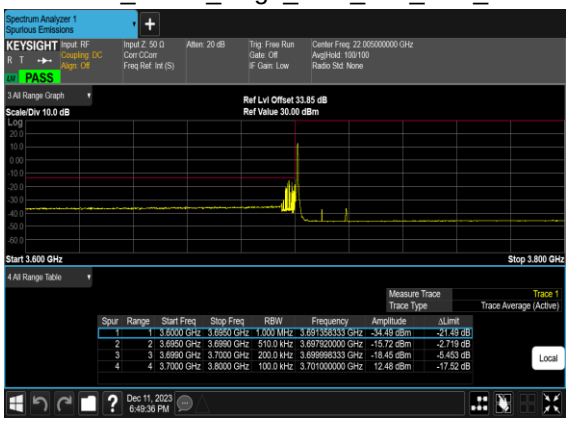


Conducted Band Edge

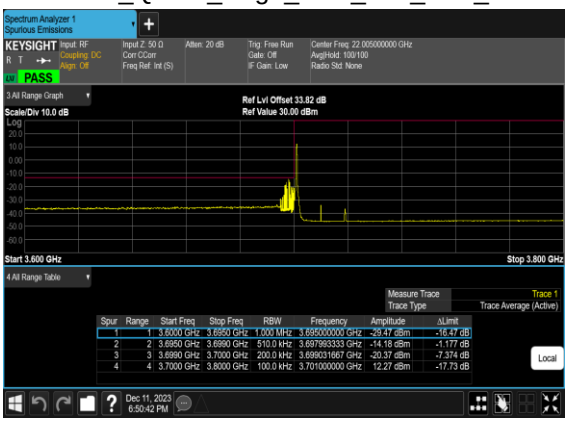
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
77	30	20	647334	3710.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	20	647334	3710.01	DFT-s-OFDM BPSK	50@0	see graph	**PASS**
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	50@0	see graph	**PASS**
77	30	20	664666	3969.99	DFT-s-OFDM BPSK	1@50	see graph	**PASS**
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	1@50	see graph	**PASS**
77	30	20	664666	3969.99	DFT-s-OFDM BPSK	50@0	see graph	**PASS**
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	50@0	see graph	**PASS**
77	30	60	648668	3730.02	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	648668	3730.02	DFT-s-OFDM BPSK	162@0	see graph	**PASS**
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	162@0	see graph	**PASS**
77	30	60	663332	3949.98	DFT-s-OFDM BPSK	1@161	see graph	**PASS**
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	1@161	see graph	**PASS**
77	30	60	663332	3949.98	DFT-s-OFDM BPSK	162@0	see graph	**PASS**
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	162@0	see graph	**PASS**
77	30	100	650000	3750.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	100	650000	3750.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	100	650000	3750.0	DFT-s-OFDM BPSK	270@0	see graph	**PASS**
77	30	100	650000	3750.0	DFT-s-OFDM QPSK	270@0	see graph	**PASS**
77	30	100	662000	3930.0	DFT-s-OFDM BPSK	1@272	see graph	**PASS**
77	30	100	662000	3930.0	DFT-s-OFDM QPSK	1@272	see graph	**PASS**
77	30	100	662000	3930.0	DFT-s-OFDM BPSK	270@0	see graph	**PASS**

77	30	100	662000	3930.0	DFT-s-OFDM QPSK	270@0	see graph	**PASS**

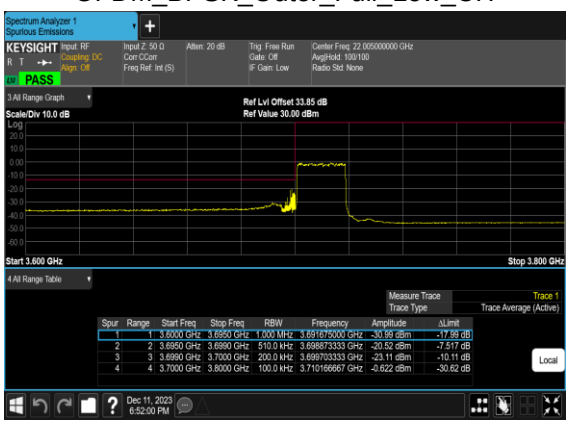
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



