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**FEDERAL COMMUNICATIONS COMMISSION**
Registration number: 556682



# *TEST REPORT*

| | |
|---|---|
| **Application No.:** | SZEMO090704238RF |
| **Applicant:** | Shenzhen Fuyeda Industry Development Corp. |
| **Manufacturer/ Factory:** | Shenzhen Fuyeda Industry Development Corp. |
| **Address of Applicant:** | No.1 NEWMEN ROAD. TONGSHENG VILLAGE, DALANG STREET, BAO'AN, SHENZHEN, CHINA |
| **FCC ID:** | V4P-MS150OR-1 |
| **Fundamental Carrier** | 2.402GHz to 2.480GHz |
| **Equipment Under Test (EUT):** | |
| Name: | MOUSE |
| Model: | MS-150OR |
| **Standards:** | FCC PART 15: 2008 |
| **Date of Receipt:** | 24 July 2009 |
| **Date of Test:** | 24 July to 05 August 2009 |
| **Date of Issue:** | 06 August 2009 |
| **Test Result :** | **PASS *** |

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Robinson Lo
Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.
The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. All test results in this report can be traceable to National or International Standards.

# 2 Test Summary

| Test | Test Requirement | Standard Paragraph | Result |
|---|---|---|---|
| **Flied Strength of Fundamental** | FCC PART 15 : 2008 | Section 15.249 (a) | PASS |
| **Flied Strength of Harmonics or other Frequency Emission** | FCC PART 15 : 2008 | Section 15.249 (a)<br>Section 15.209/15.205 | PASS |
| **Occupied Bandwidth** | FCC PART 15 : 2008 | Section 15.215/15.249 | PASS |

# 3 Contents

# 4 General Information

## 4.1 General Description of E.U.T

| | |
|---|---|
| Product Name: | MOUSE |
| Model: | MS-150OR |
| Operation Frequency | 2402MHz to 2480MHz |
| Modulated Type | FHSS (Frequency Hopping Spread Spectrum) |
| Channel Number | 125 Channels |
| Channel Spacing | 0.629MHz |
| Power Supply: | DC 3.0V(2*1.5V"AAA"Size Batteries) |
| Power Cord: | N/A- |

## 4.2 Description of Support Units

The EUT was tested with associated equipment below:

| Description | Manufacturer | Model No. |
|---|---|---|
| PC | DELL | OPTIPLEX 755 |
| LCD-displaying | DELL | E1909WF |
| KEYBOARD | DELL | SK-8115 |

## 4.3 Standards Applicable for Testing

The customer requested FCC tests for a 2.4G wireless mouse

The standard used was FCC PART 15, SUBPART C: 2008 section 15.249.

## 4.4 Test Location

All tests were performed at:

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, District Shenzhen, China 518057

Telephone: +86 (0) 755 2601 2053 Fax: +86 (0) 755 2671 0594

No tests were sub-contracted.

## 4.5 Other Information Requested by the Customer

None.

## 4.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations

- **CNAS (No. CNAS L2929)**
  CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.
- **VCCI**
  The 3m Semi-anechoic chamber and Shielded Room (7.5m x 4.0m x 3.0m) of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-2197 and C-2383 respectively.
  Date of Registration: September 29, 2008. Valid until September 28, 2011.
- **FCC – Registration No.: 556682**
  SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 556682, June 27, 2008.
- **Industry Canada (IC)**
  The 3m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1.

# 5 Test Results

## 5.1 Test Instruments

| RE in Chamber | | | | | | |
|---|---|---|---|---|---|---|
| **Item** | **Test Equipment** | **Manufacturer** | **Model No.** | **Inventory No.** | **Cal.Date (dd-mm-yy)** | **Cal.Due date (dd-mm-yy)** |
| 1 | 3m Semi-Anechoic Chamber | ETS-LINDGREN | N/A | SEL0017 | 16-06-2009 | 15-06-2010 |
| 2 | EMI Test Receiver | Rohde & Schwarz | ESIB26 | SEL0023 | 12-12-2008 | 11-12-2009 |
| 3 | EMI Test software | AUDIX | E3 | SEL0050 | N/A | N/A |
| 4 | Coaxial cable | SGS | N/A | SEL0028 | 18-06-2009 | 17-06-2010 |
| 5 | BiConiLog Antenna (26-3000MHz) | ETS-LINDGREN | 3142C | SEL0014 | 12-08-2009 | 11-08-2010 |
| 6 | Pre-amplifier (0.1-1300MHz) | Agilent Technologies | 8447D | SEL0053 | 18-06-2009 | 17-06-2010 |
| 7 | Double-ridged horn (1-18GHz) | ETS-LINDGREN | 3117 | SEL0005 | 12-08-2009 | 11-08-2010 |
| 8 | Horn Antenna (18-26GHz) | ETS-LINDGREN | 3160 | SEL0076 | 12-08-2009 | 11-08-2010 |
| 9 | Pre-amplifier (1-18GHz) | Rohde & Schwarz | AFS42-00101 800-25-S-42 | SEL0081 | 18-06-2009 | 17-06-2010 |
| 10 | Pre-amplifier (18-26GHz) | Rohde & Schwarz | AFS33-18002 650-30-8P-44 | SEL0080 | 18-06-2009 | 17-06-2010 |
| 11 | Band filter | Amindeon | 82346 | SEL0094 | 18-06-2009 | 17-06-2010 |
| 12 | Active Loop Antenna | Beijing Daze | ZN30900A | SEL0097 | 15-06-2009 | 14-06-2010 |

## 5.2 E.U.T. Operation

| | |
|---|---|
| Input voltage: | DC3.0V(2*1.5V"AAA"Size Batteries) |
| Operating Environment: | |
| Temperature: | 24°C |
| Humidity: | 50 % RH |
| Atmospheric Pressure: | 1010 mbar |
| EUT Operation: | Test in transmitting with modulation.<br>Lowest channel: channel 1=2402MHz,<br>Middle channel: channel 63=2441MHz,<br>Highest channel: channel 125=2480MHz. |

The EUT is a mouse and was configured by using an external test program. This program allowed the unit to transmit /receive on one of 3 channels (Low: 2402MHz, Middle: 2441MHz, High: 2480MHz). The unit was also programmed to hop on 125 channels with its normal pseudorandom rate. Worst case emission levels are provided in the test results data.

## 5.3 Test Procedure & Measurement Data

### 5.3.1 Radiated Emissions

#### 5.3.1.1 Test in transmitting mode

Test Requirement: FCC Part15.249,15.209 and 15.205

Test Method: ANSI C63.4: 2003

Measurement Distance: 3m (Semi-Anechoic Chamber)

Frequency range 30 MHz – 25GHz

Test instrumentation resolution bandwidth

| Frequency Range | Detector | RBW/VBW |
|---|---|---|
| 30MHz to 1000MHz | Quasi-Peak | 120KHz/300KHz |
| 1GHz to 25GHz | Peak | 1MHz/3MHz for Peak |
| | | 1MHz/10Hz for Average |

Operation: Receive antenna scan height 1 - 4 m, polarization Vertical/ Horizontal

| Fundamental Frequency (MHz) | Field Strength of Fundamental (dBuV/m @ 3m) | Field Strength of Harmonics and Spurious Emissions (dBuV/m @ 3m) |
|---|---|---|
| 902 to 928 | 94.0 | 54.0 |
| 2400 to 2483.5 | 94.0 | 54.0 |
| 5725 to 5875 | 94.0 | 54.0 |
| 24000 to 24250 | 108.0 | 68.0 |

The fundamental frequency of the EUT is 2.402GHz to 2.480GHz

The limit for average field strength for the fundamental frequency = 94.0 dBμV/m.

