



# FCC RF Test Report

**APPLICANT** : Guangdong OPPO Mobile Telecommunications Corp., Ltd.  
**EQUIPMENT** : Mobile Phone  
**BRAND NAME** : OPPO  
**MODEL NAME** : CPH2305  
**FCC ID** : R9C-CPH2305  
**STANDARD** : 47 CFR Part 2, 27  
**CLASSIFICATION** : PCS Licensed Transmitter Held to Ear (PCE)  
**TEST DATE(S)** : Nov. 01, 2021 ~ Nov. 17, 2021

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

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

Reviewed by: Derreck Chen / Supervisor

Approved by: Eric Shih / Manager



**Sporton International (ShenZhen) Inc.**

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...3
SUMMARY OF TEST RESULT...4
1 GENERAL DESCRIPTION...5
1.1 Applicant...5
1.2 Manufacturer...5
1.3 Product Feature of Equipment Under Test...5
1.4 Product Specification of Equipment Under Test...6
1.5 Modification of EUT...7
1.6 Maximum EIRP and Emission Designator...7
1.7 Testing Location...9
1.8 Test Software...9
1.9 Applicable Standards...9
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST...10
2.1 Test Mode...10
2.2 Connection Diagram of Test System...12
2.3 Support Unit used in test configuration and system...12
2.4 Measurement Results Explanation Example...12
2.5 Frequency List of Low/Middle/High Channels...13
3 CONDUCTED TEST ITEMS...15
3.1 Measuring Instruments...15
3.2 Test Setup...15
3.3 Test Result of Conducted Test...15
3.4 Conducted Output Power and EIRP...16
3.5 Peak-to-Average Ratio...17
3.6 Occupied Bandwidth...18
3.7 Conducted Band Edge...19
3.8 Conducted Spurious Emission...20
3.9 Frequency Stability...21
4 RADIATED TEST ITEMS...22
4.1 Measuring Instruments...22
4.2 Test Setup...22
4.3 Test Result of Radiated Test...23
4.4 Radiated Spurious Emission...24
5 LIST OF MEASURING EQUIPMENT...25
6 UNCERTAINTY OF EVALUATION...26
APPENDIX A. TEST RESULTS OF CONDUCTED TEST
APPENDIX B. TEST RESULTS OF RADIATED TEST
APPENDIX C. TEST SETUP PHOTOGRAPHS





## SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	27.50(h)(2)	Equivalent Isotropic Radiated Power (5G NR n7) (5G NR n41, n38)	EIRP < 2Watt		
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (5G NR n66)	EIRP < 1Watt		
3.5	N/A	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	Reporting Only	PASS	-
3.7	§2.1051 §27.53(h)	Conducted Band Edge Measurement (5G NR n66)	< 43+10log <sub>10</sub> (P[Watts])	PASS	-
	§27.53(m)(4)	Conducted Band Edge Measurement (5G NR n7) (5G NR n41, n38)	§27.53(m)(4)		
3.8	§2.1051 §27.53(h)	Conducted Spurious Emission (5G NR n66)	< 43+10log <sub>10</sub> (P[Watts])	PASS	-
	§2.1051 §27.53(m)(4)	Conducted Spurious Emission (5G NR n7) (5G NR n41, n38)	< 55+10log <sub>10</sub> (P[Watts])		
3.9	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within Authorized Band	PASS	-
4.4	§2.1053 §27.53(h)	Radiated Spurious Emission (5G NR n66)	< 43+10log <sub>10</sub> (P[Watts])	PASS	Under limit 27.00 dB at 10560.00 MHz
	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (5G NR n7) (5G NR n41, n38)	< 55+10log <sub>10</sub> (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

Guangdong OPPO Mobile Telecommunications Corp., Ltd.

NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong, China

## 1.2 Manufacturer

Guangdong OPPO Mobile Telecommunications Corp., Ltd.

NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong, China

## 1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Phone
Brand Name	OPPO
Model Name	CPH2305
FCC ID	R9C-CPH2305
IMEI Code	Conducted : 866483050043414/866483050043406 Radiation : 866483050044297/866483050044289
HW Version	11
SW Version	ColorOS V12.1
EUT Stage	Production Unit

Remark: Only 5G NR bands are tested in this report, all the other RF bands are tested in the other reports separately.

### 1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
<b>Tx Frequency</b>	5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz
<b>Rx Frequency</b>	5G NR n7 : 2620 MHz ~ 2690 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n66 : 2110 MHz~ 2180 MHz
<b>SCS</b>	n7, n66: 15kHz n38, n41: 30kHz
<b>Bandwidth</b>	n7 SA: 5MHz / 10MHz / 15MHz / 20MHz / 25MHz / 30MHz / 40MHz / 50MHz n7 NSA: 5MHz / 10MHz / 15MHz / 20MHz / 25MHz / 30MHz / 40MHz n38(SA): 20MHz / 30MHz n41(SA/NSA): 20MHz / 30MHz / 40MHz / 50MHz / 60MHz / 80MHz / 90MHz / 100MHz n66(SA/NSA): 5MHz / 10MHz / 15MHz / 20MHz / 30MHz / 40MHz
<b>Antenna Gain</b>	<b>&lt;Ant. 3&gt;:</b> 5G NR n7: -0.8 dBi 5G NR n38: -0.8 dBi 5G NR n41: -0.8 dBi 5G NR n66: -0.7 dBi <b>&lt;Ant. 4&gt;:</b> 5G NR n7: -0.5 dBi 5G NR n38: -0.5 dBi 5G NR n41: -0.5 dBi 5G NR n66: -1.0 dBi <b>&lt;Ant. 5&gt;:</b> 5G NR n38: 0.2 dBi 5G NR n41: 0.2 dBi <b>&lt;Ant. 6&gt;:</b> 5G NR n7: 0.5 dBi 5G NR n66: -0.8 dBi
<b>Type of Modulation</b>	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: QPSK / 16QAM / 64QAM / 256QAM

**Remark:**

1. The maximum EIRP is calculated from max output power and max antenna gain, only the maximum EIRP of n7/n38/n41 for Antenna 4, n66 for Antenna 3 and n41\_UL MIMO for Antenna 4+ Antenna 5 are shown in the report.
2. 5G NR n41 supports UL MIMO mode, and only supports CP-OFDM modulation in UL MIMO mode.
3. 5G NR Bands support SA and NSA mode. The whole testing has assessed SA mode for n7/n41 and NSA mode for n66 by referring to the higher conducted power for conducted test items.
4. For NSA mode of all EN-DC combination, we only show the combination of the maximum power among all NSA combinations 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 EIRP and Emission Designator

5G NR n7 SA		QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	2502.5 ~ 2567.5	0.1858	4M48G7D	0.1496	4M50W7D
10	2505.0 ~ 2565.0	0.1854	9M29G7D	0.1483	9M29W7D
15	2507.5 ~ 2562.5	0.1862	14M1G7D	0.1507	14M1W7D
20	2510.0 ~ 2560.0	0.1871	18M9G7D	0.1483	19M0W7D
25	2512.5 ~ 2557.5	0.1901	23M7G7D	0.1503	23M8W7D
30	2515.0 ~ 2555.0	0.1786	28M6G7D	0.1429	28M6W7D
40	2520.0 ~ 2550.0	0.2158	38M6G7D	0.1706	38M6W7D
50	2525.0 ~ 2545.0	0.1959	48M2G7D	0.1560	48M2W7D

5G NR n38 SA		QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	2580.0 ~ 2610.0	0.1803	18M2G7D	0.1466	18M2W7D
30	2585.0 ~ 2605.0	0.2032	27M9G7D	0.1600	27M9W7D

5G NR n41 SA		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	0.1734	18M2G7D	0.1265	18M2W7D
30	2511.00 ~ 2674.98	0.2028	27M9G7D	0.1265	27M9W7D
40	2516.01 ~ 2670.00	0.2056	37M8G7D	0.1265	37M9W7D
50	2521.02 ~ 2664.99	0.1507	47M6G7D	0.1265	47M6W7D
60	2526.00 ~ 2659.98	0.1510	57M9G7D	0.1250	57M9W7D
80	2536.02 ~ 2649.99	0.1510	77M4G7D	0.1265	77M5W7D
90	2541.00 ~ 2644.98	0.1524	87M4G7D	0.1279	87M5W7D
100	2546.01 ~ 2640.00	0.1542	97M3G7D	0.1297	97M4W7D



5G NR n41_UL MIMO		QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	2506.02 ~ 2679.99	0.3038	18M2G7D	0.2683	18M3W7D
30	2511.00 ~ 2674.98	0.3055	27M8G7D	0.2715	27M9W7D
40	2516.01 ~ 2670.00	0.3087	37M8G7D	0.2723	37M8W7D
50	2521.02 ~ 2664.99	0.3024	47M5G7D	0.2664	47M6W7D
60	2526.00 ~ 2659.98	0.3004	57M8G7D	0.2685	57M9W7D
80	2536.02 ~ 2649.99	0.2974	77M5G7D	0.2659	77M5W7D
90	2541.00 ~ 2644.98	0.2983	87M3G7D	0.2617	87M5W7D
100	2546.01 ~ 2640.00	0.2997	97M6G7D	0.2626	97M5W7D

5G NR n66 NSA (EN DC_7A-n66A)		QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	1712.5 ~ 1777.5	0.1858	4M47G7D	0.1538	4M49W7D
10	1715.0 ~ 1775.0	0.1820	9M27G7D	0.1493	9M28W7D
15	1717.5 ~ 1772.5	0.1888	14M1G7D	0.1528	14M1W7D
20	1720.0 ~ 1770.0	0.1905	18M9G7D	0.1552	18M9W7D
30	1725.0 ~ 1765.0	0.1910	28M5G7D	0.1521	28M5W7D
40	1730.0 ~ 1760.0	0.1928	38M5G7D	0.1503	38M5W7D

Note:

1. 5G NR Band n41 overlaps the entire frequency range of Band n38. Therefore, the conducted test results provided in this report covers Band n41 as well as Band n38.
2. All modulations have been tested, only the worst test results of PSK & QAM are shown in the report.





### 1.7 Testing Location

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

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

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

### 1.8 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH03-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, 27
- ♦ ANSI C63.26-2015
- ♦ FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01

**Remark:**

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




## 2 Test Configuration of Equipment Under Test

### 2.1 Test Mode

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

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

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

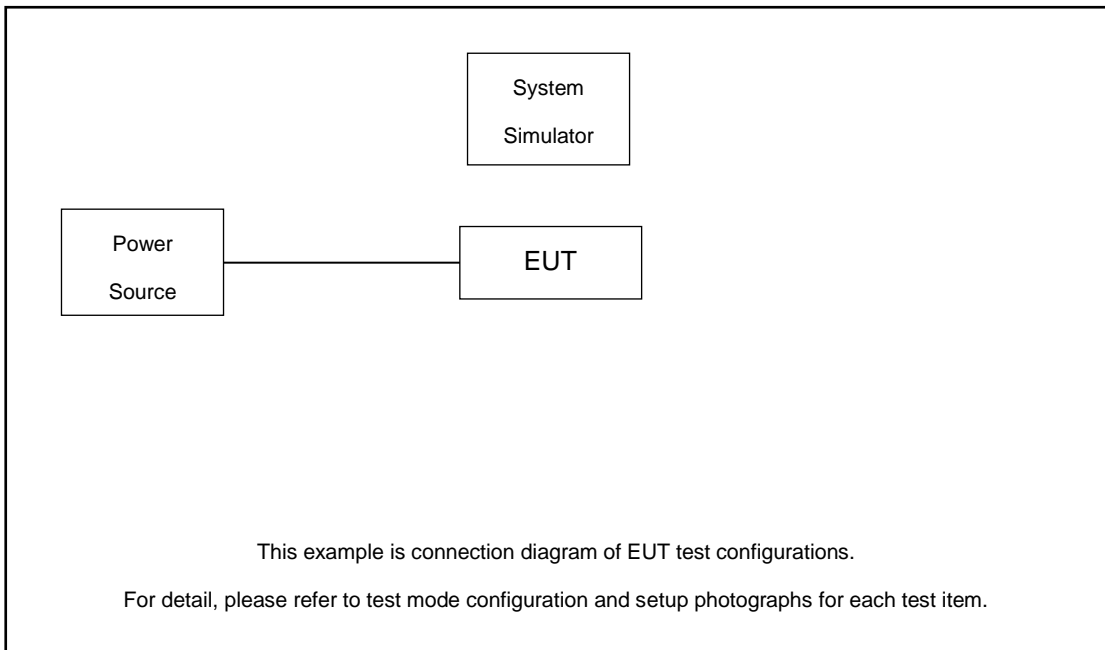
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			

Test Items	5G NR	Bandwidth (MHz)										Modulation				RB #		Test Channel		
		5	10/15	20	25	30	40	50	60	80/90	100	QPSK	16QAM	64QAM	256 QAM	1	Full	L	M	H
Max. Output Power	n7	v	v	v	v	v	v	v	-	-	-	v	v	v	v	v	v	v	v	v
	n38	-	-	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	v	v	v
	n41 MIMO	-	-	v	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	n66	v	v	v	-	v	v	-	-	-	-	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	n7			v					-	-	-	v				v	v	v	v	v
	n41	-	-	v	-							v				v	v	v	v	v
	n41 MIMO	-	-	v	-							v	v			v	v	v	v	v
	n66			v	-				-	-	-	v				v	v	v	v	v
26dB and 99% Bandwidth	n7	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	
	n41 MIMO	-	-	v	-	v	v	v	v	v	v	v	v	v	v		v		v	
	n66	v	v	v	-	v	v	-	-	-	-	v	v	v	v		v		v	
Conducted Band Edge	n7	v		v				v	-	-	-	v				v	v	v		v
	n41	-	-	v	-				v		v	v				v	v	v		v
	n41 MIMO	-	-	v	-				v		v	v	v			v	v	v		v
	n66	v		v	-		v	-	-	-	-	v				v	v	v		v



Test Items	5G NR	Bandwidth (MHz)										Modulation				RB #		Test Channel		
		5	10/15	20	25	30	40	50	60	80/90	100	QPSK	16QAM	64QAM	256 QAM	1	Full	L	M	H
Conducted Spurious Emission	n7	v		v				v	-	-	-	v				v		v	v	v
	n41	-	-	v	-				v		v	v				v		v	v	v
	n41 MIMO	-	-	v	-				v		v	v	v			v		v	v	v
	n66	v		v	-		v	-	-	-	-	v				v		v	v	v
Frequency Stability	n7			v					-	-	-	v					v		v	
	n41	-	-	v	-							v					v		v	
	n41 MIMO	-	-	v	-							v					v		v	
	n66			v	-			-	-	-	-	v					v		v	
E.I.R.P	n7	v	v	v	v	v	v	v	-	-	-	v	v	v	v	v	v	v	v	v
	n38	-	-	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	v	v	v
	n41 MIMO	-	-	v	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	n66	v	v	v	-	v	v	-	-	-	-	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	n7	Worst Case																	v	
	n41	Worst Case																	v	
	n66	Worst Case																	v	
Note	<ol style="list-style-type: none"> <li>The mark "v" means that this configuration is chosen for testing</li> <li>The mark "-" means that this bandwidth is not supported.</li> <li>The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.</li> <li>Based on engineering evaluation, only the worst modulations test results are shown in the report.</li> </ol>																			

## 2.2 Connection Diagram of Test System



## 2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	DC Power Supply	GW	GPS-3030D	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
3.	NR Base Station	Anritsu	MT8000A	N/A	N/A	Unshielded, 1.8 m

## 2.4 Measurement Results Explanation Example

### For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss.

*Offset = RF cable loss.*

Following shows an offset computation example with cable loss 5.1 dB.

Example :

$$\begin{aligned} \text{Offset(dB)} &= \text{RF cable loss(dB)}. \\ &= 5.1 \text{ (dB)} \end{aligned}$$



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

5G NR n7 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
50	Channel	529000	531000	533000
	Frequency	2525	2535	2545
40	Channel	528000	531000	534000
	Frequency	2520	2535	2550
30	Channel	527000	531000	535000
	Frequency	2515	2535	2555
25	Channel	526500	531000	535500
	Frequency	2512.5	2535	2557.5
20	Channel	526000	531000	536000
	Frequency	2510	2535	2560
15	Channel	525500	531000	536500
	Frequency	2507.5	2535	2562.5
10	Channel	525000	531000	537000
	Frequency	2505	2535	2565
5	Channel	524500	531000	537500
	Frequency	2502.5	2535	2567.5

5G NR n38 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
30	Channel	517000	519000	521000
	Frequency	2585	2595	2605
20	Channel	516000	519000	522000
	Frequency	2580	2595	2610



5G NR n41 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	509202	518598	528000
	Frequency	2546.01	2592.99	2640
90	Channel	508200	518598	528996
	Frequency	2541	2592.99	2644.98
80	Channel	507204	518598	529998
	Frequency	2536.02	2592.99	2649.99
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 n66 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
40	Channel	426000	429000	432000
	Frequency	1730	1745	1760
30	Channel	425000	429000	433000
	Frequency	1725	1745	1765
20	Channel	424000	429000	434000
	Frequency	1720	1745	1770
15	Channel	423500	429000	434500
	Frequency	1717.5	1745	1772.5
10	Channel	423000	429000	435000
	Frequency	1715	1745	1775
5	Channel	422500	429000	435500
	Frequency	1712.5	1745	1777.5

### 3 Conducted Test Items

#### 3.1 Measuring Instruments

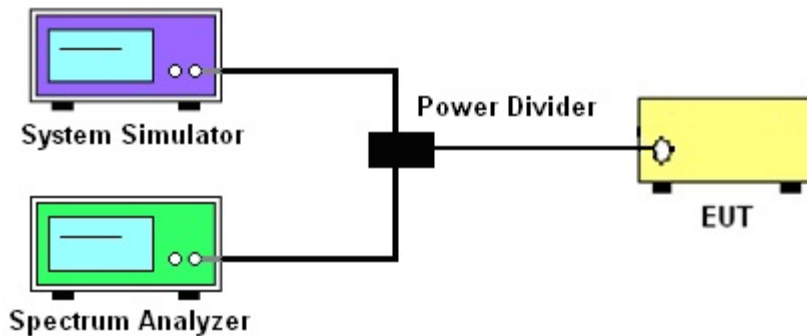
See list of measuring instruments of this test report.

#### 3.2 Test Setup

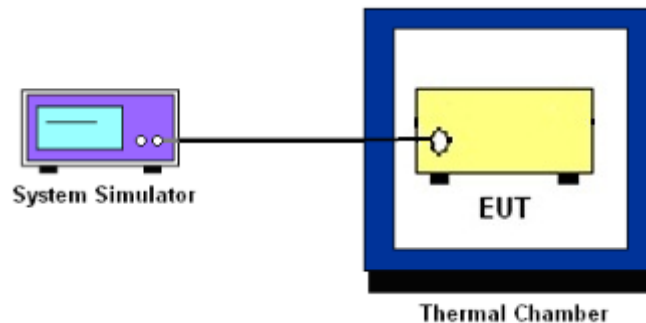
##### 3.2.1 Conducted Output Power



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



##### 3.2.3 Frequency Stability



### 3.3 Test Result of Conducted Test

Please refer to Appendix A.



### 3.4 Conducted Output Power and EIRP

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

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

The EIRP of mobile transmitters must not exceed 2 Watts for 5G NR n7, n38 and n41.

The EIRP of mobile transmitters must not exceed 1 Watts for 5G NR n66.

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 (h)

For operations in the 1710 – 1755 MHz band, the FCC limit is  $43 + 10\log_{10}(P[\text{Watts}])$  dB below the transmitter power P(Watts) in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

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.

#### 3.7.2 Test Procedures

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

Example:

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

9. For 5G NR n7/n38/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 n7/n38/n41:

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

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

#### 3.8.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
7. Set spectrum analyzer with RMS detector.
8. Taking the record of maximum spurious emission.
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
10. The limit line is derived from  $43 + 10\log(P)$ dB below the transmitter power P(Watts)  
=  $P(W) - [43 + 10\log(P)]$  (dB)  
=  $[30 + 10\log(P)]$  (dBm) -  $[43 + 10\log(P)]$  (dB)  
= -13dBm.
11. For 5G NR n7/n38/n41  
The limit line is derived from  $55 + 10\log(P)$ dB below the transmitter power P(Watts)  
=  $P(W) - [55 + 10\log(P)]$  (dB)  
=  $[30 + 10\log(P)]$  (dBm) -  $[55 + 10\log(P)]$  (dB)  
= -25dBm.



## 3.9 Frequency Stability

### 3.9.1 Description of Frequency Stability Measurement

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

### 3.9.2 Test Procedures for Temperature Variation

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

### 3.9.3 Test Procedures for Voltage Variation

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

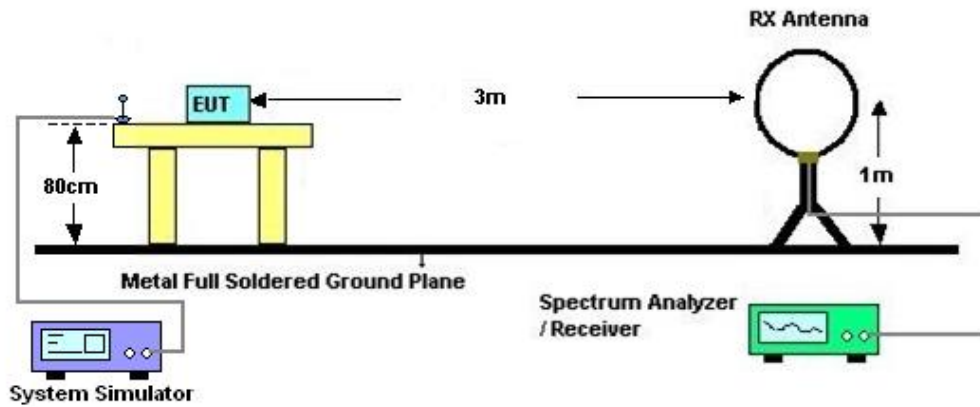
## 4 Radiated Test Items

### 4.1 Measuring Instruments

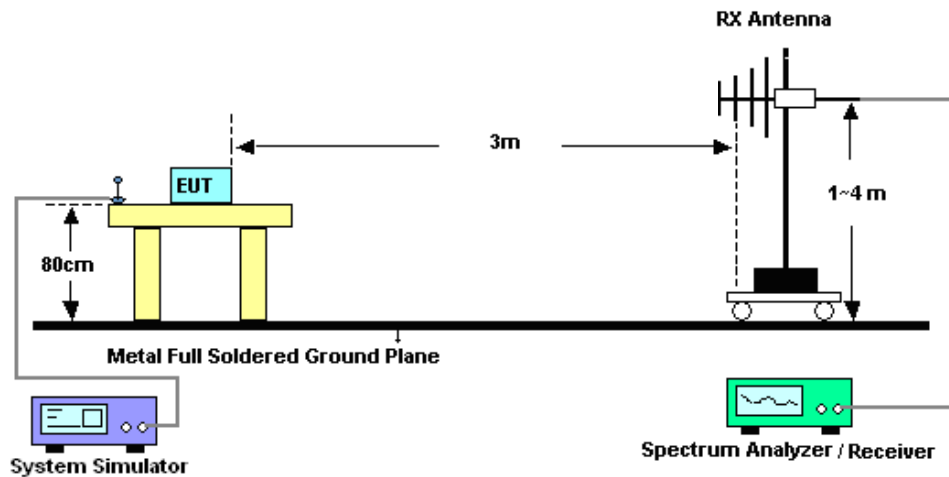
See list of measuring instruments of this test report.

