

TEST REPORT

Applicant: Realme Chongqing Mobile Telecommunications Corp., Ltd.
Address: No.178 Yulong Avenue, Yufengshan, Yubei District, Chongqing, China
Equipment Type: Mobile Phone
Model Name: RMX3943
Brand Name: realme
FCC ID: 2AUYFRMX3943
Test Standard: 47 CFR Part 15 Subpart B
ANSI C63.4-2014
Sample Arrival Date: Sep. 26, 2024
Test Date: Sep. 30, 2024 - Oct. 22, 2024
Date of Issue: Nov. 18, 2024

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Zhang Guoxi **Checked by:** Liu Zhenxiang **Approved by:** Tolan Tu
(Testing Director)

Zhang Guoxi

Liu zhen xiang

Tolan Tu

Revision History		
Version	Issue Date	Revisions
<u>Rev. 01</u>	<u>Nov. 18, 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.....	5
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	10
5	TEST ITEMS	12
5.1	Emission Tests	12
ANNEX A	TEST RESULTS.....	17
A.1	Radiated Emission.....	17
A.2	Conducted Emission, AC Ports.....	30
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	<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	Realme Chongqing Mobile Telecommunications Corp., Ltd.
Address	No.178 Yulong Avenue, Yufengshan, Yubei District, Chongqing, China

2.2 Manufacturer Information

Manufacturer	Realme Chongqing Mobile Telecommunications Corp., Ltd.
Address	No.178 Yulong Avenue, Yufengshan, Yubei District, Chongqing, China

2.3 General Description for Equipment under Test (EUT)

EUT Name	Mobile Phone
Model Name Under Test	RMX3943
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	11
Software Version	realme UI 6.0
Dimensions (Approx.)	about 165.70x76.22x7.94(mm)
Weight (Approx.)	about 190g
EUT ID	S01, S02, S16
IMEI Number	S01: IMEI1: 860836070022476 IMEI2: 860836070022468
	S02: IMEI1: 860836070022310 IMEI2: 860836070022302
	S16: IMEI1: 860836070022039 IMEI2: 860836070022021

2.4 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	realme
	Model No.	BLPB21
	Serial No.	N/A
	Capacitance	Rated: 4880mAh/19.09Wh Typical: 5000mAh/19.55Wh
	Rated Voltage	3.91V
	Limited Voltage	4.48 V
	Manufacturer	Dongguan NVT Technology Co., Ltd
Ancillary Equipment 2	Adapter 1	
	Brand Name	SUPERVOOC
	Model No.	OP52JCUH (US Plug)

	Serial No.	N/A
	Rated Input	100-240V~50-60Hz 0.4A
	Rated Output	5VDC 2A
	Manufacturer	Jiangsu Chenyang Electron Co.,Ltd.
Ancillary Equipment 3	Adapter 2	
	Brand Name	SUPERVOOC
	Model No.	OP53JAUH (US Plug)
	Serial No.	N/A
	Rated Input	100-240V~50-60Hz 0.5A
	Rated Output	5VDC 3A
	Manufacturer	Huizhou Golden Lake Industrial Co., Ltd.
Ancillary Equipment 4	Adapter 3	
	Brand Name	SUPERVOOC
	Model No.	OP53JAUH (US Plug)
	Serial No.	N/A
	Rated Input	100-240V~50-60Hz 0.5A
	Rated Output	5VDC 3A
	Manufacturer	Jiangsu Chenyang Electron Co.,Ltd.
Ancillary Equipment 5	USB Cable 1	
	Model No.	DL154
	Length (Approx.)	1.0 m
<p>Note 1: Letter in () means plug type.</p> <p>Note 2: All adapters have been tested, and the report only reflects the worst adapter data. Among them, the worst adapter for Conducted Emissions is OP53JAUH (Huizhou Golden Lake Industrial Co., Ltd.), and the worst adapter for Radiated Emission is OP52JCUH (Jiangsu Chenyang Electron Co.,Ltd.).</p>		

2.5 Technical Information

<p>Network and Wireless connectivity</p>	<p>2G Network GSM/GPRS/EDGE 850/1900 3G Network WCDMA/HSDPA/HSUPA Band 2/4/5 4G Network LTE FDD Band 2/4/5/7/12/13/17/26/66 LTE TDD Band 38/41 LTE CA Uplink (UL): CA_7C, CA_38C, CA_41C, CA_4A-7A 5G Network SA: NR n5/n7/n38/n41/n66 NSA(EN-DC): DC_66A_n5A, DC_7A_n5A, DC_2A_n7A, DC_4A_n7A, DC_5A_n7A, DC_66A_n7A, DC_4A_n38A, DC_5A_n38A, DC_66A_n38A, DC_4A_n41A, DC_26A_n41A, DC_66A_n41A, DC_2A_n66A, DC_5A_n66A, DC_7A_n66A, DC_12A_n66A 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, NFC</p>
<p>Classification of equipment</p>	<p>Class B</p>
<p>The highest internal frequency of EUT</p>	<p>5850 MHz</p>

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 (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
Laptop	Lenovo	ThinkPad E495	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"/>
TF Card	SAMSUNG	MB-MD256KA	N/A	N/A	256G	<input checked="" type="checkbox"/>
Headset	OPPO	MH135	N/A	1.12m	N/A	<input checked="" type="checkbox"/>
Type-C Headset	OPPO	MH156	N/A	1.12m	N/A	<input checked="" type="checkbox"/>

4.2 Test Configurations

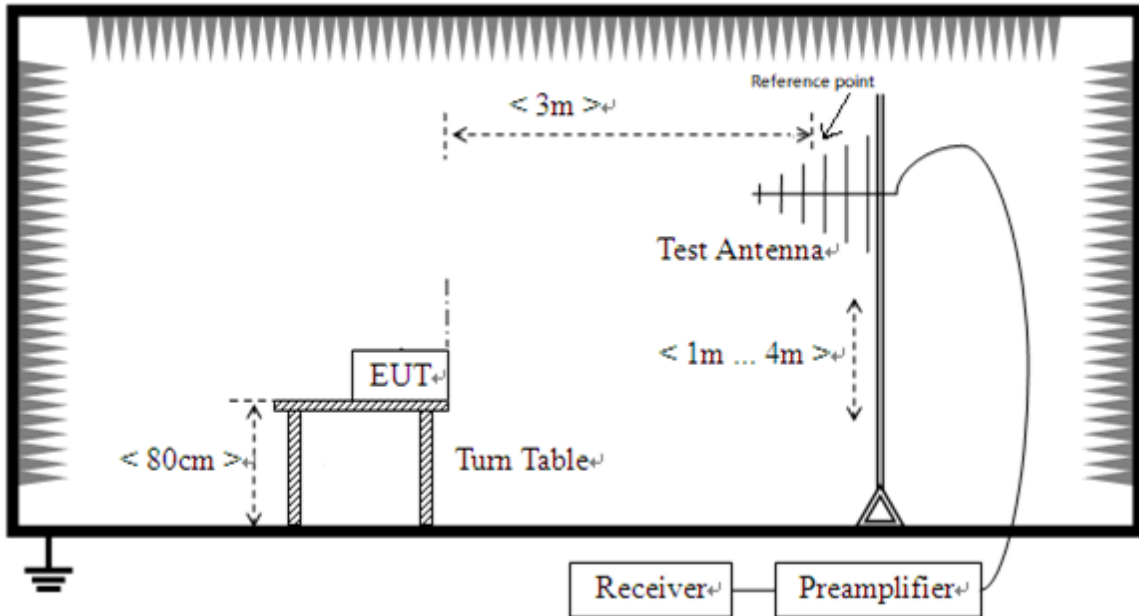
All test modes of EUT are listed in the table below.

