



FCC RF Test Report

APPLICANT : Nokia Shanghai Bell Co. Ltd.
EQUIPMENT : Nokia FastMile 5G Gateway 3.2
BRAND NAME : Nokia
MODEL NAME : 5G16-12W-A
FCC ID : 2ADZR5G1612WA
STANDARD : 47 CFR Part 2, 27
CLASSIFICATION : PCS Licensed Transmitter (PCB)
TEST DATE(S) : Dec. 13, 2021 ~ Jan. 14, 2022

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.

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG1O2908G	Rev. 01	Initial issue of report	Jan. 20, 2022



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046 §27.50(h)(2)	Conducted Output Power (5G NR n7, n41, n38)	< 2Watt	PASS	-
3.5	N/A	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	Reporting Only	PASS	-
3.7	§27.53(m)(2)(v)	Conducted Band Edge Measurement (5G NR n7, n41, n38)	< 43+10log10(P[Watts])	PASS	-
3.8	§2.1051 §27.53(m)(2)(v)	Conducted Spurious Emission (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(m)(2)(v)	Radited Spurious Emission (5G NR n7, n41, n38)	< 43+10log10(P[Watts])	PASS	Under limit 46.52 dB at 10190.000 MHz

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.



1 General Description

1.1 Applicant

Nokia Shanghai Bell Co. Ltd.

No. 388, Ningqiao Rd. 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 3.2
Brand Name	Nokia
Model Name	5G16-12W-A
FCC ID	2ADZR5G1612WA
HW Version	3TG01797A
SW Version	5GGW3-OMNI-1_D210400Bh3T0301E0156
EUT Stage	Identical Prototype

Remark:

1. Only 5G NR bands are tested in this report, all the other RF bands are tested in the other reports separately.
2. Pre-scanned harmonic for USIM and eSIM sample, we choose the worse mode of the USIM sample to test.
3. There are two types of EUT: sample 1 with 1st source antenna and sample 2 with 2nd source antenna. According to the difference, we chose sample 1 to perform full test and sample 2 to verify the worst cases of RSE.

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
Rx Frequency	5G NR n7 : 2620 MHz ~ 2690 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz
SCS	15kHz, 30kHz
Bandwidth	n7, n38(15kHz): 5MHz / 10MHz / 15MHz / 20MHz n7, n38(30kHz): 10MHz / 15MHz / 20MHz n41(15kHz): 10MHz / 15MHz / 20MHz / 40MHz / 50MHz n41(30kHz): 10MHz / 15MHz / 20MHz / 40MHz / 50MHz / 60MHz / 80MHz / 90MHz / 100MHz
Antenna Gain	5G NR n7: 4.7 dBi 5G NR n38: 4.7 dBi 5G NR n41: 4.7 dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

Remark:

1. The maximum output power is shown in the report, 5G NR n7 for Antenna 0 and 5G NR n38/n41 SISO mode for Antenna 5.
2. 5G NR Band supports SA and NSA mode for SCS 15kHz/30kHz. According to the maximum power between SA and NSA mode, NSA covers SA mode for n7 and SA covers NSA mode for 5G NR n38/n41.
3. The device supports HPUE mode for 5G NR n41.
4. 5G NR n38/n41 support UL MIMO mode for Antenna 5+6.
5. The EN-DC mode combination could be referred to the product spec.

1.5 Modification of EUT

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

1.6 Maximum Conducted Power and Emission Designator

5G NR n7(15kHz) (EN DC_2A-n7A)		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
5	2502.5 ~ 2567.5	0.2786	4M47G7D	0.2254	4M47W7D
10	2505.0 ~ 2565.0	0.2831	9M28G7D	0.2249	9M31W7D
15	2507.5 ~ 2562.5	0.2818	14M1G7D	0.2254	14M1W7D
20	2510.0 ~ 2560.0	0.2844	18M9G7D	0.2254	18M9W7D

5G NR n38(15kHz)		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
5	2572.5 ~ 2617.5	0.2692	4M47G7D	0.2228	4M48W7D
10	2575.0 ~ 2615.0	0.2366	9M29G7D	0.1858	9M29W7D
15	2577.5 ~ 2612.5	0.2344	14M1G7D	0.1879	14M1W7D
20	2580.0 ~ 2610.0	0.2360	18M9G7D	0.1871	18M9W7D

5G NR n38(15kHz) UL MIMO		QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
5	2572.5 ~ 2617.5	0.1901	4M46G7D	0.1750	4M47W7D
10	2575.0 ~ 2615.0	0.1932	9M28G7D	0.1795	9M31W7D
15	2577.5 ~ 2612.5	0.1892	14M1G7D	0.1738	14M1W7D
20	2580.0 ~ 2610.0	0.1950	18M9G7D	0.1782	19M0W7D

5G NR n41(15kHz)		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
10	2501.01 ~ 2685.00	0.4365	9M29G7D	0.3499	9M29W7D
15	2503.50 ~ 2682.495	0.4295	14M1G7D	0.3459	14M1W7D
20	2506.005 ~ 2679.99	0.4375	18M9G7D	0.3420	18M9W7D
40	2516.01 ~ 2670.00	0.4335	38M6G7D	0.3483	38M6W7D
50	2521.005 ~ 2664.99	0.4426	48M4G7D	0.3540	48M3W7D



5G NR n41(30kHz)		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
10	2501.01 ~ 2685.00	0.4188	8M59G7D	0.3350	8M59W7D
15	2503.50 ~ 2682.48	0.4178	13M6G7D	0.3319	13M6W7D
20	2506.02 ~ 2679.99	0.4169	18M2G7D	0.3304	18M2W7D
40	2516.01 ~ 2670.00	0.4178	37M9G7D	0.3319	37M9W7D
50	2521.02 ~ 2664.99	0.4236	47M5G7D	0.3365	47M6W7D
60	2526.00 ~ 2659.98	0.4236	58M0G7D	0.3357	58M0W7D
80	2536.02 ~ 2649.99	0.4266	77M6G7D	0.3396	77M7W7D
90	2541.00 ~ 2644.98	0.4178	87M7G7D	0.3327	87M7W7D
100	2546.01 ~ 2640.00	0.2128	97M6G7D	0.1663	97M6W7D

5G NR n41(15kHz) UL MIMO		QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
10	2501.01 ~ 2685.00	0.3606	9M28G7D	0.3289	9M31W7D
15	2503.50 ~ 2682.495	0.3581	14M1G7D	0.3289	14M1W7D
20	2506.005 ~ 2679.99	0.3581	18M9G7D	0.3192	19M0W7D
40	2516.01 ~ 2670.00	0.3622	38M5G7D	0.3236	38M5W7D
50	2521.005 ~ 2664.99	0.3631	48M3G7D	0.3281	48M3W7D

5G NR n41(30kHz) UL MIMO		QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
10	2501.01 ~ 2685.00	0.3162	8M56G7D	0.2904	8M58W7D
15	2503.50 ~ 2682.48	0.3289	13M6G7D	0.2979	13M6W7D
20	2506.02 ~ 2679.99	0.3192	18M2G7D	0.2904	18M2W7D
40	2516.01 ~ 2670.00	0.3350	37M8G7D	0.3034	37M9W7D
50	2521.02 ~ 2664.99	0.3396	47M5G7D	0.3062	47M6W7D
60	2526.00 ~ 2659.98	0.3192	57M9G7D	0.2877	57M9W7D
80	2536.02 ~ 2649.99	0.3365	77M6G7D	0.3034	77M7W7D
90	2541.00 ~ 2644.98	0.3327	87M8G7D	0.2992	87M7W7D
100	2546.01 ~ 2640.00	0.3069	97M5G7D	0.2761	97M7W7D

EN_DC_n41AA (15kHz)		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 BW10MHz	LTE BW20MHz	0.4325	28M4G7D	0.3828	28M5W7D
NR BW 15MHz	LTE BW20MHz	0.4310	33M2G7D	0.3835	33M7W7D
NR BW 20MHz	LTE BW10MHz	0.4315	28M7G7D	0.3837	28M8W7D
NR BW 40MHz	LTE BW10MHz	0.4285	49M9G7D	0.3724	50M0W7D
NR BW 50MHz	LTE BW10MHz	0.4355	59M6G7D	0.3837	59M8W7D

EN_DC_n41AA (30kHz)		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 BW10MHz	LTE BW20MHz	0.4385	28M1G7D	0.3917	28M1W7D
NR BW 15MHz	LTE BW20MHz	0.4479	33M0G7D	0.3945	33M1W7D
NR BW 20MHz	LTE BW10MHz	0.4487	28M4G7D	0.3945	28M5W7D
NR BW 40MHz	LTE BW10MHz	0.4457	48M6G7D	0.3864	48M7W7D
NR BW 50MHz	LTE BW10MHz	0.4467	58M1G7D	0.3972	58M2W7D
NR BW 60MHz	LTE BW10MHz	0.4416	68M5G7D	0.3908	68M1W7D
NR BW 80MHz	LTE BW10MHz	0.4416	88M1G7D	0.3936	88M2W7D
NR BW 90MHz	LTE BW20MHz	0.4364	108MG7D	0.3886	108MW7D
NR BW 100MHz	LTE BW20MHz	0.4508	117MG7D	0.3954	117MW7D

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 and 5G NR n38 supports BW5MHz for SCS 15kHz, it is tested in the report.
2. 5G NR n38/n41 UL MIMO mode support for CP-OFDM mode only.
3. 5G NR n7/n38 SCS 15kHz covers SCS 30kHz for BW10MHz/15MHz/20MHz.
4. For EN_DC_n41AA, we only show the combination of the maximum power among all bandwidth combinations in the report.
5. 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 FAX : +86-512-57900958		
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 case in section 3 of this report

1.8 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH04-KS	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, 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 plane) were recorded in this report.

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

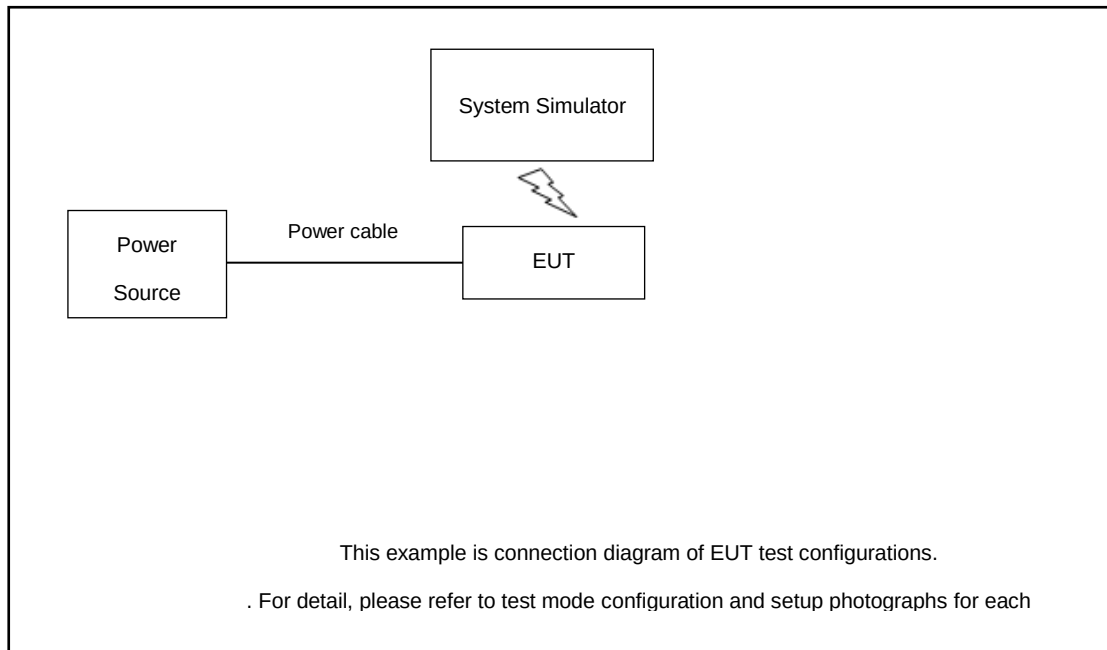
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			

Test Items	5G NR	Bandwidth (MHz)								Modulation					RB #		Test Channel		
		5	10	15	20	30	40	50-90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256 QAM	1	Full	L	M	H
Max. Output Power	n7	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	v
	n41	-	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	v	v	v
	n38	v								v	v				v	v	v	v	v
	n41	-			v					v	v				v	v	v	v	v
26dB and 99% Bandwidth	n7	v	v	v	v	-	-	-	-	v	v	v	v	v		v		v	
	n38	v								v	v	v	v	v		v		v	
	n41	-	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
	n38	v								v	v				v	v	v		v
	n41	-	v		v			v	v	v	v				v	v	v		v



Test Items	5G NR	Bandwidth (MHz)								Modulation					RB #		Test Channel		
		5	10	15	20	30	40	50-90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256 QAM	1	Full	L	M	H
Conducted Spurious Emission	n7	v	v		v	-	-	-	-	v	v				v		v	v	v
	n38	v								v	v				v		v	v	v
	n41	-	v		v			v	v	v	v				v		v	v	v
Frequency Stability	n7				v	-	-	-	-		v					v		v	
	n38	v									v					v		v	
	n41	-	-	-	v						v					v		v	
E.R.P / E.I.R.P	n7	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	v
	n41	-	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	
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.	Based on engineering evaluation, only the worst modulations test results are shown in the report.																	

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	Power Supply	GWINSTEK	PSS-2002	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
3.	NR Base Station	Anritsu	MT8000A	N/A	N/A	Unshielded, 1.8 m

2.4 Measurement Results Explanation Example

For all conducted test items:

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

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 1.9 dB and 10dB attenuator.

Example :

$$\begin{aligned}
 \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\
 &= 1.9 + 10 = 11.9 \text{ (dB)}
 \end{aligned}$$



2.5 Frequency List of Low/Middle/High Channels

5G NR n7(15kHz/30KHz) Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	526000	531000	536000
	Frequency	2510	2535	2560
15	Channel	525500	531000	536500
	Frequency	2507.5	2535	2562.5
10	Channel	525000	531000	537000
	Frequency	2505	2535	2565
5	Channel	524500	531000	537500
	Frequency	2502.5	2535	2567.5

5G NR n38(15kHz/30KHz) Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
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
5	Channel	514500	519000	523500
	Frequency	2572.5	2595	2617.5

5G NR n41(15kHz) Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
50	Channel	504201	518601	532998
	Frequency	2521.005	2593.005	2664.99
40	Channel	503202	518601	534000
	Frequency	2516.01	2593.005	2670
20	Channel	501201	518601	535998
	Frequency	2506.005	2593.005	2679.99
15	Channel	500700	518601	536499
	Frequency	2503.5	2593.005	2682.495
10	Channel	500202	518601	537000
	Frequency	2501.01	2593.005	2685



5G NR n41(30kHz) 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
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
20	Channel	501204	518598	535998
	Frequency	2506.02	2592.99	2679.99
15	Channel	500700	518598	536496
	Frequency	2503.5	2592.99	2682.48
10	Channel	500202	518598	537000
	Frequency	2501.01	2592.99	2685

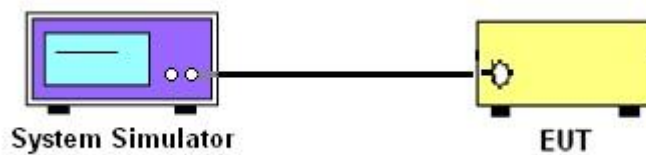
3 Conducted Test Items

3.1 Measuring Instruments

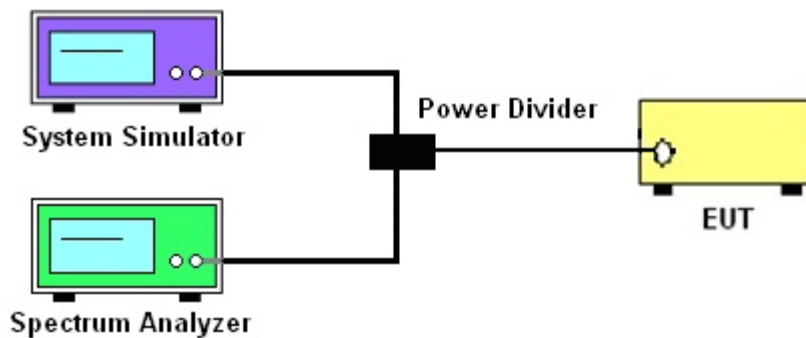
See list of measuring instruments of this test report.

3.2 Test Setup

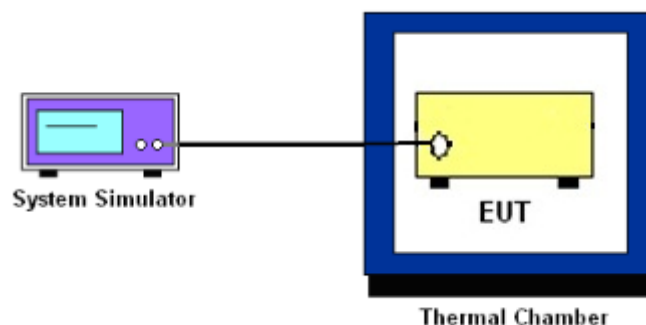
3.2.1 Conducted Output Power



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



3.2.3 Frequency Stability



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power and EIRP

3.4.1 Description of the Conducted Output Power Measurement and EIRP Measurement

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

All user stations are limited to 2.0 watts transmitter output power for 5G NR n7, n38 and n41.

According to KDB 412172 D01 Power Approach,

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

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

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

3.4.2 Test Procedures

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

3.5 Peak-to-Average Ratio

3.5.1 Description of the PAR Measurement

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

3.5.2 Test Procedures

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



3.6 Occupied Bandwidth

3.6.1 Description of Occupied Bandwidth Measurement

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

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

3.6.2 Test Procedures

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

3.7 Conducted Band Edge

3.7.1 Description of Conducted Band Edge Measurement

27.53(m)(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 $\geq 1\%$ 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.
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 $43 + 10\log(P)$ dB below the transmitter power P(Watts)

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

$= [30 + 10\log(P)]$ (dBm) - $[43 + 10\log(P)]$ (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 10th 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 $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)]$ (dB)
 $= [30 + 10\log(P)]$ (dBm) - $[43 + 10\log(P)]$ (dB)
 $= -13$ dBm.

3.9 Frequency Stability

3.9.1 Description of Frequency Stability Measurement

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

3.9.2 Test Procedures for Temperature Variation

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

3.9.3 Test Procedures for Voltage Variation

1. The testing follows ANSI C63.26 section 5.6.5
2. The EUT was placed in a temperature chamber at $20\pm 5^{\circ}\text{C}$ 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.

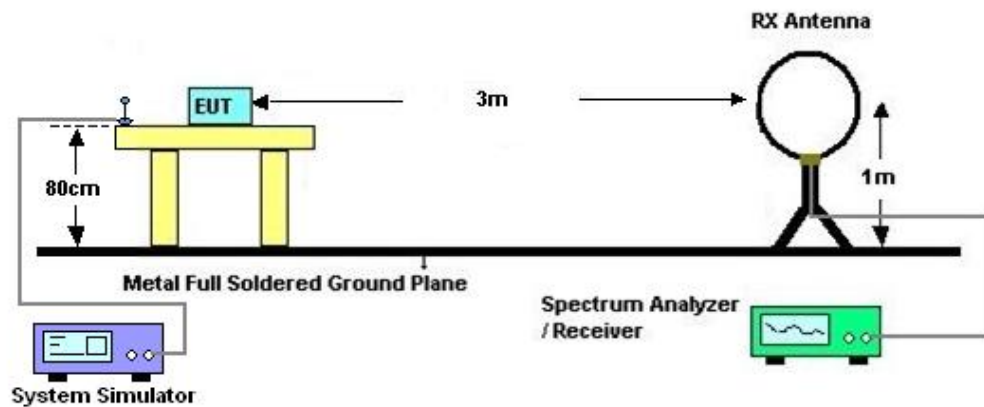
4 Radiated Test Items

4.1 Measuring Instruments

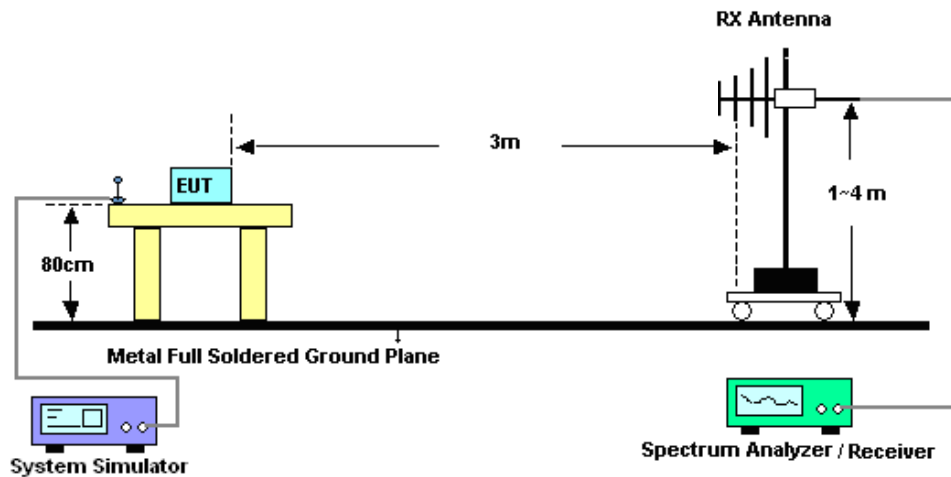
See list of measuring instruments of this test report.

4.2 Test Setup

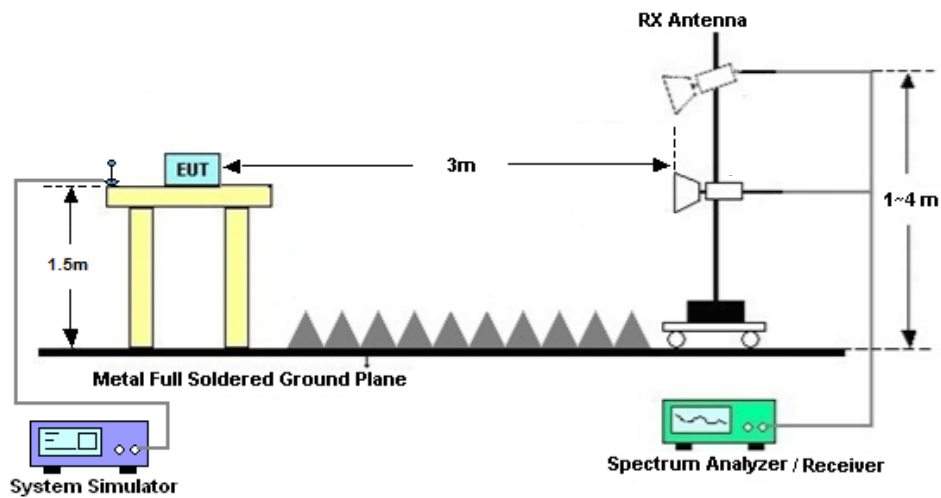
4.2.1 For radiated test below 30MHz



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. $EIRP \text{ (dBm)} = S.G. \text{ Power} - Tx \text{ Cable Loss} + Tx \text{ Antenna Gain}$
11. $ERP \text{ (dBm)} = EIRP - 2.15$
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

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

$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$$

$$= -13\text{dBm}.$$



5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EXA Signal Analyzer	KEYSIGHT	N9010B	MY60240803	10Hz~44GHz	Apr. 03, 2021	Dec. 13, 2021~Jan. 14, 2022	Apr. 02, 2022	Conducted (TH01-SZ)
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 08, 2021	Dec. 13, 2021~Jan. 14, 2022	Apr. 07, 2022	Conducted (TH01-SZ)
Power divider	STI	STI08-0055	-	0.5~40GHz	Aug. 26, 2021	Dec. 13, 2021~Jan. 14, 2022	Aug. 25, 2022	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 14, 2021	Dec. 13, 2021~Jan. 14, 2022	Jul. 13, 2022	Conducted (TH01-SZ)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz~44G,MAX 30dB	Apr. 13, 2021	Dec. 31, 2021	Apr. 12, 2022	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Oct. 30, 2021	Dec. 31, 2021	Oct. 29, 2022	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz~1GHz	May 30, 2021	Dec. 31, 2021	May 29, 2022	Radiation (03CH04-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	1356	1GHz~18GHz	Apr. 18, 2021	Dec. 31, 2021	Apr. 17, 2022	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101115	18GHz~40GHz	Jan. 06, 2021	Dec. 31, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	187289	9KHz~1GHz	Jan. 06, 2021	Dec. 31, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40G GA	060728	18~40GHz	Jan. 07, 2021	Dec. 31, 2021	Jan. 06, 2022	Radiation (03CH04-KS)
high gain Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P	2025788	1Ghz~18Ghz	Jan. 06, 2021	Dec. 31, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	Keysight	83017A	MY57280106	500MHz~26.5GHz	Oct. 13, 2021	Dec. 31, 2021	Oct. 12, 2022	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Dec. 31, 2021	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Dec. 31, 2021	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Dec. 31, 2021	NCR	Radiation (03CH04-KS)

NCR: No Calibration Required



6 Uncertainty of Evaluation

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 Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.3dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.8dB
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

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



Appendix A. Test Results of Conducted Test

Test Engineer :	Fly Liang	Temperature :	21~23°C
		Relative Humidity :	45~51%

FR1 N7(ANT0) – SCS 15kHz

LTE Band: 2, LTE BW: 10M, LTE ARFCN: Mid

Transmitter Conducted Output Power And EIRP, ($G_T - L_C$)= 4.7dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
7	15	5	524500	2502.5	DFT-s-OFDM PI/2 BPSK	12@6	24.18	28.88	0.7727
7	15	5	524500	2502.5	DFT-s-OFDM PI/2 BPSK	1@1	24.08	28.78	0.7551
7	15	5	524500	2502.5	DFT-s-OFDM PI/2 BPSK	1@23	24.12	28.82	0.7621
7	15	5	524500	2502.5	DFT-s-OFDM QPSK	12@6	24.19	28.89	0.7745
7	15	5	524500	2502.5	DFT-s-OFDM QPSK	1@1	24.25	28.95	0.7852
7	15	5	524500	2502.5	DFT-s-OFDM QPSK	1@23	24.19	28.89	0.7745
7	15	5	524500	2502.5	DFT-s-OFDM 16 QAM	12@6	23.28	27.98	0.6281
7	15	5	524500	2502.5	DFT-s-OFDM 16 QAM	1@1	23.19	27.89	0.6152
7	15	5	524500	2502.5	DFT-s-OFDM 16 QAM	1@23	23.17	27.87	0.6124
7	15	5	524500	2502.5	DFT-s-OFDM 64 QAM	12@6	21.68	26.38	0.4345
7	15	5	524500	2502.5	DFT-s-OFDM 64 QAM	1@1	21.47	26.17	0.4140
7	15	5	524500	2502.5	DFT-s-OFDM 64 QAM	1@23	21.49	26.19	0.4159
7	15	5	524500	2502.5	DFT-s-OFDM 256 QAM	12@6	19.76	24.46	0.2793
7	15	5	524500	2502.5	DFT-s-OFDM 256 QAM	1@1	19.87	24.57	0.2864
7	15	5	524500	2502.5	DFT-s-OFDM 256 QAM	1@23	19.83	24.53	0.2838
7	15	5	524500	2502.5	CP-OFDM QPSK	13@6	22.62	27.32	0.5395
7	15	5	524500	2502.5	CP-OFDM QPSK	1@1	22.44	27.14	0.5176
7	15	5	524500	2502.5	CP-OFDM QPSK	1@23	22.35	27.05	0.5070
7	15	5	531000	2535	DFT-s-OFDM PI/2 BPSK	12@6	24.18	28.88	0.7727
7	15	5	531000	2535	DFT-s-OFDM PI/2 BPSK	1@1	23.94	28.64	0.7311
7	15	5	531000	2535	DFT-s-OFDM PI/2 BPSK	1@23	24.05	28.75	0.7499
7	15	5	531000	2535	DFT-s-OFDM QPSK	12@6	24.24	28.94	0.7834
7	15	5	531000	2535	DFT-s-OFDM QPSK	1@1	24.18	28.88	0.7727
7	15	5	531000	2535	DFT-s-OFDM QPSK	1@23	24.23	28.93	0.7816
7	15	5	531000	2535	DFT-s-OFDM 16 QAM	12@6	23.31	28.01	0.6324
7	15	5	531000	2535	DFT-s-OFDM 16 QAM	1@1	23.25	27.95	0.6237
7	15	5	531000	2535	DFT-s-OFDM 16 QAM	1@23	23.27	27.97	0.6266

