FCC RF Test Report

APPLICANT	: Xiaomi Communications Co., Ltd.
EQUIPMENT	: Mobile Phone
BRAND NAME	: XIAOMI
MODEL NAME	: 22071212AG
FCC ID	: 2AFZZ12AG
STANDARD	: 47 CFR Part 2, 27 Subpart Q
CLASSIFICATION	: PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S)	: Jun. 01, 2022 ~ Jun. 11, 2022

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

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

Jason Jia

Approved by: Jason Jia

ACCREDITED Cert #5145.01

Sporton International Inc. (ShenZhen)

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People's Republic of China

TABLE OF CONTENTS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG250504H	Rev. 01	Initial issue of report	Jun. 20, 2022

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	—	Report Only	-
3.5	§27.50 (k)(4)	Peak-to-Average Ratio	<13dB	PASS	
3.6	§27.50 (k)(3)	EIRP	EIRP < 1W (30dBm)	PASS	-
3.7	§2.1049	Occupied Bandwidth	—	Report Only	-
3.8	§2.1051 §27.53 (n)(2)	Conducted Band Edge Measurement	-13dBm/MHz	PASS	-
3.9	§2.1051 §27.53 (n)(2)	Conducted Spurious Emission	-13dBm/MHz	PASS	-
3.10	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within the band	PASS	-
4.4	§2.1053 §27.53 (n)(2)	Radiated Spurious Emission	-13dBm/MHz	PASS	Under limit 25.91 dB at 7632.500 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	22071212AG
FCC ID	2AFZZ12AG
IMEI Code	Conducted: 860232060096466 Radiation: 860232060096565/860232060096573
HW Version	P2
SW Version	MIUI 13
EUT Stage	Production Unit

1.4. Product Specification of Equipment Under Test

Product Feature	
Tx/Rx Frequency	5G NR n77: 3450 MHz ~ 3550 MHz 5G NR n78: 3450 MHz ~ 3550 MHz
SCS	15kHz, 30kHz
Bandwidth	n77/n78(15kHz): 10 / 15 / 20 / 25 / 30 / 40 / 50MHz n77/n78(30kHz): 10 / 15 / 20 / 25 / 30 / 40 / 50 / 60 / 70 / 80 / 90 / 100MHz
Antenna Gain	**Ant. 4:** 5G NR n77: -1.40 dBi 5G NR n78: -1.94 dBi **Ant. 5:** 5G NR n77: -0.46 dBi 5G NR n78: -1.20 dBi **Ant. 6:** 5G NR n77: -1.26 dBi 5G NR n78: -1.04 dBi **Ant. 7:** 5G NR n77: 0 dBi 5G NR n78: -1.00 dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

Remark:

1. The maximum EIRP is calculated from max Output power and antenna gain, only the maximum EIRP are shown in the report, 5G NR n77/n78 for Antenna 6.
2. The device supports n77(1T4R) SRS resources on Antenna 4/5/6/7, only the test data of worst Antenna 6 is showed in the report according to the maximum power.
3. 5G NR n77/n78 support SA and NSA mode. The whole testing has assessed SA mode for n78 by referring to the higher conducted power for conducted test items.
4. 5G NR n78 supports HPUE for SA mode.
5. The EN-DC mode combination could be referred to the product spec.

1.5. Modification of EUT

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

1.6. Maximum EIRP Power and Emission Designator

5G NR n77 -15kHz		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)
10	3455.01 ~ 3544.995	0.1959	9M29G7D	0.1535	9M27W7D
15	3457.5 ~ 3542.49	0.1991	14M1G7D	0.1563	14M1W7D
20	3460.005 ~ 3540	0.2000	18M9G7D	0.1578	19M0W7D
25	3462.51 ~ 3537.495	0.1629	23M7G7D	0.1288	23M7W7D
30	3465 ~ 3534.99	0.1936	28M6G7D	0.1538	28M6W7D
40	3470.01 ~ 3529.995	0.1936	38M5G7D	0.1581	38M6W7D
50	3475.005 ~ 3525	0.2004	48M2G7D	0.1560	48M2W7D

5G NR n77 -30kHz		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)
10	3455.01 ~ 3544.98	0.1936	8M60G7D	0.1510	8M61W7D
15	3457.5 ~ 3542.49	0.1954	13M6G7D	0.1517	13M6W7D
20	3460.02 ~ 3540	0.1986	18M2G7D	0.1510	18M2W7D
25	3462.51 ~ 3537.48	0.1633	23M2G7D	0.1285	23M2W7D
30	3465 ~ 3534.99	0.1901	27M8G7D	0.1493	27M9W7D
40	3470.01 ~ 3529.98	0.1945	37M8G7D	0.1514	37M8W7D
50	3475.02 ~ 3525	0.1923	47M4G7D	0.1510	47M5W7D
60	3480 ~ 3519.99	0.1923	57M8G7D	0.1489	57M8W7D
70	3485.01 ~ 3514.98	0.1959	67M5G7D	0.1549	67M5W7D
80	3490.02 ~ 3510	0.1977	77M5G7D	0.1560	77M6W7D
90	3495 ~ 3504.99	0.1959	87M7G7D	0.1585	87M5W7D
100	3500.01 ~ 3500.01	0.1991	97M6G7D	0.1574	97M6W7D

5G NR n78 -15kHz		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)
10	3455.01 ~ 3544.995	0.2588	9M29G7D	0.2042	9M27W7D
15	3457.5 ~ 3542.49	0.2606	14M1G7D	0.2118	14M1W7D
20	3460.005 ~ 3540	0.2642	18M9G7D	0.2113	19M0W7D
25	3462.51 ~ 3537.495	0.2123	23M7G7D	0.1687	23M7W7D
30	3465 ~ 3534.99	0.2541	28M6G7D	0.1963	28M6W7D
40	3470.01 ~ 3529.995	0.2559	38M5G7D	0.2065	38M6W7D
50	3475.005 ~ 3525	0.2649	48M2G7D	0.2061	48M2W7D

5G NR n78-30kHz		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)
10	3455.01 ~ 3544.98	0.2518	8M60G7D	0.2018	8M61W7D
15	3457.5 ~ 3542.49	0.2564	13M6G7D	0.2018	13M6W7D
20	3460.02 ~ 3540	0.2600	18M2G7D	0.1977	18M2W7D
25	3462.51 ~ 3537.48	0.2148	23M2G7D	0.1648	23M2W7D
30	3465 ~ 3534.99	0.2483	27M8G7D	0.1968	27M9W7D
40	3470.01 ~ 3529.98	0.2477	37M8G7D	0.1945	37M8W7D
50	3475.02 ~ 3525	0.2535	47M4G7D	0.1875	47M5W7D
60	3480 ~ 3519.99	0.2518	57M8G7D	0.1905	57M8W7D
70	3485.01 ~ 3514.98	0.2600	67M5G7D	0.1982	67M5W7D
80	3490.02 ~ 3510	0.2618	77M5G7D	0.2051	77M6W7D
90	3495 ~ 3504.99	0.2624	87M7G7D	0.2061	87M5W7D
100	3500.01 ~ 3500.01	0.2636	97M6G7D	0.2065	97M6W7D

Note:

1. 5G NR Band n78 support HPUE, n77 not support HPUE, therefore n77 and n78 maximum power are tested separately.
2. 5G NR Band n78 overlaps the entire frequency range of Band n77, and n78 power > n77 power, therefore the conducted test results of n78 provided in this report cover n77.
3. All modulations have been tested, and only the worst test results of PSK & QAM are shown in the report.

1.7. Testing Site

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

Test Firm	Sporton International Inc. (Shenzhen)		
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 Firm	Sporton International Inc. (Shenzhen)		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City Guangdong Province China 518103 TEL: +86-755-33202398		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH03-SZ	CN1256	421272

1.8. Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH03-SZ	AUDIX	E3	6.2009-8-24

1.9. Applied Standards

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

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

Remark:

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

2 Test Configuration of Equipment Under Test

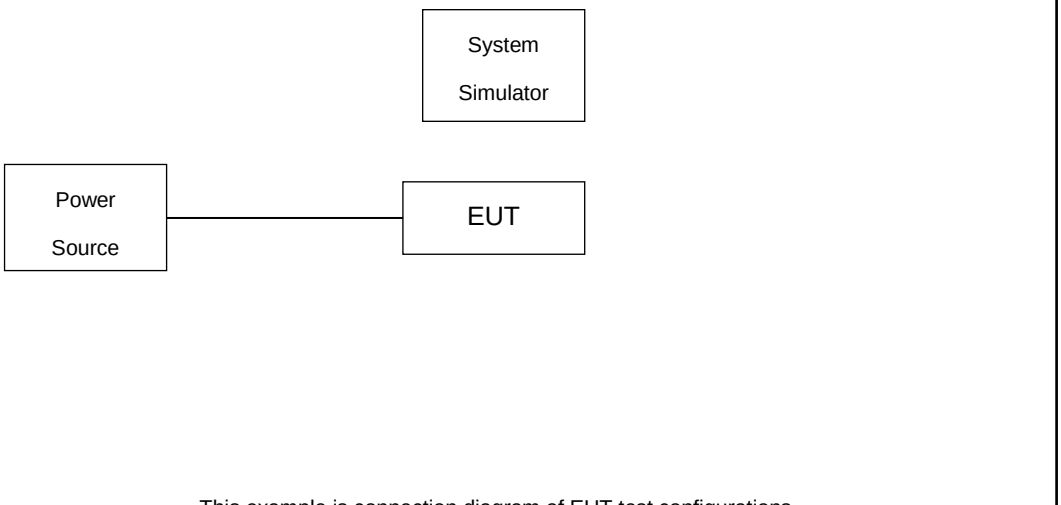
2.1. Test Mode

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

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

Test Items	5G NR	Bandwidth (MHz)									Modulation					RB #		Test Channel		
		10	15	20	25	30	40	50	60-90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256 QAM	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	v	v	v
	n78	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	n78			v							v	v				v	v	v	v	v
26dB and 99% Bandwidth	n78	v	v	v	v	v	v	v	v	v	v	v	v	v	v		v		v	
Conducted Band Edge	n78	v			v			v		v	v	v				v	v	v		v
Conducted Spurious Emission	n78	v			v			v		v	v	v				v		v	v	v
Frequency Stability	n78			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	v	v	v
	n78	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	n77	Worst Case																	v	
	n78	Worst Case																	v	
Note	1. The mark "**v** " means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. 4. Normal Voltage: 3.85Vdc, Extreme Voltage: 3.6Vdc ~4.25Vdc																			

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 8.6 dB.

Example :

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

= 8.6 (dB)

2.5. Frequency List of Low/Middle/High Channels

5G n77/n78 Channel and Frequency List-15kHz				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
50	Channel	631667	633334	635000
	Frequency	3475.005	3500.01	3525
40	Channel	631334	633334	635333
	Frequency	3470.01	3500.01	3529.995
30	Channel	631000	633334	635666
	Frequency	3465	3500.01	3534.99
25	Channel	630834	633334	635833
	Frequency	3462.51	3500.01	3537.495
20	Channel	630667	633334	636000
	Frequency	3460.005	3500.01	3540
15	Channel	630500	633334	636166
	Frequency	3457.5	3500.01	3542.49
10	Channel	630334	633334	636333
	Frequency	3455.01	3500.01	3544.995

5G n77/n78 Channel and Frequency List-30kHz				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
100	Channel	-	633334	-
	Frequency	-	3500.01	-
90	Channel	633000	633334	633666
	Frequency	3495	3500.01	3504.99
80	Channel	632668	633334	634000
	Frequency	3490.02	3500.01	3510
70	Channel	632334	633334	634332
	Frequency	3485.01	3500.01	3514.98
60	Channel	632000	633334	634666
	Frequency	3480	3500.01	3519.99
50	Channel	631668	633334	635000
	Frequency	3475.02	3500.01	3525
40	Channel	631334	633334	635332
	Frequency	3470.01	3500.01	3529.98
30	Channel	631000	633334	635666
	Frequency	3465	3500.01	3534.99
25	Channel	630834	633334	635832
	Frequency	3462.51	3500.01	3537.48
20	Channel	630668	633334	636000
	Frequency	3460.02	3500.01	3540
15	Channel	630500	633334	636166
	Frequency	3457.5	3500.01	3542.49
10	Channel	630334	633334	636332
	Frequency	3455.01	3500.01	3544.98

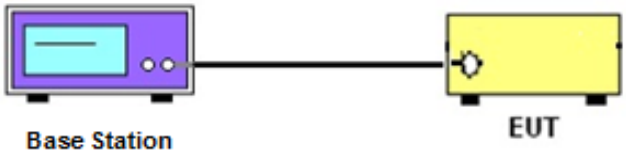
3 Conducted Test Items

3.1. Measuring Instruments

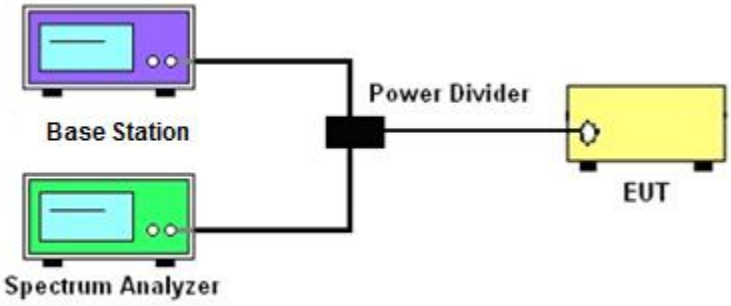
See list of measuring instruments of this test report.

3.2. Test Setup

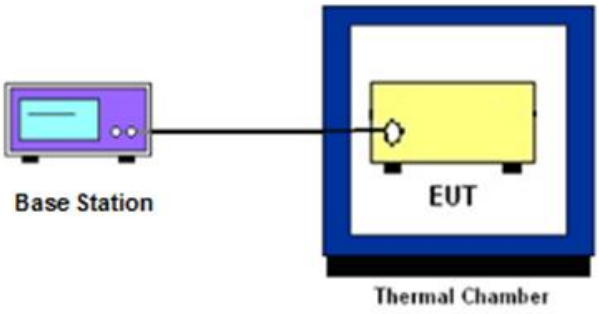
3.2.1 Conducted Output Power



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



3.2.3 Frequency Stability



3.3. Test Result of Conducted Test

Please refer to Appendix A.

3.4. Conducted Output Power Measurement

3.4.1 Description of the Conducted Output Power Measurement

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

3.4.2 Test Procedures

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

3.5. Peak-to-Average Ratio

3.5.1 Description of the PAR Measurement

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

3.5.2 Test Procedures

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

3.6. EIRP

3.6.1 Description of EIRP Limit

§ 27.50 (k)(3)

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

3.6.2 Test Procedures

1. According to KDB 412172 D01 Power Approach,
2. EIRP = $P_T + G_T – L_C$, ERP = EIRP -2.15, where

   P_T = transmitter output power in dBm

   G_T = gain of the transmitting antenna in dBi

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

3.7. Occupied Bandwidth

3.7.1 Description of Occupied Bandwidth Measurement

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

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

3.7.2 Test Procedures

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

3.8. Conducted Band Edge Measurement

3.8.1 Description of Conducted Band Edge Measurement

§ 27.53 (n)(2)

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

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

3.8.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW ≥ 1% EBW but limited to a maximum of 200 kHz in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz and 5 MHz removed from the band edge, set RBW ≥ 500KHz.
6. Beyond the 5 MHz removed from the band edge, set RBW = 1MHz.
7. Set spectrum analyzer with RMS detector.
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
9. Checked that all the results comply with the emission limit line.

3.9. Conducted Spurious Emission Measurement

3.9.1 Description of Conducted Spurious Emission Measurement

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

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

3.9.2 Test Procedures

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

3.10. Frequency Stability Measurement

3.10.1 Description of Frequency Stability Measurement

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

3.10.2 Test Procedures for Temperature Variation

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

3.10.3 Test Procedures for Voltage Variation

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

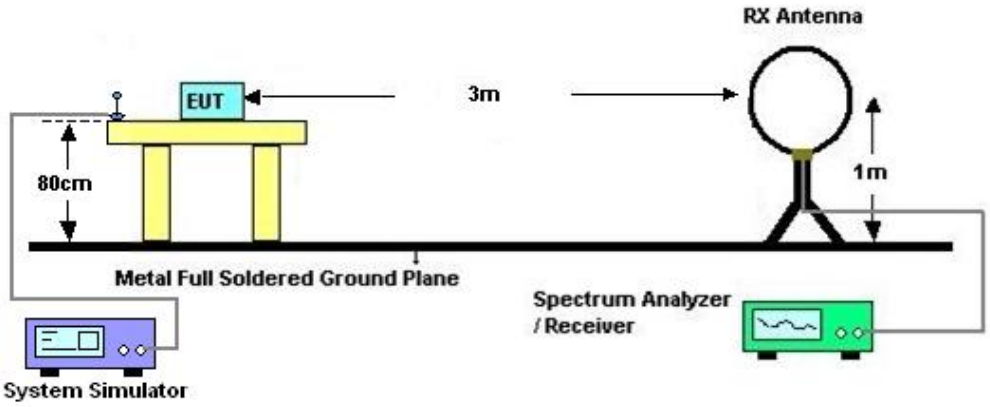
4 Radiated Test Items

4.1. Measuring Instruments

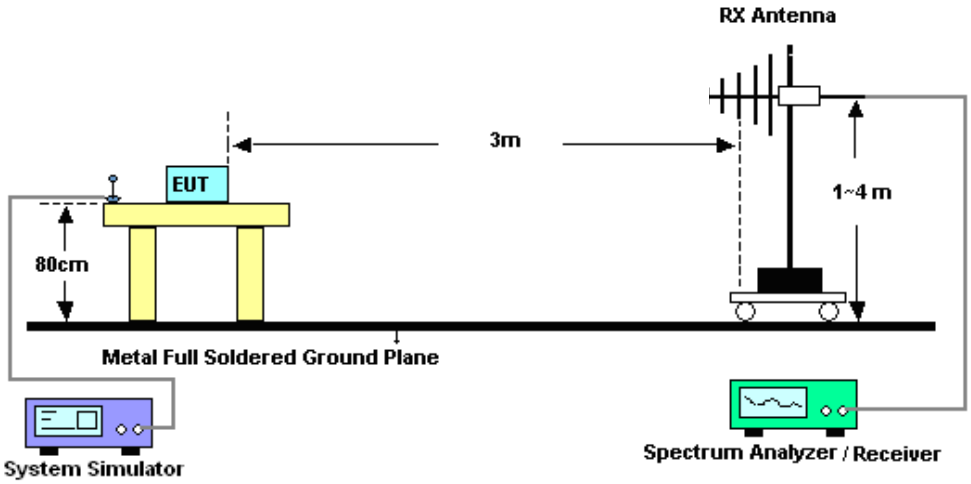
See list of measuring instruments of this test report.

4.2. Test Setup

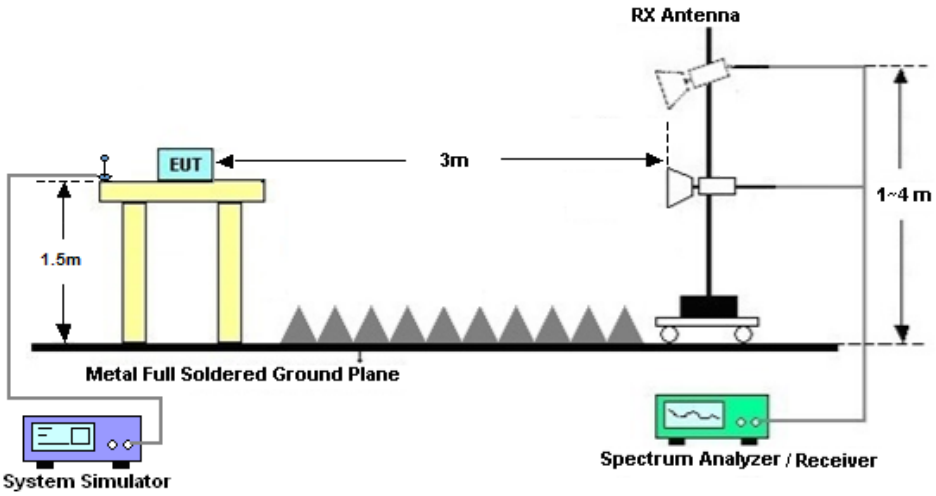
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3. Test Result of Radiated Test

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

Please refer to Appendix B.

4.4. Radiated Spurious Emission Measurement

4.4.1 Description of Radiated Spurious Emission

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

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

4.4.2 Test Procedures

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

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 07, 2022	Jun. 01, 2022~ Jun. 10, 2022	Apr. 08, 2023	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-04265	60.06.020.0077	0.4GHz~26.5GHz	Dec. 25, 2021	Jun. 01, 2022~ Jun. 10, 2022	Dec. 24, 2022	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 14, 2021	Jun. 01, 2022~ Jun. 10, 2022	Jul. 13, 2022	Conducted (TH01-SZ)
EMI Test Receiver&SA	KEYSIGHT	N9038A	MY54450083	20Hz~8.4GHz	Apr. 06, 2022	Jun. 11, 2022	Apr. 05, 2023	Radiation (03CH03-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jun. 22, 2020	Jun. 11, 2022	Jun. 21, 2022	Radiation (03CH03-SZ)
EXA Spectrum Anaiyzer	KEYSIGHT	N9010A	MY55150246	10Hz~44GHz;	Apr. 06, 2022	Jun. 11, 2022	Apr. 05, 2023	Radiation (03CH03-SZ
Bilog Antenna	TeseQ	CBL6112D	35408	30MHz-2GHz	Jun. 22, 2020	Jun. 11, 2022	Jun. 21, 2022	Radiation (03CH03-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1355	1GHz~18GHz	Apr. 08 2022	Jun. 11, 2022	Apr. 07. 2023	Radiation (03CH03-SZ)
Amplifier	Burgeon	BPA-530	102211	0.01Hz ~3000MHz	Oct. 22,2021	Jun. 11, 2022	Oct. 21,2022	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Oct. 22,2021	Jun. 11, 2022	Oct. 21,2022	Radiation (03CH03-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 10, 2022	Jun. 11, 2022	Apr. 09, 2023	Radiation (03CH03-SZ)
Amplifier	Agilent Technologies	83017A	MY39501302	500MHz~26.5GHz	Dec. 29,2021	Jun. 11, 2022	Dec. 28,2022	Radiation (03CH03-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	Jun. 11, 2022	NCR	Radiation (03CH03-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Jun. 11, 2022	NCR	Radiation (03CH03-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Jun. 11, 2022	NCR	Radiation (03CH03-SZ)

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 Conducted Measurement

Test Item	Uncertainty
Conducted Power	±1.34 dB
Conducted Emissions	±1.34 dB
Occupied Channel Bandwidth	±0.13 %

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.0 dB

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.6 dB

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.8 dB

Appendix A. Test Results of Conducted Test

Test Engineer :	Jung Kuo	**Temperature :**	22~23℃
		Relative Humidity :	45~51%

FR1 N77-15K(Ant 6)

Transmitter Conducted Output Power And EIRP, (GT-LC)= -1.26dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
77	15	10	630334	3455.01	DFT-s-OFDM QPSK	1@1	24.16	22.9	0.1950
77	15	10	630334	3455.01	DFT-s-OFDM 16 QAM	1@1	23.09	21.83	0.1524
77	15	10	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.18	22.92	0.1959
77	15	10	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.12	21.86	0.1535
77	15	10	636333	3544.995	DFT-s-OFDM QPSK	1@1	23.66	22.4	0.1738
77	15	10	636333	3544.995	DFT-s-OFDM 16 QAM	1@1	22.98	21.72	0.1486
77	15	15	630500	3457.5	DFT-s-OFDM QPSK	1@1	24.19	22.93	0.1963
77	15	15	630500	3457.5	DFT-s-OFDM 16 QAM	1@1	23.18	21.92	0.1556
77	15	15	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.25	22.99	0.1991
77	15	15	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.2	21.94	0.1563
77	15	15	636166	3542.49	DFT-s-OFDM QPSK	1@1	23.71	22.45	0.1758
77	15	15	636166	3542.49	DFT-s-OFDM 16 QAM	1@1	23.02	21.76	0.1500
77	15	20	630667	3460.005	DFT-s-OFDM QPSK	1@1	24.26	23	0.1995
77	15	20	630667	3460.005	DFT-s-OFDM 16 QAM	1@1	23.23	21.97	0.1574
77	15	20	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.27	23.01	0.2000
77	15	20	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.24	21.98	0.1578
77	15	20	636000	3540	DFT-s-OFDM QPSK	1@1	23.72	22.46	0.1762
77	15	20	636000	3540	DFT-s-OFDM 16 QAM	1@1	23.06	21.8	0.1514
77	15	25	630834	3462.51	DFT-s-OFDM QPSK	1@1	23.32	22.06	0.1607
77	15	25	630834	3462.51	DFT-s-	1@1	22.31	21.05	0.1274

					OFDM 16 QAM				
77	15	25	633334	3500.01	DFT-s-OFDM QPSK	1@1	23.34	22.08	0.1614
77	15	25	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	22.36	21.1	0.1288
77	15	25	635833	3537.495	DFT-s-OFDM QPSK	1@1	23.38	22.12	0.1629
77	15	25	635833	3537.495	DFT-s-OFDM 16 QAM	1@1	22.33	21.07	0.1279
77	15	30	631000	3465	DFT-s-OFDM QPSK	1@1	24	22.74	0.1879
77	15	30	631000	3465	DFT-s-OFDM 16 QAM	1@1	23.04	21.78	0.1507
77	15	30	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.09	22.83	0.1919
77	15	30	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.08	21.82	0.1521
77	15	30	635666	3534.99	DFT-s-OFDM QPSK	1@1	24.13	22.87	0.1936
77	15	30	635666	3534.99	DFT-s-OFDM 16 QAM	1@1	23.13	21.87	0.1538
77	15	40	631334	3470.01	DFT-s-OFDM QPSK	1@1	24.06	22.8	0.1905
77	15	40	631334	3470.01	DFT-s-OFDM 16 QAM	1@1	23.11	21.85	0.1531
77	15	40	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.1	22.84	0.1923
77	15	40	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.18	21.92	0.1556
77	15	40	635333	3529.995	DFT-s-OFDM QPSK	1@1	24.13	22.87	0.1936
77	15	40	635333	3529.995	DFT-s-OFDM 16 QAM	1@1	23.25	21.99	0.1581
77	15	50	631667	3475.005	DFT-s-OFDM PI/2 BPSK	135@67	24.19	22.93	0.1963
77	15	50	631667	3475.005	DFT-s-OFDM PI/2 BPSK	1@1	24.05	22.79	0.1901
77	15	50	631667	3475.005	DFT-s-OFDM PI/2 BPSK	1@268	23.87	22.61	0.1824
77	15	50	631667	3475.005	DFT-s-OFDM QPSK	135@67	24.23	22.97	0.1982
77	15	50	631667	3475.005	DFT-s-OFDM QPSK	1@1	24.12	22.86	0.1932
77	15	50	631667	3475.005	DFT-s-OFDM QPSK	1@268	23.96	22.7	0.1862
77	15	50	631667	3475.005	DFT-s-OFDM 16 QAM	135@67	23.15	21.89	0.1545

77	15	50	631667	3475.005	DFT-s-OFDM 16 QAM	1@1	23.15	21.89	0.1545
77	15	50	631667	3475.005	DFT-s-OFDM 16 QAM	1@268	23.01	21.75	0.1496
77	15	50	631667	3475.005	DFT-s-OFDM 64 QAM	135@67	21.6	20.34	0.1081
77	15	50	631667	3475.005	DFT-s-OFDM 64 QAM	1@1	21.49	20.23	0.1054
77	15	50	631667	3475.005	DFT-s-OFDM 64 QAM	1@268	21.37	20.11	0.1026
77	15	50	631667	3475.005	DFT-s-OFDM 256 QAM	135@67	19.61	18.35	0.0684
77	15	50	631667	3475.005	DFT-s-OFDM 256 QAM	1@1	19.26	18	0.0631
77	15	50	631667	3475.005	DFT-s-OFDM 256 QAM	1@268	19.18	17.92	0.0619
77	15	50	631667	3475.005	CP-OFDM QPSK	135@67	22.55	21.29	0.1346
77	15	50	631667	3475.005	CP-OFDM QPSK	1@1	22.59	21.33	0.1358
77	15	50	631667	3475.005	CP-OFDM QPSK	1@268	22.42	21.16	0.1306
77	15	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	135@67	24.15	22.89	0.1945
77	15	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	24.13	22.87	0.1936
77	15	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@268	23.93	22.67	0.1849
77	15	50	633334	3500.01	DFT-s-OFDM QPSK	135@67	24.28	23.02	0.2004
77	15	50	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.11	22.85	0.1928
77	15	50	633334	3500.01	DFT-s-OFDM QPSK	1@268	23.95	22.69	0.1858
77	15	50	633334	3500.01	DFT-s-OFDM 16 QAM	135@67	23.14	21.88	0.1542
77	15	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.19	21.93	0.1560
77	15	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@268	22.99	21.73	0.1489
77	15	50	633334	3500.01	DFT-s-OFDM 64 QAM	135@67	21.52	20.26	0.1062
77	15	50	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	21.61	20.35	0.1084
77	15	50	633334	3500.01	DFT-s-OFDM 64 QAM	1@268	21.42	20.16	0.1038
77	15	50	633334	3500.01	DFT-s-OFDM 256 QAM	135@67	19.51	18.25	0.0668
77	15	50	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	19.37	18.11	0.0647

