# TEST REPORT

| | |
|---|---|
| **Applicant:** | Hubei Linksci Technology Co., Ltd. |
| **Address:** | 603, 6th Floor, No. 78, Shaxian Street East, Zhifang Street, Jiangxia District, Wuhan City, Hubei Province, China |
| **Equipment Type:** | DKAM W TER MINATIAN RESISTOR |
| **Model Name:** | LD220-DKAM-1 |
| **Brand Name:** | LINKSCI |
| **FCC ID:** | 2BKRNLD220-DKAM-1 |
| **Test Standard:** | 47 CFR Part 15 Subpart F (refer to section 3.1) |
| **Sample Arrival Date:** | Apr. 18, 2025 |
| **Test Date:** | Apr. 24, 2025 - Apr. 29, 2025 |
| **Date of Issue:** | May 19, 2025 |

**ISSUED BY:**

Shenzhen BALUN Technology Co., Ltd.

**Tested by:** Julie zhu **Checked by:** Ye Hongji **Approved by:** Sunny Zou (Technical Director)

**Revision History**

| Version | Issue Date | Revisions |
|---|---|---|
| Rev. 01 | May 19, 2025 | Initial Issue |

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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 | Hubei Linksci Technology Co., Ltd. |
| Address | 603, 6th Floor, No. 78, Shaxian Street East, Zhifang Street, Jiangxia District, Wuhan City, Hubei Province, China |

## 2.2 Manufacturer Information

| | |
|---|---|
| Manufacturer | Hubei Linksci Technology Co., Ltd. |
| Address | 603, 6th Floor, No. 78, Shaxian Street East, Zhifang Street, Jiangxia District, Wuhan City, Hubei Province, China |

## 2.3 General Description for Equipment under Test (EUT)

| | |
|---|---|
| EUT Name | DKAM W TER MINATIAN RESISTOR |
| Model Name Under Test | LD220-DKAM-1 |
| Series Model Name | N/A |
| Description of Model name differentiation | N/A |
| Hardware Version | FbaC |
| Software Version | V2.5 |
| Dimensions (Approx.) | N/A |
| Weight (Approx.) | N/A |

## 2.4 Technical Information

| | |
|---|---|
| Network and Wireless connectivity | Bluetooth BLE, UWB |

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

| | |
|---|---|
| Modulation Type | UWB |
| Product Type | ☒ Mobile<br>☐ Portable<br>☐ Fix Location |
| Operating Frequency | The frequency range used is 3100MHz - 10600MHz<br>The frequency block is 6000MHz-8500MHz |
| Antenna Type | Shrapnel Antenna |
| Antenna Gain | 4.91dBi |

All channel was listed on the following table:

| Channel number | Freq. (MHz) |
|---|---|
| 5 | 6489.6 |
| 9 | 7987.2 |

Note: The above EUT information in section 2.4 and 2.5 was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

# 3 SUMMARY OF TEST RESULTS

## 3.1 Test Standards

| No. | Identity | Document Title |
|---|---|---|
| 1 | 47 CFR Part 15 Subpart F | Ultra - Wideband Operation |
| 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 | ANSI C63.10-2013 | American National Standard for Testing Unlicensed Wireless Devices |

## 3.2 Test Verdict

| No. | Description | FCC Part No. | Test Result | Verdict | Remark |
|---|---|---|---|---|---|
| 1 | Antenna Requirement | 15.203 | -- | Pass | Note [1] |
| 3 | Conducted Emission | 15.207 | ANNEX A.1 | N/A | Note [2] |
| 2 | UWB Bandwidth | 15.517(b) | ANNEX A.2 | Pass | -- |
| 4 | Radiated Emissions | 15.517(c)/15.209 | ANNEX A.3 | Pass | -- |
| 5 | Radiated Emissions in UWB Bands | 15.517(d) | ANNEX A.4 | Pass | -- |
| 6 | Peak Emissions within a 50 MHz Bandwidth | 15.517(e) | ANNEX A.5 | Pass | -- |
| Note 1: Please refer to section 5.1<br>Note 2: The EUT is an in-vehicle device, so the Conducted Emission test is not applicable. | | | | | |

# 4 GENERAL TEST CONFIGURATIONS

## 4.1 Test Environments

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

| | | |
|---|---|---|
| Relative Humidity | 46% to 61% | |
| Atmospheric Pressure | 100 kPa to 102 kPa | |
| Temperature | NT (Normal Temperature) | +21.3℃ to +26.9℃ |
| Working Voltage of the EUT | NV (Normal Voltage) | 12.0 V |

