

TEST REPORT

Applicant: Shenzhen Tinno Mobile Technology Corp.
Address: 27-001, South side of Tianlong mobile HQ Building,
Tongfa South Road, Xili Street, Nanshan District,
Shenzhen, Guangdong Province, 518000, China
Equipment Type: onn. 8" Tablet
Model Name: TBVAN100135923 (refer to section 2.3)
Brand Name: onn.
FCC ID: XD6WM2308T
Test Standard: 47 CFR Part 15 Subpart B
ANSI C63.4-2014
Sample Arrival Date: Jan. 03, 2024
Test Date: Jan. 16, 2024 - Jan. 18, 2024
Date of Issue: Jan. 24, 2024

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Xin Liao

Checked by: Zhenxiang Liu

Approved by: Liao Jianming
(Technical Director)

Xin Liao

Zhenxiang Liu

Liao Jianming

Revision History		
Version	Issue Date	Revisions
<u>Rev. 01</u>	<u>Jan. 24, 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	Shenzhen Tinno Mobile Technology Corp.
Address	27-001, South side of Tianlong mobile HQ Building, Tongfa South Road, Xili Street, Nanshan District, Shenzhen, Guangdong Province, 518000, China

2.2 Manufacturer Information

Manufacturer	Shenzhen Tinno Mobile Technology Corp.
Address	27-001, South side of Tianlong mobile HQ Building, Tongfa South Road, Xili Street, Nanshan District, Shenzhen, Guangdong Province, 518000, China

2.3 General Description for Equipment under Test (EUT)

EUT Name	onn. 8" Tablet
Model Name Under Test	TBVAN100135923
Series Model Name	TBPPY100135923, TBLVD100135923, TBIND100135923
Description of Model name differentiation	All models are same with electrical parameters and internal circuit structure, but only differ in model name and color. (this information provided by the applicant)
Hardware Version	V1.0
Software Version	T302AA_DVT_14.0_64B_FTM_07.00_00
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A
Note: Tested all mode on model TBVAN100135923, other configuration tested the worst case of each item.	

2.4 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	N/A
	Model No.	U28100115PV
	Serial No.	N/A
	Capacity	4850 mAh
	Rated Voltage	3.80 V
	Limit Charge Voltage	4.35 V
Ancillary Equipment 2	Adapter	
	Brand Name	N/A
	Model No.	LACA216
	Serial No.	N/A
	Rated Input	100-240V~, 50/60Hz, 0.3A
	Rated Output	5.0V= 2.0A, 10W
Ancillary Equipment 3	USB Cable	
	Length (Approx.)	1.0 m

2.5 Technical Information

Network and Wireless connectivity	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
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	4.8 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
Laptop	Lenovo	N/A	N/A	N/A	N/A	<input checked="" type="checkbox"/>
SD Card	Kingston	N/A	N/A	N/A	N/A	<input checked="" type="checkbox"/>
USB Flash Disk	Kingston	N/A	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.

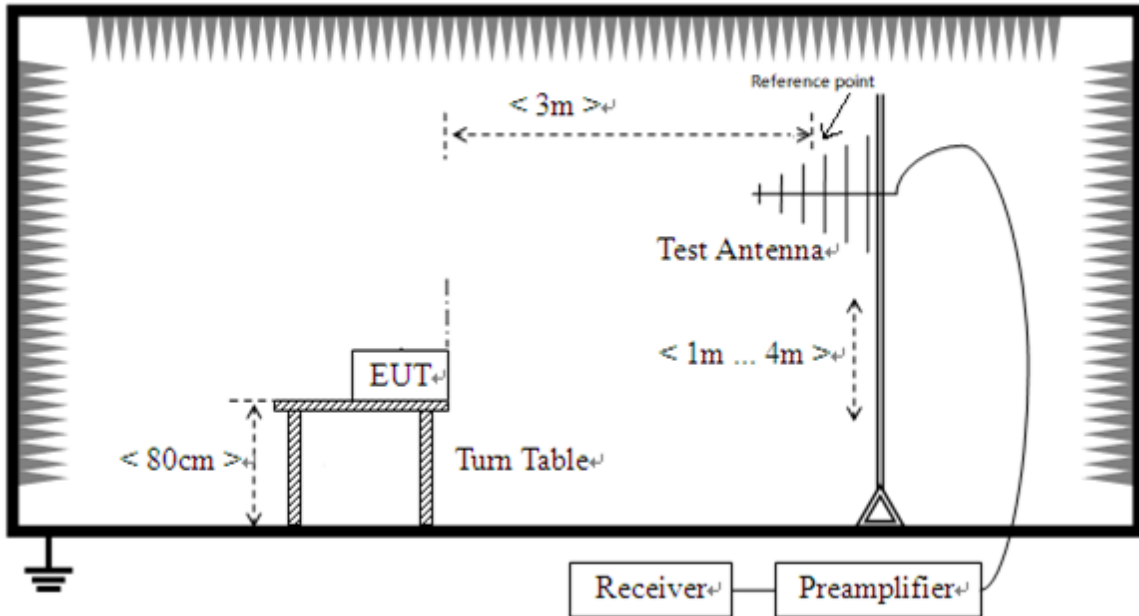
Test Mode Configuration	Description
Mode 1	<u>The Standby Test Mode</u> EUT + Adapter + USB Cable + Battery + SD Card
Mode 2	<u>The Camera Test Mode</u> EUT + Adapter + USB Cable + Battery + SD Card
Mode 3	<u>The Video Play Test Mode</u> EUT + Adapter + USB Cable + Battery + SD Card
Mode 4	<u>The OTG Test Mode</u> EUT + Adapter + USB Cable + Battery + SD Card + USB Flash Disk
Mode 5	<u>The USB Test Mode</u> EUT + USB Cable + Battery + SD Card

Test Case	Test Mode Configuration	Worst Mode
Radiated Emission	Mode 1~Mode 5	2, 5
Conducted Emission, AC Ports	Mode 1~Mode 5	2, 5

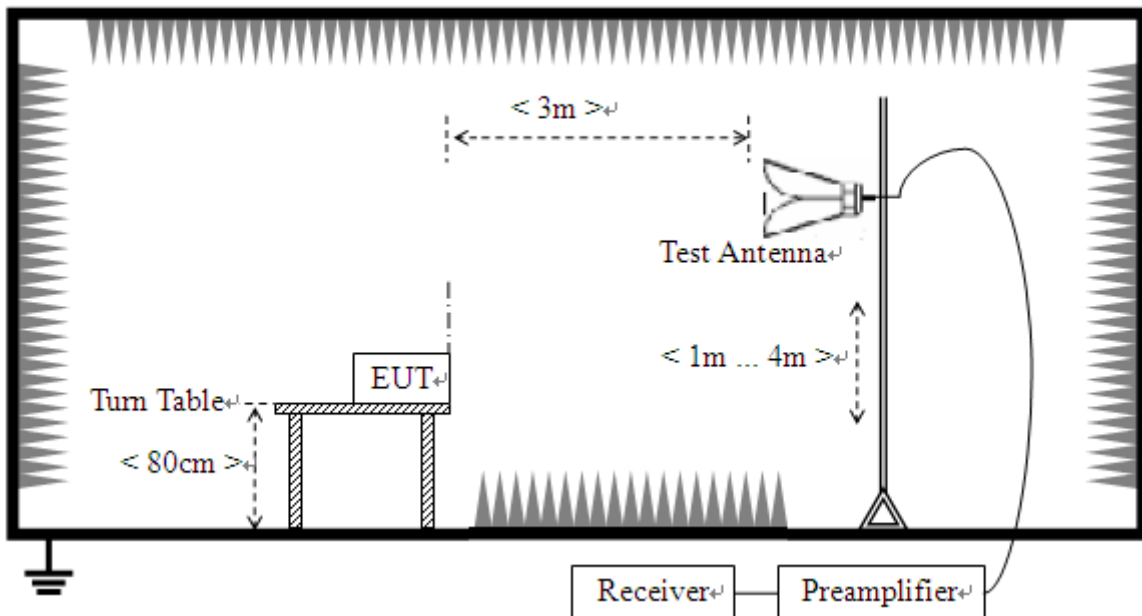
Note: All operation modes were tested, but only test data of the worst mode was presented in this report.

4.3 Test Setups

Test Setup 1

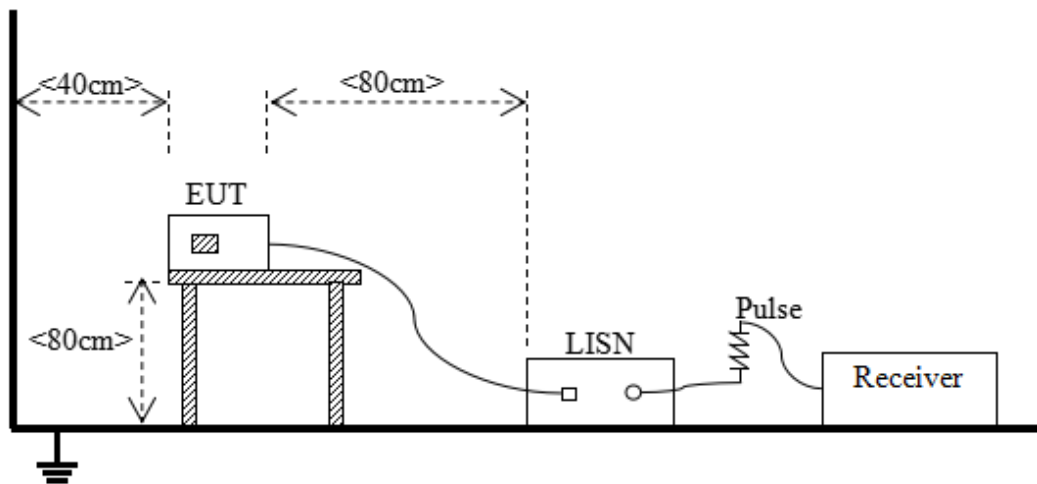


Radiated Emission (30 MHz-1 GHz)



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 $\mu\text{V/m}$) = $20 \cdot \log$ [Field Strength ($\mu\text{V/m}$)].
- 2) In the emission tables above, the tighter limit applies at the band edges.
- 3) The limits using ANSI C63.4.
- 4) For 30 MHz to 1000 MHz, the CISPR quasi-peak is employed.

For above 1000 MHz, according to the requirements of FCC 15.35, unless otherwise specified, the limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test.

Frequency range (GHz)	Class B (at 3 m)			Class A (at 3 m)	
	Field Strength ($\mu\text{V/m}$)	Field Strength Average (dB $\mu\text{V/m}$)	Field Strength Peak (dB $\mu\text{V/m}$)	Field Strength Average (dB $\mu\text{V/m}$)	Field Strength Peak (dB $\mu\text{V/m}$)
1 - F_M	500	54	74	60	80

Note 1: The highest measurement frequency, F_M , in GHz, shall be determined as next Table.

Note 2: Average Class A limit at 3m L_{3m} is determined by the following conversion formula:

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

Where:

L_{3m} is Average Class A limit at 3m;

L_{10m} is Average Class A limit at 10m;

d_{10m} is Measurement distance in 10m;

d_{3m} is Measurement distance in 3m.

For this case: $L_{3m} = 49.5 + 20 \cdot \log(10/3) = 60$ (dB $\mu\text{V/m}$).

Highest internal frequency (F_X)	Highest measurement frequency (F_M)
$F_X \leq 108$ MHz	1 GHz
108 MHz $\leq F_X \leq 500$ MHz	2 GHz
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/m) + Factor (dB/m)

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

2. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) – Amplifier Gain (dB)

3. Margin = Limit - Results

5.1.2 Conducted Emission, AC Ports

5.1.2.1 Test Limit

Frequency range (MHz)	Class A	
	Quasi-peak (dB 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.

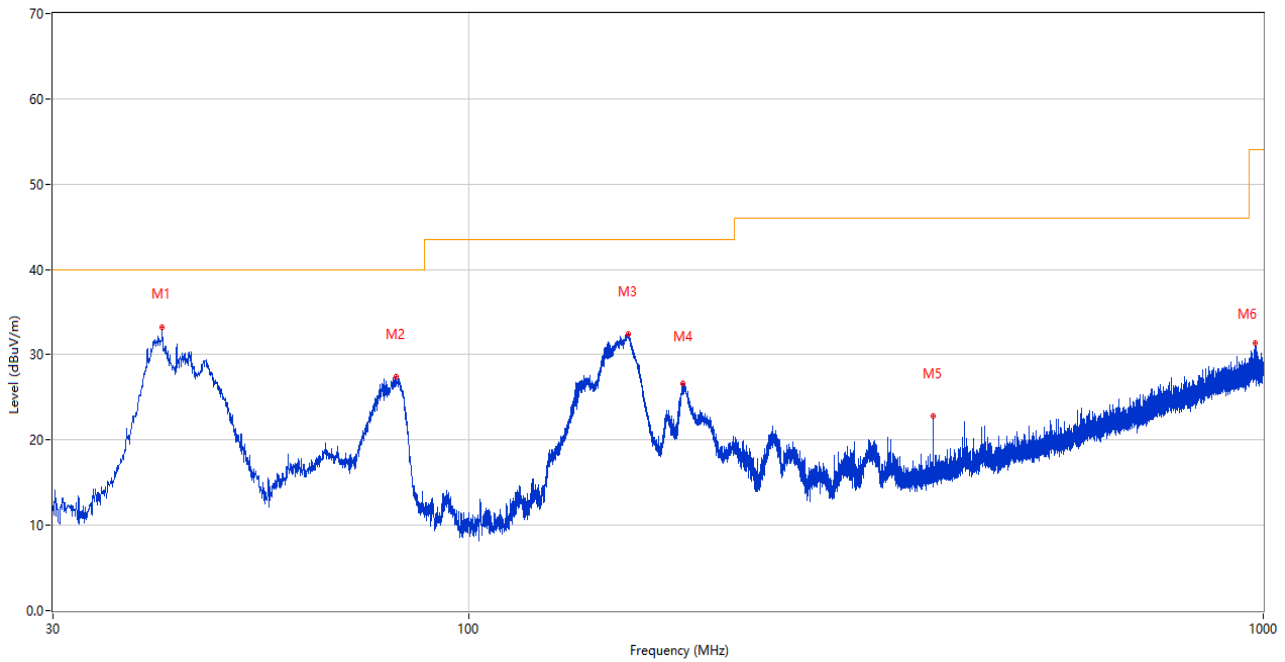
Note 2: For the test data above 1 GHz, according the ANSI C63.4-2014, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

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.	S11	Temperature	23.2°C
Humidity	48%RH	Pressure	101kPa
Test Engineer	He Shichang	Test Date	2024.01.16

