

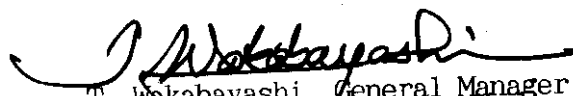
# [REPORT OF MEASUREMENTS ON TV INTERFACE DEVICE]

Date : September 18, 1998  
Issued at : Kanagawa Japan

REPORT No. : JYT98013

1. Applicant : Victor Company of Japan, Ltd.  
12, 3-chome, Moriya-cho, Kanagawa-ku,  
Yokohama, Kanagawa 221-8528, JAPAN
2. Description of the Equipment Under Test (EUT) : Videocassette Recorder
  - 2.1 FCC ID : ASIP9K045
  - 2.2 Tuner/RF conv.type : QAU0113-x
  - 2.3 Brand (Trade Name) : JVC
  - 2.4 Model No. : HR-VP674U
  - 2.5 Serial No. : ES200027
  - 2.6 Designed for RF Output Channels : Channel #3 and Channel #4
  - 2.7 Number of RF Output Terminals : 1 (F-type Connector)
  - 2.8 RF Output Impedance : 75 ohms (Unbalanced)
  - 2.9 Power Supply : AC 120 V, 60Hz
  - 2.10 Date of Manufacturer : September, 1998
3. The Highest Frequency generated in the EUT : 71.75MHz
4. External Connectors :
  - A/V Input/Output ports, RCA type
  - Cable box port, 3.5 $\phi$  mini jack type
  - Pause control port, 3.5 $\phi$  mini jack type
5. Connected Accessories for the EUT :
  - Coaxial Cable with F-Type plug
  - Audio/Video Cables with RCA Plugs
  - Cable box controller with mini plug
  - Pause control cable with mini plug
6. Measuring Method : FCC Rules and Regulations Part 15 (B)
7. Measurement Procedure : ANSI C63.4-1992
8. Date of Measurement : Sep 15, 1998
9. Place of Measurement : Victor Company of Japan Ltd.  
JVC YOKOHAMA TEST SITE
10. Measurement Results : The results obtained from the measuring of the above-mentioned device are as shown in the attached sheets.

Victor Company of Japan Ltd.

  
T. Wakabayashi, General Manager  
Engineering Support Center  
Engineering Department  
Video Division

## Section.15.109 RADIATED RADIO EMISSION MEASUREMENT

Video source connected to the EUT : Internal(Recorded Tape) 'PLAY Mode'

RF Output Channels : #3 and #4

| Frequency of<br>the emission<br>[MHz] | Meter reading |          | Correction factor |           |        | Field strength at 3m |          |
|---------------------------------------|---------------|----------|-------------------|-----------|--------|----------------------|----------|
|                                       | [dBuV]        |          | [dB]              |           |        | [dBuV/m]             |          |
|                                       | Horizontal    | Vertical | Ant.Fac.          | Gain/Loss | Limits | Horizontal           | Vertical |
| 35.9                                  | <43.0         | 44.3     | 16.5              | -29.2     | 40.0   | <30.3                | 31.6     |
| 100.6                                 | <50.0         | 50.5     | 10.5              | -26.6     | 43.5   | <33.9                | 34.4     |
| 128.9                                 | <42.0         | 42.8     | 13.7              | -26.0     | 43.5   | <29.8                | 30.6     |
| 164.6                                 | <40.0         | 39.8     | 15.5              | -25.2     | 43.5   | <30.3                | 30.1     |
| 193.3                                 | <35.0         | 35.4     | 16.5              | -24.7     | 43.5   | <26.8                | 27.2     |
| 645.3                                 | <33.0         | 35.3     | 21.6              | -19.5     | 46.0   | <35.1                | 37.4     |

- NOTES: 1) Sample calculation at 35.9 MHz :  
 Field strength : Meter Reading + Antenna Fac. + Gain/Loss \*  
 30.3 [dBuV/m] : 43.0 [dBuV] + 16.5 [dB] + (-29.2) [dB]  
 \* Gain/Loss [dB] = Cable loss - Amp.Gain + Att.Pad loss, 6dB  
 Limits :  $100[\mu\text{V/m}] = 20 \log (100 [\mu\text{V/m}]) = 40 [\text{dBuV/m}]$
- 2) The spectrum was checked from 30 at 1000 MHz and all emissions not listed above were found to be more than 20 dB below the limits specified the commissions.
- 3) The symbol of '<' means 'or less'
- 4) Arrangement of the Interface Cables : Refer to the photographs.

