

# Matsushita-Kotobuki Electronics Industries Ltd.

## Saijo Division

Address: 247 Fukutake, Saijo, Ehime 793 - 8510 Japan  
Tel: 0897 - 56 - 1111 / Fax: 0897 - 53 - 1392

### REPORT OF MEASUREMENTS-(Part I)

Date: Nov. 24, 2000

REQUIRED IN ( X ) SUBPART B (TV INTERFACE DEVICE)  
( ) ( )

EXHIBIT # : 1  
FCC ID : ACI927139AH  
OUR REF. : MKES00-F018  
MODEL NO. : VHQ-451  
Sheet 1 of 14 Sheets

Name of Manufacturer: Matsushita-Kotobuki Electronics Industries Ltd.

Address of Manufacturer: 247 Fukutake, Saijo, Ehime, Japan

#### Device Under Measurement

FCC ID : ACI927139AH  
Model No. : VHQ-451  
Trade Name : Quasar  
Applicant : Matsushita Electric Ind. Co., Ltd.  
This device is a representative model of KG-21HG chassis group.

#### Data Also Applied To

| FCC ID | Model No.(Trade Name) |
|--------|-----------------------|
| _____  | _____                 |
| _____  | _____                 |
| _____  | _____                 |

#### Device Description

Name of Device : ( X ) Video Cassette Recorder, ( ) Tuner Adapter  
Frequency : VHF 3 or 4 ch.  
Video Line Terminals: ( X ) Provided, ( ) Not Provided  
Accessories : RF Out Cable (0.9 m).  
Video/Audio out Cable (1.5 m)

#### Certification

On the basis of the measurement data contained in Part II, all devices bearing the afore mentioned FCC ID (model No., chassis No., and trade names) are stated by the undersigned to be capable of complying with the applicable sections of Part 15 of the FCC rules governing restricted radiation devices at the time of manufacture and may be expected to continue to comply under normal conditions and with usual maintenance.

The undersigned also states that the device measured was an engineering prototype, pre production, or production unit. If changes are applied to future units and such changes adversely alter spurious radiation, an amended report of measurements will be supplied to the FCC.



K. Ishikawa  
Sr. Engineer

# Matsushita-Kotobuki Electronics Industries Ltd.

## Saijo Division

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EXHIBIT # : 1  
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MODEL NO. : VHQ-451  
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### Part 15 Subpart B, (TV Interface Device)- Part

#### 2) 15.109 Radiated Emission(Including Tuner)

| Freq.<br>(MHz) | Limits<br>(dBuV/m) | Emission (dBuV/m) |       |
|----------------|--------------------|-------------------|-------|
|                |                    | Horiz.            | Vert. |
| 85.90          | 40.0               | 30.9              | 26.9  |
| 114.55         | 43.5               | 38.0              | 31.4  |
| 121.71         | 43.5               | 31.3              | 28.8  |
| 833.00         | 43.5               | 35.4              | 33.2  |
| 839.00         | 46.0               | 36.7              | 32.5  |
| 845.00         | 46.0               | 36.3              | 33.4  |

(Refer to Sheet 3, 4, 10, 11, 12, 13, 14 of 14 Sheets)

Note: Without Laurel Antenna  
With accessories

#### 3) 15.111 Antenna Power Conducted Voltage

| Freq.<br>(MHz) | Limits<br>(dBuV) | Conducted Voltage<br>(dBuV) |
|----------------|------------------|-----------------------------|
| 1618.0         | 51.8             | 39.8                        |
| 1630.0         | 51.8             | 40.3                        |
| 1642.0         | 51.8             | 41.1                        |
| 1654.0         | 51.8             | 41.9                        |
| 1666.0         | 51.8             | 41.3                        |
| 1678.0         | 51.8             | 40.5                        |

(Refer to Sheet 5 of 14 Sheets)

#### 4) 15.115(b)(1) Output Signal Level

| Ch | Limits (dBuV) |       | Level (dBuV) |       |
|----|---------------|-------|--------------|-------|
|    | Visual        | Aural | Visual       | Aural |
| 3  | 69.5          | 56.5  | 66.9         | 51.3  |
| 4  | 69.5          | 56.5  | 67.2         | 50.8  |

(Refer to Sheet 6 of 14 Sheets)

#### 5) 15.115(b)(2) Output Terminal Conducted Interference

| Ch | Freq.<br>(MHz) | Limits<br>(dBuV) | Interference<br>(dBuV) |
|----|----------------|------------------|------------------------|
| 3  | 32.15          | 39.5             | 23.2                   |
|    | 36.15          | 39.5             | 25.7                   |
|    | 43.31          | 39.5             | 29.0                   |
|    | 50.55          | 39.5             | 36.4                   |
|    | 72.00          | 39.5             | 33.1                   |
|    | 79.15          | 39.5             | 25.3                   |
| 4  | 35.00          | 39.5             | 22.9                   |
|    | 42.21          | 39.5             | 26.8                   |
|    | 49.35          | 39.5             | 29.6                   |
|    | 56.54          | 39.5             | 35.7                   |
|    | 78.00          | 39.5             | 32.6                   |
|    | 85.20          | 39.5             | 24.8                   |

(Refer to Sheet 7, 8 of 14 Sheets)

#### 6) 15.115© Transfer SW Isolation

| Ch | Limits<br>(dBuV) | Level<br>(dBuV) |
|----|------------------|-----------------|
| 3  | 9.5              | <3.9            |
| 4  | 9.5              | <3.9            |

(Refer to Sheet 9 of 14 Sheets)

MEASUREMENT SITE : MKS Site  
MEASUREMENT PROCEDURE : ANSI C63.4-1992

Note:(1) Detailed report: Refer to attached sheets.

