

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: CLA5
Brand Name: TECNO
FCC ID: 2ADYY-CLA5
Test Standard: 47 CFR Part 15 Subpart B
ANSI C63.4-2014
Sample Arrival Date: Jun. 25, 2024
Test Date: Jul. 01, 2024 - Jul. 08, 2024
Date of Issue: Aug. 14, 2024

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Li JunFeng

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Approved by: Tolan Tu
(Testing Director)

Li JunFeng

Liu zhen xiang

Tolan Tu

Revision History

Version	Issue Date	Revisions
<u>Rev. 01</u>	<u>Aug. 14, 2024</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	7
3	SUMMARY OF TEST RESULTS	8
3.1	Test Standards	8
3.2	Verdict	8
3.3	Test Uncertainty	8
4	GENERAL TEST CONFIGURATIONS	9
4.1	Test Enclosure List.....	9
4.2	Test Configurations	9
4.3	Test Setups	11
5	TEST ITEMS	13
5.1	Emission Tests	13
ANNEX A	TEST RESULTS.....	18
A.1	Radiated Emission.....	18
A.2	Conducted Emission, AC Ports.....	31
ANNEX B	TEST SETUP PHOTOS	36
ANNEX C	EUT EXTERNAL PHOTOS.....	36

ANNEX D EUT INTERNAL PHOTOS..... 36

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	☒ Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	☐ 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	CLA5
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-49OX
	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	
	Brand Name	N/A
	Model No.	U330TSB
	Serial No.	N/A
	Rated Input	100-240V ~ 50/60Hz, 1.5A
	Rated Output	5.0V= 3.0A, 15.0W or 5.0- 10.0V= 3.3A or 11.0V= 3.0A, 33.0W 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 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)-966#2	4.4 dB
Radiated emissions (30 MHz-1 GHz)-966#4	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	☒
Wireless Communications Test Set	R&S	CMW500	121551	N/A	Cal. Due 2025.04.24	☒
Laptop	Lenovo	ThinkPad E495	N/A	N/A	N/A	☒
Laptop	HONOR	N/A	N/A	N/A	N/A	☒
Data connector	UGREEN	40702	N/A	N/A	N/A	☒
USB disk	Sandisk	DTMC3G2	N/A	N/A	64G	☒
Type-C Headset	OPPO	MH156	N/A	1.12m	N/A	☒
Phone	HONOR	V20	N/A	N/A	N/A	☒

4.2 Test Configurations

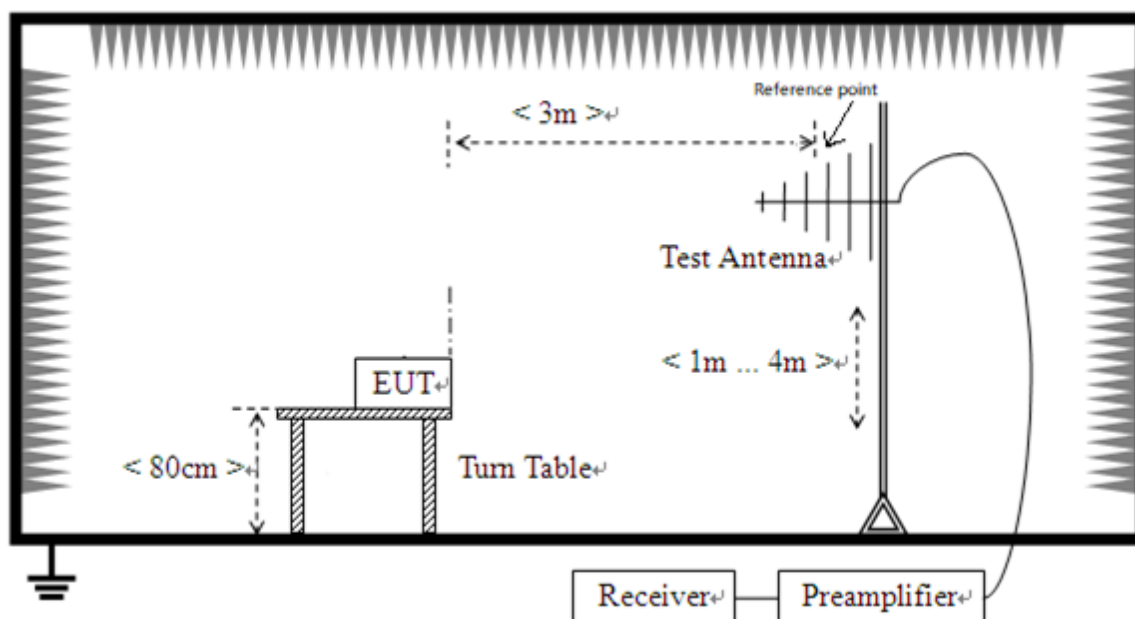
All test modes of EUT are listed in the table below.

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

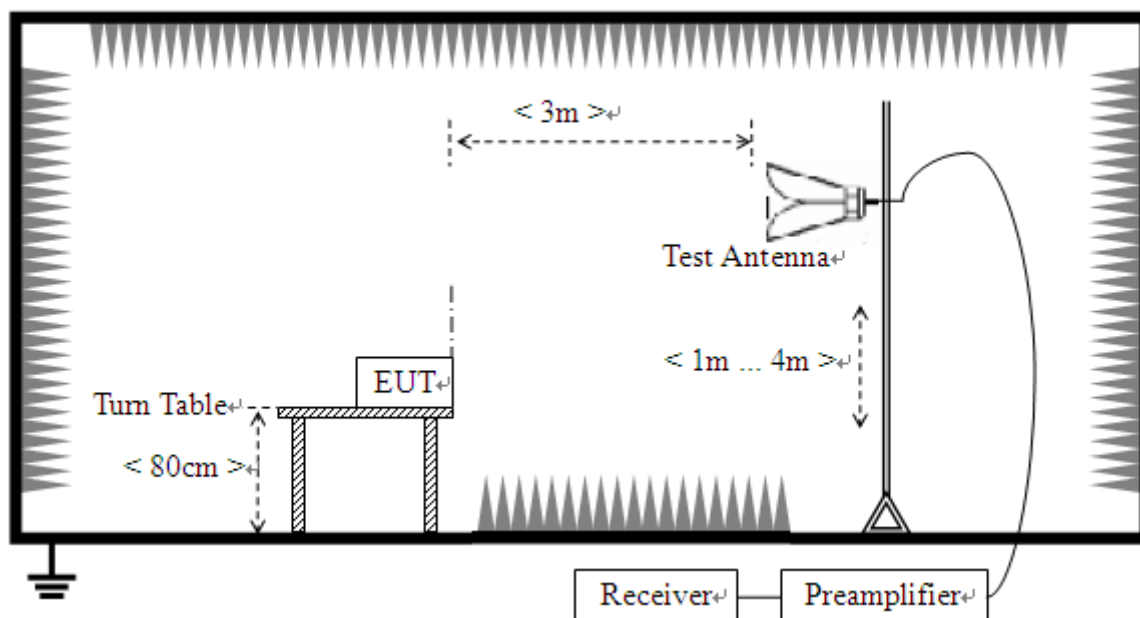
Test Case	Test Mode Configuration	Worst Mode
Radiated Emission	Mode 1~Mode 8	1, 5
Conducted Emission, AC Ports	Mode 1~Mode 5	1, 5
Note: All operation modes were tested, but only test data of the worst mode was presented in this report.		

4.3 Test Setups

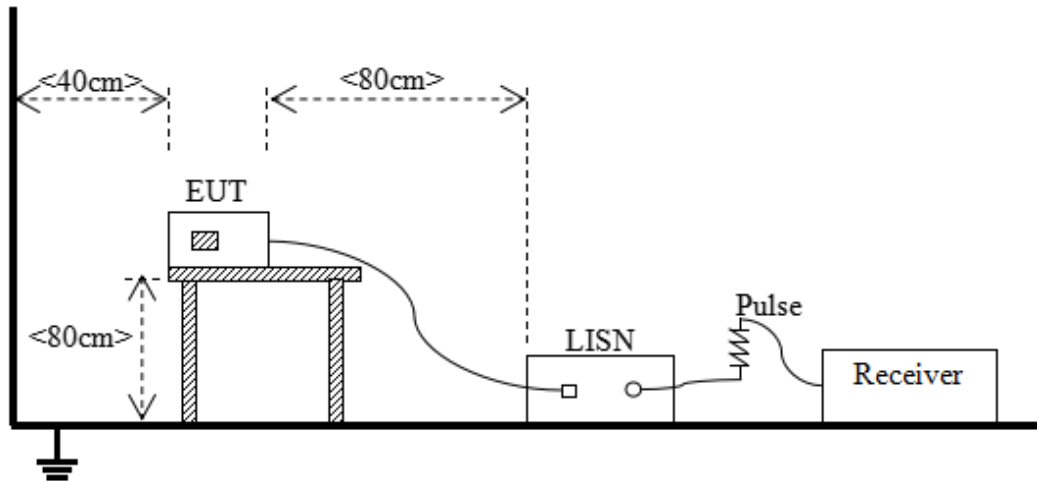
Test Setup 1



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 $\mu\text{V/m}$) = $20 \cdot \log [\text{Field Strength } (\mu\text{V/m})]$.
- 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_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

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° 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 $f \geq 1 \text{ GHz}$, 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) + 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 μ V)	Average (dB μ V)
0.15 - 0.50	79	66
0.50 - 30	73	60

Frequency range (MHz)	Class B	
	Quasi-peak (dB μ V)	Average (dB μ 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 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.

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 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

A.1 Radiated Emission

Note 1: The symbol of “--” in the table which means not application.

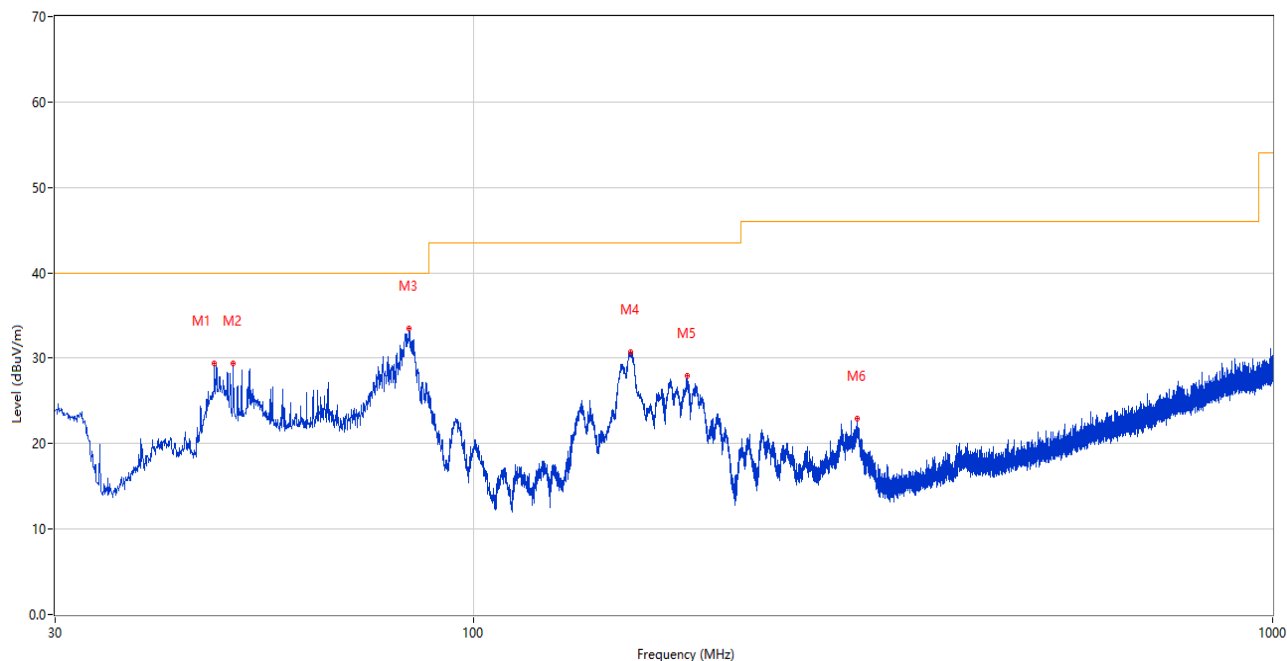
Note 2: For the test data above 1 GHz, according the ANSI C63.4-2014, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

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.	S05	Temperature	23.2℃
Humidity	47%RH	Pressure	101kPa
Test Engineer	He Shichang	Test Date	2024.07.01

