FCC RF Test Report

APPLICANT	: Xiaomi Communications Co., Ltd.
EQUIPMENT	: Mobile Phone
BRAND NAME	: Redmi
MODEL NAME	: 21091116UG
FCC ID	: 2AFZZ16UG
STANDARD	: 47 CFR Part 2, 27(O)
CLASSIFICATION	: PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S)	: Sep. 23, 2021 ~ Oct. 11, 2021

We, Sporton International (ShenZhen) 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 (Kunshan) Inc.

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

Reviewed by: Derreck Chen / Supervisor

Approved by: Eric Shih / Manager

ACCREDITED Cert #5145.01

Sporton International (ShenZhen) Inc.

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People's Republic of China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG190306G	Rev. 01	Initial issue of report	Oct. 20, 2021

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	§27.50(j)(3)	Equivalent Isotropic Radiated Power (5G NR n77, n78)	EIRP < 1Watt		
3.5	§27.50(j)(4)	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	Reporting Only	PASS	-
3.7	§2.1051 §27.53(l)(2)	Conducted Band Edge Measurement (5G NR n77, n78)	< 43+10log10(P[Watts])	PASS	-
3.8	§2.1051 §27.53(l)(2)	Conducted Spurious Emission (5G NR n77, n78)	< 43+10log10(P[Watts])	PASS	-
3.9	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within Authorized Band	PASS	-
4.4	§2.1053 §27.53(l)(2)	Radiated Spurious Emission (5G NR n77, n78)	< 43+10log$_{10}$(P[Watts])	PASS	Under limit 33.63 dB at 7584.000 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	Redmi
Model Name	21091116UG
FCC ID	2AFZZ16UG
IMEI Code	Conducted : N/A Radiation : 350506880020724
HW Version	P2
SW Version	MIUI 12.5
EUT Stage	Identical Prototype

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	5G NR n77: 3700 MHz ~ 3980 MHz 5G NR n78: 3700 MHz ~ 3800 MHz
Rx Frequency	5G NR n77: 3700 MHz ~ 3980 MHz 5G NR n78: 3700 MHz ~ 3800 MHz
SCS	n77, n78: 30kHz
Bandwidth	n77: 20MHz / 40MHz / 50MHz / 60MHz / 80MHz / 90MHz / 100MHz n78: 20MHz / 30MHz / 40MHz / 50MHz / 60MHz / 70MHz / 80MHz / 90MHz / 100MHz
Maximum Output Power to Antenna	**Ant 2:** 5G NR n77 : 24.17 dBm 5G NR n78 : 23.85 dBm **Ant 4:** 5G NR n77 : 24.02 dBm 5G NR n78 : 23.69 dBm **Ant 6:** 5G NR n77 : 25.38 dBm 5G NR n78 : 25.36 dBm **Ant 11:** 5G NR n77 : 24.17 dBm

	5G NR n78 : 23.84 dBm
Antenna Gain	**Ant 2:** 5G NR n77 : -1.8 dBi 5G NR n78 : -1.8 dBi **Ant 4:** 5G NR n77 : -3.50 dBi 5G NR n78 : -3.50 dBi **Ant 6:** 5G NR n77 : -2.57 dBi 5G NR n78 : -2.57 dBi **Ant 11:** 5G NR n77 : -2.65 dBi 5G NR n78 : -2.65 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 Output power and antenna gain, so the maximum ERP/EIRP is shown in the report, 5G NR n77/n78 for Antenna 6.
2. The device supports HPUE mode for 5G NR n78, but Power Level for 5G NR n77 the same as 5G NR n78 in accordance with Manufacturer declaration.

1.5 Modification of EUT

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

1.6 Maximum EIRP Power and Emission Designator

5G NR n77		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	**Frequency Range (MHz)**	**Maximum EIRP(W)**	**Emission Designator (99%OBW)**	**Maximum EIRP(W)**	**Emission Designator (99%OBW)**
20	3710.01 ~ 3969.99	0.1858	18M2G7D	0.1483	18M2W7D
40	3720.00 ~ 3960.00	0.1849	37M8G7D	0.1472	37M8W7D
50	3725.01 ~ 3954.99	0.1866	47M5G7D	0.1486	47M5W7D
60	3730.02 ~ 3949.98	0.1871	57M9G7D	0.1483	57M9W7D
80	3740.01 ~ 3939.99	0.1905	77M4G7D	0.1517	77M5W7D
90	3745.02 ~ 3934.98	0.1892	87M3G7D	0.1500	87M5W7D
100	3750.00 ~ 3930.00	0.1910	97M3G7D	0.1507	97M4W7D

5G NR n78		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	3710.01 ~ 3789.99	0.1901	18M2G7D	0.1524	18M2W7D
30	3715.02 ~ 3784.98	0.1901	27M8G7D	0.1507	27M8W7D
40	3720.00 ~ 3780.00	0.1901	37M8G7D	0.1517	37M8W7D
50	3725.01 ~ 3774.99	0.1897	47M5G7D	0.1500	47M5W7D
60	3730.02 ~ 3769.98	0.1888	57M9G7D	0.1503	57M9W7D
70	3735.00 ~ 3765.00	0.1892	67M5G7D	0.1496	67M4W7D
80	3740.01 ~ 3759.99	0.1875	77M4G7D	0.1472	77M5W7D
90	3745.02 ~ 3754.98	0.1871	87M3G7D	0.1493	87M5W7D
100	3750.00	0.1866	97M3G7D	0.1476	97M4W7D

Note:

1. 5G NR Band n77 overlaps the entire frequency range of Band n78. Therefore, the test results of conducted test items provided in this report covers Band n77 as well as Band n78, and add EIRP/Occupied Bandwidth test of bandwidth 30/70 MHz for Band n78.
2. All modulations have been evaluation, only the worst test results of PSK & QAM are shown in the report

1.7 Testing Location

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

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

Test data subcontracted: RSE test case in section 4 of this report

1.8 Test Software

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

1.9 Applicable Standards

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

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

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

2 Test Configuration of Equipment Under Test

2.1 Test Mode

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

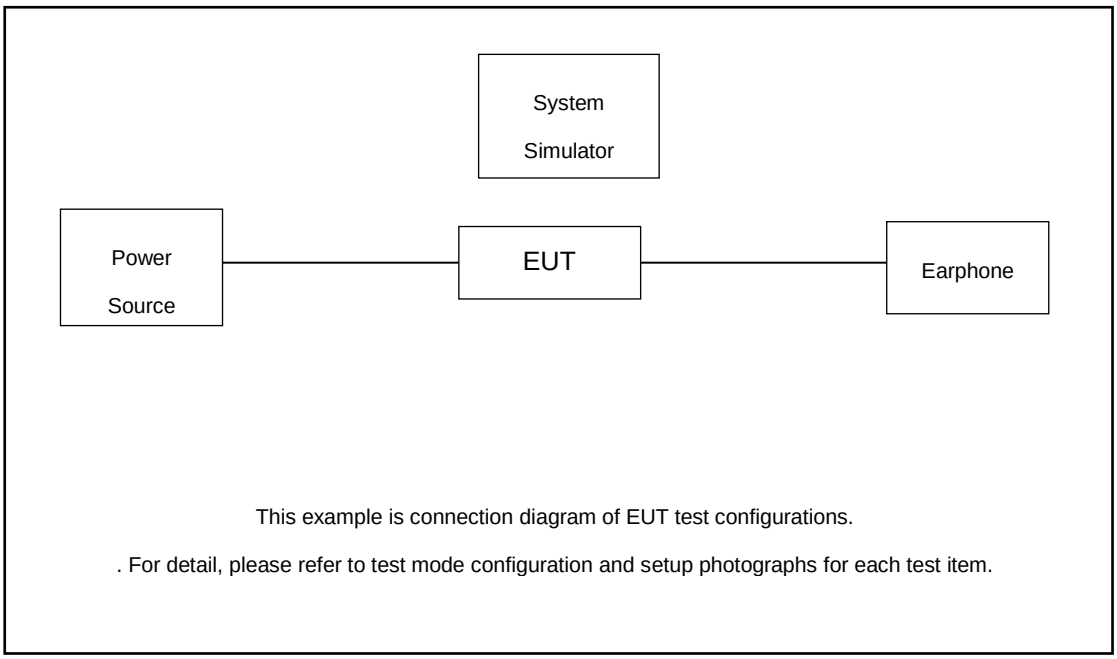
For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y plane) were recorded in this report.

The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.

Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			

Test Items	5G NR	Bandwidth (MHz)								Modulation					RB #		Test Channel		
		20	30	40	50	60	70	80-90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	1	Full	L	M	H
Max. Output Power	n77	v	-	v	v	v	-	v	v	v	v	v	v	v	v	v	v	v	v
	n78	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	n77	v	-				-			v	v					v	v	v	v
26dB and 99% Bandwidth	n77	v	-	v	v	v	-	v	v	v	v	v	v	v		v		v	
	n78		v				v			v	v	v	v	v		v		v	
Conducted Band Edge	n77	v	-			v	-		v	v	v				v	v	v		v
Conducted Spurious Emission	n77	v	-			v	-		v	v	v				v		v	v	v
Frequency Stability	n77	v	-				-				v					v		v	
E.R.P / E.I.R.P	n77	v	-	v	v	v	-	v	v	v	v	v	v	v	v	v	v	v	v
	n78	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	n77	Worst Case																v	
	n78	Worst Case																v	
Note	1.	2.	3. The mark "**v** " means that this configuration is chosen for testing 4. The mark "-" means that this bandwidth is not supported. 5. 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. 6. Based on engineering evaluation, only the worst modulations test results are shown in the report. 7. The EN-DC mode combination could be referred to the product spec																	

2.2 Connection Diagram of Test System



This example is connection diagram of EUT test configurations.

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

2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	Power Supply	GWINSTEK	PSS-2002	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
3.	NR Base Station	Anritsu	MT8000A	N/A	N/A	Unshielded, 1.8 m

2.4 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss 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 4.8 dB.

Example :

Offset(dB) = RF cable loss(dB).

=4.8 (dB)

2.5 Frequency List of Low/Middle/High Channels

5G NR n77 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
100	Channel	650000	656000	662000
	Frequency	3750	3840	3930
90	Channel	649668	656000	662332
	Frequency	3745.02	3840	3934.98
80	Channel	649334	656000	662666
	Frequency	3740.01	3840	3939.99
60	Channel	648668	656000	663332
	Frequency	3730.02	3840	3949.98
50	Channel	648334	656000	663666
	Frequency	3725.01	3840	3954.99
40	Channel	648000	656000	664000
	Frequency	3720.00	3840	3960.00
20	Channel	647334	656000	664666
	Frequency	3710.01	3840	3969.99

5G NR n78 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
100	Channel		650000	
	Frequency		3750	
90	Channel	649668	650000	650332
	Frequency	3745.02	3750	3754.98
80	Channel	649334	650000	650666
	Frequency	3740.01	3750	3759.99
70	Channel	649000	650000	651000
	Frequency	3735.00	3750	3765.00
60	Channel	648668	650000	651332
	Frequency	3730.02	3750	3769.98
50	Channel	648334	650000	651666
	Frequency	3725.01	3750	3774.99
40	Channel	648000	650000	652000
	Frequency	3720.00	3750	3780.00
30	Channel	647668	650000	652332
	Frequency	3715.02	3750	3784.98
20	Channel	647334	650000	652666
	Frequency	3710.01	3750	3789.99

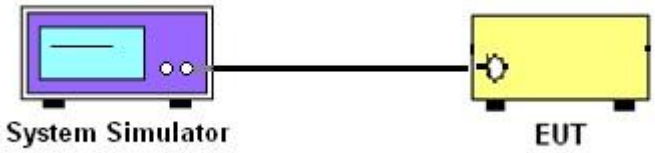
3 Conducted Test Items

3.1 Measuring Instruments

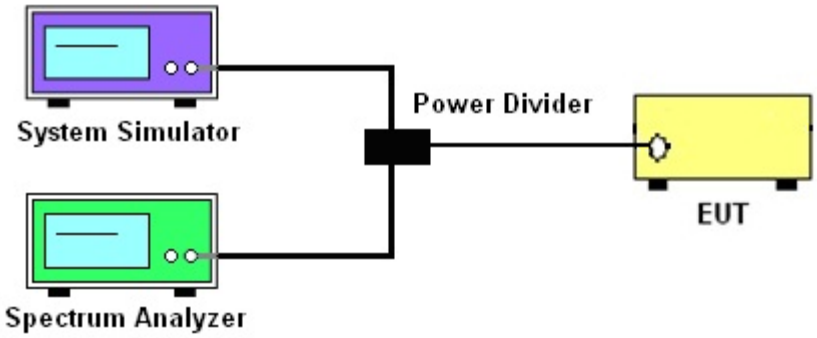
See list of measuring instruments of this test report.

3.2 Test Setup

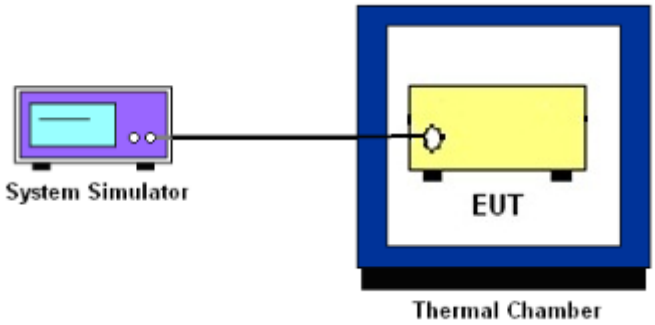
3.2.1 Conducted Output Power



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



3.2.3 Frequency Stability



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power and EIRP

3.4.1 Description of the Conducted Output Power Measurement and EIRP Measurement

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

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

According to KDB 412172 D01 Power Approach,

EIRP = $P_T + G_T – L_C$, ERP = EIRP -2.15, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

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

3.4.2 Test Procedures

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

3.5 Peak-to-Average Ratio

3.5.1 Description of the PAR Measurement

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

3.5.2 Test Procedures

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

3.6 Occupied Bandwidth

3.6.1 Description of Occupied Bandwidth Measurement

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

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

3.6.2 Test Procedures

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

3.7 Conducted Band Edge

3.7.1 Description of Conducted Band Edge Measurement

27.53(l)(2)

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

3.7.2 Test Procedures

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

   Example:

   The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)

   = P(W)- [43 + 10log(P)] (dB)

   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB) = -13dBm.

3.8 Conducted Spurious Emission

3.8.1 Description of Conducted Spurious Emission Measurement

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

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

3.8.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
7. Set spectrum analyzer with RMS detector.
8. Taking the record of maximum spurious emission.
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
10. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.

3.9 Frequency Stability

3.9.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5ppm) of the center frequency.

3.9.2 Test Procedures for Temperature Variation

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

3.9.3 Test Procedures for Voltage Variation

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

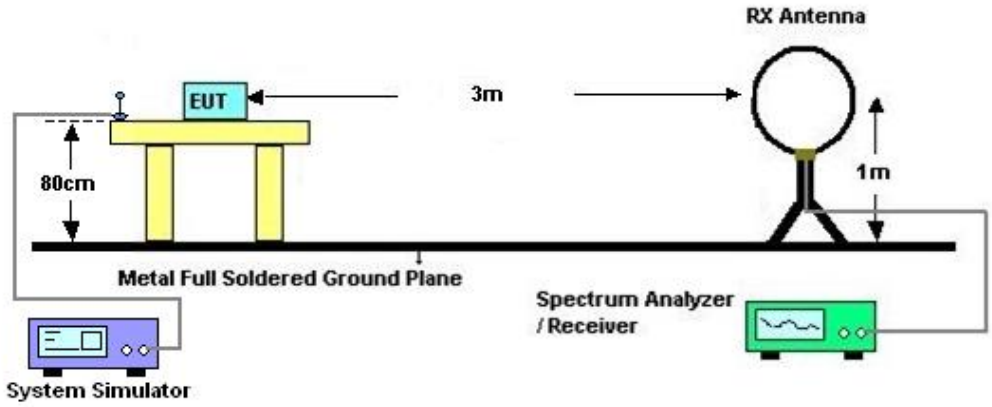
4 Radiated Test Items

4.1 Measuring Instruments

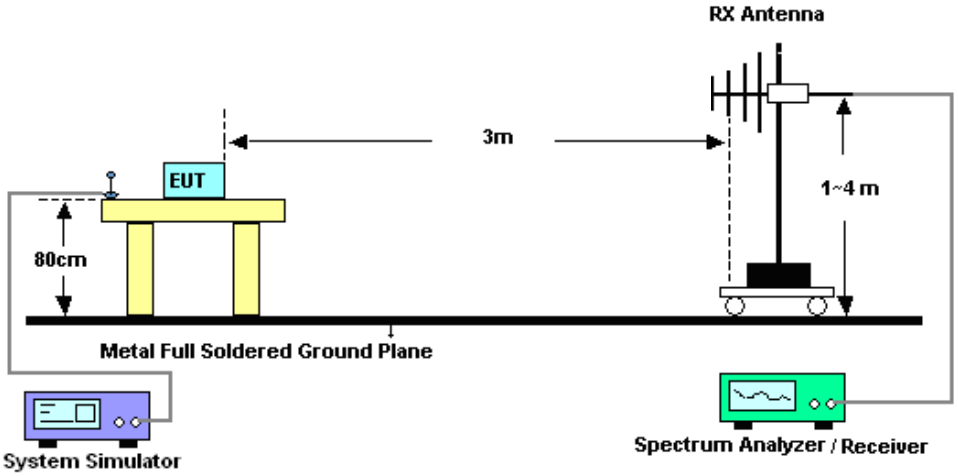
See list of measuring instruments of this test report.