I HEREBY STATE THAT: The measurements shown in Part II of this form were made in accordance with the procedures indicated and the energy emitted by this equipment was found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements and vouch for the qualifications of all persons taking them.

I FURTHER STATE THAT: On the basis of the measurements made, the device tested is capable of operation in compliance with the requirements of Part 15 of the FCC Rules under normal use and maintenance.

  
T. Watanabe  
Engineer

EXHIBIT # : 1  
 FCC ID : ACJ927139AH  
 OUR REF. : MKES00-F018  
 MODEL NO. : VHQ-451

Part 15 Subpart B. (TV Interface Device)

Sheet 3 of 14 Sheets

2) 15.109 Radiated Emission (Tuner: 115-V-D025AN/ Including Tuner, Without Accessories)

| Video Signal            | Frequency (MHz) | Meter Reading<br>Open Volt. (dBuV) |       | Correction<br>Factor (dB)<br>Open Vol. | Emission &<br>3 meters(dBuV) |       |
|-------------------------|-----------------|------------------------------------|-------|----------------------------------------|------------------------------|-------|
|                         |                 | Horiz.                             | Vert. |                                        | Horiz.                       | Vert. |
| Multi Burst<br>1 V p-p  | 85.90           | 15.9                               | 11.2  | 9.6                                    | 25.5                         | 20.8  |
|                         | 114.55          | 18.2                               | 11.8  | 14.4                                   | 32.6                         | 26.2  |
|                         | 121.71          | 10.3                               | 9.8   | 15.2                                   | 25.5                         | 25.0  |
|                         | 833.00          | 3.5                                | 1.6   | 27.7                                   | 31.2                         | 29.3  |
|                         | 839.00          | 5.4                                | 2.4   | 27.8                                   | 33.2                         | 30.2  |
|                         | 845.00          | 5.4                                | 2.1   | 28.0                                   | 33.4                         | 30.1  |
| Multi Burst<br>5 V p-p  | 85.90           | 16.0                               | 11.1  | 9.6                                    | 25.6                         | 20.7  |
|                         | 114.55          | 18.2                               | 12.6  | 14.4                                   | 32.6                         | 27.0  |
|                         | 121.71          | 10.0                               | 9.3   | 15.2                                   | 25.2                         | 24.5  |
|                         | 833.00          | 2.8                                | 3.0   | 27.7                                   | 30.5                         | 30.7  |
|                         | 839.00          | 5.1                                | 2.2   | 27.8                                   | 32.9                         | 30.0  |
|                         | 845.00          | 4.9                                | 2.2   | 28.0                                   | 32.9                         | 30.2  |
| Internal<br>Signal      | 85.90           | 15.8                               | 11.2  | 9.6                                    | 25.4                         | 20.8  |
|                         | 114.55          | 18.2                               | 11.3  | 14.4                                   | 32.6                         | 25.7  |
|                         | 121.71          | 10.2                               | 10.9  | 15.2                                   | 25.4                         | 26.1  |
|                         | 833.00          | 3.6                                | 2.0   | 27.7                                   | 31.3                         | 29.7  |
|                         | 839.00          | 5.7                                | 1.9   | 27.8                                   | 33.5                         | 29.7  |
|                         | 845.00          | 5.6                                | 2.3   | 28.0                                   | 33.6                         | 30.3  |
| RF/CATV<br>Signal Input | 85.90           | 15.9                               | 11.5  | 9.6                                    | 25.5                         | 21.1  |
|                         | 114.55          | 17.9                               | 10.7  | 14.4                                   | 32.3                         | 25.1  |
|                         | 121.71          | 10.4                               | 11.0  | 15.2                                   | 25.6                         | 26.2  |
|                         | 833.00          | 3.5                                | 2.0   | 27.7                                   | 31.2                         | 29.7  |
|                         | 839.00          | 5.6                                | 2.8   | 27.8                                   | 33.4                         | 30.6  |
|                         | 845.00          | 4.5                                | 2.4   | 28.0                                   | 32.5                         | 30.4  |

Note: 1. Sample calculation at

M.B., 1 V p-p, Horiz. 85.90 MHz ; 15.9 + 9.6 = 25.5 (dBuV/m)

2. Measuring Instruments:

- a) Field strength meter - Hewlett Packard company  
 Model: HP 8546A  
 (1) Frequency range : 9 kHz to 6.5 GHz  
 (2) RF Input : 50 ohm  
 (3) IF band width : 200 Hz/ 9 kHz/ 120 kHz/ 1MHz  
 (4) Detector function : Average/CISPR Q-Peak/Peak
- b) Test Signal Generator - Shibasoku Co., Ltd.  
 (Multi Burst) Model: TG-5, 2U2
- c) Receiving antenna - Schwarzbeck  
 Model: VHA9103 30 - 300 MHz  
 Model: UHALP9108A 300 - 1000 MHz  
 - The Electro-Mechanics Company  
 Model: 3115 1 - 18G Hz

3. The spectrum was checked from 30 MHz to 1694 MHz and the six highest emissions relative to the appropriate limit were measured and reported.

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Part 15 Subpart B. (TV Interface Device)

2) 15.109 Radiated Emission (Including Tuner, With Accessories)

| Video Signal            | Frequency (MHz) | Meter Reading<br>Open Volt. (dBuV) |       | Correction<br>Factor (dB)<br>Open Vol. | Emission &<br>3 meters(dBuV) |       |
|-------------------------|-----------------|------------------------------------|-------|----------------------------------------|------------------------------|-------|
|                         |                 | Horiz.                             | Vert. |                                        | Horiz.                       | Vert. |
| Multi Burst<br>1 V p-p  | 85.90           | 20.2                               | 18.4  | 9.6                                    | 29.8                         | 28.0  |
|                         | 114.55          | 23.5                               | 16.7  | 14.4                                   | 37.9                         | 31.1  |
|                         | 121.71          | 14.3                               | 13.5  | 15.2                                   | 29.5                         | 28.7  |
|                         | 833.00          | 6.9                                | 5.6   | 27.7                                   | 34.6                         | 33.3  |
|                         | 839.00          | 8.0                                | 2.6   | 27.8                                   | 35.8                         | 30.4  |
|                         | 845.00          | 8.6                                | 4.0   | 28.0                                   | 36.6                         | 32.0  |
| Multi Burst<br>5 V p-p  | 85.90           | 21.3                               | 17.3  | 9.6                                    | 30.9                         | 26.9  |
|                         | 114.55          | 23.6                               | 17.0  | 14.4                                   | 38.0                         | 31.4  |
|                         | 121.71          | 16.1                               | 13.6  | 15.2                                   | 31.3                         | 28.8  |
|                         | 833.00          | 7.7                                | 5.5   | 27.7                                   | 35.4                         | 33.2  |
|                         | 839.00          | 8.9                                | 4.7   | 27.8                                   | 36.7                         | 32.5  |
|                         | 845.00          | 8.3                                | 5.4   | 28.0                                   | 36.3                         | 33.4  |
| Internal<br>Signal      | 85.90           | 20.9                               | 17.6  | 9.6                                    | 30.5                         | 27.2  |
|                         | 114.55          | 23.1                               | 18.6  | 14.4                                   | 37.5                         | 33.0  |
|                         | 121.71          | 15.8                               | 14.7  | 15.2                                   | 31.0                         | 29.9  |
|                         | 833.00          | 7.3                                | 6.2   | 27.7                                   | 35.0                         | 33.9  |
|                         | 839.00          | 8.7                                | 3.8   | 27.8                                   | 36.5                         | 31.6  |
|                         | 845.00          | 8.3                                | 5.9   | 28.0                                   | 36.3                         | 33.9  |
| RF/CATV<br>Signal Input | 85.90           | 20.6                               | 17.1  | 9.6                                    | 30.2                         | 26.7  |
|                         | 114.55          | 23.4                               | 17.4  | 14.4                                   | 37.8                         | 31.8  |
|                         | 121.71          | 15.4                               | 14.9  | 15.2                                   | 30.6                         | 30.1  |
|                         | 833.00          | 7.4                                | 6.4   | 27.7                                   | 35.1                         | 34.1  |
|                         | 839.00          | 9.0                                | 6.7   | 27.8                                   | 36.8                         | 34.5  |
|                         | 845.00          | 8.3                                | 5.5   | 28.0                                   | 36.3                         | 33.5  |

Note: 1. Sample calculation at  
M.B., 1 V p-p, Horiz. 85.90 MHz ; 20.2 + 9.6 = 29.8 (dBuV/m)

2. Measuring Instruments:

- a) Field strength meter - Hewlett Packard company  
Model: HP 8546A  
(1) Frequency range : 9 kHz to 6.5 GHz  
(2) RF Input : 50 ohm  
(3) IF band width : 200 Hz/ 9 kHz/ 120 kHz/ 1MHz  
(4) Detector function : Average/CISPR Q-Peak/Peak
- b) Test Signal Generator - Shibasoku Co., Ltd.  
(Multi Burst) Model: TG-5, 2U2
- c) Receiving antenna - Schwarzbeck  
Model: VHA9103 30 - 300 MHz  
Model: UHALP9108A 300 - 1000 MHz  
- The Electro-Mechanics Company  
Model: 3115 1 - 18G Hz

3. The spectrum was checked from 30 MHz to 1694 MHz and the six highest emissions relative to the appropriate limit were measured and reported.

Part 15 Subpart B, (TV Interface Device)

3) 15.111 (a) Antenna Power Conducted Voltage

| Frequency<br>(MHz) | Meter Reading<br>(dBUV) | Matc. Pad Loss<br>(dB) | Interference<br>(dBUV) |
|--------------------|-------------------------|------------------------|------------------------|
| 1618.0             | 31.0                    | 8.8                    | 39.8                   |
| 1630.0             | 31.5                    | 8.8                    | 40.3                   |
| 1642.0             | 32.3                    | 8.8                    | 41.1                   |
| 1654.0             | 33.1                    | 8.8                    | 41.9                   |
| 1666.0             | 32.5                    | 8.8                    | 41.3                   |
| 1678.0             | 31.7                    | 8.8                    | 40.5                   |

Antenna Input Impedance: 75 ohms (Unbalanced)

Note:

1. Sample calculation at 1618.0 MHz ; 31.0 + 8.8 = 39.8 (dBUV)

2. Measuring Instrument:

a) Spectrum Analyzer

- ADVANTEST Co., Ltd.

Model : R3261A

(1) Detector function : Peak

(2) Band width : 100 kHz

b) Matching Pad

- Anritsu Electric Co., Ltd.

Model : MB-009

(1) Frequency range : DC - 2G Hz

3. The spectrum was checked from 30 MHz to 1694 MHz and the six highest emissions relative to the appropriate limit were measured and reported.

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Part 15 Subpart B.

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4) 15.115 (b) (1) Output Signal Level (Tuner: 115-V-D025AN)

| Video Signal           | Ch | Measured Frequency(MHz) |       | Meter Reading (dBuV) |       | Pad Loss (dB) | Output Signal Level (dBuV) |       |
|------------------------|----|-------------------------|-------|----------------------|-------|---------------|----------------------------|-------|
|                        |    | Visual                  | Aural | Visual               | Aural |               | Visual                     | Aural |
| Multi Burst<br>1 V p-p | 3  | 61.25                   | 65.75 | 64.6                 | 49.0  | 2.3           | 66.9                       | 51.3  |
|                        | 4  | 67.25                   | 71.75 | 64.9                 | 48.5  | 2.3           | 67.2                       | 50.8  |
| Multi Burst<br>5 V p-p | 3  | 61.25                   | 65.75 | 64.6                 | 49.0  | 2.3           | 66.9                       | 51.3  |
|                        | 4  | 67.25                   | 71.75 | 64.9                 | 48.5  | 2.3           | 67.2                       | 50.8  |
| Internal<br>Signal     | 3  | 61.25                   | 65.75 | 64.6                 | 49.0  | 2.3           | 66.9                       | 51.3  |
|                        | 4  | 67.25                   | 71.75 | 64.9                 | 48.5  | 2.3           | 67.2                       | 50.8  |
| RF/CATV<br>Signal      | 3  | 61.25                   | 65.75 | 64.6                 | 49.0  | 2.3           | 66.9                       | 51.3  |
|                        | 4  | 67.25                   | 71.75 | 64.9                 | 48.5  | 2.3           | 67.2                       | 50.8  |

RF Output Impedance: 75 ohms (Unbalanced)

Note:

1. Sample calculation at

M.B., 1 V p-p, Visual, 3 Ch ;  $64.6 + 2.3 = 66.9$  (dBuV)

2. Measuring Instrument:

a) Spectrum Analyzer

- Anritsu Electric Co., Ltd.

Model : MS62B

(1) Detector function : Peak

(2) Band width : 100 kHz

b) Matching Pad

- Anritsu Electric Co., Ltd.

Model : MP614A

(1) Frequency range : 10 - 1200 MHz

c) Test Signal Generator  
(Multi Burst)

- Shibasoku Co., Ltd.

Model : 205

Part 15 Subpart B, (TV Interface Device)

5) 15.115 (b) (2) Output Terminal Conducted Interference

| Video Signal            | Ch | Freq.<br>(MHz) | Meter<br>Read.<br>(dBuV) | Matc. Pad<br>Loss (dB) | Att. Pad<br>Loss(dB) | Gain of<br>Amp.(dB) | Interference<br>(dBuV) |
|-------------------------|----|----------------|--------------------------|------------------------|----------------------|---------------------|------------------------|
| Multi Burst<br>1 V p-p  | 3  | 32.15          | 45.2                     | 2.3                    | N/A                  | 24.3                | 23.2                   |
|                         |    | 36.15          | 47.7                     | 2.3                    | N/A                  | 24.3                | 25.7                   |
|                         |    | 43.31          | 51.0                     | 2.3                    | N/A                  | 24.3                | 29.0                   |
|                         |    | 50.55          | 58.4                     | 2.3                    | N/A                  | 24.3                | 36.4                   |
|                         |    | 72.00          | 55.2                     | 2.3                    | N/A                  | 24.4                | 33.1                   |
|                         |    | 79.15          | 47.4                     | 2.3                    | N/A                  | 24.4                | 25.3                   |
|                         |    | 35.00          | 44.9                     | 2.3                    | N/A                  | 24.3                | 22.9                   |
|                         | 4  | 42.21          | 48.8                     | 2.3                    | N/A                  | 24.3                | 26.8                   |
|                         |    | 49.35          | 51.6                     | 2.3                    | N/A                  | 24.3                | 29.6                   |
|                         |    | 56.54          | 57.7                     | 2.3                    | N/A                  | 24.3                | 35.7                   |
|                         |    | 78.00          | 54.7                     | 2.3                    | N/A                  | 24.4                | 32.6                   |
|                         |    | 85.20          | 46.8                     | 2.3                    | N/A                  | 24.3                | 24.8                   |
| Multi Burst<br>5 V p-p  | 3  | 32.15          | 45.2                     | 2.3                    | N/A                  | 24.3                | 23.2                   |
|                         |    | 36.15          | 47.7                     | 2.3                    | N/A                  | 24.3                | 25.7                   |
|                         |    | 43.31          | 51.0                     | 2.3                    | N/A                  | 24.3                | 29.0                   |
|                         |    | 50.55          | 58.4                     | 2.3                    | N/A                  | 24.3                | 36.4                   |
|                         |    | 72.00          | 55.2                     | 2.3                    | N/A                  | 24.4                | 33.1                   |
|                         |    | 79.15          | 47.4                     | 2.3                    | N/A                  | 24.4                | 25.3                   |
|                         |    | 35.00          | 44.9                     | 2.3                    | N/A                  | 24.3                | 22.9                   |
|                         | 4  | 42.21          | 48.8                     | 2.3                    | N/A                  | 24.3                | 26.8                   |
|                         |    | 49.35          | 51.6                     | 2.3                    | N/A                  | 24.3                | 29.6                   |
|                         |    | 56.54          | 57.7                     | 2.3                    | N/A                  | 24.3                | 35.7                   |
|                         |    | 78.00          | 54.7                     | 2.3                    | N/A                  | 24.4                | 32.6                   |
|                         |    | 85.20          | 46.8                     | 2.3                    | N/A                  | 24.3                | 24.8                   |
| Internal<br>Signal      | 3  | 32.15          | 45.2                     | 2.3                    | N/A                  | 24.3                | 23.2                   |
|                         |    | 36.15          | 47.7                     | 2.3                    | N/A                  | 24.3                | 25.7                   |
|                         |    | 43.31          | 51.0                     | 2.3                    | N/A                  | 24.3                | 29.0                   |
|                         |    | 50.55          | 58.4                     | 2.3                    | N/A                  | 24.3                | 36.4                   |
|                         |    | 72.00          | 55.2                     | 2.3                    | N/A                  | 24.4                | 33.1                   |
|                         |    | 79.15          | 47.4                     | 2.3                    | N/A                  | 24.4                | 25.3                   |
|                         |    | 35.00          | 44.9                     | 2.3                    | N/A                  | 24.3                | 22.9                   |
|                         | 4  | 42.21          | 48.8                     | 2.3                    | N/A                  | 24.3                | 26.8                   |
|                         |    | 49.35          | 51.6                     | 2.3                    | N/A                  | 24.3                | 29.6                   |
|                         |    | 56.54          | 57.7                     | 2.3                    | N/A                  | 24.3                | 35.7                   |
|                         |    | 78.00          | 54.7                     | 2.3                    | N/A                  | 24.4                | 32.6                   |
|                         |    | 85.20          | 46.8                     | 2.3                    | N/A                  | 24.3                | 24.8                   |
| RF/CATV<br>Signal Input | 3  | 32.15          | 45.2                     | 2.3                    | N/A                  | 24.3                | 23.2                   |
|                         |    | 36.15          | 47.7                     | 2.3                    | N/A                  | 24.3                | 25.7                   |
|                         |    | 43.31          | 51.0                     | 2.3                    | N/A                  | 24.3                | 29.0                   |
|                         |    | 50.55          | 58.4                     | 2.3                    | N/A                  | 24.3                | 36.4                   |
|                         |    | 72.00          | 55.2                     | 2.3                    | N/A                  | 24.4                | 33.1                   |
|                         |    | 79.15          | 47.4                     | 2.3                    | N/A                  | 24.4                | 25.3                   |
|                         |    | 35.00          | 44.9                     | 2.3                    | N/A                  | 24.3                | 22.9                   |
|                         | 4  | 42.21          | 48.8                     | 2.3                    | N/A                  | 24.3                | 26.8                   |
|                         |    | 49.35          | 51.6                     | 2.3                    | N/A                  | 24.3                | 29.6                   |
|                         |    | 56.54          | 57.7                     | 2.3                    | N/A                  | 24.3                | 35.7                   |
|                         |    | 78.00          | 54.7                     | 2.3                    | N/A                  | 24.4                | 32.6                   |
|                         |    | 85.20          | 46.8                     | 2.3                    | N/A                  | 24.3                | 24.8                   |

Part 15 Subpart B, (TV Interface Device)

RF Output Impedance: 75 ohms (Unbalanced)

Note:

1. Sample calculation at

M.B., 1 V p-p, 3 Ch., 32.15 MHz ;  $45.2 + 2.3 - 24.3 = 23.2$  (dBuV)

2. Measuring Instrument:

- |                                           |                                                                                                           |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| a) Spectrum Analyzer                      | - Anritsu Electric Co., Ltd.<br>Model : MS62B<br>(1) Detector function : Peak<br>(2) Band width : 100 kHz |
| b) Matching Pad                           | - Anritsu Electric Co., Ltd.<br>Model : MP614A<br>(1) Frequency range : 10 - 1200 MHz                     |
| c) Test Signal Generator<br>(Multi Burst) | - Shibasoku Co., Ltd.<br>Model : 205                                                                      |
| d) Amplifier                              | - Hewlett Packard<br>Model : 8447F                                                                        |

3. The spectrum was checked from 30 MHz to 1000 MHz and the six highest emissions relative to the appropriate limit were measured and reported.



Part 15 Subpart B, (TV Interface Device)

6) 15.115 (c) Transfer Switch Isolation

| Video Signal           | Ch | Meter Read.(DbuV) | Matching Pad Loss(dB) | Gain of Amp.(dB) | Pad Loss (dB) | Level (dBuV) |
|------------------------|----|-------------------|-----------------------|------------------|---------------|--------------|
| Multi Burst<br>1 V p-p | 3  | <26.0             | 2.3                   | 24.4             | N/A           | <3.9         |
|                        | 4  | <26.0             | 2.3                   | 24.4             | N/A           | <3.9         |
| Multi Burst<br>5 V p-p | 3  | <26.0             | 2.3                   | 24.4             | N/A           | <3.9         |
|                        | 4  | <26.0             | 2.3                   | 24.4             | N/A           | <3.9         |
| Internal<br>Signal     | 3  | <26.0             | 2.3                   | 24.4             | N/A           | <3.9         |
|                        | 4  | <26.0             | 2.3                   | 24.4             | N/A           | <3.9         |

RF Output Impedance: 75 ohms (Unbalanced)

Note:

1. Sample calculation at

M.B., 1 V p-p, Visual, 3 Ch ;  $<26.0 + 2.3 - 24.4 = <3.9$  (dBuV)

2. Measuring Instrument:

a) Spectrum Analyzer

- Anritsu Electric Co., Ltd.

Model : MS62B

(1) Detector function : Peak

(2) Band width : 100 kHz

b) Matching Pad

- Anritsu Electric Co., Ltd.

Model : MP614A

(1) Frequency range : 10 - 1200 MHz

c) Test Signal Generator  
(Multi Burst)

- Shibasoku Co., Ltd.

Model : 205

d) Amplifier

- Hewlett Packard

Model : 8447F

Part 15 Subpart B, (TV Interface Device)

15.109 RADIATED EMISSION

- CONFIGURATION OF THE EQUIPMENT UNDER TEST -

( Arrangement of interface cable on the test table )

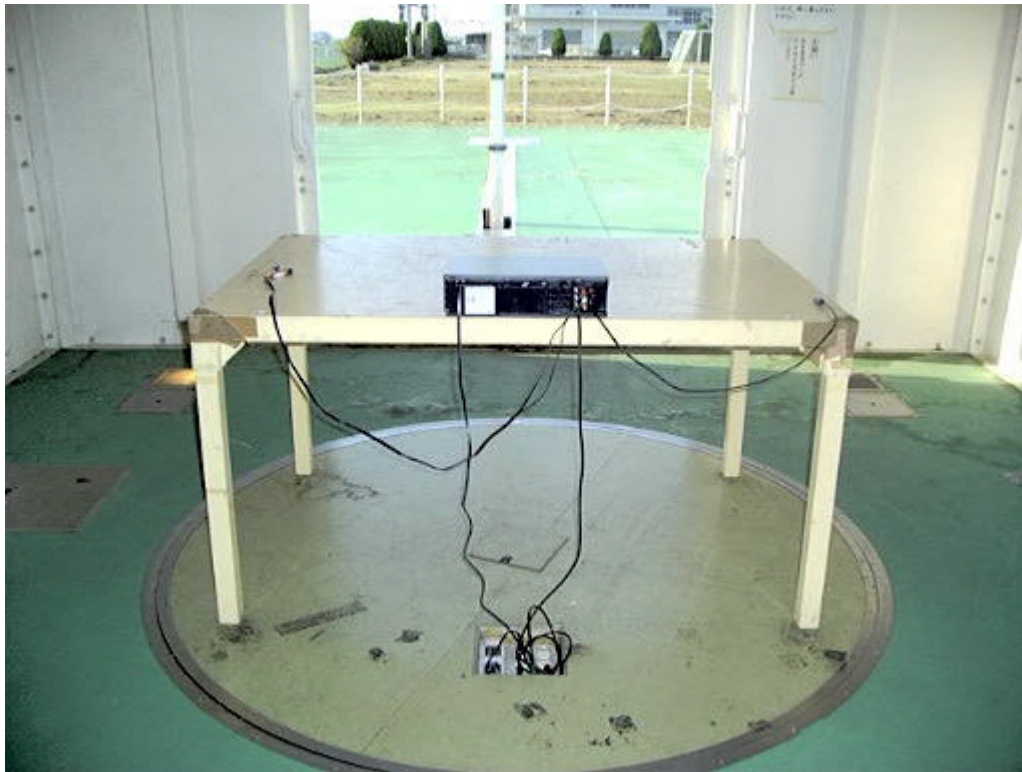


Part 15 Subpart B, (TV Interface Device)

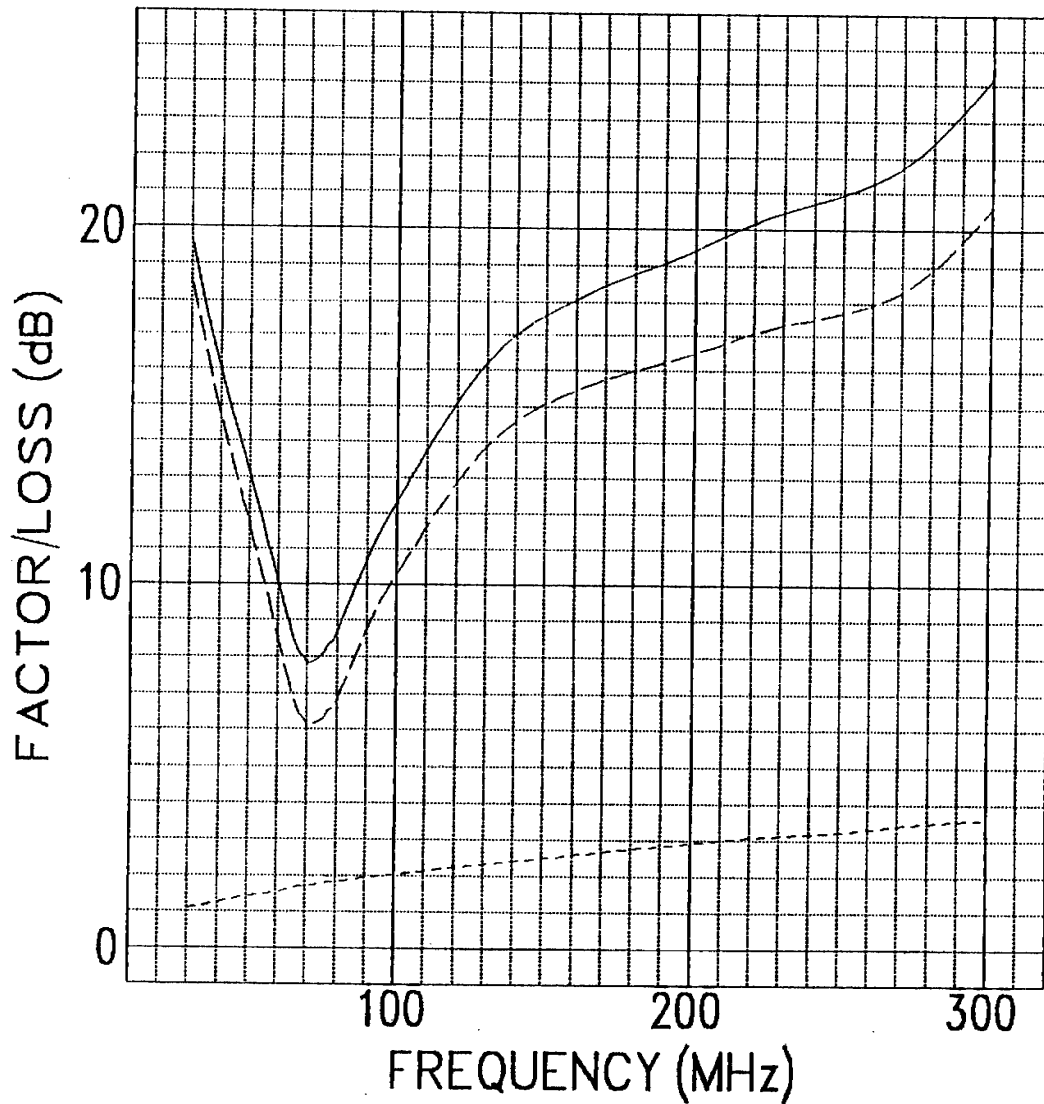
15.109 RADIATED EMISSION

- CONFIGURATION OF THE EQUIPMENT UNDER TEST -

( Arrangement of interface cable on the test table )



## CORRECTION FACTOR OF BBA9106



$$E = V + K$$

E : Field Strength

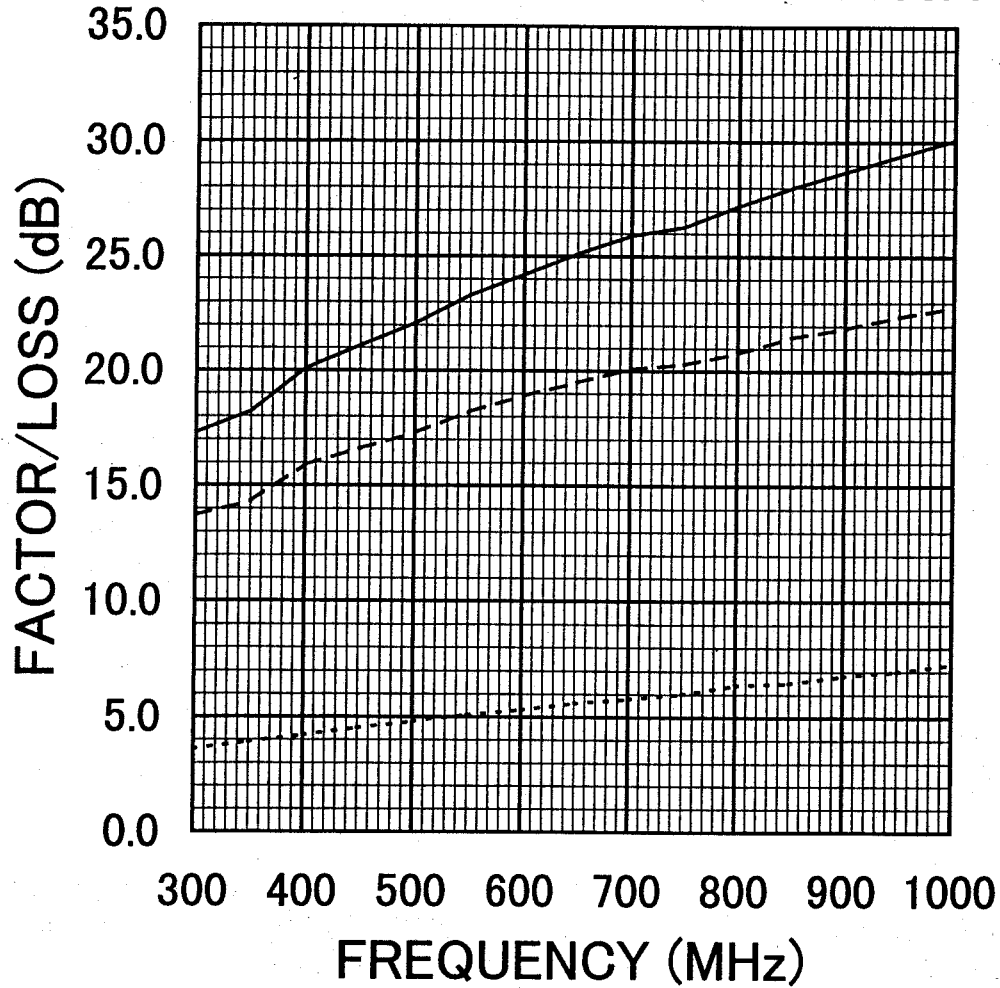
V : Correction Factor (dB)

