



FCC EMI TEST REPORT

FCC ID : U8G-P1MT01
Equipment : Peplink Pepwave Wireless Product
Brand Name :



PEPWAVE

Model Name : MAX BR1 Mini
MAX-BR1-MINI-LTE-US-T-PRM
MAX-BR1-MINI-LTEA-W-T-PRM
MAX-BR1-MINI-LTEA-US-T-PRM
MAX-BR1-MINI-LTE-US-DC-T-PRM
MAX-BR1-MINI-LTEA-W-DC-T-PRM
MAX-BR1-MINI-LTEA-US-DC-T-PRM
AP One Rugged
APO-AC-RUG

Applicant : PISMO LABS TECHNOLOGY LIMITED
A8, 5/F, HK Spinners Industrial Building,
Phase 6, 481 Castle Peak Road, Cheung Sha
Wan, Hong Kong

Manufacturer : PISMO LABS TECHNOLOGY LIMITED
A8, 5/F, HK Spinners Industrial Building,
Phase 6, 481 Castle Peak Road, Cheung Sha
Wan, Hong Kong

Standard : FCC 47 CFR FCC Part 15 Subpart B Class A



The product was received on May 06, 2022 and testing was performed from May 14, 2022 to Jul. 07, 2022. We, Sporton International Inc. EMC & Wireless Communications 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. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)



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History of this test report

Report No.	Version	Description	Issue Date
FC250205	01	Initial issue of report	Oct. 13, 2022

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.107	AC Conducted Emission	Pass	19.01 dB under the limit at 16.010 MHz
3.2	15.109	Radiated Emission	Pass	9.53 dB under the limit at 125.000 MHz for Quasi-Peak

Declaration of Conformity:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
2. The measurement uncertainty please refer to this report "Uncertainty of Evaluation".

Comments and Explanations:

1. The product specifications of the EUT presented in the report are declared by the manufacturer who shall take full responsibility for the authenticity.
2. The purpose of different model name is for marketing segmentation.

Reviewed by: Lewis Ho**Report Producer: Ming Chen**

1. General Description

1.1. Product Feature of Equipment Under Test

WCDMA/LTE, Wi-Fi 2.4GHz 802.11b/g/n, WiFi 5GHz 802.11a/n/ac, and GPS

Product Feature	
Integrated WWAN Module 1	Brand Name: Sierra Model Name: EM7411 FCC ID: N7NEM74B
Integrated WWAN Module 2	Brand Name: Sierra Model Name: MC7455 FCC ID: N7NMC7455
Integrated WWAN Module 3	Brand Name: Telit Model Name: LE910C4-NF FCC ID: RI7LE910CXNF
Sample 1	EUT with WWAN Module 1 (EM7411)
Sample 2	EUT with WWAN Module 2 (MC7455)
Sample 3	EUT with WWAN Module 3 (LE910C4-NF)
Sample 4	EUT without WWAN Module+ GPS
Antenna Type	WWAN <For EM7411>: Omni-directional Antenna <For MC7455>: Omni-directional Antenna <For LE910C4-NF >: Omni-directional Antenna WLAN: <Ant. 1>: Omni-directional Antenna <Ant. 2>: Omni-directional Antenna GPS: Directional Antenna

Remark:

1. The EUT's information above is declared by manufacturer. Please refer to Comments and Explanations in report summary.
2. The product will integrate the cellular module (EM7411, MC7455, LE910C4-NF). Among the 3 options, at a time only 1 cellular module will be installed), therefore the cellular module is incorporated into the host for Part 15B. Equipment authorization to integrate the cellular module will follow the FCC modular approval policy and procedures.

1.2. Modification of EUT

No modifications made to the EUT during the testing.

1.3. Test Location

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	Sporton Site No. CO05-HY

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 (TAF Code: 3786)
Remark	The Radiated Emission test item subcontracted to Sporton International Inc. Wensan Laboratory.

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.30-2, Dingfu Tsuen, Linkou District, New Taipei City, Taiwan 244 (R.O.C.) TEL: +886-2-2603-5367 / +886-2-2601-1640 FAX: +886-2-2601-1695
Test Site No.	Sporton Site No. OS04-LK

FCC designation No.: TW1093 and TW1132 and TW1095

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 A
- ♦ ANSI C63.4-2014

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

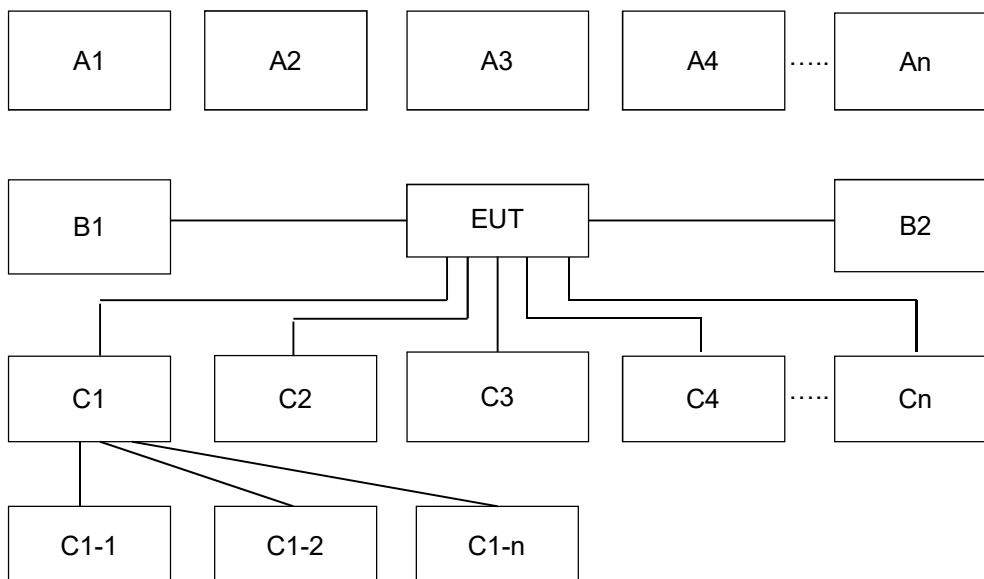
2. Test Configuration of Equipment Under Test

