

FCC Test Report

Applicant : Shanghai Catlink Intelligent Technology Co.,Ltd

Address : No.800 Naxian road, Pudong new district, Shanghai, China

Product Name : CATLINK AI Water Fountain - Pure 2 UV

Report Date : Apr. 03, 2025

Shenzhen Anbotek Compliance Laboratory Limited



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TEST REPORT

Applicant : Shanghai Catlink Intelligent Technology Co.,Ltd

Manufacturer : Shanghai Catlink Intelligent Technology Co.,Ltd

Product Name : CATLINK AI Water Fountain - Pure 2 UV

Model No. : CL-WA-02, CL-WA-01, CL-WA-03, CL-WA-04, CL-WA-05, CL-WA-06,
CL-WA-07, CL-WA-08, CL-WA-09

Trade Mark : CATLINK

Rating(s) : Input: 5V= 1A
Wireless output: 0.7W

Test Standard(s) : FCC Rules and Regulations Part 18 Subpart C

Test Method(s) : FCC/OST MP-5: 1986

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited To determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 18 Subpart C limits both radiated and conducted emissions. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited Is assumed full responsibility for the accuracy and completeness of these measurements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited

Date of Receipt: Oct. 09, 2024

Date of Test: Oct. 09, 2024 to Nov. 12, 2024

Prepared By:

Cecilia Chen

(Cecilia Chen)

Approved & Authorized Signer:

KingKong Jin

(KingKong Jin)



Revision History

Report Version	Description	Issued Date
R00	Original Issue.	Apr. 03, 2025



1. General Information

1.1. Client Information

Applicant	:	Shanghai Catlink Intelligent Technology Co.,Ltd
Address	:	No.800 Naxian road, Pudong new district, Shanghai, China
Manufacturer	:	Shanghai Catlink Intelligent Technology Co.,Ltd
Address	:	No.800 Naxian road, Pudong new district, Shanghai, China
Factory	:	Shanghai Catlink Intelligent Technology Co.,Ltd
Address	:	No.800 Naxian road, Pudong new district, Shanghai, China

1.2. Description of Device (EUT)

Product Name	:	CATLINK AI Water Fountain - Pure 2 UV
Model No.	:	CL-WA-02, CL-WA-01, CL-WA-03, CL-WA-04, CL-WA-05, CL-WA-06, CL-WA-07, CL-WA-08, CL-WA-09 (Note: All samples are the same except the model number, so we prepare "CL-WA-02" for test only.)
Trade Mark	:	CATLINK
Test Power Supply	:	DC 5V from Adapter input AC120V/60Hz
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(Engineering Sample)
Adapter	:	Manufacturer: SHENZHEN KEYU POWER SUPPLY TECHNOLOGY CO., LTD. Model: KA12C-0502000US Input: 100-240V~, 50/60Hz, 0.35A Max Output: 5V= 2000mA
RF Specification		
Operation Frequency	:	160kHz~190kHz
Modulation Type	:	ASK
Antenna Type	:	Inductive loop coil Antenna
Remark: (1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.		



1.3. Auxiliary Equipment Used During Test

Title	Manufacturer	Model No.	Serial No.
Water Fountain	No.800 Naxian road, Pudong new district, Shanghai, China	CL-WA-02	/

