TEST REPORT

Applicant:	Shanghai Xiangcheng Communication Technology Co., Ltd.
Address:	5F-6F, Building 10, No.3000 Longdong Avenue, Pudong New District, Shanghai City, China
Equipment Type:	Intelligent Mobile Data Capture Terminal
Model Name:	Ranger 2K(N) (Refer to section 2.3)
Brand Name:	N/A
FCC ID:	2A2UU-MF-T2251
Test Standard:	47 CFR Part 15 Subpart C ANSI C63.10-2020
Sample Receipt Date:	Aug. 19, 2025
Test Date:	Aug. 20, 2025 ~ Aug. 22, 2025
Date of Issue:	Sep. 18, 2025

ISSUED BY:

Shanghai Tejet Communications Technology Co., Ltd. Testing Center

Prepared by: Wu Dejun **Reviewed by:** Huang Chengkun **Approved by:** Zhang Yanqing (Laboratory Manager)

Wu Dejun Huang Chengkun Zhang Yanqing

Revision History

Version	Issue Date	Revisions
Rev. 01	Sep. 18, 2025	Initial Issue

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 Technical Information 6

3 SUMMARY OF TEST RESULTS 7

3.1 Test Standards 7

3.2 Verdict 7

3.3 Decision Rule 8

3.4 Test Uncertainty 8

4 GENERAL TEST CONFIGURATIONS 9

4.1 Test Environments 9

4.2 Description of Test Setup 10

5 TEST ITEMS 12

5.1 Antenna Requirements 12

5.2 Emission Bandwidth 13

5.3 Field Strength of Fundamental Emissions and Radiated Emissions 15

5.4 Frequency Tolerance 17

5.5 Conducted Emission 18

ANNEX A TEST RESULT 19

A.1 Emission Bandwidth 19

A.2 Field Strength of Fundamental Emissions 20

A.3 Radiated Emissions 21
A.4 Frequency Stability 25
A.5 Conducted Emissions 26
ANNEX B TEST SETUP PHOTOS 29
ANNEX C EUT EXTERNAL PHOTOS 29
ANNEX D EUT INTERNAL PHOTOS 29

1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shanghai Tejet Communications Technology Co., Ltd. Testing Center
Address	1-2/F., Building 1, No.222, Xuanlan Road, Xuanqiao, Pudong New District, Shanghai, China

1.2 Test Location

Name	Shanghai Tejet Communications Technology Co., Ltd. Testing Center
Location	1-2/F., Building 1, No.222, Xuanlan Road, Xuanqiao, Pudong New District, Shanghai, China
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	5F-6F, Building 10, No.3000 Longdong Avenue, Pudong New District, Shanghai City, China

2.2 Manufacturer Information

Manufacturer	Shanghai Xiangcheng Communication Technology Co., Ltd.
Address	5F-6F, Building 10, No.3000 Longdong Avenue, Pudong New District, Shanghai City, China

2.3 General Description for Equipment under Test (EUT)

EUT Name	Intelligent Mobile Data Capture Terminal
Model Name Under Test	Ranger 2K(N)
Series Model Name	RANGER 2K(N), Ranger2K(N), RANGER2K(N), Ranger 2K/N, RANGER 2K/N, Ranger2K/N, Ranger2K Nova, RANGER2K NOVA, Ranger2K nova, MF60N, MF60U, MF60P, MF60 Nova, MF60 Ultra, MF60 Pro, T2251, T22, P5 Pro, P5 PRO, S40C, S40U
Description of Model name differentiation	All the same except for the model name. (this information provided by the applicant)
Hardware Version	V1.0
Software Version	1.0.0
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/1900MHz 3G Network WCDMA/HSDPA/HSUPA/HSPA+ Band 2/4/5 4G Network FDD LTE Band 2/4/5/7/12/17/25/26/66 TDD LTE Band 38/41 Bluetooth,2.4G WIFI, 5G WIFI GPS, GLONASS, BDS, Galileo, NFC

The requirement for the following technical information of the EUT was tested in this report:

Modulation Type	ASK
Product Type	☒ Mobile ☐ Portable ☐ Fix Location
Frequency Range	13.56 MHz
Receiver Categorization	3
Number of Channel	1
Tested Channel	1
Antenna Type	Loop 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 C63.10-2020	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

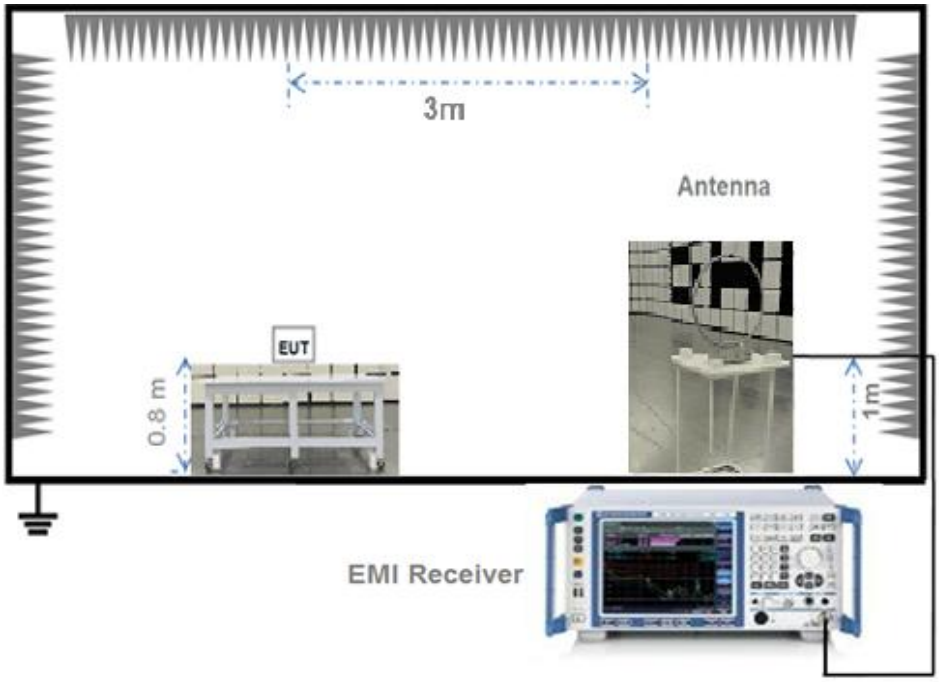
4.1 Test Environments

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

Relative Humidity	30% to 60%	
Atmospheric Pressure	100 kPa to 102 kPa	
Temperature	NT (Normal Temperature)	+23℃ to +24℃
Working Voltage of the EUT	NV (Normal Voltage)	3.85 V

