

FCC TEST REPORT

For

Shenzhen Riding Robot Tech Co., Ltd.

Product Name:	Electric Bicycle
Brand Name:	/
Model Number:	GT54
Prepared For:	Shenzhen Riding Robot Tech Co., Ltd.
Address:	5A-504, Building 2, No.309 Ping'an Avenue, Liang'antian Community, PinghuSub-district, Longgang District,Shenzhen
Prepared By:	Shenzhen SiCT Technology Co., Ltd.
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Report No.:	XK2507007067F

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TEST RESULT CERTIFICATION

Applicant : Shenzhen Riding Robot Tech Co., Ltd.

Address : 5A-504, Building 2, No.309 Ping'an Avenue, Liang'antian Community,
PinghuSub-district, Longgang District,Shenzhen

Manufacturer : Shenzhen Riding Robot Tech Co., Ltd.

Address : 5A-504, Building 2, No.309 Ping'an Avenue, Liang'antian Community,
PinghuSub-district, Longgang District,Shenzhen

EUT : Electric Bicycle

Brand Name: : /

Model Number : GT54

Date of Receipt: : Jul. 02, 2025

Test Date : Jul. 02, 2025 to Jul. 14, 2025

Date of Report : Jul. 15, 2025

Test Result: : The equipment under test was found to be compliance with the
requirements of the standards applied.

Test Procedure Used:

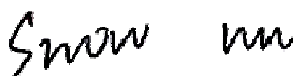
EMI : FCC Rules and Regulations Part 15 Subpart B: 2018

Compiled by:



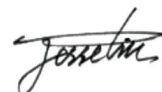
Smile Xu

Reviewed by:



Snow Wu

Approved by:



Jasse Liu/Manager

This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Shenzhen SiCT Technology Co., Ltd.

1. GENERAL INFORMATION

1.1 Description of Device (EUT)

EUT : Electric Bicycle
Brand Name : /
Model Number : GT54
Model Difference : N/A
For adapter: Input:100-240VAC,50/60Hz,2.5A
Power Supply : Output: 54.6V===2A
Bicycle Input: 54.6V===2A,IPX4
Working Frequency : Below 108MHz

Note: GT54 was selected as the test model and the data's have been recorded in this report.

1.2 Tested System Details

None.

1.3 Test Uncertainty

Conducted Emission Uncertainty : $\pm 2.57\text{dB}$

Radiated Emission Uncertainty : $\pm 4.51\text{dB}$

2. TEST INSTRUMENT USED

For Conducted Emission at the mains terminals Test

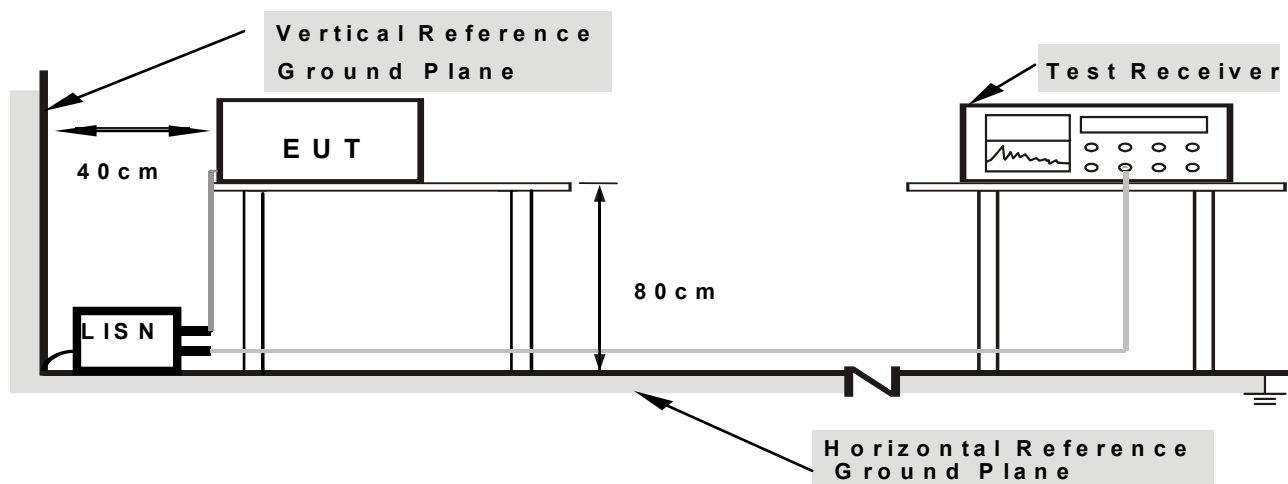
Conducted Emission Test (854 --- site)					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
843 Shielded Room	ChengYu	843 Room	843	Aug. 27, 2021	Aug. 26, 2026
EMI Receiver	R&S	ESCI	101421	Aug. 27, 2024	Aug. 26, 2025
LISN	SCHWARZBECK	NSLK8127	812779	Aug. 27, 2024	Aug. 26, 2025

For Radiated Emission Test

Radiation Emission Test (966 chamber)					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
966 chamber	ChengYu	966 Room	966	Aug. 18, 2021	Aug. 17, 2025
Spectrum Analyzer	Agilent	E4407B	MY45109572	Aug. 27, 2024	Aug. 26, 2025
Amplifier	Schwarzbeck	BBV9743	9743-119	Aug. 27, 2024	Aug. 26, 2025
Amplifier	Schwarzbeck	BBV9718	9718-270	Aug. 27, 2024	Aug. 26, 2025
Log-periodic Antenna	Schwarzbeck	VULB9160	VULB9160-3369	Aug. 27, 2024	Aug. 26, 2025
EMI Receiver	R&S	ESCI	101421	Aug. 27, 2024	Aug. 26, 2025
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1275	Aug. 27, 2024	Aug. 26, 2025
966 Cable 1#	CHENGYU	966	004	Aug. 27, 2024	Aug. 26, 2025
966 Cable 2#	CHENGYU	966	003	Aug. 27, 2024	Aug. 26, 2025

3. CONDUCTED EMISSION AT THE MAINS TERMINALS TEST

3.1 Block Diagram Of Test Setup



Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

3.2 Test Standard

FCC Part 15

3.3 Power Line Conducted Emission Limit

Frequency MHz	Limits dB(μ V)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66 ~ 56*	59 ~ 46*
0.50 ~ 5.00	56	46
5.00 ~ 30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

3.4 EUT Configuration on Test

The following equipment's are installed on conducted emission test to meet FCC Part 15 requirement and operating in a manner which tends to maximize its emission characteristics in a normal application.

3.5 Operating Condition of EUT

- 3.5.1 Setup the EUT and simulators as shown in Section 3.1.
- 3.5.2 Turn on the power of all equipments.
- 3.5.3 Let the EUT work in test modes and test it.

3.6 Test Procedure

The EUT is put on the ground and connected to the AC mains through a Artificial Mains Network (AMN). This provided a 50ohm coupling impedance for the tested equipments. Both sides of AC line are checked to find out the maximum conducted emission levels according to the **FCC Part 15** regulations during conducted emission test.

The bandwidth of the test receiver (R&S Test Receiver ESCI) is set at 10KHz.

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

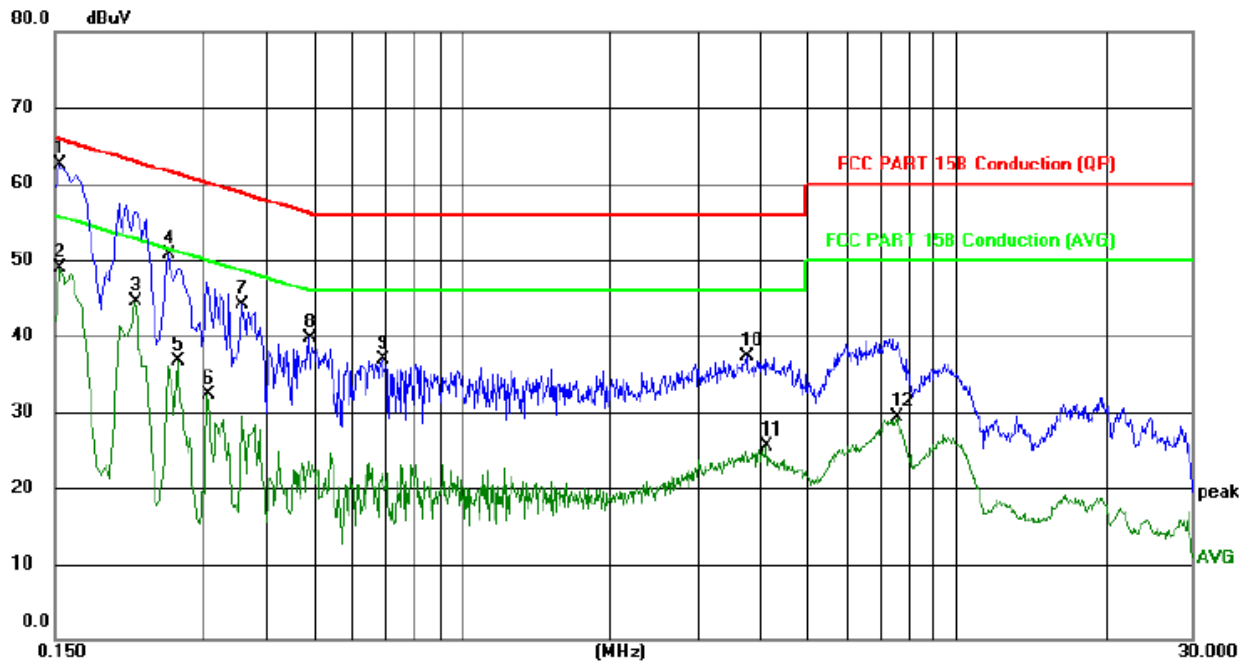
3.7 Test Result

PASS

Please refer to the following page.

Conducted Emission Test Data

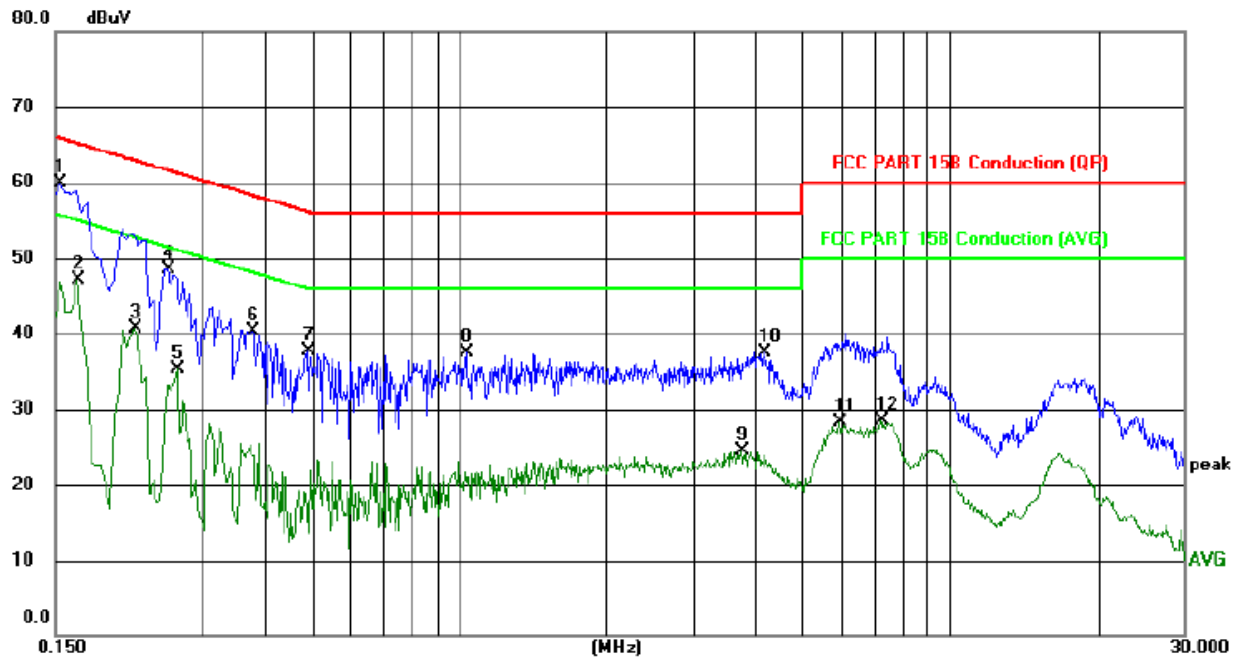
Temperature:	24.5 °C	Relative Humidity:	54%
Pressure:	1009hPa	Phase :	Line
Test Voltage :	AC 120V/60Hz	Test Mode:	ON Mode



No.	Mk.	Freq. MHz	Reading Level dBμV	Correct Factor dB	Measure- ment dBμV	Limit dBμV	Margin dB	Detector	Comment
1	*	0.1539	52.31	10.12	62.43	65.79	-3.36	peak	
2		0.1539	38.81	10.12	48.93	55.79	-6.86	AVG	
3		0.2180	34.42	10.14	44.56	52.89	-8.33	AVG	
4		0.2540	40.60	10.18	50.78	61.63	-10.85	peak	
5		0.2660	26.55	10.19	36.74	51.24	-14.50	AVG	
6		0.3060	22.17	10.22	32.39	50.08	-17.69	AVG	
7		0.3580	33.84	10.26	44.10	58.77	-14.67	peak	
8		0.4900	29.41	10.35	39.76	56.17	-16.41	peak	
9		0.6900	26.42	10.43	36.85	56.00	-19.15	peak	
10		3.7620	26.74	10.64	37.38	56.00	-18.62	peak	
11		4.1220	14.92	10.65	25.57	46.00	-20.43	AVG	
12		7.5900	18.72	10.68	29.40	50.00	-20.60	AVG	

Conducted Emission Test Data

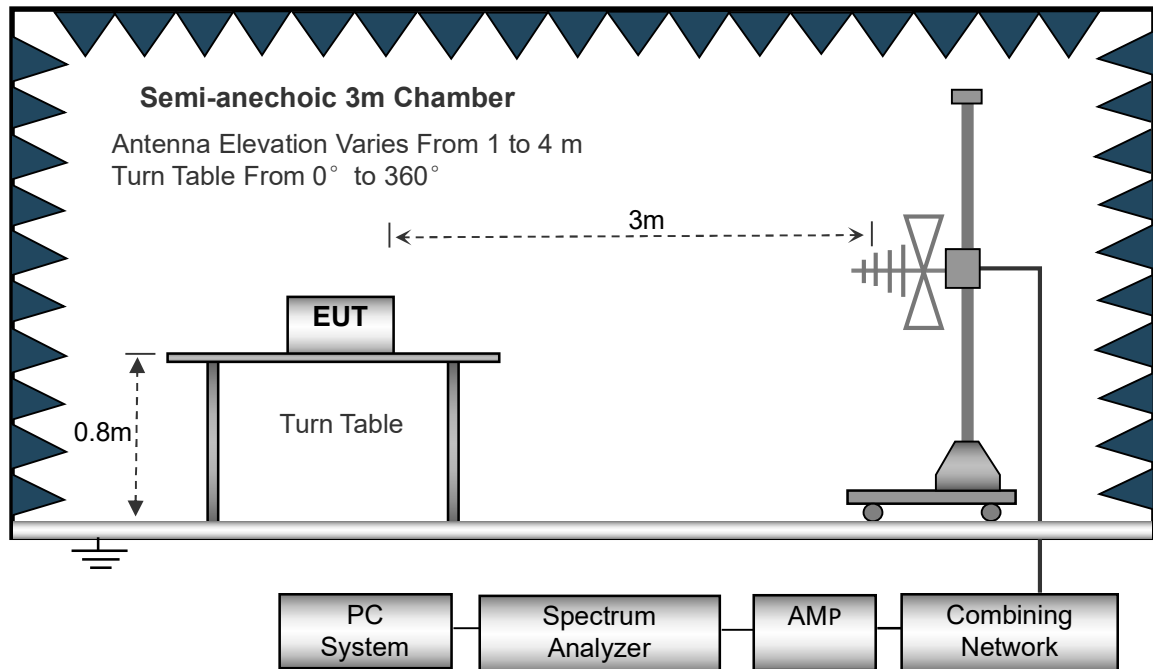
Temperature:	24.5 °C	Relative Humidity:	54%
Pressure:	1009hPa	Phase :	Neutral
Test Voltage :	AC 120V/60Hz	Test Mode:	ON Mode



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	*	0.1540	49.78	10.12	59.90	65.78	-5.88	peak	
2		0.1660	36.90	10.12	47.02	55.16	-8.14	AVG	
3		0.2180	30.62	10.14	40.76	52.89	-12.13	AVG	
4		0.2540	38.38	10.18	48.56	61.63	-13.07	peak	
5		0.2660	25.02	10.19	35.21	51.24	-16.03	AVG	
6		0.3780	30.03	10.28	40.31	58.32	-18.01	peak	
7		0.4900	27.31	10.35	37.66	56.17	-18.51	peak	
8		1.0340	27.06	10.43	37.49	56.00	-18.51	peak	
9		3.7580	13.87	10.64	24.51	46.00	-21.49	AVG	
10		4.1740	26.92	10.65	37.57	56.00	-18.43	peak	
11		5.9340	17.61	10.66	28.27	50.00	-21.73	AVG	
12		7.2260	17.81	10.67	28.48	50.00	-21.52	AVG	

4. RADIATION EMISSION TEST

4.1 Block Diagram of Test Setup



4.2 Test Standard

FCC Part 15

4.3 Radiation Limit

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMITS (dB μ V/m)
30 ~ 88	3	40.0
88 ~ 216	3	43.5
216 ~ 960	3	46.0
960 ~ 1000	3	54.0

Remark:

- (1) Emission level (dB(μ V)/m) = 20 log Emission level (μ V/m)
- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance refers to the distance in meters between the measuring instrument, antenna and the closed point of any part of the device or system.

4.4 EUT Configuration on Test

The FCC Part 15 regulations test method must be used to find the maximum emission during radiated emission test.

The configuration of EUT is the same as used in conducted emission test.

Please refer to Section 2.2.

4.5 Operating Condition of EUT

Same as conducted emission test, which is listed in Section 2.2 except the test set up replaced as Section 4.1.

4.6 Test Procedure

1) The radiated emissions test was conducted in a semi-anechoic chamber.

2) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, but separated from metallic contact with the ground reference plane by 0.1m of insulation.

3) Before final measurements of radiated emissions, a pre-scan was performed in the spectrum mode with the peak detector to find out the maximum emissions spectrum plots of the EUT.

4) The frequencies of maximum emission were determined in the final radiated emissions measurement. At each frequency, the EUT was rotated 360°, and the antenna was raised and lowered from 1 to 4 meters in order to determine the maximum disturbance. Measurements were performed for both horizontal and vertical antenna polarization.

5) The bandwidth setting on the field strength meter (R&S Test Receiver ESCI) is set at 120KHz.

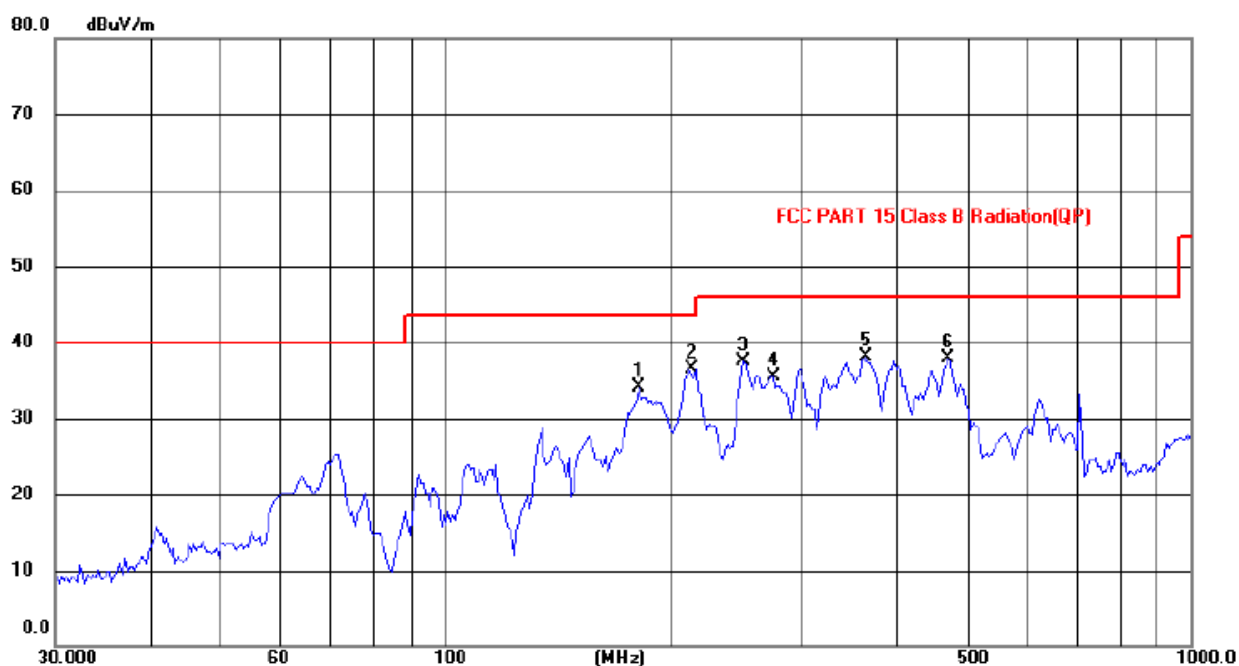
6) The frequency range from 30MHz to 1000MHz is checked.

4.7 Test Result

PASS

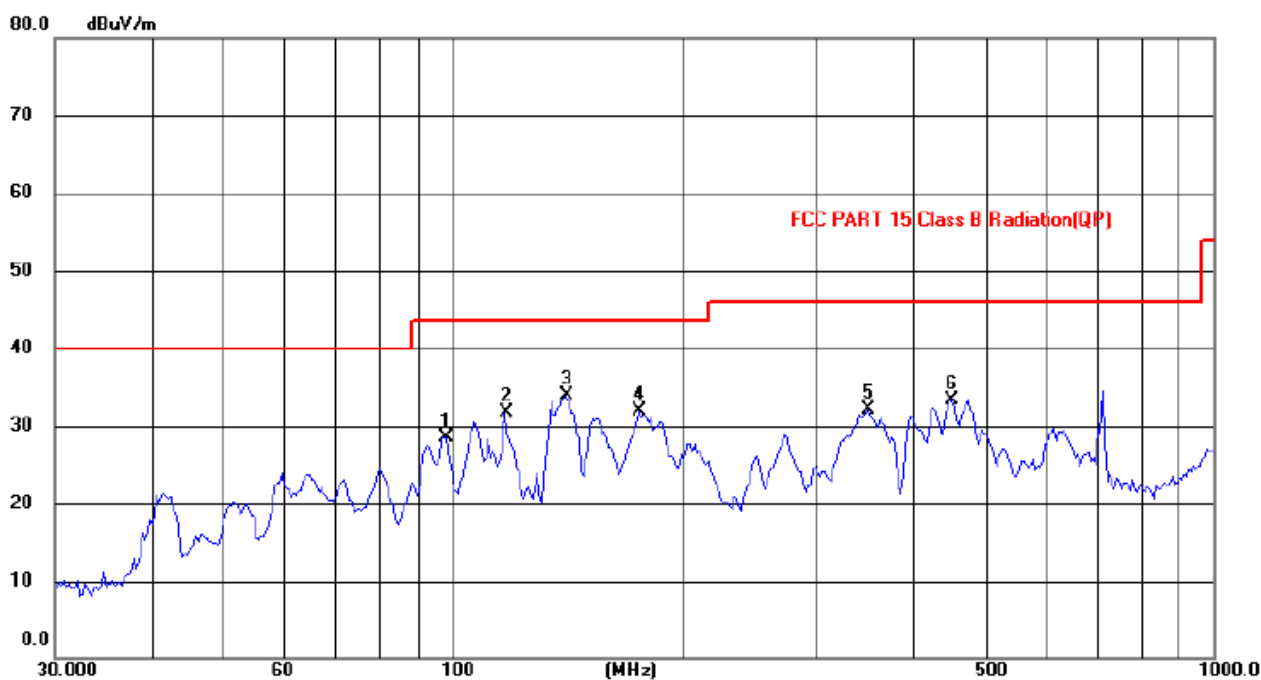
Please refer to the following page.

Radiation Emission Test Data			
Temperature:	24.5 °C	Relative Humidity:	54%
Pressure:	1009hPa	Phase :	Horizontal
Test Voltage :	AC 120V/60Hz	Test Mode:	ON Mode



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree degree	Comment
1		181.9202	50.68	-16.56	34.12	43.50	-9.38	peak		
2	*	212.2695	51.36	-14.79	36.57	43.50	-6.93	peak		
3		251.1804	51.84	-14.25	37.59	46.00	-8.41	peak		
4		273.2341	49.22	-13.66	35.56	46.00	-10.44	peak		
5		366.8231	50.42	-12.32	38.10	46.00	-7.90	peak		
6		472.1760	48.67	-10.82	37.85	46.00	-8.15	peak		

Radiation Emission Test Data			
Temperature:	24.5 °C	Relative Humidity:	54%
Pressure:	1009hPa	Phase :	Vertical
Test Voltage :	AC 120V/60Hz	Test Mode:	ON Mode



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		97.4560	44.04	-15.50	28.54	43.50	-14.96	peak		
2		116.9495	47.41	-15.79	31.62	43.50	-11.88	peak		
3	*	140.3421	51.93	-17.94	33.99	43.50	-9.51	peak		
4		175.6516	48.83	-16.95	31.88	43.50	-11.62	peak		
5		351.7079	44.70	-12.56	32.14	46.00	-13.86	peak		
6		452.7197	44.47	-11.17	33.30	46.00	-12.70	peak		

5 EUT Photographs

EUT view ☒ Whole ☐ Rear ☐ Right ☐ Left ☐ Top ☐ Bottom ☐ Internal	
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EUT view ☒ Whole ☐ Rear ☐ Right ☐ Left ☐ Top ☐ Bottom ☐ Internal	
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EUT view ☒ Whole ☐ Rear ☐ Right ☐ Left ☐ Top ☐ Bottom ☐ Internal	
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EUT view ☐ Whole ☒ Port ☐ Right ☐ Left ☐ Top ☐ Bottom ☐ Internal	
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***** END OF REPORT *****