



TEST REPORT

Reference No...... : WTH25H12332361E
Applicant..... : Shenzhen Meilan Technology Co., Ltd.
Address..... : Room 501, Building 2, Hongji Road No. 20, Jiangnan Handbag Products Industrial Zone, Longxin Community, Longgang District, Shenzhen City
Manufacturer..... : Shenzhen Meilan Technology Co., Ltd.
Address..... : Room 501, Building 2, Hongji Road No. 20, Jiangnan Handbag Products Industrial Zone, Longxin Community, Longgang District, Shenzhen City
Product Name..... : Neck massager
Model No...... : F12
Test specification..... : FCC CFR 47 Part 15 Subpart B
Date of Receipt sample..... : 2025-12-15
Date of Test..... : 2025-12-15 to 2025-12-16
Date of Issue..... : 2025-12-18
Test Report Form No...... : TRF FCC CFR 47 Part 15 Subpart B-EMC -001-V01
Test Result..... : Pass

Prepared By:

Waltek Testing Group HCT (Shenzhen) Co., Ltd.

Address: Building B, Tianji Industrial Park, 1/F. & 2/F. & 3/F., No 30-9, Laiyin Road, Xinsheng Community, Longgang Subdistrict, Longgang District, Shenzhen, Guangdong, China
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Prepared by:

SnowZeng

Approved by:



Tony Wu



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1- GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

Client Information

Applicant:	Shenzhen Meilan Technology Co., Ltd.
Address of applicant:	Room 501, Building 2, Hongji Road No. 20, Jiangnan Handbag Products Industrial Zone, Longxin Community, Longgang District, Shenzhen City
Manufacturer:	Shenzhen Meilan Technology Co., Ltd.
Address of manufacturer:	Room 501, Building 2, Hongji Road No. 20, Jiangnan Handbag Products Industrial Zone, Longxin Community, Longgang District, Shenzhen City

General Description of E.U.T

EUT Name:	Neck massager
Trade Mark:	N/A
Model No.:	F12
Operating Mode.:	Mode1: Charging mode Mode2: Working mode
Power Supply:	Input: DC 5V 0.6A 3W
Product Class:	☐ Class A, apply to Class A limits ☒ Class B, apply to Class B limits

Remark:

* The test data gathered are from the production sample provided by the manufacturer.



1.2 Test Standards

The following Declaration of Conformity report of EUT is prepared in accordance with

FCC PART15 Subpart B

This test report based on the Electromagnetic Interference (EMI) tests performed on the EUT. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4: 2014 +A1: 2017.

The tests were performed in order to determine compliance with FCC Part 15, Subpart B, section 15.107 and section 15.109 rules.

The objective of the manufacturer is to demonstrate compliance with the described standards above.

1.3 Test Summary

Table 1:

Standard	Test Items	Status
FCC Part 15:2017 15.107	Conducted Emission (150KHz to 30MHz)	☒
FCC Part 15:2017 15.109	Radiation Emission (30MHz to 1000MHz)	☒
FCC Part 15:2017 15.109	Radiation Emission (1000MHz to 6000MHz)	☐ (1)

Note: ☒ Indicates that the test is applicable, ☐ Indicates that the test is not applicable
(1) The Highest Internal Frequency Source of EUT is less than 108MHz.

1.4 Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4: 2014 +A1: 2017, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz. Radiated testing was performed at an antenna to EUT distance 3 meters.

1.5 Test Facility

All measurement required was performed at Waltek Testing Group HCT (Shenzhen) Co., Ltd. at Building B, Tianji Industrial Park, 1/F. & 2/F. & 3/F., No.30-9, Laiyin Road, Xinsheng Community, Longgang Subdistrict, Longgang District, Shenzhen, Guangdong, China

1.6 Version

Report No	Date of Issue	Description	Approved
WTH25H12332361E	2025-12-18	Original	Valid



2- SYSTEM TEST CONFIGURATION

2.1 Justification

The system was configured for testing in a typical fashion (as normally used by a typical user).

2.2 EUT Exercise Software

The EUT exercising program used during radiated and conducted testing was designed to exercise the various system components in a manner similar to a typical use. The software offered by manufacture, can let the EUT being normal operation.

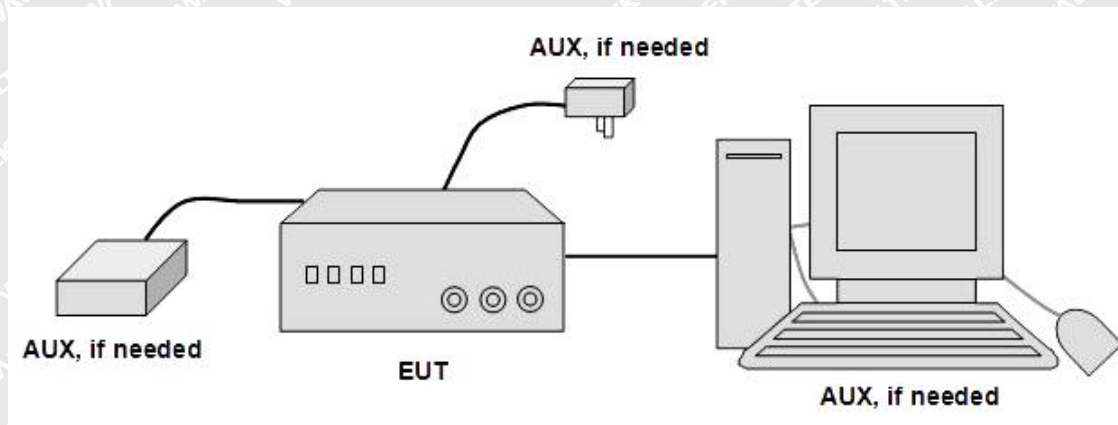
2.3 Equipment Modifications

The EUT tested was not modified by HCT.

2.4 Basic Configuration of Test System and General Test Procedures

Conducted Emissions: The EUT is placed on the table, which is 0.8 m above ground plane. According to the requirements in Section 7.1 of ANSI C63.4: 2014 +A1: 2017. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak detector mode.

Radiated Emissions: The EUT is a placed on as turntable, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4: 2014 +A1: 2017.





2.5 General Description of Test Auxiliary

EUT Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
/	/	/	/
/	/	/	/

Special Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
/	/	/	/
/	/	/	/

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
Adapter	HUAWEI	050200C01	/
/	/	/	/

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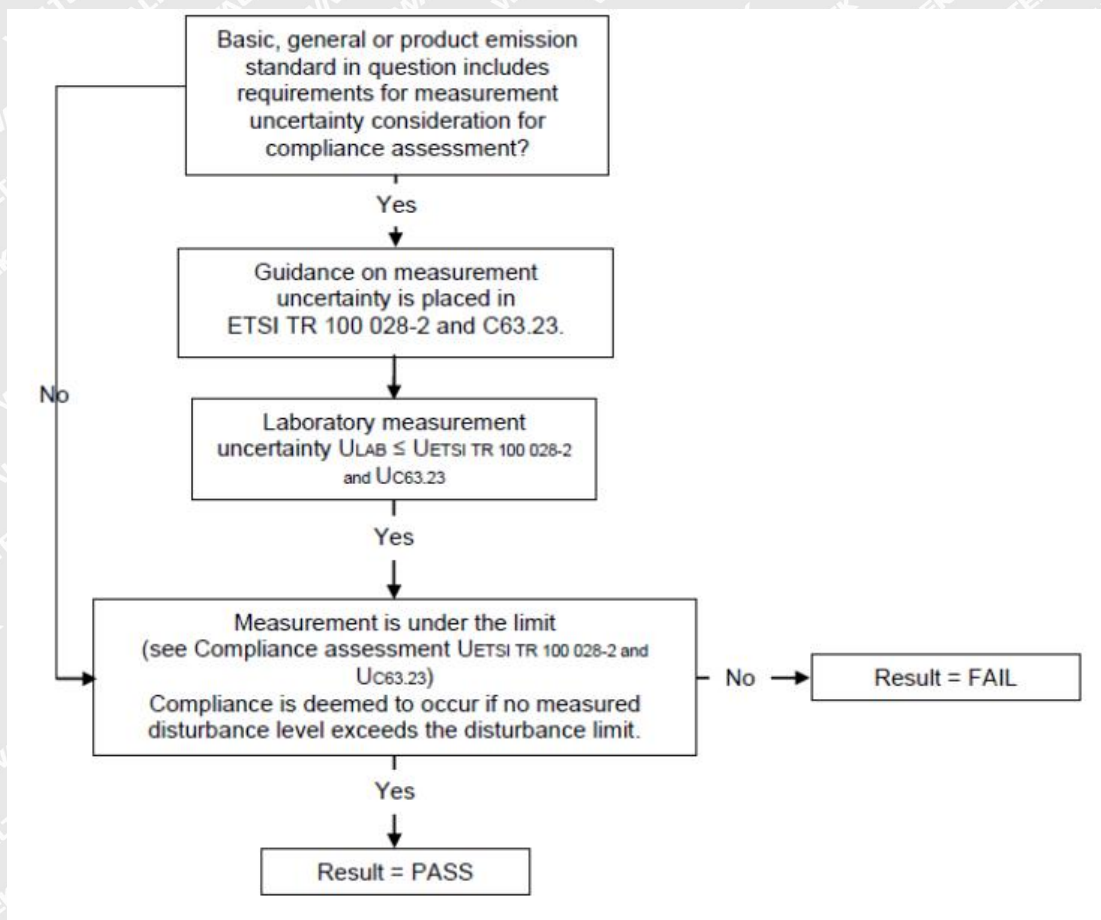


2.6 Application of decision rule

Application of decision rule and statement of conformity is defined in document CNAS-GL015 Decision rule and measurement uncertainty.

As a general rule Pass/Fail decisions are based on simple acceptance rule and acceptance limits chosen based on simple acceptance ($w = 0$, $AL = TL$) except if a decision rule is governed by particular standard or guidance document.

Decision rule:





3- CONDUCTED EMISSION

3.1 Measurement Uncertainty

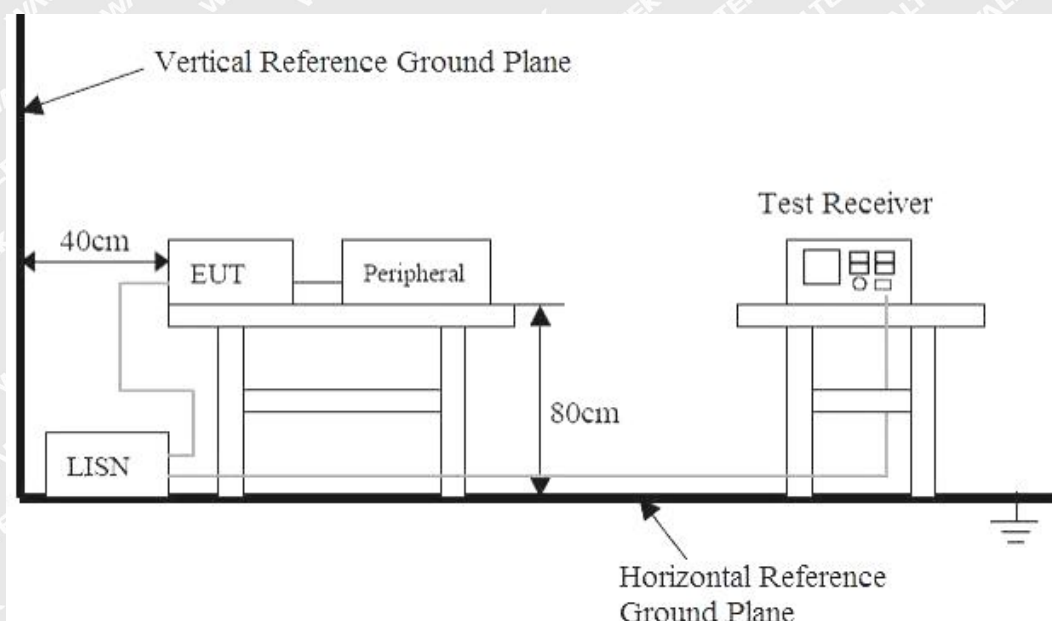
All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, and LISN. The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement is ± 2.7 dB.

3.2 Limit of Conducted Emission

Frequency Range (MHz)	Class B Equipment Limits	
	Quasi-Peak (dBuV)	Average (dBuV)
0.150~0.500	66~56	56~46
0.500~5.000	56	46
5.000~30.00	60	50

NOTE 1: The tighter limit shall apply at the edge between two frequency bands.

3.3 EUT Setup



The setup of EUT is according with ANSI C63.4: 2014 +A1: 2017 measurement procedure. The specification used was the FCC Rules and Regulations Part 15 Subpart B Section 15.107 Class B limits.

The EUT was placed center and the back edge of the test table.

The AV cables were draped along the test table and bundled to 30-40cm in the middle.

The spacing between the peripherals was 10 cm.

Maximum emission emitted from EUT was determined by manipulating the EUT, support equipment, interconnecting cables and varying the mode of operation and the levels in the final result of the test were recorded with the EUT running in the operating mode that maximum emission was emitted.



3.4 Instrument Setup

The test receiver was set with the following configurations:

Test Receiver Setting:

Frequency Range.....150 KHz to 30 MHz
 Detector.....Peak & Quasi-Peak & Average
 Sweep Speed.....Auto
 IF Band Width.....9 KHz

3.5 Test Procedure

1. During the conducted emission test, the EUT power cord was connected to the auxiliary outlet of the first Artificial Mains.
2. Maximizing procedure was performed on the six (6) highest emissions to ensure EUT compliance using all installation combination.
3. All data was recorded in the peak detection mode. Quasi-peak and Average readings were only performed when an emission was found to be marginal (within -10 dB μ V of specification limits). Quasi-peak readings are distinguished with a "QP". Average readings are distinguished with a "AV".

3.6 Test Equipment List and Details

No.	Instrument no.	Equipment	Manufacturer	Model No.	S/N	Last Calculator	Due Calculator
1	WTHE1004A1-003	EMI Test Receiver	R&S	ESCI 3	100687	2025-01-03	2026-01-02
2	WTHE1011A1-001	Teo Line Single Phase Module	SCHWARZBECK	NSLK8128	8128249	2025--01-15	2026-01-14
3	WTHE1010A1-001	10dB attenuator	SCHWARZBECK	9561-F061	8360009	2025-01-02	2026-01-01
Software List							
Description		Manufacturer		Model		Version	
Test Software		Farad		EZ-EMC		EMEC-3A1	
*Remark: indicates software version used in the compliance certification testing							



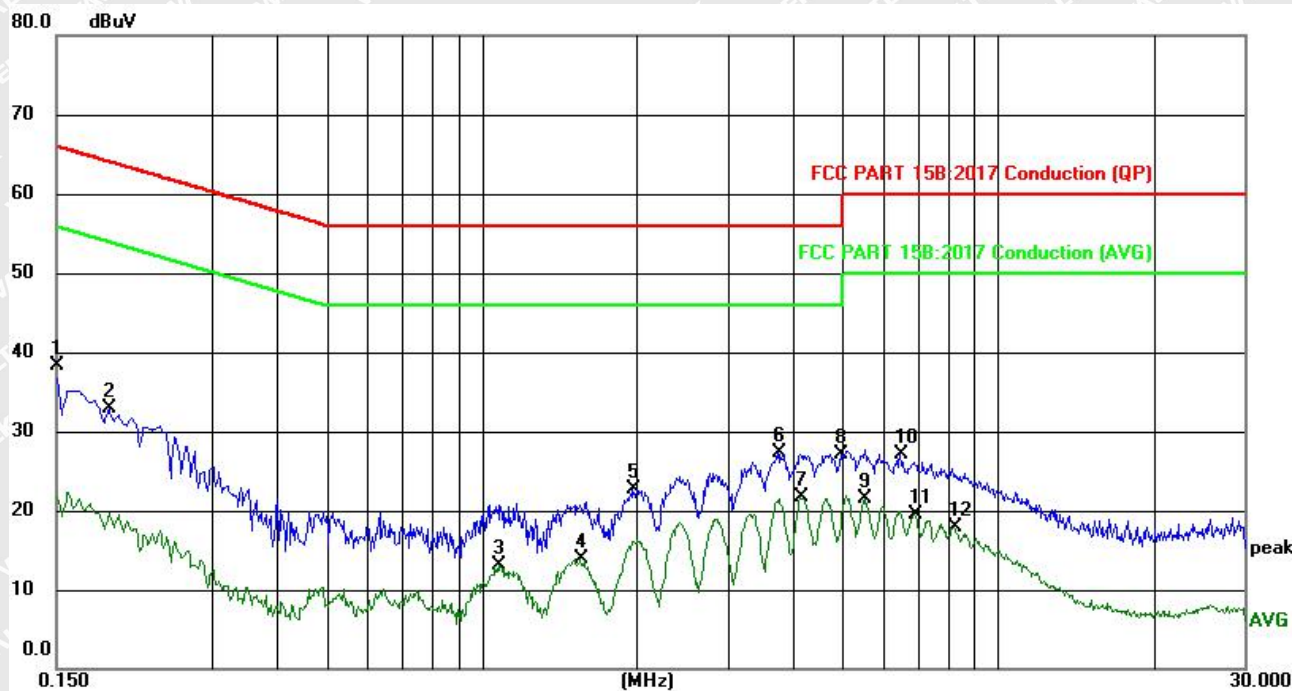
3.7 Test Data

Temperature:	24 (°C)
Humidity:	55 (%RH)
Atmospheric pressure:	101 (kPa)
Operating Mode:	Mode1
Test Result:	Pass

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**Conducted Emission Test**

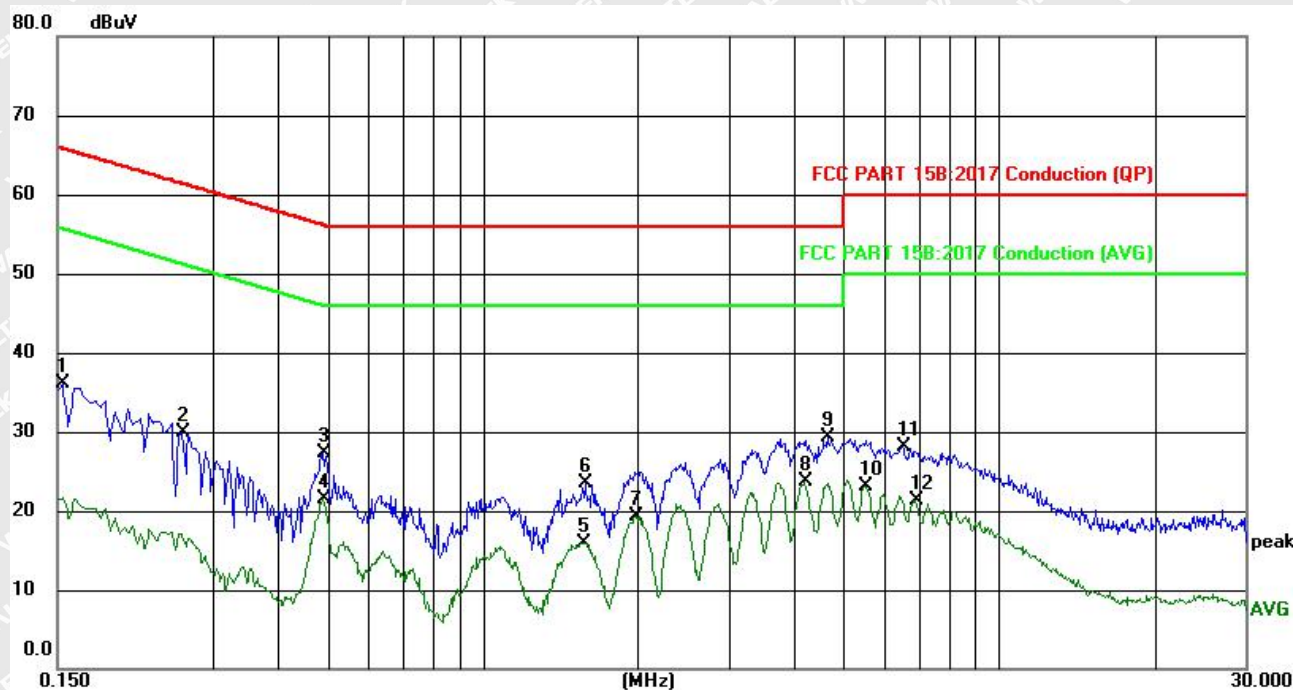
EUT:	Neck massager
M/N:	F12
Operating Mode:	Mode1
Test Site:	Shielded Room
Test Voltage:	AC 120V/60Hz
Comment:	Live Line



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1500	28.73	9.56	38.29	66.00	-27.71	QP	
2		0.1900	23.35	9.58	32.93	64.04	-31.11	QP	
3		1.0780	3.08	10.08	13.16	46.00	-32.84	AVG	
4		1.5580	3.80	10.10	13.90	46.00	-32.10	AVG	
5		1.9620	12.66	10.11	22.77	56.00	-33.23	QP	
6		3.7500	17.08	10.32	27.40	56.00	-28.60	QP	
7	*	4.1540	11.31	10.35	21.66	46.00	-24.34	AVG	
8		4.9620	16.64	10.44	27.08	56.00	-28.92	QP	
9		5.5300	10.98	10.43	21.41	50.00	-28.59	AVG	
10		6.4660	16.62	10.43	27.05	60.00	-32.95	QP	
11		6.8940	9.08	10.43	19.51	50.00	-30.49	AVG	
12		8.2220	7.53	10.42	17.95	50.00	-32.05	AVG	

**Conducted Emission Test**

EUT:	Neck massager
M/N:	F12
Operating Mode:	Mode1
Test Site:	Shielded Room
Test Voltage:	AC 120V/60Hz
Comment:	Neutral Line



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1539	26.51	9.52	36.03	65.79	-29.76	QP	
2	0.2620	20.31	9.62	29.93	61.37	-31.44	QP	
3	0.4900	17.61	9.74	27.35	56.17	-28.82	QP	
4	0.4900	11.80	9.74	21.54	46.17	-24.63	AVG	
5	1.5660	5.79	10.16	15.95	46.00	-30.05	AVG	
6	1.5820	13.30	10.16	23.46	56.00	-32.54	QP	
7	1.9740	9.09	10.21	19.30	46.00	-26.70	AVG	
8 *	4.2060	13.42	10.24	23.66	46.00	-22.34	AVG	
9	4.6579	19.08	10.24	29.32	56.00	-26.68	QP	
10	5.5300	12.93	10.23	23.16	50.00	-26.84	AVG	
11	6.4899	17.95	10.23	28.18	60.00	-31.82	QP	
12	6.8900	11.16	10.23	21.39	50.00	-28.61	AVG	



4- RADIATED EMISSION

4.1 Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of a radiation emissions measurement is ± 4.5 dB.

4.2 Limit of Radiated Emission

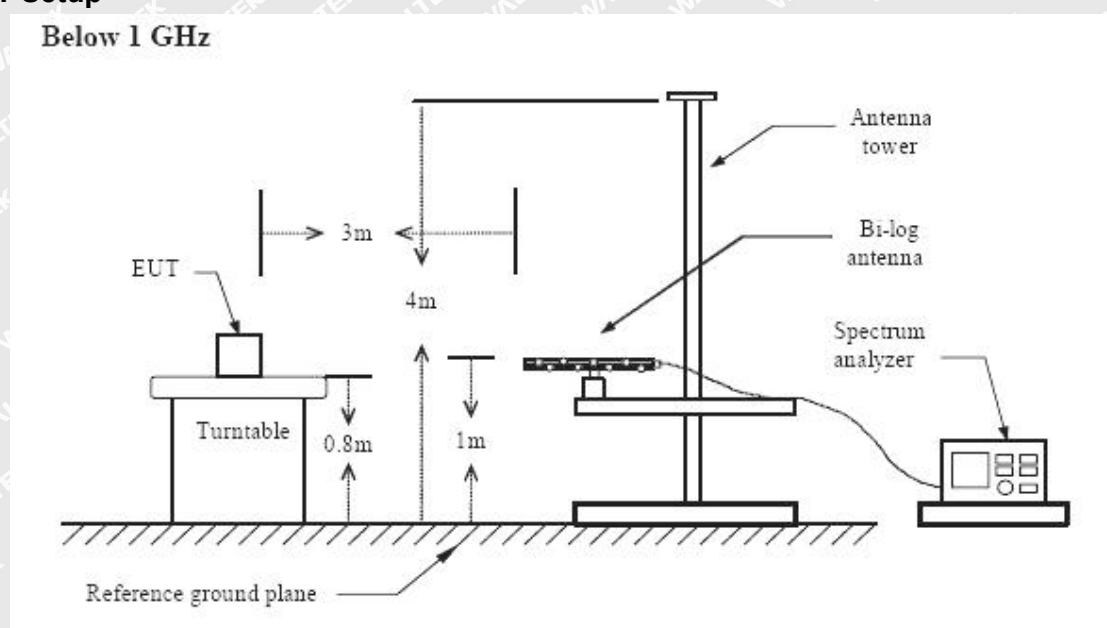
Below 1GHz Class B Equipment Limits		
Frequency (MHz)	Distance (Meters)	Quasi-Peak (dB μ V/m)
30 ~ 88	3	40
88~216	3	43.5
216 ~ 960	3	46
960 ~ 1000	3	54

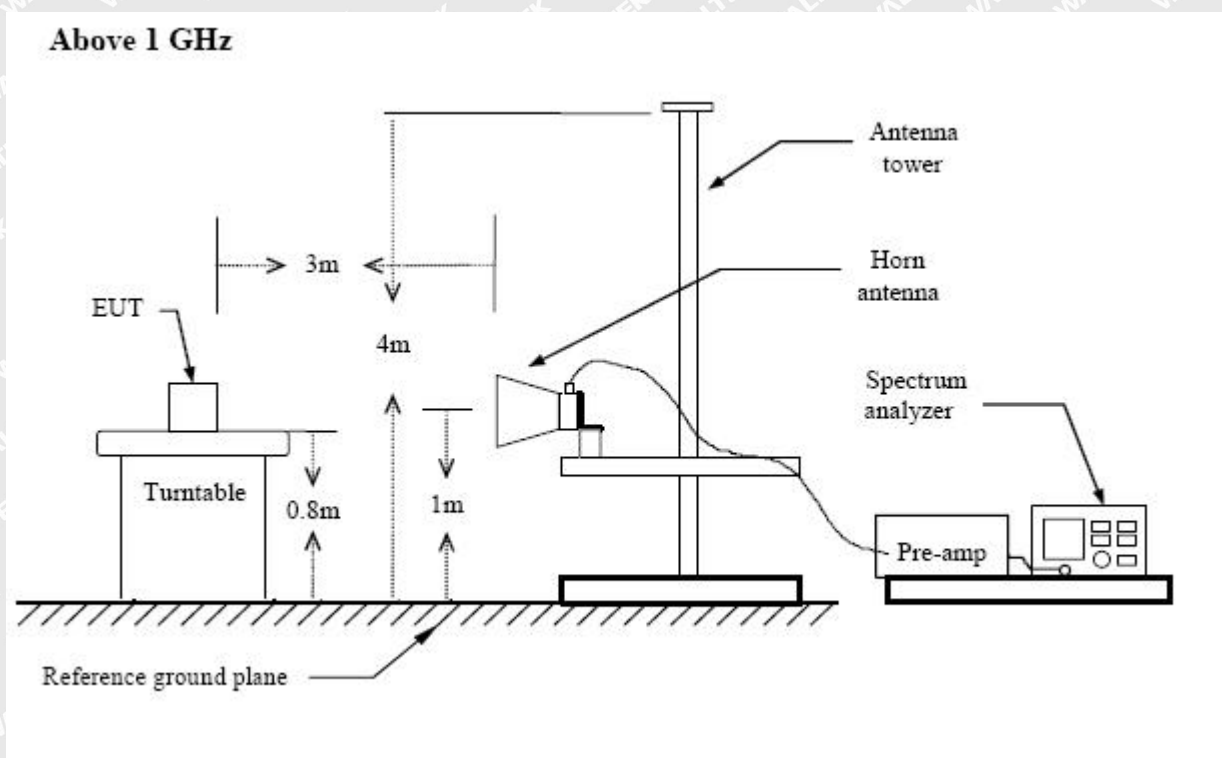
NOTE 1 The lower limit shall apply at the transition frequency.

NOTE 2 Additional provisions may be required for cases where interference occurs.

Above 1GHz Class B Equipment Limits			
Frequency (MHz)	Distance (Meters)	Field Strengths Limits AV(dB μ V/m)	Field Strengths Limits Peak (dB μ V/m)
1000~6000	3	54	74

4.3 EUT Setup





The radiated emission tests were performed in the in the 3-meter anechoic chamber, using the setup accordance with the ANSI C63.4: 2014 +A1: 2017. The specification used was the FCC Part 15 Subpart A Section 15.109 limits.

The EUT was placed on the center of the test table.

Maximum emission emitted from EUT was determined by manipulating the EUT, support equipment, interconnecting cables and varying the mode of operation and the levels in the final result of the test were recorded with the EUT running in the operating mode that maximum emission was emitted.

4.4 Test Receiver Setup

The test receiver was set with the following configurations:

Test Receiver Setting below 1000MHz:

Detector.....	Peak & Quasi-Peak
IF Band Width.....	120KHz
Frequency Range.....	30MHz to 1000MHz
Turntable Rotated.....	0 to 360 degrees

Test Receiver Setting above 1000MHz:

Detector.....	Peak & Average
IF Band Width.....	1MHz
Frequency Range.....	1000MHz to 6000MHz
Turntable Rotated.....	0 to 360 degrees

Antenna Position:

Height.....	1m to 4m
Polarity.....	Horizontal and Vertical



4.5 Test Procedure

1. Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.
2. All data was recorded in the peak detection mode. Quasi-peak readings performed only when an emission was found to be marginal (within -10 dB μ V of specification limits), and are distinguished with a "QP" in the data table.

4.6 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Corr. Ampl. = Indicated Reading + Antenna Factor + Cable Factor - Amplifier Gain

The "Margin" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB μ V means the emission is 7dB μ V below the maximum limit for Class B. The equation for margin calculation is as follows:

Margin = Limit – Corr. Ampl.

4.7 Test Equipment List and Details

No.	Instrument no.	Equipment	Manufacturer	Model No.	S/N	Last Calculator	Due Calculator
1	WTHE1004A1-001	EMI Test Receiver	R&S	ESPI7	100097	2025-01-03	2026-01-02
2	WTHE1005A2-004	Broadband Logarithmic Period Antenna	SCHWARZBECK	VULB 9162	280	2025-02-08	2026-02-07
3	WTHE1006A1-002	Preamplifier	Agilent	8447D	1937A02492	2025-01-03	2026-01-02
Software List							
Description		Manufacturer		Model		Version	
Test Software		Farad		EZ-EMC		EMEC-3A1	
*Remark: indicates software version used in the compliance certification testing							



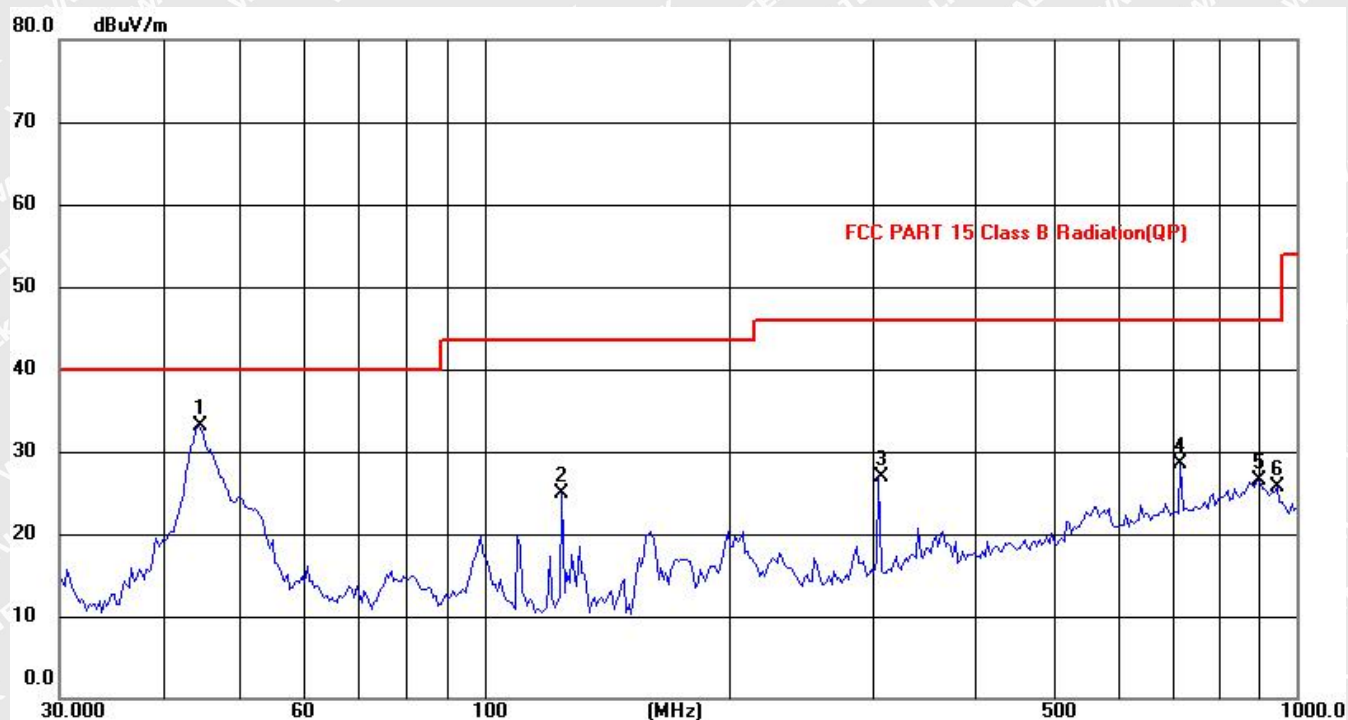
4.8 Test Data

Temperature:	24 (°C)
Humidity:	55 (%RH)
Atmospheric pressure:	101 (kPa)
Operating Mode:	Mode1/Mode2
Test Result:	Pass

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**Radiated Emission Test Data of Below 1GHz**

EUT:	Neck massager
M/N:	F12
Operating Mode:	Mode1
Test Site:	3m CHAMBER
Test Voltage:	AC 120V/60Hz
Comment:	Polarization: Vertical

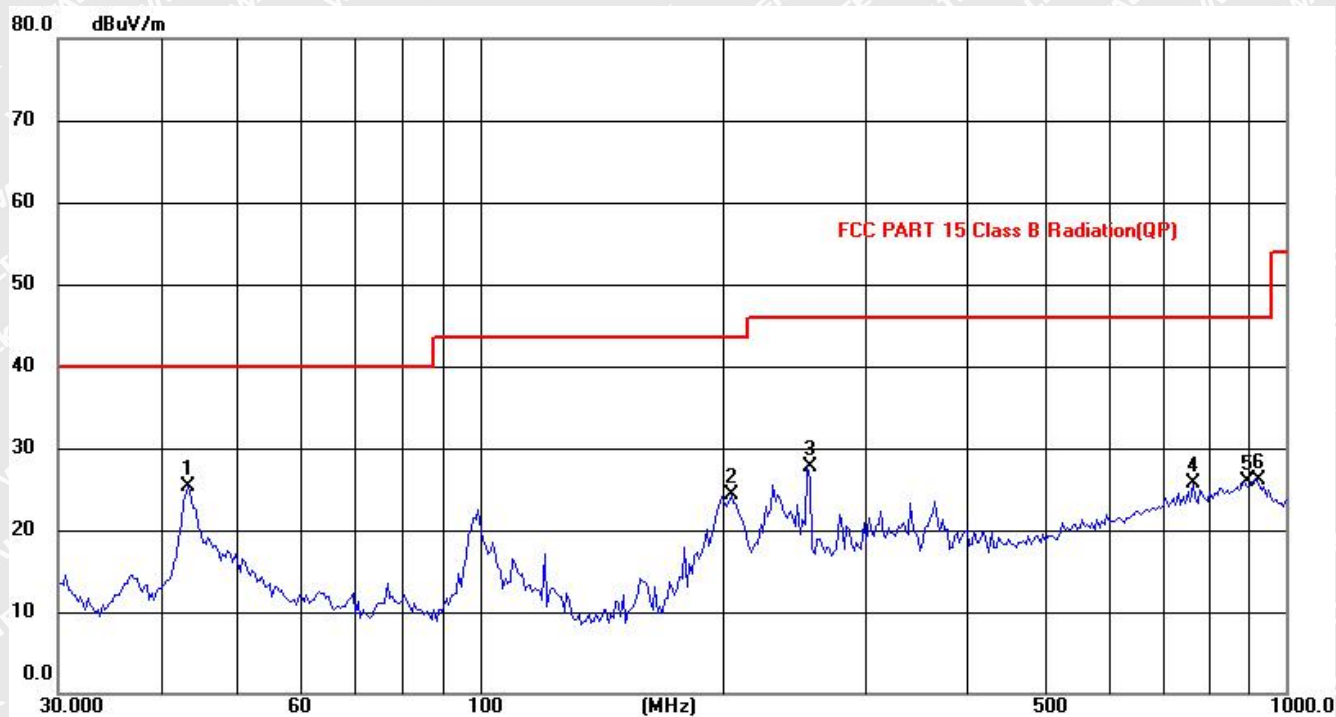


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree	Detector	Comment
1	*	44.4308	47.25	-14.22	33.03	40.00	-6.97	QP			
2		124.5690	41.22	-16.32	24.90	43.50	-18.60	QP			
3		305.6800	38.18	-11.29	26.89	46.00	-19.11	QP			
4		719.1995	31.60	-3.17	28.43	46.00	-17.57	QP			
5		893.8567	27.02	-0.42	26.60	46.00	-19.40	QP			
6		945.4399	27.16	-1.42	25.74	46.00	-20.26	QP			



Radiated Emission Test Data of Below 1GHz

EUT:	Neck massager
M/N:	F12
Operating Mode:	Mode1
Test Site:	3m CHAMBER
Test Voltage:	AC 120V/60Hz
Comment:	Polarization: Horizontal

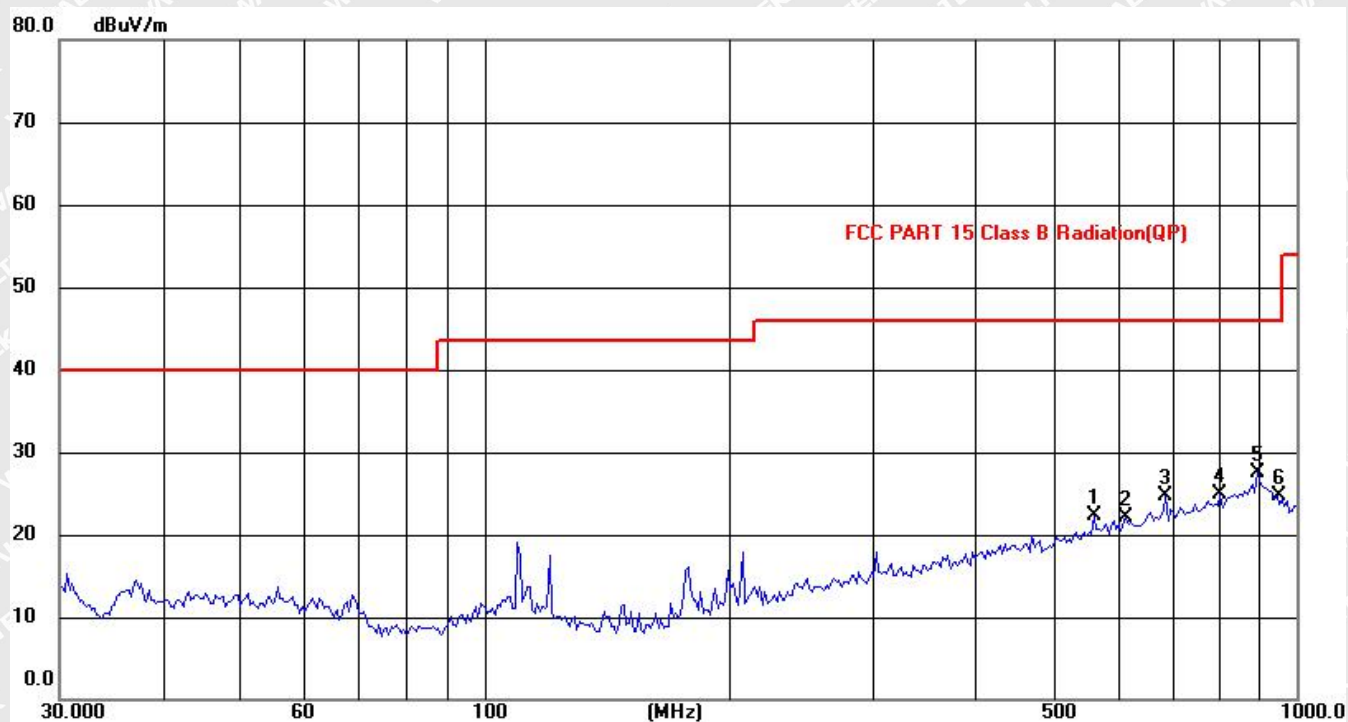


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree	Comment
1	*	43.5057	39.55	-14.31	25.24	40.00	-14.76	QP		
2		204.9551	38.83	-14.49	24.34	43.50	-19.16	QP		
3		254.7284	40.51	-12.87	27.64	46.00	-18.36	QP		
4		766.0571	28.03	-2.35	25.68	46.00	-20.32	QP		
5		887.6099	26.49	-0.58	25.91	46.00	-20.09	QP		
6		919.2866	26.15	-0.10	26.05	46.00	-19.95	QP		



Radiated Emission Test Data of Below 1GHz

EUT:	Neck massager
M/N:	F12
Operating Mode:	Mode2
Test Site:	3m CHAMBER
Test Voltage:	DC 5V
Comment:	Polarization: Vertical

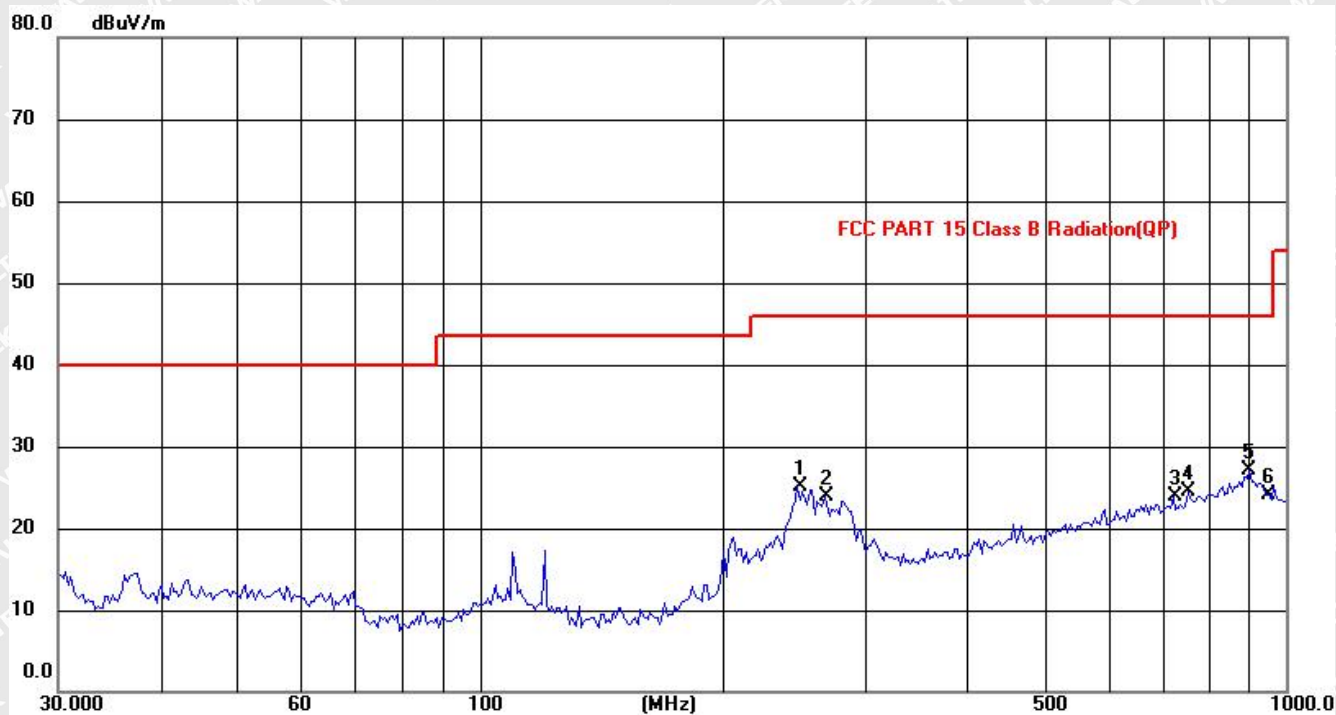


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree	Detector	Comment
1	562.6623	28.39	-6.05	22.34	46.00	-23.66			QP	
2	616.3716	27.07	-4.91	22.16	46.00	-23.84			QP	
3	689.5644	28.35	-3.67	24.68	46.00	-21.32			QP	
4	804.6027	27.01	-2.08	24.93	46.00	-21.07			QP	
5 *	893.8566	27.91	-0.42	27.49	46.00	-18.51			QP	
6	945.4400	26.05	-1.42	24.63	46.00	-21.37			QP	

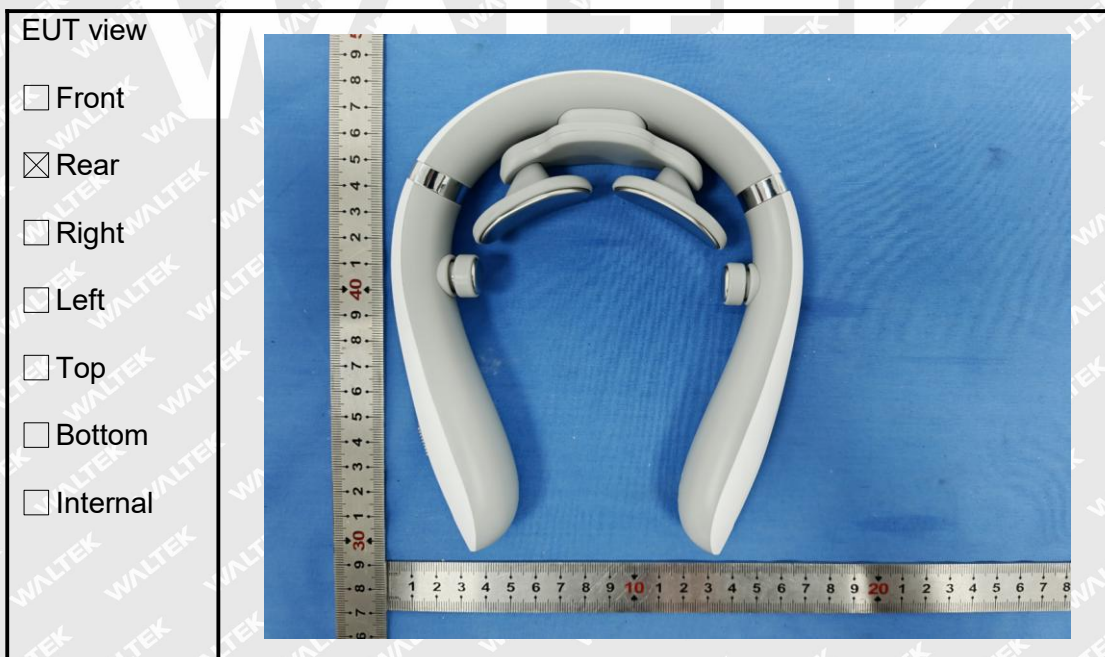


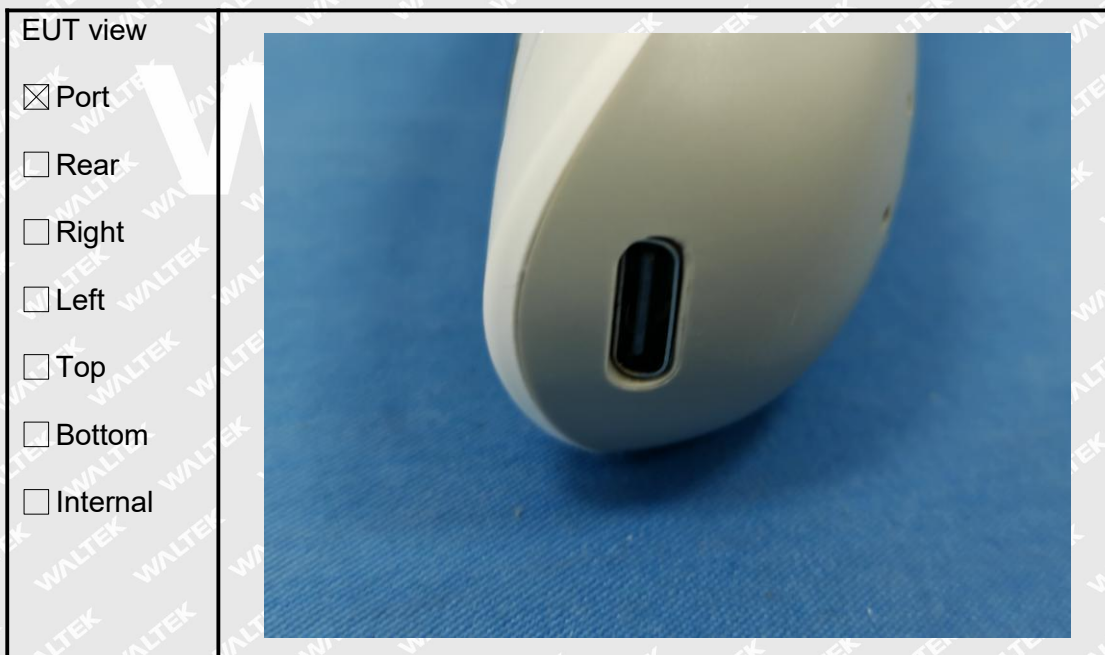
Radiated Emission Test Data of Below 1GHz

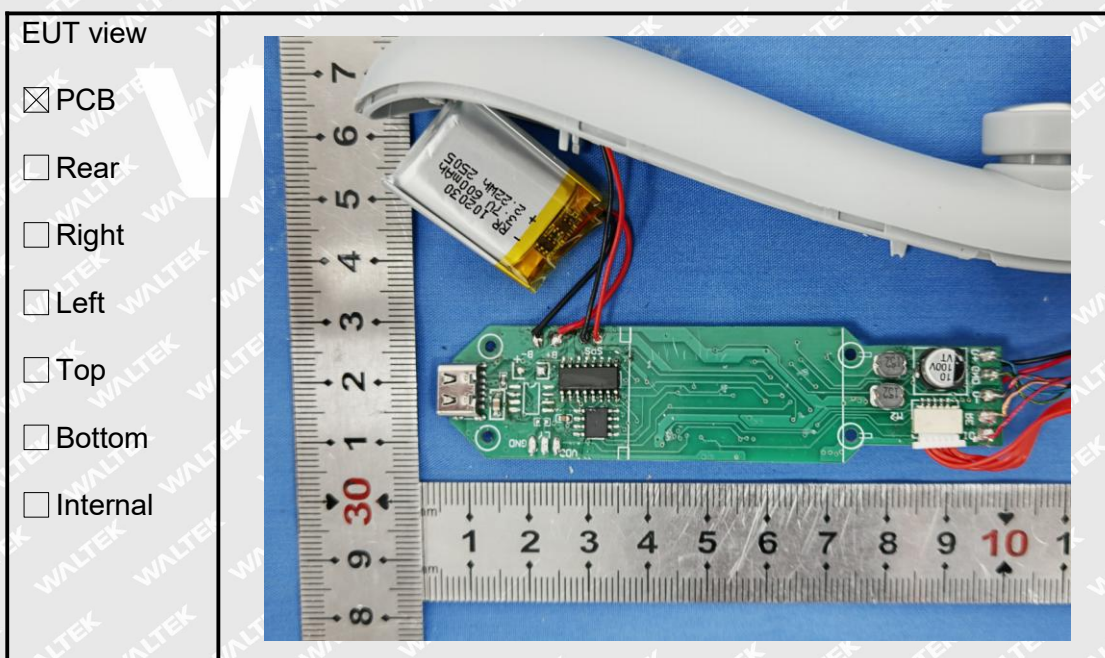
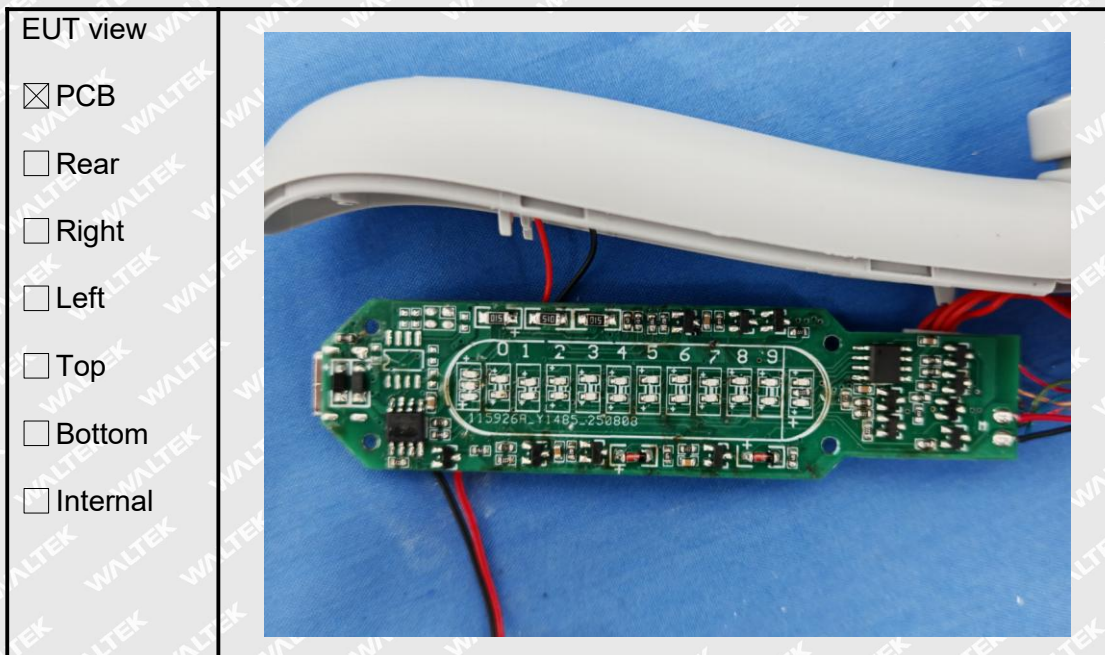
EUT:	Neck massager
M/N:	F12
Operating Mode:	Mode2
Test Site:	3m CHAMBER
Test Voltage:	DC 5V
Comment:	Polarization: Horizontal

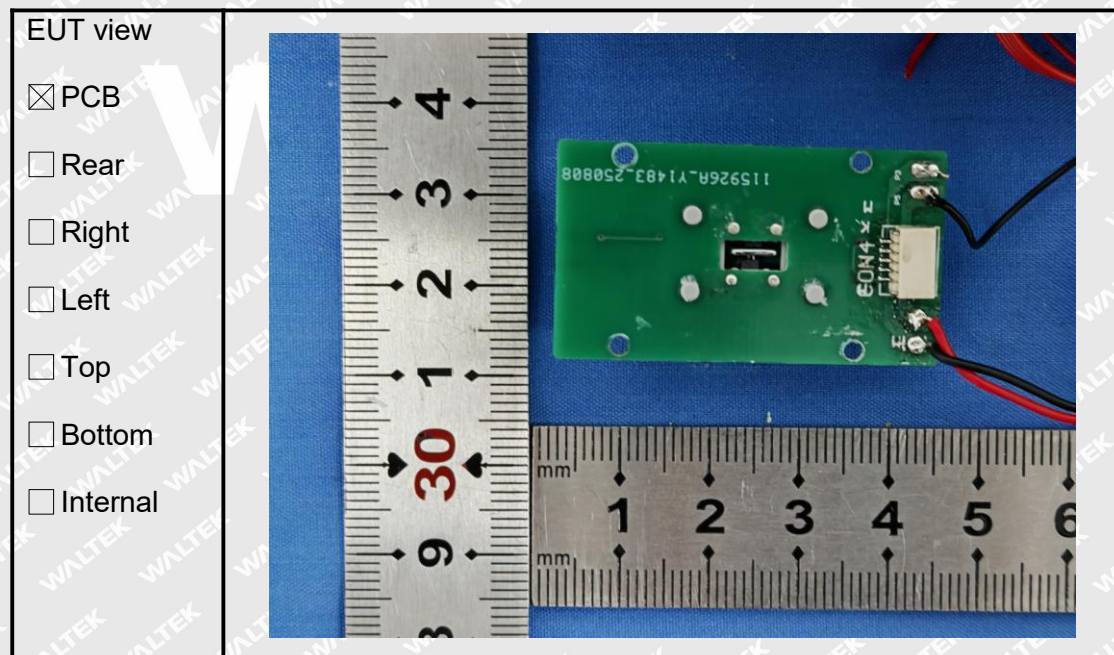
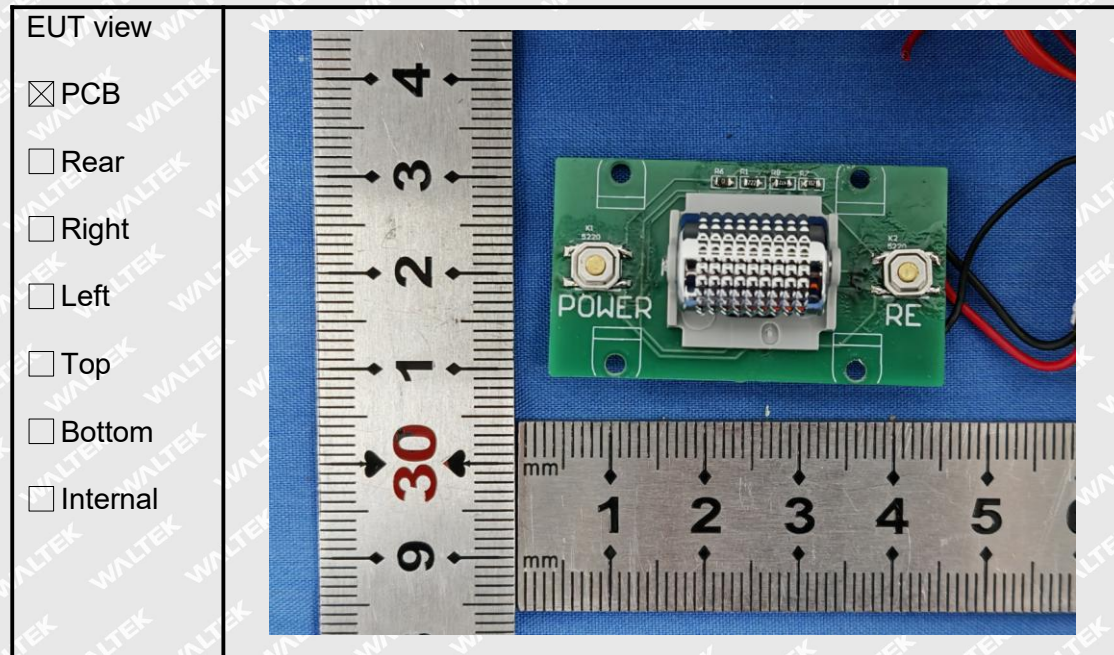


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree	Comment
1	247.6819	38.17	-13.11	25.06	46.00	-20.94	QP		
2	267.5455	36.41	-12.46	23.95	46.00	-22.05	QP		
3	724.2611	27.04	-3.07	23.97	46.00	-22.03	QP		
4	755.3873	26.98	-2.47	24.51	46.00	-21.49	QP		
5 *	900.1474	27.29	-0.27	27.02	46.00	-18.98	QP		
6	952.0937	24.08	0.06	24.14	46.00	-21.86	QP		

**APPENDIX A - EUT PHOTOGRAPHS**



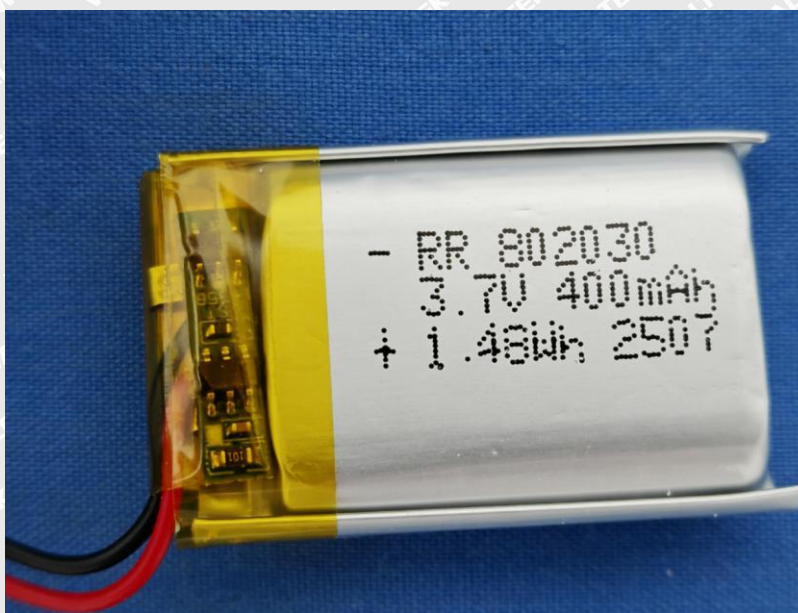






EUT view

- ☒ Battery
- ☐ Rear
- ☐ Right
- ☐ Left
- ☐ Top
- ☐ Bottom
- ☐ Internal



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Conducted Disturbance at The Mains Terminals



**(Statement):**

- 1.This report is considered invalid without approved signature and special seal;
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***** END OF REPORT *****

WALTEK