

TEST REPORT

Applicant: Shanghai Xiangcheng Communication Technology Co., Ltd

Address: 6th Floor, Building 10, No.3000, Longdong Avenue, Pudong New District, Shanghai

Equipment Type: Smart Electronic Cash Register

Model Name: D8C

Brand Name: KOZEN

FCC ID: 2A2UU-D8C

Test Standard: 47 CFR Part 15 Subpart C
ANSI C63.10-2013

Sample Receipt Date: Sep. 12, 2024

Test Date: Oct. 12, 2024 - Oct. 31, 2024

Date of Issue: Nov. 27, 2024

ISSUED BY:

Shanghai Tejet Communications Technology Co., Ltd. Testing Center

Tested by: Wu Dejun

Wu Dejun

Checked by: Huang Chengkun

Huang Chengkun

Approved by: Chen Zidong
(Technical Director)

Chen Zidong

Revision History

Version	Issue Date	Revisions
<u>Rev. 01</u>	<u>Nov. 27, 2024</u>	<u>Initial Issue</u>

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1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shanghai Tejet Communications Technology Co., Ltd. Testing Center
Address	1st to 2nd floors, Building 1, No. 222 Xuanlan Road, Xuanqiao Town, Pudong New District, Shanghai

1.2 Test Location

Name	Shanghai Tejet Communications Technology Co., Ltd. Testing Center
Location	1st to 2nd floors, Building 1, No. 222 Xuanlan Road, Xuanqiao Town, Pudong New District, Shanghai
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1352.

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Shanghai Xiangcheng Communication Technology Co., Ltd
Address	6th Floor, Building 10, No.3000, Longdong Avenue, Pudong New District, Shanghai

2.2 Manufacturer Information

Manufacturer	Shanghai Xiangcheng Communication Technology Co., Ltd
Address	6th Floor, Building 10, No.3000, Longdong Avenue, Pudong New District, Shanghai

2.3 General Description for Equipment under Test (EUT)

EUT Name	Smart Electronic Cash Register
Model Name Under Test	D8C
Series Model Name	N/A
Description of Model name differentiation	N/A
Sample No.	N/A
Hardware Version	D08C1_A0_MB_V1.0
Software Version	d08c1_kozen_combo_
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Technical Information

Network and Wireless connectivity	NFC
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The requirement for the following technical information of the EUT was tested in this report:

Modulation Type	ASK
Product Type	<input checked="" type="checkbox"/> Mobile <input type="checkbox"/> Portable <input type="checkbox"/> Fix Location
Frequency Range	13.56 MHz
Receiver Categorization	3
Number of Channel	1
Tested Channel	1
Antenna Type	Coil Antenna

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 15 Subpart C	Intentional Radiators
2	ANSI C63.10-2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

3.2 Verdict

No.	Description	FCC Part No.	Test Result	Verdict
1	Antenna Requirement	15.203	--	Pass ^{Note}
2	Emissions Bandwidth	15.215	ANNEX A.1	Pass
3	Field Strength of Fundamental Emissions	15.225(a)	ANNEX A.2	Pass
4	Radiated Emissions	15.225(d) 15.209	ANNEX A.3	Pass
5	Frequency Stability	15.225(e)	ANNEX A.4	Pass
6	Conducted Emission	15.207	ANNEX A.5	Pass

Note: The EUT has a permanently and irreplaceable attached antenna, which complies with the requirement FCC 15.203.

3.3 Decision Rule

- ☐ No Need
- ☒ Use General conformity decision rule (Consider uncertainty or not ☒ No ☐ Yes)
- ☐ Use Special Conformity Decision Rule (Consider uncertainty or not ☐ No ☐ Yes)

3.4 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 (150 kHz-30 MHz)	2.6 dB
Radiated emissions (9 kHz-30 MHz)	4.3 dB
Radiated emissions (30 MHz-1 GHz)	4.4 dB

4 GENERAL TEST CONFIGURATIONS

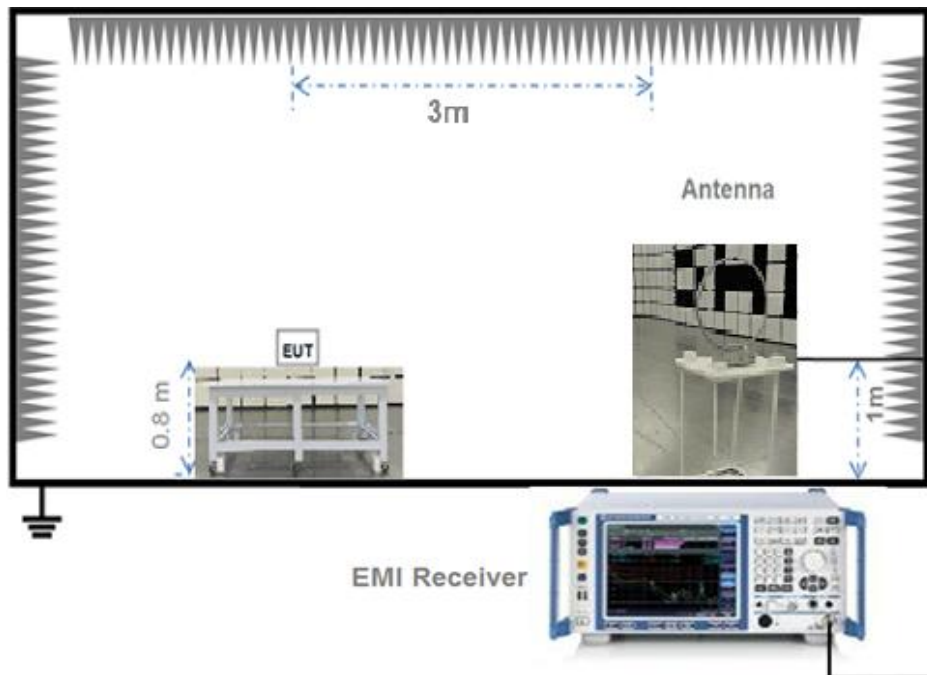
4.1 Test Environments

During the measurement, the normal environmental conditions were within the listed ranges:

Relative Humidity	54% to 57%	
Atmospheric Pressure	100 kPa to 102 kPa	
Temperature	NT (Normal Temperature)	+22.6°C to +24.6°C
Working Voltage of the EUT	NV (Normal Voltage)	5 V

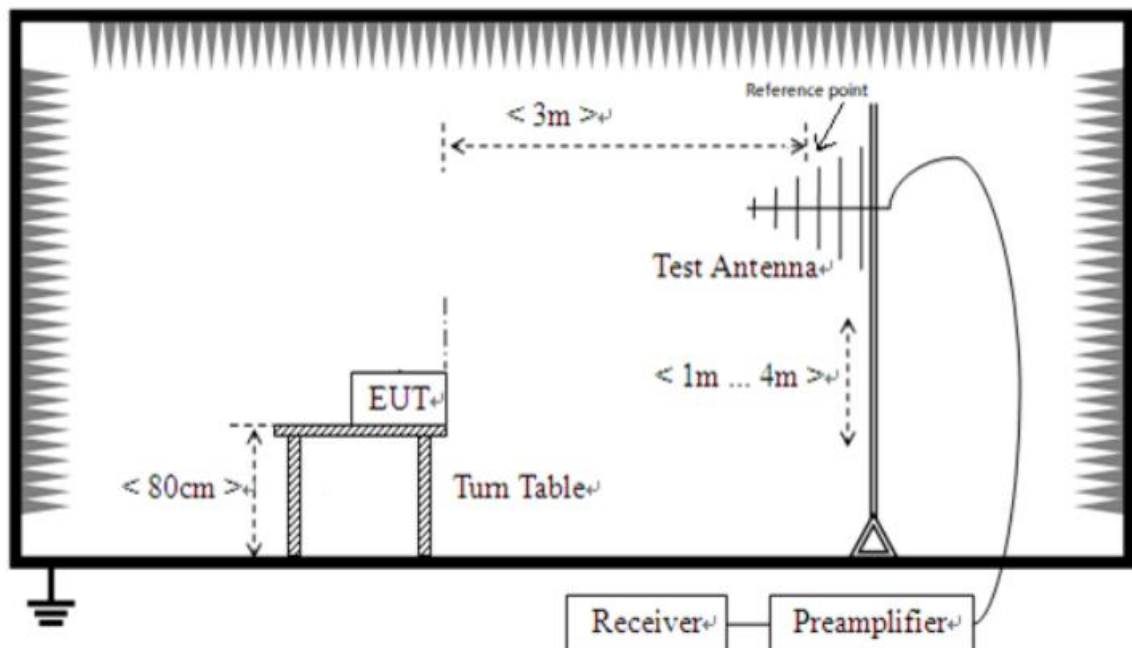
4.2 Description of Test Setup

4.2.1 For Radiated Test (Below 30 MHz)



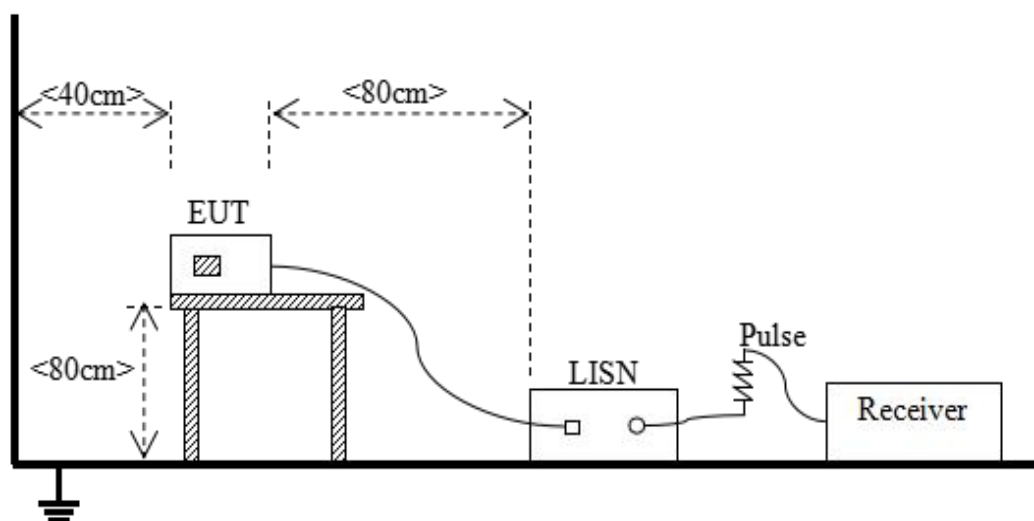
(Diagram 1)

4.2.2 For Radiated Test (30 MHz-1 GHz)



(Diagram 2)

4.2.3 For AC Power Supply Port Test



(Diagram 3)

5 TEST ITEMS

5.1 Antenna Requirements

5.1.1 Relevant Standards

FCC §15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of § 15.211, § 15.213, § 15.217, § 15.219, or § 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

5.1.2 Antenna Anti-Replacement Construction

The Antenna Anti-Replacement as following method:

Protected Method	Description
The antenna is embedded in the product.	An embedded-in antenna design is used.

Reference Documents	Item
Photo	Please refer EUT internal photos.

5.2 Emission Bandwidth

5.2.1 Definition

15.215(c);

Intentional radiators operating under the alternative provisions to the general emission limits must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

The following conditions shall be observed for measuring the occupied bandwidth and x dB bandwidth:

- The transmitter shall be operated at its maximum carrier power measured under normal test conditions.
- The span of the spectrum analyzer shall be set large enough to capture all products of the modulation process, including the emission skirts, around the carrier frequency, but small enough to avoid having other emissions (e.g. on adjacent channels) within the span.
- The detector of the spectrum analyzer shall be set to "Sample". However, a peak, or peak hold, may be used in place of the sampling detector since this usually produces a wider bandwidth than the actual bandwidth (worst-case measurement). Use of a peak hold (or "Max Hold") may be necessary to determine the occupied / x dB bandwidth if the device is not transmitting continuously.
- The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the actual occupied / x dB bandwidth and the video bandwidth (VBW) shall not be smaller than three times the RBW value. Video averaging is not permitted.

Note: It may be necessary to repeat the measurement a few times until the RBW and VBW are in compliance with the above requirement.

For the 99% emission bandwidth, the trace data points are recovered and directly summed in linear power level terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached, and that frequency recorded. The process is repeated for the highest frequency data points (starting at the highest frequency, at the right side of the span, and going down in frequency). This frequency is then recorded. The difference between the two recorded frequencies is the occupied bandwidth (or the 99% emission bandwidth).

5.2.2 Test Setup

See section 4.1.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.2.3 Test Procedure

The 20dB bandwidth is measured with a spectrum analyzer connected via a receiver antenna placed near the EUT while the EUT is operating in transmission mode.

Use the following spectrum analyzer settings:

Span = between 2 to 5 times the OBW

RBW = 1% to 5% the OBW

VBW \geq 3RBW

Sweep = auto

Detector function = peak

Trace = max hold

The 99% emission bandwidth is measured with a spectrum analyzer connected via a receiver antenna placed near the EUT while the EUT is operating in transmission mode.

Use the following spectrum analyzer settings:

Span = between 1.5 to 5 times the OBW

RBW = 1% to 5% OBW

VBW \geq 3RBW

Sweep = auto

Detector function = peak

Trace = max hold

5.2.4 Test Result

Please refer to ANNEX A.1

5.3 Field Strength of Fundamental Emissions and Radiated Emissions

5.3.1 Limit

FCC §15.225(a), (b), (c)

According to FCC section 15.225, for <30 MHz, Radiated emissions were measured according to ANSI C63.4. The EUT was set to transmit at the highest output power. The EUT was set 10 meter away from the measuring antenna. The loop antenna was positioned 1 meter above the ground from the center of the loop. The measuring bandwidth was set to 10 kHz. (Note: During testing the receive antenna was rotated about its axis to maximize the emission from the EUT)

There was no detected Restricted bands and Radiated spurious emission below 30MHz. The 30m limit was converted to 3m Limit using square factor(x) as it was found by measurements as follows; 3 m Limit(dBμV/m) = 20log(X)+40log(30/3)= 20log(15848)+40log(30/3) = 124dBμV

Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency range (MHz)	Field Strength@30m		Field Strength@10m	Field Strength@3m
	μV/m	dBμV/m	dBμV/m	dBμV/m
Below 13.110	30	29.5	48.58	69.5
13.110 ~ 13.410	106	40.5	59.58	80.5
13.410 ~ 13.553	334	50.5	69.58	90.5
13.553 ~13.567	15848	84	103.08	124
13.567 ~ 13.710	334	50.5	69.58	90.5
13.710 ~14.010	106	40.5	59.58	80.5
Above 14.010	30	29.5	48.58	69.5

NOTE:

1. Field Strength (dBμV/m) = 20*log[Field Strength (μV/m)].
2. In the emission tables above, the tighter limit applies at the band edges.

FCC §15.225(d)

According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/m)	Measurement distance (meters)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

Note:

1. For Above 1000 MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.
2. For above 1000 MHz, limit field strength of harmonics: 54dB μ V/m@3m (AV) and 74dB μ V/m@3m (PK).

5.3.2 Test Setup

See section 4.1.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.3.3 Test Procedure

The measurement frequency range is from 9 kHz to the 10th harmonic of the fundamental frequency. 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. The power of the EUT transmitting frequency should be ignored.

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

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

Trace = max hold

5.3.4 Test Result

Please refer to ANNEX A.2 and A.3

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.

5.4 Frequency Tolerance

5.4.1 Limit

FCC §15.225(e)

The frequency tolerance of the carrier signal shall be maintained within $\pm 0.01\%$ of the operating frequency over a temperature variation of -20 degrees to $+50$ degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

5.4.2 Test Setup

See section 4.1.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.4.3 Test Procedure

1. The test is performed in a Temperature Chamber.
2. The EUT is configured as MS + DC Power Supply.

5.4.4 Test Result

Please refer to ANNEX A.4.

5.5 Conducted Emission

5.5.1 Limit

FCC §15.207

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50μH/50Ω line impedance stabilization network (LISN).

Frequency range (MHz)	Conducted Limit (dBμV)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
0.50 - 30	60	50

5.5.2 Test Setup

See section 4.1.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.5.3 Test Procedure

The maximum conducted interference is searched using Peak (PK), if the emission levels 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. Refer to recorded points and plots below.

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.

5.5.4 Test Result

Please refer to ANNEX A.5.

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 RESULT

A.1 Emission Bandwidth

Sample No.	SC-SH2490014-A12	Temperature	22.6°C
Humidity	55%RH	Test Voltage	AC 120V/60Hz
Test Engineer	Hao Longda	Test Date	2024.10.31

Test Data

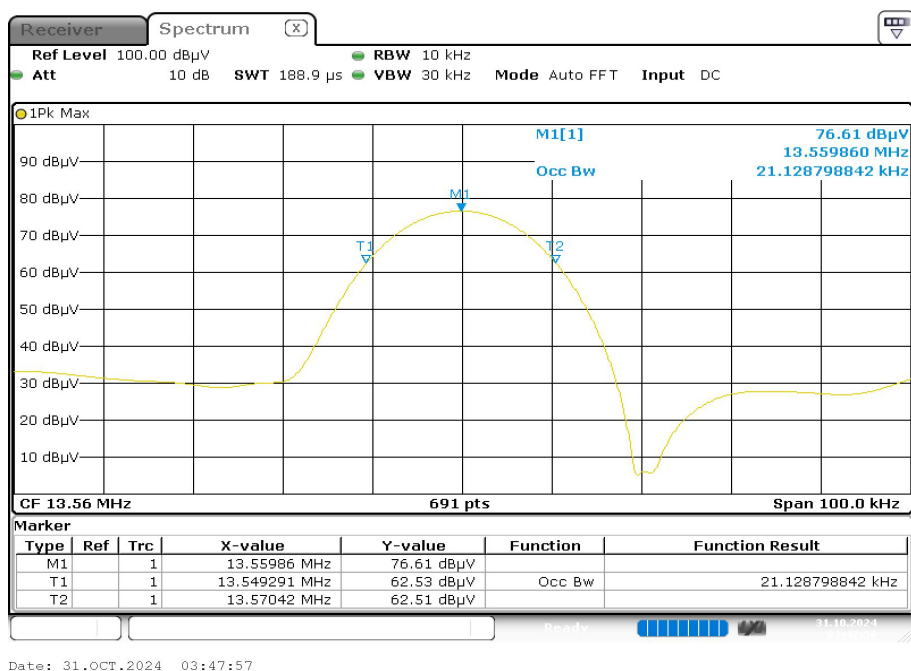
Frequency (MHz)	Emission Bandwidth(20dB down) (kHz)	Occupied Bandwidth(99%) (kHz)
13.559	24.7500	21.1288

Test plots

Emission Bandwidth



99% Occupied Bandwidth



Equipment Information						
Description	Manufacturer	Model	Equipment No.	Cal. Date	Cal. Due	Use
EMI Receiver	ROHDE&SCHWA RZ	ESRP3	BH-EMC-L010	2024.02.19	2025.02.18	<input checked="" type="checkbox"/>
Test Antenna- Loop	SCHWARZBECK	FMZB 1519B	BH-EMC-L067	2024.03.11	2027.03.10	<input checked="" type="checkbox"/>
Anechoic Chamber	YiHeng	9m*6m*6m	BH-EMC-L001	2024.04.18	2027.04.17	<input checked="" type="checkbox"/>

A.2 Field Strength of Fundamental Emissions

Note: Field Strength of Fundamental Emissions tests were performed in X, Y, Z axis direction of EUT. And only the worst axis test condition was recorded in this test report.

Sample No.	SC-SH2490014-A12	Temperature	23.5°C
Humidity	58%RH	Test Voltage	AC 120V/60Hz
Test Engineer	Hao Longda	Test Date	2024.10.17

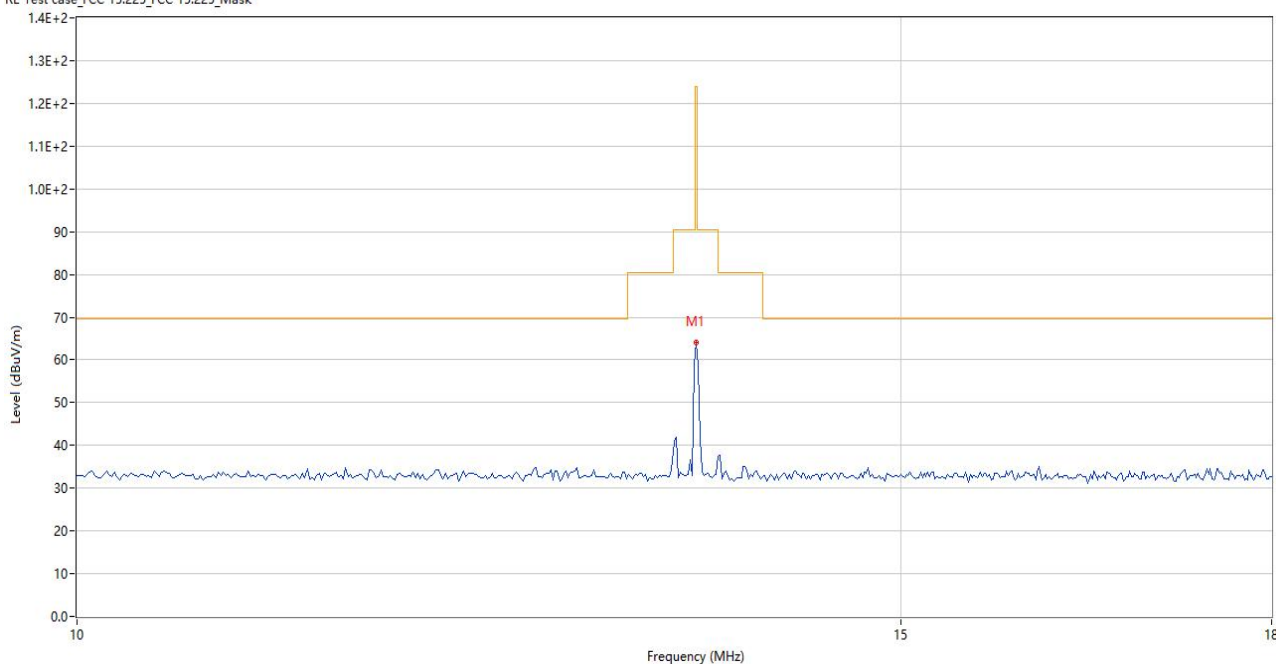
Test Data

Field Strength of Fundamental Emissions Value					
Frequency (MHz)	Detector	Field Strength (dB μ V/m)	Limit @3m (dB μ V/m)	EUT	Margin (dB)
13.560	PEAK	64.13	124.0	X axis	59.87

Test Plot

Test Antenna-LOOP, EUT X axis

RE Test case_FCC 15.225_FCC 15.225_Mask



Equipment Information						
Description	Manufacturer	Model	Equipment No.	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9038A	BH-EMC-L015	2024.07.09	2025.07.08	<input checked="" type="checkbox"/>
Test Antenna- Loop	SCHWARZBECK	FMZB 1519B	BH-EMC-L067	2024.03.11	2027.03.10	<input checked="" type="checkbox"/>
Anechoic Chamber	YiHeng	9m*6m*6m	BH-EMC-L001	2024.04.18	2027.04.17	<input checked="" type="checkbox"/>

A.3 Radiated Emissions

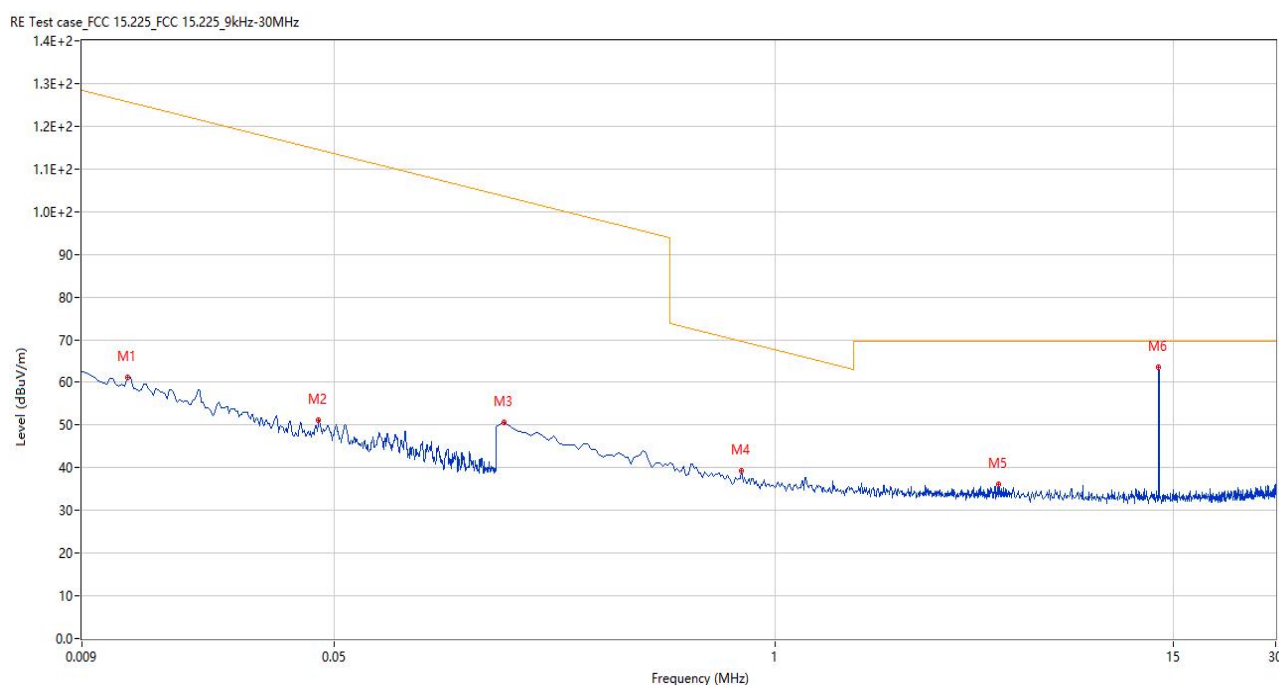
Note 1: This frequency which near 13.560 MHz with circle should be ignored because they are NFC carrier frequency.

Note 2: All Radiated Emissions tests were performed in X, Y, Z axis direction of EUT. And only the worst axis test condition was recorded in this test report.

Sample No.	SC-SH2490014-A12	Temperature	23.5°C
Humidity	58%RH	Test Voltage	AC 120V/60Hz
Test Engineer	Hao Longda	Test Date	2024.10.17

The Data and Plots (9 kHz ~ 30 MHz)

Below 30 MHz, Test Antenna LOOP, EUT X axis



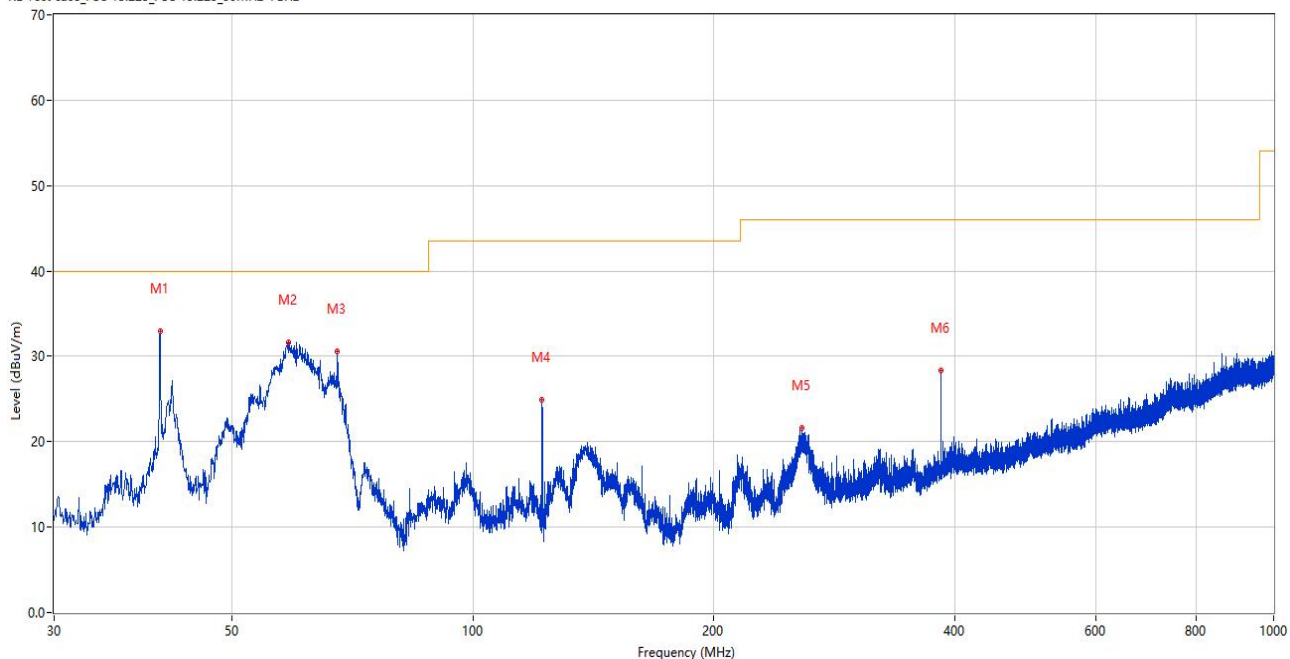
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	0.012	61.29	19.81	125.8	64.51	Peak	242.00	100	Vertical	Pass
2	0.045	51.05	19.22	114.5	63.45	Peak	61.00	100	Vertical	Pass
3	0.158	50.65	19.05	103.6	52.95	Peak	360.00	100	Vertical	Pass
4	0.797	39.28	19.03	69.6	30.32	Peak	72.00	100	Vertical	Pass
5	4.580	36.11	19.50	69.5	33.39	Peak	241.00	100	Vertical	Pass
6	13.556	63.67	19.21	69.5	5.83	Peak	181.00	100	Vertical	N/A

Equipment Information						
Description	Manufacturer	Model	Equipment No	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9038A	BH-EMC-L015	2024.07.09	2025.07.08	<input checked="" type="checkbox"/>
Test Antenna- Loop	SCHWARZBECK	FMZB 1519B	BH-EMC-L067	2024.03.11	2027.03.10	<input checked="" type="checkbox"/>
Anechoic Chamber	YiHeng	9m*6m*6m	BH-EMC-L001	2024.04.18	2027.04.17	<input checked="" type="checkbox"/>
Description	Manufacturer	Name	Version	/		Use
Test Software	BALUN	BL410-E	V21.919	/		<input checked="" type="checkbox"/>

Test Data and Plots (30 MHz ~ 10th Harmonic)

30 MHz to 1 GHz, Test Antenna Vertical, EUT X axis

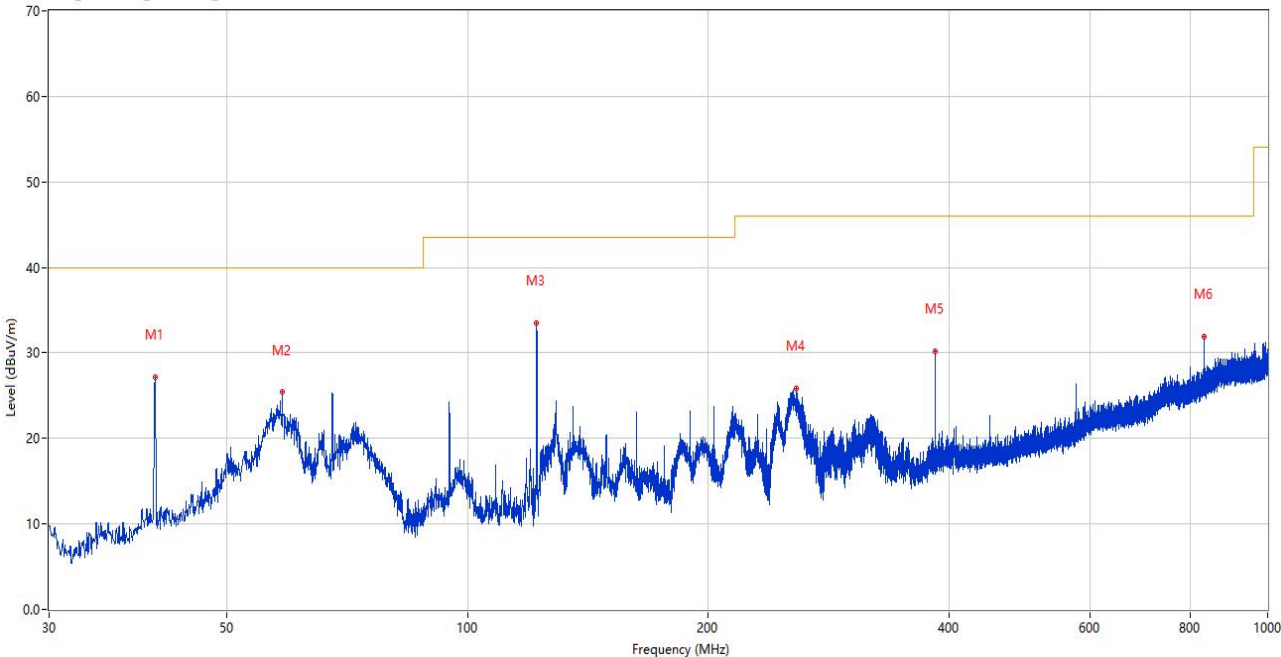
RE Test case_FCC 15.225_FCC 15.225_30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	40.670	32.97	-25.71	40.0	7.03	Peak	289.00	100	Vertical	Pass
2	58.906	31.67	-25.79	40.0	8.33	Peak	289.00	100	Vertical	Pass
3	67.782	30.58	-28.24	40.0	9.42	Peak	233.00	100	Vertical	Pass
4	122.053	24.36	-28.52	43.5	19.14	Peak	357.00	100	Vertical	Pass
5	257.659	21.68	-24.09	46.0	24.32	Peak	217.00	200	Vertical	Pass
6	384.002	28.30	-20.81	46.0	17.70	Peak	0.00	100	Vertical	Pass

30 MHz to 1 GHz, Test Antenna Horizontal, EUT X axis

RE Test case_FCC 15.225_FCC 15.225_30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	40.670	27.20	-25.71	40.0	12.80	Peak	228.00	200	Horizontal	Pass
2	58.663	25.47	-25.73	40.0	14.53	Peak	185.00	200	Horizontal	Pass
3	122.053	33.52	-28.52	43.5	9.98	Peak	106.00	200	Horizontal	Pass
4	257.659	25.87	-24.09	46.0	20.13	Peak	120.00	100	Horizontal	Pass
5	384.002	30.19	-20.81	46.0	15.81	Peak	53.00	100	Horizontal	Pass
6	832.918	31.91	-10.87	46.0	14.09	Peak	1.00	200	Horizontal	Pass

Radiated Emissions						
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9038A	BH-EMC-L015	2024.07.09	2025.07.08	<input checked="" type="checkbox"/>
Test Antenna-Bi-Log	SCHWARZBECK	VULB 9163	BH-EMC-L008	2024.03.11	2027.03.10	<input checked="" type="checkbox"/>
Anechoic Chamber	YiHeng	9m*6m*6m	BH-EMC-L001	2024.04.18	2027.04.17	<input checked="" type="checkbox"/>
Description	Manufacturer	Name		Version		Use
Test Software	BALUN	BL410-E		V21.919		<input checked="" type="checkbox"/>

A.4 Frequency Stability

Note 1: Because the 85%(4.25V) and 115% (5.75V)of the rated supply voltage value exceeds the cut-off voltage upper(5V) and lower(5V) limit of the manufacturer, the cut-off voltage of EUT is test here.

Note 2: The operating temperature range of the EUT is -20°C to 55°C.

Sample No.	SC-SH2490014-A12	Temperature	23.2°C
Humidity	57%RH	Test Voltage	AC 120V/60Hz
Test Engineer	Hao Longda	Test Date	2024.10.17

OPERATING FREQUENCY:	13560000 Hz
REFERENCE VOLTAGE:	5 V
DEVIATION LIMIT:	±0.01%

VOLTAGE (%)	Test Conditions		Frequency(Hz)	Deviation(%)	Verdict
	Power (VDC)	Temperature (°C)			
100	5.00	-20	13560000	0.000000	Pass
100		-10	13559784	-0.001593	
100		0	13560000	0.000000	
100		+10	13560022	0.000162	
100		+20	13560000	0.000000	
100		+25	13560000	0.000000	
100		+30	13559784	-0.001593	
100		+40	13559784	-0.001593	
100		+55	13560000	0.000000	
MAX(Battery End Point, 85)	4.25	+20	13559784	-0.001593	
MIN(Battery End Point, 115)	5.75	+20	13560000	0.000000	

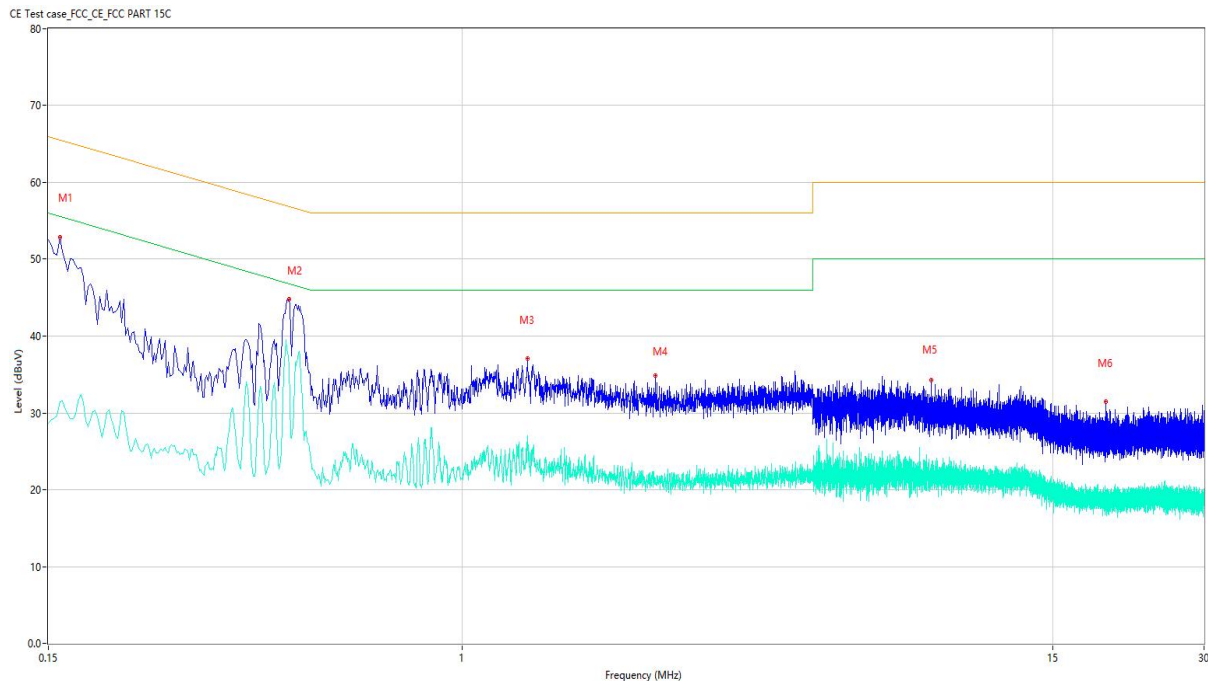
Equipment Information						
Description	Manufacturer	Model	Equipment No.	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9038A	BH-EMC-L015	2024.07.09	2025.07.08	<input checked="" type="checkbox"/>
Test Antenna- Loop	SCHWARZBECK	FMZB 1519B	BH-EMC-L067	2024.03.11	2027.03.10	<input checked="" type="checkbox"/>
Temperature Chamber	YOMA	DTL-0035	TJ8980-012	2024.04.12	2025.04.12	<input checked="" type="checkbox"/>
Anechoic Chamber	YiHeng	9m*6m*6m	BH-EMC-L001	2024.04.18	2027.04.17	<input checked="" type="checkbox"/>

A.5 Conducted Emissions

Sample No.	SC-SH2490014-A12	Temperature	24.6°C
Humidity	54%RH	Test Voltage	AC 120V/60Hz
Test Engineer	Wu Dejun	Test Date	2024.10.12

Test Data and Plots

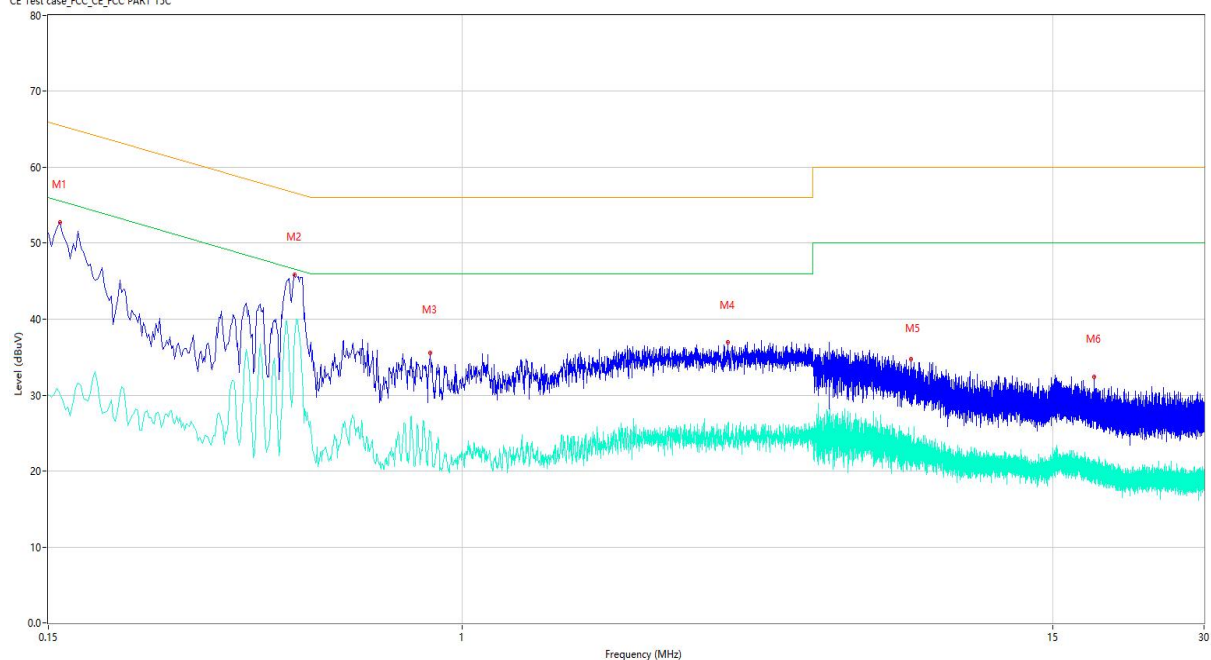
PHASE L



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.158	52.83	9.75	65.57	12.74	Peak	L	Pass
1**	0.158	31.51	9.75	55.57	24.06	AV	L	Pass
2	0.452	44.79	9.74	56.84	12.05	Peak	L	Pass
2**	0.452	36.13	9.74	46.84	10.71	AV	L	Pass
3	1.348	37.07	9.70	56.00	18.93	Peak	L	Pass
3**	1.348	26.99	9.70	46.00	19.01	AV	L	Pass
4	2.426	34.82	9.68	56.00	21.18	Peak	L	Pass
4**	2.426	21.16	9.68	46.00	24.84	AV	L	Pass
5	8.590	34.22	9.53	60.00	25.78	Peak	L	Pass
5**	8.590	22.14	9.53	50.00	27.86	AV	L	Pass
6	19.136	31.45	8.99	60.00	28.55	Peak	L	Pass
6**	19.136	17.87	8.99	50.00	32.13	AV	L	Pass

PHASE N

CE Test case_FCC_CE_FCC PART 15C



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.158	52.75	9.70	65.57	12.82	Peak	N	Pass
1**	0.158	30.22	9.70	55.57	25.35	AV	N	Pass
2	0.464	45.86	9.79	56.62	10.76	Peak	N	Pass
2**	0.464	37.92	9.79	46.62	8.70	AV	N	Pass
3	0.864	35.56	9.87	56.00	20.44	Peak	N	Pass
3**	0.864	25.17	9.87	46.00	20.83	AV	N	Pass
4	3.378	36.91	9.84	56.00	19.09	Peak	N	Pass
4**	3.378	25.83	9.84	46.00	20.17	AV	N	Pass
5	7.830	34.78	9.79	60.00	25.22	Peak	N	Pass
5**	7.830	23.57	9.79	50.00	26.43	AV	N	Pass
6	18.158	32.40	9.27	60.00	27.60	Peak	N	Pass
6**	18.158	20.91	9.27	50.00	29.09	AV	N	Pass

Equipment Information						
Description	Manufacturer	Model	Equipment No.	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9038A	BH-EMC-L127	2024.02.19	2025.02.18	<input checked="" type="checkbox"/>
LISN	SCHWARZBECK	NSLK 8127	BH-EMC-L011	2024.02.25	2025.02.24	<input checked="" type="checkbox"/>
10dB Limiter	SCHWARZBECK	VTSD 9561-F	BH-EMC-L014	2024.02.19	2025.02.18	<input checked="" type="checkbox"/>
Shielded Room	YiHeng	5m*4m*3.2m	BH-EMC-L006	2024.02.22	2027.02.21	<input checked="" type="checkbox"/>
Description	Manufacturer	Name		Version		Use
Test Software	BALUN	BL410-E		V19.618		<input checked="" type="checkbox"/>

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-BL-SH2490662-AE-1.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-BL-SH2490662-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-BL-SH2490662-AI.PDF”.

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6. Any objection shall be raised to the Testing Center within 30 days after receiving the report.

--END OF REPORT--