

TEST REPORT

Applicant: ITEL 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: S667LN
Brand Name: itel
FCC ID: 2AJMN-S667LN
Test Standard: 47 CFR Part 15 Subpart B
ANSI C63.4-2014
Sample Arrival Date: Dec. 07, 2023
Test Date: Dec. 07, 2023 - Dec. 20, 2023
Date of Issue: Jan. 15, 2024

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Zhang Guoxi **Checked by:** Zhenxiang Liu **Approved by:** Liao Jianming
(Technical Director)



Revision History

Version	Issue Date	Revisions
<u>Rev. 01</u>	<u>Jan. 15, 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	☒ 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	ITEL 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	ITEL 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	S667LN
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	Li-Polymer Battery 1	
	Brand Name	itel
	Model No.	BL-49NI
	Serial No.	N/A
	Capacitance	Rated: 4900mAh/18.86Wh Typical: 5000mAh/19.25Wh
	Rated Voltage	3.85 V
	Limited Voltage	4.40 V
Ancillary Equipment 2	Power Supply Unit 1	
	Brand Name	Itel
	Model No.	U180ISA
	Serial No.	N/A
	Rated Input	100-240VAC 50-60Hz 0.6A
	Rated Output	5.0VDC 2.4A or 7.5VDC (US Plug)
Ancillary Equipment 3	USB Cable	
	Model No.	N/A
	Length (Approx.)	1.0 m
Ancillary Equipment 4	Headset	
	Model No.	N/A
	Length (Approx.)	1.2 m

2.5 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/1900 MHz 3G Network WCDMA/HSDPA/HSUPA Band 2/4/5 4G Network FDD LTE Band 2/4/5/7/12/17/26/66 TDD LTE Band 38/41 Bluetooth (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20) 5G WIFI 802.11a, 802.11n(HT20/40), 802.11ac(VHT20/40/80) U-NII-1/2A/2C/3, GPS, GLONASS, Galileo, BDS, SBAS, NFC
Classification of equipment	Class B
The highest internal frequency of EUT	5.8 GHz

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	4.8 dB
Radiated emissions (1 GHz-18 GHz)-966#2	4.9 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 2023.12.27	☒
Laptop	Lenovo	N/A	N/A	N/A	N/A	☒
Data connector	N/A	N/A	N/A	N/A	N/A	☒
USB disk	Sandisk	N/A	N/A	N/A	N/A	☒
Type-C Headset	OPPO	N/A	N/A	N/A	1.12M	☒

4.2 Test Configurations

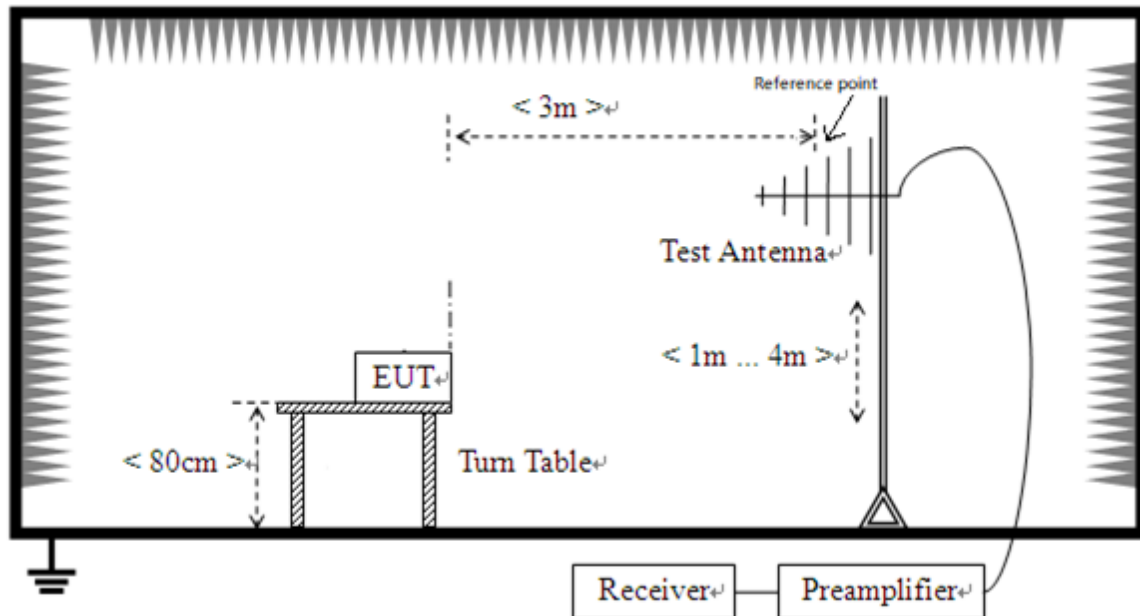
All test modes of EUT are listed in the table below.

Test Mode Configuration	Description
Mode 1	<u>The GSM 850 MHz RX Test Mode</u> GSM 850 MHz RX + EUT +Adapter + USB Cable + Battery
Mode 2	<u>The EGPRS 850 MHz RX Test Mode</u> EGPRS 850 MHz RX + EUT +Adapter + USB Cable + Battery
Mode 3	<u>The WCDMA Band 5 RX Test Mode</u> WCDMA Band 5 RX + EUT +Adapter + USB Cable + Battery
Mode 4	<u>The FDD LTE Band 5 RX Test Mode</u> LTE Band 5 RX + EUT +Adapter + USB Cable + Battery
Mode 5	<u>The FDD LTE Band 12 RX Test Mode</u> LTE Band 12 RX + EUT +Adapter + USB Cable + Battery
Mode 6	<u>The FDD LTE Band 17 RX Test Mode</u> LTE Band 17 RX + EUT +Adapter + USB Cable + Battery
Mode 7	<u>The FDD LTE Band 26 RX Test Mode</u> LTE Band 26 RX + EUT +Adapter + USB Cable + Battery
Mode 8	<u>The Camera Test Mode</u> EUT + Adapter + USB Cable + Battery
Mode 9	<u>The Video Play Test Mode</u> EUT + Adapter + USB Cable + Battery
Mode 10	<u>The USB Test Mode</u> EUT + USB Cable + Battery + Laptop
Mode 11	<u>The OTG Test Mode</u> EUT + Battery + Data connector + USB Disk
Mode 12	<u>The Type-C Headset Test Mode</u> EUT + Type-C Headset + Battery