———— : Correction Factor

----- : Antenna Factor

..... : Cable Loss

## CORRECTION FACTOR OF UHALP9108A



$$E = V + K$$

E : Field Strength

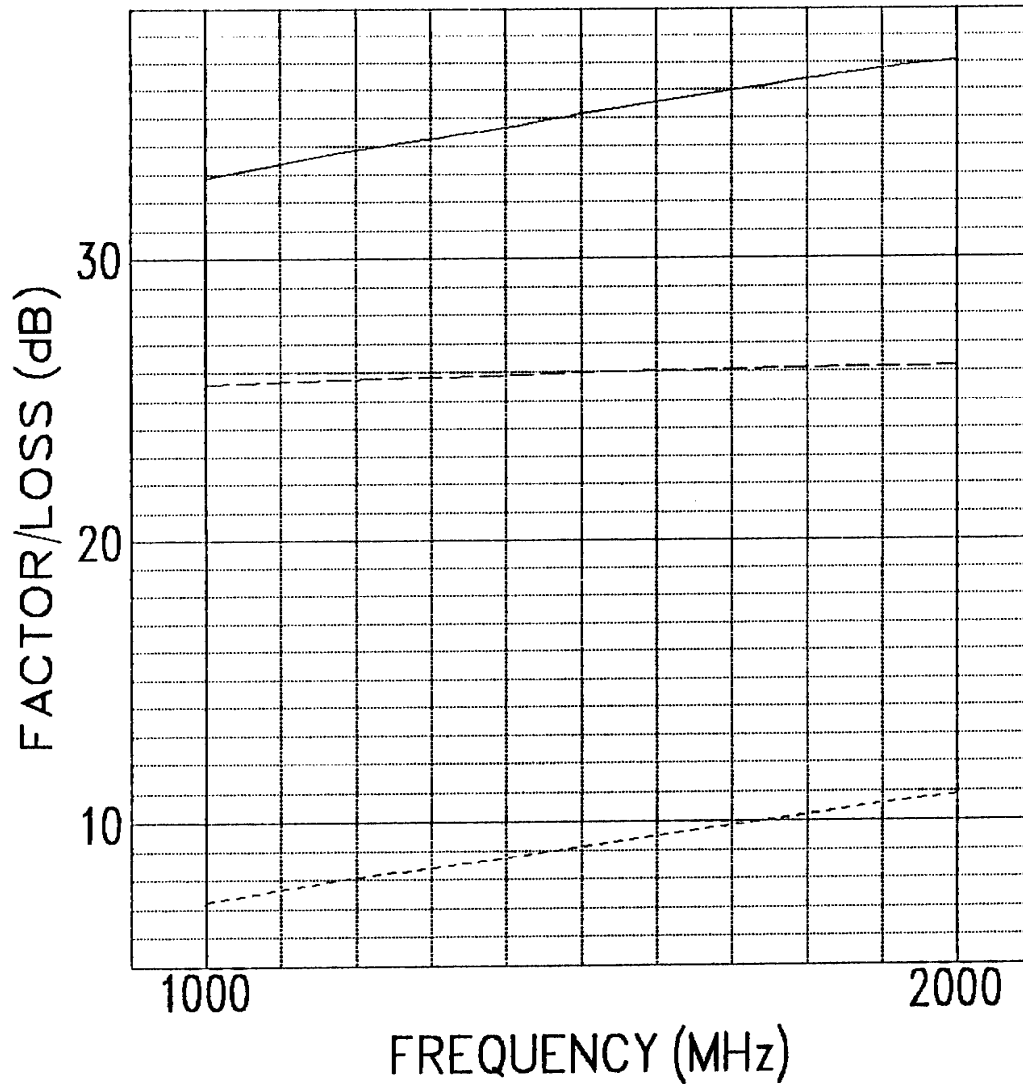
V : Correction Factor (dB)

———— : Correction Factor

----- : Antenna Factor

..... : Cable Loss

## CORRECTION FACTOR OF 3115



$$E = V + K$$

E : Field Strength

V : Correction Factor (dB)

— : Correction Factor

--- : Antenna Factor

..... : Cable Loss