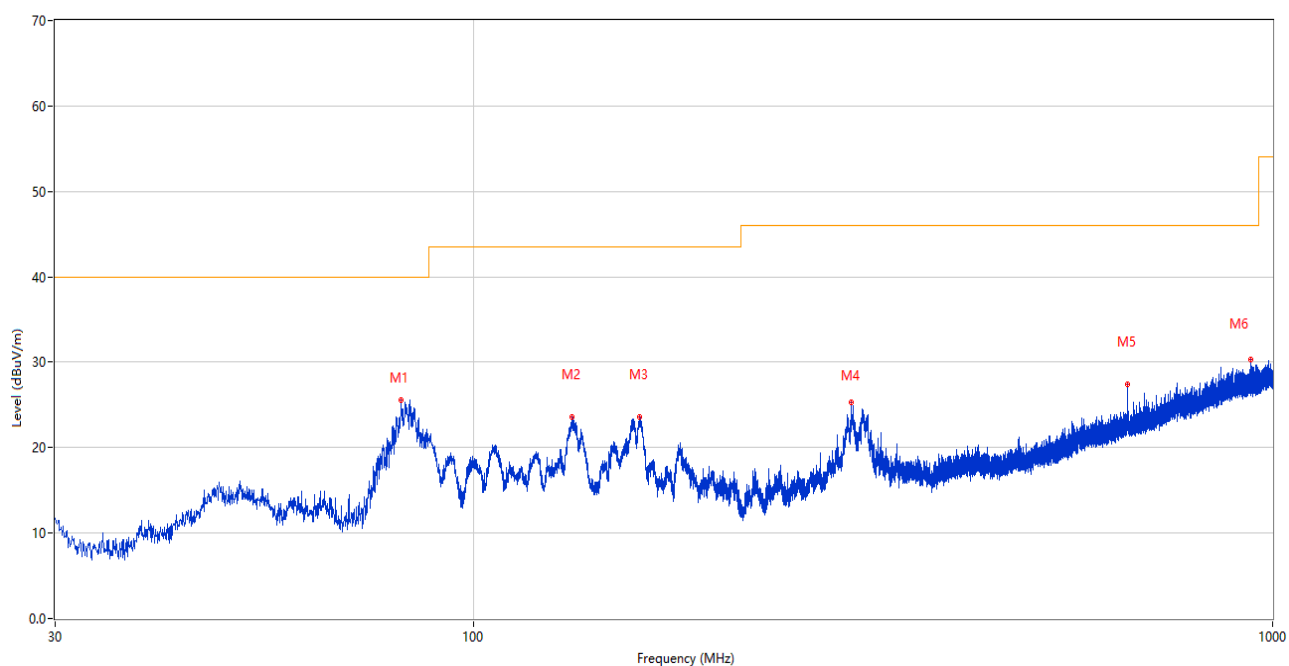
Test Mode 1

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	47.460	29.37	-25.50	40.0	10.63	Peak	29.00	100	Vertical	Pass
2	50.127	29.41	-25.59	40.0	10.59	Peak	319.00	100	Vertical	Pass
3	83.107	33.46	-30.42	40.0	6.54	Peak	61.00	100	Vertical	Pass
4	157.216	30.76	-29.73	43.5	12.74	Peak	269.00	100	Vertical	Pass
5	185.152	27.94	-28.07	43.5	15.56	Peak	222.00	100	Vertical	Pass
6	302.618	22.89	-23.65	46.0	23.11	Peak	325.00	100	Vertical	Pass

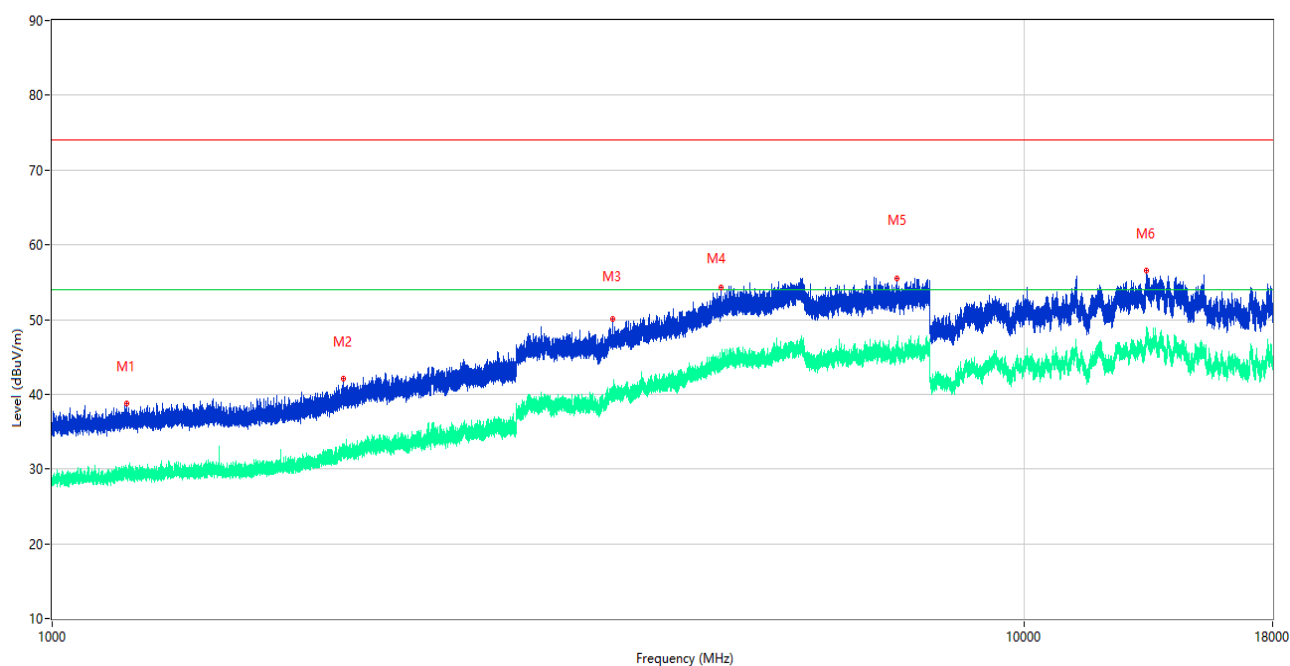
2) Test Antenna Horizontal, 30 MHz – 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	81.168	25.52	-30.88	40.0	14.48	Peak	152.00	200	Horizontal	Pass
2	132.965	23.62	-29.95	43.5	19.88	Peak	126.00	200	Horizontal	Pass
3	161.532	23.56	-29.52	43.5	19.94	Peak	178.00	200	Horizontal	Pass
4	297.235	25.32	-23.80	46.0	20.68	Peak	224.00	100	Horizontal	Pass
5	658.221	27.40	-14.74	46.0	18.60	Peak	106.00	100	Horizontal	Pass
6	940.200	30.32	-9.50	46.0	15.68	Peak	334.00	100	Horizontal	Pass

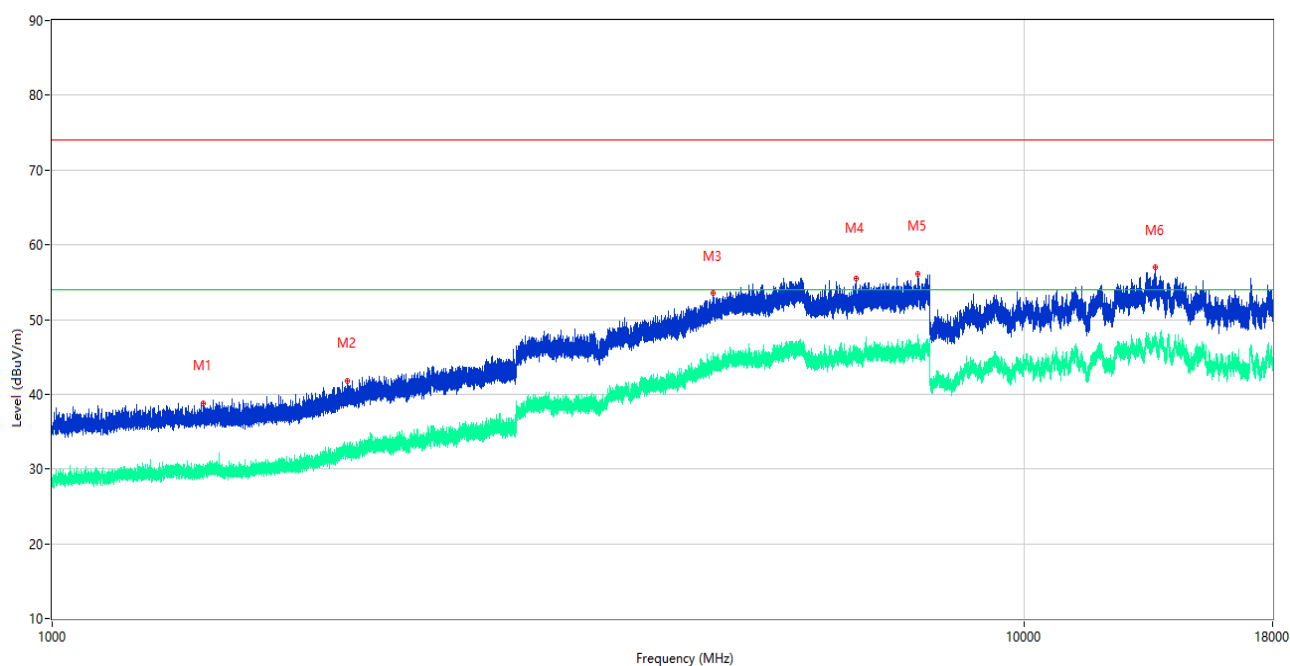
Equipment Information						
Equipment Name	Supplier	Model	Serial No.	Cal. Date	Cal. Due	Use
Frequency Below 1 GHz						
EMI Receiver	Keysight	N9038A	MY55330120	2023.09.05	2024.09.04	☒
Amplifier (30-1GHz)	COM-MV	ZT30-1000M	B2017119081	2023.12.05	2024.12.04	☒
Test Antenna- Bi-Log	SCHWARZB ECK	VULB 9168	9168-00867	2022.04.12	2025.04.11	☒
Anechoic Chamber (#2)	YiHeng	9m*6m*6m	142	2021.08.19	2024.08.18	☒
Description	Supplier	Name	Version	/		Use
Test Software	BALUN	BL410-E	V22.930	/		☒

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	1193.200	38.80	-16.15	74.0	35.20	Peak	66.00	100	Vertical	Pass
1**	1193.200	29.46	-16.15	54.0	24.54	AV	66.00	100	Vertical	Pass
2	1994.100	42.08	-13.77	74.0	31.92	Peak	75.00	100	Vertical	Pass
2**	1994.100	32.52	-13.77	54.0	21.48	AV	75.00	100	Vertical	Pass
3	3775.250	50.10	-1.71	74.0	23.90	Peak	123.00	100	Vertical	Pass
3**	3775.250	40.12	-1.71	54.0	13.88	AV	123.00	100	Vertical	Pass
4	4878.000	54.24	1.78	74.0	19.76	Peak	70.00	100	Vertical	Pass
4**	4878.000	44.43	1.78	54.0	9.57	AV	70.00	100	Vertical	Pass
5	7391.000	55.57	2.41	74.0	18.43	Peak	359.00	100	Vertical	Pass
5**	7391.000	45.57	2.41	54.0	8.43	AV	359.00	100	Vertical	Pass
6	13349.000	56.53	5.20	74.0	17.47	Peak	193.00	100	Vertical	Pass
6**	13349.000	47.09	5.20	54.0	6.91	AV	193.00	100	Vertical	Pass

4) Test Antenna Horizontal, 1 GHz – 18 GHz



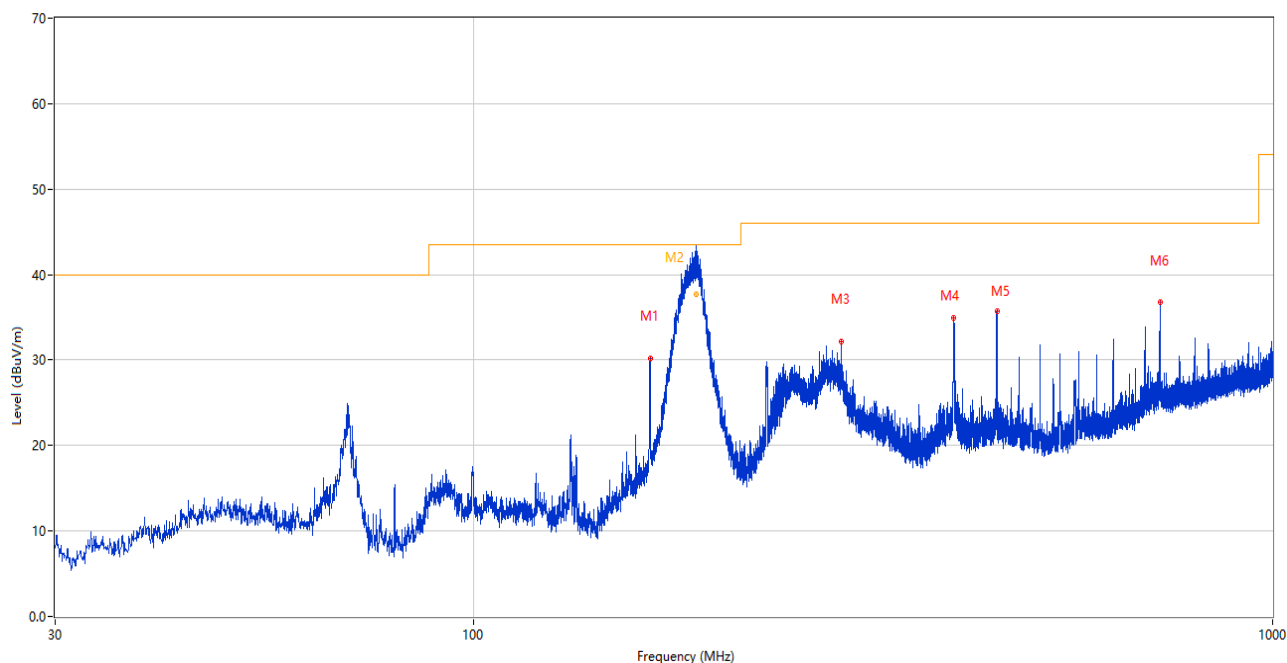
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1429.900	38.83	-15.79	74.0	35.17	Peak	309.00	100	Horizontal	Pass
1**	1429.900	30.43	-15.79	54.0	23.57	AV	309.00	100	Horizontal	Pass
2	2012.300	41.74	-13.63	74.0	32.26	Peak	318.00	100	Horizontal	Pass
2**	2012.300	32.93	-13.63	54.0	21.07	AV	318.00	100	Horizontal	Pass
3	4787.750	53.55	2.11	74.0	20.45	Peak	24.00	100	Horizontal	Pass
3**	4787.750	43.69	2.11	54.0	10.31	AV	24.00	100	Horizontal	Pass
4	6706.250	55.53	1.45	74.0	18.47	Peak	327.00	100	Horizontal	Pass
4**	6706.250	44.97	1.45	54.0	9.03	AV	327.00	100	Horizontal	Pass
5	7771.000	56.03	2.84	74.0	17.97	Peak	193.00	100	Horizontal	Pass
5**	7771.000	46.30	2.84	54.0	7.70	AV	193.00	100	Horizontal	Pass
6	13637.500	56.99	5.03	74.0	17.01	Peak	222.00	100	Horizontal	Pass
6**	13637.500	47.81	5.03	54.0	6.19	AV	222.00	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	☒
Amplifier (1-12GHz)	Advanced Microwave	WLA652A	1740103	2023.12.05	2024.12.04	☒
Amplifier (0.8-21GHz)	Mini-Circuits	ZVA-213-S+	225321316	2023.12.05	2024.12.04	☒
Test Antenna- Horn	SCHWARZB ECK	BBHA 9120D	01917	2022.06.09	2025.06.08	☒
Anechoic Chamber (#2)	YiHeng	9m*6m*6m	142	2021.08.19	2024.08.18	☒
Description	Supplier	Name	Version	/		Use
Test Software	BALUN	BL410-E	V22.930	/		☒

Sample No.	S05	Temperature	22.2℃
Humidity	47%RH	Pressure	101kPa
Test Engineer	He Shichang	Test Date	2024.07.05

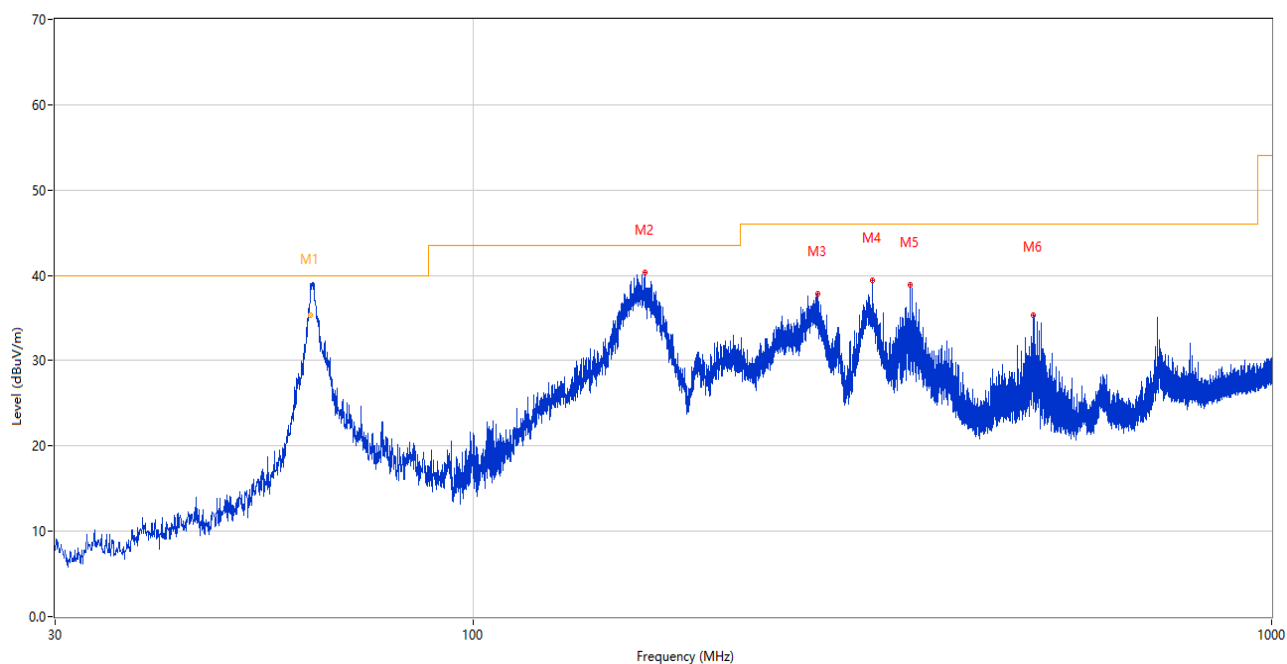
Test Mode 5

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	166.624	30.20	-29.24	43.5	13.30	Peak	84.00	100	Vertical	Pass
2	190.013	43.18	-27.44	43.5	0.32	Peak	152.00	106	Vertical	N/A
2*	190.013	37.65	-27.44	43.5	5.85	QP	152.00	106	Vertical	Pass
3	288.408	32.18	-23.93	46.0	13.82	Peak	5.00	100	Vertical	Pass
4	398.649	34.90	-21.00	46.0	11.10	Peak	174.00	100	Vertical	Pass
5	451.902	35.72	-19.83	46.0	10.28	Peak	148.00	100	Vertical	Pass
6	722.871	36.72	-13.48	46.0	9.28	Peak	163.00	200	Vertical	Pass

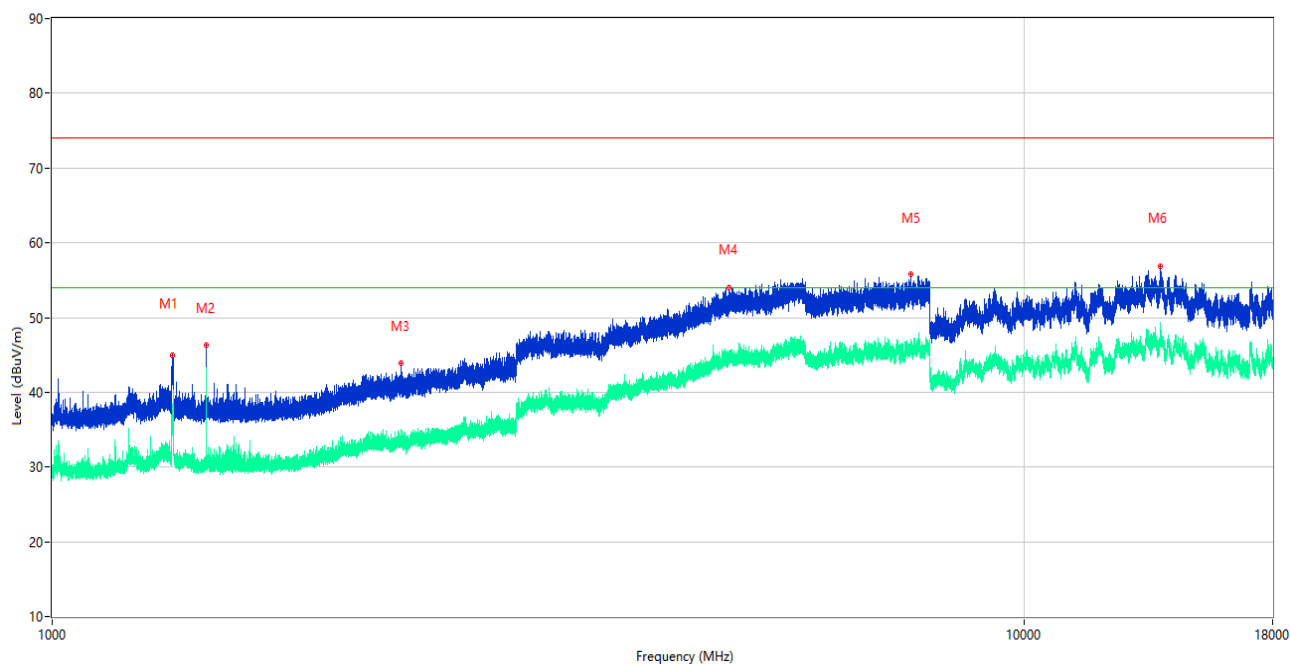
6) Test Antenna Horizontal, 30 MHz – 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	62.637	40.77	-27.19	40.0	-0.77	Peak	177.00	188	Horizontal	N/A
1*	62.637	35.37	-27.19	40.0	4.63	QP	177.00	188	Horizontal	Pass
2	164.102	40.33	-29.36	43.5	3.17	Peak	305.00	200	Horizontal	Pass
3	270.366	37.83	-24.39	46.0	8.17	Peak	225.00	100	Horizontal	Pass
4	316.247	39.47	-23.16	46.0	6.53	Peak	235.00	100	Horizontal	Pass
5	352.913	38.88	-21.84	46.0	7.12	Peak	252.00	100	Horizontal	Pass
6	503.797	35.37	-18.60	46.0	10.63	Peak	272.00	200	Horizontal	Pass

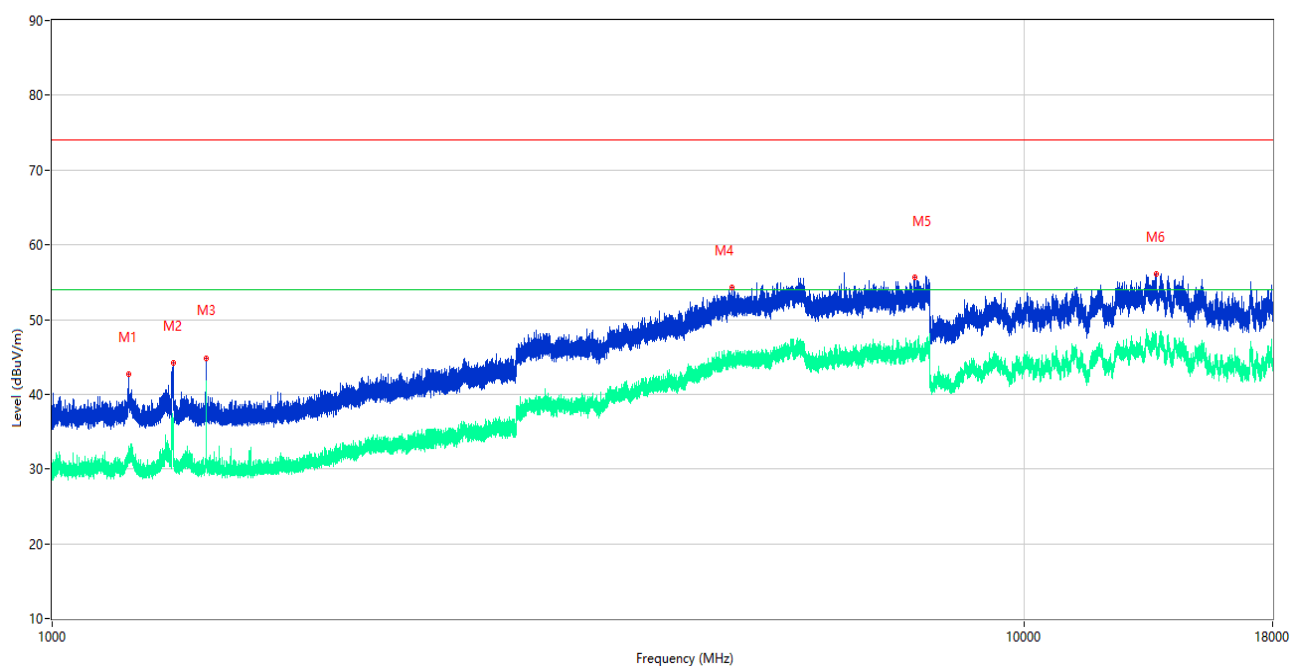
Equipment Information						
Equipment Name	Supplier	Model	Serial No.	Cal. Date	Cal. Due	Use
Frequency Below 1 GHz						
EMI Receiver	Keysight	N9038A	MY55330120	2023.09.05	2024.09.04	☒
Amplifier (30-1GHz)	COM-MV	ZT30-1000M	B2017119081	2023.12.05	2024.12.04	☒
Test Antenna- Bi-Log	SCHWARZB ECK	VULB 9168	9168-00867	2022.04.12	2025.04.11	☒
Anechoic Chamber (#2)	YiHeng	9m*6m*6m	142	2021.08.19	2024.08.18	☒
Description	Supplier	Name	Version	/		Use
Test Software	BALUN	BL410-E	V22.930	/		☒

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	1329.300	44.99	-16.08	74.0	29.01	Peak	16.00	100	Vertical	Pass
1**	1329.300	35.51	-16.08	54.0	18.49	AV	16.00	100	Vertical	Pass
2	1440.100	46.26	-15.96	74.0	27.74	Peak	247.00	100	Vertical	Pass
2**	1440.100	43.23	-15.96	54.0	10.77	AV	247.00	100	Vertical	Pass
3	2284.900	43.96	-11.76	74.0	30.04	Peak	322.00	100	Vertical	Pass
3**	2284.900	33.50	-11.76	54.0	20.50	AV	322.00	100	Vertical	Pass
4	4967.000	53.94	2.40	74.0	20.06	Peak	16.00	100	Vertical	Pass
4**	4967.000	44.22	2.40	54.0	9.78	AV	16.00	100	Vertical	Pass
5	7649.750	55.78	2.35	74.0	18.22	Peak	315.00	100	Vertical	Pass
5**	7649.750	45.96	2.35	54.0	8.04	AV	315.00	100	Vertical	Pass
6	13794.000	56.80	5.54	74.0	17.20	Peak	271.00	100	Vertical	Pass
6**	13794.000	46.97	5.54	54.0	7.03	AV	271.00	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	1199.600	42.68	-16.22	74.0	31.32	Peak	11.00	100	Horizontal	Pass
1**	1199.600	31.31	-16.22	54.0	22.69	AV	11.00	100	Horizontal	Pass
2	1332.500	44.21	-16.12	74.0	29.79	Peak	239.00	100	Horizontal	Pass
2**	1332.500	34.62	-16.12	54.0	19.38	AV	239.00	100	Horizontal	Pass
3	1439.900	44.85	-15.96	74.0	29.15	Peak	328.00	100	Horizontal	Pass
3**	1439.900	41.15	-15.96	54.0	12.85	AV	328.00	100	Horizontal	Pass
4	5000.250	54.25	1.88	74.0	19.75	Peak	33.00	100	Horizontal	Pass
4**	5000.250	44.45	1.88	54.0	9.55	AV	33.00	100	Horizontal	Pass
5	7722.750	55.58	2.20	74.0	18.42	Peak	259.00	100	Horizontal	Pass
5**	7722.750	45.26	2.20	54.0	8.74	AV	259.00	100	Horizontal	Pass
6	13658.500	56.11	4.88	74.0	17.89	Peak	75.00	100	Horizontal	Pass
6**	13658.500	46.66	4.88	54.0	7.34	AV	75.00	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	☒
Amplifier (1-12GHz)	Advanced Microwave	WLA652A	1740103	2023.12.05	2024.12.04	☒
Amplifier (0.8-21GHz)	Mini-Circuits	ZVA-213-S+	225321316	2023.12.05	2024.12.04	☒
Test Antenna- Horn	SCHWARZB ECK	BBHA 9120D	01917	2022.06.09	2025.06.08	☒
Anechoic Chamber (#2)	YiHeng	9m*6m*6m	142	2021.08.19	2024.08.18	☒
Description	Supplier	Name	Version	/		Use
Test Software	BALUN	BL410-E	V22.930	/		☒

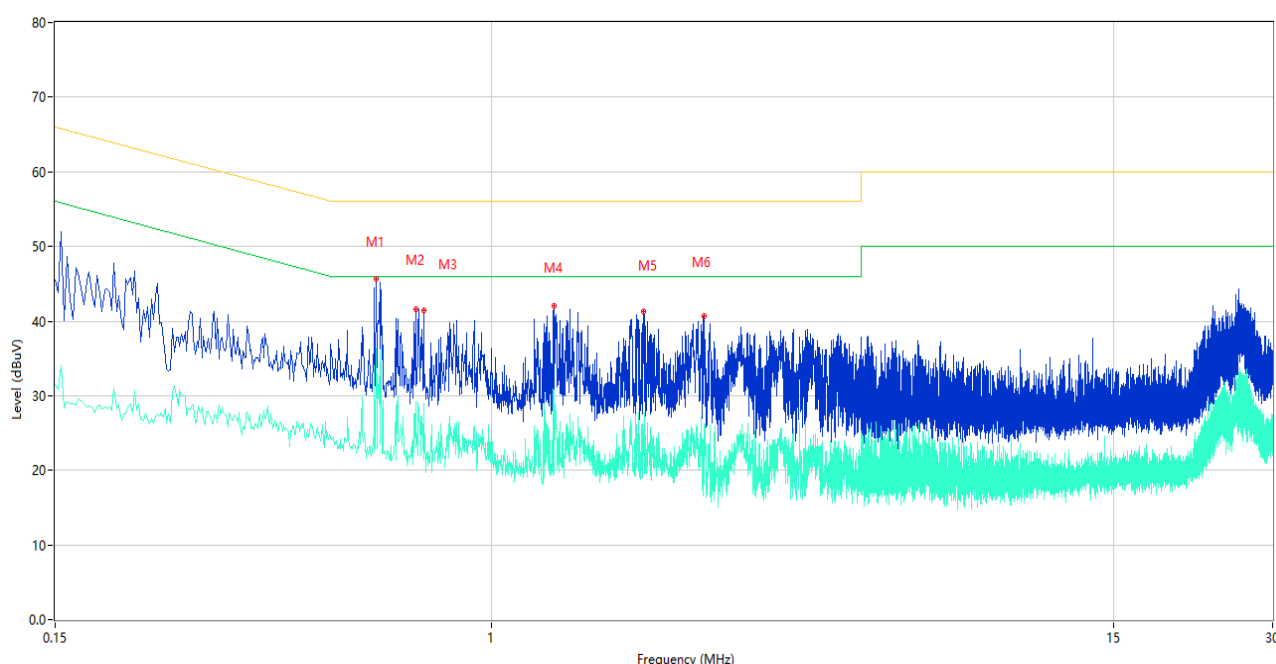
A.2 Conducted Emission, AC Ports

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, 60 Hz) shown here.

Sample No.	S05	Temperature	23.8℃
Humidity	52%RH	Pressure	101kPa
Test Engineer	Yangyang	Test Date	2024.07.01

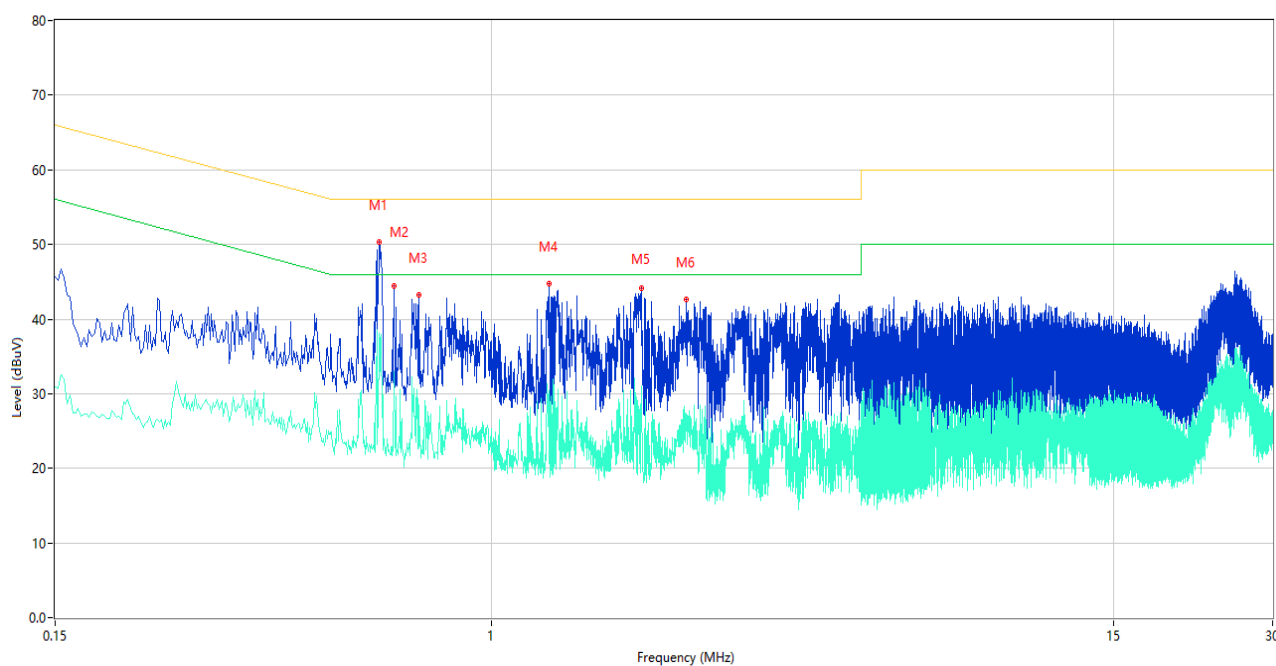
Test Mode 1

1) AC Ports - L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.606	45.58	10.66	56.00	10.42	Peak	L	Pass
1**	0.606	36.34	10.66	46.00	9.66	AV	L	Pass
2	0.720	41.57	10.51	56.00	14.43	Peak	L	Pass
2**	0.720	29.18	10.51	46.00	16.82	AV	L	Pass
3	0.746	41.46	10.13	56.00	14.54	Peak	L	Pass
3**	0.746	28.93	10.13	46.00	17.07	AV	L	Pass
4	1.316	42.10	10.54	56.00	13.90	Peak	L	Pass
4**	1.316	30.68	10.54	46.00	15.32	AV	L	Pass
5	1.940	41.29	10.28	56.00	14.71	Peak	L	Pass
5**	1.940	24.01	10.28	46.00	21.99	AV	L	Pass
6	2.522	40.72	10.52	56.00	15.28	Peak	L	Pass
6**	2.522	26.19	10.52	46.00	19.81	AV	L	Pass

2) AC Ports - N Phase

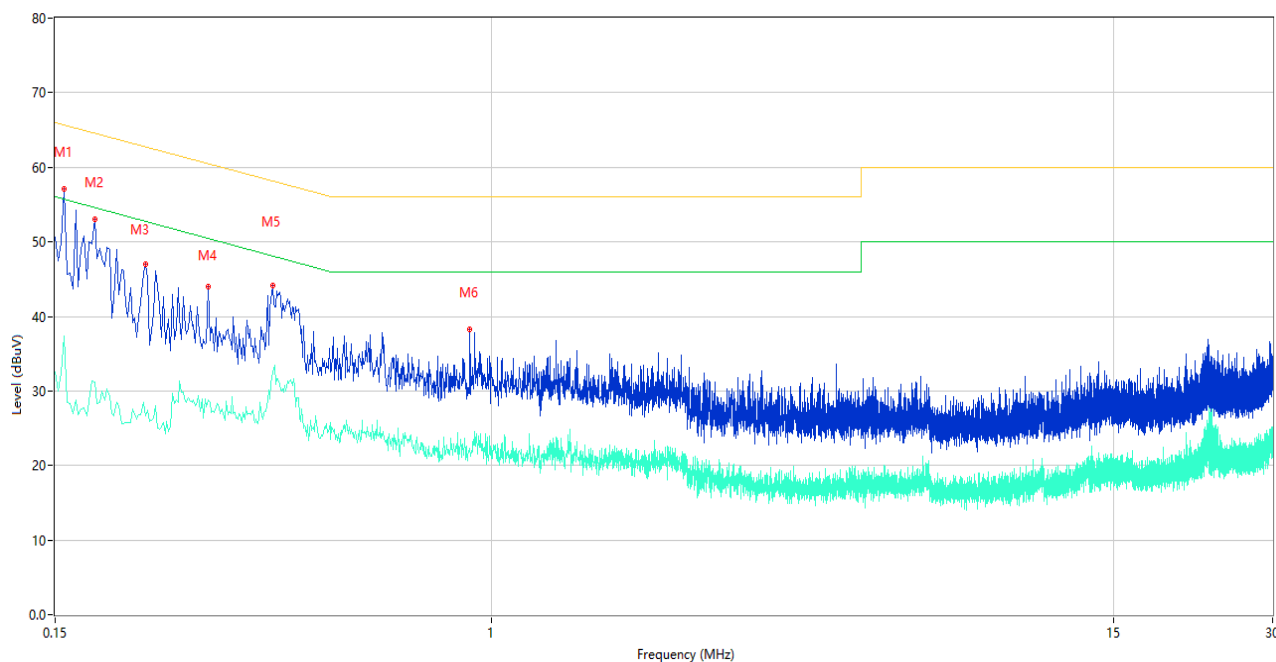


No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.614	50.35	10.61	56.00	5.65	Peak	N	Pass
1**	0.614	38.12	10.61	46.00	7.88	AV	N	Pass
2	0.656	44.43	10.41	56.00	11.57	Peak	N	Pass
2**	0.656	32.94	10.41	46.00	13.06	AV	N	Pass
3	0.732	43.27	10.34	56.00	12.73	Peak	N	Pass
3**	0.732	28.50	10.34	46.00	17.50	AV	N	Pass
4	1.288	44.75	10.43	56.00	11.25	Peak	N	Pass
4**	1.288	30.40	10.43	46.00	15.60	AV	N	Pass
5	1.924	44.21	10.31	56.00	11.79	Peak	N	Pass
5**	1.924	30.99	10.31	46.00	15.01	AV	N	Pass
6	2.342	42.60	10.57	56.00	13.40	Peak	N	Pass
6**	2.342	26.69	10.57	46.00	19.31	AV	N	Pass

Sample No.	S05	Temperature	23.8℃
Humidity	52%RH	Pressure	101kPa
Test Engineer	Yangyang	Test Date	2024.07.01

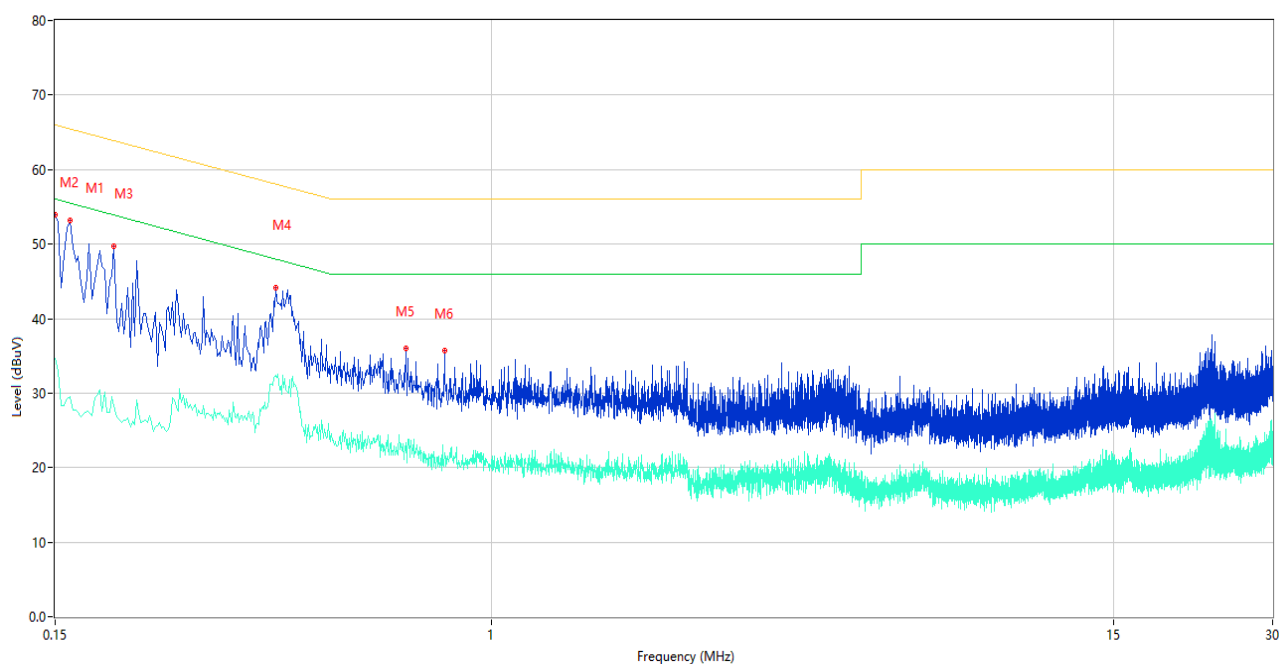
Test Mode 5

3) AC Ports - L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.156	57.08	10.11	65.67	8.59	Peak	L	Pass
1**	0.156	37.34	10.11	55.67	18.33	AV	L	Pass
2	0.178	53.06	10.09	64.58	11.52	Peak	L	Pass
2**	0.178	31.21	10.09	54.58	23.37	AV	L	Pass
3	0.222	46.97	10.06	62.74	15.77	Peak	L	Pass
3**	0.222	26.61	10.06	52.74	26.13	AV	L	Pass
4	0.292	44.03	10.09	60.47	16.44	Peak	L	Pass
4**	0.292	28.78	10.09	50.47	21.69	AV	L	Pass
5	0.386	44.19	10.49	58.15	13.96	Peak	L	Pass
5**	0.386	32.53	10.49	48.15	15.62	AV	L	Pass
6	0.912	38.22	10.32	56.00	17.78	Peak	L	Pass
6**	0.912	22.27	10.32	46.00	23.73	AV	L	Pass

4) AC Ports - N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.150	53.99	10.12	66.00	12.01	Peak	N	Pass
1**	0.150	34.63	10.12	56.00	21.37	AV	N	Pass
2	0.160	53.19	10.11	65.46	12.27	Peak	N	Pass
2**	0.160	29.56	10.11	55.46	25.90	AV	N	Pass
3	0.194	49.77	10.07	63.86	14.09	Peak	N	Pass
3**	0.194	28.36	10.07	53.86	25.50	AV	N	Pass
4	0.392	44.18	10.57	58.02	13.84	Peak	N	Pass
4**	0.392	32.39	10.57	48.02	15.63	AV	N	Pass
5	0.690	36.04	10.72	56.00	19.96	Peak	N	Pass
5**	0.690	23.34	10.72	46.00	22.66	AV	N	Pass
6	0.816	35.65	10.12	56.00	20.35	Peak	N	Pass
6**	0.816	21.92	10.12	46.00	24.08	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	☒
LISN	SCHWARZBECK	NSLK 8127	8127-687	2024.05.09	2025.05.08	☒
ISN	TESEQ	ISN T800	34449	2023.11.10	2024.11.09	☐
ISN	TESEQ	ISN T8-Cat6	53561	2024.04.24	2025.04.23	☐
Shielded Room	YiHeng Electronic Co., Ltd	3.5m*3.1m*2.8m	112	2022.02.19	2025.02.18	☒
Description	Supplier	Name	Version	/		Use
Test Software	BALUN	BL410-E	V22.930	/		☒

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SZ2460952-AE-1.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2460952-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SZ2460952-AI.PDF”.

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--END OF REPORT--