



FCC RF Test Report

APPLICANT : Xiaomi Communications Co., Ltd.
EQUIPMENT : Mobile Phone
BRAND NAME : XIAOMI
MODEL NAME : 2201123G
FCC ID : 2AFZZ123G
STANDARD : 47 CFR Part 2, 27(O)
CLASSIFICATION : PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S) : Nov. 16, 2021 ~ Oct. 09, 2021

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

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

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG1O2709I	Rev. 01	Initial issue of report	Dec. 20, 2021



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	§27.50(j)(3)	Equivalent Isotropic Radiated Power (5G NR n77, n78)	EIRP < 1Watt		
3.5	§27.50(j)(4)	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	Reporting Only	PASS	-
3.7	§2.1051 §27.53(l)(2)	Conducted Band Edge Measurement (5G NR n77, n78)	< 43+10log ₁₀ (P[Watts])	PASS	-
3.8	§2.1051 §27.53(l)(2)	Conducted Spurious Emission (5G NR n77, n78)	< 43+10log ₁₀ (P[Watts])	PASS	-
3.9	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within Authorized Band	PASS	-
4.4	§2.1053 §27.53(l)(2)	Radiated Spurious Emission (5G NR n77, n78)	< 43+10log ₁₀ (P[Watts])	PASS	Under limit 39.28 dB at 11376.000 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	2201123G
FCC ID	2AFZZ123G
IMEI Code	Conducted : 860978050062153/ 860978050062161 Radiation : 860978050061858/860978050061866
HW Version	P2.1
SW Version	MIUI13
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. 10> 5G NR n77 : 24.55 dBm 5G NR n78 : 25.88 dBm <Ant. 10+11> 5G NR n77 UL_MIMO : 22.92 dBm 5G NR n78 UL_MIMO : 24.44 dBm
Antenna Gain	<Ant.10> : 5G NR n77 : -1.9 dBi 5G NR n78 : -1.9 dBi <Ant.11> : 5G NR n77 : -5.4 dBi 5G NR n78 : -5.4 dBi

	<Ant.12> : 5G NR n77 : -2.5 dBi 5G NR n78 : -2.5 dBi <Ant.13> : 5G NR n77 : -2.7 dBi 5G NR n78 : -2.7 dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

Remark:

1. The ERP/EIRP is calculated from Output power and antenna gain, only the maximum EIRP of n77/n78 for Antenna 10 and n77/n78_UL MIMO for Antenna 10 + Antenna 11 are shown in the report.
2. 5G NR n77/n78 supports UL MIMO mode, and only supports CP-OFDM modulation in UL MIMO mode.
3. 5G NR Bands support SA and NSA mode. The whole testing has assessed SA mode for n77/n78 by referring to the higher conducted power for conducted test items.
4. The EN-DC combinations declared by the manufacturer are as follows: DC_2A_n78A, DC_5A_n78A, DC_7A_n78A, DC_38A_n78A, DC_41A_n78A and DC_66A_n78A.
5. The device supports HPUE mode for 5G NR n78.

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 SA		PI/2 BPSK /QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	3710.01 ~ 3969.99	0.1837	18M2G7D	0.1466	18M2W7D
30	3715.02 ~ 3964.98	0.1816	27M8G7D	0.1435	27M9W7D
40	3720.00 ~ 3960.00	0.1820	37M8G7D	0.1426	37M9W7D
50	3725.01 ~ 3954.99	0.1738	47M5G7D	0.1368	47M5W7D
60	3730.02 ~ 3949.98	0.1675	57M9G7D	0.1321	57M9W7D
70	3735.00 ~ 3945.00	0.1574	67M5G7D	0.1245	67M5W7D
80	3740.01 ~ 3939.99	0.1679	77M5G7D	0.1337	77M5W7D
90	3745.02 ~ 3934.98	0.1633	87M4G7D	0.1297	87M5W7D
100	3750.00 ~ 3930.00	0.1841	97M5G7D	0.1459	97M5W7D

5G NR n77 UL MIMO		QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	3710.01 ~ 3969.99	0.2461	18M2G7D	0.2188	18M3W7D
30	3715.02 ~ 3964.98	0.2456	27M9G7D	0.2210	27M9W7D
40	3720.00 ~ 3960.00	0.2530	37M8G7D	0.2218	37M9W7D
50	3725.01 ~ 3954.99	0.2368	47M4G7D	0.2077	47M5W7D
60	3730.02 ~ 3949.98	0.2324	57M8G7D	0.2078	58M0W7D
70	3735.00 ~ 3945.00	0.2302	67M5G7D	0.2034	67M7W7D
80	3740.01 ~ 3939.99	0.2308	77M4G7D	0.2046	77M7W7D
90	3745.02 ~ 3934.98	0.2340	87M5G7D	0.2047	87M6W7D
100	3750.00 ~ 3930.00	0.2321	97M3G7D	0.2056	97M7W7D

5G NR n78 SA		PI/2 BPSK /QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	3710.01 ~ 3789.99	0.2404	18M2G7D	0.1892	18M2W7D
30	3715.02 ~ 3784.98	0.2427	27M8G7D	0.1919	27M8W7D
40	3720.00 ~ 3780.00	0.2500	37M9G7D	0.1991	37M9W7D
50	3725.01 ~ 3774.99	0.2333	47M5G7D	0.1799	47M5W7D
60	3730.02 ~ 3769.98	0.2307	57M9G7D	0.1803	57M9W7D
70	3735.00 ~ 3765.00	0.2198	67M6G7D	0.1742	67M6W7D
80	3740.01 ~ 3759.99	0.2301	77M5G7D	0.1828	77M6W7D
90	3745.02 ~ 3754.98	0.2280	87M4G7D	0.1811	87M6W7D
100	3750.00	0.2280	97M4G7D	0.1791	97M6W7D

5G NR n78 UL MIMO		QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	3710.01 ~ 3789.99	0.3401	18M2G7D	0.3034	18M2W7D
30	3715.02 ~ 3784.98	0.3440	27M8G7D	0.3109	27M9W7D
40	3720.00 ~ 3780.00	0.3586	37M9G7D	0.3182	37M9W7D
50	3725.01 ~ 3774.99	0.3339	47M5G7D	0.3014	47M5W7D
60	3730.02 ~ 3769.98	0.3393	57M8G7D	0.2990	57M9W7D
70	3735.00 ~ 3765.00	0.3278	67M5G7D	0.2945	67M7W7D
80	3740.01 ~ 3759.99	0.3275	77M5G7D	0.2938	77M5W7D
90	3745.02 ~ 3754.98	0.3339	87M5G7D	0.3076	87M7W7D
100	3750.00	0.3350	97M5G7D	0.2969	97M6W7D

Note: All modulations have been evaluation, only the worst test results of PSK & QAM 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 case 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, 270
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

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



2 Test Configuration of Equipment Under Test

2.1 Test Mode

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

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

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

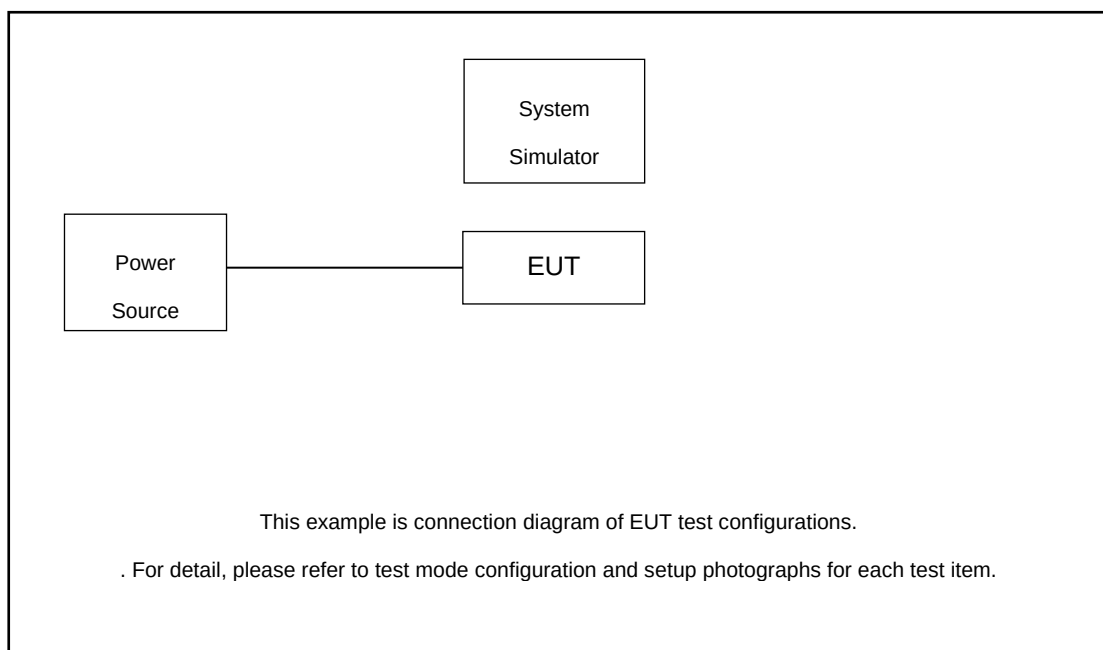
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane

Test Items	5G NR	Bandwidth (MHz)								Modulation					RB #		Test Channel		
		20	30	40	50	60	70	80-90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	1	Full	L	M	H
Max. Output Power	n77	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	n77 UL MIMO	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
	n78 UL MIMO	v	v	v	v	v	v	v	v	-	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	n77	v									v				v	v		v	
	n77 UL MIMO	v									v				v	v		v	
	n78	v									v				v	v		v	
	n78 UL MIMO	v									v				v	v		v	
26dB and 99% Bandwidth	n77	v	v	v	v	v	v	v	v		v	v	v	v		v		v	
	n77 UL MIMO	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	
	n78 UL MIMO	v	v	v	v	v	v	v	v		v	v	v	v		v		v	
Conducted Band Edge	n77	v				v			v		v				v	v	v		v
	n77 UL MIMO	v				v			v		v				v	v	v		v
	n78	v				v			v		v				v	v	v		v
	n78 UL MIMO	v				v			v		v				v	v	v		v



Test Items	5G NR	Bandwidth (MHz)								Modulation					RB #		Test Channel		
		20	30	40	50	60	70	80-90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	1	Full	L	M	H
Conducted Spurious Emission	n77	v				v			v		v				v			v	
	n77 UL MIMO	v				v			v		v				v			v	
	n78	v				v			v		v				v			v	
	n78 UL MIMO	v				v			v		v				v			v	
Frequency Stability	n77	v									v					v		v	
	n77 UL MIMO	v									v					v		v	
	n78	v									v					v		v	
	n78 UL MIMO	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
	n77 UL MIMO	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
	n78 UL MIMO	v	v	v	v	v	v	v	v		v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	n77	Worst Case																v	
	n77 UL MIMO	Worst Case																v	
	n78	Worst Case																v	
	n78 UL MIMO	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. Based on engineering evaluation, only the worst modulations test results are shown in the report.																		

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	Power Supply	GWINSTEK	PSS-2002	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
3.	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 5.1 dB.

Example :

Offset(dB) = RF cable loss(dB).
=5.1 (dB)

2.5 Frequency List of Low/Middle/High Channels

5G NR n77 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	650000	656000	662000
	Frequency	3750	3840	3930
90	Channel	649668	656000	662332
	Frequency	3745.02	3840	3934.98
80	Channel	649334	656000	662666
	Frequency	3740.01	3840	3939.99
70	Channel	649000	656000	663000
	Frequency	3735	3840	3945
60	Channel	648668	656000	663332
	Frequency	3730.02	3840	3949.98
50	Channel	648334	656000	663666
	Frequency	3725.01	3840	3954.99
40	Channel	648000	656000	664000
	Frequency	3720	3840	3960
30	Channel	647668	656000	664332
	Frequency	3715.02	3840	3964.98
20	Channel	647334	656000	664666
	Frequency	3710.01	3840	3969.99



5G NR n78 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	650000		
	Frequency	3750		
90	Channel	649668	650000	650332
	Frequency	3745.02	3750	3754.98
80	Channel	649334	650000	650666
	Frequency	3740.01	3750	3759.99
70	Channel	649000	650000	651000
	Frequency	3735	3750	3765
60	Channel	648668	650000	651332
	Frequency	3730.02	3750	3769.98
50	Channel	648334	650000	651666
	Frequency	3725.01	3750	3774.99
40	Channel	648000	650000	652000
	Frequency	3720	3750	3780
30	Channel	647668	650000	652332
	Frequency	3715.02	3750	3784.98
20	Channel	647334	650000	652666
	Frequency	3710.01	3750	3789.99

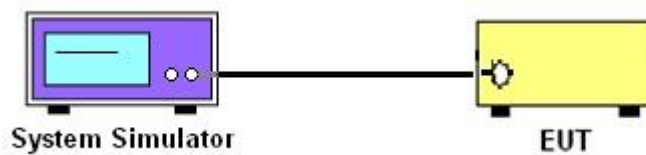
3 Conducted Test Items

3.1 Measuring Instruments

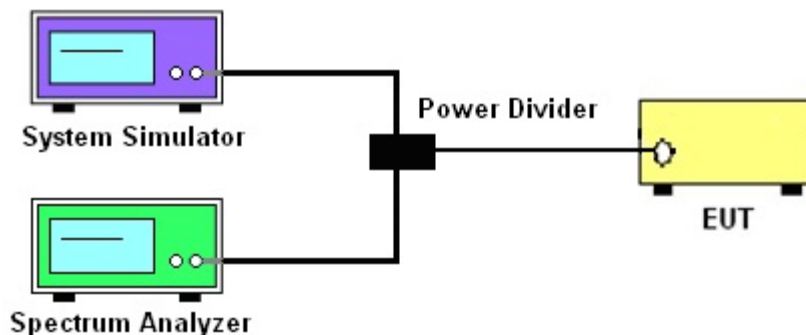
See list of measuring instruments of this test report.

3.2 Test Setup

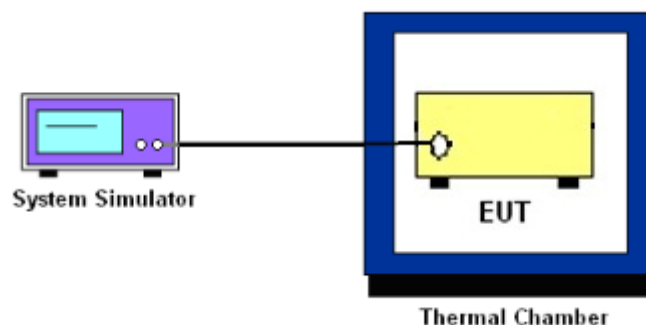
3.2.1 Conducted Output Power



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



3.2.3 Frequency Stability



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power and EIRP

3.4.1 Description of the Conducted Output Power Measurement and EIRP Measurement

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

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

According to KDB 412172 D01 Power Approach,

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

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

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

3.4.2 Test Procedures

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

3.5 Peak-to-Average Ratio

3.5.1 Description of the PAR Measurement

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

3.5.2 Test Procedures

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

3.6 Occupied Bandwidth

3.6.1 Description of Occupied Bandwidth Measurement

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

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

3.6.2 Test Procedures

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

3.7 Conducted Band Edge

3.7.1 Description of Conducted Band Edge Measurement

27.53(l)(2)

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

3.7.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW $\geq$ 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 $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)]$ (dB)
 $= [30 + 10\log(P)]$ (dBm) - $[43 + 10\log(P)]$ (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 10th 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 $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)]$ (dB)
 $= [30 + 10\log(P)]$ (dBm) - $[43 + 10\log(P)]$ (dB)
 $= -13$ dBm.

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 $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) 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 $20\pm 5^{\circ}\text{C}$ and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value for other than hand carried battery equipment.
4. For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.
5. The variation in frequency was measured for the worst case.

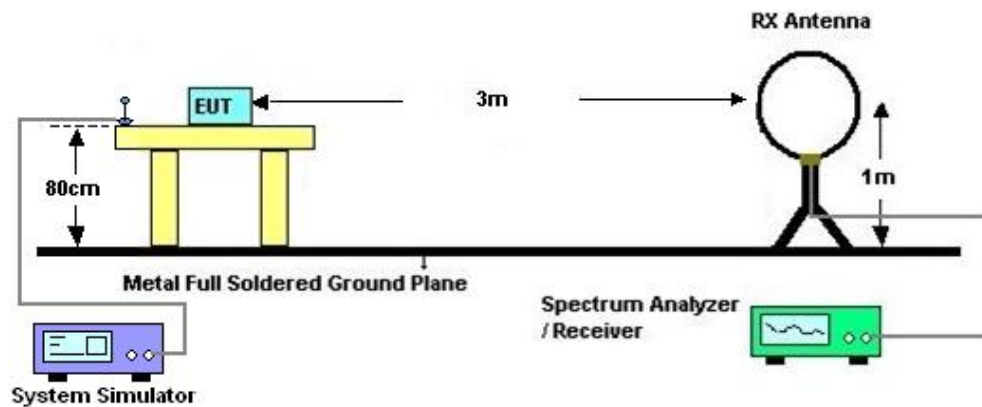
4 Radiated Test Items

4.1 Measuring Instruments

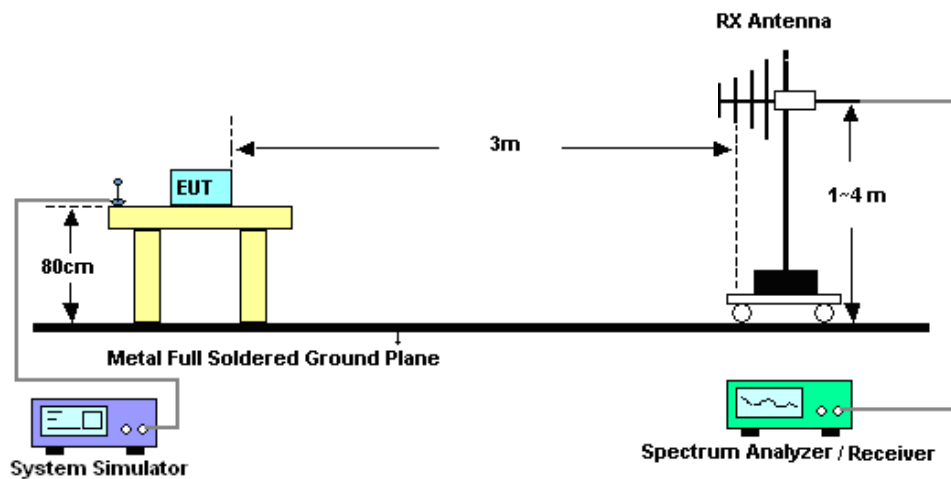
See list of measuring instruments of this test report.

4.2 Test Setup

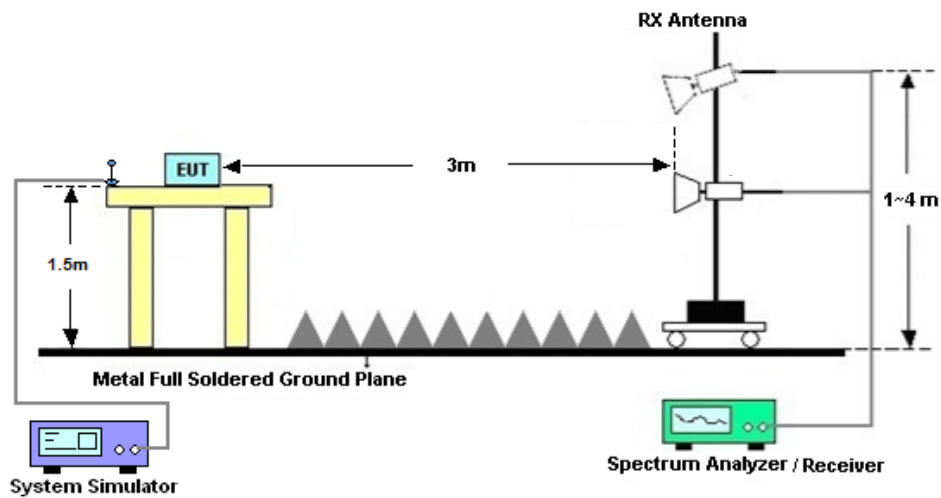
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3 Test Result of Radiated Test

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

Please refer to Appendix B.



4.4 Radiated Spurious Emission

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. $EIRP \text{ (dBm)} = S.G. \text{ Power} - Tx \text{ Cable Loss} + Tx \text{ Antenna Gain}$
11. $ERP \text{ (dBm)} = EIRP - 2.15$
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)] \text{ (dB)}$
 $= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$
 $= -13\text{dBm}.$



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	Nov. 16, 202~ Dec. 08, 2021	Apr. 02, 2022	Conducted (TH01-SZ)
Power divider	STI	STI08-0055	-	0.5~40GHz	Aug. 26, 2021	Nov. 16, 202~ Dec. 08, 2021	Aug. 25, 2022	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 14, 2021	Nov. 16, 202~ Dec. 08, 2021	Jul. 13, 2022	Conducted (TH01-SZ)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz~44G,MAX 30dB	Apr. 13, 2021	Dec. 09, 2021	Apr. 12, 2022	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 01, 2020	Dec. 09, 2021	Oct. 31, 2021	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz~1GHz	May 30, 2021	Dec. 09, 2021	May 29, 2022	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Nov. 01, 2020	Dec. 09, 2021	Oct. 31, 2021	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101115	18GHz~40GHz	Jan. 06, 2021	Dec. 09, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	187289	9KHz~1GHz	Jan. 06, 2021	Dec. 09, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40G GA	060728	18~40GHz	Jan. 07, 2021	Dec. 09, 2021	Jan. 06, 2022	Radiation (03CH04-KS)
high gain Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P	2025788	1Ghz~18Ghz	Jan. 06, 2021	Dec. 09, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	Keysight	83017A	MY57280106	500MHz~26.5GHz	Oct. 14, 2020	Dec. 09, 2021	Oct. 13, 2021	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Dec. 09, 2021	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Dec. 09, 2021	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Dec. 09, 2021	NCR	Radiation (03CH04-KS)

NCR: No Calibration Required

6 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage $K=2$ to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.3dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.8dB
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----- THE END -----



Appendix A. Test Results of Conducted Test

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Transmitter Conducted Output Power And EIRP, ($G_T - L_C$)= -1.9dB

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	24	22.1	0.1622
77	30	20	647334	3710.01	DFT-s-OFDM PI/2 BPSK	1@1	23.95	22.05	0.1603
77	30	20	647334	3710.01	DFT-s-OFDM PI/2 BPSK	1@49	24.02	22.12	0.1629
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	25@12	24.28	22.38	0.1730
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@1	24.14	22.24	0.1675
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@49	24.24	22.34	0.1714
77	30	20	647334	3710.01	DFT-s-OFDM 16 QAM	25@12	23.3	21.4	0.1380
77	30	20	647334	3710.01	DFT-s-OFDM 16 QAM	1@1	23.19	21.29	0.1346
77	30	20	647334	3710.01	DFT-s-OFDM 16 QAM	1@49	23.2	21.3	0.1349
77	30	20	647334	3710.01	DFT-s-OFDM 64 QAM	25@12	21.74	19.84	0.0964
77	30	20	647334	3710.01	DFT-s-OFDM 64 QAM	1@1	21.45	19.55	0.0902
77	30	20	647334	3710.01	DFT-s-OFDM 64 QAM	1@49	21.61	19.71	0.0935
77	30	20	647334	3710.01	DFT-s-OFDM 256 QAM	25@12	19.75	17.85	0.0610
77	30	20	647334	3710.01	DFT-s-OFDM 256 QAM	1@1	19.59	17.69	0.0587
77	30	20	647334	3710.01	DFT-s-OFDM 256 QAM	1@49	19.76	17.86	0.0611
77	30	20	647334	3710.01	CP-OFDM QPSK	25@12	22.75	20.85	0.1216
77	30	20	647334	3710.01	CP-OFDM QPSK	1@1	22.74	20.84	0.1213
77	30	20	647334	3710.01	CP-OFDM QPSK	1@49	22.71	20.81	0.1205
77	30	20	656000	3840	DFT-s-OFDM PI/2 BPSK	25@12	24.24	22.34	0.1714
77	30	20	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.18	22.28	0.1690
77	30	20	656000	3840	DFT-s-OFDM PI/2 BPSK	1@49	24.17	22.27	0.1687
77	30	20	656000	3840	DFT-s-OFDM QPSK	25@12	24.28	22.38	0.1730
77	30	20	656000	3840	DFT-s-OFDM QPSK	1@1	24.39	22.49	0.1774
77	30	20	656000	3840	DFT-s-OFDM QPSK	1@49	24.27	22.37	0.1726
77	30	20	656000	3840	DFT-s-OFDM 16 QAM	25@12	23.31	21.41	0.1384
77	30	20	656000	3840	DFT-s-OFDM 16 QAM	1@1	23.22	21.32	0.1355
77	30	20	656000	3840	DFT-s-OFDM 16 QAM	1@49	23.22	21.32	0.1355
77	30	20	656000	3840	DFT-s-OFDM 64 QAM	25@12	21.83	19.93	0.0984
77	30	20	656000	3840	DFT-s-OFDM 64 QAM	1@1	21.55	19.65	0.0923
77	30	20	656000	3840	DFT-s-OFDM 64 QAM	1@49	21.7	19.8	0.0955

77	30	20	656000	3840	DFT-s-OFDM 256 QAM	25@12	19.79	17.89	0.0615
77	30	20	656000	3840	DFT-s-OFDM 256 QAM	1@1	19.72	17.82	0.0605
77	30	20	656000	3840	DFT-s-OFDM 256 QAM	1@49	19.67	17.77	0.0598
77	30	20	656000	3840	CP-OFDM QPSK	25@12	22.81	20.91	0.1233
77	30	20	656000	3840	CP-OFDM QPSK	1@1	22.81	20.91	0.1233
77	30	20	656000	3840	CP-OFDM QPSK	1@49	22.74	20.84	0.1213
77	30	20	664666	3969.99	DFT-s-OFDM PI/2 BPSK	25@12	24.25	22.35	0.1718
77	30	20	664666	3969.99	DFT-s-OFDM PI/2 BPSK	1@1	24.21	22.31	0.1702
77	30	20	664666	3969.99	DFT-s-OFDM PI/2 BPSK	1@49	24.2	22.3	0.1698
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	25@12	24.53	22.63	0.1832
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	1@1	24.48	22.58	0.1811
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	1@49	24.54	22.64	0.1837
77	30	20	664666	3969.99	DFT-s-OFDM 16 QAM	25@12	23.56	21.66	0.1466
77	30	20	664666	3969.99	DFT-s-OFDM 16 QAM	1@1	23.44	21.54	0.1426
77	30	20	664666	3969.99	DFT-s-OFDM 16 QAM	1@49	23.43	21.53	0.1422
77	30	20	664666	3969.99	DFT-s-OFDM 64 QAM	25@12	22.01	20.11	0.1026
77	30	20	664666	3969.99	DFT-s-OFDM 64 QAM	1@1	21.84	19.94	0.0986
77	30	20	664666	3969.99	DFT-s-OFDM 64 QAM	1@49	21.86	19.96	0.0991
77	30	20	664666	3969.99	DFT-s-OFDM 256 QAM	25@12	19.99	18.09	0.0644
77	30	20	664666	3969.99	DFT-s-OFDM 256 QAM	1@1	19.84	17.94	0.0622
77	30	20	664666	3969.99	DFT-s-OFDM 256 QAM	1@49	19.99	18.09	0.0644
77	30	20	664666	3969.99	CP-OFDM QPSK	25@12	23.01	21.11	0.1291
77	30	20	664666	3969.99	CP-OFDM QPSK	1@1	22.98	21.08	0.1282
77	30	20	664666	3969.99	CP-OFDM QPSK	1@49	23.06	21.16	0.1306
77	30	30	647668	3715.02	DFT-s-OFDM PI/2 BPSK	36@18	24.09	22.19	0.1656
77	30	30	647668	3715.02	DFT-s-OFDM PI/2 BPSK	1@1	24.1	22.2	0.1660
77	30	30	647668	3715.02	DFT-s-OFDM PI/2 BPSK	1@76	24.14	22.24	0.1675
77	30	30	647668	3715.02	DFT-s-OFDM QPSK	36@18	24.33	22.43	0.1750
77	30	30	647668	3715.02	DFT-s-OFDM QPSK	1@1	24.27	22.37	0.1726
77	30	30	647668	3715.02	DFT-s-OFDM QPSK	1@76	24.35	22.45	0.1758
77	30	30	647668	3715.02	DFT-s-OFDM 16 QAM	36@18	23.35	21.45	0.1396
77	30	30	647668	3715.02	DFT-s-OFDM 16 QAM	1@1	23.35	21.45	0.1396
77	30	30	647668	3715.02	DFT-s-OFDM 16 QAM	1@76	23.25	21.35	0.1365
77	30	30	647668	3715.02	DFT-s-OFDM 64 QAM	36@18	21.83	19.93	0.0984
77	30	30	647668	3715.02	DFT-s-OFDM 64 QAM	1@1	21.5	19.6	0.0912
77	30	30	647668	3715.02	DFT-s-OFDM 64 QAM	1@76	21.84	19.94	0.0986

77	30	30	647668	3715.02	DFT-s-OFDM 256 QAM	36@18	19.82	17.92	0.0619
77	30	30	647668	3715.02	DFT-s-OFDM 256 QAM	1@1	19.85	17.95	0.0624
77	30	30	647668	3715.02	DFT-s-OFDM 256 QAM	1@76	19.82	17.92	0.0619
77	30	30	647668	3715.02	CP-OFDM QPSK	39@19	22.82	20.92	0.1236
77	30	30	647668	3715.02	CP-OFDM QPSK	1@1	22.73	20.83	0.1211
77	30	30	647668	3715.02	CP-OFDM QPSK	1@76	22.81	20.91	0.1233
77	30	30	656000	3840	DFT-s-OFDM PI/2 BPSK	36@18	24.23	22.33	0.1710
77	30	30	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.16	22.26	0.1683
77	30	30	656000	3840	DFT-s-OFDM PI/2 BPSK	1@76	24.04	22.14	0.1637
77	30	30	656000	3840	DFT-s-OFDM QPSK	36@18	24.31	22.41	0.1742
77	30	30	656000	3840	DFT-s-OFDM QPSK	1@1	24.3	22.4	0.1738
77	30	30	656000	3840	DFT-s-OFDM QPSK	1@76	24.19	22.29	0.1694
77	30	30	656000	3840	DFT-s-OFDM 16 QAM	36@18	23.28	21.38	0.1374
77	30	30	656000	3840	DFT-s-OFDM 16 QAM	1@1	23.37	21.47	0.1403
77	30	30	656000	3840	DFT-s-OFDM 16 QAM	1@76	23.03	21.13	0.1297
77	30	30	656000	3840	DFT-s-OFDM 64 QAM	36@18	21.78	19.88	0.0973
77	30	30	656000	3840	DFT-s-OFDM 64 QAM	1@1	21.53	19.63	0.0918
77	30	30	656000	3840	DFT-s-OFDM 64 QAM	1@76	21.6	19.7	0.0933
77	30	30	656000	3840	DFT-s-OFDM 256 QAM	36@18	19.78	17.88	0.0614
77	30	30	656000	3840	DFT-s-OFDM 256 QAM	1@1	19.83	17.93	0.0621
77	30	30	656000	3840	DFT-s-OFDM 256 QAM	1@76	19.69	17.79	0.0601
77	30	30	656000	3840	CP-OFDM QPSK	39@19	22.76	20.86	0.1219
77	30	30	656000	3840	CP-OFDM QPSK	1@1	22.79	20.89	0.1227
77	30	30	656000	3840	CP-OFDM QPSK	1@76	22.62	20.72	0.1180
77	30	30	664332	3964.98	DFT-s-OFDM PI/2 BPSK	36@18	24.23	22.33	0.1710
77	30	30	664332	3964.98	DFT-s-OFDM PI/2 BPSK	1@1	24.2	22.3	0.1698
77	30	30	664332	3964.98	DFT-s-OFDM PI/2 BPSK	1@76	24.17	22.27	0.1687
77	30	30	664332	3964.98	DFT-s-OFDM QPSK	36@18	24.43	22.53	0.1791
77	30	30	664332	3964.98	DFT-s-OFDM QPSK	1@1	24.49	22.59	0.1816
77	30	30	664332	3964.98	DFT-s-OFDM QPSK	1@76	24.46	22.56	0.1803
77	30	30	664332	3964.98	DFT-s-OFDM 16 QAM	36@18	23.42	21.52	0.1419
77	30	30	664332	3964.98	DFT-s-OFDM 16 QAM	1@1	23.47	21.57	0.1435
77	30	30	664332	3964.98	DFT-s-OFDM 16 QAM	1@76	23.35	21.45	0.1396
77	30	30	664332	3964.98	DFT-s-OFDM 64 QAM	36@18	21.9	20	0.1000
77	30	30	664332	3964.98	DFT-s-OFDM 64 QAM	1@1	21.78	19.88	0.0973
77	30	30	664332	3964.98	DFT-s-OFDM 64 QAM	1@76	21.72	19.82	0.0959

77	30	30	664332	3964.98	DFT-s-OFDM 256 QAM	36@18	19.87	17.97	0.0627
77	30	30	664332	3964.98	DFT-s-OFDM 256 QAM	1@1	19.92	18.02	0.0634
77	30	30	664332	3964.98	DFT-s-OFDM 256 QAM	1@76	19.95	18.05	0.0638
77	30	30	664332	3964.98	CP-OFDM QPSK	39@19	22.95	21.05	0.1274
77	30	30	664332	3964.98	CP-OFDM QPSK	1@1	23.06	21.16	0.1306
77	30	30	664332	3964.98	CP-OFDM QPSK	1@76	22.93	21.03	0.1268
77	30	40	648000	3720	DFT-s-OFDM PI/2 BPSK	50@25	24.25	22.35	0.1718
77	30	40	648000	3720	DFT-s-OFDM PI/2 BPSK	1@1	24.32	22.42	0.1746
77	30	40	648000	3720	DFT-s-OFDM PI/2 BPSK	1@104	24.34	22.44	0.1754
77	30	40	648000	3720	DFT-s-OFDM QPSK	50@25	24.31	22.41	0.1742
77	30	40	648000	3720	DFT-s-OFDM QPSK	1@1	24.45	22.55	0.1799
77	30	40	648000	3720	DFT-s-OFDM QPSK	1@104	24.36	22.46	0.1762
77	30	40	648000	3720	DFT-s-OFDM 16 QAM	50@25	23.3	21.4	0.1380
77	30	40	648000	3720	DFT-s-OFDM 16 QAM	1@1	23.36	21.46	0.1400
77	30	40	648000	3720	DFT-s-OFDM 16 QAM	1@104	23.29	21.39	0.1377
77	30	40	648000	3720	DFT-s-OFDM 64 QAM	50@25	21.83	19.93	0.0984
77	30	40	648000	3720	DFT-s-OFDM 64 QAM	1@1	21.87	19.97	0.0993
77	30	40	648000	3720	DFT-s-OFDM 64 QAM	1@104	21.58	19.68	0.0929
77	30	40	648000	3720	DFT-s-OFDM 256 QAM	50@25	19.76	17.86	0.0611
77	30	40	648000	3720	DFT-s-OFDM 256 QAM	1@1	19.94	18.04	0.0637
77	30	40	648000	3720	DFT-s-OFDM 256 QAM	1@104	19.92	18.02	0.0634
77	30	40	648000	3720	CP-OFDM QPSK	53@26	22.81	20.91	0.1233
77	30	40	648000	3720	CP-OFDM QPSK	1@1	22.87	20.97	0.1250
77	30	40	648000	3720	CP-OFDM QPSK	1@104	22.88	20.98	0.1253
77	30	40	656000	3840	DFT-s-OFDM PI/2 BPSK	50@25	24.23	22.33	0.1710
77	30	40	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.3	22.4	0.1738
77	30	40	656000	3840	DFT-s-OFDM PI/2 BPSK	1@104	24.1	22.2	0.1660
77	30	40	656000	3840	DFT-s-OFDM QPSK	50@25	24.35	22.45	0.1758
77	30	40	656000	3840	DFT-s-OFDM QPSK	1@1	24.44	22.54	0.1795
77	30	40	656000	3840	DFT-s-OFDM QPSK	1@104	24.25	22.35	0.1718
77	30	40	656000	3840	DFT-s-OFDM 16 QAM	50@25	23.28	21.38	0.1374
77	30	40	656000	3840	DFT-s-OFDM 16 QAM	1@1	23.18	21.28	0.1343
77	30	40	656000	3840	DFT-s-OFDM 16 QAM	1@104	22.99	21.09	0.1285
77	30	40	656000	3840	DFT-s-OFDM 64 QAM	50@25	21.81	19.91	0.0979
77	30	40	656000	3840	DFT-s-OFDM 64 QAM	1@1	21.84	19.94	0.0986
77	30	40	656000	3840	DFT-s-OFDM 64 QAM	1@104	21.67	19.77	0.0948

77	30	40	656000	3840	DFT-s-OFDM 256 QAM	50@25	19.79	17.89	0.0615
77	30	40	656000	3840	DFT-s-OFDM 256 QAM	1@1	19.95	18.05	0.0638
77	30	40	656000	3840	DFT-s-OFDM 256 QAM	1@104	19.75	17.85	0.0610
77	30	40	656000	3840	CP-OFDM QPSK	53@26	22.79	20.89	0.1227
77	30	40	656000	3840	CP-OFDM QPSK	1@1	22.87	20.97	0.1250
77	30	40	656000	3840	CP-OFDM QPSK	1@104	22.68	20.78	0.1197
77	30	40	664000	3960	DFT-s-OFDM PI/2 BPSK	50@25	24.36	22.46	0.1762
77	30	40	664000	3960	DFT-s-OFDM PI/2 BPSK	1@1	24.4	22.5	0.1778
77	30	40	664000	3960	DFT-s-OFDM PI/2 BPSK	1@104	24.32	22.42	0.1746
77	30	40	664000	3960	DFT-s-OFDM QPSK	50@25	24.47	22.57	0.1807
77	30	40	664000	3960	DFT-s-OFDM QPSK	1@1	24.43	22.53	0.1791
77	30	40	664000	3960	DFT-s-OFDM QPSK	1@104	24.5	22.6	0.1820
77	30	40	664000	3960	DFT-s-OFDM 16 QAM	50@25	23.44	21.54	0.1426
77	30	40	664000	3960	DFT-s-OFDM 16 QAM	1@1	23.38	21.48	0.1406
77	30	40	664000	3960	DFT-s-OFDM 16 QAM	1@104	23.44	21.54	0.1426
77	30	40	664000	3960	DFT-s-OFDM 64 QAM	50@25	21.94	20.04	0.1009
77	30	40	664000	3960	DFT-s-OFDM 64 QAM	1@1	21.65	19.75	0.0944
77	30	40	664000	3960	DFT-s-OFDM 64 QAM	1@104	21.74	19.84	0.0964
77	30	40	664000	3960	DFT-s-OFDM 256 QAM	50@25	19.91	18.01	0.0632
77	30	40	664000	3960	DFT-s-OFDM 256 QAM	1@1	19.8	17.9	0.0617
77	30	40	664000	3960	DFT-s-OFDM 256 QAM	1@104	19.89	17.99	0.0630
77	30	40	664000	3960	CP-OFDM QPSK	53@26	22.95	21.05	0.1274
77	30	40	664000	3960	CP-OFDM QPSK	1@1	22.99	21.09	0.1285
77	30	40	664000	3960	CP-OFDM QPSK	1@104	23.02	21.12	0.1294
77	30	50	648334	3725.01	DFT-s-OFDM PI/2 BPSK	64@32	23.91	22.01	0.1589
77	30	50	648334	3725.01	DFT-s-OFDM PI/2 BPSK	1@1	23.82	21.92	0.1556
77	30	50	648334	3725.01	DFT-s-OFDM PI/2 BPSK	1@131	23.86	21.96	0.1570
77	30	50	648334	3725.01	DFT-s-OFDM QPSK	64@32	24.12	22.22	0.1667
77	30	50	648334	3725.01	DFT-s-OFDM QPSK	1@1	24.14	22.24	0.1675
77	30	50	648334	3725.01	DFT-s-OFDM QPSK	1@131	24.06	22.16	0.1644
77	30	50	648334	3725.01	DFT-s-OFDM 16 QAM	64@32	23.19	21.29	0.1346
77	30	50	648334	3725.01	DFT-s-OFDM 16 QAM	1@1	23.11	21.21	0.1321
77	30	50	648334	3725.01	DFT-s-OFDM 16 QAM	1@131	23.13	21.23	0.1327
77	30	50	648334	3725.01	DFT-s-OFDM 64 QAM	64@32	21.64	19.74	0.0942
77	30	50	648334	3725.01	DFT-s-OFDM 64 QAM	1@1	21.6	19.7	0.0933
77	30	50	648334	3725.01	DFT-s-OFDM 64 QAM	1@131	21.33	19.43	0.0877

77	30	50	648334	3725.01	DFT-s-OFDM 256 QAM	64@32	19.62	17.72	0.0592
77	30	50	648334	3725.01	DFT-s-OFDM 256 QAM	1@1	19.5	17.6	0.0575
77	30	50	648334	3725.01	DFT-s-OFDM 256 QAM	1@131	19.59	17.69	0.0587
77	30	50	648334	3725.01	CP-OFDM QPSK	67@33	22.61	20.71	0.1178
77	30	50	648334	3725.01	CP-OFDM QPSK	1@1	22.57	20.67	0.1167
77	30	50	648334	3725.01	CP-OFDM QPSK	1@131	22.56	20.66	0.1164
77	30	50	656000	3840	DFT-s-OFDM PI/2 BPSK	64@32	24.08	22.18	0.1652
77	30	50	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.05	22.15	0.1641
77	30	50	656000	3840	DFT-s-OFDM PI/2 BPSK	1@131	23.96	22.06	0.1607
77	30	50	656000	3840	DFT-s-OFDM QPSK	64@32	24.16	22.26	0.1683
77	30	50	656000	3840	DFT-s-OFDM QPSK	1@1	24.15	22.25	0.1679
77	30	50	656000	3840	DFT-s-OFDM QPSK	1@131	24.06	22.16	0.1644
77	30	50	656000	3840	DFT-s-OFDM 16 QAM	64@32	23.17	21.27	0.1340
77	30	50	656000	3840	DFT-s-OFDM 16 QAM	1@1	22.97	21.07	0.1279
77	30	50	656000	3840	DFT-s-OFDM 16 QAM	1@131	22.86	20.96	0.1247
77	30	50	656000	3840	DFT-s-OFDM 64 QAM	64@32	21.6	19.7	0.0933
77	30	50	656000	3840	DFT-s-OFDM 64 QAM	1@1	21.55	19.65	0.0923
77	30	50	656000	3840	DFT-s-OFDM 64 QAM	1@131	21.26	19.36	0.0863
77	30	50	656000	3840	DFT-s-OFDM 256 QAM	64@32	19.61	17.71	0.0590
77	30	50	656000	3840	DFT-s-OFDM 256 QAM	1@1	19.51	17.61	0.0577
77	30	50	656000	3840	DFT-s-OFDM 256 QAM	1@131	19.33	17.43	0.0553
77	30	50	656000	3840	CP-OFDM QPSK	67@33	22.61	20.71	0.1178
77	30	50	656000	3840	CP-OFDM QPSK	1@1	22.62	20.72	0.1180
77	30	50	656000	3840	CP-OFDM QPSK	1@131	22.49	20.59	0.1146
77	30	50	663666	3954.99	DFT-s-OFDM PI/2 BPSK	64@32	24.11	22.21	0.1663
77	30	50	663666	3954.99	DFT-s-OFDM PI/2 BPSK	1@1	24.14	22.24	0.1675
77	30	50	663666	3954.99	DFT-s-OFDM PI/2 BPSK	1@131	24.13	22.23	0.1671
77	30	50	663666	3954.99	DFT-s-OFDM QPSK	64@32	24.24	22.34	0.1714
77	30	50	663666	3954.99	DFT-s-OFDM QPSK	1@1	24.3	22.4	0.1738
77	30	50	663666	3954.99	DFT-s-OFDM QPSK	1@131	24.22	22.32	0.1706
77	30	50	663666	3954.99	DFT-s-OFDM 16 QAM	64@32	23.26	21.36	0.1368
77	30	50	663666	3954.99	DFT-s-OFDM 16 QAM	1@1	23.16	21.26	0.1337
77	30	50	663666	3954.99	DFT-s-OFDM 16 QAM	1@131	23.1	21.2	0.1318
77	30	50	663666	3954.99	DFT-s-OFDM 64 QAM	64@32	21.67	19.77	0.0948
77	30	50	663666	3954.99	DFT-s-OFDM 64 QAM	1@1	21.55	19.65	0.0923
77	30	50	663666	3954.99	DFT-s-OFDM 64 QAM	1@131	21.66	19.76	0.0946

77	30	50	663666	3954.99	DFT-s-OFDM 256 QAM	64@32	19.65	17.75	0.0596
77	30	50	663666	3954.99	DFT-s-OFDM 256 QAM	1@1	19.61	17.71	0.0590
77	30	50	663666	3954.99	DFT-s-OFDM 256 QAM	1@131	19.54	17.64	0.0581
77	30	50	663666	3954.99	CP-OFDM QPSK	67@33	22.68	20.78	0.1197
77	30	50	663666	3954.99	CP-OFDM QPSK	1@1	22.72	20.82	0.1208
77	30	50	663666	3954.99	CP-OFDM QPSK	1@131	22.67	20.77	0.1194
77	30	60	648668	3730.02	DFT-s-OFDM PI/2 BPSK	81@40	23.77	21.87	0.1538
77	30	60	648668	3730.02	DFT-s-OFDM PI/2 BPSK	1@1	23.71	21.81	0.1517
77	30	60	648668	3730.02	DFT-s-OFDM PI/2 BPSK	1@160	23.85	21.95	0.1567
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	81@40	24.04	22.14	0.1637
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@1	24.03	22.13	0.1633
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@160	24.02	22.12	0.1629
77	30	60	648668	3730.02	DFT-s-OFDM 16 QAM	81@40	23.09	21.19	0.1315
77	30	60	648668	3730.02	DFT-s-OFDM 16 QAM	1@1	23.03	21.13	0.1297
77	30	60	648668	3730.02	DFT-s-OFDM 16 QAM	1@160	22.92	21.02	0.1265
77	30	60	648668	3730.02	DFT-s-OFDM 64 QAM	81@40	21.52	19.62	0.0916
77	30	60	648668	3730.02	DFT-s-OFDM 64 QAM	1@1	21.3	19.4	0.0871
77	30	60	648668	3730.02	DFT-s-OFDM 64 QAM	1@160	21.37	19.47	0.0885
77	30	60	648668	3730.02	DFT-s-OFDM 256 QAM	81@40	19.58	17.68	0.0586
77	30	60	648668	3730.02	DFT-s-OFDM 256 QAM	1@1	19.34	17.44	0.0555
77	30	60	648668	3730.02	DFT-s-OFDM 256 QAM	1@160	19.59	17.69	0.0587
77	30	60	648668	3730.02	CP-OFDM QPSK	81@40	22.55	20.65	0.1161
77	30	60	648668	3730.02	CP-OFDM QPSK	1@1	22.6	20.7	0.1175
77	30	60	648668	3730.02	CP-OFDM QPSK	1@160	22.52	20.62	0.1153
77	30	60	656000	3840	DFT-s-OFDM PI/2 BPSK	81@40	24.05	22.15	0.1641
77	30	60	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.03	22.13	0.1633
77	30	60	656000	3840	DFT-s-OFDM PI/2 BPSK	1@160	23.91	22.01	0.1589
77	30	60	656000	3840	DFT-s-OFDM QPSK	81@40	24.12	22.22	0.1667
77	30	60	656000	3840	DFT-s-OFDM QPSK	1@1	24.1	22.2	0.1660
77	30	60	656000	3840	DFT-s-OFDM QPSK	1@160	23.94	22.04	0.1600
77	30	60	656000	3840	DFT-s-OFDM 16 QAM	81@40	23.07	21.17	0.1309
77	30	60	656000	3840	DFT-s-OFDM 16 QAM	1@1	23	21.1	0.1288
77	30	60	656000	3840	DFT-s-OFDM 16 QAM	1@160	22.72	20.82	0.1208
77	30	60	656000	3840	DFT-s-OFDM 64 QAM	81@40	21.56	19.66	0.0925
77	30	60	656000	3840	DFT-s-OFDM 64 QAM	1@1	21.52	19.62	0.0916
77	30	60	656000	3840	DFT-s-OFDM 64 QAM	1@160	21.32	19.42	0.0875

77	30	60	656000	3840	DFT-s-OFDM 256 QAM	81@40	19.62	17.72	0.0592
77	30	60	656000	3840	DFT-s-OFDM 256 QAM	1@1	19.65	17.75	0.0596
77	30	60	656000	3840	DFT-s-OFDM 256 QAM	1@160	19.43	17.53	0.0566
77	30	60	656000	3840	CP-OFDM QPSK	81@40	22.55	20.65	0.1161
77	30	60	656000	3840	CP-OFDM QPSK	1@1	22.56	20.66	0.1164
77	30	60	656000	3840	CP-OFDM QPSK	1@160	22.36	20.46	0.1112
77	30	60	663332	3949.98	DFT-s-OFDM PI/2 BPSK	81@40	23.97	22.07	0.1611
77	30	60	663332	3949.98	DFT-s-OFDM PI/2 BPSK	1@1	23.85	21.95	0.1567
77	30	60	663332	3949.98	DFT-s-OFDM PI/2 BPSK	1@160	23.93	22.03	0.1596
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	81@40	24.05	22.15	0.1641
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	1@1	24.12	22.22	0.1667
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	1@160	24.14	22.24	0.1675
77	30	60	663332	3949.98	DFT-s-OFDM 16 QAM	81@40	23.05	21.15	0.1303
77	30	60	663332	3949.98	DFT-s-OFDM 16 QAM	1@1	23.11	21.21	0.1321
77	30	60	663332	3949.98	DFT-s-OFDM 16 QAM	1@160	22.81	20.91	0.1233
77	30	60	663332	3949.98	DFT-s-OFDM 64 QAM	81@40	21.5	19.6	0.0912
77	30	60	663332	3949.98	DFT-s-OFDM 64 QAM	1@1	21.51	19.61	0.0914
77	30	60	663332	3949.98	DFT-s-OFDM 64 QAM	1@160	21.31	19.41	0.0873
77	30	60	663332	3949.98	DFT-s-OFDM 256 QAM	81@40	19.55	17.65	0.0582
77	30	60	663332	3949.98	DFT-s-OFDM 256 QAM	1@1	19.41	17.51	0.0564
77	30	60	663332	3949.98	DFT-s-OFDM 256 QAM	1@160	19.54	17.64	0.0581
77	30	60	663332	3949.98	CP-OFDM QPSK	81@40	22.52	20.62	0.1153
77	30	60	663332	3949.98	CP-OFDM QPSK	1@1	22.52	20.62	0.1153
77	30	60	663332	3949.98	CP-OFDM QPSK	1@160	22.55	20.65	0.1161
77	30	70	649000	3735	DFT-s-OFDM PI/2 BPSK	90@45	23.68	21.78	0.1507
77	30	70	649000	3735	DFT-s-OFDM PI/2 BPSK	1@1	23.64	21.74	0.1493
77	30	70	649000	3735	DFT-s-OFDM PI/2 BPSK	1@187	23.69	21.79	0.1510
77	30	70	649000	3735	DFT-s-OFDM QPSK	90@45	23.71	21.81	0.1517
77	30	70	649000	3735	DFT-s-OFDM QPSK	1@1	23.64	21.74	0.1493
77	30	70	649000	3735	DFT-s-OFDM QPSK	1@187	23.66	21.76	0.1500
77	30	70	649000	3735	DFT-s-OFDM 16 QAM	90@45	22.7	20.8	0.1202
77	30	70	649000	3735	DFT-s-OFDM 16 QAM	1@1	22.56	20.66	0.1164
77	30	70	649000	3735	DFT-s-OFDM 16 QAM	1@187	22.57	20.67	0.1167
77	30	70	649000	3735	DFT-s-OFDM 64 QAM	90@45	21.23	19.33	0.0857
77	30	70	649000	3735	DFT-s-OFDM 64 QAM	1@1	21.03	19.13	0.0818
77	30	70	649000	3735	DFT-s-OFDM 64 QAM	1@187	21.21	19.31	0.0853

77	30	70	649000	3735	DFT-s-OFDM 256 QAM	90@45	19.18	17.28	0.0535
77	30	70	649000	3735	DFT-s-OFDM 256 QAM	1@1	18.96	17.06	0.0508
77	30	70	649000	3735	DFT-s-OFDM 256 QAM	1@187	19.01	17.11	0.0514
77	30	70	649000	3735	CP-OFDM QPSK	95@47	22.21	20.31	0.1074
77	30	70	649000	3735	CP-OFDM QPSK	1@1	22.18	20.28	0.1067
77	30	70	649000	3735	CP-OFDM QPSK	1@187	22.24	20.34	0.1081
77	30	70	656000	3840	DFT-s-OFDM PI/2 BPSK	90@45	23.82	21.92	0.1556
77	30	70	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	23.81	21.91	0.1552
77	30	70	656000	3840	DFT-s-OFDM PI/2 BPSK	1@187	23.69	21.79	0.1510
77	30	70	656000	3840	DFT-s-OFDM QPSK	90@45	23.84	21.94	0.1563
77	30	70	656000	3840	DFT-s-OFDM QPSK	1@1	23.83	21.93	0.1560
77	30	70	656000	3840	DFT-s-OFDM QPSK	1@187	23.5	21.6	0.1445
77	30	70	656000	3840	DFT-s-OFDM 16 QAM	90@45	22.83	20.93	0.1239
77	30	70	656000	3840	DFT-s-OFDM 16 QAM	1@1	22.83	20.93	0.1239
77	30	70	656000	3840	DFT-s-OFDM 16 QAM	1@187	22.58	20.68	0.1169
77	30	70	656000	3840	DFT-s-OFDM 64 QAM	90@45	21.38	19.48	0.0887
77	30	70	656000	3840	DFT-s-OFDM 64 QAM	1@1	21.1	19.2	0.0832
77	30	70	656000	3840	DFT-s-OFDM 64 QAM	1@187	20.85	18.95	0.0785
77	30	70	656000	3840	DFT-s-OFDM 256 QAM	90@45	19.34	17.44	0.0555
77	30	70	656000	3840	DFT-s-OFDM 256 QAM	1@1	19.1	17.2	0.0525
77	30	70	656000	3840	DFT-s-OFDM 256 QAM	1@187	18.88	16.98	0.0499
77	30	70	656000	3840	CP-OFDM QPSK	95@47	22.29	20.39	0.1094
77	30	70	656000	3840	CP-OFDM QPSK	1@1	22.31	20.41	0.1099
77	30	70	656000	3840	CP-OFDM QPSK	1@187	22.06	20.16	0.1038
77	30	70	663000	3945	DFT-s-OFDM PI/2 BPSK	90@45	23.85	21.95	0.1567
77	30	70	663000	3945	DFT-s-OFDM PI/2 BPSK	1@1	23.86	21.96	0.1570
77	30	70	663000	3945	DFT-s-OFDM PI/2 BPSK	1@187	23.75	21.85	0.1531
77	30	70	663000	3945	DFT-s-OFDM QPSK	90@45	23.87	21.97	0.1574
77	30	70	663000	3945	DFT-s-OFDM QPSK	1@1	23.82	21.92	0.1556
77	30	70	663000	3945	DFT-s-OFDM QPSK	1@187	23.71	21.81	0.1517
77	30	70	663000	3945	DFT-s-OFDM 16 QAM	90@45	22.85	20.95	0.1245
77	30	70	663000	3945	DFT-s-OFDM 16 QAM	1@1	22.66	20.76	0.1191
77	30	70	663000	3945	DFT-s-OFDM 16 QAM	1@187	22.59	20.69	0.1172
77	30	70	663000	3945	DFT-s-OFDM 64 QAM	90@45	21.4	19.5	0.0891
77	30	70	663000	3945	DFT-s-OFDM 64 QAM	1@1	21.23	19.33	0.0857
77	30	70	663000	3945	DFT-s-OFDM 64 QAM	1@187	21.21	19.31	0.0853

77	30	70	663000	3945	DFT-s-OFDM 256 QAM	90@45	19.39	17.49	0.0561
77	30	70	663000	3945	DFT-s-OFDM 256 QAM	1@1	19.34	17.44	0.0555
77	30	70	663000	3945	DFT-s-OFDM 256 QAM	1@187	19.17	17.27	0.0533
77	30	70	663000	3945	CP-OFDM QPSK	95@47	22.36	20.46	0.1112
77	30	70	663000	3945	CP-OFDM QPSK	1@1	22.4	20.5	0.1122
77	30	70	662666	3939.99	CP-OFDM QPSK	1@215	22.42	20.52	0.1127
77	30	80	649334	3740.01	DFT-s-OFDM PI/2 BPSK	108@54	23.89	21.99	0.1581
77	30	80	649334	3740.01	DFT-s-OFDM PI/2 BPSK	1@1	23.56	21.66	0.1466
77	30	80	649334	3740.01	DFT-s-OFDM PI/2 BPSK	1@215	23.8	21.9	0.1549
77	30	80	649334	3740.01	DFT-s-OFDM QPSK	108@54	24.04	22.14	0.1637
77	30	80	649334	3740.01	DFT-s-OFDM QPSK	1@1	23.96	22.06	0.1607
77	30	80	649334	3740.01	DFT-s-OFDM QPSK	1@215	24.04	22.14	0.1637
77	30	80	649334	3740.01	DFT-s-OFDM 16 QAM	108@54	23.08	21.18	0.1312
77	30	80	649334	3740.01	DFT-s-OFDM 16 QAM	1@1	22.94	21.04	0.1271
77	30	80	649334	3740.01	DFT-s-OFDM 16 QAM	1@215	22.8	20.9	0.1230
77	30	80	649334	3740.01	DFT-s-OFDM 64 QAM	108@54	21.57	19.67	0.0927
77	30	80	649334	3740.01	DFT-s-OFDM 64 QAM	1@1	21.19	19.29	0.0849
77	30	80	649334	3740.01	DFT-s-OFDM 64 QAM	1@215	21.27	19.37	0.0865
77	30	80	649334	3740.01	DFT-s-OFDM 256 QAM	108@54	19.56	17.66	0.0583
77	30	80	649334	3740.01	DFT-s-OFDM 256 QAM	1@1	19.49	17.59	0.0574
77	30	80	649334	3740.01	DFT-s-OFDM 256 QAM	1@215	19.33	17.43	0.0553
77	30	80	649334	3740.01	CP-OFDM QPSK	109@54	22.52	20.62	0.1153
77	30	80	649334	3740.01	CP-OFDM QPSK	1@1	22.47	20.57	0.1140
77	30	80	649334	3740.01	CP-OFDM QPSK	1@215	22.5	20.6	0.1148
77	30	80	656000	3840	DFT-s-OFDM PI/2 BPSK	108@54	23.88	21.98	0.1578
77	30	80	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	23.75	21.85	0.1531
77	30	80	656000	3840	DFT-s-OFDM PI/2 BPSK	1@215	23.7	21.8	0.1514
77	30	80	656000	3840	DFT-s-OFDM QPSK	108@54	23.98	22.08	0.1614
77	30	80	656000	3840	DFT-s-OFDM QPSK	1@1	23.98	22.08	0.1614
77	30	80	656000	3840	DFT-s-OFDM QPSK	1@215	23.77	21.87	0.1538
77	30	80	656000	3840	DFT-s-OFDM 16 QAM	108@54	22.95	21.05	0.1274
77	30	80	656000	3840	DFT-s-OFDM 16 QAM	1@1	22.74	20.84	0.1213
77	30	80	656000	3840	DFT-s-OFDM 16 QAM	1@215	22.56	20.66	0.1164
77	30	80	656000	3840	DFT-s-OFDM 64 QAM	108@54	21.43	19.53	0.0897
77	30	80	656000	3840	DFT-s-OFDM 64 QAM	1@1	21.37	19.47	0.0885
77	30	80	656000	3840	DFT-s-OFDM 64 QAM	1@215	21.17	19.27	0.0845

77	30	80	656000	3840	DFT-s-OFDM 256 QAM	108@54	19.41	17.51	0.0564
77	30	80	656000	3840	DFT-s-OFDM 256 QAM	1@1	19.25	17.35	0.0543
77	30	80	656000	3840	DFT-s-OFDM 256 QAM	1@215	19.14	17.24	0.0530
77	30	80	656000	3840	CP-OFDM QPSK	109@54	22.42	20.52	0.1127
77	30	80	656000	3840	CP-OFDM QPSK	1@1	22.44	20.54	0.1132
77	30	80	656000	3840	CP-OFDM QPSK	1@215	22.22	20.32	0.1076
77	30	80	662666	3939.99	DFT-s-OFDM PI/2 BPSK	108@54	23.89	21.99	0.1581
77	30	80	662666	3939.99	DFT-s-OFDM PI/2 BPSK	1@1	23.72	21.82	0.1521
77	30	80	662666	3939.99	DFT-s-OFDM PI/2 BPSK	1@215	23.74	21.84	0.1528
77	30	80	662666	3939.99	DFT-s-OFDM QPSK	108@54	24.15	22.25	0.1679
77	30	80	662666	3939.99	DFT-s-OFDM QPSK	1@1	24.07	22.17	0.1648
77	30	80	662666	3939.99	DFT-s-OFDM QPSK	1@215	23.91	22.01	0.1589
77	30	80	662666	3939.99	DFT-s-OFDM 16 QAM	108@54	23.16	21.26	0.1337
77	30	80	662666	3939.99	DFT-s-OFDM 16 QAM	1@1	22.98	21.08	0.1282
77	30	80	662666	3939.99	DFT-s-OFDM 16 QAM	1@215	22.8	20.9	0.1230
77	30	80	662666	3939.99	DFT-s-OFDM 64 QAM	108@54	21.66	19.76	0.0946
77	30	80	662666	3939.99	DFT-s-OFDM 64 QAM	1@1	21.4	19.5	0.0891
77	30	80	662666	3939.99	DFT-s-OFDM 64 QAM	1@215	21.25	19.35	0.0861
77	30	80	662666	3939.99	DFT-s-OFDM 256 QAM	108@54	19.65	17.75	0.0596
77	30	80	662666	3939.99	DFT-s-OFDM 256 QAM	1@1	19.51	17.61	0.0577
77	30	80	662666	3939.99	DFT-s-OFDM 256 QAM	1@215	19.2	17.3	0.0537
77	30	80	662666	3939.99	CP-OFDM QPSK	109@54	22.61	20.71	0.1178
77	30	80	662666	3939.99	CP-OFDM QPSK	1@1	22.66	20.76	0.1191
77	30	80	662666	3939.99	CP-OFDM QPSK	1@215	22.42	20.52	0.1127
77	30	90	649668	3745.02	DFT-s-OFDM PI/2 BPSK	120@60	23.86	21.96	0.1570
77	30	90	649668	3745.02	DFT-s-OFDM PI/2 BPSK	1@1	23.58	21.68	0.1472
77	30	90	649668	3745.02	DFT-s-OFDM PI/2 BPSK	1@243	23.84	21.94	0.1563
77	30	90	649668	3745.02	DFT-s-OFDM QPSK	120@60	24.03	22.13	0.1633
77	30	90	649668	3745.02	DFT-s-OFDM QPSK	1@1	23.89	21.99	0.1581
77	30	90	649668	3745.02	DFT-s-OFDM QPSK	1@243	24	22.1	0.1622
77	30	90	649668	3745.02	DFT-s-OFDM 16 QAM	120@60	23.03	21.13	0.1297
77	30	90	649668	3745.02	DFT-s-OFDM 16 QAM	1@1	22.88	20.98	0.1253
77	30	90	649668	3745.02	DFT-s-OFDM 16 QAM	1@243	22.96	21.06	0.1276
77	30	90	649668	3745.02	DFT-s-OFDM 64 QAM	120@60	21.49	19.59	0.0910
77	30	90	649668	3745.02	DFT-s-OFDM 64 QAM	1@1	21.48	19.58	0.0908
77	30	90	649668	3745.02	DFT-s-OFDM 64 QAM	1@243	21.6	19.7	0.0933

77	30	90	649668	3745.02	DFT-s-OFDM 256 QAM	120@60	19.53	17.63	0.0579
77	30	90	649668	3745.02	DFT-s-OFDM 256 QAM	1@1	19.46	17.56	0.0570
77	30	90	649668	3745.02	DFT-s-OFDM 256 QAM	1@243	19.38	17.48	0.0560
77	30	90	649668	3745.02	CP-OFDM QPSK	123@61	22.45	20.55	0.1135
77	30	90	649668	3745.02	CP-OFDM QPSK	1@1	22.43	20.53	0.1130
77	30	90	649668	3745.02	CP-OFDM QPSK	1@243	22.54	20.64	0.1159
77	30	90	656000	3840	DFT-s-OFDM PI/2 BPSK	120@60	23.89	21.99	0.1581
77	30	90	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	23.72	21.82	0.1521
77	30	90	656000	3840	DFT-s-OFDM PI/2 BPSK	1@243	23.7	21.8	0.1514
77	30	90	656000	3840	DFT-s-OFDM QPSK	120@60	23.97	22.07	0.1611
77	30	90	656000	3840	DFT-s-OFDM QPSK	1@1	23.88	21.98	0.1578
77	30	90	656000	3840	DFT-s-OFDM QPSK	1@243	23.71	21.81	0.1517
77	30	90	656000	3840	DFT-s-OFDM 16 QAM	120@60	22.95	21.05	0.1274
77	30	90	656000	3840	DFT-s-OFDM 16 QAM	1@1	22.8	20.9	0.1230
77	30	90	656000	3840	DFT-s-OFDM 16 QAM	1@243	22.71	20.81	0.1205
77	30	90	656000	3840	DFT-s-OFDM 64 QAM	120@60	21.42	19.52	0.0895
77	30	90	656000	3840	DFT-s-OFDM 64 QAM	1@1	21.34	19.44	0.0879
77	30	90	656000	3840	DFT-s-OFDM 64 QAM	1@243	21.28	19.38	0.0867
77	30	90	656000	3840	DFT-s-OFDM 256 QAM	120@60	19.45	17.55	0.0569
77	30	90	656000	3840	DFT-s-OFDM 256 QAM	1@1	19.39	17.49	0.0561
77	30	90	656000	3840	DFT-s-OFDM 256 QAM	1@243	19.24	17.34	0.0542
77	30	90	656000	3840	CP-OFDM QPSK	123@61	22.42	20.52	0.1127
77	30	90	656000	3840	CP-OFDM QPSK	1@1	22.33	20.43	0.1104
77	30	90	656000	3840	CP-OFDM QPSK	1@243	22.21	20.31	0.1074
77	30	90	662332	3934.98	DFT-s-OFDM PI/2 BPSK	120@60	23.86	21.96	0.1570
77	30	90	662332	3934.98	DFT-s-OFDM PI/2 BPSK	1@1	23.8	21.9	0.1549
77	30	90	662332	3934.98	DFT-s-OFDM PI/2 BPSK	1@243	23.73	21.83	0.1524
77	30	90	662332	3934.98	DFT-s-OFDM QPSK	120@60	23.99	22.09	0.1618
77	30	90	662332	3934.98	DFT-s-OFDM QPSK	1@1	24.01	22.11	0.1626
77	30	90	662332	3934.98	DFT-s-OFDM QPSK	1@243	23.84	21.94	0.1563
77	30	90	662332	3934.98	DFT-s-OFDM 16 QAM	120@60	22.98	21.08	0.1282
77	30	90	662332	3934.98	DFT-s-OFDM 16 QAM	1@1	22.96	21.06	0.1276
77	30	90	662332	3934.98	DFT-s-OFDM 16 QAM	1@243	22.76	20.86	0.1219
77	30	90	662332	3934.98	DFT-s-OFDM 64 QAM	120@60	21.46	19.56	0.0904
77	30	90	662332	3934.98	DFT-s-OFDM 64 QAM	1@1	21.47	19.57	0.0906
77	30	90	662332	3934.98	DFT-s-OFDM 64 QAM	1@243	21.37	19.47	0.0885

77	30	90	662332	3934.98	DFT-s-OFDM 256 QAM	120@60	19.51	17.61	0.0577
77	30	90	662332	3934.98	DFT-s-OFDM 256 QAM	1@1	19.28	17.38	0.0547
77	30	90	662332	3934.98	DFT-s-OFDM 256 QAM	1@243	19.12	17.22	0.0527
77	30	90	662332	3934.98	CP-OFDM QPSK	123@61	22.42	20.52	0.1127
77	30	90	662332	3934.98	CP-OFDM QPSK	1@1	22.55	20.65	0.1161
77	30	90	662332	3934.98	CP-OFDM QPSK	1@243	22.25	20.35	0.1084
77	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	135@67	24.13	22.23	0.1671
77	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	24.01	22.11	0.1626
77	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	1@271	24.19	22.29	0.1694
77	30	100	650000	3750	DFT-s-OFDM QPSK	135@67	24.55	22.65	0.1841
77	30	100	650000	3750	DFT-s-OFDM QPSK	1@1	24.24	22.34	0.1714
77	30	100	650000	3750	DFT-s-OFDM QPSK	1@271	24.41	22.51	0.1782
77	30	100	650000	3750	DFT-s-OFDM 16 QAM	135@67	23.54	21.64	0.1459
77	30	100	650000	3750	DFT-s-OFDM 16 QAM	1@1	23.22	21.32	0.1355
77	30	100	650000	3750	DFT-s-OFDM 16 QAM	1@271	23.37	21.47	0.1403
77	30	100	650000	3750	DFT-s-OFDM 64 QAM	135@67	22.07	20.17	0.1040
77	30	100	650000	3750	DFT-s-OFDM 64 QAM	1@1	21.84	19.94	0.0986
77	30	100	650000	3750	DFT-s-OFDM 64 QAM	1@271	22.02	20.12	0.1028
77	30	100	650000	3750	DFT-s-OFDM 256 QAM	135@67	20.04	18.14	0.0652
77	30	100	650000	3750	DFT-s-OFDM 256 QAM	1@1	19.68	17.78	0.0600
77	30	100	650000	3750	DFT-s-OFDM 256 QAM	1@271	19.88	17.98	0.0628
77	30	100	650000	3750	CP-OFDM QPSK	137@68	23.03	21.13	0.1297
77	30	100	650000	3750	CP-OFDM QPSK	1@1	22.88	20.98	0.1253
77	30	100	650000	3750	CP-OFDM QPSK	1@271	22.97	21.07	0.1279
77	30	100	656000	3840	DFT-s-OFDM PI/2 BPSK	135@67	24.41	22.51	0.1782
77	30	100	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.01	22.11	0.1626
77	30	100	656000	3840	DFT-s-OFDM PI/2 BPSK	1@271	24.02	22.12	0.1629
77	30	100	656000	3840	DFT-s-OFDM QPSK	135@67	24.43	22.53	0.1791
77	30	100	656000	3840	DFT-s-OFDM QPSK	1@1	24.35	22.45	0.1758
77	30	100	656000	3840	DFT-s-OFDM QPSK	1@271	24.33	22.43	0.1750
77	30	100	656000	3840	DFT-s-OFDM 16 QAM	135@67	23.44	21.54	0.1426
77	30	100	656000	3840	DFT-s-OFDM 16 QAM	1@1	23.32	21.42	0.1387
77	30	100	656000	3840	DFT-s-OFDM 16 QAM	1@271	23.26	21.36	0.1368
77	30	100	656000	3840	DFT-s-OFDM 64 QAM	135@67	21.95	20.05	0.1012
77	30	100	656000	3840	DFT-s-OFDM 64 QAM	1@1	21.68	19.78	0.0951
77	30	100	656000	3840	DFT-s-OFDM 64 QAM	1@271	21.62	19.72	0.0938

77	30	100	656000	3840	DFT-s-OFDM 256 QAM	135@67	19.93	18.03	0.0635
77	30	100	656000	3840	DFT-s-OFDM 256 QAM	1@1	19.82	17.92	0.0619
77	30	100	656000	3840	DFT-s-OFDM 256 QAM	1@271	19.75	17.85	0.0610
77	30	100	656000	3840	CP-OFDM QPSK	137@68	22.92	21.02	0.1265
77	30	100	656000	3840	CP-OFDM QPSK	1@1	22.88	20.98	0.1253
77	30	100	656000	3840	CP-OFDM QPSK	1@271	22.74	20.84	0.1213
77	30	100	662000	3930	DFT-s-OFDM PI/2 BPSK	135@67	24.41	22.51	0.1782
77	30	100	662000	3930	DFT-s-OFDM PI/2 BPSK	1@1	24.42	22.52	0.1786
77	30	100	662000	3930	DFT-s-OFDM PI/2 BPSK	1@271	24.35	22.45	0.1758
77	30	100	662000	3930	DFT-s-OFDM QPSK	135@67	24.5	22.6	0.1820
77	30	100	662000	3930	DFT-s-OFDM QPSK	1@1	24.44	22.54	0.1795
77	30	100	662000	3930	DFT-s-OFDM QPSK	1@271	24.37	22.47	0.1766
77	30	100	662000	3930	DFT-s-OFDM 16 QAM	135@67	23.44	21.54	0.1426
77	30	100	662000	3930	DFT-s-OFDM 16 QAM	1@1	23.34	21.44	0.1393
77	30	100	662000	3930	DFT-s-OFDM 16 QAM	1@271	23.3	21.4	0.1380
77	30	100	662000	3930	DFT-s-OFDM 64 QAM	135@67	21.96	20.06	0.1014
77	30	100	662000	3930	DFT-s-OFDM 64 QAM	1@1	21.95	20.05	0.1012
77	30	100	662000	3930	DFT-s-OFDM 64 QAM	1@271	21.92	20.02	0.1005
77	30	100	662000	3930	DFT-s-OFDM 256 QAM	135@67	19.99	18.09	0.0644
77	30	100	662000	3930	DFT-s-OFDM 256 QAM	1@1	19.89	17.99	0.0630
77	30	100	662000	3930	DFT-s-OFDM 256 QAM	1@271	19.85	17.95	0.0624
77	30	100	662000	3930	CP-OFDM QPSK	137@68	22.94	21.04	0.1271
77	30	100	662000	3930	CP-OFDM QPSK	1@1	22.9	21	0.1259
77	30	100	662000	3930	CP-OFDM QPSK	1@271	22.77	20.87	0.1222

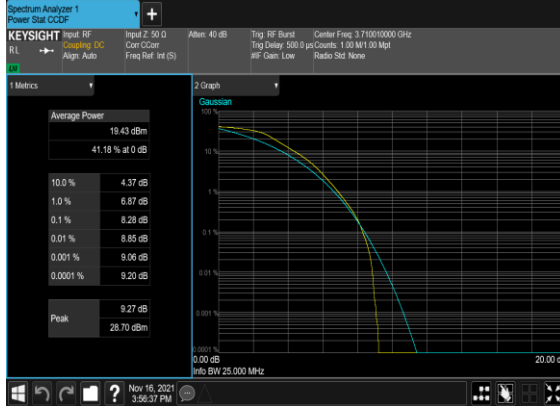
Frequency Stability

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	-0.0037	PASS	NV
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00452	PASS	LV
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.0046	PASS	HV
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00795	PASS	-30℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00204	PASS	-20℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00617	PASS	-10℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00822	PASS	0℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00535	PASS	10℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00336	PASS	20℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00314	PASS	30℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00303	PASS	40℃
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	-0.00885	PASS	50℃

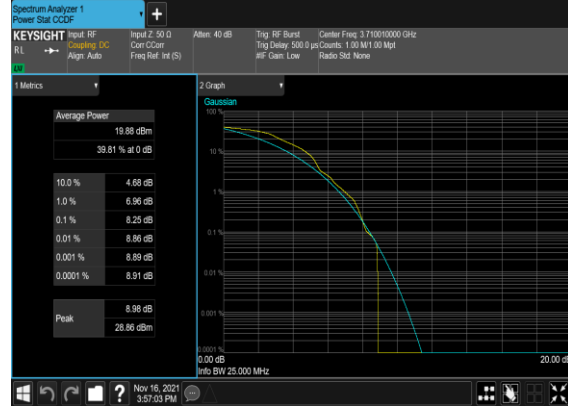
Peak to Average Ratio

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 QPSK	50@0	8.28	13	PASS
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@0	8.25	13	PASS
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	8.24	13	PASS
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	1@0	6.76	13	PASS
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	50@0	8.26	13	PASS
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	1@0	7.21	13	PASS

N77(20M)_DFT-s-
OFDM_QPSK_Outer_Full_Low_CH



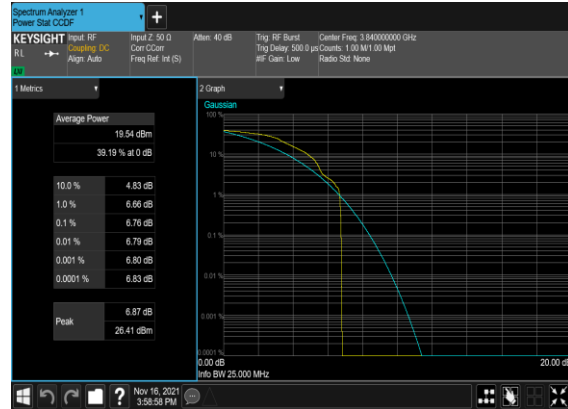
N77(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



N77(20M)_DFT-s-
OFDM_QPSK_Outer_Full_Mid_CH



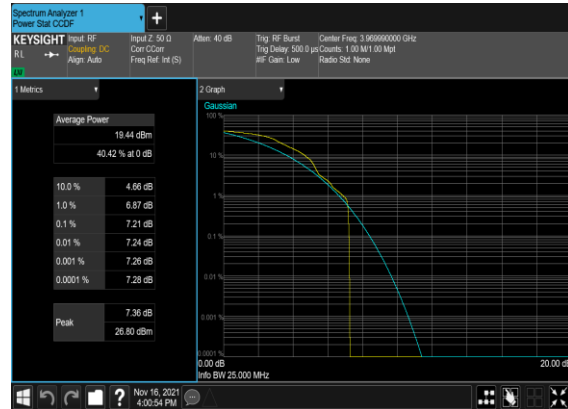
N77(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH



N77(20M)_DFT-s-
OFDM_QPSK_Outer_Full_High_CH



N77(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH

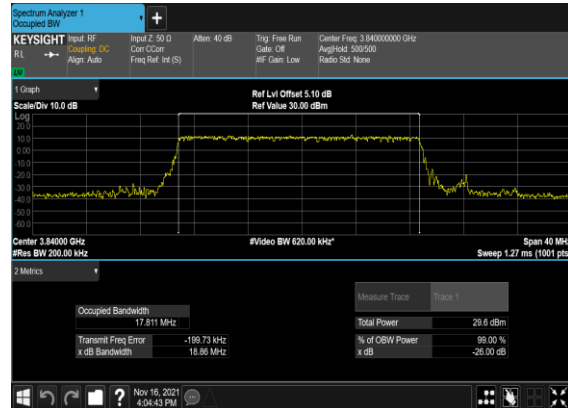


Occupied Bandwidth

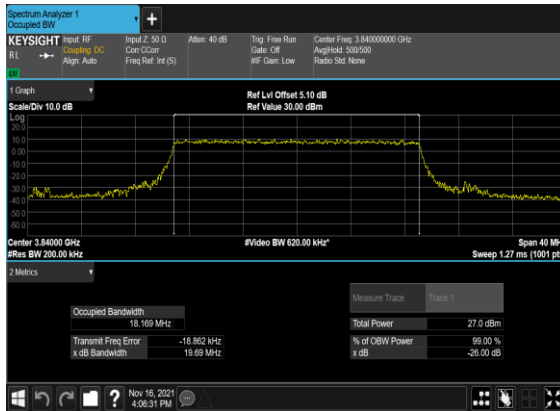
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB OBW (MHz)
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	50@0	17.811	18.86
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	18.169	19.69
77	30	20	656000	3840.0	CP-OFDM 16 QAM	51@0	18.228	19.58
77	30	20	656000	3840.0	CP-OFDM 64 QAM	51@0	18.211	19.46
77	30	20	656000	3840.0	CP-OFDM 256 QAM	51@0	18.193	19.58
77	30	30	656000	3840.0	DFT-s-OFDM QPSK	75@0	26.747	28.46
77	30	30	656000	3840.0	CP-OFDM QPSK	78@0	27.797	29.36
77	30	30	656000	3840.0	CP-OFDM 16 QAM	78@0	27.851	29.25
77	30	30	656000	3840.0	CP-OFDM 64 QAM	78@0	27.826	29.37
77	30	30	656000	3840.0	CP-OFDM 256 QAM	78@0	27.777	29.42
77	30	40	656000	3840.0	DFT-s-OFDM QPSK	100@0	35.734	37.7
77	30	40	656000	3840.0	CP-OFDM QPSK	106@0	37.828	39.77
77	30	40	656000	3840.0	CP-OFDM 16 QAM	106@0	37.855	39.64
77	30	40	656000	3840.0	CP-OFDM 64 QAM	106@0	37.751	39.75
77	30	40	656000	3840.0	CP-OFDM 256 QAM	106@0	37.847	39.47
77	30	50	656000	3840.0	DFT-s-OFDM QPSK	128@0	45.728	47.5
77	30	50	656000	3840.0	CP-OFDM QPSK	133@0	47.484	49.71
77	30	50	656000	3840.0	CP-OFDM 16 QAM	133@0	47.517	49.65
77	30	50	656000	3840.0	CP-OFDM 64 QAM	133@0	47.406	49.24
77	30	50	656000	3840.0	CP-OFDM 256 QAM	133@0	47.424	49.46
77	30	60	656000	3840.0	DFT-s-OFDM QPSK	162@0	57.862	60.0
77	30	60	656000	3840.0	CP-OFDM QPSK	162@0	57.724	60.08
77	30	60	656000	3840.0	CP-OFDM 16 QAM	162@0	57.715	59.77
77	30	60	656000	3840.0	CP-OFDM 64 QAM	162@0	57.868	60.27
77	30	60	656000	3840.0	CP-OFDM 256 QAM	162@0	57.786	60.16

77	30	70	656000	3840.0	DFT-s-OFDM QPSK	180@0	64.278	66.63
77	30	70	656000	3840.0	CP-OFDM QPSK	189@0	67.509	69.69
77	30	70	656000	3840.0	CP-OFDM 16 QAM	189@0	67.465	69.95
77	30	70	656000	3840.0	CP-OFDM 64 QAM	189@0	67.539	69.86
77	30	70	656000	3840.0	CP-OFDM 256 QAM	189@0	67.419	69.82
77	30	80	656000	3840.0	DFT-s-OFDM QPSK	216@0	77.179	79.77
77	30	80	656000	3840.0	CP-OFDM QPSK	217@0	77.497	80.02
77	30	80	656000	3840.0	CP-OFDM 16 QAM	217@0	77.532	80.0
77	30	80	656000	3840.0	CP-OFDM 64 QAM	217@0	77.493	80.1
77	30	80	656000	3840.0	CP-OFDM 256 QAM	217@0	77.439	80.33
77	30	90	656000	3840.0	DFT-s-OFDM QPSK	240@0	85.848	88.58
77	30	90	656000	3840.0	CP-OFDM QPSK	245@0	87.357	90.39
77	30	90	656000	3840.0	CP-OFDM 16 QAM	245@0	87.514	90.34
77	30	90	656000	3840.0	CP-OFDM 64 QAM	245@0	87.386	90.37
77	30	90	656000	3840.0	CP-OFDM 256 QAM	245@0	87.507	90.42
77	30	100	656000	3840.0	DFT-s-OFDM QPSK	270@0	96.416	99.61
77	30	100	656000	3840.0	CP-OFDM QPSK	273@0	97.498	100.6
77	30	100	656000	3840.0	CP-OFDM 16 QAM	273@0	97.389	100.5
77	30	100	656000	3840.0	CP-OFDM 64 QAM	273@0	97.371	100.8
77	30	100	656000	3840.0	CP-OFDM 256 QAM	273@0	97.489	100.6

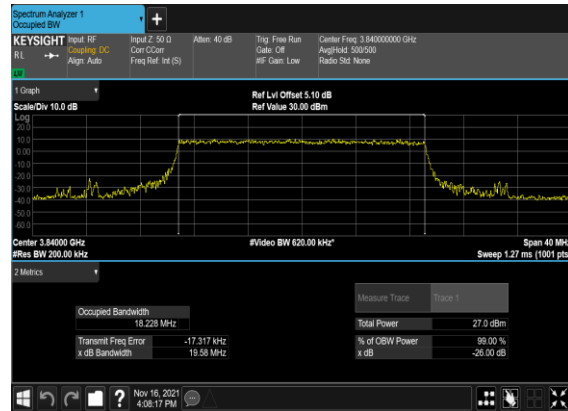
N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



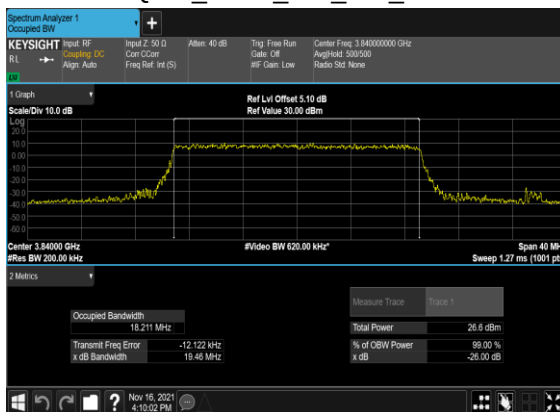
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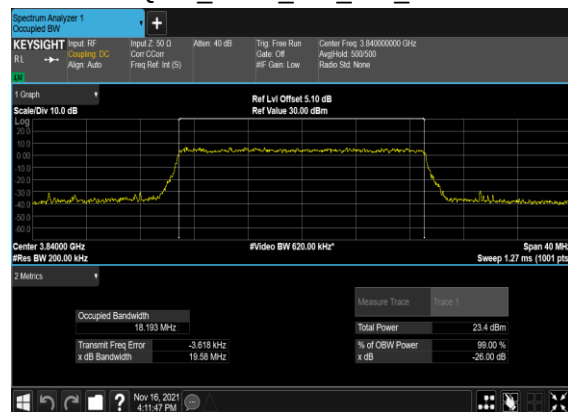
N77(20M)_CP-OFDM_16QAM_Outer_Full_Mid_CH



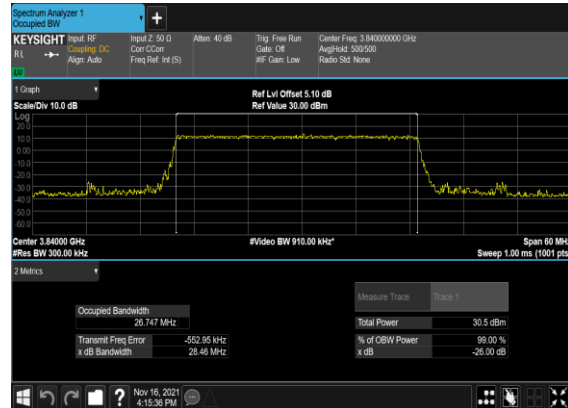
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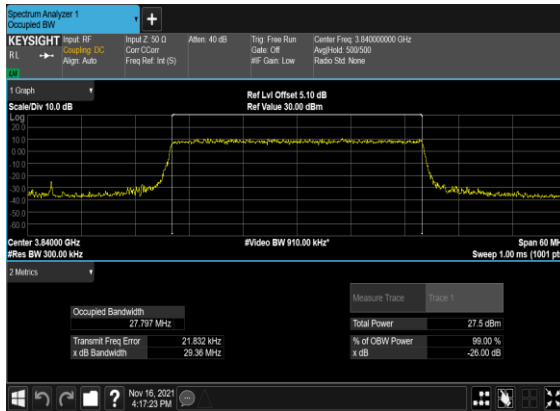
N77(20M)_CP-OFDM_256QAM_Outer_Full_Mid_CH



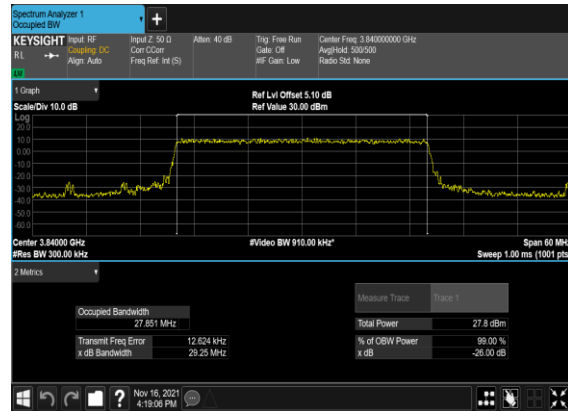
N77(30M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



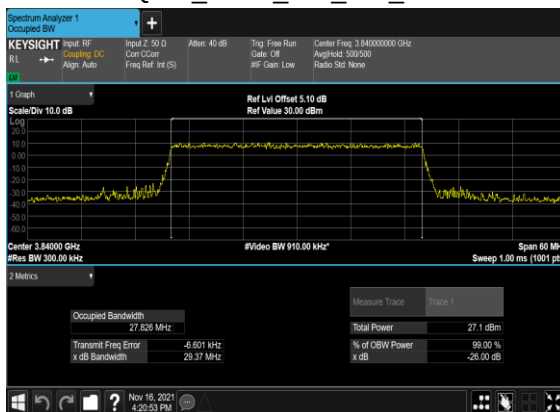
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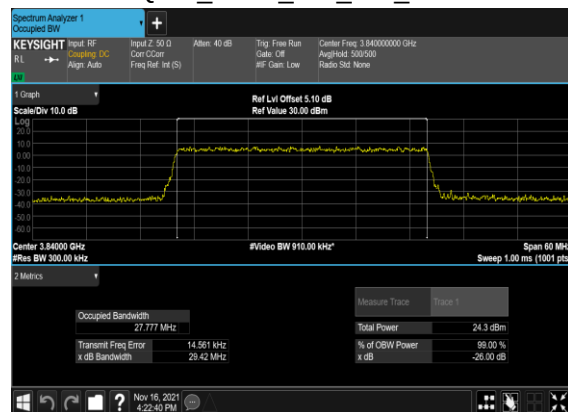
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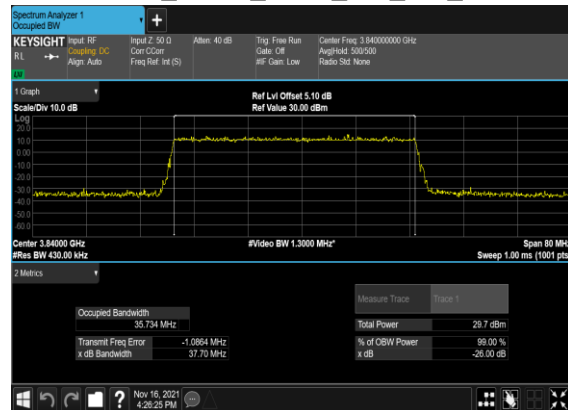
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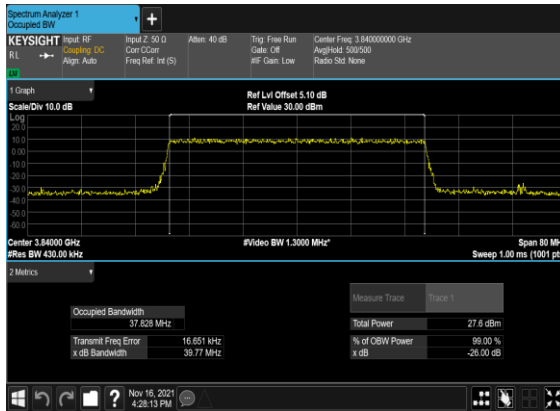
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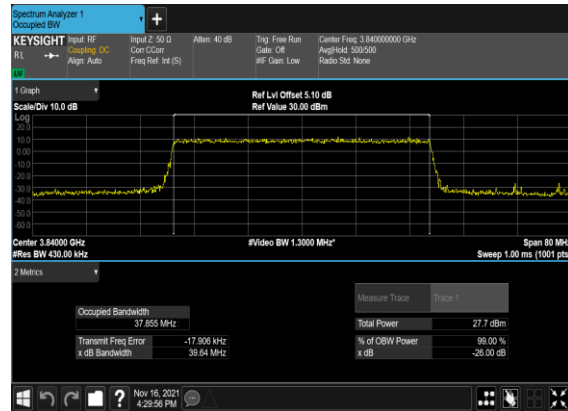
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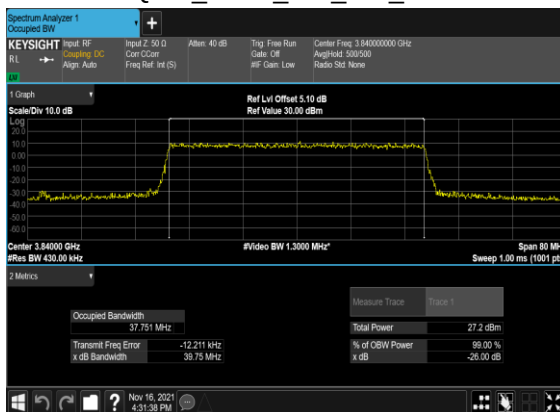
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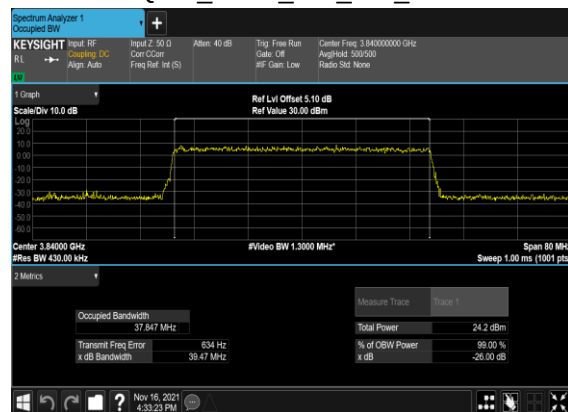
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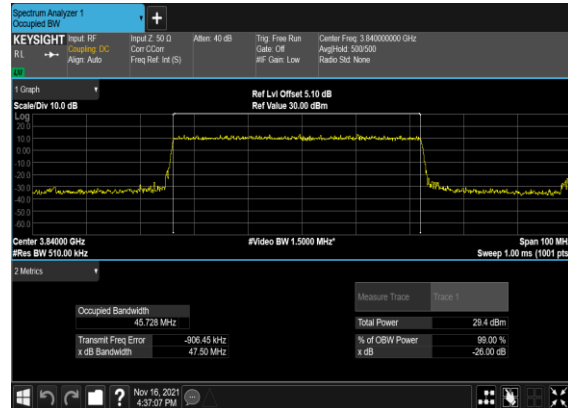
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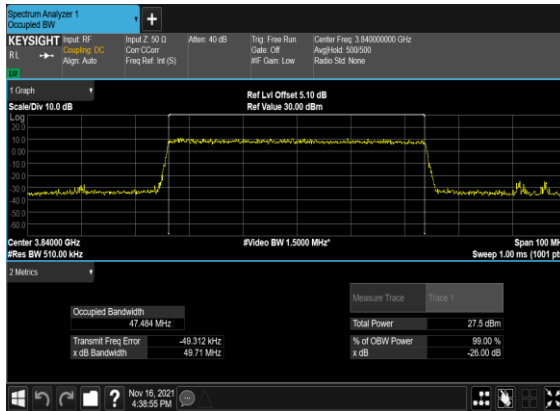
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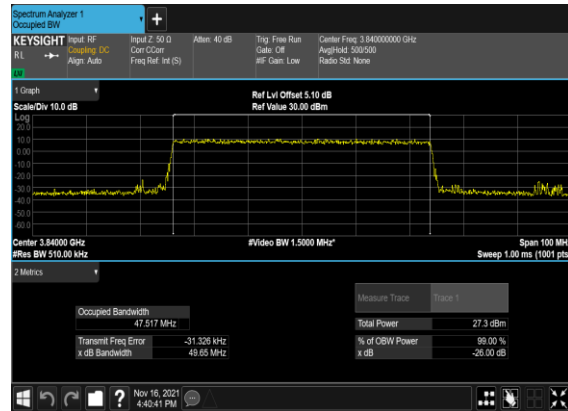
N77(50M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



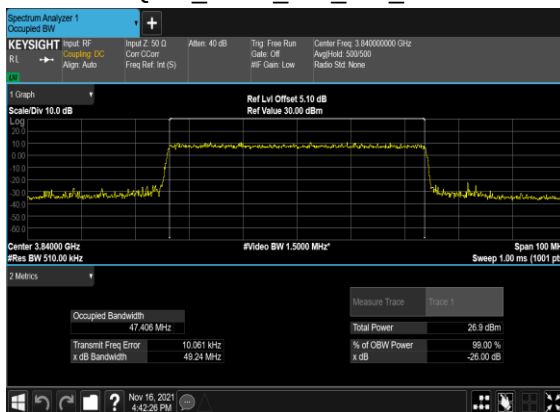
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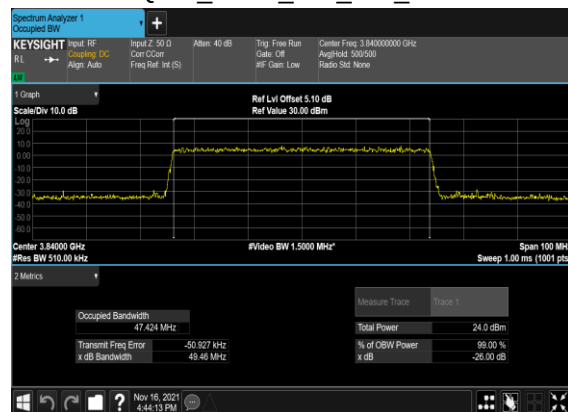
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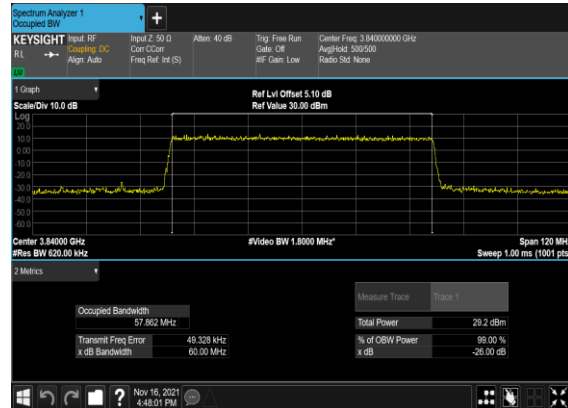
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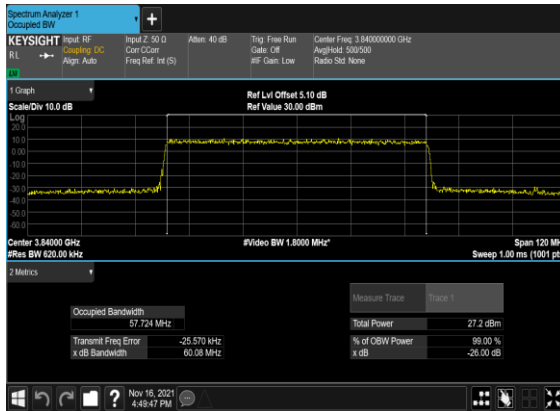
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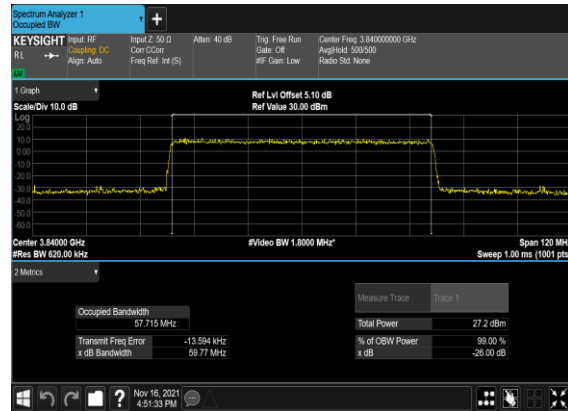
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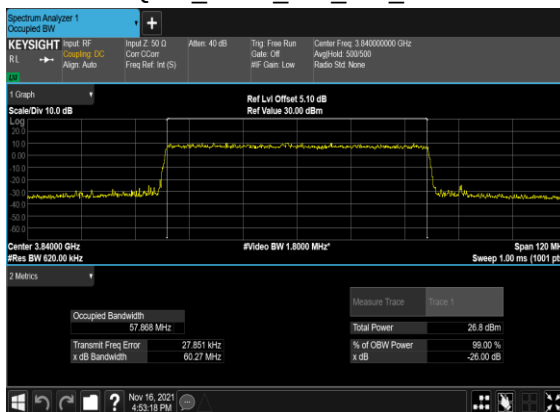
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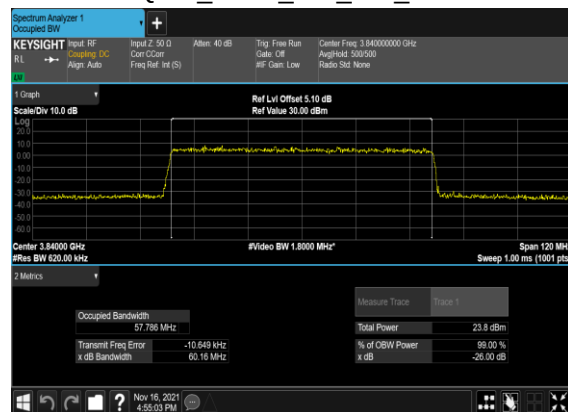
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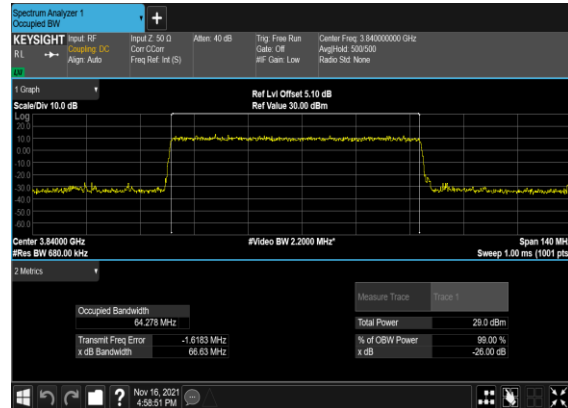
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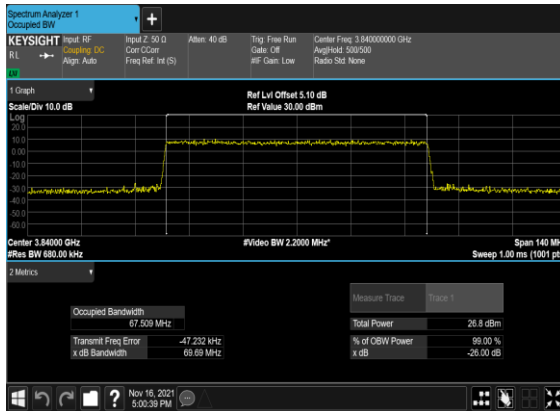
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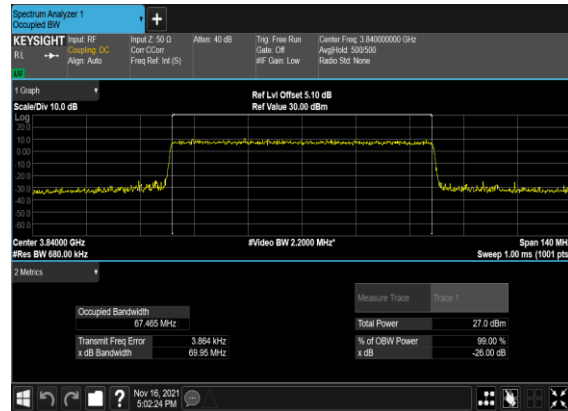
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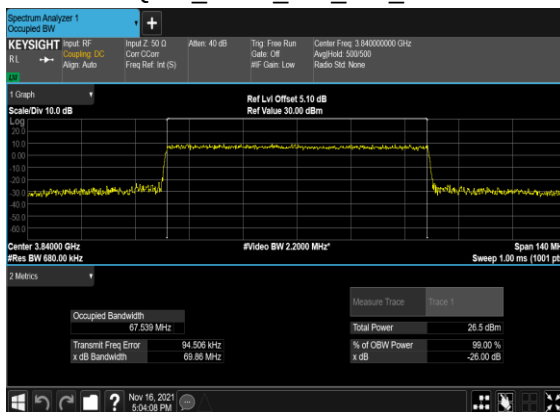
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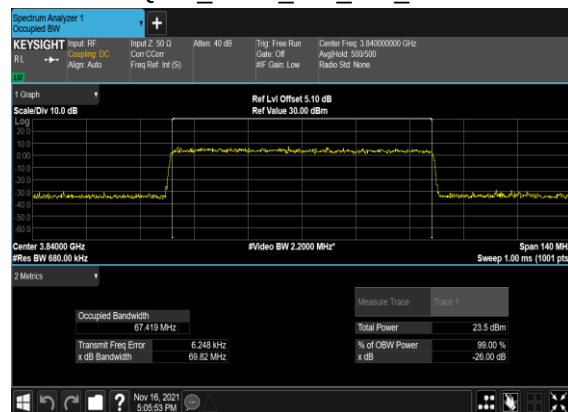
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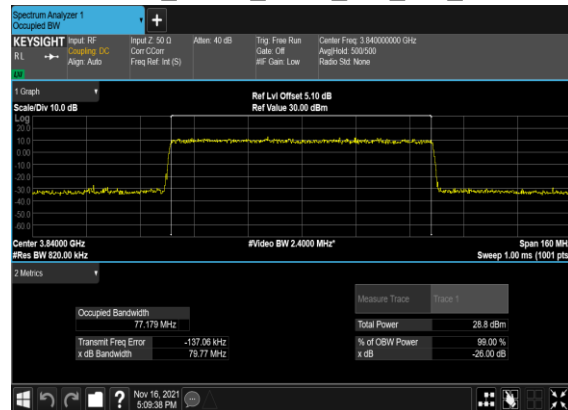
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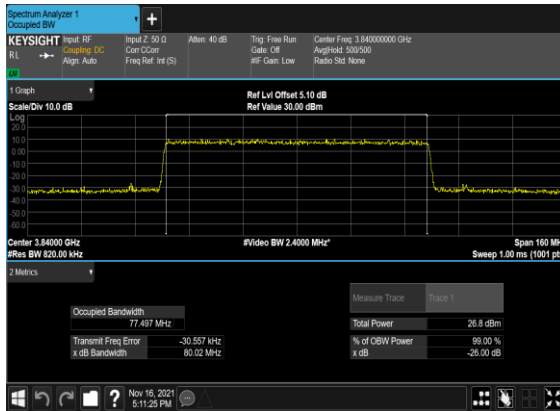
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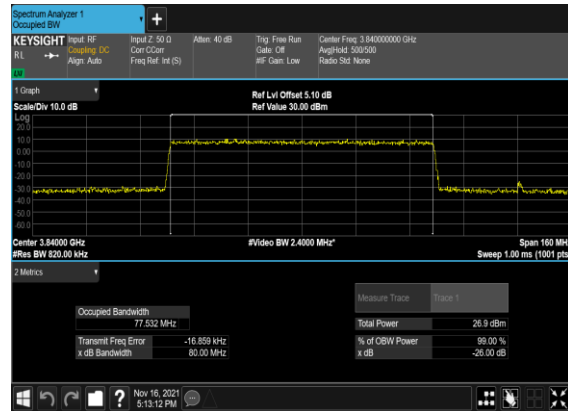
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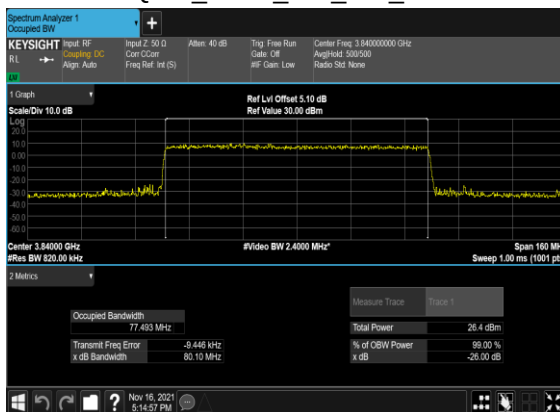
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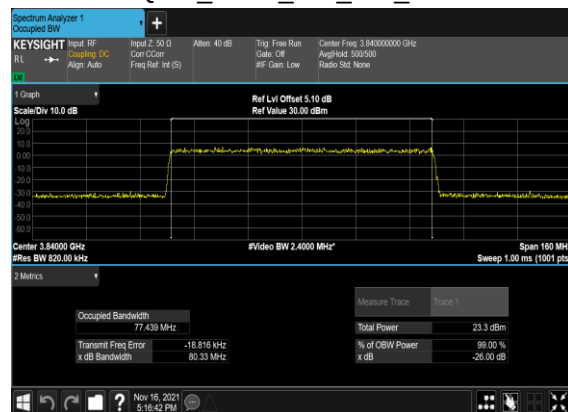
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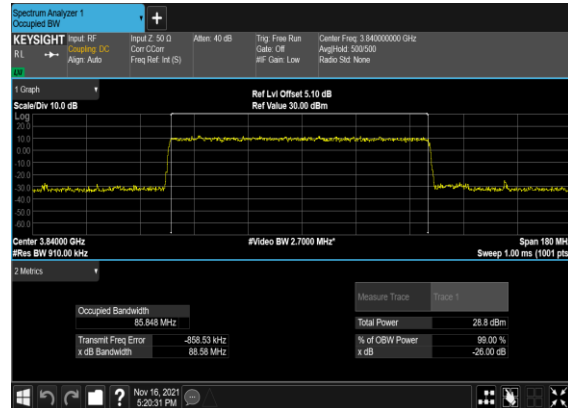
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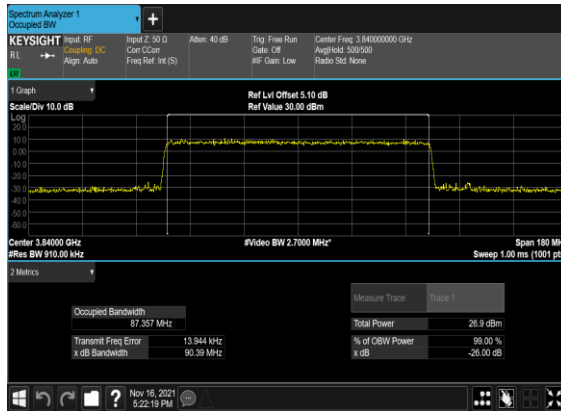
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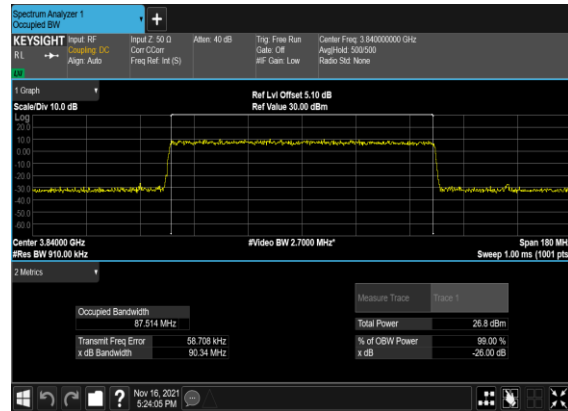
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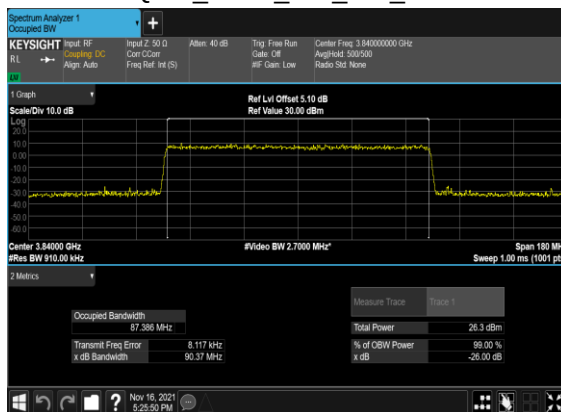
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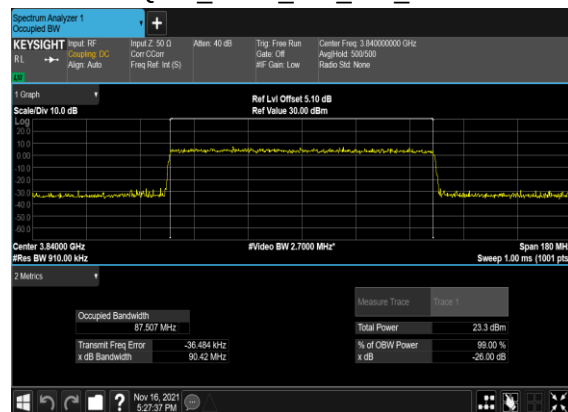
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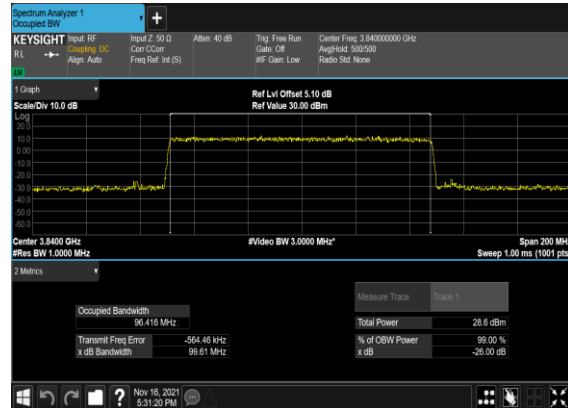
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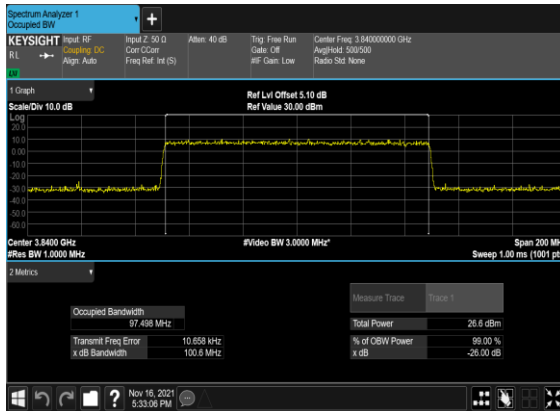
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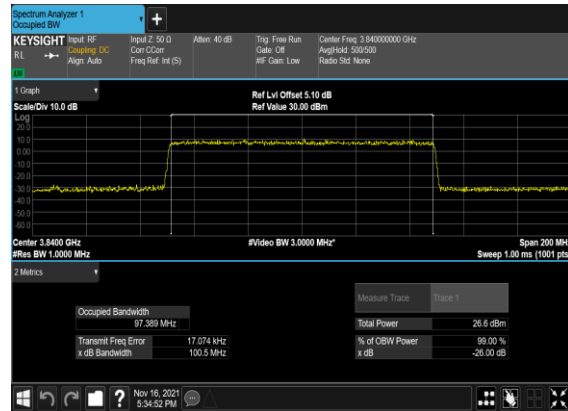
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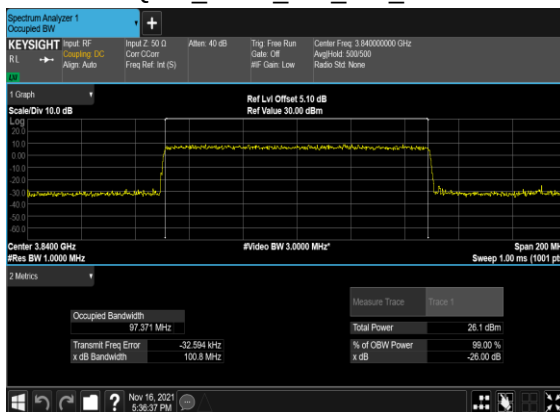
N77(100M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



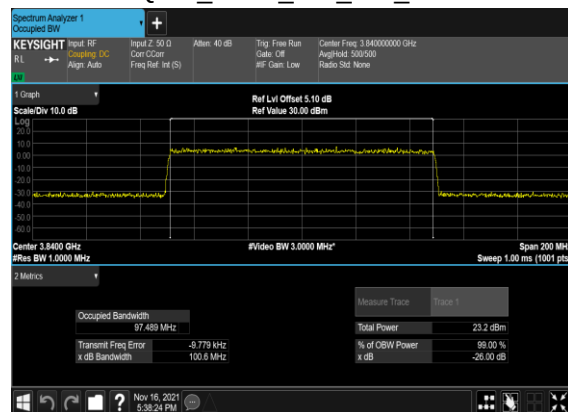
N77(100M)_CP-OFDM_16QAM_Outer_Full_Mid_CH



N77(100M)_CP-OFDM_64QAM_Outer_Full_Mid_CH



N77(100M)_CP-OFDM_256QAM_Outer_Full_Mid_CH



Conducted Spurious Emissions

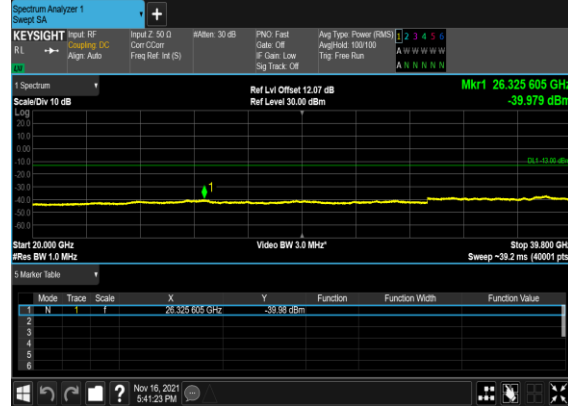
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@0	see graph	---
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	20	656000	3840.0	DFT-s-OFDM QPSK	1@0	see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

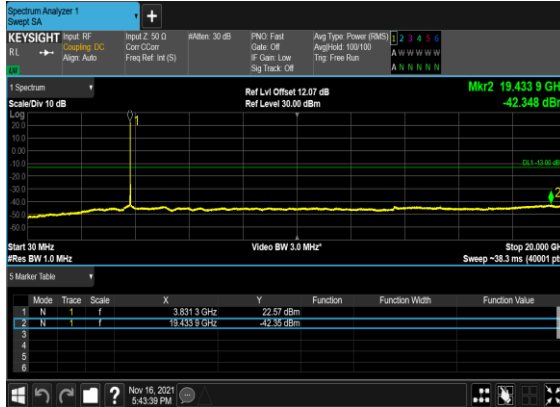
N77(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



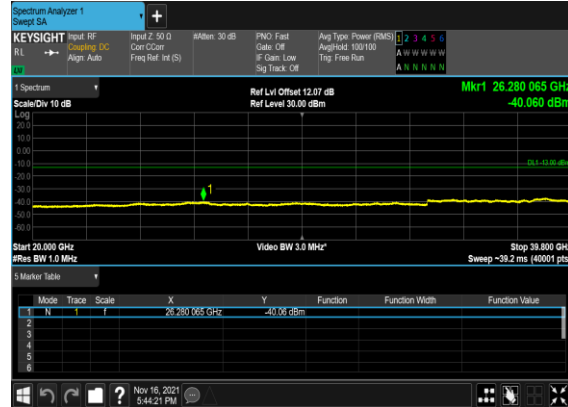
N77(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



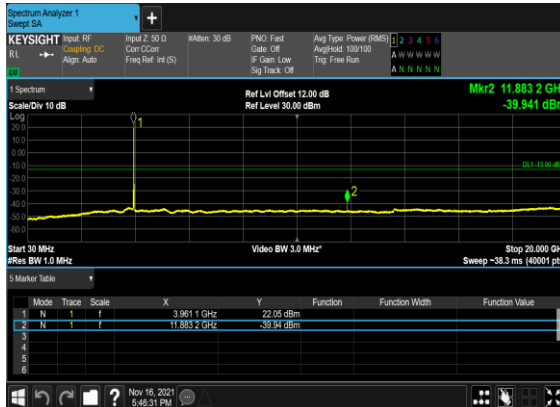
N77(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH



N77(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH



N77(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH



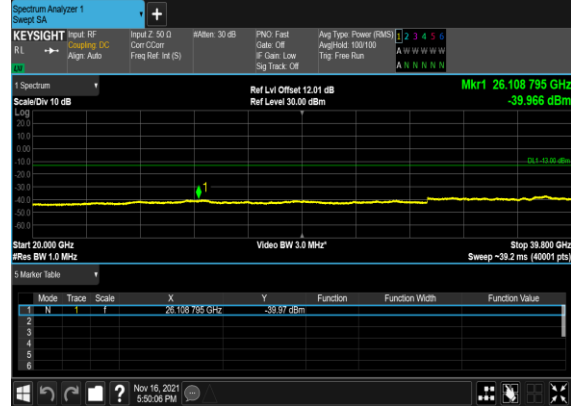
N77(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH



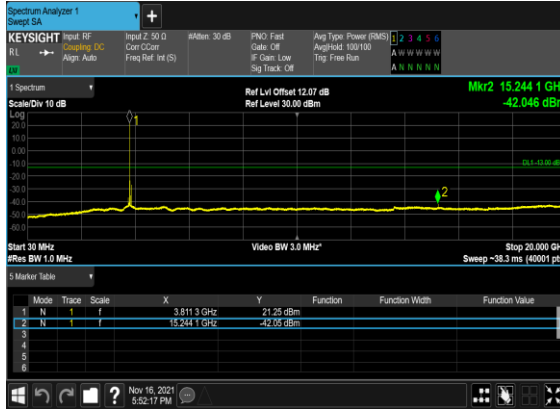
N77(60M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



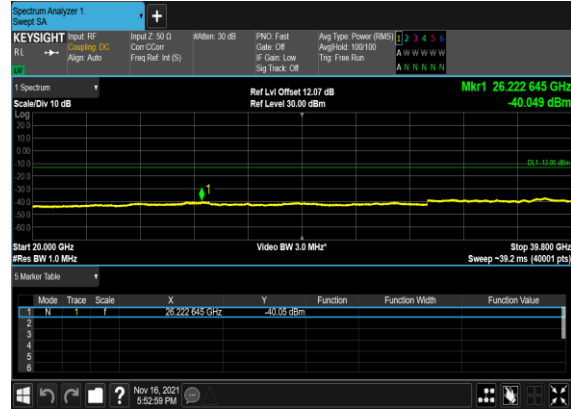
N77(60M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



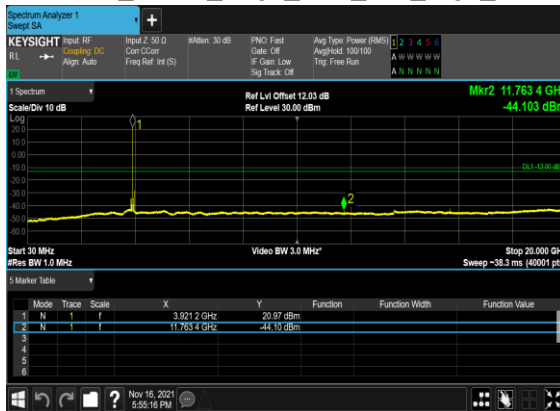
N77(60M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH



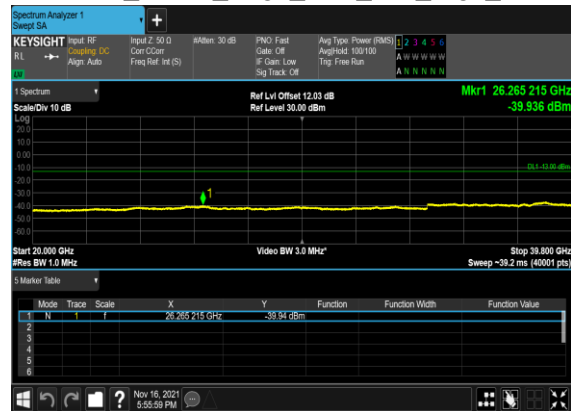
N77(60M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH



N77(60M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH



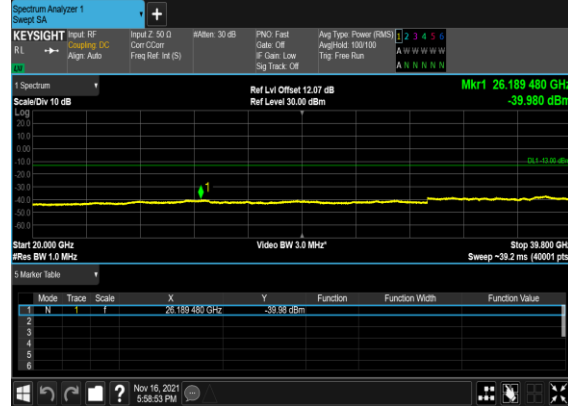
N77(60M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH



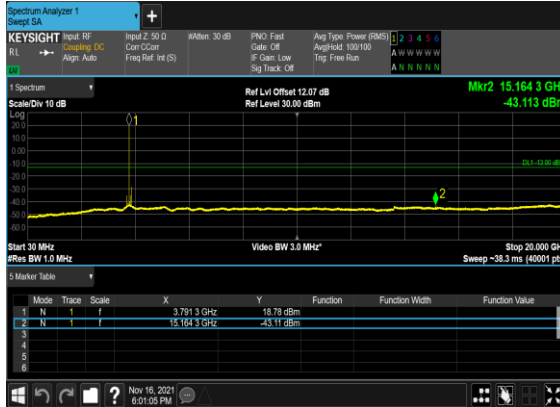
N77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



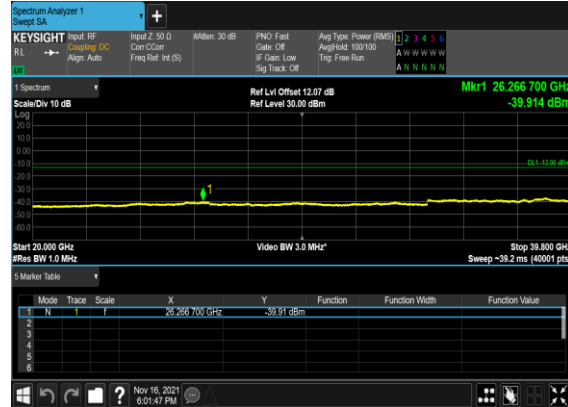
N77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



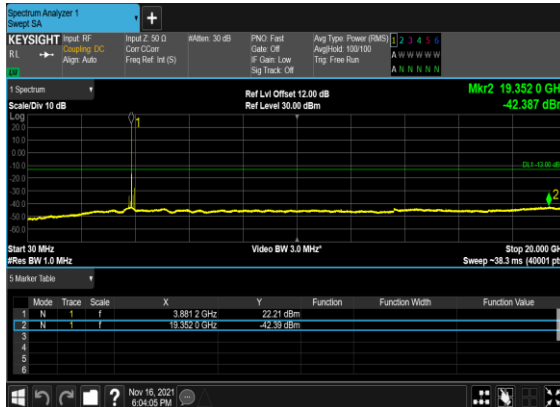
N77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH



N77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH



N77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH



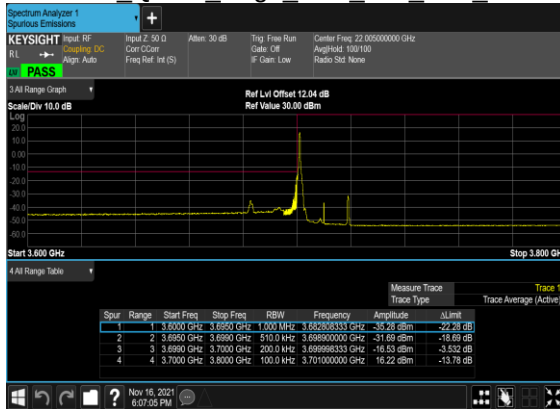
N77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH



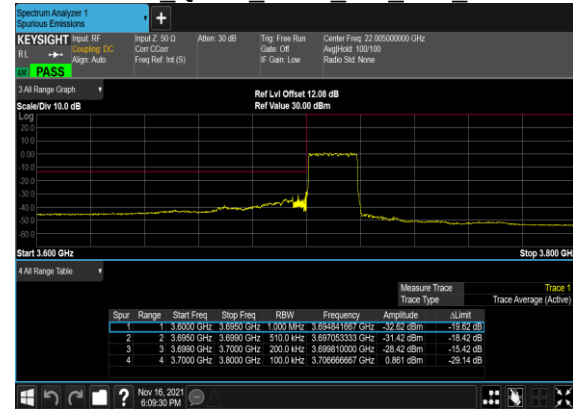
Conducted Band Edge

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

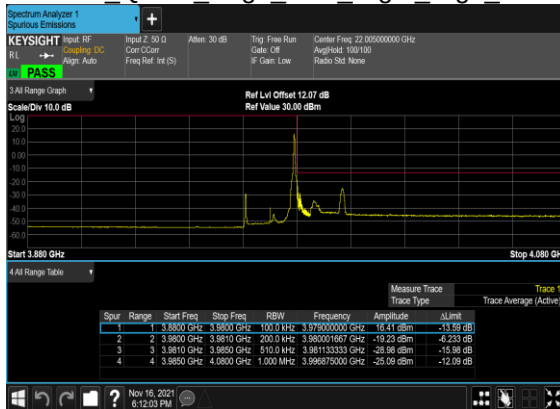
N77(20M)_DFT-s-OFDM QPSK Edge 1RB Left Low CH



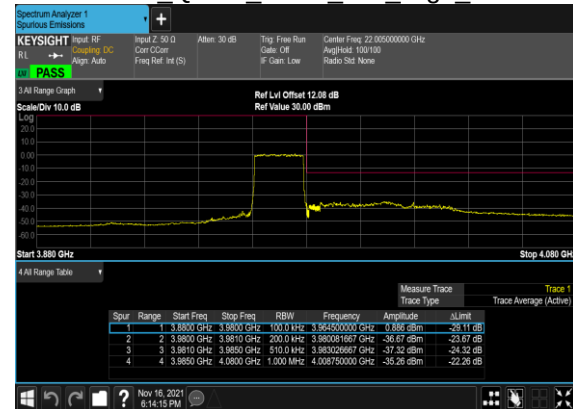
N77(20M)_DFT-s-OFDM QPSK Outer Full Low CH



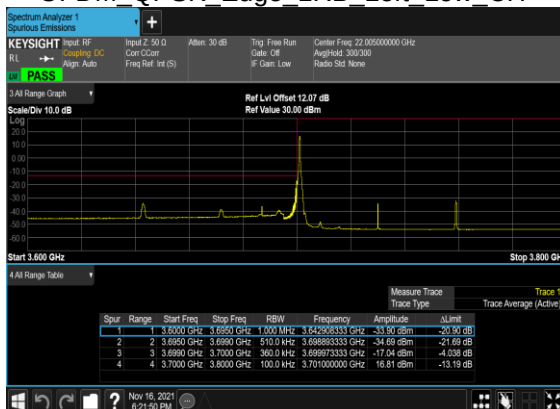
N77(20M)_DFT-s-OFDM QPSK Edge 1RB Right High CH



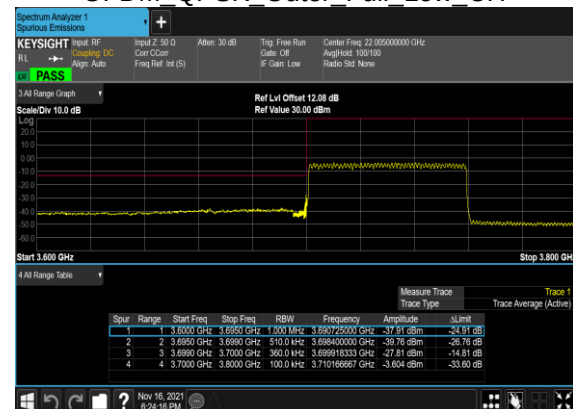
N77(20M)_DFT-s-OFDM QPSK Outer Full High CH



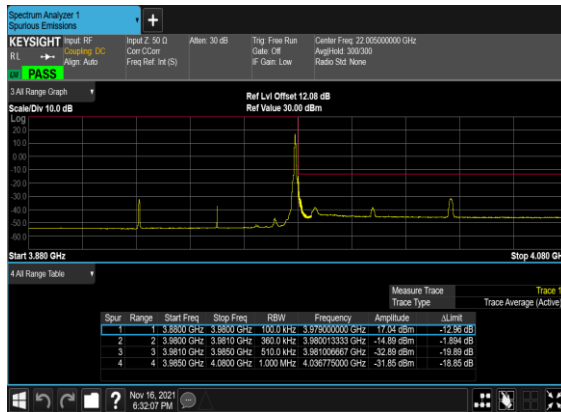
N77(60M)_DFT-s-OFDM QPSK Edge 1RB Left Low CH



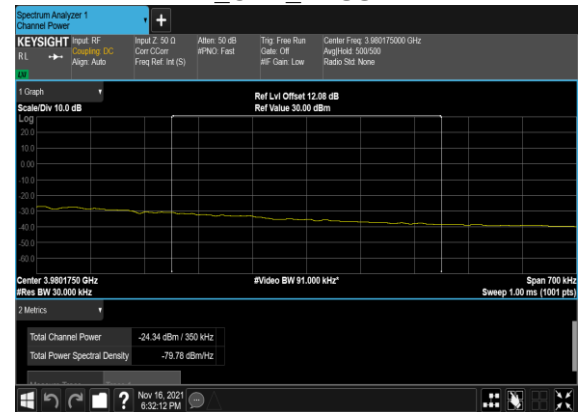
N77(60M)_DFT-s-OFDM QPSK Outer Full Low CH



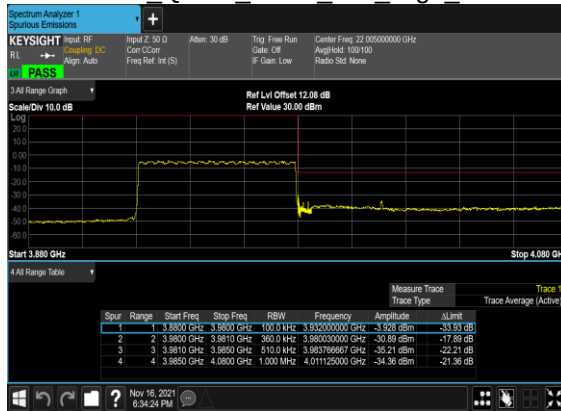
N77(60M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_High_CH



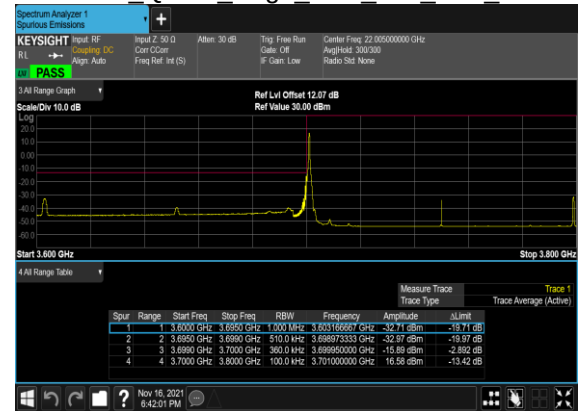
N77(60M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_High_CH
CHP_PASS



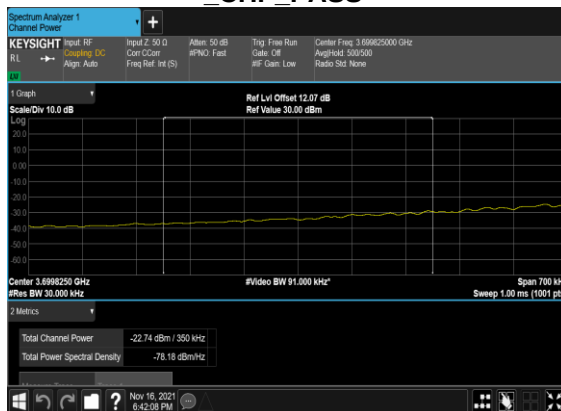
N77(60M)_DFT-s-
OFDM_QPSK_Outer_Full_High_CH



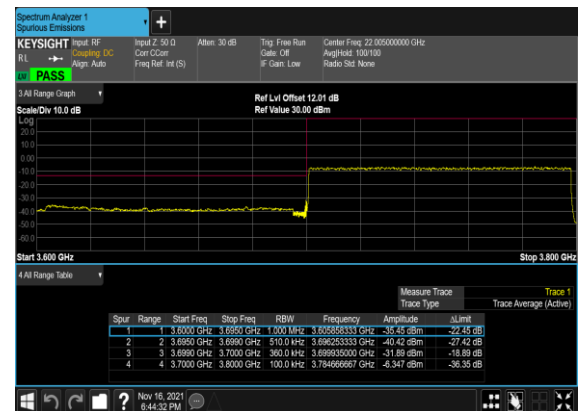
N77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



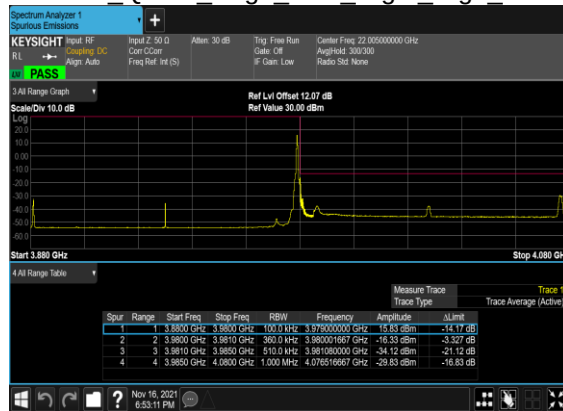
N77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH
CHP_PASS



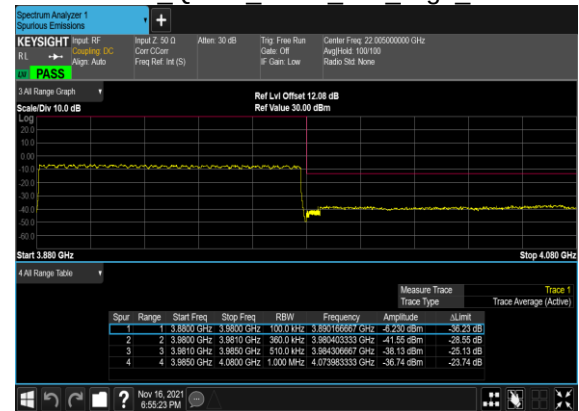
N77(100M)_DFT-s-
OFDM_QPSK_Outer_Full_Low_CH



N77(100M)_DFT-s-OFDM QPSK Edge 1RB Right High CH



N77(100M)_DFT-s-OFDM QPSK Outer Full High CH



FR1 N77 UL MIMO ANT10+ANT11

Transmitter Conducted Output Power And EIRP

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	ANT10 Power(dBm)	ANT11 Power(dBm)	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
77	30	20	647334	3710.01	CP-OFDM QPSK	25@12	19.4	19.92	22.68	23.79	0.2392
77	30	20	647334	3710.01	CP-OFDM QPSK	1@1	19.52	19.95	22.75	23.86	0.2433
77	30	20	647334	3710.01	CP-OFDM QPSK	1@49	19.52	20.01	22.78	23.89	0.2450
77	30	20	647334	3710.01	CP-OFDM 16 QAM	25@12	18.84	19.28	22.08	23.19	0.2083
77	30	20	647334	3710.01	CP-OFDM 16 QAM	1@1	18.92	19.35	22.15	23.26	0.2119
77	30	20	647334	3710.01	CP-OFDM 16 QAM	1@49	18.93	19.38	22.17	23.28	0.2129
77	30	20	647334	3710.01	CP-OFDM 64 QAM	25@12	17.41	17.82	20.63	21.74	0.1493
77	30	20	647334	3710.01	CP-OFDM 64 QAM	1@1	17.19	17.88	20.56	21.67	0.1469
77	30	20	647334	3710.01	CP-OFDM 64 QAM	1@49	17.19	17.89	20.56	21.67	0.1470
77	30	20	647334	3710.01	CP-OFDM 256 QAM	25@12	14.4	14.81	17.62	18.73	0.0746
77	30	20	647334	3710.01	CP-OFDM 256 QAM	1@1	14.57	14.99	17.80	18.91	0.0777
77	30	20	647334	3710.01	CP-OFDM 256 QAM	1@49	14.42	14.99	17.72	18.83	0.0765
77	30	20	656000	3840	CP-OFDM QPSK	25@12	19.56	19.66	22.62	23.73	0.2361
77	30	20	656000	3840	CP-OFDM QPSK	1@1	19.46	19.73	22.61	23.72	0.2354
77	30	20	656000	3840	CP-OFDM QPSK	1@49	19.51	19.71	22.62	23.73	0.2361
77	30	20	656000	3840	CP-OFDM 16 QAM	25@12	19.03	19.16	22.11	23.22	0.2097
77	30	20	656000	3840	CP-OFDM 16 QAM	1@1	18.95	19.22	22.10	23.21	0.2093
77	30	20	656000	3840	CP-OFDM 16 QAM	1@49	18.94	19.14	22.05	23.16	0.2071
77	30	20	656000	3840	CP-OFDM 64 QAM	25@12	17.49	17.68	20.60	21.71	0.1481
77	30	20	656000	3840	CP-OFDM 64 QAM	1@1	17.32	17.6	20.47	21.58	0.1440
77	30	20	656000	3840	CP-OFDM 64 QAM	1@49	17.36	17.59	20.49	21.60	0.1444
77	30	20	656000	3840	CP-OFDM 256 QAM	25@12	14.57	14.67	17.63	18.74	0.0748
77	30	20	656000	3840	CP-OFDM 256 QAM	1@1	14.63	14.78	17.72	18.83	0.0763
77	30	20	656000	3840	CP-OFDM 256 QAM	1@49	14.51	14.75	17.64	18.75	0.0750
77	30	20	664666	3969.99	CP-OFDM QPSK	25@12	19.57	19.78	22.69	23.80	0.2397
77	30	20	664666	3969.99	CP-OFDM QPSK	1@1	19.73	19.79	22.77	23.88	0.2444
77	30	20	664666	3969.99	CP-OFDM QPSK	1@49	19.78	19.8	22.80	23.91	0.2461
77	30	20	664666	3969.99	CP-OFDM 16 QAM	25@12	19.08	19.35	22.23	23.34	0.2156
77	30	20	664666	3969.99	CP-OFDM 16 QAM	1@1	19.18	19.19	22.20	23.31	0.2141
77	30	20	664666	3969.99	CP-OFDM 16 QAM	1@49	19.23	19.33	22.29	23.40	0.2188

77	30	20	664666	3969.99	CP-OFDM 64 QAM	25@12	17.59	17.76	20.69	21.80	0.1512
77	30	20	664666	3969.99	CP-OFDM 64 QAM	1@1	17.51	17.68	20.61	21.72	0.1485
77	30	20	664666	3969.99	CP-OFDM 64 QAM	1@49	17.64	17.74	20.70	21.81	0.1517
77	30	20	664666	3969.99	CP-OFDM 256 QAM	25@12	14.61	14.74	17.69	18.80	0.0758
77	30	20	664666	3969.99	CP-OFDM 256 QAM	1@1	14.59	14.92	17.77	18.88	0.0772
77	30	20	664666	3969.99	CP-OFDM 256 QAM	1@49	14.62	14.88	17.76	18.87	0.0771
77	30	30	647668	3715.02	CP-OFDM QPSK	39@19	19.45	19.78	22.63	23.74	0.2365
77	30	30	647668	3715.02	CP-OFDM QPSK	1@1	19.6	19.92	22.77	23.88	0.2445
77	30	30	647668	3715.02	CP-OFDM QPSK	1@76	19.52	19.98	22.77	23.88	0.2441
77	30	30	647668	3715.02	CP-OFDM 16 QAM	39@19	18.97	19.32	22.16	23.27	0.2123
77	30	30	647668	3715.02	CP-OFDM 16 QAM	1@1	19.03	19.4	22.23	23.34	0.2157
77	30	30	647668	3715.02	CP-OFDM 16 QAM	1@76	19.15	19.49	22.33	23.44	0.2210
77	30	30	647668	3715.02	CP-OFDM 64 QAM	39@19	17.49	17.81	20.66	21.77	0.1504
77	30	30	647668	3715.02	CP-OFDM 64 QAM	1@1	17.36	17.77	20.58	21.69	0.1476
77	30	30	647668	3715.02	CP-OFDM 64 QAM	1@76	17.47	17.89	20.70	21.81	0.1515
77	30	30	647668	3715.02	CP-OFDM 256 QAM	39@19	14.46	14.89	17.69	18.80	0.0759
77	30	30	647668	3715.02	CP-OFDM 256 QAM	1@1	14.57	15.03	17.82	18.93	0.0781
77	30	30	647668	3715.02	CP-OFDM 256 QAM	1@76	14.66	15.09	17.89	19.00	0.0794
77	30	30	656000	3840	CP-OFDM QPSK	39@19	19.54	19.62	22.59	23.70	0.2344
77	30	30	656000	3840	CP-OFDM QPSK	1@1	19.57	19.88	22.74	23.85	0.2426
77	30	30	656000	3840	CP-OFDM QPSK	1@76	19.48	19.67	22.59	23.70	0.2342
77	30	30	656000	3840	CP-OFDM 16 QAM	39@19	19.07	19.12	22.11	23.22	0.2097
77	30	30	656000	3840	CP-OFDM 16 QAM	1@1	18.97	19.32	22.16	23.27	0.2123
77	30	30	656000	3840	CP-OFDM 16 QAM	1@76	18.94	19.21	22.09	23.20	0.2088
77	30	30	656000	3840	CP-OFDM 64 QAM	39@19	17.48	17.68	20.59	21.70	0.1480
77	30	30	656000	3840	CP-OFDM 64 QAM	1@1	17.38	17.79	20.60	21.71	0.1483
77	30	30	656000	3840	CP-OFDM 64 QAM	1@76	17.33	17.56	20.46	21.57	0.1434
77	30	30	656000	3840	CP-OFDM 256 QAM	39@19	14.55	14.63	17.60	18.71	0.0743
77	30	30	656000	3840	CP-OFDM 256 QAM	1@1	14.63	14.92	17.79	18.90	0.0776
77	30	30	656000	3840	CP-OFDM 256 QAM	1@76	14.49	14.72	17.62	18.73	0.0746
77	30	30	664332	3964.98	CP-OFDM QPSK	39@19	19.57	19.72	22.66	23.77	0.2380
77	30	30	664332	3964.98	CP-OFDM QPSK	1@1	19.63	19.93	22.79	23.90	0.2456
77	30	30	664332	3964.98	CP-OFDM QPSK	1@76	19.6	19.88	22.75	23.86	0.2434
77	30	30	664332	3964.98	CP-OFDM 16 QAM	39@19	19.12	19.13	22.14	23.25	0.2111
77	30	30	664332	3964.98	CP-OFDM 16 QAM	1@1	19.11	19.23	22.18	23.29	0.2133
77	30	30	664332	3964.98	CP-OFDM 16 QAM	1@76	19.16	19.21	22.20	23.31	0.2141

77	30	30	664332	3964.98	CP-OFDM 64 QAM	39@19	17.6	17.65	20.64	21.75	0.1495
77	30	30	664332	3964.98	CP-OFDM 64 QAM	1@1	17.49	17.64	20.58	21.69	0.1474
77	30	30	664332	3964.98	CP-OFDM 64 QAM	1@76	17.53	17.69	20.62	21.73	0.1490
77	30	30	664332	3964.98	CP-OFDM 256 QAM	39@19	14.51	14.75	17.64	18.75	0.0750
77	30	30	664332	3964.98	CP-OFDM 256 QAM	1@1	14.72	14.84	17.79	18.90	0.0776
77	30	30	664332	3964.98	CP-OFDM 256 QAM	1@76	14.67	14.82	17.76	18.87	0.0770
77	30	40	648000	3720	CP-OFDM QPSK	53@26	19.53	19.85	22.70	23.81	0.2406
77	30	40	648000	3720	CP-OFDM QPSK	1@1	19.73	20.07	22.91	24.02	0.2526
77	30	40	648000	3720	CP-OFDM QPSK	1@104	19.66	19.96	22.82	23.93	0.2473
77	30	40	648000	3720	CP-OFDM 16 QAM	53@26	19.08	19.37	22.24	23.35	0.2162
77	30	40	648000	3720	CP-OFDM 16 QAM	1@1	19.16	19.51	22.35	23.46	0.2218
77	30	40	648000	3720	CP-OFDM 16 QAM	1@104	19.11	19.45	22.29	23.40	0.2190
77	30	40	648000	3720	CP-OFDM 64 QAM	53@26	17.47	17.92	20.71	21.82	0.1521
77	30	40	648000	3720	CP-OFDM 64 QAM	1@1	17.51	17.9	20.72	21.83	0.1524
77	30	40	648000	3720	CP-OFDM 64 QAM	1@104	17.45	17.82	20.65	21.76	0.1499
77	30	40	648000	3720	CP-OFDM 256 QAM	53@26	14.51	14.85	17.69	18.80	0.0759
77	30	40	648000	3720	CP-OFDM 256 QAM	1@1	14.72	15.19	17.97	19.08	0.0809
77	30	40	648000	3720	CP-OFDM 256 QAM	1@104	14.59	15.08	17.85	18.96	0.0787
77	30	40	656000	3840	CP-OFDM QPSK	53@26	19.58	19.61	22.61	23.72	0.2353
77	30	40	656000	3840	CP-OFDM QPSK	1@1	19.79	20.03	22.92	24.03	0.2530
77	30	40	656000	3840	CP-OFDM QPSK	1@104	19.53	19.69	22.62	23.73	0.2361
77	30	40	656000	3840	CP-OFDM 16 QAM	53@26	19.1	19.17	22.15	23.26	0.2116
77	30	40	656000	3840	CP-OFDM 16 QAM	1@1	19.26	19.4	22.34	23.45	0.2214
77	30	40	656000	3840	CP-OFDM 16 QAM	1@104	19	19.19	22.11	23.22	0.2097
77	30	40	656000	3840	CP-OFDM 64 QAM	53@26	17.54	17.77	20.67	21.78	0.1506
77	30	40	656000	3840	CP-OFDM 64 QAM	1@1	17.64	17.88	20.77	21.88	0.1542
77	30	40	656000	3840	CP-OFDM 64 QAM	1@104	17.47	17.54	20.52	21.63	0.1454
77	30	40	656000	3840	CP-OFDM 256 QAM	53@26	14.58	14.59	17.60	18.71	0.0742
77	30	40	656000	3840	CP-OFDM 256 QAM	1@1	14.8	15.01	17.92	19.03	0.0799
77	30	40	656000	3840	CP-OFDM 256 QAM	1@104	14.62	14.76	17.70	18.81	0.0760
77	30	40	664000	3960	CP-OFDM QPSK	53@26	19.68	19.69	22.70	23.81	0.2402
77	30	40	664000	3960	CP-OFDM QPSK	1@1	19.75	19.78	22.78	23.89	0.2446
77	30	40	664000	3960	CP-OFDM QPSK	1@104	19.87	19.89	22.89	24.00	0.2512
77	30	40	664000	3960	CP-OFDM 16 QAM	53@26	19.19	19.22	22.22	23.33	0.2150
77	30	40	664000	3960	CP-OFDM 16 QAM	1@1	19.15	19.26	22.22	23.33	0.2151
77	30	40	664000	3960	CP-OFDM 16 QAM	1@104	19.26	19.37	22.33	23.44	0.2206

77	30	40	664000	3960	CP-OFDM 64 QAM	53@26	17.62	17.78	20.71	21.82	0.1521
77	30	40	664000	3960	CP-OFDM 64 QAM	1@1	17.6	17.62	20.62	21.73	0.1489
77	30	40	664000	3960	CP-OFDM 64 QAM	1@104	17.75	17.68	20.73	21.84	0.1526
77	30	40	664000	3960	CP-OFDM 256 QAM	53@26	14.7	14.63	17.68	18.79	0.0756
77	30	40	664000	3960	CP-OFDM 256 QAM	1@1	14.81	14.92	17.88	18.99	0.0792
77	30	40	664000	3960	CP-OFDM 256 QAM	1@104	14.83	14.88	17.87	18.98	0.0790
77	30	50	648334	3725.01	CP-OFDM QPSK	67@33	19.35	19.7	22.54	23.65	0.2317
77	30	50	648334	3725.01	CP-OFDM QPSK	1@1	19.45	19.79	22.63	23.74	0.2368
77	30	50	648334	3725.01	CP-OFDM QPSK	1@131	19.31	19.69	22.51	23.62	0.2304
77	30	50	648334	3725.01	CP-OFDM 16 QAM	67@33	18.86	19.23	22.06	23.17	0.2075
77	30	50	648334	3725.01	CP-OFDM 16 QAM	1@1	18.89	19.16	22.04	23.15	0.2064
77	30	50	648334	3725.01	CP-OFDM 16 QAM	1@131	18.69	19.14	21.93	23.04	0.2014
77	30	50	648334	3725.01	CP-OFDM 64 QAM	67@33	17.3	17.67	20.50	21.61	0.1449
77	30	50	648334	3725.01	CP-OFDM 64 QAM	1@1	17.29	17.56	20.44	21.55	0.1428
77	30	50	648334	3725.01	CP-OFDM 64 QAM	1@131	17.18	17.44	20.32	21.43	0.1391
77	30	50	648334	3725.01	CP-OFDM 256 QAM	67@33	14.33	14.71	17.53	18.64	0.0732
77	30	50	648334	3725.01	CP-OFDM 256 QAM	1@1	14.34	14.78	17.58	18.69	0.0739
77	30	50	648334	3725.01	CP-OFDM 256 QAM	1@131	14.22	14.73	17.49	18.60	0.0725
77	30	50	656000	3840	CP-OFDM QPSK	67@33	19.38	19.54	22.47	23.58	0.2281
77	30	50	656000	3840	CP-OFDM QPSK	1@1	19.46	19.58	22.53	23.64	0.2312
77	30	50	656000	3840	CP-OFDM QPSK	1@131	19.31	19.53	22.43	23.54	0.2260
77	30	50	656000	3840	CP-OFDM 16 QAM	67@33	18.88	19.11	22.01	23.12	0.2050
77	30	50	656000	3840	CP-OFDM 16 QAM	1@1	18.87	19.23	22.06	23.17	0.2077
77	30	50	656000	3840	CP-OFDM 16 QAM	1@131	18.76	19.13	21.96	23.07	0.2027
77	30	50	656000	3840	CP-OFDM 64 QAM	67@33	17.36	17.55	20.47	21.58	0.1438
77	30	50	656000	3840	CP-OFDM 64 QAM	1@1	17.22	17.55	20.40	21.51	0.1415
77	30	50	656000	3840	CP-OFDM 64 QAM	1@131	17.15	17.44	20.31	21.42	0.1386
77	30	50	656000	3840	CP-OFDM 256 QAM	67@33	14.42	14.53	17.49	18.60	0.0724
77	30	50	656000	3840	CP-OFDM 256 QAM	1@1	14.53	14.67	17.61	18.72	0.0745
77	30	50	656000	3840	CP-OFDM 256 QAM	1@131	14.44	14.58	17.52	18.63	0.0730
77	30	50	663666	3954.99	CP-OFDM QPSK	67@33	19.46	19.48	22.48	23.59	0.2286
77	30	50	663666	3954.99	CP-OFDM QPSK	1@1	19.53	19.57	22.56	23.67	0.2328
77	30	50	663666	3954.99	CP-OFDM QPSK	1@131	19.62	19.62	22.63	23.74	0.2366
77	30	50	663666	3954.99	CP-OFDM 16 QAM	67@33	18.97	19.02	22.01	23.12	0.2049
77	30	50	663666	3954.99	CP-OFDM 16 QAM	1@1	18.85	19.02	21.95	23.06	0.2021
77	30	50	663666	3954.99	CP-OFDM 16 QAM	1@131	18.94	19	21.98	23.09	0.2037

77	30	50	663666	3954.99	CP-OFDM 64 QAM	67@33	17.46	17.44	20.46	21.57	0.1436
77	30	50	663666	3954.99	CP-OFDM 64 QAM	1@1	17.42	17.34	20.39	21.50	0.1413
77	30	50	663666	3954.99	CP-OFDM 64 QAM	1@131	17.5	17.39	20.46	21.57	0.1434
77	30	50	663666	3954.99	CP-OFDM 256 QAM	67@33	14.5	14.44	17.48	18.59	0.0723
77	30	50	663666	3954.99	CP-OFDM 256 QAM	1@1	14.48	14.65	17.58	18.69	0.0739
77	30	50	663666	3954.99	CP-OFDM 256 QAM	1@131	14.59	14.62	17.62	18.73	0.0746
77	30	60	648668	3730.02	CP-OFDM QPSK	81@40	19.28	19.63	22.47	23.58	0.2280
77	30	60	648668	3730.02	CP-OFDM QPSK	1@1	19.38	19.7	22.55	23.66	0.2324
77	30	60	648668	3730.02	CP-OFDM QPSK	1@160	19.44	19.62	22.54	23.65	0.2318
77	30	60	648668	3730.02	CP-OFDM 16 QAM	81@40	18.79	19.16	21.99	23.10	0.2041
77	30	60	648668	3730.02	CP-OFDM 16 QAM	1@1	18.94	19.17	22.07	23.18	0.2078
77	30	60	648668	3730.02	CP-OFDM 16 QAM	1@160	18.83	19.13	21.99	23.10	0.2043
77	30	60	648668	3730.02	CP-OFDM 64 QAM	81@40	17.28	17.62	20.46	21.57	0.1437
77	30	60	648668	3730.02	CP-OFDM 64 QAM	1@1	17.16	17.54	20.36	21.47	0.1404
77	30	60	648668	3730.02	CP-OFDM 64 QAM	1@160	17.2	17.53	20.38	21.49	0.1409
77	30	60	648668	3730.02	CP-OFDM 256 QAM	81@40	14.23	14.65	17.46	18.57	0.0719
77	30	60	648668	3730.02	CP-OFDM 256 QAM	1@1	14.38	14.78	17.59	18.70	0.0742
77	30	60	648668	3730.02	CP-OFDM 256 QAM	1@160	14.43	14.81	17.63	18.74	0.0749
77	30	60	656000	3840	CP-OFDM QPSK	81@40	19.36	19.5	22.44	23.55	0.2265
77	30	60	656000	3840	CP-OFDM QPSK	1@1	19.42	19.58	22.51	23.62	0.2302
77	30	60	656000	3840	CP-OFDM QPSK	1@160	19.35	19.48	22.43	23.54	0.2257
77	30	60	656000	3840	CP-OFDM 16 QAM	81@40	18.88	19	21.95	23.06	0.2023
77	30	60	656000	3840	CP-OFDM 16 QAM	1@1	18.94	19.05	22.01	23.12	0.2049
77	30	60	656000	3840	CP-OFDM 16 QAM	1@160	18.75	18.99	21.88	22.99	0.1992
77	30	60	656000	3840	CP-OFDM 64 QAM	81@40	17.37	17.5	20.45	21.56	0.1431
77	30	60	656000	3840	CP-OFDM 64 QAM	1@1	17.23	17.49	20.37	21.48	0.1407
77	30	60	656000	3840	CP-OFDM 64 QAM	1@160	17.12	17.4	20.27	21.38	0.1375
77	30	60	656000	3840	CP-OFDM 256 QAM	81@40	14.4	14.49	17.46	18.57	0.0719
77	30	60	656000	3840	CP-OFDM 256 QAM	1@1	14.5	14.67	17.60	18.71	0.0742
77	30	60	656000	3840	CP-OFDM 256 QAM	1@160	14.38	14.55	17.48	18.59	0.0722
77	30	60	663332	3949.98	CP-OFDM QPSK	81@40	19.3	19.47	22.40	23.51	0.2242
77	30	60	663332	3949.98	CP-OFDM QPSK	1@1	19.37	19.66	22.53	23.64	0.2311
77	30	60	663332	3949.98	CP-OFDM QPSK	1@160	19.56	19.52	22.55	23.66	0.2323
77	30	60	663332	3949.98	CP-OFDM 16 QAM	81@40	18.83	18.96	21.91	23.02	0.2003
77	30	60	663332	3949.98	CP-OFDM 16 QAM	1@1	18.88	19.12	22.01	23.12	0.2052
77	30	60	663332	3949.98	CP-OFDM 16 QAM	1@160	19.02	18.95	22.00	23.11	0.2044

77	30	60	663332	3949.98	CP-OFDM 64 QAM	81@40	17.31	17.52	20.43	21.54	0.1424
77	30	60	663332	3949.98	CP-OFDM 64 QAM	1@1	17.21	17.57	20.40	21.51	0.1417
77	30	60	663332	3949.98	CP-OFDM 64 QAM	1@160	17.41	17.42	20.43	21.54	0.1424
77	30	60	663332	3949.98	CP-OFDM 256 QAM	81@40	14.32	14.49	17.42	18.53	0.0712
77	30	60	663332	3949.98	CP-OFDM 256 QAM	1@1	14.47	14.77	17.63	18.74	0.0749
77	30	60	663332	3949.98	CP-OFDM 256 QAM	1@160	14.63	14.58	17.62	18.73	0.0746
77	30	70	649000	3735	CP-OFDM QPSK	95@47	19.31	19.61	22.47	23.58	0.2282
77	30	70	649000	3735	CP-OFDM QPSK	1@1	19.36	19.57	22.48	23.59	0.2284
77	30	70	649000	3735	CP-OFDM QPSK	1@187	19.41	19.59	22.51	23.62	0.2302
77	30	70	649000	3735	CP-OFDM 16 QAM	95@47	18.81	19.11	21.97	23.08	0.2034
77	30	70	649000	3735	CP-OFDM 16 QAM	1@1	18.8	19.04	21.93	23.04	0.2015
77	30	70	649000	3735	CP-OFDM 16 QAM	1@187	18.72	19.08	21.91	23.02	0.2006
77	30	70	649000	3735	CP-OFDM 64 QAM	95@47	17.37	17.56	20.48	21.59	0.1441
77	30	70	649000	3735	CP-OFDM 64 QAM	1@1	17.14	17.41	20.29	21.40	0.1380
77	30	70	649000	3735	CP-OFDM 64 QAM	1@187	17.13	17.4	20.28	21.39	0.1376
77	30	70	649000	3735	CP-OFDM 256 QAM	95@47	14.36	14.66	17.52	18.63	0.0730
77	30	70	649000	3735	CP-OFDM 256 QAM	1@1	14.37	14.65	17.52	18.63	0.0730
77	30	70	649000	3735	CP-OFDM 256 QAM	1@187	14.32	14.72	17.53	18.64	0.0732
77	30	70	656000	3840	CP-OFDM QPSK	95@47	19.25	19.39	22.33	23.44	0.2208
77	30	70	656000	3840	CP-OFDM QPSK	1@1	19.31	19.46	22.40	23.51	0.2242
77	30	70	656000	3840	CP-OFDM QPSK	1@187	19.12	19.36	22.25	23.36	0.2169
77	30	70	656000	3840	CP-OFDM 16 QAM	95@47	18.73	18.83	21.79	22.90	0.1950
77	30	70	656000	3840	CP-OFDM 16 QAM	1@1	18.82	18.82	21.83	22.94	0.1968
77	30	70	656000	3840	CP-OFDM 16 QAM	1@187	18.52	18.72	21.63	22.74	0.1880
77	30	70	656000	3840	CP-OFDM 64 QAM	95@47	17.22	17.4	20.32	21.43	0.1390
77	30	70	656000	3840	CP-OFDM 64 QAM	1@1	17.17	17.47	20.33	21.44	0.1394
77	30	70	656000	3840	CP-OFDM 64 QAM	1@187	16.92	17.2	20.07	21.18	0.1313
77	30	70	656000	3840	CP-OFDM 256 QAM	95@47	14.26	14.39	17.34	18.45	0.0699
77	30	70	656000	3840	CP-OFDM 256 QAM	1@1	14.48	14.6	17.55	18.66	0.0735
77	30	70	656000	3840	CP-OFDM 256 QAM	1@187	14.18	14.34	17.27	18.38	0.0689
77	30	70	663000	3945	CP-OFDM QPSK	95@47	19.35	19.43	22.40	23.51	0.2244
77	30	70	663000	3945	CP-OFDM QPSK	1@1	19.27	19.56	22.43	23.54	0.2258
77	30	70	663000	3945	CP-OFDM QPSK	1@187	19.37	19.34	22.37	23.48	0.2226
77	30	70	663000	3945	CP-OFDM 16 QAM	95@47	18.85	18.9	21.89	23.00	0.1993
77	30	70	663000	3945	CP-OFDM 16 QAM	1@1	18.81	19.06	21.95	23.06	0.2022
77	30	70	663000	3945	CP-OFDM 16 QAM	1@187	18.75	18.83	21.80	22.91	0.1955

77	30	70	663000	3945	CP-OFDM 64 QAM	95@47	17.33	17.48	20.42	21.53	0.1421
77	30	70	663000	3945	CP-OFDM 64 QAM	1@1	17.16	17.56	20.37	21.48	0.1408
77	30	70	663000	3945	CP-OFDM 64 QAM	1@187	17.16	17.28	20.23	21.34	0.1362
77	30	70	663000	3945	CP-OFDM 256 QAM	95@47	14.36	14.46	17.42	18.53	0.0713
77	30	70	663000	3945	CP-OFDM 256 QAM	1@1	14.35	14.67	17.52	18.63	0.0730
77	30	70	663000	3945	CP-OFDM 256 QAM	1@187	14.36	14.38	17.38	18.49	0.0706
77	30	80	649334	3740.01	CP-OFDM QPSK	109@54	19.29	19.6	22.46	23.57	0.2274
77	30	80	649334	3740.01	CP-OFDM QPSK	1@1	19.23	19.49	22.37	23.48	0.2230
77	30	80	649334	3740.01	CP-OFDM QPSK	1@215	19.38	19.64	22.52	23.63	0.2308
77	30	80	649334	3740.01	CP-OFDM 16 QAM	109@54	18.82	19.15	22.00	23.11	0.2046
77	30	80	649334	3740.01	CP-OFDM 16 QAM	1@1	18.65	18.98	21.83	22.94	0.1967
77	30	80	649334	3740.01	CP-OFDM 16 QAM	1@215	18.87	19.04	21.97	23.08	0.2031
77	30	80	649334	3740.01	CP-OFDM 64 QAM	109@54	17.37	17.57	20.48	21.59	0.1443
77	30	80	649334	3740.01	CP-OFDM 64 QAM	1@1	17.13	17.37	20.26	21.37	0.1371
77	30	80	649334	3740.01	CP-OFDM 64 QAM	1@215	17.24	17.4	20.33	21.44	0.1393
77	30	80	649334	3740.01	CP-OFDM 256 QAM	109@54	14.33	14.61	17.48	18.59	0.0723
77	30	80	649334	3740.01	CP-OFDM 256 QAM	1@1	14.33	14.63	17.49	18.60	0.0725
77	30	80	649334	3740.01	CP-OFDM 256 QAM	1@215	14.37	14.73	17.56	18.67	0.0737
77	30	80	656000	3840	CP-OFDM QPSK	109@54	19.24	19.37	22.32	23.43	0.2201
77	30	80	656000	3840	CP-OFDM QPSK	1@1	19.38	19.48	22.44	23.55	0.2265
77	30	80	656000	3840	CP-OFDM QPSK	1@215	19.12	19.46	22.30	23.41	0.2195
77	30	80	656000	3840	CP-OFDM 16 QAM	109@54	18.75	18.9	21.84	22.95	0.1971
77	30	80	656000	3840	CP-OFDM 16 QAM	1@1	18.86	18.81	21.85	22.96	0.1975
77	30	80	656000	3840	CP-OFDM 16 QAM	1@215	18.57	18.81	21.70	22.81	0.1911
77	30	80	656000	3840	CP-OFDM 64 QAM	109@54	17.24	17.41	20.34	21.45	0.1395
77	30	80	656000	3840	CP-OFDM 64 QAM	1@1	17.23	17.34	20.30	21.41	0.1382
77	30	80	656000	3840	CP-OFDM 64 QAM	1@215	17	17.19	20.11	21.22	0.1323
77	30	80	656000	3840	CP-OFDM 256 QAM	109@54	14.26	14.38	17.33	18.44	0.0698
77	30	80	656000	3840	CP-OFDM 256 QAM	1@1	14.42	14.56	17.50	18.61	0.0726
77	30	80	656000	3840	CP-OFDM 256 QAM	1@215	14.15	14.43	17.30	18.41	0.0694
77	30	80	662666	3939.99	CP-OFDM QPSK	109@54	19.34	19.43	22.40	23.51	0.2242
77	30	80	662666	3939.99	CP-OFDM QPSK	1@1	19.26	19.61	22.45	23.56	0.2269
77	30	80	662666	3939.99	CP-OFDM QPSK	1@215	19.33	19.44	22.40	23.51	0.2242
77	30	80	662666	3939.99	CP-OFDM 16 QAM	109@54	18.82	18.97	21.91	23.02	0.2003
77	30	80	662666	3939.99	CP-OFDM 16 QAM	1@1	18.66	19.08	21.89	23.00	0.1993
77	30	80	662666	3939.99	CP-OFDM 16 QAM	1@215	18.76	18.8	21.79	22.90	0.1950

77	30	80	662666	3939.99	CP-OFDM 64 QAM	109@54	17.32	17.5	20.42	21.53	0.1423
77	30	80	662666	3939.99	CP-OFDM 64 QAM	1@1	17.12	17.52	20.33	21.44	0.1395
77	30	80	662666	3939.99	CP-OFDM 64 QAM	1@215	17.27	17.26	20.28	21.39	0.1376
77	30	80	662666	3939.99	CP-OFDM 256 QAM	109@54	14.27	14.48	17.39	18.50	0.0707
77	30	80	662666	3939.99	CP-OFDM 256 QAM	1@1	14.33	14.69	17.52	18.63	0.0730
77	30	80	662666	3939.99	CP-OFDM 256 QAM	1@215	14.37	14.48	17.44	18.55	0.0715
77	30	90	649668	3745.02	CP-OFDM QPSK	123@61	19.36	19.6	22.49	23.60	0.2292
77	30	90	649668	3745.02	CP-OFDM QPSK	1@1	19.25	19.53	22.40	23.51	0.2245
77	30	90	649668	3745.02	CP-OFDM QPSK	1@243	19.48	19.66	22.58	23.69	0.2340
77	30	90	649668	3745.02	CP-OFDM 16 QAM	123@61	18.81	19.12	21.98	23.09	0.2036
77	30	90	649668	3745.02	CP-OFDM 16 QAM	1@1	18.74	18.93	21.85	22.96	0.1975
77	30	90	649668	3745.02	CP-OFDM 16 QAM	1@243	18.9	19.08	22.00	23.11	0.2047
77	30	90	649668	3745.02	CP-OFDM 64 QAM	123@61	17.35	17.57	20.47	21.58	0.1439
77	30	90	649668	3745.02	CP-OFDM 64 QAM	1@1	17.22	17.29	20.27	21.38	0.1373
77	30	90	649668	3745.02	CP-OFDM 64 QAM	1@243	17.41	17.38	20.41	21.52	0.1418
77	30	90	649668	3745.02	CP-OFDM 256 QAM	123@61	14.35	14.64	17.51	18.62	0.0727
77	30	90	649668	3745.02	CP-OFDM 256 QAM	1@1	14.36	14.61	17.50	18.61	0.0726
77	30	90	649668	3745.02	CP-OFDM 256 QAM	1@243	14.54	14.76	17.66	18.77	0.0754
77	30	90	656000	3840	CP-OFDM QPSK	123@61	19.26	19.39	22.34	23.45	0.2211
77	30	90	656000	3840	CP-OFDM QPSK	1@1	19.26	19.48	22.38	23.49	0.2234
77	30	90	656000	3840	CP-OFDM QPSK	1@243	19.14	19.39	22.28	23.39	0.2181
77	30	90	656000	3840	CP-OFDM 16 QAM	123@61	18.75	18.86	21.82	22.93	0.1961
77	30	90	656000	3840	CP-OFDM 16 QAM	1@1	18.77	18.84	21.82	22.93	0.1961
77	30	90	656000	3840	CP-OFDM 16 QAM	1@243	18.52	18.66	21.60	22.71	0.1867
77	30	90	656000	3840	CP-OFDM 64 QAM	123@61	17.23	17.41	20.33	21.44	0.1394
77	30	90	656000	3840	CP-OFDM 64 QAM	1@1	17.14	17.34	20.25	21.36	0.1368
77	30	90	656000	3840	CP-OFDM 64 QAM	1@243	17.02	17.19	20.12	21.23	0.1326
77	30	90	656000	3840	CP-OFDM 256 QAM	123@61	14.3	14.37	17.35	18.46	0.0701
77	30	90	656000	3840	CP-OFDM 256 QAM	1@1	14.45	14.57	17.52	18.63	0.0730
77	30	90	656000	3840	CP-OFDM 256 QAM	1@243	14.3	14.38	17.35	18.46	0.0702
77	30	90	662332	3934.98	CP-OFDM QPSK	123@61	19.22	19.45	22.35	23.46	0.2217
77	30	90	662332	3934.98	CP-OFDM QPSK	1@1	19.21	19.55	22.39	23.50	0.2241
77	30	90	662332	3934.98	CP-OFDM QPSK	1@243	19.33	19.28	22.32	23.43	0.2201
77	30	90	662332	3934.98	CP-OFDM 16 QAM	123@61	18.72	18.87	21.81	22.92	0.1957
77	30	90	662332	3934.98	CP-OFDM 16 QAM	1@1	18.7	18.9	21.81	22.92	0.1959
77	30	90	662332	3934.98	CP-OFDM 16 QAM	1@243	18.81	18.74	21.79	22.90	0.1948

77	30	90	662332	3934.98	CP-OFDM 64 QAM	123@61	17.22	17.43	20.34	21.45	0.1395
77	30	90	662332	3934.98	CP-OFDM 64 QAM	1@1	17.03	17.49	20.28	21.39	0.1376
77	30	90	662332	3934.98	CP-OFDM 64 QAM	1@243	17.14	17.22	20.19	21.30	0.1349
77	30	90	662332	3934.98	CP-OFDM 256 QAM	123@61	14.23	14.4	17.33	18.44	0.0698
77	30	90	662332	3934.98	CP-OFDM 256 QAM	1@1	14.37	14.59	17.49	18.60	0.0725
77	30	90	662332	3934.98	CP-OFDM 256 QAM	1@243	14.42	14.38	17.41	18.52	0.0711
77	30	100	650000	3750	CP-OFDM QPSK	137@68	19.42	19.47	22.46	23.57	0.2273
77	30	100	650000	3750	CP-OFDM QPSK	1@1	19.23	19.44	22.35	23.46	0.2216
77	30	100	650000	3750	CP-OFDM QPSK	1@271	19.45	19.62	22.55	23.66	0.2321
77	30	100	650000	3750	CP-OFDM 16 QAM	137@68	18.79	19.12	21.97	23.08	0.2032
77	30	100	650000	3750	CP-OFDM 16 QAM	1@1	18.74	18.91	21.84	22.95	0.1971
77	30	100	650000	3750	CP-OFDM 16 QAM	1@271	18.95	19.07	22.02	23.13	0.2056
77	30	100	650000	3750	CP-OFDM 64 QAM	137@68	17.33	17.52	20.44	21.55	0.1428
77	30	100	650000	3750	CP-OFDM 64 QAM	1@1	17.22	17.22	20.23	21.34	0.1362
77	30	100	650000	3750	CP-OFDM 64 QAM	1@271	17.44	17.52	20.49	21.60	0.1446
77	30	100	650000	3750	CP-OFDM 256 QAM	137@68	14.32	14.53	17.44	18.55	0.0716
77	30	100	650000	3750	CP-OFDM 256 QAM	1@1	14.36	14.51	17.45	18.56	0.0717
77	30	100	650000	3750	CP-OFDM 256 QAM	1@271	14.52	14.73	17.64	18.75	0.0749
77	30	100	656000	3840	CP-OFDM QPSK	137@68	19.27	19.39	22.34	23.45	0.2213
77	30	100	656000	3840	CP-OFDM QPSK	1@1	19.28	19.49	22.40	23.51	0.2242
77	30	100	656000	3840	CP-OFDM QPSK	1@271	19.3	19.42	22.37	23.48	0.2229
77	30	100	656000	3840	CP-OFDM 16 QAM	137@68	18.76	18.89	21.84	22.95	0.1971
77	30	100	656000	3840	CP-OFDM 16 QAM	1@1	18.75	18.86	21.82	22.93	0.1961
77	30	100	656000	3840	CP-OFDM 16 QAM	1@271	18.79	18.81	21.81	22.92	0.1959
77	30	100	656000	3840	CP-OFDM 64 QAM	137@68	17.26	17.44	20.36	21.47	0.1403
77	30	100	656000	3840	CP-OFDM 64 QAM	1@1	17.15	17.33	20.25	21.36	0.1368
77	30	100	656000	3840	CP-OFDM 64 QAM	1@271	17.15	17.2	20.19	21.30	0.1348
77	30	100	656000	3840	CP-OFDM 256 QAM	137@68	14.25	14.4	17.34	18.45	0.0699
77	30	100	656000	3840	CP-OFDM 256 QAM	1@1	14.46	14.47	17.48	18.59	0.0722
77	30	100	656000	3840	CP-OFDM 256 QAM	1@271	14.34	14.41	17.39	18.50	0.0707
77	30	100	662000	3930	CP-OFDM QPSK	137@68	19.28	19.37	22.34	23.45	0.2211
77	30	100	662000	3930	CP-OFDM QPSK	1@1	19.19	19.48	22.35	23.46	0.2217
77	30	100	662000	3930	CP-OFDM QPSK	1@271	19.46	19.32	22.40	23.51	0.2244
77	30	100	662000	3930	CP-OFDM 16 QAM	137@68	18.76	18.84	21.81	22.92	0.1959
77	30	100	662000	3930	CP-OFDM 16 QAM	1@1	18.6	18.97	21.80	22.91	0.1954
77	30	100	662000	3930	CP-OFDM 16 QAM	1@271	18.84	18.72	21.79	22.90	0.1950

77	30	100	662000	3930	CP-OFDM 64 QAM	137@68	17.29	17.45	20.38	21.49	0.1410
77	30	100	662000	3930	CP-OFDM 64 QAM	1@1	17.06	17.5	20.30	21.41	0.1382
77	30	100	662000	3930	CP-OFDM 64 QAM	1@271	17.31	17.26	20.30	21.41	0.1382
77	30	100	662000	3930	CP-OFDM 256 QAM	137@68	14.34	14.37	17.37	18.48	0.0704
77	30	100	662000	3930	CP-OFDM 256 QAM	1@1	14.34	14.62	17.49	18.60	0.0725
77	30	100	662000	3930	CP-OFDM 256 QAM	1@271	14.5	14.42	17.47	18.58	0.0721

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Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	-0.26041	PASS	NV
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	-0.00361	PASS	LV
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	-0.00549	PASS	HV
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	-0.00792	PASS	-30°C
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	-0.00643	PASS	-20°C
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	-0.00715	PASS	-10°C
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	-0.00809	PASS	0°C
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	-0.00808	PASS	10°C
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	-0.00769	PASS	20°C
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	-0.00487	PASS	30°C
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	-0.00845	PASS	40°C
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	-0.00898	PASS	50°C

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	CP-OFDM QPSK	51@0	10.92	13	PASS
77	30	20	647334	3710.01	CP-OFDM QPSK	1@0	10.15	13	PASS
77	30	20	656000	3840.0	CP-OFDM QPSK	51@0	10.45	13	PASS
77	30	20	656000	3840.0	CP-OFDM QPSK	1@0	10.56	13	PASS
77	30	20	664666	3969.99	CP-OFDM QPSK	51@0	10.68	13	PASS
77	30	20	664666	3969.99	CP-OFDM QPSK	1@0	10.81	13	PASS

N77(20M)_CP-
OFDM_QPSK_Outer_Full_Low_CH



N77(20M)_CP-
OFDM_QPSK_Edge_1RB_Left_Low_CH



N77(20M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



N77(20M)_CP-
OFDM_QPSK_Edge_1RB_Left_Mid_CH



N77(20M)_CP-
OFDM_QPSK_Outer_Full_High_CH



N77(20M)_CP-
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	CP-OFDM QPSK	51@0	18.214	19.46
77	30	20	656000	3840.0	CP-OFDM 16 QAM	51@0	18.211	19.83
77	30	20	656000	3840.0	CP-OFDM 64 QAM	51@0	18.221	19.94
77	30	20	656000	3840.0	CP-OFDM 256 QAM	51@0	18.191	19.45
77	30	30	656000	3840.0	CP-OFDM QPSK	78@0	27.861	29.18
77	30	30	656000	3840.0	CP-OFDM 16 QAM	78@0	27.854	29.61
77	30	30	656000	3840.0	CP-OFDM 64 QAM	78@0	27.789	29.56
77	30	30	656000	3840.0	CP-OFDM 256 QAM	78@0	27.809	29.16
77	30	40	656000	3840.0	CP-OFDM QPSK	106@0	37.842	39.53
77	30	40	656000	3840.0	CP-OFDM 16 QAM	106@0	37.881	39.52
77	30	40	656000	3840.0	CP-OFDM 64 QAM	106@0	37.741	39.6
77	30	40	656000	3840.0	CP-OFDM 256 QAM	106@0	37.731	39.66
77	30	50	656000	3840.0	CP-OFDM QPSK	133@0	47.437	49.52
77	30	50	656000	3840.0	CP-OFDM 16 QAM	133@0	47.446	49.42
77	30	50	656000	3840.0	CP-OFDM 64 QAM	133@0	47.368	49.61
77	30	50	656000	3840.0	CP-OFDM 256 QAM	133@0	47.451	49.34
77	30	60	656000	3840.0	CP-OFDM QPSK	162@0	57.728	59.83
77	30	60	656000	3840.0	CP-OFDM 16 QAM	162@0	57.744	60.14
77	30	60	656000	3840.0	CP-OFDM 64 QAM	162@0	57.825	59.87
77	30	60	656000	3840.0	CP-OFDM 256 QAM	162@0	57.827	60.19
77	30	70	656000	3840.0	CP-OFDM QPSK	189@0	67.514	69.8
77	30	70	656000	3840.0	CP-OFDM 16 QAM	189@0	67.401	69.73
77	30	70	656000	3840.0	CP-OFDM 64 QAM	189@0	67.442	69.76
77	30	70	656000	3840.0	CP-OFDM 256 QAM	189@0	67.467	69.76
77	30	80	656000	3840.0	CP-OFDM QPSK	217@0	77.517	80.37

77	30	80	656000	3840.0	CP-OFDM 16 QAM	217@0	77.445	80.31
77	30	80	656000	3840.0	CP-OFDM 64 QAM	217@0	77.45	80.38
77	30	80	656000	3840.0	CP-OFDM 256 QAM	217@0	77.451	80.08
77	30	90	656000	3840.0	CP-OFDM QPSK	245@0	87.506	90.43
77	30	90	656000	3840.0	CP-OFDM 16 QAM	245@0	87.475	90.61
77	30	90	656000	3840.0	CP-OFDM 64 QAM	245@0	87.559	90.29
77	30	90	656000	3840.0	CP-OFDM 256 QAM	245@0	87.554	90.26
77	30	100	656000	3840.0	CP-OFDM QPSK	273@0	97.286	100.7
77	30	100	656000	3840.0	CP-OFDM 16 QAM	273@0	97.385	100.7
77	30	100	656000	3840.0	CP-OFDM 64 QAM	273@0	97.556	100.8
77	30	100	656000	3840.0	CP-OFDM 256 QAM	273@0	97.429	100.7