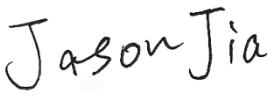
FCC RF Test Report

APPLICANT	:	Xiaomi Communications Co., Ltd.
EQUIPMENT	:	Mobile Phone
BRAND NAME	:	XIAOMI
MODEL NAME	:	2109119DG
FCC ID	:	2AFZZ119DG
STANDARD	:	47 CFR Part 2, 27(O)
CLASSIFICATION	:	PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S)	:	Jul. 10, 2021 ~ Jul. 21, 2021

We, Sporton International (Kunshan) Inc., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

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

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



Reviewed by: Jason Jia / Supervisor

Approved by: Alex Wang / Manager

ACCREDITED Cert #5145.02

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APPENDIX A. TEST RESULTS OF CONDUCTED TEST

APPENDIX B. TEST RESULTS OF RADIATED TEST

APPENDIX C. TEST SETUP PHOTOGRAPHS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG162118E	Rev. 01	Initial issue of report	Aug. 02, 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+10$\log_{10}$(P[Watts])	PASS	Under limit 39.34 dB at 15168.000 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	XIAOMI
Model Name	2109119DG
FCC ID	2AFZZ119DG
IMEI Code	Conducted: 865950050015692/865950050015700 Radiation: 865950050031798/865950050031806 for SA 865950050022839/865950050022847 for NSA
HW Version	P2
SW Version	MIUI12.5
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/n78: 20MHz / 30MHz / 40MHz / 50MHz / 60MHz / 70MHz / 80MHz / 90MHz / 100MHz
Maximum Output Power to Antenna	**<Ant.4>:** 5G NR n77 : 23.41 dBm 5G NR n78 : 26.33 dBm **<Ant.6>:** 5G NR n77 : 23.84 dBm 5G NR n78 : 26.75 dBm **<Ant.8>:** 5G NR n77 : 20.53 dBm 5G NR n78 : 23.22 dBm **<Ant.12>:** 5G NR n77 : 24.90 dBm 5G NR n78 : 27.22 dBm
Antenna Gain	**Ant. 4:** 5G NR n77: -1.6 dBi 5G NR n78: -1.6 dBi **Ant. 6:** 5G NR n77: -2.0 dBi 5G NR n78: -2.0 dBi **Ant. 8:** 5G NR n77: -0.8 dBi 5G NR n78: -0.8 dBi **Ant. 12:** 5G NR n77: -3.9 dBi 5G NR n78: -3.9 dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

Remark:

1. The EIRP is calculated from Output power and antenna gain, so the maximum EIRP is shown in the report.
2. 5G NR n78 support HPUE for SA mode.
3. The device supports SA and NSA mode for 5G NR n78 and SA mode for 5G NR n77. According to the maximum power, perform all test for conducted items of SA mode, and NSA mode verify the worst of SA mode, only record the SA conducted test data in the report.
4. For EN-DC mode and SA mode, the different modes match with different antenna combination. Pre-scanned harmonic for RSE testing, we choice worse case of antenna combination to full test.
5. The EN-DC mode combination could be referred to the product spec.
6. For modulation of CP-OFDM and DFT-s-OFDM, the maximum power of CP-OFDM is lower than DFT-s-OFDM modulation, therefore, we chose higher power (DFT-s-OFDM modulation) to perform all tests and show in the report.

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)
100	3750.00 ~ 3930.00	0.1528	97M6G7D	0.1268	97M5W7D
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)
100	3750.00	0.2985	97M5G7D	0.2410	97M5W7D

Note: Based on engineering evaluation, only the maximum bandwidth and the worst modulation test results are shown in the report.

1.7 Testing Location

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

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

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

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

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

1.8 Test Software

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

1.9 Applicable Standards

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

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

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

2 Test Configuration of Equipment Under Test

2.1 Test Mode

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

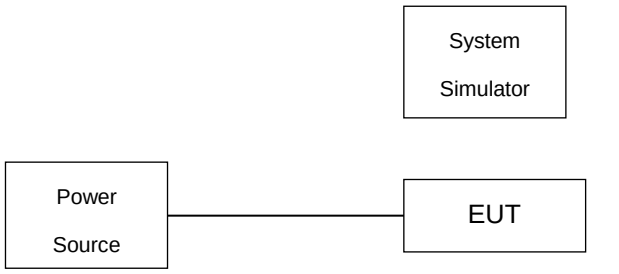
For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y plane) were recorded in this report.

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.

	X Plane	Y Plane	Z Plane
Orthogonal Planes of EUT			

Test Items	5G NR	Bandwidth (MHz)					Modulation					RB #		Test Channel		
		20	30-50	60	70-90	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
	n78	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	v
26dB and 99% Bandwidth	n77	v	v	v	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
	n78	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	n77	Worst Case													v	
	n78	Worst Case													v	
Note	1. The mark "**v** " means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. 4. For modulation of CP-OFDM and DFT-s-OFDM , the maximum power of CP-OFDM is lower than DFT-s-OFDM modulation, therefore, we chose higher power (DFT-s-OFDM modulation) to perform all tests and show in the report. 5. Based on engineering evaluation, only the worst modulations test results are shown in the report.															

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 and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 1.77 dB and 10dB attenuator.

Example :

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

= 1.77 + 10 = 11.77 (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	3750.00	3840.00	3930.00
90	Channel	649668	656000	662332
	Frequency	3745.02	3840.00	3934.98
80	Channel	649334	656000	662666
	Frequency	3740.01	3840.00	3939.99
70	Channel	649000	656000	663000
	Frequency	3735.00	3840.00	3945.00
60	Channel	648668	656000	663332
	Frequency	3730.02	3840.00	3949.98
50	Channel	648334	656000	663666
	Frequency	3725.01	3840.00	3954.99
40	Channel	648000	656000	664000
	Frequency	3720.00	3840.00	3960.00
30	Channel	647668	656000	664332
	Frequency	3715.02	3840.00	3964.98
20	Channel	647334	656000	664666
	Frequency	3710.01	3840.00	3969.99

5G NR n78 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
100	Channel		650000	
	Frequency		3750.00	
90	Channel	649668	650000	650332
	Frequency	3745.02	3750.00	3754.98
80	Channel	649334	650000	650666
	Frequency	3740.01	3750.00	3759.99
70	Channel	649000	650000	651000
	Frequency	3735.00	3750.00	3765.00
60	Channel	648668	650000	651332
	Frequency	3730.02	3750.00	3769.98
50	Channel	648334	650000	651666
	Frequency	3725.01	3750.00	3774.99
40	Channel	648000	650000	652000
	Frequency	3720.00	3750.00	3780.00
30	Channel	647668	650000	652332
	Frequency	3715.02	3750.00	3784.98
20	Channel	647334	650000	652666
	Frequency	3710.01	3750.00	3789.99

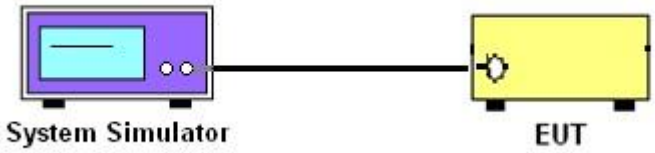
3 Conducted Test Items

3.1 Measuring Instruments

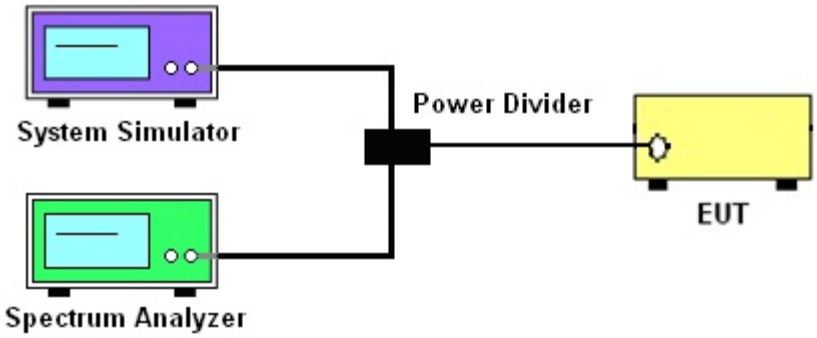
See list of measuring instruments of this test report.

3.2 Test Setup

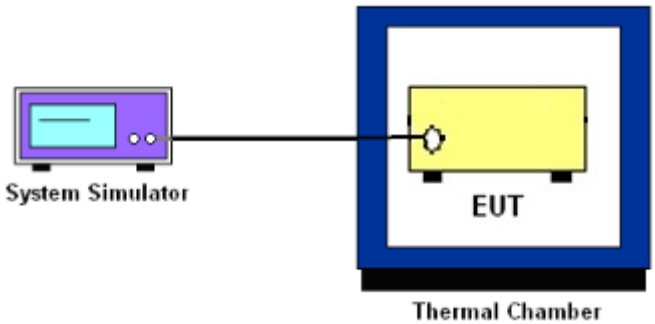
3.2.1 Conducted Output Power



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.

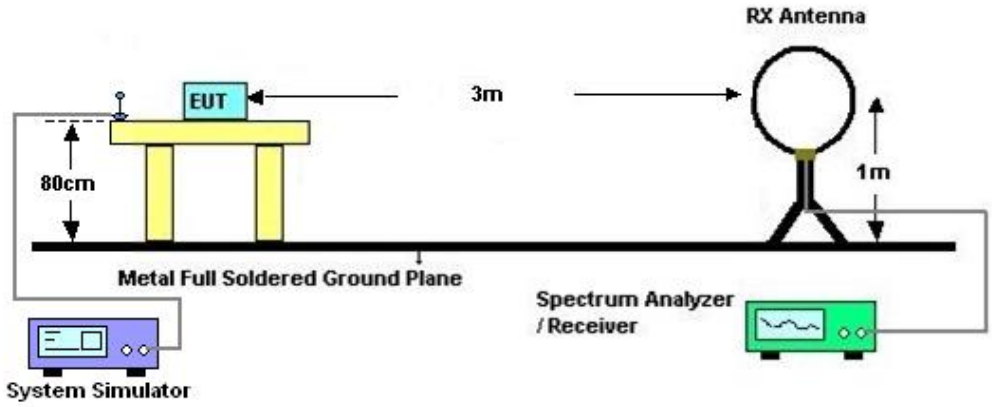
4 Radiated Test Items

4.1 Measuring Instruments

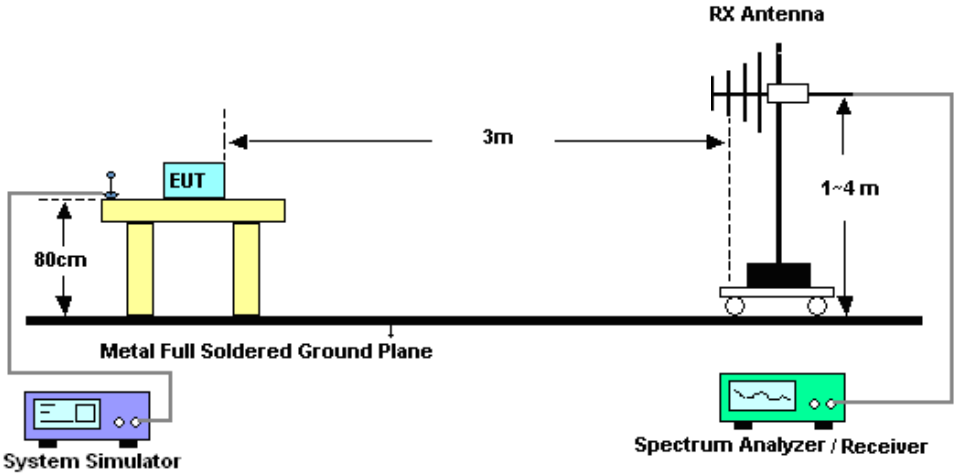
See list of measuring instruments of this test report.

4.2 Test Setup

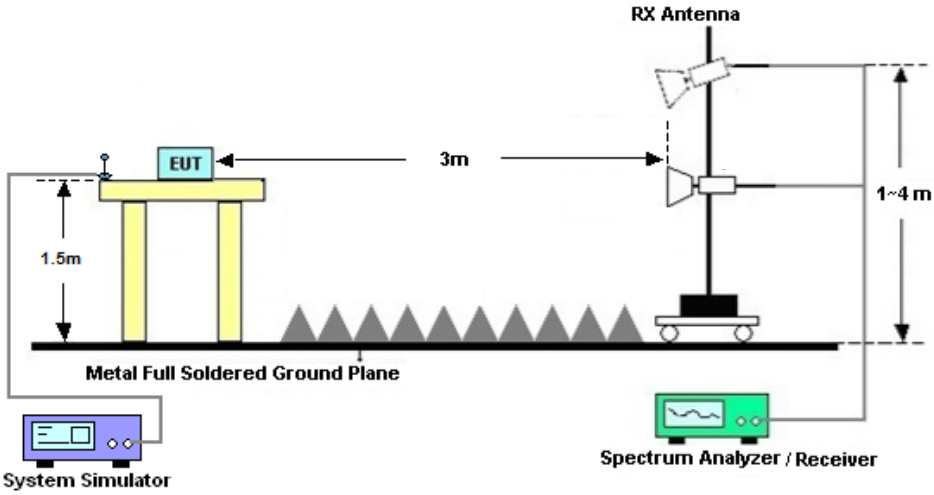
4.2.1 For radiated test below 30MHz



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	Jul. 10, 2021~ Jul. 14, 2021	Apr. 02, 2022	Conducted (TH01-SZ)
Power divider	STI	STI08-0055	-	0.5~40GHz	Aug. 27, 2020	Jul. 10, 2021~ Jul. 14, 2021	Aug. 26, 2021	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 22, 2020	Jul. 10, 2021~ Jul. 14, 2021	Jul. 21, 2021	Conducted (TH01-SZ)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz-44G,MAX 30dB	Apr. 13, 2021	Jul. 21, 2021	Apr. 12, 2022	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 01, 2020	Jul. 21, 2021	Oct. 31, 2021	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	May 30, 2021	Jul. 21, 2021	May 29, 2022	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Nov. 01, 2020	Jul. 21, 2021	Oct. 31, 2021	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101115	18GHz~40GHz	Jan. 06, 2021	Jul. 21, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Jan. 06, 2021	Jul. 21, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40GGA	060728	18~40GHz	Jan. 07, 2021	Jul. 21, 2021	Jan. 06, 2022	Radiation (03CH04-KS)
high gain Amplifier	MITEQ	AMF-7D-00101800-30-10P	2025788	1Ghz-18Ghz	Jan. 06, 2021	Jul. 21, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	Keysight	83017A	MY57280106	500MHz~26.5GHz	Oct. 14, 2020	Jul. 21, 2021	Oct. 13, 2021	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Jul. 21, 2021	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jul. 21, 2021	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Jul. 21, 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

Conducted Output Power(Average power and EIRP)

Software Version: 21.02.062201

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Transmitter Conducted Output Power And ERP/EIRP, (G_T - L_C)=-2dB

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	23.23	21.23	0.1327
77	30	20	647334	3710.01	DFT-s-OFDM PI/2 BPSK	1@1	23.4	21.4	0.1380
77	30	20	647334	3710.01	DFT-s-OFDM PI/2 BPSK	1@49	23.25	21.25	0.1334
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	25@12	23.17	21.17	0.1309
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@1	23.47	21.47	0.1403
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@49	23.38	21.38	0.1374
77	30	20	647334	3710.01	DFT-s-OFDM 16 QAM	25@12	22.21	20.21	0.1050
77	30	20	647334	3710.01	DFT-s-OFDM 16 QAM	1@1	22.56	20.56	0.1138
77	30	20	647334	3710.01	DFT-s-OFDM 16 QAM	1@49	22.45	20.45	0.1109
77	30	20	647334	3710.01	DFT-s-OFDM 64 QAM	25@12	20.69	18.69	0.0740
77	30	20	647334	3710.01	DFT-s-OFDM 64 QAM	1@1	20.89	18.89	0.0774
77	30	20	647334	3710.01	DFT-s-OFDM 64 QAM	1@49	20.92	18.92	0.0780
77	30	20	647334	3710.01	DFT-s-OFDM 256 QAM	25@12	18.81	16.81	0.0480
77	30	20	647334	3710.01	DFT-s-OFDM 256 QAM	1@1	18.87	16.87	0.0486
77	30	20	647334	3710.01	DFT-s-OFDM 256 QAM	1@49	18.88	16.88	0.0488
77	30	20	647334	3710.01	CP-OFDM QPSK	25@121	20.41	18.41	0.0693
77	30	20	647334	3710.01	CP-OFDM QPSK	1@1	22.14	20.14	0.1033
77	30	20	647334	3710.01	CP-OFDM QPSK	1@49	21.9	19.9	0.0977
77	30	20	656000	3840	DFT-s-OFDM PI/2 BPSK	25@12	23.61	21.61	0.1449
77	30	20	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	23.7	21.7	0.1479

77	30	20	656000	3840	DFT-s-OFDM PI/2 BPSK	1@49	23.55	21.55	0.1429
77	30	20	656000	3840	DFT-s-OFDM QPSK	25@12	23.63	21.63	0.1455
77	30	20	656000	3840	DFT-s-OFDM QPSK	1@1	23.63	21.63	0.1455
77	30	20	656000	3840	DFT-s-OFDM QPSK	1@49	23.56	21.56	0.1432
77	30	20	656000	3840	DFT-s-OFDM 16 QAM	25@12	22.58	20.58	0.1143
77	30	20	656000	3840	DFT-s-OFDM 16 QAM	1@1	22.76	20.76	0.1191
77	30	20	656000	3840	DFT-s-OFDM 16 QAM	1@49	22.64	20.64	0.1159
77	30	20	656000	3840	DFT-s-OFDM 64 QAM	25@12	21.1	19.1	0.0813
77	30	20	656000	3840	DFT-s-OFDM 64 QAM	1@1	20.97	18.97	0.0789
77	30	20	656000	3840	DFT-s-OFDM 64 QAM	1@49	21.08	19.08	0.0809
77	30	20	656000	3840	DFT-s-OFDM 256 QAM	25@12	19.15	17.15	0.0519
77	30	20	656000	3840	DFT-s-OFDM 256 QAM	1@1	19.26	17.26	0.0532
77	30	20	656000	3840	DFT-s-OFDM 256 QAM	1@49	19.08	17.08	0.0511
77	30	20	656000	3840	CP-OFDM QPSK	25@121	20.73	18.73	0.0746
77	30	20	656000	3840	CP-OFDM QPSK	1@1	22.41	20.41	0.1099
77	30	20	656000	3840	CP-OFDM QPSK	1@49	22.2	20.2	0.1047
77	30	20	664666	3969.99	DFT-s-OFDM PI/2 BPSK	25@12	23.34	21.34	0.1361
77	30	20	664666	3969.99	DFT-s-OFDM PI/2 BPSK	1@1	23.28	21.28	0.1343
77	30	20	664666	3969.99	DFT-s-OFDM PI/2 BPSK	1@49	23.38	21.38	0.1374
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	25@12	23.3	21.3	0.1349
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	1@1	23.38	21.38	0.1374
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	1@49	23.54	21.54	0.1426
77	30	20	664666	3969.99	DFT-s-OFDM 16 QAM	25@12	22.36	20.36	0.1086
77	30	20	664666	3969.99	DFT-s-OFDM 16 QAM	1@1	22.4	20.4	0.1096

77	30	20	664666	3969.99	DFT-s-OFDM 16 QAM	1@49	22.56	20.56	0.1138
77	30	20	664666	3969.99	DFT-s-OFDM 64 QAM	25@12	20.79	18.79	0.0757
77	30	20	664666	3969.99	DFT-s-OFDM 64 QAM	1@1	20.82	18.82	0.0762
77	30	20	664666	3969.99	DFT-s-OFDM 64 QAM	1@49	21.01	19.01	0.0796
77	30	20	664666	3969.99	DFT-s-OFDM 256 QAM	25@12	18.86	16.86	0.0485
77	30	20	664666	3969.99	DFT-s-OFDM 256 QAM	1@1	18.74	16.74	0.0472
77	30	20	664666	3969.99	DFT-s-OFDM 256 QAM	1@49	19.01	17.01	0.0502
77	30	20	664666	3969.99	CP-OFDM QPSK	25@121	20.34	18.34	0.0682
77	30	20	664666	3969.99	CP-OFDM QPSK	1@1	21.86	19.86	0.0968
77	30	20	664666	3969.99	CP-OFDM QPSK	1@49	22.01	20.01	0.1002
77	30	30	647668	3715.02	DFT-s-OFDM PI/2 BPSK	36@18	23.4	21.4	0.1380
77	30	30	647668	3715.02	DFT-s-OFDM PI/2 BPSK	1@1	23.47	21.47	0.1403
77	30	30	647668	3715.02	DFT-s-OFDM PI/2 BPSK	1@76	23.51	21.51	0.1416
77	30	30	647668	3715.02	DFT-s-OFDM QPSK	36@18	23.36	21.36	0.1368
77	30	30	647668	3715.02	DFT-s-OFDM QPSK	1@1	23.59	21.59	0.1442
77	30	30	647668	3715.02	DFT-s-OFDM QPSK	1@76	23.55	21.55	0.1429
77	30	30	647668	3715.02	DFT-s-OFDM 16 QAM	36@18	22.32	20.32	0.1076
77	30	30	647668	3715.02	DFT-s-OFDM 16 QAM	1@1	22.7	20.7	0.1175
77	30	30	647668	3715.02	DFT-s-OFDM 16 QAM	1@76	22.6	20.6	0.1148
77	30	30	647668	3715.02	DFT-s-OFDM 64 QAM	36@18	20.89	18.89	0.0774
77	30	30	647668	3715.02	DFT-s-OFDM 64 QAM	1@1	21.03	19.03	0.0800
77	30	30	647668	3715.02	DFT-s-OFDM 64 QAM	1@76	20.97	18.97	0.0789
77	30	30	647668	3715.02	DFT-s-OFDM 256 QAM	36@18	18.88	16.88	0.0488
77	30	30	647668	3715.02	DFT-s-OFDM 256 QAM	1@1	19.02	17.02	0.0504

77	30	30	647668	3715.02	DFT-s-OFDM 256 QAM	1@76	18.99	16.99	0.0500
77	30	30	647668	3715.02	CP-OFDM QPSK	39@19	21.87	19.87	0.0971
77	30	30	647668	3715.02	CP-OFDM QPSK	1@1	22.07	20.07	0.1016
77	30	30	647668	3715.02	CP-OFDM QPSK	1@76	21.95	19.95	0.0989
77	30	30	656000	3840	DFT-s-OFDM PI/2 BPSK	36@18	23.68	21.68	0.1472
77	30	30	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	23.81	21.81	0.1517
77	30	30	656000	3840	DFT-s-OFDM PI/2 BPSK	1@76	23.48	21.48	0.1406
77	30	30	656000	3840	DFT-s-OFDM QPSK	36@18	23.68	21.68	0.1472
77	30	30	656000	3840	DFT-s-OFDM QPSK	1@1	23.74	21.74	0.1493
77	30	30	656000	3840	DFT-s-OFDM QPSK	1@76	23.63	21.63	0.1455
77	30	30	656000	3840	DFT-s-OFDM 16 QAM	36@18	22.7	20.7	0.1175
77	30	30	656000	3840	DFT-s-OFDM 16 QAM	1@1	22.86	20.86	0.1219
77	30	30	656000	3840	DFT-s-OFDM 16 QAM	1@76	22.64	20.64	0.1159
77	30	30	656000	3840	DFT-s-OFDM 64 QAM	36@18	21.27	19.27	0.0845
77	30	30	656000	3840	DFT-s-OFDM 64 QAM	1@1	21.32	19.32	0.0855
77	30	30	656000	3840	DFT-s-OFDM 64 QAM	1@76	21.04	19.04	0.0802
77	30	30	656000	3840	DFT-s-OFDM 256 QAM	36@18	18.96	16.96	0.0497
77	30	30	656000	3840	DFT-s-OFDM 256 QAM	1@1	19.43	17.43	0.0553
77	30	30	656000	3840	DFT-s-OFDM 256 QAM	1@76	19	17	0.0501
77	30	30	656000	3840	CP-OFDM QPSK	39@19	22.24	20.24	0.1057
77	30	30	656000	3840	CP-OFDM QPSK	1@1	22.41	20.41	0.1099
77	30	30	656000	3840	CP-OFDM QPSK	1@76	21.96	19.96	0.0991
77	30	30	664332	3964.98	DFT-s-OFDM PI/2 BPSK	36@18	23.46	21.46	0.1400
77	30	30	664332	3964.98	DFT-s-OFDM PI/2 BPSK	1@1	23.38	21.38	0.1374

77	30	30	664332	3964.98	DFT-s-OFDM PI/2 BPSK	1@76	23.37	21.37	0.1371
77	30	30	664332	3964.98	DFT-s-OFDM QPSK	36@18	23.44	21.44	0.1393
77	30	30	664332	3964.98	DFT-s-OFDM QPSK	1@1	23.34	21.34	0.1361
77	30	30	664332	3964.98	DFT-s-OFDM QPSK	1@76	23.55	21.55	0.1429
77	30	30	664332	3964.98	DFT-s-OFDM 16 QAM	36@18	22.39	20.39	0.1094
77	30	30	664332	3964.98	DFT-s-OFDM 16 QAM	1@1	22.52	20.52	0.1127
77	30	30	664332	3964.98	DFT-s-OFDM 16 QAM	1@76	22.56	20.56	0.1138
77	30	30	664332	3964.98	DFT-s-OFDM 64 QAM	36@18	21.01	19.01	0.0796
77	30	30	664332	3964.98	DFT-s-OFDM 64 QAM	1@1	20.81	18.81	0.0760
77	30	30	664332	3964.98	DFT-s-OFDM 64 QAM	1@76	20.86	18.86	0.0769
77	30	30	664332	3964.98	DFT-s-OFDM 256 QAM	36@18	18.89	16.89	0.0489
77	30	30	664332	3964.98	DFT-s-OFDM 256 QAM	1@1	19.12	17.12	0.0515
77	30	30	664332	3964.98	DFT-s-OFDM 256 QAM	1@76	19.13	17.13	0.0516
77	30	30	664332	3964.98	CP-OFDM QPSK	39@19	21.94	19.94	0.0986
77	30	30	664332	3964.98	CP-OFDM QPSK	1@1	21.9	19.9	0.0977
77	30	30	664332	3964.98	CP-OFDM QPSK	1@76	21.94	19.94	0.0986
77	30	40	648000	3720	DFT-s-OFDM PI/2 BPSK	50@25	23.43	21.43	0.1390
77	30	40	648000	3720	DFT-s-OFDM PI/2 BPSK	1@1	23.43	21.43	0.1390
77	30	40	648000	3720	DFT-s-OFDM PI/2 BPSK	1@104	23.43	21.43	0.1390
77	30	40	648000	3720	DFT-s-OFDM QPSK	50@25	23.35	21.35	0.1365
77	30	40	648000	3720	DFT-s-OFDM QPSK	1@1	23.33	21.33	0.1358
77	30	40	648000	3720	DFT-s-OFDM QPSK	1@104	23.52	21.52	0.1419
77	30	40	648000	3720	DFT-s-OFDM 16 QAM	50@25	22.31	20.31	0.1074
77	30	40	648000	3720	DFT-s-OFDM 16 QAM	1@1	22.49	20.49	0.1119

77	30	40	648000	3720	DFT-s-OFDM 16 QAM	1@104	22.56	20.56	0.1138
77	30	40	648000	3720	DFT-s-OFDM 64 QAM	50@25	20.88	18.88	0.0773
77	30	40	648000	3720	DFT-s-OFDM 64 QAM	1@1	20.85	18.85	0.0767
77	30	40	648000	3720	DFT-s-OFDM 64 QAM	1@104	20.95	18.95	0.0785
77	30	40	648000	3720	DFT-s-OFDM 256 QAM	50@25	18.95	16.95	0.0495
77	30	40	648000	3720	DFT-s-OFDM 256 QAM	1@1	19.02	17.02	0.0504
77	30	40	648000	3720	DFT-s-OFDM 256 QAM	1@104	18.97	16.97	0.0498
77	30	40	648000	3720	CP-OFDM QPSK	53@26	21.98	19.98	0.0995
77	30	40	648000	3720	CP-OFDM QPSK	1@1	21.87	19.87	0.0971
77	30	40	648000	3720	CP-OFDM QPSK	1@104	22.04	20.04	0.1009
77	30	40	656000	3840	DFT-s-OFDM PI/2 BPSK	50@25	23.77	21.77	0.1503
77	30	40	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	23.7	21.7	0.1479
77	30	40	656000	3840	DFT-s-OFDM PI/2 BPSK	1@104	23.36	21.36	0.1368
77	30	40	656000	3840	DFT-s-OFDM QPSK	50@25	23.67	21.67	0.1469
77	30	40	656000	3840	DFT-s-OFDM QPSK	1@1	23.82	21.82	0.1521
77	30	40	656000	3840	DFT-s-OFDM QPSK	1@104	23.53	21.53	0.1422
77	30	40	656000	3840	DFT-s-OFDM 16 QAM	50@25	22.71	20.71	0.1178
77	30	40	656000	3840	DFT-s-OFDM 16 QAM	1@1	22.85	20.85	0.1216
77	30	40	656000	3840	DFT-s-OFDM 16 QAM	1@104	22.49	20.49	0.1119
77	30	40	656000	3840	DFT-s-OFDM 64 QAM	50@25	21.25	19.25	0.0841
77	30	40	656000	3840	DFT-s-OFDM 64 QAM	1@1	21.19	19.19	0.0830
77	30	40	656000	3840	DFT-s-OFDM 64 QAM	1@104	20.8	18.8	0.0759
77	30	40	656000	3840	DFT-s-OFDM 256 QAM	50@25	19.52	17.52	0.0565
77	30	40	656000	3840	DFT-s-OFDM 256 QAM	1@1	19.39	17.39	0.0548

77	30	40	656000	3840	DFT-s-OFDM 256 QAM	1@104	19.05	17.05	0.0507
77	30	40	656000	3840	CP-OFDM QPSK	53@26	22.29	20.29	0.1069
77	30	40	656000	3840	CP-OFDM QPSK	1@1	22.54	20.54	0.1132
77	30	40	656000	3840	CP-OFDM QPSK	1@104	22.03	20.03	0.1007
77	30	40	664000	3960	DFT-s-OFDM PI/2 BPSK	50@25	23.48	21.48	0.1406
77	30	40	664000	3960	DFT-s-OFDM PI/2 BPSK	1@1	23.38	21.38	0.1374
77	30	40	664000	3960	DFT-s-OFDM PI/2 BPSK	1@104	23.4	21.4	0.1380
77	30	40	664000	3960	DFT-s-OFDM QPSK	50@25	23.41	21.41	0.1384
77	30	40	664000	3960	DFT-s-OFDM QPSK	1@1	23.52	21.52	0.1419
77	30	40	664000	3960	DFT-s-OFDM QPSK	1@104	23.49	21.49	0.1409
77	30	40	664000	3960	DFT-s-OFDM 16 QAM	50@25	22.5	20.5	0.1122
77	30	40	664000	3960	DFT-s-OFDM 16 QAM	1@1	22.57	20.57	0.1140
77	30	40	664000	3960	DFT-s-OFDM 16 QAM	1@104	22.55	20.55	0.1135
77	30	40	664000	3960	DFT-s-OFDM 64 QAM	50@25	21	19	0.0794
77	30	40	664000	3960	DFT-s-OFDM 64 QAM	1@1	20.96	18.96	0.0787
77	30	40	664000	3960	DFT-s-OFDM 64 QAM	1@104	21.02	19.02	0.0798
77	30	40	664000	3960	DFT-s-OFDM 256 QAM	50@25	18.93	16.93	0.0493
77	30	40	664000	3960	DFT-s-OFDM 256 QAM	1@1	18.91	16.91	0.0491
77	30	40	664000	3960	DFT-s-OFDM 256 QAM	1@104	19.05	17.05	0.0507
77	30	40	664000	3960	CP-OFDM QPSK	53@26	22	20	0.1000
77	30	40	664000	3960	CP-OFDM QPSK	1@1	22.16	20.16	0.1038
77	30	40	664000	3960	CP-OFDM QPSK	1@104	21.94	19.94	0.0986
77	30	50	648334	3725.01	DFT-s-OFDM PI/2 BPSK	64@32	23.19	21.19	0.1315
77	30	50	648334	3725.01	DFT-s-OFDM PI/2 BPSK	1@1	23.04	21.04	0.1271

77	30	50	648334	3725.01	DFT-s-OFDM PI/2 BPSK	1@131	23.48	21.48	0.1406
77	30	50	648334	3725.01	DFT-s-OFDM QPSK	64@32	23.28	21.28	0.1343
77	30	50	648334	3725.01	DFT-s-OFDM QPSK	1@1	22.99	20.99	0.1256
77	30	50	648334	3725.01	DFT-s-OFDM QPSK	1@131	23.64	21.64	0.1459
77	30	50	648334	3725.01	DFT-s-OFDM 16 QAM	64@32	22.31	20.31	0.1074
77	30	50	648334	3725.01	DFT-s-OFDM 16 QAM	1@1	22.16	20.16	0.1038
77	30	50	648334	3725.01	DFT-s-OFDM 16 QAM	1@131	22.66	20.66	0.1164
77	30	50	648334	3725.01	DFT-s-OFDM 64 QAM	64@32	20.76	18.76	0.0752
77	30	50	648334	3725.01	DFT-s-OFDM 64 QAM	1@1	20.67	18.67	0.0736
77	30	50	648334	3725.01	DFT-s-OFDM 64 QAM	1@131	21.11	19.11	0.0815
77	30	50	648334	3725.01	DFT-s-OFDM 256 QAM	64@32	18.73	16.73	0.0471
77	30	50	648334	3725.01	DFT-s-OFDM 256 QAM	1@1	18.69	16.69	0.0467
77	30	50	648334	3725.01	DFT-s-OFDM 256 QAM	1@131	19.39	17.39	0.0548
77	30	50	648334	3725.01	CP-OFDM QPSK	67@33	21.87	19.87	0.0971
77	30	50	648334	3725.01	CP-OFDM QPSK	1@1	21.68	19.68	0.0929
77	30	50	648334	3725.01	CP-OFDM QPSK	1@131	22.31	20.31	0.1074
77	30	50	656000	3840	DFT-s-OFDM PI/2 BPSK	64@32	23.61	21.61	0.1449
77	30	50	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	23.43	21.43	0.1390
77	30	50	656000	3840	DFT-s-OFDM PI/2 BPSK	1@131	23.54	21.54	0.1426
77	30	50	656000	3840	DFT-s-OFDM QPSK	64@32	23.6	21.6	0.1445
77	30	50	656000	3840	DFT-s-OFDM QPSK	1@1	23.55	21.55	0.1429
77	30	50	656000	3840	DFT-s-OFDM QPSK	1@131	23.58	21.58	0.1439
77	30	50	656000	3840	DFT-s-OFDM 16 QAM	64@32	22.59	20.59	0.1146
77	30	50	656000	3840	DFT-s-OFDM 16 QAM	1@1	22.59	20.59	0.1146

77	30	50	656000	3840	DFT-s-OFDM 16 QAM	1@131	22.63	20.63	0.1156
77	30	50	656000	3840	DFT-s-OFDM 64 QAM	64@32	21.1	19.1	0.0813
77	30	50	656000	3840	DFT-s-OFDM 64 QAM	1@1	20.89	18.89	0.0774
77	30	50	656000	3840	DFT-s-OFDM 64 QAM	1@131	21	19	0.0794
77	30	50	656000	3840	DFT-s-OFDM 256 QAM	64@32	19.14	17.14	0.0518
77	30	50	656000	3840	DFT-s-OFDM 256 QAM	1@1	19.11	17.11	0.0514
77	30	50	656000	3840	DFT-s-OFDM 256 QAM	1@131	19.1	17.1	0.0513
77	30	50	656000	3840	CP-OFDM QPSK	67@33	22.12	20.12	0.1028
77	30	50	656000	3840	CP-OFDM QPSK	1@1	22.04	20.04	0.1009
77	30	50	656000	3840	CP-OFDM QPSK	1@131	22.04	20.04	0.1009
77	30	50	663666	3954.99	DFT-s-OFDM PI/2 BPSK	64@32	23.41	21.41	0.1384
77	30	50	663666	3954.99	DFT-s-OFDM PI/2 BPSK	1@1	23.08	21.08	0.1282
77	30	50	663666	3954.99	DFT-s-OFDM PI/2 BPSK	1@131	23.55	21.55	0.1429
77	30	50	663666	3954.99	DFT-s-OFDM QPSK	64@32	23.41	21.41	0.1384
77	30	50	663666	3954.99	DFT-s-OFDM QPSK	1@1	23.21	21.21	0.1321
77	30	50	663666	3954.99	DFT-s-OFDM QPSK	1@131	23.7	21.7	0.1479
77	30	50	663666	3954.99	DFT-s-OFDM 16 QAM	64@32	22.4	20.4	0.1096
77	30	50	663666	3954.99	DFT-s-OFDM 16 QAM	1@1	22.47	20.47	0.1114
77	30	50	663666	3954.99	DFT-s-OFDM 16 QAM	1@131	22.69	20.69	0.1172
77	30	50	663666	3954.99	DFT-s-OFDM 64 QAM	64@32	20.97	18.97	0.0789
77	30	50	663666	3954.99	DFT-s-OFDM 64 QAM	1@1	20.74	18.74	0.0748
77	30	50	663666	3954.99	DFT-s-OFDM 64 QAM	1@131	21.09	19.09	0.0811
77	30	50	663666	3954.99	DFT-s-OFDM 256 QAM	64@32	18.94	16.94	0.0494
77	30	50	663666	3954.99	DFT-s-OFDM 256 QAM	1@1	18.77	16.77	0.0475

77	30	50	663666	3954.99	DFT-s-OFDM 256 QAM	1@131	19.08	17.08	0.0511
77	30	50	663666	3954.99	CP-OFDM QPSK	67@33	21.96	19.96	0.0991
77	30	50	663666	3954.99	CP-OFDM QPSK	1@1	21.82	19.82	0.0959
77	30	50	663666	3954.99	CP-OFDM QPSK	1@131	21.96	19.96	0.0991
77	30	60	648668	3730.02	DFT-s-OFDM PI/2 BPSK	81@40	23.34	21.34	0.1361
77	30	60	648668	3730.02	DFT-s-OFDM PI/2 BPSK	1@1	23.01	21.01	0.1262
77	30	60	648668	3730.02	DFT-s-OFDM PI/2 BPSK	1@160	23.43	21.43	0.1390
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	81@40	23.29	21.29	0.1346
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@1	23.11	21.11	0.1291
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@160	23.5	21.5	0.1413
77	30	60	648668	3730.02	DFT-s-OFDM 16 QAM	81@40	22.3	20.3	0.1072
77	30	60	648668	3730.02	DFT-s-OFDM 16 QAM	1@1	22.16	20.16	0.1038
77	30	60	648668	3730.02	DFT-s-OFDM 16 QAM	1@160	22.64	20.64	0.1159
77	30	60	648668	3730.02	DFT-s-OFDM 64 QAM	81@40	20.88	18.88	0.0773
77	30	60	648668	3730.02	DFT-s-OFDM 64 QAM	1@1	20.49	18.49	0.0706
77	30	60	648668	3730.02	DFT-s-OFDM 64 QAM	1@160	21.04	19.04	0.0802
77	30	60	648668	3730.02	DFT-s-OFDM 256 QAM	81@40	18.85	16.85	0.0484
77	30	60	648668	3730.02	DFT-s-OFDM 256 QAM	1@1	18.51	16.51	0.0448
77	30	60	648668	3730.02	DFT-s-OFDM 256 QAM	1@160	19.08	17.08	0.0511
77	30	60	648668	3730.02	CP-OFDM QPSK	81@40	21.83	19.83	0.0962
77	30	60	648668	3730.02	CP-OFDM QPSK	1@1	21.8	19.8	0.0955
77	30	60	648668	3730.02	CP-OFDM QPSK	1@160	22.19	20.19	0.1045
77	30	60	656000	3840	DFT-s-OFDM PI/2 BPSK	81@40	23.58	21.58	0.1439
77	30	60	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	23.4	21.4	0.1380

77	30	60	656000	3840	DFT-s-OFDM PI/2 BPSK	1@160	23.6	21.6	0.1445
77	30	60	656000	3840	DFT-s-OFDM QPSK	81@40	23.59	21.59	0.1442
77	30	60	656000	3840	DFT-s-OFDM QPSK	1@1	23.41	21.41	0.1384
77	30	60	656000	3840	DFT-s-OFDM QPSK	1@160	23.7	21.7	0.1479
77	30	60	656000	3840	DFT-s-OFDM 16 QAM	81@40	22.65	20.65	0.1161
77	30	60	656000	3840	DFT-s-OFDM 16 QAM	1@1	22.63	20.63	0.1156
77	30	60	656000	3840	DFT-s-OFDM 16 QAM	1@160	22.7	20.7	0.1175
77	30	60	656000	3840	DFT-s-OFDM 64 QAM	81@40	21.19	19.19	0.0830
77	30	60	656000	3840	DFT-s-OFDM 64 QAM	1@1	20.99	18.99	0.0793
77	30	60	656000	3840	DFT-s-OFDM 64 QAM	1@160	21.19	19.19	0.0830
77	30	60	656000	3840	DFT-s-OFDM 256 QAM	81@40	19.13	17.13	0.0516
77	30	60	656000	3840	DFT-s-OFDM 256 QAM	1@1	18.88	16.88	0.0488
77	30	60	656000	3840	DFT-s-OFDM 256 QAM	1@160	19.17	17.17	0.0521
77	30	60	656000	3840	CP-OFDM QPSK	81@40	22.1	20.1	0.1023
77	30	60	656000	3840	CP-OFDM QPSK	1@1	22.02	20.02	0.1005
77	30	60	656000	3840	CP-OFDM QPSK	1@160	22.2	20.2	0.1047
77	30	60	663332	3949.98	DFT-s-OFDM PI/2 BPSK	81@40	23.38	21.38	0.1374
77	30	60	663332	3949.98	DFT-s-OFDM PI/2 BPSK	1@1	23.37	21.37	0.1371
77	30	60	663332	3949.98	DFT-s-OFDM PI/2 BPSK	1@160	23.64	21.64	0.1459
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	81@40	23.37	21.37	0.1371
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	1@1	23.4	21.4	0.1380
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	1@160	23.57	21.57	0.1435
77	30	60	663332	3949.98	DFT-s-OFDM 16 QAM	81@40	22.47	20.47	0.1114
77	30	60	663332	3949.98	DFT-s-OFDM 16 QAM	1@1	22.64	20.64	0.1159

77	30	60	663332	3949.98	DFT-s-OFDM 16 QAM	1@160	22.93	20.93	0.1239
77	30	60	663332	3949.98	DFT-s-OFDM 64 QAM	81@40	20.84	18.84	0.0766
77	30	60	663332	3949.98	DFT-s-OFDM 64 QAM	1@1	20.97	18.97	0.0789
77	30	60	663332	3949.98	DFT-s-OFDM 64 QAM	1@160	21.33	19.33	0.0857
77	30	60	663332	3949.98	DFT-s-OFDM 256 QAM	81@40	18.92	16.92	0.0492
77	30	60	663332	3949.98	DFT-s-OFDM 256 QAM	1@1	19.03	17.03	0.0505
77	30	60	663332	3949.98	DFT-s-OFDM 256 QAM	1@160	19.13	17.13	0.0516
77	30	60	663332	3949.98	CP-OFDM QPSK	81@40	21.94	19.94	0.0986
77	30	60	663332	3949.98	CP-OFDM QPSK	1@1	22.13	20.13	0.1030
77	30	60	663332	3949.98	CP-OFDM QPSK	1@160	22.28	20.28	0.1067
77	30	70	649000	3735	DFT-s-OFDM PI/2 BPSK	90@45	23.36	21.36	0.1368
77	30	70	649000	3735	DFT-s-OFDM PI/2 BPSK	1@1	23.01	21.01	0.1262
77	30	70	649000	3735	DFT-s-OFDM PI/2 BPSK	1@187	23.26	21.26	0.1337
77	30	70	649000	3735	DFT-s-OFDM QPSK	90@45	23.27	21.27	0.1340
77	30	70	649000	3735	DFT-s-OFDM QPSK	1@1	22.95	20.95	0.1245
77	30	70	649000	3735	DFT-s-OFDM QPSK	1@187	23.3	21.3	0.1349
77	30	70	649000	3735	DFT-s-OFDM 16 QAM	90@45	22.32	20.32	0.1076
77	30	70	649000	3735	DFT-s-OFDM 16 QAM	1@1	22.11	20.11	0.1026
77	30	70	649000	3735	DFT-s-OFDM 16 QAM	1@187	22.43	20.43	0.1104
77	30	70	649000	3735	DFT-s-OFDM 64 QAM	90@45	20.86	18.86	0.0769
77	30	70	649000	3735	DFT-s-OFDM 64 QAM	1@1	20.49	18.49	0.0706
77	30	70	649000	3735	DFT-s-OFDM 64 QAM	1@187	20.79	18.79	0.0757
77	30	70	649000	3735	DFT-s-OFDM 256 QAM	90@45	18.82	16.82	0.0481
77	30	70	649000	3735	DFT-s-OFDM 256 QAM	1@1	18.47	16.47	0.0444

77	30	70	649000	3735	DFT-s-OFDM 256 QAM	1@187	18.62	16.62	0.0459
77	30	70	649000	3735	CP-OFDM QPSK	95@47	21.81	19.81	0.0957
77	30	70	649000	3735	CP-OFDM QPSK	1@1	21.75	19.75	0.0944
77	30	70	649000	3735	CP-OFDM QPSK	1@187	21.96	19.96	0.0991
77	30	70	656000	3840	DFT-s-OFDM PI/2 BPSK	90@45	23.6	21.6	0.1445
77	30	70	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	23.26	21.26	0.1337
77	30	70	656000	3840	DFT-s-OFDM PI/2 BPSK	1@187	23.56	21.56	0.1432
77	30	70	656000	3840	DFT-s-OFDM QPSK	90@45	23.49	21.49	0.1409
77	30	70	656000	3840	DFT-s-OFDM QPSK	1@1	23.34	21.34	0.1361
77	30	70	656000	3840	DFT-s-OFDM QPSK	1@187	23.56	21.56	0.1432
77	30	70	656000	3840	DFT-s-OFDM 16 QAM	90@45	22.65	20.65	0.1161
77	30	70	656000	3840	DFT-s-OFDM 16 QAM	1@1	22.42	20.42	0.1102
77	30	70	656000	3840	DFT-s-OFDM 16 QAM	1@187	22.63	20.63	0.1156
77	30	70	656000	3840	DFT-s-OFDM 64 QAM	90@45	21.24	19.24	0.0839
77	30	70	656000	3840	DFT-s-OFDM 64 QAM	1@1	20.85	18.85	0.0767
77	30	70	656000	3840	DFT-s-OFDM 64 QAM	1@187	21.12	19.12	0.0817
77	30	70	656000	3840	DFT-s-OFDM 256 QAM	90@45	19.07	17.07	0.0509
77	30	70	656000	3840	DFT-s-OFDM 256 QAM	1@1	18.73	16.73	0.0471
77	30	70	656000	3840	DFT-s-OFDM 256 QAM	1@187	18.96	16.96	0.0497
77	30	70	656000	3840	CP-OFDM QPSK	95@47	22.04	20.04	0.1009
77	30	70	656000	3840	CP-OFDM QPSK	1@1	22.03	20.03	0.1007
77	30	70	656000	3840	CP-OFDM QPSK	1@187	22.17	20.17	0.1040
77	30	70	663000	3945	DFT-s-OFDM PI/2 BPSK	90@45	23.35	21.35	0.1365
77	30	70	663000	3945	DFT-s-OFDM PI/2 BPSK	1@1	23.23	21.23	0.1327