### 4.2 Test Setup

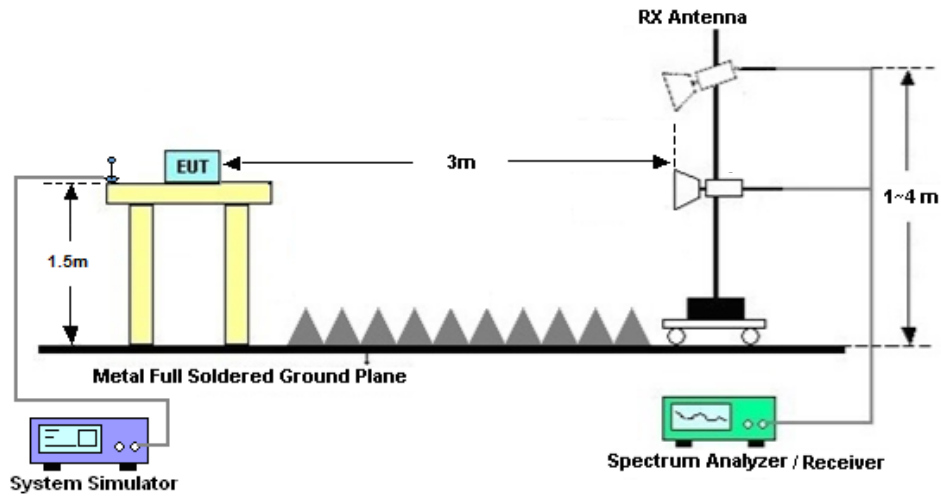
#### 4.2.1 For radiated test below 30MHz



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



#### 4.2.3 For radiated test above 1GHz



#### 4.3 Test Result of Radiated Test

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

Please refer to Appendix B.



## 4.4 Radiated Spurious Emission

### 4.4.1 Description of Radiated Spurious Emission

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

For 5G NR n7/n38/n41

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

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

### 4.4.2 Test Procedures

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

The limit line is derived from  $43 + 10\log(P)$ dB below the transmitter power P(Watts)  
= P(W)- [43 + 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  $55 + 10\log(P)$ dB below the transmitter power P(Watts)The limit line is derived from  $55 + 10\log(P)$ dB below the transmitter power P(Watts)





## 5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 08, 2021	Nov. 01, 2021~Nov. 09, 2021	Apr. 07, 2022	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-04265	60.06.020.0077	0.4GHz~26.5GHz	Dec. 26, 2020	Nov. 01, 2021~Nov. 09, 2021	Dec. 25, 2021	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 14, 2021	Nov. 01, 2021~Nov. 09, 2021	Jul. 13, 2022	Conducted (TH01-SZ)
EMI Test Receiver&SA	KEYSIGHT	N9038A	MY54450083	20Hz~8.4GHz	Apr. 07, 2021	Nov. 17, 2021	Apr. 06, 2022	Radiation (03CH03-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jun. 22, 2021	Nov. 17, 2021	Jun. 21, 2022	Radiation (03CH03-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150246	10Hz~44GHz;	Apr. 07, 2021	Nov. 17, 2021	Apr. 06, 2022	Radiation (03CH03-SZ)
Bilog Antenna	TeseQ	CBL6112D	35408	30MHz-2GHz	Jun. 22, 2021	Nov. 17, 2021	Jun. 21, 2022	Radiation (03CH03-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1355	1GHz~18GHz	Apr. 25, 2021	Nov. 17, 2021	Apr. 24, 2022	Radiation (03CH03-SZ)
Amplifier	Burgeon	BPA-530	102211	0.01Hz ~3000MHz	Oct. 22, 2021	Nov. 17, 2021	Oct. 21, 2022	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Oct. 22, 2021	Nov. 17, 2021	Oct. 21, 2022	Radiation (03CH03-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 11, 2021	Nov. 17, 2021	Apr. 10, 2022	Radiation (03CH03-SZ)
Amplifier	Agilent Technologies	83017A	MY39501302	500MHz~26.5GHz	Dec. 30, 2020	Nov. 17, 2021	Dec. 29, 2021	Radiation (03CH03-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	Nov. 17, 2021	NCR	Radiation (03CH03-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Nov. 17, 2021	NCR	Radiation (03CH03-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Nov. 17, 2021	NCR	Radiation (03CH03-SZ)

NCR: No Calibration Required



## 6 Uncertainty of Evaluation

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

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

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

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

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

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

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

----- THE END -----



## Appendix A. Test Results of Conducted Test

# FR1 N7(ANT4) SA

## Conducted Power and EIRP

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power (dBm)	EIRP (dBm)	EIRP (W)
7	15	5	524500	2502.5	DFT-s-OFDM QPSK	12@6	22.92	22.42	0.1746
7	15	5	524500	2502.5	DFT-s-OFDM QPSK	1@1	22.96	22.46	0.1762
7	15	5	524500	2502.5	DFT-s-OFDM QPSK	1@23	22.99	22.49	0.1774
7	15	5	524500	2502.5	DFT-s-OFDM 16 QAM	12@6	21.79	21.29	0.1346
7	15	5	524500	2502.5	DFT-s-OFDM 16 QAM	1@1	21.94	21.44	0.1393
7	15	5	524500	2502.5	DFT-s-OFDM 16 QAM	1@23	21.99	21.49	0.1409
7	15	5	524500	2502.5	DFT-s-OFDM 64 QAM	12@6	20.34	19.84	0.0964
7	15	5	524500	2502.5	DFT-s-OFDM 64 QAM	1@1	20.4	19.9	0.0977
7	15	5	524500	2502.5	DFT-s-OFDM 64 QAM	1@23	20.47	19.97	0.0993
7	15	5	524500	2502.5	DFT-s-OFDM 256 QAM	12@6	18.27	17.77	0.0598
7	15	5	524500	2502.5	DFT-s-OFDM 256 QAM	1@1	18.06	17.56	0.0570
7	15	5	524500	2502.5	DFT-s-OFDM 256 QAM	1@23	18.11	17.61	0.0577
7	15	5	524500	2502.5	CP-OFDM QPSK	13@6	21.43	20.93	0.1239
7	15	5	524500	2502.5	CP-OFDM QPSK	1@1	21.13	20.63	0.1156
7	15	5	524500	2502.5	CP-OFDM QPSK	1@23	21.16	20.66	0.1164
7	15	5	531000	2535	DFT-s-OFDM QPSK	12@6	22.98	22.48	0.1770
7	15	5	531000	2535	DFT-s-OFDM QPSK	1@1	22.89	22.39	0.1734
7	15	5	531000	2535	DFT-s-OFDM QPSK	1@23	23.12	22.62	0.1828
7	15	5	531000	2535	DFT-s-OFDM 16 QAM	12@6	21.86	21.36	0.1368
7	15	5	531000	2535	DFT-s-OFDM 16 QAM	1@1	21.98	21.48	0.1406
7	15	5	531000	2535	DFT-s-OFDM 16 QAM	1@23	22.04	21.54	0.1426
7	15	5	531000	2535	DFT-s-OFDM 64 QAM	12@6	20.48	19.98	0.0995
7	15	5	531000	2535	DFT-s-OFDM 64 QAM	1@1	20.48	19.98	0.0995
7	15	5	531000	2535	DFT-s-OFDM 64 QAM	1@23	20.58	20.08	0.1019
7	15	5	531000	2535	DFT-s-OFDM 256 QAM	12@6	18.12	17.62	0.0578
7	15	5	531000	2535	DFT-s-OFDM 256 QAM	1@1	18.13	17.63	0.0579
7	15	5	531000	2535	DFT-s-OFDM 256 QAM	1@23	18.18	17.68	0.0586
7	15	5	531000	2535	CP-OFDM	13@6	21.43	20.93	0.1239

					QPSK				
7	15	5	531000	2535	CP-OFDM QPSK	1@1	21.57	21.07	0.1279
7	15	5	531000	2535	CP-OFDM QPSK	1@23	21.35	20.85	0.1216
7	15	5	537500	2567.5	DFT-s-OFDM QPSK	12@6	23.06	22.56	0.1803
7	15	5	537500	2567.5	DFT-s-OFDM QPSK	1@1	23.05	22.55	0.1799
7	15	5	537500	2567.5	DFT-s-OFDM QPSK	1@23	23.19	22.69	0.1858
7	15	5	537500	2567.5	DFT-s-OFDM 16 QAM	12@6	21.96	21.46	0.1400
7	15	5	537500	2567.5	DFT-s-OFDM 16 QAM	1@1	22.12	21.62	0.1452
7	15	5	537500	2567.5	DFT-s-OFDM 16 QAM	1@23	22.25	21.75	0.1496
7	15	5	537500	2567.5	DFT-s-OFDM 64 QAM	12@6	20.58	20.08	0.1019
7	15	5	537500	2567.5	DFT-s-OFDM 64 QAM	1@1	20.56	20.06	0.1014
7	15	5	537500	2567.5	DFT-s-OFDM 64 QAM	1@23	20.64	20.14	0.1033
7	15	5	537500	2567.5	DFT-s-OFDM 256 QAM	12@6	18.13	17.63	0.0579
7	15	5	537500	2567.5	DFT-s-OFDM 256 QAM	1@1	18.15	17.65	0.0582
7	15	5	537500	2567.5	DFT-s-OFDM 256 QAM	1@23	18.3	17.8	0.0603
7	15	5	537500	2567.5	CP-OFDM QPSK	13@6	21.56	21.06	0.1276
7	15	5	537500	2567.5	CP-OFDM QPSK	1@1	21.57	21.07	0.1279
7	15	5	537500	2567.5	CP-OFDM QPSK	1@23	21.37	20.87	0.1222
7	15	10	525000	2505	DFT-s-OFDM QPSK	25@12	22.87	22.37	0.1726
7	15	10	525000	2505	DFT-s-OFDM QPSK	1@1	22.91	22.41	0.1742
7	15	10	525000	2505	DFT-s-OFDM QPSK	1@50	22.89	22.39	0.1734
7	15	10	525000	2505	DFT-s-OFDM 16 QAM	25@12	21.84	21.34	0.1361
7	15	10	525000	2505	DFT-s-OFDM 16 QAM	1@1	21.9	21.4	0.1380
7	15	10	525000	2505	DFT-s-OFDM 16 QAM	1@50	21.93	21.43	0.1390
7	15	10	525000	2505	DFT-s-OFDM 64 QAM	25@12	20.44	19.94	0.0986
7	15	10	525000	2505	DFT-s-OFDM 64 QAM	1@1	20.38	19.88	0.0973
7	15	10	525000	2505	DFT-s-OFDM 64 QAM	1@50	20.41	19.91	0.0979
7	15	10	525000	2505	DFT-s-OFDM 256 QAM	25@12	18.03	17.53	0.0566
7	15	10	525000	2505	DFT-s-OFDM 256 QAM	1@1	17.98	17.48	0.0560
7	15	10	525000	2505	DFT-s-OFDM 256 QAM	1@50	18.04	17.54	0.0568
7	15	10	525000	2505	CP-OFDM QPSK	26@13	21.3	20.8	0.1202
7	15	10	525000	2505	CP-OFDM QPSK	1@1	21.26	20.76	0.1191
7	15	10	525000	2505	CP-OFDM QPSK	1@50	21.17	20.67	0.1167
7	15	10	531000	2535	DFT-s-OFDM QPSK	25@12	23.04	22.54	0.1795

7	15	10	531000	2535	DFT-s-OFDM QPSK	1@1	22.85	22.35	0.1718
7	15	10	531000	2535	DFT-s-OFDM QPSK	1@50	23.02	22.52	0.1786
7	15	10	531000	2535	DFT-s-OFDM 16 QAM	25@12	21.95	21.45	0.1396
7	15	10	531000	2535	DFT-s-OFDM 16 QAM	1@1	21.99	21.49	0.1409
7	15	10	531000	2535	DFT-s-OFDM 16 QAM	1@50	22.16	21.66	0.1466
7	15	10	531000	2535	DFT-s-OFDM 64 QAM	25@12	20.52	20.02	0.1005
7	15	10	531000	2535	DFT-s-OFDM 64 QAM	1@1	20.43	19.93	0.0984
7	15	10	531000	2535	DFT-s-OFDM 64 QAM	1@50	20.58	20.08	0.1019
7	15	10	531000	2535	DFT-s-OFDM 256 QAM	25@12	18.13	17.63	0.0579
7	15	10	531000	2535	DFT-s-OFDM 256 QAM	1@1	18.05	17.55	0.0569
7	15	10	531000	2535	DFT-s-OFDM 256 QAM	1@50	18.2	17.7	0.0589
7	15	10	531000	2535	CP-OFDM QPSK	26@13	21.5	21	0.1259
7	15	10	531000	2535	CP-OFDM QPSK	1@1	21.39	20.89	0.1227
7	15	10	531000	2535	CP-OFDM QPSK	1@50	21.38	20.88	0.1225
7	15	10	537000	2565	DFT-s-OFDM QPSK	25@12	23.09	22.59	0.1816
7	15	10	537000	2565	DFT-s-OFDM QPSK	1@1	23.02	22.52	0.1786
7	15	10	537000	2565	DFT-s-OFDM QPSK	1@50	23.18	22.68	0.1854
7	15	10	537000	2565	DFT-s-OFDM 16 QAM	25@12	22.09	21.59	0.1442
7	15	10	537000	2565	DFT-s-OFDM 16 QAM	1@1	22.11	21.61	0.1449
7	15	10	537000	2565	DFT-s-OFDM 16 QAM	1@50	22.21	21.71	0.1483
7	15	10	537000	2565	DFT-s-OFDM 64 QAM	25@12	20.69	20.19	0.1045
7	15	10	537000	2565	DFT-s-OFDM 64 QAM	1@1	20.57	20.07	0.1016
7	15	10	537000	2565	DFT-s-OFDM 64 QAM	1@50	20.7	20.2	0.1047
7	15	10	537000	2565	DFT-s-OFDM 256 QAM	25@12	18.18	17.68	0.0586
7	15	10	537000	2565	DFT-s-OFDM 256 QAM	1@1	18.19	17.69	0.0587
7	15	10	537000	2565	DFT-s-OFDM 256 QAM	1@50	18.29	17.79	0.0601
7	15	10	537000	2565	CP-OFDM QPSK	26@13	21.55	21.05	0.1274
7	15	10	537000	2565	CP-OFDM QPSK	1@1	21.67	21.17	0.1309
7	15	10	537000	2565	CP-OFDM QPSK	1@50	21.46	20.96	0.1247
7	15	15	525500	2507.5	DFT-s-OFDM QPSK	36@18	22.96	22.46	0.1762
7	15	15	525500	2507.5	DFT-s-OFDM QPSK	1@1	22.99	22.49	0.1774
7	15	15	525500	2507.5	DFT-s-OFDM QPSK	1@77	22.89	22.39	0.1734
7	15	15	525500	2507.5	DFT-s-OFDM 16 QAM	36@18	21.98	21.48	0.1406
7	15	15	525500	2507.5	DFT-s-OFDM 16 QAM	1@1	21.96	21.46	0.1400

7	15	15	525500	2507.5	DFT-s-OFDM 16 QAM	1@77	21.99	21.49	0.1409
7	15	15	525500	2507.5	DFT-s-OFDM 64 QAM	36@18	20.5	20	0.1000
7	15	15	525500	2507.5	DFT-s-OFDM 64 QAM	1@1	20.47	19.97	0.0993
7	15	15	525500	2507.5	DFT-s-OFDM 64 QAM	1@77	20.46	19.96	0.0991
7	15	15	525500	2507.5	DFT-s-OFDM 256 QAM	36@18	18.24	17.74	0.0594
7	15	15	525500	2507.5	DFT-s-OFDM 256 QAM	1@1	18.14	17.64	0.0581
7	15	15	525500	2507.5	DFT-s-OFDM 256 QAM	1@77	18.21	17.71	0.0590
7	15	15	525500	2507.5	CP-OFDM QPSK	39@19	21.48	20.98	0.1253
7	15	15	525500	2507.5	CP-OFDM QPSK	1@1	21.34	20.84	0.1213
7	15	15	525500	2507.5	CP-OFDM QPSK	1@77	21.17	20.67	0.1167
7	15	15	531000	2535	DFT-s-OFDM QPSK	36@18	23.06	22.56	0.1803
7	15	15	531000	2535	DFT-s-OFDM QPSK	1@1	23	22.5	0.1778
7	15	15	531000	2535	DFT-s-OFDM QPSK	1@77	23.11	22.61	0.1824
7	15	15	531000	2535	DFT-s-OFDM 16 QAM	36@18	22.1	21.6	0.1445
7	15	15	531000	2535	DFT-s-OFDM 16 QAM	1@1	22.1	21.6	0.1445
7	15	15	531000	2535	DFT-s-OFDM 16 QAM	1@77	22.16	21.66	0.1466
7	15	15	531000	2535	DFT-s-OFDM 64 QAM	36@18	20.6	20.1	0.1023
7	15	15	531000	2535	DFT-s-OFDM 64 QAM	1@1	20.42	19.92	0.0982
7	15	15	531000	2535	DFT-s-OFDM 64 QAM	1@77	20.63	20.13	0.1030
7	15	15	531000	2535	DFT-s-OFDM 256 QAM	36@18	18.36	17.86	0.0611
7	15	15	531000	2535	DFT-s-OFDM 256 QAM	1@1	18.21	17.71	0.0590
7	15	15	531000	2535	DFT-s-OFDM 256 QAM	1@77	18.3	17.8	0.0603
7	15	15	531000	2535	CP-OFDM QPSK	39@19	21.58	21.08	0.1282
7	15	15	531000	2535	CP-OFDM QPSK	1@1	21.45	20.95	0.1245
7	15	15	531000	2535	CP-OFDM QPSK	1@77	21.36	20.86	0.1219
7	15	15	536500	2562.5	DFT-s-OFDM QPSK	36@18	23.11	22.61	0.1824
7	15	15	536500	2562.5	DFT-s-OFDM QPSK	1@1	23.04	22.54	0.1795
7	15	15	536500	2562.5	DFT-s-OFDM QPSK	1@77	23.2	22.7	0.1862
7	15	15	536500	2562.5	DFT-s-OFDM 16 QAM	36@18	22.16	21.66	0.1466
7	15	15	536500	2562.5	DFT-s-OFDM 16 QAM	1@1	22.14	21.64	0.1459
7	15	15	536500	2562.5	DFT-s-OFDM 16 QAM	1@77	22.28	21.78	0.1507
7	15	15	536500	2562.5	DFT-s-OFDM 64 QAM	36@18	20.66	20.16	0.1038
7	15	15	536500	2562.5	DFT-s-OFDM 64 QAM	1@1	20.61	20.11	0.1026
7	15	15	536500	2562.5	DFT-s-OFDM 64 QAM	1@77	20.72	20.22	0.1052

7	15	15	536500	2562.5	DFT-s-OFDM 256 QAM	36@18	18.36	17.86	0.0611
7	15	15	536500	2562.5	DFT-s-OFDM 256 QAM	1@1	18.33	17.83	0.0607
7	15	15	536500	2562.5	DFT-s-OFDM 256 QAM	1@77	18.56	18.06	0.0640
7	15	15	536500	2562.5	CP-OFDM QPSK	39@19	21.69	21.19	0.1315
7	15	15	536500	2562.5	CP-OFDM QPSK	1@1	21.45	20.95	0.1245
7	15	15	536500	2562.5	CP-OFDM QPSK	1@77	21.37	20.87	0.1222
7	15	20	526000	2510	DFT-s-OFDM QPSK	50@25	22.94	22.44	0.1754
7	15	20	526000	2510	DFT-s-OFDM QPSK	1@1	22.9	22.4	0.1738
7	15	20	526000	2510	DFT-s-OFDM QPSK	1@104	22.97	22.47	0.1766
7	15	20	526000	2510	DFT-s-OFDM 16 QAM	50@25	21.9	21.4	0.1380
7	15	20	526000	2510	DFT-s-OFDM 16 QAM	1@1	21.86	21.36	0.1368
7	15	20	526000	2510	DFT-s-OFDM 16 QAM	1@104	21.88	21.38	0.1374
7	15	20	526000	2510	DFT-s-OFDM 64 QAM	50@25	20.47	19.97	0.0993
7	15	20	526000	2510	DFT-s-OFDM 64 QAM	1@1	20.5	20	0.1000
7	15	20	526000	2510	DFT-s-OFDM 64 QAM	1@104	20.58	20.08	0.1019
7	15	20	526000	2510	DFT-s-OFDM 256 QAM	50@25	18.38	17.88	0.0614
7	15	20	526000	2510	DFT-s-OFDM 256 QAM	1@1	17.82	17.32	0.0540
7	15	20	526000	2510	DFT-s-OFDM 256 QAM	1@104	17.94	17.44	0.0555
7	15	20	526000	2510	CP-OFDM QPSK	53@26	21.4	20.9	0.1230
7	15	20	526000	2510	CP-OFDM QPSK	1@1	21.33	20.83	0.1211
7	15	20	526000	2510	CP-OFDM QPSK	1@104	21.3	20.8	0.1202
7	15	20	531000	2535	DFT-s-OFDM QPSK	50@25	23.09	22.59	0.1816
7	15	20	531000	2535	DFT-s-OFDM QPSK	1@1	22.92	22.42	0.1746
7	15	20	531000	2535	DFT-s-OFDM QPSK	1@104	23.1	22.6	0.1820
7	15	20	531000	2535	DFT-s-OFDM 16 QAM	50@25	22.11	21.61	0.1449
7	15	20	531000	2535	DFT-s-OFDM 16 QAM	1@1	21.9	21.4	0.1380
7	15	20	531000	2535	DFT-s-OFDM 16 QAM	1@104	22.11	21.61	0.1449
7	15	20	531000	2535	DFT-s-OFDM 64 QAM	50@25	20.65	20.15	0.1035
7	15	20	531000	2535	DFT-s-OFDM 64 QAM	1@1	20.54	20.04	0.1009
7	15	20	531000	2535	DFT-s-OFDM 64 QAM	1@104	20.76	20.26	0.1062
7	15	20	531000	2535	DFT-s-OFDM 256 QAM	50@25	18.31	17.81	0.0604
7	15	20	531000	2535	DFT-s-OFDM 256 QAM	1@1	18.02	17.52	0.0565
7	15	20	531000	2535	DFT-s-OFDM 256 QAM	1@104	18.06	17.56	0.0570
7	15	20	531000	2535	CP-OFDM QPSK	53@26	21.57	21.07	0.1279



7	15	20	531000	2535	CP-OFDM QPSK	1@1	21.37	20.87	0.1222
7	15	20	531000	2535	CP-OFDM QPSK	1@104	21.51	21.01	0.1262
7	15	20	536000	2560	DFT-s-OFDM QPSK	50@25	23.21	22.71	0.1866
7	15	20	536000	2560	DFT-s-OFDM QPSK	1@1	23.09	22.59	0.1816
7	15	20	536000	2560	DFT-s-OFDM QPSK	1@104	23.22	22.72	0.1871
7	15	20	536000	2560	DFT-s-OFDM 16 QAM	50@25	22.21	21.71	0.1483
7	15	20	536000	2560	DFT-s-OFDM 16 QAM	1@1	22.1	21.6	0.1445
7	15	20	536000	2560	DFT-s-OFDM 16 QAM	1@104	22.18	21.68	0.1472
7	15	20	536000	2560	DFT-s-OFDM 64 QAM	50@25	20.72	20.22	0.1052
7	15	20	536000	2560	DFT-s-OFDM 64 QAM	1@1	20.7	20.2	0.1047
7	15	20	536000	2560	DFT-s-OFDM 64 QAM	1@104	20.9	20.4	0.1096
7	15	20	536000	2560	DFT-s-OFDM 256 QAM	50@25	18.12	17.62	0.0578
7	15	20	536000	2560	DFT-s-OFDM 256 QAM	1@1	18.15	17.65	0.0582
7	15	20	536000	2560	DFT-s-OFDM 256 QAM	1@104	18.29	17.79	0.0601
7	15	20	536000	2560	CP-OFDM QPSK	53@26	21.74	21.24	0.1330
7	15	20	536000	2560	CP-OFDM QPSK	1@1	21.65	21.15	0.1303
7	15	20	536000	2560	CP-OFDM QPSK	1@104	21.66	21.16	0.1306
7	15	25	526500	2512.5	DFT-s-OFDM QPSK	64@32	23.06	22.56	0.1803
7	15	25	526500	2512.5	DFT-s-OFDM QPSK	1@1	22.91	22.41	0.1742
7	15	25	526500	2512.5	DFT-s-OFDM QPSK	1@131	22.97	22.47	0.1766
7	15	25	526500	2512.5	DFT-s-OFDM 16 QAM	64@32	22.01	21.51	0.1416
7	15	25	526500	2512.5	DFT-s-OFDM 16 QAM	1@1	21.86	21.36	0.1368
7	15	25	526500	2512.5	DFT-s-OFDM 16 QAM	1@131	21.95	21.45	0.1396
7	15	25	526500	2512.5	DFT-s-OFDM 64 QAM	64@32	20.54	20.04	0.1009
7	15	25	526500	2512.5	DFT-s-OFDM 64 QAM	1@1	20.55	20.05	0.1012
7	15	25	526500	2512.5	DFT-s-OFDM 64 QAM	1@131	20.71	20.21	0.1050
7	15	25	526500	2512.5	DFT-s-OFDM 256 QAM	64@32	18.45	17.95	0.0624
7	15	25	526500	2512.5	DFT-s-OFDM 256 QAM	1@1	18.19	17.69	0.0587
7	15	25	526500	2512.5	DFT-s-OFDM 256 QAM	1@131	18.23	17.73	0.0593
7	15	25	526500	2512.5	CP-OFDM QPSK	67@33	21.5	21	0.1259
7	15	25	526500	2512.5	CP-OFDM QPSK	1@1	21.4	20.9	0.1230
7	15	25	526500	2512.5	CP-OFDM QPSK	1@131	21.53	21.03	0.1268
7	15	25	531000	2535	DFT-s-OFDM QPSK	64@32	23.08	22.58	0.1811
7	15	25	531000	2535	DFT-s-OFDM QPSK	1@1	22.97	22.47	0.1766

7	15	25	531000	2535	DFT-s-OFDM QPSK	1@131	23.19	22.69	0.1858
7	15	25	531000	2535	DFT-s-OFDM 16 QAM	64@32	22.1	21.6	0.1445
7	15	25	531000	2535	DFT-s-OFDM 16 QAM	1@1	21.83	21.33	0.1358
7	15	25	531000	2535	DFT-s-OFDM 16 QAM	1@131	22.15	21.65	0.1462
7	15	25	531000	2535	DFT-s-OFDM 64 QAM	64@32	20.61	20.11	0.1026
7	15	25	531000	2535	DFT-s-OFDM 64 QAM	1@1	20.55	20.05	0.1012
7	15	25	531000	2535	DFT-s-OFDM 64 QAM	1@131	20.79	20.29	0.1069
7	15	25	531000	2535	DFT-s-OFDM 256 QAM	64@32	18.36	17.86	0.0611
7	15	25	531000	2535	DFT-s-OFDM 256 QAM	1@1	18.37	17.87	0.0612
7	15	25	531000	2535	DFT-s-OFDM 256 QAM	1@131	18.37	17.87	0.0612
7	15	25	531000	2535	CP-OFDM QPSK	67@33	21.68	21.18	0.1312
7	15	25	531000	2535	CP-OFDM QPSK	1@1	21.49	20.99	0.1256
7	15	25	531000	2535	CP-OFDM QPSK	1@131	21.72	21.22	0.1324
7	15	25	535500	2557.5	DFT-s-OFDM QPSK	64@32	23.28	22.78	0.1897
7	15	25	535500	2557.5	DFT-s-OFDM QPSK	1@1	23.21	22.71	0.1866
7	15	25	535500	2557.5	DFT-s-OFDM QPSK	1@131	23.29	22.79	0.1901
7	15	25	535500	2557.5	DFT-s-OFDM 16 QAM	64@32	22.27	21.77	0.1503
7	15	25	535500	2557.5	DFT-s-OFDM 16 QAM	1@1	22.15	21.65	0.1462
7	15	25	535500	2557.5	DFT-s-OFDM 16 QAM	1@131	22.25	21.75	0.1496
7	15	25	535500	2557.5	DFT-s-OFDM 64 QAM	64@32	20.76	20.26	0.1062
7	15	25	535500	2557.5	DFT-s-OFDM 64 QAM	1@1	20.86	20.36	0.1086
7	15	25	535500	2557.5	DFT-s-OFDM 64 QAM	1@131	20.92	20.42	0.1102
7	15	25	535500	2557.5	DFT-s-OFDM 256 QAM	64@32	18.36	17.86	0.0611
7	15	25	535500	2557.5	DFT-s-OFDM 256 QAM	1@1	18.45	17.95	0.0624
7	15	25	535500	2557.5	DFT-s-OFDM 256 QAM	1@131	18.47	17.97	0.0627
7	15	25	535500	2557.5	CP-OFDM QPSK	67@33	21.76	21.26	0.1337
7	15	25	535500	2557.5	CP-OFDM QPSK	1@1	21.66	21.16	0.1306
7	15	25	535500	2557.5	CP-OFDM QPSK	1@131	21.79	21.29	0.1346
7	15	30	527000	2515	DFT-s-OFDM QPSK	80@40	22.87	22.37	0.1726
7	15	30	527000	2515	DFT-s-OFDM QPSK	1@1	23.02	22.52	0.1786
7	15	30	527000	2515	DFT-s-OFDM QPSK	1@158	22.8	22.3	0.1698
7	15	30	527000	2515	DFT-s-OFDM 16 QAM	80@40	21.83	21.33	0.1358
7	15	30	527000	2515	DFT-s-OFDM 16 QAM	1@1	22.03	21.53	0.1422
7	15	30	527000	2515	DFT-s-OFDM 16 QAM	1@158	21.83	21.33	0.1358

7	15	30	527000	2515	DFT-s-OFDM 64 QAM	80@40	20.33	19.83	0.0962
7	15	30	527000	2515	DFT-s-OFDM 64 QAM	1@1	20.46	19.96	0.0991
7	15	30	527000	2515	DFT-s-OFDM 64 QAM	1@158	20.3	19.8	0.0955
7	15	30	527000	2515	DFT-s-OFDM 256 QAM	80@40	18.26	17.76	0.0597
7	15	30	527000	2515	DFT-s-OFDM 256 QAM	1@1	18.18	17.68	0.0586
7	15	30	527000	2515	DFT-s-OFDM 256 QAM	1@158	18.02	17.52	0.0565
7	15	30	527000	2515	CP-OFDM QPSK	80@40	21.33	20.83	0.1211
7	15	30	527000	2515	CP-OFDM QPSK	1@1	21.59	21.09	0.1285
7	15	30	527000	2515	CP-OFDM QPSK	1@158	21.2	20.7	0.1175
7	15	30	531000	2535	DFT-s-OFDM QPSK	80@40	22.77	22.27	0.1687
7	15	30	531000	2535	DFT-s-OFDM QPSK	1@1	22.88	22.38	0.1730
7	15	30	531000	2535	DFT-s-OFDM QPSK	1@158	22.86	22.36	0.1722
7	15	30	531000	2535	DFT-s-OFDM 16 QAM	80@40	21.73	21.23	0.1327
7	15	30	531000	2535	DFT-s-OFDM 16 QAM	1@1	22	21.5	0.1413
7	15	30	531000	2535	DFT-s-OFDM 16 QAM	1@158	21.99	21.49	0.1409
7	15	30	531000	2535	DFT-s-OFDM 64 QAM	80@40	20.27	19.77	0.0948
7	15	30	531000	2535	DFT-s-OFDM 64 QAM	1@1	20.37	19.87	0.0971
7	15	30	531000	2535	DFT-s-OFDM 64 QAM	1@158	20.37	19.87	0.0971
7	15	30	531000	2535	DFT-s-OFDM 256 QAM	80@40	18.19	17.69	0.0587
7	15	30	531000	2535	DFT-s-OFDM 256 QAM	1@1	18.13	17.63	0.0579
7	15	30	531000	2535	DFT-s-OFDM 256 QAM	1@158	18.09	17.59	0.0574
7	15	30	531000	2535	CP-OFDM QPSK	80@40	21.29	20.79	0.1199
7	15	30	531000	2535	CP-OFDM QPSK	1@1	21.4	20.9	0.1230
7	15	30	531000	2535	CP-OFDM QPSK	1@158	21.17	20.67	0.1167
7	15	30	535000	2555	DFT-s-OFDM QPSK	80@40	22.85	22.35	0.1718
7	15	30	535000	2555	DFT-s-OFDM QPSK	1@1	22.77	22.27	0.1687
7	15	30	535000	2555	DFT-s-OFDM QPSK	1@158	23	22.5	0.1778
7	15	30	535000	2555	DFT-s-OFDM 16 QAM	80@40	21.81	21.31	0.1352
7	15	30	535000	2555	DFT-s-OFDM 16 QAM	1@1	21.89	21.39	0.1377
7	15	30	535000	2555	DFT-s-OFDM 16 QAM	1@158	22.05	21.55	0.1429
7	15	30	535000	2555	DFT-s-OFDM 64 QAM	80@40	20.34	19.84	0.0964
7	15	30	535000	2555	DFT-s-OFDM 64 QAM	1@1	20.36	19.86	0.0968
7	15	30	535000	2555	DFT-s-OFDM 64 QAM	1@158	20.52	20.02	0.1005
7	15	30	535000	2555	DFT-s-OFDM 256 QAM	80@40	18.33	17.83	0.0607

7	15	30	535000	2555	DFT-s-OFDM 256 QAM	1@1	18	17.5	0.0562
7	15	30	535000	2555	DFT-s-OFDM 256 QAM	1@158	18.2	17.7	0.0589
7	15	30	535000	2555	CP-OFDM QPSK	80@40	21.34	20.84	0.1213
7	15	30	535000	2555	CP-OFDM QPSK	1@1	21.42	20.92	0.1236
7	15	30	535000	2555	CP-OFDM QPSK	1@158	21.31	20.81	0.1205
7	15	40	528000	2520	DFT-s-OFDM QPSK	108@54	23.61	23.11	0.2046
7	15	40	528000	2520	DFT-s-OFDM QPSK	1@1	23.6	23.1	0.2042
7	15	40	528000	2520	DFT-s-OFDM QPSK	1@214	23.72	23.22	0.2099
7	15	40	528000	2520	DFT-s-OFDM 16 QAM	108@54	22.54	22.04	0.1600
7	15	40	528000	2520	DFT-s-OFDM 16 QAM	1@1	22.54	22.04	0.1600
7	15	40	528000	2520	DFT-s-OFDM 16 QAM	1@214	22.82	22.32	0.1706
7	15	40	528000	2520	DFT-s-OFDM 64 QAM	108@54	20.99	20.49	0.1119
7	15	40	528000	2520	DFT-s-OFDM 64 QAM	1@1	21.19	20.69	0.1172
7	15	40	528000	2520	DFT-s-OFDM 64 QAM	1@214	21.37	20.87	0.1222
7	15	40	528000	2520	DFT-s-OFDM 256 QAM	108@54	19.09	18.59	0.0723
7	15	40	528000	2520	DFT-s-OFDM 256 QAM	1@1	18.54	18.04	0.0637
7	15	40	528000	2520	DFT-s-OFDM 256 QAM	1@214	18.68	18.18	0.0658
7	15	40	528000	2520	CP-OFDM QPSK	108@54	22.11	21.61	0.1449
7	15	40	528000	2520	CP-OFDM QPSK	1@1	22.12	21.62	0.1452
7	15	40	528000	2520	CP-OFDM QPSK	1@214	22.16	21.66	0.1466
7	15	40	531000	2535	DFT-s-OFDM QPSK	108@54	23.67	23.17	0.2075
7	15	40	531000	2535	DFT-s-OFDM QPSK	1@1	23.55	23.05	0.2018
7	15	40	531000	2535	DFT-s-OFDM QPSK	1@214	23.7	23.2	0.2089
7	15	40	531000	2535	DFT-s-OFDM 16 QAM	108@54	22.59	22.09	0.1618
7	15	40	531000	2535	DFT-s-OFDM 16 QAM	1@1	22.48	21.98	0.1578
7	15	40	531000	2535	DFT-s-OFDM 16 QAM	1@214	22.71	22.21	0.1663
7	15	40	531000	2535	DFT-s-OFDM 64 QAM	108@54	21.05	20.55	0.1135
7	15	40	531000	2535	DFT-s-OFDM 64 QAM	1@1	21.11	20.61	0.1151
7	15	40	531000	2535	DFT-s-OFDM 64 QAM	1@214	21.34	20.84	0.1213
7	15	40	531000	2535	DFT-s-OFDM 256 QAM	108@54	18.35	17.85	0.0610
7	15	40	531000	2535	DFT-s-OFDM 256 QAM	1@1	18.54	18.04	0.0637
7	15	40	531000	2535	DFT-s-OFDM 256 QAM	1@214	18.72	18.22	0.0664
7	15	40	531000	2535	CP-OFDM QPSK	108@54	22.16	21.66	0.1466
7	15	40	531000	2535	CP-OFDM QPSK	1@1	22.03	21.53	0.1422

7	15	40	531000	2535	CP-OFDM QPSK	1@214	22.19	21.69	0.1476
7	15	40	534000	2550	DFT-s-OFDM QPSK	108@54	23.71	23.21	0.2094
7	15	40	534000	2550	DFT-s-OFDM QPSK	1@1	23.72	23.22	0.2099
7	15	40	534000	2550	DFT-s-OFDM QPSK	1@214	23.84	23.34	0.2158
7	15	40	534000	2550	DFT-s-OFDM 16 QAM	108@54	22.78	22.28	0.1690
7	15	40	534000	2550	DFT-s-OFDM 16 QAM	1@1	22.62	22.12	0.1629
7	15	40	534000	2550	DFT-s-OFDM 16 QAM	1@214	22.81	22.31	0.1702
7	15	40	534000	2550	DFT-s-OFDM 64 QAM	108@54	21.2	20.7	0.1175
7	15	40	534000	2550	DFT-s-OFDM 64 QAM	1@1	21.28	20.78	0.1197
7	15	40	534000	2550	DFT-s-OFDM 64 QAM	1@214	21.4	20.9	0.1230
7	15	40	534000	2550	DFT-s-OFDM 256 QAM	108@54	19.21	18.71	0.0743
7	15	40	534000	2550	DFT-s-OFDM 256 QAM	1@1	18.59	18.09	0.0644
7	15	40	534000	2550	DFT-s-OFDM 256 QAM	1@214	18.8	18.3	0.0676
7	15	40	534000	2550	CP-OFDM QPSK	108@54	22.24	21.74	0.1493
7	15	40	534000	2550	CP-OFDM QPSK	1@1	22.21	21.71	0.1483
7	15	40	534000	2550	CP-OFDM QPSK	1@214	22.25	21.75	0.1496
7	15	50	529000	2525	DFT-s-OFDM QPSK	135@67	23.25	22.75	0.1884
7	15	50	529000	2525	DFT-s-OFDM QPSK	1@1	23.1	22.6	0.1820
7	15	50	529000	2525	DFT-s-OFDM QPSK	1@268	23.36	22.86	0.1932
7	15	50	529000	2525	DFT-s-OFDM 16 QAM	135@67	22.24	21.74	0.1493
7	15	50	529000	2525	DFT-s-OFDM 16 QAM	1@1	22.07	21.57	0.1435
7	15	50	529000	2525	DFT-s-OFDM 16 QAM	1@268	22.39	21.89	0.1545
7	15	50	529000	2525	DFT-s-OFDM 64 QAM	135@67	20.7	20.2	0.1047
7	15	50	529000	2525	DFT-s-OFDM 64 QAM	1@1	20.73	20.23	0.1054
7	15	50	529000	2525	DFT-s-OFDM 64 QAM	1@268	21.02	20.52	0.1127
7	15	50	529000	2525	DFT-s-OFDM 256 QAM	135@67	19.21	18.71	0.0743
7	15	50	529000	2525	DFT-s-OFDM 256 QAM	1@1	19.1	18.6	0.0724
7	15	50	529000	2525	DFT-s-OFDM 256 QAM	1@268	19.14	18.64	0.0731
7	15	50	529000	2525	CP-OFDM QPSK	135@67	21.68	21.18	0.1312
7	15	50	529000	2525	CP-OFDM QPSK	1@1	21.69	21.19	0.1315
7	15	50	529000	2525	CP-OFDM QPSK	1@268	21.81	21.31	0.1352
7	15	50	531000	2535	DFT-s-OFDM QPSK	135@67	23.22	22.72	0.1871
7	15	50	531000	2535	DFT-s-OFDM QPSK	1@1	23.11	22.61	0.1824
7	15	50	531000	2535	DFT-s-OFDM QPSK	1@268	23.27	22.77	0.1892

7	15	50	531000	2535	DFT-s-OFDM 16 QAM	135@67	22.21	21.71	0.1483
7	15	50	531000	2535	DFT-s-OFDM 16 QAM	1@1	22.04	21.54	0.1426
7	15	50	531000	2535	DFT-s-OFDM 16 QAM	1@268	22.3	21.8	0.1514
7	15	50	531000	2535	DFT-s-OFDM 64 QAM	135@67	20.71	20.21	0.1050
7	15	50	531000	2535	DFT-s-OFDM 64 QAM	1@1	20.71	20.21	0.1050
7	15	50	531000	2535	DFT-s-OFDM 64 QAM	1@268	20.94	20.44	0.1107
7	15	50	531000	2535	DFT-s-OFDM 256 QAM	135@67	19.25	18.75	0.0750
7	15	50	531000	2535	DFT-s-OFDM 256 QAM	1@1	19.22	18.72	0.0745
7	15	50	531000	2535	DFT-s-OFDM 256 QAM	1@268	18.93	18.43	0.0697
7	15	50	531000	2535	CP-OFDM QPSK	135@67	21.79	21.29	0.1346
7	15	50	531000	2535	CP-OFDM QPSK	1@1	21.68	21.18	0.1312
7	15	50	531000	2535	CP-OFDM QPSK	1@268	21.84	21.34	0.1361
7	15	50	533000	2545	DFT-s-OFDM QPSK	135@67	23.25	22.75	0.1884
7	15	50	533000	2545	DFT-s-OFDM QPSK	1@1	23.21	22.71	0.1866
7	15	50	533000	2545	DFT-s-OFDM QPSK	1@268	23.42	22.92	0.1959
7	15	50	533000	2545	DFT-s-OFDM 16 QAM	135@67	22.25	21.75	0.1496
7	15	50	533000	2545	DFT-s-OFDM 16 QAM	1@1	22.1	21.6	0.1445
7	15	50	533000	2545	DFT-s-OFDM 16 QAM	1@268	22.43	21.93	0.1560
7	15	50	533000	2545	DFT-s-OFDM 64 QAM	135@67	20.72	20.22	0.1052
7	15	50	533000	2545	DFT-s-OFDM 64 QAM	1@1	20.83	20.33	0.1079
7	15	50	533000	2545	DFT-s-OFDM 64 QAM	1@268	21.05	20.55	0.1135
7	15	50	533000	2545	DFT-s-OFDM 256 QAM	135@67	19.22	18.72	0.0745
7	15	50	533000	2545	DFT-s-OFDM 256 QAM	1@1	19.14	18.64	0.0731
7	15	50	533000	2545	DFT-s-OFDM 256 QAM	1@268	18.91	18.41	0.0693
7	15	50	533000	2545	CP-OFDM QPSK	135@67	21.8	21.3	0.1349
7	15	50	533000	2545	CP-OFDM QPSK	1@1	21.74	21.24	0.1330
7	15	50	533000	2545	CP-OFDM QPSK	1@268	21.9	21.4	0.1380

## Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	-0.00469	<b>PASS</b>	NV
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	-0.00624	<b>PASS</b>	LV
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	-0.0072	<b>PASS</b>	HV
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	-0.00664	<b>PASS</b>	-30°C
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	-0.00171	<b>PASS</b>	-20°C
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	-0.00321	<b>PASS</b>	-10°C
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	-0.00619	<b>PASS</b>	0°C
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	-0.00648	<b>PASS</b>	10°C
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	-0.00313	<b>PASS</b>	20°C
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	-0.00315	<b>PASS</b>	30°C
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	-0.00268	<b>PASS</b>	40°C
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	-0.00658	<b>PASS</b>	50°C

## Peak to Average Ratio

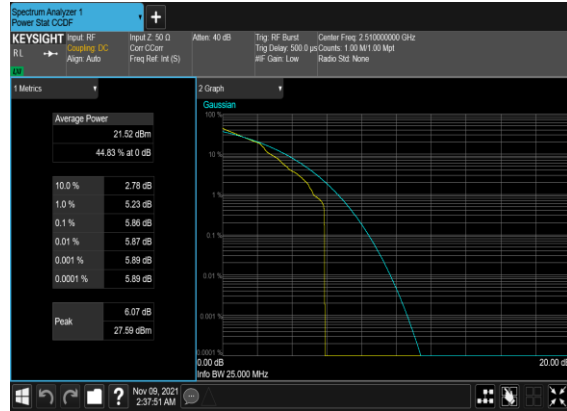
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
7	15	20	526000	2510.0	DFT-s-OFDM QPSK	100@0	5.7	13	PASS
7	15	20	526000	2510.0	DFT-s-OFDM QPSK	1@0	5.86	13	PASS
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	5.81	13	PASS
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	1@0	6.11	13	PASS
7	15	20	536000	2560.0	DFT-s-OFDM QPSK	100@0	5.89	13	PASS
7	15	20	536000	2560.0	DFT-s-OFDM QPSK	1@0	6.45	13	PASS



N7(20M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Low\_CH



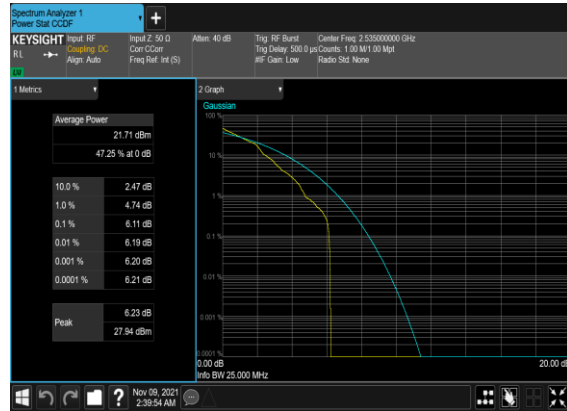
N7(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



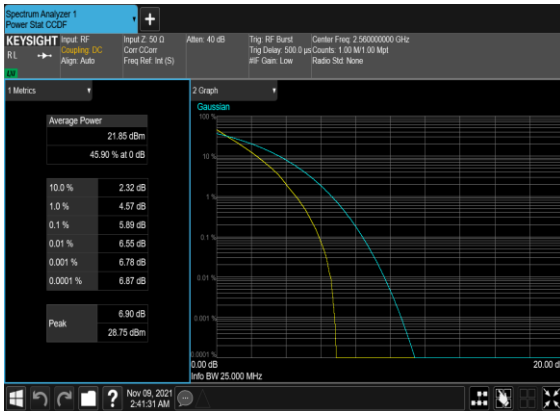
N7(20M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



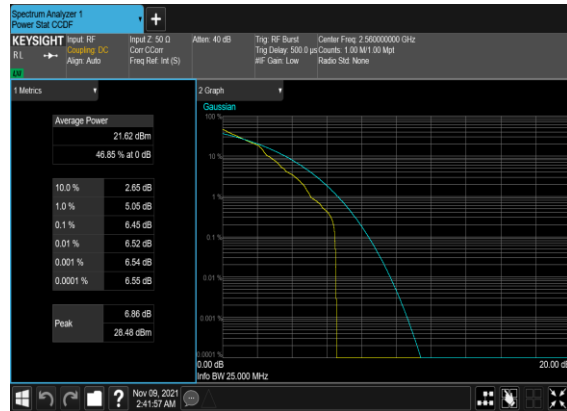
N7(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



N7(20M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_High\_CH



N7(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH

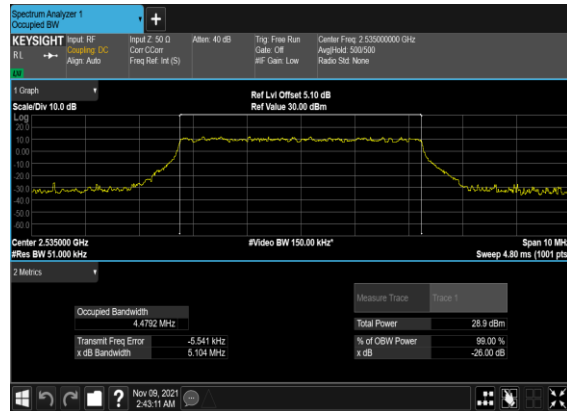


## Occupied Bandwidth

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB OBW (MHz)
7	15	5	531000	2535.0	DFT-s-OFDM QPSK	25@0	4.4792	5.104
7	15	5	531000	2535.0	CP-OFDM QPSK	25@0	4.4723	5.059
7	15	5	531000	2535.0	CP-OFDM 16 QAM	25@0	4.4994	5.115
7	15	5	531000	2535.0	CP-OFDM 64 QAM	25@0	4.4661	5.044
7	15	5	531000	2535.0	CP-OFDM 256 QAM	25@0	4.4849	5.054
7	15	10	531000	2535.0	DFT-s-OFDM QPSK	50@0	8.9314	9.693
7	15	10	531000	2535.0	CP-OFDM QPSK	52@0	9.2887	10.13
7	15	10	531000	2535.0	CP-OFDM 16 QAM	52@0	9.2892	10.07
7	15	10	531000	2535.0	CP-OFDM 64 QAM	52@0	9.2604	10.07
7	15	10	531000	2535.0	CP-OFDM 256 QAM	52@0	9.2856	10.05
7	15	15	531000	2535.0	DFT-s-OFDM QPSK	75@0	13.425	14.16
7	15	15	531000	2535.0	CP-OFDM QPSK	79@0	14.102	15.0
7	15	15	531000	2535.0	CP-OFDM 16 QAM	79@0	14.093	14.9
7	15	15	531000	2535.0	CP-OFDM 64 QAM	79@0	14.109	14.93
7	15	15	531000	2535.0	CP-OFDM 256 QAM	79@0	14.092	15.06
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	17.868	18.93
7	15	20	531000	2535.0	CP-OFDM QPSK	106@0	18.926	20.02
7	15	20	531000	2535.0	CP-OFDM 16 QAM	106@0	18.936	19.89
7	15	20	531000	2535.0	CP-OFDM 64 QAM	106@0	18.929	19.84
7	15	20	531000	2535.0	CP-OFDM 256 QAM	106@0	18.962	20.0
7	15	25	531000	2535.0	DFT-s-OFDM QPSK	128@0	22.881	23.97
7	15	25	531000	2535.0	CP-OFDM QPSK	133@0	23.734	24.82
7	15	25	531000	2535.0	CP-OFDM 16 QAM	133@0	23.725	24.9
7	15	25	531000	2535.0	CP-OFDM 64 QAM	133@0	23.788	24.87
7	15	25	531000	2535.0	CP-OFDM 256 QAM	133@0	23.753	24.81

7	15	30	531000	2535.0	DFT-s-OFDM QPSK	160@0	28.554	29.75
7	15	30	531000	2535.0	CP-OFDM QPSK	160@0	28.543	29.75
7	15	30	531000	2535.0	CP-OFDM 16 QAM	160@0	28.575	29.73
7	15	30	531000	2535.0	CP-OFDM 64 QAM	160@0	28.606	29.72
7	15	30	531000	2535.0	CP-OFDM 256 QAM	160@0	28.588	29.72
7	15	40	531000	2535.0	DFT-s-OFDM QPSK	216@0	38.488	40.1
7	15	40	531000	2535.0	CP-OFDM QPSK	216@0	38.566	40.1
7	15	40	531000	2535.0	CP-OFDM 16 QAM	216@0	38.543	40.0
7	15	40	531000	2535.0	CP-OFDM 64 QAM	216@0	38.594	40.04
7	15	40	531000	2535.0	CP-OFDM 256 QAM	216@0	38.593	40.01
7	15	50	531000	2535.0	DFT-s-OFDM QPSK	270@0	48.248	49.92
7	15	50	531000	2535.0	CP-OFDM QPSK	270@0	48.168	49.87
7	15	50	531000	2535.0	CP-OFDM 16 QAM	270@0	48.126	49.88
7	15	50	531000	2535.0	CP-OFDM 64 QAM	270@0	48.163	49.92
7	15	50	531000	2535.0	CP-OFDM 256 QAM	270@0	48.17	49.98

## N7(5M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



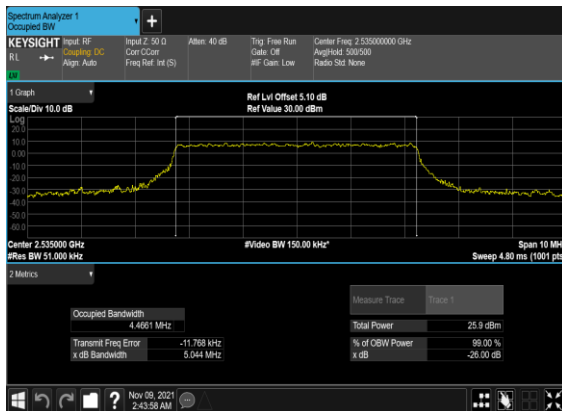
## N7(5M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



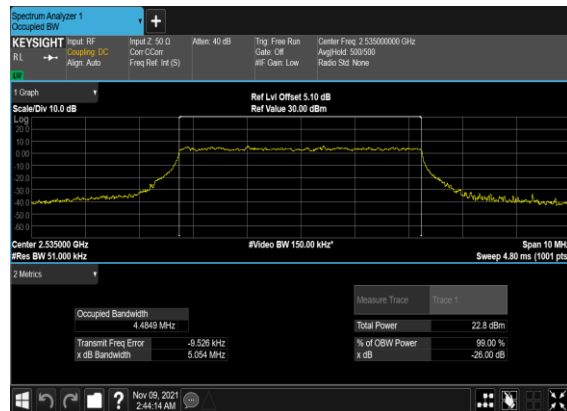
## N7(5M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



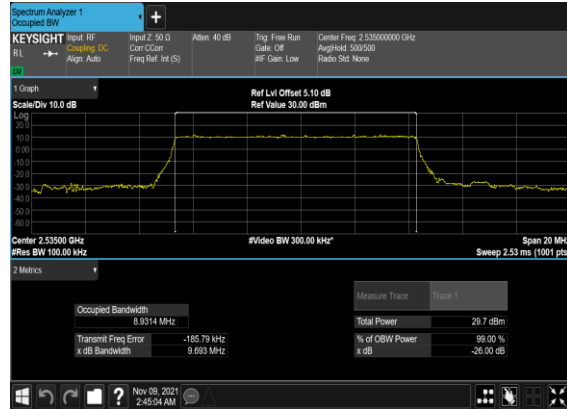
## N7(5M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH



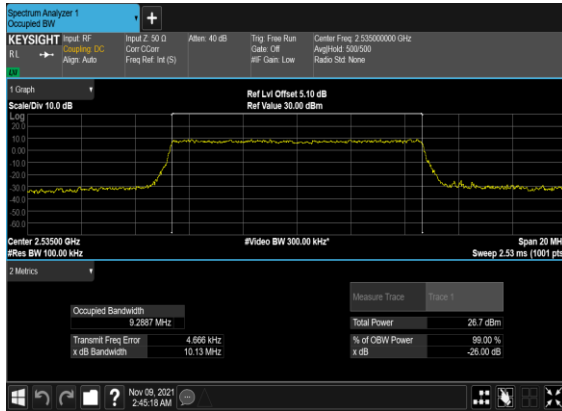
## N7(5M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH



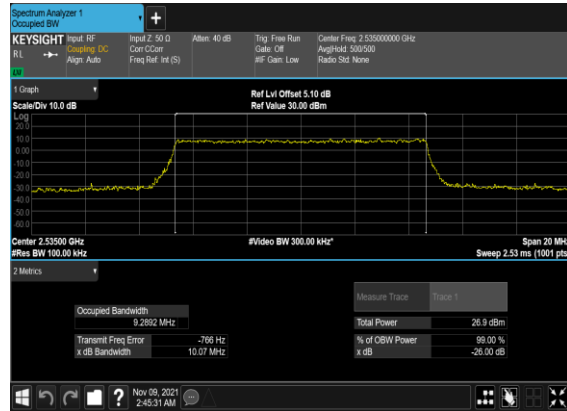
## N7(10M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



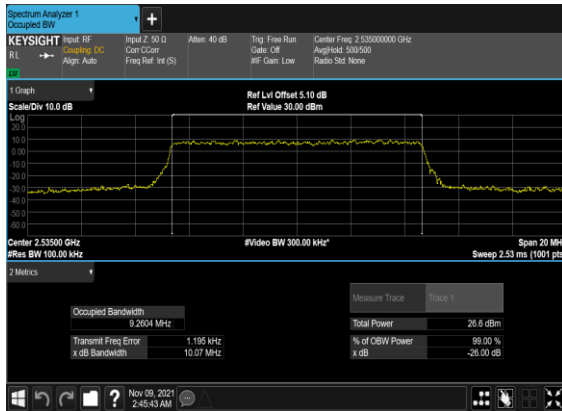
## N7(10M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



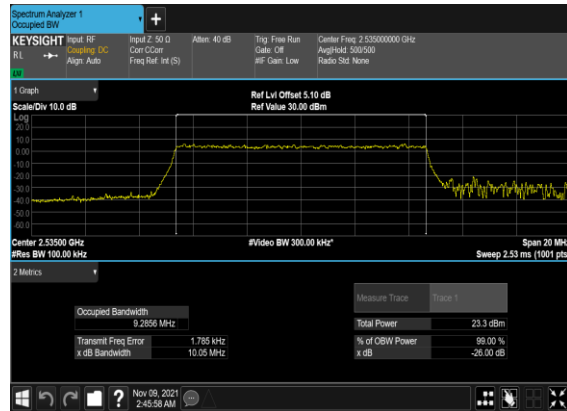
## N7(10M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



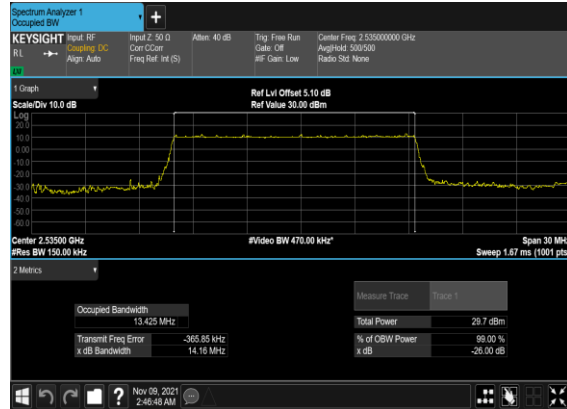
## N7(10M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH



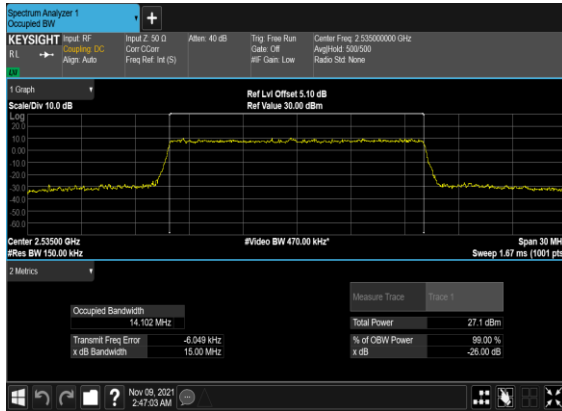
## N7(10M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH



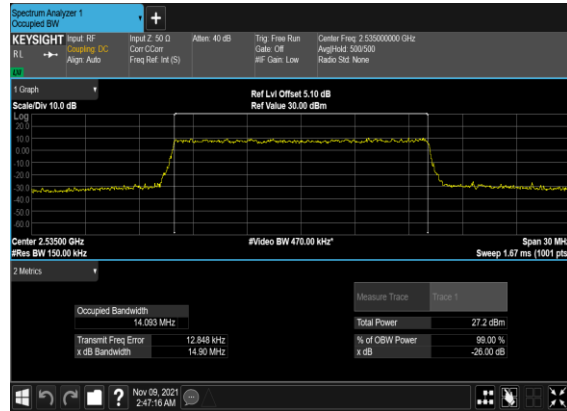
## N7(15M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



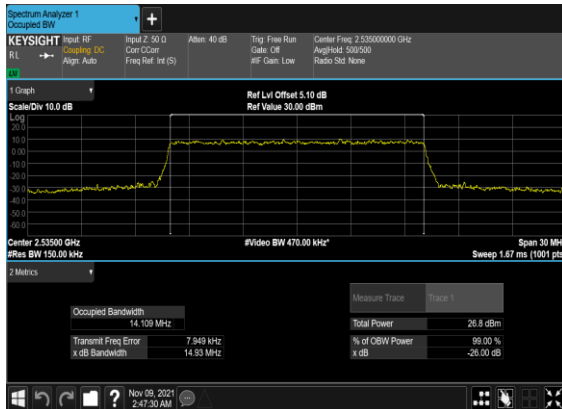
## N7(15M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



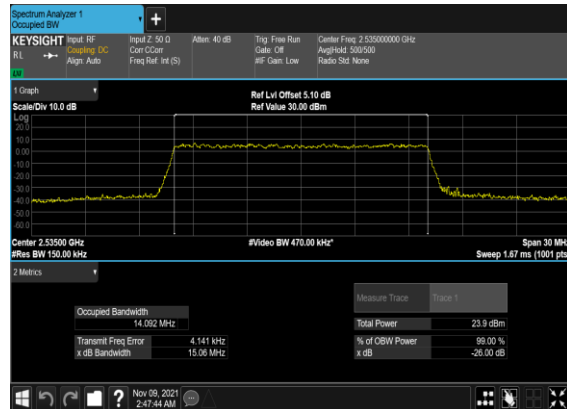
## N7(15M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



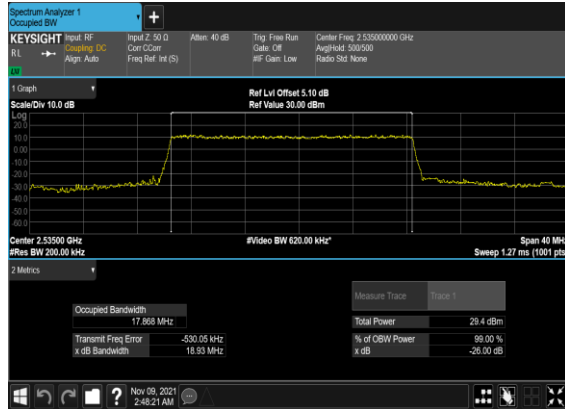
## N7(15M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH



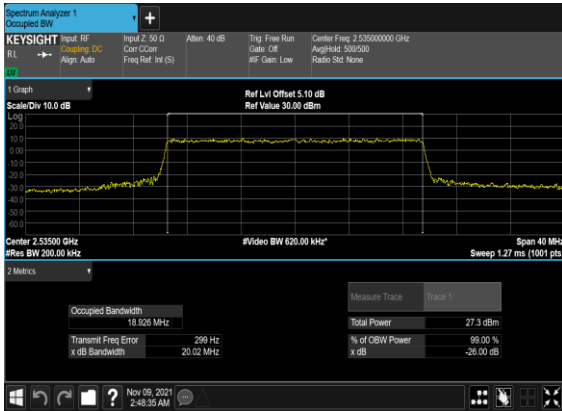
## N7(15M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH



## N7(20M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



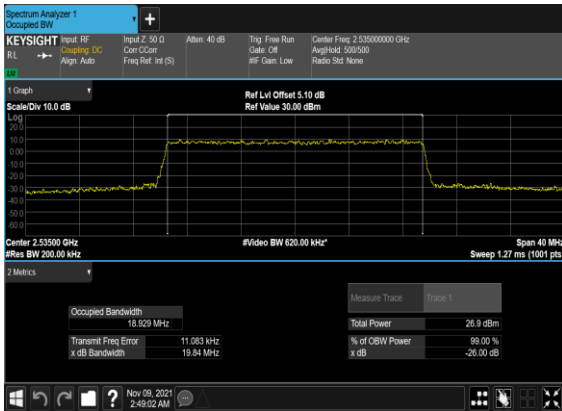
## N7(20M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



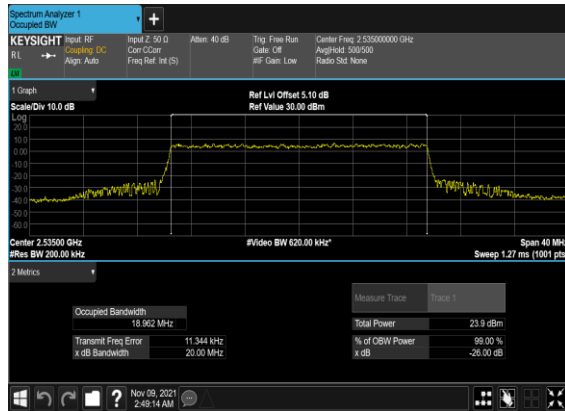
## N7(20M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



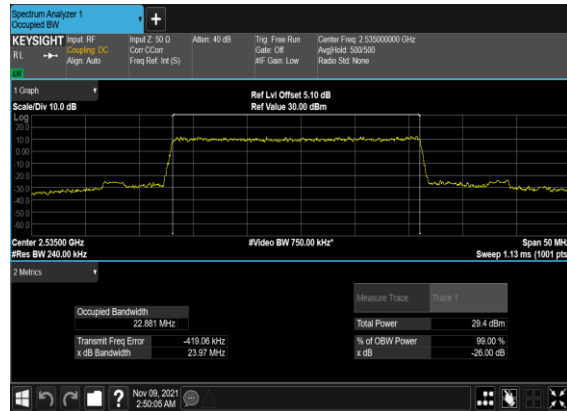
## N7(20M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH



## N7(20M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH



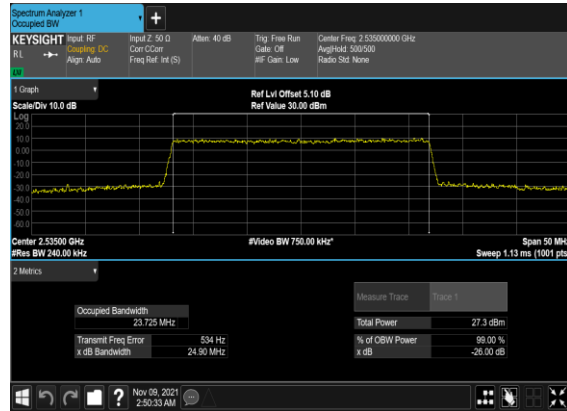
## N7(25M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



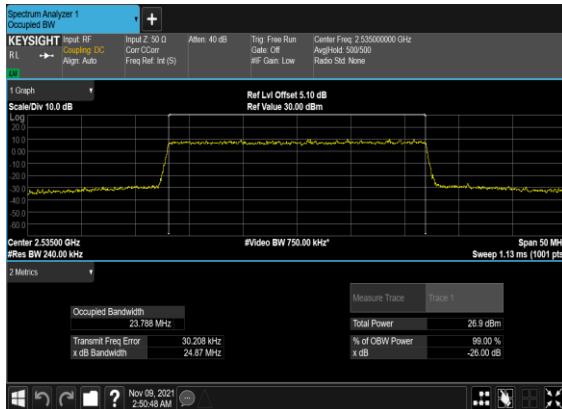
## N7(25M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



