

# EMC

## TEST REPORT

**Report No.** : EME-030829

**Model No.** : SH50330

**Issued Date** : Aug. 11, 2003

**Applicant** : SENTON Enterprises Limited  
Flat 10, 17/F., Fotan Ind. Centre, 25-28 Au Pui Wan St.,  
Fo Tan Shatin, N.T. Hong Kong

**Test By** : Intertek Testing Services Taiwan Ltd.  
No. 11, Lane 275, Ko-Nan 1 Street, Chia-Tung Li,  
Shiang-Shan District, Hsinchu City, Taiwan

This test report consists of 19 pages in total. It may be duplicated completely for legal use with the allowance of the applicant. It shall not be reproduced except in full, without the written approval of ITS Laboratory. The test result in this report only applies to the tested sample.

Project Engineer

A handwritten signature in black ink, appearing to read "Jerry Liu".

Jerry Liu

Reviewed By

A handwritten signature in black ink, appearing to read "Elton Chen".

Elton Chen

## Table of Contents

|                                                                          |    |
|--------------------------------------------------------------------------|----|
| Summary of Tests .....                                                   | 3  |
| 1. General information .....                                             | 4  |
| 1.1 Identification of the EUT .....                                      | 4  |
| 1.2 Additional information about the EUT .....                           | 4  |
| 1.3 Antenna description .....                                            | 5  |
| 1.4 Peripherals equipment.....                                           | 5  |
| 2. Test specifications.....                                              | 6  |
| 2.1 Test standard .....                                                  | 6  |
| 2.2 Operation mode.....                                                  | 6  |
| 2.4 Test equipment.....                                                  | 7  |
| 3. Radiated emission test FCC 15.249 (C).....                            | 8  |
| 3.1 Operating environment.....                                           | 8  |
| 3.2 Test setup & procedure.....                                          | 8  |
| 3.3 Emission limit.....                                                  | 9  |
| 3.3.1 Fundamental and harmonics emission limits.....                     | 9  |
| 3.3.2 General radiated emission limits.....                              | 9  |
| 3.4 Radiated emission test data FCC 15.249.....                          | 10 |
| 3.4.1 Measurement results: frequencies equal to or less than 1 GHz ..... | 10 |
| 3.4.2 Fundamental & Harmonics Radiated Emission Data.....                | 11 |
| 4. Conducted emission test FCC 15.207 .....                              | 13 |
| 4.1 Operating environment.....                                           | 13 |
| 4.2 Test setup & procedure.....                                          | 13 |
| 4.3 Emission limit.....                                                  | 14 |
| 4.4 Conducted emission data FCC 15.207 .....                             | 15 |
| 5. Radiated emission on the band edge FCC 15.249(C).....                 | 18 |

**Summary of Tests****Home Automation -Model: SH50330  
FCC ID: PEGSH50330**

| Test                           | Reference         | Results  |
|--------------------------------|-------------------|----------|
| Conducted Emission of AC Power | 15.207            | Complies |
| Radiated Emission test         | 15.249(c), 15.209 | Complies |

## 1. General information

### 1.1 Identification of the EUT

|                     |                                  |
|---------------------|----------------------------------|
| Applicant           | : SENTON Enterprises Limited     |
| Product             | : Home Automation                |
| Model No.           | : SH50330                        |
| FCC ID.             | : PEGSH50330                     |
| Operating Frequency | : 908.42MHz                      |
| Channel Number      | : 1 channels                     |
| Type of Modulation  | : FSK (TDD)                      |
| Power Supply        | : 120Vac, 60Hz                   |
| Power Cord          | : N/A                            |
| Sample Received     | : July 14, 2003                  |
| Test Date(s)        | : July 21, 2003 to July 24, 2003 |

A DoC report has been generated for the client.

### 1.2 Additional information about the EUT

The EUT is Home Automation, and it can control user's lights wirelessly from the sofa, the bed, the kitchen, or wherever. It has been designed and tested to offer safe service provided it is installed, operated, maintained and tested in strict accordance with the instructions and warnings contained in instruction manual.

For more detail features, please refer to User's manual as file name "Installation guide.pdf"

Owing to the change of PCB layout, and after verifying the change of EUT, we conducted the Radiated Spurious Emission Test, Conducted Emission Test, and Band-edge test.

### 1.3 Antenna description

The EUT uses a permanently connected antenna.

Antenna Gain : -4dBi

Antenna Type : Internal, wire (whip) antenna

Connector Type : N/A

### 1.4 Peripherals equipment

| Peripherals    | Manufacturer | Product No. | Serial No. | FCC ID     |
|----------------|--------------|-------------|------------|------------|
| Remote Control | Senton       | SH50201     | N/A        | PEGSH50201 |

Load: Lamp (330W)

## **2. Test specifications**

### **2.1 Test standard**

The EUT was performed according to the procedures in FCC Part 15 Subpart C Paragraph 15.249 for non-spread spectrum devices.

The test of radiated measurements according to FCC Part15 Section 15.33(a) had been conducted and the field strength of this frequency band were all meet limit requirement, thus we evaluate the EUT pass the specified test.

### **2.2 Operation mode**

The EUT was transmitted continuously during radiated test. And it's Not for normal use.

The EUT was operated at normal mode during conducted emission test.

## 2.4 Test equipment

| Equipment           | Brand           | Frequency range | Model No. | Series No. | Last Cal.Date |
|---------------------|-----------------|-----------------|-----------|------------|---------------|
| EMI Test Receiver   | Rohde & Schwarz | 9kHz~2.75GHz    | ESCS 30   | 825788/014 | Feb. 18, 2003 |
| Spectrum Analyzer   | Rohde & Schwarz | 9kHz~30GHz      | FSP 30    | 100137     | July 10, 2003 |
| Spectrum Analyzer   | Rohde & Schwarz | 20Hz~40GHz      | FSEK 30   | 100186     | Oct. 9, 2002  |
| Horn Antenna        | EMCO            | 1GHz~18GHz      | 3115      | 9906-5890  | Sep. 19, 2002 |
| Horn Antenna        | SCHWARZBECK     | 14GHz~40GHz     | BBHA 9170 | 159        | June 20, 2003 |
| Bilog Antenna       | SCHWARZBECK     | 25MHz~1.7GHz    | VULB 9160 | 3133       | Feb. 21, 2003 |
| Turn Table          | HDGmbH          | N/A             | DS 420S   | 420/669/01 | N/A           |
| Antenna Tower       | HDGmbH          | N/A             | MA 240    | 240/573    | N/A           |
| Microwave Amplifier | Agilent         | 2GHz~26.5GHz    | 8348A     | 3111A00567 | Dec. 20, 2002 |

**Note:**

1. The calibration interval of the above instruments is 12 months.

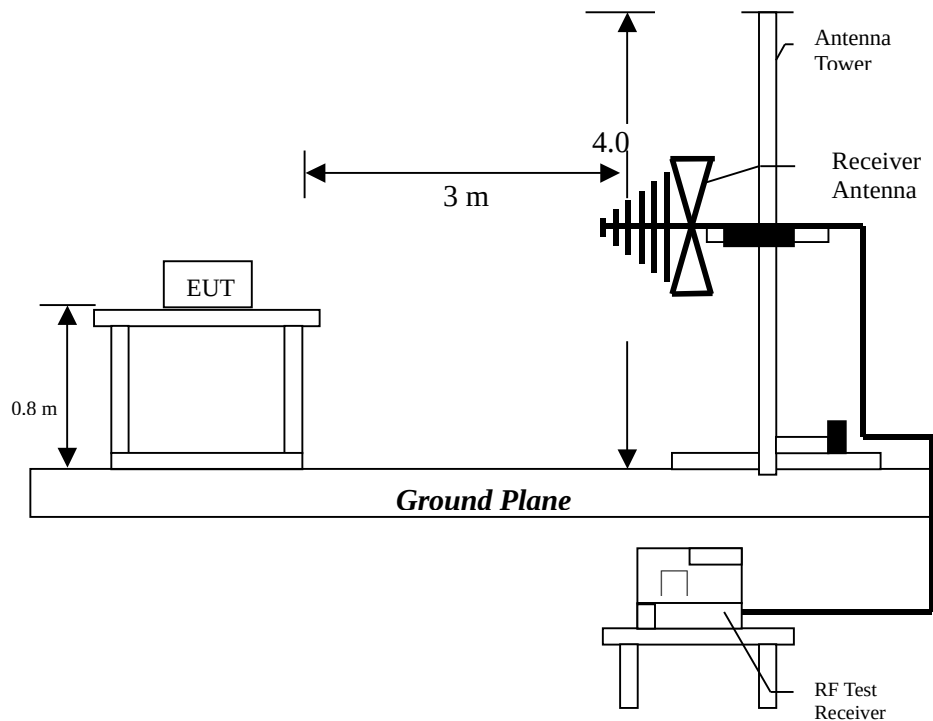
### 3. Radiated emission test FCC 15.249 (C)

#### 3.1 Operating environment

|                      |      |     |               |
|----------------------|------|-----|---------------|
| Temperature:         | 25   | °C  | (10-40°C)     |
| Relative Humidity:   | 55   | %   | (10-90%)      |
| Atmospheric Pressure | 1023 | hPa | (860-1060hPa) |

#### 3.2 Test setup & procedure

The Diagram below shows the test setup, which is utilized to make these measurements.



Radiated emissions were investigated cover the frequency range from 30MHz to 1000MHz using a receiver RBW of 120kHz record QP reading, and the frequency over 1GHz using a spectrum analyzer RBW of 1MHz and 10Hz VBW record Average reading. (15.209 paragraph), the Peak reading (1MHz RBW/VBW) recorded also on the report.

The EUT for testing is arranged on a wooden turntable. If some peripherals apply to the EUT, the peripherals will be connected to EUT and the whole system. During the test, all cables were arranged to produce worst-case emissions. The signal is maximized through rotation. The height of antenna and polarization is changing constantly for exploring for maximum signal level. The height of antenna can be up to 4 meters and down to 1 meter.



The measurement for radiated emission will be done at the distance of three meters unless the signal level is too low to measure at that distance. In the case of the reading under noise floor, a pre-amplifier is used and/or the test is conducted at a closer distance. And then all readings are extrapolated back to the equivalent three meter reading using inverse scaling with distance.

The EUT configuration please refer to the “Spurious set-up photo.pdf”.

### 3.3 Emission limit

#### 3.3.1 Fundamental and harmonics emission limits

| Frequency (MHz) | Field Strength of Fundamental |             | Field Strength of Harmonics |             |
|-----------------|-------------------------------|-------------|-----------------------------|-------------|
|                 | (mV/m@3m)                     | (dBuV/m@3m) | (uV/m@3m)                   | (dBuV/m@3m) |
| 2400-2483.5     | 50                            | 94          | 500                         | 54          |

#### 3.3.2 General radiated emission limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

| Frequency<br>MHz | 15.209 Limits<br>(dB $\mu$ V/m@3m) |
|------------------|------------------------------------|
| 30-88            | 40                                 |
| 88-216           | 43.5                               |
| 216-960          | 46                                 |
| Above 960        | 54                                 |

Remark:

1. In the above table, the tighter limit applies at the band edges.
2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system

Uncertainty was calculated in accordance with NAMAS NIS 81.

Expanded uncertainty (k=2) of radiated emission measurement is  $\pm 4.98$  dB.

Expanded uncertainty (k=2) of conducted emission measurement is  $\pm 2.02$  dB.

### 3.4 Radiated emission test data FCC 15.249

#### 3.4.1 Measurement results: frequencies equal to or less than 1 GHz

The radiated emissions at

| Frequency(MHz) | Margin |
|----------------|--------|
| 36.56          | -4.40  |

are less than uncertainty. This is within the stated measurement uncertainty, this may affect compliance determined in other test arrangements.

EUT : SH50330

| Frequency<br>(MHz) | Spectrum<br>Analyzer<br>Detector | Antenna<br>Polariz.<br>(H/V) | Correction<br>Factor<br>(dB/m) | Reading<br>(dBuV) | Corrected<br>Level<br>(dBuV) | Limit<br>@ 3 m<br>(dBuV) | Margin<br>(dB) | Antenna<br>high<br>(cm) | Turn<br>Table<br>angle<br>(degree) |
|--------------------|----------------------------------|------------------------------|--------------------------------|-------------------|------------------------------|--------------------------|----------------|-------------------------|------------------------------------|
| 36.56              | QP                               | V                            | 12.89                          | 22.71             | 35.60                        | 40.00                    | -4.40          | 113                     | 298                                |
| 48.7               | QP                               | V                            | 12.88                          | 17.92             | 30.80                        | 40.00                    | -9.20          | 100                     | 178                                |
| 107.69             | QP                               | V                            | 10.95                          | 10.35             | 21.30                        | 43.50                    | -22.20         | 123                     | 107                                |
| 222.1              | QP                               | V                            | 11.82                          | 11.08             | 22.90                        | 46.00                    | -23.10         | 106                     | 84                                 |
| 317.1              | QP                               | V                            | 14.72                          | 9.98              | 24.70                        | 46.00                    | -21.30         | 205                     | 225                                |
| 769.1              | QP                               | V                            | 23.58                          | 9.92              | 33.50                        | 46.00                    | -12.50         | 226                     | 189                                |
| 37.8               | QP                               | H                            | 12.93                          | 13.07             | 26.00                        | 40.00                    | -14.00         | 113                     | 298                                |
| 148.3              | QP                               | H                            | 14.29                          | 10.61             | 24.90                        | 43.50                    | -18.60         | 100                     | 178                                |
| 221.305            | QP                               | H                            | 11.82                          | 14.98             | 26.80                        | 46.00                    | -19.20         | 123                     | 107                                |
| 427.7              | QP                               | H                            | 17.39                          | 11.41             | 28.80                        | 46.00                    | -17.20         | 106                     | 84                                 |
| 625.6              | QP                               | H                            | 21.31                          | 10.59             | 31.90                        | 46.00                    | -14.10         | 205                     | 225                                |
| 842.9              | QP                               | H                            | 24.18                          | 11.62             | 35.80                        | 46.00                    | -10.20         | 226                     | 189                                |

Remark:

1. Corrected Level = Reading Level + Correction Factor
2. Correction Factor = Antenna Factor + Cable Loss

### 3.4.2 Fundamental & Harmonics Radiated Emission Data

EUT : SH50330

| Frequency<br>(MHz) | Spectrum<br>Analyzer<br>Detector | Antenna<br>Polariz.<br>(H/V) | Preamplifier<br>(dB) | Correction<br>Factor<br>(dB/m) | Average<br>Factor<br>(dB) | Reading<br>(dBuV) | Corrected<br>Level<br>(dBuV) | Limit<br>@ 3 m<br>(dBuV) | Margin<br>(dB) | Antenna<br>high<br>(cm) | Turn<br>Table<br>angle<br>(degree) |
|--------------------|----------------------------------|------------------------------|----------------------|--------------------------------|---------------------------|-------------------|------------------------------|--------------------------|----------------|-------------------------|------------------------------------|
| 908.42             | PK                               | V                            | 0                    | 27.51                          | 0                         | 28.15             | 55.66                        | 114                      | -58.34         | 202                     | 13                                 |
| 908.42             | AV                               | V                            | 0                    | 27.51                          | -11.49                    | 28.15             | 44.17                        | 94                       | -49.83         | 202                     | 13                                 |
| 1816.84            | PK                               | V                            | 0                    | 27.35                          | 0                         | -                 | -                            | 74                       | -              | -                       | -                                  |
| 1816.84            | AV                               | V                            | 0                    | 27.35                          | -11.49                    | -                 | -                            | 54                       | -              | -                       | -                                  |
| 2725.26            | PK                               | V                            | 33.182               | 30.77                          | 0                         | -                 | -                            | 74                       | -              | -                       | -                                  |
| 2725.26            | AV                               | V                            | 33.182               | 30.77                          | -11.49                    | -                 | -                            | 54                       | -              | -                       | -                                  |
| 3633.68            | PK                               | V                            | 32.252               | 33.46                          | 0                         | -                 | -                            | 74                       | -              | -                       | -                                  |
| 3633.68            | AV                               | V                            | 32.252               | 33.46                          | -11.49                    | -                 | -                            | 54                       | -              | -                       | -                                  |
| 4542.1             | PK                               | V                            | 32.188               | 35.35                          | 0                         | -                 | -                            | 74                       | -              | -                       | -                                  |
| 4542.1             | AV                               | V                            | 32.188               | 35.35                          | -11.49                    | -                 | -                            | 54                       | -              | -                       | -                                  |
| 5450.52            | PK                               | V                            | 32.958               | 36.5                           | 0                         | -                 | -                            | 74                       | -              | -                       | -                                  |
| 5450.52            | AV                               | V                            | 32.958               | 36.5                           | -11.49                    | -                 | -                            | 54                       | -              | -                       | -                                  |
| 6358.94            | PK                               | V                            | 33.57                | 37.74                          | 0                         | -                 | -                            | 74                       | -              | -                       | -                                  |
| 6358.94            | AV                               | V                            | 33.57                | 37.74                          | -11.49                    | -                 | -                            | 54                       | -              | -                       | -                                  |
| 7267.36            | PK                               | V                            | 34.32                | 38.42                          | 0                         | -                 | -                            | 74                       | -              | -                       | -                                  |
| 7267.36            | AV                               | V                            | 34.32                | 38.42                          | -11.49                    | -                 | -                            | 54                       | -              | -                       | -                                  |
| 8175.78            | PK                               | V                            | 34.92                | 40.05                          | 0                         | -                 | -                            | 74                       | -              | -                       | -                                  |
| 8175.78            | AV                               | V                            | 34.92                | 40.05                          | -11.49                    | -                 | -                            | 54                       | -              | -                       | -                                  |
| 9084.2             | PK                               | V                            | 35.475               | 41.34                          | 0                         | -                 | -                            | 74                       | -              | -                       | -                                  |
| 9084.2             | AV                               | V                            | 35.475               | 41.34                          | -11.49                    | -                 | -                            | 54                       | -              | -                       | -                                  |

1. Corrected Level = Reading Level + Correction Factor + Average Factor – Preamp

2. Correction Factor = Antenna Factor + Cable Loss

3. “-” means the emission is below the noise floor, noise floor is listed below:

For PK:

1GHz – 3GHz: 50dBuV

3GHz – 14GHz: 54 dBuV

EUT : SH50330

| Frequency<br>(MHz) | Spectrum<br>Analyzer<br>Detector | Antenna<br>Polariz.<br>(H/V) | Preamp<br>(dB) | Correction<br>Factor<br>(dB/m) | Average<br>Factor<br>(dB) | Reading<br>(dBuV) | Corrected<br>Level<br>(dBuV) | Limit<br>@ 3 m<br>(dBuV) | Margin<br>(dB) | Antenna<br>high<br>(cm) | Turn<br>Table<br>angle<br>(degree) |
|--------------------|----------------------------------|------------------------------|----------------|--------------------------------|---------------------------|-------------------|------------------------------|--------------------------|----------------|-------------------------|------------------------------------|
| 908.42             | PK                               | H                            | 0              | 27.51                          | 0                         | 28.8              | 56.31                        | 114                      | -57.69         | 100                     | 235                                |
| 908.42             | AV                               | H                            | 0              | 27.51                          | -11.49                    | 28.8              | 44.82                        | 94                       | -49.18         | 100                     | 235                                |
| 1816.84            | PK                               | H                            | 0              | 27.35                          | 0                         | -                 | -                            | 74                       | -              |                         |                                    |
| 1816.84            | AV                               | H                            | 0              | 27.35                          | -11.49                    | -                 | -                            | 54                       | -              |                         |                                    |
| 2725.26            | PK                               | H                            | 33.182         | 30.77                          | 0                         | -                 | -                            | 74                       | -              |                         |                                    |
| 2725.26            | AV                               | H                            | 33.182         | 30.77                          | -11.49                    | -                 | -                            | 54                       | -              |                         |                                    |
| 3633.68            | PK                               | H                            | 32.252         | 33.46                          | 0                         | -                 | -                            | 74                       | -              |                         |                                    |
| 3633.68            | AV                               | H                            | 32.252         | 33.46                          | -11.49                    | -                 | -                            | 54                       | -              |                         |                                    |
| 4542.1             | PK                               | H                            | 32.188         | 35.35                          | 0                         | -                 | -                            | 74                       | -              |                         |                                    |
| 4542.1             | AV                               | H                            | 32.188         | 35.35                          | -11.49                    | -                 | -                            | 54                       | -              |                         |                                    |
| 5450.52            | PK                               | H                            | 32.958         | 36.5                           | 0                         | -                 | -                            | 74                       | -              |                         |                                    |
| 5450.52            | AV                               | H                            | 32.958         | 36.5                           | -11.49                    | -                 | -                            | 54                       | -              |                         |                                    |
| 6358.94            | PK                               | H                            | 33.57          | 37.74                          | 0                         | -                 | -                            | 74                       | -              |                         |                                    |
| 6358.94            | AV                               | H                            | 33.57          | 37.74                          | -11.49                    | -                 | -                            | 54                       | -              |                         |                                    |
| 7267.36            | PK                               | H                            | 34.32          | 38.42                          | 0                         | -                 | -                            | 74                       | -              |                         |                                    |
| 7267.36            | AV                               | H                            | 34.32          | 38.42                          | -11.49                    | -                 | -                            | 54                       | -              |                         |                                    |
| 8175.78            | PK                               | H                            | 34.92          | 40.05                          | 0                         | -                 | -                            | 74                       | -              |                         |                                    |
| 8175.78            | AV                               | H                            | 34.92          | 40.05                          | -11.49                    | -                 | -                            | 54                       | -              |                         |                                    |
| 9084.2             | PK                               | H                            | 35.475         | 41.34                          | 0                         | -                 | -                            | 74                       | -              |                         |                                    |
| 9084.2             | AV                               | H                            | 35.475         | 41.34                          | -11.49                    | -                 | -                            | 54                       | -              |                         |                                    |

1. Corrected Level = Reading Level + Correction Factor + Average Factor – Preamp

2. Correction Factor = Antenna Factor + Cable Loss

3. “-“ means the emission is below the noise floor, noise floor is listed below:

For PK:

1GHz – 3GHz: 50dBuV

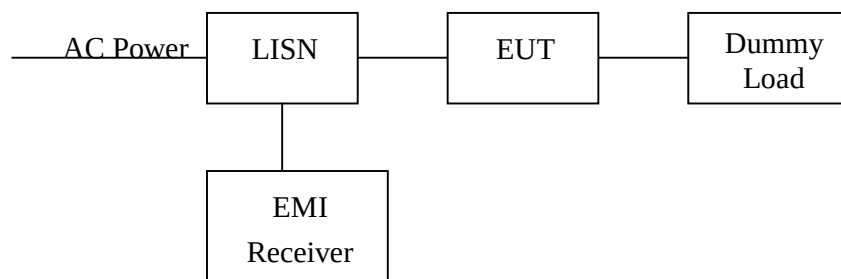
3GHz – 14GHz: 54 dBuV

#### 4. Conducted emission test FCC 15.207

##### 4.1 Operating environment

|                      |      |     |               |
|----------------------|------|-----|---------------|
| Temperature:         | 25   | °C  | (10-40°C)     |
| Relative Humidity:   | 55   | %   | (10-90%)      |
| Atmospheric Pressure | 1023 | hPa | (860-1061hPa) |

##### 4.2 Test setup & procedure



The EUT are connected to the main power through a line impedance stabilization network (LISN). This provides a 50 ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. Both sides (Line and Neutral) of AC line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4/1992 on conducted measurement.

The bandwidth of the field strength meter (R & S Test Receiver ESCS 30) is set at 9kHz.

The EUT configuration please refer to the “Conducted set-up photo.pdf”.

#### 4.3 Emission limit

| Freq.<br>(MHz) | Conducted Limit (dBuV) |          |
|----------------|------------------------|----------|
|                | Q.P.                   | Ave.     |
| 0.15~0.50      | 66 – 56*               | 56 – 46* |
| 0.50~5.00      | 56                     | 46       |
| 5.00~30.0      | 60                     | 50       |

\*Decreases with the logarithm of the frequency.

#### 4.4 Conducted emission data FCC 15.207

(1) Line

EUT : SH50330

Test Condition : Normal operation

| Freq.<br>(MHz) | Reading<br>(dB $\mu$ V)<br>QP | Limit<br>(dB $\mu$ V)<br>QP | Reading<br>(dB $\mu$ V)<br>AV | Limit<br>(dB $\mu$ V)<br>AV | Margin<br>(dB) |        |
|----------------|-------------------------------|-----------------------------|-------------------------------|-----------------------------|----------------|--------|
|                |                               |                             |                               |                             | QP             | AV     |
| 1.27000        | 41.10                         | 56.00                       | 37.80                         | 46.00                       | -14.90         | -8.20  |
| 1.92600        | 32.00                         | 56.00                       | 28.50                         | 46.00                       | -24.00         | -17.50 |
| 2.65400        | 30.80                         | 56.00                       | 28.00                         | 46.00                       | -25.20         | -18.00 |
| 3.47800        | 30.80                         | 56.00                       | 28.00                         | 46.00                       | -25.20         | -18.00 |
| 4.15600        | 30.90                         | 56.00                       | 27.80                         | 46.00                       | -25.10         | -18.20 |
| 5.10200        | 30.30                         | 60.00                       | 26.80                         | 50.00                       | -29.70         | -23.20 |

(2) Neutral

EUT : SH50330

Test Condition : Normal operation

| Freq.<br>(MHz) | Reading<br>(dB $\mu$ V)<br>QP | Limit<br>(dB $\mu$ V)<br>QP | Reading<br>(dB $\mu$ V)<br>AV | Limit<br>(dB $\mu$ V)<br>AV | Margin<br>(dB) |        |
|----------------|-------------------------------|-----------------------------|-------------------------------|-----------------------------|----------------|--------|
|                |                               |                             |                               |                             | QP             | AV     |
| 1.27000        | 39.20                         | 56.00                       | 35.80                         | 46.00                       | -16.80         | -10.20 |
| 1.85400        | 30.50                         | 56.00                       | 28.10                         | 46.00                       | -25.50         | -17.90 |
| 2.72600        | 28.90                         | 56.00                       | 26.00                         | 46.00                       | -27.10         | -20.00 |
| 3.59800        | 29.00                         | 56.00                       | 25.30                         | 46.00                       | -27.00         | -20.70 |
| 4.19800        | 30.60                         | 56.00                       | 26.80                         | 46.00                       | -25.40         | -19.20 |
| 17.76600       | 27.60                         | 60.00                       | 21.20                         | 50.00                       | -32.40         | -28.80 |

Remark:

1. The reading value included cable loss and LISN factor.

2. Uncertainty was calculated in accordance with NAMAS NIS 81.

Expanded uncertainty (k=2) of conducted emission measurement is  $\pm 2.6$  dB.

Please see the plot below.

Intertek Testing Services

RF Voltage

EUT: SH50330

Manuf: Senton

Op Cond: LISN-L

Operator: Jerry

Test Spec: Fcc 15.207

Comment: EMI Rx : EC303      LISN : EC320

120V 60Hz 22'C 54%RH

Date: 22. Jul 03 10:27

Scan Settings (1 Range)

----- Frequencies -----

Start

Stop

Step

150k

30M

8k

----- Receiver Settings -----

IF BW

Detector

M-Time

Atten

Preamp

9k

PK

20ms

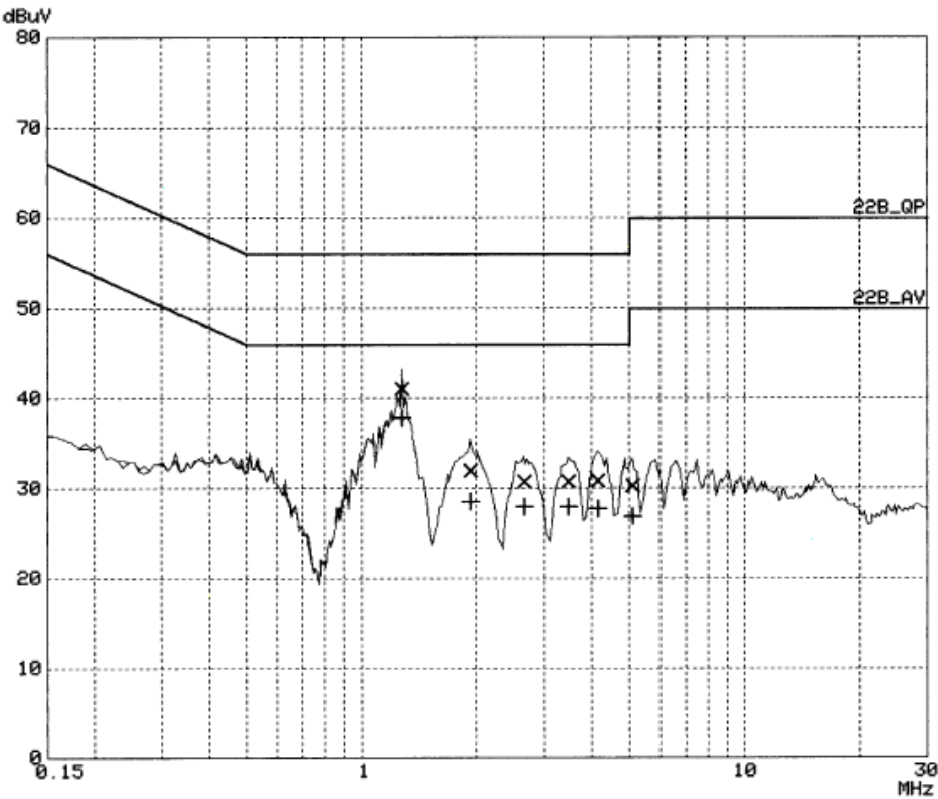
AUTO

LN

OFF

Final Measurement: x QP / + AV

Meas Time: 1 s

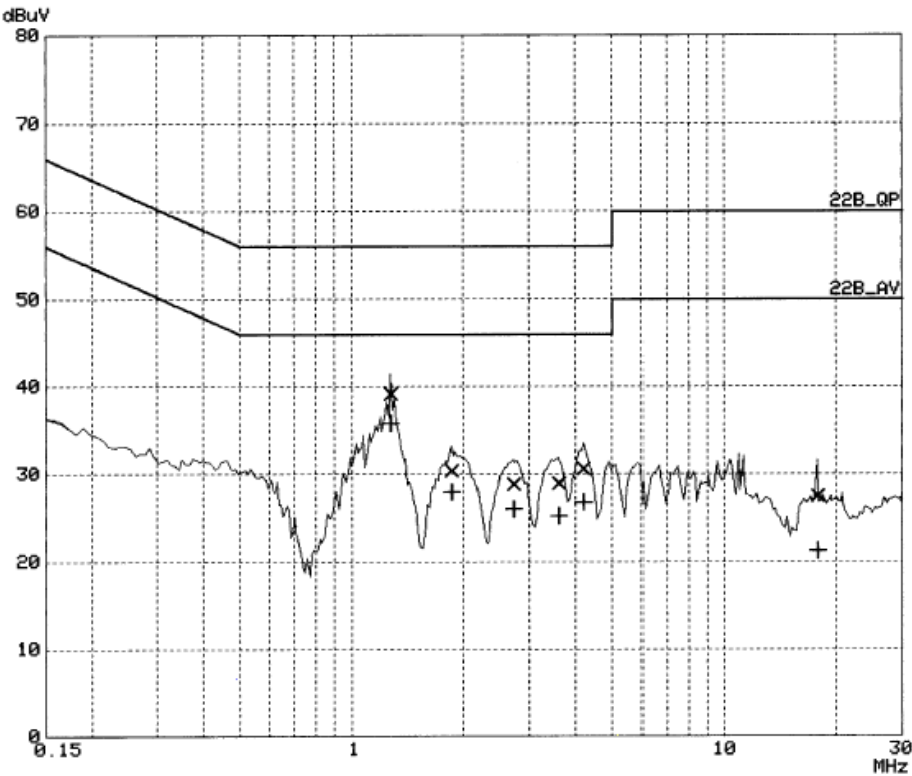




Intertek Testing Services  
RF Voltage

EUT: SH50330  
Manuf: Senton  
Op Cond: LISN-N  
Operator: Jerry  
Test Spec: Fcc 15.207  
Comment: EMI Rx : EC303 LISN : EC320  
120V 60Hz 22'C 54%RH  
Date: 22. Jul 03 10:34

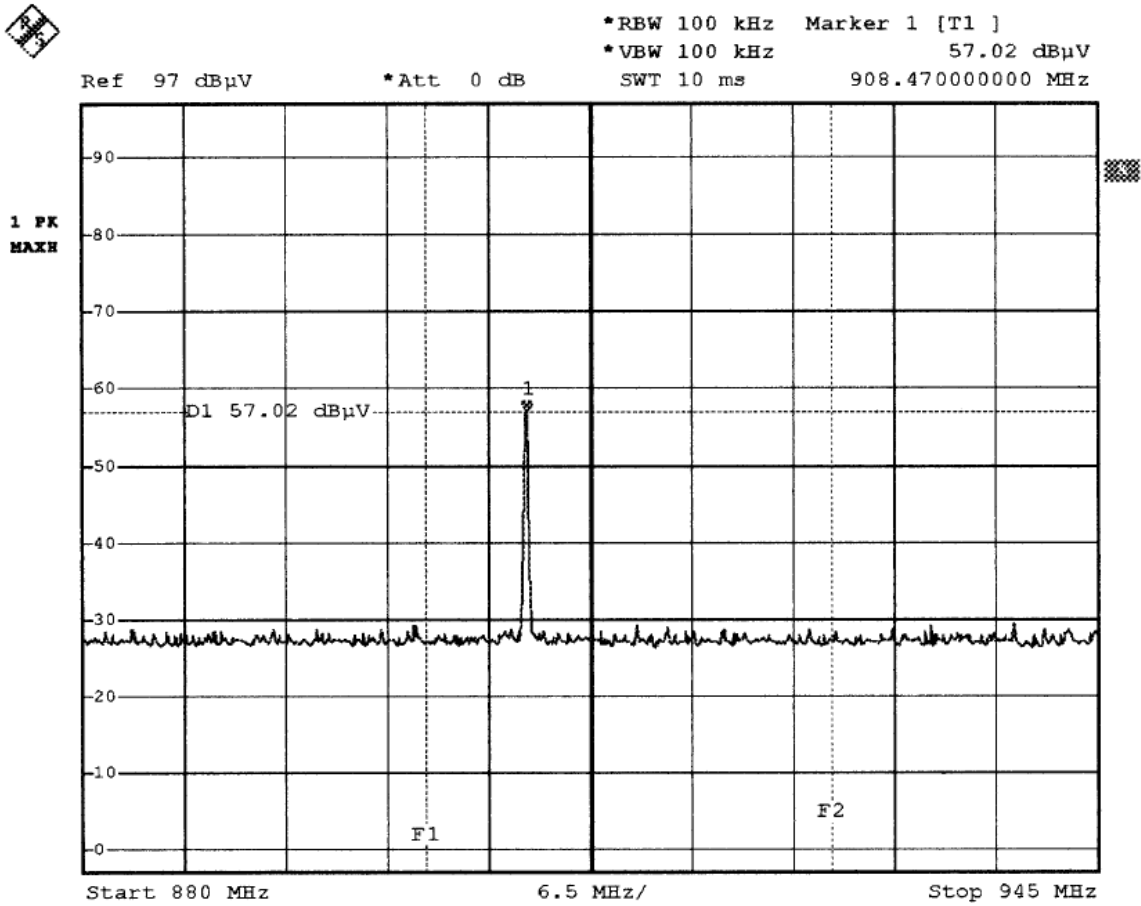
Scan Settings (1 Range)  
----- Frequencies -----|----- Receiver Settings -----|  
Start Stop Step IF BW Detector M-Time Atten Preamp  
150k 30M 8k 9k PK 20ms AUTO LN OFF  
  
Final Measurement: x QP / + AV  
Meas Time: 1 s



**5. Radiated emission on the band edge FCC 15.249(C)**

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 (902~928MHz) or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

Please see the plot below.



Comment A: SH50330 Band-edge testL(  
F1=902MHz , F2=928MHz