FCC RF Test Report

APPLICANT	:	Xiaomi Communications Co., Ltd.
EQUIPMENT	:	Mobile Phone
BRAND NAME	:	POCO
MODEL NAME	:	21091116AG
FCC ID	:	2AFZZ116AG
STANDARD	:	47 CFR Part 2, Part 27 Subpart Q
CLASSIFICATION	:	PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S)	:	Sep. 01, 2021 ~ Sep. 18, 2021

We, Sporton International (Kunshan) Inc., 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.

This report contains data that were produced under subcontract by Sporton International (Shenzhen) Inc.

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

Jason Jia

Reviewed by: Jason Jia / Supervisor

Alexwang

Approved by: Alex Wang / Manager

ACCREDITED
Cert #5145.02

Sporton International (Kunshan) Inc.

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG180507F	Rev. 01	Initial issue of report	Sep. 24, 2021

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 21.98 dB at 6900.000 MHz

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

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	21091116AG
FCC ID	2AFZZ116AG
IMEI Code	Conducted: 864926050123141/864926050123158 Radiation: 864926050121822/864926050121878
HW Version	P2
SW Version	MIUI 12.5
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
Bandwidth	SCS 15KHz: 10MHz / 15MHz / 20MHz / 40MHz / 50MHz SCS 30KHz: 10MHz / 15MHz / 20MHz / 40MHz / 50MHz / 60MHz / 70MHz / 80MHz / 90MHz / 100MHz
SCS	15kHz /30kHz
Maximum Output Power to Antenna	**SCS:15kHz** **<Ant. 1>:** 5G NR n77 : 24.78 dBm 5G NR n78 : 24.57 dBm **<Ant. 3>:** 5G NR n77 : 24.72 dBm 5G NR n78 : 24.71 dBm **<Ant. 5>:** 5G NR n77 : 25.45 dBm 5G NR n78 : 25.33 dBm **<Ant. 8>:** 5G NR n77 : 24.36 dBm 5G NR n78 : 24.88 dBm **SCS:30kHz** **<Ant. 1>:** 5G NR n77 : 24.28 dBm 5G NR n78 : 24.56 dBm **<Ant. 3>:** 5G NR n77 : 24.62 dBm 5G NR n78 : 24.56 dBm **<Ant. 5>:** 5G NR n77 : 25.41 dBm 5G NR n78 : 25.21 dBm **<Ant. 8>:** 5G NR n77 : 24.12 dBm 5G NR n78 : 24.71 dBm
Antenna Gain	**<Ant. 1>:** 5G NR n77 : -3.5 dBi 5G NR n78 : -3.8 dBi **<Ant. 3>:** 5G NR n77 : -4.8 dBi 5G NR n78 : -5.5 dBi **<Ant. 5>:** 5G NR n77 : -1.3 dBi 5G NR n78 : -1.5 dBi **<Ant. 8>:** 5G NR n77 : -5.7 dBi 5G NR n78 : -6.1 dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

Note：

1. 5G NR n78 supports SA and NSA mode and 5G NR n77 supports SA mode only. According to the maximum power between SA and NSA mode for n78 and SA mode for n77, SA covers NSA mode and 5G NR n77 covers 5G NR n78.
2. The ERP/EIRP is calculated from Output power and antenna gain, so the maximum ERP/EIRP is shown in the report, 5G NR n77/n78 for Antenna 5.
3. 5G NR n77/n78 support HPUE for SA mode.
4. 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 n77/78 (SCS=15 kHz)		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 ~ 3544.995	0.2541	9M28G7D	0.1816	9M30W7D
15	3457.5 ~ 3542.49	0.2588	14M1G7D	0.1879	14M1W7D
20	3460.005 ~ 3540	0.2410	18M9G7D	0.1888	18M9W7D
40	3470.01 ~ 3529.995	0.2333	38M6G7D	0.1862	38M5W7D
50	3475.005 ~ 3525	0.2600	48M3G7D	0.1858	48M1W7D

5G NR n77/78 (SCS=30 kHz)		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	0.2541	8M59G7D	0.1824	8M57W7D
15	3457.5 ~ 3542.49	0.2483	13M6G7D	0.1816	13M6W7D
20	3460.02 ~ 3540	0.2523	18M2G7D	0.1854	18M2W7D
40	3470.01 ~ 3529.98	0.2280	37M8G7D	0.1820	37M9W7D
50	3475.02 ~ 3525	0.2432	47M4G7D	0.1811	47M5W7D
60	3480 ~ 3519.99	0.2547	57M9G7D	0.1803	57M8W7D
70	3485.01 ~ 3514.98	0.2410	67M4G7D	0.1811	67M6W7D
80	3490.02 ~ 3510	0.2415	77M4G7D	0.1807	77M6W7D
90	3495 ~ 3504.99	0.2415	87M3G7D	0.1803	87M5W7D
100	3500.01 ~ 3500.01	0.2576	97M3G7D	0.1774	97M4W7D

Note: All modulations (BPSK/QPSK/16QAM/64QAM/256QAM) have been tested, and only the worst test results of PSK & QAM are shown in the report .

1.7 Testing Site

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

Test Firm	Sporton International (Kunshan) Inc.		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH04-KS	CN1257	314309

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

Test Firm	Sporton International (Shenzhen) Inc.		
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	TH01-SZ	CN1256	421272

Test data subcontracted: conducted test items in section 3 of this report.

1.8 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH04-KS	AUDIX	E3	6.2009-8-24a

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

Remark:

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

2 Test Configuration of Equipment Under Test

2.1 Test Mode

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

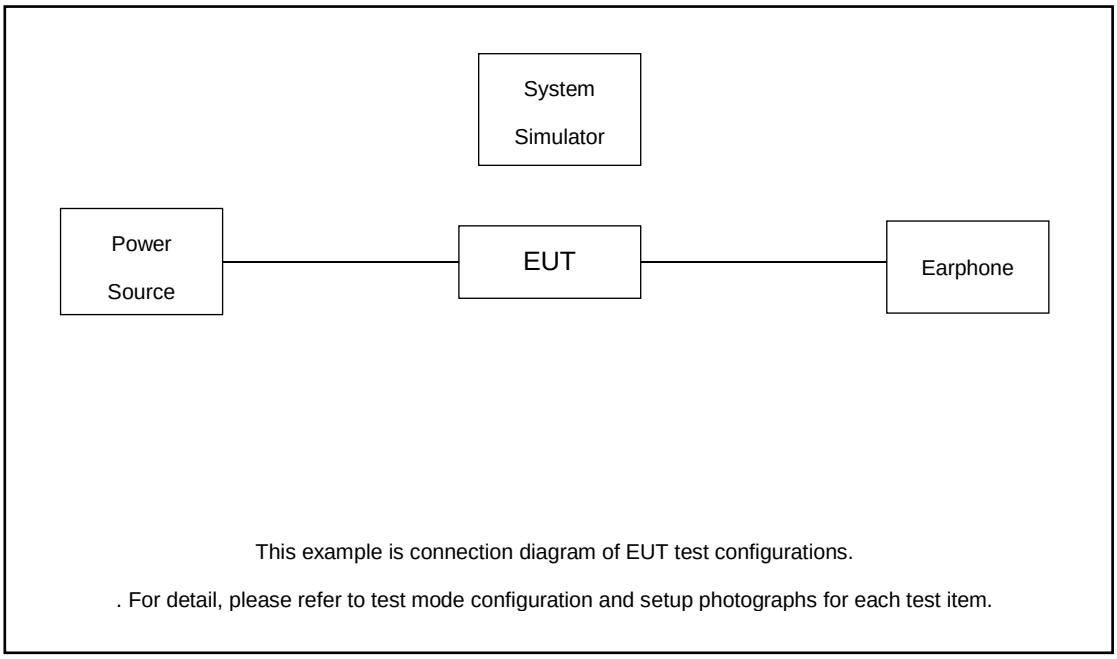
Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

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

Note:

1. 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.
2. 5G NR n77 overlaps the entire frequency range of n78, Therefore, the test results provided in this report covers n77 as well as n78.
3. Based on engineering evaluation, only the worst modulations test results are shown in the report.
4. For modulation of CP-OFDM and DFT-s-OFDM, the maximum power of CP-OFDM is lower than DFT-s-OFDM modulation, therefore, we chose higher power (DFT-s-OFDM modulation) to perform all tests and show in the report.

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	MT8821C	N/A	N/A	Unshielded, 1.8 m
3.	NR Base Station	Anritsu	MT8000A	N/A	N/A	Unshielded, 1.8 m
4.	Earphone	Xiaomi	N/A	N/A	Unshielded,1.2m	N/A

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 4.2 dB and 10dB attenuator.

Example :

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

= 4.2 + 10 = 14.2 (dB)

2.5 Frequency List of Low/Middle/High Channels

5G n77/n78 Channel and Frequency List for SCS 15kHz				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
50	Channel	631667	633334	635000
	Frequency	3475.005	3500.01	3525.00
40	Channel	631334	633334	635333
	Frequency	3470.01	3500.01	3529.995
20	Channel	630667	633334	636000
	Frequency	3460.005	3500.01	3540.00
15	Channel	630500	633334	636166
	Frequency	3457.5	3500.01	3542.49
10	Channel	630334	633334	636333
	Frequency	3455.01	3500.01	3544.995

5G n77/n78 Channel and Frequency List for SCS 30kHz				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	-	633334	-
	Frequency	-	3500.01	-
90	Channel	633000	633334	633666
	Frequency	3495.00	3500.01	3504.99
80	Channel	632668	633334	634000
	Frequency	3490.02	3500.01	3510.00
70	Channel	632334	633334	634332
	Frequency	3485.01	3500.01	3514.98
60	Channel	632000	633334	634666
	Frequency	3480.00	3500.01	3519.99
50	Channel	631668	633334	635000
	Frequency	3475.02	3500.01	3525.00
40	Channel	631334	633334	635332
	Frequency	3470.01	3500.01	3529.98
20	Channel	630668	633334	636000
	Frequency	3460.02	3500.01	3540.00
15	Channel	630500	633334	636166
	Frequency	3457.50	3500.01	3542.49
10	Channel	630334	633334	636332
	Frequency	3455.01	3500.01	3544.98

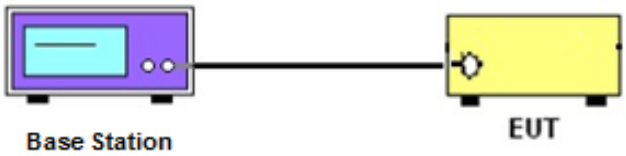
3 Conducted Test Items

3.1 Measuring Instruments

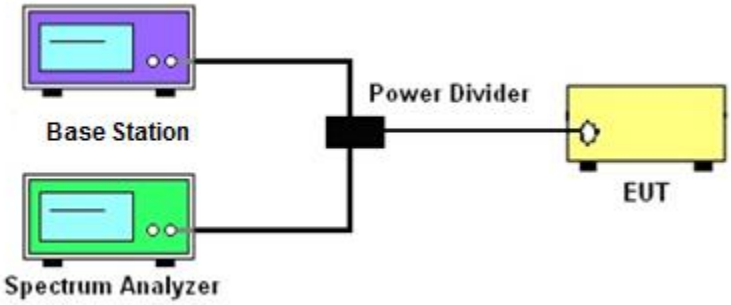
See list of measuring instruments of this test report.

3.2 Test Setup

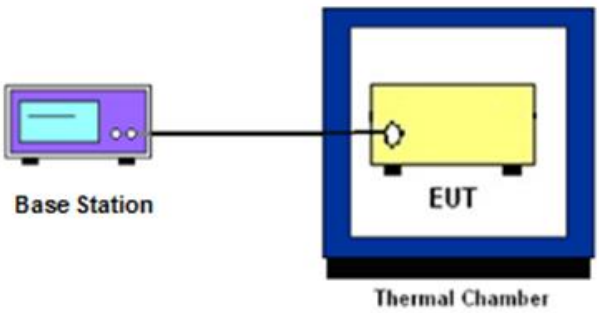
3.2.1 Conducted Output Power



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 ≥ 1% EBW but limited to a maximum of 200 kHz in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz and 5 MHz removed from the band edge, set RBW ≥ 500KHz.
6. Beyond the 5 MHz removed from the band edge, set RBW = 1MHz.
7. Set spectrum analyzer with RMS detector.
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
9. Checked that all the results comply with the emission limit line.

3.9 Conducted Spurious Emission Measurement

3.9.1 Description of Conducted Spurious Emission Measurement

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

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

3.9.2 Test Procedures

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

3.10 Frequency Stability Measurement

3.10.1 Description of Frequency Stability Measurement

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

3.10.2 Test Procedures for Temperature Variation

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

3.10.3 Test Procedures for Voltage Variation

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

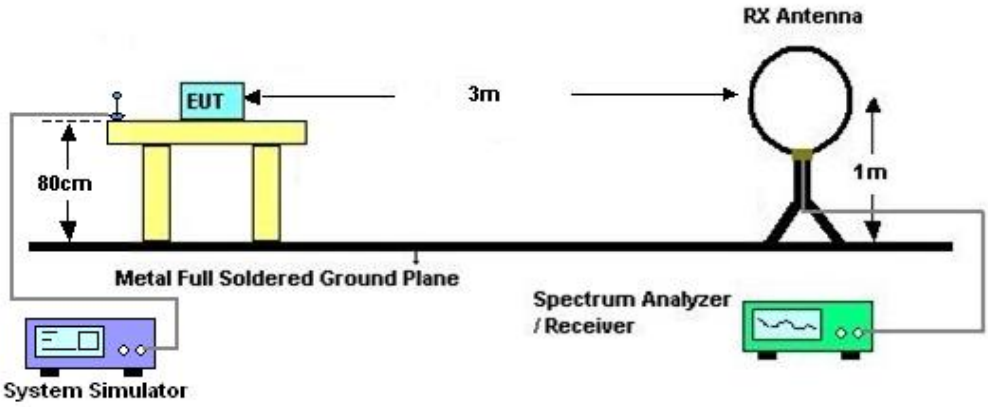
4 Radiated Test Items

4.1 Measuring Instruments

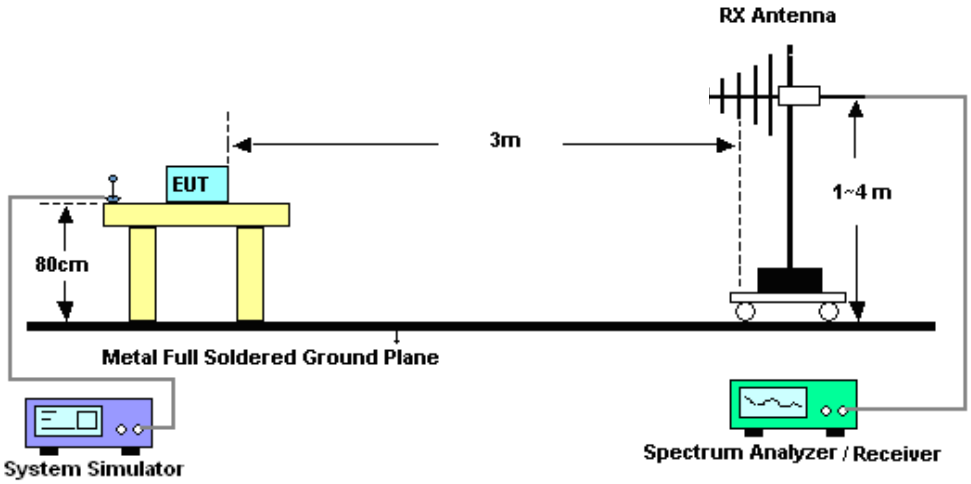
See list of measuring instruments of this test report.

4.2 Test Setup

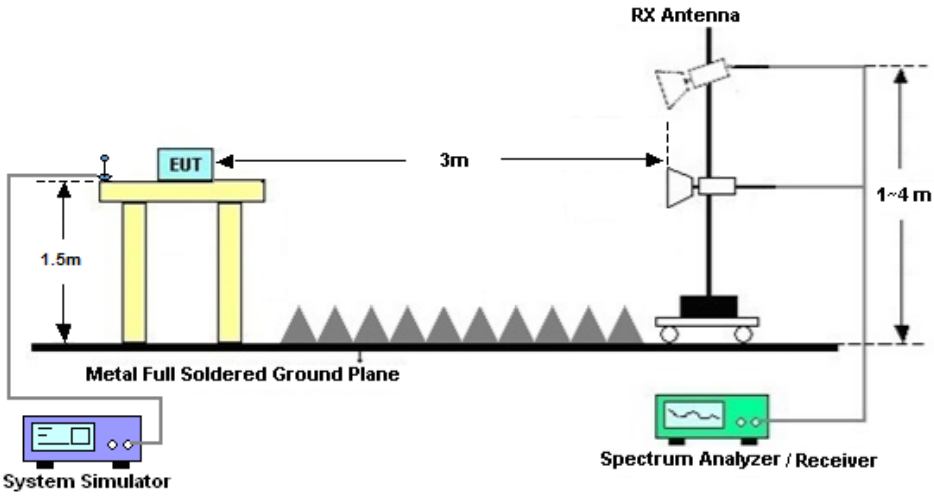
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3 Test Result of Radiated Test

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

Please refer to Appendix B.

4.4 Radiated Spurious Emission Measurement

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI/TIA-603-E. The power of any emission outside of the authorized operating frequency ranges shall not exceed −13 dBm/MHz.

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

4.4.2 Test Procedures

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

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EXA Signal Analyzer	KEYSIGHT	N9010B	MY60240803	10Hz~44GHz	Apr. 03, 2021	Sep. 07, 2021~ Sep. 18, 2021	Apr. 02, 2022	Conducted (TH01-SZ)
Power divider	STI	STI08-0055	-	0.5~40GHz	Aug. 26, 2021	Sep. 07, 2021~ Sep. 18, 2021	Aug. 25, 2022	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 14, 2021	Sep. 07, 2021~ Sep. 18, 2021	Jul. 13, 2022	Conducted (TH01-SZ)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz-44G,MAX 30dB	Apr. 13, 2021	Sep. 01, 2021	Apr. 12, 2022	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 01, 2020	Sep. 01, 2021	Oct. 31, 2021	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	May 30, 2021	Sep. 01, 2021	May 29, 2022	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Nov. 01, 2020	Sep. 01, 2021	Oct. 31, 2021	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101115	18GHz~40GHz	Jan. 06, 2021	Sep. 01, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Jan. 06, 2021	Sep. 01, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40G GA	060728	18~40GHz	Jan. 07, 2021	Sep. 01, 2021	Jan. 06, 2022	Radiation (03CH04-KS)
high gain Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P	2025788	1Ghz-18Ghz	Jan. 06, 2021	Sep. 01, 2021	Jan.05, 2022	Radiation (03CH04-KS)
Amplifier	Keysight	83017A	MY57280106	500MHz~26.5GHz	Oct. 14, 2020	Sep. 01, 2021	Oct. 13, 2021	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Sep. 01, 2021	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Sep. 01, 2021	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Sep. 01, 2021	NCR	Radiation (03CH04-KS)

NCR: No Calibration Required

6 Uncertainty of Evaluation

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 Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.3dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.8dB**

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

Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power) and EIRP

Software Version: 21.02.090401

FR1 N77

SCS=15 kHz:

Transmitter Conducted Output Power And ERP/EIRP, (G_T - L_C)=-1.3dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
77	15	10	630334	3455.01	DFT-s-OFDM PI/2 BPSK	25@12	25.06	23.76	0.2377
77	15	10	630334	3455.01	DFT-s-OFDM PI/2 BPSK	1@1	24.72	23.42	0.2198
77	15	10	630334	3455.01	DFT-s-OFDM PI/2 BPSK	1@50	24.71	23.41	0.2193
77	15	10	630334	3455.01	DFT-s-OFDM QPSK	25@12	25.12	23.82	0.2410
77	15	10	630334	3455.01	DFT-s-OFDM QPSK	1@1	24.72	23.42	0.2198
77	15	10	630334	3455.01	DFT-s-OFDM QPSK	1@50	24.74	23.44	0.2208
77	15	10	630334	3455.01	DFT-s-OFDM 16 QAM	25@12	23.77	22.47	0.1766
77	15	10	630334	3455.01	DFT-s-OFDM 16 QAM	1@1	23.71	22.41	0.1742
77	15	10	630334	3455.01	DFT-s-OFDM 16 QAM	1@50	23.71	22.41	0.1742
77	15	10	630334	3455.01	DFT-s-OFDM 64 QAM	25@12	22.28	20.98	0.1253
77	15	10	630334	3455.01	DFT-s-OFDM 64 QAM	1@1	22.23	20.93	0.1239
77	15	10	630334	3455.01	DFT-s-OFDM 64 QAM	1@50	22.55	21.25	0.1334
77	15	10	630334	3455.01	DFT-s-OFDM 256 QAM	25@12	20.29	18.99	0.0793
77	15	10	630334	3455.01	DFT-s-OFDM 256 QAM	1@1	20.31	19.01	0.0796
77	15	10	630334	3455.01	DFT-s-OFDM 256 QAM	1@50	20.16	18.86	0.0769
77	15	10	630334	3455.01	CP-OFDM QPSK	26@13	23.3	22	0.1585
77	15	10	630334	3455.01	CP-OFDM QPSK	1@1	23.23	21.93	0.1560
77	15	10	630334	3455.01	CP-OFDM QPSK	1@50	23.22	21.92	0.1556

77	15	10	633334	3500.01	DFT-s-OFDM PI/2 BPSK	25@12	25.13	23.83	0.2415
77	15	10	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	24.75	23.45	0.2213
77	15	10	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@50	24.75	23.45	0.2213
77	15	10	633334	3500.01	DFT-s-OFDM QPSK	25@12	25.35	24.05	0.2541
77	15	10	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.79	23.49	0.2234
77	15	10	633334	3500.01	DFT-s-OFDM QPSK	1@50	24.77	23.47	0.2223
77	15	10	633334	3500.01	DFT-s-OFDM 16 QAM	25@12	23.82	22.52	0.1786
77	15	10	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.89	22.59	0.1816
77	15	10	633334	3500.01	DFT-s-OFDM 16 QAM	1@50	23.88	22.58	0.1811
77	15	10	633334	3500.01	DFT-s-OFDM 64 QAM	25@12	22.31	21.01	0.1262
77	15	10	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	22.34	21.04	0.1271
77	15	10	633334	3500.01	DFT-s-OFDM 64 QAM	1@50	22.29	20.99	0.1256
77	15	10	633334	3500.01	DFT-s-OFDM 256 QAM	25@12	20.27	18.97	0.0789
77	15	10	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	20.06	18.76	0.0752
77	15	10	633334	3500.01	DFT-s-OFDM 256 QAM	1@50	20.03	18.73	0.0746
77	15	10	633334	3500.01	CP-OFDM QPSK	26@13	23.33	22.03	0.1596
77	15	10	633334	3500.01	CP-OFDM QPSK	1@1	23.26	21.96	0.1570
77	15	10	633334	3500.01	CP-OFDM QPSK	1@50	23.22	21.92	0.1556
77	15	10	636333	3544.995	DFT-s-OFDM PI/2 BPSK	25@12	25.12	23.82	0.2410
77	15	10	636333	3544.995	DFT-s-OFDM PI/2 BPSK	1@1	24.73	23.43	0.2203
77	15	10	636333	3544.995	DFT-s-OFDM PI/2 BPSK	1@50	24.72	23.42	0.2198
77	15	10	636333	3544.995	DFT-s-OFDM QPSK	25@12	24.77	23.47	0.2223
77	15	10	636333	3544.995	DFT-s-OFDM QPSK	1@1	24.71	23.41	0.2193
77	15	10	636333	3544.995	DFT-s-OFDM QPSK	1@50	24.73	23.43	0.2203

77	15	10	636333	3544.995	DFT-s-OFDM 16 QAM	25@12	23.78	22.48	0.1770
77	15	10	636333	3544.995	DFT-s-OFDM 16 QAM	1@1	23.86	22.56	0.1803
77	15	10	636333	3544.995	DFT-s-OFDM 16 QAM	1@50	23.84	22.54	0.1795
77	15	10	636333	3544.995	DFT-s-OFDM 64 QAM	25@12	22.27	20.97	0.1250
77	15	10	636333	3544.995	DFT-s-OFDM 64 QAM	1@1	22.3	21	0.1259
77	15	10	636333	3544.995	DFT-s-OFDM 64 QAM	1@50	22.24	20.94	0.1242
77	15	10	636333	3544.995	DFT-s-OFDM 256 QAM	25@12	20.23	18.93	0.0782
77	15	10	636333	3544.995	DFT-s-OFDM 256 QAM	1@1	20.35	19.05	0.0804
77	15	10	636333	3544.995	DFT-s-OFDM 256 QAM	1@50	20.26	18.96	0.0787
77	15	10	636333	3544.995	CP-OFDM QPSK	26@13	23.29	21.99	0.1581
77	15	10	636333	3544.995	CP-OFDM QPSK	1@1	23.23	21.93	0.1560
77	15	10	636333	3544.995	CP-OFDM QPSK	1@50	23.16	21.86	0.1535
77	15	15	630500	3457.5	DFT-s-OFDM PI/2 BPSK	36@18	24.96	23.66	0.2323
77	15	15	630500	3457.5	DFT-s-OFDM PI/2 BPSK	1@1	24.79	23.49	0.2234
77	15	15	630500	3457.5	DFT-s-OFDM PI/2 BPSK	1@77	24.85	23.55	0.2265
77	15	15	630500	3457.5	DFT-s-OFDM QPSK	36@18	24.96	23.66	0.2323
77	15	15	630500	3457.5	DFT-s-OFDM QPSK	1@1	24.8	23.5	0.2239
77	15	15	630500	3457.5	DFT-s-OFDM QPSK	1@77	24.84	23.54	0.2259
77	15	15	630500	3457.5	DFT-s-OFDM 16 QAM	36@18	23.99	22.69	0.1858
77	15	15	630500	3457.5	DFT-s-OFDM 16 QAM	1@1	23.84	22.54	0.1795
77	15	15	630500	3457.5	DFT-s-OFDM 16 QAM	1@77	23.82	22.52	0.1786
77	15	15	630500	3457.5	DFT-s-OFDM 64 QAM	36@18	22.47	21.17	0.1309
77	15	15	630500	3457.5	DFT-s-OFDM 64 QAM	1@1	22.6	21.3	0.1349
77	15	15	630500	3457.5	DFT-s-OFDM 64 QAM	1@77	22.3	21	0.1259

77	15	15	630500	3457.5	DFT-s-OFDM 256 QAM	36@18	20.5	19.2	0.0832
77	15	15	630500	3457.5	DFT-s-OFDM 256 QAM	1@1	20.45	19.15	0.0822
77	15	15	630500	3457.5	DFT-s-OFDM 256 QAM	1@77	20.45	19.15	0.0822
77	15	15	630500	3457.5	CP-OFDM QPSK	39@19	23.42	22.12	0.1629
77	15	15	630500	3457.5	CP-OFDM QPSK	1@1	23.33	22.03	0.1596
77	15	15	630500	3457.5	CP-OFDM QPSK	1@77	23.36	22.06	0.1607
77	15	15	633334	3500.01	DFT-s-OFDM PI/2 BPSK	36@18	25.03	23.73	0.2360
77	15	15	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	24.88	23.58	0.2280
77	15	15	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@77	24.81	23.51	0.2244
77	15	15	633334	3500.01	DFT-s-OFDM QPSK	36@18	25.38	24.08	0.2559
77	15	15	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.92	23.62	0.2301
77	15	15	633334	3500.01	DFT-s-OFDM QPSK	1@77	24.85	23.55	0.2265
77	15	15	633334	3500.01	DFT-s-OFDM 16 QAM	36@18	24.04	22.74	0.1879
77	15	15	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.08	22.78	0.1897
77	15	15	633334	3500.01	DFT-s-OFDM 16 QAM	1@77	23.85	22.55	0.1799
77	15	15	633334	3500.01	DFT-s-OFDM 64 QAM	36@18	22.44	21.14	0.1300
77	15	15	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	22.9	21.6	0.1445
77	15	15	633334	3500.01	DFT-s-OFDM 64 QAM	1@77	22.35	21.05	0.1274
77	15	15	633334	3500.01	DFT-s-OFDM 256 QAM	36@18	20.51	19.21	0.0834
77	15	15	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	20.15	18.85	0.0767
77	15	15	633334	3500.01	DFT-s-OFDM 256 QAM	1@77	20.48	19.18	0.0828
77	15	15	633334	3500.01	CP-OFDM QPSK	39@19	23.45	22.15	0.1641
77	15	15	633334	3500.01	CP-OFDM QPSK	1@1	23.32	22.02	0.1592
77	15	15	633334	3500.01	CP-OFDM QPSK	1@77	23.22	21.92	0.1556
77	15	15	636166	3542.49	DFT-s-OFDM PI/2 BPSK	36@18	24.99	23.69	0.2339

77	15	15	636166	3542.49	DFT-s-OFDM PI/2 BPSK	1@1	24.91	23.61	0.2296
77	15	15	636166	3542.49	DFT-s-OFDM PI/2 BPSK	1@77	24.81	23.51	0.2244
77	15	15	636166	3542.49	DFT-s-OFDM QPSK	36@18	25.43	24.13	0.2588
77	15	15	636166	3542.49	DFT-s-OFDM QPSK	1@1	24.83	23.53	0.2254
77	15	15	636166	3542.49	DFT-s-OFDM QPSK	1@77	24.77	23.47	0.2223
77	15	15	636166	3542.49	DFT-s-OFDM 16 QAM	36@18	24	22.7	0.1862
77	15	15	636166	3542.49	DFT-s-OFDM 16 QAM	1@1	23.8	22.5	0.1778
77	15	15	636166	3542.49	DFT-s-OFDM 16 QAM	1@77	23.87	22.57	0.1807
77	15	15	636166	3542.49	DFT-s-OFDM 64 QAM	36@18	22.46	21.16	0.1306
77	15	15	636166	3542.49	DFT-s-OFDM 64 QAM	1@1	22.29	20.99	0.1256
77	15	15	636166	3542.49	DFT-s-OFDM 64 QAM	1@77	22.63	21.33	0.1358
77	15	15	636166	3542.49	DFT-s-OFDM 256 QAM	36@18	20.52	19.22	0.0836
77	15	15	636166	3542.49	DFT-s-OFDM 256 QAM	1@1	20.46	19.16	0.0824
77	15	15	636166	3542.49	DFT-s-OFDM 256 QAM	1@77	20.12	18.82	0.0762
77	15	15	636166	3542.49	CP-OFDM QPSK	39@19	23.44	22.14	0.1637
77	15	15	636166	3542.49	CP-OFDM QPSK	1@1	23.33	22.03	0.1596
77	15	15	636166	3542.49	CP-OFDM QPSK	1@77	23.32	22.02	0.1592
77	15	20	630667	3460.005	DFT-s-OFDM PI/2 BPSK	50@25	24.98	23.68	0.2333
77	15	20	630667	3460.005	DFT-s-OFDM PI/2 BPSK	1@1	24.88	23.58	0.2280
77	15	20	630667	3460.005	DFT-s-OFDM PI/2 BPSK	1@104	24.74	23.44	0.2208
77	15	20	630667	3460.005	DFT-s-OFDM QPSK	50@25	24.96	23.66	0.2323
77	15	20	630667	3460.005	DFT-s-OFDM QPSK	1@1	24.81	23.51	0.2244
77	15	20	630667	3460.005	DFT-s-OFDM QPSK	1@104	24.81	23.51	0.2244
77	15	20	630667	3460.005	DFT-s-OFDM 16 QAM	50@25	23.99	22.69	0.1858

77	15	20	630667	3460.005	DFT-s-OFDM 16 QAM	1@1	23.77	22.47	0.1766
77	15	20	630667	3460.005	DFT-s-OFDM 16 QAM	1@104	23.77	22.47	0.1766
77	15	20	630667	3460.005	DFT-s-OFDM 64 QAM	50@25	22.46	21.16	0.1306
77	15	20	630667	3460.005	DFT-s-OFDM 64 QAM	1@1	22.34	21.04	0.1271
77	15	20	630667	3460.005	DFT-s-OFDM 64 QAM	1@104	22.66	21.36	0.1368
77	15	20	630667	3460.005	DFT-s-OFDM 256 QAM	50@25	20.45	19.15	0.0822
77	15	20	630667	3460.005	DFT-s-OFDM 256 QAM	1@1	20.16	18.86	0.0769
77	15	20	630667	3460.005	DFT-s-OFDM 256 QAM	1@104	20.43	19.13	0.0818
77	15	20	630667	3460.005	CP-OFDM QPSK	53@26	23.45	22.15	0.1641
77	15	20	630667	3460.005	CP-OFDM QPSK	1@1	23.3	22	0.1585
77	15	20	630667	3460.005	CP-OFDM QPSK	1@104	23.25	21.95	0.1567
77	15	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@25	24.99	23.69	0.2339
77	15	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	24.9	23.6	0.2291
77	15	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@104	24.77	23.47	0.2223
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	50@25	25.02	23.72	0.2355
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.87	23.57	0.2275
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	1@104	24.82	23.52	0.2249
77	15	20	633334	3500.01	DFT-s-OFDM 16 QAM	50@25	24.06	22.76	0.1888
77	15	20	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.81	22.51	0.1782
77	15	20	633334	3500.01	DFT-s-OFDM 16 QAM	1@104	23.72	22.42	0.1746
77	15	20	633334	3500.01	DFT-s-OFDM 64 QAM	50@25	22.46	21.16	0.1306
77	15	20	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	22.71	21.41	0.1384
77	15	20	633334	3500.01	DFT-s-OFDM 64 QAM	1@104	22.67	21.37	0.1371
77	15	20	633334	3500.01	DFT-s-OFDM 256 QAM	50@25	20.48	19.18	0.0828

77	15	20	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	20.53	19.23	0.0838
77	15	20	633334	3500.01	DFT-s-OFDM 256 QAM	1@104	20.38	19.08	0.0809
77	15	20	633334	3500.01	CP-OFDM QPSK	53@26	23.45	22.15	0.1641
77	15	20	633334	3500.01	CP-OFDM QPSK	1@1	23.32	22.02	0.1592
77	15	20	633334	3500.01	CP-OFDM QPSK	1@104	23.19	21.89	0.1545
77	15	20	636000	3540	DFT-s-OFDM PI/2 BPSK	50@25	24.95	23.65	0.2317
77	15	20	636000	3540	DFT-s-OFDM PI/2 BPSK	1@1	24.92	23.62	0.2301
77	15	20	636000	3540	DFT-s-OFDM PI/2 BPSK	1@104	24.83	23.53	0.2254
77	15	20	636000	3540	DFT-s-OFDM QPSK	50@25	25.12	23.82	0.2410
77	15	20	636000	3540	DFT-s-OFDM QPSK	1@1	24.87	23.57	0.2275
77	15	20	636000	3540	DFT-s-OFDM QPSK	1@104	24.74	23.44	0.2208
77	15	20	636000	3540	DFT-s-OFDM 16 QAM	50@25	23.97	22.67	0.1849
77	15	20	636000	3540	DFT-s-OFDM 16 QAM	1@1	23.98	22.68	0.1854
77	15	20	636000	3540	DFT-s-OFDM 16 QAM	1@104	23.9	22.6	0.1820
77	15	20	636000	3540	DFT-s-OFDM 64 QAM	50@25	22.43	21.13	0.1297
77	15	20	636000	3540	DFT-s-OFDM 64 QAM	1@1	22.41	21.11	0.1291
77	15	20	636000	3540	DFT-s-OFDM 64 QAM	1@104	22.3	21	0.1259
77	15	20	636000	3540	DFT-s-OFDM 256 QAM	50@25	20.42	19.12	0.0817
77	15	20	636000	3540	DFT-s-OFDM 256 QAM	1@1	20.49	19.19	0.0830
77	15	20	636000	3540	DFT-s-OFDM 256 QAM	1@104	20.39	19.09	0.0811
77	15	20	636000	3540	CP-OFDM QPSK	53@26	23.47	22.17	0.1648
77	15	20	636000	3540	CP-OFDM QPSK	1@1	23.32	22.02	0.1592
77	15	20	636000	3540	CP-OFDM QPSK	1@104	23.24	21.94	0.1563
77	15	40	631334	3470.01	DFT-s-OFDM PI/2 BPSK	108@54	24.92	23.62	0.2301
77	15	40	631334	3470.01	DFT-s-OFDM PI/2 BPSK	1@1	24.43	23.13	0.2056

77	15	40	631334	3470.01	DFT-s-OFDM PI/2 BPSK	1@214	24.58	23.28	0.2128
77	15	40	631334	3470.01	DFT-s-OFDM QPSK	108@54	24.93	23.63	0.2307
77	15	40	631334	3470.01	DFT-s-OFDM QPSK	1@1	24.68	23.38	0.2178
77	15	40	631334	3470.01	DFT-s-OFDM QPSK	1@214	24.71	23.41	0.2193
77	15	40	631334	3470.01	DFT-s-OFDM 16 QAM	108@54	23.94	22.64	0.1837
77	15	40	631334	3470.01	DFT-s-OFDM 16 QAM	1@1	23.68	22.38	0.1730
77	15	40	631334	3470.01	DFT-s-OFDM 16 QAM	1@214	23.58	22.28	0.1690
77	15	40	631334	3470.01	DFT-s-OFDM 64 QAM	108@54	22.45	21.15	0.1303
77	15	40	631334	3470.01	DFT-s-OFDM 64 QAM	1@1	22.44	21.14	0.1300
77	15	40	631334	3470.01	DFT-s-OFDM 64 QAM	1@214	22.37	21.07	0.1279
77	15	40	631334	3470.01	DFT-s-OFDM 256 QAM	108@54	20.32	19.02	0.0798
77	15	40	631334	3470.01	DFT-s-OFDM 256 QAM	1@1	20.46	19.16	0.0824
77	15	40	631334	3470.01	DFT-s-OFDM 256 QAM	1@214	20.48	19.18	0.0828
77	15	40	631334	3470.01	CP-OFDM QPSK	108@54	23.42	22.12	0.1629
77	15	40	631334	3470.01	CP-OFDM QPSK	1@1	23.48	22.18	0.1652
77	15	40	631334	3470.01	CP-OFDM QPSK	1@214	23.38	22.08	0.1614
77	15	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	108@54	24.96	23.66	0.2323
77	15	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	24.42	23.12	0.2051
77	15	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@214	24.68	23.38	0.2178
77	15	40	633334	3500.01	DFT-s-OFDM QPSK	108@54	24.98	23.68	0.2333
77	15	40	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.36	23.06	0.2023
77	15	40	633334	3500.01	DFT-s-OFDM QPSK	1@214	24.73	23.43	0.2203
77	15	40	633334	3500.01	DFT-s-OFDM 16 QAM	108@54	24	22.7	0.1862
77	15	40	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.68	22.38	0.1730

77	15	40	633334	3500.01	DFT-s-OFDM 16 QAM	1@214	23.76	22.46	0.1762
77	15	40	633334	3500.01	DFT-s-OFDM 64 QAM	108@54	22.44	21.14	0.1300
77	15	40	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	22.59	21.29	0.1346
77	15	40	633334	3500.01	DFT-s-OFDM 64 QAM	1@214	22.61	21.31	0.1352
77	15	40	633334	3500.01	DFT-s-OFDM 256 QAM	108@54	20.44	19.14	0.0820
77	15	40	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	20.57	19.27	0.0845
77	15	40	633334	3500.01	DFT-s-OFDM 256 QAM	1@214	20.64	19.34	0.0859
77	15	40	633334	3500.01	CP-OFDM QPSK	108@54	23.44	22.14	0.1637
77	15	40	633334	3500.01	CP-OFDM QPSK	1@1	23.47	22.17	0.1648
77	15	40	633334	3500.01	CP-OFDM QPSK	1@214	23.34	22.04	0.1600
77	15	40	635333	3529.995	DFT-s-OFDM PI/2 BPSK	108@54	24.97	23.67	0.2328
77	15	40	635333	3529.995	DFT-s-OFDM PI/2 BPSK	1@1	24.92	23.62	0.2301
77	15	40	635333	3529.995	DFT-s-OFDM PI/2 BPSK	1@214	24.94	23.64	0.2312
77	15	40	635333	3529.995	DFT-s-OFDM QPSK	108@54	24.98	23.68	0.2333
77	15	40	635333	3529.995	DFT-s-OFDM QPSK	1@1	24.4	23.1	0.2042
77	15	40	635333	3529.995	DFT-s-OFDM QPSK	1@214	24.76	23.46	0.2218
77	15	40	635333	3529.995	DFT-s-OFDM 16 QAM	108@54	23.94	22.64	0.1837
77	15	40	635333	3529.995	DFT-s-OFDM 16 QAM	1@1	23.71	22.41	0.1742
77	15	40	635333	3529.995	DFT-s-OFDM 16 QAM	1@214	23.75	22.45	0.1758
77	15	40	635333	3529.995	DFT-s-OFDM 64 QAM	108@54	22.45	21.15	0.1303
77	15	40	635333	3529.995	DFT-s-OFDM 64 QAM	1@1	22.64	21.34	0.1361
77	15	40	635333	3529.995	DFT-s-OFDM 64 QAM	1@214	22.47	21.17	0.1309
77	15	40	635333	3529.995	DFT-s-OFDM 256 QAM	108@54	20.4	19.1	0.0813
77	15	40	635333	3529.995	DFT-s-OFDM 256 QAM	1@1	20.71	19.41	0.0873

77	15	40	635333	3529.995	DFT-s-OFDM 256 QAM	1@214	20.73	19.43	0.0877
77	15	40	635333	3529.995	CP-OFDM QPSK	108@54	23.42	22.12	0.1629
77	15	40	635333	3529.995	CP-OFDM QPSK	1@1	23.24	21.94	0.1563
77	15	40	635333	3529.995	CP-OFDM QPSK	1@214	23.61	22.31	0.1702
77	15	50	631667	3475.005	DFT-s-OFDM PI/2 BPSK	135@67	24.94	23.64	0.2312
77	15	50	631667	3475.005	DFT-s-OFDM PI/2 BPSK	1@1	24.66	23.36	0.2168
77	15	50	631667	3475.005	DFT-s-OFDM PI/2 BPSK	1@268	24.6	23.3	0.2138
77	15	50	631667	3475.005	DFT-s-OFDM QPSK	135@67	25.45	24.15	0.2600
77	15	50	631667	3475.005	DFT-s-OFDM QPSK	1@1	24.71	23.41	0.2193
77	15	50	631667	3475.005	DFT-s-OFDM QPSK	1@268	24.53	23.23	0.2104
77	15	50	631667	3475.005	DFT-s-OFDM 16 QAM	135@67	23.94	22.64	0.1837
77	15	50	631667	3475.005	DFT-s-OFDM 16 QAM	1@1	23.71	22.41	0.1742
77	15	50	631667	3475.005	DFT-s-OFDM 16 QAM	1@268	23.6	22.3	0.1698
77	15	50	631667	3475.005	DFT-s-OFDM 64 QAM	135@67	22.44	21.14	0.1300
77	15	50	631667	3475.005	DFT-s-OFDM 64 QAM	1@1	22.23	20.93	0.1239
77	15	50	631667	3475.005	DFT-s-OFDM 64 QAM	1@268	22.51	21.21	0.1321
77	15	50	631667	3475.005	DFT-s-OFDM 256 QAM	135@67	20.4	19.1	0.0813
77	15	50	631667	3475.005	DFT-s-OFDM 256 QAM	1@1	20.1	18.8	0.0759
77	15	50	631667	3475.005	DFT-s-OFDM 256 QAM	1@268	20.76	19.46	0.0883
77	15	50	631667	3475.005	CP-OFDM QPSK	135@67	23.38	22.08	0.1614
77	15	50	631667	3475.005	CP-OFDM QPSK	1@1	23.09	21.79	0.1510
77	15	50	631667	3475.005	CP-OFDM QPSK	1@268	23.58	22.28	0.1690
77	15	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	135@67	24.97	23.67	0.2328
77	15	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	24.76	23.46	0.2218
77	15	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@268	24.56	23.26	0.2118

77	15	50	633334	3500.01	DFT-s-OFDM QPSK	135@67	24.97	23.67	0.2328
77	15	50	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.64	23.34	0.2158
77	15	50	633334	3500.01	DFT-s-OFDM QPSK	1@268	24.51	23.21	0.2094
77	15	50	633334	3500.01	DFT-s-OFDM 16 QAM	135@67	23.99	22.69	0.1858
77	15	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.71	22.41	0.1742
77	15	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@268	23.56	22.26	0.1683
77	15	50	633334	3500.01	DFT-s-OFDM 64 QAM	135@67	22.5	21.2	0.1318
77	15	50	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	22.39	21.09	0.1285
77	15	50	633334	3500.01	DFT-s-OFDM 64 QAM	1@268	22.49	21.19	0.1315
77	15	50	633334	3500.01	DFT-s-OFDM 256 QAM	135@67	20.45	19.15	0.0822
77	15	50	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	20.47	19.17	0.0826
77	15	50	633334	3500.01	DFT-s-OFDM 256 QAM	1@268	20.3	19	0.0794
77	15	50	633334	3500.01	CP-OFDM QPSK	135@67	23.48	22.18	0.1652
77	15	50	633334	3500.01	CP-OFDM QPSK	1@1	23.21	21.91	0.1552
77	15	50	633334	3500.01	CP-OFDM QPSK	1@268	23.05	21.75	0.1496
77	15	50	635000	3525	DFT-s-OFDM PI/2 BPSK	135@67	24.93	23.63	0.2307
77	15	50	635000	3525	DFT-s-OFDM PI/2 BPSK	1@1	24.71	23.41	0.2193
77	15	50	635000	3525	DFT-s-OFDM PI/2 BPSK	1@268	24.51	23.21	0.2094
77	15	50	635000	3525	DFT-s-OFDM QPSK	135@67	24.91	23.61	0.2296
77	15	50	635000	3525	DFT-s-OFDM QPSK	1@1	24.66	23.36	0.2168
77	15	50	635000	3525	DFT-s-OFDM QPSK	1@268	24.5	23.2	0.2089
77	15	50	635000	3525	DFT-s-OFDM 16 QAM	135@67	23.95	22.65	0.1841
77	15	50	635000	3525	DFT-s-OFDM 16 QAM	1@1	23.75	22.45	0.1758
77	15	50	635000	3525	DFT-s-OFDM 16 QAM	1@268	23.55	22.25	0.1679

77	15	50	635000	3525	DFT-s-OFDM 64 QAM	135@67	22.43	21.13	0.1297
77	15	50	635000	3525	DFT-s-OFDM 64 QAM	1@1	22.53	21.23	0.1327
77	15	50	635000	3525	DFT-s-OFDM 64 QAM	1@268	22.47	21.17	0.1309
77	15	50	635000	3525	DFT-s-OFDM 256 QAM	135@67	20.42	19.12	0.0817
77	15	50	635000	3525	DFT-s-OFDM 256 QAM	1@1	20.49	19.19	0.0830
77	15	50	635000	3525	DFT-s-OFDM 256 QAM	1@268	20.3	19	0.0794
77	15	50	635000	3525	CP-OFDM QPSK	135@67	23.43	22.13	0.1633
77	15	50	635000	3525	CP-OFDM QPSK	1@1	23.19	21.89	0.1545
77	15	50	635000	3525	CP-OFDM QPSK	1@268	23.02	21.72	0.1486

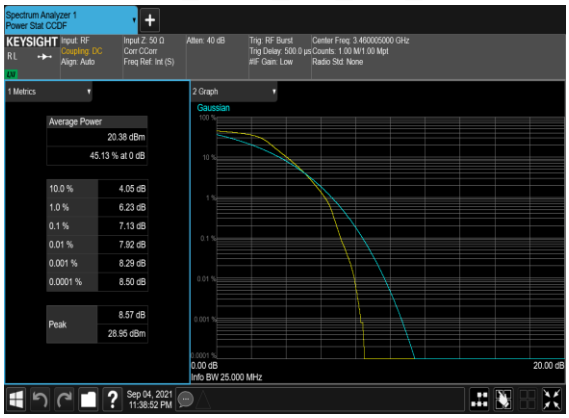
Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	-0.00237	**PASS**	NV
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	-0.00182	**PASS**	LV
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	-0.00270	**PASS**	HV
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	-0.00294	**PASS**	-30℃
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	-0.00154	**PASS**	-20℃
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	-0.00246	**PASS**	-10℃
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	-0.00177	**PASS**	0℃
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	-0.00083	**PASS**	10℃
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	-0.00348	**PASS**	20℃
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	-0.00252	**PASS**	30℃
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	-0.00131	**PASS**	40℃
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	-0.00183	**PASS**	50℃

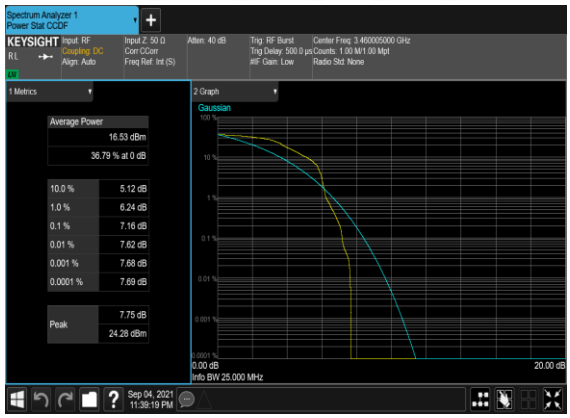
Peak to Average Radio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
77	15	20	630667	3460.005	DFT-s-OFDM PI/2 BPSK	100@0	7.13	13	**PASS**
77	15	20	630667	3460.005	DFT-s-OFDM PI/2 BPSK	1@0	7.16	13	**PASS**
77	15	20	630667	3460.005	DFT-s-OFDM QPSK	100@0	8.24	13	**PASS**
77	15	20	630667	3460.005	DFT-s-OFDM QPSK	1@0	8.18	13	**PASS**
77	15	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	100@0	7.11	13	**PASS**
77	15	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@0	7.86	13	**PASS**
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	8.23	13	**PASS**
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	1@0	8.7	13	**PASS**
77	15	20	636000	3540.0	DFT-s-OFDM PI/2 BPSK	100@0	7.12	13	**PASS**
77	15	20	636000	3540.0	DFT-s-OFDM PI/2 BPSK	1@0	7.91	13	**PASS**
77	15	20	636000	3540.0	DFT-s-OFDM QPSK	100@0	8.23	13	**PASS**
77	15	20	636000	3540.0	DFT-s-OFDM QPSK	1@0	8.39	13	**PASS**

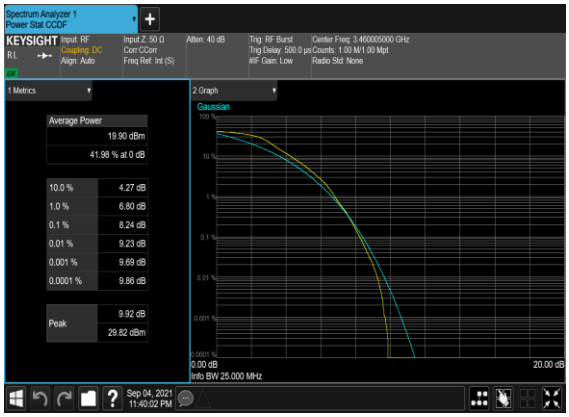
N77(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Low_CH



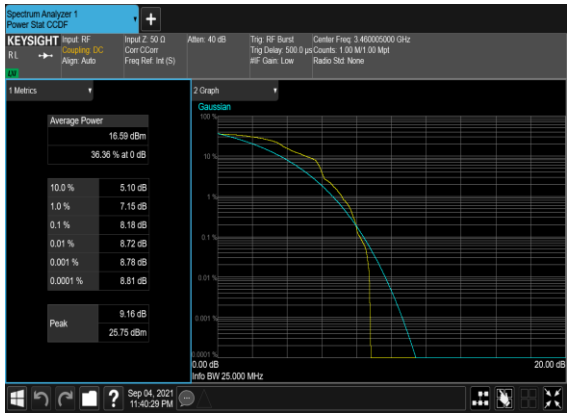
N77(20M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_Low_CH



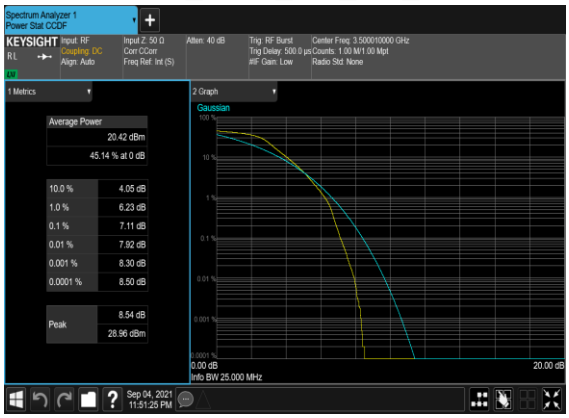
N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



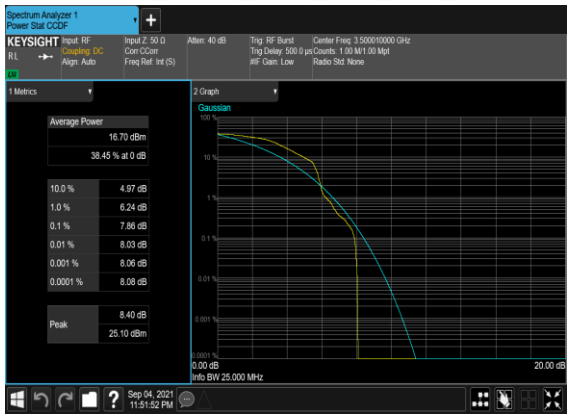
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



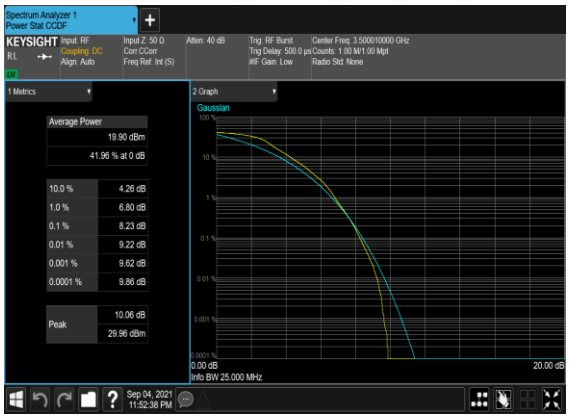
N77(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



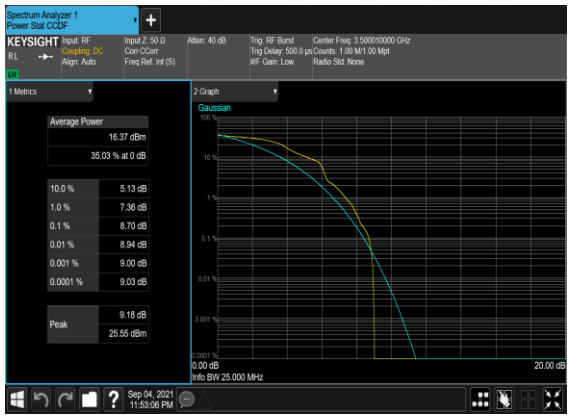
N77(20M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_Mid_CH



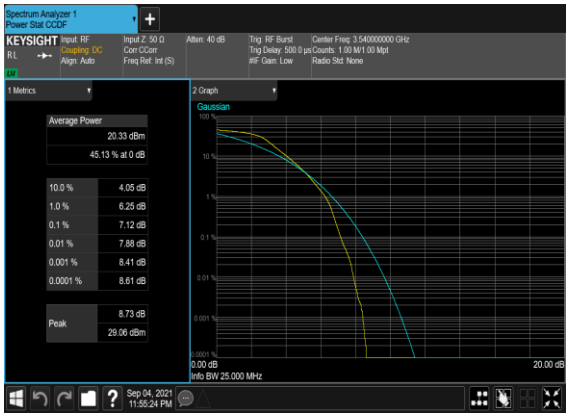
N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



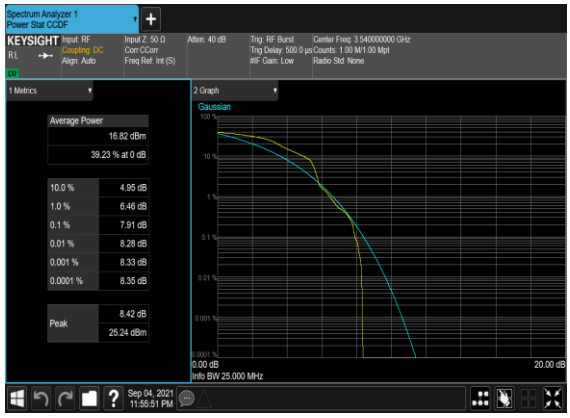
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



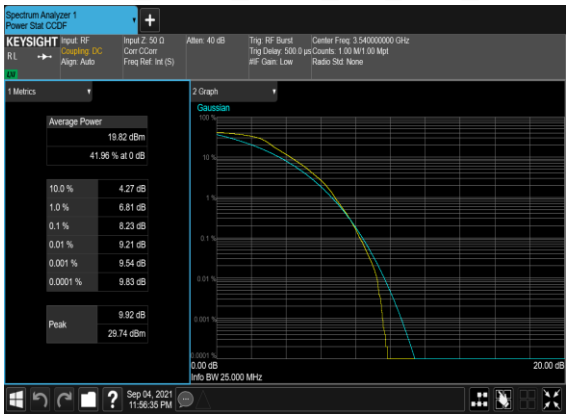
N77(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_High_CH



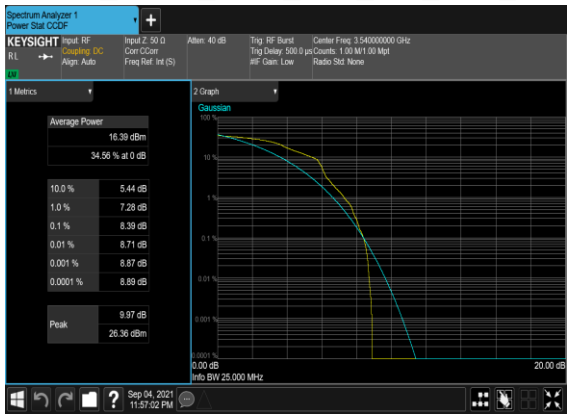
N77(20M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_High_CH



N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH

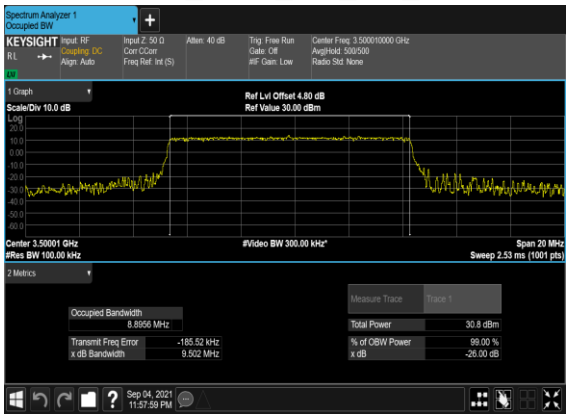


Occupied Bandwidth

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB OBW (MHz)
77	15	10	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	8.8956	9.502
77	15	10	633334	3500.01	DFT-s-OFDM QPSK	50@0	8.8859	9.434
77	15	10	633334	3500.01	CP-OFDM QPSK	52@0	9.2757	9.795
77	15	10	633334	3500.01	CP-OFDM 16 QAM	52@0	9.3011	9.84
77	15	10	633334	3500.01	CP-OFDM 64 QAM	52@0	9.2904	9.848
77	15	10	633334	3500.01	CP-OFDM 256 QAM	52@0	9.257	10.24
77	15	15	633334	3500.01	DFT-s-OFDM PI/2 BPSK	75@0	13.382	14.12
77	15	15	633334	3500.01	DFT-s-OFDM QPSK	75@0	13.358	14.08
77	15	15	633334	3500.01	CP-OFDM QPSK	79@0	14.084	14.92
77	15	15	633334	3500.01	CP-OFDM 16 QAM	79@0	14.099	14.65
77	15	15	633334	3500.01	CP-OFDM 64 QAM	79@0	14.118	14.71
77	15	15	633334	3500.01	CP-OFDM 256 QAM	79@0	14.109	14.8
77	15	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	100@0	17.876	18.8
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	17.845	18.82
77	15	20	633334	3500.01	CP-OFDM QPSK	106@0	18.917	19.69
77	15	20	633334	3500.01	CP-OFDM 16 QAM	106@0	18.874	19.82
77	15	20	633334	3500.01	CP-OFDM 64 QAM	106@0	18.866	19.79
77	15	20	633334	3500.01	CP-OFDM 256 QAM	106@0	18.917	19.87
77	15	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	216@0	38.532	39.94
77	15	40	633334	3500.01	DFT-s-OFDM QPSK	216@0	38.642	40.08
77	15	40	633334	3500.01	CP-OFDM QPSK	216@0	38.557	39.84
77	15	40	633334	3500.01	CP-OFDM 16 QAM	216@0	38.509	39.83
77	15	40	633334	3500.01	CP-OFDM 64 QAM	216@0	38.499	39.78
77	15	40	633334	3500.01	CP-OFDM 256 QAM	216@0	38.507	39.83

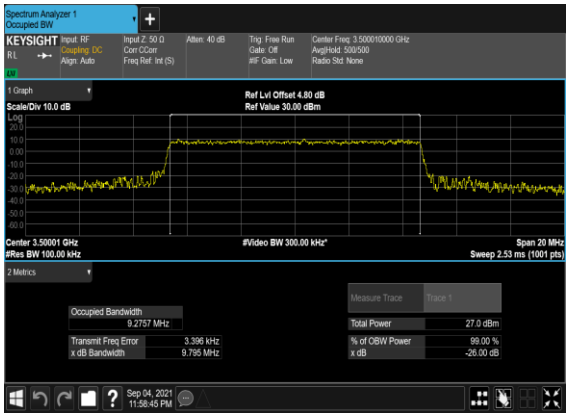
77	15	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	270@0	48.127	49.81
77	15	50	633334	3500.01	DFT-s-OFDM QPSK	270@0	48.203	49.78
77	15	50	633334	3500.01	CP-OFDM QPSK	270@0	48.252	49.75
77	15	50	633334	3500.01	CP-OFDM 16 QAM	270@0	48.111	49.82
77	15	50	633334	3500.01	CP-OFDM 64 QAM	270@0	48.048	49.81
77	15	50	633334	3500.01	CP-OFDM 256 QAM	270@0	48.118	50.03

N77(10M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH

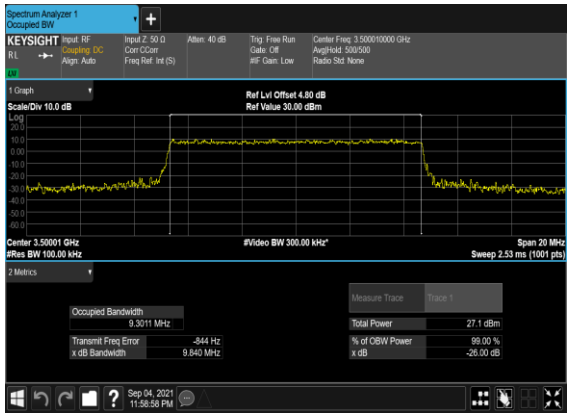


N77(10M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

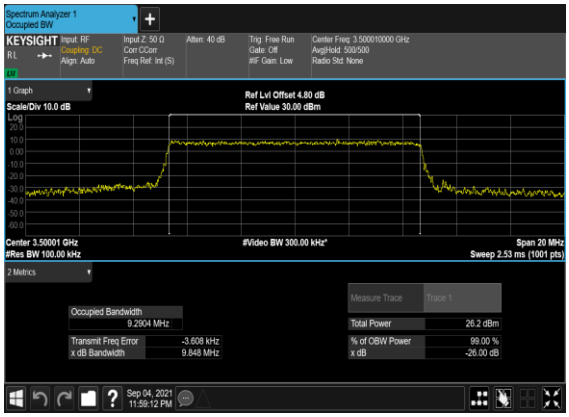
N77(10M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



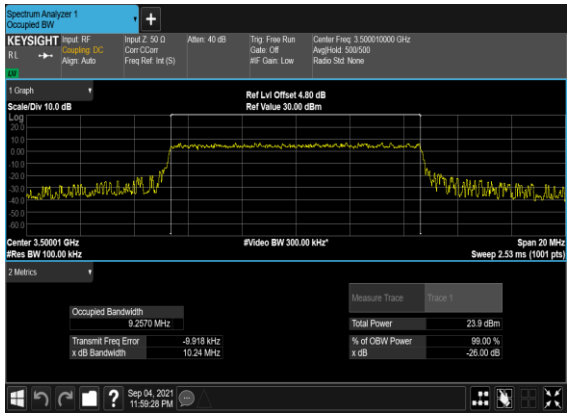
N77(10M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



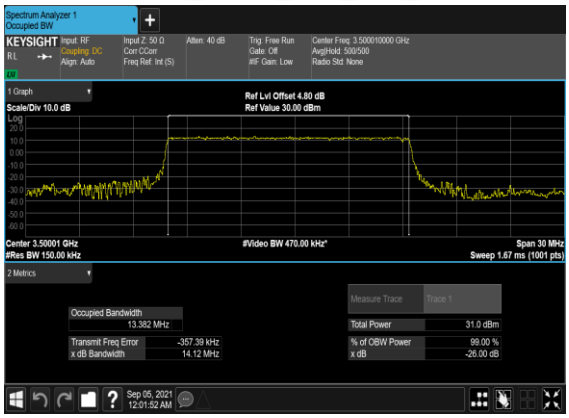
N77(10M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



N77(10M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

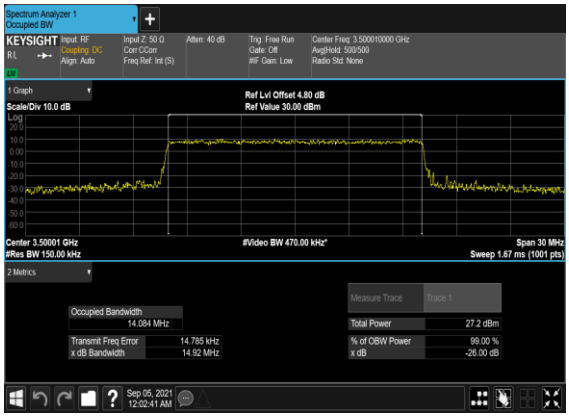


N77(15M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH

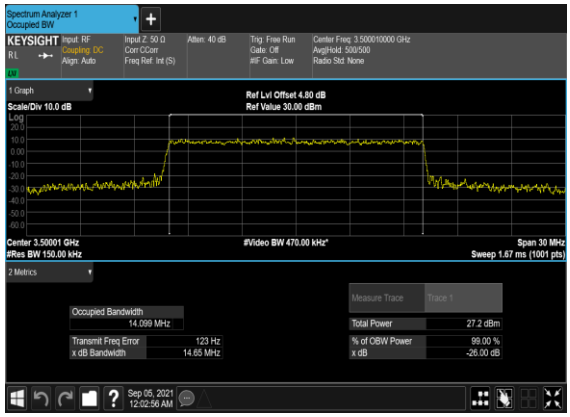


N77(15M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

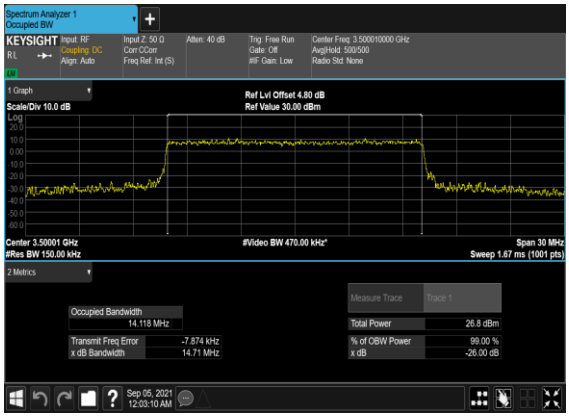
N77(15M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



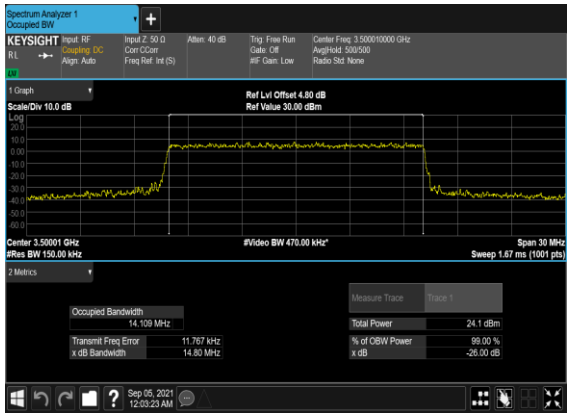
N77(15M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



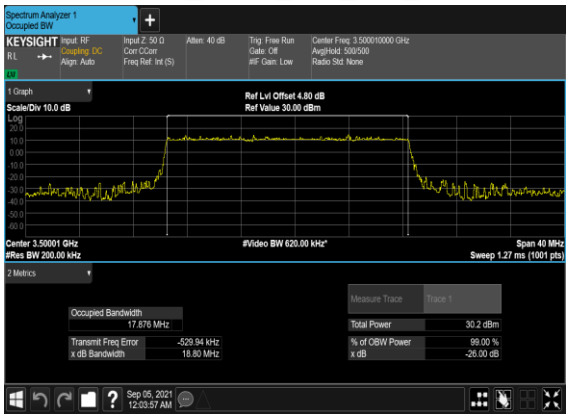
N77(15M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



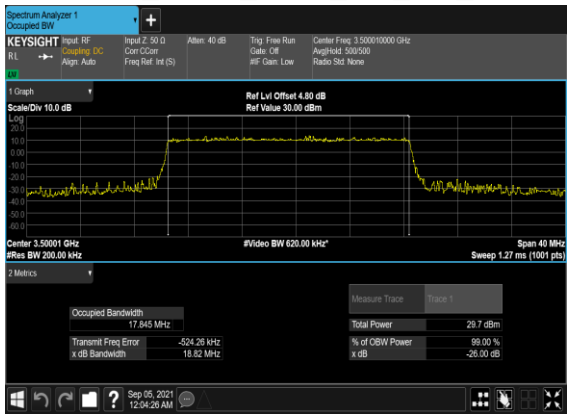
N77(15M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



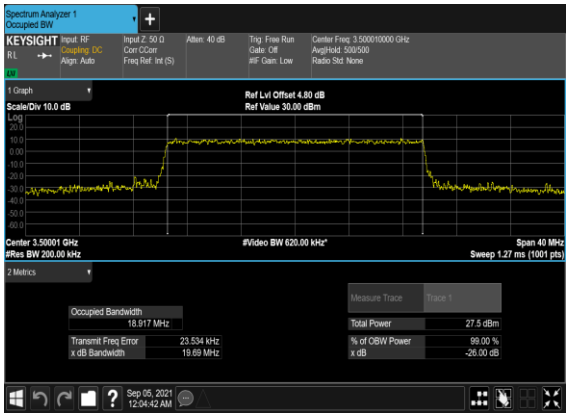
N77(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



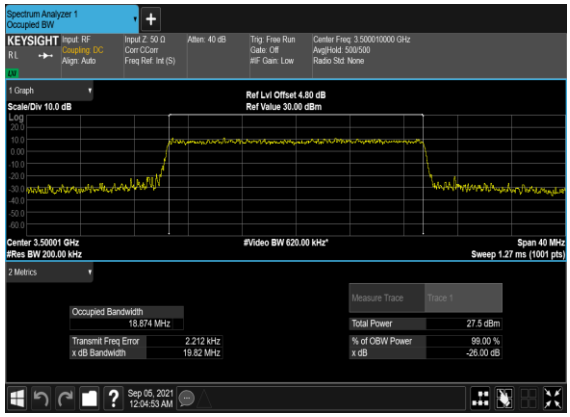
N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



N77(20M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



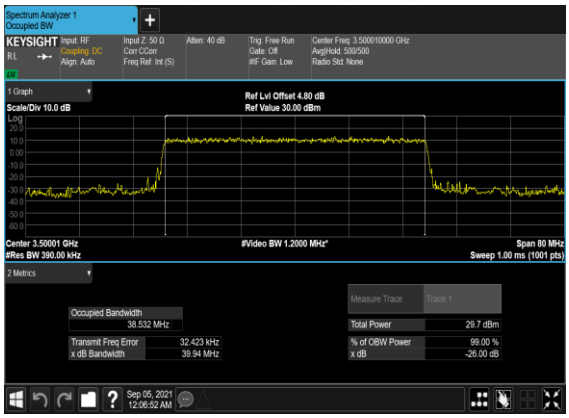
N77(20M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



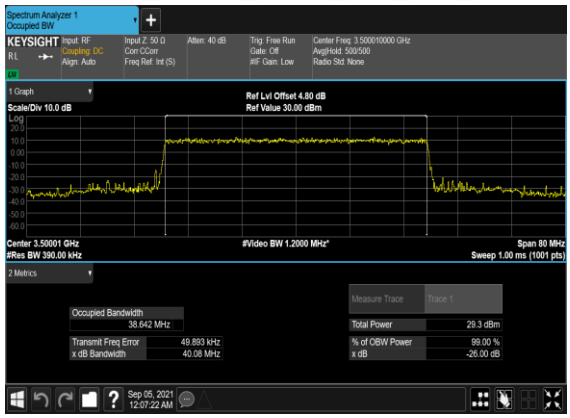
N77(20M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

N77(20M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

N77(40M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH

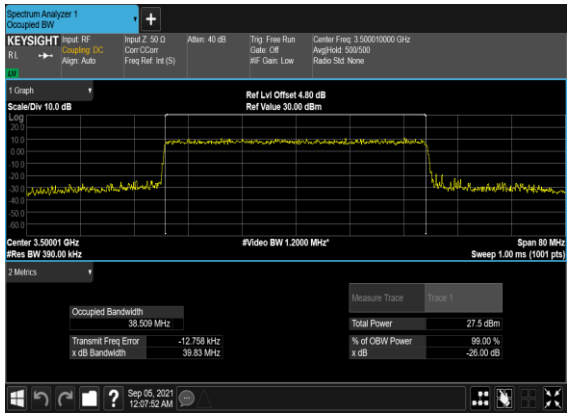


N77(40M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

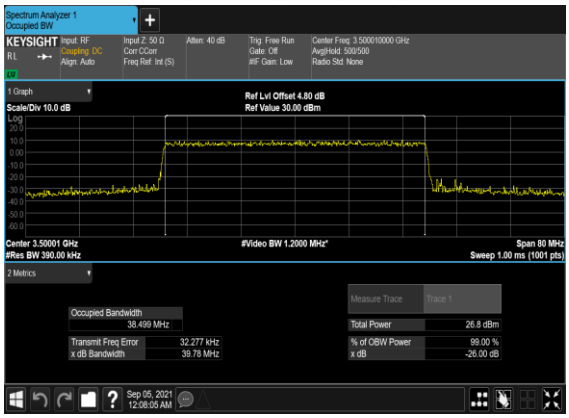


N77(40M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

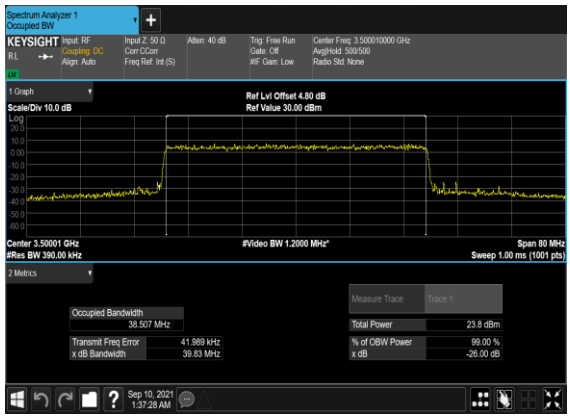
N77(40M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



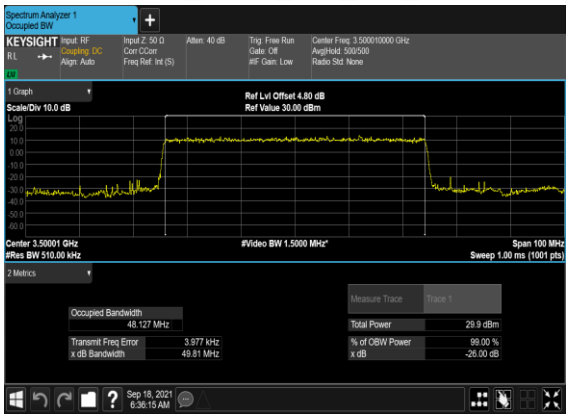
N77(40M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



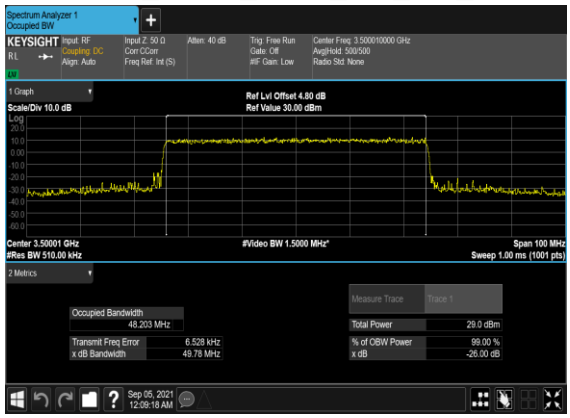
N77(40M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



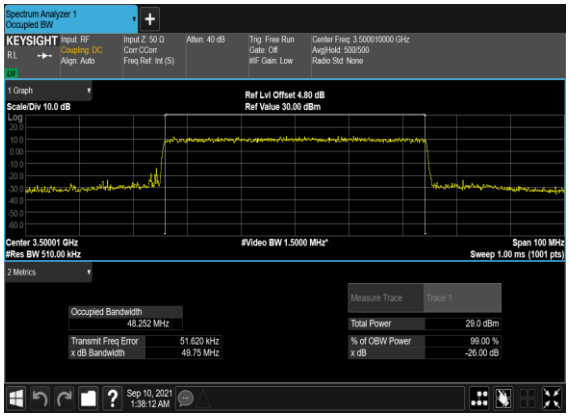
N77(50M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



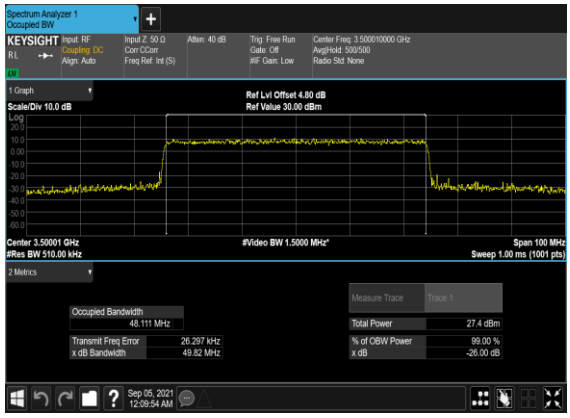
N77(50M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



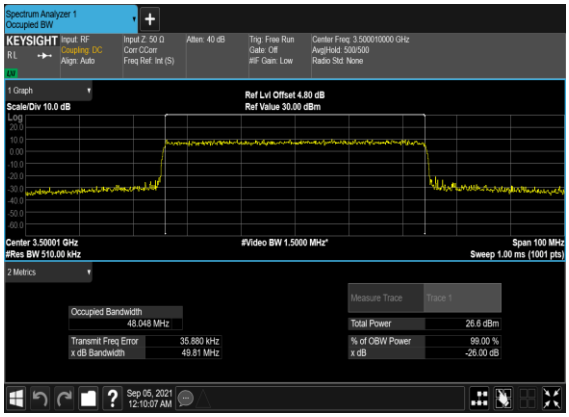
N77(50M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



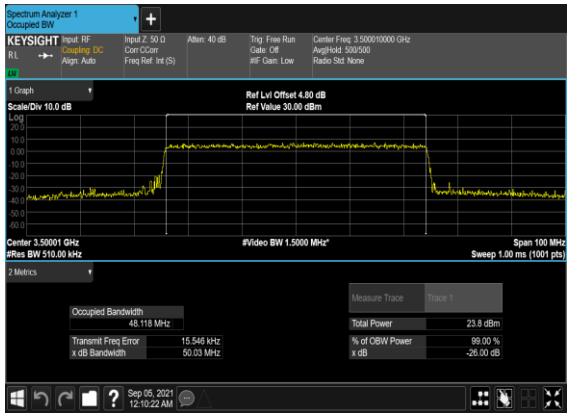
N77(50M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N77(50M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



N77(50M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



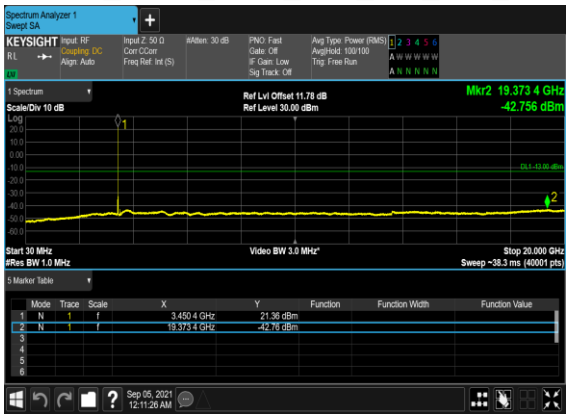
Conducted Spurious Emissions

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
77	15	10	630334	3455.01	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	15	10	630334	3455.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	10	630334	3455.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	10	630334	3455.01	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	15	10	630334	3455.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	15	10	630334	3455.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	15	10	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	15	10	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	10	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	10	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	15	10	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	15	10	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	15	10	636333	3544.995	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	15	10	636333	3544.995	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	10	636333	3544.995	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	10	636333	3544.995	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	15	10	636333	3544.995	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	15	10	636333	3544.995	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	15	20	630667	3460.005	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	15	20	630667	3460.005	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	20	630667	3460.005	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	20	630667	3460.005	DFT-s-OFDM QPSK	1@0	see graph	**---**

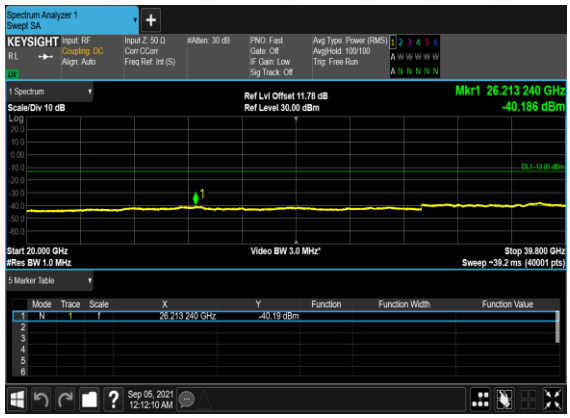
77	15	20	630667	3460.005	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	15	20	630667	3460.005	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	15	20	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	15	20	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	20	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	15	20	636000	3540.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	15	20	636000	3540.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	20	636000	3540.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	20	636000	3540.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	15	20	636000	3540.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	15	20	636000	3540.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	15	50	631667	3475.005	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	15	50	631667	3475.005	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	50	631667	3475.005	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	50	631667	3475.005	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	15	50	631667	3475.005	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	15	50	631667	3475.005	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	15	50	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	15	50	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	50	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	50	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**---**

77	15	50	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	15	50	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	15	50	635000	3525.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	15	50	635000	3525.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	50	635000	3525.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	50	635000	3525.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	15	50	635000	3525.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	15	50	635000	3525.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**

N77(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH

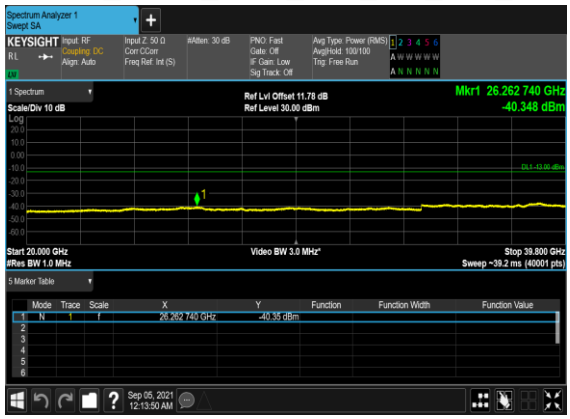


N77(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



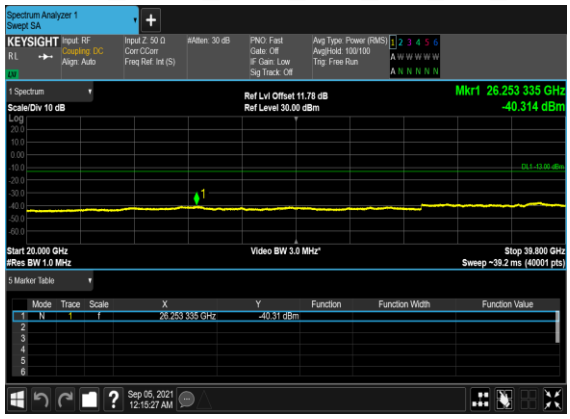
N77(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

N77(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

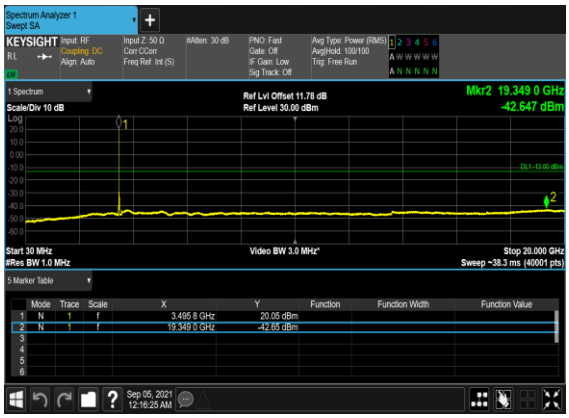


N77(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH

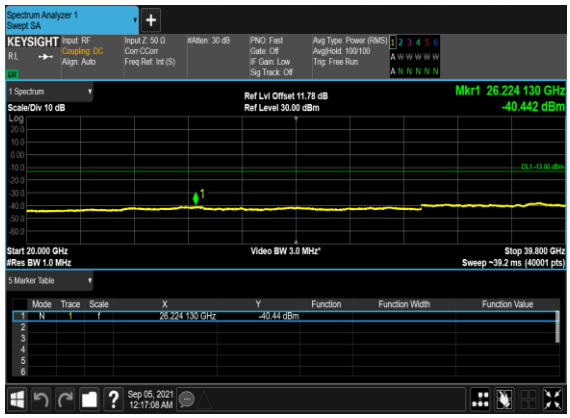
N77(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



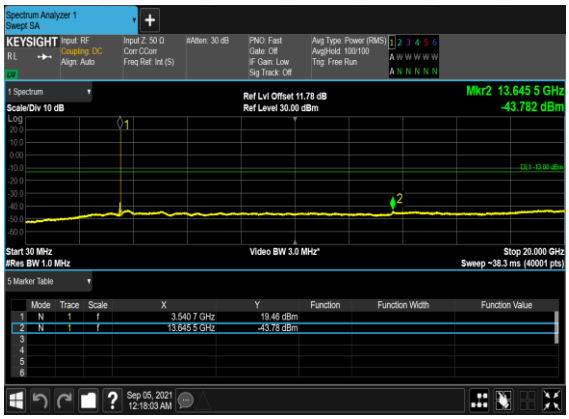
N77(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



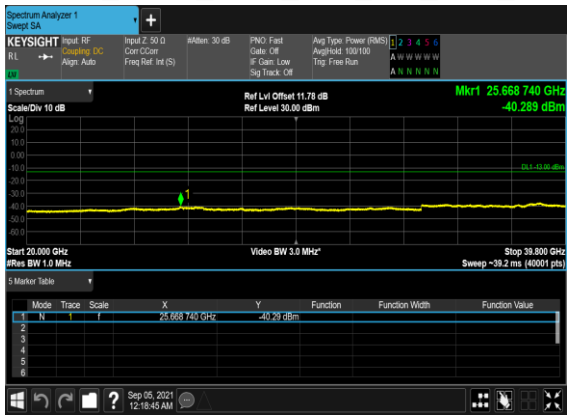
N77(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



N77(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH

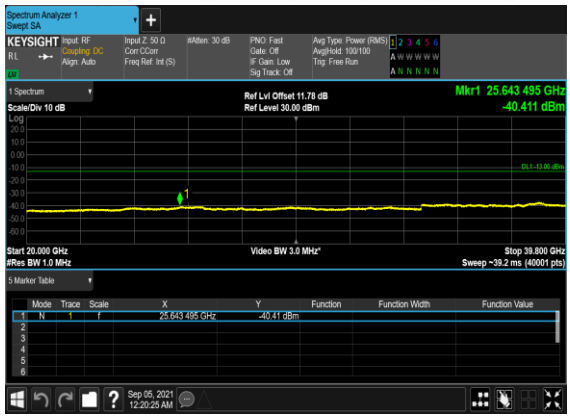


N77(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH

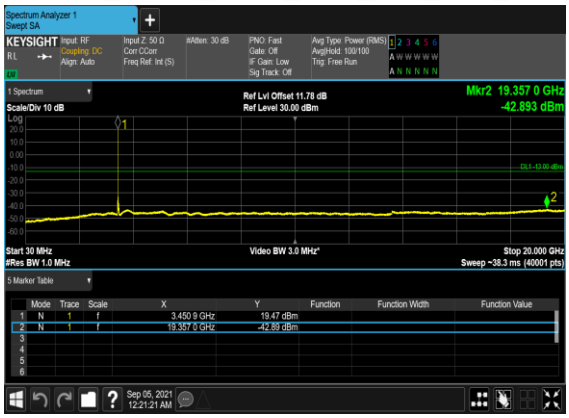


N77(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH

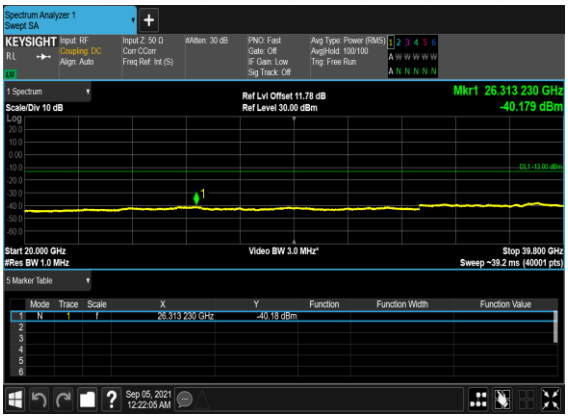
N77(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



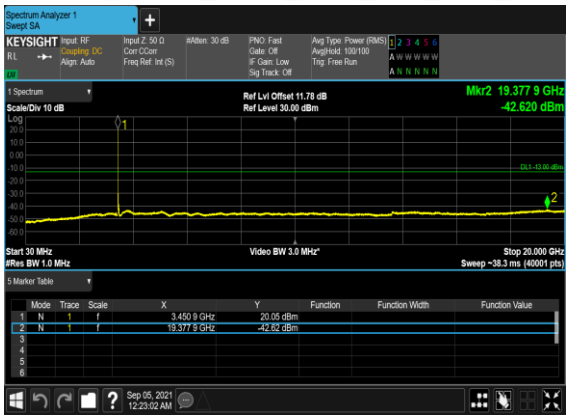
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



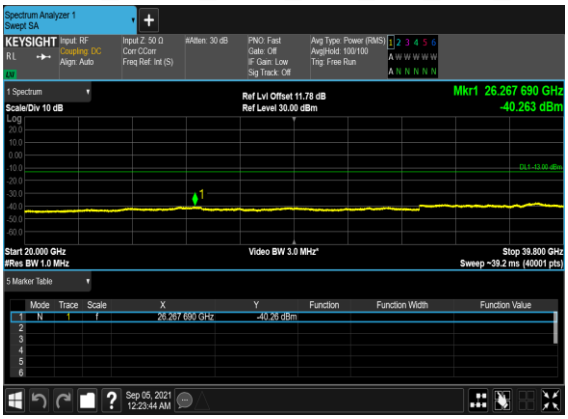
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

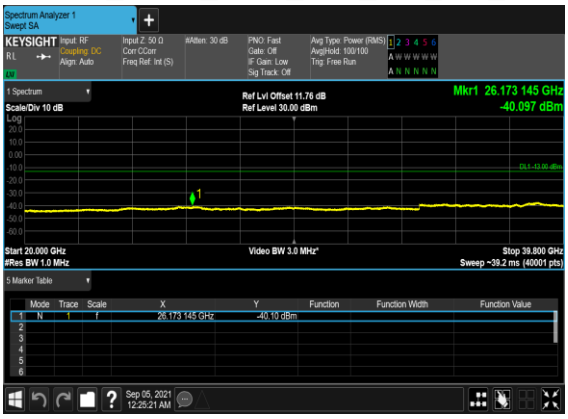


N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

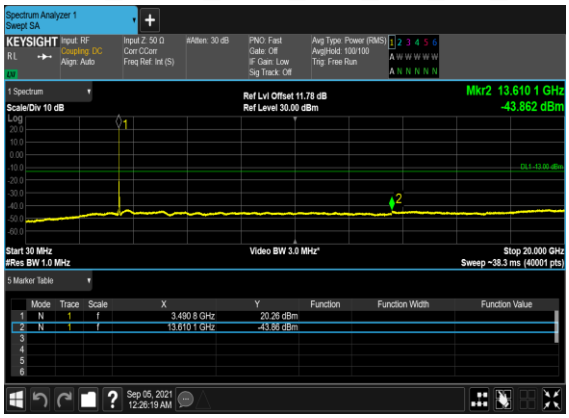


N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH

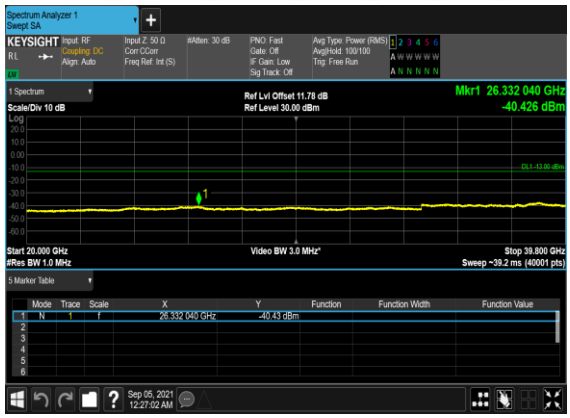
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



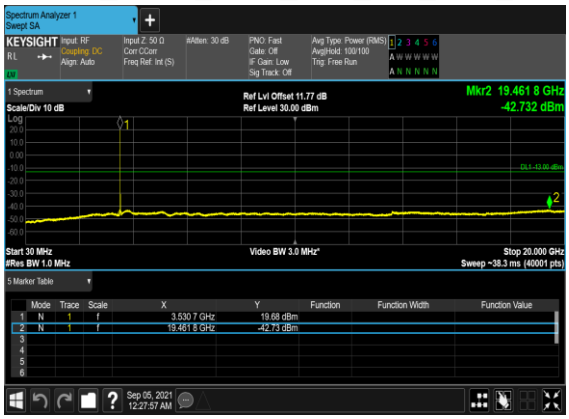
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



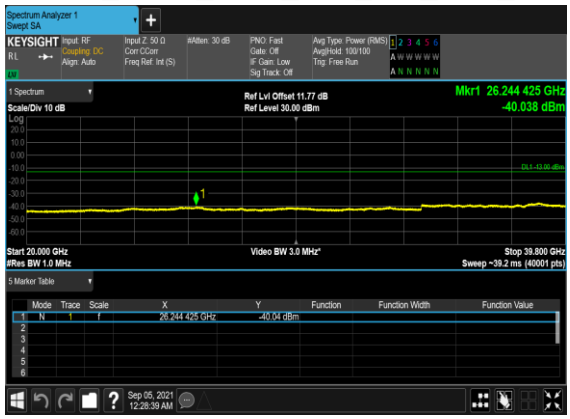
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



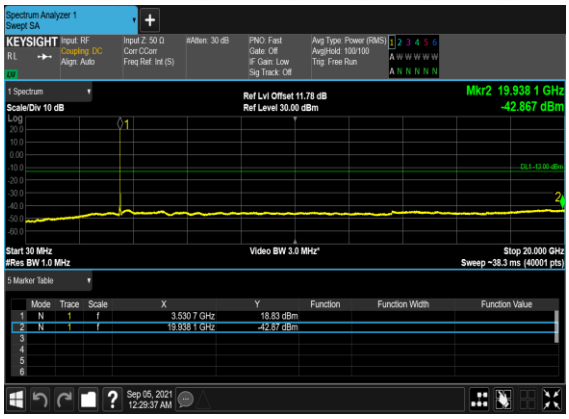
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



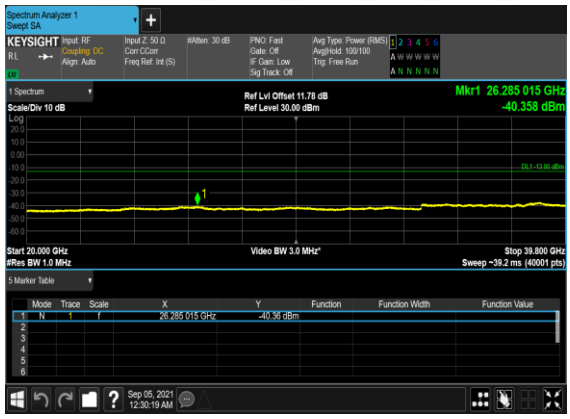
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



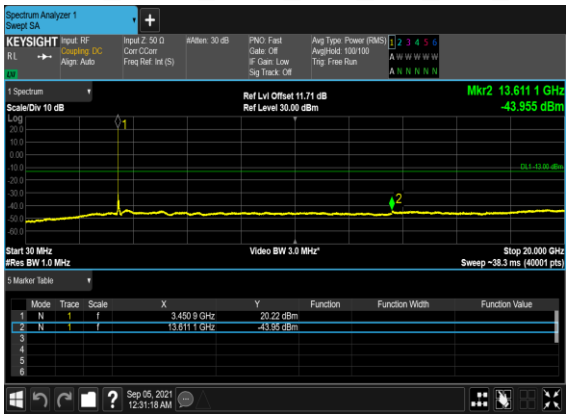
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



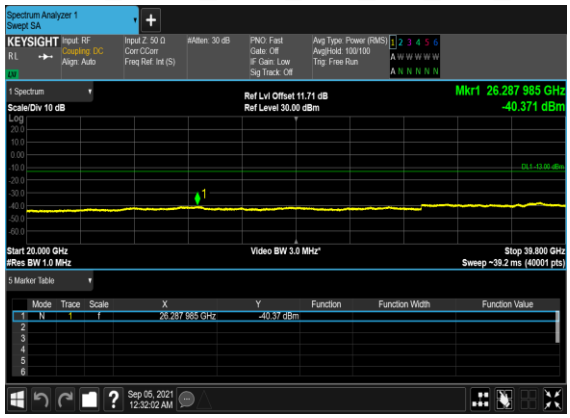
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



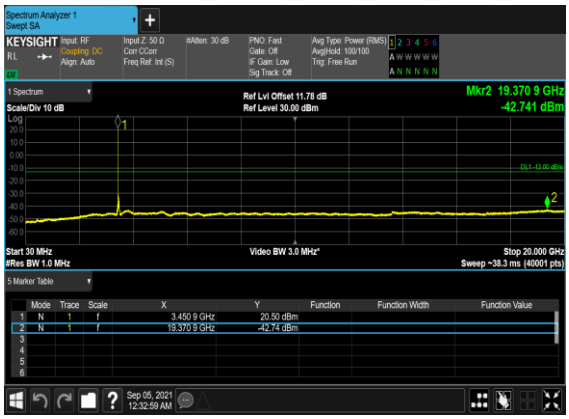
N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



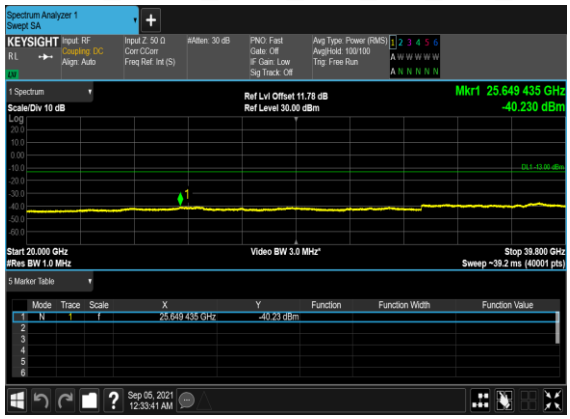
N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



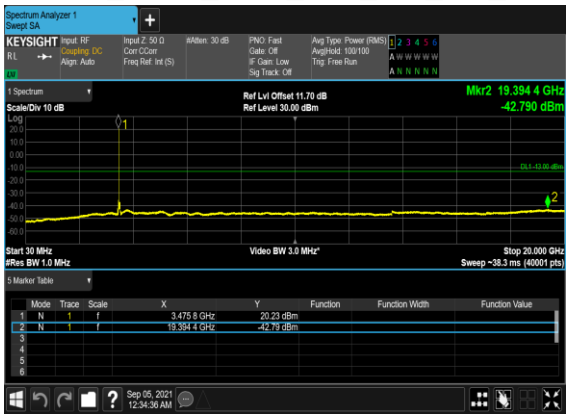
N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



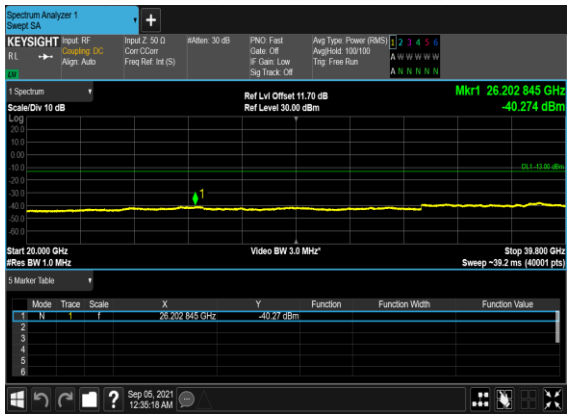
N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



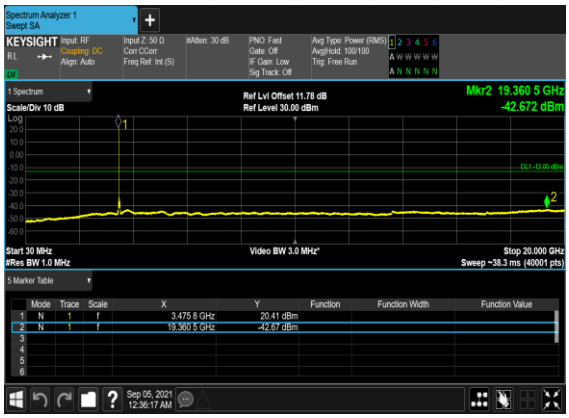
N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



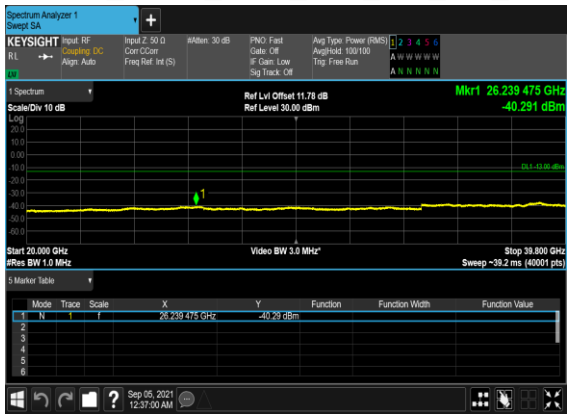
N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



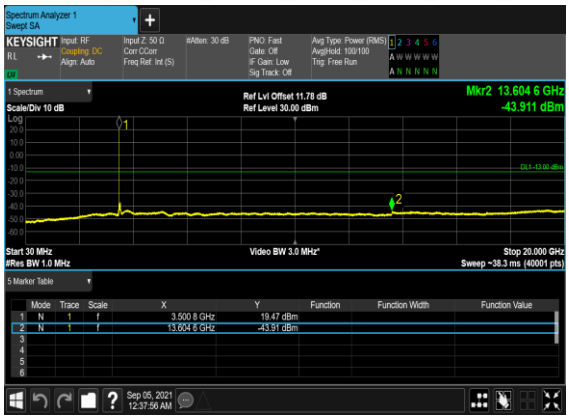
N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



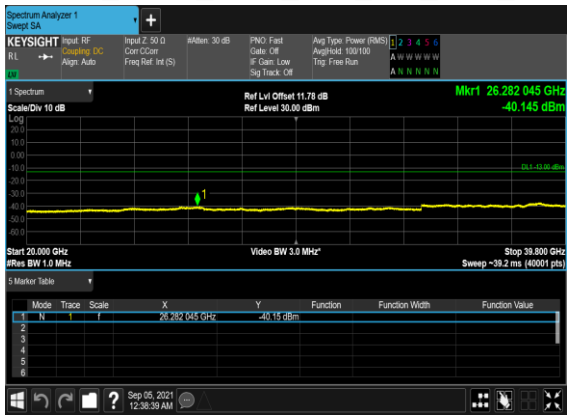
N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



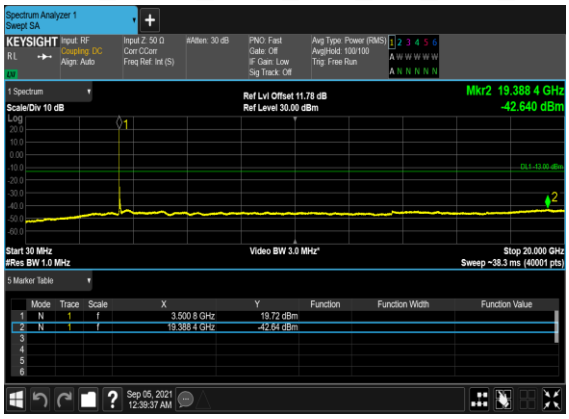
N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



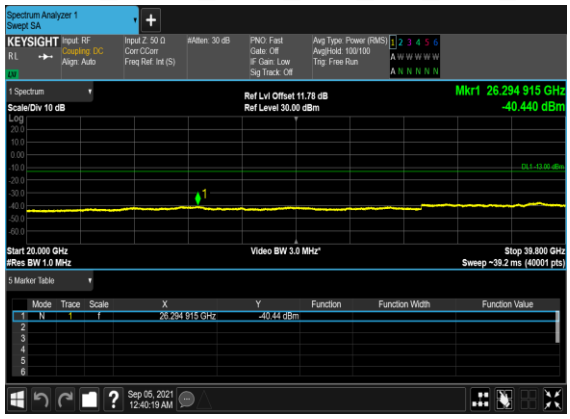
N77(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



N77(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH

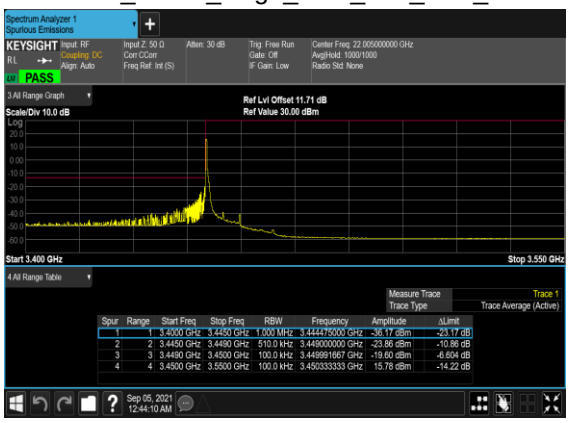


Conducted Band Edge

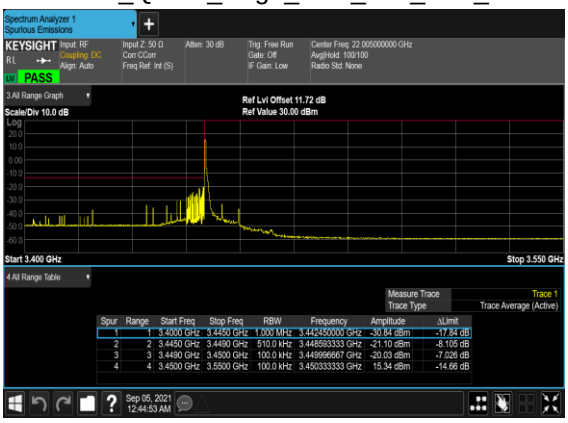
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
77	15	10	630334	3455.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	10	630334	3455.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	15	10	630334	3455.01	DFT-s-OFDM BPSK	50@0	see graph	**PASS**
77	15	10	630334	3455.01	DFT-s-OFDM QPSK	50@0	see graph	**PASS**
77	15	10	636333	3544.995	DFT-s-OFDM BPSK	1@51	see graph	**PASS**
77	15	10	636333	3544.995	DFT-s-OFDM QPSK	1@51	see graph	**PASS**
77	15	10	636333	3544.995	DFT-s-OFDM BPSK	50@0	see graph	**PASS**
77	15	10	636333	3544.995	DFT-s-OFDM QPSK	50@0	see graph	**PASS**
77	15	20	630667	3460.005	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	20	630667	3460.005	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	15	20	630667	3460.005	DFT-s-OFDM BPSK	100@0	see graph	**PASS**
77	15	20	630667	3460.005	DFT-s-OFDM QPSK	100@0	see graph	**PASS**
77	15	20	636000	3540.0	DFT-s-OFDM BPSK	1@105	see graph	**PASS**
77	15	20	636000	3540.0	DFT-s-OFDM QPSK	1@105	see graph	**PASS**
77	15	20	636000	3540.0	DFT-s-OFDM BPSK	100@0	see graph	**PASS**
77	15	20	636000	3540.0	DFT-s-OFDM QPSK	100@0	see graph	**PASS**
77	15	50	631667	3475.005	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	15	50	631667	3475.005	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	15	50	631667	3475.005	DFT-s-OFDM BPSK	270@0	see graph	**PASS**
77	15	50	631667	3475.005	DFT-s-OFDM QPSK	270@0	see graph	**PASS**
77	15	50	635000	3525.0	DFT-s-OFDM BPSK	1@269	see graph	**PASS**
77	15	50	635000	3525.0	DFT-s-OFDM QPSK	1@269	see graph	**PASS**

77	15	50	635000	3525.0	DFT-s-OFDM BPSK	270@0	see graph	**PASS**
77	15	50	635000	3525.0	DFT-s-OFDM QPSK	270@0	see graph	**PASS**

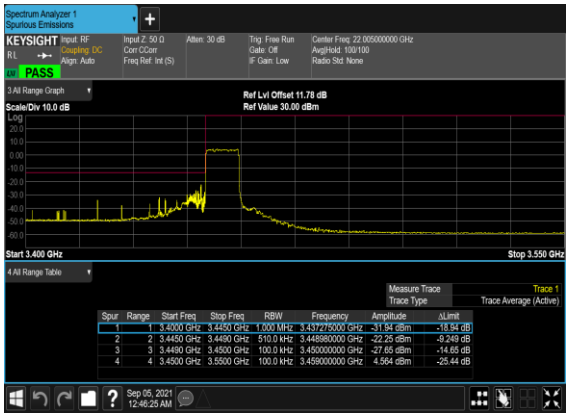
N77(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



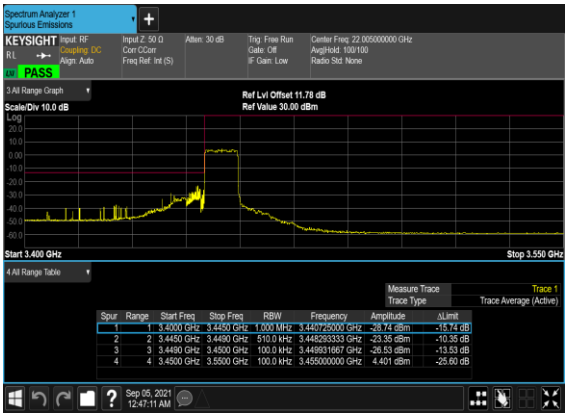
N77(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



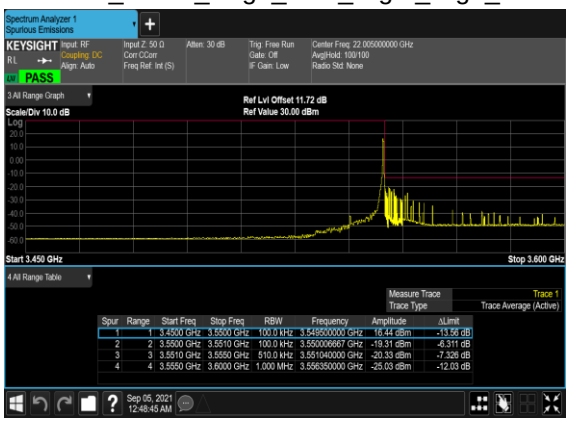
N77(10M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



N77(10M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH

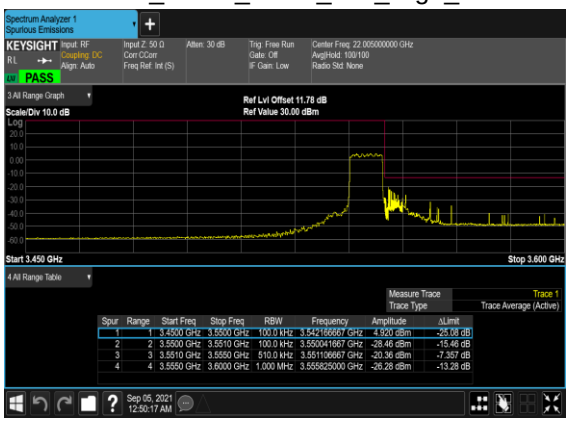


N77(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH

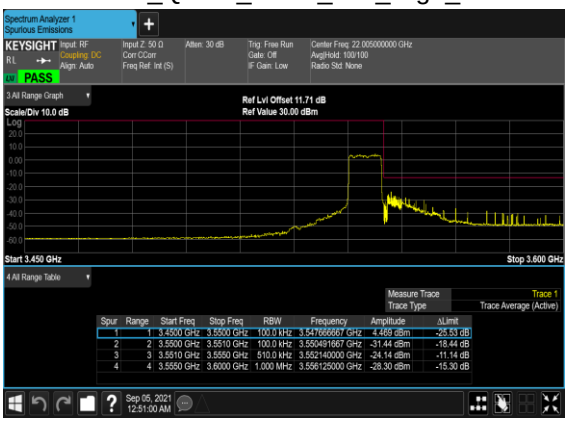


N77(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH

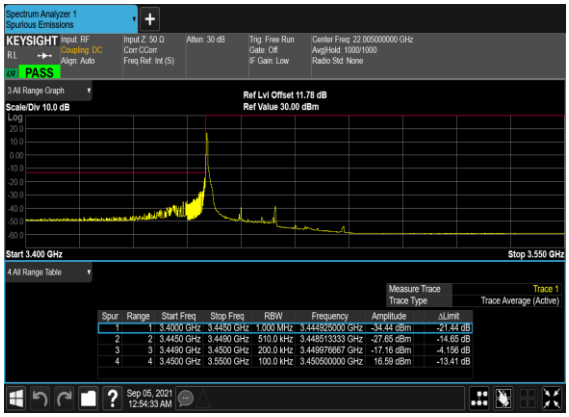
N77(10M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



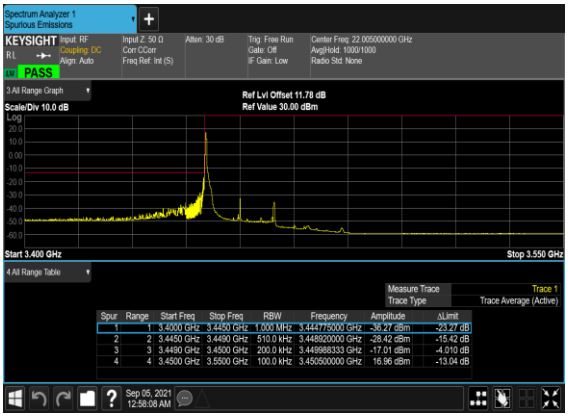
N77(10M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



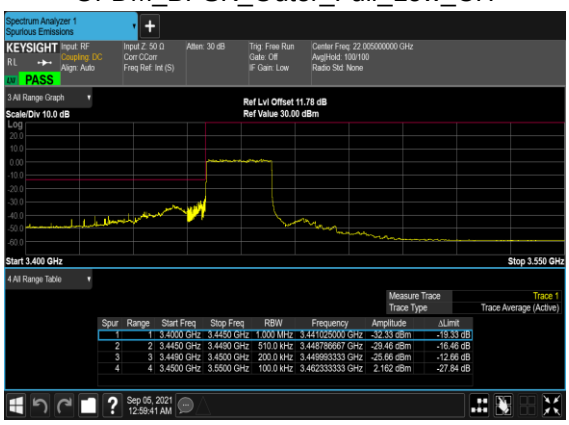
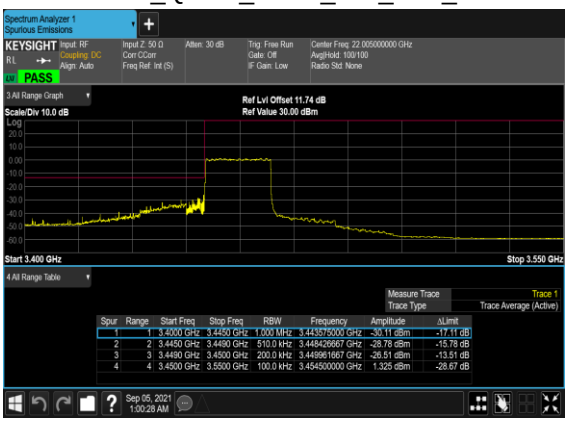
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



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