

# TEST REPORT

**Reference No.**..... : WTX24X12296563W001  
**FCC ID**..... : 2A6QM-WSH05-221  
**Applicant**..... : Shenzhen Romoss Technology Co.,Ltd  
**Address**..... : Room 1601, BLOCK B, Building 7, Shenzhen, International Innovation Valley, Nanshan, Shenzhen 518000, China  
**Manufacturer**..... : Jiangmen Romoss Technology Co., Ltd.  
**Address**..... : Room 01-2, First floor, Building 8, No. 80, Renhe Road, Tangxia Town, Pengjiang District, Jiangmen City  
**Product Name**..... : Wireless Power Bank  
**Model No.**..... : WSH05-221  
**Standards**..... : FCC Part 15.207&15.209  
**Date of Receipt sample**..... : 2024-12-16  
**Date of Test**..... : 2024-12-16 to 2025-01-02  
**Date of Issue**..... : 2025-01-02  
**Test Report Form No.**..... : WTX\_Part 15\_207\_209W  
**Test Result**..... : **Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of approver.

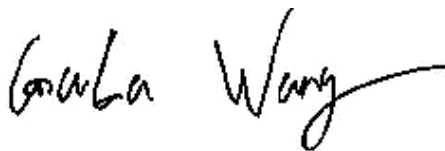
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Approved by:



Jason Su

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Report version

| Version No. | Date of issue | Description |
|-------------|---------------|-------------|
| Rev.00      | 2025-01-02    | Original    |
| /           | /             | /           |

## 1. GENERAL INFORMATION

---

### 1.1 Product Description for Equipment Under Test (EUT)

| General Description of EUT                                                                     |                                                                                 |
|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Product Name:                                                                                  | Wireless Power Bank                                                             |
| Trade Name:                                                                                    | <b>ROMOSS</b>                                                                   |
| Model No.:                                                                                     | WSH05-221                                                                       |
| Adding Model(s):                                                                               | /                                                                               |
| Rated Voltage:                                                                                 | Type C Input: 5V/9V                                                             |
| Rated Current:                                                                                 | Input : 3A/2A                                                                   |
| Rated Power:                                                                                   | Type-C Output:5V 3A, 9V 2.22A, 12V 1.67A<br>Wireless Output : 5W, 7.5W, 10W,15W |
| Power Adapter Model:                                                                           | /                                                                               |
| <i>Note: The test data is gathered from a production sample, provided by the manufacturer.</i> |                                                                                 |

| Technical Characteristics of EUT |              |
|----------------------------------|--------------|
| Frequency Range:                 | 115~205kHz   |
| Modulation Type:                 | ASK          |
| Antenna Type:                    | Coil Antenna |
| Antenna Gain                     | 0dBi         |

## 1.2 Test Standards

The tests were performed according to following standards:

**FCC Rules Part 15.207**: Conducted limits.

**FCC Rules Part 15.209**: Radiated emission limits; general requirements.

**ANSI C63.10-2013**: American National Standard for Testing Unlicensed Wireless Devices.

**Maintenance of compliance** is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.

## 1.3 Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, the equipment under test (EUT) was configured to measure its highest possible emission level. The test modes were adapted accordingly in reference to the Operating Instructions.

## 1.4 Test Facility

### **Address of the test laboratory**

Laboratory: Waltek Testing Group (Shenzhen) Co., Ltd.

Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road, Block 70 Bao'an District, Shenzhen, Guangdong, China

### **FCC – Registration No.: 125990**

Waltek Testing Group (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. The Designation Number is CN5010, and Test Firm Registration Number is 125990.

### **Industry Canada (IC) Registration No.: 11464A**

The 3m Semi-anechoic chamber of Waltek Testing Group (Shenzhen) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A and the CAB identifier is CN0057.

## 1.5 EUT Setup and Operation Mode

The equipment under test (EUT) was configured to measure its highest possible emission. The test modes were adapted according to the operation manual for use, more detailed description as follows:

| Test Mode List |                   |            |                     |
|----------------|-------------------|------------|---------------------|
| Test Mode      | Description       | Remark     | Power Supply Mode   |
| TM1            | Wireless Charging | Output 15W | Type C Input: 5V/9V |

| EUT Cable List and Details |            |                     |                        |
|----------------------------|------------|---------------------|------------------------|
| Cable Description          | Length (m) | Shielded/Unshielded | With / Without Ferrite |
| /                          | /          | /                   | /                      |

| Special Cable List and Details |            |                     |                        |
|--------------------------------|------------|---------------------|------------------------|
| Cable Description              | Length (m) | Shielded/Unshielded | With / Without Ferrite |
| USB Cable                      | 1.0        | Shielded            | With Ferrite           |

| Auxiliary Equipment List and Details |              |           |               |
|--------------------------------------|--------------|-----------|---------------|
| Description                          | Manufacturer | Model     | Serial Number |
| Adapter                              | Xiaomi       | MDY-08-ES | /             |
| iPhone                               | Apple Inc    | A3104     | /             |

## 1.6 Measurement Uncertainty

| Measurement uncertainty |            |                                |
|-------------------------|------------|--------------------------------|
| Parameter               | Conditions | Uncertainty                    |
| Conducted Emissions     | Conducted  | 9-150kHz $\pm 3.74\text{dB}$   |
|                         |            | 0.15-30MHz $\pm 3.34\text{dB}$ |
| Radiated Emissions      | Radiated   | 30-200MHz $\pm 4.52\text{dB}$  |
|                         |            | 0.2-1GHz $\pm 5.56\text{dB}$   |
|                         |            | 1-6GHz $\pm 3.84\text{dB}$     |
|                         |            | 6-18GHz $\pm 3.92\text{dB}$    |

**1.7 Test Equipment List and Details**

| Fixed asset Number                             | Description       | Manufacturer    | Model     | Serial No.     | Cal Date   | Due. Date  |
|------------------------------------------------|-------------------|-----------------|-----------|----------------|------------|------------|
| WTXE1005A<br>1005                              | Spectrum Analyzer | Agilent         | N9020A    | US471401<br>02 | 2024-03-19 | 2025-03-18 |
| WTXE1004A<br>1-001                             | Spectrum Analyzer | Rohde & Schwarz | FSP40     | 100612         | 2024-02-27 | 2025-02-26 |
| WTXE1103A<br>1003                              | Attenuator        | Pasternack      | PE4007-4  | /              | 2024-02-24 | 2025-02-23 |
| WTXE1003A<br>1-005                             | Coaxial Cable     | /               | 0M4RFC    | /              | 2024-07-03 | 2025-01-03 |
| <input type="checkbox"/> Chamber A: Below 1GHz |                   |                 |           |                |            |            |
| WTXE1005A<br>1003                              | Spectrum Analyzer | Rohde & Schwarz | FSP30     | 836079/03<br>5 | 2024-02-24 | 2025-02-23 |
| WTXE1001A<br>1001                              | EMI Test Receiver | Rohde & Schwarz | ESPI      | 101611         | 2024-03-19 | 2025-03-18 |
| WTXE1007A<br>1001                              | Amplifier         | HP              | 8447F     | 2805A034<br>75 | 2024-02-24 | 2025-02-23 |
| WTXE1010A<br>1007                              | Loop Antenna      | Schwarz beck    | FMZB 1516 | 9773           | 2024-02-26 | 2025-02-25 |
| WTXE1010A<br>1006                              | Broadband Antenna | Schwarz beck    | VULB9163  | 9163-333       | 2024-02-24 | 2025-02-23 |
| WTXE1104A<br>1032-1                            | Coaxial Cable     | /               | RC_6G-N-M | /              | 2024-03-15 | 2025-03-14 |
| WTXE1104A<br>1032-2                            | Coaxial Cable     | /               | RC_6G-N-M | /              | 2024-03-15 | 2025-03-14 |
| WTXE1104A<br>1032-3                            | Coaxial Cable     | /               | RC_6G-N-M | /              | 2024-03-15 | 2025-03-14 |
| <input type="checkbox"/> Chamber A: Above 1GHz |                   |                 |           |                |            |            |
| WTXE1005A<br>1003                              | Spectrum Analyzer | Rohde & Schwarz | FSP30     | 836079/03<br>5 | 2024-02-24 | 2025-02-23 |
| WTXE1001A<br>1001                              | EMI Test Receiver | Rohde & Schwarz | ESPI      | 101611         | 2024-03-19 | 2025-03-18 |
| WTXE1065A<br>1001                              | Amplifier         | C&D             | PAP-1G18  | 2002           | 2024-02-27 | 2025-02-26 |
| WTXE1010A<br>1005                              | Horn Antenna      | ETS             | 3117      | 00086197       | 2024-02-26 | 2025-02-25 |
| WTXE1010A<br>1010                              | DRG Horn Antenna  | A.H. SYSTEMS    | SAS-574   | 571            | 2024-03-17 | 2025-03-16 |
| WTXE1003A                                      | Pre-amplifier     | Schwarzbeck     | BBV 9721  | 9721-031       | 2024-02-29 | 2025-02-28 |



|                                                           |                                |                    |              |                |            |            |
|-----------------------------------------------------------|--------------------------------|--------------------|--------------|----------------|------------|------------|
| 1001                                                      |                                |                    |              |                |            |            |
| WTXE1104A<br>1033-1                                       | Coaxial Cable                  | /                  | C16-07-07    | /              | 2024-03-15 | 2025-03-14 |
| WTXE1104A<br>1033-2                                       | Coaxial Cable                  | /                  | C16-07-07    | /              | 2024-03-15 | 2025-03-14 |
| WTXE1104A<br>1033-3                                       | Coaxial Cable                  | /                  | C16-07-07    | /              | 2024-03-15 | 2025-03-14 |
| <input type="checkbox"/> Chamber B:Below 1GHz             |                                |                    |              |                |            |            |
| WTXE1010A<br>1006                                         | Trilog<br>Broadband<br>Antenna | Schwarz beck       | VULB9163(B)  | 9163-635       | 2024-03-17 | 2027-03-16 |
| WTXE1038A<br>1001                                         | Amplifier                      | Agilent            | 8447D        | 2944A104<br>57 | 2024-02-24 | 2025-02-23 |
| WTXE1001A<br>1002                                         | EMI Test<br>Receiver           | Rohde &<br>Schwarz | ESPI         | 101391         | 2024-02-24 | 2025-02-23 |
| WTXE1104A<br>1031-1                                       | Coaxial Cable                  | /                  | 1.5MRFC-LWB3 | /              | 2024-07-03 | 2025-07-02 |
| WTXE1104A<br>1031-2                                       | Coaxial Cable                  | /                  | RG 316       | /              | 2024-07-03 | 2025-07-02 |
| WTXE1104A<br>1031-3                                       | Coaxial Cable                  | /                  | RG 316       | /              | 2024-07-03 | 2025-07-02 |
| <input checked="" type="checkbox"/> Chamber C:Below 1GHz  |                                |                    |              |                |            |            |
| WTXE1093A<br>1001                                         | EMI Test<br>Receiver           | Rohde &<br>Schwarz | ESIB 26      | 100401         | 2024-02-27 | 2025-02-26 |
| WTXE1010A<br>1013-1                                       | Trilog<br>Broadband<br>Antenna | Schwarz beck       | VULB 9168    | 1194           | 2024-04-18 | 2027-04-17 |
| WTXE1007A<br>1002                                         | Amplifier                      | HP                 | 8447F        | 2944A038<br>69 | 2024-02-24 | 2025-02-23 |
| WTXE1010A<br>1007                                         | Loop Antenna                   | Schwarz beck       | FMZB 1516    | 9773           | 2024-02-26 | 2025-02-25 |
| WTXE1104A<br>1034-1                                       | Coaxial Cable                  | /                  | RC_6G-N-M    | /              | 2024-07-03 | 2025-07-02 |
| WTXE1104A<br>1034-2                                       | Coaxial Cable                  | /                  | RC_6G-N-M    | /              | 2024-07-03 | 2025-07-02 |
| WTXE1104A<br>1034-3                                       | Coaxial Cable                  | /                  | RC_6G-N-M    | /              | 2024-07-03 | 2025-07-02 |
| <input checked="" type="checkbox"/> Chamber C: Above 1GHz |                                |                    |              |                |            |            |
| WTXE1093A<br>1001                                         | EMI Test<br>Receiver           | Rohde &<br>Schwarz | ESIB 26      | 100401         | 2024-02-27 | 2025-02-26 |
| WTXE1103A<br>1005                                         | Horn Antenna                   | POAM               | RTF-118A     | 1820           | 2023-03-10 | 2026-03-09 |

