

# TEST REPORT

**Applicant:** TECNO MOBILE LIMITED  
**Address:** FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG  
**Equipment Type:** Mobile phone  
**Model Name:** KL7  
**Brand Name:** TECNO  
**FCC ID:** 2ADYY-KL7  
**Test Standard:** 47 CFR Part 15 Subpart B  
ANSI C63.4-2014  
**Sample Arrival Date:** Jul. 15, 2024  
**Test Date:** Jul. 17, 2024 - Jul. 27, 2024  
**Date of Issue:** Aug. 21, 2024

**ISSUED BY:**

Shenzhen BALUN Technology Co., Ltd.

**Tested by:** Li Junfeng

**Checked by:** Liu Zhenxiang

**Approved by:** Tolan Tu  
(Testing Director)



<b>Revision History</b>		
Version	Issue Date	Revisions
<u>Rev. 01</u>	<u>Aug. 21, 2024</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.

## 2 PRODUCT INFORMATION

### 2.1 Applicant Information

Applicant	TECNO MOBILE LIMITED
Address	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG

### 2.2 Manufacturer Information

Manufacturer	TECNO MOBILE LIMITED
Address	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG

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

EUT Name	Mobile phone
Model Name Under Test	KL7
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	N/A
Software Version	N/A
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

## 2.4 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	N/A
	Model No.	BL-49JT
	Serial No.	N/A
	Capacity	Rated: 4900mAh/18.96Wh Typical: 5000mAh/19.35Wh
	Rated Voltage	3.87 V
	Limit Charge Voltage	4.45 V
Ancillary Equipment 2	Adapter 1	
	Brand Name	N/A
	Model No.	U330TSB
	Rated Input	100-240V ~ 50/60Hz, 1.5A
	Rated Output	5.0V $\overline{=}$ 3.0A 15.0W or 5.0 – 10.0V $\overline{=}$ 3.3A or 11.0V $\overline{=}$ 3.0A 18.0W MAX
Ancillary Equipment 3	USB Cable	
	Length (Approx.)	1.0m
Ancillary Equipment 4	Headset	
	Length (Approx.)	1.2m

## 2.5 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/1900 3G Network WCDMA/HSDPA/HSUPA Band 2/4/5 4G Network LTE FDD Band 2/4/5/7/12/17/66 LTE TDD Band 38/41 LTE CA Uplink (UL): CA_2C, CA_5B, CA_7C, CA_38C, CA_41C, CA_66C Bluetooth (BR+EDR+BLE) WIFI 802.11a, 802.11b, 802.11g, 802.11n(HT20/40) and 802.11ac(VHT20/40/80) GPS, GLONASS, BDS, Galileo, SBAS, FM Receiver, NFC
Classification of equipment	Class B
The highest internal frequency of EUT	5850 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	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	4.3 dB
Radiated emissions (30 MHz-1 GHz)-966#2	4.4 dB
Radiated emissions (1 GHz-18 GHz)-966#2	5.0 dB

## 4 GENERAL TEST CONFIGURATIONS

### 4.1 Test Enclosure List

Description	Manufacturer	Model	Serial No.	Length	Description	Use
Wireless Communications Test Set	R&S	CMW500	127801	N/A	Cal. Due 2024.12.04	<input checked="" type="checkbox"/>
Wireless Communications Test Set	R&S	CMW500	121551	N/A	Cal. Due 2025.04.24	<input checked="" type="checkbox"/>
Laptop	Lenovo	ThinkPad E495	N/A	N/A	N/A	<input checked="" type="checkbox"/>
Laptop	HONOR	N/A	N/A	N/A	N/A	<input checked="" type="checkbox"/>
Data connector	UGREEN	40702	N/A	N/A	N/A	<input checked="" type="checkbox"/>
USB disk	Sandisk	DTMC3G2	N/A	N/A	64G	<input checked="" type="checkbox"/>
Type-C Headset	OPPO	MH156	N/A	1.12m	N/A	<input checked="" type="checkbox"/>
Phone	HONOR	V20	N/A	N/A	N/A	<input checked="" type="checkbox"/>

### 4.2 Test Configurations

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

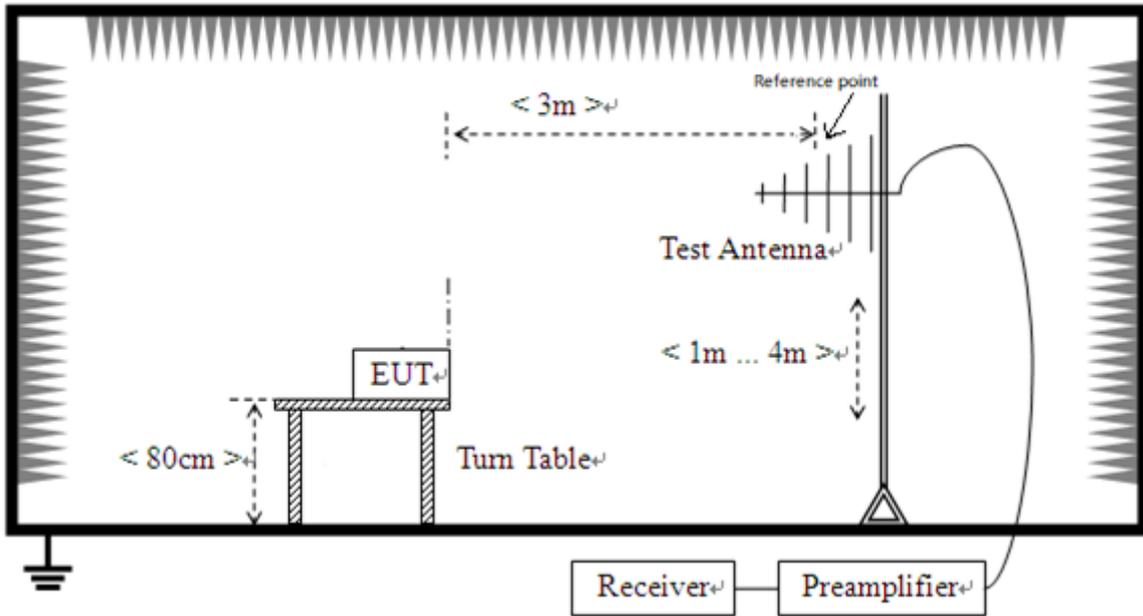
Test Mode Configuration	Description
Mode 1	<u>The Standby Test Mode</u> EUT + Adapter + USB Cable + Battery + Headset
Mode 2	<u>The Front Camera Test Mode</u> EUT + Adapter + USB Cable + Battery + Headset
Mode 3	<u>The Rear Camera Test Mode</u> EUT + Adapter + USB Cable + Battery + Headset
Mode 4	<u>The Video Play Test Mode</u> EUT + Adapter + USB Cable + Battery + Headset
Mode 5	<u>The FM Test Mode</u> EUT + Adapter + USB Cable + Battery + FM RX + Headset
Mode 6	<u>The USB Test Mode</u> EUT + USB Cable + Battery + Laptop + Headset
Mode 7	<u>The OTG Test Mode</u> EUT + Battery + Data connector + USB Disk + Phone + Headset
Mode 8	<u>The Type-C Headset Test Mode</u> EUT + Type-C Headset + Battery

Test Case	Test Mode Configuration	Worst Mode
Radiated Emission	Mode 1~Mode 8	1, 6
Conducted Emission, AC Ports	Mode 1~Mode 6	1, 6

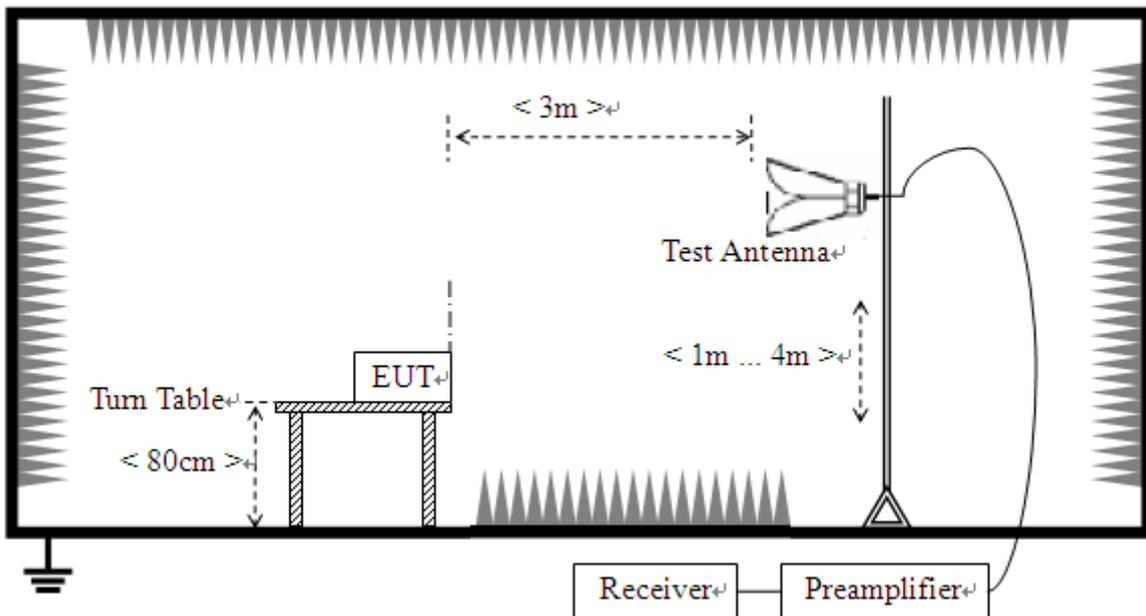
Note: All operation modes were tested, but only test data of the worst mode was presented in this report.

### 4.3 Test Setups

#### Test Setup 1

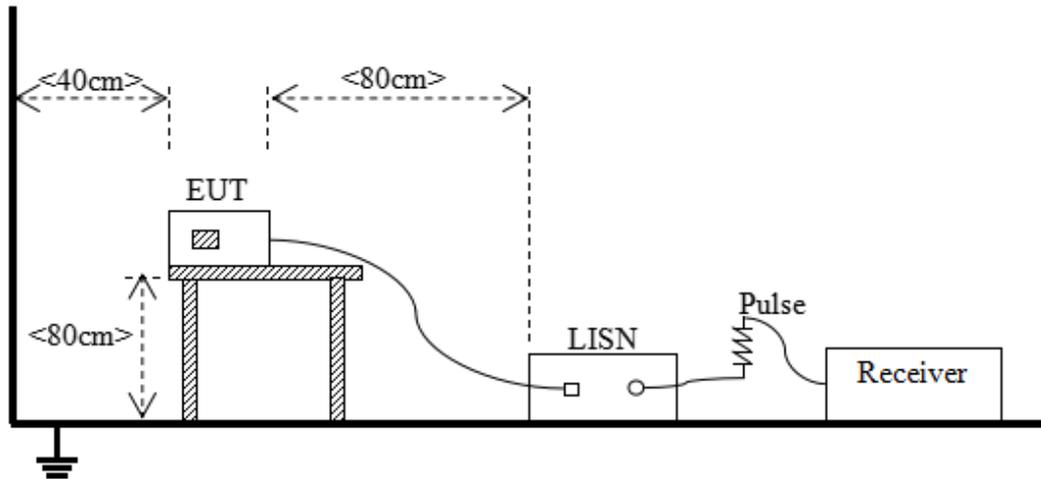


Radiated Emission (30 MHz-1 GHz)



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

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) 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 <sub>M</sub>	500	54	74	60	80

Note 1: The highest measurement frequency, F<sub>M</sub>, in GHz, shall be determined as next Table.

Note 2: Average Class A limit at 3m L<sub>3m</sub> is determined by the following conversion formula:  

$$L_{3m} = L_{10m} + 20 \cdot \log(d_{10m}/d_{3m})$$
Where:  
L<sub>3m</sub> is Average Class A limit at 3m;  
L<sub>10m</sub> is Average Class A limit at 10m;  
d<sub>10m</sub> is Measurement distance in 10m;  
d<sub>3m</sub> is Measurement distance in 3m.  
For this case: L<sub>3m</sub> = 49.5 + 20\*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
$500$ MHz $\leq F_X \leq 1$ GHz	5 GHz
$F_X \geq 1$ 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

Refer to 4.3 section (test setup 1) for radiated emission test, the photo of test setup please refer to ANNEX B.

### 5.1.1.3 Test Procedure

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  $0^\circ$  to  $360^\circ$ , 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) + 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.

### 5.1.2.2 Test Setup

Refer to 4.3 section test (test setup 2) for conducted emission, the photo of test setup please refer to ANNEX B.

### 5.1.2.3 Test Procedure

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: The symbol of "--" in the table which means not application.

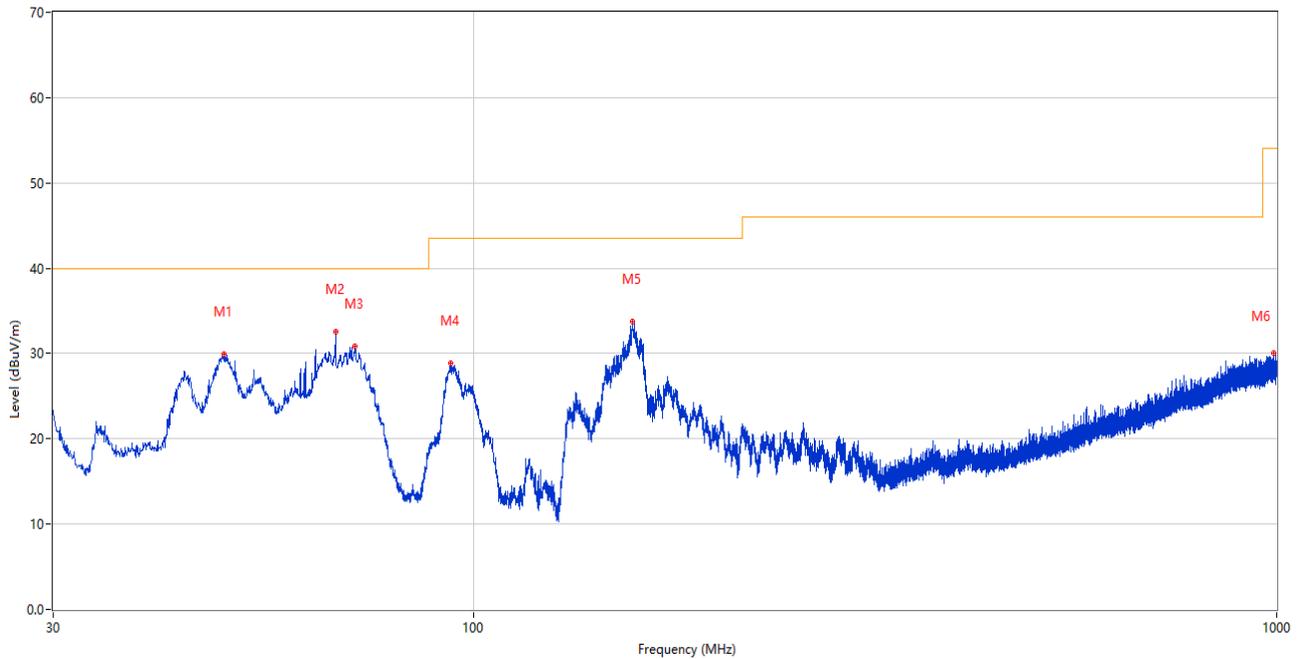
Note 2: For the test data above 1 GHz, according the ANSI C63.4-2014, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note 3: 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. The test results above 18GHz are only noise and are not recorded in the report.

Sample No.	S01	Temperature	24.3°C
Humidity	52%RH	Pressure	101kPa
Test Engineer	He Shichang	Test Date	2024.07.18

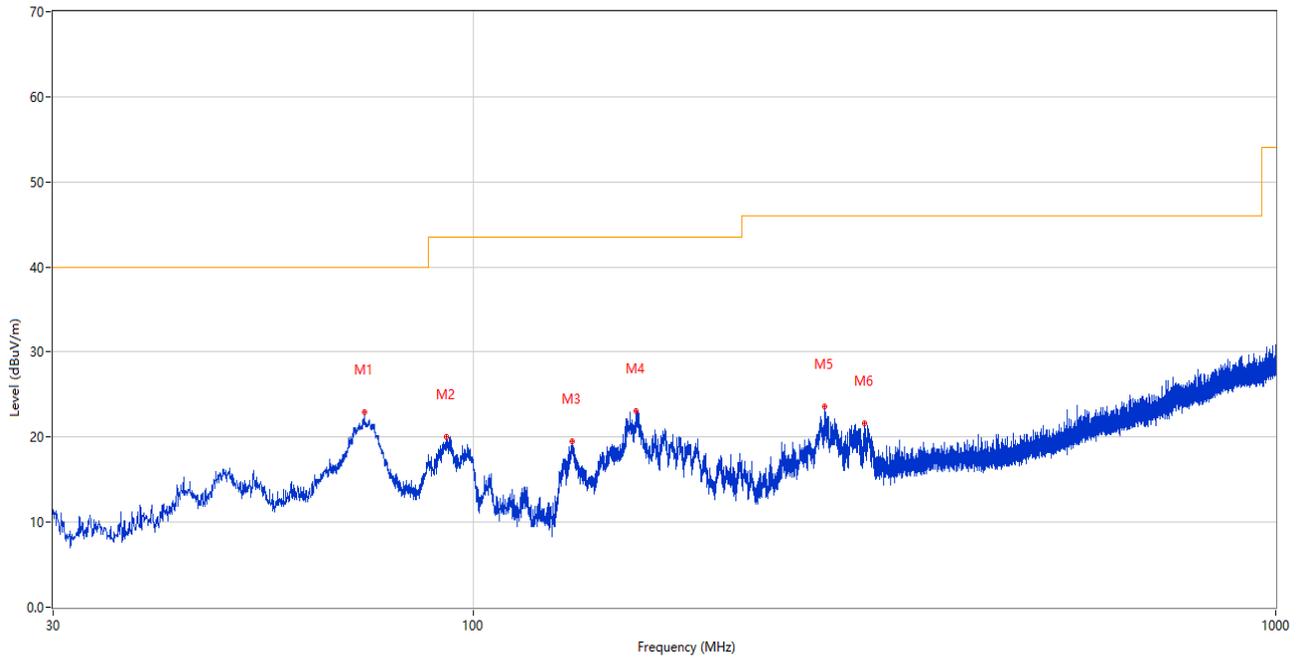
**Test Mode 1**

**1) Test Antenna Vertical, 30 MHz – 1 GHz**



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	49.012	29.88	-25.39	40.0	10.12	Peak	112.00	100	Vertical	Pass
2	67.442	32.53	-28.28	40.0	7.47	Peak	214.00	100	Vertical	Pass
3	71.225	30.84	-29.84	40.0	9.16	Peak	69.00	100	Vertical	Pass
4	93.826	28.86	-27.71	43.5	14.64	Peak	133.00	100	Vertical	Pass
5	157.749	33.72	-29.72	43.5	9.78	Peak	195.00	100	Vertical	Pass
6	991.222	30.02	-8.44	54.0	23.98	Peak	104.00	100	Vertical	Pass

2) Test Antenna Horizontal, 30 MHz – 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	73.262	22.99	-30.56	40.0	17.01	Peak	126.00	200	Horizontal	Pass
2	92.662	20.04	-27.95	43.5	23.46	Peak	298.00	200	Horizontal	Pass
3	132.965	19.55	-29.95	43.5	23.95	Peak	30.00	200	Horizontal	Pass
4	159.738	23.02	-29.59	43.5	20.48	Peak	30.00	200	Horizontal	Pass
5	274.440	23.60	-24.39	46.0	22.40	Peak	221.00	100	Horizontal	Pass
6	307.614	21.67	-23.50	46.0	24.33	Peak	222.00	100	Horizontal	Pass

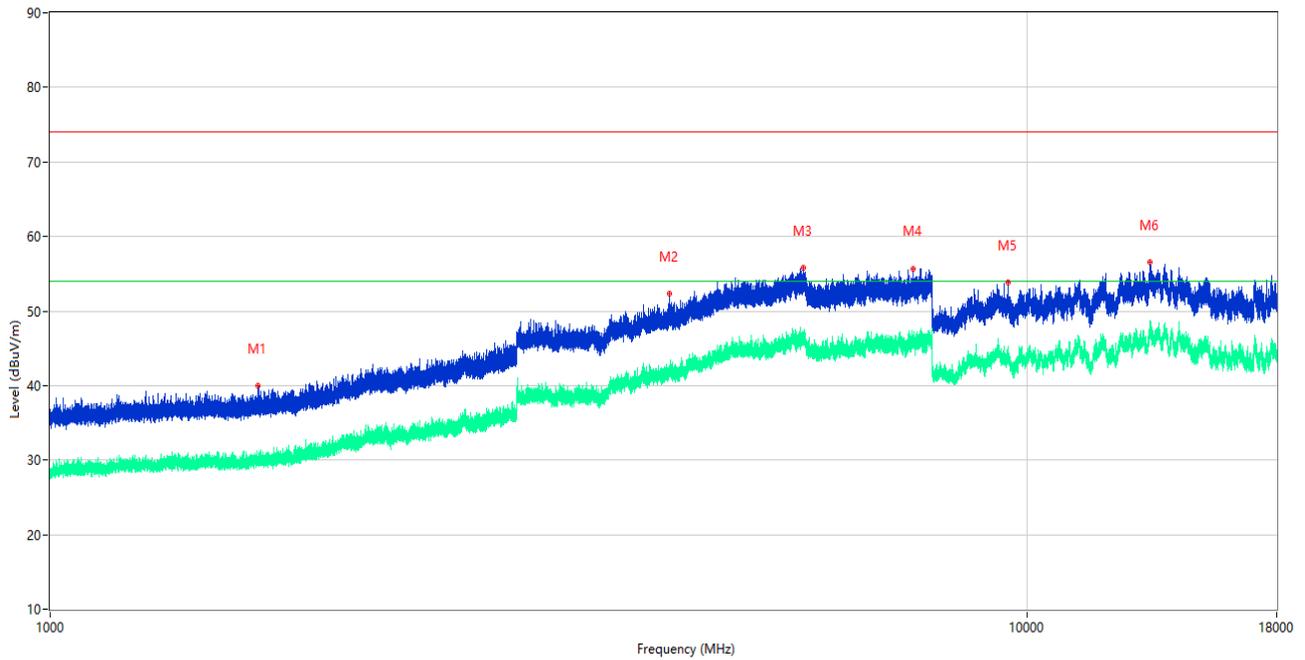
Equipment Information						
Equipment Name	Supplier	Model	Serial No.	Cal. Date	Cal. Due	Use
Frequency Below 1 GHz						
EMI Receiver	Keysight	N9038A	MY55330120	2023.09.05	2024.09.04	<input checked="" type="checkbox"/>
Amplifier (30-1GHz)	COM-MV	ZT30-1000M	B2017119081	2023.12.05	2024.12.04	<input checked="" 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"/>

3) Test Antenna Vertical, 1 GHz – 18 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1554.500	39.88	-15.99	74.0	34.12	Peak	238.00	100	Vertical	Pass
1**	1554.500	29.16	-15.99	54.0	24.84	AV	238.00	100	Vertical	Pass
2	4042.250	50.85	-1.26	74.0	23.15	Peak	291.00	100	Vertical	Pass
2**	4042.250	41.34	-1.26	54.0	12.66	AV	291.00	100	Vertical	Pass
3	7089.000	55.69	1.78	74.0	18.31	Peak	24.00	100	Vertical	Pass
3**	7089.000	45.49	1.78	54.0	8.51	AV	24.00	100	Vertical	Pass
4	10599.500	53.75	0.17	74.0	20.25	Peak	14.00	100	Vertical	Pass
4**	10599.500	43.16	0.17	54.0	10.84	AV	14.00	100	Vertical	Pass
5	13363.500	56.48	5.14	74.0	17.52	Peak	208.00	100	Vertical	Pass
5**	13363.500	46.76	5.14	54.0	7.24	AV	208.00	100	Vertical	Pass
6	17927.500	54.55	2.15	74.0	19.45	Peak	208.00	100	Vertical	Pass
6**	17927.500	45.95	2.15	54.0	8.05	AV	208.00	100	Vertical	Pass

4) Test Antenna Horizontal, 1 GHz – 18 GHz



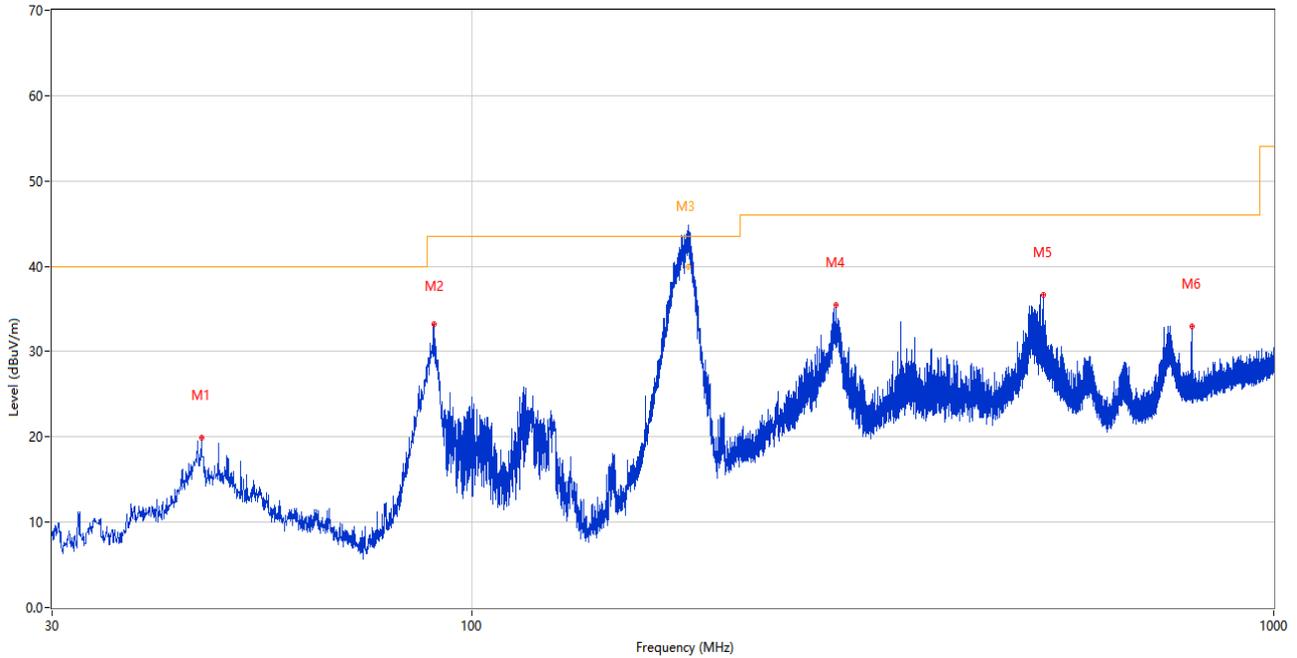
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1630.900	39.96	-15.95	74.0	34.04	Peak	226.00	100	Horizontal	Pass
1**	1630.900	30.13	-15.95	54.0	23.87	AV	226.00	100	Horizontal	Pass
2	4303.750	52.38	-0.19	74.0	21.62	Peak	26.00	100	Horizontal	Pass
2**	4303.750	41.85	-0.19	54.0	12.15	AV	26.00	100	Horizontal	Pass
3	5904.750	55.74	3.68	74.0	18.26	Peak	44.00	100	Horizontal	Pass
3**	5904.750	46.02	3.68	54.0	7.98	AV	44.00	100	Horizontal	Pass
4	7645.500	55.72	2.40	74.0	18.28	Peak	168.00	100	Horizontal	Pass
4**	7645.500	46.65	2.40	54.0	7.35	AV	168.00	100	Horizontal	Pass
5	9548.500	53.82	1.42	74.0	20.18	Peak	11.00	100	Horizontal	Pass
5**	9548.500	43.23	1.42	54.0	10.77	AV	11.00	100	Horizontal	Pass
6	13357.000	56.53	5.19	74.0	17.47	Peak	360.00	100	Horizontal	Pass
6**	13357.000	47.11	5.19	54.0	6.89	AV	360.00	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	2023.09.05	2024.09.04	<input checked="" type="checkbox"/>
Amplifier (1-12GHz)	Advanced Microwave	WLA652A	1740103	2023.12.05	2024.12.04	<input checked="" type="checkbox"/>
Amplifier (0.8-21GHz)	Mini-Circuits	ZVA-213-S+	225321316	2023.12.05	2024.12.04	<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"/>

Sample No.	S01	Temperature	22.7°C
Humidity	43%RH	Pressure	101kPa
Test Engineer	He Shichang	Test Date	2024.07.27

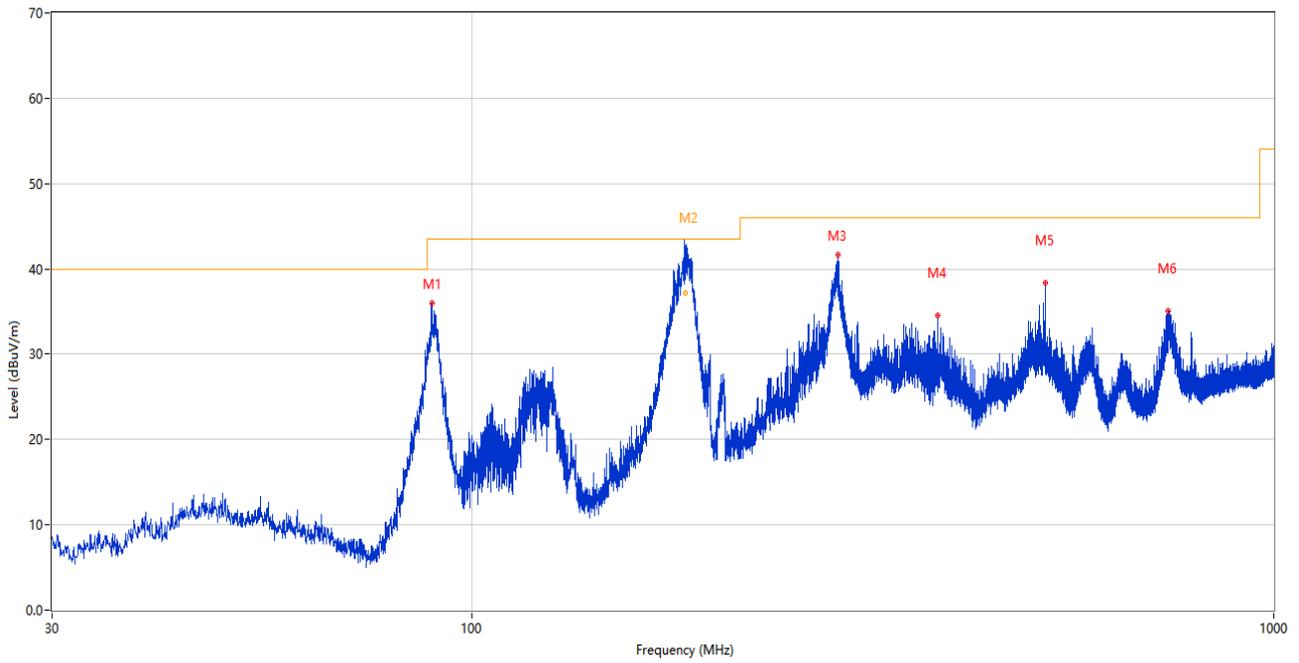
**Test Mode 6**

5) Test Antenna Vertical, 30 MHz – 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	46.102	19.87	-25.55	40.0	20.13	Peak	48.00	100	Vertical	Pass
2	89.849	33.20	-28.57	43.5	10.30	Peak	157.00	100	Vertical	Pass
3	186.082	45.30	-27.92	43.5	-1.80	Peak	72.00	101	Vertical	N/A
3*	186.082	39.99	-27.92	43.5	3.51	QP	72.00	101	Vertical	Pass
4	284.382	35.44	-24.06	46.0	10.56	Peak	111.00	200	Vertical	Pass
5	515.630	36.68	-18.31	46.0	9.32	Peak	177.00	100	Vertical	Pass
6	789.801	33.02	-12.22	46.0	12.98	Peak	220.00	200	Vertical	Pass

6) Test Antenna Horizontal, 30 MHz – 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	89.170	35.97	-28.79	43.5	7.53	Peak	122.00	200	Horizontal	Pass
2	184.482	42.87	-28.18	43.5	0.63	Peak	54.00	193	Horizontal	N/A
2*	184.482	37.17	-28.18	43.5	6.33	QP	54.00	193	Horizontal	Pass
3	286.614	41.60	-23.86	46.0	4.40	Peak	235.00	100	Horizontal	Pass
4	381.528	34.59	-21.51	46.0	11.41	Peak	232.00	100	Horizontal	Pass
5	519.559	38.36	-18.26	46.0	7.64	Peak	263.00	200	Horizontal	Pass
6	737.955	35.10	-13.11	46.0	10.90	Peak	120.00	100	Horizontal	Pass

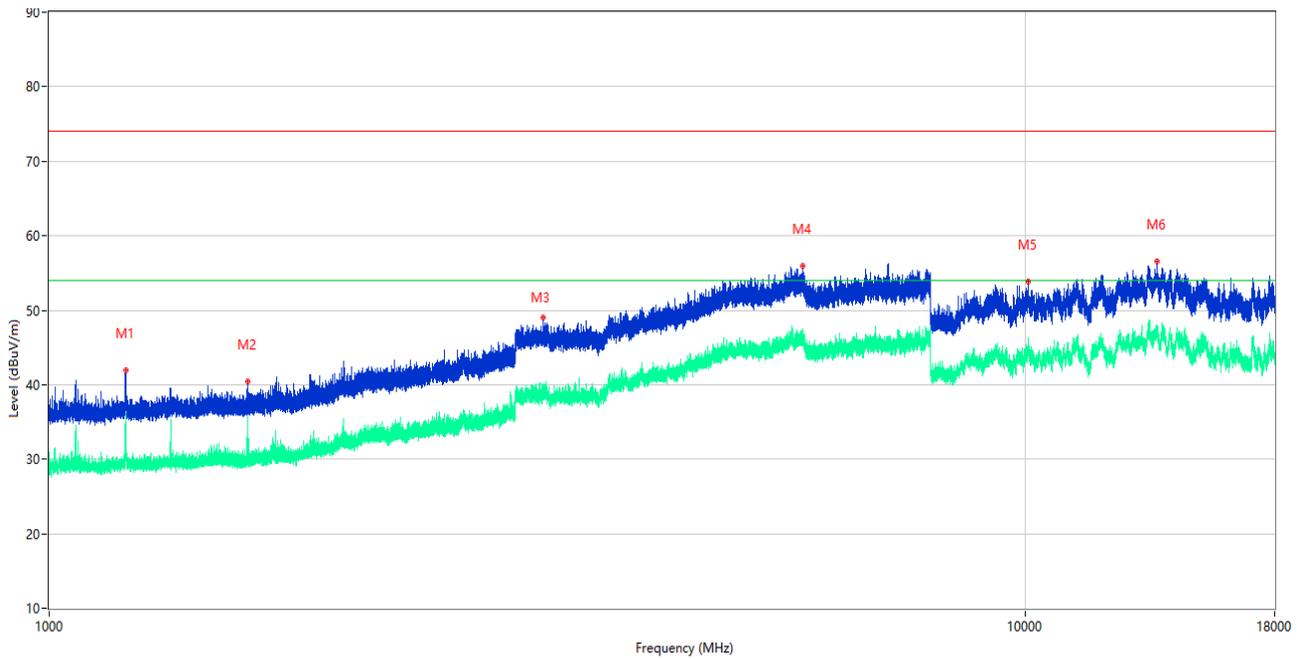
Equipment Information						
Equipment Name	Supplier	Model	Serial No.	Cal. Date	Cal. Due	Use
Frequency Below 1 GHz						
EMI Receiver	Keysight	N9038A	MY55330120	2023.09.05	2024.09.04	<input checked="" type="checkbox"/>
Amplifier (30-1GHz)	COM-MV	ZT30-1000M	B2017119081	2023.12.05	2024.12.04	<input checked="" 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"/>

7) Test Antenna Vertical, 1 GHz – 18 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1198.100	46.75	-16.21	74.0	27.25	Peak	229.00	100	Vertical	Pass
1**	1198.100	37.54	-16.21	54.0	16.46	AV	229.00	100	Vertical	Pass
2	1730.700	45.12	-15.78	74.0	28.88	Peak	211.00	100	Vertical	Pass
2**	1730.700	35.67	-15.78	54.0	18.33	AV	211.00	100	Vertical	Pass
3	2656.900	51.07	-8.66	74.0	22.93	Peak	184.00	100	Vertical	Pass
3**	2656.900	37.19	-8.66	54.0	16.81	AV	184.00	100	Vertical	Pass
4	5749.250	55.44	3.30	74.0	18.56	Peak	193.00	100	Vertical	Pass
4**	5749.250	46.61	3.30	54.0	7.39	AV	193.00	100	Vertical	Pass
5	11757.500	54.26	1.77	74.0	19.74	Peak	180.00	100	Vertical	Pass
5**	11757.500	44.54	1.77	54.0	9.46	AV	180.00	100	Vertical	Pass
6	13809.000	55.86	5.70	74.0	18.14	Peak	102.00	100	Vertical	Pass
6**	13809.000	47.23	5.70	54.0	6.77	AV	102.00	100	Vertical	Pass

8) Test Antenna Horizontal, 1 GHz – 18 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1197.500	41.89	-16.22	74.0	32.11	Peak	268.00	100	Horizontal	Pass
1**	1197.500	32.08	-16.22	54.0	21.92	AV	268.00	100	Horizontal	Pass
2	1598.300	40.44	-16.12	74.0	33.56	Peak	246.00	100	Horizontal	Pass
2**	1598.300	29.88	-16.12	54.0	24.12	AV	246.00	100	Horizontal	Pass
3	3205.000	48.99	-4.79	74.0	25.01	Peak	109.00	100	Horizontal	Pass
3**	3205.000	38.52	-4.79	54.0	15.48	AV	109.00	100	Horizontal	Pass
4	5906.250	55.95	3.58	74.0	18.05	Peak	127.00	100	Horizontal	Pass
4**	5906.250	45.78	3.58	54.0	8.22	AV	127.00	100	Horizontal	Pass
5	10061.000	53.78	2.32	74.0	20.22	Peak	234.00	100	Horizontal	Pass
5**	10061.000	44.63	2.32	54.0	9.37	AV	234.00	100	Horizontal	Pass
6	13640.500	56.60	5.05	74.0	17.40	Peak	0.00	100	Horizontal	Pass
6**	13640.500	47.13	5.05	54.0	6.87	AV	0.00	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	2023.09.05	2024.09.04	<input checked="" type="checkbox"/>
Amplifier (1-12GHz)	Advanced Microwave	WLA652A	1740103	2023.12.05	2024.12.04	<input checked="" type="checkbox"/>
Amplifier (0.8-21GHz)	Mini-Circuits	ZVA-213-S+	225321316	2023.12.05	2024.12.04	<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"/>

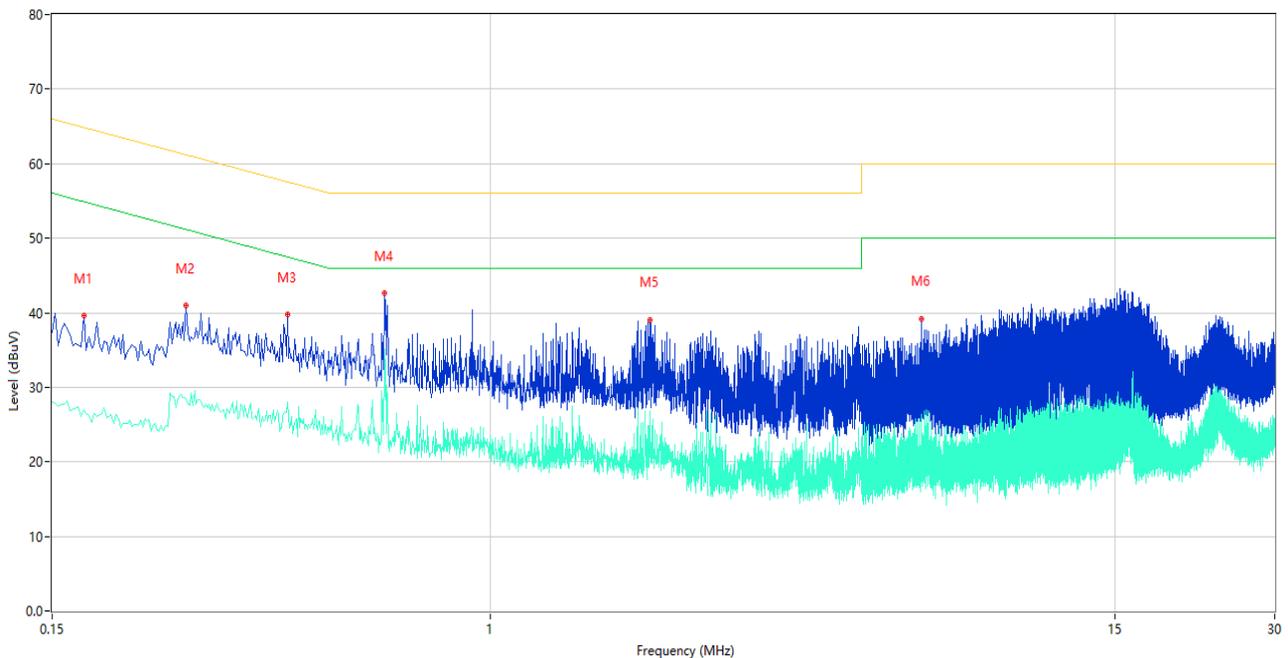
## A.2 Conducted Emission, AC Ports

Note: 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. So, The configuration 120 VAC, 60 Hz and 240 VAC, 50 Hz were tested respectively, but only the worst configuration (240 VAC, 50 Hz ) shown here.

Sample No.	S01	Temperature	24.3°C
Humidity	52%RH	Pressure	101kPa
Test Engineer	Yang yang	Test Date	2024.07.18

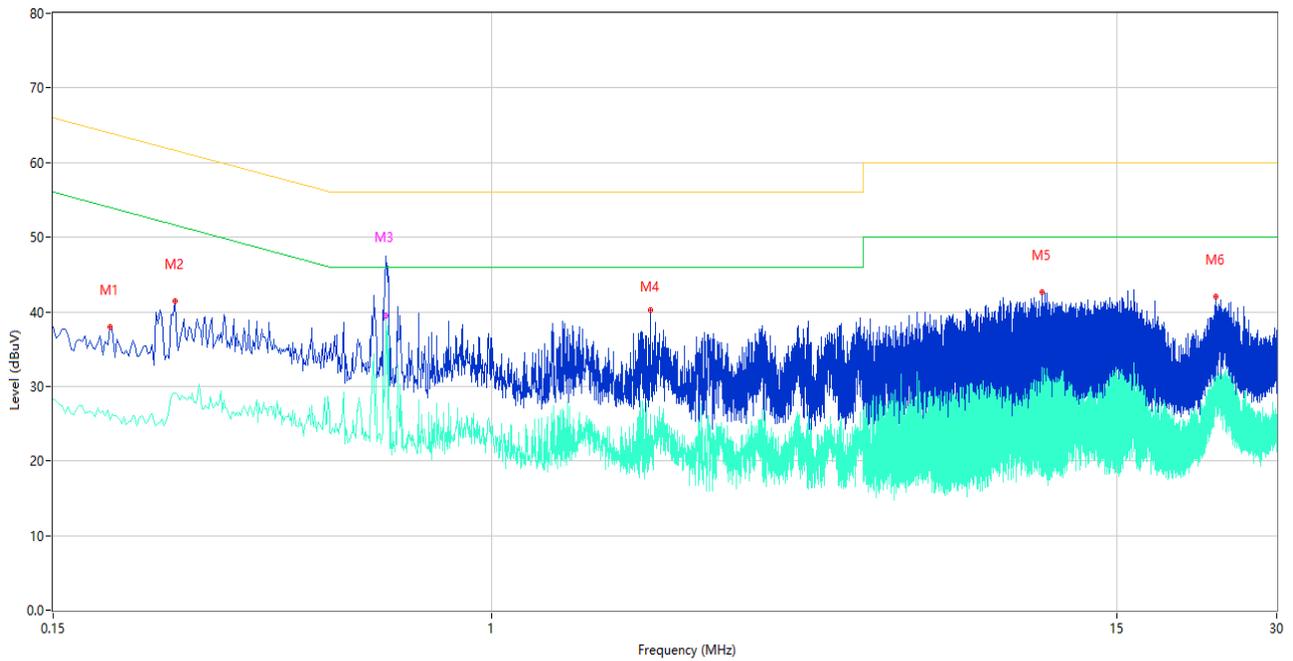
### Test Mode 1

#### 1) AC Ports - L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.172	39.59	10.09	64.86	25.27	Peak	L	Pass
1**	0.172	26.95	10.09	54.86	27.91	AV	L	Pass
2	0.268	41.01	10.08	61.18	20.17	Peak	L	Pass
2**	0.268	28.47	10.08	51.18	22.71	AV	L	Pass
3	0.416	39.71	10.66	57.53	17.82	Peak	L	Pass
3**	0.416	28.05	10.66	47.53	19.48	AV	L	Pass
4	0.634	42.66	10.46	56.00	13.34	Peak	L	Pass
4**	0.634	35.04	10.46	46.00	10.96	AV	L	Pass
5	2.002	39.09	10.37	56.00	16.91	Peak	L	Pass
5**	2.002	26.82	10.37	46.00	19.18	AV	L	Pass
6	6.492	39.23	11.03	60.00	20.77	Peak	L	Pass
6**	6.492	17.71	11.03	50.00	32.29	AV	L	Pass

2) AC Ports - N Phase

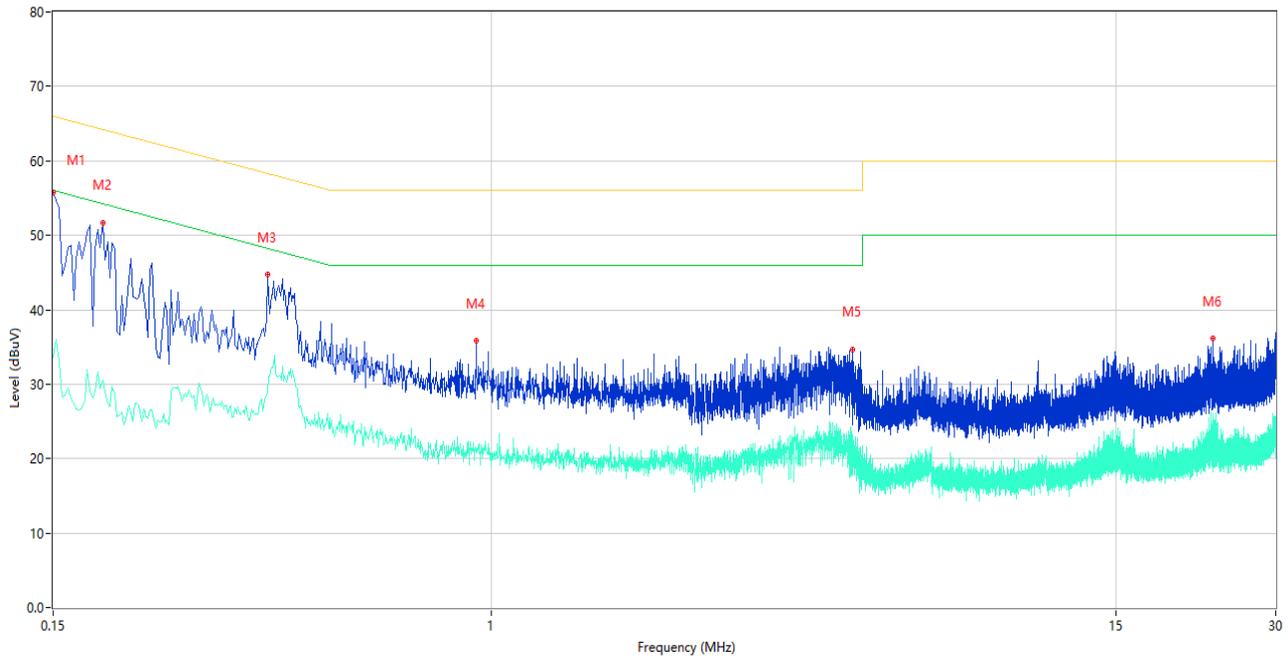


No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.192	37.92	10.07	63.95	26.03	Peak	N	Pass
1**	0.192	25.40	10.07	53.95	28.55	AV	N	Pass
2	0.254	41.44	10.07	61.63	20.19	Peak	N	Pass
2**	0.254	29.15	10.07	51.63	22.48	AV	N	Pass
3	0.632	46.56	10.47	56.00	9.44	Peak	N	Pass
3**	0.632	39.48	10.47	46.00	6.52	AV	N	Pass
4	1.992	40.28	10.33	56.00	15.72	Peak	N	Pass
4**	1.992	26.26	10.33	46.00	19.74	AV	N	Pass
5	10.870	42.66	11.90	60.00	17.34	Peak	N	Pass
5**	10.870	22.69	11.90	50.00	27.31	AV	N	Pass
6	23.086	42.01	13.39	60.00	17.99	Peak	N	Pass
6**	23.086	30.79	13.39	50.00	19.21	AV	N	Pass

Sample No.	S01	Temperature	24.3°C
Humidity	52%RH	Pressure	101kPa
Test Engineer	Yang yang	Test Date	2024.07.18

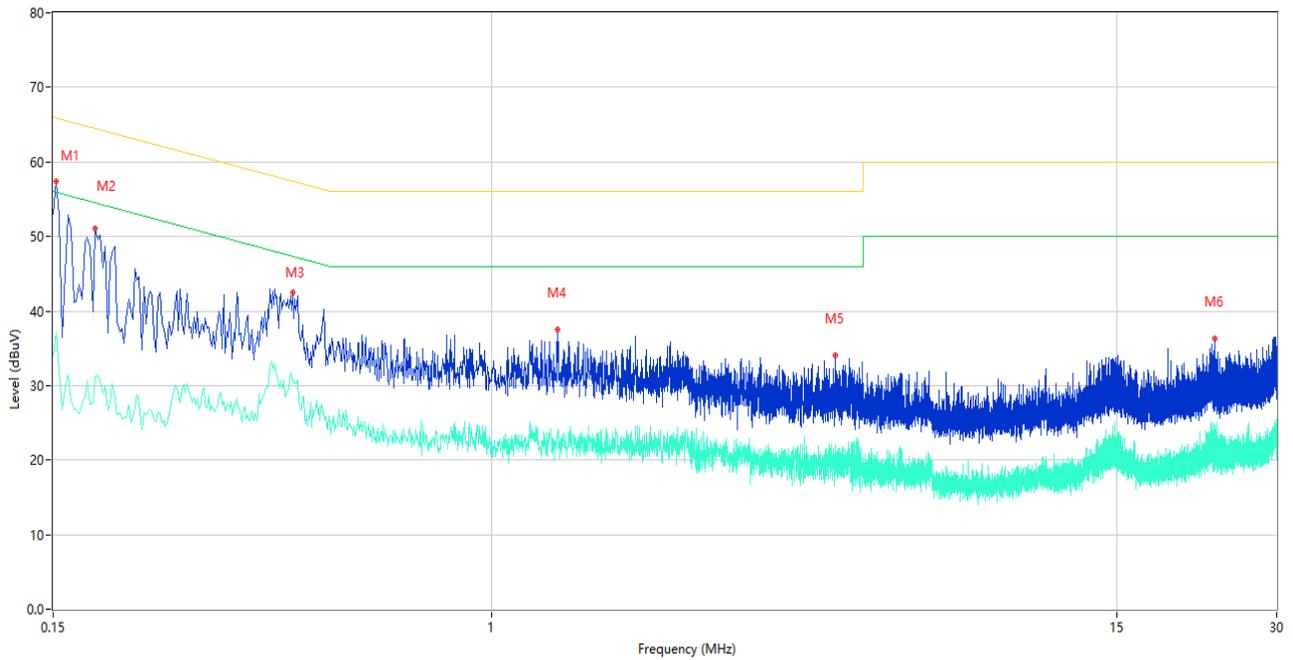
Test Mode 6

3) AC Ports - L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.150	55.70	10.12	66.00	10.30	Peak	L	Pass
1**	0.150	33.58	10.12	56.00	22.42	AV	L	Pass
2	0.186	51.74	10.08	64.21	12.47	Peak	L	Pass
2**	0.186	30.63	10.08	54.21	23.58	AV	L	Pass
3	0.380	44.72	10.41	58.28	13.56	Peak	L	Pass
3**	0.380	28.72	10.41	48.28	19.56	AV	L	Pass
4	0.938	35.87	10.84	56.00	20.13	Peak	L	Pass
4**	0.938	20.83	10.84	46.00	25.17	AV	L	Pass
5	4.792	34.72	10.79	56.00	21.28	Peak	L	Pass
5**	4.792	22.32	10.79	46.00	23.68	AV	L	Pass
6	22.810	36.17	13.08	60.00	23.83	Peak	L	Pass
6**	22.810	21.60	13.08	50.00	28.40	AV	L	Pass

4) AC Ports - N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.152	57.46	10.12	65.89	8.43	Peak	N	Pass
1**	0.152	37.28	10.12	55.89	18.61	AV	N	Pass
2	0.180	51.00	10.08	64.49	13.49	Peak	N	Pass
2**	0.180	31.26	10.08	54.49	23.23	AV	N	Pass
3	0.424	42.45	10.65	57.37	14.92	Peak	N	Pass
3**	0.424	30.82	10.65	47.37	16.55	AV	N	Pass
4	1.334	37.54	10.54	56.00	18.46	Peak	N	Pass
4**	1.334	22.99	10.54	46.00	23.01	AV	N	Pass
5	4.426	34.00	10.54	56.00	22.00	Peak	N	Pass
5**	4.426	22.03	10.54	46.00	23.97	AV	N	Pass
6	22.946	36.29	13.37	60.00	23.71	Peak	N	Pass
6**	22.946	24.64	13.37	50.00	25.36	AV	N	Pass

Equipment Information						
Equipment Name	Supplier	Model	Serial No.	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9010B	MY57110309	2023.09.05	2024.09.04	<input checked="" type="checkbox"/>
LISN	SCHWARZBECK	NSLK 8127	8127-687	2024.05.09	2025.05.08	<input checked="" type="checkbox"/>
ISN	TESEQ	ISN T800	34449	2023.11.10	2024.11.09	<input type="checkbox"/>
ISN	TESEQ	ISN T8-Cat6	53561	2024.04.24	2025.04.23	<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	Supplier	Name	Version	/		Use
Test Software	BALUN	BL410-E	V22.930	/		<input checked="" type="checkbox"/>

## **ANNEX B TEST SETUP PHOTOS**

Please refer the document “BL-SZ2470699-AE-1.PDF”.

## **ANNEX C EUT EXTERNAL PHOTOS**

Please refer the document “BL-SZ2470699-AW.PDF”.

## **ANNEX D EUT INTERNAL PHOTOS**

Please refer the document “BL-SZ2470699-AI.PDF”.

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--END OF REPORT--