

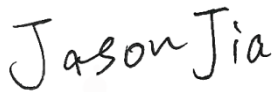
# FCC RF Test Report

APPLICANT : Motorola Mobility LLC  
EQUIPMENT : Mobile Cellular Phone  
BRAND NAME : Motorola  
MODEL NAME : XT2149-1  
FCC ID : IHDT56ZW1  
STANDARD : 47 CFR Part 2, Part 27 Subpart Q  
CLASSIFICATION : PCS Licensed Transmitter Held to Ear (PCE)  
TEST DATE(S) : Jun. 28, 2021 ~ Jul. 21, 2021

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

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

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



Reviewed by: Jason Jia / Supervisor



Approved by: Alex Wang / Manager



**Sporton International (Kunshan) Inc.**

No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300  
People's Republic of China



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## REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG141508-02B	Rev. 01	Initial issue of report	Jul. 19, 2021
FG141508-02B	Rev. 02	Add SA n78 and 3CC EN-DC combination	Jul. 27, 2021

## SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
3.5	§27.50 (k)(4)	Peak-to-Average Ratio	<13dB	PASS	
3.6	§27.50 (k)(3)	EIRP	EIRP < 1W (30dBm)	PASS	-
3.7	§2.1049	Occupied Bandwidth	Reporting Only	PASS	-
3.8	§2.1051 §27.53 (n)(2)	Conducted Band Edge Measurement	-13dBm/MHz	PASS	-
3.9	§2.1051 §27.53 (n)(2)	Conducted Spurious Emission	-13dBm/MHz	PASS	-
3.10	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within the band	PASS	-
4.4	§2.1053 §27.53 (n)(2)	Radiated Spurious Emission	-13dBm/MHz	PASS	Under limit 37.94 dB at 13806.00 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

Motorola Mobility LLC  
222 W, Merchandise Mart Plaza, Chicago IL 60654 USA

## 1.2 Manufacturer

Motorola Mobility LLC  
222 W, Merchandise Mart Plaza, Chicago IL 60654 USA

## 1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2149-1
FCC ID	IHDT56ZW1
EUT supports Radios application	GSM/WCDMA/LTE/5G NR/NFC WLAN 2.4GHz 802.11b/g/n HT20 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE FM Receiver and GNSS
IMEI Code	Conducted: N/A Radiation: 358869830068017/358869830068025/354192230010560
HW Version	DVT2
SW Version	RRS31.Q2
EUT Stage	Identical Prototype

## 1.4 Product Specification of Equipment Under Test

Product Feature	
Tx/Rx Frequency	5G NR n77/n78: 3450 MHz ~ 3550 MHz
Bandwidth	5G NR n77/n78 : 10MHz / 15MHz / 20MHz / 40MHz / 50MHz / 60MHz / 70MHz / 80MHz / 90MHz / 100MHz
SCS	30kHz
Maximum Output Power to Antenna	5G NR n77 : 22.93 dBm 5G NR n78 : 23.31 dBm
Antenna Gain	5G NR n77: -4.05 dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

Remark:

1. 5G NR bands supports SA(n78) and NSA(n77/n78) mode only. For SA/NSA mode of all 5G NR, we only show the maximum power combination of NSA combinations in the report.
2. For modulation of CP-OFDM and DFT-s-OFDM, the maximum power of CP-OFDM is lower than DFT-s-OFDM modulation, therefore, we chose higher power (DFT-s-OFDM modulation) to perform all tests and show in the report.

## 1.5 Modification of EUT

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

## 1.6 Maximum EIRP Power and Emission Designator

5G NR n77/n78 (EN DC_41A-n77A/ EN DC_5A-n78A)		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
10	3455.01 ~ 3544.98	0.0822	8M58G7D	0.0655	8M60W7D
15	3457.50 ~ 3542.49	0.0826	13M6G7D	0.0673	13M6W7D
20	3460.02 ~ 3540.00	0.0826	18M2G7D	0.0659	18M2W7D
40	3470.01 ~ 3529.98	0.0828	37M8G7D	0.0667	37M9W7D
50	3475.02 ~ 3525.00	0.0841	47M4G7D	0.0658	47M5W7D
60	3480.00 ~ 3519.99	0.0820	57M9G7D	0.0658	57M8W7D
70	3485.01 ~ 3514.98	0.0828	67M6G7D	0.0655	67M6W7D
80	3490.02 ~ 3510.00	0.0818	77M5G7D	0.0653	77M6W7D
90	3495.00 ~ 3504.99	0.0824	87M4G7D	0.0650	87M4W7D
100	3500.01 ~ 3500.01	0.0843	97M3G7D	0.0643	97M4W7D

### Note:

1. 5G NR Band n78 overlaps the entire frequency range of Band n77. Therefore, the test results of Conducted provided in this report covers Band n78 as well as Band n77.
2. All modulations have been evaluation, only the worst test results of PSK & QAM are shown in the report .

## 1.7 Testing Site

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

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

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

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

Test data subcontracted: conducted test items in section 3.1 ~ 3.10 of this report.

## 1.8 Test Software

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

## 1.9 Applied Standards

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

- ♦ 47 CFR Part 2, Part 27 Subpart Q
- ♦ ANSI C63.26-2015

- ♦ FCC KDB 971168 Power Meas License Digital Systems D01 v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01

**Remark:**

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

## 1.10 Specification of Accessory

Specification of Accessory				
AC Adapter 1(US)	Brand Name	Motorola (Chenyang)	Model Name	MC-101
AC Adapter 1(AU)	Brand Name	Motorola (Chenyang)	Model Name	MC-105
AC Adapter 2(US)	Brand Name	Motorola (Salom)	Model Name	MC-101
AC Adapter 2(AU)	Brand Name	Motorola (Salom)	Model Name	MC-105
AC Adapter 3(US)	Brand Name	Motorola (Aohai)	Model Name	MC-101
AC Adapter 3(AU)	Brand Name	Motorola (Aohai)	Model Name	MC-105
AC Adapter 4(US)	Brand Name	Motorola (Chenyang)	Model Name	MC-201
AC Adapter 4(EU)	Brand Name	Motorola (Chenyang)	Model Name	MC-202
AC Adapter 4(UK)	Brand Name	Motorola (Chenyang)	Model Name	MC-203
AC Adapter 4(BR)	Brand Name	Motorola (Chenyang)	Model Name	MC-207
AC Adapter 5(US)	Brand Name	Motorola (Acbel)	Model Name	MC-201
AC Adapter 5(EU)	Brand Name	Motorola (Acbel)	Model Name	MC-202
AC Adapter 5(UK)	Brand Name	Motorola (Acbel)	Model Name	MC-203
AC Adapter 5(KR)	Brand Name	Motorola (Acbel)	Model Name	MC-210
AC Adapter 5(Chile)	Brand Name	Motorola (Acbel)	Model Name	MC-209
AC Adapter 6 (BR Local build)	Brand Name	Motorola(Flex)	Model Name	MC-207
AC Adapter 7 (BR Local build)	Brand Name	Motorola(Salcomp)	Model Name	MC-207
Battery 1	Brand Name	Motorola (ATL)	Model Name	MS50
Battery 2	Brand Name	Motorola (Jiade)	Model Name	MS50
Earphone 1	Brand Name	Motorola (Lyand)	Model Name	MH191(SH38C81577)
Earphone 2	Brand Name	Motorola(LCHSE)	Model Name	MH191(SH38C81576)
Earphone 3	Brand Name	Motorola (New Leader)	Model Name	MH202(S928D09678)
USB Cable 1	Brand Name	Motorola (I SHENG)	Model Name	SC18C28955
USB Cable 2	Brand Name	Motorola (BRL)	Model Name	S928D13694
USB Cable 3	Brand Name	Motorola (Hexin)	Model Name	S928D13695



## 2 Test Configuration of Equipment Under Test

### 2.1 Test Mode

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

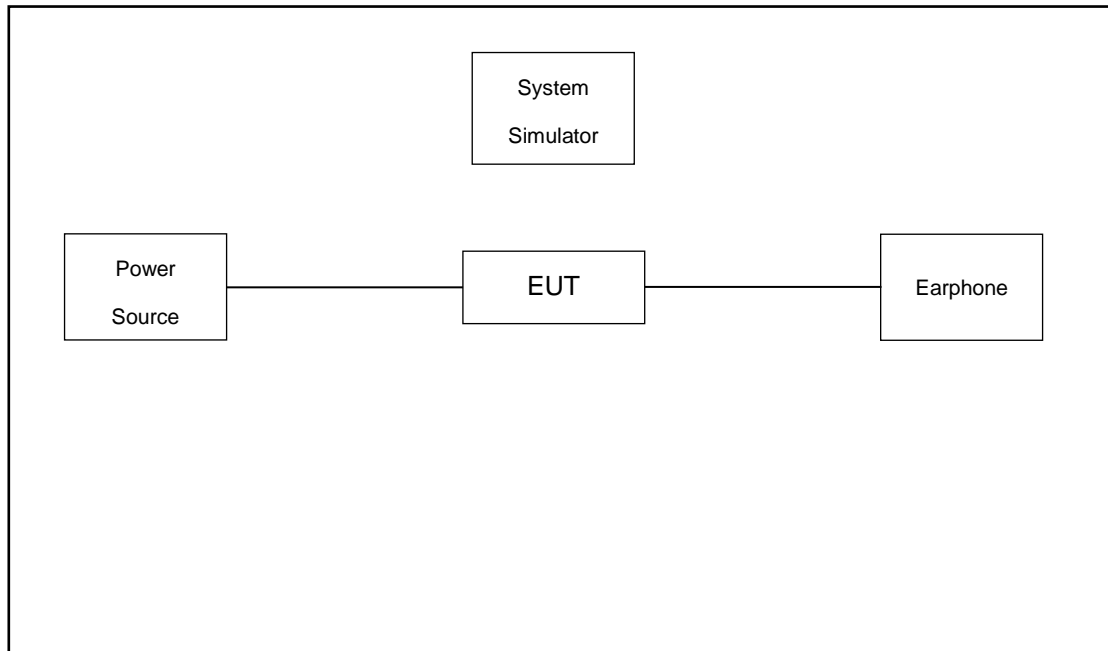
Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

Test Cases	Band	Bandwidth (MHz)	Modulation	RB #	Test Channel
		eg. 5M, 10M, 15M, 20M	eg. QPSK, 16QAM, 64QAM	1RB, Partial RB, Full RB	L/M/H
Max. Output Power	5G n77	10M, 15M, 20M, 40M, 50M, 60M, 70M, 80M, 90M, 100M	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB, Partial RB, Full RB	L, M, H
	5G n78	10M, 15M, 20M, 40M, 50M, 60M, 70M, 80M, 90M, 100M	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB, Partial RB, Full RB	L, M, H
Peak-to-Average Ratio	5G n78	20M	PI/2 BPSK, QPSK	1RB, Full RB	L, M, H
E.I.R.P	5G n78	10M, 15M, 20M, 40M, 50M, 60M, 70M, 80M, 90M, 100M	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB, Partial RB, Full RB	L, M, H
26dB and 99% Bandwidth	5G n78	10M, 15M, 20M, 40M, 50M, 60M, 70M, 80M, 90M, 100M	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	Full RB	M
Conducted Band Edge	5G n78	10M, 60M, 100M	PI/2 BPSK, QPSK	1RB, Full RB	L, H
Conducted Spurious Emission	5G n78	10M, 60M, 100M	PI/2 BPSK, QPSK	1RB	L, M, H
Frequency Stability	5G n78	20M	QPSK	Full RB	M
Radiated Spurious Emission	5G n77	Worst case from maximum power			M
	5G n78	Worst case from maximum power			M

**Note:**

1. 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.
2. 5G NR Band n78 overlaps the entire frequency range of Band n77. Therefore, the test results provided in this report covers Band n78 as well as Band n77.
3. 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 and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

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

*Offset = RF cable loss + attenuator factor.*

Following shows an offset computation example with cable loss 1.78 dB and 10dB attenuator.

Example :

$$\begin{aligned}
 \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\
 &= 1.78 + 10 = 11.78 \text{ (dB)}
 \end{aligned}$$

## 2.5 Frequency List of Low/Middle/High Channels

5G n77/n78 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	-	633334	-
	Frequency	-	3500.01	-
90	Channel	633000	633334	633666
	Frequency	3495.00	3500.01	3504.99
80	Channel	632668	633334	634000
	Frequency	3490.02	3500.01	3510.00
70	Channel	632334	633334	634332
	Frequency	3485.01	3500.01	3514.98
60	Channel	632000	633334	634666
	Frequency	3480.00	3500.01	3519.99
50	Channel	631668	633334	635000
	Frequency	3475.02	3500.01	3525.00
40	Channel	631334	633334	635332
	Frequency	3470.01	3500.01	3529.98
20	Channel	630668	633334	636000
	Frequency	3460.02	3500.01	3540.00
15	Channel	630500	633334	636166
	Frequency	3457.50	3500.01	3542.49
10	Channel	630334	633334	636332
	Frequency	3455.01	3500.01	3544.98

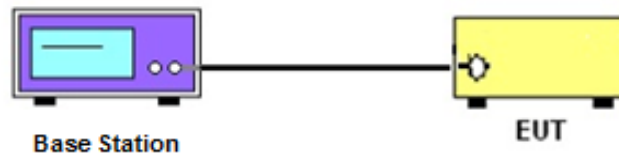
### 3 Conducted Test Items

#### 3.1 Measuring Instruments

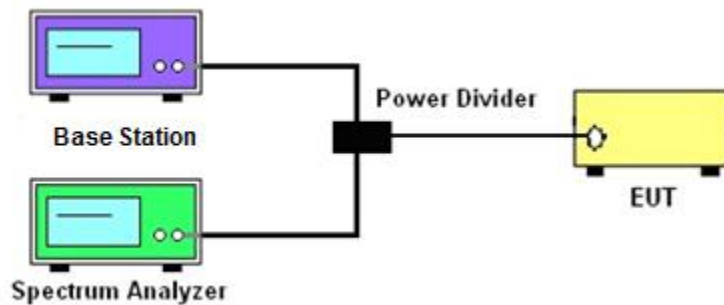
See list of measuring instruments of this test report.

#### 3.2 Test Setup

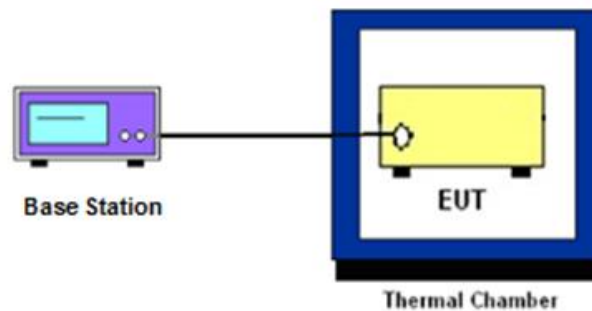
##### 3.2.1 Conducted Output Power



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



##### 3.2.3 Frequency Stability



### 3.3 Test Result of Conducted Test

Please refer to Appendix A.



## **3.4 Conducted Output Power Measurement**

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

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

### **3.4.2 Test Procedures**

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

## 3.5 Peak-to-Average Ratio

### 3.5.1 Description of the PAR Measurement

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

### 3.5.2 Test Procedures

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

## 3.6 EIRP

### 3.6.1 Description of EIRP Limit

#### § 27.50 (k)(3)

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

### 3.6.2 Test Procedures

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

## 3.7 Occupied Bandwidth

### 3.7.1 Description of Occupied Bandwidth Measurement

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

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

### 3.7.2 Test Procedures

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



## 3.8 Conducted Band Edge Measurement

### 3.8.1 Description of Conducted Band Edge Measurement

#### § 27.53 (n)(2)

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

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

### 3.8.2 Test Procedures

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

## 3.9 Conducted Spurious Emission Measurement

### 3.9.1 Description of Conducted Spurious Emission Measurement

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

It is measured by means of a calibrated spectrum analyzer and scanned from 9 kHz up to a frequency including its 10<sup>th</sup> harmonic.

### 3.9.2 Test Procedures

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

## 3.10 Frequency Stability Measurement

### 3.10.1 Description of Frequency Stability Measurement

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

### 3.10.2 Test Procedures for Temperature Variation

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

### 3.10.3 Test Procedures for Voltage Variation

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

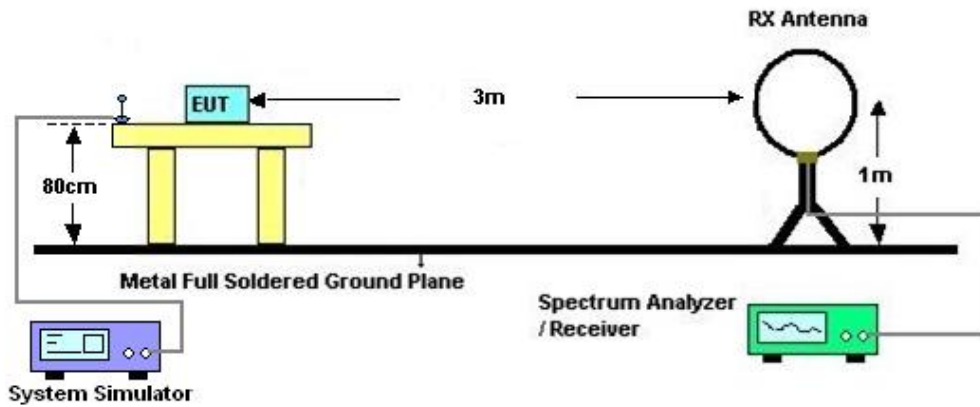
## 4 Radiated Test Items

### 4.1 Measuring Instruments

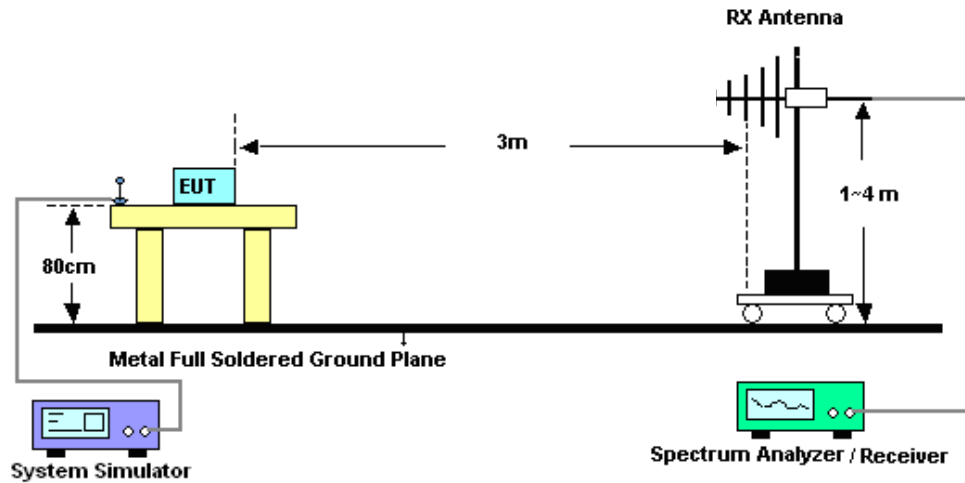
See list of measuring instruments of this test report.

### 4.2 Test Setup

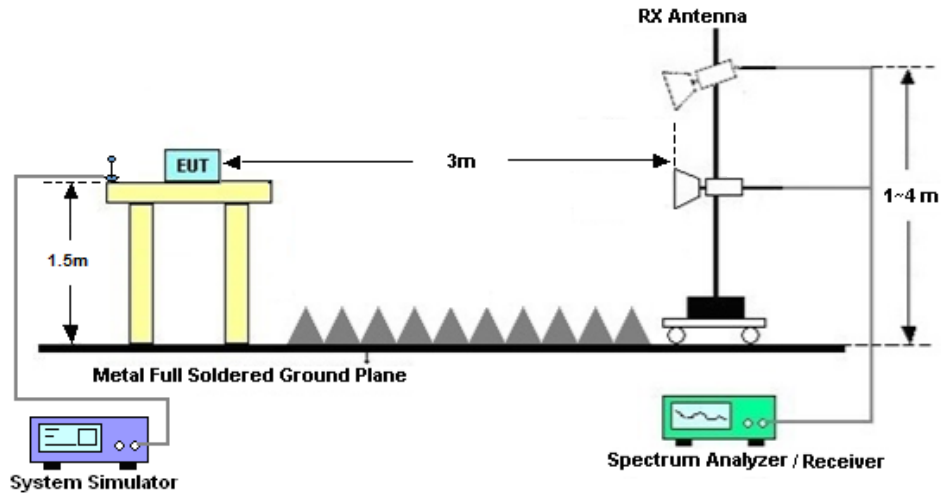
#### 4.2.1 For radiated test below 30MHz



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



### 4.2.3 For radiated test above 1GHz



### 4.3 Test Result of Radiated Test

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

Please refer to Appendix B.

## 4.4 Radiated Spurious Emission Measurement

### 4.4.1 Description of Radiated Spurious Emission

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

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

### 4.4.2 Test Procedures

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



## 5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 08, 2021	Jul. 13, 2021	Apr. 07, 2022	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-04 265	60.06.020.007 7	0.4GHz~26.5GHz	Dec. 26, 2020	Jul. 13, 2021	Dec. 25, 2021	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 22, 2020	Jul. 13, 2021	Jul. 21, 2021	Conducted (TH01-SZ)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz-44G,MAX 30dB	Apr. 13, 2021	Jun. 28, 2021~ Jul. 21, 2021	Apr. 12, 2022	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 1, 2020	Jun. 28, 2021~ Jul. 21, 2021	Oct. 31, 2021	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	Jun. 07, 2021	Jun. 28, 2021~ Jul. 21, 2021	Jun. 06, 2022	Radiation (03CH04-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	1356	1GHz~18GHz	Apr. 18, 2021	Jun. 28, 2021~ Jul. 21, 2021	Apr. 17, 2022	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101115	18GHz~40GHz	Jan. 06, 2021	Jun. 28, 2021~ Jul. 21, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Jan. 06, 2021	Jun. 28, 2021~ Jul. 21, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40G GA	060728	18~40GHz	Jan. 07, 2021	Jun. 28, 2021~ Jul. 21, 2021	Jan. 06, 2022	Radiation (03CH04-KS)
high gain Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P	2025788	1Ghz-18Ghz	Jan. 06, 2021	Jun. 28, 2021~ Jul. 21, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	Keysight	83017A	MY57280106	500MHz~26.5GHz	Oct. 14, 2020	Jun. 28, 2021~ Jul. 21, 2021	Oct. 13, 2021	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Jun. 28, 2021~ Jul. 21, 2021	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jun. 28, 2021~ Jul. 21, 2021	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Jun. 28, 2021~ Jul. 21, 2021	NCR	Radiation (03CH04-KS)

NCR: No Calibration Required

## 6 Uncertainty of Evaluation

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

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

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

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

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

**FR1 N77**

LTE Band: 41, LTE BW: 10M, LTE ARFCN: Mid.

**Transmitter Conducted Output Power**

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)
77	30	10	630334	3455.01	DFT-s-OFDM PI/2 BPSK	12@6	22.76
77	30	10	630334	3455.01	DFT-s-OFDM PI/2 BPSK	1@1	22.58
77	30	10	630334	3455.01	DFT-s-OFDM PI/2 BPSK	1@22	22.6
77	30	10	630334	3455.01	DFT-s-OFDM QPSK	12@6	22.79
77	30	10	630334	3455.01	DFT-s-OFDM QPSK	1@1	22.62
77	30	10	630334	3455.01	DFT-s-OFDM QPSK	1@22	22.63
77	30	10	630334	3455.01	DFT-s-OFDM 16 QAM	12@6	21.69
77	30	10	630334	3455.01	DFT-s-OFDM 16 QAM	1@1	21.49
77	30	10	630334	3455.01	DFT-s-OFDM 16 QAM	1@22	21.69
77	30	10	630334	3455.01	DFT-s-OFDM 64 QAM	12@6	20.16
77	30	10	630334	3455.01	DFT-s-OFDM 64 QAM	1@1	20.28
77	30	10	630334	3455.01	DFT-s-OFDM 64 QAM	1@22	20.2
77	30	10	630334	3455.01	DFT-s-OFDM 256 QAM	12@6	18.24
77	30	10	630334	3455.01	DFT-s-OFDM 256 QAM	1@1	18.12
77	30	10	630334	3455.01	DFT-s-OFDM 256 QAM	1@22	18.34
77	30	10	630334	3455.01	CP-OFDM QPSK	12@6	21.19
77	30	10	630334	3455.01	CP-OFDM QPSK	1@1	21.19
77	30	10	630334	3455.01	CP-OFDM QPSK	1@22	21.07
77	30	10	633334	3500.01	DFT-s-OFDM PI/2 BPSK	12@6	22.7
77	30	10	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	22.65
77	30	10	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@22	22.58

77	30	10	633334	3500.01	DFT-s-OFDM QPSK	12@6	22.73
77	30	10	633334	3500.01	DFT-s-OFDM QPSK	1@1	22.57
77	30	10	633334	3500.01	DFT-s-OFDM QPSK	1@22	22.57
77	30	10	633334	3500.01	DFT-s-OFDM 16 QAM	12@6	21.77
77	30	10	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	21.77
77	30	10	633334	3500.01	DFT-s-OFDM 16 QAM	1@22	21.64
77	30	10	633334	3500.01	DFT-s-OFDM 64 QAM	12@6	20.18
77	30	10	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	19.99
77	30	10	633334	3500.01	DFT-s-OFDM 64 QAM	1@22	19.98
77	30	10	633334	3500.01	DFT-s-OFDM 256 QAM	12@6	18.26
77	30	10	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	18.29
77	30	10	633334	3500.01	DFT-s-OFDM 256 QAM	1@22	18.22
77	30	10	633334	3500.01	CP-OFDM QPSK	12@6	21.19
77	30	10	633334	3500.01	CP-OFDM QPSK	1@1	21.25
77	30	10	633334	3500.01	CP-OFDM QPSK	1@22	21.21
77	30	10	636332	3544.98	DFT-s-OFDM PI/2 BPSK	12@6	22.9
77	30	10	636332	3544.98	DFT-s-OFDM PI/2 BPSK	1@1	22.75
77	30	10	636332	3544.98	DFT-s-OFDM PI/2 BPSK	1@22	22.72
77	30	10	636332	3544.98	DFT-s-OFDM QPSK	12@6	22.9
77	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@1	22.75
77	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@22	22.74
77	30	10	636332	3544.98	DFT-s-OFDM 16 QAM	12@6	21.84
77	30	10	636332	3544.98	DFT-s-OFDM 16 QAM	1@1	21.66
77	30	10	636332	3544.98	DFT-s-OFDM 16 QAM	1@22	21.69
77	30	10	636332	3544.98	DFT-s-OFDM 64 QAM	12@6	20.36
77	30	10	636332	3544.98	DFT-s-OFDM 64 QAM	1@1	20.17
77	30	10	636332	3544.98	DFT-s-OFDM 64 QAM	1@22	20.49

77	30	10	636332	3544.98	DFT-s-OFDM 256 QAM	12@6	18.46
77	30	10	636332	3544.98	DFT-s-OFDM 256 QAM	1@1	18.28
77	30	10	636332	3544.98	DFT-s-OFDM 256 QAM	1@22	18.47
77	30	10	636332	3544.98	CP-OFDM QPSK	12@6	21.42
77	30	10	636332	3544.98	CP-OFDM QPSK	1@1	21.34
77	30	10	636332	3544.98	CP-OFDM QPSK	1@22	21.38
77	30	15	630500	3457.5	DFT-s-OFDM PI/2 BPSK	18@9	22.79
77	30	15	630500	3457.5	DFT-s-OFDM PI/2 BPSK	1@1	22.68
77	30	15	630500	3457.5	DFT-s-OFDM PI/2 BPSK	1@36	22.69
77	30	15	630500	3457.5	DFT-s-OFDM QPSK	18@9	22.76
77	30	15	630500	3457.5	DFT-s-OFDM QPSK	1@1	22.64
77	30	15	630500	3457.5	DFT-s-OFDM QPSK	1@36	22.64
77	30	15	630500	3457.5	DFT-s-OFDM 16 QAM	18@9	21.75
77	30	15	630500	3457.5	DFT-s-OFDM 16 QAM	1@1	21.71
77	30	15	630500	3457.5	DFT-s-OFDM 16 QAM	1@36	21.89
77	30	15	630500	3457.5	DFT-s-OFDM 64 QAM	18@9	20.24
77	30	15	630500	3457.5	DFT-s-OFDM 64 QAM	1@1	20.65
77	30	15	630500	3457.5	DFT-s-OFDM 64 QAM	1@36	20.34
77	30	15	630500	3457.5	DFT-s-OFDM 256 QAM	18@9	18.38
77	30	15	630500	3457.5	DFT-s-OFDM 256 QAM	1@1	18.4
77	30	15	630500	3457.5	DFT-s-OFDM 256 QAM	1@36	18.25
77	30	15	630500	3457.5	CP-OFDM QPSK	19@9	21.19
77	30	15	630500	3457.5	CP-OFDM QPSK	1@1	21.25
77	30	15	630500	3457.5	CP-OFDM QPSK	1@36	21.17
77	30	15	633334	3500.01	DFT-s-OFDM PI/2 BPSK	18@9	22.7
77	30	15	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	22.64
77	30	15	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@36	22.54

77	30	15	633334	3500.01	DFT-s-OFDM QPSK	18@9	22.78
77	30	15	633334	3500.01	DFT-s-OFDM QPSK	1@1	22.59
77	30	15	633334	3500.01	DFT-s-OFDM QPSK	1@36	22.57
77	30	15	633334	3500.01	DFT-s-OFDM 16 QAM	18@9	21.62
77	30	15	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	21.77
77	30	15	633334	3500.01	DFT-s-OFDM 16 QAM	1@36	21.74
77	30	15	633334	3500.01	DFT-s-OFDM 64 QAM	18@9	20.2
77	30	15	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	19.94
77	30	15	633334	3500.01	DFT-s-OFDM 64 QAM	1@36	20.2
77	30	15	633334	3500.01	DFT-s-OFDM 256 QAM	18@9	18.32
77	30	15	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	18.24
77	30	15	633334	3500.01	DFT-s-OFDM 256 QAM	1@36	18.27
77	30	15	633334	3500.01	CP-OFDM QPSK	19@9	21.13
77	30	15	633334	3500.01	CP-OFDM QPSK	1@1	21.24
77	30	15	633334	3500.01	CP-OFDM QPSK	1@36	21.18
77	30	15	636166	3542.49	DFT-s-OFDM PI/2 BPSK	18@9	22.89
77	30	15	636166	3542.49	DFT-s-OFDM PI/2 BPSK	1@1	22.66
77	30	15	636166	3542.49	DFT-s-OFDM PI/2 BPSK	1@36	22.71
77	30	15	636166	3542.49	DFT-s-OFDM QPSK	18@9	22.88
77	30	15	636166	3542.49	DFT-s-OFDM QPSK	1@1	22.66
77	30	15	636166	3542.49	DFT-s-OFDM QPSK	1@36	22.74
77	30	15	636166	3542.49	DFT-s-OFDM 16 QAM	18@9	21.81
77	30	15	636166	3542.49	DFT-s-OFDM 16 QAM	1@1	21.75
77	30	15	636166	3542.49	DFT-s-OFDM 16 QAM	1@36	21.95
77	30	15	636166	3542.49	DFT-s-OFDM 64 QAM	18@9	20.31
77	30	15	636166	3542.49	DFT-s-OFDM 64 QAM	1@1	20.36
77	30	15	636166	3542.49	DFT-s-OFDM 64 QAM	1@36	20.73

77	30	15	636166	3542.49	DFT-s-OFDM 256 QAM	18@9	18.46
77	30	15	636166	3542.49	DFT-s-OFDM 256 QAM	1@1	18.37
77	30	15	636166	3542.49	DFT-s-OFDM 256 QAM	1@36	18.43
77	30	15	636166	3542.49	CP-OFDM QPSK	19@9	21.3
77	30	15	636166	3542.49	CP-OFDM QPSK	1@1	21.3
77	30	15	636166	3542.49	CP-OFDM QPSK	1@36	21.32
77	30	20	630668	3460.02	DFT-s-OFDM PI/2 BPSK	25@12	22.85
77	30	20	630668	3460.02	DFT-s-OFDM PI/2 BPSK	1@1	22.61
77	30	20	630668	3460.02	DFT-s-OFDM PI/2 BPSK	1@49	22.57
77	30	20	630668	3460.02	DFT-s-OFDM QPSK	25@12	22.84
77	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@1	22.58
77	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@49	22.6
77	30	20	630668	3460.02	DFT-s-OFDM 16 QAM	25@12	21.81
77	30	20	630668	3460.02	DFT-s-OFDM 16 QAM	1@1	21.56
77	30	20	630668	3460.02	DFT-s-OFDM 16 QAM	1@49	21.58
77	30	20	630668	3460.02	DFT-s-OFDM 64 QAM	25@12	20.25
77	30	20	630668	3460.02	DFT-s-OFDM 64 QAM	1@1	20.27
77	30	20	630668	3460.02	DFT-s-OFDM 64 QAM	1@49	20.24
77	30	20	630668	3460.02	DFT-s-OFDM 256 QAM	25@12	18.38
77	30	20	630668	3460.02	DFT-s-OFDM 256 QAM	1@1	18.24
77	30	20	630668	3460.02	DFT-s-OFDM 256 QAM	1@49	18.27
77	30	20	630668	3460.02	CP-OFDM QPSK	25@121	19.74
77	30	20	630668	3460.02	CP-OFDM QPSK	1@1	21.17
77	30	20	630668	3460.02	CP-OFDM QPSK	1@49	21.23
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	25@12	22.74
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	22.57
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@49	22.53

77	30	20	633334	3500.01	DFT-s-OFDM QPSK	25@12	22.79
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@1	22.69
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@49	22.57
77	30	20	633334	3500.01	DFT-s-OFDM 16 QAM	25@12	21.7
77	30	20	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	21.61
77	30	20	633334	3500.01	DFT-s-OFDM 16 QAM	1@49	21.86
77	30	20	633334	3500.01	DFT-s-OFDM 64 QAM	25@12	20.18
77	30	20	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	20.66
77	30	20	633334	3500.01	DFT-s-OFDM 64 QAM	1@49	20.64
77	30	20	633334	3500.01	DFT-s-OFDM 256 QAM	25@12	18.29
77	30	20	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	18.21
77	30	20	633334	3500.01	DFT-s-OFDM 256 QAM	1@49	18.23
77	30	20	633334	3500.01	CP-OFDM QPSK	25@121	19.72
77	30	20	633334	3500.01	CP-OFDM QPSK	1@1	21.24
77	30	20	633334	3500.01	CP-OFDM QPSK	1@49	21.17
77	30	20	636000	3540.0	DFT-s-OFDM PI/2 BPSK	25@12	22.91
77	30	20	636000	3540.0	DFT-s-OFDM PI/2 BPSK	1@1	22.66
77	30	20	636000	3540.0	DFT-s-OFDM PI/2 BPSK	1@49	22.61
77	30	20	636000	3540.0	DFT-s-OFDM QPSK	25@12	22.87
77	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@1	22.69
77	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@49	22.67
77	30	20	636000	3540.0	DFT-s-OFDM 16 QAM	25@12	21.82
77	30	20	636000	3540.0	DFT-s-OFDM 16 QAM	1@1	21.72
77	30	20	636000	3540.0	DFT-s-OFDM 16 QAM	1@49	21.69
77	30	20	636000	3540.0	DFT-s-OFDM 64 QAM	25@12	20.31
77	30	20	636000	3540.0	DFT-s-OFDM 64 QAM	1@1	20.4
77	30	20	636000	3540.0	DFT-s-OFDM 64 QAM	1@49	20.29

77	30	20	636000	3540.0	DFT-s-OFDM 256 QAM	25@12	18.44
77	30	20	636000	3540.0	DFT-s-OFDM 256 QAM	1@1	18.26
77	30	20	636000	3540.0	DFT-s-OFDM 256 QAM	1@49	18.26
77	30	20	636000	3540.0	CP-OFDM QPSK	25@121	19.81
77	30	20	636000	3540.0	CP-OFDM QPSK	1@1	21.34
77	30	20	636000	3540.0	CP-OFDM QPSK	1@49	21.32
77	30	40	631334	3470.01	DFT-s-OFDM PI/2 BPSK	50@25	22.92
77	30	40	631334	3470.01	DFT-s-OFDM PI/2 BPSK	1@1	22.4
77	30	40	631334	3470.01	DFT-s-OFDM PI/2 BPSK	1@104	22.25
77	30	40	631334	3470.01	DFT-s-OFDM QPSK	50@25	22.92
77	30	40	631334	3470.01	DFT-s-OFDM QPSK	1@1	22.34
77	30	40	631334	3470.01	DFT-s-OFDM QPSK	1@104	22.29
77	30	40	631334	3470.01	DFT-s-OFDM 16 QAM	50@25	21.9
77	30	40	631334	3470.01	DFT-s-OFDM 16 QAM	1@1	21.55
77	30	40	631334	3470.01	DFT-s-OFDM 16 QAM	1@104	21.2
77	30	40	631334	3470.01	DFT-s-OFDM 64 QAM	50@25	20.39
77	30	40	631334	3470.01	DFT-s-OFDM 64 QAM	1@1	19.76
77	30	40	631334	3470.01	DFT-s-OFDM 64 QAM	1@104	19.7
77	30	40	631334	3470.01	DFT-s-OFDM 256 QAM	50@25	18.51
77	30	40	631334	3470.01	DFT-s-OFDM 256 QAM	1@1	17.99
77	30	40	631334	3470.01	DFT-s-OFDM 256 QAM	1@104	17.95
77	30	40	631334	3470.01	CP-OFDM QPSK	53@26	21.35
77	30	40	631334	3470.01	CP-OFDM QPSK	1@1	20.97
77	30	40	631334	3470.01	CP-OFDM QPSK	1@104	20.91
77	30	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@25	22.81
77	30	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	22.37
77	30	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@104	22.33



77	30	40	633334	3500.01	DFT-s-OFDM QPSK	50@25	22.79
77	30	40	633334	3500.01	DFT-s-OFDM QPSK	1@1	22.32
77	30	40	633334	3500.01	DFT-s-OFDM QPSK	1@104	22.29
77	30	40	633334	3500.01	DFT-s-OFDM 16 QAM	50@25	21.83
77	30	40	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	21.32
77	30	40	633334	3500.01	DFT-s-OFDM 16 QAM	1@104	21.25
77	30	40	633334	3500.01	DFT-s-OFDM 64 QAM	50@25	20.29
77	30	40	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	20.02
77	30	40	633334	3500.01	DFT-s-OFDM 64 QAM	1@104	19.68
77	30	40	633334	3500.01	DFT-s-OFDM 256 QAM	50@25	18.43
77	30	40	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	18.07
77	30	40	633334	3500.01	DFT-s-OFDM 256 QAM	1@104	17.93
77	30	40	633334	3500.01	CP-OFDM QPSK	53@26	21.27
77	30	40	633334	3500.01	CP-OFDM QPSK	1@1	20.89
77	30	40	633334	3500.01	CP-OFDM QPSK	1@104	20.89
77	30	40	635332	3529.98	DFT-s-OFDM PI/2 BPSK	50@25	22.89
77	30	40	635332	3529.98	DFT-s-OFDM PI/2 BPSK	1@1	22.32
77	30	40	635332	3529.98	DFT-s-OFDM PI/2 BPSK	1@104	22.29
77	30	40	635332	3529.98	DFT-s-OFDM QPSK	50@25	22.82
77	30	40	635332	3529.98	DFT-s-OFDM QPSK	1@1	22.3
77	30	40	635332	3529.98	DFT-s-OFDM QPSK	1@104	22.28
77	30	40	635332	3529.98	DFT-s-OFDM 16 QAM	50@25	21.92
77	30	40	635332	3529.98	DFT-s-OFDM 16 QAM	1@1	21.32
77	30	40	635332	3529.98	DFT-s-OFDM 16 QAM	1@104	21.37
77	30	40	635332	3529.98	DFT-s-OFDM 64 QAM	50@25	20.42
77	30	40	635332	3529.98	DFT-s-OFDM 64 QAM	1@1	20.02
77	30	40	635332	3529.98	DFT-s-OFDM 64 QAM	1@104	19.99

77	30	40	635332	3529.98	DFT-s-OFDM 256 QAM	50@25	18.5
77	30	40	635332	3529.98	DFT-s-OFDM 256 QAM	1@1	17.95
77	30	40	635332	3529.98	DFT-s-OFDM 256 QAM	1@104	17.96
77	30	40	635332	3529.98	CP-OFDM QPSK	53@26	21.4
77	30	40	635332	3529.98	CP-OFDM QPSK	1@1	20.91
77	30	40	635332	3529.98	CP-OFDM QPSK	1@104	20.96
77	30	50	631668	3475.02	DFT-s-OFDM PI/2 BPSK	64@32	22.9
77	30	50	631668	3475.02	DFT-s-OFDM PI/2 BPSK	1@1	22.54
77	30	50	631668	3475.02	DFT-s-OFDM PI/2 BPSK	1@131	22.44
77	30	50	631668	3475.02	DFT-s-OFDM QPSK	64@32	22.9
77	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@1	22.58
77	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@131	22.44
77	30	50	631668	3475.02	DFT-s-OFDM 16 QAM	64@32	21.92
77	30	50	631668	3475.02	DFT-s-OFDM 16 QAM	1@1	21.49
77	30	50	631668	3475.02	DFT-s-OFDM 16 QAM	1@131	21.36
77	30	50	631668	3475.02	DFT-s-OFDM 64 QAM	64@32	20.39
77	30	50	631668	3475.02	DFT-s-OFDM 64 QAM	1@1	20.53
77	30	50	631668	3475.02	DFT-s-OFDM 64 QAM	1@131	20.15
77	30	50	631668	3475.02	DFT-s-OFDM 256 QAM	64@32	18.48
77	30	50	631668	3475.02	DFT-s-OFDM 256 QAM	1@1	18.18
77	30	50	631668	3475.02	DFT-s-OFDM 256 QAM	1@131	18
77	30	50	631668	3475.02	CP-OFDM QPSK	67@33	21.4
77	30	50	631668	3475.02	CP-OFDM QPSK	1@1	21.22
77	30	50	631668	3475.02	CP-OFDM QPSK	1@131	21.05
77	30	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	64@32	22.85
77	30	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	22.53
77	30	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@131	22.48

77	30	50	633334	3500.01	DFT-s-OFDM QPSK	64@32	22.87
77	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@1	22.56
77	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@131	22.54
77	30	50	633334	3500.01	DFT-s-OFDM 16 QAM	64@32	21.91
77	30	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	21.42
77	30	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@131	21.67
77	30	50	633334	3500.01	DFT-s-OFDM 64 QAM	64@32	20.39
77	30	50	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	20.15
77	30	50	633334	3500.01	DFT-s-OFDM 64 QAM	1@131	20.17
77	30	50	633334	3500.01	DFT-s-OFDM 256 QAM	64@32	18.44
77	30	50	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	18.19
77	30	50	633334	3500.01	DFT-s-OFDM 256 QAM	1@131	18.17
77	30	50	633334	3500.01	CP-OFDM QPSK	67@33	21.34
77	30	50	633334	3500.01	CP-OFDM QPSK	1@1	21.24
77	30	50	633334	3500.01	CP-OFDM QPSK	1@131	21.12
77	30	50	635000	3525.0	DFT-s-OFDM PI/2 BPSK	64@32	22.85
77	30	50	635000	3525.0	DFT-s-OFDM PI/2 BPSK	1@1	22.49
77	30	50	635000	3525.0	DFT-s-OFDM PI/2 BPSK	1@131	22.58
77	30	50	635000	3525.0	DFT-s-OFDM QPSK	64@32	22.88
77	30	50	635000	3525.0	DFT-s-OFDM QPSK	1@1	22.41
77	30	50	635000	3525.0	DFT-s-OFDM QPSK	1@131	22.56
77	30	50	635000	3525.0	DFT-s-OFDM 16 QAM	64@32	21.84
77	30	50	635000	3525.0	DFT-s-OFDM 16 QAM	1@1	21.58
77	30	50	635000	3525.0	DFT-s-OFDM 16 QAM	1@131	21.7
77	30	50	635000	3525.0	DFT-s-OFDM 64 QAM	64@32	20.31
77	30	50	635000	3525.0	DFT-s-OFDM 64 QAM	1@1	19.85
77	30	50	635000	3525.0	DFT-s-OFDM 64 QAM	1@131	20.25

77	30	50	635000	3525.0	DFT-s-OFDM 256 QAM	64@32	18.49
77	30	50	635000	3525.0	DFT-s-OFDM 256 QAM	1@1	18.04
77	30	50	635000	3525.0	DFT-s-OFDM 256 QAM	1@131	18.22
77	30	50	635000	3525.0	CP-OFDM QPSK	67@33	21.36
77	30	50	635000	3525.0	CP-OFDM QPSK	1@1	21.1
77	30	50	635000	3525.0	CP-OFDM QPSK	1@131	21.18
77	30	60	632000	3480.0	DFT-s-OFDM PI/2 BPSK	81@40	22.89
77	30	60	632000	3480.0	DFT-s-OFDM PI/2 BPSK	1@1	22.48
77	30	60	632000	3480.0	DFT-s-OFDM PI/2 BPSK	1@160	22.36
77	30	60	632000	3480.0	DFT-s-OFDM QPSK	81@40	22.89
77	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@1	22.51
77	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@160	22.33
77	30	60	632000	3480.0	DFT-s-OFDM 16 QAM	81@40	21.87
77	30	60	632000	3480.0	DFT-s-OFDM 16 QAM	1@1	21.56
77	30	60	632000	3480.0	DFT-s-OFDM 16 QAM	1@160	21.46
77	30	60	632000	3480.0	DFT-s-OFDM 64 QAM	81@40	20.33
77	30	60	632000	3480.0	DFT-s-OFDM 64 QAM	1@1	20.22
77	30	60	632000	3480.0	DFT-s-OFDM 64 QAM	1@160	20.15
77	30	60	632000	3480.0	DFT-s-OFDM 256 QAM	81@40	18.49
77	30	60	632000	3480.0	DFT-s-OFDM 256 QAM	1@1	18.13
77	30	60	632000	3480.0	DFT-s-OFDM 256 QAM	1@160	18.07
77	30	60	632000	3480.0	CP-OFDM QPSK	81@40	21.41
77	30	60	632000	3480.0	CP-OFDM QPSK	1@1	21.06
77	30	60	632000	3480.0	CP-OFDM QPSK	1@160	21
77	30	60	633334	3500.01	DFT-s-OFDM PI/2 BPSK	81@40	22.87
77	30	60	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	22.48
77	30	60	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@160	22.48

77	30	60	633334	3500.01	DFT-s-OFDM QPSK	81@40	22.78
77	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@1	22.39
77	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@160	22.43
77	30	60	633334	3500.01	DFT-s-OFDM 16 QAM	81@40	21.82
77	30	60	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	21.41
77	30	60	633334	3500.01	DFT-s-OFDM 16 QAM	1@160	21.38
77	30	60	633334	3500.01	DFT-s-OFDM 64 QAM	81@40	20.35
77	30	60	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	20.13
77	30	60	633334	3500.01	DFT-s-OFDM 64 QAM	1@160	20.12
77	30	60	633334	3500.01	DFT-s-OFDM 256 QAM	81@40	18.45
77	30	60	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	18.13
77	30	60	633334	3500.01	DFT-s-OFDM 256 QAM	1@160	18.14
77	30	60	633334	3500.01	CP-OFDM QPSK	81@40	21.34
77	30	60	633334	3500.01	CP-OFDM QPSK	1@1	21.05
77	30	60	633334	3500.01	CP-OFDM QPSK	1@160	21.01
77	30	60	634666	3519.99	DFT-s-OFDM PI/2 BPSK	81@40	22.9
77	30	60	634666	3519.99	DFT-s-OFDM PI/2 BPSK	1@1	22.37
77	30	60	634666	3519.99	DFT-s-OFDM PI/2 BPSK	1@160	22.36
77	30	60	634666	3519.99	DFT-s-OFDM QPSK	81@40	22.82
77	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@1	22.4
77	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@160	22.4
77	30	60	634666	3519.99	DFT-s-OFDM 16 QAM	81@40	21.77
77	30	60	634666	3519.99	DFT-s-OFDM 16 QAM	1@1	21.37
77	30	60	634666	3519.99	DFT-s-OFDM 16 QAM	1@160	21.34
77	30	60	634666	3519.99	DFT-s-OFDM 64 QAM	81@40	20.36
77	30	60	634666	3519.99	DFT-s-OFDM 64 QAM	1@1	20.09
77	30	60	634666	3519.99	DFT-s-OFDM 64 QAM	1@160	19.86

77	30	60	634666	3519.99	DFT-s-OFDM 256 QAM	81@40	18.49
77	30	60	634666	3519.99	DFT-s-OFDM 256 QAM	1@1	18.1
77	30	60	634666	3519.99	DFT-s-OFDM 256 QAM	1@160	18.08
77	30	60	634666	3519.99	CP-OFDM QPSK	81@40	21.27
77	30	60	634666	3519.99	CP-OFDM QPSK	1@1	21.03
77	30	60	634666	3519.99	CP-OFDM QPSK	1@160	20.97
77	30	70	632334	3485.01	DFT-s-OFDM PI/2 BPSK	90@45	22.82
77	30	70	632334	3485.01	DFT-s-OFDM PI/2 BPSK	1@1	22.33
77	30	70	632334	3485.01	DFT-s-OFDM PI/2 BPSK	1@187	22.21
77	30	70	632334	3485.01	DFT-s-OFDM QPSK	90@45	22.84
77	30	70	632334	3485.01	DFT-s-OFDM QPSK	1@1	22.33
77	30	70	632334	3485.01	DFT-s-OFDM QPSK	1@187	22.27
77	30	70	632334	3485.01	DFT-s-OFDM 16 QAM	90@45	21.84
77	30	70	632334	3485.01	DFT-s-OFDM 16 QAM	1@1	21.53
77	30	70	632334	3485.01	DFT-s-OFDM 16 QAM	1@187	21.48
77	30	70	632334	3485.01	DFT-s-OFDM 64 QAM	90@45	20.29
77	30	70	632334	3485.01	DFT-s-OFDM 64 QAM	1@1	19.96
77	30	70	632334	3485.01	DFT-s-OFDM 64 QAM	1@187	19.78
77	30	70	632334	3485.01	DFT-s-OFDM 256 QAM	90@45	18.38
77	30	70	632334	3485.01	DFT-s-OFDM 256 QAM	1@1	18.1
77	30	70	632334	3485.01	DFT-s-OFDM 256 QAM	1@187	17.94
77	30	70	632334	3485.01	CP-OFDM QPSK	95@47	21.22
77	30	70	632334	3485.01	CP-OFDM QPSK	1@1	20.95
77	30	70	632334	3485.01	CP-OFDM QPSK	1@187	20.95
77	30	70	633334	3500.01	DFT-s-OFDM PI/2 BPSK	90@45	22.86
77	30	70	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	22.48
77	30	70	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@187	22.34

77	30	70	633334	3500.01	DFT-s-OFDM QPSK	90@45	22.85
77	30	70	633334	3500.01	DFT-s-OFDM QPSK	1@1	22.48
77	30	70	633334	3500.01	DFT-s-OFDM QPSK	1@187	22.32
77	30	70	633334	3500.01	DFT-s-OFDM 16 QAM	90@45	21.81
77	30	70	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	21.51
77	30	70	633334	3500.01	DFT-s-OFDM 16 QAM	1@187	21.48
77	30	70	633334	3500.01	DFT-s-OFDM 64 QAM	90@45	20.34
77	30	70	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	19.99
77	30	70	633334	3500.01	DFT-s-OFDM 64 QAM	1@187	19.6
77	30	70	633334	3500.01	DFT-s-OFDM 256 QAM	90@45	18.4
77	30	70	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	18.29
77	30	70	633334	3500.01	DFT-s-OFDM 256 QAM	1@187	18.19
77	30	70	633334	3500.01	CP-OFDM QPSK	95@47	21.35
77	30	70	633334	3500.01	CP-OFDM QPSK	1@1	21.1
77	30	70	633334	3500.01	CP-OFDM QPSK	1@187	21.03
77	30	70	634332	3514.98	DFT-s-OFDM PI/2 BPSK	90@45	22.81
77	30	70	634332	3514.98	DFT-s-OFDM PI/2 BPSK	1@1	22.28
77	30	70	634332	3514.98	DFT-s-OFDM PI/2 BPSK	1@187	22.38
77	30	70	634332	3514.98	DFT-s-OFDM QPSK	90@45	22.86
77	30	70	634332	3514.98	DFT-s-OFDM QPSK	1@1	22.38
77	30	70	634332	3514.98	DFT-s-OFDM QPSK	1@187	22.33
77	30	70	634332	3514.98	DFT-s-OFDM 16 QAM	90@45	21.78
77	30	70	634332	3514.98	DFT-s-OFDM 16 QAM	1@1	21.38
77	30	70	634332	3514.98	DFT-s-OFDM 16 QAM	1@187	21.39
77	30	70	634332	3514.98	DFT-s-OFDM 64 QAM	90@45	20.29
77	30	70	634332	3514.98	DFT-s-OFDM 64 QAM	1@1	19.97
77	30	70	634332	3514.98	DFT-s-OFDM 64 QAM	1@187	19.64

77	30	70	634332	3514.98	DFT-s-OFDM 256 QAM	90@45	18.42
77	30	70	634332	3514.98	DFT-s-OFDM 256 QAM	1@1	18.15
77	30	70	634332	3514.98	DFT-s-OFDM 256 QAM	1@187	18.12
77	30	70	634332	3514.98	CP-OFDM QPSK	95@47	21.3
77	30	70	634332	3514.98	CP-OFDM QPSK	1@1	20.96
77	30	70	634332	3514.98	CP-OFDM QPSK	1@187	21.04
77	30	80	632668	3490.02	DFT-s-OFDM PI/2 BPSK	108@54	22.79
77	30	80	632668	3490.02	DFT-s-OFDM PI/2 BPSK	1@1	22.22
77	30	80	632668	3490.02	DFT-s-OFDM PI/2 BPSK	1@215	22.04
77	30	80	632668	3490.02	DFT-s-OFDM QPSK	108@54	22.76
77	30	80	632668	3490.02	DFT-s-OFDM QPSK	1@1	22.17
77	30	80	632668	3490.02	DFT-s-OFDM QPSK	1@215	22.16
77	30	80	632668	3490.02	DFT-s-OFDM 16 QAM	108@54	21.8
77	30	80	632668	3490.02	DFT-s-OFDM 16 QAM	1@1	21.22
77	30	80	632668	3490.02	DFT-s-OFDM 16 QAM	1@215	21.27
77	30	80	632668	3490.02	DFT-s-OFDM 64 QAM	108@54	20.15
77	30	80	632668	3490.02	DFT-s-OFDM 64 QAM	1@1	19.44
77	30	80	632668	3490.02	DFT-s-OFDM 64 QAM	1@215	19.76
77	30	80	632668	3490.02	DFT-s-OFDM 256 QAM	108@54	18.41
77	30	80	632668	3490.02	DFT-s-OFDM 256 QAM	1@1	17.95
77	30	80	632668	3490.02	DFT-s-OFDM 256 QAM	1@215	17.85
77	30	80	632668	3490.02	CP-OFDM QPSK	109@54	21.18
77	30	80	632668	3490.02	CP-OFDM QPSK	1@1	20.72
77	30	80	632668	3490.02	CP-OFDM QPSK	1@215	20.72
77	30	80	633334	3500.01	DFT-s-OFDM PI/2 BPSK	108@54	22.89
77	30	80	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	22.29
77	30	80	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@215	22.24



77	30	80	633334	3500.01	DFT-s-OFDM QPSK	108@54	22.85
77	30	80	633334	3500.01	DFT-s-OFDM QPSK	1@1	22.33
77	30	80	633334	3500.01	DFT-s-OFDM QPSK	1@215	22.27
77	30	80	633334	3500.01	DFT-s-OFDM 16 QAM	108@54	21.82
77	30	80	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	21.55
77	30	80	633334	3500.01	DFT-s-OFDM 16 QAM	1@215	21.38
77	30	80	633334	3500.01	DFT-s-OFDM 64 QAM	108@54	20.25
77	30	80	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	19.93
77	30	80	633334	3500.01	DFT-s-OFDM 64 QAM	1@215	19.52
77	30	80	633334	3500.01	DFT-s-OFDM 256 QAM	108@54	18.5
77	30	80	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	18.06
77	30	80	633334	3500.01	DFT-s-OFDM 256 QAM	1@215	18.02
77	30	80	633334	3500.01	CP-OFDM QPSK	109@54	21.37
77	30	80	633334	3500.01	CP-OFDM QPSK	1@1	20.89
77	30	80	633334	3500.01	CP-OFDM QPSK	1@215	20.82
77	30	80	634000	3510.0	DFT-s-OFDM PI/2 BPSK	108@54	22.85
77	30	80	634000	3510.0	DFT-s-OFDM PI/2 BPSK	1@1	22.25
77	30	80	634000	3510.0	DFT-s-OFDM PI/2 BPSK	1@215	22.2
77	30	80	634000	3510.0	DFT-s-OFDM QPSK	108@54	22.85
77	30	80	634000	3510.0	DFT-s-OFDM QPSK	1@1	22.24
77	30	80	634000	3510.0	DFT-s-OFDM QPSK	1@215	22.26
77	30	80	634000	3510.0	DFT-s-OFDM 16 QAM	108@54	21.82
77	30	80	634000	3510.0	DFT-s-OFDM 16 QAM	1@1	21.36
77	30	80	634000	3510.0	DFT-s-OFDM 16 QAM	1@215	21.35
77	30	80	634000	3510.0	DFT-s-OFDM 64 QAM	108@54	20.37
77	30	80	634000	3510.0	DFT-s-OFDM 64 QAM	1@1	19.86
77	30	80	634000	3510.0	DFT-s-OFDM 64 QAM	1@215	19.5

77	30	80	634000	3510.0	DFT-s-OFDM 256 QAM	108@54	18.5
77	30	80	634000	3510.0	DFT-s-OFDM 256 QAM	1@1	18.02
77	30	80	634000	3510.0	DFT-s-OFDM 256 QAM	1@215	18.04
77	30	80	634000	3510.0	CP-OFDM QPSK	109@54	21.28
77	30	80	634000	3510.0	CP-OFDM QPSK	1@1	20.82
77	30	80	634000	3510.0	CP-OFDM QPSK	1@215	20.72
77	30	90	633000	3495.0	DFT-s-OFDM PI/2 BPSK	120@60	22.85
77	30	90	633000	3495.0	DFT-s-OFDM PI/2 BPSK	1@1	22.18
77	30	90	633000	3495.0	DFT-s-OFDM PI/2 BPSK	1@243	22.1
77	30	90	633000	3495.0	DFT-s-OFDM QPSK	120@60	22.82
77	30	90	633000	3495.0	DFT-s-OFDM QPSK	1@1	22.1
77	30	90	633000	3495.0	DFT-s-OFDM QPSK	1@243	22.09
77	30	90	633000	3495.0	DFT-s-OFDM 16 QAM	120@60	21.79
77	30	90	633000	3495.0	DFT-s-OFDM 16 QAM	1@1	21.22
77	30	90	633000	3495.0	DFT-s-OFDM 16 QAM	1@243	20.94
77	30	90	633000	3495.0	DFT-s-OFDM 64 QAM	120@60	20.31
77	30	90	633000	3495.0	DFT-s-OFDM 64 QAM	1@1	19.46
77	30	90	633000	3495.0	DFT-s-OFDM 64 QAM	1@243	19.7
77	30	90	633000	3495.0	DFT-s-OFDM 256 QAM	120@60	18.46
77	30	90	633000	3495.0	DFT-s-OFDM 256 QAM	1@1	17.81
77	30	90	633000	3495.0	DFT-s-OFDM 256 QAM	1@243	17.85
77	30	90	633000	3495.0	CP-OFDM QPSK	123@61	21.24
77	30	90	633000	3495.0	CP-OFDM QPSK	1@1	20.69
77	30	90	633000	3495.0	CP-OFDM QPSK	1@243	20.6
77	30	90	633334	3500.01	DFT-s-OFDM PI/2 BPSK	120@60	22.85
77	30	90	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	22.17
77	30	90	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@243	22.07

77	30	90	633334	3500.01	DFT-s-OFDM QPSK	120@60	22.8
77	30	90	633334	3500.01	DFT-s-OFDM QPSK	1@1	22.13
77	30	90	633334	3500.01	DFT-s-OFDM QPSK	1@243	22.13
77	30	90	633334	3500.01	DFT-s-OFDM 16 QAM	120@60	21.76
77	30	90	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	21.06
77	30	90	633334	3500.01	DFT-s-OFDM 16 QAM	1@243	21.24
77	30	90	633334	3500.01	DFT-s-OFDM 64 QAM	120@60	20.35
77	30	90	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	19.79
77	30	90	633334	3500.01	DFT-s-OFDM 64 QAM	1@243	19.72
77	30	90	633334	3500.01	DFT-s-OFDM 256 QAM	120@60	18.48
77	30	90	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	17.92
77	30	90	633334	3500.01	DFT-s-OFDM 256 QAM	1@243	17.79
77	30	90	633334	3500.01	CP-OFDM QPSK	123@61	21.27
77	30	90	633334	3500.01	CP-OFDM QPSK	1@1	20.79
77	30	90	633334	3500.01	CP-OFDM QPSK	1@243	20.72
77	30	90	633666	3504.99	DFT-s-OFDM PI/2 BPSK	120@60	22.77
77	30	90	633666	3504.99	DFT-s-OFDM PI/2 BPSK	1@1	22.18
77	30	90	633666	3504.99	DFT-s-OFDM PI/2 BPSK	1@243	22.1
77	30	90	633666	3504.99	DFT-s-OFDM QPSK	120@60	22.83
77	30	90	633666	3504.99	DFT-s-OFDM QPSK	1@1	22.2
77	30	90	633666	3504.99	DFT-s-OFDM QPSK	1@243	22.06
77	30	90	633666	3504.99	DFT-s-OFDM 16 QAM	120@60	21.73
77	30	90	633666	3504.99	DFT-s-OFDM 16 QAM	1@1	21.23
77	30	90	633666	3504.99	DFT-s-OFDM 16 QAM	1@243	21
77	30	90	633666	3504.99	DFT-s-OFDM 64 QAM	120@60	20.23
77	30	90	633666	3504.99	DFT-s-OFDM 64 QAM	1@1	19.87
77	30	90	633666	3504.99	DFT-s-OFDM 64 QAM	1@243	19.71

77	30	90	633666	3504.99	DFT-s-OFDM 256 QAM	120@60	18.47
77	30	90	633666	3504.99	DFT-s-OFDM 256 QAM	1@1	17.98
77	30	90	633666	3504.99	DFT-s-OFDM 256 QAM	1@243	17.81
77	30	90	633666	3504.99	CP-OFDM QPSK	123@61	21.24
77	30	90	633666	3504.99	CP-OFDM QPSK	1@1	20.82
77	30	90	633666	3504.99	CP-OFDM QPSK	1@243	20.72
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	135@67	22.93
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	22.05
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@271	21.92
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	135@67	22.81
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@1	22.03
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@271	22
77	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	135@67	21.82
77	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	20.94
77	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@271	21.12
77	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	135@67	20.36
77	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	19.93
77	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@271	19.95
77	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	135@67	18.47
77	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	17.78
77	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@271	17.79
77	30	100	633334	3500.01	CP-OFDM QPSK	137@68	21.31
77	30	100	633334	3500.01	CP-OFDM QPSK	1@1	20.59
77	30	100	633334	3500.01	CP-OFDM QPSK	1@271	20.55

**FR1 N78**

LTE Band: 5, LTE BW: 10M, LTE ARFCN: Mid

**Transmitter Conducted Output Power And ERP/EIRP, ( $G_T - L_C$ )=-4.05dB**

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
78	30	10	630334	3455.01	DFT-s-OFDM PI/2 BPSK	12@6	23.03	18.98	0.0791
78	30	10	630334	3455.01	DFT-s-OFDM PI/2 BPSK	1@1	22.78	18.73	0.0746
78	30	10	630334	3455.01	DFT-s-OFDM PI/2 BPSK	1@22	22.78	18.73	0.0746
78	30	10	630334	3455.01	DFT-s-OFDM QPSK	12@6	22.91	18.86	0.0769
78	30	10	630334	3455.01	DFT-s-OFDM QPSK	1@1	22.74	18.69	0.0740
78	30	10	630334	3455.01	DFT-s-OFDM QPSK	1@22	22.81	18.76	0.0752
78	30	10	630334	3455.01	DFT-s-OFDM 16 QAM	12@6	21.98	17.93	0.0621
78	30	10	630334	3455.01	DFT-s-OFDM 16 QAM	1@1	21.91	17.86	0.0611
78	30	10	630334	3455.01	DFT-s-OFDM 16 QAM	1@22	21.74	17.69	0.0587
78	30	10	630334	3455.01	DFT-s-OFDM 64 QAM	12@6	20.48	16.43	0.0440
78	30	10	630334	3455.01	DFT-s-OFDM 64 QAM	1@1	20.51	16.46	0.0443
78	30	10	630334	3455.01	DFT-s-OFDM 64 QAM	1@22	20.47	16.42	0.0439
78	30	10	630334	3455.01	DFT-s-OFDM 256 QAM	12@6	18.57	14.52	0.0283
78	30	10	630334	3455.01	DFT-s-OFDM 256 QAM	1@1	18.62	14.57	0.0286
78	30	10	630334	3455.01	DFT-s-OFDM 256 QAM	1@22	18.47	14.42	0.0277
78	30	10	630334	3455.01	CP-OFDM QPSK	12@6	21.36	17.31	0.0538
78	30	10	630334	3455.01	CP-OFDM QPSK	1@1	21.45	17.4	0.0550
78	30	10	630334	3455.01	CP-OFDM QPSK	1@22	21.39	17.34	0.0542

78	30	10	633334	3500.01	DFT-s-OFDM PI/2 BPSK	12@6	22.86	18.81	0.0760
78	30	10	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	22.8	18.75	0.0750
78	30	10	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@22	22.77	18.72	0.0745
78	30	10	633334	3500.01	DFT-s-OFDM QPSK	12@6	22.86	18.81	0.0760
78	30	10	633334	3500.01	DFT-s-OFDM QPSK	1@1	22.84	18.79	0.0757
78	30	10	633334	3500.01	DFT-s-OFDM QPSK	1@22	22.76	18.71	0.0743
78	30	10	633334	3500.01	DFT-s-OFDM 16 QAM	12@6	21.88	17.83	0.0607
78	30	10	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	21.9	17.85	0.0610
78	30	10	633334	3500.01	DFT-s-OFDM 16 QAM	1@22	22.1	18.05	0.0638
78	30	10	633334	3500.01	DFT-s-OFDM 64 QAM	12@6	20.44	16.39	0.0436
78	30	10	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	20.52	16.47	0.0444
78	30	10	633334	3500.01	DFT-s-OFDM 64 QAM	1@22	20.44	16.39	0.0436
78	30	10	633334	3500.01	DFT-s-OFDM 256 QAM	12@6	18.58	14.53	0.0284
78	30	10	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	18.47	14.42	0.0277
78	30	10	633334	3500.01	DFT-s-OFDM 256 QAM	1@22	18.41	14.36	0.0273
78	30	10	633334	3500.01	CP-OFDM QPSK	12@6	21.34	17.29	0.0536
78	30	10	633334	3500.01	CP-OFDM QPSK	1@1	21.42	17.37	0.0546
78	30	10	633334	3500.01	CP-OFDM QPSK	1@22	21.45	17.4	0.0550
78	30	10	636332	3544.98	DFT-s-OFDM PI/2 BPSK	12@6	23.2	19.15	0.0822
78	30	10	636332	3544.98	DFT-s-OFDM PI/2 BPSK	1@1	23.04	18.99	0.0793
78	30	10	636332	3544.98	DFT-s-OFDM PI/2 BPSK	1@22	23.15	19.1	0.0813
78	30	10	636332	3544.98	DFT-s-OFDM QPSK	12@6	23.17	19.12	0.0817
78	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@1	23.06	19.01	0.0796
78	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@22	23.16	19.11	0.0815

78	30	10	636332	3544.98	DFT-s-OFDM 16 QAM	12@6	22.21	18.16	0.0655
78	30	10	636332	3544.98	DFT-s-OFDM 16 QAM	1@1	22.03	17.98	0.0628
78	30	10	636332	3544.98	DFT-s-OFDM 16 QAM	1@22	22.0	17.95	0.0624
78	30	10	636332	3544.98	DFT-s-OFDM 64 QAM	12@6	20.79	16.74	0.0472
78	30	10	636332	3544.98	DFT-s-OFDM 64 QAM	1@1	20.74	16.69	0.0467
78	30	10	636332	3544.98	DFT-s-OFDM 64 QAM	1@22	20.86	16.81	0.0480
78	30	10	636332	3544.98	DFT-s-OFDM 256 QAM	12@6	18.68	14.63	0.0290
78	30	10	636332	3544.98	DFT-s-OFDM 256 QAM	1@1	18.57	14.52	0.0283
78	30	10	636332	3544.98	DFT-s-OFDM 256 QAM	1@22	18.65	14.6	0.0288
78	30	10	636332	3544.98	CP-OFDM QPSK	12@6	21.63	17.58	0.0573
78	30	10	636332	3544.98	CP-OFDM QPSK	1@1	21.73	17.68	0.0586
78	30	10	636332	3544.98	CP-OFDM QPSK	1@22	21.8	17.75	0.0596
78	30	15	630500	3457.5	DFT-s-OFDM PI/2 BPSK	18@9	23.01	18.96	0.0787
78	30	15	630500	3457.5	DFT-s-OFDM PI/2 BPSK	1@1	22.85	18.8	0.0759
78	30	15	630500	3457.5	DFT-s-OFDM PI/2 BPSK	1@36	22.86	18.81	0.0760
78	30	15	630500	3457.5	DFT-s-OFDM QPSK	18@9	22.93	18.88	0.0773
78	30	15	630500	3457.5	DFT-s-OFDM QPSK	1@1	22.87	18.82	0.0762
78	30	15	630500	3457.5	DFT-s-OFDM QPSK	1@36	22.85	18.8	0.0759
78	30	15	630500	3457.5	DFT-s-OFDM 16 QAM	18@9	21.99	17.94	0.0622
78	30	15	630500	3457.5	DFT-s-OFDM 16 QAM	1@1	22.04	17.99	0.0630
78	30	15	630500	3457.5	DFT-s-OFDM 16 QAM	1@36	22.15	18.1	0.0646
78	30	15	630500	3457.5	DFT-s-OFDM 64 QAM	18@9	20.52	16.47	0.0444
78	30	15	630500	3457.5	DFT-s-OFDM 64 QAM	1@1	20.85	16.8	0.0479
78	30	15	630500	3457.5	DFT-s-OFDM 64 QAM	1@36	20.41	16.36	0.0433

78	30	15	630500	3457.5	DFT-s-OFDM 256 QAM	18@9	18.64	14.59	0.0288
78	30	15	630500	3457.5	DFT-s-OFDM 256 QAM	1@1	18.49	14.44	0.0278
78	30	15	630500	3457.5	DFT-s-OFDM 256 QAM	1@36	18.55	14.5	0.0282
78	30	15	630500	3457.5	CP-OFDM QPSK	19@9	21.5	17.45	0.0556
78	30	15	630500	3457.5	CP-OFDM QPSK	1@1	21.5	17.45	0.0556
78	30	15	630500	3457.5	CP-OFDM QPSK	1@36	21.49	17.44	0.0555
78	30	15	633334	3500.01	DFT-s-OFDM PI/2 BPSK	18@9	22.94	18.89	0.0774
78	30	15	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	22.87	18.82	0.0762
78	30	15	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@36	22.85	18.8	0.0759
78	30	15	633334	3500.01	DFT-s-OFDM QPSK	18@9	22.97	18.92	0.0780
78	30	15	633334	3500.01	DFT-s-OFDM QPSK	1@1	22.89	18.84	0.0766
78	30	15	633334	3500.01	DFT-s-OFDM QPSK	1@36	22.76	18.71	0.0743
78	30	15	633334	3500.01	DFT-s-OFDM 16 QAM	18@9	21.99	17.94	0.0622
78	30	15	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	21.84	17.79	0.0601
78	30	15	633334	3500.01	DFT-s-OFDM 16 QAM	1@36	21.89	17.84	0.0608
78	30	15	633334	3500.01	DFT-s-OFDM 64 QAM	18@9	20.52	16.47	0.0444
78	30	15	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	20.62	16.57	0.0454
78	30	15	633334	3500.01	DFT-s-OFDM 64 QAM	1@36	20.55	16.5	0.0447
78	30	15	633334	3500.01	DFT-s-OFDM 256 QAM	18@9	18.58	14.53	0.0284
78	30	15	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	18.55	14.5	0.0282
78	30	15	633334	3500.01	DFT-s-OFDM 256 QAM	1@36	18.67	14.62	0.0290
78	30	15	633334	3500.01	CP-OFDM QPSK	19@9	21.49	17.44	0.0555
78	30	15	633334	3500.01	CP-OFDM QPSK	1@1	21.56	17.51	0.0564
78	30	15	633334	3500.01	CP-OFDM QPSK	1@36	21.41	17.36	0.0545



78	30	15	636166	3542.49	DFT-s-OFDM PI/2 BPSK	18@9	23.22	19.17	0.0826
78	30	15	636166	3542.49	DFT-s-OFDM PI/2 BPSK	1@1	23.01	18.96	0.0787
78	30	15	636166	3542.49	DFT-s-OFDM PI/2 BPSK	1@36	23.15	19.1	0.0813
78	30	15	636166	3542.49	DFT-s-OFDM QPSK	18@9	23.18	19.13	0.0818
78	30	15	636166	3542.49	DFT-s-OFDM QPSK	1@1	23.08	19.03	0.0800
78	30	15	636166	3542.49	DFT-s-OFDM QPSK	1@36	23.13	19.08	0.0809
78	30	15	636166	3542.49	DFT-s-OFDM 16 QAM	18@9	22.25	18.2	0.0661
78	30	15	636166	3542.49	DFT-s-OFDM 16 QAM	1@1	21.99	17.94	0.0622
78	30	15	636166	3542.49	DFT-s-OFDM 16 QAM	1@36	22.33	18.28	0.0673
78	30	15	636166	3542.49	DFT-s-OFDM 64 QAM	18@9	20.73	16.68	0.0466
78	30	15	636166	3542.49	DFT-s-OFDM 64 QAM	1@1	21.09	17.04	0.0506
78	30	15	636166	3542.49	DFT-s-OFDM 64 QAM	1@36	21.21	17.16	0.0520
78	30	15	636166	3542.49	DFT-s-OFDM 256 QAM	18@9	18.66	14.61	0.0289
78	30	15	636166	3542.49	DFT-s-OFDM 256 QAM	1@1	18.67	14.62	0.0290
78	30	15	636166	3542.49	DFT-s-OFDM 256 QAM	1@36	18.81	14.76	0.0299
78	30	15	636166	3542.49	CP-OFDM QPSK	19@9	21.61	17.56	0.0570
78	30	15	636166	3542.49	CP-OFDM QPSK	1@1	21.74	17.69	0.0587
78	30	15	636166	3542.49	CP-OFDM QPSK	1@36	21.77	17.72	0.0592
78	30	20	630668	3460.02	DFT-s-OFDM PI/2 BPSK	25@12	23.08	19.03	0.0800
78	30	20	630668	3460.02	DFT-s-OFDM PI/2 BPSK	1@1	22.86	18.81	0.0760
78	30	20	630668	3460.02	DFT-s-OFDM PI/2 BPSK	1@49	22.86	18.81	0.0760
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	25@12	23.09	19.04	0.0802
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@1	22.83	18.78	0.0755
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@49	22.82	18.77	0.0753

78	30	20	630668	3460.02	DFT-s-OFDM 16 QAM	25@12	22.1	18.05	0.0638
78	30	20	630668	3460.02	DFT-s-OFDM 16 QAM	1@1	21.8	17.75	0.0596
78	30	20	630668	3460.02	DFT-s-OFDM 16 QAM	1@49	21.85	17.8	0.0603
78	30	20	630668	3460.02	DFT-s-OFDM 64 QAM	25@12	20.53	16.48	0.0445
78	30	20	630668	3460.02	DFT-s-OFDM 64 QAM	1@1	20.56	16.51	0.0448
78	30	20	630668	3460.02	DFT-s-OFDM 64 QAM	1@49	20.55	16.5	0.0447
78	30	20	630668	3460.02	DFT-s-OFDM 256 QAM	25@12	18.61	14.56	0.0286
78	30	20	630668	3460.02	DFT-s-OFDM 256 QAM	1@1	18.68	14.63	0.0290
78	30	20	630668	3460.02	DFT-s-OFDM 256 QAM	1@49	18.57	14.52	0.0283
78	30	20	630668	3460.02	CP-OFDM QPSK	25@121	20.05	16	0.0398
78	30	20	630668	3460.02	CP-OFDM QPSK	1@1	21.48	17.43	0.0553
78	30	20	630668	3460.02	CP-OFDM QPSK	1@49	21.54	17.49	0.0561
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	25@12	23.01	18.96	0.0787
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	22.85	18.8	0.0759
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@49	22.8	18.75	0.0750
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	25@12	23.06	19.01	0.0796
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@1	22.9	18.85	0.0767
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@49	22.78	18.73	0.0746
78	30	20	633334	3500.01	DFT-s-OFDM 16 QAM	25@12	21.98	17.93	0.0621
78	30	20	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	22.11	18.06	0.0640
78	30	20	633334	3500.01	DFT-s-OFDM 16 QAM	1@49	22.01	17.96	0.0625
78	30	20	633334	3500.01	DFT-s-OFDM 64 QAM	25@12	20.46	16.41	0.0438
78	30	20	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	20.58	16.53	0.0450
78	30	20	633334	3500.01	DFT-s-OFDM 64 QAM	1@49	20.52	16.47	0.0444

78	30	20	633334	3500.01	DFT-s-OFDM 256 QAM	25@12	18.59	14.54	0.0284
78	30	20	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	18.68	14.63	0.0290
78	30	20	633334	3500.01	DFT-s-OFDM 256 QAM	1@49	18.62	14.57	0.0286
78	30	20	633334	3500.01	CP-OFDM QPSK	25@121	20.03	15.98	0.0396
78	30	20	633334	3500.01	CP-OFDM QPSK	1@1	21.53	17.48	0.0560
78	30	20	633334	3500.01	CP-OFDM QPSK	1@49	21.47	17.42	0.0552
78	30	20	636000	3540.0	DFT-s-OFDM PI/2 BPSK	25@12	23.22	19.17	0.0826
78	30	20	636000	3540.0	DFT-s-OFDM PI/2 BPSK	1@1	22.97	18.92	0.0780
78	30	20	636000	3540.0	DFT-s-OFDM PI/2 BPSK	1@49	23.08	19.03	0.0800
78	30	20	636000	3540.0	DFT-s-OFDM QPSK	25@12	23.2	19.15	0.0822
78	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@1	22.98	18.93	0.0782
78	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@49	23.1	19.05	0.0804
78	30	20	636000	3540.0	DFT-s-OFDM 16 QAM	25@12	22.24	18.19	0.0659
78	30	20	636000	3540.0	DFT-s-OFDM 16 QAM	1@1	21.83	17.78	0.0600
78	30	20	636000	3540.0	DFT-s-OFDM 16 QAM	1@49	22.18	18.13	0.0650
78	30	20	636000	3540.0	DFT-s-OFDM 64 QAM	25@12	20.74	16.69	0.0467
78	30	20	636000	3540.0	DFT-s-OFDM 64 QAM	1@1	20.69	16.64	0.0461
78	30	20	636000	3540.0	DFT-s-OFDM 64 QAM	1@49	20.63	16.58	0.0455
78	30	20	636000	3540.0	DFT-s-OFDM 256 QAM	25@12	18.63	14.58	0.0287
78	30	20	636000	3540.0	DFT-s-OFDM 256 QAM	1@1	18.51	14.46	0.0279
78	30	20	636000	3540.0	DFT-s-OFDM 256 QAM	1@49	18.72	14.67	0.0293
78	30	20	636000	3540.0	CP-OFDM QPSK	25@121	20.2	16.15	0.0412
78	30	20	636000	3540.0	CP-OFDM QPSK	1@1	21.66	17.61	0.0577
78	30	20	636000	3540.0	CP-OFDM QPSK	1@49	21.84	17.79	0.0601

78	30	40	631334	3470.01	DFT-s-OFDM PI/2 BPSK	50@25	23.18	19.13	0.0818
78	30	40	631334	3470.01	DFT-s-OFDM PI/2 BPSK	1@1	22.6	18.55	0.0716
78	30	40	631334	3470.01	DFT-s-OFDM PI/2 BPSK	1@104	22.55	18.5	0.0708
78	30	40	631334	3470.01	DFT-s-OFDM QPSK	50@25	23.13	19.08	0.0809
78	30	40	631334	3470.01	DFT-s-OFDM QPSK	1@1	22.57	18.52	0.0711
78	30	40	631334	3470.01	DFT-s-OFDM QPSK	1@104	22.52	18.47	0.0703
78	30	40	631334	3470.01	DFT-s-OFDM 16 QAM	50@25	22.11	18.06	0.0640
78	30	40	631334	3470.01	DFT-s-OFDM 16 QAM	1@1	21.66	17.61	0.0577
78	30	40	631334	3470.01	DFT-s-OFDM 16 QAM	1@104	21.68	17.63	0.0579
78	30	40	631334	3470.01	DFT-s-OFDM 64 QAM	50@25	20.7	16.65	0.0462
78	30	40	631334	3470.01	DFT-s-OFDM 64 QAM	1@1	20.31	16.26	0.0423
78	30	40	631334	3470.01	DFT-s-OFDM 64 QAM	1@104	20.3	16.25	0.0422
78	30	40	631334	3470.01	DFT-s-OFDM 256 QAM	50@25	18.79	14.74	0.0298
78	30	40	631334	3470.01	DFT-s-OFDM 256 QAM	1@1	18.44	14.39	0.0275
78	30	40	631334	3470.01	DFT-s-OFDM 256 QAM	1@104	18.25	14.2	0.0263
78	30	40	631334	3470.01	CP-OFDM QPSK	53@26	21.68	17.63	0.0579
78	30	40	631334	3470.01	CP-OFDM QPSK	1@1	21.25	17.2	0.0525
78	30	40	631334	3470.01	CP-OFDM QPSK	1@104	21.17	17.12	0.0515
78	30	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@25	23.03	18.98	0.0791
78	30	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	22.54	18.49	0.0706
78	30	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@104	22.58	18.53	0.0713
78	30	40	633334	3500.01	DFT-s-OFDM QPSK	50@25	23.11	19.06	0.0805
78	30	40	633334	3500.01	DFT-s-OFDM QPSK	1@1	22.55	18.5	0.0708
78	30	40	633334	3500.01	DFT-s-OFDM QPSK	1@104	22.55	18.5	0.0708

78	30	40	633334	3500.01	DFT-s-OFDM 16 QAM	50@25	22.06	18.01	0.0632
78	30	40	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	21.55	17.5	0.0562
78	30	40	633334	3500.01	DFT-s-OFDM 16 QAM	1@104	21.48	17.43	0.0553
78	30	40	633334	3500.01	DFT-s-OFDM 64 QAM	50@25	20.65	16.6	0.0457
78	30	40	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	20.24	16.19	0.0416
78	30	40	633334	3500.01	DFT-s-OFDM 64 QAM	1@104	20.08	16.03	0.0401
78	30	40	633334	3500.01	DFT-s-OFDM 256 QAM	50@25	18.69	14.64	0.0291
78	30	40	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	18.23	14.18	0.0262
78	30	40	633334	3500.01	DFT-s-OFDM 256 QAM	1@104	18.23	14.18	0.0262
78	30	40	633334	3500.01	CP-OFDM QPSK	53@26	21.58	17.53	0.0566
78	30	40	633334	3500.01	CP-OFDM QPSK	1@1	21.18	17.13	0.0516
78	30	40	633334	3500.01	CP-OFDM QPSK	1@104	21.16	17.11	0.0514
78	30	40	635332	3529.98	DFT-s-OFDM PI/2 BPSK	50@25	23.23	19.18	0.0828
78	30	40	635332	3529.98	DFT-s-OFDM PI/2 BPSK	1@1	22.52	18.47	0.0703
78	30	40	635332	3529.98	DFT-s-OFDM PI/2 BPSK	1@104	22.77	18.72	0.0745
78	30	40	635332	3529.98	DFT-s-OFDM QPSK	50@25	23.22	19.17	0.0826
78	30	40	635332	3529.98	DFT-s-OFDM QPSK	1@1	22.55	18.5	0.0708
78	30	40	635332	3529.98	DFT-s-OFDM QPSK	1@104	22.8	18.75	0.0750
78	30	40	635332	3529.98	DFT-s-OFDM 16 QAM	50@25	22.29	18.24	0.0667
78	30	40	635332	3529.98	DFT-s-OFDM 16 QAM	1@1	21.42	17.37	0.0546
78	30	40	635332	3529.98	DFT-s-OFDM 16 QAM	1@104	21.99	17.94	0.0622
78	30	40	635332	3529.98	DFT-s-OFDM 64 QAM	50@25	20.71	16.66	0.0463
78	30	40	635332	3529.98	DFT-s-OFDM 64 QAM	1@1	20.11	16.06	0.0404
78	30	40	635332	3529.98	DFT-s-OFDM 64 QAM	1@104	20.55	16.5	0.0447

78	30	40	635332	3529.98	DFT-s-OFDM 256 QAM	50@25	18.82	14.77	0.0300
78	30	40	635332	3529.98	DFT-s-OFDM 256 QAM	1@1	18.22	14.17	0.0261
78	30	40	635332	3529.98	DFT-s-OFDM 256 QAM	1@104	18.46	14.41	0.0276
78	30	40	635332	3529.98	CP-OFDM QPSK	53@26	21.69	17.64	0.0581
78	30	40	635332	3529.98	CP-OFDM QPSK	1@1	21.16	17.11	0.0514
78	30	40	635332	3529.98	CP-OFDM QPSK	1@104	21.45	17.4	0.0550
78	30	50	631668	3475.02	DFT-s-OFDM PI/2 BPSK	64@32	23.16	19.11	0.0815
78	30	50	631668	3475.02	DFT-s-OFDM PI/2 BPSK	1@1	22.83	18.78	0.0755
78	30	50	631668	3475.02	DFT-s-OFDM PI/2 BPSK	1@131	22.65	18.6	0.0724
78	30	50	631668	3475.02	DFT-s-OFDM QPSK	64@32	23.19	19.14	0.0820
78	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@1	22.82	18.77	0.0753
78	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@131	22.69	18.64	0.0731
78	30	50	631668	3475.02	DFT-s-OFDM 16 QAM	64@32	22.23	18.18	0.0658
78	30	50	631668	3475.02	DFT-s-OFDM 16 QAM	1@1	22.03	17.98	0.0628
78	30	50	631668	3475.02	DFT-s-OFDM 16 QAM	1@131	21.88	17.83	0.0607
78	30	50	631668	3475.02	DFT-s-OFDM 64 QAM	64@32	20.73	16.68	0.0466
78	30	50	631668	3475.02	DFT-s-OFDM 64 QAM	1@1	20.8	16.75	0.0473
78	30	50	631668	3475.02	DFT-s-OFDM 64 QAM	1@131	20.78	16.73	0.0471
78	30	50	631668	3475.02	DFT-s-OFDM 256 QAM	64@32	18.78	14.73	0.0297
78	30	50	631668	3475.02	DFT-s-OFDM 256 QAM	1@1	18.73	14.68	0.0294
78	30	50	631668	3475.02	DFT-s-OFDM 256 QAM	1@131	18.54	14.49	0.0281
78	30	50	631668	3475.02	CP-OFDM QPSK	67@33	21.66	17.61	0.0577
78	30	50	631668	3475.02	CP-OFDM QPSK	1@1	21.55	17.5	0.0562
78	30	50	631668	3475.02	CP-OFDM QPSK	1@131	21.31	17.26	0.0532

78	30	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	64@32	23.13	19.08	0.0809
78	30	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	22.8	18.75	0.0750
78	30	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@131	22.81	18.76	0.0752
78	30	50	633334	3500.01	DFT-s-OFDM QPSK	64@32	23.15	19.1	0.0813
78	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@1	22.83	18.78	0.0755
78	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@131	22.86	18.81	0.0760
78	30	50	633334	3500.01	DFT-s-OFDM 16 QAM	64@32	22.09	18.04	0.0637
78	30	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	21.83	17.78	0.0600
78	30	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@131	22.03	17.98	0.0628
78	30	50	633334	3500.01	DFT-s-OFDM 64 QAM	64@32	20.58	16.53	0.0450
78	30	50	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	20.58	16.53	0.0450
78	30	50	633334	3500.01	DFT-s-OFDM 64 QAM	1@131	20.56	16.51	0.0448
78	30	50	633334	3500.01	DFT-s-OFDM 256 QAM	64@32	18.75	14.7	0.0295
78	30	50	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	18.49	14.44	0.0278
78	30	50	633334	3500.01	DFT-s-OFDM 256 QAM	1@131	18.56	14.51	0.0282
78	30	50	633334	3500.01	CP-OFDM QPSK	67@33	21.65	17.6	0.0575
78	30	50	633334	3500.01	CP-OFDM QPSK	1@1	21.46	17.41	0.0551
78	30	50	633334	3500.01	CP-OFDM QPSK	1@131	21.45	17.4	0.0550
78	30	50	635000	3525.0	DFT-s-OFDM PI/2 BPSK	64@32	23.3	19.25	0.0841
78	30	50	635000	3525.0	DFT-s-OFDM PI/2 BPSK	1@1	22.78	18.73	0.0746
78	30	50	635000	3525.0	DFT-s-OFDM PI/2 BPSK	1@131	23.0	18.95	0.0785
78	30	50	635000	3525.0	DFT-s-OFDM QPSK	64@32	23.22	19.17	0.0826
78	30	50	635000	3525.0	DFT-s-OFDM QPSK	1@1	22.7	18.65	0.0733
78	30	50	635000	3525.0	DFT-s-OFDM QPSK	1@131	22.97	18.92	0.0780

78	30	50	635000	3525.0	DFT-s-OFDM 16 QAM	64@32	22.19	18.14	0.0652
78	30	50	635000	3525.0	DFT-s-OFDM 16 QAM	1@1	21.78	17.73	0.0593
78	30	50	635000	3525.0	DFT-s-OFDM 16 QAM	1@131	22.21	18.16	0.0655
78	30	50	635000	3525.0	DFT-s-OFDM 64 QAM	64@32	20.73	16.68	0.0466
78	30	50	635000	3525.0	DFT-s-OFDM 64 QAM	1@1	20.57	16.52	0.0449
78	30	50	635000	3525.0	DFT-s-OFDM 64 QAM	1@131	20.83	16.78	0.0476
78	30	50	635000	3525.0	DFT-s-OFDM 256 QAM	64@32	18.8	14.75	0.0299
78	30	50	635000	3525.0	DFT-s-OFDM 256 QAM	1@1	18.6	14.55	0.0285
78	30	50	635000	3525.0	DFT-s-OFDM 256 QAM	1@131	18.46	14.41	0.0276
78	30	50	635000	3525.0	CP-OFDM QPSK	67@33	21.72	17.67	0.0585
78	30	50	635000	3525.0	CP-OFDM QPSK	1@1	21.4	17.35	0.0543
78	30	50	635000	3525.0	CP-OFDM QPSK	1@131	21.71	17.66	0.0583
78	30	60	632000	3480.0	DFT-s-OFDM PI/2 BPSK	81@40	23.17	19.12	0.0817
78	30	60	632000	3480.0	DFT-s-OFDM PI/2 BPSK	1@1	22.76	18.71	0.0743
78	30	60	632000	3480.0	DFT-s-OFDM PI/2 BPSK	1@160	22.58	18.53	0.0713
78	30	60	632000	3480.0	DFT-s-OFDM QPSK	81@40	23.17	19.12	0.0817
78	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@1	22.74	18.69	0.0740
78	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@160	22.59	18.54	0.0714
78	30	60	632000	3480.0	DFT-s-OFDM 16 QAM	81@40	22.23	18.18	0.0658
78	30	60	632000	3480.0	DFT-s-OFDM 16 QAM	1@1	21.89	17.84	0.0608
78	30	60	632000	3480.0	DFT-s-OFDM 16 QAM	1@160	21.74	17.69	0.0587
78	30	60	632000	3480.0	DFT-s-OFDM 64 QAM	81@40	20.65	16.6	0.0457
78	30	60	632000	3480.0	DFT-s-OFDM 64 QAM	1@1	20.41	16.36	0.0433
78	30	60	632000	3480.0	DFT-s-OFDM 64 QAM	1@160	20.23	16.18	0.0415



78	30	60	632000	3480.0	DFT-s-OFDM 256 QAM	81@40	18.85	14.8	0.0302
78	30	60	632000	3480.0	DFT-s-OFDM 256 QAM	1@1	18.58	14.53	0.0284
78	30	60	632000	3480.0	DFT-s-OFDM 256 QAM	1@160	18.52	14.47	0.0280
78	30	60	632000	3480.0	CP-OFDM QPSK	81@40	21.63	17.58	0.0573
78	30	60	632000	3480.0	CP-OFDM QPSK	1@1	21.4	17.35	0.0543
78	30	60	632000	3480.0	CP-OFDM QPSK	1@160	21.22	17.17	0.0521
78	30	60	633334	3500.01	DFT-s-OFDM PI/2 BPSK	81@40	23.12	19.07	0.0807
78	30	60	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	22.71	18.66	0.0735
78	30	60	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@160	22.72	18.67	0.0736
78	30	60	633334	3500.01	DFT-s-OFDM QPSK	81@40	23.1	19.05	0.0804
78	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@1	22.75	18.7	0.0741
78	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@160	22.76	18.71	0.0743
78	30	60	633334	3500.01	DFT-s-OFDM 16 QAM	81@40	22.14	18.09	0.0644
78	30	60	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	21.86	17.81	0.0604
78	30	60	633334	3500.01	DFT-s-OFDM 16 QAM	1@160	21.89	17.84	0.0608
78	30	60	633334	3500.01	DFT-s-OFDM 64 QAM	81@40	20.69	16.64	0.0461
78	30	60	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	20.38	16.33	0.0430
78	30	60	633334	3500.01	DFT-s-OFDM 64 QAM	1@160	20.42	16.37	0.0434
78	30	60	633334	3500.01	DFT-s-OFDM 256 QAM	81@40	18.78	14.73	0.0297
78	30	60	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	18.61	14.56	0.0286
78	30	60	633334	3500.01	DFT-s-OFDM 256 QAM	1@160	18.64	14.59	0.0288
78	30	60	633334	3500.01	CP-OFDM QPSK	81@40	21.59	17.54	0.0568
78	30	60	633334	3500.01	CP-OFDM QPSK	1@1	21.34	17.29	0.0536
78	30	60	633334	3500.01	CP-OFDM QPSK	1@160	21.41	17.36	0.0545

78	30	60	634666	3519.99	DFT-s-OFDM PI/2 BPSK	81@40	23.19	19.14	0.0820
78	30	60	634666	3519.99	DFT-s-OFDM PI/2 BPSK	1@1	22.62	18.57	0.0719
78	30	60	634666	3519.99	DFT-s-OFDM PI/2 BPSK	1@160	22.83	18.78	0.0755
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	81@40	23.14	19.09	0.0811
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@1	22.68	18.63	0.0729
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@160	22.85	18.8	0.0759
78	30	60	634666	3519.99	DFT-s-OFDM 16 QAM	81@40	22.1	18.05	0.0638
78	30	60	634666	3519.99	DFT-s-OFDM 16 QAM	1@1	21.79	17.74	0.0594
78	30	60	634666	3519.99	DFT-s-OFDM 16 QAM	1@160	22.03	17.98	0.0628
78	30	60	634666	3519.99	DFT-s-OFDM 64 QAM	81@40	20.61	16.56	0.0453
78	30	60	634666	3519.99	DFT-s-OFDM 64 QAM	1@1	20.27	16.22	0.0419
78	30	60	634666	3519.99	DFT-s-OFDM 64 QAM	1@160	20.48	16.43	0.0440
78	30	60	634666	3519.99	DFT-s-OFDM 256 QAM	81@40	18.78	14.73	0.0297
78	30	60	634666	3519.99	DFT-s-OFDM 256 QAM	1@1	18.37	14.32	0.0270
78	30	60	634666	3519.99	DFT-s-OFDM 256 QAM	1@160	18.53	14.48	0.0281
78	30	60	634666	3519.99	CP-OFDM QPSK	81@40	21.58	17.53	0.0566
78	30	60	634666	3519.99	CP-OFDM QPSK	1@1	21.27	17.22	0.0527
78	30	60	634666	3519.99	CP-OFDM QPSK	1@160	21.52	17.47	0.0558
78	30	70	632334	3485.01	DFT-s-OFDM PI/2 BPSK	90@45	23.1	19.05	0.0804
78	30	70	632334	3485.01	DFT-s-OFDM PI/2 BPSK	1@1	22.64	18.59	0.0723
78	30	70	632334	3485.01	DFT-s-OFDM PI/2 BPSK	1@187	22.52	18.47	0.0703
78	30	70	632334	3485.01	DFT-s-OFDM QPSK	90@45	23.12	19.07	0.0807
78	30	70	632334	3485.01	DFT-s-OFDM QPSK	1@1	22.61	18.56	0.0718
78	30	70	632334	3485.01	DFT-s-OFDM QPSK	1@187	22.56	18.51	0.0710

78	30	70	632334	3485.01	DFT-s-OFDM 16 QAM	90@45	22.04	17.99	0.0630
78	30	70	632334	3485.01	DFT-s-OFDM 16 QAM	1@1	21.8	17.75	0.0596
78	30	70	632334	3485.01	DFT-s-OFDM 16 QAM	1@187	21.75	17.7	0.0589
78	30	70	632334	3485.01	DFT-s-OFDM 64 QAM	90@45	20.59	16.54	0.0451
78	30	70	632334	3485.01	DFT-s-OFDM 64 QAM	1@1	20.27	16.22	0.0419
78	30	70	632334	3485.01	DFT-s-OFDM 64 QAM	1@187	20.23	16.18	0.0415
78	30	70	632334	3485.01	DFT-s-OFDM 256 QAM	90@45	18.72	14.67	0.0293
78	30	70	632334	3485.01	DFT-s-OFDM 256 QAM	1@1	18.41	14.36	0.0273
78	30	70	632334	3485.01	DFT-s-OFDM 256 QAM	1@187	18.43	14.38	0.0274
78	30	70	632334	3485.01	CP-OFDM QPSK	95@47	21.56	17.51	0.0564
78	30	70	632334	3485.01	CP-OFDM QPSK	1@1	21.29	17.24	0.0530
78	30	70	632334	3485.01	CP-OFDM QPSK	1@187	21.3	17.25	0.0531
78	30	70	633334	3500.01	DFT-s-OFDM PI/2 BPSK	90@45	23.23	19.18	0.0828
78	30	70	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	22.7	18.65	0.0733
78	30	70	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@187	22.66	18.61	0.0726
78	30	70	633334	3500.01	DFT-s-OFDM QPSK	90@45	23.22	19.17	0.0826
78	30	70	633334	3500.01	DFT-s-OFDM QPSK	1@1	22.79	18.74	0.0748
78	30	70	633334	3500.01	DFT-s-OFDM QPSK	1@187	22.73	18.68	0.0738
78	30	70	633334	3500.01	DFT-s-OFDM 16 QAM	90@45	22.21	18.16	0.0655
78	30	70	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	21.64	17.59	0.0574
78	30	70	633334	3500.01	DFT-s-OFDM 16 QAM	1@187	21.65	17.6	0.0575
78	30	70	633334	3500.01	DFT-s-OFDM 64 QAM	90@45	20.74	16.69	0.0467
78	30	70	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	20.35	16.3	0.0427
78	30	70	633334	3500.01	DFT-s-OFDM 64 QAM	1@187	20.19	16.14	0.0411

78	30	70	633334	3500.01	DFT-s-OFDM 256 QAM	90@45	18.76	14.71	0.0296
78	30	70	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	18.79	14.74	0.0298
78	30	70	633334	3500.01	DFT-s-OFDM 256 QAM	1@187	18.42	14.37	0.0274
78	30	70	633334	3500.01	CP-OFDM QPSK	95@47	21.62	17.57	0.0571
78	30	70	633334	3500.01	CP-OFDM QPSK	1@1	21.45	17.4	0.0550
78	30	70	633334	3500.01	CP-OFDM QPSK	1@187	21.5	17.45	0.0556
78	30	70	634332	3514.98	DFT-s-OFDM PI/2 BPSK	90@45	23.12	19.07	0.0807
78	30	70	634332	3514.98	DFT-s-OFDM PI/2 BPSK	1@1	22.64	18.59	0.0723
78	30	70	634332	3514.98	DFT-s-OFDM PI/2 BPSK	1@187	22.83	18.78	0.0755
78	30	70	634332	3514.98	DFT-s-OFDM QPSK	90@45	23.15	19.1	0.0813
78	30	70	634332	3514.98	DFT-s-OFDM QPSK	1@1	22.6	18.55	0.0716
78	30	70	634332	3514.98	DFT-s-OFDM QPSK	1@187	22.75	18.7	0.0741
78	30	70	634332	3514.98	DFT-s-OFDM 16 QAM	90@45	22.14	18.09	0.0644
78	30	70	634332	3514.98	DFT-s-OFDM 16 QAM	1@1	21.76	17.71	0.0590
78	30	70	634332	3514.98	DFT-s-OFDM 16 QAM	1@187	21.92	17.87	0.0612
78	30	70	634332	3514.98	DFT-s-OFDM 64 QAM	90@45	20.66	16.61	0.0458
78	30	70	634332	3514.98	DFT-s-OFDM 64 QAM	1@1	20.31	16.26	0.0423
78	30	70	634332	3514.98	DFT-s-OFDM 64 QAM	1@187	20.43	16.38	0.0435
78	30	70	634332	3514.98	DFT-s-OFDM 256 QAM	90@45	18.72	14.67	0.0293
78	30	70	634332	3514.98	DFT-s-OFDM 256 QAM	1@1	18.57	14.52	0.0283
78	30	70	634332	3514.98	DFT-s-OFDM 256 QAM	1@187	18.37	14.32	0.0270
78	30	70	634332	3514.98	CP-OFDM QPSK	95@47	21.68	17.63	0.0579
78	30	70	634332	3514.98	CP-OFDM QPSK	1@1	21.34	17.29	0.0536
78	30	70	634332	3514.98	CP-OFDM QPSK	1@187	21.58	17.53	0.0566

78	30	80	632668	3490.02	DFT-s-OFDM PI/2 BPSK	108@54	23.04	18.99	0.0793
78	30	80	632668	3490.02	DFT-s-OFDM PI/2 BPSK	1@1	22.46	18.41	0.0693
78	30	80	632668	3490.02	DFT-s-OFDM PI/2 BPSK	1@215	22.43	18.38	0.0689
78	30	80	632668	3490.02	DFT-s-OFDM QPSK	108@54	23.09	19.04	0.0802
78	30	80	632668	3490.02	DFT-s-OFDM QPSK	1@1	22.47	18.42	0.0695
78	30	80	632668	3490.02	DFT-s-OFDM QPSK	1@215	22.47	18.42	0.0695
78	30	80	632668	3490.02	DFT-s-OFDM 16 QAM	108@54	22.07	18.02	0.0634
78	30	80	632668	3490.02	DFT-s-OFDM 16 QAM	1@1	21.31	17.26	0.0532
78	30	80	632668	3490.02	DFT-s-OFDM 16 QAM	1@215	21.35	17.3	0.0537
78	30	80	632668	3490.02	DFT-s-OFDM 64 QAM	108@54	20.51	16.46	0.0443
78	30	80	632668	3490.02	DFT-s-OFDM 64 QAM	1@1	19.98	15.93	0.0392
78	30	80	632668	3490.02	DFT-s-OFDM 64 QAM	1@215	20.11	16.06	0.0404
78	30	80	632668	3490.02	DFT-s-OFDM 256 QAM	108@54	18.73	14.68	0.0294
78	30	80	632668	3490.02	DFT-s-OFDM 256 QAM	1@1	18.34	14.29	0.0269
78	30	80	632668	3490.02	DFT-s-OFDM 256 QAM	1@215	18.1	14.05	0.0254
78	30	80	632668	3490.02	CP-OFDM QPSK	109@54	21.6	17.55	0.0569
78	30	80	632668	3490.02	CP-OFDM QPSK	1@1	21.09	17.04	0.0506
78	30	80	632668	3490.02	CP-OFDM QPSK	1@215	21.13	17.08	0.0511
78	30	80	633334	3500.01	DFT-s-OFDM PI/2 BPSK	108@54	23.14	19.09	0.0811
78	30	80	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	22.54	18.49	0.0706
78	30	80	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@215	22.71	18.66	0.0735
78	30	80	633334	3500.01	DFT-s-OFDM QPSK	108@54	23.17	19.12	0.0817
78	30	80	633334	3500.01	DFT-s-OFDM QPSK	1@1	22.63	18.58	0.0721
78	30	80	633334	3500.01	DFT-s-OFDM QPSK	1@215	22.67	18.62	0.0728

78	30	80	633334	3500.01	DFT-s-OFDM 16 QAM	108@54	22.2	18.15	0.0653
78	30	80	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	21.6	17.55	0.0569
78	30	80	633334	3500.01	DFT-s-OFDM 16 QAM	1@215	21.81	17.76	0.0597
78	30	80	633334	3500.01	DFT-s-OFDM 64 QAM	108@54	20.64	16.59	0.0456
78	30	80	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	20.32	16.27	0.0424
78	30	80	633334	3500.01	DFT-s-OFDM 64 QAM	1@215	20.35	16.3	0.0427
78	30	80	633334	3500.01	DFT-s-OFDM 256 QAM	108@54	18.84	14.79	0.0301
78	30	80	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	18.39	14.34	0.0272
78	30	80	633334	3500.01	DFT-s-OFDM 256 QAM	1@215	18.26	14.21	0.0264
78	30	80	633334	3500.01	CP-OFDM QPSK	109@54	21.71	17.66	0.0583
78	30	80	633334	3500.01	CP-OFDM QPSK	1@1	21.25	17.2	0.0525
78	30	80	633334	3500.01	CP-OFDM QPSK	1@215	21.27	17.22	0.0527
78	30	80	634000	3510.0	DFT-s-OFDM PI/2 BPSK	108@54	23.18	19.13	0.0818
78	30	80	634000	3510.0	DFT-s-OFDM PI/2 BPSK	1@1	22.56	18.51	0.0710
78	30	80	634000	3510.0	DFT-s-OFDM PI/2 BPSK	1@215	22.67	18.62	0.0728
78	30	80	634000	3510.0	DFT-s-OFDM QPSK	108@54	23.11	19.06	0.0805
78	30	80	634000	3510.0	DFT-s-OFDM QPSK	1@1	22.56	18.51	0.0710
78	30	80	634000	3510.0	DFT-s-OFDM QPSK	1@215	22.63	18.58	0.0721
78	30	80	634000	3510.0	DFT-s-OFDM 16 QAM	108@54	22.18	18.13	0.0650
78	30	80	634000	3510.0	DFT-s-OFDM 16 QAM	1@1	21.66	17.61	0.0577
78	30	80	634000	3510.0	DFT-s-OFDM 16 QAM	1@215	21.83	17.78	0.0600
78	30	80	634000	3510.0	DFT-s-OFDM 64 QAM	108@54	20.63	16.58	0.0455
78	30	80	634000	3510.0	DFT-s-OFDM 64 QAM	1@1	20.06	16.01	0.0399
78	30	80	634000	3510.0	DFT-s-OFDM 64 QAM	1@215	20.34	16.29	0.0426

78	30	80	634000	3510.0	DFT-s-OFDM 256 QAM	108@54	18.85	14.8	0.0302
78	30	80	634000	3510.0	DFT-s-OFDM 256 QAM	1@1	18.37	14.32	0.0270
78	30	80	634000	3510.0	DFT-s-OFDM 256 QAM	1@215	18.32	14.27	0.0267
78	30	80	634000	3510.0	CP-OFDM QPSK	109@54	21.64	17.59	0.0574
78	30	80	634000	3510.0	CP-OFDM QPSK	1@1	21.18	17.13	0.0516
78	30	80	634000	3510.0	CP-OFDM QPSK	1@215	21.35	17.3	0.0537
78	30	90	633000	3495.0	DFT-s-OFDM PI/2 BPSK	120@60	23.17	19.12	0.0817
78	30	90	633000	3495.0	DFT-s-OFDM PI/2 BPSK	1@1	22.37	18.32	0.0679
78	30	90	633000	3495.0	DFT-s-OFDM PI/2 BPSK	1@243	22.4	18.35	0.0684
78	30	90	633000	3495.0	DFT-s-OFDM QPSK	120@60	23.1	19.05	0.0804
78	30	90	633000	3495.0	DFT-s-OFDM QPSK	1@1	22.33	18.28	0.0673
78	30	90	633000	3495.0	DFT-s-OFDM QPSK	1@243	22.41	18.36	0.0685
78	30	90	633000	3495.0	DFT-s-OFDM 16 QAM	120@60	22.13	18.08	0.0643
78	30	90	633000	3495.0	DFT-s-OFDM 16 QAM	1@1	21.66	17.61	0.0577
78	30	90	633000	3495.0	DFT-s-OFDM 16 QAM	1@243	21.75	17.7	0.0589
78	30	90	633000	3495.0	DFT-s-OFDM 64 QAM	120@60	20.61	16.56	0.0453
78	30	90	633000	3495.0	DFT-s-OFDM 64 QAM	1@1	20.18	16.13	0.0410
78	30	90	633000	3495.0	DFT-s-OFDM 64 QAM	1@243	20.09	16.04	0.0402
78	30	90	633000	3495.0	DFT-s-OFDM 256 QAM	120@60	18.73	14.68	0.0294
78	30	90	633000	3495.0	DFT-s-OFDM 256 QAM	1@1	18.34	14.29	0.0269
78	30	90	633000	3495.0	DFT-s-OFDM 256 QAM	1@243	17.99	13.94	0.0248
78	30	90	633000	3495.0	CP-OFDM QPSK	123@61	21.59	17.54	0.0568
78	30	90	633000	3495.0	CP-OFDM QPSK	1@1	21.0	16.95	0.0495
78	30	90	633000	3495.0	CP-OFDM QPSK	1@243	21.11	17.06	0.0508

78	30	90	633334	3500.01	DFT-s-OFDM PI/2 BPSK	120@60	23.12	19.07	0.0807
78	30	90	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	22.45	18.4	0.0692
78	30	90	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@243	22.55	18.5	0.0708
78	30	90	633334	3500.01	DFT-s-OFDM QPSK	120@60	23.11	19.06	0.0805
78	30	90	633334	3500.01	DFT-s-OFDM QPSK	1@1	22.45	18.4	0.0692
78	30	90	633334	3500.01	DFT-s-OFDM QPSK	1@243	22.49	18.44	0.0698
78	30	90	633334	3500.01	DFT-s-OFDM 16 QAM	120@60	22.18	18.13	0.0650
78	30	90	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	21.32	17.27	0.0533
78	30	90	633334	3500.01	DFT-s-OFDM 16 QAM	1@243	21.57	17.52	0.0565
78	30	90	633334	3500.01	DFT-s-OFDM 64 QAM	120@60	20.61	16.56	0.0453
78	30	90	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	20.11	16.06	0.0404
78	30	90	633334	3500.01	DFT-s-OFDM 64 QAM	1@243	20.03	15.98	0.0396
78	30	90	633334	3500.01	DFT-s-OFDM 256 QAM	120@60	18.79	14.74	0.0298
78	30	90	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	18.49	14.44	0.0278
78	30	90	633334	3500.01	DFT-s-OFDM 256 QAM	1@243	18.04	13.99	0.0251
78	30	90	633334	3500.01	CP-OFDM QPSK	123@61	21.6	17.55	0.0569
78	30	90	633334	3500.01	CP-OFDM QPSK	1@1	21.12	17.07	0.0509
78	30	90	633334	3500.01	CP-OFDM QPSK	1@243	21.13	17.08	0.0511
78	30	90	633666	3504.99	DFT-s-OFDM PI/2 BPSK	120@60	23.21	19.16	0.0824
78	30	90	633666	3504.99	DFT-s-OFDM PI/2 BPSK	1@1	22.48	18.43	0.0697
78	30	90	633666	3504.99	DFT-s-OFDM PI/2 BPSK	1@243	22.55	18.5	0.0708
78	30	90	633666	3504.99	DFT-s-OFDM QPSK	120@60	23.17	19.12	0.0817
78	30	90	633666	3504.99	DFT-s-OFDM QPSK	1@1	22.46	18.41	0.0693
78	30	90	633666	3504.99	DFT-s-OFDM QPSK	1@243	22.54	18.49	0.0706



78	30	90	633666	3504.99	DFT-s-OFDM 16 QAM	120@60	22.16	18.11	0.0647
78	30	90	633666	3504.99	DFT-s-OFDM 16 QAM	1@1	21.39	17.34	0.0542
78	30	90	633666	3504.99	DFT-s-OFDM 16 QAM	1@243	21.56	17.51	0.0564
78	30	90	633666	3504.99	DFT-s-OFDM 64 QAM	120@60	20.6	16.55	0.0452
78	30	90	633666	3504.99	DFT-s-OFDM 64 QAM	1@1	20.11	16.06	0.0404
78	30	90	633666	3504.99	DFT-s-OFDM 64 QAM	1@243	20.22	16.17	0.0414
78	30	90	633666	3504.99	DFT-s-OFDM 256 QAM	120@60	18.8	14.75	0.0299
78	30	90	633666	3504.99	DFT-s-OFDM 256 QAM	1@1	18.5	14.45	0.0279
78	30	90	633666	3504.99	DFT-s-OFDM 256 QAM	1@243	18.2	14.15	0.0260
78	30	90	633666	3504.99	CP-OFDM QPSK	123@61	21.6	17.55	0.0569
78	30	90	633666	3504.99	CP-OFDM QPSK	1@1	21.12	17.07	0.0509
78	30	90	633666	3504.99	CP-OFDM QPSK	1@243	21.14	17.09	0.0512
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	135@67	23.31	19.26	0.0843
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	22.24	18.19	0.0659
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@271	22.38	18.33	0.0681
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	135@67	23.17	19.12	0.0817
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@1	22.26	18.21	0.0662
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@271	22.48	18.43	0.0697
78	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	135@67	22.13	18.08	0.0643
78	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	21.21	17.16	0.0520
78	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@271	21.41	17.36	0.0545
78	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	135@67	20.62	16.57	0.0454
78	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	20.02	15.97	0.0395
78	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@271	20.08	16.03	0.0401

78	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	135@67	18.8	14.75	0.0299
78	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	18.19	14.11	0.0258
78	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@271	17.91	13.83	0.0242
78	30	100	633334	3500.01	CP-OFDM QPSK	137@68	21.69	17.61	0.0577
78	30	100	633334	3500.01	CP-OFDM QPSK	1@1	20.9	16.82	0.0481
78	30	100	633334	3500.01	CP-OFDM QPSK	1@271	21.03	16.95	0.0495

## Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00286	PASS	NV
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00356	PASS	LV
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00312	PASS	HV
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00625	PASS	-30°C
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00689	PASS	-20°C
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00598	PASS	-10°C
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00581	PASS	0°C
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00563	PASS	10°C
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00353	PASS	20°C
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00253	PASS	30°C
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00653	PASS	40°C
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	-0.00521	PASS	50°C

## Peak to Average Ratio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
78	30	20	630668	3460.02	DFT-s-OFDM PI/2 BPSK	50@0	7.12	13	PASS
78	30	20	630668	3460.02	DFT-s-OFDM PI/2 BPSK	1@0	7.24	13	PASS
78	30	20	630668	3460.02	DFT-s-OFDM PI/2 BPSK	1@50	7.23	13	PASS
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	50@0	8.29	13	PASS
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@0	8.58	13	PASS
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@50	7.77	13	PASS
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	7.06	13	PASS
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@0	7.21	13	PASS
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@50	7.19	13	PASS
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	8.23	13	PASS
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@0	7.85	13	PASS
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@50	7.73	13	PASS
78	30	20	636000	3540.0	DFT-s-OFDM PI/2 BPSK	50@0	7.04	13	PASS
78	30	20	636000	3540.0	DFT-s-OFDM PI/2 BPSK	1@0	7.14	13	PASS
78	30	20	636000	3540.0	DFT-s-OFDM PI/2 BPSK	1@50	7.02	13	PASS
78	30	20	636000	3540.0	DFT-s-OFDM QPSK	50@0	8.21	13	PASS
78	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@0	7.75	13	PASS
78	30	20	636000	3540.0	DFT-s-OFDM QPSK	1@50	7.7	13	PASS

B5\_N78(20M)\_DFT-s-OFDM\_PI\_2-BPSK\_Outer\_Full\_Low\_CH



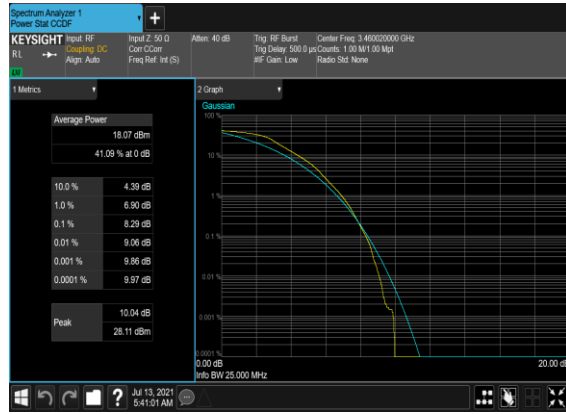
B5\_N78(20M)\_DFT-s-OFDM\_PI\_2-BPSK\_Edge\_1RB\_Left\_Low\_CH



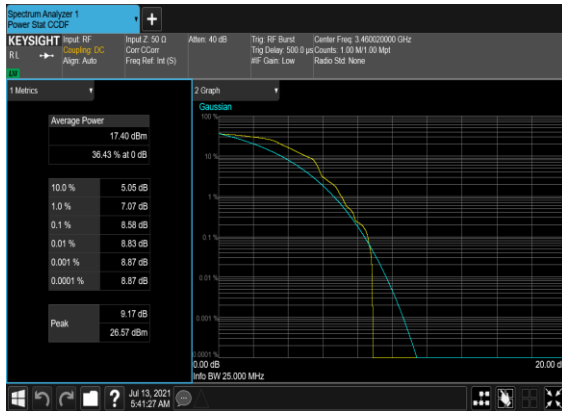
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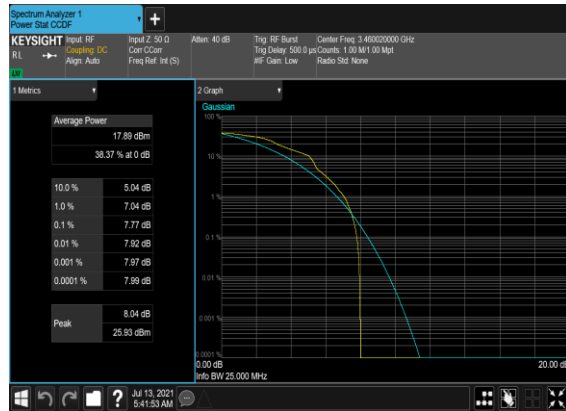
B5\_N78(20M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Low\_CH



B5\_N78(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



B5\_N78(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Right\_Low\_CH



B5\_N78(20M)\_DFT-s-OFDM\_PI\_2-  
BPSK\_Outer\_Full\_Mid\_CH



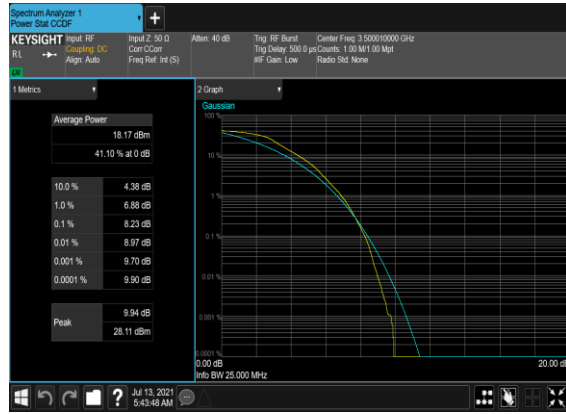
B5\_N78(20M)\_DFT-s-OFDM\_PI\_2-  
BPSK\_Edge\_1RB\_Left\_Mid\_CH



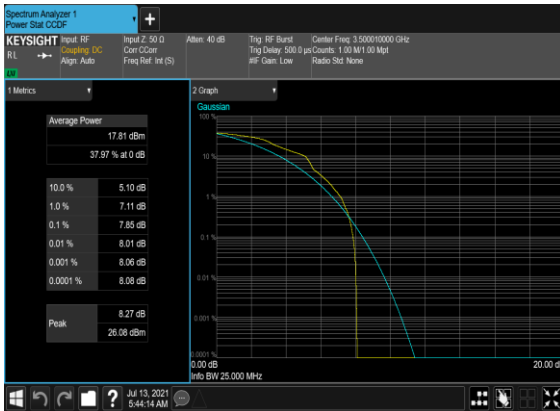
B5\_N78(20M)\_DFT-s-OFDM\_PI\_2-  
BPSK\_Edge\_1RB\_Right\_Mid\_CH



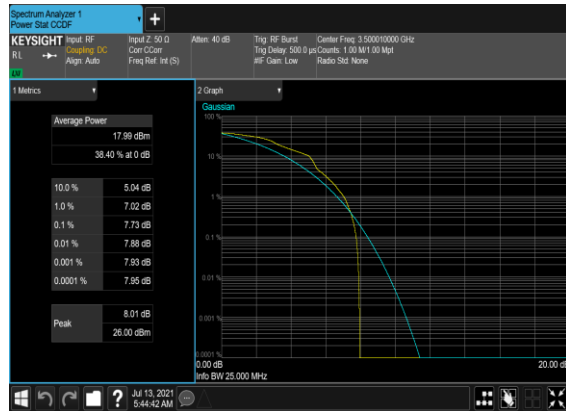
B5\_N78(20M)\_DFT-s-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



B5\_N78(20M)\_DFT-s-  
OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



B5\_N78(20M)\_DFT-s-  
OFDM\_QPSK\_Edge\_1RB\_Right\_Mid\_CH



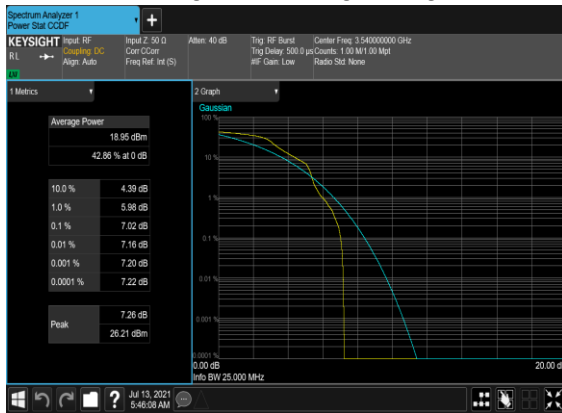
B5\_N78(20M)\_DFT-s-OFDM\_PI\_2-BPSK\_Outer\_Full\_High\_CH



B5\_N78(20M)\_DFT-s-OFDM\_PI\_2-BPSK\_Edge\_1RB\_Left\_High\_CH



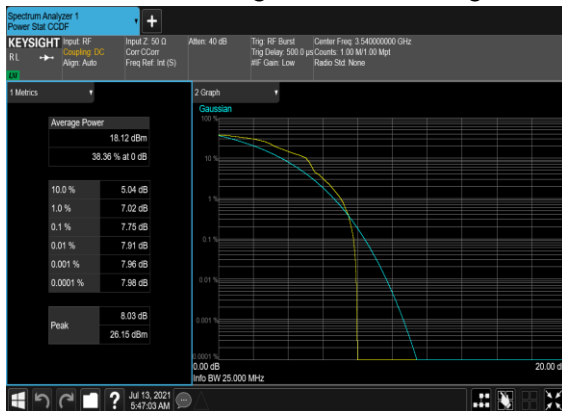
B5\_N78(20M)\_DFT-s-OFDM\_PI\_2-BPSK\_Edge\_1RB\_Right\_High\_CH



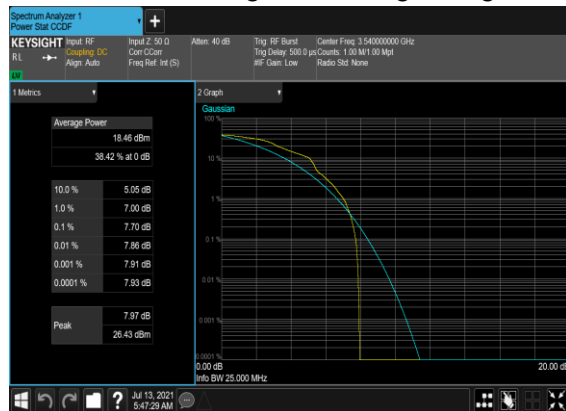
B5\_N78(20M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_High\_CH



B5\_N78(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



B5\_N78(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Right\_High\_CH



## Occupied Bandwidth

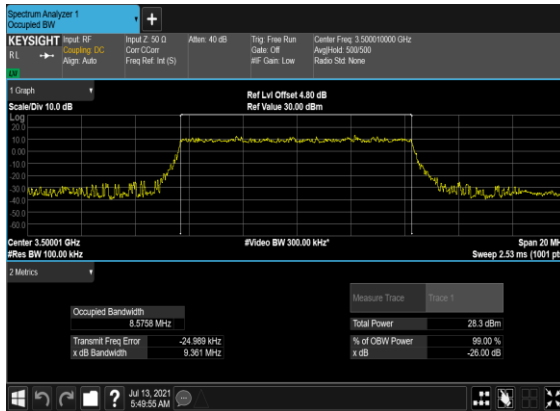
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB OBW (MHz)
78	30	10	633334	3500.01	DFT-s-OFDM PI/2 BPSK	24@0	8.5758	9.361
78	30	10	633334	3500.01	DFT-s-OFDM QPSK	24@0	8.5806	9.298
78	30	10	633334	3500.01	CP-OFDM QPSK	24@0	8.5691	9.294
78	30	10	633334	3500.01	CP-OFDM 16 QAM	24@0	8.5839	9.369
78	30	10	633334	3500.01	CP-OFDM 64 QAM	24@0	8.5915	9.458
78	30	10	633334	3500.01	CP-OFDM 256 QAM	24@0	8.5991	9.408
78	30	15	633334	3500.01	DFT-s-OFDM PI/2 BPSK	36@0	12.853	13.74
78	30	15	633334	3500.01	DFT-s-OFDM QPSK	36@0	12.876	13.97
78	30	15	633334	3500.01	CP-OFDM QPSK	38@0	13.559	14.54
78	30	15	633334	3500.01	CP-OFDM 16 QAM	38@0	13.536	14.4
78	30	15	633334	3500.01	CP-OFDM 64 QAM	38@0	13.562	14.42
78	30	15	633334	3500.01	CP-OFDM 256 QAM	38@0	13.547	14.32
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	17.801	18.77
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	17.776	19.02
78	30	20	633334	3500.01	CP-OFDM QPSK	51@0	18.221	19.3
78	30	20	633334	3500.01	CP-OFDM 16 QAM	51@0	18.175	19.23
78	30	20	633334	3500.01	CP-OFDM 64 QAM	51@0	18.185	19.12
78	30	20	633334	3500.01	CP-OFDM 256 QAM	51@0	18.194	19.06
78	30	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	100@0	35.745	37.56
78	30	40	633334	3500.01	DFT-s-OFDM QPSK	100@0	35.686	37.47
78	30	40	633334	3500.01	CP-OFDM QPSK	106@0	37.82	39.52
78	30	40	633334	3500.01	CP-OFDM 16 QAM	106@0	37.873	39.39
78	30	40	633334	3500.01	CP-OFDM 64 QAM	106@0	37.811	39.45
78	30	40	633334	3500.01	CP-OFDM 256 QAM	106@0	37.775	39.37



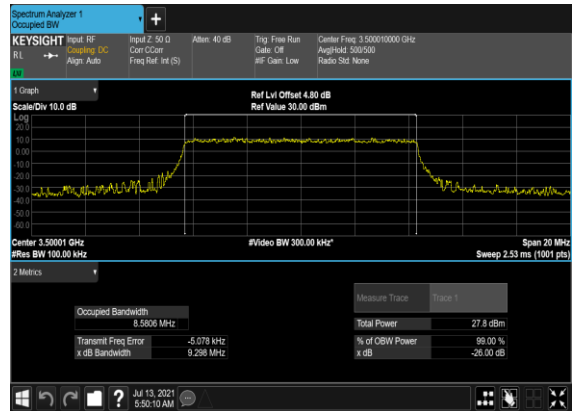
78	30	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	128@0	45.687	47.5
78	30	50	633334	3500.01	DFT-s-OFDM QPSK	128@0	45.749	47.89
78	30	50	633334	3500.01	CP-OFDM QPSK	133@0	47.386	49.42
78	30	50	633334	3500.01	CP-OFDM 16 QAM	133@0	47.422	49.18
78	30	50	633334	3500.01	CP-OFDM 64 QAM	133@0	47.44	49.39
78	30	50	633334	3500.01	CP-OFDM 256 QAM	133@0	47.51	49.17
78	30	60	633334	3500.01	DFT-s-OFDM PI/2 BPSK	162@0	57.817	59.82
78	30	60	633334	3500.01	DFT-s-OFDM QPSK	162@0	57.881	60.1
78	30	60	633334	3500.01	CP-OFDM QPSK	162@0	57.828	60.0
78	30	60	633334	3500.01	CP-OFDM 16 QAM	162@0	57.734	59.84
78	30	60	633334	3500.01	CP-OFDM 64 QAM	162@0	57.763	59.9
78	30	60	633334	3500.01	CP-OFDM 256 QAM	162@0	57.794	59.9
78	30	70	633334	3500.01	DFT-s-OFDM PI/2 BPSK	180@0	64.336	67.02
78	30	70	633334	3500.01	DFT-s-OFDM QPSK	180@0	64.327	66.96
78	30	70	633334	3500.01	CP-OFDM QPSK	189@0	67.587	70.15
78	30	70	633334	3500.01	CP-OFDM 16 QAM	189@0	67.585	69.95
78	30	70	633334	3500.01	CP-OFDM 64 QAM	189@0	67.517	70.19
78	30	70	633334	3500.01	CP-OFDM 256 QAM	189@0	67.533	69.85
78	30	80	633334	3500.01	DFT-s-OFDM PI/2 BPSK	216@0	77.168	79.98
78	30	80	633334	3500.01	DFT-s-OFDM QPSK	216@0	77.176	79.73
78	30	80	633334	3500.01	CP-OFDM QPSK	217@0	77.475	80.02
78	30	80	633334	3500.01	CP-OFDM 16 QAM	217@0	77.504	80.21
78	30	80	633334	3500.01	CP-OFDM 64 QAM	217@0	77.613	80.21
78	30	80	633334	3500.01	CP-OFDM 256 QAM	217@0	77.553	79.96
78	30	90	633334	3500.01	DFT-s-OFDM PI/2 BPSK	240@0	85.697	88.86
78	30	90	633334	3500.01	DFT-s-OFDM	240@0	85.623	88.59

QPSK								
78	30	90	633334	3500.01	CP-OFDM QPSK	245@0	87.419	90.28
78	30	90	633334	3500.01	CP-OFDM 16 QAM	245@0	87.423	90.22
78	30	90	633334	3500.01	CP-OFDM 64 QAM	245@0	87.373	90.41
78	30	90	633334	3500.01	CP-OFDM 256 QAM	245@0	87.372	90.34
78	30	100	633334	3500.01	DFT-s- OFDM PI/2 BPSK	270@0	96.23	99.53
78	30	100	633334	3500.01	DFT-s- OFDM QPSK	270@0	96.252	99.41
78	30	100	633334	3500.01	CP-OFDM QPSK	273@0	97.313	100.8
78	30	100	633334	3500.01	CP-OFDM 16 QAM	273@0	97.392	100.5
78	30	100	633334	3500.01	CP-OFDM 64 QAM	273@0	97.366	100.5
78	30	100	633334	3500.01	CP-OFDM 256 QAM	273@0	97.43	100.5

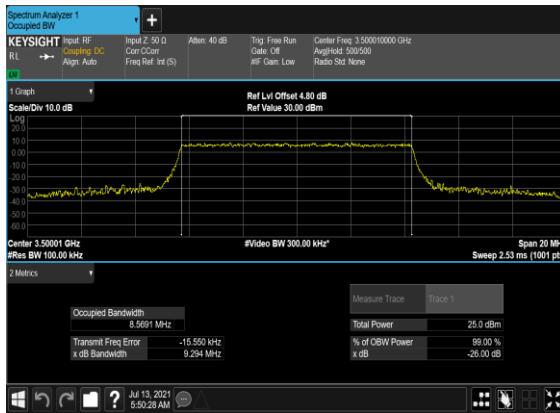
B5\_N78(10M)\_DFT-s-OFDM\_PI\_2-  
BPSK\_Outer\_Full\_Mid\_CH



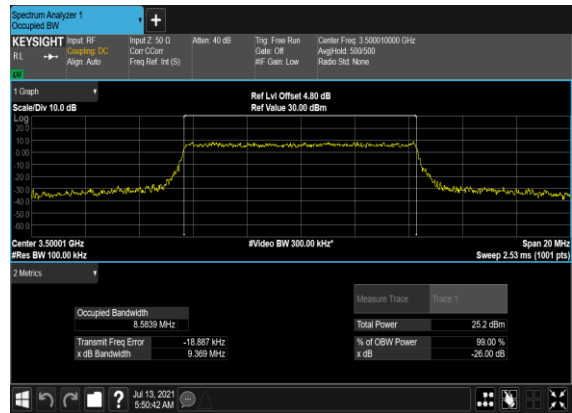
B5\_N78(10M)\_DFT-s-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



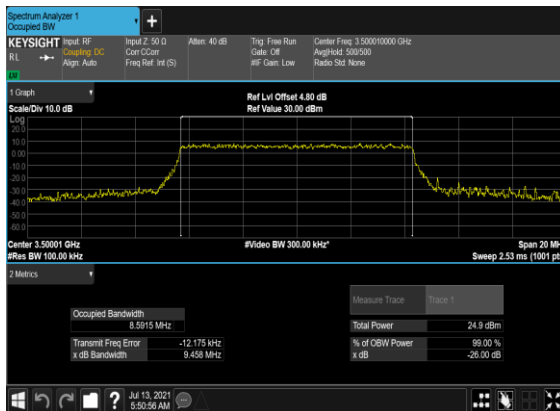
B5\_N78(10M)\_CP-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



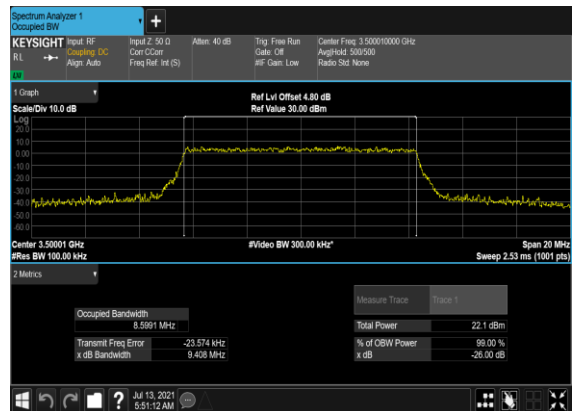
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QAM\_Outer\_Full\_Mid\_CH



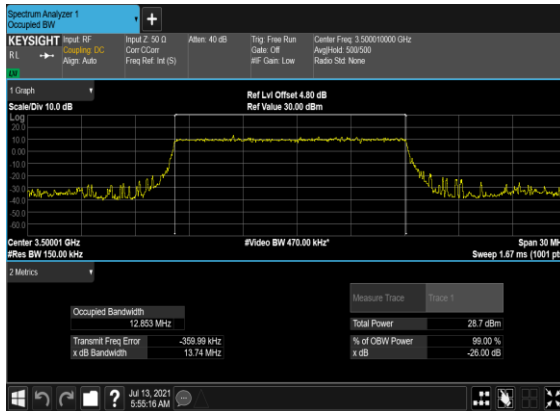
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QAM\_Outer\_Full\_Mid\_CH



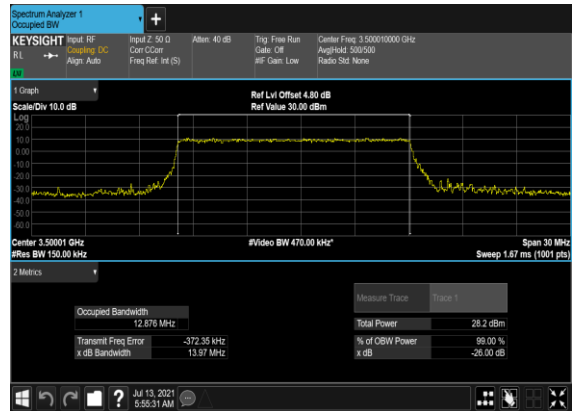
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QAM\_Outer\_Full\_Mid\_CH



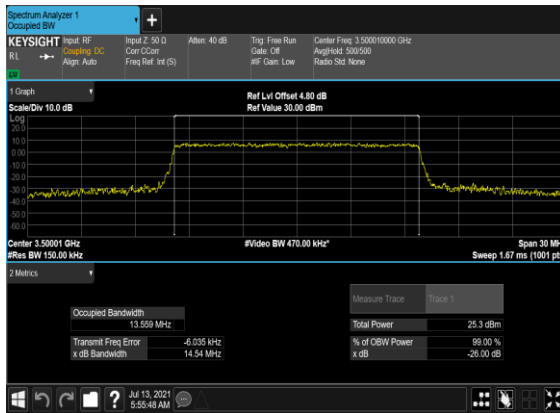
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BPSK\_Outer\_Full\_Mid\_CH



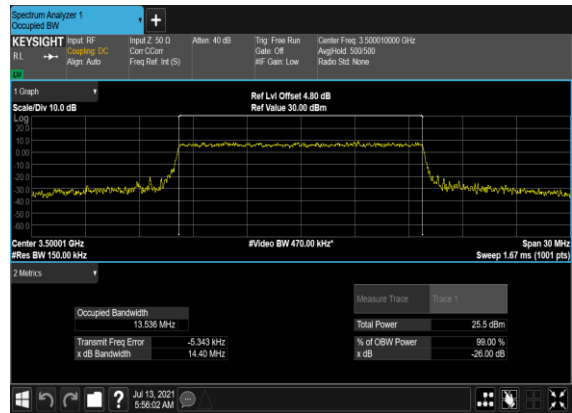
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OFDM\_QPSK\_Outer\_Full\_Mid\_CH



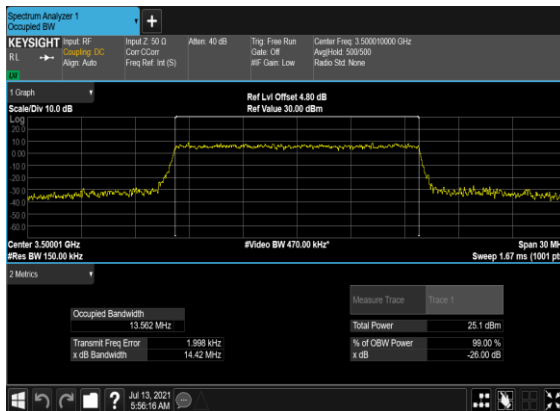
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OFDM\_QPSK\_Outer\_Full\_Mid\_CH



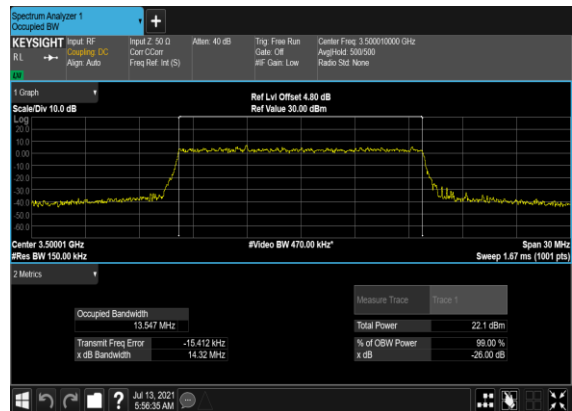
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QAM\_Outer\_Full\_Mid\_CH



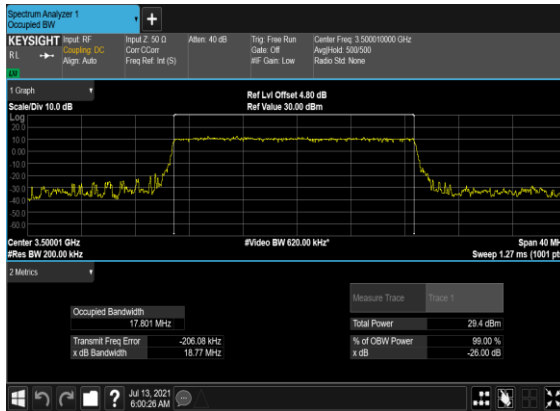
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QAM\_Outer\_Full\_Mid\_CH



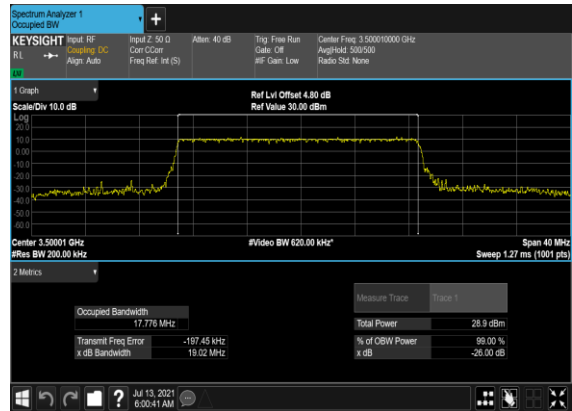
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QAM\_Outer\_Full\_Mid\_CH



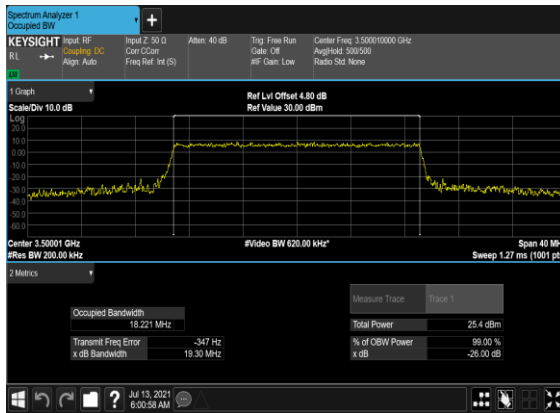
B5\_N78(20M)\_DFT-s-OFDM\_PI\_2-  
BPSK\_Outer\_Full\_Mid\_CH



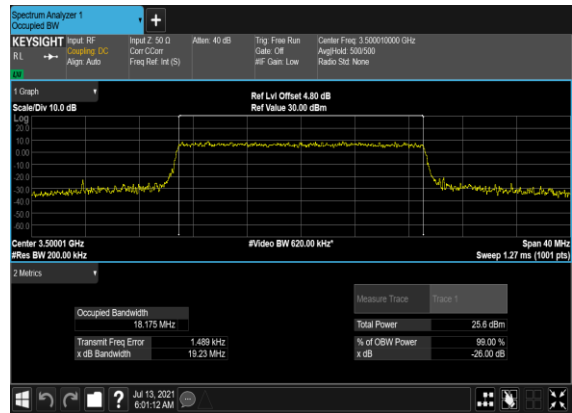
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OFDM\_QPSK\_Outer\_Full\_Mid\_CH



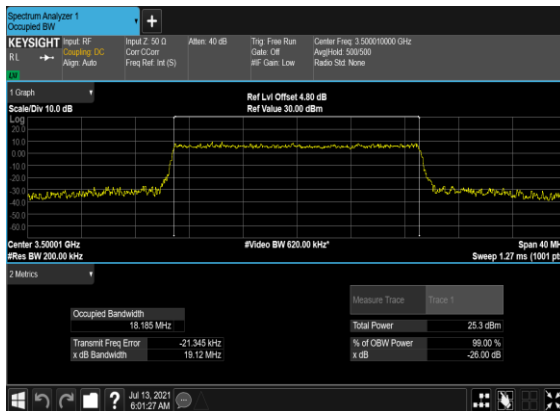
B5\_N78(20M)\_CP-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



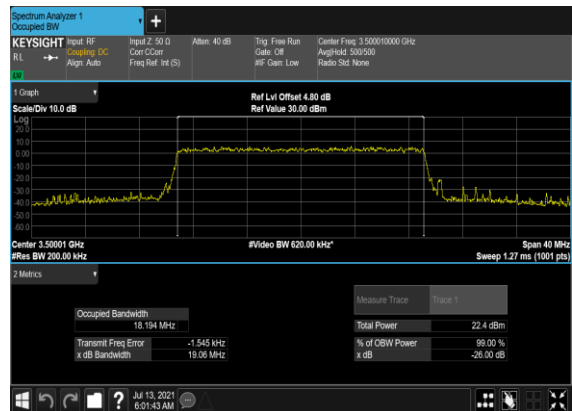
B5\_N78(20M)\_CP-OFDM\_16  
QAM\_Outer\_Full\_Mid\_CH



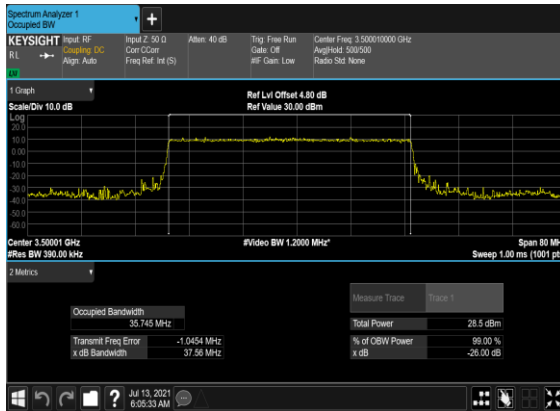
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QAM\_Outer\_Full\_Mid\_CH



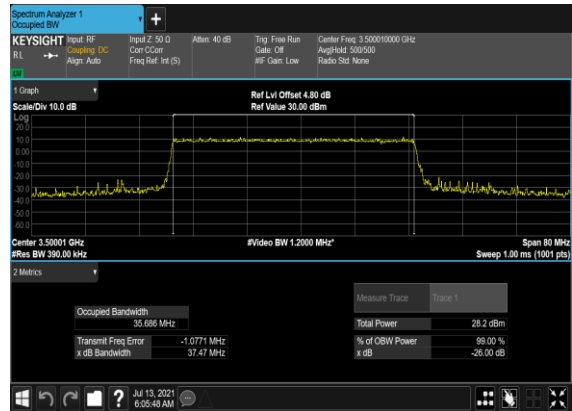
B5\_N78(20M)\_CP-OFDM\_256  
QAM\_Outer\_Full\_Mid\_CH



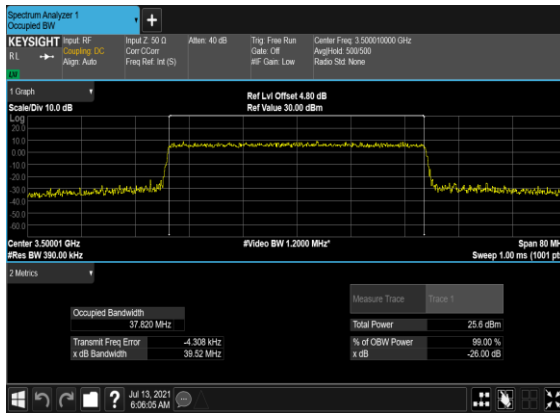
### B5\_N78(40M)\_DFT-s-OFDM\_PI\_2- BPSK\_Outer\_Full\_Mid\_CH



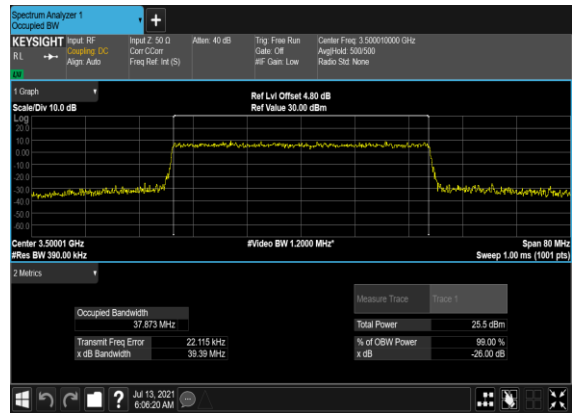
### B5\_N78(40M)\_DFT-s- OFDM\_QPSK\_Outer\_Full\_Mid\_CH



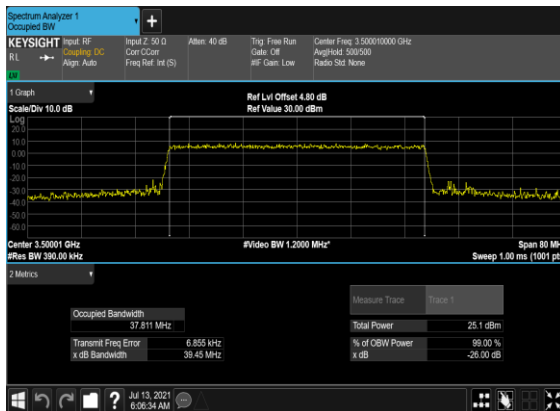
### B5\_N78(40M)\_CP- OFDM\_QPSK\_Outer\_Full\_Mid\_CH



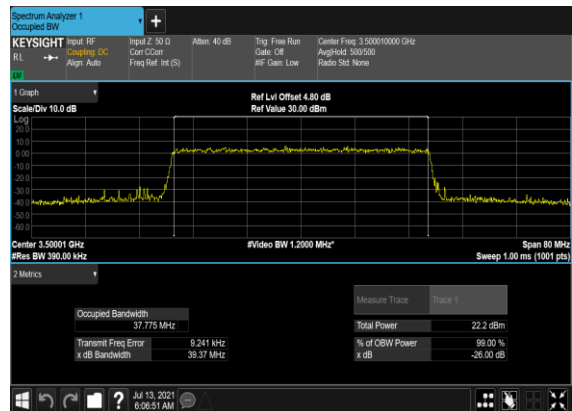
### B5\_N78(40M)\_CP-OFDM\_16 QAM\_Outer\_Full\_Mid\_CH



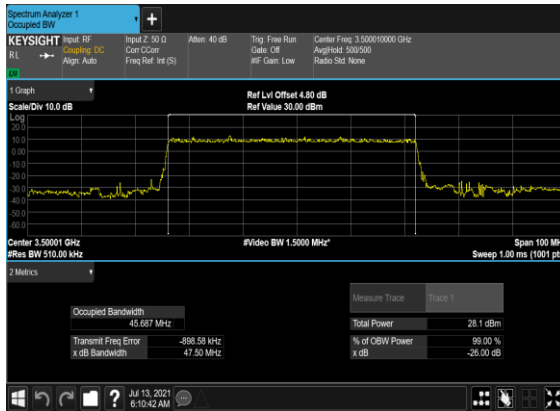
### B5\_N78(40M)\_CP-OFDM\_64 QAM\_Outer\_Full\_Mid\_CH



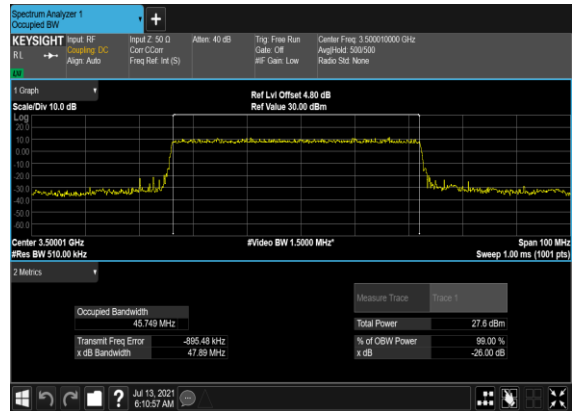
### B5\_N78(40M)\_CP-OFDM\_256 QAM\_Outer\_Full\_Mid\_CH



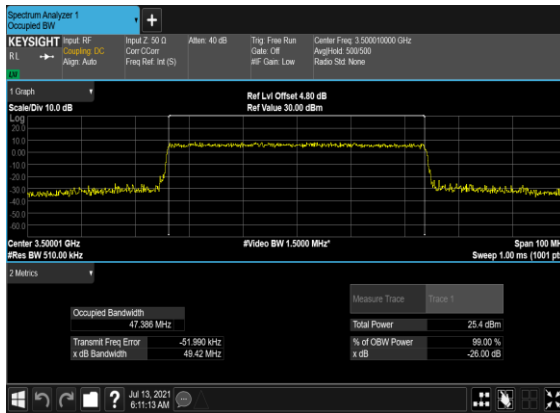
B5\_N78(50M)\_DFT-s-OFDM\_PI\_2-  
BPSK\_Outer\_Full\_Mid\_CH



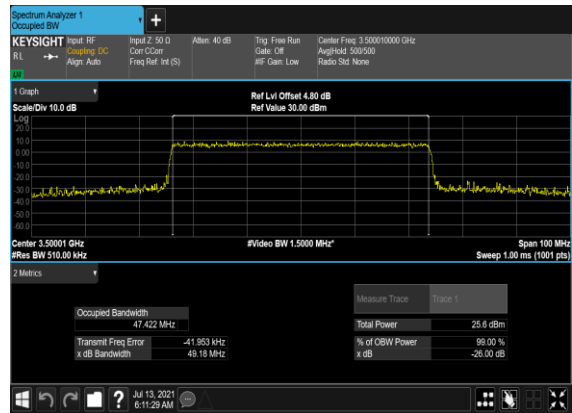
B5\_N78(50M)\_DFT-s-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



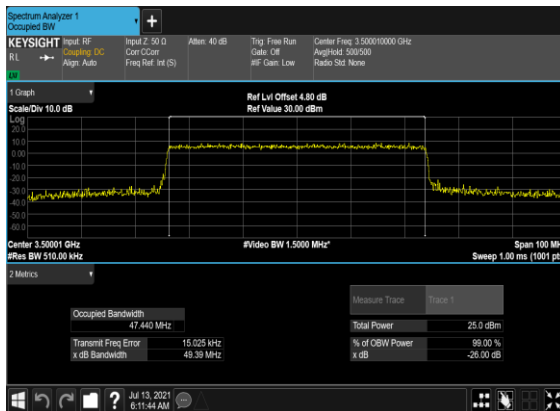
B5\_N78(50M)\_CP-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



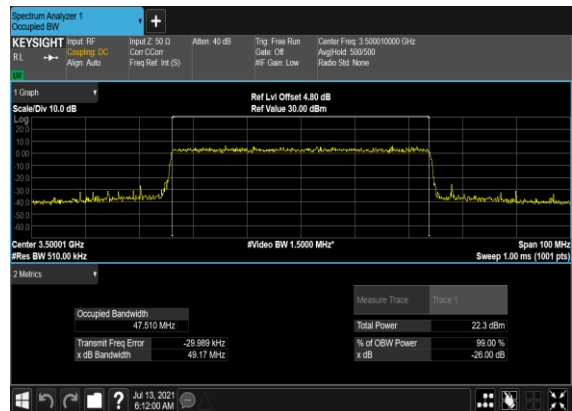
B5\_N78(50M)\_CP-OFDM\_16  
QAM\_Outer\_Full\_Mid\_CH



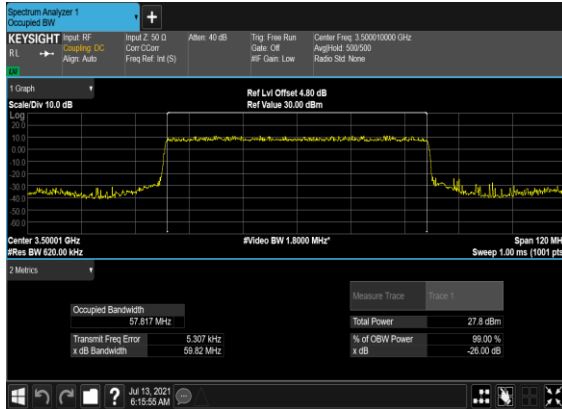
B5\_N78(50M)\_CP-OFDM\_64  
QAM\_Outer\_Full\_Mid\_CH



B5\_N78(50M)\_CP-OFDM\_256  
QAM\_Outer\_Full\_Mid\_CH



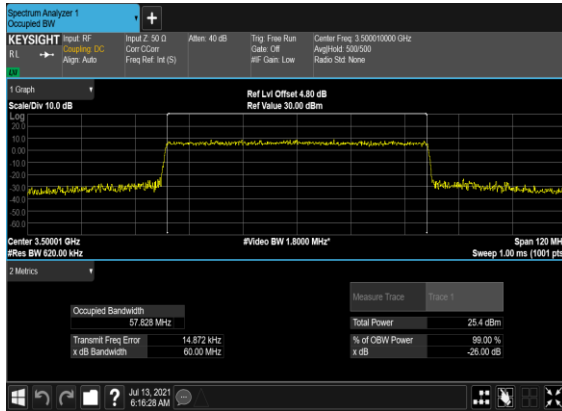
### B5\_N78(60M)\_DFT-s-OFDM\_PI\_2- BPSK\_Outer\_Full\_Mid\_CH



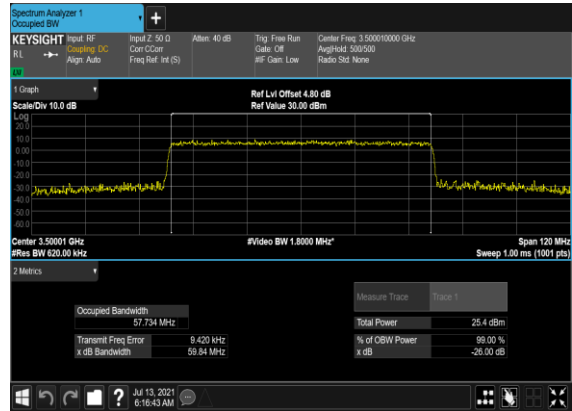
### B5\_N78(60M)\_DFT-s- OFDM\_QPSK\_Outer\_Full\_Mid\_CH



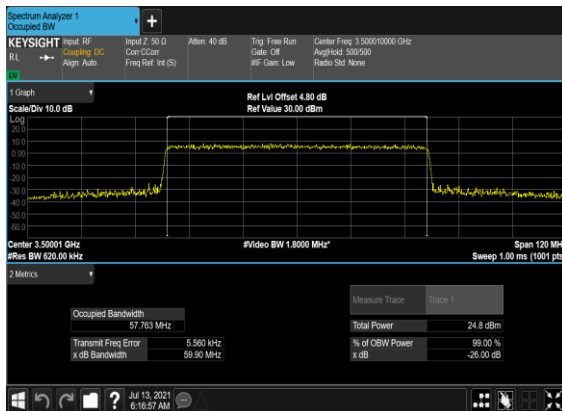
### B5\_N78(60M)\_CP- OFDM\_QPSK\_Outer\_Full\_Mid\_CH



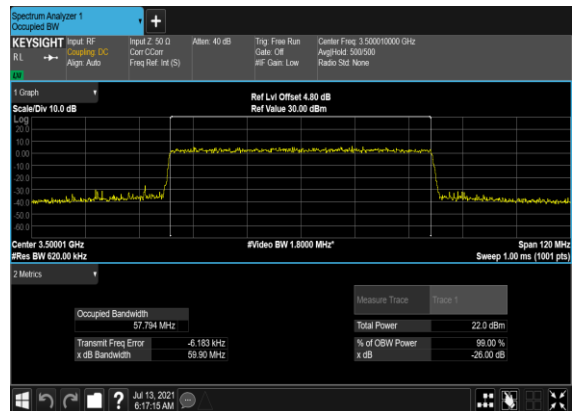
### B5\_N78(60M)\_CP-OFDM\_16 QAM\_Outer\_Full\_Mid\_CH



### B5\_N78(60M)\_CP-OFDM\_64 QAM\_Outer\_Full\_Mid\_CH

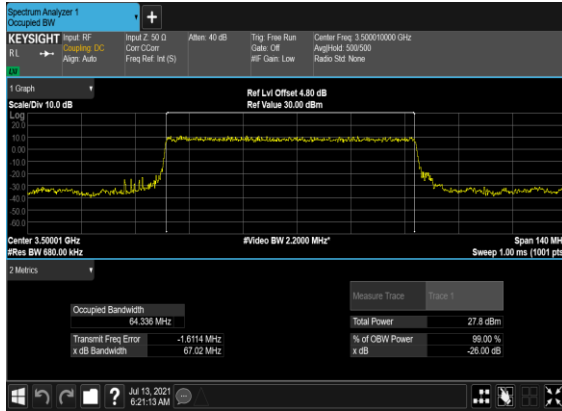


### B5\_N78(60M)\_CP-OFDM\_256 QAM\_Outer\_Full\_Mid\_CH

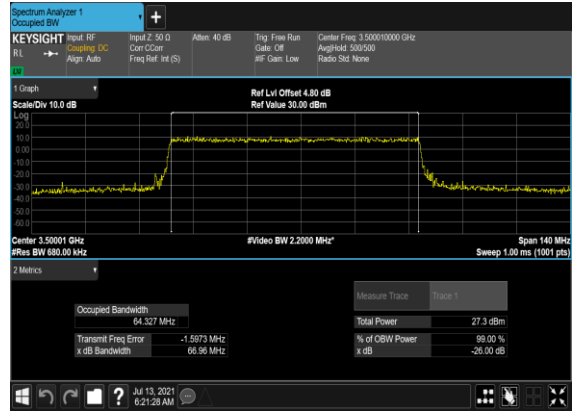




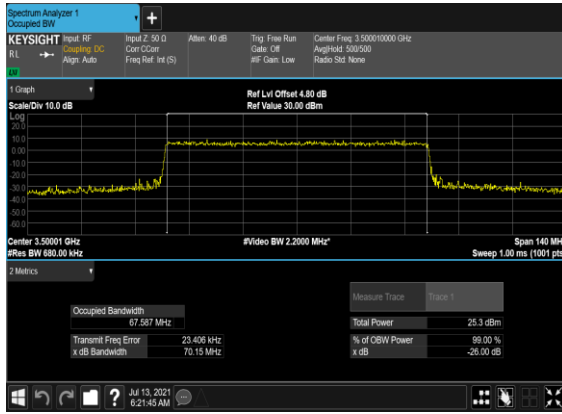
### B5\_N78(70M)\_DFT-s-OFDM\_PI\_2- BPSK\_Outer\_Full\_Mid\_CH



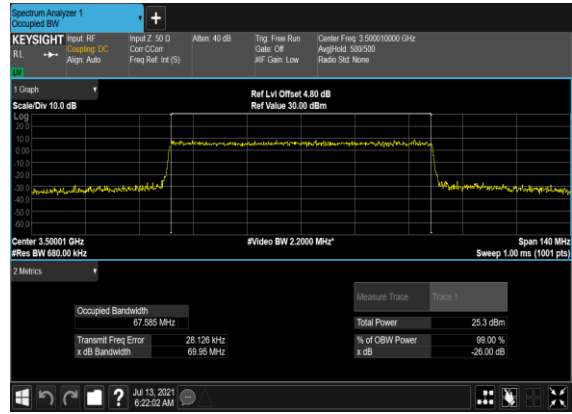
### B5\_N78(70M)\_DFT-s- OFDM\_QPSK\_Outer\_Full\_Mid\_CH



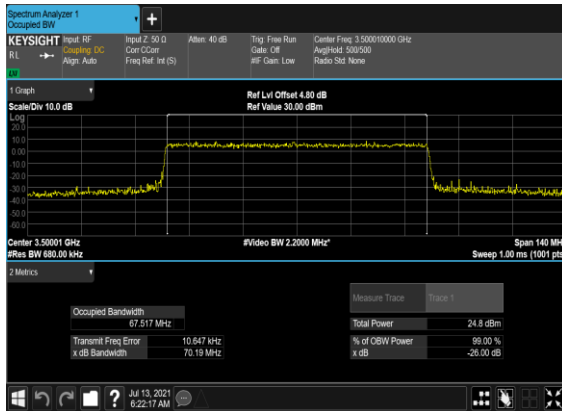
### B5\_N78(70M)\_CP- OFDM\_QPSK\_Outer\_Full\_Mid\_CH



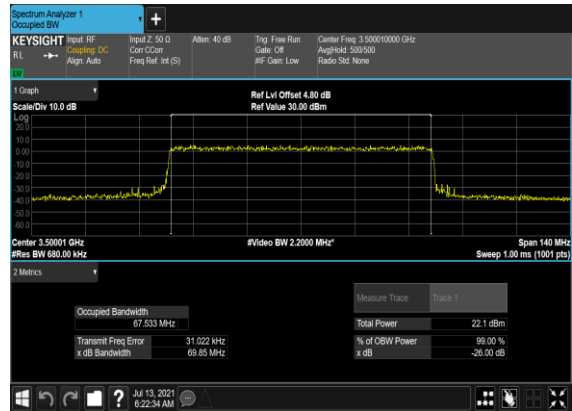
### B5\_N78(70M)\_CP-OFDM\_16 QAM\_Outer\_Full\_Mid\_CH



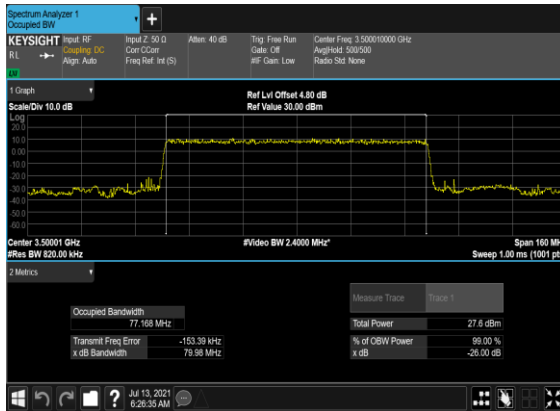
### B5\_N78(70M)\_CP-OFDM\_64 QAM\_Outer\_Full\_Mid\_CH



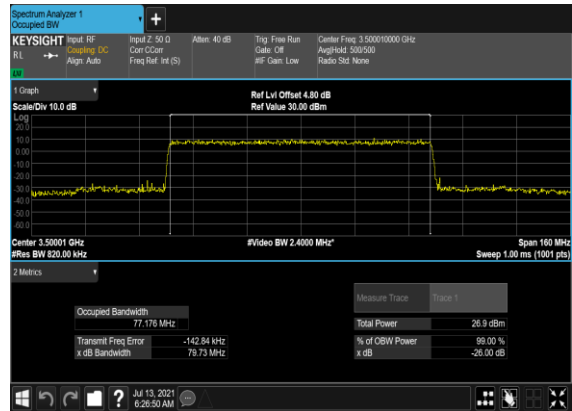
### B5\_N78(70M)\_CP-OFDM\_256 QAM\_Outer\_Full\_Mid\_CH



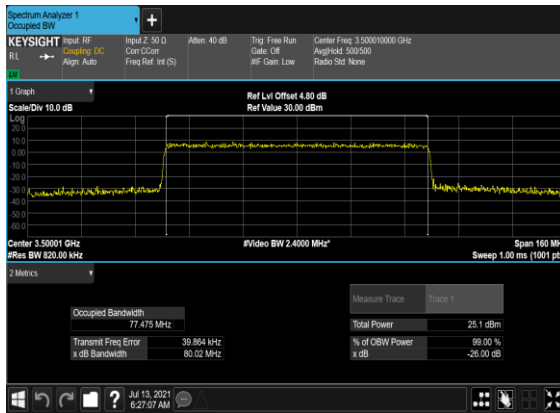
### B5\_N78(80M)\_DFT-s-OFDM\_PI\_2- BPSK\_Outer\_Full\_Mid\_CH



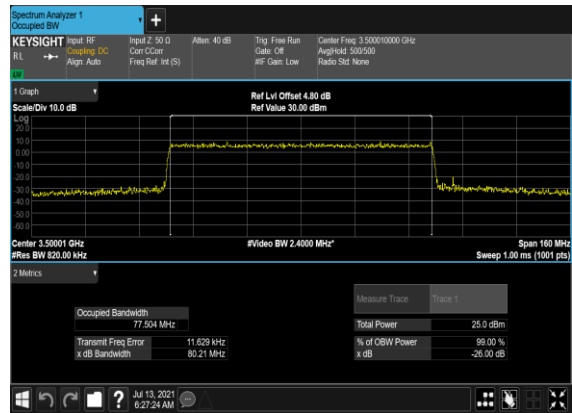
### B5\_N78(80M)\_DFT-s- OFDM\_QPSK\_Outer\_Full\_Mid\_CH



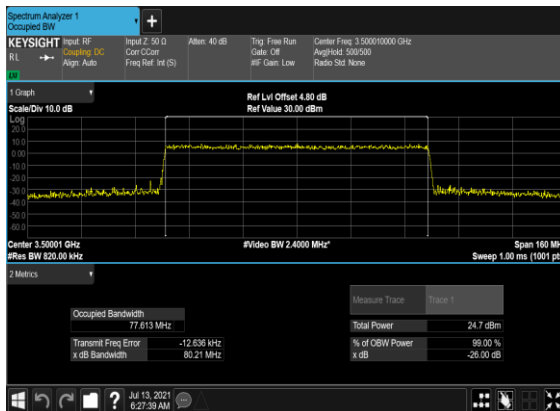
### B5\_N78(80M)\_CP- OFDM\_QPSK\_Outer\_Full\_Mid\_CH



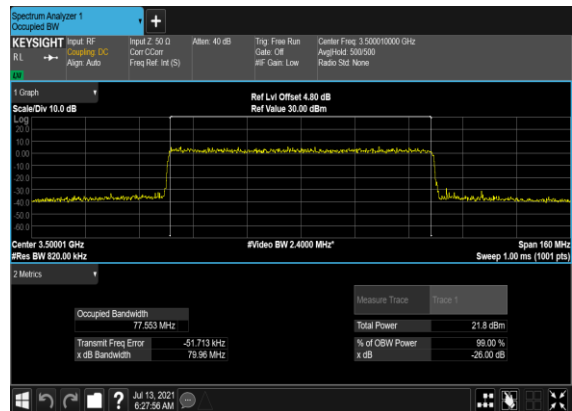
### B5\_N78(80M)\_CP-OFDM\_16 QAM\_Outer\_Full\_Mid\_CH



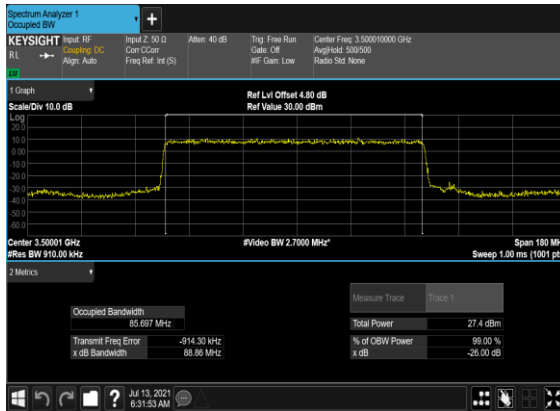
### B5\_N78(80M)\_CP-OFDM\_64 QAM\_Outer\_Full\_Mid\_CH



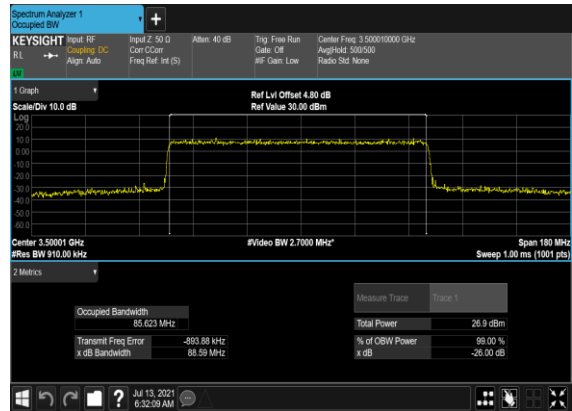
### B5\_N78(80M)\_CP-OFDM\_256 QAM\_Outer\_Full\_Mid\_CH



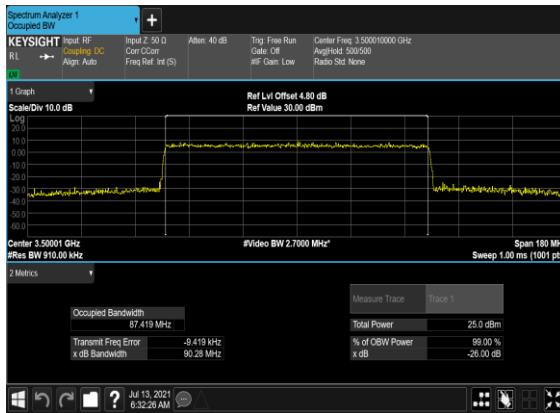
### B5\_N78(90M)\_DFT-s-OFDM\_PI\_2- BPSK\_Outer\_Full\_Mid\_CH



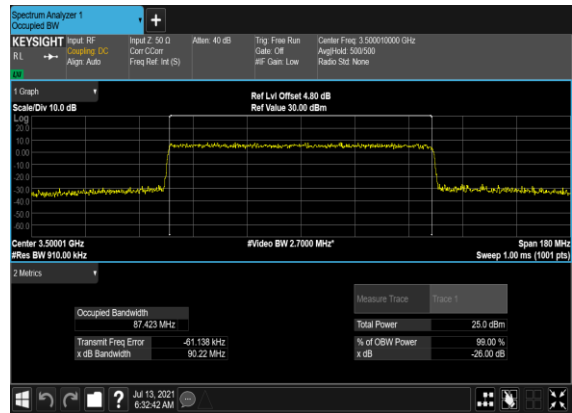
### B5\_N78(90M)\_DFT-s- OFDM\_QPSK\_Outer\_Full\_Mid\_CH



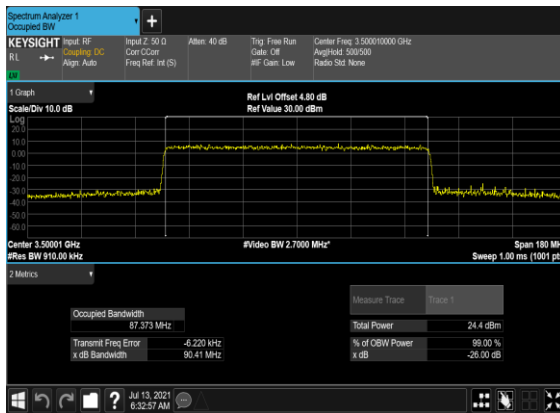
### B5\_N78(90M)\_CP- OFDM\_QPSK\_Outer\_Full\_Mid\_CH



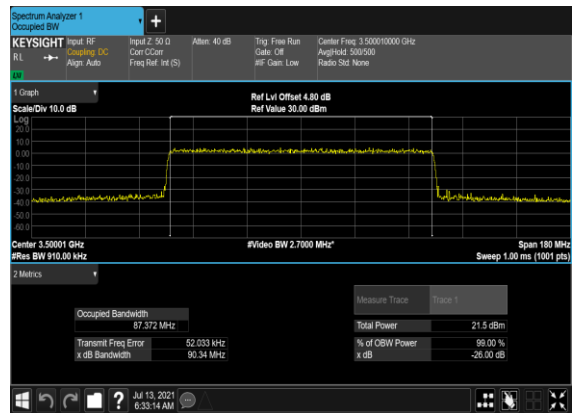
### B5\_N78(90M)\_CP-OFDM\_16 QAM\_Outer\_Full\_Mid\_CH



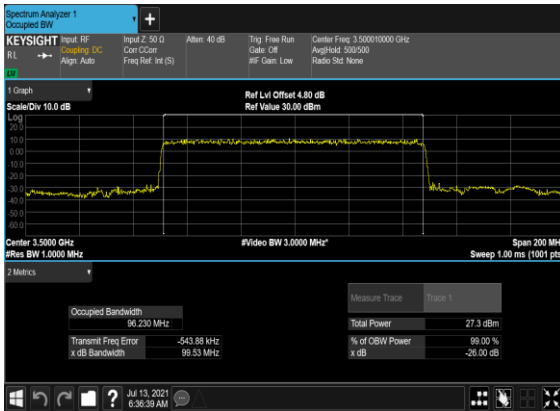
### B5\_N78(90M)\_CP-OFDM\_64 QAM\_Outer\_Full\_Mid\_CH



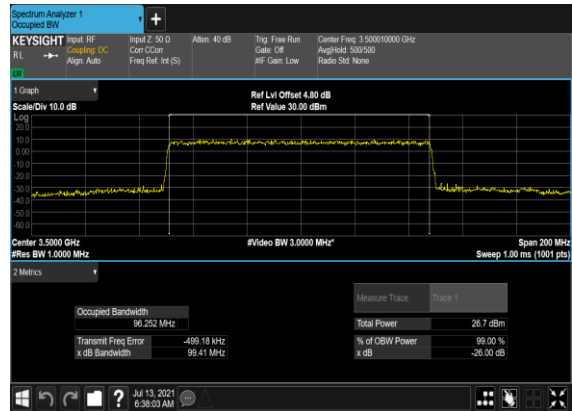
### B5\_N78(90M)\_CP-OFDM\_256 QAM\_Outer\_Full\_Mid\_CH



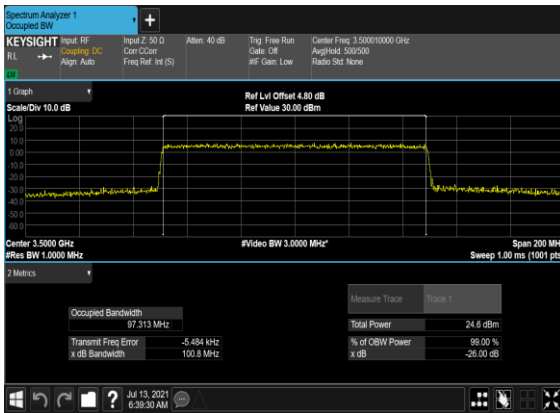
B5\_N78(100M)\_DFT-s-OFDM\_PI\_2-  
BPSK\_Outer\_Full\_Mid\_CH



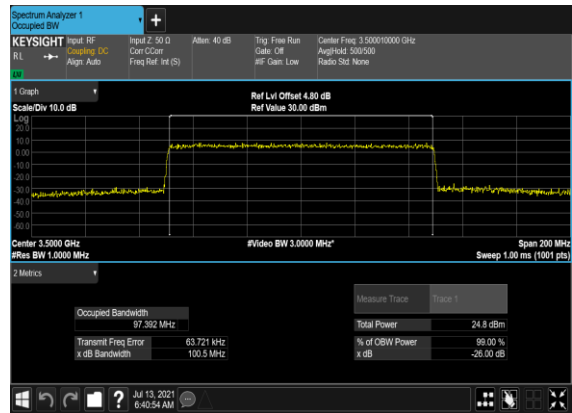
B5\_N78(100M)\_DFT-s-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



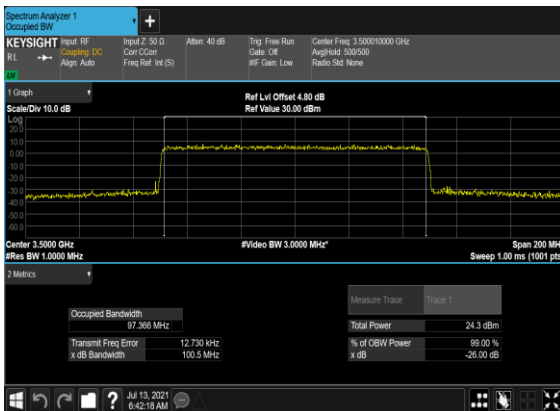
B5\_N78(100M)\_CP-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



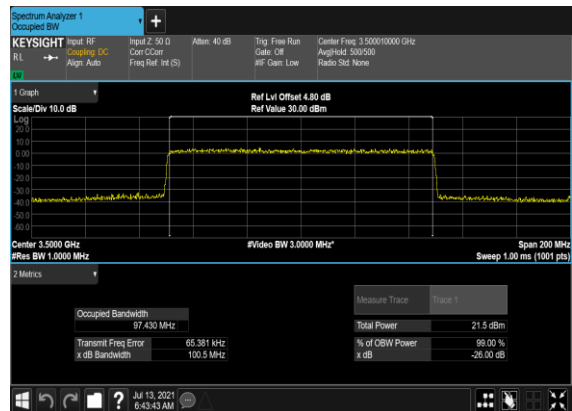
B5\_N78(100M)\_CP-OFDM\_16  
QAM\_Outer\_Full\_Mid\_CH



B5\_N78(100M)\_CP-OFDM\_64  
QAM\_Outer\_Full\_Mid\_CH



B5\_N78(100M)\_CP-OFDM\_256  
QAM\_Outer\_Full\_Mid\_CH

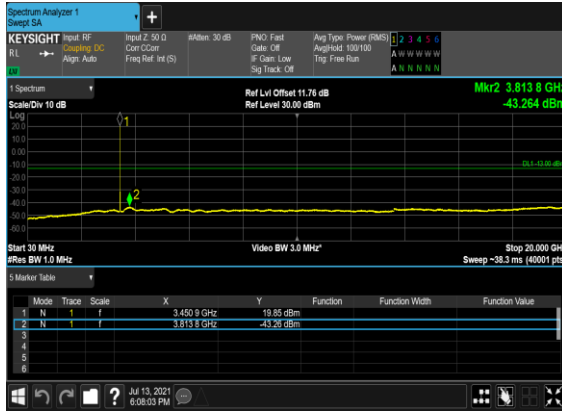


## Conducted Spurious Emissions

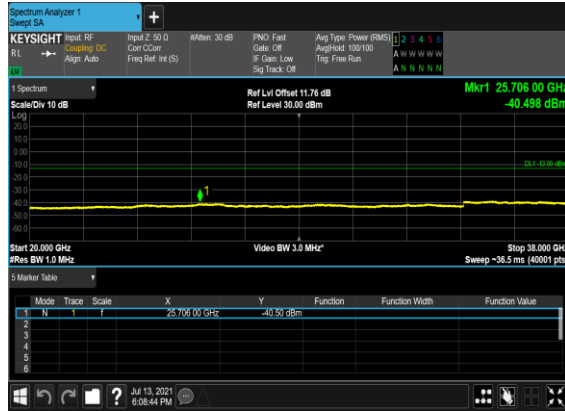
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
78	30	10	630334	3455.01	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	10	630334	3455.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	10	630334	3455.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	10	630334	3455.01	DFT-s-OFDM QPSK	1@0	see graph	---
78	30	10	630334	3455.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	10	630334	3455.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	10	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	10	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	10	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	10	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	---
78	30	10	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	10	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	10	636332	3544.98	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	10	636332	3544.98	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	10	636332	3544.98	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@0	see graph	---
78	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	60	632000	3480.0	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	60	632000	3480.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	60	632000	3480.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@0	see graph	---

78	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	60	632000	3480.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	60	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	60	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	60	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	---
78	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	60	634666	3519.99	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	60	634666	3519.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	60	634666	3519.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@0	see graph	---
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	---
78	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	---
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS

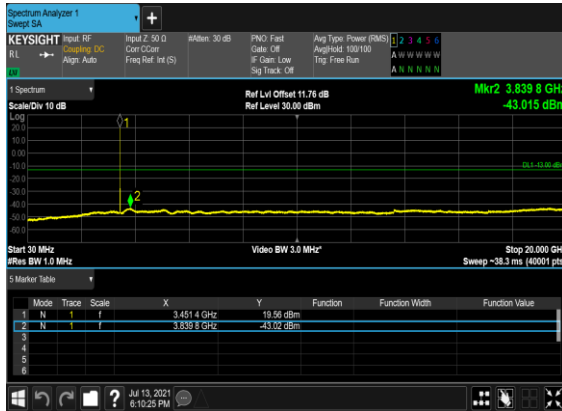
### B5\_N78(10M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



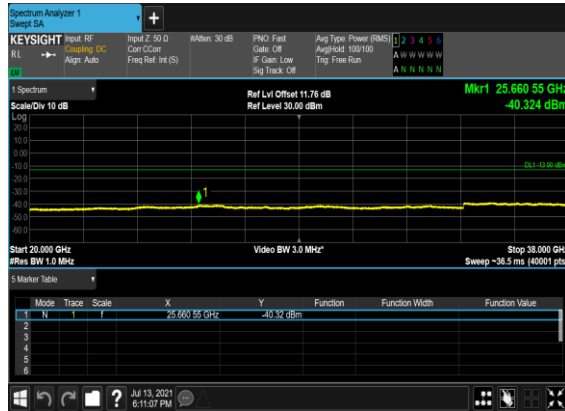
### B5\_N78(10M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



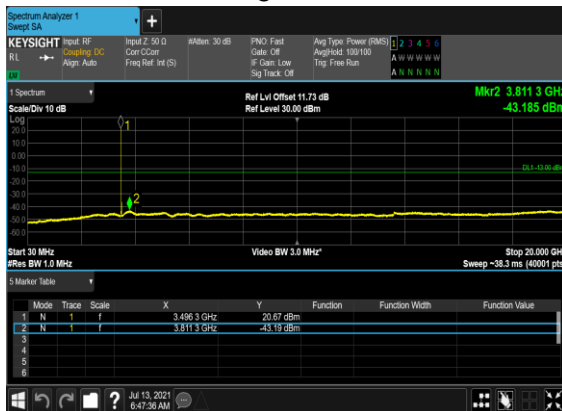
### B5\_N78(10M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



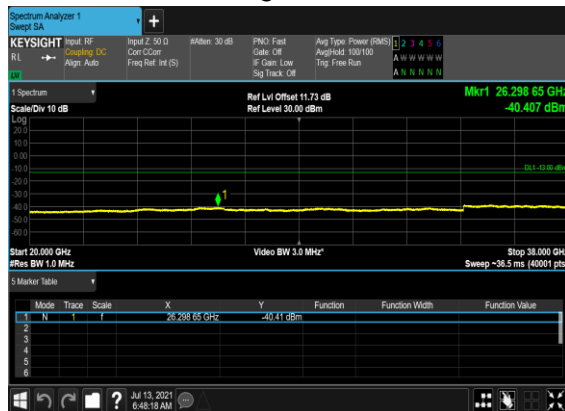
### B5\_N78(10M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



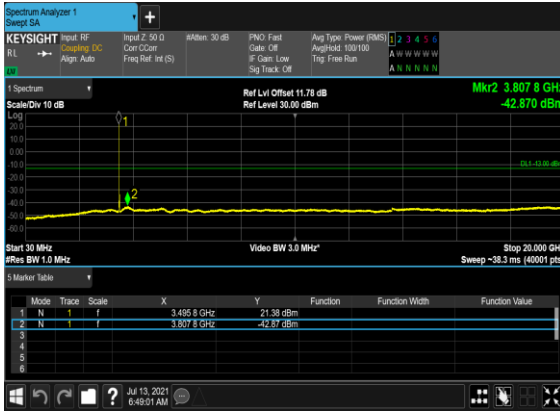
### B5\_N78(10M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



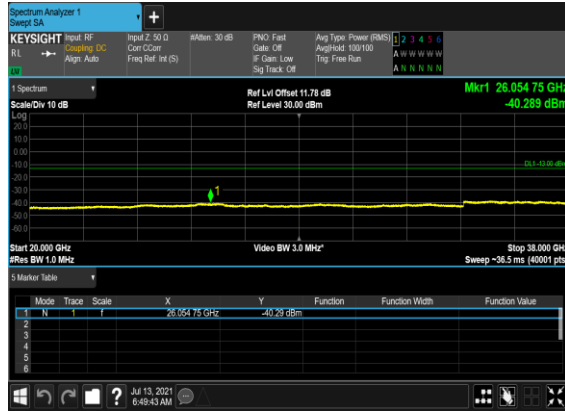
### B5\_N78(10M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



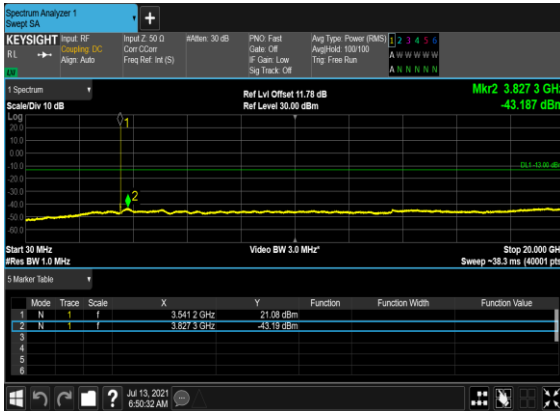
### B5\_N78(10M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



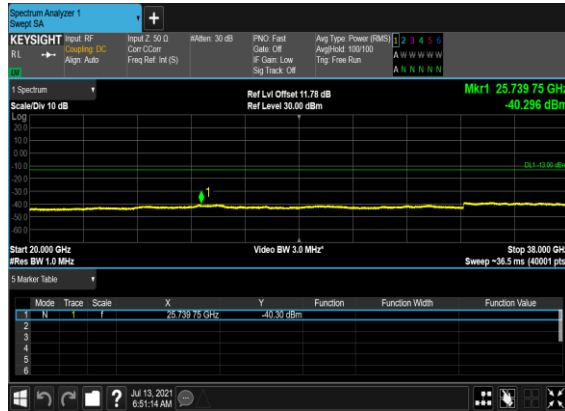
### B5\_N78(10M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



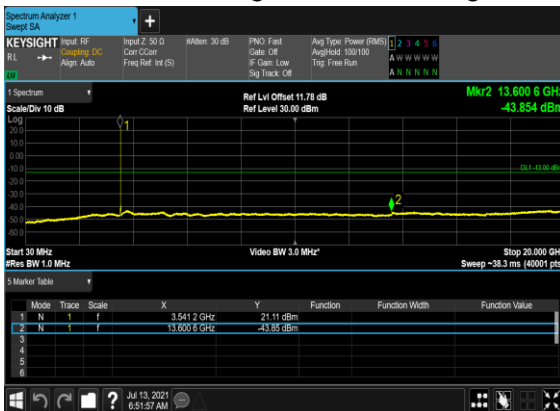
### B5\_N78(10M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_High\_CH



### B5\_N78(10M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_High\_CH



### B5\_N78(10M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



### B5\_N78(10M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH