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

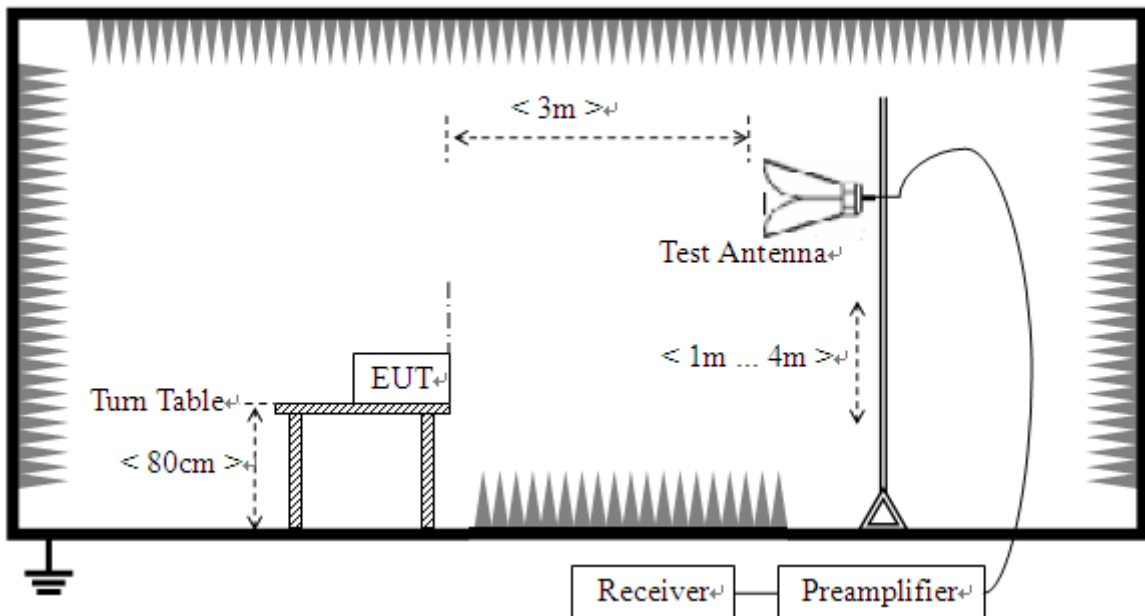
Test Case	Test Mode Configuration	Worst Mode
Radiated Emission	Mode 1~Mode 8	3, 5
Conducted Emission, AC Ports	Mode 1~Mode 6	4, 5
Note: All operation modes were tested, but only test data of the worst mode was presented in this report.		

4.3 Test Setups

Test Setup 1

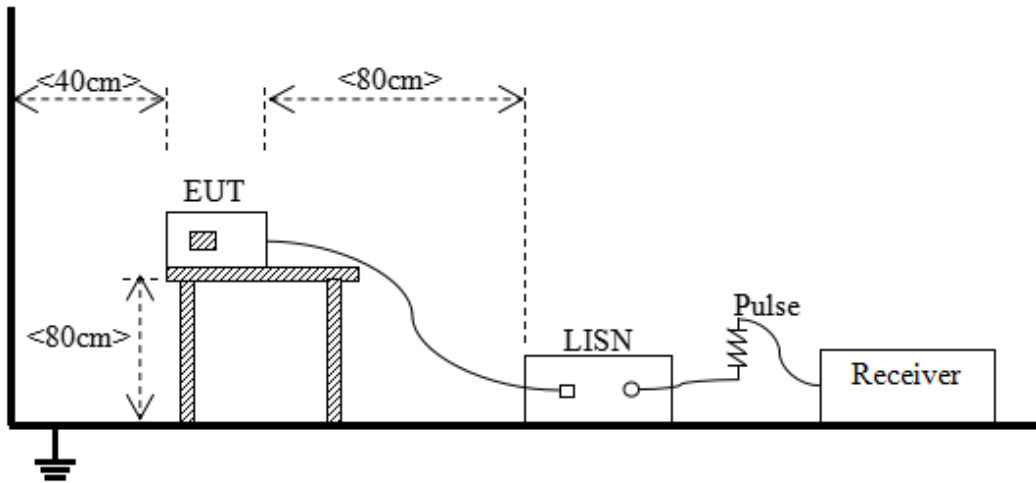


Radiated Emission (30 MHz-1 GHz)



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*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 _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*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° 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 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.

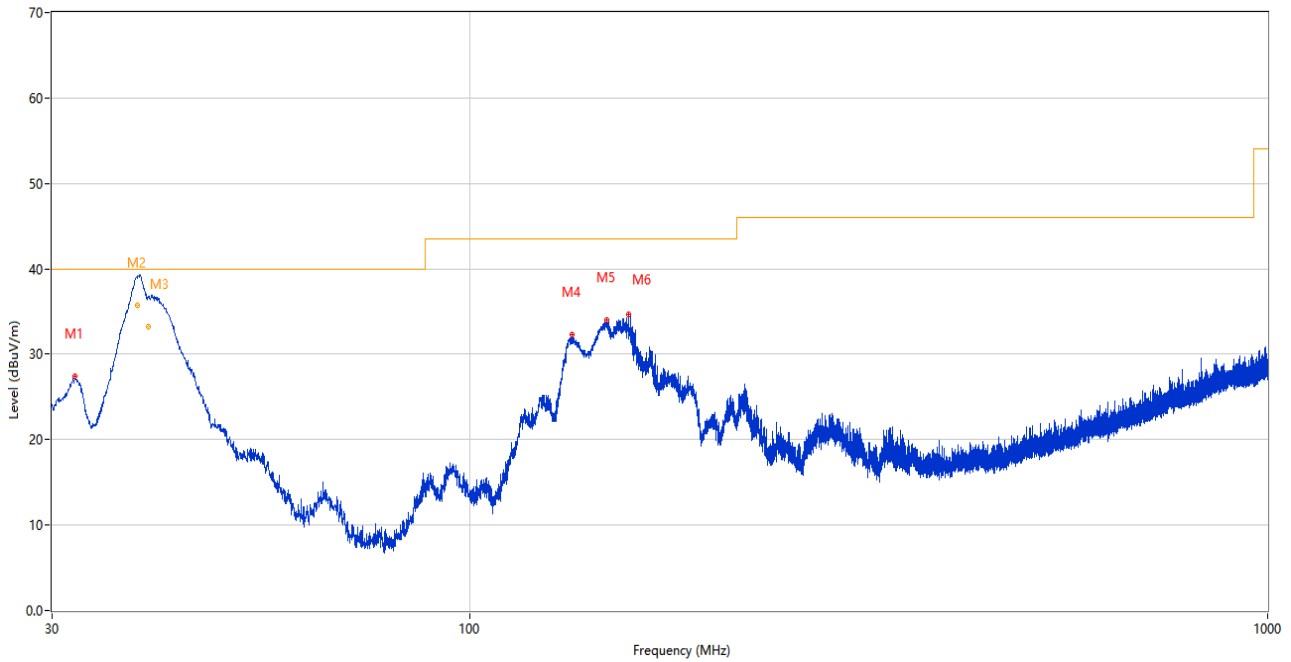
Note 2: For the test data above 1 GHz, according the ANSI C63.4-2014, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

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.	S16	Temperature	22.7°C
Humidity	46%RH	Pressure	101kPa
Test Engineer	He Shichang	Test Date	2024.10.12

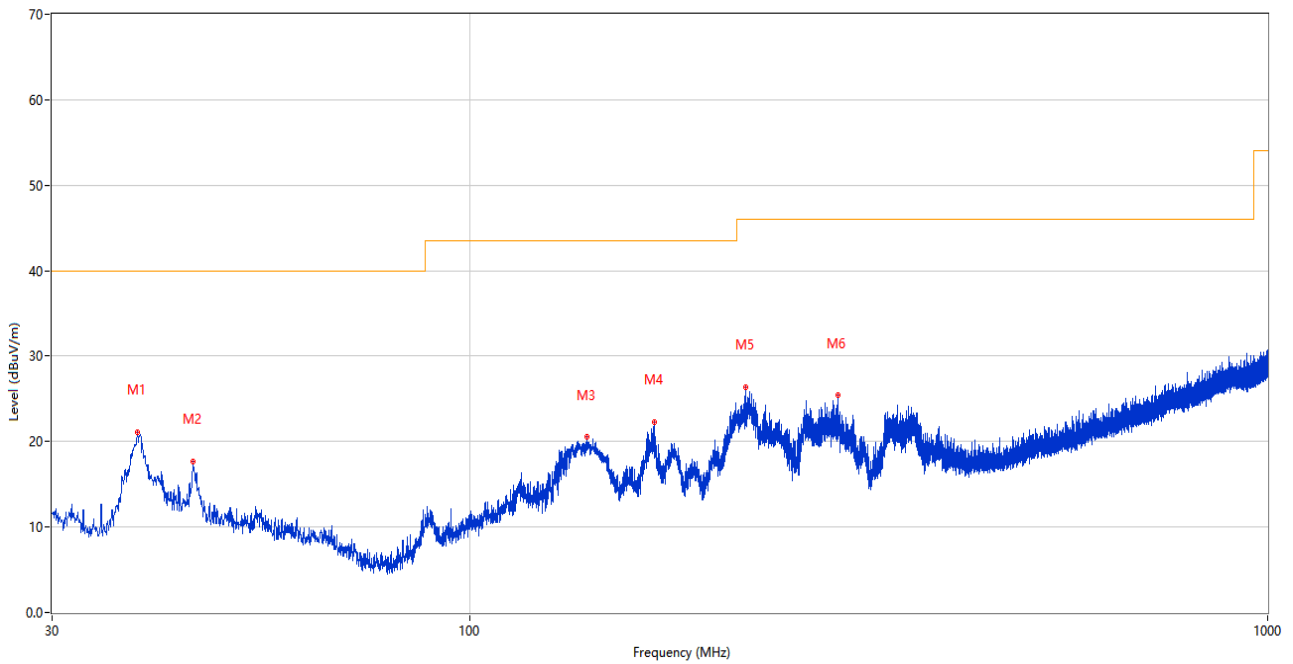
Test Mode 3

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	32.085	27.42	-29.03	40.0	12.58	Peak	148.00	100	Vertical	Pass
2	38.327	38.26	-27.04	40.0	1.74	Peak	212.00	101	Vertical	N/A
2*	38.327	35.75	-27.04	40.0	4.25	QP	212.00	101	Vertical	Pass
3	39.656	35.44	-26.68	40.0	4.56	Peak	208.00	101	Vertical	N/A
3*	39.656	33.21	-26.68	40.0	6.79	QP	208.00	101	Vertical	Pass
4	134.469	32.26	-29.97	43.5	11.24	Peak	280.00	100	Vertical	Pass
5	148.486	33.96	-30.11	43.5	9.54	Peak	296.00	100	Vertical	Pass
6	158.137	34.72	-29.71	43.5	8.78	Peak	241.00	100	Vertical	Pass

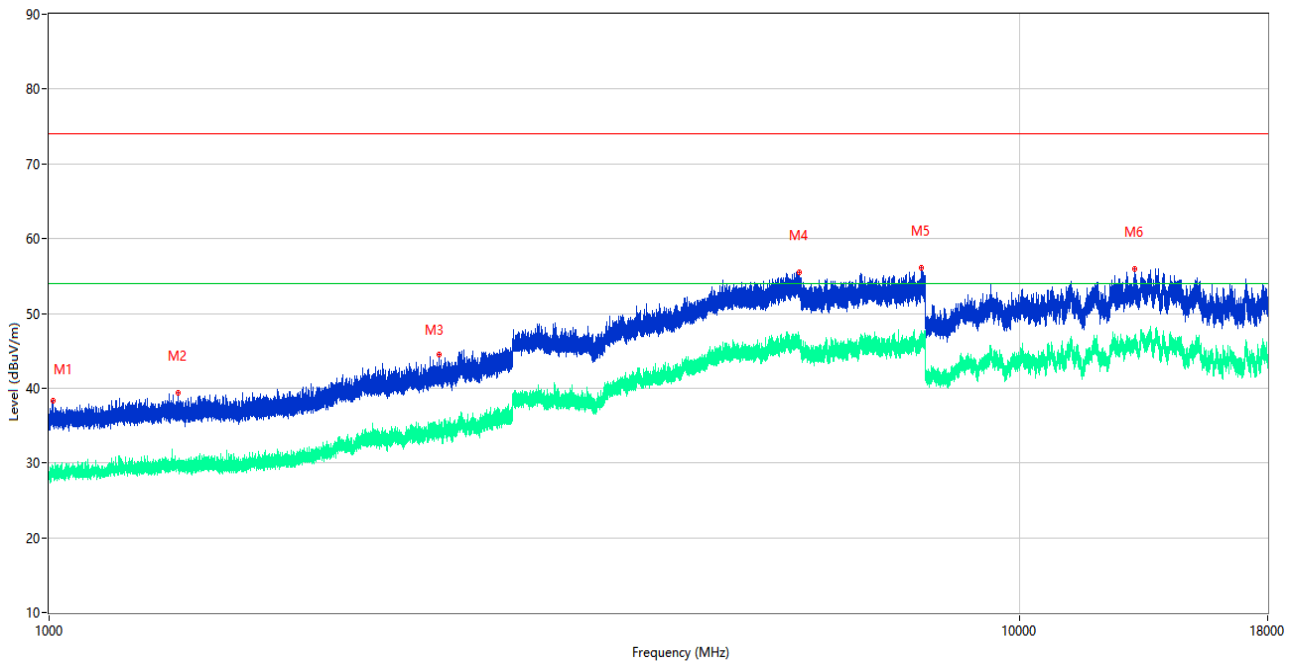
2) Test Antenna Horizontal, 30 MHz – 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	38.391	21.13	-27.11	40.0	18.87	Peak	98.00	200	Horizontal	Pass
2	45.084	17.63	-25.53	40.0	22.37	Peak	21.00	100	Horizontal	Pass
3	140.386	20.50	-30.29	43.5	23.00	Peak	0.00	200	Horizontal	Pass
4	170.553	22.26	-29.17	43.5	21.24	Peak	270.00	200	Horizontal	Pass
5	221.915	26.33	-26.13	46.0	19.67	Peak	59.00	100	Horizontal	Pass
6	289.330	25.51	-23.93	46.0	20.49	Peak	69.00	100	Horizontal	Pass

