FCC RF Test Report

APPLICANT	:	Motorola Mobility LLC
EQUIPMENT	:	Mobile Cellular Phone
BRAND NAME	:	Motorola
MODEL NAME	:	XT2215-2, XT2215-3, XT2215-4, XT2215DL
FCC ID	:	IHDT56AA4
STANDARD	:	47 CFR Part 2, 27
CLASSIFICATION	:	PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S)	:	Jan. 07, 2022 ~ Jan. 15, 2022

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

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

Reviewed by: Derreck Chen / Supervisor

Approved by: Eric Shih / Manager

ACCREDITED Cert #5145.01

Sporton International Inc. (ShenZhen)

1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055

People's Republic of China

TABLE OF CONTENTS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG1N0903J	Rev. 01	Initial issue of report	Jan. 30, 2022

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 n12, 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	§24.232(d) §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 n12, n71) (5G NR n77, n78)	< 43+10log10(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 n12, n71) (5G NR n77, n78)	< 43+10log10(P[Watts])	PASS	-
	§2.1051 §27.53(m)(4)	Conducted Spurious Emission (5G NR n41)	< $55+10\log_{10}$(P[Watts])		
3.9	§2.1055 §22.355	Frequency Stability Temperature & Voltage	< 2.5 ppm for Part 22	PASS	-
	§24.235 §27.54		Within Authorized Band		
4.4	§2.1053 §27.53(g) §27.53(l)(2)	Radiated Spurious Emission (5G NR n12, n71) (5G NR n77, n78)	< $43+10\log_{10}$(P[Watts])	PASS	Under limit 27.66 dB at 10560.00 MHz
	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (5G NR n41)	< $55+10\log_{10}$(P[Watts])		

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	XT2215-2, XT2215-3, XT2215-4, XT2215DL
FCC ID	IHDT56AA4
IMEI Code	Conducted : 351475460011370 Radiation : 351475460012056
HW Version	DVT2
SW Version	S1SD32.29
EUT Stage	Identical Prototype

Remark:

1. Only 5G NR bands are tested in this report, all the other RF bands are tested in the other reports separately.
2. The four models XT2215-2, XT2215-3, XT2215-4 and XT2215DL are only for market differentiation, all the others are the same.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	5G NR n12 : 699 MHz ~ 716 MHz 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
Rx Frequency	5G NR n12: 729 MHz ~ 746 MHz 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
Bandwidth	n12: 5MHz / 10MHz / 15MHz n71: 5MHz / 10MHz / 15MHz / 20MHz n41/n77/n78: 20MHz / 30MHz / 40MHz / 50MHz / 60MHz / 70MHz / 80MHz / 90MHz / 100MHz
SCS	n12, n71: 15kHz n41, n77, n78: 30kHz
Antenna Gain	<Ant 1> n12: -7.2 dBi n41: -4.5 dBi n71: -7.5 dBi <Ant 2> n12: -7.7 dBi n41: -6.5 dBi n71: -7.6 dBi n77: -6.3 dBi n78: -6.8 dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

Note:

1. The maximum ERP/EIRP is calculated from max Output power and antenna gain, only the maximum ERP/EIRP of n41 for Ant. 1, n12/n71/n77/n78 for Ant.2 are shown in the report.
2. 5G NR n41/n77 support HPUE.
3. 5G NR Bands support SA and NSA mode. The whole testing has assessed by referring to the higher conducted power for conducted test items.
4. All the supported ENDC combinations are verified conducted power, only the ENDC combination with highest power are shown in the report.
5. The EN-DC mode combination could be referred to the product spec.

1.5 Modification of EUT

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

1.6 Maximum ERP/EIRP Power and Emission Designator

5G NR n12		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	701.5 ~ 713.5	0.0233	4M48G7D	0.0187	4M48W7D
10	704.0~ 711.0	0.0234	9M27G7D	0.0183	9M28W7D
15	706.5 ~ 708.5	0.0230	14M1G7D	0.0177	14M1W7D

5G NR n41		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	0.1706	18M2G7D	0.1288	18M3W7D
30	2511.00 ~ 2674.98	0.1567	27M8G7D	0.1300	27M8W7D
40	2516.01 ~ 2670.00	0.1648	37M9G7D	0.1346	37M9W7D
50	2521.02 ~ 2664.99	0.1574	47M5G7D	0.1274	47M6W7D
60	2526.00 ~ 2659.98	0.1503	58M0G7D	0.1169	57M9W7D
70	2531.01 ~ 2655.00	0.1538	67M5G7D	0.1294	67M6W7D
80	2536.02 ~ 2649.99	0.1549	77M6G7D	0.1309	77M7W7D
90	2541.00 ~ 2644.98	0.1574	87M5G7D	0.1306	87M6W7D
100	2546.01 ~ 2640.00	0.1614	97M5G7D	0.1233	97M9W7D

5G NR n71		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	0.0228	4M48G7D	0.0183	4M48W7D
10	668.0 ~ 693.0	0.0231	9M26G7D	0.0182	9M27W7D
15	670.5 ~ 690.5	0.0233	14M1G7D	0.0180	14M1W7D
20	673.0 ~ 688.0	0.0234	18M8G7D	0.0185	18M9W7D

5G NR n77		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	3710.01 ~ 3969.99	0.1002	18M2G7D	0.0836	18M2W7D
30	3715.02 ~ 3964.98	0.1026	27M8G7D	0.0847	27M9W7D
40	3720.00 ~ 3960.00	0.1069	37M9G7D	0.0879	37M8W7D
50	3725.01 ~ 3954.99	0.1002	47M4G7D	0.0818	47M5W7D
60	3730.02 ~ 3949.98	0.0991	57M9G7D	0.0841	57M8W7D
70	3735.00 ~ 3945.00	0.0964	67M4G7D	0.0805	67M5W7D
80	3740.01 ~ 3939.99	0.0955	77M4G7D	0.0796	77M6W7D
90	3745.02 ~ 3934.98	0.0957	87M5G7D	0.0800	87M7W7D
100	3750.00 ~ 3930.00	0.0966	97M4G7D	0.0796	97M6W7D

5G NR n78		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	3710.01 ~ 3789.99	0.1002	18M2G7D	0.0836	18M2W7D
30	3715.02 ~ 3784.98	0.1026	27M8G7D	0.0847	27M9W7D
40	3720.00 ~ 3780.00	0.1069	37M9G7D	0.0879	37M8W7D
50	3725.01 ~3774.99	0.1002	47M4G7D	0.0818	47M5W7D
60	3730.02 ~ 3769.98	0.0991	57M9G7D	0.0841	57M8W7D
70	3735.00 ~ 3765.00	0.0964	67M4G7D	0.0805	67M5W7D
80	3740.01 ~ 3759.99	0.0955	77M4G7D	0.0796	77M6W7D
90	3745.02 ~ 3754.98	0.0957	87M5G7D	0.0800	87M7W7D
100	3750	0.0966	97M4G7D	0.0796	97M6W7D

Note:

5G NR Band n77 overlaps the entire frequency range of Band n78. Therefore, the conducted test results provided in this report covers Band n77 as well as Band n78.

1.7 Testing Location

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

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

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

1.8 Test Software

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

1.9 Applicable Standards

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

- 47 CFR Part 2, 22, 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.

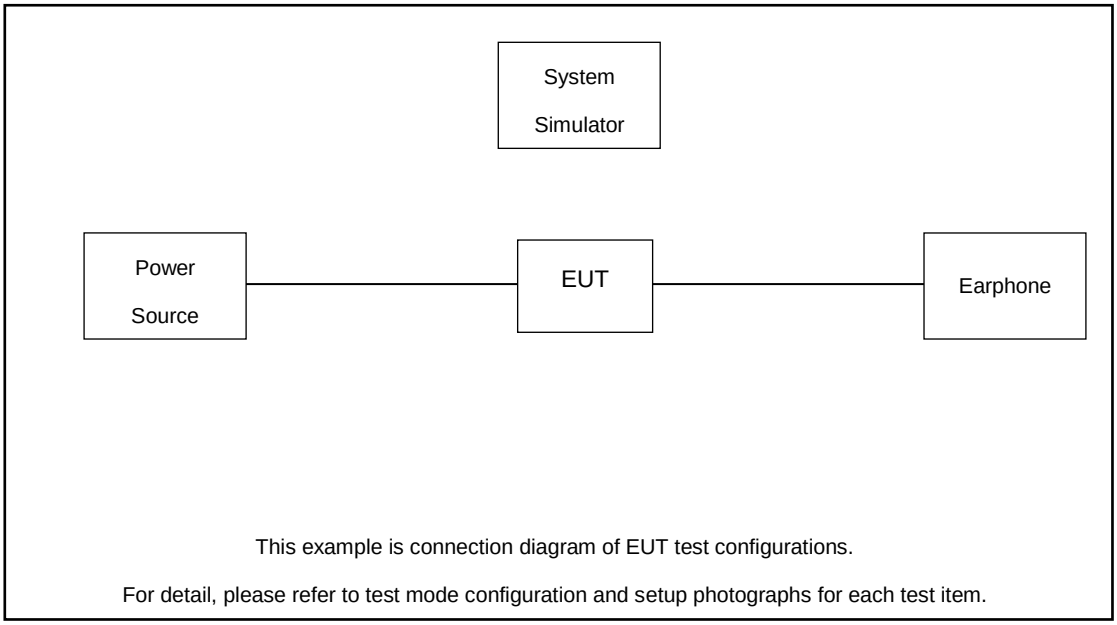
The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.

	X Plane	Y Plane	Z Plane
Orthogonal Planes of EUT			

Test Items	5G NR	Bandwidth (MHz)						Modulation					RB #		Test Channel		
		5	10	15	20	50-90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	1	Full	L	M	H
Max. Output Power	n12	v	v	v	-	-	-	v	v	v	v	v	v	v	v	v	v
	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	v	v	v
	n78	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	n12			v	-	-	-	v	v	v	v	v		v	v	v	v
	n41	-	-	-	v	-	-	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	v
26dB and 99% Bandwidth	n12	v	v	v	-	-	-	v	v	v	v	v		v	v	v	v
	n41	-	-	-	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
	n77	v	v	v	v	-	-	v	v	v	v	v		v	v	v	v

Test Items	Band	Bandwidth (MHz)						Modulation					RB #		Test Channel		
		5	10	15	20	50-90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	1	Full	L	M	H
Conducted Band Edge	n12	v	v	v	v	-	-	v	v	v	v	v	v	v	v		v
	n41	-	-	-	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
	n77	v	v	v	v	-	-	v	v	v	v	v	v	v	v		v
Conducted Spurious Emission	n12	v	v		v	-	-	v	v	v	v	v	v	v	v	v	v
	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
	n77	v	v		v	-	-	v	v	v	v	v	v	v	v	v	v
Frequency Stability	n12				v	-	-	v						v		v	
	n41	-	-	-	v			v						v		v	
	n71				v	-	-	v						v		v	
	n77				v	-	-	v						v		v	
E.R.P / E.I.R.P	n12	v	v		v	-	-	v	v	v	v	v	v	v	v	v	v
	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
	n77	v	v		v	-	-	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	n12	Worst Case														v	
	n41	Worst Case														v	
	n71	Worst Case														v	
	n77	Worst Case														v	
Note	1. The mark "**v** " means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. 4. 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. 5. 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. 6. All modulations (BPSK/QPSK/16QAM/64QAM/256QAM) have been tested, and only the worst 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.	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 :

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

= 5.2 + 10 = 15.2 (dB)

2.5 Frequency List of Low/Middle/High Channels

5G NR n12 Channel and Frequency List -SCS 15k				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
15	Channel	147300	147500	147700
	Frequency	706.5	707.5	708.5
10	Channel	146800	147500	148200
	Frequency	704	707.5	711
5	Channel	146300	147500	148700
	Frequency	701.5	707.5	713.5

5G NR n41 Channel and Frequency List -SCS 30k				
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
70	Channel	506202	518598	531000
	Frequency	2531.01	2592.99	2655
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-SCS 15k				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	125400	126900	128400
	Frequency	673	680.5	688
15	Channel	124900	126900	128900
	Frequency	670.5	680.5	690.5
10	Channel	124400	126900	129400
	Frequency	668	680.5	693
5	Channel	123900	126900	129900
	Frequency	665.5	680.5	695.5

5G NR n77 Channel and Frequency List-SCS 30k				
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-SCS 30k				
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

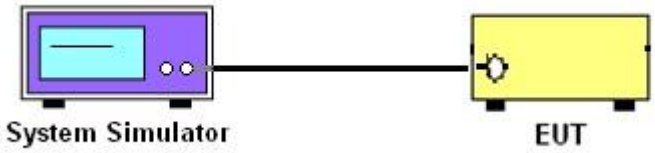
3 Conducted Test Items

3.1 Measuring Instruments

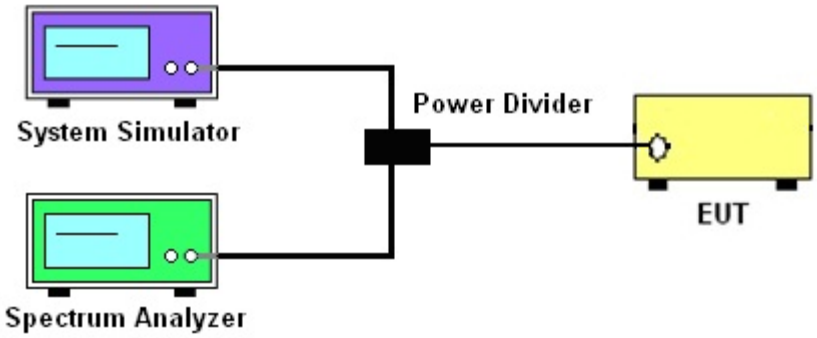
See list of measuring instruments of this test report.

3.2 Test Setup

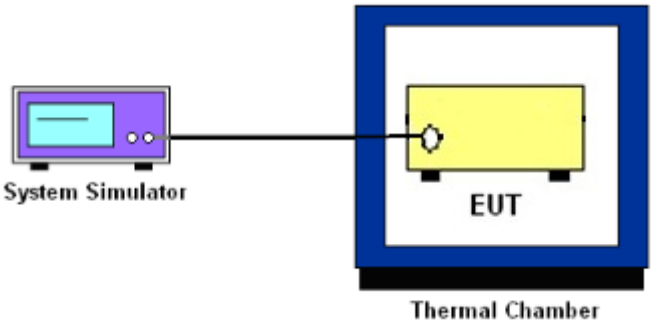
3.2.1 Conducted Output Power



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 n12 and 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 + 10log10(P[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 >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. Checked that all the results comply with the emission limit line.
   Example:
   The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
   = P(W)- [43 + 10log(P)] (dB)
   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB) = -13dBm.
9. For 5G NR n41, the other 40 dB, and 55 dB have additionally applied same calculation above.
10. When using the integration method, the starting frequency of the integration shall be centered at one-half of the RBW away from the band edge.

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^{th} harmonic.

3.8.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
7. Set spectrum analyzer with RMS detector.
8. Taking the record of maximum spurious emission.
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
10. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.
11. For 5G NR n41
    The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [55+ 10log(P)] (dB)
    = [30+ 10log(P)] (dBm) - [55+ 10log(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 ±0.00025% (±2.5ppm) of the center frequency.

3.9.2 Test Procedures for Temperature Variation

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

3.9.3 Test Procedures for Voltage Variation

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

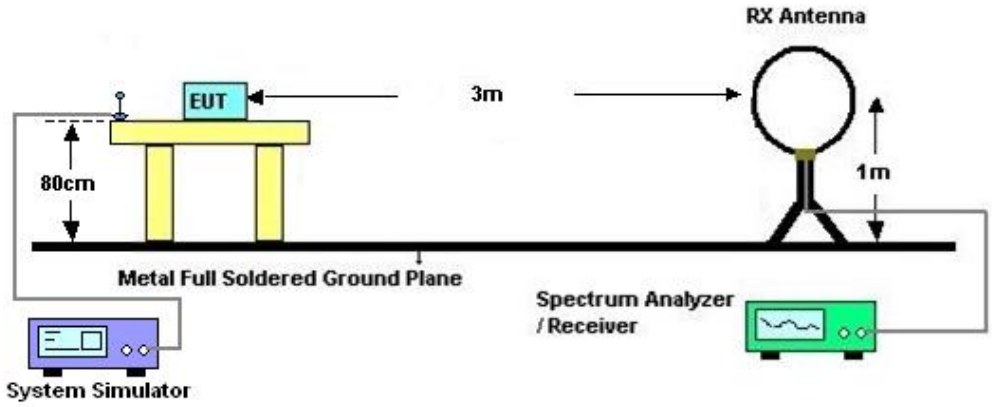
4 Radiated Test Items

4.1 Measuring Instruments

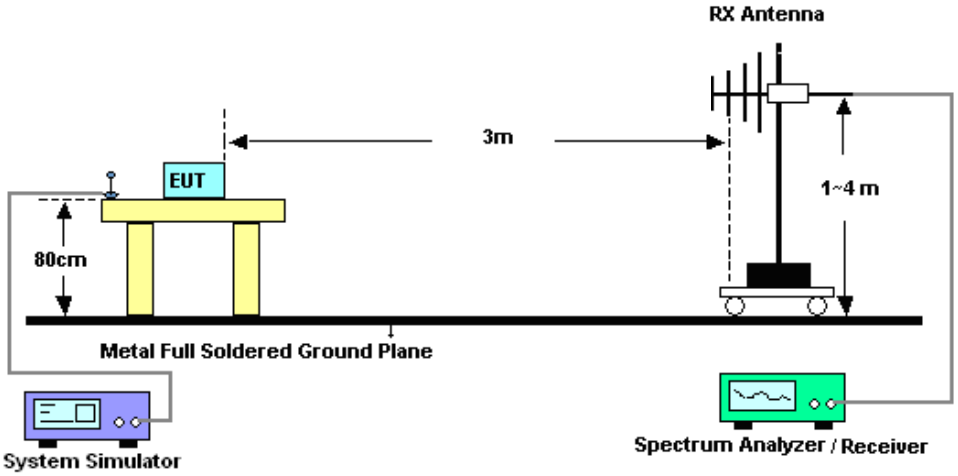
See list of measuring instruments of this test report.

4.2 Test Setup

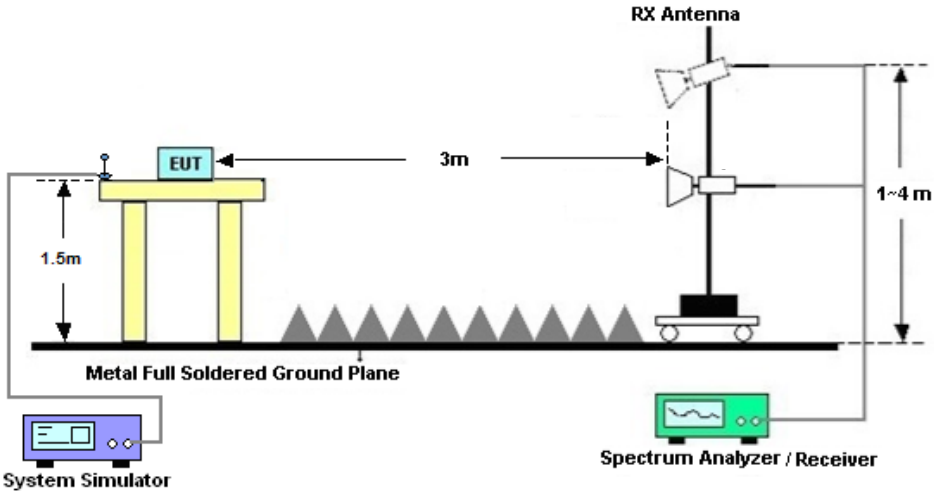
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3 Test Result of Radiated Test

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

Please refer to Appendix B.

4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

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

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 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.
13. For 5G NR n7/n38/n41:
    The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)The limit line is derived from 55 + 10log(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
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 08, 2021	Jan. 07, 2022~ Jan. 09, 2022	Apr. 07, 2022	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-04 265	60.06.020.007 7	0.4GHz~26.5GHz	Dec. 25, 2021	Jan. 07, 2022~ Jan. 09, 2022	Dec. 24, 2022	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 14, 2021	Jan. 07, 2022~ Jan. 09, 2022	Jul. 13, 2022	Conducted (TH01-SZ)
EMI Test Receiver	R&S	ESR7	101404	9kHz~7GHz	Oct. 22, 2021	Jan. 15, 2022	Oct. 21, 2022	Radiation (03CH04-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 20, 2021	Jan. 15, 2022	Jul. 19, 2022	Radiation (03CH04-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jun. 22, 2020	Jan. 15, 2022	Jun. 21, 2022	Radiation (03CH04-SZ)
Bilog Antenna	TeseQ	CBL6111D	41909	30MHz~1GHz	Oct. 22, 2021	Jan. 15, 2022	Oct. 21, 2022	Radiation (03CH04-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1474	1GHz~18GHz	Jul. 15, 2021	Jan. 15, 2022	Jul. 14, 2022	Radiation (03CH04-SZ)
Horn Antenna	SCHWARZBECK	BBHA9170	9170#679	15GHz~40GHz	Jul. 25, 2021	Jan. 15, 2022	Jul. 24, 2022	Radiation (03CH04-SZ)
Amplifier	Burgeon	BPA-530	102211	0.01Hz ~3000MHz	Oct. 22, 2021	Jan. 15, 2022	Oct. 21, 2022	Radiation (03CH04-SZ)
HF Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P-R	1943528	1GHz~18GHz	Oct. 22, 2021	Jan. 15, 2022	Oct. 21, 2022	Radiation (03CH04-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 20. 2021	Jan. 15, 2022	Jul. 19. 2022	Radiation (03CH04-SZ)
Amplifier	Agilent Technologies	83017A	MY53270156	500MHz~26.5GHz	Oct. 22, 2021	Jan. 15, 2022	Oct. 21, 2022	Radiation (03CH04-SZ)
AC Power Source	Chroma	61601	N/A	N/A	NCR	Jan. 15, 2022	NCR	Radiation (03CH04-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Jan. 15, 2022	NCR	Radiation (03CH04-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Jan. 15, 2022	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))	**5.1dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.8dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.1dB**

Appendix A. Test Results of Conducted Test

Test Engineer :	Jung Kuo	**Temperature :**	22~23℃
		Relative Humidity :	40~42%

Software Version: 21.02.121001

FR1 N12

LTE Band: 2, LTE BW: 10M, LTE ARFCN: Mid

Transmitter Conducted Output Power And ERP/EIRP, (G_T - L_C) =-7.7dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	ERP(dBm)	ERP(W)
12	15	5	146300	701.5	DFT-s-OFDM PI/2 BPSK	12@6	23.44	13.59	0.0229
12	15	5	146300	701.5	DFT-s-OFDM PI/2 BPSK	1@1	23.48	13.63	0.0231
12	15	5	146300	701.5	DFT-s-OFDM PI/2 BPSK	1@23	23.45	13.6	0.0229
12	15	5	146300	701.5	DFT-s-OFDM QPSK	12@6	23.51	13.66	0.0232
12	15	5	146300	701.5	DFT-s-OFDM QPSK	1@1	23.52	13.67	0.0233
12	15	5	146300	701.5	DFT-s-OFDM QPSK	1@23	23.46	13.61	0.0230
12	15	5	146300	701.5	DFT-s-OFDM 16 QAM	12@6	22.56	12.71	0.0187
12	15	5	146300	701.5	DFT-s-OFDM 16 QAM	1@1	22.41	12.56	0.0180
12	15	5	146300	701.5	DFT-s-OFDM 16 QAM	1@23	22.45	12.6	0.0182
12	15	5	146300	701.5	DFT-s-OFDM 64 QAM	12@6	21.03	11.18	0.0131
12	15	5	146300	701.5	DFT-s-OFDM 64 QAM	1@1	21.18	11.33	0.0136
12	15	5	146300	701.5	DFT-s-OFDM 64 QAM	1@23	21.12	11.27	0.0134
12	15	5	146300	701.5	DFT-s-OFDM 256 QAM	12@6	18.8	8.95	0.0079
12	15	5	146300	701.5	DFT-s-OFDM 256 QAM	1@1	18.46	8.61	0.0073
12	15	5	146300	701.5	DFT-s-OFDM 256 QAM	1@23	18.13	8.28	0.0067
12	15	5	146300	701.5	CP-OFDM QPSK	13@6	22.02	12.17	0.0165
12	15	5	146300	701.5	CP-OFDM QPSK	1@1	21.91	12.06	0.0161
12	15	5	146300	701.5	CP-OFDM QPSK	1@23	21.9	12.05	0.0160
12	15	5	147500	707.5	DFT-s-OFDM PI/2 BPSK	12@6	23.31	13.46	0.0222
12	15	5	147500	707.5	DFT-s-OFDM PI/2 BPSK	1@1	23.4	13.55	0.0226
12	15	5	147500	707.5	DFT-s-OFDM PI/2 BPSK	1@23	23.33	13.48	0.0223
12	15	5	147500	707.5	DFT-s-OFDM QPSK	12@6	23.34	13.49	0.0223

12	15	5	147500	707.5	DFT-s-OFDM QPSK	1@1	23.37	13.52	0.0225
12	15	5	147500	707.5	DFT-s-OFDM QPSK	1@23	23.34	13.49	0.0223
12	15	5	147500	707.5	DFT-s-OFDM 16 QAM	12@6	22.41	12.56	0.0180
12	15	5	147500	707.5	DFT-s-OFDM 16 QAM	1@1	22.31	12.46	0.0176
12	15	5	147500	707.5	DFT-s-OFDM 16 QAM	1@23	22.25	12.4	0.0174
12	15	5	147500	707.5	DFT-s-OFDM 64 QAM	12@6	20.93	11.08	0.0128
12	15	5	147500	707.5	DFT-s-OFDM 64 QAM	1@1	21.08	11.23	0.0133
12	15	5	147500	707.5	DFT-s-OFDM 64 QAM	1@23	21.01	11.16	0.0131
12	15	5	147500	707.5	DFT-s-OFDM 256 QAM	12@6	18.9	9.05	0.0080
12	15	5	147500	707.5	DFT-s-OFDM 256 QAM	1@1	18.36	8.51	0.0071
12	15	5	147500	707.5	DFT-s-OFDM 256 QAM	1@23	18.11	8.26	0.0067
12	15	5	147500	707.5	CP-OFDM QPSK	13@6	21.9	12.05	0.0160
12	15	5	147500	707.5	CP-OFDM QPSK	1@1	21.86	12.01	0.0159
12	15	5	147500	707.5	CP-OFDM QPSK	1@23	21.74	11.89	0.0155
12	15	5	148700	713.5	DFT-s-OFDM PI/2 BPSK	12@6	23.21	13.36	0.0217
12	15	5	148700	713.5	DFT-s-OFDM PI/2 BPSK	1@1	23.23	13.38	0.0218
12	15	5	148700	713.5	DFT-s-OFDM PI/2 BPSK	1@23	23.2	13.35	0.0216
12	15	5	148700	713.5	DFT-s-OFDM QPSK	12@6	23.2	13.35	0.0216
12	15	5	148700	713.5	DFT-s-OFDM QPSK	1@1	23.27	13.42	0.0220
12	15	5	148700	713.5	DFT-s-OFDM QPSK	1@23	23.17	13.32	0.0215
12	15	5	148700	713.5	DFT-s-OFDM 16 QAM	12@6	22.28	12.43	0.0175
12	15	5	148700	713.5	DFT-s-OFDM 16 QAM	1@1	22.21	12.36	0.0172
12	15	5	148700	713.5	DFT-s-OFDM 16 QAM	1@23	22.09	12.24	0.0167
12	15	5	148700	713.5	DFT-s-OFDM 64 QAM	12@6	20.8	10.95	0.0124
12	15	5	148700	713.5	DFT-s-OFDM 64 QAM	1@1	20.91	11.06	0.0128
12	15	5	148700	713.5	DFT-s-OFDM 64 QAM	1@23	20.85	11	0.0126
12	15	5	148700	713.5	DFT-s-OFDM 256 QAM	12@6	19.03	9.18	0.0083
12	15	5	148700	713.5	DFT-s-OFDM 256 QAM	1@1	18.72	8.87	0.0077
12	15	5	148700	713.5	DFT-s-OFDM 256 QAM	1@23	18.12	8.27	0.0067
12	15	5	148700	713.5	CP-OFDM QPSK	13@6	21.72	11.87	0.0154

12	15	5	148700	713.5	CP-OFDM QPSK	1@1	21.69	11.84	0.0153
12	15	5	148700	713.5	CP-OFDM QPSK	1@23	21.61	11.76	0.0150
12	15	10	146800	704	DFT-s-OFDM PI/2 BPSK	25@12	23.43	13.58	0.0228
12	15	10	146800	704	DFT-s-OFDM PI/2 BPSK	1@1	23.51	13.66	0.0232
12	15	10	146800	704	DFT-s-OFDM PI/2 BPSK	1@50	23.32	13.47	0.0222
12	15	10	146800	704	DFT-s-OFDM QPSK	25@12	23.43	13.58	0.0228
12	15	10	146800	704	DFT-s-OFDM QPSK	1@1	23.55	13.7	0.0234
12	15	10	146800	704	DFT-s-OFDM QPSK	1@50	23.34	13.49	0.0223
12	15	10	146800	704	DFT-s-OFDM 16 QAM	25@12	22.47	12.62	0.0183
12	15	10	146800	704	DFT-s-OFDM 16 QAM	1@1	22.45	12.6	0.0182
12	15	10	146800	704	DFT-s-OFDM 16 QAM	1@50	22.29	12.44	0.0175
12	15	10	146800	704	DFT-s-OFDM 64 QAM	25@12	20.91	11.06	0.0128
12	15	10	146800	704	DFT-s-OFDM 64 QAM	1@1	21.2	11.35	0.0136
12	15	10	146800	704	DFT-s-OFDM 64 QAM	1@50	20.99	11.14	0.0130
12	15	10	146800	704	DFT-s-OFDM 256 QAM	25@12	18.62	8.77	0.0075
12	15	10	146800	704	DFT-s-OFDM 256 QAM	1@1	18.4	8.55	0.0072
12	15	10	146800	704	DFT-s-OFDM 256 QAM	1@50	18.31	8.46	0.0070
12	15	10	146800	704	CP-OFDM QPSK	26@13	21.86	12.01	0.0159
12	15	10	146800	704	CP-OFDM QPSK	1@1	21.96	12.11	0.0163
12	15	10	146800	704	CP-OFDM QPSK	1@50	21.78	11.93	0.0156
12	15	10	147500	707.5	DFT-s-OFDM PI/2 BPSK	25@12	23.38	13.53	0.0225
12	15	10	147500	707.5	DFT-s-OFDM PI/2 BPSK	1@1	23.43	13.58	0.0228
12	15	10	147500	707.5	DFT-s-OFDM PI/2 BPSK	1@50	23.23	13.38	0.0218
12	15	10	147500	707.5	DFT-s-OFDM QPSK	25@12	23.36	13.51	0.0224
12	15	10	147500	707.5	DFT-s-OFDM QPSK	1@1	23.5	13.65	0.0232
12	15	10	147500	707.5	DFT-s-OFDM QPSK	1@50	23.28	13.43	0.0220
12	15	10	147500	707.5	DFT-s-OFDM 16 QAM	25@12	22.37	12.52	0.0179
12	15	10	147500	707.5	DFT-s-OFDM 16 QAM	1@1	22.43	12.58	0.0181
12	15	10	147500	707.5	DFT-s-OFDM 16 QAM	1@50	22.22	12.37	0.0173
12	15	10	147500	707.5	DFT-s-OFDM 64 QAM	25@12	20.88	11.03	0.0127

12	15	10	147500	707.5	DFT-s-OFDM 64 QAM	1@1	21.14	11.29	0.0135
12	15	10	147500	707.5	DFT-s-OFDM 64 QAM	1@50	20.92	11.07	0.0128
12	15	10	147500	707.5	DFT-s-OFDM 256 QAM	25@12	19.16	9.31	0.0085
12	15	10	147500	707.5	DFT-s-OFDM 256 QAM	1@1	18.34	8.49	0.0071
12	15	10	147500	707.5	DFT-s-OFDM 256 QAM	1@50	18.26	8.41	0.0069
12	15	10	147500	707.5	CP-OFDM QPSK	26@13	21.77	11.92	0.0156
12	15	10	147500	707.5	CP-OFDM QPSK	1@1	21.94	12.09	0.0162
12	15	10	147500	707.5	CP-OFDM QPSK	1@50	21.73	11.88	0.0154
12	15	10	148200	711	DFT-s-OFDM PI/2 BPSK	25@12	23.28	13.43	0.0220
12	15	10	148200	711	DFT-s-OFDM PI/2 BPSK	1@1	23.4	13.55	0.0226
12	15	10	148200	711	DFT-s-OFDM PI/2 BPSK	1@50	23.19	13.34	0.0216
12	15	10	148200	711	DFT-s-OFDM QPSK	25@12	23.27	13.42	0.0220
12	15	10	148200	711	DFT-s-OFDM QPSK	1@1	23.39	13.54	0.0226
12	15	10	148200	711	DFT-s-OFDM QPSK	1@50	23.18	13.33	0.0215
12	15	10	148200	711	DFT-s-OFDM 16 QAM	25@12	22.3	12.45	0.0176
12	15	10	148200	711	DFT-s-OFDM 16 QAM	1@1	22.32	12.47	0.0177
12	15	10	148200	711	DFT-s-OFDM 16 QAM	1@50	22.1	12.25	0.0168
12	15	10	148200	711	DFT-s-OFDM 64 QAM	25@12	20.83	10.98	0.0125
12	15	10	148200	711	DFT-s-OFDM 64 QAM	1@1	21.07	11.22	0.0132
12	15	10	148200	711	DFT-s-OFDM 64 QAM	1@50	21.18	11.33	0.0136
12	15	10	148200	711	DFT-s-OFDM 256 QAM	25@12	19	9.15	0.0082
12	15	10	148200	711	DFT-s-OFDM 256 QAM	1@1	18.25	8.4	0.0069
12	15	10	148200	711	DFT-s-OFDM 256 QAM	1@50	18.16	8.31	0.0068
12	15	10	148200	711	CP-OFDM QPSK	26@13	21.69	11.84	0.0153
12	15	10	148200	711	CP-OFDM QPSK	1@1	21.84	11.99	0.0158
12	15	10	148200	711	CP-OFDM QPSK	1@50	21.62	11.77	0.0150
12	15	15	147300	706.5	DFT-s-OFDM PI/2 BPSK	36@18	23.29	13.44	0.0221
12	15	15	147300	706.5	DFT-s-OFDM PI/2 BPSK	1@1	23.38	13.53	0.0225
12	15	15	147300	706.5	DFT-s-OFDM PI/2 BPSK	1@77	23.16	13.31	0.0214
12	15	15	147300	706.5	DFT-s-OFDM QPSK	36@18	23.28	13.43	0.0220

12	15	15	147300	706.5	DFT-s-OFDM QPSK	1@1	23.46	13.61	0.0230
12	15	15	147300	706.5	DFT-s-OFDM QPSK	1@77	23.18	13.33	0.0215
12	15	15	147300	706.5	DFT-s-OFDM 16 QAM	36@18	22.32	12.47	0.0177
12	15	15	147300	706.5	DFT-s-OFDM 16 QAM	1@1	22.33	12.48	0.0177
12	15	15	147300	706.5	DFT-s-OFDM 16 QAM	1@77	22.08	12.23	0.0167
12	15	15	147300	706.5	DFT-s-OFDM 64 QAM	36@18	20.81	10.96	0.0125
12	15	15	147300	706.5	DFT-s-OFDM 64 QAM	1@1	21.09	11.24	0.0133
12	15	15	147300	706.5	DFT-s-OFDM 64 QAM	1@77	20.85	11	0.0126
12	15	15	147300	706.5	DFT-s-OFDM 256 QAM	36@18	18.73	8.88	0.0077
12	15	15	147300	706.5	DFT-s-OFDM 256 QAM	1@1	18.38	8.53	0.0071
12	15	15	147300	706.5	DFT-s-OFDM 256 QAM	1@77	18.17	8.32	0.0068
12	15	15	147300	706.5	CP-OFDM QPSK	39@19	21.75	11.9	0.0155
12	15	15	147300	706.5	CP-OFDM QPSK	1@1	21.92	12.07	0.0161
12	15	15	147300	706.5	CP-OFDM QPSK	1@77	21.56	11.71	0.0148
12	15	15	147500	707.5	DFT-s-OFDM PI/2 BPSK	36@18	23.19	13.34	0.0216
12	15	15	147500	707.5	DFT-s-OFDM PI/2 BPSK	1@1	23.37	13.52	0.0225
12	15	15	147500	707.5	DFT-s-OFDM PI/2 BPSK	1@77	23.1	13.25	0.0211
12	15	15	147500	707.5	DFT-s-OFDM QPSK	36@18	23.25	13.4	0.0219
12	15	15	147500	707.5	DFT-s-OFDM QPSK	1@1	23.43	13.58	0.0228
12	15	15	147500	707.5	DFT-s-OFDM QPSK	1@77	23.19	13.34	0.0216
12	15	15	147500	707.5	DFT-s-OFDM 16 QAM	36@18	22.28	12.43	0.0175
12	15	15	147500	707.5	DFT-s-OFDM 16 QAM	1@1	22.31	12.46	0.0176
12	15	15	147500	707.5	DFT-s-OFDM 16 QAM	1@77	22.05	12.2	0.0166
12	15	15	147500	707.5	DFT-s-OFDM 64 QAM	36@18	20.8	10.95	0.0124
12	15	15	147500	707.5	DFT-s-OFDM 64 QAM	1@1	21.08	11.23	0.0133
12	15	15	147500	707.5	DFT-s-OFDM 64 QAM	1@77	20.83	10.98	0.0125
12	15	15	147500	707.5	DFT-s-OFDM 256 QAM	36@18	18.62	8.77	0.0075
12	15	15	147500	707.5	DFT-s-OFDM 256 QAM	1@1	18.33	8.48	0.0070
12	15	15	147500	707.5	DFT-s-OFDM 256 QAM	1@77	18.13	8.28	0.0067
12	15	15	147500	707.5	CP-OFDM QPSK	39@19	21.72	11.87	0.0154

12	15	15	147500	707.5	CP-OFDM QPSK	1@1	21.93	12.08	0.0161
12	15	15	147500	707.5	CP-OFDM QPSK	1@77	21.51	11.66	0.0147
12	15	15	147700	708.5	DFT-s-OFDM PI/2 BPSK	36@18	23.19	13.34	0.0216
12	15	15	147700	708.5	DFT-s-OFDM PI/2 BPSK	1@1	23.35	13.5	0.0224
12	15	15	147700	708.5	DFT-s-OFDM PI/2 BPSK	1@77	23.1	13.25	0.0211
12	15	15	147700	708.5	DFT-s-OFDM QPSK	36@18	23.24	13.39	0.0218
12	15	15	147700	708.5	DFT-s-OFDM QPSK	1@1	23.42	13.57	0.0228
12	15	15	147700	708.5	DFT-s-OFDM QPSK	1@77	23.14	13.29	0.0213
12	15	15	147700	708.5	DFT-s-OFDM 16 QAM	36@18	22.27	12.42	0.0175
12	15	15	147700	708.5	DFT-s-OFDM 16 QAM	1@1	22.33	12.48	0.0177
12	15	15	147700	708.5	DFT-s-OFDM 16 QAM	1@77	22.02	12.17	0.0165
12	15	15	147700	708.5	DFT-s-OFDM 64 QAM	36@18	20.79	10.94	0.0124
12	15	15	147700	708.5	DFT-s-OFDM 64 QAM	1@1	21.07	11.22	0.0132
12	15	15	147700	708.5	DFT-s-OFDM 64 QAM	1@77	20.92	11.07	0.0128
12	15	15	147700	708.5	DFT-s-OFDM 256 QAM	36@18	18.62	8.77	0.0075
12	15	15	147700	708.5	DFT-s-OFDM 256 QAM	1@1	18.19	8.34	0.0068
12	15	15	147700	708.5	DFT-s-OFDM 256 QAM	1@77	18.05	8.2	0.0066
12	15	15	147700	708.5	CP-OFDM QPSK	39@19	21.72	11.87	0.0154
12	15	15	147700	708.5	CP-OFDM QPSK	1@1	21.86	12.01	0.0159
12	15	15	147700	708.5	CP-OFDM QPSK	1@77	21.51	11.66	0.0147

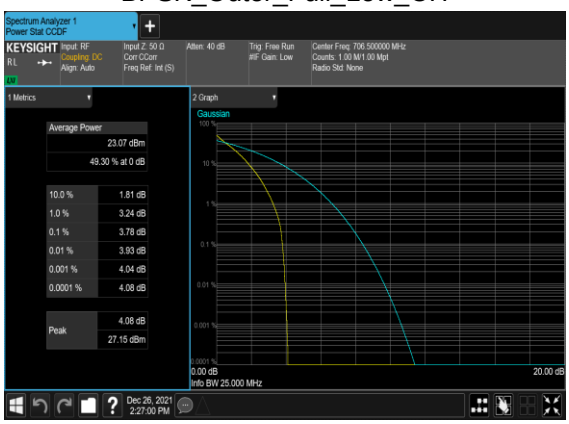
Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
12	15	15	147500	707.5	DFT-s-OFDM QPSK	75@0	0.0388	**PASS**	NV
12	15	15	147500	707.5	DFT-s-OFDM QPSK	75@0	0.0425	**PASS**	LV
12	15	15	147500	707.5	DFT-s-OFDM QPSK	75@0	0.0025	**PASS**	HV
12	15	15	147500	707.5	DFT-s-OFDM QPSK	75@0	0.0419	**PASS**	-30℃
12	15	15	147500	707.5	DFT-s-OFDM QPSK	75@0	0.0393	**PASS**	-20℃
12	15	15	147500	707.5	DFT-s-OFDM QPSK	75@0	0.0378	**PASS**	-10℃
12	15	15	147500	707.5	DFT-s-OFDM QPSK	75@0	0.0458	**PASS**	0℃
12	15	15	147500	707.5	DFT-s-OFDM QPSK	75@0	0.0363	**PASS**	10℃
12	15	15	147500	707.5	DFT-s-OFDM QPSK	75@0	0.0625	**PASS**	20℃
12	15	15	147500	707.5	DFT-s-OFDM QPSK	75@0	0.0348	**PASS**	30℃
12	15	15	147500	707.5	DFT-s-OFDM QPSK	75@0	0.0376	**PASS**	40℃
12	15	15	147500	707.5	DFT-s-OFDM QPSK	75@0	0.0324	**PASS**	50℃

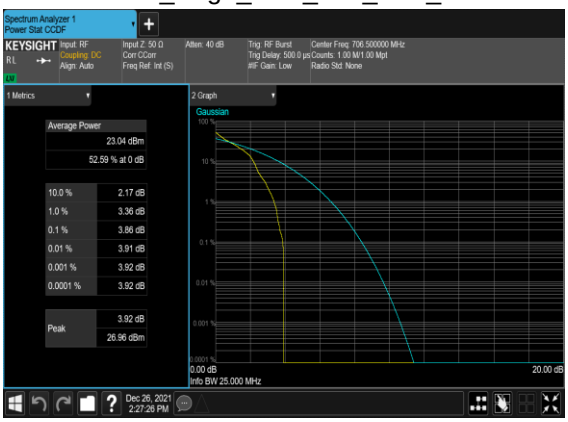
Peak to Average Radio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
12	15	15	147300	706.5	DFT-s-OFDM PI/2 BPSK	75@0	3.78	13	**PASS**
12	15	15	147300	706.5	DFT-s-OFDM PI/2 BPSK	1@0	3.86	13	**PASS**
12	15	15	147300	706.5	DFT-s-OFDM QPSK	75@0	4.99	13	**PASS**
12	15	15	147300	706.5	DFT-s-OFDM QPSK	1@0	4.55	13	**PASS**
12	15	15	147500	707.5	DFT-s-OFDM PI/2 BPSK	75@0	3.73	13	**PASS**
12	15	15	147500	707.5	DFT-s-OFDM PI/2 BPSK	1@0	3.92	13	**PASS**
12	15	15	147500	707.5	DFT-s-OFDM QPSK	75@0	4.93	13	**PASS**
12	15	15	147500	707.5	DFT-s-OFDM QPSK	1@0	4.66	13	**PASS**
12	15	15	147700	708.5	DFT-s-OFDM PI/2 BPSK	75@0	3.82	13	**PASS**
12	15	15	147700	708.5	DFT-s-OFDM PI/2 BPSK	1@0	4.0	13	**PASS**
12	15	15	147700	708.5	DFT-s-OFDM QPSK	75@0	5.02	13	**PASS**
12	15	15	147700	708.5	DFT-s-OFDM QPSK	1@0	4.78	13	**PASS**

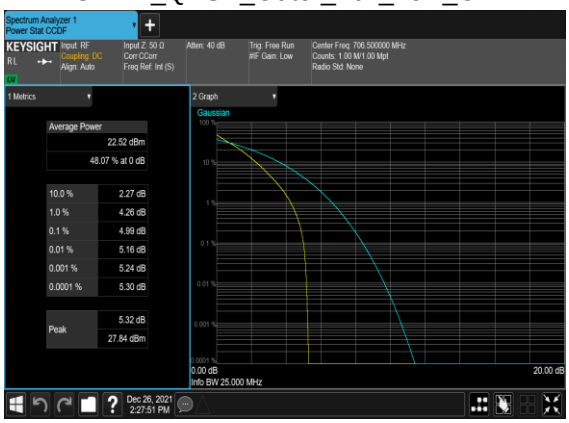
N12(15M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Low_CH



N12(15M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_Low_CH

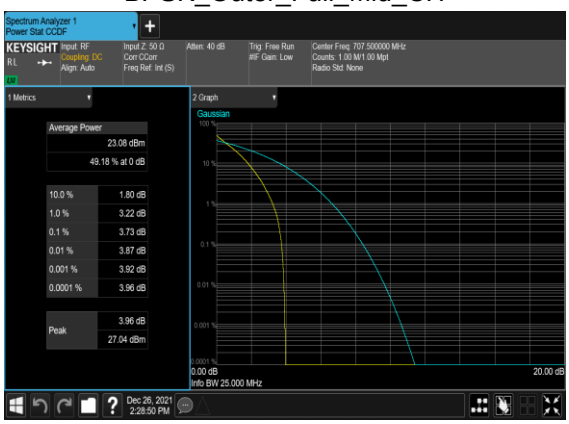


N12(15M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



N12(15M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

N12(15M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



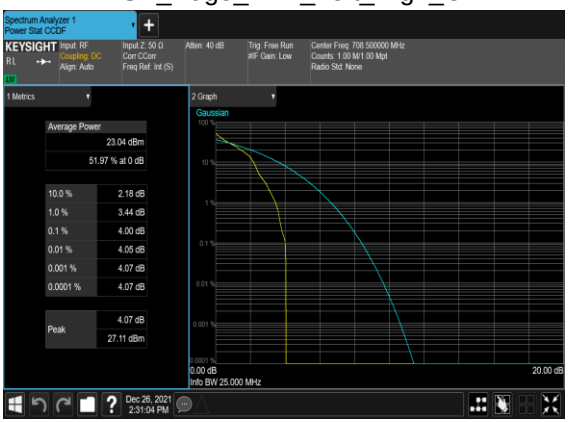
N12(15M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_Mid_CH

N12(15M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

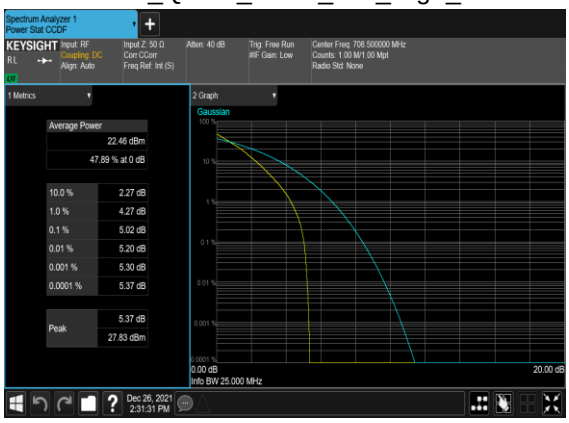
N12(15M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH

N12(15M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_High_CH

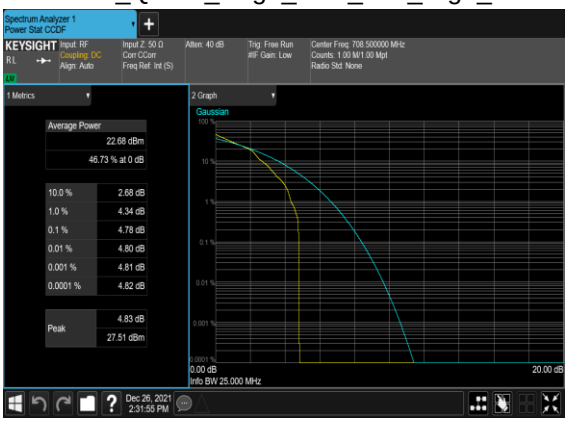
N12(15M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_High_CH



N12(15M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



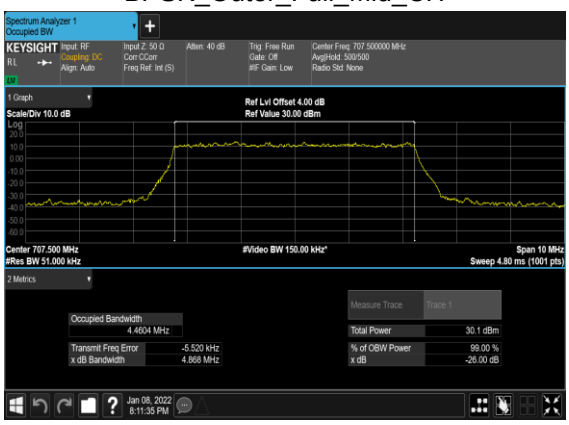
N12(15M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



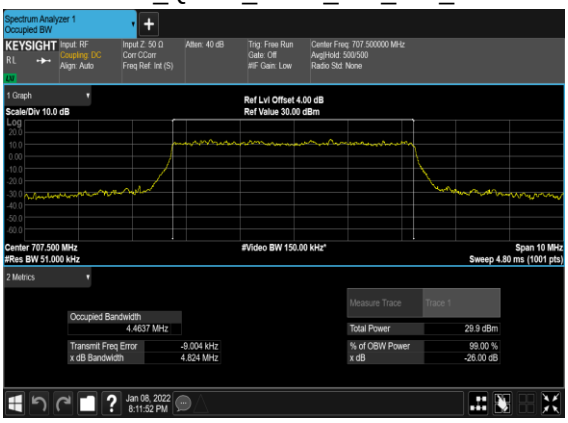
Occupied Bandwidth

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB OBW (MHz)
12	15	5	147500	707.5	DFT-s-OFDM PI/2 BPSK	25@0	4.4604	4.868
12	15	5	147500	707.5	DFT-s-OFDM QPSK	25@0	4.4637	4.824
12	15	5	147500	707.5	CP-OFDM QPSK	25@0	4.4771	4.928
12	15	5	147500	707.5	CP-OFDM 16 QAM	25@0	4.4744	4.923
12	15	5	147500	707.5	CP-OFDM 64 QAM	25@0	4.4754	4.973
12	15	5	147500	707.5	CP-OFDM 256 QAM	25@0	4.4693	4.939
12	15	10	147500	707.5	DFT-s-OFDM PI/2 BPSK	50@0	8.875	9.459
12	15	10	147500	707.5	DFT-s-OFDM QPSK	50@0	8.8925	9.476
12	15	10	147500	707.5	CP-OFDM QPSK	52@0	9.2658	9.99
12	15	10	147500	707.5	CP-OFDM 16 QAM	52@0	9.2616	9.844
12	15	10	147500	707.5	CP-OFDM 64 QAM	52@0	9.2587	9.852
12	15	10	147500	707.5	CP-OFDM 256 QAM	52@0	9.278	9.907
12	15	15	147500	707.5	DFT-s-OFDM PI/2 BPSK	75@0	13.357	14.1
12	15	15	147500	707.5	DFT-s-OFDM QPSK	75@0	13.369	14.12
12	15	15	147500	707.5	CP-OFDM QPSK	79@0	14.062	14.86
12	15	15	147500	707.5	CP-OFDM 16 QAM	79@0	14.095	14.86
12	15	15	147500	707.5	CP-OFDM 64 QAM	79@0	14.103	14.76
12	15	15	147500	707.5	CP-OFDM 256 QAM	79@0	14.08	14.86

B2_N12(5M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



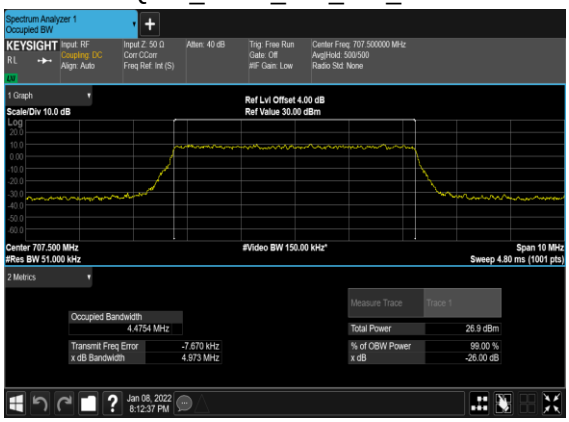
B2_N12(5M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



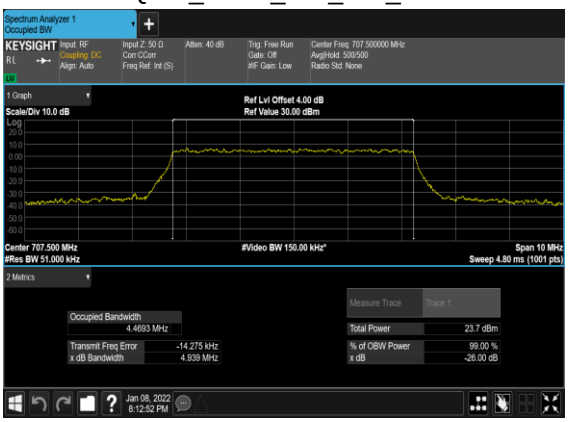
B2_N12(5M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

B2_N12(5M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

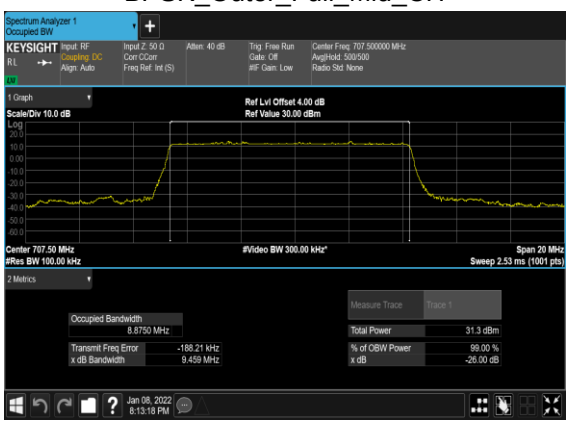
B2_N12(5M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



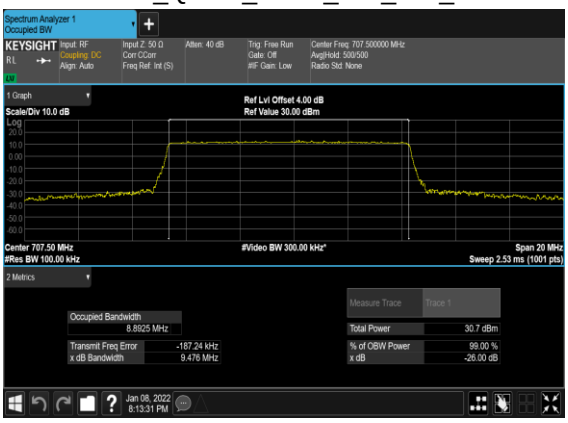
B2_N12(5M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



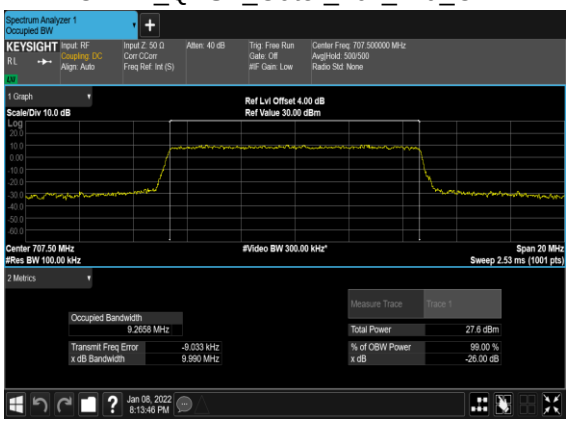
B2_N12(10M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



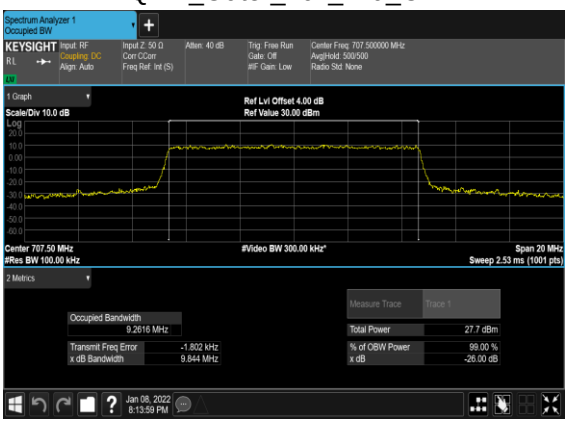
B2_N12(10M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



B2_N12(10M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

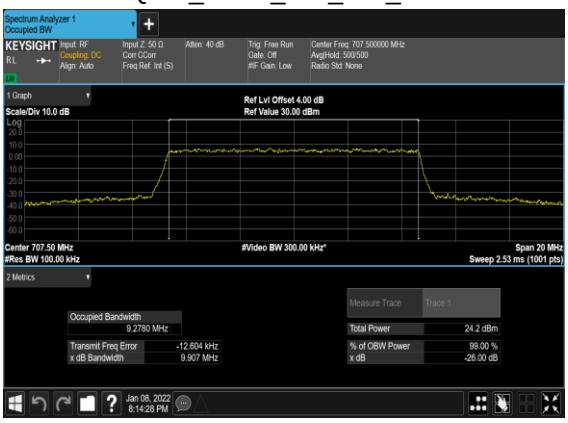


B2_N12(10M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

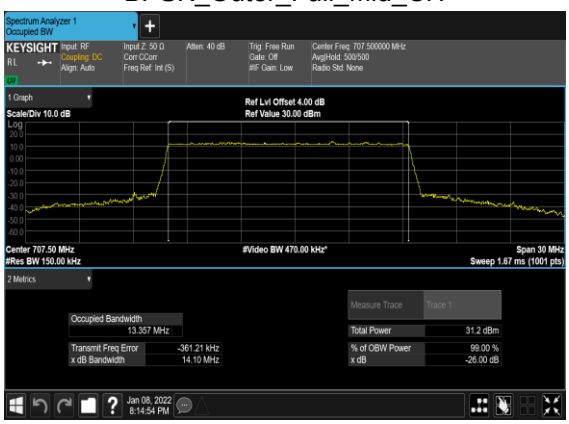


B2_N12(10M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

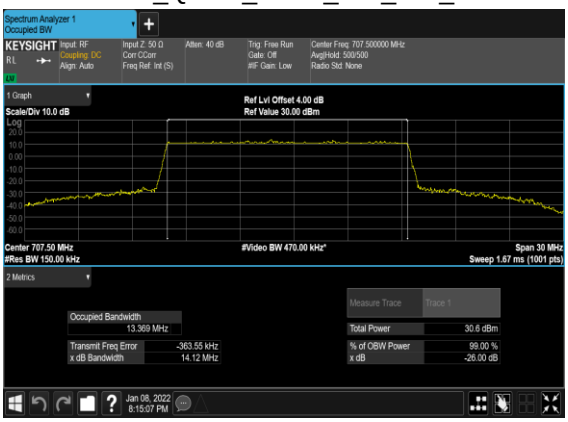
B2_N12(10M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



B2_N12(15M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



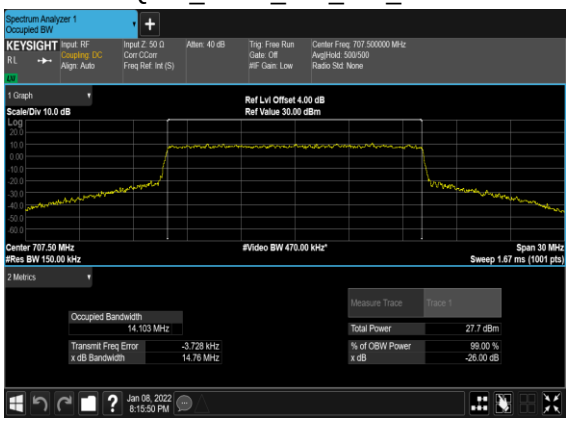
B2_N12(15M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



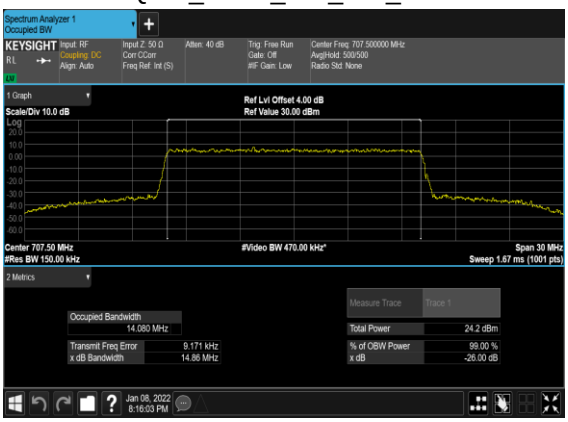
B2_N12(15M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

B2_N12(15M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

B2_N12(15M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



B2_N12(15M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



Conducted Spurious Emissions

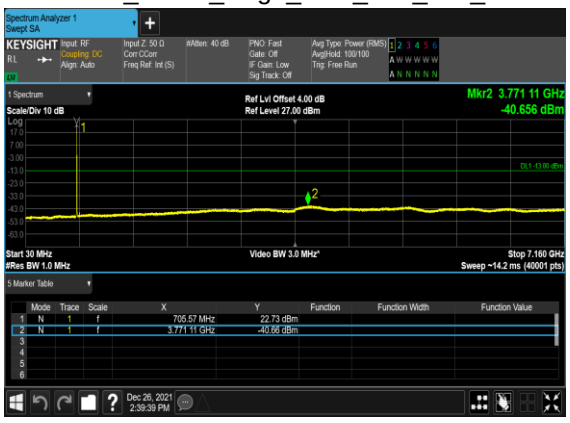
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
12	15	5	146300	701.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
12	15	5	146300	701.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
12	15	5	146300	701.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
12	15	5	146300	701.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
12	15	5	147500	707.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
12	15	5	147500	707.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
12	15	5	147500	707.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
12	15	5	147500	707.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
12	15	5	148700	713.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
12	15	5	148700	713.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
12	15	5	148700	713.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
12	15	5	148700	713.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
12	15	10	146800	704.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
12	15	10	146800	704.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
12	15	10	146800	704.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
12	15	10	146800	704.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
12	15	10	147500	707.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
12	15	10	147500	707.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
12	15	10	147500	707.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
12	15	10	147500	707.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
12	15	10	148200	711.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
12	15	10	148200	711.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**

12	15	10	148200	711.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
12	15	10	148200	711.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
12	15	15	147300	706.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
12	15	15	147300	706.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
12	15	15	147300	706.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
12	15	15	147300	706.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
12	15	15	147500	707.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
12	15	15	147500	707.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
12	15	15	147500	707.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
12	15	15	147500	707.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
12	15	15	147700	708.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
12	15	15	147700	708.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
12	15	15	147700	708.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
12	15	15	147700	708.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**

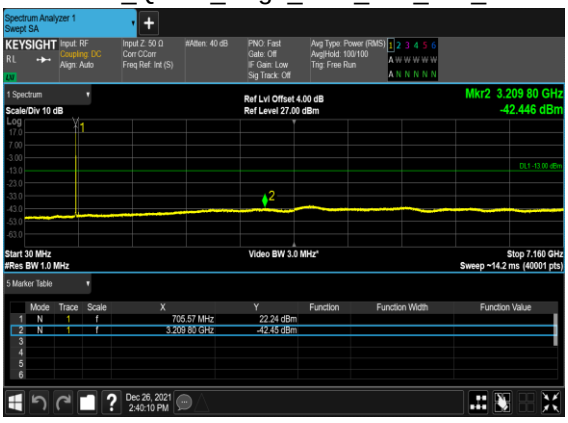
N12(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH

N12(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

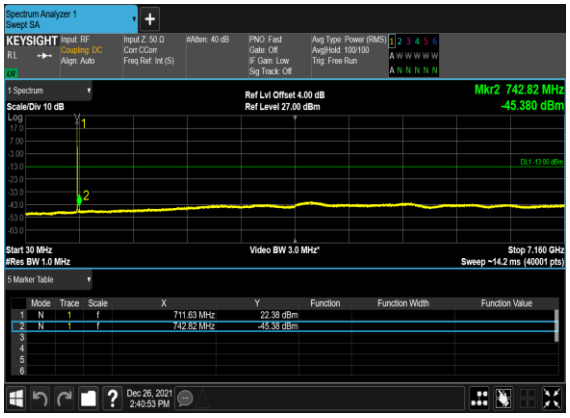
N12(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



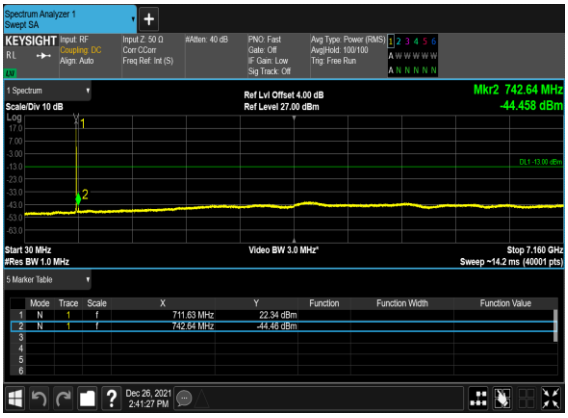
N12(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



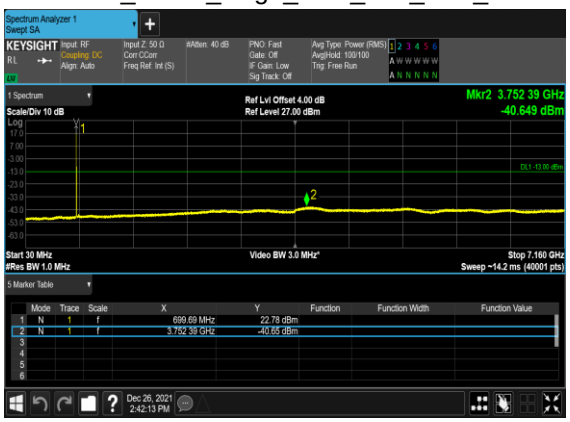
N12(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



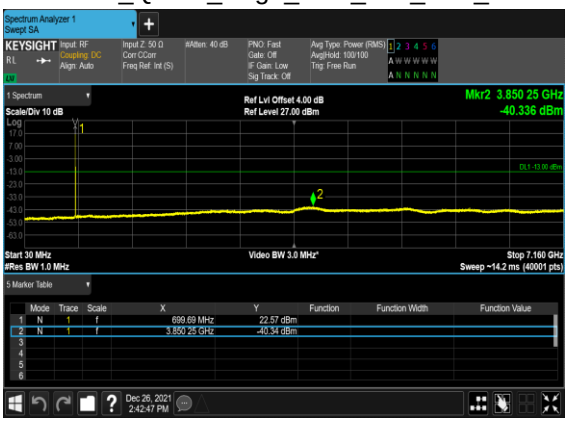
N12(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



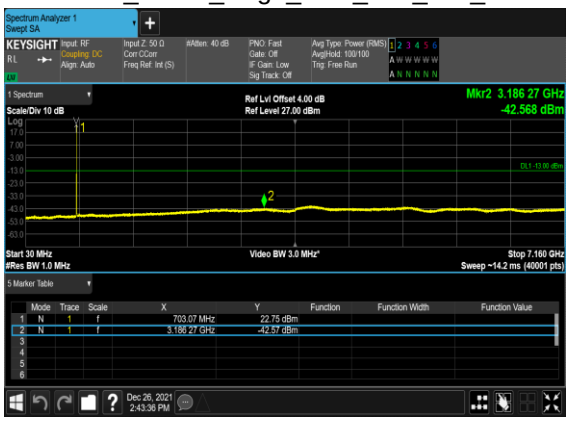
N12(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



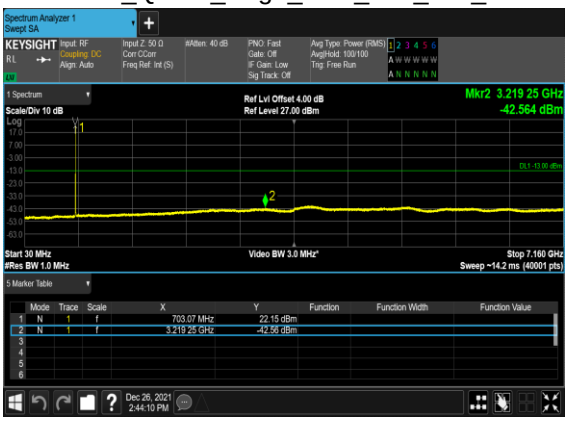
N12(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



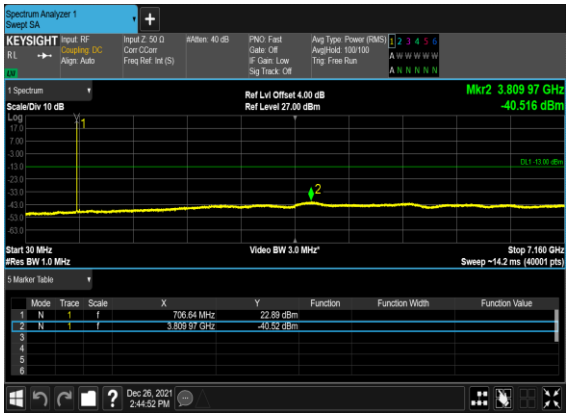
N12(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



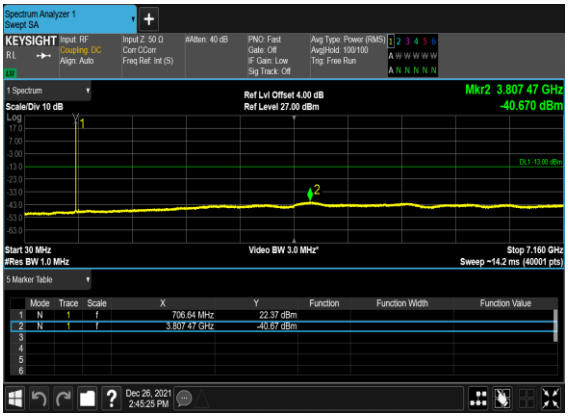
N12(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



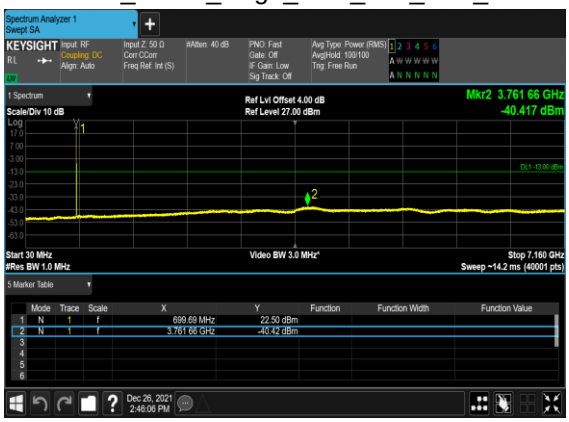
N12(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



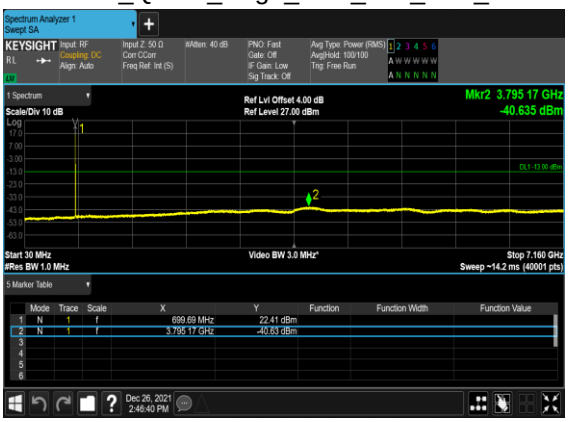
N12(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



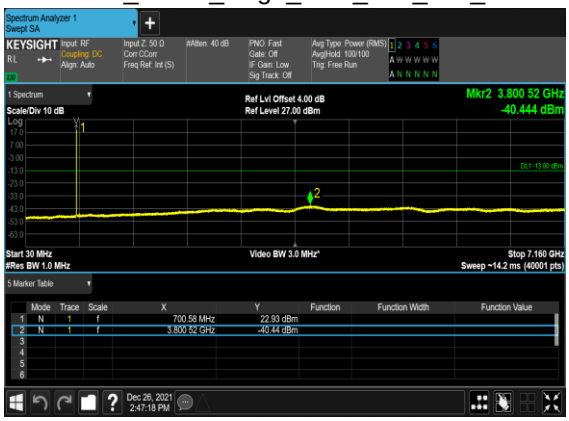
N12(15M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



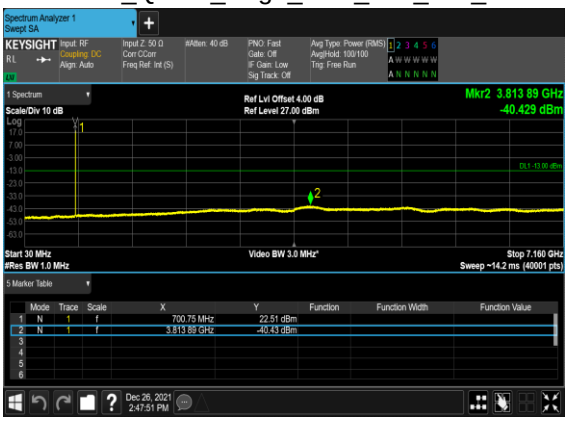
N12(15M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



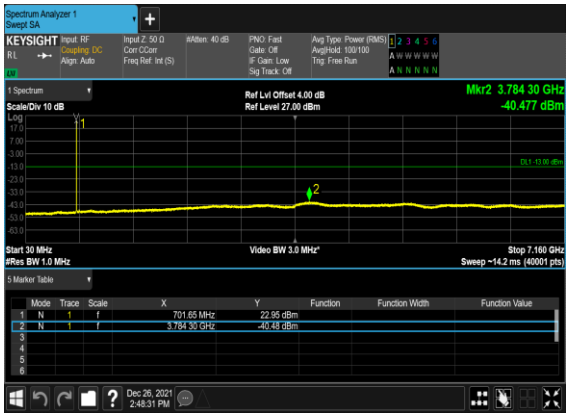
N12(15M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



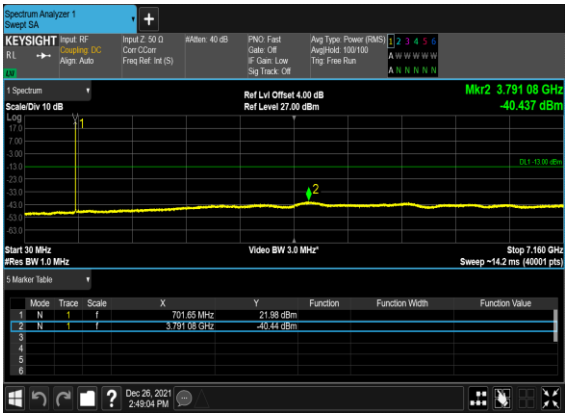
N12(15M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



N12(15M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



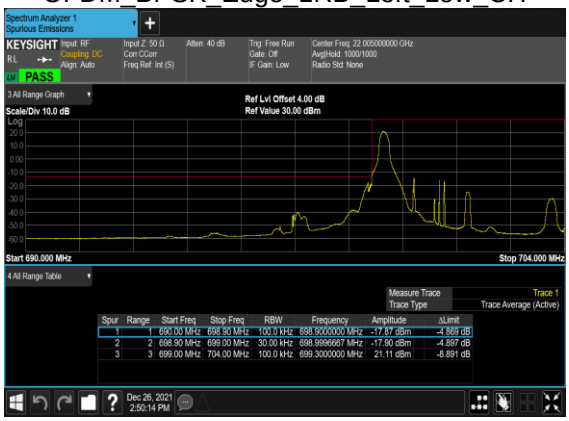
N12(15M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



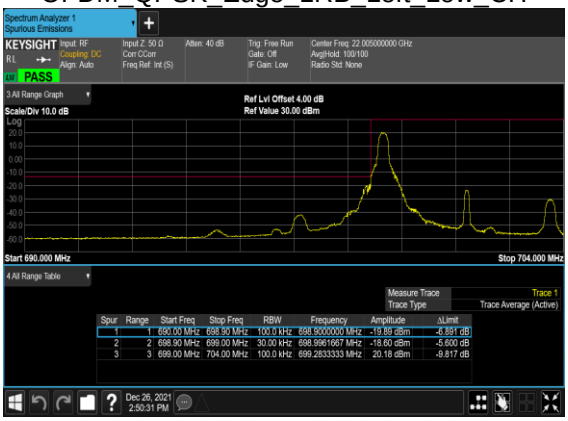
Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
12	15	5	146300	701.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
12	15	5	146300	701.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
12	15	5	146300	701.5	DFT-s-OFDM BPSK	25@0	see graph	**PASS**
12	15	5	146300	701.5	DFT-s-OFDM QPSK	25@0	see graph	**PASS**
12	15	5	148700	713.5	DFT-s-OFDM BPSK	1@24	see graph	**PASS**
12	15	5	148700	713.5	DFT-s-OFDM QPSK	1@24	see graph	**PASS**
12	15	5	148700	713.5	DFT-s-OFDM BPSK	25@0	see graph	**PASS**
12	15	5	148700	713.5	DFT-s-OFDM QPSK	25@0	see graph	**PASS**
12	15	10	146800	704.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
12	15	10	146800	704.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
12	15	10	146800	704.0	DFT-s-OFDM BPSK	50@0	see graph	**PASS**
12	15	10	146800	704.0	DFT-s-OFDM QPSK	50@0	see graph	**PASS**
12	15	10	148200	711.0	DFT-s-OFDM BPSK	1@51	see graph	**PASS**
12	15	10	148200	711.0	DFT-s-OFDM QPSK	1@51	see graph	**PASS**
12	15	10	148200	711.0	DFT-s-OFDM BPSK	50@0	see graph	**PASS**
12	15	10	148200	711.0	DFT-s-OFDM QPSK	50@0	see graph	**PASS**
12	15	15	147300	706.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
12	15	15	147300	706.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
12	15	15	147300	706.5	DFT-s-OFDM BPSK	75@0	see graph	**PASS**
12	15	15	147300	706.5	DFT-s-OFDM QPSK	75@0	see graph	**PASS**
12	15	15	147700	708.5	DFT-s-OFDM BPSK	1@78	see graph	**PASS**
12	15	15	147700	708.5	DFT-s-OFDM QPSK	1@78	see graph	**PASS**
12	15	15	147700	708.5	DFT-s-OFDM BPSK	75@0	see graph	**PASS**
12	15	15	147700	708.5	DFT-s-OFDM QPSK	75@0	see graph	**PASS**

N12(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH

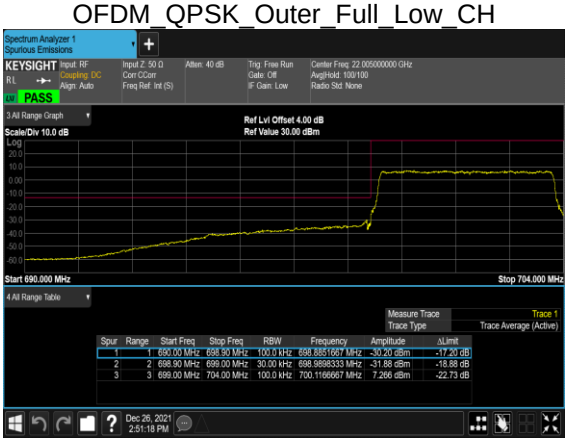


N12(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

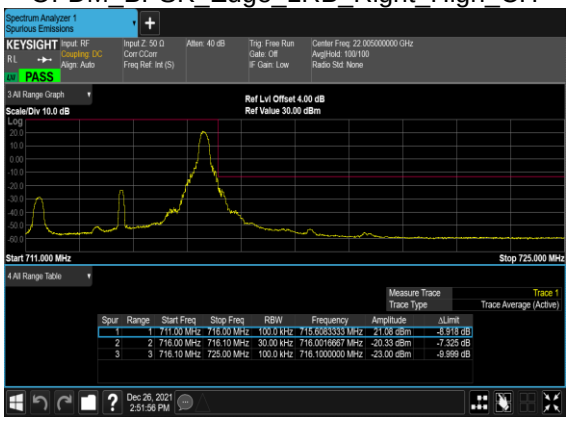


N12(5M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH

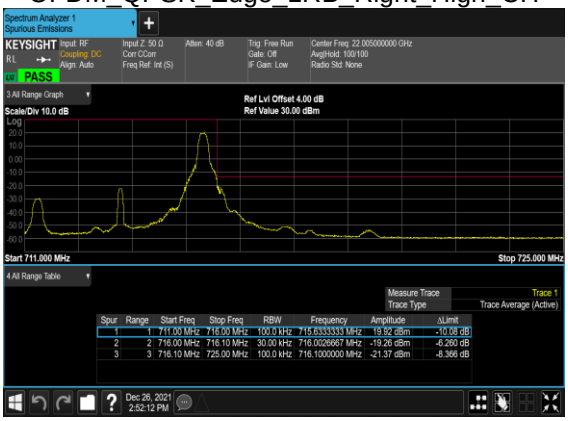
N12(5M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



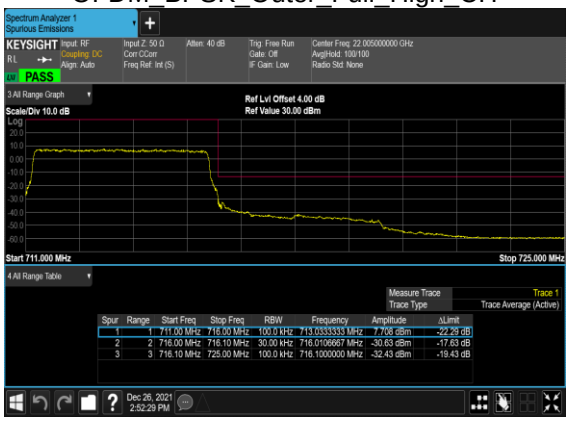
N12(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



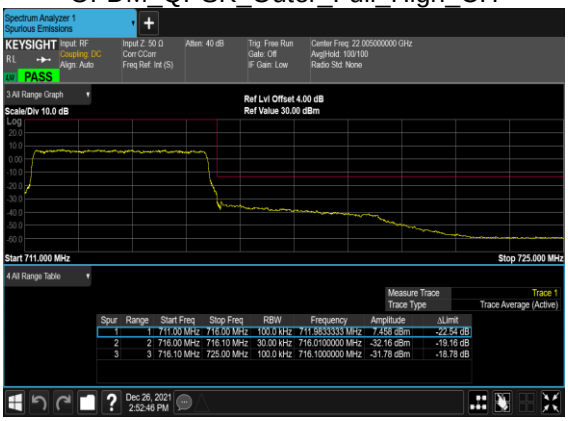
N12(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



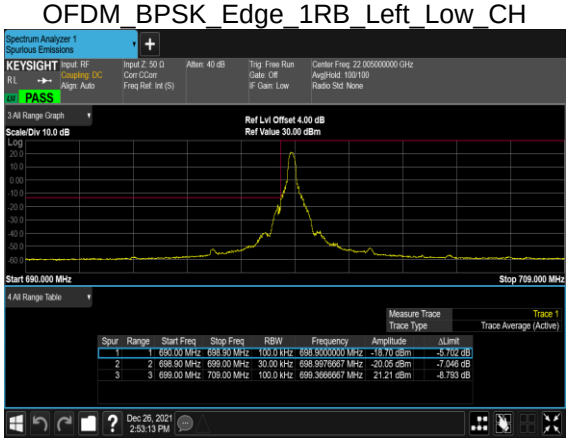
N12(5M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



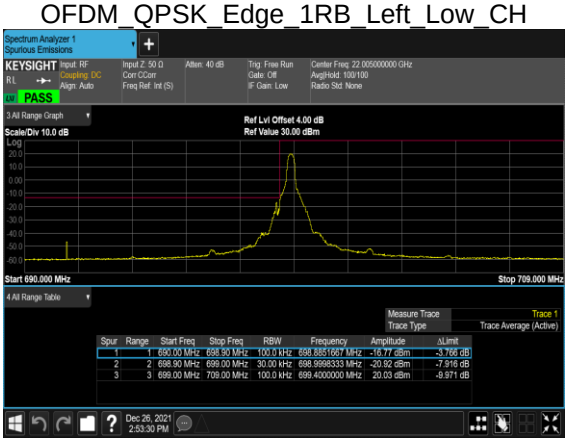
N12(5M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



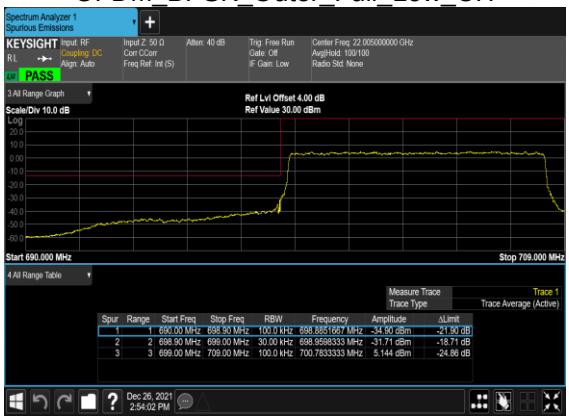
N12(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



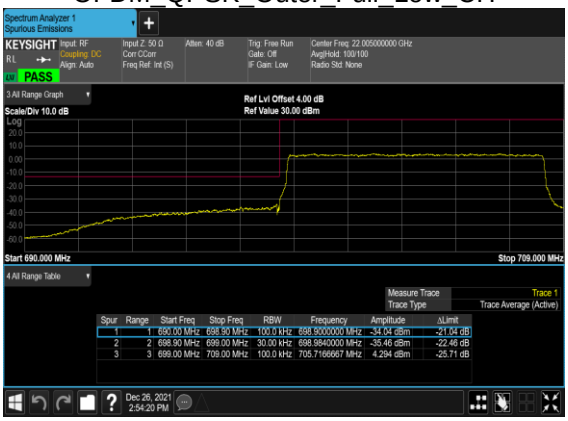
N12(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



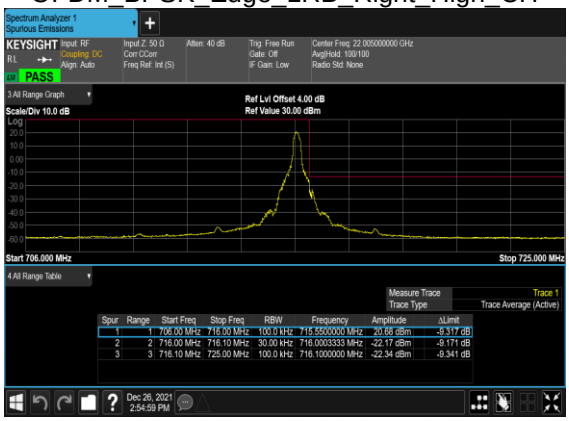
N12(10M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



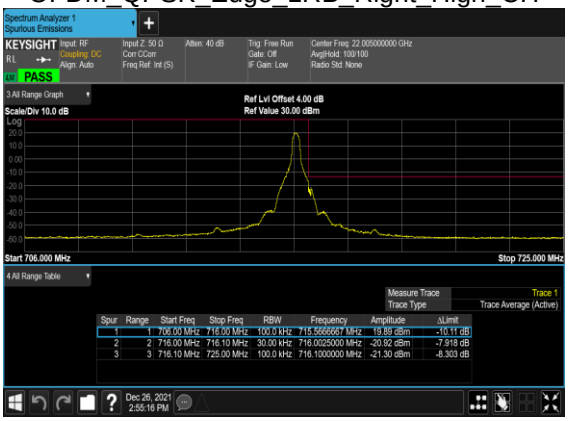
N12(10M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



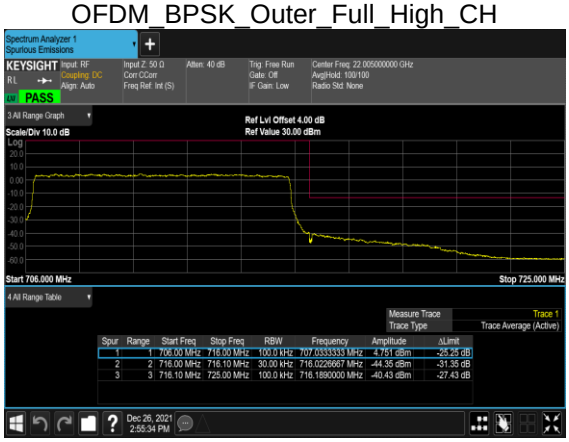
N12(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



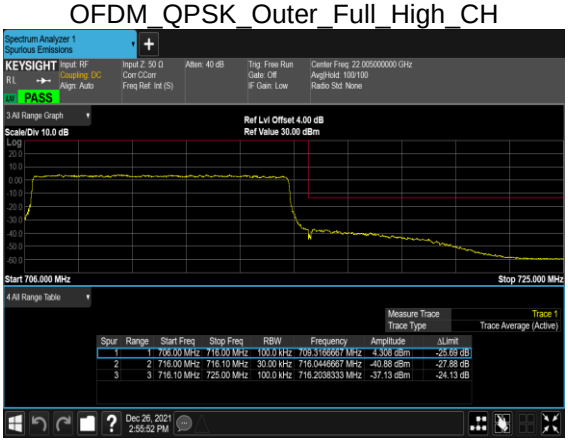
N12(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



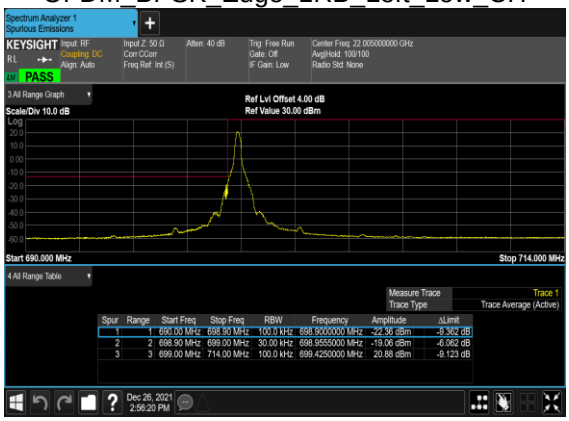
N12(10M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



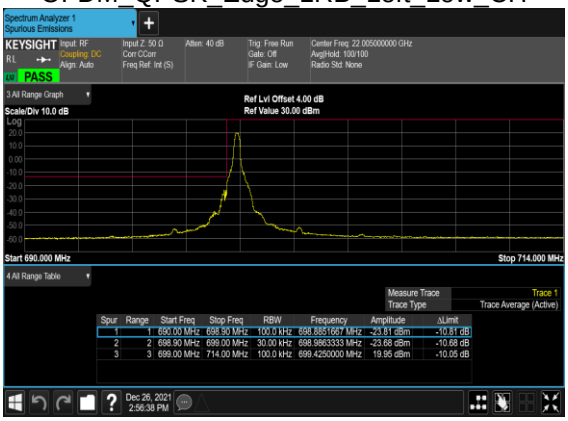
N12(10M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



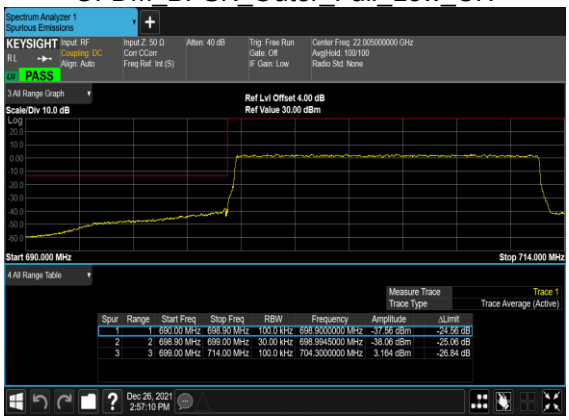
N12(15M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



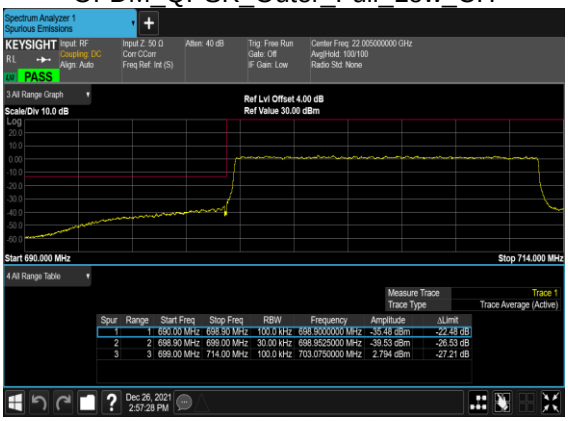
N12(15M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



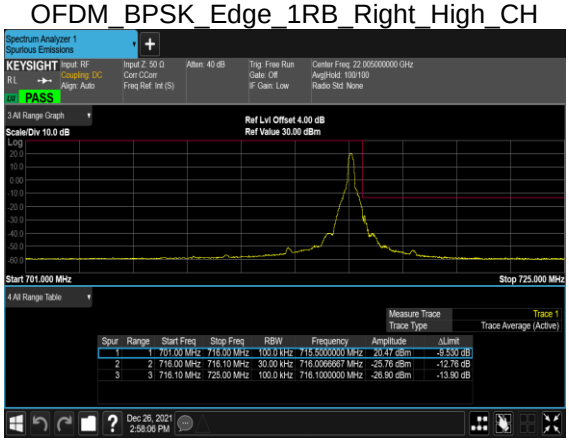
N12(15M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



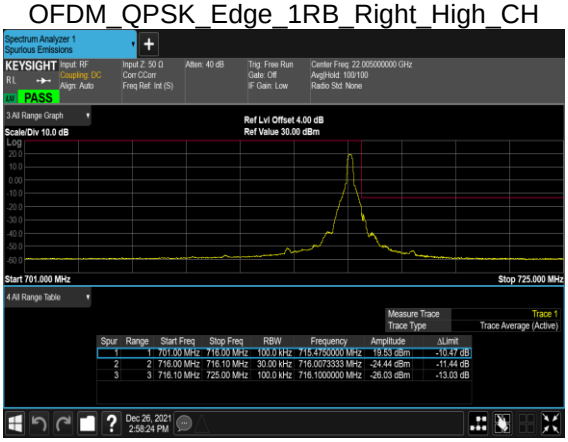
N12(15M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



N12(15M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH

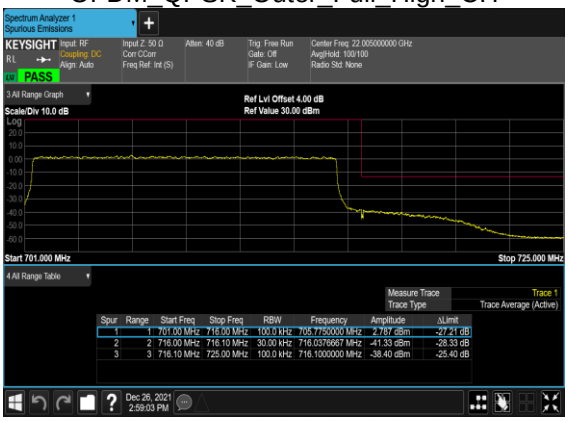


N12(15M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



N12(15M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH

N12(15M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



Software Version: 21.02.121001

FR1 N41

LTE Band: 2, LTE BW: 10M, LTE ARFCN: Mid

Transmitter Conducted Output Power And ERP/EIRP, (G_T - L_C) =-4.5dB

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	26.71	22.21	0.1663
41	30	20	501204	2506.02	DFT-s-OFDM PI/2 BPSK	1@1	26.67	22.17	0.1648
41	30	20	501204	2506.02	DFT-s-OFDM PI/2 BPSK	1@49	26.69	22.19	0.1656
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	25@12	26.82	22.32	0.1706
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	1@1	26.72	22.22	0.1667
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	1@49	26.71	22.21	0.1663
41	30	20	501204	2506.02	DFT-s-OFDM 16 QAM	25@12	25.59	21.09	0.1285
41	30	20	501204	2506.02	DFT-s-OFDM 16 QAM	1@1	25.47	20.97	0.1250
41	30	20	501204	2506.02	DFT-s-OFDM 16 QAM	1@49	25.6	21.1	0.1288
41	30	20	501204	2506.02	DFT-s-OFDM 64 QAM	25@12	24.05	19.55	0.0902
41	30	20	501204	2506.02	DFT-s-OFDM 64 QAM	1@1	23.84	19.34	0.0859
41	30	20	501204	2506.02	DFT-s-OFDM 64 QAM	1@49	23.89	19.39	0.0869
41	30	20	501204	2506.02	DFT-s-OFDM 256 QAM	25@12	21.95	17.45	0.0556
41	30	20	501204	2506.02	DFT-s-OFDM 256 QAM	1@1	21.75	17.25	0.0531
41	30	20	501204	2506.02	DFT-s-OFDM 256 QAM	1@49	21.7	17.2	0.0525
41	30	20	501204	2506.02	CP-OFDM QPSK	25@12	25.04	20.54	0.1132
41	30	20	501204	2506.02	CP-OFDM QPSK	1@1	24.76	20.26	0.1062
41	30	20	501204	2506.02	CP-OFDM QPSK	1@49	25.01	20.51	0.1125

41	30	20	518598	2592.99	DFT-s-OFDM PI/2 BPSK	25@12	26.35	21.85	0.1531
41	30	20	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	26.35	21.85	0.1531
41	30	20	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@49	26.38	21.88	0.1542
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	25@12	26.38	21.88	0.1542
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	1@1	26.39	21.89	0.1545
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	1@49	26.32	21.82	0.1521
41	30	20	518598	2592.99	DFT-s-OFDM 16 QAM	25@12	25.15	20.65	0.1161
41	30	20	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	25.31	20.81	0.1205
41	30	20	518598	2592.99	DFT-s-OFDM 16 QAM	1@49	25.39	20.89	0.1227
41	30	20	518598	2592.99	DFT-s-OFDM 64 QAM	25@12	23.7	19.2	0.0832
41	30	20	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	23.65	19.15	0.0822
41	30	20	518598	2592.99	DFT-s-OFDM 64 QAM	1@49	23.77	19.27	0.0845
41	30	20	518598	2592.99	DFT-s-OFDM 256 QAM	25@12	21.61	17.11	0.0514
41	30	20	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	21.47	16.97	0.0498
41	30	20	518598	2592.99	DFT-s-OFDM 256 QAM	1@49	21.44	16.94	0.0494
41	30	20	518598	2592.99	CP-OFDM QPSK	25@12	24.69	20.19	0.1045
41	30	20	518598	2592.99	CP-OFDM QPSK	1@1	24.72	20.22	0.1052
41	30	20	518598	2592.99	CP-OFDM QPSK	1@49	24.61	20.11	0.1026
41	30	20	535998	2679.99	DFT-s-OFDM PI/2 BPSK	25@12	26.31	21.81	0.1517
41	30	20	535998	2679.99	DFT-s-OFDM PI/2 BPSK	1@1	26.29	21.79	0.1510
41	30	20	535998	2679.99	DFT-s-OFDM PI/2 BPSK	1@49	26.34	21.84	0.1528
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	25@12	26.4	21.9	0.1549
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	1@1	26.25	21.75	0.1496

41	30	20	535998	2679.99	DFT-s-OFDM QPSK	1@49	26.34	21.84	0.1528
41	30	20	535998	2679.99	DFT-s-OFDM 16 QAM	25@12	25.38	20.88	0.1225
41	30	20	535998	2679.99	DFT-s-OFDM 16 QAM	1@1	25.35	20.85	0.1216
41	30	20	535998	2679.99	DFT-s-OFDM 16 QAM	1@49	25.56	21.06	0.1276
41	30	20	535998	2679.99	DFT-s-OFDM 64 QAM	25@12	23.83	19.33	0.0857
41	30	20	535998	2679.99	DFT-s-OFDM 64 QAM	1@1	23.67	19.17	0.0826
41	30	20	535998	2679.99	DFT-s-OFDM 64 QAM	1@49	23.74	19.24	0.0839
41	30	20	535998	2679.99	DFT-s-OFDM 256 QAM	25@12	21.79	17.29	0.0536
41	30	20	535998	2679.99	DFT-s-OFDM 256 QAM	1@1	21.51	17.01	0.0502
41	30	20	535998	2679.99	DFT-s-OFDM 256 QAM	1@49	21.59	17.09	0.0512
41	30	20	535998	2679.99	CP-OFDM QPSK	25@12	24.88	20.38	0.1091
41	30	20	535998	2679.99	CP-OFDM QPSK	1@1	24.83	20.33	0.1079
41	30	20	535998	2679.99	CP-OFDM QPSK	1@49	24.98	20.48	0.1117
41	30	30	502200	2511	DFT-s-OFDM PI/2 BPSK	36@18	26.24	21.74	0.1493
41	30	30	502200	2511	DFT-s-OFDM PI/2 BPSK	1@1	26.32	21.82	0.1521
41	30	30	502200	2511	DFT-s-OFDM PI/2 BPSK	1@76	26.16	21.66	0.1466
41	30	30	502200	2511	DFT-s-OFDM QPSK	36@18	26.21	21.71	0.1483
41	30	30	502200	2511	DFT-s-OFDM QPSK	1@1	26.27	21.77	0.1503
41	30	30	502200	2511	DFT-s-OFDM QPSK	1@76	26.19	21.69	0.1476
41	30	30	502200	2511	DFT-s-OFDM 16 QAM	36@18	25.1	20.6	0.1148
41	30	30	502200	2511	DFT-s-OFDM 16 QAM	1@1	25.24	20.74	0.1186
41	30	30	502200	2511	DFT-s-OFDM 16 QAM	1@76	25.32	20.82	0.1208
41	30	30	502200	2511	DFT-s-OFDM 64 QAM	36@18	23.54	19.04	0.0802

41	30	30	502200	2511	DFT-s-OFDM 64 QAM	1@1	23.57	19.07	0.0807
41	30	30	502200	2511	DFT-s-OFDM 64 QAM	1@76	23.69	19.19	0.0830
41	30	30	502200	2511	DFT-s-OFDM 256 QAM	36@18	21.55	17.05	0.0507
41	30	30	502200	2511	DFT-s-OFDM 256 QAM	1@1	21.21	16.71	0.0469
41	30	30	502200	2511	DFT-s-OFDM 256 QAM	1@76	21.43	16.93	0.0493
41	30	30	502200	2511	CP-OFDM QPSK	39@19	24.53	20.03	0.1007
41	30	30	502200	2511	CP-OFDM QPSK	1@1	24.69	20.19	0.1045
41	30	30	502200	2511	CP-OFDM QPSK	1@76	24.55	20.05	0.1012
41	30	30	518598	2592.99	DFT-s-OFDM PI/2 BPSK	36@18	26.35	21.85	0.1531
41	30	30	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	26.4	21.9	0.1549
41	30	30	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@76	26.45	21.95	0.1567
41	30	30	518598	2592.99	DFT-s-OFDM QPSK	36@18	26.38	21.88	0.1542
41	30	30	518598	2592.99	DFT-s-OFDM QPSK	1@1	26.3	21.8	0.1514
41	30	30	518598	2592.99	DFT-s-OFDM QPSK	1@76	26.35	21.85	0.1531
41	30	30	518598	2592.99	DFT-s-OFDM 16 QAM	36@18	25.2	20.7	0.1175
41	30	30	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	25.33	20.83	0.1211
41	30	30	518598	2592.99	DFT-s-OFDM 16 QAM	1@76	25.5	21	0.1259
41	30	30	518598	2592.99	DFT-s-OFDM 64 QAM	36@18	23.71	19.21	0.0834
41	30	30	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	23.65	19.15	0.0822
41	30	30	518598	2592.99	DFT-s-OFDM 64 QAM	1@76	23.71	19.21	0.0834
41	30	30	518598	2592.99	DFT-s-OFDM 256 QAM	36@18	21.67	17.17	0.0521
41	30	30	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	21.35	16.85	0.0484
41	30	30	518598	2592.99	DFT-s-OFDM 256 QAM	1@76	21.59	17.09	0.0512

41	30	30	518598	2592.99	CP-OFDM QPSK	39@19	24.66	20.16	0.1038
41	30	30	518598	2592.99	CP-OFDM QPSK	1@1	24.77	20.27	0.1064
41	30	30	518598	2592.99	CP-OFDM QPSK	1@76	24.82	20.32	0.1076
41	30	30	534996	2674.98	DFT-s-OFDM PI/2 BPSK	36@18	26.27	21.77	0.1503
41	30	30	534996	2674.98	DFT-s-OFDM PI/2 BPSK	1@1	26.26	21.76	0.1500
41	30	30	534996	2674.98	DFT-s-OFDM PI/2 BPSK	1@76	26.45	21.95	0.1567
41	30	30	534996	2674.98	DFT-s-OFDM QPSK	36@18	26.32	21.82	0.1521
41	30	30	534996	2674.98	DFT-s-OFDM QPSK	1@1	26.06	21.56	0.1432
41	30	30	534996	2674.98	DFT-s-OFDM QPSK	1@76	26.45	21.95	0.1567
41	30	30	534996	2674.98	DFT-s-OFDM 16 QAM	36@18	25.32	20.82	0.1208
41	30	30	534996	2674.98	DFT-s-OFDM 16 QAM	1@1	25.45	20.95	0.1245
41	30	30	534996	2674.98	DFT-s-OFDM 16 QAM	1@76	25.64	21.14	0.1300
41	30	30	534996	2674.98	DFT-s-OFDM 64 QAM	36@18	23.96	19.46	0.0883
41	30	30	534996	2674.98	DFT-s-OFDM 64 QAM	1@1	23.71	19.21	0.0834
41	30	30	534996	2674.98	DFT-s-OFDM 64 QAM	1@76	24.01	19.51	0.0893
41	30	30	534996	2674.98	DFT-s-OFDM 256 QAM	36@18	21.75	17.25	0.0531
41	30	30	534996	2674.98	DFT-s-OFDM 256 QAM	1@1	21.47	16.97	0.0498
41	30	30	534996	2674.98	DFT-s-OFDM 256 QAM	1@76	21.84	17.34	0.0542
41	30	30	534996	2674.98	CP-OFDM QPSK	39@19	24.87	20.37	0.1089
41	30	30	534996	2674.98	CP-OFDM QPSK	1@1	24.85	20.35	0.1084
41	30	30	534996	2674.98	CP-OFDM QPSK	1@76	25.05	20.55	0.1135
41	30	40	503202	2516.01	DFT-s-OFDM PI/2 BPSK	50@25	26.17	21.67	0.1469
41	30	40	503202	2516.01	DFT-s-OFDM PI/2 BPSK	1@1	26.16	21.66	0.1466
41	30	40	503202	2516.01	DFT-s-OFDM PI/2 BPSK	1@104	26.03	21.53	0.1422

41	30	40	503202	2516.01	DFT-s-OFDM QPSK	50@25	26.15	21.65	0.1462
41	30	40	503202	2516.01	DFT-s-OFDM QPSK	1@1	26.23	21.73	0.1489
41	30	40	503202	2516.01	DFT-s-OFDM QPSK	1@104	26.06	21.56	0.1432
41	30	40	503202	2516.01	DFT-s-OFDM 16 QAM	50@25	25.19	20.69	0.1172
41	30	40	503202	2516.01	DFT-s-OFDM 16 QAM	1@1	25.15	20.65	0.1161
41	30	40	503202	2516.01	DFT-s-OFDM 16 QAM	1@104	25.37	20.87	0.1222
41	30	40	503202	2516.01	DFT-s-OFDM 64 QAM	50@25	23.56	19.06	0.0805
41	30	40	503202	2516.01	DFT-s-OFDM 64 QAM	1@1	23.35	18.85	0.0767
41	30	40	503202	2516.01	DFT-s-OFDM 64 QAM	1@104	23.63	19.13	0.0818
41	30	40	503202	2516.01	DFT-s-OFDM 256 QAM	50@25	21.5	17	0.0501
41	30	40	503202	2516.01	DFT-s-OFDM 256 QAM	1@1	21.18	16.68	0.0466
41	30	40	503202	2516.01	DFT-s-OFDM 256 QAM	1@104	21.38	16.88	0.0488
41	30	40	503202	2516.01	CP-OFDM QPSK	53@26	24.67	20.17	0.1040
41	30	40	503202	2516.01	CP-OFDM QPSK	1@1	24.53	20.03	0.1007
41	30	40	503202	2516.01	CP-OFDM QPSK	1@104	24.75	20.25	0.1059
41	30	40	518598	2592.99	DFT-s-OFDM PI/2 BPSK	50@25	26.42	21.92	0.1556
41	30	40	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	26.47	21.97	0.1574
41	30	40	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@104	26.47	21.97	0.1574
41	30	40	518598	2592.99	DFT-s-OFDM QPSK	50@25	26.47	21.97	0.1574
41	30	40	518598	2592.99	DFT-s-OFDM QPSK	1@1	26.29	21.79	0.1510
41	30	40	518598	2592.99	DFT-s-OFDM QPSK	1@104	26.39	21.89	0.1545
41	30	40	518598	2592.99	DFT-s-OFDM 16 QAM	50@25	25.2	20.7	0.1175
41	30	40	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	25.36	20.86	0.1219

41	30	40	518598	2592.99	DFT-s-OFDM 16 QAM	1@104	25.56	21.06	0.1276
41	30	40	518598	2592.99	DFT-s-OFDM 64 QAM	50@25	23.73	19.23	0.0838
41	30	40	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	23.69	19.19	0.0830
41	30	40	518598	2592.99	DFT-s-OFDM 64 QAM	1@104	23.87	19.37	0.0865
41	30	40	518598	2592.99	DFT-s-OFDM 256 QAM	50@25	21.63	17.13	0.0516
41	30	40	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	21.41	16.91	0.0491
41	30	40	518598	2592.99	DFT-s-OFDM 256 QAM	1@104	21.57	17.07	0.0509
41	30	40	518598	2592.99	CP-OFDM QPSK	53@26	24.73	20.23	0.1054
41	30	40	518598	2592.99	CP-OFDM QPSK	1@1	24.81	20.31	0.1074
41	30	40	518598	2592.99	CP-OFDM QPSK	1@104	24.93	20.43	0.1104
41	30	40	534000	2670	DFT-s-OFDM PI/2 BPSK	50@25	26.4	21.9	0.1549
41	30	40	534000	2670	DFT-s-OFDM PI/2 BPSK	1@1	26.19	21.69	0.1476
41	30	40	534000	2670	DFT-s-OFDM PI/2 BPSK	1@104	26.59	22.09	0.1618
41	30	40	534000	2670	DFT-s-OFDM QPSK	50@25	26.35	21.85	0.1531
41	30	40	534000	2670	DFT-s-OFDM QPSK	1@1	26.13	21.63	0.1455
41	30	40	534000	2670	DFT-s-OFDM QPSK	1@104	26.67	22.17	0.1648
41	30	40	534000	2670	DFT-s-OFDM 16 QAM	50@25	25.41	20.91	0.1233
41	30	40	534000	2670	DFT-s-OFDM 16 QAM	1@1	25.34	20.84	0.1213
41	30	40	534000	2670	DFT-s-OFDM 16 QAM	1@104	25.79	21.29	0.1346
41	30	40	534000	2670	DFT-s-OFDM 64 QAM	50@25	23.95	19.45	0.0881
41	30	40	534000	2670	DFT-s-OFDM 64 QAM	1@1	23.89	19.39	0.0869
41	30	40	534000	2670	DFT-s-OFDM 64 QAM	1@104	24.28	19.78	0.0951
41	30	40	534000	2670	DFT-s-OFDM 256 QAM	50@25	21.87	17.37	0.0546

41	30	40	534000	2670	DFT-s-OFDM 256 QAM	1@1	21.4	16.9	0.0490
41	30	40	534000	2670	DFT-s-OFDM 256 QAM	1@104	21.89	17.39	0.0548
41	30	40	534000	2670	CP-OFDM QPSK	53@26	25.03	20.53	0.1130
41	30	40	534000	2670	CP-OFDM QPSK	1@1	24.79	20.29	0.1069
41	30	40	534000	2670	CP-OFDM QPSK	1@104	25.33	20.83	0.1211
41	30	50	504204	2521.02	DFT-s-OFDM PI/2 BPSK	64@32	26.4	21.9	0.1549
41	30	50	504204	2521.02	DFT-s-OFDM PI/2 BPSK	1@1	26.36	21.86	0.1535
41	30	50	504204	2521.02	DFT-s-OFDM PI/2 BPSK	1@131	26.11	21.61	0.1449
41	30	50	504204	2521.02	DFT-s-OFDM QPSK	64@32	26.3	21.8	0.1514
41	30	50	504204	2521.02	DFT-s-OFDM QPSK	1@1	26.47	21.97	0.1574
41	30	50	504204	2521.02	DFT-s-OFDM QPSK	1@131	26.16	21.66	0.1466
41	30	50	504204	2521.02	DFT-s-OFDM 16 QAM	64@32	25.28	20.78	0.1197
41	30	50	504204	2521.02	DFT-s-OFDM 16 QAM	1@1	25.3	20.8	0.1202
41	30	50	504204	2521.02	DFT-s-OFDM 16 QAM	1@131	25.55	21.05	0.1274
41	30	50	504204	2521.02	DFT-s-OFDM 64 QAM	64@32	23.79	19.29	0.0849
41	30	50	504204	2521.02	DFT-s-OFDM 64 QAM	1@1	23.55	19.05	0.0804
41	30	50	504204	2521.02	DFT-s-OFDM 64 QAM	1@131	23.96	19.46	0.0883
41	30	50	504204	2521.02	DFT-s-OFDM 256 QAM	64@32	21.72	17.22	0.0527
41	30	50	504204	2521.02	DFT-s-OFDM 256 QAM	1@1	21.34	16.84	0.0483
41	30	50	504204	2521.02	DFT-s-OFDM 256 QAM	1@131	21.59	17.09	0.0512
41	30	50	504204	2521.02	CP-OFDM QPSK	67@33	24.8	20.3	0.1072
41	30	50	504204	2521.02	CP-OFDM QPSK	1@1	24.7	20.2	0.1047
41	30	50	504204	2521.02	CP-OFDM QPSK	1@131	24.98	20.48	0.1117
41	30	50	518598	2592.99	DFT-s-OFDM PI/2 BPSK	64@32	26.15	21.65	0.1462

41	30	50	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	25.82	21.32	0.1355
41	30	50	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@131	25.93	21.43	0.1390
41	30	50	518598	2592.99	DFT-s-OFDM QPSK	64@32	26.26	21.76	0.1500
41	30	50	518598	2592.99	DFT-s-OFDM QPSK	1@1	25.82	21.32	0.1355
41	30	50	518598	2592.99	DFT-s-OFDM QPSK	1@131	26.02	21.52	0.1419
41	30	50	518598	2592.99	DFT-s-OFDM 16 QAM	64@32	25.16	20.66	0.1164
41	30	50	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	25	20.5	0.1122
41	30	50	518598	2592.99	DFT-s-OFDM 16 QAM	1@131	25.02	20.52	0.1127
41	30	50	518598	2592.99	DFT-s-OFDM 64 QAM	64@32	23.65	19.15	0.0822
41	30	50	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	23.3	18.8	0.0759
41	30	50	518598	2592.99	DFT-s-OFDM 64 QAM	1@131	23.38	18.88	0.0773
41	30	50	518598	2592.99	DFT-s-OFDM 256 QAM	64@32	21.41	16.91	0.0491
41	30	50	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	20.98	16.48	0.0445
41	30	50	518598	2592.99	DFT-s-OFDM 256 QAM	1@131	21.07	16.57	0.0454
41	30	50	518598	2592.99	CP-OFDM QPSK	67@33	24.59	20.09	0.1021
41	30	50	518598	2592.99	CP-OFDM QPSK	1@1	24.36	19.86	0.0968
41	30	50	518598	2592.99	CP-OFDM QPSK	1@131	24.37	19.87	0.0971
41	30	50	532998	2664.99	DFT-s-OFDM PI/2 BPSK	64@32	26.13	21.63	0.1455
41	30	50	532998	2664.99	DFT-s-OFDM PI/2 BPSK	1@1	25.45	20.95	0.1245
41	30	50	532998	2664.99	DFT-s-OFDM PI/2 BPSK	1@131	26	21.5	0.1413
41	30	50	532998	2664.99	DFT-s-OFDM QPSK	64@32	26.09	21.59	0.1442
41	30	50	532998	2664.99	DFT-s-OFDM QPSK	1@1	25.57	21.07	0.1279
41	30	50	532998	2664.99	DFT-s-OFDM QPSK	1@131	25.89	21.39	0.1377

41	30	50	532998	2664.99	DFT-s-OFDM 16 QAM	64@32	25.24	20.74	0.1186
41	30	50	532998	2664.99	DFT-s-OFDM 16 QAM	1@1	24.64	20.14	0.1033
41	30	50	532998	2664.99	DFT-s-OFDM 16 QAM	1@131	25.26	20.76	0.1191
41	30	50	532998	2664.99	DFT-s-OFDM 64 QAM	64@32	23.72	19.22	0.0836
41	30	50	532998	2664.99	DFT-s-OFDM 64 QAM	1@1	23.17	18.67	0.0736
41	30	50	532998	2664.99	DFT-s-OFDM 64 QAM	1@131	23.62	19.12	0.0817
41	30	50	532998	2664.99	DFT-s-OFDM 256 QAM	64@32	21.65	17.15	0.0519
41	30	50	532998	2664.99	DFT-s-OFDM 256 QAM	1@1	20.85	16.35	0.0432
41	30	50	532998	2664.99	DFT-s-OFDM 256 QAM	1@131	21.37	16.87	0.0486
41	30	50	532998	2664.99	CP-OFDM QPSK	67@33	24.69	20.19	0.1045
41	30	50	532998	2664.99	CP-OFDM QPSK	1@1	24.14	19.64	0.0920
41	30	50	532998	2664.99	CP-OFDM QPSK	1@131	24.53	20.03	0.1007
41	30	60	505200	2526	DFT-s-OFDM PI/2 BPSK	81@40	26.11	21.61	0.1449
41	30	60	505200	2526	DFT-s-OFDM PI/2 BPSK	1@1	25.77	21.27	0.1340
41	30	60	505200	2526	DFT-s-OFDM PI/2 BPSK	1@160	25.53	21.03	0.1268
41	30	60	505200	2526	DFT-s-OFDM QPSK	81@40	26.18	21.68	0.1472
41	30	60	505200	2526	DFT-s-OFDM QPSK	1@1	25.81	21.31	0.1352
41	30	60	505200	2526	DFT-s-OFDM QPSK	1@160	25.59	21.09	0.1285
41	30	60	505200	2526	DFT-s-OFDM 16 QAM	81@40	25.18	20.68	0.1169
41	30	60	505200	2526	DFT-s-OFDM 16 QAM	1@1	24.46	19.96	0.0991
41	30	60	505200	2526	DFT-s-OFDM 16 QAM	1@160	24.78	20.28	0.1067
41	30	60	505200	2526	DFT-s-OFDM 64 QAM	81@40	23.64	19.14	0.0820
41	30	60	505200	2526	DFT-s-OFDM 64 QAM	1@1	23.08	18.58	0.0721

41	30	60	505200	2526	DFT-s-OFDM 64 QAM	1@160	23.3	18.8	0.0759
41	30	60	505200	2526	DFT-s-OFDM 256 QAM	81@40	21.62	17.12	0.0515
41	30	60	505200	2526	DFT-s-OFDM 256 QAM	1@1	20.76	16.26	0.0423
41	30	60	505200	2526	DFT-s-OFDM 256 QAM	1@160	21.01	16.51	0.0448
41	30	60	505200	2526	CP-OFDM QPSK	81@40	24.64	20.14	0.1033
41	30	60	505200	2526	CP-OFDM QPSK	1@1	24.15	19.65	0.0923
41	30	60	505200	2526	CP-OFDM QPSK	1@160	24.34	19.84	0.0964
41	30	60	518598	2592.99	DFT-s-OFDM PI/2 BPSK	81@40	26.18	21.68	0.1472
41	30	60	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	25.49	20.99	0.1256
41	30	60	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@160	25.67	21.17	0.1309
41	30	60	518598	2592.99	DFT-s-OFDM QPSK	81@40	26.27	21.77	0.1503
41	30	60	518598	2592.99	DFT-s-OFDM QPSK	1@1	25.52	21.02	0.1265
41	30	60	518598	2592.99	DFT-s-OFDM QPSK	1@160	25.73	21.23	0.1327
41	30	60	518598	2592.99	DFT-s-OFDM 16 QAM	81@40	25.07	20.57	0.1140
41	30	60	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	24.56	20.06	0.1014
41	30	60	518598	2592.99	DFT-s-OFDM 16 QAM	1@160	24.69	20.19	0.1045
41	30	60	518598	2592.99	DFT-s-OFDM 64 QAM	81@40	23.61	19.11	0.0815
41	30	60	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	23.08	18.58	0.0721
41	30	60	518598	2592.99	DFT-s-OFDM 64 QAM	1@160	23.25	18.75	0.0750
41	30	60	518598	2592.99	DFT-s-OFDM 256 QAM	81@40	21.58	17.08	0.0511
41	30	60	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	20.83	16.33	0.0430
41	30	60	518598	2592.99	DFT-s-OFDM 256 QAM	1@160	20.93	16.43	0.0440
41	30	60	518598	2592.99	CP-OFDM QPSK	81@40	24.58	20.08	0.1019

41	30	60	518598	2592.99	CP-OFDM QPSK	1@1	24.2	19.7	0.0933
41	30	60	518598	2592.99	CP-OFDM QPSK	1@160	24.22	19.72	0.0938
41	30	60	531996	2659.98	DFT-s-OFDM PI/2 BPSK	81@40	26.19	21.69	0.1476
41	30	60	531996	2659.98	DFT-s-OFDM PI/2 BPSK	1@1	25.32	20.82	0.1208
41	30	60	531996	2659.98	DFT-s-OFDM PI/2 BPSK	1@160	25.93	21.43	0.1390
41	30	60	531996	2659.98	DFT-s-OFDM QPSK	81@40	26.2	21.7	0.1479
41	30	60	531996	2659.98	DFT-s-OFDM QPSK	1@1	25.35	20.85	0.1216
41	30	60	531996	2659.98	DFT-s-OFDM QPSK	1@160	25.92	21.42	0.1387
41	30	60	531996	2659.98	DFT-s-OFDM 16 QAM	81@40	25.12	20.62	0.1153
41	30	60	531996	2659.98	DFT-s-OFDM 16 QAM	1@1	24.52	20.02	0.1005
41	30	60	531996	2659.98	DFT-s-OFDM 16 QAM	1@160	25.1	20.6	0.1148
41	30	60	531996	2659.98	DFT-s-OFDM 64 QAM	81@40	23.71	19.21	0.0834
41	30	60	531996	2659.98	DFT-s-OFDM 64 QAM	1@1	23	18.5	0.0708
41	30	60	531996	2659.98	DFT-s-OFDM 64 QAM	1@160	23.4	18.9	0.0776
41	30	60	531996	2659.98	DFT-s-OFDM 256 QAM	81@40	21.7	17.2	0.0525
41	30	60	531996	2659.98	DFT-s-OFDM 256 QAM	1@1	20.65	16.15	0.0412
41	30	60	531996	2659.98	DFT-s-OFDM 256 QAM	1@160	21.22	16.72	0.0470
41	30	60	531996	2659.98	CP-OFDM QPSK	81@40	24.73	20.23	0.1054
41	30	60	531996	2659.98	CP-OFDM QPSK	1@1	23.98	19.48	0.0887
41	30	60	531996	2659.98	CP-OFDM QPSK	1@160	24.55	20.05	0.1012
41	30	70	506202	2531.01	DFT-s-OFDM PI/2 BPSK	90@45	26.16	21.66	0.1466
41	30	70	506202	2531.01	DFT-s-OFDM PI/2 BPSK	1@1	26.34	21.84	0.1528
41	30	70	506202	2531.01	DFT-s-OFDM PI/2 BPSK	1@187	26.01	21.51	0.1416
41	30	70	506202	2531.01	DFT-s-OFDM	90@45	26.25	21.75	0.1496

					QPSK				
41	30	70	506202	2531.01	DFT-s-OFDM QPSK	1@1	26.37	21.87	0.1538
41	30	70	506202	2531.01	DFT-s-OFDM QPSK	1@187	26.13	21.63	0.1455
41	30	70	506202	2531.01	DFT-s-OFDM 16 QAM	90@45	25.2	20.7	0.1175
41	30	70	506202	2531.01	DFT-s-OFDM 16 QAM	1@1	25.17	20.67	0.1167
41	30	70	506202	2531.01	DFT-s-OFDM 16 QAM	1@187	25.39	20.89	0.1227
41	30	70	506202	2531.01	DFT-s-OFDM 64 QAM	90@45	23.74	19.24	0.0839
41	30	70	506202	2531.01	DFT-s-OFDM 64 QAM	1@1	23.43	18.93	0.0782
41	30	70	506202	2531.01	DFT-s-OFDM 64 QAM	1@187	23.72	19.22	0.0836
41	30	70	506202	2531.01	DFT-s-OFDM 256 QAM	90@45	21.65	17.15	0.0519
41	30	70	506202	2531.01	DFT-s-OFDM 256 QAM	1@1	21.27	16.77	0.0475
41	30	70	506202	2531.01	DFT-s-OFDM 256 QAM	1@187	21.49	16.99	0.0500
41	30	70	506202	2531.01	CP-OFDM QPSK	95@47	24.65	20.15	0.1035
41	30	70	506202	2531.01	CP-OFDM QPSK	1@1	24.6	20.1	0.1023
41	30	70	506202	2531.01	CP-OFDM QPSK	1@187	24.97	20.47	0.1114
41	30	70	518598	2592.99	DFT-s-OFDM PI/2 BPSK	90@45	26.29	21.79	0.1510
41	30	70	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	25.92	21.42	0.1387
41	30	70	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@187	26.22	21.72	0.1486
41	30	70	518598	2592.99	DFT-s-OFDM QPSK	90@45	26.32	21.82	0.1521
41	30	70	518598	2592.99	DFT-s-OFDM QPSK	1@1	26.02	21.52	0.1419
41	30	70	518598	2592.99	DFT-s-OFDM QPSK	1@187	26.22	21.72	0.1486
41	30	70	518598	2592.99	DFT-s-OFDM 16 QAM	90@45	25.1	20.6	0.1148
41	30	70	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	25.02	20.52	0.1127

41	30	70	518598	2592.99	DFT-s-OFDM 16 QAM	1@187	25.09	20.59	0.1146
41	30	70	518598	2592.99	DFT-s-OFDM 64 QAM	90@45	23.64	19.14	0.0820
41	30	70	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	23.5	19	0.0794
41	30	70	518598	2592.99	DFT-s-OFDM 64 QAM	1@187	23.66	19.16	0.0824
41	30	70	518598	2592.99	DFT-s-OFDM 256 QAM	90@45	21.49	16.99	0.0500
41	30	70	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	21.38	16.88	0.0488
41	30	70	518598	2592.99	DFT-s-OFDM 256 QAM	1@187	21.45	16.95	0.0495
41	30	70	518598	2592.99	CP-OFDM QPSK	95@47	24.6	20.1	0.1023
41	30	70	518598	2592.99	CP-OFDM QPSK	1@1	24.66	20.16	0.1038
41	30	70	518598	2592.99	CP-OFDM QPSK	1@187	24.72	20.22	0.1052
41	30	70	531000	2655	DFT-s-OFDM PI/2 BPSK	90@45	26.15	21.65	0.1462
41	30	70	531000	2655	DFT-s-OFDM PI/2 BPSK	1@1	25.8	21.3	0.1349
41	30	70	531000	2655	DFT-s-OFDM PI/2 BPSK	1@187	26.32	21.82	0.1521
41	30	70	531000	2655	DFT-s-OFDM QPSK	90@45	26.08	21.58	0.1439
41	30	70	531000	2655	DFT-s-OFDM QPSK	1@1	25.79	21.29	0.1346
41	30	70	531000	2655	DFT-s-OFDM QPSK	1@187	26.37	21.87	0.1538
41	30	70	531000	2655	DFT-s-OFDM 16 QAM	90@45	25.16	20.66	0.1164
41	30	70	531000	2655	DFT-s-OFDM 16 QAM	1@1	25.08	20.58	0.1143
41	30	70	531000	2655	DFT-s-OFDM 16 QAM	1@187	25.62	21.12	0.1294
41	30	70	531000	2655	DFT-s-OFDM 64 QAM	90@45	23.64	19.14	0.0820
41	30	70	531000	2655	DFT-s-OFDM 64 QAM	1@1	23.38	18.88	0.0773
41	30	70	531000	2655	DFT-s-OFDM 64 QAM	1@187	23.91	19.41	0.0873
41	30	70	531000	2655	DFT-s-OFDM 256 QAM	90@45	21.66	17.16	0.0520

41	30	70	531000	2655	DFT-s-OFDM 256 QAM	1@1	21.2	16.7	0.0468
41	30	70	531000	2655	DFT-s-OFDM 256 QAM	1@187	21.71	17.21	0.0526
41	30	70	531000	2655	CP-OFDM QPSK	95@47	24.65	20.15	0.1035
41	30	70	531000	2655	CP-OFDM QPSK	1@1	24.41	19.91	0.0979
41	30	70	531000	2655	CP-OFDM QPSK	1@187	25.13	20.63	0.1156
41	30	80	507204	2536.02	DFT-s-OFDM PI/2 BPSK	108@54	26.13	21.63	0.1455
41	30	80	507204	2536.02	DFT-s-OFDM PI/2 BPSK	1@1	26.26	21.76	0.1500
41	30	80	507204	2536.02	DFT-s-OFDM PI/2 BPSK	1@215	26.25	21.75	0.1496
41	30	80	507204	2536.02	DFT-s-OFDM QPSK	108@54	26.24	21.74	0.1493
41	30	80	507204	2536.02	DFT-s-OFDM QPSK	1@1	26.36	21.86	0.1535
41	30	80	507204	2536.02	DFT-s-OFDM QPSK	1@215	26.25	21.75	0.1496
41	30	80	507204	2536.02	DFT-s-OFDM 16 QAM	108@54	25.22	20.72	0.1180
41	30	80	507204	2536.02	DFT-s-OFDM 16 QAM	1@1	25.07	20.57	0.1140
41	30	80	507204	2536.02	DFT-s-OFDM 16 QAM	1@215	25.41	20.91	0.1233
41	30	80	507204	2536.02	DFT-s-OFDM 64 QAM	108@54	23.72	19.22	0.0836
41	30	80	507204	2536.02	DFT-s-OFDM 64 QAM	1@1	23.35	18.85	0.0767
41	30	80	507204	2536.02	DFT-s-OFDM 64 QAM	1@215	23.65	19.15	0.0822
41	30	80	507204	2536.02	DFT-s-OFDM 256 QAM	108@54	21.7	17.2	0.0525
41	30	80	507204	2536.02	DFT-s-OFDM 256 QAM	1@1	21.21	16.71	0.0469
41	30	80	507204	2536.02	DFT-s-OFDM 256 QAM	1@215	21.46	16.96	0.0497
41	30	80	507204	2536.02	CP-OFDM QPSK	109@54	24.78	20.28	0.1067
41	30	80	507204	2536.02	CP-OFDM QPSK	1@1	24.59	20.09	0.1021
41	30	80	507204	2536.02	CP-OFDM QPSK	1@215	24.86	20.36	0.1086
41	30	80	518598	2592.99	DFT-s-OFDM PI/2 BPSK	108@54	26.14	21.64	0.1459

41	30	80	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	25.87	21.37	0.1371
41	30	80	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@215	26.2	21.7	0.1479
41	30	80	518598	2592.99	DFT-s-OFDM QPSK	108@54	26.2	21.7	0.1479
41	30	80	518598	2592.99	DFT-s-OFDM QPSK	1@1	25.9	21.4	0.1380
41	30	80	518598	2592.99	DFT-s-OFDM QPSK	1@215	26.31	21.81	0.1517
41	30	80	518598	2592.99	DFT-s-OFDM 16 QAM	108@54	25.18	20.68	0.1169
41	30	80	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	25.23	20.73	0.1183
41	30	80	518598	2592.99	DFT-s-OFDM 16 QAM	1@215	25.42	20.92	0.1236
41	30	80	518598	2592.99	DFT-s-OFDM 64 QAM	108@54	23.6	19.1	0.0813
41	30	80	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	23.39	18.89	0.0774
41	30	80	518598	2592.99	DFT-s-OFDM 64 QAM	1@215	23.71	19.21	0.0834
41	30	80	518598	2592.99	DFT-s-OFDM 256 QAM	108@54	21.51	17.01	0.0502
41	30	80	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	21.19	16.69	0.0467
41	30	80	518598	2592.99	DFT-s-OFDM 256 QAM	1@215	21.41	16.91	0.0491
41	30	80	518598	2592.99	CP-OFDM QPSK	109@54	24.61	20.11	0.1026
41	30	80	518598	2592.99	CP-OFDM QPSK	1@1	24.58	20.08	0.1019
41	30	80	518598	2592.99	CP-OFDM QPSK	1@215	24.73	20.23	0.1054
41	30	80	529998	2649.99	DFT-s-OFDM PI/2 BPSK	108@54	26.18	21.68	0.1472
41	30	80	529998	2649.99	DFT-s-OFDM PI/2 BPSK	1@1	25.9	21.4	0.1380
41	30	80	529998	2649.99	DFT-s-OFDM PI/2 BPSK	1@215	26.39	21.89	0.1545
41	30	80	529998	2649.99	DFT-s-OFDM QPSK	108@54	26.18	21.68	0.1472
41	30	80	529998	2649.99	DFT-s-OFDM QPSK	1@1	25.78	21.28	0.1343
41	30	80	529998	2649.99	DFT-s-OFDM QPSK	1@215	26.4	21.9	0.1549

41	30	80	529998	2649.99	DFT-s-OFDM 16 QAM	108@54	25.1	20.6	0.1148
41	30	80	529998	2649.99	DFT-s-OFDM 16 QAM	1@1	24.98	20.48	0.1117
41	30	80	529998	2649.99	DFT-s-OFDM 16 QAM	1@215	25.67	21.17	0.1309
41	30	80	529998	2649.99	DFT-s-OFDM 64 QAM	108@54	23.63	19.13	0.0818
41	30	80	529998	2649.99	DFT-s-OFDM 64 QAM	1@1	23.2	18.7	0.0741
41	30	80	529998	2649.99	DFT-s-OFDM 64 QAM	1@215	23.93	19.43	0.0877
41	30	80	529998	2649.99	DFT-s-OFDM 256 QAM	108@54	21.54	17.04	0.0506
41	30	80	529998	2649.99	DFT-s-OFDM 256 QAM	1@1	21.09	16.59	0.0456
41	30	80	529998	2649.99	DFT-s-OFDM 256 QAM	1@215	21.77	17.27	0.0533
41	30	80	529998	2649.99	CP-OFDM QPSK	109@54	24.64	20.14	0.1033
41	30	80	529998	2649.99	CP-OFDM QPSK	1@1	24.46	19.96	0.0991
41	30	80	529998	2649.99	CP-OFDM QPSK	1@215	25.01	20.51	0.1125
41	30	90	508200	2541	DFT-s-OFDM PI/2 BPSK	120@60	26.22	21.72	0.1486
41	30	90	508200	2541	DFT-s-OFDM PI/2 BPSK	1@1	26.28	21.78	0.1507
41	30	90	508200	2541	DFT-s-OFDM PI/2 BPSK	1@243	26.35	21.85	0.1531
41	30	90	508200	2541	DFT-s-OFDM QPSK	120@60	26.14	21.64	0.1459
41	30	90	508200	2541	DFT-s-OFDM QPSK	1@1	26.33	21.83	0.1524
41	30	90	508200	2541	DFT-s-OFDM QPSK	1@243	26.39	21.89	0.1545
41	30	90	508200	2541	DFT-s-OFDM 16 QAM	120@60	25.28	20.78	0.1197
41	30	90	508200	2541	DFT-s-OFDM 16 QAM	1@1	25.04	20.54	0.1132
41	30	90	508200	2541	DFT-s-OFDM 16 QAM	1@243	25.36	20.86	0.1219
41	30	90	508200	2541	DFT-s-OFDM 64 QAM	120@60	23.78	19.28	0.0847
41	30	90	508200	2541	DFT-s-OFDM 64 QAM	1@1	23.33	18.83	0.0764

41	30	90	508200	2541	DFT-s-OFDM 64 QAM	1@243	23.69	19.19	0.0830
41	30	90	508200	2541	DFT-s-OFDM 256 QAM	120@60	21.68	17.18	0.0522
41	30	90	508200	2541	DFT-s-OFDM 256 QAM	1@1	21.1	16.6	0.0457
41	30	90	508200	2541	DFT-s-OFDM 256 QAM	1@243	21.54	17.04	0.0506
41	30	90	508200	2541	CP-OFDM QPSK	123@61	24.68	20.18	0.1042
41	30	90	508200	2541	CP-OFDM QPSK	1@1	24.5	20	0.1000
41	30	90	508200	2541	CP-OFDM QPSK	1@243	24.83	20.33	0.1079
41	30	90	518598	2592.99	DFT-s-OFDM PI/2 BPSK	120@60	26.26	21.76	0.1500
41	30	90	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	25.88	21.38	0.1374
41	30	90	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@243	26.32	21.82	0.1521
41	30	90	518598	2592.99	DFT-s-OFDM QPSK	120@60	26.28	21.78	0.1507
41	30	90	518598	2592.99	DFT-s-OFDM QPSK	1@1	25.95	21.45	0.1396
41	30	90	518598	2592.99	DFT-s-OFDM QPSK	1@243	26.4	21.9	0.1549
41	30	90	518598	2592.99	DFT-s-OFDM 16 QAM	120@60	25.17	20.67	0.1167
41	30	90	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	25.23	20.73	0.1183
41	30	90	518598	2592.99	DFT-s-OFDM 16 QAM	1@243	25.51	21.01	0.1262
41	30	90	518598	2592.99	DFT-s-OFDM 64 QAM	120@60	23.61	19.11	0.0815
41	30	90	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	23.6	19.1	0.0813
41	30	90	518598	2592.99	DFT-s-OFDM 64 QAM	1@243	23.86	19.36	0.0863
41	30	90	518598	2592.99	DFT-s-OFDM 256 QAM	120@60	21.57	17.07	0.0509
41	30	90	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	21.23	16.73	0.0471
41	30	90	518598	2592.99	DFT-s-OFDM 256 QAM	1@243	21.52	17.02	0.0504
41	30	90	518598	2592.99	CP-OFDM QPSK	123@61	24.56	20.06	0.1014

41	30	90	518598	2592.99	CP-OFDM QPSK	1@1	24.67	20.17	0.1040
41	30	90	518598	2592.99	CP-OFDM QPSK	1@243	24.9	20.4	0.1096
41	30	90	528996	2644.98	DFT-s-OFDM PI/2 BPSK	120@60	26.08	21.58	0.1439
41	30	90	528996	2644.98	DFT-s-OFDM PI/2 BPSK	1@1	25.86	21.36	0.1368
41	30	90	528996	2644.98	DFT-s-OFDM PI/2 BPSK	1@243	26.47	21.97	0.1574
41	30	90	528996	2644.98	DFT-s-OFDM QPSK	120@60	26.12	21.62	0.1452
41	30	90	528996	2644.98	DFT-s-OFDM QPSK	1@1	25.95	21.45	0.1396
41	30	90	528996	2644.98	DFT-s-OFDM QPSK	1@243	26.43	21.93	0.1560
41	30	90	528996	2644.98	DFT-s-OFDM 16 QAM	120@60	25.12	20.62	0.1153
41	30	90	528996	2644.98	DFT-s-OFDM 16 QAM	1@1	25.02	20.52	0.1127
41	30	90	528996	2644.98	DFT-s-OFDM 16 QAM	1@243	25.66	21.16	0.1306
41	30	90	528996	2644.98	DFT-s-OFDM 64 QAM	120@60	23.65	19.15	0.0822
41	30	90	528996	2644.98	DFT-s-OFDM 64 QAM	1@1	23.36	18.86	0.0769
41	30	90	528996	2644.98	DFT-s-OFDM 64 QAM	1@243	23.98	19.48	0.0887
41	30	90	528996	2644.98	DFT-s-OFDM 256 QAM	120@60	21.58	17.08	0.0511
41	30	90	528996	2644.98	DFT-s-OFDM 256 QAM	1@1	21.05	16.55	0.0452
41	30	90	528996	2644.98	DFT-s-OFDM 256 QAM	1@243	21.71	17.21	0.0526
41	30	90	528996	2644.98	CP-OFDM QPSK	123@61	24.63	20.13	0.1030
41	30	90	528996	2644.98	CP-OFDM QPSK	1@1	24.4	19.9	0.0977
41	30	90	528996	2644.98	CP-OFDM QPSK	1@243	24.95	20.45	0.1109
41	30	100	509202	2546.01	DFT-s-OFDM PI/2 BPSK	135@67	26.19	21.69	0.1476
41	30	100	509202	2546.01	DFT-s-OFDM PI/2 BPSK	1@1	26.36	21.86	0.1535
41	30	100	509202	2546.01	DFT-s-OFDM PI/2 BPSK	1@271	26.23	21.73	0.1489
41	30	100	509202	2546.01	DFT-s-OFDM	135@67	26.26	21.76	0.1500

					QPSK				
41	30	100	509202	2546.01	DFT-s-OFDM QPSK	1@1	26.4	21.9	0.1549
41	30	100	509202	2546.01	DFT-s-OFDM QPSK	1@271	26.34	21.84	0.1528
41	30	100	509202	2546.01	DFT-s-OFDM 16 QAM	135@67	25.02	20.52	0.1127
41	30	100	509202	2546.01	DFT-s-OFDM 16 QAM	1@1	25.19	20.69	0.1172
41	30	100	509202	2546.01	DFT-s-OFDM 16 QAM	1@271	25.35	20.85	0.1216
41	30	100	509202	2546.01	DFT-s-OFDM 64 QAM	135@67	23.55	19.05	0.0804
41	30	100	509202	2546.01	DFT-s-OFDM 64 QAM	1@1	23.57	19.07	0.0807
41	30	100	509202	2546.01	DFT-s-OFDM 64 QAM	1@271	23.65	19.15	0.0822
41	30	100	509202	2546.01	DFT-s-OFDM 256 QAM	135@67	21.55	17.05	0.0507
41	30	100	509202	2546.01	DFT-s-OFDM 256 QAM	1@1	21.28	16.78	0.0476
41	30	100	509202	2546.01	DFT-s-OFDM 256 QAM	1@271	21.28	16.78	0.0476
41	30	100	509202	2546.01	CP-OFDM QPSK	137@68	24.45	19.95	0.0989
41	30	100	509202	2546.01	CP-OFDM QPSK	1@1	24.66	20.16	0.1038
41	30	100	509202	2546.01	CP-OFDM QPSK	1@271	24.61	20.11	0.1026
41	30	100	518598	2592.99	DFT-s-OFDM PI/2 BPSK	135@67	26.19	21.69	0.1476
41	30	100	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	26.03	21.53	0.1422
41	30	100	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@271	26.42	21.92	0.1556
41	30	100	518598	2592.99	DFT-s-OFDM QPSK	135@67	26.3	21.8	0.1514
41	30	100	518598	2592.99	DFT-s-OFDM QPSK	1@1	26.02	21.52	0.1419
41	30	100	518598	2592.99	DFT-s-OFDM QPSK	1@271	26.55	22.05	0.1603
41	30	100	518598	2592.99	DFT-s-OFDM 16 QAM	135@67	25.06	20.56	0.1138
41	30	100	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	24.84	20.34	0.1081

41	30	100	518598	2592.99	DFT-s-OFDM 16 QAM	1@271	25.37	20.87	0.1222
41	30	100	518598	2592.99	DFT-s-OFDM 64 QAM	135@67	23.6	19.1	0.0813
41	30	100	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	23.24	18.74	0.0748
41	30	100	518598	2592.99	DFT-s-OFDM 64 QAM	1@271	23.71	19.21	0.0834
41	30	100	518598	2592.99	DFT-s-OFDM 256 QAM	135@67	21.41	16.91	0.0491
41	30	100	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	20.89	16.39	0.0436
41	30	100	518598	2592.99	DFT-s-OFDM 256 QAM	1@271	21.35	16.85	0.0484
41	30	100	518598	2592.99	CP-OFDM QPSK	137@68	24.5	20	0.1000
41	30	100	518598	2592.99	CP-OFDM QPSK	1@1	24.27	19.77	0.0948
41	30	100	518598	2592.99	CP-OFDM QPSK	1@271	24.69	20.19	0.1045
41	30	100	528000	2640	DFT-s-OFDM PI/2 BPSK	135@67	26.12	21.62	0.1452
41	30	100	528000	2640	DFT-s-OFDM PI/2 BPSK	1@1	25.9	21.4	0.1380
41	30	100	528000	2640	DFT-s-OFDM PI/2 BPSK	1@271	26.58	22.08	0.1614
41	30	100	528000	2640	DFT-s-OFDM QPSK	135@67	26.21	21.71	0.1483
41	30	100	528000	2640	DFT-s-OFDM QPSK	1@1	25.98	21.48	0.1406
41	30	100	528000	2640	DFT-s-OFDM QPSK	1@271	26.56	22.06	0.1607
41	30	100	528000	2640	DFT-s-OFDM 16 QAM	135@67	24.93	20.43	0.1104
41	30	100	528000	2640	DFT-s-OFDM 16 QAM	1@1	24.8	20.3	0.1072
41	30	100	528000	2640	DFT-s-OFDM 16 QAM	1@271	25.41	20.91	0.1233
41	30	100	528000	2640	DFT-s-OFDM 64 QAM	135@67	23.45	18.95	0.0785
41	30	100	528000	2640	DFT-s-OFDM 64 QAM	1@1	23.17	18.67	0.0736
41	30	100	528000	2640	DFT-s-OFDM 64 QAM	1@271	23.73	19.23	0.0838
41	30	100	528000	2640	DFT-s-OFDM 256 QAM	135@67	21.4	16.9	0.0490

41	30	100	528000	2640	DFT-s-OFDM 256 QAM	1@1	20.96	16.46	0.0443
41	30	100	528000	2640	DFT-s-OFDM 256 QAM	1@271	21.48	16.98	0.0499
41	30	100	528000	2640	CP-OFDM QPSK	137@68	24.46	19.96	0.0991
41	30	100	528000	2640	CP-OFDM QPSK	1@1	24.19	19.69	0.0931
41	30	100	528000	2640	CP-OFDM QPSK	1@271	24.76	20.26	0.1062

Frequency Stability

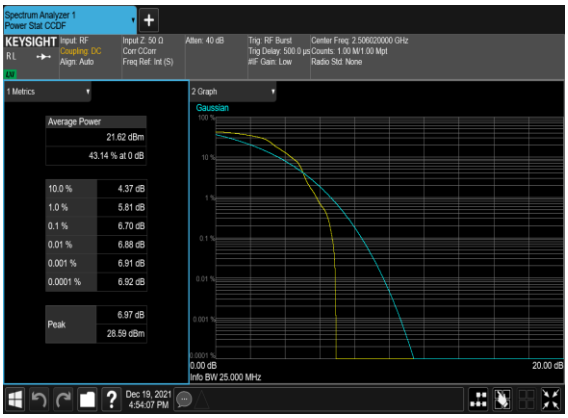
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	0.0388	**PASS**	NV
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	0.0258	**PASS**	LV
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	0.0599	**PASS**	HV
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	0.0594	**PASS**	-30°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	0.0412	**PASS**	-20°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	0.0055	**PASS**	-10°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	0.0465	**PASS**	0°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	0.0302	**PASS**	10°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	0.0028	**PASS**	20°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	0.0279	**PASS**	30°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	0.0285	**PASS**	40°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	0.0602	**PASS**	50°C

Peak to Average Radio

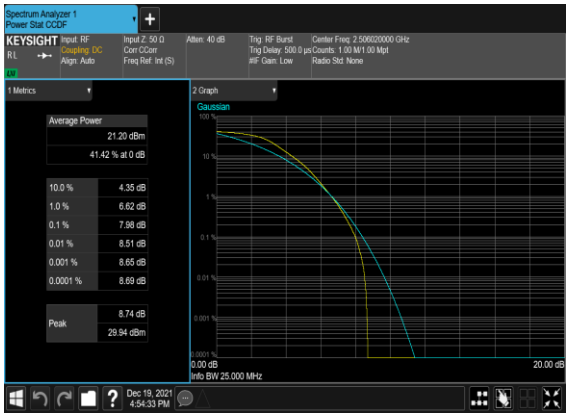
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
41	30	20	501204	2506.02	DFT-s-OFDM PI/2 BPSK	50@0	6.69	13	**PASS**
41	30	20	501204	2506.02	DFT-s-OFDM PI/2 BPSK	1@0	6.7	13	**PASS**
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	50@0	7.98	13	**PASS**
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	1@0	7.87	13	**PASS**
41	30	20	518598	2592.99	DFT-s-OFDM PI/2 BPSK	50@0	6.85	13	**PASS**
41	30	20	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@0	6.8	13	**PASS**
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	8.22	13	**PASS**
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	1@0	8.17	13	**PASS**
41	30	20	535998	2679.99	DFT-s-OFDM PI/2 BPSK	50@0	6.78	13	**PASS**
41	30	20	535998	2679.99	DFT-s-OFDM PI/2 BPSK	1@0	7.08	13	**PASS**
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	50@0	8.11	13	**PASS**
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	1@0	8.35	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

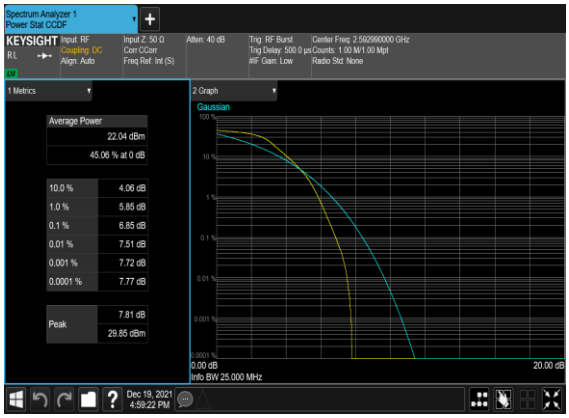


N41(20M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



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