



# FCC RF Test Report

**APPLICANT** : Motorola Mobility LLC  
**EQUIPMENT** : Mobile Cellular Phone  
**BRAND NAME** : Motorola  
**MODEL NAME** : XT2141-2  
**FCC ID** : IHDT56ZP2  
**STANDARD** : 47 CFR Part 2, 24, 27  
**CLASSIFICATION** : PCS Licensed Transmitter Held to Ear (PCE)  
**TEST DATE(S)** : Jun. 30, 2021 ~ Jul. 05, 2021

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

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

Reviewed by: Derreck Chen / Supervisor

Approved by: Eric Shih / Manager



**Sporton International (ShenZhen) Inc.**

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**People's Republic of China**



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### REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG151701-01E	Rev. 01	Initial issue of report	Jul. 09, 2021



## SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	§27.50(c)(10)	Effective Radiated Power (5G NR n71)	ERP < 3 Watt		
	§27.50(h)(2)	Equivalent Isotropic Radiated Power (5G NR n41)	EIRP < 2Watt		
	§27.50(j)(3)	Equivalent Isotropic Radiated Power (5G NR n77, n78)	EIRP < 1Watt		
3.5	§27.50(j)(4)	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	Reporting Only	PASS	-
3.7	§2.1051 §27.53(g) §27.53(l)(2)	Conducted Band Edge Measurement (5G NR n71) (5G NR n77, n78)	< 43+10log <sub>10</sub> (P[Watts])	PASS	-
	§27.53(m)(4)	Conducted Band Edge Measurement (5G NR n41)	§27.53(m)(4)		
3.8	§2.1051 §27.53(g) §27.53(l)(2)	Conducted Spurious Emission (5G NR n71) (5G NR n77, n78)	< 43+10log <sub>10</sub> (P[Watts])	PASS	-
	§2.1051 §27.53(m)(4)	Conducted Spurious Emission (5G NR n41)	< 55+10log <sub>10</sub> (P[Watts])		
3.9	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within Authorized Band	PASS	-
4.4	§2.1053 §27.53(g) §27.53(l)(2)	Radiated Spurious Emission (5G NR n71) (5G NR n77, n78)	< 43+10log <sub>10</sub> (P[Watts])	PASS	Under limit 12.73 dB at 7492.200 MHz
	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (5G NR n41)	< 55+10log <sub>10</sub> (P[Watts])		

<b>Declaration of Conformity:</b>
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
<b>Comments and Explanations:</b>
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	XT2141-2
FCC ID	IHDT56ZP2
EUT supports Radios application	GSM/WCDMA/LTE/5G NR WLAN 2.4GHz 802.11b/g/n HT20 WLAN 2.4GHz 802.11ac/ax VHT20/HE20 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80/VHT160 WLAN 5GHz 802.11ax HE20/HE40/HE80/HE160 WLAN 6GHz 802.11a/n HT20/HT40 WLAN 6GHz 802.11ac VHT20/VHT40/VHT80/VHT160 WLAN 6GHz 802.11ax HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE NFC and GNSS
IMEI Code	Conducted: 354398490012424 Radiation: 354398490013240
HW Version	DVT2
SW Version	RRM31.43
EUT Stage	Identical Prototype

### 1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
<b>Tx Frequency</b>	5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n71: 663 MHz ~ 698 MHz 5G NR n77: 3700 MHz ~ 3980 MHz 5G NR n78: 3700 MHz ~ 3800 MHz
<b>Rx Frequency</b>	5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n71: 617 MHz ~ 652 MHz 5G NR n77: 3700 MHz ~ 3980 MHz 5G NR n78: 3700 MHz ~ 3800 MHz
<b>SCS</b>	n71: 15kHz n41, n77, n78: 30kHz
<b>Bandwidth</b>	n41: 20/30/40/50/60/80/90/100MHz n71: 5/10/5/20MHz n77/n78: 20/30/40/50/60/70/80/90/100MHz
<b>Antenna Gain</b>	<b>Main Ant:</b> n41: -2.23 dBi n71: -4.08 dBi n77: -2.78 dBi n78: -2.59 dBi <b>ASDIV Ant:</b> n71: -4.38 dBi
<b>Type of Modulation</b>	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

**Remark:**

1. 5G NR n41 SA and n77 SA/NSA support HPUE.
2. Only those 5G NR bands are tested in this report, all the other RF bands are tested in the other reports separately.

### 1.5 Modification of EUT

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

### 1.6 Specification of Accessory

Specification of Accessory				
<b>AC Adapter 1</b>	<b>Brand Name</b>	Motorola (Salom)	<b>Model Name</b>	MC-301
<b>AC Adapter 2</b>	<b>Brand Name</b>	Motorola (Acbel)	<b>Model Name</b>	MC-301
<b>Battery</b>	<b>Brand Name</b>	Motorola (ATL)	<b>Model Name</b>	MB50
<b>USB Cable 1</b>	<b>Brand Name</b>	Motorola (Luxshare)	<b>Model Name</b>	SC18D13217
<b>USB Cable 2</b>	<b>Brand Name</b>	Motorola (Saibao)	<b>Model Name</b>	SC18D13215
<b>USB Cable 3</b>	<b>Brand Name</b>	Motorola (Cabletech)	<b>Model Name</b>	SC18D13216



### 1.7 Maximum ERP/EIRP Power and Emission Designator

5G NR n41 SA		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	2506.02 ~ 2679.99	0.2667	18M2G7D	0.2673	18M2W7D
30	2511.00 ~ 2674.98	0.2636	27M9G7D	0.2529	27M9W7D
40	2516.01 ~ 2670.00	0.2553	37M8G7D	0.2291	37M9W7D
50	2521.02 ~ 2664.99	0.2307	47M5G7D	0.2280	47M6W7D
60	2526.00 ~ 2659.98	0.2518	58M0G7D	0.2679	57M9W7D
80	2536.02 ~ 2649.99	0.2301	77M5G7D	0.2355	77M6W7D
90	2541.00 ~ 2644.98	0.2360	87M4G7D	0.2410	87M6W7D
100	2546.01 ~ 2640.00	0.2679	97M8G7D	0.2410	97M6W7D

5G NR n71 SA		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
5	665.5 ~ 695.5	0.0598	4M47G7D	0.0465	4M49W7D
10	668.0 ~ 693.0	0.0600	9M27G7D	0.0465	9M28W7D
15	670.5 ~ 690.5	0.0586	14M1G7D	0.0462	14M1W7D
20	673.0 ~ 688.0	0.0646	18M9G7D	0.0426	18M9W7D

5G NR n77 SA		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	3710.01 ~ 3969.99	0.2564	18M2G7D	0.1603	18M2W7D
30	3715.02 ~ 3964.98	0.2553	27M9G7D	0.1517	27M9W7D
40	3720.00 ~ 3960.00	0.2529	37M8G7D	0.1641	37M9W7D
50	3725.01 ~ 3954.99	0.2415	47M5G7D	0.1549	48M0W7D
60	3730.02 ~ 3949.98	0.2399	57M8G7D	0.1560	57M8W7D
70	3735.00 ~ 3945.00	0.2360	67M4G7D	0.1483	67M6W7D
80	3740.01 ~ 3939.99	0.2366	77M5G7D	0.1496	77M6W7D
90	3745.02 ~ 3934.98	0.2350	87M4G7D	0.1476	87M6W7D
100	3750.00 ~ 3930.00	0.2612	97M5G7D	0.1531	97M6W7D



5G NR n78 SA		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	3710.01 ~ 3789.99	0.1377	18M2G7D	0.1079	18M2W7D
30	3715.02 ~ 3784.98	0.1393	27M9G7D	0.1140	27M9W7D
40	3720.00 ~ 3780.00	0.1403	37M8G7D	0.1132	37M9W7D
50	3725.01 ~3774.99	0.1337	47M5G7D	0.1099	48M0W7D
60	3730.02 ~ 3769.98	0.1629	57M8G7D	0.1315	57M8W7D
70	3735.00 ~ 3765.00	0.1346	67M4G7D	0.1104	67M6W7D
80	3740.01 ~ 3759.99	0.1352	77M5G7D	0.1119	77M6W7D
90	3745.02 ~ 3754.98	0.1349	87M4G7D	0.1062	87M6W7D
100	3750	0.1629	97M5G7D	0.1172	97M6W7D





### 1.8 Testing Location

<FCC>-SZ

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

<b>Test Firm</b>	Sporton International (Shenzhen) Inc.		
<b>Test Site Location</b>	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City Guangdong Province China 518103 TEL: +86-755-33202398		
<b>Test Site No.</b>	<b>Sporton Site No.</b>	<b>FCC Designation No.</b>	<b>FCC Test Firm Registration No.</b>
	03CH04-SZ	CN1256	421272

### 1.9 Test Software

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

### 1.10 Applicable Standards

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

- ♦ 47 CFR Part 2, 24, 27
- ♦ ANSI C63.26-2015
- ♦ FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01

**Remark:**

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




## 2 Test Configuration of Equipment Under Test

### 2.1 Test Mode

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

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

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

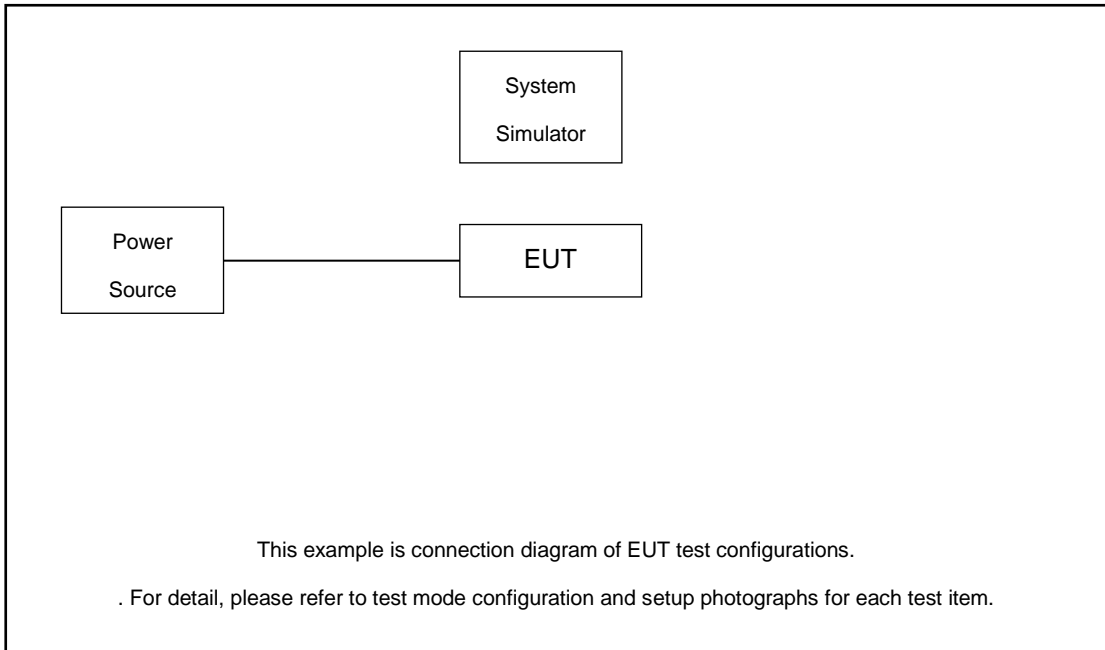
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			

Test Items	5G NR	Bandwidth (MHz)						Modulation					RB #		Test Channel			
		5	10	15	20	30-90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	1	Full	L	M	H	
Max. Output Power	n41				v	v	v	v	v	v	v	v	v	v	v	v	v	v
	n71	v	v	v	v			v	v	v	v	v	v	v	v	v	v	v
	n77				v	v	v	v	v	v	v	v	v	v	v	v	v	v
	n78				v	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	n41				v			v	v				v	v	v	v	v	
	n71				v			v	v				v	v	v	v	v	
	n77				v			v	v				v	v	v	v	v	
26dB and 99% Bandwidth	n41				v	v	v	v	v	v	v	v		v		v		
	n71	v	v	v	v			v	v	v	v	v		v		v		
	n77				v	v	v	v	v	v	v	v		v		v		



Test Items	Band	Bandwidth (MHz)						Modulation					RB #		Test Channel		
		5	10	15	20	30-90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	1	Full	L	M	H
Conducted Band Edge	n41				v	v	v	v	v				v	v	v		v
	n71	v	v	v	v			v	v				v	v	v		v
	n77				v	v	v	v	v				v	v	v		v
Conducted Spurious Emission	n41				v	v	v	v	v				v		v	v	v
	n71	v	v	v	v			v	v				v		v	v	v
	n77				v	v	v	v	v				v		v	v	v
Frequency Stability	n41				v				v					v		v	
	n71				v				v					v		v	
	n77				v				v					v		v	
E.R.P / E.I.R.P	n41				v	v	v	v	v	v	v	v	v	v	v	v	v
	n71	v	v	v	v			v	v	v	v	v	v	v	v	v	v
	n77				v	v	v	v	v	v	v	v	v	v	v	v	v
	n78				v	v	v	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	n41	Worst Case													v	v	v
	n71	Worst Case													v	v	v
	n77	Worst Case													v	v	v
Note	<ol style="list-style-type: none"> <li>The mark "v" means that this configuration is chosen for testing</li> <li>The mark "-" means that this bandwidth is not supported.</li> <li>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.</li> <li>5G NR supports SA and NSA mode (refer to the Operation Description), all the EN-DC modes are tested, and according to the maximum power, only show the worst EN-DC mode in the report.</li> <li>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.</li> <li>All modulations (BPSK/QPSK/16QAM/64QAM/256QAM) have been tested, and only the worst test results are shown in the report.</li> <li>The RSE and conducted items of n77 could cover n78, only Power and EIRP are full test for n77 and n78.</li> </ol>																

## 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.	DC Power Supply	GW	GPS-3030D	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 5.2 dB and 10dB attenuator.

Example :

$$\begin{aligned} \text{Offset}(dB) &= \text{RF cable loss}(dB) + \text{attenuator factor}(dB). \\ &= 5.2 + 10 = 15.2 \text{ (dB)} \end{aligned}$$



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

5G NR n41 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	509202	518598	528000
	Frequency	2546.01	2592.99	2640
90	Channel	508200	518598	528996
	Frequency	2541	2592.99	2644.98
80	Channel	507204	518598	529998
	Frequency	2536.02	2592.99	2649.99
60	Channel	505200	518598	531996
	Frequency	2526	2592.99	2659.98
50	Channel	504204	518598	532998
	Frequency	2521.02	2592.99	2664.99
40	Channel	503202	518598	534000
	Frequency	2516.01	2592.99	2670
30	Channel	502200	518598	534996
	Frequency	2511	2592.99	2674.98
20	Channel	501204	518598	535998
	Frequency	2506.02	2592.99	2679.99

5G NR n71 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	134600	136100	137600
	Frequency	673	680.5	688
15	Channel	134100	136100	138100
	Frequency	670.5	680.5	690.5
10	Channel	133600	136100	138600
	Frequency	668	680.5	693
5	Channel	133100	136100	139100
	Frequency	665.5	680.5	695.5



5G NR n77 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	650000	656000	662000
	Frequency	3750	3840	3930
90	Channel	649668	656000	662332
	Frequency	3745.02	3840	3934.98
80	Channel	649334	656000	662666
	Frequency	3740.01	3840	3939.99
70	Channel	649000	656000	66300
	Frequency	3735.00	3840	3945.00
60	Channel	648668	656000	663332
	Frequency	3730.02	3840	3949.98
50	Channel	648334	656000	663666
	Frequency	3725.01	3840	3954.99
40	Channel	648000	656000	664000
	Frequency	3720.00	3840	3960.00
30	Channel	647668	656000	664332
	Frequency	3715.02	3840	3964.98
20	Channel	647334	656000	664666
	Frequency	3710.01	3840	3969.99



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



### 3 Conducted Test Items

#### 3.1 Measuring Instruments

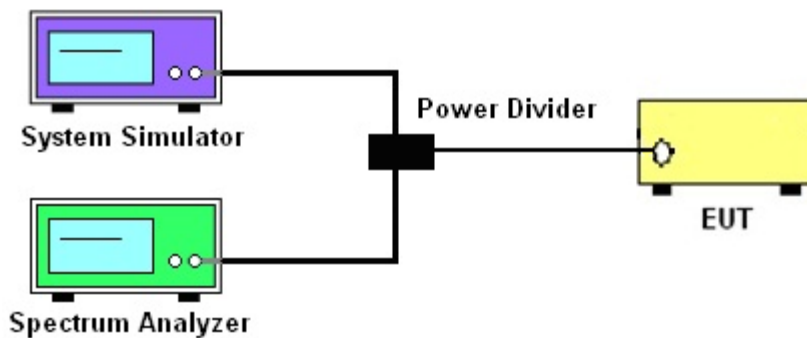
See list of measuring instruments of this test report.

#### 3.2 Test Setup

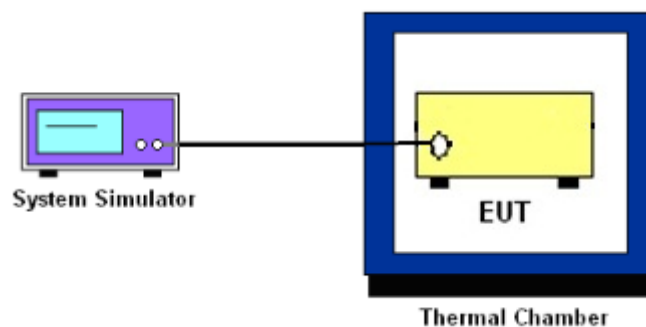
##### 3.2.1 Conducted Output Power



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



##### 3.2.3 Frequency Stability



### 3.3 Test Result of Conducted Test

Please refer to Appendix A.



