

TEST REPORT

Applicant: EDGETEL VIETNAM COMPANY LIMITED Lot Cn

Address: C12 Chau Phong Industrial Cluster, Chau Cau Hamlet, Chau Phong Commune, Que Vo To Bac Ninh.

Equipment Type: IoT cellular

Model Name: AMA-03R

Brand Name: EDGETEL

FCC ID: 2BPYK-AMA03

Test Standard: 47 CFR Part 15 Subpart B
ANSI C63.4-2014

Sample Arrival Date: Oct. 11, 2025

Test Date: Oct. 16, 2025

Date of Issue: Nov. 06, 2025

ISSUED BY:

Shanghai Tejet Communications Technology Co., Ltd. Testing Center

Prepared by: She Xihao

Reviewed by: Huang Chengkun

Approved by: Zhang Yanqing
(Laboratory Manager)

She Xi Hao

Huang Chengkun

Zhang Yanqing

Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Nov. 06, 2025</u>	<u>Initial Issue</u>

TABLE OF CONTENTS

1 GENERAL INFORMATION	4
1.1 Test Laboratory	4
1.2 Test Location	4
2 PRODUCT INFORMATION	5
2.1 Applicant Information	5
2.2 Manufacturer Information	5
2.3 General Description for Equipment under Test (EUT)	5
2.4 Ancillary Equipment	6
2.5 Technical Information	6
3 SUMMARY OF TEST RESULTS	7
3.1 Test Standards	7
3.2 Verdict	7
3.3 Decision Rule	7
3.4 Test Uncertainty	7
4 GENERAL TEST CONFIGURATIONS	8
4.1 Test Enclosure List	8
4.2 Test Configurations	8
4.3 Test Setups	9
5 TEST ITEMS	11
5.1 Emission Tests	11
5.1.1 Radiated emission	11
5.1.2 Conducted emission	13
ANNEX A TEST RESULTS AND TEST EQUIPMENT LIST	14
A.1 Radiated emission	14
A.2 Conducted emission	20

ANNEX B TEST SETUP PHOTOS	21
ANNEX C EUT EXTERNAL PHOTOS	21
ANNEX D EUT INTERNAL PHOTOS	21

1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shanghai Tejet Communications Technology Co., Ltd. Testing Center
Address	1-2/F., Building 1, No.222, Xuanlan Road, Xuanqiao, Pudong New District, Shanghai, China

1.2 Test Location

Name	Shanghai Tejet Communications Technology Co., Ltd. Testing Center
Location	1-2/F., Building 1, No.222, Xuanlan Road, Xuanqiao, Pudong New District, Shanghai, China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1352.

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	EDGETEL VIETNAM COMPANY LIMITED Lot Cn
Address	C12 Chau Phong Industrial Cluster, Chau Cau Hamlet, Chau Phong Commune, Que Vo To Bac Ninh.

2.2 Manufacturer Information

Manufacturer	EDGETEL VIETNAM COMPANY LIMITED Lot Cn
Address	C12 Chau Phong Industrial Cluster, Chau Cau Hamlet, Chau Phong Commune, Que Vo To Bac Ninh.

2.3 General Description for Equipment under Test (EUT)

Equipment Type	IoT cellular
Model Name Under Test	AMA-03R
Series Model Name	N/A
Description of Model Name Differentiation	N/A
Hardware Version	1.0
Software Version	1.0
Dimensions (Approx.)	16.3mm(W) × 17.0mm(L) × 2.4mm(H)
Weight (Approx.)	N/A

2.4 Ancillary Equipment

Note: Not applicable.

2.5 Technical Information

Network and wireless connectivity	4G Network FDD LTE Band2/4/12/13/14/17/25/66
Classification of equipment	Class B
Highest frequency generated or used in the device or on which the device operates or tunes(MHz)	1980 MHz

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 15 Subpart B	Unintentional Radiators
2	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 40 GHz

3.2 Verdict

No.	Description	FCC Rule	Test Verdict	Remark
1	Radiated Emission	15.109	Pass	--
2	Conducted Emission, AC Ports	15.107	N/A	Note 1
Note 1: The EUT has no AC Ports.				

3.3 Decision Rule

- ☐ No Need
- ☒ Use General conformity decision rule (Consider uncertainty or not ☒ No ☐ Yes)
- ☐ Use Special Conformity Decision Rule (Consider uncertainty or not ☐ No ☐ Yes)

3.4 Test Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Measurement	Value
Conducted emissions (150 kHz-30 MHz)-AMN	2.8 dB
Radiated emissions (30 MHz-1 GHz)-966#1	4.2 dB
Radiated emissions (1 GHz-18 GHz) -966#1	5.3 dB

4 GENERAL TEST CONFIGURATIONS

4.1 Test Enclosure List

Description	Manufacturer	Model	Serial No.	Length	Description	Use
ANTENNA	N/A	N/A	N/A	N/A	Customer provided	☒
Battery	N/A	N/A	N/A	N/A	N/A	☒

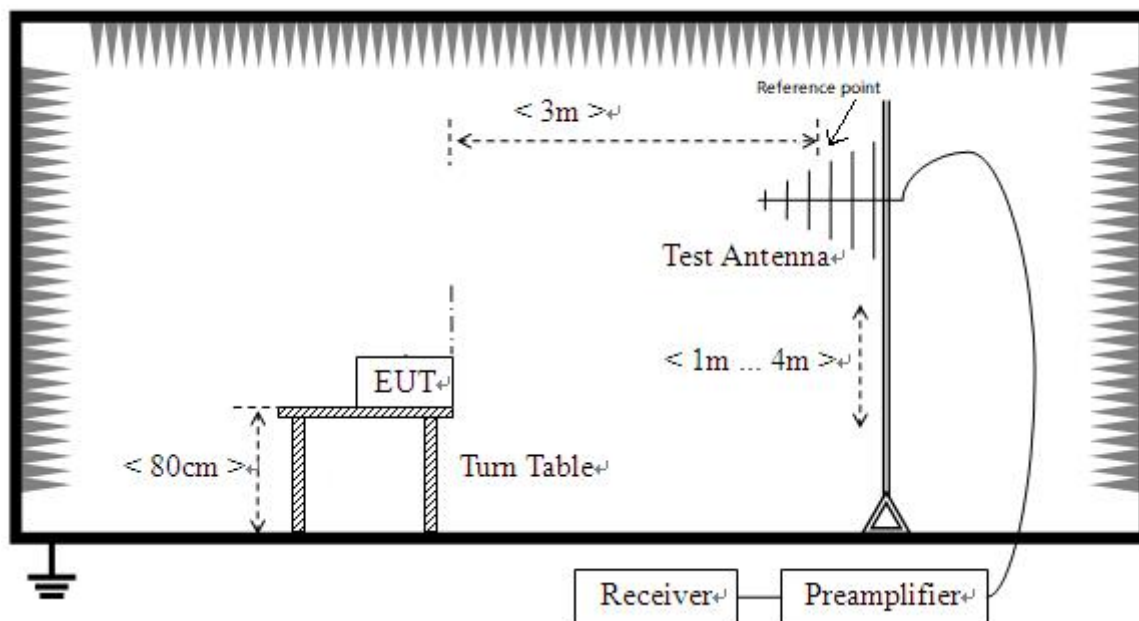
4.2 Test Configurations

All test modes of EUT are listed in the table below.

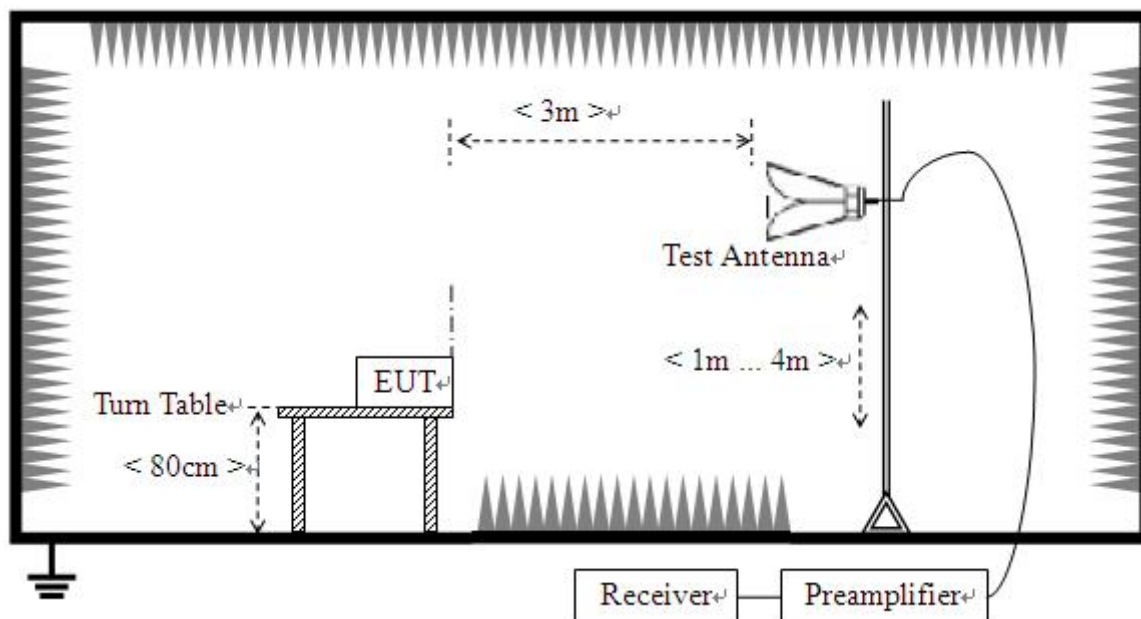
Test Mode Configuration	Description
Mode 1	<u>The Full System Test Mode</u> EUT + Batter + ANTENNA

4.3 Test Setups

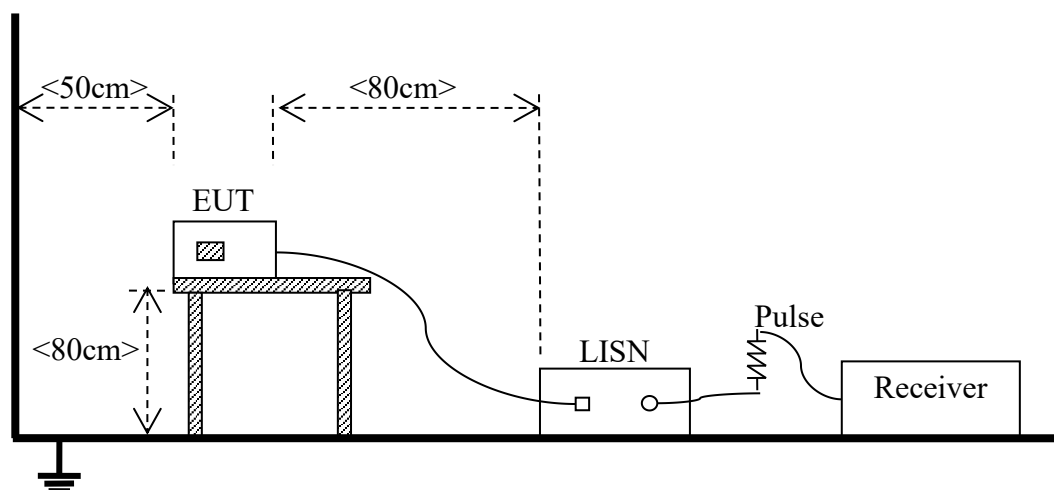
Test Setup 1



Radiated Emission (30 MHz-1 GHz)



Radiated Emission (above 1 GHz)

Test Setup 2

Conducted emission, AC ports

5 TEST ITEMS

5.1 Emission Tests

5.1.1 Radiated emission

5.1.1.1 Limit

Frequency range (MHz)	Class B (at 3 m)		Class A (at 3 m)
	Field Strength ($\mu\text{V/m}$)	Field Strength (dB $\mu\text{V/m}$)	Field Strength (dB $\mu\text{V/m}$)
30 - 88	100	40	49.5
88 - 216	150	43.5	54
216 - 960	200	46	56.9
Above 960	500	54	60

Note:

- 1) Field Strength (dB $\mu\text{V/m}$) = $20 \cdot \log [\text{Field Strength } (\mu\text{V/m})]$.
- 2) In the emission tables above, the tighter limit applies at the band edges.
- 3) The limits using ANSI C63.4-2014.
- 4) For 30-1000 MHz, the CISPR quasi-peak is employed.

For above 1000 MHz, according to the requirements of FCC 15.35, unless otherwise specified, the limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test.

Frequency range (GHz)	Class B (at 3 m)			Class A (at 3 m)	
	Field Strength ($\mu\text{V/m}$)	Field Strength Average (dB $\mu\text{V/m}$)	Field Strength Peak (dB $\mu\text{V/m}$)	Field Strength Average (dB $\mu\text{V/m}$)	Field Strength Peak (dB $\mu\text{V/m}$)
1 - F_M	500	54	74	60	80

Note 1: The highest measurement frequency, F_M , in GHz, shall be determined as next Table.

Note 2: Average Class A limit at 3m L_{3m} is determined by the following conversion formula:

$$L_{3m} = L_{10m} + 20 \cdot \log(d_{10m}/d_{3m})$$
Where:
 L_{3m} is Average Class A limit at 3m;
 L_{10m} is Average Class A limit at 10m;
 d_{10m} is Measurement distance in 10m;
 d_{3m} is Measurement distance in 3m.
For this case: $L_{3m} = 49.5 + 20 \cdot \log(10/3) = 60$ (dB $\mu\text{V/m}$).

Highest internal frequency (F_X)	Highest measurement frequency (F_M)
$F_X \leq 108 \text{ MHz}$	1 GHz
$108 \text{ MHz} \leq F_X \leq 500 \text{ MHz}$	2 GHz
$500 \text{ MHz} \leq F_X \leq 1 \text{ GHz}$	5 GHz
$F_X \geq 1 \text{ GHz}$	$5 * F_X$ or 40 GHz, whichever is lower.
Note: F_X is Highest frequency generated or used in the device or on which the device operates or tunes.	

5.1.1.2 Test setup

Please refer to 4.2 section description of test setup of test setup 1. The photo of test setup please refer to ANNEX B.

5.1.1.3 Test procedure

1. The test employing the methods of measurement described in the publication referenced in Section 3(b) (ANSI C63.4);
2. All Radiated Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.
3. An initial pre-scan was performed in the chamber using the EMI Receiver in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by Bi-Log antenna with 2 orthogonal polarities.
4. The measurement frequency range is from 30 MHz to the 5th harmonic of the maximum frequency of the EUT internal source. The Turn Table is actuated to turn from 0° to 360° , and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.
5. Use the following spectrum analyzer settings:
 Span = wide enough to fully capture the emission being measured
 RBW = 1 MHz for $f \geq 1 \text{ GHz}$, 100 kHz for $f < 1 \text{ GHz}$
 VBW $\geq$ RBW
 Sweep = auto
 Detector function = peak for $f < 1 \text{ GHz}$, peak & RMS Average for $f \geq 1 \text{ GHz}$
 Trace = max hold

5.1.1.4 Test result and test equipment list

Please refer to ANNEX A.1.

Note:

1. Results (dB μ V/m) = Reading (dB μ V/m) + Factor (dB/m)

The reading level is calculated by software which is not shown in the sheet

2. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) – Amplifier Gain (dB)
3. Margin = Limit – Results

5.1.2 Conducted emission

5.1.2.1 Limit

Frequency range (MHz)	Class A		Class B	
	Quasi-peak (dB μ V)	Average (dB μ V)	Quasi-peak (dB μ V)	Average (dB μ V)
0.15 - 0.50	79	66	66 to 56	56 to 46
0.50 - 5	73	60	56	46
5 - 30	73	60	60	50

Note:

- 1) The lower limit shall apply at the band edges.
- 2) The limit decreases linearly with the logarithm of the frequency in the range 0.15 - 0.50 MHz.
- 3) The limit using ANSI C63.4.

5.1.2.2 Test setup

Please refer to 4.2 section description of test setup of test setup 2. The photo of test setup please refer to ANNEX B.

5.1.2.3 Test procedure

1. The test employing the methods of measurement described in the publication referenced in Section 3(b) (ANSI C63.4);
2. The EUT is connected to the power mains through a LISN which provides 50 Ω /50 μ H of coupling impedance for the measuring instrument. The test frequency range is from 150 kHz to 30 MHz. The maximum conducted interference is searched using Peak (PK), Quasi-peak (QP) and Average (AV) detectors; the emission levels that are more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed.
3. Use the following spectrum analyzer settings:
 RBW = 9 kHz
 VBW $\geq$ RBW
 Sweep = 10ms
 Detector function = Peak & Average
 Trace = max hold

5.1.2.4 Test result and test equipment list

Please refer to ANNEX A.2.

Note:

1. Results (dB μ V) = Reading (dB μ V) + Factor (dB)

The reading level is calculated by software which is not shown in the sheet

2. Factor = Insertion loss + Cable loss

3. Margin = Limit – Results

ANNEX A TEST RESULTS AND TEST EQUIPMENT LIST

A.1 Radiated emission

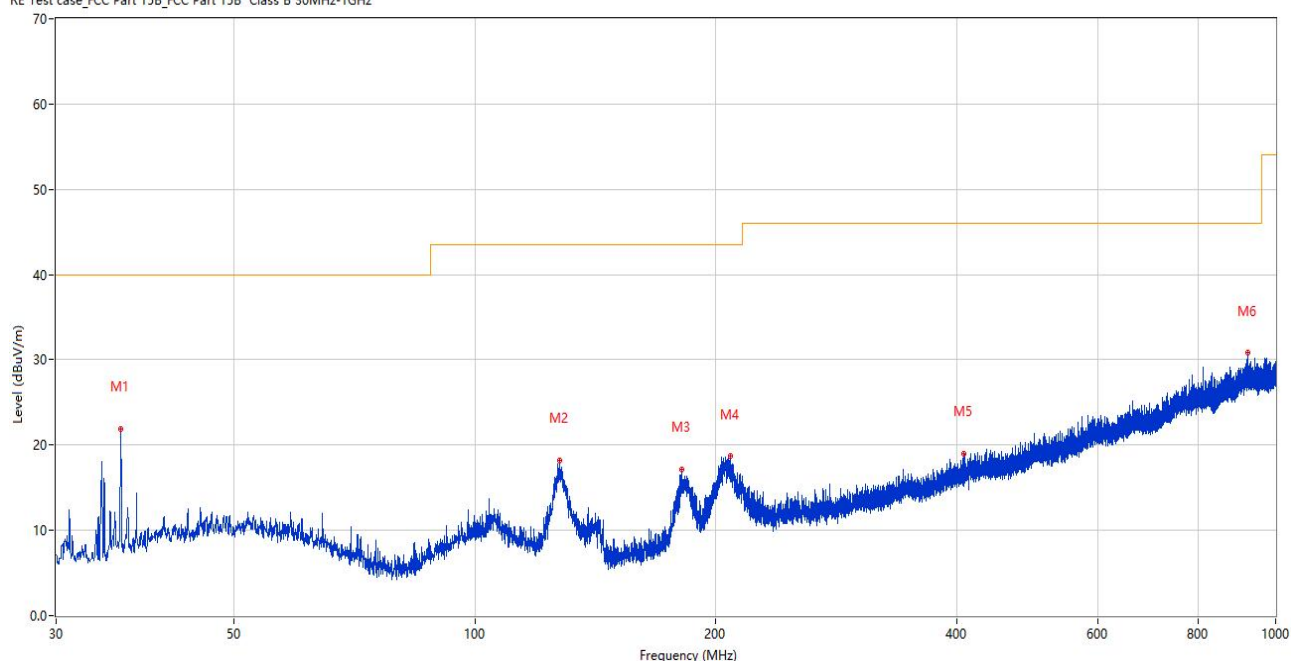
Note 1: Measurements shall be made with a quasi-peak measuring receiver in the frequency range 30 MHz to 1000 MHz. To reduce the testing time, a peak measuring receiver may be used instead of a quasi-peak measuring receiver. In case of dispute, measurement with a quasi-peak measuring receiver will take precedence.

Sample No.	SC-SH25A0011-S03	Temperature	22.3°C
Humidity	53%RH	Test Voltage	DC 3.8V
Test Engineer	She Xihao	Test Date	2025.10.16

Test Mode 1

A.1.1 Test Antenna Vertical, 30 MHz – 1 GHz

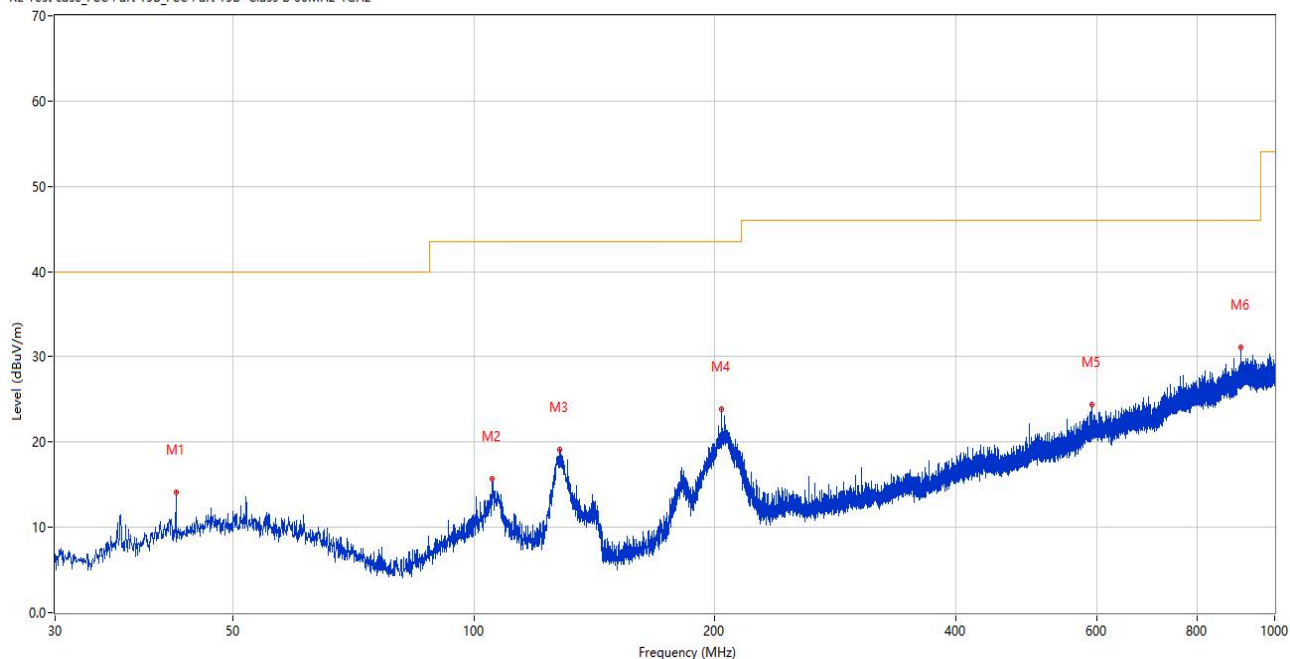
RE Test case_FCC Part 15B_FCC Part 15B Class B 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	36.160	21.93	-28.64	40.0	18.07	Peak	14.00	100	Vertical	Pass
2	127.534	18.15	-29.70	43.5	25.35	Peak	291.00	100	Vertical	Pass
3	181.078	17.12	-28.42	43.5	26.38	Peak	230.00	100	Vertical	Pass
4	208.238	18.65	-27.14	43.5	24.85	Peak	39.00	100	Vertical	Pass
5	407.766	18.94	-20.74	46.0	27.06	Peak	303.00	200	Vertical	Pass
6	924.292	30.79	-9.13	46.0	15.21	Peak	352.00	200	Vertical	Pass

A.1.2 Test Antenna Horizontal, 30 MHz – 1 GHz

RE Test case_FCC Part 15B_FCC Part 15B Class B 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	42.513	14.08	-26.50	40.0	25.92	Peak	1.00	200	Horizontal	Pass
2	105.418	15.72	-26.89	43.5	27.78	Peak	350.00	200	Horizontal	Pass
3	128.067	19.18	-29.73	43.5	24.32	Peak	330.00	200	Horizontal	Pass
4	203.678	23.86	-27.04	43.5	19.64	Peak	360.00	100	Horizontal	Pass
5	591.921	24.35	-15.71	46.0	21.65	Peak	320.00	100	Horizontal	Pass
6	908.432	31.08	-9.53	46.0	14.92	Peak	162.00	100	Horizontal	Pass

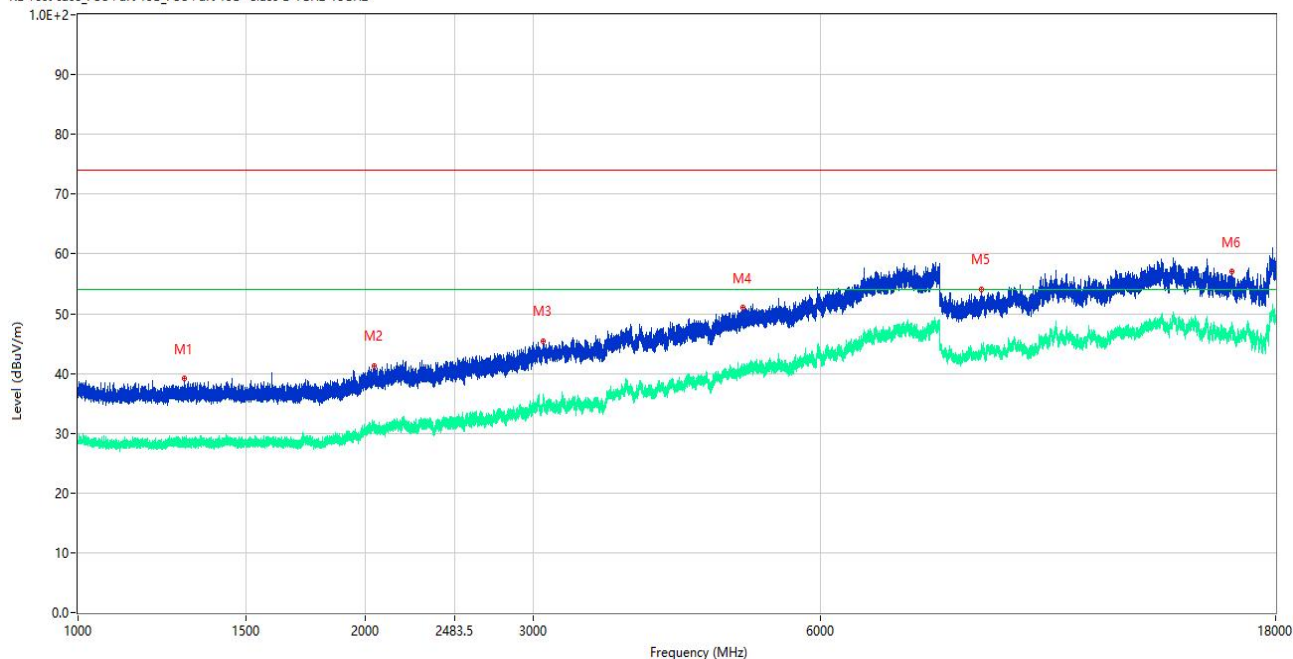
Equipment Information						
Equipment Name	Manufacturer	Model	Equipment No.	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9038A	BH-EMC-L127	2025.02.12	2026.02.11	☒
Test Antenna-Bi-Log	SCHWARZBECK	VULB 9163	BH-EMC-L132	2024.03.11	2027.03.10	☒
Anechoic Chamber	YiHeng	9m*6m*6m	BH-EMC-L001	2024.04.18	2027.04.17	☒
Description	Manufacturer	Name	Version	/		Use
Test Software	BALUN	BL410-E	V21.919	/		☒

Sample No.	SC-SH25A0011-S03	Temperature	22.3°C
Humidity	53%RH	Test Voltage	DC 3.8V
Test Engineer	She Xihao	Test Date	2025.10.16

Test Mode 1

A.1.3 Test Antenna Vertical, 1 GHz – 18 GHz

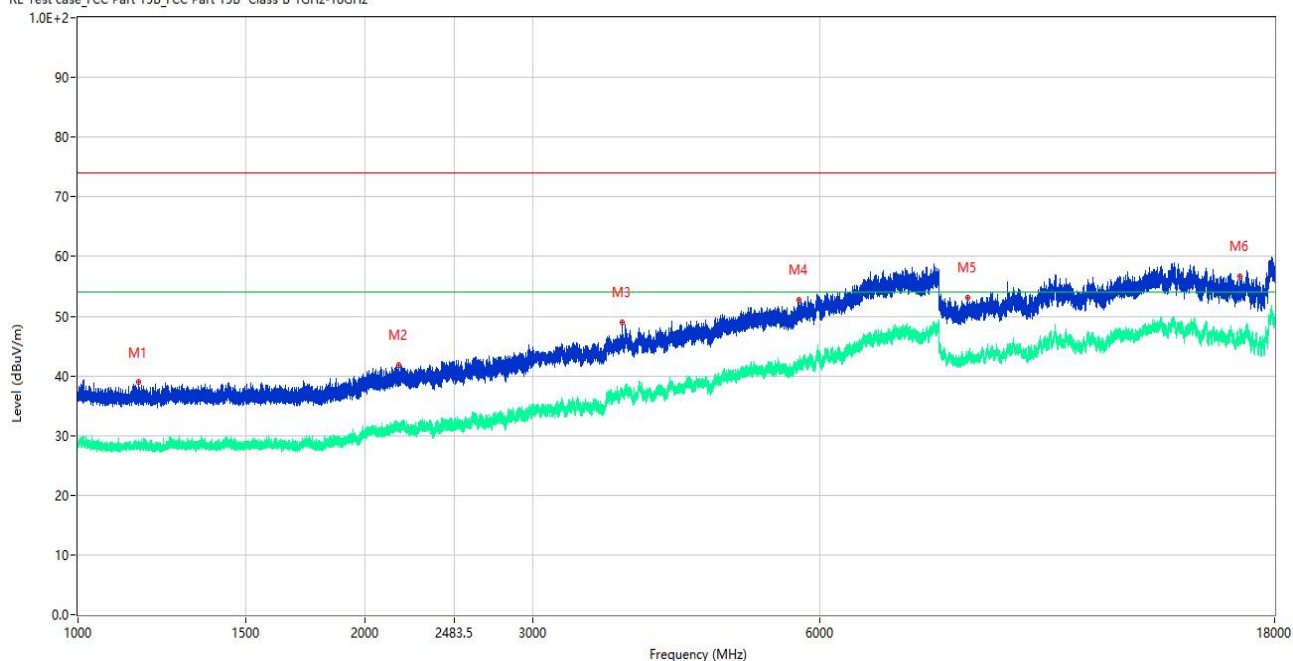
RE Test case_FCC Part 15B_FCC Part 15B Class B 1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1293.000	39.09	-16.02	74.0	34.91	Peak	1.00	100	Vertical	Pass
1**	1293.000	27.90	-16.02	54.0	26.10	AV	1.00	100	Vertical	Pass
2	2045.000	41.26	-13.44	74.0	32.74	Peak	43.00	100	Vertical	Pass
2**	2045.000	30.97	-13.44	54.0	23.03	AV	43.00	100	Vertical	Pass
3	3071.750	45.38	-6.97	74.0	28.62	Peak	343.00	100	Vertical	Pass
3**	3071.750	35.28	-6.97	54.0	18.72	AV	343.00	100	Vertical	Pass
4	4977.000	51.04	-1.03	74.0	22.96	Peak	138.00	100	Vertical	Pass
4**	4977.000	40.27	-1.03	54.0	13.73	AV	138.00	100	Vertical	Pass
5	8843.500	54.07	1.88	74.0	19.93	Peak	206.00	100	Vertical	Pass
5**	8843.500	43.67	1.88	54.0	10.33	AV	206.00	100	Vertical	Pass
6	16199.000	57.09	6.39	74.0	16.91	Peak	51.00	100	Vertical	Pass
6**	16199.000	47.90	6.39	54.0	6.10	AV	51.00	100	Vertical	Pass

A.1.4 Test Antenna Horizontal, 1 GHz – 18 GHz

RE Test case_FCC Part 15B_FCC Part 15B Class B 1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1158.700	38.90	-15.73	74.0	35.10	Peak	89.00	100	Horizontal	Pass
1**	1158.700	28.20	-15.73	54.0	25.80	AV	89.00	100	Horizontal	Pass
2	2167.800	41.85	-12.90	74.0	32.15	Peak	345.00	100	Horizontal	Pass
2**	2167.800	31.30	-12.90	54.0	22.70	AV	345.00	100	Horizontal	Pass
3	3722.250	48.96	-3.35	74.0	25.04	Peak	241.00	100	Horizontal	Pass
3**	3722.250	36.73	-3.35	54.0	17.27	AV	241.00	100	Horizontal	Pass
4	5702.000	52.81	0.08	74.0	21.19	Peak	167.00	100	Horizontal	Pass
4**	5702.000	41.97	0.08	54.0	12.03	AV	167.00	100	Horizontal	Pass
5	8580.500	53.09	1.60	74.0	20.91	Peak	360.00	100	Horizontal	Pass
5**	8580.500	43.41	1.60	54.0	10.59	AV	360.00	100	Horizontal	Pass
6	16556.500	56.62	5.65	74.0	17.38	Peak	298.00	100	Horizontal	Pass
6**	16556.500	45.90	5.65	54.0	8.10	AV	298.00	100	Horizontal	Pass

Equipment Information						
Equipment Name	Manufacturer	Model	Equipment No.	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9038A	BH-EMC-L127	2025.02.12	2026.02.11	☒
Test Antenna-Horn	SCHWARZBECK	BBHA 9120D	BH-EMC-L111	2024.03.11	2027.03.10	☒
Anechoic Chamber	YiHeng	9m*6m*6m	BH-EMC-L001	2024.04.18	2027.04.17	☒
Description	Manufacturer	Name	Version	/		Use
Test Software	BALUN	BL410-E	V21.919	/		☒

A.2 Conducted emission

Note: Not applicable

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SH25A1125-AE.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SH25A1125-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SH25A1125-AI.PDF”.

Statement

1. The Testing Center guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
2. For the report with Accreditation Symbol, the items marked with "☆" are not within the accredited scope.
3. This report is invalid if it is altered, without the signature of the testing and approval personnel, or without the test report stamp.
4. The test data and results are only valid for the tested samples provided by the customer.
5. This report shall not be partially reproduced without the written permission of the Testing Center.
6. Any objection shall be raised to the Testing Center within 30 days after receiving the report.

--END OF REPORT--