FCC RF Test Report

APPLICANT	: Fibocom Wireless Inc.
EQUIPMENT	: 5G module
BRAND NAME	: Fibocom
MODEL NAME	: FM350R-GL
FCC ID	: ZMOFM350RGL
STANDARD	: 47 CFR Part 2, 22, 24
CLASSIFICATION	: PCS Licensed Transmitter (PCB)
TEST DATE(S)	: Apr. 30, 2024 ~ May 01, 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

Sporton International Inc. (ShenZhen)

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

People's Republic of China

TABLE OF CONTENTS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG431133K	Rev. 01	Initial issue of report	Jun. 21, 2024

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	§22.913(a)(5)	Effective Radiated Power (5G NR n5, n26)	ERP < 7 Watt		
	§24.232(c)	Equivalent Isotropic Radiated Power (5G NR n2, n25)	EIRP < 2Watt		
3.5	§24.232(d)	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	Reporting Only	PASS	-
3.7	§2.1051 §22.917(a) §24.238(a)	Conducted Band Edge Measurement (5G NR n5, n26) (5G NR n2, n25)	< 43+10log10(P[Watts])	PASS	-
3.8	§2.1051 §22.917(a) §24.238(a)	Conducted Spurious Emission (5G NR n5, n26) (5G NR n2, n25)	< 43+10log10(P[Watts])	PASS	-
3.9	§2.1055 §22.355	Frequency Stability Temperature & Voltage	< 2.5 ppm for Part 22	PASS	-
	§24.235		Within Authorized Band		
4.4	§2.1053 §22.917(a) §24.238(a)	Radiated Spurious Emission (5G NR n5, n26) (5G NR n2, n25)	< $43+10\log_{10}(P[Watts])$	PASS	Under limit 12.42 dB at 14482.00 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

Fibocom Wireless Inc.
1101,Tower A, Building 6, Shenzhen International Innovation Valley, Dashi 1st Rd, Nanshan,Shenzhen, China.

1.2 Manufacturer

Fibocom Wireless Inc.
1101,Tower A, Building 6, Shenzhen International Innovation Valley, Dashi 1st Rd, Nanshan,Shenzhen, China.

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	5G module
Brand Name	Fibocom
Model Name	FM350R-GL
FCC ID	ZMOFM350RGL
IMEI Code	Conducted : 863687070001797 Radiation : 863687070001516
HW Version	V1.1
SW Version	81601.0000.00.29.24.13
EUT Stage	Identical Prototype

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n26 : 824 MHz ~ 849 MHz
Rx Frequency	5G NR n2 : 1930 MHz ~ 1990 MHz 5G NR n5 : 869 MHz ~ 894 MHz 5G NR n25 : 1930 MHz ~ 1995 MHz 5G NR n26 : 869 MHz ~ 894 MHz
Bandwidth	**SCS 15K:** n2: 5MHz / 10MHz / 15MHz / 20MHz / 25MHz / 30MHz n5: 5MHz / 10MHz / 15MHz / 20MHz / 25MHz n25: 5MHz / 10MHz / 15MHz / 20MHz / 25MHz / 30MHz / 35MHz / 40MHz / 45MHz n26: 5MHz / 10MHz / 15MHz / 20MHz **SCS 30K:** n2: 10MHz / 15MHz / 20MHz / 25MHz / 30MHz n5: 10MHz / 15MHz / 20MHz / 25MHz

	n25: 10MHz / 15MHz / 20MHz / 25MHz / 30MHz / 35MHz / 40MHz / 45MHz n26: 10MHz / 15MHz / 20MHz
SCS	15kHz, 30kHz
Antenn Type	External Monopole Antenna or External PIFA Antenna
Antenna Gain	n2: 4.0 dBi n25: 4.0 dBi n5: 3.0 dBi n26: 3.0 dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

Remark:

1. The device has two optional antennas, they are same antenna gain, RSE pretest the two antennas, choose worst antenna to perform final test and recorded in the report.
2. There are two samples under test, sample 1 is 1st source and sample 2 is 2nd source, the detailed differences could be referred to the FM350R-GL_Operational Description of Product Equality Declaration which is exhibit separately. According to the differences, sample 1 perform full test, sample 2 verify conducted power and found less than sample 1, and sample 2 additional verify the worst case of RSE.
3. All the supported ENDC combinations are verified conducted power, only the ENDC combination with highest power are tested in the report.
4. 5G NR n26 support SA mode, and n2/n5/n25 support SA & NSA mode. According to the maximum power between SA and NSA mode, SA covers NSA mode and SCS 15kHz cover 30kHz.
5. The device supports two PAs for 5G NR n2/n25 (main PA for SA mode and other PA for NSA mode), the maximum power of the main PA is higher than other PA, therefore, we chose higher power of the main PA to calculate the output Power and show in the report.
6. 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 Conducted Power and Emission Designator

5G NR n2_ SCS 15kHz		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
5	1852.5 ~ 1907.5	0.2333	4M47G7D	0.1972	4M47W7D
10	1855.0 ~ 1905.0	0.2328	9M30G7D	0.1866	9M31W7D
15	1857.5 ~ 1902.5	0.2265	14M1G7D	0.1991	14M1W7D
20	1860.0 ~ 1900.0	0.2339	18M9G7D	0.1932	18M9W7D
25	1862.5 ~ 1897.5	0.2143	23M7G7D	0.1910	23M8W7D
30	1865.0 ~ 1895.0	0.2350	28M6G7D	0.1892	28M6W7D

5G NR n25_ SCS 15kHz		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
5	1852.5 ~ 1912.5	0.2280	4M47G7D	0.1879	4M47W7D
10	1855.0 ~ 1910.0	0.2270	9M30G7D	0.1766	9M31W7D
15	1857.5 ~ 1907.5	0.2350	14M1G7D	0.1824	14M1W7D
20	1860.0 ~ 1905.0	0.2265	18M9G7D	0.1820	18M9W7D
25	1862.5 ~ 1902.5	0.2350	23M7G7D	0.1799	23M8W7D
30	1865.0 ~ 1900.0	0.2213	28M6G7D	0.1734	28M6W7D
35	1867.5 ~ 1897.5	0.2254	33M5G7D	0.1816	33M6W7D
40	1870.0 ~ 1895.0	0.2113	38M6G7D	0.1656	38M6W7D
45	1872.5 ~ 1892.5	0.2427	43M3G7D	0.1914	43M2W7D

5G NR n5_ SCS 15kHz		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
5	826.5 ~ 846.5	0.2032	4M46G7D	0.1611	4M47W7D
10	829.0 ~ 844.0	0.1977	9M27G7D	0.1600	9M28W7D
15	831.5 ~ 841.5	0.2075	14M1G7D	0.1611	14M1W7D
20	834.0 ~ 839.0	0.2061	18M9G7D	0.1563	18M9W7D
25	836.5	0.2094	23M7G7D	0.1644	23M8W7D

5G NR n26_ SCS 15kHz		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
5	826.5 ~ 846.5	0.2014	4M46G7D	0.1514	4M47W7D
10	829.0 ~ 844.0	0.2014	9M27G7D	0.1489	9M28W7D
15	831.5 ~ 841.5	0.2056	14M1G7D	0.1517	14M1W7D
20	834.0 ~ 839.0	0.2138	18M9G7D	0.1633	18M9W7D

Note:

1. 5G NR n26 overlaps the entire frequency range of 5G NR n5. Therefore, the test results provided in this report covers 5G NR n5 subject to Part 22, and 5G NR n5 additional test BW 25MHz.
2. 5G NR n25 overlaps the entire frequency range of 5G NR n2. Therefore, the test results provided in this report covers 5G NR n25 as well as 5G NR n2.
3. 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.**
	03CH01-SZ	CN1256	421272

1.8 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH01-SZ	AUDIX	E3	6.2009-8-24

1.9 Applicable Standards

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

- 47 CFR Part 2, 22, 24
- 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 (X plane) were recorded in this report.

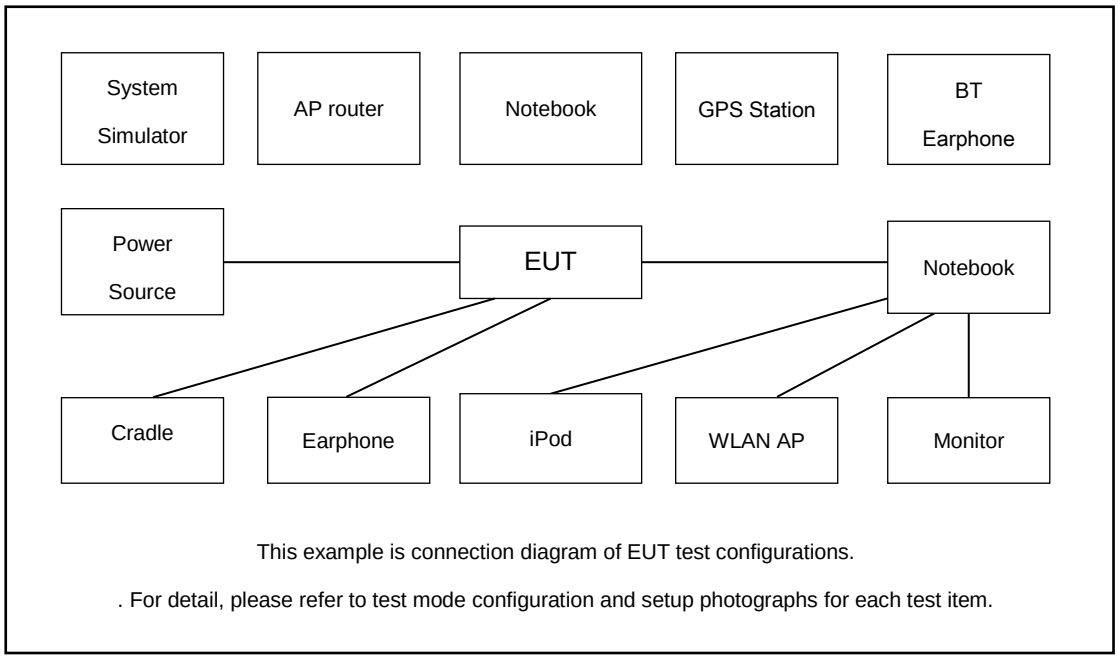
The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.

	X Plane	Y Plane	Z Plane
Orthogonal Planes of EUT			

Test Items	5G NR	Bandwidth (MHz)													Modulation					RB #		Test Channel		
		5	10	15	20	25	30	35	40	45	70	80	90	100	PI/2 BPSK	QPSK	16 QAM	64 QAM	256 QAM	1	Full	L	M	H
Max. Output Power	n2	v	v	v	v	v	v	-	-	-	-	-	-	-	v	v	v	v	v	v	v	v	v	v
	n5	v	v	v	v	v	-	-	-	-	-	-	-	-	v	v	v	v	v	v	v	v	v	v
	n25	v	v	v	v	v	v	v	v	v	-	-	-	-	v	v	v	v	v	v	v	v	v	v
	n26	v	v	v	v	-	-	-	-	-	-	-	-	-	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	n25				v				-	-	-	-	-	-	v	v					v		v	
	n26				v	-	-	-	-	-	-	-	-	-	v	v					v		v	
26dB and 99% Bandwidth	n25	v	v	v	v	v	v	v	v	v	-	-	-	-		v	v	v	v		v		v	
	n5					v										v	v	v	v		v		v	
	n26	v	v	v	v	-	-	-	-	-	-	-	-	-		v	v	v	v		v		v	
Conducted Band Edge	n5					v	-	-	-	-	-	-	-	-	v	v				v	v	v		v
	n25	v				v				v					v	v				v	v	v		v
	n26	v	v		v	-	-	-	-	-	-	-	-	-	v	v				v	v	v		v
Conducted Spurious Emission	n5					v	-	-	-	-	-	-	-	-	v	v				v		v	v	v
	n25	v				v				v	-	-	-	-	v	v				v		v	v	v
	n26	v	v		v	-	-	-	-	-	-	-	-	-	v	v				v		v	v	v
Frequency Stability	n25				v						-	-	-	-		v					v		v	
	n26				v	-	-	-	-	-	-	-	-	-		v					v		v	
E.R.P / E.I.R.P	n2	v	v	v	v	v	v	-	-	-	-	-	-	-	v	v	v	v	v	v	v	v	v	v
	n5	v	v	v	v	v	-	-	-	-	-	-	-	-	v	v	v	v	v	v	v	v	v	v

Test Items	5G NR	Bandwidth (MHz)													Modulation					RB #		Test Channel		
		5	10	15	20	25	30	35	40	45	70	80	90	100	PI/2 BPSK	QPSK	16 QAM	64 QAM	256 QAM	1	Full	L	M	H
	n25	v	v	v	v	v	v	v	v	v	-	-	-	-	v	v	v	v	v	v	v	v	v	v
	n26	v	v	v	v	-	-	-	-	-	-	-	-	-	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	n5	Worst Case																					v	
	n25	Worst Case																					v	
	n26	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 = 3.3V ；Low Voltage =3.14V.；High Voltage =4.4V																							

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
4.	Test Jig	Fibocom	N/A	N/A	N/A	N/A
5.	Antenna	Fibocom	N/A	N/A	N/A	N/A

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 7.5 dB.

Example :

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

= 7.5 (dB)

2.5 Frequency List of Low/Middle/High Channels

5G NR n2 Channel and Frequency List for SCS 15K & 30K				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
30	Channel	373000	376000	379000
	Frequency	1865	1880	1895
25	Channel	372500	376000	379500
	Frequency	1862.5	1880	1897.5
20	Channel	372000	376000	380000
	Frequency	1860	1880	1900
15	Channel	371500	376000	380500
	Frequency	1857.5	1880	1902.5
10	Channel	371000	376000	381000
	Frequency	1855	1880	1905
5	Channel	370500	376000	381500
	Frequency	1852.5	1880	1907.5

5G NR n5 Channel and Frequency List for SCS 15K & 30K				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
25	Channel	-	167300	-
	Frequency	-	836.5	-
20	Channel	166800	167300	167800
	Frequency	834	836.5	839
15	Channel	166300	167300	168300
	Frequency	831.5	836.5	841.5
10	Channel	165800	167300	168800
	Frequency	829	836.5	844
5	Channel	165300	167300	169300
	Frequency	826.5	836.5	846.5

5G NR n25 Channel and Frequency List for SCS 15K & 30K				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
45	Channel	374500	376500	378500
	Frequency	1872.5	1882.5	1892.5
40	Channel	390000	392500	395000
	Frequency	1870	1882.5	1895
35	Channel	373500	376500	379500
	Frequency	1867.5	1882.5	1897.5
30	Channel	389000	392500	396000
	Frequency	1865	1882.5	1900
25	Channel	388500	392500	396500
	Frequency	1862.5	1882.5	1902.5
20	Channel	372000	376500	381000
	Frequency	1860	1882.5	1905
15	Channel	371500	376500	381500
	Frequency	1857.5	1882.5	1907.5
10	Channel	371000	376500	382000
	Frequency	1855	1882.5	1910
5	Channel	370500	376500	382500
	Frequency	1852.5	1882.5	1912.5

5G NR n26 Channel and Frequency List for SCS 15K & 30K				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
20	Channel	166800	167300	167800
	Frequency	834	836.5	839
15	Channel	166300	167300	168300
	Frequency	831.5	836.5	841.5
10	Channel	165800	167300	168800
	Frequency	829	836.5	844
5	Channel	165300	167300	169300
	Frequency	826.5	836.5	846.5

Note: for the bands above, SCS 30kHz does not support 5MHz Bandwidths.

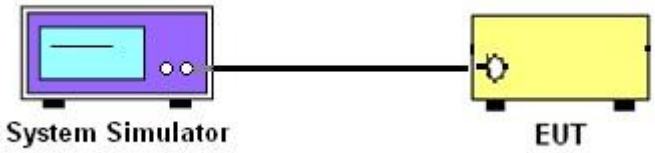
3 Conducted Test Items

3.1 Measuring Instruments

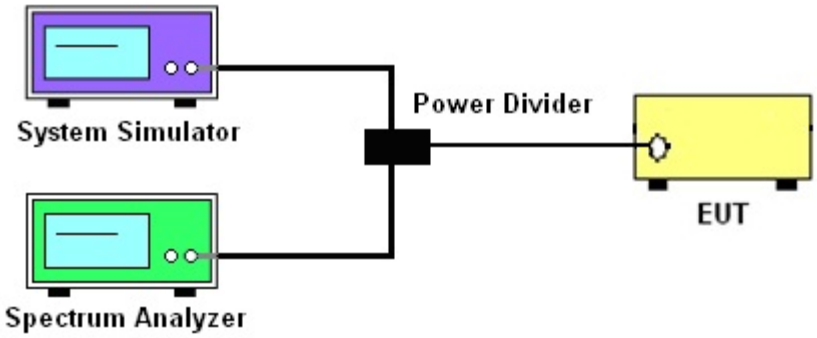
See list of measuring instruments of this test report.

3.2 Test Setup

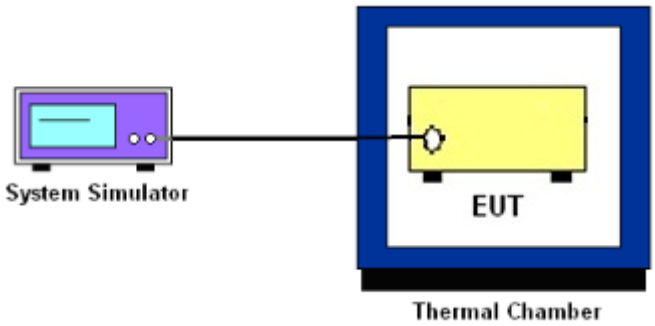
3.2.1 Conducted Output Power



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



3.2.3 Frequency Stability



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power and ERP/EIRP

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

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

The ERP of mobile transmitters must not exceed 7 Watts for 5G NR n5, n26.

The EIRP of mobile transmitters must not exceed 2 Watts for 5G NR n2, n25

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

22.917(a)

For operations in the 824 – 849 MHz band, the FCC limit is 43 + $10\log_{10}$(P[Watts]) dB below the transmitter power P(Watts) in a 100kHz 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.

24.238 (a)

For operations in the 1850-1910 and 1930-1990 MHz band, the FCC limit is 43 + $10\log_{10}$(P[Watts]) dB below the transmitter power P(Watts) in a 1MHz bandwidth. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

3.7.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used 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. 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.

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.

3.9 Frequency Stability

3.9.1 Description of Frequency Stability Measurement

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

3.9.2 Test Procedures for Temperature Variation

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

3.9.3 Test Procedures for Voltage Variation

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

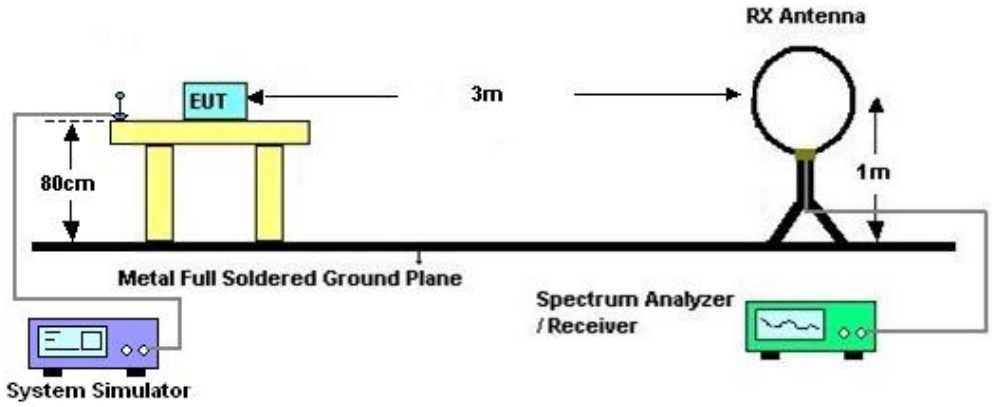
4 Radiated Test Items

4.1 Measuring Instruments

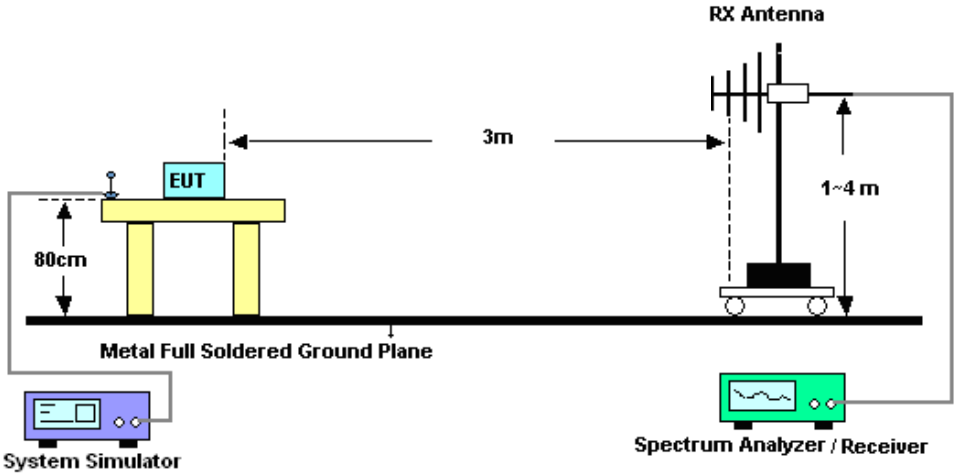
See list of measuring instruments of this test report.

4.2 Test Setup

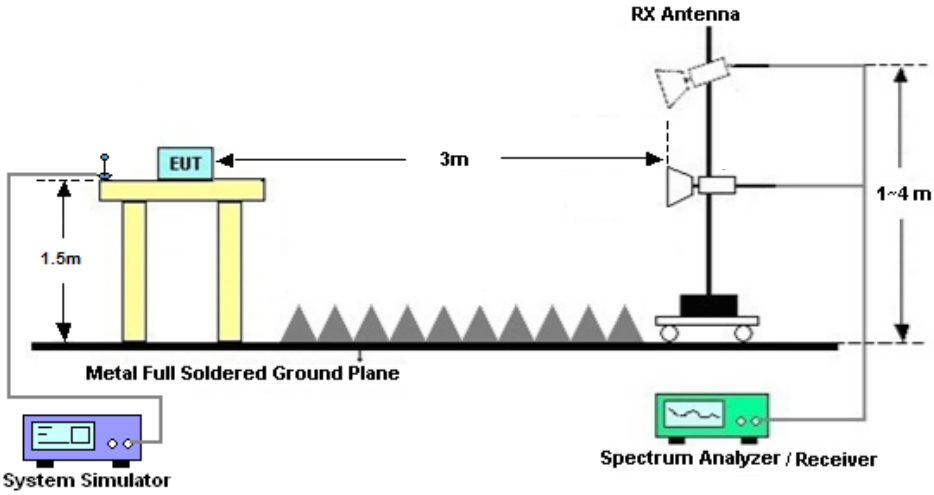
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3 Test Result of Radiated Test

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

Please refer to Appendix B.

4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

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

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.

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. 09, 2024	Apr. 30, 2024	Apr. 08, 2025	Conducted (TH01-SZ)
DC Power Supply	TTI	PL330P	290070	Max 32V，3A	Oct. 16, 2023	Apr. 30, 2024	Oct. 15, 2024	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-04 265	60.06.020.007 7	0.4GHz~26.5GHz	Dec. 25, 2023	Apr. 30, 2024	Dec. 24, 2024	Conducted (TH01-SZ)
Power Divider	SOLVANG TECHNOLOY	STI08-0055	-	Max 40GHz	Mar. 20, 2024	Apr. 30, 2024	Mar. 19, 2025	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 05, 2023	Apr. 30, 2024	Jul. 04, 2024	Conducted (TH01-SZ)
EMI Test Receiver&SA	Agilent	N9038A	MY52260185	20Hz~26.5GHz	Dec. 27, 2023	Apr. 30, 2024~ May 01, 2024	Dec. 26, 2024	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jul. 28, 2022	Apr. 30, 2024~ May 01, 2024	Jul. 27, 2024	Radiation (03CH01-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 18, 2023	Apr. 30, 2024~ May 01, 2024	Oct. 17, 2024	Radiation (03CH01-SZ
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Oct. 24, 2023	Apr. 30, 2024~ May 01, 2024	Oct. 23, 2025	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 08, 2023	Apr. 30, 2024~ May 01, 2024	Jul. 07, 2024	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 09, 2024	Apr. 30, 2024~ May 01, 2024	Apr. 08, 2025	Radiation (03CH01-SZ)
LF Amplifier	Burgeon	BPA-530	102209	0.01~3000Mhz	Apr. 09, 2024	Apr. 30, 2024~ May 01, 2024	Apr. 08, 2025	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P-R	1943528	1GHz~18GHz	Oct. 18, 2023	Apr. 30, 2024~ May 01, 2024	Oct. 17, 2024	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 07, 2023	Apr. 30, 2024~ May 01, 2024	Jul. 06, 2024	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	Oct. 18, 2023	Apr. 30, 2024~ May 01, 2024	Oct. 17, 2024	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Apr. 30, 2024~ May 01, 2024	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Apr. 30, 2024~ May 01, 2024	NCR	Radiation (03CH01-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 ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.48 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.53 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.02 dB

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

Appendix A. Test Results of Conducted Test

Test Engineer :	Khan Zhen	**Temperature :**	22~23℃
		Relative Humidity :	40~42%

Software Version: 23.06.1602

FR1 N2 - SCS 15k

Transmitter Conducted Output Power And EIRP, (G_T - L_C)=4dBi

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
2	15	5	370500	1852.5	DFT-s-OFDM QPSK	1@1	23.68	27.68	0.5861
2	15	5	370500	1852.5	DFT-s-OFDM 16 QAM	1@1	22.95	26.95	0.4955
2	15	5	376000	1880	DFT-s-OFDM QPSK	1@1	23.32	27.32	0.5395
2	15	5	376000	1880	DFT-s-OFDM 16 QAM	1@1	22.8	26.8	0.4786
2	15	5	381500	1907.5	DFT-s-OFDM QPSK	1@1	23.34	27.34	0.5420
2	15	5	381500	1907.5	DFT-s-OFDM 16 QAM	1@1	22.46	26.46	0.4426
2	15	10	371000	1855	DFT-s-OFDM QPSK	1@1	23.67	27.67	0.5848
2	15	10	371000	1855	DFT-s-OFDM 16 QAM	1@1	22.71	26.71	0.4688
2	15	10	376000	1880	DFT-s-OFDM QPSK	1@1	23.33	27.33	0.5408
2	15	10	376000	1880	DFT-s-OFDM 16 QAM	1@1	22.57	26.57	0.4539
2	15	10	381000	1905	DFT-s-OFDM QPSK	1@1	23.14	27.14	0.5176
2	15	10	381000	1905	DFT-s-OFDM 16 QAM	1@1	22.6	26.6	0.4571
2	15	15	371500	1857.5	DFT-s-OFDM QPSK	1@1	23.55	27.55	0.5689
2	15	15	371500	1857.5	DFT-s-OFDM 16 QAM	1@1	22.99	26.99	0.5000
2	15	15	376000	1880	DFT-s-OFDM QPSK	1@1	23.53	27.53	0.5662
2	15	15	376000	1880	DFT-s-OFDM 16 QAM	1@1	22.76	26.76	0.4742
2	15	15	380500	1902.5	DFT-s-OFDM QPSK	1@1	23.17	27.17	0.5212
2	15	15	380500	1902.5	DFT-s-OFDM 16 QAM	1@1	22.42	26.42	0.4385
2	15	20	372000	1860	DFT-s-OFDM QPSK	1@1	23.69	27.69	0.5875
2	15	20	372000	1860	DFT-s-OFDM 16 QAM	1@1	22.86	26.86	0.4853
2	15	20	376000	1880	DFT-s-OFDM QPSK	1@1	23.33	27.33	0.5408
2	15	20	376000	1880	DFT-s-OFDM 16 QAM	1@1	22.68	26.68	0.4656
2	15	20	380000	1900	DFT-s-OFDM QPSK	1@1	23.05	27.05	0.5070
2	15	20	380000	1900	DFT-s-OFDM 16 QAM	1@1	22.33	26.33	0.4295
2	15	25	372500	1862.5	DFT-s-OFDM QPSK	1@1	23.31	27.31	0.5383
2	15	25	372500	1862.5	DFT-s-OFDM 16 QAM	1@1	22.81	26.81	0.4797
2	15	25	376000	1880	DFT-s-OFDM QPSK	1@1	23.21	27.21	0.5260
2	15	25	376000	1880	DFT-s-OFDM 16 QAM	1@1	22.74	26.74	0.4721
2	15	25	379500	1897.5	DFT-s-OFDM QPSK	1@1	23.07	27.07	0.5093
2	15	25	379500	1897.5	DFT-s-OFDM 16 QAM	1@1	22.69	26.69	0.4667
2	15	30	373000	1865	DFT-s-OFDM PI/2 BPSK	80@40	23.57	27.57	0.5715
2	15	30	373000	1865	DFT-s-OFDM PI/2 BPSK	1@1	23.52	27.52	0.5649
2	15	30	373000	1865	DFT-s-OFDM PI/2 BPSK	1@158	23.34	27.34	0.5420
2	15	30	373000	1865	DFT-s-OFDM QPSK	80@40	23.71	27.71	0.5902
2	15	30	373000	1865	DFT-s-OFDM QPSK	1@1	23.59	27.59	0.5741
2	15	30	373000	1865	DFT-s-OFDM QPSK	1@158	23.36	27.36	0.5445
2	15	30	373000	1865	DFT-s-OFDM 16 QAM	80@40	22.45	26.45	0.4416
2	15	30	373000	1865	DFT-s-OFDM 16 QAM	1@1	22.74	26.74	0.4721
2	15	30	373000	1865	DFT-s-OFDM 16 QAM	1@158	22.68	26.68	0.4656
2	15	30	373000	1865	DFT-s-OFDM 64 QAM	80@40	21.11	25.11	0.3243
2	15	30	373000	1865	DFT-s-OFDM 64 QAM	1@1	21.13	25.13	0.3258
2	15	30	373000	1865	DFT-s-OFDM 64 QAM	1@158	21.15	25.15	0.3273
2	15	30	373000	1865	DFT-s-OFDM 256 QAM	80@40	19.2	23.2	0.2089
2	15	30	373000	1865	DFT-s-OFDM 256 QAM	1@1	18.85	22.85	0.1928
2	15	30	373000	1865	DFT-s-OFDM 256 QAM	1@158	18.84	22.84	0.1923

2	15	30	373000	1865	CP-OFDM QPSK	80@40	22.04	26.04	0.4018
2	15	30	373000	1865	CP-OFDM QPSK	1@1	22.02	26.02	0.3999
2	15	30	373000	1865	CP-OFDM QPSK	1@158	22.03	26.03	0.4009
2	15	30	376000	1880	DFT-s-OFDM PI/2 BPSK	80@40	23.69	27.69	0.5875
2	15	30	376000	1880	DFT-s-OFDM PI/2 BPSK	1@1	23.24	27.24	0.5297
2	15	30	376000	1880	DFT-s-OFDM PI/2 BPSK	1@158	23.17	27.17	0.5212
2	15	30	376000	1880	DFT-s-OFDM QPSK	80@40	23.62	27.62	0.5781
2	15	30	376000	1880	DFT-s-OFDM QPSK	1@1	23.48	27.48	0.5598
2	15	30	376000	1880	DFT-s-OFDM QPSK	1@158	22.94	26.94	0.4943
2	15	30	376000	1880	DFT-s-OFDM 16 QAM	80@40	22.66	26.66	0.4634
2	15	30	376000	1880	DFT-s-OFDM 16 QAM	1@1	22.77	26.77	0.4753
2	15	30	376000	1880	DFT-s-OFDM 16 QAM	1@158	22.53	26.53	0.4498
2	15	30	376000	1880	DFT-s-OFDM 64 QAM	80@40	21.26	25.26	0.3357
2	15	30	376000	1880	DFT-s-OFDM 64 QAM	1@1	20.79	24.79	0.3013
2	15	30	376000	1880	DFT-s-OFDM 64 QAM	1@158	20.78	24.78	0.3006
2	15	30	376000	1880	DFT-s-OFDM 256 QAM	80@40	18.92	22.92	0.1959
2	15	30	376000	1880	DFT-s-OFDM 256 QAM	1@1	18.83	22.83	0.1919
2	15	30	376000	1880	DFT-s-OFDM 256 QAM	1@158	18.64	22.64	0.1837
2	15	30	376000	1880	CP-OFDM QPSK	80@40	22.08	26.08	0.4055
2	15	30	376000	1880	CP-OFDM QPSK	1@1	22.07	26.07	0.4046
2	15	30	376000	1880	CP-OFDM QPSK	1@158	21.76	25.76	0.3767
2	15	30	379000	1895	DFT-s-OFDM PI/2 BPSK	80@40	23.29	27.29	0.5358
2	15	30	379000	1895	DFT-s-OFDM PI/2 BPSK	1@1	23.22	27.22	0.5272
2	15	30	379000	1895	DFT-s-OFDM PI/2 BPSK	1@158	23.46	27.46	0.5572
2	15	30	379000	1895	DFT-s-OFDM QPSK	80@40	23.23	27.23	0.5284
2	15	30	379000	1895	DFT-s-OFDM QPSK	1@1	23.06	27.06	0.5082
2	15	30	379000	1895	DFT-s-OFDM QPSK	1@158	23.33	27.33	0.5408
2	15	30	379000	1895	DFT-s-OFDM 16 QAM	80@40	22.35	26.35	0.4315
2	15	30	379000	1895	DFT-s-OFDM 16 QAM	1@1	22.35	26.35	0.4315
2	15	30	379000	1895	DFT-s-OFDM 16 QAM	1@158	22.64	26.64	0.4613
2	15	30	379000	1895	DFT-s-OFDM 64 QAM	80@40	20.96	24.96	0.3133
2	15	30	379000	1895	DFT-s-OFDM 64 QAM	1@1	20.91	24.91	0.3097
2	15	30	379000	1895	DFT-s-OFDM 64 QAM	1@158	20.85	24.85	0.3055
2	15	30	379000	1895	DFT-s-OFDM 256 QAM	80@40	19.01	23.01	0.2000
2	15	30	379000	1895	DFT-s-OFDM 256 QAM	1@1	18.65	22.65	0.1841
2	15	30	379000	1895	DFT-s-OFDM 256 QAM	1@158	18.49	22.49	0.1774
2	15	30	379000	1895	CP-OFDM QPSK	80@40	21.95	25.95	0.3936
2	15	30	379000	1895	CP-OFDM QPSK	1@1	21.78	25.78	0.3784
2	15	30	379000	1895	CP-OFDM QPSK	1@158	21.66	25.66	0.3681

FR1 N2 - SCS 30k

Transmitter Conducted Output Power And EIRP, (G_T - L_C)=4dBi

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP(W)
2	30	10	371000	1855	DFT-s-OFDM QPSK	1@1	23.46	27.46	0.5572
2	30	10	371000	1855	DFT-s-OFDM 16 QAM	1@1	22.58	26.58	0.4550
2	30	10	376000	1880	DFT-s-OFDM QPSK	1@1	23.29	27.29	0.5358
2	30	10	376000	1880	DFT-s-OFDM 16 QAM	1@1	22.34	26.34	0.4305
2	30	10	381000	1905	DFT-s-OFDM QPSK	1@1	22.93	26.93	0.4932
2	30	10	381000	1905	DFT-s-OFDM 16 QAM	1@1	22.23	26.23	0.4198
2	30	15	371500	1857.5	DFT-s-OFDM QPSK	1@1	23.35	27.35	0.5433
2	30	15	371500	1857.5	DFT-s-OFDM 16 QAM	1@1	22.8	26.8	0.4786
2	30	15	376000	1880	DFT-s-OFDM QPSK	1@1	23.3	27.3	0.5370
2	30	15	376000	1880	DFT-s-OFDM 16 QAM	1@1	22.51	26.51	0.4477
2	30	15	380500	1902.5	DFT-s-OFDM QPSK	1@1	22.87	26.87	0.4864
2	30	15	380500	1902.5	DFT-s-OFDM 16 QAM	1@1	22.19	26.19	0.4159
2	30	20	372000	1860	DFT-s-OFDM QPSK	1@1	23.48	27.48	0.5598
2	30	20	372000	1860	DFT-s-OFDM 16 QAM	1@1	22.74	26.74	0.4721
2	30	20	376000	1880	DFT-s-OFDM QPSK	1@1	23.17	27.17	0.5212
2	30	20	376000	1880	DFT-s-OFDM 16 QAM	1@1	22.3	26.3	0.4266
2	30	20	380000	1900	DFT-s-OFDM QPSK	1@1	23.27	27.27	0.5333
2	30	20	380000	1900	DFT-s-OFDM 16 QAM	1@1	22.11	26.11	0.4083
2	30	25	388500	1862.5	DFT-s-OFDM QPSK	1@1	23.42	27.42	0.5521
2	30	25	388500	1862.5	DFT-s-OFDM 16 QAM	1@1	22.32	26.32	0.4285
2	30	25	392000	1880	DFT-s-OFDM QPSK	1@1	23.16	27.16	0.5200
2	30	25	392000	1880	DFT-s-OFDM 16 QAM	1@1	22.29	26.29	0.4256
2	30	25	395500	1897.5	DFT-s-OFDM QPSK	1@1	23.04	27.04	0.5058
2	30	25	395500	1897.5	DFT-s-OFDM 16 QAM	1@1	22.17	26.17	0.4140
2	30	30	389000	1865	DFT-s-OFDM PI/2 BPSK	36@18	23.6	27.6	0.5754
2	30	30	389000	1865	DFT-s-OFDM PI/2 BPSK	1@1	23.51	27.51	0.5636
2	30	30	389000	1865	DFT-s-OFDM PI/2 BPSK	1@76	23.4	27.4	0.5495
2	30	30	389000	1865	DFT-s-OFDM QPSK	36@18	23.37	27.37	0.5458
2	30	30	389000	1865	DFT-s-OFDM QPSK	1@1	23.51	27.51	0.5636
2	30	30	389000	1865	DFT-s-OFDM QPSK	1@76	23.38	27.38	0.5470
2	30	30	389000	1865	DFT-s-OFDM 16 QAM	36@18	22.6	26.6	0.4571
2	30	30	389000	1865	DFT-s-OFDM 16 QAM	1@1	22.75	26.75	0.4732
2	30	30	389000	1865	DFT-s-OFDM 16 QAM	1@76	22.46	26.46	0.4426
2	30	30	389000	1865	DFT-s-OFDM 64 QAM	36@18	20.94	24.94	0.3119
2	30	30	389000	1865	DFT-s-OFDM 64 QAM	1@1	20.99	24.99	0.3155
2	30	30	389000	1865	DFT-s-OFDM 64 QAM	1@76	20.76	24.76	0.2992
2	30	30	389000	1865	DFT-s-OFDM 256 QAM	36@18	19.03	23.03	0.2009

2	30	30	389000	1865	DFT-s-OFDM 256 QAM	1@1	18.75	22.75	0.1884
2	30	30	389000	1865	DFT-s-OFDM 256 QAM	1@76	18.74	22.74	0.1879
2	30	30	389000	1865	CP-OFDM QPSK	39@19	21.85	25.85	0.3846
2	30	30	389000	1865	CP-OFDM QPSK	1@1	21.94	25.94	0.3926
2	30	30	389000	1865	CP-OFDM QPSK	1@76	21.8	25.8	0.3802
2	30	30	392000	1880	DFT-s-OFDM PI/2 BPSK	36@18	23.45	27.45	0.5559
2	30	30	392000	1880	DFT-s-OFDM PI/2 BPSK	1@1	23.51	27.51	0.5636
2	30	30	392000	1880	DFT-s-OFDM PI/2 BPSK	1@76	23.3	27.3	0.5370
2	30	30	392000	1880	DFT-s-OFDM QPSK	36@18	23.24	27.24	0.5297
2	30	30	392000	1880	DFT-s-OFDM QPSK	1@1	23.36	27.36	0.5445
2	30	30	392000	1880	DFT-s-OFDM QPSK	1@76	23.19	27.19	0.5236
2	30	30	392000	1880	DFT-s-OFDM 16 QAM	36@18	22.63	26.63	0.4603
2	30	30	392000	1880	DFT-s-OFDM 16 QAM	1@1	22.23	26.23	0.4198
2	30	30	392000	1880	DFT-s-OFDM 16 QAM	1@76	22.15	26.15	0.4121
2	30	30	392000	1880	DFT-s-OFDM 64 QAM	36@18	20.82	24.82	0.3034
2	30	30	392000	1880	DFT-s-OFDM 64 QAM	1@1	20.71	24.71	0.2958
2	30	30	392000	1880	DFT-s-OFDM 64 QAM	1@76	20.83	24.83	0.3041
2	30	30	392000	1880	DFT-s-OFDM 256 QAM	36@18	18.8	22.8	0.1905
2	30	30	392000	1880	DFT-s-OFDM 256 QAM	1@1	18.86	22.86	0.1932
2	30	30	392000	1880	DFT-s-OFDM 256 QAM	1@76	18.32	22.32	0.1706
2	30	30	392000	1880	CP-OFDM QPSK	39@19	21.92	25.92	0.3908
2	30	30	392000	1880	CP-OFDM QPSK	1@1	22.05	26.05	0.4027
2	30	30	392000	1880	CP-OFDM QPSK	1@76	21.48	25.48	0.3532
2	30	30	395000	1895	DFT-s-OFDM PI/2 BPSK	36@18	23.4	27.4	0.5495
2	30	30	395000	1895	DFT-s-OFDM PI/2 BPSK	1@1	23.08	27.08	0.5105
2	30	30	395000	1895	DFT-s-OFDM PI/2 BPSK	1@76	23.18	27.18	0.5224
2	30	30	395000	1895	DFT-s-OFDM QPSK	36@18	23.45	27.45	0.5559
2	30	30	395000	1895	DFT-s-OFDM QPSK	1@1	23.04	27.04	0.5058
2	30	30	395000	1895	DFT-s-OFDM QPSK	1@76	23.23	27.23	0.5284
2	30	30	395000	1895	DFT-s-OFDM 16 QAM	36@18	22.1	26.1	0.4074
2	30	30	395000	1895	DFT-s-OFDM 16 QAM	1@1	22.39	26.39	0.4355
2	30	30	395000	1895	DFT-s-OFDM 16 QAM	1@76	22.35	26.35	0.4315
2	30	30	395000	1895	DFT-s-OFDM 64 QAM	36@18	20.84	24.84	0.3048
2	30	30	395000	1895	DFT-s-OFDM 64 QAM	1@1	20.73	24.73	0.2972
2	30	30	395000	1895	DFT-s-OFDM 64 QAM	1@76	20.51	24.51	0.2825
2	30	30	395000	1895	DFT-s-OFDM 256 QAM	36@18	18.79	22.79	0.1901
2	30	30	395000	1895	DFT-s-OFDM 256 QAM	1@1	18.4	22.4	0.1738
2	30	30	395000	1895	DFT-s-OFDM 256 QAM	1@76	18.33	22.33	0.1710
2	30	30	395000	1895	CP-OFDM QPSK	39@19	21.88	25.88	0.3873
2	30	30	395000	1895	CP-OFDM QPSK	1@1	21.63	25.63	0.3656
2	30	30	395000	1895	CP-OFDM QPSK	1@76	21.75	25.75	0.3758

Software Version: 23.06.1602

FR1 N5 - SCS 15k

Transmitter Conducted Output Power And ERP, (G_T - L_C)=3dBi

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	ERP (dBm)	ERP (W)
5	15	5	165300	826.5	DFT-s-OFDM QPSK	1@1	23.08	23.93	0.2472
5	15	5	165300	826.5	DFT-s-OFDM 16 QAM	1@1	21.99	22.84	0.1923
5	15	5	167300	836.5	DFT-s-OFDM QPSK	1@1	23.05	23.9	0.2455
5	15	5	167300	836.5	DFT-s-OFDM 16 QAM	1@1	22.07	22.92	0.1959
5	15	5	169300	846.5	DFT-s-OFDM QPSK	1@1	22.76	23.61	0.2296
5	15	5	169300	846.5	DFT-s-OFDM 16 QAM	1@1	21.73	22.58	0.1811
5	15	10	165800	829	DFT-s-OFDM QPSK	1@1	22.96	23.81	0.2404
5	15	10	165800	829	DFT-s-OFDM 16 QAM	1@1	22.04	22.89	0.1945
5	15	10	167300	836.5	DFT-s-OFDM QPSK	1@1	22.8	23.65	0.2317
5	15	10	167300	836.5	DFT-s-OFDM 16 QAM	1@1	21.92	22.77	0.1892
5	15	10	168800	844	DFT-s-OFDM QPSK	1@1	22.71	23.56	0.2270
5	15	10	168800	844	DFT-s-OFDM 16 QAM	1@1	21.65	22.5	0.1778
5	15	15	166300	831.5	DFT-s-OFDM QPSK	1@1	23.11	23.96	0.2489
5	15	15	166300	831.5	DFT-s-OFDM 16 QAM	1@1	21.99	22.84	0.1923
5	15	15	167300	836.5	DFT-s-OFDM QPSK	1@1	23.17	24.02	0.2523
5	15	15	167300	836.5	DFT-s-OFDM 16 QAM	1@1	22.07	22.92	0.1959
5	15	15	168300	841.5	DFT-s-OFDM QPSK	1@1	23.03	23.88	0.2443
5	15	15	168300	841.5	DFT-s-OFDM 16 QAM	1@1	21.84	22.69	0.1858
5	15	20	166800	834	DFT-s-OFDM QPSK	1@1	23.14	23.99	0.2506
5	15	20	166800	834	DFT-s-OFDM 16 QAM	1@1	21.94	22.79	0.1901
5	15	20	167300	836.5	DFT-s-OFDM QPSK	1@1	23.07	23.92	0.2466
5	15	20	167300	836.5	DFT-s-OFDM 16 QAM	1@1	21.91	22.76	0.1888
5	15	20	167800	839	DFT-s-OFDM QPSK	1@1	22.94	23.79	0.2393
5	15	20	167800	839	DFT-s-OFDM 16 QAM	1@1	21.79	22.64	0.1837
5	15	25	167300	836.5	DFT-s-OFDM PI/2 BPSK	64@32	22.85	23.7	0.2344
5	15	25	167300	836.5	DFT-s-OFDM PI/2 BPSK	1@1	22.8	23.65	0.2317
5	15	25	167300	836.5	DFT-s-OFDM PI/2 BPSK	1@131	22.64	23.49	0.2234
5	15	25	167300	836.5	DFT-s-OFDM QPSK	64@32	23.21	24.06	0.2547
5	15	25	167300	836.5	DFT-s-OFDM QPSK	1@1	22.78	23.63	0.2307
5	15	25	167300	836.5	DFT-s-OFDM QPSK	1@131	22.75	23.6	0.2291
5	15	25	167300	836.5	DFT-s-OFDM 16 QAM	64@32	21.97	22.82	0.1914
5	15	25	167300	836.5	DFT-s-OFDM 16 QAM	1@1	22.16	23.01	0.2000
5	15	25	167300	836.5	DFT-s-OFDM 16 QAM	1@131	22.05	22.9	0.1950
5	15	25	167300	836.5	DFT-s-OFDM 64 QAM	64@32	20.41	21.26	0.1337
5	15	25	167300	836.5	DFT-s-OFDM 64 QAM	1@1	20.5	21.35	0.1365
5	15	25	167300	836.5	DFT-s-OFDM 64 QAM	1@131	20.11	20.96	0.1247
5	15	25	167300	836.5	DFT-s-OFDM 256 QAM	64@32	18.44	19.29	0.0849
5	15	25	167300	836.5	DFT-s-OFDM 256 QAM	1@1	18.32	19.17	0.0826
5	15	25	167300	836.5	DFT-s-OFDM 256 QAM	1@131	18.05	18.9	0.0776
5	15	25	167300	836.5	CP-OFDM QPSK	67@33	21.28	22.13	0.1633
5	15	25	167300	836.5	CP-OFDM QPSK	1@1	21.33	22.18	0.1652
5	15	25	167300	836.5	CP-OFDM QPSK	1@131	21.3	22.15	0.1641

FR1 N5 - SCS 30k

Transmitter Conducted Output Power And ERP, (G_T - L_C)=3dBi

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power(dBm)	ERP (dBm)	ERP(W)
5	30	10	165800	829	DFT-s-OFDM QPSK	1@1	23.1	23.95	0.2483
5	30	10	165800	829	DFT-s-OFDM 16 QAM	1@1	22.24	23.09	0.2037
5	30	10	167300	836.5	DFT-s-OFDM QPSK	1@1	22.85	23.7	0.2344
5	30	10	167300	836.5	DFT-s-OFDM 16 QAM	1@1	22.2	23.05	0.2018
5	30	10	168800	844	DFT-s-OFDM QPSK	1@1	22.86	23.71	0.2350
5	30	10	168800	844	DFT-s-OFDM 16 QAM	1@1	22	22.85	0.1928
5	30	15	166300	831.5	DFT-s-OFDM QPSK	1@1	22.91	23.76	0.2377
5	30	15	166300	831.5	DFT-s-OFDM 16 QAM	1@1	22.21	23.06	0.2023
5	30	15	167300	836.5	DFT-s-OFDM QPSK	1@1	22.95	23.8	0.2399
5	30	15	167300	836.5	DFT-s-OFDM 16 QAM	1@1	22.09	22.94	0.1968
5	30	15	168300	841.5	DFT-s-OFDM QPSK	1@1	22.85	23.7	0.2344
5	30	15	168300	841.5	DFT-s-OFDM 16 QAM	1@1	22.03	22.88	0.1941
5	30	20	166800	834	DFT-s-OFDM QPSK	1@1	22.87	23.72	0.2355
5	30	20	166800	834	DFT-s-OFDM 16 QAM	1@1	22.24	23.09	0.2037
5	30	20	167300	836.5	DFT-s-OFDM QPSK	1@1	23.09	23.94	0.2477
5	30	20	167300	836.5	DFT-s-OFDM 16 QAM	1@1	21.97	22.82	0.1914
5	30	20	167800	839	DFT-s-OFDM QPSK	1@1	22.88	23.73	0.2360
5	30	20	167800	839	DFT-s-OFDM 16 QAM	1@1	22.01	22.86	0.1932
5	30	25	167300	836.5	DFT-s-OFDM PI/2 BPSK	32@16	22.92	23.77	0.2382
5	30	25	167300	836.5	DFT-s-OFDM PI/2 BPSK	1@1	22.82	23.67	0.2328
5	30	25	167300	836.5	DFT-s-OFDM PI/2 BPSK	1@63	22.86	23.71	0.2350
5	30	25	167300	836.5	DFT-s-OFDM QPSK	32@16	23.09	23.94	0.2477
5	30	25	167300	836.5	DFT-s-OFDM QPSK	1@1	23.17	24.02	0.2523
5	30	25	167300	836.5	DFT-s-OFDM QPSK	1@63	22.86	23.71	0.2350
5	30	25	167300	836.5	DFT-s-OFDM 16 QAM	32@16	22.13	22.98	0.1986
5	30	25	167300	836.5	DFT-s-OFDM 16 QAM	1@1	22.32	23.17	0.2075
5	30	25	167300	836.5	DFT-s-OFDM 16 QAM	1@63	21.94	22.79	0.1901
5	30	25	167300	836.5	DFT-s-OFDM 64 QAM	32@16	20.63	21.48	0.1406
5	30	25	167300	836.5	DFT-s-OFDM 64 QAM	1@1	20.38	21.23	0.1327
5	30	25	167300	836.5	DFT-s-OFDM 64 QAM	1@63	20.4	21.25	0.1334
5	30	25	167300	836.5	DFT-s-OFDM 256 QAM	32@16	18.48	19.33	0.0857
5	30	25	167300	836.5	DFT-s-OFDM 256 QAM	1@1	18.41	19.26	0.0843
5	30	25	167300	836.5	DFT-s-OFDM 256 QAM	1@63	18.53	19.38	0.0867
5	30	25	167300	836.5	CP-OFDM QPSK	33@16	21.49	22.34	0.1714
5	30	25	167300	836.5	CP-OFDM QPSK	1@1	21.72	22.57	0.1807
5	30	25	167300	836.5	CP-OFDM QPSK	1@63	21.23	22.08	0.1614

FR1 N5 - SCS 15k

Occupied Bandwidth

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB BW (MHz)
5	15	25	167300	836.5	CP-OFDM QPSK	133@0	23.741	24.62
5	15	25	167300	836.5	CP-OFDM 16 QAM	133@0	23.678	24.74
5	15	25	167300	836.5	CP-OFDM 64 QAM	133@0	23.736	24.85
5	15	25	167300	836.5	CP-OFDM 256 QAM	133@0	23.795	24.75

N5(25M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

N5(25M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

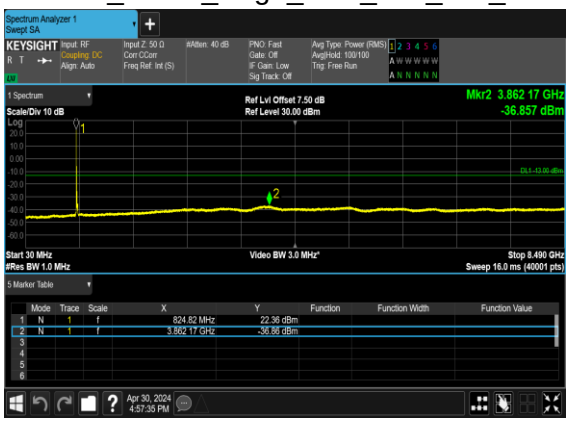
N5(25M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

N5(25M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

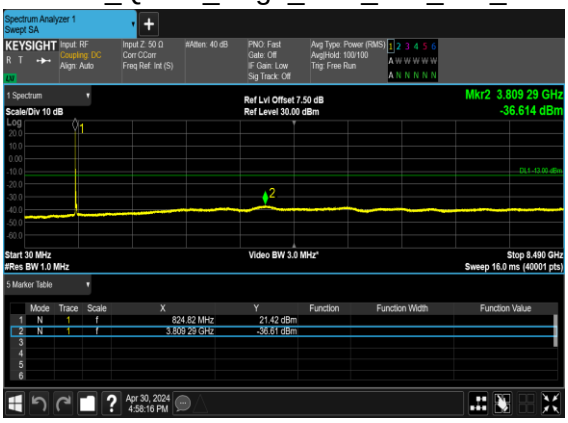
Conducted Spurious Emissions

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
5	15	25	167300	836.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
5	15	25	167300	836.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
5	15	25	167300	836.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
5	15	25	167300	836.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**

N5(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



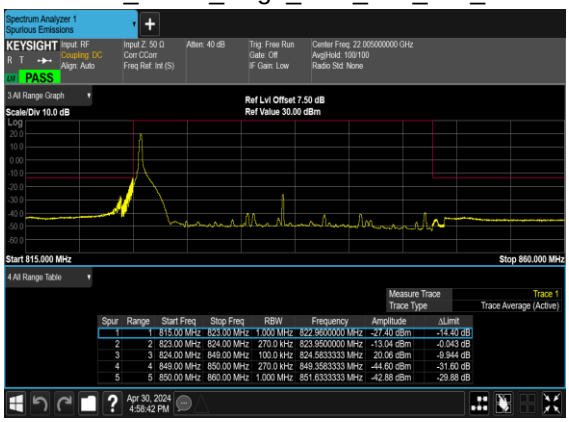
N5(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



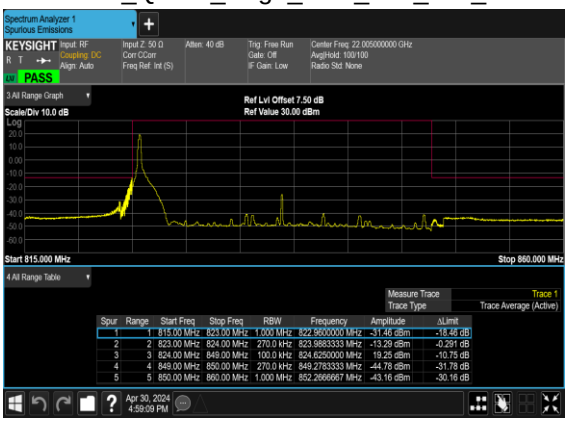
Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
5	15	25	167300	836.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
5	15	25	167300	836.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
5	15	25	167300	836.5	DFT-s-OFDM BPSK	1@132	see graph	**PASS**
5	15	25	167300	836.5	DFT-s-OFDM QPSK	1@132	see graph	**PASS**
5	15	25	167300	836.5	DFT-s-OFDM BPSK	128@0	see graph	**PASS**
5	15	25	167300	836.5	DFT-s-OFDM QPSK	128@0	see graph	**PASS**

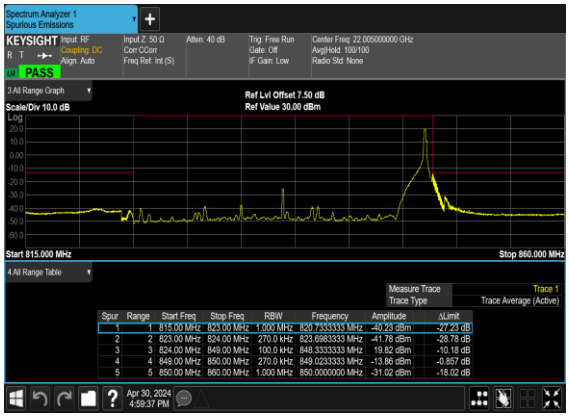
N5(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



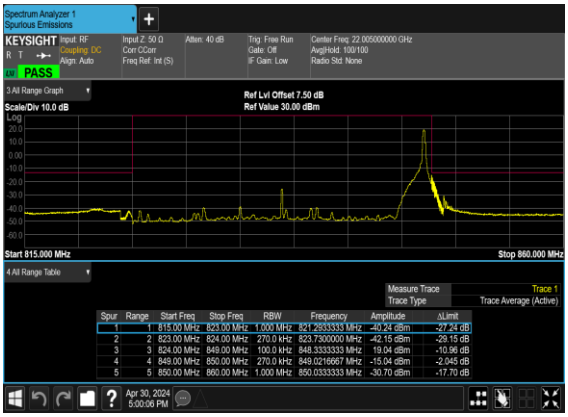
N5(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



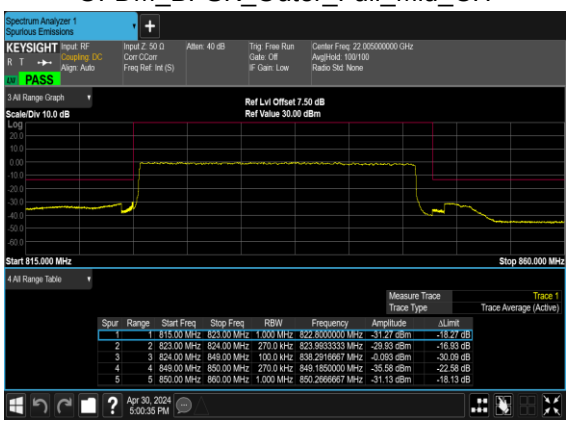
N5(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_Mid_CH



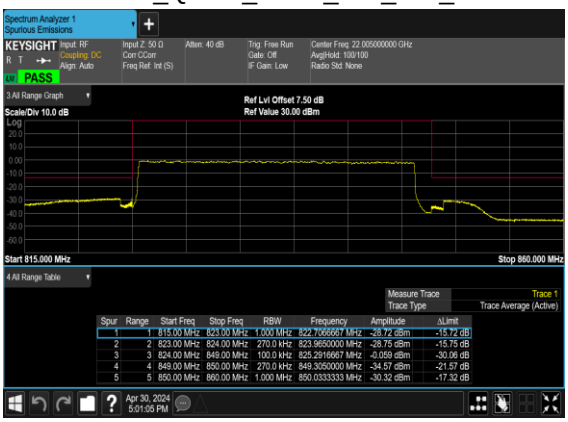
N5(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_Mid_CH



N5(25M)_DFT-s-OFDM_BPSK_Outer_Full_Mid_CH



N5(25M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



Software Version: 23.06.1602

FR1 N25(Main PA) - SCS 15k

Transmitter Conducted Output Power And EIRP, (G_T - L_C)=4dBi

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
25	15	5	370500	1852.5	DFT-s-OFDM QPSK	1@1	23.38	27.38	0.5470
25	15	5	370500	1852.5	DFT-s-OFDM 16 QAM	1@1	22.61	26.61	0.4581
25	15	5	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.58	27.58	0.5728
25	15	5	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.23	26.23	0.4198
25	15	5	382500	1912.5	DFT-s-OFDM QPSK	1@1	23.22	27.22	0.5272
25	15	5	382500	1912.5	DFT-s-OFDM 16 QAM	1@1	22.28	26.28	0.4246
25	15	10	371000	1855	DFT-s-OFDM QPSK	1@1	23.28	27.28	0.5346
25	15	10	371000	1855	DFT-s-OFDM 16 QAM	1@1	22.47	26.47	0.4436
25	15	10	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.2	27.2	0.5248
25	15	10	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.12	26.12	0.4093
25	15	10	382000	1910	DFT-s-OFDM QPSK	1@1	23.15	27.15	0.5188
25	15	10	382000	1910	DFT-s-OFDM 16 QAM	1@1	22.04	26.04	0.4018
25	15	15	371500	1857.5	DFT-s-OFDM QPSK	1@1	23.69	27.69	0.5875
25	15	15	371500	1857.5	DFT-s-OFDM 16 QAM	1@1	22.47	26.47	0.4436
25	15	15	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.5	27.5	0.5623
25	15	15	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.34	26.34	0.4305
25	15	15	381500	1907.5	DFT-s-OFDM QPSK	1@1	23.26	27.26	0.5321
25	15	15	381500	1907.5	DFT-s-OFDM 16 QAM	1@1	22.12	26.12	0.4093
25	15	20	372000	1860	DFT-s-OFDM QPSK	1@1	23.55	27.55	0.5689
25	15	20	372000	1860	DFT-s-OFDM 16 QAM	1@1	22.39	26.39	0.4355
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.26	27.26	0.5321
25	15	20	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.57	26.57	0.4539
25	15	20	381000	1905	DFT-s-OFDM QPSK	1@1	23.11	27.11	0.5140
25	15	20	381000	1905	DFT-s-OFDM 16 QAM	1@1	22.36	26.36	0.4325
25	15	25	372500	1862.5	DFT-s-OFDM QPSK	1@1	23.5	27.5	0.5623
25	15	25	372500	1862.5	DFT-s-OFDM 16 QAM	1@1	22.38	26.38	0.4345
25	15	25	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.37	27.37	0.5458
25	15	25	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.26	26.26	0.4227
25	15	25	380500	1902.5	DFT-s-OFDM QPSK	1@1	23.06	27.06	0.5082
25	15	25	380500	1902.5	DFT-s-OFDM 16 QAM	1@1	21.94	25.94	0.3926
25	15	30	373000	1865	DFT-s-OFDM QPSK	1@1	23.31	27.31	0.5383
25	15	30	373000	1865	DFT-s-OFDM 16 QAM	1@1	22.21	26.21	0.4178
25	15	30	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.16	27.16	0.5200
25	15	30	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	21.96	25.96	0.3945
25	15	30	380000	1900	DFT-s-OFDM QPSK	1@1	22.93	26.93	0.4932
25	15	30	380000	1900	DFT-s-OFDM 16 QAM	1@1	22.08	26.08	0.4055
25	15	35	373500	1867.5	DFT-s-OFDM QPSK	1@1	22.97	26.97	0.4977
25	15	35	373500	1867.5	DFT-s-OFDM 16 QAM	1@1	22.17	26.17	0.4140