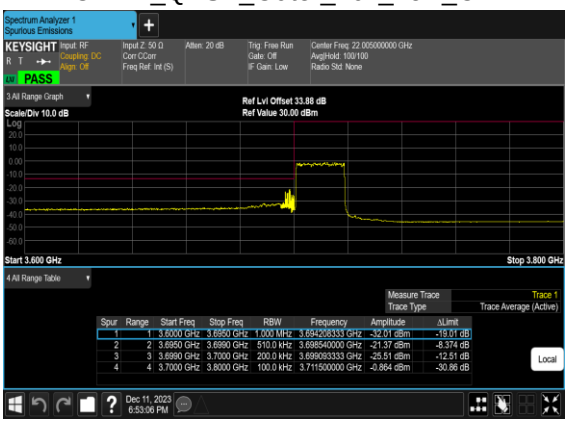
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



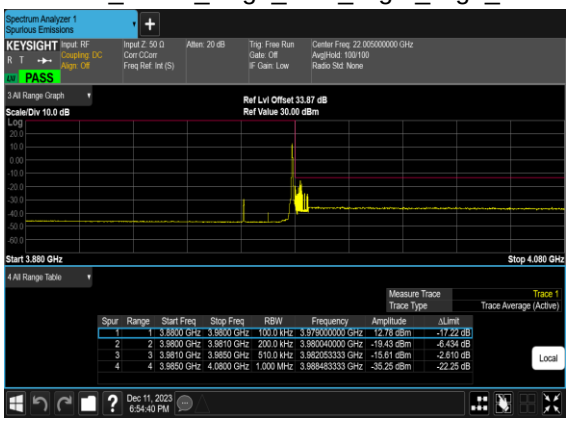
N77(20M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



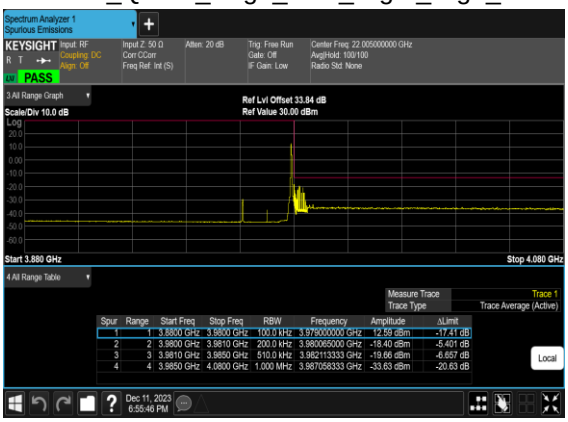
N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



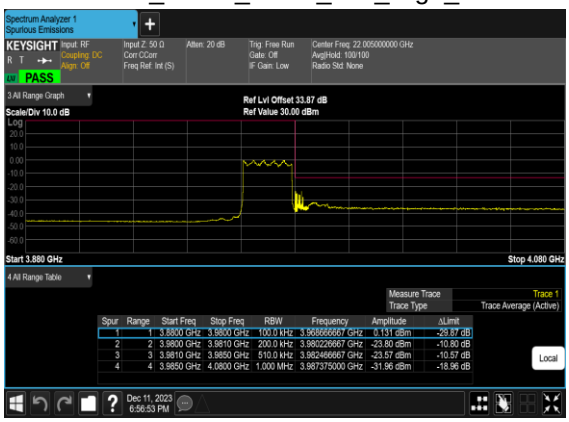
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



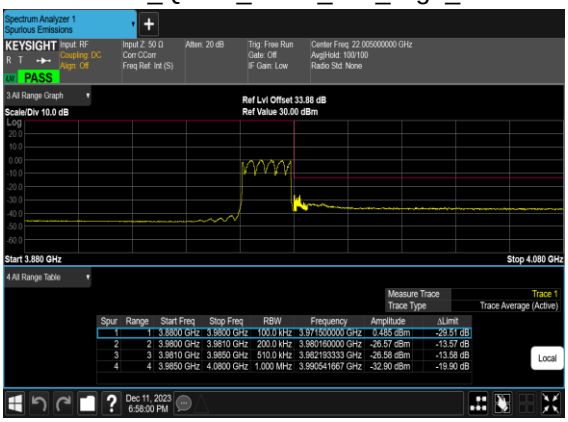
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



N77(20M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



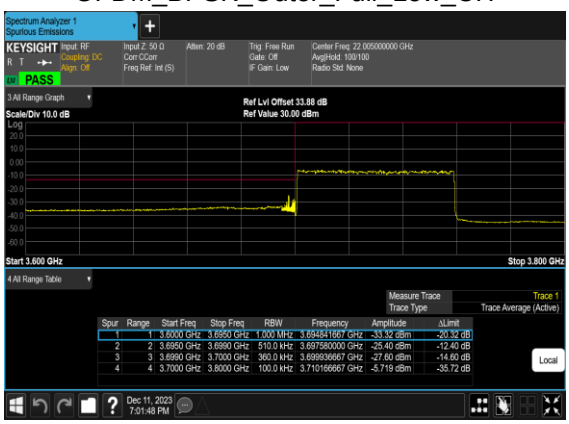
N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



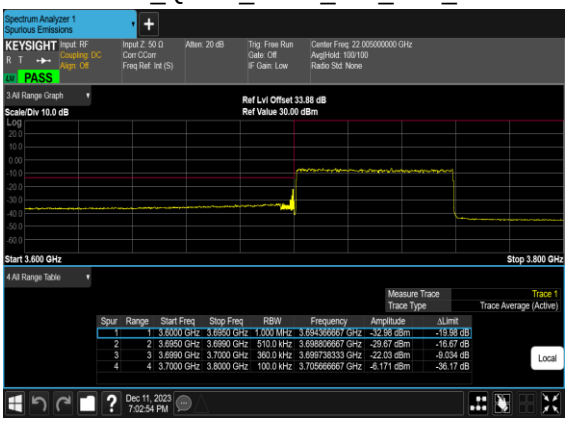
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH

N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

N77(60M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH

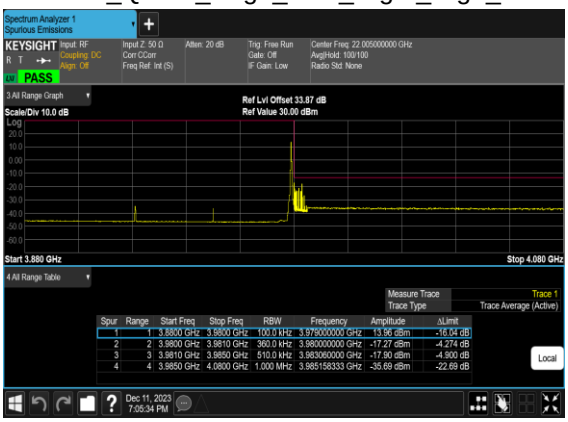


N77(60M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH

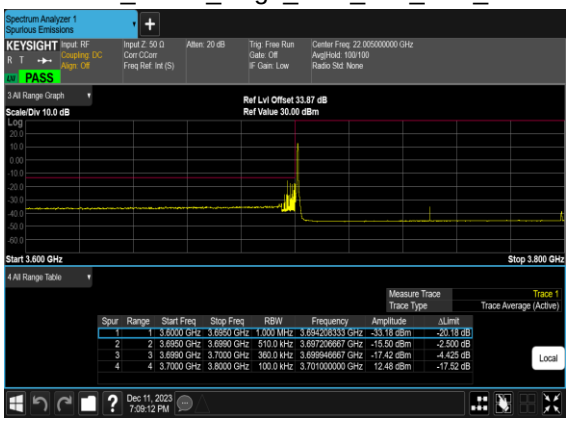
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



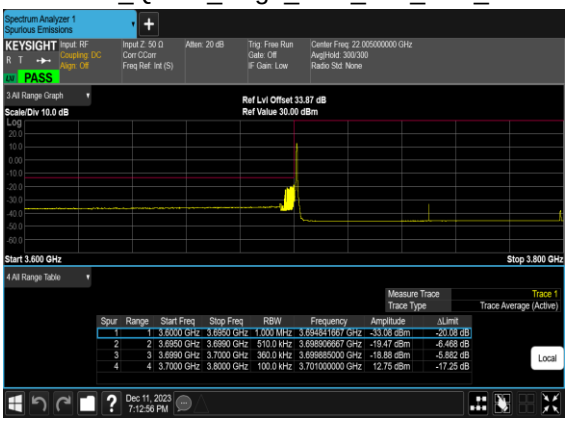
N77(60M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH

N77(60M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH

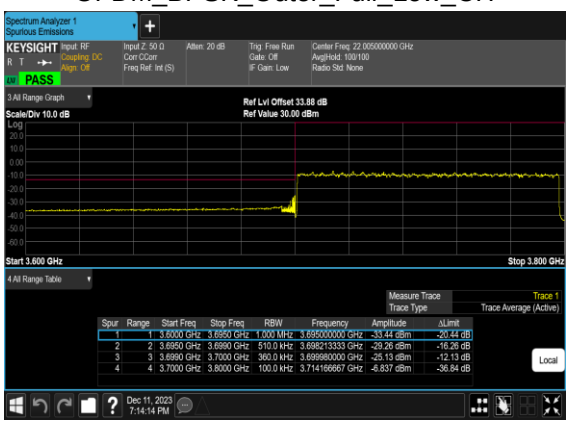
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



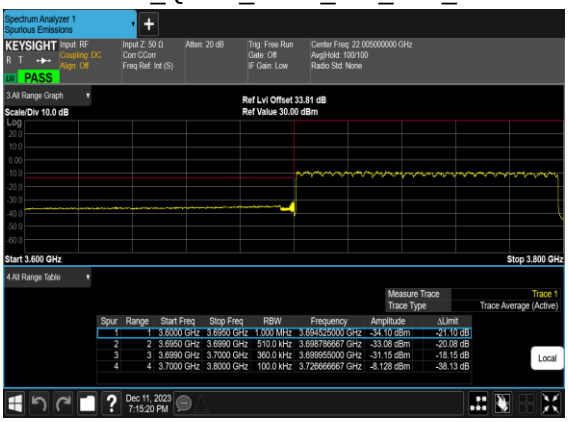
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



N77(100M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



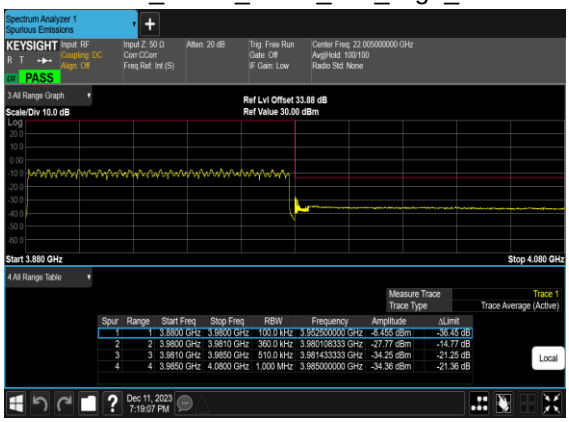
N77(100M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



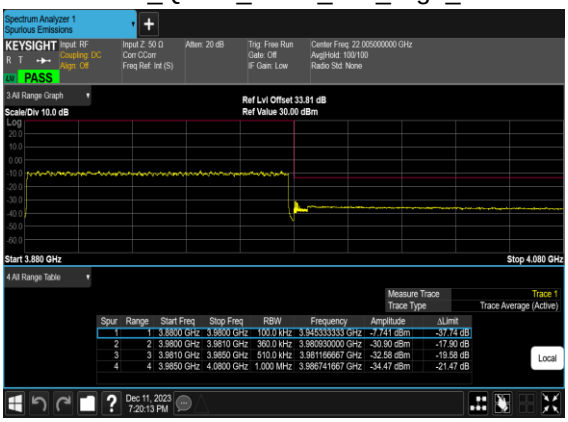
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH

N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH

N77(100M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



N77(100M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



Software Version: 23.06.1602

FR1 N77 MIMO-ANT5+8

Transmitter Conducted Output Power And EIRP,(G_T - L_C)=2.62dB

NR Band	SCS	Band Width	Arfcn	Freq (MHz)	Modulation	RB	ANT8 Power (dBm)	ANT5 Power (dBm)	Conducted Power(dBm)	EIRP (dBm)	EIRP(W)
77	30	20	647334	3710.01	CP-OFDM QPSK	1@1	21.48	21.2	24.35	26.97	0.4980
77	30	20	647334	3710.01	CP-OFDM 16 QAM	1@1	20.69	20.82	23.77	26.39	0.4351
77	30	20	647334	3710.01	CP-OFDM 64 QAM	1@1	19.13	19.2	22.18	24.80	0.3017
77	30	20	656000	3840	CP-OFDM QPSK	1@1	21.31	20.91	24.12	26.74	0.4726
77	30	20	656000	3840	CP-OFDM 16 QAM	1@1	20.57	20.59	23.59	26.21	0.4179
77	30	20	656000	3840	CP-OFDM 64 QAM	1@1	18.94	18.92	21.94	24.56	0.2858
77	30	20	664666	3969.99	CP-OFDM QPSK	1@1	21.54	20.86	24.22	26.84	0.4835
77	30	20	664666	3969.99	CP-OFDM 16 QAM	1@1	20.86	20.54	23.71	26.33	0.4299
77	30	20	664666	3969.99	CP-OFDM 64 QAM	1@1	19.11	18.81	21.97	24.59	0.2879
77	30	30	647668	3715.02	CP-OFDM QPSK	1@1	21.51	21.23	24.38	27.00	0.5015
77	30	30	647668	3715.02	CP-OFDM 16 QAM	1@1	20.78	20.92	23.86	26.48	0.4447
77	30	30	647668	3715.02	CP-OFDM 64 QAM	1@1	19.1	19.22	22.17	24.79	0.3014
77	30	30	656000	3840	CP-OFDM QPSK	1@1	21.28	21.09	24.20	26.82	0.4804
77	30	30	656000	3840	CP-OFDM 16 QAM	1@1	20.66	20.68	23.68	26.30	0.4266
77	30	30	656000	3840	CP-OFDM 64 QAM	1@1	18.98	18.91	21.96	24.58	0.2868
77	30	30	664332	3964.98	CP-OFDM QPSK	1@1	21.65	20.81	24.26	26.88	0.4876
77	30	30	664332	3964.98	CP-OFDM 16 QAM	1@1	21.01	20.47	23.76	26.38	0.4344
77	30	30	664332	3964.98	CP-OFDM 64 QAM	1@1	19.21	18.79	22.02	24.64	0.2908
77	30	40	648000	3720	CP-OFDM QPSK	1@1	21.42	21.1	24.27	26.89	0.4890
77	30	40	648000	3720	CP-OFDM 16 QAM	1@1	20.85	21.07	23.97	26.59	0.4562
77	30	40	648000	3720	CP-OFDM 64 QAM	1@1	19.17	19.39	22.29	24.91	0.3099
77	30	40	656000	3840	CP-OFDM QPSK	1@1	21.5	21.14	24.33	26.95	0.4959
77	30	40	656000	3840	CP-OFDM 16 QAM	1@1	20.67	20.82	23.76	26.38	0.4341
77	30	40	656000	3840	CP-OFDM 64 QAM	1@1	19.14	19.1	22.13	24.75	0.2986
77	30	40	664000	3960	CP-OFDM QPSK	1@1	21.61	20.87	24.27	26.89	0.4882
77	30	40	664000	3960	CP-OFDM 16 QAM	1@1	20.96	20.55	23.77	26.39	0.4355
77	30	40	664000	3960	CP-OFDM 64 QAM	1@1	19.27	18.82	22.06	24.68	0.2938
77	30	60	648668	3730.02	CP-OFDM QPSK	1@1	21.2	21.09	24.16	26.78	0.4760
77	30	60	648668	3730.02	CP-OFDM 16 QAM	1@1	20.47	20.63	23.56	26.18	0.4151
77	30	60	648668	3730.02	CP-OFDM 64 QAM	1@1	18.92	18.95	21.95	24.57	0.2861

77	30	60	656000	3840	CP-OFDM QPSK	1@1	21.14	20.82	23.99	26.61	0.4585
77	30	60	656000	3840	CP-OFDM 16 QAM	1@1	20.41	20.47	23.45	26.07	0.4046
77	30	60	656000	3840	CP-OFDM 64 QAM	1@1	18.89	18.88	21.90	24.52	0.2828
77	30	60	663332	3949.98	CP-OFDM QPSK	1@1	21.08	20.77	23.94	26.56	0.4527
77	30	60	663332	3949.98	CP-OFDM 16 QAM	1@1	20.26	20.45	23.37	25.99	0.3969
77	30	60	663332	3949.98	CP-OFDM 64 QAM	1@1	18.8	18.74	21.78	24.40	0.2754
77	30	80	649334	3740.01	CP-OFDM QPSK	1@1	21.14	21	24.08	26.70	0.4678
77	30	80	649334	3740.01	CP-OFDM 16 QAM	1@1	20.47	20.57	23.53	26.15	0.4122
77	30	80	649334	3740.01	CP-OFDM 64 QAM	1@1	18.81	19	21.92	24.54	0.2842
77	30	80	656000	3840	CP-OFDM QPSK	1@1	21.18	20.81	24.01	26.63	0.4602
77	30	80	656000	3840	CP-OFDM 16 QAM	1@1	20.43	20.47	23.46	26.08	0.4055
77	30	80	656000	3840	CP-OFDM 64 QAM	1@1	18.9	18.85	21.89	24.51	0.2822
77	30	80	662666	3939.99	CP-OFDM QPSK	1@1	20.82	20.74	23.79	26.41	0.4376
77	30	80	662666	3939.99	CP-OFDM 16 QAM	1@1	20.09	20.38	23.25	25.87	0.3862
77	30	80	662666	3939.99	CP-OFDM 64 QAM	1@1	18.66	18.77	21.73	24.35	0.2720
77	30	100	650000	3750	CP-OFDM QPSK	137@68	21.17	20.54	23.88	26.50	0.4463
77	30	100	650000	3750	CP-OFDM QPSK	1@1	21.19	20.73	23.98	26.60	0.4567
77	30	100	650000	3750	CP-OFDM QPSK	1@271	21.21	20.63	23.94	26.56	0.4529
77	30	100	650000	3750	CP-OFDM 16 QAM	137@68	20.66	20.14	23.42	26.04	0.4016
77	30	100	650000	3750	CP-OFDM 16 QAM	1@1	20.5	20.3	23.41	26.03	0.4010
77	30	100	650000	3750	CP-OFDM 16 QAM	1@271	20.56	20.18	23.38	26.00	0.3985
77	30	100	650000	3750	CP-OFDM 64 QAM	137@68	19.17	18.61	21.91	24.53	0.2837
77	30	100	650000	3750	CP-OFDM 64 QAM	1@1	18.87	18.62	21.76	24.38	0.2740
77	30	100	650000	3750	CP-OFDM 64 QAM	1@271	18.93	18.68	21.82	24.44	0.2778
77	30	100	650000	3750	CP-OFDM 256 QAM	137@68	16.08	15.46	18.79	21.41	0.1384
77	30	100	650000	3750	CP-OFDM 256 QAM	1@1	16.19	15.55	18.89	21.51	0.1416
77	30	100	650000	3750	CP-OFDM 256 QAM	1@271	16.19	15.56	18.90	21.52	0.1418
77	30	100	656000	3840	CP-OFDM QPSK	137@68	20.94	20.46	23.72	26.34	0.4302
77	30	100	656000	3840	CP-OFDM QPSK	1@1	21.16	20.59	23.89	26.51	0.4482
77	30	100	656000	3840	CP-OFDM QPSK	1@271	21.06	20.38	23.74	26.36	0.4329
77	30	100	656000	3840	CP-OFDM 16 QAM	137@68	20.47	19.94	23.22	25.84	0.3840
77	30	100	656000	3840	CP-OFDM 16 QAM	1@1	20.35	20.24	23.31	25.93	0.3913
77	30	100	656000	3840	CP-OFDM 16 QAM	1@271	20.37	19.86	23.13	25.75	0.3761
77	30	100	656000	3840	CP-OFDM 64 QAM	137@68	18.97	18.44	21.72	24.34	0.2719
77	30	100	656000	3840	CP-OFDM 64 QAM	1@1	18.89	18.47	21.70	24.32	0.2701
77	30	100	656000	3840	CP-OFDM 64 QAM	1@271	18.83	18.37	21.62	24.24	0.2652
77	30	100	656000	3840	CP-OFDM 256 QAM	137@68	16.05	15.44	18.77	21.39	0.1376

