



TEST REPORT

Report No..... : CHTW25080033

Project No : SHT2507053805W

FCC ID : 2BQ5J-THEFLOW

Applicant's name : Laboratoire Gibro SA

Address..... : Entre-deux Rivières 10 2114 Fleurier Switzerland

Product Name : IoT Suction Machine

Trade Mark..... : -

Model No..... : The Flow

Listed Model(s) : -

Standard : **FCC CFR Title 47 Part 15 Subpart C § 15.247**

Date of receipt of test sample.....: 2025/7/21

Date of testing.....: 2025/7/22 - 2025/8/8

Date of issue.....: 2025/8/19

Result..... : **PASS**



Compiled by (Position+Printed name+Signature) :	File administrator	Xiaodong Zhao	<i>Xiaodong Zhao</i>
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Testing Laboratory Name : **Shenzhen Huatongwei International Inspection Co., Ltd.**

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Test Report Form No. : R0066

Test Report Form(s) Originator : Shenzhen Huatongwei International Inspection Co., Ltd.

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1. TEST STANDARDS AND REPORT VERSION

1.1. Test Standards

The tests were performed according to following standards:

- [FCC CFR Title 47 Part 15 Subpart C § 15.247](#): Operation within the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz
- [ANSI C63.10:2020](#): American National Standard for Testing Unlicensed Wireless Devices
- [KDB 558074 D01 15.247 Meas Guidance v05r02](#): Guidance for Compliance Measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid System Devices Operating under Section 15.247 of The FCC Rules

1.2. Report version

Revision No.	Date of issue	Description
N/A	2025/8/19	Original

2. TEST DESCRIPTION

Report clause	Test Items	Standard Requirement	Result	Test Engineer
5.1	Antenna Requirement	15.203/15.247(c)	PASS	Xiangyu Wei
5.2	AC Conducted Emission	15.207	PASS	Xiangyu Wei
-	Peak Output Power	15.247(b)(3)	PASS*	-
-	Power Spectral Density	15.247(e)	PASS*	-
-	6dB Bandwidth	15.247(a)(2)	PASS*	-
-	99% Occupied Bandwidth	-	PASS*	-
-	Duty cycle	-	N/A	-
-	Conducted Band Edge and Spurious Emission	15.247(d)/15.205	PASS*	-
5.3	Radiated Band Edge Emission	15.205/15.209	PASS	Yifan Wang
5.4	Radiated Spurious Emission	15.247(d)/15.205/15.209	PASS	Yifan Wang

Note:

- 1) Pass: The EUT meet this standard requirement.
- 2) N/A: Not applicable.
- 3) The measurement uncertainty is not included in the test result.
- 4) *: Refer to the module report which report No. is FR1D1609A(FCC ID:2AC7Z-ESPS3WROOM1U).
- 5) This device has installed the certified modular which model number is ESP32-S3-WROOM-1U(FCC ID:2AC7Z-ESPS3WROOM1U), so these conducted test data directly reference the modular's data.

3. SUMMARY

3.1. Client Information

Applicant:	Laboratoire Gibro SA
Address:	Entre-deux Rivières 10 2114 Fleurier Switzerland
Manufacturer:	Laboratoire Gibro SA
Address:	Entre-deux Rivières 10 2114 Fleurier Switzerland

3.2. Product Description

Main unit information:	
Product Name:	IoT Suction Machine
Trade Mark:	-
Model No.:	The Flow
Listed Model(s):	-
Power supply:	AC 120V
Hardware version:	4
Software version:	0.1
Accessory unit information:	
Adapter information:	MODEL NO:XY-15003000AU INPUT:120VAC 60Hz OUTPUT:15V 3000mA 45W

3.3. Radio Specification Description

Bluetooth version:	V5.0
Support function:	BLE
Modulation:	GFSK
Operation frequency:	2402MHz~2480MHz
Channel number:	40
Channel separation:	2MHz
Antenna type:	FLEX CABLE BALANCE ANTENNA
Antenna gain:	2.2dBi

3.4. Testing Laboratory Information

Laboratory Name	Shenzhen Huatongwei International Inspection Co., Ltd.	
Laboratory Location	Building 7, Baiwang Idea Factory, No.1051, Songbai Road, Yangguang Community, Xili Subdistrict, Nanshan District, Shenzhen, Guangdong, China	
Contact information:	Phone: 400-963-0755 E-mail: cs@szhtw.com.cn http://www.szhtw.com.cn	
Qualifications	Type	Accreditation Number
	FCC Registration Number	762235
	FCC Designation Number	CN1181

4. TEST CONFIGURATION

4.1. Test frequency list

According to section 15.31(m), regards to the operating frequency range over 10 MHz, must select three channels which were tested. The Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, please see the below blue front.

Channel	Frequency (MHz)
00	2402
01	2404
. . .	. . .
19	2440
. . .	. . .
38	2478
39	2480

4.2. Descriptions of Test mode

For AC conducted emission
The EUT was set to connect with the Bluetooth instrument under large package sizes transmission.
For Radiated spurious emissions test item:
The engineering test program was provided and enabled to make EUT continuous transmit. The EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data Recorded in the report.

4.3. Test sample information

Test item	HTW sample no.
RF Radiated test items	YPHT25070538001
EMI test items	YPHT25070538001

Note:

RF Radiated test items: Radiated Band Edge Emission, Radiated Spurious Emission

EMI test items: AC Conducted Emission

4.4. Support unit used in test configuration and system

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The following peripheral devices and interface cables were connected during the measurement:

Whether support unit is used?			
✓ Yes			
Item	Equipment	Trade Name	Model No.
1	mobile phone	Apple	MN9X2LL/A
2	-	-	-

4.5. Testing environmental condition

Type	Requirement	Actual
Temperature:	15~35°C	25°C
Relative Humidity:	25~75%	50%
Air Pressure:	860~1060mbar	1000mbar

4.6. Statement of the measurement uncertainty

No.	Test Items	Measurement Uncertainty
1	AC Conducted Emission	3.21dB
2	Radiated Band Edge Emission	4.54dB for 30MHz-1GHz 5.10dB for above 1GHz
3	Radiated Spurious Emission	4.54dB for 30MHz-1GHz 5.10dB for above 1GHz

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

4.7. Equipment Used during the Test

● EMC Test Software					
Used	Test Item	Software Name	Manufacturer	Equipment No.	Version
●	Conducted Emission	EMC32	R&S	HTWER012	V10.60.20

● RF Test Software					
Used	Test Item	Software Name	Manufacturer	Equipment No.	Version
●	Radiated Spurious Emission	EMC32	R&S	HTWER012	V10.60.20
●	Radiated Spurious Emission	E3	AUDIX	HTWER006	V6.110407a

● Conducted Emission							
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	EMI Test Receiver	R&S	HTWE0111	ESCI	101247	2024/8/12	2025/8/11
●	Artificial Mains	SCHWARZBECK	HTWE0113	NNLK 8121	573	2024/8/12	2025/8/11
●	Protection Network	SCHWARZBECK	HTWE0567	VTSD9561FN	00899	2024/8/12	2025/8/11
●	ISN	FCC	HTWE0148	FCC-TLISN-T2-02	20371	2024/8/12	2025/8/11
●	ISN	FCC	HTWE0150	FCC-TLISN-T8-02	20375	2024/8/12	2025/8/11

● Radiated emission- 9kHz~30MHz

Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	Semi-Anechoic Chamber	Albatross projects	HTWE0127	SAC-3m-02	C11121	2023/4/6	2026/4/5
●	EMI Test Receiver	R&S	HTWE0099	ESCI 7	100900	2024/8/12	2025/8/11
●	Loop Antenna	R&S	HTWE0546	HFH2-Z2E	101073	2024/4/8	2027/4/7

● Radiated emission- 30MHz~1GHz

Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	Semi-Anechoic Chamber	Albatross projects	HTWE0127	SAC-3m-02	C11121	2023/4/6	2026/4/5
●	EMI Test Receiver	R&S	HTWE0099	ESCI 7	100900	2024/8/12	2025/8/11
●	Ultra-Broadband Antenna	SCHWARZBECK	HTWE0119	VULB9163	546	2023/2/22	2026/2/21
●	Pre-Amplifier	SCHWARZBECK	HTWE0295	BBV 9742	/	2025/5/26	2026/5/25
●	CMAD	SCHWARZBECK	HTWE0537	CMAD1614	1614-530	2024/8/5	2025/8/4
						2025/8/4	2026/8/3

● Radiated emission- Above 1GHz

Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	Full-Anechoic Chamber	Albatross projects	HTWE0122	SAC-3m-01	C11122	2023/4/17	2026/4/16
●	Spectrum Analyzer	R&S	HTWE0098	FSP40	100597	2024/8/12	2025/8/11
●	Horn Antenna	SCHWARZBECK	HTWE0126	BBHA 9120D	1011	2023/2/14	2026/2/13
●	Broadband Pre-amplifier	SCHWARZBECK	HTWE0551	SCU18F	100855	2025/5/26	2026/5/25

5. TEST CONDITIONS AND RESULTS

5.1. Antenna Requirement

REQUIREMENT

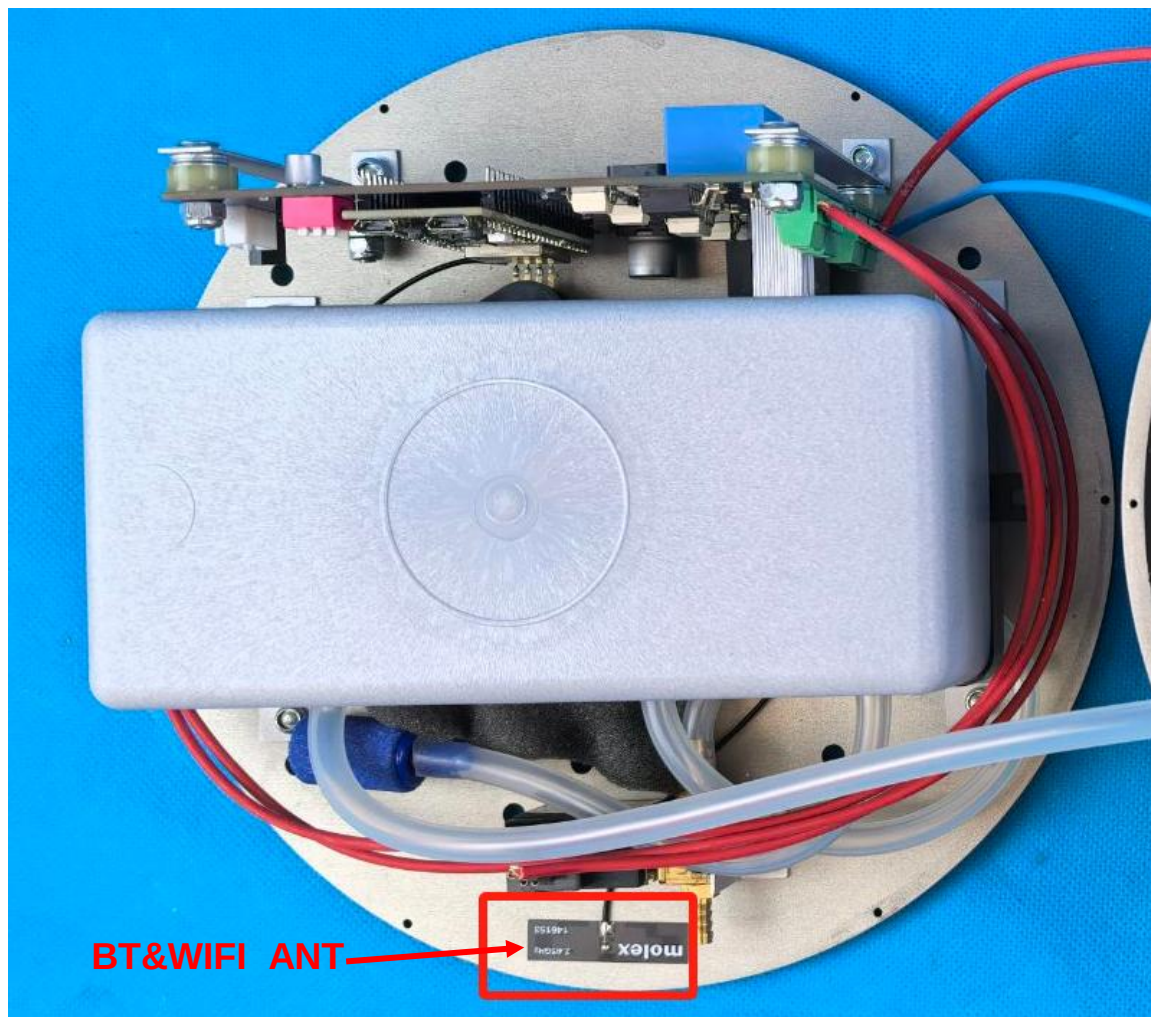
FCC CFR Title 47 Part 15 Subpart C Section 15.203:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

TEST RESULT

☒ Passed ☐ Not Applicable

The antenna type is a FLEX CABLE BALANCE ANTENNA, please refer to the below antenna photo.



5.2. AC Conducted Emission

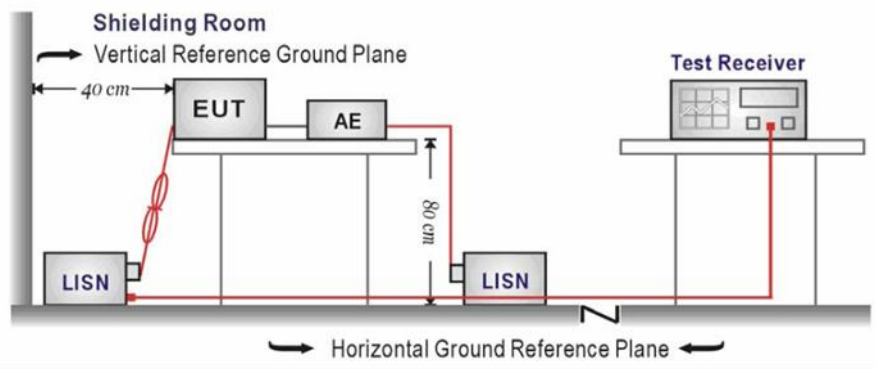
LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.207

Frequency range (MHz)	Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

TEST CONFIGURATION



TEST PROCEDURE

1. The EUT was setup according to ANSI C63.10 requirements.
2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface.
3. The EUT and simulators are connected to the main power through a line impedances stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment.
4. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
5. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
6. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
7. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
8. During the above scans, the emissions were maximized by cable manipulation.

TEST MODE

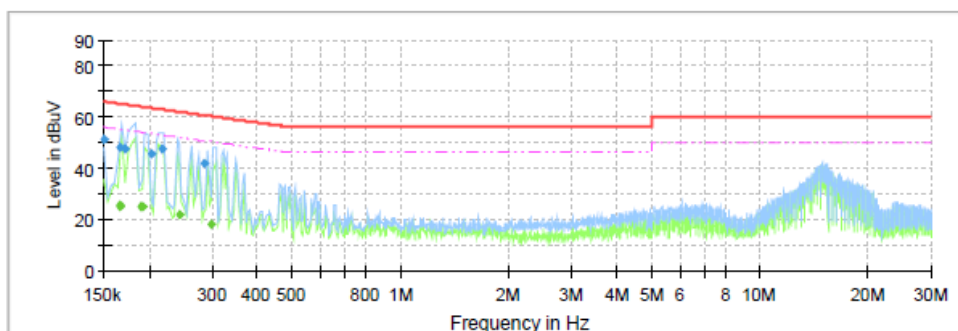
Refer to the clause 4.2

TEST RESULT

☒ Passed ☐ Not Applicable

Test Line:

L

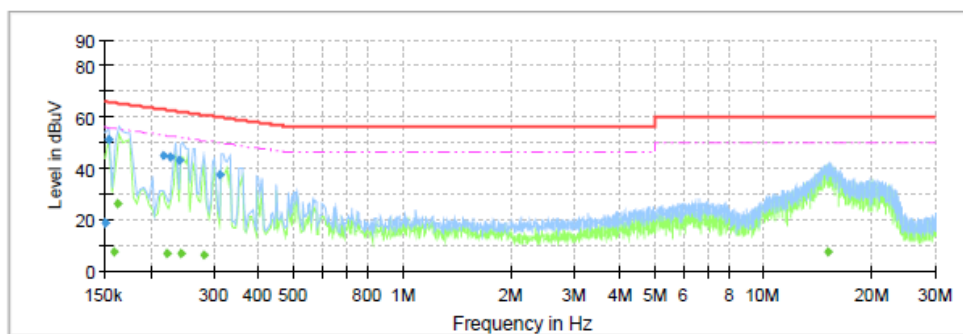


Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr. (dB)
0.1500	51.24	---	66.00	14.76	L1	10.1
0.1651	---	25.60	55.20	29.61	L1	10.2
0.1651	48.15	---	65.20	17.05	L1	10.2
0.1660	---	24.85	55.16	30.31	L1	10.2
0.1723	47.73	---	64.85	17.12	L1	10.2
0.1909	---	25.16	54.00	28.84	L1	10.2
0.1923	---	25.29	53.94	28.65	L1	10.2
0.2024	45.77	---	63.51	17.75	L1	10.2
0.2171	47.38	---	62.93	15.56	L1	10.2
0.2434	---	22.08	51.98	29.90	L1	10.2
0.2842	42.17	---	60.69	18.52	L1	10.2
0.2991	---	18.09	50.27	32.17	L1	10.3

Test Line:

N



Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr. (dB)
0.1500	18.56	---	66.00	47.44	N	10.1
0.1540	51.33	---	65.78	14.45	N	10.1
0.1580	---	7.70	55.57	47.86	N	10.1
0.1620	---	26.04	55.36	29.32	N	10.1
0.2173	44.96	---	62.92	17.96	N	10.2
0.2213	---	6.88	52.77	45.89	N	10.2
0.2285	44.08	---	62.50	18.42	N	10.2
0.2394	43.31	---	62.12	18.81	N	10.2
0.2440	---	6.74	51.96	45.22	N	10.2
0.2821	---	6.45	50.75	44.30	N	10.2
0.3103	37.46	---	59.96	22.51	N	10.2
15.1671	---	7.51	50.00	42.49	N	10.5

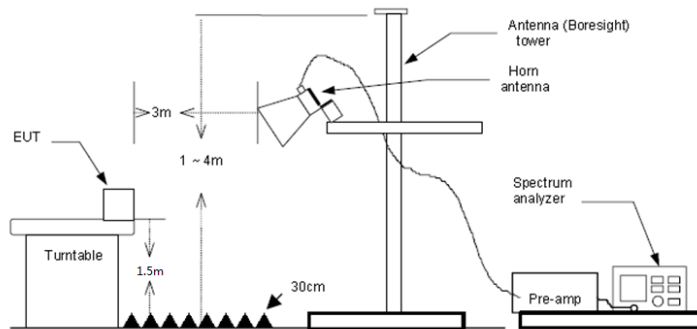
5.3. Radiated Band edge Emission

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (d):

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, Radiated Emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the Radiated Emissions limits specified in §15.209(a) (see §15.205(c)).

TEST CONFIGURATION



TEST PROCEDURE

1. The EUT was setup and tested according to ANSI C63.10 .
2. The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10 on radiated measurement.
5. Use the following spectrum analyzer settings:
 - a) Span shall wide enough to fully capture the emission being measured
 - b) Set RBW=100kHz for <1GHz, VBW=3*RBW, Sweep time=auto, Detector=peak, Trace=max hold
 - c) Set RBW=1MHz, VBW=3MHz for >1GHz, Sweep time=auto, Detector=peak, Trace=max hold for Peak measurement

For average measurement:

 - VBW=10Hz, When duty cycle is no less than 98 percent
 - VBW $\geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation, so refer to this clause 5.6 duty cycle.

TEST MODE

Refer to the clause 4.2

TEST RESULT

☒ Passed ☐ Not Applicable

Note:

- 1) Level= Reading + Factor; Factor =Antenna Factor+ Cable Loss- Preamp Factor
- 2) Over Limit = Level– Limit
- 3) Average measurement was not performed if peak level is lower than average limit(54 dBuV/m).

BLE 1Mbps:

Test channel		CH00			Polarity		Horizontal		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2310.00	48.08	27.86	3.95	41.18	38.71	74.00	-35.29	Peak
2	2390.03	49.26	27.54	4.08	41.11	39.77	74.00	-34.23	Peak

Test channel		CH00			Polarity		Vertical		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2310.00	47.46	27.86	3.95	41.18	38.09	74.00	-35.91	Peak
2	2390.03	47.93	27.54	4.08	41.11	38.44	74.00	-35.56	Peak

Test channel		CH39			Polarity		Horizontal		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2483.50	58.79	27.33	4.18	41.04	49.26	74.00	-24.74	Peak
2	2500.00	49.88	27.30	4.20	41.02	40.36	74.00	-33.64	Peak

Test channel		CH39			Polarity		Vertical		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2483.50	54.15	27.33	4.18	41.04	44.62	74.00	-29.38	Peak
2	2500.00	50.28	27.30	4.20	41.02	40.76	74.00	-33.24	Peak

BLE 2Mbps:

Test channel		CH00			Polarity			Horizontal		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark	
1	2310.00	47.90	27.86	3.95	41.18	38.53	74.00	-35.47	Peak	
2	2390.03	49.45	27.54	4.08	41.11	39.96	74.00	-34.04	Peak	

Test channel		CH00			Polarity			Vertical		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark	
1	2310.00	47.71	27.86	3.95	41.18	38.34	74.00	-35.66	Peak	
2	2390.03	49.16	27.54	4.08	41.11	39.67	74.00	-34.33	Peak	

Test channel		CH39			Polarity			Horizontal		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark	
1	2483.50	60.92	27.33	4.18	41.04	51.39	74.00	-22.61	Peak	
2	2500.00	49.08	27.30	4.20	41.02	39.56	74.00	-34.44	Peak	

Test channel		CH39			Polarity			Vertical		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark	
1	2483.50	59.09	27.33	4.18	41.04	49.56	74.00	-24.44	Peak	
2	2500.00	49.27	27.30	4.20	41.02	39.75	74.00	-34.25	Peak	

5.4. Radiated Spurious Emission

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.209

Frequency	Limit (dBuV/m)	Value
0.009 MHz ~0.49 MHz	2400/F(kHz) @300m	Quasi-peak
0.49 MHz ~ 1.705 MHz	24000/F(kHz) @30m	Quasi-peak
1.705 MHz ~30 MHz	30 @30m	Quasi-peak

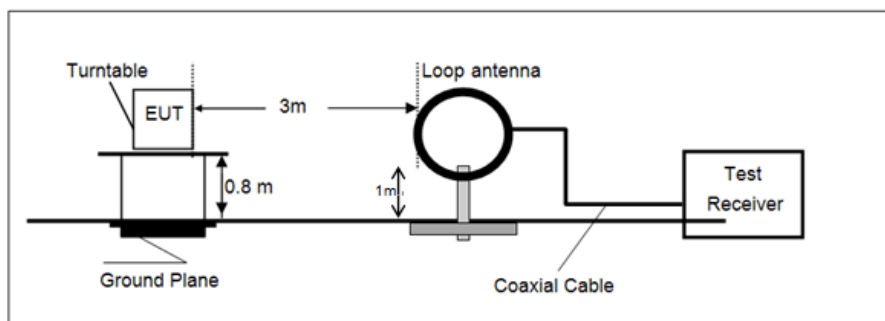
Note: Limit dBuV/m @3m = Limit dBuV/m @300m + 40*log(300/3)= Limit dBuV/m @300m +80,

Limit dBuV/m @3m = Limit dBuV/m @30m +40*log(30/3)= Limit dBuV/m @30m + 40.

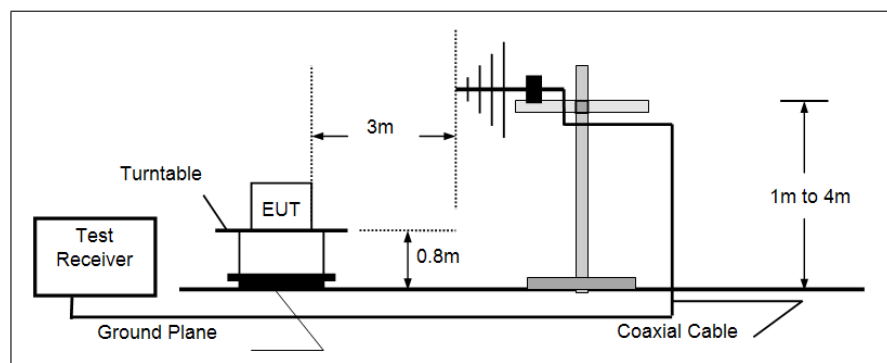
Frequency	Limit (dBuV/m @3m)	Value
30MHz~88MHz	40.00	Quasi-peak
88MHz~216MHz	43.50	Quasi-peak
216MHz~960MHz	46.00	Quasi-peak
960MHz~1GHz	54.00	Quasi-peak
Above 1GHz	54.00	Average
	74.00	Peak

TEST CONFIGURATION

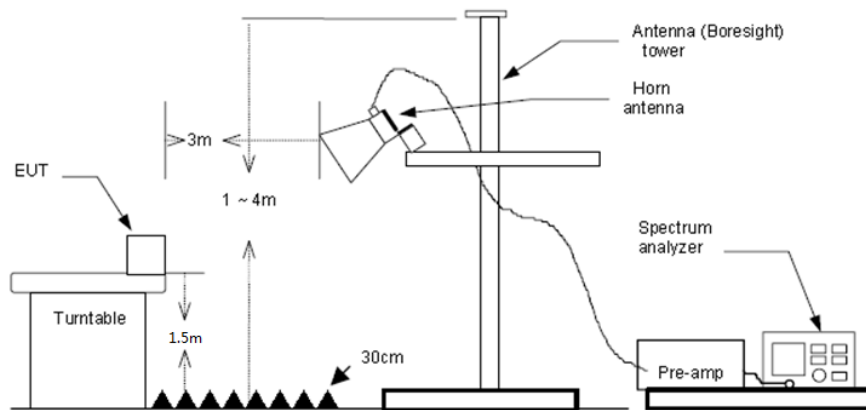
- 9 kHz ~ 30 MHz



- 30 MHz ~ 1 GHz



- Above 1 GHz



TEST PROCEDURE

1. The EUT was setup and tested according to ANSI C63.10 .
2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
4. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
5. Set to the maximum power setting and enable the EUT transmit continuously.
6. Use the following spectrum analyzer settings
 - a) Span shall wide enough to fully capture the emission being measured;
 - b) Below 1 GHz:

RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold;

If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
 - c) Set RBW=1MHz, VBW=3MHz for >1GHz, Sweep time=auto, Detector=peak, Trace=max hold for Peak measurement

For average measurement:

 - VBW=10Hz, When duty cycle is no less than 98 percent
 - $VBW \geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation, so refer to this clause 5.6 duty cycle.

TEST MODE

Refer to the clause 4.2

TEST RESULT

☒ **Passed** ☐ **Not Applicable**

Note:

- 1) Level= Reading + Factor/Transd; Factor/Transd =Antenna Factor+ Cable Loss- Preamp Factor
- 2) Over Limit = Level– Limit
- 3) Average measurement was not performed if peak level is lower than average limit(54 dBuV/m) for above 1GHz.

For 9 kHz ~ 30 MHz

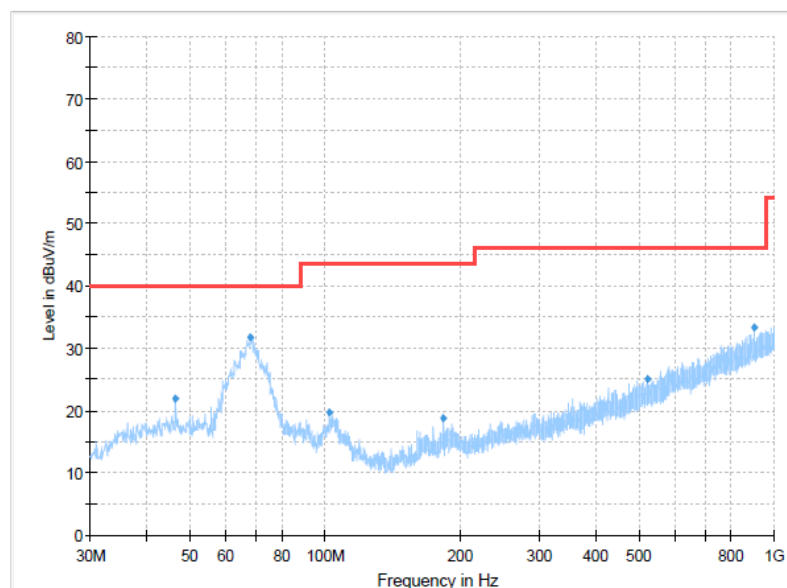
The EUT was pre-scanned this frequency band, found the radiated level 20dB lower than the limit, so don't show data on this report.

For 30 MHz ~ 1000 MHz

Have pre-scan all test channel, found CH39 which it was worst case, so only show the worst case's data on this report.

Polarization:

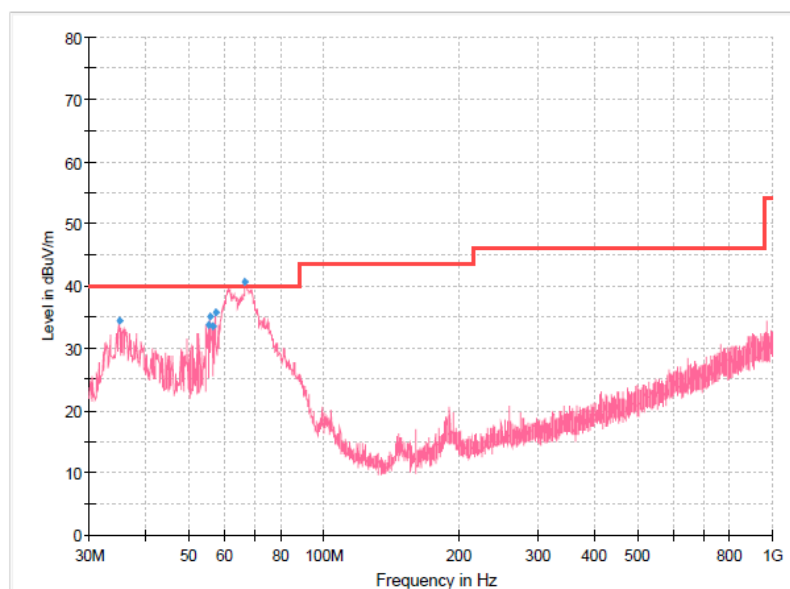
Horizontal

**Final Result**

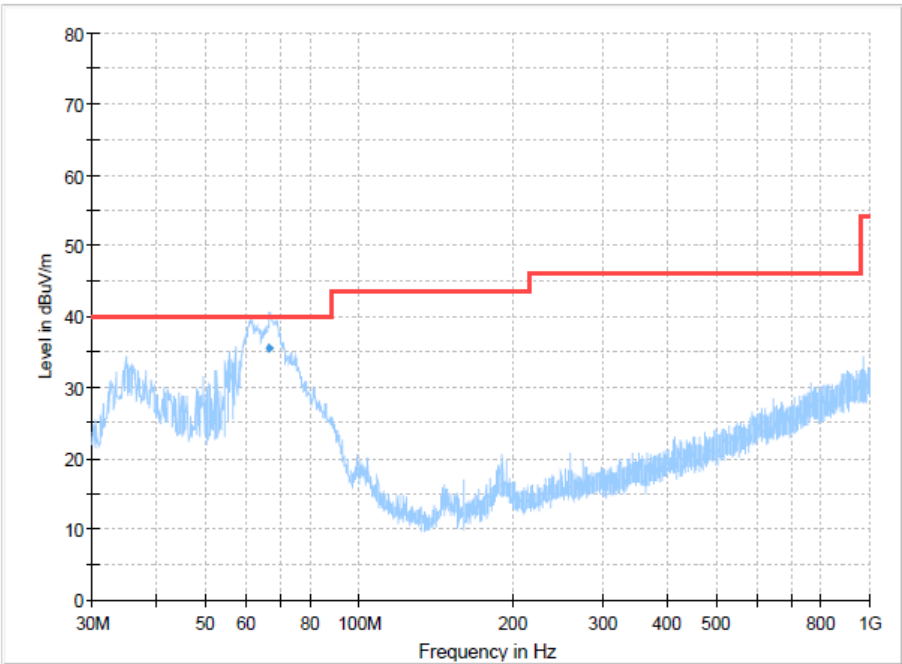
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
46.4900	21.83	40.00	18.17	100.0	H	80.0	-8.6
68.3150	31.78	40.00	8.22	300.0	H	57.0	-12.7
102.3863	19.78	43.50	23.72	300.0	H	202.0	-10.7
183.6238	18.84	43.50	24.66	100.0	H	269.0	-11.9
521.9113	25.10	46.00	20.90	100.0	H	37.0	-1.5
904.4550	33.20	46.00	12.80	300.0	H	249.0	6.6

Polarization:

Vertical

**Final Result**

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
34.9713	34.42	40.00	5.58	100.0	V	38.0	-11.8
55.2200	33.81	40.00	6.19	100.0	V	285.0	-9.1
55.5838	35.11	40.00	4.89	100.0	V	0.0	-9.1
56.7963	33.50	40.00	6.50	100.0	V	355.0	-9.3
57.2813	35.84	40.00	4.16	100.0	V	47.0	-9.4
66.6175	40.58	40.00	-0.58	100.0	V	113.0	-12.0



Final Result

Frequency (MHz)	QuasiPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
66.5975	35.45	40.00	4.55	100.0	V	98.0	-12.0

For 1 GHz ~ 25 GHz**BLE 1Mbps:**

Test channel		CH00			Polarity		Horizontal		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	3824.76	43.92	29.50	5.28	40.55	38.15	74.00	-35.85	Peak
2	4652.95	43.60	31.01	5.86	40.35	40.12	74.00	-33.88	Peak
3	7941.19	42.63	36.85	8.03	39.95	47.56	74.00	-26.44	Peak
4	11428.08	40.90	40.43	9.14	40.27	50.20	74.00	-23.80	Peak
Test channel		CH00			Polarity		Vertical		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	3200.50	47.09	28.90	4.78	40.82	39.95	74.00	-34.05	Peak
2	6956.63	41.79	34.93	7.38	39.45	44.65	74.00	-29.35	Peak
3	8083.96	42.05	37.00	8.05	39.92	47.18	74.00	-26.82	Peak
4	11515.68	40.73	40.47	9.22	40.22	50.20	74.00	-23.80	Peak

Test channel		CH19			Polarity		Horizontal		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	3973.62	44.10	29.75	5.40	40.35	38.90	74.00	-35.10	Peak
2	6047.78	41.28	32.50	6.69	39.21	41.26	74.00	-32.74	Peak
3	7961.43	42.74	36.92	8.03	39.95	47.74	74.00	-26.26	Peak
4	11254.86	41.17	40.05	9.00	40.45	49.77	74.00	-24.23	Peak
Test channel		CH19			Polarity		Vertical		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	4034.78	43.50	29.87	5.48	40.28	38.57	74.00	-35.43	Peak
2	4883.52	46.20	31.20	5.93	40.25	43.08	74.00	-30.92	Peak
3	7451.57	41.90	36.20	7.75	39.92	45.93	74.00	-28.07	Peak
4	10374.42	40.83	39.82	8.90	40.12	49.43	74.00	-24.57	Peak

Test channel		CH39			Polarity		Horizontal		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	4501.49	43.59	30.60	5.87	40.43	39.63	74.00	-34.37	Peak
2	6833.77	39.89	34.34	7.41	39.38	42.26	74.00	-31.74	Peak
3	8022.46	41.09	37.00	8.04	39.93	46.20	74.00	-27.80	Peak
4	10805.68	39.84	40.31	8.88	40.51	48.52	74.00	-25.48	Peak
Test channel		CH39			Polarity		Vertical		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	3893.52	42.15	29.69	5.32	40.44	36.72	74.00	-37.28	Peak
2	5546.36	41.12	31.71	6.44	39.66	39.61	74.00	-34.39	Peak
3	8104.56	41.66	36.98	8.05	39.91	46.78	74.00	-27.22	Peak
4	11515.68	38.79	40.47	9.22	40.22	48.26	74.00	-25.74	Peak

BLE 2Mbps:

Test channel		CH00			Polarity		Horizontal		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	3463.29	43.93	28.78	5.00	40.89	36.82	74.00	-37.18	Peak
2	5138.58	40.65	31.92	6.11	40.04	38.64	74.00	-35.36	Peak
3	7961.43	40.44	36.92	8.03	39.95	45.44	74.00	-28.56	Peak
4	11283.55	40.92	40.08	9.03	40.42	49.61	74.00	-24.39	Peak

Test channel		CH00			Polarity		Vertical		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	3525.56	43.46	29.10	5.12	40.96	36.72	74.00	-37.28	Peak
2	5617.41	40.57	31.60	6.52	39.55	39.14	74.00	-34.86	Peak
3	7099.75	40.57	35.70	7.42	39.57	44.12	74.00	-29.88	Peak
4	9784.47	40.23	39.30	8.60	39.86	48.27	74.00	-25.73	Peak

Test channel		CH19			Polarity		Horizontal		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	4034.78	42.19	29.87	5.48	40.28	37.26	74.00	-36.74	Peak
2	6833.77	40.04	34.34	7.41	39.38	42.41	74.00	-31.59	Peak
3	9181.20	39.96	38.69	8.47	39.93	47.19	74.00	-26.81	Peak
4	11574.46	39.59	40.35	9.29	40.30	48.93	74.00	-25.07	Peak

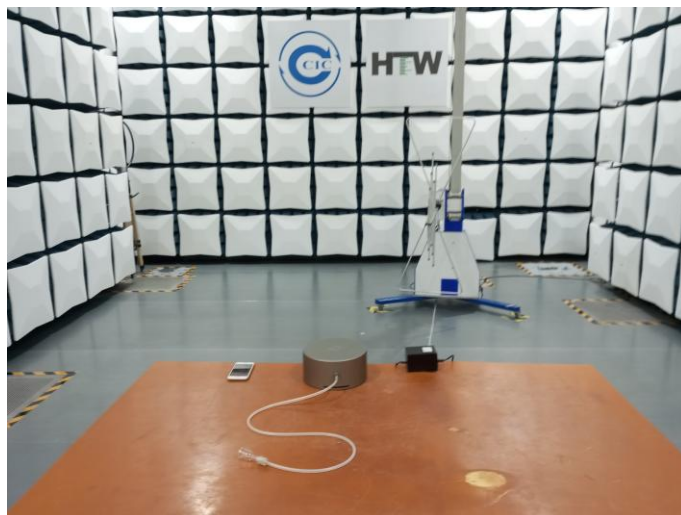
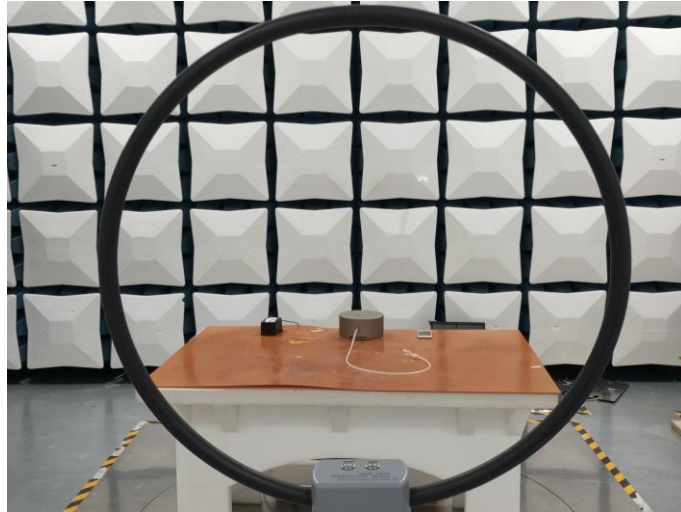
Test channel		CH19			Polarity		Vertical		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	5325.01	42.17	31.35	6.26	39.85	39.93	74.00	-34.07	Peak
2	7489.60	40.65	36.20	7.78	39.93	44.70	74.00	-29.30	Peak
3	9834.41	40.45	39.37	8.60	39.87	48.55	74.00	-25.45	Peak
4	11486.41	39.61	40.49	9.19	40.21	49.08	74.00	-24.92	Peak

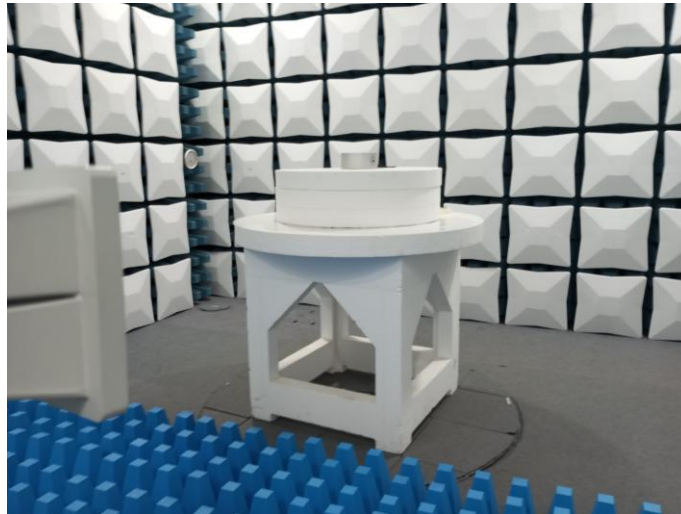
Test channel		CH39			Polarity		Horizontal		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	4958.68	45.81	31.23	5.97	40.22	42.79	74.00	-31.21	Peak
2	7081.70	41.82	35.55	7.40	39.55	45.22	74.00	-28.78	Peak
3	9228.06	40.93	38.97	8.49	39.91	48.48	74.00	-25.52	Peak
4	11428.08	41.13	40.43	9.14	40.27	50.43	74.00	-23.57	Peak

Test channel		CH39			Polarity		Vertical		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	4256.33	45.09	30.03	5.79	40.47	40.44	74.00	-33.56	Peak
2	6047.78	41.49	32.50	6.69	39.21	41.47	74.00	-32.53	Peak
3	8506.17	42.63	37.21	8.24	40.20	47.88	74.00	-26.12	Peak
4	10944.09	41.15	40.50	8.82	40.64	49.83	74.00	-24.17	Peak

6. TEST SETUP PHOTOS

Radiated Emission



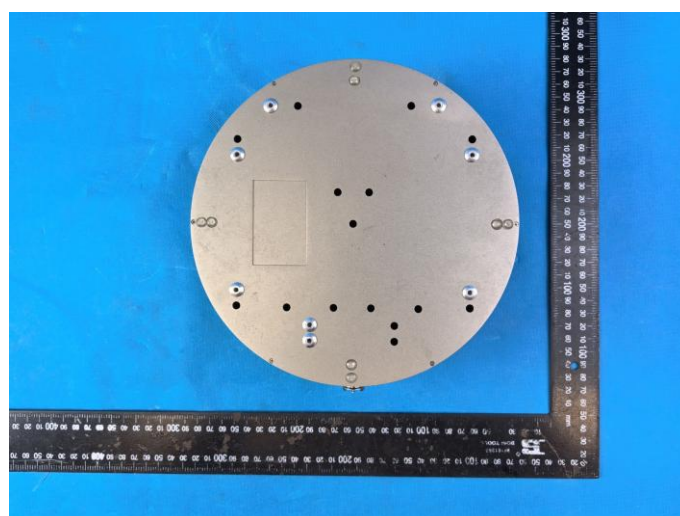
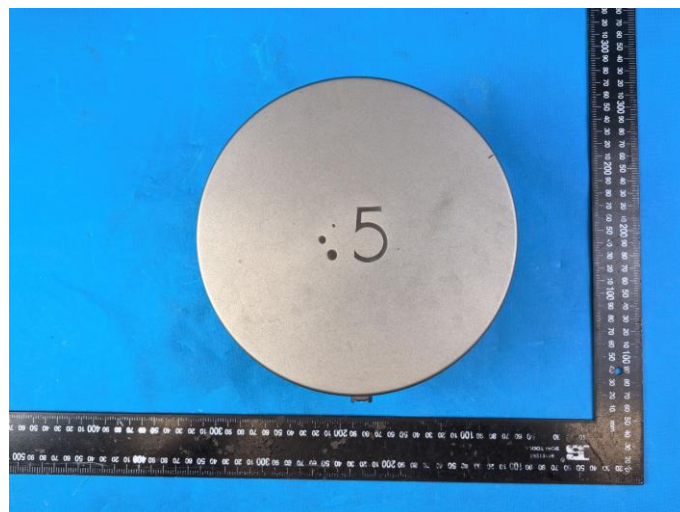
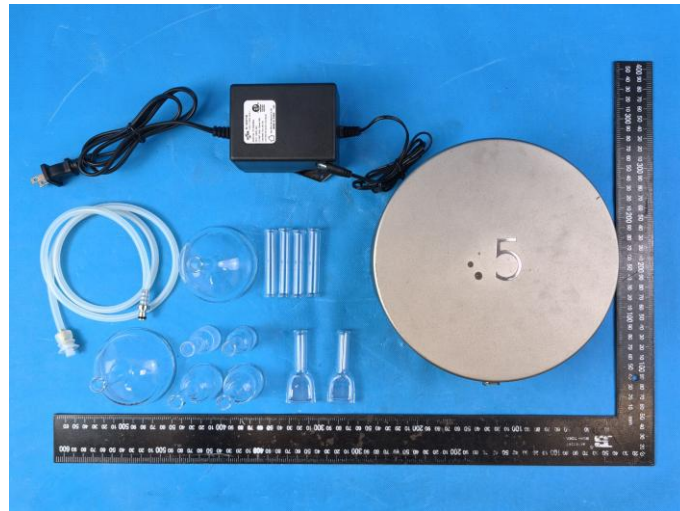


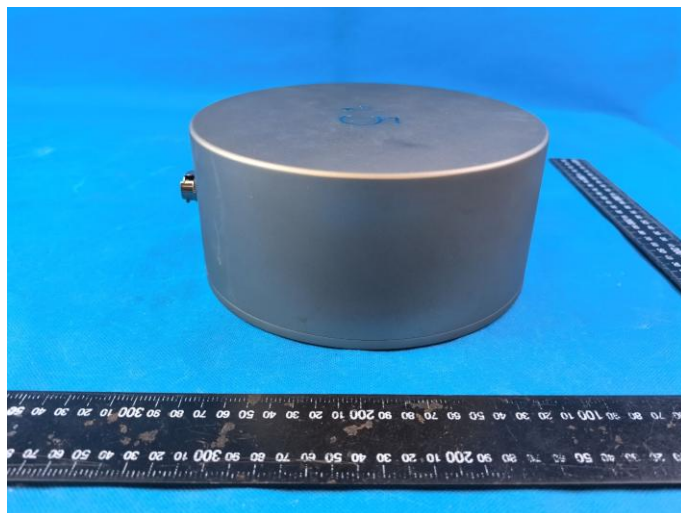
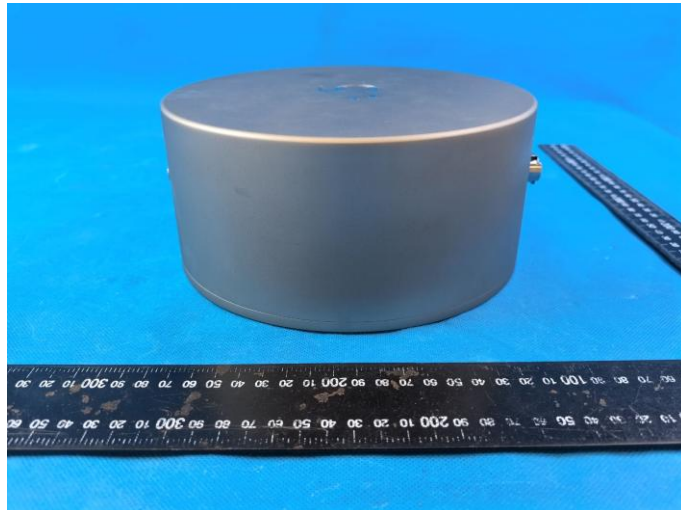
AC Conducted Emission

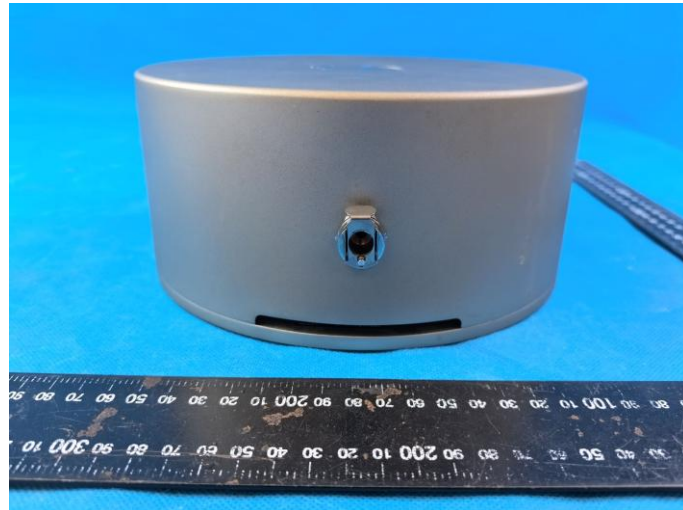


7. EXTERNAL AND INTERNAL PHOTOS

7.1. External Photos

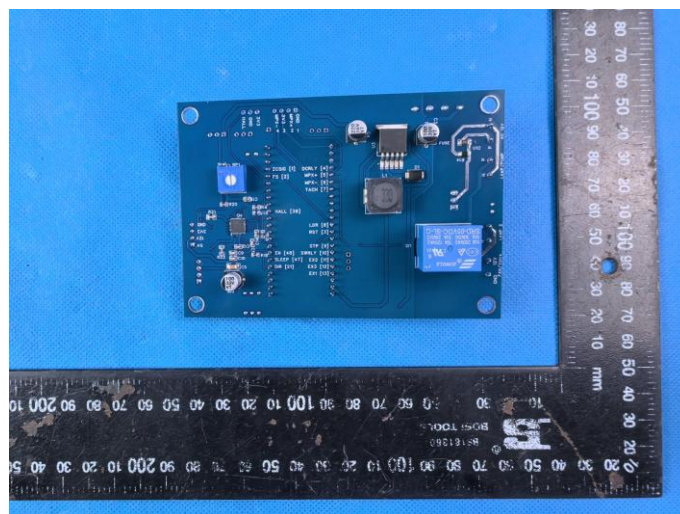
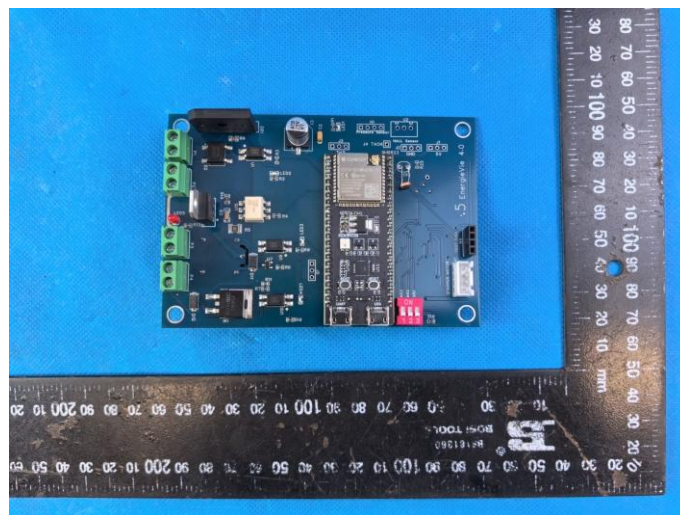
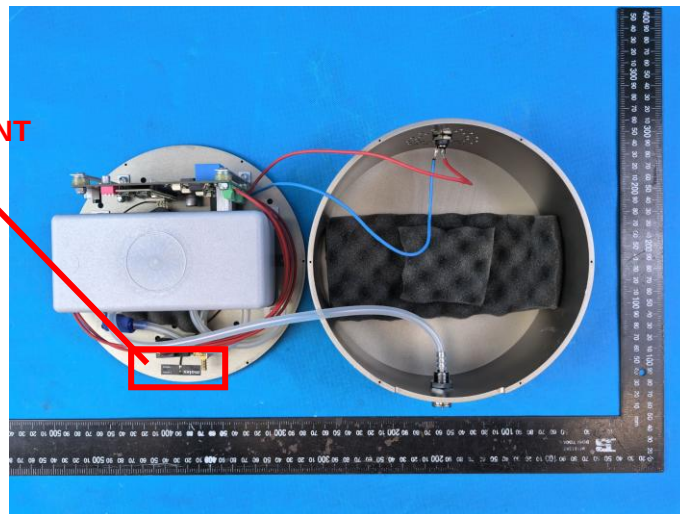


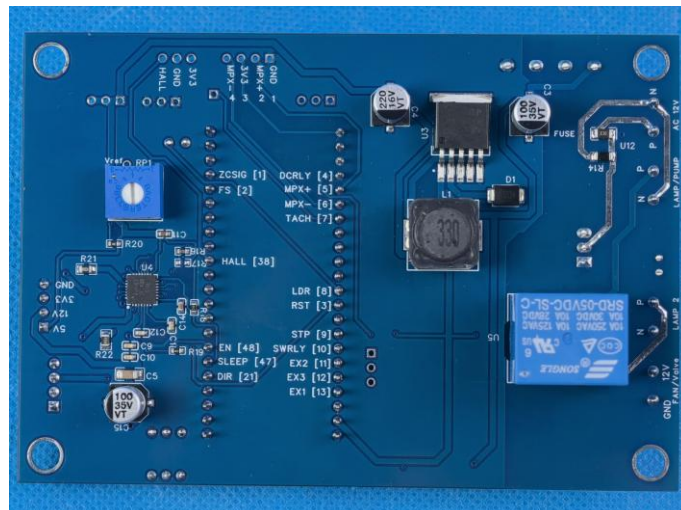
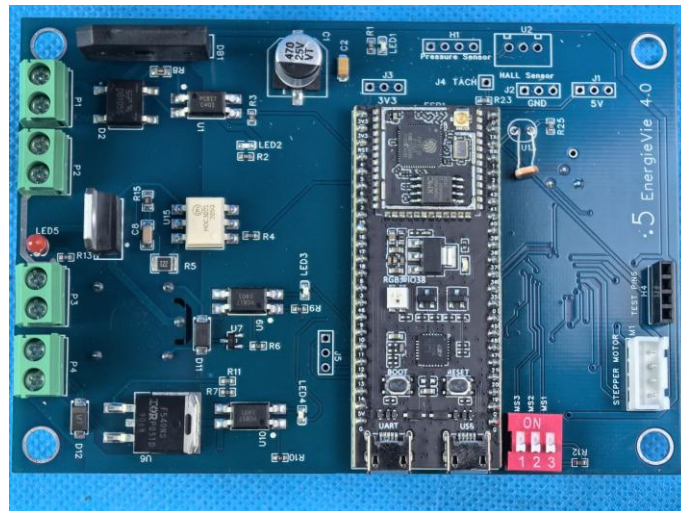
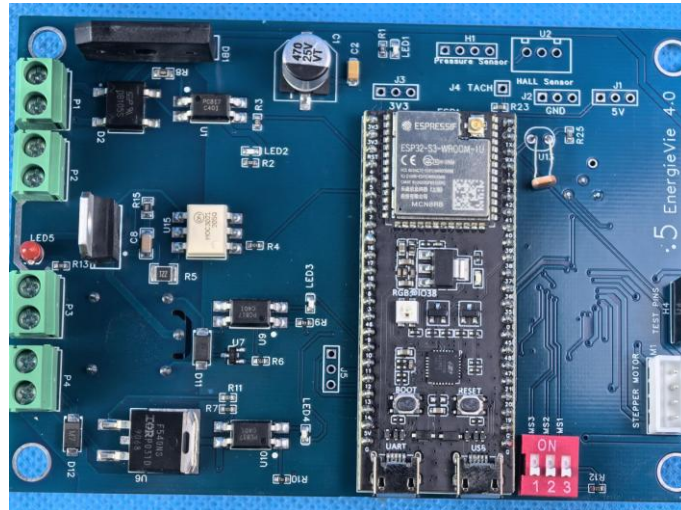




7.2. Internal Photos

BT & 2.4G WIFI ANT





--- End of Report ---