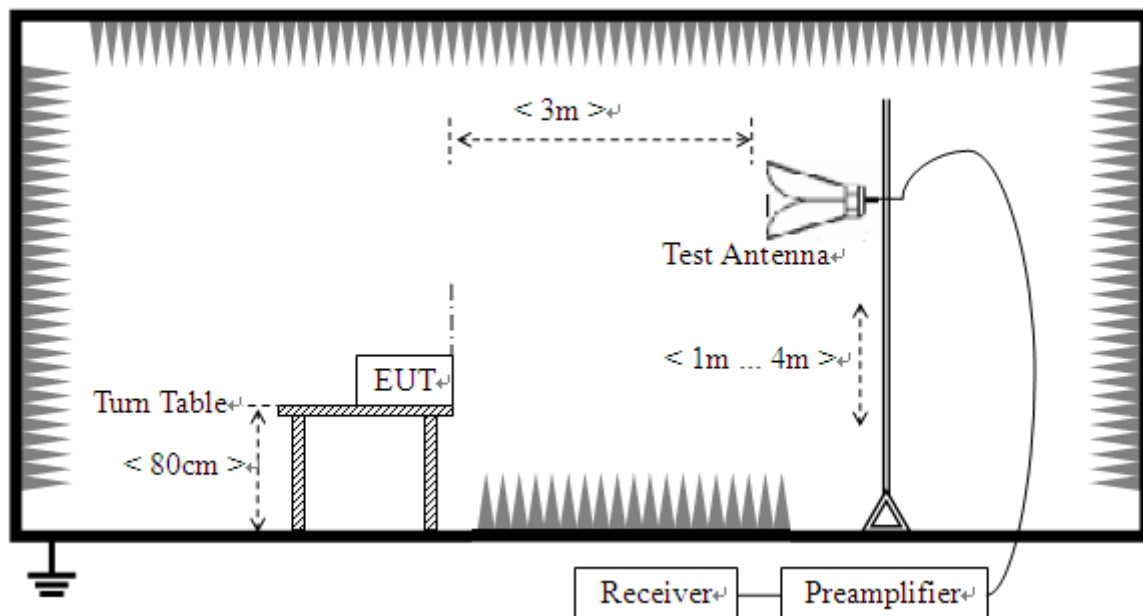
Test Case	Test Mode Configuration	Worst Mode
Radiated Emission	Mode 1~Mode 12	8, 10
Conducted Emission, AC Ports	Mode 1~Mode 12	8, 10
Note: Based on client request, all normal using modes of the normal function were tested, but only data of the worst mode was reported in this report.		

4.3 Test Setups

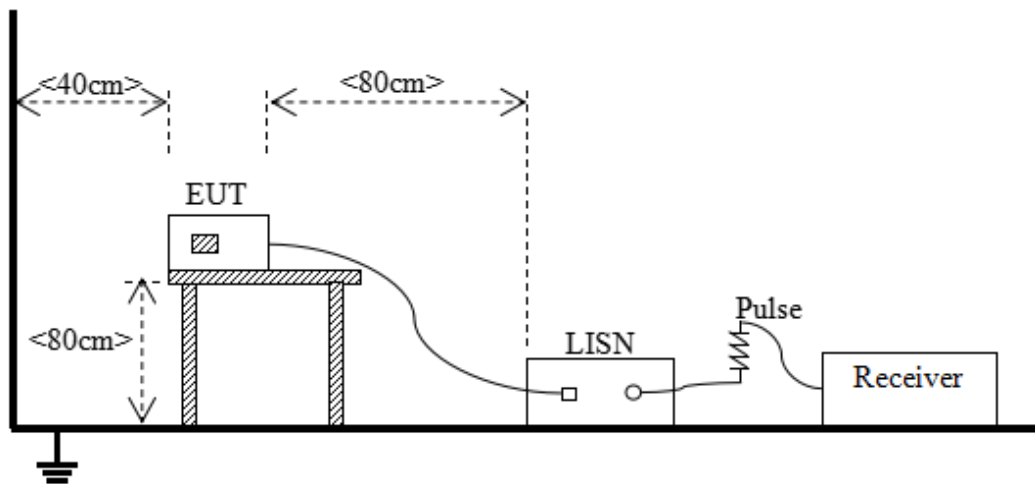
Test Setup 1



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 $\mu\text{V/m}$) = $20 \times \log [\text{Field Strength } (\mu\text{V/m})]$.
- 2) In the emission tables above, the tighter limit applies at the band edges.
- 3) The limits using ANSI C63.4.
- 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:

$$L_{3m} = L_{10m} + 20 \times \log(d_{10m}/d_{3m})$$

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: $L_{3m} = 49.5 + 20 \times \log(10/3) = 60$ (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/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. Over limit = Results – Limit.

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 (dBμV) = Reading (dBμV) + Factor (dB)

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

2. Factor = Insertion loss + Cable loss

3. Over limit = Results – Limit.

ANNEX A TEST RESULTS

A.1 Radiated Emission

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

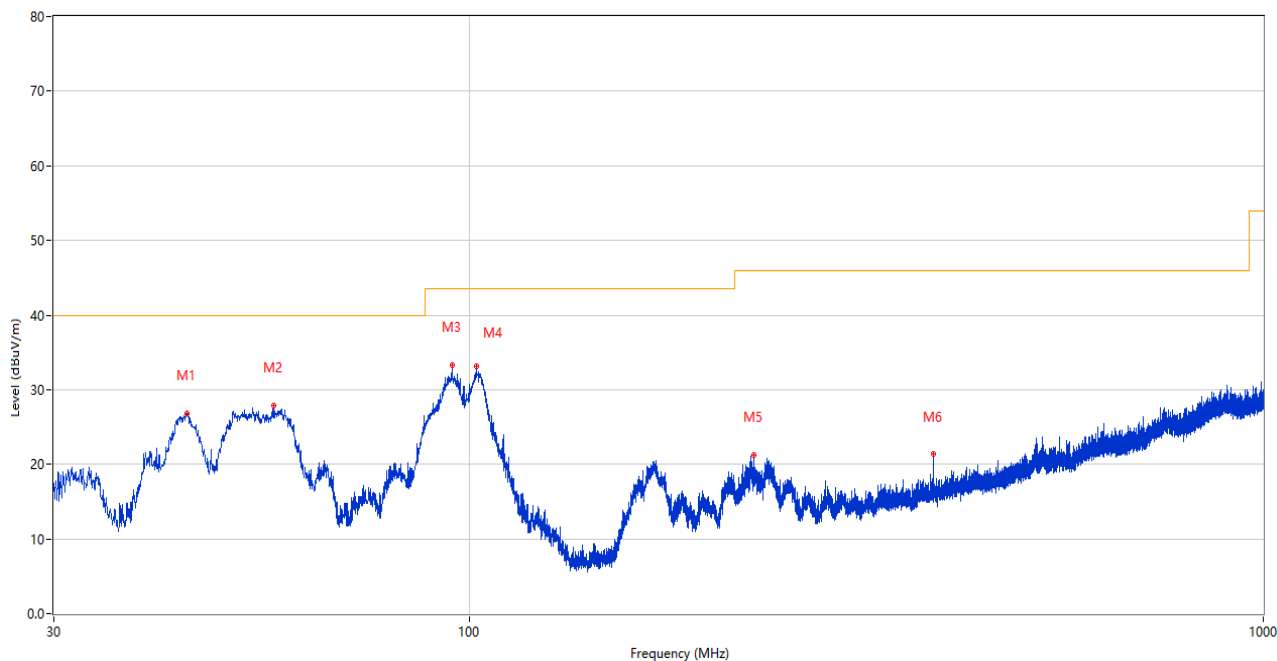
Note 2: For the test data above 1 GHz, according the ANSI C63.4-2014, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

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.	S04	Temperature	25.3℃
Humidity	44%RH	Pressure	101kPa
Test Engineer	He Shichang	Test Date	2023.12.07

Test Mode 8

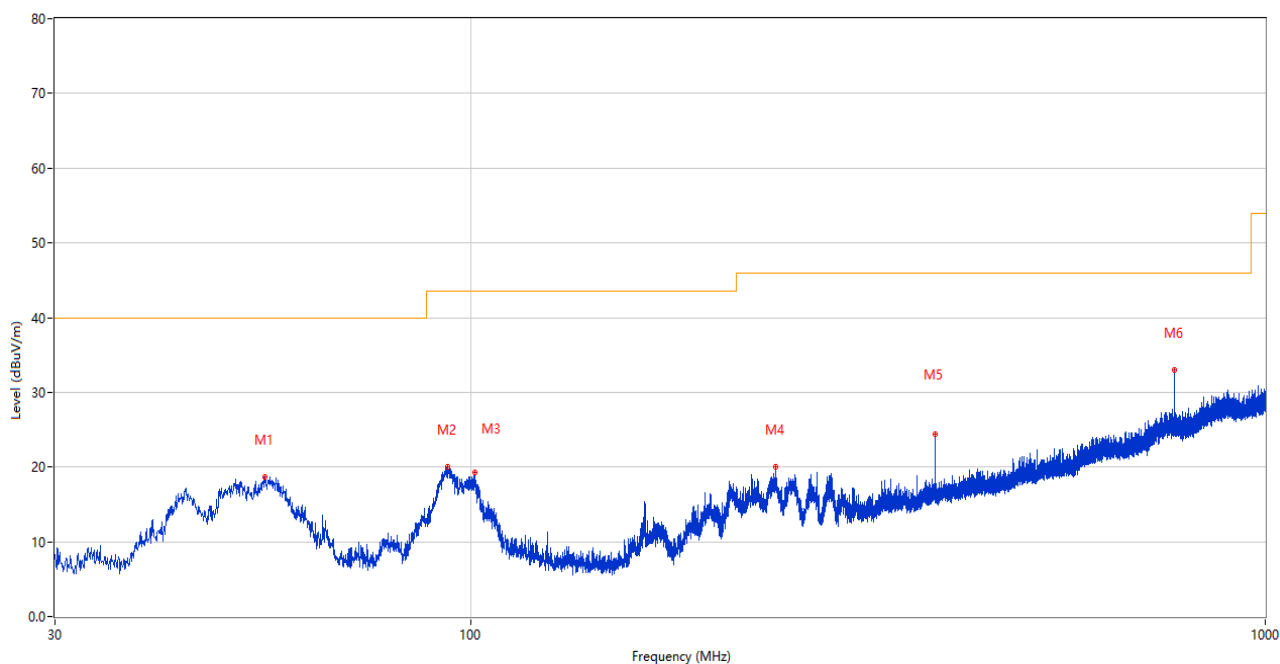
1) Test Antenna Vertical, 30 MHz – 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	44.162	26.88	-26.13	40.0	13.12	Peak	238.00	100	Vertical	Pass
2	56.772	27.92	-25.53	40.0	12.08	Peak	170.00	100	Vertical	Pass
3	95.135	33.36	-27.47	43.5	10.14	Peak	235.00	100	Vertical	Pass
4	102.168	33.12	-26.88	43.5	10.38	Peak	305.00	100	Vertical	Pass
5	228.122	21.18	-25.47	46.0	24.82	Peak	341.00	100	Vertical	Pass
6	384.050	21.37	-21.28	46.0	24.63	Peak	35.00	200	Vertical	Pass

Note: This frequency which near 900 MHz with circle should be ignored because they are MS and SS carrier frequency

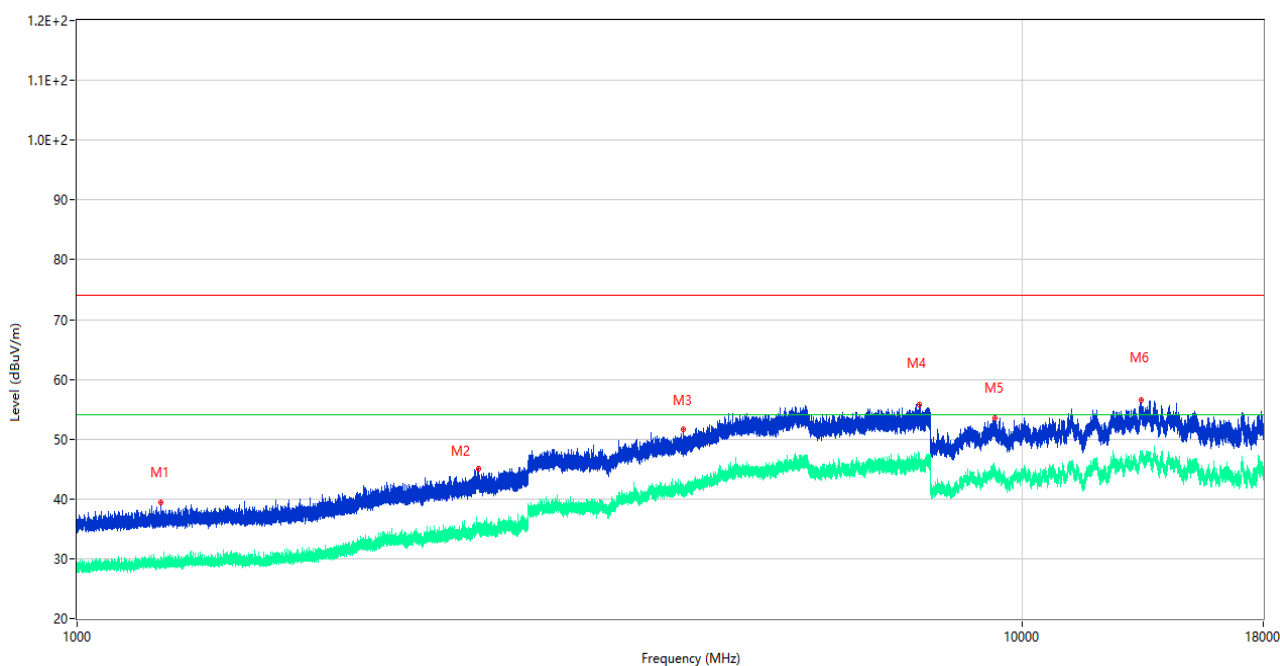
2) Test Antenna Horizontal, 30 MHz – 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	55.075	18.70	-25.33	40.0	21.30	Peak	243.00	100	Horizontal	Pass
2	93.584	19.99	-27.77	43.5	23.51	Peak	259.00	200	Horizontal	Pass
3	101.198	19.27	-26.93	43.5	24.23	Peak	241.00	200	Horizontal	Pass
4	242.139	20.03	-24.73	46.0	25.97	Peak	274.00	100	Horizontal	Pass
5	384.002	24.46	-21.29	46.0	21.54	Peak	117.00	100	Horizontal	Pass
6	768.024	32.99	-12.08	46.0	13.01	Peak	119.00	100	Horizontal	Pass

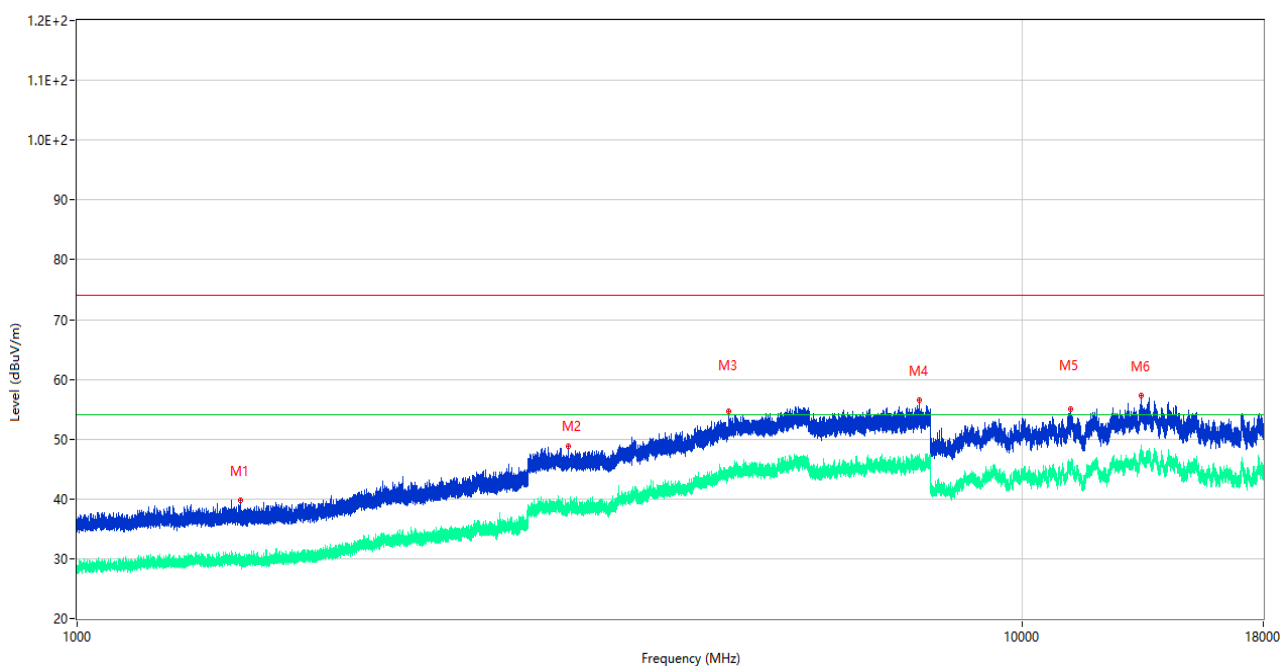
Equipment Information						
Equipment Name	Supplier	Model	Serial No.	Cal. Date	Cal. Due	Use
Frequency Below 1 GHz						
EMI Receiver	Keysight	N9038A	MY55330120	2023.09.05	2024.09.04	☒
Amplifier (30-1GHz)	COM-MV	ZT30-1000M	B2017119081	2023.12.05	2024.12.04	☒
Test Antenna- Bi-Log	SCHWARZB ECK	VULB 9168	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	1226.300	39.46	-16.14	74.0	34.54	Peak	303.00	100	Vertical	Pass
1**	1226.300	29.13	-16.14	54.0	24.87	AV	303.00	100	Vertical	Pass
2	2660.400	45.01	-8.43	74.0	28.99	Peak	140.00	100	Vertical	Pass
2**	2660.400	35.01	-8.43	54.0	18.99	AV	140.00	100	Vertical	Pass
3	4381.250	51.59	-0.11	74.0	22.41	Peak	237.00	100	Vertical	Pass
3**	4381.250	40.60	-0.11	54.0	13.40	AV	237.00	100	Vertical	Pass
4	7783.250	55.85	3.17	74.0	18.15	Peak	84.00	100	Vertical	Pass
4**	7783.250	45.73	3.17	54.0	8.27	AV	84.00	100	Vertical	Pass
5	9355.000	53.58	2.10	74.0	20.42	Peak	294.00	100	Vertical	Pass
5**	9355.000	45.15	2.10	54.0	8.85	AV	294.00	100	Vertical	Pass
6	13371.500	56.50	5.09	74.0	17.50	Peak	335.00	100	Vertical	Pass
6**	13371.500	47.34	5.09	54.0	6.66	AV	335.00	100	Vertical	Pass

4) Test Antenna Horizontal, 1 GHz – 18 GHz

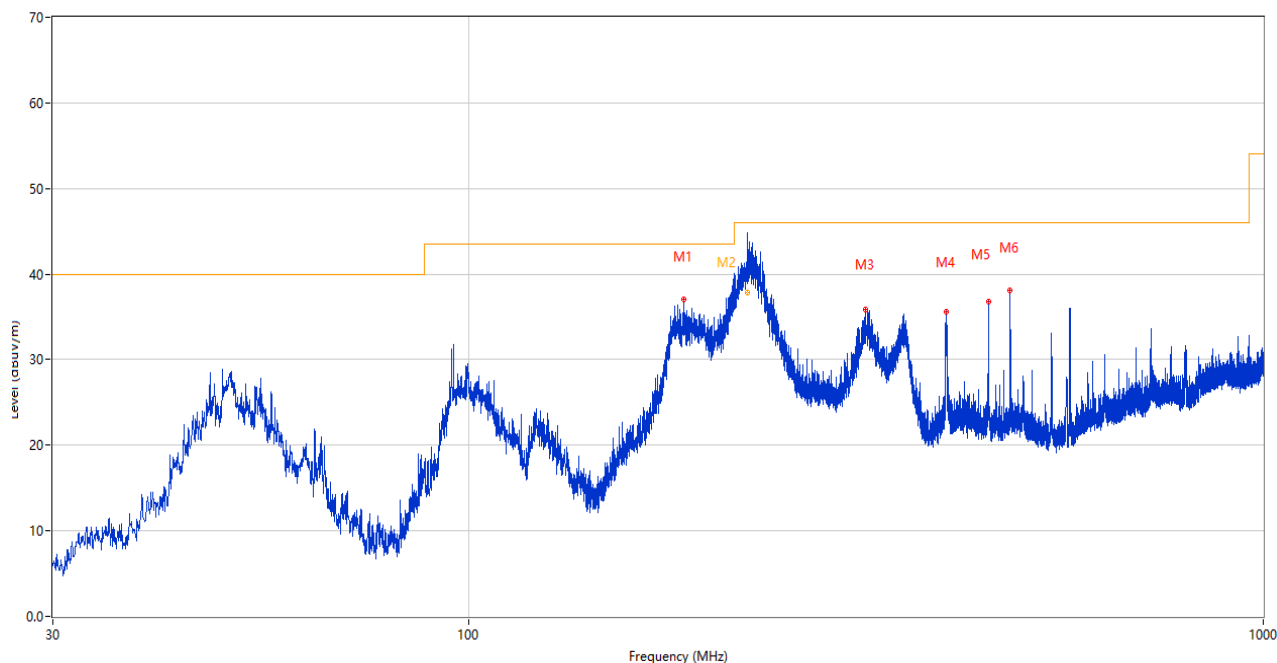


No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1488.400	39.76	-15.86	74.0	34.24	Peak	0.00	100	Horizontal	Pass
1**	1488.400	29.41	-15.86	54.0	24.59	AV	0.00	100	Horizontal	Pass
2	3312.500	48.73	-4.69	74.0	25.27	Peak	70.00	100	Horizontal	Pass
2**	3312.500	39.16	-4.69	54.0	14.84	AV	70.00	100	Horizontal	Pass
3	4898.500	54.61	1.75	74.0	19.39	Peak	353.00	100	Horizontal	Pass
3**	4898.500	43.95	1.75	54.0	10.05	AV	353.00	100	Horizontal	Pass
4	7787.250	56.49	3.17	74.0	17.51	Peak	287.00	100	Horizontal	Pass
4**	7787.250	46.23	3.17	54.0	7.77	AV	287.00	100	Horizontal	Pass
5	11266.500	55.04	1.99	74.0	18.96	Peak	360.00	100	Horizontal	Pass
5**	11266.500	45.27	1.99	54.0	8.73	AV	360.00	100	Horizontal	Pass
6	13362.000	57.24	5.15	74.0	16.76	Peak	38.00	100	Horizontal	Pass
6**	13362.000	47.39	5.15	54.0	6.61	AV	38.00	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	/		☒

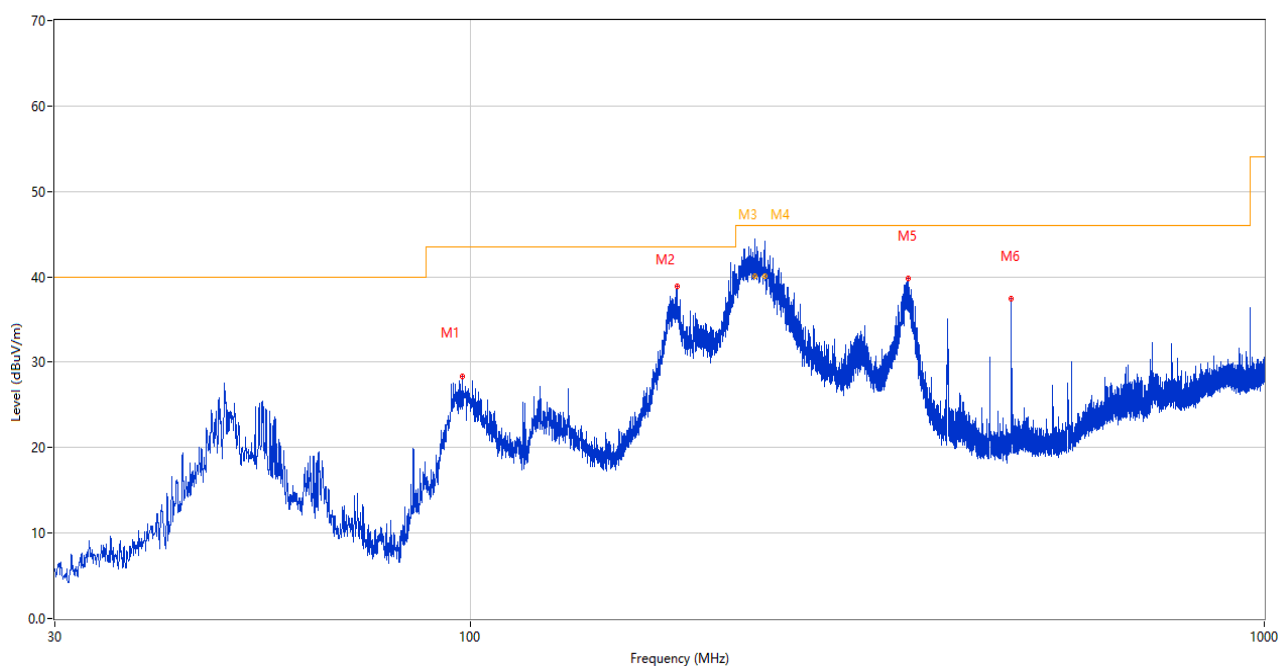
Test Mode 10

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	186.655	37.09	-27.59	43.5	6.41	Peak	215.00	100	Vertical	Pass
2	224.503	43.65	-25.59	46.0	2.35	Peak	198.00	116	Vertical	N/A
2*	224.503*	37.81	-25.59	46.0	8.19	QP	198.00	116	Vertical	Pass
3	316.150	35.86	-23.25	46.0	10.14	Peak	142.00	200	Vertical	Pass
4	399.037	35.53	-20.82	46.0	10.47	Peak	171.00	100	Vertical	Pass
5	451.417	36.77	-19.79	46.0	9.23	Peak	120.00	100	Vertical	Pass
6	479.983	38.10	-19.16	46.0	7.90	Peak	0.00	100	Vertical	Pass

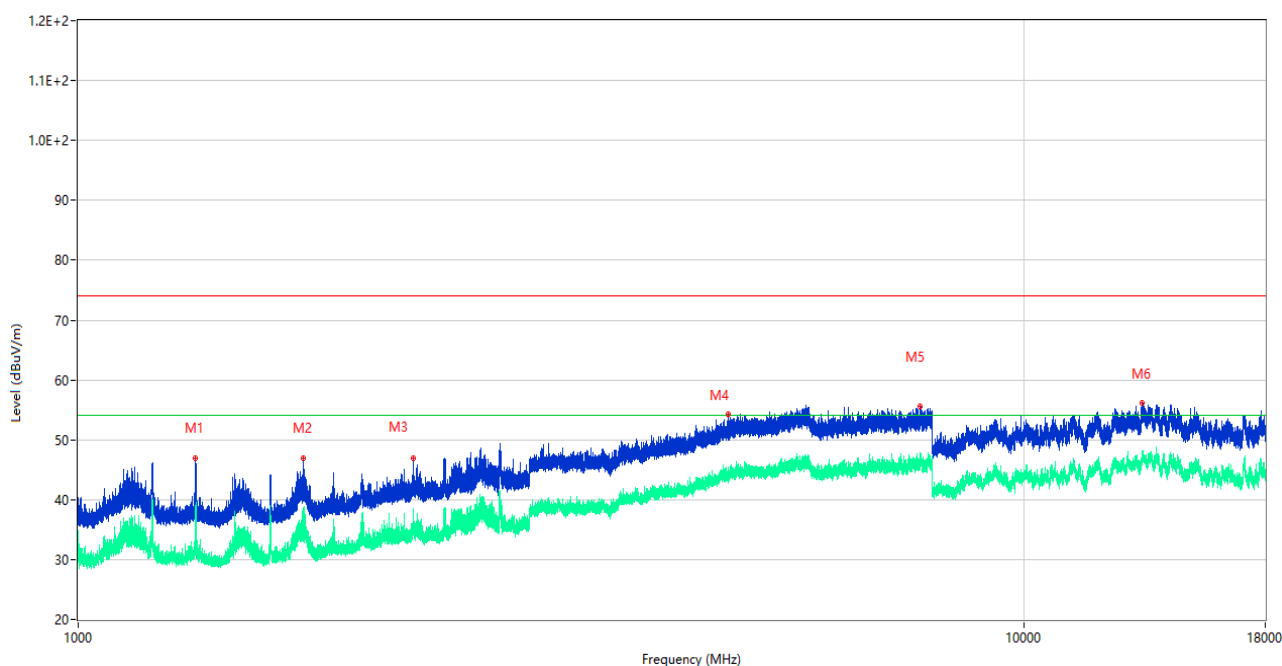
6) Test Antenna Horizontal, 30 MHz – 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	97.706	28.36	-27.01	43.5	15.14	Peak	307.00	200	Horizontal	Pass
2	182.048	38.89	-28.20	43.5	4.61	Peak	167.00	200	Horizontal	Pass
3	228.459	47.15	-25.47	46.0	-1.15	Peak	303.00	153	Horizontal	N/A
3*	228.459*	40.10	-25.47	46.0	5.90	QP	303.00	153	Horizontal	Pass
4	234.807	44.59	-25.18	46.0	1.41	Peak	165.00	123	Horizontal	N/A
4*	234.807*	40.08	-25.18	46.0	5.92	QP	165.00	123	Horizontal	Pass
5	355.678	39.83	-22.07	46.0	6.17	Peak	233.00	100	Horizontal	Pass
6	480.031	37.46	-19.16	46.0	8.54	Peak	305.00	100	Horizontal	Pass

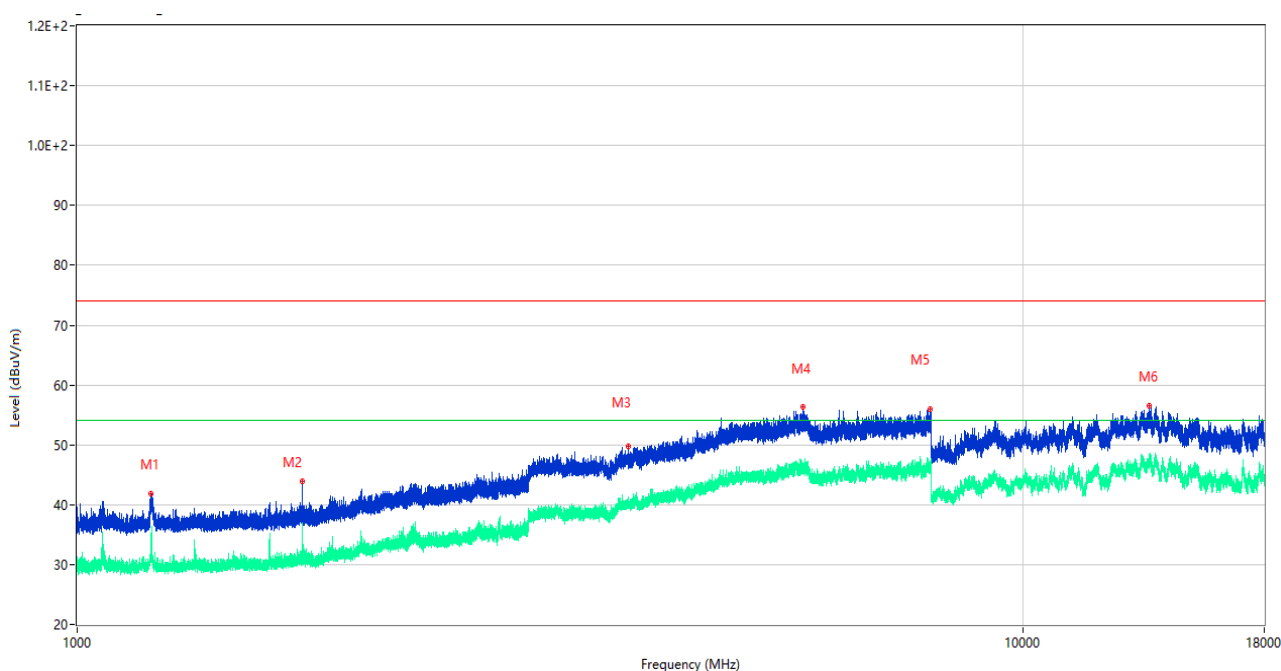
Equipment Information						
Equipment Name	Supplier	Model	Serial No.	Cal. Date	Cal. Due	Use
Frequency Below 1 GHz						
EMI Receiver	Keysight	N9038A	MY55330120	2023.09.05	2024.09.04	☒
Amplifier (30-1GHz)	COM-MV	ZT30-1000M	B2017119081	2023.12.05	2024.12.04	☒
Test Antenna- Bi-Log	SCHWARZB ECK	VULB 9168	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	/		☒

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	1331.200	47.00	-16.14	74.0	27.00	Peak	181.00	100	Vertical	Pass
1**	1331.200	37.19	-16.14	54.0	16.81	AV	181.00	100	Vertical	Pass
2	1730.400	46.95	-15.83	74.0	27.05	Peak	209.00	100	Vertical	Pass
2**	1730.400	37.37	-15.83	54.0	16.63	AV	209.00	100	Vertical	Pass
3	2260.400	46.87	-12.47	74.0	27.13	Peak	233.00	100	Vertical	Pass
3**	2260.400	35.67	-12.47	54.0	18.33	AV	233.00	100	Vertical	Pass
4	4864.500	54.36	1.51	74.0	19.64	Peak	177.00	100	Vertical	Pass
4**	4864.500	43.84	1.51	54.0	10.16	AV	177.00	100	Vertical	Pass
5	7767.000	55.53	2.59	74.0	18.47	Peak	322.00	100	Vertical	Pass
5**	7767.000	45.41	2.59	54.0	8.59	AV	322.00	100	Vertical	Pass
6	13351.500	56.07	5.22	74.0	17.93	Peak	280.00	100	Vertical	Pass
6**	13351.500	47.39	5.22	54.0	6.61	AV	280.00	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	1197.200	41.75	-16.27	74.0	32.25	Peak	175.00	100	Horizontal	Pass
1**	1197.200	33.65	-16.27	54.0	20.35	AV	175.00	100	Horizontal	Pass
2	1728.700	43.87	-15.83	74.0	30.13	Peak	263.00	100	Horizontal	Pass
2**	1728.700	31.68	-15.83	54.0	22.32	AV	263.00	100	Horizontal	Pass
3	3828.750	49.70	-2.32	74.0	24.30	Peak	295.00	100	Horizontal	Pass
3**	3828.750	39.61	-2.32	54.0	14.39	AV	295.00	100	Horizontal	Pass
4	5853.000	56.33	3.66	74.0	17.67	Peak	228.00	100	Horizontal	Pass
4**	5853.000	45.92	3.66	54.0	8.08	AV	228.00	100	Horizontal	Pass
5	7987.250	56.00	2.27	74.0	18.00	Peak	334.00	100	Horizontal	Pass
5**	7987.250	45.96	2.27	54.0	8.04	AV	334.00	100	Horizontal	Pass
6	13605.000	56.45	4.75	74.0	17.55	Peak	205.00	100	Horizontal	Pass
6**	13605.000	47.23	4.75	54.0	6.77	AV	205.00	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	/		☒

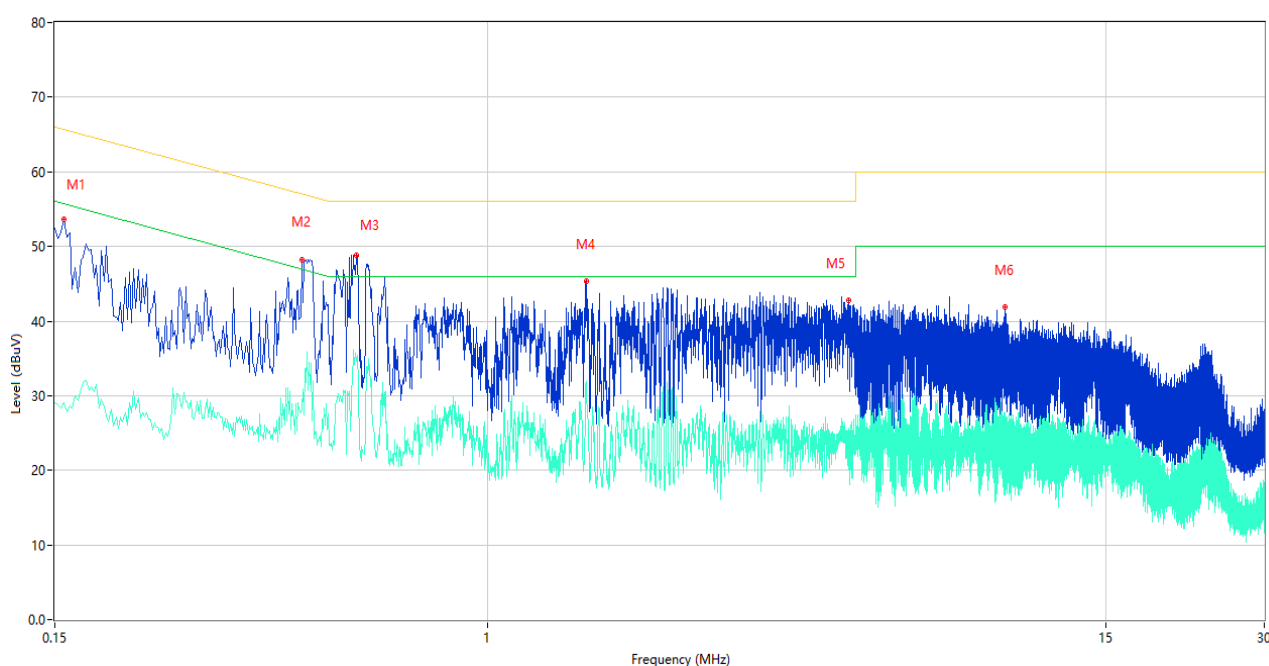
A.2 Conducted Emission, AC Ports

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.	S03	Temperature	24.3℃
Humidity	52%RH	Pressure	101kPa
Test Engineer	Yang Yang	Test Date	2023.12.08

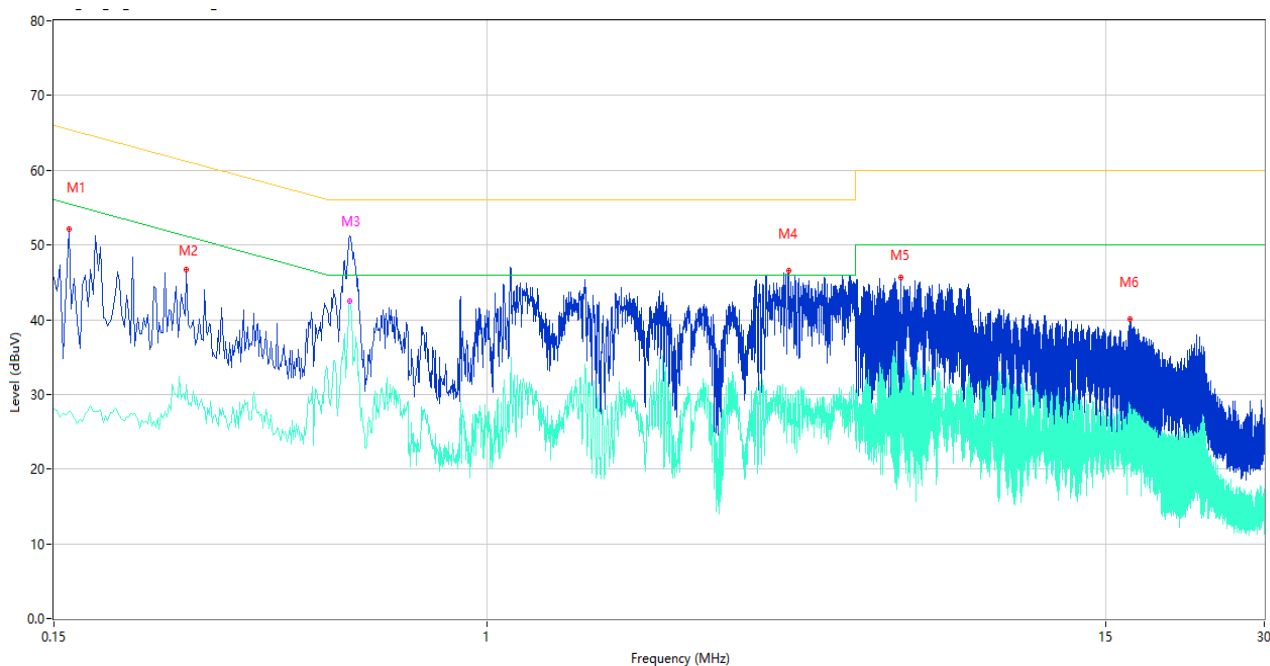
Test Mode 8

1) AC Ports - L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.156	53.66	9.46	65.67	12.01	Peak	L	Pass
1**	0.156	29.05	9.46	55.67	26.62	AV	L	Pass
2	0.442	48.18	9.94	57.02	8.84	Peak	L	Pass
2**	0.442	28.18	9.94	47.02	18.84	AV	L	Pass
3	0.562	48.83	9.86	56.00	7.17	Peak	L	Pass
3**	0.562	34.65	9.86	46.00	11.35	AV	L	Pass
4	1.540	45.33	9.70	56.00	10.67	Peak	L	Pass
4**	1.540	31.90	9.70	46.00	14.10	AV	L	Pass
5	4.868	42.78	9.56	56.00	13.22	Peak	L	Pass
5**	4.868	25.53	9.56	46.00	20.47	AV	L	Pass
6	9.638	41.88	8.85	60.00	18.12	Peak	L	Pass
6**	9.638	26.23	8.85	50.00	23.77	AV	L	Pass