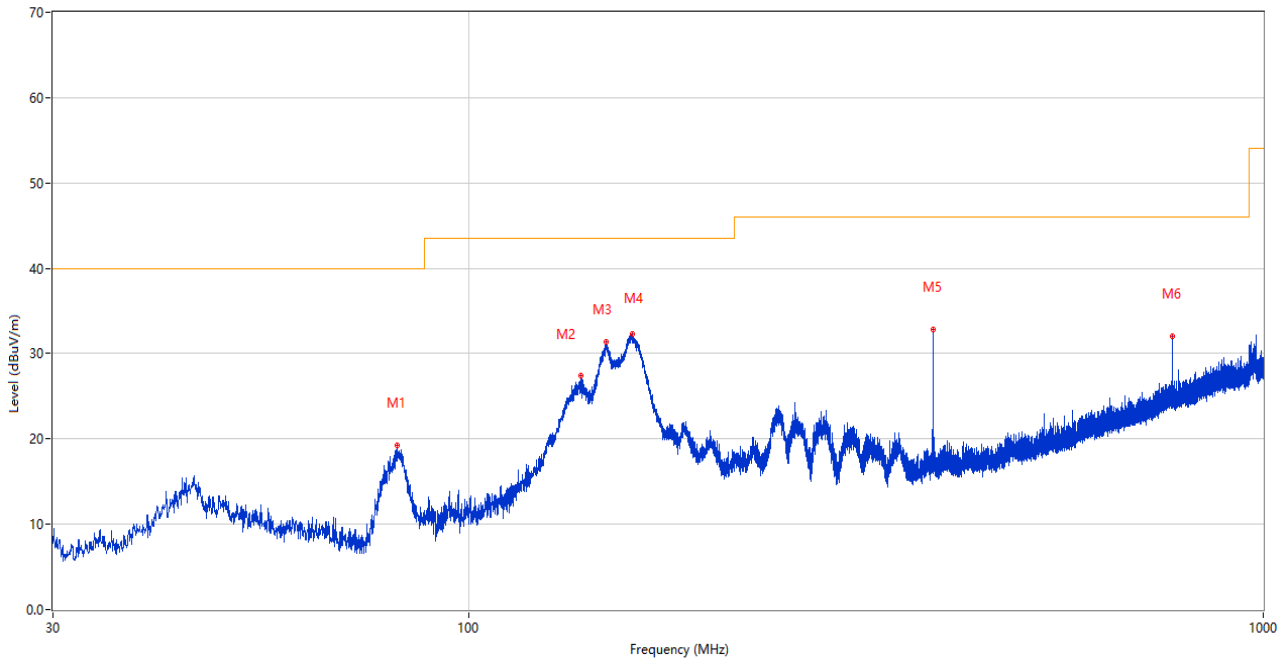
Test Mode 2

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	41.155	33.19	-26.32	40.0	6.81	Peak	237.00	100	Vertical	Pass
2	81.168	27.40	-30.88	40.0	12.60	Peak	267.00	100	Vertical	Pass
3	159.010	32.46	-29.64	43.5	11.04	Peak	2.00	100	Vertical	Pass
4	185.976	26.67	-27.96	43.5	16.83	Peak	128.00	100	Vertical	Pass
5	384.002	22.75	-21.41	46.0	23.25	Peak	1.00	100	Vertical	Pass
6	976.429	31.31	-8.69	54.0	22.69	Peak	207.00	100	Vertical	Pass

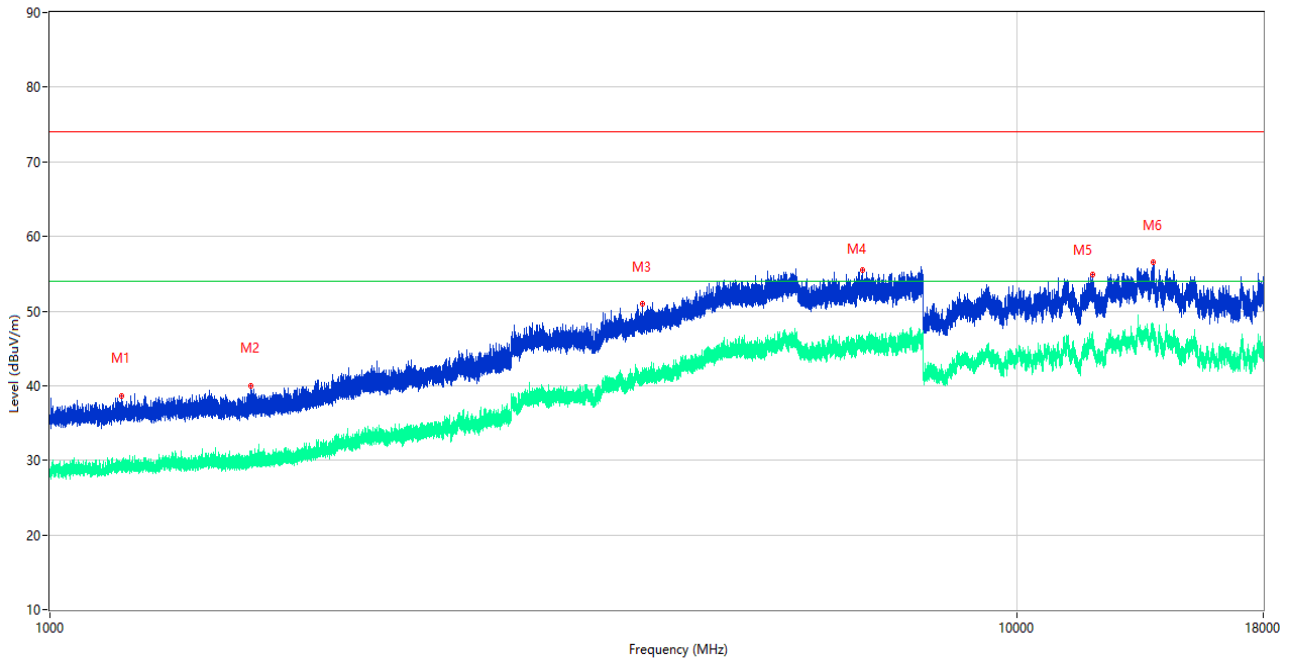
2) Test Antenna Horizontal, 30 MHz – 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	81.362	19.22	-30.84	40.0	20.78	Peak	139.00	200	Horizontal	Pass
2	138.301	27.39	-30.19	43.5	16.11	Peak	299.00	200	Horizontal	Pass
3	148.825	31.32	-30.06	43.5	12.18	Peak	304.00	200	Horizontal	Pass
4	160.708	32.34	-29.54	43.5	11.16	Peak	126.00	200	Horizontal	Pass
5	384.002	32.87	-21.41	46.0	13.13	Peak	45.00	100	Horizontal	Pass
6	767.976	32.10	-12.46	46.0	13.90	Peak	294.00	100	Horizontal	Pass

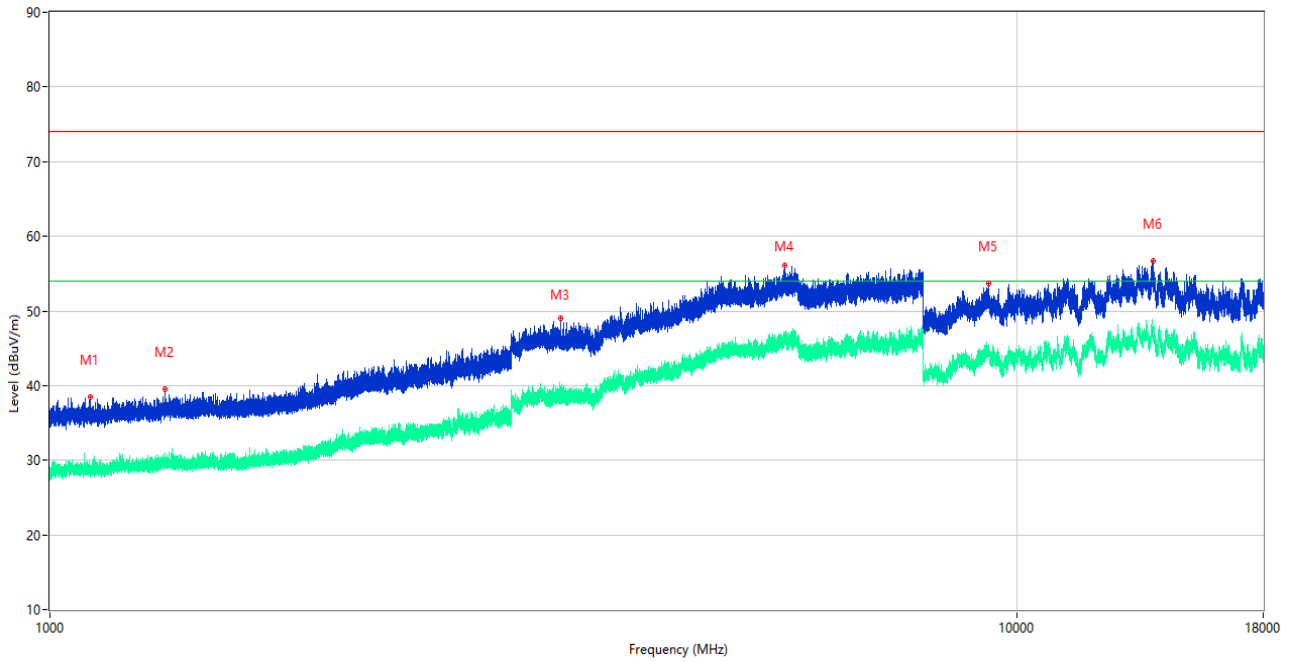
Equipment Information						
Equipment Name	Supplier	Model	Serial No.	Cal. Date	Cal. Due	Use
Frequency Below 1 GHz						
EMI Receiver	Keysight	N9038A	MY55330120	2023.09.05	2024.09.04	<input checked="" type="checkbox"/>
Amplifier (30-1GHz)	COM-MV	ZT30-1000M	B2017119081	2023.12.05	2024.12.04	<input checked="" 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	1185.300	38.64	-16.30	74.0	35.36	Peak	360.00	100	Vertical	Pass
1**	1185.300	29.25	-16.30	54.0	24.75	AV	360.00	100	Vertical	Pass
2	1614.400	40.05	-15.93	74.0	33.95	Peak	249.00	100	Vertical	Pass
2**	1614.400	30.19	-15.93	54.0	23.81	AV	249.00	100	Vertical	Pass
3	4104.250	50.93	-1.29	74.0	23.07	Peak	238.00	100	Vertical	Pass
3**	4104.250	41.14	-1.29	54.0	12.86	AV	238.00	100	Vertical	Pass
4	6922.250	55.45	1.77	74.0	18.55	Peak	360.00	100	Vertical	Pass
4**	6922.250	46.83	1.77	54.0	7.17	AV	360.00	100	Vertical	Pass
5	11995.000	54.88	2.63	74.0	19.12	Peak	133.00	100	Vertical	Pass
5**	11995.000	45.75	2.63	54.0	8.25	AV	133.00	100	Vertical	Pass
6	13847.000	56.49	5.21	74.0	17.51	Peak	187.00	100	Vertical	Pass
6**	13847.000	46.74	5.21	54.0	7.26	AV	187.00	100	Vertical	Pass

4) Test Antenna Horizontal, 1 GHz – 18 GHz



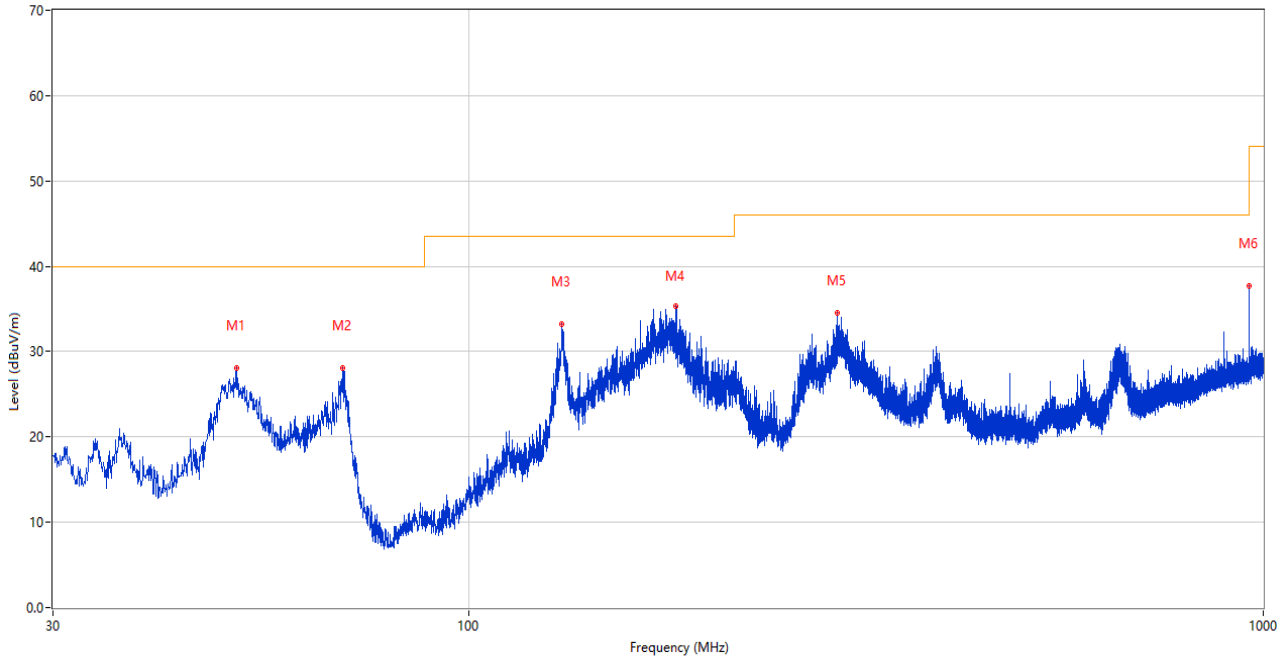
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1100.200	38.48	-16.32	74.0	35.52	Peak	339.00	100	Horizontal	Pass
1**	1100.200	28.61	-16.32	54.0	25.39	AV	339.00	100	Horizontal	Pass
2	1314.900	39.48	-15.84	74.0	34.52	Peak	353.00	100	Horizontal	Pass
2**	1314.900	29.58	-15.84	54.0	24.42	AV	353.00	100	Horizontal	Pass
3	3374.000	49.01	-4.38	74.0	24.99	Peak	233.00	100	Horizontal	Pass
3**	3374.000	38.20	-4.38	54.0	15.80	AV	233.00	100	Horizontal	Pass
4	5755.500	56.07	3.37	74.0	17.93	Peak	242.00	100	Horizontal	Pass
4**	5755.500	46.57	3.37	54.0	7.43	AV	242.00	100	Horizontal	Pass
5	9351.999	53.65	2.13	74.0	20.35	Peak	256.00	100	Horizontal	Pass
5**	9351.999	44.94	2.13	54.0	9.06	AV	256.00	100	Horizontal	Pass
6	13838.000	56.74	5.33	74.0	17.26	Peak	174.00	100	Horizontal	Pass
6**	13838.000	47.41	5.33	54.0	6.59	AV	174.00	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"/>
Amplifier (18-40GHz)	COM-MV	KA LNA18-40G-01	18050001	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"/>
Test Antenna-Horn	A-INFOMW	LB-180400KF	J211060273	2021.07.02	2024.07.01	<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.	S11	Temperature	23.2°C
Humidity	48%RH	Pressure	101kPa
Test Engineer	He Shichang	Test Date	2024.01.19