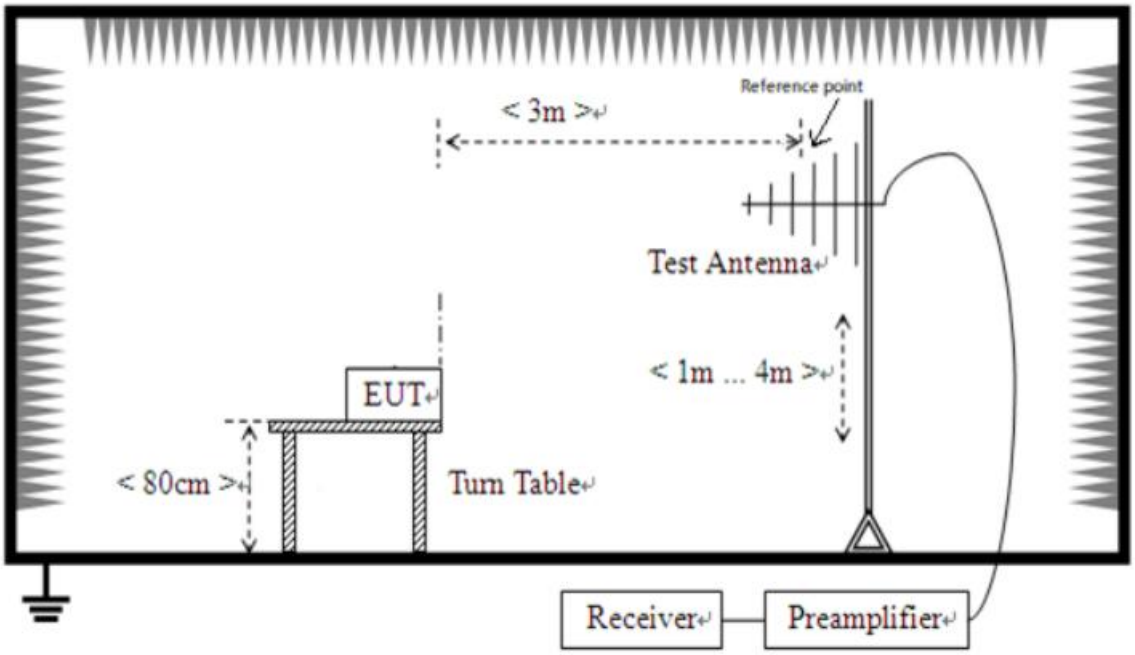
4.2 Description of Test Setup

4.2.1 For Radiated Test (Below 30 MHz)



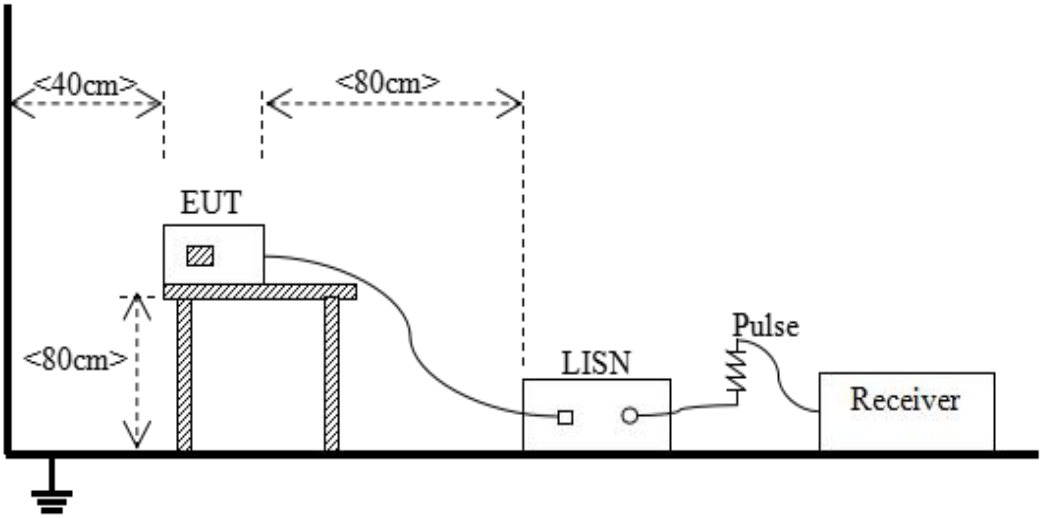
(Diagram 1)

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 ≥ 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 ≥ 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: 54dBμV/m@3m (AV) and 74dBμV/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 ≥ 1 GHz, 100 kHz for f < 1 GHz
VBW ≥ 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 (dBμV/m) = Reading (dBμV/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 ±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-SH2580033-S11	Temperature	23.9°C
Humidity	50%RH	Test Voltage	AC 120V/60Hz
Test Engineer	Hao Longda	Test Date	2025.08.22

Test Data

Frequency (MHz)	Emission Bandwidth(20dB down) (kHz)	Occupied Bandwidth(99%) (kHz)
13.56	25.63	22.174

Test plots

Emission Bandwidth

Equipment Information						
Description	Manufacturer	Model	Equipment No.	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9038A	BH-EMC-L127	2025.02.12	2026.02.11	☒
Test Antenna-Loop	SCHWARZBECK	FMZB 1519B	BH-EMC-L067	2024.03.11	2027.03.10	☒
Anechoic Chamber	YiHeng	9m*6m*6m	BH-EMC-L001	2024.04.18	2027.04.17	☒

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.

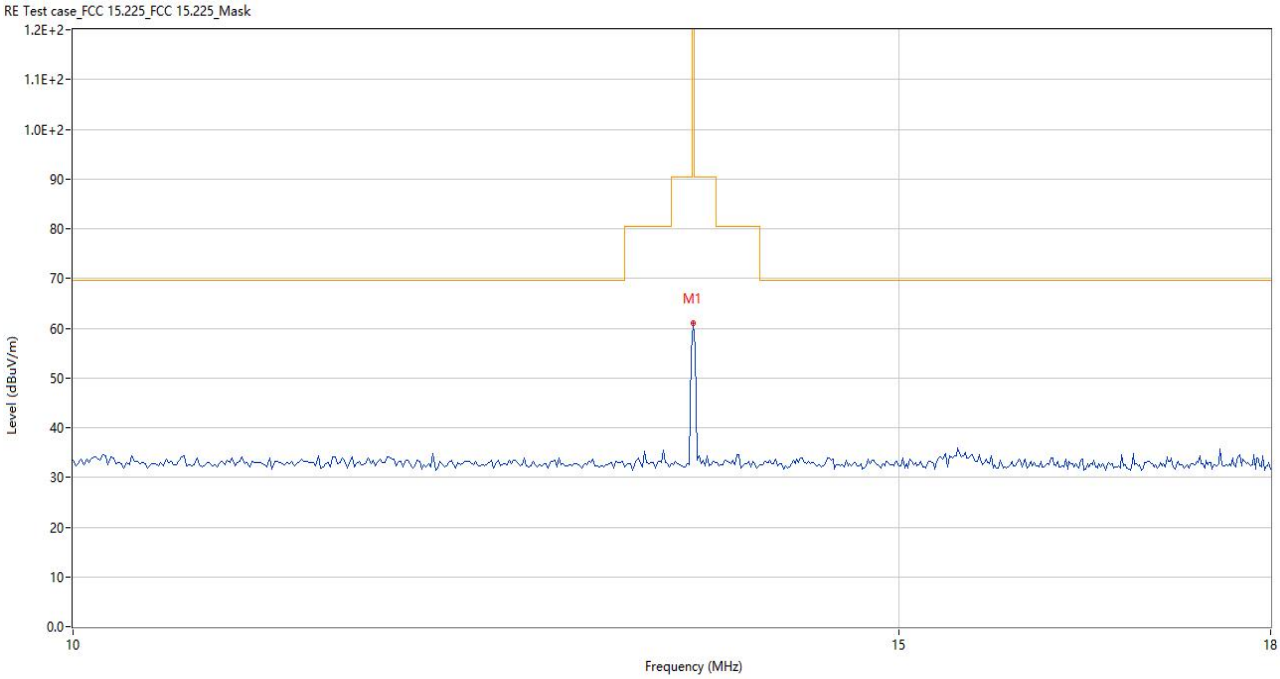
Sample No.	SC-SH2580033-S11	Temperature	23.9°C
Humidity	50%RH	Test Voltage	AC 120V/60Hz
Test Engineer	Hao Longda	Test Date	2025.08.22

Test Data

Field Strength of Fundamental Emissions Value					
Frequency (MHz)	Detector	Field Strength (dBμV/m)	Limit @3m (dBμV/m)	EUT	Margin (dB)
13.560	PEAK	61.01	124.0	X axis	62.99

Test Plot

Test Antenna-LOOP, EUT X axis



Equipment Information						
Description	Manufacturer	Model	Equipment No.	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9038A	BH-EMC-L127	2025.02.12	2026.02.11	☒
Test Antenna-Loop	SCHWARZBECK	FMZB 1519B	BH-EMC-L067	2024.03.11	2027.03.10	☒
Anechoic Chamber	YiHeng	9m*6m*6m	BH-EMC-L001	2024.04.18	2027.04.17	☒

A.3 Radiated Emissions

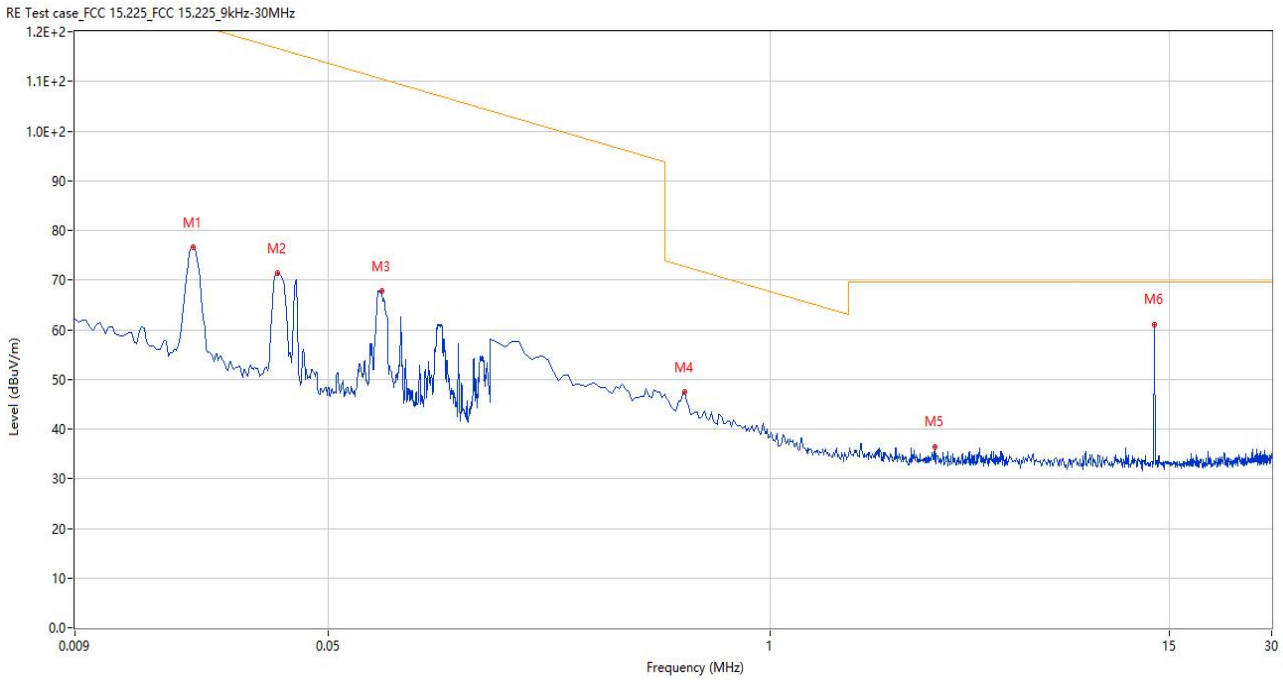
Note 1: This frequency which near 13.560 MHz with circle should be ignored because they are NFC carrier frequency.

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-SH2580033-S11	Temperature	23.9°C
Humidity	50%RH	Test Voltage	AC 120V/60Hz
Test Engineer	Hao Longda	Test Date	2025.08.22

The Data and Plots (9 kHz ~ 30 MHz)(at 3m chamber)

Below 30 MHz, Test Antenna LOOP, EUT X axis

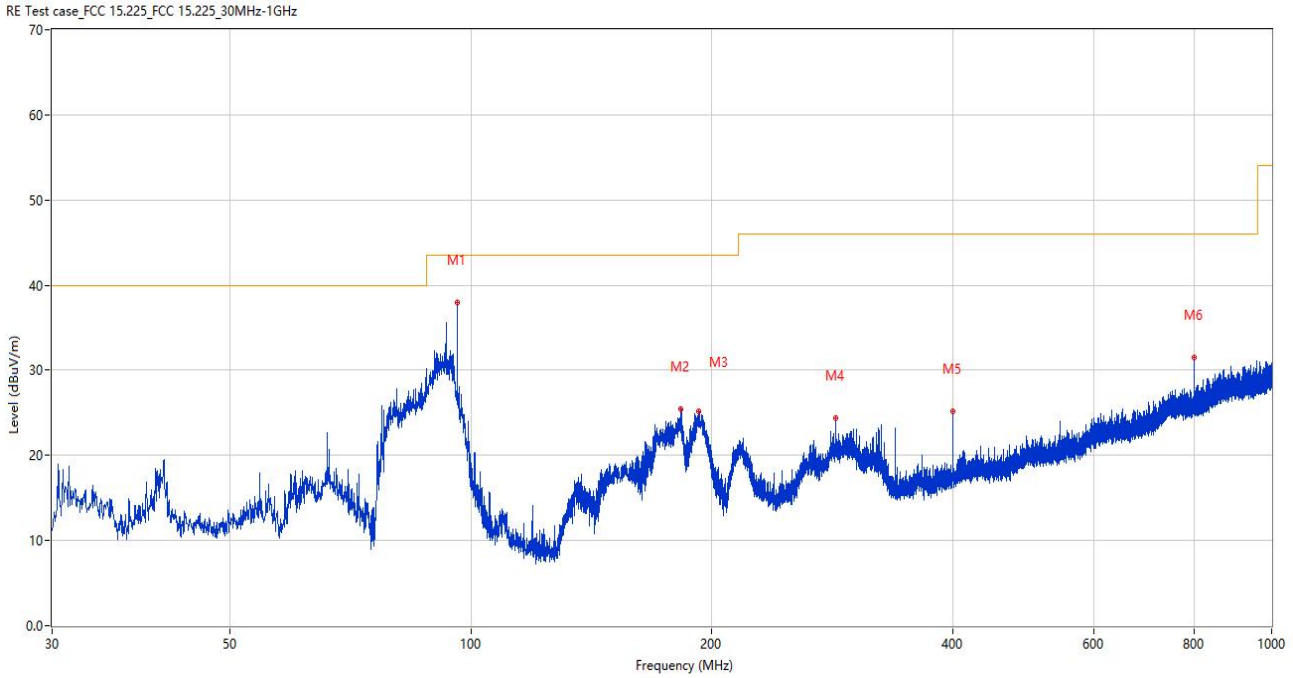


No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	0.020	76.54	19.39	121.5	44.96	Peak	315.00	100	Vertical	Pass
2	0.036	71.39	19.26	116.6	45.21	Peak	101.00	100	Vertical	Pass
3	0.072	67.77	19.16	110.5	42.73	Peak	100.00	100	Vertical	Pass
4	0.562	47.47	19.00	72.6	25.13	Peak	111.00	100	Vertical	Pass
5	3.060	36.48	19.34	69.5	33.02	Peak	212.00	100	Vertical	Pass
6	13.560	61.12	19.21	69.5	8.38	Peak	2.00	100	Vertical	N/A

Equipment Information						
Description	Manufacturer	Model	Equipment No	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9038A	BH-EMC-L127	2025.02.12	2026.02.11	☒
Test Antenna-Loop	SCHWARZBECK	FMZB 1519B	BH-EMC-L067	2024.03.11	2027.03.10	☒
Anechoic Chamber	YiHeng	9m*6m*6m	BH-EMC-L001	2024.04.18	2027.04.17	☒
Description	Manufacturer	Name	Version	/		Use
Test Software	BALUN	BL410-E	V21.919	/		☒

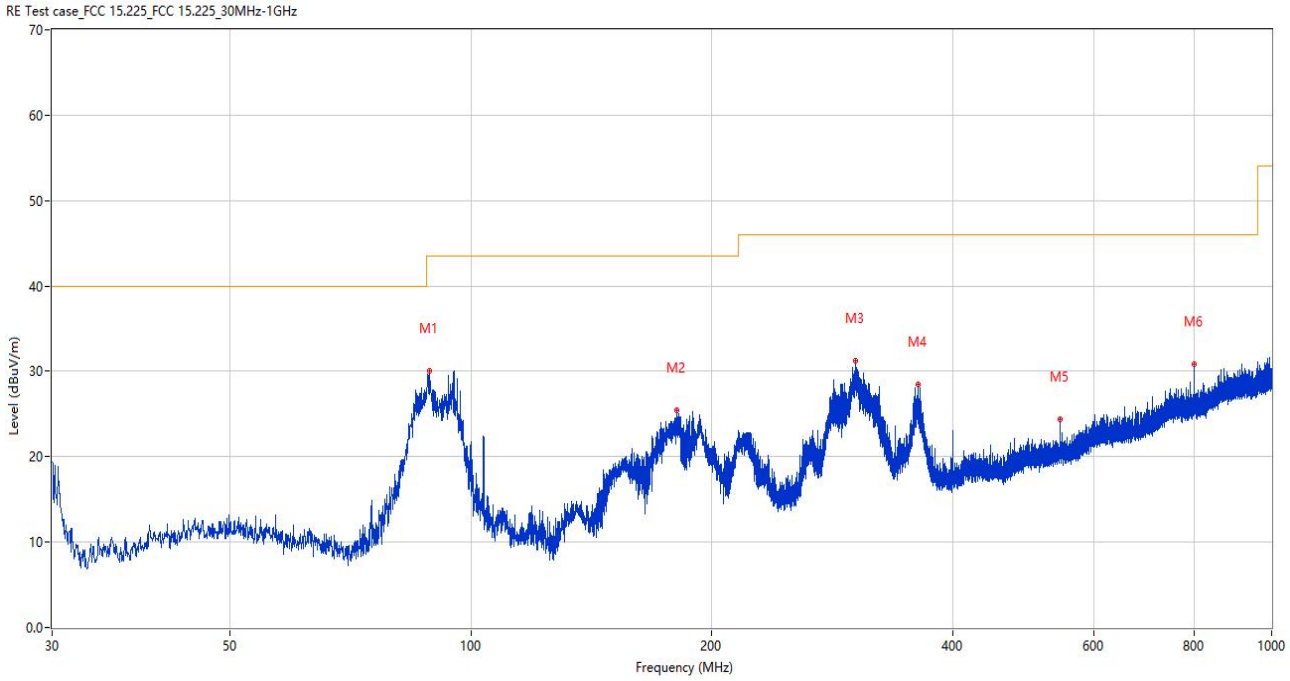
Test Data and Plots (30 MHz ~ 10th Harmonic)

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



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	96.154	37.96	-26.50	43.5	5.54	Peak	0.00	100	Vertical	Pass
2	183.066	25.46	-27.46	43.5	18.04	Peak	255.00	100	Vertical	Pass
3	192.620	25.21	-25.90	43.5	18.29	Peak	337.00	100	Vertical	Pass
4	285.353	24.35	-23.33	46.0	21.65	Peak	297.00	200	Vertical	Pass
5	400.006	25.24	-20.42	46.0	20.76	Peak	149.00	100	Vertical	Pass
6	799.937	31.47	-11.68	46.0	14.53	Peak	178.00	100	Vertical	Pass

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



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	88.830	30.06	-28.43	43.5	13.44	Peak	129.00	200	Horizontal	Pass
2	180.690	25.41	-27.73	43.5	18.09	Peak	262.00	200	Horizontal	Pass
3	301.842	31.21	-23.24	46.0	14.79	Peak	236.00	100	Horizontal	Pass
4	361.498	28.44	-21.82	46.0	17.56	Peak	249.00	100	Horizontal	Pass
5	544.439	24.41	-16.99	46.0	21.59	Peak	32.00	200	Horizontal	Pass
6	799.986	30.89	-11.68	46.0	15.11	Peak	14.00	100	Horizontal	Pass

Radiated Emissions						
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9038A	BH-EMC-L127	2025.02.12	2026.02.11	☒
Test Antenna-Bi-Log	SCHWARZBECK	VULB 9163	BH-EMC-L132	2024.03.11	2027.03.10	☒
Anechoic Chamber	YiHeng	9m*6m*6m	BH-EMC-L001	2024.04.18	2027.04.17	☒
Description	Manufacturer	Name		Version		Use
Test Software	BALUN	BL410-E		V21.919		☒

A.4 Frequency Stability

Note 1: Because the 115% (4.4275V)of the rated supply voltage value exceeds the cut-off voltage upper(4.4V) 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-SH2580033-S11	Temperature	22.7°C
Humidity	51%RH	Test Voltage	DC 3.85V
Test Engineer	Hao Longda	Test Date	2025.08.22

OPERATING FREQUENCY:	13560000 Hz
REFERENCE VOLTAGE:	3.85 V
DEVIATION LIMIT:	±0.01%

VOLTAGE (%)	Test Conditions		Frequency(Hz)	Deviation(%)	Verdict
	Power (VDC)	Temperature (°C)			
100	3.85	-20	13559792	-0.001534	Pass
100		-10	13560025	0.000184	
100		0	13560000	0.000000	
100		+10	13559792	-0.001534	
100		+20	13560025	0.000184	
100		+25	13560000	0.000000	
100		+30	13560025	0.000184	
100		+40	13559792	-0.001534	
100		+50	13560000	0.000000	
100		+55	13560025	0.000184	
MAX(Battery End Point, 85)	3.2725	+20	13559792	-0.001534	
MIN(Battery End Point, 115)	4.4	+20	13560000	0.000000	

Equipment Information						
Description	Manufacturer	Model	Equipment No.	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9038A	BH-EMC-L127	2025.02.12	2026.02.11	☒
Test Antenna-Loop	SCHWARZBECK	FMZB 1519B	BH-EMC-L067	2024.03.11	2027.03.10	☒
Temperature Chamber	YOMA	DTL-0035	TJ8980-012	2025.04.12	2026.04.11	☒
Anechoic Chamber	YiHeng	9m*6m*6m	BH-EMC-L001	2024.04.18	2027.04.17	☒

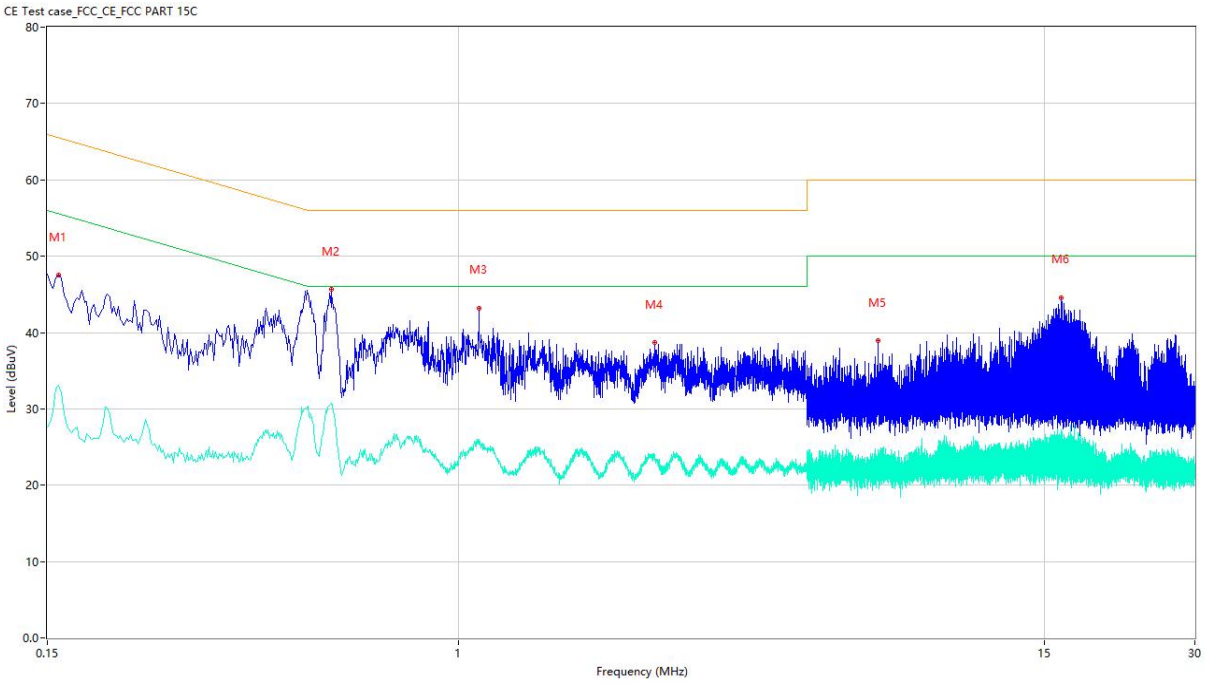
A.5 Conducted Emissions

Note 1: Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 60 Hz and 240 VAC, 50 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.	SC-SH2580033-S11	Temperature	23.4°C
Humidity	54%RH	Test Voltage	AC 120V/60Hz
Test Engineer	Xiang Jibin	Test Date	2025.08.20

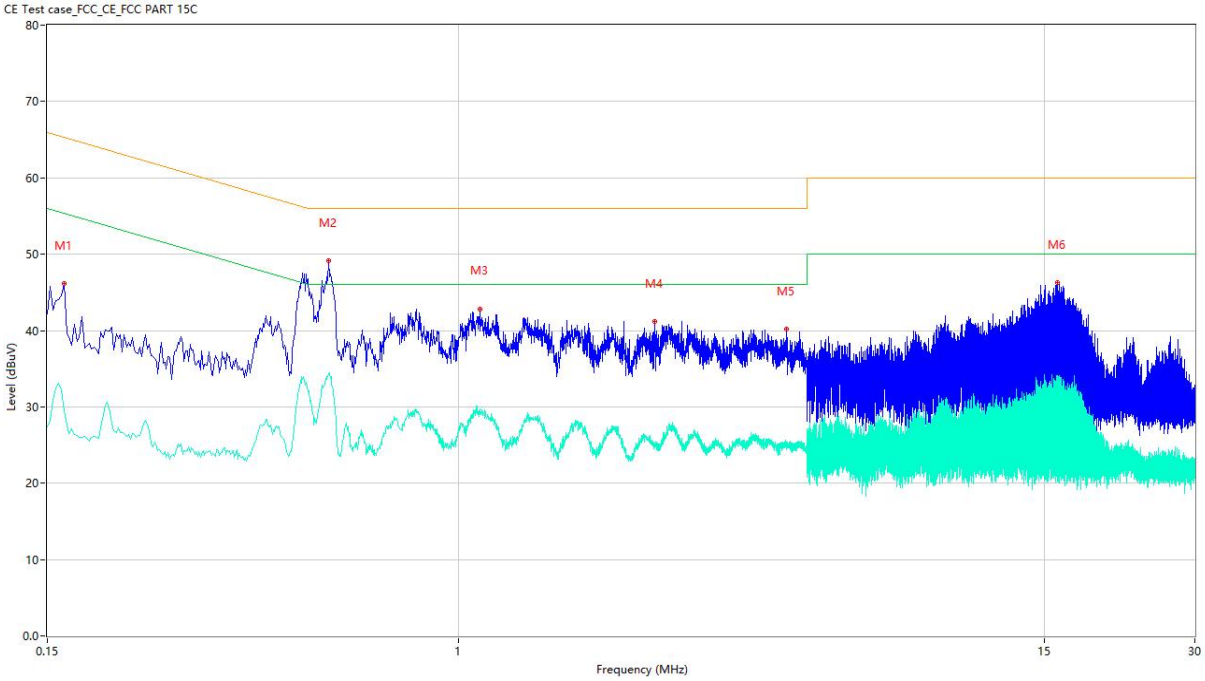
Test Data and Plots

PHASE L



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.158	47.47	10.06	65.57	18.10	Peak	L	Pass
1**	0.158	33.13	10.06	55.57	22.44	AV	L	Pass
2	0.556	45.68	10.17	56.00	10.32	Peak	L	Pass
2**	0.556	30.77	10.17	46.00	15.23	AV	L	Pass
3	1.100	43.23	10.20	56.00	12.77	Peak	L	Pass
3**	1.100	25.40	10.20	46.00	20.60	AV	L	Pass
4	2.476	38.71	10.37	56.00	17.29	Peak	L	Pass
4**	2.476	23.95	10.37	46.00	22.05	AV	L	Pass
5	6.946	38.94	10.71	60.00	21.06	Peak	L	Pass
5**	6.946	24.60	10.71	50.00	25.40	AV	L	Pass
6	16.176	44.60	11.18	60.00	15.40	Peak	L	Pass
6**	16.176	25.64	11.18	50.00	24.36	AV	L	Pass

PHASE N



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.162	46.16	10.15	65.36	19.20	Peak	N	Pass
1**	0.162	29.43	10.15	55.36	25.93	AV	N	Pass
2	0.550	49.08	10.18	56.00	6.92	Peak	N	Pass
2**	0.550	34.25	10.18	46.00	11.75	AV	N	Pass
3	1.104	42.74	10.25	56.00	13.26	Peak	N	Pass
3**	1.104	29.58	10.25	46.00	16.42	AV	N	Pass
4	2.476	41.15	10.28	56.00	14.85	Peak	N	Pass
4**	2.476	24.88	10.28	46.00	21.12	AV	N	Pass
5	4.544	40.15	10.41	56.00	15.85	Peak	N	Pass
5**	4.544	24.99	10.41	46.00	21.01	AV	N	Pass
6	15.894	46.31	11.17	60.00	13.69	Peak	N	Pass
6**	15.894	34.08	11.17	50.00	15.92	AV	N	Pass

Equipment Information						
Description	Manufacturer	Model	Equipment No.	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9038A	TJEMC144	2025.02.12	2026.02.11	☒
LISN	SCHWARZBECK	NSLK 8127	BH-EMC-L011	2025.02.11	2026.02.10	☒
10dB Limiter	SCHWARZBECK	VTSD 9561-F	BH-EMC-L014	2025.02.11	2026.02.10	☒
Shielded Room	YiHeng	5m*4m*3.2m	BH-EMC-L006	2024.02.22	2027.02.21	☒
Description	Manufacturer	Name		Version		Use
Test Software	BALUN	BL410-E		V19.618		☒

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SH2580894-AE-1.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SH2580894-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SH2580894-AI.PDF”.

Statement

1. The Testing Center 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. For the report with Accreditation Symbol, the items marked with "☆" are not within the accredited scope.

3. This report is invalid if it is altered, without the signature of the testing and approval personnel, or without the test report stamp.

4. The test data and results are only valid for the tested samples provided by the customer.

5. This report shall not be partially reproduced without the written permission of the Testing Center.

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

--END OF REPORT--