|                                                       |                      |                    |             |                 |            |            |
|-------------------------------------------------------|----------------------|--------------------|-------------|-----------------|------------|------------|
| WTXE1103A<br>1006                                     | Amplifier            | Tonscend           | TAP01018050 | AP22E806<br>235 | 2024-02-27 | 2025-02-26 |
| WTXE1010A<br>1010                                     | DRG Horn<br>Antenna  | A.H. SYSTEMS       | SAS-574     | 571             | 2024-03-17 | 2025-03-16 |
| WTXE1003A<br>1001                                     | Pre-amplifier        | Schwarzbeck        | BBV 9721    | 9721-031        | 2024-02-29 | 2025-02-28 |
| WTXE1104A<br>1035-1                                   | Coaxial Cable        | /                  | RC-18G-N-M  | /               | 2024-07-03 | 2025-07-02 |
| WTXE1104A<br>1035-2                                   | Coaxial Cable        | /                  | RC-18G-N-M  | /               | 2024-07-03 | 2025-07-02 |
| WTXE1104A<br>1035-3                                   | Coaxial Cable        | /                  | RC-18G-N-M  | /               | 2024-07-03 | 2025-07-02 |
| <input type="checkbox"/> Conducted Room 1#            |                      |                    |             |                 |            |            |
| WTXE1104A<br>1029                                     | EMI Test<br>Receiver | Rohde &<br>Schwarz | ESCI        | 100525          | 2024-12-08 | 2025-12-07 |
| WTXE1002A<br>1001                                     | Pulse Limiter        | Rohde &<br>Schwarz | ESH3-Z2     | 100911          | 2024-02-24 | 2025-02-23 |
| WTXE1003A<br>1001                                     | AC LISN              | Schwarz beck       | NSLK8126    | 8126-279        | 2024-02-24 | 2025-02-23 |
| WTXE1104A<br>1036                                     | Coaxial Cable        | /                  | RG 316      | /               | 2024-07-03 | 2025-07-02 |
| WTXE1104A<br>1038                                     | Coaxial Cable        | /                  | 6MRFC-DP    | /               | 2024-07-03 | 2025-07-02 |
| <input checked="" type="checkbox"/> Conducted Room 2# |                      |                    |             |                 |            |            |
| WTXE1001A<br>1004                                     | EMI Test<br>Receiver | Rohde &<br>Schwarz | ESPI        | 101259          | 2024-02-24 | 2025-02-23 |
| WTXE1003A<br>1003                                     | LISN                 | Rohde &<br>Schwarz | ENV 216     | 100097          | 2024-02-24 | 2025-02-23 |
| WTXE1104A<br>1037                                     | Coaxial Cable        | /                  | RG 316      | /               | 2024-07-03 | 2025-07-02 |

| Software List                                        |              |        |                        |
|------------------------------------------------------|--------------|--------|------------------------|
| Description                                          | Manufacturer | Model  | Version                |
| EMI Test Software<br>(Radiated Emission A)           | Farad        | EZ-EMC | RA-03A1<br>(1.1.4.2)   |
| EMI Test Software<br>(Radiated Emission B)           | Farad        | EZ-EMC | RA-03A1<br>(1.1.4.2)   |
| EMI Test Software<br>(Radiated Emission C)           | Farad        | EZ-EMC | RA-03A1-2<br>(1.1.4.2) |
| EMI Test Software<br>(Conducted Emission Room<br>1#) | Farad        | EZ-EMC | 3A1*CE-RE<br>1.1.4.3   |
| EMI Test Software<br>(Conducted Emission Room<br>2#) | Farad        | EZ-EMC | 3A1*CE-RE<br>1.1.4.3   |

\*Remark: indicates software version used in the compliance certification testing.

2. SUMMARY OF TEST RESULTS

| Description of Test            | Result    |
|--------------------------------|-----------|
| §15.203Antenna Requirement     | Compliant |
| §15.207 (a) Conducted Emission | Compliant |
| §15.209 Radiated Emission      | Compliant |

N/A: not applicable.

### **3. Antenna Requirement**

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#### **3.1 Standard Applicable**

According to FCC 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.

#### **3.2 Test Result**

This product has a Coil Antenna, fulfill the requirement of this section.

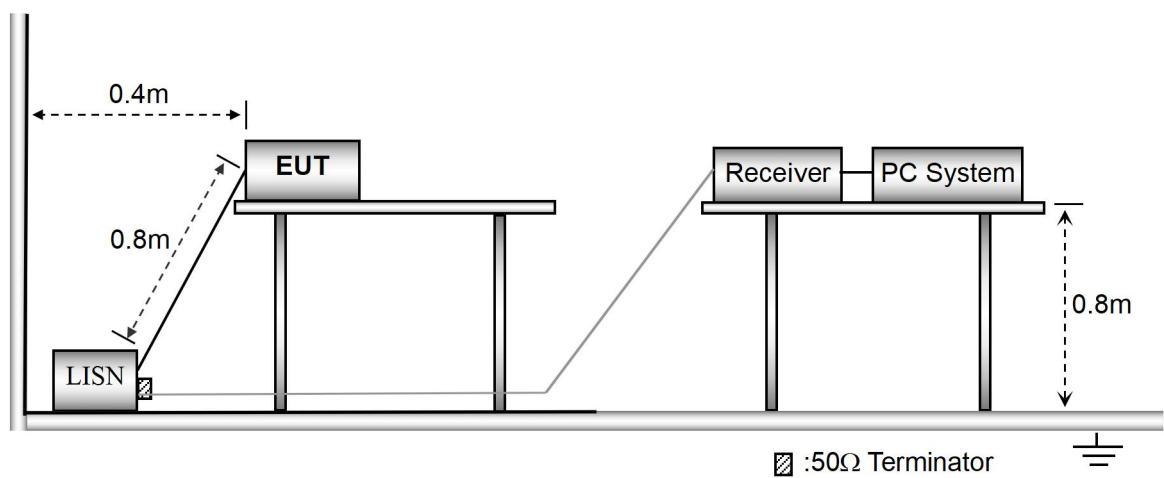
## 4. Conducted Emissions

### 4.1 Test Procedure

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

The external I/O cables were draped along the test table and formed a bundle 30 to 40cm long in the middle. The spacing between the peripherals was 10cm.

### 4.2 Basic Test Setup Block Diagram

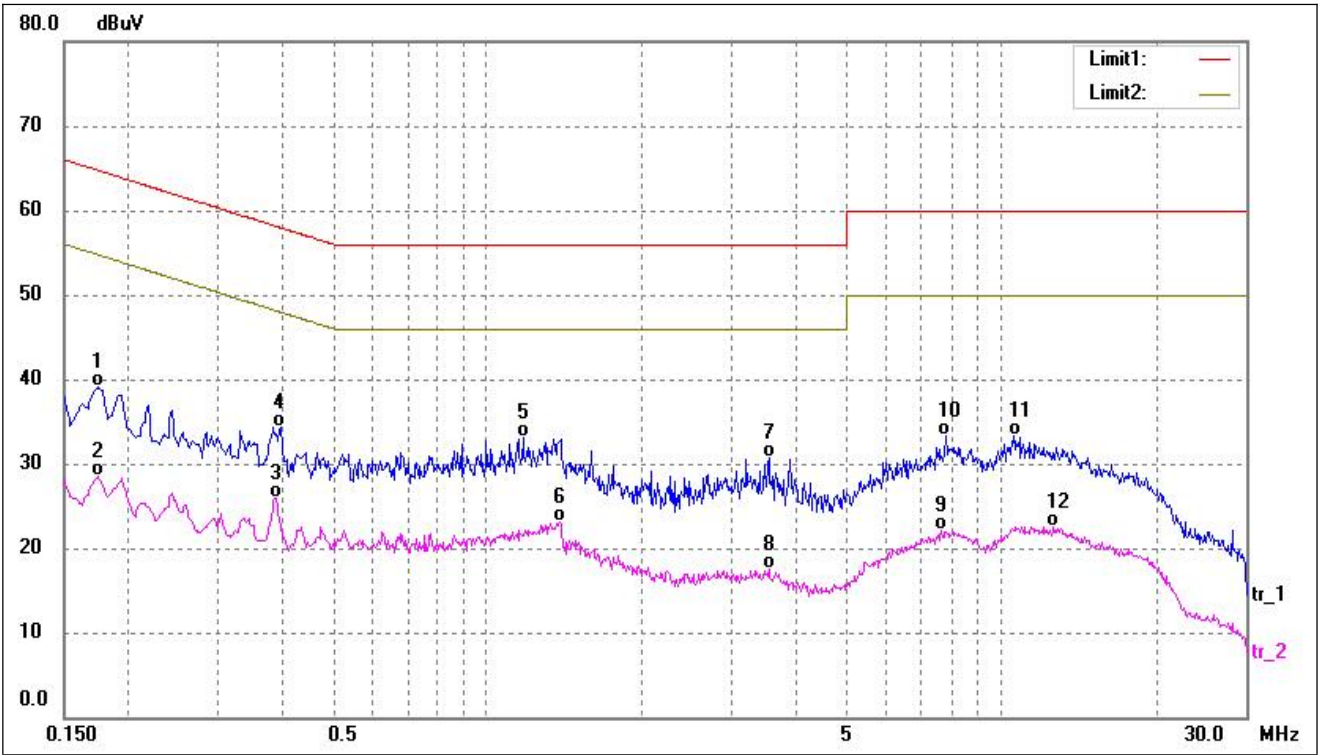


### 4.3 Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 23.5 °C   |
| Relative Humidity: | 54 %      |
| ATM Pressure:      | 1011 mbar |

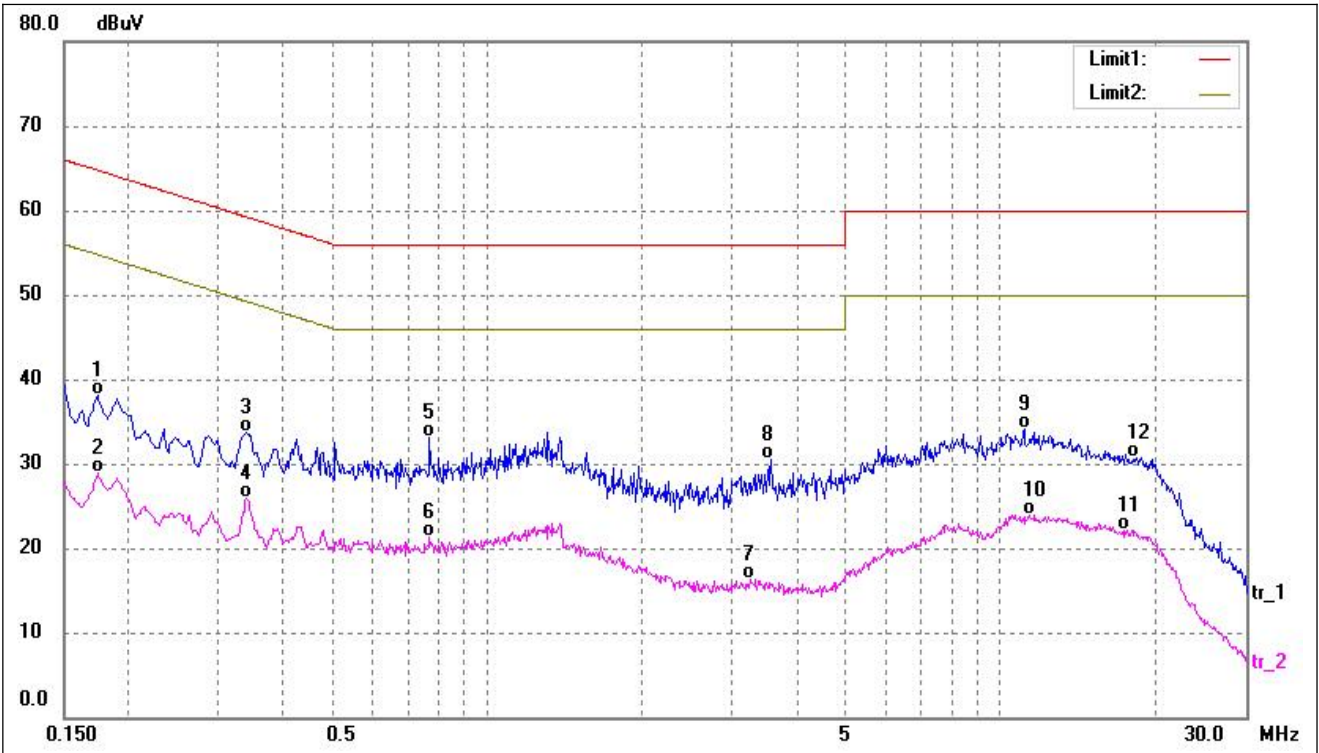
### 4.4 Summary of Test Results/Plots

|            |     |           |      |
|------------|-----|-----------|------|
| Test mode: | TM1 | Polarity: | Line |
|------------|-----|-----------|------|



| No. | Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>(dB) | Result<br>(dBuV) | Limit<br>(dBuV) | Margin<br>(dB) | Detector |
|-----|--------------------|-------------------|-----------------|------------------|-----------------|----------------|----------|
| 1   | 0.1740             | 29.38             | 9.67            | 39.05            | 64.76           | -25.71         | QP       |
| 2   | 0.1740             | 18.81             | 9.67            | 28.48            | 54.76           | -26.28         | AVG      |
| 3*  | 0.3860             | 16.25             | 9.68            | 25.93            | 48.15           | -22.22         | AVG      |
| 4   | 0.3940             | 24.70             | 9.69            | 34.39            | 57.98           | -23.59         | QP       |
| 5   | 1.1740             | 23.43             | 9.66            | 33.09            | 56.00           | -22.91         | QP       |
| 6   | 1.3820             | 13.37             | 9.65            | 23.02            | 46.00           | -22.98         | AVG      |
| 7   | 3.5460             | 21.00             | 9.65            | 30.65            | 56.00           | -25.35         | QP       |
| 8   | 3.5460             | 7.76              | 9.65            | 17.41            | 46.00           | -28.59         | AVG      |
| 9   | 7.6660             | 12.30             | 9.81            | 22.11            | 50.00           | -27.89         | AVG      |
| 10  | 7.8300             | 23.49             | 9.83            | 33.32            | 60.00           | -26.68         | QP       |
| 11  | 10.5860            | 23.38             | 9.89            | 33.27            | 60.00           | -26.73         | QP       |
| 12  | 12.6540            | 12.66             | 9.93            | 22.59            | 50.00           | -27.41         | AVG      |

|            |     |           |         |
|------------|-----|-----------|---------|
| Test mode: | TM1 | Polarity: | Neutral |
|------------|-----|-----------|---------|



| No. | Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>(dB) | Result<br>(dBuV) | Limit<br>(dBuV) | Margin<br>(dB) | Detector |
|-----|--------------------|-------------------|-----------------|------------------|-----------------|----------------|----------|
| 1   | 0.1740             | 28.34             | 9.67            | 38.01            | 64.76           | -26.75         | QP       |
| 2   | 0.1740             | 19.15             | 9.67            | 28.82            | 54.76           | -25.94         | AVG      |
| 3   | 0.3379             | 23.96             | 9.66            | 33.62            | 59.25           | -25.63         | QP       |
| 4   | 0.3379             | 16.25             | 9.66            | 25.91            | 49.25           | -23.34         | AVG      |
| 5*  | 0.7740             | 23.35             | 9.68            | 33.03            | 56.00           | -22.97         | QP       |
| 6   | 0.7740             | 11.56             | 9.68            | 21.24            | 46.00           | -24.76         | AVG      |
| 7   | 3.2580             | 6.66              | 9.63            | 16.29            | 46.00           | -29.71         | AVG      |
| 8   | 3.5700             | 20.79             | 9.65            | 30.44            | 56.00           | -25.56         | QP       |
| 9   | 11.1300            | 24.16             | 9.90            | 34.06            | 60.00           | -25.94         | QP       |
| 10  | 11.3740            | 14.07             | 9.91            | 23.98            | 50.00           | -26.02         | AVG      |
| 11  | 17.4060            | 11.98             | 10.10           | 22.08            | 50.00           | -27.92         | AVG      |
| 12  | 18.3940            | 20.63             | 10.16           | 30.79            | 60.00           | -29.21         | QP       |



5. RADIATED EMISSION

5.1 Standard Applicable

According to 15.209(a), radiated emission limits; general requirements.

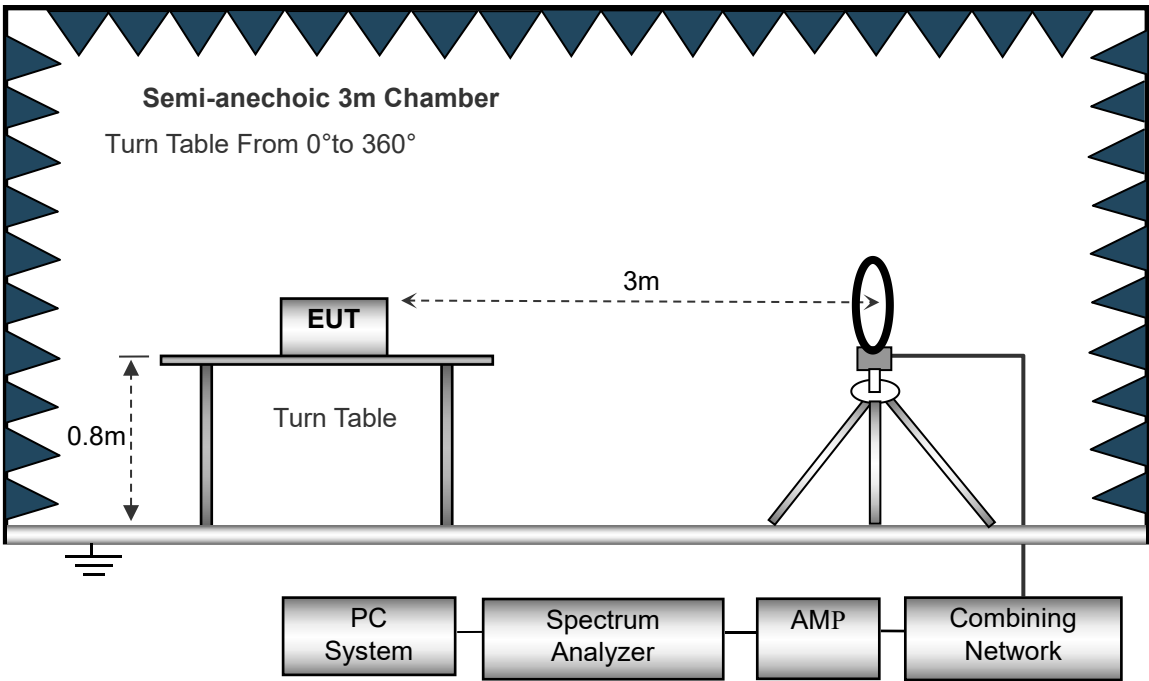
| Frequency<br>(MHz) | Field Strength |                 | Field Strength Limit at 3m Measurement Dist |                                |
|--------------------|----------------|-----------------|---------------------------------------------|--------------------------------|
|                    | uV/m           | Distance<br>(m) | uV/m                                        | dBuV/m                         |
| 0.009 ~ 0.490      | 2400/F(kHz)    | 300             | 10000 * 2400/F(kHz)                         | $20\log^{(2400/F(kHz))} + 80$  |
| 0.490 ~ 1.705      | 24000/F(kHz)   | 30              | 100 * 24000/F(kHz)                          | $20\log^{(24000/F(kHz))} + 40$ |
| 1.705 ~ 30         | 30             | 30              | 100 * 30                                    | $20\log^{(30)} + 40$           |
| 30 ~ 88            | 100            | 3               | 100                                         | $20\log^{(100)}$               |
| 88 ~ 216           | 150            | 3               | 150                                         | $20\log^{(150)}$               |
| 216 ~ 960          | 200            | 3               | 200                                         | $20\log^{(200)}$               |
| Above 960          | 500            | 3               | 500                                         | $20\log^{(500)}$               |

5.2 Test Procedure

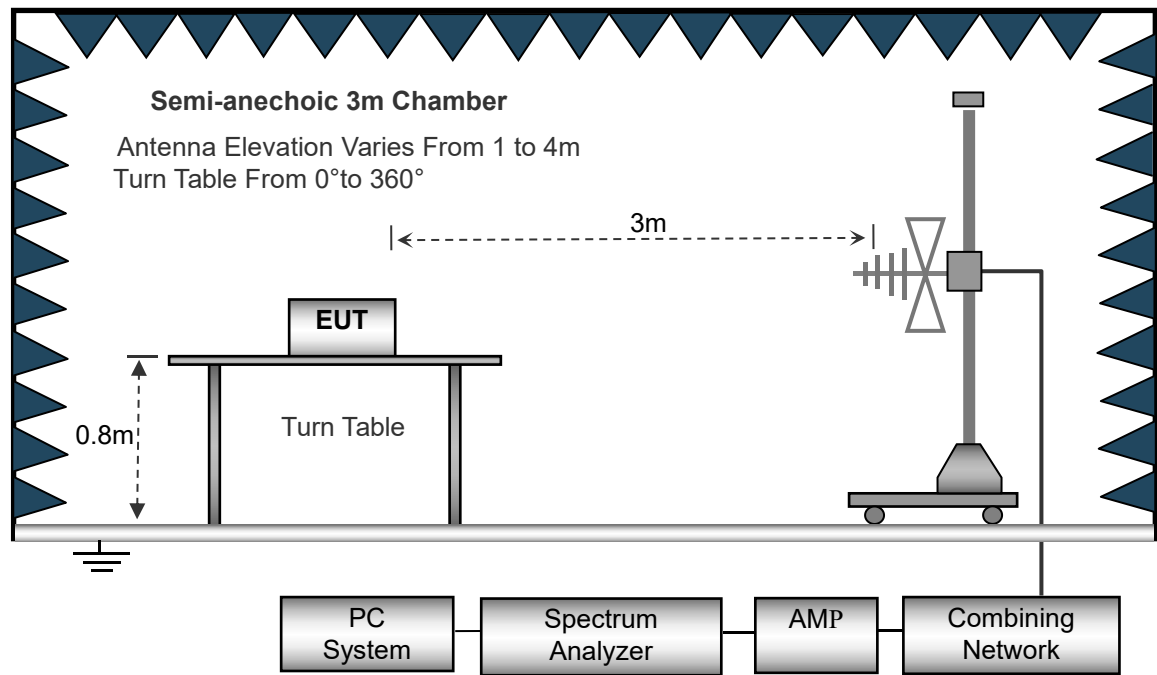
The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.209 Limit.

The external I/O cables were draped along the test table and formed a bundle 30 to 40cm long in the middle. The spacing between the peripherals was 10cm.

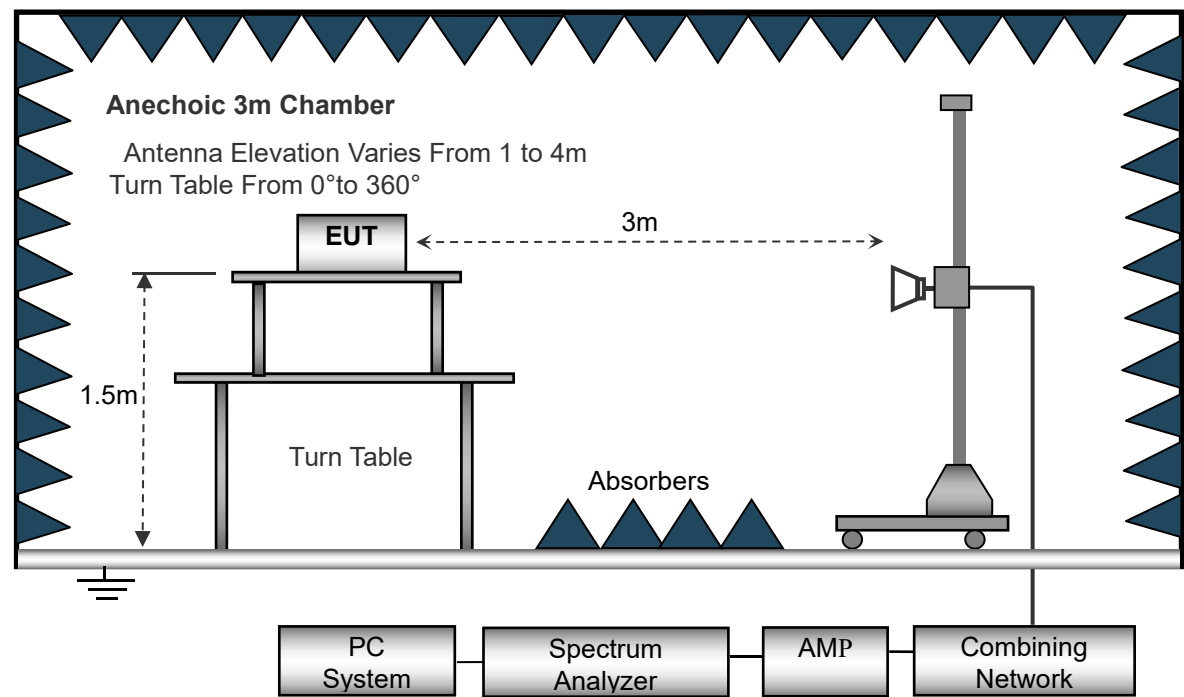
The test setup for emission measurement below 30MHz.



The test setup for emission measurement from 30MHz to 1GHz.



The test setup for emission measurement above 1GHz.



### 5.3 Test Receiver Setup

Frequency :9kHz-30MHz

RBW=10kHz,

VBW =30kHz

Sweep time= Auto

Trace = max hold

Detector function = peak

Frequency :30MHz-1GHz

RBW=120kHz,

VBW=300kHz

Sweep time= Auto

Trace = max hold

Detector function = peak, QP

Frequency :Above 1GHz

RBW=1MHz,

VBW=3MHz(Peak), 10Hz(AV)

Sweep time= Auto

Trace = max hold

Detector function = peak, AV

### 5.4 Corrected Amplitude & Margin Calculation

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

$$\text{Corr. Ampl.} = \text{Indicated Reading} - \text{Corr. Factor}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dB $\mu$ V means the emission is 6dB $\mu$ V below the maximum limit for a Class B device. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{FCC Part 15.209(a) Limit}$$

### 5.5 Environmental Conditions

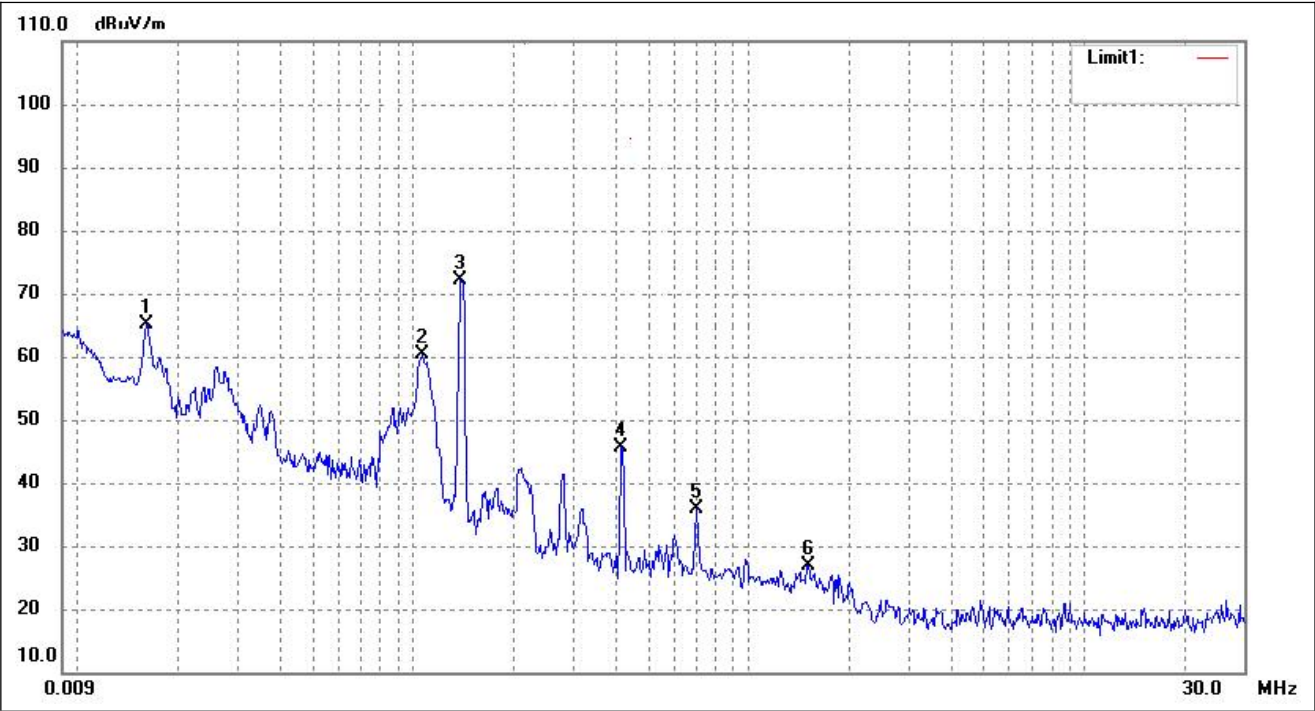
|                    |           |
|--------------------|-----------|
| Temperature:       | 23.5 °C   |
| Relative Humidity: | 54 %      |
| ATM Pressure:      | 1011 mbar |

### 5.6 Summary of Test Results/Plots

**Note:** this EUT was tested in 3 orthogonal positions and the worst case position data was reported.

➤ Below 30MHz

|            |     |           |            |
|------------|-----|-----------|------------|
| Test mode: | TM1 | Polarity: | Horizontal |
|------------|-----|-----------|------------|



| No. | Frequency<br>(MHz) | Reading<br>(dBuV/m) | Correct<br>dB | Result<br>(dBuV/m) | Result<br>(dBuA/m) | Limit<br>(dBuA/m) | Margin<br>(dB) | Remark |
|-----|--------------------|---------------------|---------------|--------------------|--------------------|-------------------|----------------|--------|
| 1   | 0.0160             | 71.64               | -6.52         | 65.12              | 13.62              | 69.00             | -3.88          | peak   |
| 2   | 0.1068             | 68.27               | -7.91         | 60.36              | 8.86               | 52.37             | -43.51         | peak   |
| 3   | 0.1385             | 79.99               | -7.98         | 72.01              | 20.51              | 42.14             | -21.63         | peak   |
| 4   | 0.4174             | 54.04               | -8.32         | 45.72              | -5.78              | 32.82             | -38.60         | peak   |
| 5   | 0.7015             | 43.86               | -8.10         | 35.76              | -15.74             | 29.68             | -45.42         | peak   |
| 6   | 1.5038             | 34.86               | -7.90         | 26.96              | -24.54             | 25.08             | -49.62         | peak   |

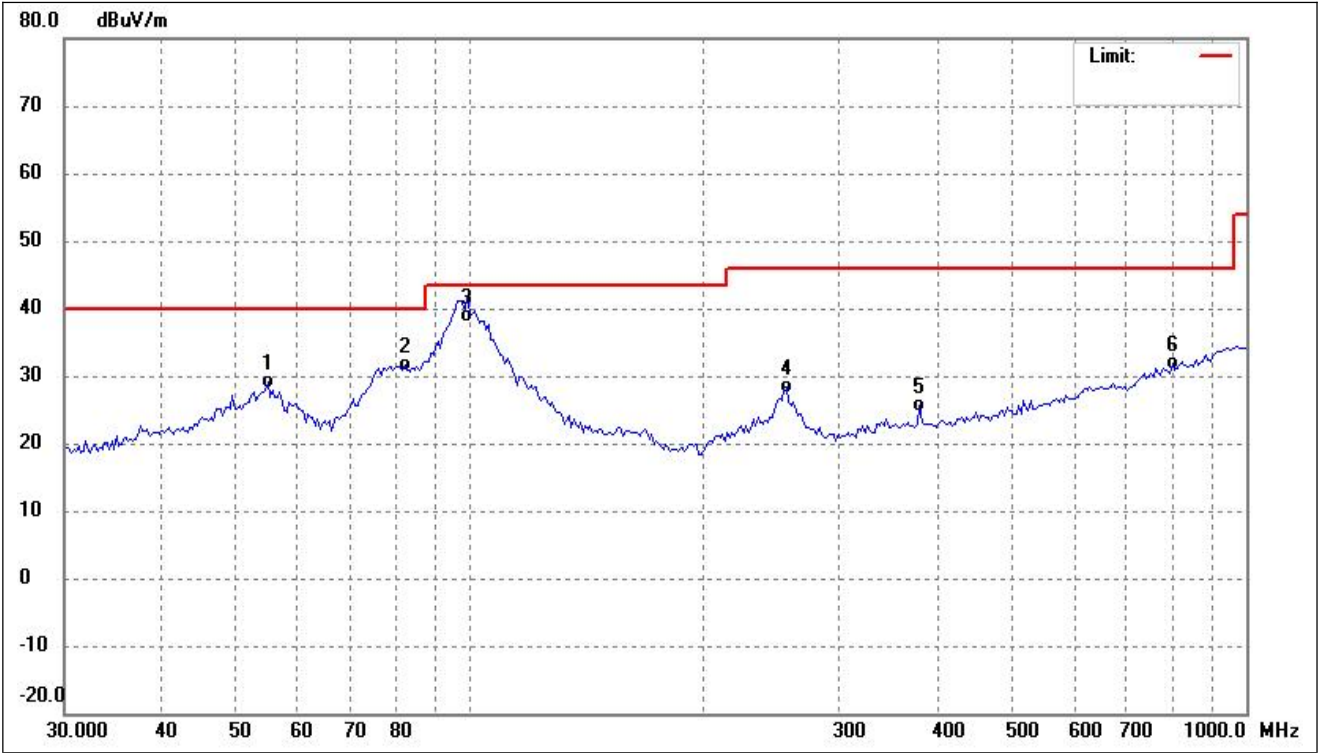
Note: 1.  $\text{Correct} = F(\text{Antenna Factor}) + \text{CL}(\text{Cable Loss}) - \text{PA}(\text{Preamp Factor})$ ,  $\text{Result}^1 = \text{Reading} + \text{Correct}$ ,  
 $\text{Result}^2 = \text{Result}^1 - \text{AF}^H$

2.  $\text{E-field} = Z_0 \times \text{H-field}$ ,  $\text{H-field} = \text{E-field} \div Z_0$ , Where  $Z_0 = \text{Free Space Impedance} = 377\Omega$

For measuring equipment calibrated in dB $\mu$ V/m, the reading should be reduced by 51,5 dB to be converted to dB $\mu$ A/m.

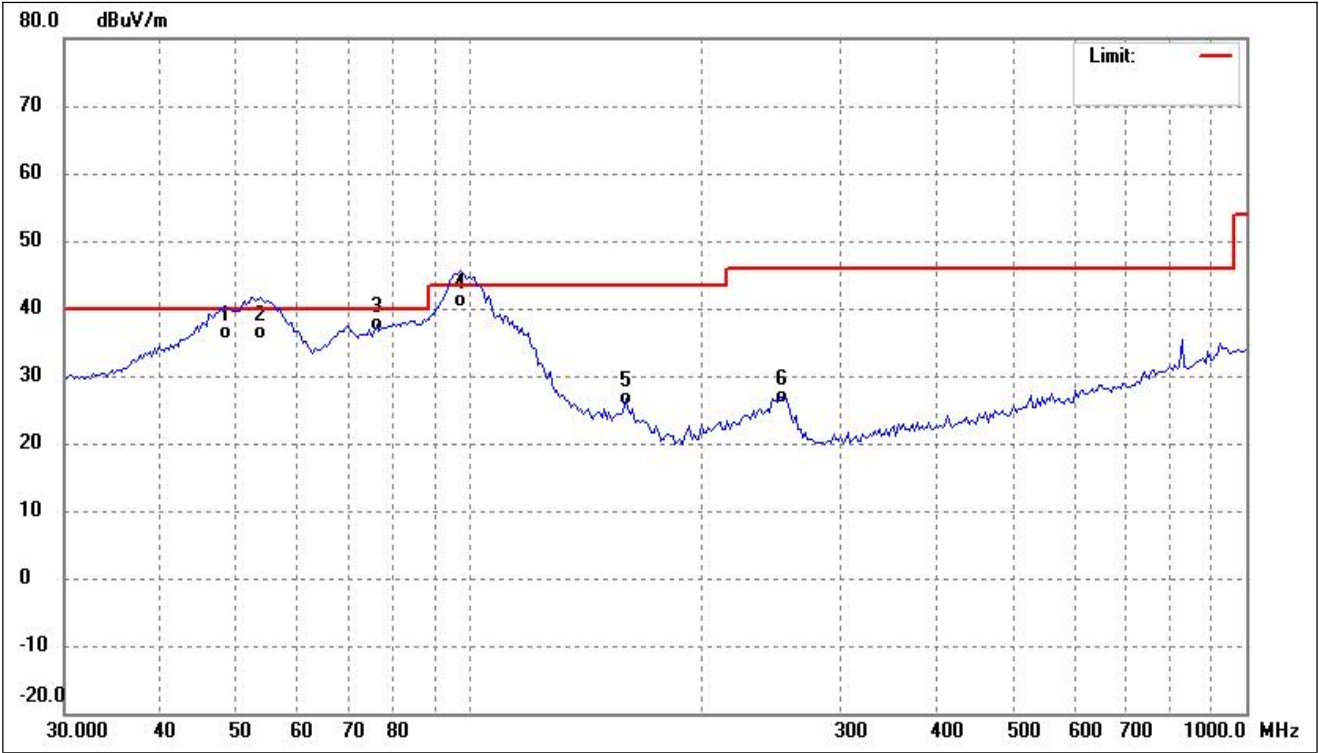
➤ 30MHz-1GHz

|              |     |           |            |
|--------------|-----|-----------|------------|
| ➤ Test mode: | TM1 | Polarity: | Horizontal |
|--------------|-----|-----------|------------|



| No. | Frequency<br>(MHz) | Reading<br>(dBuV/m) | Correct<br>dB/m | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Degree<br>( ) | Height<br>(cm) | Remark |
|-----|--------------------|---------------------|-----------------|--------------------|-------------------|----------------|---------------|----------------|--------|
| 1   | 54.9011            | 37.14               | -8.12           | 29.02              | 40.00             | -10.98         | -             | -              | QP     |
| 2   | 82.5257            | 44.00               | -12.48          | 31.52              | 40.00             | -8.48          | -             | -              | QP     |
| 3   | 99.0690            | 50.96               | -12.04          | 38.92              | 43.50             | -4.58          | -             | -              | QP     |
| 4   | 255.8226           | 37.95               | -9.47           | 28.48              | 46.00             | -17.52         | -             | -              | QP     |
| 5   | 379.1780           | 32.16               | -6.53           | 25.63              | 46.00             | -20.37         | -             | -              | QP     |
| 6   | 804.2523           | 30.87               | 1.05            | 31.92              | 46.00             | -14.08         | -             | -              | QP     |

|            |     |           |          |
|------------|-----|-----------|----------|
| Test mode: | TM1 | Polarity: | Vertical |
|------------|-----|-----------|----------|



| No. | Frequency<br>(MHz) | Reading<br>(dBuV/m) | Correct<br>dB/m | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Degree<br>( ) | Height<br>(cm) | Remark |
|-----|--------------------|---------------------|-----------------|--------------------|-------------------|----------------|---------------|----------------|--------|
| 1   | 48.3780            | 44.11               | -7.71           | 36.40              | 40.00             | -3.60          | -             | -              | QP     |
| 2   | 53.7559            | 44.49               | -7.99           | 36.50              | 40.00             | -3.50          | -             | -              | QP     |
| 3   | 75.8520            | 49.07               | -11.54          | 37.53              | 40.00             | -2.47          | -             | -              | QP     |
| 4   | 97.0023            | 53.24               | -12.17          | 41.07              | 43.50             | -2.43          | -             | -              | QP     |
| 5   | 158.6399           | 34.80               | -8.05           | 26.75              | 43.50             | -16.75         | -             | -              | QP     |
| 6   | 252.2523           | 36.43               | -9.61           | 26.82              | 46.00             | -19.18         | -             | -              | QP     |

Remark: ‘-’Means’ the test Degree and Height are not recorded by the test software and only show the worst case in the test report.

## 6. Occupied Bandwidth

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### 6.1 Standard Applicable

According to 15.215,20dB emission bandwidth.

### 6.2 Test Procedure

- The transmitter shall be operated at its maximum carrier power measured under normal test conditions.
- The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts.
- The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the occupied bandwidth (OBW) and video bandwidth (VBW) shall be approximately 3x RBW.

### 6.3 Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 25 °C     |
| Relative Humidity: | 53%       |
| ATM Pressure:      | 1018 mbar |

### 6.4 Summary of Test Results/Plots

| Test mode | Test Channel(kHz) | 20dB Bandwidth(Hz) |
|-----------|-------------------|--------------------|
| TM1       | 138.79            | 790                |

*Please refer to the attached plots.*



*Note: The RBW of the analyzer measuring Bandwidth cannot be adjusted to 1%-5% OBW, the RBW of the test setting is the closest value.*



## APPENDIX PHOTOGRAPHS

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Please refer to “ANNEX”

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