### 3.4 Conducted Output Power and ERP/EIRP

#### 3.4.1 Description of the Conducted Output Power Measurement and ERP/EIRP Measurement

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

The ERP of mobile transmitters must not exceed 3 Watts for 5G NR n71.

The EIRP of mobile transmitters must not exceed 2 Watts for 5G NR n41.

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

According to KDB 412172 D01 Power Approach,

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

$P_T$  = transmitter output power in dBm

$G_T$  = gain of the transmitting antenna in dBi

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

#### 3.4.2 Test Procedures

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



## **3.5 Peak-to-Average Ratio**

### **3.5.1 Description of the PAR Measurement**

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

### **3.5.2 Test Procedures**

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



## 3.6 Occupied Bandwidth

### 3.6.1 Description of Occupied Bandwidth Measurement

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

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

### 3.6.2 Test Procedures

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



### 3.7 Conducted Band Edge

#### 3.7.1 Description of Conducted Band Edge Measurement

27.53 (g)

For operations in the 600MHz band and 698 -746 MHz band, the FCC limit is  $43 + 10\log_{10}(P[\text{Watts}])$  dB below the transmitter power P(Watts) in a 100 kHz bandwidth. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

27.53(m)(4)

For mobile digital stations, the attenuation factor shall be not less than  $40 + 10 \log (P)$  dB on all frequencies between the channel edge and 5 megahertz from the channel edge,  $43 + 10 \log (P)$  dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and  $55 + 10 \log (P)$  dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that  $43 + 10 \log (P)$  dB on all frequencies between 2490.5 MHz and 2496 MHz and  $55 + 10 \log (P)$  dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

27.53(l)(2)

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



### 3.7.2 Test Procedures

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

Example:

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

$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)} = -13\text{dBm}.$$

9. For 5G NR n41, the other 40 dB, and 55 dB have additionally applied same calculation above.



### 3.8 Conducted Spurious Emission

#### 3.8.1 Description of Conducted Spurious Emission Measurement

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

For 5G NR n41:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least  $55 + 10 \log (P)$  dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10<sup>th</sup> harmonic.

#### 3.8.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
7. Set spectrum analyzer with RMS detector.
8. Taking the record of maximum spurious emission.
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
10. The limit line is derived from  $43 + 10\log(P)$ dB below the transmitter power P(Watts)  
=  $P(W) - [43 + 10\log(P)]$  (dB)  
=  $[30 + 10\log(P)]$  (dBm) -  $[43 + 10\log(P)]$  (dB)  
= -13dBm.
11. For 5G NR n41  
The limit line is derived from  $55 + 10\log(P)$ dB below the transmitter power P(Watts)  
=  $P(W) - [55 + 10\log(P)]$  (dB)  
=  $[30 + 10\log(P)]$  (dBm) -  $[55 + 10\log(P)]$  (dB)  
= -25dBm.



## 3.9 Frequency Stability

### 3.9.1 Description of Frequency Stability Measurement

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

### 3.9.2 Test Procedures for Temperature Variation

1. The testing follows ANSI C63.26 section 5.6.4
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. With power OFF, the temperature was decreased to  $-30^{\circ}\text{C}$  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.

### 3.9.3 Test Procedures for Voltage Variation

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



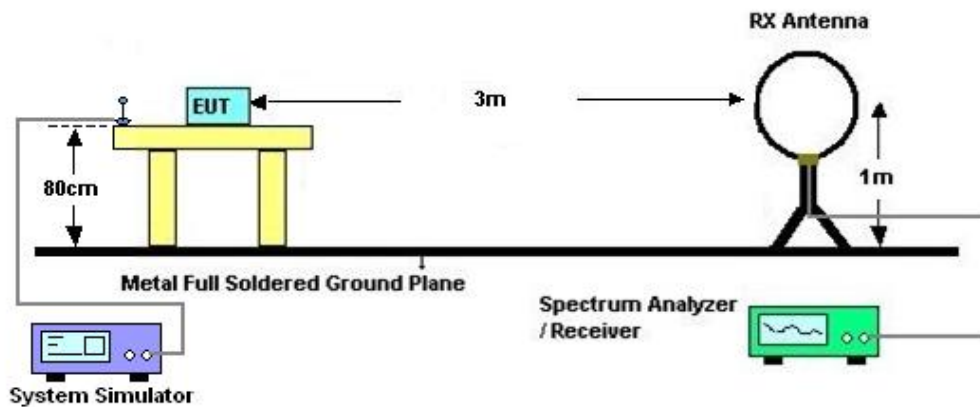
## 4 Radiated Test Items

### 4.1 Measuring Instruments

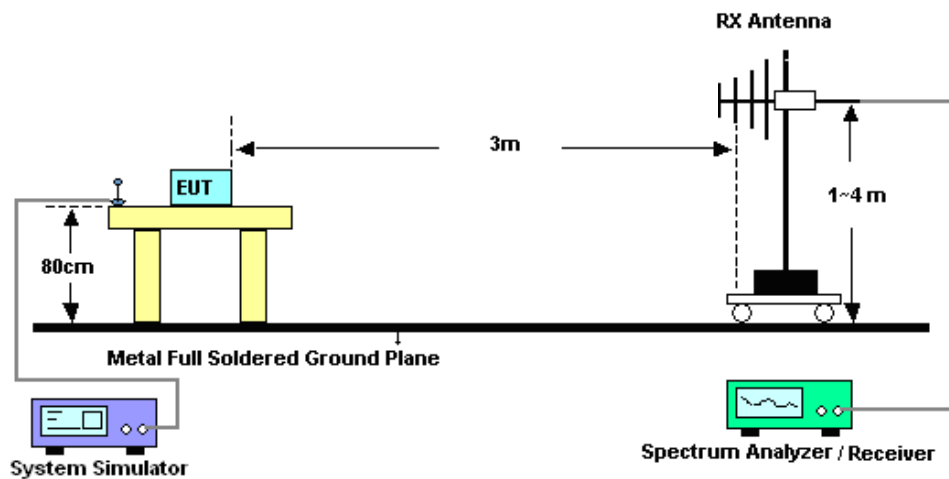
See list of measuring instruments of this test report.

### 4.2 Test Setup

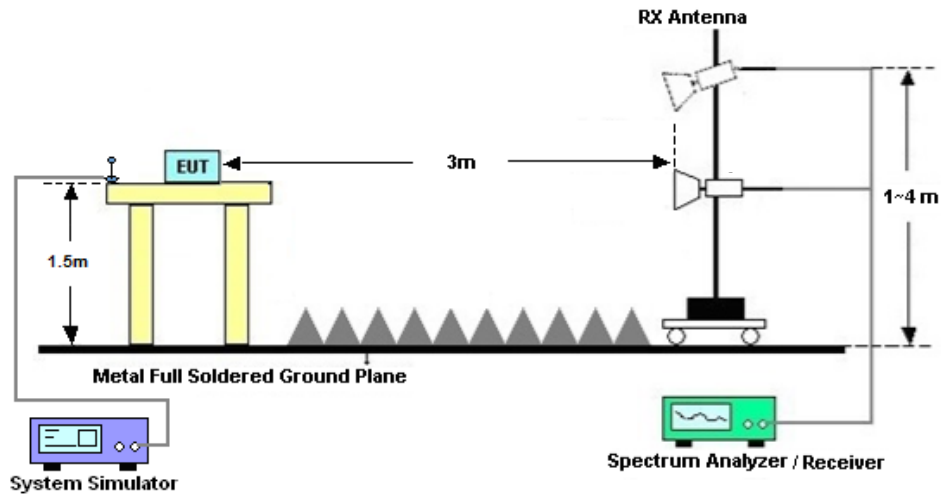
#### 4.2.1 For radiated test below 30MHz



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



#### 4.2.3 For radiated test above 1GHz



#### 4.3 Test Result of Radiated Test

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

Please refer to Appendix B.



## 4.4 Radiated Spurious Emission

### 4.4.1 Description of Radiated Spurious Emission

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

For 5G NR n41

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least  $55 + 10 \log (P)$  dB.

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

### 4.4.2 Test Procedures

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

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

13. For 5G NR n41:

The limit line is derived from  $55 + 10\log(P)$ dB below the transmitter power P(Watts)The limit line is derived from  $55 + 10\log(P)$ dB below the transmitter power P(Watts)



## 5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EXA Signal Analyzer	KEYSIGHT	N9010B	MY60240803	10Hz~44GHz	Apr. 03, 2021	Jun. 30, 2021~ Jul. 05, 2021	Apr. 02, 2022	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-04 265	60.06.020.007 7	0.4GHz~26.5GHz	Dec. 26, 2020	Jun. 30, 2021~ Jul. 05, 2021	Dec. 25, 2021	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 22, 2020	Jun. 30, 2021~ Jul. 05, 2021	Jul. 21, 2021	Conducted (TH01-SZ)
EMI Test Receiver	R&S	ESR7	101404	9kHz~7GHz	Oct. 16, 2020	Jul. 02, 2021	Oct. 15, 2021	Radiation (03CH04-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 21, 2020	Jul. 02, 2021	Jul. 20, 2021	Radiation (03CH04-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jun. 22, 2020	Jul. 02, 2021	Jun. 21, 2022	Radiation (03CH04-SZ)
Bilog Antenna	TeseQ	CBL6111D	41909	30MHz~1GHz	Nov. 07, 2020	Jul. 02, 2021	Nov. 06, 2021	Radiation (03CH04-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1474	1GHz~18GHz	Jul. 16, 2020	Jul. 02, 2021	Jul. 15, 2021	Radiation (03CH04-SZ)
Horn Antenna	SCHWARZBECK	BBHA9170	9170#679	15GHz~40GHz	Jul. 26, 2020	Jul. 02, 2021	Jul. 25, 2021	Radiation (03CH04-SZ)
Amplifier	Burgeon	BPA-530	102211	0.01Hz ~3000MHz	Oct. 16,2020	Jul. 02, 2021	Oct. 15,2021	Radiation (03CH04-SZ)
HF Amplifier	MITEQ	AMF-7D-00 101800-30-1	1943528	1GHz~18GHz	Oct. 17,2020	Jul. 02, 2021	Oct. 16,2021	Radiation (03CH04-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 21. 2020	Jul. 02, 2021	Jul. 20. 2021	Radiation (03CH04-SZ)
Amplifier	Agilent Technologies	83017A	MY53270156	500MHz~26.5GHz	Oct.17, 2020	Jul. 02, 2021	Oct.16, 2021	Radiation (03CH04-SZ)
AC Power Source	Chroma	61601	N/A	N/A	NCR	Jul. 02, 2021	NCR	Radiation (03CH04-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Jul. 02, 2021	NCR	Radiation (03CH04-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Jul. 02, 2021	NCR	Radiation (03CH04-SZ)

NCR: No Calibration Required



## 6 Uncertainty of Evaluation

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.8dB
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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))	3.1dB
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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))	3.9dB
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## Appendix A. Test Results of Conducted Test

### Output Power (Average power and EIRP)

# FR1 N41

## Transmitter Conducted Output Power And ERP/EIRP, (G<sub>T</sub> - L<sub>c</sub>)=-2.23dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
41	30	20	501204	2506.02	DFT-s-OFDM PI/2 BPSK	25@12	25.66	23.43	0.2203
41	30	20	501204	2506.02	DFT-s-OFDM PI/2 BPSK	1@1	26.25	24.02	0.2523
41	30	20	501204	2506.02	DFT-s-OFDM PI/2 BPSK	1@49	25.86	23.63	0.2307
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	25@12	25.87	23.64	0.2312
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	1@1	26.2	23.97	0.2495
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	1@49	26.32	24.09	0.2564
41	30	20	501204	2506.02	DFT-s-OFDM 16 QAM	25@12	25.65	23.42	0.2198
41	30	20	501204	2506.02	DFT-s-OFDM 16 QAM	1@1	26.5	24.27	0.2673
41	30	20	501204	2506.02	DFT-s-OFDM 16 QAM	1@49	26.24	24.01	0.2518
41	30	20	501204	2506.02	DFT-s-OFDM 64 QAM	25@12	25.02	22.79	0.1901
41	30	20	501204	2506.02	DFT-s-OFDM 64 QAM	1@1	25.19	22.96	0.1977
41	30	20	501204	2506.02	DFT-s-OFDM 64 QAM	1@49	25.16	22.93	0.1963
41	30	20	501204	2506.02	DFT-s-OFDM 256 QAM	25@12	23.42	21.19	0.1315
41	30	20	501204	2506.02	DFT-s-OFDM 256 QAM	1@1	23.5	21.27	0.134
41	30	20	501204	2506.02	DFT-s-OFDM 256 QAM	1@49	23.54	21.31	0.1352
41	30	20	501204	2506.02	CP-OFDM QPSK	25@121	24.31	22.08	0.1614
41	30	20	501204	2506.02	CP-OFDM QPSK	1@1	26.45	24.22	0.2642
41	30	20	501204	2506.02	CP-OFDM QPSK	1@49	26.25	24.02	0.2523
41	30	20	518598	2592.99	DFT-s-OFDM PI/2 BPSK	25@12	25.54	23.31	0.2143
41	30	20	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	25.98	23.75	0.2371

41	30	20	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@49	26.3	24.07	0.2553
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	25@12	25.57	23.34	0.2158
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	1@1	26.35	24.12	0.2582
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	1@49	26.35	24.12	0.2582
41	30	20	518598	2592.99	DFT-s-OFDM 16 QAM	25@12	25.84	23.61	0.2296
41	30	20	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	26.28	24.05	0.2541
41	30	20	518598	2592.99	DFT-s-OFDM 16 QAM	1@49	26.19	23.96	0.2489
41	30	20	518598	2592.99	DFT-s-OFDM 64 QAM	25@12	24.61	22.38	0.173
41	30	20	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	25	22.77	0.1892
41	30	20	518598	2592.99	DFT-s-OFDM 64 QAM	1@49	24.97	22.74	0.1879
41	30	20	518598	2592.99	DFT-s-OFDM 256 QAM	25@12	23.79	21.56	0.1432
41	30	20	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	23.48	21.25	0.1334
41	30	20	518598	2592.99	DFT-s-OFDM 256 QAM	1@49	23.24	21.01	0.1262
41	30	20	518598	2592.99	CP-OFDM QPSK	25@121	26.25	24.02	0.2523
41	30	20	518598	2592.99	CP-OFDM QPSK	1@1	26.24	24.01	0.2518
41	30	20	518598	2592.99	CP-OFDM QPSK	1@49	26.47	24.24	0.2655
41	30	20	535998	2592.99	DFT-s-OFDM PI/2 BPSK	25@12	26.49	24.26	0.2667
41	30	20	535998	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	26.31	24.08	0.2559
41	30	20	535998	2592.99	DFT-s-OFDM PI/2 BPSK	1@49	26.24	24.01	0.2518
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	25@12	25.66	23.43	0.2203
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	1@1	26.19	23.96	0.2489
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	1@49	26.1	23.87	0.2438
41	30	20	535998	2679.99	DFT-s-OFDM 16 QAM	25@12	25.39	23.16	0.207
41	30	20	535998	2679.99	DFT-s-OFDM 16 QAM	1@1	25.48	23.25	0.2113



41	30	20	535998	2679.99	DFT-s-OFDM 16 QAM	1@49	26.02	23.79	0.2393
41	30	20	535998	2679.99	DFT-s-OFDM 64 QAM	25@12	24.72	22.49	0.1774
41	30	20	535998	2679.99	DFT-s-OFDM 64 QAM	1@1	25.2	22.97	0.1982
41	30	20	535998	2679.99	DFT-s-OFDM 64 QAM	1@49	25.19	22.96	0.1977
41	30	20	535998	2679.99	DFT-s-OFDM 256 QAM	25@12	23.51	21.28	0.1343
41	30	20	535998	2679.99	DFT-s-OFDM 256 QAM	1@1	23.01	20.78	0.1197
41	30	20	535998	2679.99	DFT-s-OFDM 256 QAM	1@49	23.15	20.92	0.1236
41	30	20	535998	2679.99	CP-OFDM QPSK	25@121	24.34	22.11	0.1626
41	30	20	535998	2679.99	CP-OFDM QPSK	1@1	26.28	24.05	0.2541
41	30	20	535998	2679.99	CP-OFDM QPSK	1@49	26.35	24.12	0.2582
41	30	30	502200	2511.0	DFT-s-OFDM PI/2 BPSK	36@18	25.62	23.39	0.2183
41	30	30	502200	2511.0	DFT-s-OFDM PI/2 BPSK	1@1	25.99	23.76	0.2377
41	30	30	502200	2511.0	DFT-s-OFDM PI/2 BPSK	1@76	25.59	23.36	0.2168
41	30	30	502200	2511.0	DFT-s-OFDM QPSK	36@18	25.94	23.71	0.235
41	30	30	502200	2511.0	DFT-s-OFDM QPSK	1@1	26.05	23.82	0.241
41	30	30	502200	2511.0	DFT-s-OFDM QPSK	1@76	25.95	23.72	0.2355
41	30	30	502200	2511.0	DFT-s-OFDM 16 QAM	36@18	25.71	23.48	0.2228
41	30	30	502200	2511.0	DFT-s-OFDM 16 QAM	1@1	25.92	23.69	0.2339
41	30	30	502200	2511.0	DFT-s-OFDM 16 QAM	1@76	26.02	23.79	0.2393
41	30	30	502200	2511.0	DFT-s-OFDM 64 QAM	36@18	25.06	22.83	0.1919
41	30	30	502200	2511.0	DFT-s-OFDM 64 QAM	1@1	24.83	22.6	0.182
41	30	30	502200	2511.0	DFT-s-OFDM 64 QAM	1@76	24.97	22.74	0.1879
41	30	30	502200	2511.0	DFT-s-OFDM 256 QAM	36@18	22.7	20.47	0.1114
41	30	30	502200	2511.0	DFT-s-OFDM 256 QAM	1@1	23.08	20.85	0.1216