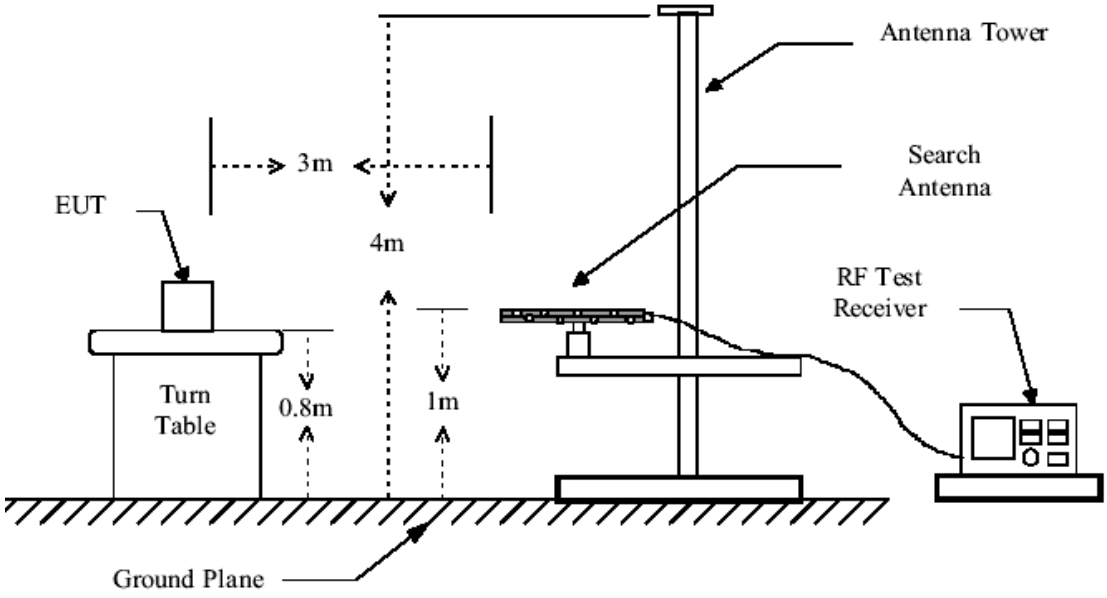
No fundamental is allowed in the restricted bands.

Test Procedure:

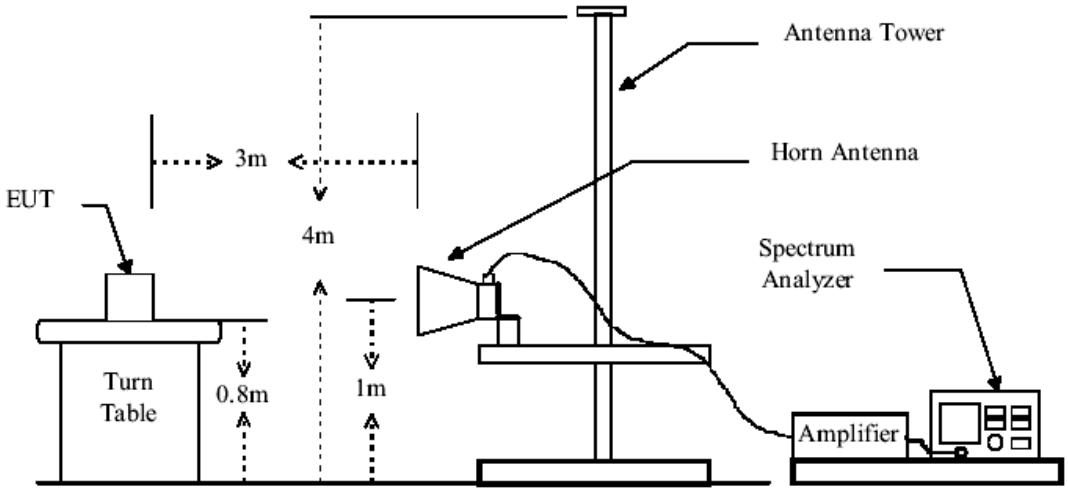
1. The EUT is placed on a turntable, which is 0.8m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.
7 The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

**Test Configuration:**

Below 1GHz




Above 1GHz



The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor

The following test results were performed on the EUT:

1. The following test results were performed at 30MHz—1GHz

Vertical:

| Frequency (MHz) | Cable Loss (dB) | Antenna Factor (dB/m) | Preamp Factor (dB) | Read Level (dBuV) | Quasi-peak Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) |
|---|---|---|---|---|---|---|---|
| 32.910 | 0.60 | 13.91 | 28.16 | 37.36 | 23.71 | 40.00 | -16.29 |
| 66.860 | 0.80 | 6.99 | 28.01 | 39.52 | 19.30 | 40.00 | -20.70 |
| 126.030 | 1.27 | 7.77 | 27.63 | 36.10 | 17.51 | 43.50 | -25.99 |
| 749.740 | 3.06 | 21.70 | 27.11 | 34.06 | 31.71 | 46.00 | -14.29 |
| 797.270 | 3.19 | 22.09 | 26.95 | 37.75 | 36.08 | 46.00 | -9.92 |
| 854.500 | 3.42 | 22.48 | 26.65 | 35.45 | 34.70 | 46.00 | -11.30 |

Horizontal

| Frequency (MHz) | Cable Loss (dB) | Antenna Factor (dB/m) | Preamp Factor (dB) | Read Level (dBuV) | Quasi-peak Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) |
|---|---|---|---|---|---|---|---|
| 32.910 | 0.60 | 13.84 | 28.16 | 30.38 | 16.66 | 40.00 | -23.34 |
| 126.030 | 1.27 | 7.77 | 27.63 | 34.37 | 15.78 | 43.50 | -27.72 |
| 183.260 | 1.37 | 9.97 | 27.24 | 34.47 | 18.57 | 43.50 | -24.93 |
| 210.420 | 1.46 | 10.73 | 27.10 | 34.92 | 20.01 | 43.50 | -23.49 |
| 710.940 | 2.94 | 21.60 | 27.24 | 40.38 | 37.68 | 46.00 | -8.32 |
| 749.740 | 3.06 | 21.70 | 27.11 | 38.56 | 36.21 | 46.00 | -9.79 |

2. The following test results were performed at above 1GHz

For 2402MHz:

Harmonics & Spurious Emissions

Peak Measurement

| Frequency (MHz) | Cable loss (dB) | Antenna factors (dB/m) | Preamp factor (dB) | Reading Level (dBμV) | Emission Level (dBμV/m) | Limit (dBμV/m) | Over limit | polarization |
|---|---|---|---|---|---|---|---|---|
| *2402.10* | *4.97* | *32.25* | *0* | *55.31* | *92.53* | *114* | *-21.47* | *Vertical* |
| 2198.50 | 4.71 | 32.13 | 44.71 | 47.17 | 39.30 | 74.00 | -34.70 | Vertical |
| 2386.50 | 4.97 | 32.24 | 44.75 | 47.14 | 39.60 | 74.00 | -34.40 | Vertical |
| 2400.00 | 4.97 | 32.25 | 44.75 | 45.54 | 38.01 | 74.00 | -35.99 | Vertical |
| 2562.80 | 5.10 | 32.46 | 44.80 | 46.71 | 39.47 | 74.00 | -34.53 | Vertical |
| 3749.50 | 5.86 | 33.30 | 45.08 | 49.25 | 43.33 | 74.00 | -30.67 | Vertical |
| 6099.50 | 7.24 | 35.45 | 45.66 | 48.48 | 45.51 | 74.00 | -28.49 | Vertical |
| *2402.10* | *4.97* | *32.25* | *0* | *45.31* | *82.53* | *114* | *-31.47* | *Horizontal* |
| 2245.50 | 4.77 | 32.16 | 44.72 | 51.77 | 43.98 | 74.00 | -30.02 | Horizontal |
| 2386.50 | 4.97 | 32.24 | 44.75 | 48.57 | 41.03 | 74.00 | -32.97 | Horizontal |
| 2400.00 | 4.97 | 32.25 | 44.75 | 46.68 | 39.15 | 74.00 | -34.85 | Horizontal |
| 2997.50 | 5.09 | 33.40 | 44.90 | 48.27 | 41.86 | 74.00 | -32.14 | Horizontal |
| 3749.50 | 5.86 | 33.30 | 45.08 | 51.92 | 46.00 | 74.00 | -28.00 | Horizontal |
| 6616.50 | 7.42 | 36.17 | 45.13 | 49.24 | 47.70 | 74.00 | -26.30 | Horizontal |

Average Measurement

| Frequency (MHz) | Cable loss (dB) | Antenna factors (dB/m) | Preamp factor (dB) | Reading Level (dBμV) | Emission Level (dBμV/m) | Limit (dBμV/m) | Over limit | polarization |
|---|---|---|---|---|---|---|---|---|
| *2402.10* | *4.97* | *32.25* | *0* | *45.65* | *82.87* | *94* | *-11.13* | *Vertical* |
| 2257.35 | 4.80 | 32.16 | 44.72 | 37.32 | 29.56 | 54.00 | -24.44 | Vertical |
| 2386.50 | 4.97 | 32.24 | 44.75 | 37.29 | 29.75 | 54.00 | -24.25 | Vertical |
| 2400.00 | 4.97 | 32.25 | 44.75 | 37.28 | 29.75 | 54.00 | -24.25 | Vertical |
| 2457.00 | 5.06 | 32.28 | 44.77 | 37.15 | 29.72 | 54.00 | -24.28 | Vertical |
| 3679.00 | 5.80 | 33.28 | 45.07 | 37.16 | 31.17 | 54.00 | -22.83 | Vertical |
| 6945.50 | 7.70 | 36.64 | 44.78 | 38.29 | 37.85 | 54.00 | -16.15 | Vertical |
| *2402.10* | *4.97* | *32.25* | *0* | *40.26* | *77.48* | *94* | *-16.52* | *Horizontal* |
| 2257.25 | 4.80 | 32.16 | 44.72 | 38.45 | 30.69 | 54.00 | -23.31 | Horizontal |
| 2398.25 | 4.97 | 32.25 | 44.75 | 38.04 | 30.51 | 54.00 | -23.49 | Horizontal |
| 2400.00 | 4.97 | 32.25 | 44.75 | 37.99 | 30.46 | 54.00 | -23.54 | Horizontal |
| 3256.00 | 5.38 | 33.29 | 44.96 | 37.04 | 30.75 | 54.00 | -23.25 | Horizontal |
| 4830.50 | 6.62 | 34.03 | 45.40 | 37.74 | 32.99 | 54.00 | -21.01 | Horizontal |
| 6957.25 | 7.70 | 36.64 | 44.78 | 38.19 | 37.75 | 54.00 | -16.25 | Horizontal |

For 2441MHz:

. Harmonics & Spurious Emissions

Peak Measurement

| Frequency (MHz) | Cable loss (dB) | Antenna factors (dB/m) | Preamp factor (dB) | Reading Level (dBμV) | Emission Level (dBμV/m) | Limit (dBμV/m) | Over limit | polarization |
|---|---|---|---|---|---|---|---|---|
| *2441.00* | *5.03* | *32.27* | *0* | *56.66* | *93.96* | *114* | *-20.04* | *Vertical* |
| 2327.75 | 4.88 | 32.20 | 44.74 | 46.65 | 38.99 | 74.00 | -35.01 | Vertical |
| 2468.75 | 5.06 | 32.28 | 44.77 | 45.89 | 38.46 | 74.00 | -35.54 | Vertical |
| 2609.75 | 5.10 | 32.56 | 44.81 | 46.43 | 39.28 | 74.00 | -34.72 | Vertical |
| 3491.00 | 5.65 | 33.20 | 45.02 | 46.39 | 40.22 | 74.00 | -33.78 | Vertical |
| 4995.00 | 6.69 | 34.00 | 45.46 | 46.89 | 42.12 | 74.00 | -31.88 | Vertical |
| 6452.00 | 7.33 | 35.92 | 45.29 | 46.73 | 44.69 | 74.00 | -29.31 | Vertical |
| *2441.00* | *5.03* | *32.27* | *0* | *45.28* | *82.58* | *114* | *-31.42* | *Horizontal* |
| 2386.50 | 4.97 | 32.24 | 44.75 | 45.63 | 38.09 | 74.00 | -35.91 | Horizontal |
| 2445.25 | 5.03 | 32.27 | 44.77 | 45.39 | 37.92 | 74.00 | -36.08 | Horizontal |
| 2750.75 | 5.10 | 32.88 | 44.84 | 47.41 | 40.55 | 74.00 | -33.45 | Horizontal |
| 3749.50 | 5.86 | 33.30 | 45.08 | 50.40 | 44.48 | 74.00 | -29.52 | Horizontal |
| 5183.00 | 6.80 | 34.25 | 45.51 | 46.52 | 42.06 | 74.00 | -31.94 | Horizontal |
| 6522.50 | 7.35 | 36.03 | 45.22 | 47.35 | 45.51 | 74.00 | -28.49 | Horizontal |

Average Measurement

| Frequency (MHz) | Cable loss (dB) | Antenna factors (dB/m) | Preamp factor (dB) | Reading Level (dBμV) | Emission Level (dBμV/m) | Limit (dBμV/m) | Over limit | polarization |
|---|---|---|---|---|---|---|---|---|
| *2441.00* | *5.03* | *32.27* | *0* | *46.08* | *83.38* | *94* | *-10.62* | *Vertical* |
| 2292.50 | 4.84 | 32.18 | 44.73 | 33.00 | 25.29 | 54.00 | -28.71 | Vertical |
| 2410.00 | 4.99 | 32.25 | 44.76 | 32.96 | 25.44 | 54.00 | -28.56 | Vertical |
| 3126.75 | 5.23 | 33.35 | 44.93 | 32.72 | 26.37 | 54.00 | -27.63 | Vertical |
| 5465.00 | 6.98 | 34.66 | 45.60 | 33.85 | 29.89 | 54.00 | -24.11 | Vertical |
| 7180.50 | 7.65 | 36.36 | 44.53 | 32.79 | 32.27 | 54.00 | -21.73 | Vertical |
| 9272.00 | 8.30 | 36.62 | 42.51 | 31.40 | 33.81 | 54.00 | -20.19 | Vertical |
| *2441.00* | *5.03* | *32.27* | *0* | *43.55* | *80.85* | *94* | *-13.15* | *Horizontal* |
| 2280.75 | 4.82 | 32.18 | 44.73 | 39.34 | 31.61 | 54.00 | -22.39 | Horizontal |
| 2527.50 | 5.10 | 32.37 | 44.79 | 38.47 | 31.15 | 54.00 | -22.85 | Horizontal |
| 3162.00 | 5.26 | 33.33 | 44.94 | 37.90 | 31.55 | 54.00 | -22.45 | Horizontal |
| 4290.00 | 6.31 | 33.82 | 45.24 | 38.33 | 33.22 | 54.00 | -20.78 | Horizontal |
| 6099.50 | 7.24 | 35.45 | 45.66 | 39.17 | 36.20 | 54.00 | -17.80 | Horizontal |
| 7180.50 | 7.65 | 36.36 | 44.53 | 37.83 | 37.31 | 54.00 | -16.69 | Horizontal |

For 2480MHz:

Harmonics & Spurious Emissions

Peak Measurement

| Frequency (MHz) | Cable loss (dB) | Antenna factors (dB/m) | Preamp factor (dB) | Reading Level (dBμV) | Emission Level (dBμV/m) | Limit (dBμV/m) | Over limit | polarization |
|---|---|---|---|---|---|---|---|---|
| *2480.00* | *5.08* | *32.29* | *0* | *63.58* | *100.95* | *114* | *-13.05* | *Vertical* |
| 2280.75 | 4.82 | 32.18 | 44.73 | 45.13 | 37.40 | 74.00 | -36.60 | Vertical |
| 2483.50 | 5.08 | 32.29 | 44.77 | 44.97 | 37.57 | 74.00 | -36.43 | Vertical |
| 2492.25 | 5.10 | 32.30 | 44.78 | 45.71 | 38.33 | 74.00 | -35.67 | Vertical |
| 3749.50 | 5.86 | 33.30 | 45.08 | 49.93 | 44.01 | 74.00 | -29.99 | Vertical |
| 4689.50 | 6.56 | 34.06 | 45.36 | 46.98 | 42.24 | 74.00 | -31.76 | Vertical |
| 6111.25 | 7.25 | 35.45 | 45.65 | 47.68 | 44.73 | 74.00 | -29.27 | Vertical |
| *2480.00* | *5.08* | *32.29* | *0* | *50.14* | *87.51* | *114* | *-26.49* | *Horizontal* |
| 2292.50 | 4.84 | 32.18 | 44.73 | 45.05 | 37.34 | 74.00 | -36.66 | Horizontal |
| 2483.50 | 5.08 | 32.29 | 44.77 | 46.99 | 39.59 | 74.00 | -34.41 | Horizontal |
| 2504.00 | 5.10 | 32.32 | 44.78 | 45.11 | 37.75 | 74.00 | -36.25 | Horizontal |
| 2786.00 | 5.09 | 32.95 | 44.85 | 44.92 | 38.11 | 74.00 | -35.89 | Horizontal |
| 3749.50 | 5.86 | 33.30 | 45.08 | 49.56 | 43.64 | 74.00 | -30.36 | Horizontal |
| 6123.00 | 7.25 | 35.47 | 45.65 | 47.23 | 44.30 | 74.00 | -29.70 | Horizontal |

Average Measurement

| Frequency (MHz) | Cable loss (dB) | Antenna factors (dB/m) | Preamp factor (dB) | Reading Level (dBμV) | Emission Level (dBμV/m) | Limit (dBμV/m) | Over limit | polarization |
|---|---|---|---|---|---|---|---|---|
| *2480.00* | *5.08* | *32.29* | *0* | *53.28* | *90.65* | *94* | *-3.35* | *Vertical* |
| 2292.50 | 4.84 | 32.18 | 44.73 | 37.05 | 29.34 | 54.00 | -24.66 | Vertical |
| 2483.50 | 5.08 | 32.29 | 44.77 | 36.75 | 29.35 | 54.00 | -24.65 | Vertical |
| 2492.25 | 5.10 | 32.30 | 44.78 | 36.73 | 29.35 | 54.00 | -24.65 | Vertical |
| 3432.25 | 5.57 | 33.22 | 45.00 | 36.79 | 30.58 | 54.00 | -23.42 | Vertical |
| 5465.00 | 6.98 | 34.66 | 45.60 | 37.69 | 33.73 | 54.00 | -20.27 | Vertical |
| 7709.25 | 7.69 | 35.89 | 43.98 | 36.50 | 36.10 | 54.00 | -17.90 | Vertical |
| *2480.00* | *5.08* | *32.29* | *0* | *45.28* | *82.65* | *94* | *-11.35* | *Horizontal* |
| 2280.75 | 4.82 | 32.18 | 44.73 | 36.96 | 29.23 | 54.00 | -24.77 | Horizontal |
| 2483.50 | 5.08 | 32.29 | 44.77 | 36.66 | 29.26 | 54.00 | -24.74 | Horizontal |
| 2492.25 | 5.10 | 32.30 | 44.78 | 36.64 | 29.26 | 54.00 | -24.74 | Horizontal |
| 3608.50 | 5.73 | 33.25 | 45.05 | 36.84 | 30.77 | 54.00 | -23.23 | Horizontal |
| 5159.50 | 6.79 | 34.23 | 45.51 | 37.65 | 33.16 | 54.00 | -20.84 | Horizontal |
| 7709.25 | 7.69 | 35.89 | 43.98 | 36.48 | 36.08 | 54.00 | -17.92 | Horizontal |

N/A: refer to remark 1).

Remark:

1). For this intentional radiator operates below 10 GHz, the spectrum shall be investigated to the tenth harmonic of the highest fundamental frequency. And above the fifth harmonic of this intentional radiator, the disturbance is very low. So the test result only displays to $4^{th}$ harmonic.

2). According to 15.249 (e) As shown in Section 15.35(b), for frequencies above 1000 MHz, the above field strength limits 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.

TEST RESULTS: The unit does meet the FCC requirements.

## 5.3.2 Occupy Bandwidth

Test Requirement: FCC Part 15.215 and part 15.249

Test Method: ANSI C63.4: 2003

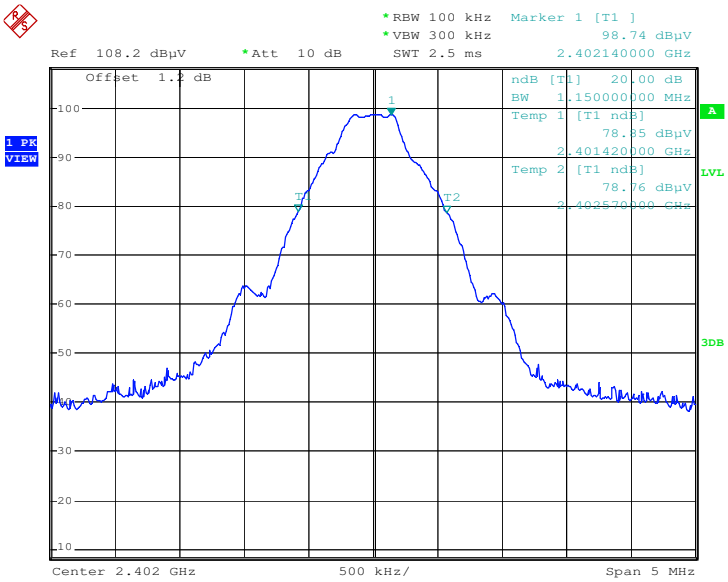
Requirement: Operation within the band 2402 – 2480MHz

Results:

| Channel | Frequency (MHz) | Occupy bandwidth(MHz) | Results |
|---|---|---|---|
| Lowest | 2402 | 1.15 | Pass |
| Middle | 2441 | 1.17 | Pass |
| Highest | 2480 | 1.21 | Pass |

**The occupied bandwidth as below:**

1. For 2402MHz:

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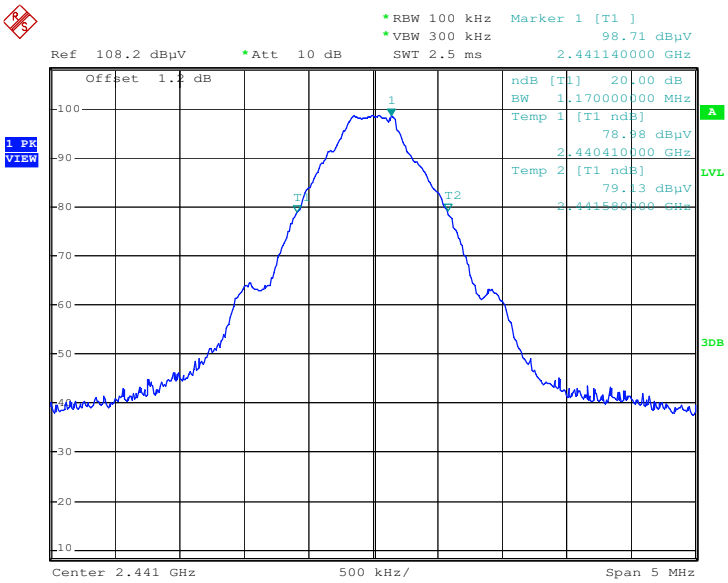
2. For 2441MHz:

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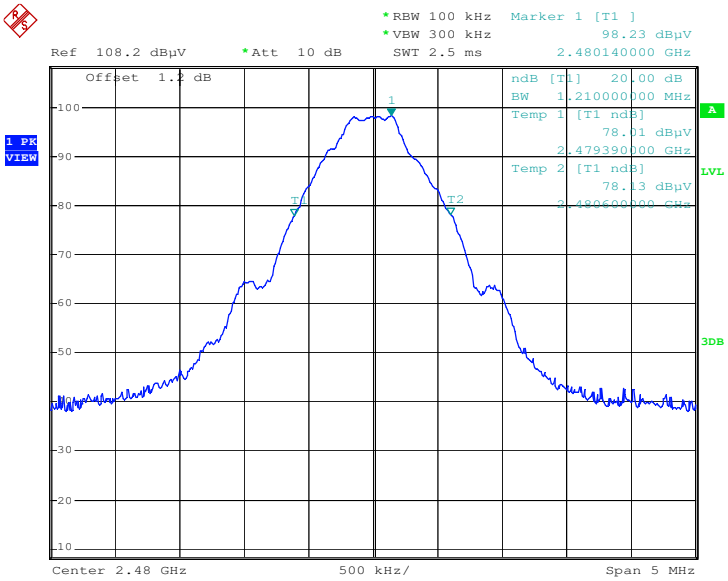
3. For 2480MHz:

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