

# FCC RF Test Report

APPLICANT : KonnectONE, LLC  
EQUIPMENT : 5G MiFi  
BRAND NAME : moxee  
MODEL NAME : K873HSVL  
FCC ID : 2APQU-K873HSVL  
STANDARD : 47 CFR Part 2, Part 27 Subpart Q  
CLASSIFICATION : PCS Licensed Transmitter (PCB)  
TEST DATE(S) : Jul. 01, 2021 ~ Jul. 23, 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.

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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.

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## REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG182710F	Rev. 01	Initial issue of report	Dec. 03, 2021



### SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	-	Reporting 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	-	Reporting 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 39.93 dB at 10356.000 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

KonnnectONE, LLC  
40 Lake Bellevue Drive, Suite 350, Bellevue, WA 98005

## 1.2 Manufacturer

MeiG Smart Technology Co., Ltd  
Floor 2, Office Building No.5, Lingxia Road, Fenghuang Community, Fuyong Street, Bao 'an District, Shenzhen

## 1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	5G MiFi
Brand Name	moxee
Model Name	K873HSVL
FCC ID	2APQU-K873HSVL
HW Version	873_V1.01_PCB
SW Version	K873HSVL_6.0.01_EQ102
EUT Stage	Identical Prototype

Remark: This is a report for change in FCC ID, there is no difference on the product design, all the test results are leveraged from original FCC ID: 2APJ4-SRT873, report number FG133010F.

## 1.4 Product Specification of Equipment Under Test

Product Feature	
Tx/Rx Frequency	5G NR n77: 3450 MHz ~ 3550 MHz
Bandwidth	5G NR n77 : 20MHz / 40MHz / 50MHz / 60MHz / 80MHz / 90MHz / 100MHz
SCS	30kHz
Maximum Output Power to Antenna	5G NR n77 ULMIMO : 22.73 dBm 5G NR n77: 24.69 dBm EN DC_2A-n77A : 24.64 dBm
Antenna Gain	5G NR n77 : 5.0 dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

Remark:

1. The ERP/EIRP is calculated from max Output power and max antenna gain, only the maximum ERP/EIRP is shown in the report.
2. 5G NR supports SA and NSA mode, all the EN-DC modes are tested, and according to the maximum power, only show the worst EN-DC mode in the report.

## 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 ULMIMO (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)
20	3460.02 ~ 3540.00	0.5929	18M3G7D	0.5145	18M3W7D
40	3470.01 ~ 3529.98	0.5709	38M2G7D	0.5318	37M9W7D
50	3475.02 ~ 3525.00	0.5140	47M8G7D	0.4443	47M7W7D
60	3480.00 ~ 3519.99	0.5357	57M8G7D	0.4645	58M1W7D
80	3490.02 ~ 3510.00	0.5613	77M5G7D	0.5114	77M8W7D
90	3495.00 ~ 3504.99	0.5775	87M0G7D	0.5180	87M6W7D
100	3500.01 ~ 3500.01	0.4912	97M3G7D	0.4394	97M5W7D

5G NR n77 (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)
20	3460.02 ~ 3540.00	0.8414	18M2G7D	0.6607	18M2W7D
40	3470.01 ~ 3529.98	0.9311	37M8G7D	0.7194	37M8W7D
50	3475.02 ~ 3525.00	0.8610	47M5G7D	0.6998	47M5W7D
60	3480.00 ~ 3519.99	0.8318	57M9G7D	0.6887	57M9W7D
80	3490.02 ~ 3510.00	0.8630	77M5G7D	0.6966	77M5W7D
90	3495.00 ~ 3504.99	0.9099	87M4G7D	0.7413	87M7W7D
100	3500.01 ~ 3500.01	0.8970	97M3G7D	0.7261	97M5W7D



5G NR n77(SCS=30 kHz) (EN DC_2A-n77A)		BPSK/QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	3460.02 ~ 3540.00	0.8035	18M2G7D	0.6237	18M2W7D
40	3470.01 ~ 3529.98	0.8730	37M8G7D	0.6988	37M9W7D
50	3475.02 ~ 3525.00	0.8241	47M4G7D	0.6607	47M5W7D
60	3480.00 ~ 3519.99	0.8204	57M9G7D	0.6637	57M8W7D
80	3490.02 ~ 3510.00	0.8185	77M5G7D	0.6792	77M5W7D
90	3495.00 ~ 3504.99	0.8872	87M4G7D	0.7079	87M5W7D
100	3500.01 ~ 3500.01	0.9204	97M3G7D	0.7311	97M4W7D

**Note:** All modulations have been evaluation, 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.

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

<b>Test Firm</b>	Sporton International (Shenzhen) Inc.		
<b>Test Site Location</b>	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		
<b>Test Site No.</b>	<b>Sporton Site No.</b>	<b>FCC Designation No.</b>	<b>FCC Test Firm Registration No.</b>
	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.

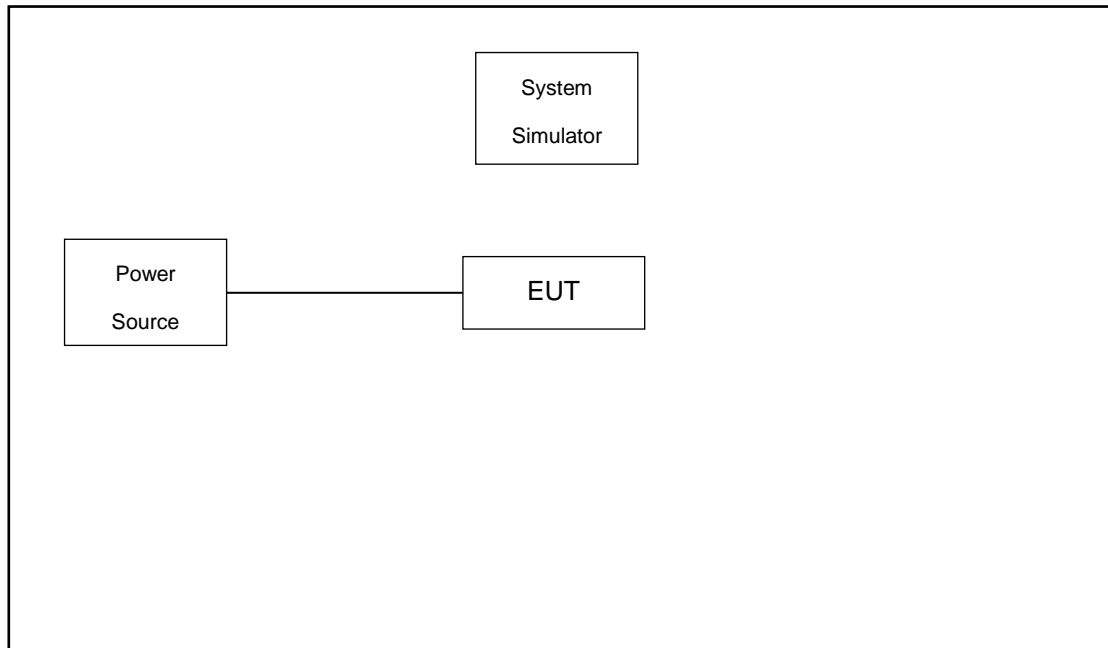
Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

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

**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. Based on engineering evaluation, only the worst modulations test results are shown 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.	LTE 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 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.

*Offset = RF cable loss.*

Following shows an offset computation example with cable loss 5.0dB.

Example :

*Offset(dB) = RF cable loss(dB).*  
 = 5.0 (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	-	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
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

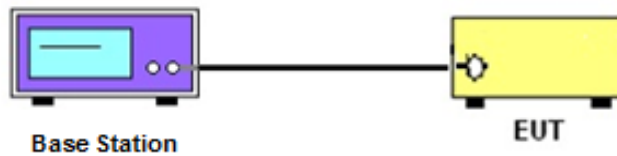
### 3 Conducted Test Items

#### 3.1 Measuring Instruments

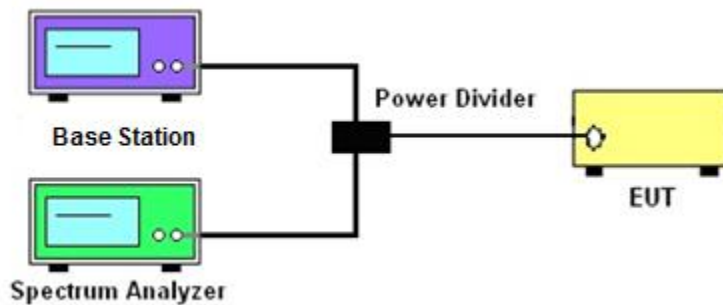
See list of measuring instruments of this test report.

#### 3.2 Test Setup

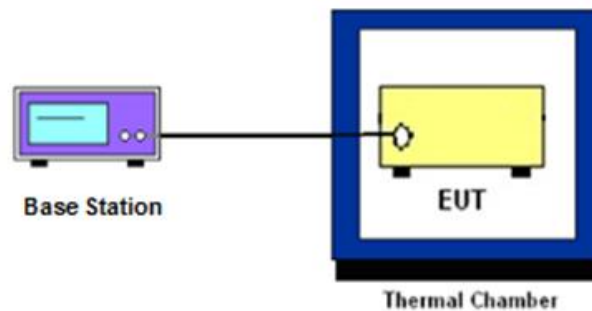
##### 3.2.1 Conducted Output Power



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



##### 3.2.3 Frequency Stability



### 3.3 Test Result of Conducted Test

Please refer to Appendix A.



## **3.4 Conducted Output Power Measurement**

### **3.4.1 Description of the Conducted Output Power Measurement**

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

### **3.4.2 Test Procedures**

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

## **3.5 Peak-to-Average Ratio**

### **3.5.1 Description of the PAR Measurement**

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

### **3.5.2 Test Procedures**

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



## 3.6 EIRP

### 3.6.1 Description of EIRP Limit

#### § 27.50 (k)(3)

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

### 3.6.2 Test Procedures

1. According to KDB 412172 D01 Power Approach,
2.  $EIRP = P_T + G_T - L_C$ ,  $ERP = EIRP - 2.15$ , where  
 $P_T$  = transmitter output power in dBm  
 $G_T$  = gain of the transmitting antenna in dBi  
 $L_C$  = signal attenuation in the connecting cable between the transmitter and antenna in dB

## 3.7 Occupied Bandwidth

### 3.7.1 Description of Occupied Bandwidth Measurement

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

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

### 3.7.2 Test Procedures

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



## 3.8 Conducted Band Edge Measurement

### 3.8.1 Description of Conducted Band Edge Measurement

#### § 27.53 (n)(2)

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

Compliance with this paragraph is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed, but limited to a maximum of 200 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz.

### 3.8.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW  $\geq 1\%$  EBW but limited to a maximum of 200 kHz in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz and 5 MHz removed from the band edge, set RBW  $\geq 500$ KHz.
6. Beyond the 5 MHz removed from the band edge, set RBW = 1MHz.
7. Set spectrum analyzer with RMS detector.
8. 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 30MHz up to a frequency including its 10<sup>th</sup> harmonic.

### 3.9.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
7. Set spectrum analyzer with RMS detector.
8. 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  $-30^{\circ}\text{C}$  and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
4. With power OFF, the temperature was raised in  $10^{\circ}\text{C}$  step up to  $50^{\circ}\text{C}$ . The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

### 3.10.3 Test Procedures for Voltage Variation

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

## 4 Radiated Test Items

### 4.1 Measuring Instruments

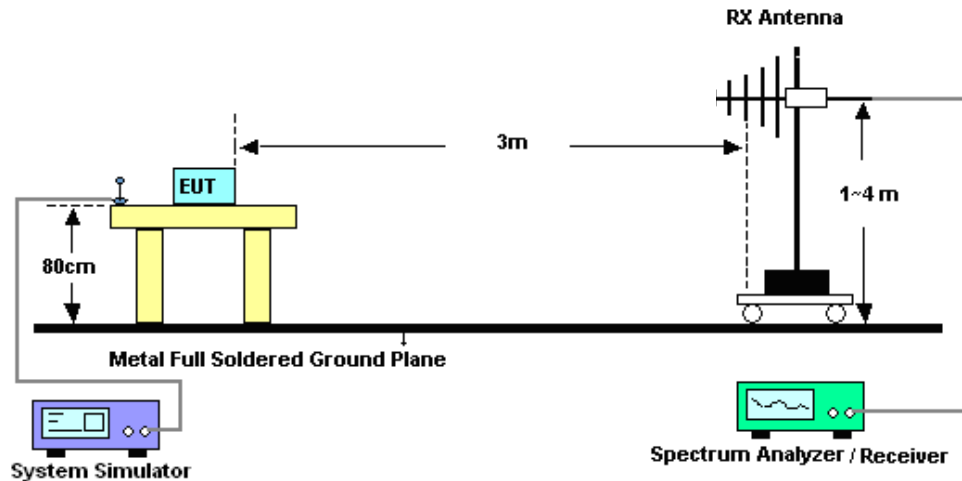
See list of measuring instruments of this test report.

### 4.2 Test Setup

#### 4.2.1 For radiated test below 30MHz



#### 4.2.2 For radiated test from 30MHz to 1GHz



### 4.2.3 For radiated test above 1GHz



### 4.3 Test Result of Radiated Test

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

Please refer to Appendix B.