4.2 Test Setup

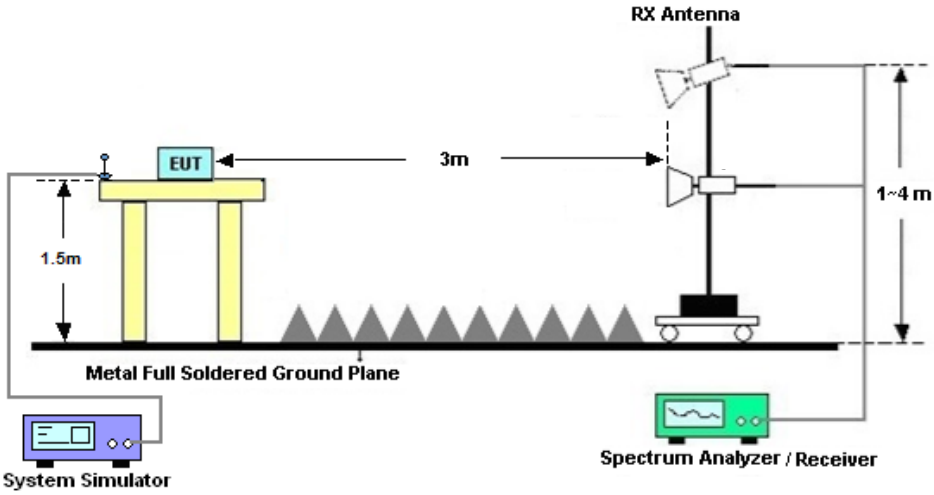
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3 Test Result of Radiated Test

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

Please refer to Appendix B.

4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

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

4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EXA Signal Analyzer	KEYSIGHT	N9010B	MY60240803	10Hz~44GHz	Apr. 03, 2021	Sep. 23, 2021~ Oct. 11, 2021	Apr. 02, 2022	Conducted (TH01-SZ)
Power divider	STI	STI08-0055	-	0.5~40GHz	Aug. 26, 2021	Sep. 23, 2021~ Oct. 11, 2021	Aug. 25, 2022	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 14, 2021	Sep. 23, 2021~ Oct. 11, 2021	Jul. 13, 2022	Conducted (TH01-SZ)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz-44G,MAX 30dB	Apr. 13, 2021	Oct. 11, 2021	Apr. 12, 2022	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 01, 2020	Oct. 11, 2021	Oct. 31, 2021	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	May 30, 2021	Oct. 11, 2021	May 29, 2022	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Nov. 01, 2020	Oct. 11, 2021	Oct. 31, 2021	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101115	18GHz~40GHz	Jan. 06, 2021	Oct. 11, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Jan. 06, 2021	Oct. 11, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40GGA	060728	18~40GHz	Jan. 07, 2021	Oct. 11, 2021	Jan. 06, 2022	Radiation (03CH04-KS)
high gain Amplifier	MITEQ	AMF-7D-00101800-30-10P	2025788	1Ghz-18Ghz	Jan. 06, 2021	Oct. 11, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	Keysight	83017A	MY57280106	500MHz~26.5GHz	Oct. 14, 2020	Oct. 11, 2021	Oct. 13, 2021	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Oct. 11, 2021	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Oct. 11, 2021	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Oct. 11, 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 ~ 18 GHz)

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

Uncertainty of Radiated Emission Measurement (18 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

Software Version: 21.02.091701

FR1 N77

Transmitter Conducted Output Power And EIRP, Gain=-2.57dBi

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
77	30	20	647334	3710.01	DFT-s-OFDM PI/2 BPSK	25@12	25.1	22.53	0.1791
77	30	20	647334	3710.01	DFT-s-OFDM PI/2 BPSK	1@1	24.81	22.24	0.1675
77	30	20	647334	3710.01	DFT-s-OFDM PI/2 BPSK	1@49	24.95	22.38	0.1730
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	25@12	25.12	22.55	0.1799
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@1	24.79	22.22	0.1667
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@49	24.95	22.38	0.1730
77	30	20	647334	3710.01	DFT-s-OFDM 16 QAM	25@12	24.07	21.5	0.1413
77	30	20	647334	3710.01	DFT-s-OFDM 16 QAM	1@1	23.86	21.29	0.1346
77	30	20	647334	3710.01	DFT-s-OFDM 16 QAM	1@49	23.87	21.3	0.1349
77	30	20	647334	3710.01	DFT-s-OFDM 64 QAM	25@12	22.6	20.03	0.1007
77	30	20	647334	3710.01	DFT-s-OFDM 64 QAM	1@1	22.24	19.67	0.0927
77	30	20	647334	3710.01	DFT-s-OFDM 64 QAM	1@49	22.45	19.88	0.0973
77	30	20	647334	3710.01	DFT-s-OFDM 256 QAM	25@12	20.56	17.99	0.0630
77	30	20	647334	3710.01	DFT-s-OFDM 256 QAM	1@1	20.3	17.73	0.0593
77	30	20	647334	3710.01	DFT-s-OFDM 256 QAM	1@49	20.44	17.87	0.0612
77	30	20	647334	3710.01	CP-OFDM QPSK	25@12	23.62	21.05	0.1274
77	30	20	647334	3710.01	CP-OFDM QPSK	1@1	23.3	20.73	0.1183
77	30	20	647334	3710.01	CP-OFDM QPSK	1@49	23.47	20.9	0.1230
77	30	20	656000	3840	DFT-s-OFDM PI/2 BPSK	25@12	25.24	22.67	0.1849

77	30	20	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	25.11	22.54	0.1795
77	30	20	656000	3840	DFT-s-OFDM PI/2 BPSK	1@49	25	22.43	0.1750
77	30	20	656000	3840	DFT-s-OFDM QPSK	25@12	25.26	22.69	0.1858
77	30	20	656000	3840	DFT-s-OFDM QPSK	1@1	25.1	22.53	0.1791
77	30	20	656000	3840	DFT-s-OFDM QPSK	1@49	25.03	22.46	0.1762
77	30	20	656000	3840	DFT-s-OFDM 16 QAM	25@12	24.28	21.71	0.1483
77	30	20	656000	3840	DFT-s-OFDM 16 QAM	1@1	24.14	21.57	0.1435
77	30	20	656000	3840	DFT-s-OFDM 16 QAM	1@49	23.94	21.37	0.1371
77	30	20	656000	3840	DFT-s-OFDM 64 QAM	25@12	22.71	20.14	0.1033
77	30	20	656000	3840	DFT-s-OFDM 64 QAM	1@1	22.53	19.96	0.0991
77	30	20	656000	3840	DFT-s-OFDM 64 QAM	1@49	22.42	19.85	0.0966
77	30	20	656000	3840	DFT-s-OFDM 256 QAM	25@12	20.69	18.12	0.0649
77	30	20	656000	3840	DFT-s-OFDM 256 QAM	1@1	20.7	18.13	0.0650
77	30	20	656000	3840	DFT-s-OFDM 256 QAM	1@49	20.45	17.88	0.0614
77	30	20	656000	3840	CP-OFDM QPSK	25@12	23.74	21.17	0.1309
77	30	20	656000	3840	CP-OFDM QPSK	1@1	23.64	21.07	0.1279
77	30	20	656000	3840	CP-OFDM QPSK	1@49	23.57	21	0.1259
77	30	20	664666	3969.99	DFT-s-OFDM PI/2 BPSK	25@12	25.25	22.68	0.1854
77	30	20	664666	3969.99	DFT-s-OFDM PI/2 BPSK	1@1	25.07	22.5	0.1778
77	30	20	664666	3969.99	DFT-s-OFDM PI/2 BPSK	1@49	25.05	22.48	0.1770
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	25@12	25.23	22.66	0.1845
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	1@1	25.09	22.52	0.1786
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	1@49	25.1	22.53	0.1791
77	30	20	664666	3969.99	DFT-s-OFDM 16	25@12	24.23	21.66	0.1466

					QAM				
77	30	20	664666	3969.99	DFT-s-OFDM 16 QAM	1@1	23.97	21.4	0.1380
77	30	20	664666	3969.99	DFT-s-OFDM 16 QAM	1@49	23.98	21.41	0.1384
77	30	20	664666	3969.99	DFT-s-OFDM 64 QAM	25@12	22.73	20.16	0.1038
77	30	20	664666	3969.99	DFT-s-OFDM 64 QAM	1@1	22.62	20.05	0.1012
77	30	20	664666	3969.99	DFT-s-OFDM 64 QAM	1@49	22.67	20.1	0.1023
77	30	20	664666	3969.99	DFT-s-OFDM 256 QAM	25@12	20.68	18.11	0.0647
77	30	20	664666	3969.99	DFT-s-OFDM 256 QAM	1@1	20.52	17.95	0.0624
77	30	20	664666	3969.99	DFT-s-OFDM 256 QAM	1@49	20.7	18.13	0.0650
77	30	20	664666	3969.99	CP-OFDM QPSK	25@12	23.65	21.08	0.1282
77	30	20	664666	3969.99	CP-OFDM QPSK	1@1	23.56	20.99	0.1256
77	30	20	664666	3969.99	CP-OFDM QPSK	1@49	23.52	20.95	0.1245
77	30	40	648000	3720	DFT-s-OFDM PI/2 BPSK	50@25	25.16	22.59	0.1816
77	30	40	648000	3720	DFT-s-OFDM PI/2 BPSK	1@1	24.52	21.95	0.1567
77	30	40	648000	3720	DFT-s-OFDM PI/2 BPSK	1@104	24.77	22.2	0.1660
77	30	40	648000	3720	DFT-s-OFDM QPSK	50@25	25.17	22.6	0.1820
77	30	40	648000	3720	DFT-s-OFDM QPSK	1@1	24.57	22	0.1585
77	30	40	648000	3720	DFT-s-OFDM QPSK	1@104	24.73	22.16	0.1644
77	30	40	648000	3720	DFT-s-OFDM 16 QAM	50@25	24.23	21.66	0.1466
77	30	40	648000	3720	DFT-s-OFDM 16 QAM	1@1	23.56	20.99	0.1256
77	30	40	648000	3720	DFT-s-OFDM 16 QAM	1@104	23.77	21.2	0.1318
77	30	40	648000	3720	DFT-s-OFDM 64 QAM	50@25	22.68	20.11	0.1026
77	30	40	648000	3720	DFT-s-OFDM 64 QAM	1@1	22.01	19.44	0.0879
77	30	40	648000	3720	DFT-s-OFDM 64 QAM	1@104	22.2	19.63	0.0918

77	30	40	648000	3720	DFT-s-OFDM 256 QAM	50@25	20.68	18.11	0.0647
77	30	40	648000	3720	DFT-s-OFDM 256 QAM	1@1	20.03	17.46	0.0557
77	30	40	648000	3720	DFT-s-OFDM 256 QAM	1@104	20.36	17.79	0.0601
77	30	40	648000	3720	CP-OFDM QPSK	53@26	23.66	21.09	0.1285
77	30	40	648000	3720	CP-OFDM QPSK	1@1	23.06	20.49	0.1119
77	30	40	648000	3720	CP-OFDM QPSK	1@104	23.27	20.7	0.1175
77	30	40	656000	3840	DFT-s-OFDM PI/2 BPSK	50@25	25.23	22.66	0.1845
77	30	40	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.71	22.14	0.1637
77	30	40	656000	3840	DFT-s-OFDM PI/2 BPSK	1@104	24.68	22.11	0.1626
77	30	40	656000	3840	DFT-s-OFDM QPSK	50@25	25.24	22.67	0.1849
77	30	40	656000	3840	DFT-s-OFDM QPSK	1@1	24.76	22.19	0.1656
77	30	40	656000	3840	DFT-s-OFDM QPSK	1@104	24.72	22.15	0.1641
77	30	40	656000	3840	DFT-s-OFDM 16 QAM	50@25	24.25	21.68	0.1472
77	30	40	656000	3840	DFT-s-OFDM 16 QAM	1@1	23.83	21.26	0.1337
77	30	40	656000	3840	DFT-s-OFDM 16 QAM	1@104	23.78	21.21	0.1321
77	30	40	656000	3840	DFT-s-OFDM 64 QAM	50@25	22.7	20.13	0.1030
77	30	40	656000	3840	DFT-s-OFDM 64 QAM	1@1	22.24	19.67	0.0927
77	30	40	656000	3840	DFT-s-OFDM 64 QAM	1@104	22.1	19.53	0.0897
77	30	40	656000	3840	DFT-s-OFDM 256 QAM	50@25	20.72	18.15	0.0653
77	30	40	656000	3840	DFT-s-OFDM 256 QAM	1@1	20.29	17.72	0.0592
77	30	40	656000	3840	DFT-s-OFDM 256 QAM	1@104	20.24	17.67	0.0585
77	30	40	656000	3840	CP-OFDM QPSK	53@26	23.72	21.15	0.1303
77	30	40	656000	3840	CP-OFDM QPSK	1@1	23.18	20.61	0.1151
77	30	40	656000	3840	CP-OFDM QPSK	1@104	23.18	20.61	0.1151

77	30	40	664000	3960	DFT-s-OFDM PI/2 BPSK	50@25	25.15	22.58	0.1811
77	30	40	664000	3960	DFT-s-OFDM PI/2 BPSK	1@1	24.64	22.07	0.1611
77	30	40	664000	3960	DFT-s-OFDM PI/2 BPSK	1@104	24.66	22.09	0.1618
77	30	40	664000	3960	DFT-s-OFDM QPSK	50@25	25.17	22.6	0.1820
77	30	40	664000	3960	DFT-s-OFDM QPSK	1@1	24.66	22.09	0.1618
77	30	40	664000	3960	DFT-s-OFDM QPSK	1@104	24.67	22.1	0.1622
77	30	40	664000	3960	DFT-s-OFDM 16 QAM	50@25	24.22	21.65	0.1462
77	30	40	664000	3960	DFT-s-OFDM 16 QAM	1@1	23.68	21.11	0.1291
77	30	40	664000	3960	DFT-s-OFDM 16 QAM	1@104	23.6	21.03	0.1268
77	30	40	664000	3960	DFT-s-OFDM 64 QAM	50@25	22.64	20.07	0.1016
77	30	40	664000	3960	DFT-s-OFDM 64 QAM	1@1	22.07	19.5	0.0891
77	30	40	664000	3960	DFT-s-OFDM 64 QAM	1@104	22.11	19.54	0.0899
77	30	40	664000	3960	DFT-s-OFDM 256 QAM	50@25	20.67	18.1	0.0646
77	30	40	664000	3960	DFT-s-OFDM 256 QAM	1@1	20.22	17.65	0.0582
77	30	40	664000	3960	DFT-s-OFDM 256 QAM	1@104	20.16	17.59	0.0574
77	30	40	664000	3960	CP-OFDM QPSK	53@26	23.61	21.04	0.1271
77	30	40	664000	3960	CP-OFDM QPSK	1@1	23.14	20.57	0.1140
77	30	40	664000	3960	CP-OFDM QPSK	1@104	23.19	20.62	0.1153
77	30	50	648334	3725.01	DFT-s-OFDM PI/2 BPSK	64@32	25.27	22.7	0.1862
77	30	50	648334	3725.01	DFT-s-OFDM PI/2 BPSK	1@1	24.8	22.23	0.1671
77	30	50	648334	3725.01	DFT-s-OFDM PI/2 BPSK	1@131	25.04	22.47	0.1766
77	30	50	648334	3725.01	DFT-s-OFDM QPSK	64@32	25.23	22.66	0.1845
77	30	50	648334	3725.01	DFT-s-OFDM QPSK	1@1	24.86	22.29	0.1694
77	30	50	648334	3725.01	DFT-s-OFDM	1@131	25.07	22.5	0.1778

					QPSK				
77	30	50	648334	3725.01	DFT-s-OFDM 16 QAM	64@32	24.27	21.7	0.1479
77	30	50	648334	3725.01	DFT-s-OFDM 16 QAM	1@1	23.78	21.21	0.1321
77	30	50	648334	3725.01	DFT-s-OFDM 16 QAM	1@131	23.98	21.41	0.1384
77	30	50	648334	3725.01	DFT-s-OFDM 64 QAM	64@32	22.75	20.18	0.1042
77	30	50	648334	3725.01	DFT-s-OFDM 64 QAM	1@1	22.3	19.73	0.0940
77	30	50	648334	3725.01	DFT-s-OFDM 64 QAM	1@131	22.49	19.92	0.0982
77	30	50	648334	3725.01	DFT-s-OFDM 256 QAM	64@32	20.81	18.24	0.0667
77	30	50	648334	3725.01	DFT-s-OFDM 256 QAM	1@1	20.47	17.9	0.0617
77	30	50	648334	3725.01	DFT-s-OFDM 256 QAM	1@131	20.64	18.07	0.0641
77	30	50	648334	3725.01	CP-OFDM QPSK	67@33	23.78	21.21	0.1321
77	30	50	648334	3725.01	CP-OFDM QPSK	1@1	23.41	20.84	0.1213
77	30	50	648334	3725.01	CP-OFDM QPSK	1@131	23.65	21.08	0.1282
77	30	50	656000	3840	DFT-s-OFDM PI/2 BPSK	64@32	25.27	22.7	0.1862
77	30	50	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	25	22.43	0.1750
77	30	50	656000	3840	DFT-s-OFDM PI/2 BPSK	1@131	24.91	22.34	0.1714
77	30	50	656000	3840	DFT-s-OFDM QPSK	64@32	25.28	22.71	0.1866
77	30	50	656000	3840	DFT-s-OFDM QPSK	1@1	24.99	22.42	0.1746
77	30	50	656000	3840	DFT-s-OFDM QPSK	1@131	24.95	22.38	0.1730
77	30	50	656000	3840	DFT-s-OFDM 16 QAM	64@32	24.29	21.72	0.1486
77	30	50	656000	3840	DFT-s-OFDM 16 QAM	1@1	23.98	21.41	0.1384
77	30	50	656000	3840	DFT-s-OFDM 16 QAM	1@131	23.85	21.28	0.1343
77	30	50	656000	3840	DFT-s-OFDM 64 QAM	64@32	22.77	20.2	0.1047
77	30	50	656000	3840	DFT-s-OFDM 64 QAM	1@1	22.6	20.03	0.1007

77	30	50	656000	3840	DFT-s-OFDM 64 QAM	1@131	22.42	19.85	0.0966
77	30	50	656000	3840	DFT-s-OFDM 256 QAM	64@32	20.84	18.27	0.0671
77	30	50	656000	3840	DFT-s-OFDM 256 QAM	1@1	20.69	18.12	0.0649
77	30	50	656000	3840	DFT-s-OFDM 256 QAM	1@131	20.35	17.78	0.0600
77	30	50	656000	3840	CP-OFDM QPSK	67@33	23.72	21.15	0.1303
77	30	50	656000	3840	CP-OFDM QPSK	1@1	23.57	21	0.1259
77	30	50	656000	3840	CP-OFDM QPSK	1@131	23.52	20.95	0.1245
77	30	50	663666	3954.99	DFT-s-OFDM PI/2 BPSK	64@32	25.18	22.61	0.1824
77	30	50	663666	3954.99	DFT-s-OFDM PI/2 BPSK	1@1	24.93	22.36	0.1722
77	30	50	663666	3954.99	DFT-s-OFDM PI/2 BPSK	1@131	24.89	22.32	0.1706
77	30	50	663666	3954.99	DFT-s-OFDM QPSK	64@32	25.2	22.63	0.1832
77	30	50	663666	3954.99	DFT-s-OFDM QPSK	1@1	25.02	22.45	0.1758
77	30	50	663666	3954.99	DFT-s-OFDM QPSK	1@131	24.92	22.35	0.1718
77	30	50	663666	3954.99	DFT-s-OFDM 16 QAM	64@32	24.21	21.64	0.1459
77	30	50	663666	3954.99	DFT-s-OFDM 16 QAM	1@1	23.97	21.4	0.1380
77	30	50	663666	3954.99	DFT-s-OFDM 16 QAM	1@131	23.89	21.32	0.1355
77	30	50	663666	3954.99	DFT-s-OFDM 64 QAM	64@32	22.67	20.1	0.1023
77	30	50	663666	3954.99	DFT-s-OFDM 64 QAM	1@1	22.42	19.85	0.0966
77	30	50	663666	3954.99	DFT-s-OFDM 64 QAM	1@131	22.36	19.79	0.0953
77	30	50	663666	3954.99	DFT-s-OFDM 256 QAM	64@32	20.71	18.14	0.0652
77	30	50	663666	3954.99	DFT-s-OFDM 256 QAM	1@1	20.56	17.99	0.0630
77	30	50	663666	3954.99	DFT-s-OFDM 256 QAM	1@131	20.36	17.79	0.0601
77	30	50	663666	3954.99	CP-OFDM QPSK	67@33	23.63	21.06	0.1276
77	30	50	663666	3954.99	CP-OFDM QPSK	1@1	23.51	20.94	0.1242

77	30	50	663666	3954.99	CP-OFDM QPSK	1@131	23.54	20.97	0.1250
77	30	60	648668	3730.02	DFT-s-OFDM PI/2 BPSK	81@40	25.29	22.72	0.1871
77	30	60	648668	3730.02	DFT-s-OFDM PI/2 BPSK	1@1	24.7	22.13	0.1633
77	30	60	648668	3730.02	DFT-s-OFDM PI/2 BPSK	1@160	24.91	22.34	0.1714
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	81@40	25.26	22.69	0.1858
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@1	24.73	22.16	0.1644
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@160	24.9	22.33	0.1710
77	30	60	648668	3730.02	DFT-s-OFDM 16 QAM	81@40	24.27	21.7	0.1479
77	30	60	648668	3730.02	DFT-s-OFDM 16 QAM	1@1	23.67	21.1	0.1288
77	30	60	648668	3730.02	DFT-s-OFDM 16 QAM	1@160	23.8	21.23	0.1327
77	30	60	648668	3730.02	DFT-s-OFDM 64 QAM	81@40	22.76	20.19	0.1045
77	30	60	648668	3730.02	DFT-s-OFDM 64 QAM	1@1	22.2	19.63	0.0918
77	30	60	648668	3730.02	DFT-s-OFDM 64 QAM	1@160	22.37	19.8	0.0955
77	30	60	648668	3730.02	DFT-s-OFDM 256 QAM	81@40	20.77	18.2	0.0661
77	30	60	648668	3730.02	DFT-s-OFDM 256 QAM	1@1	20.28	17.71	0.0590
77	30	60	648668	3730.02	DFT-s-OFDM 256 QAM	1@160	20.47	17.9	0.0617
77	30	60	648668	3730.02	CP-OFDM QPSK	81@40	23.78	21.21	0.1321
77	30	60	648668	3730.02	CP-OFDM QPSK	1@1	23.33	20.76	0.1191
77	30	60	648668	3730.02	CP-OFDM QPSK	1@160	23.63	21.06	0.1276
77	30	60	656000	3840	DFT-s-OFDM PI/2 BPSK	81@40	25.28	22.71	0.1866
77	30	60	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.9	22.33	0.1710
77	30	60	656000	3840	DFT-s-OFDM PI/2 BPSK	1@160	24.83	22.26	0.1683
77	30	60	656000	3840	DFT-s-OFDM QPSK	81@40	25.28	22.71	0.1866
77	30	60	656000	3840	DFT-s-OFDM QPSK	1@1	24.95	22.38	0.1730

77	30	60	656000	3840	DFT-s-OFDM QPSK	1@160	24.84	22.27	0.1687
77	30	60	656000	3840	DFT-s-OFDM 16 QAM	81@40	24.28	21.71	0.1483
77	30	60	656000	3840	DFT-s-OFDM 16 QAM	1@1	24.03	21.46	0.1400
77	30	60	656000	3840	DFT-s-OFDM 16 QAM	1@160	24	21.43	0.1390
77	30	60	656000	3840	DFT-s-OFDM 64 QAM	81@40	22.77	20.2	0.1047
77	30	60	656000	3840	DFT-s-OFDM 64 QAM	1@1	22.47	19.9	0.0977
77	30	60	656000	3840	DFT-s-OFDM 64 QAM	1@160	22.38	19.81	0.0957
77	30	60	656000	3840	DFT-s-OFDM 256 QAM	81@40	20.74	18.17	0.0656
77	30	60	656000	3840	DFT-s-OFDM 256 QAM	1@1	20.46	17.89	0.0615
77	30	60	656000	3840	DFT-s-OFDM 256 QAM	1@160	20.43	17.86	0.0611
77	30	60	656000	3840	CP-OFDM QPSK	81@40	23.78	21.21	0.1321
77	30	60	656000	3840	CP-OFDM QPSK	1@1	23.49	20.92	0.1236
77	30	60	656000	3840	CP-OFDM QPSK	1@160	23.57	21	0.1259
77	30	60	663332	3949.98	DFT-s-OFDM PI/2 BPSK	81@40	25.2	22.63	0.1832
77	30	60	663332	3949.98	DFT-s-OFDM PI/2 BPSK	1@1	24.9	22.33	0.1710
77	30	60	663332	3949.98	DFT-s-OFDM PI/2 BPSK	1@160	24.87	22.3	0.1698
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	81@40	25.2	22.63	0.1832
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	1@1	24.91	22.34	0.1714
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	1@160	24.89	22.32	0.1706
77	30	60	663332	3949.98	DFT-s-OFDM 16 QAM	81@40	24.23	21.66	0.1466
77	30	60	663332	3949.98	DFT-s-OFDM 16 QAM	1@1	23.84	21.27	0.1340
77	30	60	663332	3949.98	DFT-s-OFDM 16 QAM	1@160	23.92	21.35	0.1365
77	30	60	663332	3949.98	DFT-s-OFDM 64 QAM	81@40	22.68	20.11	0.1026
77	30	60	663332	3949.98	DFT-s-OFDM 64	1@1	22.42	19.85	0.0966

					QAM				
77	30	60	663332	3949.98	DFT-s-OFDM 64 QAM	1@160	22.27	19.7	0.0933
77	30	60	663332	3949.98	DFT-s-OFDM 256 QAM	81@40	20.7	18.13	0.0650
77	30	60	663332	3949.98	DFT-s-OFDM 256 QAM	1@1	20.53	17.96	0.0625
77	30	60	663332	3949.98	DFT-s-OFDM 256 QAM	1@160	20.49	17.92	0.0619
77	30	60	663332	3949.98	CP-OFDM QPSK	81@40	23.69	21.12	0.1294
77	30	60	663332	3949.98	CP-OFDM QPSK	1@1	23.45	20.88	0.1225
77	30	60	663332	3949.98	CP-OFDM QPSK	1@160	23.54	20.97	0.1250
77	30	80	649334	3740.01	DFT-s-OFDM PI/2 BPSK	108@54	25.37	22.8	0.1905
77	30	80	649334	3740.01	DFT-s-OFDM PI/2 BPSK	1@1	24.56	21.99	0.1581
77	30	80	649334	3740.01	DFT-s-OFDM PI/2 BPSK	1@215	24.82	22.25	0.1679
77	30	80	649334	3740.01	DFT-s-OFDM QPSK	108@54	25.35	22.78	0.1897
77	30	80	649334	3740.01	DFT-s-OFDM QPSK	1@1	24.62	22.05	0.1603
77	30	80	649334	3740.01	DFT-s-OFDM QPSK	1@215	24.85	22.28	0.1690
77	30	80	649334	3740.01	DFT-s-OFDM 16 QAM	108@54	24.38	21.81	0.1517
77	30	80	649334	3740.01	DFT-s-OFDM 16 QAM	1@1	23.63	21.06	0.1276
77	30	80	649334	3740.01	DFT-s-OFDM 16 QAM	1@215	23.82	21.25	0.1334
77	30	80	649334	3740.01	DFT-s-OFDM 64 QAM	108@54	22.83	20.26	0.1062
77	30	80	649334	3740.01	DFT-s-OFDM 64 QAM	1@1	22.18	19.61	0.0914
77	30	80	649334	3740.01	DFT-s-OFDM 64 QAM	1@215	22.36	19.79	0.0953
77	30	80	649334	3740.01	DFT-s-OFDM 256 QAM	108@54	20.86	18.29	0.0675
77	30	80	649334	3740.01	DFT-s-OFDM 256 QAM	1@1	20.18	17.61	0.0577
77	30	80	649334	3740.01	DFT-s-OFDM 256 QAM	1@215	20.47	17.9	0.0617
77	30	80	649334	3740.01	CP-OFDM QPSK	109@54	23.81	21.24	0.1330

77	30	80	649334	3740.01	CP-OFDM QPSK	1@1	23.13	20.56	0.1138
77	30	80	649334	3740.01	CP-OFDM QPSK	1@215	23.37	20.8	0.1202
77	30	80	656000	3840	DFT-s-OFDM PI/2 BPSK	108@54	25.27	22.7	0.1862
77	30	80	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.72	22.15	0.1641
77	30	80	656000	3840	DFT-s-OFDM PI/2 BPSK	1@215	24.57	22	0.1585
77	30	80	656000	3840	DFT-s-OFDM QPSK	108@54	25.27	22.7	0.1862
77	30	80	656000	3840	DFT-s-OFDM QPSK	1@1	24.86	22.29	0.1694
77	30	80	656000	3840	DFT-s-OFDM QPSK	1@215	24.7	22.13	0.1633
77	30	80	656000	3840	DFT-s-OFDM 16 QAM	108@54	24.31	21.74	0.1493
77	30	80	656000	3840	DFT-s-OFDM 16 QAM	1@1	23.79	21.22	0.1324
77	30	80	656000	3840	DFT-s-OFDM 16 QAM	1@215	23.55	20.98	0.1253
77	30	80	656000	3840	DFT-s-OFDM 64 QAM	108@54	22.75	20.18	0.1042
77	30	80	656000	3840	DFT-s-OFDM 64 QAM	1@1	22.27	19.7	0.0933
77	30	80	656000	3840	DFT-s-OFDM 64 QAM	1@215	22.13	19.56	0.0904
77	30	80	656000	3840	DFT-s-OFDM 256 QAM	108@54	20.77	18.2	0.0661
77	30	80	656000	3840	DFT-s-OFDM 256 QAM	1@1	20.4	17.83	0.0607
77	30	80	656000	3840	DFT-s-OFDM 256 QAM	1@215	20.25	17.68	0.0586
77	30	80	656000	3840	CP-OFDM QPSK	109@54	23.81	21.24	0.1330
77	30	80	656000	3840	CP-OFDM QPSK	1@1	23.3	20.73	0.1183
77	30	80	656000	3840	CP-OFDM QPSK	1@215	23.13	20.56	0.1138
77	30	80	662666	3939.99	DFT-s-OFDM PI/2 BPSK	108@54	25.32	22.75	0.1884
77	30	80	662666	3939.99	DFT-s-OFDM PI/2 BPSK	1@1	24.75	22.18	0.1652
77	30	80	662666	3939.99	DFT-s-OFDM PI/2 BPSK	1@215	24.74	22.17	0.1648
77	30	80	662666	3939.99	DFT-s-OFDM QPSK	108@54	25.31	22.74	0.1879