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
AC Conducted Emission	Mode 1: LTE Band 5 Idle + WLAN (2.4GHz) Link + LAN 1 Link + WAN Link + GPS Rx + Adapter + LAN 2 Port with RJ45 Load + SIM A for Sample 1
	Mode 2: LTE Band 12 Idle + WLAN (5GHz) Link + LAN 2 Link + WAN Link + GPS Rx + POE IN + SIM B for Sample 1
	Mode 3: LTE Band 13 Idle + WLAN (5GHz) Idle + LAN 2 Link + WAN Link + GPS Rx + POE IN + SIM B for Sample 1
	Mode 4: LTE Band 12 Idle + WLAN (5GHz) Link + LAN 2 Link + WAN Link + GPS Rx + POE IN + SIM B for Sample 2
	Mode 5: LTE Band 12 Idle + WLAN (5GHz) Link + LAN 2 Link + WAN Link + GPS Rx + POE IN + SIM B for Sample 3
	Mode 6: WLAN (5GHz) Link + LAN 2 Link + WAN Link + POE IN + SIM B for Sample 4
Radiated Emissions	Mode 1: LTE Band 5 Idle + WLAN (2.4GHz) Link + LAN 1 Link + WAN Link + GPS Rx + Adapter + LAN 2 Port with RJ45 Load + SIM A for Sample 1
	Mode 2: LTE Band 12 Idle + WLAN (5GHz) Link + LAN 2 Link + WAN Link + GPS Rx + POE IN + SIM B for Sample 1
	Mode 3: LTE Band 13 Idle + WLAN (5GHz) Idle + LAN 2 Link + WAN Link + GPS Rx + POE IN + SIM B for Sample 1
	Mode 4: LTE Band 13 Idle + WLAN (5GHz) Idle + LAN 2 Link + WAN Link + GPS Rx + POE IN + SIM B for Sample 2
	Mode 5: LTE Band 13 Idle + WLAN (5GHz) Idle + LAN 2 Link + WAN Link + GPS Rx + POE IN + SIM B for Sample 3
	Mode 6: WLAN (5GHz) Idle + LAN 2 Link + WAN Link + POE IN + SIM B for Sample 4
	Mode 7: LTE Band 13 Idle + WLAN (5GHz) Idle + LAN2 Link + WAN Link + GPS Rx + DC 12V + SIM B for Sample 1
	Mode 8: LTE Band 13 Idle + WLAN (5GHz) Idle + LAN 2 Link + WAN Link + GPS Rx + DC 24V + SIM B for Sample 1
Remark: 1. The worst case of AC is mode 6; only the test data of this mode was reported. 2. The worst case of RE is mode 6; only the test data of this mode was reported. 3. For Radiation Emission after pre-scanned the cellular band between 30MHz ~ 960MHz (LTE Band 5/12/13); only the worst case for cellular band test data of this mode was reported.	

2.2. Connection Diagram of Test System



Conduction Test Setup									
No.	Wireless Station	Connection Type	Test Mode						
			1	2	3	4	5	6	-
A1	System Simulator	LTE	X	X	X	X	X	-	-
A2	GPS Station	GPS	X	X	X	X	X	-	-
A3	Notebook	WiFi	X	X	X	X	X	X	-
No.	Power Source	Connection Type	1	2	3	4	5	6	-
B1	AC : 120V/60Hz	AC Power Cable	X	-	-	-	-	-	-
B2	AC : 120V/60Hz	RJ45 Cable (PoE)	-	X	X	X	X	X	-
No.	Setup Peripherals	Connection Type	1	2	3	4	5	6	-
C1	Notebook	RJ45 Cable	X	X	X	X	X	X	-
C2	Notebook	RJ45 Cable	X	X	X	X	X	X	-

Radiation Test Setup									
No.	Wireless Station	Connection Type	Test Mode						
			1	2	3	4	5	6	7
A1	System Simulator	GSM/UMTS/CDMA/WCDMA/LTE	X	X	X	X	X	-	X
A2	GPS Station	GPS	X	X	X	X	X	-	X
A3	Notebook	WiFi	X	X	X	X	X	X	X
No.	Power Source	Connection Type	1	2	3	4	5	6	7
B1	AC : 120V/60Hz	AC Power Cable	X	X	X	X	X	X	-
B2	AC : 120V/60Hz	RJ-45 Cable (PoE)	-	X	X	X	X	X	-
B3	DC : 12V/24V	DC Power Cable	-	-	-	-	-	-	X
No.	Setup Peripherals	Connection Type	1	2	3	4	5	6	7
C1	Notebook	RJ-45 Cable	X	X	X	X	X	X	X
C2	AP router	RJ-45 Cable	X	X	X	X	X	X	X
C2-1	Notebook	RJ-45 Cable to C2	X	X	X	X	X	X	X

Radiation Test Setup									
No.	Wireless Station	Connection Type	Test Mode						
			8	-	-	-	-	-	-
A1	System Simulator	GSM/UMTS/CDMA/WCDMA/LTE	X	-	-	-	-	-	-
A2	GPS Station	GPS	X	-	-	-	-	-	-
A3	Notebook	WiFi	X	-	-	-	-	-	-
No.	Power Source	Connection Type	8	-	-	-	-	-	-
B1	AC : 120V/60Hz	AC Power Cable	-	-	-	-	-	-	-
B2	AC : 120V/60Hz	RJ-45 Cable (PoE)	-	-	-	-	-	-	-
B3	DC : 12V/24V	DC Power Cable	X	-	-	-	-	-	-
No.	Setup Peripherals	Connection Type	8	-	-	-	-	-	-
C1	Notebook	RJ-45 Cable	X	-	-	-	-	-	-
C2	AP router	RJ-45 Cable	X	-	-	-	-	-	-
C2-1	Notebook	RJ-45 Cable to C2	X	-	-	-	-	-	-

2.3. Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8m
2.	GPS Station	Pendulum	GSG-54	N/A	N/A	Unshielded, 1.8m
3.	Notebook	Dell	Latitude 3400	FCC DoC	N/A	AC I/P : Unshielded, 1.2m DC O/P : Shielded, 1.8m
4.	Notebook	Dell	Latitude5480	FCC DoC	N/A	AC I/P : Unshielded, 1.2m DC O/P : Shielded, 1.8m
5.	Notebook	Dell	Latitude3340	FCC DoC	N/A	AC I/P : Unshielded, 1.2m DC O/P : Shielded, 1.8m
6.	POE Adapter	Billion	BP035-560054QAX	FCC DoC	N/A	N/A

2.4. EUT Operation Test Setup

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

At the same time, the EUT was attached to the Notebook and executes ping via WLAN function and the following programs installed in the EUT were programmed during the test:

1. EUT links with Notebook and executes ping via RJ-45, LAN Port and WAN Port.
2. Execute "GPS Test" to make the EUT receive continuous signals from GPS station.

3. Test Result

3.1. Test of AC Conducted Emission Measurement

3.1.1. Limits of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

<Class A>

Frequency of emission (MHz)	Conducted limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	79	66
0.5-30	73	60

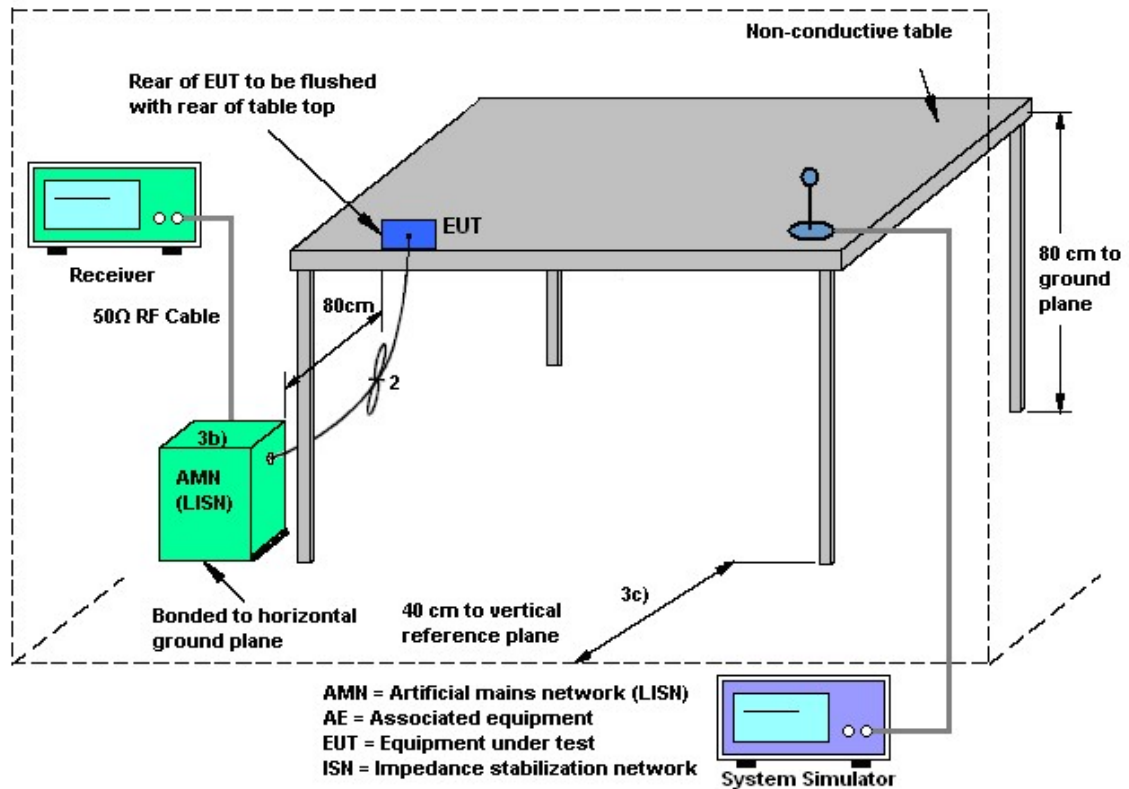
3.1.2. Measuring Instruments

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

3.1.3. Test Procedure

1. The EUT is placed 0.4 meter away from the conducting wall of the shielding room, and is kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN shall be used.
6. Both Line and Neutral shall be tested in order to find out the maximum conducted emission.
7. The frequency range from 150 kHz to 30 MHz is scanned.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (If Bandwidth = 9 kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

3.1.4. Test Setup



3.1.5. Test Result of AC Conducted Emission

Please refer to Appendix A.

3.2. Test of Radiated Emission Measurement

3.2.1. Limit of Radiated Emission

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

<Class A>

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
Above 960	300	3

Frequency (MHz)	Field Strength (microvolts/meter)	Field strength (dBuV/m)	Measurement Distance (meters)
30-88	90	39.08	10
88-216	150	43.52	10
216-960	210	46.44	10
Above 960	300	49.54	10

Note: Measurement follows the CISPR 22 limit line as below :

15.109 (g) As an alternative to the radiated emission limits shown in paragraphs (a) and (b) of this section, digital devices may be shown to comply with the standards contained in Third Edition of the International Special Committee on Radio Interference (CISPR), Pub. 22, "Information Technology Equipment - Radio Disturbance Characteristics - Limits and Methods of Measurement"

3.2.2. Measuring Instruments

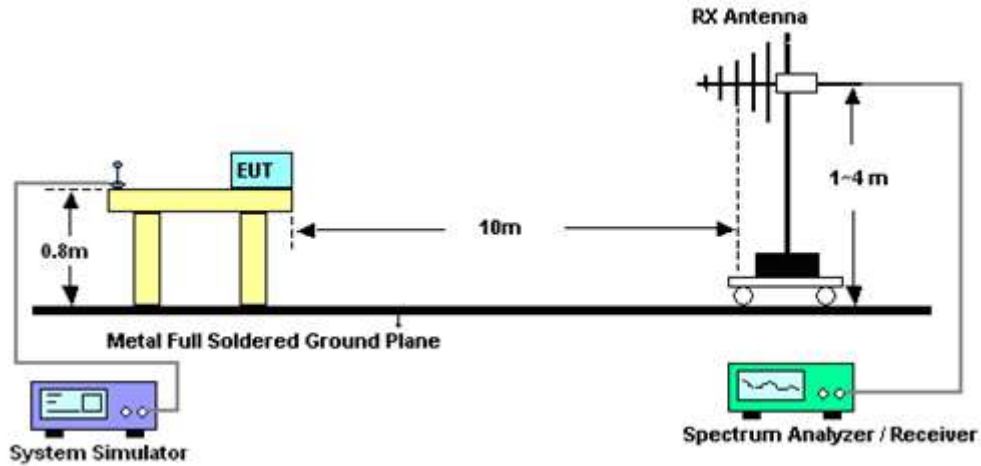
Please refer to the measuring equipment list in this test report.

3.2.3. Test Procedures

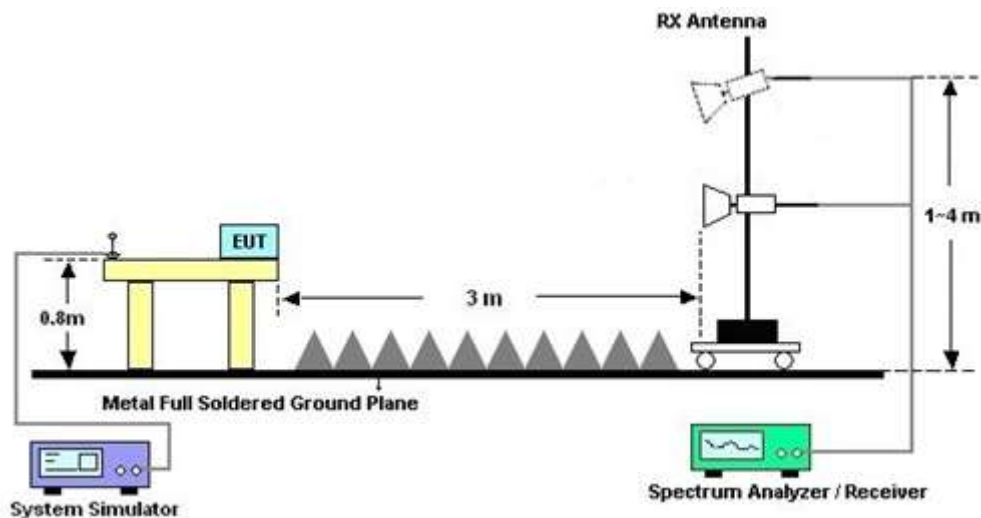
1. The EUT is placed on a turntable with 0.8 meter above ground.
2. The EUT is set 10 meters (30 M~1 G) and 3 meters (1 G~ 13 G) from the interference receiving antenna, which is mounted on the top of a variable height antenna tower.
3. The table is rotated 360 degrees to determine the position of the 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.
8. Emission level (dB μ V/m) = 20 log Emission level (μ V/m)
9. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

3.2.4. Test Setup of Radiated Emission

For Radiated Emissions from 30 MHz to 1 GHz



For Radiated Emissions above 1 GHz



3.2.5. Test Result of Radiated Emission

Please refer to Appendix B.

4. List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	May 25, 2022~ Jun. 29, 2022	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Dec. 01, 2021	May 25, 2022~ Jun. 29, 2022	Nov. 30, 2022	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 17, 2021	May 25, 2022~ Jun. 29, 2022	Nov. 16, 2022	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 03, 2021	May 25, 2022~ Jun. 29, 2022	Dec. 02, 2022	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32	N/A	N/A	N/A	May 25, 2022~ Jun. 29, 2022	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-FN	00691	N/A	Jul. 28, 2021	May 25, 2022~ Jun. 29, 2022	Jul. 27, 2022	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 30, 2021	May 25, 2022~ Jun. 29, 2022	Dec. 29, 2022	Conduction (CO05-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1325	1GHz~18GHz	Oct. 21, 2021	May 14, 2022~ Jul. 05, 2022	Oct. 20, 2022	Radiation (03CH10-HY)
Preamplifier	Jet-Power	JAP00101800-30-10P	160118550004	1GHz~18GHz	Feb. 27, 2022	May 14, 2022~ Jul. 05, 2022	Feb. 26, 2023	Radiation (03CH10-HY)
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	May 14, 2022~ Jul. 05, 2022	N/A	Radiation (03CH10-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	May 14, 2022~ Jul. 05, 2022	N/A	Radiation (03CH10-HY)
Turn Table	EMEC	TT 2200	N/A	0~360 Degree	N/A	May 14, 2022~ Jul. 05, 2022	N/A	Radiation (03CH10-HY)
Software	Audix	E3 6.2009-8-24	RK-001042	N/A	N/A	May 14, 2022~ Jul. 05, 2022	N/A	Radiation (03CH10-HY)
EMI Test Receiver	Keysight	N9038A	MY59053012	3Hz~26.5GHz	Nov. 18, 2021	May 14, 2022~ Jul. 05, 2022	Nov. 17, 2022	Radiation (03CH10-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104 / 102	MY11692/4PE, MY11693/4PE, MY2855/2	1GHz~18GHz	Nov. 04, 2021	May 14, 2022~ Jul. 05, 2022	Nov. 03, 2022	Radiation (03CH10-HY)
Amplifier	Agilent	8447D	2944A07468	10 kHz ~ 1.3GHz	Nov. 30, 2021	Jul. 07, 2022	Nov. 29, 2022	Radiation (OS04-LK)
Spectrum Analyzer	R&S	FSP 7	838858/037	9 kHz ~ 7 GHz	May 25, 2022	Jul. 07, 2022	May 24, 2023	Radiation (OS04-LK)
Test Receiver	R&S	ESCS 30	838251/003	9 kHz ~ 2.75 GHz	Aug. 11, 2021	Jul. 07, 2022	Aug. 10, 2022	Radiation (OS04-LK)
Bilog Antenna with 5dB Attenuator	TESEQ & EMC	CBL6112D & N-6-05	35377 & AT-N0518	30 MHz ~ 2 GHz	Jun. 25, 2022	Jul. 07, 2022	Jun. 24, 2023	Radiation (OS04-LK)
Turn Table	EMCO	2080	9711-2021	0 ~ 360 degree	NCR	Jul. 07, 2022	NCR	Radiation (OS04-LK)
Antenna Mast	EMCO	2075	9711-2115	1 m ~ 4 m	NCR	Jul. 07, 2022	NCR	Radiation (OS04-LK)
RF Cable-R10m	Woken	CFD400NL-LW	CB011	30 MHz ~ 1 GHz	Dec. 08, 2021	Jul. 07, 2022	Dec. 07, 2022	Radiation (OS04-LK)
Software	Audix	E3	Version:4	-	NCR	Jul. 07, 2022	NCR	Radiation (OS04-LK)

5. Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	3.1 dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	5.5 dB
---	--------

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	5.3 dB
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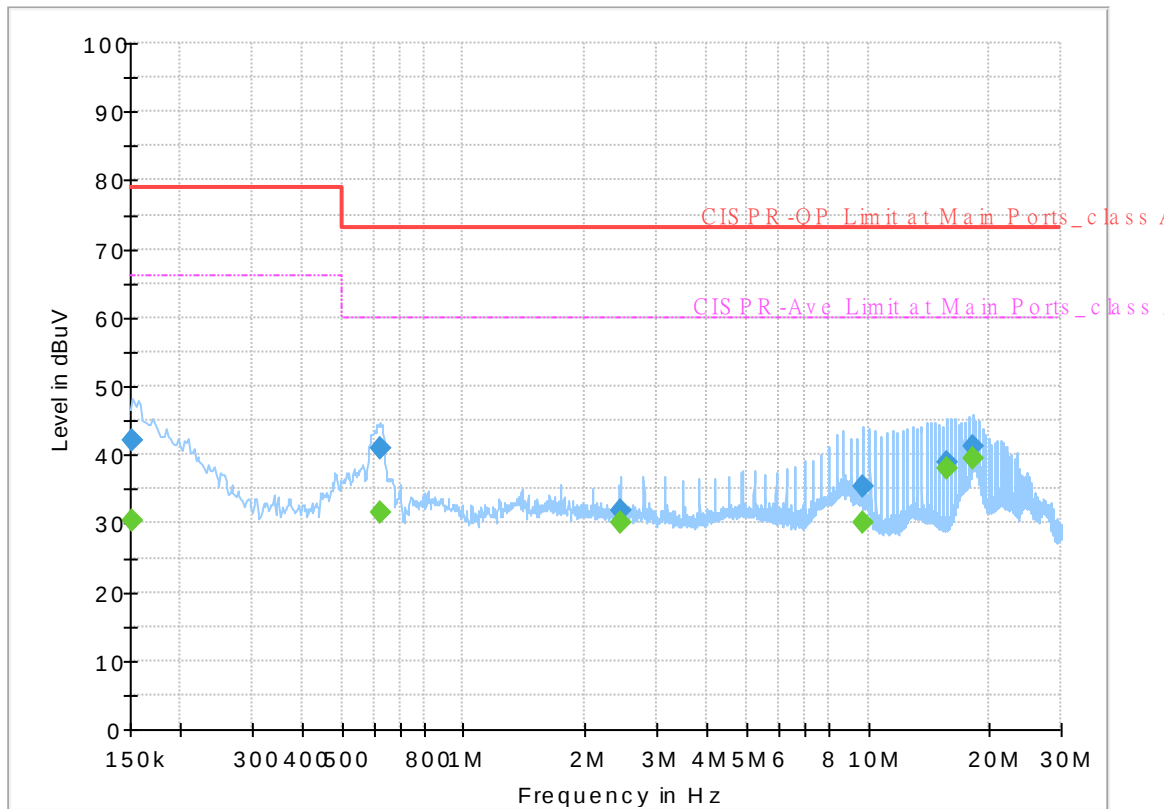
Appendix A. AC Conducted Emission Test Results

Test Engineer :	Calvin Wang and Tom Lee	Temperature :	23~26°C
		Relative Humidity :	45~55%

EUT Information

Report NO : 250205
Test Mode : Mode 6
Test Voltage : 120Vac/60Hz
Phase : Line

Full Spectrum



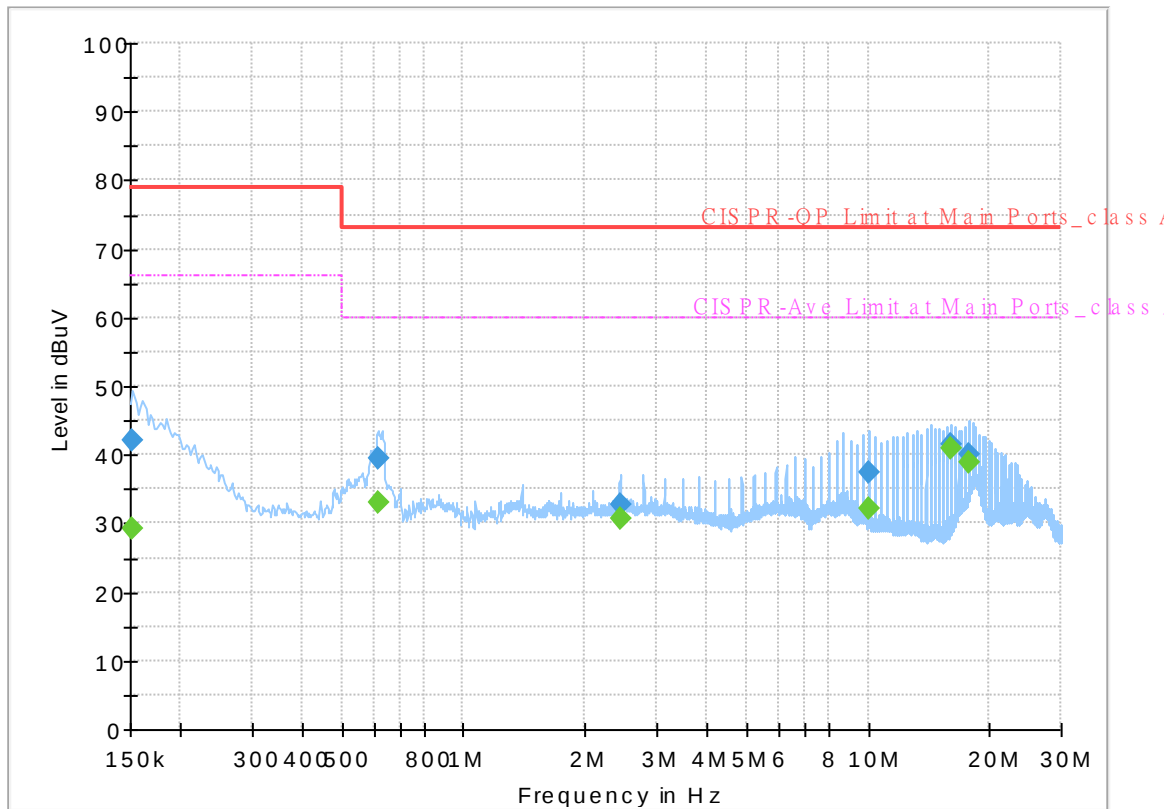
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	30.43	66.00	35.57	L1	OFF	19.6
0.152250	42.15	---	79.00	36.85	L1	OFF	19.6
0.620250	---	31.61	60.00	28.39	L1	OFF	19.6
0.620250	40.79	---	73.00	32.21	L1	OFF	19.6
2.438250	---	30.14	60.00	29.86	L1	OFF	19.6
2.438250	31.90	---	73.00	41.10	L1	OFF	19.6
9.748500	---	30.08	60.00	29.92	L1	OFF	19.8
9.748500	35.27	---	73.00	37.73	L1	OFF	19.8
15.668250	---	38.13	60.00	21.87	L1	OFF	19.8
15.668250	38.84	---	73.00	34.16	L1	OFF	19.8
18.102750	---	39.42	60.00	20.58	L1	OFF	19.8
18.102750	41.09	---	73.00	31.91	L1	OFF	19.8

EUT Information

Report NO : 250205
Test Mode : Mode 6
Test Voltage : 120Vac/60Hz
Phase : Neutral

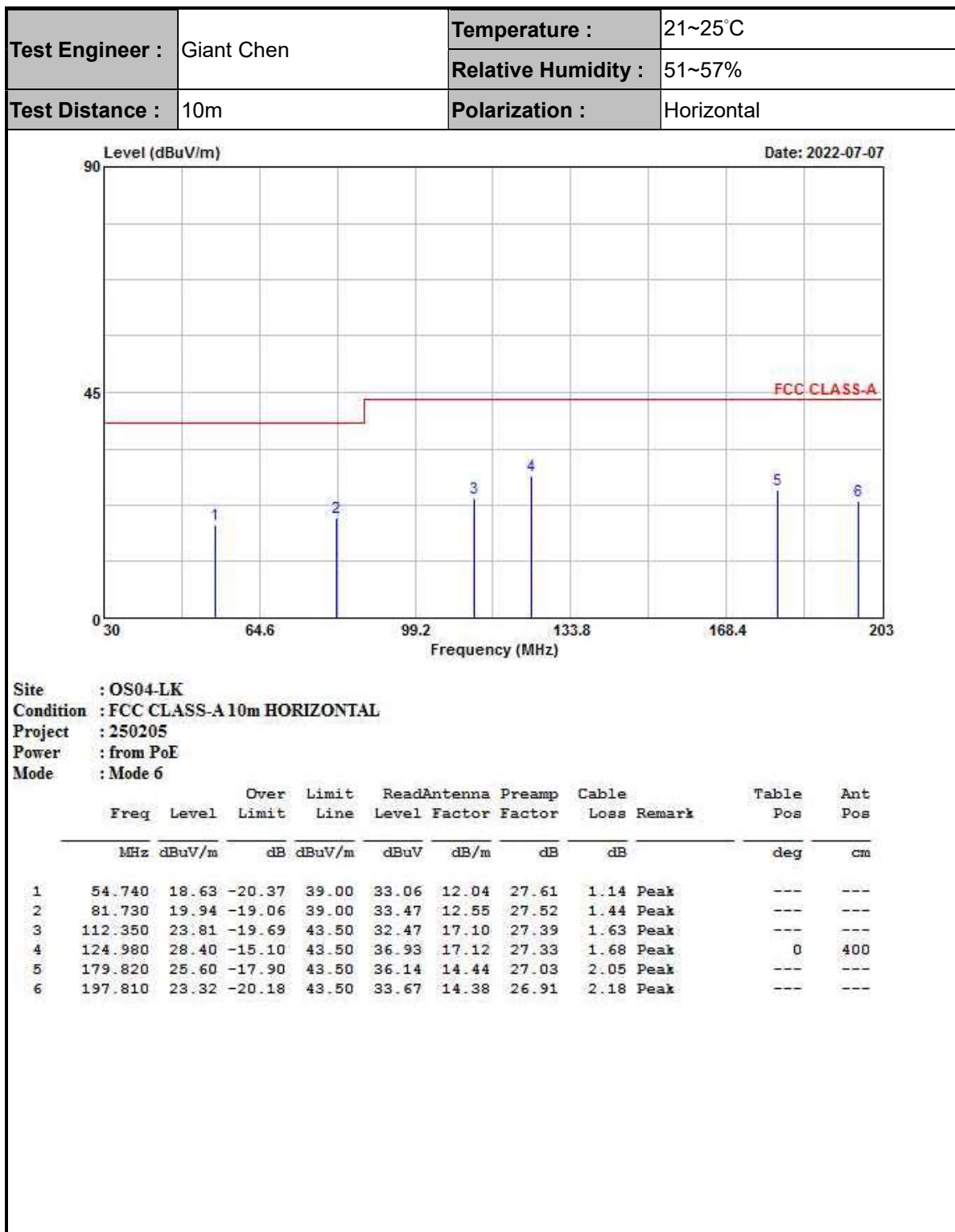
Full Spectrum



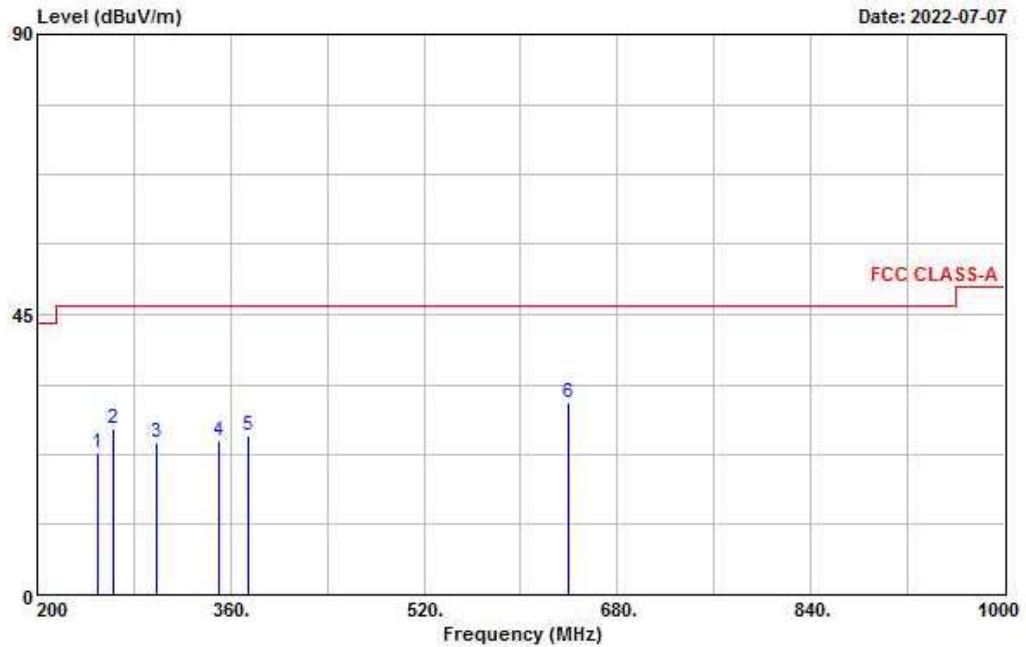
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	29.38	66.00	36.62	N	OFF	19.6
0.152250	42.11	---	79.00	36.89	N	OFF	19.6
0.613500	---	32.99	60.00	27.01	N	OFF	19.6
0.613500	39.34	---	73.00	33.66	N	OFF	19.6
2.436000	---	30.64	60.00	29.36	N	OFF	19.6
2.436000	32.88	---	73.00	40.12	N	OFF	19.6
10.090500	---	32.31	60.00	27.69	N	OFF	19.8
10.090500	37.37	---	73.00	35.63	N	OFF	19.8
16.010250	---	40.99	60.00	19.01	N	OFF	19.9
16.010250	41.53	---	73.00	31.47	N	OFF	19.9
17.749500	---	38.75	60.00	21.25	N	OFF	19.9
17.749500	40.11	---	73.00	32.89	N	OFF	19.9

Appendix B. Radiated Emission Test Result



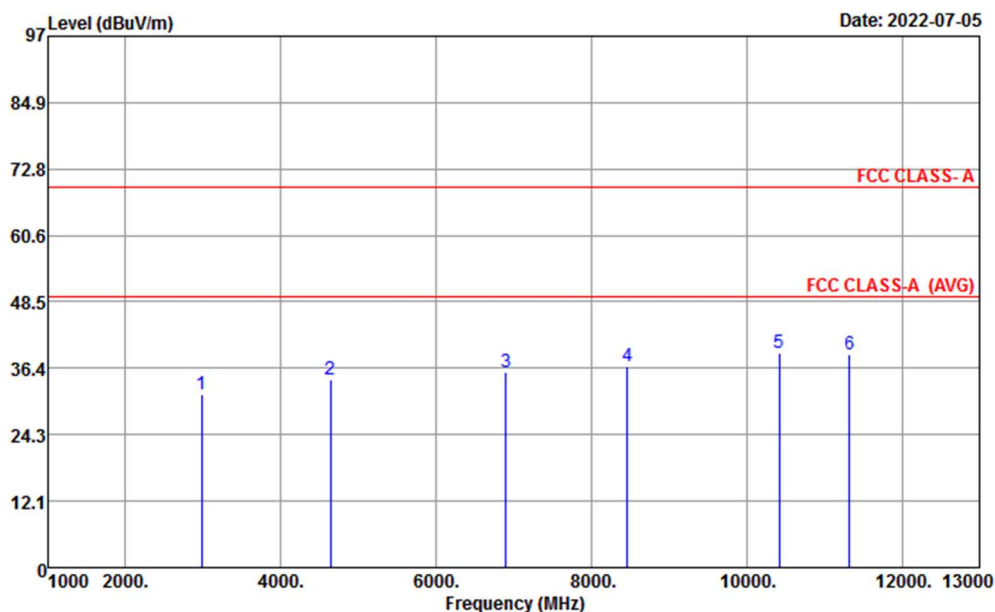
Test Engineer :	Giant Chen	Temperature :	21~25°C
		Relative Humidity :	51~57%
Test Distance :	10m	Polarization :	Horizontal



Site : OS04-LK
 Condition : FCC CLASS-A 10m HORIZONTAL
 Project : 250205
 Power : from PoE
 Mode : Mode 6

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Preamplifier Factor	Cable Loss	Remark	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm
1	249.600	22.80	-23.60	46.40	29.54	17.48	26.66	2.44	Peak	---	---
2	262.400	26.66	-19.74	46.40	32.07	18.79	26.67	2.47	Peak	---	---
3	298.400	24.43	-21.97	46.40	30.19	18.36	26.68	2.56	Peak	---	---
4	349.600	24.81	-21.59	46.40	29.44	19.44	27.01	2.94	Peak	---	---
5	374.400	25.51	-20.89	46.40	29.76	19.97	27.22	3.00	Peak	---	---
6	640.000	30.94	-15.46	46.40	30.53	24.24	27.95	4.12	Peak	---	---

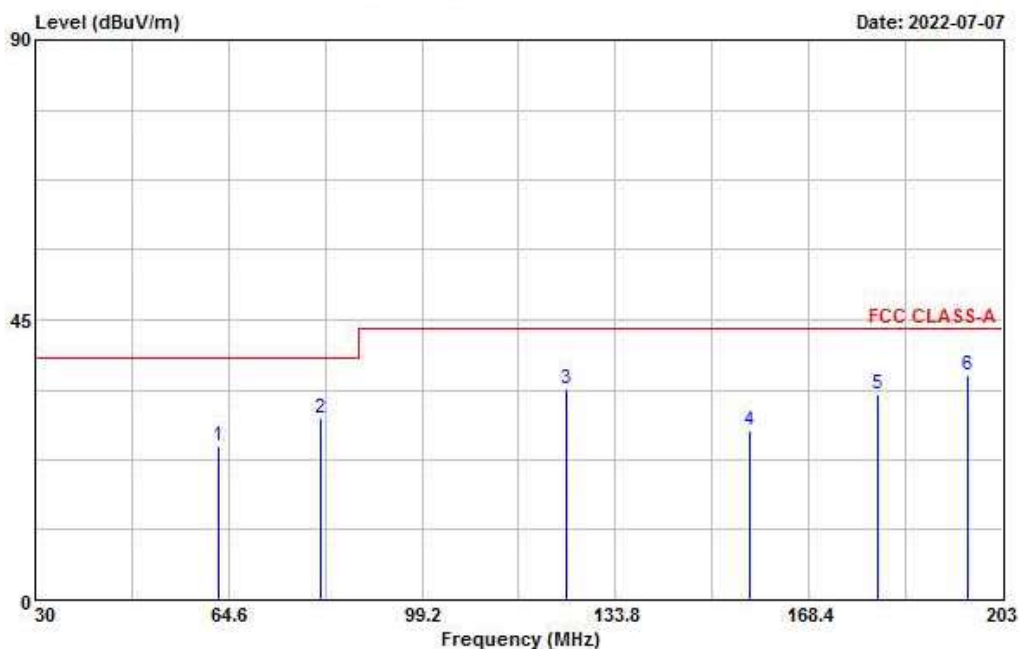
Test Engineer :	Donny Tang	Temperature :	22.9~23.8°C
		Relative Humidity :	59.2~61.3%
Test Distance :	3m	Polarization :	Horizontal



Site : 03CH10-HY
 Condition : FCC CLASS- A 3m 9120B-1325_211021 HORIZONTAL
 Project : 250205
 Power : 120Vac/60Hz
 Mode : 6

Frequency	Level	Distance extrapolation	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak
		Factor	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Average
(MHz)	(dBuV/m)	(dB)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)
2984	31.62	10.45	-37.92	69.54	54.73	29.44	6.52	59.07	-	-	P
4636	34.44	10.45	-35.1	69.54	53.99	31.79	8.3	59.64	-	-	P
6904	35.79	10.45	-33.75	69.54	49.42	35.87	10.87	60.37	-	-	P
8468	36.62	10.45	-32.92	69.54	48.02	37.34	11.7	60.44	-	-	P
10424	39.16	10.45	-30.38	69.54	47.81	38.89	13.05	60.59	-	-	P
11326	38.84	10.45	-30.7	69.54	46.24	38.93	13.77	60.1	-	-	P

Test Engineer :	Giant Chen	Temperature :	21~25°C
		Relative Humidity :	51~57%
Test Distance :	10m	Polarization :	Vertical

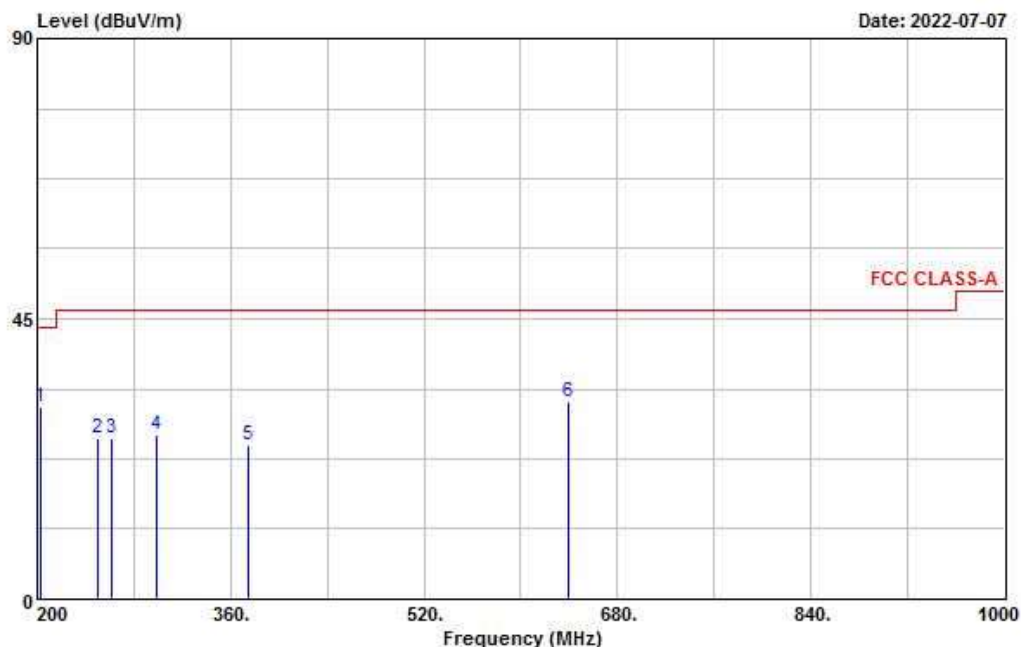


Site : OS04-LK
 Condition : FCC CLASS-A 10m VERTICAL
 Project : 250205
 Power : from PoE
 Mode : Mode 6

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Preamplifier Factor	Cable Loss	Remark	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB		deg	cm
1	62.870	24.59	-14.41	39.00	39.48	11.45	27.58	1.24 Peak	---	---
2 @	81.040	29.06	-9.94	39.00	42.59	12.55	27.52	1.44 Peak	---	---
3 @	125.000	33.97	-9.53	43.50	42.50	17.12	27.33	1.68 QP	112	100
4	157.670	27.24	-16.26	43.50	37.23	15.33	27.15	1.83 Peak	---	---
5 @	180.680	33.10	-10.40	43.50	43.66	14.40	27.02	2.06 Peak	---	---
6 @	196.770	36.22	-7.28	43.50	46.60	14.37	26.92	2.17 Peak	---	---



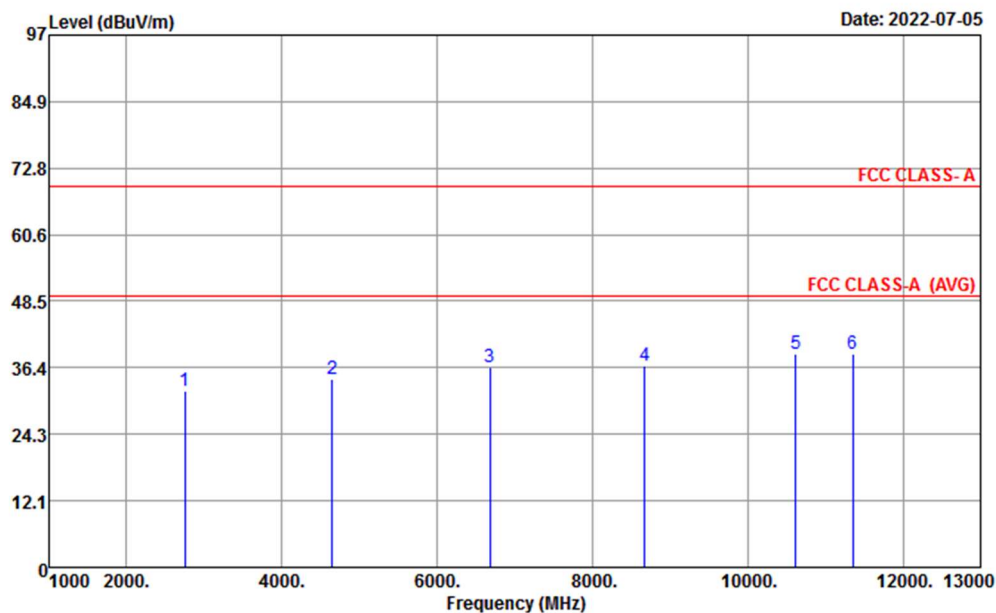
Test Engineer :	Giant Chen	Temperature :	21~25°C
		Relative Humidity :	51~57%
Test Distance :	10m	Polarization :	Vertical



Site : OS04-LK
Condition : FCC CLASS-A 10m VERTICAL
Project : 250205
Power : from PoE
Mode : Mode 6

	Freq	Level	Over	Limit	ReadAntenna	Preampl	Cable	Remark	Table	Ant
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss		Pos	Pos
			dB	dBuV/m	dBuV	dB/m	dB		deg	cm
1	202.400	30.81	-12.69	43.50	40.97	14.53	26.89	2.20 Peak	---	---
2	249.600	25.78	-20.62	46.40	32.52	17.48	26.66	2.44 Peak	---	---
3	261.600	25.97	-20.43	46.40	31.28	18.88	26.66	2.47 Peak	---	---
4	298.400	26.46	-19.94	46.40	32.22	18.36	26.68	2.56 Peak	---	---
5	374.400	24.83	-21.57	46.40	29.08	19.97	27.22	3.00 Peak	---	---
6	640.000	31.67	-14.73	46.40	31.26	24.24	27.95	4.12 Peak	---	---

Test Engineer :	Donny Tang	Temperature :	22.9~23.8°C
		Relative Humidity :	59.2~61.3%
Test Distance :	3m	Polarization :	Vertical



Site : 03CH10-HY
 Condition : FCC CLASS- A 3m 9120D-1325_211021 VERTICAL
 Project : 250205
 Power : 120Vac/60Hz
 Mode : 6

Frequency	Level	Distance extrapolation	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak
		Factor	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Average
(MHz)	(dBuV/m)	(dB)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)
2746	32.14	10.45	-37.4	69.54	56.85	28.08	6.19	58.98	-	-	P
4648	34.25	10.45	-35.29	69.54	53.74	31.82	8.32	59.63	-	-	P
6682	36.5	10.45	-33.04	69.54	50.33	35.97	10.53	60.33	-	-	P
8672	36.72	10.45	-32.82	69.54	47.65	37.79	11.87	60.59	-	-	P
10616	38.95	10.45	-30.59	69.54	46.83	39.11	13.21	60.2	-	-	P
11354	38.94	10.45	-30.6	69.54	46.32	38.98	13.79	60.15	-	-	P