7	15	5	531000	2535	DFT-s-OFDM 64 QAM	12@6	21.68	26.38	0.4345
7	15	5	531000	2535	DFT-s-OFDM 64 QAM	1@1	21.64	26.34	0.4305
7	15	5	531000	2535	DFT-s-OFDM 64 QAM	1@23	21.65	26.35	0.4315
7	15	5	531000	2535	DFT-s-OFDM 256 QAM	12@6	19.66	24.36	0.2729
7	15	5	531000	2535	DFT-s-OFDM 256 QAM	1@1	19.74	24.44	0.2780
7	15	5	531000	2535	DFT-s-OFDM 256 QAM	1@23	19.75	24.45	0.2786
7	15	5	531000	2535	CP-OFDM QPSK	13@6	22.6	27.3	0.5370
7	15	5	531000	2535	CP-OFDM QPSK	1@1	22.53	27.23	0.5284
7	15	5	531000	2535	CP-OFDM QPSK	1@23	22.52	27.22	0.5272
7	15	5	537500	2567.5	DFT-s-OFDM PI/2 BPSK	12@6	24.35	29.05	0.8035
7	15	5	537500	2567.5	DFT-s-OFDM PI/2 BPSK	1@1	24.18	28.88	0.7727
7	15	5	537500	2567.5	DFT-s-OFDM PI/2 BPSK	1@23	24.16	28.86	0.7691
7	15	5	537500	2567.5	DFT-s-OFDM QPSK	12@6	24.45	29.15	0.8222
7	15	5	537500	2567.5	DFT-s-OFDM QPSK	1@1	24.39	29.09	0.8110
7	15	5	537500	2567.5	DFT-s-OFDM QPSK	1@23	24.38	29.08	0.8091
7	15	5	537500	2567.5	DFT-s-OFDM 16 QAM	12@6	23.53	28.23	0.6653
7	15	5	537500	2567.5	DFT-s-OFDM 16 QAM	1@1	23.51	28.21	0.6622
7	15	5	537500	2567.5	DFT-s-OFDM 16 QAM	1@23	23.47	28.17	0.6561
7	15	5	537500	2567.5	DFT-s-OFDM 64 QAM	12@6	21.92	26.62	0.4592
7	15	5	537500	2567.5	DFT-s-OFDM 64 QAM	1@1	21.82	26.52	0.4487
7	15	5	537500	2567.5	DFT-s-OFDM 64 QAM	1@23	21.83	26.53	0.4498
7	15	5	537500	2567.5	DFT-s-OFDM 256 QAM	12@6	19.89	24.59	0.2877
7	15	5	537500	2567.5	DFT-s-OFDM 256 QAM	1@1	19.96	24.66	0.2924
7	15	5	537500	2567.5	DFT-s-OFDM 256 QAM	1@23	19.92	24.62	0.2897
7	15	5	537500	2567.5	CP-OFDM QPSK	13@6	22.83	27.53	0.5662
7	15	5	537500	2567.5	CP-OFDM QPSK	1@1	22.73	27.43	0.5534
7	15	5	537500	2567.5	CP-OFDM QPSK	1@23	22.69	27.39	0.5483
7	15	10	525000	2505	DFT-s-OFDM PI/2 BPSK	25@12	24.21	28.91	0.7780
7	15	10	525000	2505	DFT-s-OFDM PI/2 BPSK	1@1	23.99	28.69	0.7396
7	15	10	525000	2505	DFT-s-OFDM PI/2 BPSK	1@50	24.07	28.77	0.7534
7	15	10	525000	2505	DFT-s-OFDM QPSK	25@12	24.26	28.96	0.7870
7	15	10	525000	2505	DFT-s-OFDM QPSK	1@1	24.2	28.9	0.7762
7	15	10	525000	2505	DFT-s-OFDM QPSK	1@50	24.24	28.94	0.7834
7	15	10	525000	2505	DFT-s-OFDM 16 QAM	25@12	23.24	27.94	0.6223

7	15	10	525000	2505	DFT-s-OFDM 16 QAM	1@1	23.13	27.83	0.6067
7	15	10	525000	2505	DFT-s-OFDM 16 QAM	1@50	23.21	27.91	0.6180
7	15	10	525000	2505	DFT-s-OFDM 64 QAM	25@12	21.68	26.38	0.4345
7	15	10	525000	2505	DFT-s-OFDM 64 QAM	1@1	21.47	26.17	0.4140
7	15	10	525000	2505	DFT-s-OFDM 64 QAM	1@50	21.5	26.2	0.4169
7	15	10	525000	2505	DFT-s-OFDM 256 QAM	25@12	19.74	24.44	0.2780
7	15	10	525000	2505	DFT-s-OFDM 256 QAM	1@1	19.85	24.55	0.2851
7	15	10	525000	2505	DFT-s-OFDM 256 QAM	1@50	19.9	24.6	0.2884
7	15	10	525000	2505	CP-OFDM QPSK	26@13	22.66	27.36	0.5445
7	15	10	525000	2505	CP-OFDM QPSK	1@1	22.41	27.11	0.5140
7	15	10	525000	2505	CP-OFDM QPSK	1@50	22.43	27.13	0.5164
7	15	10	531000	2535	DFT-s-OFDM PI/2 BPSK	25@12	24.23	28.93	0.7816
7	15	10	531000	2535	DFT-s-OFDM PI/2 BPSK	1@1	23.85	28.55	0.7161
7	15	10	531000	2535	DFT-s-OFDM PI/2 BPSK	1@50	24.14	28.84	0.7656
7	15	10	531000	2535	DFT-s-OFDM QPSK	25@12	24.32	29.02	0.7980
7	15	10	531000	2535	DFT-s-OFDM QPSK	1@1	24.09	28.79	0.7568
7	15	10	531000	2535	DFT-s-OFDM QPSK	1@50	24.26	28.96	0.7870
7	15	10	531000	2535	DFT-s-OFDM 16 QAM	25@12	23.29	27.99	0.6295
7	15	10	531000	2535	DFT-s-OFDM 16 QAM	1@1	23.23	27.93	0.6209
7	15	10	531000	2535	DFT-s-OFDM 16 QAM	1@50	23.31	28.01	0.6324
7	15	10	531000	2535	DFT-s-OFDM 64 QAM	25@12	21.69	26.39	0.4355
7	15	10	531000	2535	DFT-s-OFDM 64 QAM	1@1	21.61	26.31	0.4276
7	15	10	531000	2535	DFT-s-OFDM 64 QAM	1@50	21.66	26.36	0.4325
7	15	10	531000	2535	DFT-s-OFDM 256 QAM	25@12	19.63	24.33	0.2710
7	15	10	531000	2535	DFT-s-OFDM 256 QAM	1@1	19.66	24.36	0.2729
7	15	10	531000	2535	DFT-s-OFDM 256 QAM	1@50	19.81	24.51	0.2825
7	15	10	531000	2535	CP-OFDM QPSK	26@13	22.77	27.47	0.5585
7	15	10	531000	2535	CP-OFDM QPSK	1@1	22.46	27.16	0.5200
7	15	10	531000	2535	CP-OFDM QPSK	1@50	22.55	27.25	0.5309
7	15	10	537000	2565	DFT-s-OFDM PI/2 BPSK	25@12	24.46	29.16	0.8241
7	15	10	537000	2565	DFT-s-OFDM PI/2 BPSK	1@1	24.27	28.97	0.7889
7	15	10	537000	2565	DFT-s-OFDM PI/2 BPSK	1@50	24.17	28.87	0.7709
7	15	10	537000	2565	DFT-s-OFDM QPSK	25@12	24.52	29.22	0.8356
7	15	10	537000	2565	DFT-s-OFDM QPSK	1@1	24.42	29.12	0.8166

7	15	10	537000	2565	DFT-s-OFDM QPSK	1@50	24.39	29.09	0.8110
7	15	10	537000	2565	DFT-s-OFDM 16 QAM	25@12	23.51	28.21	0.6622
7	15	10	537000	2565	DFT-s-OFDM 16 QAM	1@1	23.52	28.22	0.6637
7	15	10	537000	2565	DFT-s-OFDM 16 QAM	1@50	23.48	28.18	0.6577
7	15	10	537000	2565	DFT-s-OFDM 64 QAM	25@12	21.94	26.64	0.4613
7	15	10	537000	2565	DFT-s-OFDM 64 QAM	1@1	21.74	26.44	0.4406
7	15	10	537000	2565	DFT-s-OFDM 64 QAM	1@50	21.89	26.59	0.4560
7	15	10	537000	2565	DFT-s-OFDM 256 QAM	25@12	19.85	24.55	0.2851
7	15	10	537000	2565	DFT-s-OFDM 256 QAM	1@1	19.95	24.65	0.2917
7	15	10	537000	2565	DFT-s-OFDM 256 QAM	1@50	19.88	24.58	0.2871
7	15	10	537000	2565	CP-OFDM QPSK	26@13	22.98	27.68	0.5861
7	15	10	537000	2565	CP-OFDM QPSK	1@1	22.66	27.36	0.5445
7	15	10	537000	2565	CP-OFDM QPSK	1@50	22.71	27.41	0.5508
7	15	15	525500	2507.5	DFT-s-OFDM PI/2 BPSK	36@18	24.19	28.89	0.7745
7	15	15	525500	2507.5	DFT-s-OFDM PI/2 BPSK	1@1	23.99	28.69	0.7396
7	15	15	525500	2507.5	DFT-s-OFDM PI/2 BPSK	1@77	23.95	28.65	0.7328
7	15	15	525500	2507.5	DFT-s-OFDM QPSK	36@18	24.21	28.91	0.7780
7	15	15	525500	2507.5	DFT-s-OFDM QPSK	1@1	24.18	28.88	0.7727
7	15	15	525500	2507.5	DFT-s-OFDM QPSK	1@77	24.05	28.75	0.7499
7	15	15	525500	2507.5	DFT-s-OFDM 16 QAM	36@18	23.18	27.88	0.6138
7	15	15	525500	2507.5	DFT-s-OFDM 16 QAM	1@1	23.16	27.86	0.6109
7	15	15	525500	2507.5	DFT-s-OFDM 16 QAM	1@77	23.1	27.8	0.6026
7	15	15	525500	2507.5	DFT-s-OFDM 64 QAM	36@18	21.67	26.37	0.4335
7	15	15	525500	2507.5	DFT-s-OFDM 64 QAM	1@1	21.46	26.16	0.4130
7	15	15	525500	2507.5	DFT-s-OFDM 64 QAM	1@77	21.35	26.05	0.4027
7	15	15	525500	2507.5	DFT-s-OFDM 256 QAM	36@18	19.77	24.47	0.2799
7	15	15	525500	2507.5	DFT-s-OFDM 256 QAM	1@1	19.76	24.46	0.2793
7	15	15	525500	2507.5	DFT-s-OFDM 256 QAM	1@77	19.72	24.42	0.2767
7	15	15	525500	2507.5	CP-OFDM QPSK	39@19	22.7	27.4	0.5495
7	15	15	525500	2507.5	CP-OFDM QPSK	1@1	22.33	27.03	0.5047
7	15	15	525500	2507.5	CP-OFDM QPSK	1@77	22.12	26.82	0.4808
7	15	15	531000	2535	DFT-s-OFDM PI/2 BPSK	36@18	24.17	28.87	0.7709
7	15	15	531000	2535	DFT-s-OFDM PI/2 BPSK	1@1	23.79	28.49	0.7063
7	15	15	531000	2535	DFT-s-OFDM PI/2 BPSK	1@77	24.08	28.78	0.7551

7	15	15	531000	2535	DFT-s-OFDM QPSK	36@18	24.23	28.93	0.7816
7	15	15	531000	2535	DFT-s-OFDM QPSK	1@1	24	28.7	0.7413
7	15	15	531000	2535	DFT-s-OFDM QPSK	1@77	24.24	28.94	0.7834
7	15	15	531000	2535	DFT-s-OFDM 16 QAM	36@18	23.27	27.97	0.6266
7	15	15	531000	2535	DFT-s-OFDM 16 QAM	1@1	23.04	27.74	0.5943
7	15	15	531000	2535	DFT-s-OFDM 16 QAM	1@77	23.25	27.95	0.6237
7	15	15	531000	2535	DFT-s-OFDM 64 QAM	36@18	21.71	26.41	0.4375
7	15	15	531000	2535	DFT-s-OFDM 64 QAM	1@1	21.41	26.11	0.4083
7	15	15	531000	2535	DFT-s-OFDM 64 QAM	1@77	21.58	26.28	0.4246
7	15	15	531000	2535	DFT-s-OFDM 256 QAM	36@18	19.68	24.38	0.2742
7	15	15	531000	2535	DFT-s-OFDM 256 QAM	1@1	19.63	24.33	0.2710
7	15	15	531000	2535	DFT-s-OFDM 256 QAM	1@77	19.72	24.42	0.2767
7	15	15	531000	2535	CP-OFDM QPSK	39@19	22.71	27.41	0.5508
7	15	15	531000	2535	CP-OFDM QPSK	1@1	22.33	27.03	0.5047
7	15	15	531000	2535	CP-OFDM QPSK	1@77	22.26	26.96	0.4966
7	15	15	536500	2562.5	DFT-s-OFDM PI/2 BPSK	36@18	24.49	29.19	0.8299
7	15	15	536500	2562.5	DFT-s-OFDM PI/2 BPSK	1@1	24.21	28.91	0.7780
7	15	15	536500	2562.5	DFT-s-OFDM PI/2 BPSK	1@77	24.14	28.84	0.7656
7	15	15	536500	2562.5	DFT-s-OFDM QPSK	36@18	24.5	29.2	0.8318
7	15	15	536500	2562.5	DFT-s-OFDM QPSK	1@1	24.35	29.05	0.8035
7	15	15	536500	2562.5	DFT-s-OFDM QPSK	1@77	24.35	29.05	0.8035
7	15	15	536500	2562.5	DFT-s-OFDM 16 QAM	36@18	23.53	28.23	0.6653
7	15	15	536500	2562.5	DFT-s-OFDM 16 QAM	1@1	23.31	28.01	0.6324
7	15	15	536500	2562.5	DFT-s-OFDM 16 QAM	1@77	23.43	28.13	0.6501
7	15	15	536500	2562.5	DFT-s-OFDM 64 QAM	36@18	21.97	26.67	0.4645
7	15	15	536500	2562.5	DFT-s-OFDM 64 QAM	1@1	21.6	26.3	0.4266
7	15	15	536500	2562.5	DFT-s-OFDM 64 QAM	1@77	21.79	26.49	0.4457
7	15	15	536500	2562.5	DFT-s-OFDM 256 QAM	36@18	19.93	24.63	0.2904
7	15	15	536500	2562.5	DFT-s-OFDM 256 QAM	1@1	19.81	24.51	0.2825
7	15	15	536500	2562.5	DFT-s-OFDM 256 QAM	1@77	19.85	24.55	0.2851
7	15	15	536500	2562.5	CP-OFDM QPSK	39@19	22.99	27.69	0.5875
7	15	15	536500	2562.5	CP-OFDM QPSK	1@1	22.57	27.27	0.5333
7	15	15	536500	2562.5	CP-OFDM QPSK	1@77	22.42	27.12	0.5152
7	15	20	526000	2510	DFT-s-OFDM PI/2 BPSK	50@25	24.18	28.88	0.7727

7	15	20	526000	2510	DFT-s-OFDM PI/2 BPSK	1@1	24.08	28.78	0.7551
7	15	20	526000	2510	DFT-s-OFDM PI/2 BPSK	1@104	23.93	28.63	0.7295
7	15	20	526000	2510	DFT-s-OFDM QPSK	50@25	24.23	28.93	0.7816
7	15	20	526000	2510	DFT-s-OFDM QPSK	1@1	24.2	28.9	0.7762
7	15	20	526000	2510	DFT-s-OFDM QPSK	1@104	24.08	28.78	0.7551
7	15	20	526000	2510	DFT-s-OFDM 16 QAM	50@25	23.23	27.93	0.6209
7	15	20	526000	2510	DFT-s-OFDM 16 QAM	1@1	23.16	27.86	0.6109
7	15	20	526000	2510	DFT-s-OFDM 16 QAM	1@104	23.19	27.89	0.6152
7	15	20	526000	2510	DFT-s-OFDM 64 QAM	50@25	21.7	26.4	0.4365
7	15	20	526000	2510	DFT-s-OFDM 64 QAM	1@1	21.54	26.24	0.4207
7	15	20	526000	2510	DFT-s-OFDM 64 QAM	1@104	21.62	26.32	0.4285
7	15	20	526000	2510	DFT-s-OFDM 256 QAM	50@25	19.8	24.5	0.2818
7	15	20	526000	2510	DFT-s-OFDM 256 QAM	1@1	19.88	24.58	0.2871
7	15	20	526000	2510	DFT-s-OFDM 256 QAM	1@104	19.81	24.51	0.2825
7	15	20	526000	2510	CP-OFDM QPSK	53@26	22.61	27.31	0.5383
7	15	20	526000	2510	CP-OFDM QPSK	1@1	22.44	27.14	0.5176
7	15	20	526000	2510	CP-OFDM QPSK	1@104	22.36	27.06	0.5082
7	15	20	531000	2535	DFT-s-OFDM PI/2 BPSK	50@25	24.17	28.87	0.7709
7	15	20	531000	2535	DFT-s-OFDM PI/2 BPSK	1@1	23.8	28.5	0.7079
7	15	20	531000	2535	DFT-s-OFDM PI/2 BPSK	1@104	24.19	28.89	0.7745
7	15	20	531000	2535	DFT-s-OFDM QPSK	50@25	24.27	28.97	0.7889
7	15	20	531000	2535	DFT-s-OFDM QPSK	1@1	23.98	28.68	0.7379
7	15	20	531000	2535	DFT-s-OFDM QPSK	1@104	24.32	29.02	0.7980
7	15	20	531000	2535	DFT-s-OFDM 16 QAM	50@25	23.33	28.03	0.6353
7	15	20	531000	2535	DFT-s-OFDM 16 QAM	1@1	23.1	27.8	0.6026
7	15	20	531000	2535	DFT-s-OFDM 16 QAM	1@104	23.34	28.04	0.6368
7	15	20	531000	2535	DFT-s-OFDM 64 QAM	50@25	21.7	26.4	0.4365
7	15	20	531000	2535	DFT-s-OFDM 64 QAM	1@1	21.47	26.17	0.4140
7	15	20	531000	2535	DFT-s-OFDM 64 QAM	1@104	21.65	26.35	0.4315
7	15	20	531000	2535	DFT-s-OFDM 256 QAM	50@25	19.7	24.4	0.2754
7	15	20	531000	2535	DFT-s-OFDM 256 QAM	1@1	19.71	24.41	0.2761
7	15	20	531000	2535	DFT-s-OFDM 256 QAM	1@104	19.83	24.53	0.2838
7	15	20	531000	2535	CP-OFDM QPSK	53@26	22.73	27.43	0.5534
7	15	20	531000	2535	CP-OFDM QPSK	1@1	22.35	27.05	0.5070

7	15	20	531000	2535	CP-OFDM QPSK	1@104	22.51	27.21	0.5260
7	15	20	536000	2560	DFT-s-OFDM PI/2 BPSK	50@25	24.44	29.14	0.8204
7	15	20	536000	2560	DFT-s-OFDM PI/2 BPSK	1@1	24.27	28.97	0.7889
7	15	20	536000	2560	DFT-s-OFDM PI/2 BPSK	1@104	24.19	28.89	0.7745
7	15	20	536000	2560	DFT-s-OFDM QPSK	50@25	24.54	29.24	0.8395
7	15	20	536000	2560	DFT-s-OFDM QPSK	1@1	24.39	29.09	0.8110
7	15	20	536000	2560	DFT-s-OFDM QPSK	1@104	24.4	29.1	0.8128
7	15	20	536000	2560	DFT-s-OFDM 16 QAM	50@25	23.53	28.23	0.6653
7	15	20	536000	2560	DFT-s-OFDM 16 QAM	1@1	23.33	28.03	0.6353
7	15	20	536000	2560	DFT-s-OFDM 16 QAM	1@104	23.52	28.22	0.6637
7	15	20	536000	2560	DFT-s-OFDM 64 QAM	50@25	21.96	26.66	0.4634
7	15	20	536000	2560	DFT-s-OFDM 64 QAM	1@1	21.64	26.34	0.4305
7	15	20	536000	2560	DFT-s-OFDM 64 QAM	1@104	21.89	26.59	0.4560
7	15	20	536000	2560	DFT-s-OFDM 256 QAM	50@25	19.95	24.65	0.2917
7	15	20	536000	2560	DFT-s-OFDM 256 QAM	1@1	19.89	24.59	0.2877
7	15	20	536000	2560	DFT-s-OFDM 256 QAM	1@104	19.97	24.67	0.2931
7	15	20	536000	2560	CP-OFDM QPSK	53@26	22.96	27.66	0.5834
7	15	20	536000	2560	CP-OFDM QPSK	1@1	22.56	27.26	0.5321
7	15	20	536000	2560	CP-OFDM QPSK	1@104	22.68	27.38	0.5470

Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	0.0024	PASS	NV
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	0.0028	PASS	LV
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	0.0032	PASS	HV
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	0.0032	PASS	-30°C
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	0.0008	PASS	-20°C
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	0.0012	PASS	-10°C
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	0.0036	PASS	0°C
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	0.0020	PASS	10°C
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	0.0000	PASS	20°C
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	0.0012	PASS	30°C
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	0.0004	PASS	40°C
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	0.0020	PASS	50°C

Peak to Average Ratio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
7	15	20	526000	2510.0	DFT-s-OFDM PI/2 BPSK	100@0	4.54	13	PASS
7	15	20	526000	2510.0	DFT-s-OFDM PI/2 BPSK	1@0	4.1	13	PASS
7	15	20	526000	2510.0	DFT-s-OFDM QPSK	100@0	5.81	13	PASS
7	15	20	526000	2510.0	DFT-s-OFDM QPSK	1@0	5.14	13	PASS
7	15	20	531000	2535.0	DFT-s-OFDM PI/2 BPSK	100@0	4.42	13	PASS
7	15	20	531000	2535.0	DFT-s-OFDM PI/2 BPSK	1@0	3.81	13	PASS
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	5.67	13	PASS
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	1@0	4.74	13	PASS
7	15	20	536000	2560.0	DFT-s-OFDM PI/2 BPSK	100@0	4.68	13	PASS
7	15	20	536000	2560.0	DFT-s-OFDM PI/2 BPSK	1@0	4.95	13	PASS
7	15	20	536000	2560.0	DFT-s-OFDM QPSK	100@0	5.79	13	PASS
7	15	20	536000	2560.0	DFT-s-OFDM QPSK	1@0	5.97	13	PASS

B2_N7(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Low_CH



B2_N7(20M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_Low_CH



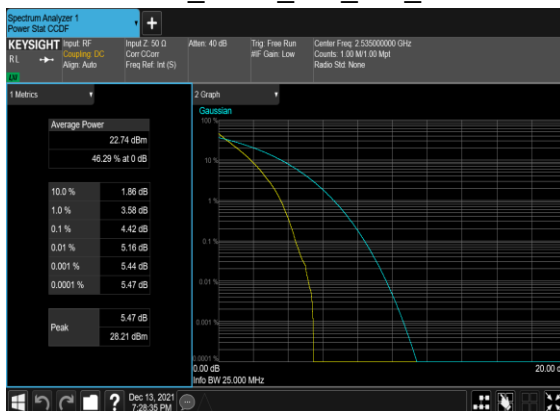
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B2_N7(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



B2_N7(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



B2_N7(20M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_Mid_CH



B2_N7(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



B2_N7(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



B2_N7(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_High_CH



B2_N7(20M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_High_CH



B2_N7(20M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



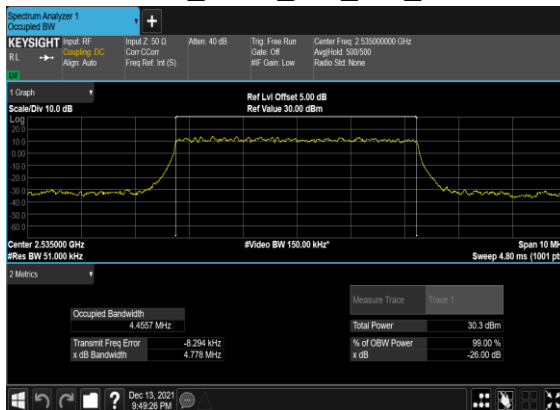
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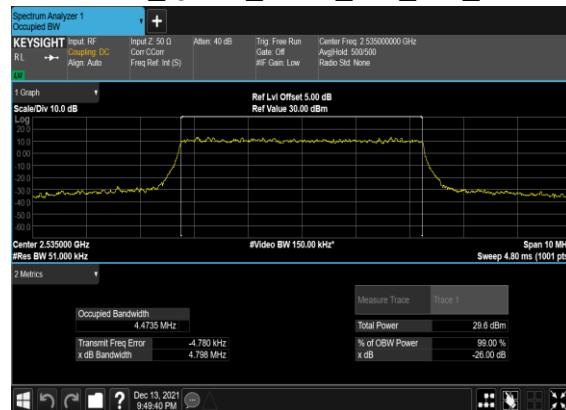
Occupied Bandwidth

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB OBW (MHz)
7	15	5	531000	2535.0	DFT-s-OFDM PI/2 BPSK	25@0	4.4557	4.778
7	15	5	531000	2535.0	DFT-s-OFDM QPSK	25@0	4.4735	4.798
7	15	5	531000	2535.0	CP-OFDM QPSK	25@0	4.4664	4.893
7	15	5	531000	2535.0	CP-OFDM 16 QAM	25@0	4.4581	4.838
7	15	5	531000	2535.0	CP-OFDM 64 QAM	25@0	4.4689	4.88
7	15	5	531000	2535.0	CP-OFDM 256 QAM	25@0	4.463	4.865
7	15	10	531000	2535.0	DFT-s-OFDM PI/2 BPSK	50@0	8.9243	9.591
7	15	10	531000	2535.0	DFT-s-OFDM QPSK	50@0	8.9156	9.528
7	15	10	531000	2535.0	CP-OFDM QPSK	52@0	9.2785	9.84
7	15	10	531000	2535.0	CP-OFDM 16 QAM	52@0	9.2636	9.887
7	15	10	531000	2535.0	CP-OFDM 64 QAM	52@0	9.3103	9.878
7	15	10	531000	2535.0	CP-OFDM 256 QAM	52@0	9.2816	9.892
7	15	15	531000	2535.0	DFT-s-OFDM PI/2 BPSK	75@0	13.368	14.08
7	15	15	531000	2535.0	DFT-s-OFDM QPSK	75@0	13.371	14.15
7	15	15	531000	2535.0	CP-OFDM QPSK	79@0	14.083	14.84
7	15	15	531000	2535.0	CP-OFDM 16 QAM	79@0	14.106	14.73
7	15	15	531000	2535.0	CP-OFDM 64 QAM	79@0	14.107	14.75
7	15	15	531000	2535.0	CP-OFDM 256 QAM	79@0	14.07	14.79
7	15	20	531000	2535.0	DFT-s-OFDM PI/2 BPSK	100@0	17.827	18.78
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	100@0	17.846	18.93
7	15	20	531000	2535.0	CP-OFDM QPSK	106@0	18.918	19.87
7	15	20	531000	2535.0	CP-OFDM 16 QAM	106@0	18.892	19.83
7	15	20	531000	2535.0	CP-OFDM 64 QAM	106@0	18.886	19.98
7	15	20	531000	2535.0	CP-OFDM 256 QAM	106@0	18.92	19.87

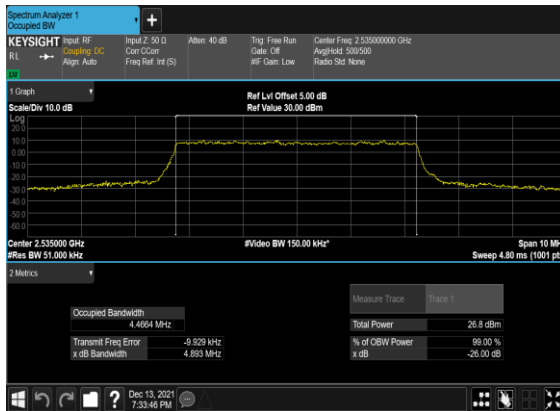
B2_N7(5M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Mid_CH



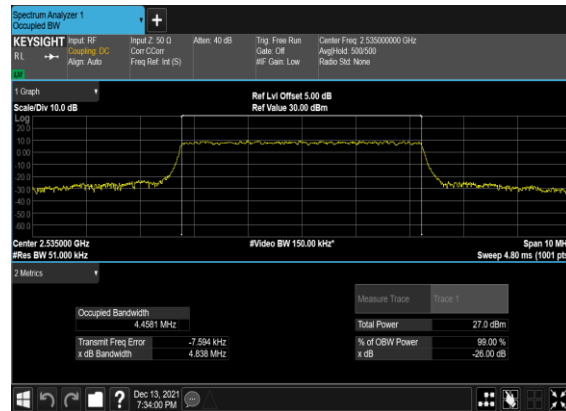
B2_N7(5M)_DFT-s-
OFDM_QPSK_Outer_Full_Mid_CH



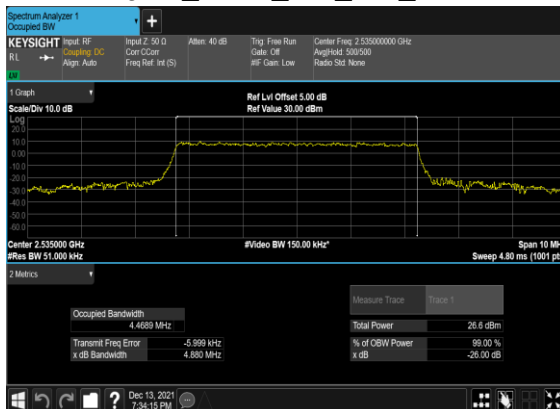
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OFDM_QPSK_Outer_Full_Mid_CH



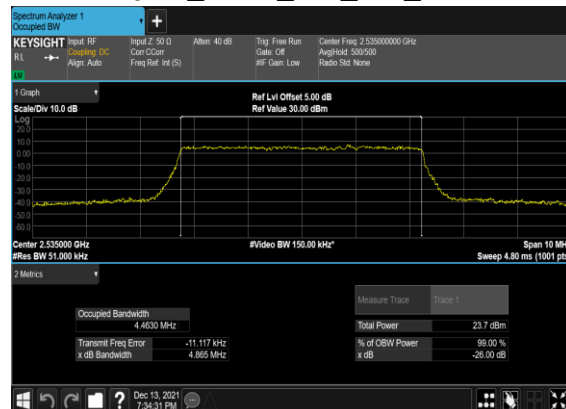
B2_N7(5M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



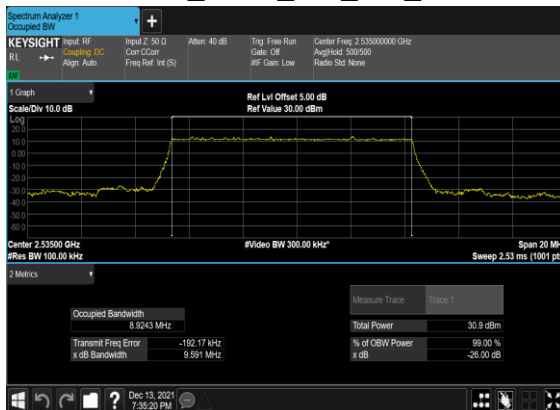
B2_N7(5M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH



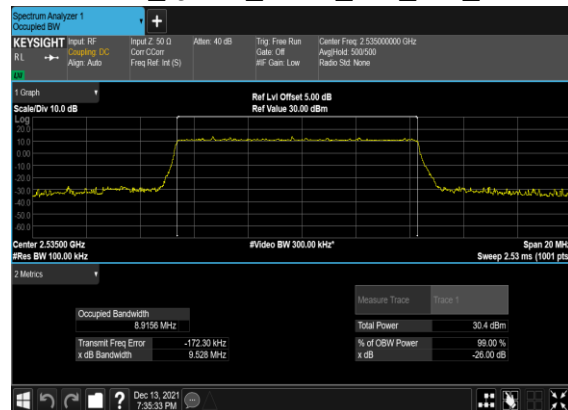
B2_N7(5M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH



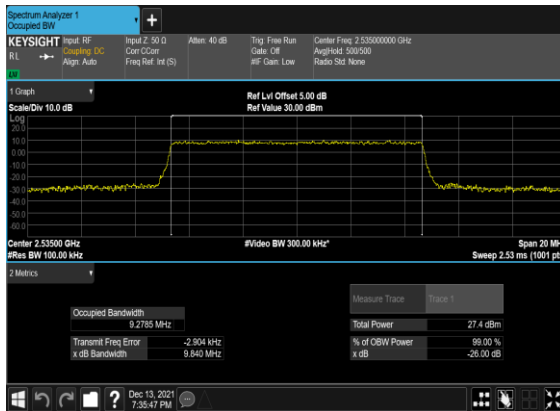
B2_N7(10M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Mid_CH



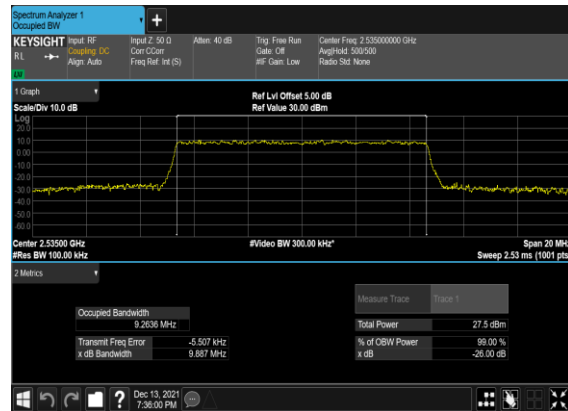
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OFDM_QPSK_Outer_Full_Mid_CH



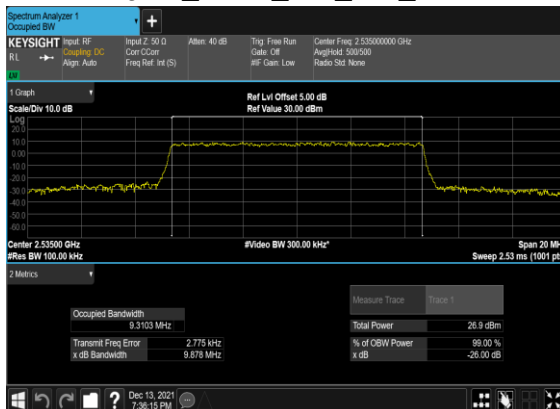
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OFDM_QPSK_Outer_Full_Mid_CH



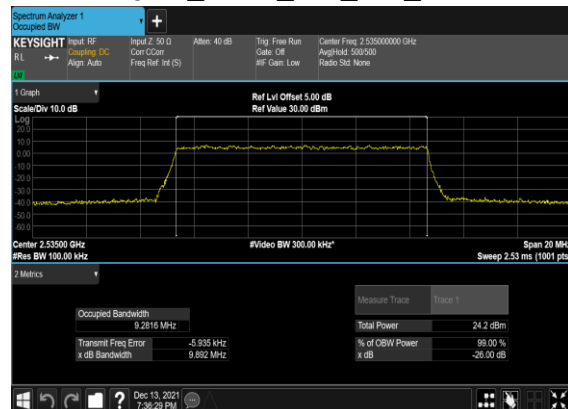
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QAM_Outer_Full_Mid_CH



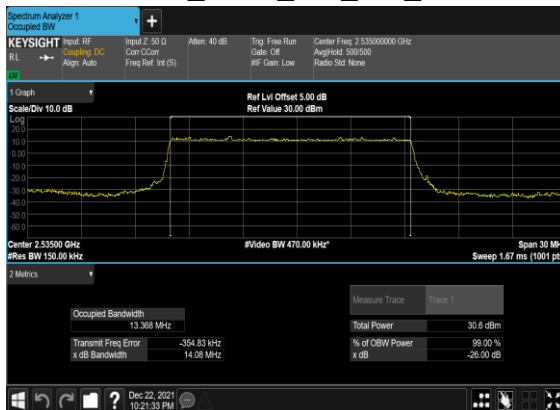
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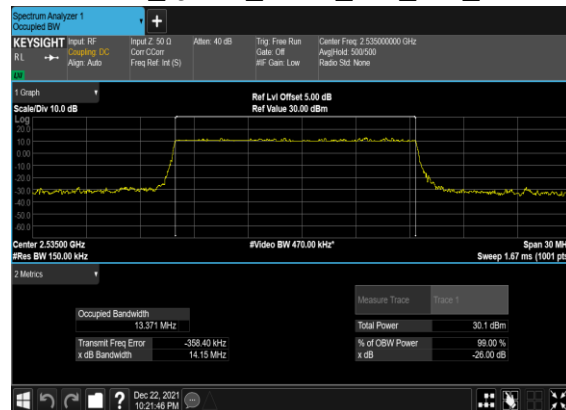
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QAM_Outer_Full_Mid_CH



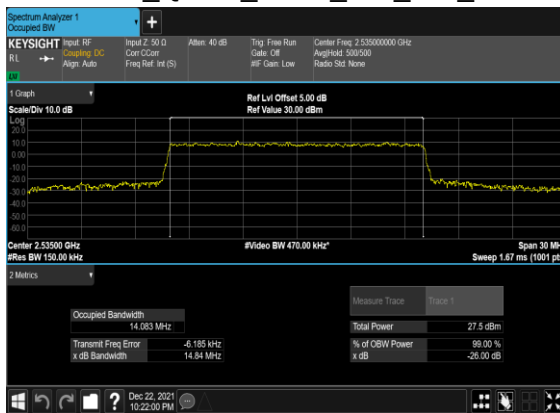
B2_N7(15M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Mid_CH



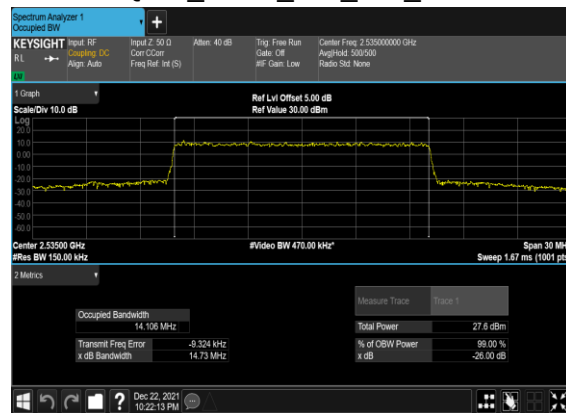
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OFDM_QPSK_Outer_Full_Mid_CH



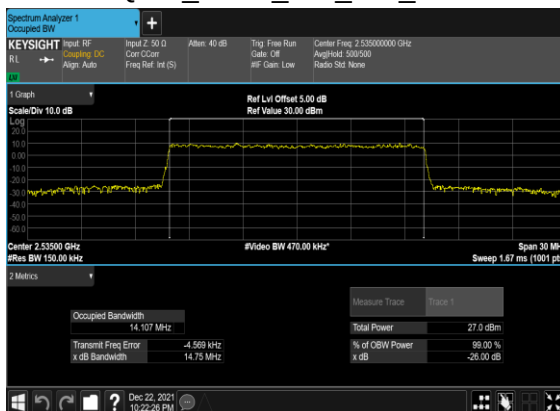
B2_N7(15M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



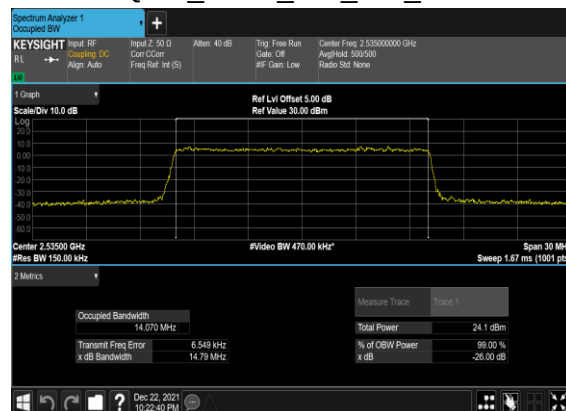
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QAM_Outer_Full_Mid_CH



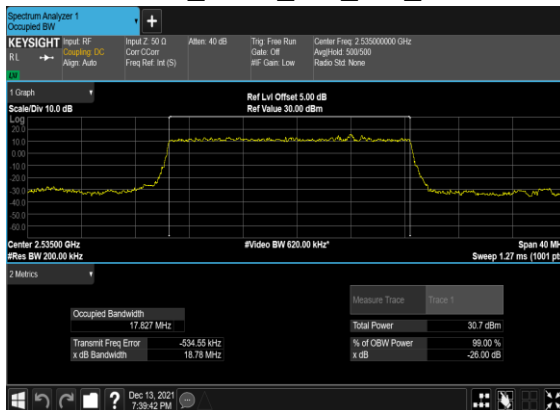
B2_N7(15M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH



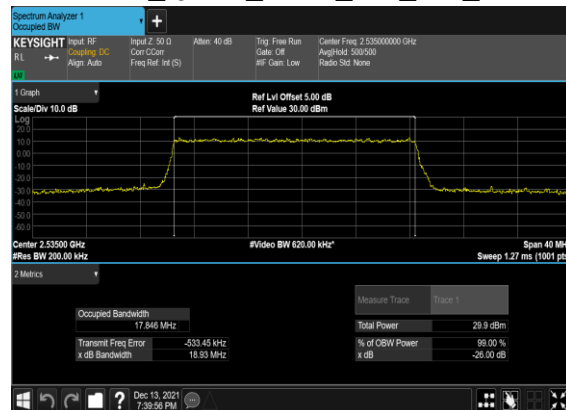
B2_N7(15M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH



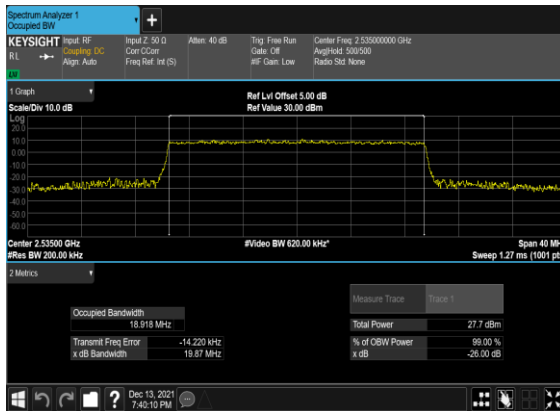
B2_N7(20M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Mid_CH



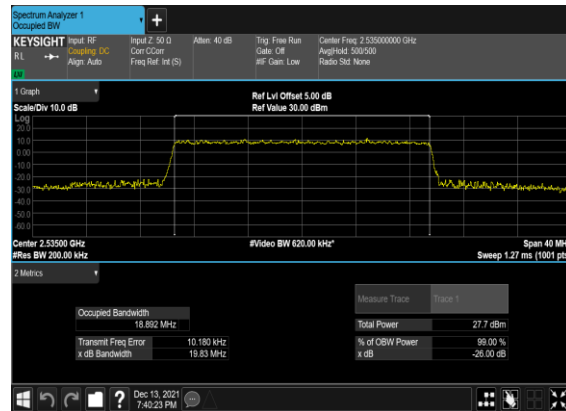
B2_N7(20M)_DFT-s-
OFDM_QPSK_Outer_Full_Mid_CH



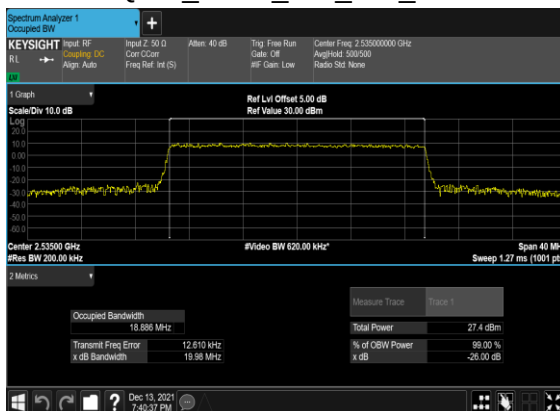
B2_N7(20M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



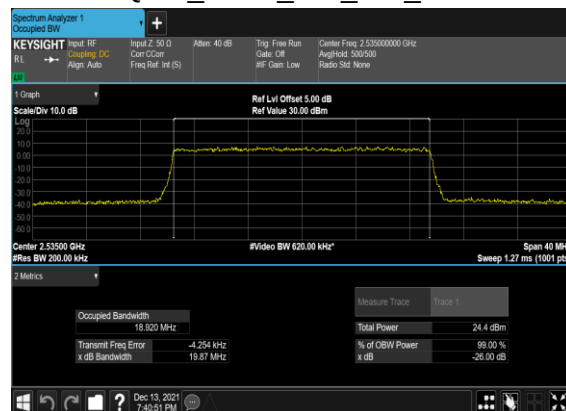
B2_N7(20M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



B2_N7(20M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH



B2_N7(20M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH



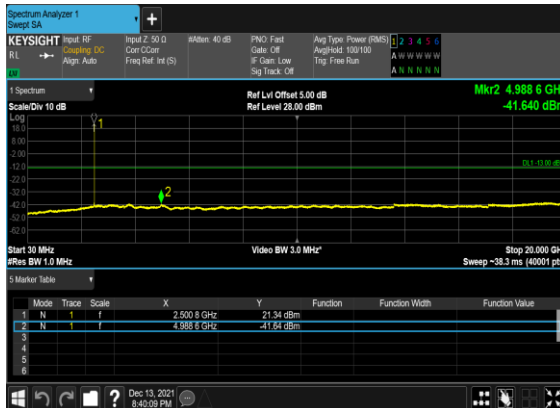
Conducted Spurious Emissions

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
7	15	5	524500	2502.5	DFT-s-OFDM BPSK	1@0	see graph	---
7	15	5	524500	2502.5	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	5	524500	2502.5	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	5	524500	2502.5	DFT-s-OFDM QPSK	1@0	see graph	---
7	15	5	524500	2502.5	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	5	524500	2502.5	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	5	531000	2535.0	DFT-s-OFDM BPSK	1@0	see graph	---
7	15	5	531000	2535.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	5	531000	2535.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	5	531000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	---
7	15	5	531000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	5	531000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	5	537500	2567.5	DFT-s-OFDM BPSK	1@0	see graph	---
7	15	5	537500	2567.5	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	5	537500	2567.5	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	5	537500	2567.5	DFT-s-OFDM QPSK	1@0	see graph	---
7	15	5	537500	2567.5	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	5	537500	2567.5	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	10	525000	2505.0	DFT-s-OFDM BPSK	1@0	see graph	---
7	15	10	525000	2505.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	10	525000	2505.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	10	525000	2505.0	DFT-s-OFDM QPSK	1@0	see graph	---

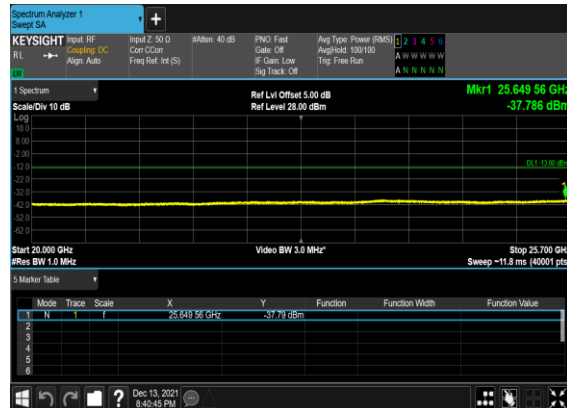
7	15	10	525000	2505.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	10	525000	2505.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	10	531000	2535.0	DFT-s-OFDM BPSK	1@0	see graph	---
7	15	10	531000	2535.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	10	531000	2535.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	10	531000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	---
7	15	10	531000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	10	531000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	10	537000	2565.0	DFT-s-OFDM BPSK	1@0	see graph	---
7	15	10	537000	2565.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	10	537000	2565.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	10	537000	2565.0	DFT-s-OFDM QPSK	1@0	see graph	---
7	15	10	537000	2565.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	10	537000	2565.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	10	537000	2565.0	DFT-s-OFDM QPSK	1@0	see graph	---
7	15	10	537000	2565.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	20	526000	2510.0	DFT-s-OFDM BPSK	1@0	see graph	---
7	15	20	526000	2510.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	20	526000	2510.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	20	526000	2510.0	DFT-s-OFDM QPSK	1@0	see graph	---
7	15	20	526000	2510.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	20	526000	2510.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	20	531000	2535.0	DFT-s-OFDM BPSK	1@0	see graph	---
7	15	20	531000	2535.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	20	531000	2535.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	---

7	15	20	531000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	20	531000	2535.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	20	536000	2560.0	DFT-s-OFDM BPSK	1@0	see graph	---
7	15	20	536000	2560.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	20	536000	2560.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	20	536000	2560.0	DFT-s-OFDM QPSK	1@0	see graph	---
7	15	20	536000	2560.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	20	536000	2560.0	DFT-s-OFDM QPSK	1@0	see graph	PASS

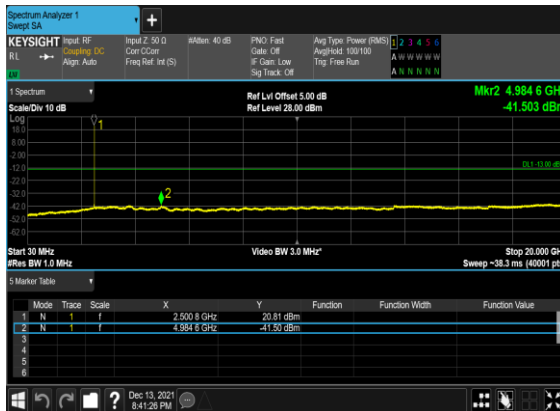
B2_N7(5M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Low_CH



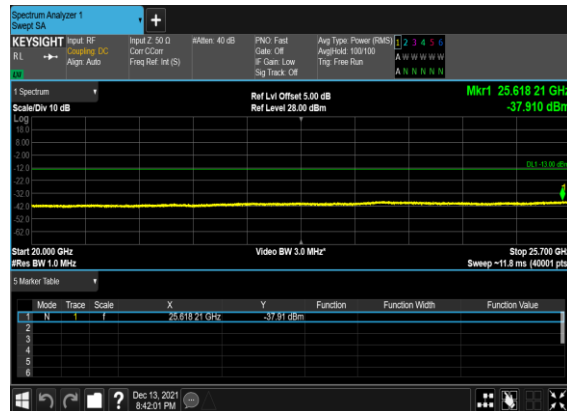
B2_N7(5M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Low_CH



B2_N7(5M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



B2_N7(5M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



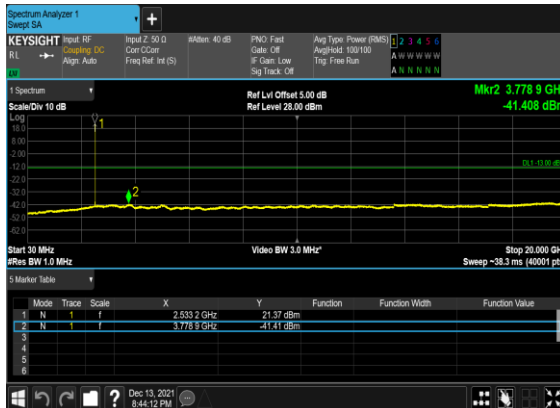
B2_N7(5M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Mid_CH



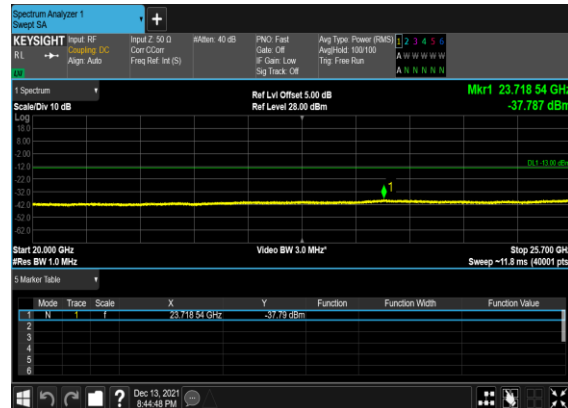
B2_N7(5M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Mid_CH



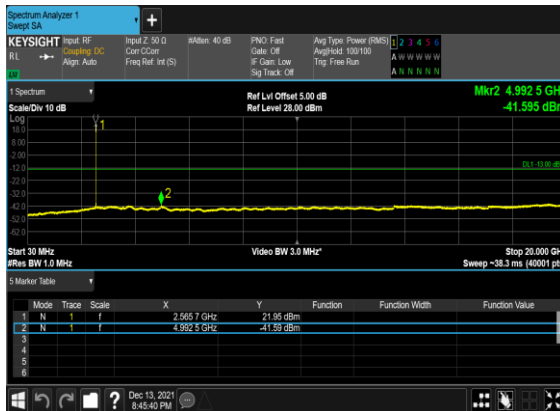
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OFDM_QPSK_Edge_1RB_Left_Mid_CH



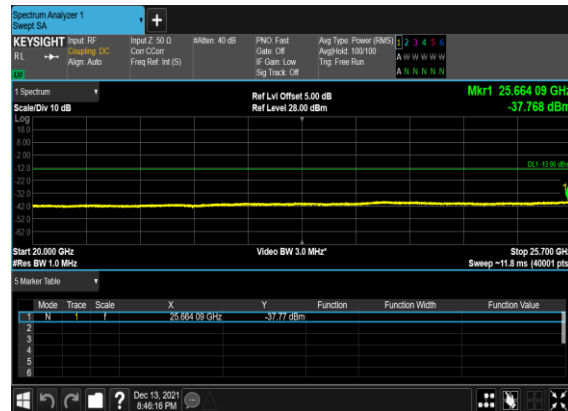
B2_N7(5M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH



B2_N7(5M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_High_CH



B2_N7(5M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_High_CH



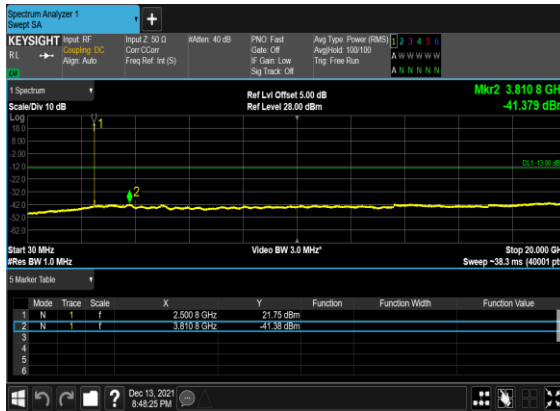
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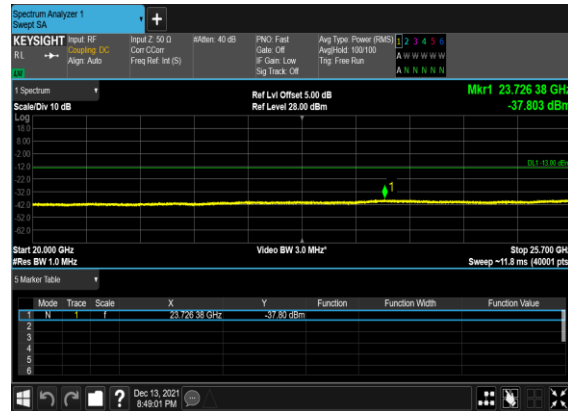
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OFDM_QPSK_Edge_1RB_Left_High_CH



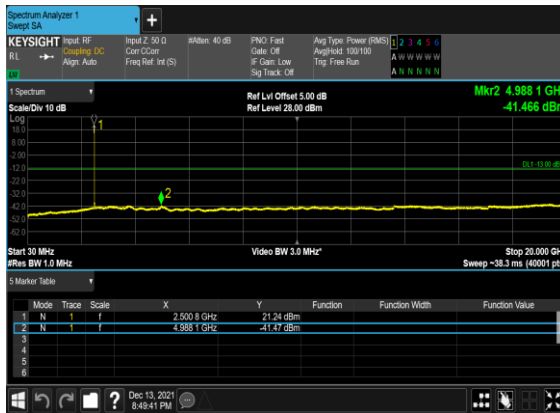
B2_N7(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



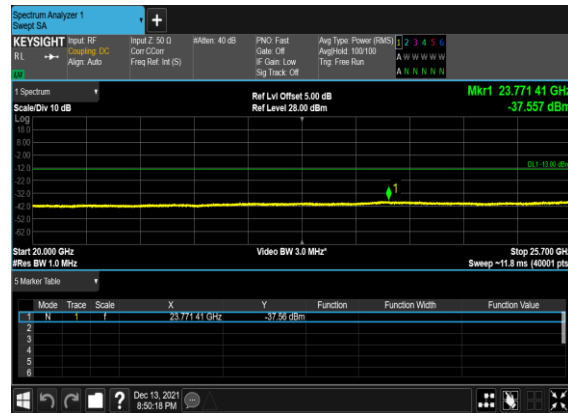
B2_N7(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



B2_N7(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



B2_N7(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



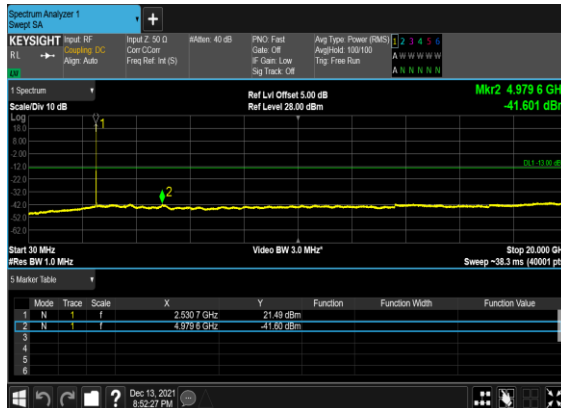
B2_N7(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



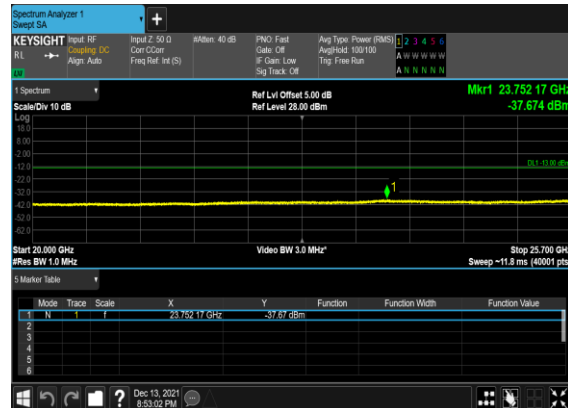
B2_N7(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



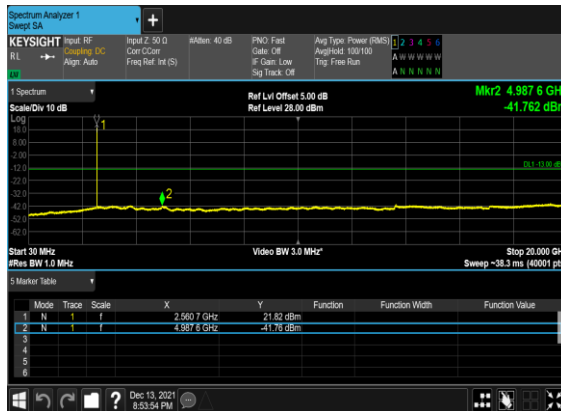
B2_N7(10M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH



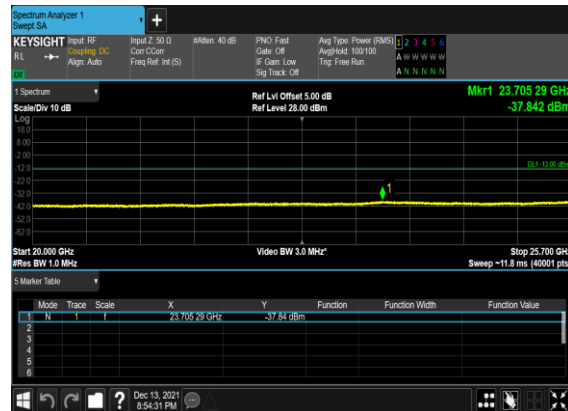
B2_N7(10M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH



B2_N7(10M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_High_CH



B2_N7(10M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_High_CH



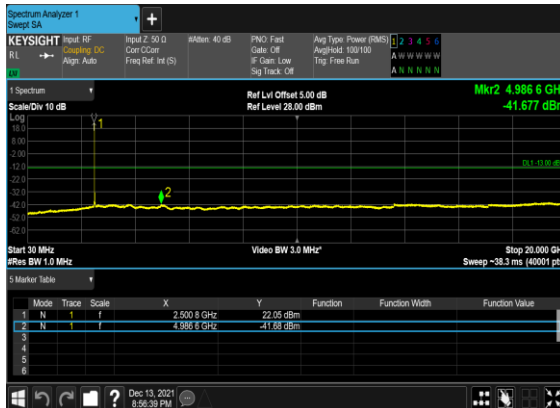
B2_N7(10M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH



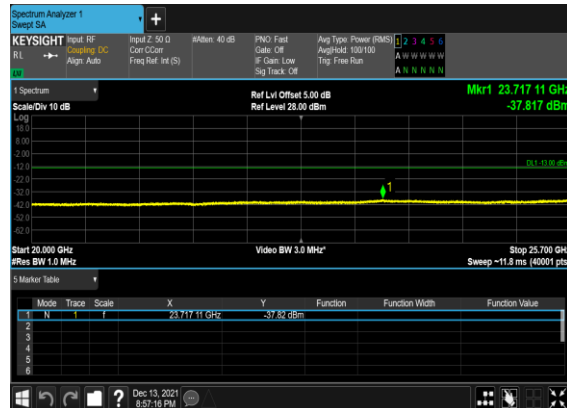
B2_N7(10M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH



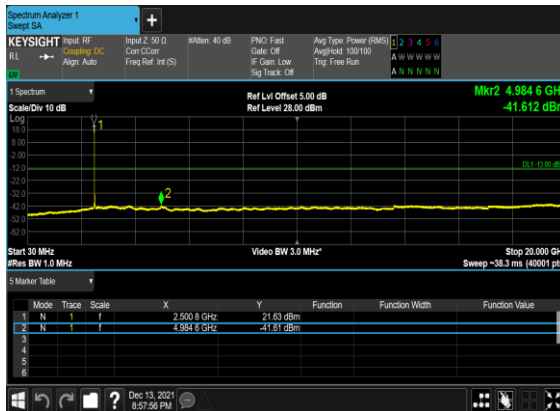
B2_N7(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



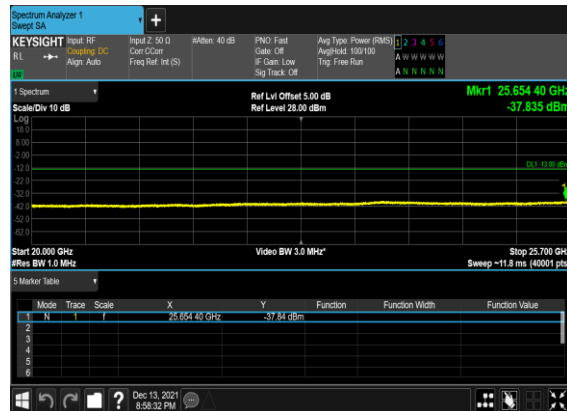
B2_N7(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



B2_N7(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



B2_N7(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



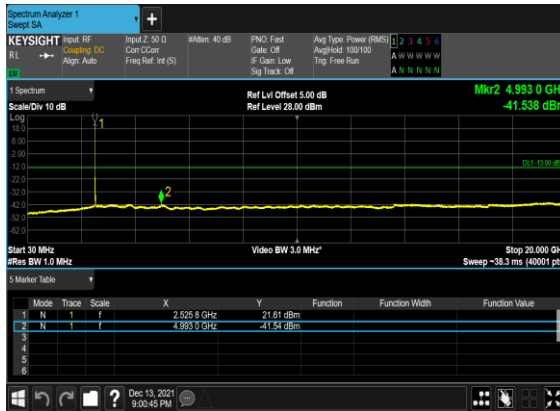
B2_N7(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



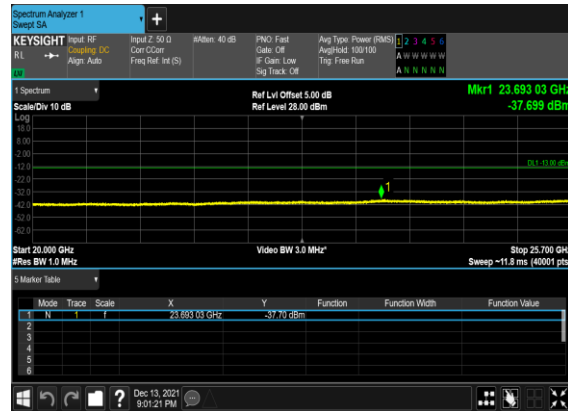
B2_N7(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



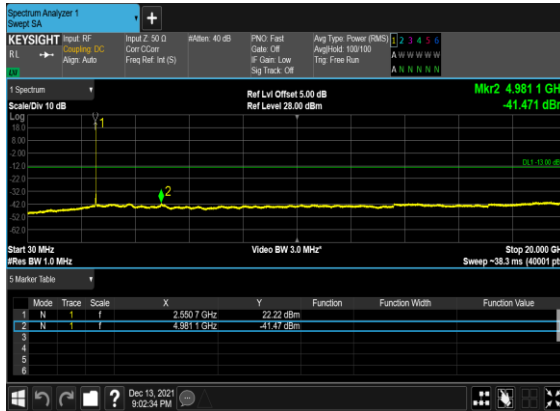
B2_N7(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH



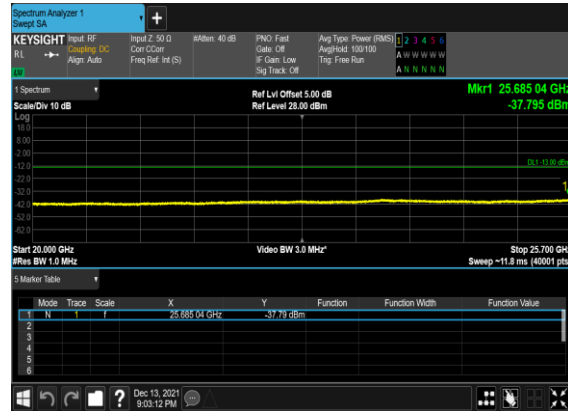
B2_N7(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH



B2_N7(20M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_High_CH



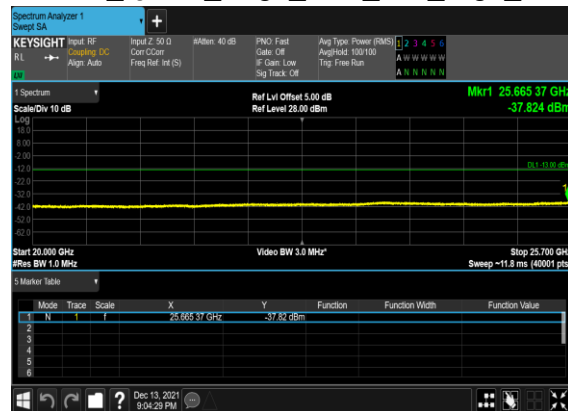
B2_N7(20M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_High_CH



B2_N7(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH



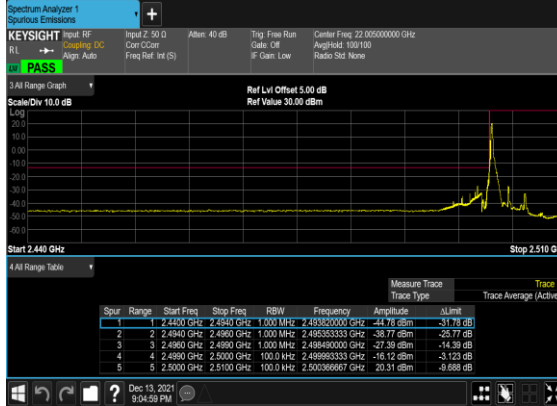
B2_N7(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH



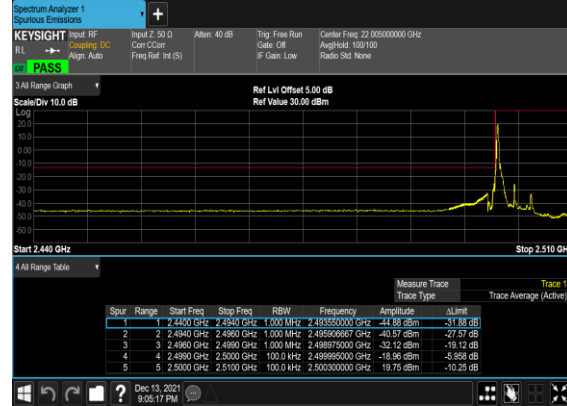
Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
7	15	5	524500	2502.5	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	5	524500	2502.5	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	5	524500	2502.5	DFT-s-OFDM BPSK	25@0	see graph	PASS
7	15	5	524500	2502.5	DFT-s-OFDM QPSK	25@0	see graph	PASS
7	15	5	537500	2567.5	DFT-s-OFDM BPSK	1@24	see graph	PASS
7	15	5	537500	2567.5	DFT-s-OFDM QPSK	1@24	see graph	PASS
7	15	5	537500	2567.5	DFT-s-OFDM BPSK	25@0	see graph	PASS
7	15	5	537500	2567.5	DFT-s-OFDM QPSK	25@0	see graph	PASS
7	15	10	525000	2505.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	10	525000	2505.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	10	525000	2505.0	DFT-s-OFDM BPSK	50@0	see graph	PASS
7	15	10	525000	2505.0	DFT-s-OFDM QPSK	50@0	see graph	PASS
7	15	10	537000	2565.0	DFT-s-OFDM BPSK	1@51	see graph	PASS
7	15	10	537000	2565.0	DFT-s-OFDM QPSK	1@51	see graph	PASS
7	15	10	537000	2565.0	DFT-s-OFDM BPSK	50@0	see graph	PASS
7	15	10	537000	2565.0	DFT-s-OFDM QPSK	50@0	see graph	PASS
7	15	20	526000	2510.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
7	15	20	526000	2510.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
7	15	20	526000	2510.0	DFT-s-OFDM BPSK	100@0	see graph	PASS
7	15	20	526000	2510.0	DFT-s-OFDM QPSK	100@0	see graph	PASS
7	15	20	536000	2560.0	DFT-s-OFDM BPSK	1@105	see graph	PASS
7	15	20	536000	2560.0	DFT-s-OFDM QPSK	1@105	see graph	PASS
7	15	20	536000	2560.0	DFT-s-OFDM BPSK	100@0	see graph	PASS
7	15	20	536000	2560.0	DFT-s-OFDM QPSK	100@0	see graph	PASS

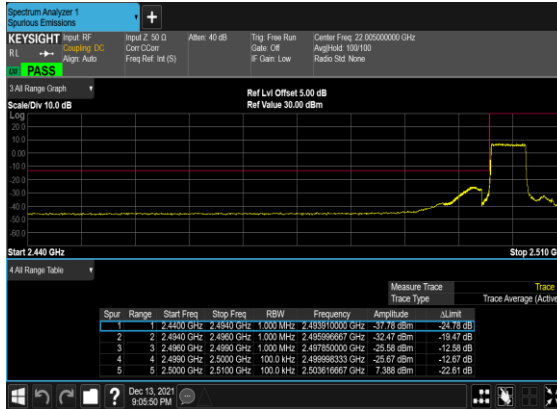
B2_N7(5M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Low_CH



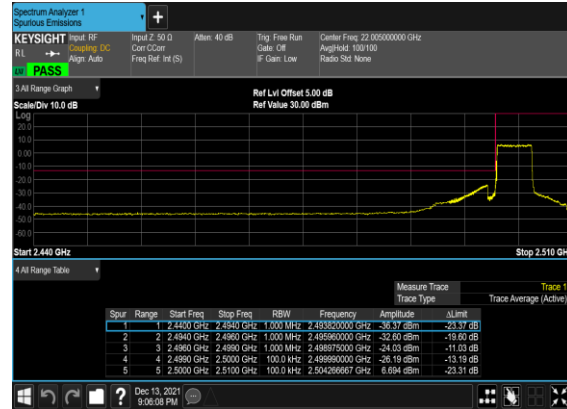
B2_N7(5M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



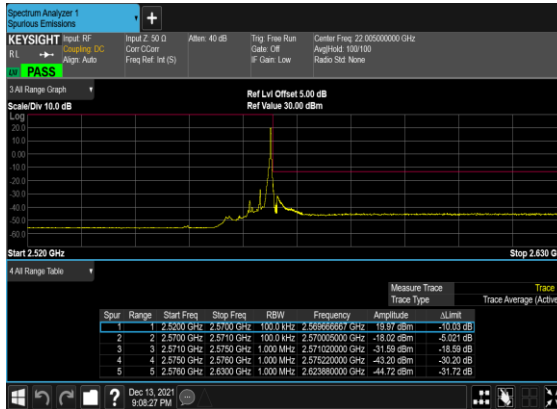
B2_N7(5M)_DFT-s-
OFDM_BPSK_Outer_Full_Low_CH



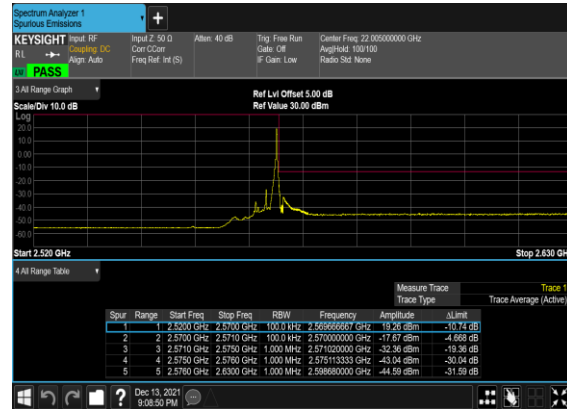
B2_N7(5M)_DFT-s-
OFDM_QPSK_Outer_Full_Low_CH



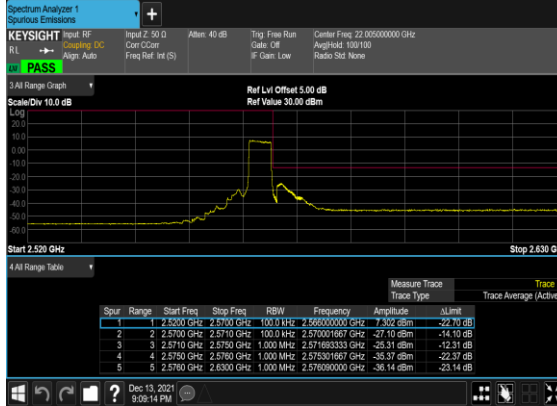
B2_N7(5M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_High_CH



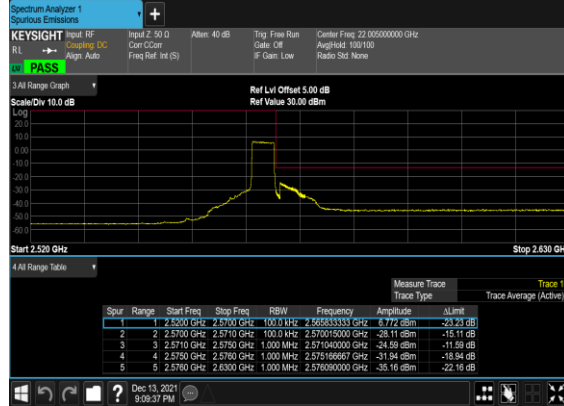
B2_N7(5M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_High_CH



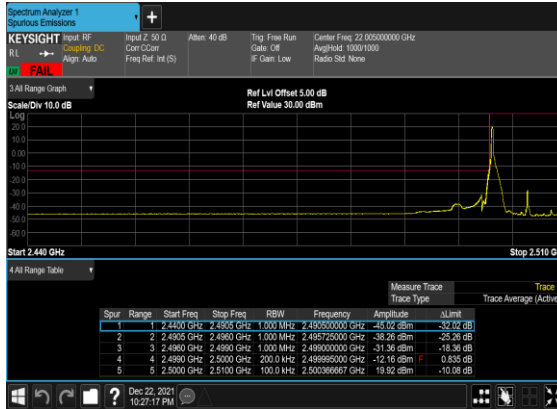
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OFDM_BPSK_Outer_Full_High_CH



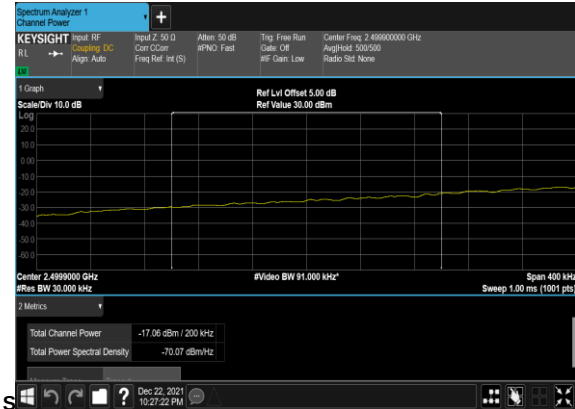
B2_N7(5M)_DFT-s-
OFDM_QPSK_Outer_Full_High_CH



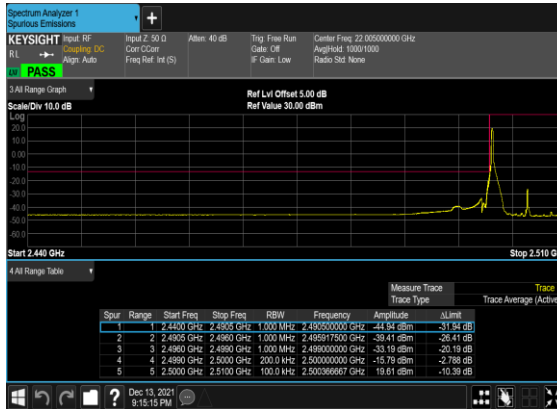
B2_N7(10M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Low_CH



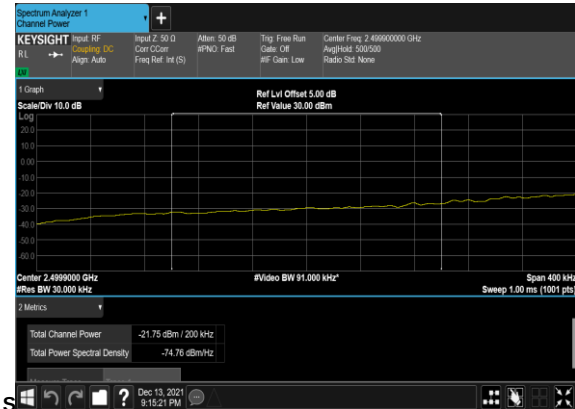
B2_N7(10M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Low_CH_CHP_PAS



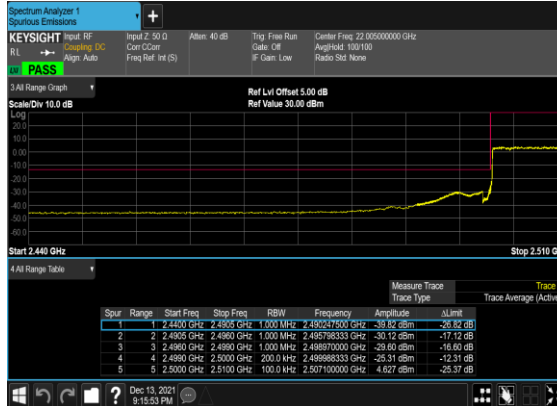
B2_N7(10M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



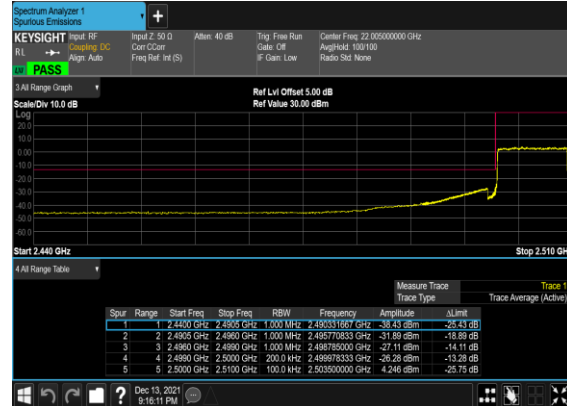
B2_N7(10M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH_CHP_PAS



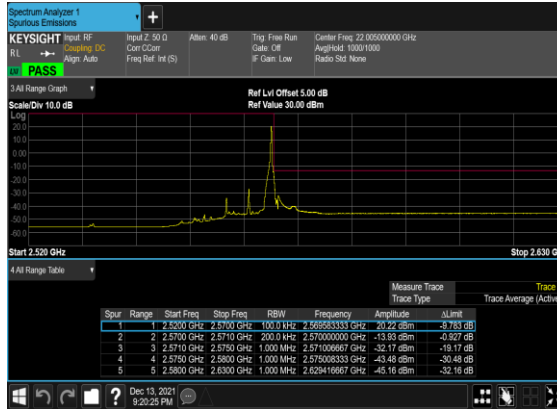
B2_N7(10M)_DFT-s-
OFDM_BPSK_Outer_Full_Low_CH



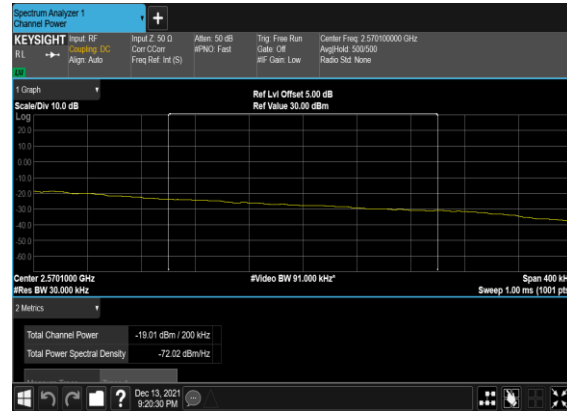
B2_N7(10M)_DFT-s-
OFDM_QPSK_Outer_Full_Low_CH



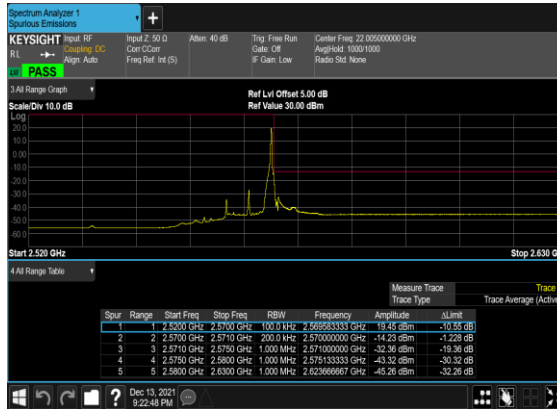
B2_N7(10M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_High_CH



B2_N7(10M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_High_CH_CH_P
ASS



B2_N7(10M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_High_CH



B2_N7(10M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_High_CH_CH_P
ASS

