

# TEST REPORT

Applicant Name: JME & CO. NYC.LLC  
Address: 469 7TH AVE 14TH FLOOR NEW YORK, NY 10018 United States  
Report Number: 2401Y39587E-RF-00  
FCC ID: 2BMOI-520M

## Test Standard (s)

FCC Part 15C

## Sample Description

Product Type: Magsafe Powerbank  
Model No.: 554  
Multiple Model(s) No.: 520M, PW1042, 555, 552, 530  
Trade Mark: N/A  
Date Received: 2024/10/29  
Issue Date: 2025/02/27

|              |       |
|--------------|-------|
| Test Result: | Pass▲ |
|--------------|-------|

▲ In the configuration tested, the EUT complied with the standards above.

## Prepared and Checked By:

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Bruce Lin  
RF Engineer

## Approved By:

Jimmy Xiao

Jimmy Xiao  
EMC Manager

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DOCUMENT REVISION HISTORY

| Revision Number | Report Number     | Description of Revision | Date of Revision |
|-----------------|-------------------|-------------------------|------------------|
| 0               | 2401Y39587E-RF-00 | Original Report         | 2025/02/27       |

## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

|                                                                                                                                                                                                                        |                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Product                                                                                                                                                                                                                | Magsafe Powerbank                   |
| Tested Model                                                                                                                                                                                                           | 554                                 |
| Multiple Model(s)                                                                                                                                                                                                      | 520M, PW1042, 555, 552, 530         |
| Frequency Range                                                                                                                                                                                                        | 110.5-205kHz                        |
| Antenna Type                                                                                                                                                                                                           | Coil                                |
| Input                                                                                                                                                                                                                  | DC 5V/3A                            |
| Battery Voltage                                                                                                                                                                                                        | 3.7V                                |
| Maximum Wireless Output Power                                                                                                                                                                                          | 5Watts                              |
| Modulation                                                                                                                                                                                                             | FSK                                 |
| Sample serial number                                                                                                                                                                                                   | 2TLE-1 (Assigned by BACL, Shenzhen) |
| Sample/EUT Status                                                                                                                                                                                                      | Good condition                      |
| Adapter Information                                                                                                                                                                                                    | N/A                                 |
| Note: The Multiple models are electrically identical with the test model except for the model name and color. Please refer to the declaration letter <sup>#</sup> for more detail, which was provided by manufacturer. |                                     |

### Objective

This test report is in accordance with Part 2, Subpart J, and Part 15, Subparts A and C of the Federal Communications Commission's rules.

The objective is to determine the compliance of EUT with FCC rules, section 15.203, 15.205, 15.207 and 15.209.

### Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliant Testing of Unlicensed Wireless Devices and KDB 680106 D01 Wireless Power Transfer v04.

## Measurement Uncertainty

| Parameter                             |                             | Uncertainty                          |
|---------------------------------------|-----------------------------|--------------------------------------|
| AC Power Lines<br>Conducted Emissions | 9kHz-150kHz                 | 3.63dB(k=2, 95% level of confidence) |
|                                       | 150kHz-30MHz                | 3.66dB(k=2, 95% level of confidence) |
| Radiated Emissions                    | 9kHz – 30MHz                | 3.60dB(k=2, 95% level of confidence) |
|                                       | 30MHz~200MHz (Horizontal)   | 5.32dB(k=2, 95% level of confidence) |
|                                       | 30MHz~200MHz (Vertical)     | 5.43dB(k=2, 95% level of confidence) |
|                                       | 200MHz~1000MHz (Horizontal) | 5.77dB(k=2, 95% level of confidence) |
|                                       | 200MHz~1000MHz (Vertical)   | 5.73dB(k=2, 95% level of confidence) |
| Temperature                           |                             | ±1°C                                 |
| Humidity                              |                             | ±1%                                  |
| Supply voltages                       |                             | ±0.4%                                |
| Nerve Simulation                      | H-Field                     | 0.74dB(k=2, 95% level of confidence) |
|                                       | E-Field                     | 1.14dB(k=2, 95% level of confidence) |

*Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.*

## Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 5F(B-West) , 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 715558, the FCC Designation No. : CN5045.

Each test item follows test standards and with no deviation.

## SYSTEM TEST CONFIGURATION

### Description of Test Configuration

The system was configured for testing in a test mode.

### EUT Exercise Software

No software used in test.

### Local Support Equipment

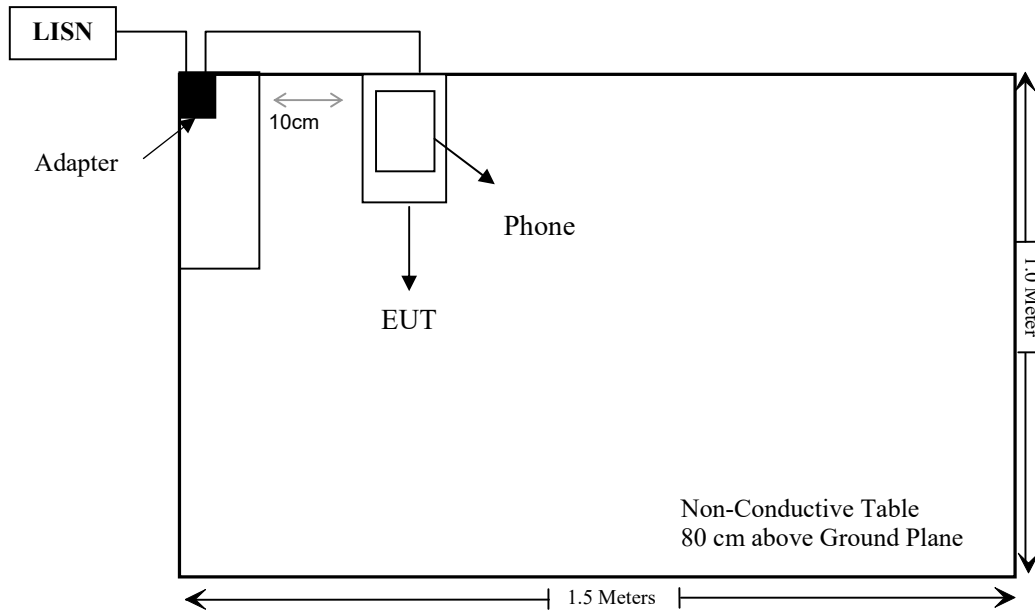
| Manufacturer | Description | Model     | Serial Number |
|--------------|-------------|-----------|---------------|
| Apple Inc.   | Phone       | iPhone 15 | GW10RR4RTW    |
| TECNO        | Adapter     | U700TSA   | Unknown       |

### External I/O Cable

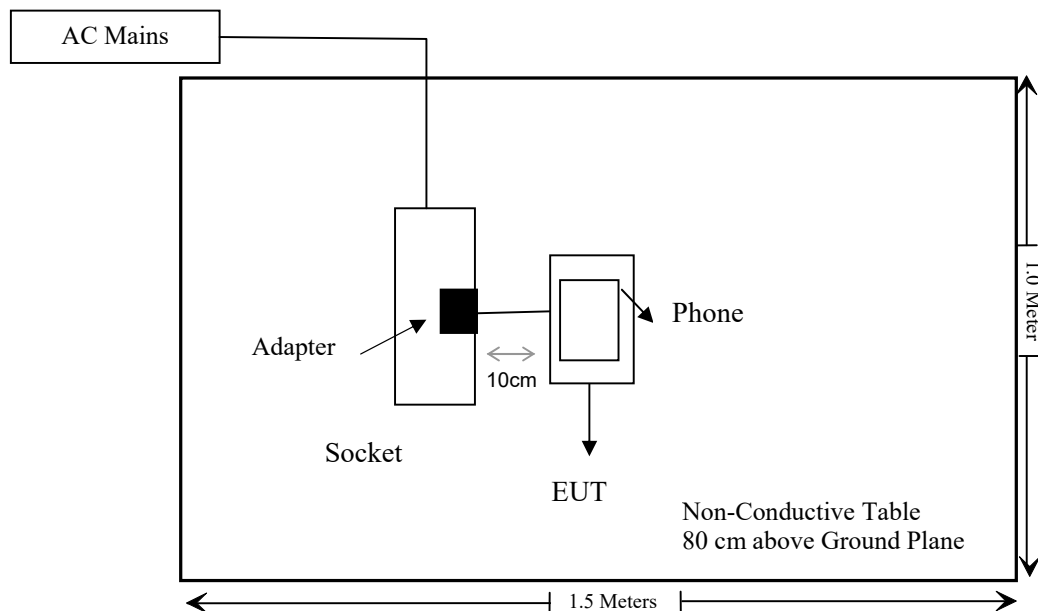
| Cable Description                | Length (m) | From Port | To      |
|----------------------------------|------------|-----------|---------|
| Un-shielded Detachable USB Cable | 1.0        | EUT       | Adapter |

## Block Diagram of Test Setup

For Conducted Emission:



For Radiated Emission:



**SUMMARY OF TEST RESULTS**

| FCC Rules               | Description of Test               | Result    |
|-------------------------|-----------------------------------|-----------|
| FCC§1.1310 &<br>§2.1093 | Maximum Permissible Exposure(MPE) | Compliant |
| FCC§15.203              | Antenna Requirement               | Compliant |
| FCC§15.207              | AC Line Conducted Emission        | Compliant |
| §15.209 §15.205         | Radiated Emission Test            | Compliant |
| §15.215 (c)             | 20dB Bandwidth                    | Compliant |

**TEST EQUIPMENT LIST**

| Manufacturer                    | Description             | Model             | Serial Number          | Calibration Date | Calibration Due Date |
|---------------------------------|-------------------------|-------------------|------------------------|------------------|----------------------|
| <b>Conducted Emissions Test</b> |                         |                   |                        |                  |                      |
| Rohde & Schwarz                 | EMI Test Receiver       | ESCI              | 101120                 | 2024/01/16       | 2025/01/15           |
| Rohde & Schwarz                 | LISN                    | ENV216            | 101613                 | 2024/01/16       | 2025/01/15           |
| Rohde & Schwarz                 | Transient Limiter       | ESH3Z2            | DE25985                | 2024/05/21       | 2025/05/20           |
| Unknown                         | CE Cable                | Unknown           | UF A210B-1-0720-504504 | 2024/05/21       | 2025/05/20           |
| Audix                           | EMI Test software       | E3                | 191218(V9)             | NCR              | NCR                  |
| <b>RF Radiated Test</b>         |                         |                   |                        |                  |                      |
| Rohde & Schwarz                 | EMI Test Receiver       | ESR3              | 102455                 | 2024/01/16       | 2025/01/15           |
| Sonoma instrument               | Pre-amplifier           | 310 N             | 186238                 | 2024/05/21       | 2025/05/20           |
| Sunol Sciences                  | Broadband Antenna       | JB1               | A040904-1              | 2023/07/20       | 2026/07/19           |
| Unknown                         | Cable                   | Chamber A Cable 1 | N/A                    | 2024/06/18       | 2025/06/17           |
| Unknown                         | Cable                   | XH500C            | J-10M-A                | 2024/06/18       | 2025/06/17           |
| BACL                            | Active Loop Antenna     | 1313-1A           | 4031911                | 2024/05/14       | 2027/05/13           |
| Unknown                         | Cable                   | 2Y194             | 0735                   | 2024/05/21       | 2025/05/20           |
| Unknown                         | Cable                   | PNG214            | 1354                   | 2024/05/21       | 2025/05/20           |
| Audix                           | EMI Test software       | E3                | 19821b(V9)             | NCR              | NCR                  |
| <b>MPE</b>                      |                         |                   |                        |                  |                      |
| SPEAG                           | Probe                   | MAGPy-8H3D-E3D    | 3106                   | 2024/03/04       | 2025/03/03           |
| SPEAG                           | Data Acquisition System | MAPGPY-DAS        | 3089                   | 2024/03/04       | 2025/03/03           |

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

## **FCC§15.203 - ANTENNA REQUIREMENT**

---

### **Applicable Standard**

According to 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.

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.

### **Antenna Connected Construction**

The EUT has one internal coil antenna arrangement which was permanently attached, fulfill the requirement of this section. Please refer to the EUT photos.

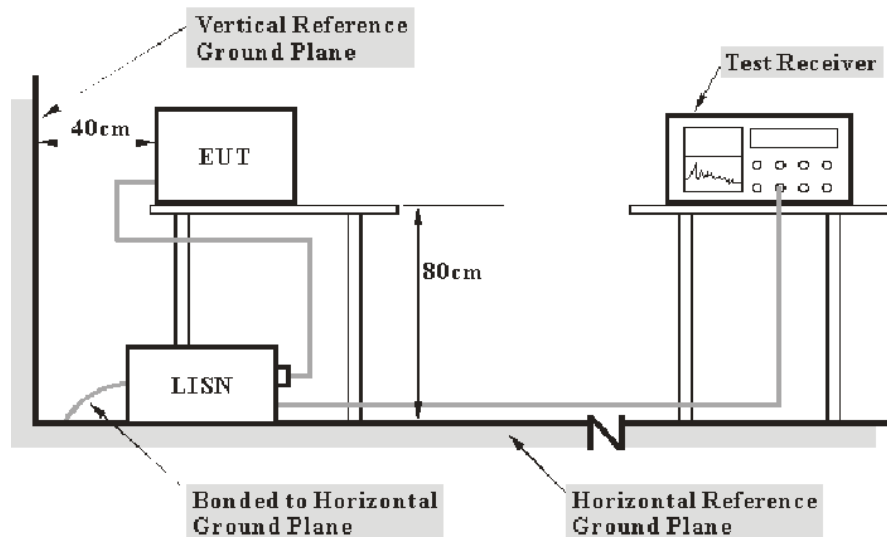
**Result: Compliant.**

## FCC §15.207 - AC LINE CONDUCTED EMISSION

### Applicable Standard

FCC§15.207

### EUT Setup



Note: 1. Support units were connected to second LISN.  
 2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

### EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

| Frequency Range  | IF B/W |
|------------------|--------|
| 150 kHz – 30 MHz | 9 kHz  |

## Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All final data was recorded in the Quasi-peak and average detection mode.

## Factor & Over Limit Calculation

The factor is calculated by adding LISN VDF (Voltage Division Factor) and Cable Loss. The basic equation is as follows:

$$\text{Factor} = \text{LISN VDF} + \text{Cable Loss}$$

The “**Over limit**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over limit of -7 dB means the emission is 7 dB below the limit. The equation for calculation is as follows:

$$\begin{aligned}\text{Over Limit} &= \text{Level} - \text{Limit} \\ \text{Level} &= \text{Read Level} + \text{Factor}\end{aligned}$$

Note: The term "cable loss" refers to the combination of a cable and a 10dB transient limiter (attenuator).

## Test Data

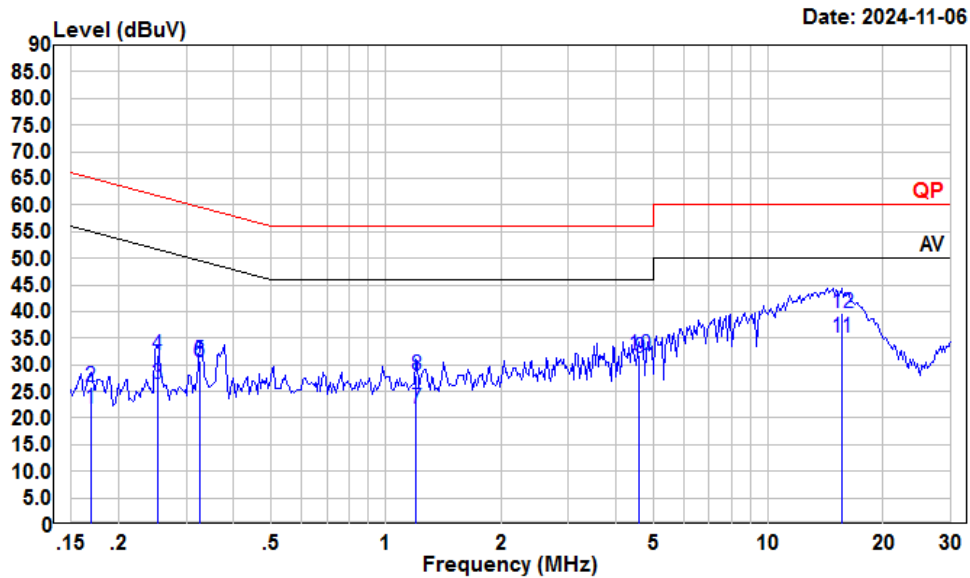
### Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 26.0 °C   |
| Relative Humidity: | 44 %      |
| ATM Pressure:      | 101.0 kPa |

*The testing was performed by Macy Shi on 2024-11-06.*

*Test Mode: Wireless Charging*

## AC 120 V/60 Hz, Line



Condition: Line

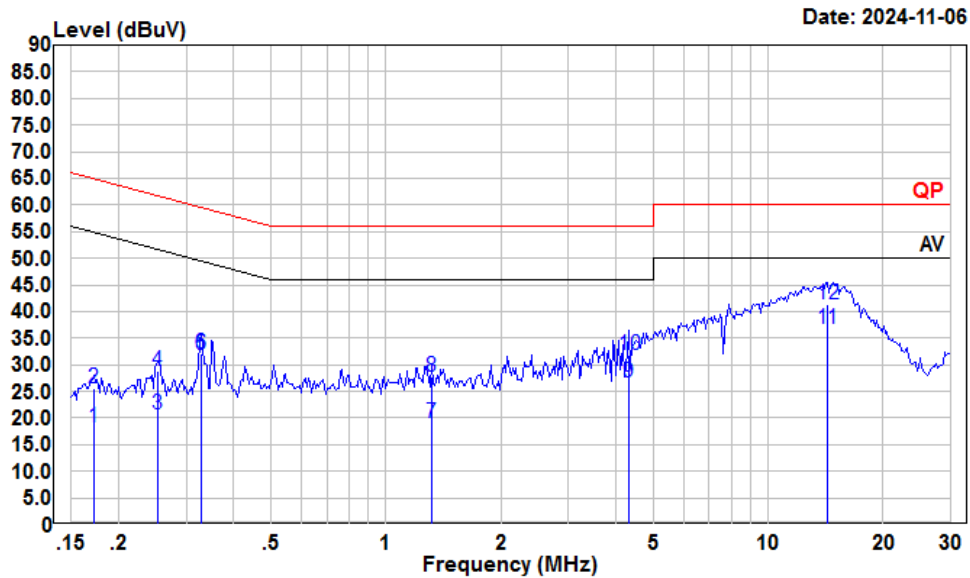
Project : 2401Y39587E-RF

tester : Macy.shi

Note : WIRELESS CHARGE

|    | Freq   | Read Level | LISN Level | LISN Factor | Cable Loss | Limit Line | Over Limit | Remark  |
|----|--------|------------|------------|-------------|------------|------------|------------|---------|
|    | MHz    | dBuV       | dBuV       | dB          | dB         | dBuV       | dB         |         |
| 1  | 0.169  | 0.93       | 21.89      | 10.86       | 10.10      | 55.03      | -33.14     | Average |
| 2  | 0.169  | 4.86       | 25.82      | 10.86       | 10.10      | 65.03      | -39.21     | QP      |
| 3  | 0.252  | 5.54       | 26.34      | 10.72       | 10.08      | 51.69      | -25.35     | Average |
| 4  | 0.252  | 11.00      | 31.80      | 10.72       | 10.08      | 61.69      | -29.89     | QP      |
| 5  | 0.325  | 9.98       | 30.74      | 10.64       | 10.12      | 49.57      | -18.83     | Average |
| 6  | 0.325  | 9.79       | 30.55      | 10.64       | 10.12      | 59.57      | -29.02     | QP      |
| 7  | 1.197  | 1.08       | 21.67      | 10.45       | 10.14      | 46.00      | -24.33     | Average |
| 8  | 1.197  | 7.40       | 27.99      | 10.45       | 10.14      | 56.00      | -28.01     | QP      |
| 9  | 4.598  | 10.84      | 31.38      | 10.35       | 10.19      | 46.00      | -14.62     | Average |
| 10 | 4.598  | 11.26      | 31.80      | 10.35       | 10.19      | 56.00      | -24.20     | QP      |
| 11 | 15.552 | 14.34      | 35.19      | 10.64       | 10.21      | 50.00      | -14.81     | Average |
| 12 | 15.552 | 18.79      | 39.64      | 10.64       | 10.21      | 60.00      | -20.36     | QP      |

## AC 120V/ 60 Hz, Neutral



Condition: Neutral

Project : 2401Y39587E-RF

tester : Macy.shi

Note : WIRELESS CHARGE

|    | Freq   | Read Level | LISN Level | LISN Factor | Cable Loss | Limit Line | Over Limit | Remark  |
|----|--------|------------|------------|-------------|------------|------------|------------|---------|
|    | MHz    | dBuV       | dBuV       | dB          | dB         | dBuV       | dB         |         |
| 1  | 0.172  | -2.24      | 18.36      | 10.50       | 10.10      | 54.86      | -36.50     | Average |
| 2  | 0.172  | 4.86       | 25.46      | 10.50       | 10.10      | 64.86      | -39.40     | QP      |
| 3  | 0.252  | 0.14       | 20.70      | 10.48       | 10.08      | 51.69      | -30.99     | Average |
| 4  | 0.252  | 8.24       | 28.80      | 10.48       | 10.08      | 61.69      | -32.89     | QP      |
| 5  | 0.329  | 11.20      | 31.88      | 10.56       | 10.12      | 49.49      | -17.61     | Average |
| 6  | 0.329  | 11.32      | 32.00      | 10.56       | 10.12      | 59.49      | -27.49     | QP      |
| 7  | 1.317  | -1.84      | 19.01      | 10.70       | 10.15      | 46.00      | -26.99     | Average |
| 8  | 1.317  | 6.86       | 27.71      | 10.70       | 10.15      | 56.00      | -28.29     | QP      |
| 9  | 4.315  | 5.89       | 26.53      | 10.44       | 10.20      | 46.00      | -19.47     | Average |
| 10 | 4.315  | 11.29      | 31.93      | 10.44       | 10.20      | 56.00      | -24.07     | QP      |
| 11 | 14.288 | 15.77      | 36.79      | 10.80       | 10.22      | 50.00      | -13.21     | Average |
| 12 | 14.288 | 20.36      | 41.38      | 10.80       | 10.22      | 60.00      | -18.62     | QP      |

## **FCC §1.1310 & §2.1093 - MAXIMUM PERMISSIBLE EXPOSURE (MPE)**

### **Applicable Standard**

According to subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

### **Limits for Maximum Permissible Exposure (MPE)**

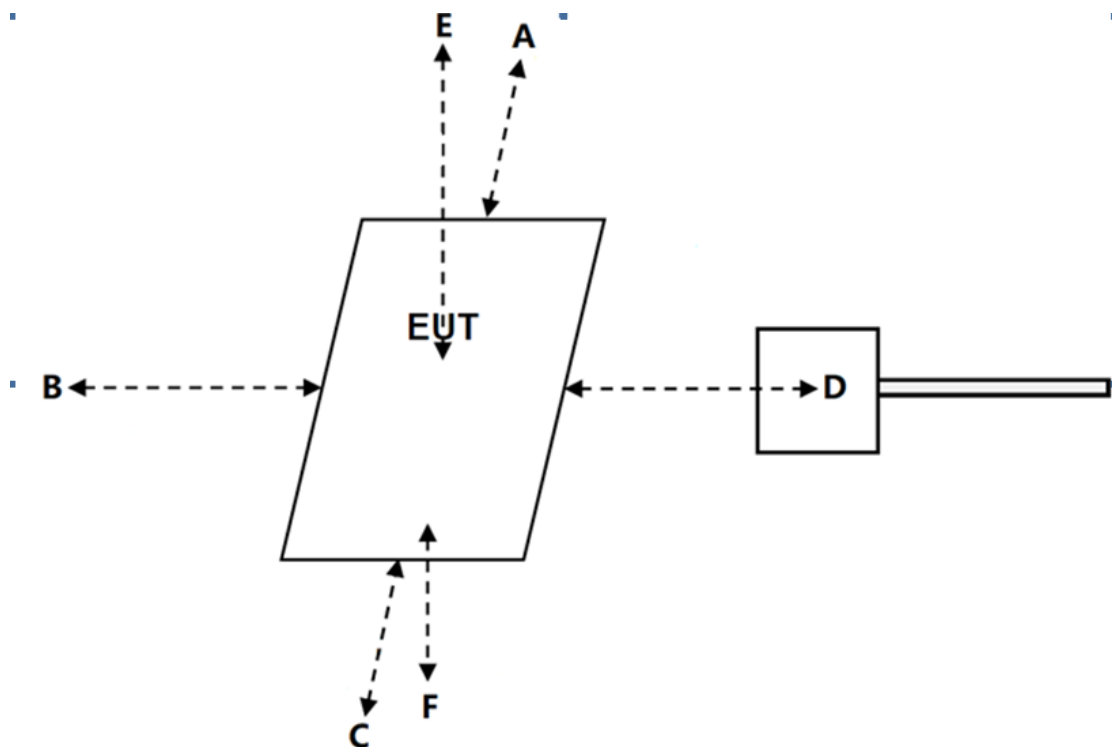
| <b>(B) Limits for General Population/Uncontrolled Exposure</b> |                                      |                                      |                                          |                                 |
|----------------------------------------------------------------|--------------------------------------|--------------------------------------|------------------------------------------|---------------------------------|
| <b>Frequency Range (MHz)</b>                                   | <b>Electric Field Strength (V/m)</b> | <b>Magnetic Field Strength (A/m)</b> | <b>Power Density (mW/cm<sup>2</sup>)</b> | <b>Averaging Time (minutes)</b> |
| 0.3–1.34                                                       | 614                                  | 1.63                                 | *(100)                                   | 30                              |
| 1.34–30                                                        | 824/f                                | 2.19/f                               | *(180/f <sup>2</sup> )                   | 30                              |
| 30–300                                                         | 27.5                                 | 0.073                                | 0.2                                      | 30                              |
| 300–1500                                                       | /                                    | /                                    | f/1500                                   | 30                              |
| 1500–100,000                                                   | /                                    | /                                    | 1.0                                      | 30                              |

f = frequency in MHz; \* = Plane-wave equivalent power density;

According with 680106 D01 Wireless Power Transfer v04 clause 3.2

Accordingly, for § 2.1091-Mobile devices, the MPE limits between 100 kHz to 300 kHz are to be considered the same as those at 300 kHz in Table 1 of § 1.1310, that is, 614 V/m and 1.63 A/m, for the electric field and magnetic field, respectively. For § 2.1093-Portable devices below 4 MHz and down to 100 kHz, the MPE limits in § 1.1310 (with the 300 kHz limit applicable all the way down to 100 kHz) can be used for the purpose of equipment authorization in lieu of SAR evaluations.

### **Block Diagram of Test Setup**



## MAGPy Probe Information

The full MAGPy-8H3D+E3D V2 probe consists of eight isotropic H-field subprobes and one isotropic E-field subprobe that are all integrated inside the probe head with a flat tip. Each isotropic H-field subprobe comprises three concentric orthogonal loop coil sensors. The isotropic E-field subprobe is composed of three orthogonal sensors (x and y sensors are dipoles and the sensor measuring the z component is a monopole). In total, the MAGPy-8H3D+E3D V2 probe is thus composed of nine subprobes and 27 single sensors that measure in the time-domain. The flat-tip probe design brings the sensors closer to the tip (e.g., the closest H-field sensors are now 7.5mm from the tip). The probe specifications are provided in Table 2.1.

| Parameter                           | Specs                                                                                       |
|-------------------------------------|---------------------------------------------------------------------------------------------|
| <b>PROBE DESIGN</b>                 |                                                                                             |
| Diameter                            | 60 mm                                                                                       |
| 8 isotropic <i>H</i> -field sensors | concentric loops of 1 cm <sup>2</sup> arranged at the corner of a cube of 22 mm side length |
| 1 isotropic <i>E</i> -field sensor  | orthogonal dipole/monopole (arm length: 50 mm)                                              |
| Measurement center                  | 18.5 mm from the probe tip                                                                  |
| Temperature range                   | 0–40 °C                                                                                     |
| Dimensions                          | 110 × 635 × 35 mm<br>(MAGPy-8H3D+E3D V2 & MAGPy-DAS V2)                                     |
| <b><i>H</i>-FIELD SPECIFICATION</b> |                                                                                             |
| Frequency range                     | 3 kHz–10 MHz                                                                                |
| Measurement range                   | 0.1–3200 A/m, 0.12 μT–4 mT                                                                  |
| Gradient range                      | 0–80 T/m/T                                                                                  |
| <b><i>E</i>-FIELD SPECIFICATION</b> |                                                                                             |
| Frequency range                     | 3 kHz–10 MHz                                                                                |
| Measurement range                   | 0.08–2000 V/m                                                                               |

Table 2.1: MAGPy-8H3D+E3D V2 probe specifications

## Test Procedures

- 1) The measuring distance from the center of the probe to the tip of the probe is 1.85cm, so the minimum measurement distance is 1.85cm. To obtain the H-field and E-field at 0cm, perform the following steps.
- 2) Perform H-field and E-field measurements for each all sides of the EUT surface at 3cm, along all the principal axes defined with respect to the orientation of the transmitting element (e.g., coil or antenna). Compare the test data of all the sides to get the worst position.
- 3) At the worst position, test the H-field and E-field at the distance from 2cm to 6cm. If the worst position is the top side, then test from 3cm to 7cm. As the load (Phone) has some thickness. The test step is 1cm.
- 4) The highest emission level was recorded.
- 5) According to the measurement data, the curve is fitted with the measured distance as the horizontal coordinate and the measured H-field or E- field as the vertical coordinate.
- 6) The fitted curve needs to be validated through the probe measurements for the two closest points to the device surface. The difference needs to be less than 30%.
- 7) The H-field or E-field at 0cm is estimated from the fitted curve and compared with limit.

## Test Data

### Environmental Conditions

|                           |                 |
|---------------------------|-----------------|
| <b>Temperature:</b>       | 24.7~26.1 °C    |
| <b>Relative Humidity:</b> | 44~62 %         |
| <b>ATM Pressure:</b>      | 101.1~101.5 kPa |

*The testing was performed by Rainbow Zhu on 2025-02-12.*

*Test mode: Wireless charging*

### H-Field Strength

| Test Frequency (kHz) | Position A (A/m) | Position B (A/m) | Position C (A/m) | Position D (A/m) | Position E (A/m) | Position F (A/m) | Limit (A/m) |
|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------|
| 110.5-205            | 0.2              | 0.21             | 0.13             | 0.31             | 0.44             | 0.26             | 1.63        |

### E-Field Strength

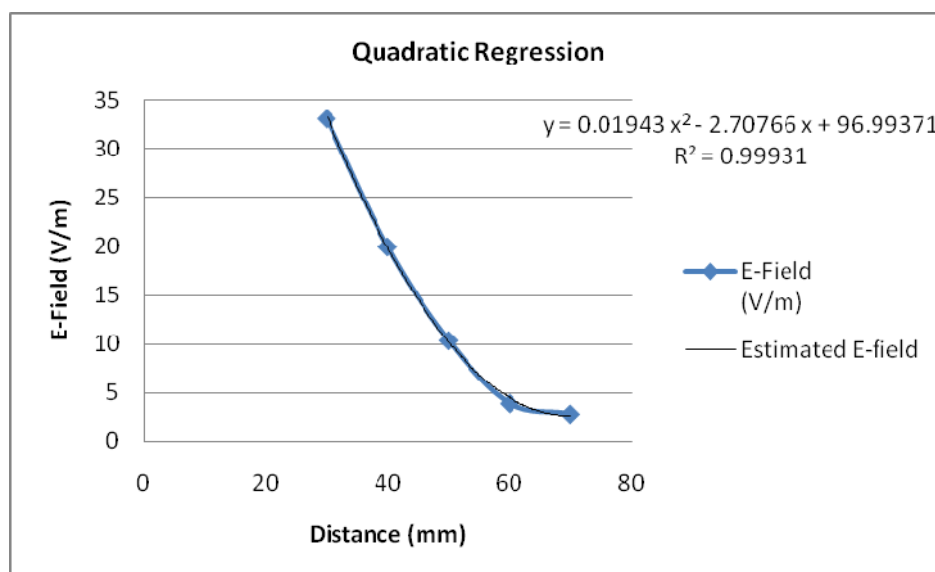
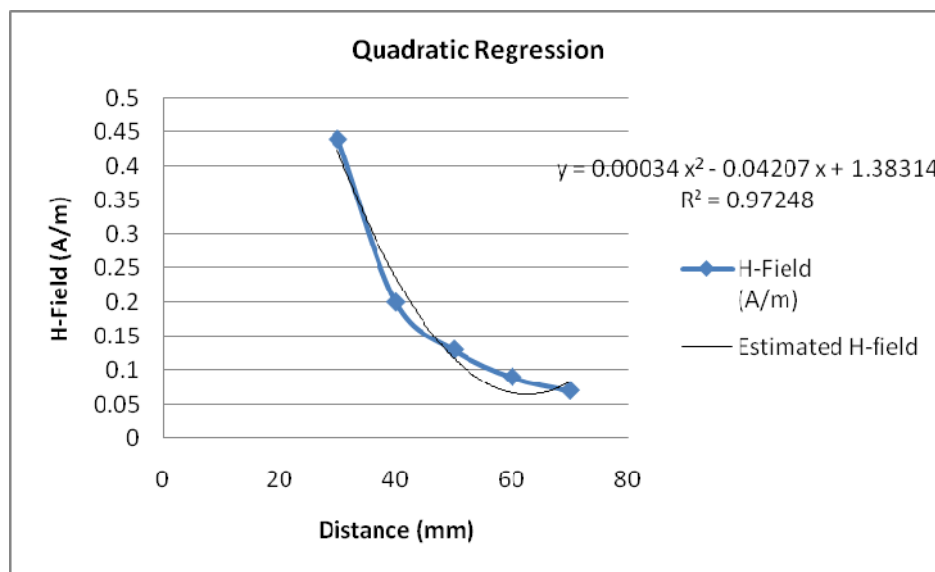
| Test Frequency (kHz) | Position A (V/m) | Position B (V/m) | Position C (V/m) | Position D (V/m) | Position E (V/m) | Position F (V/m) | Limit (V/m) |
|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------|
| 110.5-205            | 21.3             | 4.16             | 11.1             | 11.2             | 33.1             | 23.5             | 614         |

Note 1: The test distance is 30mm from the center of the probe to the EUT edge.

Note 2: The worst position is E side according to the above data table. So we perform the curve fitting at the position E.

| Test Frequency (kHz) | Measuring Position | Measuring Distance (mm) | H-Field (A/m) | E-Field (V/m) |
|----------------------|--------------------|-------------------------|---------------|---------------|
| 110.5-205            | E                  | 30                      | 0.44          | 33.10         |
|                      |                    | 40                      | 0.20          | 20.00         |
|                      |                    | 50                      | 0.13          | 10.40         |
|                      |                    | 60                      | 0.09          | 3.96          |
|                      |                    | 70                      | 0.07          | 2.88          |

### Curve Fitting



**Verify the fitting curve**

| Measuring Position | Measuring Distance (mm) | Estimated H-Field (A/m) | Measured H-Field (A/m) | Agreement Between Estimated and Measured (%) | Limit (%) |
|--------------------|-------------------------|-------------------------|------------------------|----------------------------------------------|-----------|
| E                  | 30                      | 0.43                    | 0.44                   | -2.27                                        | ±30       |
|                    | 40                      | 0.24                    | 0.20                   | 20.00                                        | ±30       |

| Measuring Position | Measuring Distance (mm) | Estimated E-Field (V/m) | Measured E-Field (V/m) | Agreement Between Estimated and Measured (%) | Limit (%) |
|--------------------|-------------------------|-------------------------|------------------------|----------------------------------------------|-----------|
| E                  | 30                      | 33.25                   | 33.1                   | 0.45                                         | ±30       |
|                    | 40                      | 19.78                   | 20.0                   | -1.10                                        | ±30       |

Conclusion: The validation is considered sufficient, because within 30% agreement between the estimated model and the (E-Field and H-Field) probe measurements is demonstrated.

**Result:** The estimated result at 0mm is **1.38A/m (H-field), 96.99V/m (E-Field)**, which below the limit: 1.63A/m (H-field), 614V/m (E-Field). So it is compliance.

## FCC §15.205 & §15.209 - RADIATED EMISSIONS TEST

### Applicable Standard

As per FCC Part 15.209

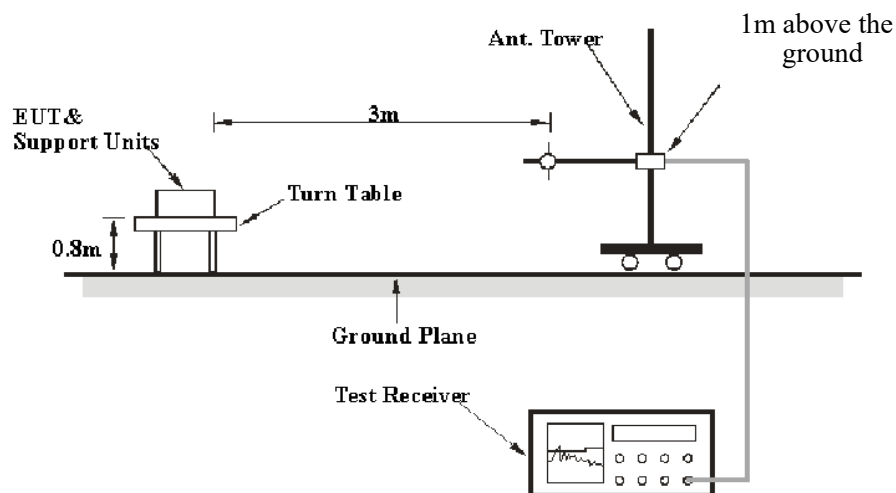
(a) Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

| Frequency (MHz) | Field strength (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                             |

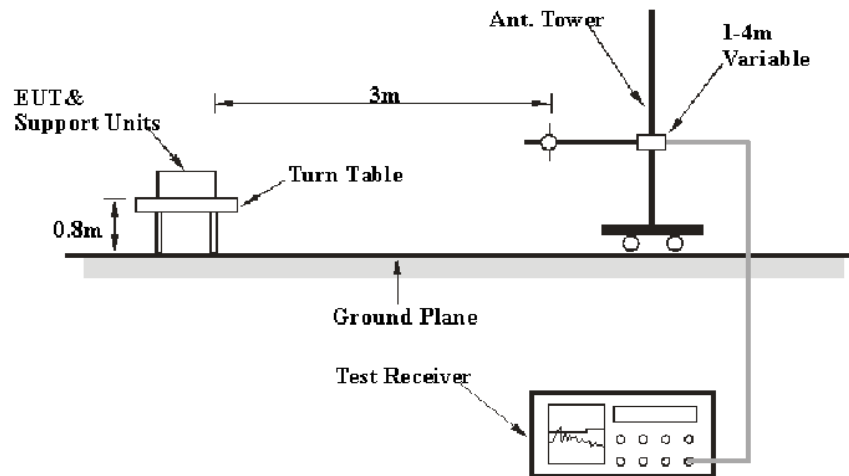
\*\*Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§15.231 and 15.241.

### EUT Setup

9 kHz-30MHz:



30MHz-1GHz:



The radiated emission tests were performed in the 3-meter chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC Part Subpart C limits.

The spacing between the peripherals was 10 cm.

### EMI Test Receiver Setup

The system was investigated from 9 kHz to 1000MHz.

| Frequency Range   | RBW     | Video B/W | IF B/W  | Measurement |
|-------------------|---------|-----------|---------|-------------|
| 9 kHz – 150 kHz   | /       | /         | 200 Hz  | QP          |
|                   | 300 Hz  | 1 kHz     | /       | PK          |
| 150 kHz – 30 MHz  | /       | /         | 9 kHz   | QP          |
|                   | 10 kHz  | 30 kHz    | /       | PK          |
| 30 MHz – 1000 MHz | /       | /         | 120 kHz | QP          |
|                   | 100 kHz | 300 kHz   | /       | PK          |

Note 1: For the frequency bands 9–90 kHz, 110–490 kHz are based on measurements employing an average detector.

Note 2: If the maximized peak measured value complies with under the QP/Average limit more than 6dB, then it is unnecessary to perform an QP/Average measurement.

For 9 kHz-30MHz, the report shall list the six emissions with the smallest margin relative to the limit, for each of the three antenna orientations (parallel, perpendicular, and ground-parallel) unless the margin is greater than 20 dB.

## Factor & Over Limit/Margin Calculation

The Factor is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain. The basic equation is as follows:

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “**Over Limit/Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over Limit/margin of -7dB means the emission is 7dB below the limit. The equation for calculation is as follows:

$$\begin{aligned}\text{Over Limit/Margin} &= \text{Level} / \text{Corrected Amplitude} - \text{Limit} \\ \text{Level} / \text{Corrected Amplitude} &= \text{Read Level} + \text{Factor}\end{aligned}$$

## Test Data

### Environmental Conditions

|                           |           |
|---------------------------|-----------|
| <b>Temperature:</b>       | 22.0 °C   |
| <b>Relative Humidity:</b> | 54 %      |
| <b>ATM Pressure:</b>      | 101.0 kPa |

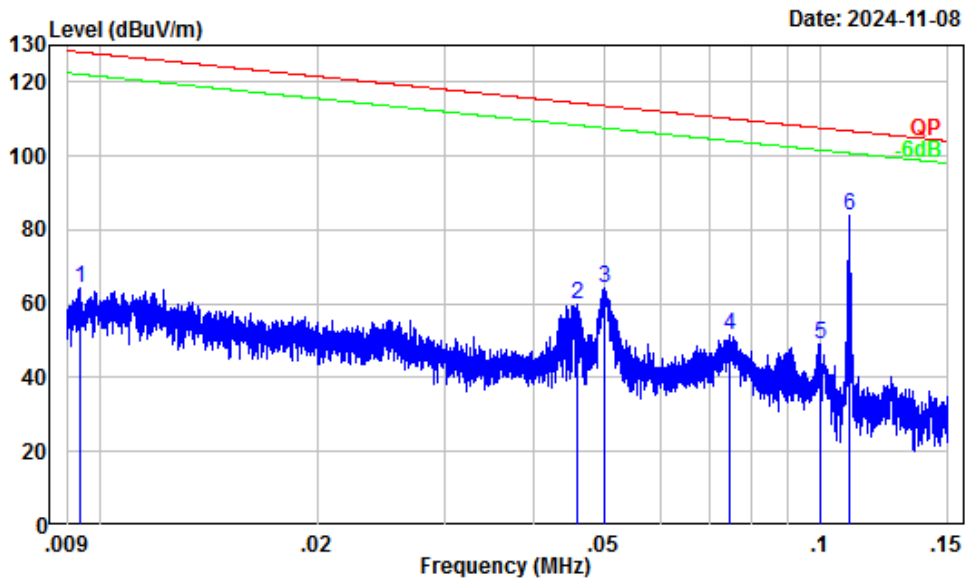
*The testing was performed by Anson Su on 2024-11-08 for below 30MHz and Anson Su on 2024-11-08 for below 1GHz.*

*Test Mode: Wireless Charging*

*Note: Pre-scan in the X, Y and Z axes of orientation, the worst case X-axis of orientation was recorded*

**Parallel:**

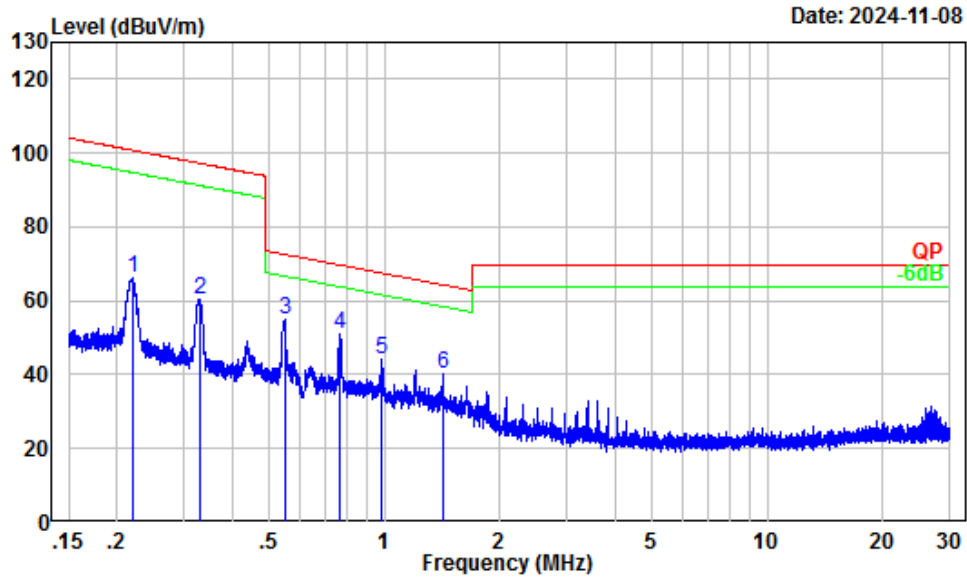
9 kHz~150 kHz



Site : Chamber A  
Condition : 3m  
Project Number: 2401Y39587E-RF  
Test Mode : Transmitting  
Note : Parallel  
Tester : Anson Su

|   | Freq | Factor | Read<br>Level | Level  | Limit<br>Line | Over<br>Limit | Remark |
|---|------|--------|---------------|--------|---------------|---------------|--------|
|   | MHz  | dB/m   | dBuV          | dBuV/m | dBuV/m        | dB            |        |
| 1 | 0.01 | 38.19  | 26.06         | 64.25  | 128.17        | -63.92        | Peak   |
| 2 | 0.05 | 23.99  | 35.90         | 59.89  | 114.38        | -54.49        | Peak   |
| 3 | 0.05 | 23.05  | 41.16         | 64.21  | 113.59        | -49.38        | Peak   |
| 4 | 0.07 | 19.72  | 31.92         | 51.64  | 110.12        | -58.48        | Peak   |
| 5 | 0.10 | 17.06  | 32.13         | 49.19  | 107.61        | -58.42        | Peak   |
| 6 | 0.11 | 16.61  | 67.05         | 83.66  | 106.82        | -23.16        | Peak   |

150 kHz~30 MHz

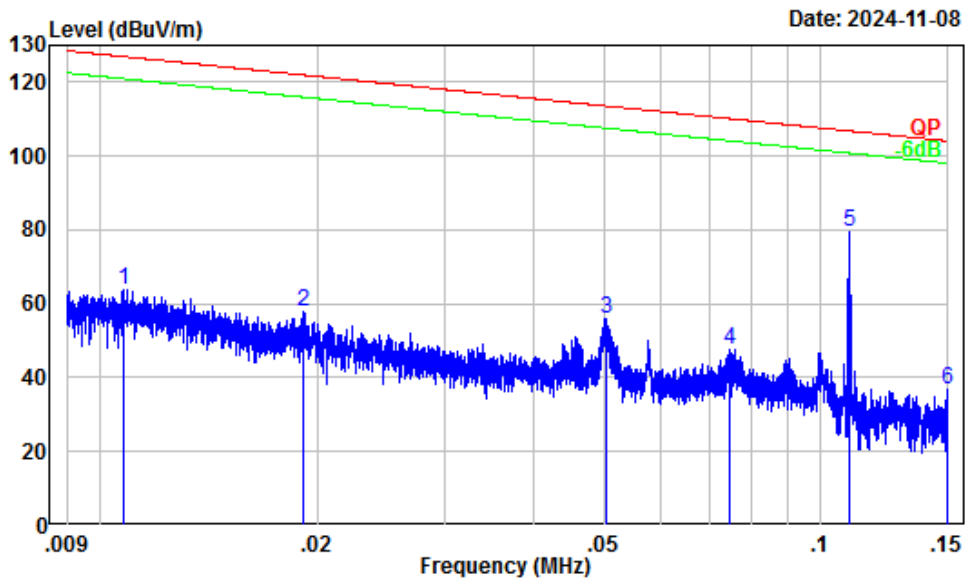


Site : Chamber A  
Condition : 3m  
Project Number: 2401Y39587E-RF  
Test Mode : Transmitting  
Note : Parallel  
Tester : Anson Su

|   | Freq | Factor | Read<br>Level | Level  | Limit<br>Line | Over<br>Limit | Remark |
|---|------|--------|---------------|--------|---------------|---------------|--------|
|   | MHz  | dB/m   | dBuV          | dBuV/m | dBuV/m        | dB            |        |
| 1 | 0.22 | 11.45  | 54.59         | 66.04  | 100.75        | -34.71        | Peak   |
| 2 | 0.33 | 7.10   | 53.40         | 60.50  | 97.25         | -36.75        | Peak   |
| 3 | 0.55 | 2.90   | 51.97         | 54.87  | 72.80         | -17.93        | Peak   |
| 4 | 0.77 | 0.27   | 50.56         | 50.83  | 69.81         | -18.98        | Peak   |
| 5 | 0.98 | -1.47  | 45.60         | 44.13  | 67.62         | -23.49        | Peak   |
| 6 | 1.42 | -3.05  | 43.13         | 40.08  | 64.36         | -24.28        | Peak   |

**Ground-parallel:**

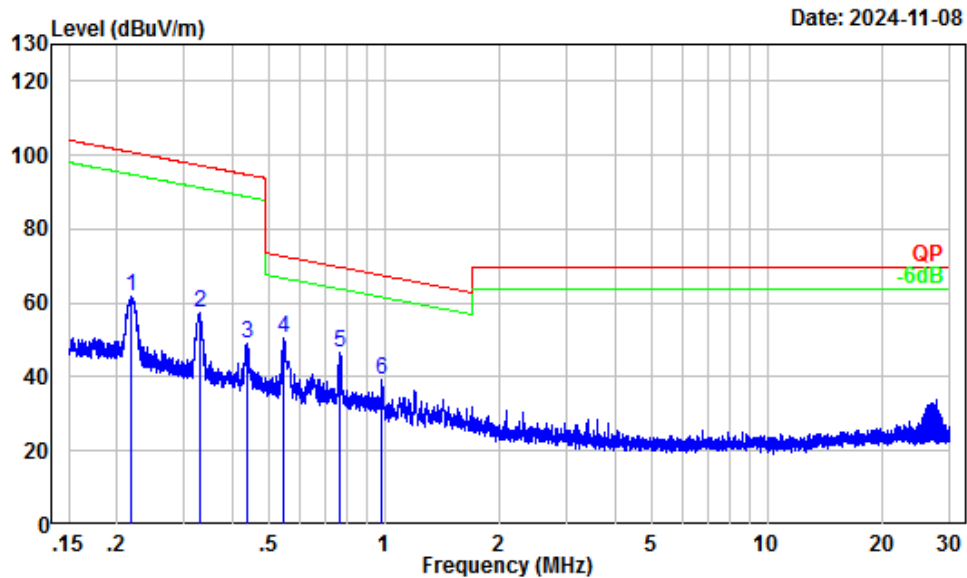
9 kHz~150 kHz



Site : Chamber A  
Condition : 3m  
Project Number: 2401Y39587E-RF  
Test Mode : Transmitting  
Note : Ground-parallel  
Tester : Anson Su

|   | Freq | Factor | Read<br>Level | Level  | Limit<br>Line | Over<br>Limit | Remark |
|---|------|--------|---------------|--------|---------------|---------------|--------|
|   | MHz  | dB/m   | dBuV          | dBuV/m | dBuV/m        | dB            |        |
| 1 | 0.01 | 37.28  | 26.67         | 63.95  | 126.93        | -62.98        | Peak   |
| 2 | 0.02 | 33.04  | 24.71         | 57.75  | 121.98        | -64.23        | Peak   |
| 3 | 0.05 | 23.02  | 33.09         | 56.11  | 113.56        | -57.45        | Peak   |
| 4 | 0.07 | 19.74  | 28.06         | 47.80  | 110.13        | -62.33        | Peak   |
| 5 | 0.11 | 16.61  | 62.79         | 79.40  | 106.82        | -27.42        | Peak   |
| 6 | 0.15 | 14.74  | 21.89         | 36.63  | 104.11        | -67.48        | Peak   |

150 kHz~30 MHz

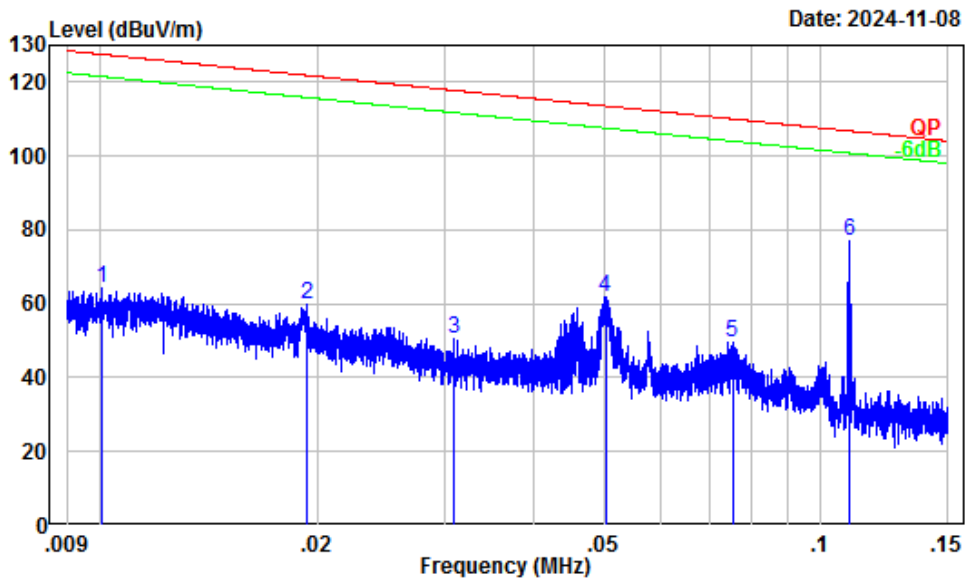


Site : Chamber A  
Condition : 3m  
Project Number: 2401Y39587E-RF  
Test Mode : Transmitting  
Note : Ground-parallel  
Tester : Anson Su

|   | Freq | Factor | Read<br>Level | Level  | Limit<br>Line | Over<br>Limit | Remark |
|---|------|--------|---------------|--------|---------------|---------------|--------|
|   | MHz  | dB/m   | dBuV          | dBuV/m | dBuV/m        | dB            |        |
| 1 | 0.22 | 11.52  | 50.40         | 61.92  | 100.81        | -38.89        | Peak   |
| 2 | 0.33 | 7.11   | 50.18         | 57.29  | 97.27         | -39.98        | Peak   |
| 3 | 0.44 | 4.82   | 44.07         | 48.89  | 94.80         | -45.91        | Peak   |
| 4 | 0.55 | 2.91   | 47.57         | 50.48  | 72.82         | -22.34        | Peak   |
| 5 | 0.77 | 0.29   | 46.16         | 46.45  | 69.83         | -23.38        | Peak   |
| 6 | 0.99 | -1.48  | 40.80         | 39.32  | 67.60         | -28.28        | Peak   |

**Perpendicular:**

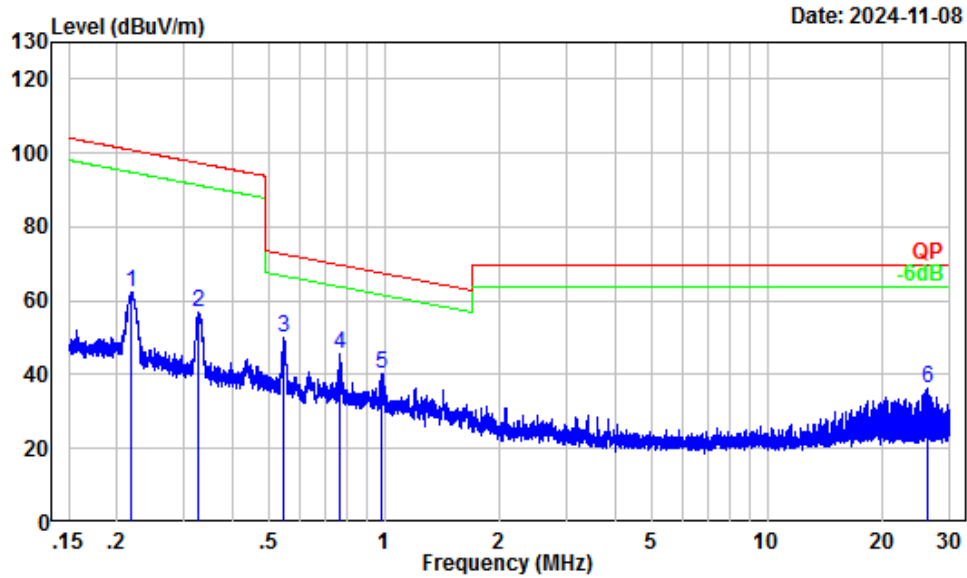
9 kHz~150 kHz



Site : Chamber A  
Condition : 3m  
Project Number: 2401Y39587E-RF  
Test Mode : Transmitting  
Note : Perpendicular  
Tester : Anson Su

|   | Freq | Factor | Read<br>Level | Level  | Limit<br>Line | Over<br>Limit | Remark |
|---|------|--------|---------------|--------|---------------|---------------|--------|
|   | MHz  | dB/m   | dBuV          | dBuV/m | dBuV/m        | dB            |        |
| 1 | 0.01 | 37.66  | 26.81         | 64.47  | 127.55        | -63.08        | Peak   |
| 2 | 0.02 | 32.92  | 26.87         | 59.79  | 121.88        | -62.09        | Peak   |
| 3 | 0.03 | 27.28  | 23.07         | 50.35  | 117.80        | -67.45        | Peak   |
| 4 | 0.05 | 23.04  | 38.83         | 61.87  | 113.58        | -51.71        | Peak   |
| 5 | 0.08 | 19.65  | 30.05         | 49.70  | 110.06        | -60.36        | Peak   |
| 6 | 0.11 | 16.61  | 60.52         | 77.13  | 106.82        | -29.69        | Peak   |

150 kHz~30 MHz

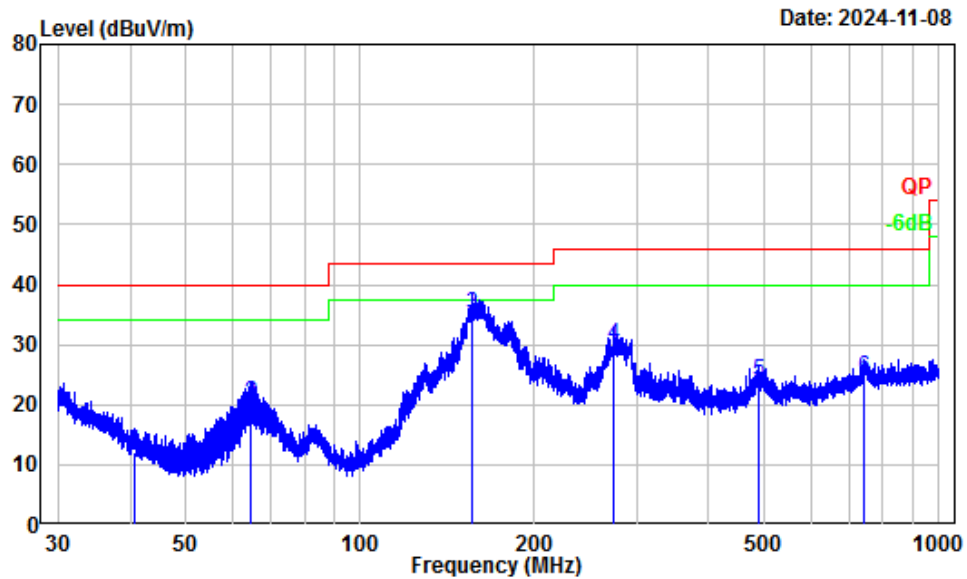


Site : Chamber A  
Condition : 3m  
Project Number: 2401Y39587E-RF  
Test Mode : Transmitting  
Note : Perpendicular  
Tester : Anson Su

|   | Freq  | Factor | Read<br>Level | Level  | Limit<br>Line | Over<br>Limit | Remark |
|---|-------|--------|---------------|--------|---------------|---------------|--------|
|   | MHz   | dB/m   | dBuV          | dBuV/m | dBuV/m        | dB            |        |
| 1 | 0.22  | 11.49  | 50.78         | 62.27  | 100.79        | -38.52        | Peak   |
| 2 | 0.33  | 7.12   | 49.61         | 56.73  | 97.28         | -40.55        | Peak   |
| 3 | 0.55  | 2.92   | 47.27         | 50.19  | 72.82         | -22.63        | Peak   |
| 4 | 0.77  | 0.30   | 45.45         | 45.75  | 69.84         | -24.09        | Peak   |
| 5 | 0.99  | -1.49  | 41.73         | 40.24  | 67.59         | -27.35        | Peak   |
| 6 | 26.28 | -4.89  | 41.13         | 36.24  | 69.54         | -33.30        | Peak   |

**30MHz~1GHz:**

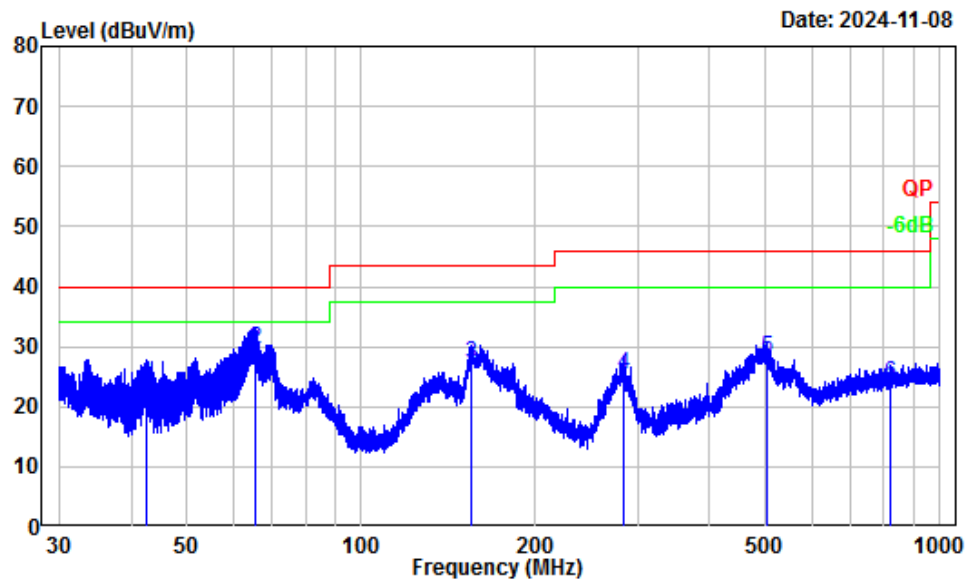
*Note: when the result of Peak below the limit of QP more than 6dB, just the peak value was record*

**Horizontal**

Site : Chamber A  
Condition : 3m Horizontal  
Project Number: 2401Y39587E-RF  
Test Mode : Transmitting  
Tester : Anson Su

|   | Freq   | Factor | Read<br>Level | Level  | Limit<br>Line | Over<br>Limit | Remark |
|---|--------|--------|---------------|--------|---------------|---------------|--------|
|   | MHz    | dB/m   | dBuV          | dBuV/m | dBuV/m        | dB            |        |
| 1 | 40.68  | -12.85 | 24.89         | 12.04  | 40.00         | -27.96        | QP     |
| 2 | 64.80  | -18.00 | 38.24         | 20.24  | 40.00         | -19.76        | QP     |
| 3 | 155.84 | -12.64 | 47.75         | 35.11  | 43.50         | -8.39         | QP     |
| 4 | 274.92 | -11.36 | 41.19         | 29.83  | 46.00         | -16.17        | QP     |
| 5 | 488.17 | -6.06  | 29.84         | 23.78  | 46.00         | -22.22        | QP     |
| 6 | 744.54 | -2.90  | 27.38         | 24.48  | 46.00         | -21.52        | QP     |

Vertical



Site : Chamber A  
Condition : 3m Vertical  
Project Number: 2401Y39587E-RF  
Test Mode : Transmitting  
Tester : Anson Su

|   | Freq Factor |        | Read Level | Limit Level | Over Limit | Remark    |
|---|-------------|--------|------------|-------------|------------|-----------|
|   | MHz         | dB/m   | dBuV       | dBuV/m      | dBuV/m     | dB        |
| 1 | 42.66       | -14.34 | 38.02      | 23.68       | 40.00      | -16.32 QP |
| 2 | 65.46       | -17.94 | 47.49      | 29.55       | 40.00      | -10.45 QP |
| 3 | 155.09      | -12.64 | 39.70      | 27.06       | 43.50      | -16.44 QP |
| 4 | 284.48      | -11.23 | 36.46      | 25.23       | 46.00      | -20.77 QP |
| 5 | 503.16      | -5.76  | 33.72      | 27.96       | 46.00      | -18.04 QP |
| 6 | 821.35      | -2.01  | 25.93      | 23.92       | 46.00      | -22.08 QP |

## FCC §15.215 (c) - 20 dB EMISSION BANDWIDTH

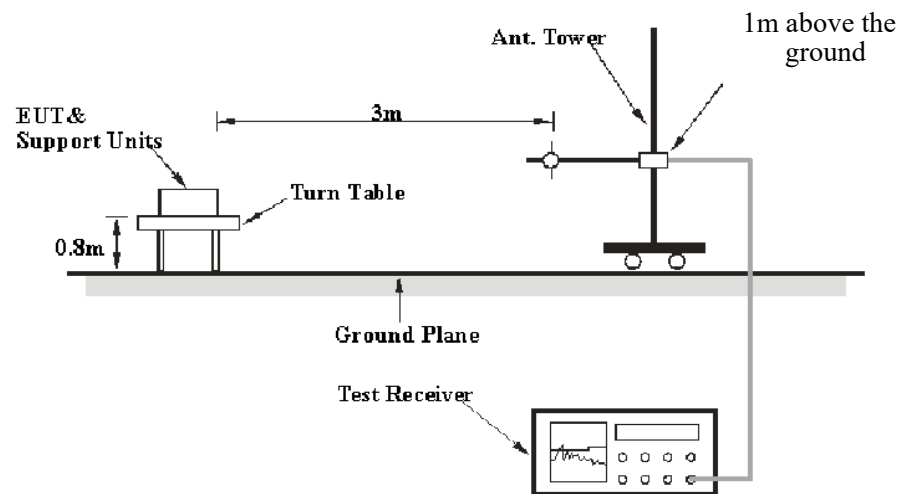
### Applicable Standard

According to § 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. In the case of intentional radiators operating under the provisions of subpart E, the emission bandwidth may span across multiple contiguous frequency bands identified in that subpart. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

### Test Procedure

Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.



Test Data

Environmental Conditions

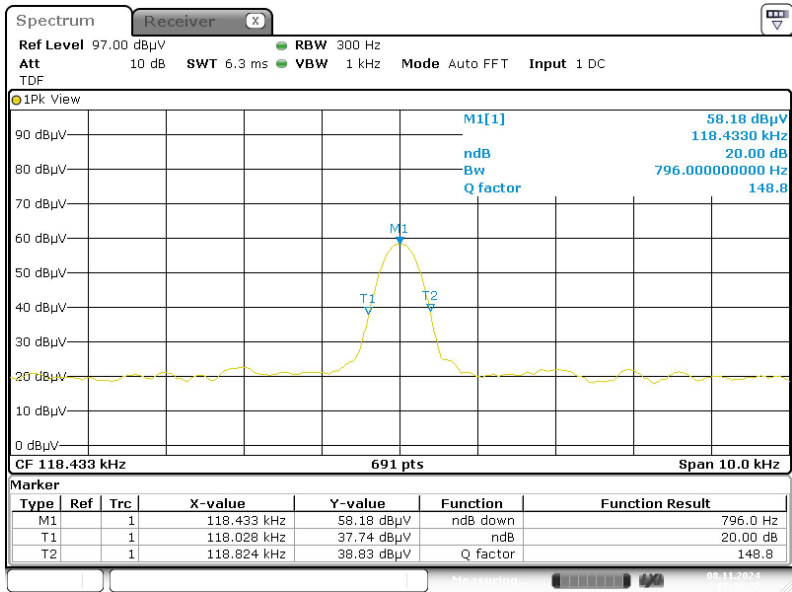
|                    |           |
|--------------------|-----------|
| Temperature:       | 22.0°C    |
| Relative Humidity: | 54 %      |
| ATM Pressure:      | 101.0 kPa |

The testing was performed by Anson Su on 2024-11-08.

EUT operation mode: Transmitting

Test Result: Compliant. Please refer to following table and plot.

| Frequency (kHz) | 20 dB Emission Bandwidth (kHz) |
|-----------------|--------------------------------|
| 118.433         | 0.796                          |



ProjectNo.:2401Y39587E-RF Tester:Anson Su  
Date: 8.NOV.2024 17:30:27

## **EUT PHOTOGRAPHS**

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Please refer to the attachment 2401Y39587E-RF External photo and 2401Y39587E-RF Internal photo.

## **TEST SETUP PHOTOGRAPHS**

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Please refer to the attachment 2401Y39587E-RF Test Setup photo.

**\*\*\*\*\* END OF REPORT \*\*\*\*\***