77	30	100	656000	3840	CP-OFDM 256 QAM	1@1	16.2	15.53	18.89	21.51	0.1415
77	30	100	656000	3840	CP-OFDM 256 QAM	1@271	16.05	15.29	18.70	21.32	0.1354
77	30	100	662000	3930	CP-OFDM QPSK	137@68	21.64	21.36	24.51	27.13	0.5167
77	30	100	662000	3930	CP-OFDM QPSK	1@1	21.51	21.07	24.31	26.93	0.4927
77	30	100	662000	3930	CP-OFDM QPSK	1@271	21.44	21.11	24.29	26.91	0.4907
77	30	100	662000	3930	CP-OFDM 16 QAM	137@68	20.59	20.04	23.33	25.95	0.3939
77	30	100	662000	3930	CP-OFDM 16 QAM	1@1	20.29	20.14	23.23	25.85	0.3842
77	30	100	662000	3930	CP-OFDM 16 QAM	1@271	20.46	20.26	23.37	25.99	0.3973
77	30	100	662000	3930	CP-OFDM 64 QAM	137@68	19.14	18.57	21.87	24.49	0.2815
77	30	100	662000	3930	CP-OFDM 64 QAM	1@1	18.66	18.5	21.59	24.21	0.2637
77	30	100	662000	3930	CP-OFDM 64 QAM	1@271	18.82	18.58	21.71	24.33	0.2711
77	30	100	662000	3930	CP-OFDM 256 QAM	137@68	16.05	15.06	18.59	21.21	0.1322
77	30	100	662000	3930	CP-OFDM 256 QAM	1@1	16.15	15.71	18.95	21.57	0.1434
77	30	100	662000	3930	CP-OFDM 256 QAM	1@271	16.19	15.82	19.02	21.64	0.1459

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Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	0.0034	**PASS**	NV
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	0.0025	**PASS**	LV
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	0.0041	**PASS**	HV
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	0.0022	**PASS**	-30℃
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	0.0036	**PASS**	-20℃
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	0.0012	**PASS**	-10℃
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	0.0062	**PASS**	0℃
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	0.0013	**PASS**	10℃
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	0.0089	**PASS**	20℃
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	0.0075	**PASS**	30℃
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	0.0054	**PASS**	40℃
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	0.0039	**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	656000	3840.0	CP-OFDM QPSK	51@0	10.12	13	**PASS**
77	30	20	656000	3840.0	CP-OFDM QPSK	1@0	10.94	13	**PASS**
77	30	20	656000	3840.0	CP-OFDM 16 QAM	51@0	10.09	13	**PASS**
77	30	20	656000	3840.0	CP-OFDM 16 QAM	1@0	10.35	13	**PASS**