FCC RF Test Report

APPLICANT	:	Motorola Mobility LLC
EQUIPMENT	:	Mobile Cellular Phone
BRAND NAME	:	Motorola
MODEL NAME	:	XT2417-1, XT2417-2, XT2417-4, XT2417D
FCC ID	:	IHDT56AQ3
STANDARD	:	47 CFR Part 2, 22, 24
CLASSIFICATION	:	PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S)	:	Nov. 03, 2023 ~ Nov. 23, 2023

We, Sporton International Inc. (Kunshan), 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. (Kunshan), the test report shall not be reproduced except in full.

Jason Jia

Approved by: Jason Jia

ACCREDITED Cert #5145.02

Sporton International Inc. (Kunshan)
No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China

TABLE OF CONTENTS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG3O1303J	Rev. 01	Initial issue of report	Nov. 30, 2023

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 §27.54		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+10log$_{10}$(P[Watts])	PASS	Under limit 41.59 dB at 2488.00 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	XT2417-1, XT2417-2, XT2417-4, XT2417D
FCC ID	IHDT56AQ3
IMEI Code	Conducted : 354581940048052/354581940048060 Radiation : 350735340018255/350735340018263
HW Version	DVT2
SW Version	U1UFN34.35
EUT Stage	Identical Prototype

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. The four different model names are only for market segment, no other difference.

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	n2, n5, n26: 5MHz / 10MHz / 15MHz / 20MHz n25: 5MHz / 10MHz / 15MHz / 20MHz / 25MHz / 30MHz / 40MHz
SCS	15kHz
Antenna Gain	**<Ant.0>** n2 : -0.5 dBi n5 : -3.5 dBi n25 : -0.5 dBi

	n26 : -3.5 dBi **<Ant.4>** n2 : -1.8 dBi n5 : -3.3 dBi n25 : -1.8 dBi n26 : -3.3 dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

Remark:

1. The maximum ERP/EIRP is calculated from max output power and max antenna gain, only the maximum ERP/EIRP of Ant.0 for 5G NR n2/n5/n25/n26 are shown in the report.
2. All the supported ENDC combinations are verified conducted power, only the ENDC combination with highest power are shown in the report.
3. 5G NR n26 only support SA mode, and n2/n5/n25 support SA & NSA mode. For the bands support SA & NSA mode, SA covers NSA mode according to the maximum power.
4. The device supports two PAs for 5G NR n2/n25 (main PA for SA mode and other PA for NSA mode), both PA are full tested, the maximum power of main PA is higher than the other PA, therefore, , we chose higher power of main PA to calculate the EIRP and show in the report.
5. The EN-DC mode combination could be referred to the product spec.

1.5 Modification of EUT

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

1.6 Specification of Accessory

Specification of Accessory				
AC Adapter 1	**Brand Name**	Motorola(AOHAI)	**Model Name**	MC-101
AC Adapter 2	**Brand Name**	Motorola (Salcomp)	**Model Name**	MC-101
AC Adapter 3	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-101
Battery 1	**Brand Name**	Motorola (ATL)	**Model Name**	QF50
Battery 2	**Brand Name**	Motorola (Sunwoda)	**Model Name**	QF50
USB Cable 1	**Brand Name**	HE XIN	**Model Name**	HX-HQ-05
USB Cable 2	**Brand Name**	SAI BAO	**Model Name**	SHQ-A174
Earphone	**Brand Name**	Newleader	**Model Name**	EM313A-19SF

1.7 Maximum ERP/EIRP and Emission Designator

5G NR n2		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	1852.5 ~ 1907.5	0.2009	4M47G7D	0.1589	4M47W7D
10	1855.0 ~ 1905.0	0.1977	9M29G7D	0.1496	9M30W7D
15	1857.5 ~ 1902.5	0.2000	14M1G7D	0.1500	14M1W7D
20	1860.0 ~ 1900.0	0.2138	19M0G7D	0.1563	19M0W7D
5G NR n25		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	1852.5 ~ 1912.5	0.2143	4M47G7D	0.2061	4M47W7D
10	1855.0 ~ 1910.0	0.2051	9M29G7D	0.1722	9M30W7D
15	1857.5 ~ 1907.5	0.2018	14M1G7D	0.1687	14M1W7D
20	1860.0 ~ 1905.0	0.2009	19M0G7D	0.1679	19M0W7D
25	1862.5 ~ 1902.5	0.2042	23M8G7D	0.1694	23M8W7D
30	1865.0 ~ 1900.0	0.2046	28M6G7D	0.1706	28M7W7D
40	1870.0 ~ 1895.0	0.2163	38M6G7D	0.1726	38M6W7D
5G NR n5		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
5	826.5 ~ 846.5	0.0546	4M46G7D	0.0444	4M49W7D
10	829.0 ~ 844.0	0.0537	9M27G7D	0.0435	9M28W7D
15	831.5 ~ 841.5	0.0533	14M1G7D	0.0434	14M1W7D
20	834.0 ~ 839.0	0.0570	18M9G7D	0.0431	18M9W7D
5G NR n26		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
5	826.5 ~ 846.5	0.0519	4M46G7D	0.0409	4M49W7D
10	829.0 ~ 844.0	0.0520	9M27G7D	0.0414	9M28W7D
15	831.5 ~ 841.5	0.0513	14M1G7D	0.0406	14M1W7D
20	834.0 ~ 839.0	0.0594	18M9G7D	0.0442	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 and the portion of 5G NR n26 subject to Part 22.
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.

1.8 Testing Location

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH03-KS 03CH04-KS TH01-KS	CN1257	314309

1.9 Test Software

Item	Site	Manufacture	Name	Version
1.	TH01-KS	Tonscend	JS1120-3 test system China_210602	3.3.10
2.	03CH03-KS	AUDIX	E3	210616
3.	03CH04-KS	AUDIX	E3	210616

1.10 Applicable Standards

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

- 47 CFR Part 2, 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 (Y plane) were recorded in this report.

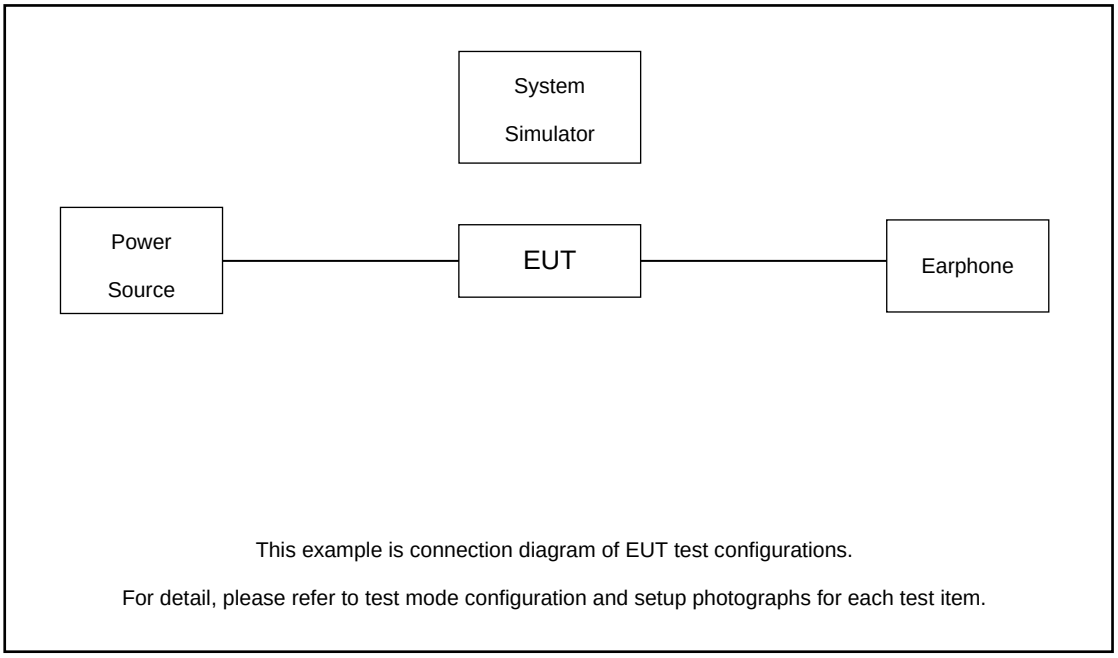
The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.

	X Plane	Y Plane	Z Plane
Orthogonal Planes of EUT			

Test Items	5G NR	Bandwidth (MHz)													Modulation					RB #		Test Channel		
		5	10	15	20	25	30	40	50	60	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
	n5	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
	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		v	
	n26				v	-	-	-	-	-	-	-	-	-	v	v				v	v		v	
26dB and 99% Bandwidth	n25	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	
Conducted Band Edge	n25	v			v			v	-	-	-	-	-	-	v	v				v	v	v		v
	n26	v	v		v	-	-	-	-	-	-	-	-	-	v	v				v	v	v		v
Conducted Spurious Emission	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
	n5	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
	n26	v	v	v	v	-	-	-	-	-	-	-	-	-	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	n5	Worst Case																			v	v	v
	n25	Worst Case																			v	v	v
	n26	Worst Case																			v	v	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 = 3.91V ；Low Voltage =3.40V.；High Voltage =4.50V																						

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 and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 5.6 dB and 20dB attenuator.

Example :

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

= 5.6 + 20 = 25.6 (dB)

2.5 Frequency List of Low/Middle/High Channels

5G NR n2 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
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				
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

5G NR n25 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
40	Channel	390000	392500	395000
	Frequency	1870	1882.5	1895
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				
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

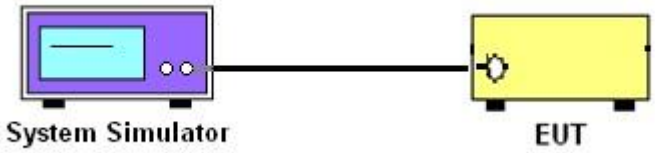
3 Conducted Test Items

3.1 Measuring Instruments

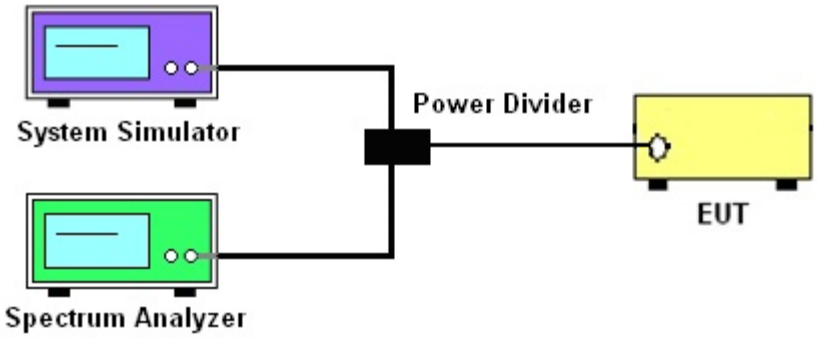
See list of measuring instruments of this test report.

3.2 Test Setup

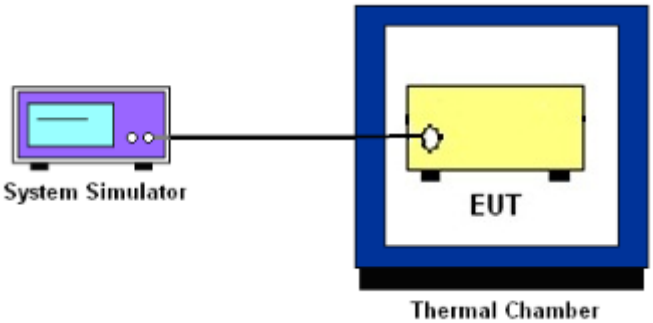
3.2.1 Conducted Output Power



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.

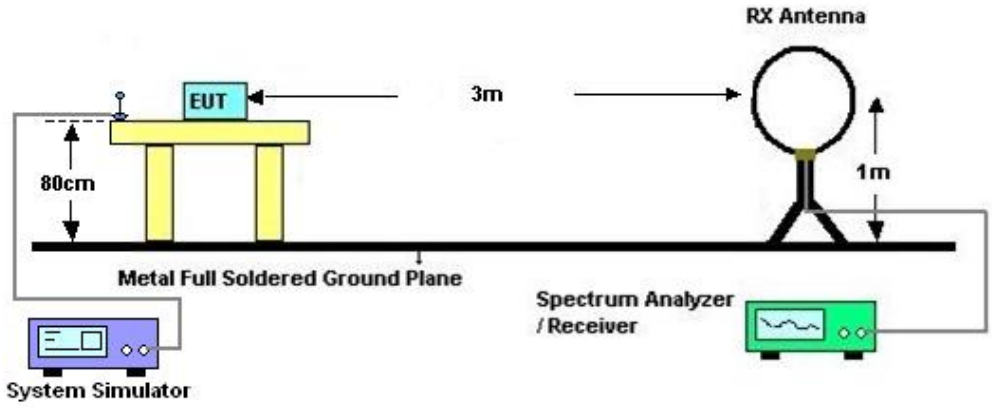
4 Radiated Test Items

4.1 Measuring Instruments

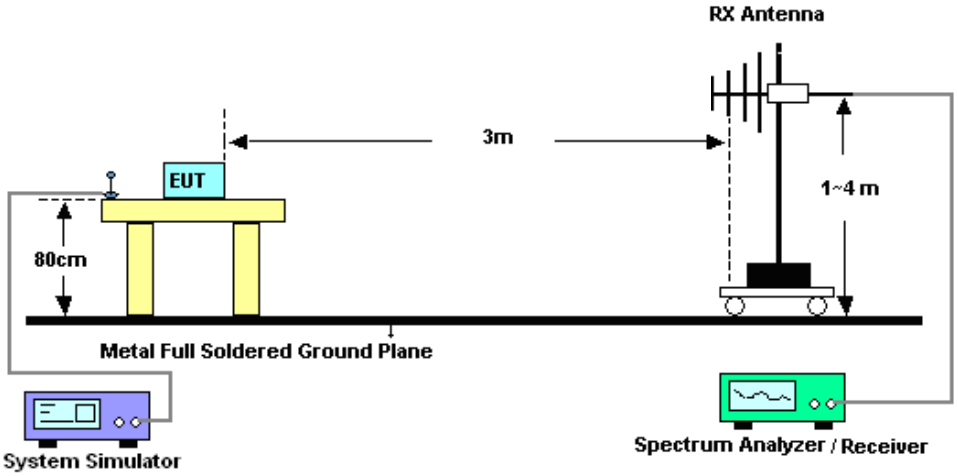
See list of measuring instruments of this test report.

4.2 Test Setup

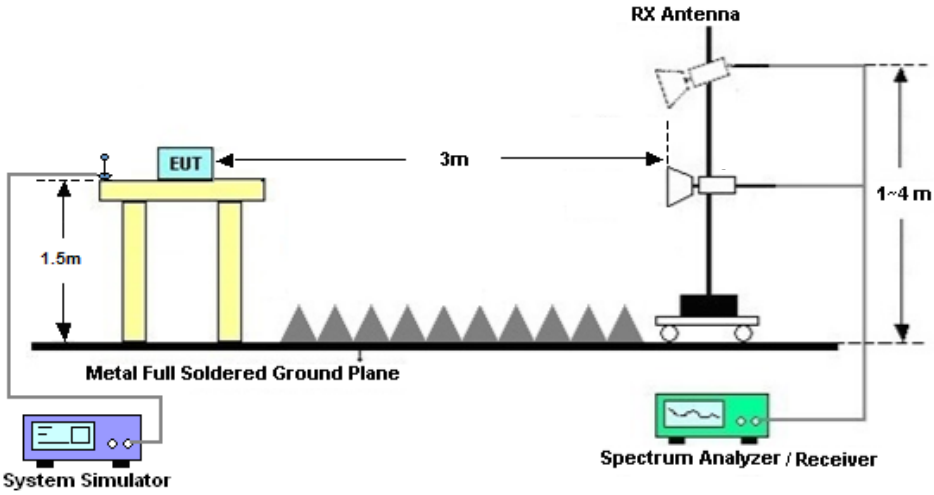
4.2.1 For radiated test below 30MHz



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	101040	10Hz~40GHz	Oct. 11, 2023	Nov. 03, 2023~ Nov. 10, 2023	Oct. 10, 2024	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	/	Nov. 03, 2023~ Nov. 10, 2023	/	Conducted (TH01-KS)
Temperature & humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 06, 2023	Nov. 03, 2023~ Nov. 10, 2023	Jul. 05, 2024	Conducted (TH01-KS)
EMI Test Receiver	Keysight	N9038A	MY56400004	3Hz~8.5GHz;Max 30dBm	Oct. 10, 2023	Nov. 23, 2023	Oct. 09, 2024	Radiation (03CH03-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz-44GHz	May 15, 2023	Nov. 23, 2023	May 14, 2024	Radiation (03CH03-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Oct. 10, 2023	Nov. 23, 2023	Oct. 09, 2024	Radiation (03CH03-KS)
Bilog Antenna	TeseQ	CBL6112D	23182	30MHz-1GHz	Dec. 23, 2022	Nov. 23, 2023	Dec. 22, 2023	Radiation (03CH03-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Oct. 23, 2023	Nov. 23, 2023	Oct. 22, 2024	Radiation (03CH03-KS)
SHF-EHF Horn	com-power	AH-840	101116	18GHz~40GHz	Oct. 10, 2023	Nov. 23, 2023	Oct. 09, 2024	Radiation (03CH03-KS)
Amplifier	SONOMA	310N	413740	30MHz ~1000MHz	Jan. 05, 2023	Nov. 23, 2023	Jan. 04, 2024	Radiation (03CH03-KS)
Amplifier	EM	EM18G40GA	060851	18~40GHz	Jan. 05, 2023	Nov. 23, 2023	Jan. 04, 2024	Radiation (03CH03-KS)
high gain Amplifier	MITEQ	AMF-7D-00101800-30-10P	2082394	1Ghz-18Ghz	Jan. 05, 2023	Nov. 23, 2023	Jan. 04, 2024	Radiation (03CH03-KS)
Amplifier	Keysight	83017A	MY53270319	1GHz~26.5GHz	Oct. 10, 2023	Nov. 23, 2023	Oct. 09, 2024	Radiation (03CH03-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Nov. 23, 2023	NCR	Radiation (03CH03-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Nov. 23, 2023	NCR	Radiation (03CH03-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Nov. 23, 2023	NCR	Radiation (03CH03-KS)
EXA Spectrum Analyzer	Keysight	N9010B	MY57471079	10Hz-44G,MAX 30dB	Oct. 10, 2023	Nov. 23, 2023	Oct. 09, 2024	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 11 2023	Nov. 23, 2023	Sep. 10, 2024	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	Apr. 09, 2023	Nov. 23, 2023	Apr. 08, 2024	Radiation (03CH04-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	1284	1GHz~18GHz	Oct. 10, 2023	Nov. 23, 2023	Oct. 09, 2024	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 08, 2023	Nov. 23, 2023	Jan. 07, 2024	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	380827	9KHz-1GHz	Jul. 06, 2023	Nov. 23, 2023	Jul. 05, 2024	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40GGA	060728	18~40GHz	Jan. 05, 2023	Nov. 23, 2023	Jan. 04, 2024	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18GA	060840	1Ghz-18Ghz	Oct. 10, 2023	Nov. 23, 2023	Oct. 09, 2024	Radiation (03CH04-KS)
Amplifier	Agilent	8449B	3008A02370	1Ghz-18Ghz	Oct. 10, 2023	Nov. 23, 2023	Oct. 09, 2024	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Nov. 23, 2023	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Nov. 23, 2023	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Nov. 23, 2023	NCR	Radiation (03CH04-KS)

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

Conducted Spurious Emission & Bandedge	**±2.26 dB**
Occupied Channel Bandwidth	**±0.1%**
Conducted Power	**±0.46 dB**
Peak to Average Ratio	**±0.46 dB**
Frequency Stability	**±0.4 Hz**

03CH03-KS

Uncertainty of Radiated Emission Measurement (9 KHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.76 dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.65 dB**

Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.57 dB**

03CH04-KS

Uncertainty of Radiated Emission Measurement (9 KHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.82 dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.56 dB**

Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.54 dB**

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

Appendix A. Test Results of Conducted Test

Test Engineer :	Simle Wang	**Temperature :**	22~23℃
		Relative Humidity :	40~42%

Software Version: 22.02.012001

FR1 N2(ANT0)

Transmitter Conducted Output Power And EIRP, (G_T-L_C)=-0.5dB

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power(dBm)	EIRP(dBm)	EIRP(W)
2	15	5	370500	1852.5	DFT-s-OFDM PI/2 BPSK	1@1	22.55	22.05	0.1603
2	15	5	370500	1852.5	DFT-s-OFDM QPSK	1@1	22.63	22.13	0.1633
2	15	5	370500	1852.5	DFT-s-OFDM 16 QAM	1@1	21.76	21.26	0.1337
2	15	5	376000	1880	DFT-s-OFDM PI/2 BPSK	1@1	23.53	23.03	0.2009
2	15	5	376000	1880	DFT-s-OFDM QPSK	1@1	22.61	22.11	0.1626
2	15	5	376000	1880	DFT-s-OFDM 16 QAM	1@1	22.37	21.87	0.1538
2	15	5	381500	1907.5	DFT-s-OFDM PI/2 BPSK	1@1	23.43	22.93	0.1963
2	15	5	381500	1907.5	DFT-s-OFDM QPSK	1@1	22.65	22.15	0.1641
2	15	5	381500	1907.5	DFT-s-OFDM 16 QAM	1@1	22.51	22.01	0.1589
2	15	10	371000	1855	DFT-s-OFDM PI/2 BPSK	1@1	22.54	22.04	0.1600
2	15	10	371000	1855	DFT-s-OFDM QPSK	1@1	22.58	22.08	0.1614
2	15	10	371000	1855	DFT-s-OFDM 16 QAM	1@1	21.69	21.19	0.1315
2	15	10	376000	1880	DFT-s-OFDM PI/2 BPSK	1@1	23.07	22.57	0.1807
2	15	10	376000	1880	DFT-s-OFDM QPSK	1@1	23.46	22.96	0.1977
2	15	10	376000	1880	DFT-s-OFDM 16 QAM	1@1	21.89	21.39	0.1377
2	15	10	381000	1905	DFT-s-OFDM PI/2 BPSK	1@1	23.16	22.66	0.1845
2	15	10	381000	1905	DFT-s-OFDM QPSK	1@1	23.41	22.91	0.1954
2	15	10	381000	1905	DFT-s-OFDM 16 QAM	1@1	22.25	21.75	0.1496
2	15	15	371500	1857.5	DFT-s-OFDM PI/2 BPSK	1@1	22.57	22.07	0.1611
2	15	15	371500	1857.5	DFT-s-OFDM QPSK	1@1	22.62	22.12	0.1629
2	15	15	371500	1857.5	DFT-s-OFDM 16 QAM	1@1	21.72	21.22	0.1324
2	15	15	376000	1880	DFT-s-OFDM PI/2 BPSK	1@1	22.97	22.47	0.1766
2	15	15	376000	1880	DFT-s-OFDM QPSK	1@1	23.51	23.01	0.2000
2	15	15	376000	1880	DFT-s-OFDM 16 QAM	1@1	21.88	21.38	0.1374
2	15	15	380500	1902.5	DFT-s-OFDM PI/2 BPSK	1@1	23.09	22.59	0.1816
2	15	15	380500	1902.5	DFT-s-OFDM QPSK	1@1	23.19	22.69	0.1858
2	15	15	380500	1902.5	DFT-s-OFDM 16 QAM	1@1	22.26	21.76	0.1500
2	15	20	372000	1860	DFT-s-OFDM PI/2 BPSK	50@25	22.73	22.23	0.1671
2	15	20	372000	1860	DFT-s-OFDM PI/2 BPSK	1@1	22.48	21.98	0.1578
2	15	20	372000	1860	DFT-s-OFDM PI/2 BPSK	1@104	22.87	22.37	0.1726
2	15	20	372000	1860	DFT-s-OFDM QPSK	50@25	22.81	22.31	0.1702
2	15	20	372000	1860	DFT-s-OFDM QPSK	1@1	22.58	22.08	0.1614
2	15	20	372000	1860	DFT-s-OFDM QPSK	1@104	22.9	22.4	0.1738
2	15	20	372000	1860	DFT-s-OFDM 16 QAM	50@25	21.74	21.24	0.1330
2	15	20	372000	1860	DFT-s-OFDM 16 QAM	1@1	21.67	21.17	0.1309
2	15	20	372000	1860	DFT-s-OFDM 16 QAM	1@104	22.11	21.61	0.1449
2	15	20	372000	1860	DFT-s-OFDM 64 QAM	50@25	20.31	19.81	0.0957
2	15	20	372000	1860	DFT-s-OFDM 64 QAM	1@1	20.18	19.68	0.0929
2	15	20	372000	1860	DFT-s-OFDM 64 QAM	1@104	20.63	20.13	0.1030
2	15	20	372000	1860	DFT-s-OFDM 256 QAM	50@25	18.25	17.75	0.0596

2	15	20	372000	1860	DFT-s-OFDM 256 QAM	1@1	17.83	17.33	0.0541
2	15	20	372000	1860	DFT-s-OFDM 256 QAM	1@104	18.18	17.68	0.0586
2	15	20	372000	1860	CP-OFDM QPSK	53@26	21.31	20.81	0.1205
2	15	20	372000	1860	CP-OFDM QPSK	1@1	21.19	20.69	0.1172
2	15	20	372000	1860	CP-OFDM QPSK	1@104	21.57	21.07	0.1279
2	15	20	376000	1880	DFT-s-OFDM PI/2 BPSK	50@25	23.15	22.65	0.1841
2	15	20	376000	1880	DFT-s-OFDM PI/2 BPSK	1@1	23.8	23.3	0.2138
2	15	20	376000	1880	DFT-s-OFDM PI/2 BPSK	1@104	21.59	21.09	0.1285
2	15	20	376000	1880	DFT-s-OFDM QPSK	50@25	23.19	22.69	0.1858
2	15	20	376000	1880	DFT-s-OFDM QPSK	1@1	23.02	22.52	0.1786
2	15	20	376000	1880	DFT-s-OFDM QPSK	1@104	23.02	22.52	0.1786
2	15	20	376000	1880	DFT-s-OFDM 16 QAM	50@25	22.12	21.62	0.1452
2	15	20	376000	1880	DFT-s-OFDM 16 QAM	1@1	22.17	21.67	0.1469
2	15	20	376000	1880	DFT-s-OFDM 16 QAM	1@104	22.03	21.53	0.1422
2	15	20	376000	1880	DFT-s-OFDM 64 QAM	50@25	20.69	20.19	0.1045
2	15	20	376000	1880	DFT-s-OFDM 64 QAM	1@1	20.67	20.17	0.1040
2	15	20	376000	1880	DFT-s-OFDM 64 QAM	1@104	20.71	20.21	0.1050
2	15	20	376000	1880	DFT-s-OFDM 256 QAM	50@25	18.68	18.18	0.0658
2	15	20	376000	1880	DFT-s-OFDM 256 QAM	1@1	18.34	17.84	0.0608
2	15	20	376000	1880	DFT-s-OFDM 256 QAM	1@104	18.34	17.84	0.0608
2	15	20	376000	1880	CP-OFDM QPSK	53@26	21.72	21.22	0.1324
2	15	20	376000	1880	CP-OFDM QPSK	1@1	21.64	21.14	0.1300
2	15	20	376000	1880	CP-OFDM QPSK	1@104	21.69	21.19	0.1315
2	15	20	380000	1900	DFT-s-OFDM PI/2 BPSK	50@25	23.17	22.67	0.1849
2	15	20	380000	1900	DFT-s-OFDM PI/2 BPSK	1@1	23.05	22.55	0.1799
2	15	20	380000	1900	DFT-s-OFDM PI/2 BPSK	1@104	23.2	22.7	0.1862
2	15	20	380000	1900	DFT-s-OFDM QPSK	50@25	23.18	22.68	0.1854
2	15	20	380000	1900	DFT-s-OFDM QPSK	1@1	23.2	22.7	0.1862
2	15	20	380000	1900	DFT-s-OFDM QPSK	1@104	23.27	22.77	0.1892
2	15	20	380000	1900	DFT-s-OFDM 16 QAM	50@25	22.15	21.65	0.1462
2	15	20	380000	1900	DFT-s-OFDM 16 QAM	1@1	22.22	21.72	0.1486
2	15	20	380000	1900	DFT-s-OFDM 16 QAM	1@104	22.44	21.94	0.1563
2	15	20	380000	1900	DFT-s-OFDM 64 QAM	50@25	20.74	20.24	0.1057
2	15	20	380000	1900	DFT-s-OFDM 64 QAM	1@1	20.76	20.26	0.1062
2	15	20	380000	1900	DFT-s-OFDM 64 QAM	1@104	20.93	20.43	0.1104
2	15	20	380000	1900	DFT-s-OFDM 256 QAM	50@25	18.6	18.1	0.0646
2	15	20	380000	1900	DFT-s-OFDM 256 QAM	1@1	18.35	17.85	0.0610
2	15	20	380000	1900	DFT-s-OFDM 256 QAM	1@104	18.58	18.08	0.0643
2	15	20	380000	1900	CP-OFDM QPSK	53@26	21.67	21.17	0.1309
2	15	20	380000	1900	CP-OFDM QPSK	1@1	21.71	21.21	0.1321
2	15	20	380000	1900	CP-OFDM QPSK	1@104	21.92	21.42	0.1387

Software Version: 22.02.012001

FR1 N5(ANT0)

Transmitter Conducted Output Power And ERP, (G_T-L_C)=-3.5dB

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power (dBm)	ERP (dBm)	ERP(W)
5	15	5	165300	826.5	DFT-s-OFDM PI/2 BPSK	1@1	23	17.35	0.0543
5	15	5	165300	826.5	DFT-s-OFDM QPSK	1@1	23.02	17.37	0.0546
5	15	5	165300	826.5	DFT-s-OFDM 16 QAM	1@1	22.12	16.47	0.0444
5	15	5	167300	836.5	DFT-s-OFDM PI/2 BPSK	1@1	22.79	17.14	0.0518
5	15	5	167300	836.5	DFT-s-OFDM QPSK	1@1	22.91	17.26	0.0532
5	15	5	167300	836.5	DFT-s-OFDM 16 QAM	1@1	21.9	16.25	0.0422
5	15	5	169300	846.5	DFT-s-OFDM PI/2 BPSK	1@1	22.73	17.08	0.0511
5	15	5	169300	846.5	DFT-s-OFDM QPSK	1@1	22.71	17.06	0.0508
5	15	5	169300	846.5	DFT-s-OFDM 16 QAM	1@1	21.91	16.26	0.0423
5	15	10	165800	829	DFT-s-OFDM PI/2 BPSK	1@1	22.85	17.2	0.0525
5	15	10	165800	829	DFT-s-OFDM QPSK	1@1	22.95	17.3	0.0537
5	15	10	165800	829	DFT-s-OFDM 16 QAM	1@1	22.03	16.38	0.0435
5	15	10	167300	836.5	DFT-s-OFDM PI/2 BPSK	1@1	22.77	17.12	0.0515
5	15	10	167300	836.5	DFT-s-OFDM QPSK	1@1	22.84	17.19	0.0524
5	15	10	167300	836.5	DFT-s-OFDM 16 QAM	1@1	21.96	16.31	0.0428
5	15	10	168800	844	DFT-s-OFDM PI/2 BPSK	1@1	22.7	17.05	0.0507
5	15	10	168800	844	DFT-s-OFDM QPSK	1@1	22.78	17.13	0.0516
5	15	10	168800	844	DFT-s-OFDM 16 QAM	1@1	21.9	16.25	0.0422
5	15	15	166300	831.5	DFT-s-OFDM PI/2 BPSK	1@1	22.76	17.11	0.0514
5	15	15	166300	831.5	DFT-s-OFDM QPSK	1@1	22.92	17.27	0.0533
5	15	15	166300	831.5	DFT-s-OFDM 16 QAM	1@1	22.02	16.37	0.0434
5	15	15	167300	836.5	DFT-s-OFDM PI/2 BPSK	1@1	22.72	17.07	0.0509
5	15	15	167300	836.5	DFT-s-OFDM QPSK	1@1	22.89	17.24	0.0530
5	15	15	167300	836.5	DFT-s-OFDM 16 QAM	1@1	21.92	16.27	0.0424
5	15	15	168300	841.5	DFT-s-OFDM PI/2 BPSK	1@1	22.74	17.09	0.0512
5	15	15	168300	841.5	DFT-s-OFDM QPSK	1@1	22.39	16.74	0.0472
5	15	15	168300	841.5	DFT-s-OFDM 16 QAM	1@1	21.90	16.25	0.0422
5	15	20	166800	834	DFT-s-OFDM PI/2 BPSK	50@25	23.14	17.49	0.0561
5	15	20	166800	834	DFT-s-OFDM PI/2 BPSK	1@1	23.21	17.56	0.0570
5	15	20	166800	834	DFT-s-OFDM PI/2 BPSK	1@104	23.19	17.54	0.0568
5	15	20	166800	834	DFT-s-OFDM QPSK	50@25	22.72	17.07	0.0509
5	15	20	166800	834	DFT-s-OFDM QPSK	1@1	22.85	17.2	0.0525
5	15	20	166800	834	DFT-s-OFDM QPSK	1@104	22.62	16.97	0.0498
5	15	20	166800	834	DFT-s-OFDM 16 QAM	50@25	21.76	16.11	0.0408
5	15	20	166800	834	DFT-s-OFDM 16 QAM	1@1	21.99	16.34	0.0431
5	15	20	166800	834	DFT-s-OFDM 16 QAM	1@104	21.81	16.16	0.0413
5	15	20	166800	834	DFT-s-OFDM 64 QAM	50@25	20.33	14.68	0.0294
5	15	20	166800	834	DFT-s-OFDM 64 QAM	1@1	20.48	14.83	0.0304
5	15	20	166800	834	DFT-s-OFDM 64 QAM	1@104	20.3	14.65	0.0292
5	15	20	166800	834	DFT-s-OFDM 256 QAM	50@25	20.32	14.67	0.0293

5	15	20	166800	834	DFT-s-OFDM 256 QAM	1@1	18.17	12.52	0.0179
5	15	20	166800	834	DFT-s-OFDM 256 QAM	1@104	17.95	12.3	0.0170
5	15	20	166800	834	CP-OFDM QPSK	53@26	21.36	15.71	0.0372
5	15	20	166800	834	CP-OFDM QPSK	1@1	21.52	15.87	0.0386
5	15	20	166800	834	CP-OFDM QPSK	1@104	20.94	15.29	0.0338
5	15	20	167300	836.5	DFT-s-OFDM PI/2 BPSK	50@25	22.83	17.18	0.0522
5	15	20	167300	836.5	DFT-s-OFDM PI/2 BPSK	1@1	22.78	17.13	0.0516
5	15	20	167300	836.5	DFT-s-OFDM PI/2 BPSK	1@104	22.59	16.94	0.0494
5	15	20	167300	836.5	DFT-s-OFDM QPSK	50@25	22.84	17.19	0.0524
5	15	20	167300	836.5	DFT-s-OFDM QPSK	1@1	22.79	17.14	0.0518
5	15	20	167300	836.5	DFT-s-OFDM QPSK	1@104	22.58	16.93	0.0493
5	15	20	167300	836.5	DFT-s-OFDM 16 QAM	50@25	21.82	16.17	0.0414
5	15	20	167300	836.5	DFT-s-OFDM 16 QAM	1@1	21.97	16.32	0.0429
5	15	20	167300	836.5	DFT-s-OFDM 16 QAM	1@104	21.78	16.13	0.0410
5	15	20	167300	836.5	DFT-s-OFDM 64 QAM	50@25	20.36	14.71	0.0296
5	15	20	167300	836.5	DFT-s-OFDM 64 QAM	1@1	20.5	14.85	0.0305
5	15	20	167300	836.5	DFT-s-OFDM 64 QAM	1@104	20.27	14.62	0.0290
5	15	20	167300	836.5	DFT-s-OFDM 256 QAM	50@25	20.56	14.91	0.0310
5	15	20	167300	836.5	DFT-s-OFDM 256 QAM	1@1	18.08	12.43	0.0175
5	15	20	167300	836.5	DFT-s-OFDM 256 QAM	1@104	17.95	12.3	0.0170
5	15	20	167300	836.5	CP-OFDM QPSK	53@26	21.39	15.74	0.0375
5	15	20	167300	836.5	CP-OFDM QPSK	1@1	21.48	15.83	0.0383
5	15	20	167300	836.5	CP-OFDM QPSK	1@104	20.93	15.28	0.0337
5	15	20	167800	839	DFT-s-OFDM PI/2 BPSK	50@25	22.82	17.17	0.0521
5	15	20	167800	839	DFT-s-OFDM PI/2 BPSK	1@1	22.76	17.11	0.0514
5	15	20	167800	839	DFT-s-OFDM PI/2 BPSK	1@104	22.53	16.88	0.0488
5	15	20	167800	839	DFT-s-OFDM QPSK	50@25	22.81	17.16	0.0520
5	15	20	167800	839	DFT-s-OFDM QPSK	1@1	22.82	17.17	0.0521
5	15	20	167800	839	DFT-s-OFDM QPSK	1@104	22.61	16.96	0.0497
5	15	20	167800	839	DFT-s-OFDM 16 QAM	50@25	21.79	16.14	0.0411
5	15	20	167800	839	DFT-s-OFDM 16 QAM	1@1	21.99	16.34	0.0431
5	15	20	167800	839	DFT-s-OFDM 16 QAM	1@104	21.76	16.11	0.0408
5	15	20	167800	839	DFT-s-OFDM 64 QAM	50@25	20.4	14.75	0.0299
5	15	20	167800	839	DFT-s-OFDM 64 QAM	1@1	20.44	14.79	0.0301
5	15	20	167800	839	DFT-s-OFDM 64 QAM	1@104	20.28	14.63	0.0290
5	15	20	167800	839	DFT-s-OFDM 256 QAM	50@25	18.23	12.58	0.0181
5	15	20	167800	839	DFT-s-OFDM 256 QAM	1@1	18.05	12.4	0.0174
5	15	20	167800	839	DFT-s-OFDM 256 QAM	1@104	17.84	12.19	0.0166
5	15	20	167800	839	CP-OFDM QPSK	53@26	21.24	15.59	0.0362
5	15	20	167800	839	CP-OFDM QPSK	1@1	21.42	15.77	0.0378
5	15	20	167800	839	CP-OFDM QPSK	1@104	21.23	15.58	0.0361

Software Version: 23.06.1602

FR1 N25(ANT0)

Transmitter Conducted Output Power And EIRP, (G_T-L_C)=-0.5dB

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power(dBm)	EIRP(dBm)	EIRP(W)
25	15	40	374000	1870	DFT-s-OFDM PI/2 BPSK	108@54	23.48	22.98	0.1986
25	15	40	374000	1870	DFT-s-OFDM PI/2 BPSK	1@1	23.08	22.58	0.1811
25	15	40	374000	1870	DFT-s-OFDM PI/2 BPSK	1@214	23.42	22.92	0.1959
25	15	40	374000	1870	DFT-s-OFDM QPSK	108@54	23.52	23.02	0.2004
25	15	40	374000	1870	DFT-s-OFDM QPSK	1@1	23.18	22.68	0.1854
25	15	40	374000	1870	DFT-s-OFDM QPSK	1@214	23.46	22.96	0.1977
25	15	40	374000	1870	DFT-s-OFDM 16 QAM	108@54	22.75	22.25	0.1679
25	15	40	374000	1870	DFT-s-OFDM 16 QAM	1@1	22.47	21.97	0.1574
25	15	40	374000	1870	DFT-s-OFDM 16 QAM	1@214	22.73	22.23	0.1671
25	15	40	374000	1870	DFT-s-OFDM 64 QAM	108@54	21.2	20.7	0.1175
25	15	40	374000	1870	DFT-s-OFDM 64 QAM	1@1	20.91	20.41	0.1099
25	15	40	374000	1870	DFT-s-OFDM 64 QAM	1@214	21.21	20.71	0.1178
25	15	40	374000	1870	DFT-s-OFDM 256 QAM	108@54	19.12	18.62	0.0728
25	15	40	374000	1870	DFT-s-OFDM 256 QAM	1@1	18.68	18.18	0.0658
25	15	40	374000	1870	DFT-s-OFDM 256 QAM	1@214	19.04	18.54	0.0714
25	15	40	374000	1870	CP-OFDM QPSK	108@54	22.15	21.65	0.1462
25	15	40	374000	1870	CP-OFDM QPSK	1@1	21.91	21.41	0.1384
25	15	40	374000	1870	CP-OFDM QPSK	1@214	22.23	21.73	0.1489
25	15	40	376500	1882.5	DFT-s-OFDM PI/2 BPSK	108@54	23.55	23.05	0.2018
25	15	40	376500	1882.5	DFT-s-OFDM PI/2 BPSK	1@1	23.4	22.9	0.1950
25	15	40	376500	1882.5	DFT-s-OFDM PI/2 BPSK	1@214	23.39	22.89	0.1945
25	15	40	376500	1882.5	DFT-s-OFDM QPSK	108@54	23.51	23.01	0.2000
25	15	40	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.48	22.98	0.1986
25	15	40	376500	1882.5	DFT-s-OFDM QPSK	1@214	23.55	23.05	0.2018
25	15	40	376500	1882.5	DFT-s-OFDM 16 QAM	108@54	22.78	22.28	0.1690
25	15	40	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.75	22.25	0.1679
25	15	40	376500	1882.5	DFT-s-OFDM 16 QAM	1@214	22.7	22.2	0.1660
25	15	40	376500	1882.5	DFT-s-OFDM 64 QAM	108@54	21.27	20.77	0.1194
25	15	40	376500	1882.5	DFT-s-OFDM 64 QAM	1@1	21.2	20.7	0.1175
25	15	40	376500	1882.5	DFT-s-OFDM 64 QAM	1@214	21.23	20.73	0.1183
25	15	40	376500	1882.5	DFT-s-OFDM 256 QAM	108@54	18.95	18.45	0.0700
25	15	40	376500	1882.5	DFT-s-OFDM 256 QAM	1@1	18.93	18.43	0.0697
25	15	40	376500	1882.5	DFT-s-OFDM 256 QAM	1@214	18.98	18.48	0.0705
25	15	40	376500	1882.5	CP-OFDM QPSK	108@54	22.14	21.64	0.1459
25	15	40	376500	1882.5	CP-OFDM QPSK	1@1	22.17	21.67	0.1469
25	15	40	376500	1882.5	CP-OFDM QPSK	1@214	21.89	21.39	0.1377
25	15	40	379000	1895	DFT-s-OFDM PI/2 BPSK	108@54	23.54	23.04	0.2014
25	15	40	379000	1895	DFT-s-OFDM PI/2 BPSK	1@1	23.54	23.04	0.2014
25	15	40	379000	1895	DFT-s-OFDM PI/2 BPSK	1@214	23.48	22.98	0.1986
25	15	40	379000	1895	DFT-s-OFDM QPSK	108@54	23.85	23.35	0.2163

25	15	40	379000	1895	DFT-s-OFDM QPSK	1@1	23.74	23.24	0.2109
25	15	40	379000	1895	DFT-s-OFDM QPSK	1@214	23.51	23.01	0.2000
25	15	40	379000	1895	DFT-s-OFDM 16 QAM	108@54	22.74	22.24	0.1675
25	15	40	379000	1895	DFT-s-OFDM 16 QAM	1@1	22.87	22.37	0.1726
25	15	40	379000	1895	DFT-s-OFDM 16 QAM	1@214	22.73	22.23	0.1671
25	15	40	379000	1895	DFT-s-OFDM 64 QAM	108@54	21.23	20.73	0.1183
25	15	40	379000	1895	DFT-s-OFDM 64 QAM	1@1	21.38	20.88	0.1225
25	15	40	379000	1895	DFT-s-OFDM 64 QAM	1@214	21.28	20.78	0.1197
25	15	40	379000	1895	DFT-s-OFDM 256 QAM	108@54	19.02	18.52	0.0711
25	15	40	379000	1895	DFT-s-OFDM 256 QAM	1@1	19.09	18.59	0.0723
25	15	40	379000	1895	DFT-s-OFDM 256 QAM	1@214	19.04	18.54	0.0714
25	15	40	379000	1895	CP-OFDM QPSK	108@54	22.19	21.69	0.1476
25	15	40	379000	1895	CP-OFDM QPSK	1@1	22.35	21.85	0.1531
25	15	40	379000	1895	CP-OFDM QPSK	1@214	21.96	21.46	0.1400
25	15	5	370500	1852.5	DFT-s-OFDM PI/2 BPSK	1@1	23.29	22.79	0.1901
25	15	5	370500	1852.5	DFT-s-OFDM QPSK	1@1	23.37	22.87	0.1936
25	15	5	370500	1852.5	DFT-s-OFDM 16 QAM	1@1	22.62	22.12	0.1629
25	15	5	376500	1882.5	DFT-s-OFDM PI/2 BPSK	1@1	23.56	23.06	0.2023
25	15	5	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.81	23.31	0.2143
25	15	5	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	23.64	23.14	0.2061
25	15	5	382500	1912.5	DFT-s-OFDM PI/2 BPSK	1@1	23.47	22.97	0.1982
25	15	5	382500	1912.5	DFT-s-OFDM QPSK	1@1	23.55	23.05	0.2018
25	15	5	382500	1912.5	DFT-s-OFDM 16 QAM	1@1	22.81	22.31	0.1702
25	15	10	371000	1855	DFT-s-OFDM PI/2 BPSK	1@1	23.29	22.79	0.1901
25	15	10	371000	1855	DFT-s-OFDM QPSK	1@1	23.36	22.86	0.1932
25	15	10	371000	1855	DFT-s-OFDM 16 QAM	1@1	22.65	22.15	0.1641
25	15	10	376500	1882.5	DFT-s-OFDM PI/2 BPSK	1@1	23.52	23.02	0.2004
25	15	10	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.62	23.12	0.2051
25	15	10	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.86	22.36	0.1722
25	15	10	382000	1910	DFT-s-OFDM PI/2 BPSK	1@1	23.47	22.97	0.1982
25	15	10	382000	1910	DFT-s-OFDM QPSK	1@1	23.56	23.06	0.2023
25	15	10	382000	1910	DFT-s-OFDM 16 QAM	1@1	22.83	22.33	0.1710
25	15	15	371500	1857.5	DFT-s-OFDM PI/2 BPSK	1@1	23.16	22.66	0.1845
25	15	15	371500	1857.5	DFT-s-OFDM QPSK	1@1	23.2	22.7	0.1862
25	15	15	371500	1857.5	DFT-s-OFDM 16 QAM	1@1	22.48	21.98	0.1578
25	15	15	376500	1882.5	DFT-s-OFDM PI/2 BPSK	1@1	23.45	22.95	0.1972
25	15	15	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.55	23.05	0.2018
25	15	15	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.75	22.25	0.1679
25	15	15	381500	1907.5	DFT-s-OFDM PI/2 BPSK	1@1	23.48	22.98	0.1986
25	15	15	381500	1907.5	DFT-s-OFDM QPSK	1@1	23.5	23	0.1995
25	15	15	381500	1907.5	DFT-s-OFDM 16 QAM	1@1	22.77	22.27	0.1687
25	15	20	372000	1860	DFT-s-OFDM PI/2 BPSK	1@1	23.14	22.64	0.1837
25	15	20	372000	1860	DFT-s-OFDM QPSK	1@1	23.17	22.67	0.1849
25	15	20	372000	1860	DFT-s-OFDM 16 QAM	1@1	22.35	21.85	0.1531
25	15	20	376500	1882.5	DFT-s-OFDM PI/2 BPSK	1@1	23.34	22.84	0.1923
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.43	22.93	0.1963
25	15	20	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.71	22.21	0.1663
25	15	20	381000	1905	DFT-s-OFDM PI/2 BPSK	1@1	23.39	22.89	0.1945

