FCC RF Test Report

APPLICANT	: Nokia Shanghai Bell Co., Ltd.
EQUIPMENT	: Nokia FastMile 5G Gateway 12
BRAND NAME	: Nokia
MODEL NAME	: 5G31-03W-B
FCC ID	: 2ADZR5G3103WB
STANDARD	: 47 CFR Part 2, 27
CLASSIFICATION	: PCS Licensed Transmitter (PCB)
CLASSIFICATION	: Apr. 06, 2024 ~ May 09, 2024

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.

This report contains data that were produced under subcontract by Sporton International Inc. (Shenzhen).

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

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People's Republic of China

TABLE OF CONTENTS

REVISION HISTORY **3**

SUMMARY OF TEST RESULT **4**

1 GENERAL DESCRIPTION **5**

1.1 Applicant 5
1.2 Manufacturer 5
1.3 Product Feature of Equipment Under Test 5
1.4 Product Specification of Equipment Under Test 6
1.5 Modification of EUT 7
1.6 Maximum Conducted Power and ERP/EIRP and Emission Designator 7
1.7 Testing Location 9
1.8 Test Software 10
1.9 Applicable Standards 10

2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST **11**

2.1 Test Mode 11
2.2 Connection Diagram of Test System 12
2.3 Support Unit used in test configuration and system 13
2.4 Measurement Results Explanation Example 13
2.5 Frequency List of Low/Middle/High Channels 14

3 CONDUCTED TEST ITEMS **16**

3.1 Measuring Instruments 16
3.2 Test Setup 16
3.3 Test Result of Conducted Test 16
3.4 Conducted Output Power and ERP/EIRP 17
3.5 Peak-to-Average Ratio 18
3.6 Occupied Bandwidth 19
3.7 Conducted Band Edge 20
3.8 Conducted Spurious Emission 22
3.9 Frequency Stability 23

4 RADIATED TEST ITEMS **24**

4.1 Measuring Instruments 24
4.2 Test Setup 24
4.3 Test Result of Radiated Test 25
4.4 Radiated Spurious Emission 26

5 LIST OF MEASURING EQUIPMENT **27**

6 MEASUREMENT UNCERTAINTY **28**

APPENDIX A. TEST RESULTS OF CONDUCTED TEST

APPENDIX B. TEST RESULTS OF RADIATED TEST

APPENDIX C. TEST SETUP PHOTOGRAPHS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG432101I	Rev. 01	Initial issue of report	Jun. 21, 2024

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	§2.1046 §27.50(h)(2)	Equivalent Isotropic Radiated Power (5G NR n7, n41, n38)	EIRP < 2Watt		
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (5G NR n66)	EIRP < 1 Watt		
3.5	N/A	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	Reporting Only	PASS	-
3.7	§2.1051 §27.53(h) §27.53(m)(4)	Conducted Band Edge Measurement (5G NR n66) (5G NR n7, n41, n38)	< 43+10log10(P[Watts])	PASS	-
3.8	§2.1051 §27.53(h) §27.53(m)(4)	Conducted Spurious Emission (5G NR n66) (5G NR n7, n41, n38)	< 43+10log10(P[Watts])	PASS	-
3.9	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within Authorized Band	PASS	-
4.4	§2.1053 §27.53(h) §27.53(m)(4)	Radiated Spurious Emission (5G NR n66) (5G NR n7, n41, n38)	< 43+10log10(P[Watts])	PASS	Under limit 17.56 dB at 7542.000 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 Gateway 12
Brand Name	Nokia
Model Name	5G31-03W-B
FCC ID	2ADZR5G3103WB
SN / IMEI Code	Conducted: KLT241102369(SN) Radiation: 355630740001412(IMEI)
HW Version	3TG03021Exxx (x may be from A to Z)
SW Version	5GGW-QCOM7X_D240200B31T0601E0496
EUT Stage	Identical Prototype

Remark: There are three samples under test, only different for the antenna manufacturers as below. According to the difference, we choose sample 1 to full test and the sample 2/3 are verified the RSE worse cases of LTE/NR in another report.

Ant Description	P/N	Vendor_1	Vendor_2	Vendor_3
Ant0&WiFi3_2.4G	3TG03393AAAA	GW12-A0W3	N42NKASA-PK1-D1X95BUD150U4LI	NKH049-15-000-R
Ant1&WiFi2_6G	3TG03394AAAA	GW12-A1W2	N40NKASB-PK1-E1X190BUE110U4LI	NKH050-15-000-R
Ant 2,Ant3,Ant5,Ant7	3TG03395AAAA	GW12-A2357	N40NKASC-PK1-R150U4LID115U4LI E165U4LIA105U4LI	NKH051-15-000-R
Ant4,Ant6&Ant9	3TG03396AAAA	GW12-A469	N40NKASD-PK1-A135U4LID170U4LI E200U4LI	NKH052-15-000-R
WiFi1_6G	3TG03397AAAA	GW12-W1	N06NKASF-PK1-A1X95BU	NKH053-15-000-R
WiFi4_2.4G	3TG03398AAAA	GW12-W4	N01NKASG-PK1-R1X160BU	NKH054-15-000-R
WiFi5_5G	3TG03399AAAA	GW12-W5	N02NKASH-PK1-D1X90BU	NKH055-15-000-R
Ant8&WiFi6_5G	3TG03400AAAA	GW12-A8W6	N43NKASE-PK1-E1X95BUA165U4LI	NKH056-15-000-R
WiFi7_5G	3TG03401AAAA	GW12-W7	N02NKASJ-PK1-A1X95BU	NKH057-15-000-R
WiFi8_5G	3TG03402AAAA	GW12-W8	N02NKASK-PK1-R1X115BU	NKH058-15-000-R

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz
Rx Frequency	5G NR n7 : 2620 MHz ~ 2690 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n66 : 2110 MHz~ 2200 MHz
Bandwidth	**For SCS 15kHz:** n7/n66: 5MHz/ 10MHz/ 15MHz/ 20MHz/ 25MHz/ 30MHz/ 40MHz **For SCS 30kHz:** n38: 20MHz/ 30MHz/ 40MHz n41 : 20MHz/ 30MHz/ 40MHz/ 50MHz/ 60MHz/ 70MHz/ 80MHz/ 90MHz/ 100MHz
SCS	15kHz, 30kHz
Antenna Gain Description	**<Ant. 0>** n66: 2.1 dBi **<Ant. 1>** n66: 3.2 dBi **<Ant. 8>** n38: 6.0 dBi n41: 6.0 dBi **<Ant. 9>** n7: 4.5 dBi **<MIMO Ant. 0+1>(See Remark6)** n66: 1.5 dBi **<MIMO Ant. 8+9>(See Remark6&7)** n38: 3.8 dBi n41: 3.8 dBi **<MIMO Ant. 8+9>(See Remark6)** n7: 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 EIRP is calculated from max output power and max antenna gain, only the maximum EIRP are shown in the report, Ant.1(n66)/ Ant.8(n38/41)/ Ant.9(n7) for SISO mode and Ant.0+1(n66)/ Ant.8+9(n7/38/41) for UL MIMO mode.
2. 5G NR n41/n66 support SA mode and NSA mode, n7/n38 support SA mode only. According to the maximum power between SA and NSA mode, SA covers NSA mode for n66, and NSA covers SA mode for n41.
3. 5G NR n66 supports antenna switch function, SA mode work on Ant.0, NSA mode switch to Ant.1(for DC_48A_n66A remain work on Ant.0). According to the maximum output power, conducted items full test the Ant.0, RSE test Ant.0 for SA mode and Ant.1 for NSA mode.
4. 5G NR n7/n38/n41/n66 support UL MIMO mode, n7/n66 for Power class 2 and n41 for Power class 1.5, and UL MIMO mode only support CP-OFDM Modulation for n7/n38/n66.
5. 5G NR n41 supports HPUE mode(Power class 2) for SISO mode.
6. The UL MIMO mode only work on Ant.0+1 for n66 & Ant.8+9 for n7/38/41, MIMO Antenna gain is

calculated according to KDB 662911 D01.

7. For 5G NR n38/n41, SISO mode work on Ant.8, but both Ant.2&8 need to be connected during testing; UL MIMO mode work on Ant.8+9, but Ant.2&8&3&9 need to be connected simultaneously during testing.
8. For UL MIMO mode, the conducted BE/Spurious are tested at single antenna port and add 10*log(NANT) according to KDB 662911 D01.
9. All the supported EN-DC combinations are verified conducted power, only the EN-DC combination with highest power are shown in the report.
10. The EN-DC mode combination could be referred to the product spec.

1.5 Modification of EUT

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

1.6 Maximum EIRP Power and Emission Designator

5G NR n7 SISO		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	2502.5 ~ 2567.5	0.6194	4M47G7D	0.5012	4M47W7D
10	2505.0 ~ 2565.0	0.6081	9M28G7D	0.4932	9M30W7D
15	2507.5 ~ 2562.5	0.5970	14M1G7D	0.4797	14M1W7D
20	2510.0 ~ 2560.0	0.5848	18M9G7D	0.4797	18M9W7D
25	2512.5 ~ 2557.5	0.6209	23M8G7D	0.5164	23M8W7D
30	2515.0 ~ 2555.0	0.6339	28M6G7D	0.5058	28M6W7D
40	2520.0 ~ 2550.0	0.6383	38M6G7D	0.5082	38M7W7D

5G NR n7 UL MIMO		QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	2502.5 ~ 2567.5	0.6457	4M47G7D	0.5623	4M47W7D
10	2505.0 ~ 2565.0	0.6457	9M28G7D	0.5768	9M30W7D
15	2507.5 ~ 2562.5	0.6442	14M1G7D	0.5781	14M1W7D
20	2510.0 ~ 2560.0	0.6486	18M9G7D	0.5689	19M0W7D
25	2512.5 ~ 2557.5	0.6792	23M8G7D	0.6095	23M8W7D
30	2515.0 ~ 2555.0	0.6871	28M6G7D	0.6310	28M6W7D
40	2520.0 ~ 2550.0	0.6887	38M7G7D	0.6166	38M6W7D

5G NR n38 SISO		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)
20	2580.0 ~ 2610.0	0.9141	18M2G7D	0.7362	18M2W7D
30	2585.0 ~ 2605.0	0.9550	27M9G7D	0.7362	28M0W7D
40	2590.0 ~ 2600.0	0.9661	37M8G7D	0.7551	38M0W7D

5G NR n38 UL MIMO		QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	2580.0 ~ 2610.0	0.4335	18M2G7D	0.3793	18M2W7D
30	2585.0 ~ 2605.0	0.4667	27M9G7D	0.4130	27M9W7D
40	2590.0 ~ 2600.0	0.4699	37M9G7D	0.4178	37M9W7D

5G NR n41 SISO		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)
20	2506.02 ~ 2679.99	1.6866	18M2G7D	1.3002	18M2W7D
30	2511.00 ~ 2674.98	1.7539	27M9G7D	1.3804	28M0W7D
40	2516.01 ~ 2670.00	1.7140	37M8G7D	1.3740	38M0W7D
50	2521.02 ~ 2664.99	1.8239	47M5G7D	1.4521	47M6W7D
60	2526.00 ~ 2659.98	1.8030	57M8G7D	1.4060	58M0W7D
70	2531.01 ~ 2655.00	1.7458	67M5G7D	1.3932	67M7W7D
80	2536.02 ~ 2649.99	1.7783	77M7G7D	1.4223	77M6W7D
90	2541.00 ~ 2644.98	1.7660	87M6G7D	1.4521	87M7W7D
100	2546.01 ~ 2640.00	1.8450	97M8G7D	1.4223	97M8W7D

5G NR n41 UL MIMO		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)
20	2506.02 ~ 2679.99	1.4388	18M2G7D	1.1246	18M2W7D
30	2511.00 ~ 2674.98	1.5171	27M9G7D	1.1668	27M9W7D
40	2516.01 ~ 2670.00	1.4655	37M9G7D	1.183	37M9W7D
50	2521.02 ~ 2664.99	1.5524	47M5G7D	1.2503	47M7W7D
60	2526.00 ~ 2659.98	1.5276	58M0G7D	1.1995	58M1W7D
70	2531.01 ~ 2655.00	1.5241	67M7G7D	1.2218	67M7W7D
80	2536.02 ~ 2649.99	1.5346	77M7G7D	1.2106	77M7W7D
90	2541.00 ~ 2644.98	1.5524	87M7G7D	1.2331	87M8W7D
100	2546.01 ~ 2640.00	1.5596	97M6G7D	1.2078	97M8W7D

5G NR n66 SISO		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 ~ 1777.5	0.4188	4M47G7D	0.3420	4M48W7D
10	1715.0 ~ 1775.0	0.4345	9M28G7D	0.3508	9M30W7D
15	1717.5 ~ 1772.5	0.4188	14M1G7D	0.3524	14M1W7D
20	1720.0 ~ 1770.0	0.4266	18M9G7D	0.3855	19M0W7D
25	1722.5 ~ 1767.5	0.4457	23M7G7D	0.3741	23M8W7D
30	1725.0 ~ 1765.0	0.4613	28M5G7D	0.3690	28M6W7D
40	1730.0 ~ 1760.0	0.4457	38M5G7D	0.3565	38M6W7D

5G NR n66 UL MIMO		QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	1712.5 ~ 1777.5	0.4345	4M47G7D	0.3963	4M47W7D
10	1715.0 ~ 1775.0	0.4446	9M28G7D	0.3908	9M30W7D
15	1717.5 ~ 1772.5	0.4246	14M1G7D	0.3864	14M1W7D
20	1720.0 ~ 1770.0	0.4385	18M9G7D	0.3776	19M0W7D
25	1722.5 ~ 1767.5	0.4487	23M8G7D	0.3954	23M8W7D
30	1725.0 ~ 1765.0	0.4487	28M6G7D	0.4009	28M6W7D
40	1730.0 ~ 1760.0	0.4519	38M6G7D	0.4055	38M6W7D

Note:

1. 5G NR Band n41 overlaps the entire frequency range of Band n38. Therefore, the conducted test results provided in this report covers Band n41 as well as Band n38 for SISO/MIMO mode.
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. (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.**
	03CH04-KS	CN1257	314309

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 data subcontracted: Conducted test cases in section 3 of this report.

1.8 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH04-KS	AUDIX	E3	6.2009-8-24al

1.9 Applicable Standards

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

- 47 CFR Part 2, 27
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

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

2 Test Configuration of Equipment Under Test

2.1 Test Mode

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

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

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

	X Plane	Y Plane	Z Plane
Orthogonal Planes of EUT			

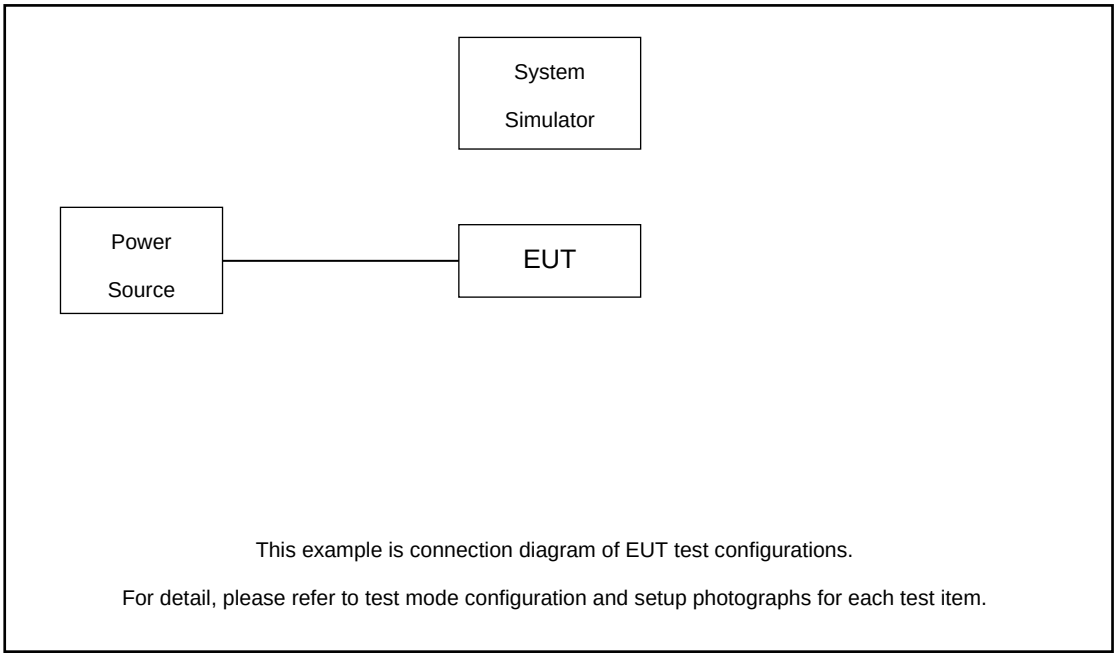
Test Items	5G NR	Bandwidth (MHz)													Modulation					RB #		Test Channel		
		5	10	15	20	25	30	35	40	45	50	60	70~90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	1	Full	L	M	H
Max. Output Power	n7	v	v	v	v	v	v	-	v	-	-	-	-	-	v	v	v	v	v	v	v	v	v	v
	n38	-	-	-	v	-	v	-	v	-	-	-	-	-	v	v	v	v	v	v	v	v	v	v
	n41	-	-	-	v	-	v	-	v	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	n66	v	v	v	v	v	v	-	v	-	-	-	-	-	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	n7				v			-		-	-	-	-	-	v	v					v		v	
	n41	-			v	-		-		-					v	v					v		v	
	n66				v			-		-	-	-	-	-	v	v					v		v	
26dB and 99% Bandwidth	n7	v	v	v	v	v	v	-	v	-	-	-	-	-		v	v	v	v		v		v	
	n41	-	-	-	v	-	v	-	v	-	v	v	v	v		v	v	v	v		v		v	
	n66	v	v	v	v	v	v	-	v	-	-	-	-	-		v	v	v	v		v		v	
Conducted Band Edge	n7	v			v			-	v	-	-	-	-	-	v	v				v	v	v		v
	n41	-	-	-	v	-		-		-		v		v	v	v				v	v	v		v
	n66	v			v			-	v	-	-	-	-	-	v	v				v	v	v		v
Conducted Spurious Emission	n7	v			v			-	v	-	-	-	-	-	v	v				v		v	v	v
	n41	-	-	-	v	-		-		-		v		v	v	v				v		v	v	v
	n66	v			v			-	v	-	-	-	-	-	v	v				v		v	v	v
Frequency	n7				v			-		-	-	-	-	-		v					v		v	

Test Items	5G NR	Bandwidth (MHz)													Modulation					RB #		Test Channel		
		5	10	15	20	25	30	35	40	45	50	60	70~90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	1	Full	L	M	H
Stability	n41	-			v	-		-		-						v					v		v	
	n66				v			-		-	-	-	-	-		v					v		v	
E.I.R.P	n7	v	v	v	v	v	v	-	v	-	-	-	-	-	v	v	v	v	v	v	v	v	v	v
	n38	-	-	-	v	-	v	-	v	-	-	-	-	-	v	v	v	v	v	v	v	v	v	v
	n41	-	-	-	v	-	v	-	v	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	n66	v	v	v	v	v	v	-	v	-	-	-	-	-	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	n7	Worst Case																					v	
	n41	Worst Case																					v	
	n66	Worst Case																					v	

Note

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 = 12V；Low Voltage =10.8V；High Voltage =13.2V;
5. All test items are based on engineering evaluation.

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	MT8820/8821	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 8.6 dB.

Example :

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

= 8.6 (dB)

2.5 Frequency List of Low/Middle/High Channels

5G NR n7 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
40	Channel	504000	507000	510000
	Frequency	2520	2535	2550
30	Channel	503000	507000	511000
	Frequency	2515	2535	2555
25	Channel	502500	507000	511500
	Frequency	2512.5	2535	2557.5
20	Channel	502000	507000	512000
	Frequency	2510	2535	2560
15	Channel	501500	507000	512500
	Frequency	2507.5	2535	2562.5
10	Channel	501000	507000	513000
	Frequency	2505	2535	2565
5	Channel	500500	507000	513500
	Frequency	2502.5	2535	2567.5

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
20	Channel	516000	519000	522000
	Frequency	2580	2595	2610

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

5G NR n66 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
40	Channel	346000	349000	352000
	Frequency	1730	1745	1760
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

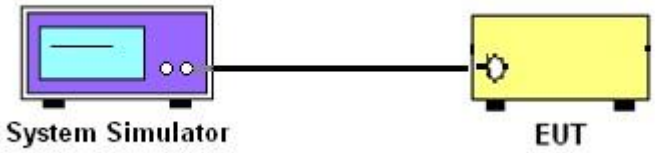
3 Conducted Test Items

3.1 Measuring Instruments

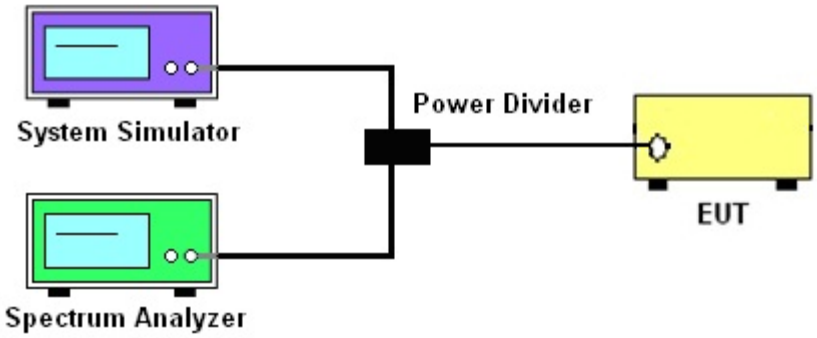
See list of measuring instruments of this test report.

3.2 Test Setup

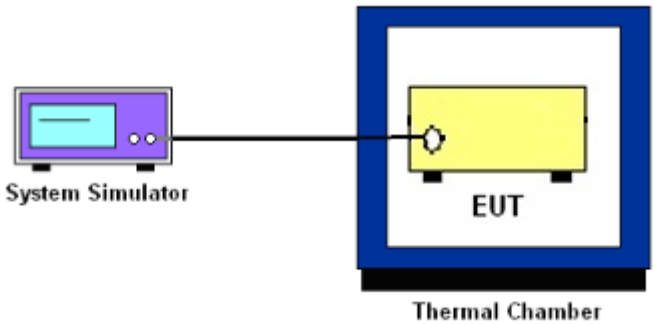
3.2.1 Conducted Output Power



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

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

According to KDB 412172 D01 Power Approach,

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

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

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

3.4.2 Test Procedures

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

3.5 Peak-to-Average Ratio

3.5.1 Description of the PAR Measurement

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

3.5.2 Test Procedures

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

3.6 Occupied Bandwidth

3.6.1 Description of Occupied Bandwidth Measurement

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

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

3.6.2 Test Procedures

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

3.7 Conducted Band Edge

3.7.1 Description of Conducted Band Edge Measurement

27.53 (h)

For operations in the 1710 – 1755 MHz band, the FCC limit is 43 + 10log$_{10}$(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)(4)

For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

3.7.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW >= 1%/2% EBW in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used or a narrower RBW was used (generally limited to no less than 1% of the OBW) and the measured power was integrated over the full required measurement bandwidth.
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. Checked that all the results comply with the emission limit line.
   Example:
   The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
   = P(W)- [43 + 10log(P)] (dB)
   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB) = -13dBm.
9. When using the integration method, the starting frequency of the integration shall be centered at one-half of the RBW away from the band edge.

3.8 Conducted Spurious Emission

3.8.1 Description of Conducted Spurious Emission Measurement

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

For n7,n38,n41:

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

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

3.8.2 Test Procedures

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

3.9 Frequency Stability

3.9.1 Description of Frequency Stability Measurement

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

3.9.2 Test Procedures for Temperature Variation

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

3.9.3 Test Procedures for Voltage Variation

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

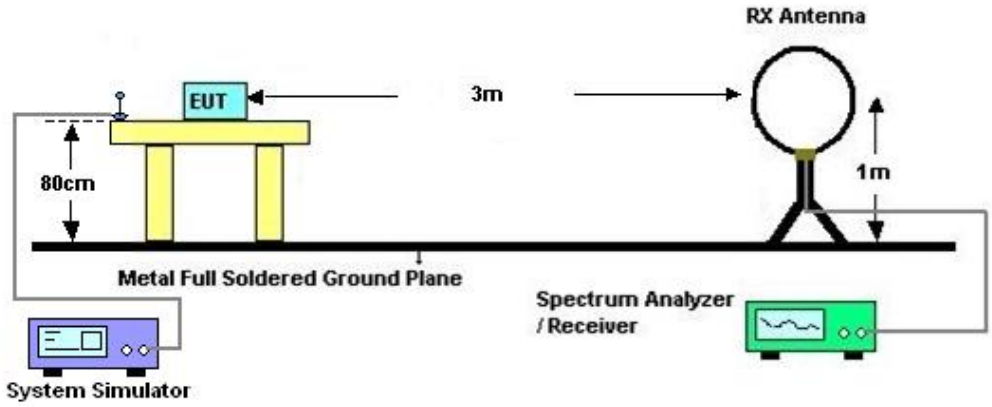
4 Radiated Test Items

4.1 Measuring Instruments

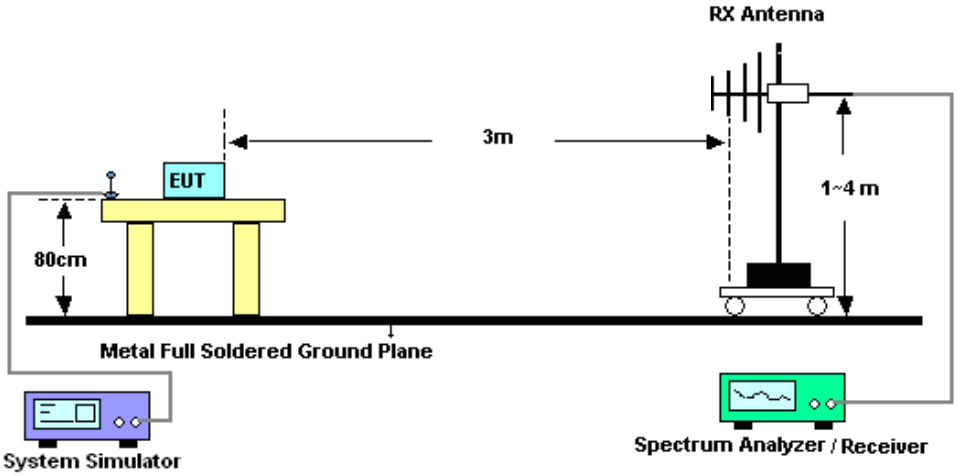
See list of measuring instruments of this test report.

4.2 Test Setup

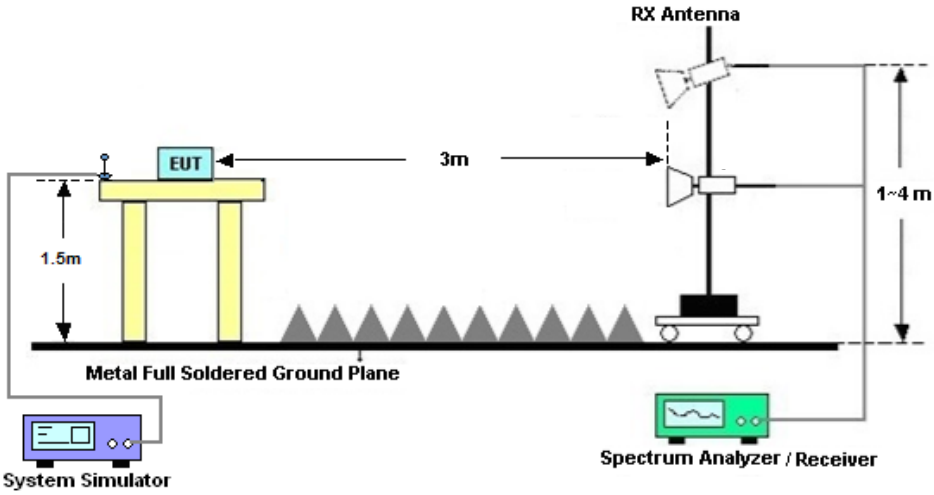
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3 Test Result of Radiated Test

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

Please refer to Appendix B.

4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

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

For n7, n38, n41

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

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

4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.
13. For n7, n38, n41:
    The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 07, 2023	Apr. 06, 2024~ Apr. 21, 2024	Jul. 06, 2024	Conducted (TH01-SZ)
DC Power Supply	TTI	PL330P	290070	Max 32V，3A	Oct. 16, 2023	Apr. 06, 2024~ Apr. 21, 2024	Oct. 15, 2024	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-04265	60.06.020.0077	0.4GHz~26.5GHz	Dec. 25, 2023	Apr. 06, 2024~ Apr. 21, 2024	Dec. 24, 2024	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 05, 2023	Apr. 06, 2024~ Apr. 21, 2024	Jul. 04, 2024	Conducted (TH01-SZ)
EXA Spectrum Analyzer	Keysight	N9010B	MY57471079	10Hz-44G,MAX 30dB	Oct. 10, 2023	May 09, 2024	Oct. 09, 2024	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 11, 2023	May 09, 2024	Sep. 10, 2024	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	59913	30MHz-1GHz	Aug. 19, 2023	May 09, 2024	Aug. 18, 2024	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00251694	1GHz~18GHz	Jul. 12, 2023	May 09, 2024	Jul. 11, 2024	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 05, 2024	May 09, 2024	Jan. 04, 2025	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	380827	9KHz-1GHz	Jul. 06, 2023	May 09, 2024	Jul. 05, 2024	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40GGA	060728	18~40GHz	Jan. 05, 2024	May 09, 2024	Jan. 04, 2025	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18GA	060840	1Ghz-18Ghz	Oct. 10, 2023	May 09, 2024	Oct. 09, 2024	Radiation (03CH04-KS)
Amplifier	Agilent	8449B	3008A02370	1Ghz-18Ghz	Oct. 10, 2023	May 09, 2024	Oct. 09, 2024	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	May 09, 2024	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	May 09, 2024	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	May 09, 2024	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

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))	2.83 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.83 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.82 dB

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

Appendix A. Test Results of Conducted Test

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

Software Version: 23.06.1602

FR1 n7 (ANT9)

Transmitter Conducted Output Power And EIRP, (G_T - L_C)=4.5dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
7	15	5	500500	2502.5	DFT-s-OFDM QPSK	1@1	23.3	27.8	0.6026
7	15	5	500500	2502.5	DFT-s-OFDM 16 QAM	1@1	22.3	26.8	0.4786
7	15	5	507000	2535	DFT-s-OFDM QPSK	1@1	23.2	27.7	0.5888
7	15	5	507000	2535	DFT-s-OFDM 16 QAM	1@1	22.18	26.68	0.4656
7	15	5	513500	2567.5	DFT-s-OFDM QPSK	1@1	23.42	27.92	0.6194
7	15	5	513500	2567.5	DFT-s-OFDM 16 QAM	1@1	22.5	27	0.5012
7	15	10	501000	2505	DFT-s-OFDM QPSK	1@1	23.21	27.71	0.5902
7	15	10	501000	2505	DFT-s-OFDM 16 QAM	1@1	22.26	26.76	0.4742
7	15	10	507000	2535	DFT-s-OFDM QPSK	1@1	23.1	27.6	0.5754
7	15	10	507000	2535	DFT-s-OFDM 16 QAM	1@1	22.3	26.8	0.4786
7	15	10	513000	2565	DFT-s-OFDM QPSK	1@1	23.34	27.84	0.6081
7	15	10	513000	2565	DFT-s-OFDM 16 QAM	1@1	22.43	26.93	0.4932
7	15	15	501500	2507.5	DFT-s-OFDM QPSK	1@1	23.26	27.76	0.5970
7	15	15	501500	2507.5	DFT-s-OFDM 16 QAM	1@1	22.31	26.81	0.4797
7	15	15	507000	2535	DFT-s-OFDM QPSK	1@1	23.07	27.57	0.5715
7	15	15	507000	2535	DFT-s-OFDM 16 QAM	1@1	22.15	26.65	0.4624
7	15	15	512500	2562.5	DFT-s-OFDM QPSK	1@1	23.19	27.69	0.5875
7	15	15	512500	2562.5	DFT-s-OFDM 16 QAM	1@1	22.31	26.81	0.4797
7	15	20	502000	2510	DFT-s-OFDM QPSK	1@1	23.14	27.64	0.5808
7	15	20	502000	2510	DFT-s-OFDM 16 QAM	1@1	22.3	26.8	0.4786
7	15	20	507000	2535	DFT-s-OFDM QPSK	1@1	23.05	27.55	0.5689
7	15	20	507000	2535	DFT-s-OFDM 16 QAM	1@1	22.31	26.81	0.4797
7	15	20	512000	2560	DFT-s-OFDM QPSK	1@1	23.17	27.67	0.5848
7	15	20	512000	2560	DFT-s-OFDM 16 QAM	1@1	22.25	26.75	0.4732
7	15	25	502500	2512.5	DFT-s-OFDM QPSK	1@1	23.43	27.93	0.6209
7	15	25	502500	2512.5	DFT-s-OFDM 16 QAM	1@1	22.45	26.95	0.4955
7	15	25	507000	2535	DFT-s-OFDM QPSK	1@1	23.3	27.8	0.6026
7	15	25	507000	2535	DFT-s-OFDM 16 QAM	1@1	22.63	27.13	0.5164
7	15	25	511500	2557.5	DFT-s-OFDM QPSK	1@1	23.31	27.81	0.6039
7	15	25	511500	2557.5	DFT-s-OFDM 16 QAM	1@1	22.42	26.92	0.4920
7	15	30	503000	2515	DFT-s-OFDM QPSK	1@1	23.52	28.02	0.6339
7	15	30	503000	2515	DFT-s-OFDM 16 QAM	1@1	22.54	27.04	0.5058
7	15	30	507000	2535	DFT-s-OFDM QPSK	1@1	23.46	27.96	0.6252
7	15	30	507000	2535	DFT-s-OFDM 16 QAM	1@1	22.32	26.82	0.4808
7	15	30	511000	2555	DFT-s-OFDM QPSK	1@1	23.4	27.9	0.6166
7	15	30	511000	2555	DFT-s-OFDM 16 QAM	1@1	22.39	26.89	0.4887

7	15	40	504000	2520	DFT-s-OFDM PI/2 BPSK	108@54	23.46	27.96	0.6252
7	15	40	504000	2520	DFT-s-OFDM PI/2 BPSK	1@1	23.46	27.96	0.6252
7	15	40	504000	2520	DFT-s-OFDM PI/2 BPSK	1@214	23.22	27.72	0.5916
7	15	40	504000	2520	DFT-s-OFDM QPSK	108@54	23.41	27.91	0.6180
7	15	40	504000	2520	DFT-s-OFDM QPSK	1@1	23.47	27.97	0.6266
7	15	40	504000	2520	DFT-s-OFDM QPSK	1@214	23.17	27.67	0.5848
7	15	40	504000	2520	DFT-s-OFDM 16 QAM	108@54	22.31	26.81	0.4797
7	15	40	504000	2520	DFT-s-OFDM 16 QAM	1@1	22.51	27.01	0.5023
7	15	40	504000	2520	DFT-s-OFDM 16 QAM	1@214	22.18	26.68	0.4656
7	15	40	504000	2520	DFT-s-OFDM 64 QAM	108@54	21.01	25.51	0.3556
7	15	40	504000	2520	DFT-s-OFDM 64 QAM	1@1	21.2	25.7	0.3715
7	15	40	504000	2520	DFT-s-OFDM 64 QAM	1@214	20.94	25.44	0.3499
7	15	40	504000	2520	DFT-s-OFDM 256 QAM	108@54	18.97	23.47	0.2223
7	15	40	504000	2520	DFT-s-OFDM 256 QAM	1@1	19.22	23.72	0.2355
7	15	40	504000	2520	DFT-s-OFDM 256 QAM	1@214	18.59	23.09	0.2037
7	15	40	504000	2520	CP-OFDM QPSK	108@54	21.84	26.34	0.4305
7	15	40	504000	2520	CP-OFDM QPSK	1@1	21.98	26.48	0.4446
7	15	40	504000	2520	CP-OFDM QPSK	1@214	21.8	26.3	0.4266
7	15	40	507000	2535	DFT-s-OFDM PI/2 BPSK	108@54	23.47	27.97	0.6266
7	15	40	507000	2535	DFT-s-OFDM PI/2 BPSK	1@1	23.41	27.91	0.6180
7	15	40	507000	2535	DFT-s-OFDM PI/2 BPSK	1@214	23.34	27.84	0.6081
7	15	40	507000	2535	DFT-s-OFDM QPSK	108@54	23.33	27.83	0.6067
7	15	40	507000	2535	DFT-s-OFDM QPSK	1@1	23.43	27.93	0.6209
7	15	40	507000	2535	DFT-s-OFDM QPSK	1@214	23.3	27.8	0.6026
7	15	40	507000	2535	DFT-s-OFDM 16 QAM	108@54	22.24	26.74	0.4721
7	15	40	507000	2535	DFT-s-OFDM 16 QAM	1@1	22.34	26.84	0.4831
7	15	40	507000	2535	DFT-s-OFDM 16 QAM	1@214	22.29	26.79	0.4775
7	15	40	507000	2535	DFT-s-OFDM 64 QAM	108@54	20.92	25.42	0.3483
7	15	40	507000	2535	DFT-s-OFDM 64 QAM	1@1	21.08	25.58	0.3614
7	15	40	507000	2535	DFT-s-OFDM 64 QAM	1@214	20.87	25.37	0.3443
7	15	40	507000	2535	DFT-s-OFDM 256 QAM	108@54	19.02	23.52	0.2249
7	15	40	507000	2535	DFT-s-OFDM 256 QAM	1@1	19.34	23.84	0.2421
7	15	40	507000	2535	DFT-s-OFDM 256 QAM	1@214	18.59	23.09	0.2037
7	15	40	507000	2535	CP-OFDM QPSK	108@54	21.34	25.84	0.3837
7	15	40	507000	2535	CP-OFDM QPSK	1@1	21.75	26.25	0.4217
7	15	40	507000	2535	CP-OFDM QPSK	1@214	21.83	26.33	0.4295
7	15	40	510000	2550	DFT-s-OFDM PI/2 BPSK	108@54	23.55	28.05	0.6383
7	15	40	510000	2550	DFT-s-OFDM PI/2 BPSK	1@1	23.29	27.79	0.6012
7	15	40	510000	2550	DFT-s-OFDM PI/2 BPSK	1@214	23.43	27.93	0.6209
7	15	40	510000	2550	DFT-s-OFDM QPSK	108@54	23.35	27.85	0.6095
7	15	40	510000	2550	DFT-s-OFDM QPSK	1@1	23.22	27.72	0.5916
7	15	40	510000	2550	DFT-s-OFDM QPSK	1@214	23.45	27.95	0.6237
7	15	40	510000	2550	DFT-s-OFDM 16 QAM	108@54	22.37	26.87	0.4864
7	15	40	510000	2550	DFT-s-OFDM 16 QAM	1@1	22.35	26.85	0.4842

7	15	40	510000	2550	DFT-s-OFDM 16 QAM	1@214	22.56	27.06	0.5082
7	15	40	510000	2550	DFT-s-OFDM 64 QAM	108@54	20.91	25.41	0.3475
7	15	40	510000	2550	DFT-s-OFDM 64 QAM	1@1	21.04	25.54	0.3581
7	15	40	510000	2550	DFT-s-OFDM 64 QAM	1@214	21.23	25.73	0.3741
7	15	40	510000	2550	DFT-s-OFDM 256 QAM	108@54	18.96	23.46	0.2218
7	15	40	510000	2550	DFT-s-OFDM 256 QAM	1@1	19.08	23.58	0.2280
7	15	40	510000	2550	DFT-s-OFDM 256 QAM	1@214	18.91	23.41	0.2193
7	15	40	510000	2550	CP-OFDM QPSK	108@54	21.8	26.3	0.4266
7	15	40	510000	2550	CP-OFDM QPSK	1@1	21.85	26.35	0.4315
7	15	40	510000	2550	CP-OFDM QPSK	1@214	22.11	26.61	0.4581

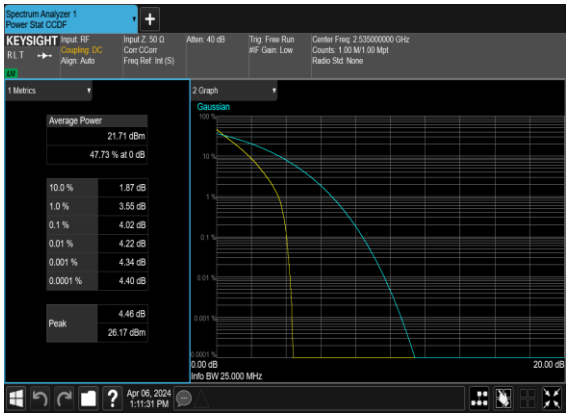
Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
7	15	20	507000	2535.0	DFT-s-OFDM QPSK	100@0	0.0048	**PASS**	NV
7	15	20	507000	2535.0	DFT-s-OFDM QPSK	100@0	0.0021	**PASS**	LV
7	15	20	507000	2535.0	DFT-s-OFDM QPSK	100@0	0.0036	**PASS**	HV
7	15	20	507000	2535.0	DFT-s-OFDM QPSK	100@0	0.0066	**PASS**	-30℃
7	15	20	507000	2535.0	DFT-s-OFDM QPSK	100@0	0.0067	**PASS**	-20℃
7	15	20	507000	2535.0	DFT-s-OFDM QPSK	100@0	0.0022	**PASS**	-10℃
7	15	20	507000	2535.0	DFT-s-OFDM QPSK	100@0	0.0064	**PASS**	0℃
7	15	20	507000	2535.0	DFT-s-OFDM QPSK	100@0	0.0060	**PASS**	10℃
7	15	20	507000	2535.0	DFT-s-OFDM QPSK	100@0	0.0048	**PASS**	20℃
7	15	20	507000	2535.0	DFT-s-OFDM QPSK	100@0	0.0061	**PASS**	30℃
7	15	20	507000	2535.0	DFT-s-OFDM QPSK	100@0	0.0029	**PASS**	40℃
7	15	20	507000	2535.0	DFT-s-OFDM QPSK	100@0	0.0067	**PASS**	50℃

Peak to Average Ratio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
7	15	20	507000	2535.0	DFT-s-OFDM PI/2 BPSK	100@0	4.02	13	**PASS**
7	15	20	507000	2535.0	DFT-s-OFDM QPSK	100@0	5.06	13	**PASS**

N7(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



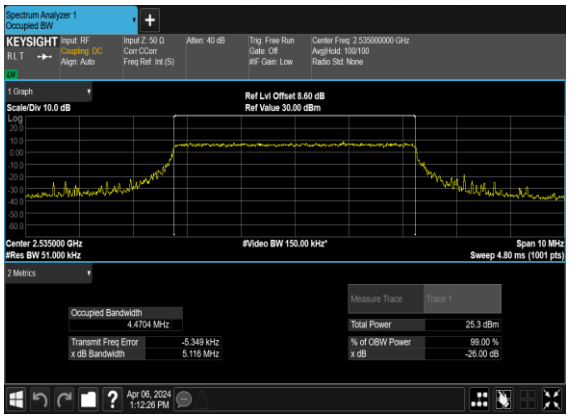
N7(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

Occupied Bandwidth

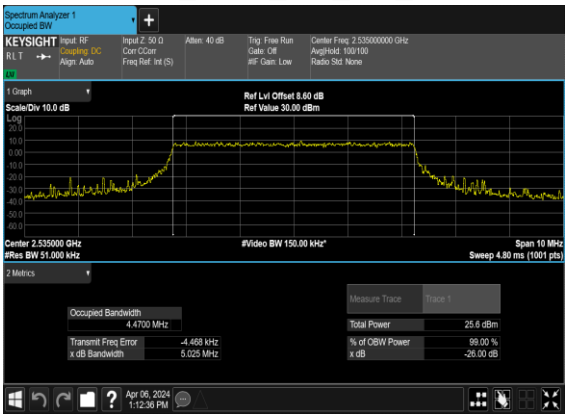
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB BW (MHz)
7	15	5	507000	2535.0	CP-OFDM QPSK	25@0	4.4704	5.116
7	15	5	507000	2535.0	CP-OFDM 16 QAM	25@0	4.47	5.025
7	15	5	507000	2535.0	CP-OFDM 64 QAM	25@0	4.4721	5.693
7	15	5	507000	2535.0	CP-OFDM 256 QAM	25@0	4.468	5.247
7	15	10	507000	2535.0	CP-OFDM QPSK	52@0	9.2805	10.44
7	15	10	507000	2535.0	CP-OFDM 16 QAM	52@0	9.2938	10.15
7	15	10	507000	2535.0	CP-OFDM 64 QAM	52@0	9.2889	10.03
7	15	10	507000	2535.0	CP-OFDM 256 QAM	52@0	9.3065	9.974
7	15	15	507000	2535.0	CP-OFDM QPSK	79@0	14.098	15.03
7	15	15	507000	2535.0	CP-OFDM 16 QAM	79@0	14.117	14.91
7	15	15	507000	2535.0	CP-OFDM 64 QAM	79@0	14.115	15.57
7	15	15	507000	2535.0	CP-OFDM 256 QAM	79@0	14.105	15.34
7	15	20	507000	2535.0	CP-OFDM QPSK	106@0	18.929	19.68
7	15	20	507000	2535.0	CP-OFDM 16 QAM	106@0	18.948	19.89
7	15	20	507000	2535.0	CP-OFDM 64 QAM	106@0	18.925	19.81
7	15	20	507000	2535.0	CP-OFDM 256 QAM	106@0	18.926	19.89
7	15	25	507000	2535.0	CP-OFDM QPSK	133@0	23.753	25.05
7	15	25	507000	2535.0	CP-OFDM 16 QAM	133@0	23.756	24.77
7	15	25	507000	2535.0	CP-OFDM 64 QAM	133@0	23.735	24.83
7	15	25	507000	2535.0	CP-OFDM 256 QAM	133@0	23.744	24.75
7	15	30	507000	2535.0	CP-OFDM QPSK	160@0	28.559	29.65
7	15	30	507000	2535.0	CP-OFDM 16 QAM	160@0	28.543	29.56
7	15	30	507000	2535.0	CP-OFDM 64 QAM	160@0	28.584	29.68
7	15	30	507000	2535.0	CP-OFDM 256 QAM	160@0	28.586	29.66
7	15	40	507000	2535.0	CP-OFDM QPSK	216@0	38.561	40.07

7	15	40	507000	2535.0	CP-OFDM 16 QAM	216@0	38.545	40.0
7	15	40	507000	2535.0	CP-OFDM 64 QAM	216@0	38.689	39.98
7	15	40	507000	2535.0	CP-OFDM 256 QAM	216@0	38.489	40.45

N7(5M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



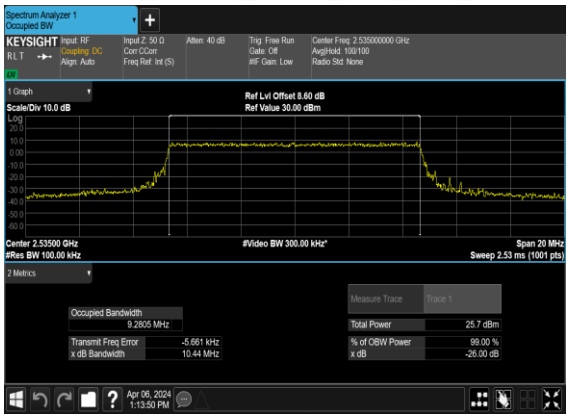
N7(5M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



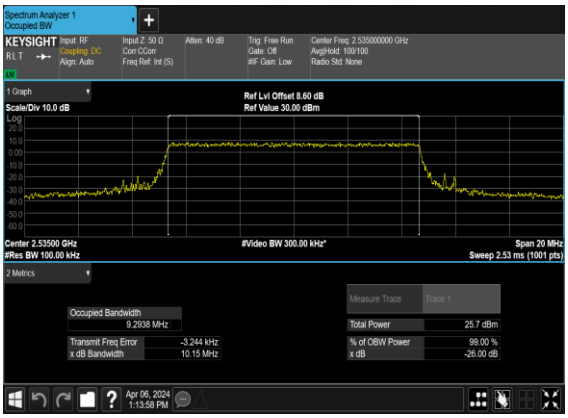
N7(5M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

N7(5M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

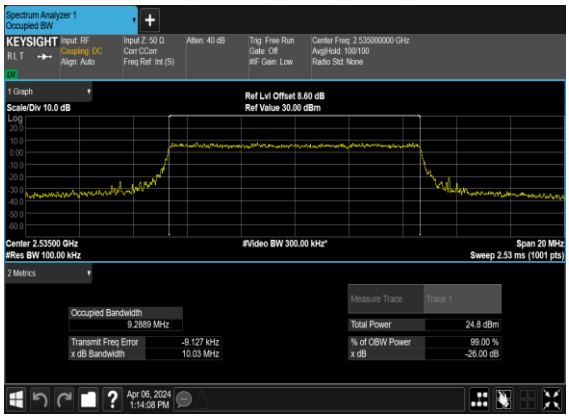
N7(10M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



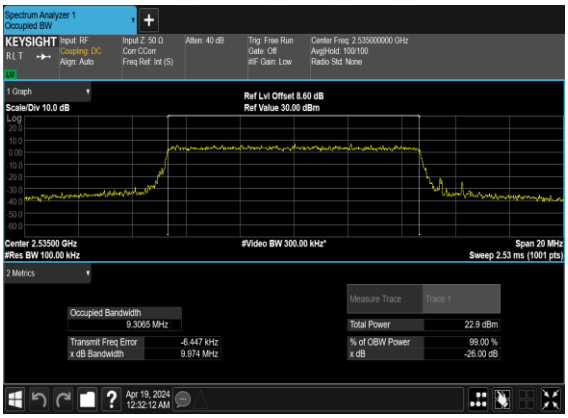
N7(10M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N7(10M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



N7(10M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



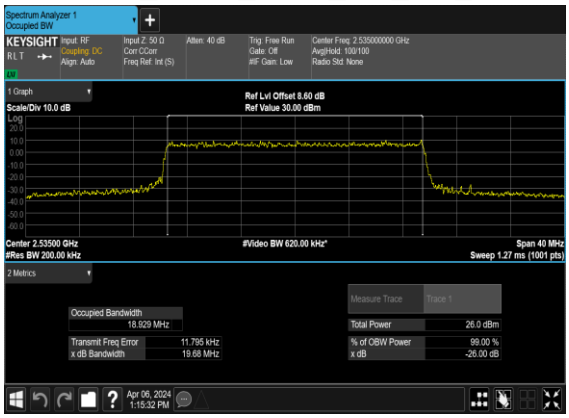
N7(15M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

N7(15M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

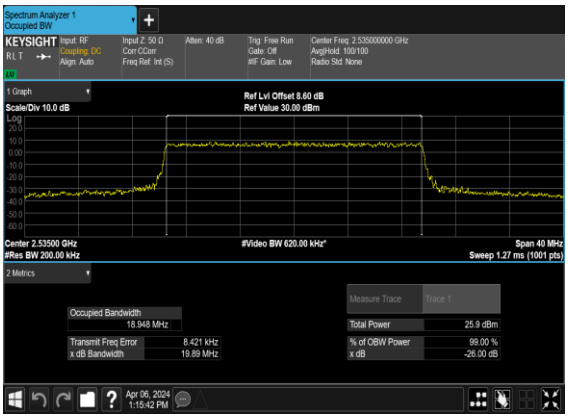
N7(15M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

N7(15M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

N7(20M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

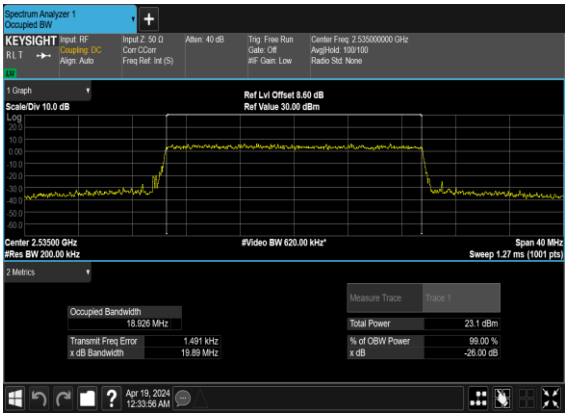


N7(20M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N7(20M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

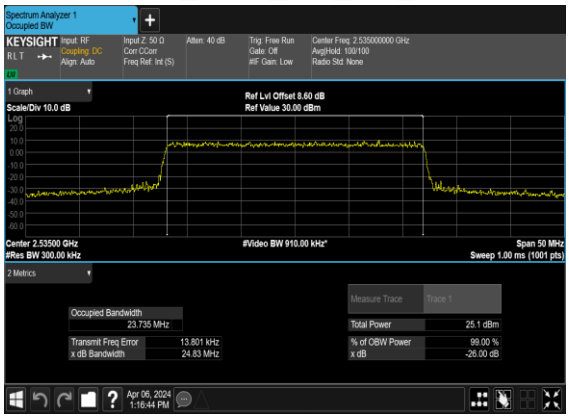
N7(20M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



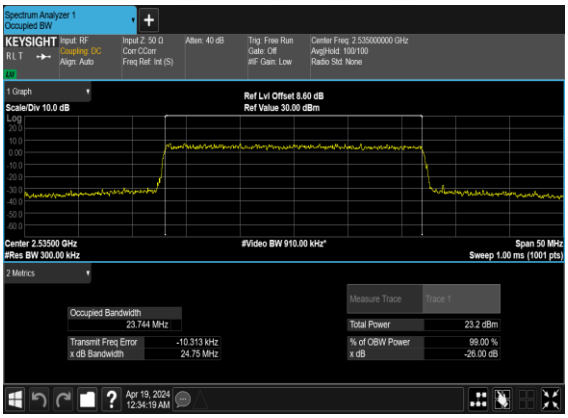
N7(25M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

N7(25M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

N7(25M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

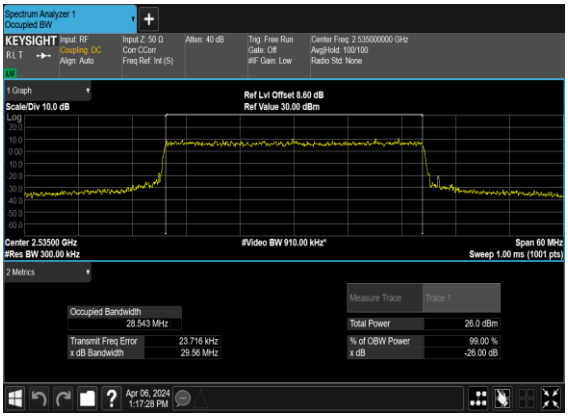


N7(25M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

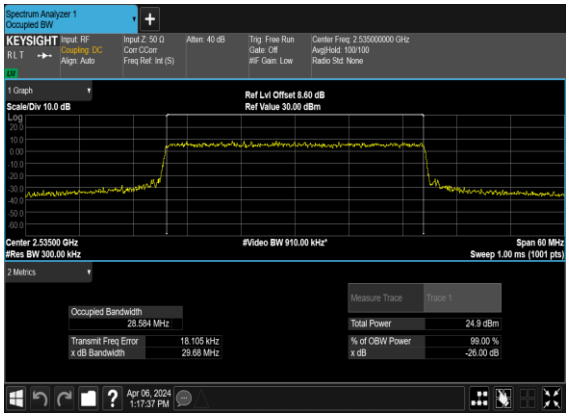


N7(30M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

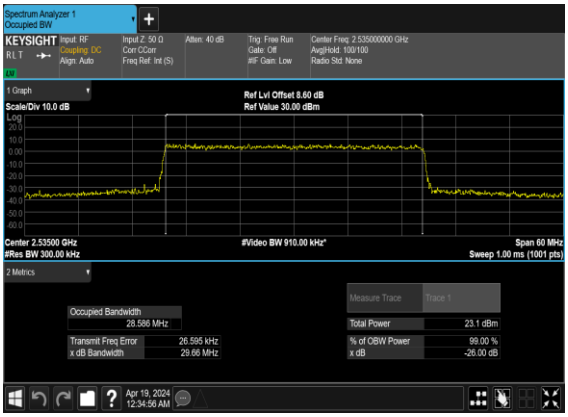
N7(30M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



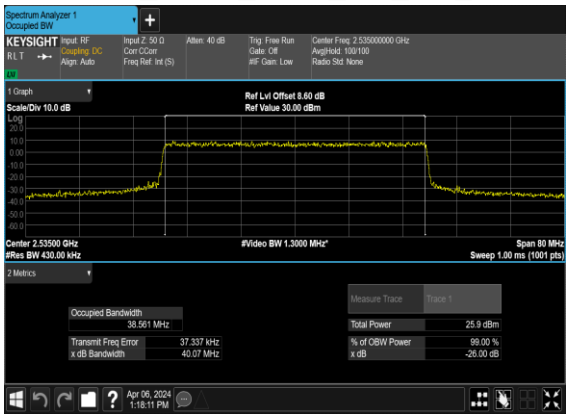
N7(30M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



N7(30M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

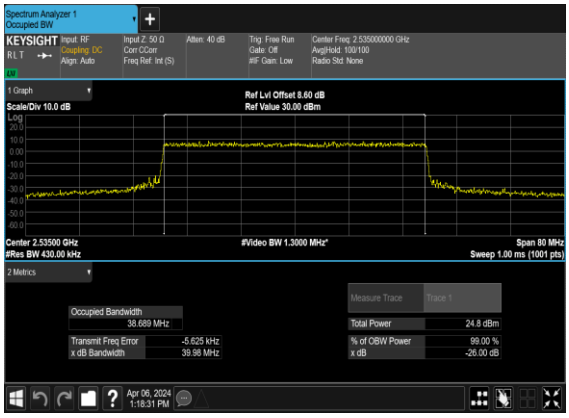


N7(40M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

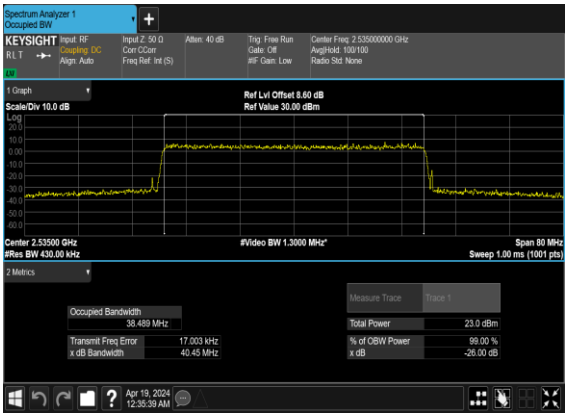


N7(40M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

N7(40M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



N7(40M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



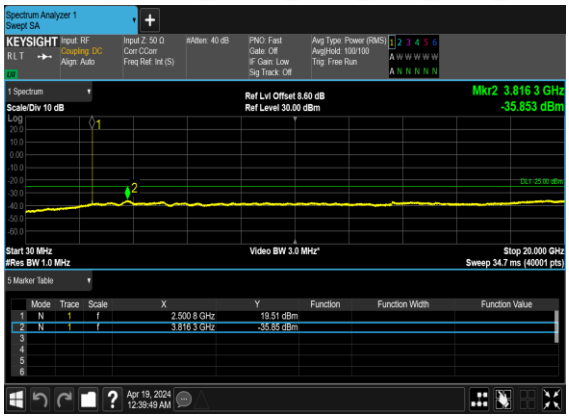
Conducted Spurious Emissions

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
7	15	5	500500	2502.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
7	15	5	500500	2502.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	5	500500	2502.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	5	500500	2502.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
7	15	5	500500	2502.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
7	15	5	500500	2502.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
7	15	5	507000	2535.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
7	15	5	507000	2535.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	5	507000	2535.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	5	507000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
7	15	5	507000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
7	15	5	507000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
7	15	5	513500	2567.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
7	15	5	513500	2567.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	5	513500	2567.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	5	513500	2567.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
7	15	5	513500	2567.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
7	15	5	513500	2567.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
7	15	20	502000	2510.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
7	15	20	502000	2510.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	20	502000	2510.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	20	502000	2510.0	DFT-s-OFDM QPSK	1@0	see graph	**---**

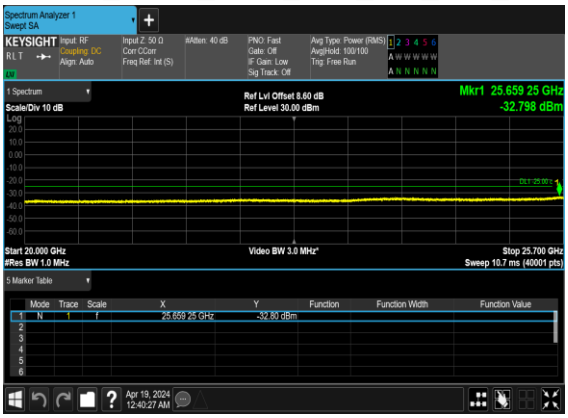
7	15	20	502000	2510.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
7	15	20	502000	2510.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
7	15	20	507000	2535.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
7	15	20	507000	2535.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	20	507000	2535.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	20	507000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
7	15	20	507000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
7	15	20	507000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
7	15	20	512000	2560.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
7	15	20	512000	2560.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	20	512000	2560.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	20	512000	2560.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
7	15	20	512000	2560.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
7	15	20	512000	2560.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
7	15	40	504000	2520.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
7	15	40	504000	2520.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	40	504000	2520.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	40	504000	2520.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
7	15	40	504000	2520.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
7	15	40	504000	2520.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
7	15	40	507000	2535.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
7	15	40	507000	2535.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	40	507000	2535.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	40	507000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	**---**

7	15	40	507000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
7	15	40	507000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
7	15	40	510000	2550.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
7	15	40	510000	2550.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	40	510000	2550.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	40	510000	2550.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
7	15	40	510000	2550.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
7	15	40	510000	2550.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**

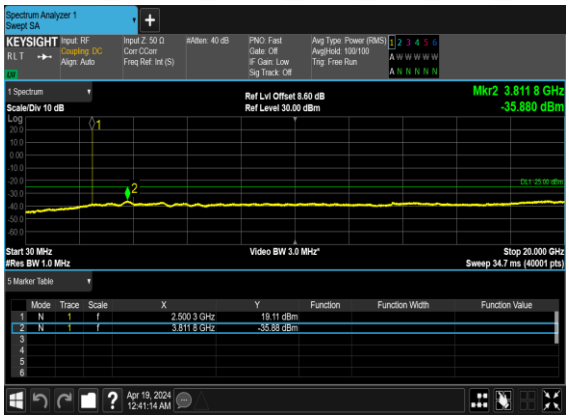
N7(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



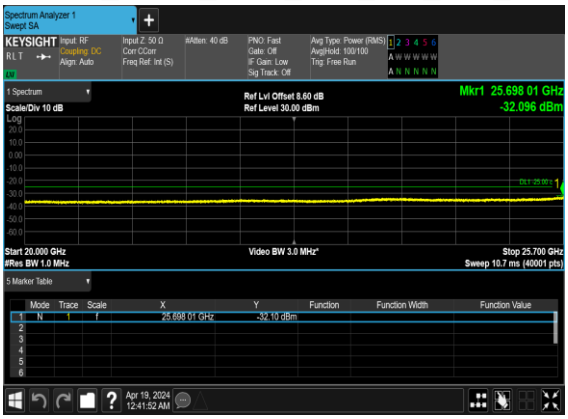
N7(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



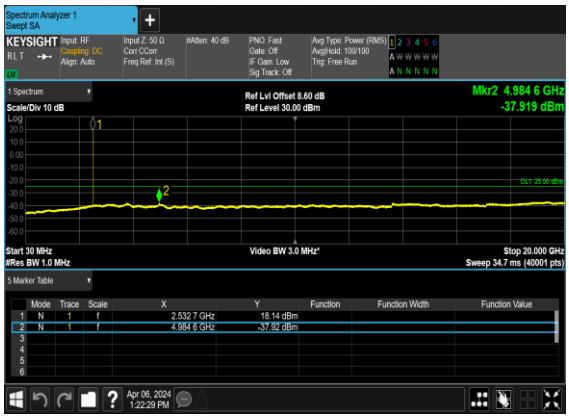
N7(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



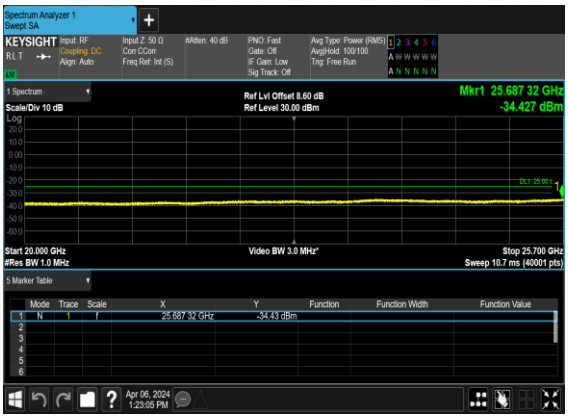
N7(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



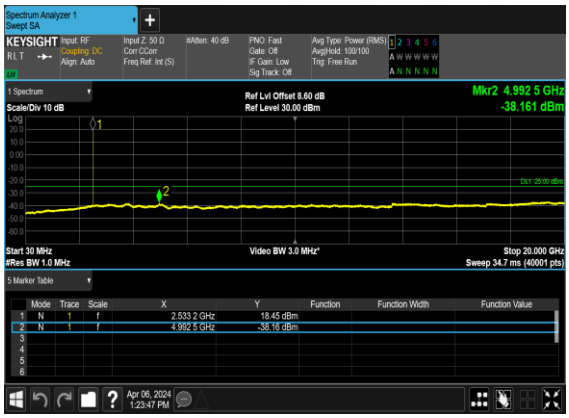
N7(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



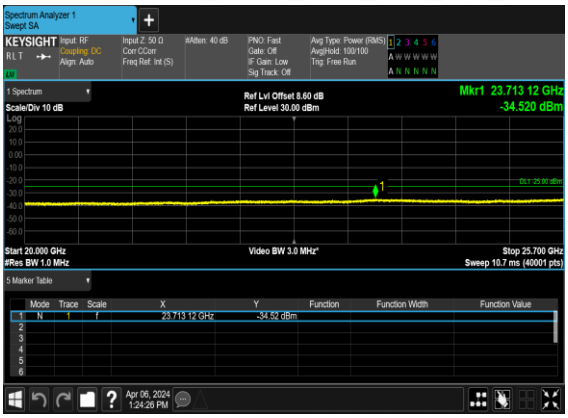
N7(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



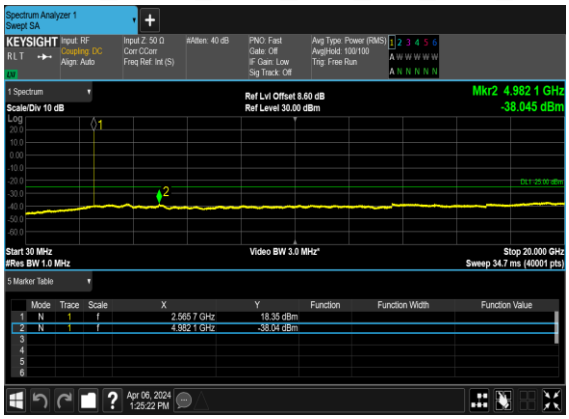
N7(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



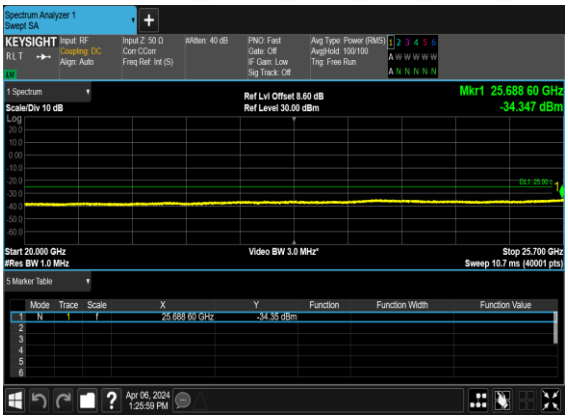
N7(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



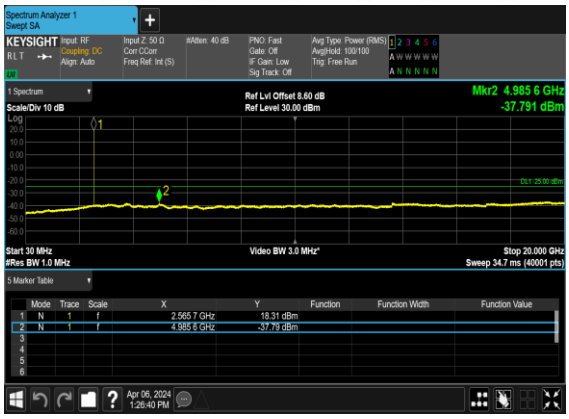
N7(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



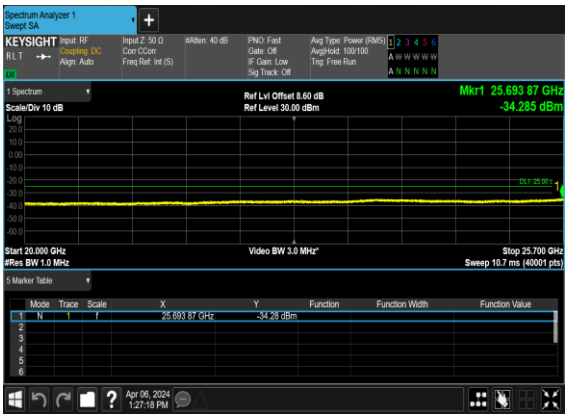
N7(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



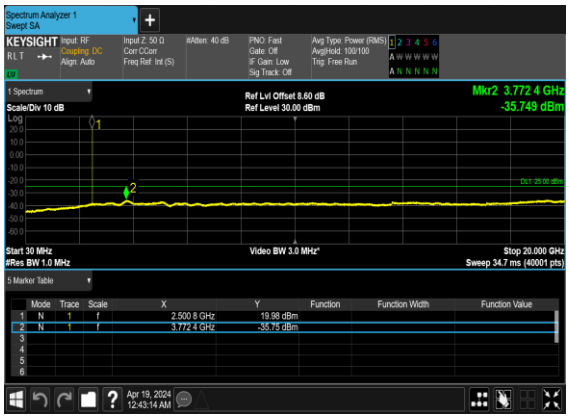
N7(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



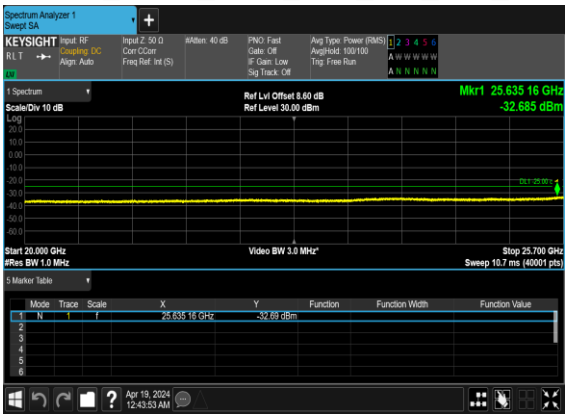
N7(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



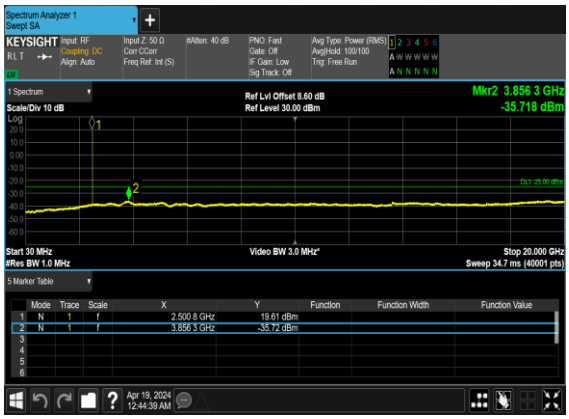
N7(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



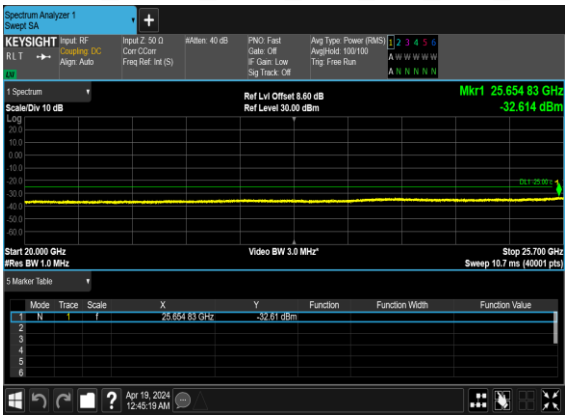
N7(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



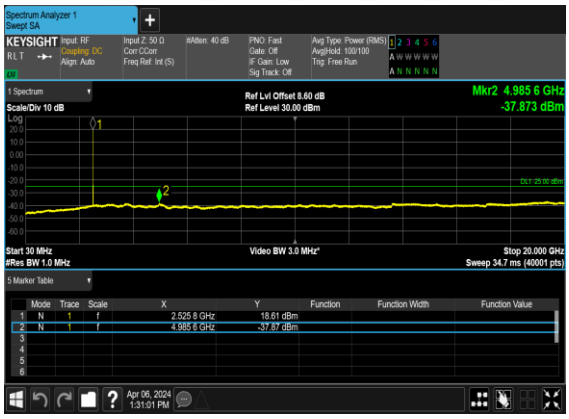
N7(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



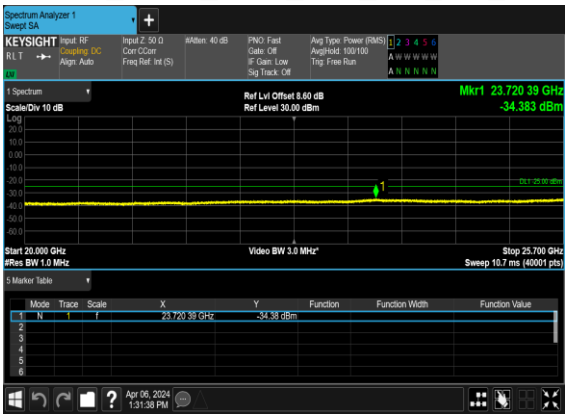
N7(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



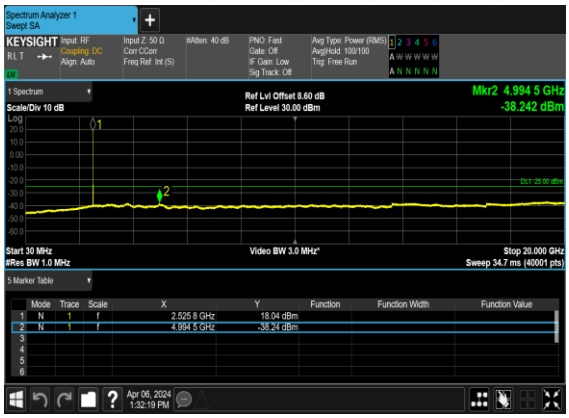
N7(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



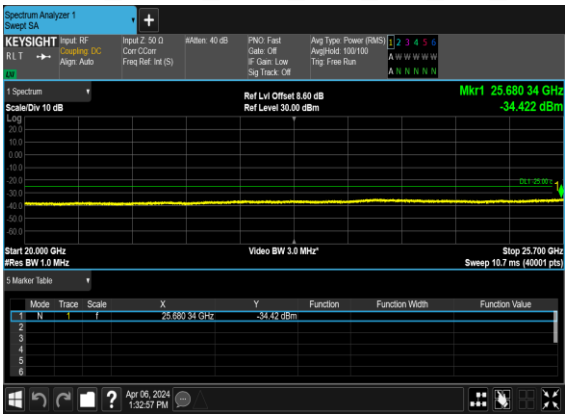
N7(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



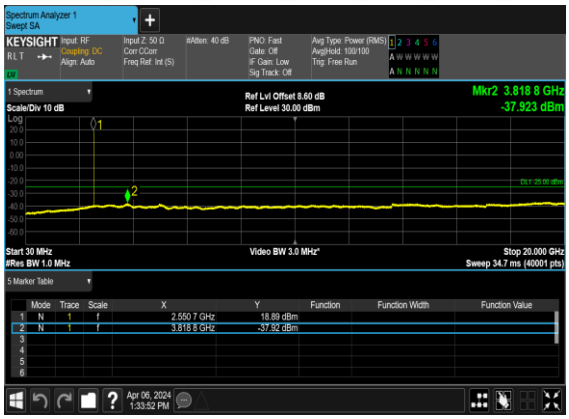
N7(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



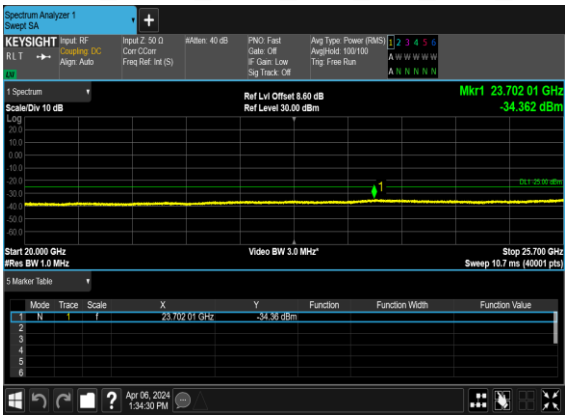
N7(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



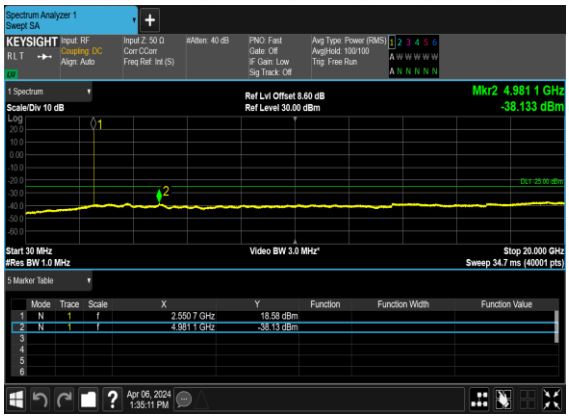
N7(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



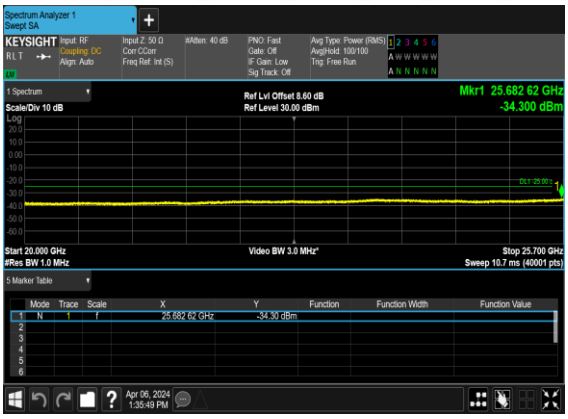
N7(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



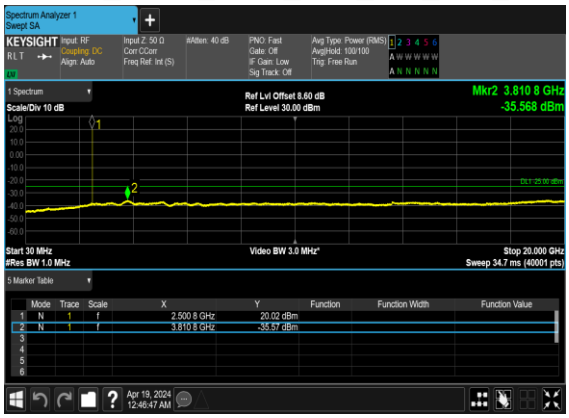
N7(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



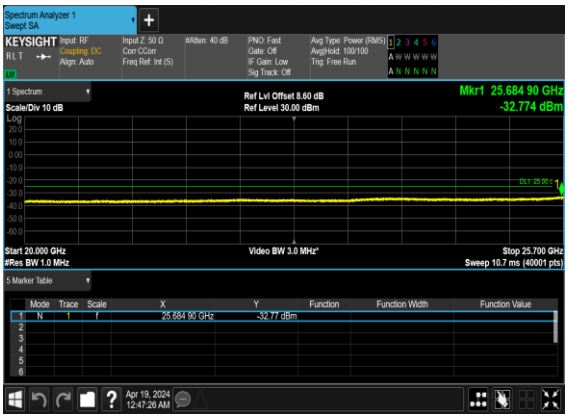
N7(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



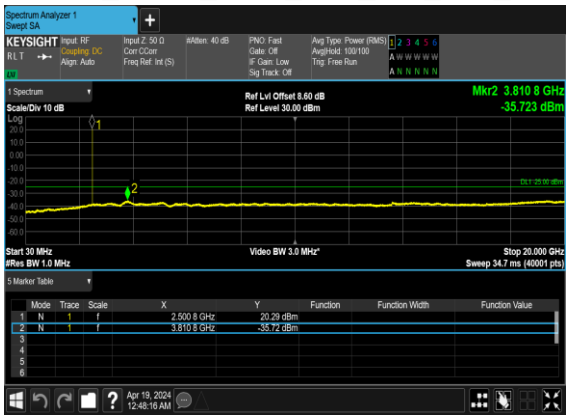
N7(40M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



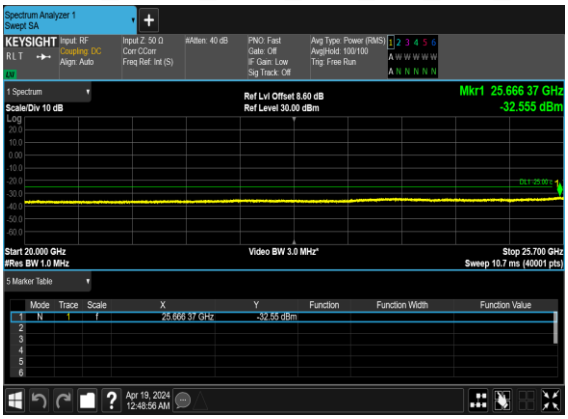
N7(40M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



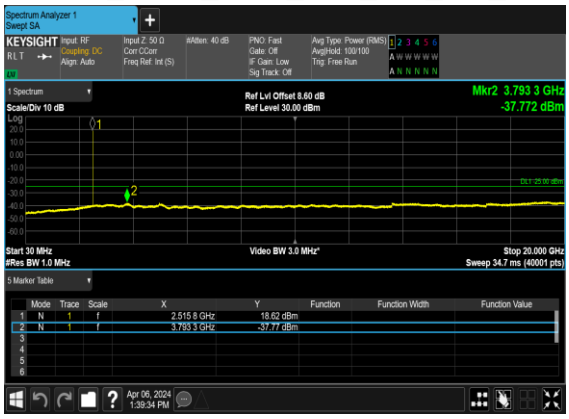
N7(40M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



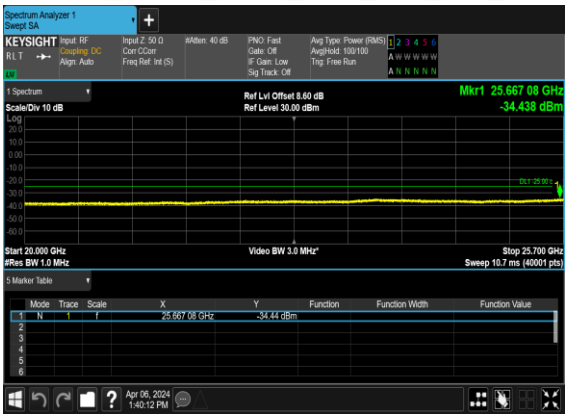
N7(40M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



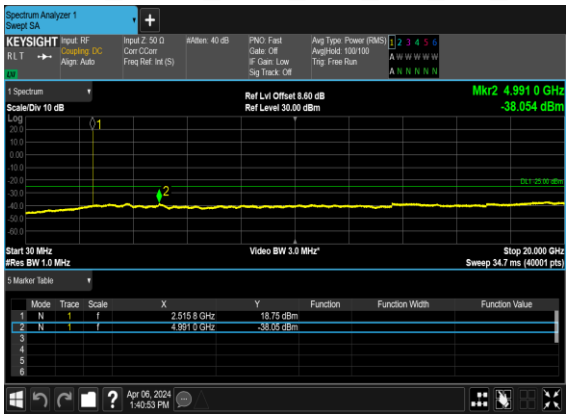
N7(40M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



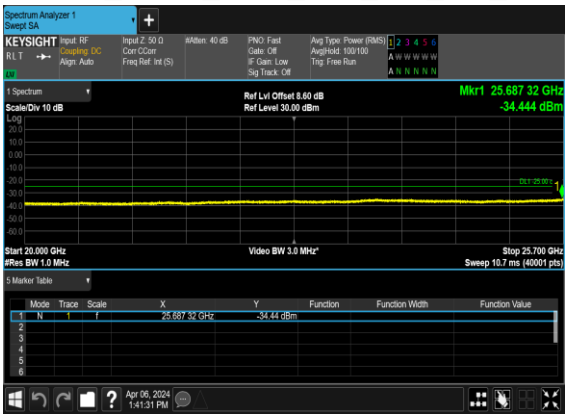
N7(40M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



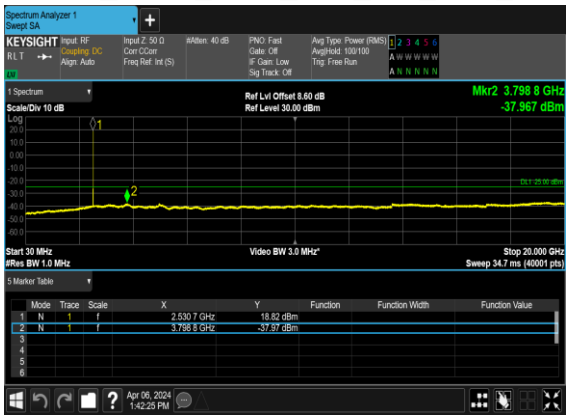
N7(40M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



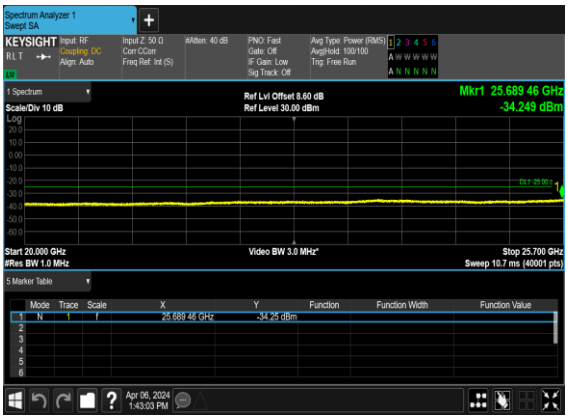
N7(40M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



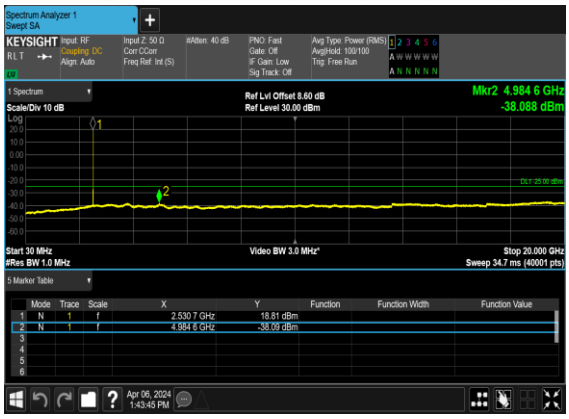
N7(40M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



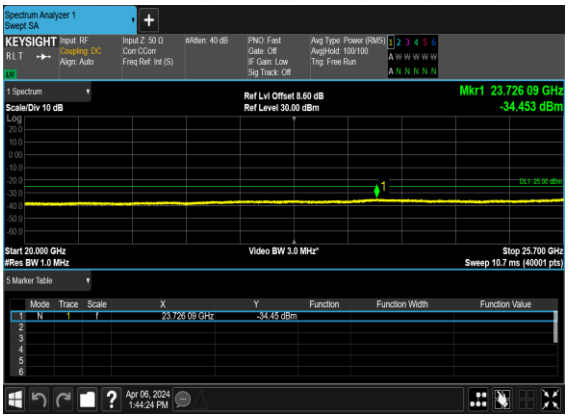
N7(40M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



N7(40M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



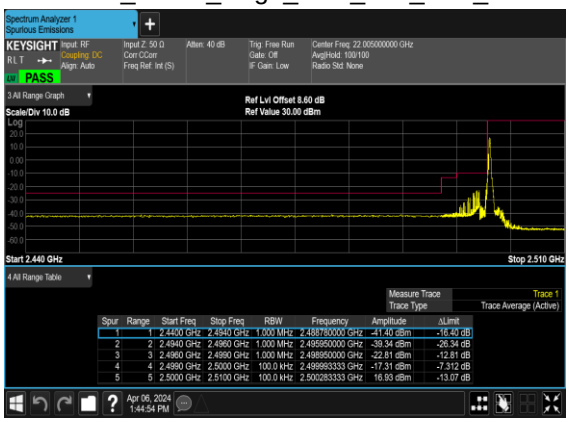
N7(40M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



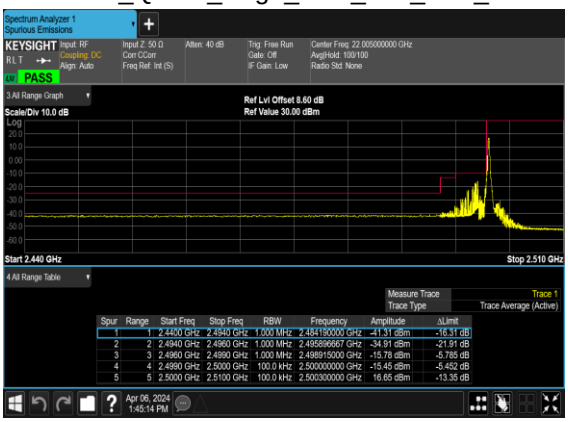
Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
7	15	5	500500	2502.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	5	500500	2502.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
7	15	5	500500	2502.5	DFT-s-OFDM BPSK	25@0	see graph	**PASS**
7	15	5	500500	2502.5	DFT-s-OFDM QPSK	25@0	see graph	**PASS**
7	15	5	513500	2567.5	DFT-s-OFDM BPSK	1@24	see graph	**PASS**
7	15	5	513500	2567.5	DFT-s-OFDM QPSK	1@24	see graph	**PASS**
7	15	5	513500	2567.5	DFT-s-OFDM BPSK	25@0	see graph	**PASS**
7	15	5	513500	2567.5	DFT-s-OFDM QPSK	25@0	see graph	**PASS**
7	15	20	502000	2510.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	20	502000	2510.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
7	15	20	502000	2510.0	DFT-s-OFDM BPSK	100@0	see graph	**PASS**
7	15	20	502000	2510.0	DFT-s-OFDM QPSK	100@0	see graph	**PASS**
7	15	20	512000	2560.0	DFT-s-OFDM BPSK	1@105	see graph	**PASS**
7	15	20	512000	2560.0	DFT-s-OFDM QPSK	1@105	see graph	**PASS**
7	15	20	512000	2560.0	DFT-s-OFDM BPSK	100@0	see graph	**PASS**
7	15	20	512000	2560.0	DFT-s-OFDM QPSK	100@0	see graph	**PASS**
7	15	40	504000	2520.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
7	15	40	504000	2520.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
7	15	40	504000	2520.0	DFT-s-OFDM BPSK	216@0	see graph	**PASS**
7	15	40	504000	2520.0	DFT-s-OFDM QPSK	216@0	see graph	**PASS**
7	15	40	510000	2550.0	DFT-s-OFDM BPSK	1@215	see graph	**PASS**
7	15	40	510000	2550.0	DFT-s-OFDM QPSK	1@215	see graph	**PASS**
7	15	40	510000	2550.0	DFT-s-OFDM BPSK	216@0	see graph	**PASS**
7	15	40	510000	2550.0	DFT-s-OFDM QPSK	216@0	see graph	**PASS**

N7(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH

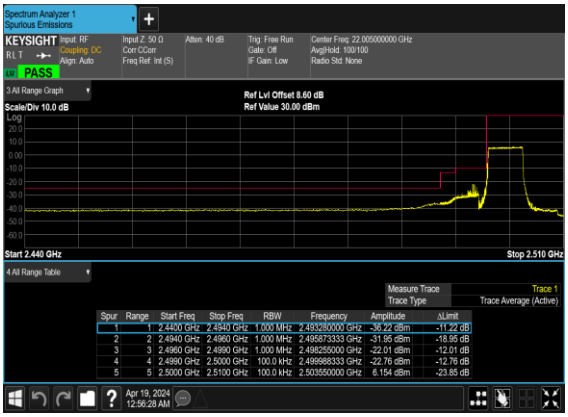


N7(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

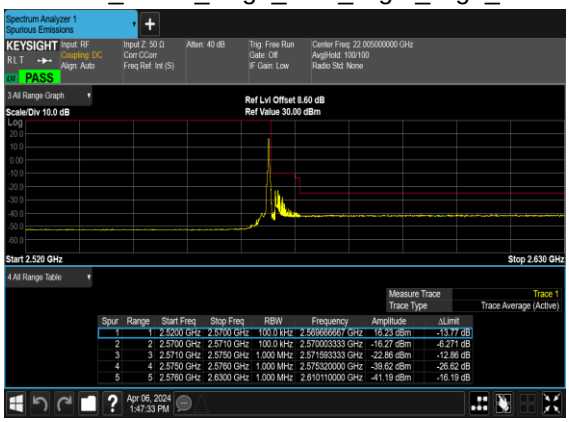


N7(5M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH

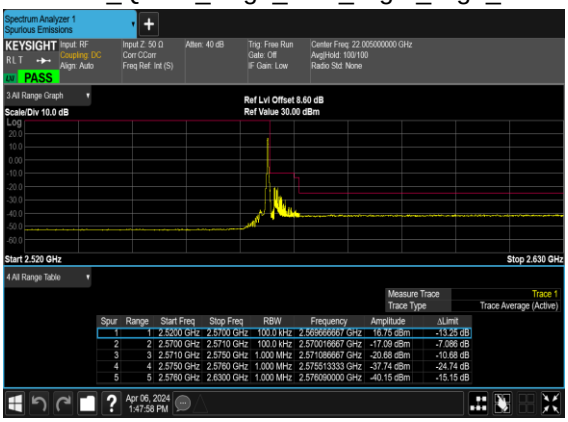
N7(5M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



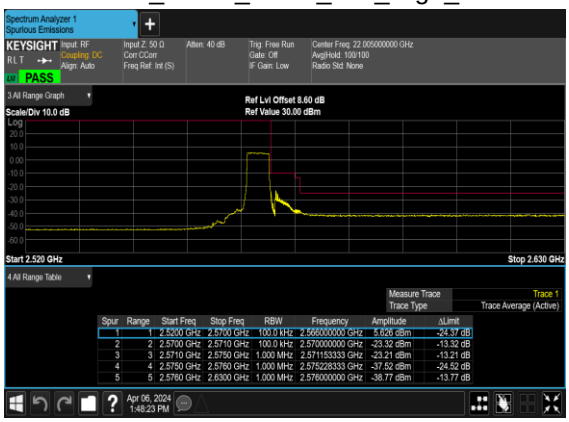
N7(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



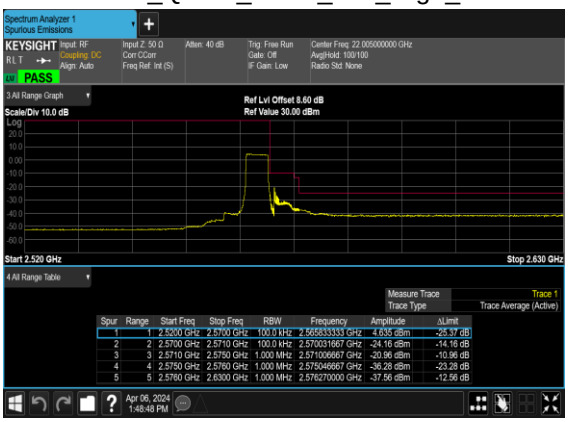
N7(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



N7(5M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH

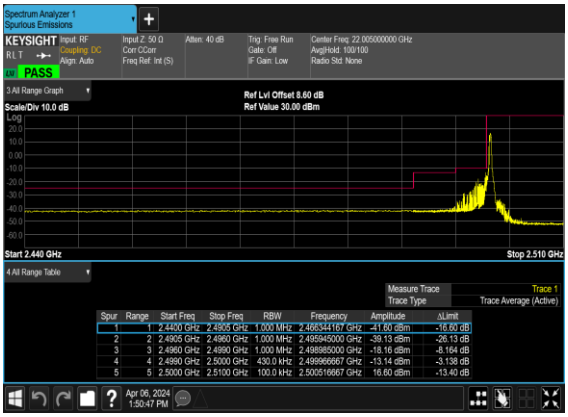


N7(5M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH

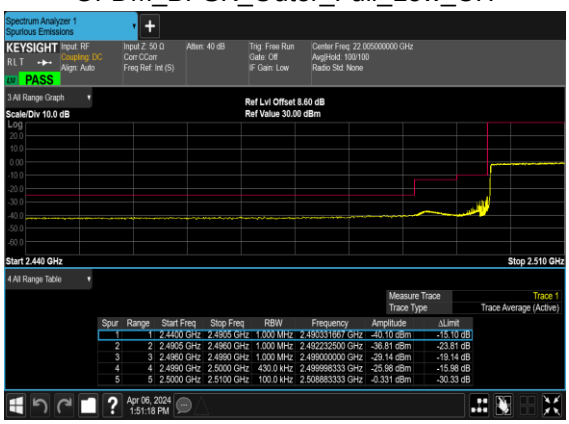


N7(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH

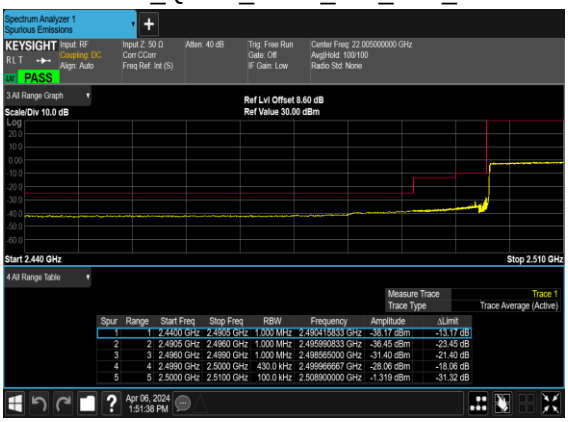
N7(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



N7(20M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH

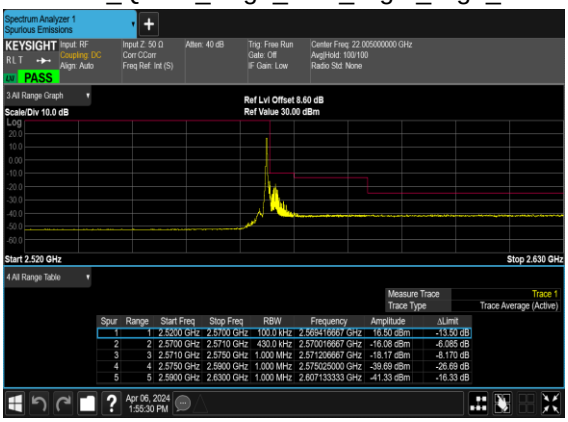


N7(20M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH

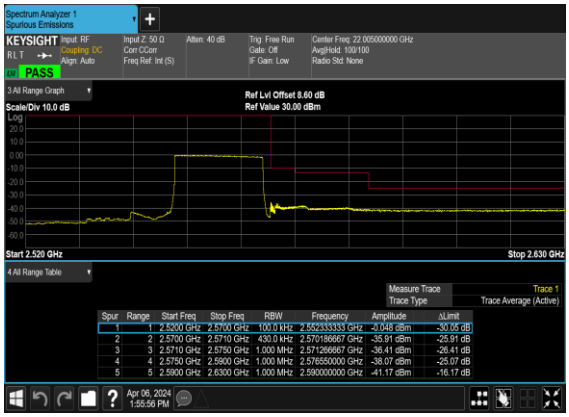


N7(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH

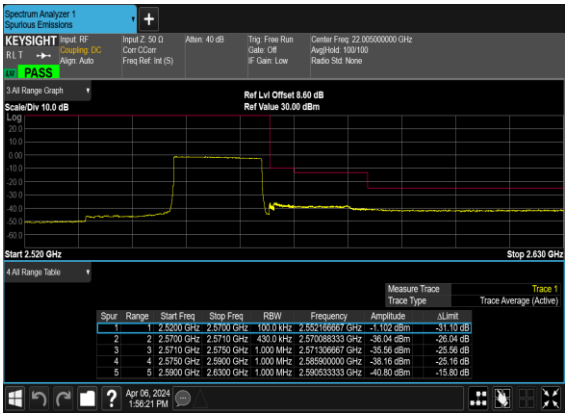
N7(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



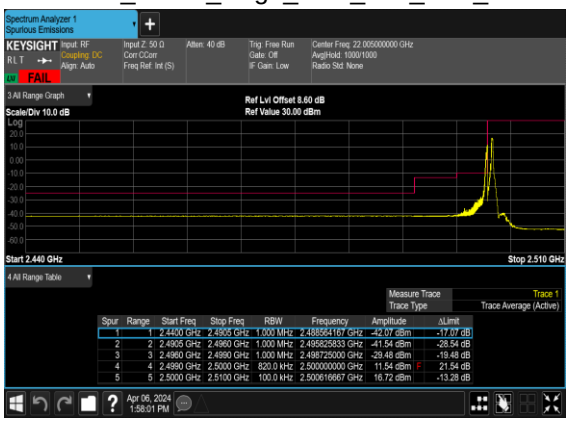
N7(20M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



N7(20M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



N7(40M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



N7(40M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH_**CHP_PASS**