



FCC 47 CFR PART 15 SUBPART C

TEST REPORT

For

Applicant : SUNYOUNG ELECTRONIC (SHENZHEN) CO., LTD

Address : Room 2811, United Plaza A, No.5022, Binhe Road,
Futian District , Shenzhen, China

Product Name : Wireless Mouse Receiver

Model Name : RM001A, RM001X(X:B-Z)

Brand Name : N/A

FCC ID : X4TSY666RM001X

Report No. : MOST/STS100102F1

Date of Issue : February 3, 2010

Issued by : Most Technology Service Co., Ltd.

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1. VERIFICATION OF CONFORMITY

Equipment Under Test: Wireless Mouse Receiver
Brand Name: N/A
Model Number: RM001A, RM001X(X:B-Z)
FCC ID: X4TSY666RM001X
Applicant: SUNYOUNG ELECTRONIC (SHENZHEN) CO., LTD
Room 2811, United Plaza A, No.5022, Binhe Road, Futian District ,
Shenzhen, China
Manufacturer: SUNYOUNG ELECTRONIC (SHENZHEN) CO., LTD
Room 2811, United Plaza A, No.5022, Binhe Road, Futian District ,
Shenzhen, China
Technical Standards: 47 CFR Part 15 Subpart C
File Number: MOST/STS100102F1
Date of test: January 18, 2010 - February 3, 2010
Deviation: None
Condition of Test Sample: Normal
Test Result: PASS

The above equipment was tested by MOST for compliance with the requirements set forth in FCC rules and the Technical Standards mentioned above. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment and the level of the immunity endurance of the equipment are within the compliance requirements.

The test results of this report relate only to the tested sample identified in this report.

Tested by (+ signature):

Petter Ping

Petter Ping

February 3, 2010



Review by (+ signature):

July Wen

July Wen

February 3, 2010

Approved by (+ signature):

Terry Yang

Terry Yang

February 3, 2010

2. GENERAL INFORMATION

2.1 Product Information

| | |
|--------------------------|--|
| Product | Wireless Mouse |
| Trade Name | N/A |
| Model Number | RM001A |
| Power Supply | DC 5.0 V by USB Port |
| Frequency Range | 2404 MHz -2477MHz |
| Modulation Type | FSK (GFSK) |
| Channel Number | 16 (2404MHz, 2407MHz, 2414MHz, 2417MHz, 2424MHz, 2427MHz, 2434MHz, 2437MHz, 2444MHz, 2447MHz, 2454MHz, 2457MHz, 2464 MHz, 2464 MHz, 2474 MHz,2477 MHz) |
| Temperature Range | -20°C ~ 55°C |

NOTE:

1. Please refer to Appendix I for the photographs of the EUT. For a more detailed features description about the EUT, please refer to User's Manual.

2.2 Objective

The objective of the report is to perform tests according to 47 CFR Part 15 Subpart C for the EUT FCC ID Certification:

| No. | Identity | Document Title |
|-----|-------------------------------------|-------------------------|
| 1 | 47 CFR Part 15 (10-1-05 Edition) | Radio Frequency Devices |

2.3 Test Standards and Results

Test items and the results are as bellow:

| No. | Section | Description | Result | Date of Test |
|-----|-----------|------------------------------------|--------|--------------|
| 1 | 15.249(a) | Spurious Emission | PASS | 2010-01-18 |
| 2 | 15.249(a) | Band Edge | PASS | 2010-01-18 |
| 3 | 15.207 | Power Line Conducted Emission Test | PASS | 2010-02-103 |

Note: 1. The test result judgment is decided by the limit of measurement standard
2. The information of measurement uncertainty is available upon the customer's request.

2.4 Environmental Conditions

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

- Temperature: 15-35°C
- Humidity: 30-60 %
- Atmospheric pressure: 86-106 kPa

3. TEST FACILITY

3.1 TEST FACILITY

Test Site: Most Technology Service Co.,ltd

Location: No.5, Nangshan 2nd Rd., North Hi-Tech Industrial park , Nanshan Shenzhen, Guangdong ,China

Description: There is one 3m semi-anechoic an area test sites and two line conducted labs for final test. The Open Area Test Sites and the Line Conducted labs are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:2003 and CISPR 16 requirements. The FCC Registration Number is **490827**.

Site Filing: The site description is on file with the Federal Communications Commission, 7435 Oakland Mills Road, Columbia, MD 21046.

Instrument Tolerance: All measuring equipment is in accord with ANSI C63.4:2003 and CISPR 16 requirements that meet industry regulatory agency and accreditation agency requirement.

Ground Plane: Two conductive reference ground planes were used during the Line Conducted Emission, one in vertical and the other in horizontal. The dimensions of these ground planes are as below. The vertical ground plane was placed distancing 40 cm to the rear of the wooden test table on where the EUT and the support equipment were placed during test. The horizontal ground plane projected 50 cm beyond the footprint of the EUT system and distanced 80 cm to the wooden test table. For Radiated Emission Test, one horizontal conductive ground plane extended at least 1m beyond the periphery of the EUT and the largest measuring antenna, and covered the entire area between the EUT and the antenna. It has no holes or gaps having longitudinal dimensions larger than one-tenth of a wavelength at the highest frequency of measurement up to 1GHz.

3.2 GENERAL TEST PROCEDURES

EUT Function and Test Mode

The EUT has been tested under normal operating (TX) and standby (RX) condition.

The field strength of radiation emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis).

The following data show only with the worst case setup.

The worst case of Y axis was reported.

Based on client request, all normal using modes of the Bluetooth function were tested but only the worst test data of the worst mode is reported by this report.

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4:2003, Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4:2003.

