FCC RF Test Report

APPLICANT	:	**Motorola Mobility LLC**
EQUIPMENT	:	**Mobile Cellular Phone**
BRAND NAME	:	**Motorola**
MODEL NAME	:	**XT2451-3**
FCC ID	:	**IHDT56AP8**
STANDARD	:	**47 CFR Part 2, 27**
CLASSIFICATION	:	**PCS Licensed Transmitter Held to Ear (PCE)**
TEST DATE(S)	:	**Apr. 29, 2024**

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

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

Jason Jia

Approved by: Jason Jia

ACCREDITED
Cert #5145.01

Sporton International Inc. (ShenZhen)

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

People's Republic of China

TABLE OF CONTENTS

REVISION HISTORY 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 5
1.5 Modification of EUT 6
1.6 Maximum EIRP and Emission Designator 6
1.7 Testing Location 7
1.8 Test Software 7
1.9 Applicable Standards 7
1.10 Specification of Accessory 8

2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST 9

2.1 Test Mode 9
2.2 Connection Diagram of Test System 10
2.3 Support Unit used in test configuration and system 10
2.4 Measurement Results Explanation Example 10
2.5 Frequency List of Low/Middle/High Channels 11

3 CONDUCTED TEST ITEMS 12

3.1 Measuring Instruments 12
3.2 Test Setup 12
3.3 Test Result of Conducted Test 12
3.4 Conducted Output Power and EIRP 13
3.5 Peak-to-Average Ratio 14
3.6 Occupied Bandwidth 15
3.7 Conducted Band Edge 16
3.8 Conducted Spurious Emission 17
3.9 Frequency Stability 18

4 RADIATED TEST ITEMS 19

4.1 Measuring Instruments 19
4.2 Test Setup 19
4.3 Test Result of Radiated Test 20
4.4 Radiated Spurious Emission 21

5 LIST OF MEASURING EQUIPMENT 22

6 MEASUREMENT UNCERTAINTY 23

APPENDIX A. TEST RESULTS OF CONDUCTED TEST

APPENDIX B. TEST RESULTS OF RADIATED TEST

APPENDIX C. TEST SETUP PHOTOGRAPHS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG420703-01D	Rev. 01	Initial issue of report	Apr. 30, 2024

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 n41)	EIRP < 2Watt		
3.5	N/A	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	Reporting Only	PASS	-
3.7	§27.53(m)(4)	Conducted Band Edge Measurement (5G NR n41)	§27.53(m)(4)	PASS	-
3.8	§2.1051 §27.53(m)(4)	Conducted Spurious Emission (5G NR n41)	< 55+10log$_{10}$(P[Watts])	PASS	-
3.9	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within Authorized Band	PASS	-
4.4	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (5G NR n41)	< 55+10log$_{10}$(P[Watts])	PASS	Under limit 24.69 dB at 10178.00 MHz

Conformity Assessment Condition:
1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account. 2. The measurement uncertainty please refer to each test result in the section “Measurement Uncertainty”
Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

1 General Description

1.1 Applicant

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

1.2 Manufacturer

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

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2451-3
FCC ID	IHDT56AP8
IMEI Code	Conducted: 355473450019278/355473450019286 Radiation: 355473450020474/355473450020482
HW Version	DVT2
SW Version	U3UX34.16
EUT Stage	Identical Prototype

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	5G NR n41 : 2496 MHz ~ 2690 MHz
Rx Frequency	5G NR n41 : 2496 MHz ~ 2690 MHz
Bandwidth	n41 : 10MHz / 15MHz / 20MHz / 25MHz / 30MHz / 40MHz / 50MHz / 60MHz / 70 MHz / 80MHz / 90MHz / 100MHz
SCS	30kHz
Antenna Gain	**<Ant. 0>:** n41: -2.93 dBi **<Ant. 1>:** n41: -2.14 dBi **<Ant. 2>:** n41: -3.20 dBi **<Ant. 3>:** n41: -2.40 dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

Remark:

1. The maximum EIRP is calculated from max output power and max antenna gain, only the maximum EIRP are shown in the report, 5G NR n41_UL MIMO for Ant.(0+1).
2. 5G NR n41 supports SA and NSA mode.
3. 5G NR n41 UL MIMO mode supports Power Class 2.
4. 5G NR n41 supports UL MIMO mode for Ant(2+3) / Ant(2+1) / Ant(0+3) / Ant(0+1), only the worst test data of Ant(2+3) for the max power is shown in the report.

5. 5G NR n41 UL_MIMO mode only supports CP-OFDM Modulation, the MIMO mode is completely uncorrelated, so the directional gain is selected the maximum gain among all antennas.
6. For UL MIMO mode, the conducted BE/Spurious are tested at single antenna port and add 10*log(N_{ANT}) according to KDB 662911 D01.
7. The device supports n41 (1T4R) SRS resources on ant.0/1/2/3.
8. The EN-DC mode combination could be referred to the product spec.
9. Only the test data for 5G NR n41 UL MIMO are showed in this report, other test reults could be referred to the spot check report 420703-01.

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 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)
10	2501.01 ~ 2685.00	0.2685	8M60G7D	0.2275	8M59W7D
15	2503.50 ~ 2682.48	0.2655	13M6G7D	0.2280	13M6W7D
20	2506.02 ~ 2679.99	0.2594	18M2G7D	0.2193	18M3W7D
25	2508.51 ~ 2677.50	0.2667	23M3G7D	0.2312	23M2W7D
30	2511.00 ~ 2674.98	0.2685	27M9G7D	0.2259	27M9W7D
40	2516.01 ~ 2670.00	0.2588	37M8G7D	0.2188	37M8W7D
50	2521.02 ~ 2664.99	0.2729	47M5G7D	0.2339	47M5W7D
60	2526.00 ~ 2659.98	0.2667	57M9G7D	0.2259	57M9W7D
70	2531.01 ~ 2655.00	0.2642	67M5G7D	0.2239	67M7W7D
80	2536.02 ~ 2649.99	0.2630	77M6G7D	0.2291	77M6W7D
90	2541.00 ~ 2644.98	0.2673	87M6G7D	0.2323	87M6W7D
100	2546.01 ~ 2640.00	0.2735	97M3G7D	0.2366	97M6W7D

Note: All modulations have been tested, only the worst test results of PSK & QAM are shown in the report.

1.7 Testing Location

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

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

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH04-SZ	CN1256	421272

1.8 Test Software

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

1.9 Applicable Standards

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

- 47 CFR Part 2, 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.

1.10 Specification of Accessory

Specification of Accessory				
AC Adapter 1(US)	**Brand Name**	Motorola (Chenyang)	**Model Name**	MC-681N
AC Adapter 1(EU)	**Brand Name**	Motorola (Chenyang)	**Model Name**	MC-682N
AC Adapter 1(UK)	**Brand Name**	Motorola (Chenyang)	**Model Name**	MC-683N
AC Adapter 1(AU)	**Brand Name**	Motorola (Chenyang)	**Model Name**	MC-685N
AC Adapter 1(AR)	**Brand Name**	Motorola (Chenyang)	**Model Name**	MC-686N
AC Adapter 1(BR)	**Brand Name**	Motorola (Chenyang)	**Model Name**	MC-687N
AC Adapter 1(CHILE)	**Brand Name**	Motorola (Chenyang)	**Model Name**	MC-689N
AC Adapter 1(KR)	**Brand Name**	Motorola (Chenyang)	**Model Name**	MC-680N
AC Adapter 2(US)	**Brand Name**	Motorola (Acbel)	**Model Name**	MC-681N
AC Adapter 2(EU)	**Brand Name**	Motorola (Acbel)	**Model Name**	MC-682N
AC Adapter 2(UK)	**Brand Name**	Motorola (Acbel)	**Model Name**	MC-683N
AC Adapter 2(AU)	**Brand Name**	Motorola (Acbel)	**Model Name**	MC-685N
AC Adapter 2(AR)	**Brand Name**	Motorola (Acbel)	**Model Name**	MC-686N
AC Adapter 2(BR)	**Brand Name**	Motorola (Acbel)	**Model Name**	MC-687N
AC Adapter 3(IN)	**Brand Name**	Motorola (Acbel)	**Model Name**	MC-684N
Battery 1	**Brand Name**	Motorola(ATL)	**Model Name**	QR10
Battery 2	**Brand Name**	Motorola(ATL)	**Model Name**	QR30
USB Cable 1	**Brand Name**	Motorola(SAIBAO)	**Model Name**	SC18D71644
USB Cable 2	**Brand Name**	Motorola(Luxshare)	**Model Name**	SC18E08104
Wireless Earphones	**Brand Name**	Motorola	**Model Name**	XT2441-1

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.

The EUT is a folding phone, pretest the open status and closed status, only the worst status perform final test and record in the report. For the accessories, pretest standalone mode / Earphone mode / Adapter mode / Wireless charging mode, only the worst status perform final test and record in the report.

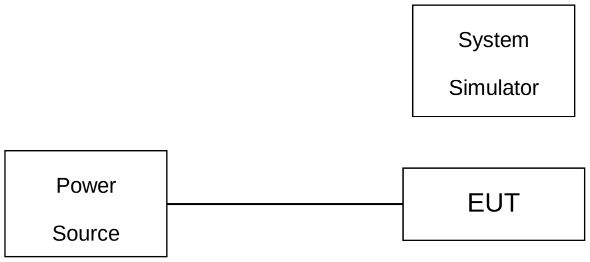
For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y plane) were recorded in this report.

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	35	40	50	60	70	80	90	100	QPSK	16 QAM	64 QAM	256 QAM	1	Full	L	M	H
Max. Output Power	n41	-	v	v	v	v	v	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	n41	-			v			-								v					v		v	
26dB and 99% Bandwidth	n41	-	v	v	v	v	v	-	v	v	v	v	v	v	v	v	v	v	v		v		v	
Conducted Band Edge	n41	-	v					-		v					v	v				v	v	v		v
Conducted Spurious Emission	n41	-	v					-		v					v	v				v		v	v	v
Frequency Stability	n41	-			v			-								v					v		v	
E.I.R.P	n41	-	v	v	v	v	v	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	n41	Worst Case																					v	
Note	1. The mark "**v**" means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. 4. Frequency Stability : Normal Voltage = 3.88V ; Low Voltage =3.40V. ; High Voltage =4.53V																							

2.2 Connection Diagram of Test System



This example is connection diagram of EUT test configurations.

. For detail, please refer to test mode configuration and setup photographs for each test item.

The EUT has been configuration operated in a manner tended to maximize its emission characteristics in a typical application.

2.3 Support Unit used in test configuration and system

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

2.4 Measurement Results Explanation Example

For all conducted test items:

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

The spectrum analyzer offset is derived from RF cable loss.

Offset = RF cable loss.

Following shows an offset computation example with cable loss 8.6 dB.

Example :

Offset(dB) = RF cable loss(dB).= 8.6 (dB)

2.5 Frequency List of Low/Middle/High Channels

5G NR n41 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	509202	518598	528000
	Frequency	2546.01	2592.99	2640
90	Channel	508200	518598	528996
	Frequency	2541	2592.99	2644.98
80	Channel	507204	518598	529998
	Frequency	2536.02	2592.99	2649.99
70	Channel	506202	518598	531000
	Frequency	2531.01	2592.99	2655
60	Channel	505200	518598	531996
	Frequency	2526	2592.99	2659.98
50	Channel	504204	518598	532998
	Frequency	2521.02	2592.99	2664.99
40	Channel	503202	518598	534000
	Frequency	2516.01	2592.99	2670
30	Channel	502200	518598	534996
	Frequency	2511	2592.99	2674.98
25	Channel	501702	518598	535500
	Frequency	2508.51	2592.99	2677.5
20	Channel	501204	518598	535998
	Frequency	2506.02	2592.99	2679.99
15	Channel	500700	518598	536496
	Frequency	2503.5	2592.99	2682.48
10	Channel	500202	518598	537000
	Frequency	2501.01	2592.99	2685

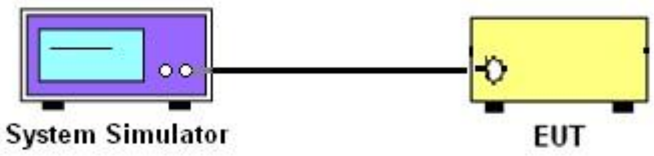
3 Conducted Test Items

3.1 Measuring Instruments

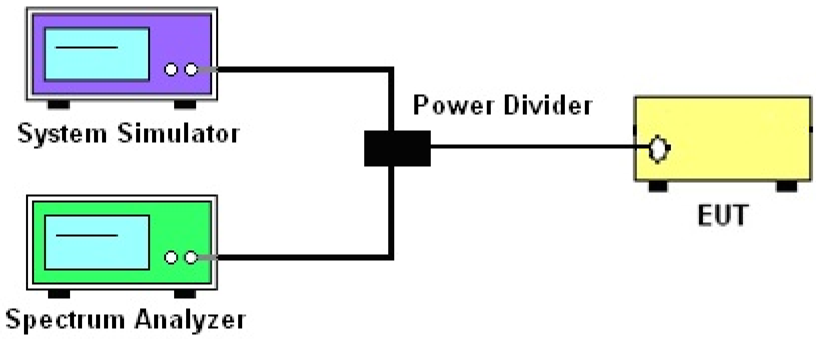
See list of measuring instruments of this test report.

3.2 Test Setup

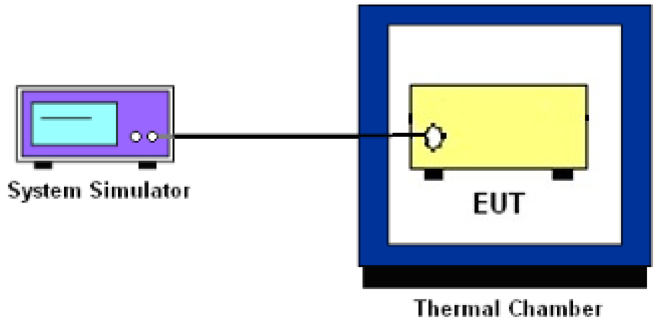
3.2.1 Conducted Output Power



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 n41.

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(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 >= 1%/2% 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 or a narrower RBW was used (generally limited to no less than 1% of the OBW) and the measured power was integrated over the full required measurement bandwidth.
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. Checked that all the results comply with the emission limit line.

   Example:

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

   = P(W)- [43 + 10log(P)] (dB)

   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB) = -13dBm.
9. For 5G NR n41, the other 40 dB, and 55 dB have additionally applied same calculation above.
10. When using the integration method, the starting frequency of the integration shall be centered at one-half of the RBW away from the band edge.

3.8 Conducted Spurious Emission

3.8.1 Description of Conducted Spurious Emission Measurement

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

For 5G NR n41:

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

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10^{th} harmonic.

3.8.2 Test Procedures

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

3.9 Frequency Stability

3.9.1 Description of Frequency Stability Measurement

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

3.9.2 Test Procedures for Temperature Variation

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

3.9.3 Test Procedures for Voltage Variation

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

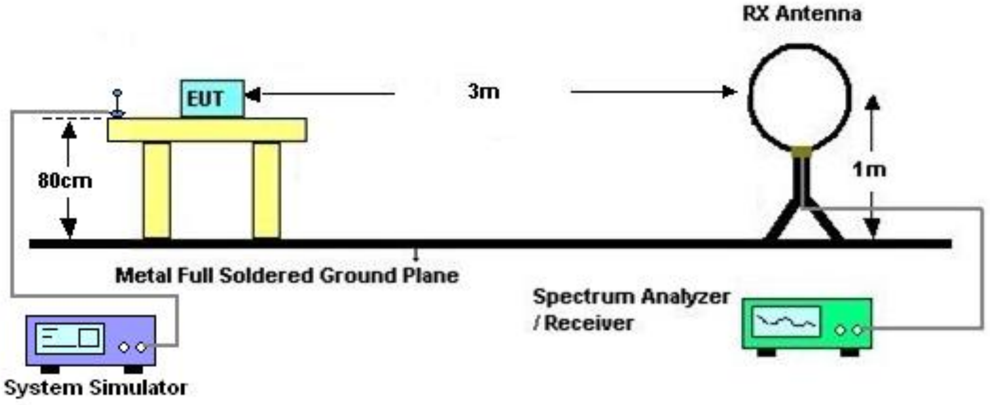
4 Radiated Test Items

4.1 Measuring Instruments

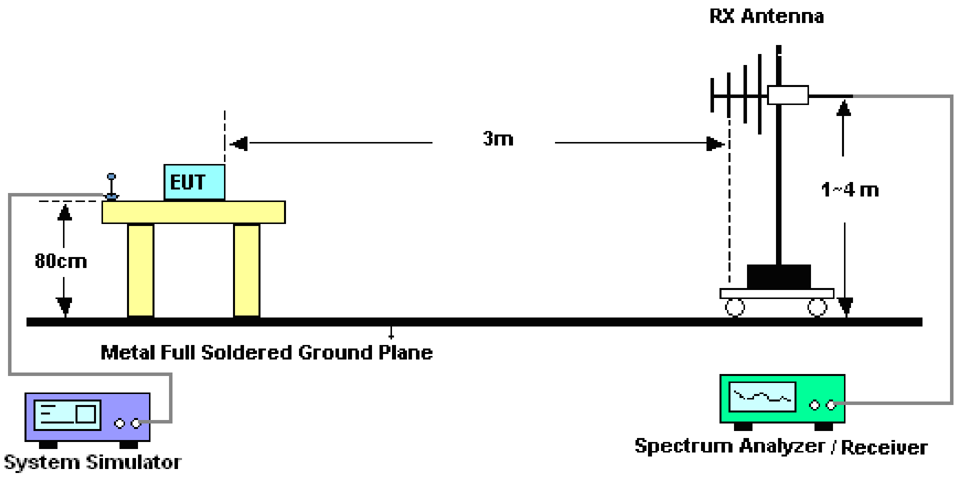
See list of measuring instruments of this test report.

4.2 Test Setup

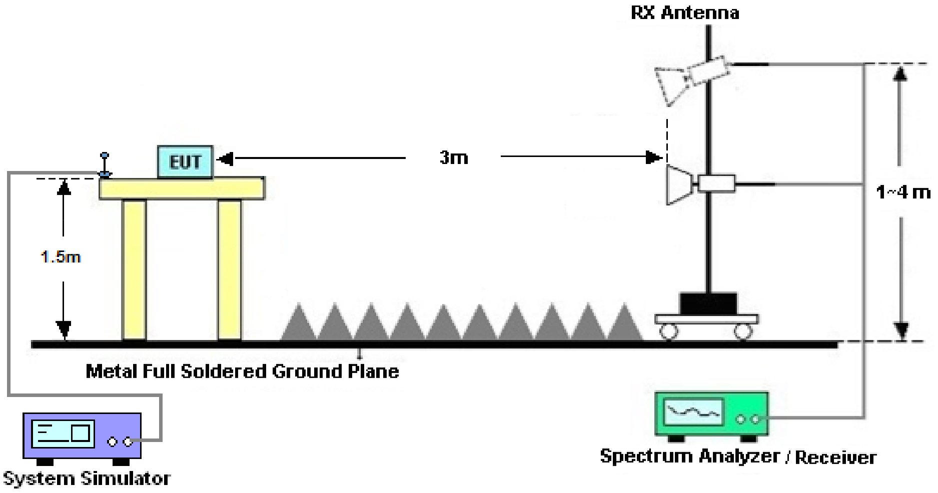
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3 Test Result of Radiated Test

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

Please refer to Appendix B.

4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26.

For 5G NR n41

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

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

4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.
13. For 5G NR n41:
    The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 07, 2023	Apr. 29, 2024	Jul. 06, 2024	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-04 265	60.06.020.007 7	0.4GHz~26.5GHz	Dec. 25, 2023	Apr. 29, 2024	Dec. 24, 2024	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 05, 2023	Apr. 29, 2024	Jul. 04, 2024	Conducted (TH01-SZ)
EMI Test Receiver	R&S	ESR7	101404	9kHz~7GHz	Oct. 18, 2023	Apr. 29, 2024	Oct. 17, 2024	Radiation (03CH04-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 07, 2023	Apr. 29, 2024	Jul. 06, 2024	Radiation (03CH04-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jun. 28, 2022	Apr. 29, 2024	Jun. 27, 2024	Radiation (03CH04-SZ)
Bilog Antenna	TeseQ	CBL6111D	41909	30MHz~1GHz	May 14, 2023	Apr. 29, 2024	May 13, 2024	Radiation (03CH04-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1474	1GHz~18GHz	Jul. 07, 2023	Apr. 29, 2024	Jul. 06, 2024	Radiation (03CH04-SZ)
Horn Antenna	SCHWARZBECK	BBHA9170	9170#679	15GHz~40GHz	Jul. 08, 2023	Apr. 29, 2024	Jul. 07, 2024	Radiation (03CH04-SZ)
Amplifier	Burgeon	BPA-530	102211	0.01Hz ~3000MHz	Oct. 18, 2023	Apr. 29, 2024	Oct. 17, 2024	Radiation (03CH04-SZ)
HF Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P-R	1943528	1GHz~18GHz	Oct. 18, 2023	Apr. 29, 2024	Oct. 17, 2024	Radiation (03CH04-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 07, 2023	Apr. 29, 2024	Jul. 06, 2024	Radiation (03CH04-SZ)
Amplifier	Agilent Technologies	83017A	MY57280136	500MHz~26.5GHz	Aug. 21, 2023	Apr. 29, 2024	Aug. 20, 2024	Radiation (03CH04-SZ)
AC Power Source	APC	AFV-S-600B	F119050019	N/A	Oct. 18, 2023	Apr. 29, 2024	Oct. 17, 2024	Radiation (03CH04-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Apr. 29, 2024	NCR	Radiation (03CH04-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Apr. 29, 2024	NCR	Radiation (03CH04-SZ)

NCR: No Calibration Required

6 Measurement Uncertainty

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 Conducted Measurement

Test Item	Uncertainty
Conducted Spurious Emission & Bandedge	±1.34 dB
Occupied Channel Bandwidth	±0.012 MHz
Conducted Power	±1.34 dB
Peak to Average Ratio	±1.34 dB
Frequency Stability	±1.3 Hz

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1 GHz)

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.1 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.9 dB

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

Appendix A. Test Results of Conducted Test

Test Engineer :	Khan Zheng	**Temperature :**	24~26℃
		Relative Humidity :	50~53%

Software Version: 23.06.1602

FR1 N41 MIMO

Transmitter Conducted Output Power and EIRP, $(G_T - L_C)$=-2.14dB

NR Band	SCS	Band Width	Arfcn	Freq (MHz)	Modulation	RB	ANT0 Power (dBm)	ANT1 Power (dBm)	Conducted Power (dBm)	EIRP (dBm)	EIRP (W)
41	30	10	500202	2501.01	CP-OFDM QPSK	1@1	23.1	23.71	26.43	24.29	0.2685
41	30	10	500202	2501.01	CP-OFDM 16 QAM	1@1	22.54	22.85	25.71	23.57	0.2275
41	30	10	518598	2592.99	CP-OFDM QPSK	1@1	23.18	23.64	26.43	24.29	0.2685
41	30	10	518598	2592.99	CP-OFDM 16 QAM	1@1	22.5	22.83	25.68	23.54	0.2259
41	30	10	537000	2685	CP-OFDM QPSK	1@1	22.77	23.32	26.06	23.92	0.2466
41	30	10	537000	2685	CP-OFDM 16 QAM	1@1	22.2	22.56	25.39	23.25	0.2113
41	30	15	500700	2503.5	CP-OFDM QPSK	1@1	23.12	23.6	26.38	24.24	0.2655
41	30	15	500700	2503.5	CP-OFDM 16 QAM	1@1	22.57	22.85	25.72	23.58	0.2280
41	30	15	518598	2592.99	CP-OFDM QPSK	1@1	23.08	23.51	26.31	24.17	0.2612
41	30	15	518598	2592.99	CP-OFDM 16 QAM	1@1	22.56	22.73	25.66	23.52	0.2249
41	30	15	536496	2682.48	CP-OFDM QPSK	1@1	22.93	23.5	26.23	24.09	0.2564
41	30	15	536496	2682.48	CP-OFDM 16 QAM	1@1	22.31	22.58	25.46	23.32	0.2148
41	30	20	501204	2506.02	CP-OFDM QPSK	1@1	22.94	23.33	26.15	24.01	0.2518
41	30	20	501204	2506.02	CP-OFDM 16 QAM	1@1	22.3	22.64	25.48	23.34	0.2158
41	30	20	518598	2592.99	CP-OFDM QPSK	1@1	23.04	23.49	26.28	24.14	0.2594
41	30	20	518598	2592.99	CP-OFDM 16 QAM	1@1	22.36	22.72	25.55	23.41	0.2193
41	30	20	535998	2679.99	CP-OFDM QPSK	1@1	22.88	23.34	26.13	23.99	0.2506
41	30	20	535998	2679.99	CP-OFDM 16 QAM	1@1	22.36	22.57	25.48	23.34	0.2158
41	30	25	501702	2508.51	CP-OFDM QPSK	1@1	23.02	23.55	26.30	24.16	0.2606
41	30	25	501702	2508.51	CP-OFDM 16 QAM	1@1	22.56	22.69	25.64	23.5	0.2239
41	30	25	518598	2592.99	CP-OFDM QPSK	1@1	23.05	23.71	26.40	24.26	0.2667
41	30	25	518598	2592.99	CP-OFDM 16 QAM	1@1	22.62	22.92	25.78	23.64	0.2312
41	30	25	535500	2677.5	CP-OFDM QPSK	1@1	22.9	23.44	26.19	24.05	0.2541
41	30	25	535500	2677.5	CP-OFDM 16 QAM	1@1	22.41	22.57	25.50	23.36	0.2168
41	30	30	502200	2511	CP-OFDM QPSK	1@1	23.11	23.68	26.41	24.27	0.2673

NR Band	SCS	Band Width	Arfcn	Freq (MHz)	Modulation	RB	ANT0 Power (dBm)	ANT1 Power (dBm)	Conducted Power (dBm)	EIRP (dBm)	EIRP (W)
41	30	30	502200	2511	CP-OFDM 16 QAM	1@1	22.57	22.77	25.68	23.54	0.2259
41	30	30	518598	2592.99	CP-OFDM QPSK	1@1	23.13	23.7	26.43	24.29	0.2685
41	30	30	518598	2592.99	CP-OFDM 16 QAM	1@1	22.6	22.74	25.68	23.54	0.2259
41	30	30	534996	2674.98	CP-OFDM QPSK	1@1	23.1	23.45	26.29	24.15	0.2600
41	30	30	534996	2674.98	CP-OFDM 16 QAM	1@1	22.53	22.75	25.65	23.51	0.2244
41	30	40	503202	2516.01	CP-OFDM QPSK	1@1	22.89	23.5	26.22	24.08	0.2559
41	30	40	503202	2516.01	CP-OFDM 16 QAM	1@1	22.36	22.54	25.46	23.32	0.2148
41	30	40	518598	2592.99	CP-OFDM QPSK	1@1	22.9	23.6	26.27	24.13	0.2588
41	30	40	518598	2592.99	CP-OFDM 16 QAM	1@1	22.35	22.7	25.54	23.4	0.2188
41	30	40	534000	2670	CP-OFDM QPSK	1@1	22.83	23.29	26.08	23.94	0.2477
41	30	40	534000	2670	CP-OFDM 16 QAM	1@1	22.28	22.41	25.36	23.22	0.2099
41	30	50	504204	2521.02	CP-OFDM QPSK	1@1	23.09	23.74	26.44	24.3	0.2692
41	30	50	504204	2521.02	CP-OFDM 16 QAM	1@1	22.57	22.81	25.70	23.56	0.2270
41	30	50	518598	2592.99	CP-OFDM QPSK	1@1	23.13	23.83	26.50	24.36	0.2729
41	30	50	518598	2592.99	CP-OFDM 16 QAM	1@1	22.7	22.94	25.83	23.69	0.2339
41	30	50	532998	2664.99	CP-OFDM QPSK	1@1	23.04	23.65	26.37	24.23	0.2649
41	30	50	532998	2664.99	CP-OFDM 16 QAM	1@1	22.47	22.72	25.61	23.47	0.2223
41	30	60	505200	2526	CP-OFDM QPSK	1@1	22.95	23.39	26.19	24.05	0.2541
41	30	60	505200	2526	CP-OFDM 16 QAM	1@1	22.58	22.7	25.65	23.51	0.2244
41	30	60	518598	2592.99	CP-OFDM QPSK	1@1	23.11	23.65	26.40	24.26	0.2667
41	30	60	518598	2592.99	CP-OFDM 16 QAM	1@1	22.57	22.76	25.68	23.54	0.2259
41	30	60	531996	2659.98	CP-OFDM QPSK	1@1	23.07	23.52	26.31	24.17	0.2612
41	30	60	531996	2659.98	CP-OFDM 16 QAM	1@1	22.46	22.65	25.57	23.43	0.2203
41	30	70	505200	2531.01	CP-OFDM QPSK	1@1	22.98	23.67	26.35	24.21	0.2636
41	30	70	505200	2531.01	CP-OFDM 16 QAM	1@1	22.39	22.65	25.53	23.39	0.2183
41	30	70	518598	2592.99	CP-OFDM QPSK	1@1	22.97	23.7	26.36	24.22	0.2642
41	30	70	518598	2592.99	CP-OFDM 16 QAM	1@1	22.45	22.8	25.64	23.5	0.2239
41	30	70	531996	2655	CP-OFDM QPSK	1@1	23	23.35	26.19	24.05	0.2541
41	30	70	531996	2655	CP-OFDM 16 QAM	1@1	22.36	22.37	25.38	23.24	0.2109
41	30	80	507204	2536.02	CP-OFDM QPSK	1@1	22.91	23.6	26.28	24.14	0.2594

NR Band	SCS	Band Width	Arfcn	Freq (MHz)	Modulation	RB	ANT0 Power (dBm)	ANT1 Power (dBm)	Conducted Power (dBm)	EIRP (dBm)	EIRP (W)
41	30	80	507204	2536.02	CP-OFDM 16 QAM	1@1	22.3	22.73	25.53	23.39	0.2183
41	30	80	518598	2592.99	CP-OFDM QPSK	1@1	22.99	23.64	26.34	24.2	0.2630
41	30	80	518598	2592.99	CP-OFDM 16 QAM	1@1	22.49	22.96	25.74	23.6	0.2291
41	30	80	529998	2649.99	CP-OFDM QPSK	1@1	23.19	23.46	26.34	24.2	0.2630
41	30	80	529998	2649.99	CP-OFDM 16 QAM	1@1	22.48	22.59	25.55	23.41	0.2193
41	30	90	508200	2541	CP-OFDM QPSK	1@1	22.95	23.67	26.34	24.2	0.2630
41	30	90	508200	2541	CP-OFDM 16 QAM	1@1	22.43	22.8	25.63	23.49	0.2234
41	30	90	518598	2592.99	CP-OFDM QPSK	1@1	23	23.76	26.41	24.27	0.2673
41	30	90	518598	2592.99	CP-OFDM 16 QAM	1@1	22.63	22.95	25.80	23.66	0.2323
41	30	90	528996	2644.98	CP-OFDM QPSK	1@1	23.16	23.6	26.40	24.26	0.2667
41	30	90	528996	2644.98	CP-OFDM 16 QAM	1@1	22.65	22.86	25.77	23.63	0.2307
41	30	100	509202	2546.01	CP-OFDM QPSK	137@68	22.92	23.19	26.07	23.93	0.2472
41	30	100	509202	2546.01	CP-OFDM QPSK	1@1	23.02	23.55	26.30	24.16	0.2606
41	30	100	509202	2546.01	CP-OFDM QPSK	1@271	23.26	23.51	26.40	24.26	0.2667
41	30	100	509202	2546.01	CP-OFDM 16 QAM	137@68	22.46	22.71	25.60	23.46	0.2218
41	30	100	509202	2546.01	CP-OFDM 16 QAM	1@1	22.41	22.69	25.56	23.42	0.2198
41	30	100	509202	2546.01	CP-OFDM 16 QAM	1@271	22.54	22.37	25.47	23.33	0.2153
41	30	100	509202	2546.01	CP-OFDM 64 QAM	137@68	21.08	21.08	24.09	21.95	0.1567
41	30	100	509202	2546.01	CP-OFDM 64 QAM	1@1	20.88	20.92	23.91	21.77	0.1503
41	30	100	509202	2546.01	CP-OFDM 64 QAM	1@271	21	20.75	23.89	21.75	0.1496
41	30	100	509202	2546.01	CP-OFDM 256 QAM	137@68	20.86	21.09	23.99	21.85	0.1531
41	30	100	509202	2546.01	CP-OFDM 256 QAM	1@1	17.19	17.44	20.33	18.19	0.0659
41	30	100	509202	2546.01	CP-OFDM 256 QAM	1@271	17.55	17.28	20.43	18.29	0.0675
41	30	100	518598	2592.99	CP-OFDM QPSK	137@68	22.97	23.37	26.18	24.04	0.2535
41	30	100	518598	2592.99	CP-OFDM QPSK	1@1	23.03	23.93	26.51	24.37	0.2735
41	30	100	518598	2592.99	CP-OFDM QPSK	1@271	22.93	23.59	26.28	24.14	0.2594
41	30	100	518598	2592.99	CP-OFDM 16 QAM	137@68	22.61	23.11	25.88	23.74	0.2366
41	30	100	518598	2592.99	CP-OFDM 16 QAM	1@1	22.48	22.88	25.69	23.55	0.2265
41	30	100	518598	2592.99	CP-OFDM 16 QAM	1@271	22.32	22.69	25.52	23.38	0.2178
41	30	100	518598	2592.99	CP-OFDM 64 QAM	137@68	20.89	21.35	24.14	22	0.1585

NR Band	SCS	Band Width	Arfcn	Freq (MHz)	Modulation	RB	ANT0 Power (dBm)	ANT1 Power (dBm)	Conducted Power (dBm)	EIRP (dBm)	EIRP (W)
41	30	100	518598	2592.99	CP-OFDM 64 QAM	1@1	20.82	21.01	23.93	21.79	0.1510
41	30	100	518598	2592.99	CP-OFDM 64 QAM	1@271	20.7	20.85	23.79	21.65	0.1462
41	30	100	518598	2592.99	CP-OFDM 256 QAM	137@68	20.93	21.48	24.22	22.08	0.1614
41	30	100	518598	2592.99	CP-OFDM 256 QAM	1@1	17.3	17.89	20.62	18.48	0.0705
41	30	100	518598	2592.99	CP-OFDM 256 QAM	1@271	17.28	17.63	20.47	18.33	0.0681
41	30	100	528000	2640	CP-OFDM QPSK	137@68	22.77	22.87	25.83	23.69	0.2339
41	30	100	528000	2640	CP-OFDM QPSK	1@1	23.04	23.65	26.37	24.23	0.2649
41	30	100	528000	2640	CP-OFDM QPSK	1@271	22.81	23.63	26.25	24.11	0.2576
41	30	100	528000	2640	CP-OFDM 16 QAM	137@68	22.43	22.8	25.63	23.49	0.2234
41	30	100	528000	2640	CP-OFDM 16 QAM	1@1	22.56	22.66	25.62	23.48	0.2228
41	30	100	528000	2640	CP-OFDM 16 QAM	1@271	22.3	22.74	25.54	23.4	0.2188
41	30	100	528000	2640	CP-OFDM 64 QAM	137@68	20.78	21.14	23.97	21.83	0.1524
41	30	100	528000	2640	CP-OFDM 64 QAM	1@1	20.8	20.92	23.87	21.73	0.1489
41	30	100	528000	2640	CP-OFDM 64 QAM	1@271	20.64	20.98	23.82	21.68	0.1472
41	30	100	528000	2640	CP-OFDM 256 QAM	137@68	20.88	21.02	23.96	21.82	0.1521
41	30	100	528000	2640	CP-OFDM 256 QAM	1@1	17.33	17.33	20.34	18.2	0.0661
41	30	100	528000	2640	CP-OFDM 256 QAM	1@271	16.97	17.57	20.29	18.15	0.0653

FR1 N41 MIMO-(ANT2+3)-ANT2

Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0043	**PASS**	NV
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0028	**PASS**	LV
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0025	**PASS**	HV
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0058	**PASS**	-30℃
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0036	**PASS**	-20℃
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0068	**PASS**	-10℃
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0067	**PASS**	0℃
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0057	**PASS**	10℃
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0043	**PASS**	20℃
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0020	**PASS**	30℃
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0038	**PASS**	40℃
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0036	**PASS**	50℃

Peak to Average Ratio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	6.48	13	**PASS**

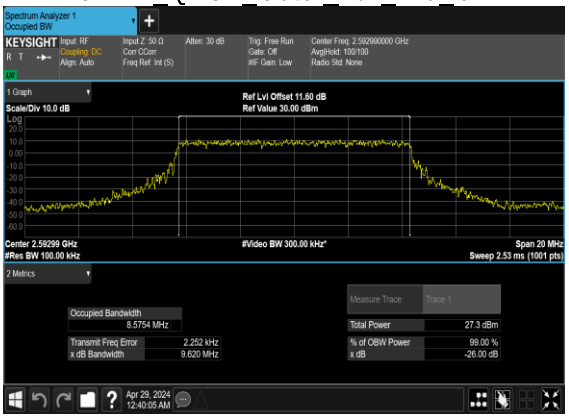
N41(20M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

Occupied Bandwidth

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB BW (MHz)
41	30	10	518598	2592.99	CP-OFDM QPSK	24@0	8.5754	9.62
41	30	10	518598	2592.99	CP-OFDM 16 QAM	24@0	8.5788	9.753
41	30	10	518598	2592.99	CP-OFDM 64 QAM	24@0	8.5724	9.613
41	30	10	518598	2592.99	CP-OFDM 256 QAM	24@0	8.5405	9.281
41	30	15	518598	2592.99	CP-OFDM QPSK	38@0	13.547	14.92
41	30	15	518598	2592.99	CP-OFDM 16 QAM	38@0	13.554	14.56
41	30	15	518598	2592.99	CP-OFDM 64 QAM	38@0	13.553	14.58
41	30	15	518598	2592.99	CP-OFDM 256 QAM	38@0	13.557	14.95
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	18.151	19.24
41	30	20	518598	2592.99	CP-OFDM 16 QAM	51@0	18.179	19.7
41	30	20	518598	2592.99	CP-OFDM 64 QAM	51@0	18.287	19.1
41	30	20	518598	2592.99	CP-OFDM 256 QAM	51@0	18.23	19.47
41	30	25	518598	2592.99	CP-OFDM QPSK	65@0	23.251	24.71
41	30	25	518598	2592.99	CP-OFDM 16 QAM	65@0	23.185	24.54
41	30	25	518598	2592.99	CP-OFDM 64 QAM	65@0	23.246	24.48
41	30	25	518598	2592.99	CP-OFDM 256 QAM	65@0	23.234	24.26
41	30	30	518598	2592.99	CP-OFDM QPSK	78@0	27.904	29.39
41	30	30	518598	2592.99	CP-OFDM 16 QAM	78@0	27.74	29.44
41	30	30	518598	2592.99	CP-OFDM 64 QAM	78@0	27.895	29.13
41	30	30	518598	2592.99	CP-OFDM 256 QAM	78@0	27.883	28.92
41	30	40	518598	2592.99	CP-OFDM QPSK	106@0	37.804	39.3
41	30	40	518598	2592.99	CP-OFDM 16 QAM	106@0	37.787	39.44
41	30	40	518598	2592.99	CP-OFDM 64 QAM	106@0	37.744	39.44
41	30	40	518598	2592.99	CP-OFDM 256 QAM	106@0	37.709	39.65
41	30	50	518598	2592.99	CP-OFDM QPSK	133@0	47.488	49.32

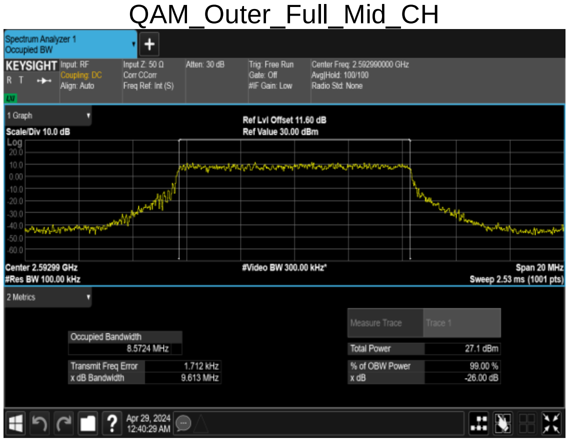
41	30	50	518598	2592.99	CP-OFDM 16 QAM	133@0	47.385	49.14
41	30	50	518598	2592.99	CP-OFDM 64 QAM	133@0	47.49	49.06
41	30	50	518598	2592.99	CP-OFDM 256 QAM	133@0	47.455	49.14
41	30	60	518598	2592.99	CP-OFDM QPSK	162@0	57.897	59.82
41	30	60	518598	2592.99	CP-OFDM 16 QAM	162@0	57.842	59.79
41	30	60	518598	2592.99	CP-OFDM 64 QAM	162@0	57.854	60.08
41	30	60	518598	2592.99	CP-OFDM 256 QAM	162@0	57.808	60.16
41	30	70	518598	2592.99	CP-OFDM QPSK	189@0	67.464	69.84
41	30	70	518598	2592.99	CP-OFDM 16 QAM	189@0	67.478	69.68
41	30	70	518598	2592.99	CP-OFDM 64 QAM	189@0	67.434	69.62
41	30	70	518598	2592.99	CP-OFDM 256 QAM	189@0	67.459	69.76
41	30	80	518598	2592.99	CP-OFDM QPSK	217@0	77.408	79.79
41	30	80	518598	2592.99	CP-OFDM 16 QAM	217@0	77.35	80.03
41	30	80	518598	2592.99	CP-OFDM 64 QAM	217@0	77.341	80.1
41	30	80	518598	2592.99	CP-OFDM 256 QAM	217@0	77.397	80.01
41	30	90	518598	2592.99	CP-OFDM QPSK	245@0	87.48	90.33
41	30	90	518598	2592.99	CP-OFDM 16 QAM	245@0	87.571	90.25
41	30	90	518598	2592.99	CP-OFDM 64 QAM	245@0	87.418	90.14
41	30	90	518598	2592.99	CP-OFDM 256 QAM	245@0	87.534	90.47
41	30	100	518598	2592.99	CP-OFDM QPSK	273@0	97.279	100.5
41	30	100	518598	2592.99	CP-OFDM 16 QAM	273@0	97.532	100.6
41	30	100	518598	2592.99	CP-OFDM 64 QAM	273@0	97.532	100.4
41	30	100	518598	2592.99	CP-OFDM 256 QAM	273@0	97.579	100.8

N41(10M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

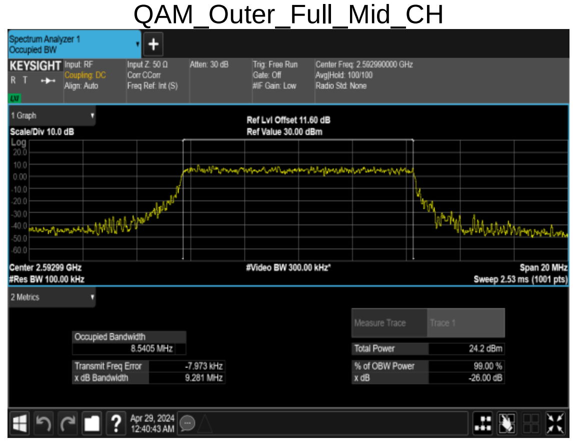


N41(10M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

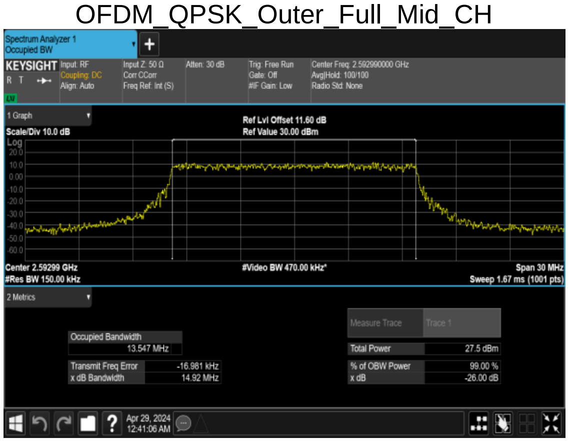
N41(10M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



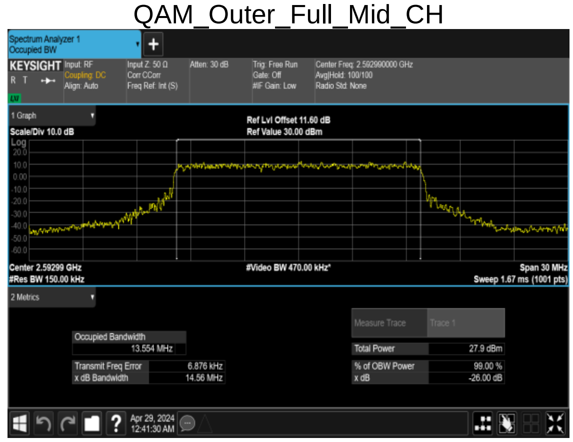
N41(10M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



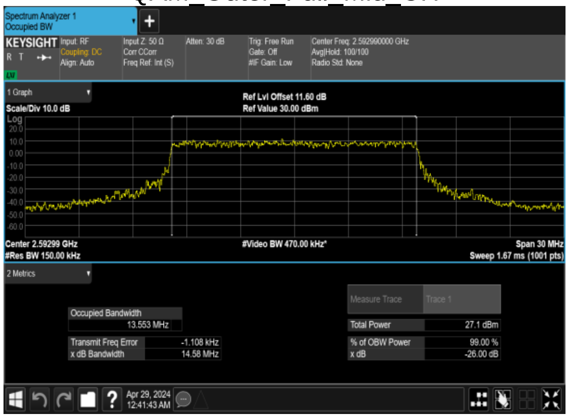
N41(15M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



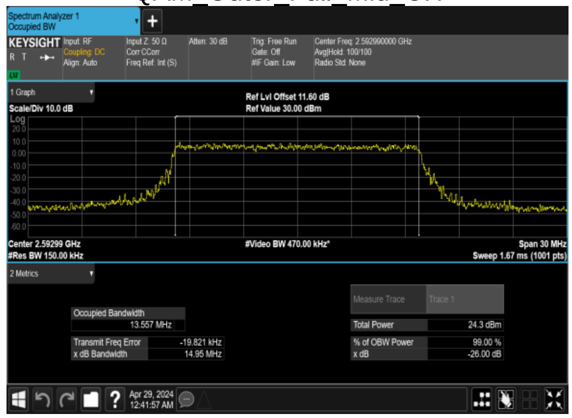
N41(15M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



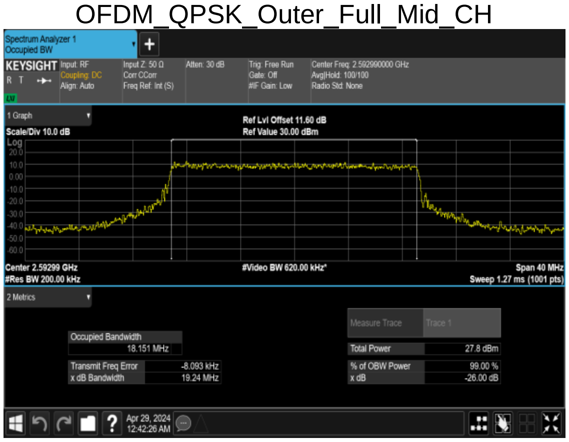
N41(15M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



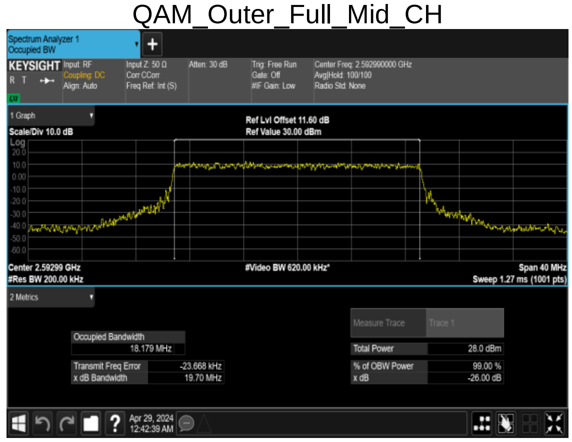
N41(15M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



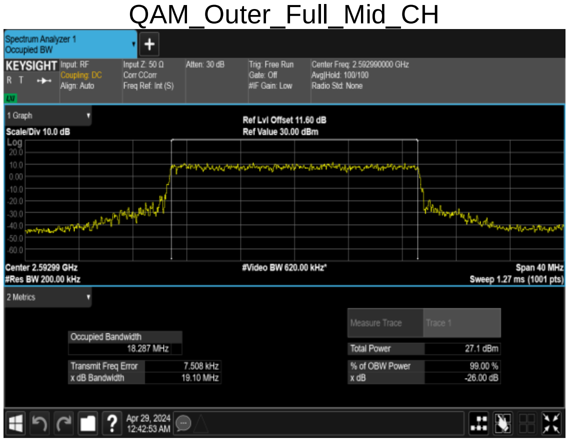
N41(20M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



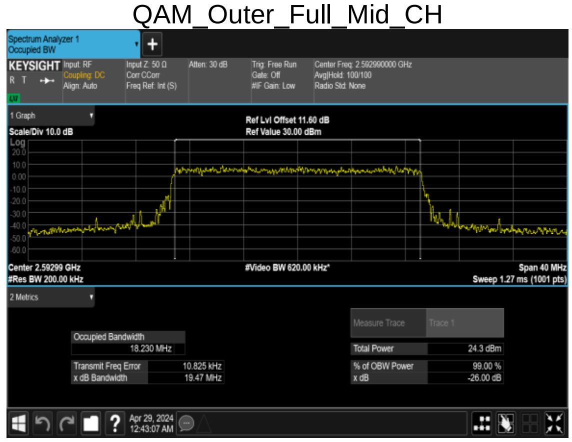
N41(20M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



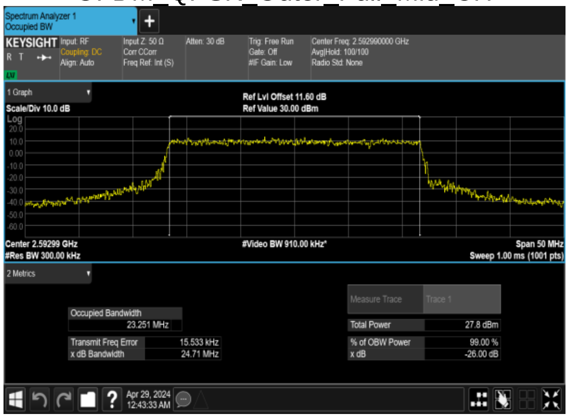
N41(20M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



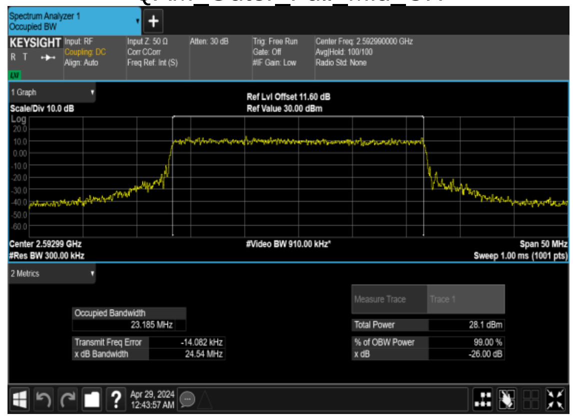
N41(20M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



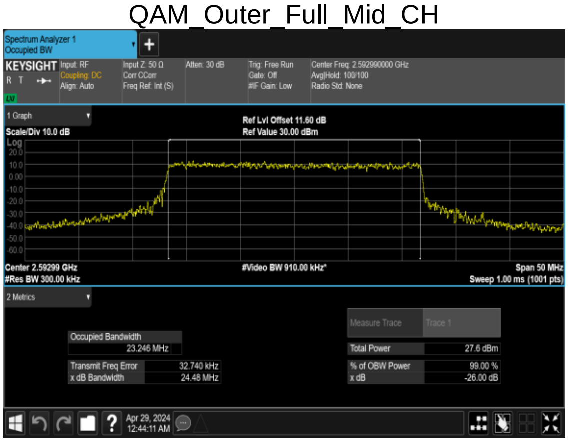
N41(25M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



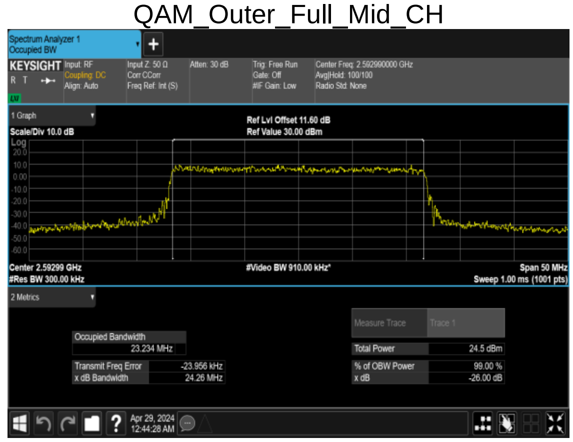
N41(25M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



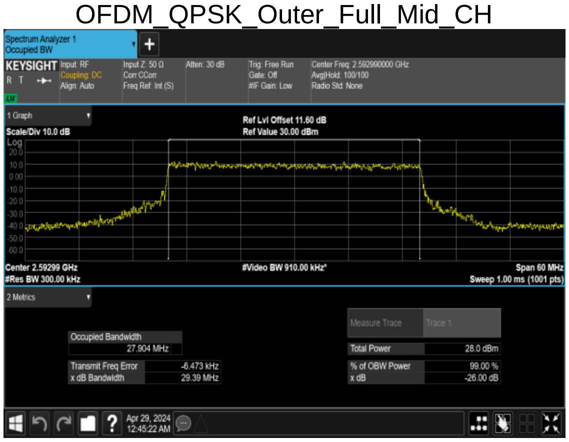
N41(25M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



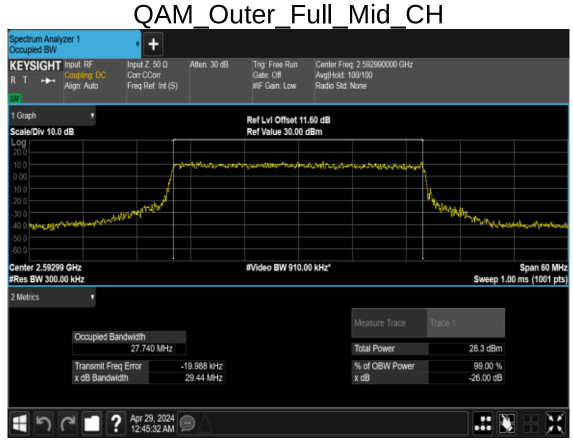
N41(25M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



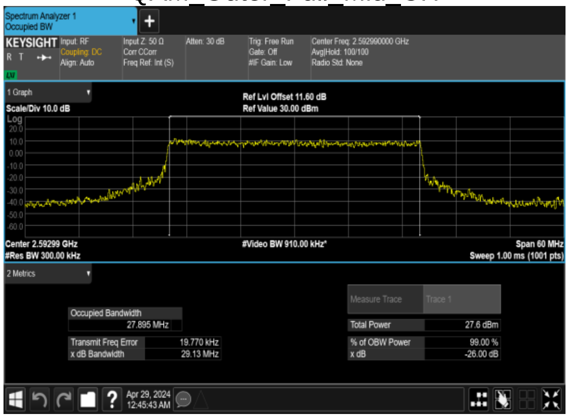
N41(30M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



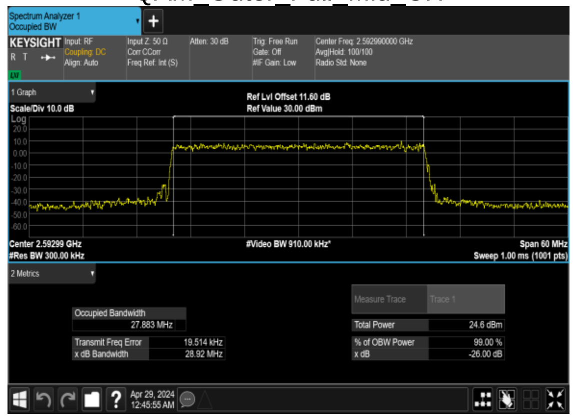
N41(30M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



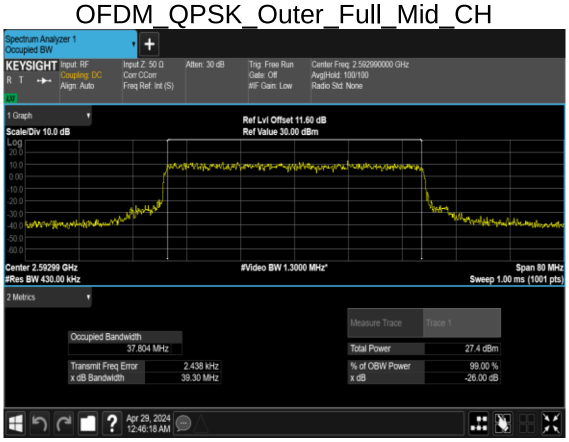
N41(30M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



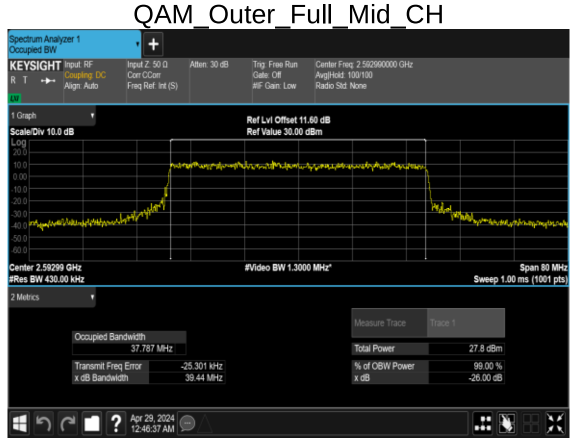
N41(30M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



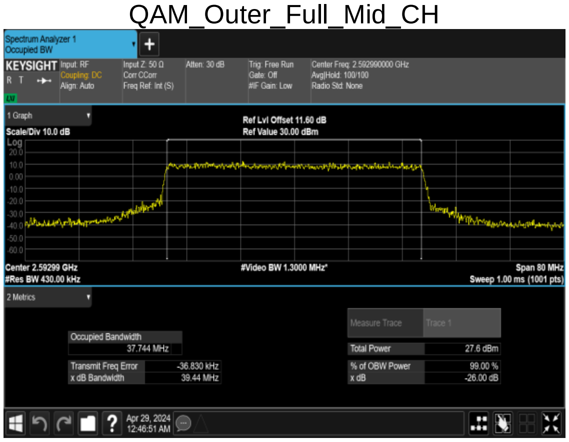
N41(40M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



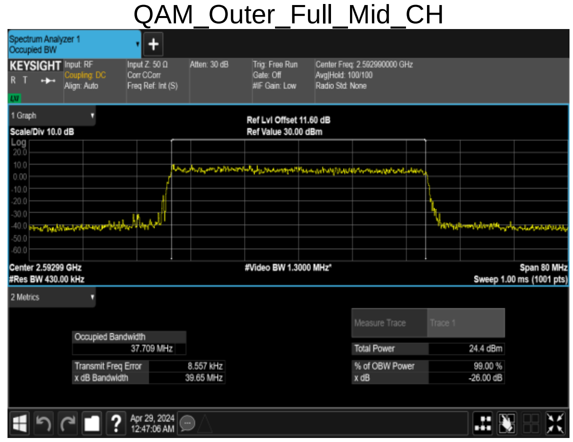
N41(40M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



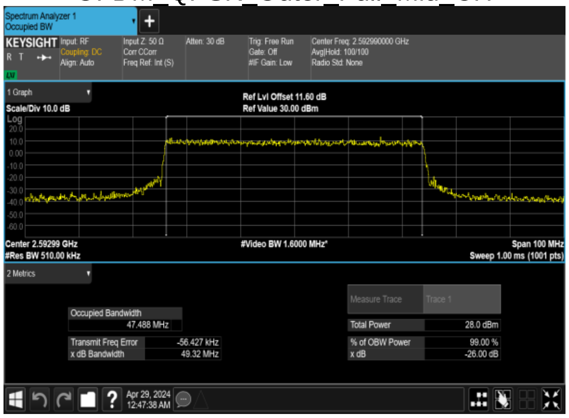
N41(40M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



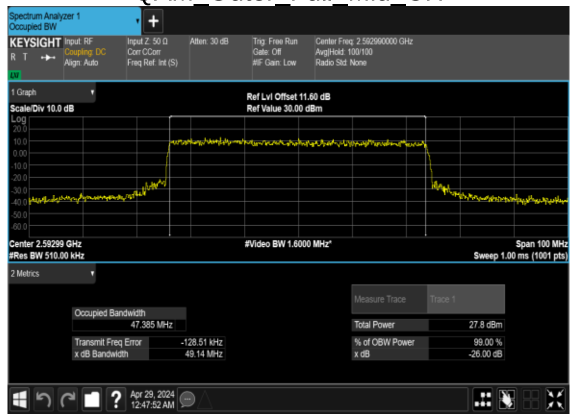
N41(40M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



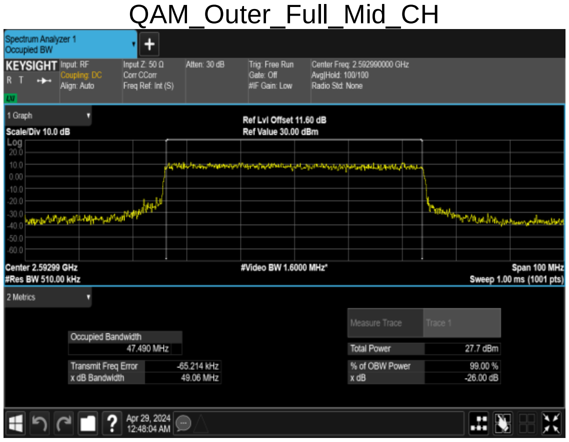
N41(50M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



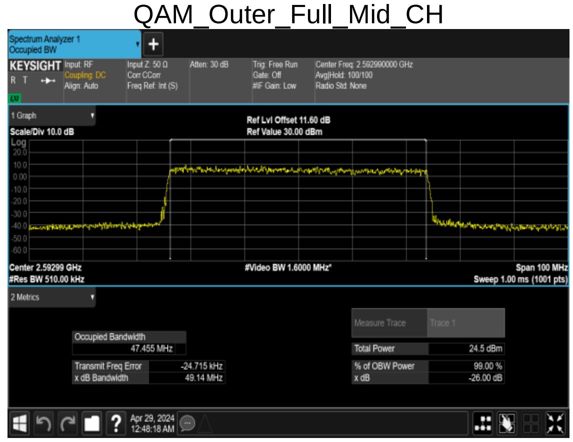
N41(50M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



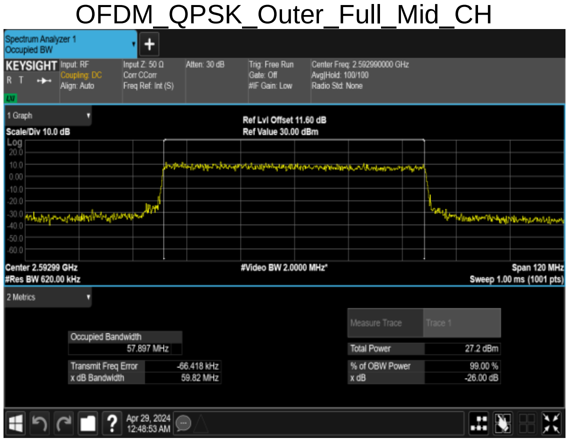
N41(50M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



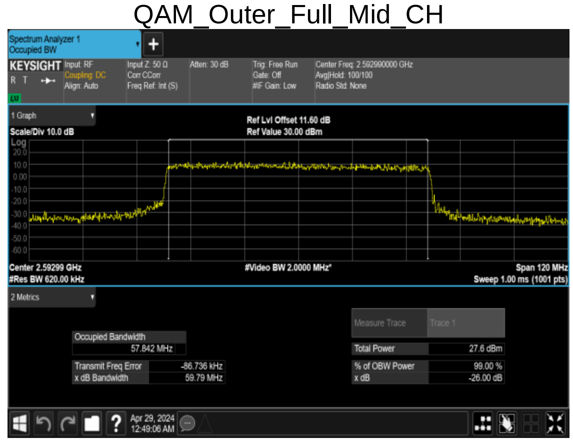
N41(50M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



N41(60M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



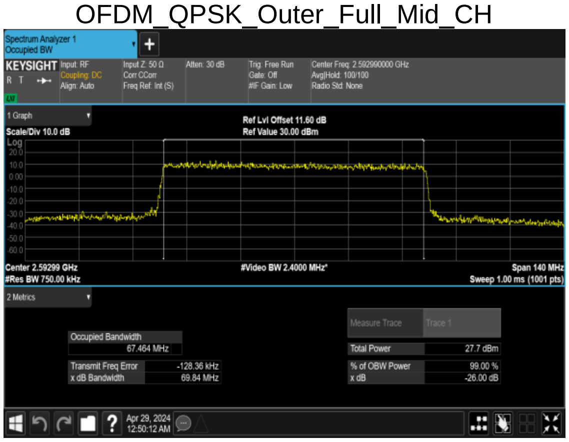
N41(60M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



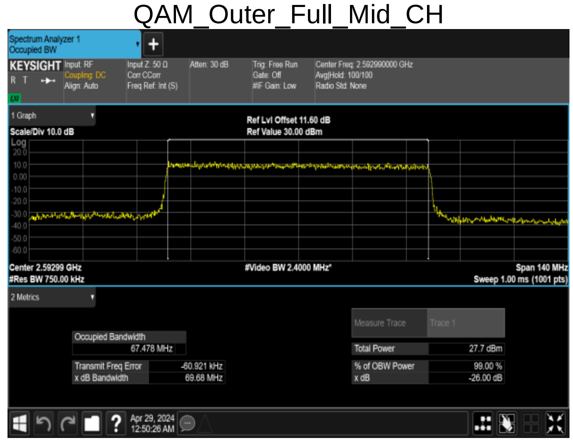
N41(60M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

N41(60M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

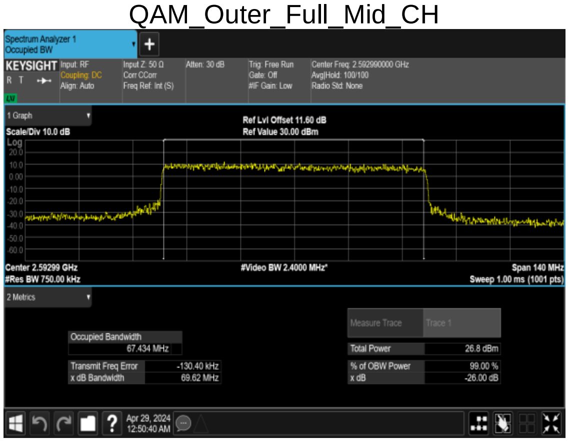
N41(70M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



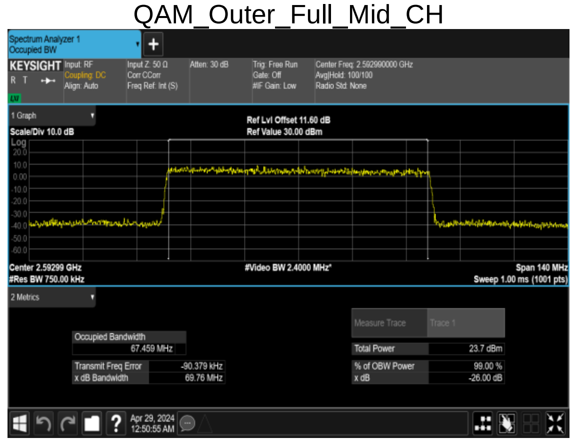
N41(70M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N41(70M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

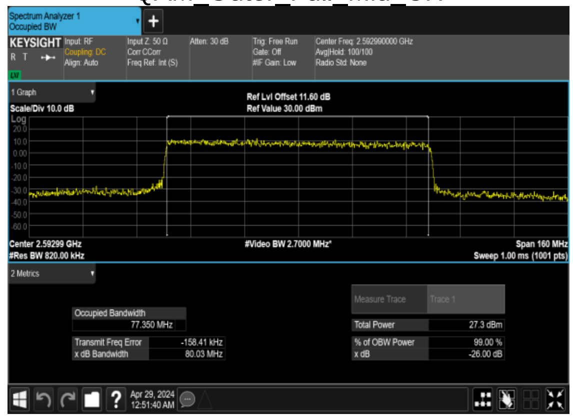


N41(70M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

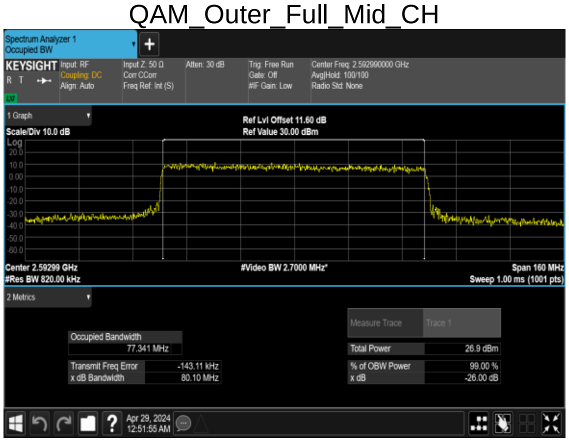


N41(80M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

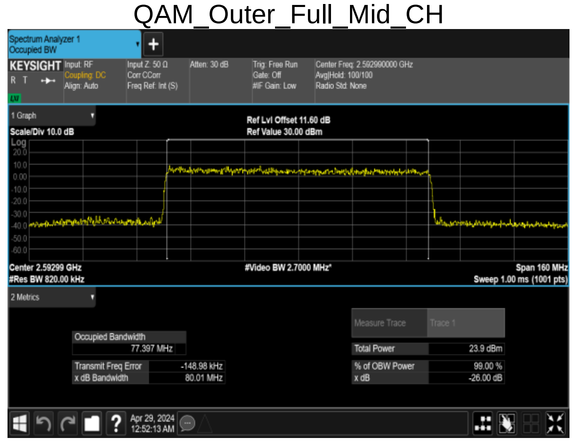
N41(80M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



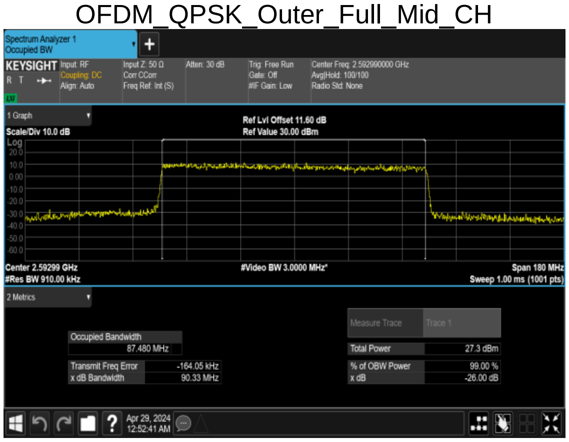
N41(80M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



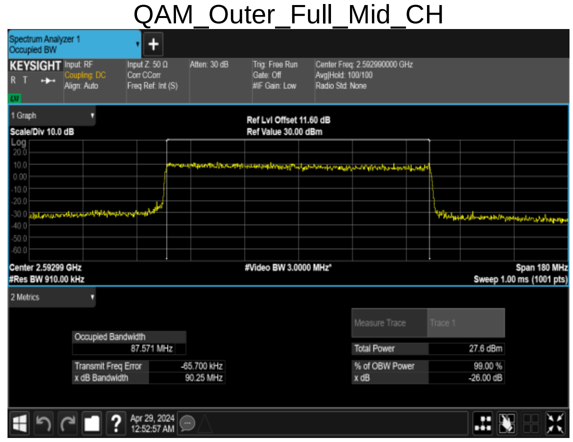
N41(80M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



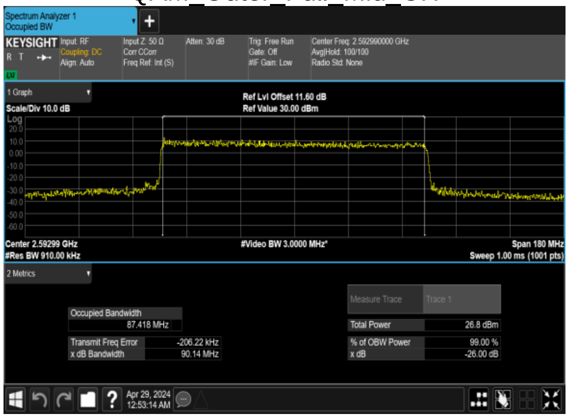
N41(90M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



N41(90M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

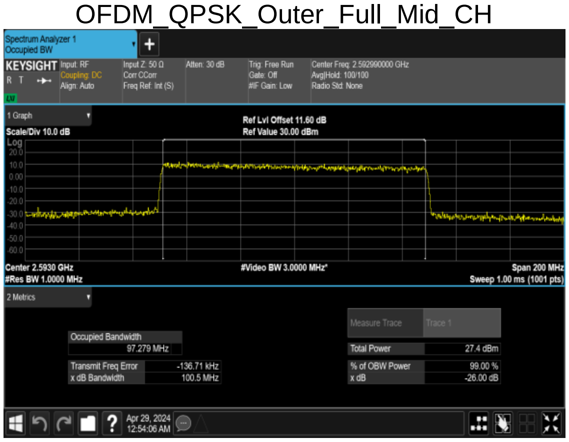


N41(90M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

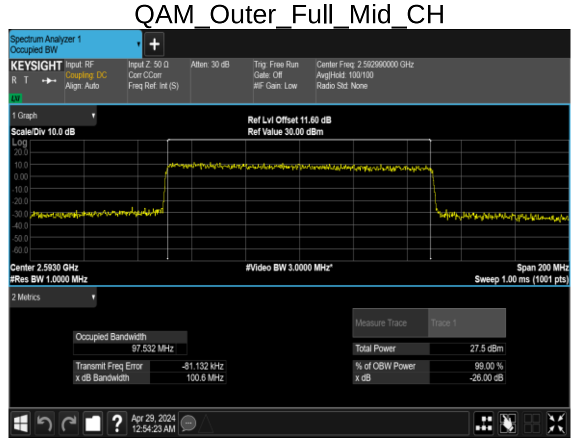


N41(90M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

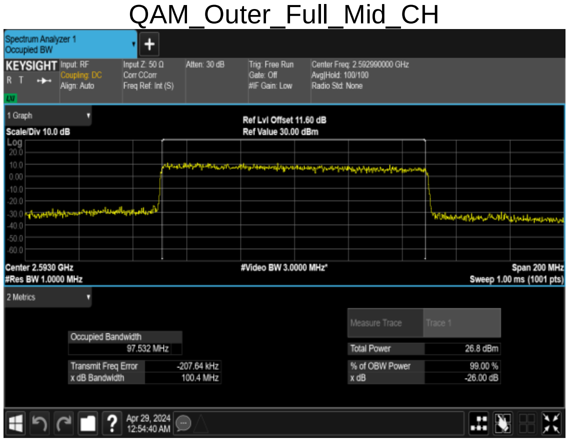
N41(100M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



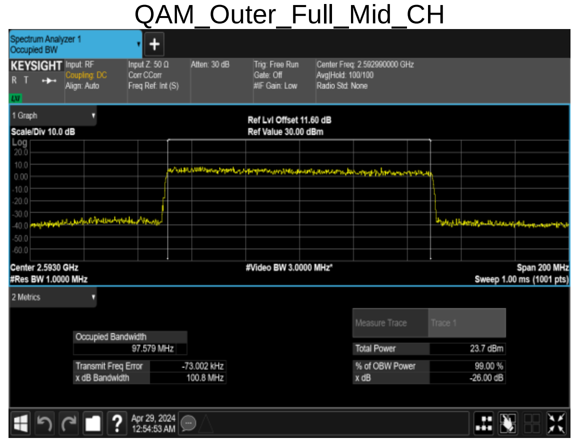
N41(100M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N41(100M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



N41(100M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

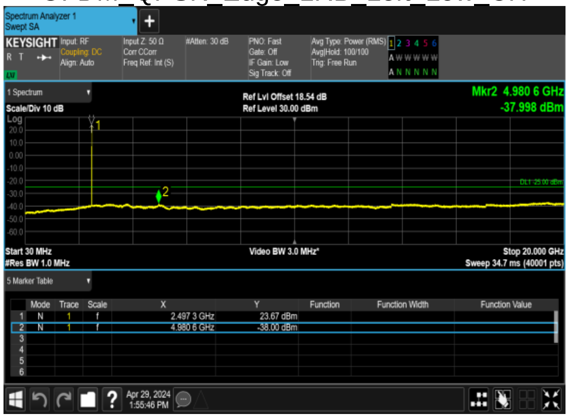


Conducted Spurious Emissions

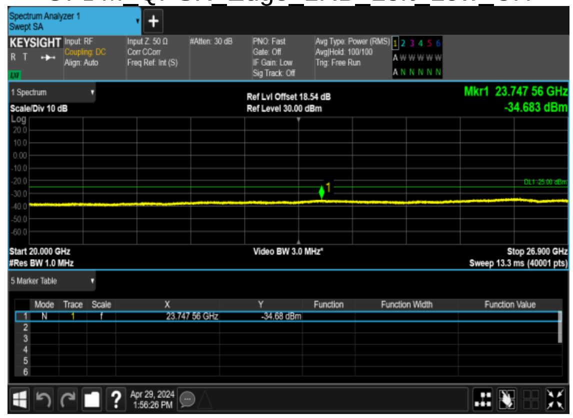
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
41	30	10	500202	2501.01	CP-OFDM QPSK	1@0	see graph	**---**
41	30	10	500202	2501.01	CP-OFDM QPSK	1@0	see graph	**PASS**
41	30	10	500202	2501.01	CP-OFDM QPSK	1@0	see graph	**PASS**
41	30	10	518598	2592.99	CP-OFDM QPSK	1@0	see graph	**---**
41	30	10	518598	2592.99	CP-OFDM QPSK	1@0	see graph	**PASS**
41	30	10	518598	2592.99	CP-OFDM QPSK	1@0	see graph	**PASS**
41	30	10	537000	2685.0	CP-OFDM QPSK	1@0	see graph	**---**
41	30	10	537000	2685.0	CP-OFDM QPSK	1@0	see graph	**PASS**
41	30	10	537000	2685.0	CP-OFDM QPSK	1@0	see graph	**PASS**
41	30	50	504204	2521.02	CP-OFDM QPSK	1@0	see graph	**---**
41	30	50	504204	2521.02	CP-OFDM QPSK	1@0	see graph	**PASS**
41	30	50	504204	2521.02	CP-OFDM QPSK	1@0	see graph	**PASS**
41	30	50	518598	2592.99	CP-OFDM QPSK	1@0	see graph	**---**
41	30	50	518598	2592.99	CP-OFDM QPSK	1@0	see graph	**PASS**
41	30	50	518598	2592.99	CP-OFDM QPSK	1@0	see graph	**PASS**
41	30	50	532998	2664.99	CP-OFDM QPSK	1@0	see graph	**---**
41	30	50	532998	2664.99	CP-OFDM QPSK	1@0	see graph	**PASS**
41	30	50	532998	2664.99	CP-OFDM QPSK	1@0	see graph	**PASS**
41	30	100	509202	2546.01	CP-OFDM QPSK	1@0	see graph	**---**
41	30	100	509202	2546.01	CP-OFDM QPSK	1@0	see graph	**PASS**
41	30	100	509202	2546.01	CP-OFDM QPSK	1@0	see graph	**PASS**

41	30	100	518598	2592.99	CP-OFDM QPSK	1@0	see graph	**---**
41	30	100	518598	2592.99	CP-OFDM QPSK	1@0	see graph	**PASS**
41	30	100	518598	2592.99	CP-OFDM QPSK	1@0	see graph	**PASS**
41	30	100	528000	2640.0	CP-OFDM QPSK	1@0	see graph	**---**
41	30	100	528000	2640.0	CP-OFDM QPSK	1@0	see graph	**PASS**
41	30	100	528000	2640.0	CP-OFDM QPSK	1@0	see graph	**PASS**

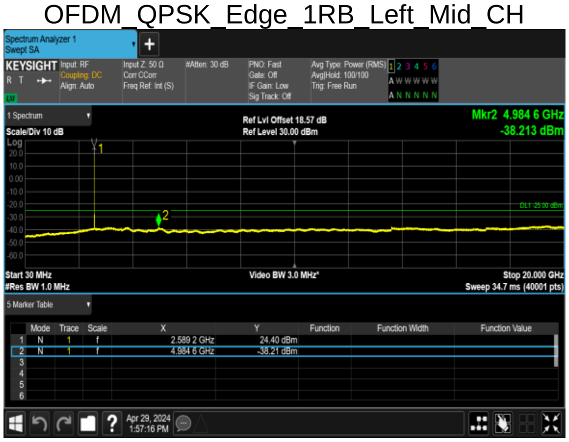
N41(10M)_CP-OFDM_QPSK_Edge_1RB_Left_Low_CH



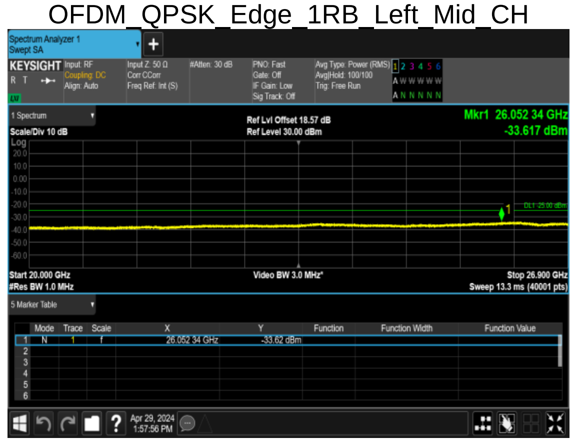
N41(10M)_CP-OFDM_QPSK_Edge_1RB_Left_Low_CH



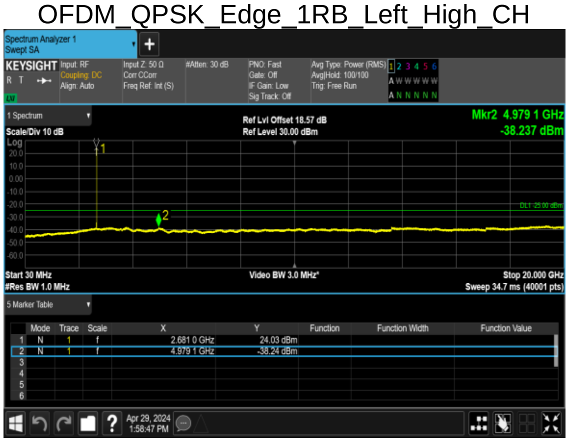
N41(10M)_CP-OFDM_QPSK_Edge_1RB_Left_Mid_CH



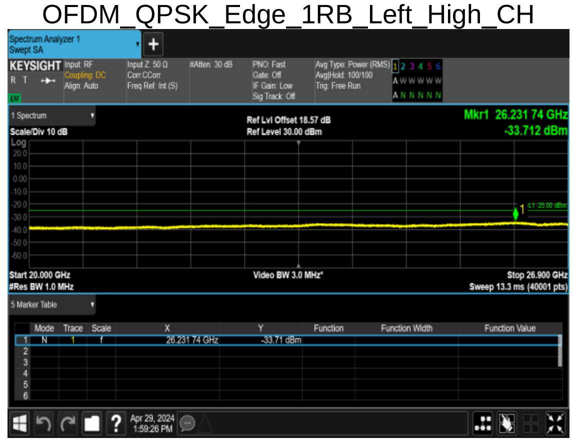
N41(10M)_CP-OFDM_QPSK_Edge_1RB_Left_Mid_CH



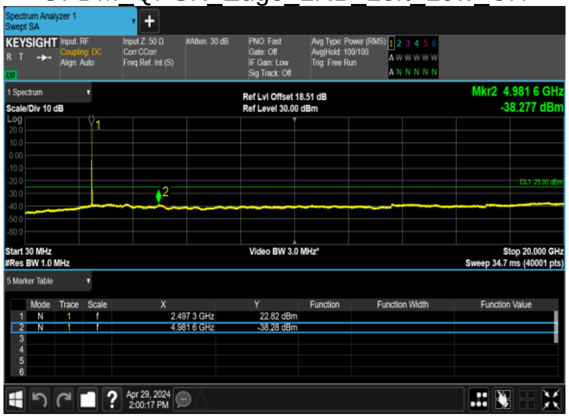
N41(10M)_CP-OFDM_QPSK_Edge_1RB_Left_High_CH



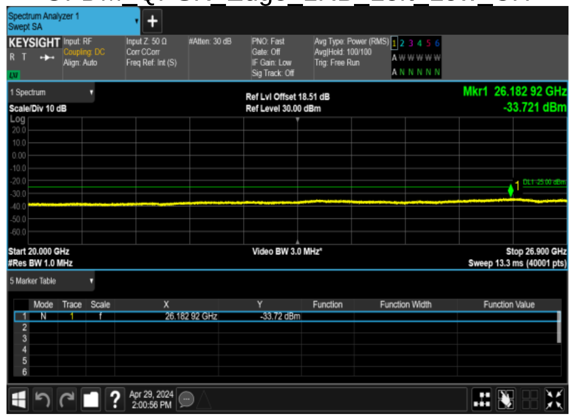
N41(10M)_CP-OFDM_QPSK_Edge_1RB_Left_High_CH



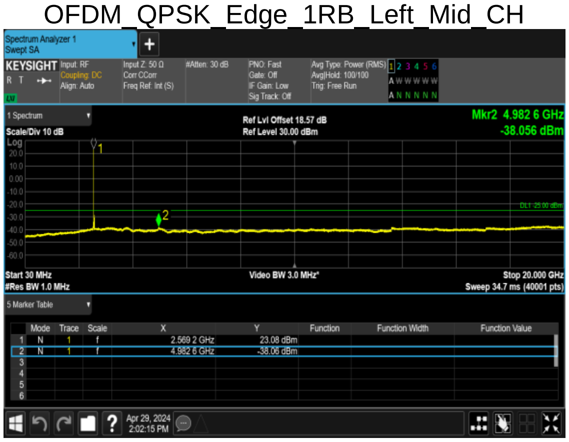
N41(50M)_CP-OFDM_QPSK_Edge_1RB_Left_Low_CH



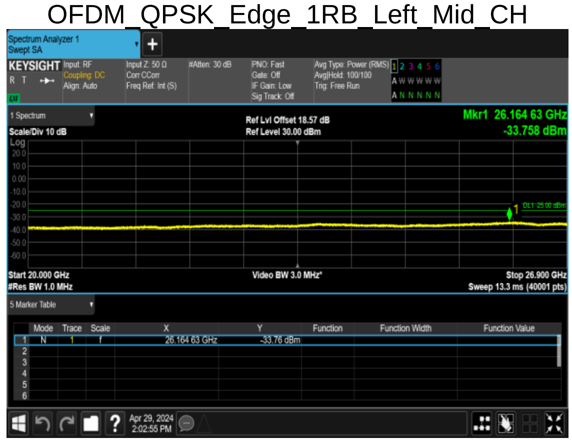
N41(50M)_CP-OFDM_QPSK_Edge_1RB_Left_Low_CH



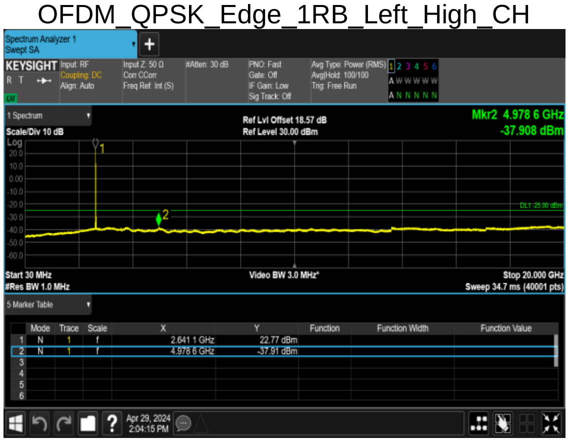
N41(50M)_CP-OFDM_QPSK_Edge_1RB_Left_Mid_CH



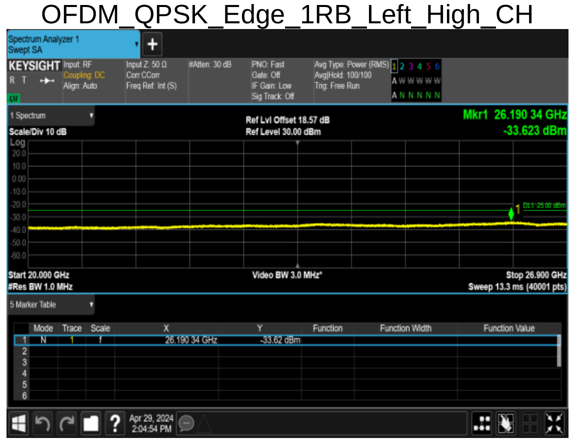
N41(50M)_CP-OFDM_QPSK_Edge_1RB_Left_Mid_CH



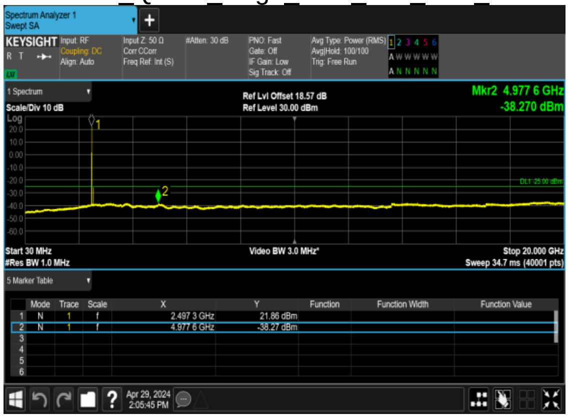
N41(50M)_CP-OFDM_QPSK_Edge_1RB_Left_High_CH



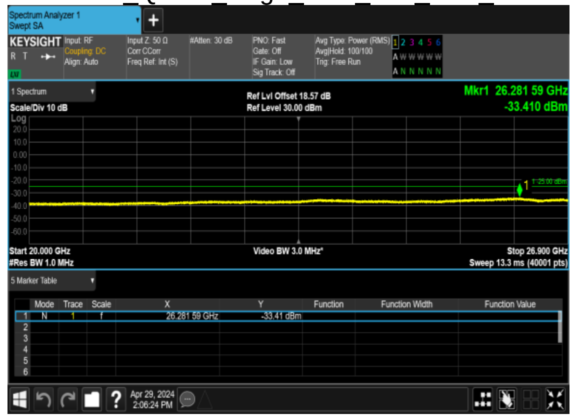
N41(50M)_CP-OFDM_QPSK_Edge_1RB_Left_High_CH



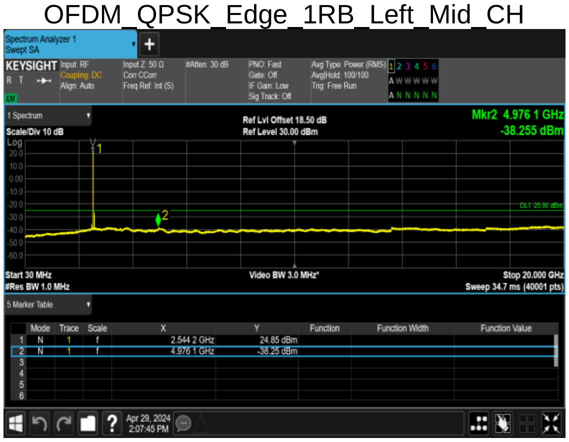
N41(100M)_CP-OFDM_QPSK_Edge_1RB_Left_Low_CH



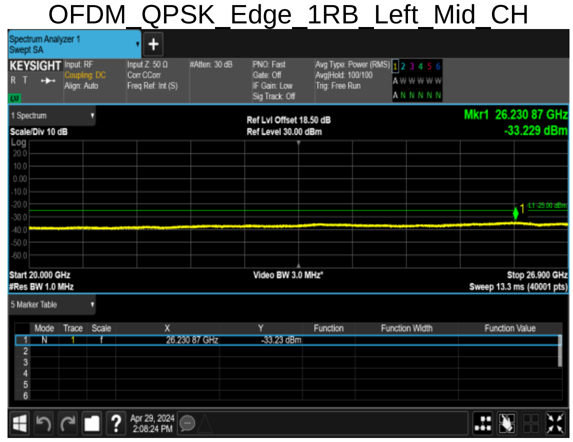
N41(100M)_CP-OFDM_QPSK_Edge_1RB_Left_Low_CH



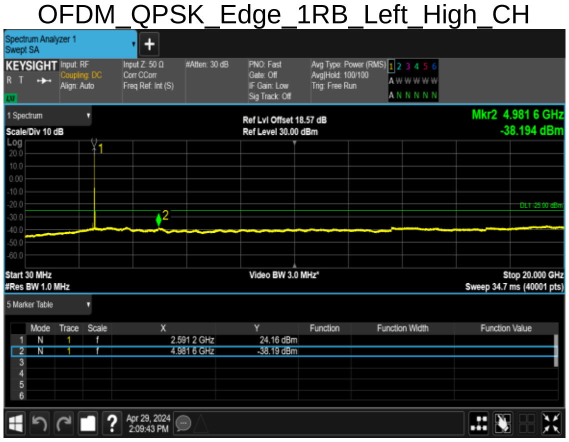
N41(100M)_CP-OFDM_QPSK_Edge_1RB_Left_Mid_CH



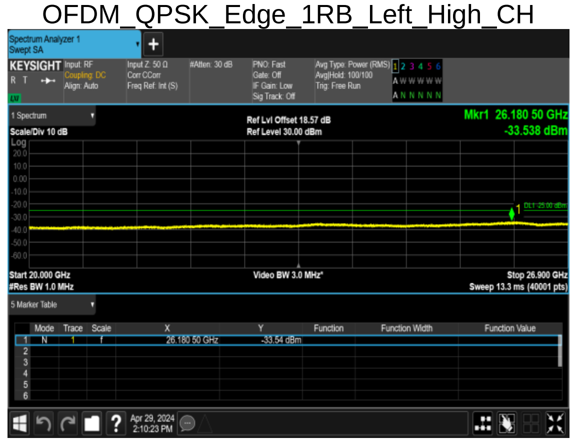
N41(100M)_CP-OFDM_QPSK_Edge_1RB_Left_Mid_CH



N41(100M)_CP-OFDM_QPSK_Edge_1RB_Left_High_CH



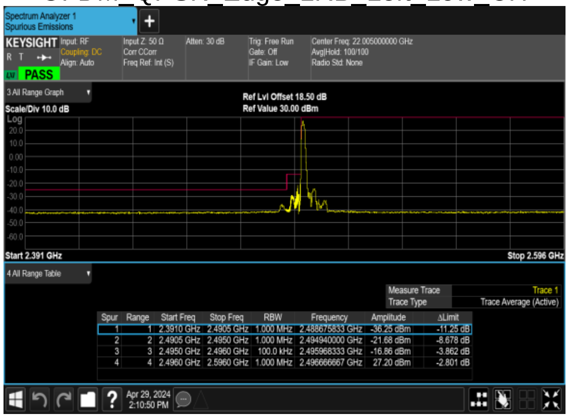
N41(100M)_CP-OFDM_QPSK_Edge_1RB_Left_High_CH



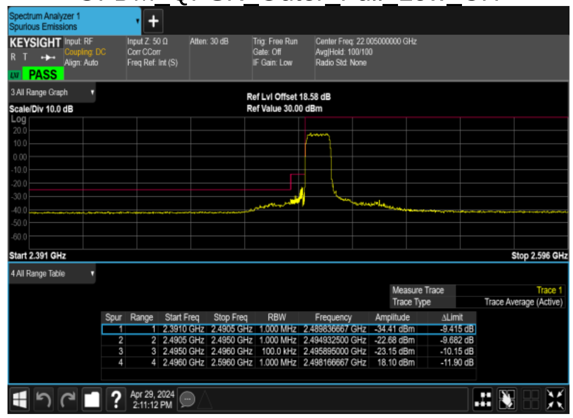
Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
41	30	10	500202	2501.01	CP-OFDM QPSK	1@0	see graph	**PASS**
41	30	10	500202	2501.01	CP-OFDM QPSK	24@0	see graph	**PASS**
41	30	10	537000	2685.0	CP-OFDM QPSK	1@23	see graph	**PASS**
41	30	10	537000	2685.0	CP-OFDM QPSK	24@0	see graph	**PASS**
41	30	50	504204	2521.02	CP-OFDM QPSK	1@0	see graph	**PASS**
41	30	50	504204	2521.02	CP-OFDM QPSK	133@0	see graph	**PASS**
41	30	50	532998	2664.99	CP-OFDM QPSK	1@132	see graph	**PASS**
41	30	50	532998	2664.99	CP-OFDM QPSK	133@0	see graph	**PASS**
41	30	100	509202	2546.01	CP-OFDM QPSK	1@0	see graph	**PASS**
41	30	100	509202	2546.01	CP-OFDM QPSK	273@0	see graph	**PASS**
41	30	100	528000	2640.0	CP-OFDM QPSK	1@272	see graph	**PASS**
41	30	100	528000	2640.0	CP-OFDM QPSK	273@0	see graph	**PASS**

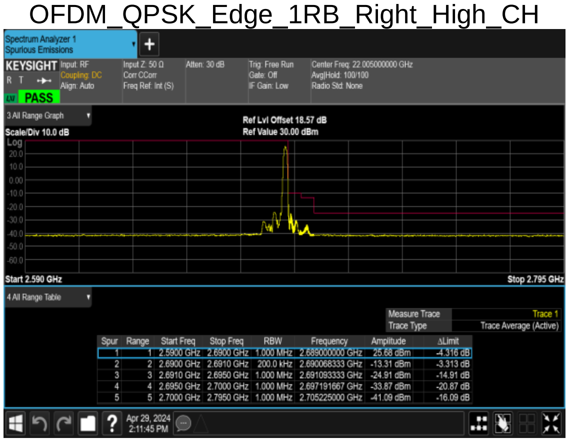
N41(10M)_CP-OFDM_QPSK_Edge_1RB_Left_Low_CH



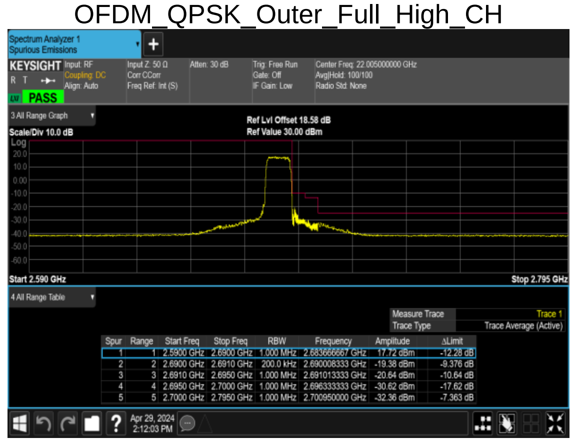
N41(10M)_CP-OFDM_QPSK_Outer_Full_Low_CH



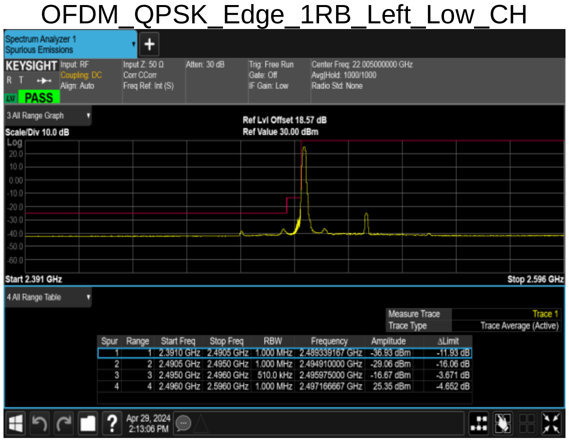
N41(10M)_CP-OFDM_QPSK_Edge_1RB_Right_High_CH



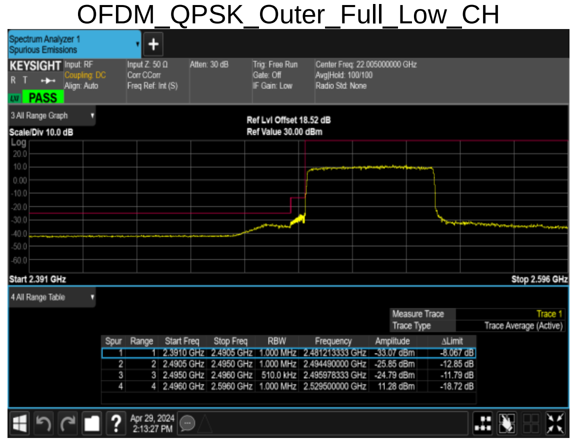
N41(10M)_CP-OFDM_QPSK_Outer_Full_High_CH



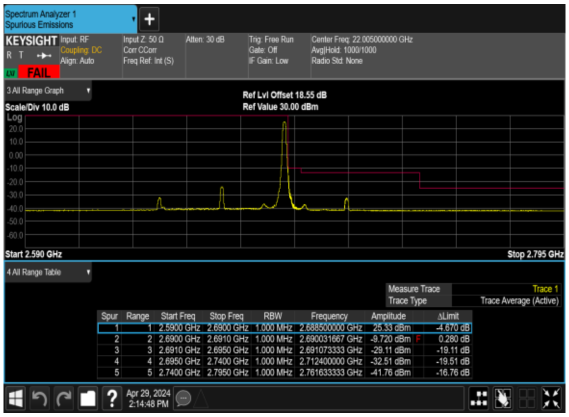
N41(50M)_CP-OFDM_QPSK_Edge_1RB_Left_Low_CH



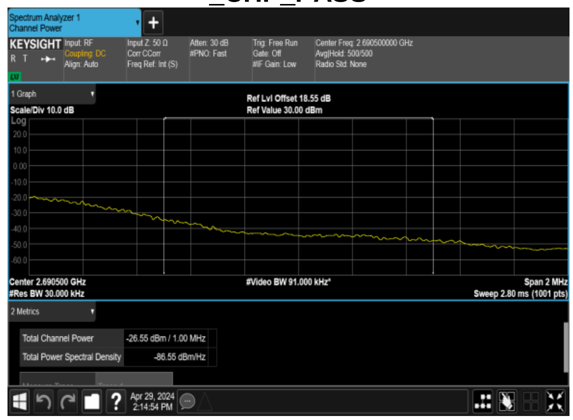
N41(50M)_CP-OFDM_QPSK_Outer_Full_Low_CH



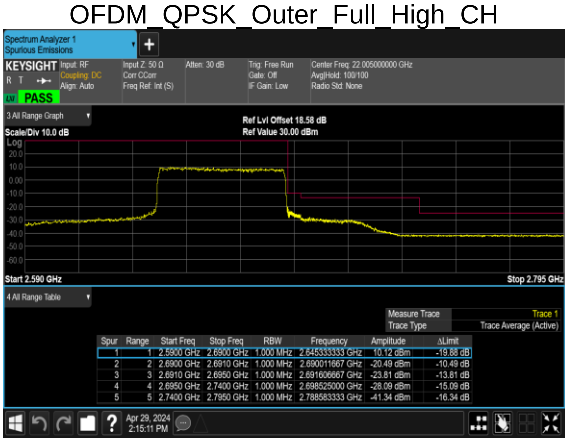
N41(50M)_CP-OFDM_QPSK_Edge_1RB_Right_High_CH



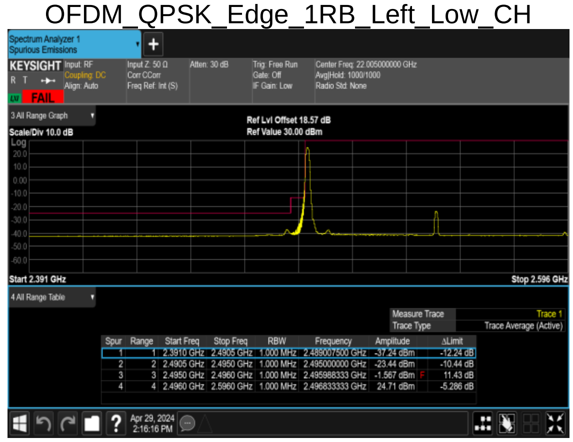
N41(50M)_CP-OFDM_QPSK_Edge_1RB_Right_High_CH **_CHP_PASS**



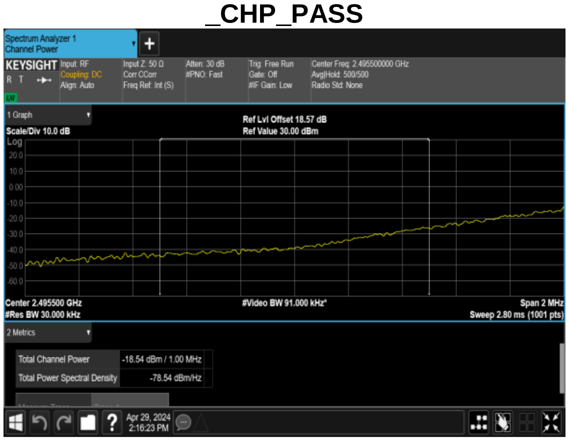
N41(50M)_CP-OFDM_QPSK_Outer_Full_High_CH



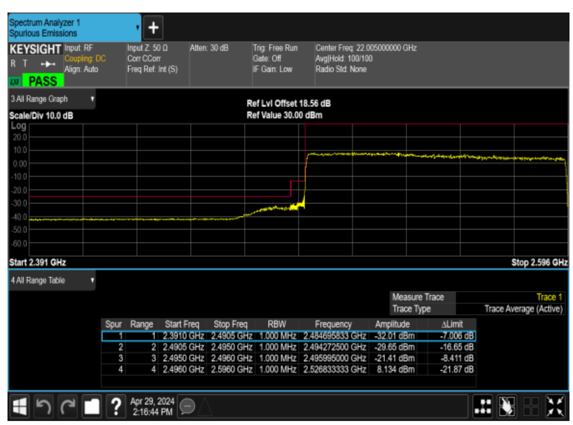
N41(100M)_CP-OFDM_QPSK_Edge_1RB_Left_Low_CH



N41(100M)_CP-OFDM_QPSK_Edge_1RB_Left_Low_CH **_CHP_PASS**

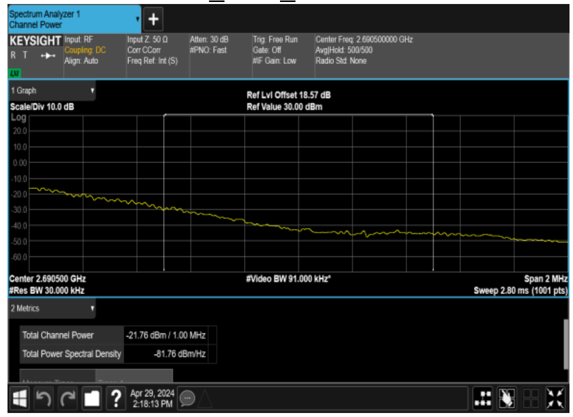


N41(100M)_CP-OFDM_QPSK_Outer_Full_Low_CH

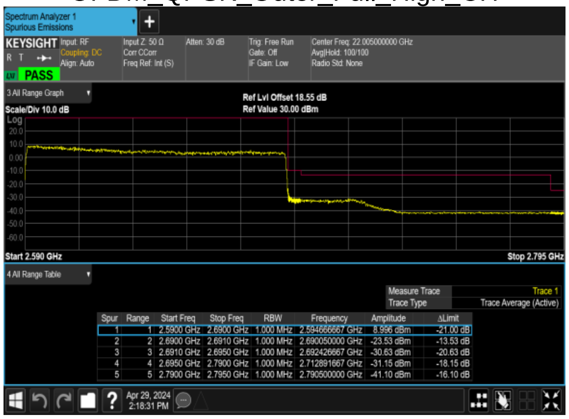


N41(100M)_CP-OFDM_QPSK_Edge_1RB_Right_High_CH

N41(100M)_CP-OFDM_QPSK_Edge_1RB_Right_High_CH**_CHP_PASS**



N41(100M)_CP-OFDM_QPSK_Outer_Full_High_CH



Software Version: 23.06.1602

FR1 N41 MIMO(ANT2+3)-ANT3

Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0052	**PASS**	NV
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0029	**PASS**	LV
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0070	**PASS**	HV
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0048	**PASS**	-30℃
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0058	**PASS**	-20℃
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0026	**PASS**	-10℃
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0034	**PASS**	0℃
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0037	**PASS**	10℃
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0052	**PASS**	20℃
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0022	**PASS**	30℃
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0026	**PASS**	40℃
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	0.0029	**PASS**	50℃

Peak to Average Ratio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	6.5	13	**PASS**

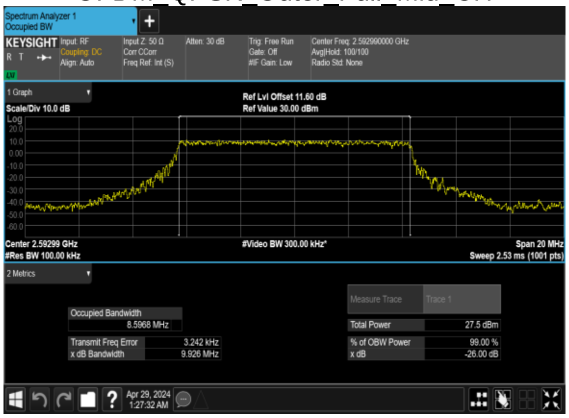
N41(20M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH

Occupied Bandwidth

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB BW (MHz)
41	30	10	518598	2592.99	CP-OFDM QPSK	24@0	8.5968	9.926
41	30	10	518598	2592.99	CP-OFDM 16 QAM	24@0	8.5491	9.755
41	30	10	518598	2592.99	CP-OFDM 64 QAM	24@0	8.5648	9.405
41	30	10	518598	2592.99	CP-OFDM 256 QAM	24@0	8.5918	9.354
41	30	15	518598	2592.99	CP-OFDM QPSK	38@0	13.585	14.86
41	30	15	518598	2592.99	CP-OFDM 16 QAM	38@0	13.553	14.58
41	30	15	518598	2592.99	CP-OFDM 64 QAM	38@0	13.61	14.86
41	30	15	518598	2592.99	CP-OFDM 256 QAM	38@0	13.575	14.58
41	30	20	518598	2592.99	CP-OFDM QPSK	51@0	18.186	19.15
41	30	20	518598	2592.99	CP-OFDM 16 QAM	51@0	18.171	19.54
41	30	20	518598	2592.99	CP-OFDM 64 QAM	51@0	18.154	19.15
41	30	20	518598	2592.99	CP-OFDM 256 QAM	51@0	18.156	19.15
41	30	25	518598	2592.99	CP-OFDM QPSK	65@0	23.192	24.62
41	30	25	518598	2592.99	CP-OFDM 16 QAM	65@0	23.162	24.71
41	30	25	518598	2592.99	CP-OFDM 64 QAM	65@0	23.204	24.61
41	30	25	518598	2592.99	CP-OFDM 256 QAM	65@0	23.224	24.46
41	30	30	518598	2592.99	CP-OFDM QPSK	78@0	27.891	29.39
41	30	30	518598	2592.99	CP-OFDM 16 QAM	78@0	27.835	29.21
41	30	30	518598	2592.99	CP-OFDM 64 QAM	78@0	27.852	28.95
41	30	30	518598	2592.99	CP-OFDM 256 QAM	78@0	27.747	28.91
41	30	40	518598	2592.99	CP-OFDM QPSK	106@0	37.824	39.13
41	30	40	518598	2592.99	CP-OFDM 16 QAM	106@0	37.816	39.45
41	30	40	518598	2592.99	CP-OFDM 64 QAM	106@0	37.764	39.47
41	30	40	518598	2592.99	CP-OFDM 256 QAM	106@0	37.829	39.44
41	30	50	518598	2592.99	CP-OFDM QPSK	133@0	47.321	49.17

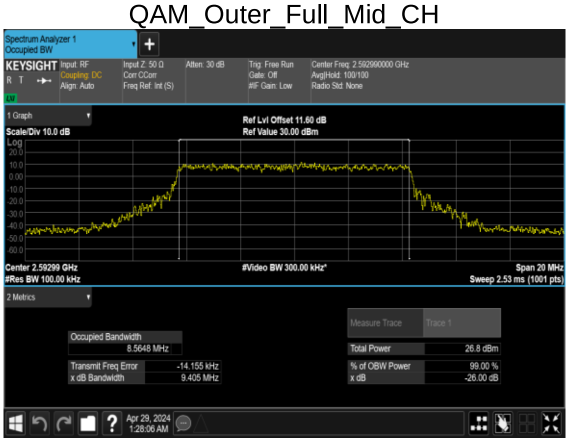
41	30	50	518598	2592.99	CP-OFDM 16 QAM	133@0	47.469	49.46
41	30	50	518598	2592.99	CP-OFDM 64 QAM	133@0	47.459	49.0
41	30	50	518598	2592.99	CP-OFDM 256 QAM	133@0	47.509	49.26
41	30	60	518598	2592.99	CP-OFDM QPSK	162@0	57.874	59.78
41	30	60	518598	2592.99	CP-OFDM 16 QAM	162@0	57.83	60.03
41	30	60	518598	2592.99	CP-OFDM 64 QAM	162@0	57.903	59.7
41	30	60	518598	2592.99	CP-OFDM 256 QAM	162@0	57.791	59.7
41	30	70	518598	2592.99	CP-OFDM QPSK	189@0	67.341	69.66
41	30	70	518598	2592.99	CP-OFDM 16 QAM	189@0	67.578	69.77
41	30	70	518598	2592.99	CP-OFDM 64 QAM	189@0	67.412	69.63
41	30	70	518598	2592.99	CP-OFDM 256 QAM	189@0	67.716	69.66
41	30	80	518598	2592.99	CP-OFDM QPSK	217@0	77.56	79.91
41	30	80	518598	2592.99	CP-OFDM 16 QAM	217@0	77.428	80.08
41	30	80	518598	2592.99	CP-OFDM 64 QAM	217@0	77.633	79.92
41	30	80	518598	2592.99	CP-OFDM 256 QAM	217@0	77.355	79.96
41	30	90	518598	2592.99	CP-OFDM QPSK	245@0	87.605	90.18
41	30	90	518598	2592.99	CP-OFDM 16 QAM	245@0	87.286	90.45
41	30	90	518598	2592.99	CP-OFDM 64 QAM	245@0	87.49	90.47
41	30	90	518598	2592.99	CP-OFDM 256 QAM	245@0	87.237	90.11
41	30	100	518598	2592.99	CP-OFDM QPSK	273@0	97.269	100.5
41	30	100	518598	2592.99	CP-OFDM 16 QAM	273@0	97.425	100.9
41	30	100	518598	2592.99	CP-OFDM 64 QAM	273@0	97.605	100.5
41	30	100	518598	2592.99	CP-OFDM 256 QAM	273@0	97.472	100.5

N41(10M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

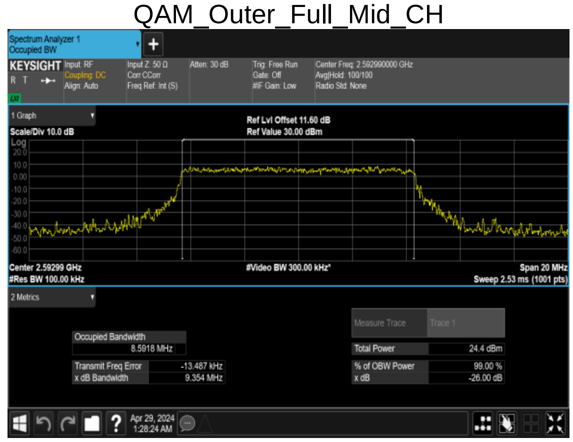


N41(10M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

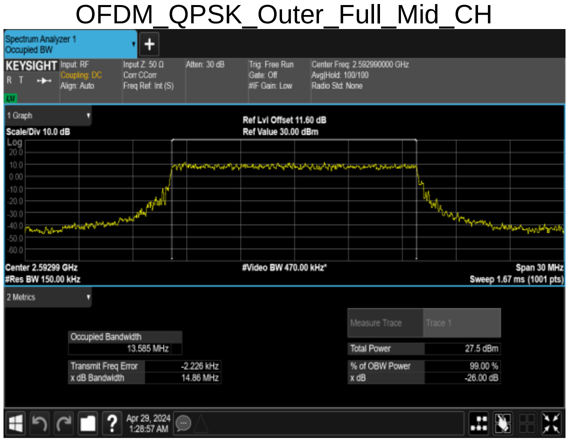
N41(10M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



N41(10M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



N41(15M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



N41(15M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH