JQA APPLICATION NO.: 400-10075 Issue Date : May 9, 2001

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# EMI TEST REPORT

JQA APPLICATION NO. : 400-10075

Model No. : RM-SRXDP10J

Type of Equipment : Remote Controller

Regulations Applied : CFR 47 FCC Rules and Regulations Part 15

FCC ID : GT3CSC003

Applicant : SMK Corporation

Address : 5-5, Togoshi d/chome, Shinagawa-ku,

Tokyo 142-8511, Japan

Manufacture : \$MK Corporation

Address : 5-5 Togoshi 6-chome, Shinagawa-ku,

Tokyo 142-8511, Japan

Received date of EUT : May 7, 2001

Final Judgment : Passed

TEST RESULTS IN THIS REPORT are obtained in use of equipment that is traceable to Electro-Technical Lab. of METI Japan and Communications Research Lab. of MPHPT Japan.

The test results only respond to the tested sample. This report should not be reproduced except in full, without the written approval of JQA EMC Engineering Dept. Testing Div.

FCC ID :GT3CSC003 Issue Date :May 9, 2001

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#### 1 DOCUMENTATION

#### 1.1 TEST REGULATION

FCC Rules and Regulations Part 15 Subpart A and C (June 23, 1989) Intentional Radiators

#### Test procedure:

AC power line conducted emission, radiated emission, frequency stability and occupied bandwidth tests were performed according to the procedures in ANSI C63.4-1992.

#### 1.2 GENERAL INFORMATION

#### 1.2.1 Test facility:

1) Test Facility located at EMC Engineering Dept. Testing Div. :

- No.2 and 3 Anechoic Chambers (3 meters Site).

- Shielded Enclosure.

Expiration date of FCC test facility filing: June 04, 2002

2) EMC Engineering Dept. Testing Div. is recognized under the National Voluntary Laboratory accreditation Program for satisfactory compliance established in title 15, Part 285 Code of Federal Regulations.

NVLAP Lab Code : 200189-0 (Effective through : June 30, 2001)

#### 1.2.2 Description of the Equipment Under Test (EUT) :

1) Type of Equipment

2) Product Type

3) Category

4) EUT Authorization

5) FCC ID

6) Trade Name

7) Model No.

8) Operating Frequency Range

9) Highest Frequency Used in the EUT

10) Serial No.

11) Date of Manufacture

12) Power Rating

13) EUT Grounding

: Remote Controller

: Pre-Production

: Security/Remote Control Transmitter

: Certification

: GT3CSC003

: JVC

: RM-SRXDP10J

: 423.22 MHz - 433.92 MHz

: 433.92 MHz

: None

: DC 3.0V(Battery)

: None

#### 1.2.3 Definitions for symbols used in this test report:

x - indicates that the listed condition, standard or equipment is applicable for

- indicates that the listed condition, standard or equipment is not applicable for this report.

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### 1.3 TEST CONDITION

| 1.3.1 | The | mea | surement | ο£  | the  | AC   | Power  | Line  | Co  | nducted | Emission | 1 |
|-------|-----|-----|----------|-----|------|------|--------|-------|-----|---------|----------|---|
|       | _   | was | performe | d i | n th | ne f | ollowi | ng te | est | site.   |          |   |

 $\underline{x}$  - was not applicable.

#### Test location :

Safety Testing Center EMC Engineering Dept. Testing Div. 21-25, Kinuta 1-chome, Setagaya-ku, Tokyo 157-8573, Japan

\_\_\_ - Shielded Enclosure

- Anechoic Chamber No. 2 (portable Type)

|                      |           | ^ //                |              |      |      |          |
|----------------------|-----------|---------------------|--------------|------|------|----------|
| Type                 | Model No. | Manufacturer        | Serial No.   | Last | Cal. | Interval |
| Test Receiver        | ESH-2     | Rohde & Schwarz     | 880370/016   | Sep. | 2000 | 1 Year   |
| Test Receiver        | ESH-3     | Rohde & Schwarz     | 881460/030   | June | 2000 | 1 Year   |
| LISN(for Peripheral) | KNW-407   | Kyoritsu Electrical | 8-833-6      | Apr. | 2001 | 1 Year   |
| LISN(for EUT)        | KNW-407   | Kyoritsu Electrical | 8-855-2      | Apr. | 2001 | 1 Year   |
| LISN                 | KNW-407   | Kyoritsu Electrical | 8-757-1      | Apr. | 2001 | 1 Year   |
| RF Cable             | 3D-2W ((  | Fujikura            | 155-21-006E0 | Apr. | 2001 | 1 Year   |
| RF Cable             | 3D-2W \   | Fujikura            | 155-21-007E0 | Apr. | 2001 | 1 Year   |
| 50ohm Termination    | -//> \    | SUHNER              | 154-06-501E0 | Jan. | 2001 | 1 Year   |
| 50ohm Termination    |           | SUHNER              | 154-06-502E0 | Jan. | 2001 | 1 Year   |

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| 1.3.2 | 2 The | measurement | of | the | Radiated | Emission( | 9 | kHz | _ | 30 | MHz | ) |
|-------|-------|-------------|----|-----|----------|-----------|---|-----|---|----|-----|---|
|-------|-------|-------------|----|-----|----------|-----------|---|-----|---|----|-----|---|

- was performed in the following test site.
- $\underline{x}$  was not applicable.

#### Test location:

Safety Testing Center EMC Engineering Dept. Testing Div. 21-25, Kinuta 1-chome, Setagaya-ku, Tokyo 157-8573, Japan

- Anechoic Chamber No. 2 (3 meters)
- \_\_\_\_ Anechoic Chamber No. 3 (3 meters)

#### Validation of Site Attenuation :

1) Last Confirmed Date : N/A 2) Interval

| Type            | Model No. | Manufacturer    | Serial No. | Last Cal. | Interval |
|-----------------|-----------|-----------------|------------|-----------|----------|
| - Test Receiver | ESH-2     | Rohde & Schwarz | 880370/016 | Sep. 2000 | 1 Year   |
| Test Receiver   | ESH-3     | Rohde & Schwarz | 881460/030 | June 2000 | 1 Year   |
| Test Receiver   | ESHS10    | Rohde & Schwarz | 835871/004 | Oct. 2000 | 1 Year   |
| Antenna         | HFH2-Z2(( | Rohde & Schwarz | 881058/62  | Nov 2000  | 1 Year   |
|                 | ^ //      | . 11            |            |           |          |

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| 1.3.3 | The | measurement | ο£ | the | Radiated | Emiss: | ion(30 | MHz | - | 1000 | MHz | ) |
|-------|-----|-------------|----|-----|----------|--------|--------|-----|---|------|-----|---|
|-------|-----|-------------|----|-----|----------|--------|--------|-----|---|------|-----|---|

 $\underline{x}$  - was performed in the following test site.

\_\_\_ - was not applicable.

#### Test location:

Safety Testing Center EMC Engineering Dept. Testing Div. 21-25, Kinuta 1-chome, Setagaya-ku, Tokyo 157-8573, Japan

x - Anechoic Chamber No. 2 (3 meters)

\_\_\_ - Anechoic Chamber No. 3 (3 meters)

#### Validation of Site Attenuation :

1) Last Confirmed Date : March, 2001

2) Interval :1 year

|     |                        |           |                     | \ /          |      |      |          |
|-----|------------------------|-----------|---------------------|--------------|------|------|----------|
|     | Туре                   | Model No. | Manufacturer        | Serial No.   | Last | Cal. | Interval |
|     | - Test Receiver        | ESH-2     | Rohde & Schwarz     | 880370/016   | Sep. | 2000 | 1 Year   |
| _X  | - Test Receiver        | ESVS10    | Rohde & Schwarz     | 826148/002   | May  | 2001 | 1 Year   |
|     | - Test Receiver        | ESVS10    | Rohde & Schwarz     | 832699/001   | May  | 2001 | 1 Year   |
| _x  | Antenna                | KBA-5114  | Kyoritsu Electrical | 0-170-1      | Nov. | 2000 | 1 Year   |
|     | - Antenna              | KBA<511A  | Kyoritsu Electrical | 0-201-13     | Nov. | 2000 | 1 Year   |
| _x  | - Antenna              | KBA-611   | Kyoritsu Electrical | 0-147-14     | Nov. | 2000 | 1 Year   |
|     | - Antenna              | KBA-611   | Kyoritsu Electrical | 0-210-5      | Nov. | 2000 | 1 Year   |
|     | - Biconical Antenna    | BRA9106   | /\$chwarzbeck       | VHA91031150  | May  | 2000 | 1 Year   |
|     | - Biconical Antenna    | BBA9106   | Schwarzbeck         | 11905078E0   | May  | 2000 | 1 Year   |
|     | - Log-Periodic Antenna | UHALP9107 | Schwarzbeck         | 11905079E0   | May  | 2000 | 1 Year   |
|     | - Log-Periodic Antenna | UHALP9107 | Schwarzbeck         | 11905110     | May  | 2000 | 1 Year   |
| х . | - RF Cable             | 5D-2W     | Fujikura            | 155-21-001E0 | Feb. | 2001 | 1 Year   |
| -   | - RF Cable             | 5D-2W     | Fujikura            | 155-21-002E0 | Feb. | 2001 | 1 Year   |

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# 1.3.4 The measurement of the Radiated Emission(Above 1000 MHz)

 $\underline{x}$  - was performed in the following test site.

\_\_\_ - was not applicable.

#### Test location:

Safety Testing Center EMC Engineering Dept. Testing Div. 21-25, Kinuta 1-chome, Setagaya-ku, Tokyo 157-8573, Japan

x - No. 2 site (3 meters)

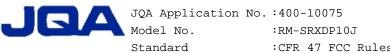
\_\_\_ - No. 3 site (3 meters)

#### Validation of Site Attenuation :

1) Last Confirmed Date : N/A

2) Interval : N/A

|     | Type                 | Model No.                | Manufacturer       | Serial No.   | Last | Cal. | Interval |
|-----|----------------------|--------------------------|--------------------|--------------|------|------|----------|
|     | Spectrum Analyzer    | 8560E                    | Hewlett Packard    | 3240A00189   | Nov. | 2000 | 1 Year   |
|     | Spectrum Analyzer    | 8566B                    | Newlett Packard    | 2140A01091   | Apr. | 2001 | 1 Year   |
|     | RF Pre-selector      | 85685A ((                | Hewlett Packard    | 2648A00522   | Apr. | 2001 | 1 Year   |
| _x  | Spectrum Analyzer    | 8566B                    | Hewlett Packard    | 2747A05855   | June | 2000 | 1 Year   |
| _x  | RF Pre-selector      | 85685A                   | Hewlett Packard    | 2091A00933   | June | 2000 | 1 Year   |
|     | Log-Periodic Antenna | нц 025                   | Rohde & Schwarz    | 340182/015   | Nov. | 2000 | 1 Year   |
|     | RF Amplifier         | DBR-0102N5334272B        | DBS Microwave Inc. | 012          | Mar. | 2001 | 1 Year   |
| _x  | RF Amplifier         | WJ-688 <del>2-8</del> 14 | Watkins-Johnson    | 0414         | June | 2000 | 1 Year   |
|     | RF Amplifier         | WJ-5315-556              | Watkins-Johnson    | 106          | June | 2000 | 1 Year   |
|     | RF Amplifier         | WJ-5320-307              | Watkins-Johnson    | 645          | June | 2000 | 1 Year   |
| _x  | RF Cable(10m)        | S 04272B                 | Suhner             | 155-21-011E0 | May  | 2000 | 1 Year   |
|     | RF Cable(2m)         | SUCOFLEX 104             | Suhner             | 155-21-012E0 | May  | 2000 | 1 Year   |
| х - | RF Cable(1m)         | SUCOFLEX 104             | Suhner             | 155-21-013E0 | May  | 2000 | 1 Year   |



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| 1.3.5 The measurement          | or the Fre | equency scapificy |            |           |          |
|--------------------------------|------------|-------------------|------------|-----------|----------|
| was performed                  | d.         |                   |            |           |          |
| <u>x</u> - was not appl        | icable.    |                   |            |           |          |
| Used test instrume             | ents :     |                   |            |           |          |
| Туре                           | Model No.  | Manufacturer      | Serial No. | Last Cal. | Interval |
| Frequency Counter              | 53131A     | Hewlett Packard   | 3546A11807 | May 2000  | 1 Year   |
| Oven                           | _          | Ohnishi Co. Ltd.  | _          | Aug. 2000 | 1 Year   |
| DC Power Supply                | 6628A      | Hewlett Packard   | 3224A00284 | July 2000 | 1 Year   |
|                                |            |                   |            |           |          |
| 1.3.6 The measurement          | of the Oc  | cupied Bandwidth  |            |           |          |
| $\underline{x}$ - was performe | d.         |                   |            |           |          |
| - was not appl                 | icable.    |                   | >          |           |          |

| Used test instrumen   | nts :     |                 | ] [        |           |           |
|-----------------------|-----------|-----------------|------------|-----------|-----------|
| Туре                  | Model No. | . Manufacturer  | Serial No. | Last Cal. | Interval  |
| Type                  | Model No  | . Manuracturer  | Certai No. | nast Car. | Incer var |
| Spectrum Analyzer     | 8560E     | Hewlett Packard | 3240A00189 | Nov. 2000 | 1 Year    |
| Spectrum Analyzer     | 8566B     | Hewlett Packard | 2140A01091 | Apr. 2001 | 1 Year    |
| x - Spectrum Analyzer | 8566B     | Hewlett Packard | 2747A05855 | June 2000 | 1 Year    |
| Function Generator    | 3325A     | Hewlett Packard | 2512A21776 | May 2000  | 1 Year    |
| FM Linear Detector    | MS61A \   | Anritsu Corp.   | M77486     | Sep. 2000 | 1 Year    |
| Level Meter           | MI.422C   | Anritsu Corp.   | M87571     | June 2000 | 1 Year    |
|                       |           |                 |            |           |           |

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#### EUT MODIFICATION / Deviation from Standard 1.4

#### 1.4.1 EUT MODIFICATION

| X | -No | modifications | were | conducted | by | JQA | to | achieve | compliance | to | Class | В | levels |
|---|-----|---------------|------|-----------|----|-----|----|---------|------------|----|-------|---|--------|
|   |     |               |      |           |    |     |    |         |            |    |       |   |        |

- To achieve compliance to Class B levels, the following changes were made by JQA during the compliance test.

The modifications will be implemented in all production models of this equipment. Applicant : Date : Typed Name: Position : 1.4.2 Deviation from Standard:  $\underline{x}$  - No deviations from the standard described in clause 1.1. \_\_\_ - The following deviations were employed from the standard described in clause 1.1:

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### 1.5 TEST RESULTS

Remarks:

| AC Power Line Conducted Emission | Applicable                      | x - NOT Applicable         |
|----------------------------------|---------------------------------|----------------------------|
| The requirements are             | PASSED                          | NOT PASSED                 |
| Remarks :                        |                                 |                            |
| Radiated Emission [§15.231(b)]   | $ar{	ext{x}}$ - Applicable      | NOT Applicable             |
| The requirements are             | x - PASSED                      | NOT PASSED                 |
| Remarks:                         | $\langle \hat{\lambda} \rangle$ |                            |
| Frequency Stability              | - Applicable                    | $oxed{x}$ - NOT Applicable |
| The requirements are             | PASSED                          | NOT PASSED                 |
| Remarks:                         |                                 |                            |
| Occupied Bandwidth [\$15.231(c)] | <u>x</u> - Applicable           | NOT Applicable             |
| The requirements are             | x - PASSED                      | NOT PASSED                 |

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#### 1.6 SUMMARY

#### General Remarks:

The EUT was tested according to the requirements of FCC Rules and Regulations Part 15 Subpart A and C (June 23, 1989) under the test configuration, as shown in clause 1.7 to 1.10.

The conclusion for the test items which are required by the applied regulation is indicated under the final judgment.

#### Final Judgment:

The "as received" sample;

x - fulfill the test requirements of the regulation mentioned on clause 1.1.

\_ - fulfill the test requirements of the regulation mentioned on clause 1.1, but with certain qualifications.

- doesn't fulfill the test regulation mentioned on clause 1.1.

Begin of testing: May 🛝

End of testing : May 7, 2001

- JAPAN QUALITY ASSURANCE ORGANIZATION -

Approved by:

Signatories:

Issued by:

Masaaki Takahashi

Manager

JQA EMC Engineering Dept.

Assistant Manager

JQA EMC Engineering Dept.

FCC ID :GT3CSC003 Issue Date :May 9, 2001

### 1.7 TEST CONFIGURATION / OPERATION OF EUT

### 1.7.1 Test Configuration

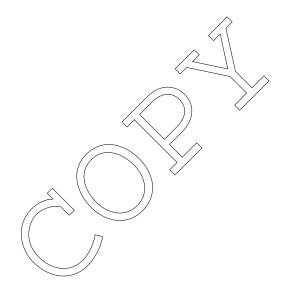
#### The equipment under test (EUT) consists of :

| Item              | Manufacturer    | Model No.   | FCC ID    | Serial No. |
|-------------------|-----------------|-------------|-----------|------------|
| Remote Controller | SMK Corporation | RM-SRXDP10J | GT3CSC003 | None       |

#### 1.7.2 Operating condition

Power supply Voltage : 3.0 VDC(Battery)

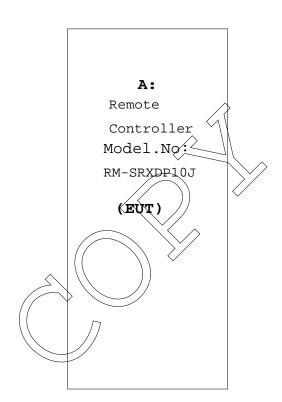
The tests have been carried out under the transmitting condition.



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### 1.8 EUT ARRANGEMENT (DRAWINGS)



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#### 1.9 PRELIMINARY TEST AND TEST-SETUP (DRAWINGS)

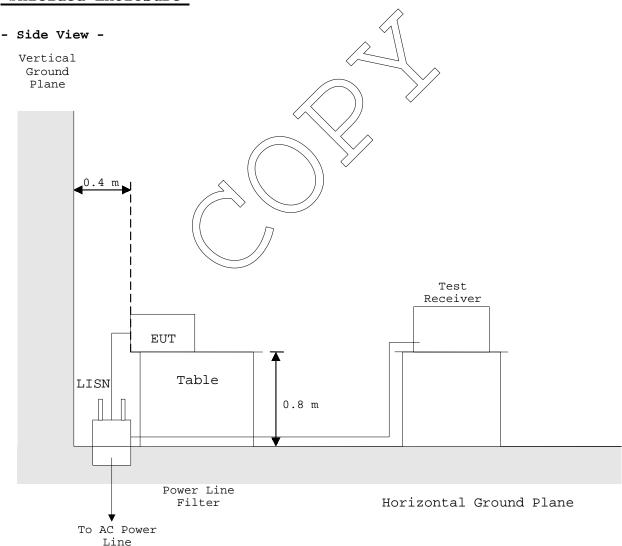
#### 1.9.1 AC Power Line Conducted Emission ( 450 kHz - 30 MHz) :

According to description of ANSI C63.4-1992 sec.13.1.3.1, the AC power line preliminary conducted emissions measurements were carried out.

The preliminary conducted measurements were performed using the spectrum analyzer to observe the emission characteristics of the EUT.

The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions. These configurations were used for final AC power line conducted emissions measurements.

## Shielded Enclosure



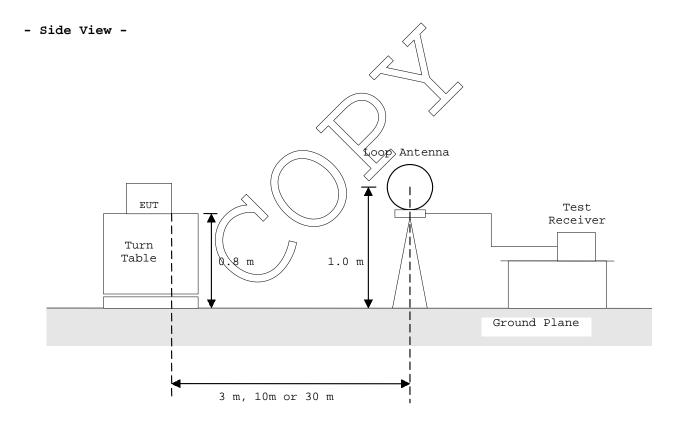
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#### 1.9.2 Radiated Emission ( 9 kHz - 30 MHz):

According to description of ANSI C63.4-1992 sec.13.1.4.1, the preliminary radiated emissions measurement were carried out. The preliminary radiated measurements were performed at the measurement distance that specified for compliance to determine the emission characteristics of the EUT.

The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions. These configurations were used for the final radiated emissions measurements.



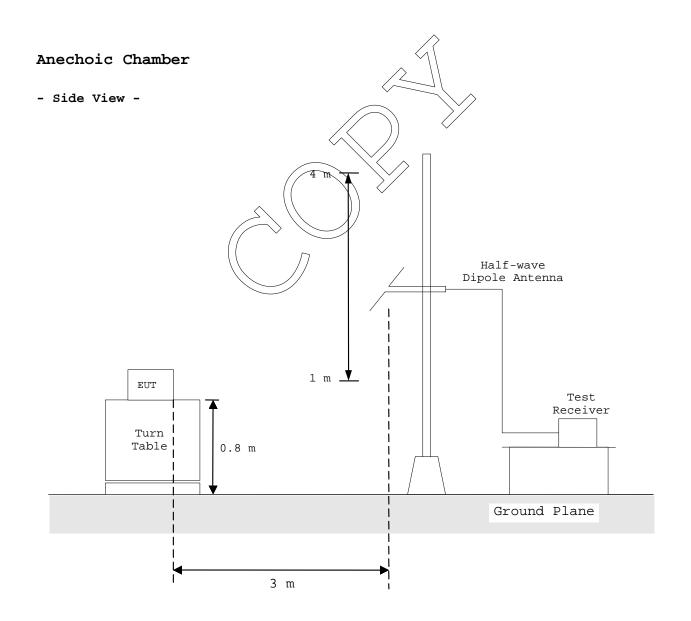
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#### 1.9.3 Radiated Emission ( 30 MHz - 1000 MHz):

According to description of ANSI C63.4-1992 sec.13.1.4.1, the preliminary radiated emissions measurement were carried out. The preliminary radiated measurements were performed at the measurement distance that specified for compliance to determine the emission characteristics of the EUT.

The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions. These configurations were used for the final radiated emissions measurements.



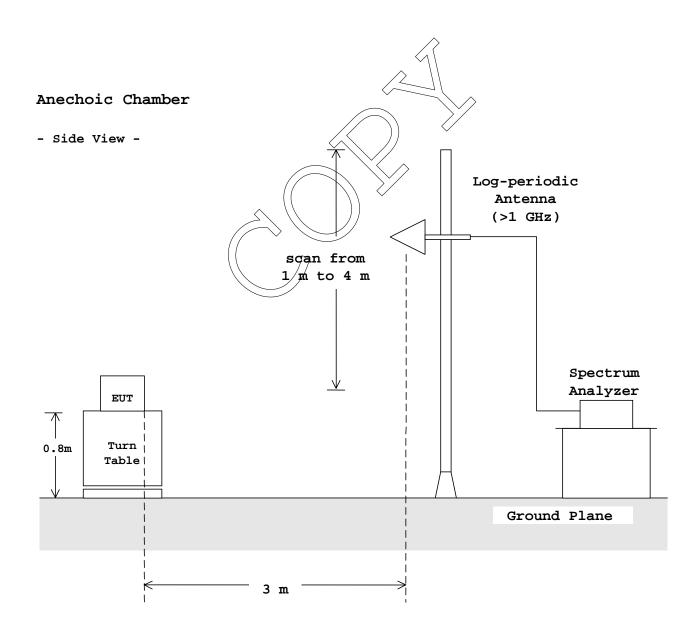
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#### 1.9.4 Radiated Emission (Above 1 GHz):

According to description of ANSI C63.4-1992 sec.13.1.4.1, the preliminary radiated emissions measurements were carried out. The preliminary radiated measurements were performed at the measurement distance that specified for compliance to determine the emission characteristics of the EUT.

The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions. These configurations were used for the final radiated emissions measurements.



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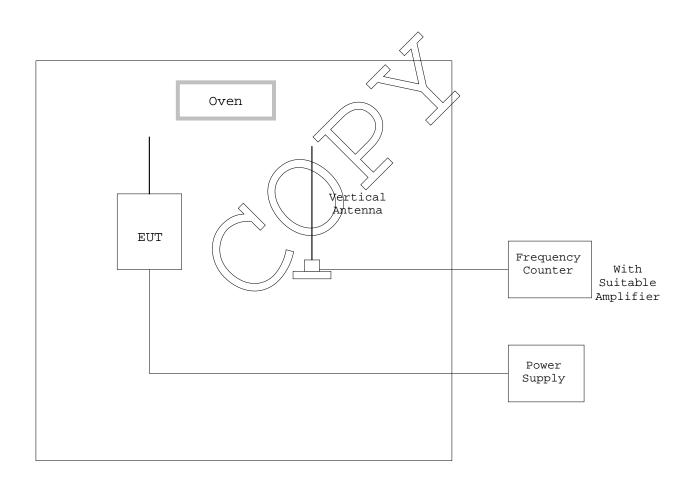
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#### 1.9.5 Frequency Stability:

According to description of ANSI C63.4-1992 sec.13.1.5 and sec.13.1.6, the frequency stability measurements were carried out. By using frequency counter with suitable RF amplifier, the carrier frequency of the transmitter under test was measured with a temperature variation of  $-20\,^{\circ}\text{C}$  to  $+50\,^{\circ}\text{C}$  at the normal supply voltage, and if required , with a variation in the primary voltage from 85 % to 115 % the rated supply voltage at the temperature of  $+20\,^{\circ}\text{C}$ .

These measurements were carried out after allow sufficient time (approximately 1 hour) for the temperature of the chamber to stabilize.



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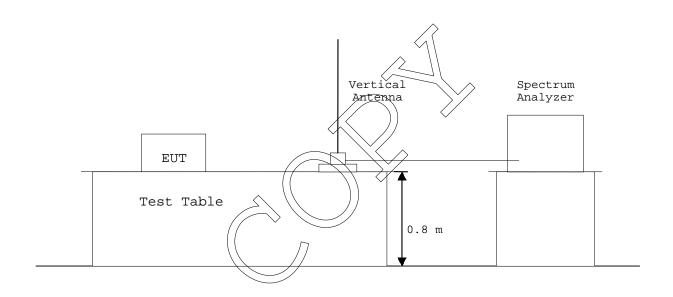
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## 1.9.6 Occupied Bandwidth:

According to description of ANSI C63.4-1992 sec.13.1.7, the occupied bandwidth measurements were carried out. By using a spectrum analyzer with a vertical antenna for picking up the signal, the measurements of the emission were made under the transmitting modes of the EUT.

The resolution bandwidth of spectrum analyzer was set to the value specified in sec.13.1.7.

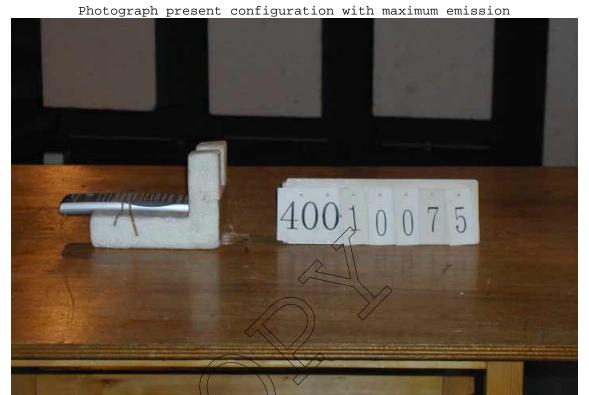


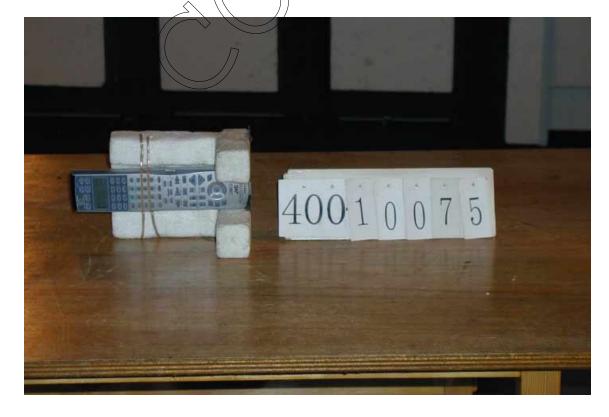
:CFR 47 FCC Rules Part 15 Page 20 of 30 Standard

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### 1.10 TEST ARRANGEMENT (PHOTOGRAPHS)

PHOTOGRAPHS OF EUT CONFIGURATION FOR RADIATED EMISSIONS MEASUREMENT







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### TEST DATA

### 2.2 Radiated Emissions Measurement

Date : \_\_\_May 7, 2001

Temp.: \_\_\_22 °C \_ Humi.: \_\_\_61 %

Operating Frequency : 433.92 MHz Distance of Measurement : 3.0 meters

|             | Correctio | n Meter   | Reading    |         |               | Field Stre    | ngth at 3 m   |  |
|-------------|-----------|-----------|------------|---------|---------------|---------------|---------------|--|
| Frequency   | Factor    | Horiz.    | Vert.      | Factor* | Limits        | Horiz.        | Vert.         |  |
| (MHz)       | (dB/m)    | (dBµV)    | (dBµV)     | (dB/m)  | $(dB\mu V/m)$ | $(dB\mu V/m)$ | $(dB\mu V/m)$ |  |
| Fundamental |           |           |            |         |               |               |               |  |
| 433.920     | 24.0      | 59.6      | 61.0       | -13.3   | 80.8          | 70.3          | 71.7          |  |
| Harmonics   | & other   | Frequency | components |         |               |               |               |  |
| 867.840     | 31.7      | 22.6      | 21.2       | -13.3   | 60.8          | 41.0          | 39.6          |  |
| 1301.760    | 27.1      | 28.0      | 29.8       | -13.3   | 54.0**        | 41.8          | 43.6          |  |
| 1735.680    | 30.5      | 22.7      | 23.5       | -13.3   | ~\\60.8       | 39.9          | 40.7          |  |
| 2169.600    | -13.4     | 61.8      | 59.3       | -13.3   | <u> </u>      | 35.1          | 32.6          |  |
| 2603.520    | -11.9     | 62.0      | 60.8       | =13.3   | 69,8          | 36.8          | 35.6          |  |
| 3037.440    | -10.0     | 61.6      | 58.9       | -13).)3 | 60.8          | 38.3          | 35.6          |  |
| 3471.360    | -8.2      | 54.5      | 54.0       | -13.3   | 60.8          | 33.0          | 32.5          |  |
| 3905.280    | -6.6      | < 47.0    | 47.0       | -13.3   | 54.0**        | > 27.1        | > 27.1        |  |
| 4339.200    | -5.3      | < 47.0    | (< 47.0)   | -13.3   | 54.0**        | > 28.4        | > 28.4        |  |

Operating Frequency

Distance of Measurement : 3.0 meters

|            |            | ( )         | / /         |         |               |               |               |
|------------|------------|-------------|-------------|---------|---------------|---------------|---------------|
|            | Correction | n Meter R   | eading      |         |               | Field Strer   | ngth at 3 m   |
| Frequency  | Factor     | Horiz.      | Vert.       | Factor* | Limits        | Horiz.        | Vert.         |
| (MHz)      | (dB/m)     | (dBµV)      | $(dB\mu V)$ | (dB/m)  | $(dB\mu V/m)$ | $(dB\mu V/m)$ | $(dB\mu V/m)$ |
| Fundamenta | al         |             |             |         |               |               |               |
| 423.220    | 23.7       | 58.2        | 59.3        | -13.3   | 80.5          | 68.7          | 69.8          |
| Harmonics  | & other F  | requency co | mponents    |         |               |               |               |
| 846.440    | 31.4       | 21.8        | 22.2        | -13.3   | 60.5          | 40.0          | 40.4          |
| 1269.660   | 26.8       | 30.1        | 29.1        | -13.3   | 60.5          | 43.7          | 42.7          |
| 1692.880   | 30.4       | 20.0        | 22.9        | -13.3   | 54.0**        | 37.2          | 40.1          |
| 2116.100   | -13.8      | 59.1        | 59.2        | -13.3   | 60.5          | 32.1          | 32.2          |
| 2539.320   | -12.2      | 59.2        | 58.2        | -13.3   | 60.5          | 33.8          | 32.8          |
| 2962.540   | -10.3      | 50.4        | 52.3        | -13.3   | 60.5          | 26.9          | 28.8          |
| 3385.760   | -8.6       | 50.9        | 50.5        | -13.3   | 60.5          | 29.1          | 28.7          |
| 3808.980   | -7.0       | < 47.0      | < 47.0      | -13.3   | 54.0**        | > 26.8        | > 26.8        |
| 4232.200   | -5.6       | < 47.0      | < 47.0      | -13.3   | 54.0**        | > 28.2        | > 28.2        |

Standard :CFR 47 FCC Rules Part 15

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Note: 1. The spectrum was checked from 30 MHz to tenth harmonics.

All emissions not listed were found to be more than 20 dB below the limits.

- 2. The symbol of "<" means "or less".
- 3. The cable loss and amplifier gain were included in the correction factor.
- 4. Sample calculation :

at 433.920 MHz

 $Cf + Mr + F = 24.0 + 61.0 - 13.3 = 71.7 dB\mu V/m$ 

Where,

Cf = Correction Factor

Mr = Meter Reading

F = Peak to Average Factor

5. "\*": The factor due to the pulsed waveform as shown in the attached sheet.

6. Measuring Instrument Setting

Detector function

IF Bandwidtk

/ Peak

: 1 MHz

7. "\*\*": Restricted Bands

Tested by

Shigeru Osawa Testing Engineer Standard : CFR 47 FCC Rules Part 15

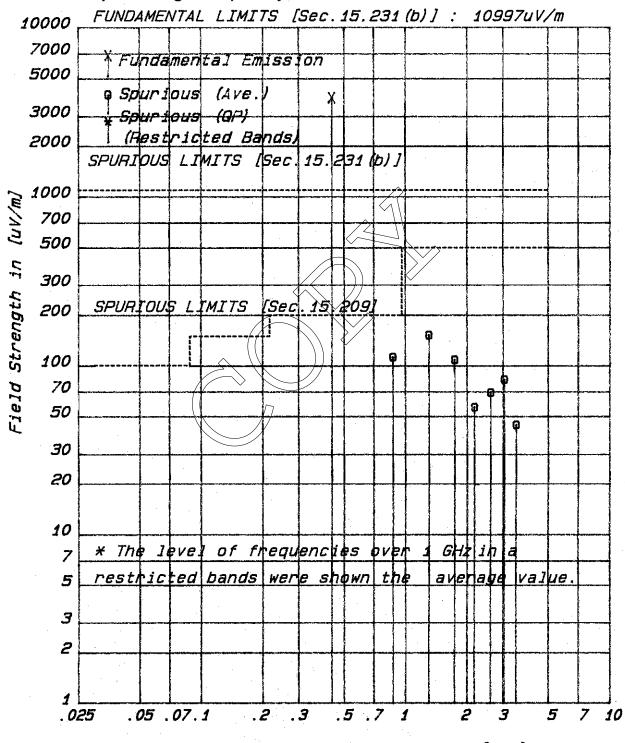
FCC ID :GT3CSC003
Issue Date :May 9, 2001

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# Radiated Fundamental & Spurious Emissions

FCC ID : GT3CSC003

Operating Frequency: 433.920 MHz



Standard

:RM-SRXDP10J

:CFR 47 FCC Rules Part 15

FCC ID :GT3CSC003

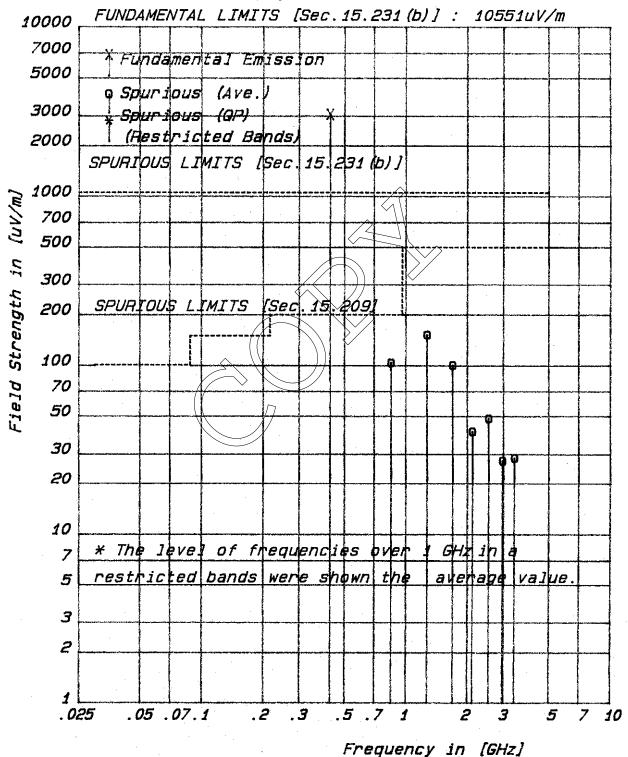
Issue Date :May 9, 2001

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# Radiated Fundamental & Spurious Emissions

FCC ID : GT3CSC003

Operating Frequency: 423.220 MHz



FCC ID :GT3CSC003

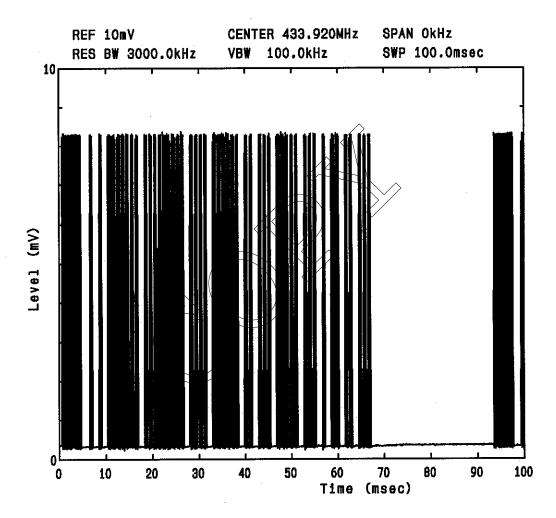
Issue Date :May 9, 2001

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### The encoded waveform in the time domain

FCC ID: GT3CSC003 Model: RM-SRXDP10J

Mode of EUT: Transmit



The above waveform indicates the case when field stength averaged over 100 milliseconds was maximum value. In order to obtain the peak to average factor, calculation of the period of total on-time was computed by personal computer. Results was obtaind by following.

Duty cycle = (Maximum total on-time / 100 msec)  $\times$  100 = (21.6 msec / 100 msec)  $\times$  100 = 21.6 %

Therefore

Factor is  $20\log(0.2160) = -13.3$  dB

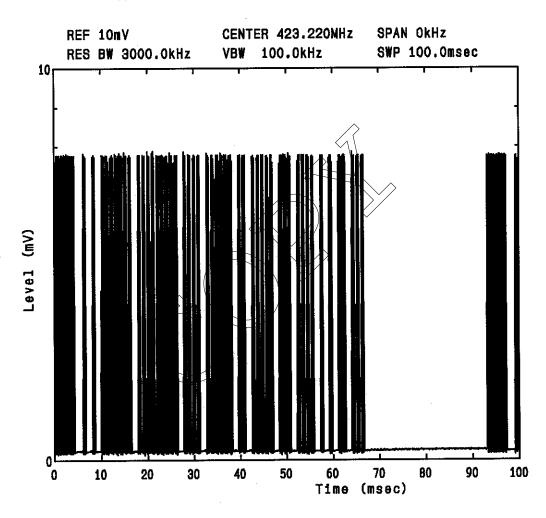
FCC ID :GT3CSC003 Issue Date :May 9, 2001

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# The encoded waveform in the time domain

FCC ID: GT3CSC003 Model: RM-SRXDP10J

Mode of EUT: Transmit



The above waveform indicates the case when field stength averaged over 100 milliseconds was maximum value. In order to obtain the peak to average factor, calculation of the period of total on-time was computed by personal computer. Results was obtaind by following.

Duty cycle = (Maximum total on-time / 100 msec) x 100 = (21.6 msec / 100 msec) x 100 = 21.6 %

Therefore

Factor is  $20\log(0.2160) = -13.3 \text{ dB}$ 

-10075 FCC ID :GT3CSC003 -SRXDP10J Issue Date :May 9, 2001

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#### 2.4 Occupied Bandwidth Measurement

Date : <u>May 7</u>, 2001

Temp.: <u>22 °C</u> Humi.: <u>61 %</u>

Measurements Results :

Specified Limits: 0.25 % of the fundamental frequency

 $433.92 \text{ MHz} \times 0.0025 = 1084.8 \text{ kHz}$ 

 $423.22 \text{ MHz} \times 0.0025 = 1058.1 \text{ kHz}$ 

Refer to the attached graphs.

Tested by :

Shigeru Osawa Testing Engineer Standard

:CFR 47 FCC Rules Part 15

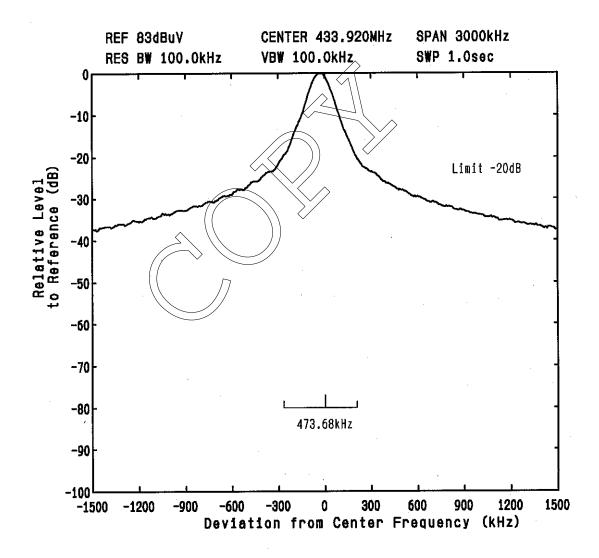
FCC ID :GT3CSC003 Issue Date : May 9, 2001

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# Emission Limitation

FCC ID: GT3CSC003 Model: RM-SRXDP10J

Mode of EUT: Transmit



FCC ID :GT3CSC003 Issue Date : May 9, 2001

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# Emission Limitation

FCC ID: GT3CSC003 Model: RM-SRXDP10J

Mode of EUT: Transmit