3.3 FCC PART 15.205 RESTRICTED BANDS OF OPERATIONS

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

| MHz | MHz | MHz | GHz |
|----------------------------|-----------------------|-----------------|------------------|
| 0.090 - 0.110 | 16.42 - 16.423 | 399.9 - 410 | 4.5 - 5.15 |
| ¹ 0.495 - 0.505 | 16.69475 - 16.69525 | 608 - 614 | 5.35 - 5.46 |
| 2.1735 - 2.1905 | 16.80425 - 16.80475 | 960 - 1240 | 7.25 - 7.75 |
| 4.125 - 4.128 | 25.5 - 25.67 | 1300 - 1427 | 8.025 - 8.5 |
| 4.17725 - 4.17775 | 37.5 - 38.25 | 1435 - 1626.5 | 9.0 - 9.2 |
| 4.20725 - 4.20775 | 73 - 74.6 | 1645.5 - 1646.5 | 9.3 - 9.5 |
| 6.215 - 6.218 | 74.8 - 75.2 | 1660 - 1710 | 10.6 - 12.7 |
| 6.26775 - 6.26825 | 108 - 121.94 | 1718.8 - 1722.2 | 13.25 - 13.4 |
| 6.31175 - 6.31225 | 123 - 138 | 2200 - 2300 | 14.47 - 14.5 |
| 8.291 - 8.294 | 149.9 - 150.05 | 2310 - 2390 | 15.35 - 16.2 |
| 8.362 - 8.366 | 156.52475 - 156.52525 | 2483.5 - 2500 | 17.7 - 21.4 |
| 8.37625 - 8.38675 | 156.7 - 156.9 | 2655 - 2900 | 22.01 - 23.12 |
| 8.41425 - 8.41475 | 162.0125 - 167.17 | 3260 - 3267 | 23.6 - 24.0 |
| 12.29 - 12.293 | 167.72 - 173.2 | 3332 - 3339 | 31.2 - 31.8 |
| 12.51975 - 12.52025 | 240 - 285 | 3345.8 - 3358 | 36.43 - 36.5 |
| 12.57675 - 12.57725 | 322 - 335.4 | 3600 - 4400 | (²) |
| 13.36 - 13.41 | | | |

¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

² Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

4. SETUP OF EQUIPMENT UNDER TEST**4.1 SUPPORT EQUIPMENT**

| Device Type | Brand | Model | FCC ID | Series No. | Data Cable | Power Cord |
|-------------|--------|-------|--------|------------|------------|------------|
| Notebook | Lenovo | X200 | -- | -- | -- | -- |

Remark:

All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4.2 TEST EQUIPMENT LIST

Instrumentation: The following list contains equipment used at Most for testing. The equipment conforms to the CISPR 16-1 / ANSI C63.2 Specifications for Electromagnetic Interference and Field Strength Instrumentation from 10 kHz to 1.0 GHz or above.

| No. | Equipment | Manufacturer | Model No. | S/N | Calculator due date |
|-----|--------------------------------------|-------------------|----------------|-------------|---------------------|
| 1 | Test Receiver | Rohde & Schwarz | ESCI | 100492 | 2010/03/14 |
| 2 | L.I.S.N. | Rohde & Schwarz | ENV216 | 100093 | 2010/03/14 |
| 3 | Coaxial Switch | Anritsu Corp | MP59B | 6200283933 | 2010/03/14 |
| 4 | Terminator | Hubersuhner | 50Ω | No.1 | 2010/03/14 |
| 5 | RF Cable | SchwarzBeck | N/A | No.1 | 2010/03/14 |
| 6 | Test Receiver | Rohde & Schwarz | ESPI | 101202 | 2010/03/14 |
| 7 | Bilog Antenna | SCHWARZBECK | BBHA9120D | D69250 | 2010/03/14 |
| 8 | Cable | Resenberger | N/A | NO.1 | 2010/03/14 |
| 9 | Cable | SchwarzBeck | N/A | NO.2 | 2010/03/14 |
| 10 | Cable | SchwarzBeck | N/A | NO.3 | 2010/03/14 |
| 11 | DC Power Filter | DuoJi | DL2×30B | N/A | 2010/03/14 |
| 12 | Single Phase Power Line Filter | DuoJi | FNF 202B30 | N/A | 2010/03/14 |
| 13 | 3 Phase Power Line Filter | DuoJi | FNF 402B30 | N/A | 2010/03/14 |
| 14 | Test Receiver | Rohde & Schwarz | ESCI | 100492 | 2010/03/14 |
| 15 | Absorbing Clamp | Luthi | MDS21 | 3635 | 2010/03/14 |
| 16 | Coaxial Switch | Anritsu Corp | MP59B | 6200283933 | 2010/03/14 |
| 17 | AC Power Source | Kikusui | AC40MA | LM003232 | 2010/03/14 |
| 18 | Test Analyzer | Kikusui | KHA1000 | LM003720 | 2010/03/14 |
| 19 | Line Impedance Network | Kikusui | LIN40MA-PCR-L | LM002352 | 2010/03/14 |
| 20 | ESD Tester | Kikusui | KES4021 | LM003537 | 2010/03/14 |
| 21 | EMCPRO System | EM Test | UCS-500-M4 | V0648102026 | 2010/03/14 |
| 22 | Signal Generator | IFR | 2032 | 203002/100 | 2010/03/14 |
| 23 | Amplifier | A&R | 150W1000 | 301584 | 2010/03/14 |
| 24 | CDN | FCC | FCC-801-M2-25 | 47 | 2010/03/14 |
| 25 | CDN | FCC | FCC-801-M3-25 | 107 | 2010/03/14 |
| 26 | EM Injection Clamp | FCC | F-203I-23mm | 403 | 2010/03/14 |
| 27 | RF Cable | MIYAZAKI | N/A | No.1/No.2 | 2010/03/14 |
| 28 | Universal Radio Communication Tester | ROHDE&SCHWARZ | CMU200 | 0304789 | 2010/03/14 |
| 29 | Telecommunication Antenna | European Antennas | PSA 75301R/170 | 0304213 | 2010/03/14 |
| 30 | Telecommunication Test Equipment | R&S | CMU200 | N/A | 2010/03/14 |

NOTE: Equipments listed above have been calibrated and are in the period of validation.

5. 47 CFR Part 15C 15.249 Requirements

5.1 Spurious Emission Test

5.1.1 Requirement

According to FCC section 15.249(a):

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 (MHz) | Field Strength of Fundamental (mV/m) | Field Strength of Harmonics (μV/m) |
|-----------------------------|--------------------------------------|------------------------------------|
| 902-928 | 50 | 500 |
| 2400-2483.5 | 50 | 500 |
| 5725-5875 | 50 | 500 |
| 24000-24250 | 250 | 2500 |

According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

| Frequency (MHz) | Field Strength (μV/m) | Measurement Distance (m) |
|-----------------|-----------------------|--------------------------|
| 1.705 - 30.0 | 30 | 30 |
| 30 - 88 | 100 | 3 |
| 88 - 216 | 150 | 3 |
| 216 - 960 | 200 | 3 |
| Above 960 | 500 | 3 |

Remark: 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., Sections 15.231 and 15.241.

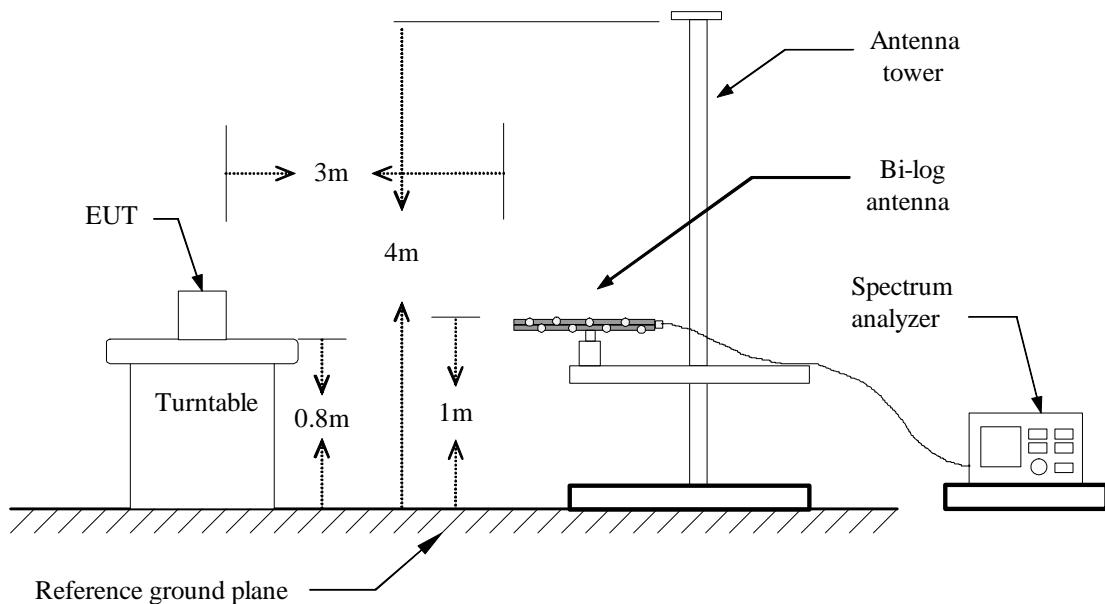
In the above emission table, the tighter limit applies at the band edges.

| Frequency (MHz) | Field Strength (μV/m) | Measurement Distance (m) |
|-----------------|-----------------------|--------------------------|
| 30 - 88 | 100 | 3 |
| 88 - 216 | 150 | 3 |
| 216 - 960 | 200 | 3 |
| Above 960 | 500 | 3 |

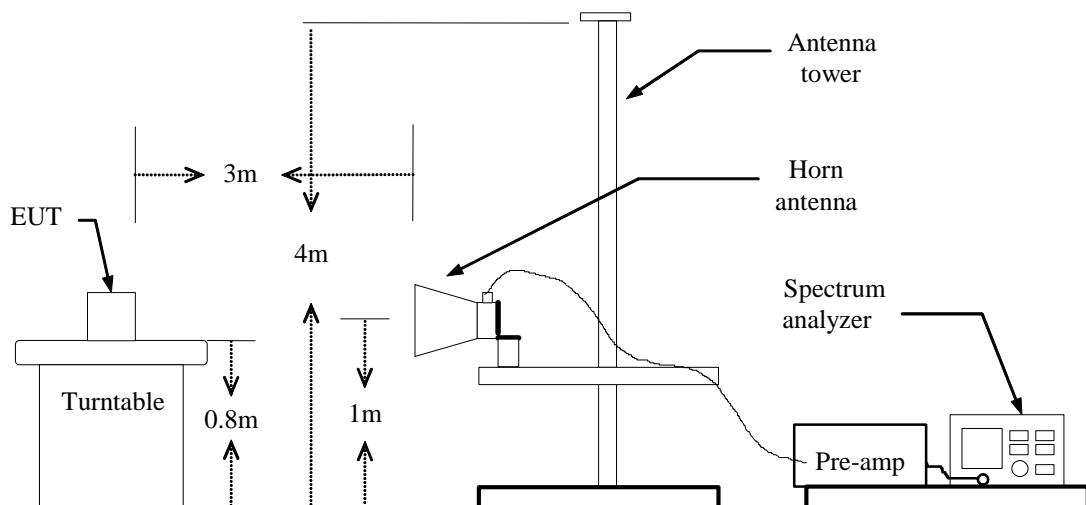
5.1.2 Test Description

Test Setup:

Below 1GHz:



Above 1GHz:



5.1.3 Test Description

5.1.4 Test Result

Below 1 GHz

Test Mode: Operating Mode/ CH Low **Test Date:** January 18, 2010
Temperature: 20°C **Tested by:** Petter Ping
Humidity: 70 % RH **Polarity:** Ver. / Hor.

| Freq. (MHz) | Ant.Pol. H/V | Detector Mode (PK/QP) | Reading (dBuV) | Factor (dB) | Actual FS (dBuV/m) | Limit 3m (dBuV/m) | Safe Margin (dB) |
|----------------|-----------------|-----------------------------|-------------------|----------------|-----------------------|----------------------|---------------------|
| 297.72 | V | Peak | 4.39 | 19.30 | 23.69 | 46.00 | -22.31 |
| -- | | | | | | | > 20 |
| 282.20 | H | Peak | 4.35 | 19.42 | 23.77 | 46.00 | -22.23 |
| -- | | | | | | | > 20 |

Notes:

1. Measuring frequencies from 30 MHz to the 1GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown “---” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
4. The IF bandwidth of SPA between 30MHz to 1GHz was 100 kHz.

Test Mode: Operating Mode/ CH Middle **Test Date:** January 18, 2010
Temperature: 20°C **Tested by:** Petter Ping
Humidity: 70 % RH **Polarity:** Ver. / Hor.

| Freq. (MHz) | Ant.Pol. H/V | Detector Mode (PK/QP) | Reading (dBuV) | Factor (dB) | Actual FS (dBuV/m) | Limit 3m (dBuV/m) | Safe Margin (dB) |
|----------------|-----------------|-----------------------------|-------------------|----------------|-----------------------|----------------------|---------------------|
| 429.64 | V | Peak | 4.18 | 20.30 | 24.48 | 46.00 | -21.52 |
| -- | | | | | | | > 20 |
| -- | | | | | | | > 20 |
| -- | | | | | | | > 20 |

Notes:

1. Measuring frequencies from 30 MHz to the 1GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown “---” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
4. The IF bandwidth of SPA between 30MHz to 1GHz was 100 kHz.

Test Mode: Operating Mode/ CH High
Temperature: 20°C
Humidity: 70 % RH

Test Date: January 18, 2010
Tested by: Petter Ping
Polarity: Ver. / Hor.

| Freq. (MHz) | Ant.Pol. H/V | Detector Mode (PK/QP) | Reading (dBuV) | Factor (dB) | Actual FS (dBuV/m) | Limit 3m (dBuV/m) | Safe Margin (dB) |
|----------------|-----------------|-----------------------------|-------------------|----------------|-----------------------|----------------------|---------------------|
| 494.63 | V | Peak | 4.27 | 21.51 | 25.78 | 46.00 | -20.22 |
| -- | | | | | | | > 20 |
| -- | | | | | | | > 20 |

Notes:

1. Measuring frequencies from 30 MHz to the 1GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown “---” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
4. The IF bandwidth of SPA between 30MHz to 1GHz was 100 kHz.

Above 1 GHz

Operation Mode: CH Low **Test Date:** January 18, 2010
Temperature: 20°C **Tested by:** Petter Ping
Humidity: 70 % RH **Polarity:** Ver. / Hor.

| Freq. (MHz) | Ant. Pol H/V | Peak Reading (dBuV) | AV Reading (dBuV) | Ant. / CL CF (dB) | Actual Fs | | Peak Limit (dBuV/m) | AV Limit (dBuV/m) | Margin (dB) | Remark |
|----------------|--------------------|---------------------------|-------------------------|----------------------------|------------------|----------------|---------------------------|-------------------------|----------------|--------|
| | | | | | Peak (dBuV/m) | AV (dBuV/m) | | | | |
| 2404.03 | H | 75.32 | -- | 6.15 | 81.47 | -- | 94.00 | -- | -12.53 | |
| 4808.10 | H | 31.60 | -- | 8.21 | 39.81 | -- | 74.00 | 54.00 | -14.19 | |
| N/A | | | | | | | | | >20 | |
| N/A | | | | | | | | | | |
| 2404.03 | V | 63.29 | -- | 6.15 | 69.44 | -- | 94.00 | -- | -24.25 | |
| 4808.10 | V | 28.51 | -- | 8.21 | 36.72 | -- | 74.00 | 54.00 | -17.28 | Peak |
| N/A | | | | | | | | | >20 | |
| N/A | | | | | | | | | | |

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz - 26GHz, RBW = 1MHz, VBW = 1MHz, Sweep time = 200 ms.
 - b. AV Setting 1GHz - 26GHz, RBW = 1MHz, VBW = 10Hz, Sweep time = 200 ms.

Operation Mode: CH Mid **Test Date:** January 18, 2010
Temperature: 20°C **Tested by:** Petter Ping
Humidity: 70 % RH **Polarity:** Ver. / Hor.

| Freq. (MHz) | Ant. Pol H/V | Peak Reading (dBuV) | AV Reading (dBuV) | Ant. / CL CF (dB) | Actual Fs | | Peak Limit (dBuV/m) | AV Limit (dBuV/m) | Margin (dB) | Remark |
|----------------|--------------------|---------------------------|-------------------------|----------------------------|------------------|----------------|---------------------------|-------------------------|----------------|--------|
| | | | | | Peak (dBuV/m) | AV (dBuV/m) | | | | |
| 2444.05 | H | 70.11 | --- | 6.90 | 77.01 | --- | 94.00 | --- | -16.99 | |
| 4888.13 | H | 31.21 | --- | 8.36 | 39.57 | --- | 74.00 | 54.00 | -14.43 | Peak |
| N/A | | | | | | | | | >20 | |
| N/A | | | | | | | | | | |
| 2444.05 | V | 68.89 | --- | 6.90 | 75.79 | --- | 94.00 | --- | -18.21 | |
| 4888.13 | V | 30.65 | --- | 8.36 | 39.01 | --- | 74.00 | 54.00 | -14.99 | Peak |
| N/A | | | | | | | | | >20 | |
| N/A | | | | | | | | | | |

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz - 26GHz, RBW = 1MHz, VBW = 1MHz, Sweep time = 200 ms.
 - b. AV Setting 1GHz - 26GHz, RBW = 1MHz, VBW = 10Hz, Sweep time = 200 ms.

Operation Mode: CH High**Test Date:** January 18, 2010**Temperature:** 20°C**Tested by:** Petter Ping**Humidity:** 70 % RH**Polarity:** Ver. / Hor.

| Freq. (MHz) | Ant. Pol H/V | Peak Reading (dBuV) | AV Reading (dBuV) | Ant. / CL CF (dB) | Actual Fs | | Peak Limit (dBuV/m) | AV Limit (dBuV/m) | Margin (dB) | Remark |
|----------------|--------------------|---------------------------|-------------------------|----------------------------|------------------|----------------|---------------------------|-------------------------|----------------|--------|
| | | | | | Peak (dBuV/m) | AV (dBuV/m) | | | | |
| 2477.06 | H | 73.65 | --- | 6.98 | 80.63 | --- | 94.00 | --- | -13.37 | |
| N/A | | | | | | | 74.00 | 54.00 | >20 | Peak |
| N/A | | | | | | | | | | |
| N/A | | | | | | | | | | |
| 2477.06 | V | 69.32 | --- | 6.98 | 76.30 | --- | 94.00 | --- | -17.70 | |
| N/A | | | | | | | 74.00 | 54.00 | >20 | Peak |
| N/A | | | | | | | | | | |
| N/A | | | | | | | | | | |

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Spectrum setting:
 - a. Peak Setting 1GHz - 26GHz, RBW = 1MHz, VBW = 1MHz, Sweep time = 200 ms.
 - b. AV Setting 1GHz - 26GHz, RBW = 1MHz, VBW = 10Hz, Sweep time = 200 ms.

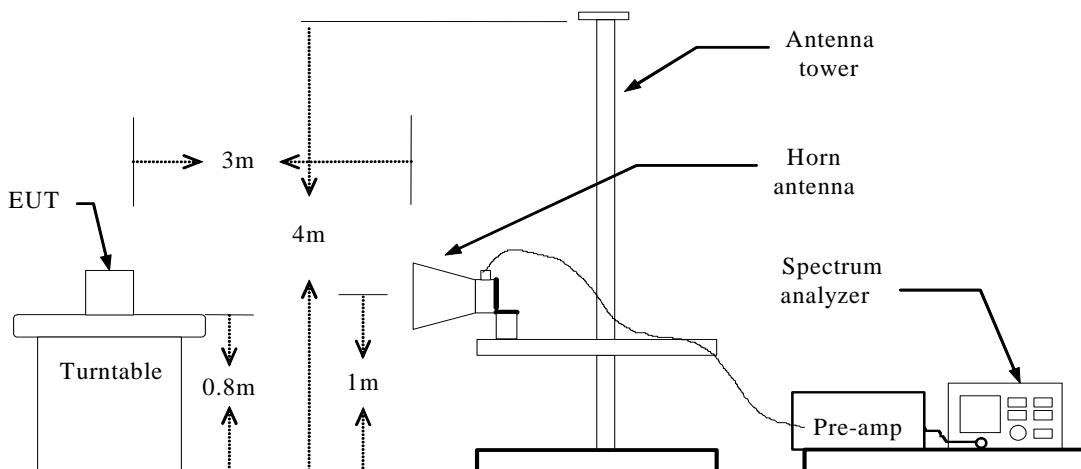
5.2 Band Edge

5.2.1 Requirement

As shown in Section 15.35(b), for frequencies above 1000 MHz, the above field strength limits in paragraphs (a) and (b) of this section are based on average limits. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device, e.g., the total peak power level.

Note that the use of a pulse desensitization correction factor may be needed to determine the total peak emission level. The instruction manual or application note for the measurement instrument should be consulted for determining pulse desensitization factors, as necessary.

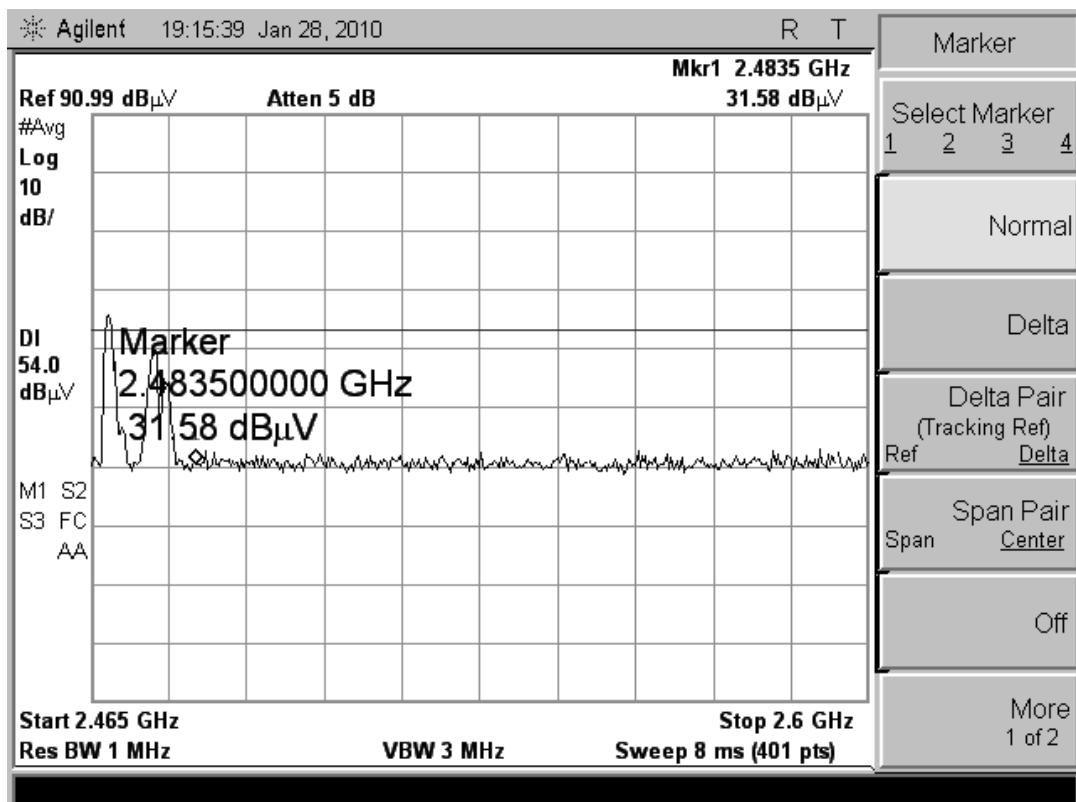
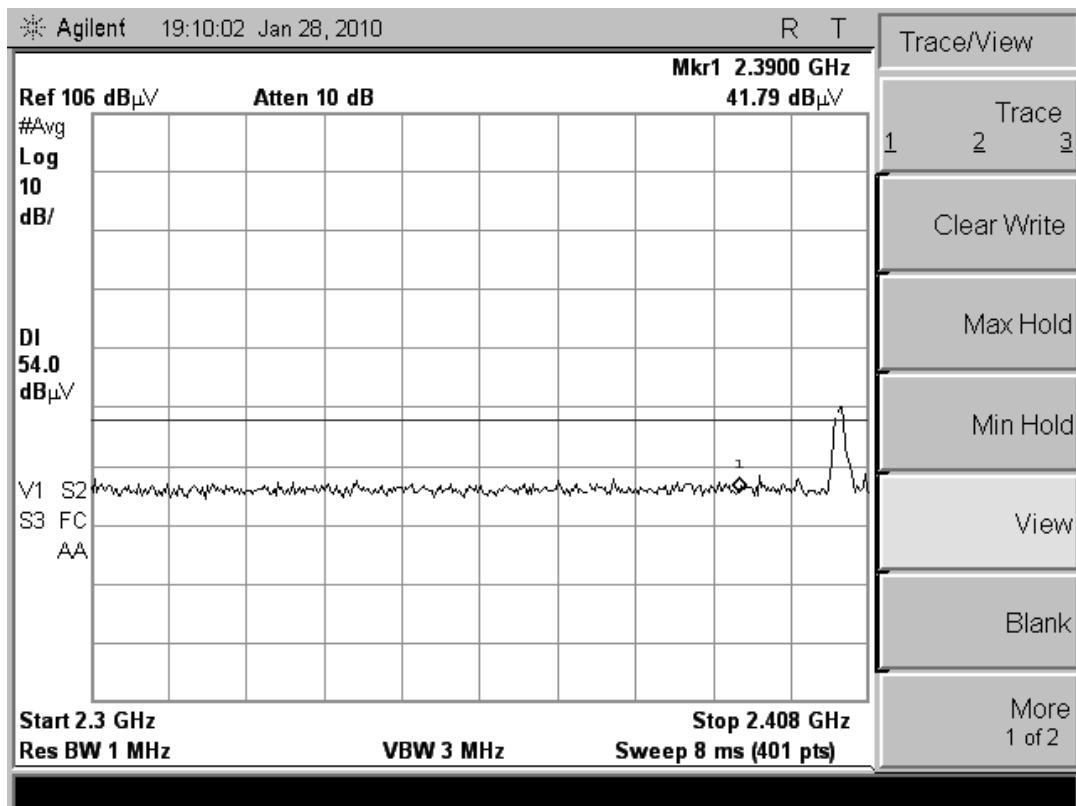
5.2.2 Test Description



5.2.3 Test Result

The EUT operates at hopping-off test mode. The lowest and highest channels are tested to verify the band edge emissions.

Test Plot:



5.3 Power Line Conducted Emission Test

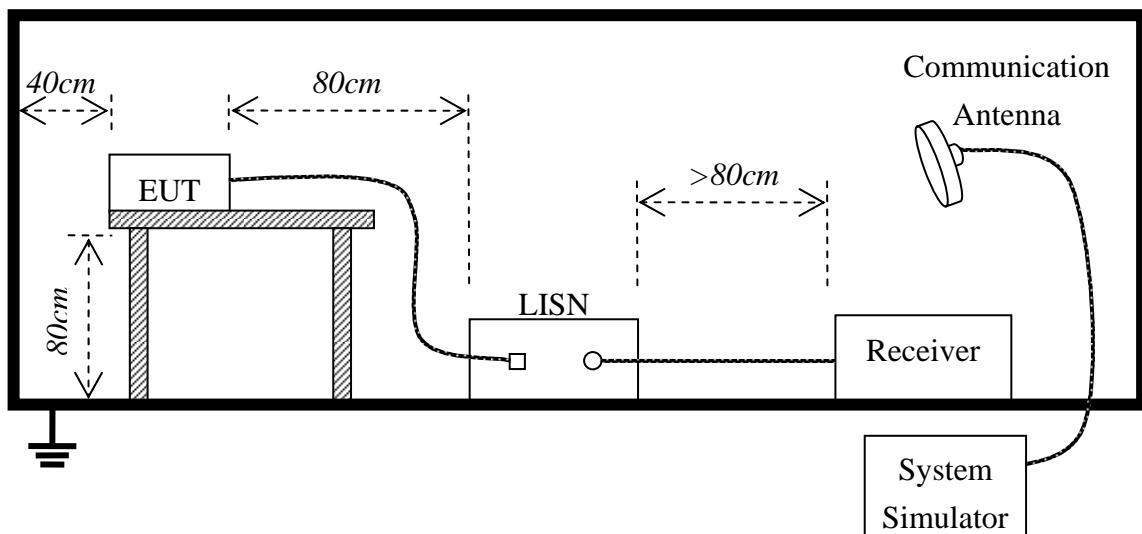
5.3.1 Limits of Line Conducted Emission Test

| Frequency | Maximum RF Line Voltage | |
|---------------|-------------------------|----------------|
| | Q.P.(dBuV) | Average(dBuV) |
| 150kHz-500kHz | 66-56 | 56-46 |
| 500kHz-5MHz | 56 | 46 |
| 5MHz-30MHz | 60 | 50 |

****Note:** 1. the lower limit shall apply at the transition frequency.

2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz

5.3.2 BLOCK DIAGRAM OF TEST SETUP



5.3.3 PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST

- 1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per FCC Part 15 (see Test Facility for the dimensions of the ground plane used). When the EUT is floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2) Support equipment, if needed, was placed as per FCC Part 15.
- 3) All I/O cables were positioned to simulate typical actual usage as per FCC Part 15.
- 4) The EUT received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
- 5) All support equipments received power from a second LISN supplying power of AC 120V/60Hz, if any.
- 6) The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7) Analyzer / Receiver scanned from 150 kHz to 30 MHz for emissions in each of the test modes.
- 8) During the above scans, the emissions were maximized by cable manipulation.
- 9) The following test mode(s) were scanned during the preliminary test:

| Preliminary Conducted Emission Test | | | | |
|-------------------------------------|----------|------------------|---------|------------|
| Frequency Range Investigated | | 150KHz TO 30 MHz | | |
| Mode of operation | Date | Report No. | Data# | Worst Mode |
| PC Mode | 2010-2-3 | MOST/STS100102F1 | 1_(L,N) | ● |
| | | | | |
| | | | | |

Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

5.3.4 FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

EUT and support equipment was set up on the test bench as per step 9 of the preliminary test.

A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions.

Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less -2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.

The test data of the worst case condition(s) was reported on the Summary Data page.

5.3.5 TEST RESULT OF LINE CONDUCTED EMISSION TEST



Address: No.5, Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong, China
Tel: 0755-86170306 Fax: 0755-86170310

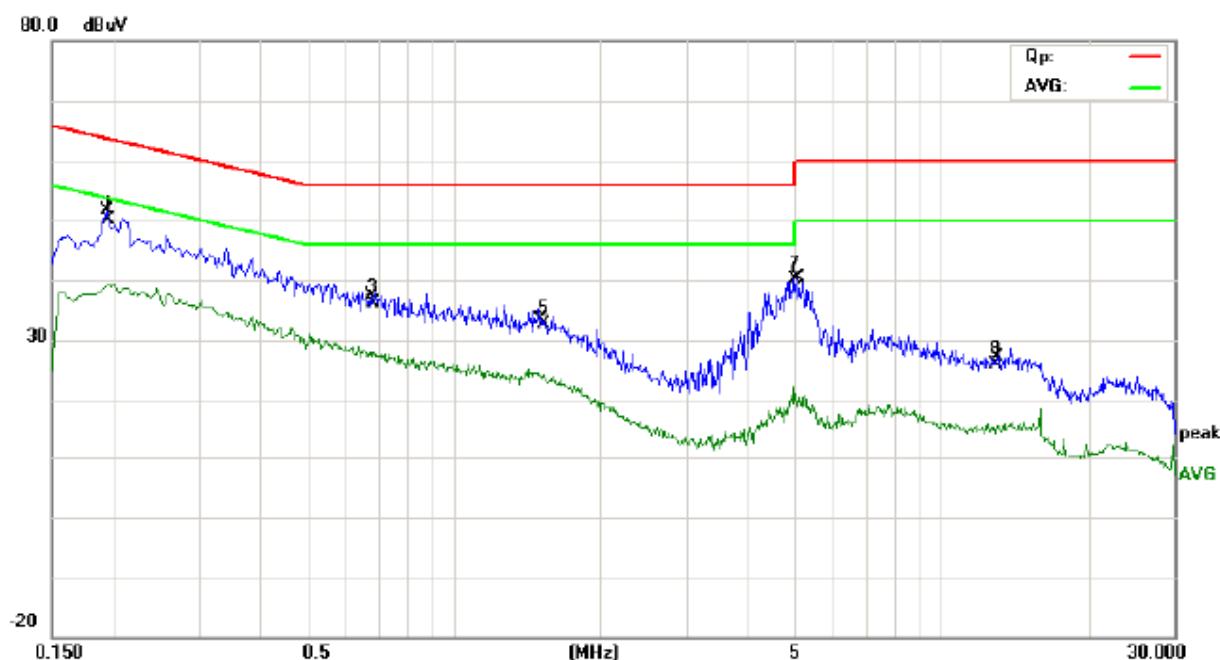
Conducted Emission Measurement

File: 0203

Data #: 16

Date: 2010/02/03

Time: 18:56:27



Site site #1

Phase: L1

Temperature: 26

Limit: FCC Part15 B Class B QP

Power: AC 120V/60Hz

Humidity: 60 %

EUT: Receiver

M/N:

Mode: ON

Note:

| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Over | Detector | Comment |
|-----|-----|---------|---------|---------|----------|-------|--------|----------|---------|
| | | | Level | Factor | ment | | | | |
| 1 | * | 0.1955 | 38.37 | 11.73 | 50.10 | 63.80 | -13.70 | peak | |
| 2 | | 0.1955 | 27.40 | 11.73 | 39.13 | 53.80 | -14.67 | AVG | |
| 3 | | 0.6820 | 26.03 | 10.00 | 36.03 | 56.00 | -19.97 | peak | |
| 4 | | 0.6820 | 17.99 | 10.00 | 27.99 | 46.00 | -18.01 | AVG | |
| 5 | | 1.5260 | 23.17 | 9.47 | 32.64 | 56.00 | -23.36 | peak | |
| 6 | | 1.5260 | 14.28 | 9.47 | 23.75 | 46.00 | -22.25 | AVG | |
| 7 | | 5.0020 | 28.23 | 12.00 | 40.23 | 60.00 | -19.77 | peak | |
| 8 | | 5.0020 | 10.14 | 12.00 | 22.14 | 50.00 | -27.86 | AVG | |
| 9 | | 12.8380 | 16.97 | 9.00 | 25.97 | 60.00 | -34.03 | peak | |
| 10 | | 12.8380 | 6.26 | 9.00 | 15.26 | 50.00 | -34.74 | AVG | |



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Tel: 0755-86170306 Fax: 0755-86170310

Conducted Emission Measurement

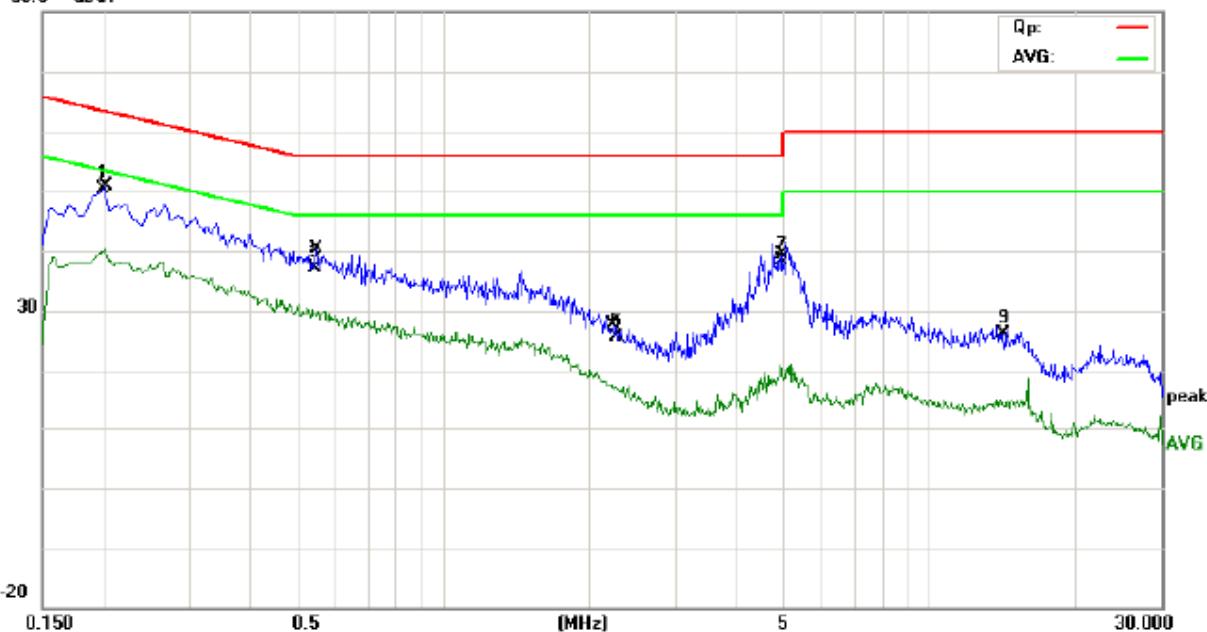
File: 0203

Data #: 17

Date: 2010/02/03

Time: 18:58:06

0.00 dBuV



Site site #1

Phase: L1

Temperature: 26

Limit: FCC Part15 B Class B QP

Power: AC 120V/60Hz

Humidity: 60 %

EUT: Receiver

M/N:

Mode: ON

Note:

| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Over | Detector | Comment |
|-----|-----|---------|---------|---------|----------|-------|--------|----------|---------|
| | | | Level | Factor | ment | | | | |
| | | | MHz | dBuV | dB | dBuV | dB | | |
| 1 | * | 0.1997 | 38.47 | 11.98 | 50.45 | 63.62 | -13.17 | peak | |
| 2 | | 0.1997 | 28.00 | 11.98 | 39.98 | 53.62 | -13.64 | AVG | |
| 3 | | 0.5420 | 27.21 | 10.00 | 37.21 | 56.00 | -18.79 | peak | |
| 4 | | 0.5420 | 19.61 | 10.00 | 29.61 | 46.00 | -16.39 | AVG | |
| 5 | | 2.2580 | 16.25 | 9.26 | 25.51 | 56.00 | -30.49 | peak | |
| 6 | | 2.2580 | 7.55 | 9.26 | 16.81 | 46.00 | -29.19 | AVG | |
| 7 | | 4.9300 | 26.36 | 11.93 | 38.29 | 56.00 | -17.71 | peak | |
| 8 | | 4.9300 | 8.88 | 11.93 | 20.81 | 46.00 | -25.19 | AVG | |
| 9 | | 14.1380 | 17.08 | 9.00 | 26.08 | 60.00 | -33.92 | peak | |
| 10 | | 14.1380 | 5.61 | 9.00 | 14.61 | 50.00 | -35.39 | AVG | |

-----END OF REPORT-----