25	15	35	376500	1882.5	DFT-s-OFDM QPSK	1@1	22.9	26.9	0.4898
25	15	35	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	21.73	25.73	0.3741
25	15	35	379500	1897.5	DFT-s-OFDM QPSK	1@1	23.16	27.16	0.5200
25	15	35	379500	1897.5	DFT-s-OFDM 16 QAM	1@1	21.93	25.93	0.3917
25	15	40	374000	1870	DFT-s-OFDM QPSK	1@1	23.04	27.04	0.5058
25	15	40	374000	1870	DFT-s-OFDM 16 QAM	1@1	21.78	25.78	0.3784
25	15	40	376500	1882.5	DFT-s-OFDM QPSK	1@1	22.89	26.89	0.4887
25	15	40	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	21.96	25.96	0.3945
25	15	40	379000	1895	DFT-s-OFDM QPSK	1@1	22.84	26.84	0.4831
25	15	40	379000	1895	DFT-s-OFDM 16 QAM	1@1	21.94	25.94	0.3926
25	15	45	374500	1872.5	DFT-s-OFDM PI/2 BPSK	120@60	23.78	27.78	0.5998
25	15	45	374500	1872.5	DFT-s-OFDM PI/2 BPSK	1@1	23.57	27.57	0.5715
25	15	45	374500	1872.5	DFT-s-OFDM PI/2 BPSK	1@240	23.16	27.16	0.5200
25	15	45	374500	1872.5	DFT-s-OFDM QPSK	120@60	23.85	27.85	0.6095
25	15	45	374500	1872.5	DFT-s-OFDM QPSK	1@1	23.46	27.46	0.5572
25	15	45	374500	1872.5	DFT-s-OFDM QPSK	1@240	23.16	27.16	0.5200
25	15	45	374500	1872.5	DFT-s-OFDM 16 QAM	120@60	22.82	26.82	0.4808
25	15	45	374500	1872.5	DFT-s-OFDM 16 QAM	1@1	22.52	26.52	0.4487
25	15	45	374500	1872.5	DFT-s-OFDM 16 QAM	1@240	22.16	26.16	0.4130
25	15	45	374500	1872.5	DFT-s-OFDM 64 QAM	120@60	21.08	25.08	0.3221
25	15	45	374500	1872.5	DFT-s-OFDM 64 QAM	1@1	21.07	25.07	0.3214
25	15	45	374500	1872.5	DFT-s-OFDM 64 QAM	1@240	20.45	24.45	0.2786
25	15	45	374500	1872.5	DFT-s-OFDM 256 QAM	120@60	19.12	23.12	0.2051
25	15	45	374500	1872.5	DFT-s-OFDM 256 QAM	1@1	18.77	22.77	0.1892
25	15	45	374500	1872.5	DFT-s-OFDM 256 QAM	1@240	18.8	22.8	0.1905
25	15	45	374500	1872.5	CP-OFDM QPSK	121@60	22.25	26.25	0.4217
25	15	45	374500	1872.5	CP-OFDM QPSK	1@1	21.95	25.95	0.3936
25	15	45	374500	1872.5	CP-OFDM QPSK	1@240	21.82	25.82	0.3819
25	15	45	376500	1882.5	DFT-s-OFDM PI/2 BPSK	120@60	23.53	27.53	0.5662
25	15	45	376500	1882.5	DFT-s-OFDM PI/2 BPSK	1@1	23.27	27.27	0.5333
25	15	45	376500	1882.5	DFT-s-OFDM PI/2 BPSK	1@240	23.36	27.36	0.5445
25	15	45	376500	1882.5	DFT-s-OFDM QPSK	120@60	23.8	27.8	0.6026
25	15	45	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.25	27.25	0.5309
25	15	45	376500	1882.5	DFT-s-OFDM QPSK	1@240	23.25	27.25	0.5309
25	15	45	376500	1882.5	DFT-s-OFDM 16 QAM	120@60	22.53	26.53	0.4498
25	15	45	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.36	26.36	0.4325
25	15	45	376500	1882.5	DFT-s-OFDM 16 QAM	1@240	22.05	26.05	0.4027
25	15	45	376500	1882.5	DFT-s-OFDM 64 QAM	120@60	21.02	25.02	0.3177
25	15	45	376500	1882.5	DFT-s-OFDM 64 QAM	1@1	20.72	24.72	0.2965
25	15	45	376500	1882.5	DFT-s-OFDM 64 QAM	1@240	20.29	24.29	0.2685
25	15	45	376500	1882.5	DFT-s-OFDM 256 QAM	120@60	19.12	23.12	0.2051
25	15	45	376500	1882.5	DFT-s-OFDM 256 QAM	1@1	18.82	22.82	0.1914
25	15	45	376500	1882.5	DFT-s-OFDM 256 QAM	1@240	18.44	22.44	0.1754
25	15	45	376500	1882.5	CP-OFDM QPSK	121@60	22.3	26.3	0.4266
25	15	45	376500	1882.5	CP-OFDM QPSK	1@1	22.07	26.07	0.4046
25	15	45	376500	1882.5	CP-OFDM QPSK	1@240	21.52	25.52	0.3565

25	15	45	378500	1892.5	DFT-s-OFDM PI/2 BPSK	120@60	23.61	27.61	0.5768
25	15	45	378500	1892.5	DFT-s-OFDM PI/2 BPSK	1@1	23.31	27.31	0.5383
25	15	45	378500	1892.5	DFT-s-OFDM PI/2 BPSK	1@240	23.42	27.42	0.5521
25	15	45	378500	1892.5	DFT-s-OFDM QPSK	120@60	23.61	27.61	0.5768
25	15	45	378500	1892.5	DFT-s-OFDM QPSK	1@1	23.27	27.27	0.5333
25	15	45	378500	1892.5	DFT-s-OFDM QPSK	1@240	23.05	27.05	0.5070
25	15	45	378500	1892.5	DFT-s-OFDM 16 QAM	120@60	22.74	26.74	0.4721
25	15	45	378500	1892.5	DFT-s-OFDM 16 QAM	1@1	22.32	26.32	0.4285
25	15	45	378500	1892.5	DFT-s-OFDM 16 QAM	1@240	22.1	26.1	0.4074
25	15	45	378500	1892.5	DFT-s-OFDM 64 QAM	120@60	20.91	24.91	0.3097
25	15	45	378500	1892.5	DFT-s-OFDM 64 QAM	1@1	20.68	24.68	0.2938
25	15	45	378500	1892.5	DFT-s-OFDM 64 QAM	1@240	20.47	24.47	0.2799
25	15	45	378500	1892.5	DFT-s-OFDM 256 QAM	120@60	18.92	22.92	0.1959
25	15	45	378500	1892.5	DFT-s-OFDM 256 QAM	1@1	18.89	22.89	0.1945
25	15	45	378500	1892.5	DFT-s-OFDM 256 QAM	1@240	18.61	22.61	0.1824
25	15	45	378500	1892.5	CP-OFDM QPSK	121@60	21.91	25.91	0.3899
25	15	45	378500	1892.5	CP-OFDM QPSK	1@1	21.79	25.79	0.3793
25	15	45	378500	1892.5	CP-OFDM QPSK	1@240	21.83	25.83	0.3828

FR1 N25(Main PA) - SCS 30k

Transmitter Conducted Output Power And EIRP, (G_T - L_C)=4dBi

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP(W)
25	30	10	371000	1855	DFT-s-OFDM QPSK	1@1	23.27	27.27	0.5333
25	30	10	371000	1855	DFT-s-OFDM 16 QAM	1@1	22.71	26.71	0.4688
25	30	10	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.51	27.51	0.5636
25	30	10	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.59	26.59	0.4560
25	30	10	382000	1910	DFT-s-OFDM QPSK	1@1	22.99	26.99	0.5000
25	30	10	382000	1910	DFT-s-OFDM 16 QAM	1@1	22.2	26.2	0.4169
25	30	15	371500	1857.5	DFT-s-OFDM QPSK	1@1	23.3	27.3	0.5370
25	30	15	371500	1857.5	DFT-s-OFDM 16 QAM	1@1	22.77	26.77	0.4753
25	30	15	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.4	27.4	0.5495
25	30	15	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.7	26.7	0.4677
25	30	15	381500	1907.5	DFT-s-OFDM QPSK	1@1	23.12	27.12	0.5152
25	30	15	381500	1907.5	DFT-s-OFDM 16 QAM	1@1	22.2	26.2	0.4169
25	30	20	372000	1860	DFT-s-OFDM QPSK	1@1	23.13	27.13	0.5164
25	30	20	372000	1860	DFT-s-OFDM 16 QAM	1@1	22.57	26.57	0.4539
25	30	20	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.09	27.09	0.5117
25	30	20	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.69	26.69	0.4667
25	30	20	381000	1905	DFT-s-OFDM QPSK	1@1	22.98	26.98	0.4989
25	30	20	381000	1905	DFT-s-OFDM 16 QAM	1@1	22.19	26.19	0.4159
25	30	25	388500	1862.5	DFT-s-OFDM QPSK	1@1	23.06	27.06	0.5082
25	30	25	388500	1862.5	DFT-s-OFDM 16 QAM	1@1	22.23	26.23	0.4198
25	30	25	392500	1882.5	DFT-s-OFDM QPSK	1@1	22.88	26.88	0.4875
25	30	25	392500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.01	26.01	0.3990
25	30	25	396500	1902.5	DFT-s-OFDM QPSK	1@1	22.71	26.71	0.4688
25	30	25	396500	1902.5	DFT-s-OFDM 16 QAM	1@1	21.92	25.92	0.3908
25	30	30	389000	1865	DFT-s-OFDM QPSK	1@1	23.19	27.19	0.5236
25	30	30	389000	1865	DFT-s-OFDM 16 QAM	1@1	22.24	26.24	0.4207
25	30	30	392500	1882.5	DFT-s-OFDM QPSK	1@1	23.09	27.09	0.5117
25	30	30	392500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.23	26.23	0.4198
25	30	30	396000	1900	DFT-s-OFDM QPSK	1@1	23.07	27.07	0.5093
25	30	30	396000	1900	DFT-s-OFDM 16 QAM	1@1	22.03	26.03	0.4009
25	30	35	389500	1867.5	DFT-s-OFDM QPSK	1@1	23.18	27.18	0.5224
25	30	35	389500	1867.5	DFT-s-OFDM 16 QAM	1@1	21.98	25.98	0.3963
25	30	35	392500	1882.5	DFT-s-OFDM QPSK	1@1	22.77	26.77	0.4753
25	30	35	392500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.16	26.16	0.4130
25	30	35	395500	1897.5	DFT-s-OFDM QPSK	1@1	22.86	26.86	0.4853
25	30	35	395500	1897.5	DFT-s-OFDM 16 QAM	1@1	22.09	26.09	0.4064
25	30	40	390000	1870	DFT-s-OFDM QPSK	1@1	23.07	27.07	0.5093

25	30	40	390000	1870	DFT-s-OFDM 16 QAM	1@1	21.97	25.97	0.3954
25	30	40	392500	1882.5	DFT-s-OFDM QPSK	1@1	22.92	26.92	0.4920
25	30	40	392500	1882.5	DFT-s-OFDM 16 QAM	1@1	21.87	25.87	0.3864
25	30	40	395000	1895	DFT-s-OFDM QPSK	1@1	22.94	26.94	0.4943
25	30	40	395000	1895	DFT-s-OFDM 16 QAM	1@1	22.19	26.19	0.4159
25	30	45	390500	1872.5	DFT-s-OFDM PI/2 BPSK	54@27	23.57	27.57	0.5715
25	30	45	390500	1872.5	DFT-s-OFDM PI/2 BPSK	1@1	23.57	27.57	0.5715
25	30	45	390500	1872.5	DFT-s-OFDM PI/2 BPSK	1@117	23.1	27.1	0.5129
25	30	45	390500	1872.5	DFT-s-OFDM QPSK	54@27	23.65	27.65	0.5821
25	30	45	390500	1872.5	DFT-s-OFDM QPSK	1@1	23.08	27.08	0.5105
25	30	45	390500	1872.5	DFT-s-OFDM QPSK	1@117	22.96	26.96	0.4966
25	30	45	390500	1872.5	DFT-s-OFDM 16 QAM	54@27	22.7	26.7	0.4677
25	30	45	390500	1872.5	DFT-s-OFDM 16 QAM	1@1	22.72	26.72	0.4699
25	30	45	390500	1872.5	DFT-s-OFDM 16 QAM	1@117	22.04	26.04	0.4018
25	30	45	390500	1872.5	DFT-s-OFDM 64 QAM	54@27	21.18	25.18	0.3296
25	30	45	390500	1872.5	DFT-s-OFDM 64 QAM	1@1	20.66	24.66	0.2924
25	30	45	390500	1872.5	DFT-s-OFDM 64 QAM	1@117	20.49	24.49	0.2812
25	30	45	390500	1872.5	DFT-s-OFDM 256 QAM	54@27	19.41	23.41	0.2193
25	30	45	390500	1872.5	DFT-s-OFDM 256 QAM	1@1	18.75	22.75	0.1884
25	30	45	390500	1872.5	DFT-s-OFDM 256 QAM	1@117	18.72	22.72	0.1871
25	30	45	390500	1872.5	CP-OFDM QPSK	59@29	22.07	26.07	0.4046
25	30	45	390500	1872.5	CP-OFDM QPSK	1@1	22.23	26.23	0.4198
25	30	45	390500	1872.5	CP-OFDM QPSK	1@117	21.77	25.77	0.3776
25	30	45	392500	1882.5	DFT-s-OFDM PI/2 BPSK	54@27	23.38	27.38	0.5470
25	30	45	392500	1882.5	DFT-s-OFDM PI/2 BPSK	1@1	23.52	27.52	0.5649
25	30	45	392500	1882.5	DFT-s-OFDM PI/2 BPSK	1@117	23.02	27.02	0.5035
25	30	45	392500	1882.5	DFT-s-OFDM QPSK	54@27	23.57	27.57	0.5715
25	30	45	392500	1882.5	DFT-s-OFDM QPSK	1@1	23.41	27.41	0.5508
25	30	45	392500	1882.5	DFT-s-OFDM QPSK	1@117	23.12	27.12	0.5152
25	30	45	392500	1882.5	DFT-s-OFDM 16 QAM	54@27	22.78	26.78	0.4764
25	30	45	392500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.38	26.38	0.4345
25	30	45	392500	1882.5	DFT-s-OFDM 16 QAM	1@117	22.03	26.03	0.4009
25	30	45	392500	1882.5	DFT-s-OFDM 64 QAM	54@27	21.27	25.27	0.3365
25	30	45	392500	1882.5	DFT-s-OFDM 64 QAM	1@1	20.84	24.84	0.3048
25	30	45	392500	1882.5	DFT-s-OFDM 64 QAM	1@117	20.28	24.28	0.2679
25	30	45	392500	1882.5	DFT-s-OFDM 256 QAM	54@27	19.22	23.22	0.2099
25	30	45	392500	1882.5	DFT-s-OFDM 256 QAM	1@1	18.75	22.75	0.1884
25	30	45	392500	1882.5	DFT-s-OFDM 256 QAM	1@117	18.63	22.63	0.1832
25	30	45	392500	1882.5	CP-OFDM QPSK	59@29	22.02	26.02	0.3999
25	30	45	392500	1882.5	CP-OFDM QPSK	1@1	21.88	25.88	0.3873
25	30	45	392500	1882.5	CP-OFDM QPSK	1@117	21.69	25.69	0.3707
25	30	45	394500	1892.5	DFT-s-OFDM PI/2 BPSK	54@27	23.26	27.26	0.5321
25	30	45	394500	1892.5	DFT-s-OFDM PI/2 BPSK	1@1	23.2	27.2	0.5248

25	30	45	394500	1892.5	DFT-s-OFDM PI/2 BPSK	1@117	23.05	27.05	0.5070
25	30	45	394500	1892.5	DFT-s-OFDM QPSK	54@27	23.58	27.58	0.5728
25	30	45	394500	1892.5	DFT-s-OFDM QPSK	1@1	23.23	27.23	0.5284
25	30	45	394500	1892.5	DFT-s-OFDM QPSK	1@117	23.28	27.28	0.5346
25	30	45	394500	1892.5	DFT-s-OFDM 16 QAM	54@27	22.66	26.66	0.4634
25	30	45	394500	1892.5	DFT-s-OFDM 16 QAM	1@1	22.57	26.57	0.4539
25	30	45	394500	1892.5	DFT-s-OFDM 16 QAM	1@117	22.25	26.25	0.4217
25	30	45	394500	1892.5	DFT-s-OFDM 64 QAM	54@27	20.77	24.77	0.2999
25	30	45	394500	1892.5	DFT-s-OFDM 64 QAM	1@1	20.97	24.97	0.3141
25	30	45	394500	1892.5	DFT-s-OFDM 64 QAM	1@117	20.8	24.8	0.3020
25	30	45	394500	1892.5	DFT-s-OFDM 256 QAM	54@27	18.82	22.82	0.1914
25	30	45	394500	1892.5	DFT-s-OFDM 256 QAM	1@1	18.9	22.9	0.1950
25	30	45	394500	1892.5	DFT-s-OFDM 256 QAM	1@117	18.65	22.65	0.1841
25	30	45	394500	1892.5	CP-OFDM QPSK	59@29	22.08	26.08	0.4055
25	30	45	394500	1892.5	CP-OFDM QPSK	1@1	22.02	26.02	0.3999
25	30	45	394500	1892.5	CP-OFDM QPSK	1@117	21.81	25.81	0.3811

FR1 N25(Main PA) - SCS 15k

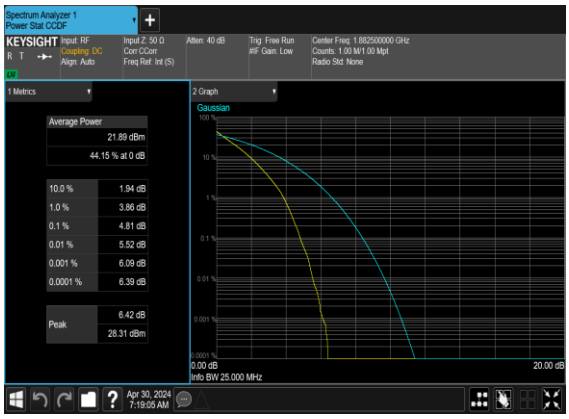
Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0031	**PASS**	NV
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0034	**PASS**	LV
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0062	**PASS**	HV
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0047	**PASS**	-30℃
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0030	**PASS**	-20℃
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0051	**PASS**	-10℃
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0048	**PASS**	0℃
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0064	**PASS**	10℃
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0031	**PASS**	20℃
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0047	**PASS**	30℃
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0022	**PASS**	40℃
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0031	**PASS**	50℃

Peak to Average Ratio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
25	15	20	376500	1882.5	DFT-s-OFDM PI/2 BPSK	100@0	4.81	13	**PASS**
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	6.11	13	**PASS**

N25(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH

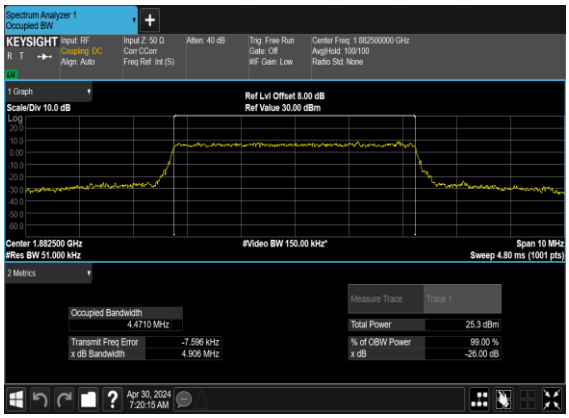


N25(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

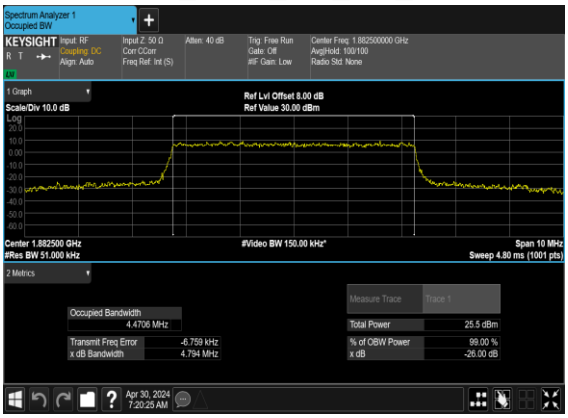
Occupied Bandwidth

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB BW (MHz)
25	15	5	376500	1882.5	CP-OFDM QPSK	25@0	4.471	4.906
25	15	5	376500	1882.5	CP-OFDM 16 QAM	25@0	4.4706	4.794
25	15	5	376500	1882.5	CP-OFDM 64 QAM	25@0	4.4504	4.823
25	15	5	376500	1882.5	CP-OFDM 256 QAM	25@0	4.4674	4.819
25	15	10	376500	1882.5	CP-OFDM QPSK	52@0	9.3014	9.876
25	15	10	376500	1882.5	CP-OFDM 16 QAM	52@0	9.2803	9.805
25	15	10	376500	1882.5	CP-OFDM 64 QAM	52@0	9.3097	9.845
25	15	10	376500	1882.5	CP-OFDM 256 QAM	52@0	9.2516	9.754
25	15	15	376500	1882.5	CP-OFDM QPSK	79@0	14.107	14.77
25	15	15	376500	1882.5	CP-OFDM 16 QAM	79@0	14.107	14.66
25	15	15	376500	1882.5	CP-OFDM 64 QAM	79@0	14.083	14.66
25	15	15	376500	1882.5	CP-OFDM 256 QAM	79@0	14.069	14.74
25	15	20	376500	1882.5	CP-OFDM QPSK	106@0	18.913	19.77
25	15	20	376500	1882.5	CP-OFDM 16 QAM	106@0	18.91	19.95
25	15	20	376500	1882.5	CP-OFDM 64 QAM	106@0	18.925	19.92
25	15	20	376500	1882.5	CP-OFDM 256 QAM	106@0	18.923	19.84
25	15	25	376500	1882.5	CP-OFDM QPSK	133@0	23.734	24.66
25	15	25	376500	1882.5	CP-OFDM 16 QAM	133@0	23.775	24.7
25	15	25	376500	1882.5	CP-OFDM 64 QAM	133@0	23.769	24.91
25	15	25	376500	1882.5	CP-OFDM 256 QAM	133@0	23.804	24.72
25	15	30	376500	1882.5	CP-OFDM QPSK	160@0	28.569	29.76
25	15	30	376500	1882.5	CP-OFDM 16 QAM	160@0	28.523	29.79
25	15	30	376500	1882.5	CP-OFDM 64 QAM	160@0	28.63	29.54
25	15	30	376500	1882.5	CP-OFDM 256 QAM	160@0	28.542	29.59
25	15	35	376500	1882.5	CP-OFDM QPSK	188@0	33.537	35.08
25	15	35	376500	1882.5	CP-OFDM 16 QAM	188@0	33.561	35.17
25	15	35	376500	1882.5	CP-OFDM 64 QAM	188@0	33.555	34.91
25	15	35	376500	1882.5	CP-OFDM 256 QAM	188@0	33.479	34.78
25	15	40	376500	1882.5	CP-OFDM QPSK	216@0	38.563	39.89
25	15	40	376500	1882.5	CP-OFDM 16 QAM	216@0	38.56	39.91
25	15	40	376500	1882.5	CP-OFDM 64 QAM	216@0	38.553	40.05
25	15	40	376500	1882.5	CP-OFDM 256 QAM	216@0	38.5	39.98
25	15	45	376500	1882.5	CP-OFDM QPSK	242@0	43.257	44.72
25	15	45	376500	1882.5	CP-OFDM 16 QAM	242@0	43.222	44.69
25	15	45	376500	1882.5	CP-OFDM 64 QAM	242@0	43.126	44.72
25	15	45	376500	1882.5	CP-OFDM 256 QAM	242@0	43.196	45.2

N25(5M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



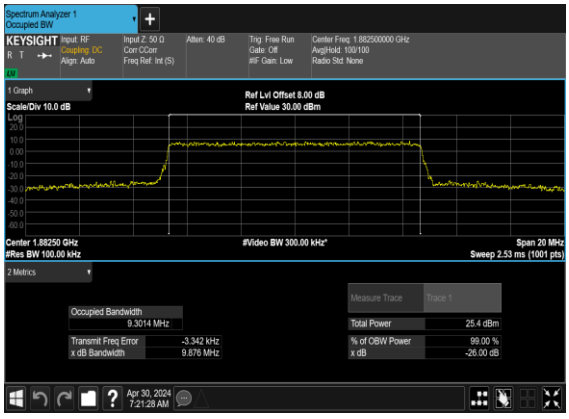
N25(5M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N25(5M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

N25(5M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

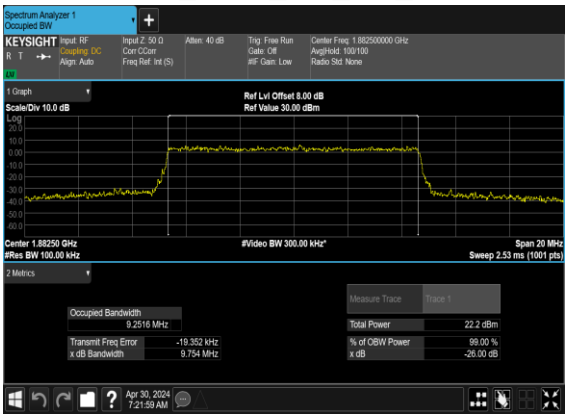
N25(10M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



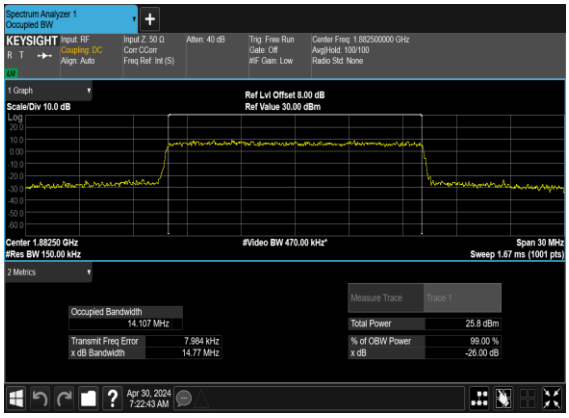
N25(10M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

N25(10M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

N25(10M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



N25(15M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

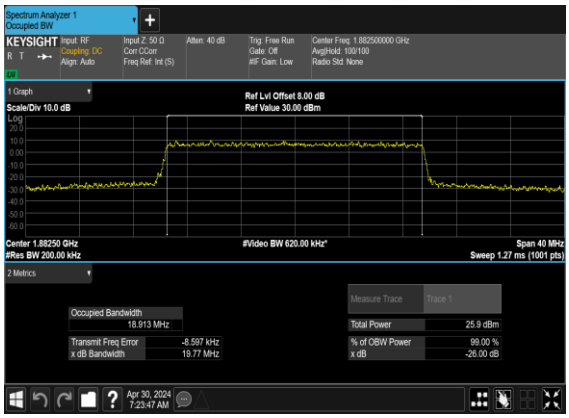


N25(15M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

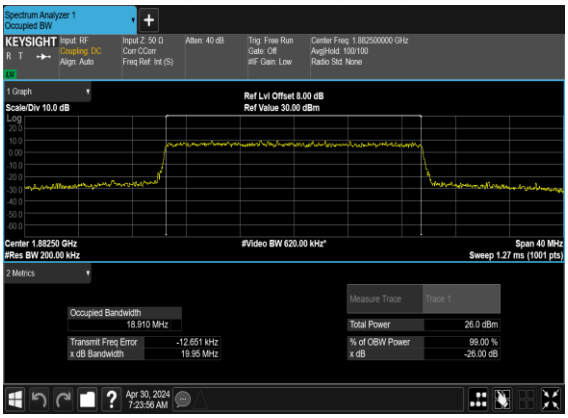
N25(15M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

N25(15M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

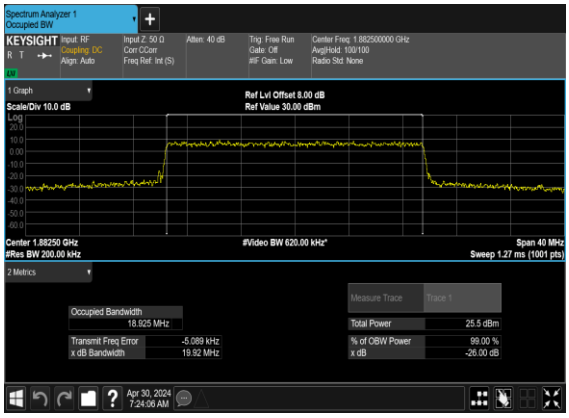
N25(20M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



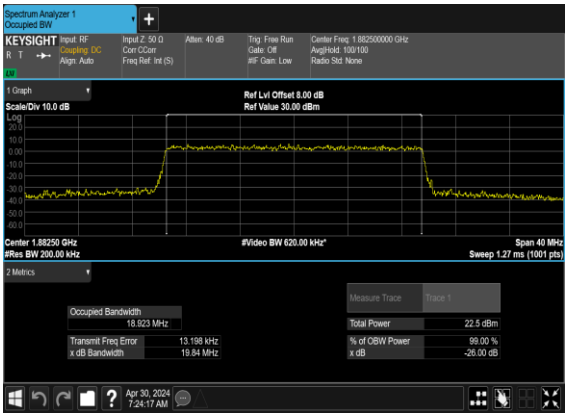
N25(20M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



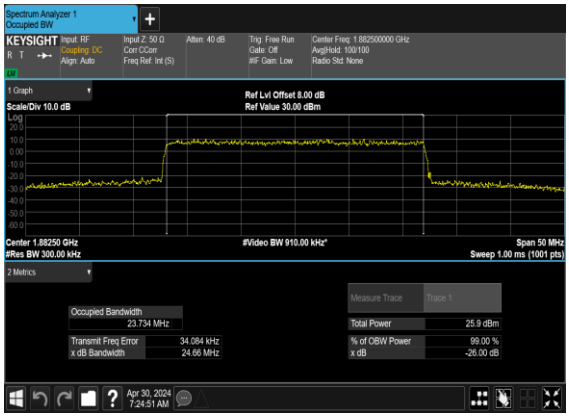
N25(20M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



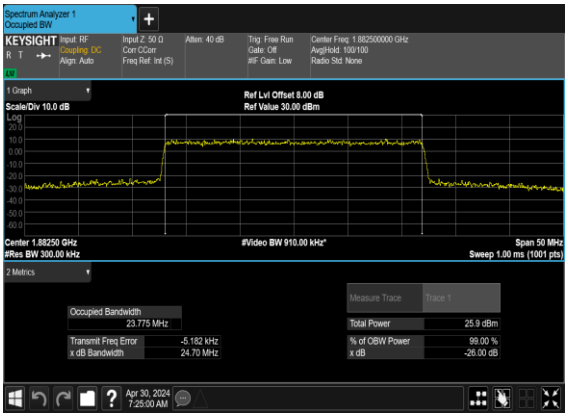
N25(20M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



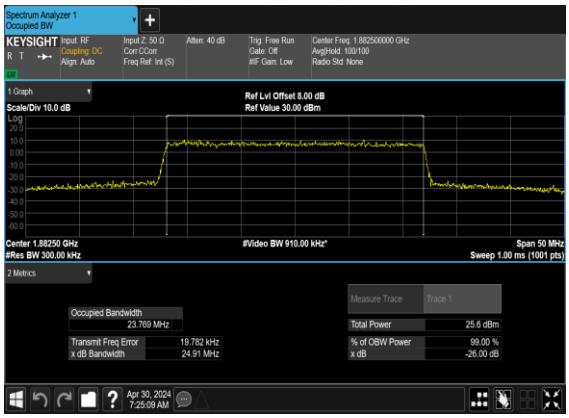
N25(25M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



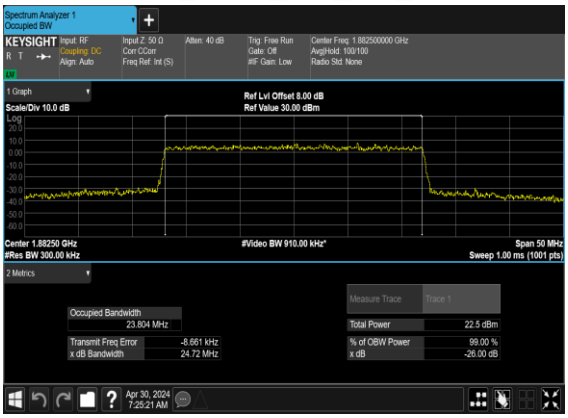
N25(25M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N25(25M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

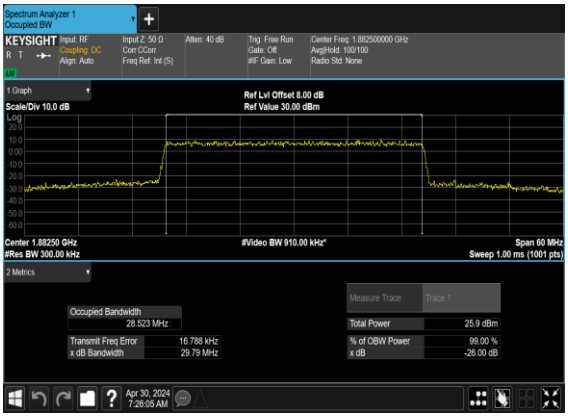


N25(25M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

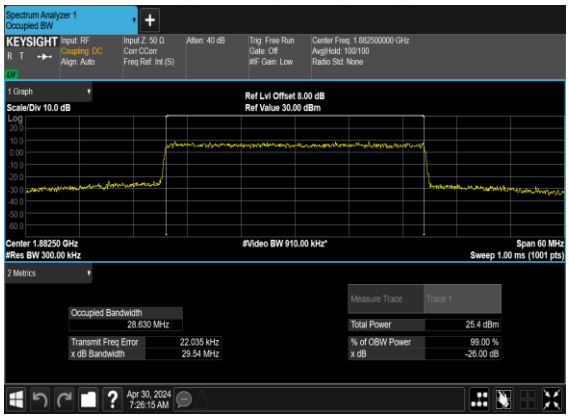


N25(30M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

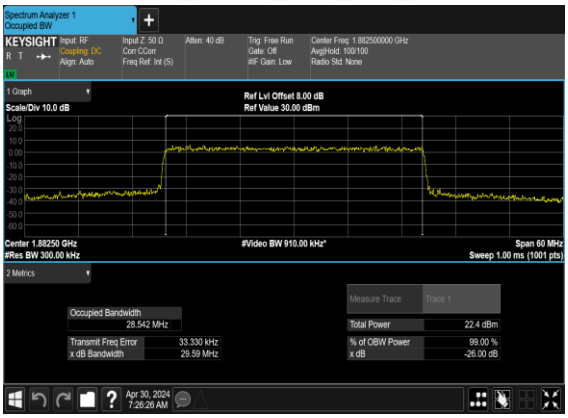
N25(30M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N25(30M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

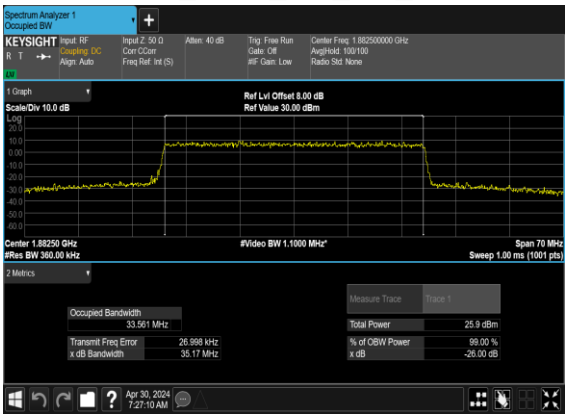


N25(30M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

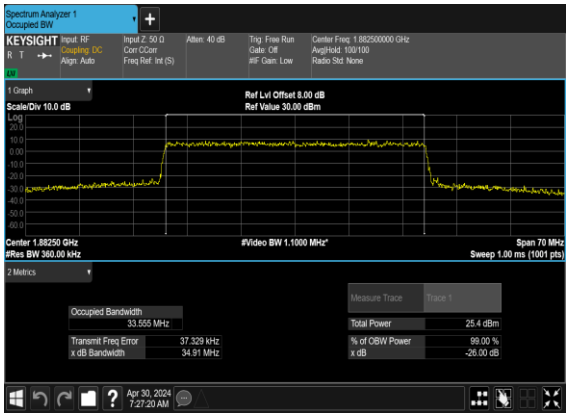


N25(35M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

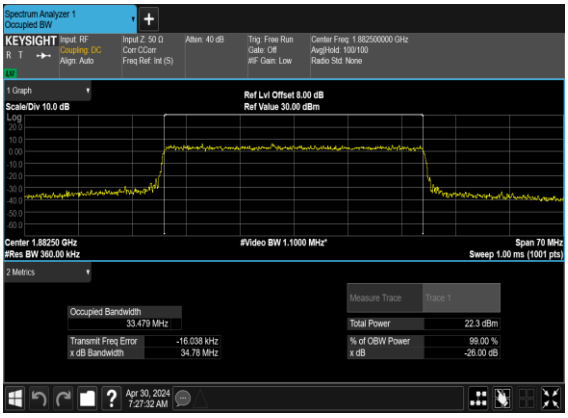
N25(35M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



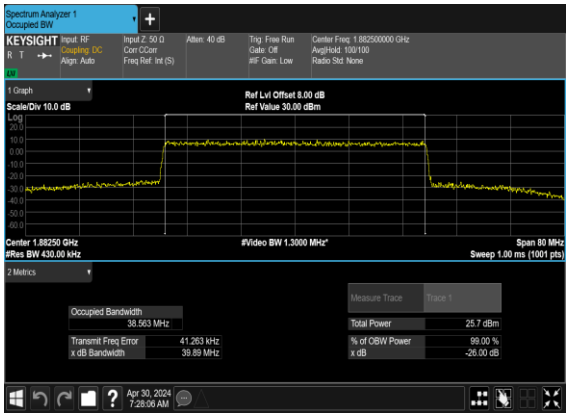
N25(35M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



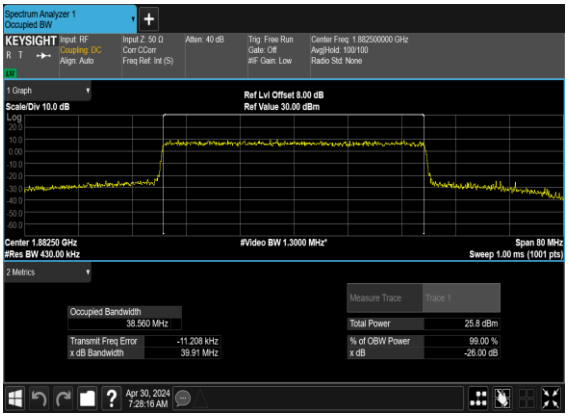
N25(35M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



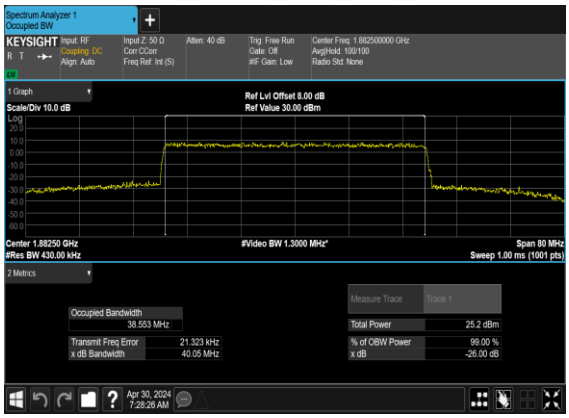
N25(40M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



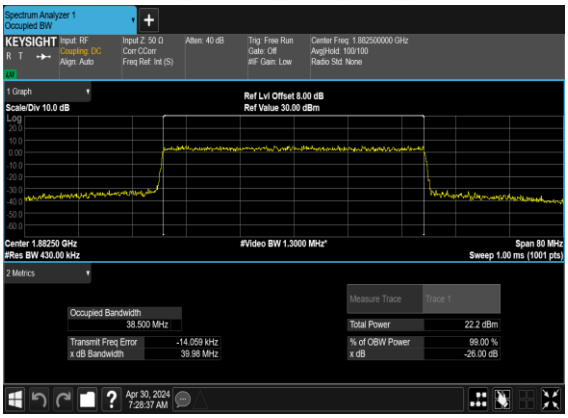
N25(40M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



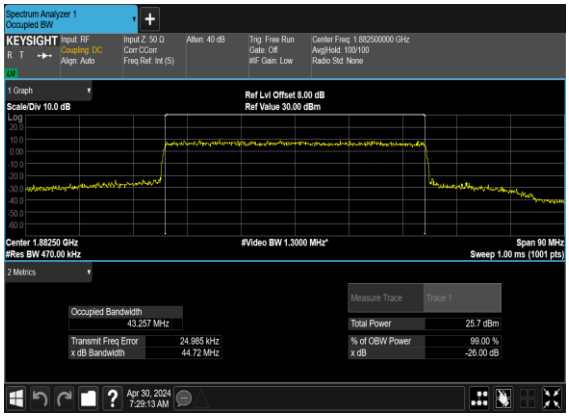
N25(40M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



N25(40M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

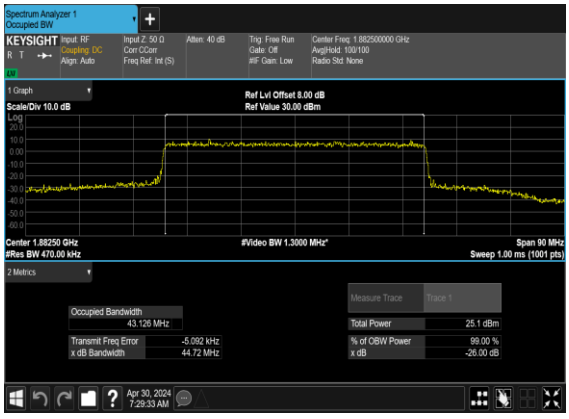


N25(45M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



N25(45M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

N25(45M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

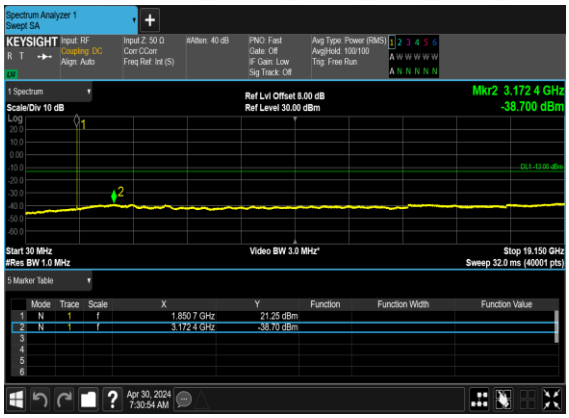


N25(45M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

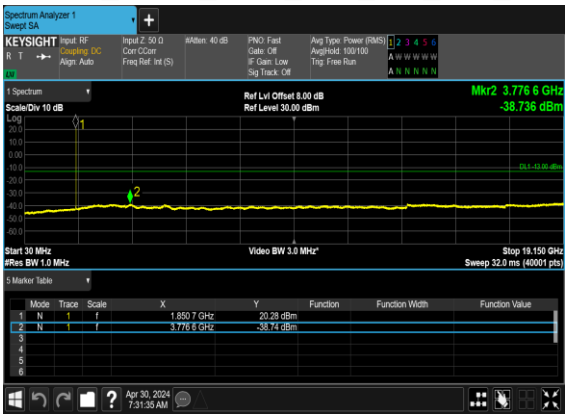
Conducted Spurious Emissions

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
25	15	5	370500	1852.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
25	15	5	370500	1852.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	5	370500	1852.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
25	15	5	370500	1852.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
25	15	5	376500	1882.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
25	15	5	376500	1882.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	5	376500	1882.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
25	15	5	376500	1882.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
25	15	5	382500	1912.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
25	15	5	382500	1912.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	5	382500	1912.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
25	15	5	382500	1912.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
25	15	25	372500	1862.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
25	15	25	372500	1862.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	25	372500	1862.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
25	15	25	372500	1862.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
25	15	25	376500	1882.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
25	15	25	376500	1882.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	25	376500	1882.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
25	15	25	376500	1882.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
25	15	25	380500	1902.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
25	15	25	380500	1902.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	25	380500	1902.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
25	15	25	380500	1902.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
25	15	45	374500	1872.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
25	15	45	374500	1872.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	45	374500	1872.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
25	15	45	374500	1872.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
25	15	45	376500	1882.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
25	15	45	376500	1882.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	45	376500	1882.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
25	15	45	376500	1882.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
25	15	45	378500	1892.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
25	15	45	378500	1892.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	45	378500	1892.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
25	15	45	378500	1892.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**

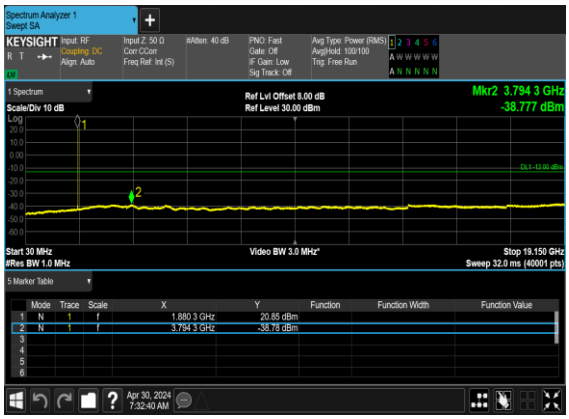
N25(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



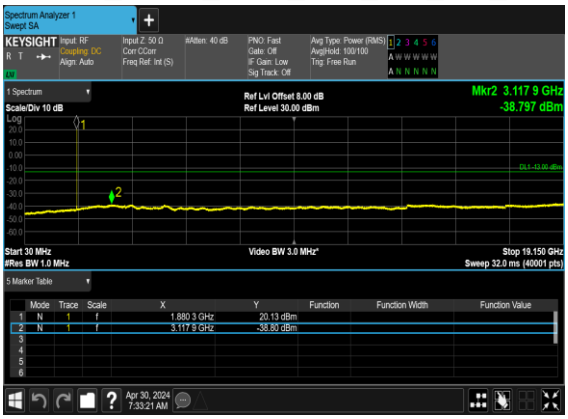
N25(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



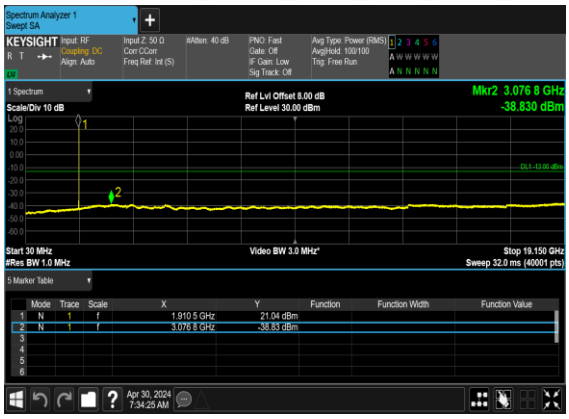
N25(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



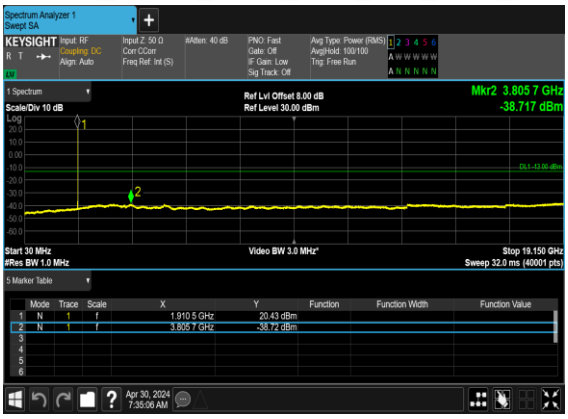
N25(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



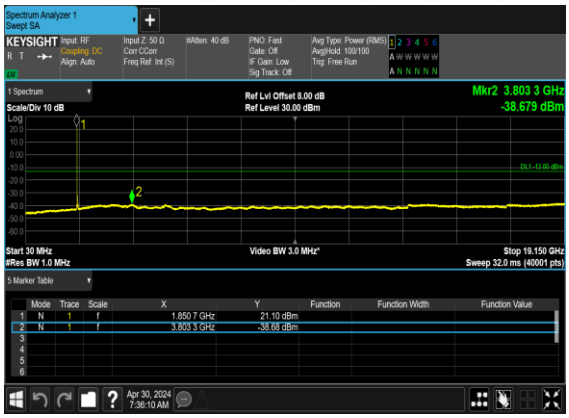
N25(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



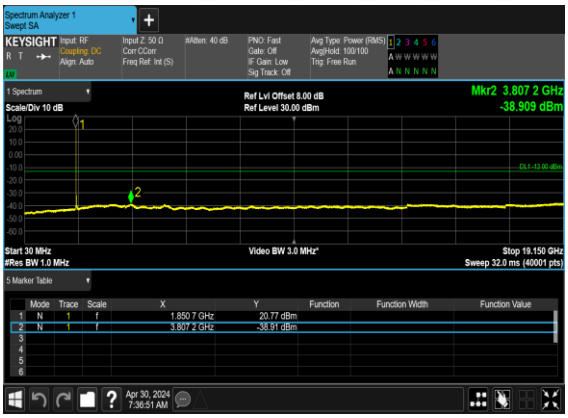
N25(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



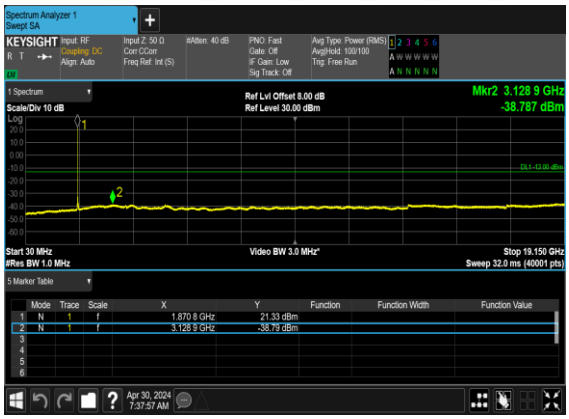
N25(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



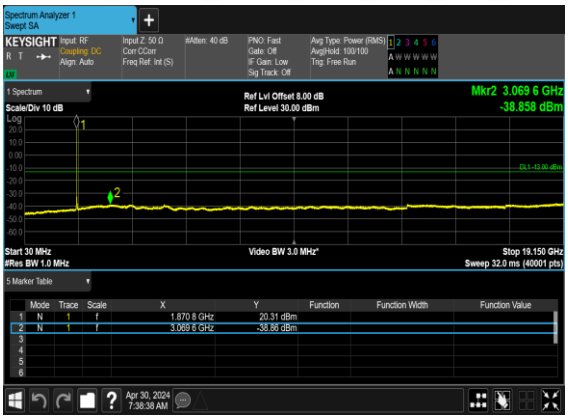
N25(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



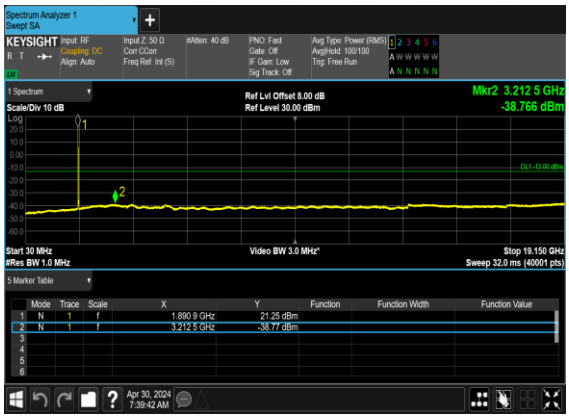
N25(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



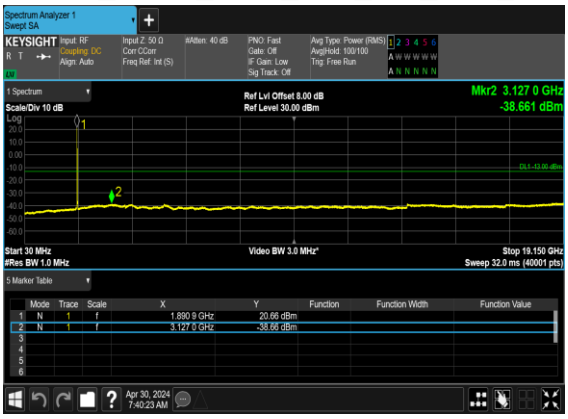
N25(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



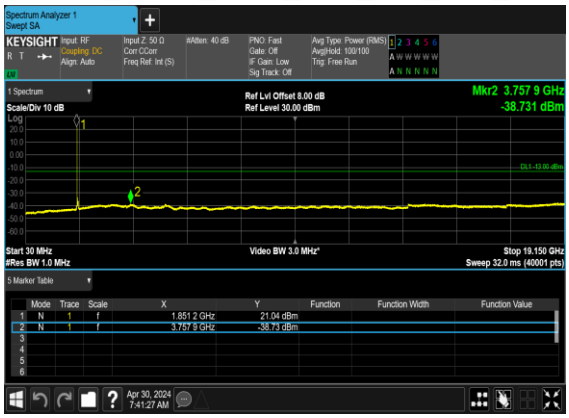
N25(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



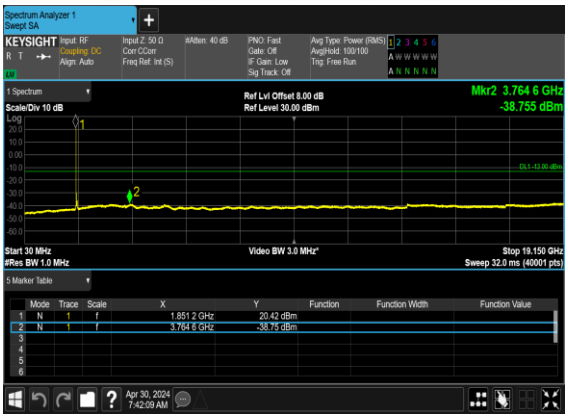
N25(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



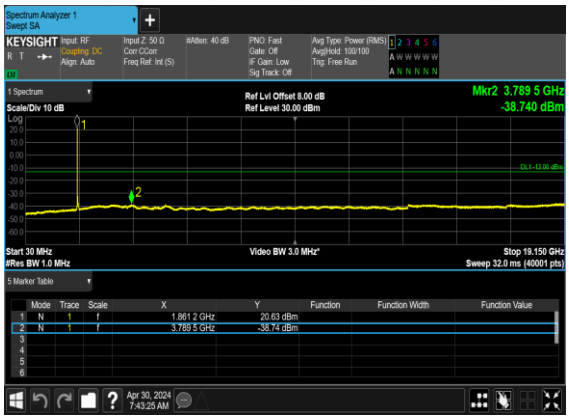
N25(45M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



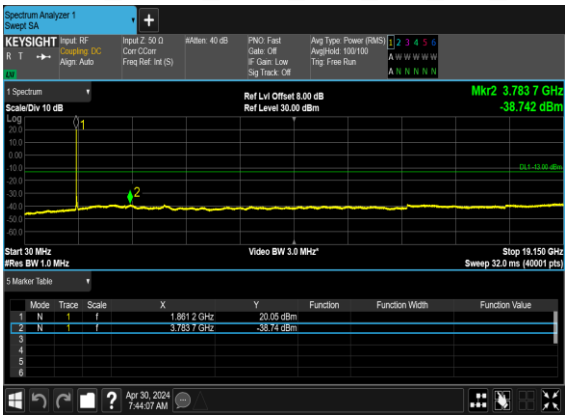
N25(45M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



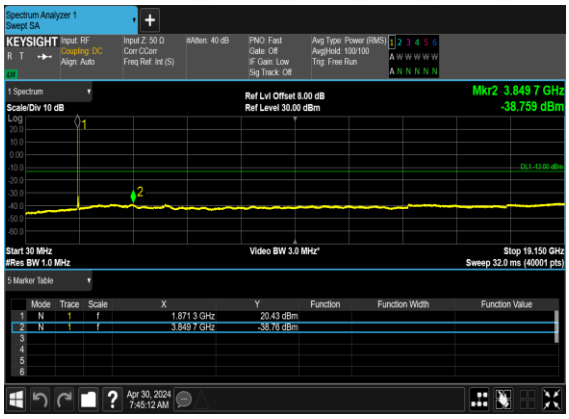
N25(45M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



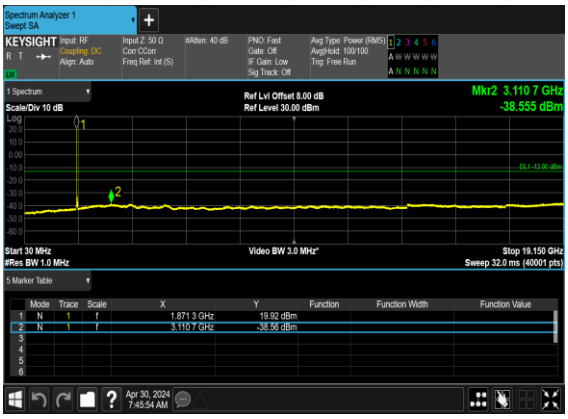
N25(45M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



N25(45M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



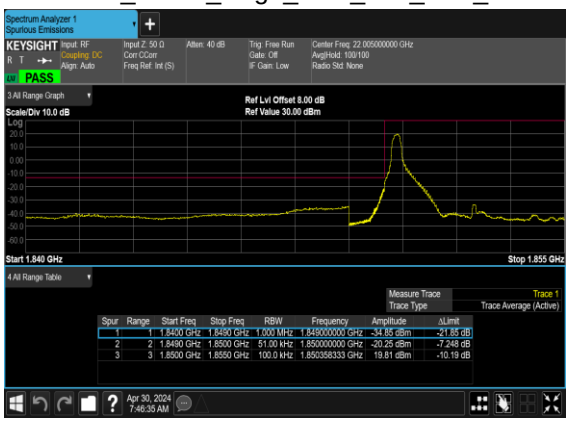
N25(45M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



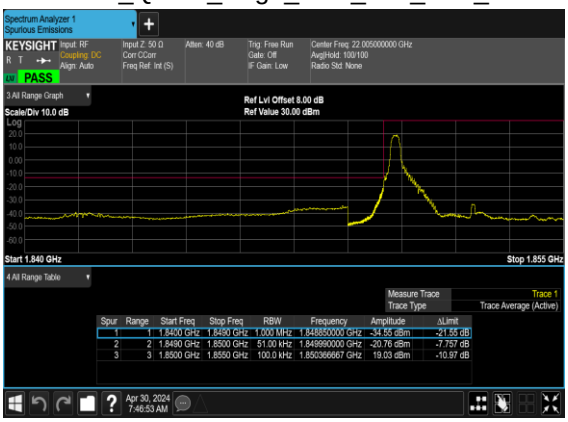
Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
25	15	5	370500	1852.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	5	370500	1852.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
25	15	5	370500	1852.5	DFT-s-OFDM BPSK	25@0	see graph	**PASS**
25	15	5	370500	1852.5	DFT-s-OFDM QPSK	25@0	see graph	**PASS**
25	15	5	382500	1912.5	DFT-s-OFDM BPSK	1@24	see graph	**PASS**
25	15	5	382500	1912.5	DFT-s-OFDM QPSK	1@24	see graph	**PASS**
25	15	5	382500	1912.5	DFT-s-OFDM BPSK	25@0	see graph	**PASS**
25	15	5	382500	1912.5	DFT-s-OFDM QPSK	25@0	see graph	**PASS**
25	15	25	372500	1862.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	25	372500	1862.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
25	15	25	372500	1862.5	DFT-s-OFDM BPSK	128@0	see graph	**PASS**
25	15	25	372500	1862.5	DFT-s-OFDM QPSK	128@0	see graph	**PASS**
25	15	25	380500	1902.5	DFT-s-OFDM BPSK	1@132	see graph	**PASS**
25	15	25	380500	1902.5	DFT-s-OFDM QPSK	1@132	see graph	**PASS**
25	15	25	380500	1902.5	DFT-s-OFDM BPSK	128@0	see graph	**PASS**
25	15	25	380500	1902.5	DFT-s-OFDM QPSK	128@0	see graph	**PASS**
25	15	45	374500	1872.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	45	374500	1872.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
25	15	45	374500	1872.5	DFT-s-OFDM BPSK	240@0	see graph	**PASS**
25	15	45	374500	1872.5	DFT-s-OFDM QPSK	240@0	see graph	**PASS**
25	15	45	378500	1892.5	DFT-s-OFDM BPSK	1@241	see graph	**PASS**
25	15	45	378500	1892.5	DFT-s-OFDM QPSK	1@241	see graph	**PASS**
25	15	45	378500	1892.5	DFT-s-OFDM BPSK	240@0	see graph	**PASS**
25	15	45	378500	1892.5	DFT-s-OFDM QPSK	240@0	see graph	**PASS**

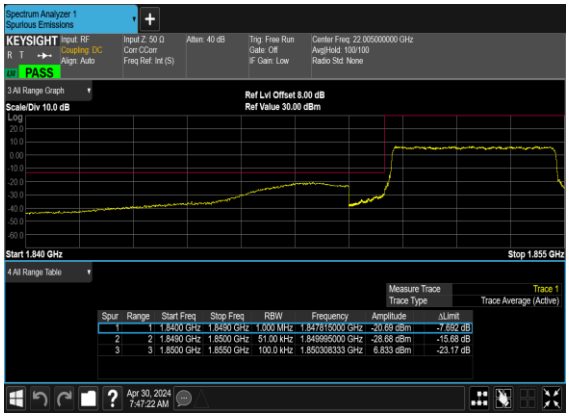
N25(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



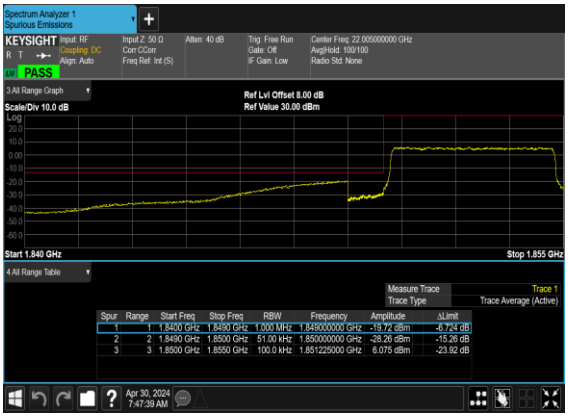
N25(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



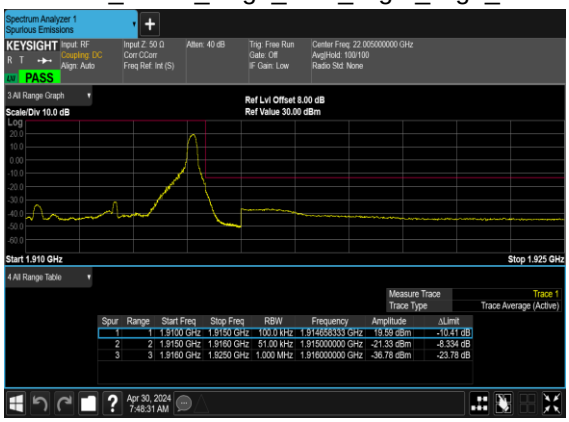
N25(5M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



N25(5M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



N25(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



N25(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH