



FCC EMI TEST REPORT

FCC ID : NKR-VMC-SA525MAX
Equipment : NAD(NETWORK ACCESS DEVICE)
Brand Name : WNC CORPORATION
Model Name : VMC-SA525MAX
Applicant : WNC CORPORATION
20 PARK AVENUE II, HSINCHU SCIENCE PARK, HSINCHU,
TAIWAN 308
Manufacturer : WNC CORPORATION
20 PARK AVENUE II, HSINCHU SCIENCE PARK, HSINCHU,
TAIWAN 308
Standard : FCC 47 CFR FCC Part 15 Subpart B Class B

The product was received on Feb. 12, 2026 and testing was performed from Apr. 09, 2026 to Apr. 09, 2026. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2014 and has been in compliance with the applicable technical standards.

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

Louis Wu

Responsible Party (Name) : _____

Responsible Party (Title) : _____

Approved by: Louis Wu

Responsible Company : _____

Sporton International Inc. Wensan Laboratory

No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)



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History of this test report

Report No.	Version	Description	Issue Date
FC621357	01	Initial issue of report	May 28, 2026

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)
-	15.107	AC Conducted Emission	Not Required
3.1	15.109	Radiated Emission	Pass

Remark: Not required means after assessing, test items are not necessary to carry out.

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: Yun Huang

Report Producer: Lili Lu

1. General Description

1.1. Product Feature of Equipment Under Test

Product Specification is subject to this standard	
General Specs	LTE/5G NR and GNSS
Antenna Type	WWAN: Dipole Antenna GPS/Galileo: External GNSS passive antenna (SMA connector)

Remark: The EUT's information above is declared by manufacturer. Please refer to Disclaimer in report summary.

1.2. Modification of EUT

No modifications made to the EUT during the testing.

1.3. Test Location

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	Sporton Site No.
	03CH10-HY

FCC designation No.: TW1132

1.4. Applicable Standards

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

- ♦ FCC 47 CFR FCC Part 15 Subpart B Class B
- ♦ ANSI C63.4-2014
- ♦ ANSI C63.4a-2017

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

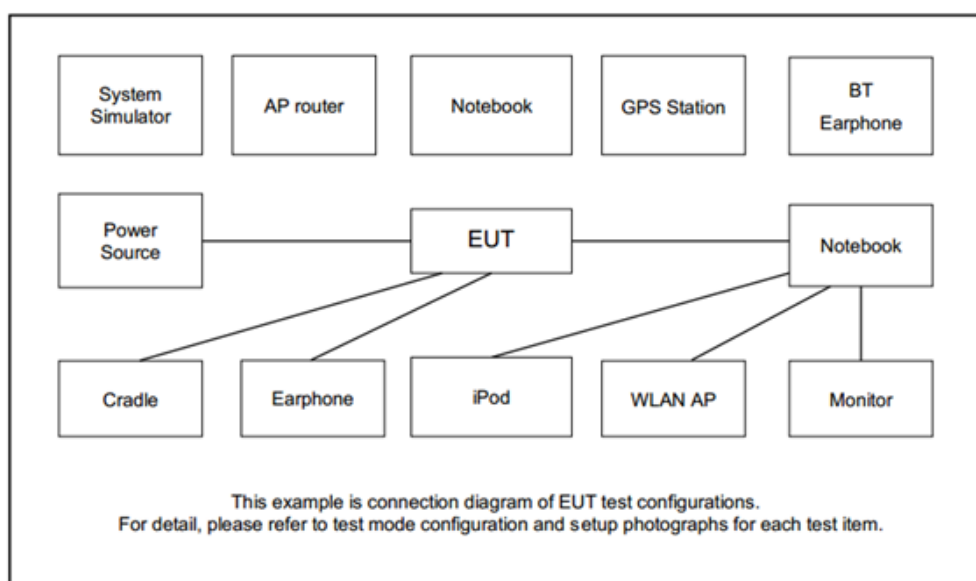
2. Test Configuration of Equipment Under Test

2.1. Test Mode

The EUT is tested along with the peripherals, operating under possible configurations in compliant with normal operation. The maximum emissions can be identified by a pre-scan carried out in different orientations of placement pursuant to ANSI C63.4-2014. Frequency range covered: Conduction Emission (150 kHz to 30 MHz), Radiation Emission (30 MHz to the 5th harmonics of the highest fundamental frequency or to 40 GHz, whichever is lower).

Test Items	Functions Enabled
Radiated Emissions	Mode 1 : LTE Band 5 Idle + WWAN_Ant 1, 2 Port with Antenna + GNSS Port with GPS Antenna + GPS Rx + DC12V
	Mode 2: LTE Band n25 Idle + WWAN_Ant 1, 2 Port with Antenna + GNSS Port with GPS Antenna + GPS Rx + DC12V
Remark: The worst case of RE is mode 1; only the test data of this mode was reported.	

2.2. Connection Diagram of Test System



2.3. Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	5G Wireless Test Platform	Anritsu	MT8000A	N/A	N/A	Unshielded,1.8m
2.	Base Station	Anritsu	MT8821C	N/A	N/A	Unshielded,1.8m
3.	GPS Station	Pendulum	GSG-54	N/A	N/A	Unshielded,1.8m
4.	DC Power Supply	GW	GPC-60300	N/A	N/A	Unshielded,1.8m

2.4. EUT Operation Test Setup

The EUT is in WCDMA or LTE idle mode during the test. The EUT is synchronized with the BCCH, and has been continuous receiving mode by setting paging reorganization of the system simulator.

At the same time, the following programs installed in the EUT are programmed during the test:

1. Execute "Tool" to make the EUT receive continuous signals from GPS station.

3. Test Result

3.1. Test of Radiated Emission Measurement

3.1.1. Limit of Radiated Emission

The emissions from an unintentional radiator shall not exceed the field strength levels specified in the following table:

<Class B>

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

Remark: Follows the 15.109 (g) (2), measurements above 1000 MHz may be performed at the distance specified in the CISPR 22 publications is extrapolated to the new measurement distance using an inverse linear distance extrapolation factor (20 dB/decade).

3.1.2. Measuring Instruments

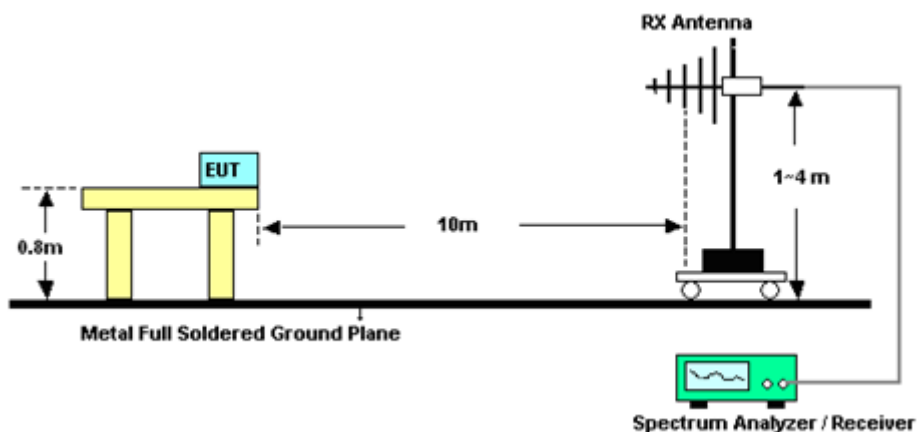
Please refer to the measuring equipment list in this test report.

3.1.3. Test Procedures

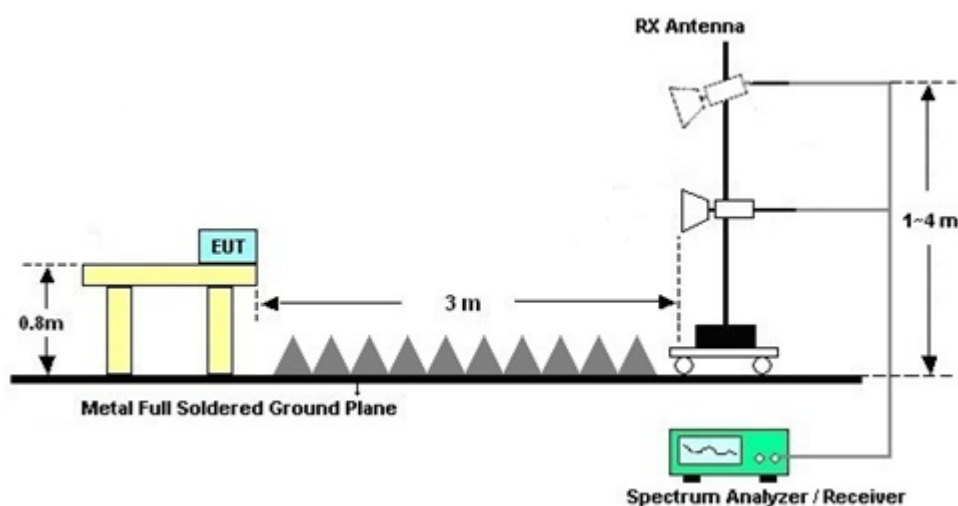
1. The EUT is placed on a turntable with 0.8 meter above ground.
2. The EUT is set 10 meters (30 M~1 G), 3 meters (1 G~18 G), and 1 meter (18 G~40 G) from the interference receiving antenna, which is mounted on the top of a variable height antenna tower.
3. The table is rotated 360 degrees to determine the position of the highest radiation.
4. The antenna is a Bi-Log antenna and its height is adjusted between one to four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT is arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode (RBW=120 kHz/VBW=300 kHz for frequency below 1 GHz; RBW=1 MHz VBW=3 MHz (Peak), RBW=1 MHz/VBW=10 Hz (Average) for frequency above 1 GHz).
7. If the emission level of the EUT in peak mode is 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.

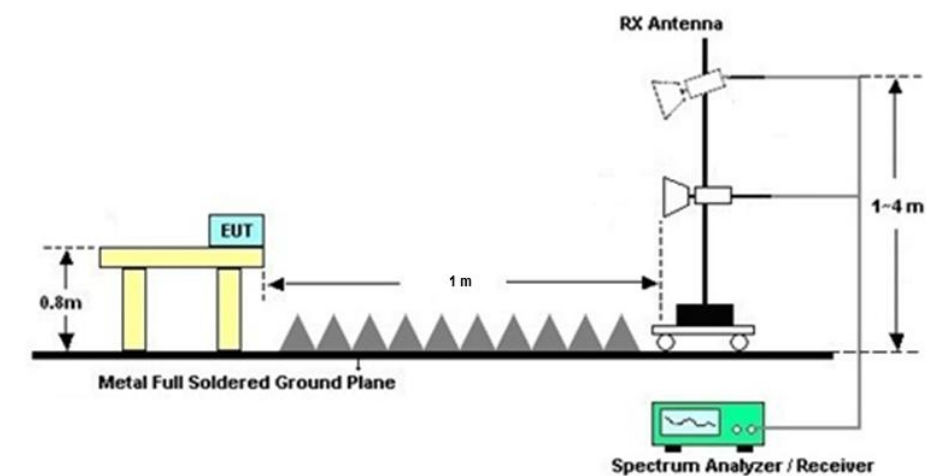
3.1.4. Test Setup of Radiated Emission

For Radiated Emissions from 30 MHz to 1 GHz



For Radiated Emissions from 1GHz to 18GHz



For Radiated Emissions above 18GHz

3.1.5. Test Result of Radiated Emission

Please refer to Appendix A.



4. List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Amplifier	SONOMA	310N	187311	9kHz~1GHz	Oct. 13, 2025	Apr. 09, 2026	Oct. 12, 2026	Radiation (03CH10-HY)
Bilog Antenna	TESEQ	CBL 6111D & VFA_Z-04002-N-06	35413 & 01	30MHz~1GHz	May.28, 2025	Apr. 09, 2026	May.27, 2026	Radiation (03CH10-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-02038	1GHz~18GHz	Aug. 07, 2025	Apr. 09, 2026	Aug. 06, 2026	Radiation (03CH10-HY)
Preamplifier	Jet-Power	JAP00101800-30-10P	160118550004	1GHz~18GHz	Feb. 24, 2026	Apr. 09, 2026	Feb. 23, 2027	Radiation (03CH10-HY)
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	Apr. 09, 2026	N/A	Radiation (03CH10-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Apr. 09, 2026	N/A	Radiation (03CH10-HY)
Turn Table	EMEC	TT 2200	N/A	0~360 Degree	N/A	Apr. 09, 2026	N/A	Radiation (03CH10-HY)
Software	Audix	E3 6.2009-8-24	RK-001042	N/A	N/A	Apr. 09, 2026	N/A	Radiation (03CH10-HY)
EMI Test Receiver	Agilent	N9038A	MY59053012	3Hz~26.5GHz	Nov. 13, 2025	Apr. 09, 2026	Nov. 22, 2026	Radiation (03CH10-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	519226/2, 804014/2, 804026/2	30MHz~40GHz	Oct. 28, 2025	Apr. 09, 2026	Oct. 27, 2026	Radiation (03CH10-HY)
Spectrum Analyzer	Keysight	N9010B	MY60241058	10Hz~44GHz	Jul. 15, 2025	Apr. 09, 2026	Jul. 14, 2026	Radiation (03CH10-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	1223	18GHz~40GHz	Jul. 02, 2025	Apr. 09, 2026	Jul. 01, 2026	Radiation (03CH10-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	May. 26, 2025	Apr. 09, 2026	May. 25, 2026	Radiation (03CH10-HY)

5. Measurement Uncertainty

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	6.5 dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 6000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	4.4 dB
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Uncertainty of Radiated Emission Measurement (6000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	4.2 dB
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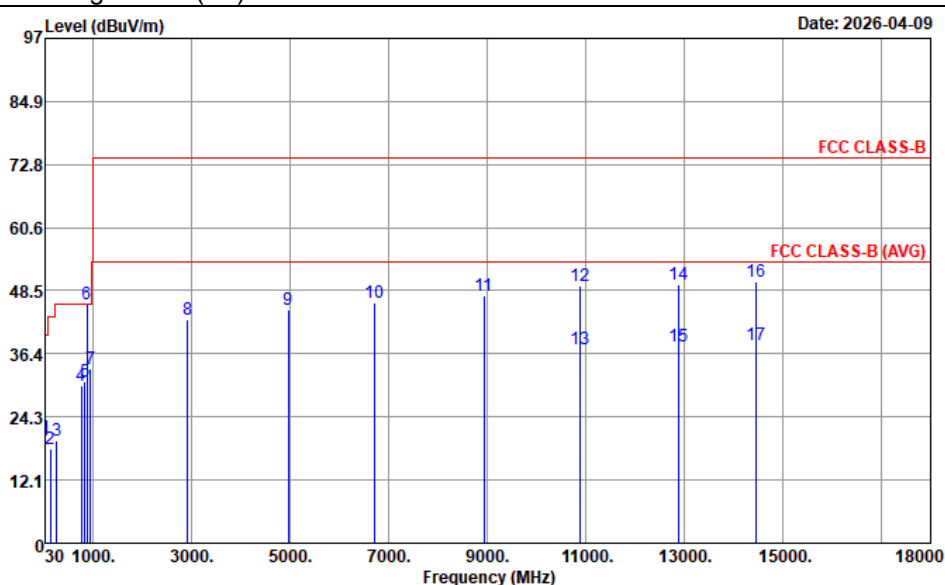
Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	5.4 dB
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Appendix A. Radiated Emission Test Result

Test Engineer :	Tom Lee	Temperature :	21.2~21.5°C
		Relative Humidity :	45.3~46.7%
Test Distance :	3m	Polarization :	Horizontal
Remark :	#6 is system simulator signal which can be ignored.		

- Emission level (dBμV/m) = 20 log Emission level (μV/m)
- Factor(dB) = Antenna Factor + Cable Loss + Filter loss – Preamplifier Factor
- Corrected Reading: Factor(dB) + Read Level = Level



Site : 03CH10-HY
Condition : FCC CLASS-B 3m 9120D-1325_251028 HORIZONTAL
Project : 621357
Power : DC 12V
Mode : 1

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	cm	deg	
1	30.27	20.28	-19.72	40.00	28.47	-8.19	---	---	Peak
2	132.87	18.05	-25.45	43.50	31.10	-13.05	---	---	Peak
3	263.55	19.84	-26.16	46.00	30.00	-10.16	---	---	Peak
4	767.60	30.28	-15.72	46.00	30.05	0.23	---	---	Peak
5	836.90	30.98	-15.02	46.00	29.73	1.25	---	---	Peak
6 *	881.50	46.05			44.17	1.88	---	---	Peak
7	946.80	33.47	-12.53	46.00	29.34	4.13	---	---	Peak
8	2920.00	42.98	-31.02	74.00	63.04	-20.06	---	---	Peak
9	4972.00	44.95	-29.05	74.00	58.52	-13.57	---	---	Peak
10	6724.00	46.11	-27.89	74.00	55.17	-9.06	---	---	Peak
11	8942.00	47.45	-26.55	74.00	53.45	-6.00	---	---	Peak
12	10878.00	49.38	-24.62	74.00	51.23	-1.85	---	---	Peak
13	10878.00	37.26	-16.74	54.00	39.11	-1.85	---	---	Average
14	12882.00	49.83	-24.17	74.00	48.25	1.58	---	---	Peak
15	12882.00	37.70	-16.30	54.00	36.12	1.58	---	---	Average
16	14470.00	50.34	-23.66	74.00	46.30	4.04	---	---	Peak
17	14470.00	38.21	-15.79	54.00	34.17	4.04	---	---	Average



Test Engineer :	Tom Lee	Temperature :	21.2~21.5°C																														
		Relative Humidity :	45.3~46.7%																														
Test Distance :	1m	Polarization :	Horizontal																														
■ Emission level (dBμV/m) = 20 log Emission level (μV/m) ■ Distance extrapolation factor (for above 18GHz) = 20 log (test distance / specific distance) (dB) ■ EX.: Distance extrapolation factor = 20 log (1/3) = -9.54 (dB) ■ Factor(dB) = Antenna Factor + Cable Loss + Filter loss – Preamp Factor + Distance extrapolation factor ■ Level = Read Level + Factor(dB)																																	
Level (dBμV/m) Date: 2026-04-09 Site : 03CH10-HY Condition : FCC CLASS B 1m SHF_1223_250702 HORIZONTAL Project : 621357 Power : DC 12V Mode : 1 <table><thead><tr><th></th><th>Freq</th><th>Level</th><th>Over Limit</th><th>Limit Line</th><th>Read Level</th><th>Factor</th><th>A/Pos</th><th>T/Pos</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBμV/m</th><th>dB</th><th>dBμV/m</th><th>dBμV</th><th>dB/m</th><th>cm</th><th>deg</th><th></th></tr></thead><tbody><tr><td>1</td><td>39560.00</td><td>47.77</td><td>-26.23</td><td>74.00</td><td>32.64</td><td>15.13</td><td>---</td><td>---</td><td>Peak</td></tr></tbody></table>					Freq	Level	Over Limit	Limit Line	Read Level	Factor	A/Pos	T/Pos	Remark		MHz	dB μ V/m	dB	dB μ V/m	dB μ V	dB/m	cm	deg		1	39560.00	47.77	-26.23	74.00	32.64	15.13	---	---	Peak
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	A/Pos	T/Pos	Remark																								
	MHz	dB μ V/m	dB	dB μ V/m	dB μ V	dB/m	cm	deg																									
1	39560.00	47.77	-26.23	74.00	32.64	15.13	---	---	Peak																								

Test Engineer :	Tom Lee	Temperature :	21.2~21.5°C	
		Relative Humidity :	45.3~46.7%	
Test Distance :	3m	Polarization :	Vertical	
Remark :	#6 is system simulator signal which can be ignored.			
■ Emission level (dBμV/m) = 20 log Emission level (μV/m)				
■ Factor(dB) = Antenna Factor + Cable Loss + Filter loss – Preamp Factor				
■ Corrected Reading: Factor(dB) + Read Level = Level				

Level (dBuV/m)

Date: 2026-04-09

Site : 03CH10-HY

Condition : FCC CLASS-B 3m 9120D-1325_251028 VERTICAL

Project : 621357

Power : DC 12V

Mode : 1

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	cm	deg	
1	36.21	24.38	-15.62	40.00	35.12	-10.74	---	---	Peak
2	60.24	23.17	-16.83	40.00	42.71	-19.54	---	---	Peak
3	96.15	20.84	-22.66	43.50	36.19	-15.35	---	---	Peak
4	771.10	30.65	-15.35	46.00	30.42	0.23	---	---	Peak
5	852.30	31.07	-14.93	46.00	29.30	1.77	---	---	Peak
6 *	881.50	56.36			54.48	1.88	---	---	Peak
7	947.50	33.79	-12.21	46.00	29.63	4.16	---	---	Peak
8	2978.00	42.82	-31.18	74.00	62.43	-19.61	---	---	Peak
9	4688.00	44.23	-29.77	74.00	59.24	-15.01	---	---	Peak
10	6944.00	46.08	-27.92	74.00	55.14	-9.06	---	---	Peak
11	8730.00	47.43	-26.57	74.00	53.56	-6.13	---	---	Peak
12	10766.00	49.36	-24.64	74.00	51.23	-1.87	---	---	Peak
13	10766.00	37.24	-16.76	54.00	39.11	-1.87	---	---	Average
14	12942.00	49.99	-24.01	74.00	48.32	1.67	---	---	Peak
15	12942.00	37.87	-16.13	54.00	36.20	1.67	---	---	Average
16	13580.00	50.69	-23.31	74.00	47.32	3.37	---	---	Peak
17	13580.00	38.57	-15.43	54.00	35.20	3.37	---	---	Average



Test Engineer :	Tom Lee	Temperature :	21.2~21.5℃
		Relative Humidity :	45.3~46.7%
Test Distance :	1m	Polarization :	Vertical

■ Emission level (dBμV/m) = 20 log Emission level (μV/m)

■ Distance extrapolation factor (for above 18GHz) = 20 log (test distance / specific distance) (dB)

■ EX.: Distance extrapolation factor = 20 log (1/3) = -9.54 (dB)

■ Factor(dB) = Antenna Factor + Cable Loss + Filter loss – Preamp Factor + Distance extrapolation factor

■ Level = Read Level + Factor(dB)

Level (dBuV/m)

97

84.9

72.8

60.6

48.5

36.4

24.3

12.1

0

18000

21000.

23000.

25000.

27000.

29000.

31000.

33000.

35000.

37000.

40000

Frequency (MHz)

Date: 2026-04-09

FCC CLASS B

FCC CLASS-B (AVG)

1

Site : 03CH10-HY

Condition : FCC CLASS B 1m SHF_1223_250702 VERTICAL

Project : 621357

Power : DC 12V

Mode : 1

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	cm	deg	
1	38900.00	47.84	-26.16	74.00	34.49	13.35	---	---	Peak