41	30	30	502200	2511.0	DFT-s-OFDM 256 QAM	1@76	22.94	20.71	0.1178
41	30	30	502200	2511.0	CP-OFDM QPSK	39@19	25.88	23.65	0.2317
41	30	30	502200	2511.0	CP-OFDM QPSK	1@1	26	23.77	0.2382
41	30	30	502200	2511.0	CP-OFDM QPSK	1@76	25.92	23.69	0.2339
41	30	30	518598	2592.99	DFT-s-OFDM PI/2 BPSK	36@18	25.58	23.35	0.2163
41	30	30	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	25.75	23.52	0.2249
41	30	30	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@76	26.44	24.21	0.2636
41	30	30	518598	2592.99	DFT-s-OFDM QPSK	36@18	26	23.77	0.2382
41	30	30	518598	2592.99	DFT-s-OFDM QPSK	1@1	25.94	23.71	0.235
41	30	30	518598	2592.99	DFT-s-OFDM QPSK	1@76	25.94	23.71	0.235
41	30	30	518598	2592.99	DFT-s-OFDM 16 QAM	36@18	25.99	23.76	0.2377
41	30	30	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	26.22	23.99	0.2506
41	30	30	518598	2592.99	DFT-s-OFDM 16 QAM	1@76	26.05	23.82	0.241
41	30	30	518598	2592.99	DFT-s-OFDM 64 QAM	36@18	24.96	22.73	0.1875
41	30	30	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	24.83	22.6	0.182
41	30	30	518598	2592.99	DFT-s-OFDM 64 QAM	1@76	25.08	22.85	0.1928
41	30	30	518598	2592.99	DFT-s-OFDM 256 QAM	36@18	22.95	20.72	0.118
41	30	30	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	22.87	20.64	0.1159
41	30	30	518598	2592.99	DFT-s-OFDM 256 QAM	1@76	22.88	20.65	0.1161
41	30	30	518598	2592.99	CP-OFDM QPSK	39@19	25.41	23.18	0.208
41	30	30	518598	2592.99	CP-OFDM QPSK	1@1	25.75	23.52	0.2249
41	30	30	518598	2592.99	CP-OFDM QPSK	1@76	26.01	23.78	0.2388
41	30	30	534996	2674.98	DFT-s-OFDM PI/2 BPSK	36@18	25.41	23.18	0.208
41	30	30	534996	2674.98	DFT-s-OFDM PI/2 BPSK	1@1	25.75	23.52	0.2249

41	30	30	534996	2674.98	DFT-s-OFDM PI/2 BPSK	1@76	25.82	23.59	0.2286
41	30	30	534996	2674.98	DFT-s-OFDM QPSK	36@18	25.81	23.58	0.228
41	30	30	534996	2674.98	DFT-s-OFDM QPSK	1@1	25.76	23.53	0.2254
41	30	30	534996	2674.98	DFT-s-OFDM QPSK	1@76	25.83	23.6	0.2291
41	30	30	534996	2674.98	DFT-s-OFDM 16 QAM	36@18	25.81	23.58	0.228
41	30	30	534996	2674.98	DFT-s-OFDM 16 QAM	1@1	26.26	24.03	0.2529
41	30	30	534996	2674.98	DFT-s-OFDM 16 QAM	1@76	25.84	23.61	0.2296
41	30	30	534996	2674.98	DFT-s-OFDM 64 QAM	36@18	24.87	22.64	0.1837
41	30	30	534996	2674.98	DFT-s-OFDM 64 QAM	1@1	24.71	22.48	0.177
41	30	30	534996	2674.98	DFT-s-OFDM 64 QAM	1@76	24.77	22.54	0.1795
41	30	30	534996	2674.98	DFT-s-OFDM 256 QAM	36@18	22.73	20.5	0.1122
41	30	30	534996	2674.98	DFT-s-OFDM 256 QAM	1@1	22.59	20.36	0.1086
41	30	30	534996	2674.98	DFT-s-OFDM 256 QAM	1@76	22.65	20.42	0.1102
41	30	30	534996	2674.98	CP-OFDM QPSK	39@19	25.43	23.2	0.2089
41	30	30	534996	2674.98	CP-OFDM QPSK	1@1	25.63	23.4	0.2188
41	30	30	534996	2674.98	CP-OFDM QPSK	1@76	25.95	23.72	0.2355
41	30	40	503202	2516.01	DFT-s-OFDM PI/2 BPSK	50@25	25.82	23.59	0.2286
41	30	40	503202	2516.01	DFT-s-OFDM PI/2 BPSK	1@1	25.78	23.55	0.2265
41	30	40	503202	2516.01	DFT-s-OFDM PI/2 BPSK	1@104	25.59	23.36	0.2168
41	30	40	503202	2516.01	DFT-s-OFDM QPSK	50@25	25.89	23.66	0.2323
41	30	40	503202	2516.01	DFT-s-OFDM QPSK	1@1	25.63	23.4	0.2188
41	30	40	503202	2516.01	DFT-s-OFDM QPSK	1@104	25.56	23.33	0.2153
41	30	40	503202	2516.01	DFT-s-OFDM 16 QAM	50@25	25.68	23.45	0.2213
41	30	40	503202	2516.01	DFT-s-OFDM 16 QAM	1@1	25.83	23.6	0.2291

41	30	40	503202	2516.01	DFT-s-OFDM 16 QAM	1@104	25.79	23.56	0.227
41	30	40	503202	2516.01	DFT-s-OFDM 64 QAM	50@25	24.81	22.58	0.1811
41	30	40	503202	2516.01	DFT-s-OFDM 64 QAM	1@1	24.96	22.73	0.1875
41	30	40	503202	2516.01	DFT-s-OFDM 64 QAM	1@104	24.34	22.11	0.1626
41	30	40	503202	2516.01	DFT-s-OFDM 256 QAM	50@25	22.51	20.28	0.1067
41	30	40	503202	2516.01	DFT-s-OFDM 256 QAM	1@1	22.78	20.55	0.1135
41	30	40	503202	2516.01	DFT-s-OFDM 256 QAM	1@104	22.64	20.41	0.1099
41	30	40	503202	2516.01	CP-OFDM QPSK	53@26	25.77	23.54	0.2259
41	30	40	503202	2516.01	CP-OFDM QPSK	1@1	25.72	23.49	0.2234
41	30	40	503202	2516.01	CP-OFDM QPSK	1@104	25.82	23.59	0.2286
41	30	40	518598	2592.99	DFT-s-OFDM PI/2 BPSK	50@25	25.49	23.26	0.2118
41	30	40	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	25.81	23.58	0.228
41	30	40	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@104	25.87	23.64	0.2312
41	30	40	518598	2592.99	DFT-s-OFDM QPSK	50@25	25.86	23.63	0.2307
41	30	40	518598	2592.99	DFT-s-OFDM QPSK	1@1	25.87	23.64	0.2312
41	30	40	518598	2592.99	DFT-s-OFDM QPSK	1@104	25.51	23.28	0.2128
41	30	40	518598	2592.99	DFT-s-OFDM 16 QAM	50@25	25.82	23.59	0.2286
41	30	40	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	25.71	23.48	0.2228
41	30	40	518598	2592.99	DFT-s-OFDM 16 QAM	1@104	25.8	23.57	0.2275
41	30	40	518598	2592.99	DFT-s-OFDM 64 QAM	50@25	24.83	22.6	0.182
41	30	40	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	24.68	22.45	0.1758
41	30	40	518598	2592.99	DFT-s-OFDM 64 QAM	1@104	24.8	22.57	0.1807
41	30	40	518598	2592.99	DFT-s-OFDM 256 QAM	50@25	23.17	20.94	0.1242
41	30	40	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	22.87	20.64	0.1159

41	30	40	518598	2592.99	DFT-s-OFDM 256 QAM	1@104	22.85	20.62	0.1153
41	30	40	518598	2592.99	CP-OFDM QPSK	53@26	25.62	23.39	0.2183
41	30	40	518598	2592.99	CP-OFDM QPSK	1@1	26.07	23.84	0.2421
41	30	40	518598	2592.99	CP-OFDM QPSK	1@104	26.13	23.9	0.2455
41	30	40	534000	2670.0	DFT-s-OFDM PI/2 BPSK	50@25	25.19	22.96	0.1977
41	30	40	534000	2670.0	DFT-s-OFDM PI/2 BPSK	1@1	25.25	23.02	0.2004
41	30	40	534000	2670.0	DFT-s-OFDM PI/2 BPSK	1@104	26.3	24.07	0.2553
41	30	40	534000	2670.0	DFT-s-OFDM QPSK	50@25	25.69	23.46	0.2218
41	30	40	534000	2670.0	DFT-s-OFDM QPSK	1@1	25.77	23.54	0.2259
41	30	40	534000	2670.0	DFT-s-OFDM QPSK	1@104	25.78	23.55	0.2265
41	30	40	534000	2670.0	DFT-s-OFDM 16 QAM	50@25	25.76	23.53	0.2254
41	30	40	534000	2670.0	DFT-s-OFDM 16 QAM	1@1	25.82	23.59	0.2286
41	30	40	534000	2670.0	DFT-s-OFDM 16 QAM	1@104	25.79	23.56	0.227
41	30	40	534000	2670.0	DFT-s-OFDM 64 QAM	50@25	24.75	22.52	0.1786
41	30	40	534000	2670.0	DFT-s-OFDM 64 QAM	1@1	24.7	22.47	0.1766
41	30	40	534000	2670.0	DFT-s-OFDM 64 QAM	1@104	24.71	22.48	0.177
41	30	40	534000	2670.0	DFT-s-OFDM 256 QAM	50@25	22.4	20.17	0.104
41	30	40	534000	2670.0	DFT-s-OFDM 256 QAM	1@1	22.24	20.01	0.1002
41	30	40	534000	2670.0	DFT-s-OFDM 256 QAM	1@104	22.65	20.42	0.1102
41	30	40	534000	2670.0	CP-OFDM QPSK	53@26	25.77	23.54	0.2259
41	30	40	534000	2670.0	CP-OFDM QPSK	1@1	25.91	23.68	0.2333
41	30	40	534000	2670.0	CP-OFDM QPSK	1@104	25.61	23.38	0.2178
41	30	50	504204	2521.02	DFT-s-OFDM PI/2 BPSK	64@32	25.66	23.43	0.2203
41	30	50	504204	2521.02	DFT-s-OFDM PI/2 BPSK	1@1	25.69	23.46	0.2218

41	30	50	504204	2521.02	DFT-s-OFDM PI/2 BPSK	1@131	25.59	23.36	0.2168
41	30	50	504204	2521.02	DFT-s-OFDM QPSK	64@32	25.83	23.6	0.2291
41	30	50	504204	2521.02	DFT-s-OFDM QPSK	1@1	25.86	23.63	0.2307
41	30	50	504204	2521.02	DFT-s-OFDM QPSK	1@131	25.5	23.27	0.2123
41	30	50	504204	2521.02	DFT-s-OFDM 16 QAM	64@32	25.81	23.58	0.228
41	30	50	504204	2521.02	DFT-s-OFDM 16 QAM	1@1	25.73	23.5	0.2239
41	30	50	504204	2521.02	DFT-s-OFDM 16 QAM	1@131	25.6	23.37	0.2173
41	30	50	504204	2521.02	DFT-s-OFDM 64 QAM	64@32	24.42	22.19	0.1656
41	30	50	504204	2521.02	DFT-s-OFDM 64 QAM	1@1	24.67	22.44	0.1754
41	30	50	504204	2521.02	DFT-s-OFDM 64 QAM	1@131	24.57	22.34	0.1714
41	30	50	504204	2521.02	DFT-s-OFDM 256 QAM	64@32	23.4	21.17	0.1309
41	30	50	504204	2521.02	DFT-s-OFDM 256 QAM	1@1	22.33	20.1	0.1023
41	30	50	504204	2521.02	DFT-s-OFDM 256 QAM	1@131	22.68	20.45	0.1109
41	30	50	504204	2521.02	CP-OFDM QPSK	67@33	25.46	23.23	0.2104
41	30	50	504204	2521.02	CP-OFDM QPSK	1@1	25.66	23.43	0.2203
41	30	50	504204	2521.02	CP-OFDM QPSK	1@131	25.77	23.54	0.2259
41	30	50	518598	2592.99	DFT-s-OFDM PI/2 BPSK	64@32	25.37	23.14	0.2061
41	30	50	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	25.45	23.22	0.2099
41	30	50	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@131	25.57	23.34	0.2158
41	30	50	518598	2592.99	DFT-s-OFDM QPSK	64@32	23.01	20.78	0.1197
41	30	50	518598	2592.99	DFT-s-OFDM QPSK	1@1	25.63	23.4	0.2188
41	30	50	518598	2592.99	DFT-s-OFDM QPSK	1@131	25.69	23.46	0.2218
41	30	50	518598	2592.99	DFT-s-OFDM 16 QAM	64@32	25.78	23.55	0.2265
41	30	50	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	25.7	23.47	0.2223

41	30	50	518598	2592.99	DFT-s-OFDM 16 QAM	1@131	25.78	23.55	0.2265
41	30	50	518598	2592.99	DFT-s-OFDM 64 QAM	64@32	24.73	22.5	0.1778
41	30	50	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	24.51	22.28	0.169
41	30	50	518598	2592.99	DFT-s-OFDM 64 QAM	1@131	24.44	22.21	0.1663
41	30	50	518598	2592.99	DFT-s-OFDM 256 QAM	64@32	22.63	20.4	0.1096
41	30	50	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	22.16	19.93	0.0984
41	30	50	518598	2592.99	DFT-s-OFDM 256 QAM	1@131	22.52	20.29	0.1069
41	30	50	518598	2592.99	CP-OFDM QPSK	67@33	25.71	23.48	0.2228
41	30	50	518598	2592.99	CP-OFDM QPSK	1@1	25.5	23.27	0.2123
41	30	50	518598	2592.99	CP-OFDM QPSK	1@131	25.64	23.41	0.2193
41	30	50	532998	2664.99	DFT-s-OFDM PI/2 BPSK	64@32	25.73	23.5	0.2239
41	30	50	532998	2664.99	DFT-s-OFDM PI/2 BPSK	1@1	25.56	23.33	0.2153
41	30	50	532998	2664.99	DFT-s-OFDM PI/2 BPSK	1@131	25.59	23.36	0.2168
41	30	50	532998	2664.99	DFT-s-OFDM QPSK	64@32	25.68	23.45	0.2213
41	30	50	532998	2664.99	DFT-s-OFDM QPSK	1@1	25.22	22.99	0.1991
41	30	50	532998	2664.99	DFT-s-OFDM QPSK	1@131	25.55	23.32	0.2148
41	30	50	532998	2664.99	DFT-s-OFDM 16 QAM	64@32	25.8	23.57	0.2275
41	30	50	532998	2664.99	DFT-s-OFDM 16 QAM	1@1	25.78	23.55	0.2265
41	30	50	532998	2664.99	DFT-s-OFDM 16 QAM	1@131	25.46	23.23	0.2104
41	30	50	532998	2664.99	DFT-s-OFDM 64 QAM	64@32	24.36	22.13	0.1633
41	30	50	532998	2664.99	DFT-s-OFDM 64 QAM	1@1	24.28	22.05	0.1603
41	30	50	532998	2664.99	DFT-s-OFDM 64 QAM	1@131	24.65	22.42	0.1746
41	30	50	532998	2664.99	DFT-s-OFDM 256 QAM	64@32	22.74	20.51	0.1125
41	30	50	532998	2664.99	DFT-s-OFDM 256 QAM	1@1	22.43	20.2	0.1047

