FCC TEST REPORT

Applicant……	:	Paul C. Buff, Inc.
Address……...	:	2725 Bransford Ave., Nashville, Tennessee, United States
Manufacturer,……..……..	:	Paul C. Buff, Inc.
Address……...	:	2725 Bransford Ave., Nashville, Tennessee, United States
Factory……...	:	Mototech Electronics (DG) Co., Ltd
Address……...	:	No.17 XiangRong Road, SongMuShan Village, DaLang Town, DongGuan, GuangDong, China
Product Name……	:	CSXCV Transceiver
Brand Name……...	:	Buff
Model No. ……..	:	CSXCV
FCC ID…….		OUECSXCVR2
Measurement Standard……	:	47 CFR FCC Part 15, Subpart B, Class B
Receipt Date of Samples….	:	October 30, 2025
Date of Tested……	:	October 30, 2025 to November 26, 2025
Date of Report……	:	December 03, 2025

This report shows that above equipment is technically compliant with the requirements of the standards above. All test results in this report apply only to the tested sample(s). Without prior written approval of Dongguan Nore Testing Center Co., Ltd., this report shall not be reproduced except in full.

Prepared by

Jenny Liu / Project Engineer

Approved by

Iori Fan / Authorized Signatory

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Revision History

Report Number	Description	Issued Date
NTC2510459FV00	Initial Issue	2025-12-03

1. Summary of Test Result

EMISSION				
Standard	**Test Clause**	**Test Item**	**Result**	**Remarks**
47 CFR FCC Part 15, Subpart B, Class B; ANSI C63.4-2014	§15.107(a)	Conducted Emission	PASS	---
	§15.109(a)	Radiated Emission	PASS	---

2. General Description of EUT

Product Information	
Product Name:	CSXCV Transceiver
Main Model Name:	CSXCV
Additional Model Name:	N/A
Model Difference:	N/A
S/N:	2510-6920
Brand Name:	Buff
Hardware version:	R9
Software version:	Not Stated
Rating:	DC 3.3V, 300mA
Classification:	Class B
Operation Frequency:	2.4GHz RX
Typical arrangement:	Table-top
I/O Port:	Refer to the user manual
Accessories Information	
Adapter:	N/A
Cable:	N/A
Other:	N/A
Additional Information	
Note:	N/A
Remark:	All the information above are provided by the manufacturer. More detailed feature of the EUT please refers to the user manual.

Technical Specification (2.4G RX Function)	
Frequency Range:	2427-2457MHz
Number of Channel:	16 (refer to following channel list for details)
Channel Space:	2MHz
Antenna Type:	PCB Antenna

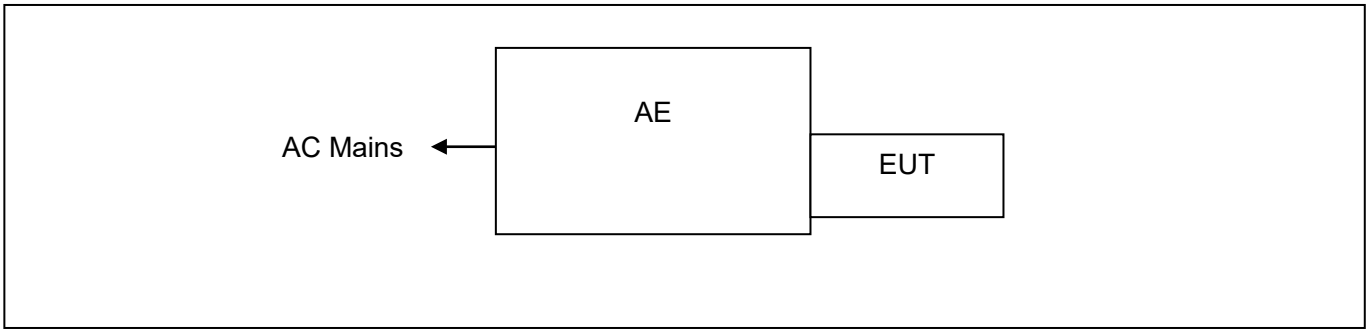
Channel list			
Channel	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**
1	2427	9	2443
2	2429	10	2445
3	2431	11	2447
4	2433	12	2449
5	2435	13	2451
6	2437	14	2453
7	2439	15	2455
8	2441	16	2457

3. Configuration of EUT

Description of Test Modes

Test Mode		Description
1.	RX Mode	Insert the EUT into auxiliary equipment, and make the EUT pair with the remote control, then make it work at RX mode.

Block Diagram of Configuration



Note:

a. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.

b. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

c. AE means auxiliary equipment.

4. Description of Support Device

No.	Equipment	Brand	M/N	S/N	Cable Specification	Remarks
1.	Auxiliary Equipment	---	---	---	---	Provided by the manufacturer

5. Test Facility

Test Site	:	Dongguan Nore Testing Center Co., Ltd. (Dongguan NTC Co., Ltd.)
Accreditations and Authorizations	:	The Laboratory has been assessed and proved to be in compliance with CNAS/CL01 Listed by CNAS, August 13, 2018 The Certificate Registration Number is L5795. The Certificate is valid until August 13, 2030 The Laboratory has been assessed and proved to be in compliance with ISO17025 Listed by A2LA, November 01, 2017 The Certificate Registration Number is 4429.01 The Certificate is valid until December 31, 2027 Listed by FCC, November 06, 2017 Test Firm Registration Number: 907417 Listed by Industry Canada, June 08, 2017 The Certificate Registration Number. Is 46405-9743A
Test Site Location	:	Room 101, 1101, Building 2, No. 61, Hongmei Section, Wangsha Road, Hongmei Town, Dongguan, Guangdong, People's Republic of China

6. Test Conditions

No.	Test Item	Test Mode	Test Voltage	Tested by	Remarks
1.	Conducted Emission	1	AC 120V / 60Hz	Desn	See note 1
2.	Radiated Emission	1	AC 120V / 60Hz	Rick	See note 1

Note:

1. The testing climatic conditions for temperature, humidity, and atmospheric pressure are within: 15~35°C, 30~70% and 86~106KPa.
2. AC 120V 60Hz come from auxiliary equipment.

7. Measurement Uncertainty

No.	Test Item	Frequency	Uncertainty	Remarks
1.	Conducted Emission	9KHz ~ 150KHz	± 2.96 dB	---
		150KHz ~ 30MHz	± 2.46 dB	---
2.	Radiated Emission	30MHz ~ 1GHz	± 5.63 dB	---
		Above 1GHz	± 5.16 dB	---

Note:

1. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.
2. The measurement uncertainly levels above are estimated and calculated according to CISPR 16-4-2.

8. Measurement Bandwidths

No.	Frequency Range (MHz)	Peak Level (kHz)	Quasi-Peak Level (kHz)	Average Level (kHz)
1.	0.01 ~ 0.15	0.3	0.2	0.2
2.	0.15 ~ 30.0	10.0	9.0	9.0
3.	30 ~ 1000	100.0	120.0	120.0
4.	Above 1000	1000.0	N/A	1000.0

Note: Measurements were made using the bandwidths and detectors specified by the standard. No video filter was used.

9. Deviations and Abnormalities from Standard Conditions

No additions, deviations and exclusions from the standard.

10. Sample Calculations

Conducted Emission						
Freq. (MHz)	**Reading Level (dBuV)**	**Correct Factor (dB)**	**Measurement (dBuV)**	**Limit (dBuV)**	**Over (dB)**	**Detector**
0.1539	33.81	20.59	54.40	65.79	-11.39	QP

Where,

Freq.	= Emission frequency in MHz
Reading Level	= Spectrum Analyzer/Receiver Reading
Corrector Factor	= Insertion loss of LISN + Cable Loss + RF Switching Unit attenuation
Measurement	= Reading + Corrector Factor
Limit	= Limit stated in standard
Margin	= Measurement - Limit
Detector	= Reading for Quasi-Peak / Average / Peak

Radiated Emission						
Freq. (MHz)	**Reading Level (dBuV)**	**Correct Factor (dB/m)**	**Measurement (dBuV/m)**	**Limit (dBuV/m)**	**Over (dB)**	**Detector**
30.9700	42.09	-9.79	32.30	40.00	-7.70	QP

Where,

Freq.	= Emission frequency in MHz
Reading Level	= Spectrum Analyzer/Receiver Reading
Corrector Factor	= Antenna Factor + Cable Loss - Pre-amplifier
Measurement	= Reading + Corrector Factor
Limit	= Limit stated in standard
Over	= Margin, which calculated by Measurement - Limit
Detector	= Reading for Quasi-Peak / Average / Peak

11. Conducted Emission Measurement

LIMITS

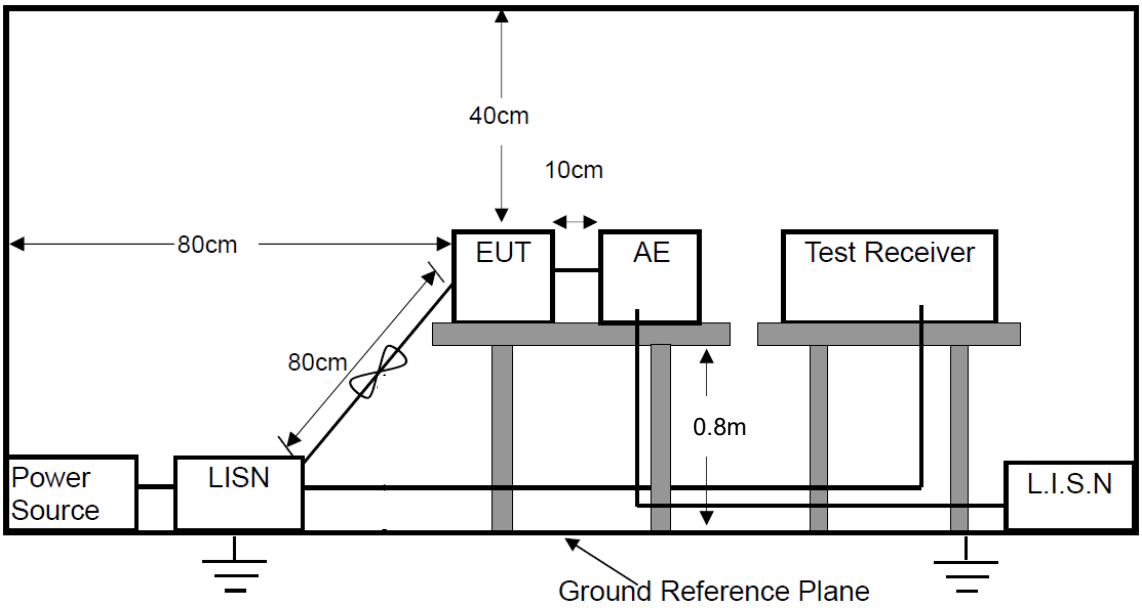
Limits for conducted disturbance for the AC mains power ports:

Frequency (MHz)	☐Class A (dBuV)		☒Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 to 0.5	79	66	66 to 56	56 to 46
0.5 to 5	73	60	56	46
5 to 30	73	60	60	50

Note:
1. If the limits for the average detector are met when using the quasi-peak detector, then the limits for the measurements with the average detector are considered to be met.
2. The higher value measured with and without the outer conductor screen of the antenna terminal connected to earth is considered.
3. Television receivers with teletext facilities should be tested in teletext mode with teletext Picture.
4. The lower limit shall apply at the transition frequencies.
5. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5MHz.

BLOCK DIAGRAM OF TEST SETUP

Conducted Disturbance at the Mains power Ports



TEST PROCEDURES

a. The EUT was placed on a wooden table 0.8m height from the metal ground plan and 0.4m from the conducting wall of the shielding room and it was kept at 0.8m from any other grounded conducting surface.

b. Configure the EUT and support devices as per section 3.

c. All I/O cables and support devices were positioned as per ANSI C63.4-2014.

d. Connect mains power port of the EUT to a line impedance stabilization network (LISN) and wired network port to Asymmetric Artificial Network (AAN).

e. Connect all support devices to the other LISN and AAN, if needed.

f. Turn on the EUT and all support devices, and make it run stably.

g. Set the detector and measurement bandwidth of test-receiver system as per ANSI C63.4-2014.

h. Scan the frequency range from 150KHz to 30MHz at both sides of AC line for conducted interference checking

i. Repeat the above scans in each mode and record the test data.

TEST RESULTS

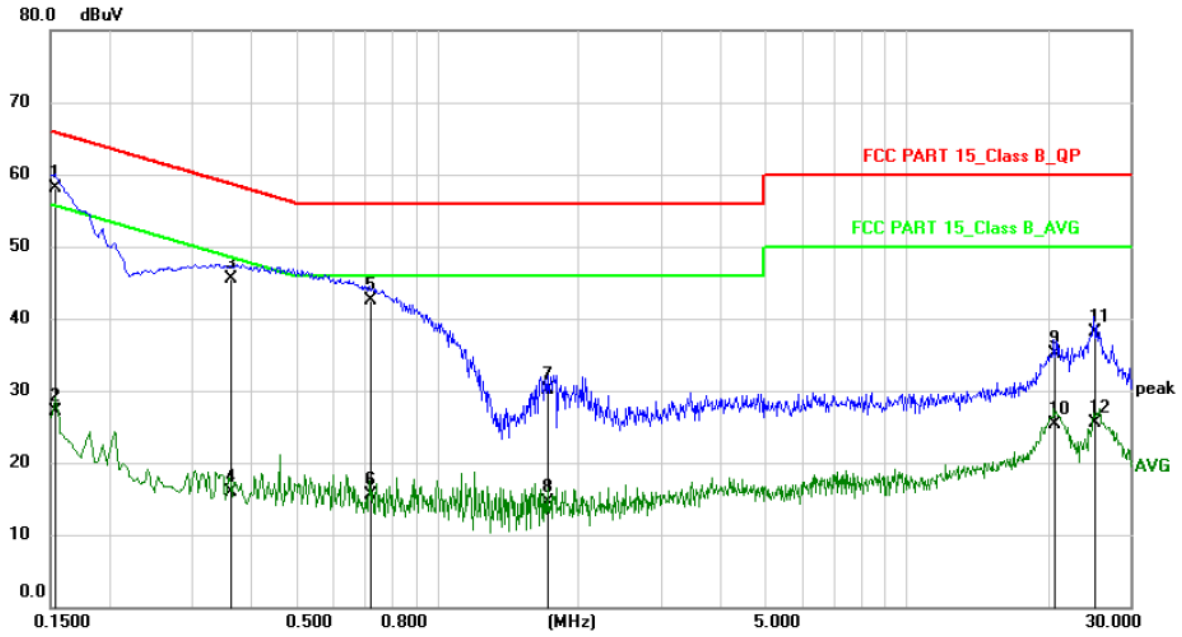
PASS

Please refer to the following pages.

M/N: CSXCV	Testing Voltage: AC 120V / 60Hz
Phase: L1	Detector: QP & AVG
Test Mode: 1	

Conducted Emission Measurement

Date: 2025/11/27 Time: 9:16:59

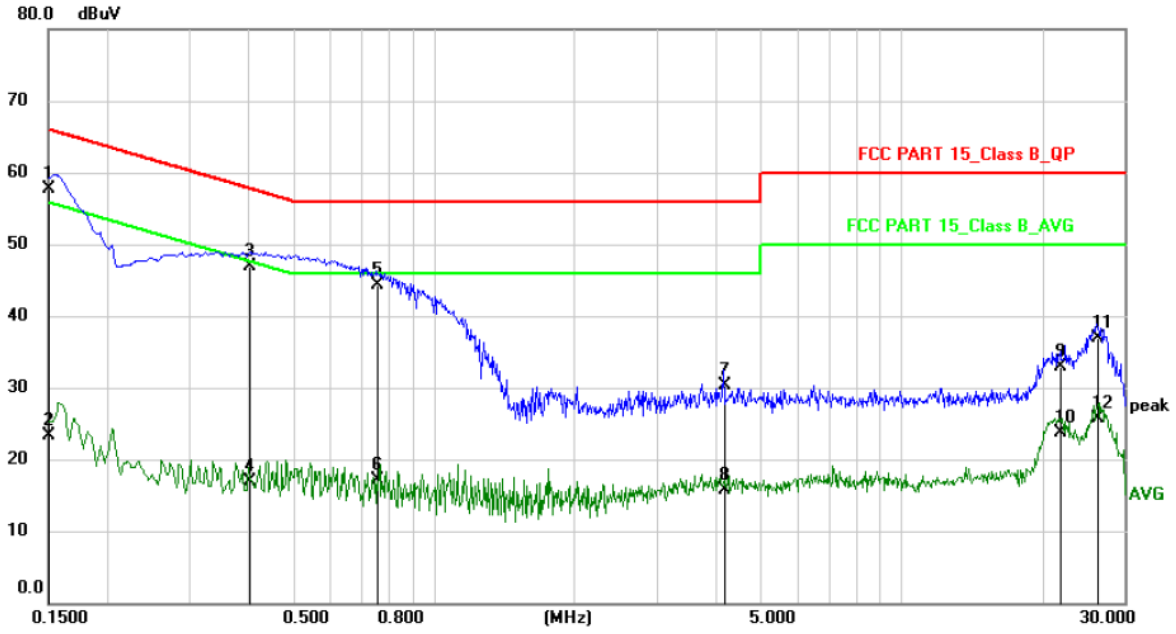


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1539	37.36	20.74	58.10	65.79	-7.69	QP	
2		0.1539	6.36	20.74	27.10	55.79	-28.69	AVG	
3		0.3620	24.33	21.17	45.50	58.68	-13.18	QP	
4		0.3620	-5.27	21.17	15.90	48.68	-32.78	AVG	
5		0.7180	21.34	21.16	42.50	56.00	-13.50	QP	
6		0.7180	-5.66	21.16	15.50	46.00	-30.50	AVG	
7		1.7220	9.05	21.05	30.10	56.00	-25.90	QP	
8		1.7220	-6.55	21.05	14.50	46.00	-31.50	AVG	
9		20.6780	14.69	20.41	35.10	60.00	-24.90	QP	
10		20.6780	4.99	20.41	25.40	50.00	-24.60	AVG	
11		25.0940	17.65	20.55	38.20	60.00	-21.80	QP	
12		25.0940	5.05	20.55	25.60	50.00	-24.40	AVG	

M/N: CSXCV	Testing Voltage: AC 120V / 60Hz
Phase: N	Detector: QP & AVG
Test Mode: 1	

Conducted Emission Measurement

Date: 2025/11/27 Time: 9:22:53



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1500	37.11	20.69	57.80	66.00	-8.20	QP	
2		0.1500	2.71	20.69	23.40	56.00	-32.60	AVG	
3		0.4020	25.77	21.13	46.90	57.81	-10.91	QP	
4		0.4020	-4.23	21.13	16.90	47.81	-30.91	AVG	
5		0.7580	23.18	21.12	44.30	56.00	-11.70	QP	
6		0.7580	-3.92	21.12	17.20	46.00	-28.80	AVG	
7		4.1619	9.75	20.65	30.40	56.00	-25.60	QP	
8		4.1619	-4.85	20.65	15.80	46.00	-30.20	AVG	
9		21.8980	12.62	20.38	33.00	60.00	-27.00	QP	
10		21.8980	3.32	20.38	23.70	50.00	-26.30	AVG	
11		26.1860	16.13	20.77	36.90	60.00	-23.10	QP	
12		26.1860	5.03	20.77	25.80	50.00	-24.20	AVG	

12. Radiated Emission Measurement

LIMITS

Below 1GHz for 47 CFR FCC Part 15, §15.109:

Frequency range MHz	☐ Class A Field Strengths Limit		☒ Class B Field Strengths Limit	
	μV/m	dB(μV)/m 3m	μV/m	dB(μV)/m 3m
30 ~ 88	90	49.0	100	40.0
88 ~ 216	150	53.5	150	43.5
216 ~ 960	210	56.4	200	46.0
960 ~ 1000	300	59.5	500	54.0
Note: 1. Emission level (dB)μV = 20 log Emission level μV/m. 2. The smaller limit shall apply at the cross point between two frequency bands.				

Above 1GHz:

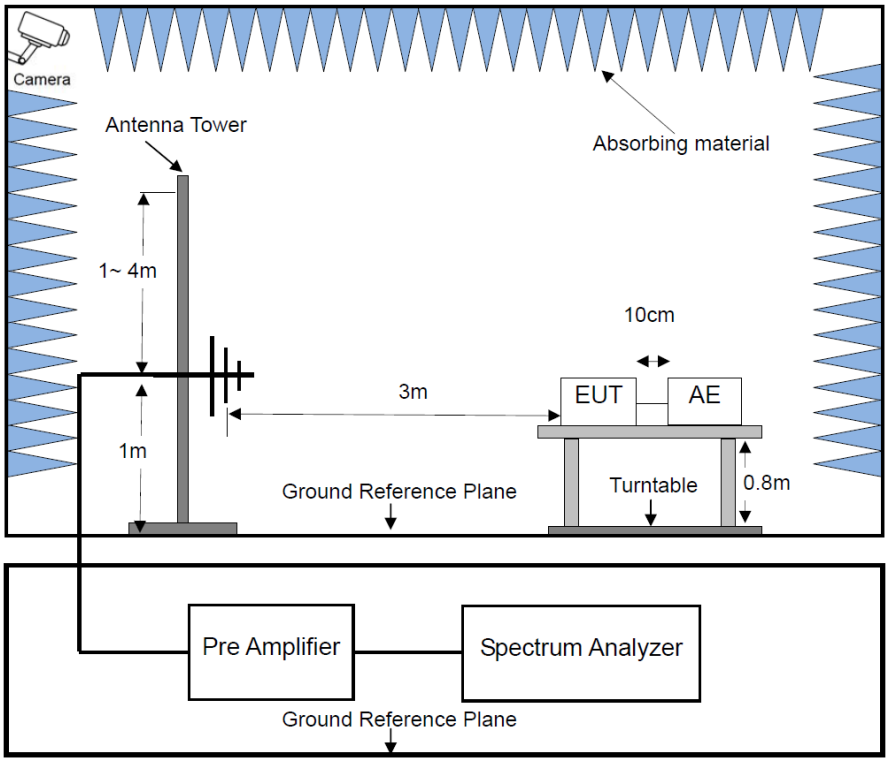
Frequency (GHz)	Measuring the distance at 3m			
	☐ Class A		☒ Class B	
	Peak dB(uV/m)	Average dB(uV/m)	Peak dB(uV/m)	Average dB(uV/m)
1~40	80	60	74	54
Note: The smaller limit shall apply at the cross point between two frequency bands.				

Required frequency range of radiated measurement

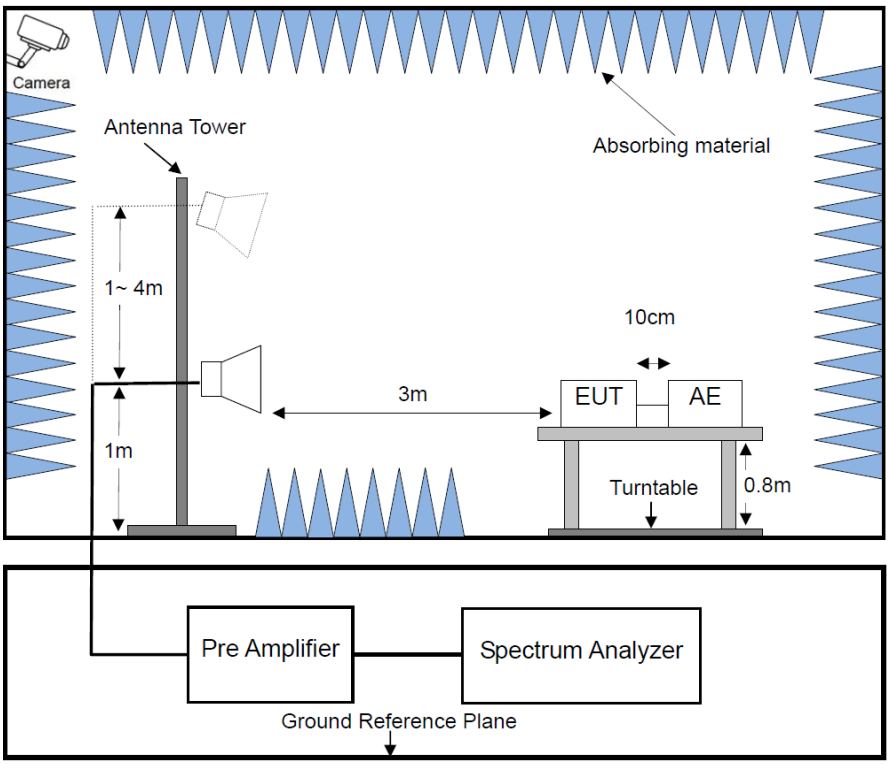
Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705~108	1000
108~500	2000
500~1000	5000
Above 1000	5^{th} harmonic of the highest frequency or 40 GHz, Whichever is lower.

BLOCKDIAGRAM OF TEST SETUP

Below 1GHz:



Above 1GHz:



TEST PROCEDURES

a. The EUT was placed on a rotatable wooden table top 0.8m above ground.

b. The EUT was set 3m away from the receiving antenna which was mounted on the top of a variable height antenna tower.

c. Configure the EUT and support devices as per section 3.

d. All I/O cables and support devices were positioned as per ANSI C63.4-2014.

e. Connect mains power port of the EUT to the outlet socket under the turntable and connect all other support devices to other outlet socket under the turntable.

f. Turn on the EUT and all support devices, and make it run stably.

g. Set the detector and measurement bandwidth of test-receiver system as per ANSI C63.4-2014.

h. Scan the frequency range from 30MHz to 12750MHz for radiation emissions checking.

i. Emissions were scanned and measured rotating the EUT from 0 to 360 degrees and positioning the antenna from 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.

j. Repeat the above scans in each mode and channel and record the test data.

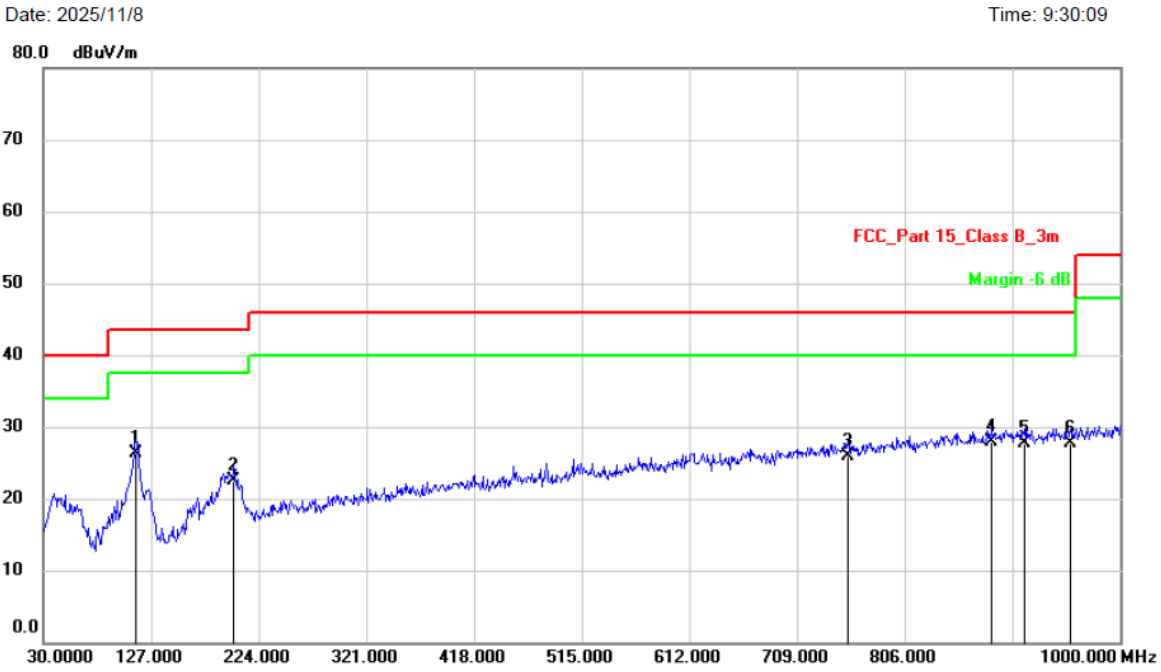
TEST RESULTS

PASS

Please refer to the following pages.

M/N: CSXCV	Testing Voltage: AC 120V / 60Hz
Polarization: Horizontal	Detector: QP
Test Mode: 1	Distance: 3m

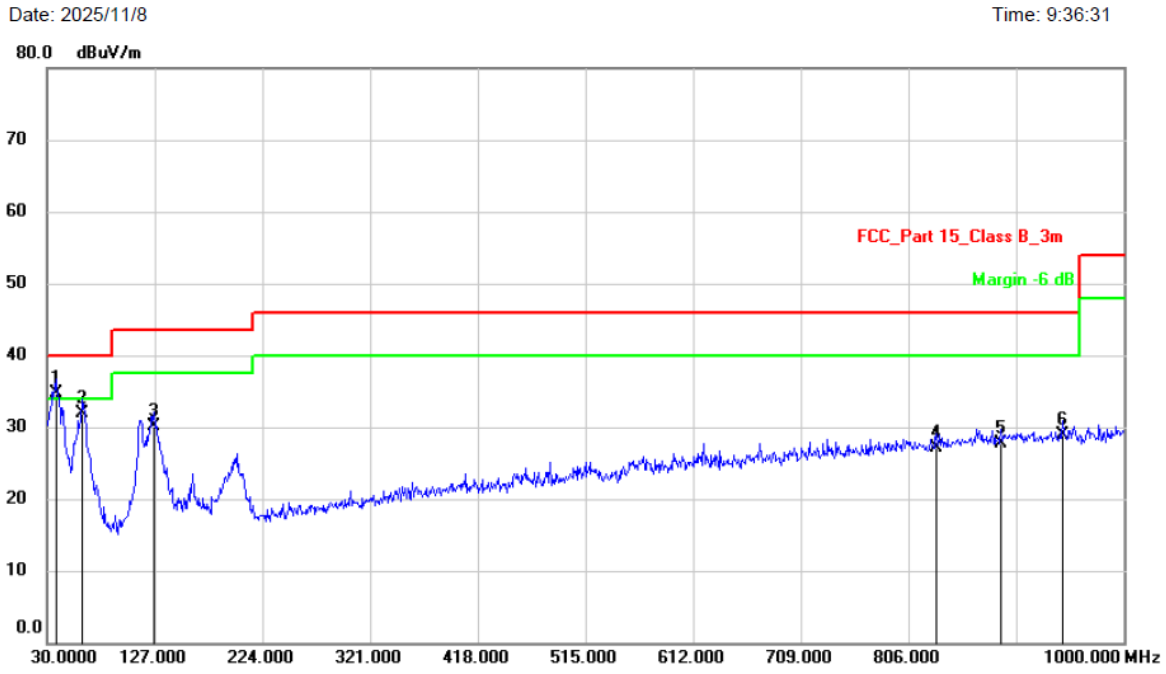
Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	113.4200	36.53	-10.13	26.40	43.50	-17.10	QP	
2		201.6900	31.99	-9.39	22.60	43.50	-20.90	QP	
3		754.5900	23.91	2.09	26.00	46.00	-20.00	QP	
4		883.6000	24.10	3.90	28.00	46.00	-18.00	QP	
5		913.6700	23.67	4.03	27.70	46.00	-18.30	QP	
6		955.3800	23.55	4.25	27.80	46.00	-18.20	QP	

M/N: CSXCV	Testing Voltage: AC 120V / 60Hz
Polarization: Vertical	Detector: QP
Test Mode: 1	Distance: 3m

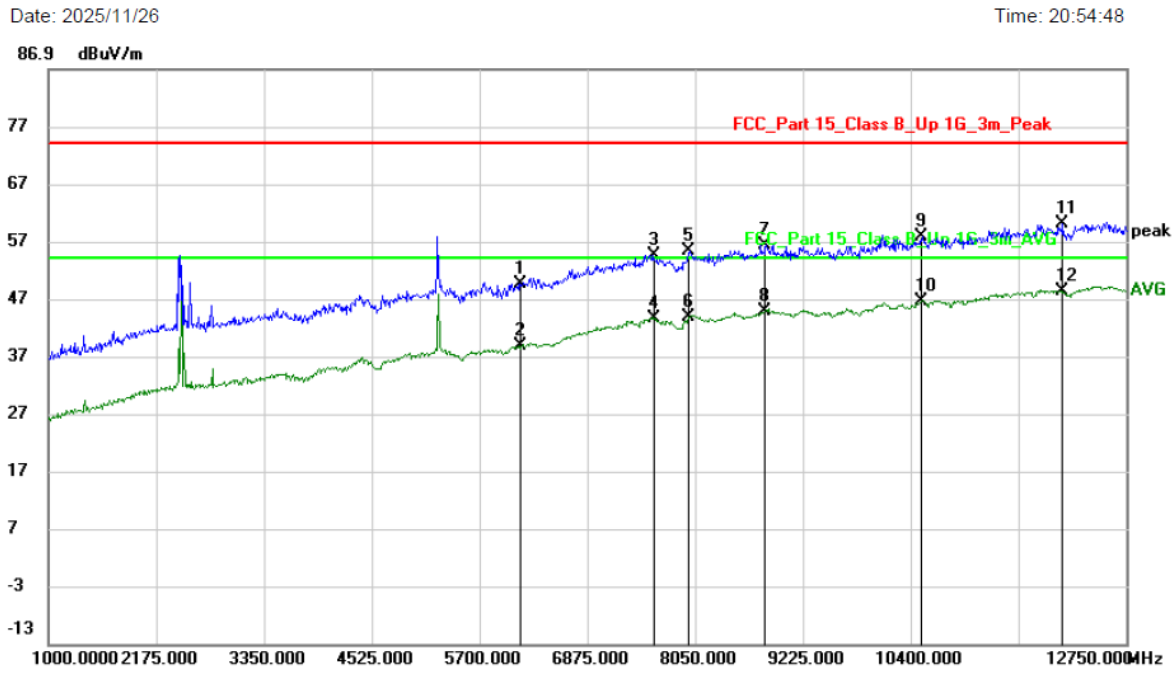
Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	37.7599	43.88	-9.18	34.70	40.00	-5.30	QP	
2		62.0100	41.01	-9.01	32.00	40.00	-8.00	QP	
3		126.0300	42.30	-12.10	30.20	43.50	-13.30	QP	
4		831.2199	23.93	3.27	27.20	46.00	-18.80	QP	
5		889.4200	23.87	3.93	27.80	46.00	-18.20	QP	
6		944.7100	24.72	4.18	28.90	46.00	-17.10	QP	

M/N: CSXCV	Testing Voltage: AC 120V / 60Hz
Polarization: Horizontal	Detector: Peak & AVG
Test Mode: 1	Distance: 3m

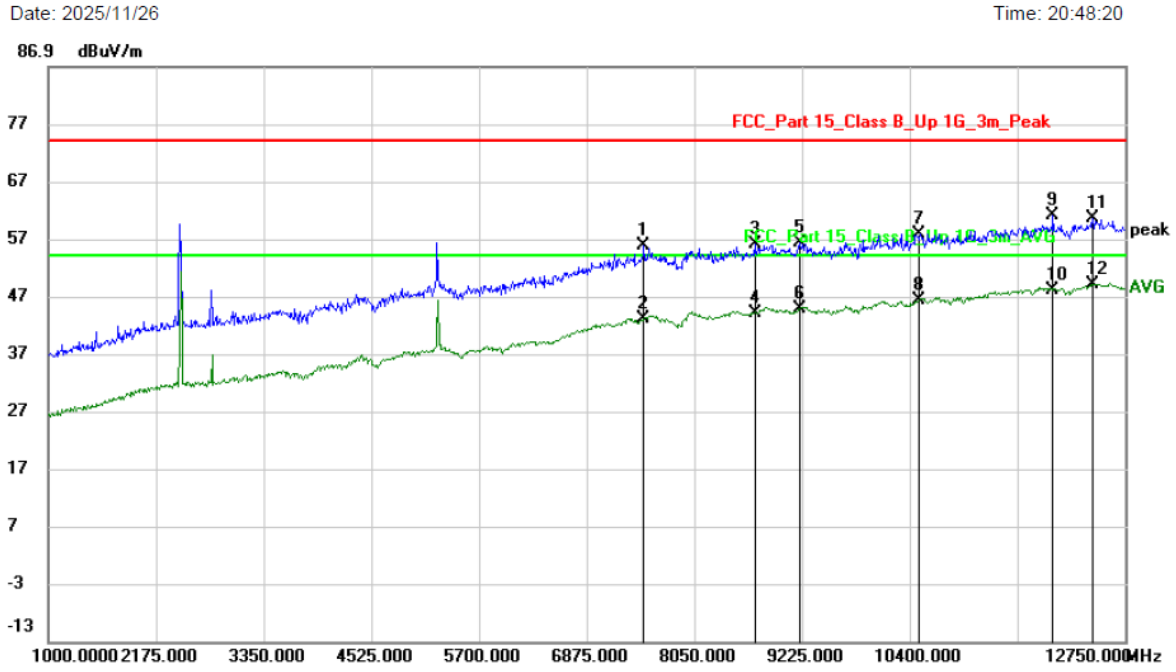
Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		6146.500	43.97	5.66	49.63	74.00	-24.37	peak	
2		6146.500	33.10	5.66	38.76	54.00	-15.24	AVG	
3		7603.500	44.90	9.71	54.61	74.00	-19.39	peak	
4		7603.500	33.77	9.71	43.48	54.00	-10.52	AVG	
5		7979.500	45.56	9.64	55.20	74.00	-18.80	peak	
6		7979.500	34.08	9.64	43.72	54.00	-10.28	AVG	
7		8813.750	46.12	10.26	56.38	74.00	-17.62	peak	
8		8813.750	34.50	10.26	44.76	54.00	-9.24	AVG	
9		10517.500	45.70	12.06	57.76	74.00	-16.24	peak	
10		10517.500	34.46	12.06	46.52	54.00	-7.48	AVG	
11		12056.750	46.38	13.71	60.09	74.00	-13.91	peak	
12	*	12056.750	34.64	13.71	48.35	54.00	-5.65	AVG	

M/N: CSXCV	Testing Voltage: AC 120V / 60Hz
Polarization: Vertical	Detector: Peak & AVG
Test Mode: 1	Distance: 3m

Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		7497.750	45.81	9.87	55.68	74.00	-18.32	peak	
2		7497.750	33.28	9.87	43.15	54.00	-10.85	AVG	
3		8708.000	45.82	10.17	55.99	74.00	-18.01	peak	
4		8708.000	33.97	10.17	44.14	54.00	-9.86	AVG	
5		9201.500	46.02	10.27	56.29	74.00	-17.71	peak	
6		9201.500	34.55	10.27	44.82	54.00	-9.18	AVG	
7		10505.750	45.80	12.05	57.85	74.00	-16.15	peak	
8		10505.750	34.27	12.05	46.32	54.00	-7.68	AVG	
9		11962.750	47.36	13.62	60.98	74.00	-13.02	peak	
10		11962.750	34.53	13.62	48.15	54.00	-5.85	AVG	
11		12397.500	46.35	14.15	60.50	74.00	-13.50	peak	
12	*	12397.500	34.80	14.15	48.95	54.00	-5.05	AVG	

13. Measuring Devices and Test Equipment

☒ For Conducted Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESR3	103038	Aug. 21, 2025	1 Year
2.	L.I.S.N	Rohde & Schwarz	ENV 216	102529	Aug. 21, 2025	1 Year
3.	L.I.S.N	Rohde & Schwarz	ESH2-Z5	893606/014	Aug. 22, 2025	1 Year
4.	Pulse Limiter	EM	PL00902	2203	Aug. 28, 2025	1 Year
5.	Test Software	EZ	EZ_EMC, NTC-3A1.1	N/A	N/A	N/A

☒ For Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESRP	102505	Aug. 21, 2025	1 Year
2.	Spectrum Analyzer	Keysight	N9010B	MY62170254	Aug. 21, 2025	1 Year
3.	Antenna	Schwarzbeck	VULB9162	9162-010	Mar. 22, 2025	2 Year
4.	Loop Antenna	Schwarzbeck	FMZB 1513	1513-272	Aug. 16, 2025	2 Year
5.	Horn Antenna	COM-Power	AH-118	071078	Aug. 16, 2025	2 Year
6.	Pre-Amplifier	HP	HP 8447D	2944A08219	Aug. 22, 2025	1 Year
7.	Pre-Amplifier	Agilent	8449B	3008A02301	Aug. 23, 2025	1 Year
8.	Chamber	YIHENG	9*6*6m	N/A	Sep. 22, 2025	2 Year
9.	Test Software	EZ	EZ_EMC, NTC-3A1.1	N/A	N/A	N/A
10.	CDN	KEHUAN	KH3663E	366330847	Aug. 21, 2025	1 Year

14. Photographs of Test Configuration

Photo of Conducted Emission Measurement

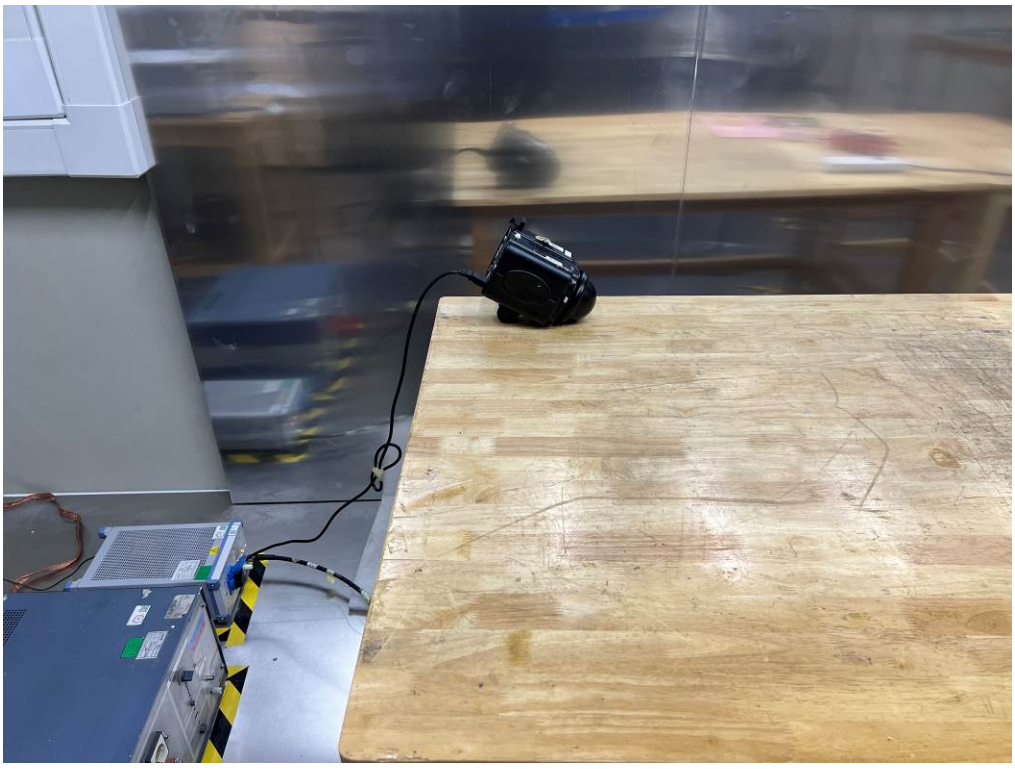
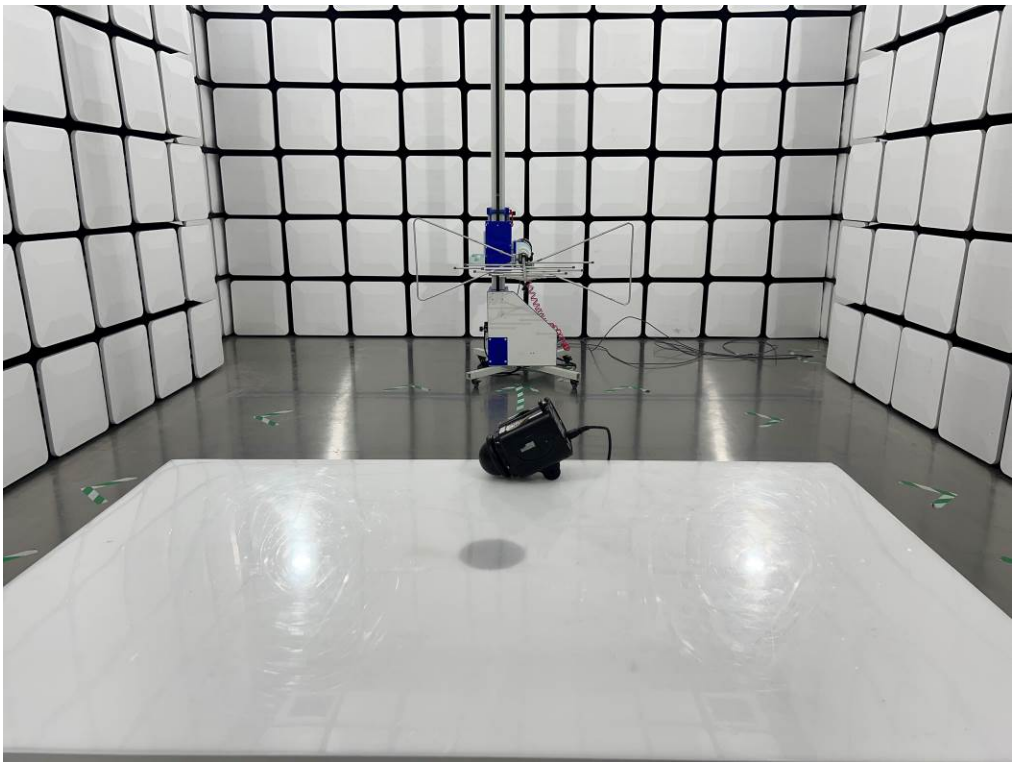
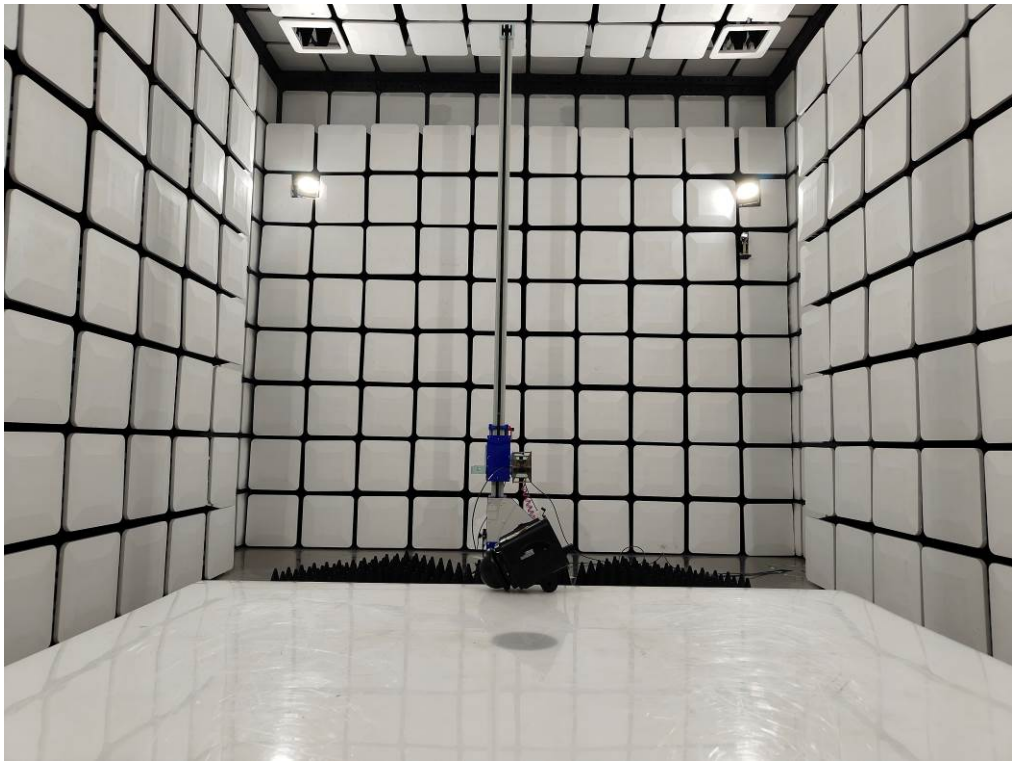
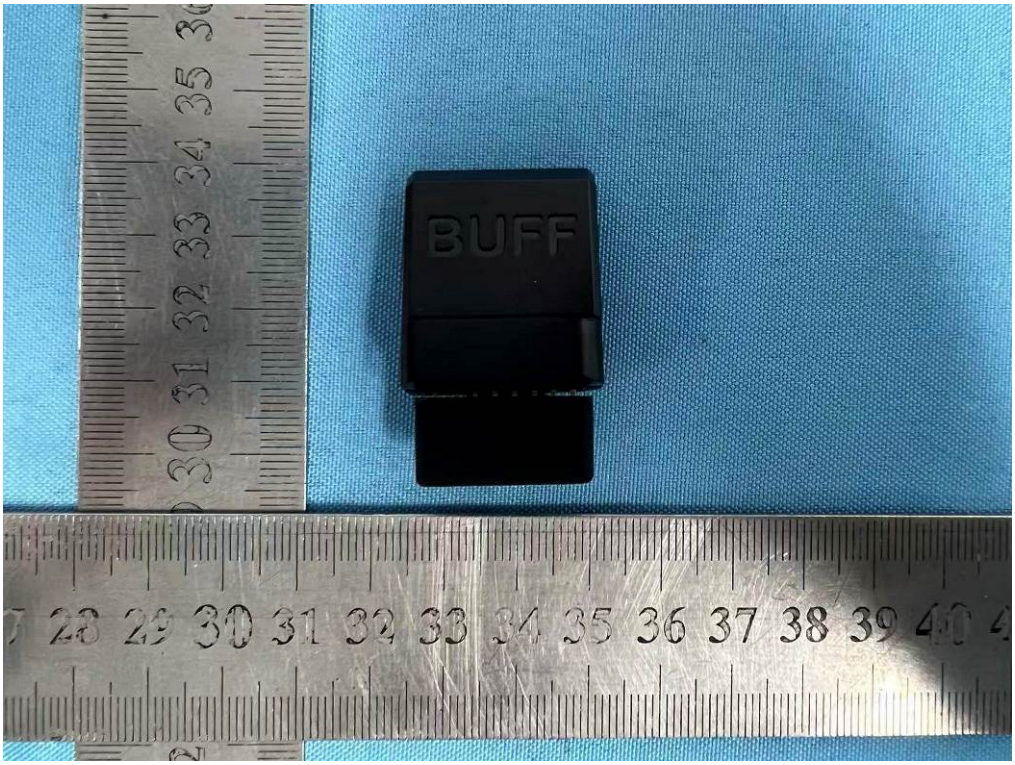


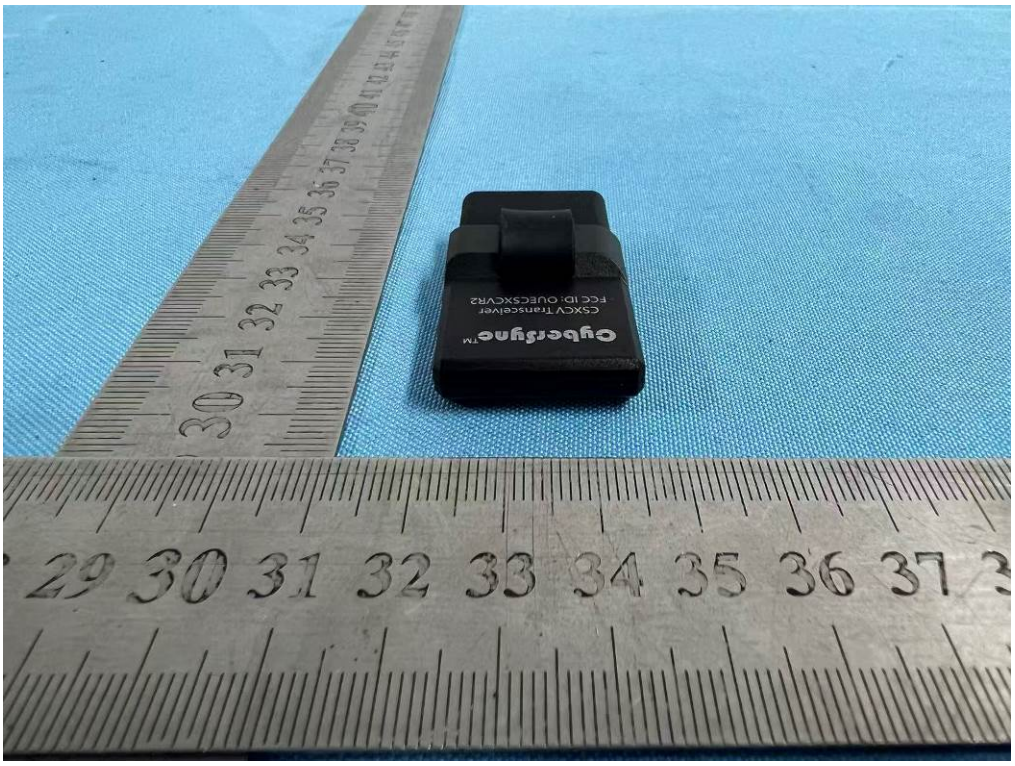
Photo of Radiated Emission Measurement

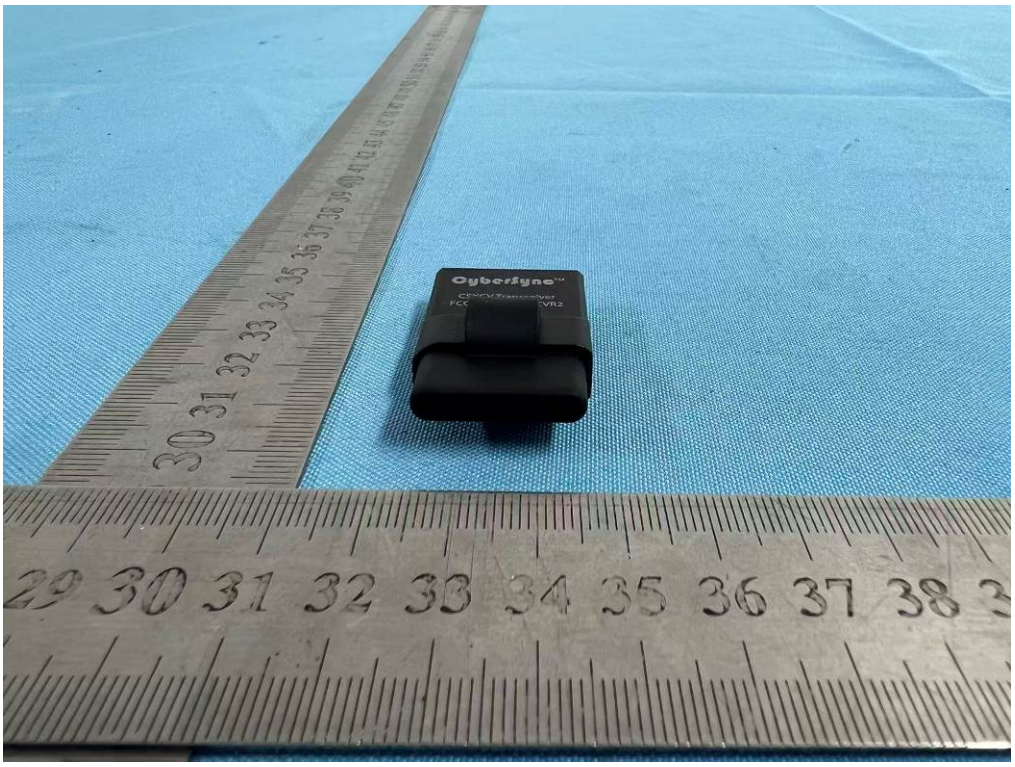


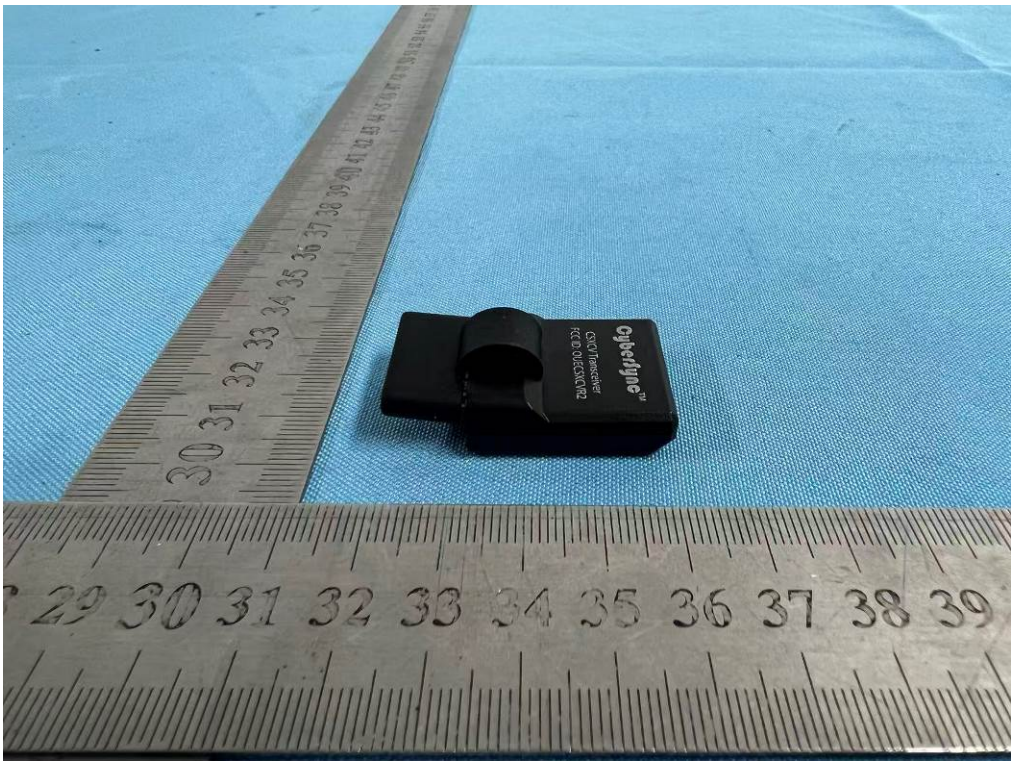


15. Photographs of the EUT




Cyberfyne™
CSXCV Transceiver
FCC ID: OUECSXCVR2
30 31 32 33 34 35 36 37
29 30 31 32 33 34 35 36 37


Cyberfyne™
30 31 32 33 34 35 36 37 38
29 30 31 32 33 34 35 36 37 38


Cybertyne
CSKV Transceiver
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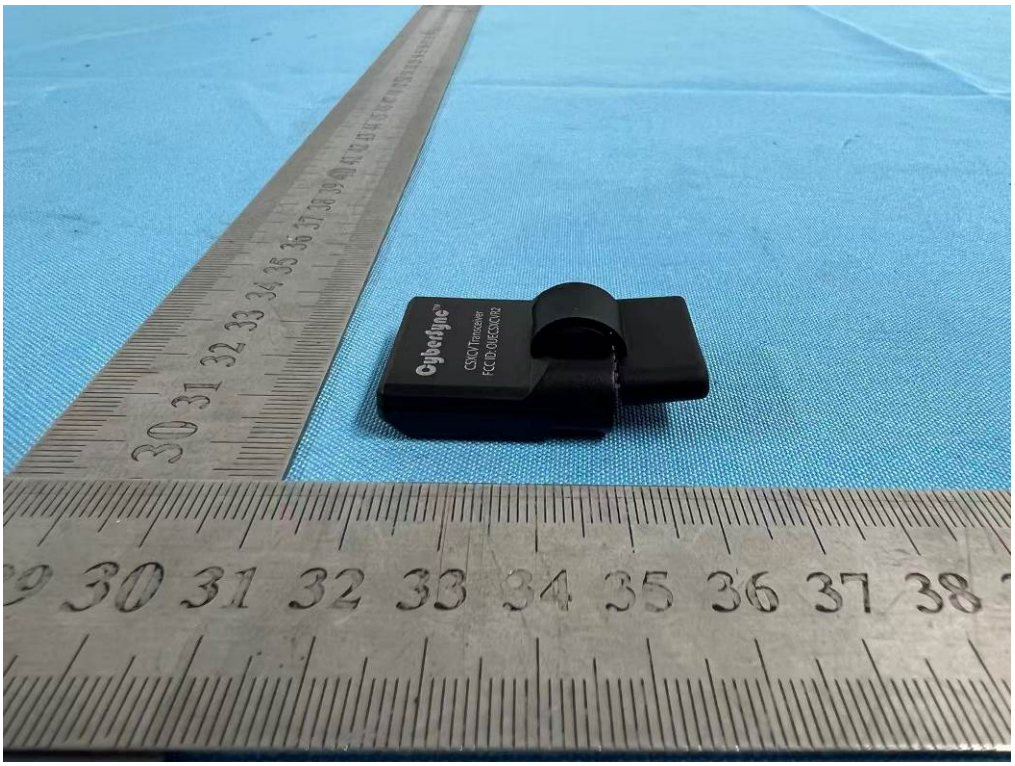
Cybertyne
CSKV Transceiver
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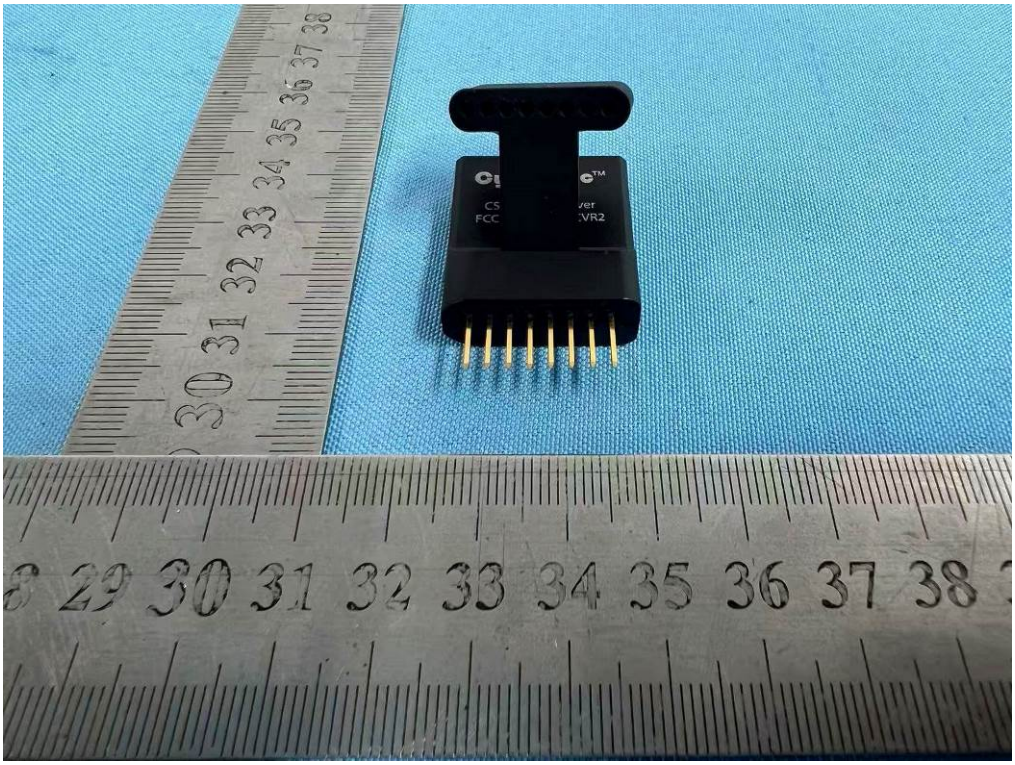
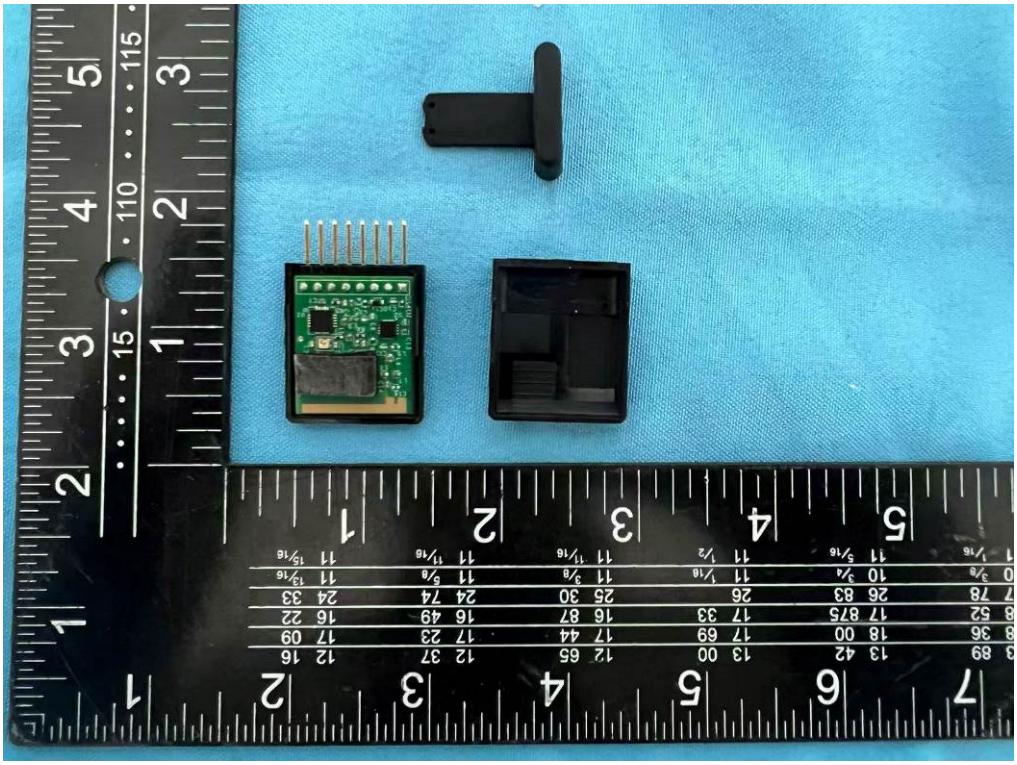
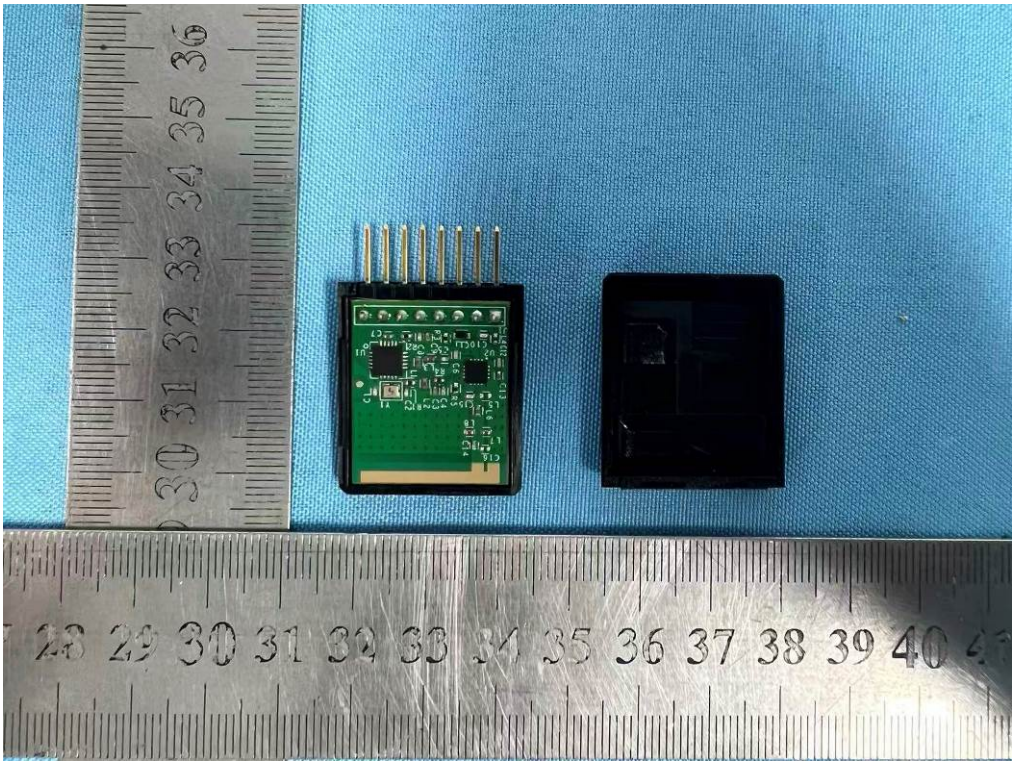
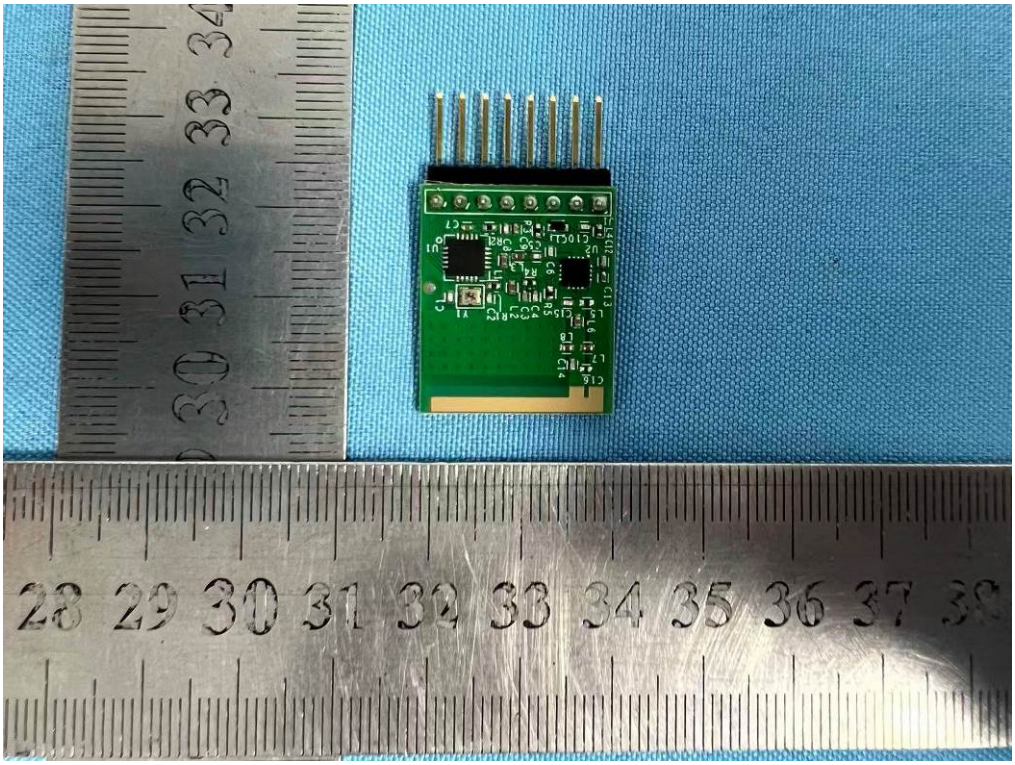
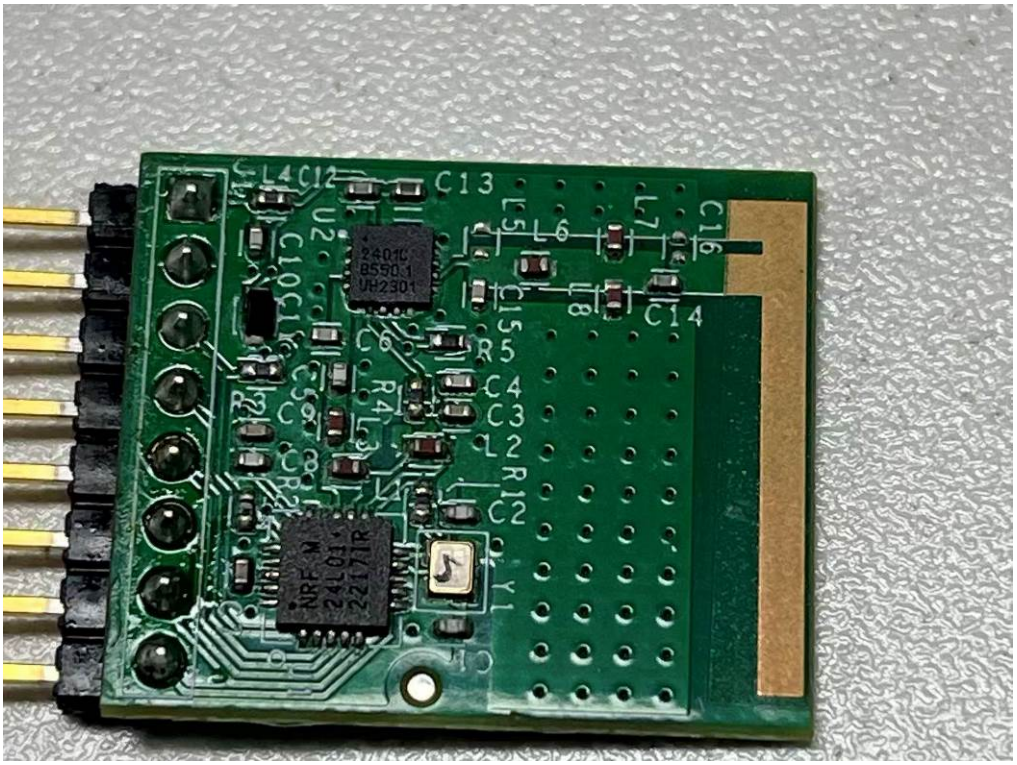
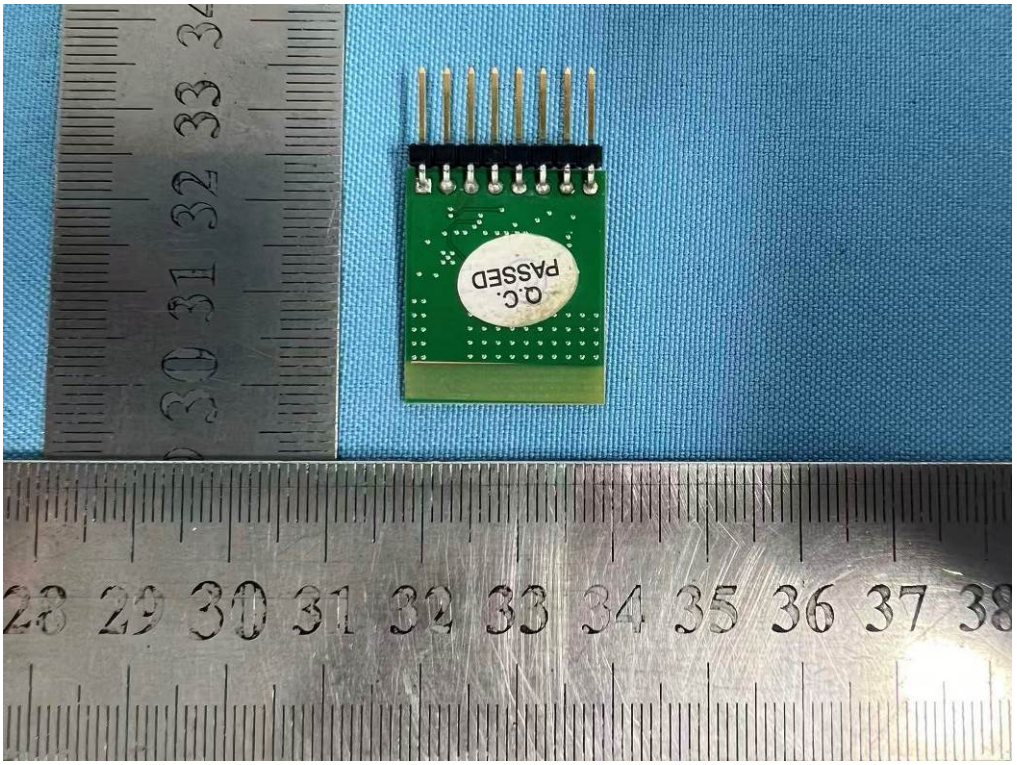









C13
L5
L6
L7
C16
C14
C15
R5
C4
C3
L2
R12
C2
Y1
NRF M
24L01+
2217R


Q.C.
PASSED
28 29 30 31 32 33 34 35 36 37 38

---End---