FCC RF Test Report

APPLICANT	**:**	**Nokia Shanghai Bell Co., Ltd.**
EQUIPMENT	**:**	**Nokia FastMile 5G Receiver**
BRAND NAME	**:**	**Nokia**
MODEL NAME	**:**	**5G16-B**
FCC ID	**:**	**2ADZR5G16B**
STANDARD	**:**	**47 CFR Part 2, 24, 27**
CLASSIFICATION	**:**	**PCS Licensed Transmitter (PCB)**
TEST DATE(S)	**:**	**Jun. 17, 2024 ~ Jul. 18, 2024**

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

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

Jason Jia

Approved by: Jason Jia

ACCREDITED
Cert #5145.01

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People's Republic of China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG341901-02F	Rev. 01	Initial issue of report	Jul. 26, 2024

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power (5G NR n2, n25)	Reporting Only	PASS	-
	§2.1046 §27.50(h)(2)	Conducted Output Power (5G NR n41, n38)	< 2Watt		
	§24.232(c)	Equivalent Isotropic Radiated Power (5G NR n2, n25)	EIRP < 2Watt		
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (5G NR n66)	EIRP < 1Watt		
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 §24.238(a) §27.53(h) §27.53(m)(2)(v)	Conducted Band Edge Measurement (5G NR n2, n25) (5G NR n66) (5G NR n41, n38)	< 43+10log10(P[Watts])	PASS	-
3.8	§2.1051 §24.238(a) §27.53(h) §27.53(m)(2)(v)	Conducted Spurious Emission (5G NR n2, n25) (5G NR n66) (5G NR n41, n38)	< 43+10log10(P[Watts])	PASS	-
3.9	§2.1055 §24.235 §27.54	Frequency Stability Temperature & Voltage	Within Authorized Band	PASS	-
4.4	§2.1053 §24.238(a) §27.53(h) §27.53(m)(2)(v)	Radiated Spurious Emission (5G NR n2, n25) (5G NR n66) (5G NR n41, n38)	< 43+10log$_{10}$(P[Watts])	PASS	Under limit 10.23 dB at 14464.00 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

Nokia Shanghai Bell Co., Ltd.
388#, Ningqiao Road, China (Shanghai) Pilot Free Trade Zone, Shanghai 201206, China

1.2 Manufacturer

Nokia Solutions and Networks Oy
Karakaari 7, 02610 Espoo, Finland

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Nokia FastMile 5G Receiver
Brand Name	Nokia
Model Name	5G16-B
FCC ID	2ADZR5G16B
IMEI Code	Conducted : 358937920000081 Radiation : 358937920000248
HW Version	3TG02508Axxx(x:A~Z)
SW Version	5GReceiver-HG-2_D240200BieT0001E0643
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 n25 : 1850 MHz - 1915 MHz 5G NR n38 : 2570 MHz - 2620 MHz 5G NR n41 : 2496 MHz - 2690 MHz 5G NR n66 : 1710 MHz - 1755 MHz
Rx Frequency	5G NR n2 : 1930 MHz - 1990 MHz 5G NR n25 : 1930 MHz - 1995 MHz 5G NR n38: 2570 MHz - 2620 MHz 5G NR n41 : 2496 MHz - 2690 MHz 5G NR n66 : 2110 MHz - 2155 MHz
Bandwidth	n2 : 5MHz / 10MHz / 15MHz / 20MHz / 25MHz / 30MHz / 35MHz / 40MHz n25/n66 : 5MHz / 10MHz / 15MHz / 20MHz / 25MHz / 30MHz / 35MHz / 40MHz / 45 MHz n38: 10MHz / 15MHz / 20MHz / 25MHz / 30MHz / 40MHz n41: 10MHz/ 15MHz/ 20MHz/ 30MHz/ 35MHz/ 40MHz/ 50MHz/ 60MHz/ 70MHz/ 80MHz/ 90MHz/ 100MHz
SCS	15kHz for FDD Bands, 30kHz for TDD Band

	NR Band	Mode	Ant. 0	Ant. 1
Antenna Gain	**n2**	SA	3.5dBi	-
		NSA	3.5dB	2.9dBi
	n25	SA	3.5dBi	-
		NSA	3.5dBi	2.9dBi
	n38	SA		2dBi
		NSA/CA	2.8dBi	2dBi
		UL MIMO	1.8dBi	
	n41	SA	-	2dBi
		NSA/CA	2.8dBi	2dBi
		ULMIMO	1.8dBi	
	n66	SA	3.3dBi	-
		NSA	3.3dBi	2.9dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM			

Remark:

1. The maximum EIRP is calculated from max output power and max antenna gain, only the maximum EIRP are shown in the report, 5G NR n2/n25/66 for Ant. 0 and 5GNR n38AA/n41B for Ant.1
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 n2/25//66 support SA mode and NSA mode. According to the maximum power between SA and NSA mode, SA covers NSA mode.
4. 5G NR n38AA/n41B test results are shown in this report, the other results will be issued separately.
5. The EN-DC mode combination could be referred to the product spec.
6. Note: There are two Samples under test, Sample 1 is 1st antenna, Sample 2 is 2nd antenna and they are with the same Gain but different manufacturers. According to the difference, we choose sample 1 to full test and the sample 2 is verified the worse case for Radiation Spurious Emission among NR WWAN Bands which can refer to FG341901-02H

Specification of Accessory				
AC Adapter	**Brand Name**	NOKIA	**Model Name**	G1418B-540-028-2.5G

1.5 Modification of EUT

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

1.6 Maximum EIRP or Conducted power 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	0.5129	4M47G7D	0.4335	4M47W7D
10	1855.0 – 1905.0	0.5236	9M27G7D	0.4477	9M30W7D
15	1857.5 – 1902.5	0.5082	14M1G7D	0.4345	14M1W7D
20	1860.0 – 1900.0	0.5224	18M9G7D	0.4426	18M9W7D
25	1862.5 – 1897.5	0.5176	23M8G7D	0.4188	23M8W7D
30	1865.0 – 1895.0	0.5152	28M5G7D	0.4256	28M5W7D
35	1867.5 – 1892.5	0.5012	33M7G7D	0.4159	33M6W7D
40	1870.0 – 1890.0	0.5248	38M5G7D	0.4178	38M6W7D

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	0.5224	4M47G7D	0.4645	4M47W7D
10	1855.0 – 1910.0	0.5321	9M27G7D	0.4603	9M30W7D
15	1857.5 – 1907.5	0.5309	14M1G7D	0.4624	14M1W7D
20	1860.0 – 1905.0	0.5383	18M9G7D	0.4624	18M9W7D
25	1862.5 – 1902.5	0.5458	23M8G7D	0.4266	23M8W7D
30	1865.0 – 1900.0	0.5152	28M5G7D	0.4395	28M5W7D
35	1867.5 – 1897.5	0.5212	33M7G7D	0.4365	33M6W7D
40	1870.0 – 1895.0	0.5224	38M5G7D	0.4295	38M6W7D
45	1872.5 – 1892.5	0.5559	43M2G7D	0.4446	43M2W7D

5G NR n66		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	1712.5 – 1752.5	0.5023	4M46G7D	0.4207	4M47W7D
10	1715.0 – 1750.0	0.5105	9M27G7D	0.4295	9M29W7D
15	1717.5 – 1747.5	0.5082	14M1G7D	0.4305	14M1W7D
20	1720.0 – 1745.0	0.5035	18M9G7D	0.4266	18M9W7D
25	1722.5 – 1742.5	0.5012	23M8G7D	0.4055	23M7W7D
30	1725.0 – 1740.0	0.5012	28M5G7D	0.4140	28M5W7D
35	1727.5 – 1737.5	0.5023	33M5G7D	0.4018	33M5W7D
40	1730.0 – 1735.0	0.4989	38M5G7D	0.3990	38M5W7D
45	1732.5	0.5117	43M0G7D	0.4074	43M2W7D

EN_DC_n38AA		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)		Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
NR BW 10MHz	**LTE BW 5MHz**	0.2350	14M0G7D	0.2254	14M0W7D
NR BW 15MHz	**LTE BW 5MHz**	0.2323	19M0G7D	0.2265	19M0W7D
NR BW 20MHz	**LTE BW 5MHz**	0.2291	23M8G7D	0.2291	23M9W7D
NR BW 25MHz	**LTE BW 5MHz**	0.2249	28M8G7D	0.2443	28M8W7D
NR BW 30MHz	**LTE BW 5MHz**	0.2570	33M7G7D	0.2280	33M7W7D
NR BW 40MHz	**LTE BW 5MHz**	0.2344	43M7G7D	0.2328	43M6W7D

Note: EN_DC_n38AA is Power Class 3.

N41B	PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
NR BW 20MHz+20MHz	0.1770	38M0G7D	0.1581	38M1W7D
NR BW 20MHz+10MHz	0.1774	27M9G7D	0.1549	27M9W7D
NR BW 10MHz+20MHz	0.1766	27M9G7D	0.1545	27M9W7D
NR BW 10MHz+10MHz	0.1094	18M4G7D	0.0685	18M5W7D
NR BW 10MHz+30MHz	0.1730	37M8G7D	0.1493	37M9W7D
NR BW 10MHz+40MHz	0.1730	47M4G7D	0.1545	47M5W7D
NR BW 10MHz+50MHz	0.1706	57M3G7D	0.1510	57M4W7D
NR BW 20MHz+30MHz	0.1766	47M6G7D	0.1585	47M7W7D
NR BW 20MHz+40MHz	0.1698	57M6G7D	0.1542	57M7W7D
NR BW 20MHz+50MHz	0.1660	67M3G7D	0.1507	67M3W7D
NR BW 30MHz+10MHz	0.1718	37M8G7D	0.1535	37M8W7D
NR BW 30MHz+20MHz	0.1766	47M7G7D	0.1570	47M7W7D
NR BW 30MHz+30MHz	0.1679	57M6G7D	0.1483	57M6W7D
NR BW 30MHz+40MHz	0.1706	67M3G7D	0.1510	67M3W7D
NR BW 30MHz+50MHz	0.1726	77M0G7D	0.1542	77M1W7D
NR BW 40MHz+10MHz	0.1778	47M4G7D	0.1535	47M4W7D
NR BW 40MHz+20MHz	0.1770	57M6G7D	0.1578	57M6W7D
NR BW 40MHz+30MHz	0.1730	67M3G7D	0.1531	67M2W7D
NR BW 40MHz+40MHz	0.1718	77M7G7D	0.1535	77M6W7D
NR BW 40MHz+50MHz	0.1738	87M2G7D	0.1542	87M1W7D
NR BW 50MHz+10MHz	0.1738	57M5G7D	0.1521	57M5W7D
NR BW 50MHz+20MHz	0.1718	67M5G7D	0.1542	67M5W7D
NR BW 50MHz+30MHz	0.1706	77M0G7D	0.1514	77M1W7D
NR BW 50MHz+40MHz	0.1714	87M2G7D	0.1535	87M3W7D
NR BW 50MHz+50MHz	0.1820	97M0G7D	0.1585	97M0W7D

Note: 5G n41B is Power Class 3.

Note:

1. 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.
2. All modulations have been tested, only the worst test results of PSK & QAM are shown in the report.

1.7 Testing Location

Sporton International 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.**
	03CH02-SZ	CN1256	421272

1.8 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH02-SZ	AUDIX	E3	6.2009-8-24a

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, 24, 27
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

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

2 Test Configuration of Equipment Under Test

2.1 Test Mode

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

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

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

Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			

Test Items	5G NR	Bandwidth (MHz)													Modulation					RB #		Test Channel		
		5	10	15	20	25	30	35	40	45	70	80	90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	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	v	v
	n25	v	v	v	v	v	v	v	v	v	-	-	-	-	v	v	v	v	v	v	v	v	v	v
	n66	v	v	v	v	v	v	v	v	v	-	-	-	-	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	n25				v						-	-	-	-	v	v					v		v	
	n66				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	
	n66	v	v	v	v	v	v	v	v	v	-	-	-	-		v	v	v	v		v		v	
Conducted Band Edge	n25	v				v				v	-	-	-	-	v	v						v		v
	n66	v				v				v	-	-	-	-	v	v						v		v
Conducted Spurious Emission	n25	v				v				v	-	-	-	-	v	v				v		v	v	v
	n66	v				v				v	-	-	-	-	v	v				v		v	v	v
Frequency Stability	n25				v						-	-	-	-		v					v		v	
	n66				v						-	-	-	-		v					v		v	
E.I.R.P	n2	v	v	v	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
	n66	v	v	v	v	v	v	v	v	v	-	-	-	-	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	n25	Worst Case																					v	
	n66	Worst Case																					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	16QAM	64QAM	256QAM	1	Full	L	M	H
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 = 54V ; Low Voltage =48V. ; High Voltage =57V																							

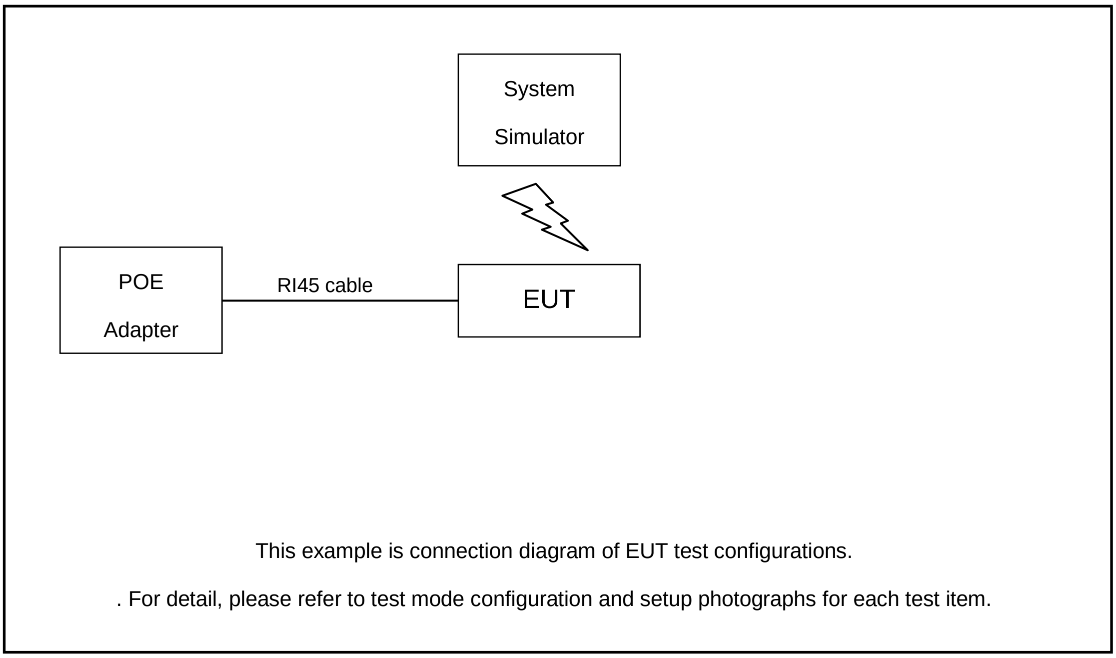
Test Cases	Band	Bandwidth (MHz)	Modulation	RB #	Test Channel
		eg. 10+10M, 10+20M, 10+30M, 10+40M, 10+50M, 20+10M, 20+20M, 20+30M, 20+40M, 20+50M, 30+10M, 30+20M, 30+30M, 30+40M, 30+50M, 40+10M, 40+20M, 40+30M, 40+40M, 40+50M, 50+10M, 50+20M, 50+30M, 50+40M, 50+50M,	eg. PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB, Partial RB, Full RB	L/M/H
Max. Output Power	n41B	All supported Bandwidth	All Modulation	1RB, Full RB	L, M, H
E.I.R.P	n41B	All supported Bandwidth	All Modulation	1RB, Full RB	L, M, H
26dB and 99% Bandwidth	n41B	All supported Bandwidth	QPSK, 16QAM, 64QAM, 256QAM	Full RB	M
Conducted Band Edge	n41B	10+10M, 30+30M, 50+50M	PI/2 BPSK, QPSK	1RB, Full RB	L, H
Conducted Spurious Emission	n41B	10+10M, 30+30M, 50+50M	PI/2 BPSK, QPSK	1RB, Full RB	L, M, H
Radiated Spurious Emission	n41B	Worst case from maximum power			M

Note:
1. 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.

Test Cases	Band	Bandwidth (MHz)	Modulation	RB #	Test Channel
		eg. 10+5M, 15+5M, 20+5M, 25+5M, 30+5, 40+5M	eg. PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB, Partial RB, Full RB	L/M/H
Max. Output Power	n38AA	All supported Bandwidth	All Modulation	1RB, Full RB	L, M, H
Peak-to-Average Ratio	n38AA	20+5M	PI/2 BPSK, QPSK	Full RB	M
E.I.R.P	n38AA	All supported Bandwidth	All Modulation	1RB, Full RB	L, M, H
26dB and 99% Bandwidth	n38AA	All supported Bandwidth	QPSK, 16QAM, 64QAM, 256QAM	Full RB	M
Conducted Band Edge	n38AA	10+5M, 20+5M, 40+5M,	PI/2 BPSK, QPSK	1RB, Full RB	L, H
Conducted Spurious Emission	n38AA	10+5M, 20+5M, 40+5M,,	PI/2 BPSK, QPSK	1RB, Full RB	L, M, H
Frequency Stability	n38AA	20+5M	PI/2 BPSK	Full RB	M
Radiated Spurious Emission	n38AA	Worst case from maximum power			M

Note:
1. 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.
2. All test items are based on engineering evaluation.
3. Frequency Stability: Normal Voltage = 54V ; Low Voltage = 48V ; High Voltage = 57V.

2.2 Connection Diagram of Test System



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 between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss.

Offset = RF cable loss.

Following shows an offset computation example with cable loss 8.0 dB.

Example :

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

= 8.0 (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**
40	Channel	374000	376000	378000
	Frequency	1870	1880	1890
35	Channel	373500	376000	378500
	Frequency	1867.5	1880	1892.5
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 n25 Channel and Frequency List				
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 n38 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
40	Channel	518000	519000	520000
	Frequency	2590	2595	2600
30	Channel	517000	519000	521000
	Frequency	2585	2595	2605
25	Channel	516500	519000	521500
	Frequency	2582.5	2595	2607.5
20	Channel	516000	519000	522000
	Frequency	2580	2595	2610
15	Channel	515500	519000	522500
	Frequency	2577.5	2595	2612.5
10	Channel	515000	519000	523000
	Frequency	2575	2595	2615

5G NR n41 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	509202	518598	528000
	Frequency	2546.01	2592.99	2640
90	Channel	508200	518598	528996
	Frequency	2541	2592.99	2644.98
80	Channel	507204	518598	529998
	Frequency	2536.02	2592.99	2649.99
70	Channel	506202	518598	531000
	Frequency	2531.01	2592.99	2655
60	Channel	505200	518598	531996
	Frequency	2526	2592.99	2659.98
50	Channel	504204	518598	532998
	Frequency	2521.02	2592.99	2664.99
40	Channel	503202	518598	534000
	Frequency	2516.01	2592.99	2670
35	Channel	502704	518598	534498
	Frequency	2513.52	2592.99	2672.49
30	Channel	502200	518598	534996
	Frequency	2511	2592.99	2674.98
20	Channel	501204	518598	535998
	Frequency	2506.02	2592.99	2679.99

15	Channel	500700	518598	536496
	Frequency	2503.5	2592.99	2682.48
10	Channel	500202	518598	537000
	Frequency	2501.01	2592.99	2685

5G NR n66 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
45	Channel	346500	349000	351500
	Frequency	1732.5	1745	1757.5
40	Channel	346000	349000	352000
	Frequency	1730	1745	1760
35	Channel	345500	349000	352500
	Frequency	1727.5	1745	1762.5
30	Channel	345000	349000	353000
	Frequency	1725	1745	1765
25	Channel	344500	349000	353500
	Frequency	1722.5	1745	1767.5
20	Channel	344000	349000	354000
	Frequency	1720	1745	1770
15	Channel	343500	349000	354500
	Frequency	1717.5	1745	1772.5
10	Channel	343000	349000	355000
	Frequency	1715	1745	1775
5	Channel	342500	349000	355500
	Frequency	1712.5	1745	1777.5

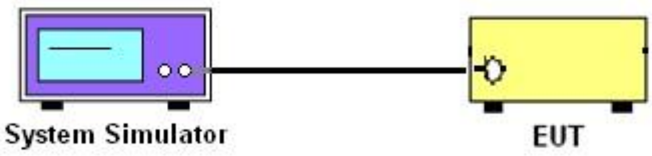
3 Conducted Test Items

3.1 Measuring Instruments

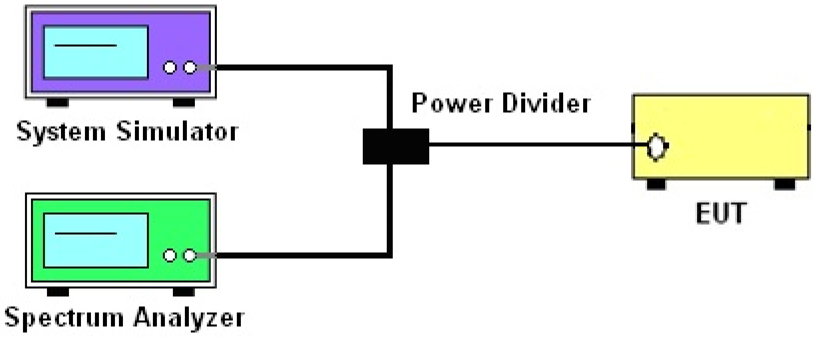
See list of measuring instruments of this test report.

3.2 Test Setup

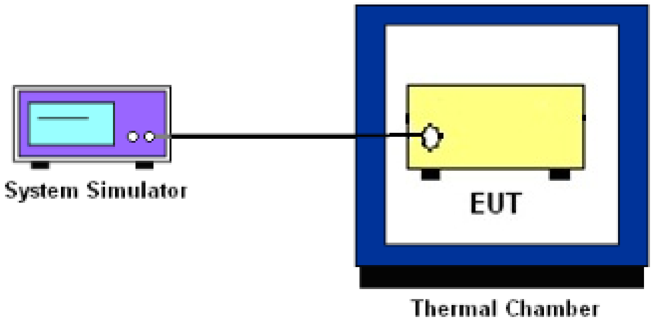
3.2.1 Conducted Output Power



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



3.2.3 Frequency Stability



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power and EIRP

3.4.1 Description of the Conducted Output Power Measurement and EIRP Measurement

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

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

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

The transmitter output power must not exceed 2 Watts for 5G NR n38, n41

According to KDB 412172 D01 Power Approach,

EIRP = $P_T + G_T – L_C$, ERP = EIRP -2.15, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

3.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter output port was connected to the system simulator.
3. Set EUT at maximum power through the system simulator.
4. Select lowest, middle, and highest channels for each band and different modulation.
5. Measure and record the power level from the system simulator.

3.5 Peak-to-Average Ratio

3.5.1 Description of the PAR Measurement

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

3.5.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2.3.4 (CCDF).
2. The EUT was connected to spectrum and system simulator via a power divider.
3. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
4. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
5. Record the deviation as Peak to Average Ratio.

3.6 Occupied Bandwidth

3.6.1 Description of Occupied Bandwidth Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

3.6.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.4
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
4. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
5. Set the detection mode to peak, and the trace mode to max hold.
6. Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace. (this is the reference value)
7. Determine the "-26 dB down amplitude" as equal to (Reference Value – X).
8. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the "–X dB down amplitude" determined in step 6. If a marker is below this "-X dB down amplitude" value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.
9. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

3.7 Conducted Band Edge

3.7.1 Description of Conducted Band Edge Measurement

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.

27.53 (h)

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

27.53(m)(2)(v)

For all fixed digital user stations, the attenuation factor shall be not less than 43 + 10 log (P) dB at the channel edge.

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.

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.

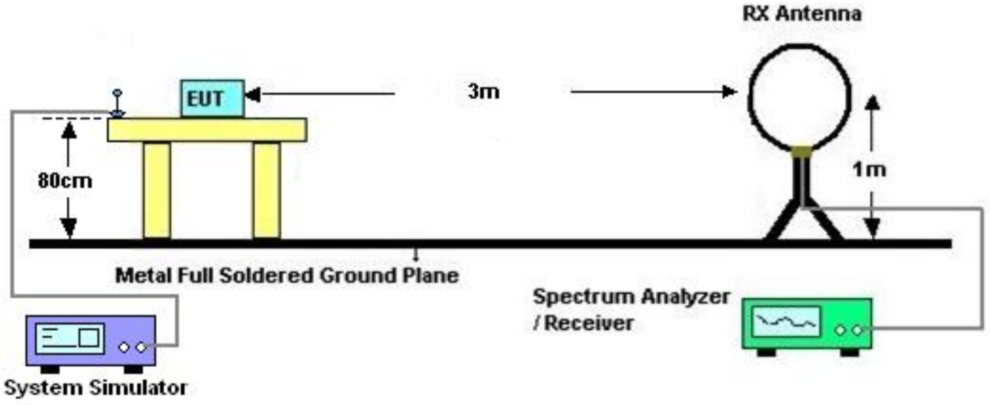
4 Radiated Test Items

4.1 Measuring Instruments

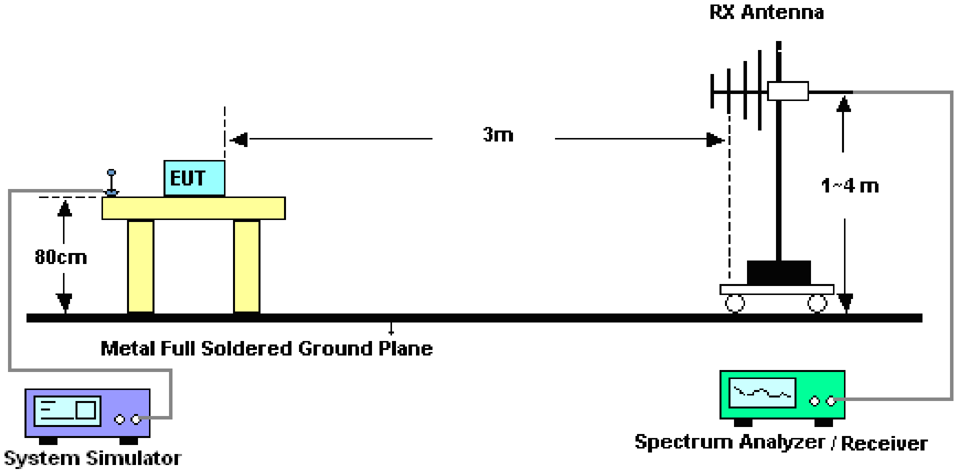
See list of measuring instruments of this test report.

4.2 Test Setup

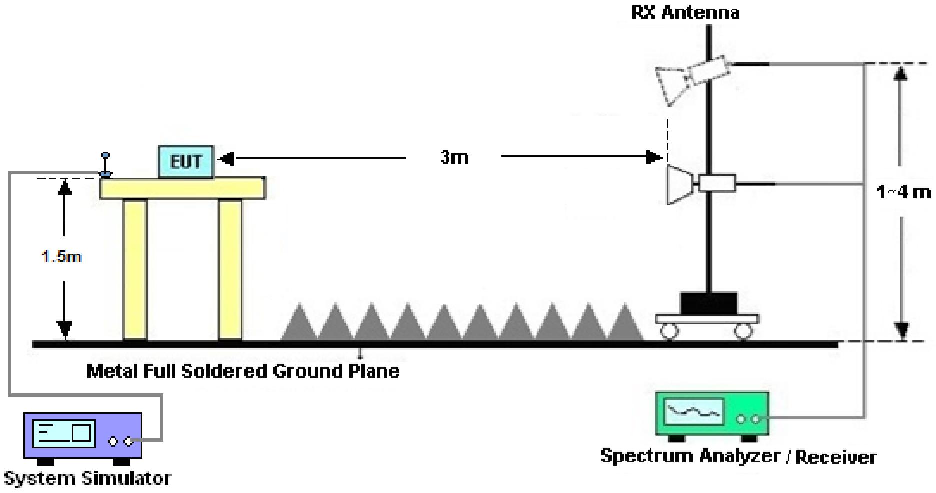
4.2.1 For radiated test below 30MHz



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	Jun. 17, 2024~ Jul. 18, 2024	Apr. 08, 2025	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-04 265	60.06.020.007 7	0.4GHz~26.5GHz	Dec. 25, 2023	Jun. 17, 2024~ Jul. 18, 2024	Dec. 24, 2024	Conducted (TH01-SZ)
Power Divider	SOLVANG TECHNOLOY	STI08-0055	-	Max 40GHz	Mar. 20, 2024	Jun. 17, 2024~ Jul. 18, 2024	Mar. 19, 2025	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 05, 2023 Jul. 04, 2024	Jun. 17, 2024~ Jul. 18, 2024	Jul. 04, 2024 Jul. 03, 2025	Conducted (TH01-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 07, 2023	Jun. 20, 2024~ Jun. 26, 2024	Jul. 06, 2024	Radiation (03CH02-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jul. 28, 2022	Jun. 20, 2024~ Jun. 26, 2024	Jul. 27, 2024	Radiation (03CH02-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Oct. 24, 2023	Jun. 20, 2024~ Jun. 26, 2024	Oct. 23, 2025	Radiation (03CH02-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 08, 2023	Jun. 20, 2024~ Jun. 26, 2024	Jul. 07, 2024	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 07, 2023	Jun. 20, 2024~ Jun. 26, 2024	Jul. 06, 2024	Radiation (03CH02-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 09, 2024	Jun. 20, 2024~ Jun. 26, 2024	Apr. 08, 2025	Radiation (03CH02-SZ)
LF Amplifier	Burgeon	BPA-530	102211	0.01~3000Mhz	Oct. 18, 2023	Jun. 20, 2024~ Jun. 26, 2024	Oct. 17, 2024	Radiation (03CH02-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 18, 2023	Jun. 20, 2024~ Jun. 26, 2024	Oct. 17, 2024	Radiation (03CH02-SZ)
AC Power Source	Chroma	61601	616010003043	N/A	Oct. 18, 2023	Jun. 20, 2024~ Jun. 26, 2024	Oct. 17, 2024	Radiation (03CH02-SZ)
Turn Table	Chaintek	T-200	N/A	0~360 degree	NCR	Jun. 20, 2024~ Jun. 26, 2024	NCR	Radiation (03CH02-SZ)
Antenna Mast	Chaintek	MBS-400	N/A	1 m~4 m	NCR	Jun. 20, 2024~ Jun. 26, 2024	NCR	Radiation (03CH02-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))	2.47 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.31 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.72 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, $(G_T - L_C)$=3.5dB

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	23.2	26.7	0.4677
2	15	5	370500	1852.5	DFT-s-OFDM 16 QAM	1@1	22.56	26.06	0.4036
2	15	5	376000	1880	DFT-s-OFDM QPSK	1@1	23.55	27.05	0.5070
2	15	5	376000	1880	DFT-s-OFDM 16 QAM	1@1	22.86	26.36	0.4325
2	15	5	381500	1907.5	DFT-s-OFDM QPSK	1@1	23.6	27.1	0.5129
2	15	5	381500	1907.5	DFT-s-OFDM 16 QAM	1@1	22.87	26.37	0.4335
2	15	10	371000	1855	DFT-s-OFDM QPSK	1@1	23.35	26.85	0.4842
2	15	10	371000	1855	DFT-s-OFDM 16 QAM	1@1	22.65	26.15	0.4121
2	15	10	376000	1880	DFT-s-OFDM QPSK	1@1	23.55	27.05	0.5070
2	15	10	376000	1880	DFT-s-OFDM 16 QAM	1@1	22.9	26.4	0.4365
2	15	10	381000	1905	DFT-s-OFDM QPSK	1@1	23.69	27.19	0.5236
2	15	10	381000	1905	DFT-s-OFDM 16 QAM	1@1	23.01	26.51	0.4477
2	15	15	371500	1857.5	DFT-s-OFDM QPSK	1@1	23.3	26.8	0.4786
2	15	15	371500	1857.5	DFT-s-OFDM 16 QAM	1@1	22.66	26.16	0.4130
2	15	15	376000	1880	DFT-s-OFDM QPSK	1@1	23.47	26.97	0.4977
2	15	15	376000	1880	DFT-s-OFDM 16 QAM	1@1	22.87	26.37	0.4335
2	15	15	380500	1902.5	DFT-s-OFDM QPSK	1@1	23.56	27.06	0.5082
2	15	15	380500	1902.5	DFT-s-OFDM 16 QAM	1@1	22.88	26.38	0.4345
2	15	20	372000	1860	DFT-s-OFDM QPSK	1@1	23.28	26.78	0.4764
2	15	20	372000	1860	DFT-s-OFDM 16 QAM	1@1	22.63	26.13	0.4102
2	15	20	376000	1880	DFT-s-OFDM QPSK	1@1	23.49	26.99	0.5000
2	15	20	376000	1880	DFT-s-OFDM 16 QAM	1@1	22.87	26.37	0.4335
2	15	20	380000	1900	DFT-s-OFDM QPSK	1@1	23.68	27.18	0.5224
2	15	20	380000	1900	DFT-s-OFDM 16 QAM	1@1	22.96	26.46	0.4426
2	15	25	372500	1862.5	DFT-s-OFDM QPSK	1@1	23.47	26.97	0.4977
2	15	25	372500	1862.5	DFT-s-OFDM 16 QAM	1@1	22.25	25.75	0.3758
2	15	25	376000	1880	DFT-s-OFDM QPSK	1@1	23.6	27.1	0.5129
2	15	25	376000	1880	DFT-s-OFDM 16 QAM	1@1	22.47	25.97	0.3954
2	15	25	379500	1897.5	DFT-s-OFDM QPSK	1@1	23.64	27.14	0.5176
2	15	25	379500	1897.5	DFT-s-OFDM 16 QAM	1@1	22.72	26.22	0.4188
2	15	30	373000	1865	DFT-s-OFDM QPSK	1@1	23.29	26.79	0.4775
2	15	30	373000	1865	DFT-s-OFDM 16 QAM	1@1	22.37	25.87	0.3864
2	15	30	376000	1880	DFT-s-OFDM QPSK	1@1	23.41	26.91	0.4909
2	15	30	376000	1880	DFT-s-OFDM 16 QAM	1@1	22.53	26.03	0.4009
2	15	30	379000	1895	DFT-s-OFDM QPSK	1@1	23.62	27.12	0.5152
2	15	30	379000	1895	DFT-s-OFDM 16 QAM	1@1	22.79	26.29	0.4256
2	15	35	373500	1867.5	DFT-s-OFDM QPSK	1@1	23.26	26.76	0.4742
2	15	35	373500	1867.5	DFT-s-OFDM 16 QAM	1@1	22.33	25.83	0.3828

2	15	35	376000	1880	DFT-s-OFDM QPSK	1@1	23.45	26.95	0.4955
2	15	35	376000	1880	DFT-s-OFDM 16 QAM	1@1	22.48	25.98	0.3963
2	15	35	378500	1892.5	DFT-s-OFDM QPSK	1@1	23.5	27	0.5012
2	15	35	378500	1892.5	DFT-s-OFDM 16 QAM	1@1	22.69	26.19	0.4159
2	15	40	374000	1870	DFT-s-OFDM PI/2 BPSK	108@54	23.49	26.99	0.5000
2	15	40	374000	1870	DFT-s-OFDM PI/2 BPSK	1@1	23.38	26.88	0.4875
2	15	40	374000	1870	DFT-s-OFDM PI/2 BPSK	1@214	23.58	27.08	0.5105
2	15	40	374000	1870	DFT-s-OFDM QPSK	108@54	23.46	26.96	0.4966
2	15	40	374000	1870	DFT-s-OFDM QPSK	1@1	23.32	26.82	0.4808
2	15	40	374000	1870	DFT-s-OFDM QPSK	1@214	23.57	27.07	0.5093
2	15	40	374000	1870	DFT-s-OFDM 16 QAM	108@54	22.64	26.14	0.4111
2	15	40	374000	1870	DFT-s-OFDM 16 QAM	1@1	22.29	25.79	0.3793
2	15	40	374000	1870	DFT-s-OFDM 16 QAM	1@214	22.71	26.21	0.4178
2	15	40	374000	1870	DFT-s-OFDM 64 QAM	108@54	21.09	24.59	0.2877
2	15	40	374000	1870	DFT-s-OFDM 64 QAM	1@1	20.78	24.28	0.2679
2	15	40	374000	1870	DFT-s-OFDM 64 QAM	1@214	21.13	24.63	0.2904
2	15	40	374000	1870	DFT-s-OFDM 256 QAM	108@54	19.14	22.64	0.1837
2	15	40	374000	1870	DFT-s-OFDM 256 QAM	1@1	18.74	22.24	0.1675
2	15	40	374000	1870	DFT-s-OFDM 256 QAM	1@214	19.11	22.61	0.1824
2	15	40	374000	1870	CP-OFDM QPSK	108@54	22.12	25.62	0.3648
2	15	40	374000	1870	CP-OFDM QPSK	1@1	21.72	25.22	0.3327
2	15	40	374000	1870	CP-OFDM QPSK	1@214	22.09	25.59	0.3622
2	15	40	376000	1880	DFT-s-OFDM PI/2 BPSK	108@54	23.62	27.12	0.5152
2	15	40	376000	1880	DFT-s-OFDM PI/2 BPSK	1@1	23.46	26.96	0.4966
2	15	40	376000	1880	DFT-s-OFDM PI/2 BPSK	1@214	23.7	27.2	0.5248
2	15	40	376000	1880	DFT-s-OFDM QPSK	108@54	23.6	27.1	0.5129
2	15	40	376000	1880	DFT-s-OFDM QPSK	1@1	23.36	26.86	0.4853
2	15	40	376000	1880	DFT-s-OFDM QPSK	1@214	23.68	27.18	0.5224
2	15	40	376000	1880	DFT-s-OFDM 16 QAM	108@54	22.67	26.17	0.4140
2	15	40	376000	1880	DFT-s-OFDM 16 QAM	1@1	22.52	26.02	0.3999
2	15	40	376000	1880	DFT-s-OFDM 16 QAM	1@214	22.68	26.18	0.4150
2	15	40	376000	1880	DFT-s-OFDM 64 QAM	108@54	21.25	24.75	0.2985
2	15	40	376000	1880	DFT-s-OFDM 64 QAM	1@1	20.89	24.39	0.2748
2	15	40	376000	1880	DFT-s-OFDM 64 QAM	1@214	21.12	24.62	0.2897
2	15	40	376000	1880	DFT-s-OFDM 256 QAM	108@54	19.2	22.7	0.1862
2	15	40	376000	1880	DFT-s-OFDM 256 QAM	1@1	19.2	22.7	0.1862
2	15	40	376000	1880	DFT-s-OFDM 256 QAM	1@214	19.31	22.81	0.1910
2	15	40	376000	1880	CP-OFDM QPSK	108@54	22.2	25.7	0.3715
2	15	40	376000	1880	CP-OFDM QPSK	1@1	21.91	25.41	0.3475
2	15	40	376000	1880	CP-OFDM QPSK	1@214	22.12	25.62	0.3648
2	15	40	378000	1890	DFT-s-OFDM PI/2 BPSK	108@54	23.57	27.07	0.5093
2	15	40	378000	1890	DFT-s-OFDM PI/2 BPSK	1@1	23.56	27.06	0.5082
2	15	40	378000	1890	DFT-s-OFDM PI/2 BPSK	1@214	23.54	27.04	0.5058
2	15	40	378000	1890	DFT-s-OFDM QPSK	108@54	23.61	27.11	0.5140
2	15	40	378000	1890	DFT-s-OFDM QPSK	1@1	23.44	26.94	0.4943

2	15	40	378000	1890	DFT-s-OFDM QPSK	1@214	23.47	26.97	0.4977
2	15	40	378000	1890	DFT-s-OFDM 16 QAM	108@54	22.68	26.18	0.4150
2	15	40	378000	1890	DFT-s-OFDM 16 QAM	1@1	22.61	26.11	0.4083
2	15	40	378000	1890	DFT-s-OFDM 16 QAM	1@214	22.7	26.2	0.4169
2	15	40	378000	1890	DFT-s-OFDM 64 QAM	108@54	21.12	24.62	0.2897
2	15	40	378000	1890	DFT-s-OFDM 64 QAM	1@1	21.06	24.56	0.2858
2	15	40	378000	1890	DFT-s-OFDM 64 QAM	1@214	21.08	24.58	0.2871
2	15	40	378000	1890	DFT-s-OFDM 256 QAM	108@54	19.18	22.68	0.1854
2	15	40	378000	1890	DFT-s-OFDM 256 QAM	1@1	19.04	22.54	0.1795
2	15	40	378000	1890	DFT-s-OFDM 256 QAM	1@214	19.1	22.6	0.1820
2	15	40	378000	1890	CP-OFDM QPSK	108@54	22.11	25.61	0.3639
2	15	40	378000	1890	CP-OFDM QPSK	1@1	22.09	25.59	0.3622
2	15	40	378000	1890	CP-OFDM QPSK	1@214	21.97	25.47	0.3524

Software Version: 23.06.1602

FR1 N25-SCS 15k

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

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	23.21	26.71	0.4688
25	15	5	370500	1852.5	DFT-s-OFDM 16 QAM	1@1	22.65	26.15	0.4121
25	15	5	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.68	27.18	0.5224
25	15	5	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	23.05	26.55	0.4519
25	15	5	382500	1912.5	DFT-s-OFDM QPSK	1@1	23.67	27.17	0.5212
25	15	5	382500	1912.5	DFT-s-OFDM 16 QAM	1@1	23.17	26.67	0.4645
25	15	10	371000	1855	DFT-s-OFDM QPSK	1@1	23.4	26.9	0.4898
25	15	10	371000	1855	DFT-s-OFDM 16 QAM	1@1	22.72	26.22	0.4188
25	15	10	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.62	27.12	0.5152
25	15	10	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.98	26.48	0.4446
25	15	10	382000	1910	DFT-s-OFDM QPSK	1@1	23.76	27.26	0.5321
25	15	10	382000	1910	DFT-s-OFDM 16 QAM	1@1	23.13	26.63	0.4603
25	15	15	371500	1857.5	DFT-s-OFDM QPSK	1@1	23.31	26.81	0.4797
25	15	15	371500	1857.5	DFT-s-OFDM 16 QAM	1@1	22.65	26.15	0.4121
25	15	15	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.58	27.08	0.5105
25	15	15	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.92	26.42	0.4385
25	15	15	381500	1907.5	DFT-s-OFDM QPSK	1@1	23.75	27.25	0.5309
25	15	15	381500	1907.5	DFT-s-OFDM 16 QAM	1@1	23.15	26.65	0.4624
25	15	20	372000	1860	DFT-s-OFDM QPSK	1@1	23.32	26.82	0.4808
25	15	20	372000	1860	DFT-s-OFDM 16 QAM	1@1	22.72	26.22	0.4188
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.5	27	0.5012
25	15	20	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.89	26.39	0.4355
25	15	20	381000	1905	DFT-s-OFDM QPSK	1@1	23.81	27.31	0.5383
25	15	20	381000	1905	DFT-s-OFDM 16 QAM	1@1	23.15	26.65	0.4624
25	15	25	372500	1862.5	DFT-s-OFDM QPSK	1@1	23.28	26.78	0.4764
25	15	25	372500	1862.5	DFT-s-OFDM 16 QAM	1@1	22.44	25.94	0.3926
25	15	25	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.48	26.98	0.4989
25	15	25	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.7	26.2	0.4169
25	15	25	380500	1902.5	DFT-s-OFDM QPSK	1@1	23.87	27.37	0.5458
25	15	25	380500	1902.5	DFT-s-OFDM 16 QAM	1@1	22.8	26.3	0.4266
25	15	30	373000	1865	DFT-s-OFDM QPSK	1@1	23.3	26.8	0.4786
25	15	30	373000	1865	DFT-s-OFDM 16 QAM	1@1	22.57	26.07	0.4046
25	15	30	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.43	26.93	0.4932
25	15	30	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.63	26.13	0.4102
25	15	30	380000	1900	DFT-s-OFDM QPSK	1@1	23.62	27.12	0.5152
25	15	30	380000	1900	DFT-s-OFDM 16 QAM	1@1	22.93	26.43	0.4395
25	15	35	373500	1867.5	DFT-s-OFDM QPSK	1@1	23.26	26.76	0.4742
25	15	35	373500	1867.5	DFT-s-OFDM 16 QAM	1@1	22.5	26	0.3981

25	15	35	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.3	26.8	0.4786
25	15	35	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.53	26.03	0.4009
25	15	35	379500	1897.5	DFT-s-OFDM QPSK	1@1	23.67	27.17	0.5212
25	15	35	379500	1897.5	DFT-s-OFDM 16 QAM	1@1	22.9	26.4	0.4365
25	15	40	374000	1870	DFT-s-OFDM QPSK	1@1	23.32	26.82	0.4808
25	15	40	374000	1870	DFT-s-OFDM 16 QAM	1@1	22.43	25.93	0.3917
25	15	40	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.49	26.99	0.5000
25	15	40	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.55	26.05	0.4027
25	15	40	379000	1895	DFT-s-OFDM QPSK	1@1	23.68	27.18	0.5224
25	15	40	379000	1895	DFT-s-OFDM 16 QAM	1@1	22.83	26.33	0.4295
25	15	45	374500	1872.5	DFT-s-OFDM PI/2 BPSK	120@60	23.54	27.04	0.5058
25	15	45	374500	1872.5	DFT-s-OFDM PI/2 BPSK	1@1	23.26	26.76	0.4742
25	15	45	374500	1872.5	DFT-s-OFDM PI/2 BPSK	1@240	23.95	27.45	0.5559
25	15	45	374500	1872.5	DFT-s-OFDM QPSK	120@60	23.59	27.09	0.5117
25	15	45	374500	1872.5	DFT-s-OFDM QPSK	1@1	23.22	26.72	0.4699
25	15	45	374500	1872.5	DFT-s-OFDM QPSK	1@240	23.65	27.15	0.5188
25	15	45	374500	1872.5	DFT-s-OFDM 16 QAM	120@60	22.75	26.25	0.4217
25	15	45	374500	1872.5	DFT-s-OFDM 16 QAM	1@1	22.46	25.96	0.3945
25	15	45	374500	1872.5	DFT-s-OFDM 16 QAM	1@240	22.85	26.35	0.4315
25	15	45	374500	1872.5	DFT-s-OFDM 64 QAM	120@60	21.24	24.74	0.2979
25	15	45	374500	1872.5	DFT-s-OFDM 64 QAM	1@1	20.9	24.4	0.2754
25	15	45	374500	1872.5	DFT-s-OFDM 64 QAM	1@240	21.27	24.77	0.2999
25	15	45	374500	1872.5	DFT-s-OFDM 256 QAM	120@60	19.26	22.76	0.1888
25	15	45	374500	1872.5	DFT-s-OFDM 256 QAM	1@1	18.84	22.34	0.1714
25	15	45	374500	1872.5	DFT-s-OFDM 256 QAM	1@240	19.23	22.73	0.1875
25	15	45	374500	1872.5	CP-OFDM QPSK	121@60	22.28	25.78	0.3784
25	15	45	374500	1872.5	CP-OFDM QPSK	1@1	21.82	25.32	0.3404
25	15	45	374500	1872.5	CP-OFDM QPSK	1@240	22.22	25.72	0.3733
25	15	45	376500	1882.5	DFT-s-OFDM PI/2 BPSK	120@60	23.65	27.15	0.5188
25	15	45	376500	1882.5	DFT-s-OFDM PI/2 BPSK	1@1	23.29	26.79	0.4775
25	15	45	376500	1882.5	DFT-s-OFDM PI/2 BPSK	1@240	23.64	27.14	0.5176
25	15	45	376500	1882.5	DFT-s-OFDM QPSK	120@60	23.67	27.17	0.5212
25	15	45	376500	1882.5	DFT-s-OFDM QPSK	1@1	23.24	26.74	0.4721
25	15	45	376500	1882.5	DFT-s-OFDM QPSK	1@240	23.64	27.14	0.5176
25	15	45	376500	1882.5	DFT-s-OFDM 16 QAM	120@60	22.87	26.37	0.4335
25	15	45	376500	1882.5	DFT-s-OFDM 16 QAM	1@1	22.55	26.05	0.4027
25	15	45	376500	1882.5	DFT-s-OFDM 16 QAM	1@240	22.87	26.37	0.4335
25	15	45	376500	1882.5	DFT-s-OFDM 64 QAM	120@60	21.37	24.87	0.3069
25	15	45	376500	1882.5	DFT-s-OFDM 64 QAM	1@1	20.92	24.42	0.2767
25	15	45	376500	1882.5	DFT-s-OFDM 64 QAM	1@240	21.22	24.72	0.2965
25	15	45	376500	1882.5	DFT-s-OFDM 256 QAM	120@60	19.34	22.84	0.1923
25	15	45	376500	1882.5	DFT-s-OFDM 256 QAM	1@1	18.92	22.42	0.1746
25	15	45	376500	1882.5	DFT-s-OFDM 256 QAM	1@240	19.49	22.99	0.1991
25	15	45	376500	1882.5	CP-OFDM QPSK	121@60	22.38	25.88	0.3873
25	15	45	376500	1882.5	CP-OFDM QPSK	1@1	21.93	25.43	0.3491

25	15	45	376500	1882.5	CP-OFDM QPSK	1@240	22.24	25.74	0.3750
25	15	45	378500	1892.5	DFT-s-OFDM PI/2 BPSK	120@60	23.68	27.18	0.5224
25	15	45	378500	1892.5	DFT-s-OFDM PI/2 BPSK	1@1	23.35	26.85	0.4842
25	15	45	378500	1892.5	DFT-s-OFDM PI/2 BPSK	1@240	23.55	27.05	0.5070
25	15	45	378500	1892.5	DFT-s-OFDM QPSK	120@60	23.71	27.21	0.5260
25	15	45	378500	1892.5	DFT-s-OFDM QPSK	1@1	23.36	26.86	0.4853
25	15	45	378500	1892.5	DFT-s-OFDM QPSK	1@240	23.51	27.01	0.5023
25	15	45	378500	1892.5	DFT-s-OFDM 16 QAM	120@60	22.81	26.31	0.4276
25	15	45	378500	1892.5	DFT-s-OFDM 16 QAM	1@1	22.63	26.13	0.4102
25	15	45	378500	1892.5	DFT-s-OFDM 16 QAM	1@240	22.98	26.48	0.4446
25	15	45	378500	1892.5	DFT-s-OFDM 64 QAM	120@60	21.37	24.87	0.3069
25	15	45	378500	1892.5	DFT-s-OFDM 64 QAM	1@1	21.07	24.57	0.2864
25	15	45	378500	1892.5	DFT-s-OFDM 64 QAM	1@240	21.28	24.78	0.3006
25	15	45	378500	1892.5	DFT-s-OFDM 256 QAM	120@60	19.37	22.87	0.1936
25	15	45	378500	1892.5	DFT-s-OFDM 256 QAM	1@1	19.1	22.6	0.1820
25	15	45	378500	1892.5	DFT-s-OFDM 256 QAM	1@240	19.28	22.78	0.1897
25	15	45	378500	1892.5	CP-OFDM QPSK	121@60	22.36	25.86	0.3855
25	15	45	378500	1892.5	CP-OFDM QPSK	1@1	22.11	25.61	0.3639
25	15	45	378500	1892.5	CP-OFDM QPSK	1@240	22.2	25.7	0.3715

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	0.0063	**PASS**	NV
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0060	**PASS**	LV
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0024	**PASS**	HV
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0035	**PASS**	-30℃
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0068	**PASS**	-20℃
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0061	**PASS**	-10℃
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0022	**PASS**	0℃
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0032	**PASS**	10℃
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0063	**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	0.0043	**PASS**	40℃
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	0.0056	**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	4.53	13	**PASS**
25	15	20	376500	1882.5	DFT-s-OFDM QPSK	100@0	5.67	13	**PASS**

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

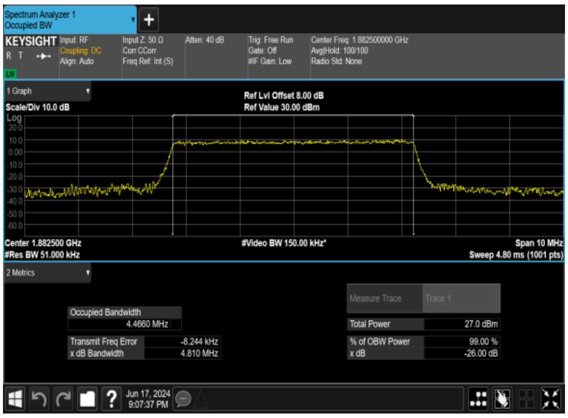
N25(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

Occupied Bandwidth

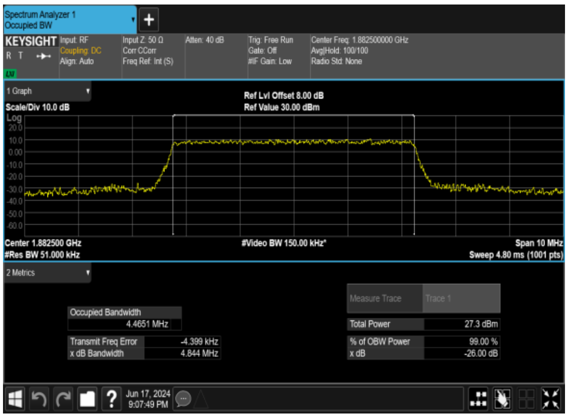
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB BW (MHz)
25	15	5	376500	1882.5	CP-OFDM QPSK	25@0	4.466	4.81
25	15	5	376500	1882.5	CP-OFDM 16 QAM	25@0	4.4651	4.844
25	15	5	376500	1882.5	CP-OFDM 64 QAM	25@0	4.4732	4.88
25	15	5	376500	1882.5	CP-OFDM 256 QAM	25@0	4.4638	4.823
25	15	10	376500	1882.5	CP-OFDM QPSK	52@0	9.2732	9.737
25	15	10	376500	1882.5	CP-OFDM 16 QAM	52@0	9.2784	9.774
25	15	10	376500	1882.5	CP-OFDM 64 QAM	52@0	9.2987	9.679
25	15	10	376500	1882.5	CP-OFDM 256 QAM	52@0	9.265	9.724
25	15	15	376500	1882.5	CP-OFDM QPSK	79@0	14.07	14.64
25	15	15	376500	1882.5	CP-OFDM 16 QAM	79@0	14.105	14.65
25	15	15	376500	1882.5	CP-OFDM 64 QAM	79@0	14.09	14.62
25	15	15	376500	1882.5	CP-OFDM 256 QAM	79@0	14.099	14.63
25	15	20	376500	1882.5	CP-OFDM QPSK	106@0	18.907	19.59
25	15	20	376500	1882.5	CP-OFDM 16 QAM	106@0	18.916	19.66
25	15	20	376500	1882.5	CP-OFDM 64 QAM	106@0	18.927	19.63
25	15	20	376500	1882.5	CP-OFDM 256 QAM	106@0	18.914	19.67
25	15	25	376500	1882.5	CP-OFDM QPSK	133@0	23.767	24.65
25	15	25	376500	1882.5	CP-OFDM 16 QAM	133@0	23.748	24.7
25	15	25	376500	1882.5	CP-OFDM 64 QAM	133@0	23.757	24.68
25	15	25	376500	1882.5	CP-OFDM 256 QAM	133@0	23.73	24.71
25	15	30	376500	1882.5	CP-OFDM QPSK	160@0	28.488	29.68
25	15	30	376500	1882.5	CP-OFDM 16 QAM	160@0	28.506	29.55
25	15	30	376500	1882.5	CP-OFDM 64 QAM	160@0	28.519	29.66
25	15	30	376500	1882.5	CP-OFDM 256 QAM	160@0	28.455	29.54
25	15	35	376500	1882.5	CP-OFDM QPSK	188@0	33.655	34.78

25	15	35	376500	1882.5	CP-OFDM 16 QAM	188@0	33.564	34.69
25	15	35	376500	1882.5	CP-OFDM 64 QAM	188@0	33.646	34.7
25	15	35	376500	1882.5	CP-OFDM 256 QAM	188@0	33.438	34.67
25	15	40	376500	1882.5	CP-OFDM QPSK	216@0	38.483	39.88
25	15	40	376500	1882.5	CP-OFDM 16 QAM	216@0	38.532	39.86
25	15	40	376500	1882.5	CP-OFDM 64 QAM	216@0	38.559	40.05
25	15	40	376500	1882.5	CP-OFDM 256 QAM	216@0	38.567	40.04
25	15	45	376500	1882.5	CP-OFDM QPSK	242@0	43.173	44.62
25	15	45	376500	1882.5	CP-OFDM 16 QAM	242@0	43.211	44.63
25	15	45	376500	1882.5	CP-OFDM 64 QAM	242@0	43.12	44.61
25	15	45	376500	1882.5	CP-OFDM 256 QAM	242@0	43.24	44.68

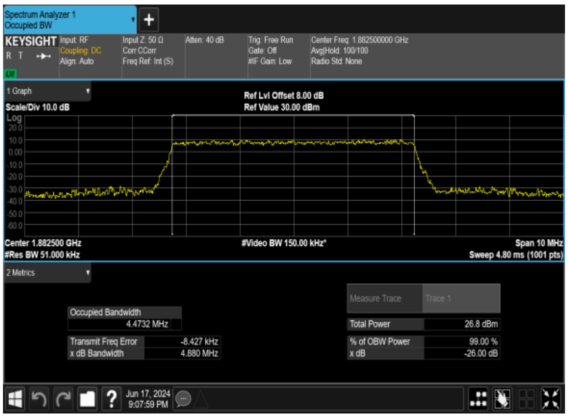
N25(5M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



N25(5M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

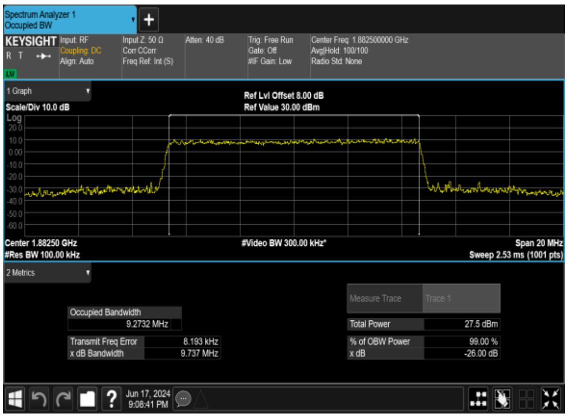


N25(5M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

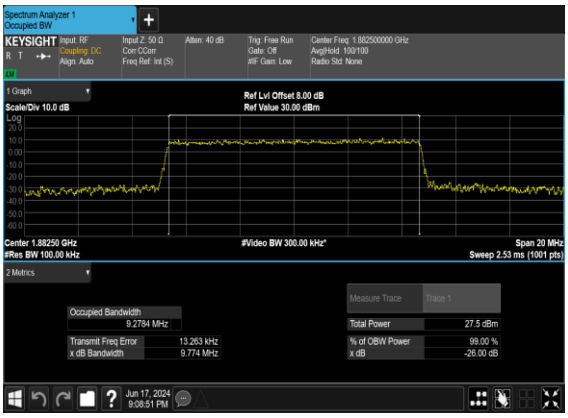


N25(5M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

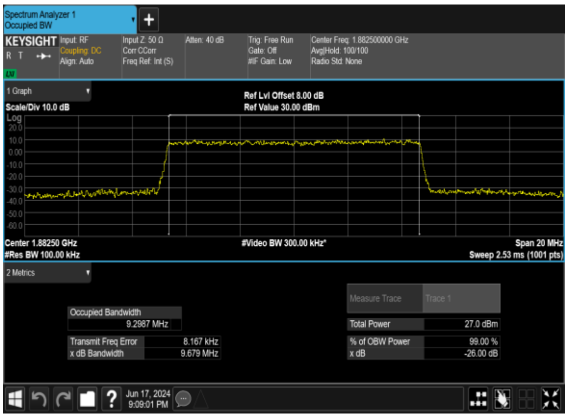
N25(10M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



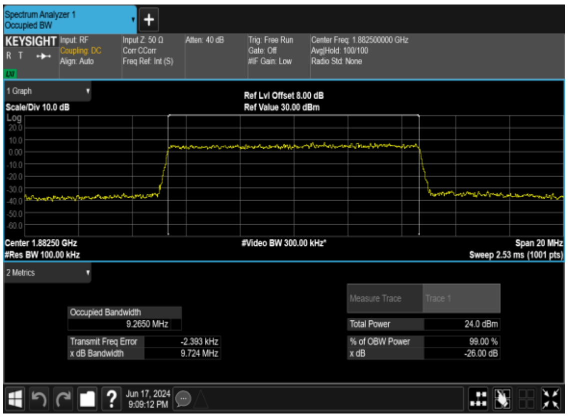
N25(10M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



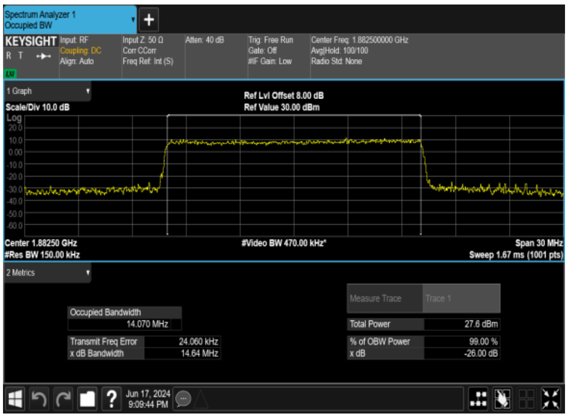
N25(10M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



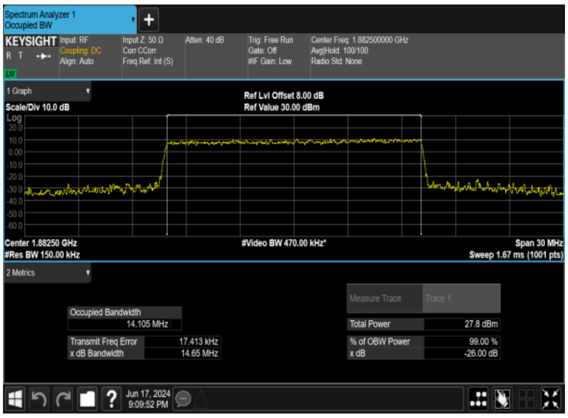
N25(10M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



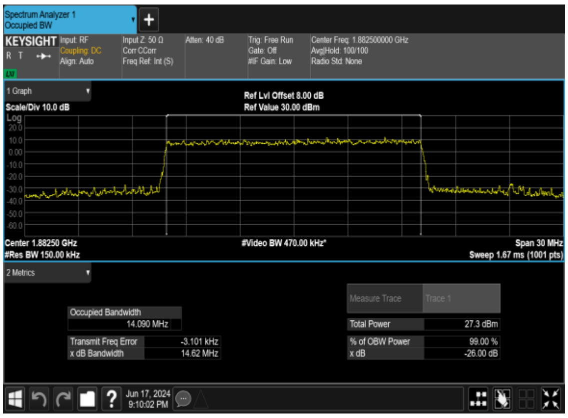
N25(15M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



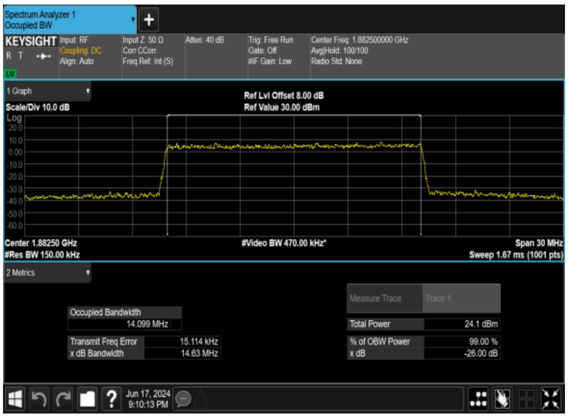
N25(15M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N25(15M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

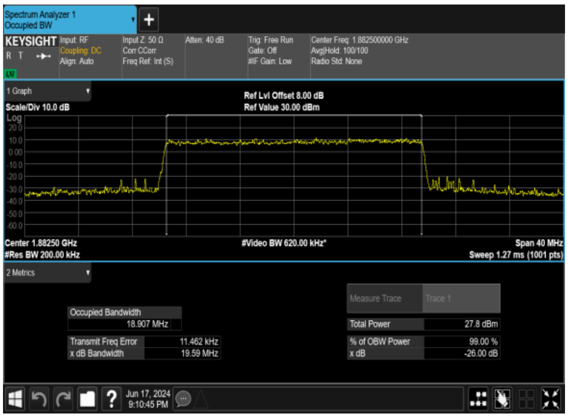


N25(15M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

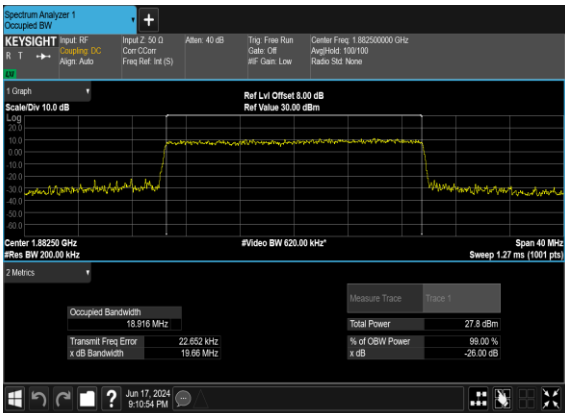


TEL : +86-755-8637-9589
FAX : +86-755-8637-9595
FCC ID : 2ADZR5G16B

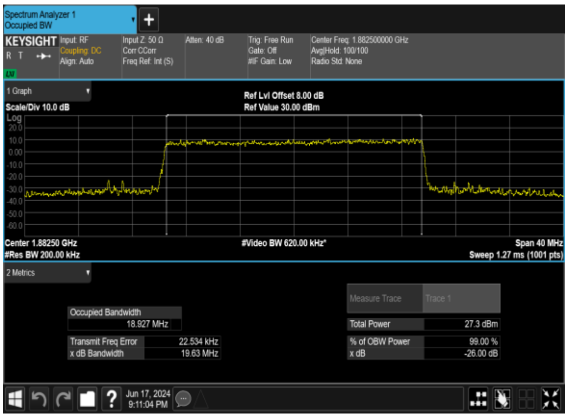
N25(20M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



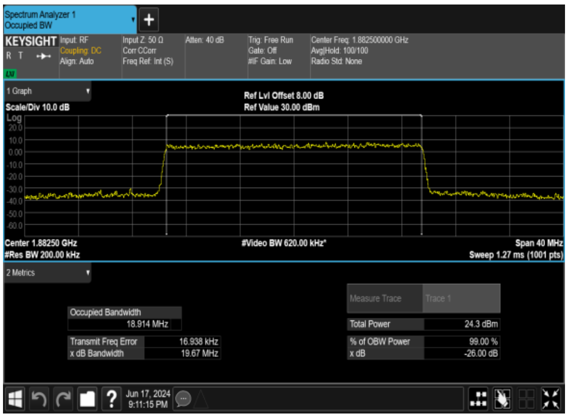
N25(20M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



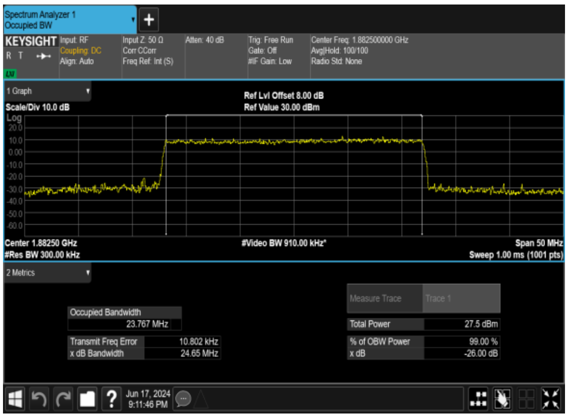
N25(20M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



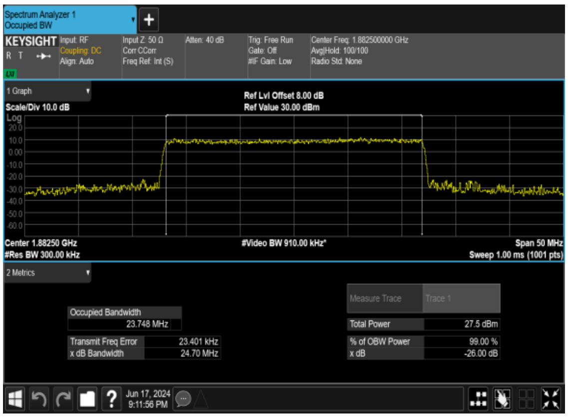
N25(20M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



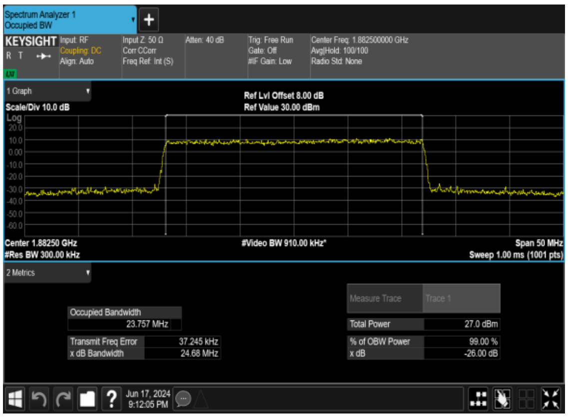
N25(25M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



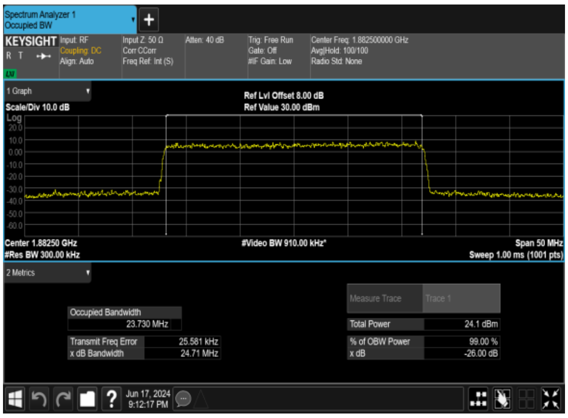
N25(25M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



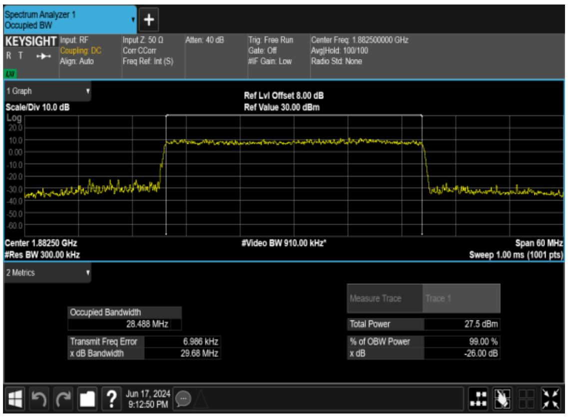
N25(25M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



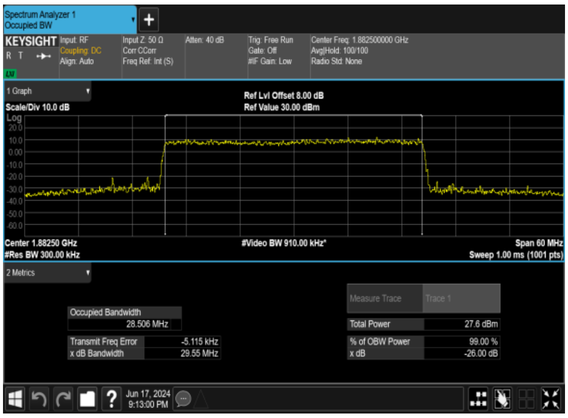
N25(25M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



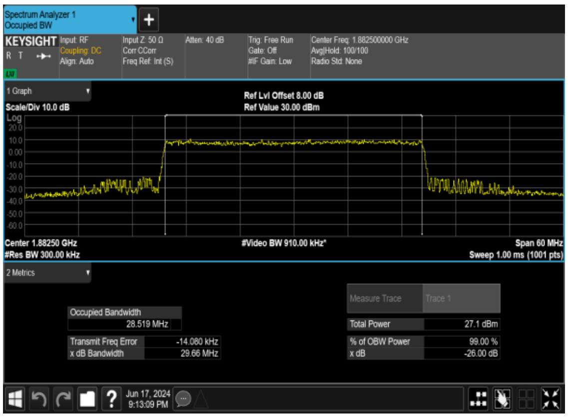
N25(30M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



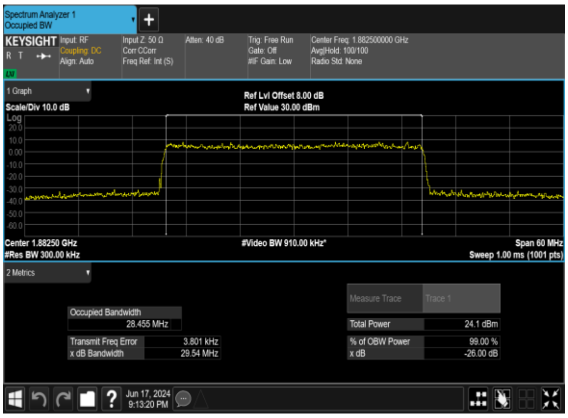
N25(30M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



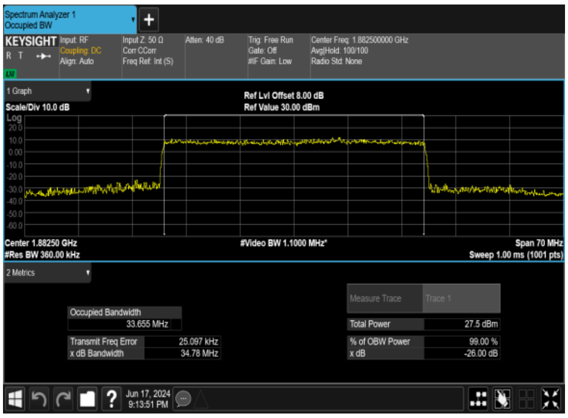
N25(30M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



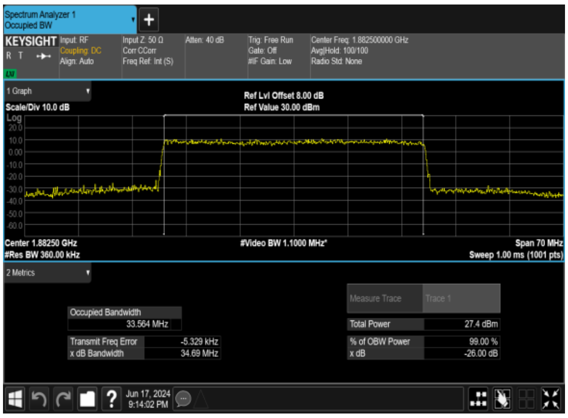
N25(30M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



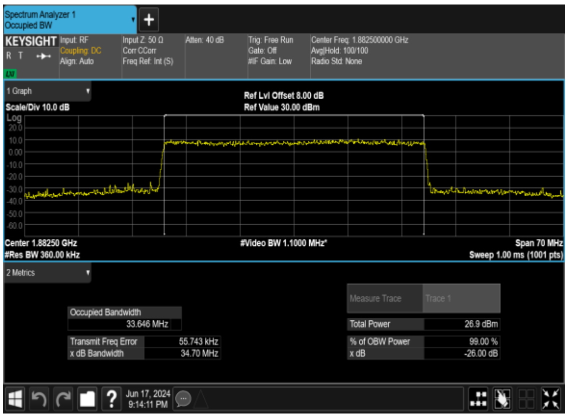
N25(35M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



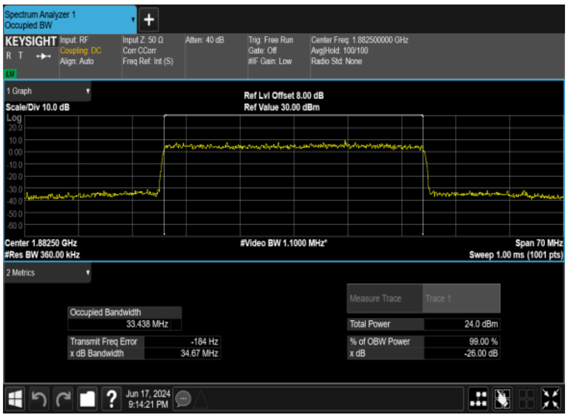
N25(35M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



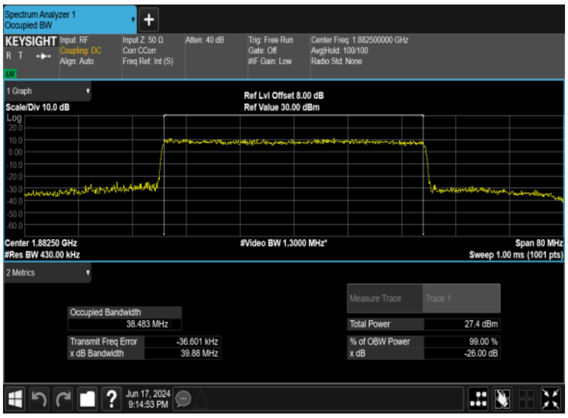
N25(35M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



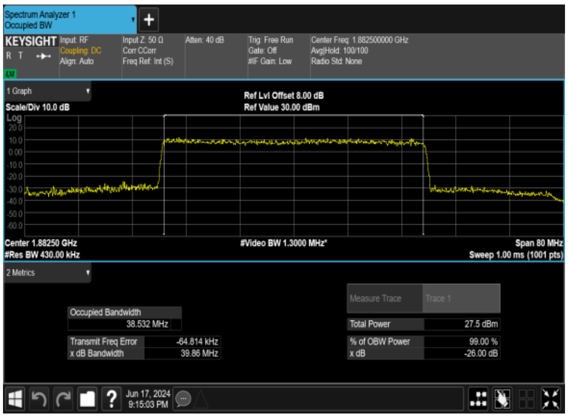
N25(35M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



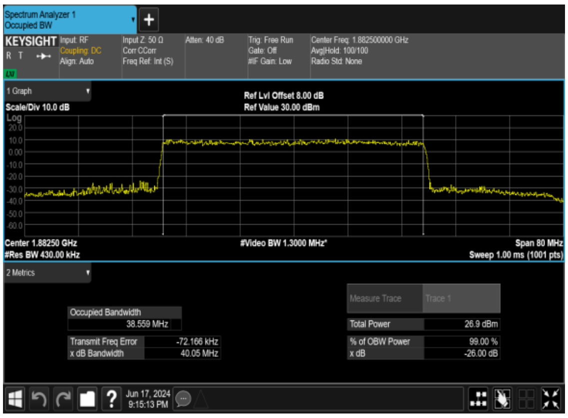
N25(40M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



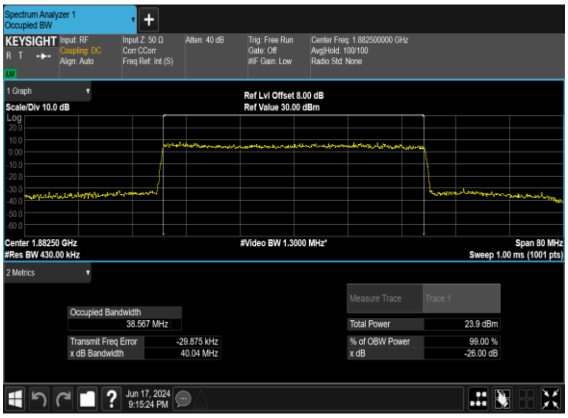
N25(40M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



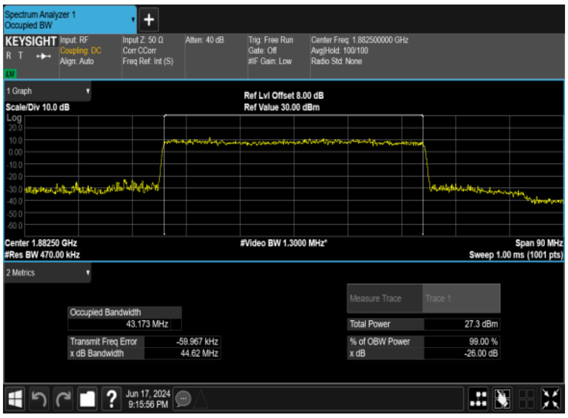
N25(40M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



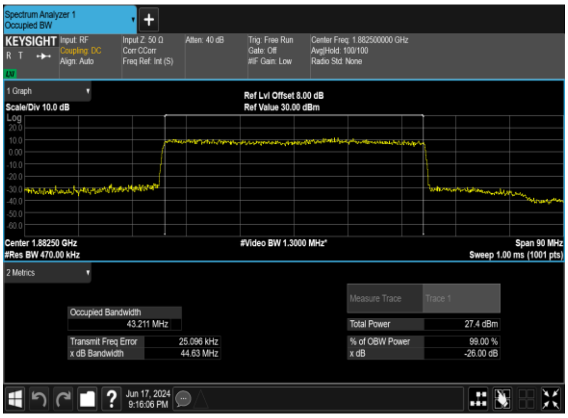
N25(40M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



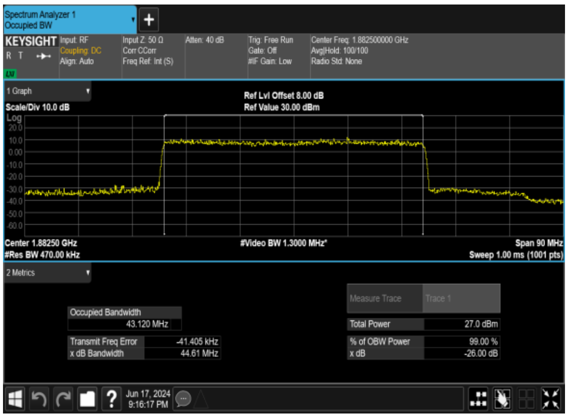
N25(45M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



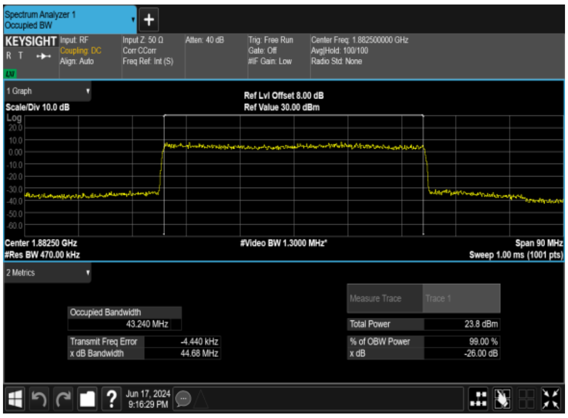
N25(45M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N25(45M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



N25(45M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

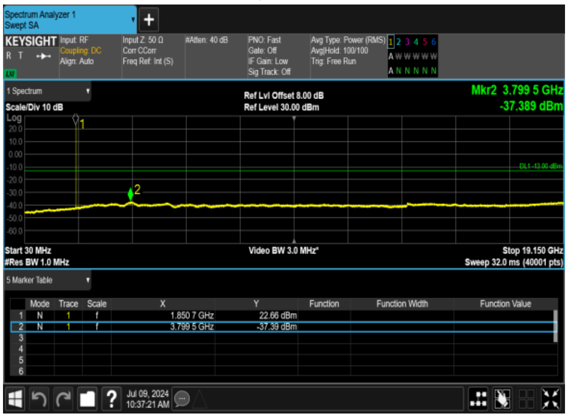


Conducted Spurious Emissions

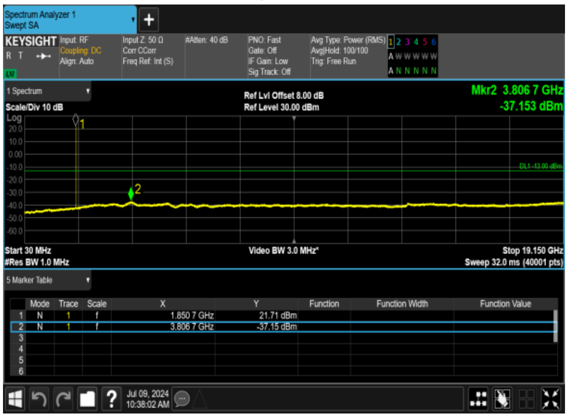
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
25	15	5	370500	1852.5	DFT-s-OFDM BPSK	1@0	see graph	---
25	15	5	370500	1852.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
25	15	5	370500	1852.5	DFT-s-OFDM QPSK	1@0	see graph	---
25	15	5	370500	1852.5	DFT-s-OFDM QPSK	1@0	see graph	**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**

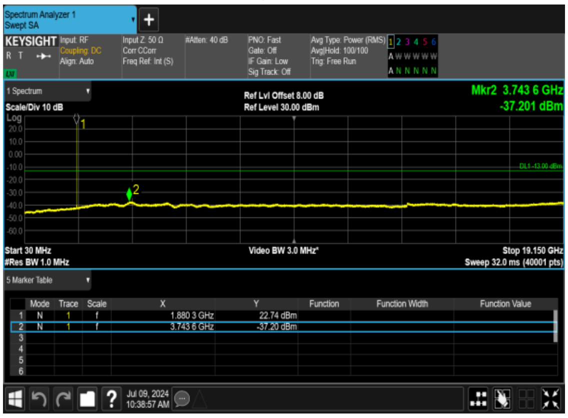
N25(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



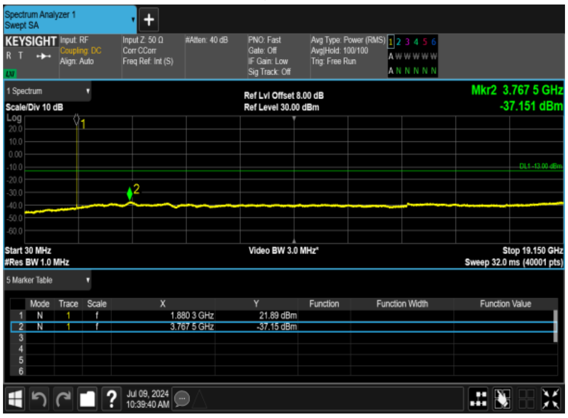
N25(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



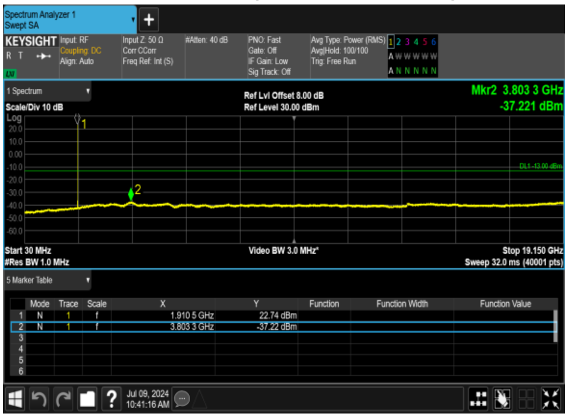
N25(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



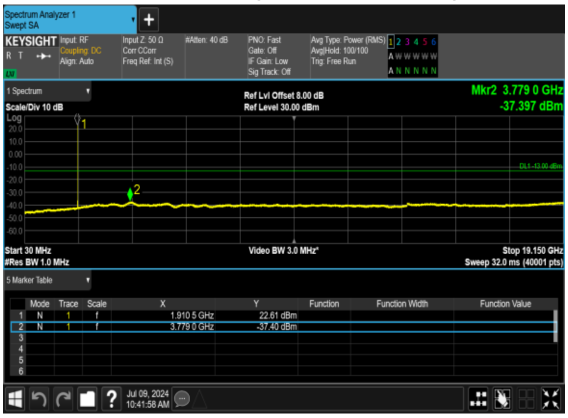
N25(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



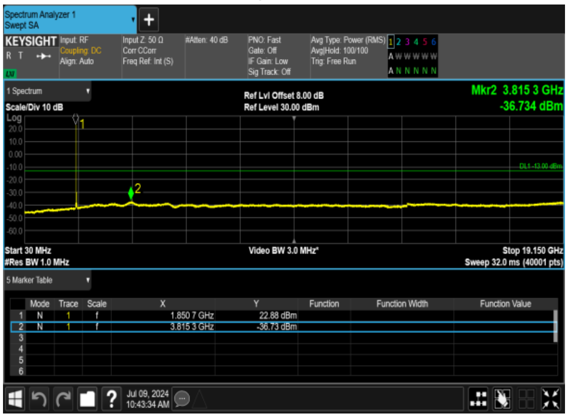
N25(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



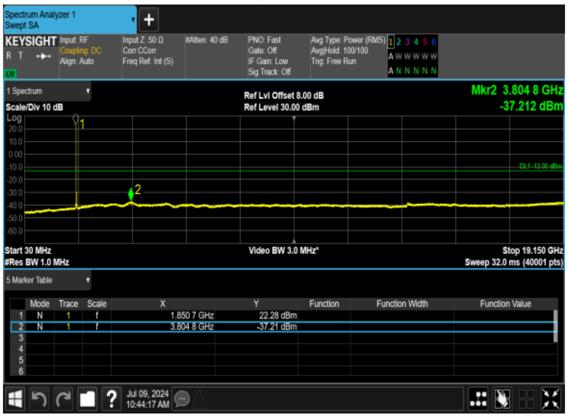
N25(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



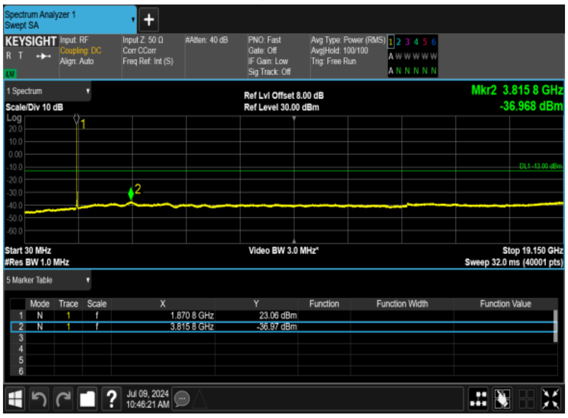
N25(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



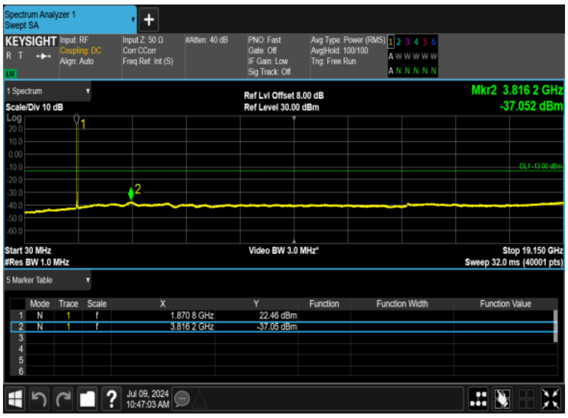
N25(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



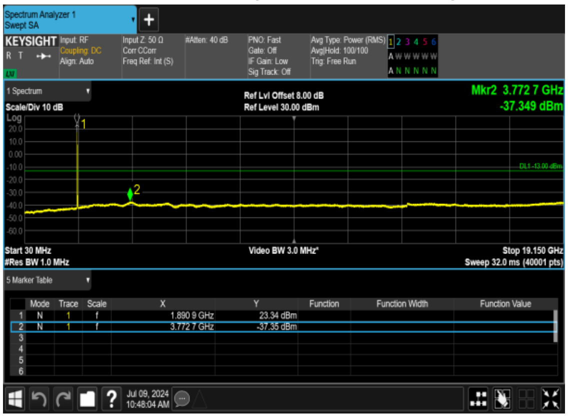
N25(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



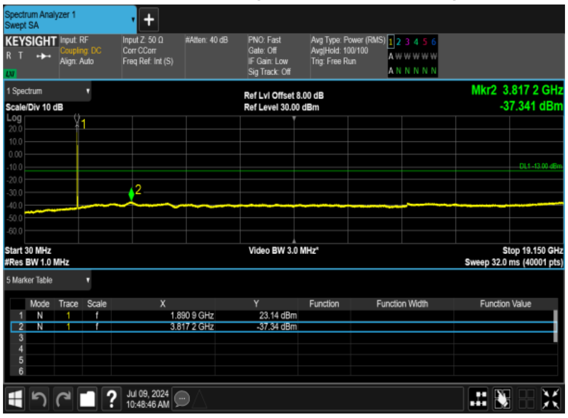
N25(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



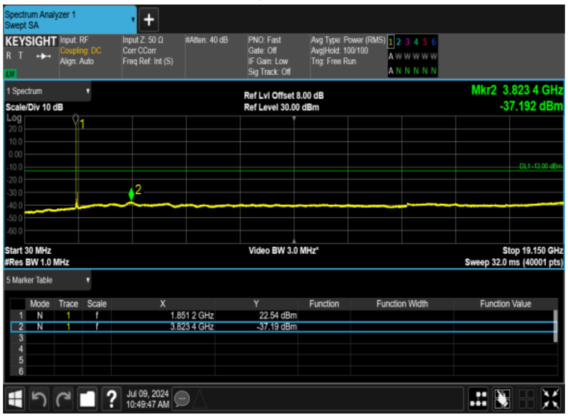
N25(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



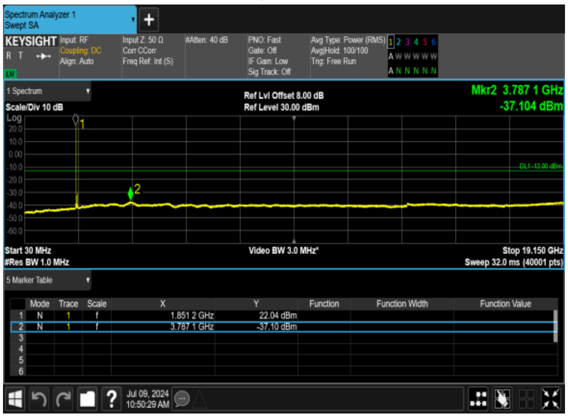
N25(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



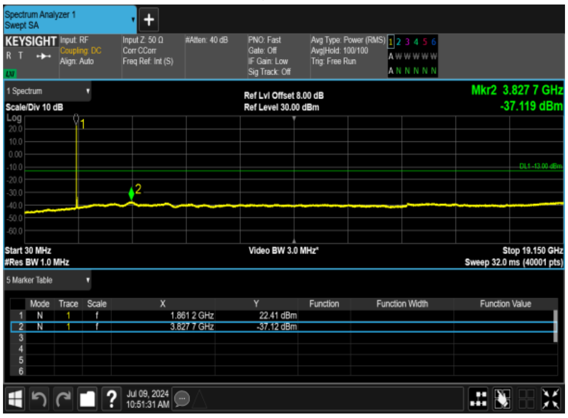
N25(45M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



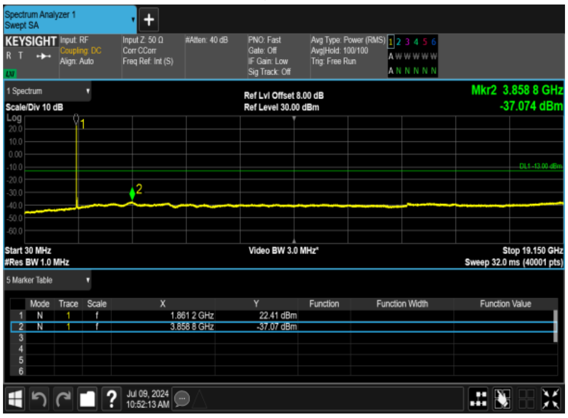
N25(45M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



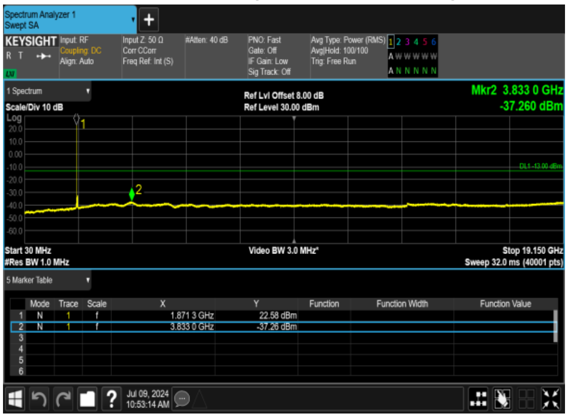
N25(45M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



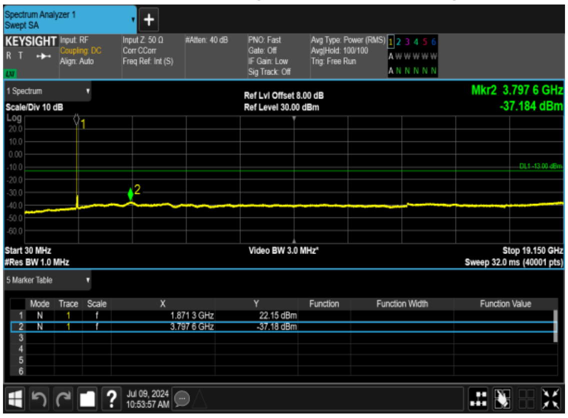
N25(45M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



N25(45M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



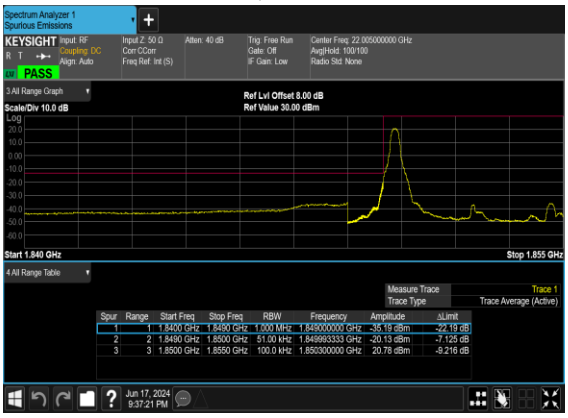
N25(45M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



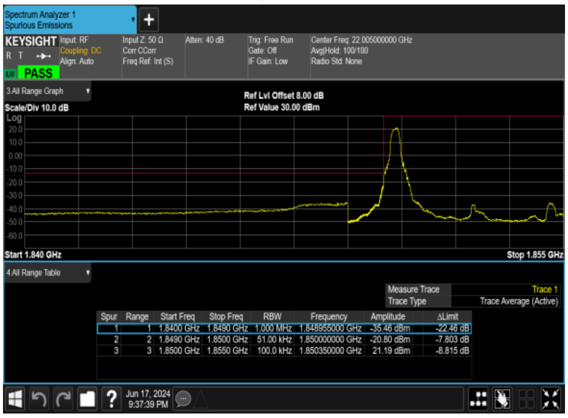
Conducted Band Edge

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**

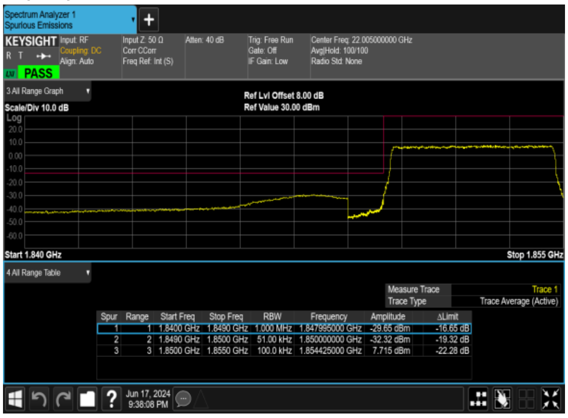
N25(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



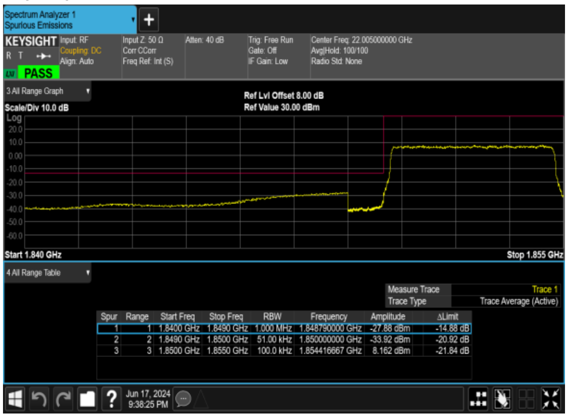
N25(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



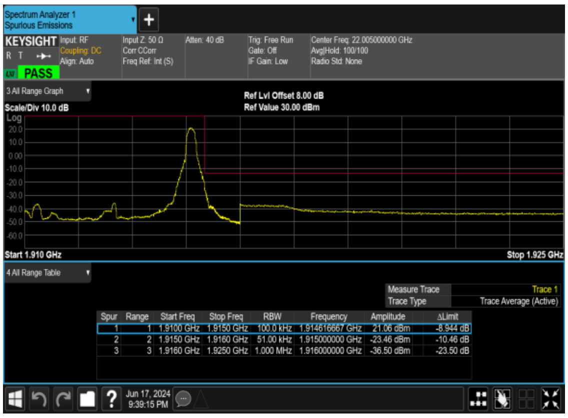
N25(5M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



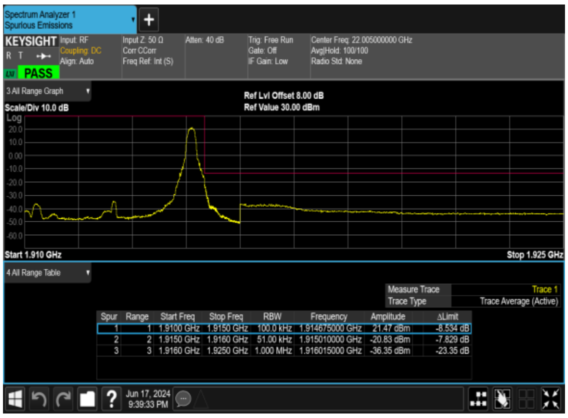
N25(5M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



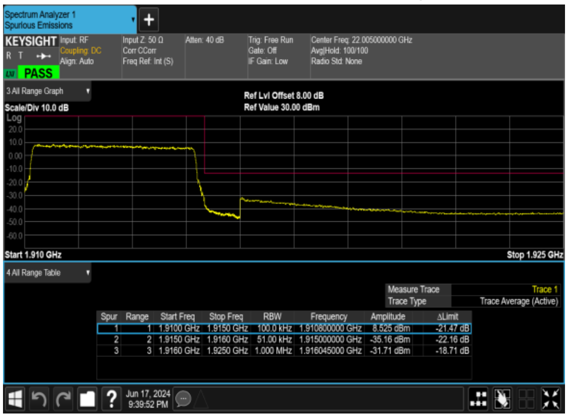
N25(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



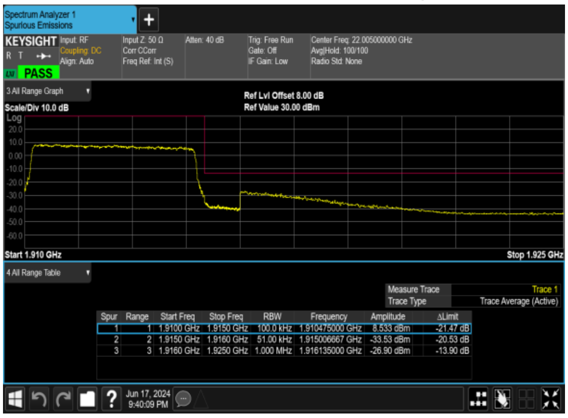
N25(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



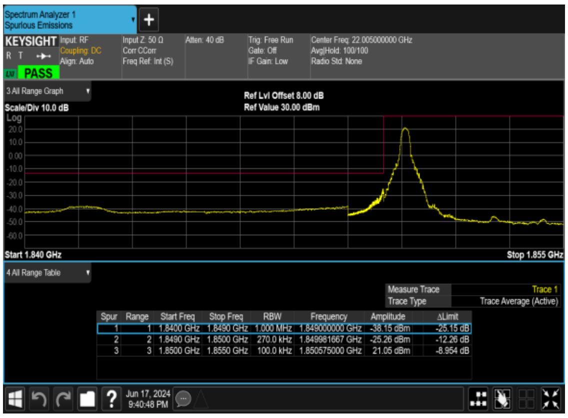
N25(5M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



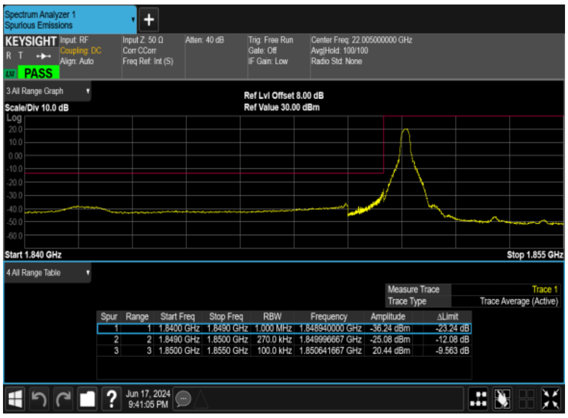
N25(5M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



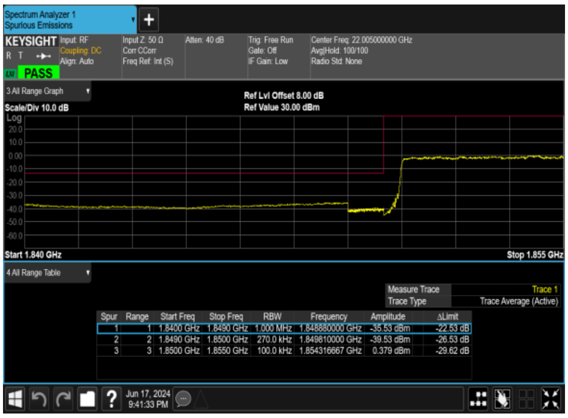
N25(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



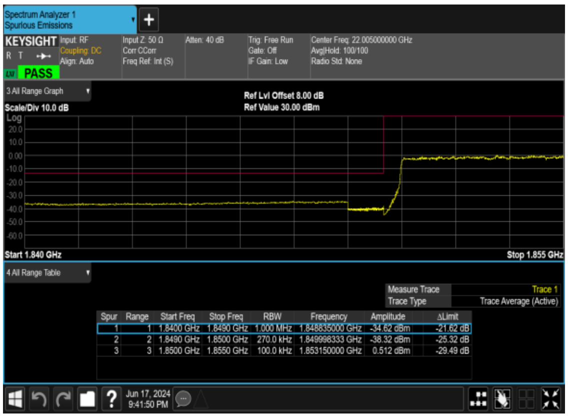
N25(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



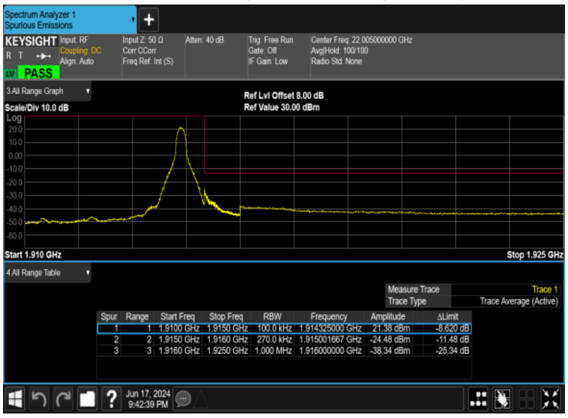
N25(25M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



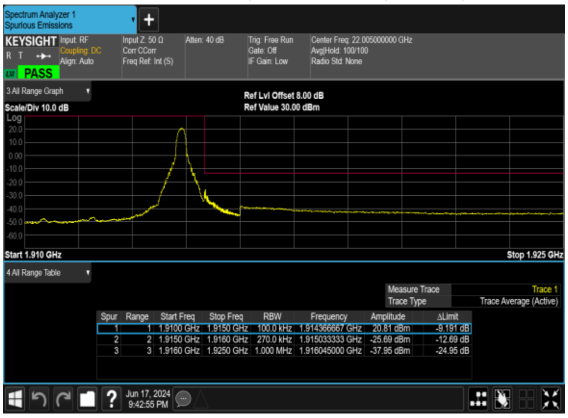
N25(25M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



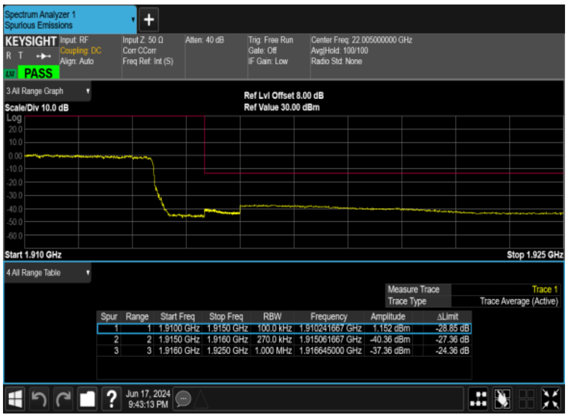
N25(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



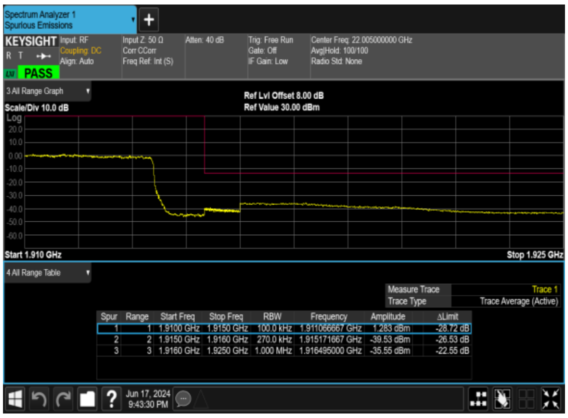
N25(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



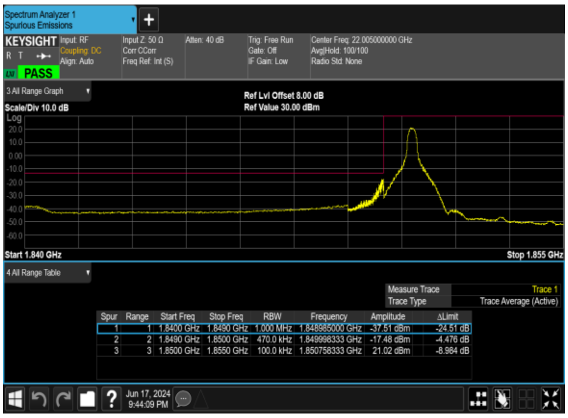
N25(25M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



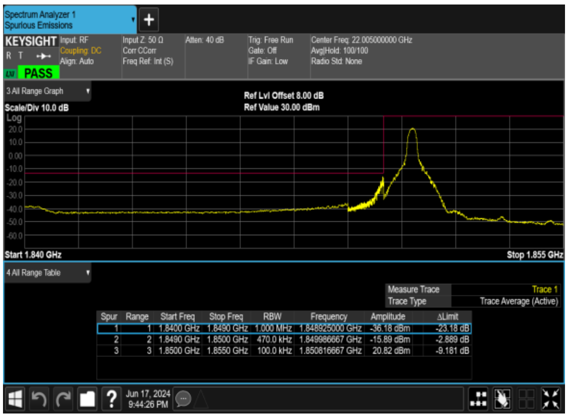
N25(25M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



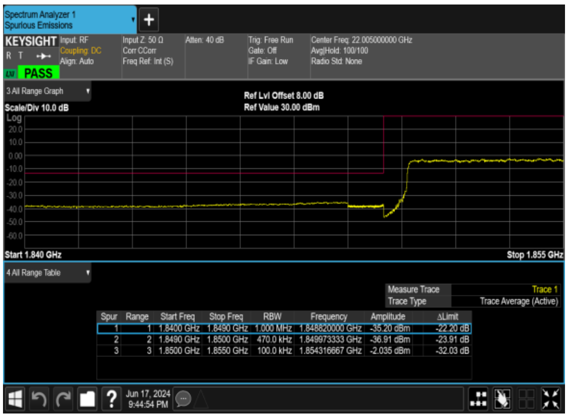
N25(45M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



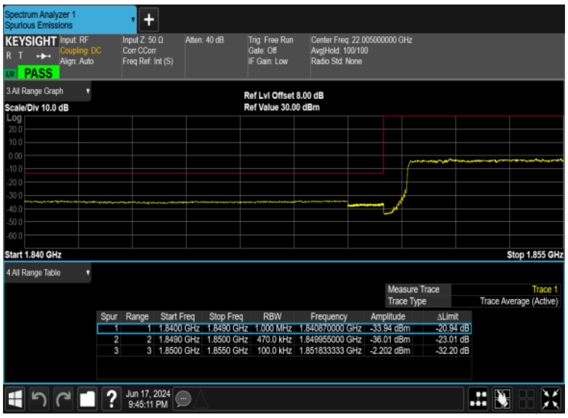
N25(45M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



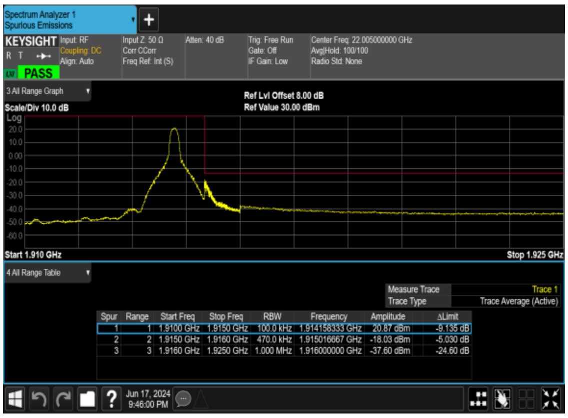
N25(45M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



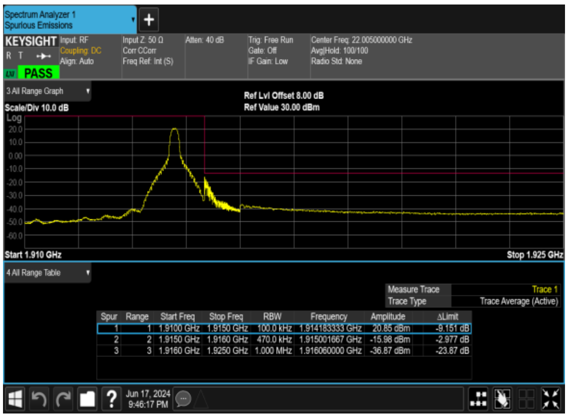
N25(45M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



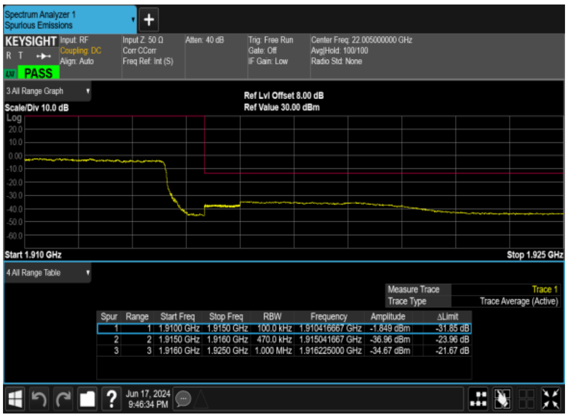
N25(45M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



N25(45M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



N25(45M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



N25(45M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH