# RF TEST REPORT

**For**

## Shenzhen Pinboyuan Technology Co., Ltd.

## Product Name: Power Bank

## Test Model(s): PB07

| | | |
|---|---|---|
| **Report Reference No.** | : | **DACE250401009RL001** |
| **FCC ID** | : | **2BOUD-PB07** |
| **Applicant's Name** | : | Shenzhen Pinboyuan Technology Co., Ltd. |
| **Address** | : | No.18, Bailong Tou, FuCheng Ao Industrial Area, Pinghu Town, Longgang District, Shenzhen, China |
| **Testing Laboratory** | : | Shenzhen DACE Testing Technology Co., Ltd. |
| **Address** | : | 102, Building H1, & 1/F., Building H, Hongfa Science & Technology Park, Tangtou Community, Shiyan Subdistrict, Bao'an District, Shenzhen, Guangdong, China |
| **Test Specification Standard** | : | **47 CFR Part 15.209** |
| **Date of Receipt** | : | April 1, 2025 |
| **Date of Test** | : | April 1, 2025 to April 11, 2025 |
| **Data of Issue** | : | April 11, 2025 |
| **Result** | : | **Pass** |

# Apply for company information

| | | |
|---|---|---|
| **Applicant's Name** | : | Shenzhen Pinboyuan Technology Co., Ltd. |
| **Address** | : | No.18, Bailong Tou, FuCheng Ao Industrial Area, Pinghu Town, Longgang District, Shenzhen, China |
| **Product Name** | : | Power Bank |
| **Test Model(s)** | : | PB07 |
| **Series Model(s)** | : | N/A |
| **Test Specification Standard(s)** | : | 47 CFR Part 15.209 |

**NOTE1:**

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

| Compiled by: | Supervised by: | Approved by: |
|---|---|---|
| Keren Huang | Ben Tang | Machael Mo |
| Keren Huang / Test Engineer | Ben Tang / Project Engineer | Machael Mo / Manager |
| April 11, 2025 | April 11, 2025 | April 11, 2025 |

# Revision History Of Report

| Version | Description | REPORT No. | Issue Date |
|---|---|---|---|
| V1.0 | Original | DACE250401009RL001 | April 11, 2025 |
| | | | |
| | | | |
| | | | |
| | | | |

# CONTENTS

# 1 TEST SUMMARY

## 1.1 Test Standards

The tests were performed according to following standards:

**47 CFR Part 15.209:** Radiated emission limits; general requirements

## 1.2 Summary of Test Result

| Item | Standard | Method | Requirement | Result |
|---|---|---|---|---|
| Antenna requirement | 47 CFR Part 15.209 | | 47 CFR Part 15.203 | Pass |
| Conducted Emission at AC power line | 47 CFR Part 15.209 | ANSI C63.10-2013 section 6.2 | 47 CFR Part 15.207(a) | Pass |
| 20dB Occupied Bandwidth | 47 CFR Part 15.209 | ANSI C63.10-2013, section 6.9.2 | 47 CFR Part 15.215(c) | Pass |
| Emissions in frequency bands (below 30MHz) | 47 CFR Part 15.209 | ANSI C63.10-2013 section 6.4 | 47 CFR Part 15.209 | Pass |
| Emissions in frequency bands (30MHz - 1GHz) | 47 CFR Part 15.209 | ANSI C63.10-2013 section 6.5 | 47 CFR Part 15.209 | Pass |

# 2 GENERAL INFORMATION

## 2.1 Client Information

| | | |
|---|---|---|
| **Applicant's Name** | : | Shenzhen Pinboyuan Technology Co., Ltd. |
| **Address** | : | No.18, Bailong Tou, FuCheng Ao Industrial Area, Pinghu Town, Longgang District, Shenzhen, China |
| **Manufacturer** | : | Shenzhen Pinboyuan Technology Co., Ltd. |
| **Address** | : | No.18, Bailong Tou, FuCheng Ao Industrial Area, Pinghu Town, Longgang District, Shenzhen, China |

## 2.2 Description of Device (EUT)

| | |
|---|---|
| Product Name: | Power Bank |
| Model/Type reference: | PB07 |
| Series Model: | N/A |
| Trade Mark: | N/A |
| Power Supply: | Capacity: 5000mAh/19.25Wh<br>USB-C Input: 5V/3A,9V/2A ; USB-C Output: 5V/3A,9V/2.22A,12V/1.67A<br>Wireless Output: 5W/7.5W/10W/15W |
| Operation Frequency: | 110KHz --205KHz |
| Number of Channels: | N/A |
| Modulation Type: | FSK |
| Antenna Type: | Inductive loop coil Antenna |
| Antenna Gain: | 0dBi |
| Hardware Version: | V1.0 |
| Software Version: | V1.0 |

## 2.3 Description of Test Modes

| No | Title | Description |
|---|---|---|
| TM1 | TM1 | AC/DC Adapter (9V/2A)+EUT +Mobile Phone(Battery Status:<1%) |
| TM2 | TM2 | AC/DC Adapter (9V/2A)+EUT +Mobile Phone(Battery Status:<50%) |
| TM3 | TM3 | AC/DC Adapter (9V/2A)+EUT +Mobile Phone(Battery Status:<100%) |
| TM4 | TM4 | AC/DC Adapter (5V/3A)+EUT +Mobile Phone(Battery Status:<1%) |
| TM5 | TM5 | AC/DC Adapter (5V/3A)+EUT +Mobile Phone(Battery Status:<50%) |
| TM6 | TM6 | AC/DC Adapter (5V/3A)+EUT +Mobile Phone(Battery Status:<100%) |
| TM7 | TM7 | EUT + Load Wireless (Battery Status:<1%) |
| TM8 | TM8 | EUT + Load Wireless (Battery Status:<50%) |
| TM9 | TM9 | EUT + Load Wireless (Battery Status:<100%) |

## 2.4 Description of Support Units

| Title | Manufacturer | Model No. | Serial No. |
|---|---|---|---|
| AC-DC adapter | HUAWEI TECHNOLOGY | HW100400C01 | |
| USB Cable | POCE | USB01 | / |
| Wireless Charging Load Module | Hanwei | / | Wireless Intput Power:5W/7.5W/10W/15 W |

## 2.5 Equipments Used During The Test

| Conducted Emission at AC power line | | | | | |
|---|---|---|---|---|---|
| **Equipment** | **Manufacturer** | **Model No** | **Inventory No** | **Cal Date** | **Cal Due Date** |
| Power absorbing clamp | SCHWARZ BECK | MESS-ELEKTRONIK | / | 2024-05-20 | 2025-05-19 |
| Electric Network | SCHWARZ BECK | CAT5 8158 | CAT5 8158#207 | / | / |
| Cable | SCHWARZ BECK | / | / | 2024-05-20 | 2025-05-19 |
| Pulse Limiter | SCHWARZ BECK | VTSD 9561-F Pulse limiter 10dB Attenuation | 561-G071 | 2024-12-06 | 2025-12-05 |
| 50ΩCoaxial Switch | Anritsu | MP59B | M20531 | / | / |
| Test Receiver | Rohde & Schwarz | ESPI TEST RECEIVER | ID:1164.6607K 03-102109-MH | 2024-06-12 | 2025-06-11 |
| L.I.S.N | R&S | ESH3-Z5 | 831.5518.52 | 2023-12-12 | 2025-12-11 |
| L.I.S.N | SCHWARZ BECK | NSLK 8126 | 05055 | 2024-06-14 | 2025-06-13 |
| Pulse Limiter | CYBERTEK | EM5010A | / | 2024-09-27 | 2025-09-26 |
| EMI test software | EZ -EMC | EZ | V1.1.42 | / | / |

| 20dB Occupied Bandwidth | | | | | |
|---|---|---|---|---|---|
| **Equipment** | **Manufacturer** | **Model No** | **Inventory No** | **Cal Date** | **Cal Due Date** |
| RF Test Software | Tachoy Information Technology(shenzhen) Co.,Ltd. | RTS-01 | V1.0.0 | / | / |
| Power divider | MIDEWEST | PWD-2533 | SMA-79 | 2023-05-11 | 2026-05-10 |
| RF Sensor Unit | Tachoy Information Technology(shenzhen) Co.,Ltd. | TR1029-2 | 000001 | / | / |
| Wideband radio communication tester | R&S | CMW500 | 113410 | 2024-06-12 | 2025-06-11 |
| Vector Signal Generator | Keysight | N5181A | MY50143455 | 2024-12-06 | 2025-12-05 |
| Signal Generator | Keysight | N5182A | MY48180415 | 2024-12-06 | 2025-12-05 |
| Spectrum Analyzer | Keysight | N9020A | MY53420323 | 2024-12-06 | 2025-12-05 |

| Emissions in frequency bands (below 30MHz)<br>Emissions in frequency bands (30MHz - 1GHz) | | | | | |
|---|---|---|---|---|---|
| **Equipment** | **Manufacturer** | **Model No** | **Inventory No** | **Cal Date** | **Cal Due Date** |
| EMI Test software | Farad | EZ -EMC | V1.1.42 | / | / |
| Positioning Controller | MF | MF-7802 | / | / | / |
| Amplifier(18-40G) | COM-POWER | AH-1840 | 10100008-1 | 2023-05-19 | 2025-05-18 |
| Horn antenna | COM-POWER | AH-1840 (18-40G) | 10100008 | 2023-05-19 | 2025-05-18 |
| Loop antenna | ZHINAN | ZN30900C | ZN30900C | 2024-06-14 | 2026-06-13 |
| Cable(LF)#2 | Schwarzbeck | / | / | 2024-12-19 | 2025-12-18 |
| Cable(LF)#1 | Schwarzbeck | / | / | 2024-12-19 | 2025-12-18 |
| Cable(HF)#2 | Schwarzbeck | AK9515E | 96250 | 2024-05-20 | 2025-05-19 |
| Cable(HF)#1 | Schwarzbeck | SYV-50-3-1 | / | 2024-05-20 | 2025-05-19 |
| Power amplifier(LF) | Schwarzbeck | BBV9743 | 9743-151 | 2024-06-12 | 2025-06-11 |
| Power amplifier(HF) | Schwarzbeck | BBV9718 | 9718-282 | 2024-06-12 | 2025-06-11 |
| Wideband radio communication tester | R&S | CMW500 | 113410 | 2024-06-12 | 2025-06-11 |
| Spectrum Analyzer | R&S | FSP30 | 1321.3008K40 -101729-jR | 2024-06-12 | 2025-06-11 |
| Test Receiver | R&S | ESCI 3 | 1166.5950K03 -101431-Jq | 2024-06-13 | 2025-06-12 |
| Horn Antenna | Sunol Sciences | DRH-118 | A091114 | 2023-05-13 | 2025-05-12 |
| Broadband Antenna | Sunol Sciences | JB6 Antenna | A090414 | 2024-09-28 | 2026-09-27 |

## 2.6 Statement Of The Measurement Uncertainty

| Test Item | Measurement Uncertainty |
|---|---|
| Conducted Disturbance (0.15~30MHz) | ±3.41dB |
| Occupied Bandwidth | ±3.63% |
| Radiated Emission (Below 1GHz) | ±5.79dB |
| Note: (1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2. | |

## 2.7 Authorizations

| | |
|---|---|
| Company Name: | Shenzhen DACE Testing Technology Co., Ltd. |
| Address: | 102, Building H1, & 1/F., Building H, Hongfa Science & Technology Park, Tangtou Community, Shiyan Subdistrict, Bao'an District, Shenzhen, Guangdong, China |
| Phone Number: | +86-13267178997 |
| Fax Number: | 86-755-29113252 |

Identification of the Responsible Testing Location

| | |
|---|---|
| Company Name: | Shenzhen DACE Testing Technology Co., Ltd. |
| Address: | 102, Building H1, & 1/F., Building H, Hongfa Science & Technology Park, Tangtou Community, Shiyan Subdistrict, Bao'an District, Shenzhen, Guangdong, China |
| Phone Number: | +86-13267178997 |
| Fax Number: | 86-755-29113252 |
| Designation Number: | CN1342 |
| Test Firm Registration No.: | 778666 |
| A2LA Certificate Number: | 6270.01 |

## 2.8 Announcement

(1) The test report reference to the report template version v0.

(2) The test report is invalid if not marked with the signatures of the persons responsible for preparing, reviewing and approving the test report.

(3) The test report is invalid if there is any evidence and/or falsification.

(4) This document may not be altered or revised in any way unless done so by DACE and all revisions are duly noted in the revisions section.

(5) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.

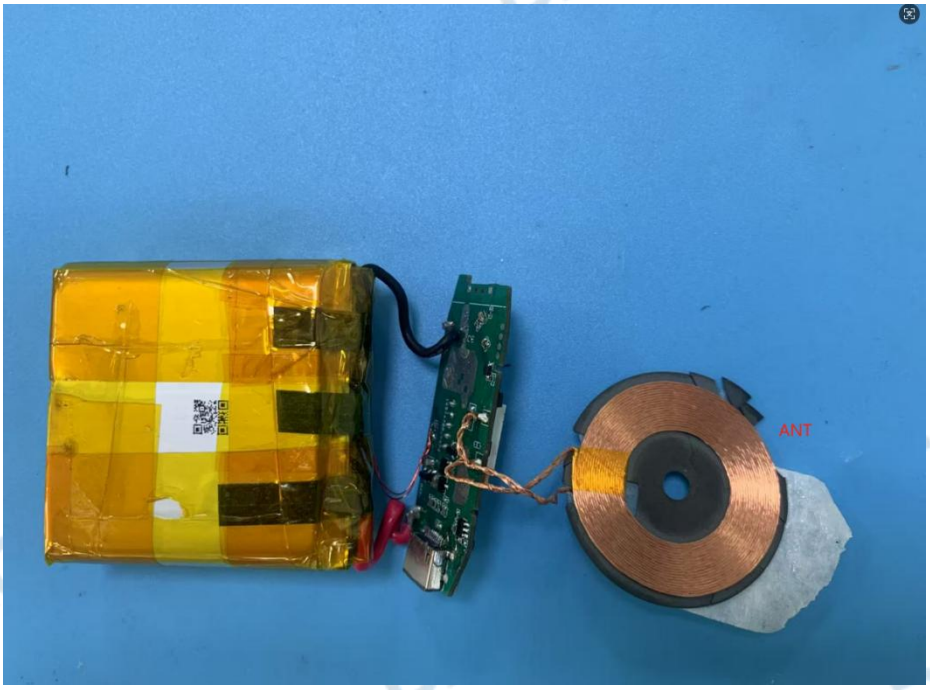
(6) We hereby declare that the laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant(information with "*" provided by applicant). the laboratory is not responsible for the accuracy of the information provided by the client. When the information provided by the customer may affect the effectiveness of the results, the responsibility lies with the customer, and the laboratory does not assume any responsibility.

# 3 Evaluation Results (Evaluation)

## 3.1 Antenna requirement

| | |
|---|---|
| Test Requirement: | Refer to 47 CFR Part 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. |

### 3.1.1 Conclusion:



# 4 Radio Spectrum Matter Test Results (RF)

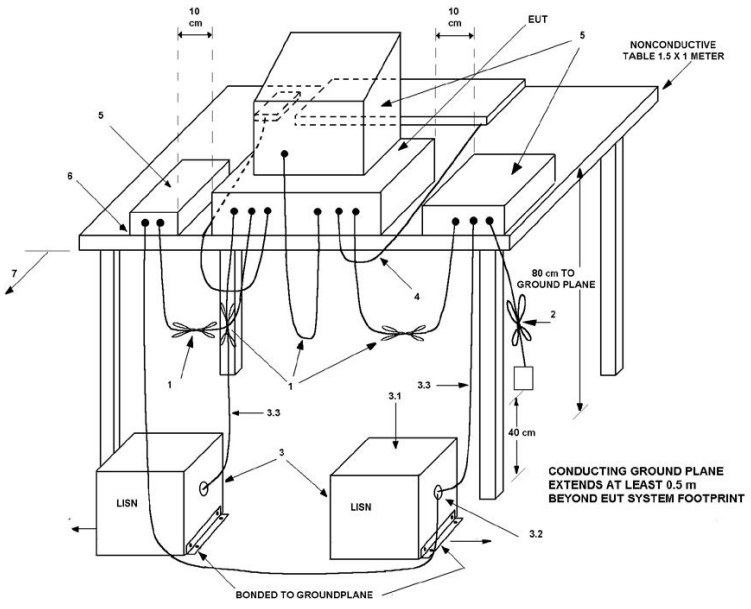
## 4.1 Conducted Emission at AC power line

| | |
|---|---|
| Test Requirement: | Except as shown in paragraphs (b)and (c)of this section, 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 or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN). |
| Test Limit: | Frequency of emission (MHz) / Conducted limit (dBμV): Quasi-peak / Average<br>0.15-0.5: 66 to 56* / 56 to 46*<br>0.5-5: 56 / 46<br>5-30: 60 / 50<br>*Decreases with the logarithm of the frequency. |
| Test Method: | ANSI C63.10-2013 section 6.2 |
| Procedure: | Refer to ANSI C63.10-2013 section 6.2, standard test method for ac power-line conducted emissions from unlicensed wireless devices |

### 4.1.1 E.U.T. Operation:

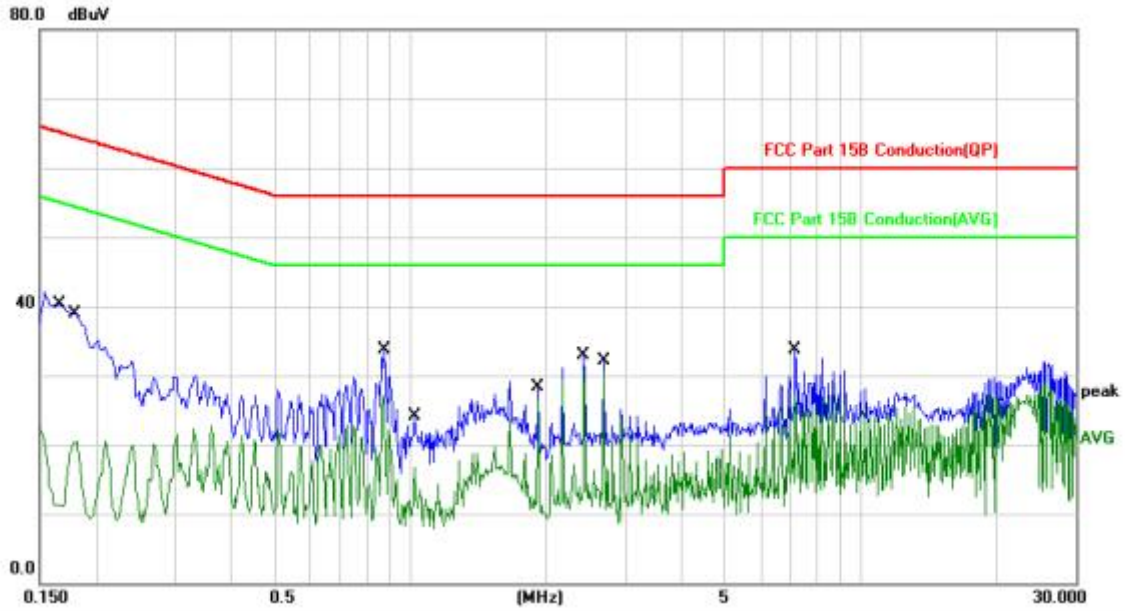
| Operating Environment: | | | | | |
|---|---|---|---|---|---|
| Temperature: | 22 °C | Humidity: | 54 % | Atmospheric Pressure: | 102 kPa |
| Pretest mode: | TM1 | | | | |
| Final test mode: | TM1 | | | | |

### 4.1.2 Test Setup Diagram:



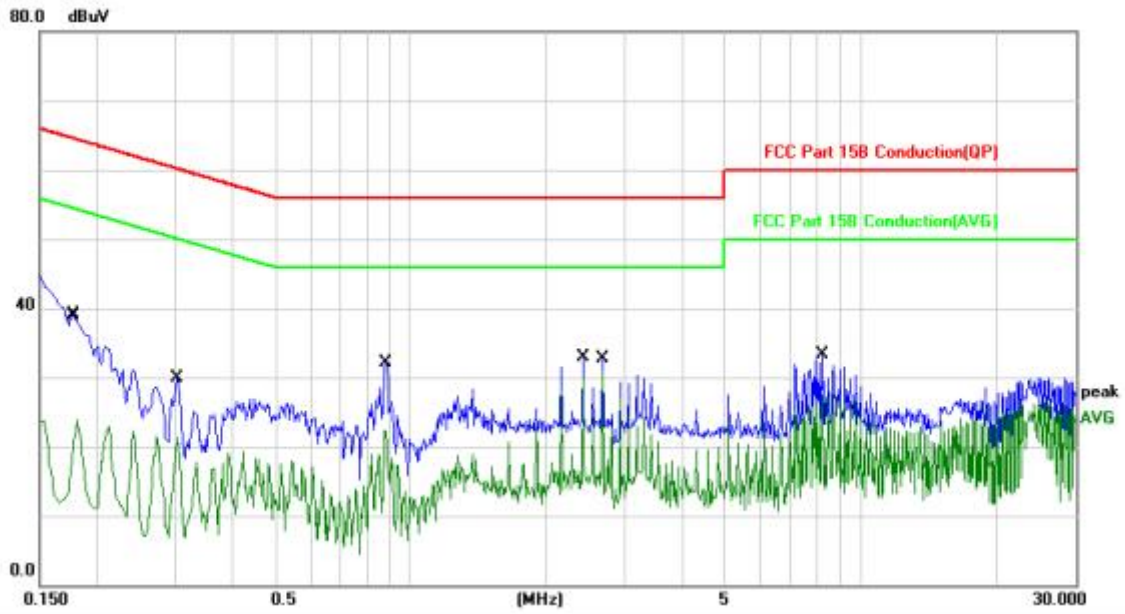
### 4.1.3 Test Data:

TM1 / Line: Line




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | | 0.1660 | 30.09 | 10.12 | 40.21 | 65.15 | -24.94 | QP | |
| 2 | | 0.1819 | 10.31 | 10.12 | 20.43 | 54.39 | -33.96 | AVG | |
| 3 | | 0.8780 | 23.62 | 10.10 | 33.72 | 56.00 | -22.28 | QP | |
| 4 | | 1.0260 | 6.61 | 10.11 | 16.72 | 46.00 | -29.28 | AVG | |
| 5 | | 1.9220 | 18.38 | 10.00 | 28.38 | 56.00 | -27.62 | QP | |
| 6 | | 1.9220 | 16.28 | 10.00 | 26.28 | 46.00 | -19.72 | AVG | |
| 7 | | 2.4340 | 22.86 | 10.03 | 32.89 | 56.00 | -23.11 | QP | |
| 8 | * | 2.4340 | 20.88 | 10.03 | 30.91 | 46.00 | -15.09 | AVG | |
| 9 | | 2.6900 | 22.01 | 10.04 | 32.05 | 56.00 | -23.95 | QP | |
| 10 | | 2.6900 | 20.47 | 10.04 | 30.51 | 46.00 | -15.49 | AVG | |
| 11 | | 7.1740 | 23.50 | 10.22 | 33.72 | 60.00 | -26.28 | QP | |
| 12 | | 7.1740 | 16.96 | 10.22 | 27.18 | 50.00 | -22.82 | AVG | |

TM1 / Line: Neutral




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | | 0.1780 | 29.01 | 10.12 | 39.13 | 64.57 | -25.44 | QP | |
| 2 | | 0.1819 | 13.71 | 10.12 | 23.83 | 54.39 | -30.56 | AVG | |
| 3 | | 0.3020 | 19.70 | 10.10 | 29.80 | 60.19 | -30.39 | QP | |
| 4 | | 0.3020 | 11.27 | 10.10 | 21.37 | 50.19 | -28.82 | AVG | |
| 5 | | 0.8780 | 12.25 | 10.10 | 22.35 | 46.00 | -23.65 | AVG | |
| 6 | | 0.8820 | 21.99 | 10.10 | 32.09 | 56.00 | -23.91 | QP | |
| 7 | | 2.4140 | 22.90 | 10.02 | 32.92 | 56.00 | -23.08 | QP | |
| 8 | | 2.4140 | 19.86 | 10.02 | 29.88 | 46.00 | -16.12 | AVG | |
| 9 | | 2.6700 | 22.74 | 10.04 | 32.78 | 56.00 | -23.22 | QP | |
| 10 | * | 2.6700 | 20.93 | 10.04 | 30.97 | 46.00 | -15.03 | AVG | |
| 11 | | 8.2020 | 23.11 | 10.26 | 33.37 | 60.00 | -26.63 | QP | |
| 12 | | 8.2020 | 17.31 | 10.26 | 27.57 | 50.00 | -22.43 | AVG | |

## 4.2 20dB Occupied Bandwidth

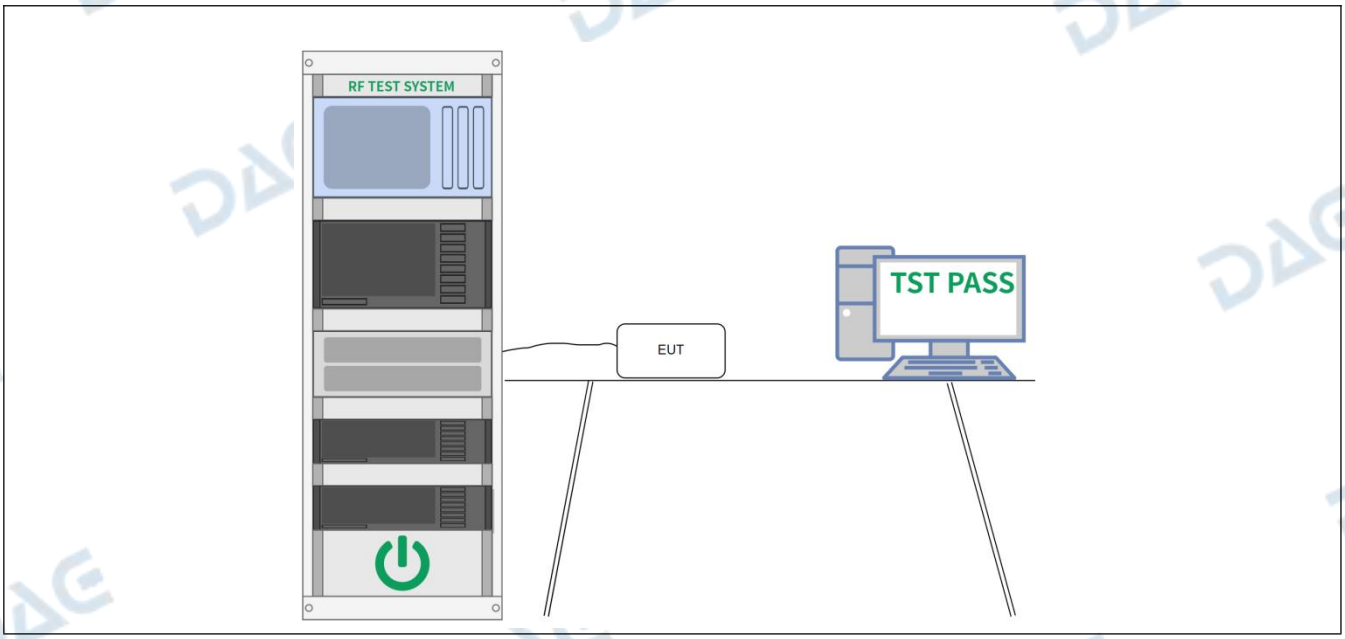
| | |
|---|---|
| Test Requirement: | 47 CFR Part 15.215(c) |
| Test Limit: | Refer to 47 CFR 15.215(c), intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in subpart E of this part, must be designed to ensure 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. |
| Test Method: | ANSI C63.10-2013, section 6.9.2 |
| Procedure: | a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the EMI receiver or spectrum analyzer shall be between two times and five times the OBW.<br>b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW and video bandwidth (VBW) shall be approximately three times RBW, unless otherwise specified by the applicable requirement.<br>c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.5.2.<br>d) Steps a) through c) might require iteration to adjust within the specified tolerances.<br>e) The dynamic range of the instrument at the selected RBW shall be more than 10 dB below the target "−xx dB down" requirement; that is, if the requirement calls for measuring the −20 dB OBW, the instrument noise floor at the selected RBW shall be at least 30 dB below the<br>reference value.<br>f) Set detection mode to peak and trace mode to max hold.<br>g) Determine the reference value: Set the EUT to transmit an unmodulated carrier or modulated signal, as applicable. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).<br>h) Determine the "−xx dB down amplitude" using [(reference value) − xx]. Alternatively, this calculation may be made by using the marker-delta function of the instrument.<br>i) If the reference value is determined by an unmodulated carrier, then turn the EUT modulation ON, and either clear the existing trace or start a new trace on the spectrum analyzer and allow the new trace to stabilize. Otherwise, the trace from step g) shall be used for step j).<br>j) Place two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the "-xx dB down amplitude" determined in step h). If a marker is below this "−xx dB down amplitude" value, then it shall be as close as possible to this value. The occupied bandwidth is the frequency difference between the two markers. Alternatively, set a marker at the lowest frequency of the envelope of the spectral display, such that the marker is at or slightly below the "-xx dB down amplitude" determined in step h). Reset the marker-delta function and move the marker to the other side of the emission until the delta marker amplitude is at the same level as the reference marker amplitude. The marker-delta frequency reading at this point is the specified emission bandwidth.<br>k) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s). |

### 4.2.1 E.U.T. Operation:

| Operating Environment: | | | | | |
|---|---|---|---|---|---|
| Temperature: | 22 °C | Humidity: | 54 % | Atmospheric Pressure: | 102 kPa |
| Pretest mode: | TM1 | | | | |

| Final test mode: | TM1 |
|---|---|

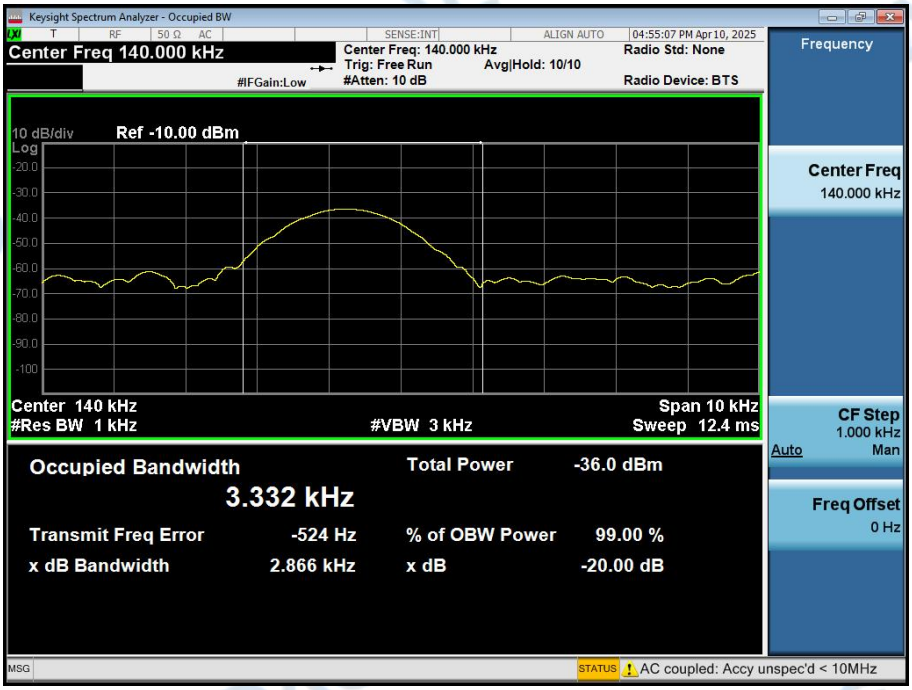
### 4.2.2 Test Setup Diagram:



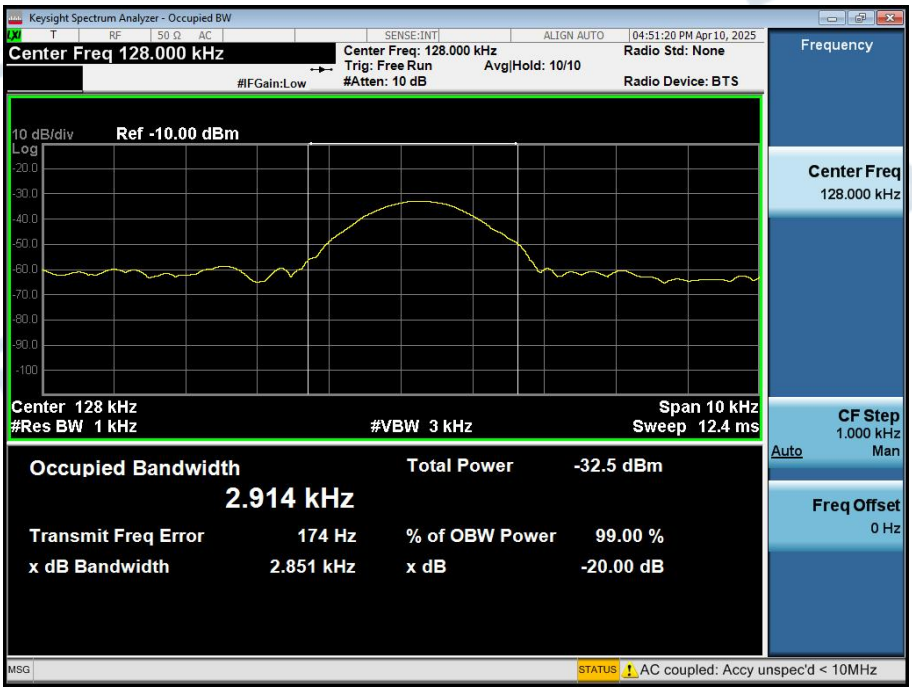

### 4.2.3 Test Data:

| Frequency(KHz) | -20dB_Emission_Bandwidth(KHz) | Occupied Bandwidth(KHz) |
|---|---|---|
| 140 | 2.866 | 3.332 |
| 128 | 2.851 | 2.914 |
| 147 | 2.954 | 4.357 |
| 139.4 | 2.879 | 2.861 |

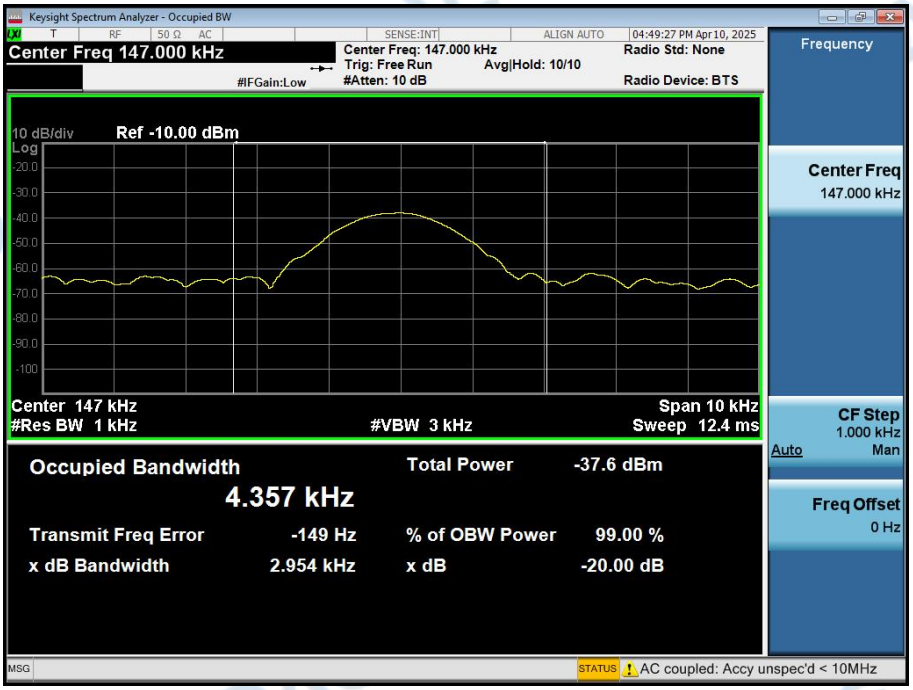
5W--Test Frequency:129KHz




7.5W--Test Frequency:127.3KHz



10W--Test Frequency:139KHz




15W--Test Frequency:139.4KHz

## 4.3 Emissions in frequency bands (below 30MHz)

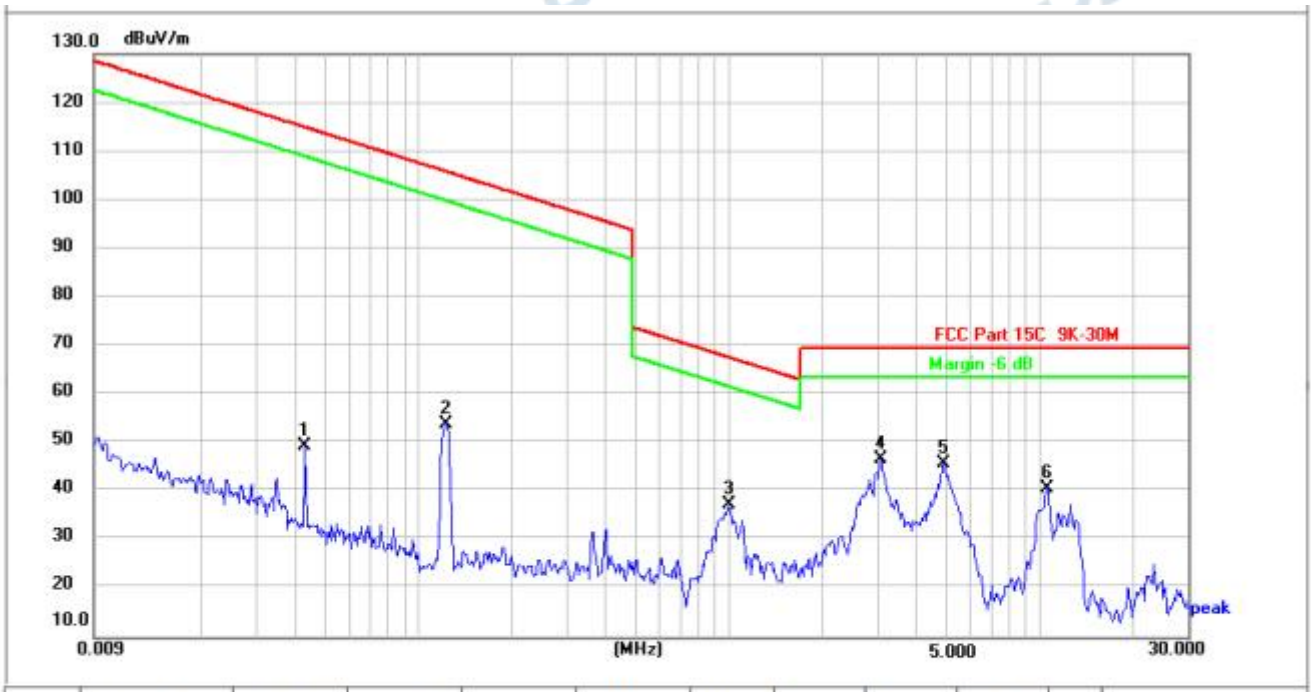
<table>
<tr><td>Test Requirement:</td><td>47 CFR Part 15.209</td></tr>
<tr><td>Test Limit:</td><td>
<table>
<tr><td>Frequency (MHz)</td><td>Field strength (microvolts/meter)</td><td>Measurement distance (meters)</td></tr>
<tr><td>0.009-0.490</td><td>2400/F(kHz)</td><td>300</td></tr>
<tr><td>0.490-1.705</td><td>24000/F(kHz)</td><td>30</td></tr>
<tr><td>1.705-30.0</td><td>30</td><td>30</td></tr>
<tr><td>30-88</td><td>100 **</td><td>3</td></tr>
<tr><td>88-216</td><td>150 **</td><td>3</td></tr>
<tr><td>216-960</td><td>200 **</td><td>3</td></tr>
<tr><td>Above 960</td><td>500</td><td>3</td></tr>
</table>
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.<br>
In the emission table above, the tighter limit applies at the band edges.<br>
The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.<br>
As shown in § 15.35(b), for frequencies above 1000 MHz, the field strength limits in paragraphs (a)and (b)of this section are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For point-to-point operation under paragraph (b)of this section, the peak field strength shall not exceed 2500 millivolts/meter at 3 meters along the antenna azimuth.
</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10-2013 section 6.4</td></tr>
<tr><td>Procedure:</td><td>ANSI C63.10-2013 section 6.4</td></tr>
</table>

### 4.3.1 E.U.T. Operation:

<table>
<tr><td colspan="6">Operating Environment:</td></tr>
<tr><td>Temperature:</td><td>22 °C</td><td>Humidity:</td><td>54 %</td><td>Atmospheric Pressure:</td><td>102 kPa</td></tr>
<tr><td>Pretest mode:</td><td colspan="5">TM1</td></tr>
<tr><td>Final test mode:</td><td colspan="5">TM1</td></tr>
</table>

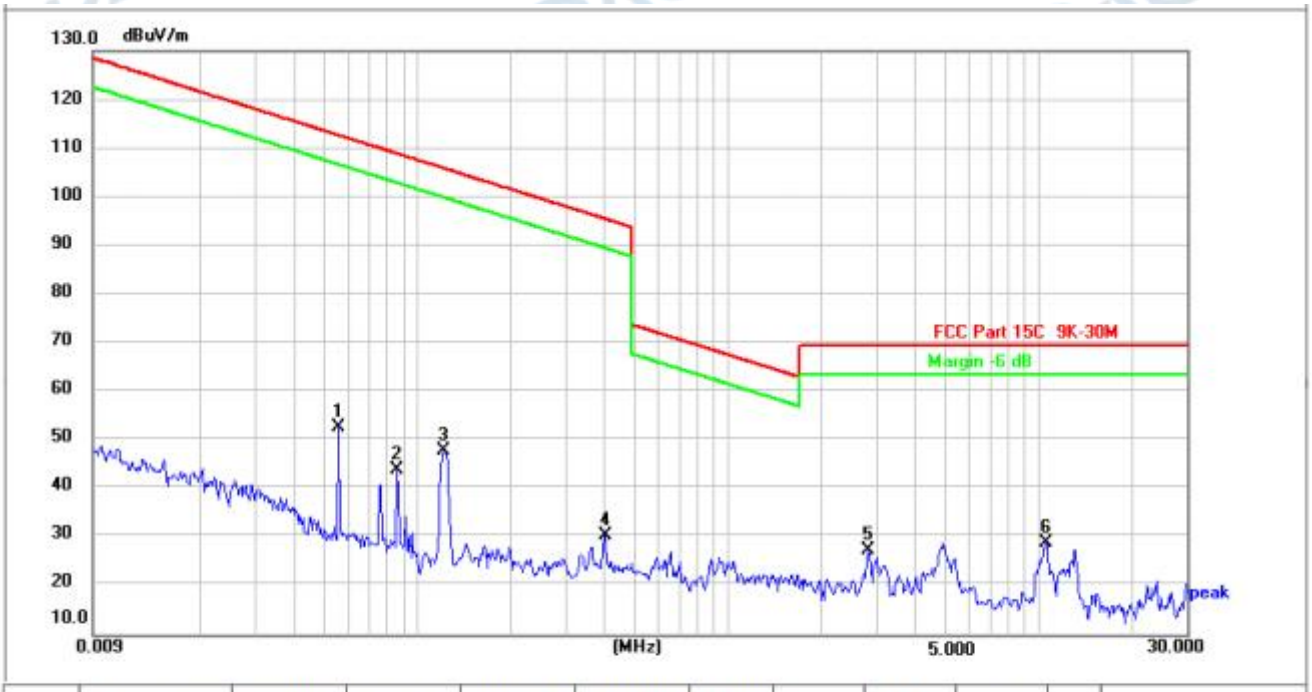
### 4.3.2 Test Data:

TM1 / Polarization: Horizontal




| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Azimuth (deg.) | P/F | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.0430 | 23.50 | 25.85 | 49.35 | 114.94 | -65.59 | peak | | | P | |
| 2 | 0.1226 | 34.52 | 19.30 | 53.82 | 105.83 | -52.01 | peak | 100 | | P | |
| 3 | 1.0024 | 16.20 | 21.26 | 37.46 | 67.60 | -30.14 | peak | 100 | | P | |
| 4 * | 3.0703 | 25.56 | 21.10 | 46.66 | 69.54 | -22.88 | peak | 100 | | P | |
| 5 | 4.8752 | 24.75 | 20.96 | 45.71 | 69.54 | -23.83 | peak | 100 | | P | |
| 6 | 10.5358 | 19.52 | 21.15 | 40.67 | 69.54 | -28.87 | peak | 100 | | P | |

TM1 / Polarization: Vertical




| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Azimuth (deg.) | P/F | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.0558 | 29.92 | 22.94 | 52.86 | 112.67 | -59.81 | peak | | | P | |
| 2 | 0.0858 | 24.03 | 20.06 | 44.09 | 108.93 | -64.84 | peak | | | P | |
| 3 | 0.1216 | 28.61 | 19.29 | 47.90 | 105.91 | -58.01 | peak | | | P | |
| 4 | 0.4008 | 9.87 | 20.74 | 30.61 | 95.55 | -64.94 | peak | | | P | |
| 5 | 2.8311 | 6.40 | 21.12 | 27.52 | 69.54 | -42.02 | peak | | | P | |
| 6 * | 10.5358 | 7.89 | 21.15 | 29.04 | 69.54 | -40.50 | peak | | | P | |

## 4.4 Emissions in frequency bands (30MHz - 1GHz)

| | |
|---|---|
| Test Requirement: | 47 CFR Part 15.209 |
| Test Limit: | |

| Frequency (MHz) | Field strength (microvolts/meter) | 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 |

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.
In the emission table above, the tighter limit applies at the band edges.
The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.
As shown in § 15.35(b), for frequencies above 1000 MHz, the field strength limits in paragraphs (a)and (b)of this section are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For point-to-point operation under paragraph (b)of this section, the peak field strength shall not exceed 2500 millivolts/meter at 3 meters along the antenna azimuth.

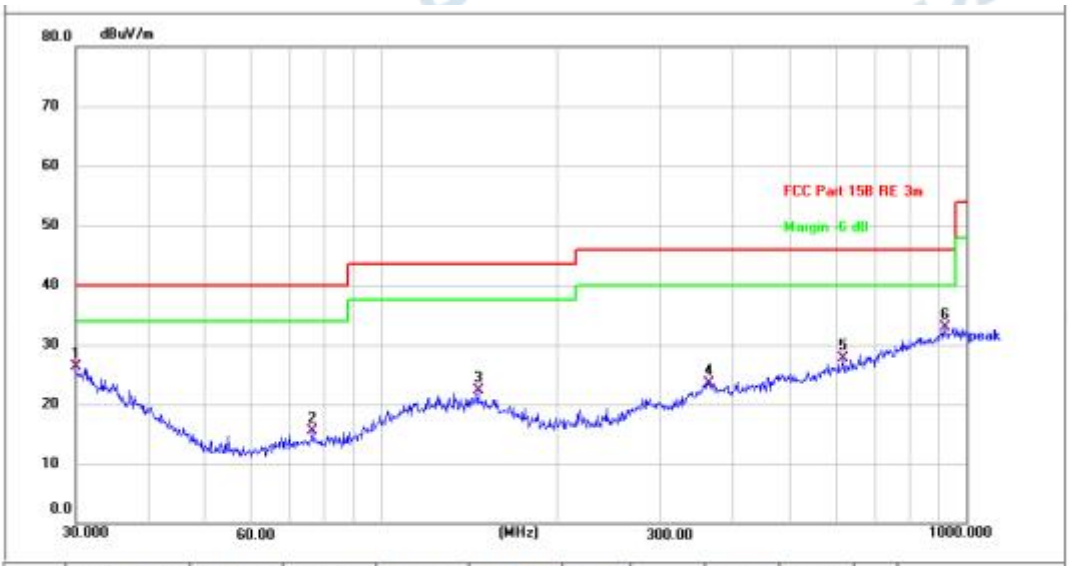
| | |
|---|---|
| Test Method: | ANSI C63.10-2013 section 6.5 |
| Procedure: | ANSI C63.10-2013 section 6.5 |

### 4.4.1 E.U.T. Operation:

| Operating Environment: | | | | | |
|---|---|---|---|---|---|
| Temperature: | 22 °C | Humidity: | 54 % | Atmospheric Pressure: | 102 kPa |
| Pretest mode: | TM1 | | | | |
| Final test mode: | TM1 | | | | |

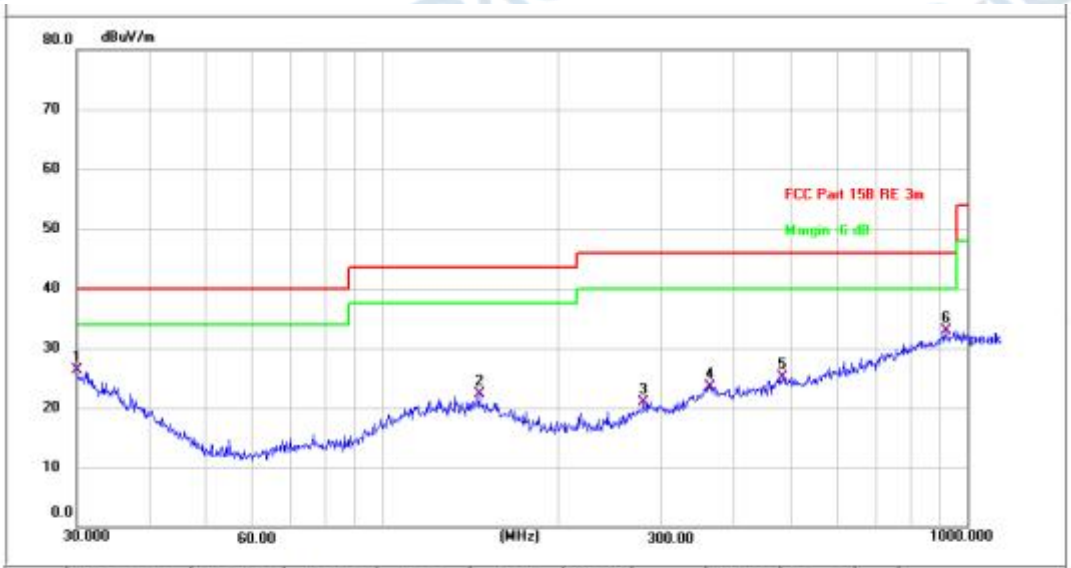
### 4.4.2 Test Data:

TM1 / Polarization: Horizontal



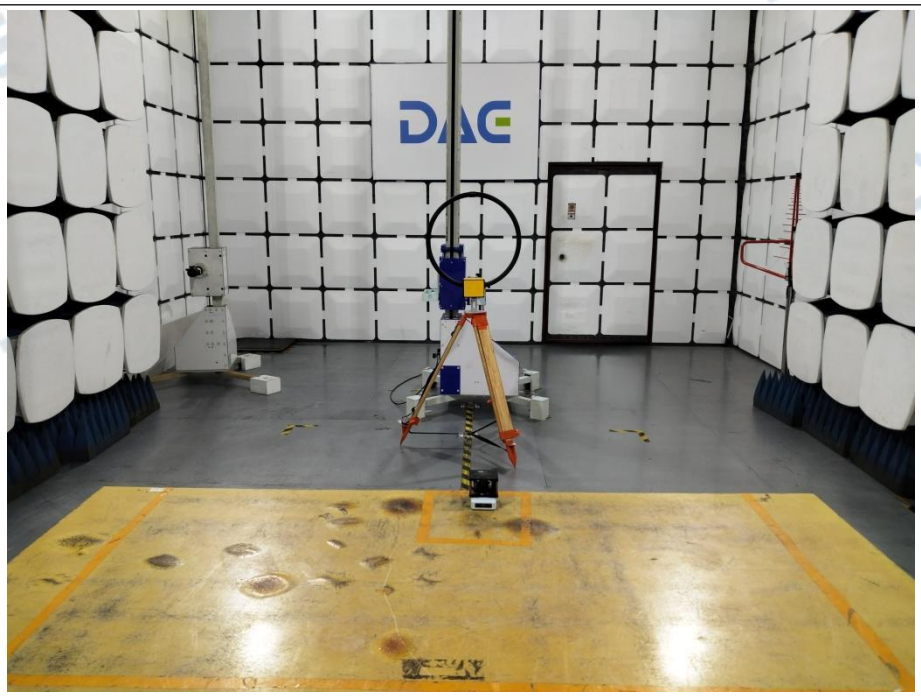

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Azimuth (deg.) | P/F | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30.0000 | 25.87 | 0.53 | 26.40 | 40.00 | -13.60 | QP | 100 | | P | |
| 2 | 76.2442 | 27.14 | -11.69 | 15.45 | 40.00 | -24.55 | QP | 100 | | P | |
| 3 | 146.3735 | 28.76 | -6.50 | 22.26 | 43.50 | -21.24 | QP | 100 | | P | |
| 4 | 362.9844 | 28.18 | -4.58 | 23.60 | 46.00 | -22.40 | QP | 100 | | P | |
| 5 | 616.3718 | 27.06 | 0.71 | 27.77 | 46.00 | -18.23 | QP | 100 | | P | |
| 6 * | 919.2866 | 26.75 | 6.18 | 32.93 | 46.00 | -13.07 | QP | 100 | | P | |

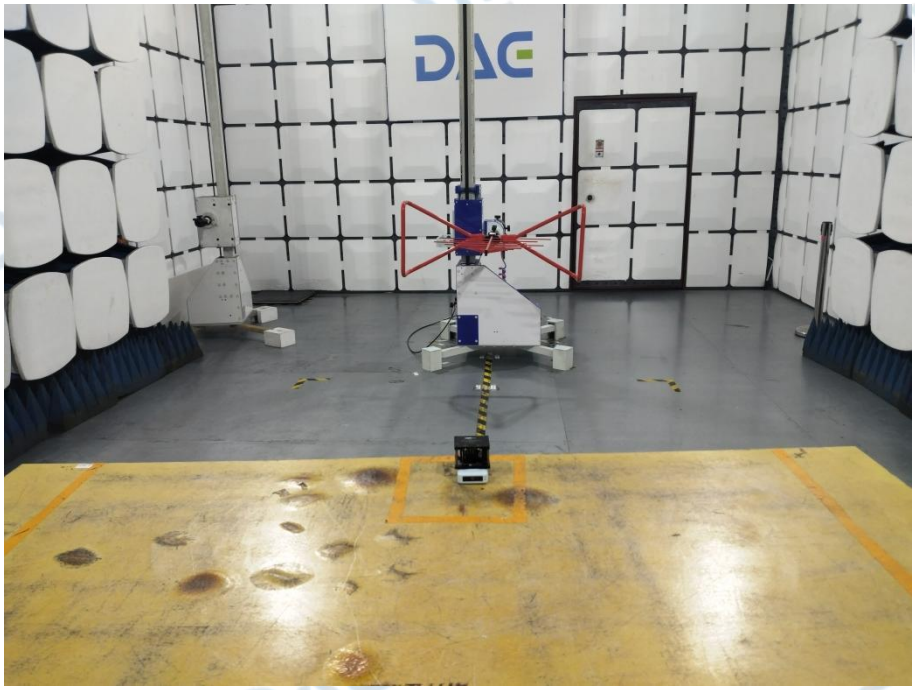
TM1 / Polarization: Vertical




| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Azimuth (deg.) | P/F | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30.0000 | 25.87 | 0.53 | 26.40 | 40.00 | -13.60 | QP | 100 | | P | |
| 2 | 146.3735 | 28.91 | -6.65 | 22.26 | 43.50 | -21.24 | QP | 100 | | P | |
| 3 | 279.0436 | 27.12 | -6.19 | 20.93 | 46.00 | -25.07 | QP | 100 | | P | |
| 4 | 362.9844 | 28.37 | -4.77 | 23.60 | 46.00 | -22.40 | QP | 100 | | P | |
| 5 | 482.2156 | 26.48 | -1.34 | 25.14 | 46.00 | -20.86 | QP | 100 | | P | |
| 6 * | 919.2866 | 26.69 | 6.24 | 32.93 | 46.00 | -13.07 | QP | 100 | | P | |

# 5 TEST SETUP PHOTOS

| Conducted Emission at AC power line |
| --- |
|  |
| **Emissions in frequency bands (below 30MHz)** |
|  |

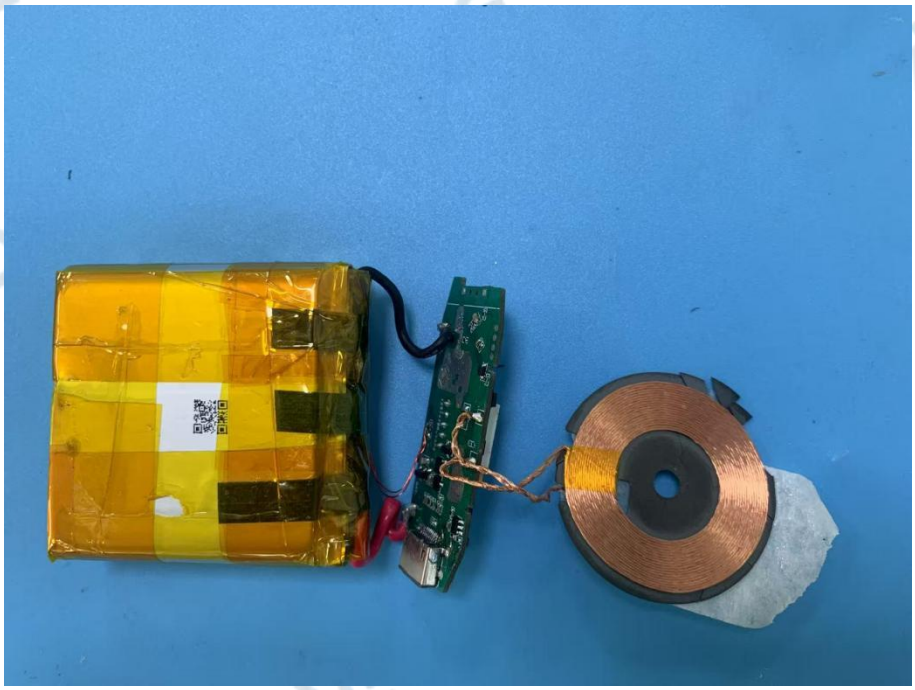
| Emissions in frequency bands (30MHz - 1GHz) |
| --- |
|  |

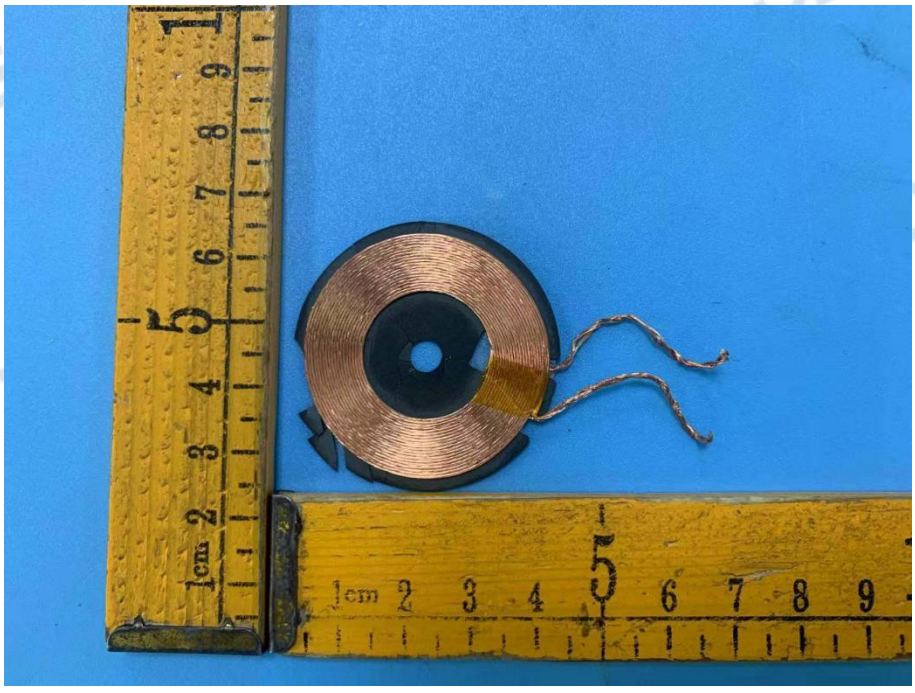
# 6 PHOTOS OF THE EUT

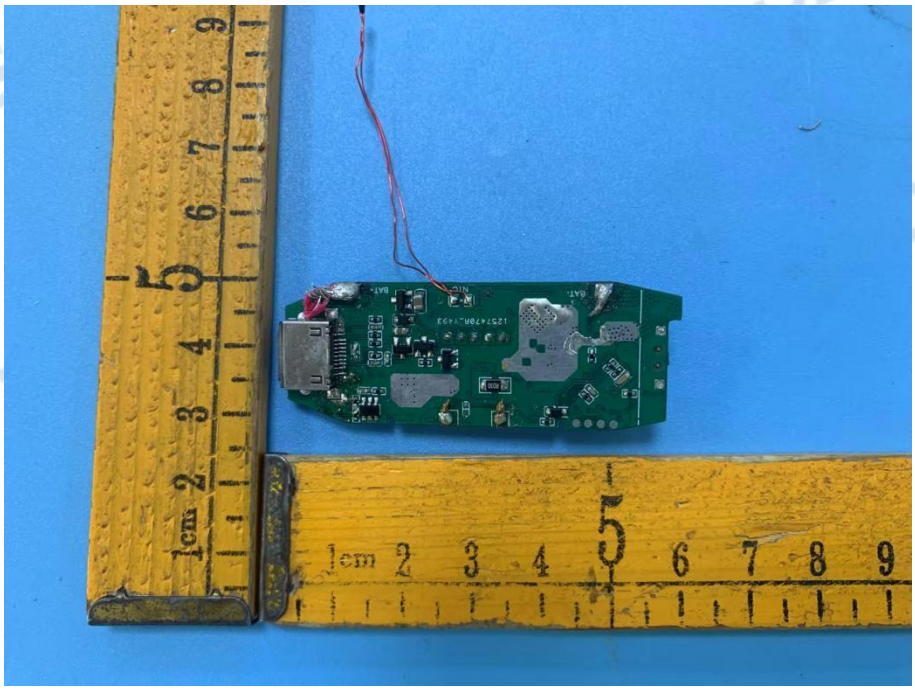
| External |
| --- |
|  |

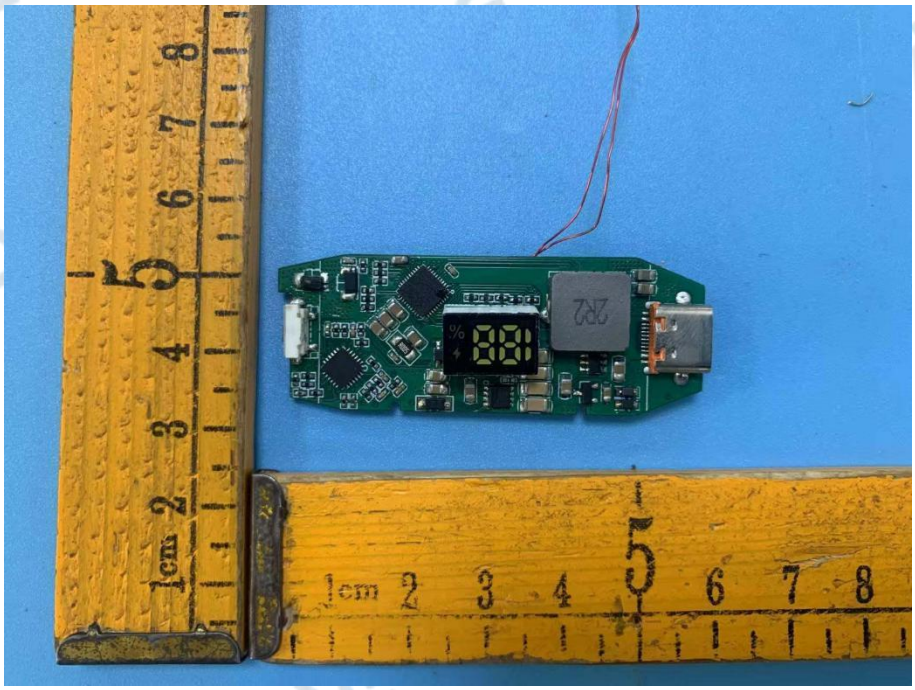
| |
| --- |
|  |

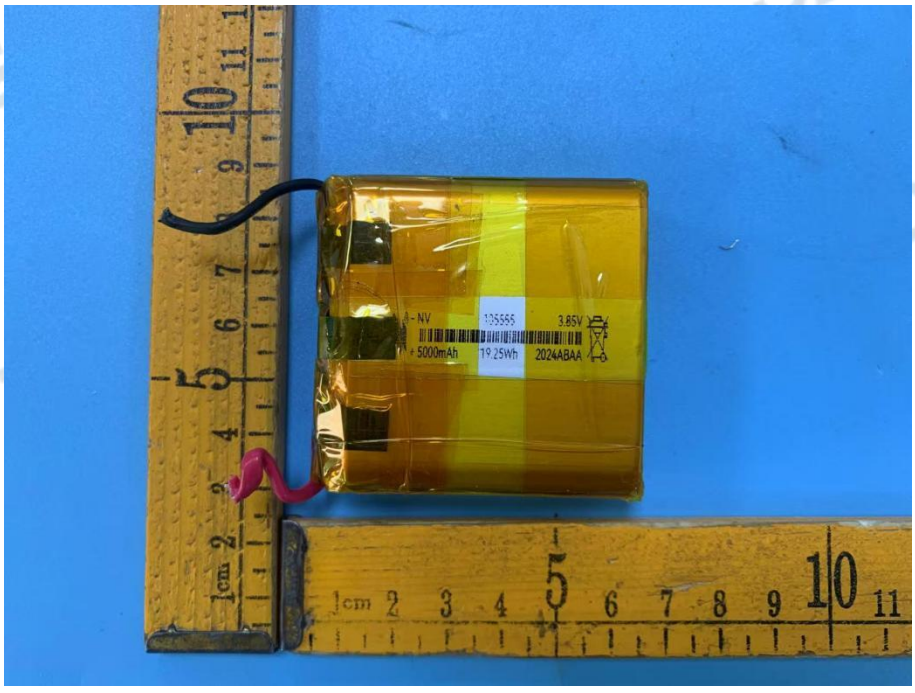
**Internal**










3.85V
5000mAh
19.25Wh
2024ABAA

********** End of Report **********