77	15	50	633334	3500.01	DFT-s-OFDM 256 QAM	1@268	19.21	17.95	0.0624
77	15	50	633334	3500.01	CP-OFDM QPSK	135@67	22.55	21.29	0.1346
77	15	50	633334	3500.01	CP-OFDM QPSK	1@1	22.64	21.38	0.1374
77	15	50	633334	3500.01	CP-OFDM QPSK	1@268	22.43	21.17	0.1309
77	15	50	635000	3525	DFT-s-OFDM PI/2 BPSK	135@67	24.19	22.93	0.1963
77	15	50	635000	3525	DFT-s-OFDM PI/2 BPSK	1@1	24.09	22.83	0.1919
77	15	50	635000	3525	DFT-s-OFDM PI/2 BPSK	1@268	23.87	22.61	0.1824
77	15	50	635000	3525	DFT-s-OFDM QPSK	135@67	24.14	22.88	0.1941
77	15	50	635000	3525	DFT-s-OFDM QPSK	1@1	24.08	22.82	0.1914
77	15	50	635000	3525	DFT-s-OFDM QPSK	1@268	23.9	22.64	0.1837
77	15	50	635000	3525	DFT-s-OFDM 16 QAM	135@67	23.18	21.92	0.1556
77	15	50	635000	3525	DFT-s-OFDM 16 QAM	1@1	23.17	21.91	0.1552
77	15	50	635000	3525	DFT-s-OFDM 16 QAM	1@268	22.99	21.73	0.1489
77	15	50	635000	3525	DFT-s-OFDM 64 QAM	135@67	21.62	20.36	0.1086
77	15	50	635000	3525	DFT-s-OFDM 64 QAM	1@1	21.52	20.26	0.1062
77	15	50	635000	3525	DFT-s-OFDM 64 QAM	1@268	21.35	20.09	0.1021
77	15	50	635000	3525	DFT-s-OFDM 256 QAM	135@67	19.56	18.3	0.0676
77	15	50	635000	3525	DFT-s-OFDM 256 QAM	1@1	19.35	18.09	0.0644
77	15	50	635000	3525	DFT-s-OFDM 256 QAM	1@268	19.14	17.88	0.0614
77	15	50	635000	3525	CP-OFDM QPSK	135@67	22.57	21.31	0.1352
77	15	50	635000	3525	CP-OFDM QPSK	1@1	22.68	21.42	0.1387
77	15	50	635000	3525	CP-OFDM QPSK	1@268	22.43	21.17	0.1309

FR1 N77-30K(Ant 6)

Transmitter Conducted Output Power And EIRP, (GT-LC)= -1.26dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
77	30	10	630334	3455.01	DFT-s-OFDM QPSK	1@1	24.13	22.87	0.1936
77	30	10	630334	3455.01	DFT-s-OFDM 16 QAM	1@1	22.97	21.71	0.1483
77	30	10	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.11	22.85	0.1928
77	30	10	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.05	21.79	0.1510
77	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@1	23.6	22.34	0.1714
77	30	10	636332	3544.98	DFT-s-OFDM 16 QAM	1@1	22.89	21.63	0.1455
77	30	15	630500	3457.5	DFT-s-OFDM QPSK	1@1	24.17	22.91	0.1954
77	30	15	630500	3457.5	DFT-s-OFDM 16 QAM	1@1	23.05	21.79	0.1510
77	30	15	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.12	22.86	0.1932
77	30	15	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.07	21.81	0.1517
77	30	15	636166	3542.49	DFT-s-OFDM QPSK	1@1	23.67	22.41	0.1742
77	30	15	636166	3542.49	DFT-s-OFDM 16 QAM	1@1	22.9	21.64	0.1459
77	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@1	24.24	22.98	0.1986
77	30	20	630668	3460.02	DFT-s-OFDM 16 QAM	1@1	23.05	21.79	0.1510
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.16	22.9	0.1950
77	30	20	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.05	21.79	0.1510
77	30	20	636000	3540	DFT-s-OFDM QPSK	1@1	23.65	22.39	0.1734
77	30	20	636000	3540	DFT-s-OFDM 16 QAM	1@1	22.87	21.61	0.1449
77	30	25	630834	3462.51	DFT-s-OFDM QPSK	1@1	23.39	22.13	0.1633
77	30	25	630834	3462.51	DFT-s-	1@1	22.32	21.06	0.1276

					OFDM 16 QAM				
77	30	25	633334	3500.01	DFT-s-OFDM QPSK	1@1	23.39	22.13	0.1633
77	30	25	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	22.35	21.09	0.1285
77	30	25	635832	3537.48	DFT-s-OFDM QPSK	1@1	23.39	22.13	0.1633
77	30	25	635832	3537.48	DFT-s-OFDM 16 QAM	1@1	22.32	21.06	0.1276
77	30	30	631000	3465	DFT-s-OFDM QPSK	1@1	23.99	22.73	0.1875
77	30	30	631000	3465	DFT-s-OFDM 16 QAM	1@1	22.91	21.65	0.1462
77	30	30	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.03	22.77	0.1892
77	30	30	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	22.94	21.68	0.1472
77	30	30	635666	3534.99	DFT-s-OFDM QPSK	1@1	24.05	22.79	0.1901
77	30	30	635666	3534.99	DFT-s-OFDM 16 QAM	1@1	23	21.74	0.1493
77	30	40	631334	3470.01	DFT-s-OFDM QPSK	1@1	24.03	22.77	0.1892
77	30	40	631334	3470.01	DFT-s-OFDM 16 QAM	1@1	22.99	21.73	0.1489
77	30	40	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.05	22.79	0.1901
77	30	40	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23	21.74	0.1493
77	30	40	635332	3529.98	DFT-s-OFDM QPSK	1@1	24.15	22.89	0.1945
77	30	40	635332	3529.98	DFT-s-OFDM 16 QAM	1@1	23.06	21.8	0.1514
77	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@1	24.03	22.77	0.1892
77	30	50	631668	3475.02	DFT-s-OFDM 16 QAM	1@1	22.96	21.7	0.1479
77	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.1	22.84	0.1923
77	30	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.03	21.77	0.1503
77	30	50	635000	3525	DFT-s-OFDM QPSK	1@1	24.06	22.8	0.1905
77	30	50	635000	3525	DFT-s-OFDM 16 QAM	1@1	23.05	21.79	0.1510
77	30	60	632000	3480	DFT-s-OFDM QPSK	1@1	24.06	22.8	0.1905

77	30	60	632000	3480	DFT-s-OFDM 16 QAM	1@1	22.99	21.73	0.1489
77	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.1	22.84	0.1923
77	30	60	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	22.97	21.71	0.1483
77	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@1	24.06	22.8	0.1905
77	30	60	634666	3519.99	DFT-s-OFDM 16 QAM	1@1	22.93	21.67	0.1469
77	30	70	632334	3485.01	DFT-s-OFDM QPSK	1@1	24.14	22.88	0.1941
77	30	70	632334	3485.01	DFT-s-OFDM 16 QAM	1@1	23.11	21.85	0.1531
77	30	70	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.18	22.92	0.1959
77	30	70	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.16	21.9	0.1549
77	30	70	634332	3514.98	DFT-s-OFDM QPSK	1@1	24.17	22.91	0.1954
77	30	70	634332	3514.98	DFT-s-OFDM 16 QAM	1@1	23.15	21.89	0.1545
77	30	80	632668	3490.02	DFT-s-OFDM QPSK	1@1	24.18	22.92	0.1959
77	30	80	632668	3490.02	DFT-s-OFDM 16 QAM	1@1	23.17	21.91	0.1552
77	30	80	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.19	22.93	0.1963
77	30	80	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.16	21.9	0.1549
77	30	80	634000	3510	DFT-s-OFDM QPSK	1@1	24.22	22.96	0.1977
77	30	80	634000	3510	DFT-s-OFDM 16 QAM	1@1	23.19	21.93	0.1560
77	30	90	633000	3495	DFT-s-OFDM QPSK	1@1	24.17	22.91	0.1954
77	30	90	633000	3495	DFT-s-OFDM 16 QAM	1@1	23.07	21.81	0.1517
77	30	90	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.12	22.86	0.1932
77	30	90	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23	21.74	0.1493
77	30	90	633666	3504.99	DFT-s-OFDM QPSK	1@1	24.18	22.92	0.1959
77	30	90	633666	3504.99	DFT-s-OFDM 16 QAM	1@1	23.26	22	0.1585
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	135@67	24.2	22.94	0.1968

77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	24.2	22.94	0.1968
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@271	23.91	22.65	0.1841
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	135@67	24.2	22.94	0.1968
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.25	22.99	0.1991
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@271	23.87	22.61	0.1824
77	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	135@67	23.2	21.94	0.1563
77	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.23	21.97	0.1574
77	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@271	22.87	21.61	0.1449
77	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	135@67	21.65	20.39	0.1094
77	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	21.75	20.49	0.1119
77	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@271	21.35	20.09	0.1021
77	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	135@67	19.65	18.39	0.0690
77	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	19.81	18.55	0.0716
77	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@271	19.44	18.18	0.0658
77	30	100	633334	3500.01	CP-OFDM QPSK	137@68	22.72	21.46	0.1400
77	30	100	633334	3500.01	CP-OFDM QPSK	1@1	22.89	21.63	0.1455
77	30	100	633334	3500.01	CP-OFDM QPSK	1@271	22.47	21.21	0.1321

Software Version: 22.05.231801

FR1 N78-15K(Ant 6)

Transmitter Conducted Output Power And EIRP, (GT-LC)= -1.04dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
78	15	10	630334	3455.01	DFT-s-OFDM QPSK	1@1	25.17	24.13	0.2588
78	15	10	630334	3455.01	DFT-s-OFDM 16 QAM	1@1	24.08	23.04	0.2014
78	15	10	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.17	24.13	0.2588
78	15	10	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.1	23.06	0.2023
78	15	10	636333	3544.995	DFT-s-OFDM QPSK	1@1	25.17	24.13	0.2588
78	15	10	636333	3544.995	DFT-s-OFDM 16 QAM	1@1	24.14	23.1	0.2042
78	15	15	630500	3457.5	DFT-s-OFDM QPSK	1@1	25.19	24.15	0.2600
78	15	15	630500	3457.5	DFT-s-OFDM 16 QAM	1@1	24.27	23.23	0.2104
78	15	15	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.2	24.16	0.2606
78	15	15	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.27	23.23	0.2104
78	15	15	636166	3542.49	DFT-s-OFDM QPSK	1@1	25.17	24.13	0.2588
78	15	15	636166	3542.49	DFT-s-OFDM 16 QAM	1@1	24.3	23.26	0.2118
78	15	20	630667	3460.005	DFT-s-OFDM QPSK	1@1	25.26	24.22	0.2642
78	15	20	630667	3460.005	DFT-s-OFDM 16 QAM	1@1	24.29	23.25	0.2113
78	15	20	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.21	24.17	0.2612
78	15	20	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.25	23.21	0.2094
78	15	20	636000	3540	DFT-s-OFDM QPSK	1@1	25.18	24.14	0.2594
78	15	20	636000	3540	DFT-s-OFDM 16 QAM	1@1	24.24	23.2	0.2089
78	15	25	630834	3462.51	DFT-s-OFDM	1@1	24.27	23.23	0.2104

					QPSK				
78	15	25	630834	3462.51	DFT-s-OFDM 16 QAM	1@1	23.24	22.2	0.1660
78	15	25	633334	3500.01	DFT-s-OFDM QPSK	1@1	24.29	23.25	0.2113
78	15	25	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.29	22.25	0.1679
78	15	25	635833	3537.495	DFT-s-OFDM QPSK	1@1	24.31	23.27	0.2123
78	15	25	635833	3537.495	DFT-s-OFDM 16 QAM	1@1	23.31	22.27	0.1687
78	15	30	631000	3465	DFT-s-OFDM QPSK	1@1	25.01	23.97	0.2495
78	15	30	631000	3465	DFT-s-OFDM 16 QAM	1@1	23.88	22.84	0.1923
78	15	30	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.09	24.05	0.2541
78	15	30	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	23.96	22.92	0.1959
78	15	30	635666	3534.99	DFT-s-OFDM QPSK	1@1	25.09	24.05	0.2541
78	15	30	635666	3534.99	DFT-s-OFDM 16 QAM	1@1	23.97	22.93	0.1963
78	15	40	631334	3470.01	DFT-s-OFDM QPSK	1@1	25.02	23.98	0.2500
78	15	40	631334	3470.01	DFT-s-OFDM 16 QAM	1@1	24.06	23.02	0.2004
78	15	40	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.07	24.03	0.2529
78	15	40	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.13	23.09	0.2037
78	15	40	635333	3529.995	DFT-s-OFDM QPSK	1@1	25.12	24.08	0.2559
78	15	40	635333	3529.995	DFT-s-OFDM 16 QAM	1@1	24.19	23.15	0.2065
78	15	50	631667	3475.005	DFT-s-OFDM PI/2 BPSK	135@67	24.9	23.86	0.2432
78	15	50	631667	3475.005	DFT-s-OFDM PI/2 BPSK	1@1	24.86	23.82	0.2410
78	15	50	631667	3475.005	DFT-s-OFDM PI/2 BPSK	1@268	24.75	23.71	0.2350
78	15	50	631667	3475.005	DFT-s-OFDM QPSK	135@67	24.97	23.93	0.2472
78	15	50	631667	3475.005	DFT-s-OFDM QPSK	1@1	25.04	24	0.2512
78	15	50	631667	3475.005	DFT-s-OFDM QPSK	1@268	24.93	23.89	0.2449
78	15	50	631667	3475.005	DFT-s-	135@67	23.93	22.89	0.1945

					OFDM 16 QAM				
78	15	50	631667	3475.005	DFT-s-OFDM 16 QAM	1@1	24.06	23.02	0.2004
78	15	50	631667	3475.005	DFT-s-OFDM 16 QAM	1@268	24.01	22.97	0.1982
78	15	50	631667	3475.005	DFT-s-OFDM 64 QAM	135@67	22.49	21.45	0.1396
78	15	50	631667	3475.005	DFT-s-OFDM 64 QAM	1@1	22.55	21.51	0.1416
78	15	50	631667	3475.005	DFT-s-OFDM 64 QAM	1@268	22.48	21.44	0.1393
78	15	50	631667	3475.005	DFT-s-OFDM 256 QAM	135@67	20.42	19.38	0.0867
78	15	50	631667	3475.005	DFT-s-OFDM 256 QAM	1@1	20.29	19.25	0.0841
78	15	50	631667	3475.005	DFT-s-OFDM 256 QAM	1@268	20.15	19.11	0.0815
78	15	50	631667	3475.005	CP-OFDM QPSK	135@67	23.46	22.42	0.1746
78	15	50	631667	3475.005	CP-OFDM QPSK	1@1	23.58	22.54	0.1795
78	15	50	631667	3475.005	CP-OFDM QPSK	1@268	23.46	22.42	0.1746
78	15	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	135@67	24.97	23.93	0.2472
78	15	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	24.96	23.92	0.2466
78	15	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@268	24.76	23.72	0.2355
78	15	50	633334	3500.01	DFT-s-OFDM QPSK	135@67	25.05	24.01	0.2518
78	15	50	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.1	24.06	0.2547
78	15	50	633334	3500.01	DFT-s-OFDM QPSK	1@268	24.94	23.9	0.2455
78	15	50	633334	3500.01	DFT-s-OFDM 16 QAM	135@67	23.96	22.92	0.1959
78	15	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.09	23.05	0.2018
78	15	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@268	23.99	22.95	0.1972
78	15	50	633334	3500.01	DFT-s-OFDM 64 QAM	135@67	22.48	21.44	0.1393
78	15	50	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	22.65	21.61	0.1449
78	15	50	633334	3500.01	DFT-s-OFDM 64 QAM	1@268	22.48	21.44	0.1393
78	15	50	633334	3500.01	DFT-s-OFDM 256 QAM	135@67	20.45	19.41	0.0873

78	15	50	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	20.29	19.25	0.0841
78	15	50	633334	3500.01	DFT-s-OFDM 256 QAM	1@268	20.18	19.14	0.0820
78	15	50	633334	3500.01	CP-OFDM QPSK	135@67	23.41	22.37	0.1726
78	15	50	633334	3500.01	CP-OFDM QPSK	1@1	23.58	22.54	0.1795
78	15	50	633334	3500.01	CP-OFDM QPSK	1@268	23.4	22.36	0.1722
78	15	50	635000	3525	DFT-s-OFDM PI/2 BPSK	135@67	24.94	23.9	0.2455
78	15	50	635000	3525	DFT-s-OFDM PI/2 BPSK	1@1	24.92	23.88	0.2443
78	15	50	635000	3525	DFT-s-OFDM PI/2 BPSK	1@268	24.71	23.67	0.2328
78	15	50	635000	3525	DFT-s-OFDM QPSK	135@67	24.97	23.93	0.2472
78	15	50	635000	3525	DFT-s-OFDM QPSK	1@1	25.27	24.23	0.2649
78	15	50	635000	3525	DFT-s-OFDM QPSK	1@268	24.92	23.88	0.2443
78	15	50	635000	3525	DFT-s-OFDM 16 QAM	135@67	24.04	23	0.1995
78	15	50	635000	3525	DFT-s-OFDM 16 QAM	1@1	24.18	23.14	0.2061
78	15	50	635000	3525	DFT-s-OFDM 16 QAM	1@268	24.01	22.97	0.1982
78	15	50	635000	3525	DFT-s-OFDM 64 QAM	135@67	22.52	21.48	0.1406
78	15	50	635000	3525	DFT-s-OFDM 64 QAM	1@1	22.66	21.62	0.1452
78	15	50	635000	3525	DFT-s-OFDM 64 QAM	1@268	22.43	21.39	0.1377
78	15	50	635000	3525	DFT-s-OFDM 256 QAM	135@67	20.45	19.41	0.0873
78	15	50	635000	3525	DFT-s-OFDM 256 QAM	1@1	20.35	19.31	0.0853
78	15	50	635000	3525	DFT-s-OFDM 256 QAM	1@268	20.1	19.06	0.0805
78	15	50	635000	3525	CP-OFDM QPSK	135@67	23.43	22.39	0.1734
78	15	50	635000	3525	CP-OFDM QPSK	1@1	23.71	22.67	0.1849
78	15	50	635000	3525	CP-OFDM QPSK	1@268	23.5	22.46	0.1762

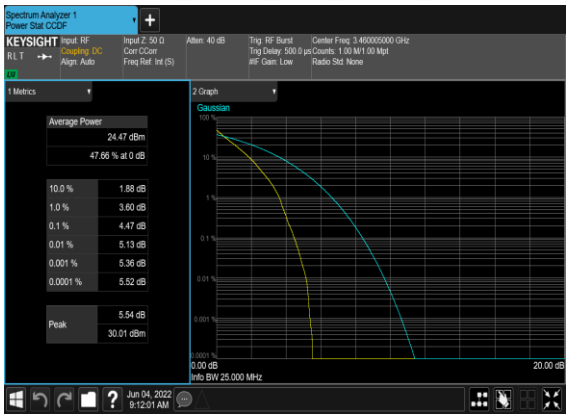
Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
78	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	0.00592	**PASS**	NV
78	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	0.00334	**PASS**	LV
78	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	0.00596	**PASS**	HV
78	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	0.00411	**PASS**	-30℃
78	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	0.00255	**PASS**	-20℃
78	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	0.00248	**PASS**	-10℃
78	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	0.00432	**PASS**	0℃
78	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	0.00615	**PASS**	10℃
78	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	0.00607	**PASS**	20℃
78	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	0.00468	**PASS**	30℃
78	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	0.00457	**PASS**	40℃
78	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	0.00501	**PASS**	50℃

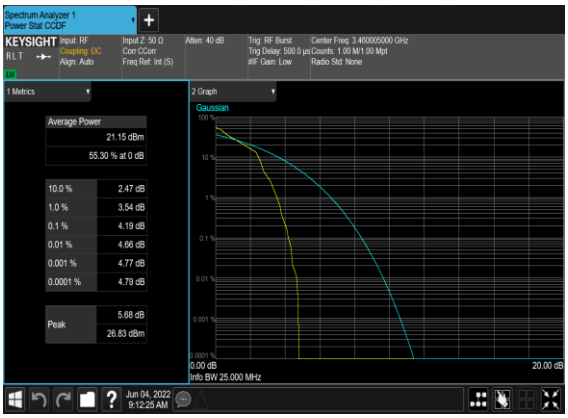
Peak to Average Radio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
78	15	20	630667	3460.005	DFT-s-OFDM PI/2 BPSK	100@0	4.47	13	**PASS**
78	15	20	630667	3460.005	DFT-s-OFDM PI/2 BPSK	1@0	4.19	13	**PASS**
78	15	20	630667	3460.005	DFT-s-OFDM QPSK	100@0	5.58	13	**PASS**
78	15	20	630667	3460.005	DFT-s-OFDM QPSK	1@0	5.34	13	**PASS**
78	15	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	100@0	4.49	13	**PASS**
78	15	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@0	4.25	13	**PASS**
78	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	5.59	13	**PASS**
78	15	20	633334	3500.01	DFT-s-OFDM QPSK	1@0	5.56	13	**PASS**
78	15	20	636000	3540.0	DFT-s-OFDM PI/2 BPSK	100@0	4.49	13	**PASS**
78	15	20	636000	3540.0	DFT-s-OFDM PI/2 BPSK	1@0	4.11	13	**PASS**
78	15	20	636000	3540.0	DFT-s-OFDM QPSK	100@0	5.57	13	**PASS**
78	15	20	636000	3540.0	DFT-s-OFDM QPSK	1@0	5.69	13	**PASS**

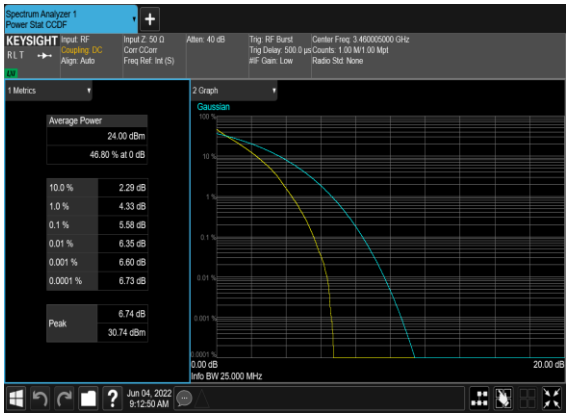
N78(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_ Low _CH



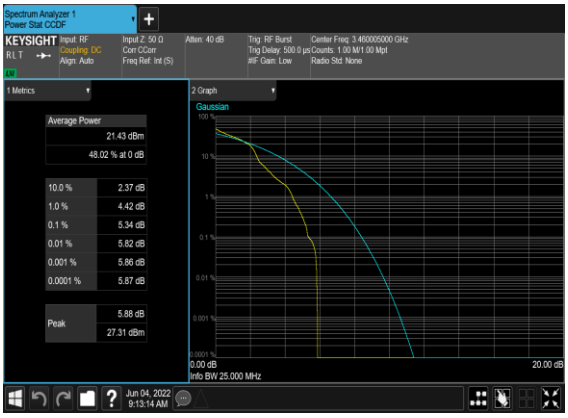
N78(20M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_Low_CH



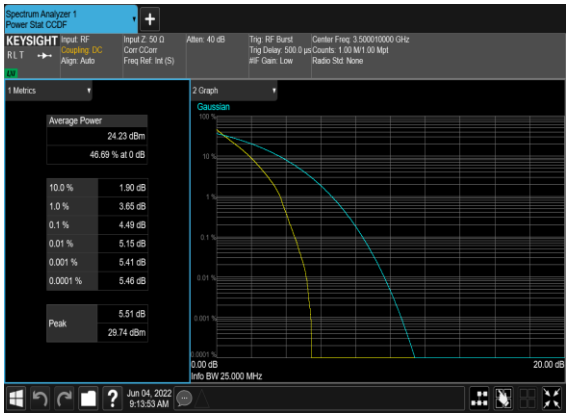
N78(20M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



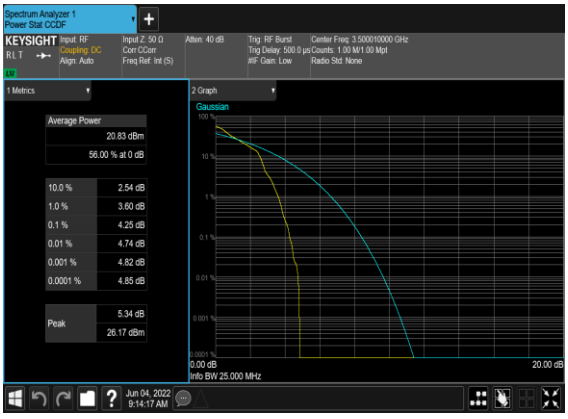
N78(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



N78(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH

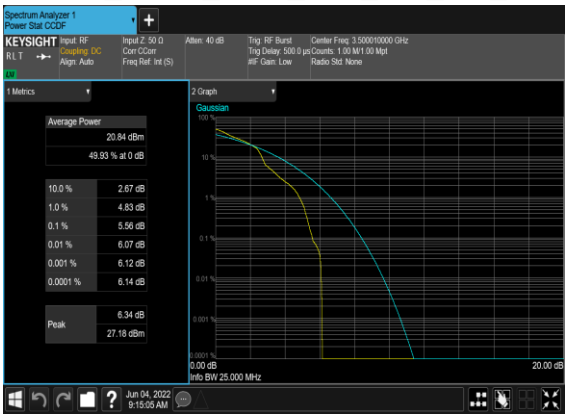


N78(20M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_Mid_CH

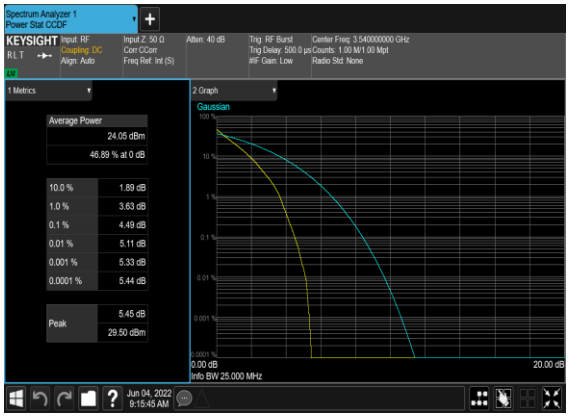


N78(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

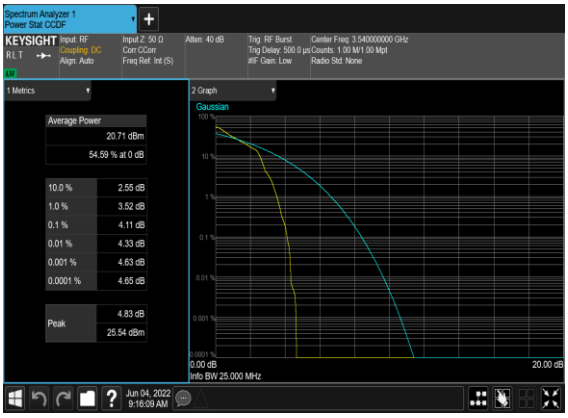
N78(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



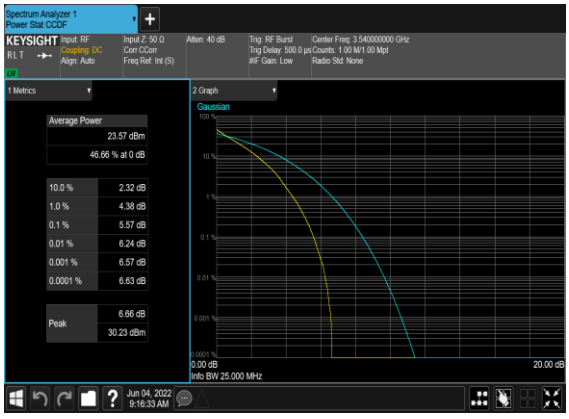
N78(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_High_CH



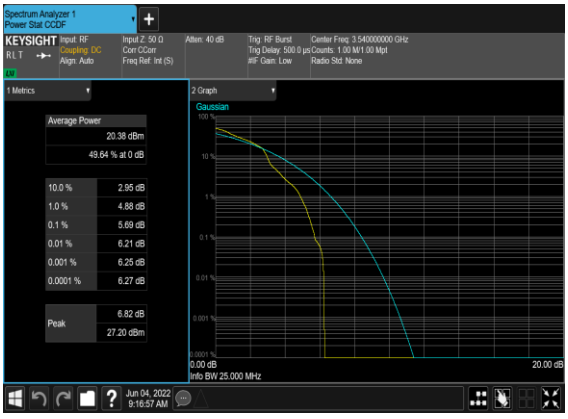
N78(20M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_High_CH



N78(20M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



N78(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH

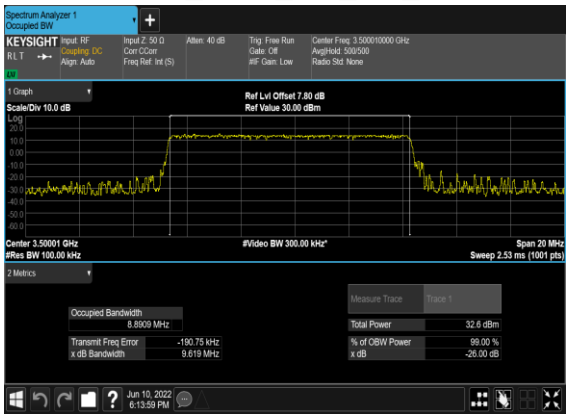


Occupied Bandwidth

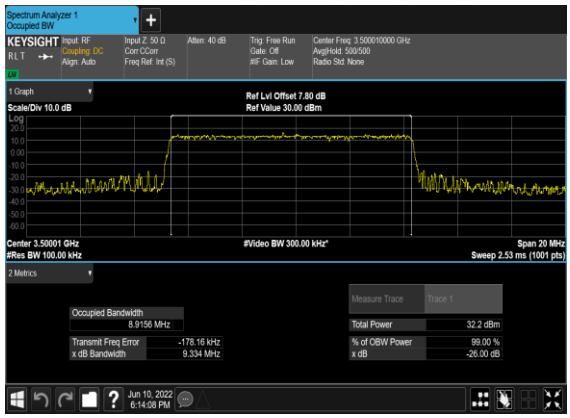
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB OBW (MHz)
78	15	10	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	8.8909	9.619
78	15	10	633334	3500.01	DFT-s-OFDM QPSK	50@0	8.9156	9.334
78	15	10	633334	3500.01	CP-OFDM QPSK	52@0	9.2928	9.756
78	15	10	633334	3500.01	CP-OFDM 16 QAM	52@0	9.2755	9.695
78	15	10	633334	3500.01	CP-OFDM 64 QAM	52@0	9.3017	9.911
78	15	10	633334	3500.01	CP-OFDM 256 QAM	52@0	9.2699	9.711
78	15	15	633334	3500.01	DFT-s-OFDM PI/2 BPSK	75@0	13.429	13.96
78	15	15	633334	3500.01	DFT-s-OFDM QPSK	75@0	13.37	14.07
78	15	15	633334	3500.01	CP-OFDM QPSK	79@0	14.107	14.69
78	15	15	633334	3500.01	CP-OFDM 16 QAM	79@0	14.079	14.69
78	15	15	633334	3500.01	CP-OFDM 64 QAM	79@0	14.082	15.03
78	15	15	633334	3500.01	CP-OFDM 256 QAM	79@0	14.085	14.72
78	15	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	100@0	17.879	18.5
78	15	20	633334	3500.01	DFT-s-OFDM QPSK	100@0	17.896	18.8
78	15	20	633334	3500.01	CP-OFDM QPSK	106@0	18.9	19.62
78	15	20	633334	3500.01	CP-OFDM 16 QAM	106@0	18.903	19.72
78	15	20	633334	3500.01	CP-OFDM 64 QAM	106@0	18.893	19.68
78	15	20	633334	3500.01	CP-OFDM 256 QAM	106@0	18.956	19.66
78	15	25	633334	3500.01	DFT-s-OFDM PI/2 BPSK	128@0	22.819	23.7
78	15	25	633334	3500.01	DFT-s-OFDM QPSK	128@0	22.833	23.72
78	15	25	633334	3500.01	CP-OFDM QPSK	133@0	23.683	24.62
78	15	25	633334	3500.01	CP-OFDM 16 QAM	133@0	23.642	24.51
78	15	25	633334	3500.01	CP-OFDM 64 QAM	133@0	23.638	24.67
78	15	25	633334	3500.01	CP-OFDM 256 QAM	133@0	23.7	24.55

78	15	30	633334	3500.01	DFT-s-OFDM PI/2 BPSK	160@0	28.445	29.66
78	15	30	633334	3500.01	DFT-s-OFDM QPSK	160@0	28.523	29.74
78	15	30	633334	3500.01	CP-OFDM QPSK	160@0	28.58	29.63
78	15	30	633334	3500.01	CP-OFDM 16 QAM	160@0	28.606	29.67
78	15	30	633334	3500.01	CP-OFDM 64 QAM	160@0	28.512	29.55
78	15	30	633334	3500.01	CP-OFDM 256 QAM	160@0	28.505	29.75
78	15	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	216@0	38.525	39.96
78	15	40	633334	3500.01	DFT-s-OFDM QPSK	216@0	38.507	39.87
78	15	40	633334	3500.01	CP-OFDM QPSK	216@0	38.548	39.92
78	15	40	633334	3500.01	CP-OFDM 16 QAM	216@0	38.569	40.13
78	15	40	633334	3500.01	CP-OFDM 64 QAM	216@0	38.533	39.9
78	15	40	633334	3500.01	CP-OFDM 256 QAM	216@0	38.581	40.15
78	15	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	270@0	48.093	49.76
78	15	50	633334	3500.01	DFT-s-OFDM QPSK	270@0	48.152	49.9
78	15	50	633334	3500.01	CP-OFDM QPSK	270@0	48.141	49.8
78	15	50	633334	3500.01	CP-OFDM 16 QAM	270@0	48.201	49.77
78	15	50	633334	3500.01	CP-OFDM 64 QAM	270@0	48.172	49.72
78	15	50	633334	3500.01	CP-OFDM 256 QAM	270@0	48.098	49.88

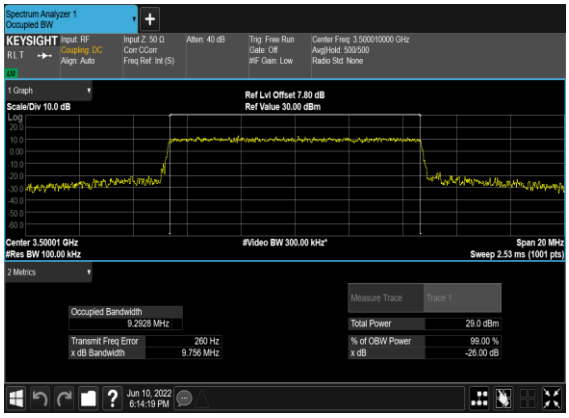
N78(10M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



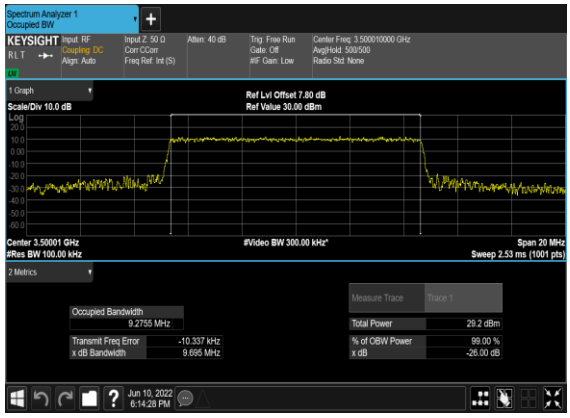
N78(10M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



N78(10M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

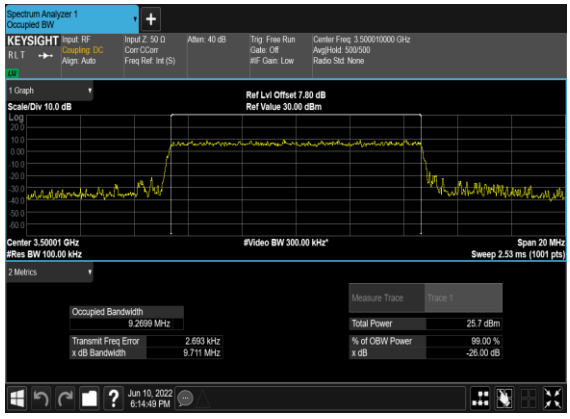


N78(10M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

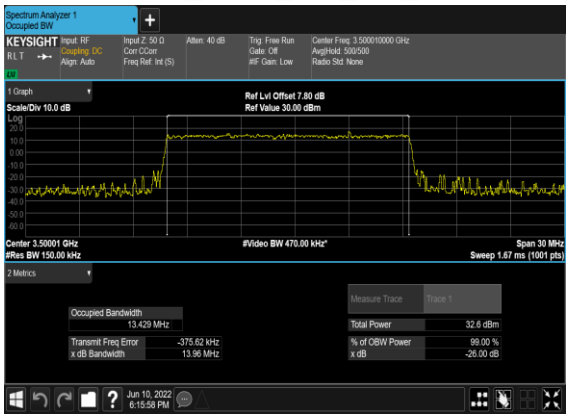


N78(10M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

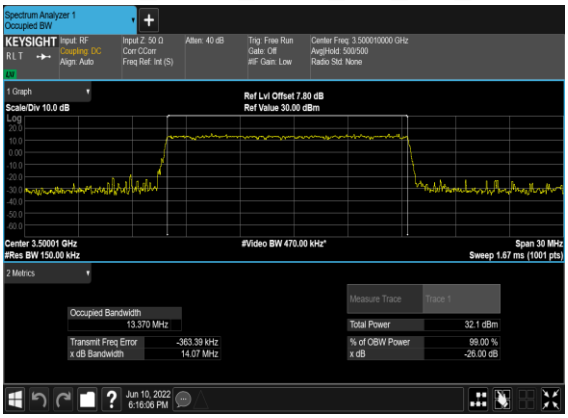
N78(10M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



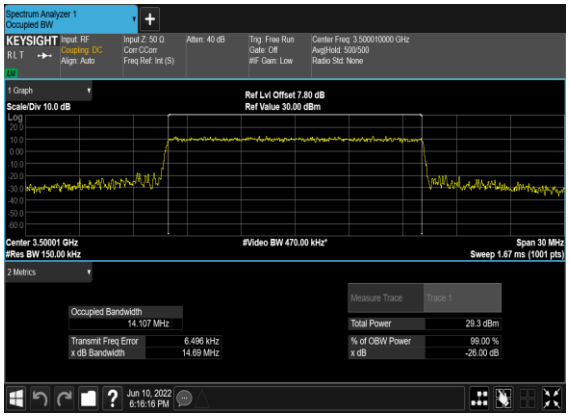
N78(15M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



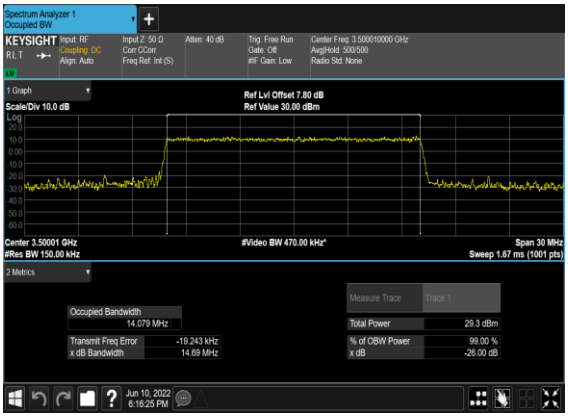
N78(15M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



N78(15M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



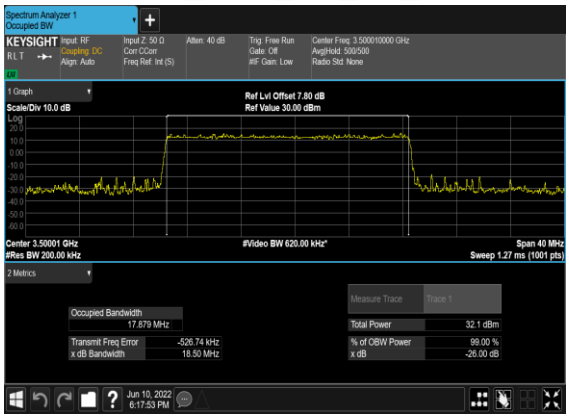
N78(15M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



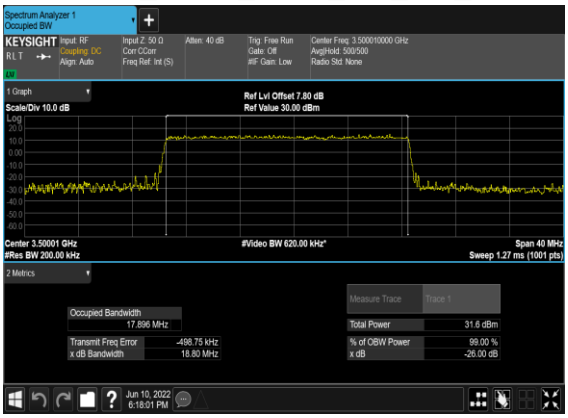
N78(15M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

N78(15M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

N78(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH

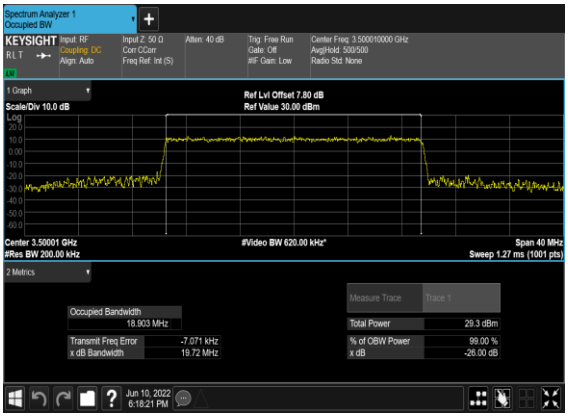


N78(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



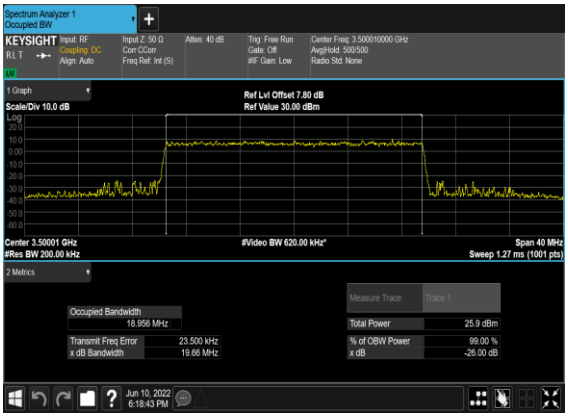
N78(20M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

N78(20M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

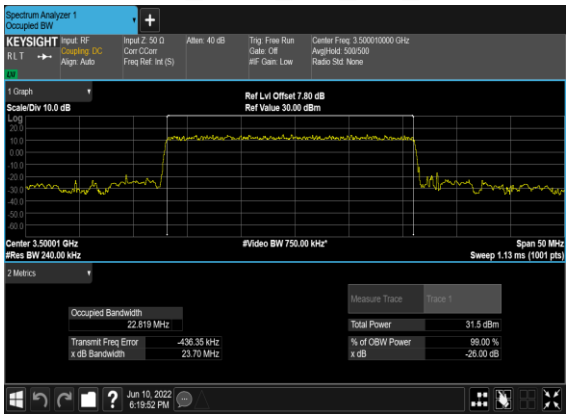


N78(20M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

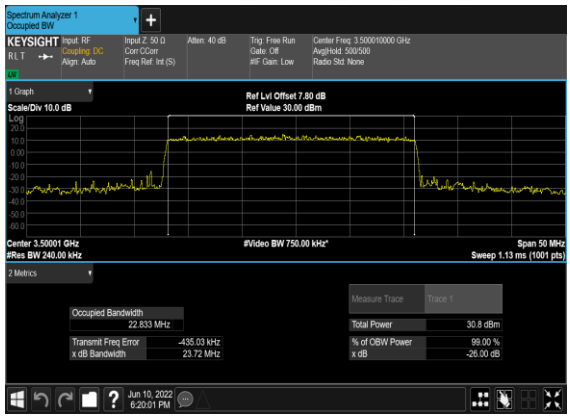
N78(20M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



N78(25M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



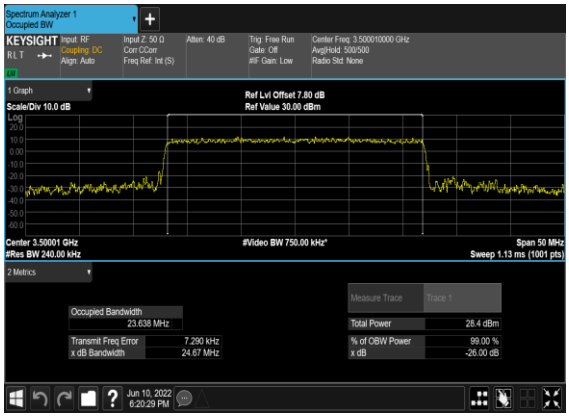
N78(25M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



N78(25M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

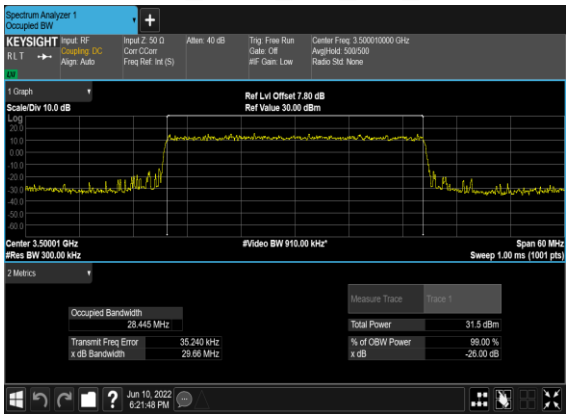
N78(25M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

N78(25M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

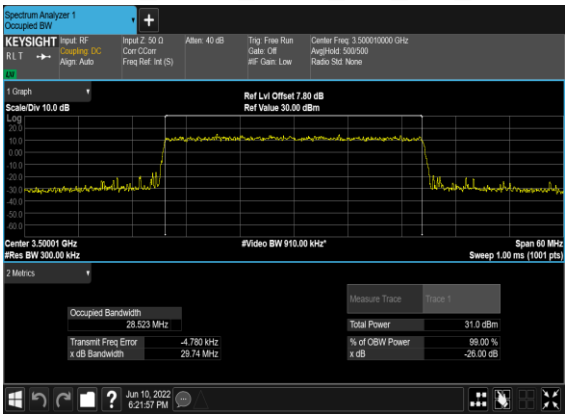


N78(25M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

N78(30M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH

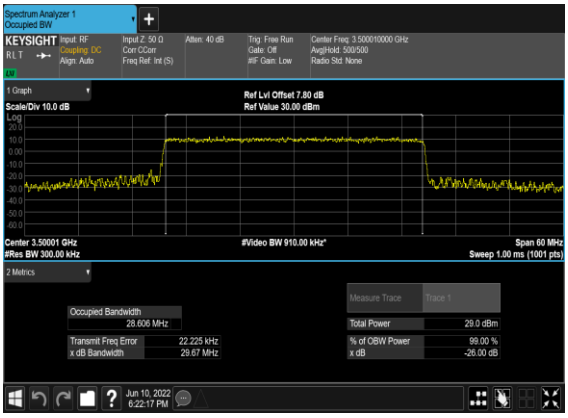


N78(30M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

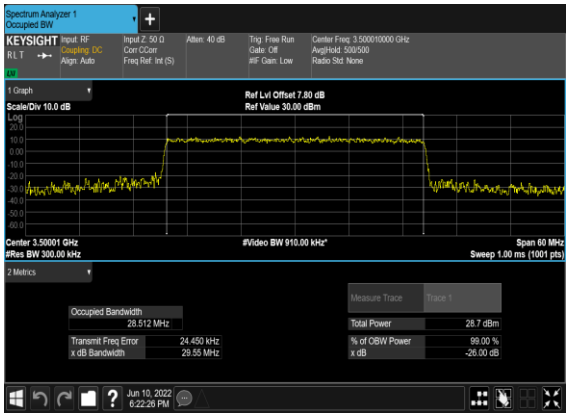


N78(30M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

N78(30M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

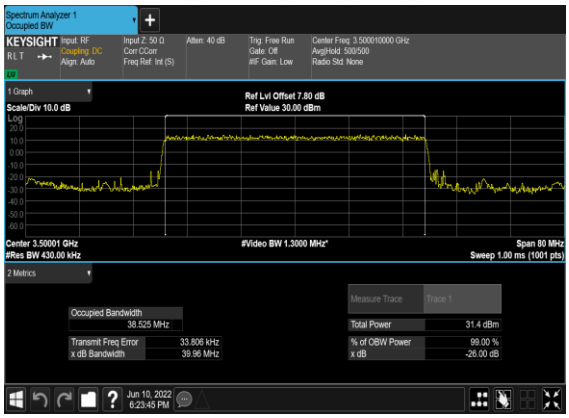


N78(30M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

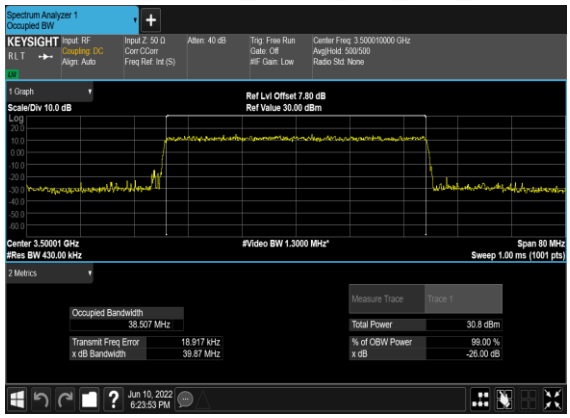


N78(30M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

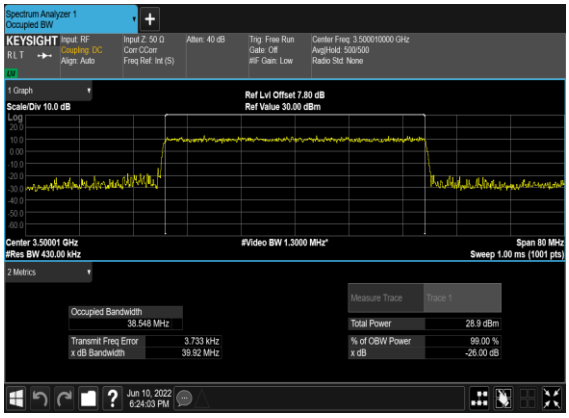
N78(40M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



N78(40M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

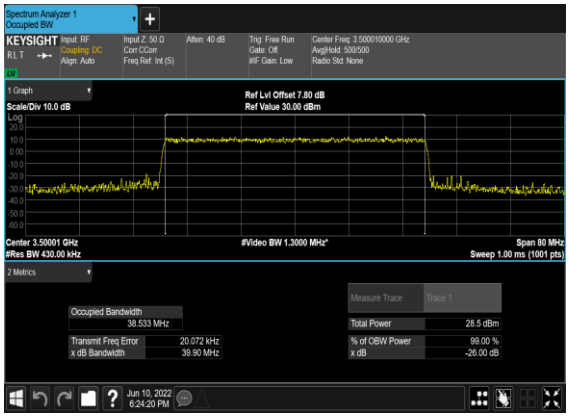


N78(40M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

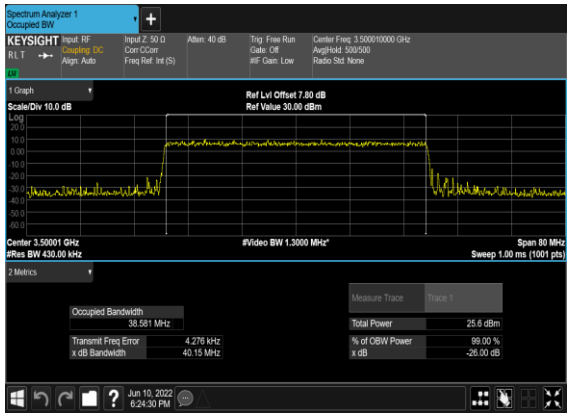


N78(40M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

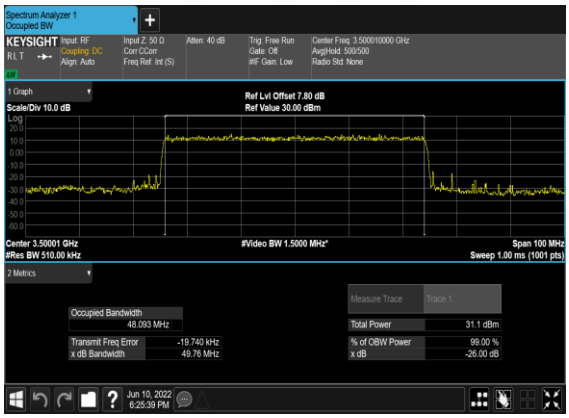
N78(40M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



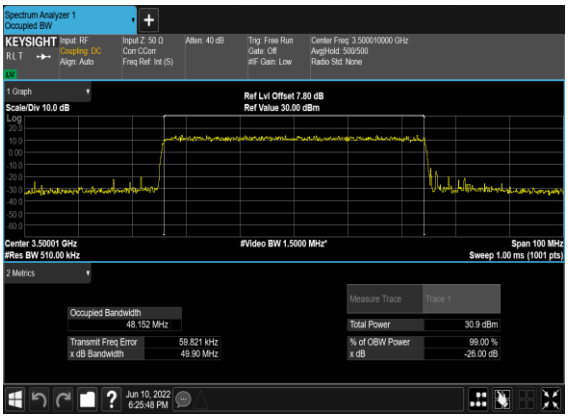
N78(40M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



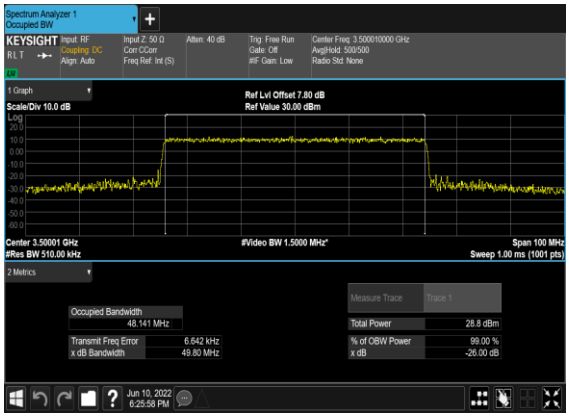
N78(50M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



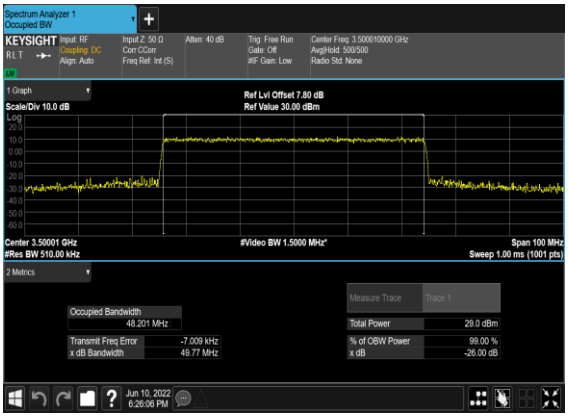
N78(50M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



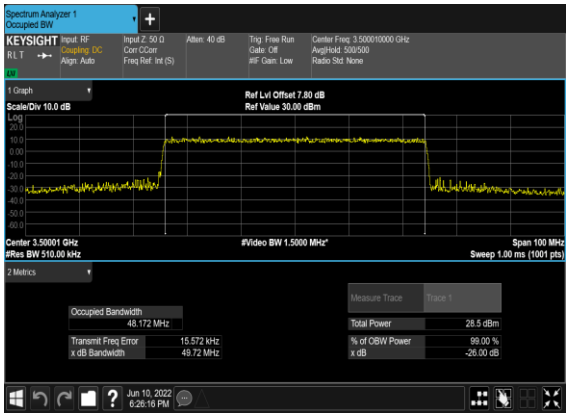
N78(50M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



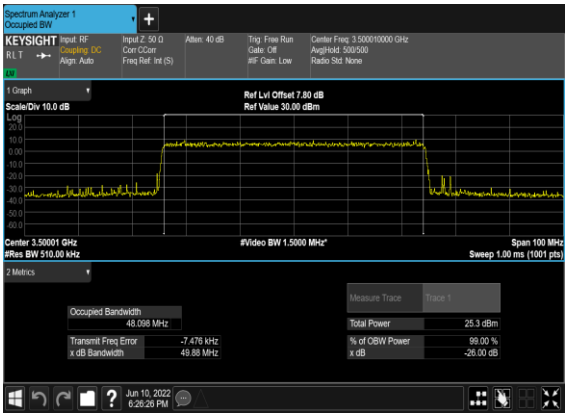
N78(50M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N78(50M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



N78(50M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



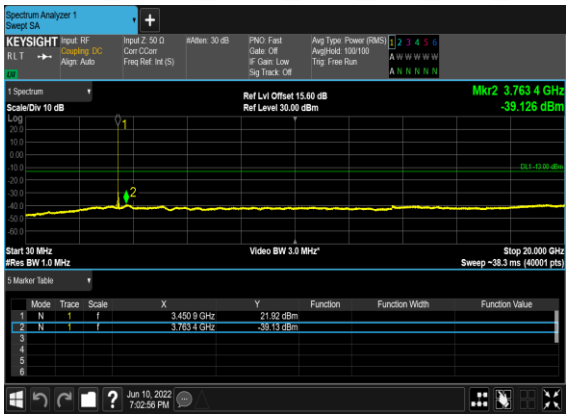
Conducted Spurious Emissions

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
78	15	10	630334	3455.01	DFT-s-OFDM BPSK	1@0	see graph	**---**
78	15	10	630334	3455.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	10	630334	3455.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	10	630334	3455.01	DFT-s-OFDM QPSK	1@0	see graph	**---**
78	15	10	630334	3455.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	15	10	630334	3455.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	15	10	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**---**
78	15	10	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	10	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	10	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**---**
78	15	10	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	15	10	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	15	10	636333	3544.995	DFT-s-OFDM BPSK	1@0	see graph	**---**
78	15	10	636333	3544.995	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	10	636333	3544.995	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	10	636333	3544.995	DFT-s-OFDM QPSK	1@0	see graph	**---**
78	15	10	636333	3544.995	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	15	10	636333	3544.995	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	15	25	630834	3462.51	DFT-s-OFDM BPSK	1@0	see graph	**---**
78	15	25	630834	3462.51	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	25	630834	3462.51	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	25	630834	3462.51	DFT-s-OFDM QPSK	1@0	see graph	**---**