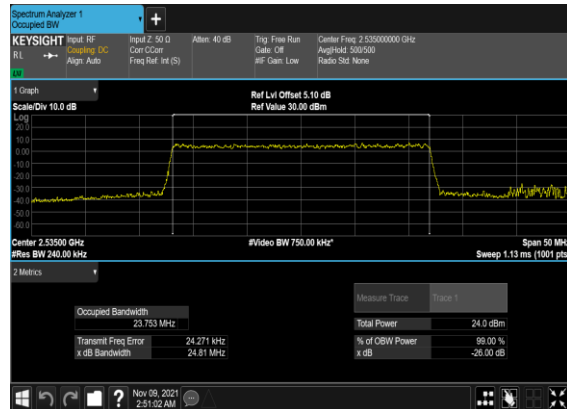
## N7(25M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



## N7(25M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH

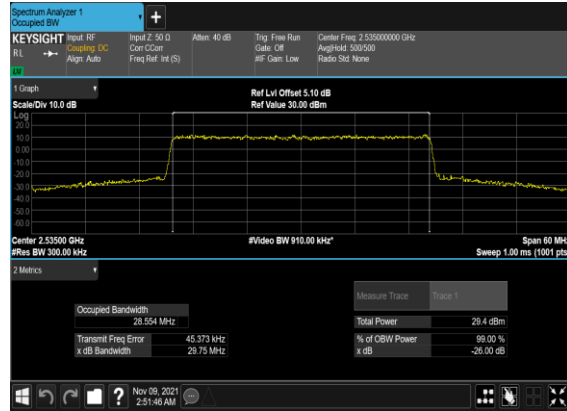


## N7(25M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH

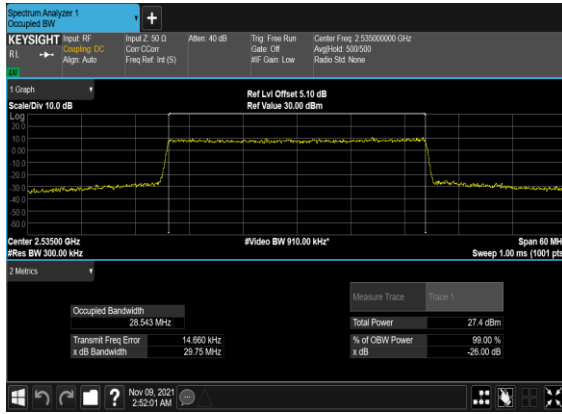




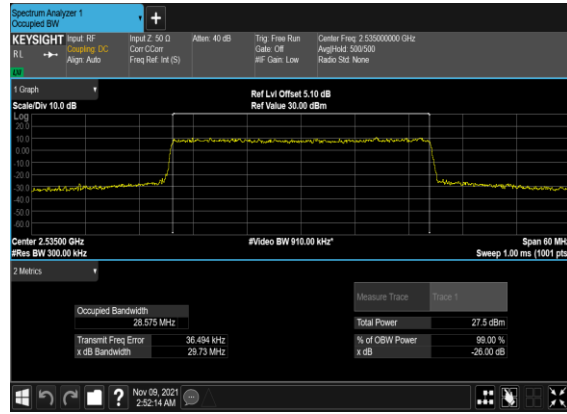
## N7(30M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



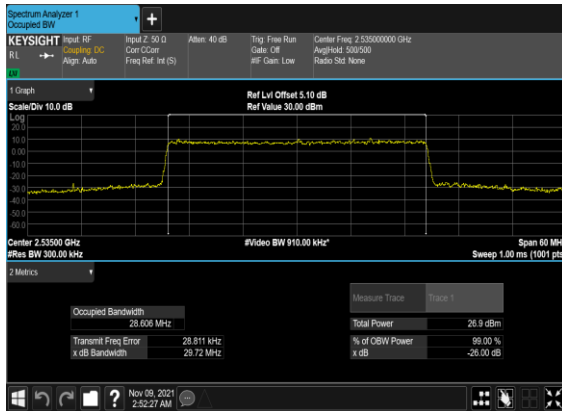
## N7(30M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



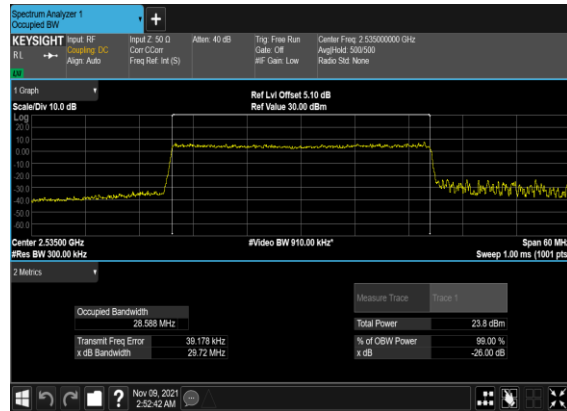
## N7(30M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



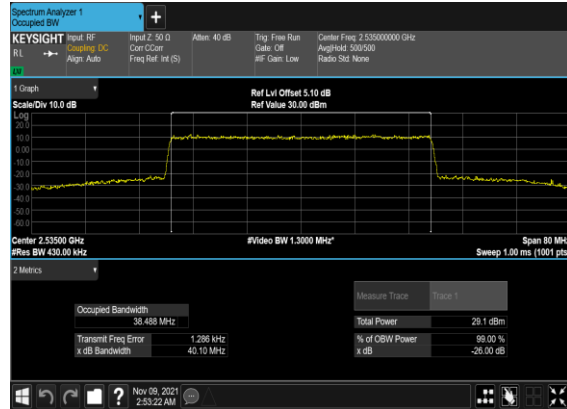
## N7(30M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH



## N7(30M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH



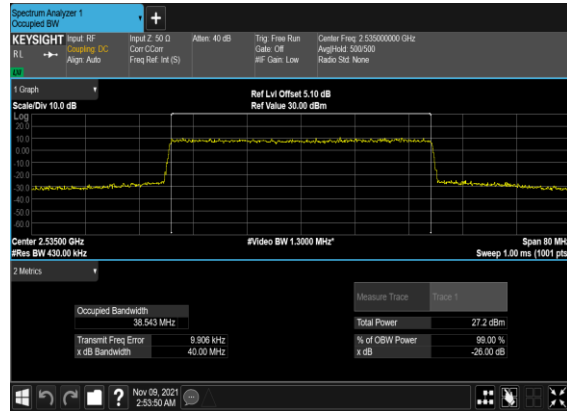
## N7(40M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



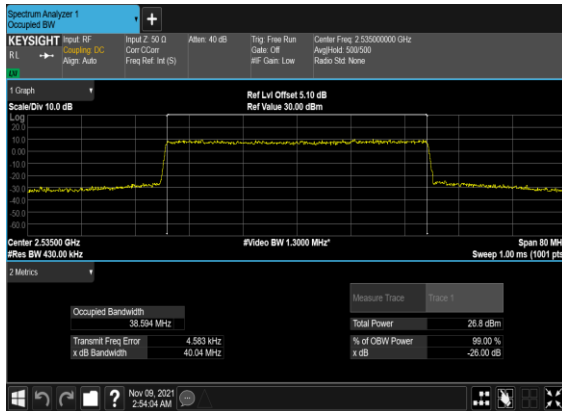
## N7(40M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



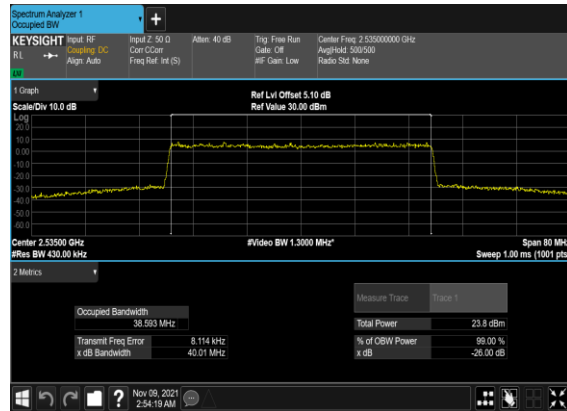
## N7(40M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



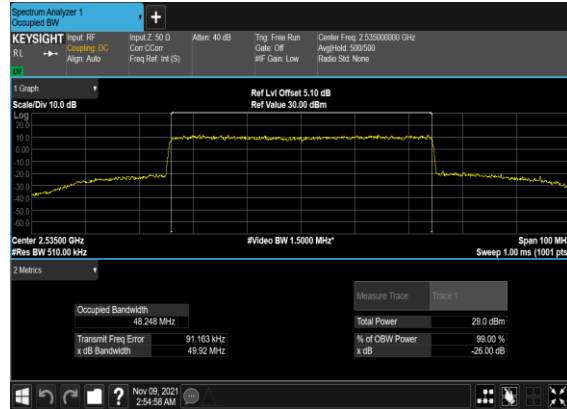
## N7(40M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH



## N7(40M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH



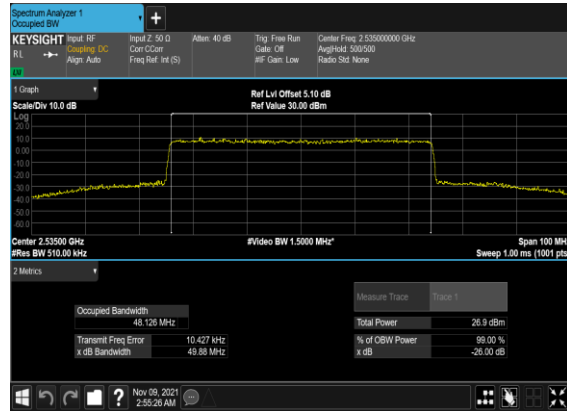
## N7(50M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



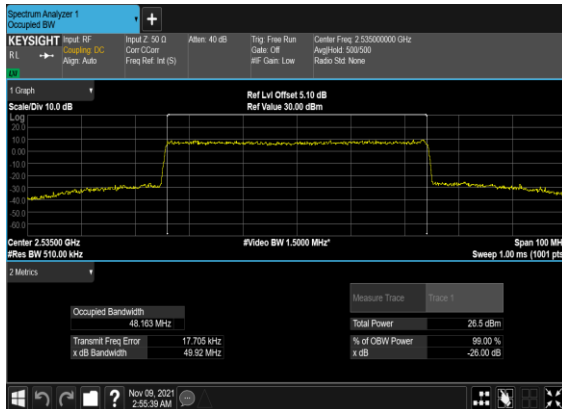
## N7(50M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



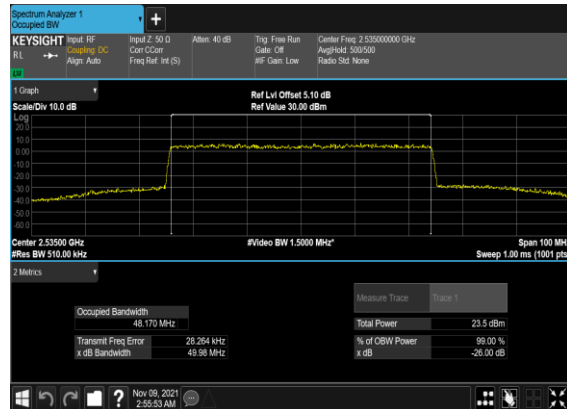
## N7(50M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



## N7(50M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH



## N7(50M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH

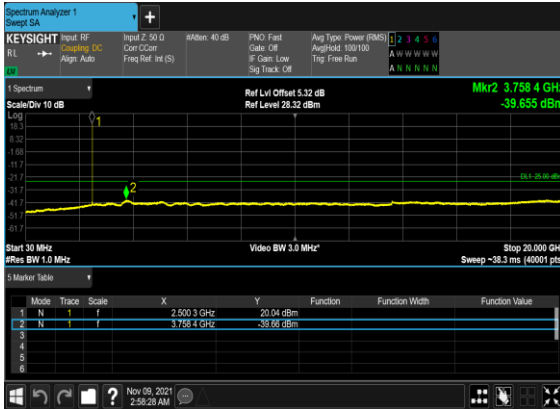


## Conducted Spurious Emissions

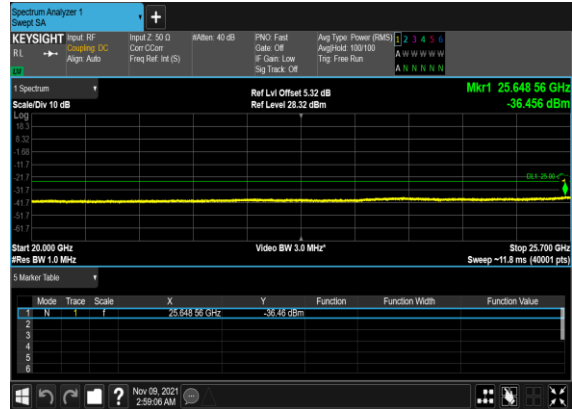
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
7	15	5	524500	2502.5	DFT-s-OFDM QPSK	1@0	see graph	---
7	15	5	524500	2502.5	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	5	524500	2502.5	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	5	531000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	---
7	15	5	531000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	5	531000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	5	537500	2567.5	DFT-s-OFDM QPSK	1@0	see graph	---
7	15	5	537500	2567.5	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	5	537500	2567.5	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	20	526000	2510.0	DFT-s-OFDM QPSK	1@0	see graph	---
7	15	20	526000	2510.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	20	526000	2510.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	---
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	20	536000	2560.0	DFT-s-OFDM QPSK	1@0	see graph	---
7	15	20	536000	2560.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	20	536000	2560.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	50	529000	2525.0	DFT-s-OFDM QPSK	1@0	see graph	---
7	15	50	529000	2525.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	50	529000	2525.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	50	531000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	---

7	15	50	531000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
7	15	50	531000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
7	15	50	533000	2545.0	DFT-s-OFDM QPSK	1@0	see graph	---
7	15	50	533000	2545.0	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
7	15	50	533000	2545.0	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>

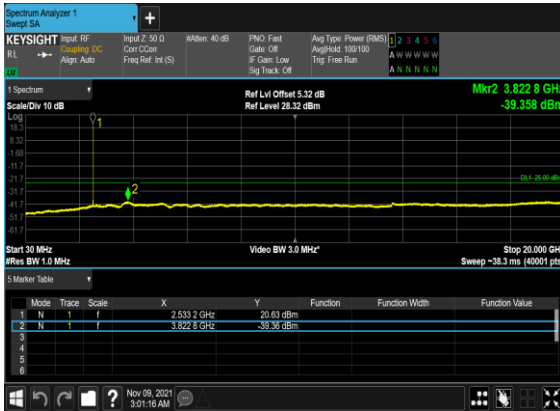
### N7(5M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



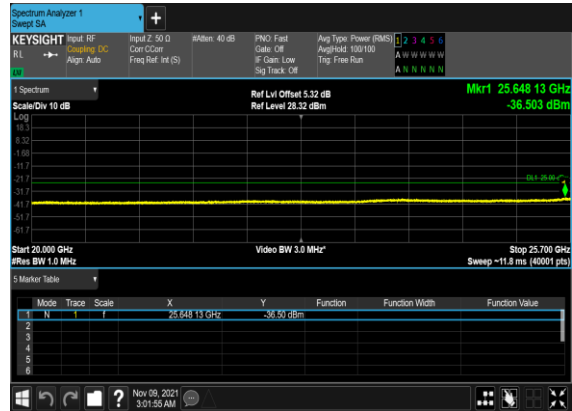
### N7(5M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



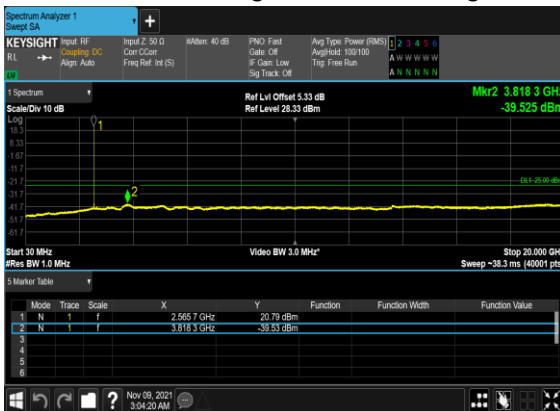
### N7(5M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



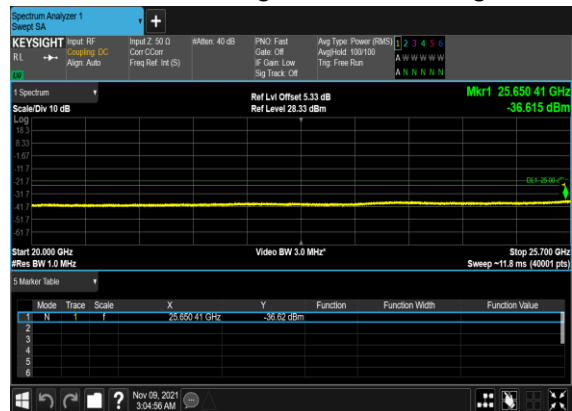
### N7(5M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



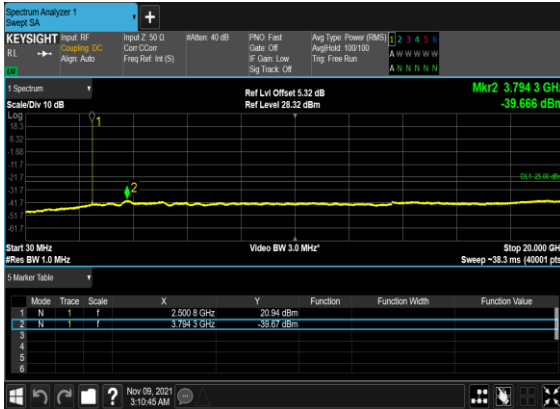
### N7(5M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



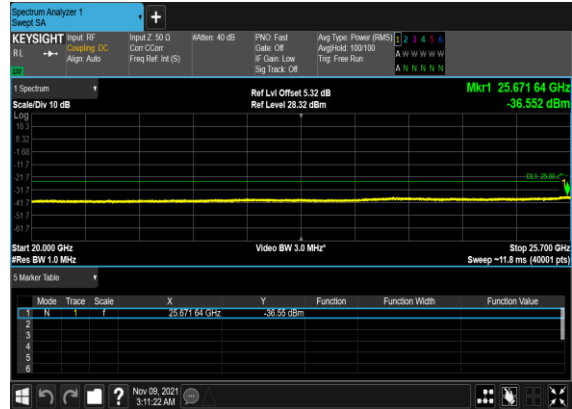
### N7(5M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



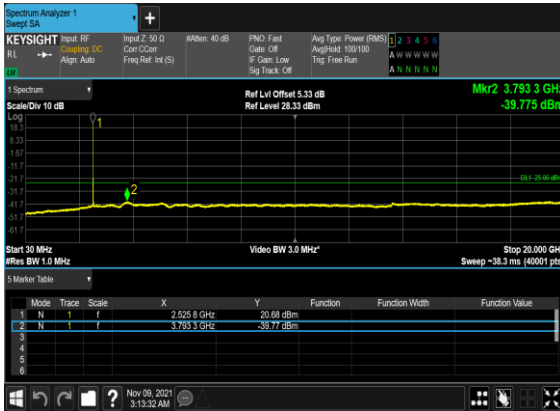
### N7(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



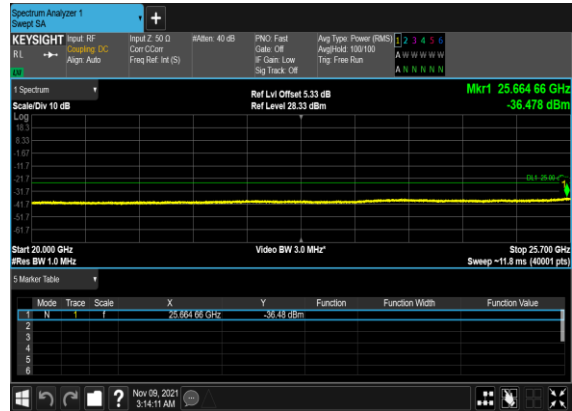
### N7(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



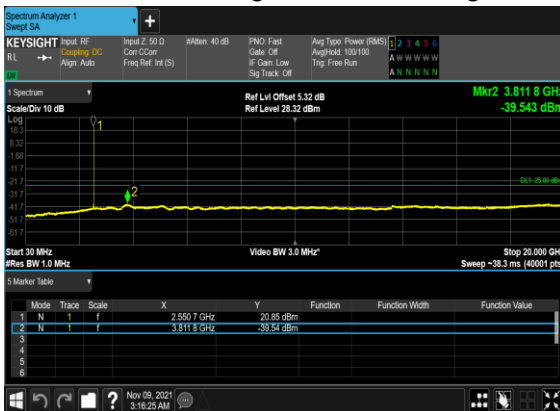
### N7(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



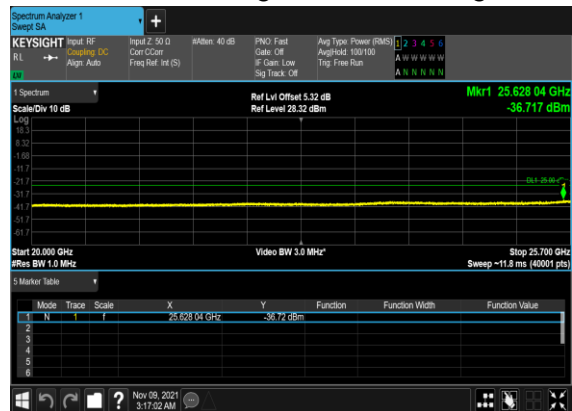
### N7(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



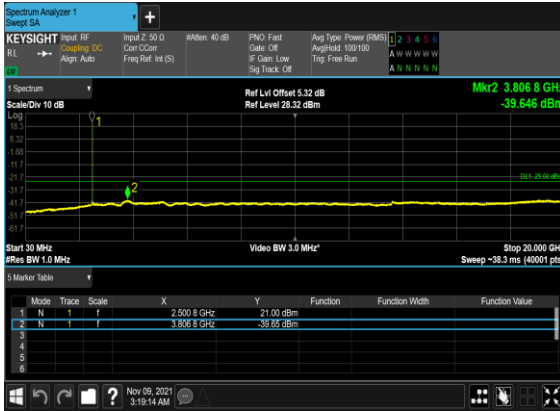
### N7(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



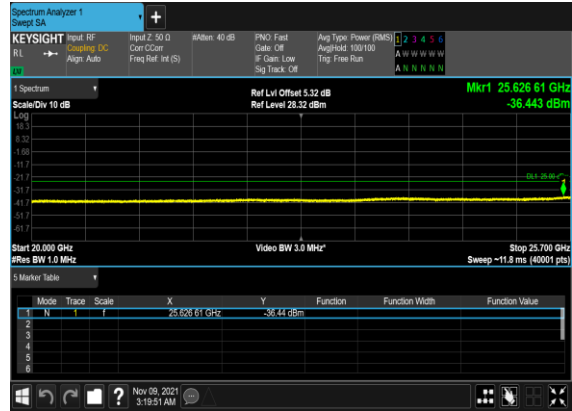
### N7(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



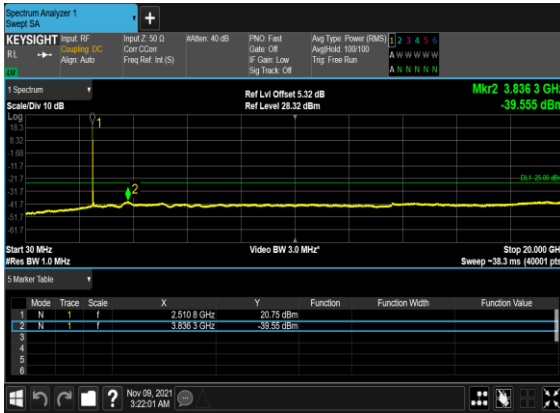
### N7(50M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



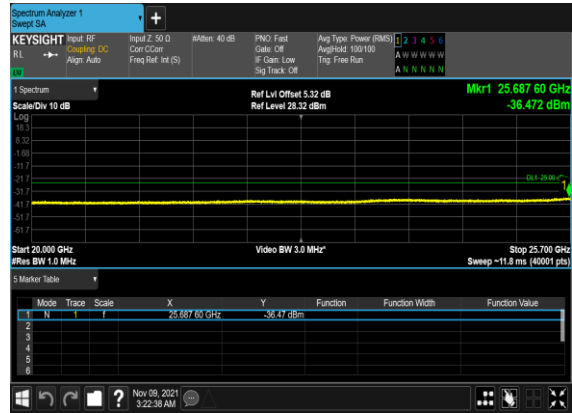
### N7(50M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



### N7(50M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



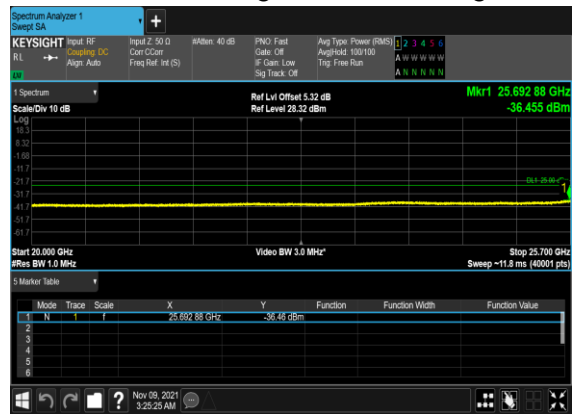
### N7(50M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



### N7(50M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



### N7(50M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH

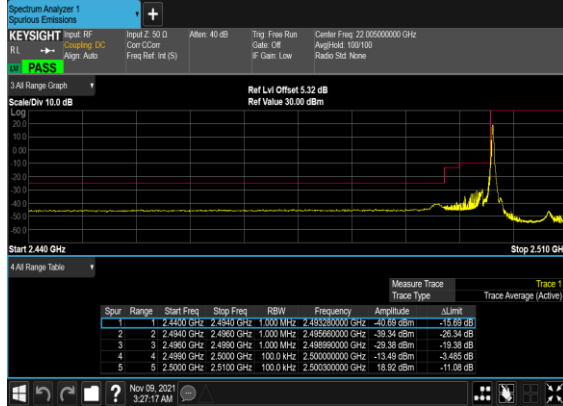




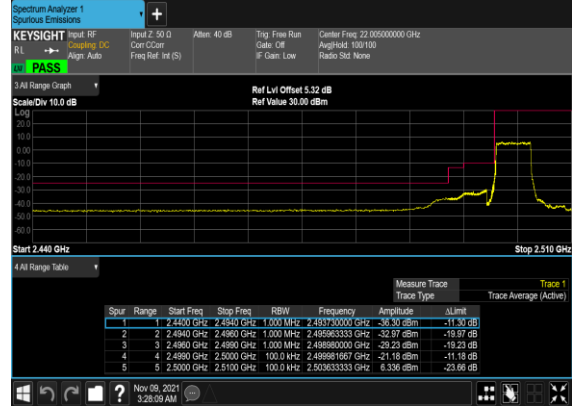
## Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
7	15	5	524500	2502.5	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
7	15	5	524500	2502.5	DFT-s-OFDM QPSK	25@0	see graph	<b>PASS</b>
7	15	5	537500	2567.5	DFT-s-OFDM QPSK	1@24	see graph	<b>PASS</b>
7	15	5	537500	2567.5	DFT-s-OFDM QPSK	25@0	see graph	<b>PASS</b>
7	15	20	526000	2510.0	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
7	15	20	526000	2510.0	DFT-s-OFDM QPSK	100@0	see graph	<b>PASS</b>
7	15	20	536000	2560.0	DFT-s-OFDM QPSK	1@105	see graph	<b>PASS</b>
7	15	20	536000	2560.0	DFT-s-OFDM QPSK	100@0	see graph	<b>PASS</b>
7	15	50	529000	2525.0	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
7	15	50	529000	2525.0	DFT-s-OFDM QPSK	270@0	see graph	<b>PASS</b>
7	15	50	533000	2545.0	DFT-s-OFDM QPSK	1@269	see graph	<b>PASS</b>
7	15	50	533000	2545.0	DFT-s-OFDM QPSK	270@0	see graph	<b>PASS</b>

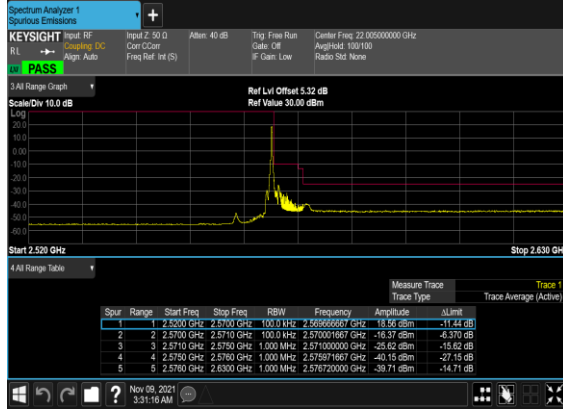
N7(5M)\_DFT-s-  
OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



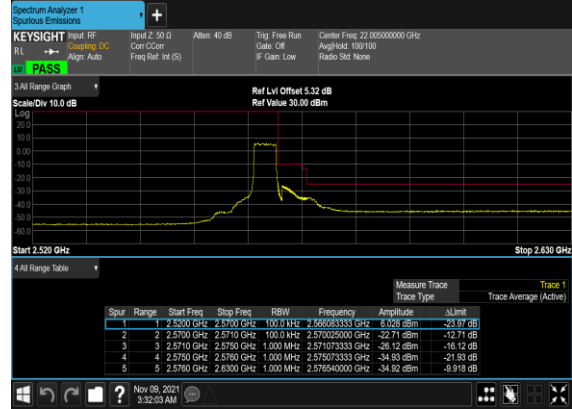
N7(5M)\_DFT-s-  
OFDM\_QPSK\_Outer\_Full\_Low\_CH



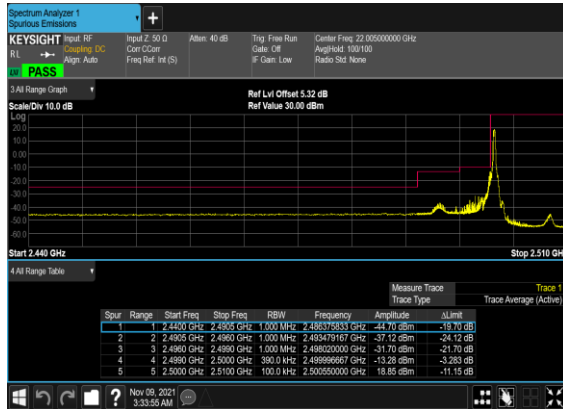
N7(5M)\_DFT-s-  
OFDM\_QPSK\_Edge\_1RB\_Right\_High\_CH



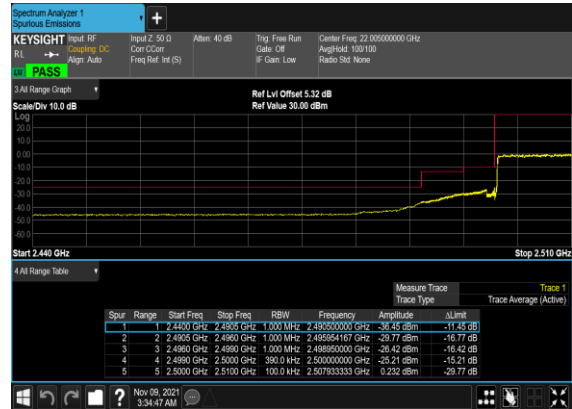
N7(5M)\_DFT-s-  
OFDM\_QPSK\_Outer\_Full\_High\_CH



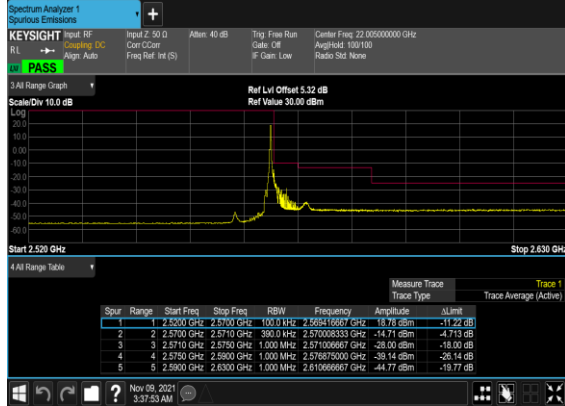
N7(20M)\_DFT-s-  
OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



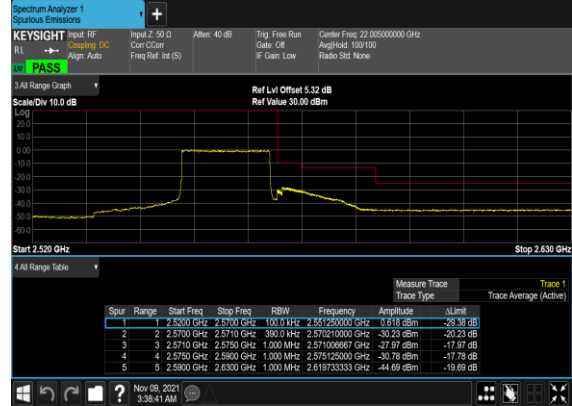
N7(20M)\_DFT-s-  
OFDM\_QPSK\_Outer\_Full\_Low\_CH



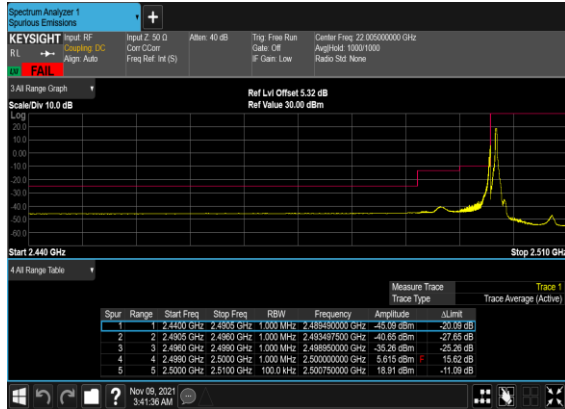
N7(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Right\_High\_CH



N7(20M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_High\_CH



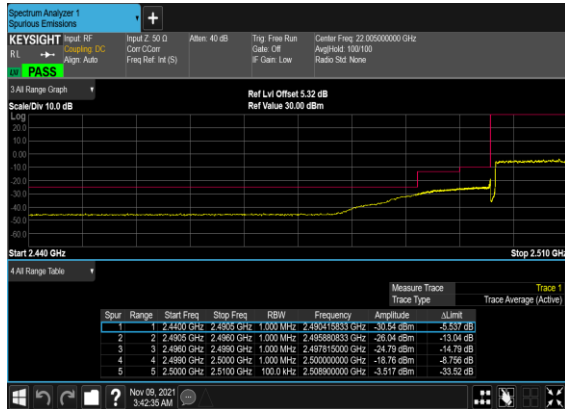
N7(50M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



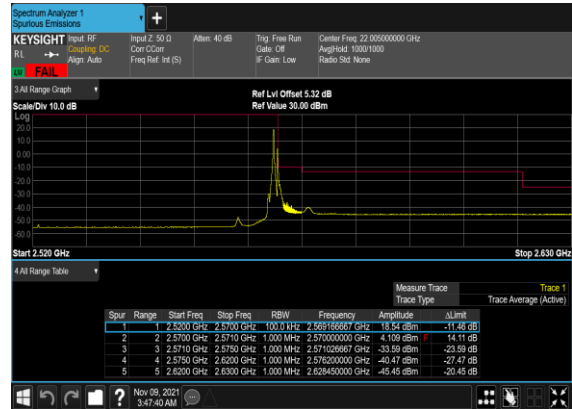
N7(50M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH\_CHP\_PASS



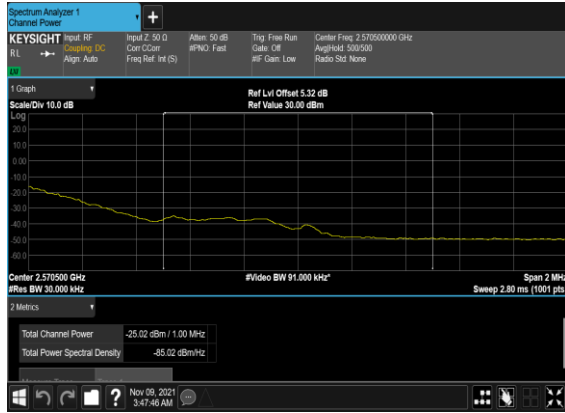
N7(50M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Low\_CH



N7(50M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Right\_High\_CH



N7(50M)\_DFT-s-  
OFDM\_QPSK\_Edge\_1RB\_Right\_High\_CH\_Chp  
\_PASS



N7(50M)\_DFT-s-  
OFDM\_QPSK\_Outer\_Full\_High\_CH



# FR1 N38(ANT4) SA

## Conducted Power and EIRP

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
38	30	20	516000	2580	DFT-s-OFDM QPSK	25@12	23.03	22.53	0.1791
38	30	20	516000	2580	DFT-s-OFDM QPSK	1@1	23.02	22.52	0.1786
38	30	20	516000	2580	DFT-s-OFDM QPSK	1@49	23.06	22.56	0.1803
38	30	20	516000	2580	DFT-s-OFDM 16 QAM	25@12	22.05	21.55	0.1429
38	30	20	516000	2580	DFT-s-OFDM 16 QAM	1@1	22.14	21.64	0.1459
38	30	20	516000	2580	DFT-s-OFDM 16 QAM	1@49	21.96	21.46	0.1400
38	30	20	516000	2580	DFT-s-OFDM 64 QAM	25@12	20.53	20.03	0.1007
38	30	20	516000	2580	DFT-s-OFDM 64 QAM	1@1	20.36	19.86	0.0968
38	30	20	516000	2580	DFT-s-OFDM 64 QAM	1@49	20.5	20	0.1000
38	30	20	516000	2580	DFT-s-OFDM 256 QAM	25@12	18.5	18	0.0631
38	30	20	516000	2580	DFT-s-OFDM 256 QAM	1@1	18.3	17.8	0.0603
38	30	20	516000	2580	DFT-s-OFDM 256 QAM	1@49	18.39	17.89	0.0615
38	30	20	516000	2580	CP-OFDM QPSK	25@12	21.51	21.01	0.1262
38	30	20	516000	2580	CP-OFDM QPSK	1@1	21.48	20.98	0.1253
38	30	20	516000	2580	CP-OFDM QPSK	1@49	21.55	21.05	0.1274
38	30	20	519000	2595	DFT-s-OFDM QPSK	25@12	23	22.5	0.1778
38	30	20	519000	2595	DFT-s-OFDM QPSK	1@1	22.97	22.47	0.1766
38	30	20	519000	2595	DFT-s-OFDM QPSK	1@49	23.06	22.56	0.1803
38	30	20	519000	2595	DFT-s-OFDM 16 QAM	25@12	22.07	21.57	0.1435
38	30	20	519000	2595	DFT-s-OFDM 16 QAM	1@1	22.16	21.66	0.1466
38	30	20	519000	2595	DFT-s-OFDM 16 QAM	1@49	21.99	21.49	0.1409
38	30	20	519000	2595	DFT-s-OFDM 64 QAM	25@12	20.49	19.99	0.0998
38	30	20	519000	2595	DFT-s-OFDM 64 QAM	1@1	20.54	20.04	0.1009
38	30	20	519000	2595	DFT-s-OFDM 64 QAM	1@49	20.67	20.17	0.1040
38	30	20	519000	2595	DFT-s-OFDM 256 QAM	25@12	18.5	18	0.0631
38	30	20	519000	2595	DFT-s-OFDM 256 QAM	1@1	18.3	17.8	0.0603
38	30	20	519000	2595	DFT-s-OFDM 256 QAM	1@49	18.38	17.88	0.0614
38	30	20	519000	2595	CP-OFDM QPSK	25@12	21.53	21.03	0.1268
38	30	20	519000	2595	CP-OFDM QPSK	1@1	21.5	21	0.1259

38	30	20	519000	2595	CP-OFDM QPSK	1@49	21.6	21.1	0.1288
38	30	20	522000	2610	DFT-s-OFDM QPSK	25@12	22.95	22.45	0.1758
38	30	20	522000	2610	DFT-s-OFDM QPSK	1@1	22.92	22.42	0.1746
38	30	20	522000	2610	DFT-s-OFDM QPSK	1@49	22.96	22.46	0.1762
38	30	20	522000	2610	DFT-s-OFDM 16 QAM	25@12	22	21.5	0.1413
38	30	20	522000	2610	DFT-s-OFDM 16 QAM	1@1	21.84	21.34	0.1361
38	30	20	522000	2610	DFT-s-OFDM 16 QAM	1@49	21.87	21.37	0.1371
38	30	20	522000	2610	DFT-s-OFDM 64 QAM	25@12	20.47	19.97	0.0993
38	30	20	522000	2610	DFT-s-OFDM 64 QAM	1@1	20.33	19.83	0.0962
38	30	20	522000	2610	DFT-s-OFDM 64 QAM	1@49	20.58	20.08	0.1019
38	30	20	522000	2610	DFT-s-OFDM 256 QAM	25@12	18.47	17.97	0.0627
38	30	20	522000	2610	DFT-s-OFDM 256 QAM	1@1	18.39	17.89	0.0615
38	30	20	522000	2610	DFT-s-OFDM 256 QAM	1@49	18.53	18.03	0.0635
38	30	20	522000	2610	CP-OFDM QPSK	25@12	21.48	20.98	0.1253
38	30	20	522000	2610	CP-OFDM QPSK	1@1	21.43	20.93	0.1239
38	30	20	522000	2610	CP-OFDM QPSK	1@49	21.51	21.01	0.1262
38	30	30	517000	2585	DFT-s-OFDM QPSK	36@18	23.53	23.03	0.2009
38	30	30	517000	2585	DFT-s-OFDM QPSK	1@1	23.56	23.06	0.2023
38	30	30	517000	2585	DFT-s-OFDM QPSK	1@76	23.55	23.05	0.2018
38	30	30	517000	2585	DFT-s-OFDM 16 QAM	36@18	22.54	22.04	0.1600
38	30	30	517000	2585	DFT-s-OFDM 16 QAM	1@1	22.45	21.95	0.1567
38	30	30	517000	2585	DFT-s-OFDM 16 QAM	1@76	22.53	22.03	0.1596
38	30	30	517000	2585	DFT-s-OFDM 64 QAM	36@18	21.05	20.55	0.1135
38	30	30	517000	2585	DFT-s-OFDM 64 QAM	1@1	21.05	20.55	0.1135
38	30	30	517000	2585	DFT-s-OFDM 64 QAM	1@76	21.1	20.6	0.1148
38	30	30	517000	2585	DFT-s-OFDM 256 QAM	36@18	18.94	18.44	0.0698
38	30	30	517000	2585	DFT-s-OFDM 256 QAM	1@1	18.83	18.33	0.0681
38	30	30	517000	2585	DFT-s-OFDM 256 QAM	1@76	18.96	18.46	0.0701
38	30	30	517000	2585	CP-OFDM QPSK	39@19	22.02	21.52	0.1419
38	30	30	517000	2585	CP-OFDM QPSK	1@1	22	21.5	0.1413
38	30	30	517000	2585	CP-OFDM QPSK	1@76	22.23	21.73	0.1489
38	30	30	519000	2595	DFT-s-OFDM QPSK	36@18	23.55	23.05	0.2018
38	30	30	519000	2595	DFT-s-OFDM QPSK	1@1	23.45	22.95	0.1972
38	30	30	519000	2595	DFT-s-OFDM QPSK	1@76	23.58	23.08	0.2032

38	30	30	519000	2595	DFT-s-OFDM 16 QAM	36@18	22.52	22.02	0.1592
38	30	30	519000	2595	DFT-s-OFDM 16 QAM	1@1	22.43	21.93	0.1560
38	30	30	519000	2595	DFT-s-OFDM 16 QAM	1@76	22.53	22.03	0.1596
38	30	30	519000	2595	DFT-s-OFDM 64 QAM	36@18	21.05	20.55	0.1135
38	30	30	519000	2595	DFT-s-OFDM 64 QAM	1@1	20.86	20.36	0.1086
38	30	30	519000	2595	DFT-s-OFDM 64 QAM	1@76	21.16	20.66	0.1164
38	30	30	519000	2595	DFT-s-OFDM 256 QAM	36@18	18.92	18.42	0.0695
38	30	30	519000	2595	DFT-s-OFDM 256 QAM	1@1	19.07	18.57	0.0719
38	30	30	519000	2595	DFT-s-OFDM 256 QAM	1@76	18.96	18.46	0.0701
38	30	30	519000	2595	CP-OFDM QPSK	39@19	22	21.5	0.1413
38	30	30	519000	2595	CP-OFDM QPSK	1@1	22.04	21.54	0.1426
38	30	30	519000	2595	CP-OFDM QPSK	1@76	22.29	21.79	0.1510
38	30	30	521000	2605	DFT-s-OFDM QPSK	36@18	23.48	22.98	0.1986
38	30	30	521000	2605	DFT-s-OFDM QPSK	1@1	23.46	22.96	0.1977
38	30	30	521000	2605	DFT-s-OFDM QPSK	1@76	23.57	23.07	0.2028
38	30	30	521000	2605	DFT-s-OFDM 16 QAM	36@18	22.45	21.95	0.1567
38	30	30	521000	2605	DFT-s-OFDM 16 QAM	1@1	22.38	21.88	0.1542
38	30	30	521000	2605	DFT-s-OFDM 16 QAM	1@76	22.45	21.95	0.1567
38	30	30	521000	2605	DFT-s-OFDM 64 QAM	36@18	20.99	20.49	0.1119
38	30	30	521000	2605	DFT-s-OFDM 64 QAM	1@1	20.94	20.44	0.1107
38	30	30	521000	2605	DFT-s-OFDM 64 QAM	1@76	21.23	20.73	0.1183
38	30	30	521000	2605	DFT-s-OFDM 256 QAM	36@18	18.9	18.4	0.0692
38	30	30	521000	2605	DFT-s-OFDM 256 QAM	1@1	19.02	18.52	0.0711
38	30	30	521000	2605	DFT-s-OFDM 256 QAM	1@76	19.06	18.56	0.0718
38	30	30	521000	2605	CP-OFDM QPSK	39@19	22.01	21.51	0.1416
38	30	30	521000	2605	CP-OFDM QPSK	1@1	22.06	21.56	0.1432
38	30	30	521000	2605	CP-OFDM QPSK	1@76	22.15	21.65	0.1462

# FR1 N41(ANT4) SA

## Conducted Power and EIRP

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 QPSK	25@12	22.89	22.39	0.1734
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	1@1	22.87	22.37	0.1726
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	1@49	22.8	22.3	0.1698
41	30	20	501204	2506.02	DFT-s-OFDM 16 QAM	25@12	21.8	21.3	0.1349
41	30	20	501204	2506.02	DFT-s-OFDM 16 QAM	1@1	22.19	21.69	0.1476
41	30	20	501204	2506.02	DFT-s-OFDM 16 QAM	1@49	22.09	21.59	0.1442
41	30	20	501204	2506.02	DFT-s-OFDM 64 QAM	25@12	20.39	19.89	0.0975
41	30	20	501204	2506.02	DFT-s-OFDM 64 QAM	1@1	20.24	19.74	0.0942
41	30	20	501204	2506.02	DFT-s-OFDM 64 QAM	1@49	20.11	19.61	0.0914
41	30	20	501204	2506.02	DFT-s-OFDM 256 QAM	25@12	18.36	17.86	0.0611
41	30	20	501204	2506.02	DFT-s-OFDM 256 QAM	1@1	18.51	18.01	0.0632
41	30	20	501204	2506.02	DFT-s-OFDM 256 QAM	1@49	18.04	17.54	0.0568
41	30	20	501204	2506.02	CP-OFDM QPSK	25@12	21.42	20.92	0.1236
41	30	20	501204	2506.02	CP-OFDM QPSK	1@1	21.4	20.9	0.1230
41	30	20	501204	2506.02	CP-OFDM QPSK	1@49	21.35	20.85	0.1216
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	25@12	22.86	22.36	0.1722
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	1@1	22.81	22.31	0.1702
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	1@49	22.89	22.39	0.1734
41	30	20	518598	2592.99	DFT-s-OFDM 16 QAM	25@12	21.86	21.36	0.1368
41	30	20	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	22.13	21.63	0.1455
41	30	20	518598	2592.99	DFT-s-OFDM 16 QAM	1@49	22.02	21.52	0.1419
41	30	20	518598	2592.99	DFT-s-OFDM 64 QAM	25@12	20.34	19.84	0.0964
41	30	20	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	20.17	19.67	0.0927
41	30	20	518598	2592.99	DFT-s-OFDM 64 QAM	1@49	20.16	19.66	0.0925
41	30	20	518598	2592.99	DFT-s-OFDM 256 QAM	25@12	18.38	17.88	0.0614
41	30	20	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	18.12	17.62	0.0578
41	30	20	518598	2592.99	DFT-s-OFDM 256 QAM	1@49	18.25	17.75	0.0596
41	30	20	518598	2592.99	CP-OFDM	25@12	21.37	20.87	0.1222



					QPSK				
41	30	20	518598	2592.99	CP-OFDM QPSK	1@1	21.37	20.87	0.1222
41	30	20	518598	2592.99	CP-OFDM QPSK	1@49	21.44	20.94	0.1242
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	25@12	22.62	22.12	0.1629
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	1@1	22.69	22.19	0.1656
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	1@49	22.6	22.1	0.1622
41	30	20	535998	2679.99	DFT-s-OFDM 16 QAM	25@12	21.61	21.11	0.1291
41	30	20	535998	2679.99	DFT-s-OFDM 16 QAM	1@1	21.94	21.44	0.1393
41	30	20	535998	2679.99	DFT-s-OFDM 16 QAM	1@49	21.82	21.32	0.1355
41	30	20	535998	2679.99	DFT-s-OFDM 64 QAM	25@12	19.99	19.49	0.0889
41	30	20	535998	2679.99	DFT-s-OFDM 64 QAM	1@1	20.06	19.56	0.0904
41	30	20	535998	2679.99	DFT-s-OFDM 64 QAM	1@49	20.01	19.51	0.0893
41	30	20	535998	2679.99	DFT-s-OFDM 256 QAM	25@12	18.08	17.58	0.0573
41	30	20	535998	2679.99	DFT-s-OFDM 256 QAM	1@1	17.97	17.47	0.0558
41	30	20	535998	2679.99	DFT-s-OFDM 256 QAM	1@49	18.14	17.64	0.0581
41	30	20	535998	2679.99	CP-OFDM QPSK	25@12	21.15	20.65	0.1161
41	30	20	535998	2679.99	CP-OFDM QPSK	1@1	21.27	20.77	0.1194
41	30	20	535998	2679.99	CP-OFDM QPSK	1@49	21.05	20.55	0.1135
41	30	30	502200	2511	DFT-s-OFDM QPSK	36@18	23.37	22.87	0.1936
41	30	30	502200	2511	DFT-s-OFDM QPSK	1@1	23.38	22.88	0.1941
41	30	30	502200	2511	DFT-s-OFDM QPSK	1@76	23.45	22.95	0.1972
41	30	30	502200	2511	DFT-s-OFDM 16 QAM	36@18	22.36	21.86	0.1535
41	30	30	502200	2511	DFT-s-OFDM 16 QAM	1@1	22.56	22.06	0.1607
41	30	30	502200	2511	DFT-s-OFDM 16 QAM	1@76	22.69	22.19	0.1656
41	30	30	502200	2511	DFT-s-OFDM 64 QAM	36@18	20.91	20.41	0.1099
41	30	30	502200	2511	DFT-s-OFDM 64 QAM	1@1	20.8	20.3	0.1072
41	30	30	502200	2511	DFT-s-OFDM 64 QAM	1@76	20.78	20.28	0.1067
41	30	30	502200	2511	DFT-s-OFDM 256 QAM	36@18	18.81	18.31	0.0678
41	30	30	502200	2511	DFT-s-OFDM 256 QAM	1@1	18.97	18.47	0.0703
41	30	30	502200	2511	DFT-s-OFDM 256 QAM	1@76	19.05	18.55	0.0716
41	30	30	502200	2511	CP-OFDM QPSK	39@19	21.89	21.39	0.1377
41	30	30	502200	2511	CP-OFDM QPSK	1@1	21.88	21.38	0.1374
41	30	30	502200	2511	CP-OFDM QPSK	1@76	21.96	21.46	0.1400
41	30	30	518598	2592.99	DFT-s-OFDM QPSK	36@18	23.49	22.99	0.1991

41	30	30	518598	2592.99	DFT-s-OFDM QPSK	1@1	23.42	22.92	0.1959
41	30	30	518598	2592.99	DFT-s-OFDM QPSK	1@76	23.57	23.07	0.2028
41	30	30	518598	2592.99	DFT-s-OFDM 16 QAM	36@18	22.48	21.98	0.1578
41	30	30	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	22.71	22.21	0.1663
41	30	30	518598	2592.99	DFT-s-OFDM 16 QAM	1@76	22.85	22.35	0.1718
41	30	30	518598	2592.99	DFT-s-OFDM 64 QAM	36@18	21.03	20.53	0.1130
41	30	30	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	20.77	20.27	0.1064
41	30	30	518598	2592.99	DFT-s-OFDM 64 QAM	1@76	20.85	20.35	0.1084
41	30	30	518598	2592.99	DFT-s-OFDM 256 QAM	36@18	18.95	18.45	0.0700
41	30	30	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	19.03	18.53	0.0713
41	30	30	518598	2592.99	DFT-s-OFDM 256 QAM	1@76	18.86	18.36	0.0685
41	30	30	518598	2592.99	CP-OFDM QPSK	39@19	21.97	21.47	0.1403
41	30	30	518598	2592.99	CP-OFDM QPSK	1@1	22	21.5	0.1413
41	30	30	518598	2592.99	CP-OFDM QPSK	1@76	22.01	21.51	0.1416
41	30	30	534996	2674.98	DFT-s-OFDM QPSK	36@18	23.17	22.67	0.1849
41	30	30	534996	2674.98	DFT-s-OFDM QPSK	1@1	23.25	22.75	0.1884
41	30	30	534996	2674.98	DFT-s-OFDM QPSK	1@76	23.31	22.81	0.1910
41	30	30	534996	2674.98	DFT-s-OFDM 16 QAM	36@18	22.2	21.7	0.1479
41	30	30	534996	2674.98	DFT-s-OFDM 16 QAM	1@1	22.54	22.04	0.1600
41	30	30	534996	2674.98	DFT-s-OFDM 16 QAM	1@76	22.51	22.01	0.1589
41	30	30	534996	2674.98	DFT-s-OFDM 64 QAM	36@18	20.73	20.23	0.1054
41	30	30	534996	2674.98	DFT-s-OFDM 64 QAM	1@1	20.56	20.06	0.1014
41	30	30	534996	2674.98	DFT-s-OFDM 64 QAM	1@76	20.62	20.12	0.1028
41	30	30	534996	2674.98	DFT-s-OFDM 256 QAM	36@18	18.7	18.2	0.0661
41	30	30	534996	2674.98	DFT-s-OFDM 256 QAM	1@1	18.58	18.08	0.0643
41	30	30	534996	2674.98	DFT-s-OFDM 256 QAM	1@76	18.58	18.08	0.0643
41	30	30	534996	2674.98	CP-OFDM QPSK	39@19	21.71	21.21	0.1321
41	30	30	534996	2674.98	CP-OFDM QPSK	1@1	21.83	21.33	0.1358
41	30	30	534996	2674.98	CP-OFDM QPSK	1@76	21.71	21.21	0.1321
41	30	40	503202	2516.01	DFT-s-OFDM QPSK	50@25	23.44	22.94	0.1968
41	30	40	503202	2516.01	DFT-s-OFDM QPSK	1@1	23.56	23.06	0.2023
41	30	40	503202	2516.01	DFT-s-OFDM QPSK	1@104	23.54	23.04	0.2014
41	30	40	503202	2516.01	DFT-s-OFDM 16 QAM	50@25	22.46	21.96	0.1570
41	30	40	503202	2516.01	DFT-s-OFDM 16 QAM	1@1	22.6	22.1	0.1622

41	30	40	503202	2516.01	DFT-s-OFDM 16 QAM	1@104	22.62	22.12	0.1629
41	30	40	503202	2516.01	DFT-s-OFDM 64 QAM	50@25	20.84	20.34	0.1081
41	30	40	503202	2516.01	DFT-s-OFDM 64 QAM	1@1	21.09	20.59	0.1146
41	30	40	503202	2516.01	DFT-s-OFDM 64 QAM	1@104	21.07	20.57	0.1140
41	30	40	503202	2516.01	DFT-s-OFDM 256 QAM	50@25	18.89	18.39	0.0690
41	30	40	503202	2516.01	DFT-s-OFDM 256 QAM	1@1	19.14	18.64	0.0731
41	30	40	503202	2516.01	DFT-s-OFDM 256 QAM	1@104	18.78	18.28	0.0673
41	30	40	503202	2516.01	CP-OFDM QPSK	53@26	21.97	21.47	0.1403
41	30	40	503202	2516.01	CP-OFDM QPSK	1@1	21.99	21.49	0.1409
41	30	40	503202	2516.01	CP-OFDM QPSK	1@104	22.07	21.57	0.1435
41	30	40	518598	2592.99	DFT-s-OFDM QPSK	50@25	23.49	22.99	0.1991
41	30	40	518598	2592.99	DFT-s-OFDM QPSK	1@1	23.54	23.04	0.2014
41	30	40	518598	2592.99	DFT-s-OFDM QPSK	1@104	23.63	23.13	0.2056
41	30	40	518598	2592.99	DFT-s-OFDM 16 QAM	50@25	22.49	21.99	0.1581
41	30	40	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	22.77	22.27	0.1687
41	30	40	518598	2592.99	DFT-s-OFDM 16 QAM	1@104	22.89	22.39	0.1734
41	30	40	518598	2592.99	DFT-s-OFDM 64 QAM	50@25	20.92	20.42	0.1102
41	30	40	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	20.81	20.31	0.1074
41	30	40	518598	2592.99	DFT-s-OFDM 64 QAM	1@104	20.88	20.38	0.1091
41	30	40	518598	2592.99	DFT-s-OFDM 256 QAM	50@25	18.96	18.46	0.0701
41	30	40	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	18.74	18.24	0.0667
41	30	40	518598	2592.99	DFT-s-OFDM 256 QAM	1@104	18.87	18.37	0.0687
41	30	40	518598	2592.99	CP-OFDM QPSK	53@26	22.03	21.53	0.1422
41	30	40	518598	2592.99	CP-OFDM QPSK	1@1	21.95	21.45	0.1396
41	30	40	518598	2592.99	CP-OFDM QPSK	1@104	22.12	21.62	0.1452
41	30	40	534000	2670	DFT-s-OFDM QPSK	50@25	23.24	22.74	0.1879
41	30	40	534000	2670	DFT-s-OFDM QPSK	1@1	23.34	22.84	0.1923
41	30	40	534000	2670	DFT-s-OFDM QPSK	1@104	23.37	22.87	0.1936
41	30	40	534000	2670	DFT-s-OFDM 16 QAM	50@25	22.25	21.75	0.1496
41	30	40	534000	2670	DFT-s-OFDM 16 QAM	1@1	22.53	22.03	0.1596
41	30	40	534000	2670	DFT-s-OFDM 16 QAM	1@104	22.55	22.05	0.1603
41	30	40	534000	2670	DFT-s-OFDM 64 QAM	50@25	20.71	20.21	0.1050
41	30	40	534000	2670	DFT-s-OFDM 64 QAM	1@1	20.73	20.23	0.1054
41	30	40	534000	2670	DFT-s-OFDM 64 QAM	1@104	20.73	20.23	0.1054

41	30	40	534000	2670	DFT-s-OFDM 256 QAM	50@25	18.74	18.24	0.0667
41	30	40	534000	2670	DFT-s-OFDM 256 QAM	1@1	18.67	18.17	0.0656
41	30	40	534000	2670	DFT-s-OFDM 256 QAM	1@104	18.96	18.46	0.0701
41	30	40	534000	2670	CP-OFDM QPSK	53@26	21.78	21.28	0.1343
41	30	40	534000	2670	CP-OFDM QPSK	1@1	21.87	21.37	0.1371
41	30	40	534000	2670	CP-OFDM QPSK	1@104	21.81	21.31	0.1352
41	30	50	504204	2521.02	DFT-s-OFDM QPSK	64@32	22.22	21.72	0.1486
41	30	50	504204	2521.02	DFT-s-OFDM QPSK	1@1	22.28	21.78	0.1507
41	30	50	504204	2521.02	DFT-s-OFDM QPSK	1@131	22.2	21.7	0.1479
41	30	50	504204	2521.02	DFT-s-OFDM 16 QAM	64@32	21.23	20.73	0.1183
41	30	50	504204	2521.02	DFT-s-OFDM 16 QAM	1@1	21.52	21.02	0.1265
41	30	50	504204	2521.02	DFT-s-OFDM 16 QAM	1@131	21.46	20.96	0.1247
41	30	50	504204	2521.02	DFT-s-OFDM 64 QAM	64@32	19.57	19.07	0.0807
41	30	50	504204	2521.02	DFT-s-OFDM 64 QAM	1@1	19.64	19.14	0.0820
41	30	50	504204	2521.02	DFT-s-OFDM 64 QAM	1@131	19.44	18.94	0.0783
41	30	50	504204	2521.02	DFT-s-OFDM 256 QAM	64@32	17.67	17.17	0.0521
41	30	50	504204	2521.02	DFT-s-OFDM 256 QAM	1@1	17.77	17.27	0.0533
41	30	50	504204	2521.02	DFT-s-OFDM 256 QAM	1@131	17.46	16.96	0.0497
41	30	50	504204	2521.02	CP-OFDM QPSK	67@33	20.67	20.17	0.1040
41	30	50	504204	2521.02	CP-OFDM QPSK	1@1	20.82	20.32	0.1076
41	30	50	504204	2521.02	CP-OFDM QPSK	1@131	20.68	20.18	0.1042
41	30	50	518598	2592.99	DFT-s-OFDM QPSK	64@32	22.19	21.69	0.1476
41	30	50	518598	2592.99	DFT-s-OFDM QPSK	1@1	22.25	21.75	0.1496
41	30	50	518598	2592.99	DFT-s-OFDM QPSK	1@131	22.23	21.73	0.1489
41	30	50	518598	2592.99	DFT-s-OFDM 16 QAM	64@32	21.18	20.68	0.1169
41	30	50	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	21.48	20.98	0.1253
41	30	50	518598	2592.99	DFT-s-OFDM 16 QAM	1@131	21.52	21.02	0.1265
41	30	50	518598	2592.99	DFT-s-OFDM 64 QAM	64@32	19.63	19.13	0.0818
41	30	50	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	19.47	18.97	0.0789
41	30	50	518598	2592.99	DFT-s-OFDM 64 QAM	1@131	19.5	19	0.0794
41	30	50	518598	2592.99	DFT-s-OFDM 256 QAM	64@32	17.64	17.14	0.0518
41	30	50	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	17.7	17.2	0.0525
41	30	50	518598	2592.99	DFT-s-OFDM 256 QAM	1@131	17.53	17.03	0.0505
41	30	50	518598	2592.99	CP-OFDM QPSK	67@33	20.89	20.39	0.1094

41	30	50	518598	2592.99	CP-OFDM QPSK	1@1	20.56	20.06	0.1014
41	30	50	518598	2592.99	CP-OFDM QPSK	1@131	20.83	20.33	0.1079
41	30	50	532998	2664.99	DFT-s-OFDM QPSK	64@32	22.04	21.54	0.1426
41	30	50	532998	2664.99	DFT-s-OFDM QPSK	1@1	21.96	21.46	0.1400
41	30	50	532998	2664.99	DFT-s-OFDM QPSK	1@131	22.16	21.66	0.1466
41	30	50	532998	2664.99	DFT-s-OFDM 16 QAM	64@32	21.09	20.59	0.1146
41	30	50	532998	2664.99	DFT-s-OFDM 16 QAM	1@1	21.12	20.62	0.1153
41	30	50	532998	2664.99	DFT-s-OFDM 16 QAM	1@131	21.26	20.76	0.1191
41	30	50	532998	2664.99	DFT-s-OFDM 64 QAM	64@32	19.47	18.97	0.0789
41	30	50	532998	2664.99	DFT-s-OFDM 64 QAM	1@1	19.21	18.71	0.0743
41	30	50	532998	2664.99	DFT-s-OFDM 64 QAM	1@131	19.46	18.96	0.0787
41	30	50	532998	2664.99	DFT-s-OFDM 256 QAM	64@32	17.54	17.04	0.0506
41	30	50	532998	2664.99	DFT-s-OFDM 256 QAM	1@1	17.38	16.88	0.0488
41	30	50	532998	2664.99	DFT-s-OFDM 256 QAM	1@131	17.63	17.13	0.0516
41	30	50	532998	2664.99	CP-OFDM QPSK	67@33	20.59	20.09	0.1021
41	30	50	532998	2664.99	CP-OFDM QPSK	1@1	20.53	20.03	0.1007
41	30	50	532998	2664.99	CP-OFDM QPSK	1@131	20.65	20.15	0.1035
41	30	60	505200	2526	DFT-s-OFDM QPSK	81@40	22.2	21.7	0.1479
41	30	60	505200	2526	DFT-s-OFDM QPSK	1@1	22.23	21.73	0.1489
41	30	60	505200	2526	DFT-s-OFDM QPSK	1@160	22.15	21.65	0.1462
41	30	60	505200	2526	DFT-s-OFDM 16 QAM	81@40	21.18	20.68	0.1169
41	30	60	505200	2526	DFT-s-OFDM 16 QAM	1@1	21.43	20.93	0.1239
41	30	60	505200	2526	DFT-s-OFDM 16 QAM	1@160	21.31	20.81	0.1205
41	30	60	505200	2526	DFT-s-OFDM 64 QAM	81@40	19.68	19.18	0.0828
41	30	60	505200	2526	DFT-s-OFDM 64 QAM	1@1	19.51	19.01	0.0796
41	30	60	505200	2526	DFT-s-OFDM 64 QAM	1@160	19.33	18.83	0.0764
41	30	60	505200	2526	DFT-s-OFDM 256 QAM	81@40	17.71	17.21	0.0526
41	30	60	505200	2526	DFT-s-OFDM 256 QAM	1@1	17.83	17.33	0.0541
41	30	60	505200	2526	DFT-s-OFDM 256 QAM	1@160	17.38	16.88	0.0488
41	30	60	505200	2526	CP-OFDM QPSK	81@40	20.72	20.22	0.1052
41	30	60	505200	2526	CP-OFDM QPSK	1@1	20.79	20.29	0.1069
41	30	60	505200	2526	CP-OFDM QPSK	1@160	20.69	20.19	0.1045
41	30	60	518598	2592.99	DFT-s-OFDM QPSK	81@40	22.19	21.69	0.1476
41	30	60	518598	2592.99	DFT-s-OFDM QPSK	1@1	22.1	21.6	0.1445

41	30	60	518598	2592.99	DFT-s-OFDM QPSK	1@160	22.29	21.79	0.1510
41	30	60	518598	2592.99	DFT-s-OFDM 16 QAM	81@40	21.18	20.68	0.1169
41	30	60	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	21.31	20.81	0.1205
41	30	60	518598	2592.99	DFT-s-OFDM 16 QAM	1@160	21.38	20.88	0.1225
41	30	60	518598	2592.99	DFT-s-OFDM 64 QAM	81@40	19.65	19.15	0.0822
41	30	60	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	19.42	18.92	0.0780
41	30	60	518598	2592.99	DFT-s-OFDM 64 QAM	1@160	19.49	18.99	0.0793
41	30	60	518598	2592.99	DFT-s-OFDM 256 QAM	81@40	17.69	17.19	0.0524
41	30	60	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	17.41	16.91	0.0491
41	30	60	518598	2592.99	DFT-s-OFDM 256 QAM	1@160	17.6	17.1	0.0513
41	30	60	518598	2592.99	CP-OFDM QPSK	81@40	20.67	20.17	0.1040
41	30	60	518598	2592.99	CP-OFDM QPSK	1@1	20.63	20.13	0.1030
41	30	60	518598	2592.99	CP-OFDM QPSK	1@160	20.76	20.26	0.1062
41	30	60	531996	2659.98	DFT-s-OFDM QPSK	81@40	22.08	21.58	0.1439
41	30	60	531996	2659.98	DFT-s-OFDM QPSK	1@1	21.89	21.39	0.1377
41	30	60	531996	2659.98	DFT-s-OFDM QPSK	1@160	22.15	21.65	0.1462
41	30	60	531996	2659.98	DFT-s-OFDM 16 QAM	81@40	21.13	20.63	0.1156
41	30	60	531996	2659.98	DFT-s-OFDM 16 QAM	1@1	21.13	20.63	0.1156
41	30	60	531996	2659.98	DFT-s-OFDM 16 QAM	1@160	21.47	20.97	0.1250
41	30	60	531996	2659.98	DFT-s-OFDM 64 QAM	81@40	19.62	19.12	0.0817
41	30	60	531996	2659.98	DFT-s-OFDM 64 QAM	1@1	19.17	18.67	0.0736
41	30	60	531996	2659.98	DFT-s-OFDM 64 QAM	1@160	19.34	18.84	0.0766
41	30	60	531996	2659.98	DFT-s-OFDM 256 QAM	81@40	18.1	17.6	0.0575
41	30	60	531996	2659.98	DFT-s-OFDM 256 QAM	1@1	18.12	17.62	0.0578
41	30	60	531996	2659.98	DFT-s-OFDM 256 QAM	1@160	18.13	17.63	0.0579
41	30	60	531996	2659.98	CP-OFDM QPSK	81@40	20.57	20.07	0.1016
41	30	60	531996	2659.98	CP-OFDM QPSK	1@1	20.38	19.88	0.0973
41	30	60	531996	2659.98	CP-OFDM QPSK	1@160	20.58	20.08	0.1019
41	30	80	507204	2536.02	DFT-s-OFDM QPSK	108@54	22.21	21.71	0.1483
41	30	80	507204	2536.02	DFT-s-OFDM QPSK	1@1	22.08	21.58	0.1439
41	30	80	507204	2536.02	DFT-s-OFDM QPSK	1@215	22.09	21.59	0.1442
41	30	80	507204	2536.02	DFT-s-OFDM 16 QAM	108@54	21.26	20.76	0.1191
41	30	80	507204	2536.02	DFT-s-OFDM 16 QAM	1@1	21.42	20.92	0.1236
41	30	80	507204	2536.02	DFT-s-OFDM 16 QAM	1@215	21.25	20.75	0.1189

41	30	80	507204	2536.02	DFT-s-OFDM 64 QAM	108@54	19.78	19.28	0.0847
41	30	80	507204	2536.02	DFT-s-OFDM 64 QAM	1@1	19.41	18.91	0.0778
41	30	80	507204	2536.02	DFT-s-OFDM 64 QAM	1@215	19.38	18.88	0.0773
41	30	80	507204	2536.02	DFT-s-OFDM 256 QAM	108@54	17.72	17.22	0.0527
41	30	80	507204	2536.02	DFT-s-OFDM 256 QAM	1@1	17.6	17.1	0.0513
41	30	80	507204	2536.02	DFT-s-OFDM 256 QAM	1@215	17.58	17.08	0.0511
41	30	80	507204	2536.02	CP-OFDM QPSK	109@54	20.7	20.2	0.1047
41	30	80	507204	2536.02	CP-OFDM QPSK	1@1	20.63	20.13	0.1030
41	30	80	507204	2536.02	CP-OFDM QPSK	1@215	20.63	20.13	0.1030
41	30	80	518598	2592.99	DFT-s-OFDM QPSK	108@54	22.21	21.71	0.1483
41	30	80	518598	2592.99	DFT-s-OFDM QPSK	1@1	22.02	21.52	0.1419
41	30	80	518598	2592.99	DFT-s-OFDM QPSK	1@215	22.29	21.79	0.1510
41	30	80	518598	2592.99	DFT-s-OFDM 16 QAM	108@54	21.29	20.79	0.1199
41	30	80	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	21.33	20.83	0.1211
41	30	80	518598	2592.99	DFT-s-OFDM 16 QAM	1@215	21.52	21.02	0.1265
41	30	80	518598	2592.99	DFT-s-OFDM 64 QAM	108@54	19.79	19.29	0.0849
41	30	80	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	19.48	18.98	0.0791
41	30	80	518598	2592.99	DFT-s-OFDM 64 QAM	1@215	19.72	19.22	0.0836
41	30	80	518598	2592.99	DFT-s-OFDM 256 QAM	108@54	17.67	17.17	0.0521
41	30	80	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	17.57	17.07	0.0509
41	30	80	518598	2592.99	DFT-s-OFDM 256 QAM	1@215	17.58	17.08	0.0511
41	30	80	518598	2592.99	CP-OFDM QPSK	109@54	20.72	20.22	0.1052
41	30	80	518598	2592.99	CP-OFDM QPSK	1@1	20.64	20.14	0.1033
41	30	80	518598	2592.99	CP-OFDM QPSK	1@215	20.82	20.32	0.1076
41	30	80	529998	2649.99	DFT-s-OFDM QPSK	108@54	22.14	21.64	0.1459
41	30	80	529998	2649.99	DFT-s-OFDM QPSK	1@1	21.98	21.48	0.1406
41	30	80	529998	2649.99	DFT-s-OFDM QPSK	1@215	22.16	21.66	0.1466
41	30	80	529998	2649.99	DFT-s-OFDM 16 QAM	108@54	21.14	20.64	0.1159
41	30	80	529998	2649.99	DFT-s-OFDM 16 QAM	1@1	21.09	20.59	0.1146
41	30	80	529998	2649.99	DFT-s-OFDM 16 QAM	1@215	21.32	20.82	0.1208
41	30	80	529998	2649.99	DFT-s-OFDM 64 QAM	108@54	19.65	19.15	0.0822
41	30	80	529998	2649.99	DFT-s-OFDM 64 QAM	1@1	19.36	18.86	0.0769
41	30	80	529998	2649.99	DFT-s-OFDM 64 QAM	1@215	19.44	18.94	0.0783
41	30	80	529998	2649.99	DFT-s-OFDM 256 QAM	108@54	17.6	17.1	0.0513

41	30	80	529998	2649.99	DFT-s-OFDM 256 QAM	1@1	17.27	16.77	0.0475
41	30	80	529998	2649.99	DFT-s-OFDM 256 QAM	1@215	17.53	17.03	0.0505
41	30	80	529998	2649.99	CP-OFDM QPSK	109@54	20.59	20.09	0.1021
41	30	80	529998	2649.99	CP-OFDM QPSK	1@1	20.36	19.86	0.0968
41	30	80	529998	2649.99	CP-OFDM QPSK	1@215	20.69	20.19	0.1045
41	30	90	508200	2541	DFT-s-OFDM QPSK	120@60	22.24	21.74	0.1493
41	30	90	508200	2541	DFT-s-OFDM QPSK	1@1	22.11	21.61	0.1449
41	30	90	508200	2541	DFT-s-OFDM QPSK	1@243	22.09	21.59	0.1442
41	30	90	508200	2541	DFT-s-OFDM 16 QAM	120@60	21.21	20.71	0.1178
41	30	90	508200	2541	DFT-s-OFDM 16 QAM	1@1	21.26	20.76	0.1191
41	30	90	508200	2541	DFT-s-OFDM 16 QAM	1@243	21.39	20.89	0.1227
41	30	90	508200	2541	DFT-s-OFDM 64 QAM	120@60	19.65	19.15	0.0822
41	30	90	508200	2541	DFT-s-OFDM 64 QAM	1@1	19.56	19.06	0.0805
41	30	90	508200	2541	DFT-s-OFDM 64 QAM	1@243	19.55	19.05	0.0804
41	30	90	508200	2541	DFT-s-OFDM 256 QAM	120@60	17.72	17.22	0.0527
41	30	90	508200	2541	DFT-s-OFDM 256 QAM	1@1	17.44	16.94	0.0494
41	30	90	508200	2541	DFT-s-OFDM 256 QAM	1@243	17.44	16.94	0.0494
41	30	90	508200	2541	CP-OFDM QPSK	123@61	20.73	20.23	0.1054
41	30	90	508200	2541	CP-OFDM QPSK	1@1	20.67	20.17	0.1040
41	30	90	508200	2541	CP-OFDM QPSK	1@243	20.54	20.04	0.1009
41	30	90	518598	2592.99	DFT-s-OFDM QPSK	120@60	22.22	21.72	0.1486
41	30	90	518598	2592.99	DFT-s-OFDM QPSK	1@1	22.09	21.59	0.1442
41	30	90	518598	2592.99	DFT-s-OFDM QPSK	1@243	22.33	21.83	0.1524
41	30	90	518598	2592.99	DFT-s-OFDM 16 QAM	120@60	21.23	20.73	0.1183
41	30	90	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	21.35	20.85	0.1216
41	30	90	518598	2592.99	DFT-s-OFDM 16 QAM	1@243	21.57	21.07	0.1279
41	30	90	518598	2592.99	DFT-s-OFDM 64 QAM	120@60	19.7	19.2	0.0832
41	30	90	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	19.34	18.84	0.0766
41	30	90	518598	2592.99	DFT-s-OFDM 64 QAM	1@243	19.7	19.2	0.0832
41	30	90	518598	2592.99	DFT-s-OFDM 256 QAM	120@60	17.76	17.26	0.0532
41	30	90	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	17.63	17.13	0.0516
41	30	90	518598	2592.99	DFT-s-OFDM 256 QAM	1@243	17.63	17.13	0.0516
41	30	90	518598	2592.99	CP-OFDM QPSK	123@61	20.77	20.27	0.1064
41	30	90	518598	2592.99	CP-OFDM QPSK	1@1	20.56	20.06	0.1014



41	30	90	518598	2592.99	CP-OFDM QPSK	1@243	20.83	20.33	0.1079
41	30	90	528996	2644.98	DFT-s-OFDM QPSK	120@60	22.08	21.58	0.1439
41	30	90	528996	2644.98	DFT-s-OFDM QPSK	1@1	21.85	21.35	0.1365
41	30	90	528996	2644.98	DFT-s-OFDM QPSK	1@243	22.16	21.66	0.1466
41	30	90	528996	2644.98	DFT-s-OFDM 16 QAM	120@60	21.07	20.57	0.1140
41	30	90	528996	2644.98	DFT-s-OFDM 16 QAM	1@1	21.06	20.56	0.1138
41	30	90	528996	2644.98	DFT-s-OFDM 16 QAM	1@243	21.41	20.91	0.1233
41	30	90	528996	2644.98	DFT-s-OFDM 64 QAM	120@60	19.55	19.05	0.0804
41	30	90	528996	2644.98	DFT-s-OFDM 64 QAM	1@1	19.17	18.67	0.0736
41	30	90	528996	2644.98	DFT-s-OFDM 64 QAM	1@243	19.45	18.95	0.0785
41	30	90	528996	2644.98	DFT-s-OFDM 256 QAM	120@60	17.56	17.06	0.0508
41	30	90	528996	2644.98	DFT-s-OFDM 256 QAM	1@1	17.41	16.91	0.0491
41	30	90	528996	2644.98	DFT-s-OFDM 256 QAM	1@243	17.44	16.94	0.0494
41	30	90	528996	2644.98	CP-OFDM QPSK	123@61	20.62	20.12	0.1028
41	30	90	528996	2644.98	CP-OFDM QPSK	1@1	20.42	19.92	0.0982
41	30	90	528996	2644.98	CP-OFDM QPSK	1@243	20.7	20.2	0.1047
41	30	100	509202	2546.01	DFT-s-OFDM QPSK	135@67	22.28	21.78	0.1507
41	30	100	509202	2546.01	DFT-s-OFDM QPSK	1@1	22.25	21.75	0.1496
41	30	100	509202	2546.01	DFT-s-OFDM QPSK	1@271	22.22	21.72	0.1486
41	30	100	509202	2546.01	DFT-s-OFDM 16 QAM	135@67	21.25	20.75	0.1189
41	30	100	509202	2546.01	DFT-s-OFDM 16 QAM	1@1	21.35	20.85	0.1216
41	30	100	509202	2546.01	DFT-s-OFDM 16 QAM	1@271	21.36	20.86	0.1219
41	30	100	509202	2546.01	DFT-s-OFDM 64 QAM	135@67	19.76	19.26	0.0843
41	30	100	509202	2546.01	DFT-s-OFDM 64 QAM	1@1	19.71	19.21	0.0834
41	30	100	509202	2546.01	DFT-s-OFDM 64 QAM	1@271	19.74	19.24	0.0839
41	30	100	509202	2546.01	DFT-s-OFDM 256 QAM	135@67	17.74	17.24	0.0530
41	30	100	509202	2546.01	DFT-s-OFDM 256 QAM	1@1	17.66	17.16	0.0520
41	30	100	509202	2546.01	DFT-s-OFDM 256 QAM	1@271	17.57	17.07	0.0509
41	30	100	509202	2546.01	CP-OFDM QPSK	137@68	20.8	20.3	0.1072
41	30	100	509202	2546.01	CP-OFDM QPSK	1@1	20.71	20.21	0.1050
41	30	100	509202	2546.01	CP-OFDM QPSK	1@271	20.71	20.21	0.1050
41	30	100	518598	2592.99	DFT-s-OFDM QPSK	135@67	22.24	21.74	0.1493
41	30	100	518598	2592.99	DFT-s-OFDM QPSK	1@1	22.1	21.6	0.1445
41	30	100	518598	2592.99	DFT-s-OFDM QPSK	1@271	22.38	21.88	0.1542

41	30	100	518598	2592.99	DFT-s-OFDM 16 QAM	135@67	21.21	20.71	0.1178
41	30	100	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	21.34	20.84	0.1213
41	30	100	518598	2592.99	DFT-s-OFDM 16 QAM	1@271	21.63	21.13	0.1297
41	30	100	518598	2592.99	DFT-s-OFDM 64 QAM	135@67	19.77	19.27	0.0845
41	30	100	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	19.44	18.94	0.0783
41	30	100	518598	2592.99	DFT-s-OFDM 64 QAM	1@271	19.79	19.29	0.0849
41	30	100	518598	2592.99	DFT-s-OFDM 256 QAM	135@67	17.75	17.25	0.0531
41	30	100	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	17.44	16.94	0.0494
41	30	100	518598	2592.99	DFT-s-OFDM 256 QAM	1@271	17.8	17.3	0.0537
41	30	100	518598	2592.99	CP-OFDM QPSK	137@68	20.75	20.25	0.1059
41	30	100	518598	2592.99	CP-OFDM QPSK	1@1	20.6	20.1	0.1023
41	30	100	518598	2592.99	CP-OFDM QPSK	1@271	20.89	20.39	0.1094
41	30	100	528000	2640	DFT-s-OFDM QPSK	135@67	22.13	21.63	0.1455
41	30	100	528000	2640	DFT-s-OFDM QPSK	1@1	21.84	21.34	0.1361
41	30	100	528000	2640	DFT-s-OFDM QPSK	1@271	22.25	21.75	0.1496
41	30	100	528000	2640	DFT-s-OFDM 16 QAM	135@67	21.08	20.58	0.1143
41	30	100	528000	2640	DFT-s-OFDM 16 QAM	1@1	21.13	20.63	0.1156
41	30	100	528000	2640	DFT-s-OFDM 16 QAM	1@271	21.53	21.03	0.1268
41	30	100	528000	2640	DFT-s-OFDM 64 QAM	135@67	19.61	19.11	0.0815
41	30	100	528000	2640	DFT-s-OFDM 64 QAM	1@1	19.28	18.78	0.0755
41	30	100	528000	2640	DFT-s-OFDM 64 QAM	1@271	19.64	19.14	0.0820
41	30	100	528000	2640	DFT-s-OFDM 256 QAM	135@67	17.61	17.11	0.0514
41	30	100	528000	2640	DFT-s-OFDM 256 QAM	1@1	17.33	16.83	0.0482
41	30	100	528000	2640	DFT-s-OFDM 256 QAM	1@271	17.62	17.12	0.0515
41	30	100	528000	2640	CP-OFDM QPSK	137@68	20.65	20.15	0.1035
41	30	100	528000	2640	CP-OFDM QPSK	1@1	20.4	19.9	0.0977
41	30	100	528000	2640	CP-OFDM QPSK	1@271	20.69	20.19	0.1045

## 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	-0.00756	PASS	NV
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.00531	PASS	LV
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.00664	PASS	HV
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.00404	PASS	-30°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.00675	PASS	-20°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.00211	PASS	-10°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.00513	PASS	0°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.00652	PASS	10°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.0044	PASS	20°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.00657	PASS	30°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.00381	PASS	40°C
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	-0.00446	PASS	50°C

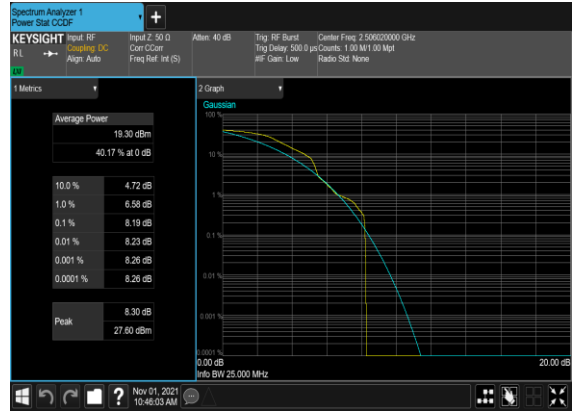
## Peak to Average Ratio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	50@0	8.17	13	PASS
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	1@0	8.19	13	PASS
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	7.53	13	PASS
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	1@0	7.62	13	PASS
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	50@0	7.66	13	PASS
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	1@0	7.66	13	PASS

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



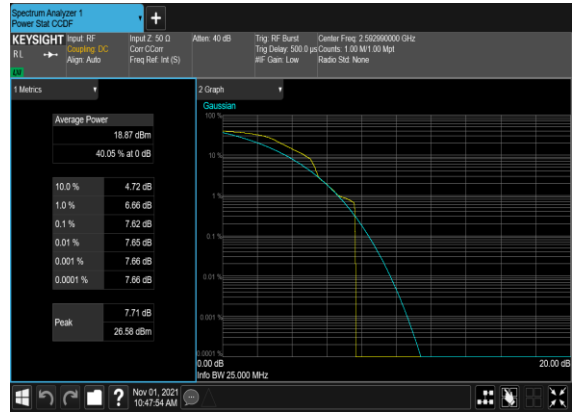
N41(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



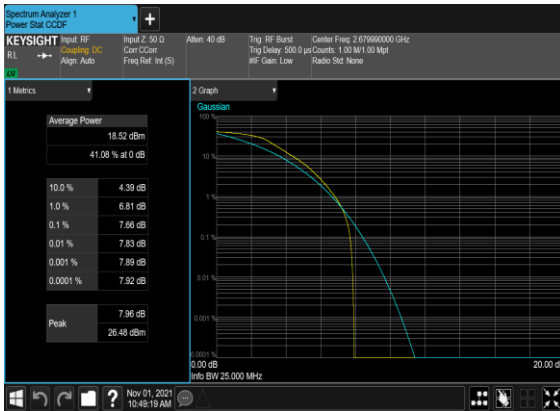
N41(20M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



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



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



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



## Occupied Bandwidth

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB OBW (MHz)
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	50@0	17.803	19.14
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	18.179	19.71
41	30	20	518598	2592.99	CP-OFDM 16 QAM	51@0	18.214	19.42
41	30	20	518598	2592.99	CP-OFDM 64 QAM	51@0	18.242	19.59
41	30	20	518598	2592.99	CP-OFDM 256 QAM	51@0	18.214	19.44
41	30	30	518598	2592.99	DFT-s-OFDM QPSK	75@0	26.735	28.45
41	30	30	518598	2592.99	CP-OFDM QPSK	78@0	27.877	29.42
41	30	30	518598	2592.99	CP-OFDM 16 QAM	78@0	27.856	29.53
41	30	30	518598	2592.99	CP-OFDM 64 QAM	78@0	27.84	29.4
41	30	30	518598	2592.99	CP-OFDM 256 QAM	78@0	27.86	29.4
41	30	40	518598	2592.99	DFT-s-OFDM QPSK	100@0	35.764	37.45
41	30	40	518598	2592.99	CP-OFDM QPSK	106@0	37.797	39.99
41	30	40	518598	2592.99	CP-OFDM 16 QAM	106@0	37.817	39.81
41	30	40	518598	2592.99	CP-OFDM 64 QAM	106@0	37.734	39.61
41	30	40	518598	2592.99	CP-OFDM 256 QAM	106@0	37.891	39.79
41	30	50	518598	2592.99	DFT-s-OFDM QPSK	128@0	45.847	47.52
41	30	50	518598	2592.99	CP-OFDM QPSK	133@0	47.578	49.48
41	30	50	518598	2592.99	CP-OFDM 16 QAM	133@0	47.486	49.4
41	30	50	518598	2592.99	CP-OFDM 64 QAM	133@0	47.459	49.35
41	30	50	518598	2592.99	CP-OFDM 256 QAM	133@0	47.58	49.48
41	30	60	518598	2592.99	DFT-s-OFDM QPSK	162@0	57.904	60.04
41	30	60	518598	2592.99	CP-OFDM QPSK	162@0	57.921	60.05
41	30	60	518598	2592.99	CP-OFDM 16 QAM	162@0	57.938	59.83
41	30	60	518598	2592.99	CP-OFDM 64 QAM	162@0	57.771	59.99
41	30	60	518598	2592.99	CP-OFDM 256 QAM	162@0	57.832	60.1

41	30	80	518598	2592.99	DFT-s-OFDM QPSK	216@0	77.144	79.79
41	30	80	518598	2592.99	CP-OFDM QPSK	217@0	77.449	80.23
41	30	80	518598	2592.99	CP-OFDM 16 QAM	217@0	77.466	80.23
41	30	80	518598	2592.99	CP-OFDM 64 QAM	217@0	77.421	80.22
41	30	80	518598	2592.99	CP-OFDM 256 QAM	217@0	77.455	80.01
41	30	90	518598	2592.99	DFT-s-OFDM QPSK	240@0	85.55	88.8
41	30	90	518598	2592.99	CP-OFDM QPSK	245@0	87.401	90.31
41	30	90	518598	2592.99	CP-OFDM 16 QAM	245@0	87.482	90.28
41	30	90	518598	2592.99	CP-OFDM 64 QAM	245@0	87.33	90.54
41	30	90	518598	2592.99	CP-OFDM 256 QAM	245@0	87.474	90.12
41	30	100	518598	2592.99	DFT-s-OFDM QPSK	270@0	96.429	99.83
41	30	100	518598	2592.99	CP-OFDM QPSK	273@0	97.315	100.7
41	30	100	518598	2592.99	CP-OFDM 16 QAM	273@0	97.402	100.5
41	30	100	518598	2592.99	CP-OFDM 64 QAM	273@0	97.435	100.6
41	30	100	518598	2592.99	CP-OFDM 256 QAM	273@0	97.383	100.5