77	30	70	663000	3945	DFT-s-OFDM PI/2 BPSK	1@187	23.65	21.65	0.1462
77	30	70	663000	3945	DFT-s-OFDM QPSK	90@45	23.34	21.34	0.1361
77	30	70	663000	3945	DFT-s-OFDM QPSK	1@1	23.15	21.15	0.1303
77	30	70	663000	3945	DFT-s-OFDM QPSK	1@187	23.63	21.63	0.1455
77	30	70	663000	3945	DFT-s-OFDM 16 QAM	90@45	22.35	20.35	0.1084
77	30	70	663000	3945	DFT-s-OFDM 16 QAM	1@1	22.19	20.19	0.1045
77	30	70	663000	3945	DFT-s-OFDM 16 QAM	1@187	22.83	20.83	0.1211
77	30	70	663000	3945	DFT-s-OFDM 64 QAM	90@45	20.9	18.9	0.0776
77	30	70	663000	3945	DFT-s-OFDM 64 QAM	1@1	20.73	18.73	0.0746
77	30	70	663000	3945	DFT-s-OFDM 64 QAM	1@187	21.16	19.16	0.0824
77	30	70	663000	3945	DFT-s-OFDM 256 QAM	90@45	19	17	0.0501
77	30	70	663000	3945	DFT-s-OFDM 256 QAM	1@1	19	17	0.0501
77	30	70	663000	3945	DFT-s-OFDM 256 QAM	1@187	19.47	17.47	0.0558
77	30	70	663000	3945	CP-OFDM QPSK	95@47	21.9	19.9	0.0977
77	30	70	663000	3945	CP-OFDM QPSK	1@1	21.78	19.78	0.0951
77	30	70	663000	3945	CP-OFDM QPSK	1@187	22.26	20.26	0.1062
77	30	80	649334	3740.01	DFT-s-OFDM PI/2 BPSK	108@54	23.3	21.3	0.1349
77	30	80	649334	3740.01	DFT-s-OFDM PI/2 BPSK	1@1	22.93	20.93	0.1239
77	30	80	649334	3740.01	DFT-s-OFDM PI/2 BPSK	1@215	23.18	21.18	0.1312
77	30	80	649334	3740.01	DFT-s-OFDM QPSK	108@54	23.28	21.28	0.1343
77	30	80	649334	3740.01	DFT-s-OFDM QPSK	1@1	23.02	21.02	0.1265
77	30	80	649334	3740.01	DFT-s-OFDM QPSK	1@215	23.22	21.22	0.1324
77	30	80	649334	3740.01	DFT-s-OFDM 16 QAM	108@54	22.32	20.32	0.1076
77	30	80	649334	3740.01	DFT-s-OFDM 16 QAM	1@1	22.07	20.07	0.1016

77	30	80	649334	3740.01	DFT-s-OFDM 16 QAM	1@215	22.2	20.2	0.1047
77	30	80	649334	3740.01	DFT-s-OFDM 64 QAM	108@54	20.82	18.82	0.0762
77	30	80	649334	3740.01	DFT-s-OFDM 64 QAM	1@1	20.43	18.43	0.0697
77	30	80	649334	3740.01	DFT-s-OFDM 64 QAM	1@215	20.58	18.58	0.0721
77	30	80	649334	3740.01	DFT-s-OFDM 256 QAM	108@54	19.05	17.05	0.0507
77	30	80	649334	3740.01	DFT-s-OFDM 256 QAM	1@1	18.67	16.67	0.0465
77	30	80	649334	3740.01	DFT-s-OFDM 256 QAM	1@215	18.64	16.64	0.0461
77	30	80	649334	3740.01	CP-OFDM QPSK	109@54	21.85	19.85	0.0966
77	30	80	649334	3740.01	CP-OFDM QPSK	1@1	21.47	19.47	0.0885
77	30	80	649334	3740.01	CP-OFDM QPSK	1@215	21.72	19.72	0.0938
77	30	80	656000	3840	DFT-s-OFDM PI/2 BPSK	108@54	23.58	21.58	0.1439
77	30	80	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	23.11	21.11	0.1291
77	30	80	656000	3840	DFT-s-OFDM PI/2 BPSK	1@215	23.36	21.36	0.1368
77	30	80	656000	3840	DFT-s-OFDM QPSK	108@54	23.5	21.5	0.1413
77	30	80	656000	3840	DFT-s-OFDM QPSK	1@1	23.15	21.15	0.1303
77	30	80	656000	3840	DFT-s-OFDM QPSK	1@215	23.5	21.5	0.1413
77	30	80	656000	3840	DFT-s-OFDM 16 QAM	108@54	22.7	20.7	0.1175
77	30	80	656000	3840	DFT-s-OFDM 16 QAM	1@1	22.3	20.3	0.1072
77	30	80	656000	3840	DFT-s-OFDM 16 QAM	1@215	22.53	20.53	0.1130
77	30	80	656000	3840	DFT-s-OFDM 64 QAM	108@54	21.06	19.06	0.0805
77	30	80	656000	3840	DFT-s-OFDM 64 QAM	1@1	20.4	18.4	0.0692
77	30	80	656000	3840	DFT-s-OFDM 64 QAM	1@215	20.87	18.87	0.0771
77	30	80	656000	3840	DFT-s-OFDM 256 QAM	108@54	19.07	17.07	0.0509
77	30	80	656000	3840	DFT-s-OFDM 256 QAM	1@1	18.72	16.72	0.0470

77	30	80	656000	3840	DFT-s-OFDM 256 QAM	1@215	18.96	16.96	0.0497
77	30	80	656000	3840	CP-OFDM QPSK	109@54	22.07	20.07	0.1016
77	30	80	656000	3840	CP-OFDM QPSK	1@1	21.64	19.64	0.0920
77	30	80	656000	3840	CP-OFDM QPSK	1@215	22.01	20.01	0.1002
77	30	80	662666	3939.99	DFT-s-OFDM PI/2 BPSK	108@54	23.35	21.35	0.1365
77	30	80	662666	3939.99	DFT-s-OFDM PI/2 BPSK	1@1	23.28	21.28	0.1343
77	30	80	662666	3939.99	DFT-s-OFDM PI/2 BPSK	1@215	23.6	21.6	0.1445
77	30	80	662666	3939.99	DFT-s-OFDM QPSK	108@54	23.36	21.36	0.1368
77	30	80	662666	3939.99	DFT-s-OFDM QPSK	1@1	23.39	21.39	0.1377
77	30	80	662666	3939.99	DFT-s-OFDM QPSK	1@215	23.5	21.5	0.1413
77	30	80	662666	3939.99	DFT-s-OFDM 16 QAM	108@54	22.4	20.4	0.1096
77	30	80	662666	3939.99	DFT-s-OFDM 16 QAM	1@1	22.4	20.4	0.1096
77	30	80	662666	3939.99	DFT-s-OFDM 16 QAM	1@215	22.63	20.63	0.1156
77	30	80	662666	3939.99	DFT-s-OFDM 64 QAM	108@54	20.88	18.88	0.0773
77	30	80	662666	3939.99	DFT-s-OFDM 64 QAM	1@1	20.77	18.77	0.0753
77	30	80	662666	3939.99	DFT-s-OFDM 64 QAM	1@215	21.31	19.31	0.0853
77	30	80	662666	3939.99	DFT-s-OFDM 256 QAM	108@54	18.9	16.9	0.0490
77	30	80	662666	3939.99	DFT-s-OFDM 256 QAM	1@1	18.96	16.96	0.0497
77	30	80	662666	3939.99	DFT-s-OFDM 256 QAM	1@215	19.06	17.06	0.0508
77	30	80	662666	3939.99	CP-OFDM QPSK	109@54	21.83	19.83	0.0962
77	30	80	662666	3939.99	CP-OFDM QPSK	1@1	21.89	19.89	0.0975
77	30	80	662666	3939.99	CP-OFDM QPSK	1@215	22.16	20.16	0.1038
77	30	90	649668	3745.02	DFT-s-OFDM PI/2 BPSK	120@60	23.32	21.32	0.1355
77	30	90	649668	3745.02	DFT-s-OFDM PI/2 BPSK	1@1	23.05	21.05	0.1274

77	30	90	649668	3745.02	DFT-s-OFDM PI/2 BPSK	1@243	23.18	21.18	0.1312
77	30	90	649668	3745.02	DFT-s-OFDM QPSK	120@60	23.32	21.32	0.1355
77	30	90	649668	3745.02	DFT-s-OFDM QPSK	1@1	23.11	21.11	0.1291
77	30	90	649668	3745.02	DFT-s-OFDM QPSK	1@243	23.28	21.28	0.1343
77	30	90	649668	3745.02	DFT-s-OFDM 16 QAM	120@60	22.29	20.29	0.1069
77	30	90	649668	3745.02	DFT-s-OFDM 16 QAM	1@1	22.12	20.12	0.1028
77	30	90	649668	3745.02	DFT-s-OFDM 16 QAM	1@243	22.39	20.39	0.1094
77	30	90	649668	3745.02	DFT-s-OFDM 64 QAM	120@60	20.77	18.77	0.0753
77	30	90	649668	3745.02	DFT-s-OFDM 64 QAM	1@1	20.58	18.58	0.0721
77	30	90	649668	3745.02	DFT-s-OFDM 64 QAM	1@243	20.9	18.9	0.0776
77	30	90	649668	3745.02	DFT-s-OFDM 256 QAM	120@60	18.71	16.71	0.0469
77	30	90	649668	3745.02	DFT-s-OFDM 256 QAM	1@1	18.34	16.34	0.0431
77	30	90	649668	3745.02	DFT-s-OFDM 256 QAM	1@243	18.68	16.68	0.0466
77	30	90	649668	3745.02	CP-OFDM QPSK	123@61	21.81	19.81	0.0957
77	30	90	649668	3745.02	CP-OFDM QPSK	1@1	21.56	19.56	0.0904
77	30	90	649668	3745.02	CP-OFDM QPSK	1@243	21.63	19.63	0.0918
77	30	90	656000	3840	DFT-s-OFDM PI/2 BPSK	120@60	23.74	21.74	0.1493
77	30	90	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	23.03	21.03	0.1268
77	30	90	656000	3840	DFT-s-OFDM PI/2 BPSK	1@243	23.42	21.42	0.1387
77	30	90	656000	3840	DFT-s-OFDM QPSK	120@60	23.59	21.59	0.1442
77	30	90	656000	3840	DFT-s-OFDM QPSK	1@1	23.16	21.16	0.1306
77	30	90	656000	3840	DFT-s-OFDM QPSK	1@243	23.5	21.5	0.1413
77	30	90	656000	3840	DFT-s-OFDM 16 QAM	120@60	22.58	20.58	0.1143
77	30	90	656000	3840	DFT-s-OFDM 16 QAM	1@1	22.17	20.17	0.1040

77	30	90	656000	3840	DFT-s-OFDM 16 QAM	1@243	22.39	20.39	0.1094
77	30	90	656000	3840	DFT-s-OFDM 64 QAM	120@60	21.08	19.08	0.0809
77	30	90	656000	3840	DFT-s-OFDM 64 QAM	1@1	20.44	18.44	0.0698
77	30	90	656000	3840	DFT-s-OFDM 64 QAM	1@243	20.72	18.72	0.0745
77	30	90	656000	3840	DFT-s-OFDM 256 QAM	120@60	19.12	17.12	0.0515
77	30	90	656000	3840	DFT-s-OFDM 256 QAM	1@1	18.7	16.7	0.0468
77	30	90	656000	3840	DFT-s-OFDM 256 QAM	1@243	18.98	16.98	0.0499
77	30	90	656000	3840	CP-OFDM QPSK	123@61	22.08	20.08	0.1019
77	30	90	656000	3840	CP-OFDM QPSK	1@1	21.58	19.58	0.0908
77	30	90	656000	3840	CP-OFDM QPSK	1@243	21.86	19.86	0.0968
77	30	90	662332	3934.98	DFT-s-OFDM PI/2 BPSK	120@60	23.28	21.28	0.1343
77	30	90	662332	3934.98	DFT-s-OFDM PI/2 BPSK	1@1	23.43	21.43	0.1390
77	30	90	662332	3934.98	DFT-s-OFDM PI/2 BPSK	1@243	23.45	21.45	0.1396
77	30	90	662332	3934.98	DFT-s-OFDM QPSK	120@60	23.37	21.37	0.1371
77	30	90	662332	3934.98	DFT-s-OFDM QPSK	1@1	23.4	21.4	0.1380
77	30	90	662332	3934.98	DFT-s-OFDM QPSK	1@243	23.53	21.53	0.1422
77	30	90	662332	3934.98	DFT-s-OFDM 16 QAM	120@60	22.37	20.37	0.1089
77	30	90	662332	3934.98	DFT-s-OFDM 16 QAM	1@1	22.57	20.57	0.1140
77	30	90	662332	3934.98	DFT-s-OFDM 16 QAM	1@243	22.64	20.64	0.1159
77	30	90	662332	3934.98	DFT-s-OFDM 64 QAM	120@60	20.82	18.82	0.0762
77	30	90	662332	3934.98	DFT-s-OFDM 64 QAM	1@1	20.85	18.85	0.0767
77	30	90	662332	3934.98	DFT-s-OFDM 64 QAM	1@243	21.04	19.04	0.0802
77	30	90	662332	3934.98	DFT-s-OFDM 256 QAM	120@60	18.91	16.91	0.0491
77	30	90	662332	3934.98	DFT-s-OFDM 256 QAM	1@1	18.99	16.99	0.0500

77	30	90	662332	3934.98	DFT-s-OFDM 256 QAM	1@243	18.9	16.9	0.0490
77	30	90	662332	3934.98	CP-OFDM QPSK	123@61	21.78	19.78	0.0951
77	30	90	662332	3934.98	CP-OFDM QPSK	1@1	22.03	20.03	0.1007
77	30	90	662332	3934.98	CP-OFDM QPSK	1@243	21.98	19.98	0.0995
77	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	135@67	23.32	21.32	0.1355
77	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	22.89	20.89	0.1227
77	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	1@271	23.32	21.32	0.1355
77	30	100	650000	3750	DFT-s-OFDM QPSK	135@67	23.28	21.28	0.1343
77	30	100	650000	3750	DFT-s-OFDM QPSK	1@1	22.96	20.96	0.1247
77	30	100	650000	3750	DFT-s-OFDM QPSK	1@271	23.34	21.34	0.1361
77	30	100	650000	3750	DFT-s-OFDM 16 QAM	135@67	22.27	20.27	0.1064
77	30	100	650000	3750	DFT-s-OFDM 16 QAM	1@1	22.09	20.09	0.1021
77	30	100	650000	3750	DFT-s-OFDM 16 QAM	1@271	22.42	20.42	0.1102
77	30	100	650000	3750	DFT-s-OFDM 64 QAM	135@67	20.87	18.87	0.0771
77	30	100	650000	3750	DFT-s-OFDM 64 QAM	1@1	20.42	18.42	0.0695
77	30	100	650000	3750	DFT-s-OFDM 64 QAM	1@271	20.63	18.63	0.0729
77	30	100	650000	3750	DFT-s-OFDM 256 QAM	135@67	18.64	16.64	0.0461
77	30	100	650000	3750	DFT-s-OFDM 256 QAM	1@1	18.31	16.31	0.0428
77	30	100	650000	3750	DFT-s-OFDM 256 QAM	1@271	18.93	16.93	0.0493
77	30	100	650000	3750	CP-OFDM QPSK	137@68	21.8	19.8	0.0955
77	30	100	650000	3750	CP-OFDM QPSK	1@1	21.52	19.52	0.0895
77	30	100	650000	3750	CP-OFDM QPSK	1@271	21.75	19.75	0.0944
77	30	100	656000	3840	DFT-s-OFDM PI/2 BPSK	135@67	23.84	21.84	0.1528
77	30	100	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	22.93	20.93	0.1239

77	30	100	656000	3840	DFT-s-OFDM PI/2 BPSK	1@271	23.44	21.44	0.1393
77	30	100	656000	3840	DFT-s-OFDM QPSK	135@67	23.48	21.48	0.1406
77	30	100	656000	3840	DFT-s-OFDM QPSK	1@1	23.02	21.02	0.1265
77	30	100	656000	3840	DFT-s-OFDM QPSK	1@271	23.42	21.42	0.1387
77	30	100	656000	3840	DFT-s-OFDM 16 QAM	135@67	22.37	20.37	0.1089
77	30	100	656000	3840	DFT-s-OFDM 16 QAM	1@1	22.09	20.09	0.1021
77	30	100	656000	3840	DFT-s-OFDM 16 QAM	1@271	23.03	21.03	0.1268
77	30	100	656000	3840	DFT-s-OFDM 64 QAM	135@67	20.9	18.9	0.0776
77	30	100	656000	3840	DFT-s-OFDM 64 QAM	1@1	20.23	18.23	0.0665
77	30	100	656000	3840	DFT-s-OFDM 64 QAM	1@271	20.78	18.78	0.0755
77	30	100	656000	3840	DFT-s-OFDM 256 QAM	135@67	19.13	17.13	0.0516
77	30	100	656000	3840	DFT-s-OFDM 256 QAM	1@1	18.46	16.46	0.0443
77	30	100	656000	3840	DFT-s-OFDM 256 QAM	1@271	18.76	16.76	0.0474
77	30	100	656000	3840	CP-OFDM QPSK	137@68	22.1	20.1	0.1023
77	30	100	656000	3840	CP-OFDM QPSK	1@1	21.48	19.48	0.0887
77	30	100	656000	3840	CP-OFDM QPSK	1@271	22.1	20.1	0.1023
77	30	100	662000	3930	DFT-s-OFDM PI/2 BPSK	135@67	23.39	21.39	0.1377
77	30	100	662000	3930	DFT-s-OFDM PI/2 BPSK	1@1	23.44	21.44	0.1393
77	30	100	662000	3930	DFT-s-OFDM PI/2 BPSK	1@271	23.59	21.59	0.1442
77	30	100	662000	3930	DFT-s-OFDM QPSK	135@67	23.47	21.47	0.1403
77	30	100	662000	3930	DFT-s-OFDM QPSK	1@1	23.45	21.45	0.1396
77	30	100	662000	3930	DFT-s-OFDM QPSK	1@271	23.59	21.59	0.1442
77	30	100	662000	3930	DFT-s-OFDM 16 QAM	135@67	22.42	20.42	0.1102
77	30	100	662000	3930	DFT-s-OFDM 16 QAM	1@1	22.71	20.71	0.1178

77	30	100	662000	3930	DFT-s-OFDM 16 QAM	1@271	22.65	20.65	0.1161
77	30	100	662000	3930	DFT-s-OFDM 64 QAM	135@67	21.03	19.03	0.0800
77	30	100	662000	3930	DFT-s-OFDM 64 QAM	1@1	20.62	18.62	0.0728
77	30	100	662000	3930	DFT-s-OFDM 64 QAM	1@271	21.04	19.04	0.0802
77	30	100	662000	3930	DFT-s-OFDM 256 QAM	135@67	18.99	16.99	0.0500
77	30	100	662000	3930	DFT-s-OFDM 256 QAM	1@1	19.03	17.03	0.0505
77	30	100	662000	3930	DFT-s-OFDM 256 QAM	1@271	18.76	16.76	0.0474
77	30	100	662000	3930	CP-OFDM QPSK	137@68	21.99	19.99	0.0998
77	30	100	662000	3930	CP-OFDM QPSK	1@1	21.94	19.94	0.0986
77	30	100	662000	3930	CP-OFDM QPSK	1@271	22.22	20.22	0.1052

Frequency Stability

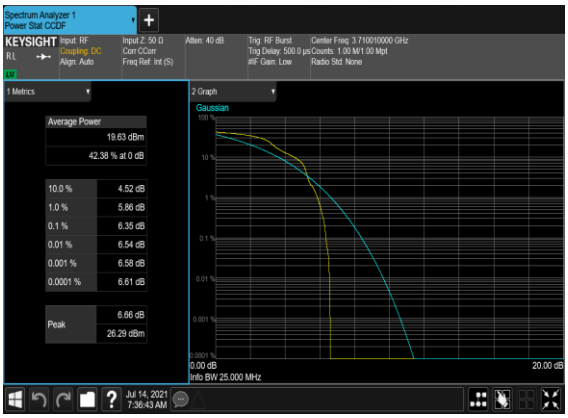
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00108	PASS	NV
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00771	PASS	LV
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00742	PASS	HV
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00883	PASS	-30℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.0025	PASS	-20℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00299	PASS	-10℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00431	PASS	0℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00669	PASS	10℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00525	PASS	20℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00663	PASS	30℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00221	PASS	40℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00841	PASS	50℃

Peak to Average Radio

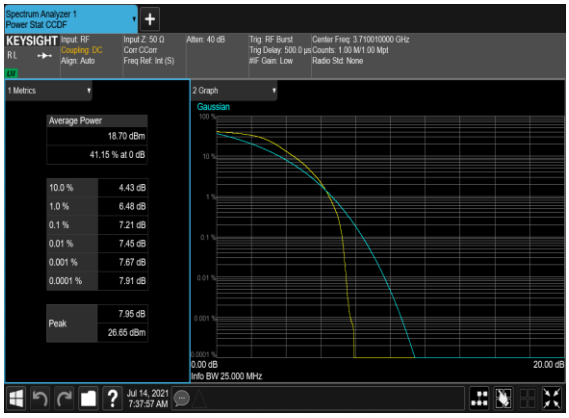
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
77	30	20	647334	3710.01	DFT-s-OFDM PI/2 BPSK	50@0	6.79	13	PASS
77	30	20	647334	3710.01	DFT-s-OFDM PI/2 BPSK	1@0	6.35	13	PASS
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	50@0	7.21	13	PASS
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@0	6.48	13	PASS
77	30	20	656000	3840.0	DFT-s-OFDM PI/2 BPSK	50@0	6.62	13	PASS
77	30	20	656000	3840.0	DFT-s-OFDM PI/2 BPSK	1@0	6.93	13	PASS
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	7.55	13	PASS
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	1@0	7.94	13	PASS
77	30	20	664666	3969.99	DFT-s-OFDM PI/2 BPSK	50@0	6.65	13	PASS
77	30	20	664666	3969.99	DFT-s-OFDM PI/2 BPSK	1@0	6.3	13	PASS
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	50@0	7.55	13	PASS
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	1@0	7.57	13	PASS

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

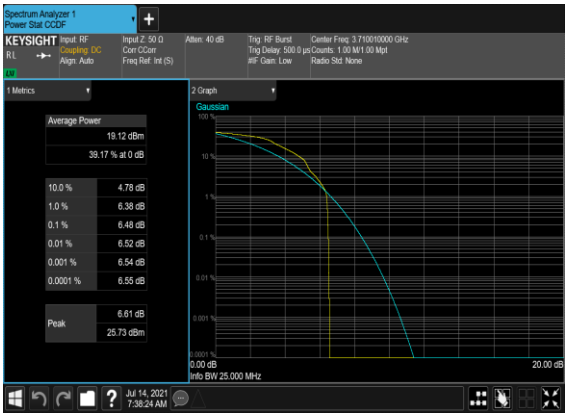
N77(20M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_Low_CH



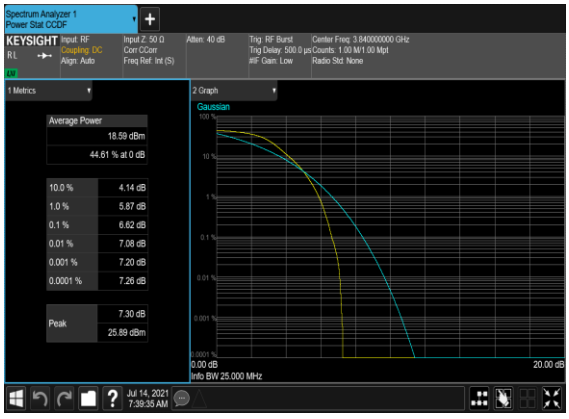
N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



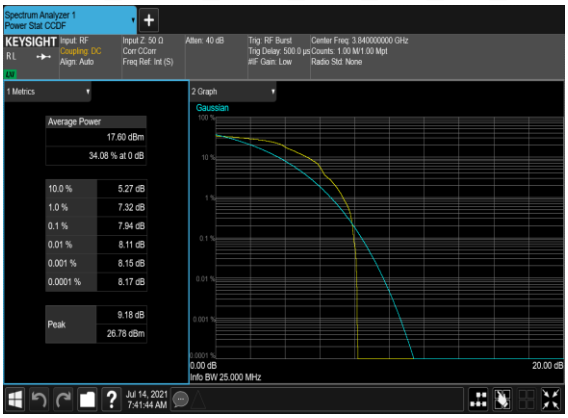
N77(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



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

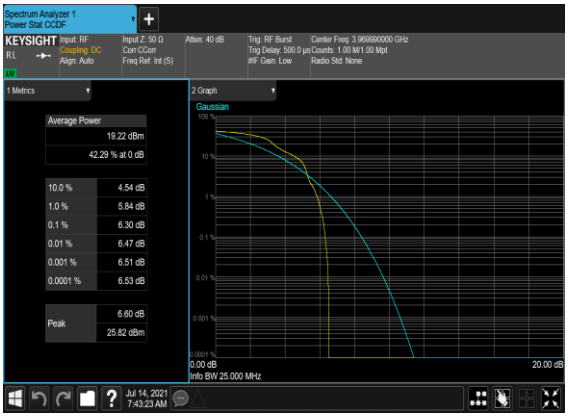
N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH

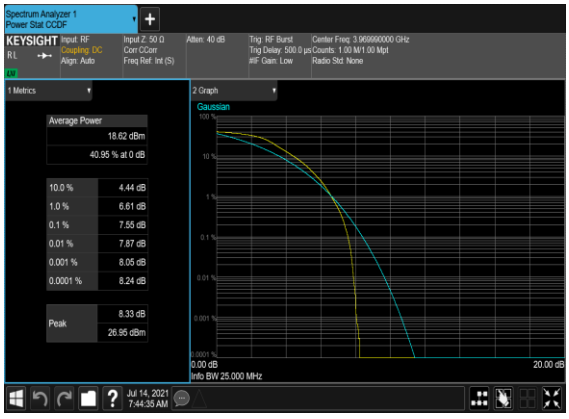


N77(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_High_CH

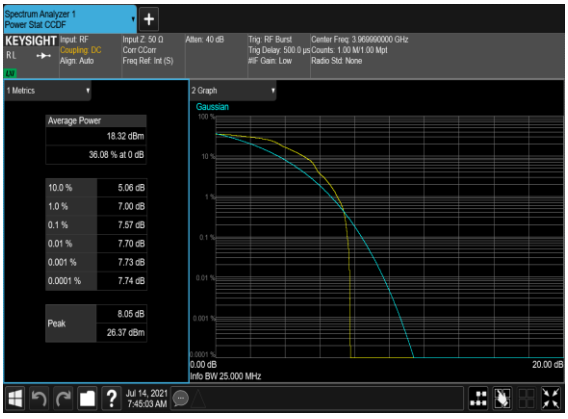
N77(20M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_High_CH



N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



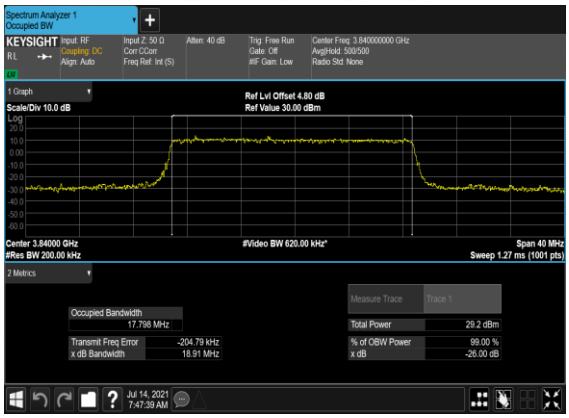
Occupied Bandwidth

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	17.798	18.91
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	17.803	19.0
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	18.199	19.25
77	30	20	656000	3840.0	CP-OFDM 16 QAM	51@0	18.205	19.3
77	30	20	656000	3840.0	CP-OFDM 64 QAM	51@0	18.21	19.12
77	30	20	656000	3840.0	CP-OFDM 256 QAM	51@0	18.178	19.32
77	30	30	656000	3840.0	DFT-s-OFDM PI/2 BPSK	75@0	26.742	28.3
77	30	30	656000	3840.0	DFT-s-OFDM QPSK	75@0	26.731	28.07
77	30	30	656000	3840.0	CP-OFDM QPSK	78@0	27.847	29.23
77	30	30	656000	3840.0	CP-OFDM 16 QAM	78@0	27.849	29.31
77	30	30	656000	3840.0	CP-OFDM 64 QAM	78@0	27.848	29.01
77	30	30	656000	3840.0	CP-OFDM 256 QAM	78@0	27.837	29.24
77	30	40	656000	3840.0	DFT-s-OFDM PI/2 BPSK	100@0	35.681	37.15
77	30	40	656000	3840.0	DFT-s-OFDM QPSK	100@0	35.675	37.1
77	30	40	656000	3840.0	CP-OFDM QPSK	106@0	37.818	39.37
77	30	40	656000	3840.0	CP-OFDM 16 QAM	106@0	37.83	39.34
77	30	40	656000	3840.0	CP-OFDM 64 QAM	106@0	37.753	39.39
77	30	40	656000	3840.0	CP-OFDM 256 QAM	106@0	37.82	39.35
77	30	50	656000	3840.0	DFT-s-OFDM PI/2 BPSK	128@0	45.735	47.42
77	30	50	656000	3840.0	DFT-s-OFDM QPSK	128@0	45.718	47.45
77	30	50	656000	3840.0	CP-OFDM QPSK	133@0	47.451	49.24
77	30	50	656000	3840.0	CP-OFDM 16 QAM	133@0	47.438	49.14
77	30	50	656000	3840.0	CP-OFDM 64 QAM	133@0	47.431	49.19
77	30	50	656000	3840.0	CP-OFDM 256 QAM	133@0	47.429	49.43

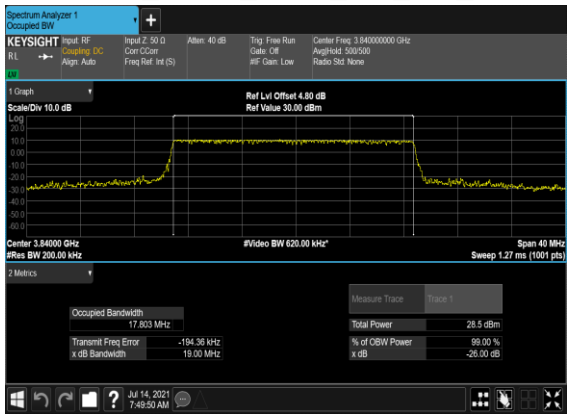
77	30	60	656000	3840.0	DFT-s-OFDM PI/2 BPSK	162@0	57.917	59.93
77	30	60	656000	3840.0	DFT-s-OFDM QPSK	162@0	57.808	59.93
77	30	60	656000	3840.0	CP-OFDM QPSK	162@0	57.75	59.8
77	30	60	656000	3840.0	CP-OFDM 16 QAM	162@0	57.733	59.82
77	30	60	656000	3840.0	CP-OFDM 64 QAM	162@0	57.905	59.82
77	30	60	656000	3840.0	CP-OFDM 256 QAM	162@0	57.825	59.83
77	30	70	656000	3840.0	DFT-s-OFDM PI/2 BPSK	180@0	64.485	66.41
77	30	70	656000	3840.0	DFT-s-OFDM QPSK	180@0	64.402	66.38
77	30	70	656000	3840.0	CP-OFDM QPSK	189@0	67.504	69.8
77	30	70	656000	3840.0	CP-OFDM 16 QAM	189@0	67.567	69.8
77	30	70	656000	3840.0	CP-OFDM 64 QAM	189@0	67.451	69.78
77	30	70	656000	3840.0	CP-OFDM 256 QAM	189@0	67.508	69.64
77	30	80	656000	3840.0	DFT-s-OFDM PI/2 BPSK	216@0	77.154	79.68
77	30	80	656000	3840.0	DFT-s-OFDM QPSK	216@0	77.172	79.59
77	30	80	656000	3840.0	CP-OFDM QPSK	217@0	77.485	79.98
77	30	80	656000	3840.0	CP-OFDM 16 QAM	217@0	77.51	80.09
77	30	80	656000	3840.0	CP-OFDM 64 QAM	217@0	77.387	79.98
77	30	80	656000	3840.0	CP-OFDM 256 QAM	217@0	77.448	79.96
77	30	90	656000	3840.0	DFT-s-OFDM PI/2 BPSK	240@0	85.708	88.54
77	30	90	656000	3840.0	DFT-s-OFDM QPSK	240@0	85.666	88.4
77	30	90	656000	3840.0	CP-OFDM QPSK	245@0	87.318	90.41
77	30	90	656000	3840.0	CP-OFDM 16 QAM	245@0	87.46	90.27
77	30	90	656000	3840.0	CP-OFDM 64 QAM	245@0	87.406	90.42
77	30	90	656000	3840.0	CP-OFDM 256 QAM	245@0	87.496	90.44
77	30	100	656000	3840.0	DFT-s-OFDM PI/2 BPSK	270@0	96.226	99.47
77	30	100	656000	3840.0	DFT-s-OFDM	270@0	96.365	99.53

					QPSK			
77	30	100	656000	3840.0	CP-OFDM QPSK	273@0	97.578	100.6
77	30	100	656000	3840.0	CP-OFDM 16 QAM	273@0	97.522	100.6
77	30	100	656000	3840.0	CP-OFDM 64 QAM	273@0	97.332	100.6
77	30	100	656000	3840.0	CP-OFDM 256 QAM	273@0	97.459	100.6

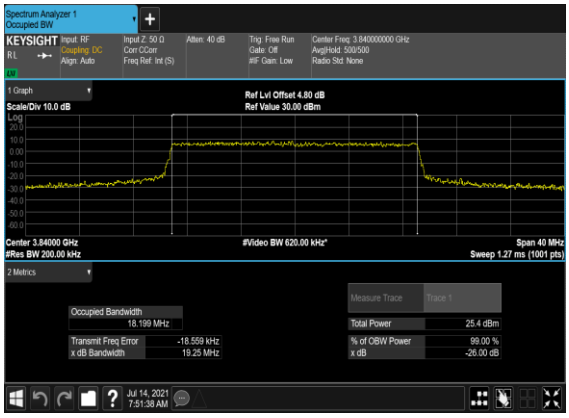
N77(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

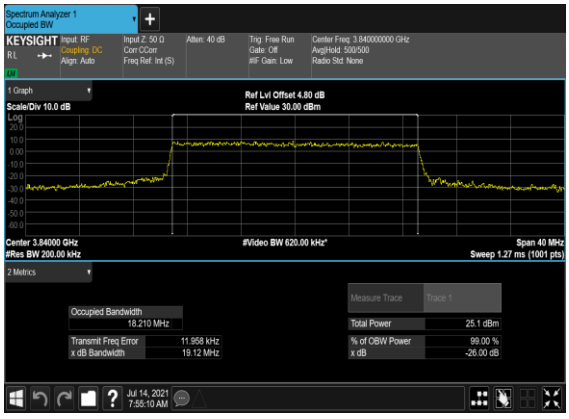


N77(20M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

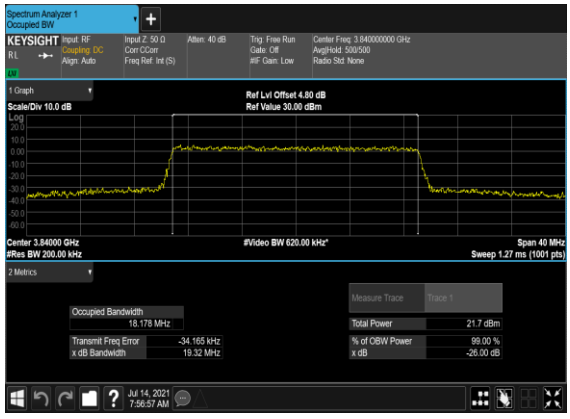


N77(20M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

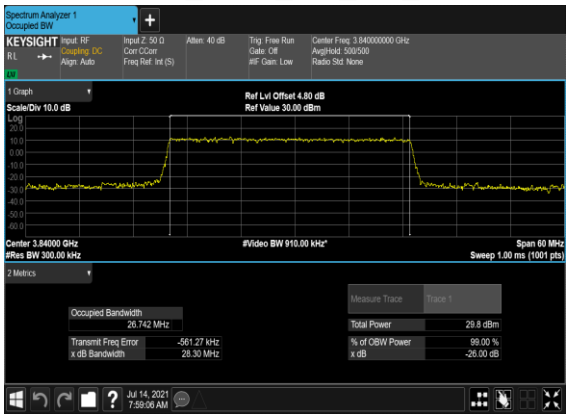
N77(20M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



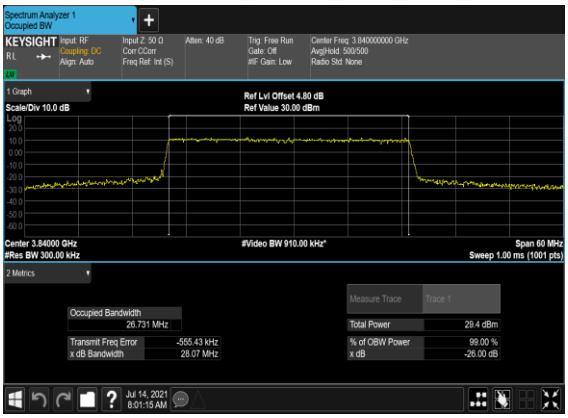
N77(20M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



N77(30M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



N77(30M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



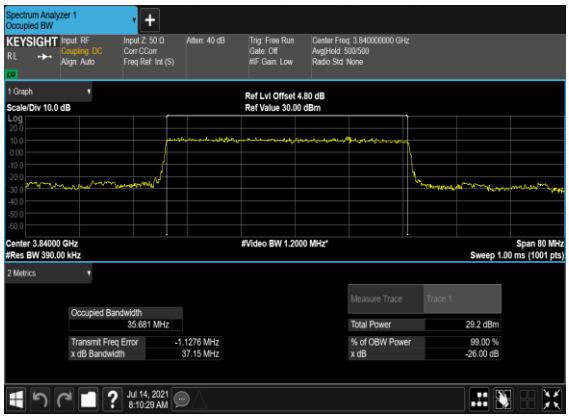
N77(30M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

N77(30M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

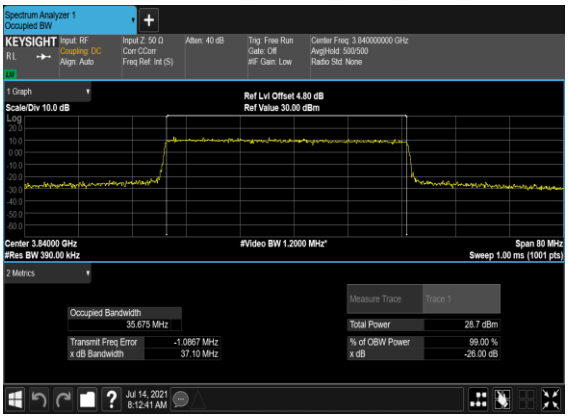
N77(30M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

N77(30M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

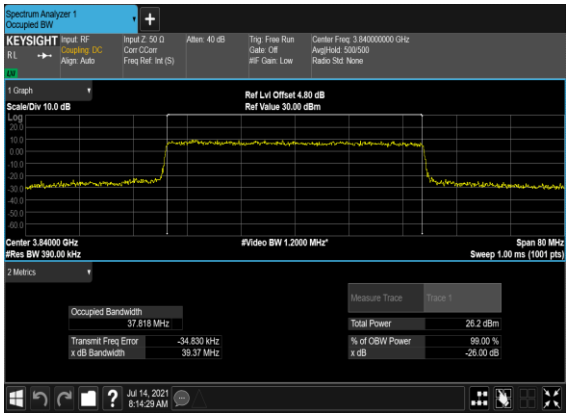
N77(40M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



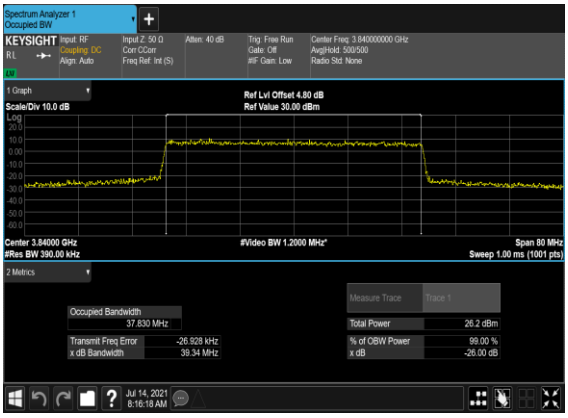
N77(40M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



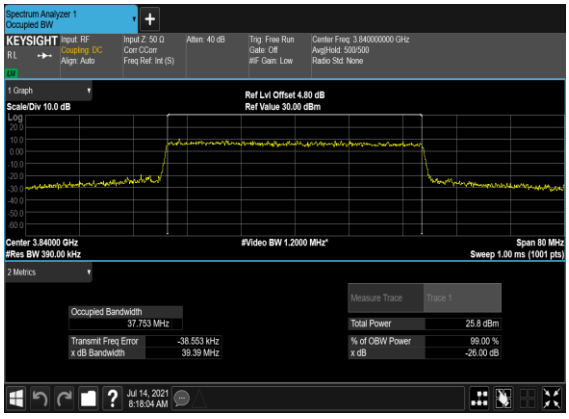
N77(40M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



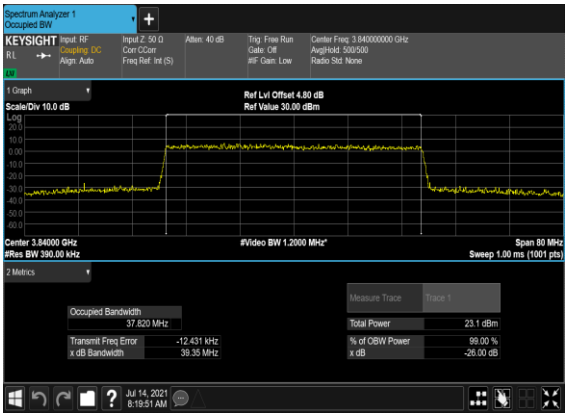
N77(40M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



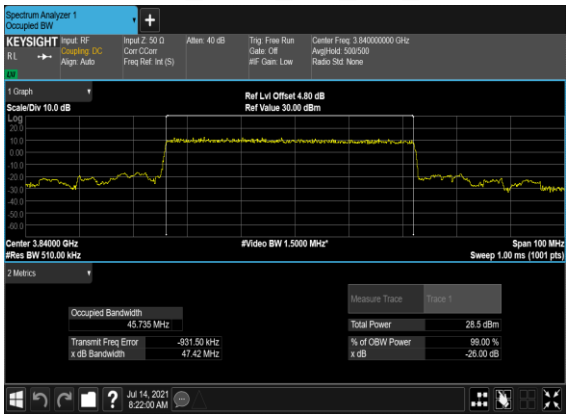
N77(40M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



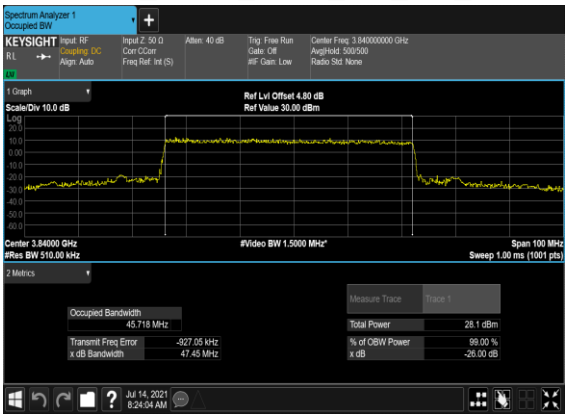
N77(40M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



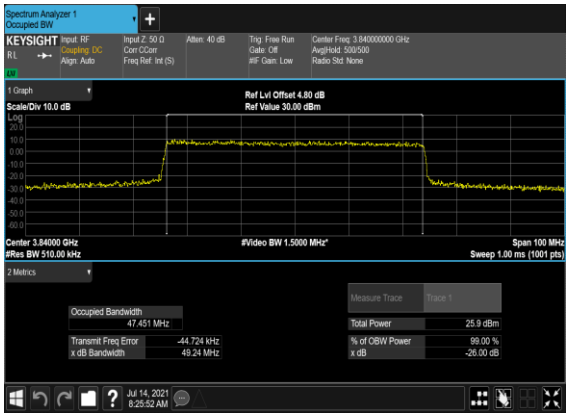
N77(50M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



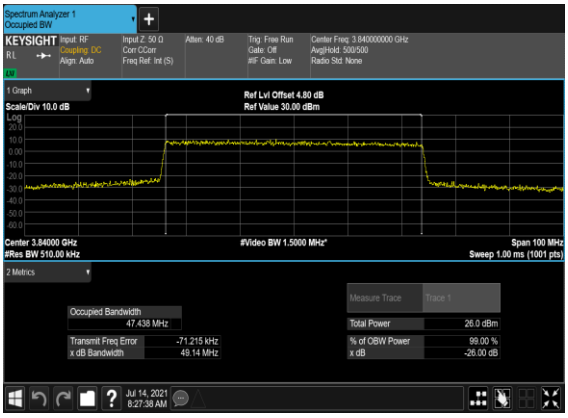
N77(50M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



N77(50M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

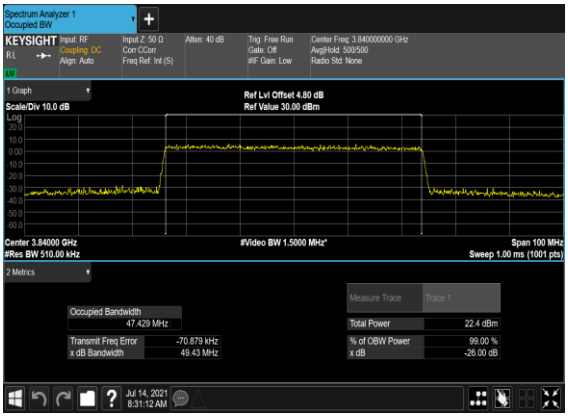


N77(50M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

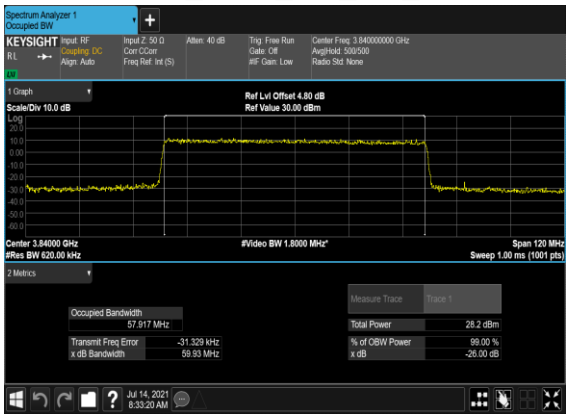


N77(50M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

N77(50M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



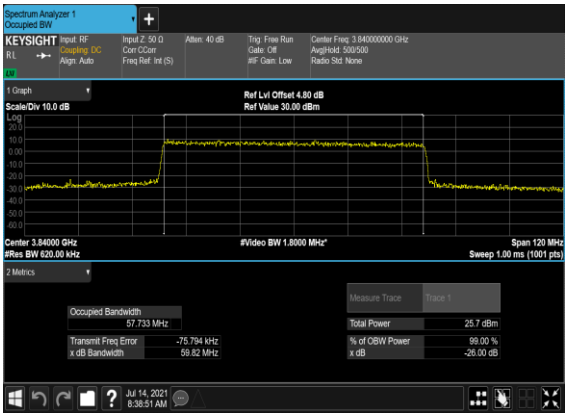
N77(60M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



N77(60M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

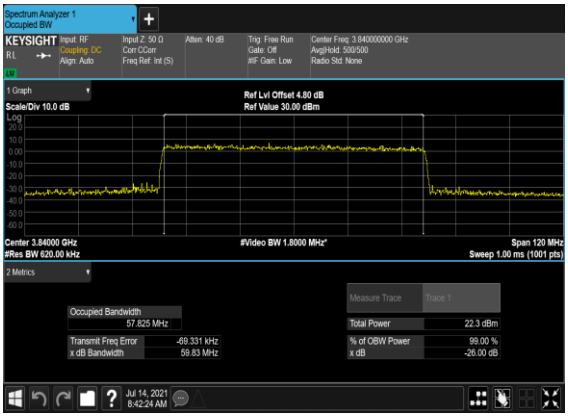
N77(60M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

N77(60M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

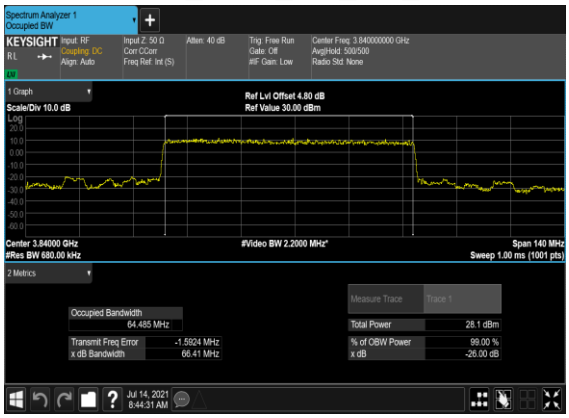


N77(60M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

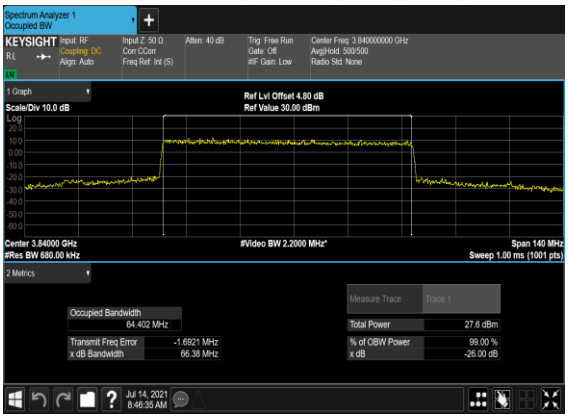
N77(60M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



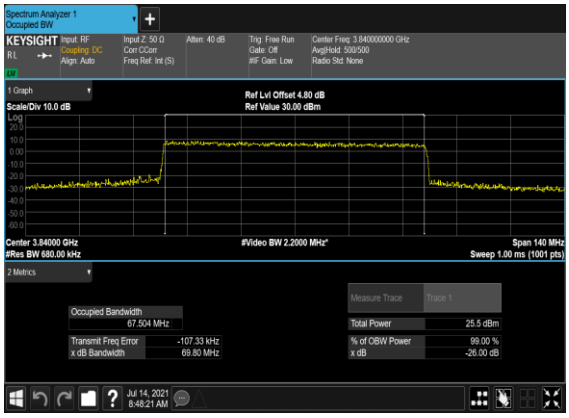
N77(70M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



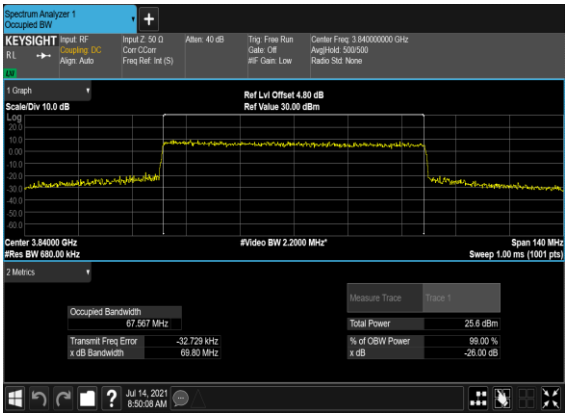
N77(70M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



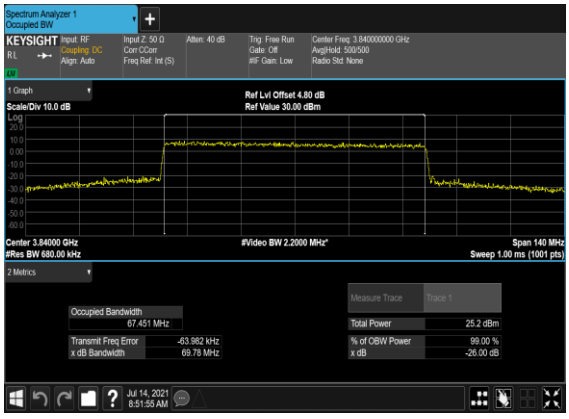
N77(70M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



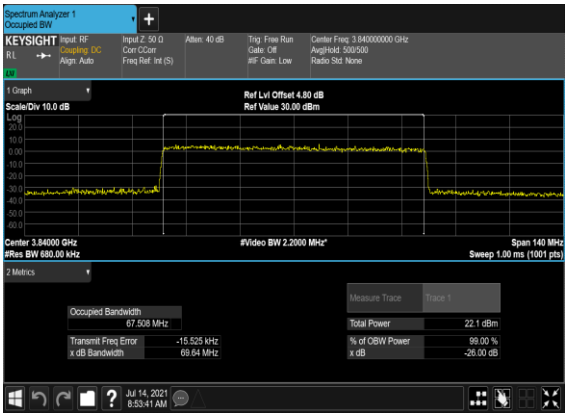
N77(70M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N77(70M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

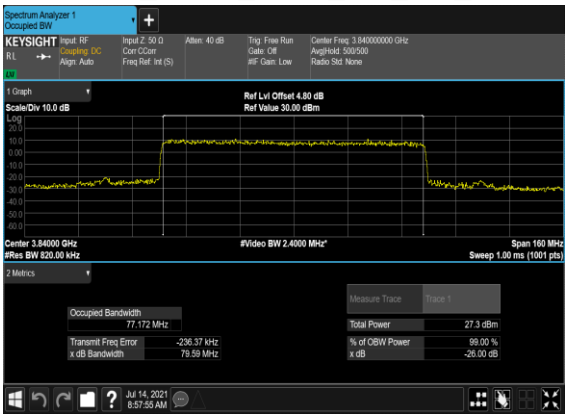


N77(70M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

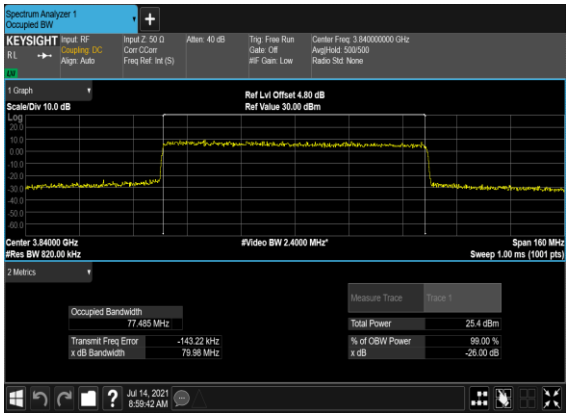


N77(80M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH

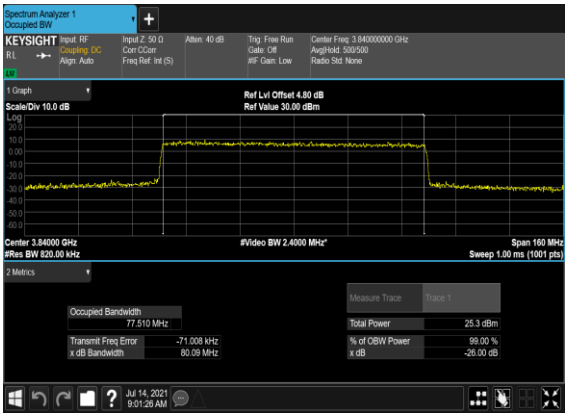
N77(80M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



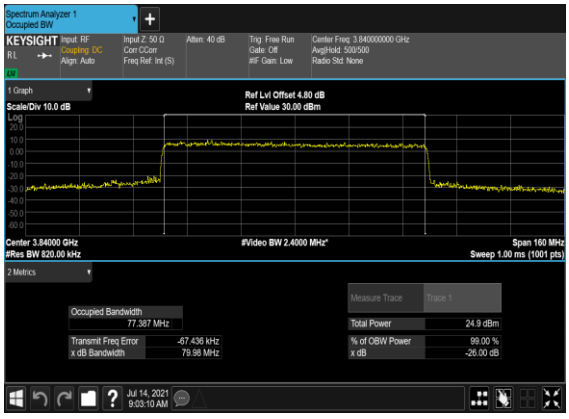
N77(80M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



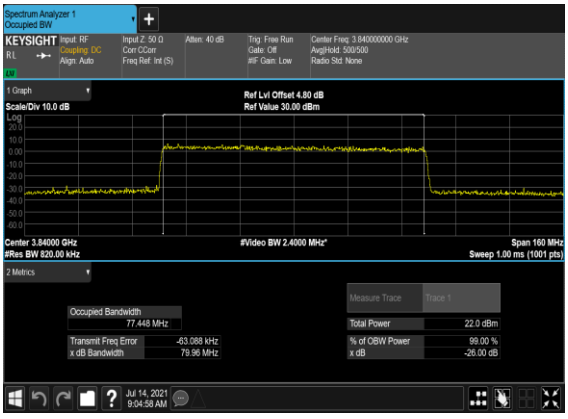
N77(80M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



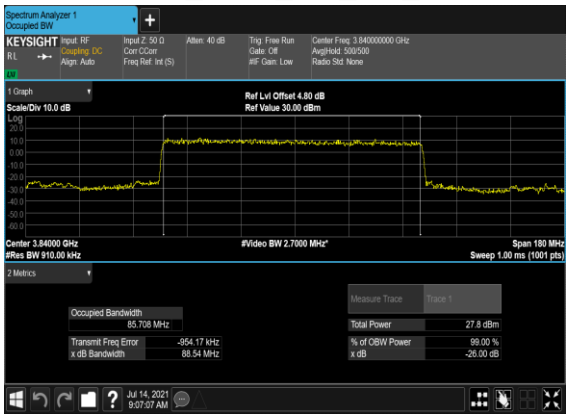
N77(80M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



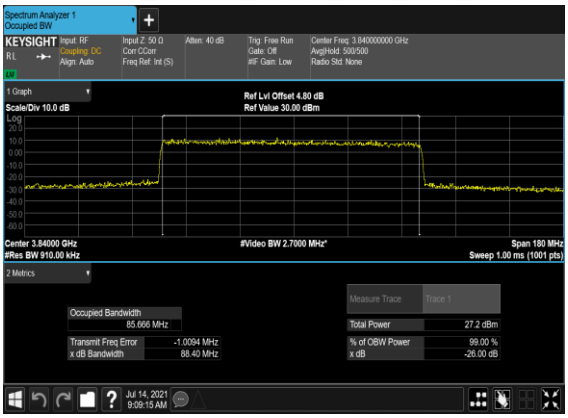
N77(80M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



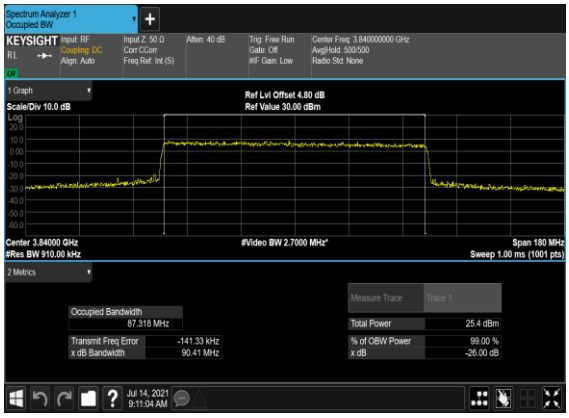
N77(90M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



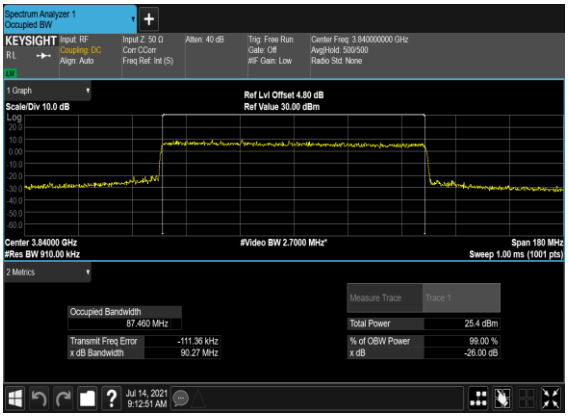
N77(90M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



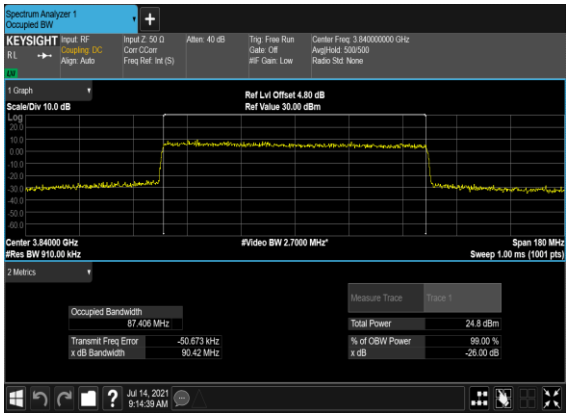
N77(90M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



N77(90M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

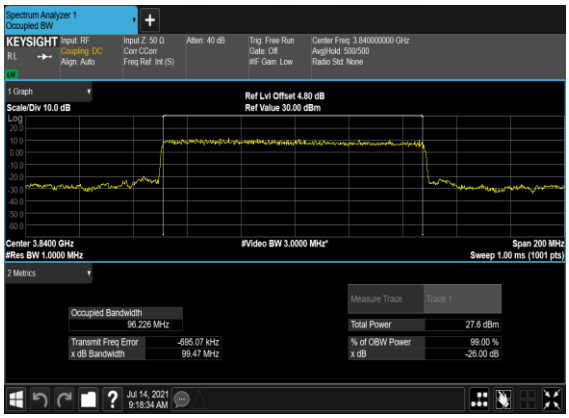


N77(90M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

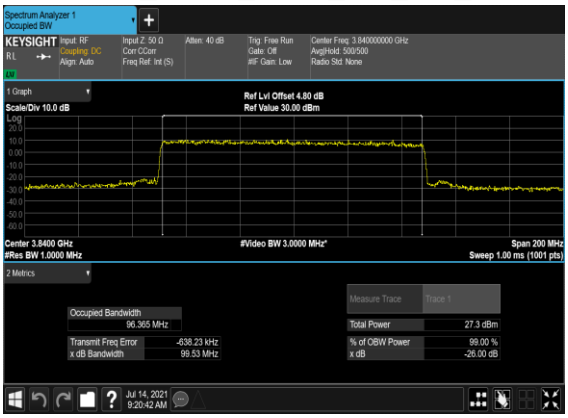


N77(90M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

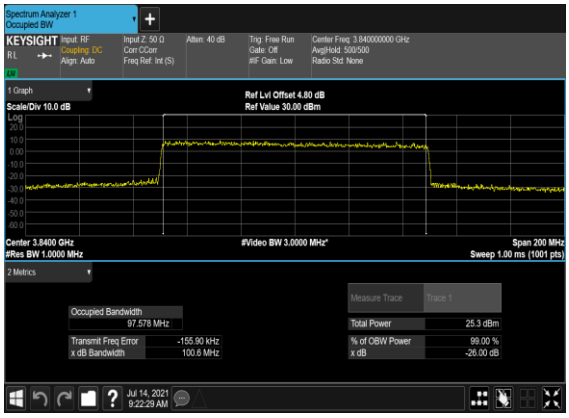
N77(100M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



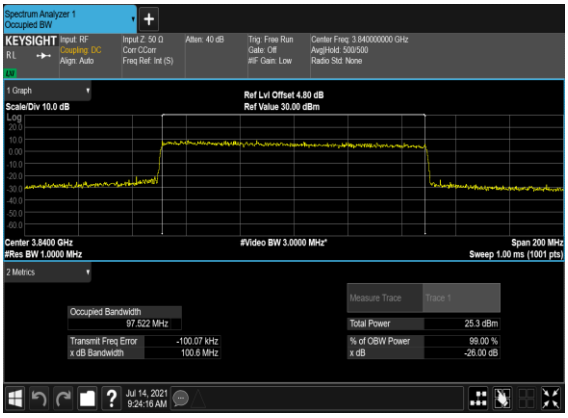
N77(100M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



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

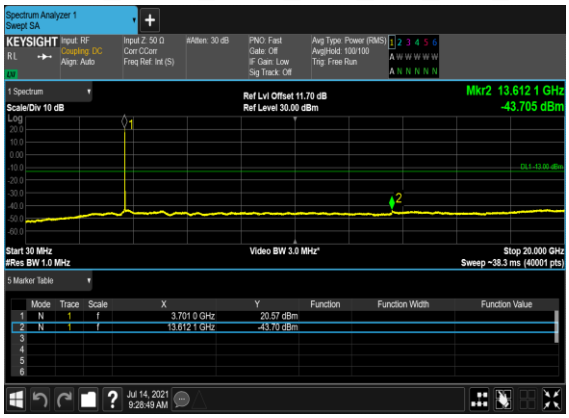
Conducted Spurious Emissions

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	---

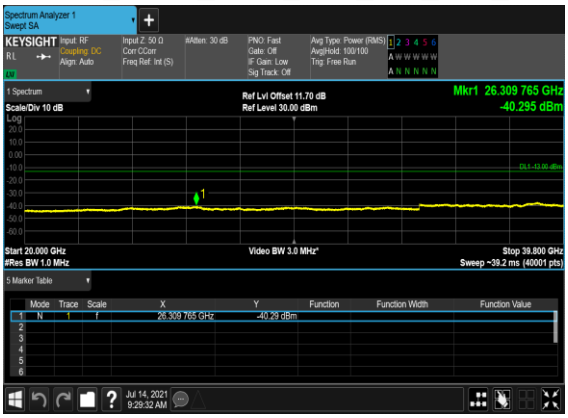
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	60	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	---
77	30	60	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	60	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	60	656000	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

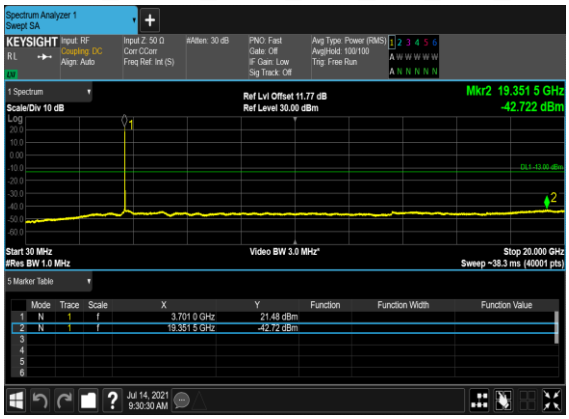
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



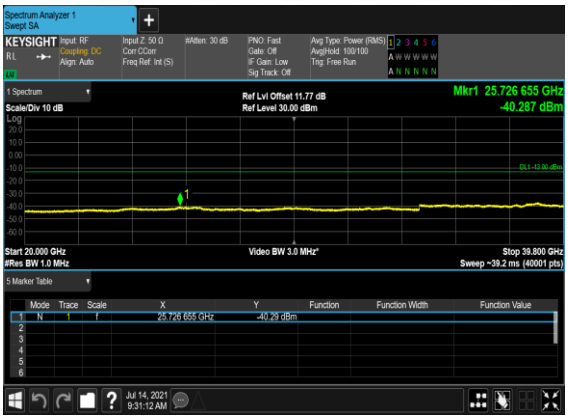
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



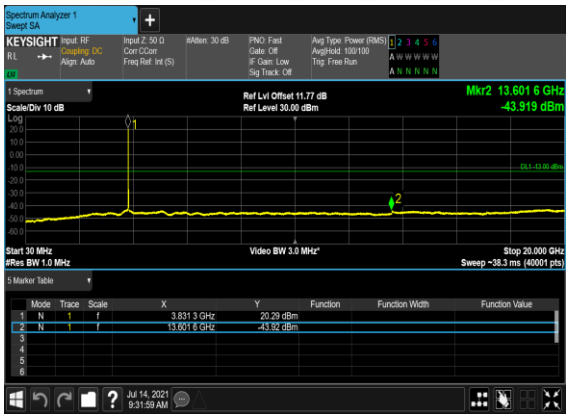
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



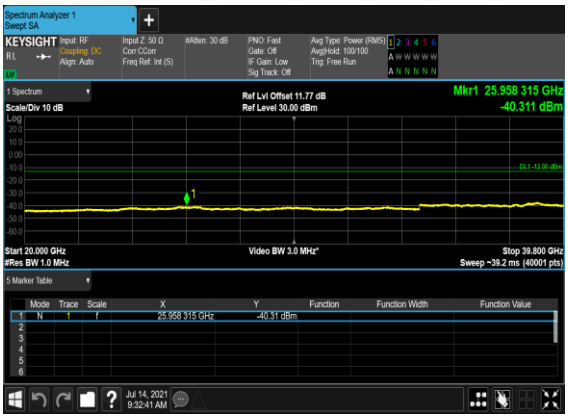
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



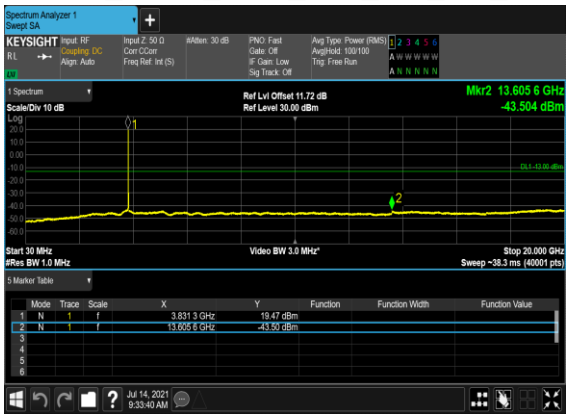
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



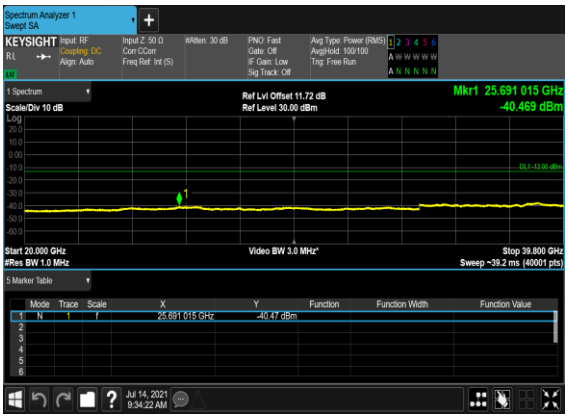
N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



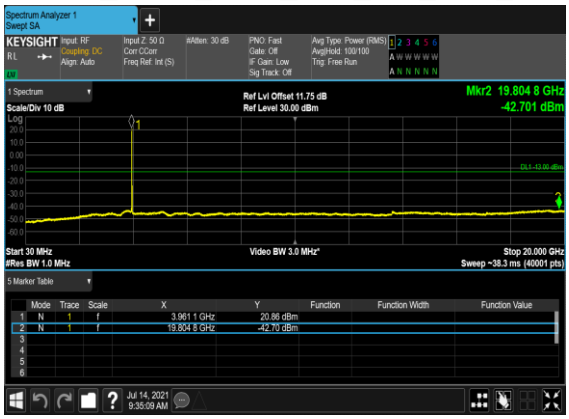
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



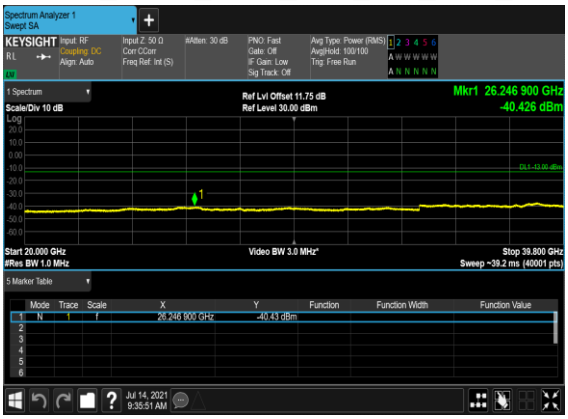
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH

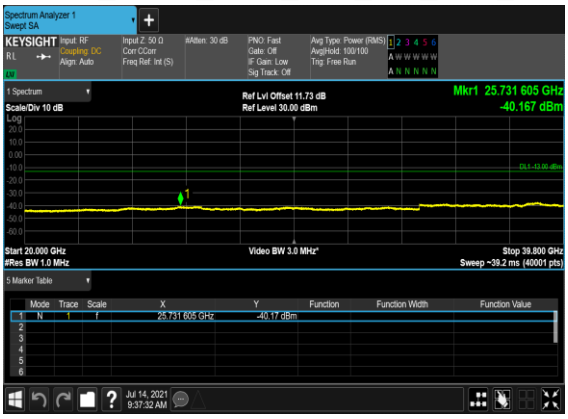


N77(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH

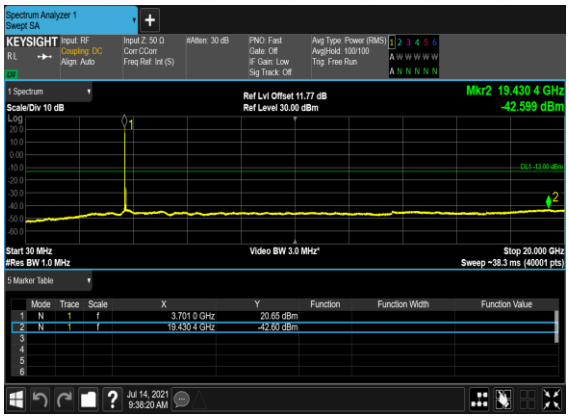


N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH

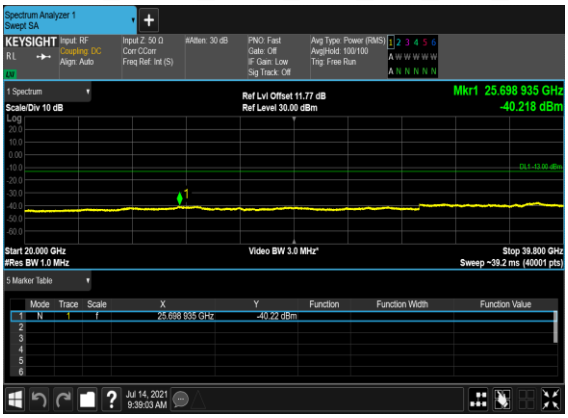
N77(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



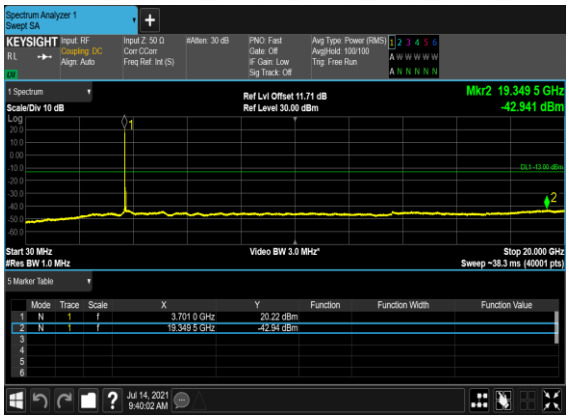
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



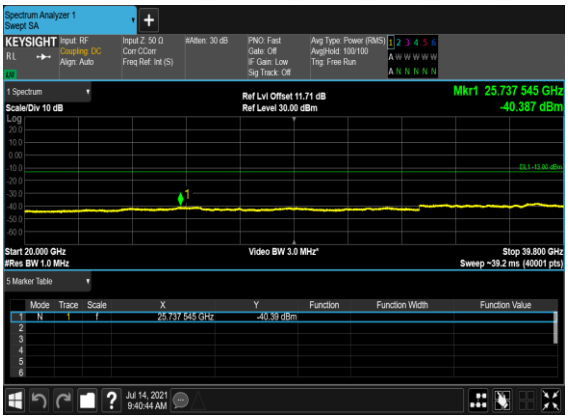
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



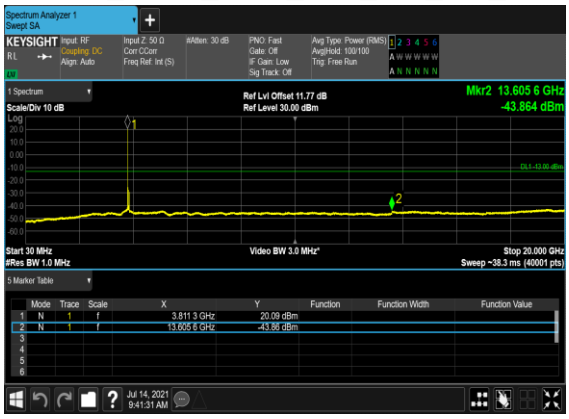
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



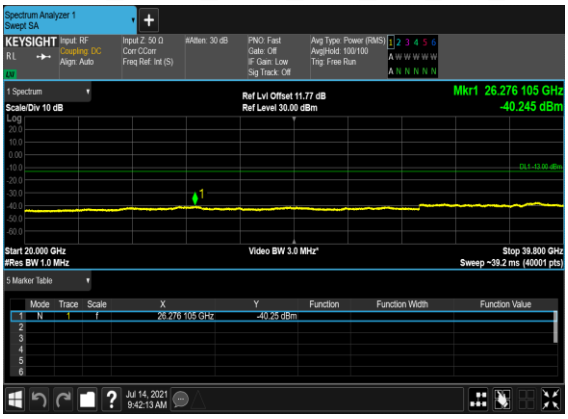
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



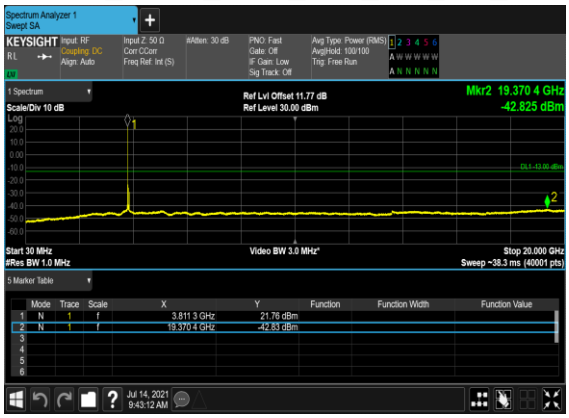
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



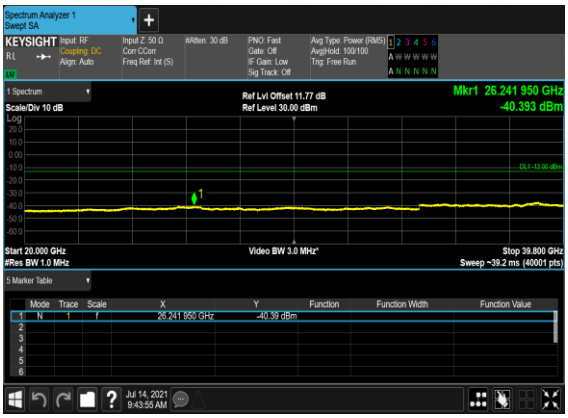
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



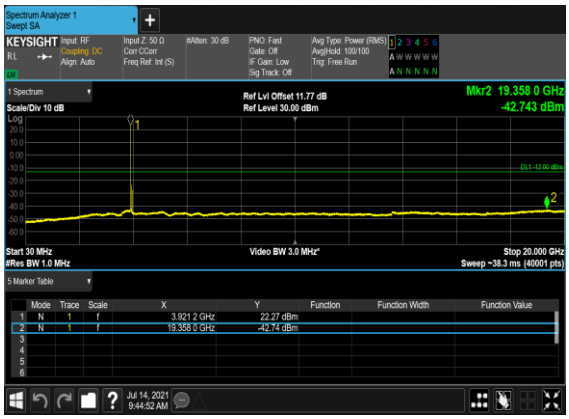
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



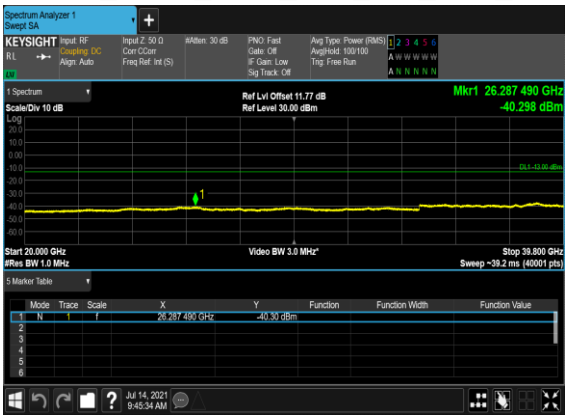
N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



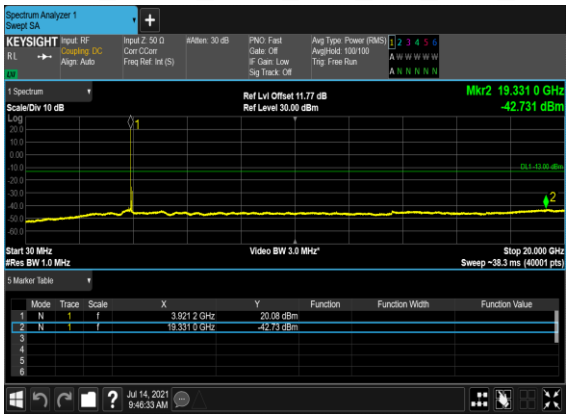
N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



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