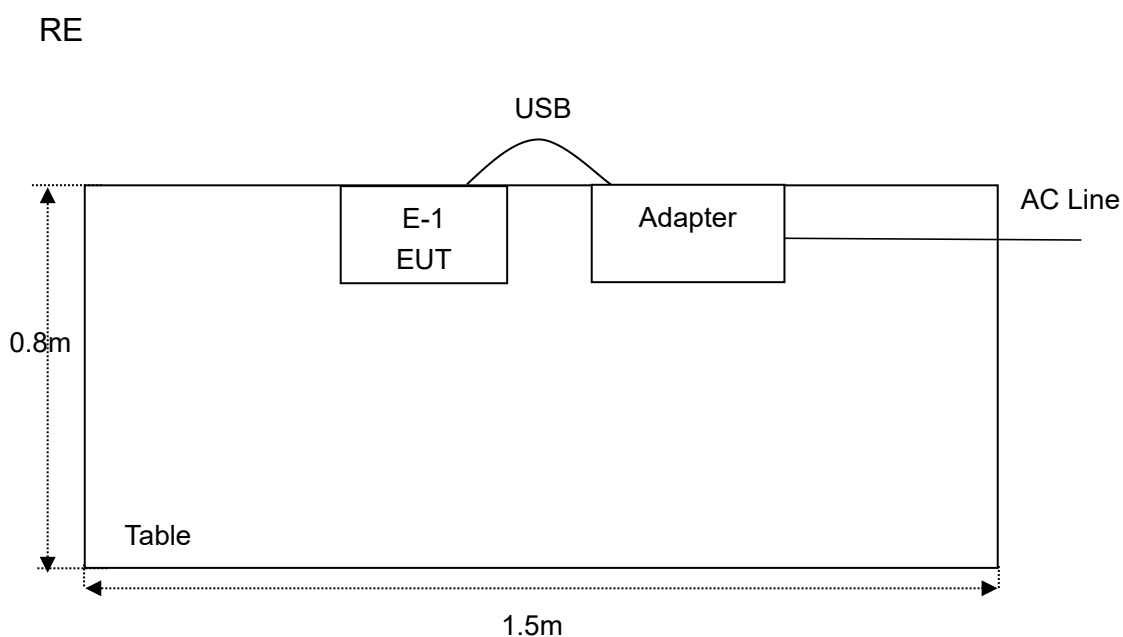
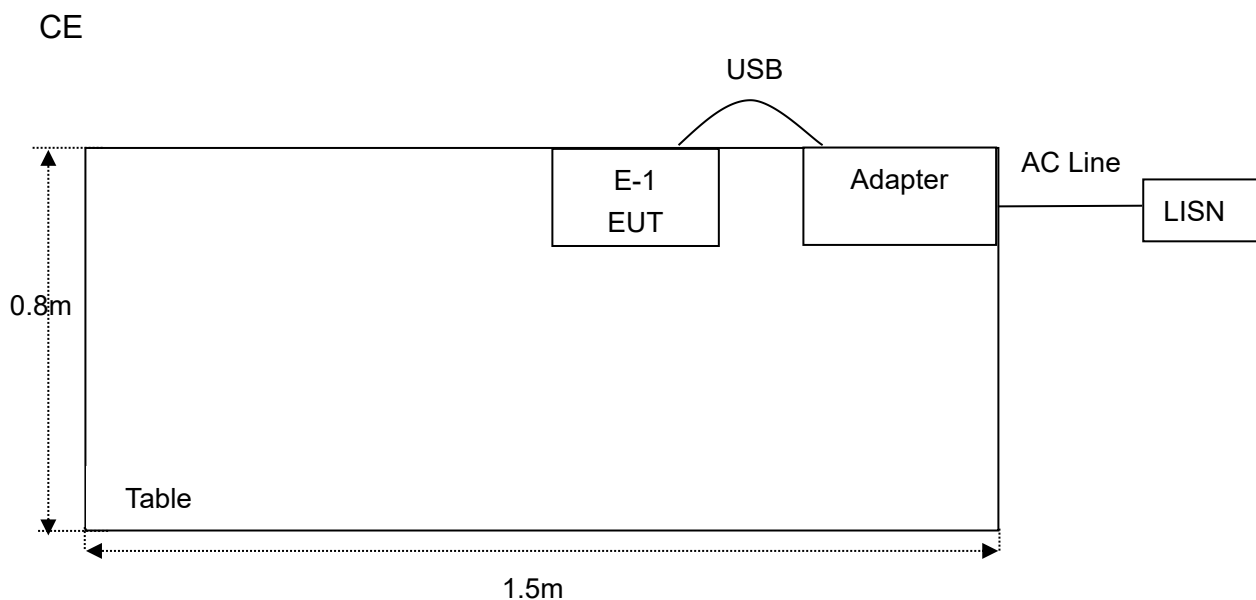
1.4. Description of Test Modes