77	30	80	662666	3939.99	DFT-s-OFDM QPSK	1@1	24.84	22.27	0.1687
77	30	80	662666	3939.99	DFT-s-OFDM QPSK	1@215	24.8	22.23	0.1671
77	30	80	662666	3939.99	DFT-s-OFDM 16 QAM	108@54	24.31	21.74	0.1493
77	30	80	662666	3939.99	DFT-s-OFDM 16 QAM	1@1	23.81	21.24	0.1330
77	30	80	662666	3939.99	DFT-s-OFDM 16 QAM	1@215	23.73	21.16	0.1306
77	30	80	662666	3939.99	DFT-s-OFDM 64 QAM	108@54	22.82	20.25	0.1059
77	30	80	662666	3939.99	DFT-s-OFDM 64 QAM	1@1	22.34	19.77	0.0948
77	30	80	662666	3939.99	DFT-s-OFDM 64 QAM	1@215	22.35	19.78	0.0951
77	30	80	662666	3939.99	DFT-s-OFDM 256 QAM	108@54	20.81	18.24	0.0667
77	30	80	662666	3939.99	DFT-s-OFDM 256 QAM	1@1	20.37	17.8	0.0603
77	30	80	662666	3939.99	DFT-s-OFDM 256 QAM	1@215	20.46	17.89	0.0615
77	30	80	662666	3939.99	CP-OFDM QPSK	109@54	23.79	21.22	0.1324
77	30	80	662666	3939.99	CP-OFDM QPSK	1@1	23.2	20.63	0.1156
77	30	80	662666	3939.99	CP-OFDM QPSK	1@215	23.25	20.68	0.1169
77	30	90	649668	3745.02	DFT-s-OFDM PI/2 BPSK	120@60	25.34	22.77	0.1892
77	30	90	649668	3745.02	DFT-s-OFDM PI/2 BPSK	1@1	24.56	21.99	0.1581
77	30	90	649668	3745.02	DFT-s-OFDM PI/2 BPSK	1@243	24.79	22.22	0.1667
77	30	90	649668	3745.02	DFT-s-OFDM QPSK	120@60	25.34	22.77	0.1892
77	30	90	649668	3745.02	DFT-s-OFDM QPSK	1@1	24.53	21.96	0.1570
77	30	90	649668	3745.02	DFT-s-OFDM QPSK	1@243	24.82	22.25	0.1679
77	30	90	649668	3745.02	DFT-s-OFDM 16 QAM	120@60	24.33	21.76	0.1500
77	30	90	649668	3745.02	DFT-s-OFDM 16 QAM	1@1	23.44	20.87	0.1222
77	30	90	649668	3745.02	DFT-s-OFDM 16 QAM	1@243	23.72	21.15	0.1303
77	30	90	649668	3745.02	DFT-s-OFDM 64	120@60	22.82	20.25	0.1059

					QAM				
77	30	90	649668	3745.02	DFT-s-OFDM 64 QAM	1@1	22.04	19.47	0.0885
77	30	90	649668	3745.02	DFT-s-OFDM 64 QAM	1@243	22.31	19.74	0.0942
77	30	90	649668	3745.02	DFT-s-OFDM 256 QAM	120@60	20.87	18.3	0.0676
77	30	90	649668	3745.02	DFT-s-OFDM 256 QAM	1@1	20.12	17.55	0.0569
77	30	90	649668	3745.02	DFT-s-OFDM 256 QAM	1@243	20.31	17.74	0.0594
77	30	90	649668	3745.02	CP-OFDM QPSK	123@61	23.8	21.23	0.1327
77	30	90	649668	3745.02	CP-OFDM QPSK	1@1	23.07	20.5	0.1122
77	30	90	649668	3745.02	CP-OFDM QPSK	1@243	23.39	20.82	0.1208
77	30	90	656000	3840	DFT-s-OFDM PI/2 BPSK	120@60	25.27	22.7	0.1862
77	30	90	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.61	22.04	0.1600
77	30	90	656000	3840	DFT-s-OFDM PI/2 BPSK	1@243	24.46	21.89	0.1545
77	30	90	656000	3840	DFT-s-OFDM QPSK	120@60	25.29	22.72	0.1871
77	30	90	656000	3840	DFT-s-OFDM QPSK	1@1	24.61	22.04	0.1600
77	30	90	656000	3840	DFT-s-OFDM QPSK	1@243	24.52	21.95	0.1567
77	30	90	656000	3840	DFT-s-OFDM 16 QAM	120@60	24.28	21.71	0.1483
77	30	90	656000	3840	DFT-s-OFDM 16 QAM	1@1	23.5	20.93	0.1239
77	30	90	656000	3840	DFT-s-OFDM 16 QAM	1@243	23.41	20.84	0.1213
77	30	90	656000	3840	DFT-s-OFDM 64 QAM	120@60	22.76	20.19	0.1045
77	30	90	656000	3840	DFT-s-OFDM 64 QAM	1@1	22.13	19.56	0.0904
77	30	90	656000	3840	DFT-s-OFDM 64 QAM	1@243	21.97	19.4	0.0871
77	30	90	656000	3840	DFT-s-OFDM 256 QAM	120@60	20.78	18.21	0.0662
77	30	90	656000	3840	DFT-s-OFDM 256 QAM	1@1	20.14	17.57	0.0571
77	30	90	656000	3840	DFT-s-OFDM 256 QAM	1@243	19.98	17.41	0.0551

77	30	90	656000	3840	CP-OFDM QPSK	123@61	23.75	21.18	0.1312
77	30	90	656000	3840	CP-OFDM QPSK	1@1	23.18	20.61	0.1151
77	30	90	656000	3840	CP-OFDM QPSK	1@243	23.11	20.54	0.1132
77	30	90	662332	3934.98	DFT-s-OFDM PI/2 BPSK	120@60	25.2	22.63	0.1832
77	30	90	662332	3934.98	DFT-s-OFDM PI/2 BPSK	1@1	24.7	22.13	0.1633
77	30	90	662332	3934.98	DFT-s-OFDM PI/2 BPSK	1@243	24.54	21.97	0.1574
77	30	90	662332	3934.98	DFT-s-OFDM QPSK	120@60	25.2	22.63	0.1832
77	30	90	662332	3934.98	DFT-s-OFDM QPSK	1@1	24.78	22.21	0.1663
77	30	90	662332	3934.98	DFT-s-OFDM QPSK	1@243	24.6	22.03	0.1596
77	30	90	662332	3934.98	DFT-s-OFDM 16 QAM	120@60	24.24	21.67	0.1469
77	30	90	662332	3934.98	DFT-s-OFDM 16 QAM	1@1	23.77	21.2	0.1318
77	30	90	662332	3934.98	DFT-s-OFDM 16 QAM	1@243	23.51	20.94	0.1242
77	30	90	662332	3934.98	DFT-s-OFDM 64 QAM	120@60	22.7	20.13	0.1030
77	30	90	662332	3934.98	DFT-s-OFDM 64 QAM	1@1	22.27	19.7	0.0933
77	30	90	662332	3934.98	DFT-s-OFDM 64 QAM	1@243	22.1	19.53	0.0897
77	30	90	662332	3934.98	DFT-s-OFDM 256 QAM	120@60	20.72	18.15	0.0653
77	30	90	662332	3934.98	DFT-s-OFDM 256 QAM	1@1	20.32	17.75	0.0596
77	30	90	662332	3934.98	DFT-s-OFDM 256 QAM	1@243	20.21	17.64	0.0581
77	30	90	662332	3934.98	CP-OFDM QPSK	123@61	23.64	21.07	0.1279
77	30	90	662332	3934.98	CP-OFDM QPSK	1@1	23.23	20.66	0.1164
77	30	90	662332	3934.98	CP-OFDM QPSK	1@243	23.17	20.6	0.1148
77	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	135@67	25.32	22.75	0.1884
77	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	24.37	21.8	0.1514
77	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	1@271	24.68	22.11	0.1626

77	30	100	650000	3750	DFT-s-OFDM QPSK	135@67	25.38	22.81	0.1910
77	30	100	650000	3750	DFT-s-OFDM QPSK	1@1	24.4	21.83	0.1524
77	30	100	650000	3750	DFT-s-OFDM QPSK	1@271	24.74	22.17	0.1648
77	30	100	650000	3750	DFT-s-OFDM 16 QAM	135@67	24.35	21.78	0.1507
77	30	100	650000	3750	DFT-s-OFDM 16 QAM	1@1	23.35	20.78	0.1197
77	30	100	650000	3750	DFT-s-OFDM 16 QAM	1@271	23.67	21.1	0.1288
77	30	100	650000	3750	DFT-s-OFDM 64 QAM	135@67	22.81	20.24	0.1057
77	30	100	650000	3750	DFT-s-OFDM 64 QAM	1@1	21.95	19.38	0.0867
77	30	100	650000	3750	DFT-s-OFDM 64 QAM	1@271	22.21	19.64	0.0920
77	30	100	650000	3750	DFT-s-OFDM 256 QAM	135@67	20.83	18.26	0.0670
77	30	100	650000	3750	DFT-s-OFDM 256 QAM	1@1	20.03	17.46	0.0557
77	30	100	650000	3750	DFT-s-OFDM 256 QAM	1@271	20.28	17.71	0.0590
77	30	100	650000	3750	CP-OFDM QPSK	137@68	23.8	21.23	0.1327
77	30	100	650000	3750	CP-OFDM QPSK	1@1	22.92	20.35	0.1084
77	30	100	650000	3750	CP-OFDM QPSK	1@271	23.28	20.71	0.1178
77	30	100	656000	3840	DFT-s-OFDM PI/2 BPSK	135@67	25.22	22.65	0.1841
77	30	100	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.47	21.9	0.1549
77	30	100	656000	3840	DFT-s-OFDM PI/2 BPSK	1@271	24.28	21.71	0.1483
77	30	100	656000	3840	DFT-s-OFDM QPSK	135@67	25.23	22.66	0.1845
77	30	100	656000	3840	DFT-s-OFDM QPSK	1@1	24.49	21.92	0.1556
77	30	100	656000	3840	DFT-s-OFDM QPSK	1@271	24.36	21.79	0.1510
77	30	100	656000	3840	DFT-s-OFDM 16 QAM	135@67	24.25	21.68	0.1472
77	30	100	656000	3840	DFT-s-OFDM 16 QAM	1@1	23.44	20.87	0.1222
77	30	100	656000	3840	DFT-s-OFDM 16	1@271	23.34	20.77	0.1194

					QAM				
77	30	100	656000	3840	DFT-s-OFDM 64 QAM	135@67	22.73	20.16	0.1038
77	30	100	656000	3840	DFT-s-OFDM 64 QAM	1@1	22.06	19.49	0.0889
77	30	100	656000	3840	DFT-s-OFDM 64 QAM	1@271	21.82	19.25	0.0841
77	30	100	656000	3840	DFT-s-OFDM 256 QAM	135@67	20.72	18.15	0.0653
77	30	100	656000	3840	DFT-s-OFDM 256 QAM	1@1	20.08	17.51	0.0564
77	30	100	656000	3840	DFT-s-OFDM 256 QAM	1@271	19.9	17.33	0.0541
77	30	100	656000	3840	CP-OFDM QPSK	137@68	23.72	21.15	0.1303
77	30	100	656000	3840	CP-OFDM QPSK	1@1	23.05	20.48	0.1117
77	30	100	656000	3840	CP-OFDM QPSK	1@271	22.88	20.31	0.1074
77	30	100	662000	3930	DFT-s-OFDM PI/2 BPSK	135@67	25.19	22.62	0.1828
77	30	100	662000	3930	DFT-s-OFDM PI/2 BPSK	1@1	24.55	21.98	0.1578
77	30	100	662000	3930	DFT-s-OFDM PI/2 BPSK	1@271	24.4	21.83	0.1524
77	30	100	662000	3930	DFT-s-OFDM QPSK	135@67	25.19	22.62	0.1828
77	30	100	662000	3930	DFT-s-OFDM QPSK	1@1	24.61	22.04	0.1600
77	30	100	662000	3930	DFT-s-OFDM QPSK	1@271	24.48	21.91	0.1552
77	30	100	662000	3930	DFT-s-OFDM 16 QAM	135@67	24.19	21.62	0.1452
77	30	100	662000	3930	DFT-s-OFDM 16 QAM	1@1	23.59	21.02	0.1265
77	30	100	662000	3930	DFT-s-OFDM 16 QAM	1@271	23.45	20.88	0.1225
77	30	100	662000	3930	DFT-s-OFDM 64 QAM	135@67	22.68	20.11	0.1026
77	30	100	662000	3930	DFT-s-OFDM 64 QAM	1@1	22.13	19.56	0.0904
77	30	100	662000	3930	DFT-s-OFDM 64 QAM	1@271	21.98	19.41	0.0873
77	30	100	662000	3930	DFT-s-OFDM 256 QAM	135@67	20.68	18.11	0.0647
77	30	100	662000	3930	DFT-s-OFDM 256 QAM	1@1	20.2	17.63	0.0579

77	30	100	662000	3930	DFT-s-OFDM 256 QAM	1@271	20	17.43	0.0553
77	30	100	662000	3930	CP-OFDM QPSK	137@68	23.64	21.07	0.1279
77	30	100	662000	3930	CP-OFDM QPSK	1@1	23.15	20.58	0.1143
77	30	100	662000	3930	CP-OFDM QPSK	1@271	22.97	20.4	0.1096

Frequency Stability

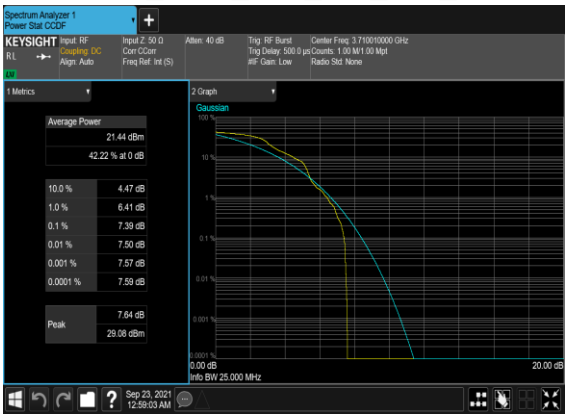
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00195	**PASS**	NV
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00251	**PASS**	LV
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00364	**PASS**	HV
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00157	**PASS**	-30℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00354	**PASS**	-20℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00388	**PASS**	-10℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00369	**PASS**	0℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00348	**PASS**	10℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00547	**PASS**	20℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00368	**PASS**	30℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00482	**PASS**	40℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00487	**PASS**	50℃

Peak to Average Radio

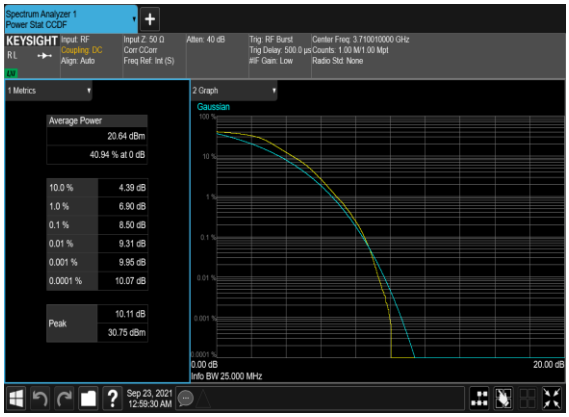
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
77	30	20	647334	3710.01	DFT-s-OFDM PI/2 BPSK	50@0	7.31	13	**PASS**
77	30	20	647334	3710.01	DFT-s-OFDM PI/2 BPSK	1@0	7.39	13	**PASS**
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	50@0	8.5	13	**PASS**
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@0	7.81	13	**PASS**
77	30	20	656000	3840.0	DFT-s-OFDM PI/2 BPSK	50@0	7.19	13	**PASS**
77	30	20	656000	3840.0	DFT-s-OFDM PI/2 BPSK	1@0	7.36	13	**PASS**
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	8.42	13	**PASS**
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	1@0	8.81	13	**PASS**
77	30	20	664666	3969.99	DFT-s-OFDM PI/2 BPSK	50@0	7.18	13	**PASS**
77	30	20	664666	3969.99	DFT-s-OFDM PI/2 BPSK	1@0	7.39	13	**PASS**
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	50@0	8.39	13	**PASS**
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	1@0	8.77	13	**PASS**

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

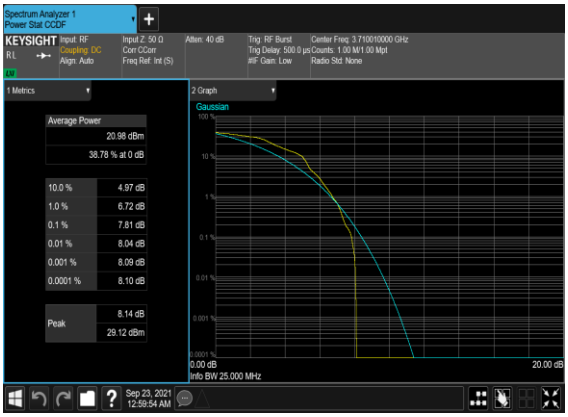
N77(20M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_Low_CH



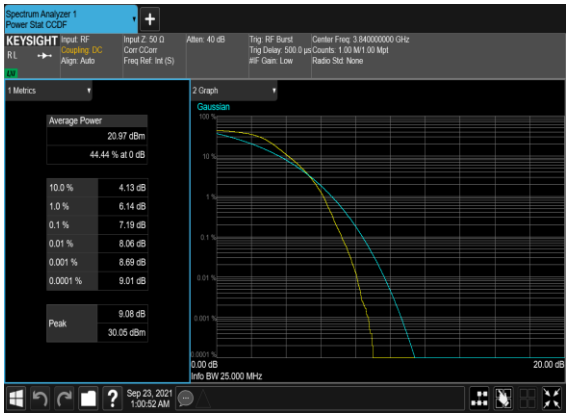
N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



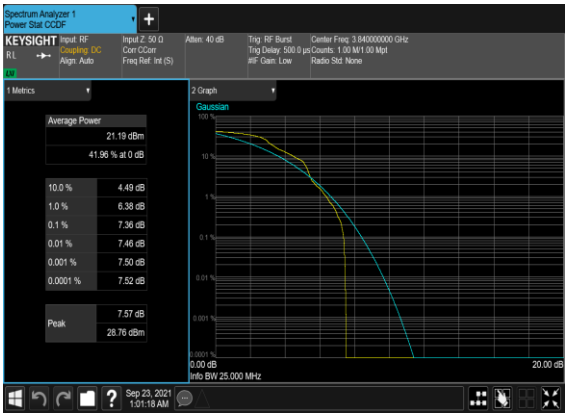
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



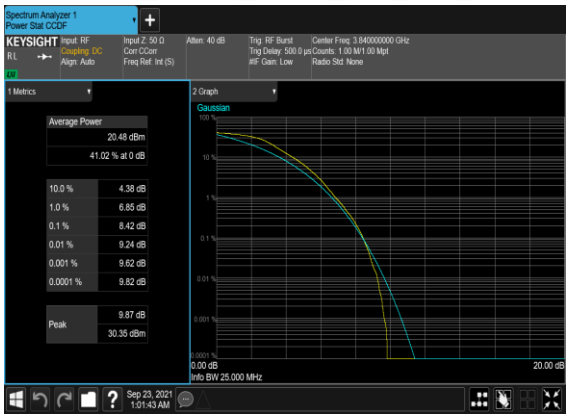
N77(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



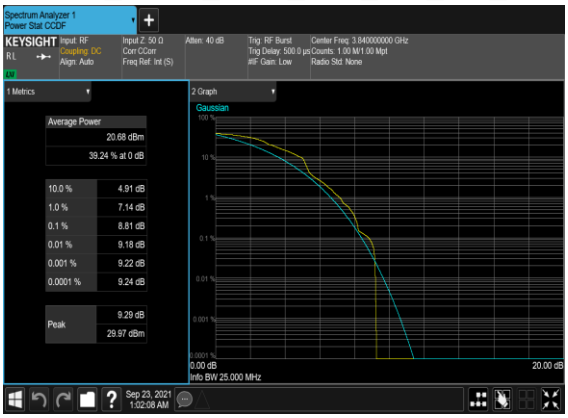
N77(20M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_Mid_CH



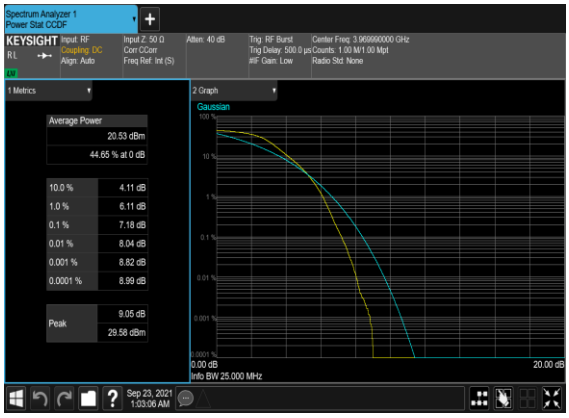
N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



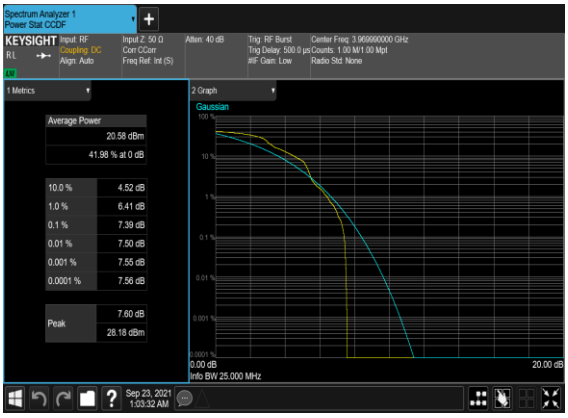
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



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

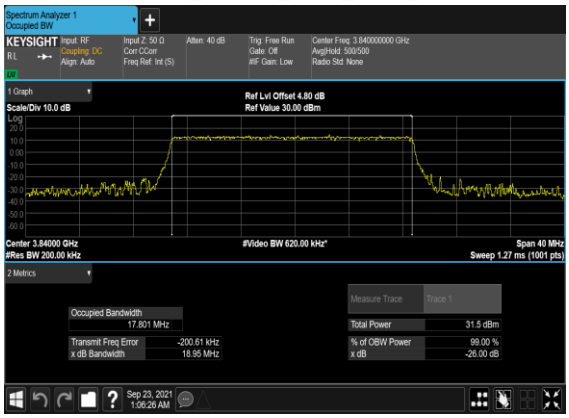
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH

Occupied Bandwidth

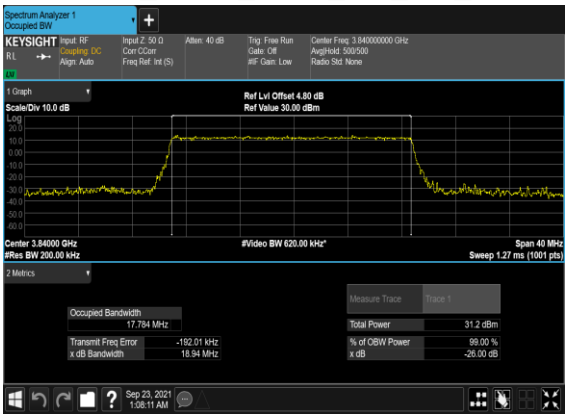
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB OBW (MHz)
77	30	20	656000	3840.0	DFT-s-OFDM PI/2 BPSK	50@0	17.801	18.95
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	17.784	18.94
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	18.17	19.16
77	30	20	656000	3840.0	CP-OFDM 16 QAM	51@0	18.163	19.04
77	30	20	656000	3840.0	CP-OFDM 64 QAM	51@0	18.181	19.28
77	30	20	656000	3840.0	CP-OFDM 256 QAM	51@0	18.202	19.41
77	30	40	656000	3840.0	DFT-s-OFDM PI/2 BPSK	100@0	35.688	37.48
77	30	40	656000	3840.0	DFT-s-OFDM QPSK	100@0	35.699	37.49
77	30	40	656000	3840.0	CP-OFDM QPSK	106@0	37.827	39.37
77	30	40	656000	3840.0	CP-OFDM 16 QAM	106@0	37.79	39.25
77	30	40	656000	3840.0	CP-OFDM 64 QAM	106@0	37.812	39.64
77	30	40	656000	3840.0	CP-OFDM 256 QAM	106@0	37.787	39.38
77	30	50	656000	3840.0	DFT-s-OFDM PI/2 BPSK	128@0	45.696	47.44
77	30	50	656000	3840.0	DFT-s-OFDM QPSK	128@0	45.7	47.85
77	30	50	656000	3840.0	CP-OFDM QPSK	133@0	47.491	49.61
77	30	50	656000	3840.0	CP-OFDM 16 QAM	133@0	47.429	49.2
77	30	50	656000	3840.0	CP-OFDM 64 QAM	133@0	47.434	49.67
77	30	50	656000	3840.0	CP-OFDM 256 QAM	133@0	47.469	49.43
77	30	60	656000	3840.0	DFT-s-OFDM PI/2 BPSK	162@0	57.845	60.18
77	30	60	656000	3840.0	DFT-s-OFDM QPSK	162@0	57.802	59.96
77	30	60	656000	3840.0	CP-OFDM QPSK	162@0	57.892	60.11
77	30	60	656000	3840.0	CP-OFDM 16 QAM	162@0	57.823	60.18
77	30	60	656000	3840.0	CP-OFDM 64 QAM	162@0	57.874	59.82
77	30	60	656000	3840.0	CP-OFDM 256 QAM	162@0	57.712	59.89

77	30	80	656000	3840.0	DFT-s-OFDM PI/2 BPSK	216@0	77.121	79.78
77	30	80	656000	3840.0	DFT-s-OFDM QPSK	216@0	77.061	79.73
77	30	80	656000	3840.0	CP-OFDM QPSK	217@0	77.383	80.03
77	30	80	656000	3840.0	CP-OFDM 16 QAM	217@0	77.46	80.13
77	30	80	656000	3840.0	CP-OFDM 64 QAM	217@0	77.472	80.02
77	30	80	656000	3840.0	CP-OFDM 256 QAM	217@0	77.406	80.11
77	30	90	656000	3840.0	DFT-s-OFDM PI/2 BPSK	240@0	85.575	88.68
77	30	90	656000	3840.0	DFT-s-OFDM QPSK	240@0	85.627	88.41
77	30	90	656000	3840.0	CP-OFDM QPSK	245@0	87.303	90.24
77	30	90	656000	3840.0	CP-OFDM 16 QAM	245@0	87.392	90.48
77	30	90	656000	3840.0	CP-OFDM 64 QAM	245@0	87.368	90.37
77	30	90	656000	3840.0	CP-OFDM 256 QAM	245@0	87.474	90.25
77	30	100	656000	3840.0	DFT-s-OFDM PI/2 BPSK	270@0	96.475	99.59
77	30	100	656000	3840.0	DFT-s-OFDM QPSK	270@0	96.332	99.5
77	30	100	656000	3840.0	CP-OFDM QPSK	273@0	97.251	100.6
77	30	100	656000	3840.0	CP-OFDM 16 QAM	273@0	97.098	100.5
77	30	100	656000	3840.0	CP-OFDM 64 QAM	273@0	97.177	101.0
77	30	100	656000	3840.0	CP-OFDM 256 QAM	273@0	97.405	100.4

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



N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

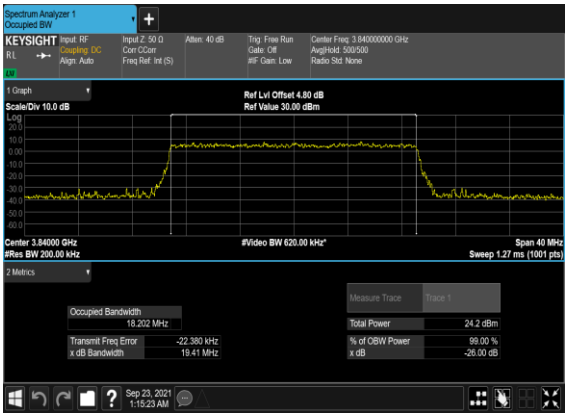


N77(20M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

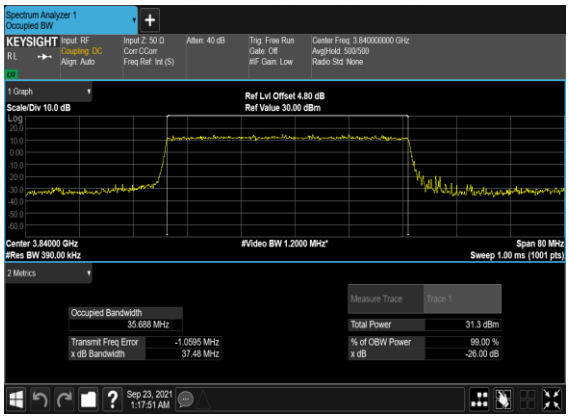
N77(20M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

N77(20M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

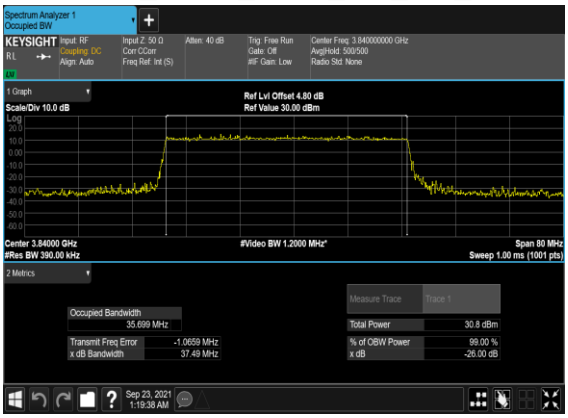
N77(20M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



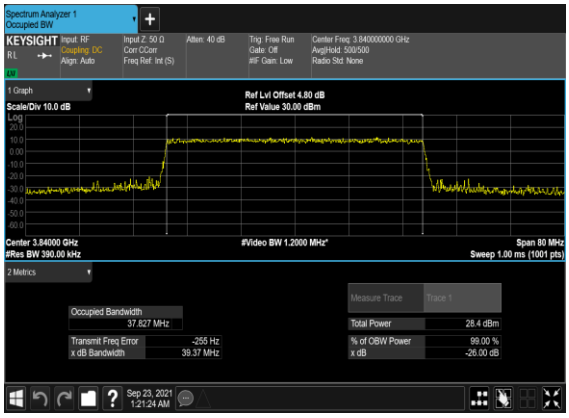
N77(40M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



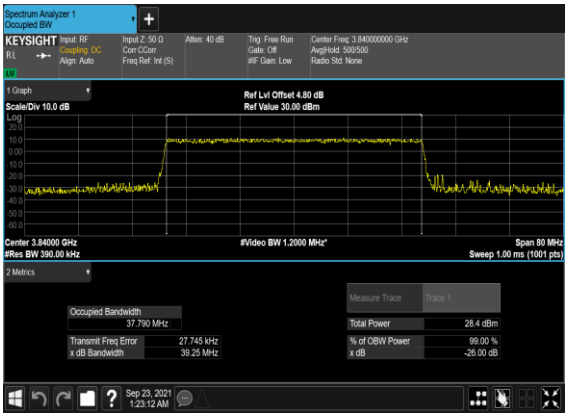
N77(40M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



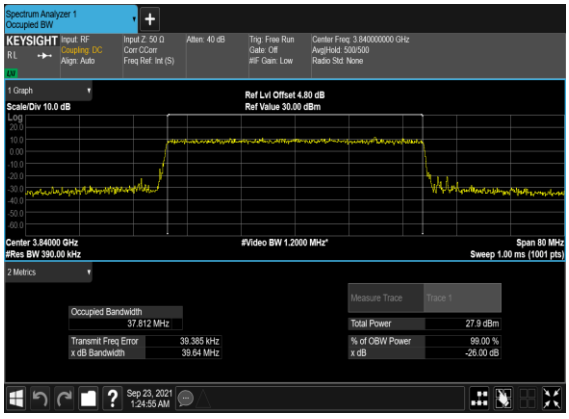
N77(40M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



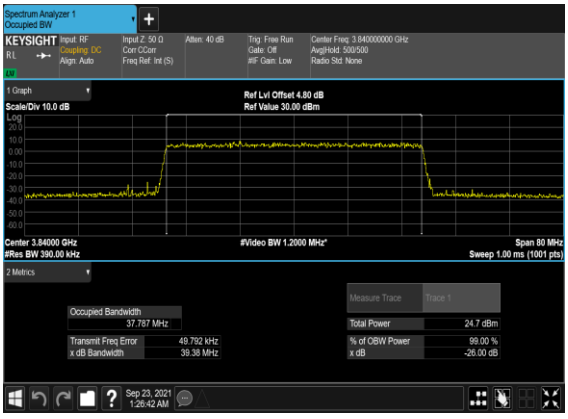
N77(40M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



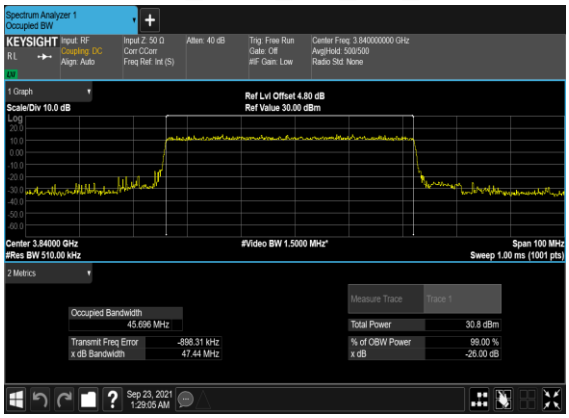
N77(40M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



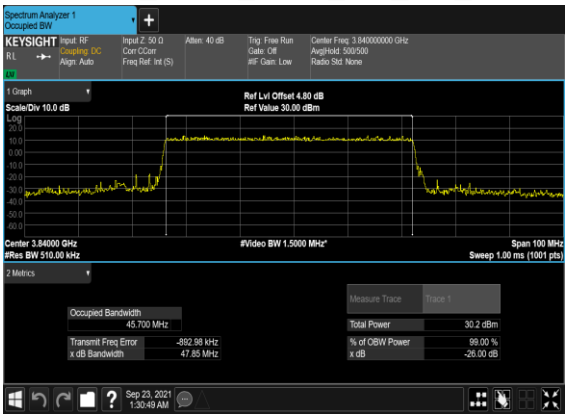
N77(40M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



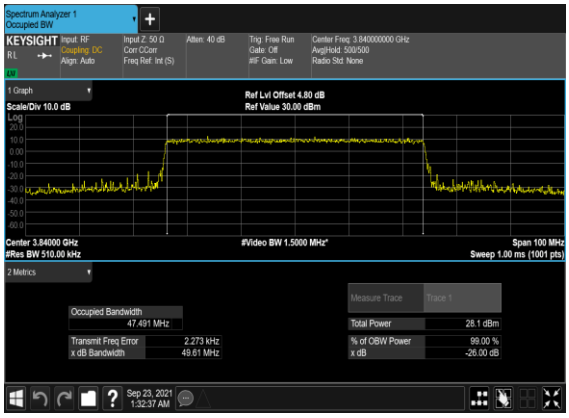
N77(50M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



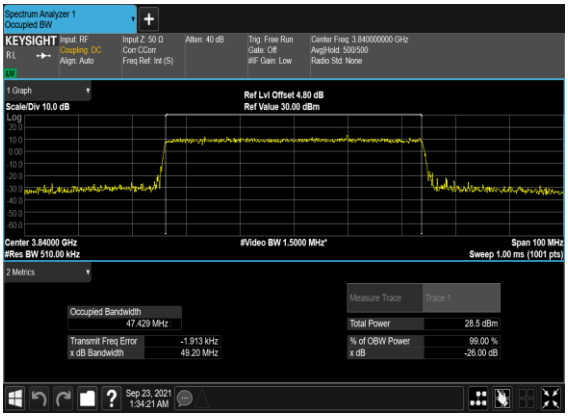
N77(50M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



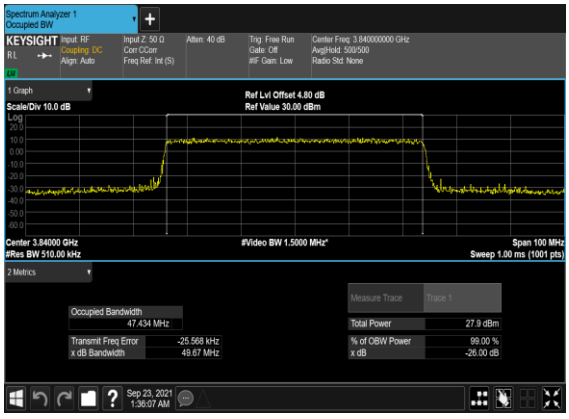
N77(50M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



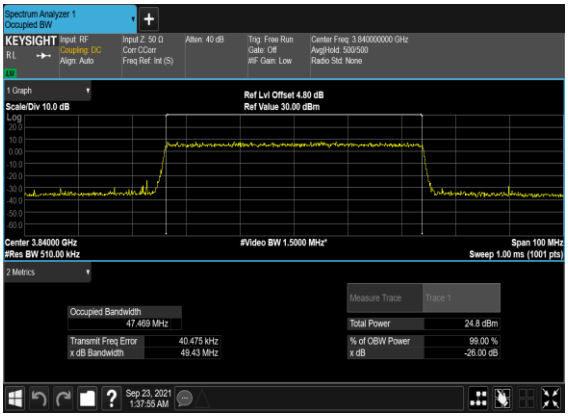
N77(50M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



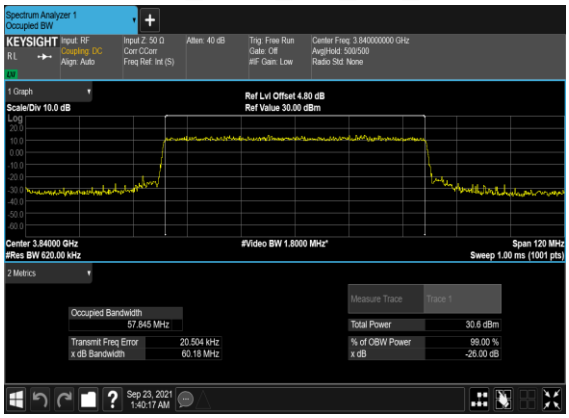
N77(50M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



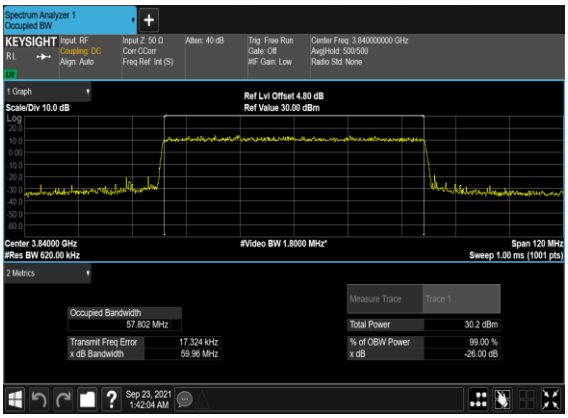
N77(50M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



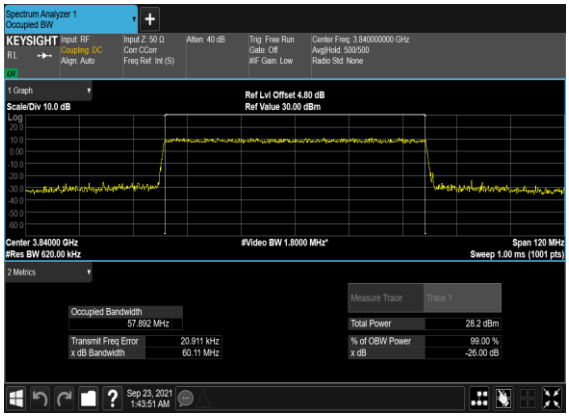
N77(60M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



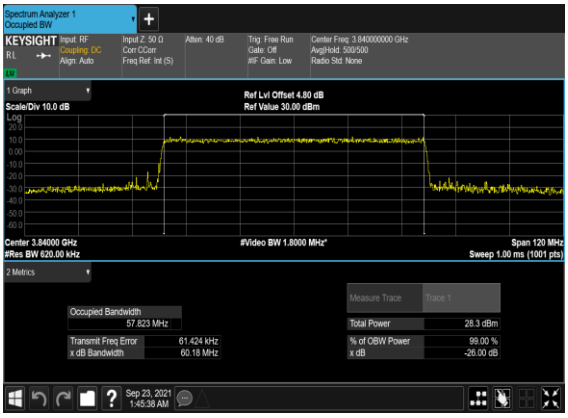
N77(60M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



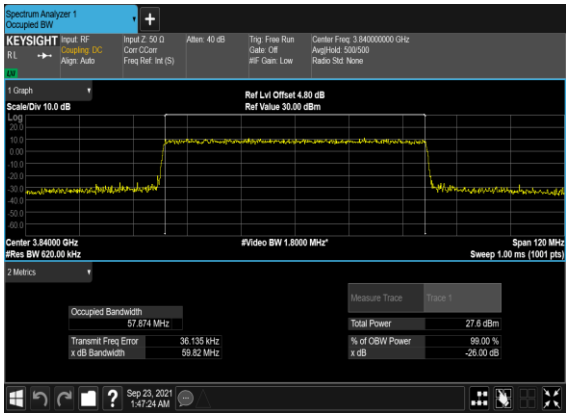
N77(60M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



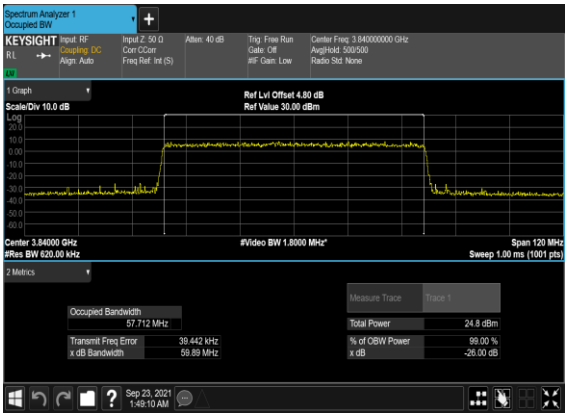
N77(60M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N77(60M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

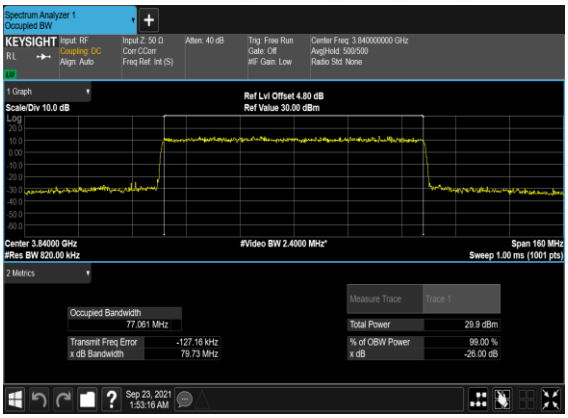


N77(60M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

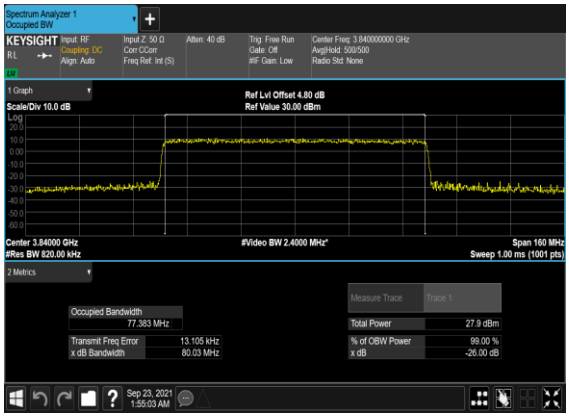


N77(80M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH

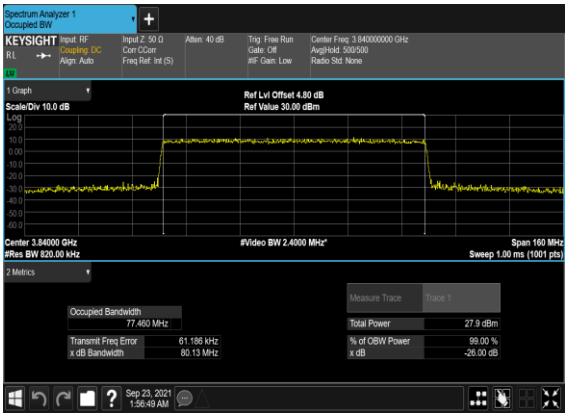
N77(80M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



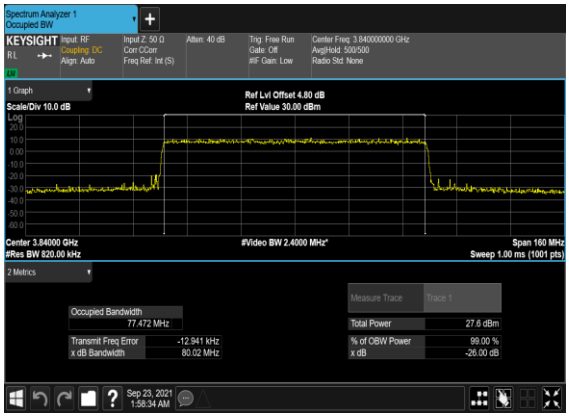
N77(80M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



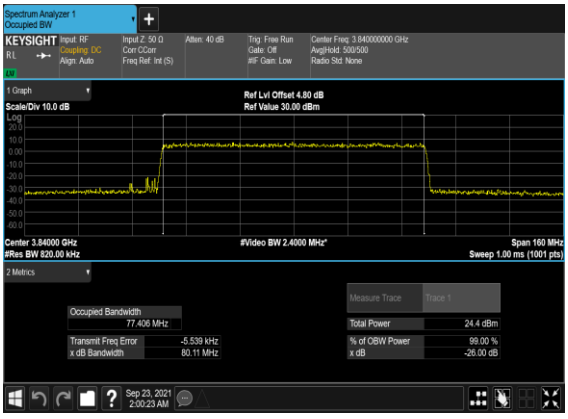
N77(80M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N77(80M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



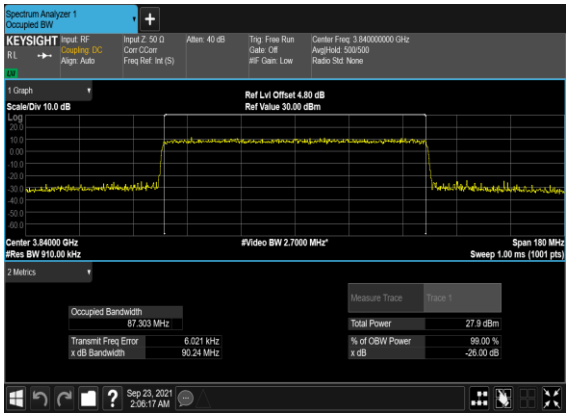
N77(80M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



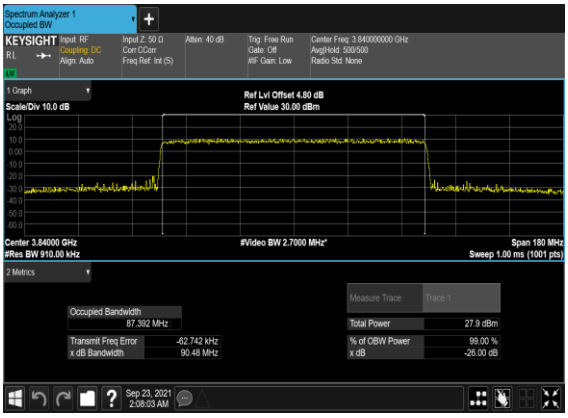
N77(90M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH

N77(90M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

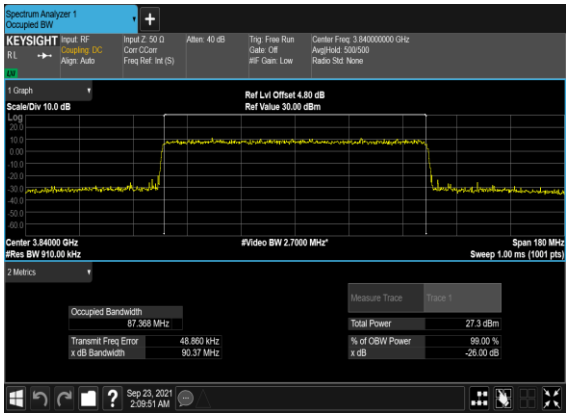
N77(90M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



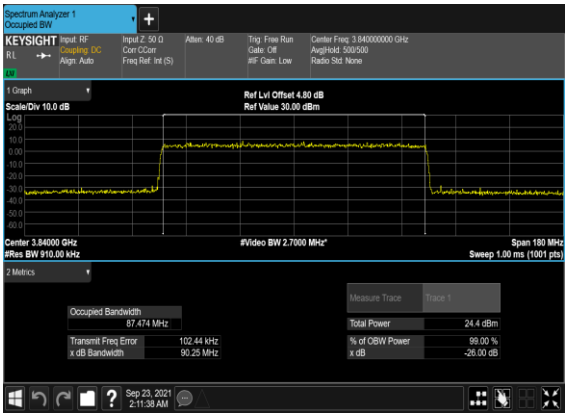
N77(90M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



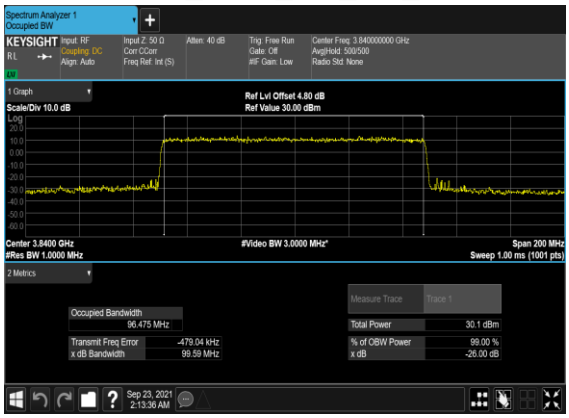
N77(90M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



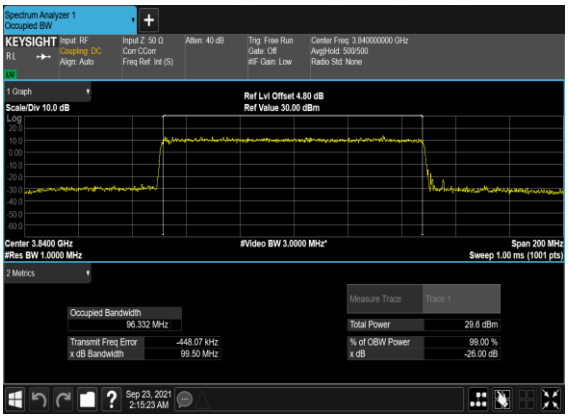
N77(90M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



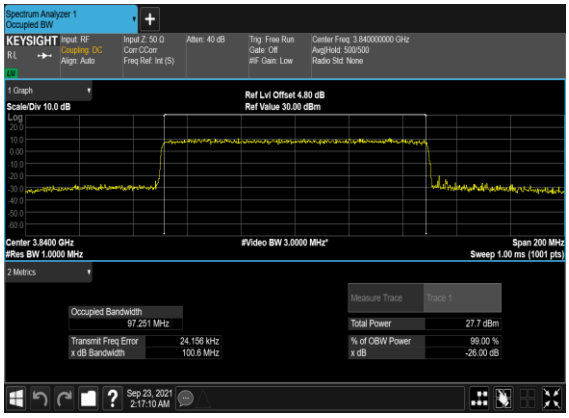
N77(100M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



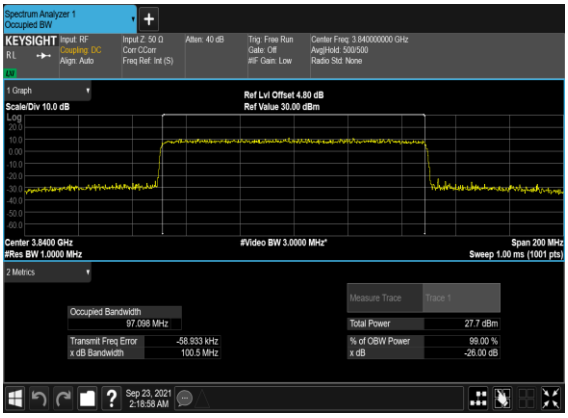
N77(100M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



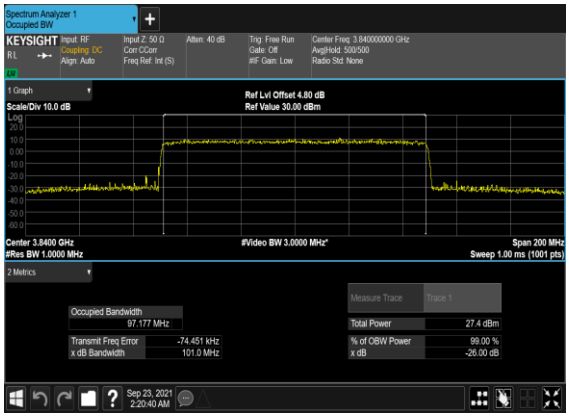
N77(100M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



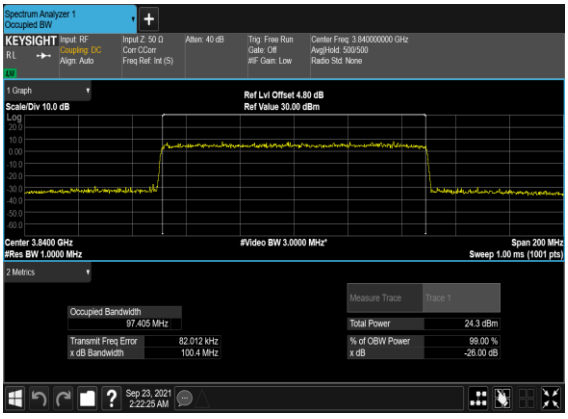
N77(100M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N77(100M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



N77(100M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



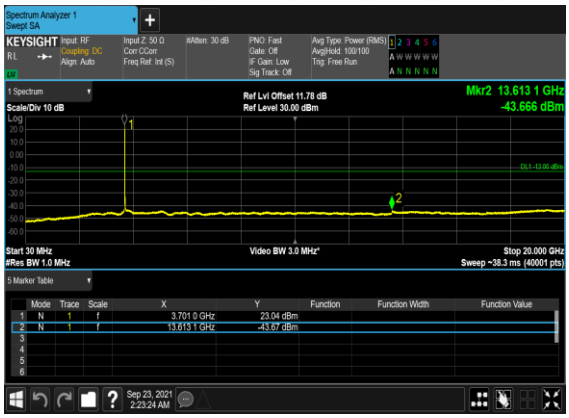
Conducted Spurious Emissions

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

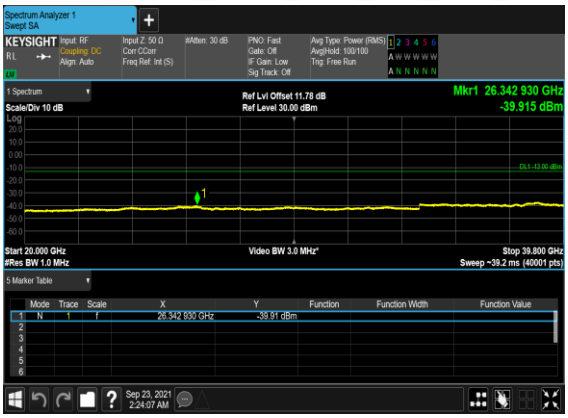
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	60	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	60	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph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

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

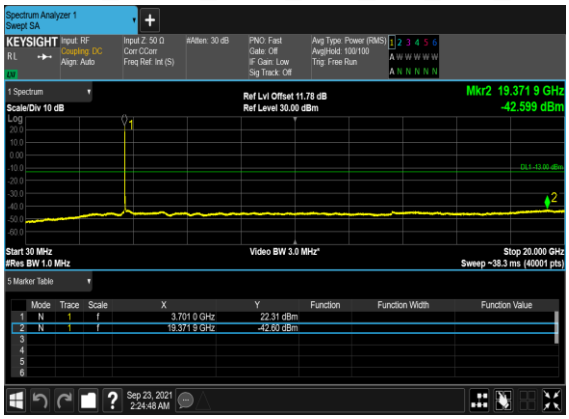
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



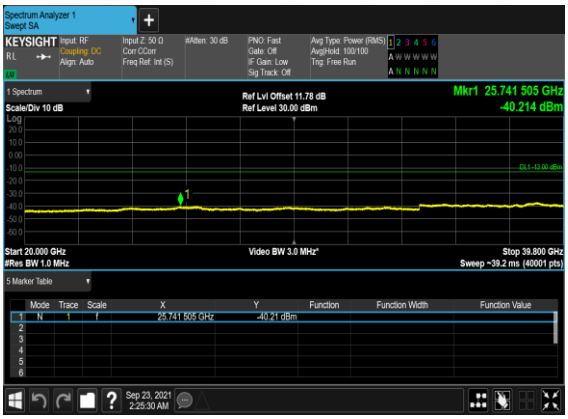
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



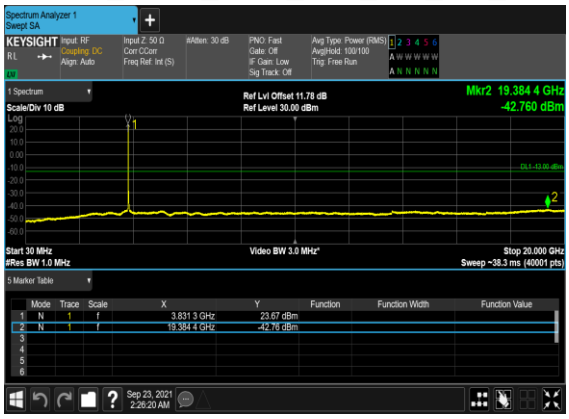
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



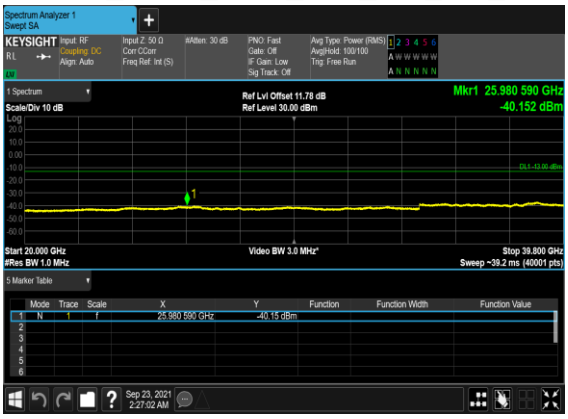
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



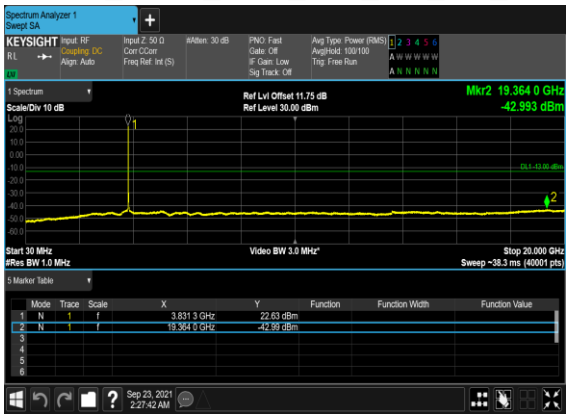
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



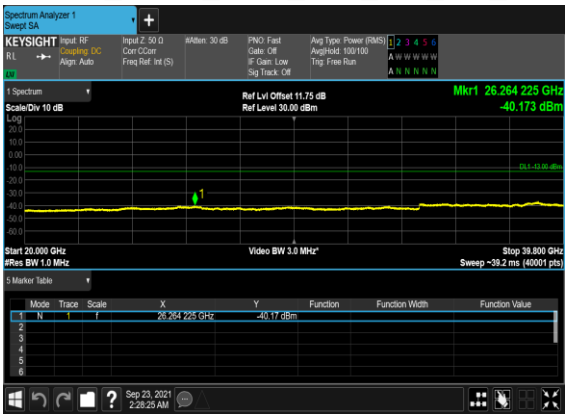
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



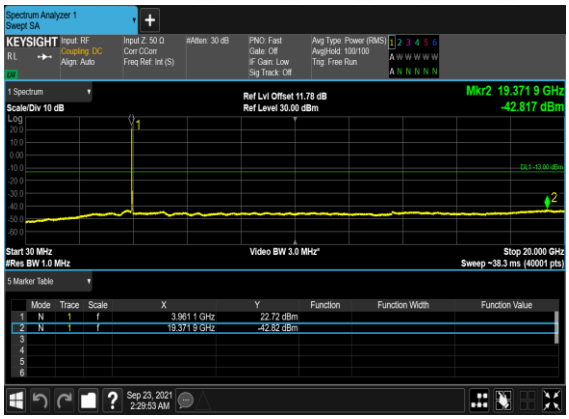
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



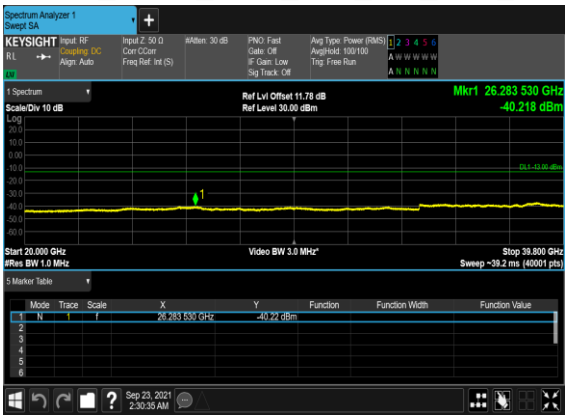
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



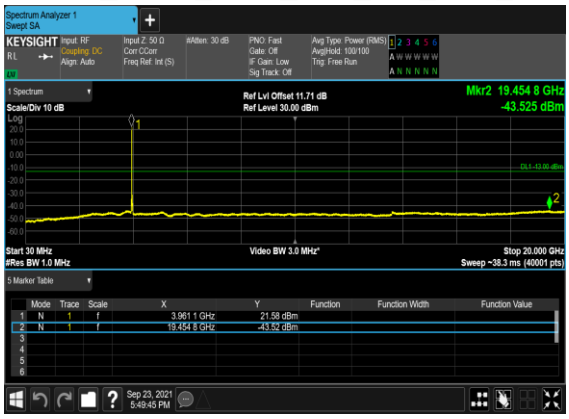
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



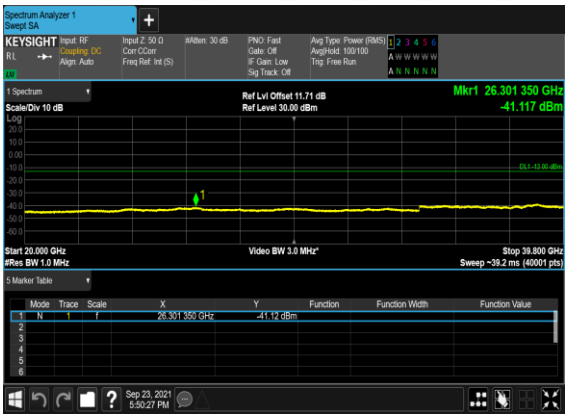
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



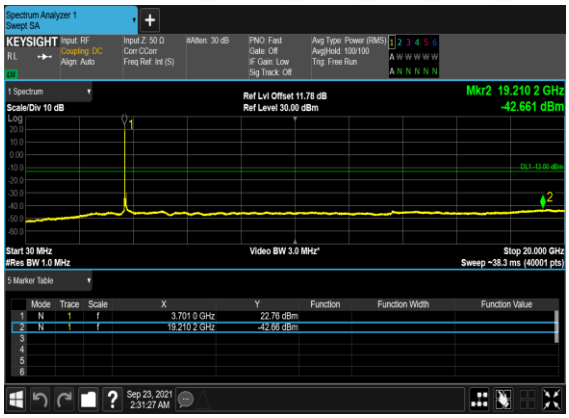
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



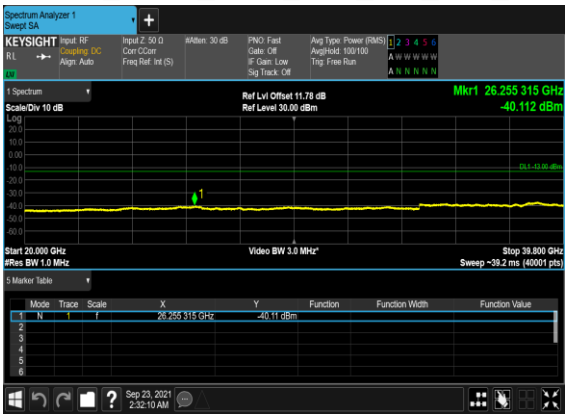
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



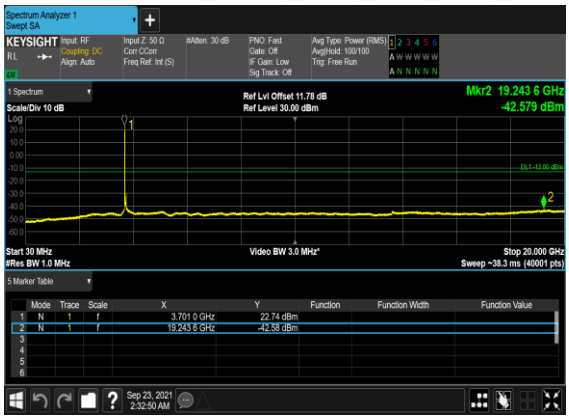
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



