FCC Test Report

Applicant	:	**PROSOMNUS SLEEP TECHNOLOGIES, INC.**
Address	:	**5675 Gibraltar Drive, Pleasanton, California 94588, United States**
Product Name	:	**ProSomnus RPMO2 Charging Station**
Report Date	:	**Oct. 31, 2024**

Shenzhen Anbotek Compliance Laboratory Limited

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TEST REPORT

Applicant	:	PROSOMNUS SLEEP TECHNOLOGIES, INC.
Manufacturer	:	PROSOMNUS SLEEP TECHNOLOGIES, INC.
Product Name	:	ProSomnus RPMO2 Charging Station
Model No.	:	$RPMO_2$ Oximeter
Trade Mark	:	ProSomnus $RPMO_2$ Charging Station
Rating(s)	:	Charging Station input: 5V⎓ 1A Output: 0.065W
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: Aug. 23, 2024

Date of Test: Aug. 23, 2024 to Sept. 05, 2024

Prepared By: Nian xiu Chen

(Nianxiu Chen)

Approved & Authorized Signer: KingKong Jin

(KingKong Jin)

Revision History

Report Version	Description	Issued Date
R00	Original Issue.	Oct. 31, 2024

1. General Information

1.1. Client Information

Applicant	:	PROSOMNUS SLEEP TECHNOLOGIES, INC.
Address	:	5675 Gibraltar Drive, Pleasanton, California 94588, United States
Manufacturer	:	PROSOMNUS SLEEP TECHNOLOGIES, INC.
Address	:	5675 Gibraltar Drive, Pleasanton, California 94588, United States
Factory	:	Hangzhou Sleepon Technology Co., Ltd
Address	:	Room 1125, 11th Floor, Building 2, No. 368, Xiangwang Street, Wuchang Street, Yuhang District, Hangzhou, China

1.2. Description of Device (EUT)

Product Name	:	ProSomnus RPMO2 Charging Station
Model No.	:	$RPMO_2$ Oximeter
Trade Mark	:	ProSomnus $RPMO_2$ Charging Station
Test Power Supply	:	DC 5V from adapter input AC 120V/60Hz
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(Engineering Sample)
Adapter	:	N/A
RF Specification		
Operation Frequency	:	13.56MHz
Modulation Type	:	FSK
Antenna Type	:	FPC 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.
Xiaomi 33W adapter	Xiaomi	MDY-11-EX	SA62212LA04358J
ProSomnus RPMO2 Oximeter Device	PROSOMNUS SLEEP TECHNOLOGIES, INC.	$RPMO_2$ Oximeter	/

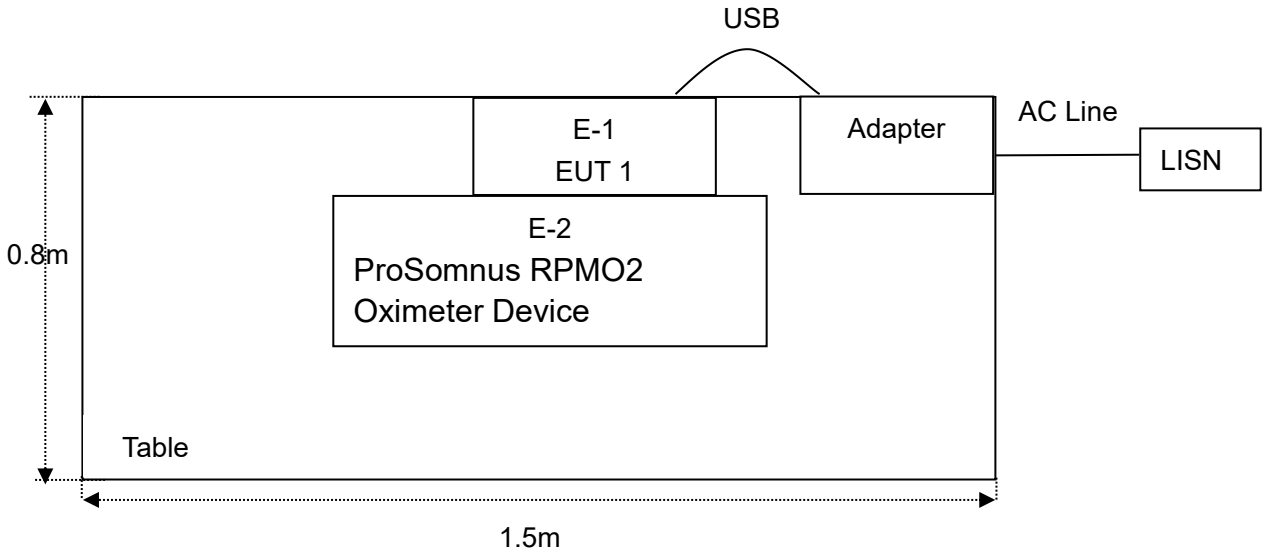
1.4. Description of Test Modes

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.

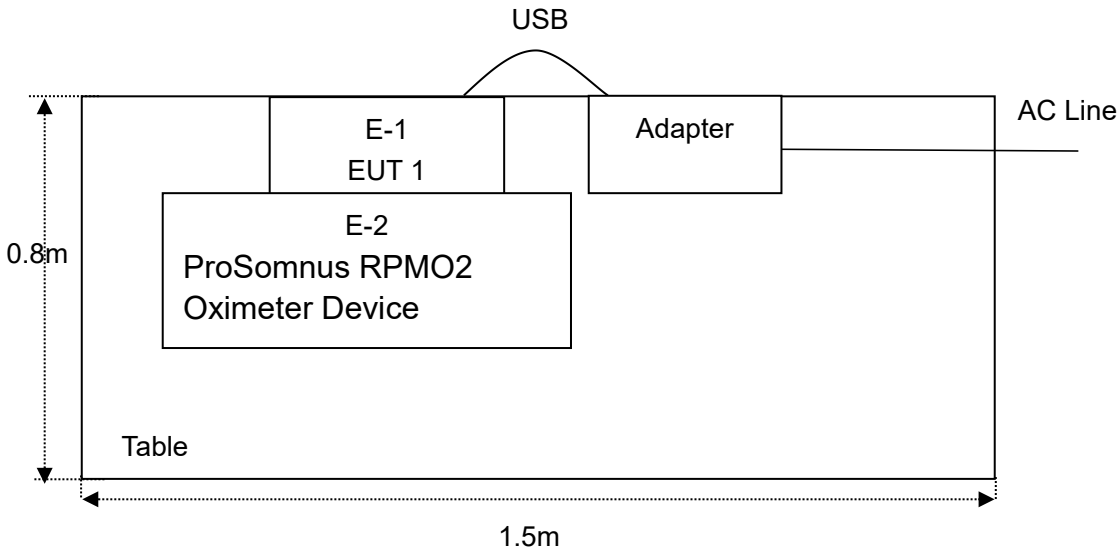
Pretest Modes	Descriptions
TM1	WPT Energy transmission

1.5. Description Of Test Setup

CE



RE



1.5. Test Summary

Standard Section	Test Items	Test Mode	Status
§18.307 (b)	Power Line Conducted Emission Test (150KHz To 30MHz)	Mode 1	P
§18.305 (b)	Radiation Spurious Emission Test	Mode 1	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	2024-01-18	2025-01-17
2.	Three Phase V-type Artificial Power Network	CYBERTEK	EM5040DT	E215040DT001	2024-01-17	2025-01-16
3.	Software Name EZ-EMC	Farad Technology	ANB-03A	N/A	/	/
4.	EMI Test Receiver	Rohde & Schwarz	ESPI3	100926	2023-10-12	2024-10-11

Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1.	EMI Test Receiver	Rohde & Schwarz	ESR26	101481	2024-01-23	2025-01-22
2.	Pre-amplifier	SONOMA	310N	186860	2024-01-17	2025-01-16
3.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	345	2022-10-23	2025-10-22
4.	Software Name EZ-EMC	Farad Technology	ANB-03A	N/A	/	/
5.	Loop Antenna	Schwarzbeck	FMZB1519B	00053	2023-10-12	2024-10-11

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

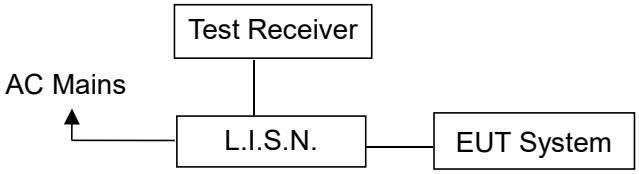
2.1. Test Standard and Limit

Test Standard	FCC Part 18 Subpart C

Power Line Conducted Emission Measurement Limits (All Induction cooking ranges and ultrasonic equipment:)

	Frequency of emission (MHz)	Conducted limit (dBμV)	
		Quasi-peak Level	Average Level
Test Limit	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.

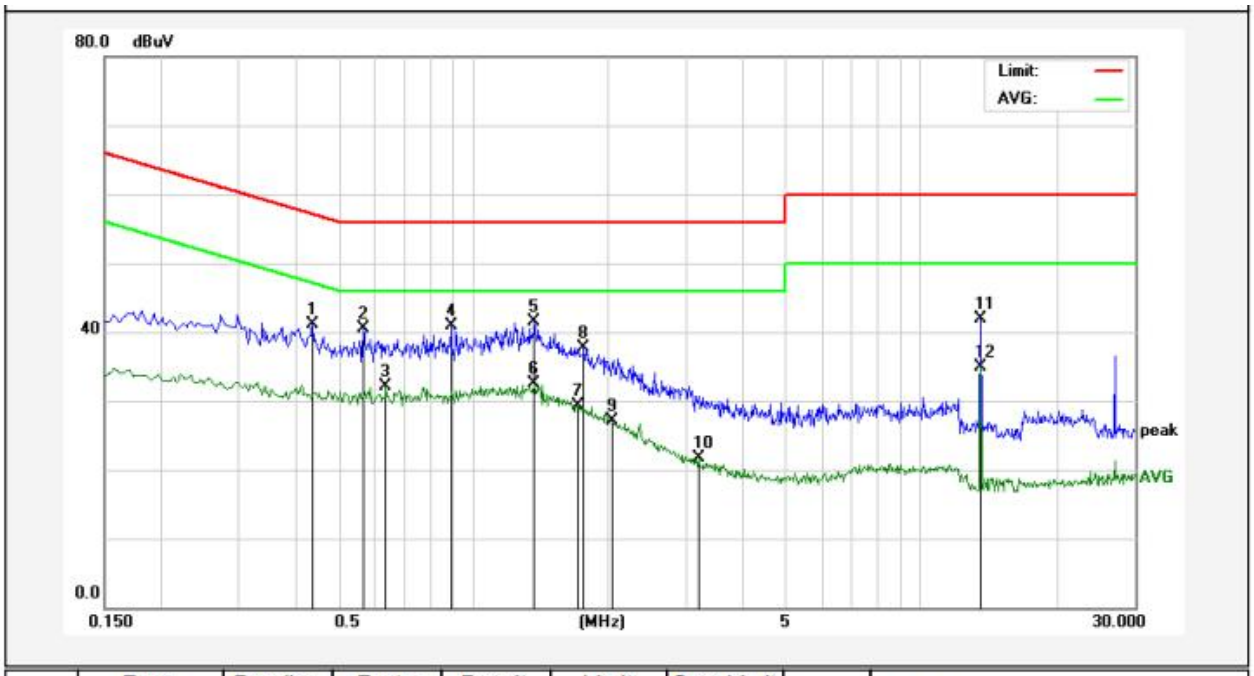
2.6. Test Results

PASS

The test curves are shown in the following pages.

Conducted Emission Test Data

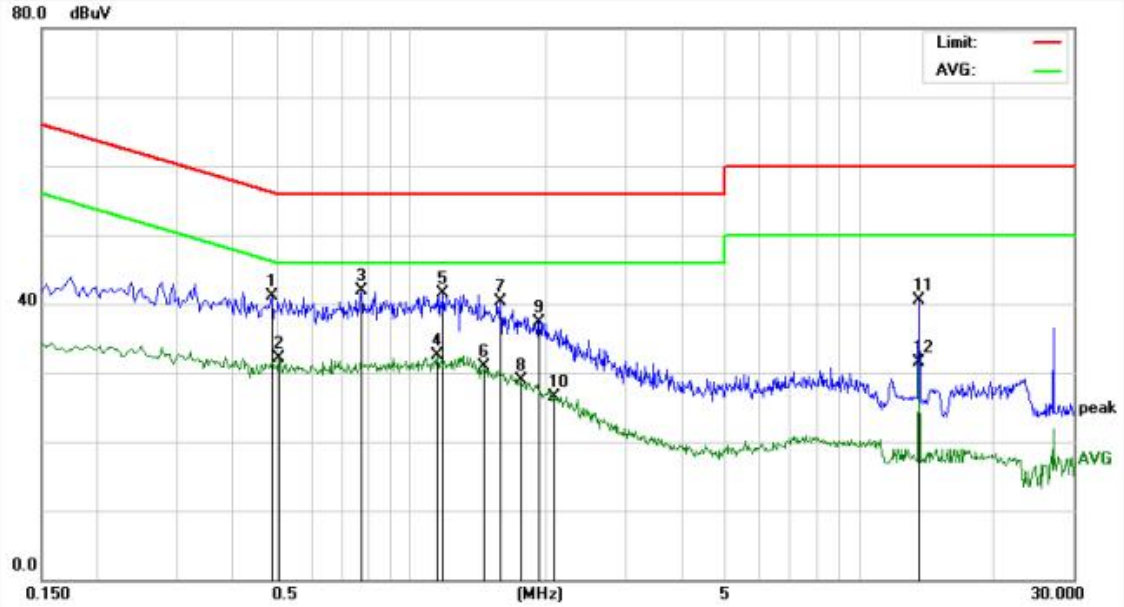
Test Site: 1# Shielded Room
Operating Condition: Mode 1
Test Specification: DC 5V from Adapter input AC 120V/60Hz
Comment: Live Line
Temp.(℃)/Hum.(%RH): 23.9℃/50%RH



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	0.4380	23.20	17.83	41.03	57.10	-16.07	QP	
2	0.5700	22.55	17.86	40.41	56.00	-15.59	QP	
3	0.6380	14.14	17.87	32.01	46.00	-13.99	AVG	
4	0.8900	23.05	17.86	40.91	56.00	-15.09	QP	
5	1.3700	23.70	17.86	41.56	56.00	-14.44	QP	
6	1.3700	14.72	17.86	32.58	46.00	-13.42	AVG	
7	1.7020	11.37	17.85	29.22	46.00	-16.78	AVG	
8	1.7700	19.80	17.86	37.66	56.00	-18.34	QP	
9	2.0300	9.31	17.85	27.16	46.00	-18.84	AVG	
10	3.1820	3.92	17.85	21.77	46.00	-24.23	AVG	
11	13.5619	23.76	18.10	41.86	60.00	-18.14	QP	
12	13.5619	16.85	18.10	34.95	50.00	-15.05	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.(℃)/Hum.(%RH): 23.9℃/50%RH



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	0.4900	23.18	17.86	41.04	56.17	-15.13	QP	
2	0.5100	14.31	17.86	32.17	46.00	-13.83	AVG	
3	0.7780	24.04	17.87	41.91	56.00	-14.09	QP	
4	1.1420	14.72	17.86	32.58	46.00	-13.42	AVG	
5	1.1820	23.63	17.85	41.48	56.00	-14.52	QP	
6	1.4620	13.14	17.86	31.00	46.00	-15.00	AVG	
7	1.5900	22.38	17.85	40.23	56.00	-15.77	QP	
8	1.7660	11.13	17.86	28.99	46.00	-17.01	AVG	
9	1.9340	19.47	17.85	37.32	56.00	-18.68	QP	
10	2.0820	8.68	17.85	26.53	46.00	-19.47	AVG	
11	13.5619	22.34	18.10	40.44	60.00	-19.56	QP	
12	13.5619	13.46	18.10	31.56	50.00	-18.44	AVG	

3. Radiation Spurious Emission Test

3.1. Test Standard and Limit

Test Standard	FCC Part 18 Subpart C

Radiated Emission Test Limit

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

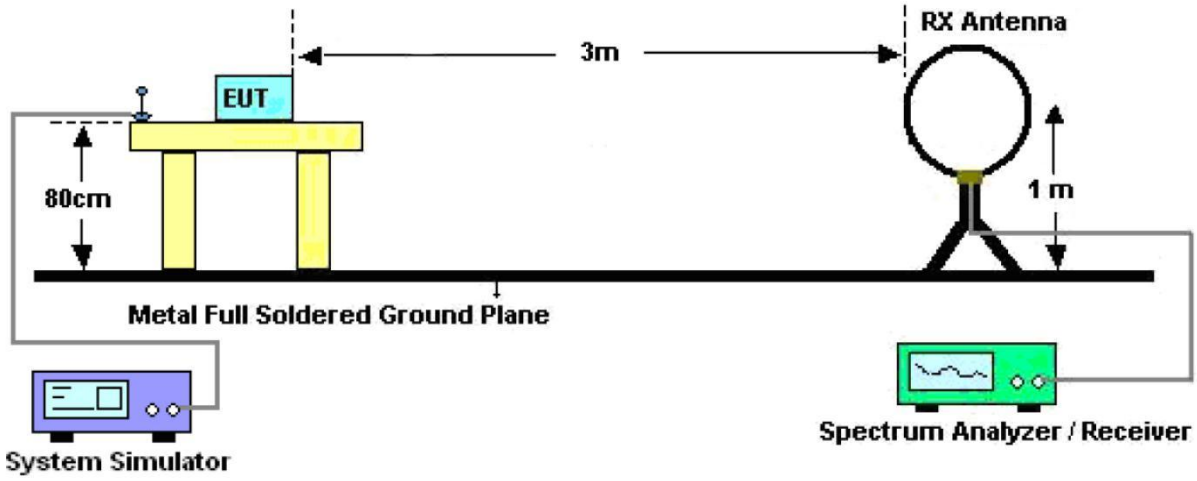


Figure 1. Below 30MHz

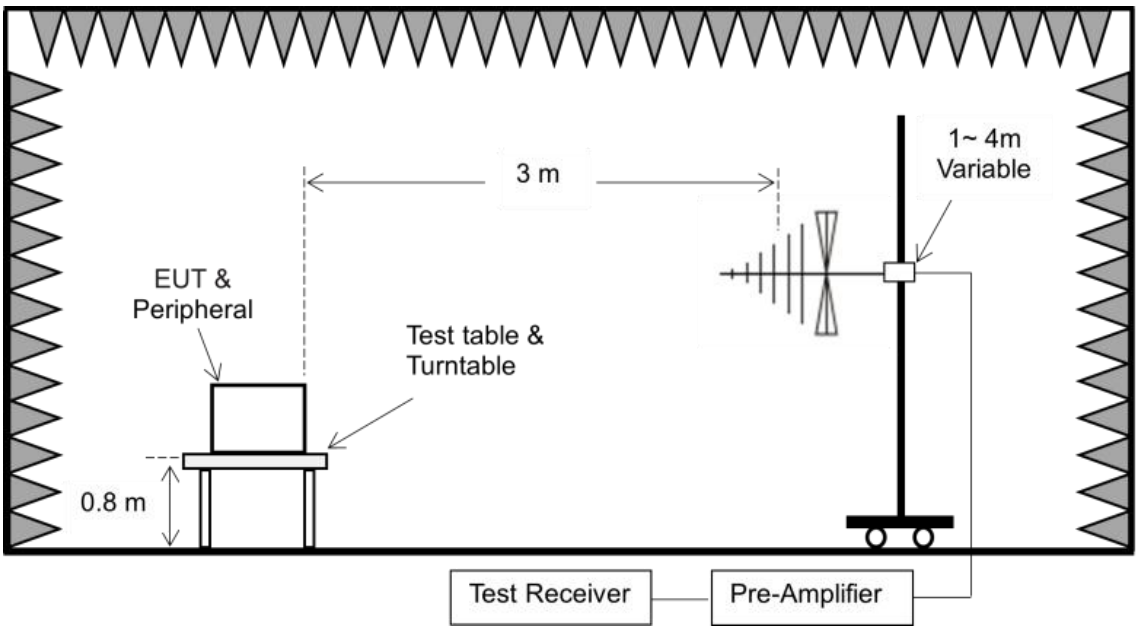


Figure 2. 30MHz to 1GHz

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 below 1GHz: The EUT is placed on a turntable, which is 0.8m above the ground plane.
The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Rotated the EUT through three orthogonal axes to determine the maximum emissions, both horizontal and vertical polarization of the antenna are set on test. The EUT is tested in 9*6*6 Chamber. The device is evaluated in xyz orientation.

For 9kHz to 150kHz, Set the spectrum analyzer as:
RBW = 200Hz, VBW =1kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

For 150kHz to 30MHz, Set the spectrum analyzer as:
RBW = 9KHz, VBW =30kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

For 30MHz to 1000MHz, Set the spectrum analyzer as:
RBW = 100kHz, VBW =300kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple

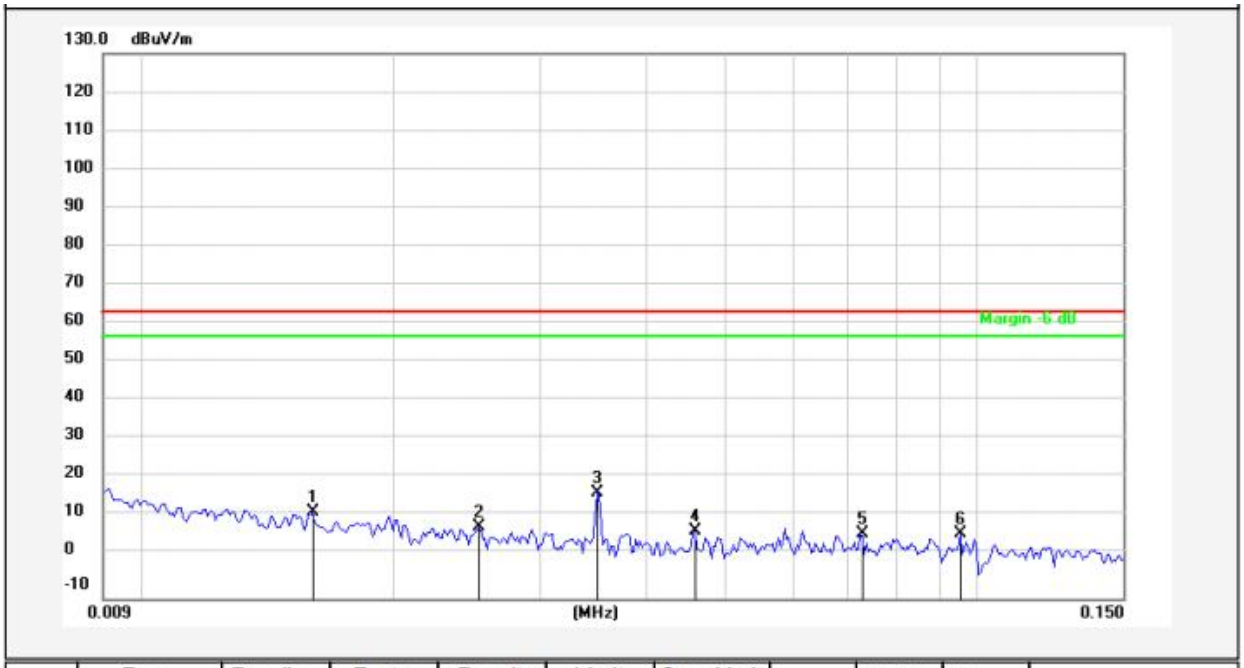
3.6. Test Results

PASS

The test curves are shown in the following pages.

Test Results (Between 9KHz – 150KHz)

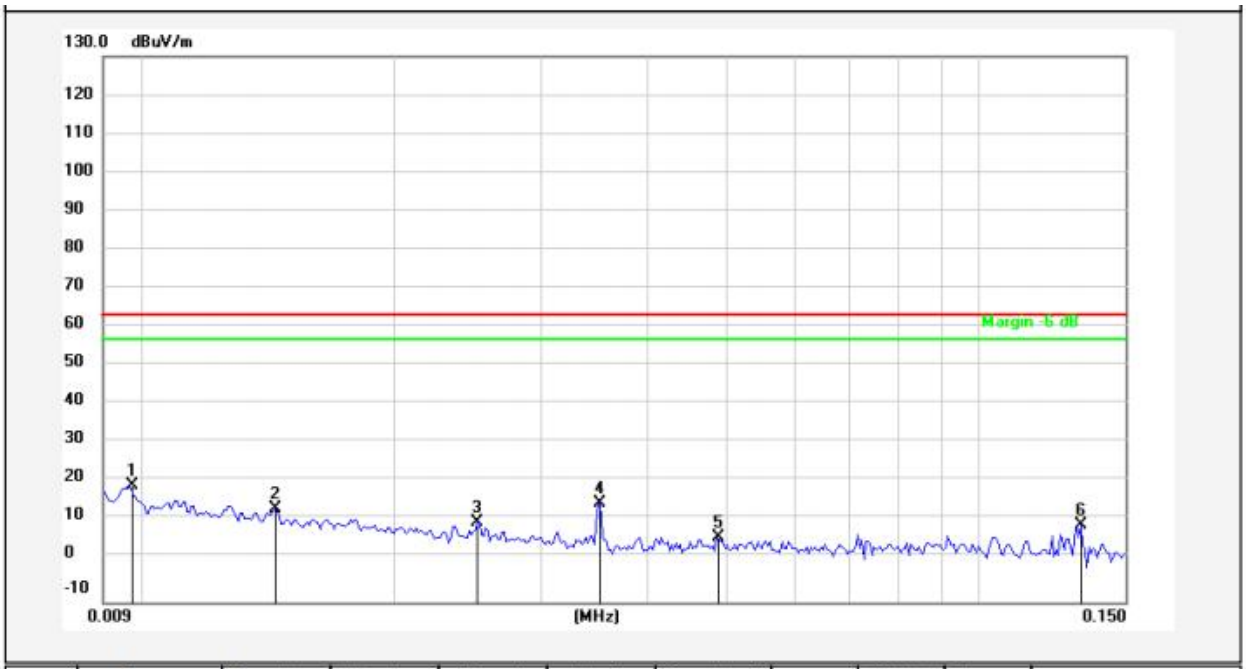
Test item:	**Radiation Test**	**Polarization:**	**X**
Standard:	**(RE)FCC Part 18 Subpart C**	**Power Source:**	**DC 5V from Adapter input AC 120V/60Hz**
Distance:	**3m**	**Temp.(℃)/Hum.(%RH):**	**25.1(℃)/54%RH**
Test Frequency:	**9KHz-150KHz**		



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	0.0160	-8.20	20.30	12.10	63.50	-51.40	QP			
2	0.0253	-11.97	20.38	8.41	63.50	-55.09	QP			
3	0.0351	-3.36	20.49	17.13	63.50	-46.37	QP			
4	0.0460	-12.99	20.46	7.47	63.50	-56.03	QP			
5	0.0726	-13.61	20.37	6.76	63.50	-56.74	QP			
6	0.0956	-13.76	20.29	6.53	63.50	-56.97	QP			

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

Test item:	**Radiation Test**	**Polarization:**	**Y**
Standard:	**(RE)FCC Part 18 Subpart C**	**Power Source:**	**DC 5V from Adapter input AC 120V/60Hz**
Distance:	**3m**	**Temp.(℃)/Hum.(%RH):**	**25.1(℃)/54%RH**
Test Frequency:	**9KHz-150KHz**		

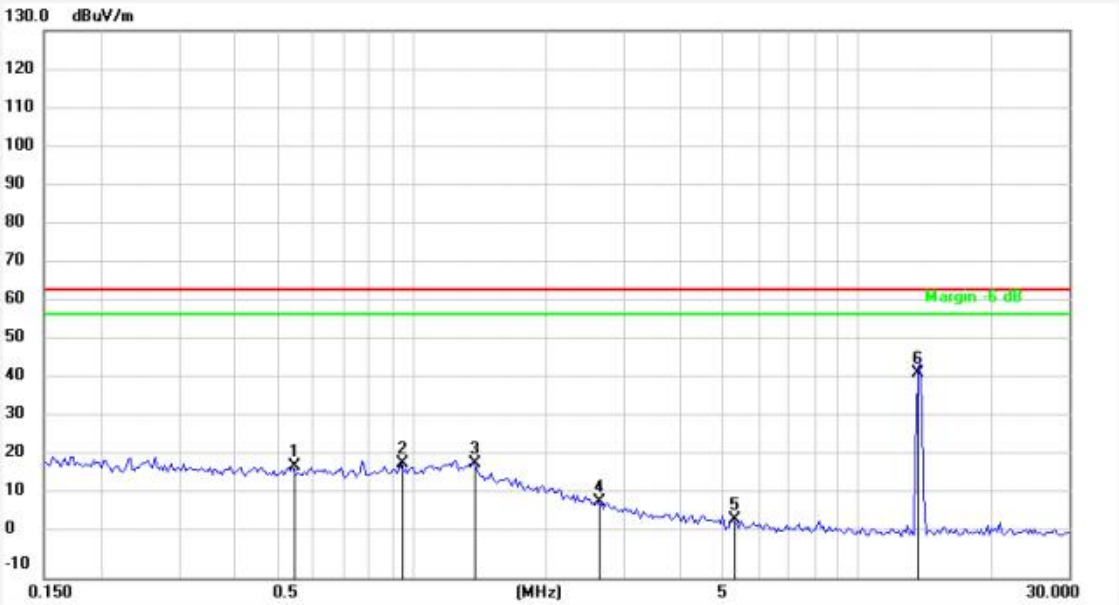


No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	0.0097	-0.22	20.10	19.88	63.50	-43.62	QP			
2	0.0144	-6.25	20.23	13.98	63.50	-49.52	QP			
3	0.0252	-9.92	20.38	10.46	63.50	-53.04	QP			
4	0.0353	-5.22	20.47	15.25	63.50	-48.25	QP			
5	0.0487	-13.66	20.42	6.76	63.50	-56.74	QP			
6	0.1324	-10.72	20.34	9.62	63.50	-53.88	QP			

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

Test Results (Between 0.15MHz – 30MHz)

Test item:	**Radiation Test**	**Polarization:**	**X**
Standard:	**(RE)FCC Part 18 Subpart C**	**Power Source:**	**DC 5V from Adapter input AC 120V/60Hz**
Distance:	**3m**	**Temp.(℃)/Hum.(%RH):**	**25.1(℃)/54%RH**
Test Frequency:	**150KHz-30MHz**		



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	0.5407	-1.87	20.27	18.40	63.50	-45.10	QP			
2	0.9481	-1.12	20.26	19.14	63.50	-44.36	QP			
3	1.3738	-1.00	20.26	19.26	63.50	-44.24	QP			
4	2.6221	-10.74	20.29	9.55	63.50	-53.95	QP			
5	5.2770	-15.48	20.40	4.92	63.50	-58.58	QP			
6	13.5600	21.75	20.53	42.28	63.50	-21.22	QP			

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

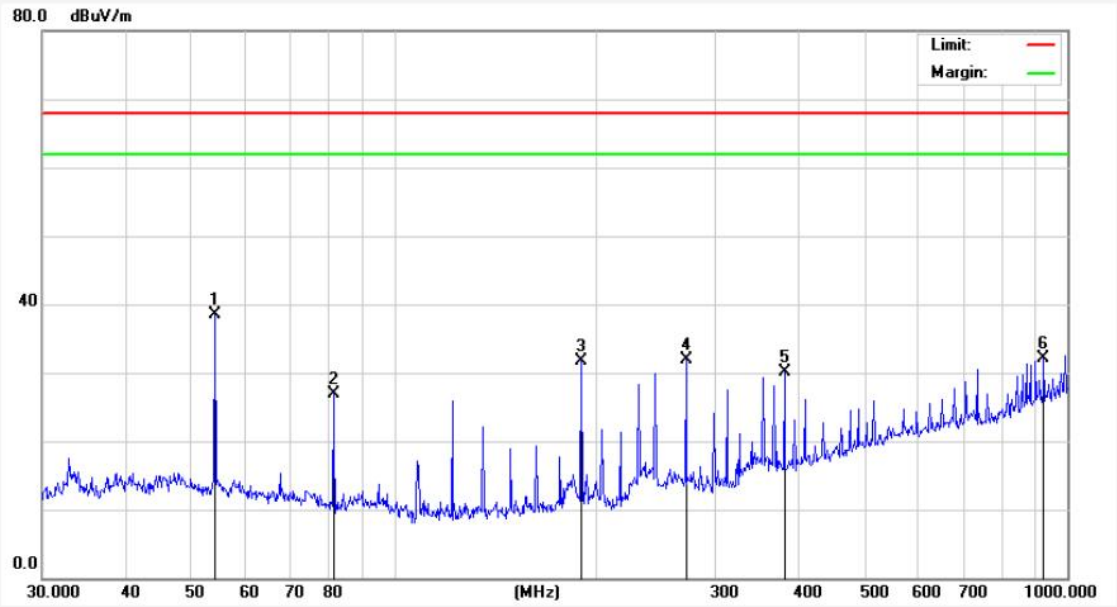
Test item:	**Radiation Test**	**Polarization:**	**Y**
Standard:	**(RE)FCC Part 18 Subpart C**	**Power Source:**	**DC 5V from Adapter input AC 120V/60Hz**
Distance:	**3m**	**Temp.(℃)/Hum.(%RH):**	**25.1(℃)/54%RH**
Test Frequency：	**150KHz-30MHz**		

No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	0.3465	-0.52	20.29	19.77	63.50	-43.73	QP			
2	0.7752	-1.18	20.25	19.07	63.50	-44.43	QP			
3	1.2226	-1.67	20.26	18.59	63.50	-44.91	QP			
4	2.1898	-8.47	20.28	11.81	63.50	-51.69	QP			
5	4.3606	-15.16	20.39	5.23	63.50	-58.27	QP			
6	13.5600	25.94	20.53	46.47	63.50	-17.03	QP			

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

Test Results (Between 30MHz –1000 MHz)

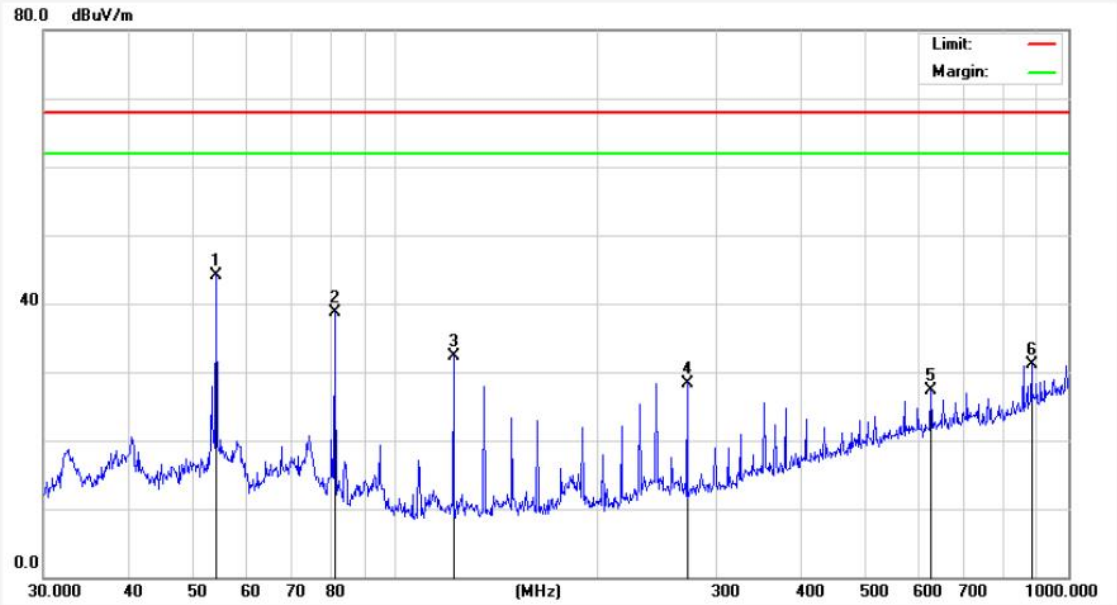
Test item:	**Radiation Test**	**Polarization:**	**Horizontal**
Standard:	**(RE)FCC Part 18 Subpart C**	**Power Source:**	**DC 5V from Adapter input AC 120V/60Hz**
Distance:	**3m**	**Temp.(℃)/Hum.(%RH):**	**25.1(℃)/54%RH**
Test Frequency:	**30MHz ~ 1000MHz**		



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	54.2610	54.59	-16.06	38.53	67.95	-29.42	QP			
2	81.2117	46.80	-19.85	26.95	67.95	-41.00	QP			
3	189.7385	52.73	-21.09	31.64	67.95	-36.31	QP			
4	271.3246	50.64	-18.68	31.96	67.95	-35.99	QP			
5	379.9141	44.73	-14.66	30.07	67.95	-37.88	QP			
6	922.5157	38.00	-5.96	32.04	67.95	-35.91	QP			

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

Test item:	**Radiation Test**	**Polarization:**	**Vertical**
Standard:	**(RE)FCC Part 18 Subpart C**	**Power Source:**	**DC 5V from Adapter input AC 120V/60Hz**
Distance:	**3m**	**Temp.(℃)/Hum.(%RH):**	**25.1(℃)/54%RH**
Test Frequency:	**30MHz ~ 1000MHz**		



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	54.2610	61.47	-17.35	44.12	67.95	-23.83	QP			
2	81.2117	57.85	-19.12	38.73	67.95	-29.22	QP			
3	121.9755	52.48	-20.23	32.25	67.95	-35.70	QP			
4	271.3246	45.56	-17.22	28.34	67.95	-39.61	QP			
5	625.0780	37.89	-10.60	27.29	67.95	-40.66	QP			
6	881.4067	37.70	-6.68	31.02	67.95	-36.93	QP			

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 ----------