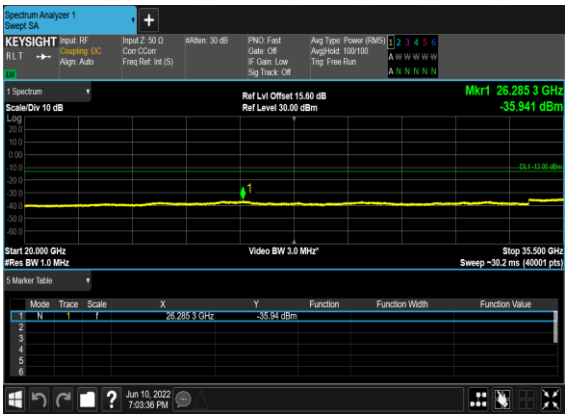
78	15	25	630834	3462.51	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	15	25	630834	3462.51	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	15	25	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**---**
78	15	25	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	25	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	25	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**---**
78	15	25	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	15	25	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	15	25	635833	3537.495	DFT-s-OFDM BPSK	1@0	see graph	**---**
78	15	25	635833	3537.495	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	25	635833	3537.495	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	25	635833	3537.495	DFT-s-OFDM QPSK	1@0	see graph	**---**
78	15	25	635833	3537.495	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	15	25	635833	3537.495	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	15	50	631667	3475.005	DFT-s-OFDM BPSK	1@0	see graph	**---**
78	15	50	631667	3475.005	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	50	631667	3475.005	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	50	631667	3475.005	DFT-s-OFDM QPSK	1@0	see graph	**---**
78	15	50	631667	3475.005	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	15	50	631667	3475.005	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	15	50	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**---**
78	15	50	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	50	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	50	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**---**

78	15	50	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	15	50	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	15	50	635000	3525.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
78	15	50	635000	3525.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	50	635000	3525.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	50	635000	3525.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
78	15	50	635000	3525.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	15	50	635000	3525.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**

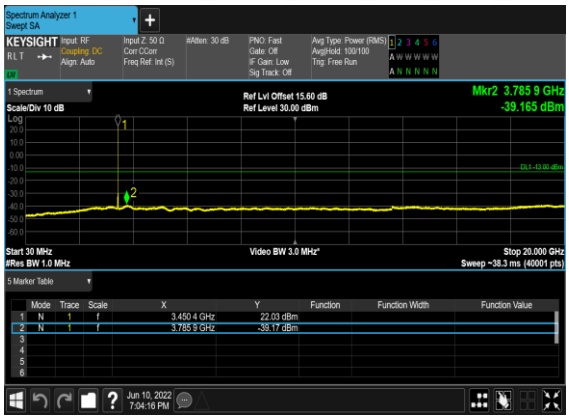
N78(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



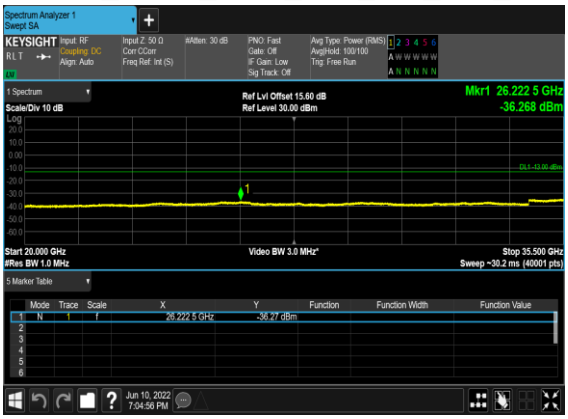
N78(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



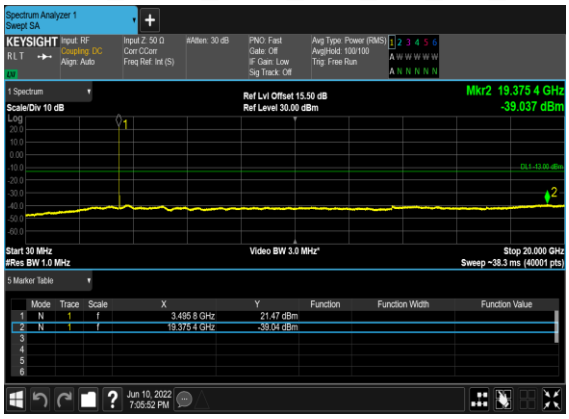
N78(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



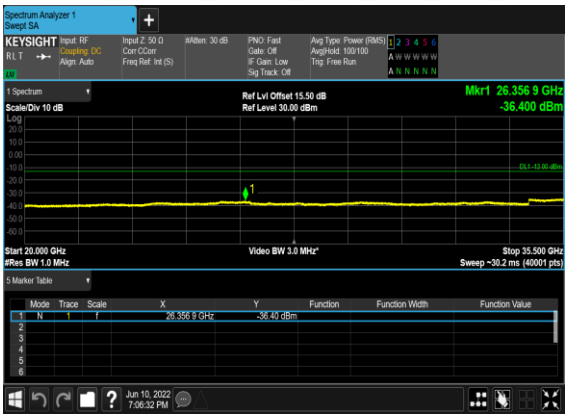
N78(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



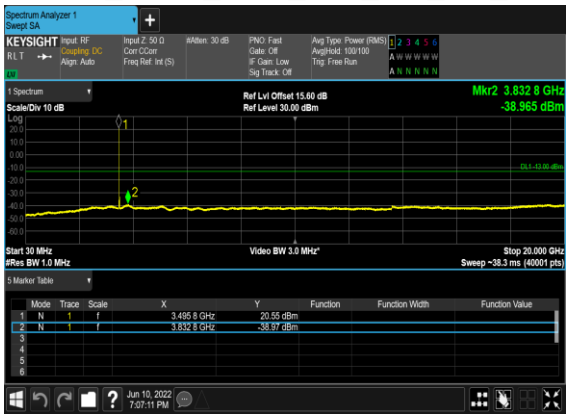
N78(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



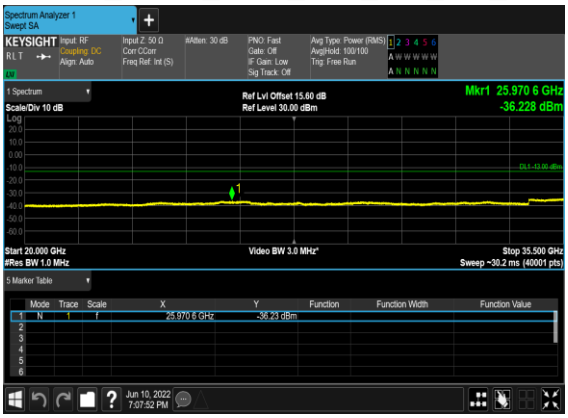
N78(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



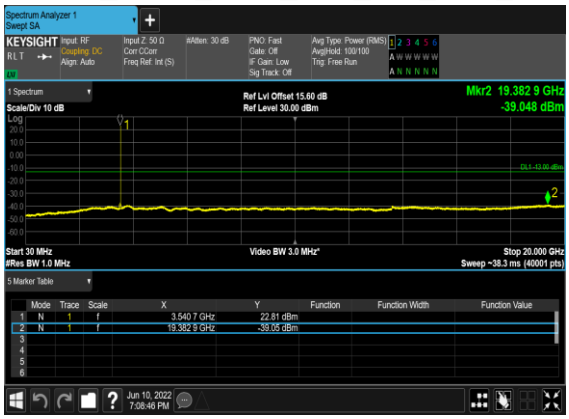
N78(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



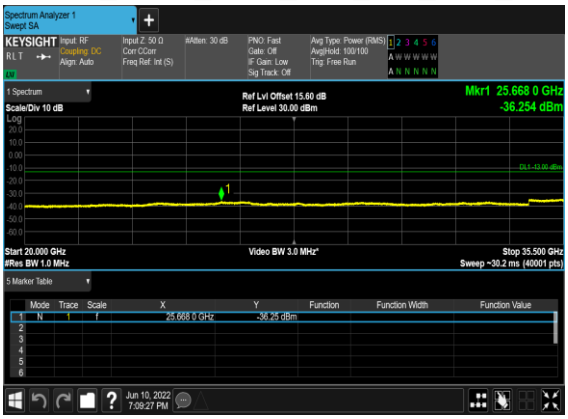
N78(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



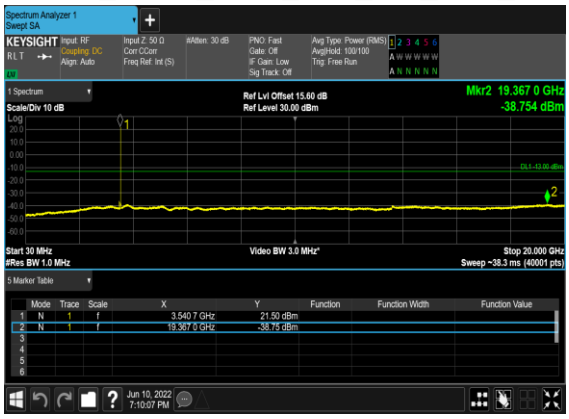
N78(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



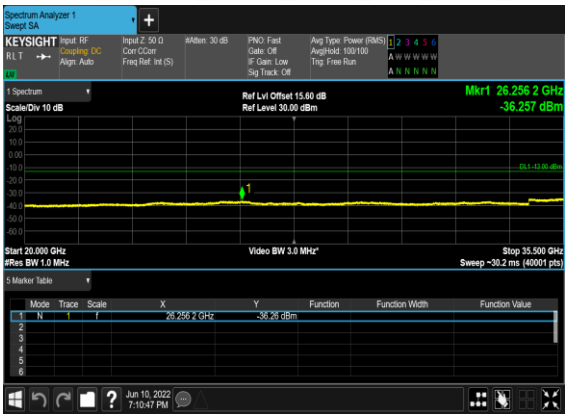
N78(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



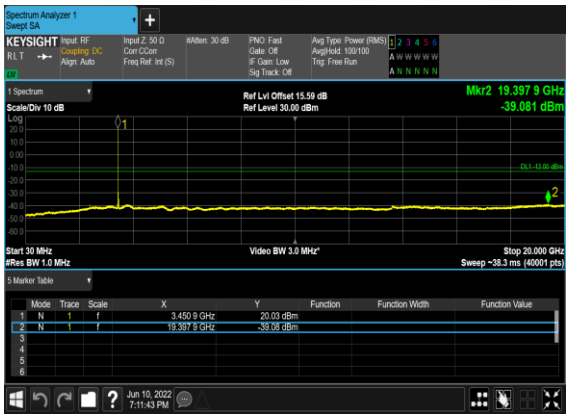
N78(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



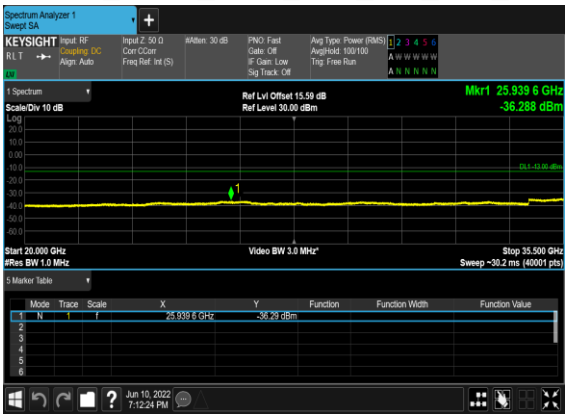
N78(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



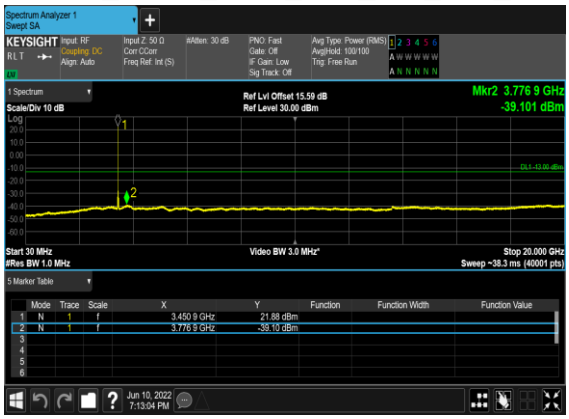
N78(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



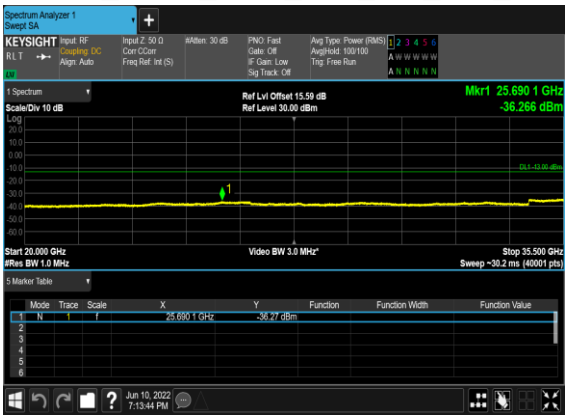
N78(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



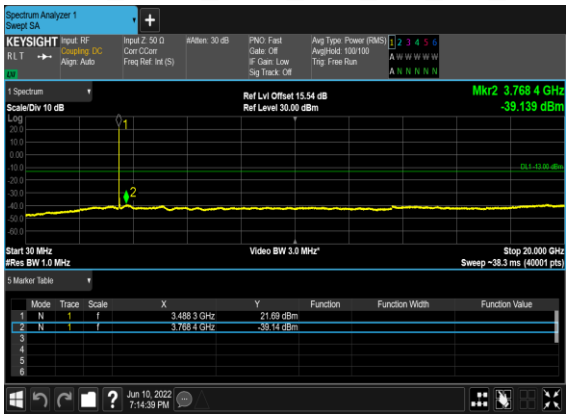
N78(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



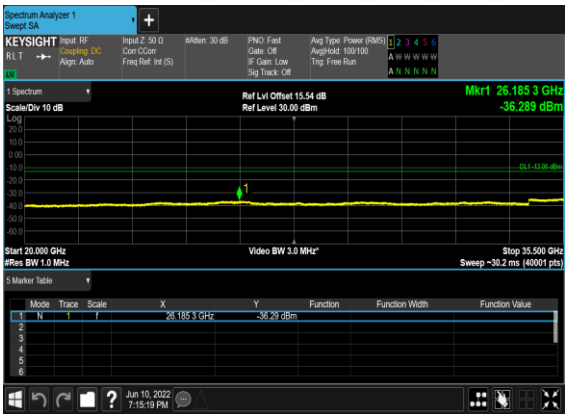
N78(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



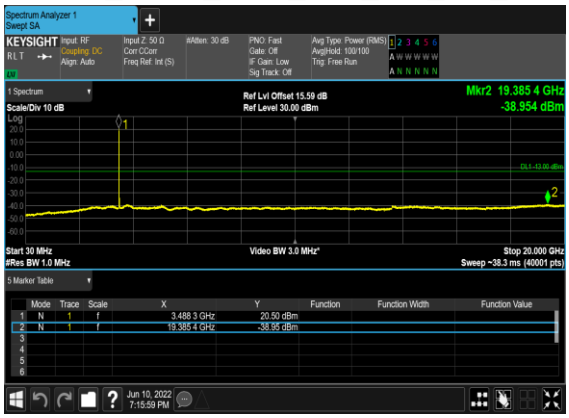
N78(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



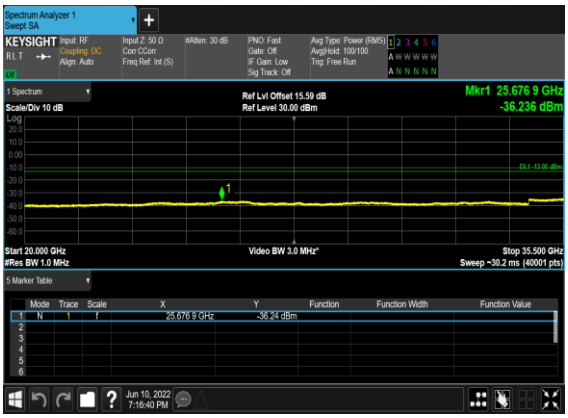
N78(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



