

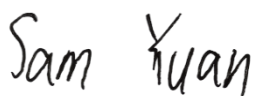
# TEST REPORT

**Applicant:** Cavli Inc.  
**Address:** 99 South Almaden Blvd., Suite 600, San Jose, CA  
95113 United States  
**Equipment Type:** LTE Modem/Module  
**Model Name:** C10GS (refer to section 2.3)  
**Brand Name:** Cavli Wireless  
**FCC ID:** 2BB64C10GS  
47 CFR Part 15 Subpart B  
**Test Standard:** ICES-003 (Issue 7, October 15, 2020)  
ANSI C63.4-2014  
**Sample Arrival Date:** Jul. 07, 2023  
**Test Date:** Jul. 15, 2023 - Aug. 10, 2023  
**Date of Issue:** Aug. 25, 2023

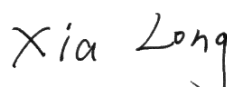
**ISSUED BY:**

Shenzhen BALUN Technology Co., Ltd.

**Tested by:** Sam Yuan



**Checked by:** Xia Long



**Approved by:** Liao Jianming  
(Technical Director)



### Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Aug. 25, 2023</u>	<u>Initial Issue</u>

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# 1 GENERAL INFORMATION

## 1.1 Test Laboratory

Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100

## 1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	<input checked="" type="checkbox"/> Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	<input type="checkbox"/> 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196. The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A.

## 2 PRODUCT INFORMATION

### 2.1 Applicant Information

Applicant	Cavli Inc.
Address	99 South Almaden Blvd., Suite 600, San Jose, CA 95113 United States

### 2.2 Manufacturer Information

Manufacturer	Cavli Inc.
Address	99 South Almaden Blvd., Suite 600, San Jose, CA 95113 United States

### 2.3 General Description for Equipment under Test (EUT)

EUT Name	LTE Modem/Module
Model Name Under Test	C10GS
Series Model Name	C10GS-S001H, C10GS-S001N, C10GS-GNA1H, C10GS-GNA1N, C10GS-S004H, C10GS-S004N, C10GS-GNA4H, C10GS-GNA4N
Description of Model name differentiation	All these have the same PCB are same product with optional features omitted (this information provided by the customer)
Hardware Version	2.8
Software Version	1.3.0
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

## 2.4 Ancillary Equipment

Note: Not applicable.

## 2.5 Technical Information

Network and Wireless connectivity	4G Network LTE FDD Band 2/4/5/18/19/25/26/66 LTE TDD Band 40
Classification of equipment	Class B

The requirement for the following technical information of the EUT was tested in this report:

The highest internal frequency of EUT	2.4 GHz
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### 3 SUMMARY OF TEST RESULTS

#### 3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 15 Subpart B	Unintentional Radiators
2	ICES-003 (Issue 7, October 15, 2020)	Information Technology Equipment (Including Digital Apparatus)
3	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	ISED Rule	Test Verdict	Remark
1	Radiated Emission	15.109	ICES-003, 3.2.2	Pass	--
2	Conducted Emission, AC Ports	15.107	ICES-003, 3.2.1	Pass	--

#### 3.3 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 (9 kHz-30 MHz)	3.2 dB
Radiated emissions (30 MHz-1 GHz)-10m	4.8 dB
Radiated emissions (30 MHz-1 GHz)-3m	4.8 dB
Radiated emissions (1 GHz-18 GHz)-3m	4.9 dB

## 4 GENERAL TEST CONFIGURATIONS

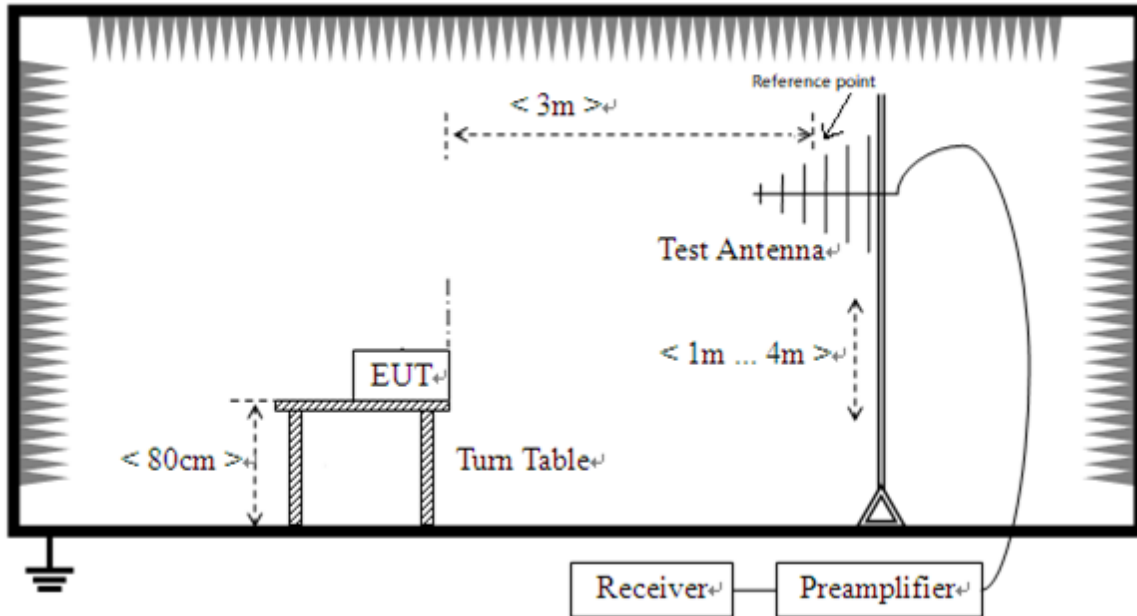
### 4.1 Test Configurations

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

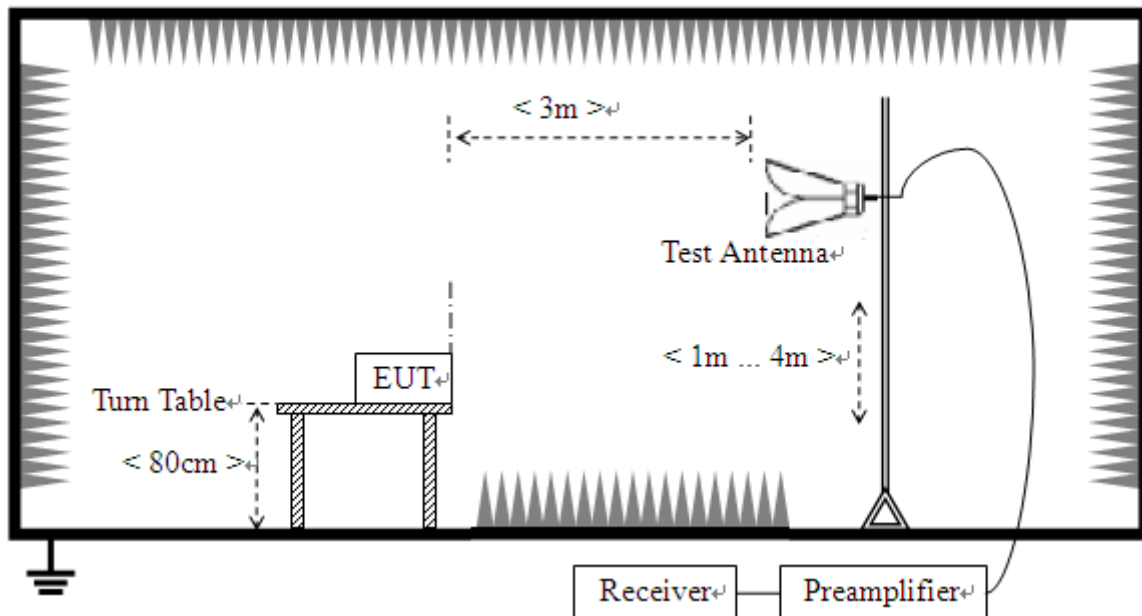
Test Mode Configuration	Description
Mode 1	<u>Stand By Mode</u> EUT + PCB Board + Adapter + Type-c Cable + Antenna

## 4.2 Test Setups

### Test Setup 1



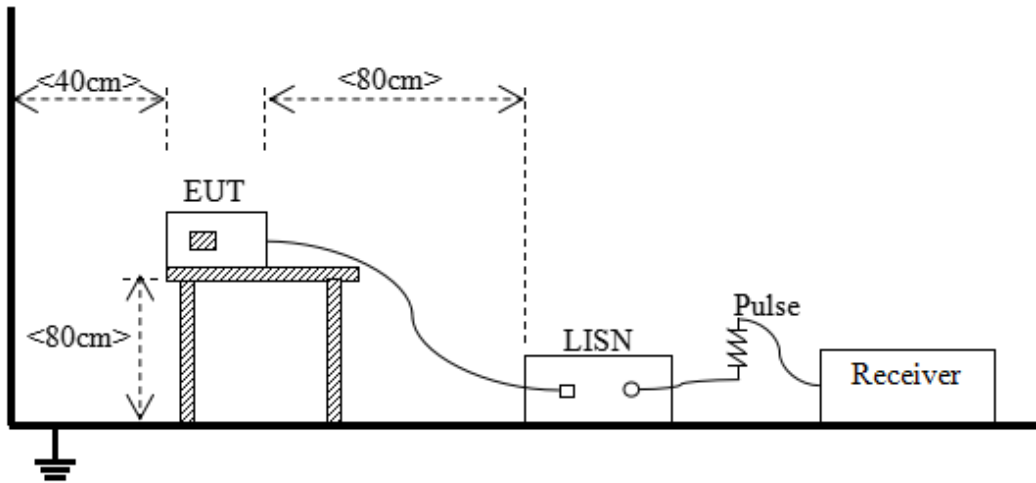
Radiated Emission (30 MHz-1 GHz)



Radiated Emission (above 1 GHz)



Test Setup 2



Conducted Emissions, AC Ports

## 5 TEST ITEMS

### 5.1 Emission Tests

#### 5.1.1 Radiated Emission

##### 5.1.1.1 Limit

FCC:

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\*log [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.
- 4) For 30 MHz to 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 ( $F_M$ )
$F_X \leq 108$ MHz	1 GHz
$108$ MHz $\leq F_X \leq 500$ MHz	2 GHz

Highest internal frequency ( $F_X$ )	Highest measurement frequency ( $F_M$ )
$500 \text{ MHz} \leq F_X \leq 1 \text{ GHz}$	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.

IC:

Frequency range (MHz)	Class A (3 m) Quasi-peak (dB $\mu$ V/m)	Class A (10 m) Quasi-peak (dB $\mu$ V/m)	Class B (3 m) Quasi-peak (dB $\mu$ V/m)	Class B (10m) Quasi-peak (dB $\mu$ V/m)
30 - 88	50.0	40.0	40.0	30.0
88 - 216	54.0	43.5	43.5	33.1
216 - 230	56.9	46.4	46.0	35.6
230 - 960	57.0	47.0	47.0	37.0
960 - 1000	60.0	49.5	54.0	43.5

Note: The more stringent limit applies at transition frequencies.

Frequency range (GHz)	Class A (3 m) Average (dB $\mu$ V/m)	Class A (3 m) Peak (dB $\mu$ V/m)	Class B (3 m) Average (dB $\mu$ V/m)	Class B (3 m) Peak (dB $\mu$ V/m)
1 - $F_M$	60	80	54	74

Note:

- The highest measurement frequency,  $F_M$ , in GHz, shall be determined as next Table.
- The measurement bandwidth shall be 1 MHz or greater.
- These limit levels apply for a measurement distance of 3 m. If using a different measurement distance, the measured levels shall be extrapolated to the 3 m limit distance using a factor of 20 dB per decade of distance. The measurement distance shall place the measurement antenna in the far field of the ITE or digital apparatus under test.
- The test site shall have been validated at the distance used for radiated emission measurements on the ITE or digital apparatus under test

Highest internal frequency ( $F_X$ )	Highest measurement frequency ( $F_M$ )
$F_X \leq 108 \text{ MHz}$	1GHz
$108 \text{ MHz} \leq F_X \leq 500 \text{ MHz}$	2GHz
$500 \text{ MHz} \leq F_X \leq 1 \text{ GHz}$	5GHz
$F_X \geq 1 \text{ GHz}$	$5 * F_X$ up to a maximum of 40 GHz

Note:  $F_X$  is the highest fundamental frequency generated and/or used in the ITE or digital apparatus

Highest internal frequency (F <sub>x</sub> )	Highest measurement frequency (F <sub>M</sub> )
under test.	

### 5.1.1.2 Test Setup

Refer to 4.5 section (test setup 1 to test setup 2) for radiated emission test, the photo of test setup please refer to ANNEX B.

### 5.1.1.3 Test Procedure

The test employing the methods of measurement described in the publication referenced in Section 3(b) (ANSI C63.4);

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.

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.

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.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz for  $f \geq 1$  GHz, 100 kHz for  $f < 1$  GHz

VBW  $\geq$  RBW

Sweep = auto

Detector function = peak for  $f < 1$  GHz, peak & RMS Average for  $f \geq 1$  GHz

Trace = max hold

### 5.1.1.4 Test Result and Test Equipment List

Please refer to ANNEX A.1.

NOTE:

1. Results (dB $\mu$ V/m) = Reading (dB $\mu$ 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, AC Ports

### 5.1.2.1 Test Limit

Frequency range (MHz)	Class A	
	Quasi-peak (dB $\mu$ V)	Average (dB $\mu$ V)
0.15 - 0.50	79	66
0.50 - 30	73	60

Frequency range (MHz)	Class B	
	Quasi-peak (dB $\mu$ V)	Average (dB $\mu$ V)
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	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

Refer to 4.5 section test (test setup 3) for conducted emission, the photo of test setup please refer to ANNEX B.

### 5.1.2.3 Test Procedure

The test employing the methods of measurement described in the publication referenced in Section 3(b) (ANSI C63.4);

The EUT is connected to the power mains through a LISN which provides 50  $\Omega$ /50  $\mu$ 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.

Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz) for which the device is capable of operation. A device rated for 50/60 Hz operation need not be tested at both frequencies provided the radiated and line conducted emissions are the same at both frequencies.

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 $\mu$ V) = Reading (dB $\mu$ 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

### A.1 Radiated Emission

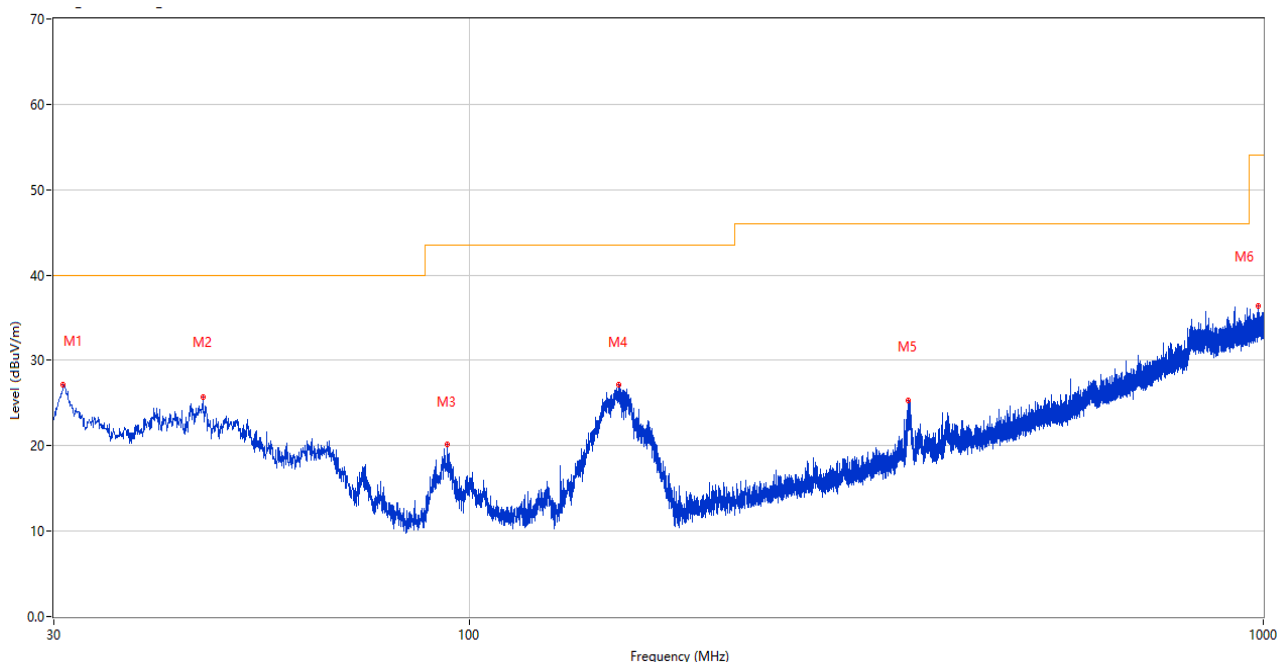
Note 1: For the test data above 1 GHz, according the ANSI C63.4-2014, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note 2: The Radiated Emission is required to be investigated to the upper frequency of 5th harmonic of the highest internal frequency of EUT or 40 GHz, whichever is lower.

Sample No.	S02	Temperature	22.6°C
Humidity	51%RH	Pressure	101kPa
Test Engineer	He Shichang	Test date	Jun. 27, 2023

1) Test Antenna Vertical, 30 MHz – 1 GHz (FCC)

Test Site:	3m-2	Work Mode:	Stand By
Remark1:	120V + Laboratory Adapter + USB Cable (A04) + Antenna (A01)	Remark2:	N.A

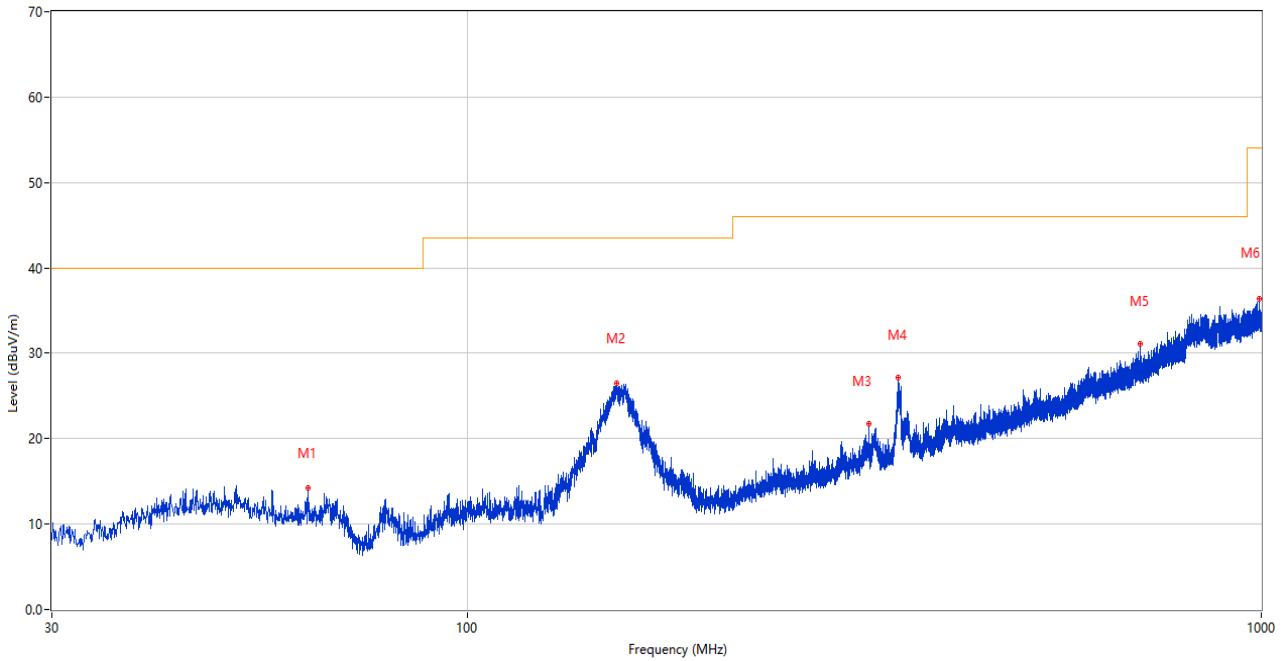


No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	30.825	27.10	-28.13	40.0	12.90	Peak	105.00	100	Vertical	Pass
2	46.199	25.75	-24.44	40.0	14.25	Peak	288.00	100	Vertical	Pass
3	93.923	20.21	-26.21	43.5	23.29	Peak	66.00	100	Vertical	Pass
4	154.208	27.14	-28.03	43.5	16.36	Peak	105.00	100	Vertical	Pass
5	357.230	25.29	-18.69	46.0	20.71	Peak	55.00	100	Vertical	Pass
6	984.820	36.32	-2.92	54.0	17.68	Peak	280.00	100	Vertical	Pass



2) Test Antenna Horizontal, 30 MHz – 1 GHz (FCC)

Test Site:	3m-2	Work Mode:	Stand By
Remark1:	120V + Laboratory Adapter + USB Cable (A04) + Antenna (A01)	Remark2:	N.A

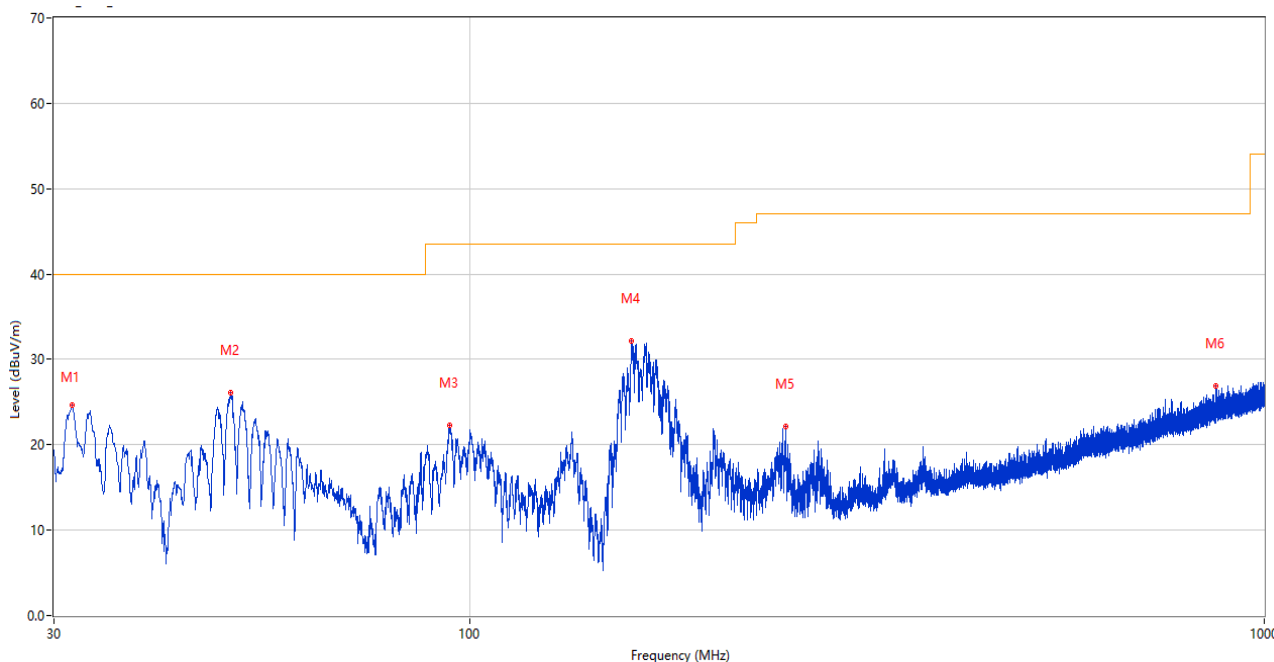


No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	63.029	14.18	-25.92	40.0	25.82	Peak	303.00	100	Horizontal	Pass
2	154.111	26.46	-28.03	43.5	17.04	Peak	146.00	200	Horizontal	Pass
3	320.418	21.76	-20.16	46.0	24.24	Peak	177.00	100	Horizontal	Pass
4	349.276	27.12	-18.46	46.0	18.88	Peak	235.00	100	Horizontal	Pass
5	704.053	31.07	-9.27	46.0	14.93	Peak	5.00	100	Horizontal	Pass
6	993.161	36.33	-2.59	54.0	17.67	Peak	96.00	100	Horizontal	Pass

Sample No.	S02	Temperature	22.9°C
Humidity	53%RH	Pressure	101kPa
Test Engineer	He Shichang	Test date	Aug. 10, 2023

3) Test Antenna Vertical, 30 MHz – 1 GHz (IC)

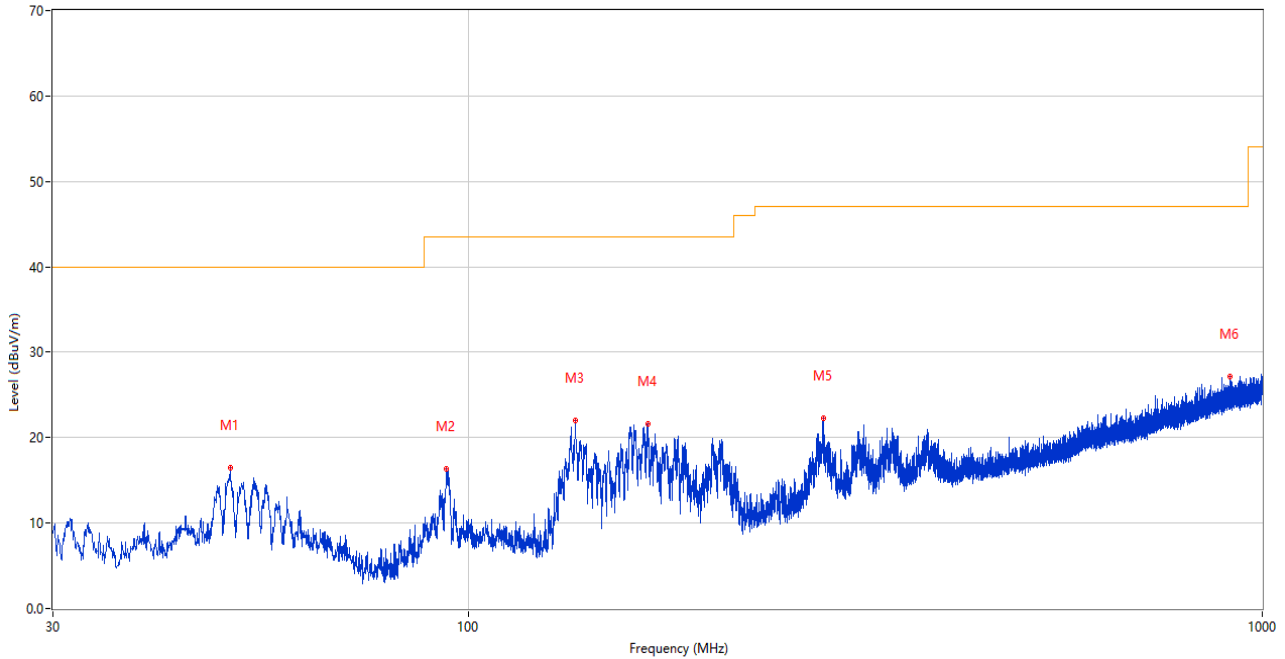
Test Site: 3m-2 Work Mode: Stand By  
 Remark1: 120V + Laboratory Adapter Remark2: N.A  
 + USB Cable (A04) +  
 Antenna (A01)



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	31.601	24.62	-29.05	40.0	15.38	Peak	97.00	100	Vertical	Pass
2	50.031	26.16	-25.59	40.0	13.84	Peak	227.00	100	Vertical	Pass
3	94.359	22.31	-27.65	43.5	21.19	Peak	339.00	100	Vertical	Pass
4	159.883	32.15	-29.58	43.5	11.35	Peak	39.00	100	Vertical	Pass
5	249.705	22.15	-24.92	47.0	24.85	Peak	69.00	100	Vertical	Pass
6	868.711	26.86	-10.53	47.0	20.14	Peak	32.00	100	Vertical	Pass

4) Test Antenna Horizontal, 30 MHz – 1 GHz (IC)

Test Site:	3m-2	Work Mode:	Stand By
Remark1:	120V + Laboratory Adapter + USB Cable (A04) + Antenna (A01)	Remark2:	N.A



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	50.176	16.45	-25.59	40.0	23.55	Peak	100.00	100	Horizontal	Pass
2	93.971	16.37	-27.69	43.5	27.13	Peak	349.00	200	Horizontal	Pass
3	136.361	21.99	-30.11	43.5	21.51	Peak	0.00	200	Horizontal	Pass
4	168.322	21.67	-29.25	43.5	21.83	Peak	279.00	200	Horizontal	Pass
5	279.823	22.25	-24.15	47.0	24.75	Peak	346.00	100	Horizontal	Pass
6	910.323	27.20	-9.74	47.0	19.80	Peak	263.00	100	Horizontal	Pass

Equipment Information						
Equipment Name	Supplier	Model	Serial No.	Cal. Date	Cal. Due	Use
Frequency Below 1 GHz						
EMI Receiver	Keysight	N9038A	MY55330120	2022.09.09	2023.09.08	<input checked="" type="checkbox"/>
Amplifier (30-1GHz)	COM-MV	ZT30-1000M	B2017119081	2022.12.07	2023.12.06	<input checked="" type="checkbox"/>
Test Antenna-Bi-Log	SCHWARZB ECK	VULB 9168	9168-00867	2022.04.12	2025.04.11	<input checked="" type="checkbox"/>
Anechoic Chamber (#2)	YiHeng	9m*6m*6m	142	2021.08.19	2024.08.18	<input checked="" type="checkbox"/>
Description	Supplier	Name	Version	/		Use
Test Software	BALUN	BL410-E	V22.930	/		<input checked="" type="checkbox"/>

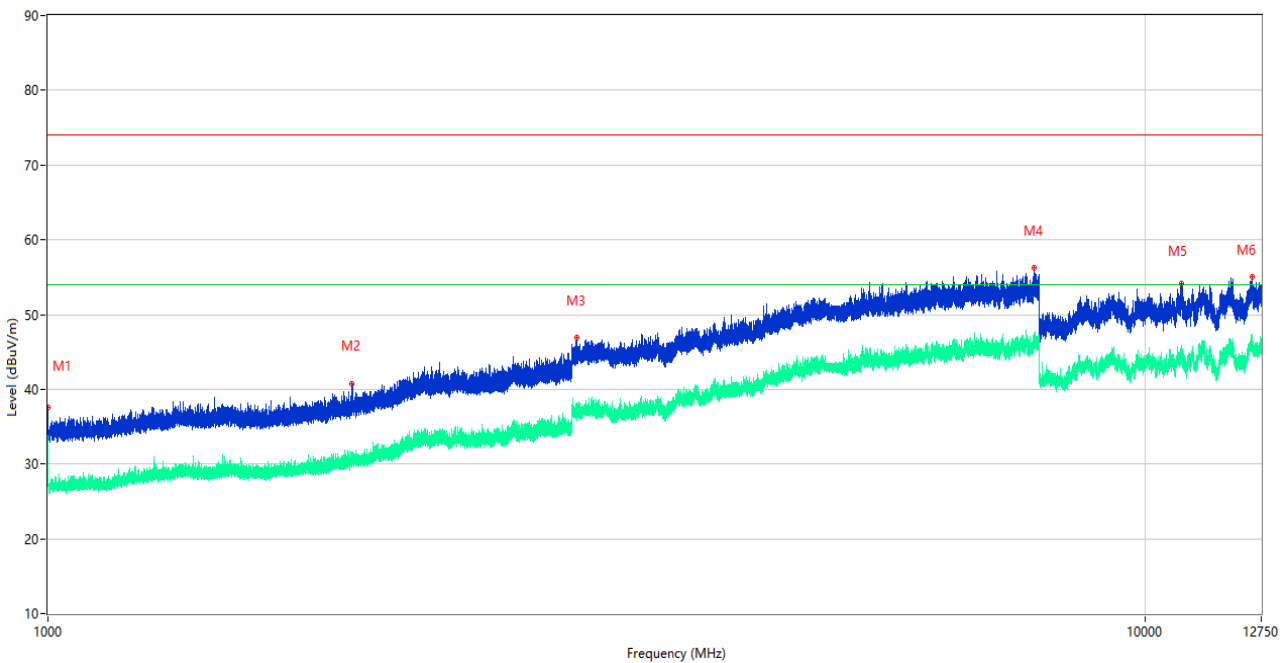
The equipment listed in the table below are supported unit provided by the laboratory for achieving EUT functions or monitor EUT functions during the testing process. The supported units are validated by the laboratory before testing.

Supported Unit	Supplier	Model	Serial No.	Description
Adapter	HUAWEI	HW-100400C01	/	/
PCB Board	CAVLI	/	/	/
USB data cable	/	/	/	1m
Antenna	/	/	/	/

Sample No.	S02	Temperature	22.6°C
Humidity	51%RH	Pressure	101kPa
Test Engineer	He Shichang	Test date	Jul. 27, 2023

5) Test Antenna Vertical, 1 GHz – 12.75 GHz (FCC)

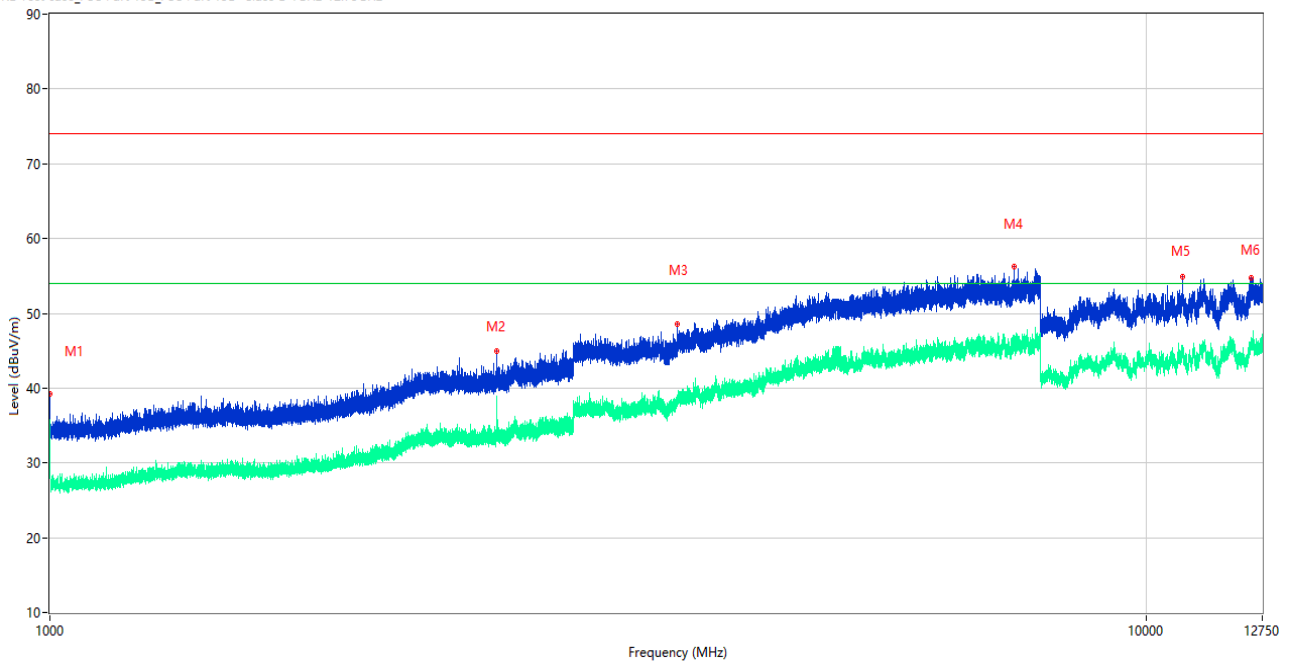
Test Site: 3m-2 Work Mode: Stand By  
 Remark1: 240V+Laboratory Adapter+ Remark2: N.A  
 USB Cable (A04) +  
 Antenna (A01)



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1000.300	37.58	-17.30	74.0	36.42	Peak	165.00	100	Vertical	Pass
1**	1000.300	33.75	-17.30	54.0	20.25	AV	165.00	100	Vertical	Pass
2	1891.400	40.78	-15.33	74.0	33.22	Peak	202.00	100	Vertical	Pass
2**	1891.400	30.91	-15.33	54.0	23.09	AV	202.00	100	Vertical	Pass
3	3035.750	46.84	-5.72	74.0	27.16	Peak	18.00	100	Vertical	Pass
3**	3035.750	36.77	-5.72	54.0	17.23	AV	18.00	100	Vertical	Pass
4	7925.000	56.31	3.01	74.0	17.69	Peak	223.00	100	Vertical	Pass
4**	7925.000	47.46	3.01	54.0	6.54	AV	223.00	100	Vertical	Pass
5	10774.500	54.18	1.33	74.0	19.82	Peak	202.00	100	Vertical	Pass
5**	10774.500	44.31	1.33	54.0	9.69	AV	202.00	100	Vertical	Pass
6	12516.500	55.11	2.85	74.0	18.89	Peak	134.00	100	Vertical	Pass
6**	12516.500	45.56	2.85	54.0	8.44	AV	134.00	100	Vertical	Pass

6) Test Antenna Horizontal, 1 GHz – 12.75 GHz (FCC)

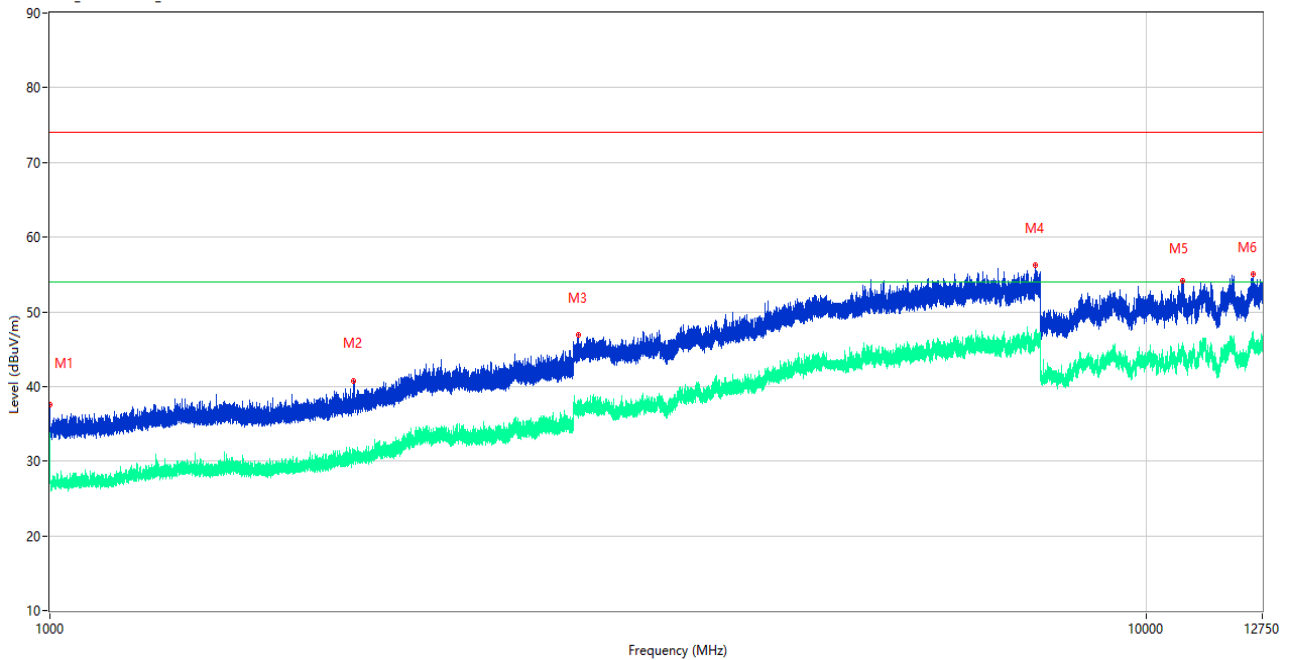
Test Site: 3m-2 Work Mode: Stand By  
 Remark1: 240V + Laboratory Adapter Remark2: N.A  
 + USB Cable (A04) +  
 Antenna (A01)



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1000.300	39.21	-17.30	74.0	34.79	Peak	67.00	100	Horizontal	Pass
1**	1000.300	35.32	-17.30	54.0	18.68	AV	67.00	100	Horizontal	Pass
2	2557.800	44.90	-11.18	74.0	29.10	Peak	221.00	100	Horizontal	Pass
2**	2557.800	36.44	-11.18	54.0	17.56	AV	221.00	100	Horizontal	Pass
3	3737.000	48.50	-3.95	74.0	25.50	Peak	204.00	100	Horizontal	Pass
3**	3737.000	39.11	-3.95	54.0	14.89	AV	204.00	100	Horizontal	Pass
4	7566.250	56.32	2.68	74.0	17.68	Peak	35.00	100	Horizontal	Pass
4**	7566.250	45.40	2.68	54.0	8.60	AV	35.00	100	Horizontal	Pass
5	10793.500	54.82	1.99	74.0	19.18	Peak	0.00	100	Horizontal	Pass
5**	10793.500	44.09	1.99	54.0	9.91	AV	0.00	100	Horizontal	Pass
6	12464.500	54.78	2.84	74.0	19.22	Peak	34.00	100	Horizontal	Pass
6**	12464.500	45.89	2.84	54.0	8.11	AV	34.00	100	Horizontal	Pass

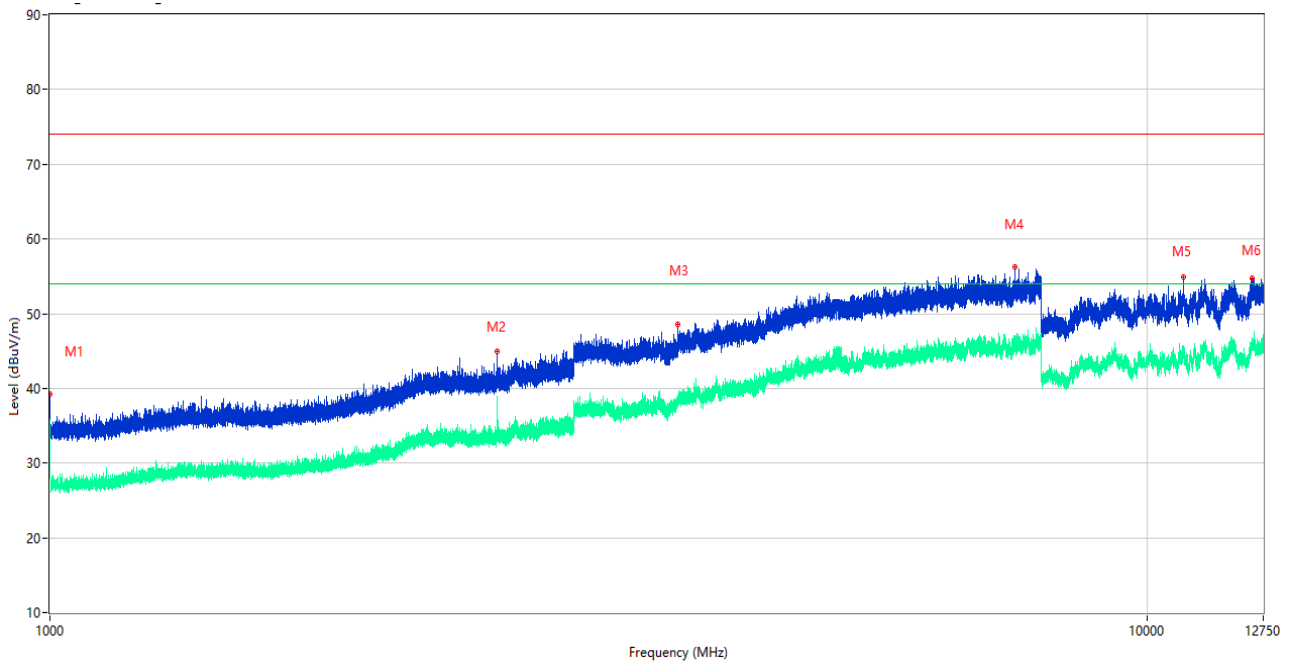
Sample No.	S02	Temperature	22.9°C
Humidity	53%RH	Pressure	101kPa
Test Engineer	He Shichang	Test date	Aug. 10, 2023

7) Test Antenna Vertical, 1 GHz – 12.75 GHz (IC)



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1000.300	37.58	-17.30	74.0	36.42	Peak	165.00	100	Vertical	Pass
1**	1000.300	33.75	-17.30	54.0	20.25	AV	165.00	100	Vertical	Pass
2	1891.400	40.78	-15.33	74.0	33.22	Peak	202.00	100	Vertical	Pass
2**	1891.400	30.91	-15.33	54.0	23.09	AV	202.00	100	Vertical	Pass
3	3035.750	46.84	-5.72	74.0	27.16	Peak	18.00	100	Vertical	Pass
3**	3035.750	36.77	-5.72	54.0	17.23	AV	18.00	100	Vertical	Pass
4	7925.000	56.31	3.01	74.0	17.69	Peak	223.00	100	Vertical	Pass
4**	7925.000	47.46	3.01	54.0	6.54	AV	223.00	100	Vertical	Pass
5	10774.500	54.18	1.33	74.0	19.82	Peak	202.00	100	Vertical	Pass
5**	10774.500	44.31	1.33	54.0	9.69	AV	202.00	100	Vertical	Pass
6	12516.500	55.11	2.85	74.0	18.89	Peak	134.00	100	Vertical	Pass
6**	12516.500	45.56	2.85	54.0	8.44	AV	134.00	100	Vertical	Pass

8) Test Antenna Horizontal, 1 GHz – 12.75 GHz (IC)



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1000.300	39.21	-17.30	74.0	34.79	Peak	67.00	100	Horizontal	Pass
1**	1000.300	35.32	-17.30	54.0	18.68	AV	67.00	100	Horizontal	Pass
2	2557.800	44.90	-11.18	74.0	29.10	Peak	221.00	100	Horizontal	Pass
2**	2557.800	36.44	-11.18	54.0	17.56	AV	221.00	100	Horizontal	Pass
3	3737.000	48.50	-3.95	74.0	25.50	Peak	204.00	100	Horizontal	Pass
3**	3737.000	39.11	-3.95	54.0	14.89	AV	204.00	100	Horizontal	Pass
4	7566.250	56.32	2.68	74.0	17.68	Peak	35.00	100	Horizontal	Pass
4**	7566.250	45.40	2.68	54.0	8.60	AV	35.00	100	Horizontal	Pass
5	10793.500	54.82	1.99	74.0	19.18	Peak	0.00	100	Horizontal	Pass
5**	10793.500	44.09	1.99	54.0	9.91	AV	0.00	100	Horizontal	Pass
6	12464.500	54.78	2.84	74.0	19.22	Peak	34.00	100	Horizontal	Pass
6**	12464.500	45.89	2.84	54.0	8.11	AV	34.00	100	Horizontal	Pass



Equipment Information						
Equipment Name	Supplier	Model	Serial No.	Cal. Date	Cal. Due	Use
Frequency Above 1 GHz						
EMI Receiver	Keysight	N9038A	MY55330120	2022.09.09	2023.09.08	<input checked="" type="checkbox"/>
Amplifier (1-12GHz)	Advanced Microwave	WLA652A	1740103	2022.12.07	2023.12.06	<input checked="" type="checkbox"/>
Amplifier (0.8-21GHz)	Mini-Circuits	ZVA-213-S+	225321316	2022.12.07	2023.12.06	<input checked="" type="checkbox"/>
Test Antenna-Horn	SCHWARZB ECK	BBHA 9120D	01917	2022.06.09	2025.06.08	<input checked="" type="checkbox"/>
Anechoic Chamber (#2)	YiHeng	9m*6m*6m	142	2021.08.19	2024.08.18	<input checked="" type="checkbox"/>
Description	Supplier	Name	Version	/		Use
Test Software	BALUN	BL410-E	V22.930	/		<input checked="" type="checkbox"/>

The equipment listed in the table below are supported unit provided by the laboratory for achieving EUT functions or monitor EUT functions during the testing process. The supported units are validated by the laboratory before testing.

Supported Unit	Supplier	Model	Serial No.	Description
Adapter	HUAWEI	HW-100400C01	/	/
PCB Board	CAVLI	/	/	/
USB data cable	/	/	/	1m
Antenna	/	/	/	/

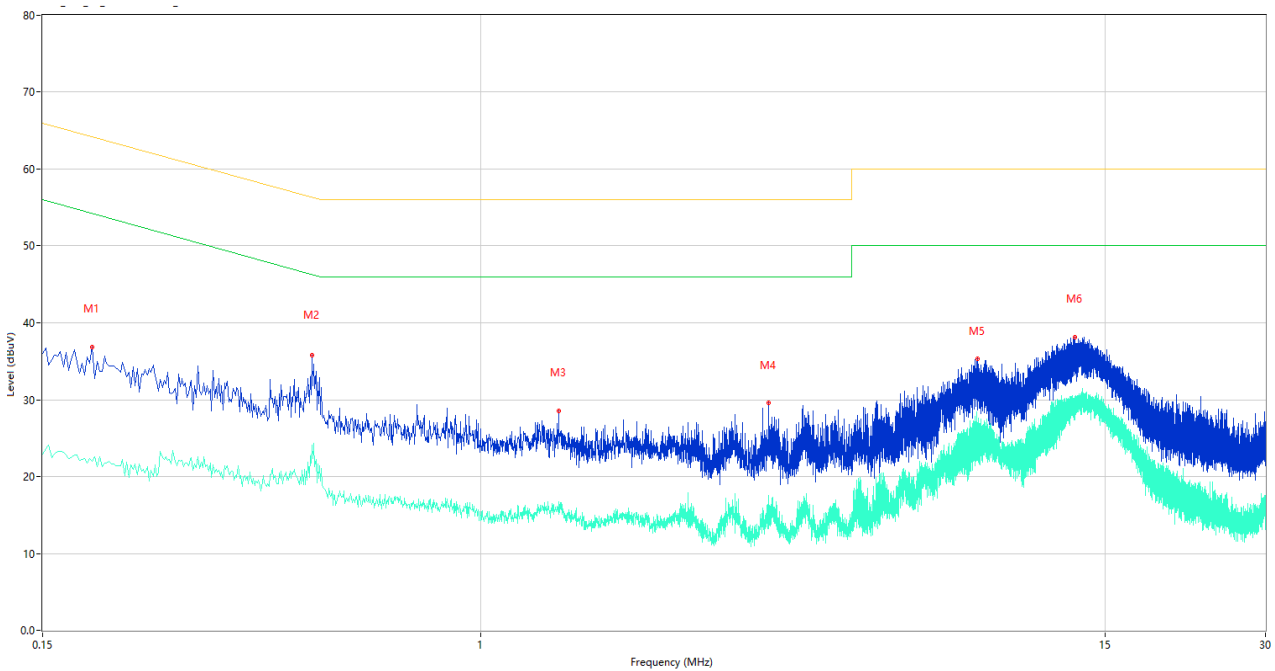
## A.2 Conducted Emission, AC Ports

Sample No.	S02	Temperature	24.1°C
Humidity	52%RH	Pressure	101kPa
Test Engineer	Yang Yang	Test date	Jul. 14, 2023

### 1) L Phase

Test Site: Conduction Shielding Chamber      Work Mode: Stand By

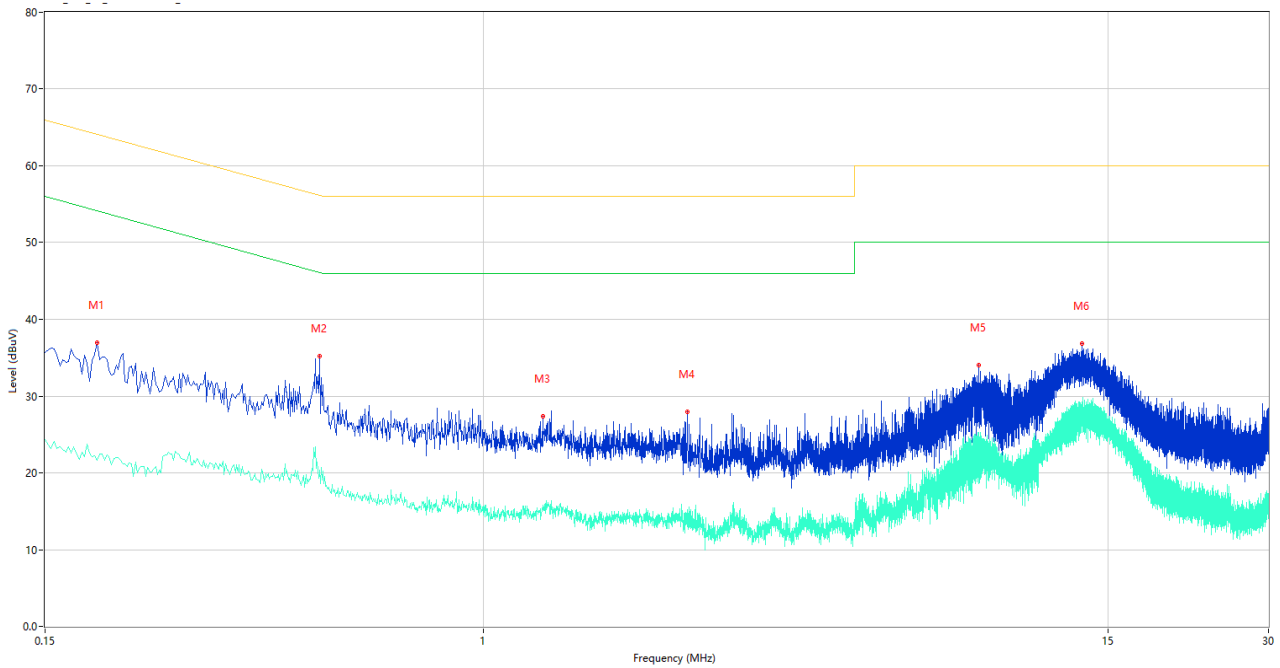
Remark1: 240V + Laboratory Adapter + USB Cable (A04) + Antenna (A01)      Remark2: N.A



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.186	36.85	9.80	64.21	27.36	Peak	L	Pass
1**	0.186	21.94	9.80	54.21	32.27	AV	L	Pass
2	0.482	35.76	10.15	56.30	20.54	Peak	L	Pass
2**	0.482	24.07	10.15	46.30	22.23	AV	L	Pass
3	1.402	28.53	10.54	56.00	27.47	Peak	L	Pass
3**	1.402	16.33	10.54	46.00	29.67	AV	L	Pass
4	3.484	29.54	10.31	56.00	26.46	Peak	L	Pass
4**	3.484	15.46	10.31	46.00	30.54	AV	L	Pass
5	8.620	35.36	10.27	60.00	24.64	Peak	L	Pass
5**	8.620	26.80	10.27	50.00	23.20	AV	L	Pass
6	13.158	38.17	10.38	60.00	21.83	Peak	L	Pass
6**	13.158	27.39	10.38	50.00	22.61	AV	L	Pass

2) N Phase

Test Site: Conduction Shielding Chamber Work Mode: Stand By  
 Remark1: 240V + Laboratory Adapter + USB Cable (A04) + Antenna (A01) Remark2: N.A



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.188	36.93	9.79	64.12	27.19	Peak	N	Pass
1**	0.188	21.61	9.79	54.12	32.51	AV	N	Pass
2	0.492	35.17	10.10	56.13	20.96	Peak	N	Pass
2**	0.492	20.34	10.10	46.13	25.79	AV	N	Pass
3	1.294	27.33	10.17	56.00	28.67	Peak	N	Pass
3**	1.294	15.19	10.17	46.00	30.81	AV	N	Pass
4	2.424	27.90	10.16	56.00	28.10	Peak	N	Pass
4**	2.424	12.95	10.16	46.00	33.05	AV	N	Pass
5	8.552	34.00	10.41	60.00	26.00	Peak	N	Pass
5**	8.552	24.58	10.41	50.00	25.42	AV	N	Pass
6	13.390	36.81	10.54	60.00	23.19	Peak	N	Pass
6**	13.390	29.18	10.54	50.00	20.82	AV	N	Pass

Equipment Information						
Equipment Name	Supplier	Model	Serial No.	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9010B	MY57110309	2022.09.09	2023.09.08	<input checked="" type="checkbox"/>
LISN	SCHWARZECK	NSLK 8127	8127-687	2023.05.16	2024.05.15	<input checked="" type="checkbox"/>
ISN	TESEQ	ISN T800	34449	2022.11.11	2023.11.10	<input type="checkbox"/>
ISN	TESEQ	ISN T8-Cat6	53561	2023.04.23	2024.04.22	<input type="checkbox"/>
Shielded Room	YiHeng Electronic Co., Ltd	3.5m*3.1m*2.8m	112	2022.02.19	2025.02.18	<input checked="" type="checkbox"/>
Description	Manufacturer	Name	Version	/		Use
Test Software	BALUN	BL410-E	V22.930	/		<input checked="" type="checkbox"/>

The equipment listed in the table below are supported unit provided by the laboratory for achieving EUT functions or monitor EUT functions during the testing process. The supported units are validated by the laboratory before testing.

Supported Unit	Supplier	Model	Serial No.	Description
Adapter	HUAWEI	HW-100400C01	/	/
PCB Board	CAVLI	/	/	/
USB data cable	/	/	/	1m
Antenna	/	/	/	/

## **ANNEX B TEST SETUP PHOTOS**

Please refer the document “BL-SZ2370302-AE.PDF”.

## **ANNEX C EUT EXTERNAL PHOTOS**

Please refer the document “BL-SZ2370302-AW.PDF”.

## **ANNEX D EUT INTERNAL PHOTOS**

Please refer the document “BL-SZ2370302-AI.PDF”.

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--END OF REPORT--