





TEST REPORT

For FCC Part15B

Report No.: **CHEW23060036** Report verification: 
Project No.: **SHT2303011905EW**
FCC ID.....: **2ASLFGZX-B300**
Applicant's name: **Guangzhou Homesun Medical Technology Co., Ltd**
Address.....: Floor 7th,TianxiangBusiness Building, No.28, Li Fu Road, Haizhu District, Guangzhou,GD .China
Product Name: **Smart Peak Flow Meter**
Trade Mark: -
Model No.: B300
Listed Model(s): -
Standard: **FCC CFR Title 47 Part 15 Subpart B**
Date of receipt of test sample.....: Apr.25,2023
Date of testing.....: Apr.26,2023- Jun.12,2023
Date of issue.....: Jun.21,2023
Result.....: **Pass**

Compiled by
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Testing Laboratory Name: **Shenzhen Huatongwei International Inspection Co., Ltd.**
Address.....: 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China

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The test report merely corresponds to the test sample.

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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 B](#) - Unintentional Radiators

[ANSI C63.4: 2014](#) – 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 40GHz

1.2. Report version information

Revision No.	Date of issue	Description
N/A	2023-06-21	Original

2. TEST DESCRIPTION

Section	Test Item	Section in CFR 47	Result #1	Test Engineer
5.1	Conducted Emissions	15.107(a)	PASS	Yongjin Lin
5.2	Radiated Emissions	15.109(a)	PASS	Chuanfeng Li Yifan Wang

Note:

#1: The test result does not include measurement uncertainty value

3. SUMMARY

3.1. Client Information

Applicant:	Guangzhou Homesun Medical Technology Co., Ltd
Address:	Floor 7th,TianxiangBusiness Building, No.28, Li Fu Road, Haizhu District, Guangzhou,GD .China
Manufacturer:	Guangzhou Homesun Medical Technology Co., Ltd
Address:	Floor 7th,TianxiangBusiness Building, No.28, Li Fu Road, Haizhu District, Guangzhou,GD .China

3.2. Product Description

Main unit information:	
Product Name:	Smart Peak Flow Meter
Trade Mark:	-
Model No.:	B300
Listed Model(s):	-
Power supply:	DC 3.7V from Battery
Hardware version:	V1.0.1.20220801
Software version:	V1.0.1.20220825

3.3. Testing Laboratory Information

Laboratory Name	Shenzhen Huatongwei International Inspection Co., Ltd.	
Laboratory Location	1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China	
Contact information:	Tel: 86-755-26715499 E-mail: cs@szhtw.com.cn http://www.szhtw.com.cn	
Qualifications	Type	Accreditation Number
	FCC	762235

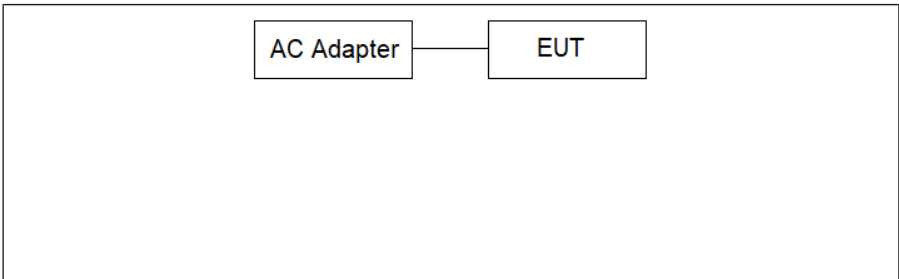
4. TEST CONFIGURATION

4.1. Descriptions of test mode

Test mode	Description
O1	The EUT is powered on and connected to the adapter.

Test Item	Test mode
Conducted Emissions	O1
Radiated Emissions	O1

4.2. Configuration of Tested System

Test mode	Configuration
O1	 <pre> graph LR AC[AC Adapter] --- EUT[EUT] </pre>

4.3. Support unit used in test configuration

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	Adapter	HUAWEI	HW-050200C01

4.4. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15~35°C
Relative Humidity:	30~60 %
Air Pressure:	950~1050mba

4.5. Statement of the measurement uncertainty

No.	Test Items	Measurement Uncertainty
1	AC Conducted Emission	3.21dB
2	Radiated 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 $k=1.96$.

4.6. Equipments Used during the Test

● 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	2022/8/30	2023/8/29
●	Artificial Mains	SCHWARZBECK	HTWE0113	NNLK 8121	573	2022/8/29	2023/8/28
●	Protection Network	SCHWARZBECK	HTWE0567	VTSD9561FN	00899	2022/8/29	2023/8/28
●	ISN	FCC	HTWE0148	FCC-TLISN-T2-02	20371	2022/8/29	2023/8/28
●	ISN	FCC	HTWE0150	FCC-TLISN-T8-02	20375	2022/8/29	2023/8/28
●	Test Software	R&S	N/A	EMC32	N/A	N/A	N/A

● 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	2022/8/30	2023/8/29
●	Ultra-Broadband Antenna	SCHWARZBECK	HTWE0119	VULB9163	546	2023/2/22	2026/2/21
●	Pre-Amplifier	SCHWARZBECK	HTWE0295	BBV 9742	/	2023/5/25	2024/5/24
●	Test Software	R&S	N/A	EMC32	N/A	N/A	N/A

● 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)
●	Semi-Anechoic Chamber	Albatross projects	HTWE0122	SAC-3m-01	C11121	2023/4/17	2026/4/16
●	Spectrum Analyzer	R&S	HTWE0098	FSP40	100597	2022/8/25	2023/8/24
●	Horn Antenna	SCHWARZBECK	HTWE0126	BBHA 9120D	1011	2023/2/14	2026/2/13
●	Horn Antenna	SCHWARZBECK	HTWE0103	BBHA9170	BBHA9170472	2023/2/20	2026/2/19
●	Broadband Pre-amplifier	SCHWARZBECK	HTWE0201	BBV 9718	9718-248	2023/5/25	2024/5/24
●	Test Software	R&S	N/A	EMC32	N/A	N/A	N/A

5. TEST CONDITIONS AND RESULTS

5.1. Conducted Emissions

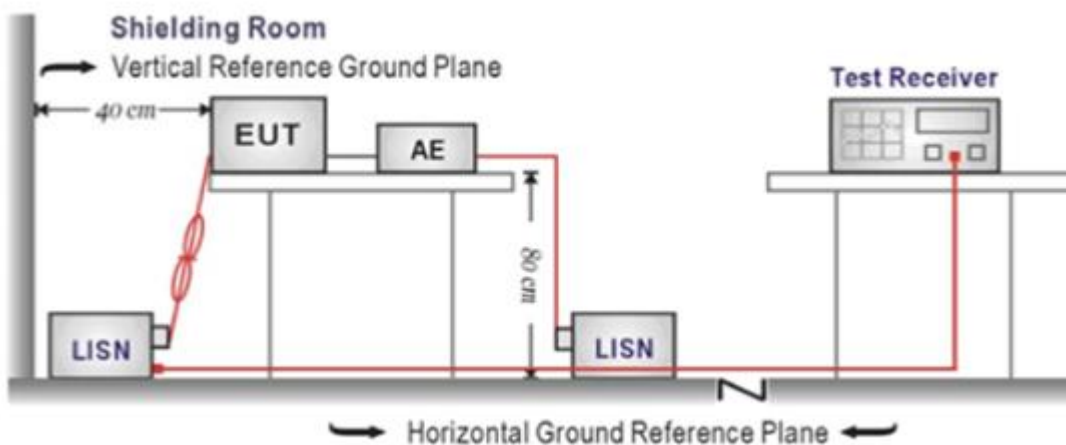
LIMIT

FCC CFR Title 47 Part 15 Subpart B Section 15.107:

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 C63.4:2014
2. The EUT was placed on a plat form 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 impedance stabilization network (LISN). The LISN provides a 50ohm / 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:

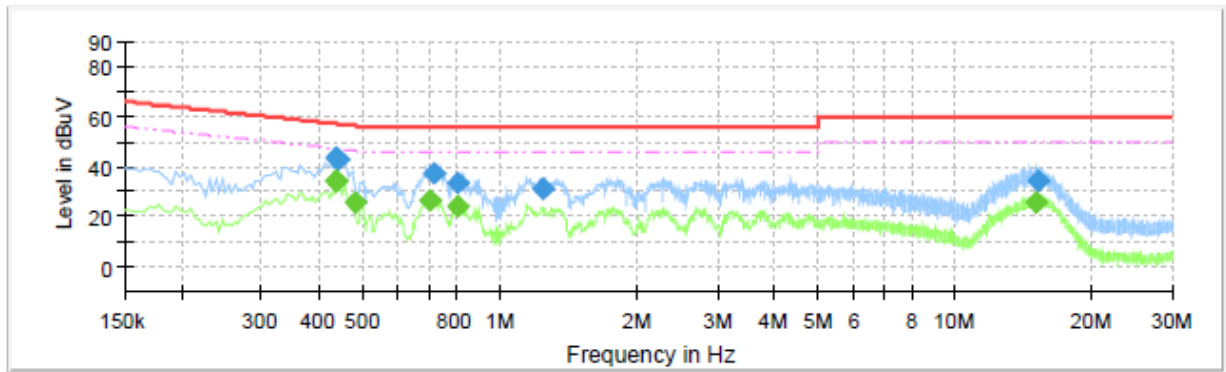
Please refer to the clause 3.3

TEST RESULTS

Passed Not Applicable

Test Line:

L

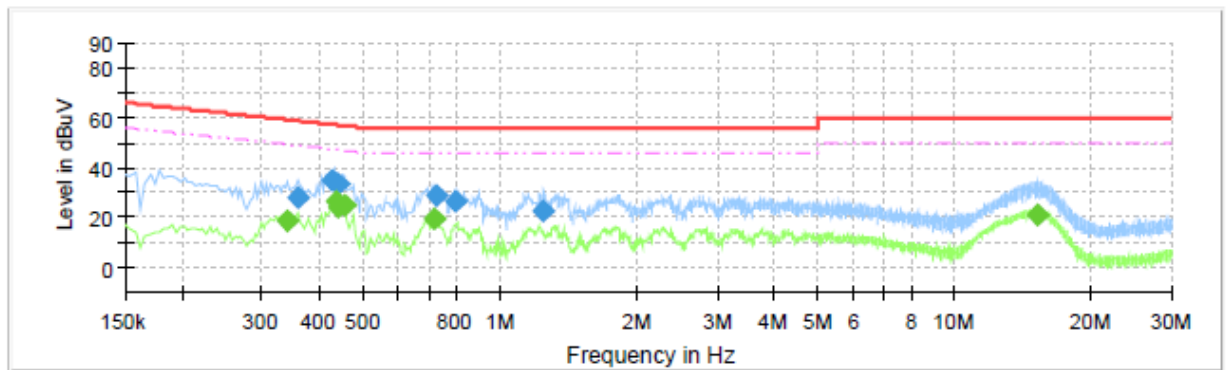


Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr. (dB)
0.435500	---	34.31	47.15	12.84	L1	10.2
0.435500	43.52	---	57.15	13.63	L1	10.2
0.436500	---	34.12	47.13	13.01	L1	10.2
0.439500	43.10	---	57.07	13.97	L1	10.2
0.479500	---	25.83	46.35	20.52	L1	10.2
0.703500	---	26.53	46.00	19.47	L1	10.3
0.719500	37.53	---	56.00	18.47	L1	10.3
0.807500	---	23.73	46.00	22.27	L1	10.3
0.811500	33.42	---	56.00	22.58	L1	10.3
1.243500	31.21	---	56.00	24.79	L1	10.3
14.995500	---	25.86	50.00	24.15	L1	10.7
15.183500	33.97	---	60.00	26.03	L1	10.7

Test Line:

N



Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr. (dB)
0.339500	---	18.91	49.22	30.31	N	10.2
0.359500	27.69	---	58.74	31.05	N	10.2
0.427500	35.05	---	57.30	22.25	N	10.2
0.435500	---	26.15	47.15	21.00	N	10.2
0.443500	33.53	---	57.00	23.47	N	10.2
0.443500	---	24.29	47.00	22.71	N	10.2
0.455500	---	24.51	46.77	22.26	N	10.2
0.715500	---	19.25	46.00	26.75	N	10.2
0.723500	28.98	---	56.00	27.02	N	10.2
0.799500	26.56	---	56.00	29.44	N	10.2
1.239500	22.95	---	56.00	33.05	N	10.3
15.199500	---	21.35	50.00	28.65	N	10.6

5.2. Radiated Emissions

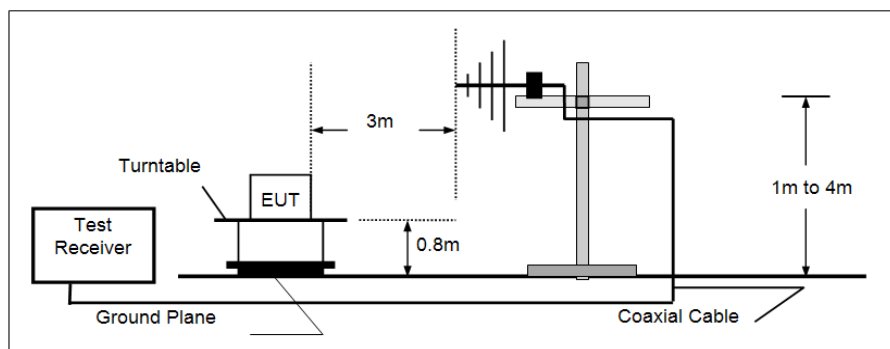
LIMIT

FCC CFR Title 47 Part 15 Subpart B Section 15.109

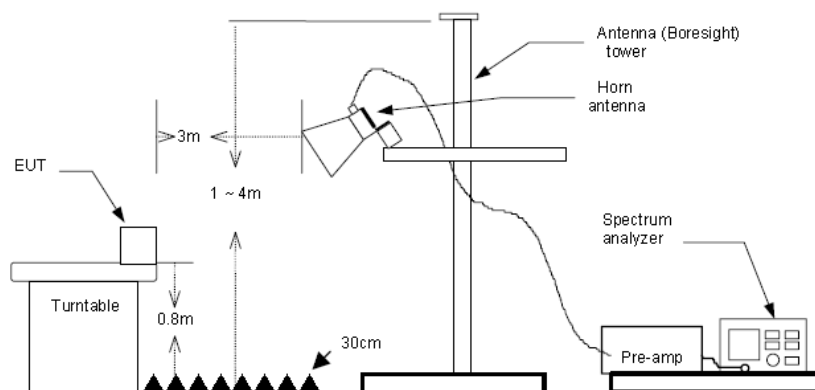
Frequency	Limit (dBuV/m @3m)	Value
30MHz-88MHz	40.00	Quasi-peak
88MHz-216MHz	43.50	Quasi-peak
216MHz-960MHz	46.00	Quasi-peak
960MHz-1GHz	54.00	Quasi-peak
Above 1GHz	54.00	Average
	74.00	Peak

TEST CONFIGURATION

➤ 30MHz ~ 1GHz



➤ Above 1GHz



TEST PROCEDURE

- The EUT was tested according to ANSI C63.4:2014.
- The EUT is placed on a turn table which is 0.8 meter above ground.
- The turn table is rotated 360 degrees to determine the position of the maximum emission level.
- The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
- 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.
- Use the following spectrum analyzer settings
 - Span shall wide enough to fully capture the emission being measured;
 - Below 1GHz,
RBW=120KHz, VBW=300KHz, 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.
 - From 1GHz to 5th harmonic, RBW=1MHz, VBW=3MHz

TEST MODE:

Please refer to the clause 3.3

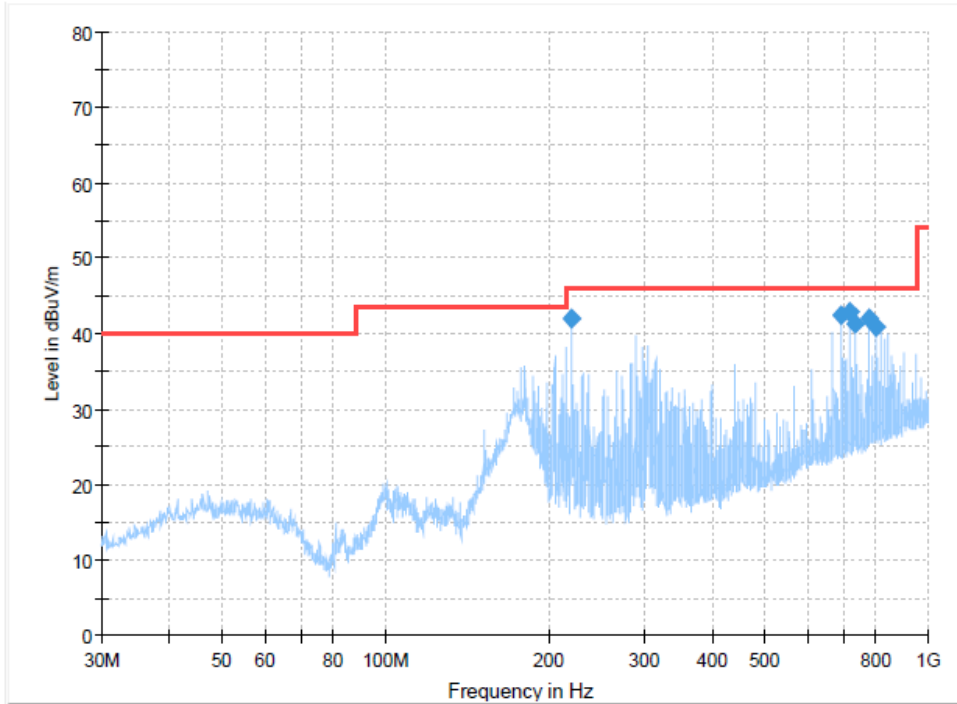
TEST RESULTS

Passed **Not Applicable**

Note: Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
The emission levels of frequency above 6GHz are very lower than limit and not show in test report.

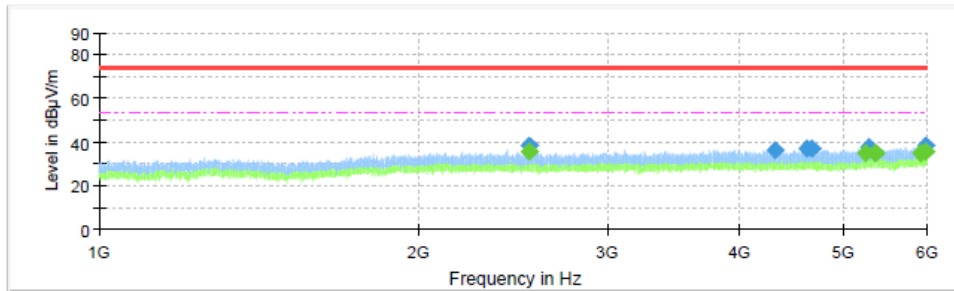
Polarization:

Horizontal



Final Result

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
219.877500	42.03	46.00	3.97	100.0	H	186.0	-10.5
693.116250	42.57	46.00	3.43	100.0	H	157.0	2.2
719.185000	42.94	46.00	3.06	100.0	H	150.0	2.9
735.068750	41.25	46.00	4.75	100.0	H	139.0	3.2
777.021250	42.03	46.00	3.97	100.0	H	139.0	4.1
802.726250	40.84	46.00	5.16	100.0	H	168.0	4.8

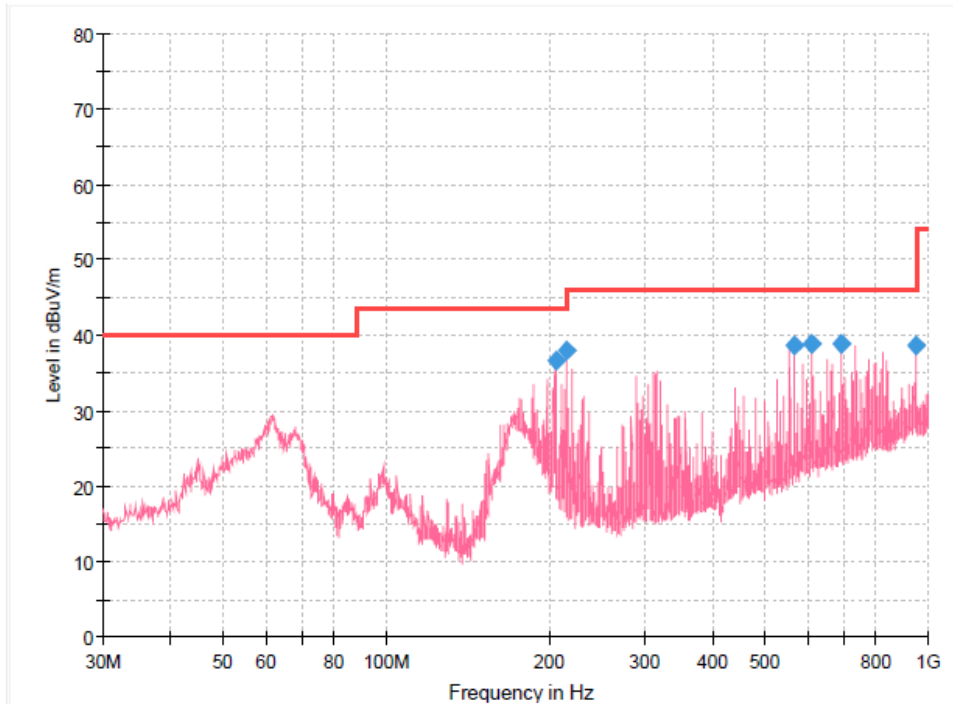


Final Result

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2535.781250	---	35.62	54.00	18.38	150.0	H	144.0	-5.4
2535.781250	38.05	---	74.00	35.95	150.0	H	144.0	-5.4
4314.687500	36.48	---	74.00	37.52	150.0	H	120.0	-2.5
4620.156250	37.28	---	74.00	36.72	150.0	H	323.0	-1.5
4672.343750	37.12	---	74.00	36.88	150.0	H	299.0	-1.5
5242.968750	---	34.92	54.00	19.08	150.0	H	354.0	-0.3
5293.125000	37.38	---	74.00	36.62	150.0	H	24.0	-0.1
5353.593750	---	34.54	54.00	19.46	150.0	H	127.0	0.0
5365.000000	---	34.68	54.00	19.32	150.0	H	134.0	0.0
5906.250000	---	35.21	54.00	18.79	150.0	H	41.0	1.2
5978.593750	---	35.39	54.00	18.61	150.0	H	213.0	1.2
5978.593750	38.25	---	74.00	35.75	150.0	H	213.0	1.2

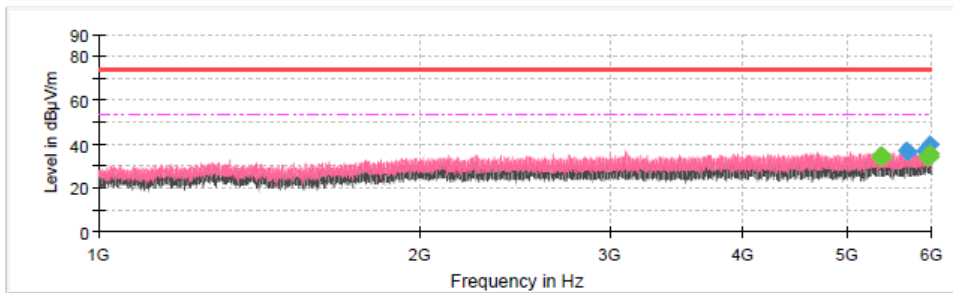
Polarization:

Vertical



Final Result

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
205.327500	36.62	43.50	6.88	100.0	V	301.0	-11.0
215.027500	38.01	43.50	5.49	100.0	V	201.0	-10.7
567.016250	38.74	46.00	7.26	100.0	V	63.0	-0.6
609.090000	38.95	46.00	7.05	100.0	V	312.0	1.2
693.116250	38.87	46.00	7.13	100.0	V	51.0	2.2
948.347500	38.74	46.00	7.26	100.0	V	110.0	7.1



Final Result

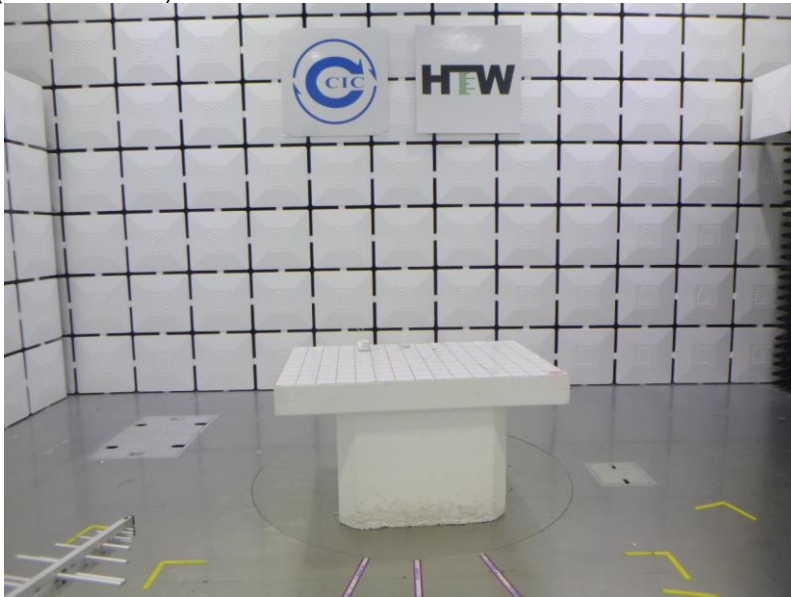
Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5363.593750	---	34.18	54.00	19.82	150.0	V	40.0	0.0
5376.250000	---	34.79	54.00	19.21	150.0	V	8.0	0.0
5408.437500	---	34.20	54.00	19.80	150.0	V	40.0	0.1
5692.968750	36.63	---	74.00	37.37	150.0	V	40.0	0.4
5708.593750	36.32	---	74.00	37.68	150.0	V	0.0	0.5
5912.343750	36.77	---	74.00	37.23	150.0	V	16.0	1.2
5928.281250	36.50	---	74.00	37.50	150.0	V	8.0	1.2
5929.687500	---	34.11	54.00	19.89	150.0	V	8.0	1.2
5962.031250	36.41	---	74.00	37.59	150.0	V	0.0	1.2
5971.562500	---	34.29	54.00	19.71	150.0	V	16.0	1.2
5982.187500	39.64	---	74.00	34.36	150.0	V	0.0	1.2
5982.187500	---	35.49	54.00	18.51	150.0	V	0.0	1.2

6. TEST SETUP PHOTOS OF THE EUT

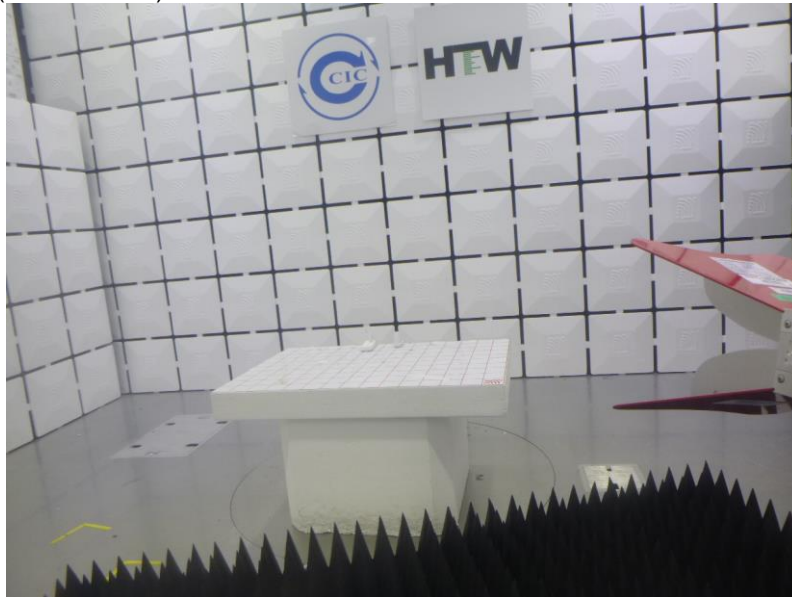
Conducted Emissions (AC Mains)



Radiated Emissions (30MHz-1GHz)



Radiated Emissions (Above 1GHz)



7. EXTERNAL AND INTERNAL PHOTOS OF THE EUT

Refer to the test report No.: CHTEW23060033

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