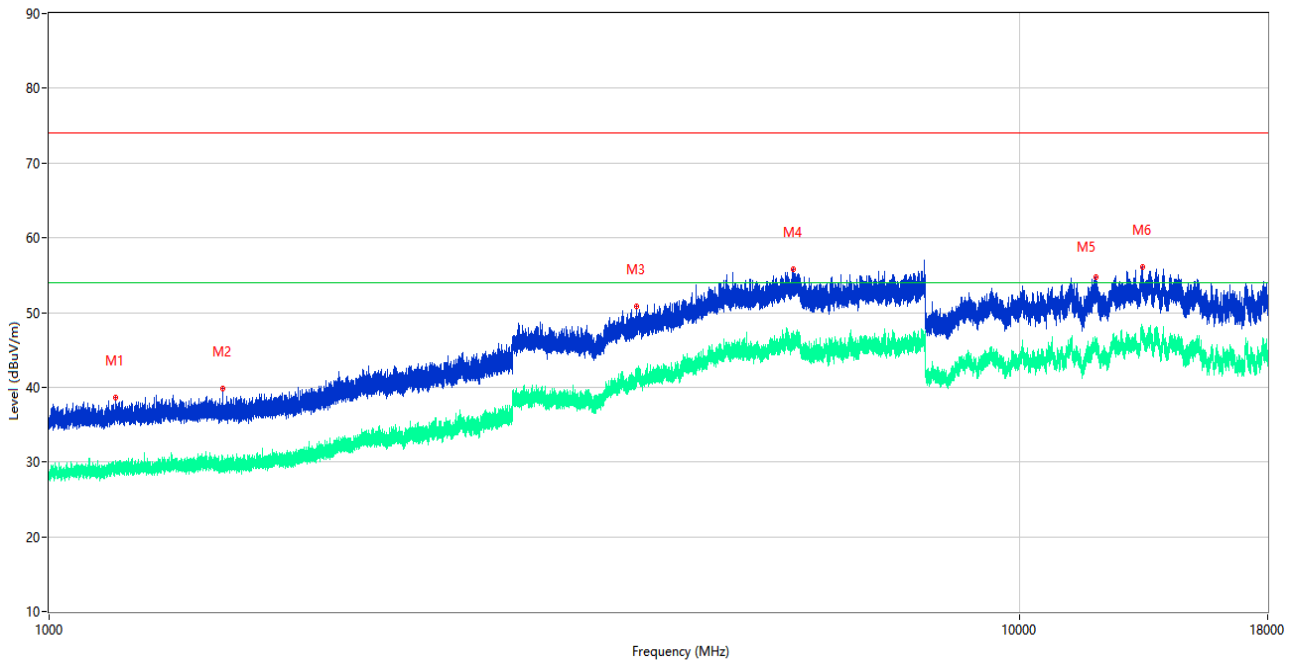
Equipment Information						
Equipment Name	Supplier	Model	Serial No.	Cal. Date	Cal. Due	Use
Frequency Below 1 GHz						
EMI Receiver	Keysight	N9038A	MY55330120	2024.08.01	2025.07.31	<input checked="" type="checkbox"/>
Amplifier (30MHz-1GHz)	COM-MV	ZT30-1000M	B2017119081	2023.12.05	2024.12.04	<input checked="" 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	2024.07.21	2027.07.20	<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 – 6 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1010.400	38.26	-15.94	74.0	35.74	Peak	-1.00	100	Vertical	Pass
1**	1010.400	28.45	-15.94	54.0	25.55	AV	-1.00	100	Vertical	Pass
2	1359.000	39.33	-16.10	74.0	34.67	Peak	220.00	100	Vertical	Pass
2**	1359.000	29.29	-16.10	54.0	24.71	AV	220.00	100	Vertical	Pass
3	2519.500	44.54	-10.11	74.0	29.46	Peak	0.00	100	Vertical	Pass
3**	2519.500	34.89	-10.11	54.0	19.11	AV	0.00	100	Vertical	Pass
4	5932.250	55.50	2.95	74.0	18.50	Peak	195.00	100	Vertical	Pass
4**	5932.250	45.27	2.95	54.0	8.73	AV	195.00	100	Vertical	Pass
5	7917.500	56.10	2.88	74.0	17.90	Peak	122.00	100	Vertical	Pass
5**	7917.500	46.85	2.88	54.0	7.15	AV	122.00	100	Vertical	Pass
6	13143.500	55.97	4.20	74.0	18.03	Peak	58.00	100	Vertical	Pass
6**	13143.500	46.30	4.20	54.0	7.70	AV	58.00	100	Vertical	Pass

4) Test Antenna Horizontal, 1 GHz – 6 GHz

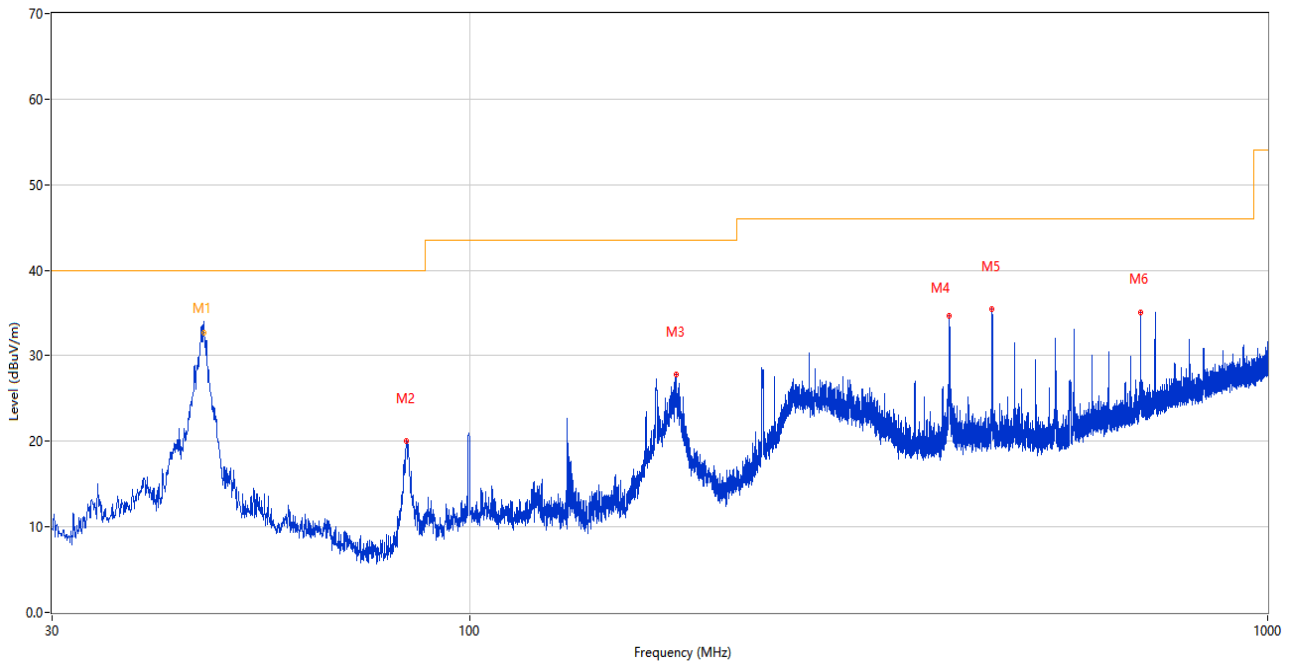


No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1170.500	38.59	-16.17	74.0	35.41	Peak	21.00	100	Horizontal	Pass
1**	1170.500	29.21	-16.17	54.0	24.79	AV	21.00	100	Horizontal	Pass
2	1508.700	39.77	-16.01	74.0	34.23	Peak	209.00	100	Horizontal	Pass
2**	1508.700	29.62	-16.01	54.0	24.38	AV	209.00	100	Horizontal	Pass
3	4029.750	50.76	-1.90	74.0	23.24	Peak	181.00	100	Horizontal	Pass
3**	4029.750	40.82	-1.90	54.0	13.18	AV	181.00	100	Horizontal	Pass
4	5837.250	55.73	3.89	74.0	18.27	Peak	342.00	100	Horizontal	Pass
4**	5837.250	46.94	3.89	54.0	7.06	AV	342.00	100	Horizontal	Pass
5	11990.000	54.77	2.63	74.0	19.23	Peak	258.00	100	Horizontal	Pass
5**	11990.000	44.89	2.63	54.0	9.11	AV	258.00	100	Horizontal	Pass
6	13377.000	56.15	5.05	74.0	17.85	Peak	29.00	100	Horizontal	Pass
6**	13377.000	46.51	5.05	54.0	7.49	AV	29.00	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	2024.08.01	2025.07.31	<input checked="" type="checkbox"/>
EMI Receiver	R&S	FSV-40	101544	2023.12.27	2024.12.26	<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"/>
Amplifier (18-40GHz)	COM-MV	KA_LNA18- 40G-01	18050001	2024.06.15	2027.06.14	<input checked="" type="checkbox"/>
Test Antenna- Horn	SCHWARZB ECK	BBHA 9120D	01917	2022.06.09	2025.06.08	<input checked="" type="checkbox"/>
Test Antenna- Horn	A-INFOMW	LB-180400KF	J211060273	2024.06.15	2027.06.14	<input checked="" type="checkbox"/>
Anechoic Chamber (#2)	YiHeng	9m*6m*6m	142	2024.07.21	2027.07.20	<input checked="" type="checkbox"/>
Description	Supplier	Name	Version	/		Use
Test Software	BALUN	BL410-E	V22.930	/		<input checked="" type="checkbox"/>

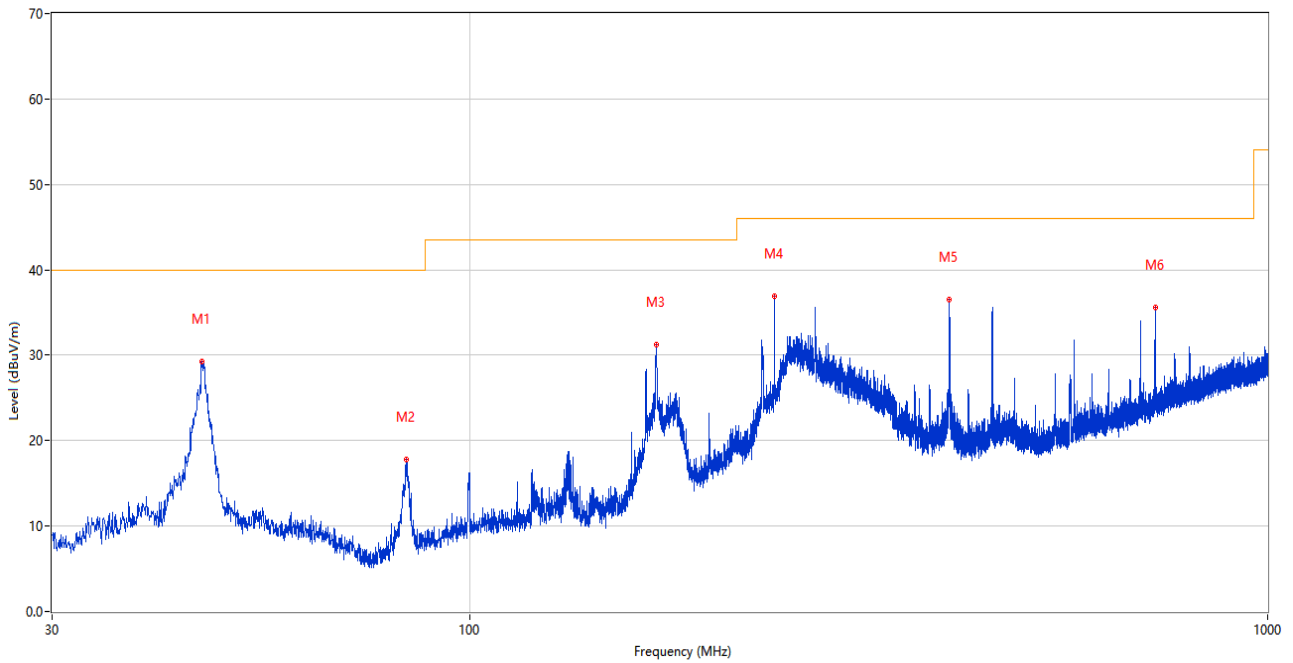
Test Mode 5

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	46.536	35.46	-25.56	40.0	4.54	Peak	17.00	101	Vertical	N/A
1*	46.536	32.69	-25.56	40.0	7.31	QP	17.00	101	Vertical	Pass
2	83.447	20.02	-30.33	40.0	19.98	Peak	335.00	100	Vertical	Pass
3	181.562	27.88	-28.39	43.5	15.62	Peak	122.00	100	Vertical	Pass
4	398.697	34.72	-21.00	46.0	11.28	Peak	118.00	100	Vertical	Pass
5	451.805	35.51	-19.84	46.0	10.49	Peak	145.00	100	Vertical	Pass
6	693.140	35.12	-14.16	46.0	10.88	Peak	101.00	100	Vertical	Pass

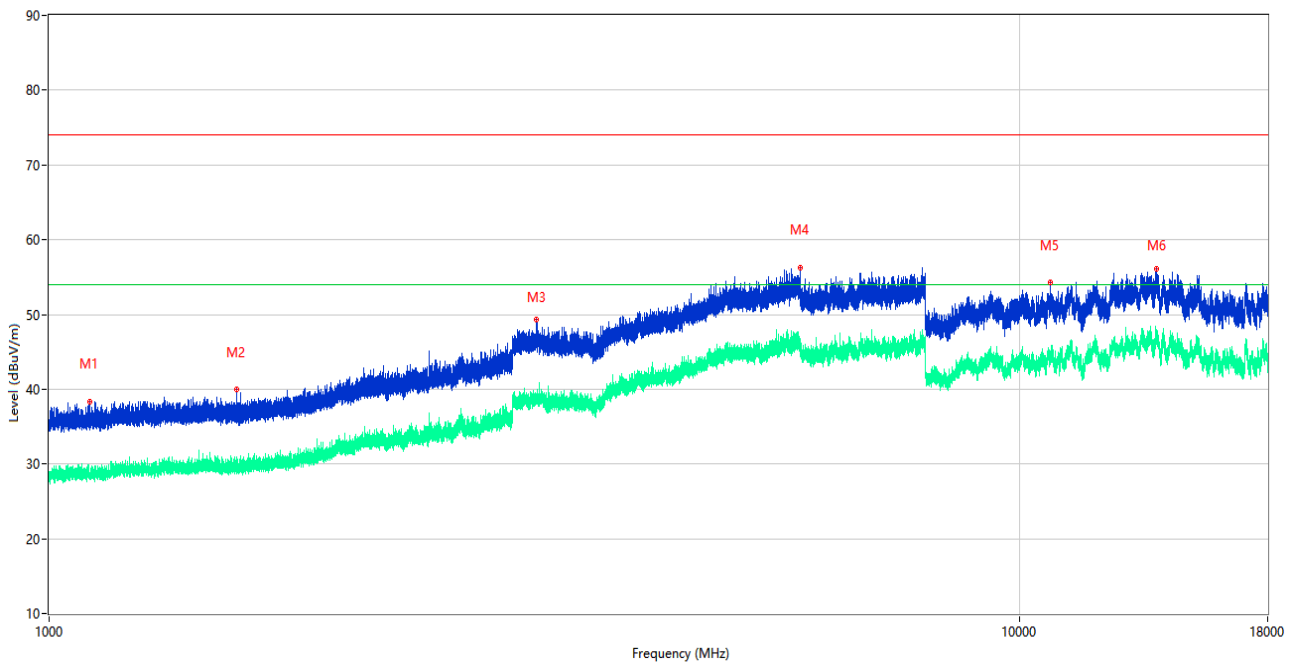
6) Test Antenna Horizontal, 30 MHz – 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	46.199	29.26	-25.55	40.0	10.74	Peak	267.00	200	Horizontal	Pass
2	83.301	17.81	-30.37	40.0	22.19	Peak	72.00	200	Horizontal	Pass
3	171.378	31.25	-29.11	43.5	12.25	Peak	185.00	200	Horizontal	Pass
4	241.169	36.89	-25.08	46.0	9.11	Peak	52.00	100	Horizontal	Pass
5	398.649	36.48	-21.00	46.0	9.52	Peak	217.00	100	Horizontal	Pass
6	722.871	35.59	-13.48	46.0	10.41	Peak	99.00	200	Horizontal	Pass

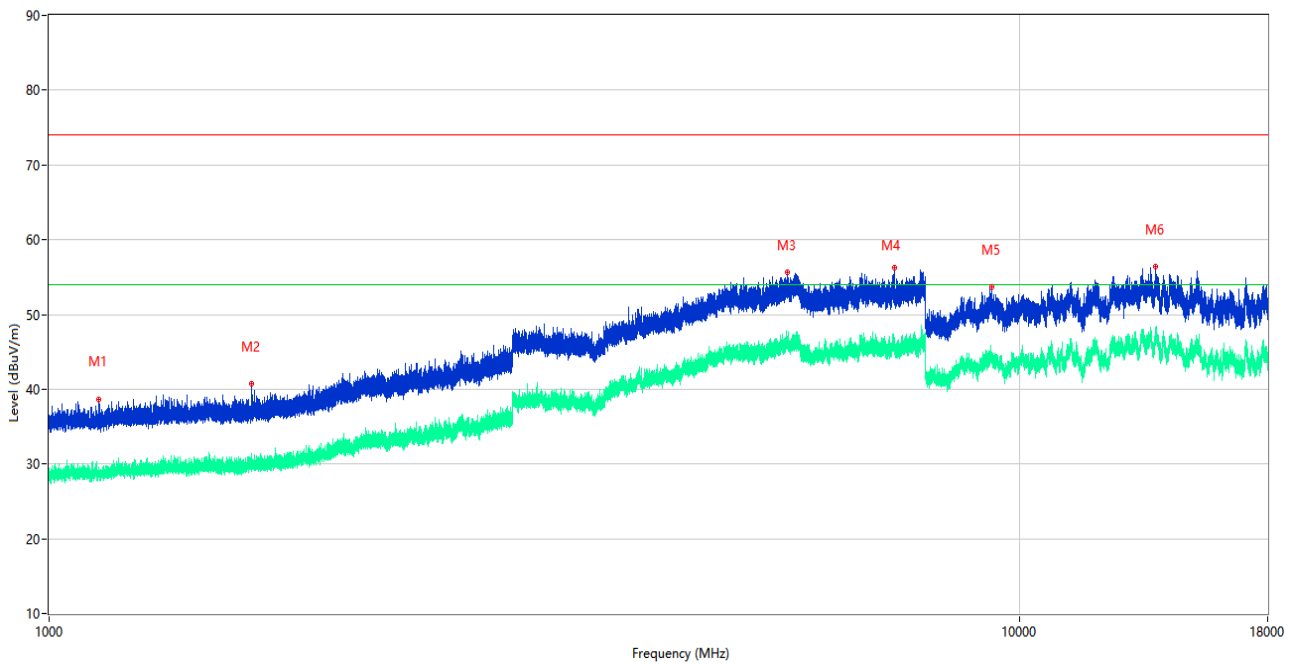
Equipment Information						
Equipment Name	Supplier	Model	Serial No.	Cal. Date	Cal. Due	Use
Frequency Below 1 GHz						
EMI Receiver	Keysight	N9038A	MY55330120	2024.08.01	2025.07.31	<input checked="" type="checkbox"/>
Amplifier (30MHz-1GHz)	COM-MV	ZT30-1000M	B2017119081	2023.12.05	2024.12.04	<input checked="" 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	2024.07.21	2027.07.20	<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 – 6 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1100.200	38.38	-16.32	74.0	35.62	Peak	281.00	100	Vertical	Pass
1**	1100.200	28.59	-16.32	54.0	25.41	AV	281.00	100	Vertical	Pass
2	1560.700	39.99	-16.00	74.0	34.01	Peak	175.00	100	Vertical	Pass
2**	1560.700	29.19	-16.00	54.0	24.81	AV	175.00	100	Vertical	Pass
3	3177.750	49.33	-3.63	74.0	24.67	Peak	45.00	100	Vertical	Pass
3**	3177.750	38.67	-3.63	54.0	15.33	AV	45.00	100	Vertical	Pass
4	5936.750	56.31	2.82	74.0	17.69	Peak	280.00	100	Vertical	Pass
4**	5936.750	45.85	2.82	54.0	8.15	AV	280.00	100	Vertical	Pass
5	10748.500	54.27	0.51	74.0	19.73	Peak	238.00	100	Vertical	Pass
5**	10748.500	44.94	0.51	54.0	9.06	AV	238.00	100	Vertical	Pass
6	13814.000	56.13	5.63	74.0	17.87	Peak	-1.00	100	Vertical	Pass
6**	13814.000	46.85	5.63	54.0	7.15	AV	-1.00	100	Vertical	Pass

8) Test Antenna Horizontal, 1 GHz – 6 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1125.800	38.68	-16.28	74.0	35.32	Peak	284.00	100	Horizontal	Pass
1**	1125.800	28.69	-16.28	54.0	25.31	AV	284.00	100	Horizontal	Pass
2	1617.800	40.73	-15.98	74.0	33.27	Peak	73.00	100	Horizontal	Pass
2**	1617.800	29.85	-15.98	54.0	24.15	AV	73.00	100	Horizontal	Pass
3	5758.500	55.58	3.35	74.0	18.42	Peak	192.00	100	Horizontal	Pass
3**	5758.500	46.94	3.35	54.0	7.06	AV	192.00	100	Horizontal	Pass
4	7420.250	56.18	3.04	74.0	17.82	Peak	18.00	100	Horizontal	Pass
4**	7420.250	45.28	3.04	54.0	8.72	AV	18.00	100	Horizontal	Pass
5	9359.000	53.73	2.07	74.0	20.27	Peak	290.00	100	Horizontal	Pass
5**	9359.000	43.85	2.07	54.0	10.15	AV	290.00	100	Horizontal	Pass
6	13811.000	56.44	5.67	74.0	17.56	Peak	58.00	100	Horizontal	Pass
6**	13811.000	47.42	5.67	54.0	6.58	AV	58.00	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	2024.08.01	2025.07.31	<input checked="" type="checkbox"/>
EMI Receiver	R&S	FSV-40	101544	2023.12.27	2024.12.26	<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"/>
Amplifier (18-40GHz)	COM-MV	KA_LNA18- 40G-01	18050001	2024.06.15	2027.06.14	<input checked="" type="checkbox"/>
Test Antenna- Horn	SCHWARZB ECK	BBHA 9120D	01917	2022.06.09	2025.06.08	<input checked="" type="checkbox"/>
Test Antenna- Horn	A-INFOMW	LB-180400KF	J211060273	2024.06.15	2027.06.14	<input checked="" type="checkbox"/>
Anechoic Chamber (#2)	YiHeng	9m*6m*6m	142	2024.07.21	2027.07.20	<input checked="" type="checkbox"/>
Description	Supplier	Name	Version	/		Use
Test Software	BALUN	BL410-E	V22.930	/		<input checked="" type="checkbox"/>

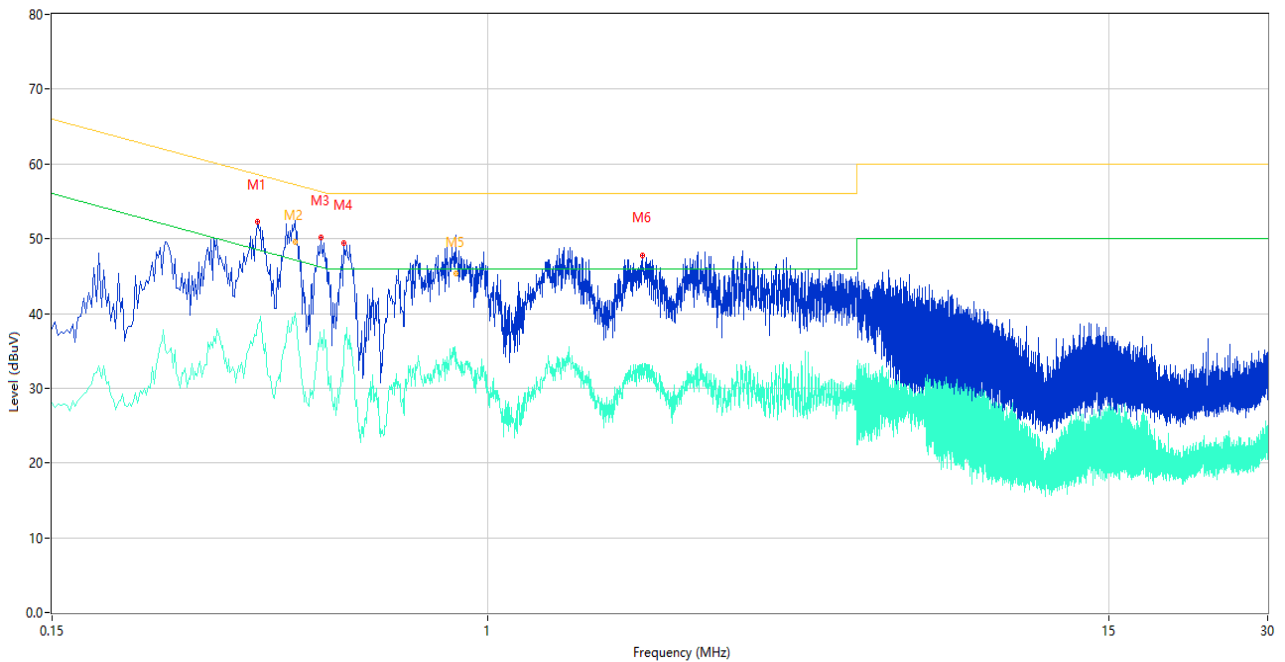
A.2 Conducted Emission, AC Ports

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, 60 Hz) shown here.

Sample No.	S01	Temperature	23.2°C
Humidity	52%RH	Pressure	101kPa
Test Engineer	Yang Yang	Test Date	2024.10.12

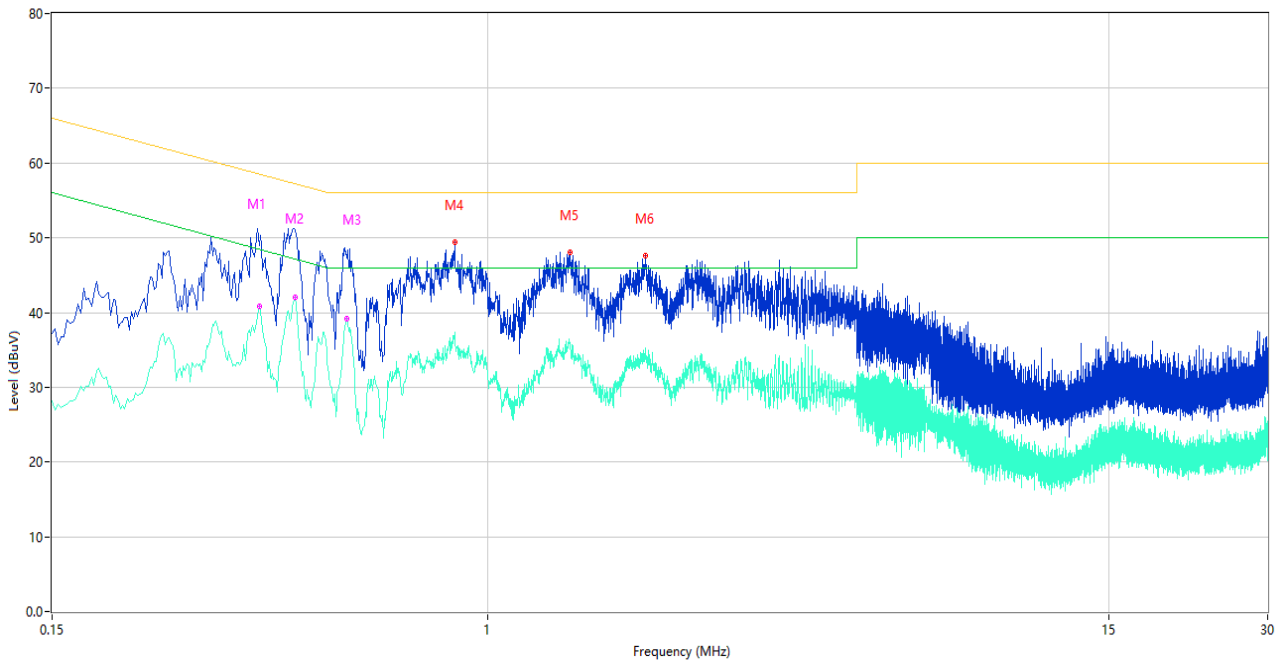
Test Mode 4

1) AC Ports - L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.368	52.32	10.24	58.55	6.23	Peak	L	Pass
1**	0.368	38.52	10.24	48.55	10.03	AV	L	Pass
2	0.432	53.55	10.64	57.21	3.66	Peak	L	N/A
2*	0.432	49.57	10.64	57.21	7.64	QP	L	Pass
2**	0.432	40.09	10.64	47.21	7.12	AV	L	Pass
3	0.484	50.11	10.45	56.27	6.16	Peak	L	Pass
3**	0.484	35.60	10.45	46.27	10.67	AV	L	Pass
4	0.534	49.49	10.46	56.00	6.51	Peak	L	Pass
4**	0.534	34.83	10.46	46.00	11.17	AV	L	Pass
5	0.872	51.44	10.40	56.00	4.56	Peak	L	N/A
5*	0.872	45.35	10.40	56.00	10.65	QP	L	Pass
5**	0.872	34.81	10.40	46.00	11.19	AV	L	Pass
6	1.964	47.82	10.29	56.00	8.18	Peak	L	Pass
6**	1.964	33.36	10.29	46.00	12.64	AV	L	Pass

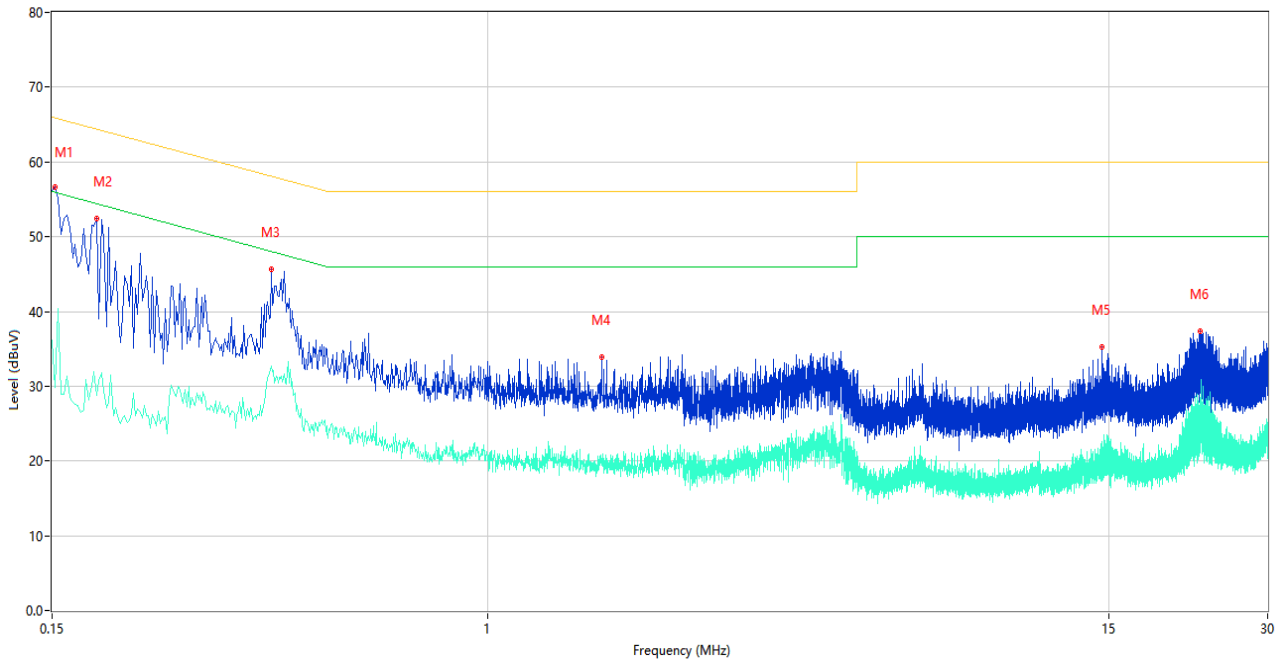
2) AC Ports - N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.370	48.98	10.27	58.50	9.52	Peak	N	Pass
1**	0.370	40.83	10.27	48.50	7.67	AV	N	Pass
2	0.432	51.07	10.64	57.21	6.14	Peak	N	Pass
2**	0.432	41.97	10.64	47.21	5.24	AV	N	Pass
3	0.542	47.26	10.48	56.00	8.74	Peak	N	Pass
3**	0.542	39.16	10.48	46.00	6.84	AV	N	Pass
4	0.868	49.37	10.46	56.00	6.63	Peak	N	Pass
4**	0.868	37.30	10.46	46.00	8.70	AV	N	Pass
5	1.432	47.99	10.65	56.00	8.01	Peak	N	Pass
5**	1.432	35.42	10.65	46.00	10.58	AV	N	Pass
6	1.992	47.60	10.33	56.00	8.40	Peak	N	Pass
6**	1.992	35.22	10.33	46.00	10.78	AV	N	Pass

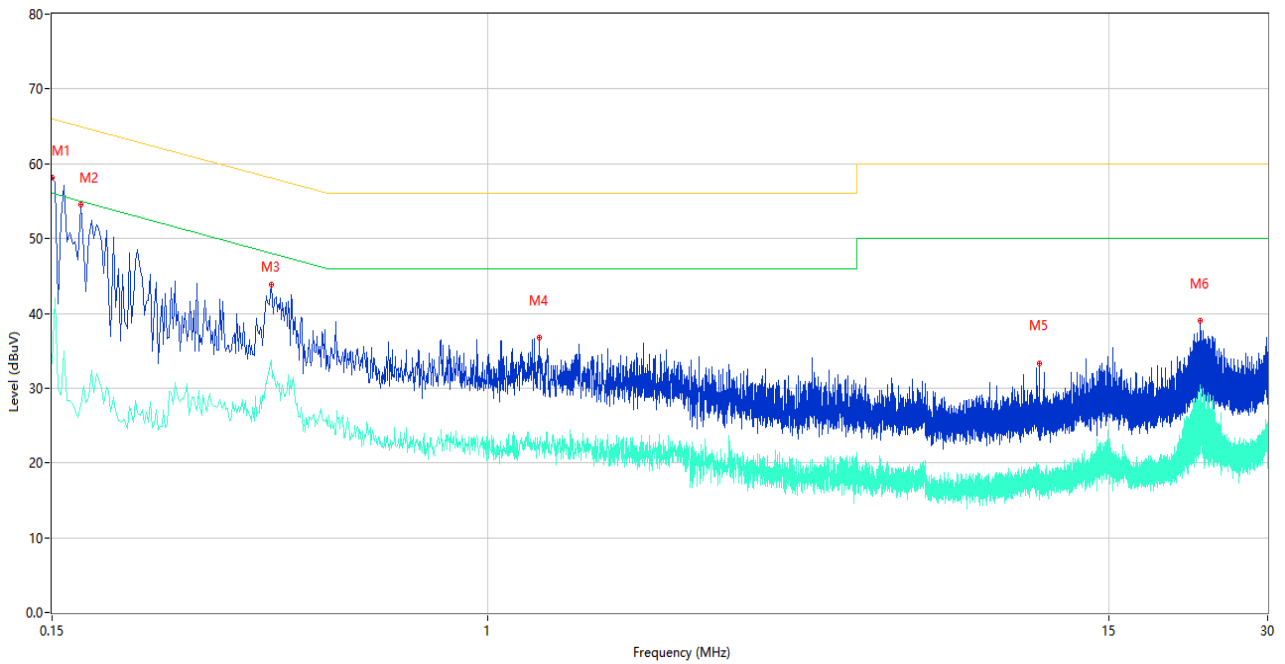
Test Mode 5

3) AC Ports - L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.152	56.69	10.12	65.89	9.20	Peak	L	Pass
1**	0.152	29.81	10.12	55.89	26.08	AV	L	Pass
2	0.182	52.47	10.08	64.39	11.92	Peak	L	Pass
2**	0.182	28.79	10.08	54.39	25.60	AV	L	Pass
3	0.390	45.67	10.54	58.06	12.39	Peak	L	Pass
3**	0.390	32.76	10.54	48.06	15.30	AV	L	Pass
4	1.644	33.93	10.68	56.00	22.07	Peak	L	Pass
4**	1.644	20.37	10.68	46.00	25.63	AV	L	Pass
5	14.584	35.19	12.70	60.00	24.81	Peak	L	Pass
5**	14.584	20.53	12.70	50.00	29.47	AV	L	Pass
6	22.374	37.31	13.23	60.00	22.69	Peak	L	Pass
6**	22.374	24.43	13.23	50.00	25.57	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	58.15	10.12	66.00	7.85	Peak	N	Pass
1**	0.150	33.29	10.12	56.00	22.71	AV	N	Pass
2	0.170	54.55	10.10	64.96	10.41	Peak	N	Pass
2**	0.170	27.69	10.10	54.96	27.27	AV	N	Pass
3	0.390	43.80	10.54	58.06	14.26	Peak	N	Pass
3**	0.390	33.72	10.54	48.06	14.34	AV	N	Pass
4	1.254	36.72	10.08	56.00	19.28	Peak	N	Pass
4**	1.254	22.91	10.08	46.00	23.09	AV	N	Pass
5	11.082	33.36	11.80	60.00	26.64	Peak	N	Pass
5**	11.082	18.35	11.80	50.00	31.65	AV	N	Pass
6	22.314	38.97	13.48	60.00	21.03	Peak	N	Pass
6**	22.314	28.43	13.48	50.00	21.57	AV	N	Pass

Equipment Information						
Equipment Name	Supplier	Model	Serial No.	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9010B	MY57110309	2024.08.01	2025.07.31	<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-SZ2491182-AE-1.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2491182-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SZ2491182-AI.PDF”.

Statement

1. The laboratory 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. The report without China inspection body and laboratory Mandatory Approval (CMA) mark has no effect of proving to the society.
3. For the report with CNAS mark or A2LA mark, the items marked with "☆" are not within the accredited scope.
4. This report is invalid if it is altered, without the signature of the testing and approval personnel, or without the "inspection and testing dedicated stamp" or test report stamp.
5. The test data and results are only valid for the tested samples provided by the customer.
6. This report shall not be partially reproduced without the written permission of the laboratory.
7. Any objection shall be raised to the laboratory within 30 days after receiving the report.

--END OF REPORT--