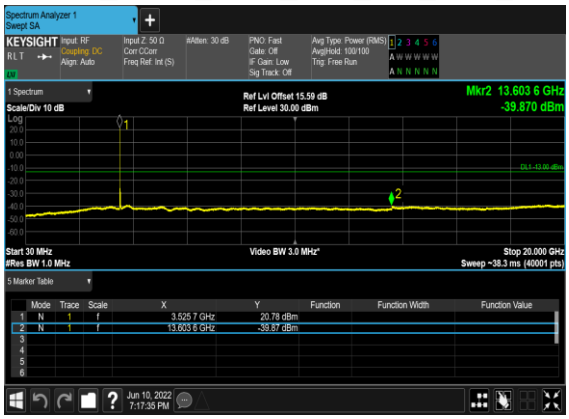
N78(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



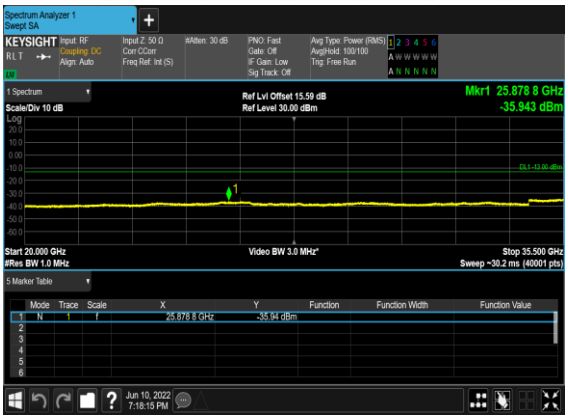
N78(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



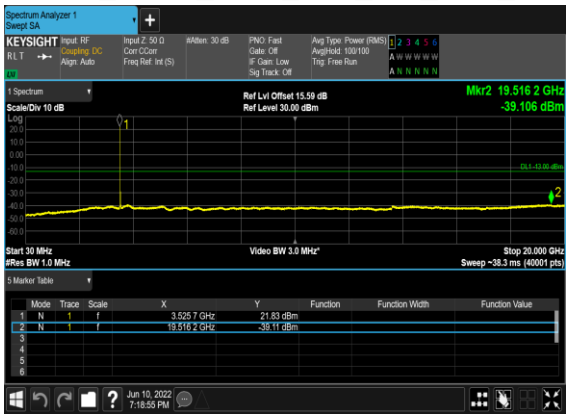
N78(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



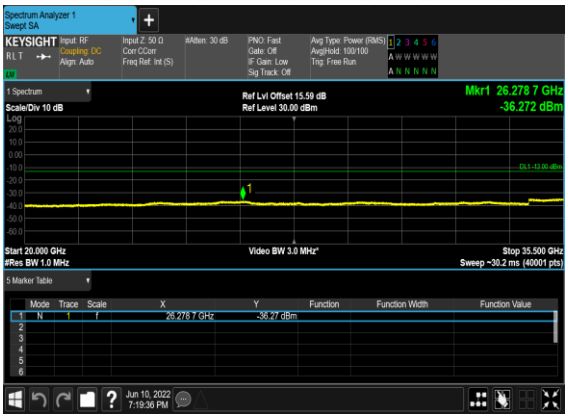
N78(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



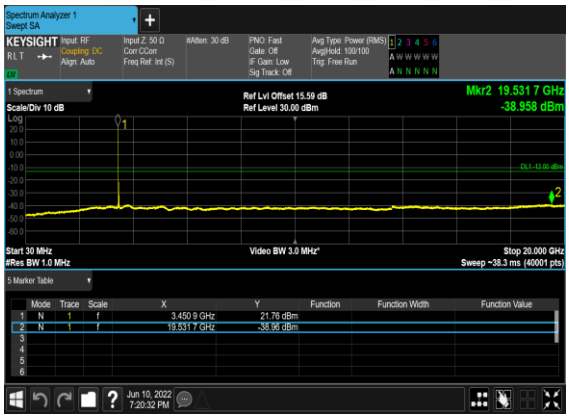
N78(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



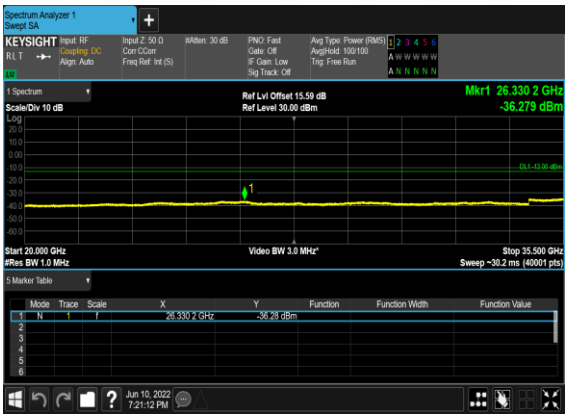
N78(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



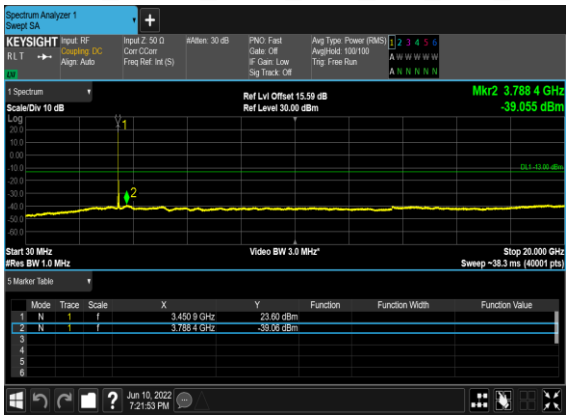
N78(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



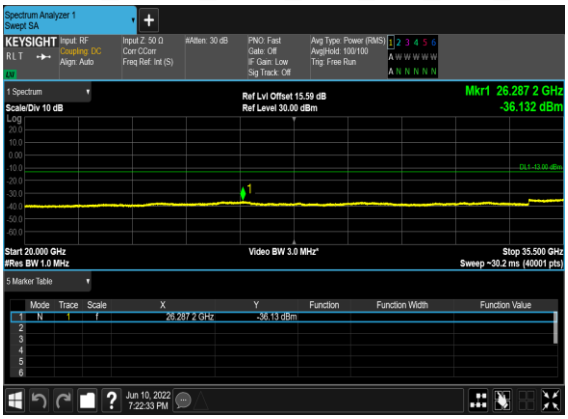
N78(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



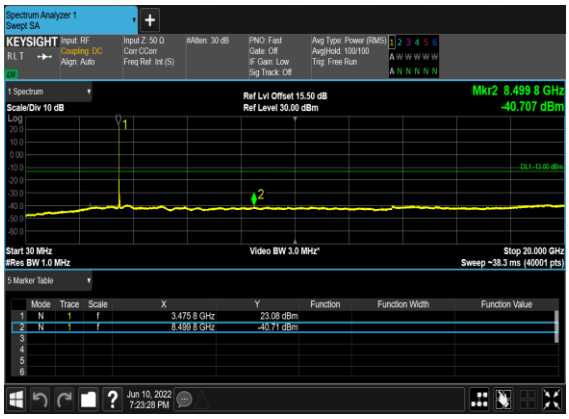
N78(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



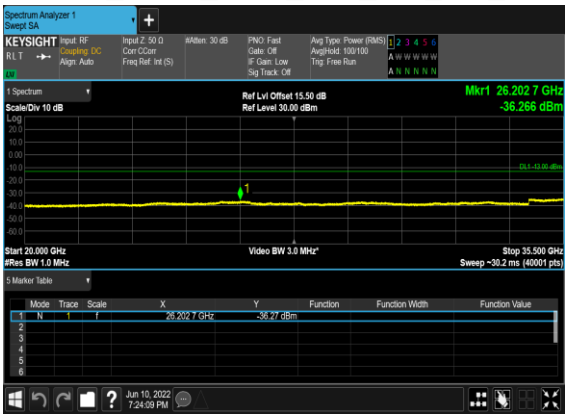
N78(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



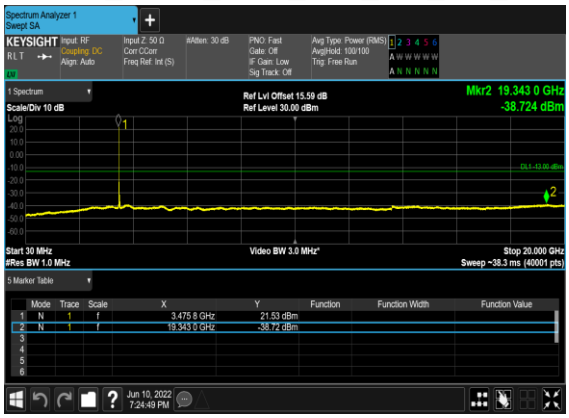
N78(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



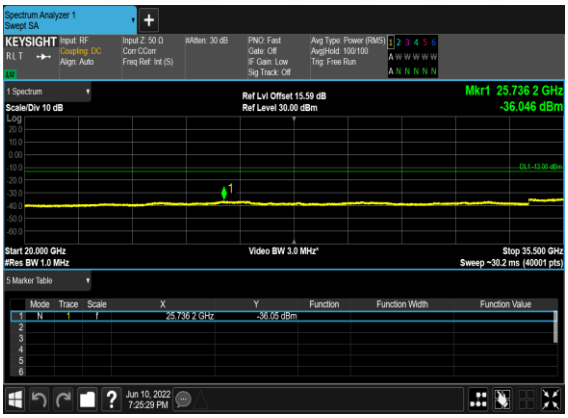
N78(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



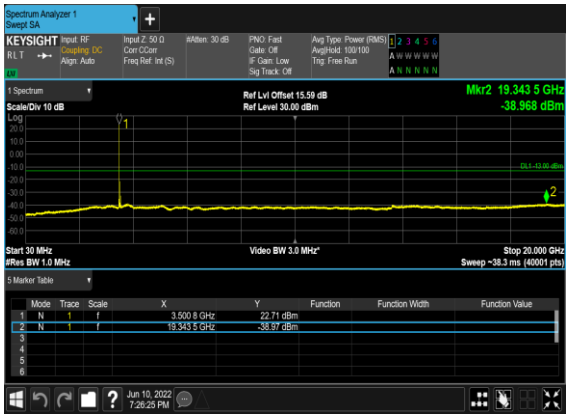
N78(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



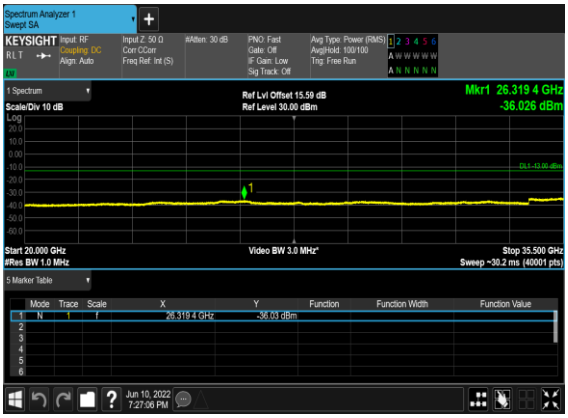
N78(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



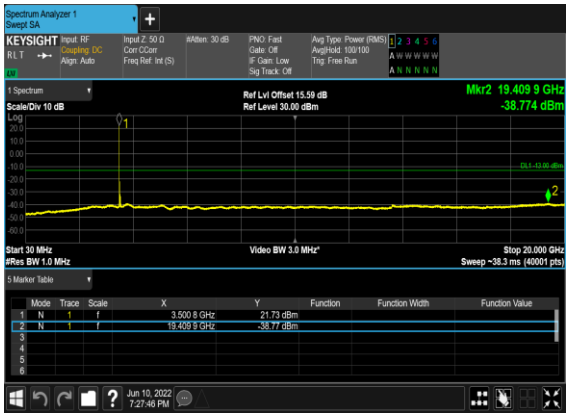
N78(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



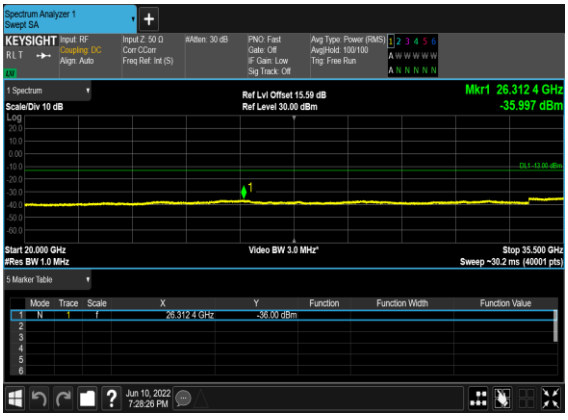
N78(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



N78(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



N78(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
78	15	10	630334	3455.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	10	630334	3455.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	15	10	630334	3455.01	DFT-s-OFDM BPSK	50@0	see graph	**PASS**
78	15	10	630334	3455.01	DFT-s-OFDM QPSK	50@0	see graph	**PASS**
78	15	10	636333	3544.995	DFT-s-OFDM BPSK	1@51	see graph	**PASS**
78	15	10	636333	3544.995	DFT-s-OFDM QPSK	1@51	see graph	**PASS**
78	15	10	636333	3544.995	DFT-s-OFDM BPSK	50@0	see graph	**PASS**
78	15	10	636333	3544.995	DFT-s-OFDM QPSK	50@0	see graph	**PASS**
78	15	25	630834	3462.51	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	25	630834	3462.51	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	15	25	630834	3462.51	DFT-s-OFDM BPSK	128@0	see graph	**PASS**
78	15	25	630834	3462.51	DFT-s-OFDM QPSK	128@0	see graph	**PASS**
78	15	25	635833	3537.495	DFT-s-OFDM BPSK	1@132	see graph	**PASS**
78	15	25	635833	3537.495	DFT-s-OFDM QPSK	1@132	see graph	**PASS**
78	15	25	635833	3537.495	DFT-s-OFDM BPSK	128@0	see graph	**PASS**
78	15	25	635833	3537.495	DFT-s-OFDM QPSK	128@0	see graph	**PASS**
78	15	50	631667	3475.005	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	15	50	631667	3475.005	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	15	50	631667	3475.005	DFT-s-OFDM BPSK	270@0	see graph	**PASS**
78	15	50	631667	3475.005	DFT-s-OFDM QPSK	270@0	see graph	**PASS**
78	15	50	635000	3525.0	DFT-s-OFDM BPSK	1@269	see graph	**PASS**
78	15	50	635000	3525.0	DFT-s-OFDM QPSK	1@269	see graph	**PASS**

78	15	50	635000	3525.0	DFT-s-OFDM BPSK	270@0	see graph	**PASS**
78	15	50	635000	3525.0	DFT-s-OFDM QPSK	270@0	see graph	**PASS**