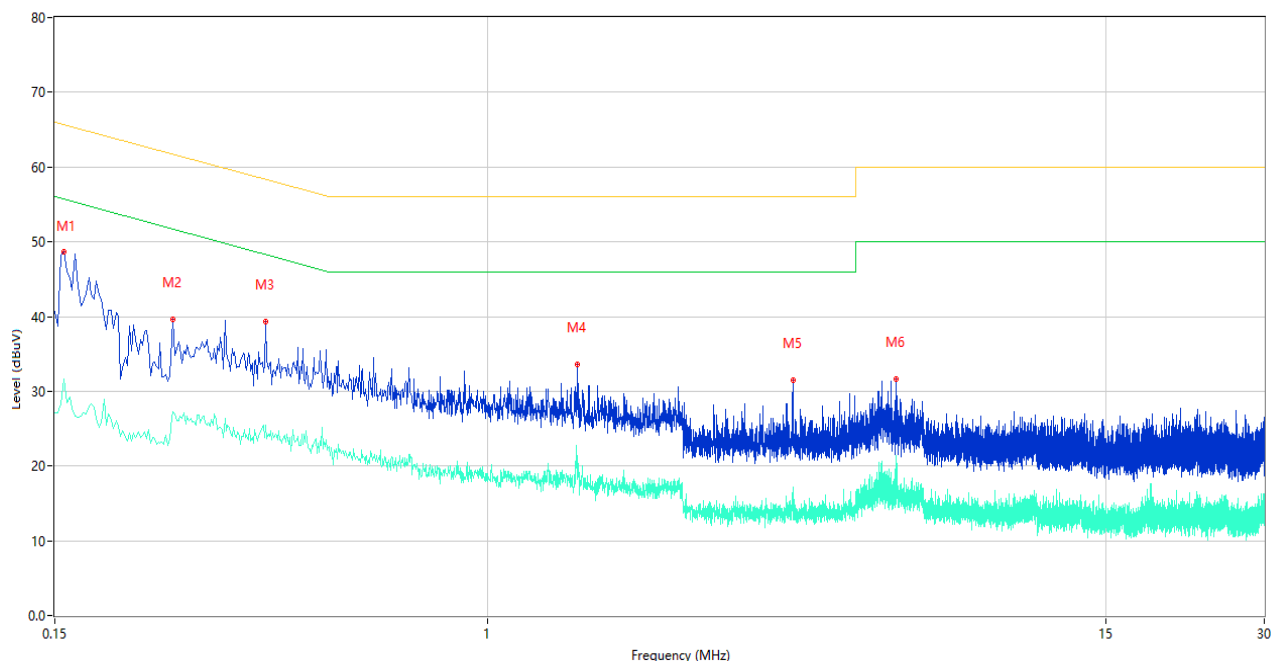
2) AC Ports - N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.160	52.13	9.46	65.46	13.33	Peak	N	Pass
1**	0.160	27.70	9.46	55.46	27.76	AV	N	Pass
2	0.268	46.66	9.43	61.18	14.52	Peak	N	Pass
2**	0.268	31.35	9.43	51.18	19.83	AV	N	Pass
3	0.548	51.18	9.80	56.00	4.82	Peak	N	Pass
3**	0.548	42.43	9.80	46.00	3.57	AV	N	Pass
4	3.736	46.51	9.94	56.00	9.49	Peak	N	Pass
4**	3.736	29.31	9.94	46.00	16.69	AV	N	Pass
5	6.114	45.66	9.17	60.00	14.34	Peak	N	Pass
5**	6.114	25.55	9.17	50.00	24.45	AV	N	Pass
6	16.650	40.11	7.48	60.00	19.89	Peak	N	Pass
6**	16.650	28.69	7.48	50.00	21.31	AV	N	Pass

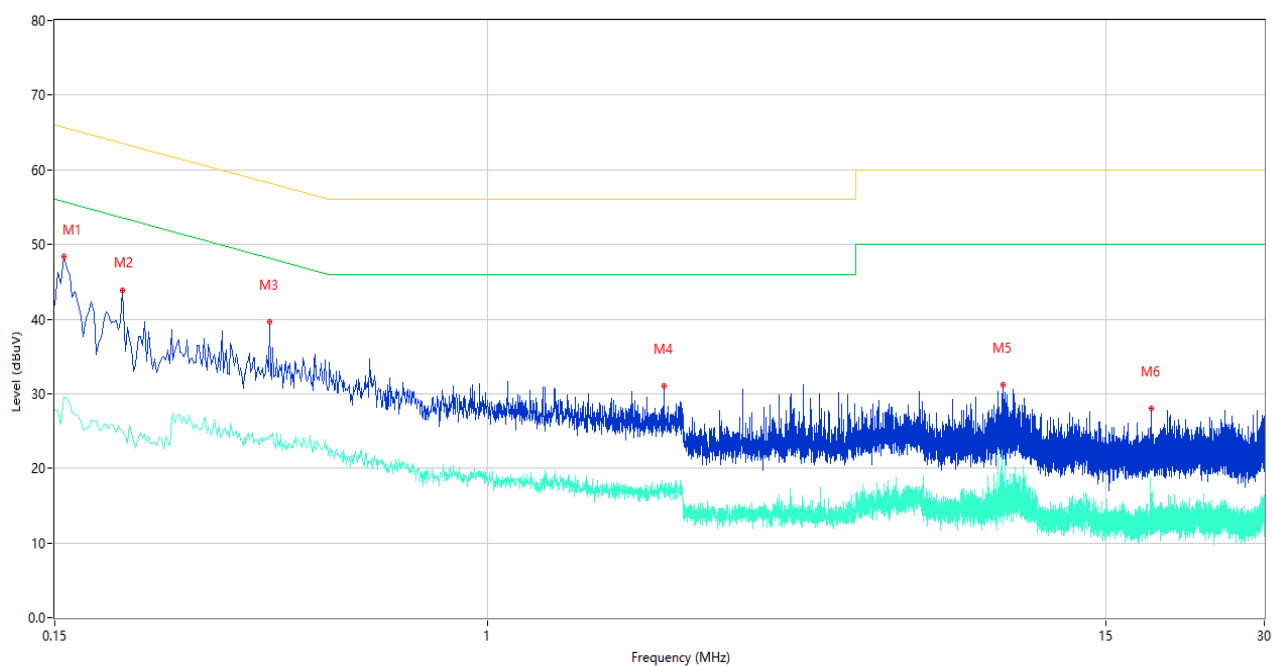
Test Mode 10

3) AC Ports - L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.156	48.64	9.46	65.67	17.03	Peak	L	Pass
1**	0.156	31.67	9.46	55.67	24.00	AV	L	Pass
2	0.252	39.61	9.43	61.69	22.08	Peak	L	Pass
2**	0.252	27.33	9.43	51.69	24.36	AV	L	Pass
3	0.378	39.36	9.71	58.32	18.96	Peak	L	Pass
3**	0.378	25.39	9.71	48.32	22.93	AV	L	Pass
4	1.480	33.53	9.67	56.00	22.47	Peak	L	Pass
4**	1.480	18.21	9.67	46.00	27.79	AV	L	Pass
5	3.808	31.48	9.26	56.00	24.52	Peak	L	Pass
5**	3.808	17.14	9.26	46.00	28.86	AV	L	Pass
6	5.992	31.57	9.26	60.00	28.43	Peak	L	Pass
6**	5.992	21.44	9.26	50.00	28.56	AV	L	Pass

4) AC Ports - N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.156	48.43	9.46	65.67	17.24	Peak	N	Pass
1**	0.156	29.49	9.46	55.67	26.18	AV	N	Pass
2	0.202	43.80	9.42	63.53	19.73	Peak	N	Pass
2**	0.202	24.98	9.42	53.53	28.55	AV	N	Pass
3	0.384	39.62	9.80	58.19	18.57	Peak	N	Pass
3**	0.384	24.46	9.80	48.19	23.73	AV	N	Pass
4	2.164	30.98	9.89	56.00	25.02	Peak	N	Pass
4**	2.164	17.61	9.89	46.00	28.39	AV	N	Pass
5	9.554	31.22	8.64	60.00	28.78	Peak	N	Pass
5**	9.554	19.16	8.64	50.00	30.84	AV	N	Pass
6	18.302	28.01	7.40	60.00	31.99	Peak	N	Pass
6**	18.302	16.54	7.40	50.00	33.46	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	SCHWARZB ECK	NSLK 8127	8127-687	2023.05.16	2024.05.15	☒
ISN	TESEQ	ISN T800	34449	2023.11.10	2024.11.09	☐
ISN	TESEQ	ISN T8-Cat6	53561	2023.04.23	2024.04.22	☐
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-SZ23C0328-AE-1.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ23C0328-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SZ23C0328-AI.PDF”.

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--END OF REPORT--