

FCC RF Test Report

APPLICANT : Rolling Wireless S.a r.l.
EQUIPMENT : 5G Module
BRAND NAME : Rolling Wireless
MODEL NAME : RW151-GL
FCC ID : 2AX2URW151GL
STANDARD : 47 CFR Part 96
CLASSIFICATION : Citizens Band End User Devices (CBE)
EQUIPMENT TYPE : End User Equipment
TEST DATE(S) : Jun. 07, 2026 ~ Sep. 22, 2026

The product was received on Jun. 01, 2026. We, Sporton International Inc. (ShenZhen), would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26 and shown compliance with the applicable technical standards.

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



Approved by: Fly Liang



Sporton International Inc. (ShenZhen)

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People's Republic of China



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History of this test report

Report No.	Version	Description	Issued Date
FG642220Q-R01	01	Initial issue of report	Sep. 22, 2026

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046	Conducted Output Power	Reporting only	-
3.3	§96.41	Peak-to-Average Ratio	Not Applicable	Not applicable for End User Devices
3.4	§96.41	Maximum E.I.R.P	Pass	-
		Maximum Power Spectral Density	Not Applicable	Not applicable for End User Devices
3.5	§2.1049 §96.41	Occupied Bandwidth	Reporting only	-
3.6	§2.1051 §96.41	Conducted Band Edge Measurement Adjacent Channel Leakage Ratio	Pass	-
3.7	§2.1051 §96.41	Conducted Spurious Emission	Pass	
3.8	§2.1055	Frequency Stability for Temperature & Voltage	Pass	-
4.4	§2.1051 §96.41	Radiated Spurious Emission	Pass	Under limit 8.08 dB at 14644.00 MHz

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture 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.

Reviewed by: Berry Chang

1 General Description

1.1 Applicant

Rolling Wireless S.a r.l.
 8-10, rue Mathias Hardt 1717, Luxembourg
 Contact Name : Gene Santana
 Tel No.: +1-561-9098960

1.2 Manufacturer

Rolling Wireless S.a r.l.
 8-10, rue Mathias Hardt 1717, Luxembourg

1.3 Feature of Equipment Under Test

Product Feature	
Equipment	5G Module
Brand Name	Rolling Wireless
Model Name	RW151-GL
FCC ID	2AX2URW151GL
Tx Frequency	5G NR n48: 3550 MHz ~ 3700 MHz
Rx Frequency	5G NR n48: 3550 MHz ~ 3700 MHz
SCS	30kHz
Bandwidth	10MHz / 15MHz / 20MHz / 30MHz / 40MHz
Antenna Gain	<Ant. 0>:1.00 dBi <Ant. 2>:1.00 dBi
Type of Modulation	DFT-s-OFDM (PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM) CP-OFDM (QPSK / 16QAM / 64QAM / 256QAM)
IMEI Code	Conducted: 358389830005596/358389830009408 358389830006727/358389830010539 Radiation: 358389830014770/358389830016502
EUT Stage	Identical Prototype

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. The maximum EIRP is calculated from max output power and max antenna gain, only the maximum EIRP are shown in the report, 5G NR n48 for Ant. 0 and n48 UL MIMO mode for Ant.(0+2).
3. 5G NR n48 supports UL MIMO mode, the MIMO mode is completely uncorrelated.
4. For n48 UL MIMO mode, the conducted BE/Spurious are tested at single antenna port and add $10 \cdot \log(N_{ANT})$ according to KDB 662911 D01.
5. All the supported EN-DC combinations are verified conducted power, only the EN-DC combination with highest power are shown in the report.
6. The EN-DC mode combination could be referred to the product spec.
7. All antenna gain values in this report are supplied by the manufacturer, and the manufacturer takes all responsibilities for the accuracy of this information and its effect on the test results.

1.4 Maximum Conducted Power and Emission Designator

5G NR n48		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	3555.00~3694.98	0.1377	8M56G7D	0.1107	8M60W7D
15	3557.52~3692.49	0.1361	13M6G7D	0.1119	13M6W7D
20	3560.01~3690.00	0.1349	18M2G7D	0.1091	18M2W7D
30	3565.02~3684.99	0.1432	27M8G7D	0.1130	27M9W7D
40	3570.00~3679.98	0.1435	37M7G7D	0.1143	38M0W7D

5G NR n48 UL MIMO		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	3555.00~3694.98	0.1542	8M57G7D	0.1219	8M60W7D
15	3557.52~3692.49	0.1507	13M6G7D	0.1250	13M6W7D
20	3560.01~3690.00	0.1535	18M2G7D	0.1225	18M3W7D
30	3565.02~3684.99	0.1545	27M9G7D	0.1239	27M9W7D
40	3570.00~3679.98	0.1556	37M8G7D	0.1219	37M9W7D

1.5 Testing Site

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	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	TH01-SZ 03CH04-SZ	CN1256	421272

1.6 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH04-SZ	AUDIX	E3	6.2009-8-24

1.7 Applied Standards

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

- ♦ ANSI C63.26-2015
- ♦ 47 CFR Part 96
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- ♦ FCC KDB 940660 D01 Part 96 CBRS v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



2 Test Configuration of Equipment Under Test

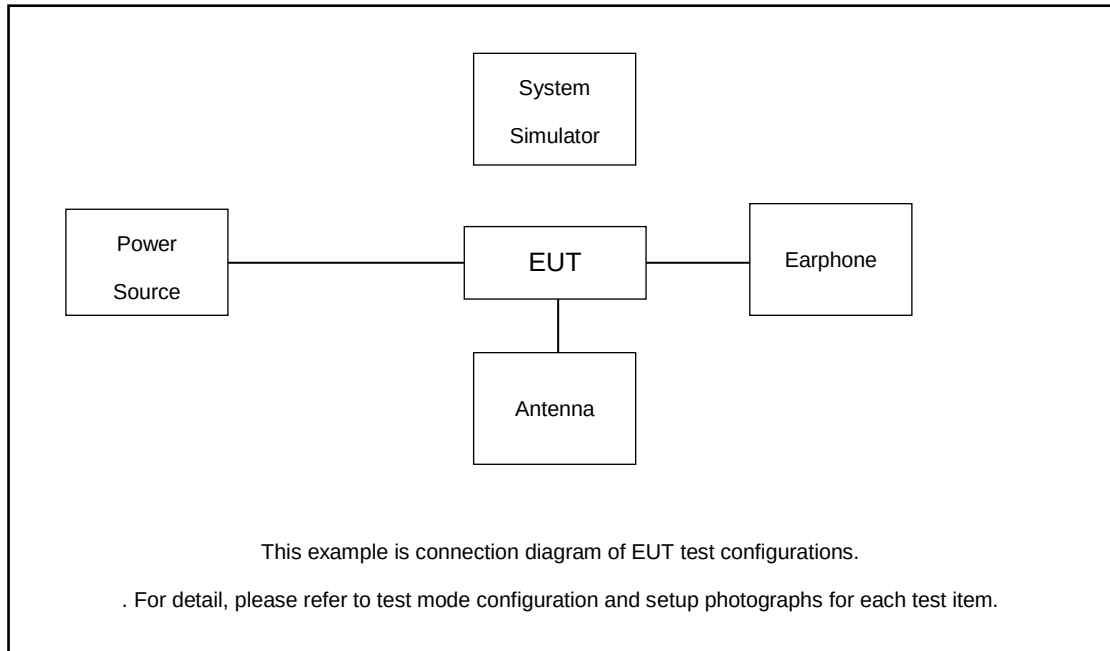
2.1 Test Mode

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

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

Test Items	Band	Bandwidth (MHz)						Modulation					RB #		Test Channel		
		5	10	15	20	30	40	PI/2 BPSK	QPSK	16QAM	64QAM	256 QAM	1	Full	L	M	H
Max. Output Power	n48	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	n48	-	-	-	v	-	-	v	v					v		v	
26dB and 99% Bandwidth	n48	-	v	v	v	v -	v		v	v	v	v		v		v	
Adjacent Channel Leakage Ratio	n48	-	v	-	v		v	v	v				v	v	v	v	v
Conducted Band Edge	n48	-	v	-	v	v	v	v	v				v	v	v	v	v
Conducted Spurious Emission	n48	-	v	-	v		v	v	v				v		v	v	v
E.I.R.P.	n48	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Frequency Stability	n48	-		-	v				v					v	v	v	v
Radiated Spurious Emission	n48	Worst Case													v	v	v
Remark	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. All test items are based on engineering evaluation. 5. Frequency Stability: Normal Voltage = 3.3V ; Low Voltage =3.14V; High Voltage =4.4V																

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration

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.	Base Station	Anritsu	MT8000A	N/A	N/A	Shielded, 1.5m
3.	Base Station	Anritsu	MT8821C	N/A	N/A	Shielded, 1.5m
4.	Earphone	N/A	N/A	N/A	N/A	N/A

2.4 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss 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.

Following shows an offset computation example with cable loss 8.9 dB.

Example :

$$\begin{aligned}
 \text{Offset(dB)} &= \text{RF cable loss(dB)}. \\
 &= 8.9 \text{ (dB)}
 \end{aligned}$$

2.5 Frequency List of Low/Middle/High Channels

5G NR n48 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
40	Channel	638000	641666	645332
	Frequency	3570	3624.99	3679.98
30	Channel	637666	641666	645666
	Frequency	3564.99	3624.99	3684.99
20	Channel	637334	641666	646000
	Frequency	3560.01	3624.99	3690
15	Channel	637168	641666	646166
	Frequency	3557.52	3624.99	3692.49
10	Channel	637000	641666	646332
	Frequency	3555	3624.99	3694.98

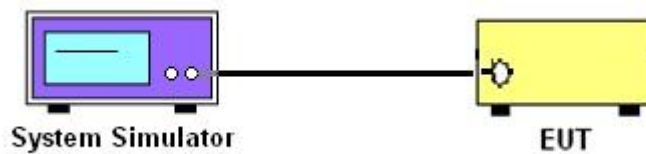
3 Conducted Test Items

3.1 Measuring Instruments

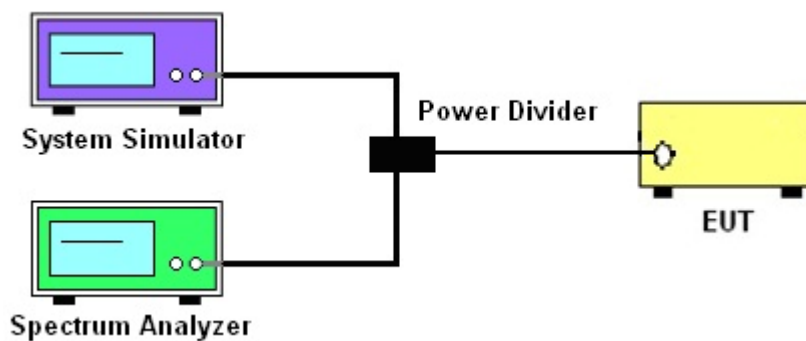
See list of measuring instruments of this test report.

3.1.1 Test Setup

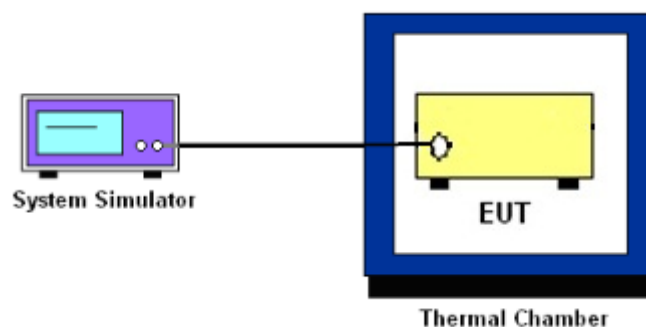
3.1.2 Conducted Output Power / ACLR



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



3.1.4 Frequency Stability



3.1.5 Test Result of Conducted Test

Please refer to Appendix A.



3.2 Conducted Output Power

3.2.1 Description of the Conducted Output Power 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.

3.2.2 Test Procedures

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

3.3 Peak-to-Average Ratio

3.3.1 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.

3.3.2 Test Procedures

The testing follows ANSI C63.26-2015 Section 5.2.6

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

3.4 EIRP

3.4.1 Description of the EIRP Measurement

EIRP limits for CBRS equipment as below table:

Device		Maximum EIRP (dBm/10 MHz)	Maximum PSD (dBm/MHz)
Applied	End User Device	23	n/a
☐	Category A CBSD	30	20

Remark: The worst case EIRP shown in this section is found with NR operating only using 1RB. As such, the EIRP/10MHz and full channel EIRP values will be identical since 1RB is fully contained within all available channel bandwidths for n48 (i.e. 10, 15, 20MHz)

3.4.2 Test Procedures for EIRP

1. Establishing a communications link with the call box (Base station) to measure the Maximum conducted power, the parameters were set to force the EUT transmitting at maximum output power level. Use the average power measurement function to measure total channel power of each channel bandwidth (per ANSI C63.26-2015 Section 5.2.1)
2. Determining ERP and/or EIRP from conducted RF output power measurements (Per ANSI C63.26-2015 Section 5.2.5.5)
$$\text{EIRP} = P_T + G_T - L_C, \text{ ERP} = \text{EIRP} - 2.15, \text{ where}$$

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

3.5 Occupied Bandwidth

3.5.1 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.

3.5.2 Test Procedures

The testing follows ANSI C63.26-2015 Section 5.4.3 (26dB) and Section 5.4.4 (99OB)

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. 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.
3. 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.
4. Set the detection mode to peak, and the trace mode to max hold.
5. 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)
6. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
7. 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.
8. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

3.6 Conducted Band Edge

3.6.1 Description of Conducted Band Edge Measurement

Part 96.41 (e) (1) (ii)

For End User Devices the emission limits outside the fundamental are as follows:

Within 0 MHz to B MHz above and below the assigned channel ≤ -13 dBm/MHz

Greater than B MHz above and below the assigned channel ≤ -25 dBm/MHz

where B is the bandwidth in megahertz of the assigned channel or multiple contiguous channels of the End User Device.

Notwithstanding the emission limits in this paragraph, the Adjacent Channel Leakage Ratio for End User Devices shall be at least 30 dB.

Part 96.41 (e) (2)

For CBSDs and End User Devices, the conducted power of emissions below 3540 MHz or above 3710 MHz shall not exceed -25 dBm/MHz, and the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed -40 dBm/MHz

3.6.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The band edges of low and high channels for the highest RF powers were measured.
3. Set RBW $\geq 1\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
4. Beyond the 1 MHz band from the band edge, RBW=1MHz was used
5. Offset has included the duty factor for LTE Band 48. Duty factor $=10 \log (1/x)$, where x is the measured duty cycle.
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

3.7 Conducted Spurious Emission

3.7.1 Description of Conducted Spurious Emission Measurement

96.41 (e)(2)

The conducted power of any emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz.

3.7.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. 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.
3. The middle channel for the highest RF power within the transmitting frequency was measured.
4. The conducted spurious emission for the whole frequency range was taken.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
6. Set spectrum analyzer with RMS detector.
7. Taking the record of maximum spurious emission.
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
9. The limit line is -40dBm/MHz.

3.8 Frequency Stability

3.8.1 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

3.8.2 Test Procedures for Temperature Variation

The testing follows FCC KDB 971168 D01 v03r01 Section 9.0.

1. The EUT was set up in the thermal chamber and connected with the system simulator.
2. 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.
3. 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.

3.8.3 Test Procedures for Voltage Variation

The testing follows FCC KDB 971168 D01 v03r01 Section 9.0.

1. The EUT was placed in a temperature chamber at $25\pm 5^{\circ}\text{C}$ and connected with the system simulator.
2. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

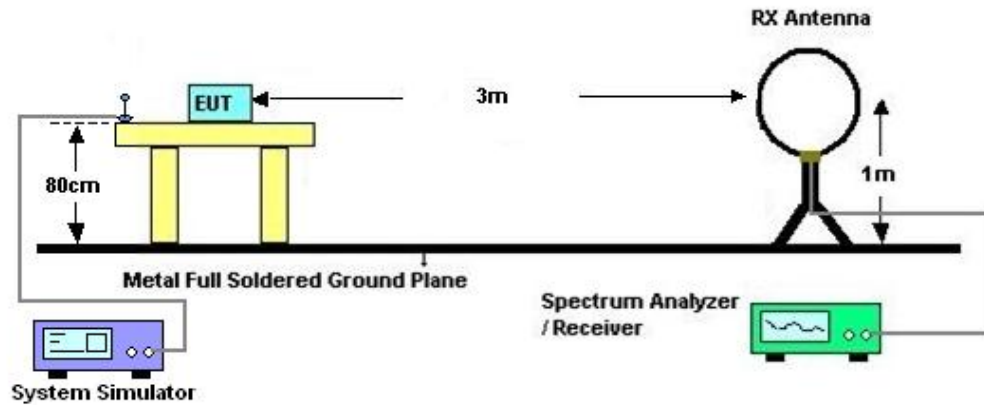
4 Radiated Test Items

4.1 Measuring Instruments

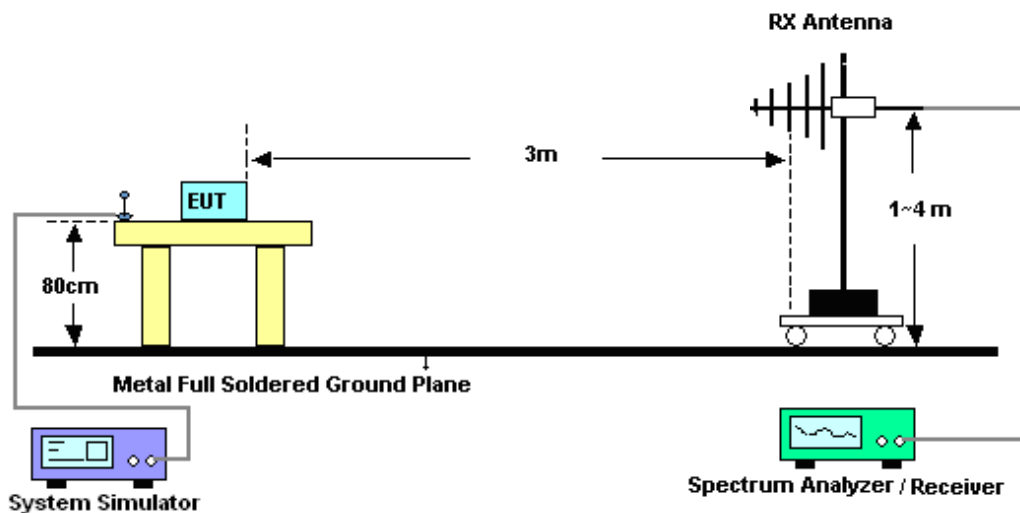
See list of measuring instruments of this test report.

4.2 Test Setup

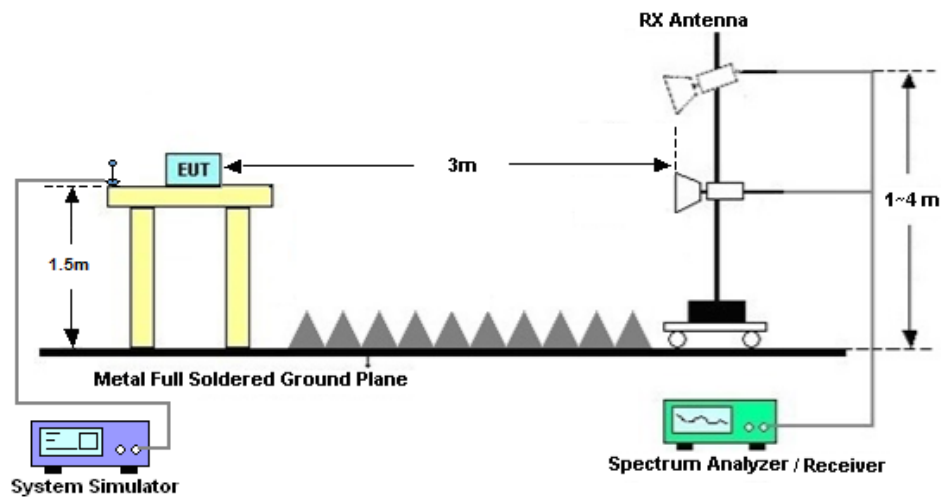
4.2.1 For radiated test below 30MHz



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 Measurement

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 -40dBm / MHz.

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

4.4.2 Test Procedures

1. 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.
2. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
5. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
$$\text{EIRP (dBm)} = \text{S.G. Power} - \text{Tx Cable Loss} + \text{Tx Antenna Gain}$$
$$\text{ERP (dBm)} = \text{EIRP} - 2.15$$
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
The limit line is -40dBm/MHz



5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	R&S	ESR7	101404	9kHz~7GHz	Oct. 15, 2025	Sep. 17, 2026~ Sep. 22, 2026	Oct. 14, 2026	Radiation (03CH04-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY551502 13	10Hz~44GHz	Jul. 02, 2026	Sep. 17, 2026~ Sep. 22, 2026	Jul. 01, 2027	Radiation (03CH04-SZ)
Loop Antenna	R&S	HFH2-Z2E	101141	9kHz~30MHz	Dec. 25, 2025	Sep. 17, 2026~ Sep. 22, 2026	Dec. 24, 2026	Radiation (03CH04-SZ)
Bilog Antenna	TeseQ	CBL6111D	41909	30MHz~1GHz	Apr. 20, 2026	Sep. 17, 2026~ Sep. 22, 2026	Apr. 19, 2027	Radiation (03CH04-SZ)
Double Ridge Guide Antenna	ETS-Lindgren	Burgeon-3117	00240057	1GHz~18GHz	Jul. 26, 2026	Sep. 17, 2026~ Sep. 22, 2026	Jul. 25, 2027	Radiation (03CH04-SZ)
Horn Antenna	SCHWARZBECK	BBHA9170	9170#679	15GHz~40GHz	Jul. 03, 2026	Sep. 17, 2026~ Sep. 22, 2026	Jul. 02, 2027	Radiation (03CH04-SZ)
LF Amplifier	EM Electronics	EM330	060773	20MHz~3GHz	Mar. 26, 2026	Sep. 17, 2026~ Sep. 22, 2026	Mar. 25, 2027	Radiation (03CH04-SZ)
HF Amplifier	MITEQ	AMF-7D-0010 1800-30-10P-R	1943528	1GHz~18GHz	Oct. 13, 2025	Sep. 17, 2026~ Sep. 22, 2026	Oct. 12, 2026	Radiation (03CH04-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jun. 23, 2026	Sep. 17, 2026~ Sep. 22, 2026	Jun. 22, 2027	Radiation (03CH04-SZ)
Amplifier	Agilent Technologies	83017A	MY572801 36	500MHz~26.5G Hz	Jun. 22, 2026	Sep. 17, 2026~ Sep. 22, 2026	Jun. 21, 2027	Radiation (03CH04-SZ)
AC Power Source	APC	AFV-S-600B	F11905001 9	N/A	Oct. 14, 2025	Sep. 17, 2026~ Sep. 22, 2026	Oct. 13, 2026	Radiation (03CH04-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Sep. 17, 2026~ Sep. 22, 2026	NCR	Radiation (03CH04-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Sep. 17, 2026~ Sep. 22, 2026	NCR	Radiation (03CH04-SZ)
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Mar. 26, 2026	Jun. 07, 2026~ Sep. 01, 2026	Mar. 25, 2027	Conducted (TH01-SZ)
DC Power Supply	TTI	PL330P	290070	Max 32V , 3A	Oct.13,2025	Jun. 07, 2026~ Sep. 01, 2026	Oct. 12, 2026	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-0426 5	60.06.020. 0077	0.4GHz~26.5G Hz	Dec. 24, 2025	Jun. 07, 2026~ Sep. 01, 2026	Dec. 23, 2026	Conducted (TH01-SZ)
Spectrum Analyzer	R&S	FSV3044	101174	10Hz~44GHz	Jun. 22, 2026	Jun. 07, 2026~ Sep. 01, 2026	Jun. 21, 2027	Conducted (TH01-SZ)

NCR: No Calibration Required

6 Measurement Uncertainty

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Spurious Emission & Bandedge	± 0.9 dB
Occupied Channel Bandwidth	0.52×10^{-6} MHz
Conducted Power	± 0.8 dB
Conducted Power Density	± 0.88 dB
Peak to Average Ratio	± 1.34 dB
Frequency Stability	± 1.3 Hz

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.8 dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.1 dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.9 dB
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----- THE END -----



Appendix A. Test Results of Conducted Test

Test Engineer :	Khan Zhen	Temperature :	22~23°C
		Relative Humidity :	40~42%

Conducted Output Power(Average power)



FR1 N48_ANT0

Transmitter Conducted Output Power And EIRP, ($G_T - L_C$)=1.0 dB

NR Band	SCS	BandWidth	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
48	30	10	637000	3555	DFT-s-OFDM QPSK	12@6	21.17	22.17	0.1648
48	30	10	637000	3555	DFT-s-OFDM QPSK	1@1	21.26	22.26	0.1683
48	30	10	637000	3555	DFT-s-OFDM QPSK	1@22	21.18	22.18	0.1652
48	30	10	637000	3555	DFT-s-OFDM 16 QAM	12@6	20.27	21.27	0.1340
48	30	10	637000	3555	DFT-s-OFDM 16 QAM	1@1	20.33	21.33	0.1358
48	30	10	637000	3555	DFT-s-OFDM 16 QAM	1@22	20.26	21.26	0.1337
48	30	10	641666	3624.99	DFT-s-OFDM QPSK	12@6	21.31	22.31	0.1702
48	30	10	641666	3624.99	DFT-s-OFDM QPSK	1@1	21.39	22.39	0.1734
48	30	10	641666	3624.99	DFT-s-OFDM QPSK	1@22	21.38	22.38	0.1730
48	30	10	641666	3624.99	DFT-s-OFDM 16 QAM	12@6	20.44	21.44	0.1393
48	30	10	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	20.4	21.4	0.1380
48	30	10	641666	3624.99	DFT-s-OFDM 16 QAM	1@22	20.41	21.41	0.1384
48	30	10	646332	3694.98	DFT-s-OFDM QPSK	12@6	21.17	22.17	0.1648
48	30	10	646332	3694.98	DFT-s-OFDM QPSK	1@1	21.16	22.16	0.1644
48	30	10	646332	3694.98	DFT-s-OFDM QPSK	1@22	21.21	22.21	0.1663
48	30	10	646332	3694.98	DFT-s-OFDM 16 QAM	12@6	20.14	21.14	0.1300
48	30	10	646332	3694.98	DFT-s-OFDM 16 QAM	1@1	20.13	21.13	0.1297
48	30	10	646332	3694.98	DFT-s-OFDM 16 QAM	1@22	20.02	21.02	0.1265
48	30	15	637168	3557.52	DFT-s-OFDM QPSK	18@9	21.13	22.13	0.1633
48	30	15	637168	3557.52	DFT-s-OFDM QPSK	1@1	21.25	22.25	0.1679
48	30	15	637168	3557.52	DFT-s-OFDM QPSK	1@36	21.02	22.02	0.1592
48	30	15	637168	3557.52	DFT-s-OFDM 16 QAM	18@9	20.17	21.17	0.1309
48	30	15	637168	3557.52	DFT-s-OFDM 16 QAM	1@1	20.38	21.38	0.1374
48	30	15	637168	3557.52	DFT-s-OFDM 16 QAM	1@36	20.18	21.18	0.1312
48	30	15	641666	3624.99	DFT-s-OFDM QPSK	18@9	21.3	22.3	0.1698
48	30	15	641666	3624.99	DFT-s-OFDM QPSK	1@1	21.34	22.34	0.1714
48	30	15	641666	3624.99	DFT-s-OFDM QPSK	1@36	21.28	22.28	0.1690
48	30	15	641666	3624.99	DFT-s-OFDM 16 QAM	18@9	20.34	21.34	0.1361
48	30	15	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	20.49	21.49	0.1409
48	30	15	641666	3624.99	DFT-s-OFDM 16 QAM	1@36	20.35	21.35	0.1365
48	30	15	646166	3692.49	DFT-s-OFDM QPSK	18@9	20.98	21.98	0.1578
48	30	15	646166	3692.49	DFT-s-OFDM QPSK	1@1	21.18	22.18	0.1652
48	30	15	646166	3692.49	DFT-s-OFDM QPSK	1@36	21.03	22.03	0.1596
48	30	15	646166	3692.49	DFT-s-OFDM 16 QAM	18@9	20.1	21.1	0.1288
48	30	15	646166	3692.49	DFT-s-OFDM 16 QAM	1@1	20.31	21.31	0.1352
48	30	15	646166	3692.49	DFT-s-OFDM 16 QAM	1@36	19.94	20.94	0.1242
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	25@12	21.14	22.14	0.1637
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	1@1	21.26	22.26	0.1683
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	1@49	20.98	21.98	0.1578



NR Band	SCS	BandWidth	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
48	30	20	637334	3560.01	DFT-s-OFDM 16 QAM	25@12	20.18	21.18	0.1312
48	30	20	637334	3560.01	DFT-s-OFDM 16 QAM	1@1	20.35	21.35	0.1365
48	30	20	637334	3560.01	DFT-s-OFDM 16 QAM	1@49	20.07	21.07	0.1279
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	25@12	21.28	22.28	0.1690
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	1@1	21.3	22.3	0.1698
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	1@49	21.22	22.22	0.1667
48	30	20	641666	3624.99	DFT-s-OFDM 16 QAM	25@12	20.34	21.34	0.1361
48	30	20	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	20.38	21.38	0.1374
48	30	20	641666	3624.99	DFT-s-OFDM 16 QAM	1@49	20.28	21.28	0.1343
48	30	20	646000	3690	DFT-s-OFDM QPSK	25@12	21.1	22.1	0.1622
48	30	20	646000	3690	DFT-s-OFDM QPSK	1@1	21.2	22.2	0.1660
48	30	20	646000	3690	DFT-s-OFDM QPSK	1@49	21.05	22.05	0.1603
48	30	20	646000	3690	DFT-s-OFDM 16 QAM	25@12	20.12	21.12	0.1294
48	30	20	646000	3690	DFT-s-OFDM 16 QAM	1@1	20.32	21.32	0.1355
48	30	20	646000	3690	DFT-s-OFDM 16 QAM	1@49	19.99	20.99	0.1256
48	30	30	637668	3565.02	DFT-s-OFDM QPSK	36@18	21.02	22.02	0.1592
48	30	30	637668	3565.02	DFT-s-OFDM QPSK	1@1	21.33	22.33	0.1710
48	30	30	637668	3565.02	DFT-s-OFDM QPSK	1@76	21.05	22.05	0.1603
48	30	30	637668	3565.02	DFT-s-OFDM 16 QAM	36@18	20.07	21.07	0.1279
48	30	30	637668	3565.02	DFT-s-OFDM 16 QAM	1@1	20.41	21.41	0.1384
48	30	30	637668	3565.02	DFT-s-OFDM 16 QAM	1@76	20.13	21.13	0.1297
48	30	30	641666	3624.99	DFT-s-OFDM QPSK	36@18	21.28	22.28	0.1690
48	30	30	641666	3624.99	DFT-s-OFDM QPSK	1@1	21.41	22.41	0.1742
48	30	30	641666	3624.99	DFT-s-OFDM QPSK	1@76	21.3	22.3	0.1698
48	30	30	641666	3624.99	DFT-s-OFDM 16 QAM	36@18	20.32	21.32	0.1355
48	30	30	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	20.46	21.46	0.1400
48	30	30	641666	3624.99	DFT-s-OFDM 16 QAM	1@76	20.32	21.32	0.1355
48	30	30	645666	3684.99	DFT-s-OFDM QPSK	36@18	21.2	22.2	0.1660
48	30	30	645666	3684.99	DFT-s-OFDM QPSK	1@1	21.56	22.56	0.1803
48	30	30	645666	3684.99	DFT-s-OFDM QPSK	1@76	20.96	21.96	0.1570
48	30	30	645666	3684.99	DFT-s-OFDM 16 QAM	36@18	20.18	21.18	0.1312
48	30	30	645666	3684.99	DFT-s-OFDM 16 QAM	1@1	20.53	21.53	0.1422
48	30	30	645666	3684.99	DFT-s-OFDM 16 QAM	1@76	20.05	21.05	0.1274
48	30	40	638000	3570	DFT-s-OFDM PI/2 BPSK	50@25	21.08	22.08	0.1614
48	30	40	638000	3570	DFT-s-OFDM PI/2 BPSK	1@1	21.29	22.29	0.1694
48	30	40	638000	3570	DFT-s-OFDM PI/2 BPSK	1@104	21.13	22.13	0.1633
48	30	40	638000	3570	DFT-s-OFDM QPSK	50@25	21.02	22.02	0.1592
48	30	40	638000	3570	DFT-s-OFDM QPSK	1@1	21.22	22.22	0.1667
48	30	40	638000	3570	DFT-s-OFDM QPSK	1@104	21.05	22.05	0.1603
48	30	40	638000	3570	DFT-s-OFDM 16 QAM	50@25	20.07	21.07	0.1279
48	30	40	638000	3570	DFT-s-OFDM 16 QAM	1@1	20.33	21.33	0.1358
48	30	40	638000	3570	DFT-s-OFDM 16 QAM	1@104	20.17	21.17	0.1309
48	30	40	638000	3570	DFT-s-OFDM 64 QAM	50@25	18.57	19.57	0.0906
48	30	40	638000	3570	DFT-s-OFDM 64 QAM	1@1	18.73	19.73	0.0940
48	30	40	638000	3570	DFT-s-OFDM 64 QAM	1@104	18.64	19.64	0.0920



NR Band	SCS	BandWidth	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
48	30	40	638000	3570	DFT-s-OFDM 256 QAM	50@25	16.53	17.53	0.0566
48	30	40	638000	3570	DFT-s-OFDM 256 QAM	1@1	16.64	17.64	0.0581
48	30	40	638000	3570	DFT-s-OFDM 256 QAM	1@104	16.51	17.51	0.0564
48	30	40	638000	3570	CP-OFDM QPSK	53@26	19.62	20.62	0.1153
48	30	40	638000	3570	CP-OFDM QPSK	1@1	19.59	20.59	0.1146
48	30	40	638000	3570	CP-OFDM QPSK	1@104	19.58	20.58	0.1143
48	30	40	641666	3624.99	DFT-s-OFDM PI/2 BPSK	50@25	21.33	22.33	0.1710
48	30	40	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@1	21.37	22.37	0.1726
48	30	40	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@104	21.26	22.26	0.1683
48	30	40	641666	3624.99	DFT-s-OFDM QPSK	50@25	21.35	22.35	0.1718
48	30	40	641666	3624.99	DFT-s-OFDM QPSK	1@1	21.31	22.31	0.1702
48	30	40	641666	3624.99	DFT-s-OFDM QPSK	1@104	21.18	22.18	0.1652
48	30	40	641666	3624.99	DFT-s-OFDM 16 QAM	50@25	20.22	21.22	0.1324
48	30	40	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	20.38	21.38	0.1374
48	30	40	641666	3624.99	DFT-s-OFDM 16 QAM	1@104	20.27	21.27	0.1340
48	30	40	641666	3624.99	DFT-s-OFDM 64 QAM	50@25	18.76	19.76	0.0946
48	30	40	641666	3624.99	DFT-s-OFDM 64 QAM	1@1	18.84	19.84	0.0964
48	30	40	641666	3624.99	DFT-s-OFDM 64 QAM	1@104	18.68	19.68	0.0929
48	30	40	641666	3624.99	DFT-s-OFDM 256 QAM	50@25	16.83	17.83	0.0607
48	30	40	641666	3624.99	DFT-s-OFDM 256 QAM	1@1	16.68	17.68	0.0586
48	30	40	641666	3624.99	DFT-s-OFDM 256 QAM	1@104	16.58	17.58	0.0573
48	30	40	641666	3624.99	CP-OFDM QPSK	53@26	19.77	20.77	0.1194
48	30	40	641666	3624.99	CP-OFDM QPSK	1@1	19.77	20.77	0.1194
48	30	40	641666	3624.99	CP-OFDM QPSK	1@104	19.64	20.64	0.1159
48	30	40	645332	3679.98	DFT-s-OFDM PI/2 BPSK	50@25	21.19	22.19	0.1656
48	30	40	645332	3679.98	DFT-s-OFDM PI/2 BPSK	1@1	21.57	22.57	0.1807
48	30	40	645332	3679.98	DFT-s-OFDM PI/2 BPSK	1@104	20.93	21.93	0.1560
48	30	40	645332	3679.98	DFT-s-OFDM QPSK	50@25	21.28	22.28	0.1690
48	30	40	645332	3679.98	DFT-s-OFDM QPSK	1@1	21.52	22.52	0.1786
48	30	40	645332	3679.98	DFT-s-OFDM QPSK	1@104	20.93	21.93	0.1560
48	30	40	645332	3679.98	DFT-s-OFDM 16 QAM	50@25	20.32	21.32	0.1355
48	30	40	645332	3679.98	DFT-s-OFDM 16 QAM	1@1	20.58	21.58	0.1439
48	30	40	645332	3679.98	DFT-s-OFDM 16 QAM	1@104	19.96	20.96	0.1247
48	30	40	645332	3679.98	DFT-s-OFDM 64 QAM	50@25	18.73	19.73	0.0940
48	30	40	645332	3679.98	DFT-s-OFDM 64 QAM	1@1	19.06	20.06	0.1014
48	30	40	645332	3679.98	DFT-s-OFDM 64 QAM	1@104	18.48	19.48	0.0887
48	30	40	645332	3679.98	DFT-s-OFDM 256 QAM	50@25	16.7	17.7	0.0589
48	30	40	645332	3679.98	DFT-s-OFDM 256 QAM	1@1	16.88	17.88	0.0614
48	30	40	645332	3679.98	DFT-s-OFDM 256 QAM	1@104	16.22	17.22	0.0527
48	30	40	645332	3679.98	CP-OFDM QPSK	53@26	19.64	20.64	0.1159
48	30	40	645332	3679.98	CP-OFDM QPSK	1@1	20	21	0.1259
48	30	40	645332	3679.98	CP-OFDM QPSK	1@104	19.38	20.38	0.1091



Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (Hz)	Verdict	Environment
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	15.2	PASS	NV
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	11.1	PASS	LV
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	10.9	PASS	HV
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	18.9	PASS	-30℃
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	14.4	PASS	-20℃
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	16.1	PASS	-10℃
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	17.8	PASS	0℃
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	13.8	PASS	10℃
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	15.2	PASS	20℃
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	15.4	PASS	30℃
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	17.2	PASS	40℃
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	11.9	PASS	50℃
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	18.6	PASS	NV
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	13	PASS	LV
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	15.6	PASS	HV
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	14.6	PASS	-30℃
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	12.1	PASS	-20℃
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	16.7	PASS	-10℃
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	15.8	PASS	0℃
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	13.5	PASS	10℃
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	18.6	PASS	20℃
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	15.7	PASS	30℃
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	12.6	PASS	40℃
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	12.3	PASS	50℃
48	30	20	646000	3690.0	DFT-s-OFDM QPSK	50@0	18	PASS	NV
48	30	20	646000	3690.0	DFT-s-OFDM QPSK	50@0	13.4	PASS	LV
48	30	20	646000	3690.0	DFT-s-OFDM QPSK	50@0	14.2	PASS	HV
48	30	20	646000	3690.0	DFT-s-OFDM QPSK	50@0	14.7	PASS	-30℃
48	30	20	646000	3690.0	DFT-s-OFDM QPSK	50@0	10.8	PASS	-20℃
48	30	20	646000	3690.0	DFT-s-OFDM QPSK	50@0	13.3	PASS	-10℃
48	30	20	646000	3690.0	DFT-s-OFDM QPSK	50@0	13.9	PASS	0℃
48	30	20	646000	3690.0	DFT-s-OFDM QPSK	50@0	14.7	PASS	10℃
48	30	20	646000	3690.0	DFT-s-OFDM QPSK	50@0	18	PASS	20℃



48	30	20	646000	3690.0	DFT-s-OFDM QPSK	50@0	14.6	PASS	30℃
48	30	20	646000	3690.0	DFT-s-OFDM QPSK	50@0	11.3	PASS	40℃
48	30	20	646000	3690.0	DFT-s-OFDM QPSK	50@0	15.5	PASS	50℃

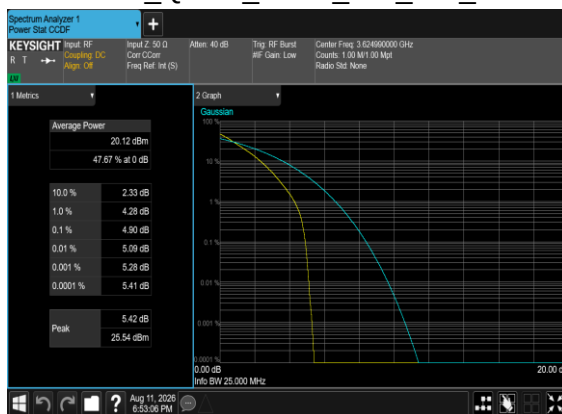
$|\text{MAX}(\Delta f)| = 18.9\text{Hz}$

Frequency Stability	Frequency (MHz)	Limit Line	Result
$f_L - \text{MAX}(\Delta f) $	3550.779181	$\geq 3550\text{ MHz}$	PASS
$f_H + \text{MAX}(\Delta f) $	3699.190819	$\leq 3700\text{ MHz}$	



Peak to Average Ratio

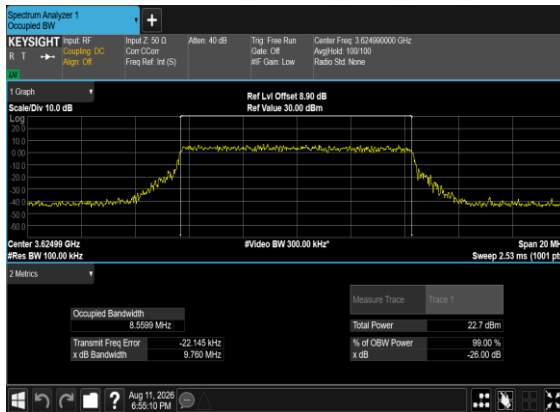
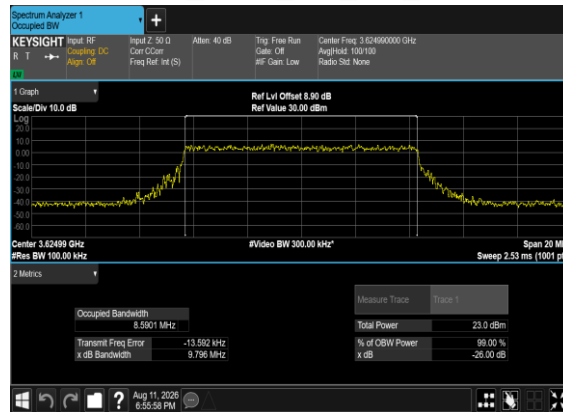
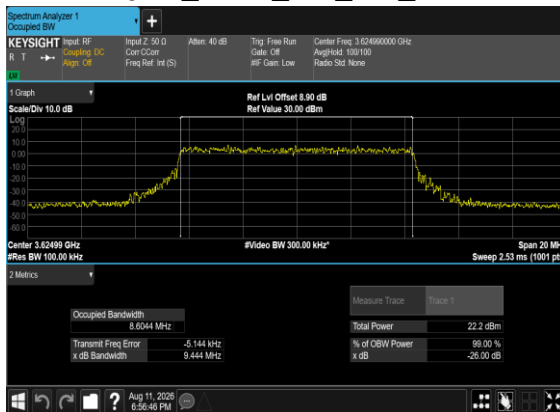
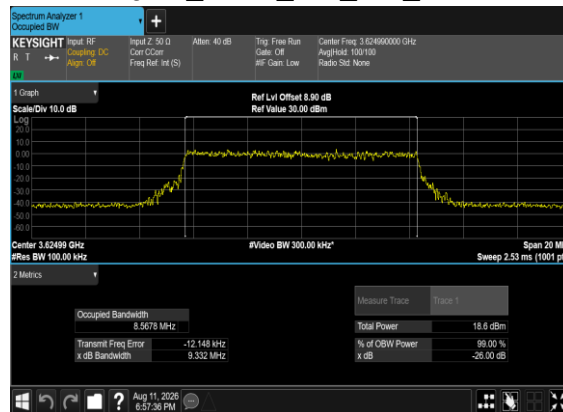
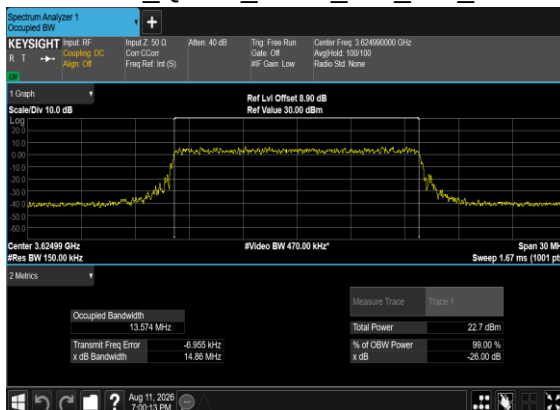
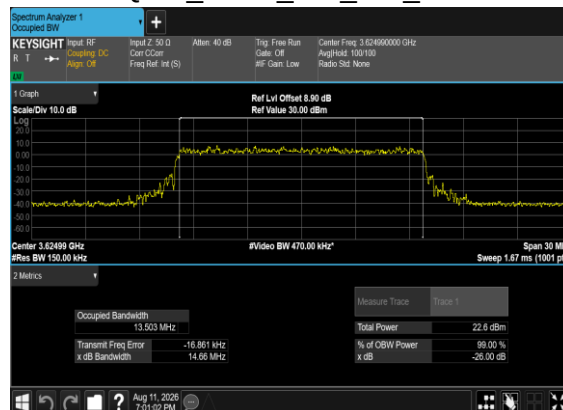
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
48	30	20	641666	3624.99	DFT-s-OFDM PI/2 BPSK	50@0	4.08	13	PASS
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	4.9	13	PASS

N48(20M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Mid_CHN48(20M)_DFT-s-
OFDM_QPSK_Outer_Full_Mid_CH



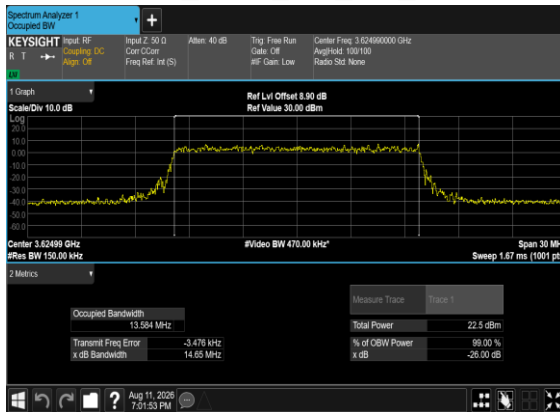
Occupied Bandwidth

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB BW (MHz)
48	30	10	641666	3624.99	CP-OFDM QPSK	24@0	8.5599	9.76
48	30	10	641666	3624.99	CP-OFDM 16 QAM	24@0	8.5901	9.796
48	30	10	641666	3624.99	CP-OFDM 64 QAM	24@0	8.6044	9.444
48	30	10	641666	3624.99	CP-OFDM 256 QAM	24@0	8.5678	9.332
48	30	15	641666	3624.99	CP-OFDM QPSK	38@0	13.574	14.86
48	30	15	641666	3624.99	CP-OFDM 16 QAM	38@0	13.503	14.66
48	30	15	641666	3624.99	CP-OFDM 64 QAM	38@0	13.584	14.65
48	30	15	641666	3624.99	CP-OFDM 256 QAM	38@0	13.567	14.6
48	30	20	641666	3624.99	CP-OFDM QPSK	51@0	18.245	19.14
48	30	20	641666	3624.99	CP-OFDM 16 QAM	51@0	18.214	19.09
48	30	20	641666	3624.99	CP-OFDM 64 QAM	51@0	18.182	19.26
48	30	20	641666	3624.99	CP-OFDM 256 QAM	51@0	18.187	19.4
48	30	30	641666	3624.99	CP-OFDM QPSK	78@0	27.839	28.89
48	30	30	641666	3624.99	CP-OFDM 16 QAM	78@0	27.82	29.15
48	30	30	641666	3624.99	CP-OFDM 64 QAM	78@0	27.891	29.15
48	30	30	641666	3624.99	CP-OFDM 256 QAM	78@0	27.76	29.05
48	30	40	641666	3624.99	CP-OFDM QPSK	106@0	37.701	39.23
48	30	40	641666	3624.99	CP-OFDM 16 QAM	106@0	37.909	39.39
48	30	40	641666	3624.99	CP-OFDM 64 QAM	106@0	37.98	39.16
48	30	40	641666	3624.99	CP-OFDM 256 QAM	106@0	37.823	39.22

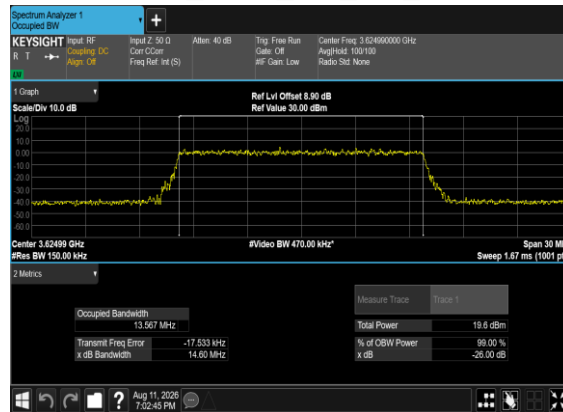
N48(10M)_CP-
OFDM_QPSK_Outer_Full_Mid_CHN48(10M)_CP-OFDM_16
QAM_Outer_Full_Mid_CHN48(10M)_CP-OFDM_64
QAM_Outer_Full_Mid_CHN48(10M)_CP-OFDM_256
QAM_Outer_Full_Mid_CHN48(15M)_CP-
OFDM_QPSK_Outer_Full_Mid_CHN48(15M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



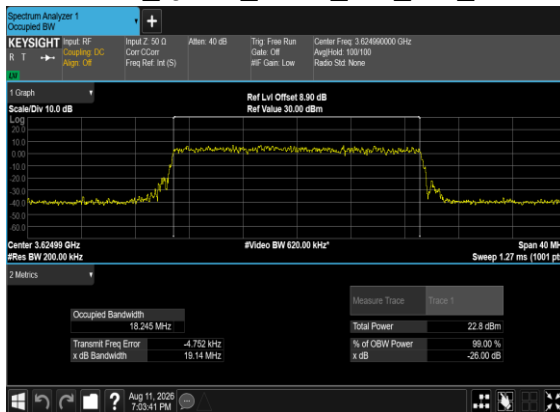
N48(15M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH



N48(15M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH



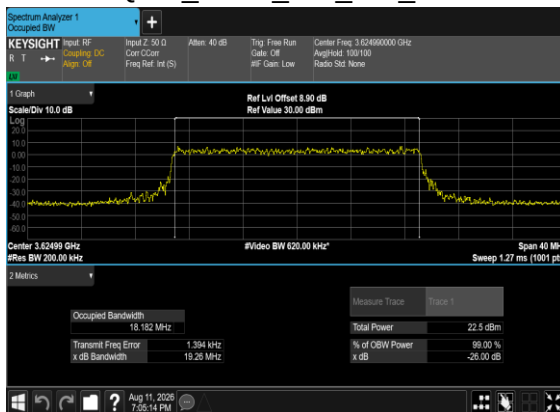
N48(20M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



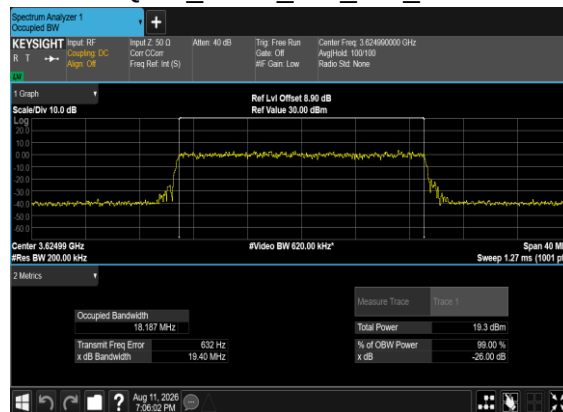
N48(20M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



N48(20M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH

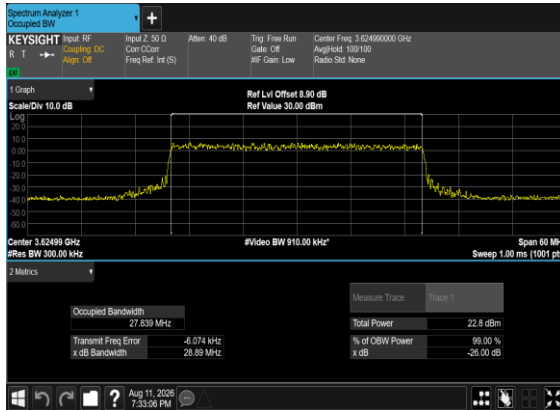


N48(20M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH

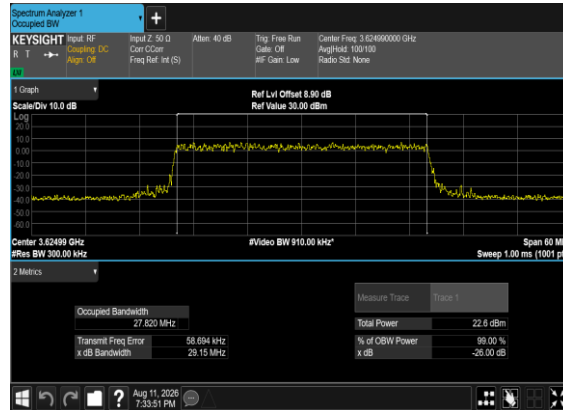




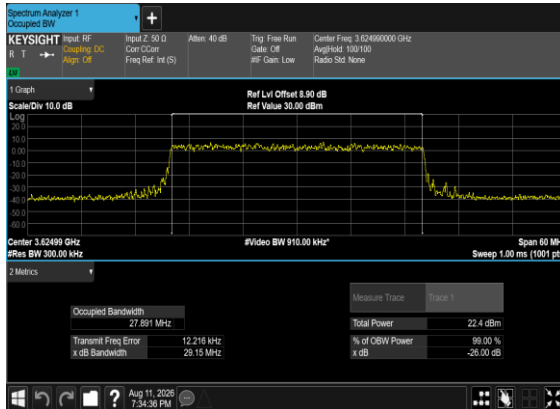
N48(30M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



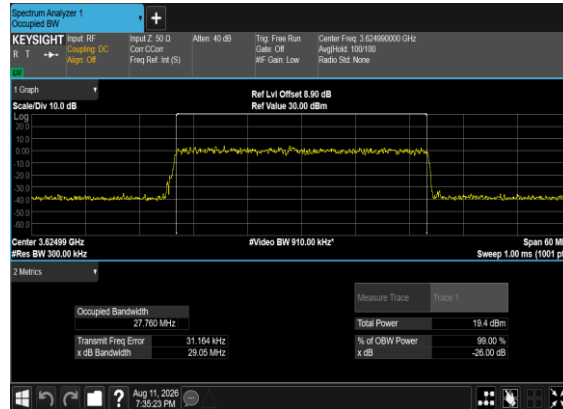
N48(30M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



N48(30M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH



N48(30M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH



N48(40M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH

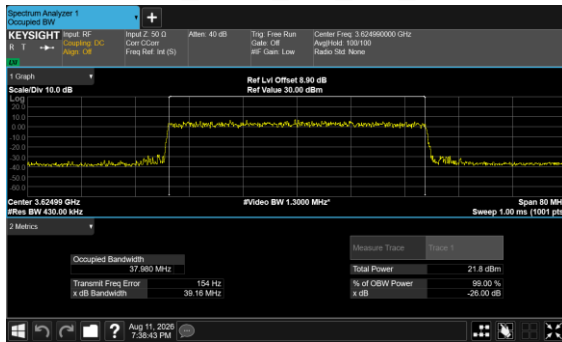


N48(40M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH

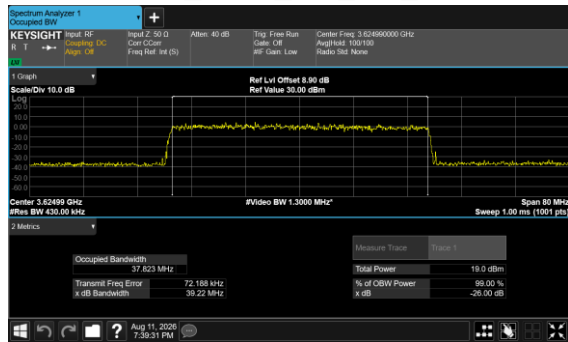




N48(40M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH



N48(40M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH





Adjacent Channel Leakage Ratio

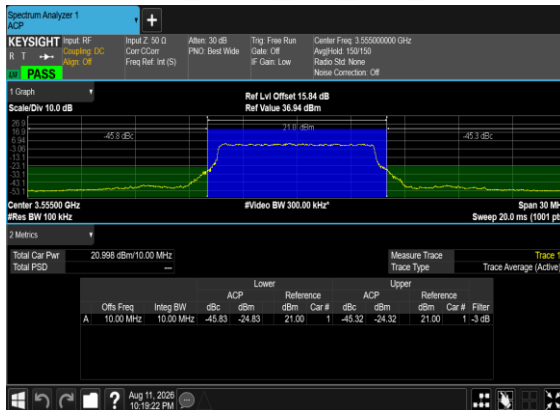
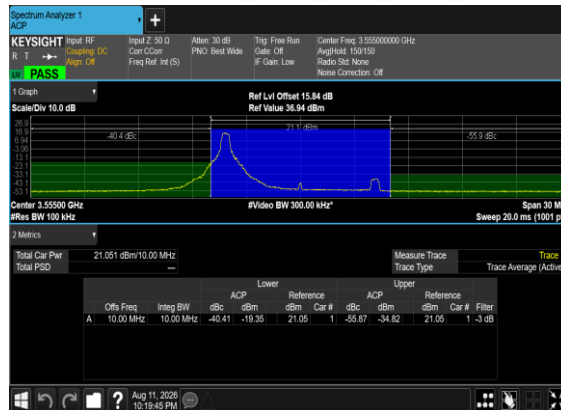
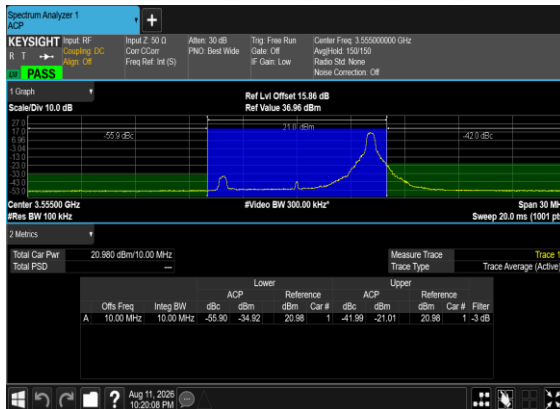
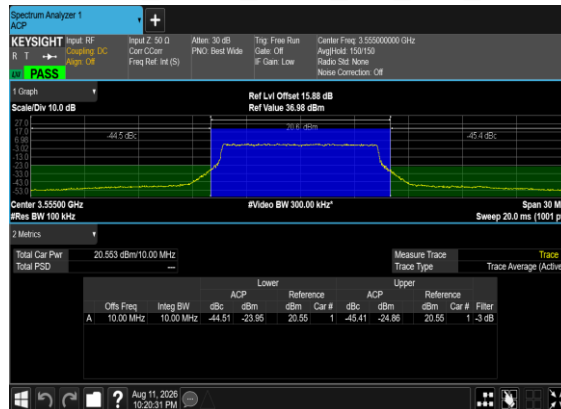
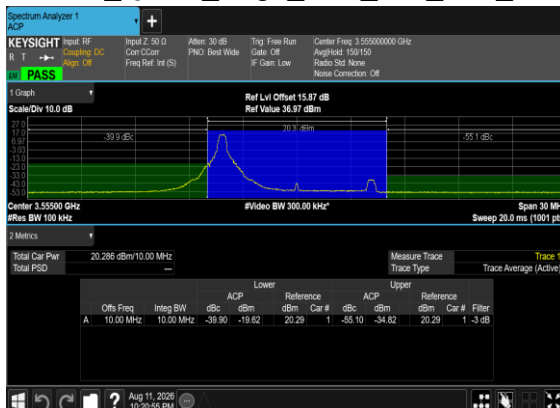
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Lower Margin	Upper Margin	Result	Verdict
48	30	10	637000	3555.0	DFT-s-OFDM PI/2 BPSK	24@0	-15.83	-15.32	see graph	PASS
48	30	10	637000	3555.0	DFT-s-OFDM PI/2 BPSK	1@0	-10.41	-25.87	see graph	PASS
48	30	10	637000	3555.0	DFT-s-OFDM PI/2 BPSK	1@23	-25.9	-11.99	see graph	PASS
48	30	10	637000	3555.0	DFT-s-OFDM QPSK	24@0	-14.51	-15.41	see graph	PASS
48	30	10	637000	3555.0	DFT-s-OFDM QPSK	1@0	-9.9	-25.1	see graph	PASS
48	30	10	637000	3555.0	DFT-s-OFDM QPSK	1@23	-25.54	-11.72	see graph	PASS
48	30	10	641666	3624.99	DFT-s-OFDM PI/2 BPSK	24@0	-17.45	-14.21	see graph	PASS
48	30	10	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@0	-8.71	-22.94	see graph	PASS
48	30	10	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@23	-25.03	-11.61	see graph	PASS
48	30	10	641666	3624.99	DFT-s-OFDM QPSK	24@0	-15.1	-15.76	see graph	PASS
48	30	10	641666	3624.99	DFT-s-OFDM QPSK	1@0	-11.03	-23.37	see graph	PASS
48	30	10	641666	3624.99	DFT-s-OFDM QPSK	1@23	-24.61	-11.41	see graph	PASS
48	30	10	646332	3694.98	DFT-s-OFDM PI/2 BPSK	24@0	-15.59	-15.32	see graph	PASS
48	30	10	646332	3694.98	DFT-s-OFDM PI/2 BPSK	1@0	-11.03	-22.84	see graph	PASS
48	30	10	646332	3694.98	DFT-s-OFDM PI/2 BPSK	1@23	-22.0	-10.23	see graph	PASS
48	30	10	646332	3694.98	DFT-s-OFDM QPSK	24@0	-14.65	-14.05	see graph	PASS
48	30	10	646332	3694.98	DFT-s-OFDM QPSK	1@0	-10.31	-21.93	see graph	PASS
48	30	10	646332	3694.98	DFT-s-OFDM QPSK	1@23	-22.83	-12.39	see graph	PASS
48	30	20	637334	3560.01	DFT-s-OFDM PI/2 BPSK	50@0	-18.01	-19.83	see graph	PASS
48	30	20	637334	3560.01	DFT-s-OFDM PI/2 BPSK	1@0	-10.99	-22.83	see graph	PASS
48	30	20	637334	3560.01	DFT-s-OFDM PI/2 BPSK	1@50	-23.44	-13.91	see graph	PASS
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	-15.95	-17.43	see graph	PASS
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	1@0	-12.19	-22.44	see graph	PASS

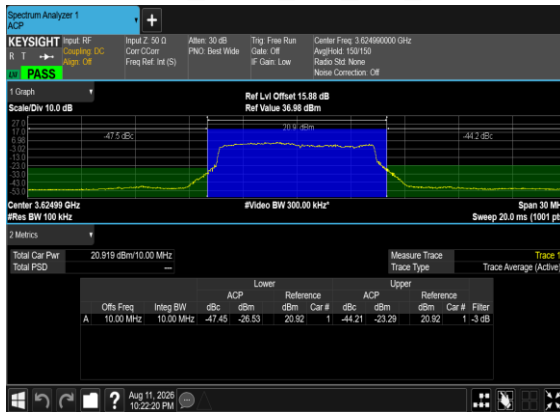
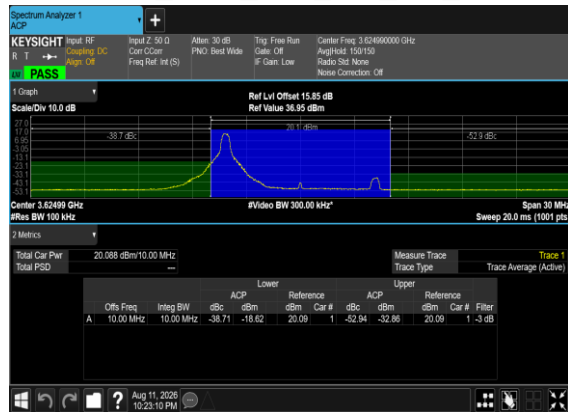
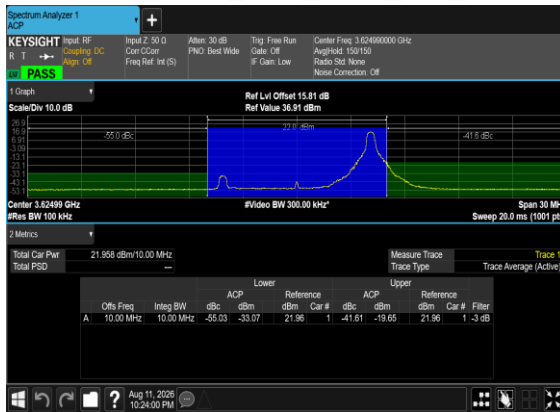
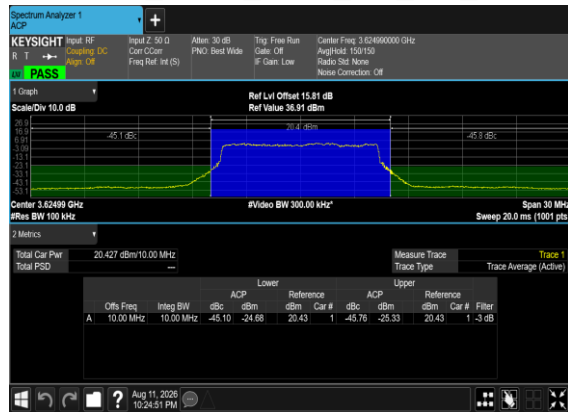
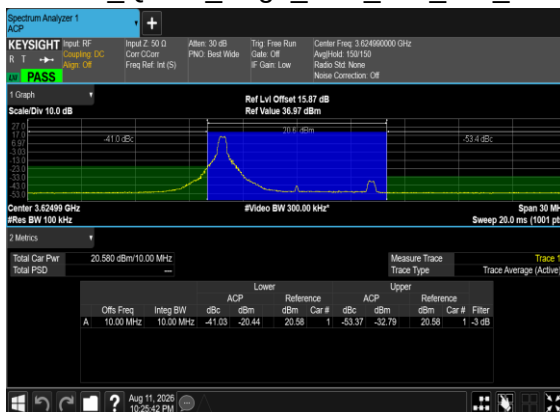
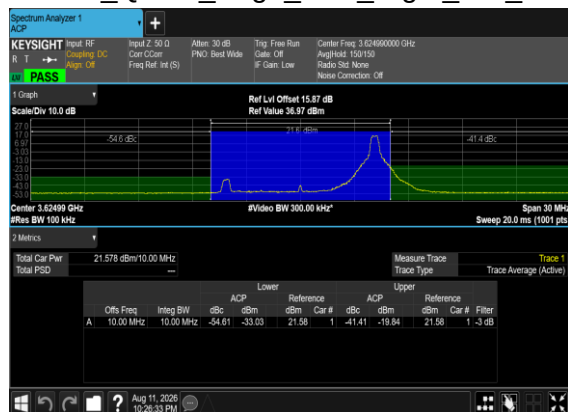


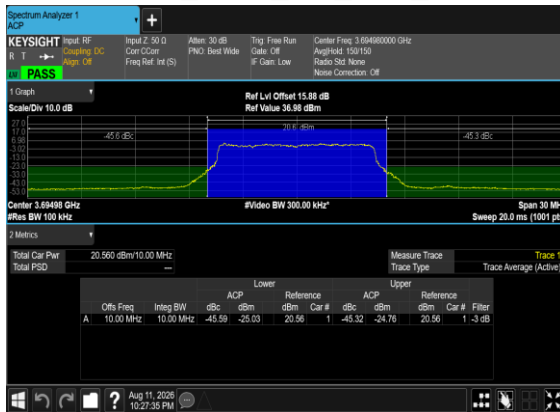
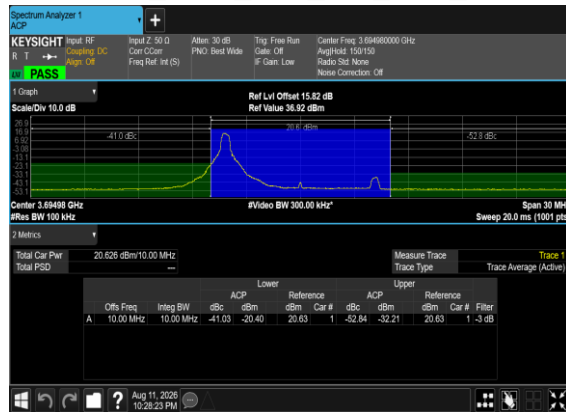
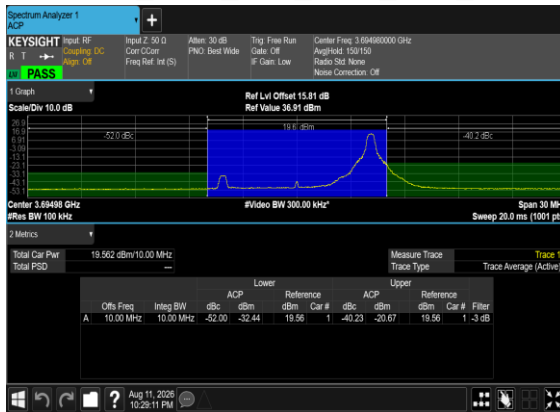
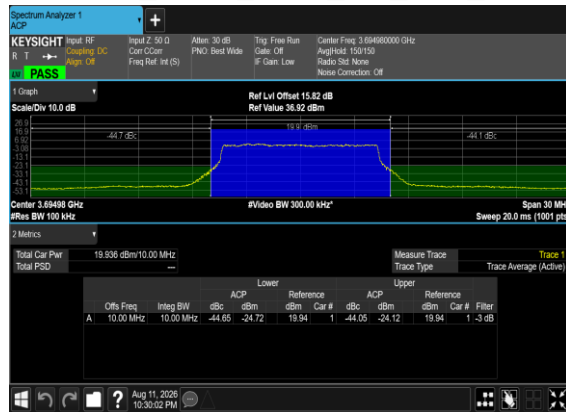
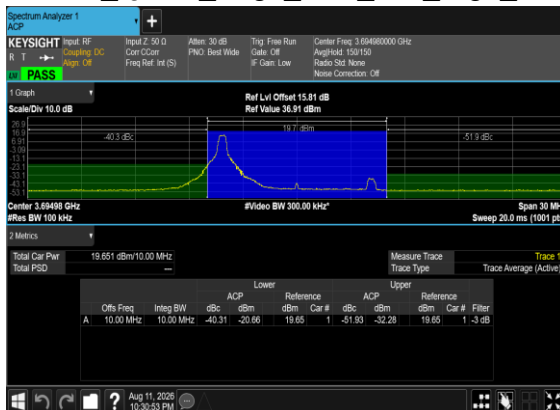
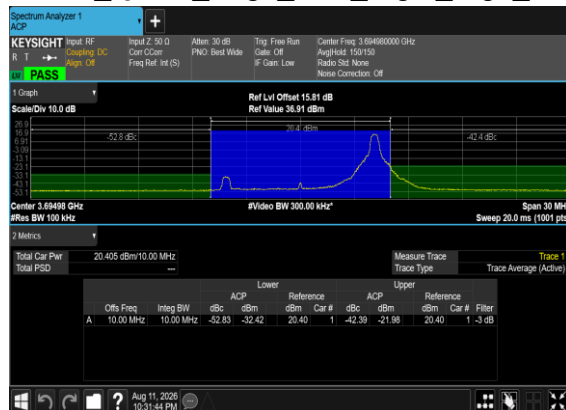
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	1@50	-22.83	-12.97	see graph	PASS
48	30	20	641666	3624.99	DFT-s-OFDM PI/2 BPSK	50@0	-17.98	-19.25	see graph	PASS
48	30	20	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@0	-11.72	-20.94	see graph	PASS
48	30	20	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@50	-21.4	-13.15	see graph	PASS
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	-16.74	-16.44	see graph	PASS
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	1@0	-11.4	-20.15	see graph	PASS
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	1@50	-20.3	-12.16	see graph	PASS
48	30	20	646000	3690.0	DFT-s-OFDM PI/2 BPSK	50@0	-17.92	-18.39	see graph	PASS
48	30	20	646000	3690.0	DFT-s-OFDM PI/2 BPSK	1@0	-12.32	-20.19	see graph	PASS
48	30	20	646000	3690.0	DFT-s-OFDM PI/2 BPSK	1@50	-20.97	-13.82	see graph	PASS
48	30	20	646000	3690.0	DFT-s-OFDM QPSK	50@0	-16.2	-15.58	see graph	PASS
48	30	20	646000	3690.0	DFT-s-OFDM QPSK	1@0	-11.15	-19.44	see graph	PASS
48	30	20	646000	3690.0	DFT-s-OFDM QPSK	1@50	-19.78	-12.67	see graph	PASS
48	30	40	638000	3570.0	DFT-s-OFDM PI/2 BPSK	100@0	-16.81	-16.6	see graph	PASS
48	30	40	638000	3570.0	DFT-s-OFDM PI/2 BPSK	1@0	-13.22	-17.71	see graph	PASS
48	30	40	638000	3570.0	DFT-s-OFDM PI/2 BPSK	1@105	-17.79	-14.15	see graph	PASS
48	30	40	638000	3570.0	DFT-s-OFDM QPSK	100@0	-15.32	-15.73	see graph	PASS
48	30	40	638000	3570.0	DFT-s-OFDM QPSK	1@0	-13.59	-17.39	see graph	PASS
48	30	40	638000	3570.0	DFT-s-OFDM QPSK	1@105	-17.5	-13.69	see graph	PASS
48	30	40	641666	3624.99	DFT-s-OFDM PI/2 BPSK	100@0	-17.44	-17.19	see graph	PASS
48	30	40	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@0	-13.64	-18.96	see graph	PASS
48	30	40	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@105	-18.2	-13.74	see graph	PASS
48	30	40	641666	3624.99	DFT-s-OFDM QPSK	100@0	-16.5	-16.27	see graph	PASS
48	30	40	641666	3624.99	DFT-s-OFDM QPSK	1@0	-11.33	-14.11	see graph	PASS
48	30	40	641666	3624.99	DFT-s-OFDM QPSK	1@105	-16.21	-12.73	see graph	PASS

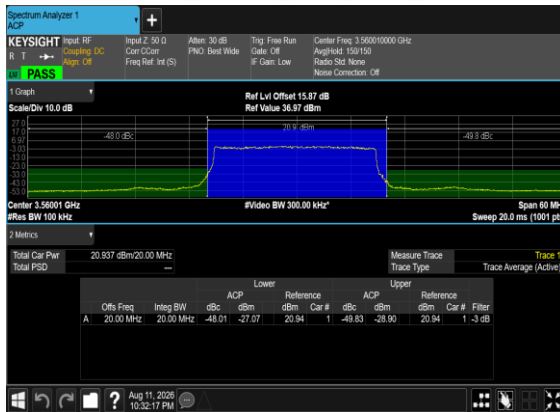
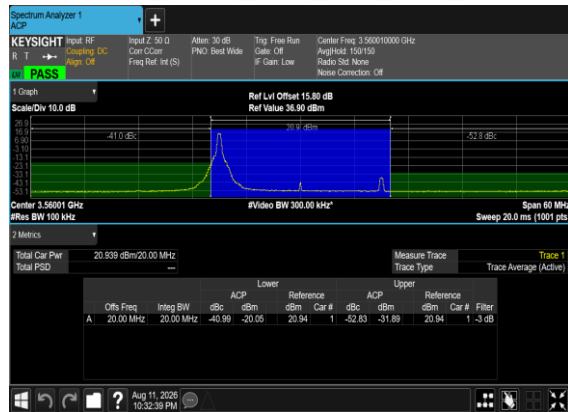
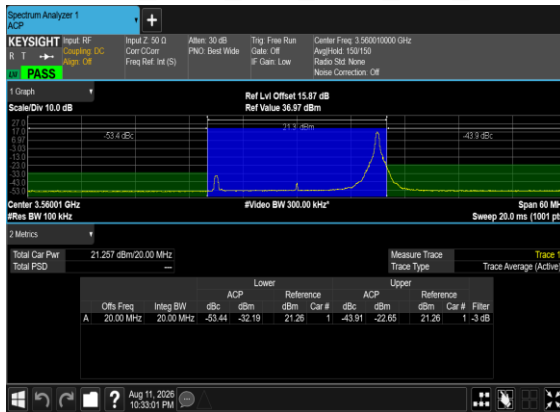
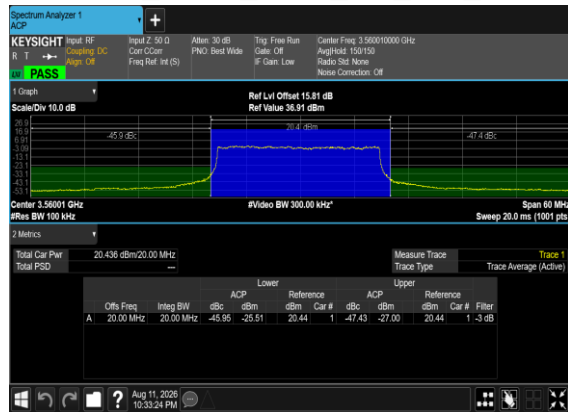
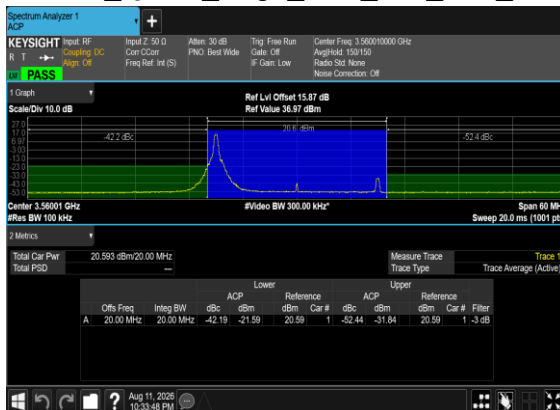
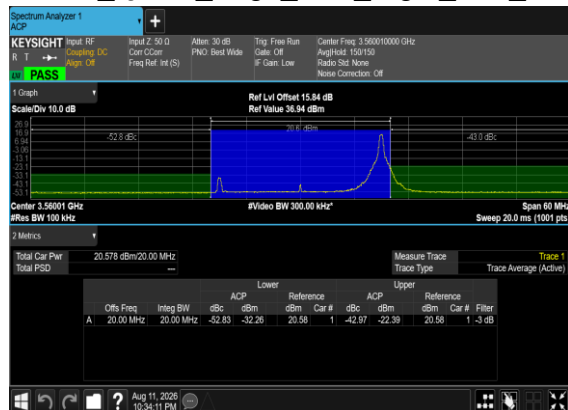


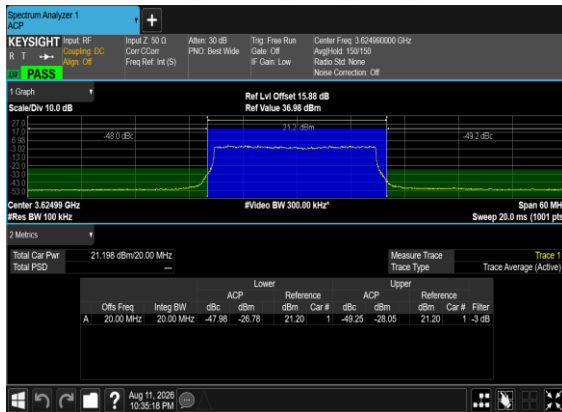
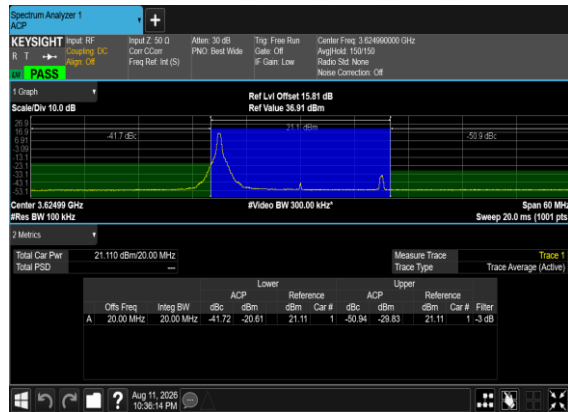
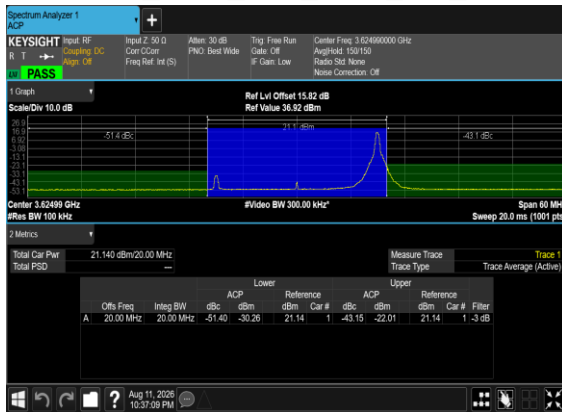
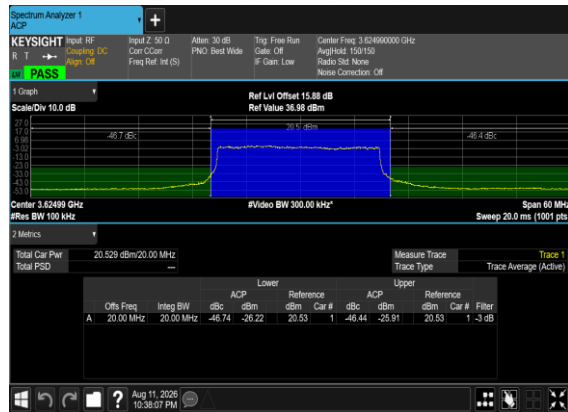
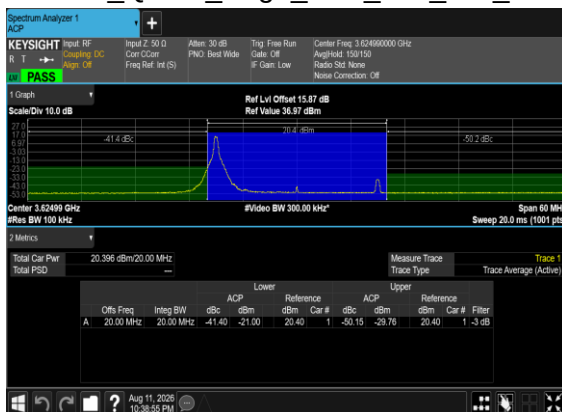
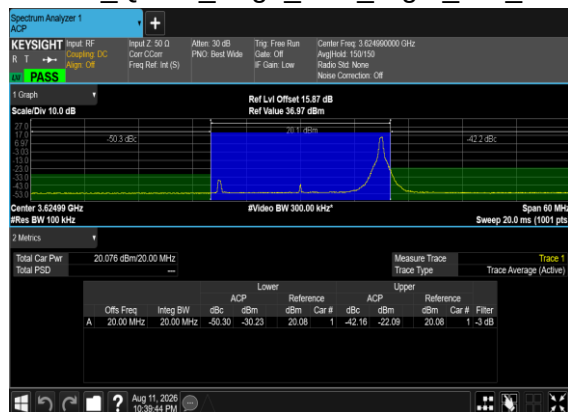
48	30	40	645332	3679.98	DFT-s-OFDM PI/2 BPSK	100@0	-16.74	-16.09	see graph	PASS
48	30	40	645332	3679.98	DFT-s-OFDM PI/2 BPSK	1@0	-12.18	-16.12	see graph	PASS
48	30	40	645332	3679.98	DFT-s-OFDM PI/2 BPSK	1@105	-18.23	-13.78	see graph	PASS
48	30	40	645332	3679.98	DFT-s-OFDM QPSK	100@0	-16.09	-15.27	see graph	PASS
48	30	40	645332	3679.98	DFT-s-OFDM QPSK	1@0	-12.73	-15.3	see graph	PASS
48	30	40	645332	3679.98	DFT-s-OFDM QPSK	1@105	-16.77	-12.73	see graph	PASS

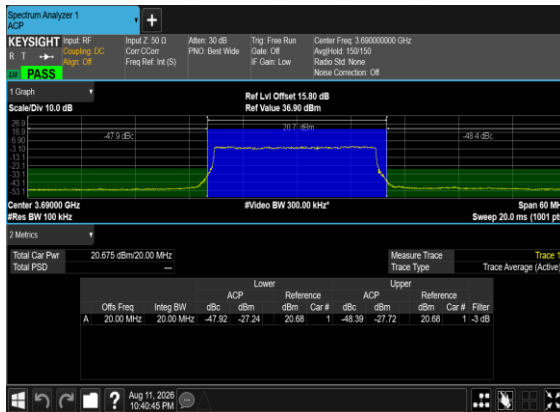
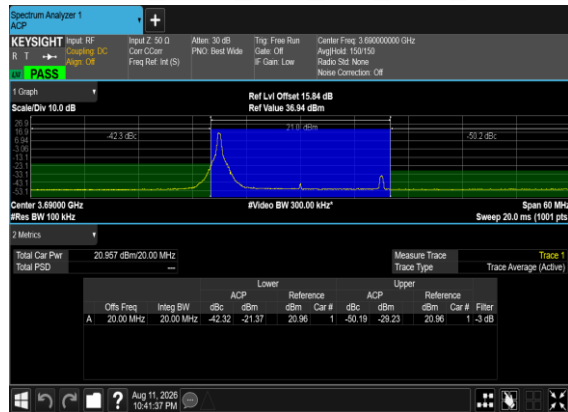
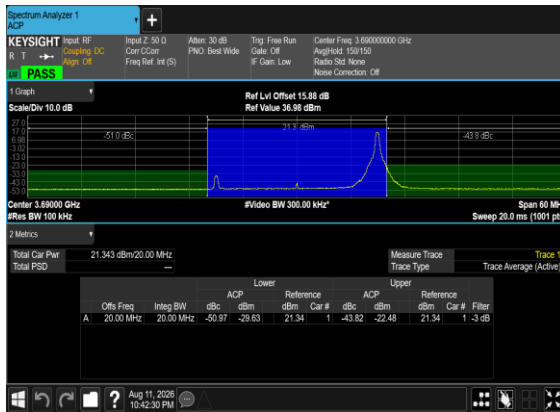
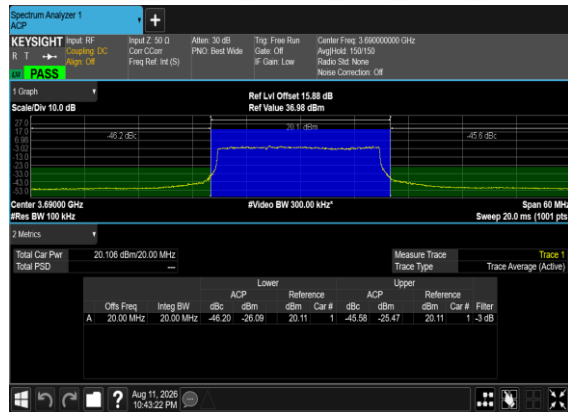
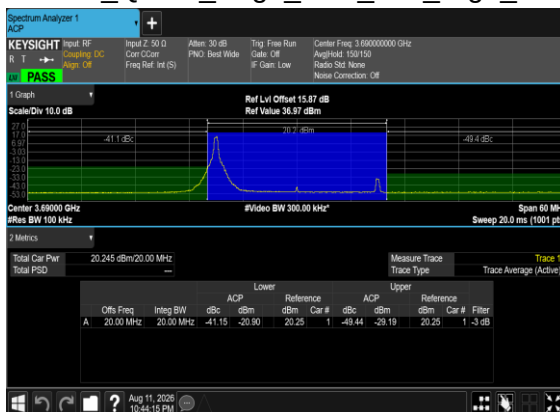
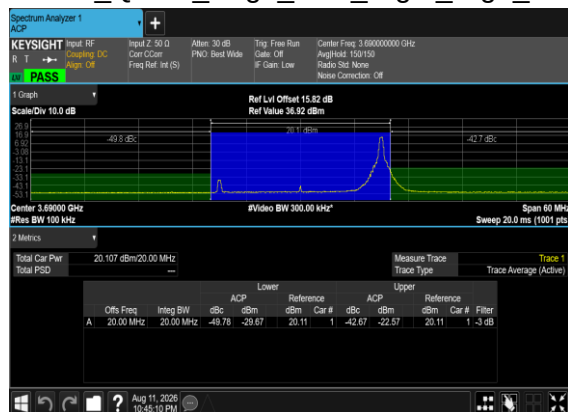
N48(10M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Low_CHN48(10M)_DFT-s-OFDM_PI_2-
BPSK_Edge_1RB_Left_Low_CHN48(10M)_DFT-s-OFDM_PI_2-
BPSK_Edge_1RB_Right_Low_CHN48(10M)_DFT-s-
OFDM_QPSK_Outer_Full_Low_CHN48(10M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CHN48(10M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_Low_CH

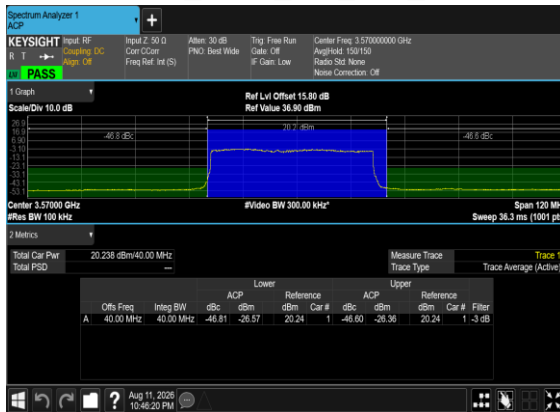
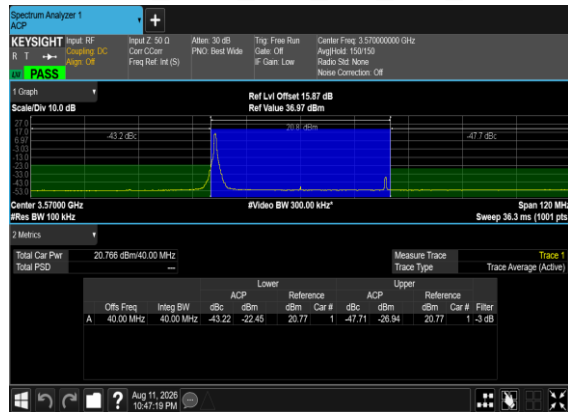
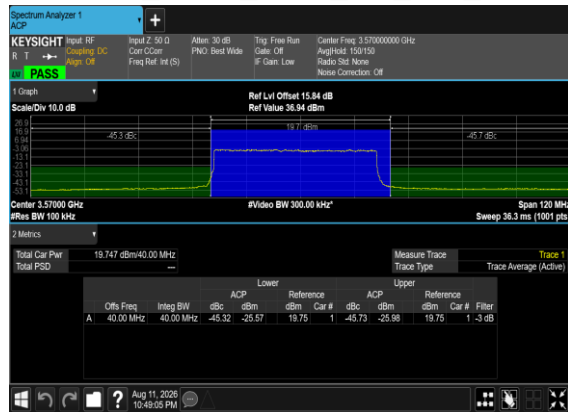
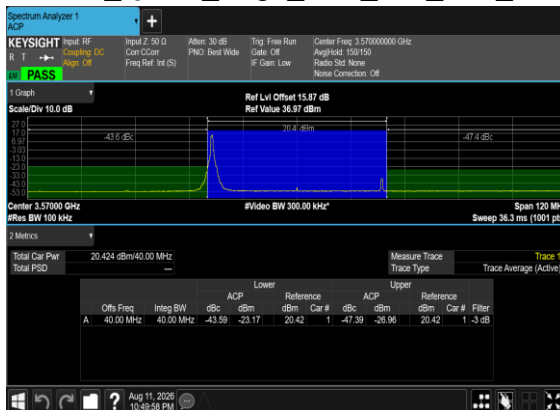
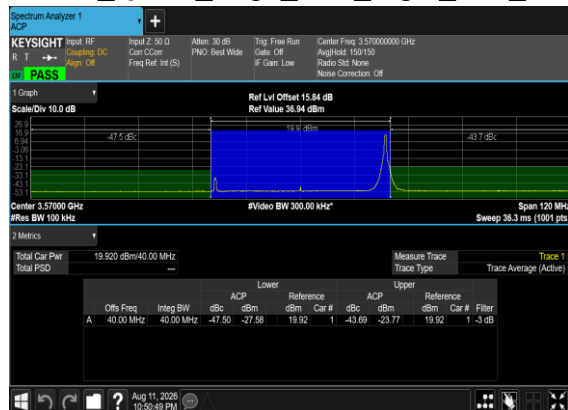
N48(10M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Mid_CHN48(10M)_DFT-s-OFDM_PI_2-
BPSK_Edge_1RB_Left_Mid_CHN48(10M)_DFT-s-OFDM_PI_2-
BPSK_Edge_1RB_Right_Mid_CHN48(10M)_DFT-s-
OFDM_QPSK_Outer_Full_Mid_CHN48(10M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CHN48(10M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_Mid_CH

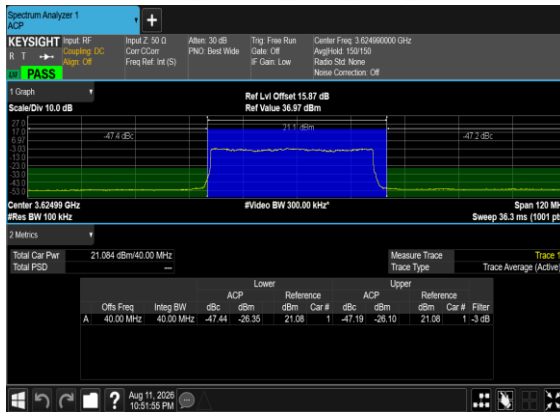
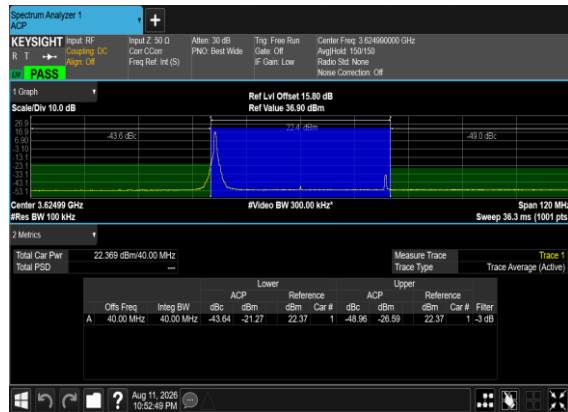
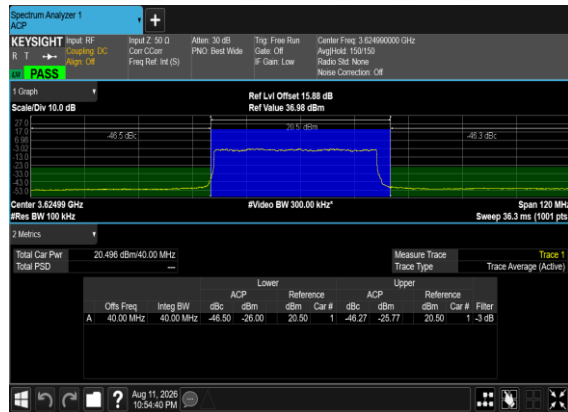
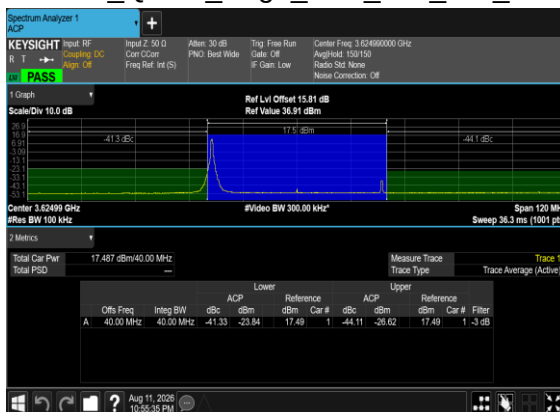
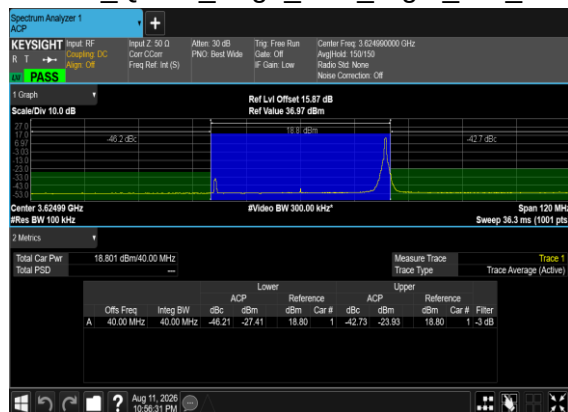
N48(10M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_High_CHN48(10M)_DFT-s-OFDM_PI_2-
BPSK_Edge_1RB_Left_High_CHN48(10M)_DFT-s-OFDM_PI_2-
BPSK_Edge_1RB_Right_High_CHN48(10M)_DFT-s-
OFDM_QPSK_Outer_Full_High_CHN48(10M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CHN48(10M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_High_CH

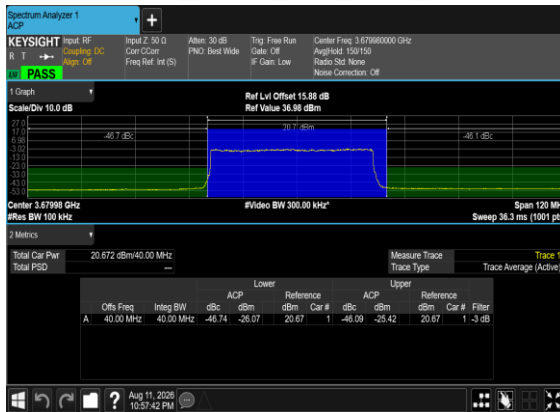
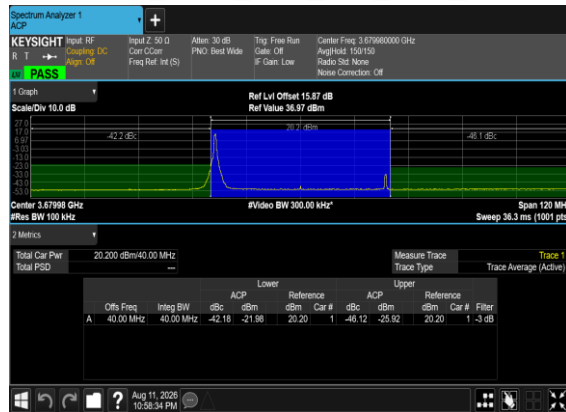
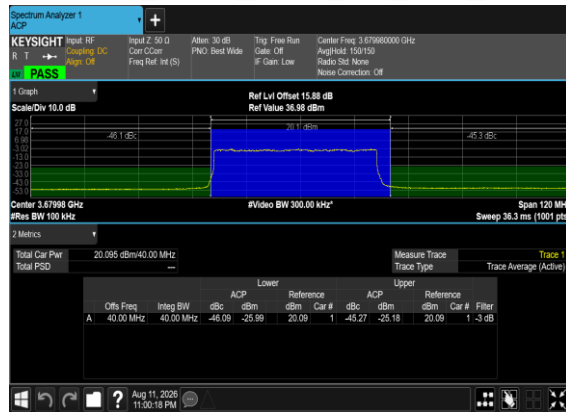
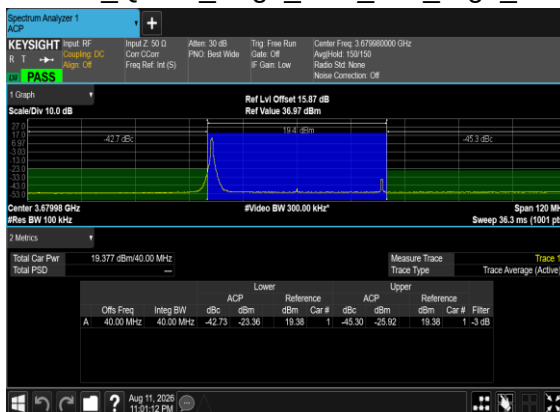
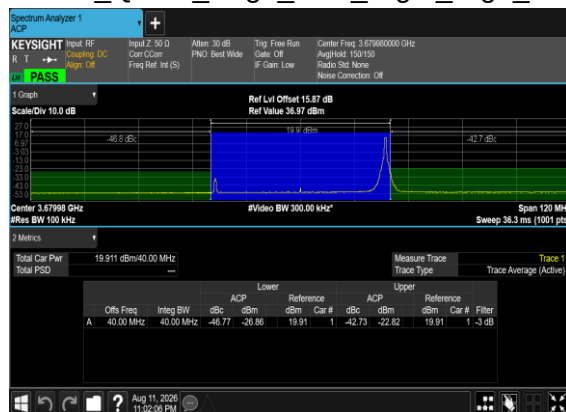
N48(20M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Low_CHN48(20M)_DFT-s-OFDM_PI_2-
BPSK_Edge_1RB_Left_Low_CHN48(20M)_DFT-s-OFDM_PI_2-
BPSK_Edge_1RB_Right_Low_CHN48(20M)_DFT-s-
OFDM_QPSK_Outer_Full_Low_CHN48(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CHN48(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_Low_CH

N48(20M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Mid_CHN48(20M)_DFT-s-OFDM_PI_2-
BPSK_Edge_1RB_Left_Mid_CHN48(20M)_DFT-s-OFDM_PI_2-
BPSK_Edge_1RB_Right_Mid_CHN48(20M)_DFT-s-
OFDM_QPSK_Outer_Full_Mid_CHN48(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CHN48(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_Mid_CH

N48(20M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_High_CHN48(20M)_DFT-s-OFDM_PI_2-
BPSK_Edge_1RB_Left_High_CHN48(20M)_DFT-s-OFDM_PI_2-
BPSK_Edge_1RB_Right_High_CHN48(20M)_DFT-s-
OFDM_QPSK_Outer_Full_High_CHN48(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CHN48(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_High_CH

N48(40M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Low_CHN48(40M)_DFT-s-OFDM_PI_2-
BPSK_Edge_1RB_Left_Low_CHN48(40M)_DFT-s-OFDM_PI_2-
BPSK_Edge_1RB_Right_Low_CHN48(40M)_DFT-s-
OFDM_QPSK_Outer_Full_Low_CHN48(40M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CHN48(40M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_Low_CH

N48(40M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Mid_CHN48(40M)_DFT-s-OFDM_PI_2-
BPSK_Edge_1RB_Left_Mid_CHN48(40M)_DFT-s-OFDM_PI_2-
BPSK_Edge_1RB_Right_Mid_CHN48(40M)_DFT-s-
OFDM_QPSK_Outer_Full_Mid_CHN48(40M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CHN48(40M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_Mid_CH

N48(40M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_High_CHN48(40M)_DFT-s-OFDM_PI_2-
BPSK_Edge_1RB_Left_High_CHN48(40M)_DFT-s-OFDM_PI_2-
BPSK_Edge_1RB_Right_High_CHN48(40M)_DFT-s-
OFDM_QPSK_Outer_Full_High_CHN48(40M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CHN48(40M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_High_CH



Conducted Spurious Emissions

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
48	30	10	637000	3555.0	DFT-s-OFDM BPSK	1@0	see graph	---
48	30	10	637000	3555.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	30	10	637000	3555.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	30	10	637000	3555.0	DFT-s-OFDM QPSK	1@0	see graph	---
48	30	10	637000	3555.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	30	10	637000	3555.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	30	10	641666	3624.99	DFT-s-OFDM BPSK	1@0	see graph	---
48	30	10	641666	3624.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	30	10	641666	3624.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	30	10	641666	3624.99	DFT-s-OFDM QPSK	1@0	see graph	---
48	30	10	641666	3624.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	30	10	641666	3624.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	30	10	646332	3694.98	DFT-s-OFDM BPSK	1@0	see graph	---
48	30	10	646332	3694.98	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	30	10	646332	3694.98	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	30	10	646332	3694.98	DFT-s-OFDM QPSK	1@0	see graph	---
48	30	10	646332	3694.98	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	30	10	646332	3694.98	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	30	20	637334	3560.01	DFT-s-OFDM BPSK	1@0	see graph	---
48	30	20	637334	3560.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	30	20	637334	3560.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	1@0	see graph	---
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	30	20	637334	3560.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	30	20	641666	3624.99	DFT-s-OFDM BPSK	1@0	see graph	---
48	30	20	641666	3624.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	30	20	641666	3624.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	1@0	see graph	---
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	30	20	641666	3624.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	30	20	646000	3690.0	DFT-s-OFDM BPSK	1@0	see graph	---
48	30	20	646000	3690.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	30	20	646000	3690.0	DFT-s-OFDM BPSK	1@0	see graph	PASS



48	30	20	646000	3690.0	DFT-s-OFDM QPSK	1@0	see graph	---
48	30	20	646000	3690.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	30	20	646000	3690.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	30	40	638000	3570.0	DFT-s-OFDM BPSK	1@0	see graph	---
48	30	40	638000	3570.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	30	40	638000	3570.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	30	40	638000	3570.0	DFT-s-OFDM QPSK	1@0	see graph	---
48	30	40	638000	3570.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	30	40	638000	3570.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	30	40	641666	3624.99	DFT-s-OFDM BPSK	1@0	see graph	---
48	30	40	641666	3624.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	30	40	641666	3624.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	30	40	641666	3624.99	DFT-s-OFDM QPSK	1@0	see graph	---
48	30	40	641666	3624.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	30	40	641666	3624.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	30	40	645332	3679.98	DFT-s-OFDM BPSK	1@0	see graph	---
48	30	40	645332	3679.98	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	30	40	645332	3679.98	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	30	40	645332	3679.98	DFT-s-OFDM QPSK	1@0	see graph	---
48	30	40	645332	3679.98	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	30	40	645332	3679.98	DFT-s-OFDM QPSK	1@0	see graph	PASS

N48(10M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Low_CHN48(10M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Low_CHN48(10M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CHN48(10M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CHN48(10M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Mid_CHN48(10M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Mid_CH