



FCC CERTIFICATION TEST REPORT

Applicant	:	Nimble For Good, PBC.
Address of Applicant	:	1008 Brioso Drive, Costa Mesa, California, United States, 92627
Manufacturer	:	Nimble For Good, PBC.
Address of Manufacturer	:	1008 Brioso Drive, Costa Mesa, California, United States, 92627
Equipment under Test	:	CHAMP WIRELESS 10K
Model No.	:	NB-CPC-10KWRLS
FCC ID	:	2AZIO-CHAMP10W
Test Standard(s)	:	FCC Rules and Regulations Part 15 Subpart C, ANSI C63.10:2013
Report No.	:	DDT-RE25022703-2E03
Issue Date	:	2025/03/13
Issue By	:	Guangdong Dongdian Testing Service Co., Ltd. Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808

REPORT

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Test Report Declare

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Test Standard Used:
FCC Rules and Regulations Part 15 Subpart C,
ANSI C63.10:2013

We Declare:
The equipment described above is tested by Guangdong Dongdian Testing Service Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Guangdong Dongdian Testing Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

Report No.:	DDT-RE25022703-2E03		
Date of Receipt:	2025/02/28	Date of Test:	2025/02/28~2025/03/13

Prepared By:

Tiger Mo

Tiger Mo/Engineer

Approved By:



Damon Hu/EMC Manager

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Guangdong Dongdian Testing Service Co., Ltd.

Revision History

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	2025/03/13	

1. Summary of Test Results

No.	Test Parameter	Clause No.	Condition	Result
1	20 dB Bandwidth	FCC Part 15: 15.215	/	Pass
2	Radiated Emission	FCC Part 15: 15.205, FCC Part 15: 15.209	/	Pass
3	Power Line Conducted Emissions	FCC Part 15: 15.207(a)	/	Pass
4	Antenna Requirement	FCC Part 15: 15.203	/	Pass
Note: N/A is an abbreviation for Not Applicable, and means this item is not applicable for this device or no need to test according to standard.				

2. General Test Information

2.1. Description of EUT

EUT Name	: CHAMP WIRELESS 10K
Model Number	: NB-CPC-10KWRLS
Difference of model number	: /
EUT Function Description	: Please reference user manual of this device
Power Supply	Input: (USB-C):5V=3A,9V=2.22A Output: (USB-C):5V=3A,9V=2.22A (wireless): 15W Max. (USB-C+wireless):5V=2A+7.5W Built-in Battery 3.87V,10,000mAh,38.7Wh
Hardware Version	: V0.3
Software Version	: V0.2

Wireless charging Operation frequency	: 111 kHz - 148 kHz, 360kHz
Antenna Type	: Inductive loop coil antenna

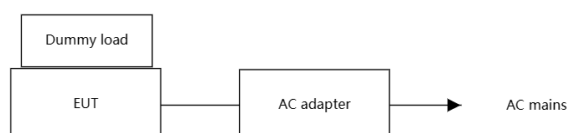
Note: The above EUT information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications or User's Manual. The above Antenna information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

“☑” means to be chosen or applicable; “☐” means don't to be chosen or not applicable; This note applies to entire report.

2.2. Accessories of EUT

Accessories	Manufacturer	Model number	Description
/	/	/	/

2.3. Block diagram of EUT configuration for test



2.4. Decision of final test mode

According pre-test, the worst test modes were reported as below:

For mode 1: Tx mode (5W load, 7.5W load, 15W load)

For mode 2: Standby mode

Note: Scan with mode 1 and mode 2, the worst case is mode 1 Tx mode (15W load) and recorded in this report

2.5. Deviations of test standard

No deviation.

2.6. Test environment conditions

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

Temperature range:	+15°C to +35 °C
Humidity range:	20% to 75%
Pressure range:	86 kPa to106 kPa

Note: The specific temperature and humidity information of each test item refers to the temperature and humidity record in the corresponding test data.

2.7. Test laboratory

Guangdong Dongdian Testing Service Co., Ltd.

Add.: Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808.

Tel.: +86-0769-38826678, <http://www.dgddt.com>, Email: ddt@dgddt.com.

CNAS Accreditation No. L6451; A2LA Accreditation Number: 3870.01

FCC Designation Number: CN1182, Test Firm Registration Number: 540522

Innovation, Science and Economic Development Canada Site Registration Number: 10288A

Conformity Assessment Body identifier: CN0048

VCCI facility registration number: C-20087, T-20088, R-20123, R-20240, G-20118

2.8. Measurement uncertainty

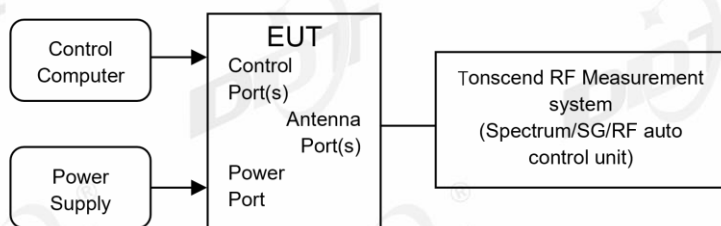
Test Item	Uncertainty
Bandwidth	1.1%
Peak Output Power (Conducted) (Spectrum analyzer)	0.86 dB ($10 \text{ MHz} \leq f < 3.6 \text{ GHz}$);
	1.38 dB ($3.6 \text{ GHz} \leq f < 8 \text{ GHz}$)
Peak Output Power (Conducted) (Power Sensor)	0.74 dB
Power Spectral Density	0.74 dB ($10 \text{ MHz} \leq f < 3.6 \text{ GHz}$);
	1.38 dB ($3.6 \text{ GHz} \leq f < 8 \text{ GHz}$)
Frequencies Stability	6.7×10^{-8} (Antenna couple method)
	5.5×10^{-8} (Conducted method)
Conducted spurious emissions	0.86 dB ($10 \text{ MHz} \leq f < 3.6 \text{ GHz}$);
	1.40 dB ($3.6 \text{ GHz} \leq f < 8 \text{ GHz}$)
	1.66 dB ($8 \text{ GHz} \leq f < 26.5 \text{ GHz}$)
Uncertainty for radio frequency (RBW < 20 kHz)	3×10^{-8}
Temperature	0.4 °C
Humidity	2 %
Uncertainty for Radiation Emission test (9 kHz – 30 MHz)	3.44 dB
Uncertainty for Radiation Emission test (30 MHz - 1 GHz)	4.70 dB (Antenna Polarize: V)
	4.84 dB (Antenna Polarize: H)
Uncertainty for Radiation Emission test (1 GHz - 40 GHz)	4.10 dB (1 - 6 GHz)
	4.40 dB (6 GHz - 18 GHz)
	3.54 dB (18 GHz - 26 GHz)
	4.30 dB (26 GHz - 40 GHz)
Uncertainty for Power line conduction emission test	3.34dB (150KHz-30MHz)
	3.72dB (9KHz-150KHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

3 20 dB Bandwidth

3.1. Test equipment

Equipment	Manufacturer	Model No.	Serial Number	Due Date
☑ RF Connected Test (RF Measurement System 2#)				
SPECTRUM ANALYZER	R&S	FSU26	201124	2025/07/08
Power Sensor	R&S	NRP-Z22	101254	2025/07/08
Test Software	Tonscend	JS1120-3	Ver.3.2.22	N/A

3.2. Block diagram of test setup



3.3. Limits

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in § 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

3.4. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description	other
Dummy load	N/A	N/A	N/A	N/A

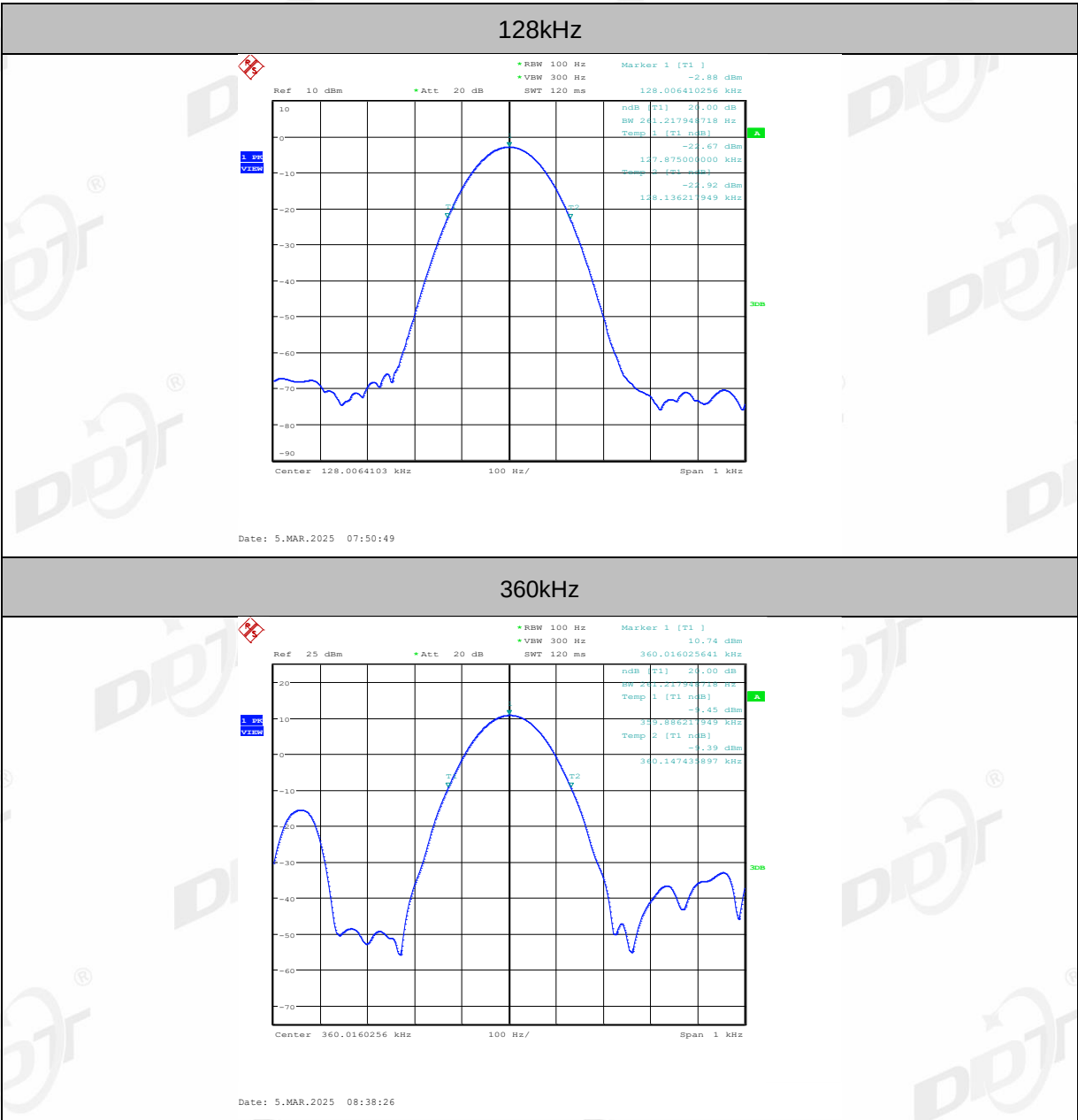
3.5. Test procedure

- (1) Connect EUT's antenna output to spectrum analyzer by RF cable.
- (2) The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100Hz RBW and 300Hz VBW. The 20 dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20 dB.

3.6. Test result

Wireless charging Operation frequency(kHz)	Freq. (kHz)	20 dB bandwidth Result (kHz)	Conclusion
111 - 148	128	261.22	Pass
360	360	261.22	Pass

3.7. Original test data

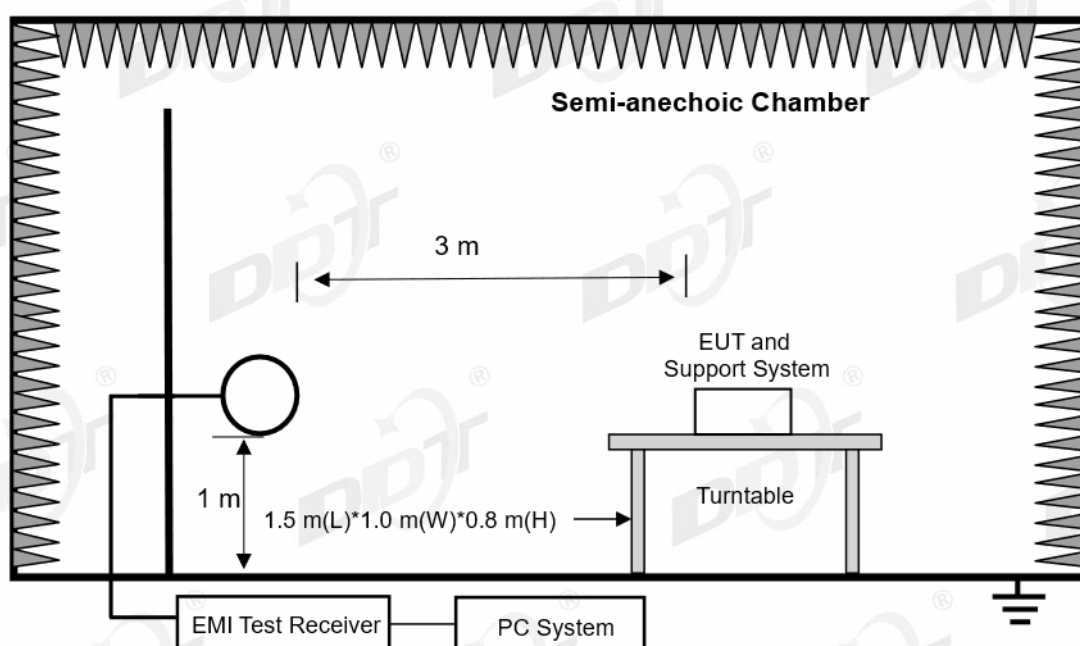


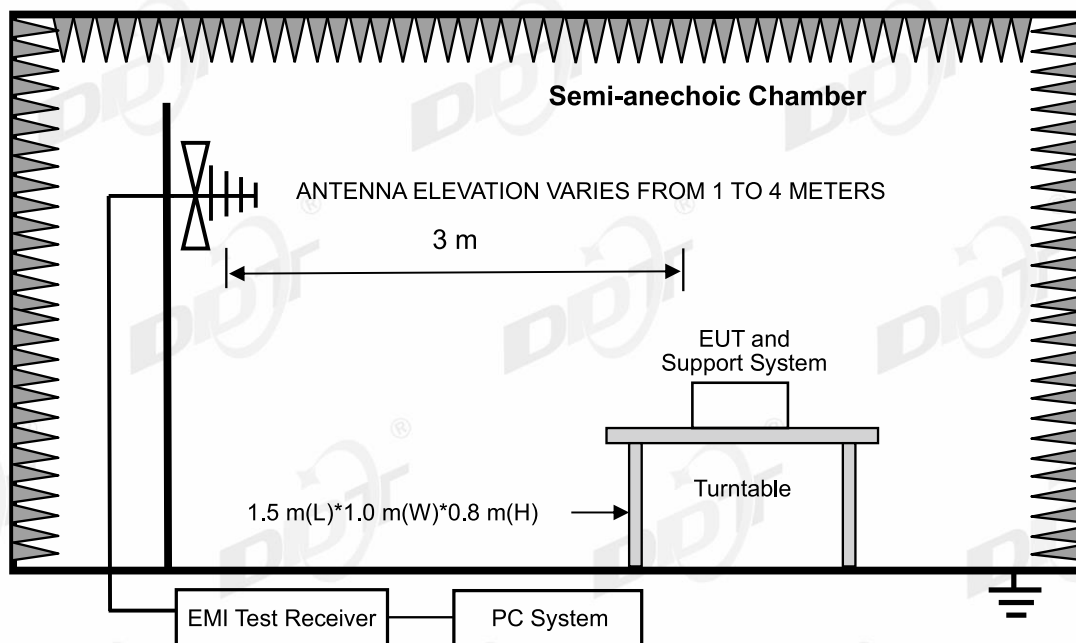
4. Radiated Emission

4.1. Test equipment

Equipment	Manufacturer	Model No.	Serial No.	Cal Due To
Micro-Tronics filters	REBES	BRM50702	DDT-ZC03242	/
RF Cable	N/A	W24.02 HL-562	DDT-ZC04022	2025/03/31
RF cable	Yuhu Technology	JCTB810-NJ-NJ-9M	DDT-ZC02538	2025/03/31
High pass filter	Micro-Tronics	HPM50102	DDT-ZC00561	2025/04/22
Active Loop Antenna	Schwarzbeck	FMZB1519	DDT-ZC00524	2025/09/11
EMI TEST RECEIVER	R&S	ESU26	DDT-ZC01909	2025/03/31
Trilog Broadband Antenna	Schwarzbeck	VULB 9163	DDT-ZC02050	2025/07/11
PSA Series Spectrum Analyzer	Agilent	E4447A	DDT-ZC00517	2025/03/31
High pass filter	Micro-Tronics	HPM50108	DDT-ZC00560	2025/04/22
Hochgewinn-Hornantenne	SCHWARZBEC K	BBHA 9120 D	DDT-ZC02129	2025/09/18
RF cable	Zhongke Junchuang	JCT26S-NJ-NJ-1.5M	DDT-ZC02762	2025/03/31
High Pass filter	Xi'an Xingbo	XBLBQ-GTA67	DDT-ZC02179	2025/04/22
RF cable	Yuhu Technology	ZT26S-SMAJ-SMAJ-1M	DDT-ZC02037	2025/03/31
Pre-amplifier	COM-POWER	PAM-840A	DDT-ZC01693	2025/03/31
Micro-Tronics filters	REBES	BRM50716	DDT-ZC03240	/
RF Cable	N/A	W13.02 AP1-X2	DDT-ZC04023	2025/03/31
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	DDT-ZC00506	2025/04/26
Pre-amplifier	COM-POWER	PAM-118A	DDT-ZC01293	2025/08/25

4.2. Block diagram of test setup





4.3. Limits

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		uV/m	dB(uV)/m
0.009 ~ 0.490	300	2400/F(kHz)	67.6-20log(F)
0.490 ~ 1.705	30	24000/F(kHz)	87.6-20log(F)
1.705 ~ 30.0	30	30	29.54
30~ 88	3	100	40.0
88~ 216	3	150	43.5
216~ 960	3	200	46.0
960~ 1000	3	500	54.0

Note:

(1) The emission limits shown in the above table are based on measurements employing a CISPR QP detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emissions limits in these three bands are based on measurements employing an average detector.

(2) At frequencies below 30 MHz, measurement may be performed at a distance closer than that specified, and the limit at closer measurement distance can be extrapolated by below formula:

$$\text{Limit}_{3\text{m}}(\text{dBuV/m}) = \text{Limit}_{300\text{m}}(\text{dBuV/m}) + 40\text{Log}(300\text{m}/3\text{m}) = \text{Limit}_{300\text{m}}(\text{dBuV/m}) + 80$$

$$\text{Limit}_{3\text{m}}(\text{dBuV/m}) = \text{Limit}_{30\text{m}}(\text{dBuV/m}) + 40\text{Log}(30\text{m}/3\text{m}) = \text{Limit}_{30\text{m}}(\text{dBuV/m}) + 40$$

4.4. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description	other
Dummy load	N/A	N/A	N/A	N/A

4.5. Test procedure

(1) EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber for below 1G and 150 cm above the ground plane inside a fully-anechoic chamber for above 1G.

(2) Test antenna was located 3 m from the EUT on an adjustable mast, and the antenna used as below table.

Test frequency range	Test antenna used	Test antenna distance
9 kHz - 30 MHz	Active Loop antenna	3 m
30 MHz - 1 GHz	Trilog Broadband Antenna	3 m

According ANSI C63.10:2013 clause 6.4.6 and 6.5.3, for measurements below 30 MHz, Antenna was located 3 m from EUT, the loop antenna was positioned in three antenna orientations (parallel, perpendicular, and round-parallel), for each measurement antenna alignment, the EUT shall be rotated through 0° to 360° on a turntable, and the lowest height of the magnetic antenna shall be 1 m above the ground. For measurement above 30MHz, the trilog Broadband Antenna or Horn Antenna was located 3m from EUT, Measurements were made with the antenna positioned in both the horizontal and vertical planes of Polarization, and the measurement antenna was varied from 1 m to 4 m. in height above the reference ground plane to obtain the maximum signal strength.

(3) Below pre-scan procedure was first performed in order to find prominent frequency spectrum radiated emissions from 9 kHz to 25 GHz:

(a) Scanning the peak frequency spectrum with the antenna specified in step (3), and the EUT was rotated 360 degree, the antenna height was varied from 1 m to 4 m (Except loop antenna, it's fixed 1 m above ground.)

(b) Change work frequency or channel of device if practicable.

(c) Change modulation type of device if practicable.

(d) Change power supply range from 85% to 115% of the rated supply voltage

(e) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions.

Spectrum frequency from 9 kHz to 25 GHz (tenth harmonic of fundamental frequency) was investigated, and no any obvious emission were detected from 18 GHz to 25 GHz, so below final test was performed with frequency range from 9 kHz to 18 GHz.

(4) For final emissions measurements at each frequency of interest, the EUT was rotated and the antenna height was varied between 1 m and 4 m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipment and all of the interface cables were changed according to ANSI C63.10:2013 on Radiated Emission test.

(5) The emissions from 9 kHz to 1 GHz were measured based on CISPR QP detector except for the frequency bands 9 - 90 kHz, 110 - 490 kHz, for emissions from 9 kHz - 90 kHz, 110 kHz - 490 kHz and above 1 GHz were measured based on average detector, for emissions above 1 GHz, peak emissions also be measured and need comply with Peak limit.

(6) The emissions from 9 kHz to 1 GHz, QP or average values were measured with EMI receiver with below RBW.

Frequency band	RBW
9 kHz - 150 kHz	200 Hz
150 kHz - 30 MHz	9 kHz
30 MHz - 1 GHz	120 kHz

(7) For emissions above 1GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1 MHz, VBW is set at 3 MHz for Peak measure; According ANSI C63.10:2013 clause 4.1.4.2.2 procedure for average measure.

(8) For portable device, X axis, Y axis, Z axis are tested, and worse setup is reported.

4.6. Test result

PASS. (See below detailed test result)

Note: All Polarity and mode have been pretest, and only the worst case is shown in report.

4.7. Test data

TR-4-E-009 Radiated Emission Test Result

Test Date:

2025-03-10

Tested By:

Lin Guoyuan

EUT:

CHAMP WIRELESS 10K

Model Number:

NB-CPC-10KWRLS

Test Mode:

Operate 111-148kHz Mode

Power Supply:

Battery

Condition:

Temp:21.3°C;Humi:47.4%

Test Site:

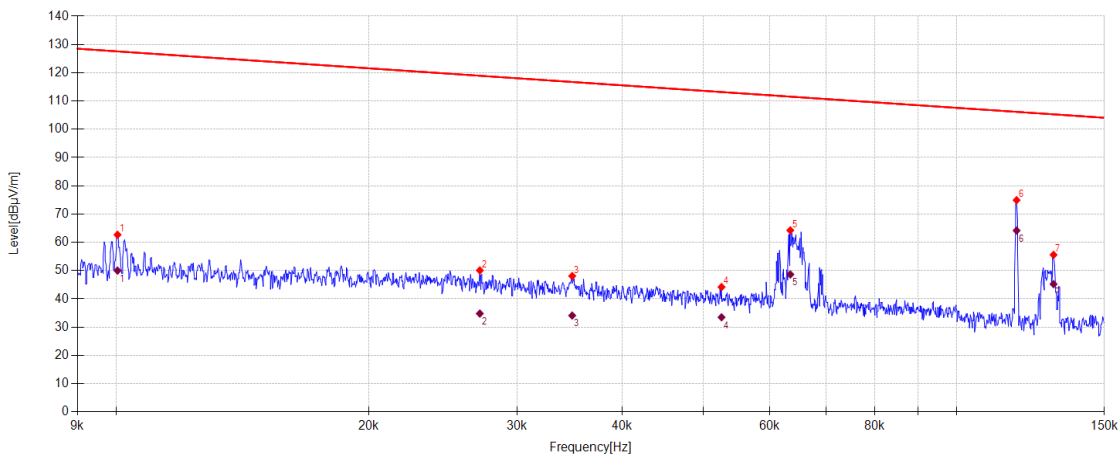
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Memo:

5W Sample Numbler:S25022703-004



Data List										
NO.	Freq. [MHz]	Reading [dBμV/m]	Antenna Factor [dB]	Cable loss [dB]	AMP [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	0.010	69.36	20.50	3.21	-30.40	62.67	127.56	64.89	PK	Vertical
2	0.027	56.92	20.43	3.23	-30.51	50.07	118.94	68.87	PK	Vertical
3	0.035	55.01	20.40	3.23	-30.57	48.07	116.74	68.67	PK	Vertical
4	0.053	51.23	20.40	3.24	-30.68	44.19	113.19	69.00	PK	Vertical
5	0.063	71.37	20.40	3.23	-30.76	64.24	111.55	47.31	PK	Vertical
6	0.118	82.45	20.26	3.22	-31.00	74.93	106.17	31.24	PK	Vertical
7	0.131	63.16	20.20	3.22	-31.00	55.58	105.29	49.71	PK	Vertical

Data List										
NO.	Freq. [MHz]	Reading [dBμV/m]	Antenna Factor [dB]	Cable loss [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	
1	0.010	56.68	20.50	3.21	49.99	127.60	77.61	AV	Vertical	
2	0.027	41.64	20.43	3.23	34.79	118.94	84.15	AV	Vertical	
3	0.035	41.03	20.40	3.23	34.09	116.74	82.65	AV	Vertical	
4	0.053	40.52	20.40	3.24	33.48	113.18	79.70	AV	Vertical	
5	0.063	55.77	20.40	3.23	48.64	111.56	62.92	AV	Vertical	
6	0.118	71.69	20.26	3.22	64.17	106.17	42.00	AV	Vertical	
7	0.131	52.78	20.20	3.22	45.20	105.29	60.09	AV	Vertical	

- Note:
1. Level = Reading + Cable Loss + Antenna Factor + AMP

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: 9kHz-150kHz RBW: 300Hz, VBW: 1 kHz, Sweep time: auto.
150kHz-30MHz RBW: 10kHz, VBW: 30kHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Date:

2025-03-10

Tested By:

Lin Guoyuan

EUT:

CHAMP WIRELESS 10K

Model Number:

NB-CPC-10KWRLS

Test Mode:

Operate 111-148kHz Mode

Power Supply:

Battery

Condition:

Temp:21.3°C;Humi:47.4%

Test Site:

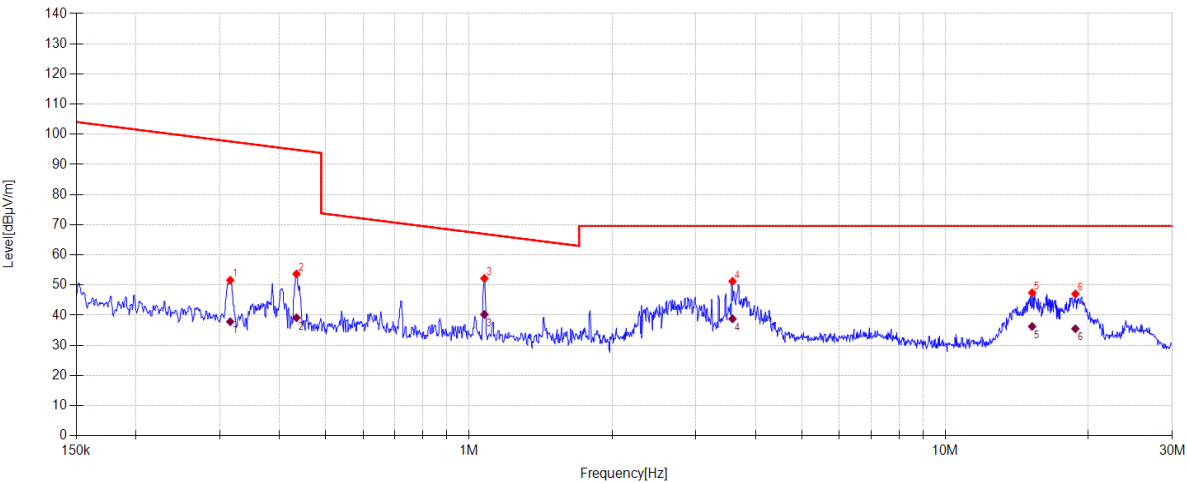
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Memo:

5W Sample Numble:S25022703-004



Data List										
NO.	Freq. [MHz]	Reading [dBμV/m]	Antenna Factor [dB]	Cable loss [dB]	AMP [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	0.316	59.16	20.19	3.25	-31.00	51.60	97.62	46.02	PK	Vertical
2	0.435	61.18	20.26	3.25	-31.00	53.69	94.84	41.15	PK	Vertical
3	1.078	59.51	20.40	3.28	-31.00	52.19	66.95	14.76	PK	Vertical
4	3.579	58.41	20.43	3.38	-31.00	51.22	69.54	18.32	PK	Vertical
5	15.231	54.51	20.28	3.66	-31.03	47.42	69.54	22.12	PK	Vertical
6	18.775	54.24	20.19	3.68	-31.04	47.07	69.54	22.47	PK	Vertical

Data List										
NO.	Freq. [MHz]	Reading [dBμV/m]	Antenna Factor [dB]	Cable loss [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity	
1	0.316	45.39	20.19	3.25	37.83	97.62	59.79	AV	Vertical	
2	0.435	46.64	20.26	3.25	39.15	94.84	55.69	AV	Vertical	
3	1.078	47.55	20.40	3.28	40.23	66.95	26.72	QP	Vertical	
4	3.579	45.98	20.43	3.38	38.79	69.54	30.75	QP	Vertical	
5	15.231	43.35	20.28	3.66	36.26	69.54	33.28	QP	Vertical	
6	18.775	42.68	20.19	3.68	35.51	69.54	34.03	QP	Vertical	

Note:

1. Level = Reading + Cable Loss + Antenna Factor + AMP

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: 9kHz-150kHz RBW: 300Hz, VBW: 1 kHz, Sweep time: auto.
150kHz-30MHz RBW: 10kHz, VBW: 30kHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Date:

2025-03-10

Tested By:

Lin Guoyuan

EUT:

CHAMP WIRELESS 10K

Model Number:

NB-CPC-10KWRLS

Test Mode:

Operate 360kHz Mode

Power Supply:

Battery

Condition:

Temp:21.3°C;Humi:47.4%

Test Site:

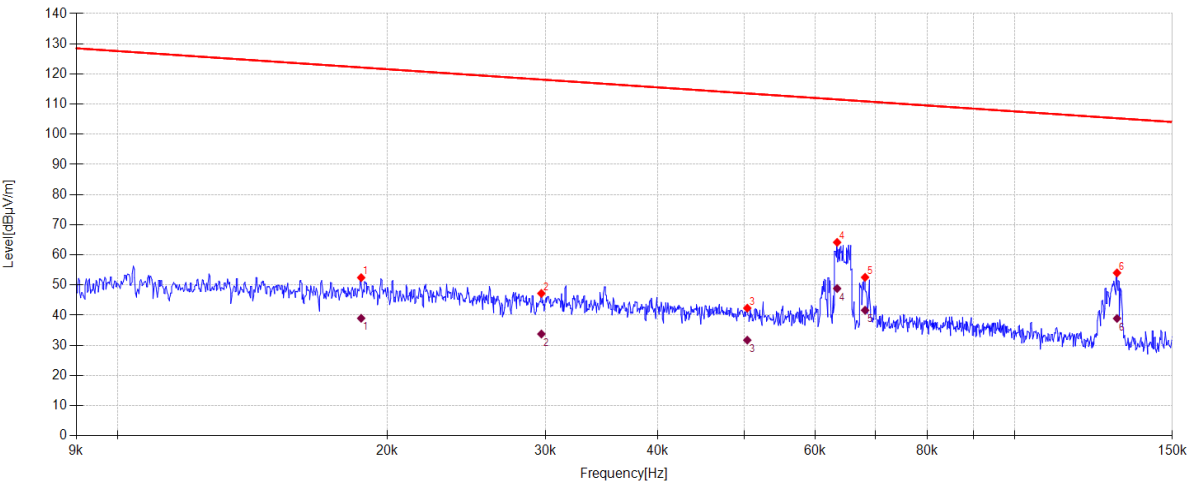
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Memo:

5W Sample Numble:S25022703-004

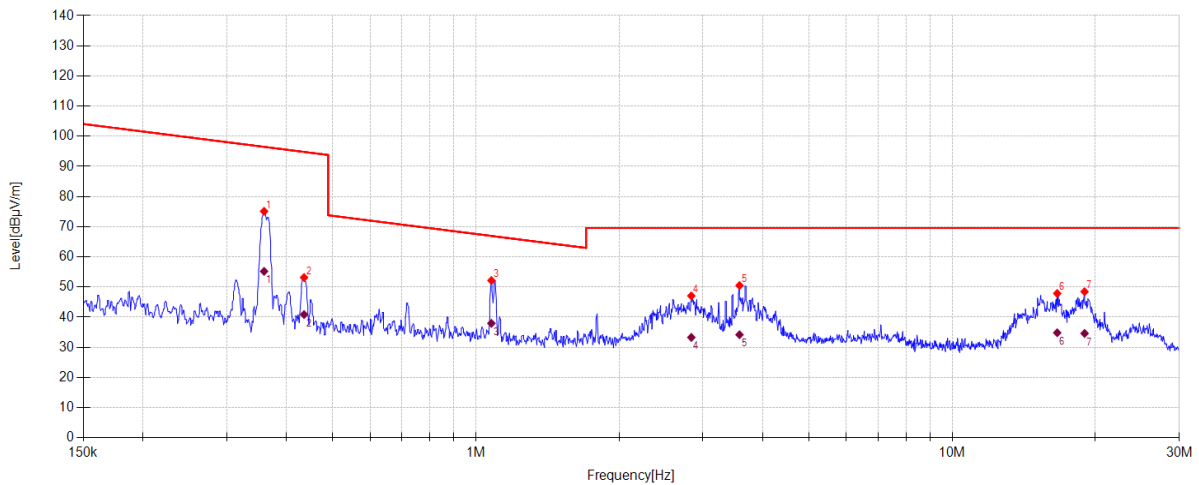


Data List										
NO.	Freq. [MHz]	Reading [dBμV/m]	Antenna Factor [dB]	Cable loss [dB]	AMP [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	0.019	59.19	20.50	3.22	-30.46	52.45	122.16	69.71	PK	Vertical
2	0.030	54.11	20.40	3.23	-30.53	47.21	118.14	70.93	PK	Vertical
3	0.050	49.36	20.40	3.25	-30.67	42.34	113.55	71.21	PK	Vertical
4	0.063	71.28	20.40	3.23	-30.76	64.15	111.55	47.40	PK	Vertical
5	0.068	59.72	20.40	3.23	-30.79	52.56	110.93	58.37	PK	Vertical
6	0.130	61.60	20.20	3.22	-31.00	54.02	105.31	51.29	PK	Vertical

Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Antenna Factor [dB]	Cable loss [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	0.019	45.71	20.50	3.22	38.97	122.16	83.19	AV	Vertical
2	0.030	40.66	20.40	3.23	33.76	118.14	84.38	AV	Vertical
3	0.050	38.74	20.40	3.25	31.72	113.55	81.83	AV	Vertical
4	0.063	55.98	20.40	3.23	48.85	111.56	62.71	AV	Vertical
5	0.068	48.79	20.40	3.23	41.63	110.92	69.29	AV	Vertical
6	0.130	46.49	20.20	3.22	38.91	105.32	66.41	AV	Vertical

- Note:
- 1. Level = Reading + Cable Loss + Antenna Factor + AMP
 - 2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
 - 3. Test setup: 9kHz-150kHz RBW: 300Hz, VBW: 1 kHz, Sweep time: auto.
150kHz-30MHz RBW: 10kHz, VBW: 30kHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Date: 2025-03-10**Tested By:** Lin Guoyuan**EUT:** CHAMP WIRELESS 10K**Model Number:** NB-CPC-10KWRLS**Test Mode:** Operate 360kHz Mode**Power Supply:** Battery**Condition:** Temp:21.3°C;Humi:47.4%**Test Site:** DDT 3# Chamber**File Path:** d:\ts\2025 report date\Q25022703-2E\FCC Below 1G\20250310-235758_V**Memo:** 5W Sample Numble:S25022703-004

Data List										
NO.	Freq. [MHz]	Reading [dBμV/m]	Antenna Factor [dB]	Cable loss [dB]	AMP [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	0.359	82.64	20.22	3.25	-31.00	75.11	96.49	21.38	PK	Vertical
2	0.436	60.65	20.26	3.25	-31.00	53.16	94.81	41.65	PK	Vertical
3	1.078	59.49	20.40	3.28	-31.00	52.17	66.95	14.78	PK	Vertical
4	2.835	54.32	20.40	3.35	-31.00	47.07	69.54	22.47	PK	Vertical
5	3.579	57.70	20.43	3.38	-31.00	50.51	69.54	19.03	PK	Vertical
6	16.622	55.09	20.14	3.67	-31.03	47.87	69.54	21.67	PK	Vertical
7	18.975	55.61	20.20	3.68	-31.04	48.45	69.54	21.09	PK	Vertical

Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Antenna Factor [dB]	Cable loss [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	0.359	62.74	20.22	3.25	55.21	96.49	41.28	AV	Vertical
2	0.436	48.36	20.26	3.25	40.87	94.81	53.94	AV	Vertical
3	1.078	45.27	20.40	3.28	37.95	66.95	29.00	QP	Vertical
4	2.835	40.55	20.40	3.35	33.30	69.54	36.24	QP	Vertical
5	3.579	41.37	20.43	3.38	34.18	69.54	35.36	QP	Vertical
6	16.622	42.06	20.14	3.67	34.84	69.54	34.70	QP	Vertical
7	18.975	41.77	20.20	3.68	34.61	69.54	34.93	QP	Vertical

Note:

- Level = Reading + Cable Loss + Antenna Factor + AMP
- If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
- Test setup: 9kHz-150kHz RBW: 300Hz, VBW: 1 kHz, Sweep time: auto.
150kHz-30MHz RBW: 10kHz, VBW: 30kHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Date:

2025-03-11

Tested By:

Lin Guoyuan

EUT:

CHAMP WIRELESS 10K

Model Number:

NB-CPC-10KWRLS

Test Mode:

Operate Mode

Power Supply:

Battery

Condition:

Temp:21.3°C;Humi:47.4%

Test Site:

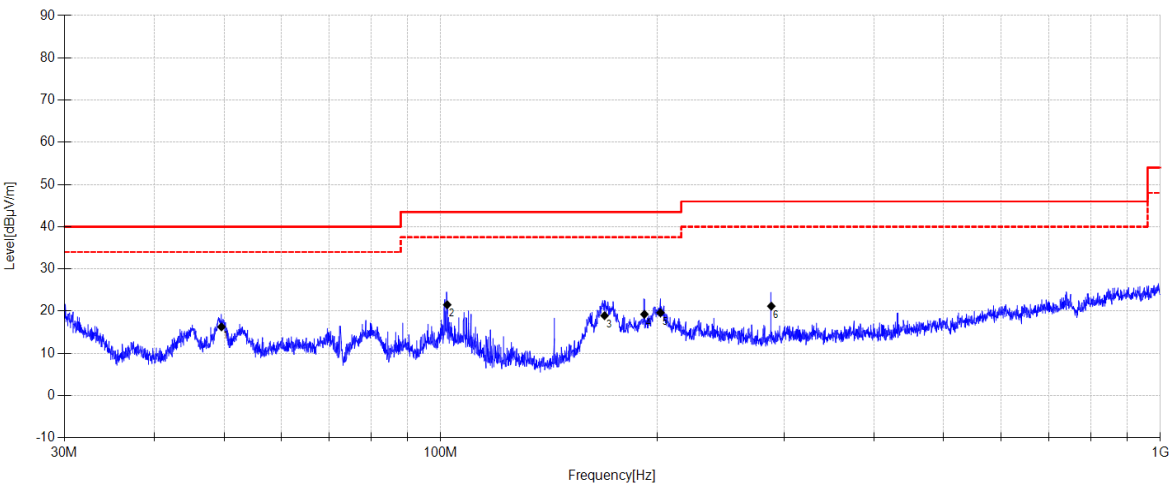
DDT 3# Chamber

File Path:

d:\ts\2025 report date\Q25022703-2E\FCC Below 1G\20250311-004833_H

Memo:

5W Sample Numble:S25022703-004



Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Antenna Factor [dB]	Cable Loss [dB]	Result [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	49.597	30.61	12.88	3.88	16.27	40.00	23.73	QP	Horizontal
2	102.120	37.54	10.84	4.23	21.51	43.50	21.99	QP	Horizontal
3	168.947	36.42	9.09	4.59	18.93	43.50	24.57	QP	Horizontal
4	191.943	36.02	9.71	4.72	19.26	43.50	24.24	QP	Horizontal
5	202.023	35.33	10.72	4.77	19.62	43.50	23.88	QP	Horizontal
6	288.062	34.58	12.81	5.17	21.18	46.00	24.82	QP	Horizontal

Note:

1. Result Level = Reading + Cable loss + Antenna Factor + AMP
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Date:

2025-03-11

Tested By:

Lin Guoyuan

EUT:

CHAMP WIRELESS 10K

Model Number:

NB-CPC-10KWRLS

Test Mode:

Operate Mode

Power Supply:

Battery

Condition:

Temp:21.3°C;Humi:47.4%

Test Site:

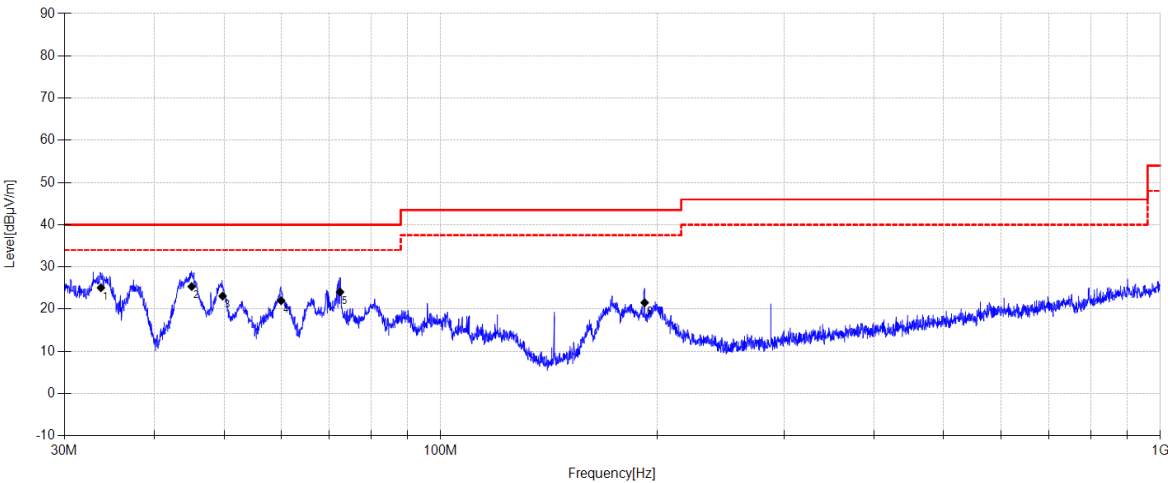
DDT 3# Chamber

File Path:

d:\ts\2025 report date\Q25022703-2E\FCC Below 1G\20250311-004904_V

Memo:

5W Sample Numble:S25022703-004



Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Antenna Factor [dB]	Cable Loss [dB]	Result [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	33.727	41.01	11.37	3.78	25.06	40.00	14.94	QP	Vertical
2	45.086	39.48	13.12	3.85	25.35	40.00	14.65	QP	Vertical
3	49.772	37.38	12.93	3.88	23.09	40.00	16.91	QP	Vertical
4	60.019	36.34	12.79	3.96	21.99	40.00	18.01	QP	Vertical
5	72.477	41.71	9.41	4.04	24.06	40.00	15.94	QP	Vertical
6	192.078	38.28	9.72	4.72	21.53	43.50	21.97	QP	Vertical

Note:

1. Result Level = Reading + Cable loss + Antenna Factor + AMP

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

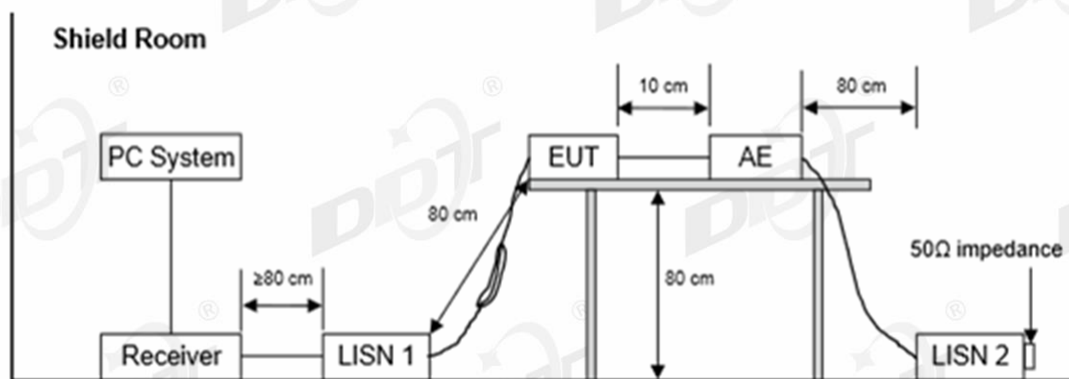
3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

5. Power Line Conducted Emissions

5.1. Test equipment

Equipment	Manufacturer	Model No.	Serial No.	Cal Due To
Conducted Radiated Software	Audix	E3	DDT-ZC00562	/
Coaxial signal signal cable	H&S	RG214-5	DDT-ZC01817	2025/03/31
Pulse Limiter	R&S	KH43101	DDT-ZC00747	2025/04/22
Two Line V-Network	R&S	ENV216	DDT-ZC02058	2025/07/08
Two Line V-Network	R&S	ENV216	DDT-ZC00586	2025/07/08
EMI Test Receiver	R&S	ESCI	DDT-ZC01972	2025/03/31

5.2. Block diagram of test setup



5.3. Limits

Frequency	Quasi-Peak Level dB(mV)	Average Level dB(mV)
150 kHz~500 kHz	66 ~ 56*	56 ~ 46*
500 kHz~5 MHz	56	46
5 MHz~30 MHz	60	50

Note 1: * Decreasing linearly with logarithm of frequency.

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

5.4. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description	other
AC Adapter	HUAWEI	HW-100400U01	Input: 100-240V~ 50/60Hz, Output: 5V/2A or 9V/2A or 10V/4A	N/A
Dummy load	N/A	N/A	N/A	N/A
Apple Watch	N/A	N/A	N/A	N/A

5.5. Test procedure

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 80cm above the ground plane.

All support equipment power received from a second LISN.

Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.

The Receiver scanned from 150 kHz to 30 MHz for emissions in each of the test modes.

During the above scans, the emissions were maximized by cable manipulation.

The test mode(s) described in clause 2.4 were scanned during the preliminary test.

After the preliminary scan, we found the test mode producing the highest emission level.

The EUT configuration and worse cable configuration of the above highest emission levels were recorded for reference of the final test.

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.

A scan was taken on both power lines, Neutral and Line, recording at least the six highest emissions.

Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

The test data of the worst-case condition(s) was recorded.

The bandwidth of test receiver is set at 9 kHz.

5.6. Test result

PASS. (See below detailed test result)

Note1: All emissions not reported below are too low against the prescribed limits.

Note2: “-----” means Peak detection; “-----” means Average detection.

Note3: Pre-test AC conducted emission at both voltage AC 120V/60Hz and AC 240V/50Hz, recorded the worst case.

5.7. Test data

TR-4-E-010 Conducted Emission Test Result

Test Site : DDT 5# Shield Room

D:\2025 report data\Q25022703-2EIFCC.EM6

Test Date : 2025-03-10

Tested By : Gen Liu

EUT : CHAMP WIRELESS 10K

Model Number : NB-CPC-10KWRLS

Power Supply : AC 120V/60Hz

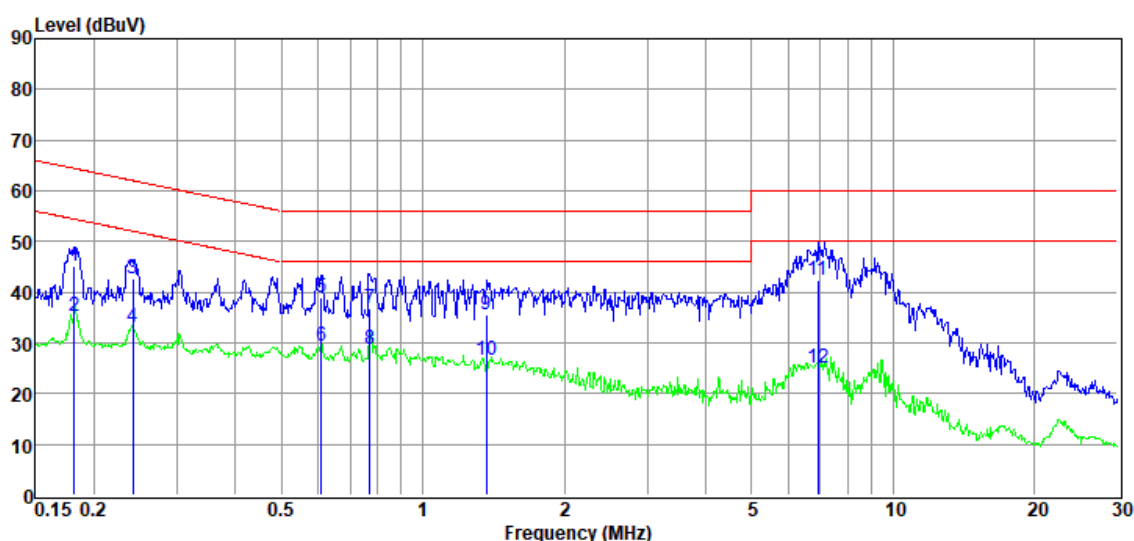
Test Mode : Working mode

Condition : Temp:24.5°C,Humi:55.5%

LISN : 2023 ENV216 2#/NEUTRAL

Memo : S25022703-001

Data: 2



Item	Freq.	Read Level	LISN Factor	Cable Loss	Pulse Limiter Factor	Result Level	Limit Line	Over Limit	Detector	Phase
(Mark)	(MHz)	(dBμV)	(dB)	(dB)	(dB)	(dBμV)	(dBμV)	(dB)		
1	0.18	25.18	9.95	0.09	10.06	45.28	64.42	-19.14	QP	NEUTRAL
2	0.18	15.08	9.95	0.09	10.06	35.18	54.42	-19.24	Average	NEUTRAL
3	0.24	22.59	9.92	0.09	10.06	42.66	62.04	-19.38	QP	NEUTRAL
4	0.24	13.05	9.92	0.09	10.06	33.12	52.04	-18.92	Average	NEUTRAL
5	0.61	18.81	10.02	0.10	10.06	38.99	56.00	-17.01	QP	NEUTRAL
6	0.61	9.05	10.02	0.10	10.06	29.23	46.00	-16.77	Average	NEUTRAL
7	0.77	16.76	9.97	0.10	10.06	36.89	56.00	-19.11	QP	NEUTRAL
8	0.77	8.63	9.97	0.10	10.06	28.76	46.00	-17.24	Average	NEUTRAL
9	1.37	15.37	9.97	0.13	10.05	35.52	56.00	-20.48	QP	NEUTRAL
10	1.37	6.37	9.97	0.13	10.05	26.52	46.00	-19.48	Average	NEUTRAL
11	6.91	22.07	10.02	0.21	10.06	42.36	60.00	-17.64	QP	NEUTRAL
12	6.91	4.84	10.02	0.21	10.06	25.13	50.00	-24.87	Average	NEUTRAL

Note: 1. Result Level = Read Level + LISN Factor + Pulse Limiter Factor + Cable loss.

2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).

4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.

TR-4-E-010 Conducted Emission Test Result

Test Site : DDT 5# Shield Room

D:\2025 report data\Q25022703-2E\FCC.EM6

Test Date : 2025-03-10

Tested By : Gen Liu

EUT : CHAMP WIRELESS 10K

Model Number : NB-CPC-10KWRLS

Power Supply : AC 120V/60Hz

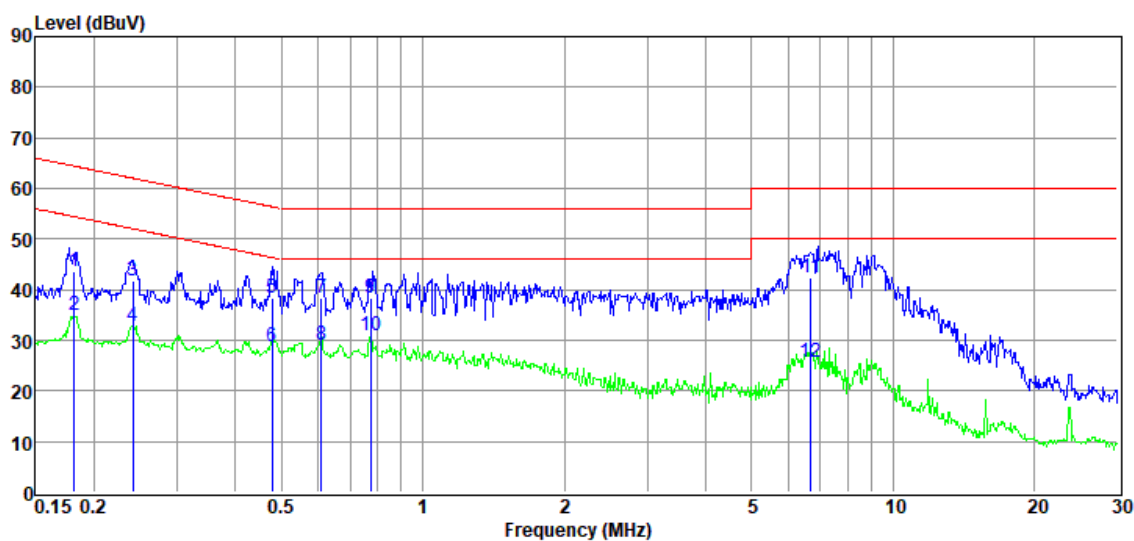
Test Mode : Working mode

Condition : Temp:24.5°C,Humi:55.5%

LISN : 2023 ENV216 2#/LINE

Memo : S25022703-001

Data: 4



Note: 1. Result Level = Read Level + LISN Factor + Pulse Limiter Factor + Cable loss.

2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).

4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.

6. Antenna Requirements

6.1. Limit

For intentional device, according to FCC 47 CFR 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. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

6.2. Result

The antenna used for this product as Antenna information described in section 2.1 of the report, and there is no other antenna than that furnished by the responsible party shall be used with the device.

8. Photos of the EUT

Please refer to DDT-Q25022703-1E appendix I

-----End Report-----