25	15	20	381000	1905	DFT-s-OFDM QPSK	1@1	23.53	23.03	0.2009
25	15	20	381000	1905	DFT-s-OFDM 16 QAM	1@1	22.75	22.25	0.1679
25	15	25	372500	1862.5	DFT-s-OFDM PI/2 BPSK	1@1	23.14	22.64	0.1837
25	15	25	372500	1862.5	DFT-s-OFDM QPSK	1@1	23.25	22.75	0.1884
25	15	25	372500	1862.5	DFT-s-OFDM 16 QAM	1@1	22.51	22.01	0.1589
25	15	25	376500	1882.5	DFT-s-OFDM PI/2 BPSK	1@1	23.49	22.99	0.1991
25	15	25	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.6	23.1	0.2042
25	15	25	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.78	22.28	0.1690
25	15	25	380500	1902.5	DFT-s-OFDM PI/2 BPSK	1@1	23.41	22.91	0.1954
25	15	25	380500	1902.5	DFT-s-OFDM QPSK	1@1	23.5	23	0.1995
25	15	25	380500	1902.5	DFT-s-OFDM 16 QAM	1@1	22.79	22.29	0.1694
25	15	30	373000	1865	DFT-s-OFDM PI/2 BPSK	1@1	23.14	22.64	0.1837
25	15	30	373000	1865	DFT-s-OFDM QPSK	1@1	23.25	22.75	0.1884
25	15	30	373000	1865	DFT-s-OFDM 16 QAM	1@1	22.52	22.02	0.1592
25	15	30	376500	1882.5	DFT-s-OFDM PI/2 BPSK	1@1	23.41	22.91	0.1954
25	15	30	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.51	23.01	0.2000
25	15	30	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.75	22.25	0.1679
25	15	30	380000	1900	DFT-s-OFDM PI/2 BPSK	1@1	23.47	22.97	0.1982
25	15	30	380000	1900	DFT-s-OFDM QPSK	1@1	23.61	23.11	0.2046
25	15	30	380000	1900	DFT-s-OFDM 16 QAM	1@1	22.82	22.32	0.1706

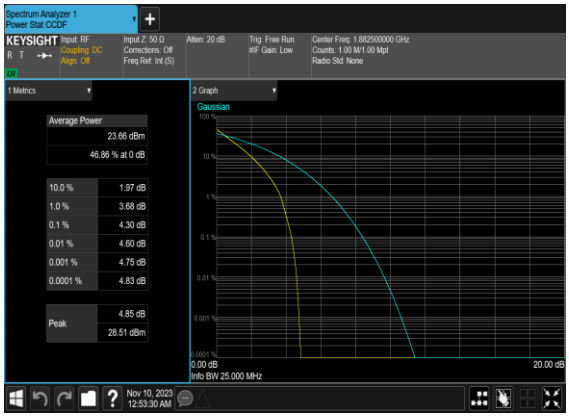
Frequency Stability

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	0.0052	**PASS**	NV
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0015	**PASS**	LV
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0042	**PASS**	HV
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0011	**PASS**	-10℃
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0015	**PASS**	0℃
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	-0.0039	**PASS**	10℃
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0017	**PASS**	20℃
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0018	**PASS**	30℃
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0038	**PASS**	40℃
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	-0.0021	**PASS**	55℃

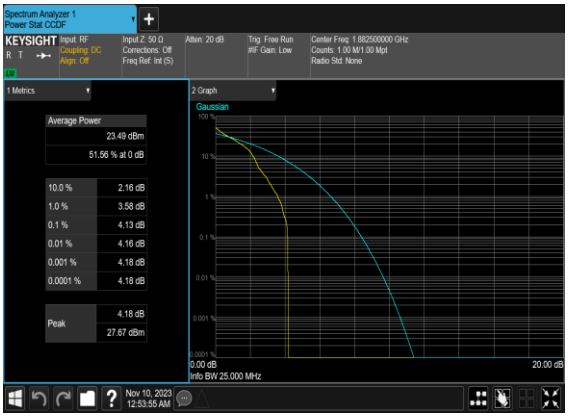
Peak to Average Ratio

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	4.3	13	**PASS**
25	15	20	376500	1882.5	DFT-s-OFDM PI/2 BPSK	1@0	4.13	13	**PASS**
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	5.86	13	**PASS**
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	1@0	5.93	13	**PASS**

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

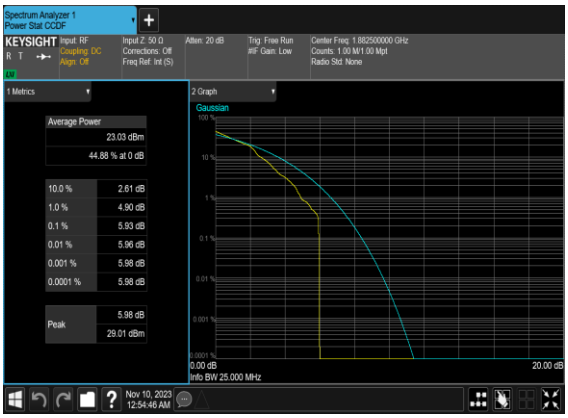


N25(20M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_Mid_CH



N25(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

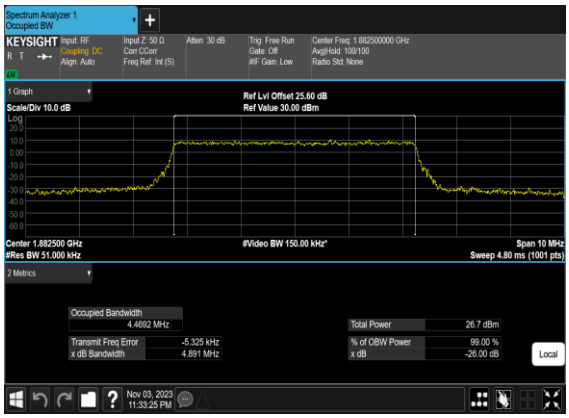
N25(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



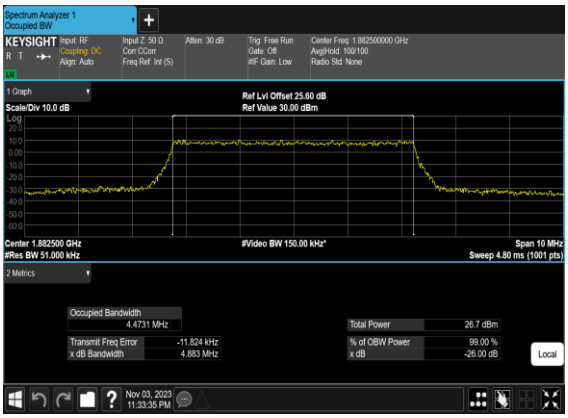
Occupied Bandwidth

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	4.4692	4.891
25	15	5	376500	1882.5	CP-OFDM 16 QAM	25@0	4.4731	4.883
25	15	5	376500	1882.5	CP-OFDM 64 QAM	25@0	4.4641	4.894
25	15	5	376500	1882.5	CP-OFDM 256 QAM	25@0	4.4653	4.912
25	15	10	376500	1882.5	CP-OFDM QPSK	52@0	9.292	9.879
25	15	10	376500	1882.5	CP-OFDM 16 QAM	52@0	9.2968	9.855
25	15	10	376500	1882.5	CP-OFDM 64 QAM	52@0	9.2741	9.778
25	15	10	376500	1882.5	CP-OFDM 256 QAM	52@0	9.2908	9.966
25	15	15	376500	1882.5	CP-OFDM QPSK	79@0	14.117	14.88
25	15	15	376500	1882.5	CP-OFDM 16 QAM	79@0	14.101	14.88
25	15	15	376500	1882.5	CP-OFDM 64 QAM	79@0	14.123	14.76
25	15	15	376500	1882.5	CP-OFDM 256 QAM	79@0	14.104	14.74
25	15	20	376500	1882.5	CP-OFDM QPSK	106@0	18.96	19.72
25	15	20	376500	1882.5	CP-OFDM 16 QAM	106@0	18.96	19.81
25	15	20	376500	1882.5	CP-OFDM 64 QAM	106@0	18.918	19.73
25	15	20	376500	1882.5	CP-OFDM 256 QAM	106@0	18.954	19.74
25	15	25	376500	1882.5	CP-OFDM QPSK	133@0	23.76	24.62
25	15	25	376500	1882.5	CP-OFDM 16 QAM	133@0	23.792	24.69
25	15	25	376500	1882.5	CP-OFDM 64 QAM	133@0	23.846	24.57
25	15	25	376500	1882.5	CP-OFDM 256 QAM	133@0	23.75	24.63
25	15	30	376500	1882.5	CP-OFDM QPSK	160@0	28.575	29.57
25	15	30	376500	1882.5	CP-OFDM 16 QAM	160@0	28.682	29.56
25	15	30	376500	1882.5	CP-OFDM 64 QAM	160@0	28.601	29.58
25	15	30	376500	1882.5	CP-OFDM 256 QAM	160@0	28.621	29.61
25	15	40	376500	1882.5	CP-OFDM QPSK	216@0	38.535	39.86
25	15	40	376500	1882.5	CP-OFDM 16 QAM	216@0	38.55	39.96
25	15	40	376500	1882.5	CP-OFDM 64 QAM	216@0	38.517	39.84
25	15	40	376500	1882.5	CP-OFDM 256 QAM	216@0	38.507	39.87

N25(5M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



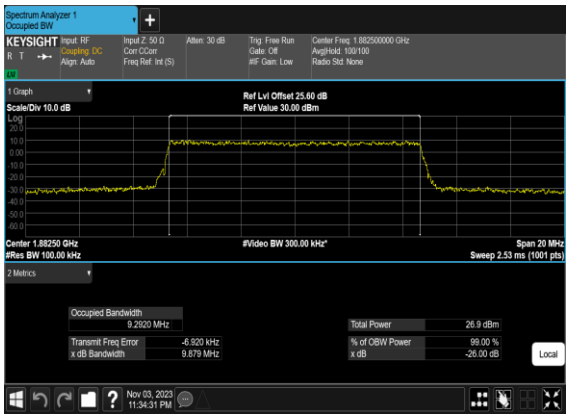
N25(5M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



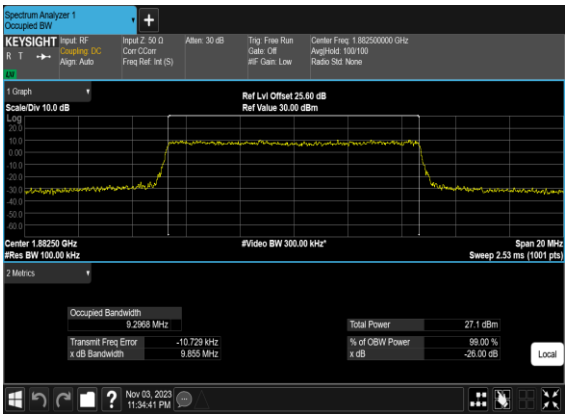
N25(5M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

N25(5M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

N25(10M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

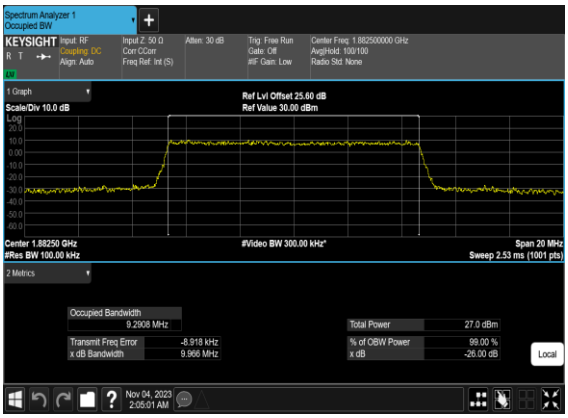


N25(10M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

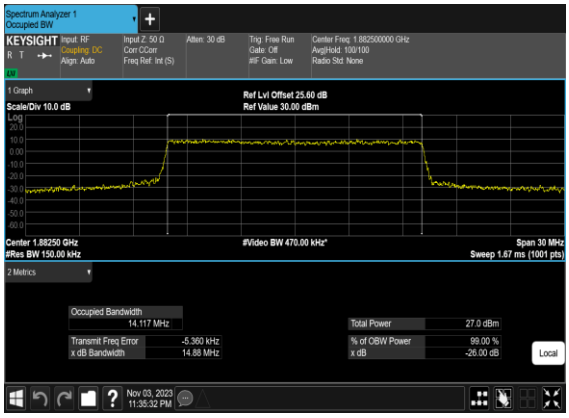


N25(10M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

N25(10M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



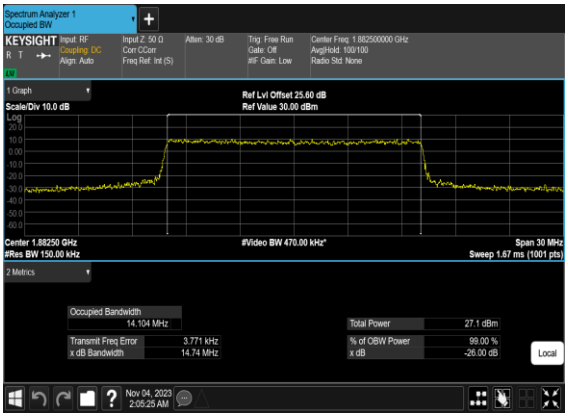
N25(15M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



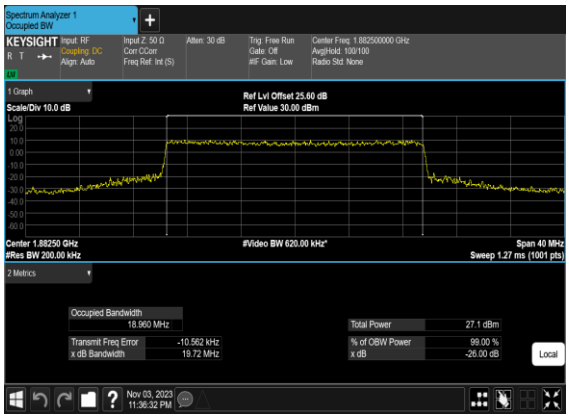
N25(15M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

N25(15M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

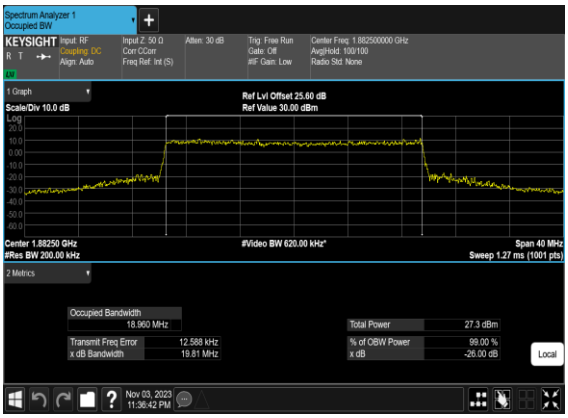
N25(15M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



N25(20M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

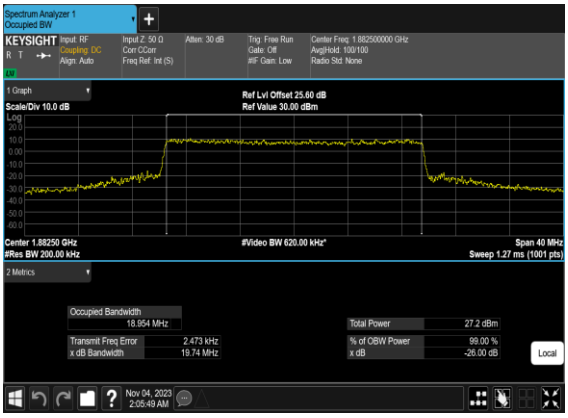


N25(20M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

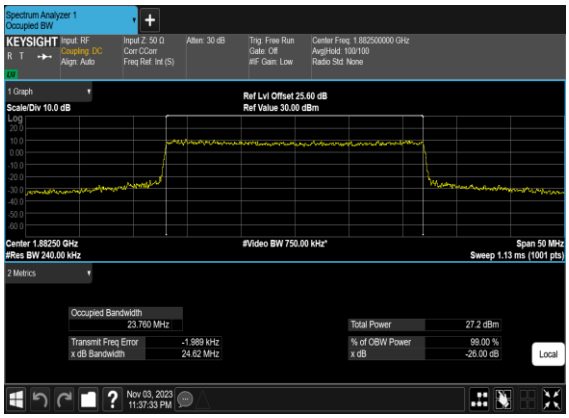


N25(20M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

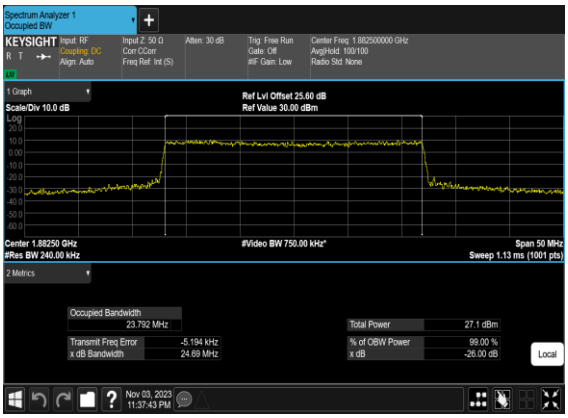
N25(20M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



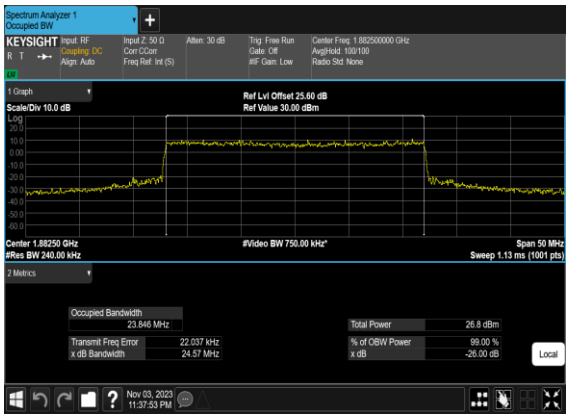
N25(25M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



N25(25M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



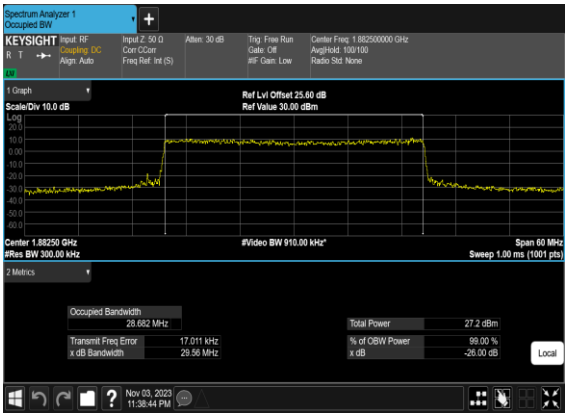
N25(25M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



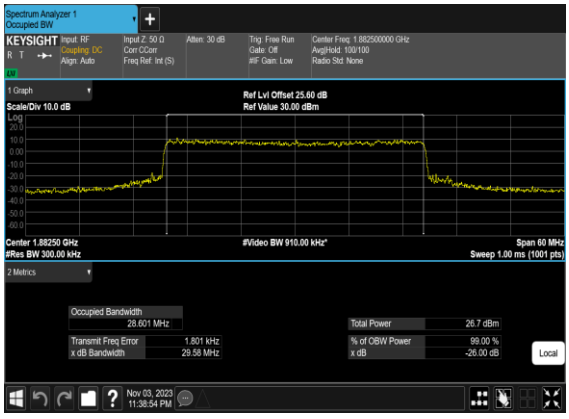
N25(25M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

N25(30M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

N25(30M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

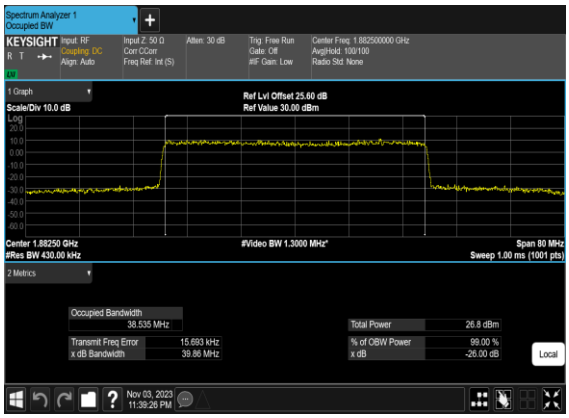


N25(30M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

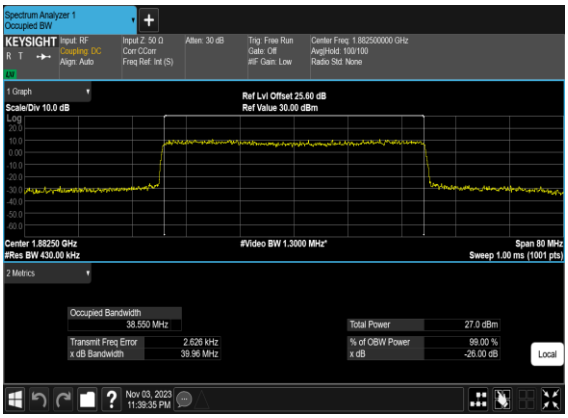


N25(30M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

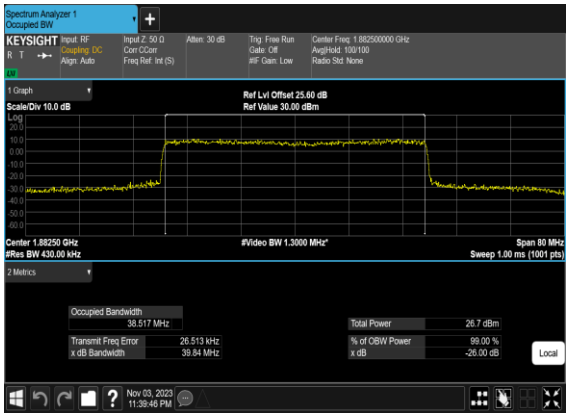
N25(40M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



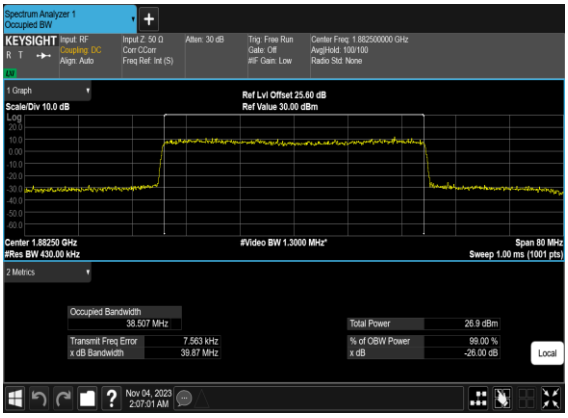
N25(40M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N25(40M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



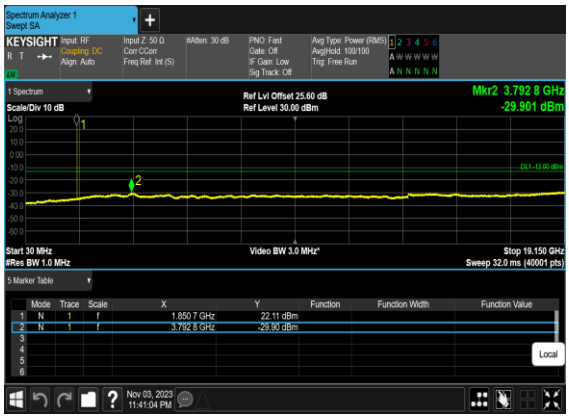
N25(40M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



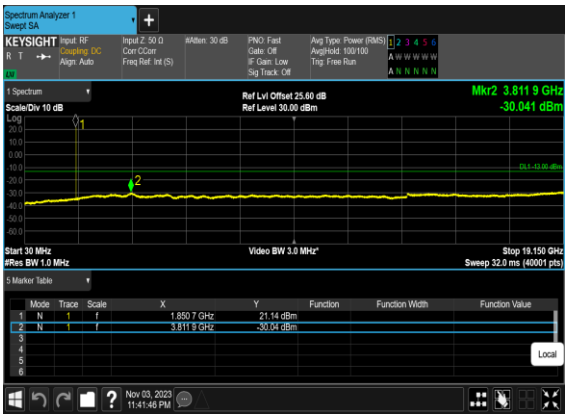
Conducted Spurious Emissions

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	20	372000	1860.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
25	15	20	372000	1860.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	20	372000	1860.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
25	15	20	372000	1860.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
25	15	20	376500	1882.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
25	15	20	376500	1882.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
25	15	20	381000	1905.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
25	15	20	381000	1905.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	20	381000	1905.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
25	15	20	381000	1905.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
25	15	40	374000	1870.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
25	15	40	374000	1870.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	40	374000	1870.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
25	15	40	374000	1870.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
25	15	40	376500	1882.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
25	15	40	376500	1882.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	40	376500	1882.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
25	15	40	376500	1882.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
25	15	40	379000	1895.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
25	15	40	379000	1895.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	40	379000	1895.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
25	15	40	379000	1895.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**

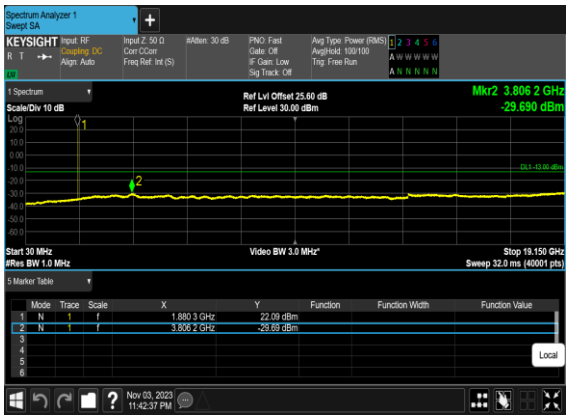
N25(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



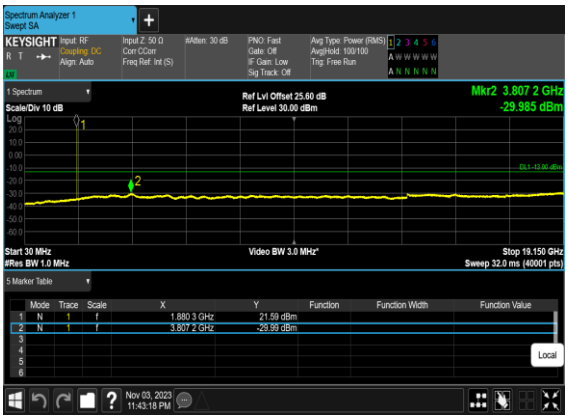
N25(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



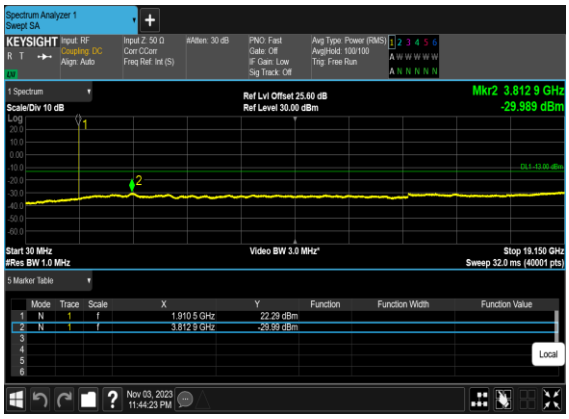
N25(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



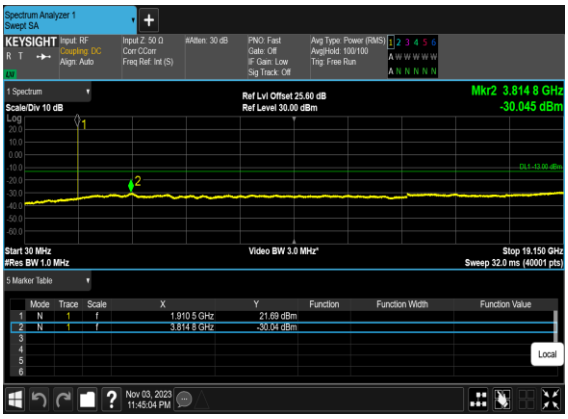
N25(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



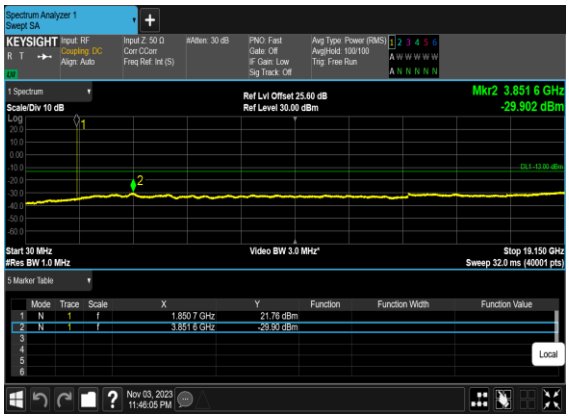
N25(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



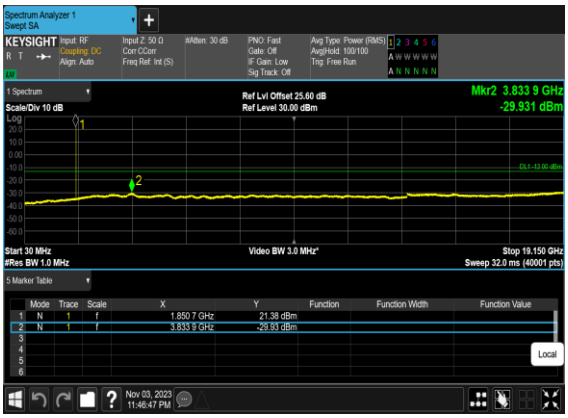
N25(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



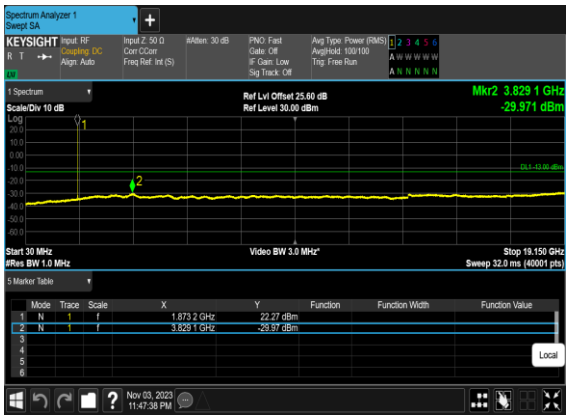
N25(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



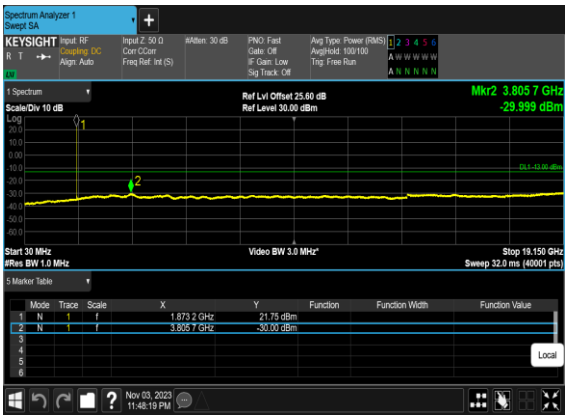
N25(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



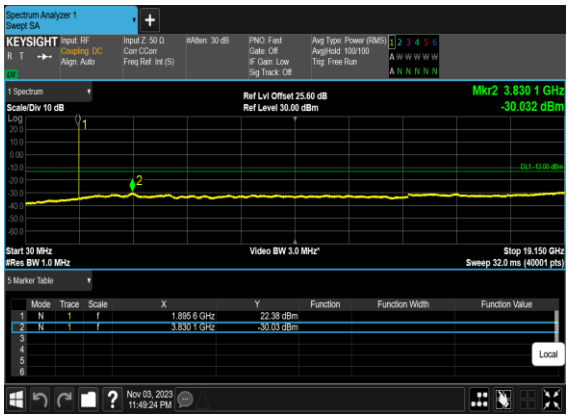
N25(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



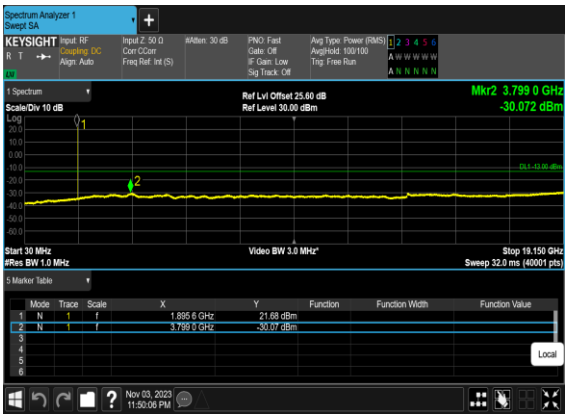
N25(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



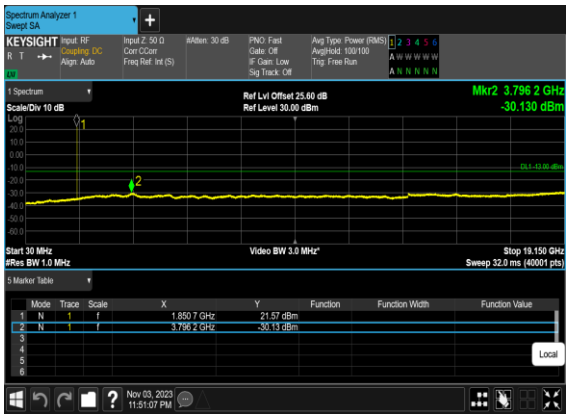
N25(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



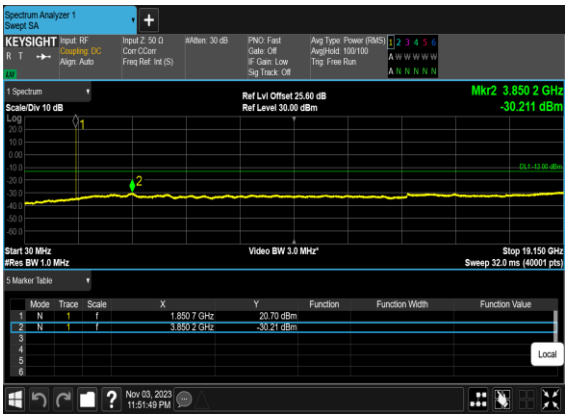
N25(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



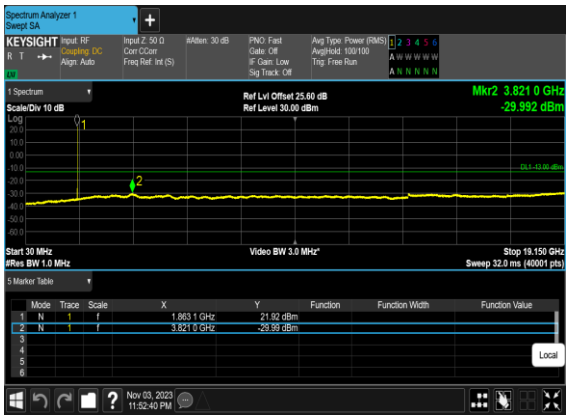
N25(40M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



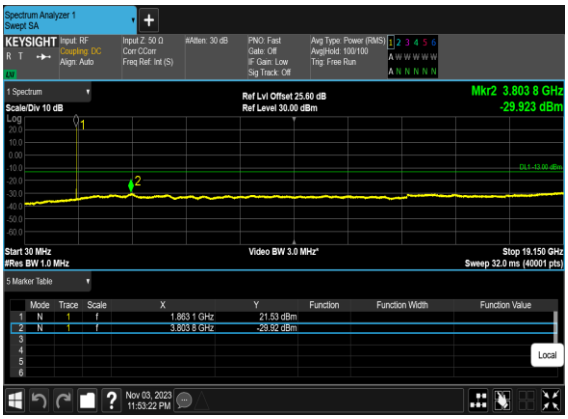
N25(40M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



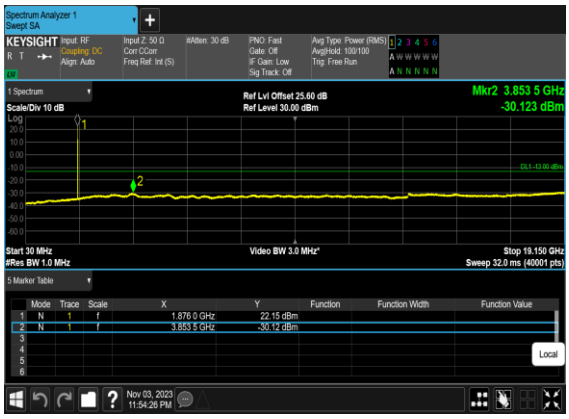
N25(40M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



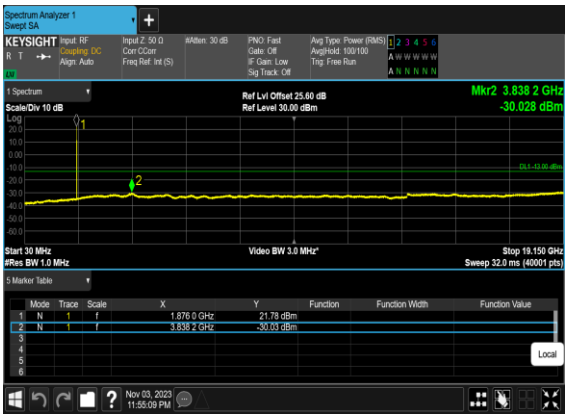
N25(40M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



N25(40M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



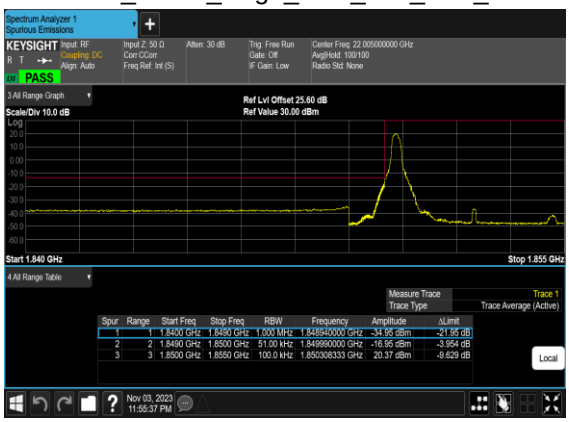
N25(40M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



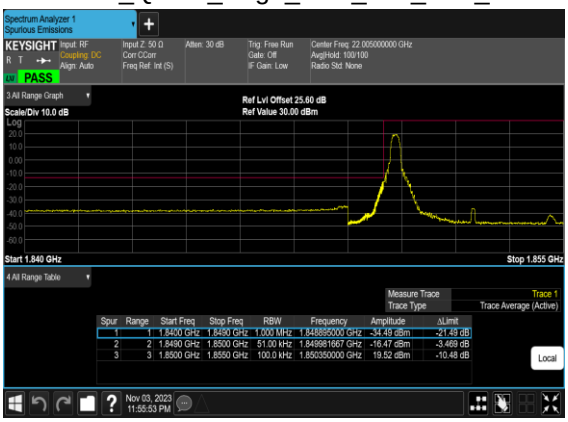
Conducted Band Edge

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	20	372000	1860.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	20	372000	1860.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
25	15	20	372000	1860.0	DFT-s-OFDM BPSK	100@0	see graph	**PASS**
25	15	20	372000	1860.0	DFT-s-OFDM QPSK	100@0	see graph	**PASS**
25	15	20	381000	1905.0	DFT-s-OFDM BPSK	1@105	see graph	**PASS**
25	15	20	381000	1905.0	DFT-s-OFDM QPSK	1@105	see graph	**PASS**
25	15	20	381000	1905.0	DFT-s-OFDM BPSK	100@0	see graph	**PASS**
25	15	20	381000	1905.0	DFT-s-OFDM QPSK	100@0	see graph	**PASS**
25	15	40	374000	1870.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	40	374000	1870.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
25	15	40	374000	1870.0	DFT-s-OFDM BPSK	216@0	see graph	**PASS**
25	15	40	374000	1870.0	DFT-s-OFDM QPSK	216@0	see graph	**PASS**
25	15	40	379000	1895.0	DFT-s-OFDM BPSK	1@215	see graph	**PASS**
25	15	40	379000	1895.0	DFT-s-OFDM QPSK	1@215	see graph	**PASS**
25	15	40	379000	1895.0	DFT-s-OFDM BPSK	216@0	see graph	**PASS**
25	15	40	379000	1895.0	DFT-s-OFDM QPSK	216@0	see graph	**PASS**

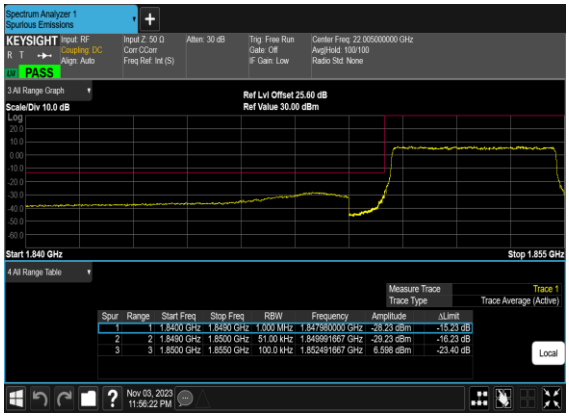
N25(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



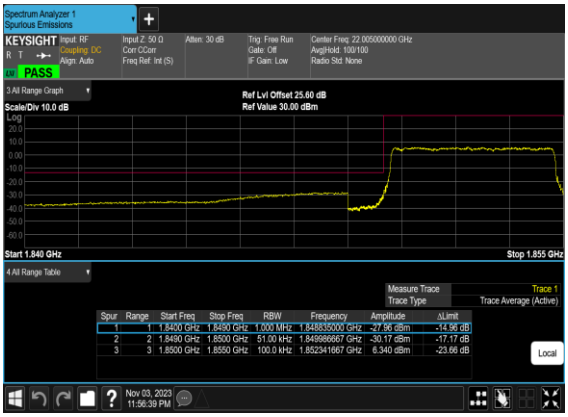
N25(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



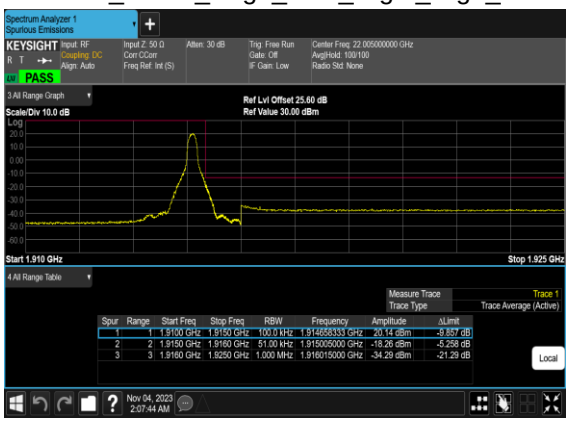
N25(5M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



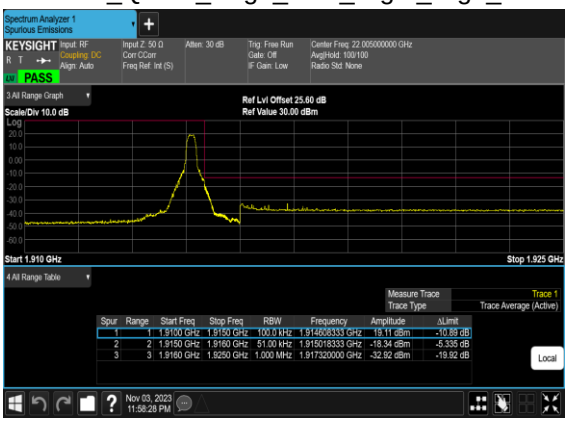
N25(5M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



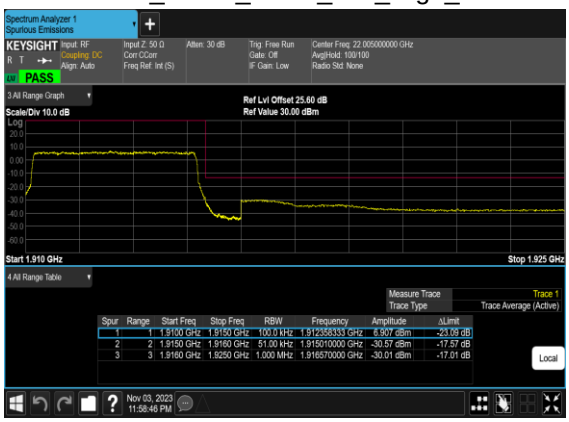
N25(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



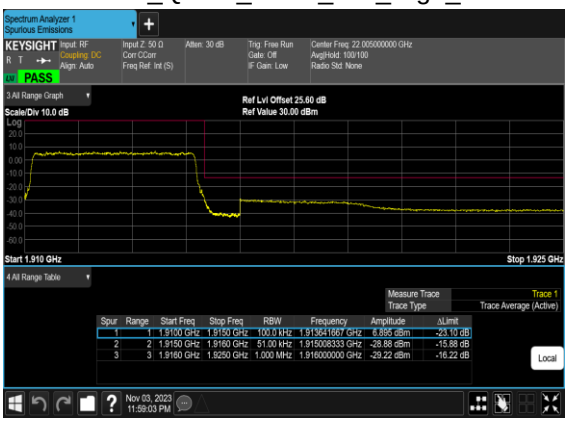
N25(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



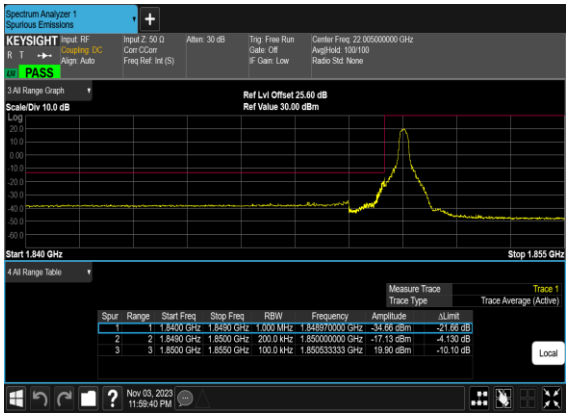
N25(5M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



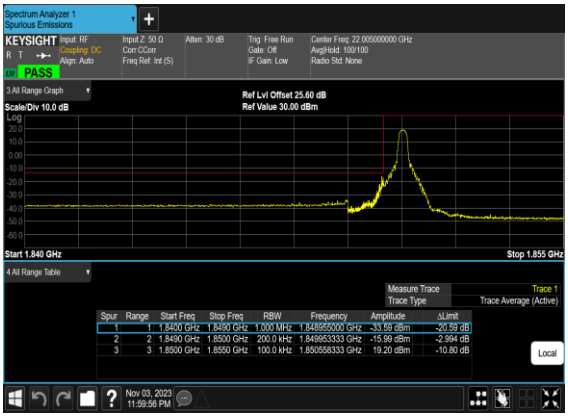
N25(5M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



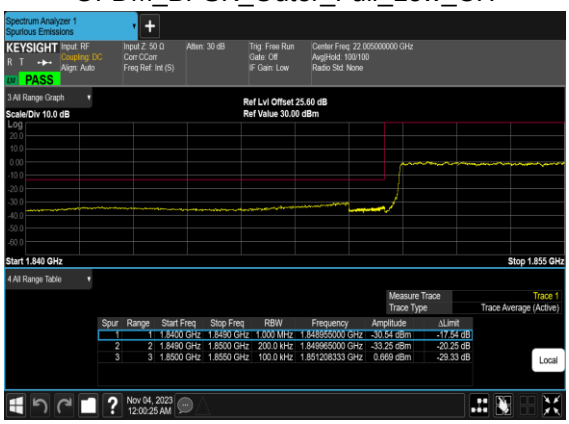
N25(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



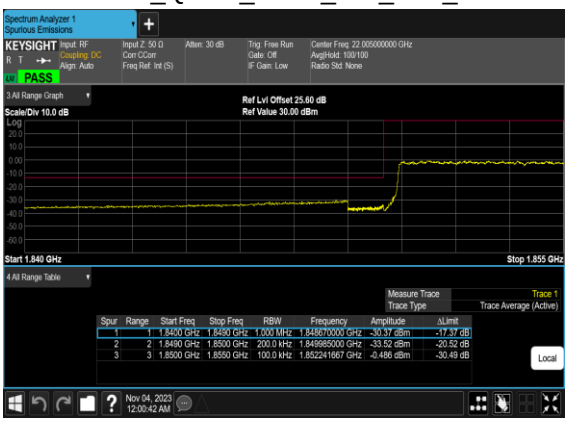
N25(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



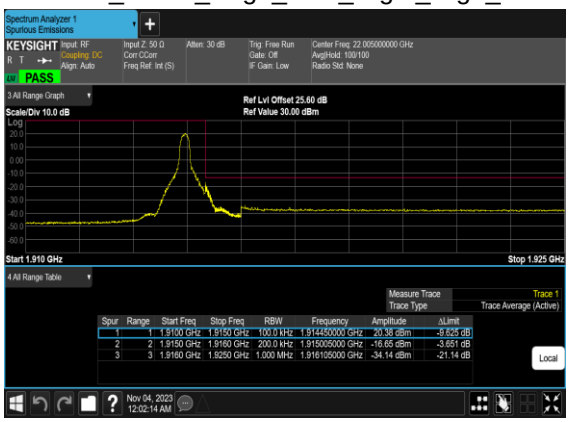
N25(20M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



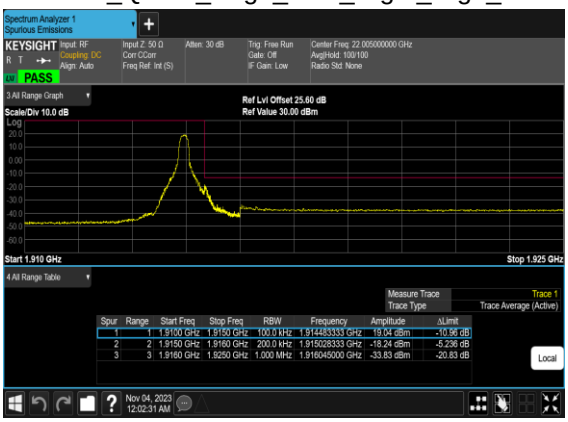
N25(20M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



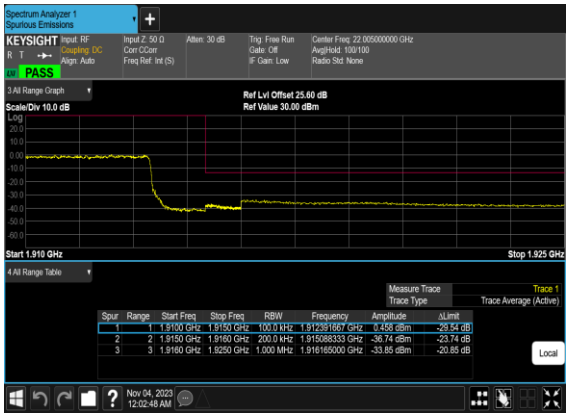
N25(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



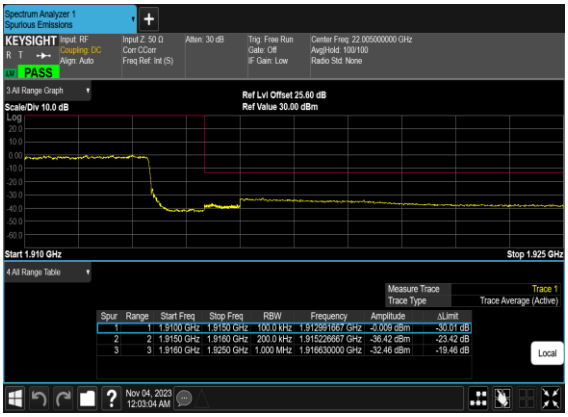
N25(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



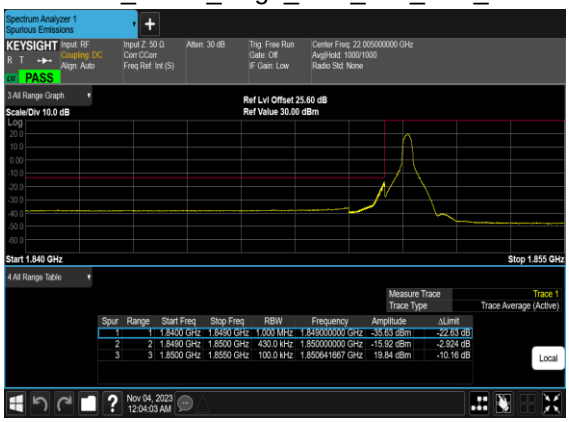
N25(20M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



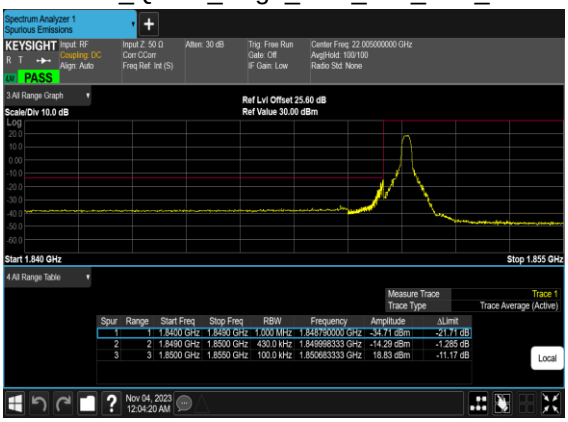
N25(20M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



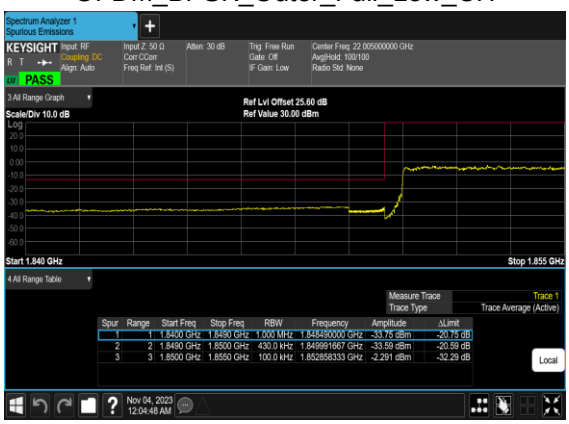
N25(40M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



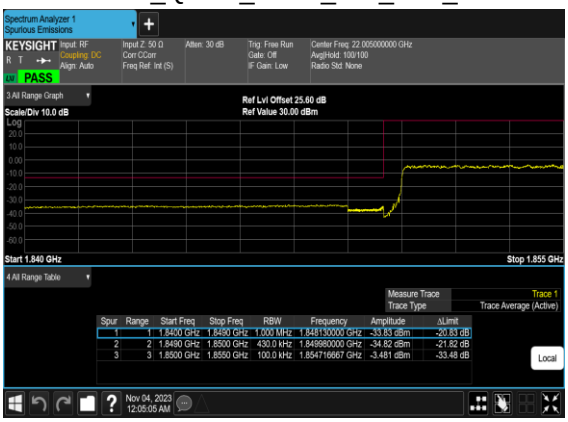
N25(40M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



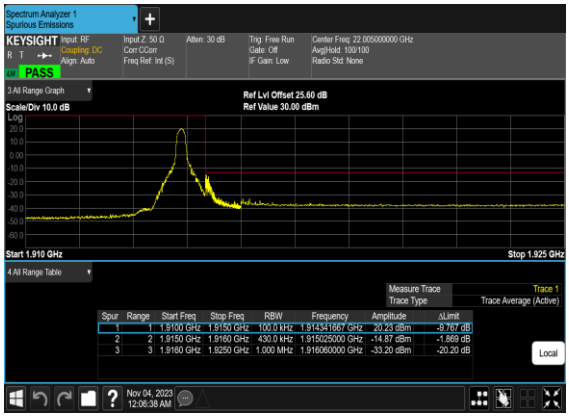
N25(40M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



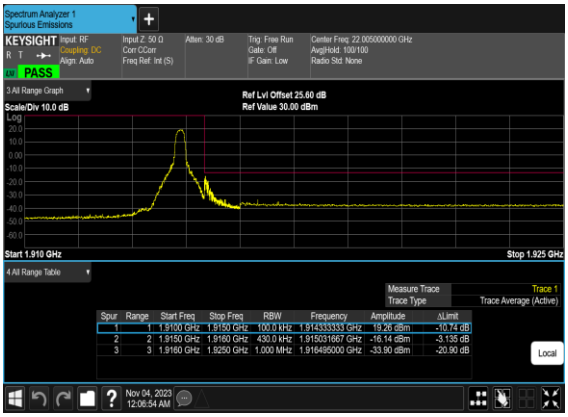
N25(40M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



N25(40M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH

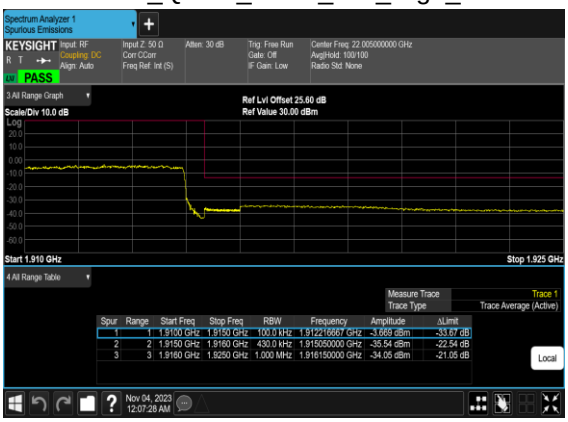


N25(40M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



N25(40M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH

N25(40M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



Software Version: 23.06.1602

FR1 N26(ANT0)

Transmitter Conducted Output Power And ERP, (G_T-L_C)=-3.5dB

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power(dBm)	ERP(dBm)	ERP(W)
26	15	5	165300	826.5	DFT-s-OFDM PI/2 BPSK	1@1	22.8	17.15	0.0519
26	15	5	165300	826.5	DFT-s-OFDM QPSK	1@1	22.59	16.94	0.0494
26	15	5	165300	826.5	DFT-s-OFDM 16 QAM	1@1	21.77	16.12	0.0409
26	15	5	167300	836.5	DFT-s-OFDM PI/2 BPSK	1@1	22.65	17	0.0501
26	15	5	167300	836.5	DFT-s-OFDM QPSK	1@1	22.44	16.79	0.0478
26	15	5	167300	836.5	DFT-s-OFDM 16 QAM	1@1	21.62	15.97	0.0395
26	15	5	169300	846.5	DFT-s-OFDM PI/2 BPSK	1@1	22.78	17.13	0.0516
26	15	5	169300	846.5	DFT-s-OFDM QPSK	1@1	22.31	16.66	0.0463
26	15	5	169300	846.5	DFT-s-OFDM 16 QAM	1@1	21.58	15.93	0.0392
26	15	10	165800	829	DFT-s-OFDM PI/2 BPSK	1@1	22.81	17.16	0.0520
26	15	10	165800	829	DFT-s-OFDM QPSK	1@1	22.6	16.95	0.0495
26	15	10	165800	829	DFT-s-OFDM 16 QAM	1@1	21.76	16.11	0.0408
26	15	10	167300	836.5	DFT-s-OFDM PI/2 BPSK	1@1	22.69	17.04	0.0506
26	15	10	167300	836.5	DFT-s-OFDM QPSK	1@1	22.48	16.83	0.0482
26	15	10	167300	836.5	DFT-s-OFDM 16 QAM	1@1	21.5	15.85	0.0385
26	15	10	168800	844	DFT-s-OFDM PI/2 BPSK	1@1	22.76	17.11	0.0514
26	15	10	168800	844	DFT-s-OFDM QPSK	1@1	22.66	17.01	0.0502
26	15	10	168800	844	DFT-s-OFDM 16 QAM	1@1	21.82	16.17	0.0414
26	15	15	166300	831.5	DFT-s-OFDM PI/2 BPSK	1@1	22.75	17.1	0.0513
26	15	15	166300	831.5	DFT-s-OFDM QPSK	1@1	22.57	16.92	0.0492
26	15	15	166300	831.5	DFT-s-OFDM 16 QAM	1@1	21.73	16.08	0.0406
26	15	15	167300	836.5	DFT-s-OFDM PI/2 BPSK	1@1	22.71	17.06	0.0508
26	15	15	167300	836.5	DFT-s-OFDM QPSK	1@1	22.51	16.86	0.0485
26	15	15	167300	836.5	DFT-s-OFDM 16 QAM	1@1	21.66	16.01	0.0399
26	15	15	168300	841.5	DFT-s-OFDM PI/2 BPSK	1@1	22.59	16.94	0.0494
26	15	15	168300	841.5	DFT-s-OFDM QPSK	1@1	22.42	16.77	0.0475
26	15	15	168300	841.5	DFT-s-OFDM 16 QAM	1@1	21.56	15.91	0.0390
26	15	20	166800	834	DFT-s-OFDM PI/2 BPSK	50@25	22.69	17.04	0.0506
26	15	20	166800	834	DFT-s-OFDM PI/2 BPSK	1@1	22.44	16.79	0.0478
26	15	20	166800	834	DFT-s-OFDM PI/2 BPSK	1@104	22.14	16.49	0.0446
26	15	20	166800	834	DFT-s-OFDM QPSK	50@25	22.35	16.7	0.0468
26	15	20	166800	834	DFT-s-OFDM QPSK	1@1	22.31	16.66	0.0463
26	15	20	166800	834	DFT-s-OFDM QPSK	1@104	22.06	16.41	0.0438
26	15	20	166800	834	DFT-s-OFDM 16 QAM	50@25	21.34	15.69	0.0371
26	15	20	166800	834	DFT-s-OFDM 16 QAM	1@1	21.43	15.78	0.0378
26	15	20	166800	834	DFT-s-OFDM 16 QAM	1@104	21.18	15.53	0.0357
26	15	20	166800	834	DFT-s-OFDM 64 QAM	50@25	19.93	14.28	0.0268
26	15	20	166800	834	DFT-s-OFDM 64 QAM	1@1	19.92	14.27	0.0267
26	15	20	166800	834	DFT-s-OFDM 64 QAM	1@104	19.69	14.04	0.0254
26	15	20	166800	834	DFT-s-OFDM 256 QAM	50@25	18.47	12.82	0.0191

26	15	20	166800	834	DFT-s-OFDM 256 QAM	1@1	18.22	12.57	0.0181
26	15	20	166800	834	DFT-s-OFDM 256 QAM	1@104	17.79	12.14	0.0164
26	15	20	166800	834	CP-OFDM QPSK	53@26	21.09	15.44	0.0350
26	15	20	166800	834	CP-OFDM QPSK	1@1	21.12	15.47	0.0352
26	15	20	166800	834	CP-OFDM QPSK	1@104	20.6	14.95	0.0313
26	15	20	167300	836.5	DFT-s-OFDM PI/2 BPSK	50@25	22.78	17.13	0.0516
26	15	20	167300	836.5	DFT-s-OFDM PI/2 BPSK	1@1	22.65	17	0.0501
26	15	20	167300	836.5	DFT-s-OFDM PI/2 BPSK	1@104	22.09	16.44	0.0441
26	15	20	167300	836.5	DFT-s-OFDM QPSK	50@25	22.37	16.72	0.0470
26	15	20	167300	836.5	DFT-s-OFDM QPSK	1@1	22.55	16.9	0.0490
26	15	20	167300	836.5	DFT-s-OFDM QPSK	1@104	22	16.35	0.0432
26	15	20	167300	836.5	DFT-s-OFDM 16 QAM	50@25	21.37	15.72	0.0373
26	15	20	167300	836.5	DFT-s-OFDM 16 QAM	1@1	21.69	16.04	0.0402
26	15	20	167300	836.5	DFT-s-OFDM 16 QAM	1@104	21.18	15.53	0.0357
26	15	20	167300	836.5	DFT-s-OFDM 64 QAM	50@25	19.97	14.32	0.0270
26	15	20	167300	836.5	DFT-s-OFDM 64 QAM	1@1	20.27	14.62	0.0290
26	15	20	167300	836.5	DFT-s-OFDM 64 QAM	1@104	19.71	14.06	0.0255
26	15	20	167300	836.5	DFT-s-OFDM 256 QAM	50@25	17.91	12.26	0.0168
26	15	20	167300	836.5	DFT-s-OFDM 256 QAM	1@1	18.25	12.6	0.0182
26	15	20	167300	836.5	DFT-s-OFDM 256 QAM	1@104	17.6	11.95	0.0157
26	15	20	167300	836.5	CP-OFDM QPSK	53@26	21.12	15.47	0.0352
26	15	20	167300	836.5	CP-OFDM QPSK	1@1	21.38	15.73	0.0374
26	15	20	167300	836.5	CP-OFDM QPSK	1@104	20.58	14.93	0.0311
26	15	20	167800	839	DFT-s-OFDM PI/2 BPSK	50@25	23.05	17.4	0.0550
26	15	20	167800	839	DFT-s-OFDM PI/2 BPSK	1@1	23.39	17.74	0.0594
26	15	20	167800	839	DFT-s-OFDM PI/2 BPSK	1@104	23.11	17.46	0.0557
26	15	20	167800	839	DFT-s-OFDM QPSK	50@25	22.45	16.8	0.0479
26	15	20	167800	839	DFT-s-OFDM QPSK	1@1	22.96	17.31	0.0538
26	15	20	167800	839	DFT-s-OFDM QPSK	1@104	21.59	15.94	0.0393
26	15	20	167800	839	DFT-s-OFDM 16 QAM	50@25	21.46	15.81	0.0381
26	15	20	167800	839	DFT-s-OFDM 16 QAM	1@1	22.1	16.45	0.0442
26	15	20	167800	839	DFT-s-OFDM 16 QAM	1@104	20.77	15.12	0.0325
26	15	20	167800	839	DFT-s-OFDM 64 QAM	50@25	20.09	14.44	0.0278
26	15	20	167800	839	DFT-s-OFDM 64 QAM	1@1	20.68	15.03	0.0318
26	15	20	167800	839	DFT-s-OFDM 64 QAM	1@104	19.31	13.66	0.0232
26	15	20	167800	839	DFT-s-OFDM 256 QAM	50@25	18.03	12.38	0.0173
26	15	20	167800	839	DFT-s-OFDM 256 QAM	1@1	17.78	12.13	0.0163
26	15	20	167800	839	DFT-s-OFDM 256 QAM	1@104	16.28	10.63	0.0116
26	15	20	167800	839	CP-OFDM QPSK	53@26	20.96	15.31	0.0340
26	15	20	167800	839	CP-OFDM QPSK	1@1	21.59	15.94	0.0393
26	15	20	167800	839	CP-OFDM QPSK	1@104	20.26	14.61	0.0289

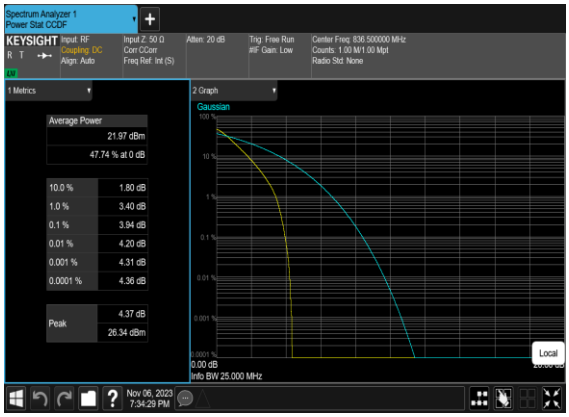
Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
26	15	20	167300	836.5	DFT-s-OFDM QPSK	100@0	0.0024	**PASS**	NV
26	15	20	167300	836.5	DFT-s-OFDM QPSK	100@0	0.0054	**PASS**	LV
26	15	20	167300	836.5	DFT-s-OFDM QPSK	100@0	0.0039	**PASS**	HV
26	15	20	167300	836.5	DFT-s-OFDM QPSK	100@0	-0.0014	**PASS**	-10℃
26	15	20	167300	836.5	DFT-s-OFDM QPSK	100@0	0.0015	**PASS**	0℃
26	15	20	167300	836.5	DFT-s-OFDM QPSK	100@0	-0.0032	**PASS**	10℃
26	15	20	167300	836.5	DFT-s-OFDM QPSK	100@0	-0.0019	**PASS**	20℃
26	15	20	167300	836.5	DFT-s-OFDM QPSK	100@0	0.0021	**PASS**	30℃
26	15	20	167300	836.5	DFT-s-OFDM QPSK	100@0	0.0019	**PASS**	40℃
26	15	20	167300	836.5	DFT-s-OFDM QPSK	100@0	0.0012	**PASS**	55℃

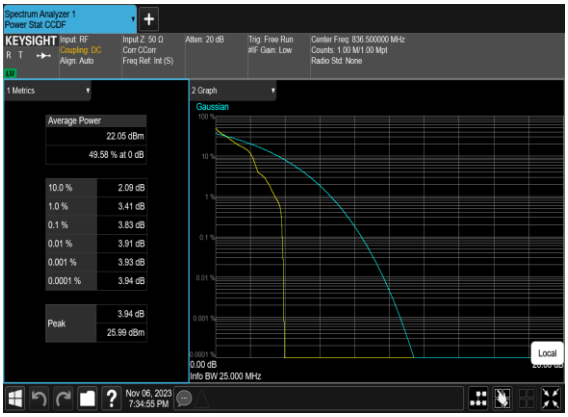
Peak to Average Ratio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
26	15	20	167300	836.5	DFT-s-OFDM PI/2 BPSK	100@0	3.94	13	**PASS**
26	15	20	167300	836.5	DFT-s-OFDM PI/2 BPSK	1@0	3.83	13	**PASS**
26	15	20	167300	836.5	DFT-s-OFDM QPSK	100@0	5.26	13	**PASS**
26	15	20	167300	836.5	DFT-s-OFDM QPSK	1@0	5.58	13	**PASS**

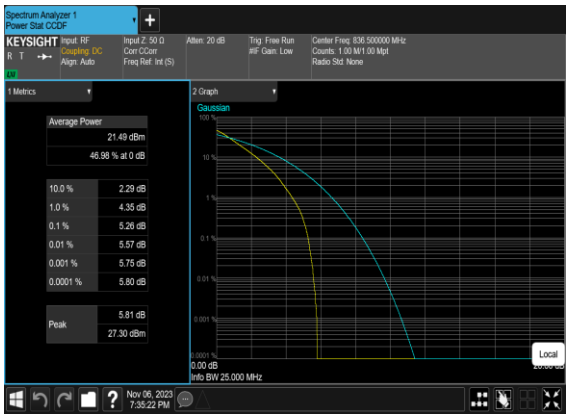
N26(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



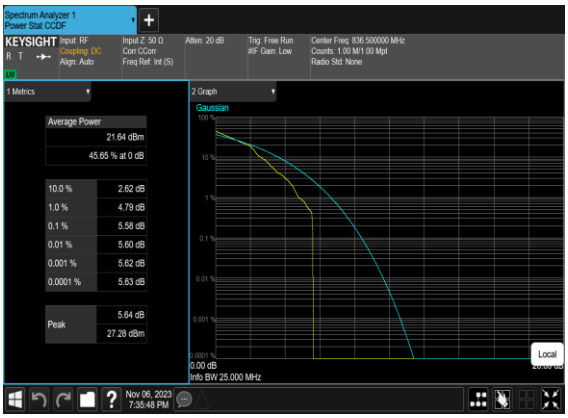
N26(20M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_Mid_CH



N26(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



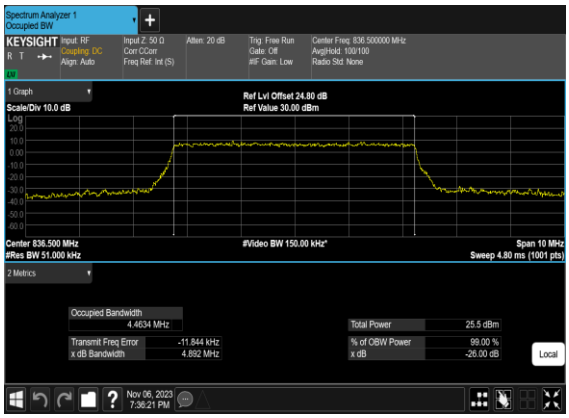
N26(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



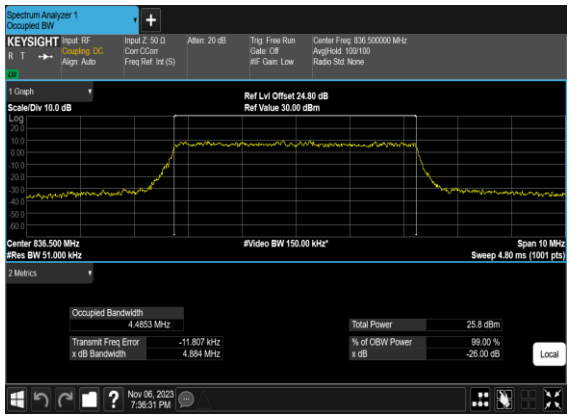
Occupied Bandwidth

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB BW (MHz)
26	15	5	167300	836.5	CP-OFDM QPSK	25@0	4.4634	4.892
26	15	5	167300	836.5	CP-OFDM 16 QAM	25@0	4.4853	4.884
26	15	5	167300	836.5	CP-OFDM 64 QAM	25@0	4.4586	4.841
26	15	5	167300	836.5	CP-OFDM 256 QAM	25@0	4.4612	4.824
26	15	10	167300	836.5	CP-OFDM QPSK	52@0	9.2748	9.783
26	15	10	167300	836.5	CP-OFDM 16 QAM	52@0	9.2792	9.879
26	15	10	167300	836.5	CP-OFDM 64 QAM	52@0	9.2713	9.827
26	15	10	167300	836.5	CP-OFDM 256 QAM	52@0	9.2708	9.804
26	15	15	167300	836.5	CP-OFDM QPSK	79@0	14.079	14.78
26	15	15	167300	836.5	CP-OFDM 16 QAM	79@0	14.07	14.81
26	15	15	167300	836.5	CP-OFDM 64 QAM	79@0	14.079	14.74
26	15	15	167300	836.5	CP-OFDM 256 QAM	79@0	14.086	14.76
26	15	20	167300	836.5	CP-OFDM QPSK	106@0	18.894	19.83
26	15	20	167300	836.5	CP-OFDM 16 QAM	106@0	18.886	19.73
26	15	20	167300	836.5	CP-OFDM 64 QAM	106@0	18.83	19.66
26	15	20	167300	836.5	CP-OFDM 256 QAM	106@0	18.887	19.62

N26(5M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



N26(5M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N26(5M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

N26(5M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

N26(10M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

N26(10M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH