

# Test Report

**Report No.** : MTi251219032-0102E1  
**Date of issue** : 2026-04-28  
**Applicant** : Dongguan Mingjian Mould Co., Ltd.  
**Product** : Wireless Keyboard  
**Model(s)** : KB951  
**FCC ID** : 2BSYG-KB951

**Shenzhen Microtest Co., Ltd.**

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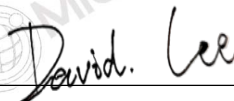
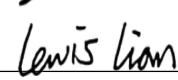
**Test Result Certification**

|                      |                                                                                                                     |
|----------------------|---------------------------------------------------------------------------------------------------------------------|
| Applicant            | Dongguan Mingjian Mould Co., Ltd.                                                                                   |
| Applicant Address    | Room 103, Building 1, No. 11 Fengping Road, Sanzhong Village, Qingxi Town, Dongguan City, Guangdong Province, China |
| Manufacturer         | Dongguan Mingjian Mould Co., Ltd.                                                                                   |
| Manufacturer Address | Room 103, Building 1, No. 11 Fengping Road, Sanzhong Village, Qingxi Town, Dongguan City, Guangdong Province, China |
| Factory              | Dongguan Mingjian Mould Co., Ltd.                                                                                   |
| Factory Address      | Room 103, Building 1, No. 11 Fengping Road, Sanzhong Village, Qingxi Town, Dongguan City, Guangdong Province, China |

**Product description**

|                 |                             |
|-----------------|-----------------------------|
| Product name    | Wireless Keyboard           |
| Trademark       | N/A                         |
| Model name      | KB951                       |
| Series Model(s) | N/A                         |
| Standards       | 47 CFR Part 15.249          |
| Test Method     | ANSI C63.10-2020+Cor 1-2023 |

**Testing Information**

|              |                          |                                                                                       |
|--------------|--------------------------|---------------------------------------------------------------------------------------|
| Date of test | 2026-04-23 to 2026-04-25 |                                                                                       |
| Test result  | Pass                     |                                                                                       |
| Prepared by: | James Qin                |  |
| Reviewed by: | David Lee                |  |
| Approved by: | Lewis Lian               |  |

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## 1 General Description

### 1.1 Description of the EUT

|                            |                                              |
|----------------------------|----------------------------------------------|
| Product name:              | Wireless Keyboard                            |
| Model name:                | KB951                                        |
| Series Model(s):           | N/A                                          |
| Model difference:          | N/A                                          |
| Electrical rating:         | Input: DC 5V/ 1A<br>Battery: DC 3.7V, 500mAh |
| Accessories:               | Dongle*1                                     |
| Hardware version:          | V1.0-BK2483-20250624                         |
| Software version:          | V7.0-QFN48                                   |
| Test sample(s) number:     | MTi251219032-01-R001                         |
| <b>RF specification</b>    |                                              |
| Operating frequency range: | 2403.75MHz-2479.75MHz                        |
| Channel number:            | 16                                           |
| Modulation type:           | GFSK                                         |
| Antenna(s) type:           | PCB Antenna                                  |
| Antenna(s) gain:           | 2.03 dBi                                     |

### 1.2 Description of test modes

| No.   | Emission test modes |
|-------|---------------------|
| Mode1 | TX                  |

#### 1.2.1 Operation channel list

| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|-----------------|---------|-----------------|---------|-----------------|---------|-----------------|
| 1       | 2403.75         | 5       | 2407.75         | 9       | 2414.75         | 13      | 2419.75         |
| 2       | 2426.75         | 6       | 2422.75         | 10      | 2436.75         | 14      | 2439.75         |
| 3       | 2441.75         | 7       | 2445.75         | 11      | 2459.75         | 15      | 2453.75         |
| 4       | 2463.75         | 8       | 2466.75         | 12      | 2473.75         | 16      | 2479.75         |

#### Test Channel List

##### Operation Band: 2.4G

| Bandwidth (MHz) | Lowest Channel (LCH) (MHz) | Middle Channel (MCH) (MHz) | Highest Channel (HCH) (MHz) |
|-----------------|----------------------------|----------------------------|-----------------------------|
| 1               | 2403.75                    | 2441.75                    | 2479.75                     |

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Note: The test software provided by manufacturer is used to control EUT for working in engineering mode, that enables selectable channel, and capable of continuous transmitting mode.

### Test Software: Key frequency setting

For power setting, refer to below table.

| Mode | 2403.75MHz | 2441.75MHz | 2479.75MHz |
|------|------------|------------|------------|
| 1M   | default    | default    | default    |

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### 1.3 Environmental Conditions

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

|                       |                  |
|-----------------------|------------------|
| Temperature:          | 15°C ~ 35°C      |
| Humidity:             | 20% RH ~ 75% RH  |
| Atmospheric pressure: | 98 kPa ~ 101 kPa |

### 1.4 Description of support units

#### Support equipment list

| Description         | Model        | Serial No.     | Manufacturer |
|---------------------|--------------|----------------|--------------|
| Laptop              | e485         | /              | Lenovo       |
| USB-A HUAWEI CHARGE | HW-050200C02 | K95212KA103561 | HUAWEI       |

#### Support cable list

| Description | Length (m) | From | To |
|-------------|------------|------|----|
| /           | /          | /    | /  |

### 1.5 Measurement uncertainty

| Measurement                              | Uncertainty |
|------------------------------------------|-------------|
| Conducted emissions (AMN 150kHz~30MHz)   | ±3.1dB      |
| Occupied channel bandwidth               | ±3 %        |
| Radiated spurious emissions (above 1GHz) | ±5.3dB      |
| Radiated spurious emissions (9kHz~30MHz) | ±4.3dB      |
| Radiated spurious emissions (30MHz~1GHz) | ±4.7dB      |
| Temperature                              | ±1 °C       |
| Humidity                                 | ± 5 %       |

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

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### 2 Summary of Test Result

| No. | Item                                      | Standard           | Requirement                                              | Result |
|-----|-------------------------------------------|--------------------|----------------------------------------------------------|--------|
| 1   | Antenna requirement                       | 47 CFR Part 15.249 | 47 CFR Part 15.203                                       | Pass   |
| 2   | Conducted Emission at AC power line       | 47 CFR Part 15.249 | 47 CFR 15.207(a)                                         | Pass   |
| 3   | Occupied Bandwidth                        | 47 CFR Part 15.249 | 47 CFR 15.215(c)                                         | Pass   |
| 4   | Field strength of fundamental             | 47 CFR Part 15.249 | 47 CFR 15.249(a)                                         | Pass   |
| 5   | Band edge emissions (Radiated)            | 47 CFR Part 15.249 | 47 CFR 15.249(d)                                         | Pass   |
| 6   | Emissions in frequency bands (below 1GHz) | 47 CFR Part 15.249 | 47 CFR 15.249(a)<br>47 CFR 15.249(d)<br>47 CFR 15.249(e) | Pass   |
| 7   | Emissions in frequency bands (above 1GHz) | 47 CFR Part 15.249 | 47 CFR 15.249(a)<br>47 CFR 15.249(d)<br>47 CFR 15.249(e) | Pass   |

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### 3 Test Facilities and accreditations

#### 3.1 Test laboratory

|                        |                                                                                                                                      |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Test laboratory:       | Shenzhen Microtest Co., Ltd.                                                                                                         |
| Test site location:    | 101, No.7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinhe Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China |
| Telephone:             | (86-755)88850135                                                                                                                     |
| Fax:                   | (86-755)88850136                                                                                                                     |
| CNAS Registration No.: | CNAS L5868                                                                                                                           |
| FCC Registration No.:  | 448573                                                                                                                               |
| IC Registration No.:   | 21760                                                                                                                                |
| CABID:                 | CN0093                                                                                                                               |

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## 4 List of test equipment

| No.                                                                                                    | Equipment                            | Manufacturer    | Model                             | Serial No. | Cal. date  | Cal. Due   |
|--------------------------------------------------------------------------------------------------------|--------------------------------------|-----------------|-----------------------------------|------------|------------|------------|
| Conducted Emission at AC power line                                                                    |                                      |                 |                                   |            |            |            |
| 1                                                                                                      | EMI Test Receiver                    | Rohde&schwarz   | ESCI3                             | 101368     | 2026-03-10 | 2027-03-09 |
| 2                                                                                                      | Artificial mains network             | Schwarzbeck     | NSLK 8127                         | 183        | 2026-03-11 | 2027-03-10 |
| 3                                                                                                      | Artificial Mains Network             | Rohde & Schwarz | ESH2-Z5                           | 100263     | 2026-03-10 | 2027-03-09 |
| 4                                                                                                      | EMI Measurement Software             | Farad           | EZ-EMC Ver.EMEC-3A1               | /          | /          | /          |
| Occupied Bandwidth                                                                                     |                                      |                 |                                   |            |            |            |
| 1                                                                                                      | Wideband Radio Communication Tester  | Rohde&schwarz   | CMW500                            | 149155     | 2026-03-09 | 2027-03-08 |
| 2                                                                                                      | ESG Series Analog Ssignal Generator  | Agilent         | E4421B                            | GB40051240 | 2026-03-09 | 2027-03-08 |
| 3                                                                                                      | PXA Signal Analyzer                  | Agilent         | N9030A                            | MY51350296 | 2026-03-10 | 2027-03-09 |
| 4                                                                                                      | Synthesized Sweeper                  | Agilent         | 83752A                            | 3610A01957 | 2026-03-10 | 2027-03-09 |
| 5                                                                                                      | MXA Signal Analyzer                  | Agilent         | N9020A                            | MY50143483 | 2026-03-09 | 2027-03-08 |
| 6                                                                                                      | RF Control Unit                      | Tonscend        | JS0806-1                          | 19D8060152 | 2026-03-11 | 2027-03-10 |
| 7                                                                                                      | Band Reject Filter Group             | Tonscend        | JS0806-F                          | 19D8060160 | 2026-03-11 | 2027-03-10 |
| 8                                                                                                      | ESG Vector Signal Generator          | Agilent         | N5182A                            | MY50143762 | 2026-03-10 | 2027-03-09 |
| 9                                                                                                      | DC Power Supply                      | Agilent         | E3632A                            | MY40027695 | 2026-03-09 | 2027-03-08 |
| 10                                                                                                     | RF Test System                       | Tonscend        | JS1120-3 Test System Ver. V3.5.39 | /          | /          | /          |
| Field strength of fundamental Band edge emissions (Radiated) Emissions in frequency bands (above 1GHz) |                                      |                 |                                   |            |            |            |
| 1                                                                                                      | EMI Test Receiver                    | Rohde&schwarz   | ESCI7                             | 101166     | 2026-03-10 | 2027-03-09 |
| 2                                                                                                      | Double Ridged Broadband Horn Antenna | schwarabeck     | BBHA 9120 D                       | 2278       | 2025-05-27 | 2027-05-26 |
| 3                                                                                                      | Amplifier                            | Agilent         | 8449B                             | 3008A01120 | 2026-03-10 | 2027-03-09 |
| 4                                                                                                      | MXA signal analyzer                  | Agilent         | N9020A                            | MY54440859 | 2026-03-10 | 2027-03-09 |
| 5                                                                                                      | PXA Signal Analyzer                  | Agilent         | N9030A                            | MY51350296 | 2026-03-10 | 2027-03-09 |
| 6                                                                                                      | Horn antenna                         | Schwarzbeck     | BBHA 9170                         | 00987      | 2025-05-27 | 2027-05-26 |

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| No.                                       | Equipment                      | Manufacturer    | Model                      | Serial No. | Cal. date  | Cal. Due   |
|-------------------------------------------|--------------------------------|-----------------|----------------------------|------------|------------|------------|
| 7                                         | Pre-amplifier                  | Space-Dtronics  | EWLAN18<br>40G             | 210405001  | 2026-03-11 | 2027-03-10 |
| 8                                         | EMI Measurement<br>Software    | Farad           | EZ-EMC<br>Ver.EMEC-<br>3A1 | /          | /          | /          |
| Emissions in frequency bands (below 1GHz) |                                |                 |                            |            |            |            |
| 1                                         | EMI Test Receiver              | Rohde&schwarz   | ESC17                      | 101166     | 2026-03-10 | 2027-03-09 |
| 2                                         | TRILOG<br>Broadband<br>Antenna | schwarabeck     | VULB<br>9163               | 9163-1338  | 2025-05-23 | 2027-05-22 |
| 3                                         | Active Loop<br>Antenna         | Schwarzbeck     | FMZB<br>1519 B             | 00066      | 2026-03-08 | 2028-03-07 |
| 4                                         | Amplifier                      | Hewlett-Packard | 8447F                      | 3113A06184 | 2026-03-10 | 2027-03-09 |
| 5                                         | EMI Measurement<br>Software    | Farad           | EZ-EMC<br>Ver.EMEC-<br>3A1 | /          | /          | /          |

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### 5 Evaluation Results (Evaluation)

#### 5.1 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. |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

##### 5.1.1 Conclusion:

The antenna of the EUT is permanently attached.  
The EUT complies with the requirement of FCC PART 15.203.

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## 6 Radio Spectrum Matter Test Results (RF)

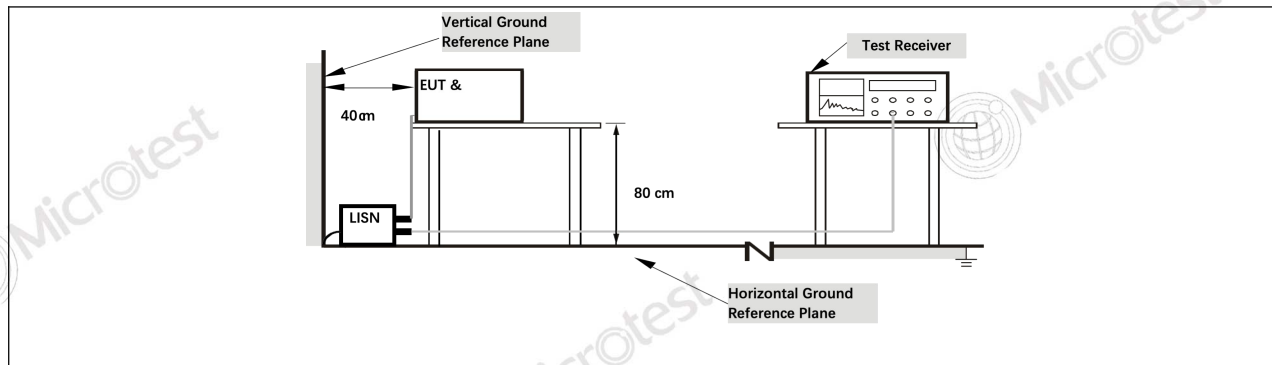
### 6.1 Conducted Emission at AC power line

|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                              |           |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------|
| 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 $\mu$ H/50 ohms line impedance stabilization network (LISN). |                              |           |
| Test Limit:                                     | Frequency of emission (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                          | Conducted limit (dB $\mu$ V) |           |
|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Quasi-peak                   | Average   |
|                                                 | 0.15-0.5                                                                                                                                                                                                                                                                                                                                                                                                                                             | 66 to 56*                    | 56 to 46* |
|                                                 | 0.5-5                                                                                                                                                                                                                                                                                                                                                                                                                                                | 56                           | 46        |
|                                                 | 5-30                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 60                           | 50        |
| *Decreases with the logarithm of the frequency. |                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                              |           |
| Test Method:                                    | ANSI C63.10-2020+Cor 1-2023 section 6.2                                                                                                                                                                                                                                                                                                                                                                                                              |                              |           |
| Procedure:                                      | Refer to ANSI C63.10-2020+Cor 1-2023 section 6.2, standard test method for ac power-line conducted emissions from unlicensed wireless devices                                                                                                                                                                                                                                                                                                        |                              |           |

#### 6.1.1 E.U.T. Operation:

|                        |         |           |      |
|------------------------|---------|-----------|------|
| Operating Environment: |         |           |      |
| Temperature:           | 25 °C   | Humidity: | 59 % |
| Atmospheric Pressure:  | 105 kPa |           |      |
| Pre test mode:         | Mode1   |           |      |
| Final test mode:       | Mode1   |           |      |

#### 6.1.2 Test Setup Diagram:

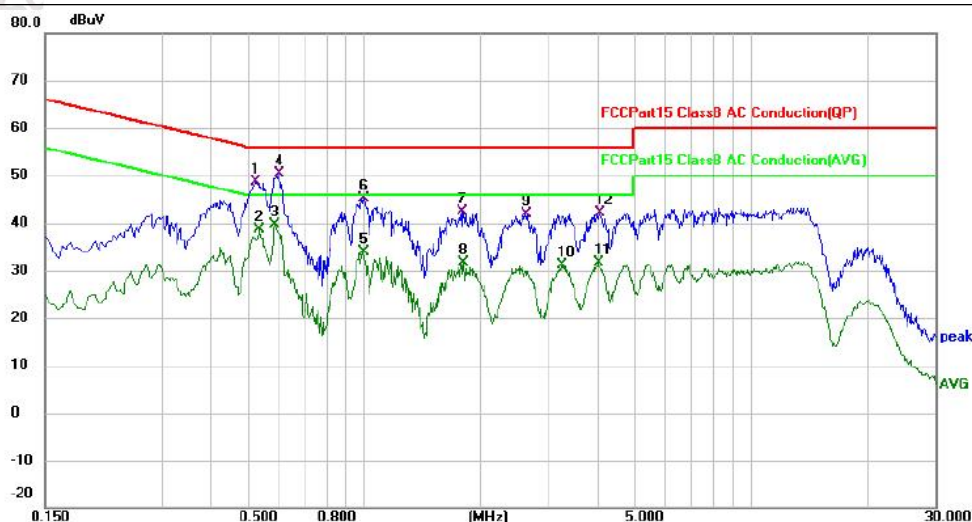


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## 6.1.3 Test Data:

Mode1 / Line: Line / CH: L

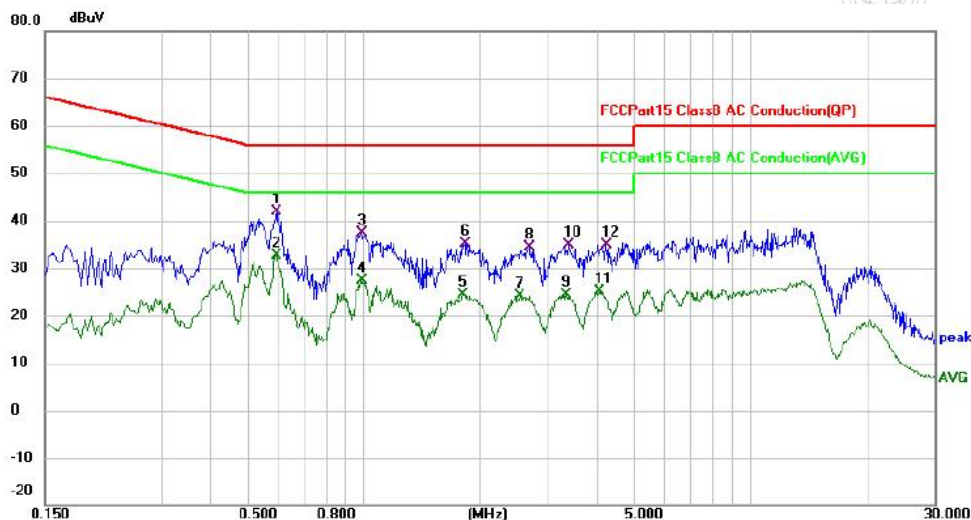


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV | Limit<br>dBuV | Over<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|---------|
| 1   |     | 0.5260       | 38.45                    | 10.28                   | 48.73                    | 56.00         | -7.27      | QP       |         |
| 2   |     | 0.5380       | 28.25                    | 10.28                   | 38.53                    | 46.00         | -7.47      | AVG      |         |
| 3   |     | 0.5899       | 29.24                    | 10.28                   | 39.52                    | 46.00         | -6.48      | AVG      |         |
| 4   | *   | 0.6020       | 40.02                    | 10.28                   | 50.30                    | 56.00         | -5.70      | QP       |         |
| 5   |     | 0.9980       | 23.63                    | 10.32                   | 33.95                    | 46.00         | -12.05     | AVG      |         |
| 6   |     | 1.0020       | 34.93                    | 10.32                   | 45.25                    | 56.00         | -10.75     | QP       |         |
| 7   |     | 1.8060       | 32.13                    | 10.37                   | 42.50                    | 56.00         | -13.50     | QP       |         |
| 8   |     | 1.8140       | 21.24                    | 10.37                   | 31.61                    | 46.00         | -14.39     | AVG      |         |
| 9   |     | 2.6180       | 31.57                    | 10.42                   | 41.99                    | 56.00         | -14.01     | QP       |         |
| 10  |     | 3.2580       | 20.72                    | 10.47                   | 31.19                    | 46.00         | -14.81     | AVG      |         |
| 11  |     | 4.0380       | 21.18                    | 10.55                   | 31.73                    | 46.00         | -14.27     | AVG      |         |
| 12  |     | 4.0900       | 31.55                    | 10.56                   | 42.11                    | 56.00         | -13.89     | QP       |         |

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Mode1 / Line: Neutral / CH: L



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV | Limit<br>dBuV | Over<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|---------|
| 1   |     | 0.5940       | 31.64                    | 10.28                   | 41.92                    | 56.00         | -14.08     | QP       |         |
| 2   | *   | 0.5940       | 22.37                    | 10.28                   | 32.65                    | 46.00         | -13.35     | AVG      |         |
| 3   |     | 0.9860       | 27.16                    | 10.32                   | 37.48                    | 56.00         | -18.52     | QP       |         |
| 4   |     | 0.9860       | 16.96                    | 10.32                   | 27.28                    | 46.00         | -18.72     | AVG      |         |
| 5   |     | 1.8140       | 14.12                    | 10.38                   | 24.50                    | 46.00         | -21.50     | AVG      |         |
| 6   |     | 1.8340       | 24.74                    | 10.38                   | 35.12                    | 56.00         | -20.88     | QP       |         |
| 7   |     | 2.5500       | 13.76                    | 10.43                   | 24.19                    | 46.00         | -21.81     | AVG      |         |
| 8   |     | 2.6860       | 23.92                    | 10.44                   | 34.36                    | 56.00         | -21.64     | QP       |         |
| 9   |     | 3.3540       | 14.00                    | 10.50                   | 24.50                    | 46.00         | -21.50     | AVG      |         |
| 10  |     | 3.4060       | 24.25                    | 10.51                   | 34.76                    | 56.00         | -21.24     | QP       |         |
| 11  |     | 4.0739       | 14.43                    | 10.58                   | 25.01                    | 46.00         | -20.99     | AVG      |         |
| 12  |     | 4.2260       | 24.37                    | 10.60                   | 34.97                    | 56.00         | -21.03     | QP       |         |

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## 6.2 Occupied Bandwidth

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement: | 47 CFR 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 C63.10-2020+Cor 1-2023, section 6.9.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Procedure:        | <p>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.</p> <p>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.</p> <p>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 <math>[10 \log (OBW/RBW)]</math> below the reference level. Specific guidance is given in 4.1.5.2.</p> <p>d) Steps a) through c) might require iteration to adjust within the specified tolerances.</p> <p>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 reference value.</p> <p>f) Set detection mode to peak and trace mode to max hold.</p> <p>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).</p> <p>h) Determine the “-xx dB down amplitude” using <math>[(\text{reference value}) - xx]</math>. Alternatively, this calculation may be made by using the marker-delta function of the instrument.</p> <p>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).</p> <p>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.</p> <p>k) The occupied bandwidth shall be reported by providing plot(s) of the</p> |

# TEST REPORT

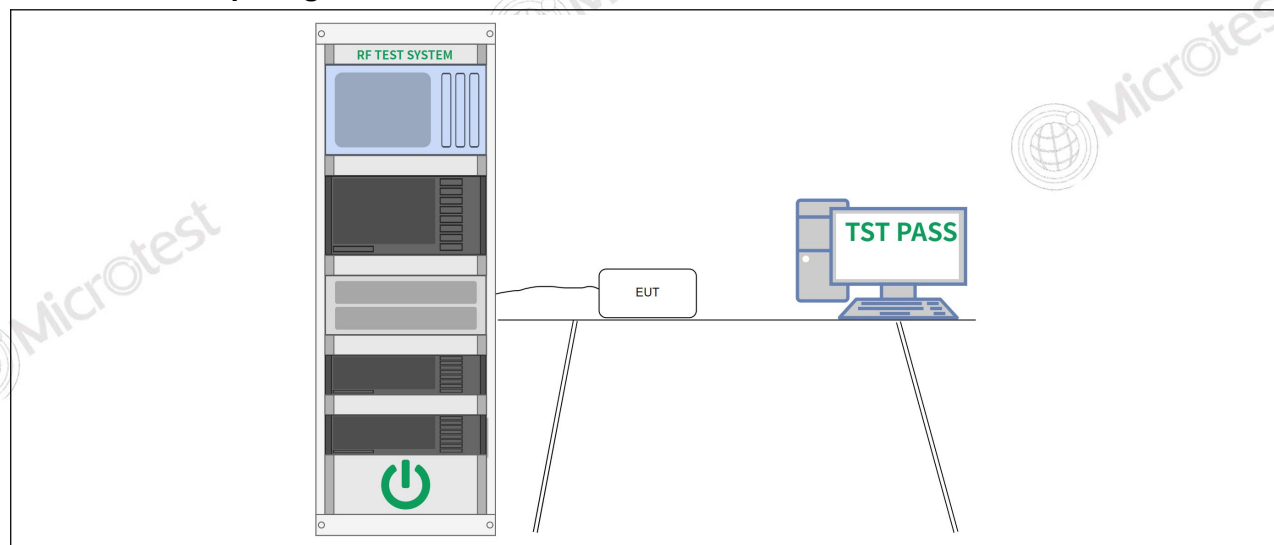
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|  |                                                                                                                                                                 |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | 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). |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 6.2.1 E.U.T. Operation:

|                        |         |           |      |                       |         |
|------------------------|---------|-----------|------|-----------------------|---------|
| Operating Environment: |         |           |      |                       |         |
| Temperature:           | 23.8 °C | Humidity: | 54 % | Atmospheric Pressure: | 101 kPa |
| Pre test mode:         | Mode1   |           |      |                       |         |
| Final test mode:       | Mode1   |           |      |                       |         |

## 6.2.2 Test Setup Diagram:



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## 6.2.3 Test Data:

| Test Mode | Antenna | Frequency [MHz] | 99% OBW [MHz] | 20db BW [MHz] |
|-----------|---------|-----------------|---------------|---------------|
| GFSK      | Ant1    | 2403.75         | 2.0807        | 1.826         |
|           |         | 2441.75         | 2.0846        | 1.846         |
|           |         | 2479.75         | 2.1000        | 2.016         |



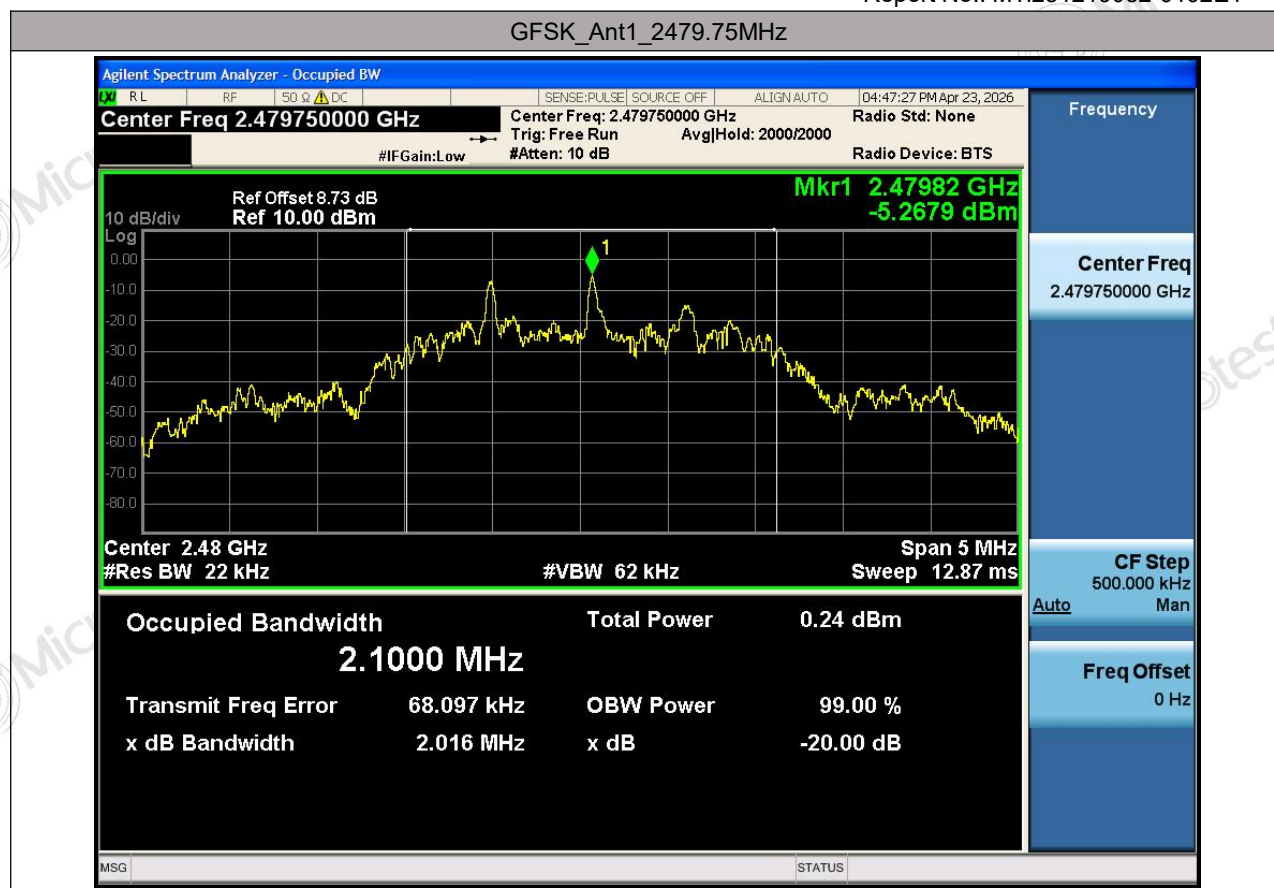
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# TEST REPORT

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# TEST REPORT

Report No.: MTi251219032-0102E1

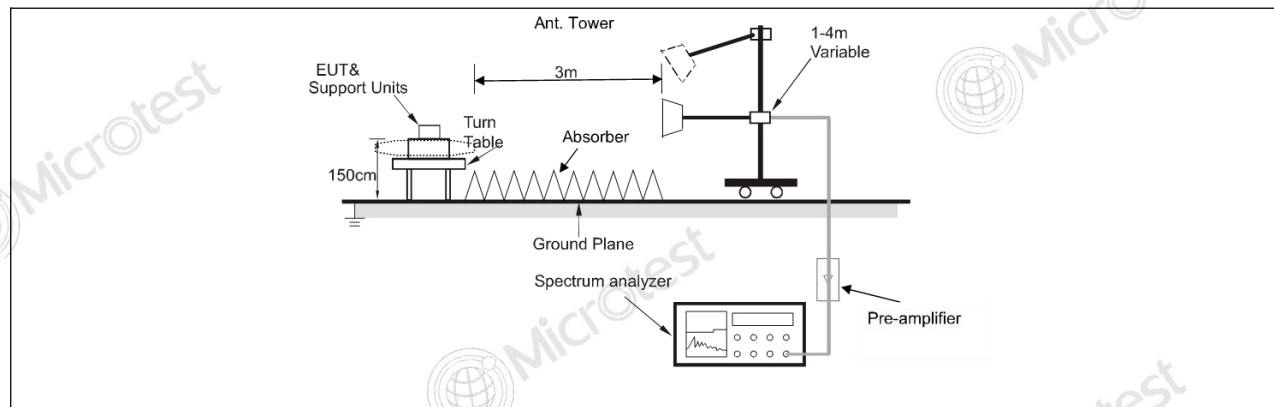
## 6.3 Field strength of fundamental

|                   |                                                                                                                                                                                        |                                                  |                                                |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|------------------------------------------------|
| Test Requirement: | Except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following: |                                                  |                                                |
|                   | Fundamental frequency                                                                                                                                                                  | Field strength of fundamental (millivolts/meter) | Field strength of harmonics (microvolts/meter) |
|                   | 902-928 MHz                                                                                                                                                                            | 50                                               | 500                                            |
|                   | 2400-2483.5 MHz                                                                                                                                                                        | 50                                               | 500                                            |
|                   | 5725-5875 MHz                                                                                                                                                                          | 50                                               | 500                                            |
|                   | 24.0-24.25 GHz                                                                                                                                                                         | 250                                              | 2500                                           |
|                   | The field strength of emissions in this band shall not exceed 2500 millivolts/meter.                                                                                                   |                                                  |                                                |
| Test Method:      | ANSI C63.10-2020+Cor 1-2023 section 6.6                                                                                                                                                |                                                  |                                                |
| Procedure:        | ANSI C63.10-2020+Cor 1-2023 section 6.6                                                                                                                                                |                                                  |                                                |

### 6.3.1 E.U.T. Operation:

|                        |       |           |      |                       |         |
|------------------------|-------|-----------|------|-----------------------|---------|
| Operating Environment: |       |           |      |                       |         |
| Temperature:           | 23 °C | Humidity: | 45 % | Atmospheric Pressure: | 101 kPa |
| Pre test mode:         | Mode1 |           |      |                       |         |
| Final test mode:       | Mode1 |           |      |                       |         |

### 6.3.2 Test Setup Diagram:



# TEST REPORT

Report No.: MTi251219032-0102E1

## 6.3.3 Test Data:

Mode1 / Polarization: Horizontal / CH: L

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector |
| 1   |     | 2403.750 | 88.17         | -4.30          | 83.87       | 114.00 | -30.13 | peak     |
| 2   | *   | 2403.750 | 83.33         | -4.30          | 79.03       | 94.00  | -14.97 | AVG      |

Mode1 / Polarization: Vertical / CH: L

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector |
| 1   |     | 2403.750 | 90.11         | -4.30          | 85.81       | 114.00 | -28.19 | peak     |
| 2   | *   | 2403.750 | 85.28         | -4.30          | 80.98       | 94.00  | -13.02 | AVG      |

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Report No.: MTi251219032-0102E1

Mode1 / Polarization: Horizontal / CH: M

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector |
| 1   |     | 2441.750 | 85.17         | -4.35          | 80.82       | 114.00 | -33.18 | peak     |
| 2   | *   | 2441.750 | 80.35         | -4.35          | 76.00       | 94.00  | -18.00 | AVG      |

Mode1 / Polarization: Vertical / CH: M

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector |
| 1   |     | 2441.750 | 91.47         | -4.35          | 87.12       | 114.00 | -26.88 | peak     |
| 2   | *   | 2441.750 | 86.66         | -4.35          | 82.31       | 94.00  | -11.69 | AVG      |

# TEST REPORT

Report No.: MTi251219032-0102E1

Mode1 / Polarization: Horizontal / CH: H

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector |
| 1   |     | 2479.750 | 81.20         | -4.24          | 76.96       | 114.00 | -37.04 | peak     |
| 2   | *   | 2479.750 | 76.36         | -4.24          | 72.12       | 94.00  | -21.88 | AVG      |

Mode1 / Polarization: Vertical / CH: H

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector |
| 1   |     | 2479.750 | 89.83         | -4.24          | 85.59       | 114.00 | -28.41 | peak     |
| 2   | *   | 2479.750 | 85.08         | -4.24          | 80.84       | 94.00  | -13.16 | AVG      |

# TEST REPORT

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## 6.4 Band edge emissions (Radiated)

| Test Requirement: | Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                               |  |                 |                                   |                               |             |             |     |             |              |    |            |    |    |       |        |   |        |        |   |         |        |   |           |     |   |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|--|-----------------|-----------------------------------|-------------------------------|-------------|-------------|-----|-------------|--------------|----|------------|----|----|-------|--------|---|--------|--------|---|---------|--------|---|-----------|-----|---|
| Test Limit:       | <p>Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation.</p> <table><tr><th>Frequency (MHz)</th><th>Field strength (microvolts/meter)</th><th>Measurement distance (meters)</th></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> <p>** 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.</p> <p>In the emission table above, the tighter limit applies at the band edges.</p> <p>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.</p> |                               |  | 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 |
| 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                             |  |                 |                                   |                               |             |             |     |             |              |    |            |    |    |       |        |   |        |        |   |         |        |   |           |     |   |
| Test Method:      | ANSI C63.10-2020+Cor 1-2023 section 6.6.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                               |  |                 |                                   |                               |             |             |     |             |              |    |            |    |    |       |        |   |        |        |   |         |        |   |           |     |   |
| Procedure:        | ANSI C63.10-2020+Cor 1-2023 section 6.6.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                               |  |                 |                                   |                               |             |             |     |             |              |    |            |    |    |       |        |   |        |        |   |         |        |   |           |     |   |

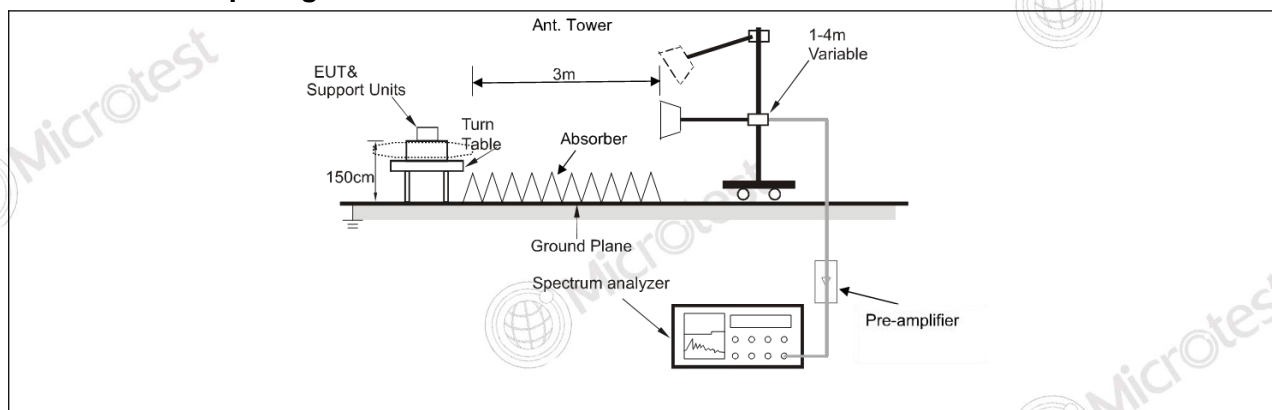
### 6.4.1 E.U.T. Operation:

|                                                                                                             |       |           |      |                       |         |
|-------------------------------------------------------------------------------------------------------------|-------|-----------|------|-----------------------|---------|
| Operating Environment:                                                                                      |       |           |      |                       |         |
| Temperature:                                                                                                | 23 °C | Humidity: | 45 % | Atmospheric Pressure: | 101 kPa |
| Pre test mode:                                                                                              | Mode1 |           |      |                       |         |
| Final test mode:                                                                                            | Mode1 |           |      |                       |         |
| Note:                                                                                                       |       |           |      |                       |         |
| The amplitude of spurious emissions which are attenuated more than 20 dB below the limits are not reported. |       |           |      |                       |         |

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### 6.4.2 Test Setup Diagram:



# TEST REPORT

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## 6.4.3 Test Data:

Mode1 / Polarization: Horizontal / CH: L

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measure-ment | Limit  | Over   |          |
|-----|-----|----------|---------------|----------------|--------------|--------|--------|----------|
|     |     | MHz      | dBuV          | dB             | dBuV/m       | dBuV/m | dB     | Detector |
| 1   |     | 2310.000 | 48.82         | -4.50          | 44.32        | 74.00  | -29.68 | peak     |
| 2   |     | 2310.000 | 37.94         | -4.50          | 33.44        | 54.00  | -20.56 | AVG      |
| 3   |     | 2390.000 | 48.97         | -4.31          | 44.66        | 74.00  | -29.34 | peak     |
| 4   |     | 2390.000 | 38.77         | -4.31          | 34.46        | 54.00  | -19.54 | AVG      |
| 5   |     | 2400.000 | 49.85         | -4.29          | 45.56        | 74.00  | -28.44 | peak     |
| 6   | *   | 2400.000 | 40.76         | -4.29          | 36.47        | 54.00  | -17.53 | AVG      |

Mode1 / Polarization: Vertical / CH: L

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measure-ment | Limit  | Over   |          |
|-----|-----|----------|---------------|----------------|--------------|--------|--------|----------|
|     |     | MHz      | dBuV          | dB             | dBuV/m       | dBuV/m | dB     | Detector |
| 1   |     | 2310.000 | 48.05         | -4.50          | 43.55        | 74.00  | -30.45 | peak     |
| 2   |     | 2310.000 | 37.90         | -4.50          | 33.40        | 54.00  | -20.60 | AVG      |
| 3   |     | 2390.000 | 48.76         | -4.31          | 44.45        | 74.00  | -29.55 | peak     |
| 4   |     | 2390.000 | 37.97         | -4.31          | 33.66        | 54.00  | -20.34 | AVG      |
| 5   |     | 2400.000 | 53.10         | -4.29          | 48.81        | 74.00  | -25.19 | peak     |
| 6   | *   | 2400.000 | 40.29         | -4.29          | 36.00        | 54.00  | -18.00 | AVG      |

# TEST REPORT

Report No.: MTi251219032-0102E1

Mode1 / Polarization: Horizontal / CH: H

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector |
| 1   |     | 2483.500 | 54.06         | -4.23          | 49.83       | 74.00  | -24.17 | peak     |
| 2   | *   | 2483.500 | 42.10         | -4.23          | 37.87       | 54.00  | -16.13 | AVG      |
| 3   |     | 2500.000 | 49.38         | -4.15          | 45.23       | 74.00  | -28.77 | peak     |
| 4   |     | 2500.000 | 38.67         | -4.15          | 34.52       | 54.00  | -19.48 | AVG      |

Mode1 / Polarization: Vertical / CH: H

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector |
| 1   |     | 2483.500 | 49.39         | -4.23          | 45.16       | 74.00  | -28.84 | peak     |
| 2   |     | 2483.500 | 38.64         | -4.23          | 34.41       | 54.00  | -19.59 | AVG      |
| 3   |     | 2500.000 | 49.39         | -4.15          | 45.24       | 74.00  | -28.76 | peak     |
| 4   | *   | 2500.000 | 38.62         | -4.15          | 34.47       | 54.00  | -19.53 | AVG      |

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## 6.5 Emissions in frequency bands (below 1GHz)

| Test Requirement:     | 47 CFR 15.249(a)<br>47 CFR 15.249(d)<br>47 CFR 15.249(e)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                |                       |                                                  |                                                |             |    |     |                 |    |     |               |    |     |                |     |      |                 |                                   |                               |             |             |     |             |              |    |            |    |    |       |        |   |        |        |   |         |        |   |           |     |   |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|-----------------------|--------------------------------------------------|------------------------------------------------|-------------|----|-----|-----------------|----|-----|---------------|----|-----|----------------|-----|------|-----------------|-----------------------------------|-------------------------------|-------------|-------------|-----|-------------|--------------|----|------------|----|----|-------|--------|---|--------|--------|---|---------|--------|---|-----------|-----|---|
| Test Limit:           | <p>Except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:</p> <table border="1"> <thead> <tr> <th>Fundamental frequency</th><th>Field strength of fundamental (millivolts/meter)</th><th>Field strength of harmonics (microvolts/meter)</th></tr> </thead> <tbody> <tr> <td>902-928 MHz</td><td>50</td><td>500</td></tr> <tr> <td>2400-2483.5 MHz</td><td>50</td><td>500</td></tr> <tr> <td>5725-5875 MHz</td><td>50</td><td>500</td></tr> <tr> <td>24.0-24.25 GHz</td><td>250</td><td>2500</td></tr> </tbody> </table> <p>Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation.</p> <table border="1"> <thead> <tr> <th>Frequency (MHz)</th><th>Field strength (microvolts/meter)</th><th>Measurement distance (meters)</th></tr> </thead> <tbody> <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> </tbody> </table> <p>** 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.</p> <p>In the emission table above, the tighter limit applies at the band edges.</p> <p>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.</p> |                                                | Fundamental frequency | Field strength of fundamental (millivolts/meter) | Field strength of harmonics (microvolts/meter) | 902-928 MHz | 50 | 500 | 2400-2483.5 MHz | 50 | 500 | 5725-5875 MHz | 50 | 500 | 24.0-24.25 GHz | 250 | 2500 | 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 |
| Fundamental frequency | Field strength of fundamental (millivolts/meter)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Field strength of harmonics (microvolts/meter) |                       |                                                  |                                                |             |    |     |                 |    |     |               |    |     |                |     |      |                 |                                   |                               |             |             |     |             |              |    |            |    |    |       |        |   |        |        |   |         |        |   |           |     |   |
| 902-928 MHz           | 50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 500                                            |                       |                                                  |                                                |             |    |     |                 |    |     |               |    |     |                |     |      |                 |                                   |                               |             |             |     |             |              |    |            |    |    |       |        |   |        |        |   |         |        |   |           |     |   |
| 2400-2483.5 MHz       | 50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 500                                            |                       |                                                  |                                                |             |    |     |                 |    |     |               |    |     |                |     |      |                 |                                   |                               |             |             |     |             |              |    |            |    |    |       |        |   |        |        |   |         |        |   |           |     |   |
| 5725-5875 MHz         | 50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 500                                            |                       |                                                  |                                                |             |    |     |                 |    |     |               |    |     |                |     |      |                 |                                   |                               |             |             |     |             |              |    |            |    |    |       |        |   |        |        |   |         |        |   |           |     |   |
| 24.0-24.25 GHz        | 250                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2500                                           |                       |                                                  |                                                |             |    |     |                 |    |     |               |    |     |                |     |      |                 |                                   |                               |             |             |     |             |              |    |            |    |    |       |        |   |        |        |   |         |        |   |           |     |   |
| 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                                              |                       |                                                  |                                                |             |    |     |                 |    |     |               |    |     |                |     |      |                 |                                   |                               |             |             |     |             |              |    |            |    |    |       |        |   |        |        |   |         |        |   |           |     |   |
| Test Method:          | ANSI C63.10-2020+Cor 1-2023 section 6.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                |                       |                                                  |                                                |             |    |     |                 |    |     |               |    |     |                |     |      |                 |                                   |                               |             |             |     |             |              |    |            |    |    |       |        |   |        |        |   |         |        |   |           |     |   |

# TEST REPORT

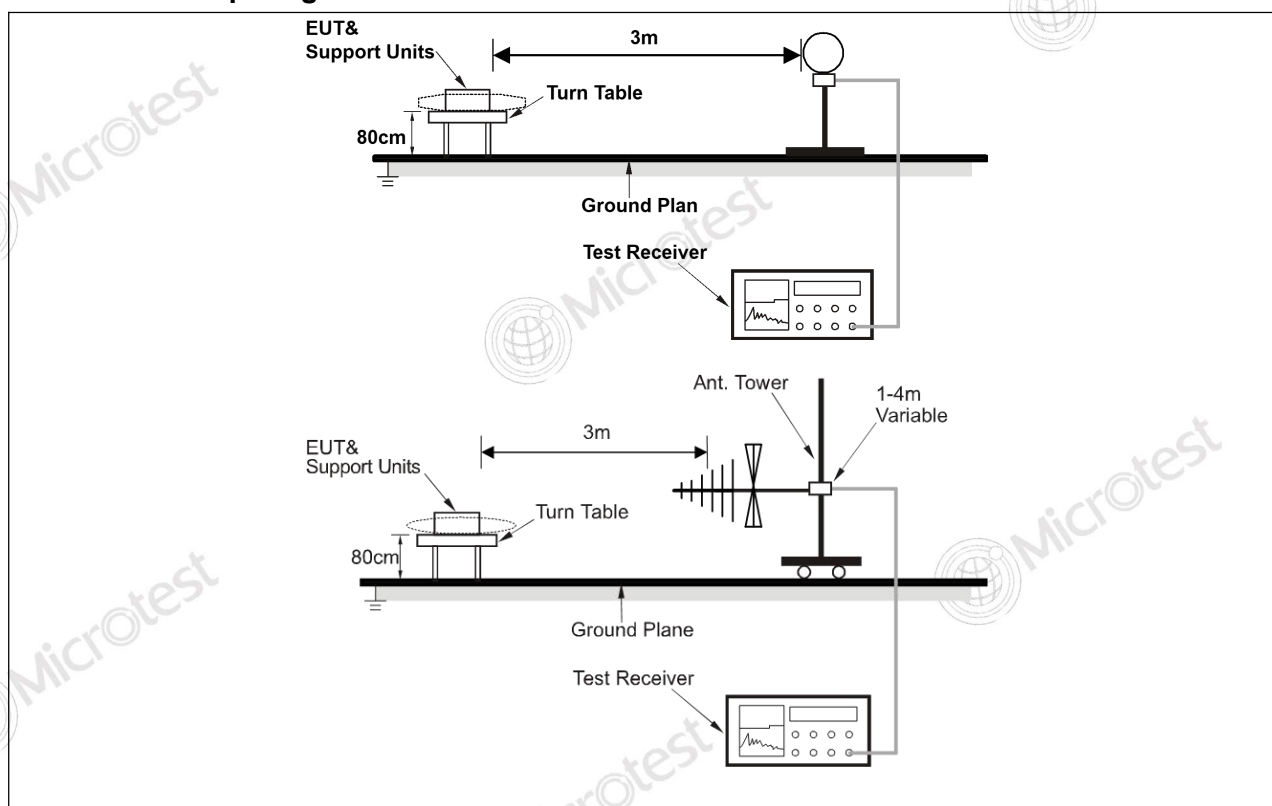
Report No.: MTi251219032-0102E1

|            |                                         |
|------------|-----------------------------------------|
| Procedure: | ANSI C63.10-2020+Cor 1-2023 section 6.5 |
|------------|-----------------------------------------|

## 6.5.1 E.U.T. Operation:

|                                                                                                                                                                        |       |           |      |                       |         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----------|------|-----------------------|---------|
| Operating Environment:                                                                                                                                                 |       |           |      |                       |         |
| Temperature:                                                                                                                                                           | 23 °C | Humidity: | 45 % | Atmospheric Pressure: | 101 kPa |
| Pre test mode:                                                                                                                                                         | Mode1 |           |      |                       |         |
| Final test mode:                                                                                                                                                       | Mode1 |           |      |                       |         |
| Note:                                                                                                                                                                  |       |           |      |                       |         |
| The amplitude of spurious emissions which are attenuated more than 20 dB below the limits are not reported.                                                            |       |           |      |                       |         |
| All modes of operation of the EUT were investigated, and only the worst-case results are reported. There were no emissions found below 30MHz within 20dB of the limit. |       |           |      |                       |         |

## 6.5.2 Test Setup Diagram:

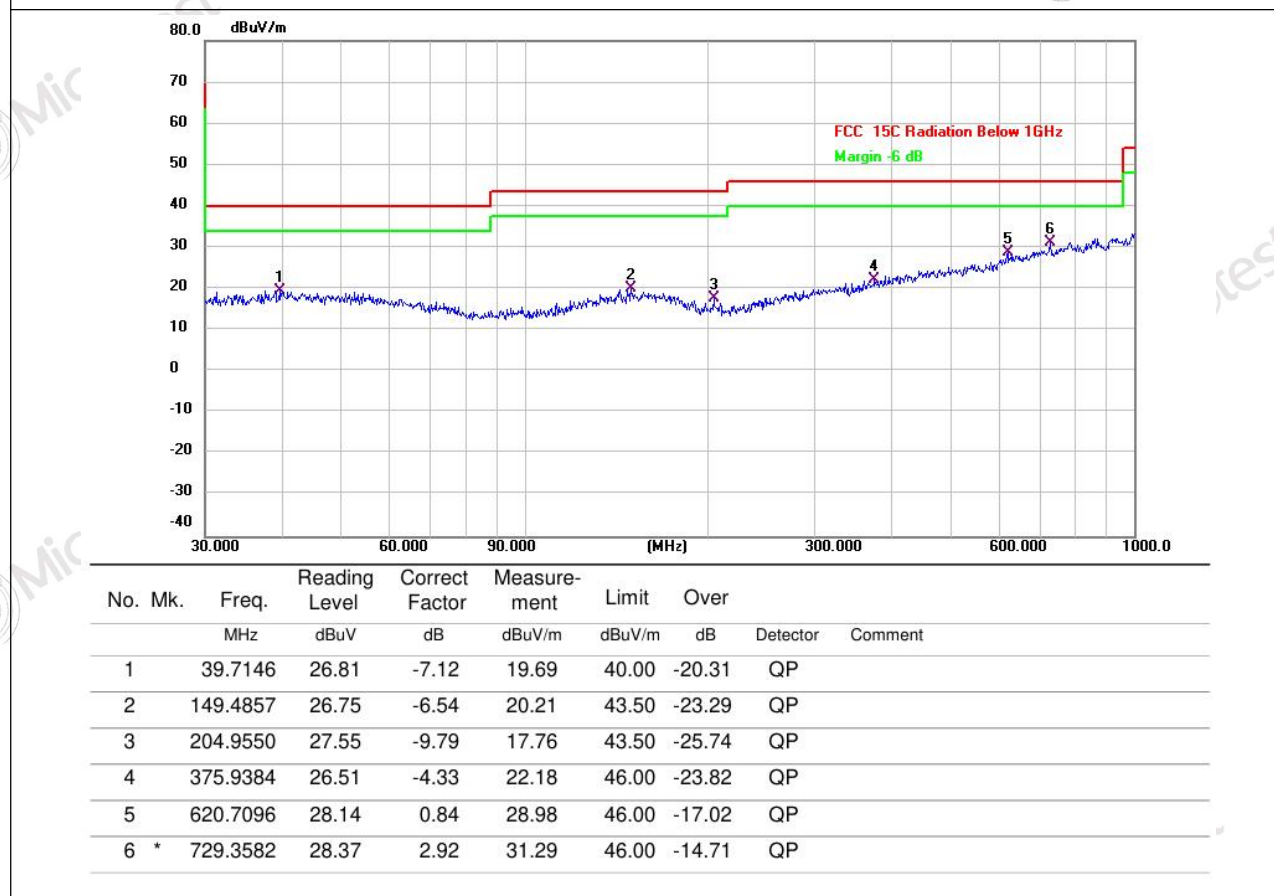


# TEST REPORT

Report No.: MTi251219032-0102E1

## 6.5.3 Test Data:

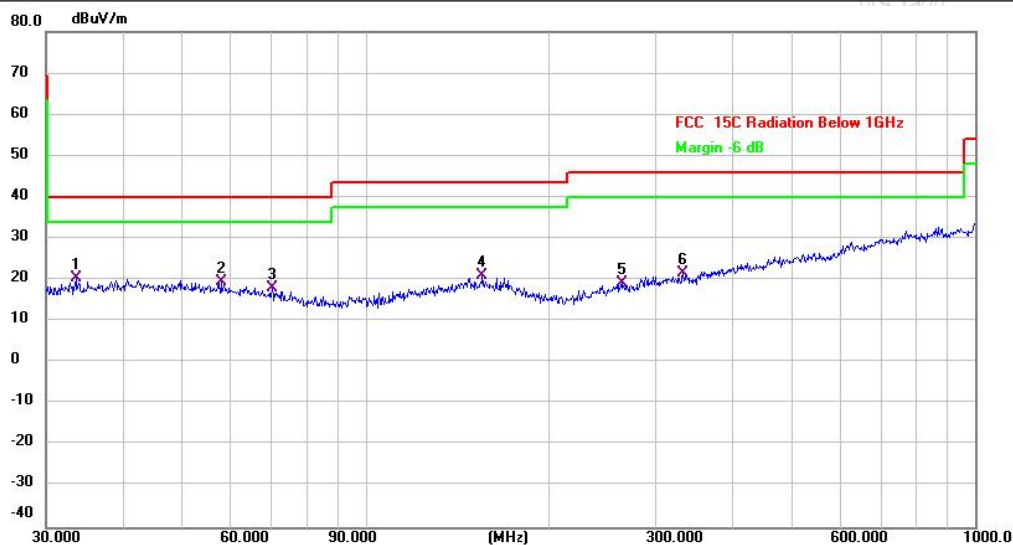
Mode1 / Polarization: Horizontal / CH: H



# TEST REPORT

Report No.: MTi251219032-0102E1

Mode1 / Polarization: Vertical / CH: H



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Over<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|------------|----------|---------|
| 1   | *   | 33.5623      | 28.20                    | -7.85                   | 20.35                      | 40.00           | -19.65     | QP       |         |
| 2   |     | 57.9992      | 27.72                    | -8.19                   | 19.53                      | 40.00           | -20.47     | QP       |         |
| 3   |     | 70.3365      | 27.71                    | -9.70                   | 18.01                      | 40.00           | -21.99     | QP       |         |
| 4   |     | 155.3642     | 27.18                    | -6.22                   | 20.96                      | 43.50           | -22.54     | QP       |         |
| 5   |     | 263.8190     | 26.33                    | -7.16                   | 19.17                      | 46.00           | -26.83     | QP       |         |
| 6   |     | 332.5187     | 26.98                    | -5.21                   | 21.77                      | 46.00           | -24.23     | QP       |         |

# TEST REPORT

Report No.: MTi251219032-0102E1

## 6.6 Emissions in frequency bands (above 1GHz)

| Test Requirement:     | 47 CFR 15.249(a)<br>47 CFR 15.249(d)<br>47 CFR 15.249(e)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                |                       |                                                  |                                                |             |    |     |                 |    |     |               |    |     |                |     |      |                 |                                   |                               |             |             |     |             |              |    |            |    |    |       |        |   |        |        |   |         |        |   |           |     |   |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|-----------------------|--------------------------------------------------|------------------------------------------------|-------------|----|-----|-----------------|----|-----|---------------|----|-----|----------------|-----|------|-----------------|-----------------------------------|-------------------------------|-------------|-------------|-----|-------------|--------------|----|------------|----|----|-------|--------|---|--------|--------|---|---------|--------|---|-----------|-----|---|
| Test Limit:           | <p>Except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:</p> <table border="1"> <thead> <tr> <th>Fundamental frequency</th><th>Field strength of fundamental (millivolts/meter)</th><th>Field strength of harmonics (microvolts/meter)</th></tr> </thead> <tbody> <tr> <td>902-928 MHz</td><td>50</td><td>500</td></tr> <tr> <td>2400-2483.5 MHz</td><td>50</td><td>500</td></tr> <tr> <td>5725-5875 MHz</td><td>50</td><td>500</td></tr> <tr> <td>24.0-24.25 GHz</td><td>250</td><td>2500</td></tr> </tbody> </table> <p>Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation.</p> <table border="1"> <thead> <tr> <th>Frequency (MHz)</th><th>Field strength (microvolts/meter)</th><th>Measurement distance (meters)</th></tr> </thead> <tbody> <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> </tbody> </table> <p>** 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.</p> <p>In the emission table above, the tighter limit applies at the band edges.</p> <p>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.</p> |                                                | Fundamental frequency | Field strength of fundamental (millivolts/meter) | Field strength of harmonics (microvolts/meter) | 902-928 MHz | 50 | 500 | 2400-2483.5 MHz | 50 | 500 | 5725-5875 MHz | 50 | 500 | 24.0-24.25 GHz | 250 | 2500 | 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 |
| Fundamental frequency | Field strength of fundamental (millivolts/meter)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Field strength of harmonics (microvolts/meter) |                       |                                                  |                                                |             |    |     |                 |    |     |               |    |     |                |     |      |                 |                                   |                               |             |             |     |             |              |    |            |    |    |       |        |   |        |        |   |         |        |   |           |     |   |
| 902-928 MHz           | 50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 500                                            |                       |                                                  |                                                |             |    |     |                 |    |     |               |    |     |                |     |      |                 |                                   |                               |             |             |     |             |              |    |            |    |    |       |        |   |        |        |   |         |        |   |           |     |   |
| 2400-2483.5 MHz       | 50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 500                                            |                       |                                                  |                                                |             |    |     |                 |    |     |               |    |     |                |     |      |                 |                                   |                               |             |             |     |             |              |    |            |    |    |       |        |   |        |        |   |         |        |   |           |     |   |
| 5725-5875 MHz         | 50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 500                                            |                       |                                                  |                                                |             |    |     |                 |    |     |               |    |     |                |     |      |                 |                                   |                               |             |             |     |             |              |    |            |    |    |       |        |   |        |        |   |         |        |   |           |     |   |
| 24.0-24.25 GHz        | 250                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2500                                           |                       |                                                  |                                                |             |    |     |                 |    |     |               |    |     |                |     |      |                 |                                   |                               |             |             |     |             |              |    |            |    |    |       |        |   |        |        |   |         |        |   |           |     |   |
| 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                                              |                       |                                                  |                                                |             |    |     |                 |    |     |               |    |     |                |     |      |                 |                                   |                               |             |             |     |             |              |    |            |    |    |       |        |   |        |        |   |         |        |   |           |     |   |
| Test Method:          | ANSI C63.10-2020+Cor 1-2023 section 6.6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                |                       |                                                  |                                                |             |    |     |                 |    |     |               |    |     |                |     |      |                 |                                   |                               |             |             |     |             |              |    |            |    |    |       |        |   |        |        |   |         |        |   |           |     |   |

# TEST REPORT

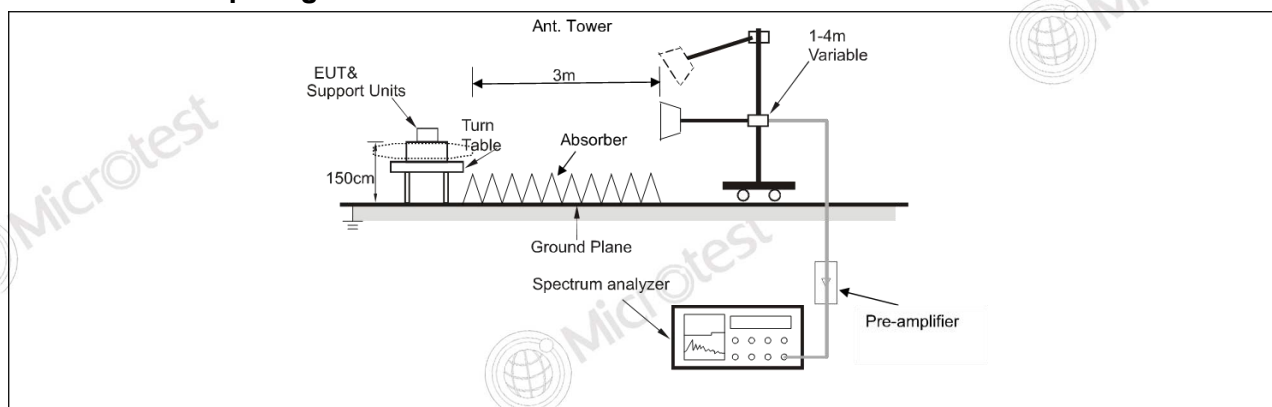
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|            |                                         |
|------------|-----------------------------------------|
| Procedure: | ANSI C63.10-2020+Cor 1-2023 section 6.6 |
|------------|-----------------------------------------|

## 6.6.1 E.U.T. Operation:

|                                                                                                                                                                                                                                                                |       |           |      |                       |         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----------|------|-----------------------|---------|
| Operating Environment:                                                                                                                                                                                                                                         |       |           |      |                       |         |
| Temperature:                                                                                                                                                                                                                                                   | 23 °C | Humidity: | 45 % | Atmospheric Pressure: | 101 kPa |
| Pre test mode:                                                                                                                                                                                                                                                 | Mode1 |           |      |                       |         |
| Final test mode:                                                                                                                                                                                                                                               | Mode1 |           |      |                       |         |
| Note: Test frequency are from 1GHz to 25GHz, the amplitude of spurious emissions which are attenuated more than 20 dB below the limits are not reported.<br>All modes of operation of the EUT were investigated, and only the worst-case results are reported. |       |           |      |                       |         |

## 6.6.2 Test Setup Diagram:



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## 6.6.3 Test Data:

Mode1 / Polarization: Horizontal / CH: L

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector |
| 1   |     | 4807.500 | 43.40         | 1.79           | 45.19       | 74.00  | -28.81 | peak     |
| 2   |     | 4807.500 | 41.46         | 1.79           | 43.25       | 54.00  | -10.75 | AVG      |
| 3   |     | 7211.250 | 43.06         | 7.55           | 50.61       | 74.00  | -23.39 | peak     |
| 4   | *   | 7211.250 | 38.97         | 7.55           | 46.52       | 54.00  | -7.48  | AVG      |
| 5   |     | 9615.000 | 42.86         | 8.84           | 51.70       | 74.00  | -22.30 | peak     |
| 6   |     | 9615.000 | 37.26         | 8.84           | 46.10       | 54.00  | -7.90  | AVG      |

Mode1 / Polarization: Vertical / CH: L

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector |
| 1   |     | 4807.500 | 41.88         | 1.79           | 43.67       | 74.00  | -30.33 | peak     |
| 2   |     | 4807.500 | 41.22         | 1.79           | 43.01       | 54.00  | -10.99 | AVG      |
| 3   |     | 7211.250 | 42.41         | 7.55           | 49.96       | 74.00  | -24.04 | peak     |
| 4   | *   | 7211.250 | 38.95         | 7.55           | 46.50       | 54.00  | -7.50  | AVG      |
| 5   |     | 9615.000 | 42.30         | 8.84           | 51.14       | 74.00  | -22.86 | peak     |
| 6   |     | 9615.000 | 37.27         | 8.84           | 46.11       | 54.00  | -7.89  | AVG      |

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Mode1 / Polarization: Horizontal / CH: M

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector |
| 1   |     | 4883.500 | 42.99         | 2.10           | 45.09       | 74.00  | -28.91 | peak     |
| 2   |     | 4883.500 | 42.04         | 2.10           | 44.14       | 54.00  | -9.86  | AVG      |
| 3   |     | 7325.250 | 40.54         | 7.95           | 48.49       | 74.00  | -25.51 | peak     |
| 4   | *   | 7325.250 | 38.57         | 7.95           | 46.52       | 54.00  | -7.48  | AVG      |
| 5   |     | 9767.000 | 41.16         | 9.34           | 50.50       | 74.00  | -23.50 | peak     |
| 6   |     | 9767.000 | 36.96         | 9.34           | 46.30       | 54.00  | -7.70  | AVG      |

Mode1 / Polarization: Vertical / CH: M

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector |
| 1   |     | 4883.500 | 42.78         | 2.10           | 44.88       | 74.00  | -29.12 | peak     |
| 2   |     | 4883.500 | 41.37         | 2.10           | 43.47       | 54.00  | -10.53 | AVG      |
| 3   |     | 7325.250 | 41.49         | 7.95           | 49.44       | 74.00  | -24.56 | peak     |
| 4   | *   | 7325.250 | 38.57         | 7.95           | 46.52       | 54.00  | -7.48  | AVG      |
| 5   |     | 9767.000 | 42.45         | 9.34           | 51.79       | 74.00  | -22.21 | peak     |
| 6   |     | 9767.000 | 36.77         | 9.34           | 46.11       | 54.00  | -7.89  | AVG      |

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Mode1 / Polarization: Horizontal / CH: H

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector |
| 1   |     | 4959.500 | 41.57         | 2.45           | 44.02       | 74.00  | -29.98 | peak     |
| 2   |     | 4959.500 | 40.65         | 2.45           | 43.10       | 54.00  | -10.90 | AVG      |
| 3   |     | 7439.250 | 41.20         | 7.79           | 48.99       | 74.00  | -25.01 | peak     |
| 4   | *   | 7439.250 | 38.62         | 7.79           | 46.41       | 54.00  | -7.59  | AVG      |
| 5   |     | 9919.000 | 41.42         | 9.17           | 50.59       | 74.00  | -23.41 | peak     |
| 6   |     | 9919.000 | 36.72         | 9.17           | 45.89       | 54.00  | -8.11  | AVG      |

Mode1 / Polarization: Vertical / CH: H

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector |
| 1   |     | 4959.500 | 41.14         | 2.45           | 43.59       | 74.00  | -30.41 | peak     |
| 2   |     | 4959.500 | 40.69         | 2.45           | 43.14       | 54.00  | -10.86 | AVG      |
| 3   |     | 7439.250 | 41.53         | 7.79           | 49.32       | 74.00  | -24.68 | peak     |
| 4   |     | 7439.250 | 38.87         | 7.79           | 46.66       | 54.00  | -7.34  | AVG      |
| 5   |     | 9919.000 | 42.49         | 9.17           | 51.66       | 74.00  | -22.34 | peak     |
| 6   | *   | 9919.000 | 37.57         | 9.17           | 46.74       | 54.00  | -7.26  | AVG      |

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### Photographs of the test setup

Refer to Appendix - Test Setup Photos

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### Photographs of the EUT

Refer to Appendix - EUT Photos

## TEST REPORT

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### Statement

1. This report is invalid without the seal and signature of the laboratory.
2. The test results of this report are only responsible for the samples submitted. Client shall be responsible for representativeness of the sample and authenticity of the material.
3. The report shall not be partially reproduced without the written consent of the Laboratory.
4. This report is invalid if transferred, altered or tampered with in any form without authorization.
5. The observations or tests with special mark fall outside the scope of accreditation, and are only used for purpose of commission, research, training, internal quality control etc.
6. Any objection to this report shall be submitted to the laboratory within 15 days from the date of receipt of the report.

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