

FCC RF Test Report

APPLICANT : Magne AI Global tech limited
EQUIPMENT : MAG1
BRAND NAME : MaQ
MODEL NAME : MA1
FCC ID : 2BVCPGC603606
STANDARD : 47 CFR Part 27 Subpart Q
CLASSIFICATION : PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S) : Mar. 05, 2026 ~ Mar. 15, 2026

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

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

Jason Jia



Approved by: Jason Jia

Sporton International Inc. (Kunshan)

**No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China**



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SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	—	Report Only	-
3.5	§27.50 (k)(4)	Peak-to-Average Ratio	<13dB	PASS	
3.6	§27.50 (k)(3)	EIRP	EIRP < 1W (30dBm)	PASS	-
3.7	§2.1049	Occupied Bandwidth	—	Report Only	-
3.8	§2.1051 §27.53 (n)(2)	Conducted Band Edge Measurement	-13dBm/MHz	PASS	-
3.9	§2.1051 §27.53 (n)(2)	Conducted Spurious Emission	-13dBm/MHz	PASS	-
3.10	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within the band	PASS	-
4.4	§2.1053 §27.53 (n)(2)	Radiated Spurious Emission	-13dBm/MHz	PASS	Under limit 16.81 dB at 6900.00 MHz

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty"

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

1 General Description

1.1 Applicant

Magne AI Global tech limited

FLAT 1019B,10/F,LIVEN HOUSE,NO.61-63 KING YIP STREET KWUN TONG HK

1.2 Manufacturer

FIH Precision Electronics(Lang Fang)Co.,Ltd.

No. 18 Furao Road, Longhe High tech Industrial Development Zone, Anci District, Langfang City, Hebei Province

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	MAG1
Brand Name	MaQ
Model Name	MA1
FCC ID	2BVCPGC603606
IMEI Code	Conducted : 016813000000057/016813000000065 Radiation : 016813000003457
EUT Stage	Production Unit

1.4 Product Specification of Equipment Under Test

Product Feature	
Tx/Rx Frequency	5G NR n77: 3450 MHz ~ 3550 MHz 5G NR n78: 3450 MHz ~ 3550 MHz
SCS	30kHz
Bandwidth	n77/n78: 10 / 15 / 20 / 25 / 30 / 40 / 50 / 60 / 70 / 80 / 90 / 100MHz
Antenna Gain	<Ant. 2> 5G NR n77/n78: -3.0 dBi <Ant. 3> 5G NR n77/n78: -5.0 dBi <Ant. 4> 5G NR n77/n78: -3.0 dBi <Ant. 5> 5G NR n77/n78: -2.0 dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

Remark:

1. The maximum EIRP is calculated from max output power and max antenna gain, only the maximum EIRP are shown in the report, 5G NR n77/n78 for Ant. 4.
2. For 5G NR n77/n78, only the test data of Ant.4 is showed in the report according to the maximum conducted power for conducted test items
3. 5G NR n77/n78 support SA and NSA mode. The whole testing has assessed SA mode for n77 by referring to the higher conducted power for conducted test items.
4. The device supports HPUE(PC2) mode for 5G NR n77/n78.

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.

1.5 Modification of EUT

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

1.6 Maximum EIRP Power and Emission Designator

5G NR n77 SA		PI/2 BPSK / QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
10	3455.01 ~ 3544.98	0.1928	8M58G7D	0.1514	8M56W7D
15	3457.50 ~ 3542.49	0.1977	13M6G7D	0.1422	13M6W7D
20	3460.02 ~ 3540.00	0.1941	18M2G7D	0.1466	18M3W7D
25	3462.51 ~ 3537.48	0.1982	23M3G7D	0.1563	23M1W7D
30	3465.00 ~ 3534.99	0.1982	27M9G7D	0.1535	27M9W7D
40	3470.01 ~ 3529.98	0.1928	37M8G7D	0.1510	37M9W7D
50	3475.02 ~ 3525.00	0.1866	47M4G7D	0.1552	47M4W7D
60	3480.00 ~ 3519.99	0.1923	57M8G7D	0.1479	57M8W7D
70	3485.01 ~ 3514.98	0.0701	67M9G7D	0.0624	67M7W7D
80	3490.02 ~ 3510.00	0.1982	77M4G7D	0.1556	77M5W7D
90	3495.00 ~ 3504.99	0.1879	87M3G7D	0.1390	87M3W7D
100	3500.01	0.1811	97M0G7D	0.1486	97M0W7D



5G NR n78 SA		PI/2 BPSK / QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
10	3455.01 ~ 3544.98	0.1928	8M58G7D	0.1585	8M56W7D
15	3457.50 ~ 3542.49	0.1950	13M6G7D	0.1479	13M6W7D
20	3460.02 ~ 3540.00	0.1959	18M2G7D	0.1496	18M3W7D
25	3462.51 ~ 3537.48	0.1932	23M3G7D	0.1552	23M1W7D
30	3465.00 ~ 3534.99	0.1954	27M9G7D	0.1469	27M9W7D
40	3470.01 ~ 3529.98	0.1919	37M8G7D	0.1476	37M9W7D
50	3475.02 ~ 3525.00	0.1858	47M4G7D	0.1578	47M4W7D
60	3480.00 ~ 3519.99	0.1905	57M8G7D	0.1578	57M8W7D
70	3485.01 ~ 3514.98	0.0724	67M9G7D	0.0608	67M7W7D
80	3490.02 ~ 3510.00	0.1936	77M4G7D	0.1629	77M5W7D
90	3495.00 ~ 3504.99	0.1862	87M3G7D	0.1531	87M3W7D
100	3500.01	0.1824	97M0G7D	0.1318	97M0W7D

Note:

- 5G NR Band n78 overlaps the entire frequency range of Band n77, and n78 power > n77 power, therefore the conducted test results of n78 provided in this report cover n77.
- All modulations have been tested, and only the worst test results of PSK & QAM are shown in the report.

1.7 Testing Site

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

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

1.8 Test Software

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

1.9 Applied Standards

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

- ♦ 47 CFR Part 27 Subpart Q
- ♦ ANSI C63.26-2015
- ♦ FCC KDB 971168 Power Meas License Digital Systems D01 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 listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

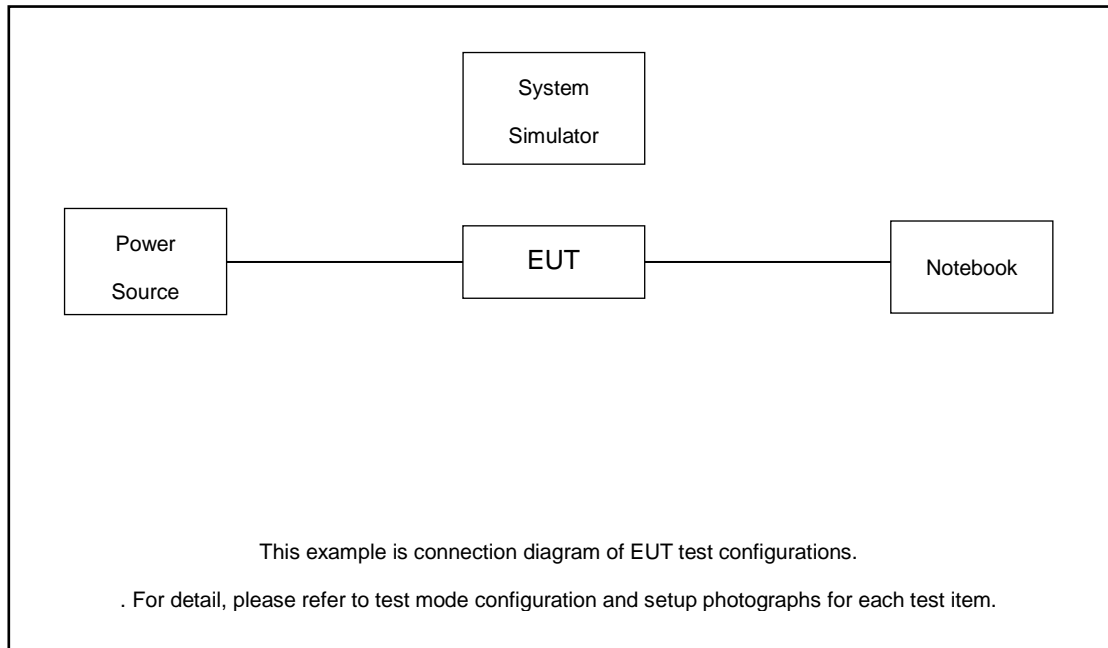
Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

Test Cases	Band	Bandwidth (MHz)	Modulation	RB #	Test Channel
		eg. 5M, 10M, 15M, 20M	eg. PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB, Partial RB, Full RB	L/M/H
Max. Output Power	5G n77	10M, 15M, 20M, 25M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M	All Modulations	1RB, Partial RB, Full RB	L, M, H
	5G n78	10M, 15M, 20M, 25M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M	All Modulations	1RB, Partial RB, Full RB	L, M, H
Peak-to-Average Ratio	5G n77	20M	PI/2 BPSK, QPSK	1RB, Full RB	M
E.I.R.P	5G n77	10M, 15M, 20M, 25M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M	All Modulations	1RB, Partial RB, Full RB	L, M, H
	5G n78	10M, 15M, 20M, 25M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M	All Modulations	1RB, Partial RB, Full RB	L, M, H
26dB and 99% Bandwidth	5G n77	10M, 15M, 20M, 25M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M	QPSK, 16QAM	Full RB	M
Conducted Band Edge	5G n77	10M, 50M, 100M	PI/2 BPSK, QPSK	1RB, Full RB	L, H
Conducted Spurious Emission	5G n77	10M, 50M, 100M	PI/2 BPSK	1RB	L, M, H
Frequency Stability	5G n77	20M	QPSK	1RB	M
Radiated Spurious Emission	5G n77	Worst case from maximum power			M
	5G n78	Worst case from maximum power			M

Note:

- 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.
- Frequency Stability: Normal Voltage = 3.5V ; Low Voltage =3.87V.; High Voltage =4.45V.

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	MT8820C	N/A	N/A	Unshielded, 1.8 m
3.	NR Base Station	Anritsu	MT8000A	N/A	N/A	Unshielded, 1.8 m
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 + attenuator factor.

Following shows an offset computation example with cable loss 6.5 dB and 10dB attenuator.

Example :

$$\begin{aligned} \text{Offset}(dB) &= \text{RF cable loss}(dB) + \text{attenuator factor}(dB). \\ &= 6.5 + 10 = 16.5 \text{ (dB)} \end{aligned}$$

2.5 Frequency List of Low/Middle/High Channels

5G n77/n78 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	-	633334	-
	Frequency	-	3500.01	-
90	Channel	633000	633334	633666
	Frequency	3495	3500.01	3504.99
80	Channel	632668	633334	634000
	Frequency	3490.02	3500.01	3510
70	Channel	632334	633334	634332
	Frequency	3485.01	3500.01	3514.98
60	Channel	632000	633334	634666
	Frequency	3480	3500.01	3519.99
50	Channel	631668	633334	635000
	Frequency	3475.02	3500.01	3525
40	Channel	631334	633334	635332
	Frequency	3470.01	3500.01	3529.98
30	Channel	631000	633334	635666
	Frequency	3465	3500.01	3534.99
25	Channel	630834	633334	635832
	Frequency	3462.51	3500.01	3537.48
20	Channel	630668	633334	636000
	Frequency	3460.02	3500.01	3540
15	Channel	630500	633334	636166
	Frequency	3457.5	3500.01	3542.49
10	Channel	630334	633334	636332
	Frequency	3455.01	3500.01	3544.98

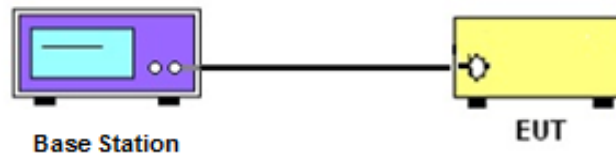
3 Conducted Test Items

3.1 Measuring Instruments

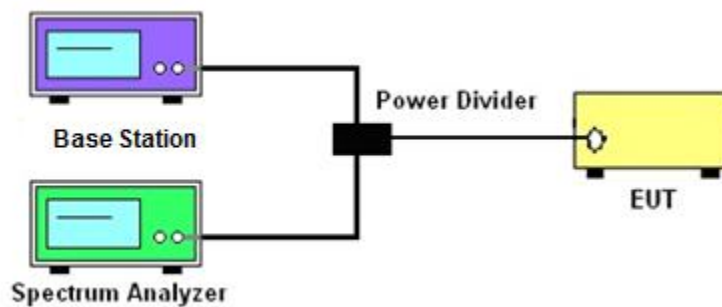
See list of measuring instruments of this test report.

3.2 Test Setup

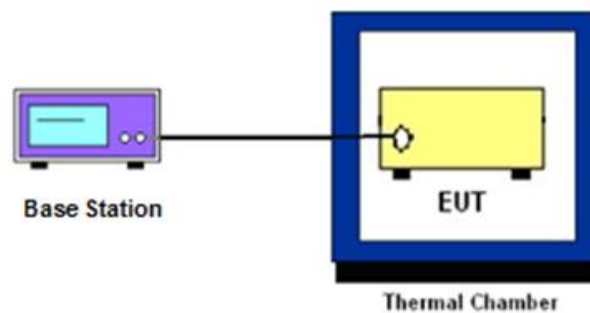
3.2.1 Conducted Output Power



3.2.2 Peak-to-Average Ratio, Occupied / 26dB Bandwidth, 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 Measurement

3.4.1 Description of the Conducted Output Power Measurement

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

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 EIRP

3.6.1 Description of EIRP Limit

§ 27.50 (k)(3)

Mobile devices are limited to 1Watt (30 dBm) EIRP. Mobile devices operating in these bands must employ a means for limiting power to the minimum necessary for successful communications

3.6.2 Test Procedures

1. According to KDB 412172 D01 Power Approach,
2. $EIRP = P_T + G_T - L_C$, $ERP = EIRP - 2.15$, 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

3.7 Occupied Bandwidth

3.7.1 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.

3.7.2 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.

3.8 Conducted Band Edge Measurement

3.8.1 Description of Conducted Band Edge Measurement

§ 27.53 (n)(2)

For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.

Compliance with this paragraph is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed, but limited to a maximum of 200 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz.

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 band edges of low and high channels for the highest RF powers were measured.
4. Set RBW \geq 1% EBW but limited to a maximum of 200 kHz in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz and 5 MHz removed from the band edge, set RBW \geq 500KHz.
6. Beyond the 5 MHz removed from the band edge, set RBW = 1MHz.
7. Set spectrum analyzer with RMS detector.
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
9. Checked that all the results comply with the emission limit line.

3.9 Conducted Spurious Emission Measurement

3.9.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges shall not exceed -13 dBm/MHz.

It is measured by means of a calibrated spectrum analyzer and scanned from 9 kHz up to a frequency including its 10th harmonic.

3.9.2 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. Checked that all the results comply with the emission limit line.

3.10 Frequency Stability Measurement

3.10.1 Description of Frequency Stability Measurement

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

3.10.2 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.

3.10.3 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.

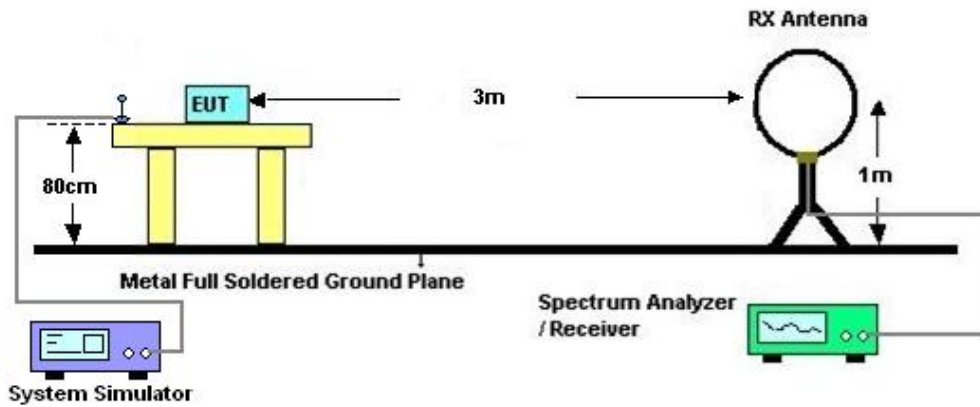
4 Radiated Test Items

4.1 Measuring Instruments

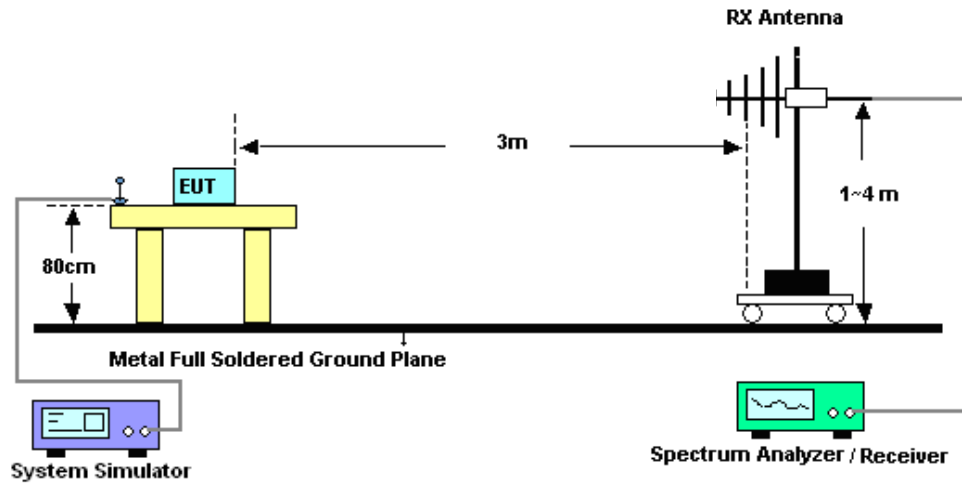
See list of measuring instruments of this test report.

4.2 Test Setup

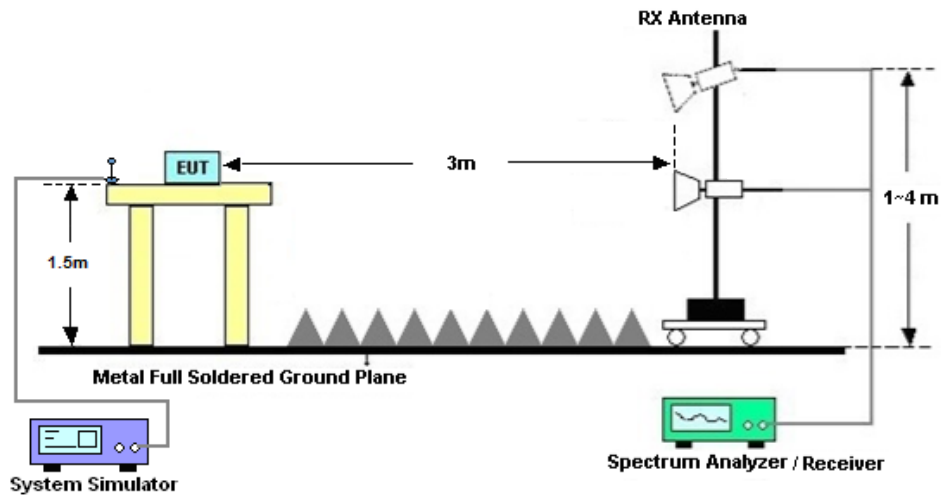
4.2.1 For radiated test below 30MHz



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 Measurement

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 shall not exceed -13 dBm/MHz.

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



5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EXA Spectrum Analyzer	Keysight	N9010A	MY55370528	10Hz-44G,MAX 30dB	Oct. 10, 2025	Mar. 15, 2026	Oct. 09, 2026	Radiation (03CH04-KS)
Active loop antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Aug. 10, 2025	Mar. 15, 2026	Aug. 09, 2026	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	44483	30MHz-1GHz	Nov. 22, 2025	Mar. 15, 2026	Nov. 21, 2026	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00227860	1GHz~18GHz	Aug. 22, 2025	Mar. 15, 2026	Aug. 21, 2026	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 10, 2026	Mar. 15, 2026	Jan. 09, 2027	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	380826	9KHz-1GHz	Jul. 02, 2025	Mar. 15, 2026	Jul. 01, 2026	Radiation (03CH04-KS)
Amplifier	EM	EM18G40G A	060852	18~40GHz	Dec. 24, 2025	Mar. 15, 2026	Dec. 23, 2026	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18G A	060890	1Ghz-18Ghz	May 23, 2025	Mar. 15, 2026	May 22, 2026	Radiation (03CH04-KS)
Amplifier	EM	EM01G18G A	060892	1Ghz-18Ghz	Oct. 11, 2025	Mar. 15, 2026	Oct. 10, 2026	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Mar. 15, 2026	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Mar. 15, 2026	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Mar. 15, 2026	NCR	Radiation (03CH04-KS)
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Jul. 07, 2025	Mar. 05, 2026	Jul. 06, 2026	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	Mar. 05, 2026	NCR	Conducted (TH01-KS)
Radio communication analyzer	Anritsu	MT8821C	6261806798	2G/3G/LTE band 1-46 ,48,65-70	Jul. 03, 2025	Mar. 05, 2026	Jul. 02, 2026	Conducted (TH01-KS)
Temperature & humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 02, 2025	Mar. 05, 2026	Jul. 01, 2026	Conducted (TH01-KS)

NCR: No Calibration Required



6 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Measurement

Conducted Spurious Emission & Bandedge	±2.00 dB
Occupied Channel Bandwidth	±0.384%
Conducted Power	±0.90 dB
Peak to Average Ratio	±0.90 dB
Frequency Stability	±0.38 ppm

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.83dB
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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))	2.83dB
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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))	2.82dB
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----- THE END -----



Appendix A. Test Results of Conducted Test

Test Engineer :	Simle Wang	Temperature :	22~23°C
		Relative Humidity :	40~42%



Software Version: 23.06.1602

FR1 N77_ANT4

Transmitter Conducted Output Power And EIRP, (G_T - L_c)= -3.0 dB

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power(dBm)	EIRP(dBm)	EIRP(W)
77	30	10	630334	3455.01	DFT-s-OFDM PI/2 BPSK	1@1	25.04	22.04	0.1600
77	30	10	630334	3455.01	DFT-s-OFDM QPSK	1@1	25.14	22.14	0.1637
77	30	10	630334	3455.01	DFT-s-OFDM 16 QAM	1@1	24.06	21.06	0.1276
77	30	10	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.36	22.36	0.1722
77	30	10	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.32	22.32	0.1706
77	30	10	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.51	21.51	0.1416
77	30	10	636332	3544.98	DFT-s-OFDM PI/2 BPSK	1@1	25.79	22.79	0.1901
77	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@1	25.85	22.85	0.1928
77	30	10	636332	3544.98	DFT-s-OFDM 16 QAM	1@1	24.80	21.80	0.1514
77	30	15	630500	3457.5	DFT-s-OFDM PI/2 BPSK	1@1	25.03	22.03	0.1596
77	30	15	630500	3457.5	DFT-s-OFDM QPSK	1@1	25.05	22.05	0.1603
77	30	15	630500	3457.5	DFT-s-OFDM 16 QAM	1@1	24.06	21.06	0.1276
77	30	15	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.34	22.34	0.1714
77	30	15	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.39	22.39	0.1734
77	30	15	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.41	21.41	0.1384
77	30	15	636166	3542.49	DFT-s-OFDM PI/2 BPSK	1@1	25.87	22.87	0.1936
77	30	15	636166	3542.49	DFT-s-OFDM QPSK	1@1	25.96	22.96	0.1977
77	30	15	636166	3542.49	DFT-s-OFDM 16 QAM	1@1	24.53	21.53	0.1422
77	30	20	630668	3460.02	DFT-s-OFDM PI/2 BPSK	1@1	25.10	22.10	0.1622
77	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@1	25.29	22.29	0.1694
77	30	20	630668	3460.02	DFT-s-OFDM 16 QAM	1@1	23.86	20.86	0.1219
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.42	22.42	0.1746
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.50	22.50	0.1778
77	30	20	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.43	21.43	0.1390
77	30	20	636000	3540	DFT-s-OFDM PI/2 BPSK	1@1	25.84	22.84	0.1923
77	30	20	636000	3540	DFT-s-OFDM QPSK	1@1	25.88	22.88	0.1941
77	30	20	636000	3540	DFT-s-OFDM 16 QAM	1@1	24.66	21.66	0.1466
77	30	25	630834	3462.51	DFT-s-OFDM PI/2 BPSK	1@1	25.11	22.11	0.1626
77	30	25	630834	3462.51	DFT-s-OFDM QPSK	1@1	25.30	22.30	0.1698
77	30	25	630834	3462.51	DFT-s-OFDM 16 QAM	1@1	23.91	20.91	0.1233
77	30	25	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.56	22.56	0.1803
77	30	25	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.59	22.59	0.1816
77	30	25	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.69	21.69	0.1476



NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power(dBm)	EIRP(dBm)	EIRP(W)
77	30	25	635832	3537.48	DFT-s-OFDM PI/2 BPSK	1@1	25.95	22.95	0.1972
77	30	25	635832	3537.48	DFT-s-OFDM QPSK	1@1	25.97	22.97	0.1982
77	30	25	635832	3537.48	DFT-s-OFDM 16 QAM	1@1	24.94	21.94	0.1563
77	30	30	631000	3465	DFT-s-OFDM PI/2 BPSK	1@1	25.17	22.17	0.1648
77	30	30	631000	3465	DFT-s-OFDM QPSK	1@1	25.29	22.29	0.1694
77	30	30	631000	3465	DFT-s-OFDM 16 QAM	1@1	24.18	21.18	0.1312
77	30	30	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.60	22.60	0.1820
77	30	30	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.75	22.75	0.1884
77	30	30	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.61	21.61	0.1449
77	30	30	635666	3534.99	DFT-s-OFDM PI/2 BPSK	1@1	25.84	22.84	0.1923
77	30	30	635666	3534.99	DFT-s-OFDM QPSK	1@1	25.97	22.97	0.1982
77	30	30	635666	3534.99	DFT-s-OFDM 16 QAM	1@1	24.86	21.86	0.1535
77	30	40	631334	3470.01	DFT-s-OFDM PI/2 BPSK	1@1	25.21	22.21	0.1663
77	30	40	631334	3470.01	DFT-s-OFDM QPSK	1@1	25.31	22.31	0.1702
77	30	40	631334	3470.01	DFT-s-OFDM 16 QAM	1@1	24.12	21.12	0.1294
77	30	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.67	22.67	0.1849
77	30	40	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.76	22.76	0.1888
77	30	40	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.79	21.79	0.1510
77	30	40	635332	3529.98	DFT-s-OFDM PI/2 BPSK	1@1	25.70	22.70	0.1862
77	30	40	635332	3529.98	DFT-s-OFDM QPSK	1@1	25.85	22.85	0.1928
77	30	40	635332	3529.98	DFT-s-OFDM 16 QAM	1@1	24.30	21.30	0.1349
77	30	50	631668	3475.02	DFT-s-OFDM PI/2 BPSK	1@1	25.25	22.25	0.1679
77	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@1	25.28	22.28	0.1690
77	30	50	631668	3475.02	DFT-s-OFDM 16 QAM	1@1	24.22	21.22	0.1324
77	30	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.64	22.64	0.1837
77	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.71	22.71	0.1866
77	30	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.91	21.91	0.1552
77	30	50	635000	3525	DFT-s-OFDM PI/2 BPSK	1@1	25.54	22.54	0.1795
77	30	50	635000	3525	DFT-s-OFDM QPSK	1@1	25.68	22.68	0.1854
77	30	50	635000	3525	DFT-s-OFDM 16 QAM	1@1	24.67	21.67	0.1469
77	30	60	632000	3480	DFT-s-OFDM PI/2 BPSK	1@1	25.33	22.33	0.1710
77	30	60	632000	3480	DFT-s-OFDM QPSK	1@1	25.41	22.41	0.1742
77	30	60	632000	3480	DFT-s-OFDM 16 QAM	1@1	24.33	21.33	0.1358
77	30	60	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.75	22.75	0.1884
77	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.84	22.84	0.1923
77	30	60	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.49	21.49	0.1409
77	30	60	634666	3519.99	DFT-s-OFDM PI/2 BPSK	1@1	25.68	22.68	0.1854
77	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@1	25.82	22.82	0.1914



NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power(dBm)	EIRP(dBm)	EIRP(W)
77	30	60	634666	3519.99	DFT-s-OFDM 16 QAM	1@1	24.70	21.70	0.1479
77	30	70	632334	3485.01	DFT-s-OFDM PI/2 BPSK	1@1	20.59	17.59	0.0574
77	30	70	632334	3485.01	DFT-s-OFDM QPSK	1@1	20.62	17.62	0.0578
77	30	70	632334	3485.01	DFT-s-OFDM 16 QAM	1@1	20.23	17.23	0.0528
77	30	70	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	21.26	18.26	0.0670
77	30	70	633334	3500.01	DFT-s-OFDM QPSK	1@1	21.27	18.27	0.0671
77	30	70	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	20.95	17.95	0.0624
77	30	70	634332	3514.98	DFT-s-OFDM PI/2 BPSK	1@1	21.46	18.46	0.0701
77	30	70	634332	3514.98	DFT-s-OFDM QPSK	1@1	21.45	18.45	0.0700
77	30	70	634332	3514.98	DFT-s-OFDM 16 QAM	1@1	20.84	17.84	0.0608
77	30	80	632668	3490.02	DFT-s-OFDM PI/2 BPSK	1@1	25.35	22.35	0.1718
77	30	80	632668	3490.02	DFT-s-OFDM QPSK	1@1	25.42	22.42	0.1746
77	30	80	632668	3490.02	DFT-s-OFDM 16 QAM	1@1	24.40	21.40	0.1380
77	30	80	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.53	22.53	0.1791
77	30	80	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.51	22.51	0.1782
77	30	80	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.56	21.56	0.1432
77	30	80	634000	3510	DFT-s-OFDM PI/2 BPSK	1@1	25.88	22.88	0.1941
77	30	80	634000	3510	DFT-s-OFDM QPSK	1@1	25.97	22.97	0.1982
77	30	80	634000	3510	DFT-s-OFDM 16 QAM	1@1	24.92	21.92	0.1556
77	30	90	633000	3495	DFT-s-OFDM PI/2 BPSK	1@1	25.42	22.42	0.1746
77	30	90	633000	3495	DFT-s-OFDM QPSK	1@1	25.48	22.48	0.1770
77	30	90	633000	3495	DFT-s-OFDM 16 QAM	1@1	24.43	21.43	0.1390
77	30	90	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.46	22.46	0.1762
77	30	90	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.56	22.56	0.1803
77	30	90	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.18	21.18	0.1312
77	30	90	633666	3504.99	DFT-s-OFDM PI/2 BPSK	1@1	25.57	22.57	0.1807
77	30	90	633666	3504.99	DFT-s-OFDM QPSK	1@1	25.74	22.74	0.1879
77	30	90	633666	3504.99	DFT-s-OFDM 16 QAM	1@1	24.20	21.20	0.1318
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.45	22.45	0.1758
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@0	23.33	20.33	0.1079
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@271	25.51	22.51	0.1782
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	2@0	23.40	20.40	0.1096
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	135@67	25.44	22.44	0.1754
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	2@271	23.41	20.41	0.1099
77	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	270@0	23.47	20.47	0.1114
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.56	22.56	0.1803
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	23.51	20.51	0.1125
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@271	25.58	22.58	0.1811



NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power(dBm)	EIRP(dBm)	EIRP(W)
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	2@0	23.41	20.41	0.1099
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	135@67	25.50	22.50	0.1778
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	2@271	23.49	20.49	0.1119
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	270@0	23.06	20.06	0.1014
77	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.72	21.72	0.1486
77	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	23.77	20.77	0.1194
77	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	21.19	18.19	0.0659
77	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	270@0	22.15	19.15	0.0822
77	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	270@0	21.64	18.64	0.0731
77	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	270@0	19.28	16.28	0.0425
77	30	100	633334	3500.01	CP-OFDM QPSK	1@1	23.91	20.91	0.1233
77	30	100	633334	3500.01	CP-OFDM 16 QAM	1@1	23.30	20.30	0.1072



Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	0.0016	PASS	NV
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	0.0024	PASS	LV
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	0.0012	PASS	HV
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	0.0000	PASS	-30°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	0.0014	PASS	-20°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	0.0003	PASS	-10°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	0.0012	PASS	0°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	0.0031	PASS	10°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	0.0021	PASS	20°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	0.0017	PASS	30°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	0.0012	PASS	40°C
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	0.0010	PASS	50°C



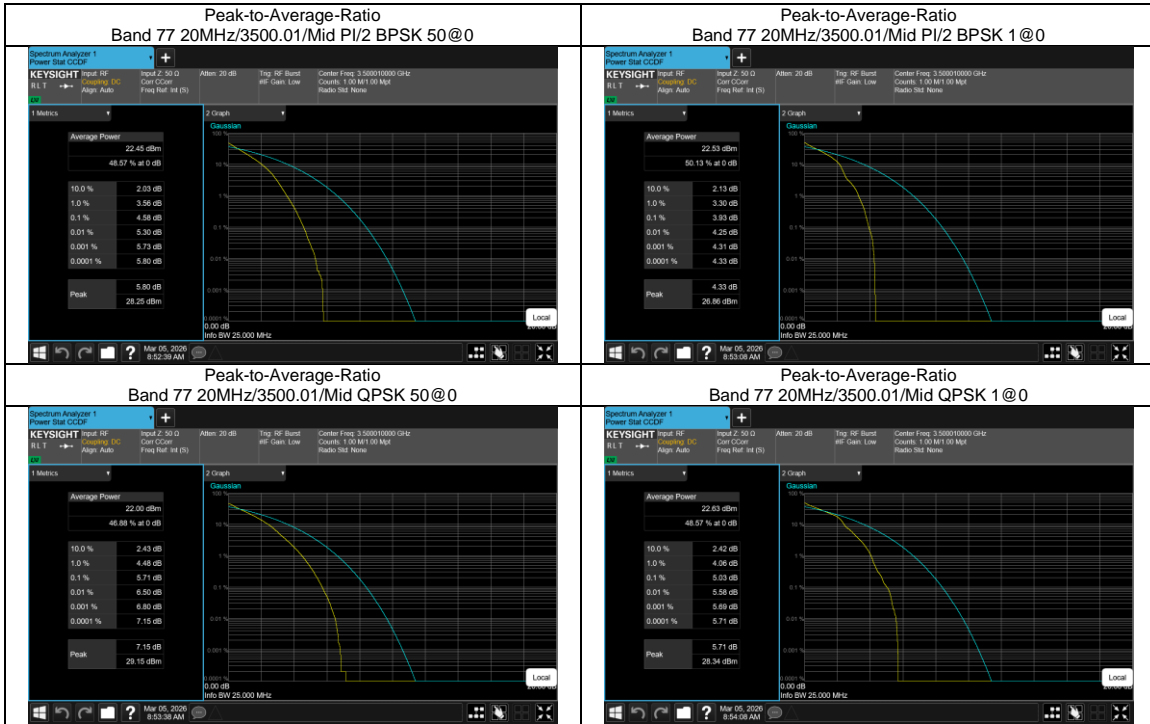
Peak to Average Ratio

Test Result

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Result	Verdict
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	4.58	13
77	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@0	3.92	13
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	50@0	5.71	13
77	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@0	5.03	13



Test Graphs





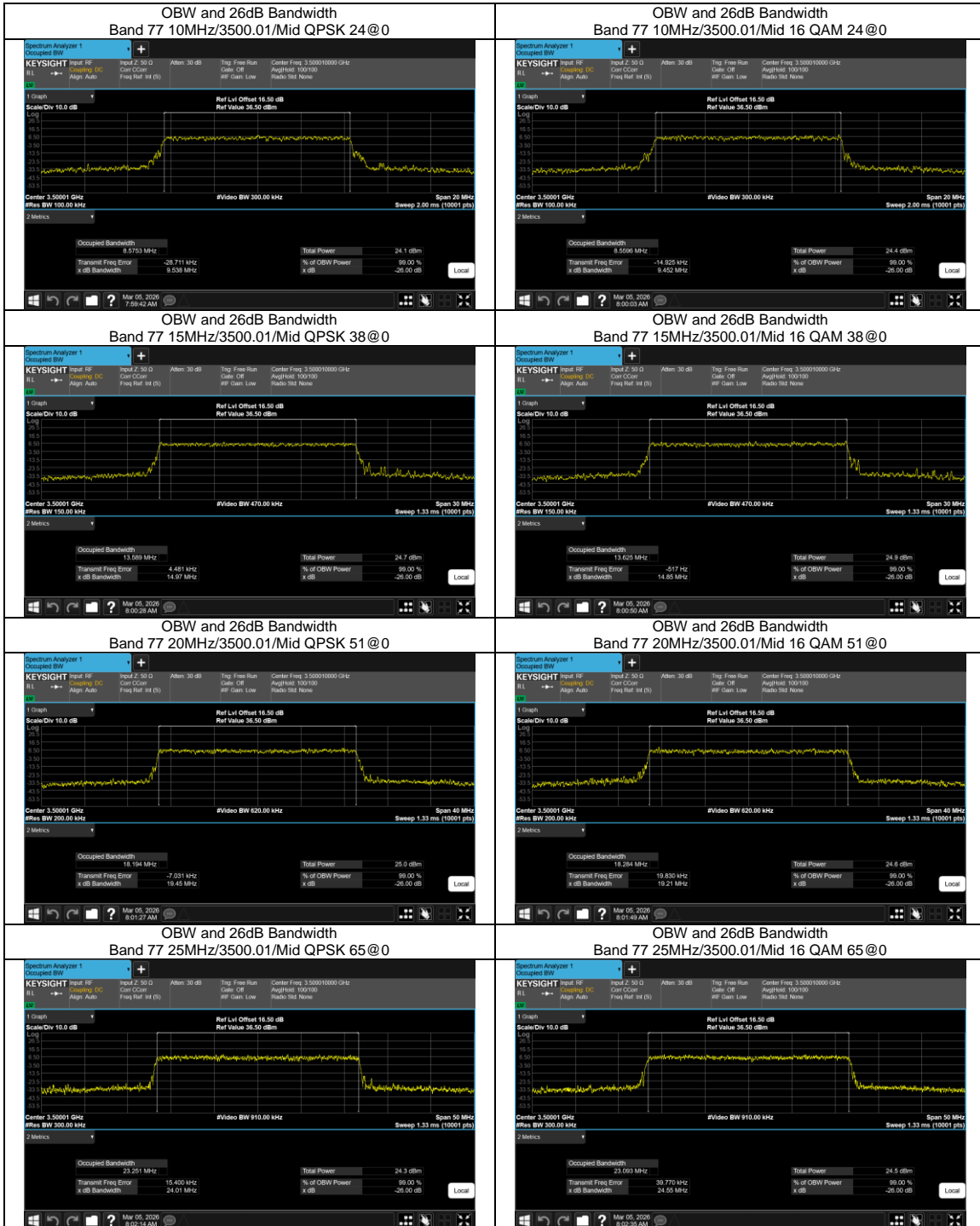
Occupied Bandwidth

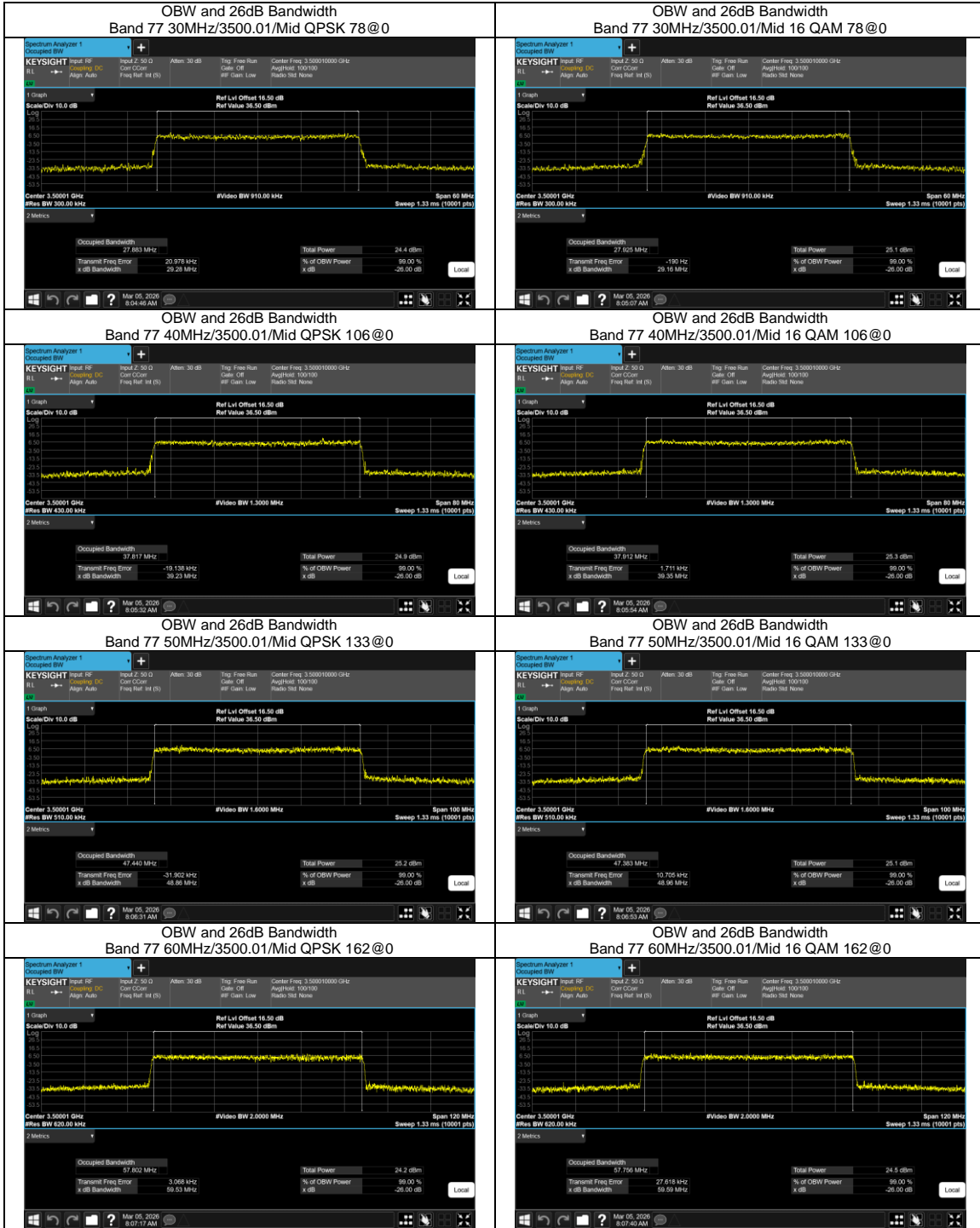
Test Result

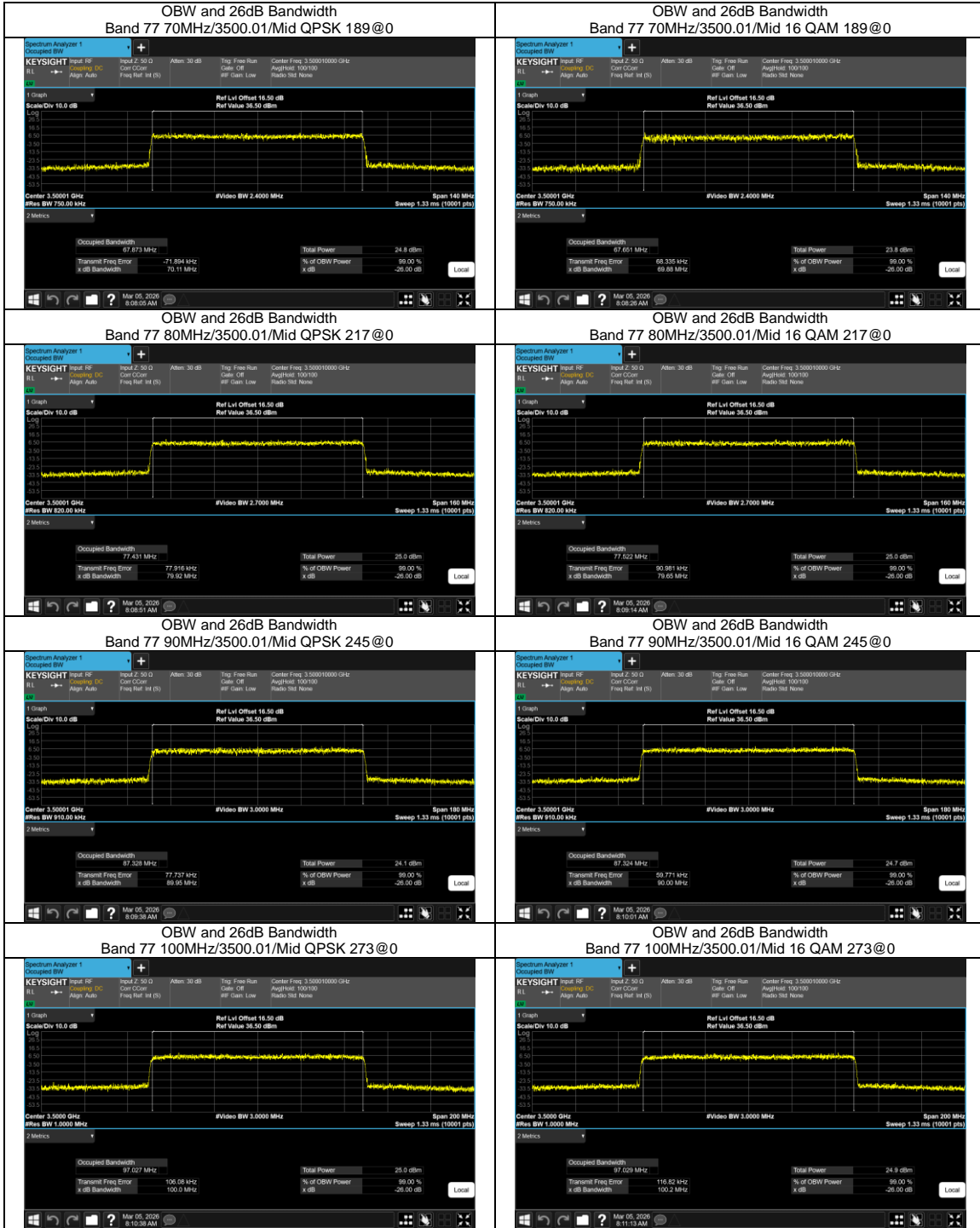
NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	OBW(MHz)	26dB OBW(MHz)
77	30	10	633334	3500.01	CP-OFDM QPSK	24@0	8.58	9.538
77	30	10	633334	3500.01	CP-OFDM 16 QAM	24@0	8.56	9.452
77	30	15	633334	3500.01	CP-OFDM QPSK	38@0	13.59	14.97
77	30	15	633334	3500.01	CP-OFDM 16 QAM	38@0	13.63	14.85
77	30	20	633334	3500.01	CP-OFDM QPSK	51@0	18.19	19.45
77	30	20	633334	3500.01	CP-OFDM 16 QAM	51@0	18.28	19.21
77	30	25	633334	3500.01	CP-OFDM QPSK	65@0	23.25	24.01
77	30	25	633334	3500.01	CP-OFDM 16 QAM	65@0	23.09	24.55
77	30	30	633334	3500.01	CP-OFDM QPSK	78@0	27.88	29.28
77	30	30	633334	3500.01	CP-OFDM 16 QAM	78@0	27.92	29.16
77	30	40	633334	3500.01	CP-OFDM QPSK	106@0	37.82	39.23
77	30	40	633334	3500.01	CP-OFDM 16 QAM	106@0	37.91	39.35
77	30	50	633334	3500.01	CP-OFDM QPSK	133@0	47.44	48.86
77	30	50	633334	3500.01	CP-OFDM 16 QAM	133@0	47.38	48.96
77	30	60	633334	3500.01	CP-OFDM QPSK	162@0	57.8	59.53
77	30	60	633334	3500.01	CP-OFDM 16 QAM	162@0	57.76	59.59
77	30	70	633334	3500.01	CP-OFDM QPSK	189@0	67.87	70.11
77	30	70	633334	3500.01	CP-OFDM 16 QAM	189@0	67.65	69.88
77	30	80	633334	3500.01	CP-OFDM QPSK	217@0	77.43	79.92
77	30	80	633334	3500.01	CP-OFDM 16 QAM	217@0	77.52	79.65
77	30	90	633334	3500.01	CP-OFDM QPSK	245@0	87.33	89.95
77	30	90	633334	3500.01	CP-OFDM 16 QAM	245@0	87.32	90.0
77	30	100	633334	3500.01	CP-OFDM QPSK	273@0	97.03	100.0
77	30	100	633334	3500.01	CP-OFDM 16 QAM	273@0	97.03	100.2



Test Graphs









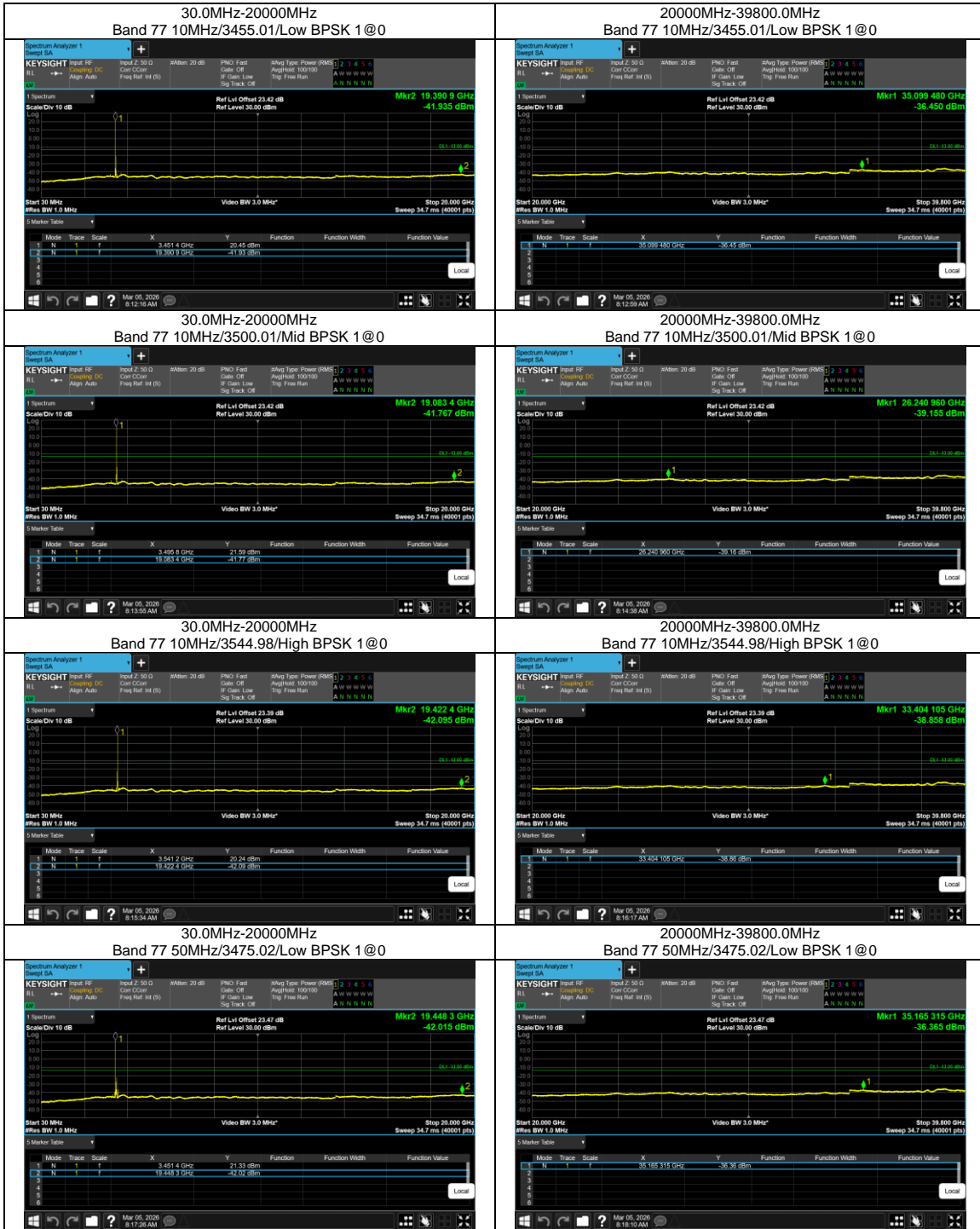
Conducted Spurious Emissions

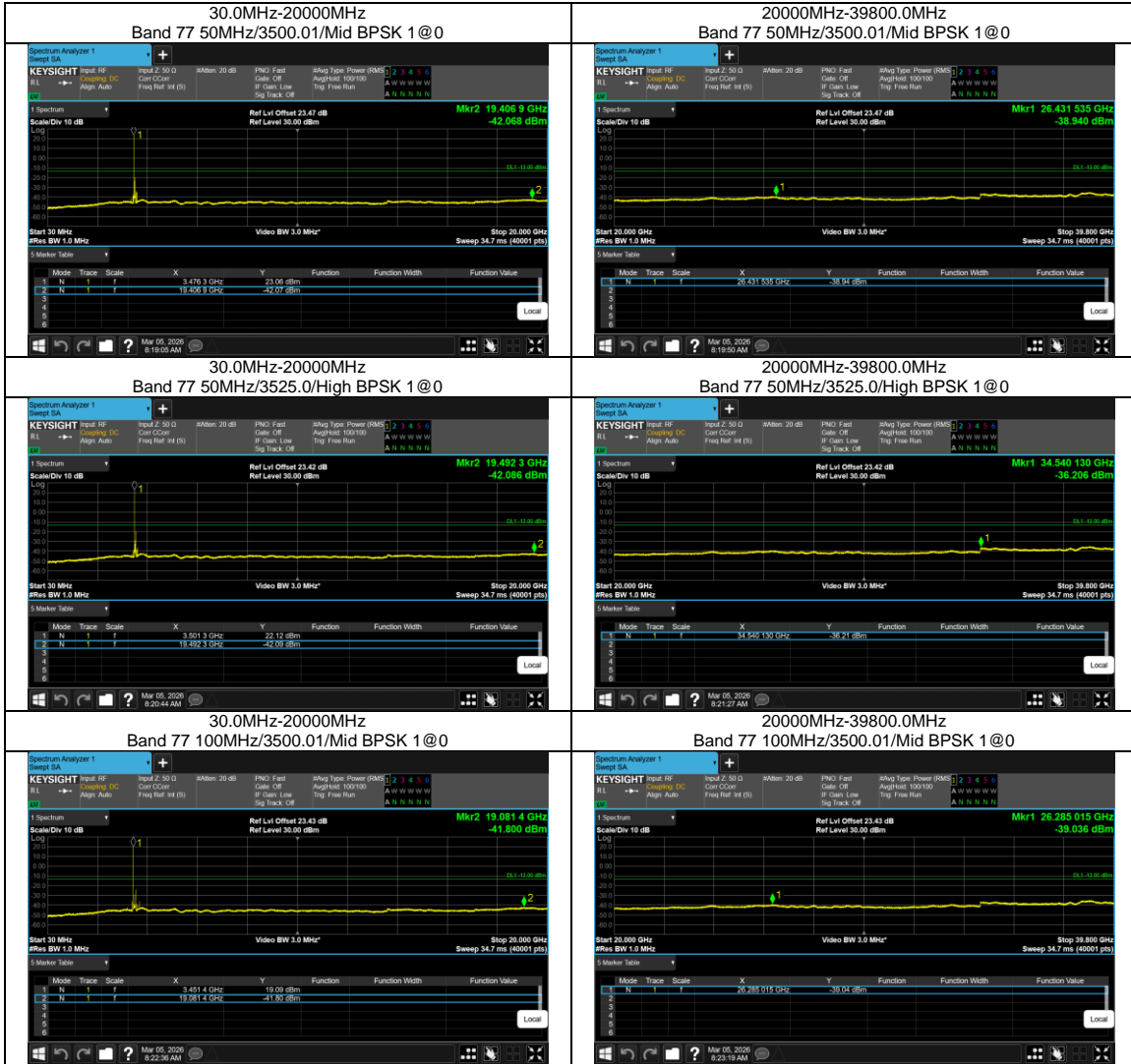
Test Result

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Freq_Range	Result	Limit	Verdict
77	30	10	630334	3455.01	DFT-s-OFDM BPSK	1@0	30.0MHz-20000MHz	20.453	-13	---
77	30	10	630334	3455.01	DFT-s-OFDM BPSK	1@0	20000MHz-39800.0MHz	-36.45	-13	PASS
77	30	10	633334	3500.01	DFT-s-OFDM BPSK	1@0	30.0MHz-20000MHz	21.588	-13	---
77	30	10	633334	3500.01	DFT-s-OFDM BPSK	1@0	20000MHz-39800.0MHz	-39.155	-13	PASS
77	30	10	636332	3544.98	DFT-s-OFDM BPSK	1@0	30.0MHz-20000MHz	20.241	-13	---
77	30	10	636332	3544.98	DFT-s-OFDM BPSK	1@0	20000MHz-39800.0MHz	-38.858	-13	PASS
77	30	50	631668	3475.02	DFT-s-OFDM BPSK	1@0	30.0MHz-20000MHz	21.335	-13	---
77	30	50	631668	3475.02	DFT-s-OFDM BPSK	1@0	20000MHz-39800.0MHz	-36.365	-13	PASS
77	30	50	633334	3500.01	DFT-s-OFDM BPSK	1@0	30.0MHz-20000MHz	23.057	-13	---
77	30	50	633334	3500.01	DFT-s-OFDM BPSK	1@0	20000MHz-39800.0MHz	-38.94	-13	PASS
77	30	50	635000	3525.0	DFT-s-OFDM BPSK	1@0	30.0MHz-20000MHz	22.117	-13	---
77	30	50	635000	3525.0	DFT-s-OFDM BPSK	1@0	20000MHz-39800.0MHz	-36.206	-13	PASS
77	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@0	30.0MHz-20000MHz	19.093	-13	---
77	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@0	20000MHz-39800.0MHz	-39.036	-13	PASS



Test Graphs







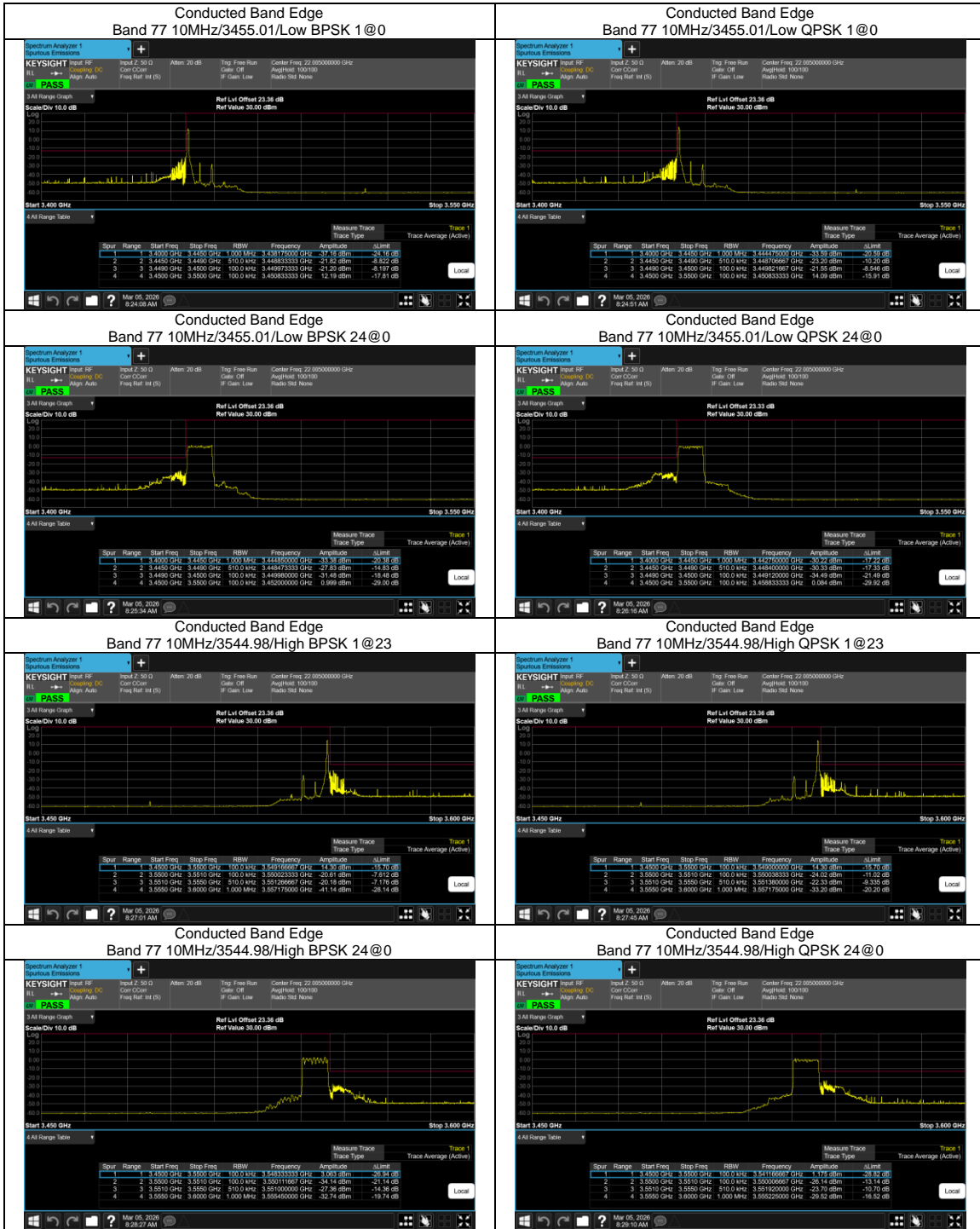
Conducted Band Edge

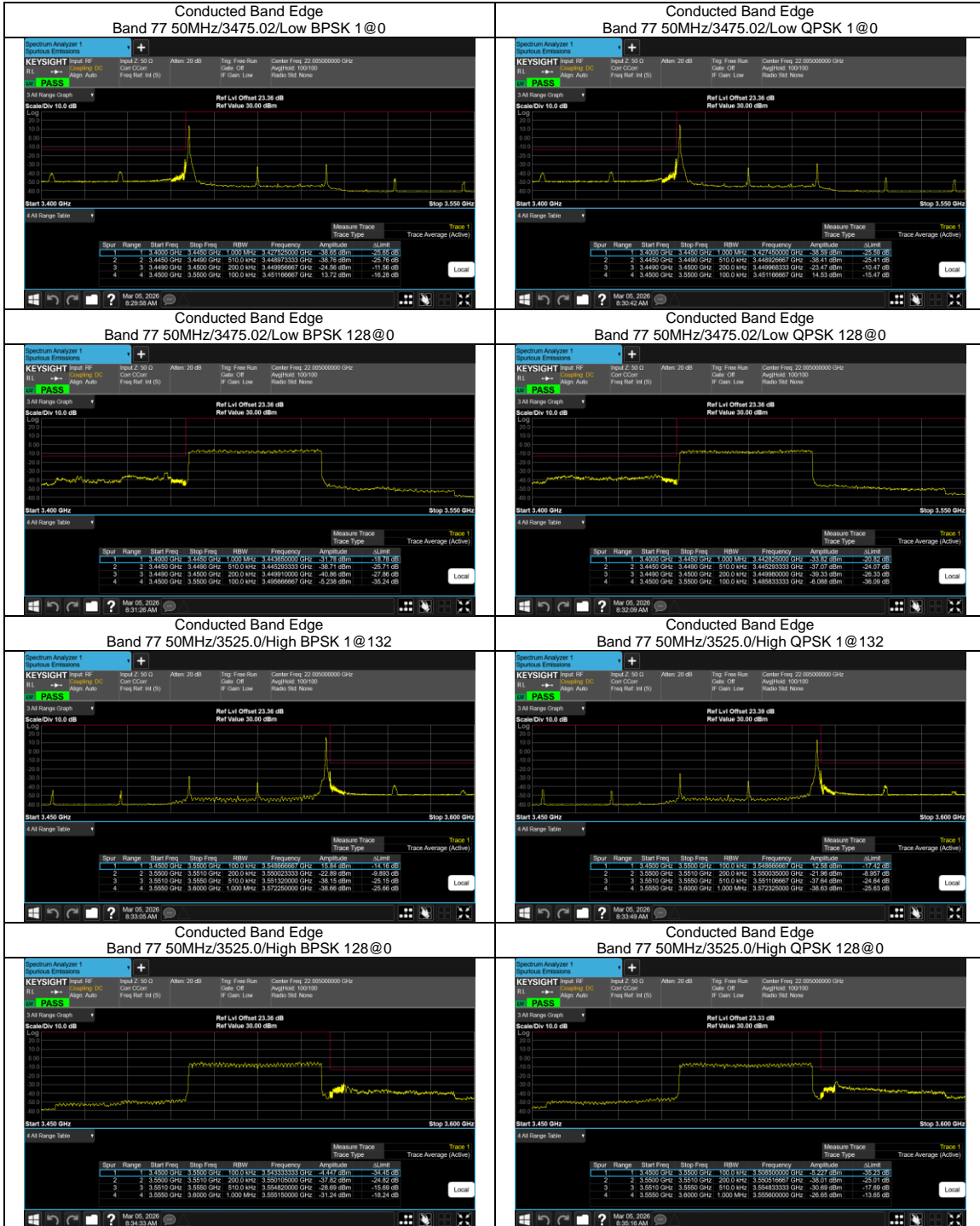
Test Result

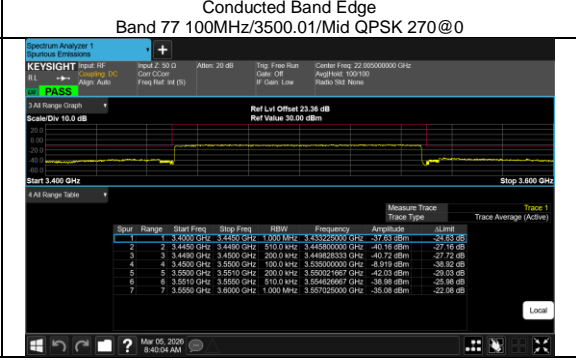
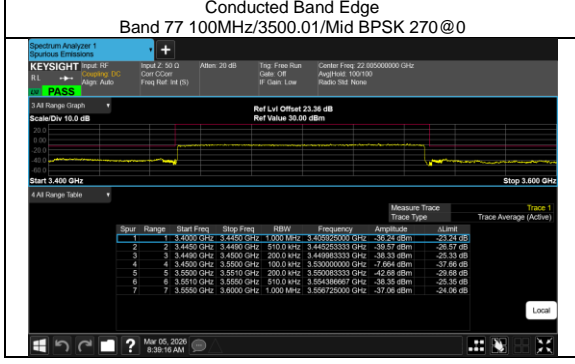
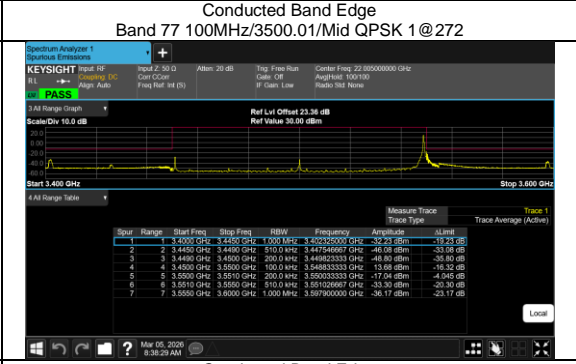
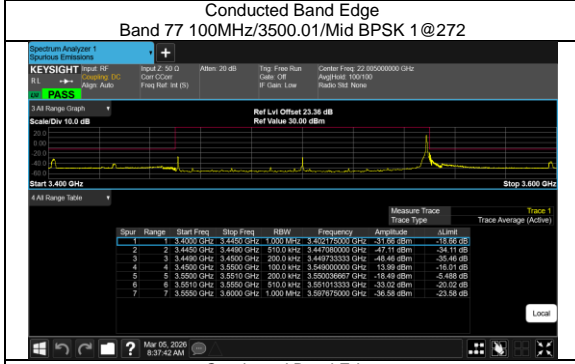
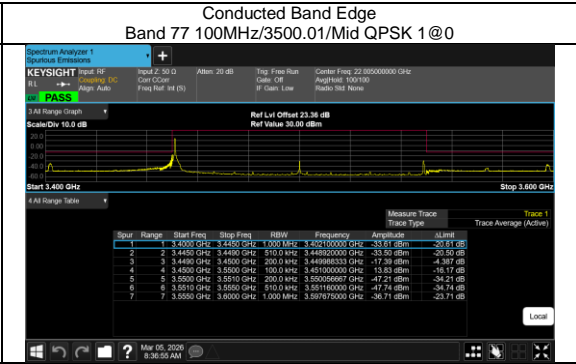
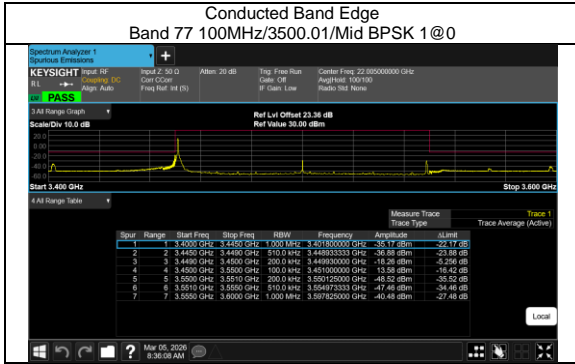
NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Result	Verdict
77	30	10	630334	3455.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	10	630334	3455.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	10	630334	3455.01	DFT-s-OFDM BPSK	24@0	see graph	PASS
77	30	10	630334	3455.01	DFT-s-OFDM QPSK	24@0	see graph	PASS
77	30	10	636332	3544.98	DFT-s-OFDM BPSK	1@23	see graph	PASS
77	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@23	see graph	PASS
77	30	10	636332	3544.98	DFT-s-OFDM BPSK	24@0	see graph	PASS
77	30	10	636332	3544.98	DFT-s-OFDM QPSK	24@0	see graph	PASS
77	30	50	631668	3475.02	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	50	631668	3475.02	DFT-s-OFDM BPSK	128@0	see graph	PASS
77	30	50	631668	3475.02	DFT-s-OFDM QPSK	128@0	see graph	PASS
77	30	50	635000	3525.0	DFT-s-OFDM BPSK	1@132	see graph	PASS
77	30	50	635000	3525.0	DFT-s-OFDM QPSK	1@132	see graph	PASS
77	30	50	635000	3525.0	DFT-s-OFDM BPSK	128@0	see graph	PASS
77	30	50	635000	3525.0	DFT-s-OFDM QPSK	128@0	see graph	PASS
77	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
77	30	100	633334	3500.01	DFT-s-OFDM BPSK	1@272	see graph	PASS
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@272	see graph	PASS
77	30	100	633334	3500.01	DFT-s-OFDM BPSK	270@0	see graph	PASS
77	30	100	633334	3500.01	DFT-s-OFDM QPSK	270@0	see graph	PASS



Test Graphs









Software Version: 23.06.1602

FR1 N78_ANT4

Transmitter Conducted Output Power And EIRP, (G_T - L_c)= -3.0 dB

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power(dBm)	EIRP(dBm)	EIRP(W)
78	30	10	630334	3455.01	DFT-s-OFDM PI/2 BPSK	1@1	25.00	22.00	0.1585
78	30	10	630334	3455.01	DFT-s-OFDM QPSK	1@1	25.10	22.10	0.1622
78	30	10	630334	3455.01	DFT-s-OFDM 16 QAM	1@1	23.82	20.82	0.1208
78	30	10	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.39	22.39	0.1734
78	30	10	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.42	22.42	0.1746
78	30	10	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.41	21.41	0.1384
78	30	10	636332	3544.98	DFT-s-OFDM PI/2 BPSK	1@1	25.72	22.72	0.1871
78	30	10	636332	3544.98	DFT-s-OFDM QPSK	1@1	25.85	22.85	0.1928
78	30	10	636332	3544.98	DFT-s-OFDM 16 QAM	1@1	25.00	22.00	0.1585
78	30	15	630500	3457.5	DFT-s-OFDM PI/2 BPSK	1@1	25.08	22.08	0.1614
78	30	15	630500	3457.5	DFT-s-OFDM QPSK	1@1	25.20	22.20	0.1660
78	30	15	630500	3457.5	DFT-s-OFDM 16 QAM	1@1	23.88	20.88	0.1225
78	30	15	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.44	22.44	0.1754
78	30	15	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.46	22.46	0.1762
78	30	15	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.70	21.70	0.1479
78	30	15	636166	3542.49	DFT-s-OFDM PI/2 BPSK	1@1	25.80	22.80	0.1905
78	30	15	636166	3542.49	DFT-s-OFDM QPSK	1@1	25.90	22.90	0.1950
78	30	15	636166	3542.49	DFT-s-OFDM 16 QAM	1@1	24.63	21.63	0.1455
78	30	20	630668	3460.02	DFT-s-OFDM PI/2 BPSK	1@1	25.02	22.02	0.1592
78	30	20	630668	3460.02	DFT-s-OFDM QPSK	1@1	25.17	22.17	0.1648
78	30	20	630668	3460.02	DFT-s-OFDM 16 QAM	1@1	24.02	21.02	0.1265
78	30	20	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.47	22.47	0.1766
78	30	20	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.44	22.44	0.1754
78	30	20	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.75	21.75	0.1496
78	30	20	636000	3540	DFT-s-OFDM PI/2 BPSK	1@1	25.79	22.79	0.1901
78	30	20	636000	3540	DFT-s-OFDM QPSK	1@1	25.92	22.92	0.1959
78	30	20	636000	3540	DFT-s-OFDM 16 QAM	1@1	24.59	21.59	0.1442
78	30	25	630834	3462.51	DFT-s-OFDM PI/2 BPSK	1@1	25.03	22.03	0.1596
78	30	25	630834	3462.51	DFT-s-OFDM QPSK	1@1	25.25	22.25	0.1679
78	30	25	630834	3462.51	DFT-s-OFDM 16 QAM	1@1	23.74	20.74	0.1186
78	30	25	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.48	22.48	0.1770
78	30	25	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.54	22.54	0.1795
78	30	25	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.65	21.65	0.1462



78	30	25	635832	3537.48	DFT-s-OFDM PI/2 BPSK	1@1	25.77	22.77	0.1892
78	30	25	635832	3537.48	DFT-s-OFDM QPSK	1@1	25.86	22.86	0.1932
78	30	25	635832	3537.48	DFT-s-OFDM 16 QAM	1@1	24.91	21.91	0.1552
78	30	30	631000	3465	DFT-s-OFDM PI/2 BPSK	1@1	25.11	22.11	0.1626
78	30	30	631000	3465	DFT-s-OFDM QPSK	1@1	25.24	22.24	0.1675
78	30	30	631000	3465	DFT-s-OFDM 16 QAM	1@1	24.13	21.13	0.1297
78	30	30	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.56	22.56	0.1803
78	30	30	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.76	22.76	0.1888
78	30	30	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.67	21.67	0.1469
78	30	30	635666	3534.99	DFT-s-OFDM PI/2 BPSK	1@1	25.76	22.76	0.1888
78	30	30	635666	3534.99	DFT-s-OFDM QPSK	1@1	25.91	22.91	0.1954
78	30	30	635666	3534.99	DFT-s-OFDM 16 QAM	1@1	24.63	21.63	0.1455
78	30	40	631334	3470.01	DFT-s-OFDM PI/2 BPSK	1@1	25.15	22.15	0.1641
78	30	40	631334	3470.01	DFT-s-OFDM QPSK	1@1	25.28	22.28	0.1690
78	30	40	631334	3470.01	DFT-s-OFDM 16 QAM	1@1	24.19	21.19	0.1315
78	30	40	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.69	22.69	0.1858
78	30	40	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.76	22.76	0.1888
78	30	40	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.44	21.44	0.1393
78	30	40	635332	3529.98	DFT-s-OFDM PI/2 BPSK	1@1	25.50	22.50	0.1778
78	30	40	635332	3529.98	DFT-s-OFDM QPSK	1@1	25.83	22.83	0.1919
78	30	40	635332	3529.98	DFT-s-OFDM 16 QAM	1@1	24.69	21.69	0.1476
78	30	50	631668	3475.02	DFT-s-OFDM PI/2 BPSK	1@1	25.20	22.20	0.1660
78	30	50	631668	3475.02	DFT-s-OFDM QPSK	1@1	25.33	22.33	0.1710
78	30	50	631668	3475.02	DFT-s-OFDM 16 QAM	1@1	24.21	21.21	0.1321
78	30	50	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.69	22.69	0.1858
78	30	50	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.69	22.69	0.1858
78	30	50	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.98	21.98	0.1578
78	30	50	635000	3525	DFT-s-OFDM PI/2 BPSK	1@1	25.53	22.53	0.1791
78	30	50	635000	3525	DFT-s-OFDM QPSK	1@1	25.67	22.67	0.1849
78	30	50	635000	3525	DFT-s-OFDM 16 QAM	1@1	24.58	21.58	0.1439
78	30	60	632000	3480	DFT-s-OFDM PI/2 BPSK	1@1	25.26	22.26	0.1683
78	30	60	632000	3480	DFT-s-OFDM QPSK	1@1	25.41	22.41	0.1742
78	30	60	632000	3480	DFT-s-OFDM 16 QAM	1@1	24.28	21.28	0.1343
78	30	60	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.77	22.77	0.1892
78	30	60	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.80	22.80	0.1905
78	30	60	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.98	21.98	0.1578
78	30	60	634666	3519.99	DFT-s-OFDM PI/2 BPSK	1@1	25.71	22.71	0.1866
78	30	60	634666	3519.99	DFT-s-OFDM QPSK	1@1	25.77	22.77	0.1892
78	30	60	634666	3519.99	DFT-s-OFDM 16 QAM	1@1	24.71	21.71	0.1483
78	30	70	632334	3485.01	DFT-s-OFDM PI/2 BPSK	1@1	21.13	18.13	0.0650



78	30	70	632334	3485.01	DFT-s-OFDM QPSK	1@1	21.11	18.11	0.0647
78	30	70	632334	3485.01	DFT-s-OFDM 16 QAM	1@1	20.32	17.32	0.0540
78	30	70	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	21.52	18.52	0.0711
78	30	70	633334	3500.01	DFT-s-OFDM QPSK	1@1	21.51	18.51	0.0710
78	30	70	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	20.73	17.73	0.0593
78	30	70	634332	3514.98	DFT-s-OFDM PI/2 BPSK	1@1	21.60	18.60	0.0724
78	30	70	634332	3514.98	DFT-s-OFDM QPSK	1@1	21.55	18.55	0.0716
78	30	70	634332	3514.98	DFT-s-OFDM 16 QAM	1@1	20.84	17.84	0.0608
78	30	80	632668	3490.02	DFT-s-OFDM PI/2 BPSK	1@1	25.29	22.29	0.1694
78	30	80	632668	3490.02	DFT-s-OFDM QPSK	1@1	25.26	22.26	0.1683
78	30	80	632668	3490.02	DFT-s-OFDM 16 QAM	1@1	24.48	21.48	0.1406
78	30	80	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.50	22.50	0.1778
78	30	80	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.62	22.62	0.1828
78	30	80	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.79	21.79	0.1510
78	30	80	634000	3510	DFT-s-OFDM PI/2 BPSK	1@1	25.81	22.81	0.1910
78	30	80	634000	3510	DFT-s-OFDM QPSK	1@1	25.87	22.87	0.1936
78	30	80	634000	3510	DFT-s-OFDM 16 QAM	1@1	25.12	22.12	0.1629
78	30	90	633000	3495	DFT-s-OFDM PI/2 BPSK	1@1	25.38	22.38	0.1730
78	30	90	633000	3495	DFT-s-OFDM QPSK	1@1	25.50	22.50	0.1778
78	30	90	633000	3495	DFT-s-OFDM 16 QAM	1@1	24.44	21.44	0.1393
78	30	90	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.49	22.49	0.1774
78	30	90	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.55	22.55	0.1799
78	30	90	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.01	21.01	0.1262
78	30	90	633666	3504.99	DFT-s-OFDM PI/2 BPSK	1@1	25.60	22.60	0.1820
78	30	90	633666	3504.99	DFT-s-OFDM QPSK	1@1	25.70	22.70	0.1862
78	30	90	633666	3504.99	DFT-s-OFDM 16 QAM	1@1	24.85	21.85	0.1531
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@1	25.38	22.38	0.1730
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@0	23.40	20.40	0.1096
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	1@271	25.42	22.42	0.1746
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	2@0	23.37	20.37	0.1089
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	135@67	25.41	22.41	0.1742
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	2@271	23.47	20.47	0.1114
78	30	100	633334	3500.01	DFT-s-OFDM PI/2 BPSK	270@0	23.50	20.50	0.1122
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@1	25.54	22.54	0.1795
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@0	23.53	20.53	0.1130
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	1@271	25.61	22.61	0.1824
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	2@0	23.33	20.33	0.1079
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	135@67	25.47	22.47	0.1766
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	2@271	23.40	20.40	0.1096
78	30	100	633334	3500.01	DFT-s-OFDM QPSK	270@0	23.07	20.07	0.1016



78	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	1@1	24.20	21.20	0.1318
78	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	1@1	23.86	20.86	0.1219
78	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	1@1	21.23	18.23	0.0665
78	30	100	633334	3500.01	DFT-s-OFDM 16 QAM	270@0	22.17	19.17	0.0826
78	30	100	633334	3500.01	DFT-s-OFDM 64 QAM	270@0	21.69	18.69	0.0740
78	30	100	633334	3500.01	DFT-s-OFDM 256 QAM	270@0	19.15	16.15	0.0412
78	30	100	633334	3500.01	CP-OFDM QPSK	1@1	23.88	20.88	0.1225
78	30	100	633334	3500.01	CP-OFDM 16 QAM	1@1	23.32	20.32	0.1076

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Simle Wang	Temperature :	22~23°C
		Relative Humidity :	40~42%

RSE pre-scanned harmonic for different antennas, choose the worst antenna perform final test and record in the report.

n77 SA / NR 100MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	6900	-29.81	-13	-16.81	-40.02	3.03	13.24	H
	10356	-47.21	-13	-34.21	-56.66	3.56	13.01	H
	13800	-53.45	-13	-40.45	-62.97	3.92	13.44	H
	6900	-31.89	-13	-18.89	-42.10	3.03	13.24	V
	10356	-51.64	-13	-38.64	-61.09	3.56	13.01	V
	13800	-51.80	-13	-38.80	-61.32	3.92	13.44	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

n78 SA / NR 100MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	6900	-30.33	-13	-17.33	-40.54	3.03	13.24	H
	10356	-48.58	-13	-35.58	-58.03	3.56	13.01	H
	13800	-55.20	-13	-42.20	-64.72	3.92	13.44	H
	6900	-31.79	-13	-18.79	-42.00	3.03	13.24	V
	10356	-50.80	-13	-37.80	-60.25	3.56	13.01	V
	13800	-51.84	-13	-38.84	-61.36	3.92	13.44	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.