41	30	50	532998	2664.99	DFT-s-OFDM 256 QAM	1@131	22.39	20.16	0.1038
41	30	50	532998	2664.99	CP-OFDM QPSK	67@33	25.68	23.45	0.2213
41	30	50	532998	2664.99	CP-OFDM QPSK	1@1	25.67	23.44	0.2208
41	30	50	532998	2664.99	CP-OFDM QPSK	1@131	25.7	23.47	0.2223
41	30	60	505200	2664.99	DFT-s-OFDM PI/2 BPSK	81@40	25.71	23.48	0.2228
41	30	60	505200	2664.99	DFT-s-OFDM PI/2 BPSK	1@1	25.55	23.32	0.2148
41	30	60	505200	2664.99	DFT-s-OFDM PI/2 BPSK	1@160	25.56	23.33	0.2153
41	30	60	505200	2526.0	DFT-s-OFDM QPSK	81@40	25.48	23.25	0.2113
41	30	60	505200	2526.0	DFT-s-OFDM QPSK	1@1	26.11	23.88	0.2443
41	30	60	505200	2526.0	DFT-s-OFDM QPSK	1@160	25.18	22.95	0.1972
41	30	60	505200	2526.0	DFT-s-OFDM 16 QAM	81@40	25.71	23.48	0.2228
41	30	60	505200	2526.0	DFT-s-OFDM 16 QAM	1@1	26.51	24.28	0.2679
41	30	60	505200	2526.0	DFT-s-OFDM 16 QAM	1@160	25.2	22.97	0.1982
41	30	60	505200	2526.0	DFT-s-OFDM 64 QAM	81@40	24.81	22.58	0.1811
41	30	60	505200	2526.0	DFT-s-OFDM 64 QAM	1@1	25.4	23.17	0.2075
41	30	60	505200	2526.0	DFT-s-OFDM 64 QAM	1@160	24.12	21.89	0.1545
41	30	60	505200	2526.0	DFT-s-OFDM 256 QAM	81@40	22.52	20.29	0.1069
41	30	60	505200	2526.0	DFT-s-OFDM 256 QAM	1@1	23.24	21.01	0.1262
41	30	60	505200	2526.0	DFT-s-OFDM 256 QAM	1@160	21.88	19.65	0.0923
41	30	60	505200	2526.0	CP-OFDM QPSK	81@40	25.61	23.38	0.2178
41	30	60	505200	2526.0	CP-OFDM QPSK	1@1	26.16	23.93	0.2472
41	30	60	505200	2526.0	CP-OFDM QPSK	1@160	25.11	22.88	0.1941
41	30	60	518598	2592.99	DFT-s-OFDM PI/2 BPSK	81@40	25.34	23.11	0.2046
41	30	60	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	25.88	23.65	0.2317



41	30	60	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@160	24.81	22.58	0.1811
41	30	60	518598	2592.99	DFT-s-OFDM QPSK	81@40	25.44	23.21	0.2094
41	30	60	518598	2592.99	DFT-s-OFDM QPSK	1@1	26.05	23.82	0.241
41	30	60	518598	2592.99	DFT-s-OFDM QPSK	1@160	25.17	22.94	0.1968
41	30	60	518598	2592.99	DFT-s-OFDM 16 QAM	81@40	25.78	23.55	0.2265
41	30	60	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	26.37	24.14	0.2594
41	30	60	518598	2592.99	DFT-s-OFDM 16 QAM	1@160	25.34	23.11	0.2046
41	30	60	518598	2592.99	DFT-s-OFDM 64 QAM	81@40	24.52	22.29	0.1694
41	30	60	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	25.26	23.03	0.2009
41	30	60	518598	2592.99	DFT-s-OFDM 64 QAM	1@160	23.89	21.66	0.1466
41	30	60	518598	2592.99	DFT-s-OFDM 256 QAM	81@40	22.53	20.3	0.1072
41	30	60	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	22.91	20.68	0.1169
41	30	60	518598	2592.99	DFT-s-OFDM 256 QAM	1@160	21.8	19.57	0.0906
41	30	60	518598	2592.99	CP-OFDM QPSK	81@40	25.53	23.3	0.2138
41	30	60	518598	2592.99	CP-OFDM QPSK	1@1	26.12	23.89	0.2449
41	30	60	518598	2592.99	CP-OFDM QPSK	1@160	24.86	22.63	0.1832
41	30	60	531996	2659.98	DFT-s-OFDM PI/2 BPSK	81@40	25.82	23.59	0.2286
41	30	60	531996	2659.98	DFT-s-OFDM PI/2 BPSK	1@1	26.17	23.94	0.2477
41	30	60	531996	2659.98	DFT-s-OFDM PI/2 BPSK	1@160	25.16	22.93	0.1963
41	30	60	531996	2659.98	DFT-s-OFDM QPSK	81@40	25.82	23.59	0.2286
41	30	60	531996	2659.98	DFT-s-OFDM QPSK	1@1	26.24	24.01	0.2518
41	30	60	531996	2659.98	DFT-s-OFDM QPSK	1@160	24.88	22.65	0.1841
41	30	60	531996	2659.98	DFT-s-OFDM 16 QAM	81@40	25.93	23.7	0.2344
41	30	60	531996	2659.98	DFT-s-OFDM 16 QAM	1@1	26.1	23.87	0.2438

41	30	60	531996	2659.98	DFT-s-OFDM 16 QAM	1@160	25.04	22.81	0.191
41	30	60	531996	2659.98	DFT-s-OFDM 64 QAM	81@40	24.56	22.33	0.171
41	30	60	531996	2659.98	DFT-s-OFDM 64 QAM	1@1	25.06	22.83	0.1919
41	30	60	531996	2659.98	DFT-s-OFDM 64 QAM	1@160	23.96	21.73	0.1489
41	30	60	531996	2659.98	DFT-s-OFDM 256 QAM	81@40	22.65	20.42	0.1102
41	30	60	531996	2659.98	DFT-s-OFDM 256 QAM	1@1	23.05	20.82	0.1208
41	30	60	531996	2659.98	DFT-s-OFDM 256 QAM	1@160	21.68	19.45	0.0881
41	30	60	531996	2659.98	CP-OFDM QPSK	81@40	25.57	23.34	0.2158
41	30	60	531996	2659.98	CP-OFDM QPSK	1@1	26.11	23.88	0.2443
41	30	60	531996	2659.98	CP-OFDM QPSK	1@160	25.05	22.82	0.1914
41	30	80	507204	2536.02	DFT-s-OFDM PI/2 BPSK	108@54	25.38	23.15	0.2065
41	30	80	507204	2536.02	DFT-s-OFDM PI/2 BPSK	1@1	25.6	23.37	0.2173
41	30	80	507204	2536.02	DFT-s-OFDM PI/2 BPSK	1@215	25.58	23.35	0.2163
41	30	80	507204	2536.02	DFT-s-OFDM QPSK	108@54	25.52	23.29	0.2133
41	30	80	507204	2536.02	DFT-s-OFDM QPSK	1@1	25.59	23.36	0.2168
41	30	80	507204	2536.02	DFT-s-OFDM QPSK	1@215	25.73	23.5	0.2239
41	30	80	507204	2536.02	DFT-s-OFDM 16 QAM	108@54	25.57	23.34	0.2158
41	30	80	507204	2536.02	DFT-s-OFDM 16 QAM	1@1	25.38	23.15	0.2065
41	30	80	507204	2536.02	DFT-s-OFDM 16 QAM	1@215	25.71	23.48	0.2228
41	30	80	507204	2536.02	DFT-s-OFDM 64 QAM	108@54	24.33	22.1	0.1622
41	30	80	507204	2536.02	DFT-s-OFDM 64 QAM	1@1	24.48	22.25	0.1679
41	30	80	507204	2536.02	DFT-s-OFDM 64 QAM	1@215	25.05	22.82	0.1914
41	30	80	507204	2536.02	DFT-s-OFDM 256 QAM	108@54	22.27	20.04	0.1009
41	30	80	507204	2536.02	DFT-s-OFDM 256 QAM	1@1	22.24	20.01	0.1002

41	30	80	507204	2536.02	DFT-s-OFDM 256 QAM	1@215	22.74	20.51	0.1125
41	30	80	507204	2536.02	CP-OFDM QPSK	109@54	25.59	23.36	0.2168
41	30	80	507204	2536.02	CP-OFDM QPSK	1@1	25.6	23.37	0.2173
41	30	80	507204	2536.02	CP-OFDM QPSK	1@215	25.61	23.38	0.2178
41	30	80	518598	2592.99	DFT-s-OFDM PI/2 BPSK	108@54	25.42	23.19	0.2084
41	30	80	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	25.45	23.22	0.2099
41	30	80	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@215	25.85	23.62	0.2301
41	30	80	518598	2592.99	DFT-s-OFDM QPSK	108@54	25.33	23.1	0.2042
41	30	80	518598	2592.99	DFT-s-OFDM QPSK	1@1	25.34	23.11	0.2046
41	30	80	518598	2592.99	DFT-s-OFDM QPSK	1@215	25.63	23.4	0.2188
41	30	80	518598	2592.99	DFT-s-OFDM 16 QAM	108@54	25.69	23.46	0.2218
41	30	80	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	25.53	23.3	0.2138
41	30	80	518598	2592.99	DFT-s-OFDM 16 QAM	1@215	25.95	23.72	0.2355
41	30	80	518598	2592.99	DFT-s-OFDM 64 QAM	108@54	24.71	22.48	0.177
41	30	80	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	24.25	22.02	0.1592
41	30	80	518598	2592.99	DFT-s-OFDM 64 QAM	1@215	24.65	22.42	0.1746
41	30	80	518598	2592.99	DFT-s-OFDM 256 QAM	108@54	22.62	20.39	0.1094
41	30	80	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	22.26	20.03	0.1007
41	30	80	518598	2592.99	DFT-s-OFDM 256 QAM	1@215	22.59	20.36	0.1086
41	30	80	518598	2592.99	CP-OFDM QPSK	109@54	25.42	23.19	0.2084
41	30	80	518598	2592.99	CP-OFDM QPSK	1@1	25.24	23.01	0.2
41	30	80	518598	2592.99	CP-OFDM QPSK	1@215	25.64	23.41	0.2193
41	30	80	529998	2649.99	DFT-s-OFDM PI/2 BPSK	108@54	25.33	23.1	0.2042
41	30	80	529998	2649.99	DFT-s-OFDM PI/2 BPSK	1@1	25.39	23.16	0.207

41	30	80	529998	2649.99	DFT-s-OFDM PI/2 BPSK	1@215	25.8	23.57	0.2275
41	30	80	529998	2649.99	DFT-s-OFDM QPSK	108@54	25.26	23.03	0.2009
41	30	80	529998	2649.99	DFT-s-OFDM QPSK	1@1	25.05	22.82	0.1914
41	30	80	529998	2649.99	DFT-s-OFDM QPSK	1@215	25.36	23.13	0.2056
41	30	80	529998	2649.99	DFT-s-OFDM 16 QAM	108@54	25.27	23.04	0.2014
41	30	80	529998	2649.99	DFT-s-OFDM 16 QAM	1@1	25.42	23.19	0.2084
41	30	80	529998	2649.99	DFT-s-OFDM 16 QAM	1@215	25.54	23.31	0.2143
41	30	80	529998	2649.99	DFT-s-OFDM 64 QAM	108@54	24.38	22.15	0.1641
41	30	80	529998	2649.99	DFT-s-OFDM 64 QAM	1@1	24.15	21.92	0.1556
41	30	80	529998	2649.99	DFT-s-OFDM 64 QAM	1@215	24.85	22.62	0.1828
41	30	80	529998	2649.99	DFT-s-OFDM 256 QAM	108@54	22.32	20.09	0.1021
41	30	80	529998	2649.99	DFT-s-OFDM 256 QAM	1@1	22	19.77	0.0948
41	30	80	529998	2649.99	DFT-s-OFDM 256 QAM	1@215	22.33	20.1	0.1023
41	30	80	529998	2649.99	CP-OFDM QPSK	109@54	25.82	23.59	0.2286
41	30	80	529998	2649.99	CP-OFDM QPSK	1@1	25.45	23.22	0.2099
41	30	80	529998	2649.99	CP-OFDM QPSK	1@215	25.59	23.36	0.2168
41	30	90	508200	2541.0	DFT-s-OFDM PI/2 BPSK	120@60	25.55	23.32	0.2148
41	30	90	508200	2541.0	DFT-s-OFDM PI/2 BPSK	1@1	25.5	23.27	0.2123
41	30	90	508200	2541.0	DFT-s-OFDM PI/2 BPSK	1@243	25.58	23.35	0.2163
41	30	90	508200	2541.0	DFT-s-OFDM QPSK	120@60	25.6	23.37	0.2173
41	30	90	508200	2541.0	DFT-s-OFDM QPSK	1@1	25.68	23.45	0.2213
41	30	90	508200	2541.0	DFT-s-OFDM QPSK	1@243	25.56	23.33	0.2153
41	30	90	508200	2541.0	DFT-s-OFDM 16 QAM	120@60	25.64	23.41	0.2193
41	30	90	508200	2541.0	DFT-s-OFDM 16 QAM	1@1	25.7	23.47	0.2223

41	30	90	508200	2541.0	DFT-s-OFDM 16 QAM	1@243	26.05	23.82	0.241
41	30	90	508200	2541.0	DFT-s-OFDM 64 QAM	120@60	24.62	22.39	0.1734
41	30	90	508200	2541.0	DFT-s-OFDM 64 QAM	1@1	24.45	22.22	0.1667
41	30	90	508200	2541.0	DFT-s-OFDM 64 QAM	1@243	24.96	22.73	0.1875
41	30	90	508200	2541.0	DFT-s-OFDM 256 QAM	120@60	22.61	20.38	0.1091
41	30	90	508200	2541.0	DFT-s-OFDM 256 QAM	1@1	22.54	20.31	0.1074
41	30	90	508200	2541.0	DFT-s-OFDM 256 QAM	1@243	22.8	20.57	0.114
41	30	90	508200	2541.0	CP-OFDM QPSK	123@61	25.55	23.32	0.2148
41	30	90	508200	2541.0	CP-OFDM QPSK	1@1	25.54	23.31	0.2143
41	30	90	508200	2541.0	CP-OFDM QPSK	1@243	25.69	23.46	0.2218
41	30	90	518598	2592.99	DFT-s-OFDM PI/2 BPSK	120@60	25.69	23.46	0.2218
41	30	90	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	24.91	22.68	0.1854
41	30	90	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@243	25.9	23.67	0.2328
41	30	90	518598	2592.99	DFT-s-OFDM QPSK	120@60	25.49	23.26	0.2118
41	30	90	518598	2592.99	DFT-s-OFDM QPSK	1@1	25.08	22.85	0.1928
41	30	90	518598	2592.99	DFT-s-OFDM QPSK	1@243	25.96	23.73	0.236
41	30	90	518598	2592.99	DFT-s-OFDM 16 QAM	120@60	25.53	23.3	0.2138
41	30	90	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	25.49	23.26	0.2118
41	30	90	518598	2592.99	DFT-s-OFDM 16 QAM	1@243	25.59	23.36	0.2168
41	30	90	518598	2592.99	DFT-s-OFDM 64 QAM	120@60	24.63	22.4	0.1738
41	30	90	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	24.28	22.05	0.1603
41	30	90	518598	2592.99	DFT-s-OFDM 64 QAM	1@243	25.01	22.78	0.1897
41	30	90	518598	2592.99	DFT-s-OFDM 256 QAM	120@60	22.69	20.46	0.1112
41	30	90	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	21.98	19.75	0.0944

41	30	90	518598	2592.99	DFT-s-OFDM 256 QAM	1@243	22.46	20.23	0.1054
41	30	90	518598	2592.99	CP-OFDM QPSK	123@61	25.66	23.43	0.2203
41	30	90	518598	2592.99	CP-OFDM QPSK	1@1	25.22	22.99	0.1991
41	30	90	518598	2592.99	CP-OFDM QPSK	1@243	25.55	23.32	0.2148
41	30	90	528996	2644.98	DFT-s-OFDM PI/2 BPSK	120@60	25.74	23.51	0.2244
41	30	90	528996	2644.98	DFT-s-OFDM PI/2 BPSK	1@1	25.25	23.02	0.2004
41	30	90	528996	2644.98	DFT-s-OFDM PI/2 BPSK	1@243	25.37	23.14	0.2061
41	30	90	528996	2644.98	DFT-s-OFDM QPSK	120@60	25.68	23.45	0.2213
41	30	90	528996	2644.98	DFT-s-OFDM QPSK	1@1	25.44	23.21	0.2094
41	30	90	528996	2644.98	DFT-s-OFDM QPSK	1@243	25.58	23.35	0.2163
41	30	90	528996	2644.98	DFT-s-OFDM 16 QAM	120@60	25.33	23.1	0.2042
41	30	90	528996	2644.98	DFT-s-OFDM 16 QAM	1@1	25.51	23.28	0.2128
41	30	90	528996	2644.98	DFT-s-OFDM 16 QAM	1@243	25.66	23.43	0.2203
41	30	90	528996	2644.98	DFT-s-OFDM 64 QAM	120@60	24.66	22.43	0.175
41	30	90	528996	2644.98	DFT-s-OFDM 64 QAM	1@1	24.04	21.81	0.1517
41	30	90	528996	2644.98	DFT-s-OFDM 64 QAM	1@243	24.63	22.4	0.1738
41	30	90	528996	2644.98	DFT-s-OFDM 256 QAM	120@60	22.38	20.15	0.1035
41	30	90	528996	2644.98	DFT-s-OFDM 256 QAM	1@1	22.19	19.96	0.0991
41	30	90	528996	2644.98	DFT-s-OFDM 256 QAM	1@243	22.31	20.08	0.1019
41	30	90	528996	2644.98	CP-OFDM QPSK	123@61	25.39	23.16	0.207
41	30	90	528996	2644.98	CP-OFDM QPSK	1@1	25.14	22.91	0.1954
41	30	90	528996	2644.98	CP-OFDM QPSK	1@243	25.68	23.45	0.2213
41	30	100	509202	2546.01	DFT-s-OFDM PI/2 BPSK	135@67	25.73	23.5	0.2239
41	30	100	509202	2546.01	DFT-s-OFDM PI/2 BPSK	1@1	25.77	23.54	0.2259

41	30	100	509202	2546.01	DFT-s-OFDM PI/2 BPSK	1@271	25.91	23.68	0.2333
41	30	100	509202	2546.01	DFT-s-OFDM QPSK	135@67	25.8	23.57	0.2275
41	30	100	509202	2546.01	DFT-s-OFDM QPSK	1@1	25.51	23.28	0.2128
41	30	100	509202	2546.01	DFT-s-OFDM QPSK	1@271	25.94	23.71	0.235
41	30	100	509202	2546.01	DFT-s-OFDM 16 QAM	135@67	25.72	23.49	0.2234
41	30	100	509202	2546.01	DFT-s-OFDM 16 QAM	1@1	25.7	23.47	0.2223
41	30	100	509202	2546.01	DFT-s-OFDM 16 QAM	1@271	25.43	23.2	0.2089
41	30	100	509202	2546.01	DFT-s-OFDM 64 QAM	135@67	24.67	22.44	0.1754
41	30	100	509202	2546.01	DFT-s-OFDM 64 QAM	1@1	24.68	22.45	0.1758
41	30	100	509202	2546.01	DFT-s-OFDM 64 QAM	1@271	24.48	22.25	0.1679
41	30	100	509202	2546.01	DFT-s-OFDM 256 QAM	135@67	22.44	20.21	0.105
41	30	100	509202	2546.01	DFT-s-OFDM 256 QAM	1@1	22.42	20.19	0.1045
41	30	100	509202	2546.01	DFT-s-OFDM 256 QAM	1@271	22.48	20.25	0.1059
41	30	100	509202	2546.01	CP-OFDM QPSK	137@68	25.54	23.31	0.2143
41	30	100	509202	2546.01	CP-OFDM QPSK	1@1	25.71	23.48	0.2228
41	30	100	509202	2546.01	CP-OFDM QPSK	1@271	25.98	23.75	0.2371
41	30	100	518598	2592.99	DFT-s-OFDM PI/2 BPSK	135@67	25.41	23.18	0.208
41	30	100	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	25.3	23.07	0.2028
41	30	100	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@271	25.53	23.3	0.2138
41	30	100	518598	2592.99	DFT-s-OFDM QPSK	135@67	25.37	23.14	0.2061
41	30	100	518598	2592.99	DFT-s-OFDM QPSK	1@1	25.35	23.12	0.2051
41	30	100	518598	2592.99	DFT-s-OFDM QPSK	1@271	26.51	24.28	0.2679
41	30	100	518598	2592.99	DFT-s-OFDM 16 QAM	135@67	25.48	23.25	0.2113
41	30	100	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	25.17	22.94	0.1968

41	30	100	518598	2592.99	DFT-s-OFDM 16 QAM	1@271	26.05	23.82	0.241
41	30	100	518598	2592.99	DFT-s-OFDM 64 QAM	135@67	24.86	22.63	0.1832
41	30	100	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	24.49	22.26	0.1683
41	30	100	518598	2592.99	DFT-s-OFDM 64 QAM	1@271	25.3	23.07	0.2028
41	30	100	518598	2592.99	DFT-s-OFDM 256 QAM	135@67	22.79	20.56	0.1138
41	30	100	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	22.01	19.78	0.0951
41	30	100	518598	2592.99	DFT-s-OFDM 256 QAM	1@271	22.48	20.25	0.1059
41	30	100	518598	2592.99	CP-OFDM QPSK	137@68	25.82	23.59	0.2286
41	30	100	518598	2592.99	CP-OFDM QPSK	1@1	25.52	23.29	0.2133
41	30	100	518598	2592.99	CP-OFDM QPSK	1@271	25.94	23.71	0.235
41	30	100	528000	2640.0	DFT-s-OFDM PI/2 BPSK	135@67	25.4	23.17	0.2075
41	30	100	528000	2640.0	DFT-s-OFDM PI/2 BPSK	1@1	25.02	22.79	0.1901
41	30	100	528000	2640.0	DFT-s-OFDM PI/2 BPSK	1@271	25.76	23.53	0.2254
41	30	100	528000	2640.0	DFT-s-OFDM QPSK	135@67	25.73	23.5	0.2239
41	30	100	528000	2640.0	DFT-s-OFDM QPSK	1@1	25.08	22.85	0.1928
41	30	100	528000	2640.0	DFT-s-OFDM QPSK	1@271	25.8	23.57	0.2275
41	30	100	528000	2640.0	DFT-s-OFDM 16 QAM	135@67	25.63	23.4	0.2188
41	30	100	528000	2640.0	DFT-s-OFDM 16 QAM	1@1	25.22	22.99	0.1991
41	30	100	528000	2640.0	DFT-s-OFDM 16 QAM	1@271	25.71	23.48	0.2228
41	30	100	528000	2640.0	DFT-s-OFDM 64 QAM	135@67	24.3	22.07	0.1611
41	30	100	528000	2640.0	DFT-s-OFDM 64 QAM	1@1	24.51	22.28	0.169
41	30	100	528000	2640.0	DFT-s-OFDM 64 QAM	1@271	24.76	22.53	0.1791
41	30	100	528000	2640.0	DFT-s-OFDM 256 QAM	135@67	22.92	20.69	0.1172
41	30	100	528000	2640.0	DFT-s-OFDM 256 QAM	1@1	22.47	20.24	0.1057



41	30	100	528000	2640.0	DFT-s-OFDM 256 QAM	1@271	22.26	20.03	0.1007
41	30	100	528000	2640.0	CP-OFDM QPSK	137@68	25.39	23.16	0.207
41	30	100	528000	2640.0	CP-OFDM QPSK	1@1	25.49	23.26	0.2118
41	30	100	528000	2640.0	CP-OFDM QPSK	1@271	25.97	23.74	0.2366

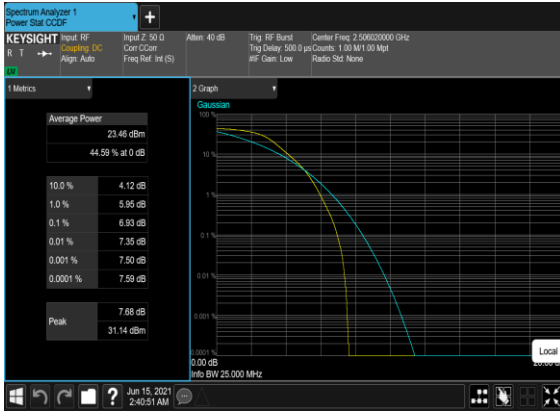
## Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.00567	PASS	NV
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.00728	PASS	LV
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.0043	PASS	HV
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.00629	PASS	-30°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.00677	PASS	-20°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.00595	PASS	-10°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.00561	PASS	0°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.00384	PASS	10°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.004	PASS	20°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.0037	PASS	30°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.00704	PASS	40°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.00438	PASS	50°C

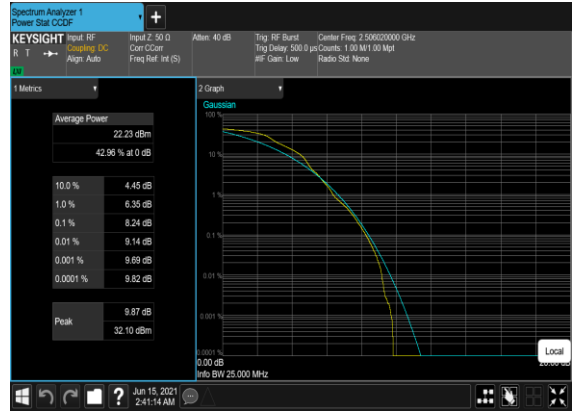
## Peak to Average Ratio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
41	30	20	501204	2506.02	DFT-s-OFDM PI/2 BPSK	50@0	6.93	13	PASS
41	30	20	501204	2506.02	DFT-s-OFDM PI/2 BPSK	1@0	8.24	13	PASS
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	50@0	8.08	13	PASS
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	1@0	8.14	13	PASS
41	30	20	518598	2592.99	DFT-s-OFDM PI/2 BPSK	50@0	6.93	13	PASS
41	30	20	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@0	6.95	13	PASS
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	8.18	13	PASS
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	1@0	8.41	13	PASS
41	30	20	535998	2679.99	DFT-s-OFDM PI/2 BPSK	50@0	7.0	13	PASS
41	30	20	535998	2679.99	DFT-s-OFDM PI/2 BPSK	1@0	6.8	13	PASS
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	50@0	8.29	13	PASS
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	1@0	8.82	13	PASS

N41(20M)\_DFT-s-OFDM\_PI\_2-BPSK\_Outer\_Full\_Low\_CH



N41(20M)\_DFT-s-OFDM\_PI\_2-BPSK\_Edge\_1RB\_Left\_Low\_CH



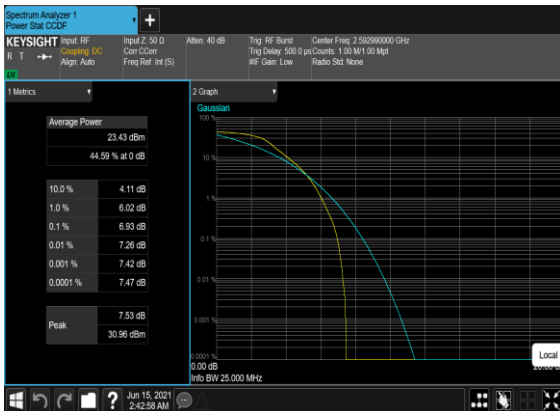
N41(20M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Low\_CH



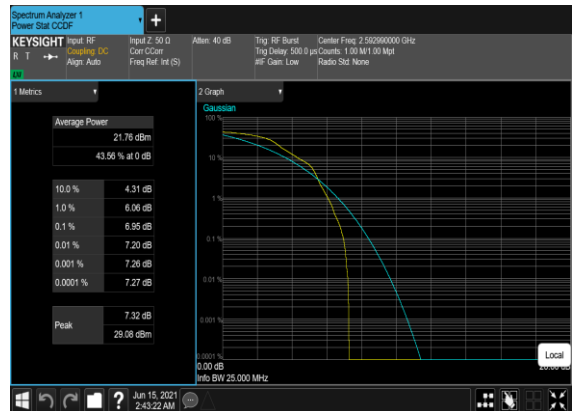
N41(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



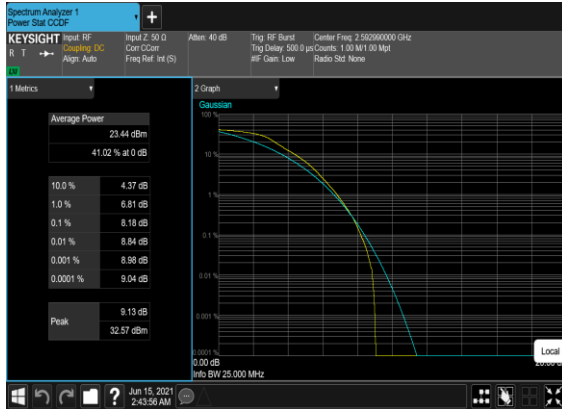
N41(20M)\_DFT-s-OFDM\_PI\_2-BPSK\_Outer\_Full\_Mid\_CH



N41(20M)\_DFT-s-OFDM\_PI\_2-BPSK\_Edge\_1RB\_Left\_Mid\_CH



N41(20M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



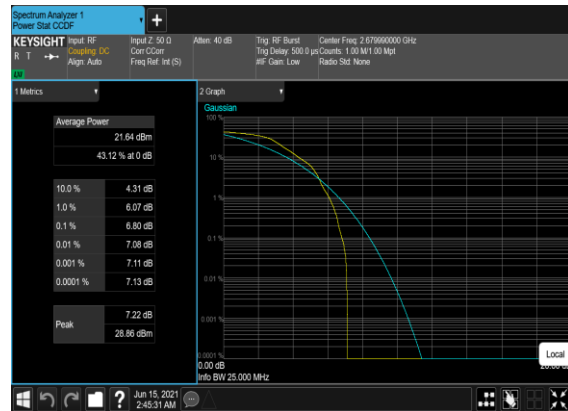
N41(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



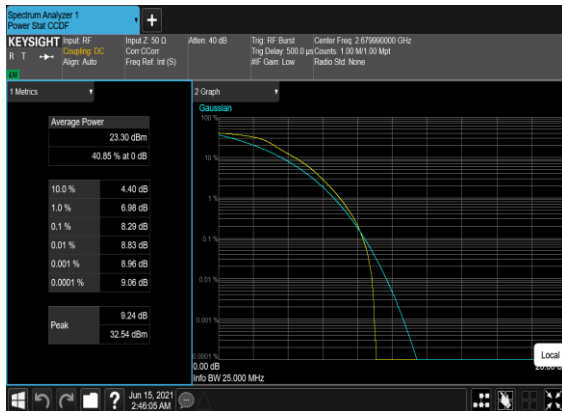
N41(20M)\_DFT-s-OFDM\_PI\_2-BPSK\_Outer\_Full\_High\_CH



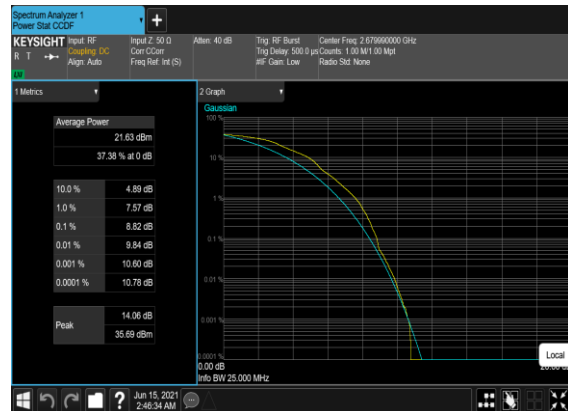
N41(20M)\_DFT-s-OFDM\_PI\_2-BPSK\_Edge\_1RB\_Left\_High\_CH



N41(20M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_High\_CH



N41(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



## Occupied Bandwidth

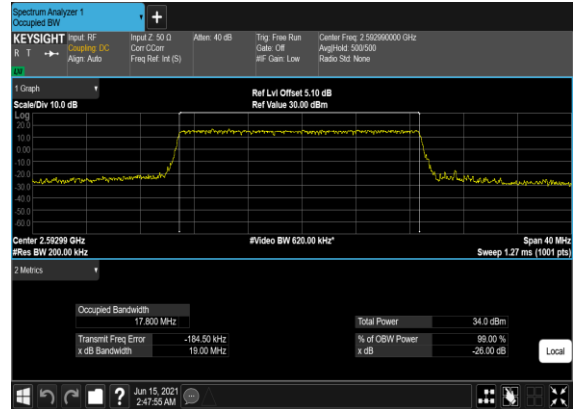
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB OBW (MHz)
41	30	20	518598	2592.99	DFT-s-OFDM PI/2 BPSK	50@0	17.799	19.12
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	17.8	19.0
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	18.183	19.41
41	30	20	518598	2592.99	CP-OFDM 16 QAM	51@0	18.249	19.19
41	30	20	518598	2592.99	CP-OFDM 64 QAM	51@0	18.243	19.07
41	30	20	518598	2592.99	CP-OFDM 256 QAM	51@0	18.214	19.23
41	30	30	518598	2592.99	DFT-s-OFDM PI/2 BPSK	75@0	26.73	28.12
41	30	30	518598	2592.99	DFT-s-OFDM QPSK	75@0	26.731	28.16
41	30	30	518598	2592.99	CP-OFDM QPSK	78@0	27.883	29.25
41	30	30	518598	2592.99	CP-OFDM 16 QAM	78@0	27.912	29.19
41	30	30	518598	2592.99	CP-OFDM 64 QAM	78@0	27.809	29.26
41	30	30	518598	2592.99	CP-OFDM 256 QAM	78@0	27.878	29.18
41	30	40	518598	2592.99	DFT-s-OFDM PI/2 BPSK	100@0	35.722	37.23
41	30	40	518598	2592.99	DFT-s-OFDM QPSK	100@0	35.764	37.18
41	30	40	518598	2592.99	CP-OFDM QPSK	106@0	37.834	39.2
41	30	40	518598	2592.99	CP-OFDM 16 QAM	106@0	37.856	39.46
41	30	40	518598	2592.99	CP-OFDM 64 QAM	106@0	37.808	39.25
41	30	40	518598	2592.99	CP-OFDM 256 QAM	106@0	37.878	39.44
41	30	50	518598	2592.99	DFT-s-OFDM PI/2 BPSK	128@0	45.812	47.48
41	30	50	518598	2592.99	DFT-s-OFDM QPSK	128@0	45.833	47.52
41	30	50	518598	2592.99	CP-OFDM QPSK	133@0	47.512	49.23
41	30	50	518598	2592.99	CP-OFDM 16 QAM	133@0	47.523	49.39
41	30	50	518598	2592.99	CP-OFDM 64 QAM	133@0	47.475	49.25
41	30	50	518598	2592.99	CP-OFDM 256 QAM	133@0	47.597	49.26

41	30	60	518598	2592.99	DFT-s-OFDM PI/2 BPSK	162@0	57.979	59.88
41	30	60	518598	2592.99	DFT-s-OFDM QPSK	162@0	57.878	59.9
41	30	60	518598	2592.99	CP-OFDM QPSK	162@0	57.978	60.01
41	30	60	518598	2592.99	CP-OFDM 16 QAM	162@0	57.917	60.0
41	30	60	518598	2592.99	CP-OFDM 64 QAM	162@0	57.886	60.02
41	30	60	518598	2592.99	CP-OFDM 256 QAM	162@0	57.942	59.97
41	30	80	518598	2592.99	DFT-s-OFDM PI/2 BPSK	216@0	77.251	79.74
41	30	80	518598	2592.99	DFT-s-OFDM QPSK	216@0	77.161	79.92
41	30	80	518598	2592.99	CP-OFDM QPSK	217@0	77.534	80.03
41	30	80	518598	2592.99	CP-OFDM 16 QAM	217@0	77.512	79.96
41	30	80	518598	2592.99	CP-OFDM 64 QAM	217@0	77.619	80.01
41	30	80	518598	2592.99	CP-OFDM 256 QAM	217@0	77.408	80.17
41	30	90	518598	2592.99	DFT-s-OFDM PI/2 BPSK	240@0	85.858	90.46
41	30	90	518598	2592.99	DFT-s-OFDM QPSK	240@0	85.869	88.77
41	30	90	518598	2592.99	CP-OFDM QPSK	245@0	87.411	90.41
41	30	90	518598	2592.99	CP-OFDM 16 QAM	245@0	87.64	90.41
41	30	90	518598	2592.99	CP-OFDM 64 QAM	245@0	87.463	90.36
41	30	90	518598	2592.99	CP-OFDM 256 QAM	245@0	87.515	90.28
41	30	100	518598	2592.99	DFT-s-OFDM PI/2 BPSK	270@0	96.542	99.66
41	30	100	518598	2592.99	DFT-s-OFDM QPSK	270@0	96.675	99.43
41	30	100	518598	2592.99	CP-OFDM QPSK	273@0	97.769	100.5
41	30	100	518598	2592.99	CP-OFDM 16 QAM	273@0	97.6	100.6
41	30	100	518598	2592.99	CP-OFDM 64 QAM	273@0	97.407	100.6
41	30	100	518598	2592.99	CP-OFDM 256 QAM	273@0	97.455	100.7

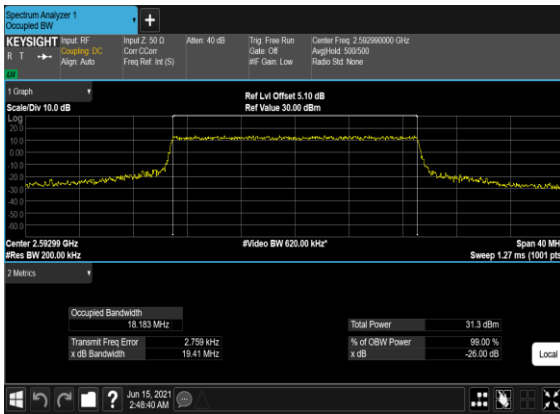
N41(20M)\_DFT-s-OFDM\_PI\_2-  
BPSK\_Outer\_Full\_Mid\_CH



N41(20M)\_DFT-s-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



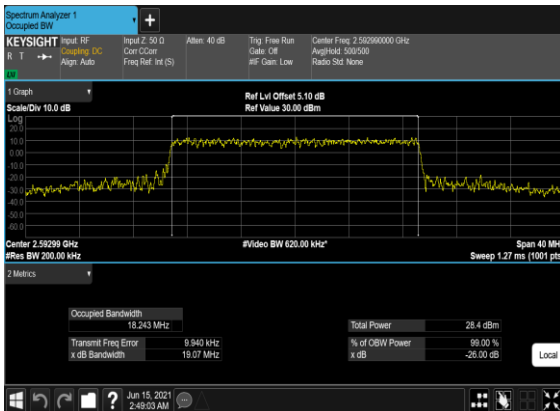
N41(20M)\_CP-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



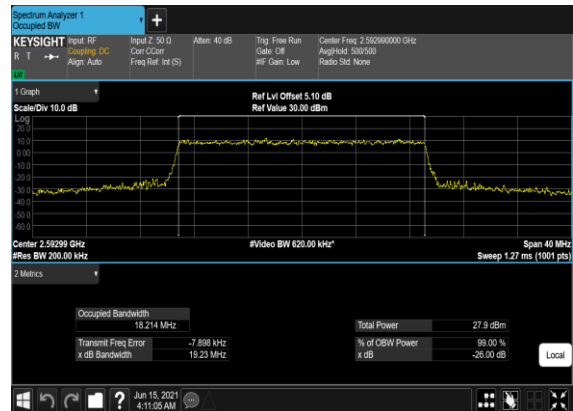
N41(20M)\_CP-OFDM\_16  
QAM\_Outer\_Full\_Mid\_CH



N41(20M)\_CP-OFDM\_64  
QAM\_Outer\_Full\_Mid\_CH



N41(20M)\_CP-OFDM\_256  
QAM\_Outer\_Full\_Mid\_CH

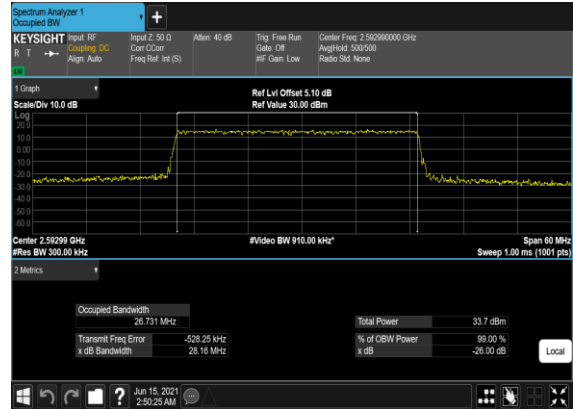




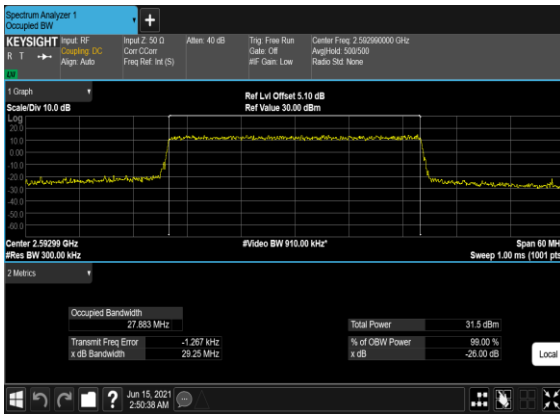
N41(30M)\_DFT-s-OFDM\_PI\_2-  
BPSK\_Outer\_Full\_Mid\_CH



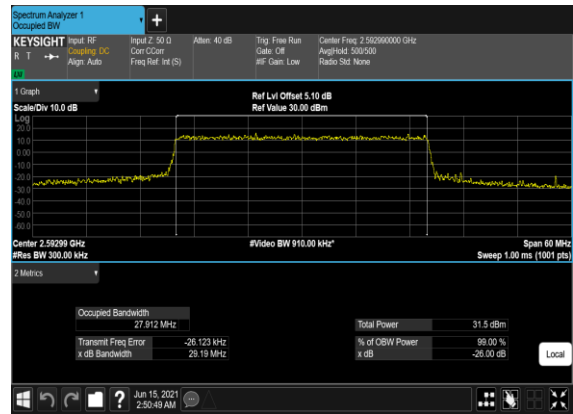
N41(30M)\_DFT-s-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



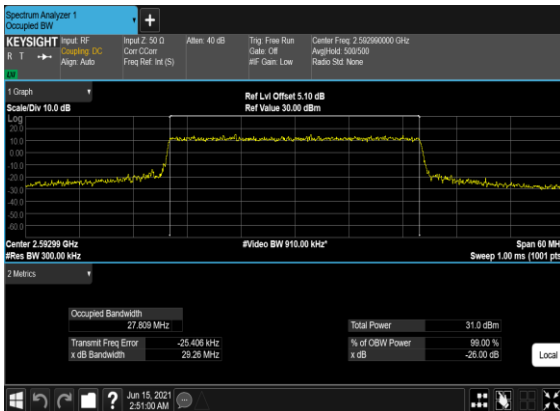
N41(30M)\_CP-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



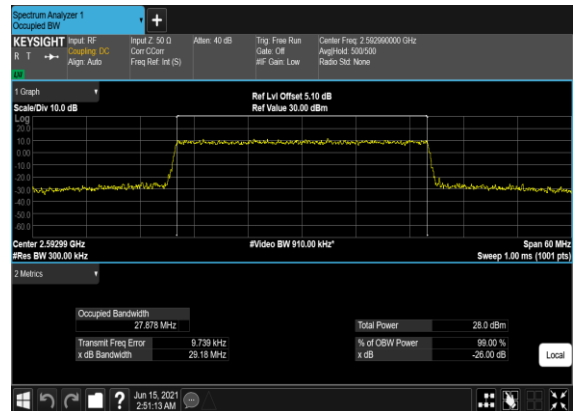
N41(30M)\_CP-OFDM\_16  
QAM\_Outer\_Full\_Mid\_CH



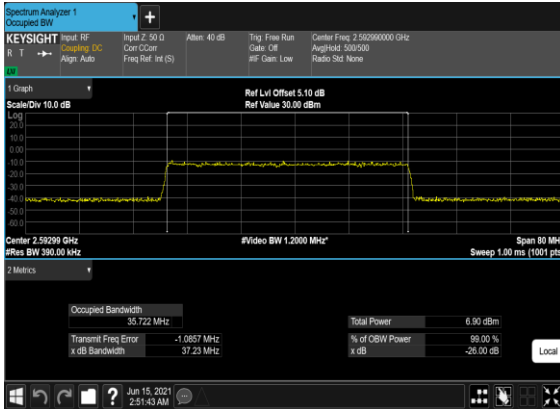
N41(30M)\_CP-OFDM\_64  
QAM\_Outer\_Full\_Mid\_CH



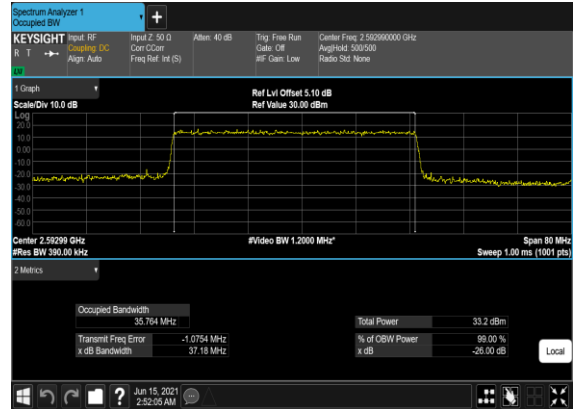
N41(30M)\_CP-OFDM\_256  
QAM\_Outer\_Full\_Mid\_CH



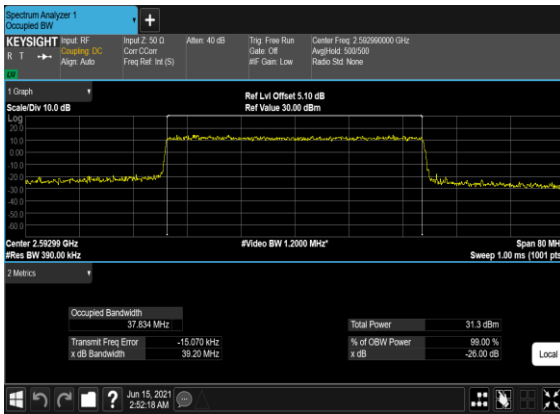
N41(40M)\_DFT-s-OFDM\_PI\_2-  
BPSK\_Outer\_Full\_Mid\_CH



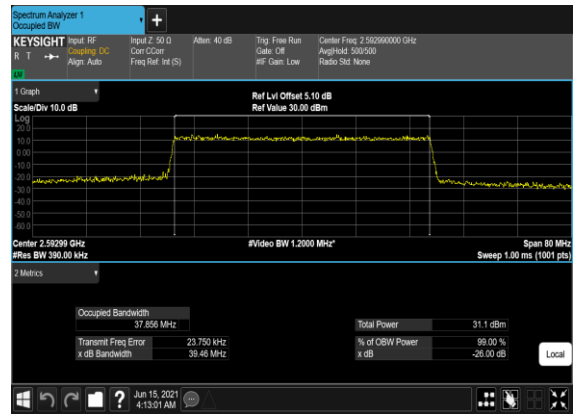
N41(40M)\_DFT-s-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



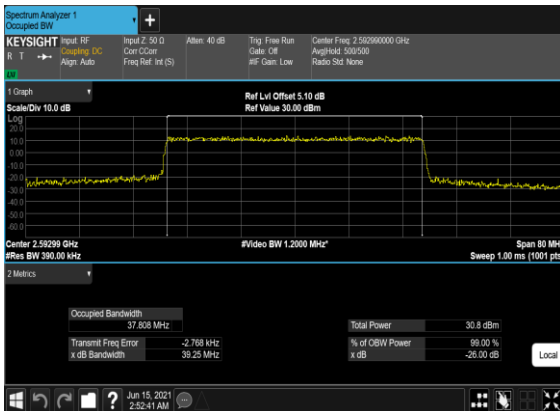
N41(40M)\_CP-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



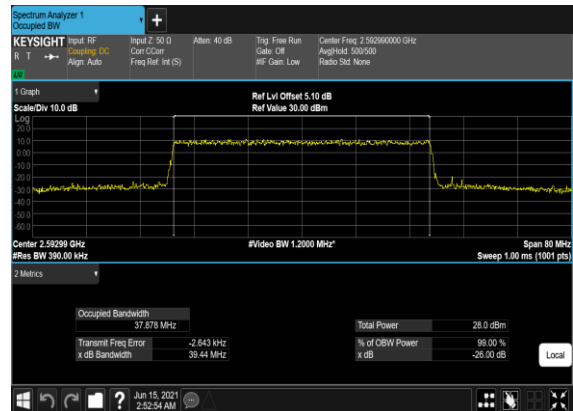
N41(40M)\_CP-OFDM\_16  
QAM\_Outer\_Full\_Mid\_CH



N41(40M)\_CP-OFDM\_64  
QAM\_Outer\_Full\_Mid\_CH



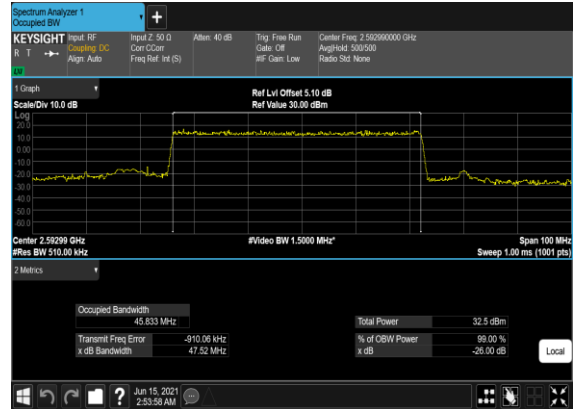
N41(40M)\_CP-OFDM\_256  
QAM\_Outer\_Full\_Mid\_CH



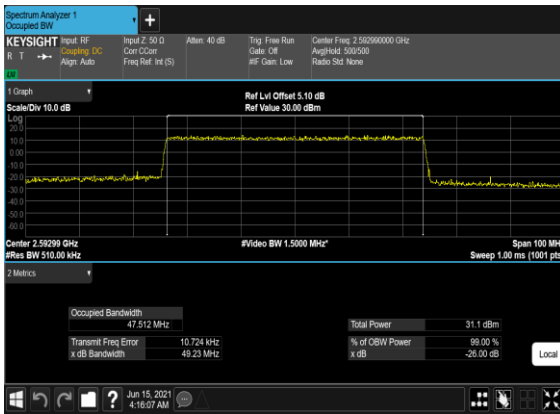
N41(50M)\_DFT-s-OFDM\_PI\_2-  
BPSK\_Outer\_Full\_Mid\_CH



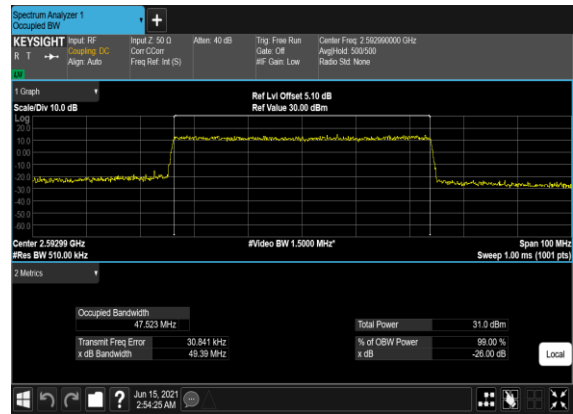
N41(50M)\_DFT-s-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



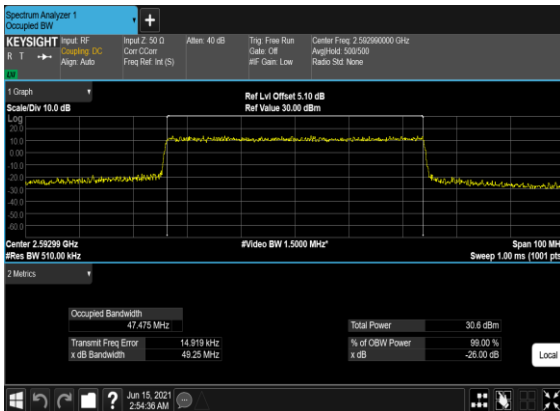
N41(50M)\_CP-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



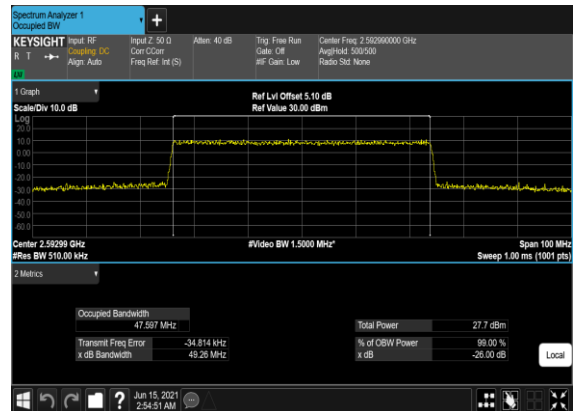
N41(50M)\_CP-OFDM\_16  
QAM\_Outer\_Full\_Mid\_CH



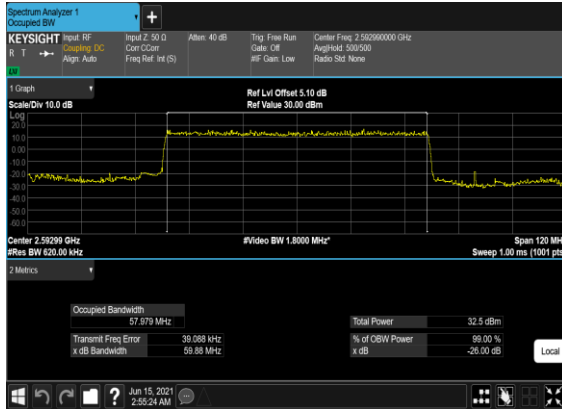
N41(50M)\_CP-OFDM\_64  
QAM\_Outer\_Full\_Mid\_CH



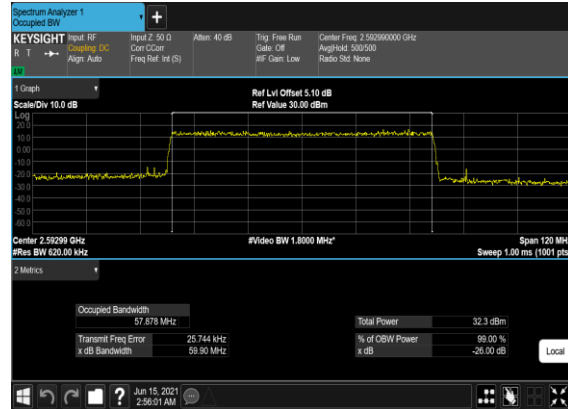
N41(50M)\_CP-OFDM\_256  
QAM\_Outer\_Full\_Mid\_CH



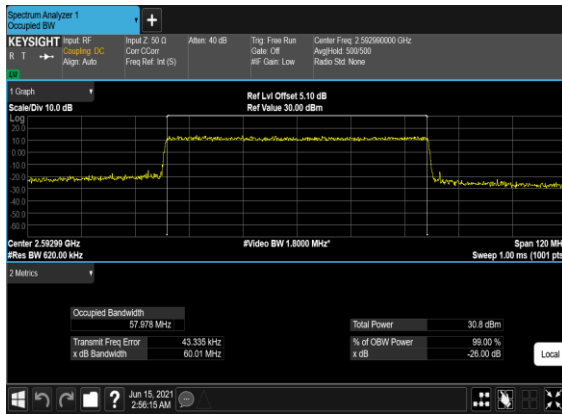
N41(60M)\_DFT-s-OFDM\_PI\_2-  
BPSK\_Outer\_Full\_Mid\_CH



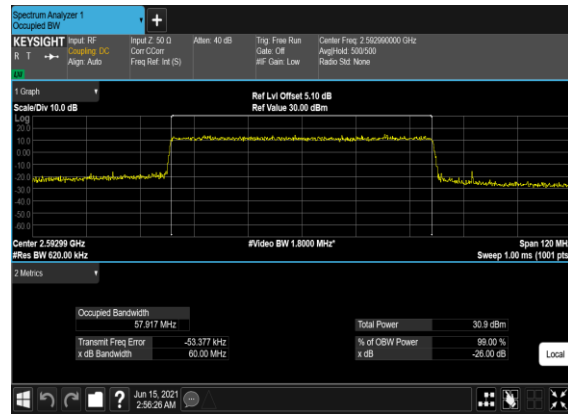
N41(60M)\_DFT-s-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



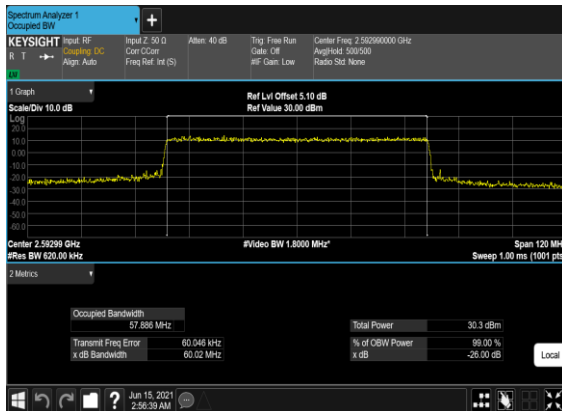
N41(60M)\_CP-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



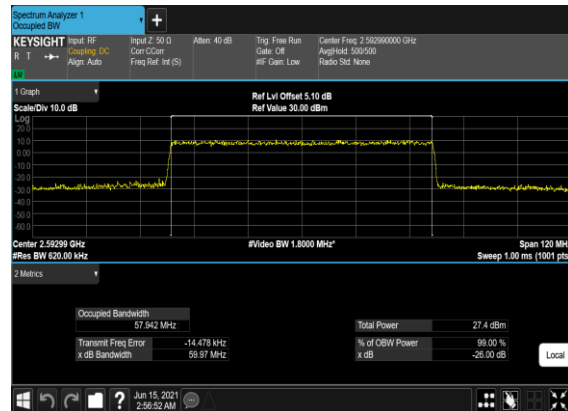
N41(60M)\_CP-OFDM\_16  
QAM\_Outer\_Full\_Mid\_CH



N41(60M)\_CP-OFDM\_64  
QAM\_Outer\_Full\_Mid\_CH



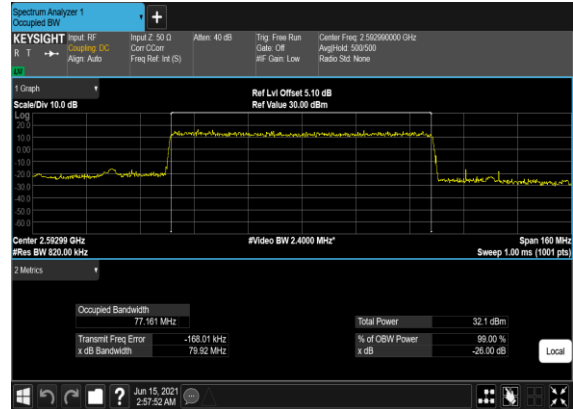
N41(60M)\_CP-OFDM\_256  
QAM\_Outer\_Full\_Mid\_CH



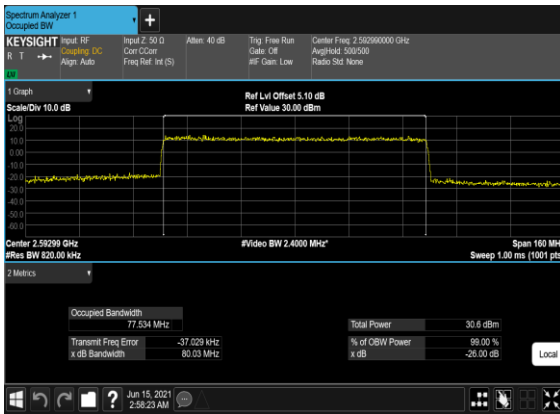
N41(80M)\_DFT-s-OFDM\_PI\_2-  
BPSK\_Outer\_Full\_Mid\_CH



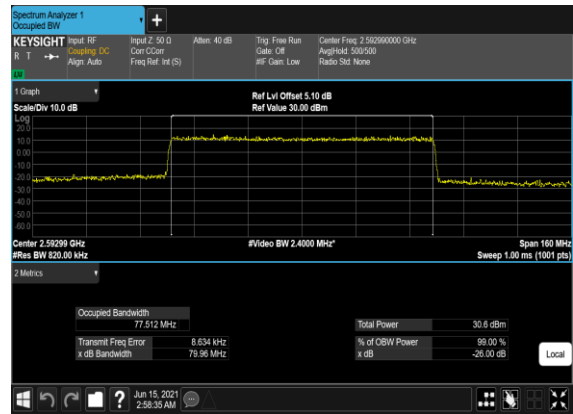
N41(80M)\_DFT-s-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



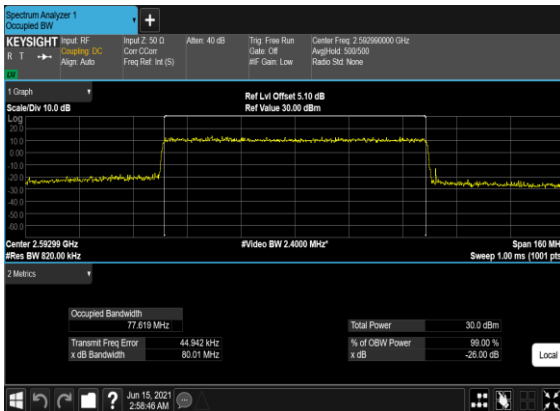
N41(80M)\_CP-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



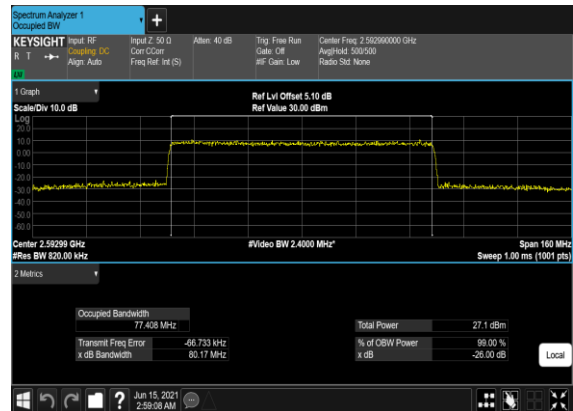
N41(80M)\_CP-OFDM\_16  
QAM\_Outer\_Full\_Mid\_CH



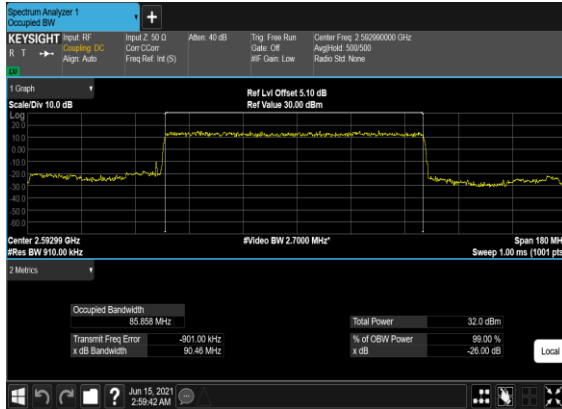
N41(80M)\_CP-OFDM\_64  
QAM\_Outer\_Full\_Mid\_CH



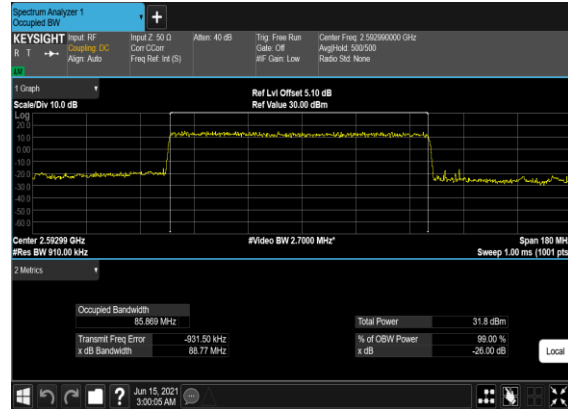
N41(80M)\_CP-OFDM\_256  
QAM\_Outer\_Full\_Mid\_CH



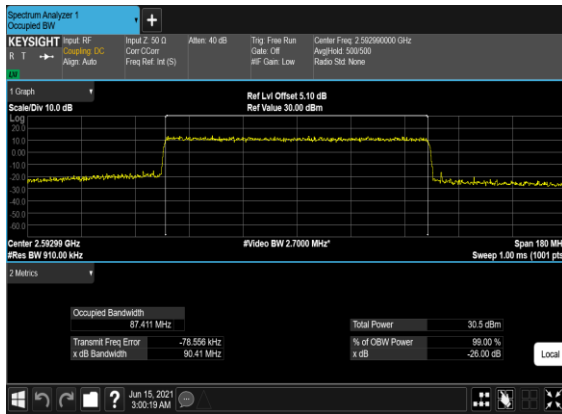
N41(90M)\_DFT-s-OFDM\_PI\_2-  
BPSK\_Outer\_Full\_Mid\_CH



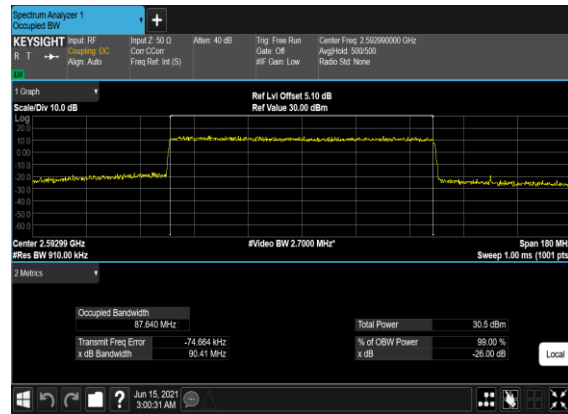
N41(90M)\_DFT-s-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



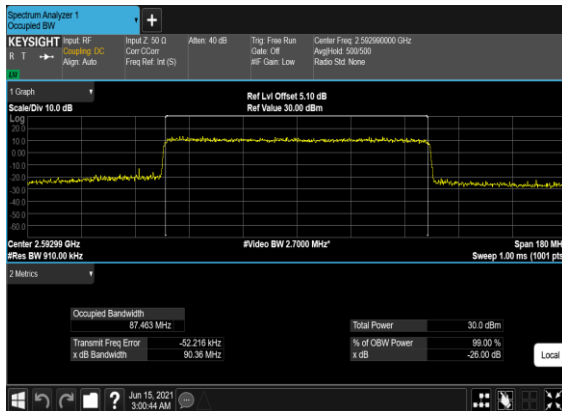
N41(90M)\_CP-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



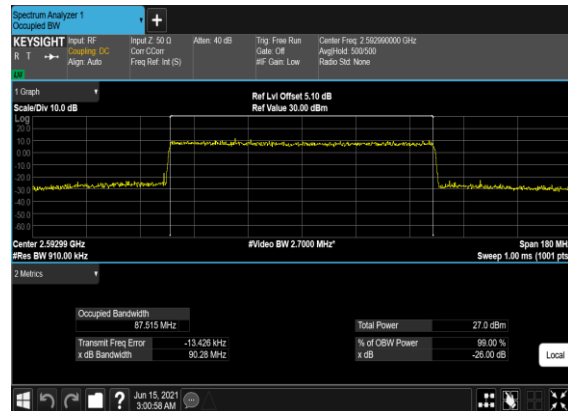
N41(90M)\_CP-OFDM\_16  
QAM\_Outer\_Full\_Mid\_CH



N41(90M)\_CP-OFDM\_64  
QAM\_Outer\_Full\_Mid\_CH



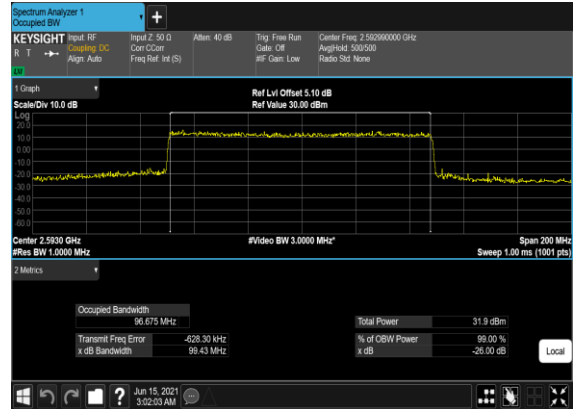
N41(90M)\_CP-OFDM\_256  
QAM\_Outer\_Full\_Mid\_CH



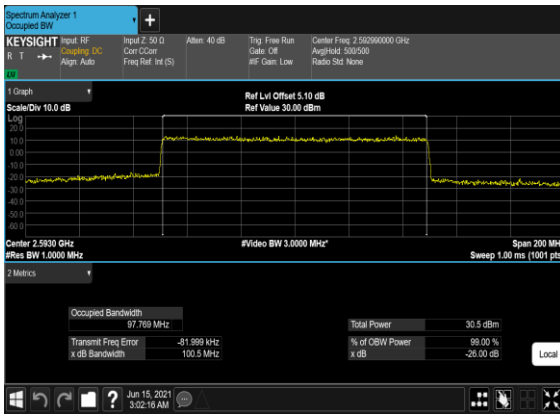
N41(100M)\_DFT-s-OFDM\_PI\_2-  
BPSK\_Outer\_Full\_Mid\_CH



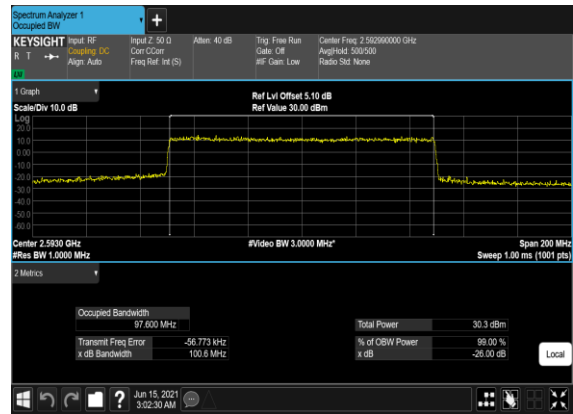
N41(100M)\_DFT-s-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



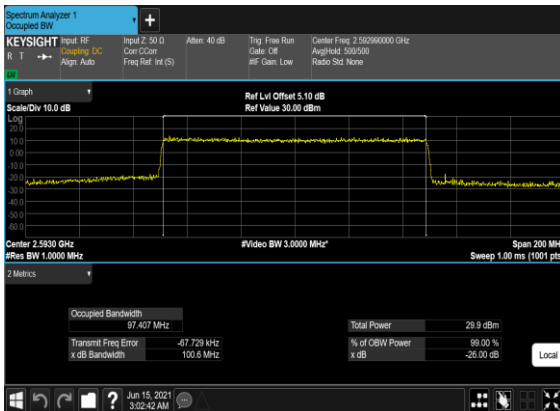
N41(100M)\_CP-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



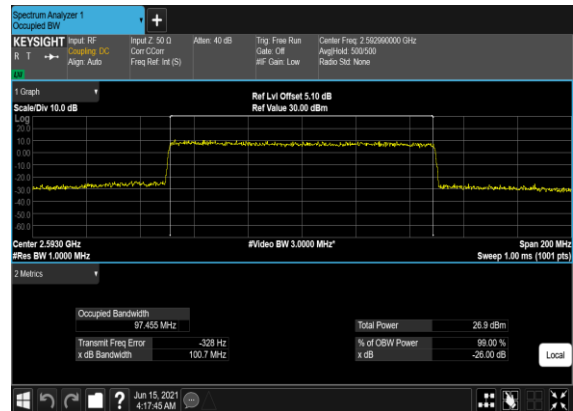
N41(100M)\_CP-OFDM\_16  
QAM\_Outer\_Full\_Mid\_CH



N41(100M)\_CP-OFDM\_64  
QAM\_Outer\_Full\_Mid\_CH



N41(100M)\_CP-OFDM\_256  
QAM\_Outer\_Full\_Mid\_CH



## Conducted Spurious Emissions

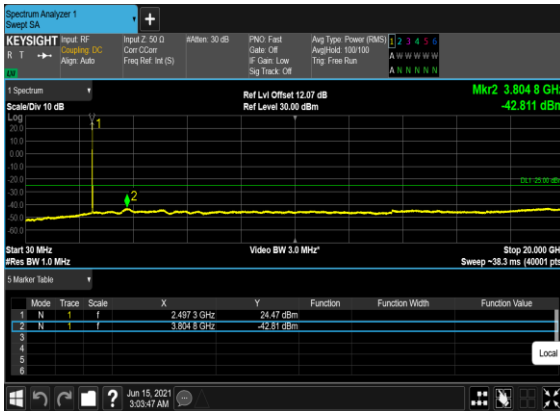
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
41	30	20	501204	2506.02	DFT-s-OFDM BPSK	1@0	see graph	---
41	30	20	501204	2506.02	DFT-s-OFDM BPSK	1@0	see graph	PASS
41	30	20	501204	2506.02	DFT-s-OFDM BPSK	1@0	see graph	PASS
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	1@0	see graph	---
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	1@0	see graph	PASS
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	1@0	see graph	PASS
41	30	20	518598	2592.99	DFT-s-OFDM BPSK	1@0	see graph	---
41	30	20	518598	2592.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
41	30	20	518598	2592.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	1@0	see graph	---
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
41	30	20	535998	2679.99	DFT-s-OFDM BPSK	1@0	see graph	---
41	30	20	535998	2679.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
41	30	20	535998	2679.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	1@0	see graph	---
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
41	30	60	505200	2526.0	DFT-s-OFDM BPSK	1@0	see graph	---
41	30	60	505200	2526.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
41	30	60	505200	2526.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
41	30	60	505200	2526.0	DFT-s-OFDM QPSK	1@0	see graph	---



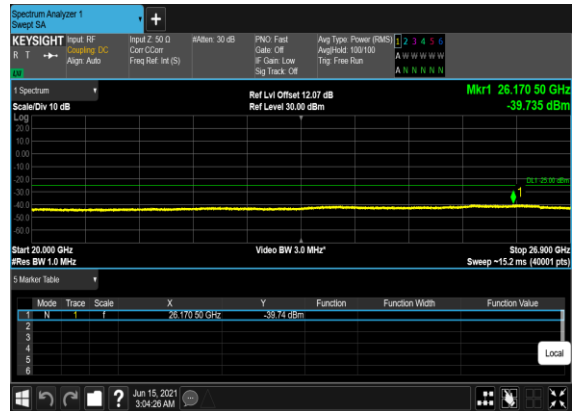
41	30	60	505200	2526.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
41	30	60	505200	2526.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
41	30	60	518598	2592.99	DFT-s-OFDM BPSK	1@0	see graph	---
41	30	60	518598	2592.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
41	30	60	518598	2592.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
41	30	60	518598	2592.99	DFT-s-OFDM QPSK	1@0	see graph	---
41	30	60	518598	2592.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
41	30	60	518598	2592.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
41	30	60	531996	2659.98	DFT-s-OFDM BPSK	1@0	see graph	---
41	30	60	531996	2659.98	DFT-s-OFDM BPSK	1@0	see graph	PASS
41	30	60	531996	2659.98	DFT-s-OFDM BPSK	1@0	see graph	PASS
41	30	60	531996	2659.98	DFT-s-OFDM QPSK	1@0	see graph	---
41	30	60	531996	2659.98	DFT-s-OFDM QPSK	1@0	see graph	PASS
41	30	60	531996	2659.98	DFT-s-OFDM QPSK	1@0	see graph	PASS
41	30	100	509202	2546.01	DFT-s-OFDM BPSK	1@0	see graph	---
41	30	100	509202	2546.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
41	30	100	509202	2546.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
41	30	100	509202	2546.01	DFT-s-OFDM QPSK	1@0	see graph	---
41	30	100	509202	2546.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
41	30	100	509202	2546.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
41	30	100	518598	2592.99	DFT-s-OFDM BPSK	1@0	see graph	---
41	30	100	518598	2592.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
41	30	100	518598	2592.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
41	30	100	518598	2592.99	DFT-s-OFDM QPSK	1@0	see graph	---

41	30	100	518598	2592.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
41	30	100	518598	2592.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
41	30	100	528000	2640.0	DFT-s-OFDM BPSK	1@0	see graph	---
41	30	100	528000	2640.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
41	30	100	528000	2640.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
41	30	100	528000	2640.0	DFT-s-OFDM QPSK	1@0	see graph	---
41	30	100	528000	2640.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
41	30	100	528000	2640.0	DFT-s-OFDM QPSK	1@0	see graph	PASS

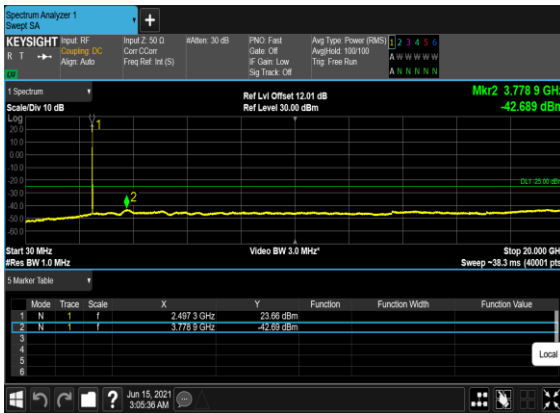
N41(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



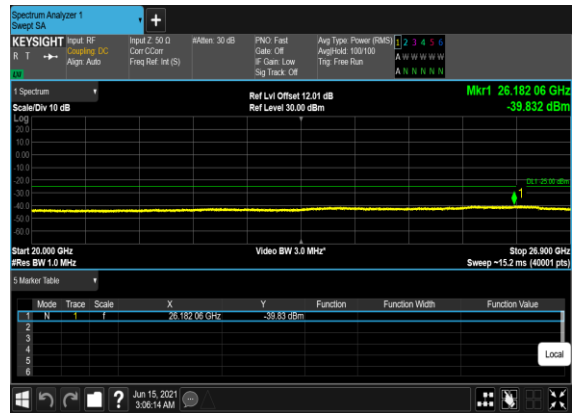
N41(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



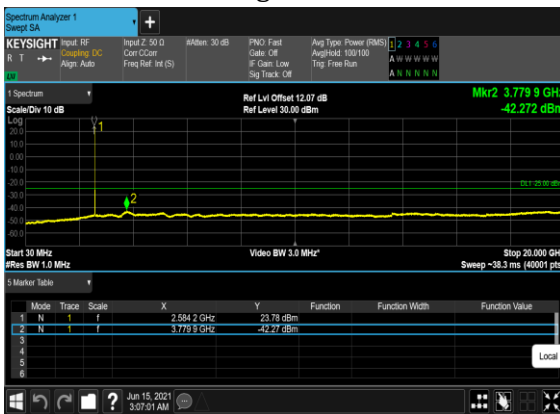
N41(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



N41(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



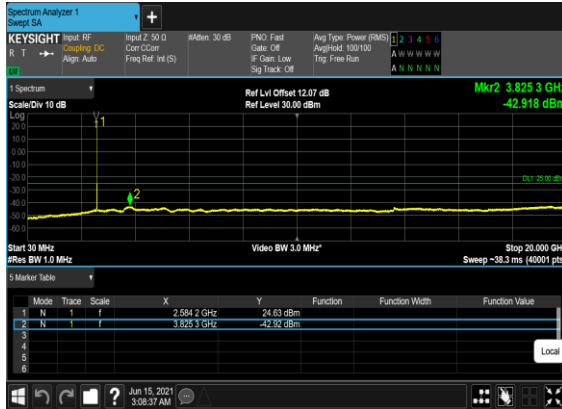
N41(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



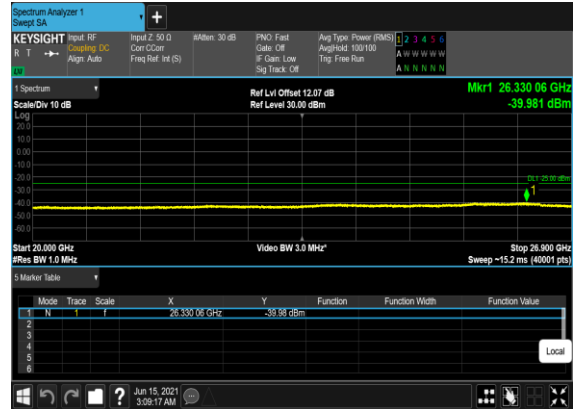
N41(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



N41(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



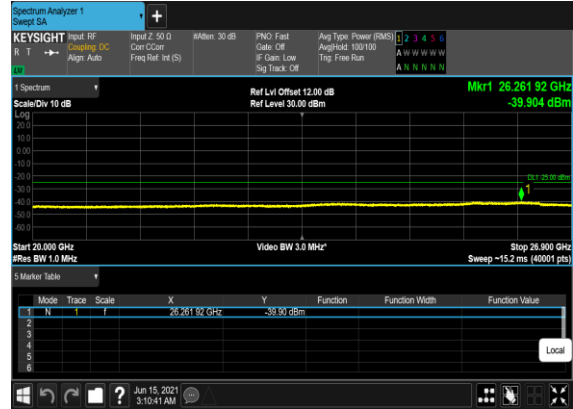
N41(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



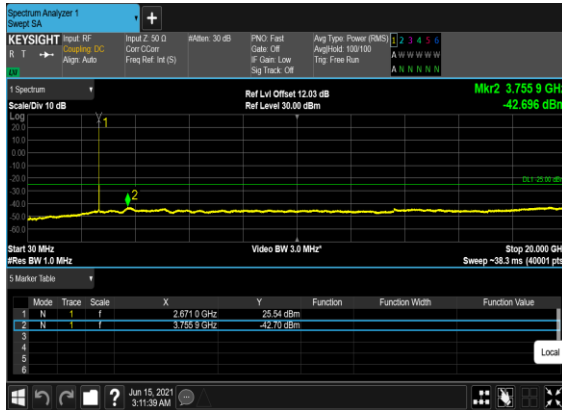
N41(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_High\_CH



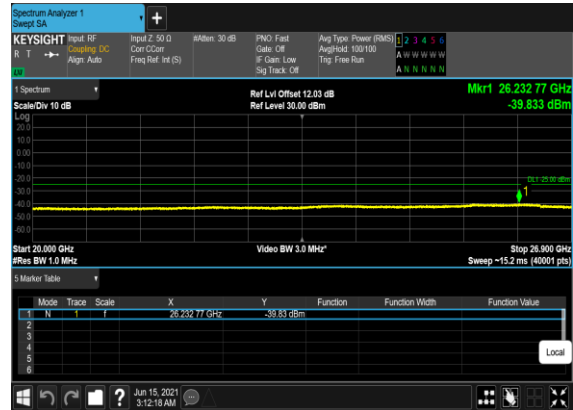
N41(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_High\_CH



N41(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



N41(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



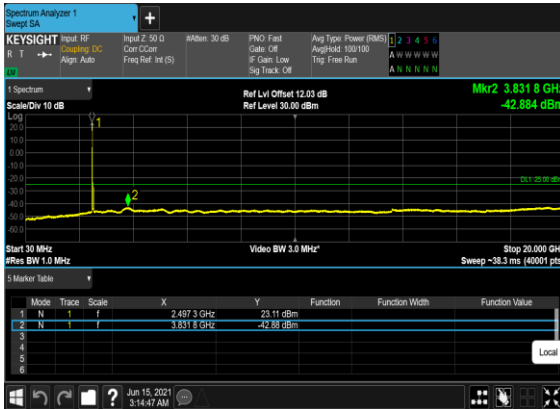
N41(60M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



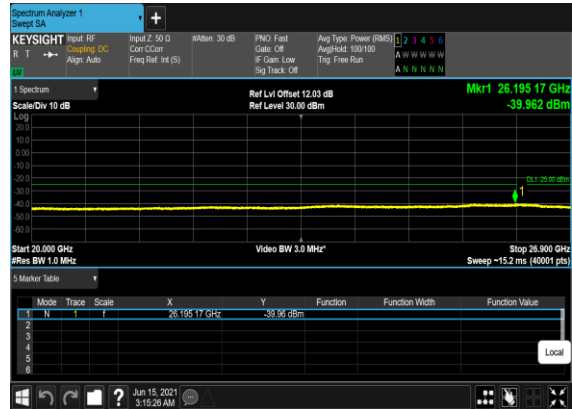
N41(60M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



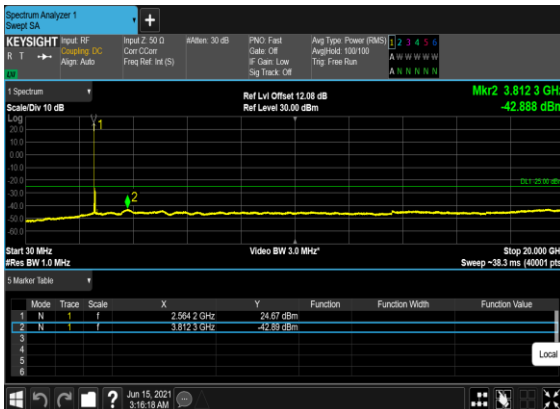
N41(60M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



N41(60M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



N41(60M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



N41(60M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



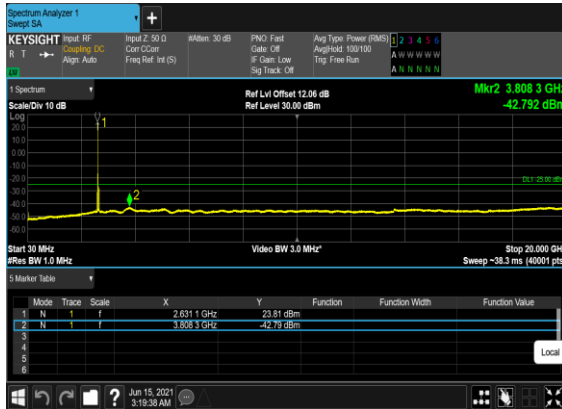
N41(60M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



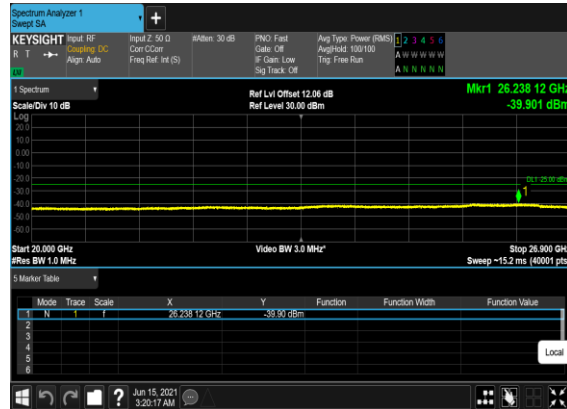
N41(60M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



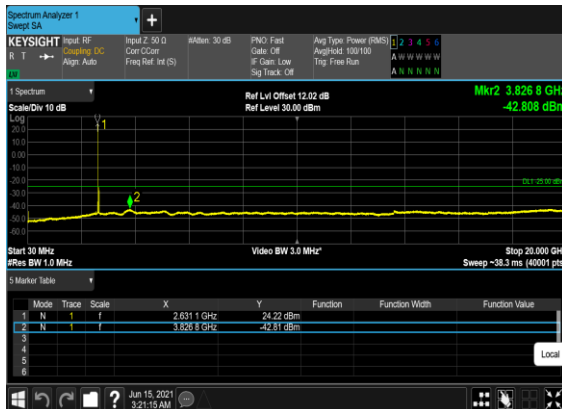
N41(60M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_High\_CH



N41(60M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_High\_CH



N41(60M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



N41(60M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH

