



Test report No: 2530429R-E3012210001-A

FCC TEST REPORT

Product Name	Peplink Pepwave Wireless Product
Trademark	 peplink PEPWAVE
Model and /or type reference	MAX Adapter MAX-ADP-LTE-US-T-PRM
FCC ID	U8G-P1234
Applicant's name / address	PISMO LABS TECHNOLOGY LIMITED A8, 5/F, HK Spinners Industrial Building, Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Hong Kong
Manufacturer's name / address	PISMO LABS TECHNOLOGY LIMITED A8, 5/F, HK Spinners Industrial Building, Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Hong Kong
Test method requested, standard	FCC CFR Title 47 Part 15 Subpart B:2023, Class A
Verdict Summary	IN COMPLIANCE
Documented By (Senior Adm. Specialist / Rita Huang)	
Approved By (Director / Vincent Lin)	
Date of Report	2025/03/13
Date of Issue	2025/04/02
Report No.	2530429R-E3012210001-A
Report Version	V1.0

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Test Photos: Please refer to the file: 2530429R-E3012210001-A Test Photos

Product Photos: Please refer to the file: 2530429R-Product Photos

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DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

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The results presented in this Test Report apply only to the particular item under test established in this document.

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General conditions

1. The test results relate only to the samples tested.
2. The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.
3. This report must not be used to claim product endorsement by TAF or any agency of the government.
4. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.
5. Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Revision History

Report No.	Version	Description	Issued Date
2530429R-E3012210001-A	V1.0	Initial issue of report.	2025-04-02

1. General Information

1.1. EUT Description

Product Name	Peplink Pepwave Wireless Product
Trademark	
Model No.	MAX Adapter MAX-ADP-LTE-US-T-PRM
EUT Max. Frequency	2690 MHz
EUT Rated Voltage	DC 9-36V (Power Port) DC 5V (USB Port)
EUT Test Voltage (Final Test mode)	AC 120V / 60Hz to DC 12V (AC Adapter)

Component	
Cellular Antenna	MFR: Master Wave M/N: 98619ZSAX053 Antenna Type: Omni-directional
GPS Antenna	MFR: INPAQ M/N: RFDPA49373ASMGBA01 Antenna Type: Omni-directional
Adapter	MFR: LEADER ELECTRONICS INC. M/N: MU24D1120200-A1 Input: AC 100- 240VA~50/60Hz 0.7A max. Output: 12.0Vdc, 2.0A Non-Shielded, 1.5m

Note:

1. This report was based on DEKRA report No.: 2410272R-E3012110001-A.
2. The difference is adding Adapter: MU24D1120200-A1.
3. The EUT is available in different model names for marketing purposes.

1.2. Mode of Operation

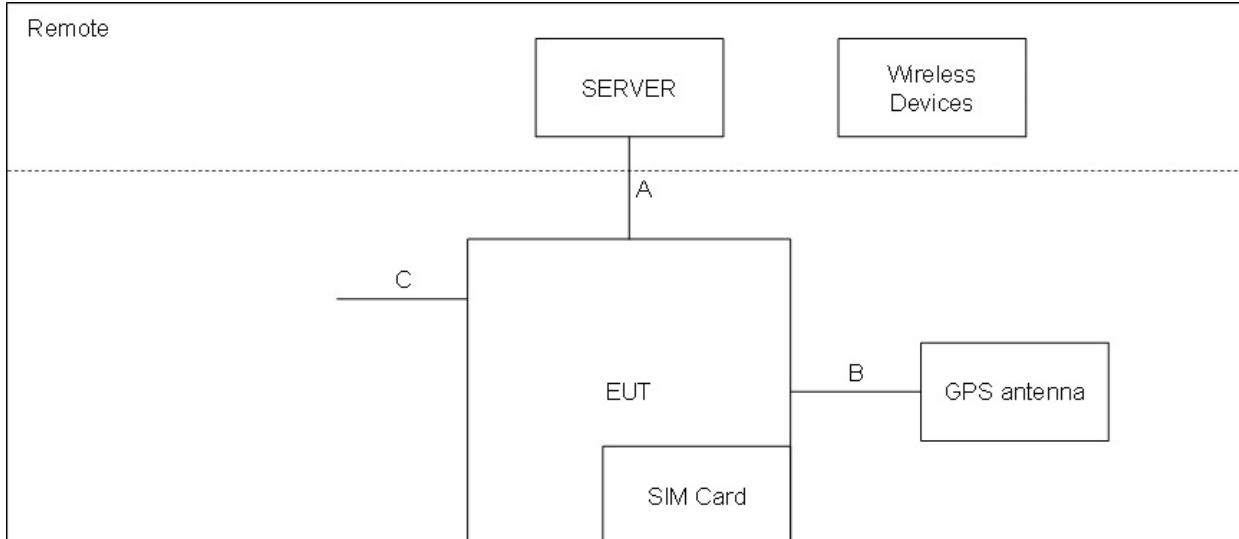
DEKRA has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Pre-Test Mode	
Mode 1: Normal Operation (LAN 1Gbps + WWAN LTE B2 Link + GPS), Power Port, DC 12V By Adapter: LEADER ELECTRONICS INC/MU24D1120200-A1	
Final Test Mode	
Emission	Mode 1

Note:

1. Refer to Certified Cellular module report worst band to test.
2. This product supports client/master mode, but it does not affect EMC testing after evaluation.

1.3. Configuration & Details of Tested System

Connection Diagram							
							
Tested System Details							
Product	Manufacturer	Model No.	No.	Cable Type & Description			
SERVER	Lenovo	5464	A	LAN *2, Non-Shielded 7m			
GPS antenna	INPAQ	RFDPA49373ASMGBA01	B	SMA, Shielded 3m			
Floating	N/A	N/A	C	USB-C, Shielded 1.8m			
SIM Card	R&S	GP-CMW-Z06					
Wireless Devices Inf.							
Product	Manufacturer	Model No.					
Wireless Router	ASUS	ROG RAPTURE GT-AXE11000					
Wireless Router	ASUS	RT-AC58U					
Base Station	R&S	CMW500					
UXM 5G Wireless Test Platform	Keysight	E7515B					
GPS Simulator	Orolia	GSG-5					

Note:

- Use Full system setup configuration determines Worst-Case Mode.
- Use 2dB law program determines Max. Cable Configuration and Worst-Case Mode.
- Radiated emission item test: Performed using the Horn Antenna 3dB Beamwidth to 3m from the EUT size sufficient to cover the procedure.
- Radiated emission item test: Performed using the Horn Antenna 3dB Beamwidth non 3m distance sufficient to cover the size of the EUT program.

1.4. EUT Exercise Software

1	Setup the EUT and simulators as shown on 1.3.
2	Turn on the power of all equipment.
3	All the features of the EUT operation normally.

2. Technical Test

2.1. Summary of Test Result

No deviations from the test standards
 Deviations from the test standards as below description:

Emission				
Performed Item	Normative References	Test Performed	Test Site	Verdict
Conducted Emission (Class A)	FCC CFR Title 47 Part 15 Subpart B:2023	Yes	FS-SR01	Pass
Radiated Emission (Class A)	FCC CFR Title 47 Part 15 Subpart B:2023	Yes	FS-CB01 FS-CB03	Pass

Note:

1. Test Site information refers to test Laboratory Information.
2. The test facility, measurement instrumentation and measurement methods used for verifying the compliance of ITE or digital apparatus with FCC CFR Title 47 Part 15 Subpart B shall comply either with the requirements in ANSI C63.4.

Test Laboratory:	DEKRA Testing and Certification Co., Ltd. Linkou Laboratory
Address:	No. 85, Wenlin St., Linkou Dist., New Taipei City, 244017, Taiwan, R.O.C
Phone number:	+886 2-77532700
Fax number:	+886 2-26026881
Test Site	
LK: No.5-22, Ruishukeng Linkou District, New Taipei City, 24451, Taiwan, R.O.C	
FS: No.6, Lane 75, Wenlin St., Linkou Dist., New Taipei City, 244017, Taiwan, R.O.C No. 85, Wenlin St., Linkou Dist., New Taipei City, 244017, Taiwan, R.O.C	
HY: No.26, Huaya 1 st Rd., Guishan Dist., Taoyuan City 333411, Taiwan, R.O.C	

2.2. List of Test Equipment

Conducted Emission / FS-SR01

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Due Date
Receiver	R&S	ESR3	102186	2024/7/10	2025/7/9
Two-Line V-Network	R&S	ENV216	101479	2024/10/15	2025/10/14
V-LISN	Schwarzbeck	NSLK 8122	8122-00165	2024/6/3	2025/6/2
Impedance Stabilization Network	TESEQ	ISN T800	42815	2024/10/15	2025/10/14
Impedance Stabilization Network	TESEQ	ISN T8-Cat6	53572	2024/8/5	2025/8/4
Impedance Stabilization Network	TESEQ	ISN ST08	56935	2024/6/25	2025/6/24
Coaxial Cable	SUHNER	RG 400	LC018-RG	2024/6/16	2025/6/15
Note : ISN T800 for LAN 10Mbps to 1Gbps, T8-Cat6 for LAN above 1Gbps, ST08 for Shielded LAN					
Test Software version : e3 V9					

Note: Test Receiver Detector: Quasipeak and Average Bandwidth: 9kHz

Radiated Emission (Below 1GHz) / FS-CB01

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Due Date
Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	01124	2024/9/20	2025/9/19
Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	01126	2024/9/20	2025/9/19
Receiver	R&S	ESR7	102255	2025/3/17	2026/3/16
Receiver	R&S	ESR7	102254	2024/12/11	2025/12/10
Coaxial Cable	SUHNER	SUCOFLEX 106	AC043-SF	2024/7/6	2025/7/5
Coaxial Cable	SUHNER	SUCOFLEX 106	AC044-SF	2024/7/6	2025/7/5
Coaxial Cable	SUHNER	SUCOFLEX 106	AC045-SF	2024/7/6	2025/7/5
Coaxial Cable	SUHNER	SUCOFLEX 106	AC046-SF	2024/7/6	2025/7/5
Coaxial Cable	SUHNER	SUCOFLEX 106	AC047-SF	2024/7/6	2025/7/5
Coaxial Cable	SUHNER	SUCOFLEX 106	AC049-SF	2024/7/6	2025/7/5
Coaxial Cable	SUHNER	SUCOFLEX 106	AC051-SF	2024/7/6	2025/7/5
Coaxial Cable	SUHNER	SUCOFLEX 106	AC052-SF	2024/7/6	2025/7/5
Preamplifier	SGH	EM330	20200921-5	2024/6/28	2025/6/27
Preamplifier	SGH	SGH0301	20211007-1	2024/6/28	2025/6/27
NSA	DEKRA	N/A	N/A	2024/7/7	2025/7/6
Test Software version : e3 V9					

Note: Test Receiver Detector: Quasipeak Bandwidth: 120kHz

Radiated Emission (Above 1GHz) / FS-CB03

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Due Date
Double Ridged Guide Horn Antenna	ETS-Lindgren	3117	00203800	2025/2/5	2026/2/4
Horn Antenna	COM-POWER	AH-840	101087	2024/7/9	2025/7/8
Receiver	R&S	ESR26	101706	2024/4/25	2025/4/24
Signal Analyzer	R&S	FSV40	101148	2024/5/14	2025/5/13
Coaxial Cable	SUHNER	SUCOFLEX 106	RF003/B	2024/7/4	2025/7/3
Coaxial Cable	SUHNER	SUCOFLEX 106	RF003/C	2024/7/4	2025/7/3
Coaxial Cable	ROSNOL	R-Test EW0630	RF003/D	2024/7/4	2025/7/3
Coaxial Cable	ROSNOL	MP533A	AC030-MP	2024/7/4	2025/7/3
Microwave Preamplifier	EMCI	EMC051835SE	980311	2025/2/6	2026/2/5
Preamplifier with cable	EMCI	EMC184045SE	980314	2024/8/22	2025/8/21
VSWR	DEKRA	N/A	N/A	2024/7/3	2025/7/2
Test Software version : e3 V9					

2.3. Measurement Uncertainty

Test Items	Uncertainty
Conducted Emission	± 2.40 dB
Radiated Emission (Below 1GHz)	± 5.60 dB
Radiated Emission (Above 1GHz)	± 4.40 dB

2.4. Test Environment

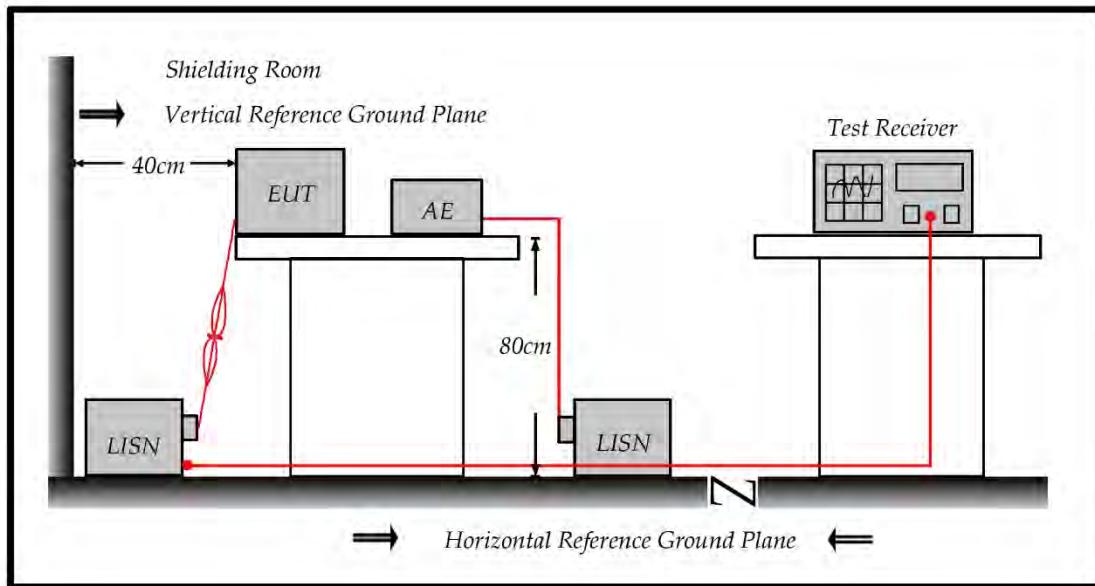
Performed Item	Items	Required
Conducted Emission	Temperature (°C)	10-40
	Humidity (%RH)	10-90
Radiated Emission	Temperature (°C)	10-40
	Humidity (%RH)	10-90

3. Conducted Emission

3.1. Test Specifications

According to Standard : FCC Part 15 Subpart B & CISPR 22

3.2. Test Setup



3.3. Limit

Conducted emissions limits (AC mains power terminals)				
Frequency range (MHz)	Class A Quasi-peak (dB μ V)	Class A Average (dB μ V)	Class B Quasi-peak (dB μ V)	Class B Average (dB μ V)
0.15 - 0.5	79	66	66 to 56	56 to 46
0.5 - 5	73	60	56	46
5 - 30	73	60	60	50

Note:

1. The more stringent limit applies at transition frequencies.
2. The limit level in dB μ V decreases linearly with the logarithm of frequency

3.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination.

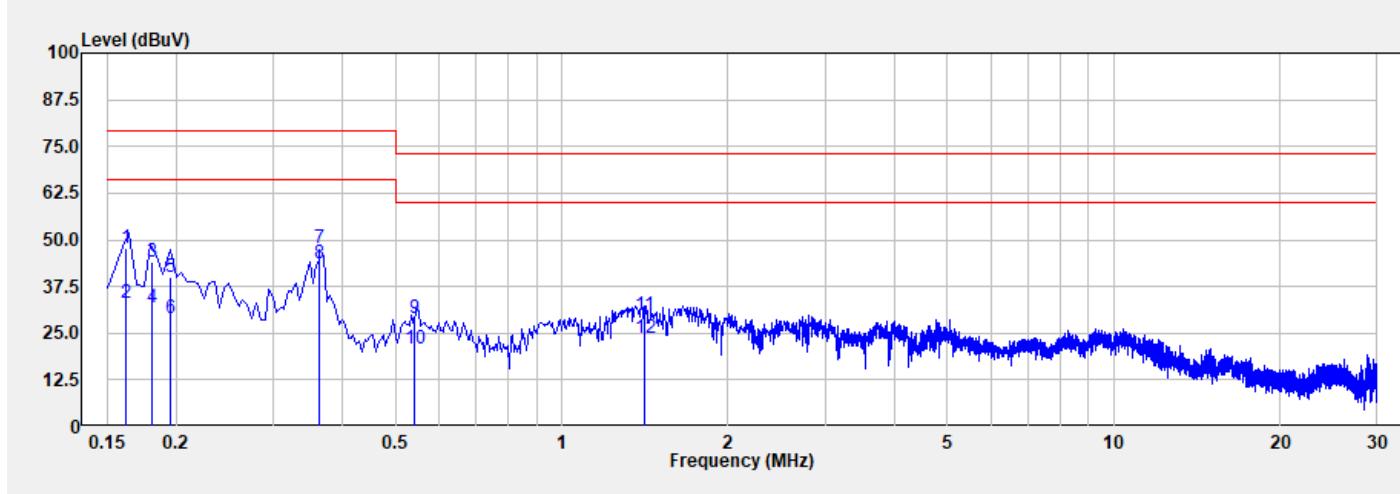
(Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

3.5. Test Result

Model No	MAX Adapter	Site	FS-SR01
Test Voltage	AC 120V/60Hz	Test Date	2025-03-27
Test Mode	Mode 1	Engineer	Tommy Chen
Phase	Line	Temperature (°C)	23.9
Test Condition	--	Humidity (%RH)	50

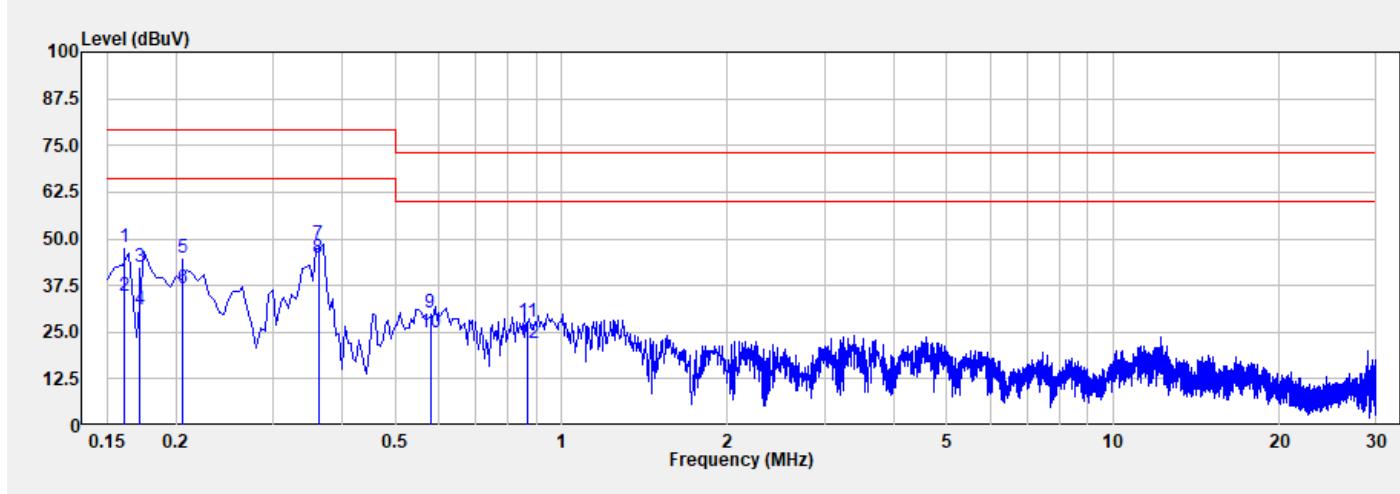


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.162	47.82	79.00	-31.18	38.15	9.67	QP
2	0.162	33.15	66.00	-32.85	23.48	9.67	Average
3	0.181	43.95	79.00	-35.05	34.28	9.67	QP
4	0.181	31.98	66.00	-34.02	22.31	9.67	Average
5	0.195	40.04	79.00	-38.96	30.37	9.67	QP
6	0.195	29.15	66.00	-36.85	19.48	9.67	Average
7	0.363	47.71	79.00	-31.29	38.02	9.68	QP
8*	0.363	43.77	66.00	-22.23	34.08	9.68	Average
9	0.542	28.92	73.00	-44.08	19.24	9.69	QP
10	0.542	21.01	60.00	-38.99	11.32	9.69	Average
11	1.413	29.68	73.00	-43.32	19.96	9.71	QP
12	1.413	23.86	60.00	-36.14	14.15	9.71	Average

Remark:

- ** means this data is the worst margin; ! means this data is over limit.
- Emission Level=Reading Level + Correct Factor (Correct Factor=LISN Factor+Cable Loss).
- Margin=Emission Level-Limit

Model No	MAX Adapter	Site	FS-SR01
Test Voltage	AC 120V/60Hz	Test Date	2025-03-27
Test Mode	Mode 1	Engineer	Tommy Chen
Phase	Neutral	Temperature (°C)	23.9
Test Condition	--	Humidity (%RH)	50



No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.162	47.64	79.00	-31.36	38.05	9.59	QP
2	0.162	34.62	66.00	-31.38	25.03	9.59	Average
3	0.172	42.32	79.00	-36.68	32.73	9.59	QP
4	0.172	30.94	66.00	-35.06	21.36	9.59	Average
5	0.206	44.80	79.00	-34.20	35.22	9.58	QP
6	0.206	36.73	66.00	-29.27	27.15	9.58	Average
7	0.363	48.54	79.00	-30.46	38.95	9.59	QP
8*	0.363	44.79	66.00	-21.21	35.20	9.59	Average
9	0.579	30.20	73.00	-42.80	20.61	9.59	QP
10	0.579	24.93	60.00	-35.07	15.33	9.59	Average
11	0.868	27.90	73.00	-45.10	18.30	9.60	QP
12	0.868	22.05	60.00	-37.95	12.44	9.60	Average

Remark:

- ** means this data is the worst margin; ! means this data is over limit.
- Emission Level=Reading Level + Correct Factor (Correct Factor=LISN Factor+Cable Loss).
- Margin=Emission Level-Limit

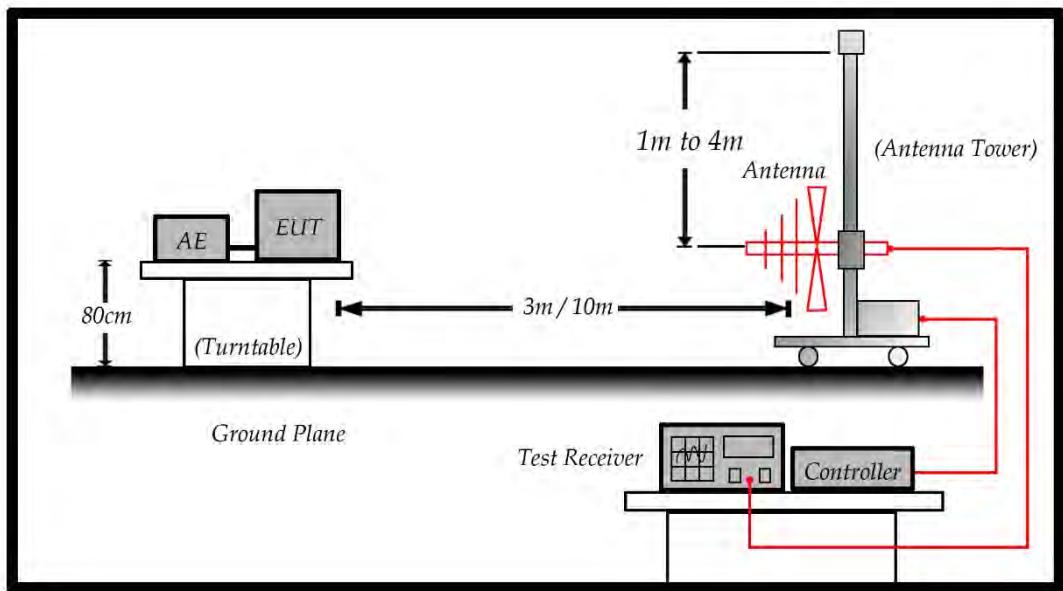
4. Radiated Emission

4.1. Test Specification

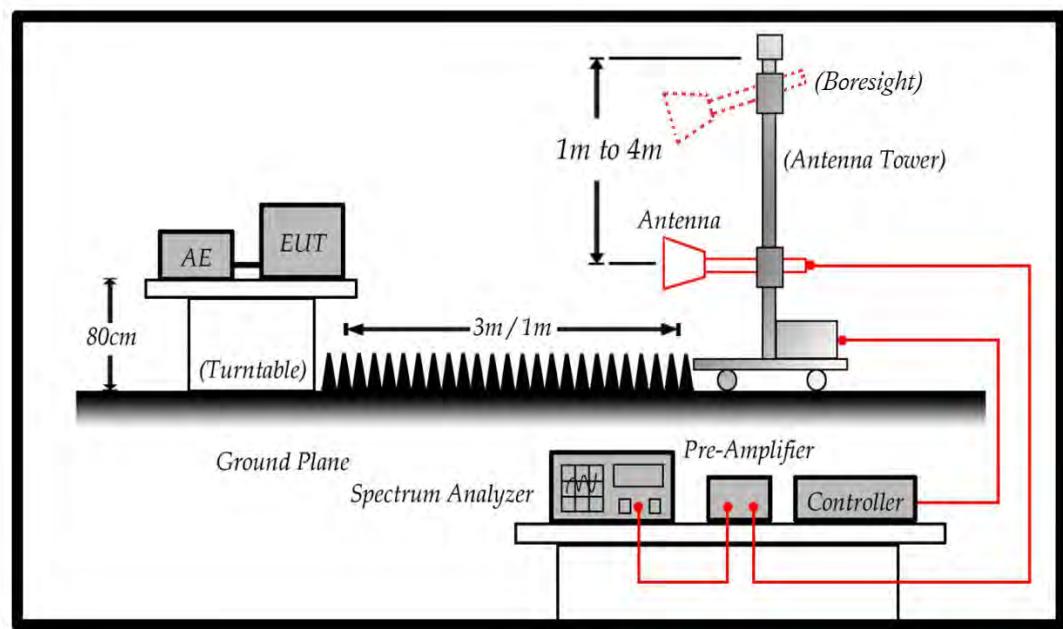
According to Standard : FCC Part 15 Subpart B & CISPR 22

4.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limit

Test shall not exceed the following value:

FCC Part 15 Subpart B Paragraph 15.109 Limits (dBuV/m)		
Frequency (MHz)	Distance(m)	dBuV/m
30-88	10	39
88-216	10	43.5
216-960	10	46.4
960-1000	10	49.5
1000-40000	3	60
18000-40000	1	69.5

Remark:

1. The tighter limit shall apply at the edge between two frequency bands.
2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
3. RF Voltage (dBuV/m) = $20 \log \text{RF Voltage (uV/m)}$

4.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground.

The turn table can rotate 360 degrees to determine the position of the maximum emission level and the antenna (boresight antenna tower) can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated on radiated measurement.

For an unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a radiated emission limit is specified, up to the frequency shown in the following table:

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705 – 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5 th harmonic of the highest frequency or 40 GHz, whichever is lower

On any frequency or frequencies below or equal to 1000MHz, the radiated limits shown are based on measuring equipment employing a quasi-peak detector function and above 1000MHz, the radiated limits shown are based on measuring equipment employing an average detector function.

When average radiated emission measurement are included emission measurement Above 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.

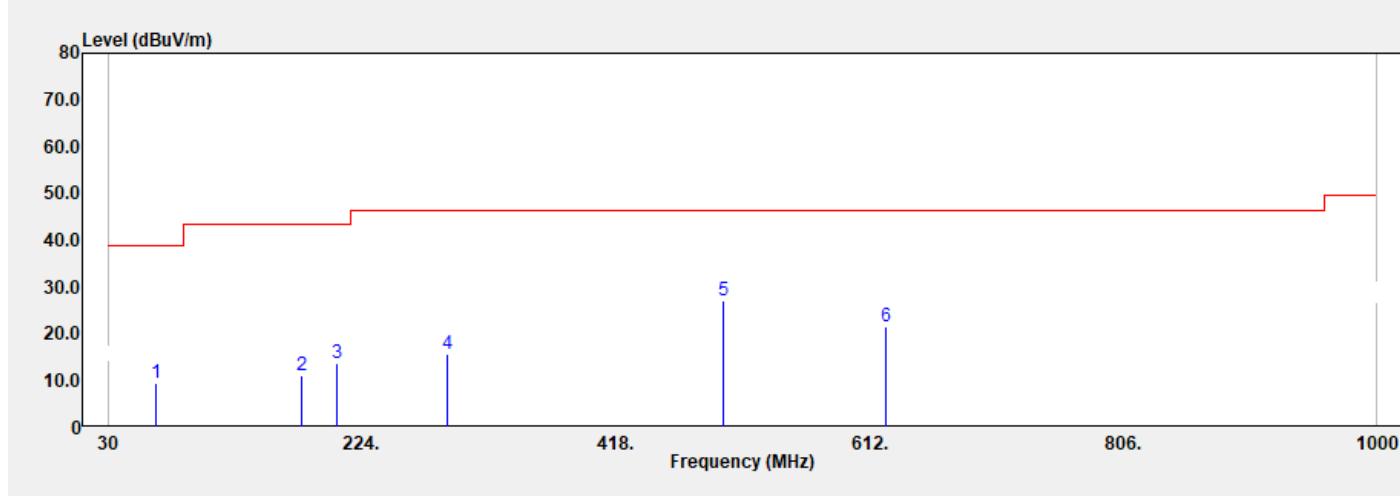
For class A, the measurement distance between the EUT and antenna is 10 meters for under 1GHz and above 1GHz.

For class B, the measurement distance between the EUT and antenna is 10 meters for under 1GHz and 3 meters for above 1GHz.

The bandwidth below 1GHz setting on the field strength meter (Test Receiver) is 120 kHz and above 1GHz is 1MHz.

4.5. Test Result

Model No	MAX Adapter	Site	FS-CB01
Test Voltage	AC 120V/60Hz	Test Date	2025-03-24
Test Mode	Mode 1	Engineer	ZhengLam Yap
Polarity	Horizontal	Temperature (°C)	20.6
Test Condition	--	Humidity (%RH)	67.8

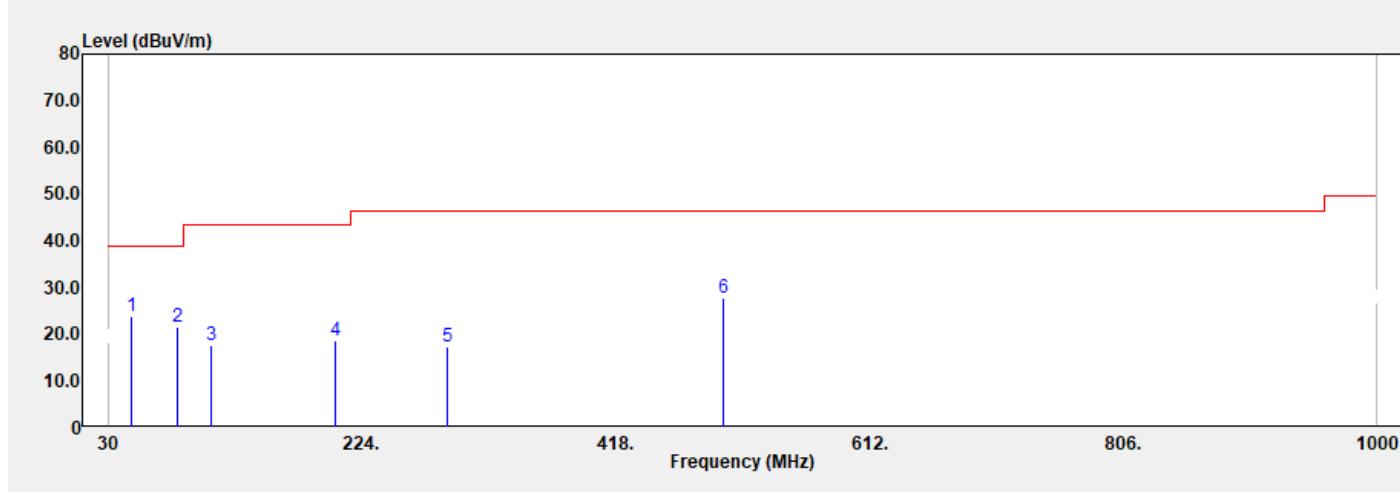


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Ant Pos (cm)	TT Pos (deg)	Detector Type
1	67.019	9.44	39.00	-29.56	34.45	-25.01	100	152	QP
2	177.888	11.24	43.50	-32.26	35.43	-24.18	400	278	QP
3	204.579	13.75	43.50	-29.75	39.82	-26.07	300	279	QP
4	289.766	15.71	46.40	-30.69	37.67	-21.96	200	91	QP
5*	500.036	27.22	46.40	-19.18	43.34	-16.12	300	360	QP
6	625.078	21.62	46.40	-24.78	34.83	-13.21	100	104	QP

Remark:

- ** means this data is the worst margin; ! means this data is over limit.
- Emission Level=Reading Level + Correct Factor (Correct Factor=Ant Factor+Cable Loss+Pre Amp).
- Margin=Emission Level - Limit.

Model No	MAX Adapter	Site	FS-CB01
Test Voltage	AC 120V/60Hz	Test Date	2025-03-24
Test Mode	Mode 1	Engineer	ZhengLam Yap
Polarity	Vertical	Temperature (°C)	20.6
Test Condition	--	Humidity (%RH)	67.8

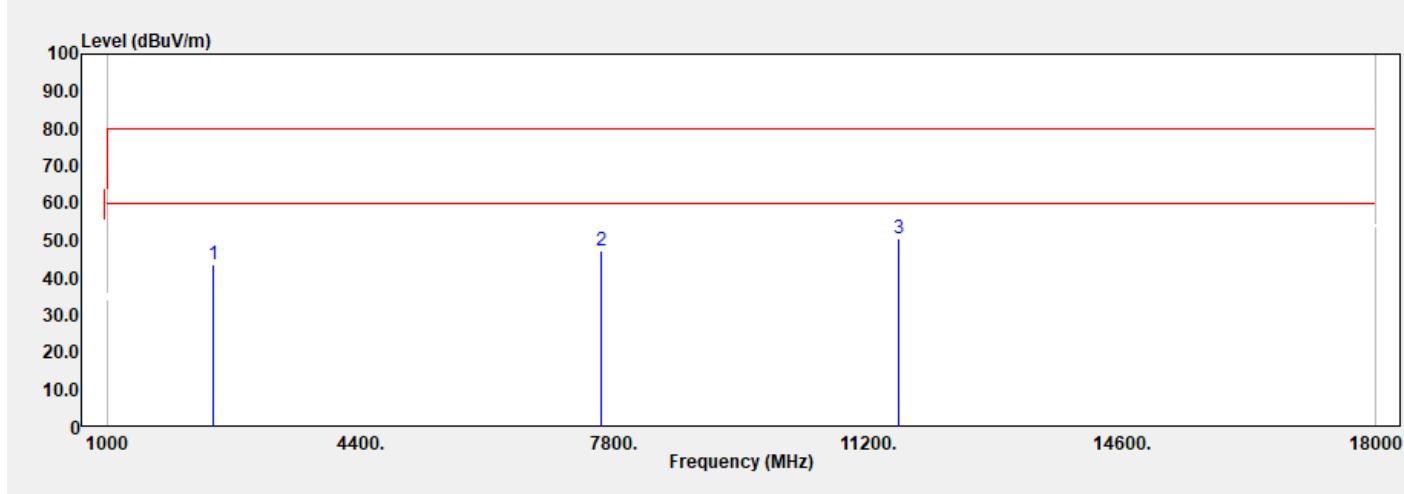


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Ant Pos (cm)	TT Pos (deg)	Detector Type
1*	48.101	23.90	39.00	-15.10	46.44	-22.54	100	246	QP
2	83.121	21.62	39.00	-17.38	49.87	-28.25	100	257	QP
3	108.486	17.51	43.50	-25.99	43.23	-25.72	100	343	QP
4	204.382	18.51	43.50	-24.99	43.55	-25.04	100	127	QP
5	289.340	17.41	46.40	-28.99	38.66	-21.26	200	210	QP
6	499.994	27.91	46.40	-18.49	43.35	-15.44	100	0	QP

Remark:

- ** means this data is the worst margin; ! means this data is over limit.
- Emission Level=Reading Level + Correct Factor (Correct Factor=Ant Factor+Cable Loss+Pre Amp).
- Margin=Emission Level - Limit.

Model No	MAX Adapter	Site	FS-CB03
Test Voltage	AC 120V/60GHz	Test Date	2025-03-27
Test Mode	Mode 1	Engineer	Cloud Hsieh
Polarity	Horizontal	Temperature (°C)	22
Test Condition	--	Humidity (%RH)	65

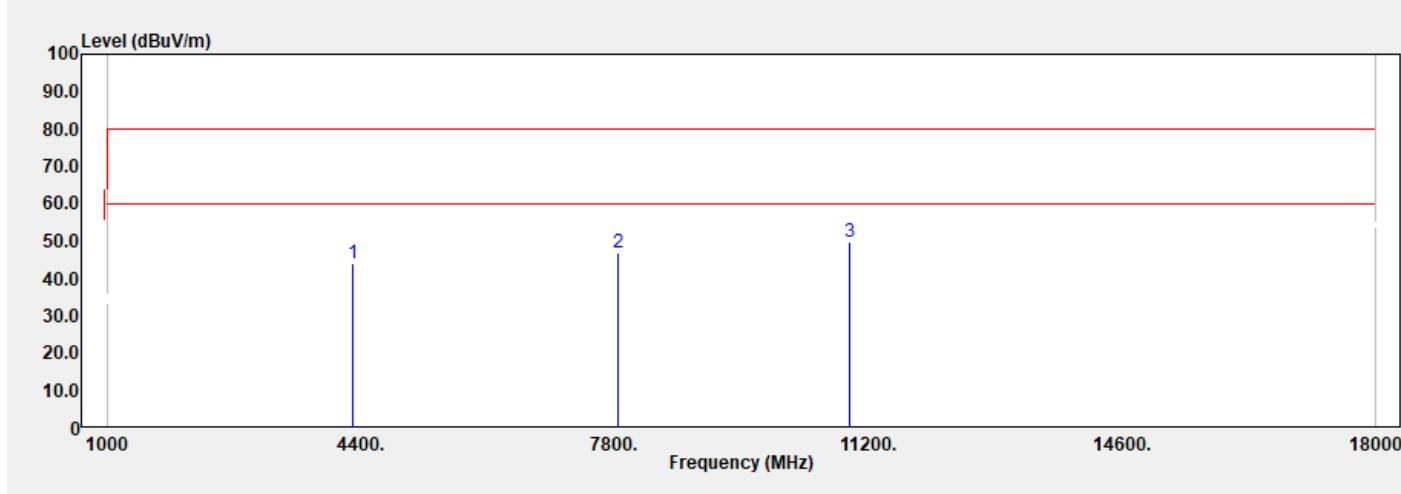


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Ant Pos (cm)	TT Pos (deg)	Detector Type
1	2432.250	43.84	80.00	-36.16	47.28	-3.44	219	1	Peak
2	7630.000	47.17	80.00	-32.83	40.74	6.44	219	1	Peak
3*	11612.250	50.44	80.00	-29.56	39.94	10.50	100	0	Peak

Remark:

- ** means this data is the worst margin; ! means this data is over limit.
- Emission Level=Reading Level + Correct Factor(Correct Factor=Ant Factor+Cable Loss+Pre Amp).
- Margin=Emission Level - Limit.
- The above 1 GHz test. When PEAK measures level less than AV limit by 20 dBuV, its average is not measured separately.

Model No	MAX Adapter	Site	FS-CB03
Test Voltage	AC 120V/60GHz	Test Date	2025-03-27
Test Mode	Mode 1	Engineer	Cloud Hsieh
Polarity	Vertical	Temperature (°C)	22
Test Condition	--	Humidity (%RH)	65



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Ant Pos (cm)	TT Pos (deg)	Detector Type
1	4289.500	44.00	80.00	-36.00	42.36	1.64	100	80	Peak
2	7838.250	47.05	80.00	-32.95	40.46	6.60	100	326	Peak
3*	10949.250	49.76	80.00	-30.24	40.31	9.44	201	316	Peak

Remark:

- ** means this data is the worst margin; ! means this data is over limit.
- Emission Level=Reading Level + Correct Factor(Correct Factor=Ant Factor+Cable Loss+Pre Amp).
- Margin=Emission Level - Limit.
- The above 1 GHz test. When PEAK measures level less than AV limit by 20 dBuV, its average is not measured separately.