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Modes	Descriptions
TM1	Adapter+WPT Mode (1% Load)
TM2	Adapter+WPT Mode (50% Load)
TM3	Adapter+WPT Mode (99% Load)
TM4	Standby Mode



1.5. Description Of Test Setup



1.5. Test Summary

Standard Section	Test Items	Test Mode	Status
§18.307 (b)	Power Line Conducted Emission Test (150KHz To 30MHz)	Mode 1~4	P
§18.305 (b)	Radiated Emission Test (9KHz To 30MHz)	Mode 1~4	P
P) Indicates "PASS". N) Indicates "Not applicable".			



1.6. Test Equipment List

Conducted Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1.	L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	100055	Jan. 18, 2024	1 Year
2.	Three Phase V-type Artificial Power Network	CYBERTEK	EM5040DT	E215040D T001	Jan. 17, 2024	1 Year
3.	Software Name EZ-EMC	Farad Technology	ANB-03A	N/A	/	/
4.	EMI Test Receiver	Rohde & Schwarz	ESPI3	100926	Sept. 09, 2024	1 Year

Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Test Receiver	Rohde & Schwarz	ESR26	101481	Jan. 23, 2024	1 Year
2.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	345	Oct. 23, 2022	3 Year
3.	Pre-amplifier	SONOMA	310N	186860	Jan. 17, 2024	1 Year
4.	Software Name EZ-EMC	Farad Technology	N/A	N/A	N/A	N/A
5.	Loop Antenna	Schwarzbeck	FMZB1519B	00053	Sept. 12, 2024	1 Year

1.7. Measurement Uncertainty

Parameter	Uncertainty
Conducted emissions (AMN 150kHz~30MHz)	3.8dB
Radiated spurious emissions (Below 30MHz)	3.53dB
Radiated spurious emissions (30MHz~1GHz)	Horizontal: 3.92dB; Vertical: 4.52dB
The measurement uncertainty and decision risk evaluated according to AB/WI-RF-F-032. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	



1.8. Description of Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

FCC-Registration No.: 434132

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No. 434132.

ISED-Registration No.: 8058A

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (ISED) Innovation, Science and Economic Development Canada. The acceptance letter from the ISED is maintained in our files. Registration 8058A.

Test Location

Shenzhen Anbotek Compliance Laboratory Limited.

Sogood Industrial Zone Laboratory & 1/F. of Building D, Sogood Science and Technology Park, Sanwei Community, Hangcheng Subdistrict, Bao'an District, Shenzhen, Guangdong, China.

1.9. Disclaimer

1. The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.
2. The test report is invalid if there is any evidence and/or falsification.
3. The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.
4. This document may not be altered or revised in any way unless done so by Anbotek and all revisions are duly noted in the revisions section.
5. Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
6. The authenticity of the information provided by the customer is the responsibility of the customer and the laboratory is not responsible for its authenticity.

The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.



2. Power Line Conducted Emission Test

2.1. Test Standard and Limit

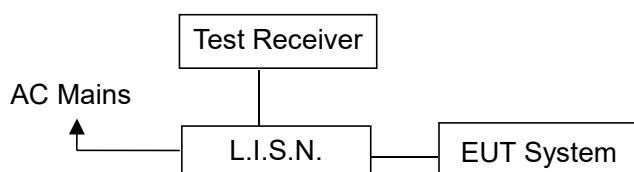
Test Standard	FCC Part 18 Subpart C
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Power Line Conducted Emission Measurement Limits (All Induction cooking ranges and ultrasonic equipment:)

Test Limit	Frequency of emission (MHz)	Conducted limit (dBμV)	
		Quasi-peak Level	Average Level
	0.15 ~ 0.5	66 ~ 56*	56 ~ 46*
	0.5 ~ 5.0	56	46
	5.0 ~ 30	60	50

Remark: (1) The lower limit shall apply at the transition frequencies.
(2) * Decreasing linearly with logarithm of frequency.

2.2. Test Setup



2.3. EUT Configuration on Measurement

The following equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

2.4. Operating Condition of EUT

- 2.4.1. Setup the EUT as shown in Section 2.2.
- 2.4.2. Turn on the power of all equipments.
- 2.4.3. Let the EUT work in test mode and measure it.



2.5. Test Procedure

The EUT system is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to FCC/OST MP-5 on Conducted Emission Measurement.

The bandwidth of the test receiver (R&S ESCI) is set at 200Hz in 9K~150KHz range and 9KHz in 150K~30MHz range.

The frequency range from 150KHz to 30MHz is checked.

All the test results are listed in Section 2.6.

2.6. Test Results

PASS

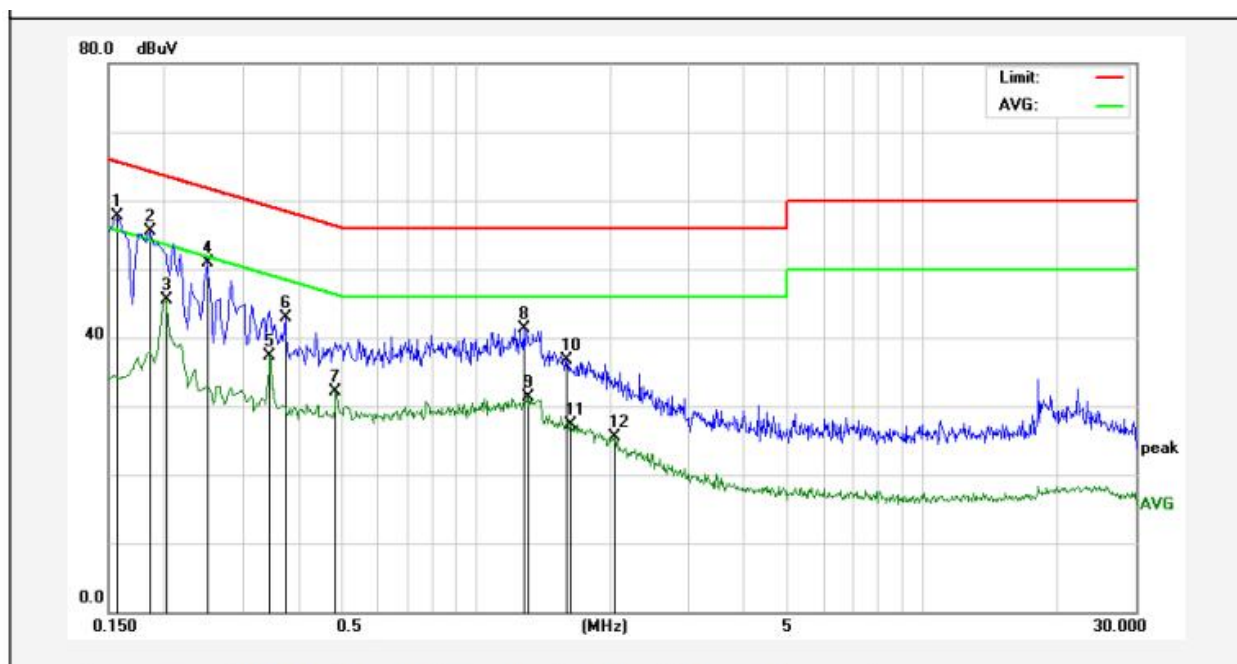
During the test, pre-scan all modes, only the worst case is recorded in the report.

Please to see the following pages



Conducted Emission Test Data

Test Site: 1# Shielded Room
Operating Condition: Mode 1
Test Specification: DC 5V from Adapter input AC 120V/60Hz
Comment: Live Line
Temp.(°C)/Hum.(%RH): 23.9°C/50%RH

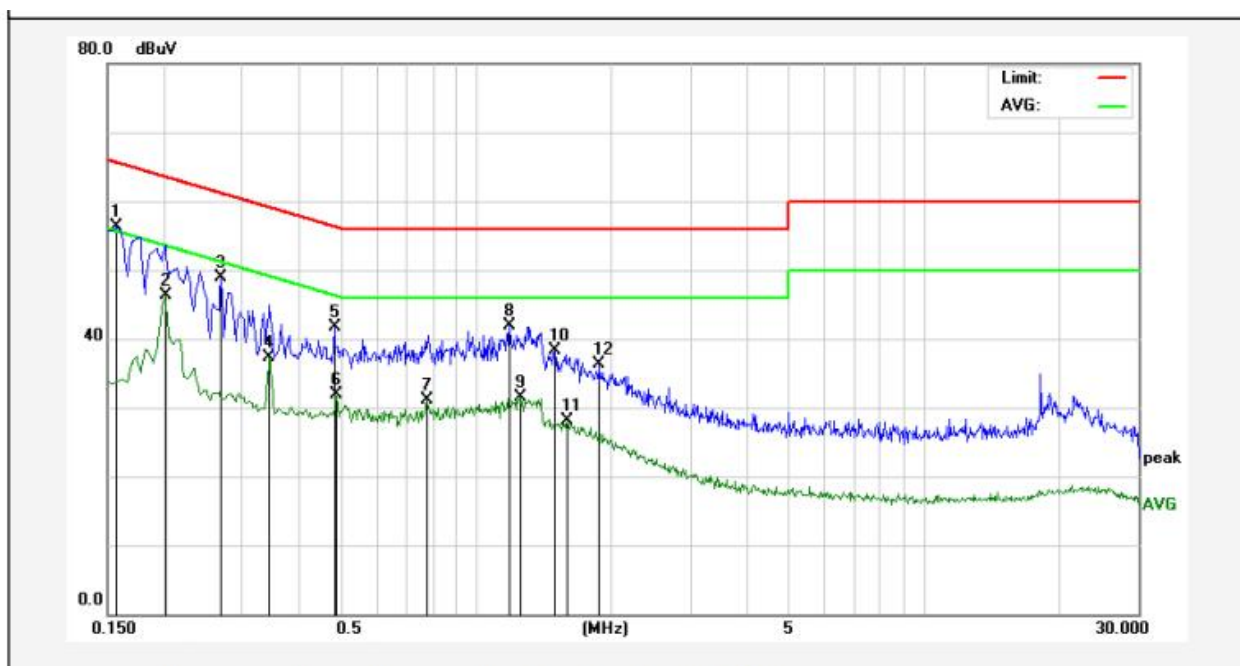


No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	0.1580	39.93	17.83	57.76	65.56	-7.80	QP	
2	0.1860	37.70	17.82	55.52	64.21	-8.69	QP	
3	0.2020	27.66	17.82	45.48	53.52	-8.04	AVG	
4	0.2500	33.18	17.82	51.00	61.75	-10.75	QP	
5	0.3460	19.40	17.83	37.23	49.06	-11.83	AVG	
6	0.3740	25.13	17.82	42.95	58.41	-15.46	QP	
7	0.4860	14.19	17.85	32.04	46.24	-14.20	AVG	
8	1.2820	23.48	17.86	41.34	56.00	-14.66	QP	
9	1.3099	13.39	17.86	31.25	46.00	-14.75	AVG	
10	1.5980	18.88	17.85	36.73	56.00	-19.27	QP	
11	1.6300	9.46	17.85	27.31	46.00	-18.69	AVG	
12	2.0460	7.63	17.85	25.48	46.00	-20.52	AVG	



Conducted Emission Test Data

Test Site: 1# Shielded Room
Operating Condition: Mode 1
Test Specification: DC 5V from Adapter input AC 120V/60Hz
Comment: Neutral Line
Temp.(°C)/Hum.(%RH): 23.9°C/50%RH



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	0.1580	38.44	17.83	56.27	65.56	-9.29	QP	
2	0.2020	28.49	17.82	46.31	53.52	-7.21	AVG	
3	0.2700	31.05	17.84	48.89	61.12	-12.23	QP	
4	0.3460	19.43	17.83	37.26	49.06	-11.80	AVG	
5	0.4820	23.88	17.85	41.73	56.30	-14.57	QP	
6	0.4860	14.03	17.85	31.88	46.24	-14.36	AVG	
7	0.7780	13.28	17.87	31.15	46.00	-14.85	AVG	
8	1.1860	23.99	17.85	41.84	56.00	-14.16	QP	
9	1.2540	13.62	17.86	31.48	46.00	-14.52	AVG	
10	1.4980	20.49	17.85	38.34	56.00	-17.66	QP	
11	1.5980	10.23	17.85	28.08	46.00	-17.92	AVG	
12	1.8820	18.49	17.85	36.34	56.00	-19.66	QP	



3. Radiated Emission Test (Below 30MHz)

3.1. Test Standard and Limit

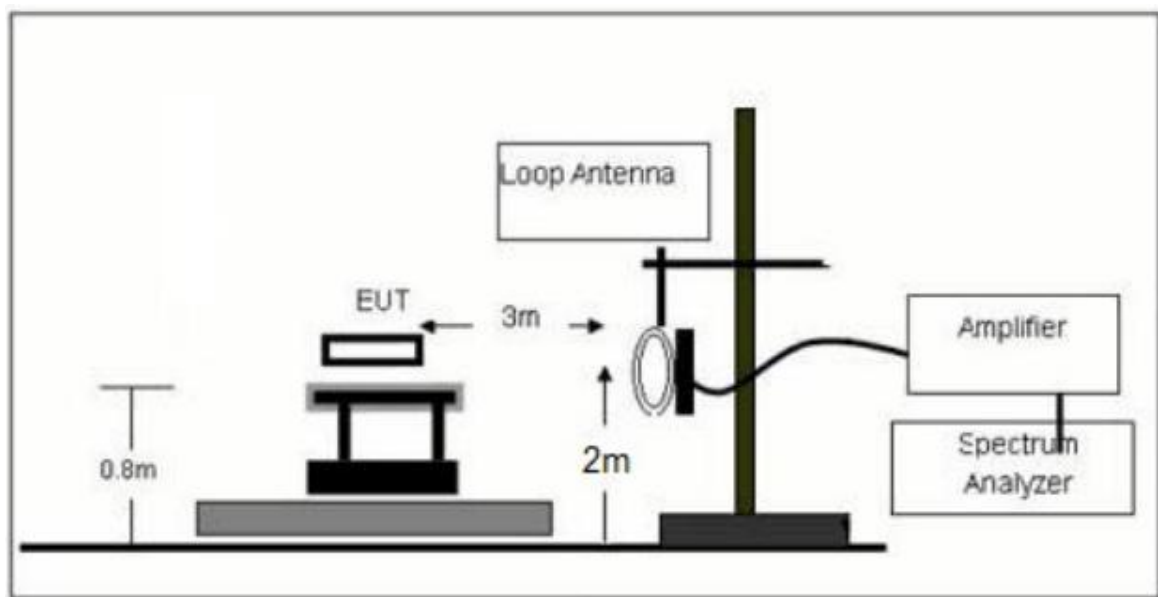
Test Standard	FCC Part 18 Subpart C
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Radiated Emission Test Limit

Equipment	Operating Frequency	RF Power generated by equipment(Watt)	Field strength limit (μV/m)	Distance (meters)
Any type unless otherwise specified (miscellaneous)	Any ISM frequency	Below 500	25	300
		500 or more	$25 \times \text{SQRT}(\text{power}/500)$	300 (Note1)
	Any non-ISM frequency	Below 500	15	300
		500 or more	$15 \times \text{SQRT}(\text{power}/500)$	300 (Note1)

Note: (1) Field strength may not exceed 10 μV/m at 1600 meters. Consumer equipment operating below 1000 MHz is not permitted the increase in field strength otherwise permitted here for power over 500 watts.

3.2. Test Setup



9KHz-30MHz



3.3. EUT Configuration on Measurement

The following equipments are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

3.4. Operating Condition of EUT

- 3.4.1. Setup the EUT as shown in Section 3.2.
- 3.4.2. Turn on the power of all equipments.
- 3.4.3. Let the EUT work in test mode and measure it.

3.5. Test Procedure

For maximizing emissions below 30 MHz, the EUT was rotated through 360°, the centre of the loop antenna was placed 1 meter above the ground, and the antenna polarization was changed. Loop antenna was used as receiving antenna. In order to find the maximum emission, all of the interface cables were manipulated according to FCC OST/MP-5 requirement during radiated test.

The IF bandwidth used to measure the radiation signal strength is 200Hz when it is below 150kHz and 9KHz when it is between 150kHz and 30MHz

The frequency range from 9KHz to 30MHz is checked.

The test results are listed in Section 3.6.

3.6. Test Results

PASS

During the test, pre-scan all modes, only the worst case is recorded in the report.

Please to see the following pages



Test item:	Radiation Test	Polarization:	Coaxial
Standard:	(RE)FCC Part 18 Subpart C	Power Source:	DC 5V from Adapter input AC 120V/60Hz
Distance:	3m	Temp.(°C)/Hum.(%RH):	23.5(°C)/49%RH
Test Frequency:	9KHz-30MHz	Test Mode:	TM1

Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector
0.0117	1.63	20.08	21.71	103.50	-81.79	Peak
0.1380	5.69	20.34	26.03	103.50	-77.47	Peak
0.1750	28.69	20.32	49.01	103.50	-54.49	Peak
0.4628	4.40	20.27	24.68	103.50	-78.82	Peak
1.2906	7.18	20.28	27.46	103.50	-76.04	Peak
4.4076	8.27	20.39	28.66	103.50	-74.84	Peak

Note: Result=Reading+Factor Over Limit=Result-Limit

Test item:	Radiation Test	Polarization:	Coplane
Standard:	(RE)FCC Part 18 Subpart C	Power Source:	DC 5V from Adapter input AC 120V/60Hz
Distance:	3m	Temp.(°C)/Hum.(%RH):	23.5(°C)/49%RH
Test Frequency:	150KHz-30MHz	Test Mode:	TM1

Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector
0.0117	2.59	20.07	22.66	103.50	-80.84	Peak
0.1394	9.69	20.34	30.03	103.50	-73.47	Peak
0.1750	28.59	20.32	48.91	103.50	-54.59	Peak
0.4600	6.19	20.26	26.45	103.50	-77.05	Peak
1.2911	6.79	20.25	27.05	103.50	-76.45	Peak
4.4083	11.59	20.40	32.00	103.50	-71.50	Peak

Note: Result=Reading+Factor Over Limit=Result-Limit



APPENDIX I -- TEST SETUP PHOTOGRAPH

Please refer to separated files Appendix I -- Test Setup Photograph_WPT

APPENDIX II -- EXTERNAL PHOTOGRAPH

Please refer to separated files Appendix II -- External Photograph

APPENDIX III -- INTERNAL PHOTOGRAPH

Please refer to separated files Appendix III -- Internal Photograph

----- End of Report -----