## 4.4 Radiated Spurious Emission Measurement

### 4.4.1 Description of Radiated Spurious Emission

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

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

### 4.4.2 Test Procedures

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



## 5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EXA Signal Analyzer	KEYSIGHT	N9010B	MY60240803	10Hz~44GHz	Apr. 03, 2021	Jul. 01, 2021~ Jul. 23, 2021	Apr. 02, 2022	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-04 265	60.06.020.007 7	0.4GHz~26.5GHz	Dec. 26, 2020	Jul. 01, 2021~ Jul. 23, 2021	Dec. 25, 2021	Conducted (TH01-SZ)
Temperature & humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 13, 2020	Jul. 01, 2021~ Jul. 23, 2021	Jul. 12, 2021	Conducted (TH01-KS)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 14, 2021		Jul. 13, 2022	Conducted (TH01-SZ)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz~44G,MAX 30dB	Apr. 13, 2021	Jul. 10, 2021	Apr. 12, 2022	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 01, 2020	Jul. 10, 2021	Oct. 31, 2021	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	Jun. 07, 2021	Jul. 10, 2021	Jun. 06, 2022	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Nov. 01, 2020	Jul. 10, 2021	Oct. 31, 2021	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101115	18GHz~40GHz	Jan. 06, 2021	Jul. 10, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Jan. 06, 2021	Jul. 10, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40G GA	060728	18~40GHz	Jan. 07, 2021	Jul. 10, 2021	Jan. 06, 2022	Radiation (03CH04-KS)
high gain Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P	2025788	1Ghz-18Ghz	Jan. 06, 2021	Jul. 10, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	Keysight	83017A	MY57280106	500MHz~26.5GHz	Oct. 14, 2020	Jul. 10, 2021	Oct. 13, 2021	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Jul. 10, 2021	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jul. 10, 2021	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Jul. 10, 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
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### Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	2.8dB
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### Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	2.8dB
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## **Appendix A. Test Results of Conducted Test**

# FR1 N77

## Transmitter Conducted Output Power And EIRP, ( $G_T - L_C$ )=5.0dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
77	30	20	630668	3460.02	DFT-s-OFDM PI/2 BPSK	25@12	24.13	29.13	0.8185
77	30	20	630668	3460.02	DFT-s-OFDM PI/2 BPSK	1@1	24.25	29.25	0.8414
77	30	20	630668	3460.02	DFT-s-OFDM PI/2 BPSK	1@49	24.01	29.01	0.7962
77	30	20	630668	3460.02	DFT-s-OFDM QPSK	25@12	24.11	29.11	0.8147
77	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@1	24.25	29.25	0.8414
77	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@49	24.03	29.03	0.7998
77	30	20	630668	3460.02	DFT-s-OFDM 16 QAM	25@12	23.2	28.2	0.6607
77	30	20	630668	3460.02	DFT-s-OFDM 16 QAM	1@1	23.2	28.2	0.6607
77	30	20	630668	3460.02	DFT-s-OFDM 16 QAM	1@49	23.07	28.07	0.6412
77	30	20	630668	3460.02	DFT-s-OFDM 64 QAM	25@12	21.62	26.62	0.4592
77	30	20	630668	3460.02	DFT-s-OFDM 64 QAM	1@1	21.72	26.72	0.4699
77	30	20	630668	3460.02	DFT-s-OFDM 64 QAM	1@49	21.48	26.48	0.4446
77	30	20	630668	3460.02	DFT-s-OFDM 256 QAM	25@12	19.68	24.68	0.2938
77	30	20	630668	3460.02	DFT-s-OFDM 256 QAM	1@1	19.6	24.6	0.2884
77	30	20	630668	3460.02	DFT-s-OFDM 256 QAM	1@49	19.41	24.41	0.2761
77	30	20	630668	3460.02	CP-OFDM QPSK	25@121	21.23	26.23	0.4198
77	30	20	630668	3460.02	CP-OFDM QPSK	1@1	23	28	0.6310
77	30	20	630668	3460.02	CP-OFDM QPSK	1@49	22.55	27.55	0.5689
77	30	20	633334	3460.02	DFT-s-OFDM PI/2 BPSK	25@12	23.46	28.46	0.7015
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	23.65	28.65	0.7328

77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@49	23.5	28.5	0.7079
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	25@12	23.5	28.5	0.7079
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@1	23.78	28.78	0.7551
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@49	23.59	28.59	0.7228
77	30	20	633334	3500.01	DFT-s-OFDM 16 QAM	25@12	22.55	27.55	0.5689
77	30	20	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	22.79	27.79	0.6012
77	30	20	633334	3500.01	DFT-s-OFDM 16 QAM	1@49	22.57	27.57	0.5715
77	30	20	633334	3500.01	DFT-s-OFDM 64 QAM	25@12	21.03	26.03	0.4009
77	30	20	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	21.36	26.36	0.4325
77	30	20	633334	3500.01	DFT-s-OFDM 64 QAM	1@49	21.11	26.11	0.4083
77	30	20	633334	3500.01	DFT-s-OFDM 256 QAM	25@12	18.99	23.99	0.2506
77	30	20	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	19.15	24.15	0.2600
77	30	20	633334	3500.01	DFT-s-OFDM 256 QAM	1@49	18.89	23.89	0.2449
77	30	20	633334	3500.01	CP-OFDM QPSK	25@121	20.61	25.61	0.3639
77	30	20	633334	3500.01	CP-OFDM QPSK	1@1	22.4	27.4	0.5495
77	30	20	633334	3500.01	CP-OFDM QPSK	1@49	22.09	27.09	0.5117
77	30	20	636000	3540.0	DFT-s-OFDM PI/2 BPSK	25@12	23.33	28.33	0.6808
77	30	20	636000	3540.0	DFT-s-OFDM PI/2 BPSK	1@1	23.51	28.51	0.7096
77	30	20	636000	3540.0	DFT-s-OFDM PI/2 BPSK	1@49	23.29	28.29	0.6745
77	30	20	636000	3540.0	DFT-s-OFDM QPSK	25@12	23.34	28.34	0.6823
77	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@1	23.57	28.57	0.7194
77	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@49	23.37	28.37	0.6871
77	30	20	636000	3540.0	DFT-s-OFDM 16 QAM	25@12	22.47	27.47	0.5585
77	30	20	636000	3540.0	DFT-s-OFDM 16 QAM	1@1	22.62	27.62	0.5781

77	30	20	636000	3540.0	DFT-s-OFDM 16 QAM	1@49	22.49	27.49	0.5610
77	30	20	636000	3540.0	DFT-s-OFDM 64 QAM	25@12	20.88	25.88	0.3873
77	30	20	636000	3540.0	DFT-s-OFDM 64 QAM	1@1	20.99	25.99	0.3972
77	30	20	636000	3540.0	DFT-s-OFDM 64 QAM	1@49	20.82	25.82	0.3819
77	30	20	636000	3540.0	DFT-s-OFDM 256 QAM	25@12	18.99	23.99	0.2506
77	30	20	636000	3540.0	DFT-s-OFDM 256 QAM	1@1	19.04	24.04	0.2535
77	30	20	636000	3540.0	DFT-s-OFDM 256 QAM	1@49	18.89	23.89	0.2449
77	30	20	636000	3540.0	CP-OFDM QPSK	25@121	20.53	25.53	0.3573
77	30	20	636000	3540.0	CP-OFDM QPSK	1@1	22.15	27.15	0.5188
77	30	20	636000	3540.0	CP-OFDM QPSK	1@49	22	27	0.5012
77	30	40	631334	3470.01	DFT-s-OFDM PI/2 BPSK	50@25	24.24	29.24	0.8395
77	30	40	631334	3470.01	DFT-s-OFDM PI/2 BPSK	1@1	24.59	29.59	0.9099
77	30	40	631334	3470.01	DFT-s-OFDM PI/2 BPSK	1@104	23.9	28.9	0.7762
77	30	40	631334	3470.01	DFT-s-OFDM QPSK	50@25	24.25	29.25	0.8414
77	30	40	631334	3470.01	DFT-s-OFDM QPSK	1@1	24.69	29.69	0.9311
77	30	40	631334	3470.01	DFT-s-OFDM QPSK	1@104	24.01	29.01	0.7962
77	30	40	631334	3470.01	DFT-s-OFDM 16 QAM	50@25	23.2	28.2	0.6607
77	30	40	631334	3470.01	DFT-s-OFDM 16 QAM	1@1	23.57	28.57	0.7194
77	30	40	631334	3470.01	DFT-s-OFDM 16 QAM	1@104	22.88	27.88	0.6138
77	30	40	631334	3470.01	DFT-s-OFDM 64 QAM	50@25	21.73	26.73	0.4710
77	30	40	631334	3470.01	DFT-s-OFDM 64 QAM	1@1	22.18	27.18	0.5224
77	30	40	631334	3470.01	DFT-s-OFDM 64 QAM	1@104	21.61	26.61	0.4581
77	30	40	631334	3470.01	DFT-s-OFDM 256 QAM	50@25	19.74	24.74	0.2979
77	30	40	631334	3470.01	DFT-s-OFDM 256 QAM	1@1	20.04	25.04	0.3192

77	30	40	631334	3470.01	DFT-s-OFDM 256 QAM	1@104	19.32	24.32	0.2704
77	30	40	631334	3470.01	CP-OFDM QPSK	53@26	22.61	27.61	0.5768
77	30	40	631334	3470.01	CP-OFDM QPSK	1@1	23.15	28.15	0.6531
77	30	40	631334	3470.01	CP-OFDM QPSK	1@104	22.45	27.45	0.5559
77	30	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@25	23.81	28.81	0.7603
77	30	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	23.98	28.98	0.7907
77	30	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@104	23.85	28.85	0.7674
77	30	40	633334	3500.01	DFT-s-OFDM QPSK	50@25	23.75	28.75	0.7499
77	30	40	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.09	29.09	0.8110
77	30	40	633334	3500.01	DFT-s-OFDM QPSK	1@104	23.75	28.75	0.7499
77	30	40	633334	3500.01	DFT-s-OFDM 16 QAM	50@25	22.74	27.74	0.5943
77	30	40	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.11	28.11	0.6471
77	30	40	633334	3500.01	DFT-s-OFDM 16 QAM	1@104	22.99	27.99	0.6295
77	30	40	633334	3500.01	DFT-s-OFDM 64 QAM	50@25	21.29	26.29	0.4256
77	30	40	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	21.46	26.46	0.4426
77	30	40	633334	3500.01	DFT-s-OFDM 64 QAM	1@104	21.45	26.45	0.4416
77	30	40	633334	3500.01	DFT-s-OFDM 256 QAM	50@25	19.28	24.28	0.2679
77	30	40	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	19.4	24.4	0.2754
77	30	40	633334	3500.01	DFT-s-OFDM 256 QAM	1@104	19.41	24.41	0.2761
77	30	40	633334	3500.01	CP-OFDM QPSK	53@26	22.26	27.26	0.5321
77	30	40	633334	3500.01	CP-OFDM QPSK	1@1	22.71	27.71	0.5902
77	30	40	633334	3500.01	CP-OFDM QPSK	1@104	22.53	27.53	0.5662
77	30	40	635332	3529.98	DFT-s-OFDM PI/2 BPSK	50@25	23.76	28.76	0.7516
77	30	40	635332	3529.98	DFT-s-OFDM PI/2 BPSK	1@1	23.77	28.77	0.7534

77	30	40	635332	3529.98	DFT-s-OFDM PI/2 BPSK	1@104	23.63	28.63	0.7295
77	30	40	635332	3529.98	DFT-s-OFDM QPSK	50@25	23.75	28.75	0.7499
77	30	40	635332	3529.98	DFT-s-OFDM QPSK	1@1	23.98	28.98	0.7907
77	30	40	635332	3529.98	DFT-s-OFDM QPSK	1@104	23.66	28.66	0.7345
77	30	40	635332	3529.98	DFT-s-OFDM 16 QAM	50@25	22.8	27.8	0.6026
77	30	40	635332	3529.98	DFT-s-OFDM 16 QAM	1@1	22.98	27.98	0.6281
77	30	40	635332	3529.98	DFT-s-OFDM 16 QAM	1@104	22.55	27.55	0.5689
77	30	40	635332	3529.98	DFT-s-OFDM 64 QAM	50@25	21.32	26.32	0.4285
77	30	40	635332	3529.98	DFT-s-OFDM 64 QAM	1@1	21.39	26.39	0.4355
77	30	40	635332	3529.98	DFT-s-OFDM 64 QAM	1@104	21.23	26.23	0.4198
77	30	40	635332	3529.98	DFT-s-OFDM 256 QAM	50@25	19.31	24.31	0.2698
77	30	40	635332	3529.98	DFT-s-OFDM 256 QAM	1@1	19.41	24.41	0.2761
77	30	40	635332	3529.98	DFT-s-OFDM 256 QAM	1@104	19.12	24.12	0.2582
77	30	40	635332	3529.98	CP-OFDM QPSK	53@26	22.3	27.3	0.5370
77	30	40	635332	3529.98	CP-OFDM QPSK	1@1	22.31	27.31	0.5383
77	30	40	635332	3529.98	CP-OFDM QPSK	1@104	22.25	27.25	0.5309
77	30	50	631668	3475.02	DFT-s-OFDM PI/2 BPSK	64@32	24.22	29.22	0.8356
77	30	50	631668	3475.02	DFT-s-OFDM PI/2 BPSK	1@1	24.33	29.33	0.8570
77	30	50	631668	3475.02	DFT-s-OFDM PI/2 BPSK	1@131	23.9	28.9	0.7762
77	30	50	631668	3475.02	DFT-s-OFDM QPSK	64@32	24.21	29.21	0.8337
77	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@1	24.28	29.28	0.8472
77	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@131	23.83	28.83	0.7638
77	30	50	631668	3475.02	DFT-s-OFDM 16 QAM	64@32	23.1	28.1	0.6457
77	30	50	631668	3475.02	DFT-s-OFDM 16 QAM	1@1	23.45	28.45	0.6998

77	30	50	631668	3475.02	DFT-s-OFDM 16 QAM	1@131	22.97	27.97	0.6266
77	30	50	631668	3475.02	DFT-s-OFDM 64 QAM	64@32	21.67	26.67	0.4645
77	30	50	631668	3475.02	DFT-s-OFDM 64 QAM	1@1	21.88	26.88	0.4875
77	30	50	631668	3475.02	DFT-s-OFDM 64 QAM	1@131	21.38	26.38	0.4345
77	30	50	631668	3475.02	DFT-s-OFDM 256 QAM	64@32	19.62	24.62	0.2897
77	30	50	631668	3475.02	DFT-s-OFDM 256 QAM	1@1	19.84	24.84	0.3048
77	30	50	631668	3475.02	DFT-s-OFDM 256 QAM	1@131	19.4	24.4	0.2754
77	30	50	631668	3475.02	CP-OFDM QPSK	67@33	22.64	27.64	0.5808
77	30	50	631668	3475.02	CP-OFDM QPSK	1@1	22.89	27.89	0.6152
77	30	50	631668	3475.02	CP-OFDM QPSK	1@131	22.45	27.45	0.5559
77	30	50	633334	3475.02	DFT-s-OFDM PI/2 BPSK	64@32	23.92	28.92	0.7798
77	30	50	633334	3475.02	DFT-s-OFDM PI/2 BPSK	1@1	24.35	29.35	0.8610
77	30	50	633334	3475.02	DFT-s-OFDM PI/2 BPSK	1@131	23.81	28.81	0.7603
77	30	50	633334	3500.01	DFT-s-OFDM QPSK	64@32	23.87	28.87	0.7709
77	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@1	23.99	28.99	0.7925
77	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@131	23.99	28.99	0.7925
77	30	50	633334	3500.01	DFT-s-OFDM 16 QAM	64@32	23.04	28.04	0.6368
77	30	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.22	28.22	0.6637
77	30	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@131	23.16	28.16	0.6546
77	30	50	633334	3500.01	DFT-s-OFDM 64 QAM	64@32	21.48	26.48	0.4446
77	30	50	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	21.76	26.76	0.4742
77	30	50	633334	3500.01	DFT-s-OFDM 64 QAM	1@131	21.55	26.55	0.4519
77	30	50	633334	3500.01	DFT-s-OFDM 256 QAM	64@32	19.48	24.48	0.2805
77	30	50	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	19.52	24.52	0.2831

77	30	50	633334	3500.01	DFT-s-OFDM 256 QAM	1@131	19.43	24.43	0.2773
77	30	50	633334	3500.01	CP-OFDM QPSK	67@33	22.42	27.42	0.5521
77	30	50	633334	3500.01	CP-OFDM QPSK	1@1	22.66	27.66	0.5834
77	30	50	633334	3500.01	CP-OFDM QPSK	1@131	22.45	27.45	0.5559
77	30	50	635000	3500.01	DFT-s-OFDM PI/2 BPSK	64@32	23.77	28.77	0.7534
77	30	50	635000	3525.0	DFT-s-OFDM PI/2 BPSK	1@1	23.86	28.86	0.7691
77	30	50	635000	3525.0	DFT-s-OFDM PI/2 BPSK	1@131	23.73	28.73	0.7464
77	30	50	635000	3525.0	DFT-s-OFDM QPSK	64@32	24.07	29.07	0.8072
77	30	50	635000	3525.0	DFT-s-OFDM QPSK	1@1	23.89	28.89	0.7745
77	30	50	635000	3525.0	DFT-s-OFDM QPSK	1@131	23.78	28.78	0.7551
77	30	50	635000	3525.0	DFT-s-OFDM 16 QAM	64@32	23.06	28.06	0.6397
77	30	50	635000	3525.0	DFT-s-OFDM 16 QAM	1@1	23	28	0.6310
77	30	50	635000	3525.0	DFT-s-OFDM 16 QAM	1@131	22.96	27.96	0.6252
77	30	50	635000	3525.0	DFT-s-OFDM 64 QAM	64@32	21.51	26.51	0.4477
77	30	50	635000	3525.0	DFT-s-OFDM 64 QAM	1@1	21.41	26.41	0.4375
77	30	50	635000	3525.0	DFT-s-OFDM 64 QAM	1@131	21.45	26.45	0.4416
77	30	50	635000	3525.0	DFT-s-OFDM 256 QAM	64@32	21.33	26.33	0.4295
77	30	50	635000	3525.0	DFT-s-OFDM 256 QAM	1@1	21.28	26.28	0.4246
77	30	50	635000	3525.0	DFT-s-OFDM 256 QAM	1@131	19.2	24.2	0.2630
77	30	50	635000	3525.0	CP-OFDM QPSK	67@33	22.48	27.48	0.5598
77	30	50	635000	3525.0	CP-OFDM QPSK	1@1	22.38	27.38	0.5470
77	30	50	635000	3525.0	CP-OFDM QPSK	1@131	22.48	27.48	0.5598
77	30	60	632000	3480.0	DFT-s-OFDM PI/2 BPSK	81@40	23.85	28.85	0.7674
77	30	60	632000	3480.0	DFT-s-OFDM PI/2 BPSK	1@1	24.2	29.2	0.8318



77	30	60	632000	3480.0	DFT-s-OFDM PI/2 BPSK	1@160	23.56	28.56	0.7178
77	30	60	632000	3480.0	DFT-s-OFDM QPSK	81@40	23.82	28.82	0.7621
77	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@1	24.18	29.18	0.8279
77	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@160	23.49	28.49	0.7063
77	30	60	632000	3480.0	DFT-s-OFDM 16 QAM	81@40	22.88	27.88	0.6138
77	30	60	632000	3480.0	DFT-s-OFDM 16 QAM	1@1	23.38	28.38	0.6887
77	30	60	632000	3480.0	DFT-s-OFDM 16 QAM	1@160	22.53	27.53	0.5662
77	30	60	632000	3480.0	DFT-s-OFDM 64 QAM	81@40	21.35	26.35	0.4315
77	30	60	632000	3480.0	DFT-s-OFDM 64 QAM	1@1	21.7	26.7	0.4677
77	30	60	632000	3480.0	DFT-s-OFDM 64 QAM	1@160	20.92	25.92	0.3908
77	30	60	632000	3480.0	DFT-s-OFDM 256 QAM	81@40	19.35	24.35	0.2723
77	30	60	632000	3480.0	DFT-s-OFDM 256 QAM	1@1	19.71	24.71	0.2958
77	30	60	632000	3480.0	DFT-s-OFDM 256 QAM	1@160	18.85	23.85	0.2427
77	30	60	632000	3480.0	CP-OFDM QPSK	81@40	22.32	27.32	0.5395
77	30	60	632000	3480.0	CP-OFDM QPSK	1@1	22.95	27.95	0.6237
77	30	60	632000	3480.0	CP-OFDM QPSK	1@160	22.07	27.07	0.5093
77	30	60	633334	3500.01	DFT-s-OFDM PI/2 BPSK	81@40	23.77	28.77	0.7534
77	30	60	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	23.97	28.97	0.7889
77	30	60	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@160	23.51	28.51	0.7096
77	30	60	633334	3500.01	DFT-s-OFDM QPSK	81@40	23.64	28.64	0.7311
77	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@1	24	29	0.7943
77	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@160	23.55	28.55	0.7161
77	30	60	633334	3500.01	DFT-s-OFDM 16 QAM	81@40	22.66	27.66	0.5834
77	30	60	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.1	28.1	0.6457

77	30	60	633334	3500.01	DFT-s-OFDM 16 QAM	1@160	22.64	27.64	0.5808
77	30	60	633334	3500.01	DFT-s-OFDM 64 QAM	81@40	21.12	26.12	0.4093
77	30	60	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	21.42	26.42	0.4385
77	30	60	633334	3500.01	DFT-s-OFDM 64 QAM	1@160	21.03	26.03	0.4009
77	30	60	633334	3500.01	DFT-s-OFDM 256 QAM	81@40	18.92	23.92	0.2466
77	30	60	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	19.37	24.37	0.2735
77	30	60	633334	3500.01	DFT-s-OFDM 256 QAM	1@160	19.08	24.08	0.2559
77	30	60	633334	3500.01	CP-OFDM QPSK	81@40	22.14	27.14	0.5176
77	30	60	633334	3500.01	CP-OFDM QPSK	1@1	22.55	27.55	0.5689
77	30	60	633334	3500.01	CP-OFDM QPSK	1@160	22.12	27.12	0.5152
77	30	60	634666	3519.99	DFT-s-OFDM PI/2 BPSK	81@40	23.63	28.63	0.7295
77	30	60	634666	3519.99	DFT-s-OFDM PI/2 BPSK	1@1	23.61	28.61	0.7261
77	30	60	634666	3519.99	DFT-s-OFDM PI/2 BPSK	1@160	23.3	28.3	0.6761
77	30	60	634666	3519.99	DFT-s-OFDM QPSK	81@40	23.55	28.55	0.7161
77	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@1	23.58	28.58	0.7211
77	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@160	23.37	28.37	0.6871
77	30	60	634666	3519.99	DFT-s-OFDM 16 QAM	81@40	22.56	27.56	0.5702
77	30	60	634666	3519.99	DFT-s-OFDM 16 QAM	1@1	22.74	27.74	0.5943
77	30	60	634666	3519.99	DFT-s-OFDM 16 QAM	1@160	22.42	27.42	0.5521
77	30	60	634666	3519.99	DFT-s-OFDM 64 QAM	81@40	21.02	26.02	0.3999
77	30	60	634666	3519.99	DFT-s-OFDM 64 QAM	1@1	21	26	0.3981
77	30	60	634666	3519.99	DFT-s-OFDM 64 QAM	1@160	20.8	25.8	0.3802
77	30	60	634666	3519.99	DFT-s-OFDM 256 QAM	81@40	19.1	24.1	0.2570
77	30	60	634666	3519.99	DFT-s-OFDM 256 QAM	1@1	19.18	24.18	0.2618

77	30	60	634666	3519.99	DFT-s-OFDM 256 QAM	1@160	18.6	23.6	0.2291
77	30	60	634666	3519.99	CP-OFDM QPSK	81@40	22.02	27.02	0.5035
77	30	60	634666	3519.99	CP-OFDM QPSK	1@1	22.05	27.05	0.5070
77	30	60	634666	3519.99	CP-OFDM QPSK	1@160	21.84	26.84	0.4831
77	30	80	632668	3490.02	DFT-s-OFDM PI/2 BPSK	108@54	23.55	28.55	0.7161
77	30	80	632668	3490.02	DFT-s-OFDM PI/2 BPSK	1@1	24.18	29.18	0.8279
77	30	80	632668	3490.02	DFT-s-OFDM PI/2 BPSK	1@215	23.34	28.34	0.6823
77	30	80	632668	3490.02	DFT-s-OFDM QPSK	108@54	23.61	28.61	0.7261
77	30	80	632668	3490.02	DFT-s-OFDM QPSK	1@1	24.31	29.31	0.8531
77	30	80	632668	3490.02	DFT-s-OFDM QPSK	1@215	23.18	28.18	0.6577
77	30	80	632668	3490.02	DFT-s-OFDM 16 QAM	108@54	22.6	27.6	0.5754
77	30	80	632668	3490.02	DFT-s-OFDM 16 QAM	1@1	23.26	28.26	0.6699
77	30	80	632668	3490.02	DFT-s-OFDM 16 QAM	1@215	22.37	27.37	0.5458
77	30	80	632668	3490.02	DFT-s-OFDM 64 QAM	108@54	21.09	26.09	0.4064
77	30	80	632668	3490.02	DFT-s-OFDM 64 QAM	1@1	21.88	26.88	0.4875
77	30	80	632668	3490.02	DFT-s-OFDM 64 QAM	1@215	20.93	25.93	0.3917
77	30	80	632668	3490.02	DFT-s-OFDM 256 QAM	108@54	19.08	24.08	0.2559
77	30	80	632668	3490.02	DFT-s-OFDM 256 QAM	1@1	19.73	24.73	0.2972
77	30	80	632668	3490.02	DFT-s-OFDM 256 QAM	1@215	18.81	23.81	0.2404
77	30	80	632668	3490.02	CP-OFDM QPSK	109@54	22.14	27.14	0.5176
77	30	80	632668	3490.02	CP-OFDM QPSK	1@1	23.12	28.12	0.6486
77	30	80	632668	3490.02	CP-OFDM QPSK	1@215	21.95	26.95	0.4955
77	30	80	633334	3500.01	DFT-s-OFDM PI/2 BPSK	108@54	23.75	28.75	0.7499
77	30	80	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	24.36	29.36	0.8630

77	30	80	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@215	23.52	28.52	0.7112
77	30	80	633334	3500.01	DFT-s-OFDM QPSK	108@54	23.72	28.72	0.7447
77	30	80	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.36	29.36	0.8630
77	30	80	633334	3500.01	DFT-s-OFDM QPSK	1@215	23.43	28.43	0.6966
77	30	80	633334	3500.01	DFT-s-OFDM 16 QAM	108@54	22.69	27.69	0.5875
77	30	80	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.43	28.43	0.6966
77	30	80	633334	3500.01	DFT-s-OFDM 16 QAM	1@215	22.34	27.34	0.5420
77	30	80	633334	3500.01	DFT-s-OFDM 64 QAM	108@54	21.33	26.33	0.4295
77	30	80	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	21.94	26.94	0.4943
77	30	80	633334	3500.01	DFT-s-OFDM 64 QAM	1@215	21.09	26.09	0.4064
77	30	80	633334	3500.01	DFT-s-OFDM 256 QAM	108@54	19.27	24.27	0.2673
77	30	80	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	19.78	24.78	0.3006
77	30	80	633334	3500.01	DFT-s-OFDM 256 QAM	1@215	18.85	23.85	0.2427
77	30	80	633334	3500.01	CP-OFDM QPSK	109@54	22.18	27.18	0.5224
77	30	80	633334	3500.01	CP-OFDM QPSK	1@1	23.06	28.06	0.6397
77	30	80	633334	3500.01	CP-OFDM QPSK	1@215	22.2	27.2	0.5248
77	30	80	634000	3510.0	DFT-s-OFDM PI/2 BPSK	108@54	23.74	28.74	0.7482
77	30	80	634000	3510.0	DFT-s-OFDM PI/2 BPSK	1@1	24.2	29.2	0.8318
77	30	80	634000	3510.0	DFT-s-OFDM PI/2 BPSK	1@215	23.37	28.37	0.6871
77	30	80	634000	3510.0	DFT-s-OFDM QPSK	108@54	23.64	28.64	0.7311
77	30	80	634000	3510.0	DFT-s-OFDM QPSK	1@1	24.21	29.21	0.8337
77	30	80	634000	3510.0	DFT-s-OFDM QPSK	1@215	23.37	28.37	0.6871
77	30	80	634000	3510.0	DFT-s-OFDM 16 QAM	108@54	22.78	27.78	0.5998
77	30	80	634000	3510.0	DFT-s-OFDM 16 QAM	1@1	23.26	28.26	0.6699

77	30	80	634000	3510.0	DFT-s-OFDM 16 QAM	1@215	22.52	27.52	0.5649
77	30	80	634000	3510.0	DFT-s-OFDM 64 QAM	108@54	21.34	26.34	0.4305
77	30	80	634000	3510.0	DFT-s-OFDM 64 QAM	1@1	21.72	26.72	0.4699
77	30	80	634000	3510.0	DFT-s-OFDM 64 QAM	1@215	20.88	25.88	0.3873
77	30	80	634000	3510.0	DFT-s-OFDM 256 QAM	108@54	19.31	24.31	0.2698
77	30	80	634000	3510.0	DFT-s-OFDM 256 QAM	1@1	19.57	24.57	0.2864
77	30	80	634000	3510.0	DFT-s-OFDM 256 QAM	1@215	18.87	23.87	0.2438
77	30	80	634000	3510.0	CP-OFDM QPSK	109@54	22.19	27.19	0.5236
77	30	80	634000	3510.0	CP-OFDM QPSK	1@1	22.62	27.62	0.5781
77	30	80	634000	3510.0	CP-OFDM QPSK	1@215	22.06	27.06	0.5082
77	30	90	633000	3525.0	DFT-s-OFDM PI/2 BPSK	120@60	23.99	28.99	0.7925
77	30	90	633000	3495.0	DFT-s-OFDM PI/2 BPSK	1@1	24.46	29.46	0.8831
77	30	90	633000	3495.0	DFT-s-OFDM PI/2 BPSK	1@243	23.93	28.93	0.7816
77	30	90	633000	3495.0	DFT-s-OFDM QPSK	120@60	24.03	29.03	0.7998
77	30	90	633000	3495.0	DFT-s-OFDM QPSK	1@1	24.44	29.44	0.8790
77	30	90	633000	3495.0	DFT-s-OFDM QPSK	1@243	23.94	28.94	0.7834
77	30	90	633000	3495.0	DFT-s-OFDM 16 QAM	120@60	22.91	27.91	0.6180
77	30	90	633000	3495.0	DFT-s-OFDM 16 QAM	1@1	23.65	28.65	0.7328
77	30	90	633000	3495.0	DFT-s-OFDM 16 QAM	1@243	22.96	27.96	0.6252
77	30	90	633000	3495.0	DFT-s-OFDM 64 QAM	120@60	21.5	26.5	0.4467
77	30	90	633000	3495.0	DFT-s-OFDM 64 QAM	1@1	22.05	27.05	0.5070
77	30	90	633000	3495.0	DFT-s-OFDM 64 QAM	1@243	21.37	26.37	0.4335
77	30	90	633000	3495.0	DFT-s-OFDM 256 QAM	120@60	19.52	24.52	0.2831
77	30	90	633000	3495.0	DFT-s-OFDM 256 QAM	1@1	19.76	24.76	0.2992

77	30	90	633000	3495.0	DFT-s-OFDM 256 QAM	1@243	19.2	24.2	0.2630
77	30	90	633000	3495.0	CP-OFDM QPSK	123@61	22.44	27.44	0.5546
77	30	90	633000	3495.0	CP-OFDM QPSK	1@1	22.98	27.98	0.6281
77	30	90	633000	3495.0	CP-OFDM QPSK	1@243	22.37	27.37	0.5458
77	30	90	633334	3500.01	DFT-s-OFDM PI/2 BPSK	120@60	24.06	29.06	0.8054
77	30	90	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	24.55	29.55	0.9016
77	30	90	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@243	23.79	28.79	0.7568
77	30	90	633334	3500.01	DFT-s-OFDM QPSK	120@60	24.01	29.01	0.7962
77	30	90	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.47	29.47	0.8851
77	30	90	633334	3500.01	DFT-s-OFDM QPSK	1@243	23.75	28.75	0.7499
77	30	90	633334	3500.01	DFT-s-OFDM 16 QAM	120@60	23.03	28.03	0.6353
77	30	90	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.7	28.7	0.7413
77	30	90	633334	3500.01	DFT-s-OFDM 16 QAM	1@243	22.98	27.98	0.6281
77	30	90	633334	3500.01	DFT-s-OFDM 64 QAM	120@60	21.51	26.51	0.4477
77	30	90	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	22.06	27.06	0.5082
77	30	90	633334	3500.01	DFT-s-OFDM 64 QAM	1@243	21.4	26.4	0.4365
77	30	90	633334	3500.01	DFT-s-OFDM 256 QAM	120@60	19.84	24.84	0.3048
77	30	90	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	19.99	24.99	0.3155
77	30	90	633334	3500.01	DFT-s-OFDM 256 QAM	1@243	19.19	24.19	0.2624
77	30	90	633334	3500.01	CP-OFDM QPSK	123@61	22.52	27.52	0.5649
77	30	90	633334	3500.01	CP-OFDM QPSK	1@1	23.05	28.05	0.6383
77	30	90	633334	3500.01	CP-OFDM QPSK	1@243	22.39	27.39	0.5483
77	30	90	633666	3504.99	DFT-s-OFDM PI/2 BPSK	120@60	24.02	29.02	0.7980
77	30	90	633666	3504.99	DFT-s-OFDM PI/2 BPSK	1@1	24.45	29.45	0.8810

77	30	90	633666	3504.99	DFT-s-OFDM PI/2 BPSK	1@243	23.81	28.81	0.7603
77	30	90	633666	3504.99	DFT-s-OFDM QPSK	120@60	23.98	28.98	0.7907
77	30	90	633666	3504.99	DFT-s-OFDM QPSK	1@1	24.59	29.59	0.9099
77	30	90	633666	3504.99	DFT-s-OFDM QPSK	1@243	23.88	28.88	0.7727
77	30	90	633666	3504.99	DFT-s-OFDM 16 QAM	120@60	23.1	28.1	0.6457
77	30	90	633666	3504.99	DFT-s-OFDM 16 QAM	1@1	23.56	28.56	0.7178
77	30	90	633666	3504.99	DFT-s-OFDM 16 QAM	1@243	23.03	28.03	0.6353
77	30	90	633666	3504.99	DFT-s-OFDM 64 QAM	120@60	21.47	26.47	0.4436
77	30	90	633666	3504.99	DFT-s-OFDM 64 QAM	1@1	22.08	27.08	0.5105
77	30	90	633666	3504.99	DFT-s-OFDM 64 QAM	1@243	21.33	26.33	0.4295
77	30	90	633666	3504.99	DFT-s-OFDM 256 QAM	120@60	19.52	24.52	0.2831
77	30	90	633666	3504.99	DFT-s-OFDM 256 QAM	1@1	19.93	24.93	0.3112
77	30	90	633666	3504.99	DFT-s-OFDM 256 QAM	1@243	19.34	24.34	0.2716
77	30	90	633666	3504.99	CP-OFDM QPSK	123@61	22.48	27.48	0.5598
77	30	90	633666	3504.99	CP-OFDM QPSK	1@1	23.26	28.26	0.6699
77	30	90	633666	3504.99	CP-OFDM QPSK	1@243	22.46	27.46	0.5572
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	135@67	24.33	29.33	0.8570
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	24.44	29.44	0.8790
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@271	23.59	28.59	0.7228
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	135@67	23.87	28.87	0.7709
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.43	29.43	0.8770
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@271	23.62	28.62	0.7278
77	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	135@67	22.79	27.79	0.6012
77	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.61	28.61	0.7261

77	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@271	22.72	27.72	0.5916
77	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	135@67	21.37	26.37	0.4335
77	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	21.93	26.93	0.4932
77	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@271	21.04	26.04	0.4018
77	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	135@67	19.32	24.32	0.2704
77	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	20.07	25.07	0.3214
77	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@271	19.1	24.1	0.2570
77	30	100	633334	3500.01	CP-OFDM QPSK	137@68	22.31	27.31	0.5383
77	30	100	633334	3500.01	CP-OFDM QPSK	1@1	23.25	28.25	0.6683
77	30	100	633334	3500.01	CP-OFDM QPSK	1@271	22.01	27.01	0.5023



## Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00982	PASS	NV
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.0052	PASS	LV
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00814	PASS	HV
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00486	PASS	-30°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00967	PASS	-20°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.0024	PASS	-10°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00938	PASS	0°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00883	PASS	10°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00954	PASS	20°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00975	PASS	30°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00745	PASS	40°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00839	PASS	50°C

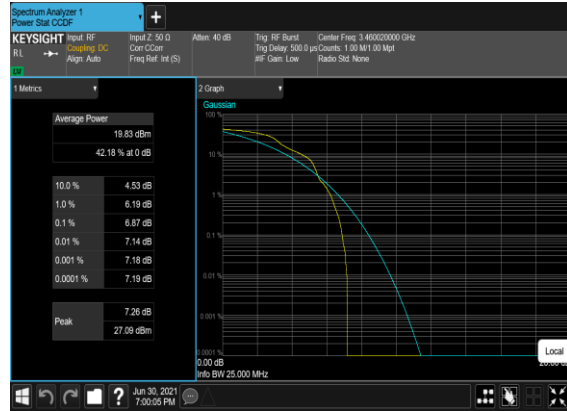
## Peak to Average Ratio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
77	30	20	630668	3460.02	DFT-s-OFDM PI/2 BPSK	50@0	7.1	13	PASS
77	30	20	630668	3460.02	DFT-s-OFDM PI/2 BPSK	1@0	6.87	13	PASS
77	30	20	630668	3460.02	DFT-s-OFDM PI/2 BPSK	1@50	6.96	13	PASS
77	30	20	630668	3460.02	DFT-s-OFDM QPSK	50@0	7.77	13	PASS
77	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@0	7.03	13	PASS
77	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@50	7.01	13	PASS
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	7.01	13	PASS
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@0	6.85	13	PASS
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@50	6.95	13	PASS
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	7.69	13	PASS
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@0	7.06	13	PASS
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@50	6.96	13	PASS
77	30	20	636000	3540.0	DFT-s-OFDM PI/2 BPSK	50@0	6.94	13	PASS
77	30	20	636000	3540.0	DFT-s-OFDM PI/2 BPSK	1@0	6.83	13	PASS
77	30	20	636000	3540.0	DFT-s-OFDM PI/2 BPSK	1@50	6.91	13	PASS
77	30	20	636000	3540.0	DFT-s-OFDM QPSK	50@0	7.63	13	PASS
77	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@0	7.0	13	PASS
77	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@50	6.89	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



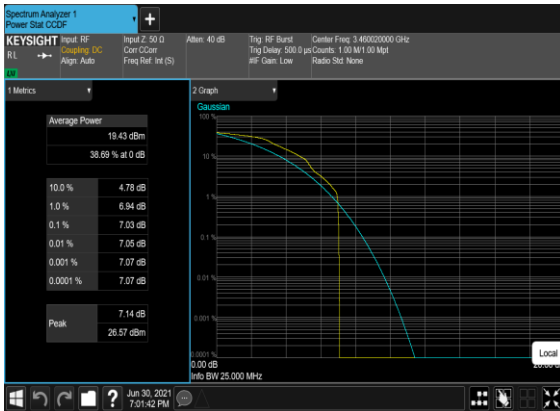
N77(20M)\_DFT-s-OFDM\_PI\_2-BPSK\_Edge\_1RB\_Right\_Low\_CH



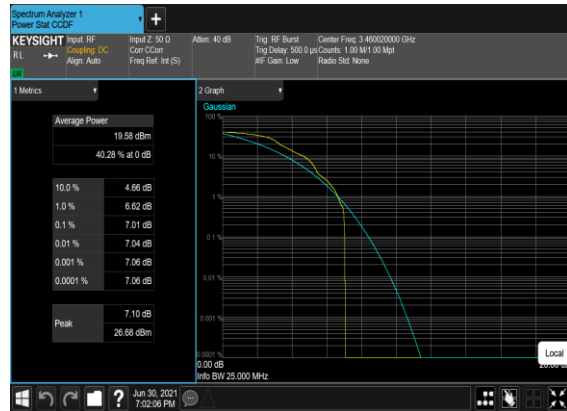
N77(20M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Low\_CH



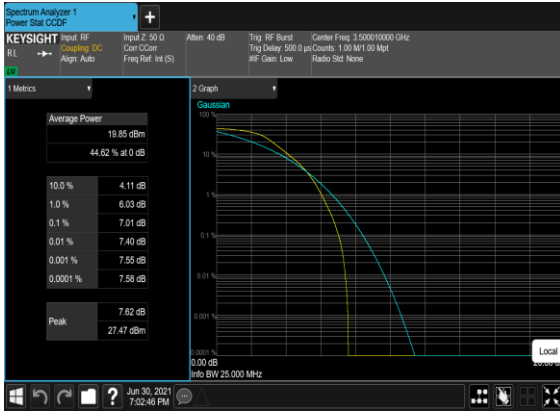
N77(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



N77(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Right\_Low\_CH



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



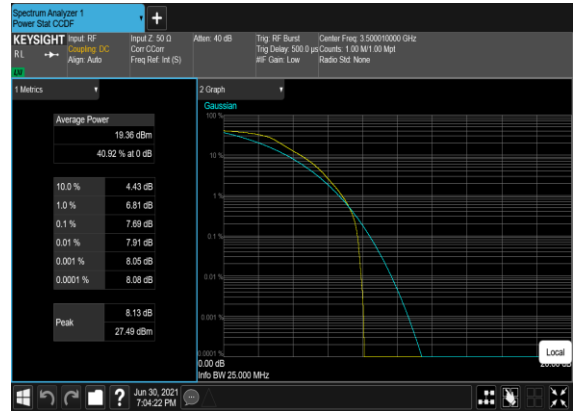
N77(20M)\_DFT-s-OFDM\_PI\_2-BPSK\_Edge\_1RB\_Left\_Mid\_CH



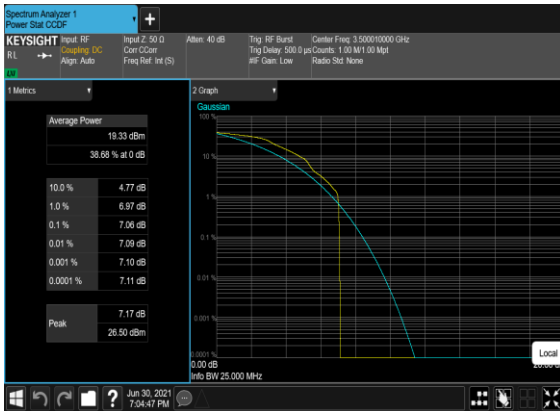
N77(20M)\_DFT-s-OFDM\_PI\_2-BPSK\_Edge\_1RB\_Right\_Mid\_CH



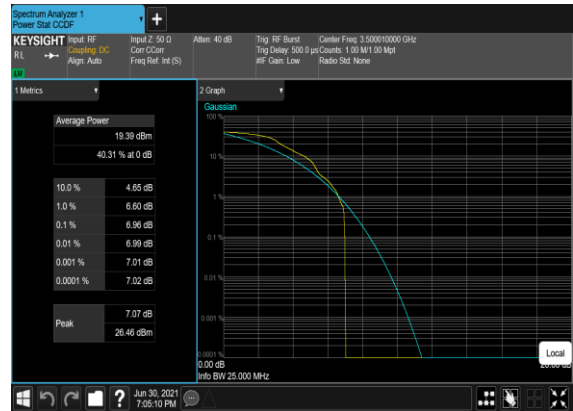
N77(20M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



N77(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



N77(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Right\_Mid\_CH



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



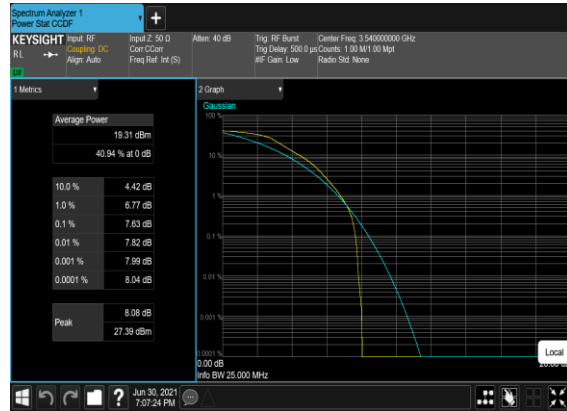
N77(20M)\_DFT-s-OFDM\_PI\_2-BPSK\_Edge\_1RB\_Left\_High\_CH



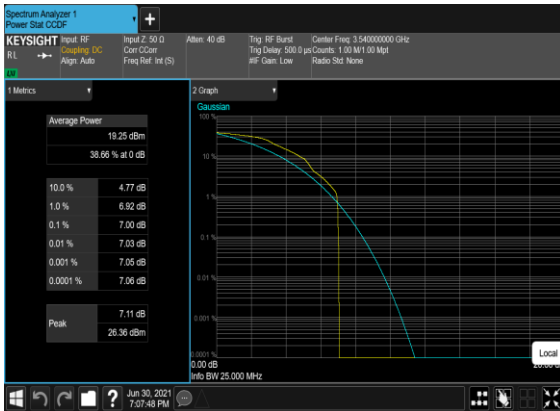
N77(20M)\_DFT-s-OFDM\_PI\_2-BPSK\_Edge\_1RB\_Right\_High\_CH



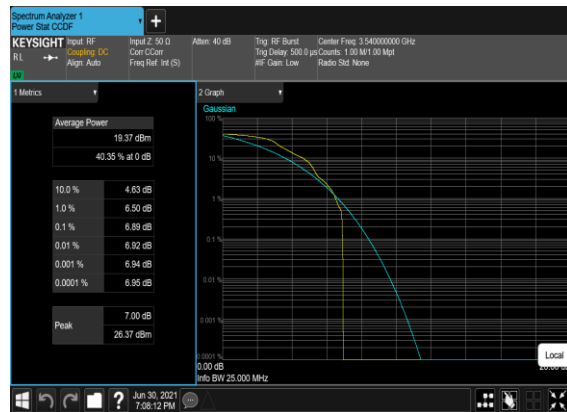
N77(20M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_High\_CH



N77(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



N77(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Right\_High\_C  
H

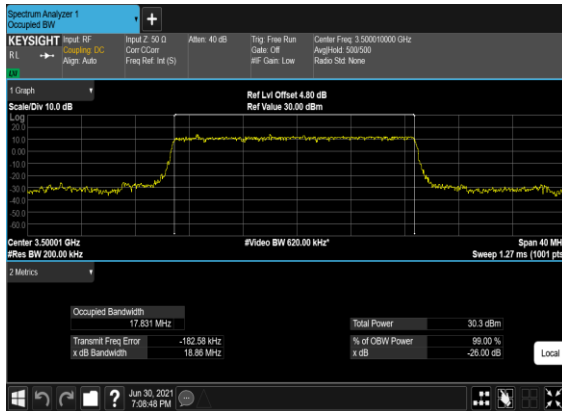


## Occupied Bandwidth

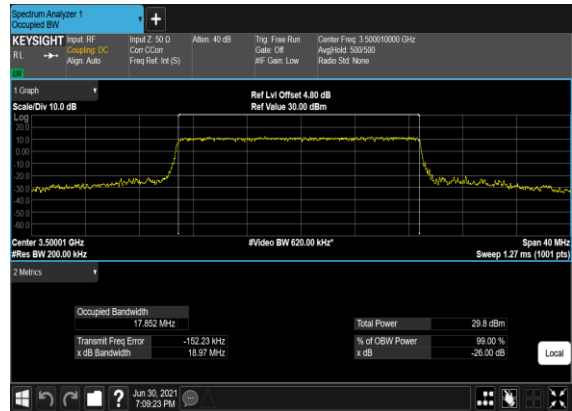
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB OBW (MHz)
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	17.831	18.86
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	17.852	18.97
77	30	20	633334	3500.01	CP-OFDM QPSK	51@0	18.195	19.51
77	30	20	633334	3500.01	CP-OFDM 16 QAM	51@0	18.245	19.53
77	30	20	633334	3500.01	CP-OFDM 64 QAM	51@0	18.213	19.18
77	30	20	633334	3500.01	CP-OFDM 256 QAM	51@0	18.208	19.39
77	30	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	100@0	35.67	37.29
77	30	40	633334	3500.01	DFT-s-OFDM QPSK	100@0	35.697	37.26
77	30	40	633334	3500.01	CP-OFDM QPSK	106@0	37.777	39.28
77	30	40	633334	3500.01	CP-OFDM 16 QAM	106@0	37.794	39.3
77	30	40	633334	3500.01	CP-OFDM 64 QAM	106@0	37.722	39.46
77	30	40	633334	3500.01	CP-OFDM 256 QAM	106@0	37.849	39.37
77	30	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	128@0	45.722	47.42
77	30	50	633334	3500.01	DFT-s-OFDM QPSK	128@0	45.739	47.34
77	30	50	633334	3500.01	CP-OFDM QPSK	133@0	47.492	49.5
77	30	50	633334	3500.01	CP-OFDM 16 QAM	133@0	47.408	49.12
77	30	50	633334	3500.01	CP-OFDM 64 QAM	133@0	47.461	49.27
77	30	50	633334	3500.01	CP-OFDM 256 QAM	133@0	47.413	49.12
77	30	60	633334	3500.01	DFT-s-OFDM PI/2 BPSK	162@0	57.876	59.82
77	30	60	633334	3500.01	DFT-s-OFDM QPSK	162@0	57.853	59.83
77	30	60	633334	3500.01	CP-OFDM QPSK	162@0	57.838	59.71
77	30	60	633334	3500.01	CP-OFDM 16 QAM	162@0	57.803	59.84
77	30	60	633334	3500.01	CP-OFDM 64 QAM	162@0	57.863	59.74
77	30	60	633334	3500.01	CP-OFDM 256 QAM	162@0	57.813	59.85

77	30	80	633334	3500.01	DFT-s-OFDM PI/2 BPSK	216@0	77.191	79.61
77	30	80	633334	3500.01	DFT-s-OFDM QPSK	216@0	77.091	79.66
77	30	80	633334	3500.01	CP-OFDM QPSK	217@0	77.548	80.03
77	30	80	633334	3500.01	CP-OFDM 16 QAM	217@0	77.455	80.03
77	30	80	633334	3500.01	CP-OFDM 64 QAM	217@0	77.425	80.09
77	30	80	633334	3500.01	CP-OFDM 256 QAM	217@0	77.4	80.04
77	30	90	633334	3500.01	DFT-s-OFDM PI/2 BPSK	240@0	85.687	88.53
77	30	90	633334	3500.01	DFT-s-OFDM QPSK	240@0	85.724	88.47
77	30	90	633334	3500.01	CP-OFDM QPSK	245@0	87.354	90.3
77	30	90	633334	3500.01	CP-OFDM 16 QAM	245@0	87.529	90.42
77	30	90	633334	3500.01	CP-OFDM 64 QAM	245@0	87.402	90.22
77	30	90	633334	3500.01	CP-OFDM 256 QAM	245@0	87.732	90.28
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	270@0	96.361	99.47
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	270@0	96.318	99.55
77	30	100	633334	3500.01	CP-OFDM QPSK	273@0	97.34	100.5
77	30	100	633334	3500.01	CP-OFDM 16 QAM	273@0	97.496	100.6
77	30	100	633334	3500.01	CP-OFDM 64 QAM	273@0	97.349	100.5
77	30	100	633334	3500.01	CP-OFDM 256 QAM	273@0	97.347	100.6

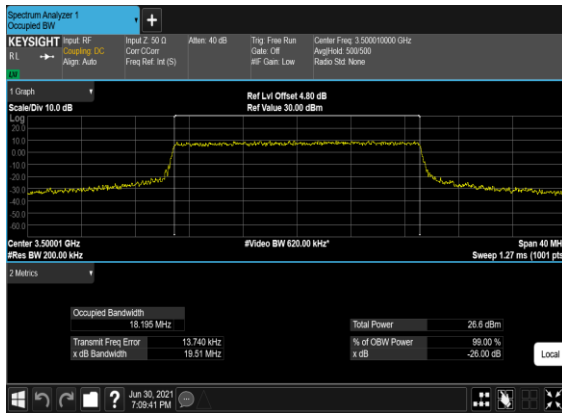
### N77(20M)\_DFT-s-OFDM\_PI\_2-BPSK\_Outer\_Full\_Mid\_CH



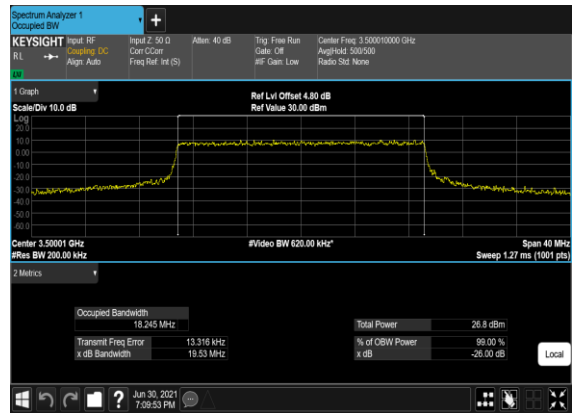
### N77(20M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



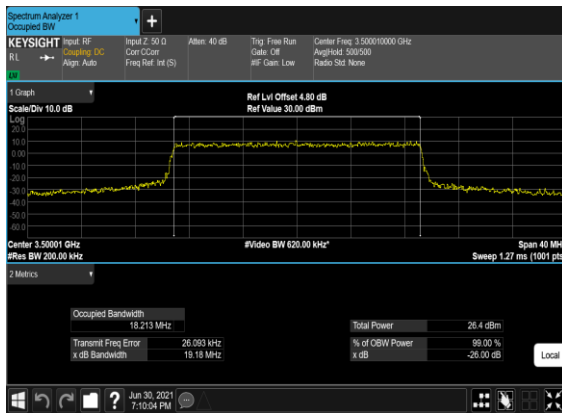
### N77(20M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



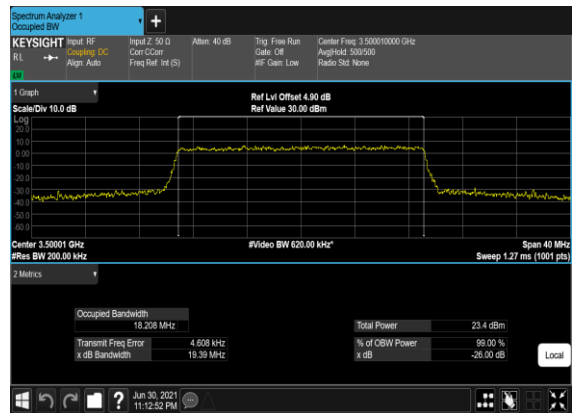
### N77(20M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



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

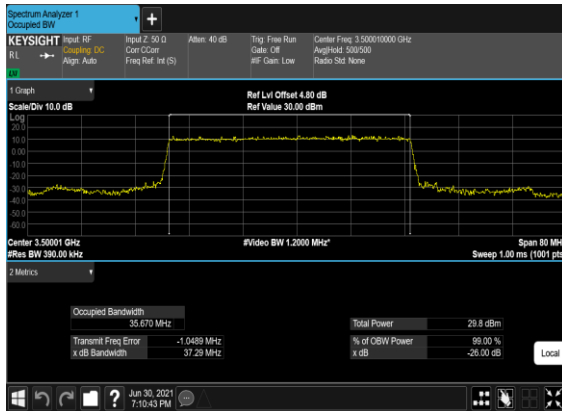


### N77(20M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH

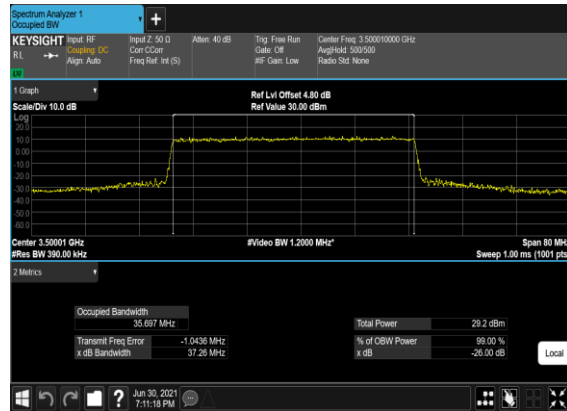




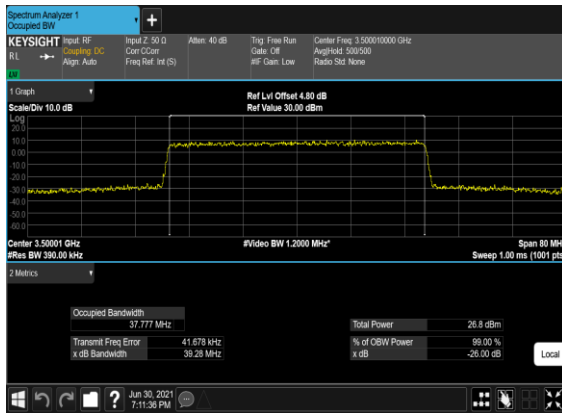
### N77(40M)\_DFT-s-OFDM\_PI\_2-BPSK\_Outer\_Full\_Mid\_CH



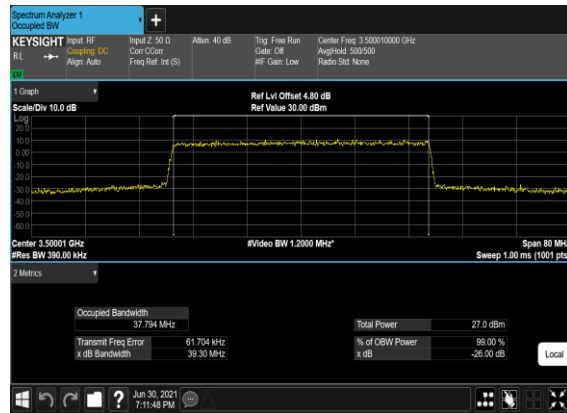
### N77(40M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



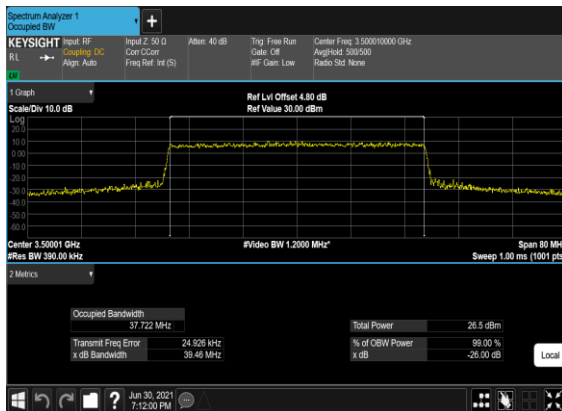
### N77(40M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



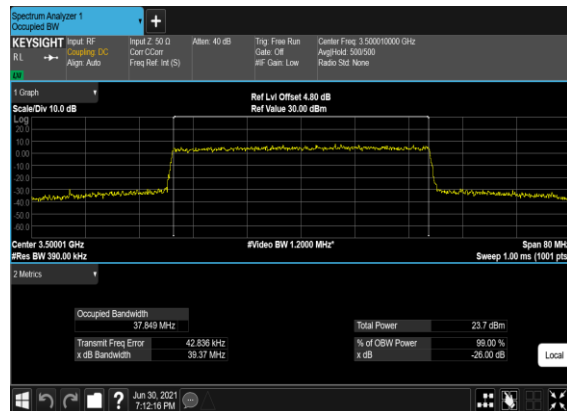
### N77(40M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



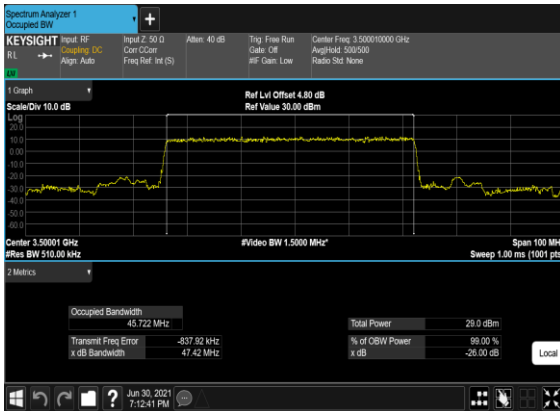
### N77(40M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH



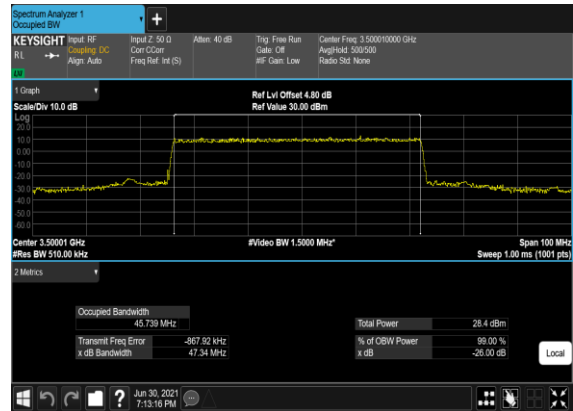
### N77(40M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH



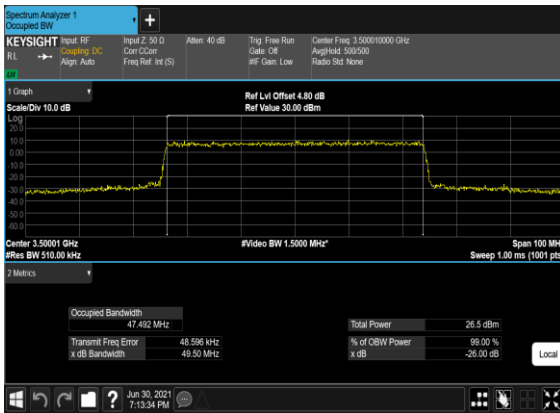
N77(50M)\_DFT-s-OFDM\_PI\_2-  
BPSK\_Outer\_Full\_Mid\_CH



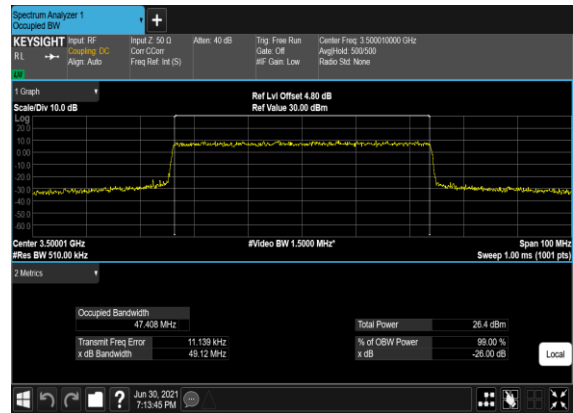
N77(50M)\_DFT-s-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



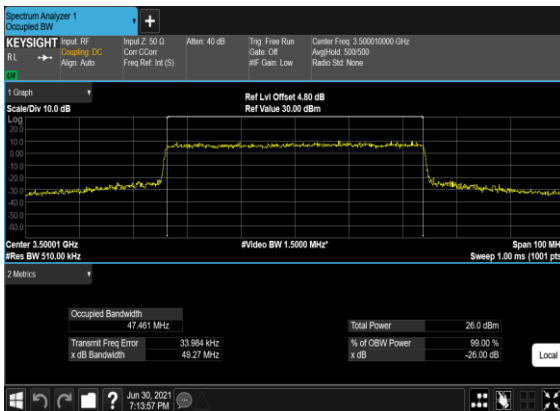
N77(50M)\_CP-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



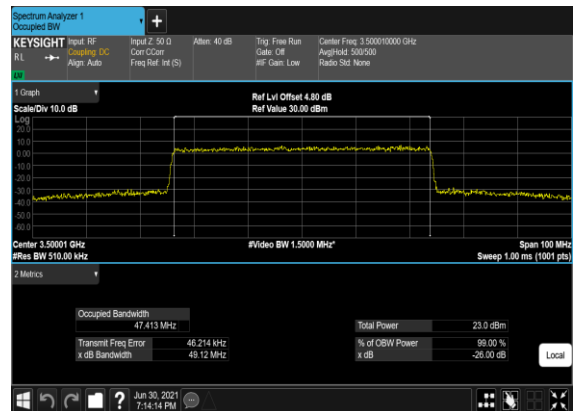
N77(50M)\_CP-OFDM\_16  
QAM\_Outer\_Full\_Mid\_CH



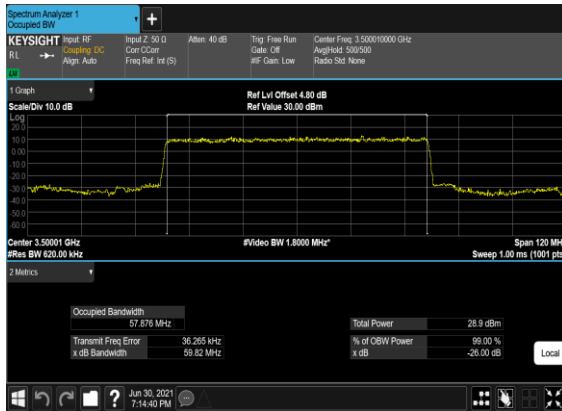
N77(50M)\_CP-OFDM\_64  
QAM\_Outer\_Full\_Mid\_CH



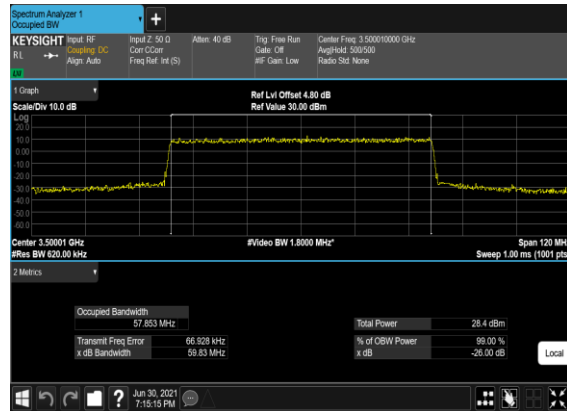
N77(50M)\_CP-OFDM\_256  
QAM\_Outer\_Full\_Mid\_CH



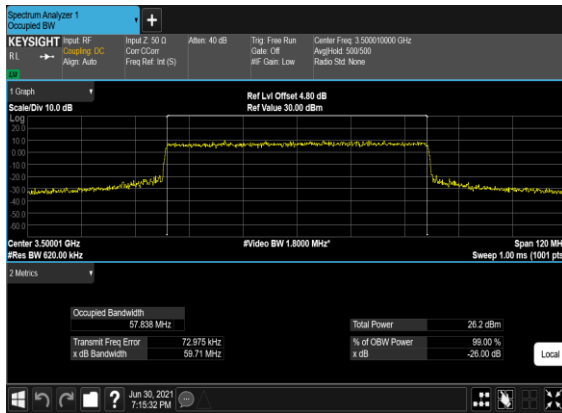
### N77(60M)\_DFT-s-OFDM\_PI\_2-BPSK\_Outer\_Full\_Mid\_CH



### N77(60M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



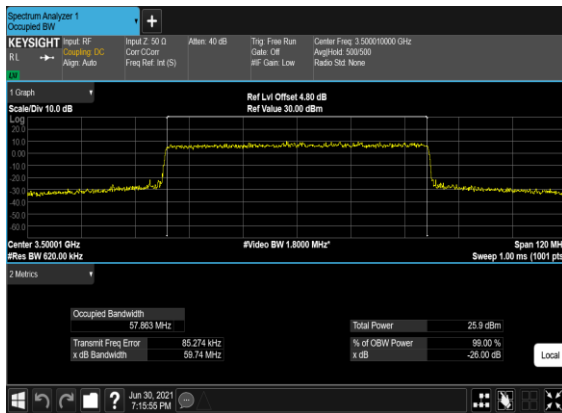
### N77(60M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



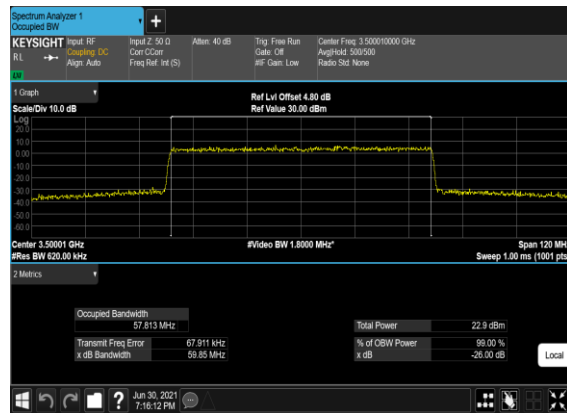
### N77(60M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



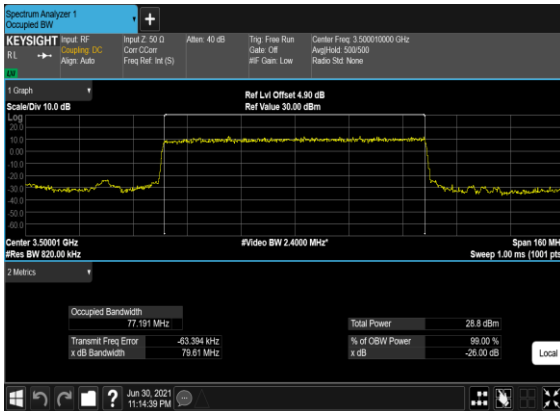
### N77(60M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH



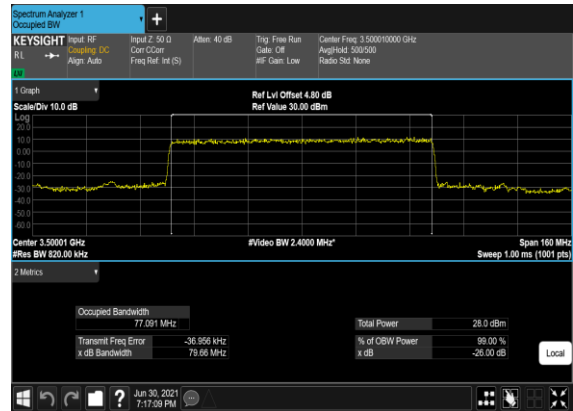
### N77(60M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH



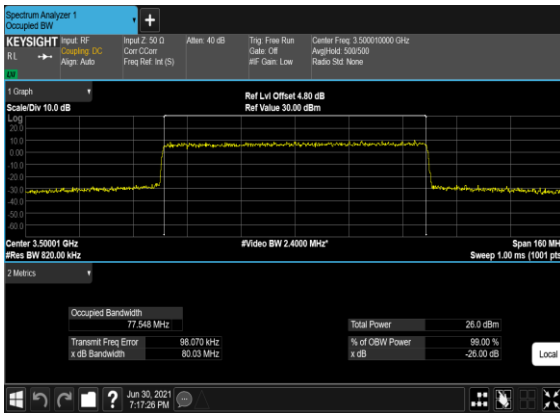
### N77(80M)\_DFT-s-OFDM\_PI\_2- BPSK\_Outer\_Full\_Mid\_CH



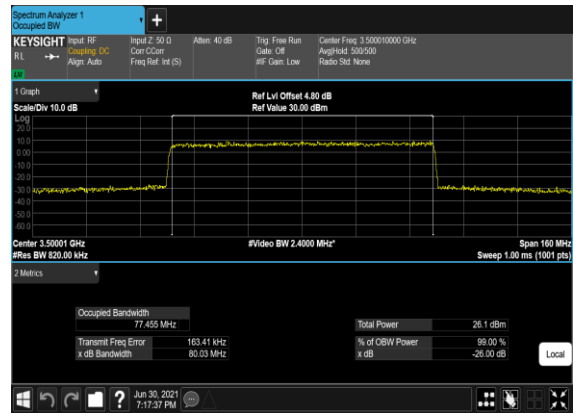
### N77(80M)\_DFT-s- OFDM\_QPSK\_Outer\_Full\_Mid\_CH



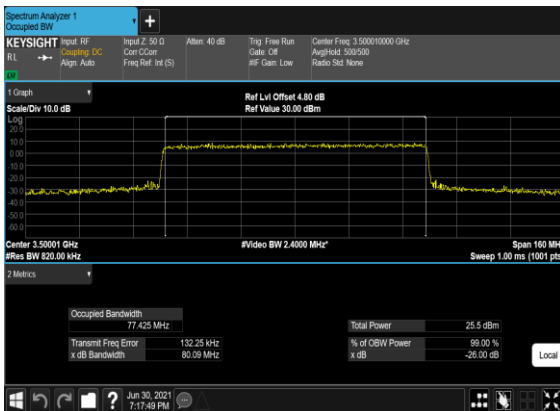
### N77(80M)\_CP- OFDM\_QPSK\_Outer\_Full\_Mid\_CH



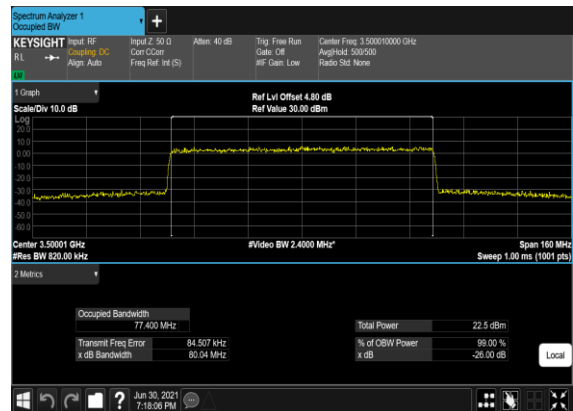
### N77(80M)\_CP-OFDM\_16 QAM\_Outer\_Full\_Mid\_CH



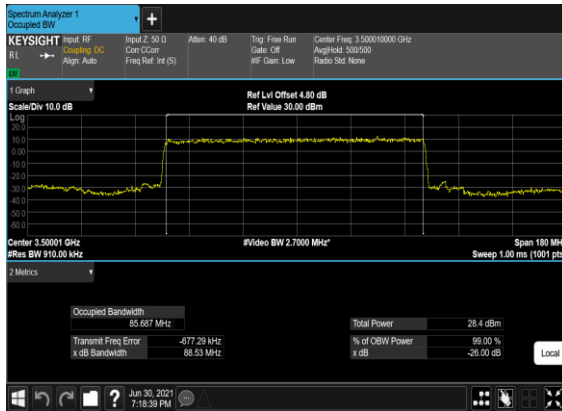
### N77(80M)\_CP-OFDM\_64 QAM\_Outer\_Full\_Mid\_CH



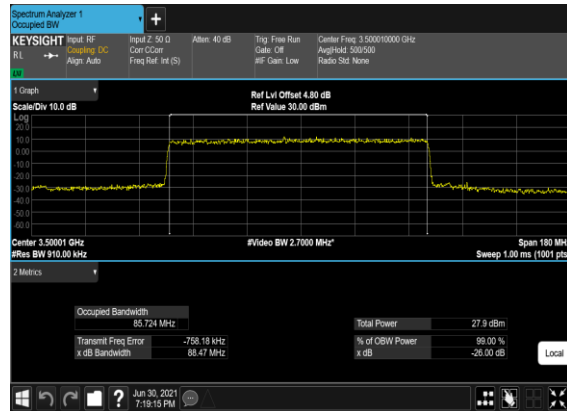
### N77(80M)\_CP-OFDM\_256 QAM\_Outer\_Full\_Mid\_CH



### N77(90M)\_DFT-s-OFDM\_PI\_2- BPSK\_Outer\_Full\_Mid\_CH



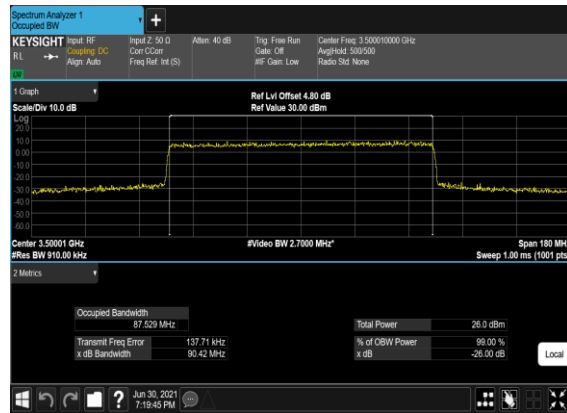
### N77(90M)\_DFT-s- OFDM\_QPSK\_Outer\_Full\_Mid\_CH



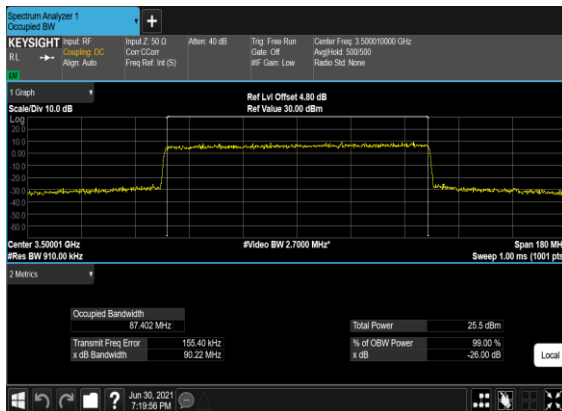
### N77(90M)\_CP- OFDM\_QPSK\_Outer\_Full\_Mid\_CH



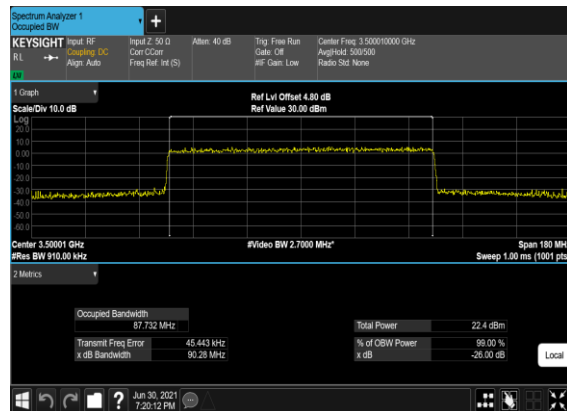
### N77(90M)\_CP-OFDM\_16 QAM\_Outer\_Full\_Mid\_CH



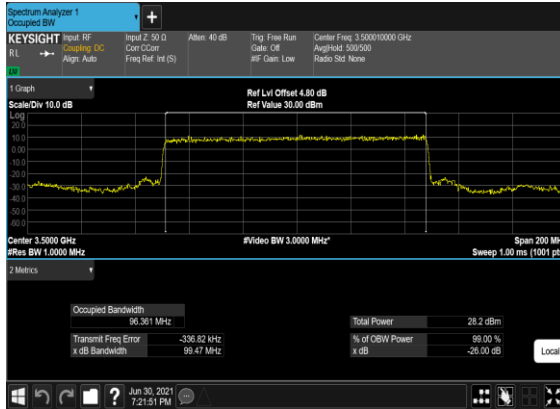
### N77(90M)\_CP-OFDM\_64 QAM\_Outer\_Full\_Mid\_CH



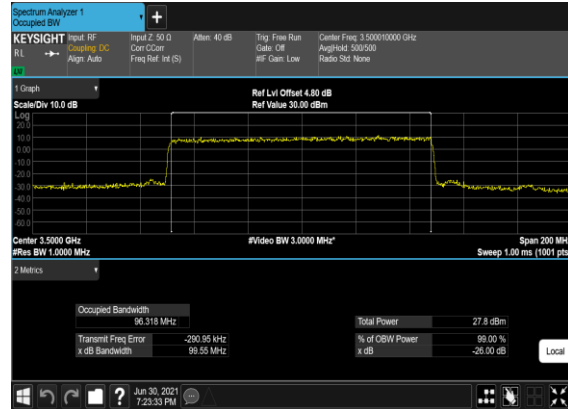
### N77(90M)\_CP-OFDM\_256 QAM\_Outer\_Full\_Mid\_CH



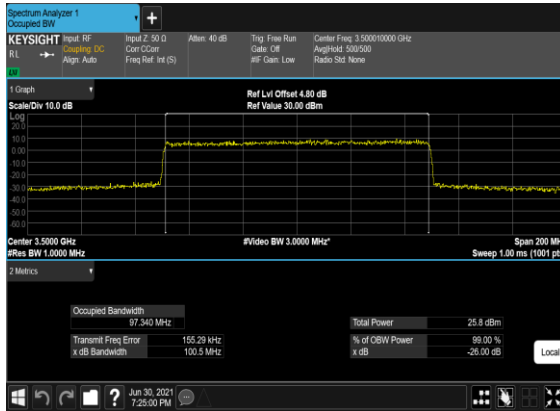
### N77(100M)\_DFT-s-OFDM\_PI\_2- BPSK\_Outer\_Full\_Mid\_CH



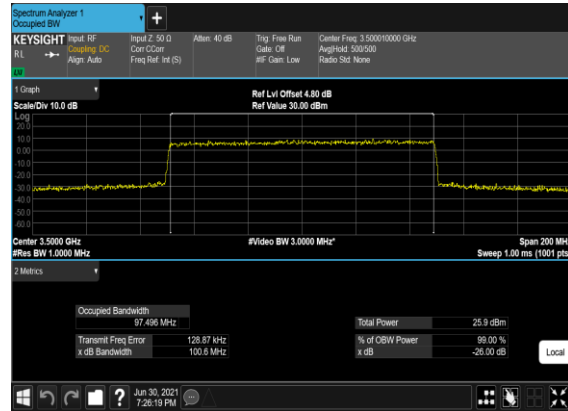
### N77(100M)\_DFT-s- OFDM\_QPSK\_Outer\_Full\_Mid\_CH



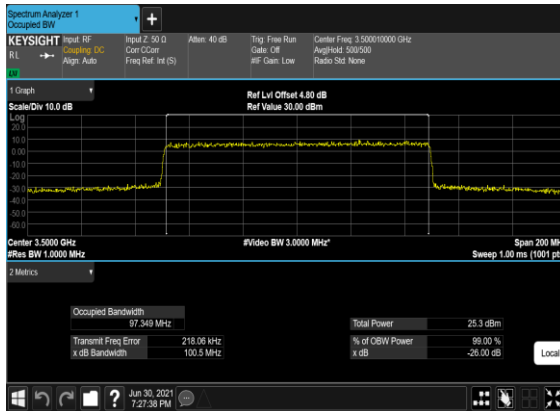
### N77(100M)\_CP- OFDM\_QPSK\_Outer\_Full\_Mid\_CH



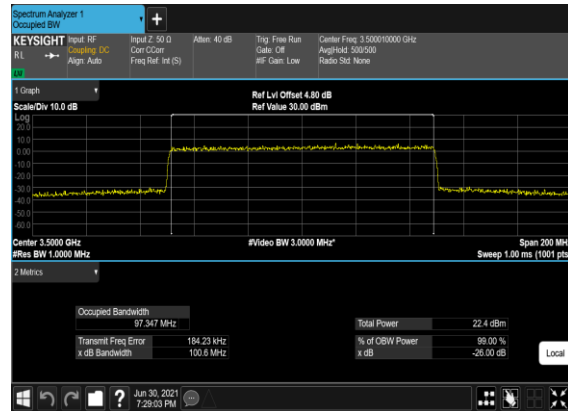
### N77(100M)\_CP-OFDM\_16 QAM\_Outer\_Full\_Mid\_CH



### N77(100M)\_CP-OFDM\_64 QAM\_Outer\_Full\_Mid\_CH



### N77(100M)\_CP-OFDM\_256 QAM\_Outer\_Full\_Mid\_CH



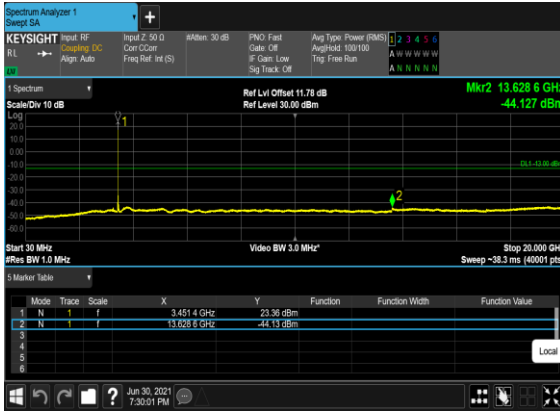
## Conducted Spurious Emissions

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

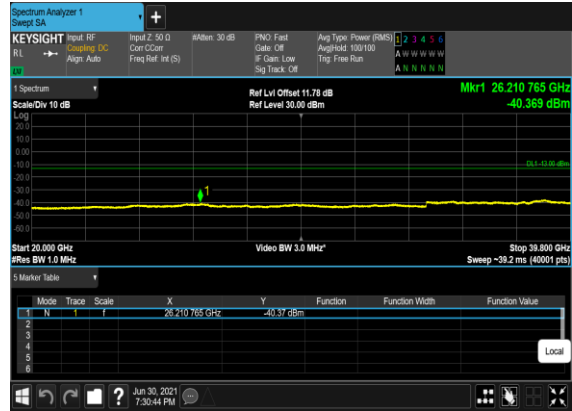
77	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	60	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	---
77	30	60	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	60	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	60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



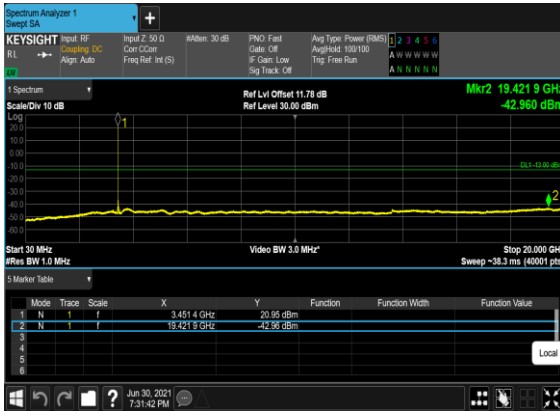
### N77(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



### N77(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



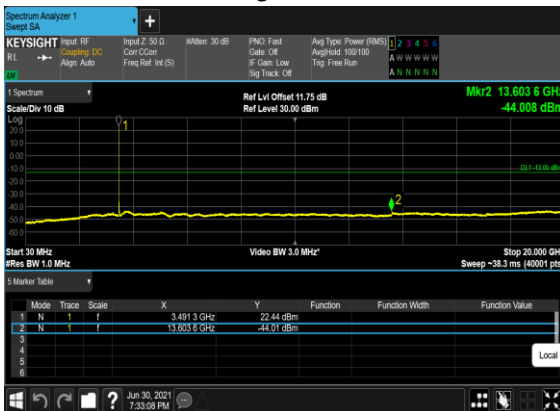
### N77(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



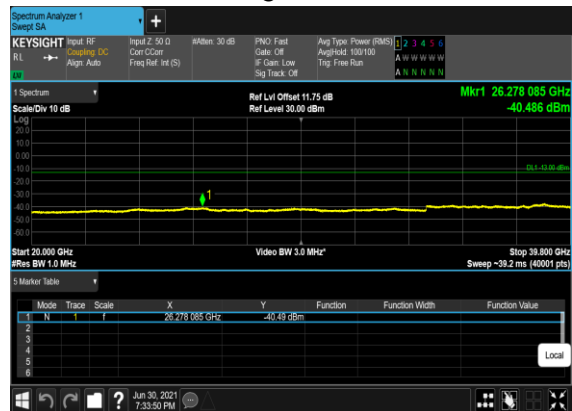
### N77(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