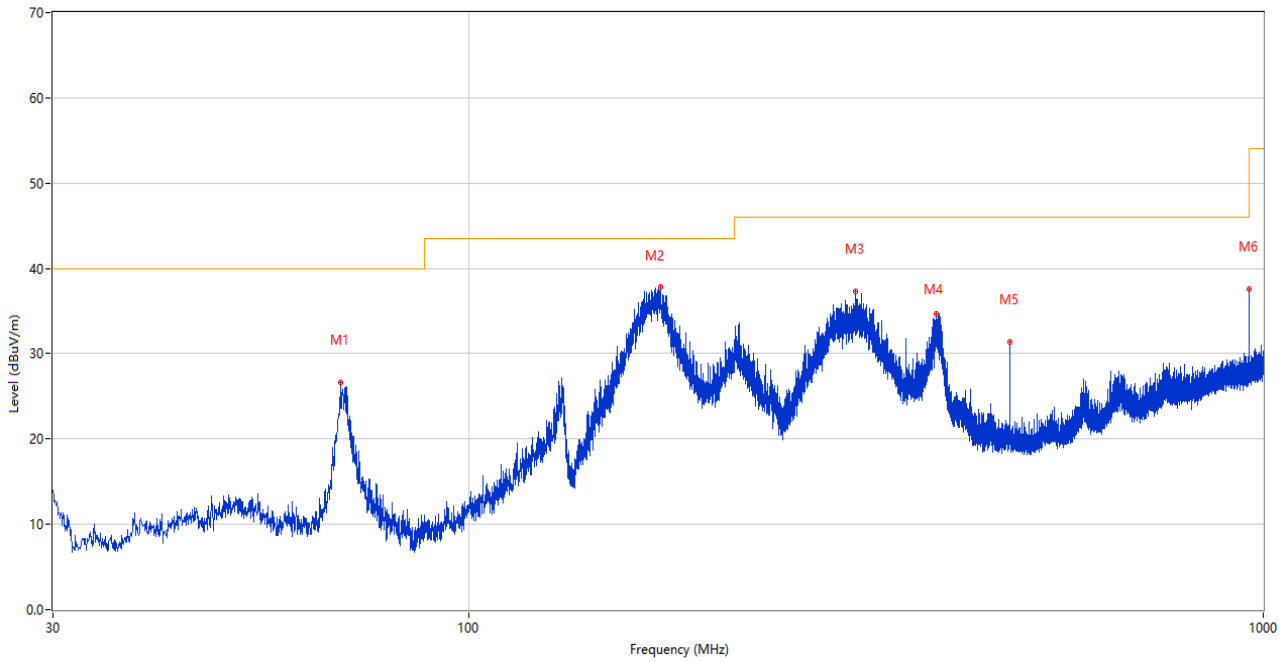
Test Mode 5

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	51.049	28.05	-25.48	40.0	11.95	Peak	271.00	100	Vertical	Pass
2	69.527	28.07	-29.16	40.0	11.93	Peak	237.00	100	Vertical	Pass
3	130.977	33.20	-29.82	43.5	10.30	Peak	286.00	100	Vertical	Pass
4	182.532	35.31	-28.27	43.5	8.19	Peak	360.00	100	Vertical	Pass
5	291.124	34.59	-23.88	46.0	11.41	Peak	284.00	100	Vertical	Pass
6	959.987	37.74	-9.29	46.0	8.26	Peak	349.00	100	Vertical	Pass

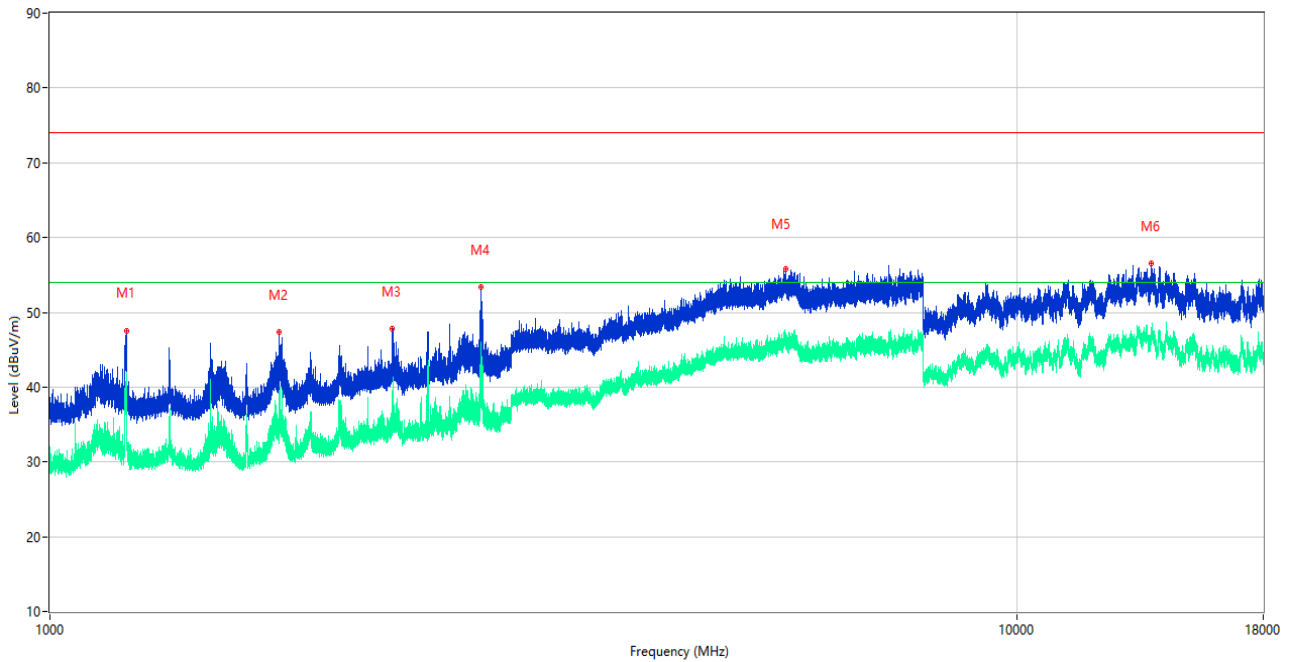
6) Test Antenna Horizontal, 30 MHz – 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	69.091	26.66	-29.00	40.0	13.34	Peak	188.00	200	Horizontal	Pass
2	174.579	37.78	-28.92	43.5	5.72	Peak	195.00	100	Horizontal	Pass
3	307.129	37.25	-23.48	46.0	8.75	Peak	225.00	100	Horizontal	Pass
4	387.930	34.73	-21.40	46.0	11.27	Peak	53.00	100	Horizontal	Pass
5	480.031	31.43	-19.19	46.0	14.57	Peak	243.00	200	Horizontal	Pass
6	959.987	37.63	-9.29	46.0	8.37	Peak	332.00	100	Horizontal	Pass

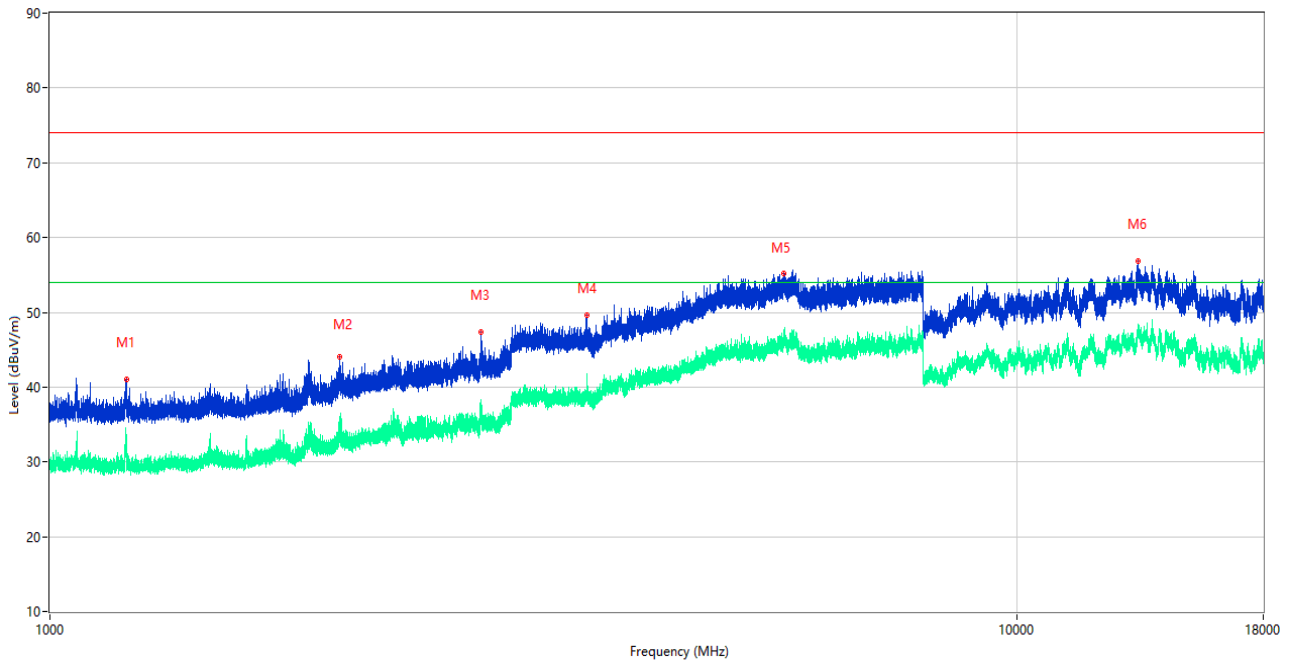
Equipment Information						
Equipment Name	Supplier	Model	Serial No.	Cal. Date	Cal. Due	Use
Frequency Below 1 GHz						
EMI Receiver	Keysight	N9038A	MY55330120	2023.09.05	2024.09.04	<input checked="" type="checkbox"/>
Amplifier (30-1GHz)	COM-MV	ZT30-1000M	B2017119081	2023.12.05	2024.12.04	<input checked="" 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	1199.600	47.59	-16.22	74.0	26.41	Peak	228.00	100	Vertical	Pass
1**	1199.600	41.10	-16.22	54.0	12.90	AV	228.00	100	Vertical	Pass
2	1727.400	47.39	-15.88	74.0	26.61	Peak	178.00	100	Vertical	Pass
2**	1727.400	33.63	-15.88	54.0	20.37	AV	178.00	100	Vertical	Pass
3	2260.800	47.82	-12.50	74.0	26.18	Peak	218.00	100	Vertical	Pass
3**	2260.800	34.78	-12.50	54.0	19.22	AV	218.00	100	Vertical	Pass
4	2791.200	53.34	-8.50	74.0	20.66	Peak	169.00	100	Vertical	Pass
4**	2791.200	41.70	-8.50	54.0	12.30	AV	169.00	100	Vertical	Pass
5	5767.500	55.79	3.25	74.0	18.21	Peak	134.00	100	Vertical	Pass
5**	5767.500	46.23	3.25	54.0	7.77	AV	134.00	100	Vertical	Pass
6	13796.000	56.53	5.63	74.0	17.47	Peak	24.00	100	Vertical	Pass
6**	13796.000	46.39	5.63	54.0	7.61	AV	24.00	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	1199.900	41.01	-16.21	74.0	32.99	Peak	296.00	100	Horizontal	Pass
1**	1199.900	33.37	-16.21	54.0	20.63	AV	296.00	100	Horizontal	Pass
2	1995.000	44.08	-13.81	74.0	29.92	Peak	141.00	100	Horizontal	Pass
2**	1995.000	34.28	-13.81	54.0	19.72	AV	141.00	100	Horizontal	Pass
3	2789.000	47.33	-8.48	74.0	26.67	Peak	67.00	100	Horizontal	Pass
3**	2789.000	36.42	-8.48	54.0	17.58	AV	67.00	100	Horizontal	Pass
4	3598.000	49.56	-3.78	74.0	24.44	Peak	71.00	100	Horizontal	Pass
4**	3598.000	38.76	-3.78	54.0	15.24	AV	71.00	100	Horizontal	Pass
5	5745.750	55.27	3.15	74.0	18.73	Peak	293.00	100	Horizontal	Pass
5**	5745.750	47.31	3.15	54.0	6.69	AV	293.00	100	Horizontal	Pass
6	13346.500	56.78	5.11	74.0	17.22	Peak	183.00	100	Horizontal	Pass
6**	13346.500	47.13	5.11	54.0	6.87	AV	183.00	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"/>
Amplifier (18-40GHz)	COM-MV	KA LNA18-40G-01	18050001	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"/>
Test Antenna-Horn	A-INFOMW	LB-180400KF	J211060273	2021.07.02	2024.07.01	<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"/>

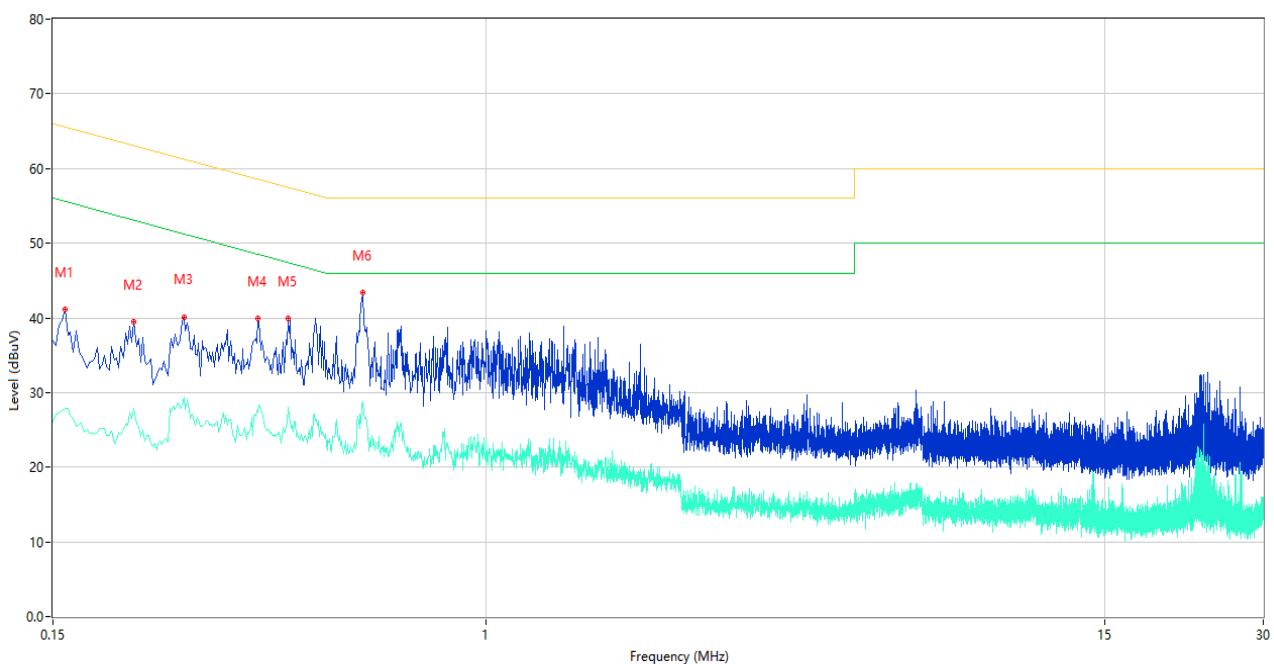
A.2 Conducted Emission, AC Ports

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 (120 VAC, 60 Hz) shown here.

Sample No.	S10	Temperature	24.3°C
Humidity	52%RH	Pressure	101kPa
Test Engineer	Yang Yang	Test Date	2024.01.16

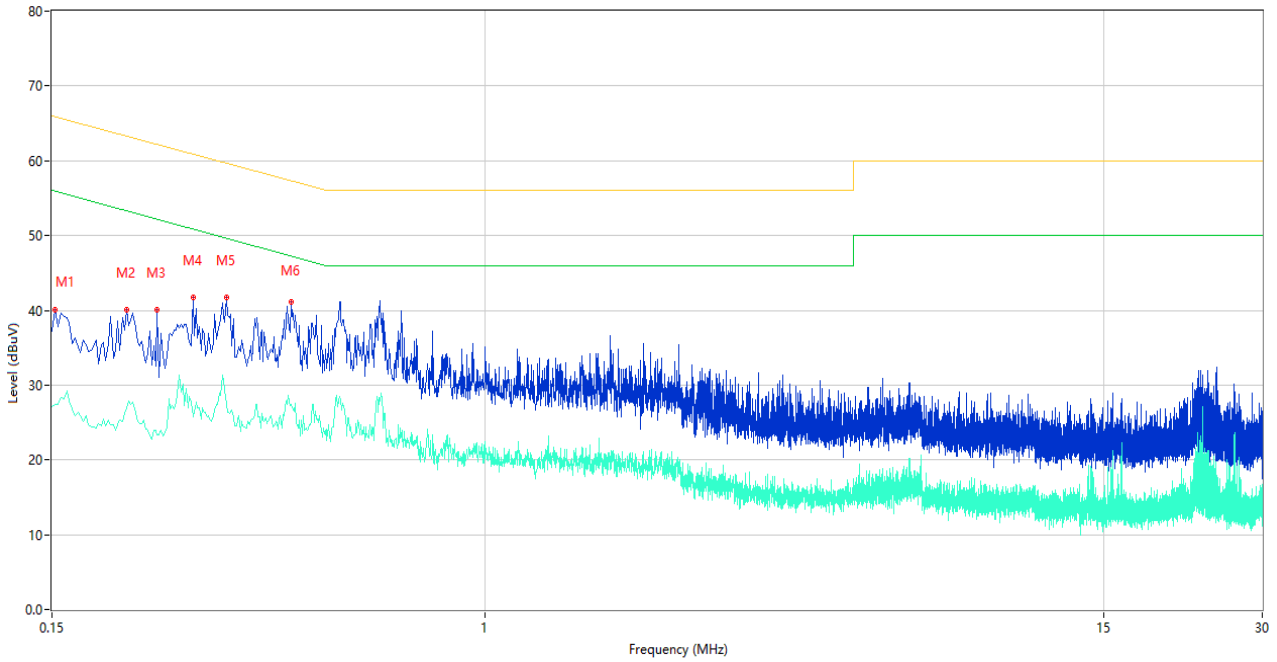
Test Mode 2

1) AC Ports - L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.158	41.14	9.46	65.57	24.43	Peak	L	Pass
1**	0.158	27.87	9.46	55.57	27.70	AV	L	Pass
2	0.214	39.45	9.42	63.05	23.60	Peak	L	Pass
2**	0.214	27.86	9.42	53.05	25.19	AV	L	Pass
3	0.266	40.13	9.43	61.24	21.11	Peak	L	Pass
3**	0.266	29.32	9.43	51.24	21.92	AV	L	Pass
4	0.368	39.94	9.58	58.55	18.61	Peak	L	Pass
4**	0.368	27.42	9.58	48.55	21.13	AV	L	Pass
5	0.420	39.92	9.98	57.45	17.53	Peak	L	Pass
5**	0.420	28.08	9.98	47.45	19.37	AV	L	Pass
6	0.582	43.33	9.94	56.00	12.67	Peak	L	Pass
6**	0.582	28.80	9.94	46.00	17.20	AV	L	Pass

2) AC Ports - N Phase

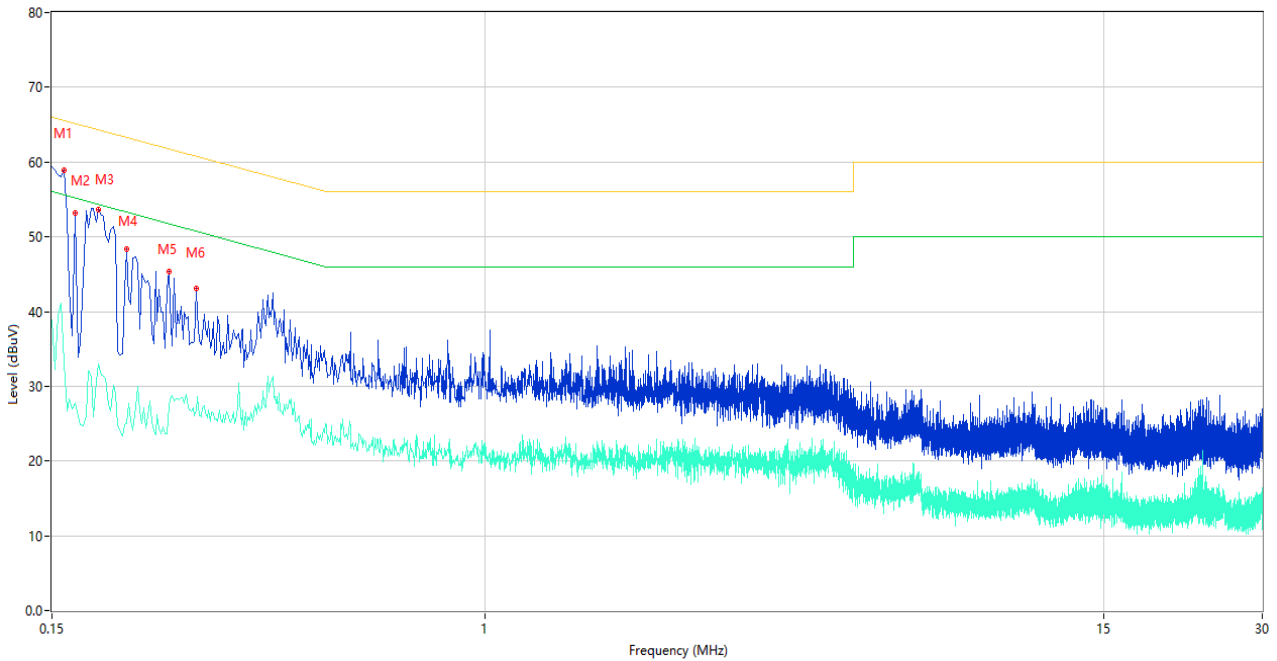


No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.152	40.07	9.47	65.89	25.82	Peak	N	Pass
1**	0.152	27.48	9.47	55.89	28.41	AV	N	Pass
2	0.208	40.10	9.42	63.28	23.18	Peak	N	Pass
2**	0.208	26.98	9.42	53.28	26.30	AV	N	Pass
3	0.238	40.08	9.43	62.17	22.09	Peak	N	Pass
3**	0.238	23.38	9.43	52.17	28.79	AV	N	Pass
4	0.278	41.70	9.43	60.88	19.18	Peak	N	Pass
4**	0.278	25.70	9.43	50.88	25.18	AV	N	Pass
5	0.322	41.72	9.39	59.66	17.94	Peak	N	Pass
5**	0.322	27.38	9.39	49.66	22.28	AV	N	Pass
6	0.428	41.09	9.97	57.29	16.20	Peak	N	Pass
6**	0.428	27.46	9.97	47.29	19.83	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	2023.05.16	2024.05.15	<input checked="" type="checkbox"/>
ISN	TESEQ	ISN T800	34449	2023.11.10	2024.11.09	<input type="checkbox"/>
ISN	TESEQ	ISN T8-Cat6	53561	2023.04.23	2024.04.22	<input type="checkbox"/>
Shielded Room	YiHeng Electronic Co., Ltd	3.5m*3.1m*2.8m	112	2022.02.19	2025.02.18	<input checked="" type="checkbox"/>
Description	Supplier	Name	Version	/		Use
Test Software	BALUN	BL410-E	V22.930	/		<input checked="" type="checkbox"/>

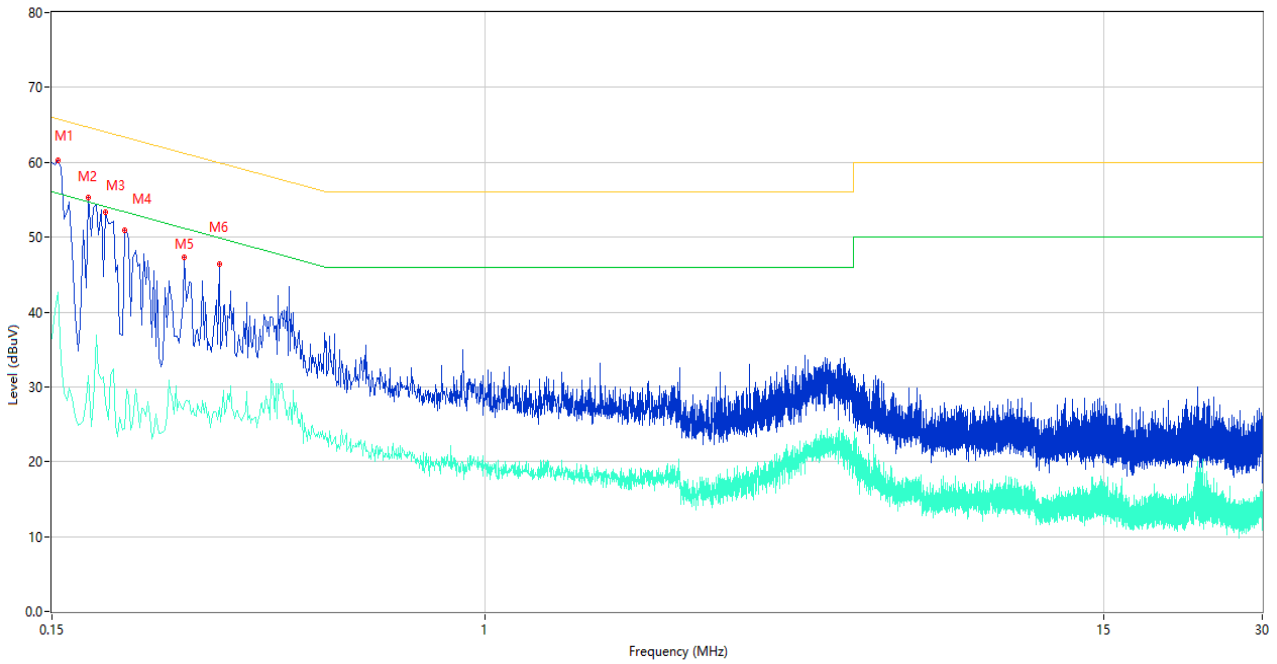
Test Mode 5

3) AC Ports - L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.158	58.83	9.46	65.57	6.74	Peak	L	Pass
1**	0.158	33.11	9.46	55.57	22.46	AV	L	Pass
2	0.166	53.11	9.45	65.16	12.05	Peak	L	Pass
2**	0.166	27.76	9.45	55.16	27.40	AV	L	Pass
3	0.184	53.63	9.43	64.30	10.67	Peak	L	Pass
3**	0.184	33.00	9.43	54.30	21.30	AV	L	Pass
4	0.208	48.42	9.42	63.28	14.86	Peak	L	Pass
4**	0.208	25.05	9.42	53.28	28.23	AV	L	Pass
5	0.250	45.30	9.43	61.76	16.46	Peak	L	Pass
5**	0.250	27.22	9.43	51.76	24.54	AV	L	Pass
6	0.282	43.13	9.43	60.76	17.63	Peak	L	Pass
6**	0.282	26.71	9.43	50.76	24.05	AV	L	Pass

4) AC Ports - N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.154	60.25	9.47	65.78	5.53	Peak	N	Pass
1**	0.154	42.68	9.47	55.78	13.10	AV	N	Pass
2	0.176	55.25	9.44	64.67	9.42	Peak	N	Pass
2**	0.176	31.48	9.44	54.67	23.19	AV	N	Pass
3	0.190	53.28	9.43	64.04	10.76	Peak	N	Pass
3**	0.190	27.81	9.43	54.04	26.23	AV	N	Pass
4	0.206	50.91	9.42	63.37	12.46	Peak	N	Pass
4**	0.206	24.38	9.42	53.37	28.99	AV	N	Pass
5	0.268	47.26	9.43	61.18	13.92	Peak	N	Pass
5**	0.268	27.64	9.43	51.18	23.54	AV	N	Pass
6	0.312	46.37	9.41	59.92	13.55	Peak	N	Pass
6**	0.312	27.31	9.41	49.92	22.61	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	2023.05.16	2024.05.15	<input checked="" type="checkbox"/>
ISN	TESEQ	ISN T800	34449	2023.11.10	2024.11.09	<input type="checkbox"/>
ISN	TESEQ	ISN T8-Cat6	53561	2023.04.23	2024.04.22	<input type="checkbox"/>
Shielded Room	YiHeng Electronic Co., Ltd	3.5m*3.1m*2.8m	112	2022.02.19	2025.02.18	<input checked="" type="checkbox"/>
Description	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-SZ23C0902-AE-1.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ23C0902-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SZ23C0902-AI.PDF”.

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--END OF REPORT--