EMC TEST REPORT

Product Name:	CrowView Note
Trade mark:	/
Model No.:	CrowView Note 14.0 ", CrowView Note 13.3 ", CrowView Note 15.6 "
S/N:	/
Report No.:	CTB240812102EX
Applicant:	Shenzhen Elecrow Limited
Address:	Elecrow, 5th Floor, Fengze Building B, Nanchang Huafeng Industrial Park, Hangcheng Street Hangkong Road, Baoan District, Shenzhen city, China
Manufacturer:	Shenzhen Elecrow Limited
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Prepared by:	Shenzhen CTB Testing Technology Co., Ltd.
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Date of Receipt:	Aug. 01, 2024
Date of Test(s):	Aug. 02, 2024 to Aug. 09, 2024
Date of Issue:	Aug. 14, 2024
Test Standard(s):	47 CFR Part 15 Subchapter B, ANSI C63.4: 2014
Test Result:	Pass

In the configuration tested, the EUT complied with the standards specified above.

Compiled by:	Reviewed by:	Approved by:
Blake Cai	Bin Mei	Rita Xiao

Note: If there is any objection to the inspection results in this report, please submit a written report to the company within 15 days from the date of receiving the report. The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen CTB Testing Technology Co., Ltd. this report can't be reproduced except in full. The tested sample(s) and the sample information are provided by the client. "★" indicates the testing items were fulfilled by subcontracted lab. "※" indicates the items are not in CNAS accreditation scope.

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1. Description of version

Report No.	Issue Date	Description	Approved
CTB240812102EX	Aug. 14, 2024	Original	Valid

2. Test summary

Test procedures according to the technical standards:

Standard	Test Item	Test Result
§15.107	Conducted Emission	PASS
§15.109	Radiated Emission	PASS

3. Measurement uncertainty

The reported uncertainty of measurement y ± U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %

Test Item	Frequency	Expanded Uncertainty (U_{Lab})
No.1 Conducted Emission	150 kHz to 30 MHz	±3.1 dB
No.2 Conducted Emission	150 kHz to 30 MHz	±3.2 dB
Radiated Emission	30 MHz to 1000 MHz	± 4.1 dB
Radiated Emission	1000 MHz to 6000 MHz	±4.8 dB

4. General information

4.1. Description of EUT

Product name	CrowView Note
Trade mark	/
Model No.	CrowView Note 14.0 "
Serial Model No.	CrowView Note 13.3 ", CrowView Note 15.6 "
Model Difference	All model's are just named and appearance is different, used to distinguish different sales customers, the rest are the same. Test Sample Model: CrowView Note 14.0 ".
Rated Power	48W
Rated Voltage& current	12V⎓4A or DC 7.4V from battery
Configuration	☒ Table-top ☐ Floor-standing
The highest frequency of the internal sources of the EUT	☐ below 1.705 MHz, the measurement shall only be made up to 30 MHz. ☒ between 1.705 MHz and 108 MHz, the measurement shall only be made up to 1 GHz. ☐ between 108 MHz and 500 MHz, the measurement shall only be made up to 2 GHz. ☐ between 500 MHz and 1 GHz, the measurement shall only be made up to 5 GHz. ☐ above 1 GHz, the measurement shall be made up to 5th harmonic of the highest frequency or 40 GHz, whichever is lower.
Adapter Information	Model No.: GQ48-120400-AG Input: AC 100-240V 50/60Hz, 1.5A Max Output: 12V⎓4A 48W

Note: The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

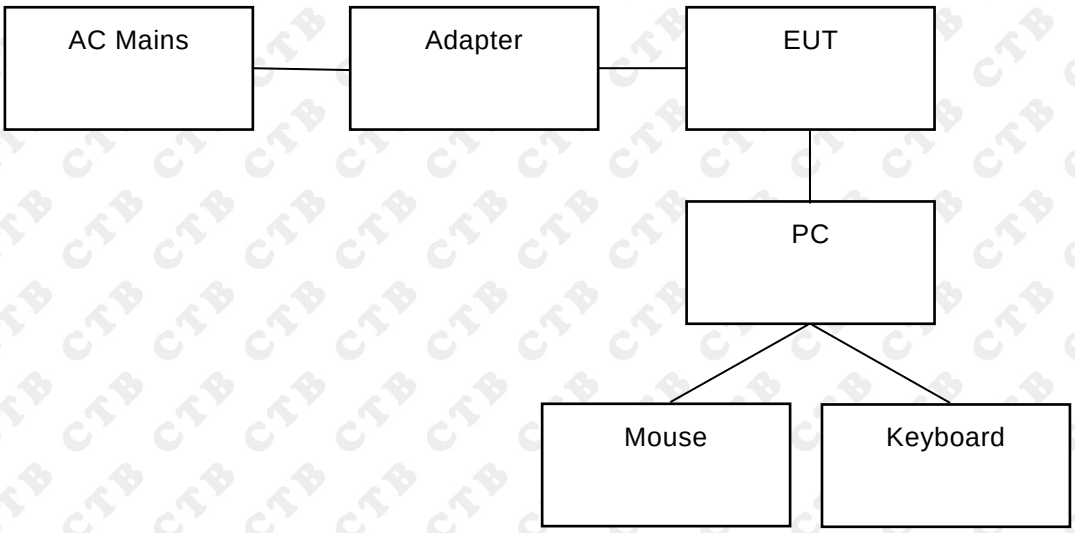
4.2. Description of accessory device

No.	Device Type	Brand	Model	Specification	Note
1	PC	DELL	Inspiron 3670	/	/
2	Mouse	DELL	KB216t	/	/
3	Keyboard	DELL	MS116c	/	/

4.3. Test conditions

Temperature: 15-25℃
Relative Humidity: 30-60 %
Atmospheric pressure: 800hPa-1060hPa

4.4. Block diagram of EUT configuration



4.5. Operating condition of EUT

Operating condition	Mode 1*	Working (HDMI)	Test Voltage	AC 120V/60Hz
	Mode 2	Working (Type-c)	Test Voltage	AC 120V/60Hz
Note:This test covers all possible operating modes of the device, only the worst data are list in report. The worst data are shows (*)is the nearest standard limit which were recorded in this report.				

5. List of Test and Measurement Instruments

No.1 Continuous disturbance						
No.	Equipment	Manufacturer	Model No.	Serial No.	Firmware version	Calibrated until
1	843 Shield Room	C/ R/ T	843	/	/	2027/6/21
2	AMN	ROHDE&SCHWARZ	ESH3-Z5	831551852	/	2025/6/30
3	Pulse limiter	ROHDE&SCHWARZ	ESH3-Z2	357881052	/	2025/6/28
4	EMI TEST RECEIVER	R&S	ESCI	100428	V4.42.SP3	2025/6/30
5	Coaxial cable	Agilent	UCE500-SMNM-1.5M	/	/	2025/6/30
6	ISN	Schwarzbeck	NTFM8158	183	/	2025/6/30
7	Voltage Probe	Schwarzbeck	TK 9420	01189	/	2024/11/16
8	EZ-EMC	Frad	Ver/ EMC-con3A1/1	/	/	/
9	Current Probe	FCC	F-52B	199453	/	2025/5/27

Radiated emission(No.2 Chamber)						
No.	Equipment	Manufacturer	Model No.	Serial No.	Firmware version	Calibrated until
1	966 Chamber	C/ R/ T	966	/	/	2026/11/14
2	Double Ridged Broadband Horn Antenna	Schwarzbeck	BBHA 9120 D	01911	/	2026/7/07
3	Broadband Antenna	Schwarzbeck	VULB 9168	1471	/	2025/7/06
4	Amplifier	Agilent	8449B	3008A01838	/	2025/6/30
5	Preamplifier	Schwarzbeck	BBV 9743 B	00500	/	2025/5/23
6	EMI TEST RECEIVER	R&S	ESCI7	100861	/	2024/11/27
7	Spectrum Analyzer	KEYSIGHT	N9020A	MY51289897	A.14.16	2025/6/28
8	EMI test software	Farad	EZ-EMC	/	Ver. FARAD-3A1+	/
9	Coaxial cable	Rosenberg	8m	/	/	2024/11/27
10	Coaxial cable	Times	2m	/	/	2024/11/27
11	Coaxial cable	Times	2m	/	/	2024/11/27
12	Coaxial cable	Times	1m	/	/	2024/11/27
13	loop antenna	Schwarzbeck	FMZB 1519B	1519B-224	/	2025/6/29

6. Conducted Emission

6.1. Limit

Except for Class A devices:

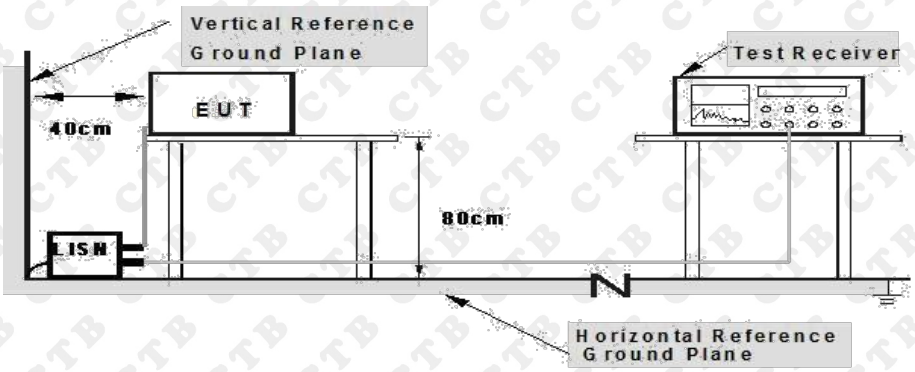
Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

Note: Decreases with the logarithm of the frequency.

For Class A devices:

Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	79	66
0.5-30	73	60

6.2. Test setup



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

The setup of EUT is according with ANSI C63.4 measurement procedure. Specification used with FCC Part 15 limits.

6.3. EMI test receiver setup

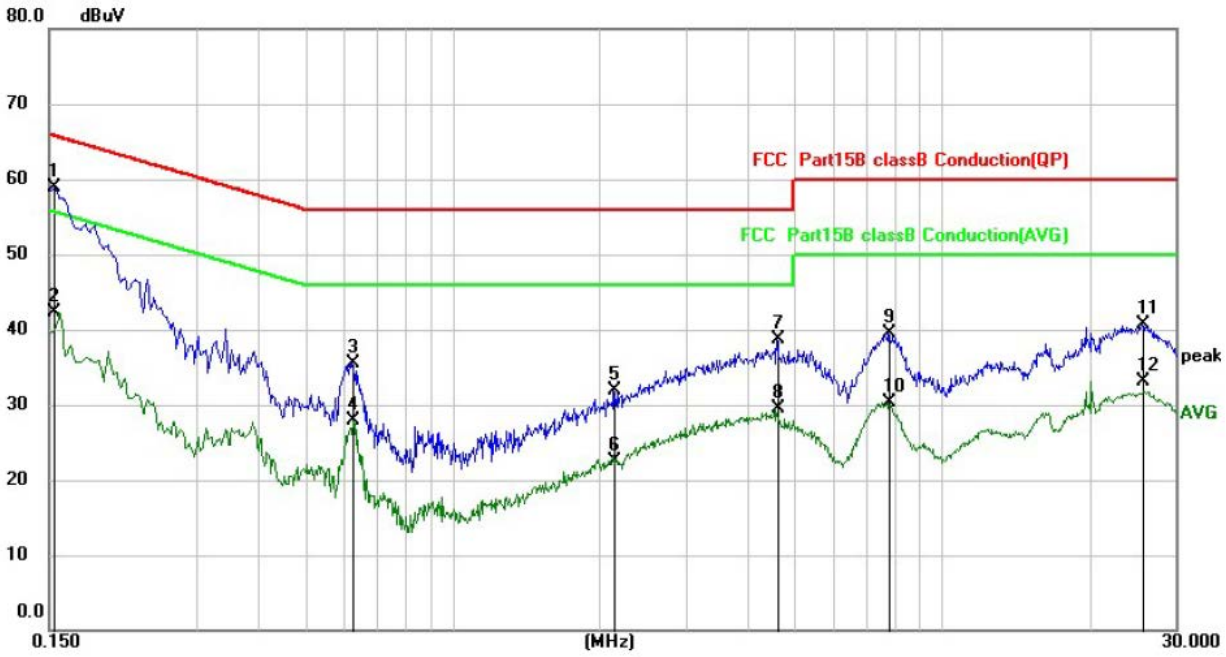
Frequency Range	9kHz-30MHz
Resolution Bandwidth	200Hz (9kHz-150kHz) 9kHz (150kHz-30MHz)

6.4. Test procedure

1. Measurement was performed in shielded room, and instruments used were followed clause 4 of ANSI C63.4.
2. Detailed test procedure was following clause 7 of ANSI C63.4.
3. Frequency range 150kHz – 30MHz was checked and EMI receiver measurement bandwidth was set to 9 kHz.

6.5. Test results

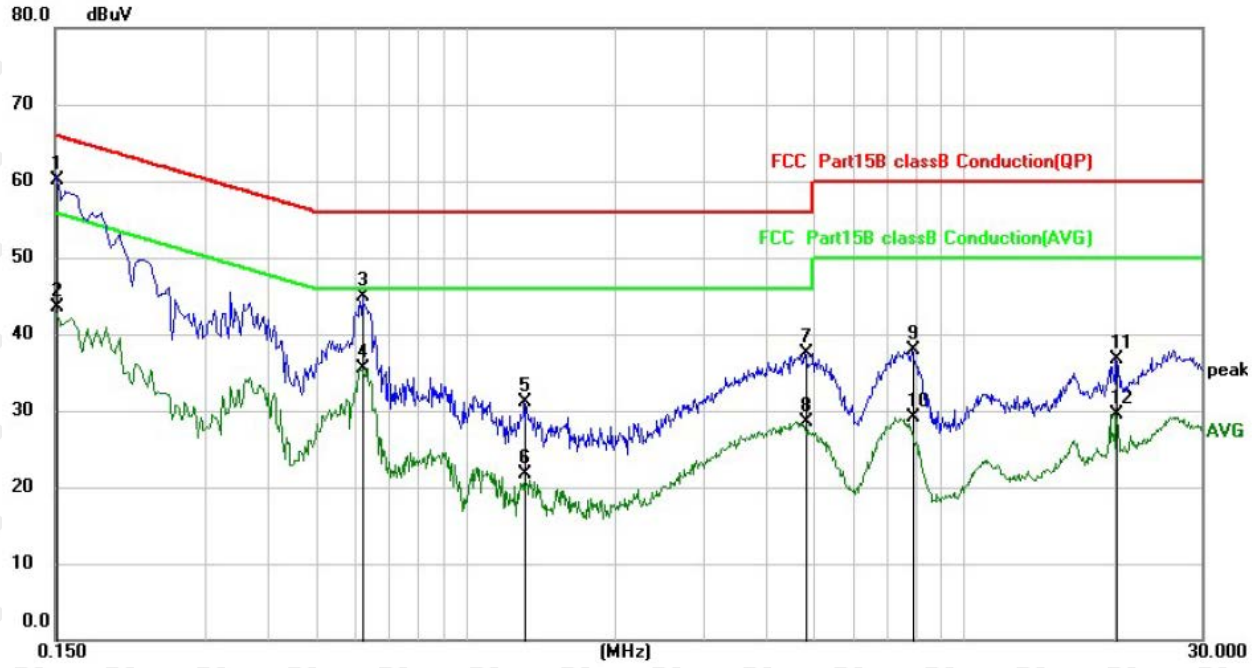
Temperature:	23℃	Relative Humidity:	54 %
Pressure:	101kPa	Phase :	Line
Test Voltage :	AC 120V/60Hz	Test Mode:	Mode 1



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	*	0.1539	48.11	10.88	58.99	65.79	-6.80	QP
2		0.1539	31.45	10.88	42.33	55.79	-13.46	AVG
3		0.6260	24.94	10.64	35.58	56.00	-20.42	QP
4		0.6260	17.20	10.64	27.84	46.00	-18.16	AVG
5		2.1340	20.20	11.61	31.81	56.00	-24.19	QP
6		2.1340	10.99	11.61	22.60	46.00	-23.40	AVG
7		4.5980	26.51	12.15	38.66	56.00	-17.34	QP
8		4.5980	17.32	12.15	29.47	46.00	-16.53	AVG
9		7.7940	26.46	13.02	39.48	60.00	-20.52	QP
10		7.7940	17.30	13.02	30.32	50.00	-19.68	AVG
11		25.6140	26.55	14.08	40.63	60.00	-19.37	QP
12		25.6140	18.99	14.08	33.07	50.00	-16.93	AVG

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

Temperature:	23℃	Relative Humidity:	54 %
Pressure:	101kPa	Phase :	Neutral
Test Voltage :	AC 120V/60Hz	Test Mode:	Mode 1



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	*	0.1516	49.23	10.88	60.11	65.91	-5.80	QP
2		0.1516	32.61	10.88	43.49	55.91	-12.42	AVG
3		0.6220	34.19	10.63	44.82	56.00	-11.18	QP
4		0.6220	24.81	10.63	35.44	46.00	-10.56	AVG
5		1.3140	19.99	11.15	31.14	56.00	-24.86	QP
6		1.3140	10.46	11.15	21.61	46.00	-24.39	AVG
7		4.8060	25.26	12.20	37.46	56.00	-18.54	QP
8		4.8060	16.36	12.20	28.56	46.00	-17.44	AVG
9		7.8900	24.96	13.03	37.99	60.00	-22.01	QP
10		7.8900	15.99	13.03	29.02	50.00	-20.98	AVG
11		20.2580	23.09	13.61	36.70	60.00	-23.30	QP
12		20.2580	15.95	13.61	29.56	50.00	-20.44	AVG

Note: Result=Reading + Factor
Over Limit=Result – Limit

7. Radiated emissions

7.1. Limit

Except for Class A devices (at 3m):

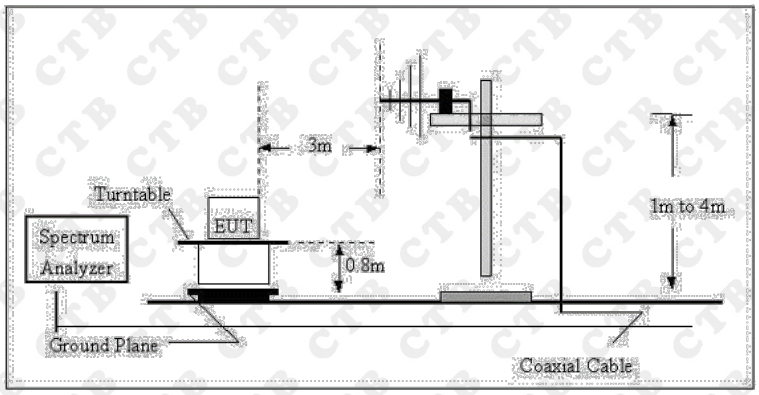
Frequency of emission (MHz)	Field strength (microvolts/meter)	
	(microvolts/meter)	(dBμV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

For Class A devices (at 10m):

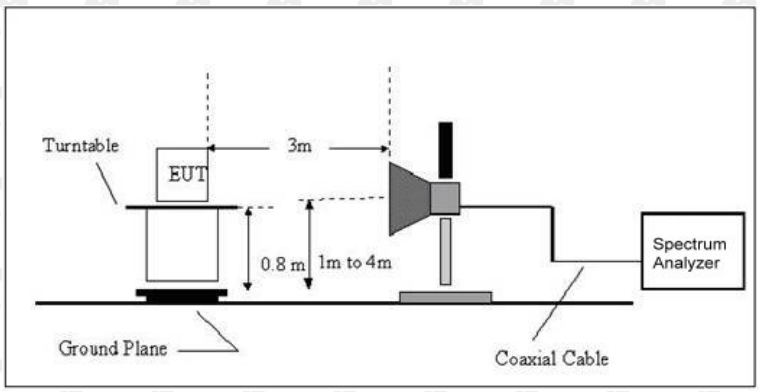
Frequency of emission (MHz)	Field strength (microvolts/meter)	
	(microvolts/meter)	(dBμV/m)
30-88	90	39
88-216	150	43.5
216-960	210	46.4
Above 960	300	49.5

7.2. Test setup

Radiated Emission Test Set-Up Frequency Below 1 GHz



Radiated Emission Test Set-Up Frequency Above 1GHz



The radiated tests were performed in 3 meter Charmber test site, using the setup accordance with the ANSI C63.4:2014.

7.3. EMI test receiver setup and spectrum analyzer setup

During the radiated emission test, the EMI test receiver and Spectrum Analyzer were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Detector
30MHz-1000MHz	100kHz	300kHz	120kHz	QP
Above 1GHz	1MHz	3MHz	/	PK
	1MHz	10Hz	/	AVG

7.4. Test procedure

1. The measurement was performed in a semi-anechoic chamber, and instruments used were followed clause 4 of ANSI C63.4

2. Detailed test procedure was following clause 8 of ANSI C63.4.

7.5. Corrected Amplitude & Margin Calculation

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

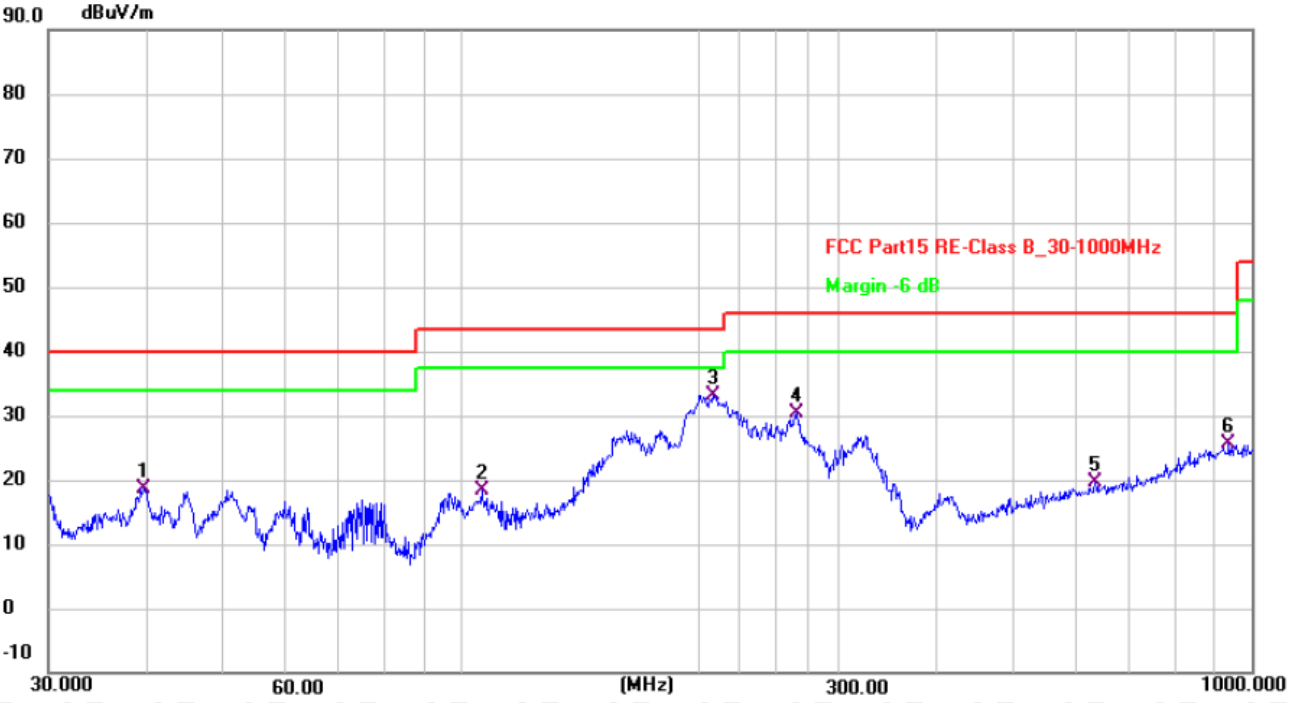
   Corrected Amplitude = Meter Reading + Antenna Factor + Cable Loss - Amplifier Gain

2. The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

   Margin = Limit – Corrected Amplitude

7.6. Test results

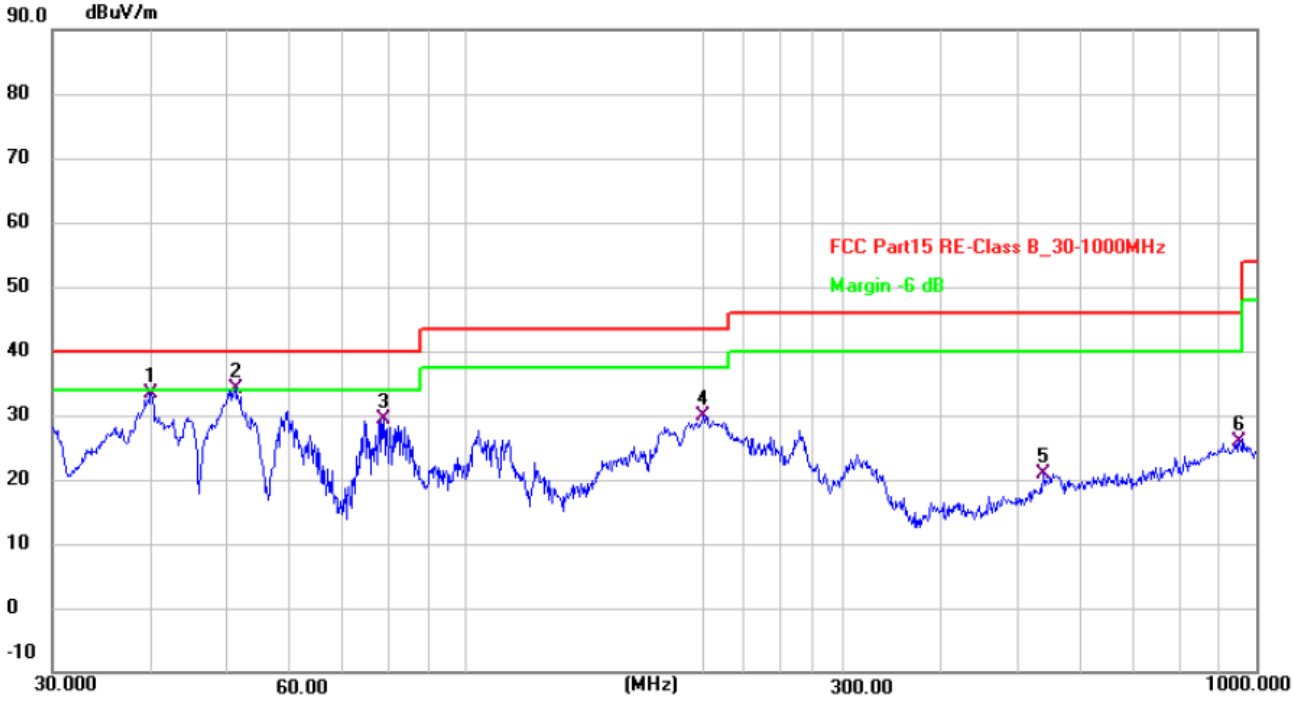
Temperature:	23℃	Relative Humidity:	54 %
Pressure:	101kPa	Polarization :	Horizontal
Test Voltage :	AC 120V/60Hz	Test Mode:	Mode 1



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	39.5757	31.39	-12.65	18.74	40.00	-21.26	QP
2	106.0126	35.83	-17.47	18.36	43.50	-25.14	QP
3 *	207.8501	50.19	-16.95	33.24	43.50	-10.26	QP
4	265.6757	45.86	-15.58	30.28	46.00	-15.72	QP
5	633.9073	25.63	-6.11	19.52	46.00	-26.48	QP
6	935.5463	26.10	-0.43	25.67	46.00	-20.33	QP

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

Temperature:	23℃	Relative Humidity:	54 %
Pressure:	101kPa	Polarization :	Vertical
Test Voltage :	AC 120V/60Hz	Test Mode:	Mode 1

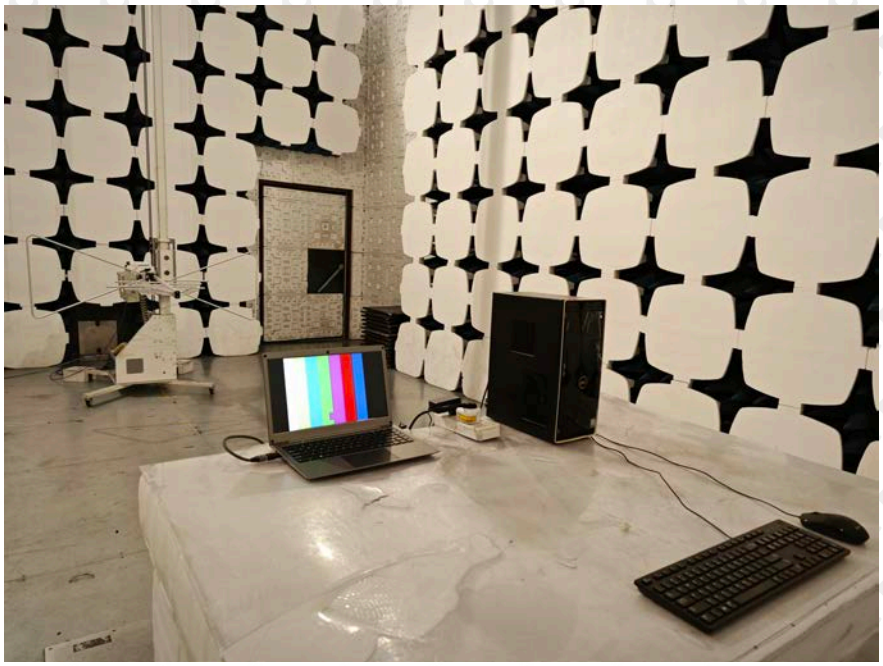


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	39.9942	46.08	-12.60	33.48	40.00	-6.52	QP
2 *	51.1210	48.77	-14.58	34.19	40.00	-5.81	QP
3	78.6887	47.73	-18.32	29.41	40.00	-10.59	QP
4	199.9855	46.86	-17.05	29.81	43.50	-13.69	QP
5	537.5891	29.13	-8.22	20.91	46.00	-25.09	QP
6	952.0937	26.31	-0.49	25.82	46.00	-20.18	QP

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

8. Photographs of test setup

RE



CE



9. Photographs of EUT

EUT photo 1



EUT photo 2



EUT photo 3



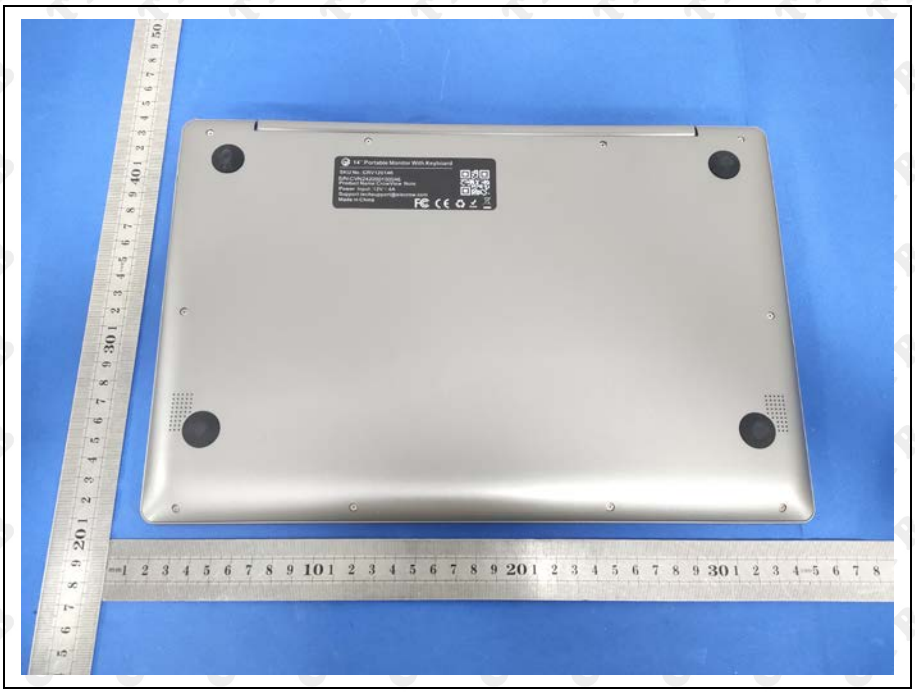
EUT photo 4



EUT photo 5



EUT photo 6



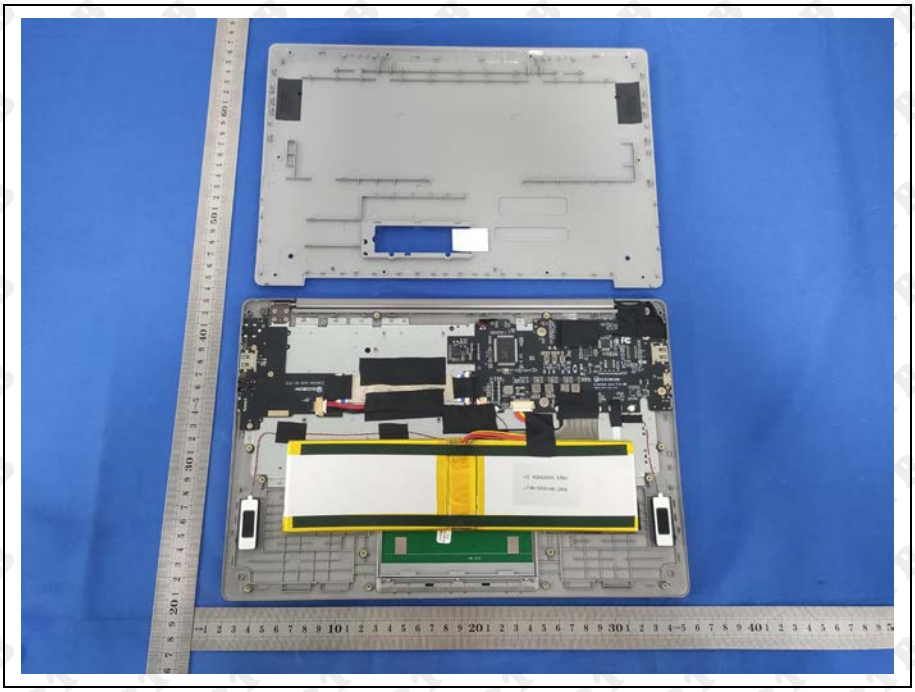
EUT photo 7



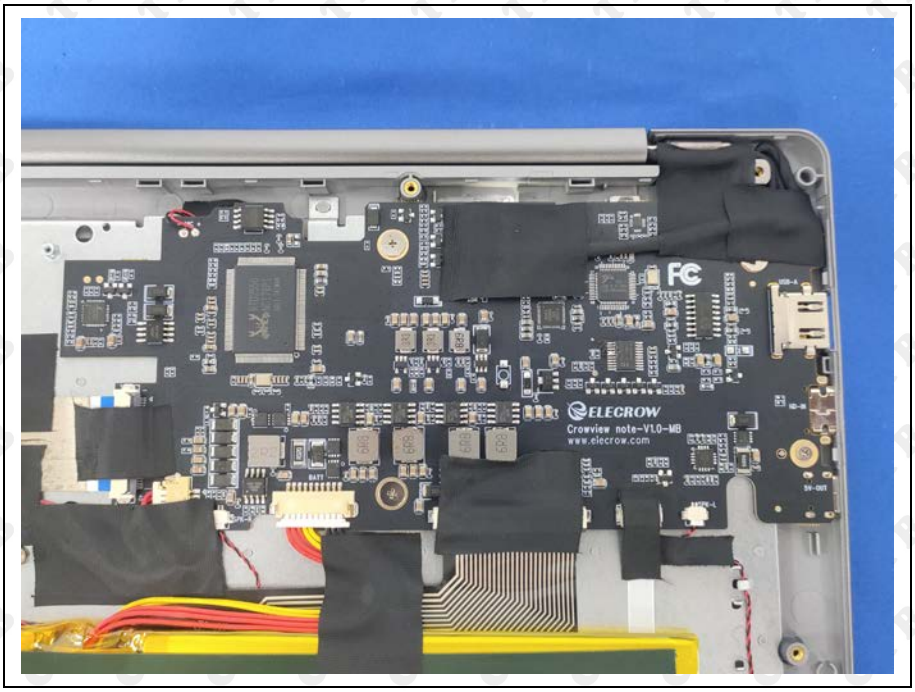
EUT photo 8



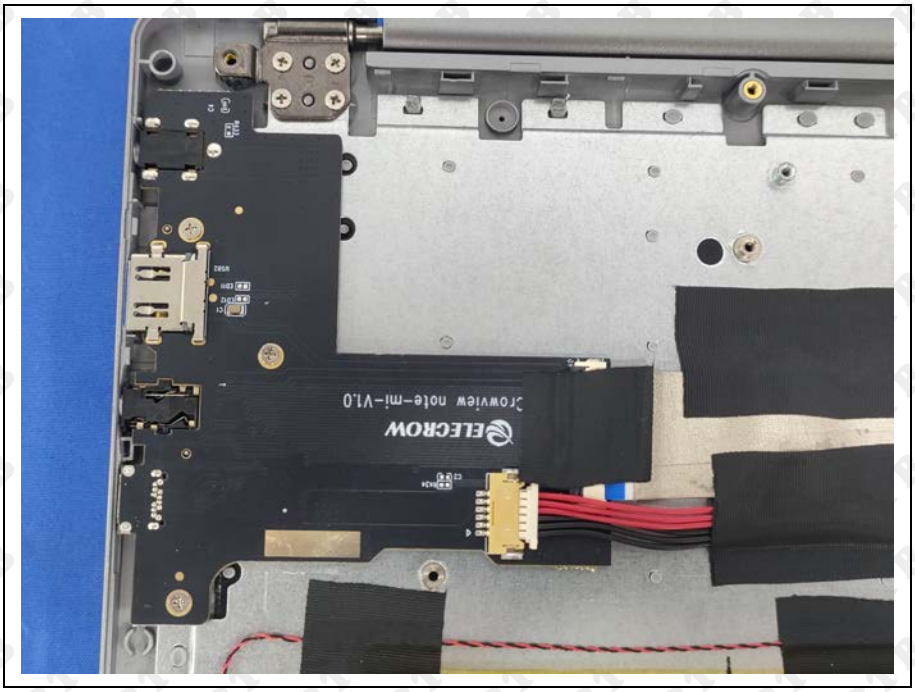
EUT photo 9



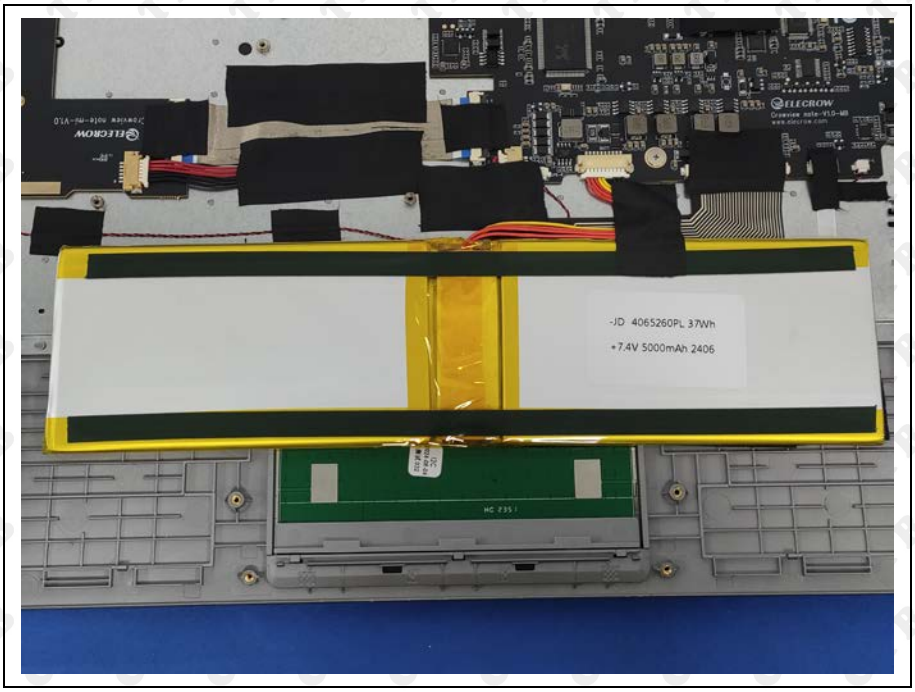
EUT photo 10



EUT photo 11



EUT photo 12



EUT photo 13



EUT photo 14



End of report