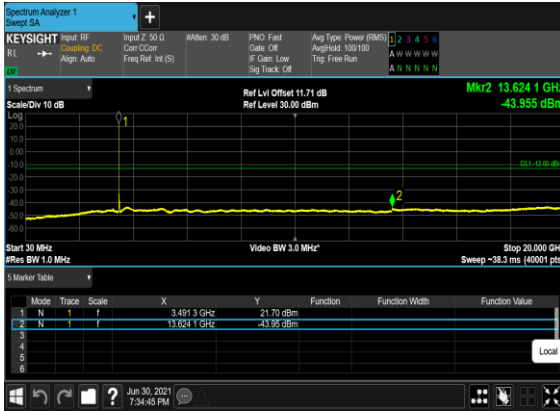
### N77(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



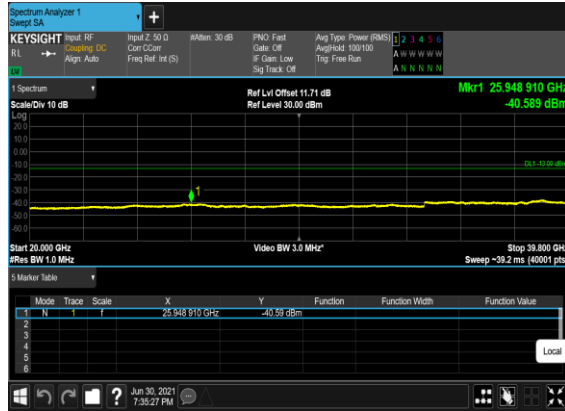
### N77(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



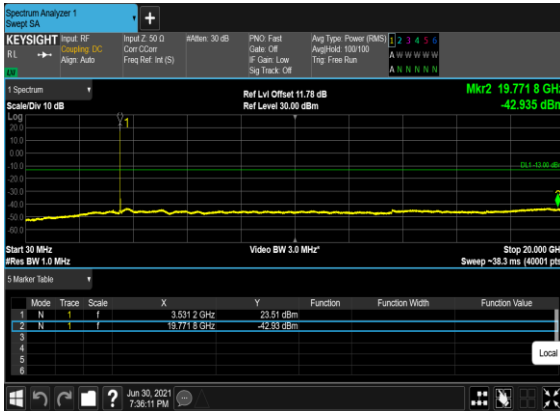
### N77(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



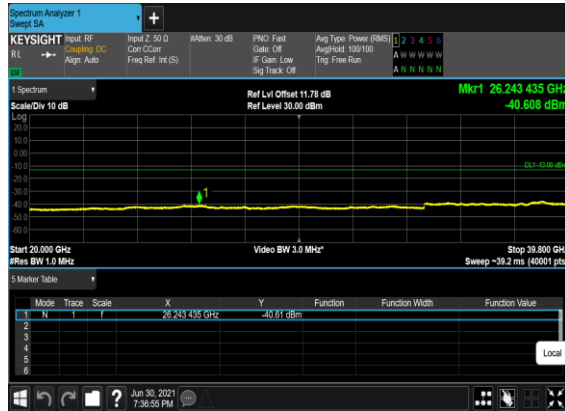
### N77(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



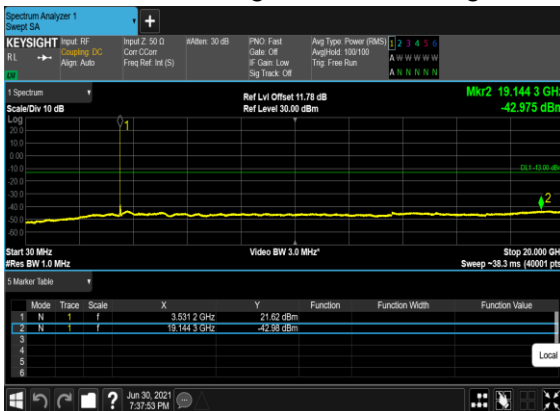
### N77(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_High\_CH



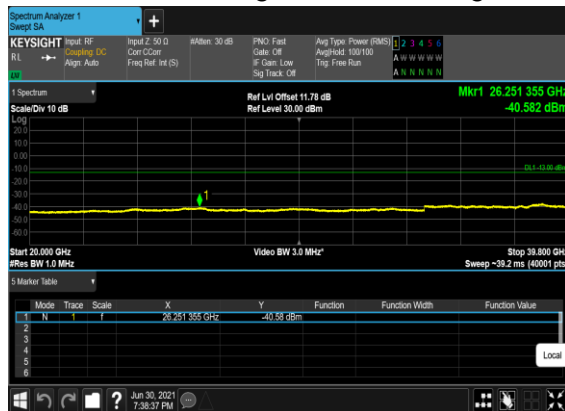
### N77(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_High\_CH



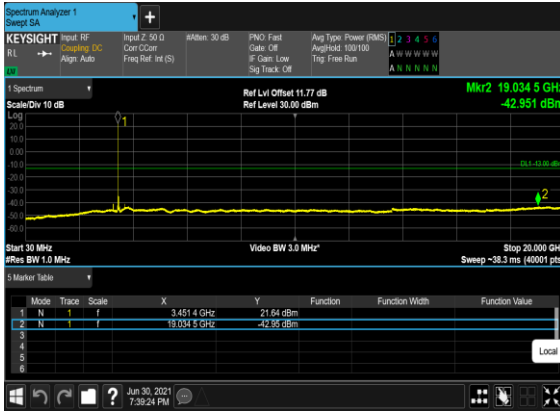
### N77(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



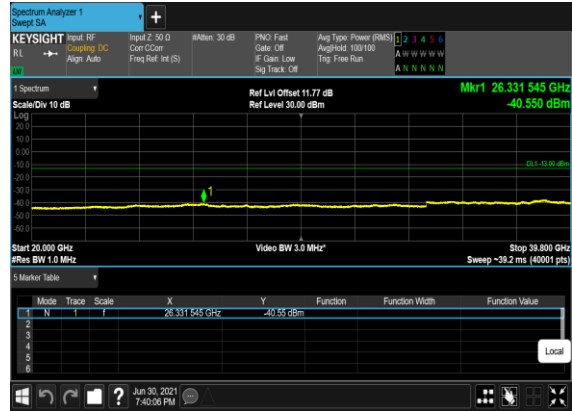
### N77(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



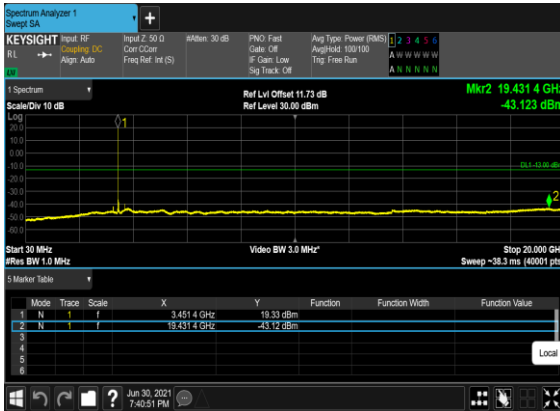
N77(60M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



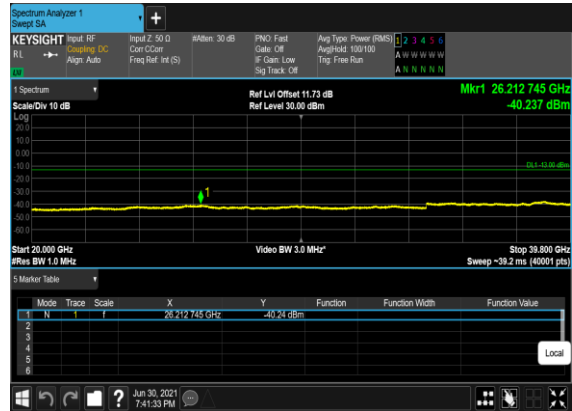
N77(60M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



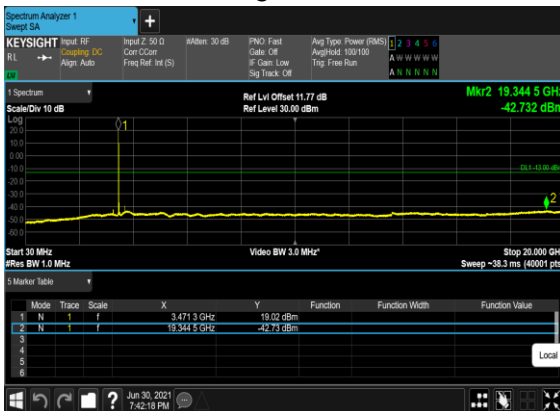
N77(60M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



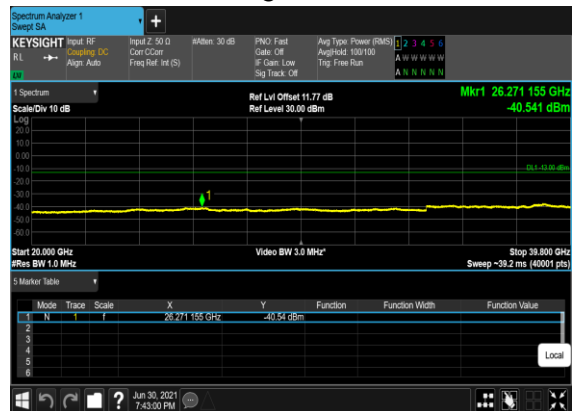
N77(60M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



N77(60M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



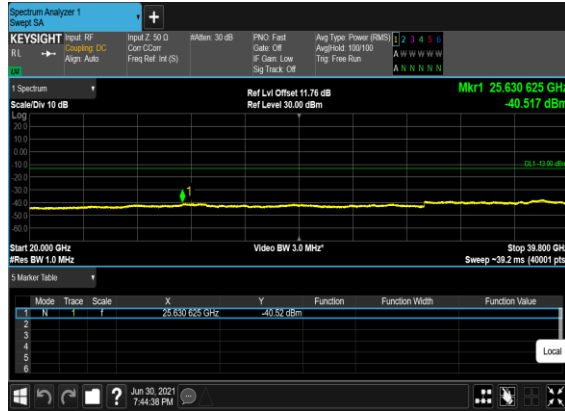
N77(60M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



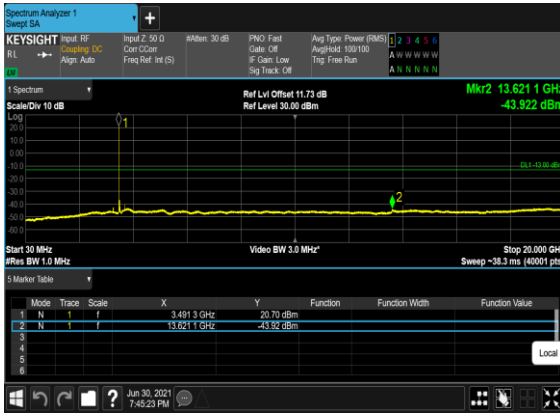
### N77(60M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



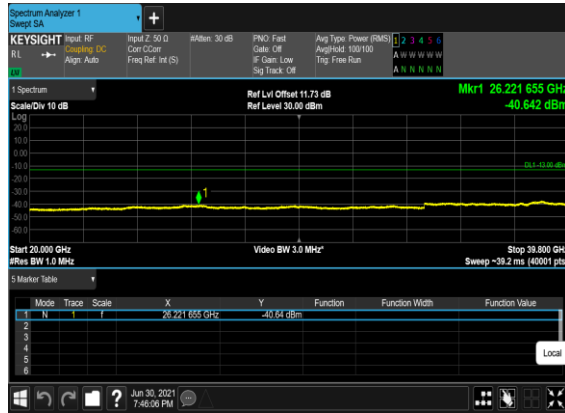
### N77(60M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



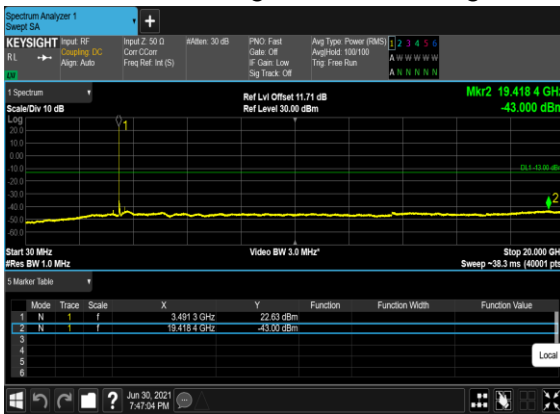
### N77(60M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_High\_CH



### N77(60M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_High\_CH



### N77(60M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



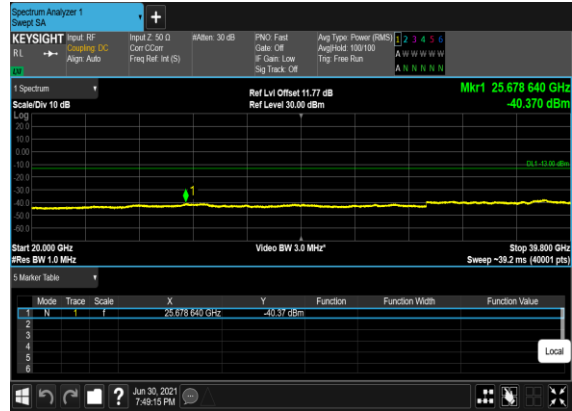
### N77(60M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



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



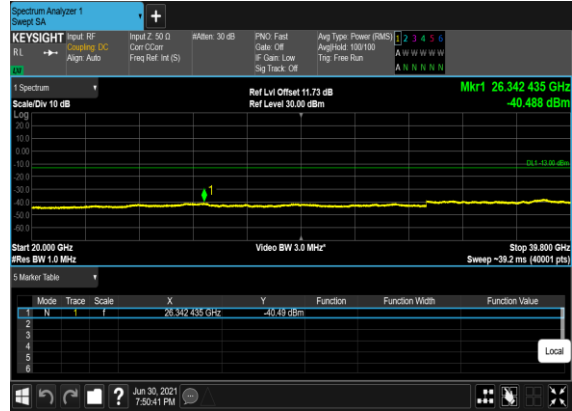
### N77(100M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



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



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



## Conducted Band Edge

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