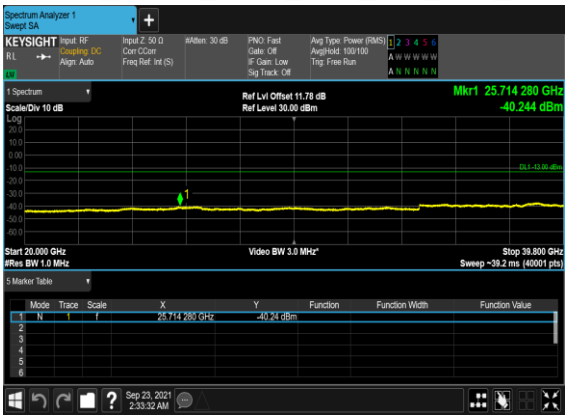
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



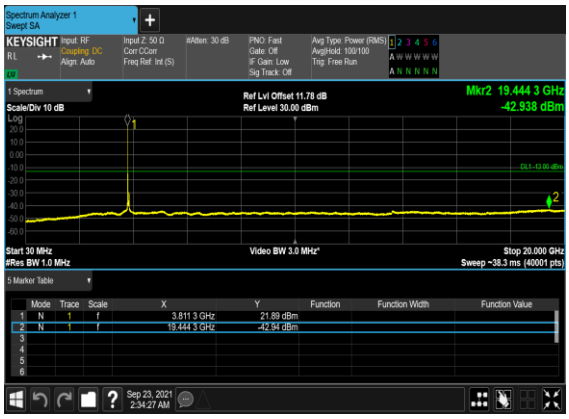
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



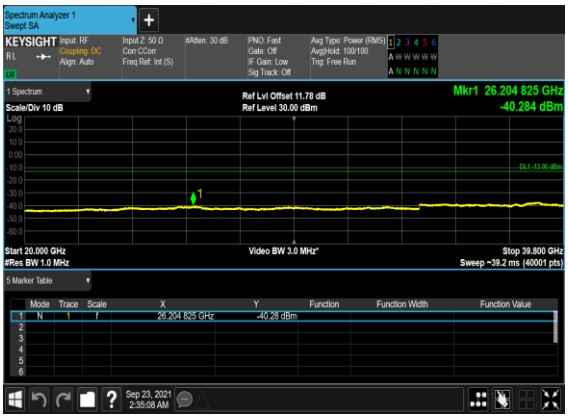
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



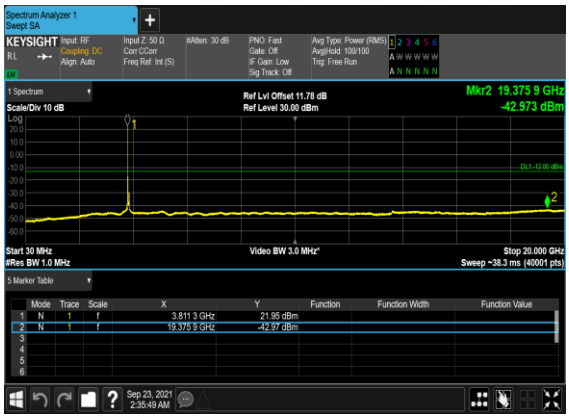
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



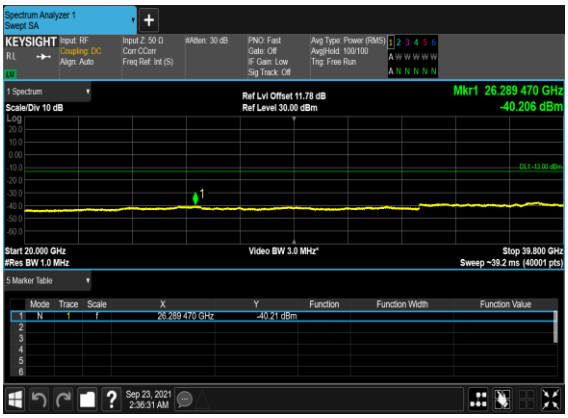
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



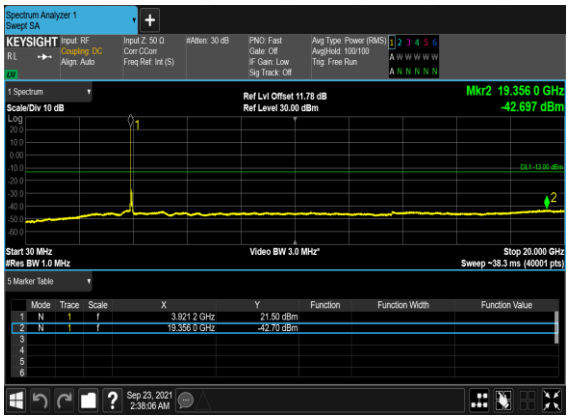
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



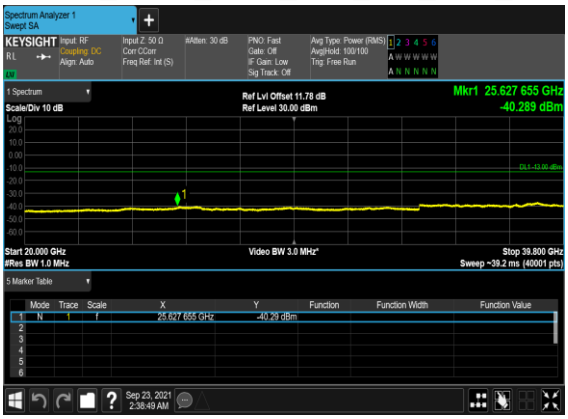
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



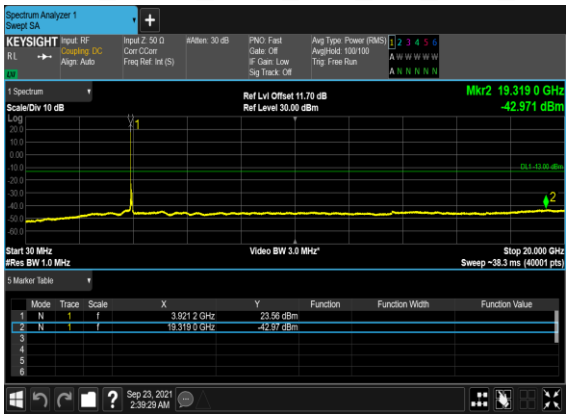
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



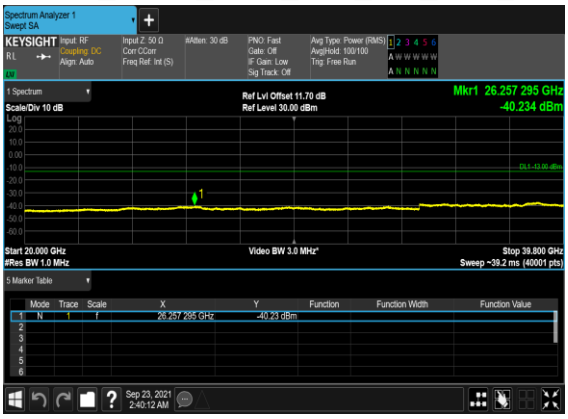
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



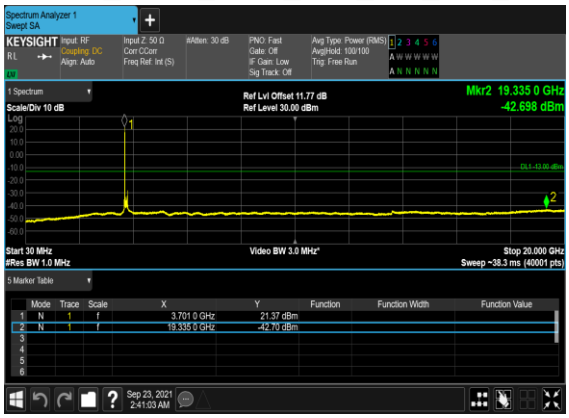
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



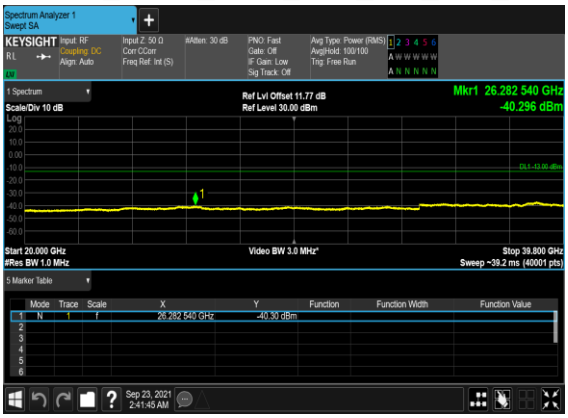
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



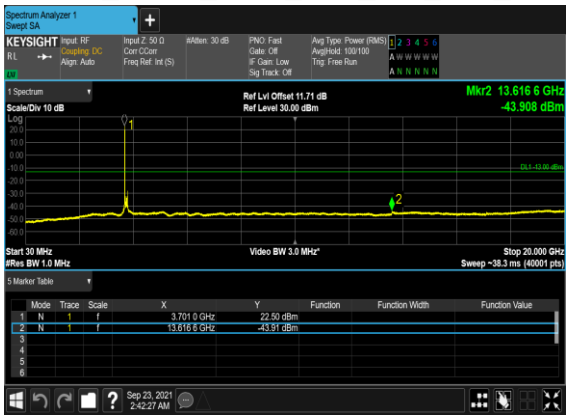
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



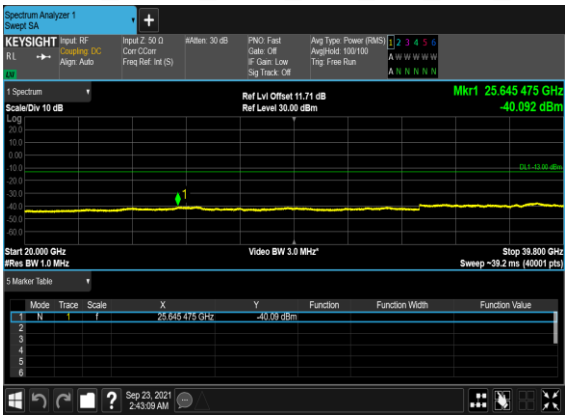
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



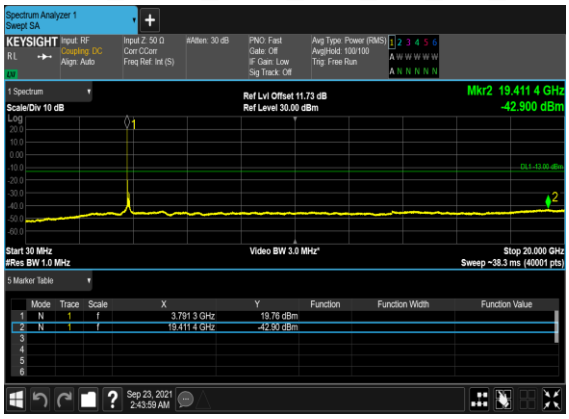
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



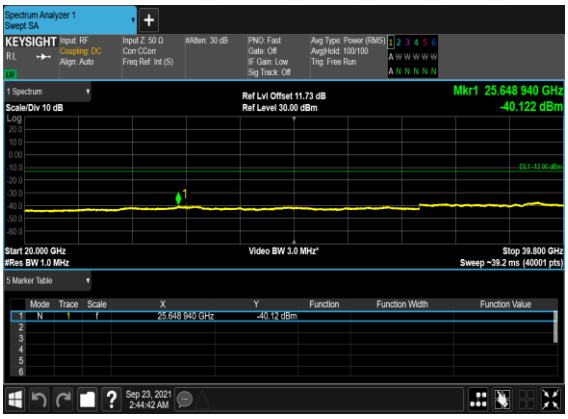
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



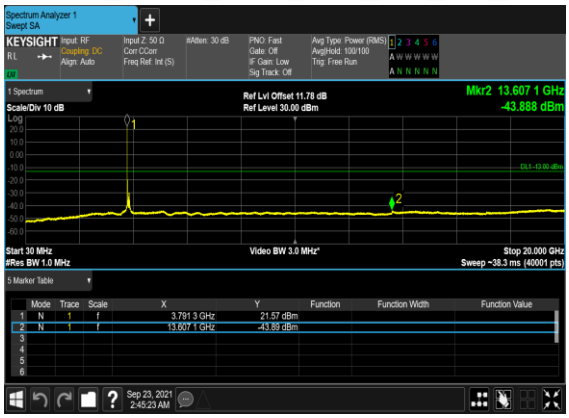
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



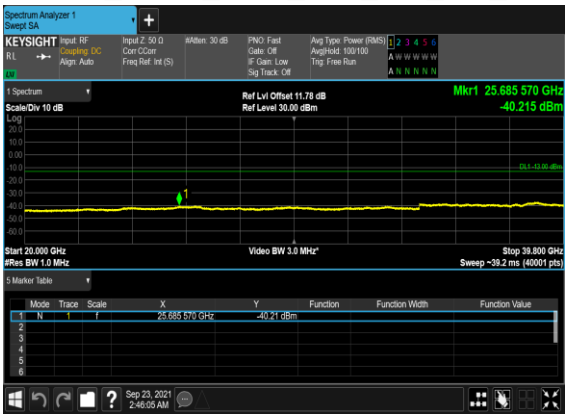
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



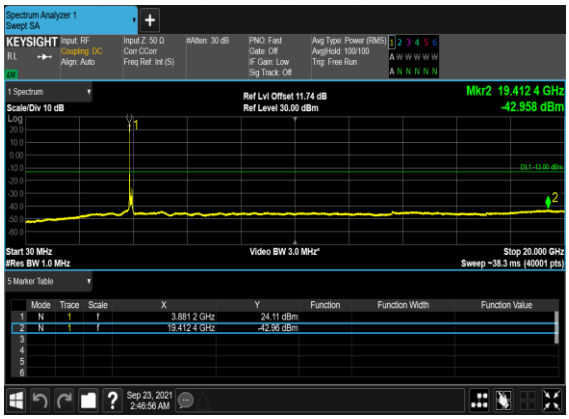
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



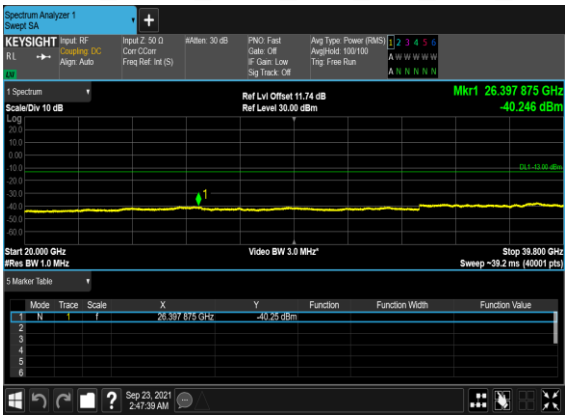
N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



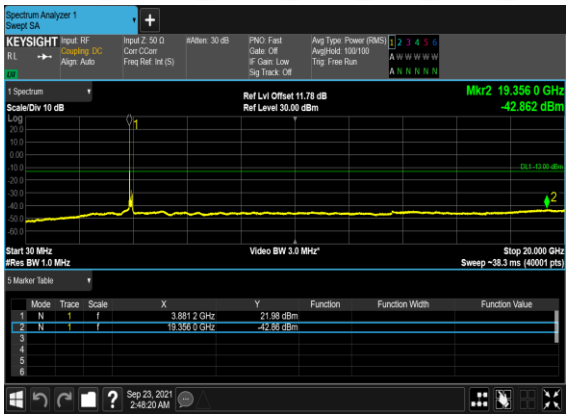
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



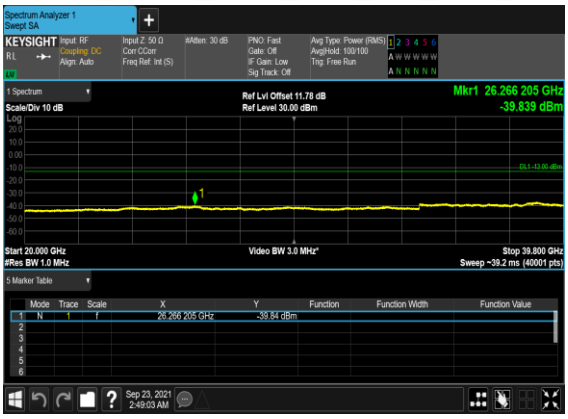
N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



Conducted Band Edge

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

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