## 4.2 Test Equipment List

| Description | Manufacturer | Model | Serial No. | Cal. Date | Cal. Due |
|---|---|---|---|---|---|
| Spectrum Analyzer | ROHDE&SCHWARZ | FSV-40 | 101544 | 2024.12.16 | 2025.12.15 |
| Spectrum Analyzer | KEYSIGHT | N9020A | MY56060183 | 2024.08.01 | 2025.07.31 |
| Spectrum Analyzer | KEYSIGHT | N9020A | MY52510065 | 2024.08.01 | 2025.07.31 |
| Test Antenna-Horn | SCHWARZBECK | BBHA 9120D | 01631 | 2025.02.22 | 2028.02.21 |
| Test Antenna-Horn | A-INFO | LB-180400KF | J211060273 | 2024.06.15 | 2027.06.14 |
| Anechoic Chamber | RAINFORD | 9m*6m*6m | 144 | 2022.02.19 | 2025.09.03 |
| Amplifier | COM-MV | LSCX_LNA 1-12G-01 | 180602 | 2024.08.01 | 2025.07.31 |
| Amplifier | COM-MV | XKu_LNA7-18G-01 | 180601 | 2024.08.01 | 2025.07.31 |
| Amplifier | COM-MV | KA LNA18 40G-01 | 18050001 | 2024.12.05 | 2025.12.04 |
| EMI Receiver | ROHDE&SCHWARZ | ESRP | 101036 | 2024.08.01 | 2025.07.31 |
| Test Antenna-Bi-Log | SCHWARZBECK | VULB 9168 | 9168-01162 | 2023.08.04 | 2026.08.03 |
| Test Antenna-Loop | SCHWARZBECK | FMZB 1519 | 1519-037 | 2024.01.23 | 2027.01.22 |
| Amplifier | COM-MV | ZT30-1000M | B2018054558 | 2024.11.28 | 2025.11.27 |
| Anechoic Chamber | EMC Electronic Co., Ltd | 20.10*11.60 *7.35m | 130 | 2024.07.13 | 2027.07.12 |
| EMI Receiver | ROHDE&SCHWARZ | ESRP | 101036 | 2024.08.01 | 2025.07.31 |
| Test Antenna-Bi-Log | SCHWARZBECK | VULB 9168 | 9168-01162 | 2023.08.04 | 2026.08.03 |
| Test Antenna-Loop | SCHWARZBECK | FMZB 1519 | 1519-037 | 2024.01.23 | 2027.01.22 |
| Amplifier | COM-MV | ZT30-1000M | B2018054558 | 2024.11.28 | 2025.11.27 |
| Anechoic Chamber | EMC Electronic Co., Ltd | 20.10*11.60 *7.35m | 130 | 2024.07.13 | 2027.07.12 |

## 4.3 Measurement Uncertainty

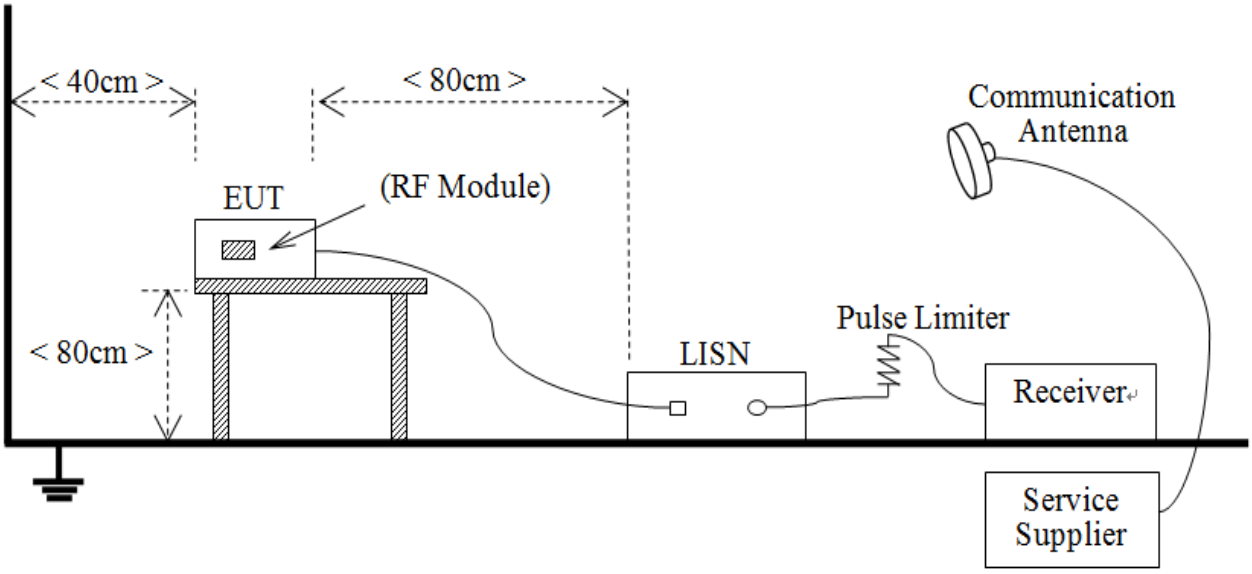
The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

| Parameters | Uncertainty |
|---|---|
| Occupied Channel Bandwidth | 2.8% |
| RF output power, conducted | 1.28 dB |
| Power Spectral Density, conducted | 1.30 dB |
| Unwanted Emissions, conducted | 1.84 dB |
| All emissions, radiated | 5.36 dB |
| Temperature | 0.8°C |
| Humidity | 4% |

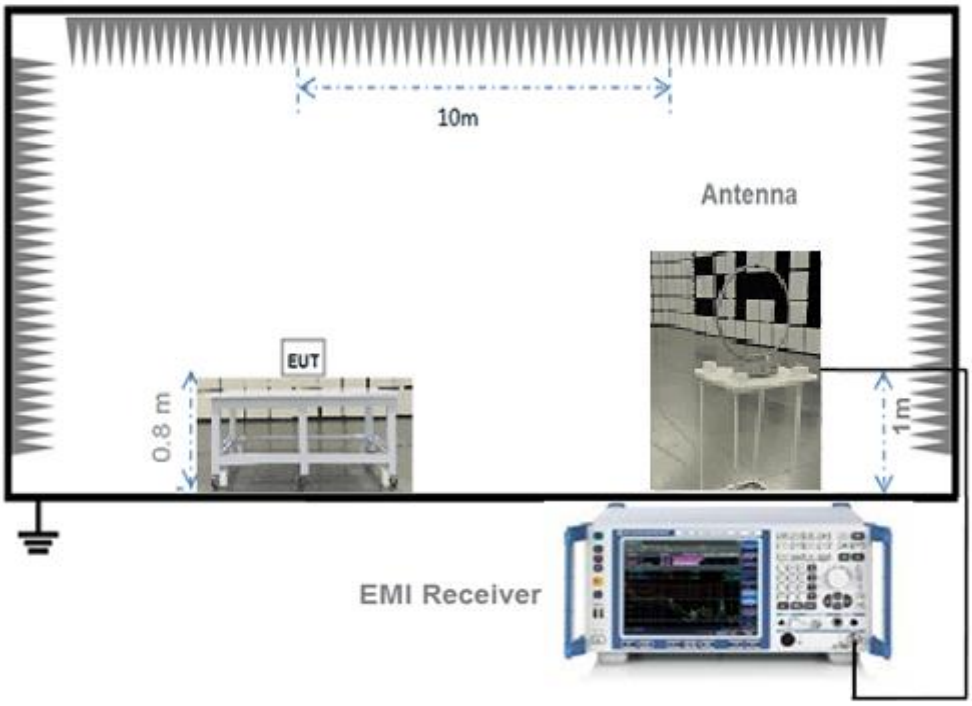
## 4.4 Description of Test Setup

### 4.4.1 For AC Power Supply Port Test



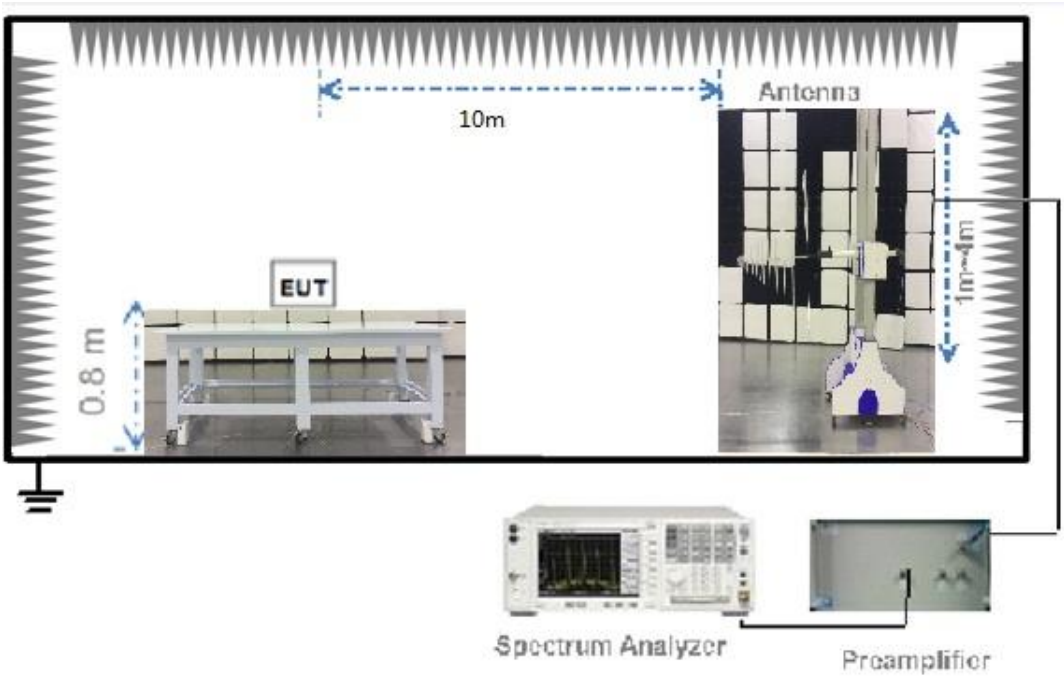

**(Diagram 1)**

### 4.4.2 For Radiated Test (Below 30 MHz)



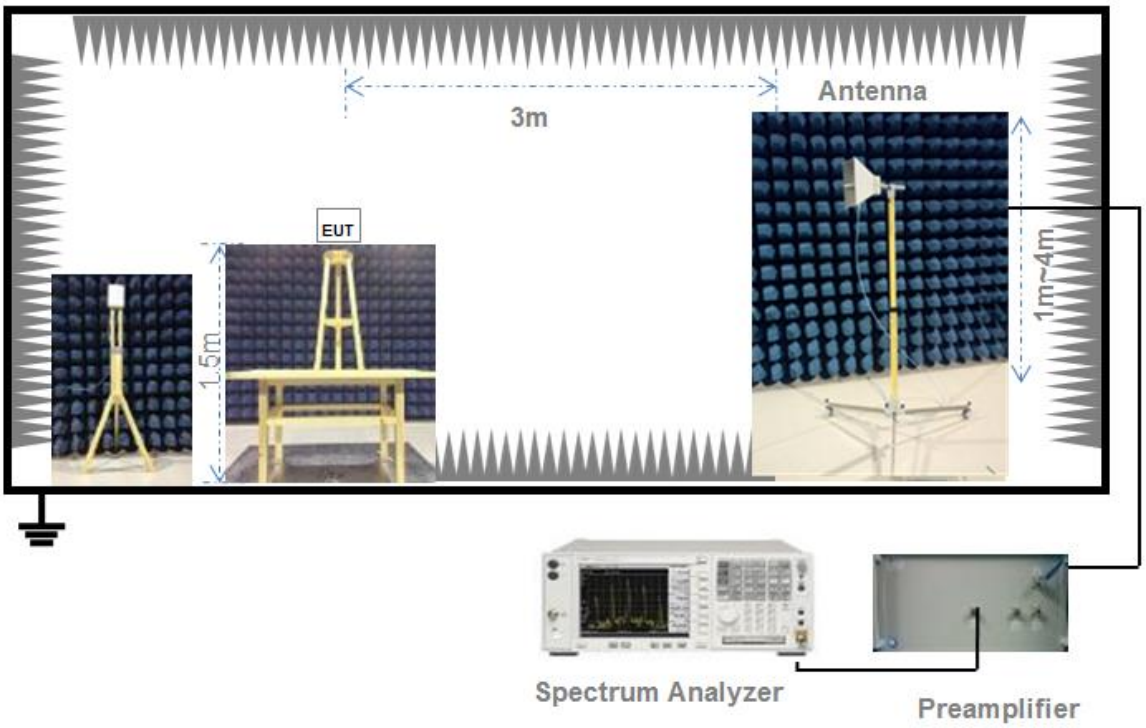

**(Diagram 2)**

### 4.4.3 For Radiated Test (30 MHz-1 GHz)




**(Diagram 3)**

### 4.4.4 For Radiated Test (Above 1 GHz)




**(Diagram 4)**

# 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 to the EUT Photo documents. |

## 5.2 Conducted Emission

### 5.2.1 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 |

### 5.2.2 Test Setup

See section 4.4.1 for test setup description for the AC power supply port. The photo of test setup please refer to ANNEX B.

### 5.2.3 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.

### 5.2.4 Test Result

Please refer to ANNEX A.1.

## 5.3 UWB Bandwidth

### 5.3.1 Limit

FCC §15.503(d)
Ultra-wideband (UWB) transmitter. An intentional radiator that, at any point in time, has a fractional bandwidth equal to or greater than 0.20 or has a UWB bandwidth equal to or greater than 500 MHz, regardless of the fractional bandwidth.
FCC §15.517(b)
The UWB bandwidth of a UWB system operating under the provisions of this section must be contained between 3100 MHz and 10,600 MHz.

### 5.3.2 Test Setups

See section 4.4.4 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

### 5.3.3 Test Procedure

Use the following spectrum analyzer settings:

RBW = 1 MHz

VBW ≥ 3 MHz

Sweep = auto

Detector function = RMS

Trace = max hold

### 5.3.4 Test Result

Please refer to ANNEX A.2.

## 5.4 Radiated Emissions

### 5.4.1 Limit

FCC §15.517(c)

The radiated emissions at or below 960 MHz from a device operating under the provisions of this section shall not exceed the emission levels in §15.209. The radiated emissions above 960 MHz from a device operating under the provisions of this section shall not exceed the following average limits when measured using a resolution bandwidth of 1 MHz:

| Frequency in MHz | EIPR in dBm |
|---|---|
| 960–1610 | -75.3 |
| 1610–1990 | -53.3 |
| 1990–3100 | -51.3 |
| 3100–10600 | -41.3 |
| Above 10600 | -51.3 |

FCC §15.209

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(m) |
|---|---|---|
| 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 |

### 5.4.2 Test Setups

See section 4.4.2 to 4.4.4 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

### 5.4.3 Test Procedure

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. The height of the antenna was varied from 1 to 4 meters. For each suspected emissions, the antenna tower was scan (from 1m to 4m) and the the turntables was turned (from 0° to 360°) to find the maximum reading.

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:

9 kHz to 960 MHz：

Span = wide enough to fully capture the emission being measured

RBW = 100 kHz

VBW = 300 kHz

Sweep time = auto
Detector function = peak(Margin which is less than 3 dB will be repeated one by one using the quasi-peak)
Trace = max hold

960 MHz to 40 GHz：
Span = wide enough to fully capture the emission being measured
RBW = 1 MHz
VBW = 3 MHz
Sweep time = 1s
Detector function = RMS
Trace = max hold

### 5.4.4 Test Result

Please refer to ANNEX A.3.

## 5.5 Radiated Emissions in UWB Bands

### 5.5.1 Limit

FCC §15.517(d)
In addition to the radiated emission limits specified in the table in paragraph (c) of this section, UWB transmitters operating under the provisions of this section shall not exceed the following average limits when measured using a resolution bandwidth of no less than 1 kHz:

| Frequency in MHz | EIPR in dBm |
|---|---|
| 1164–1240 | -85.3 |
| 1559–1610 | -85.3 |

### 5.5.2 Test Setups

See section 4.4.4 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

### 5.5.3 Test Procedure

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. The height of the antenna was varied from 1 to 4 meters. For each suspected emissions, the antenna tower was scan (from 1m to 4m) and the the turntables was turned (from 0° to 360° ) to find the maximum reading.

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 kHz
VBW = 3 kHz
Sweep time = 1s
Detector function = RMS
Trace = max hold

### 5.5.4 Test Result

Please refer to ANNEX A.4.

## 5.6 Peak Emissions within a 50MHz Bandwidth

### 5.6.1 Limit

FCC §15.517(e)

There is a limit on the peak level of the emissions contained within a 50 MHz bandwidth centered on the frequency at which the highest radiated emission occurs, fM. That limit is 0 dBm EIRP. It is acceptable to employ a different resolution bandwidth, and a correspondingly different peak emission limit, following the procedures described in §15.521.

It is acceptable to employ an RBW of less than 50 MHz (but no less than 1 MHz) when performing the required peak power measurements. When this approach is employed, the peak emissions EIRP limit (0 dBm / 50 MHz) is converted to a limit commensurate with the RBW by employing a [20 log (RBW/50 MHz)] relationship. For example, the peak power limit could be expressed in a 1 MHz bandwidth as follows in Equation :

$EIRP_{1\ MHz} = EIRP_{50\ MHz} + 20\log(1\ MHz / 50\ MHz) = 0\ dBm + (-34\ dBm) = -34dBm$

### 5.6.2 Test Setups

See section 4.4.4 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

### 5.6.3 Test Procedure

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.The height of the antenna was varied from 1 to 4 meters.For each suspected emissions, the antenna tower was scan (from 1m to 4m) and the the turntables was turned (from 0° to 360° ) to find the maximum reading.

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:

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz

VBW = 3 MHz

Sweep = auto

Detector function = peak

Trace = max hold

### 5.6.4 Test Result

Please refer to ANNEX A.5.

# ANNEX A TEST RESULT

## A.1 Conducted Emissions

Note: Not applicable.

## A.2 UWB Bandwidth

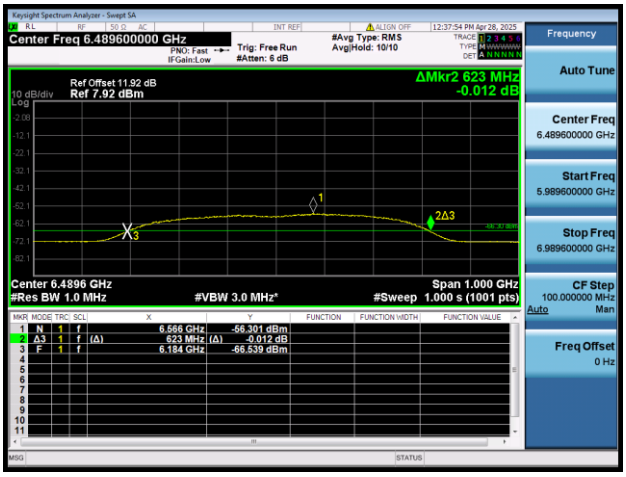
Test Data

| Channel | $F_M$ (MHz) | $F_L$ (MHz) | $F_H$ (MHz) | UWB Bandwidth (MHz) | Limit (MHz) | Verdict |
|---|---|---|---|---|---|---|
| CH5 | 6566 | 6184 | 6807 | 618.25 | UWB Bandwidth≥ 500 MHz<br>10 dB bandwidth contained between 3100 to 10600 MHz | Pass |
| CH9 | 7911 | 7657 | 8291 | 628.63 | | Pass |

Test Data and Plots

10 dB Bandwidth

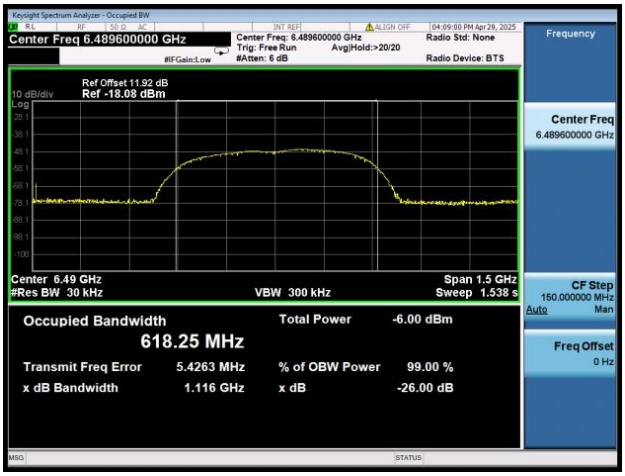
6489.6MHz




7987.2MHz

99% Bandwidth

6489.6MHz



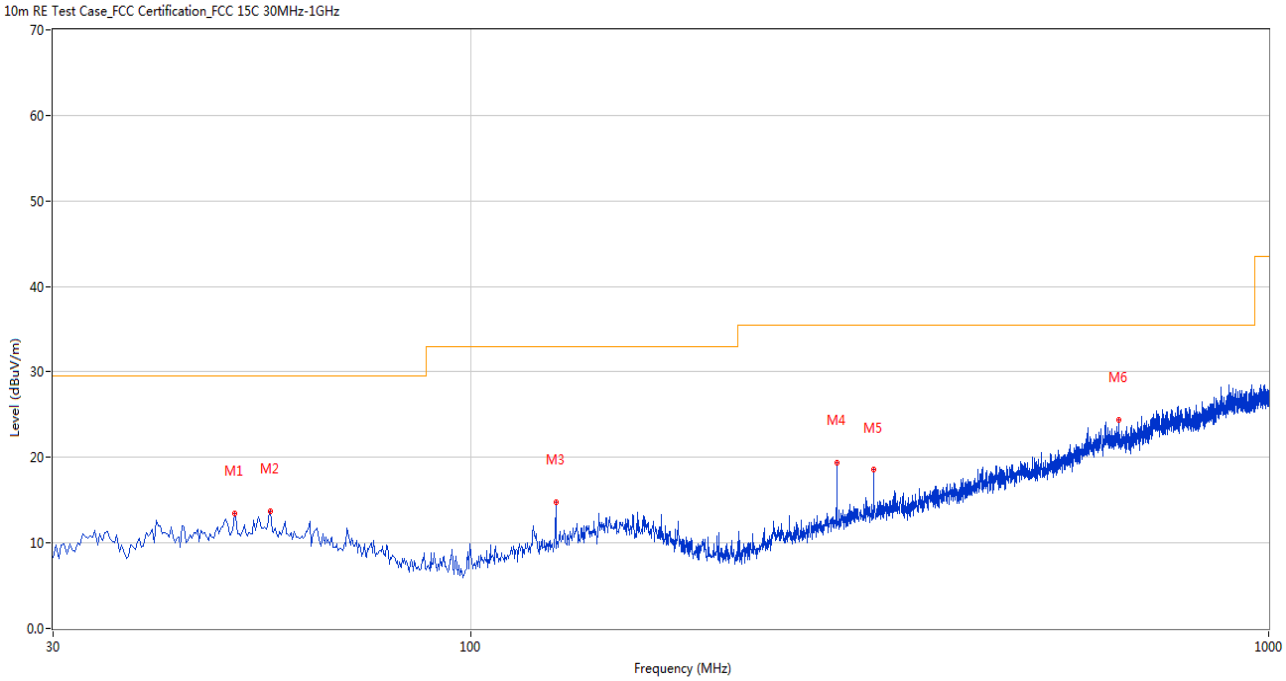

7987.2MHz

## A.3 Radiated Emissions

Note: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.209 was not reported.

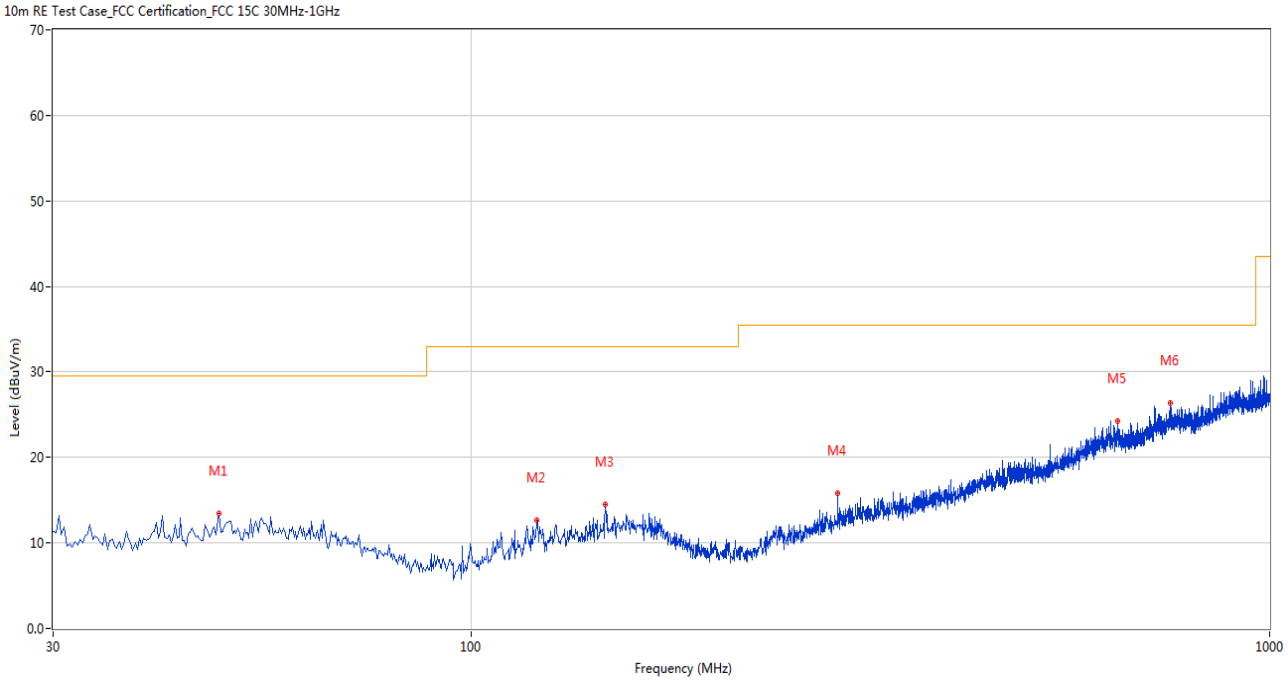
Test Data and Plots

30 MHz to 1 GHz, ANT H




| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna | Verdict |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 50.607 | 13.45 | -25.98 | 29.5 | 16.05 | Peak | 15.00 | 200 | Horizontal | Pass |
| 2 | 56.183 | 13.77 | -26.23 | 29.5 | 15.73 | Peak | 0.00 | 200 | Horizontal | Pass |
| 3 | 127.946 | 14.80 | -27.27 | 33.0 | 18.20 | Peak | 101.00 | 100 | Horizontal | Pass |
| 4 | 287.956 | 19.33 | -25.18 | 35.5 | 16.17 | Peak | 10.00 | 200 | Horizontal | Pass |
| 5 | 319.958 | 18.52 | -24.36 | 35.5 | 16.98 | Peak | 0.00 | 200 | Horizontal | Pass |
| 6 | 649.918 | 24.42 | -15.64 | 35.5 | 11.08 | Peak | 7.00 | 200 | Horizontal | Pass |

## 30 MHz to 1 GHz, ANT V




| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna | Verdict |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 48.425 | 13.51 | -26.07 | 29.5 | 15.99 | Peak | 0.00 | 200 | Vertical | Pass |
| 2 | 120.915 | 12.69 | -28.08 | 33.0 | 20.31 | Peak | 0.00 | 200 | Vertical | Pass |
| 3 | 147.341 | 14.55 | -25.58 | 33.0 | 18.45 | Peak | 0.00 | 200 | Vertical | Pass |
| 4 | 287.956 | 15.88 | -25.18 | 35.5 | 19.62 | Peak | 360.00 | 100 | Vertical | Pass |
| 5 | 646.038 | 24.23 | -15.56 | 35.5 | 11.27 | Peak | 0.00 | 200 | Vertical | Pass |
| 6 | 750.530 | 26.36 | -13.30 | 35.5 | 9.14 | Peak | 178.00 | 100 | Vertical | Pass |

Note: The spurious above 18G is noise only, do not show on the report.

6489.6 MHz ANT H

| Frequency (MHz) | Result (dBm) | Factor (dB) | Limit (dBm) | Margin (dB) | Table (o) | ANT | EUT | Verdict |
|---|---|---|---|---|---|---|---|---|
| 1332.225 | 44.04 | 74.0 | 29.96 | Peak | 236.00 | 400 | Horizontal | Pass |
| 1332.225 | 29.45 | 54.0 | 24.55 | AV | 236.00 | 400 | Horizontal | Pass |
| 2974.347 | 47.74 | 74.0 | 26.26 | Peak | 131.00 | 100 | Horizontal | Pass |
| 2974.347 | 43.41 | 54.0 | 10.59 | AV | 131.00 | 100 | Horizontal | Pass |
| 4915.125 | 49.73 | 74.0 | 24.27 | Peak | 168.00 | 200 | Horizontal | Pass |
| 4915.125 | 41.05 | 54.0 | 12.95 | AV | 168.00 | 200 | Horizontal | Pass |
| 7630.048 | 53.78 | 74.0 | 20.22 | Peak | 103.00 | 400 | Horizontal | Pass |
| 7630.048 | 42.28 | 54.0 | 11.72 | AV | 103.00 | 400 | Horizontal | Pass |
| 12476.177 | 50.62 | 74.0 | 23.38 | Peak | 278.00 | 100 | Horizontal | Pass |
| 12476.177 | 43.22 | 54.0 | 10.78 | AV | 278.00 | 100 | Horizontal | Pass |
| 16853.371 | 56.45 | 74.0 | 17.55 | Peak | 260.00 | 100 | Horizontal | Pass |
| 16853.371 | 44.77 | 54.0 | 9.23 | AV | 260.00 | 100 | Horizontal | Pass |

6489.6 MHz ANT V

| Frequency (MHz) | Result (dBm) | Factor (dB) | Limit (dBm) | Margin (dB) | Table (o) | ANT | EUT | Verdict |
|---|---|---|---|---|---|---|---|---|
| 1467.072 | 45.23 | 74.0 | 28.77 | Peak | 179.00 | 100 | Vertical | Pass |
| 1467.072 | 29.51 | 54.0 | 24.49 | AV | 179.00 | 100 | Vertical | Pass |
| 2988.633 | 49.65 | 74.0 | 24.35 | Peak | 287.00 | 200 | Vertical | Pass |
| 2988.633 | 39.37 | 54.0 | 14.63 | AV | 287.00 | 200 | Vertical | Pass |
| 4920.555 | 49.37 | 74.0 | 24.63 | Peak | 313.00 | 200 | Vertical | Pass |
| 4920.555 | 42.49 | 54.0 | 11.51 | AV | 313.00 | 200 | Vertical | Pass |
| 7968.567 | 53.68 | 74.0 | 20.32 | Peak | 49.00 | 300 | Vertical | Pass |
| 7968.567 | 44.55 | 54.0 | 9.45 | AV | 49.00 | 300 | Vertical | Pass |
| 12440.577 | 51.09 | 74.0 | 22.91 | Peak | 110.00 | 100 | Vertical | Pass |
| 12440.577 | 42.68 | 54.0 | 11.32 | AV | 110.00 | 100 | Vertical | Pass |
| 17455.257 | 53.87 | 74.0 | 20.13 | Peak | 4.00 | 200 | Vertical | Pass |
| 17455.257 | 47.57 | 54.0 | 6.43 | AV | 4.00 | 200 | Vertical | Pass |

7987.2 MHz ANT H

| Frequency (MHz) | Result (dBm) | Factor (dB) | Limit (dBm) | Margin (dB) | Table (o) | ANT | EUT | Verdict |
|---|---|---|---|---|---|---|---|---|
| 1338.467 | 40.53 | 74.0 | 33.47 | Peak | 112.00 | 300 | Horizontal | Pass |
| 1338.467 | 30.27 | 54.0 | 23.73 | AV | 112.00 | 300 | Horizontal | Pass |
| 2972.044 | 48.10 | 74.0 | 25.90 | Peak | 230.00 | 300 | Horizontal | Pass |
| 2972.044 | 40.39 | 54.0 | 13.61 | AV | 230.00 | 300 | Horizontal | Pass |
| 4913.159 | 52.43 | 74.0 | 21.57 | Peak | 231.00 | 200 | Horizontal | Pass |
| 4913.159 | 44.33 | 54.0 | 9.67 | AV | 231.00 | 200 | Horizontal | Pass |
| 7625.666 | 52.66 | 74.0 | 21.34 | Peak | 255.00 | 100 | Horizontal | Pass |
| 7625.666 | 40.01 | 54.0 | 13.99 | AV | 255.00 | 100 | Horizontal | Pass |
| 12476.018 | 53.76 | 74.0 | 20.24 | Peak | 46.00 | 400 | Horizontal | Pass |
| 12476.018 | 45.30 | 54.0 | 8.70 | AV | 46.00 | 400 | Horizontal | Pass |
| 16860.420 | 52.71 | 74.0 | 21.29 | Peak | 34.00 | 400 | Horizontal | Pass |
| 16860.420 | 41.29 | 54.0 | 12.71 | AV | 34.00 | 400 | Horizontal | Pass |

7987.2 MHz ANT V

| Frequency (MHz) | Result (dBm) | Factor (dB) | Limit (dBm) | Margin (dB) | Table (o) | ANT | EUT | Verdict |
|---|---|---|---|---|---|---|---|---|
| 1469.682 | 44.61 | 74.0 | 29.39 | Peak | 259.00 | 200 | Vertical | Pass |
| 1469.682 | 28.47 | 54.0 | 25.53 | AV | 259.00 | 200 | Vertical | Pass |
| 2993.092 | 50.83 | 74.0 | 23.17 | Peak | 243.00 | 100 | Vertical | Pass |
| 2993.092 | 42.54 | 54.0 | 11.46 | AV | 243.00 | 100 | Vertical | Pass |
| 4920.575 | 50.00 | 74.0 | 24.00 | Peak | 144.00 | 200 | Vertical | Pass |
| 4920.575 | 41.32 | 54.0 | 12.68 | AV | 144.00 | 200 | Vertical | Pass |
| 7966.631 | 53.87 | 74.0 | 20.13 | Peak | 270.00 | 100 | Vertical | Pass |
| 7966.631 | 44.57 | 54.0 | 9.43 | AV | 270.00 | 100 | Vertical | Pass |
| 12444.426 | 52.70 | 74.0 | 21.30 | Peak | 173.00 | 300 | Vertical | Pass |
| 12444.426 | 42.56 | 54.0 | 11.44 | AV | 173.00 | 300 | Vertical | Pass |
| 17453.321 | 52.74 | 74.0 | 21.26 | Peak | 284.00 | 300 | Vertical | Pass |
| 17453.321 | 47.74 | 54.0 | 6.26 | AV | 284.00 | 300 | Vertical | Pass |

# A.4 Radiated Emissions in UWB Bands

Test Data and Plots

6489.6 MHz ANT H

| Frequency (MHz) | Results (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table (Degree) | Height (cm) | Antenna | Verdict |
|---|---|---|---|---|---|---|---|
| 1177.999 | -96.67 | -85.3 | 11.37 | 162.00 | 100 | Horizontal | Pass |
| 1585.265 | -99.16 | -85.3 | 13.86 | 237.00 | 200 | Horizontal | Pass |

6489.6 MHz ANT V

| Frequency (MHz) | Results (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table (Degree) | Height (cm) | Antenna | Verdict |
|---|---|---|---|---|---|---|---|
| 1231.267 | -99.45 | -85.3 | 14.15 | 25.00 | 200 | Horizontal | Pass |
| 1572.515 | -96.95 | -85.3 | 11.65 | 105.00 | 100 | Horizontal | Pass |

7987.2 MHz ANT H

| Frequency (MHz) | Results (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table (Degree) | Height (cm) | Antenna | Verdict |
|---|---|---|---|---|---|---|---|
| 1177.434 | -98.69 | -85.3 | 13.39 | 273.00 | 200 | Horizontal | Pass |
| 1585.265 | -97.4 | -85.3 | 12.10 | 162.00 | 100 | Horizontal | Pass |

7987.2 MHz ANT V

| Frequency (MHz) | Results (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table (Degree) | Height (cm) | Antenna | Verdict |
|---|---|---|---|---|---|---|---|
| 1232.465 | -96.97 | -85.3 | 11.67 | 164.00 | 200 | Horizontal | Pass |
| 1572.515 | -99.38 | -85.3 | 14.08 | 213.00 | 300 | Horizontal | Pass |

## A.5 Peak Emissions within a 50MHz Bandwidth

Note：the correct factor of RBW 8MHz to 50MHz is 20 log (50MHz/8 MHz) =15.92

Test Data

| Measured Channel (MHz) | Measured Peak e.i.r.p. power (dBm/8 MHz) | Peak e.i.r.p. power (dBm/50 MHz) | Limit (dBm/50 MHz) | Verdict |
|---|---|---|---|---|
| 6489.6 | -21.61 | -5.69 | ≤0 | Pass |
| 7987.2 | -20.94 | -5.02 | ≤0 | Pass |

Test Data and Plot

6489.6MHz

7987.2MHz

# ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SZ2540844-AR.PDF”.

# ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2540844-AW.PDF”.

# ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SZ2540844-AI.PDF”.

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--END OF REPORT--