# Section.15.109

## Results of Radiated Emission Measurements.

Measurement Method : FCC Rules and Regulations Part 15 (B)

Measurement Distance : 3 m

EUT : Videocassette Recorder

Model No. : HR-VP674U

Serial No. : ES200027

Report No. : JYT98013

Date. : Sep 15, 1998

Video source connected to the EUT

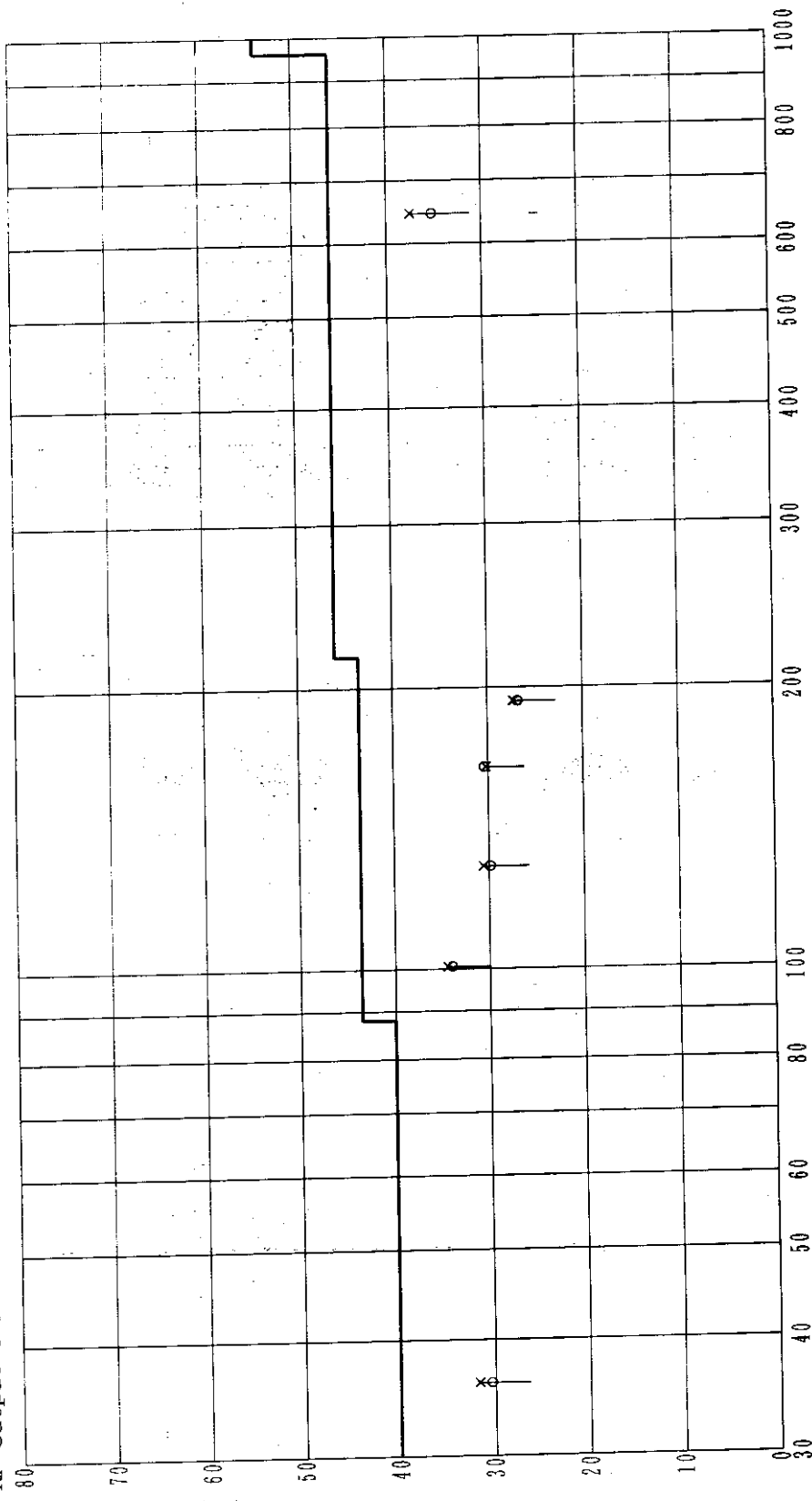
: Internal (Recorded Tape) 'PLAY Mode'

RF Output Channels : #3 and #4

— Limit Line

o : Vertical

x : Horizontal



Frequency (MHz)

## Section.15.109 RADIATED RADIO EMISSION MEASUREMENT

Video source connected to the EUT : External(VIIS at 1Vp-p) 'REC Mode'

RF Output Channels : #3 and #4

| Frequency of<br>the emission<br>[MHz] | Meter reading |          | Correction factor |           |        | Field strength at 3m |          |
|---------------------------------------|---------------|----------|-------------------|-----------|--------|----------------------|----------|
|                                       | [dBuV]        |          | [dB]              |           |        | [dBuV/m]             |          |
|                                       | Horizontal    | Vertical | Ant.Fac.          | Gain/Loss | Limits | Horizontal           | Vertical |
| 36.8                                  | <43.0         | 42.5     | 16.2              | -29.2     | 40.0   | <30.0                | 29.5     |
| 92.5                                  | <48.1         | 53.8     | 8.8               | -26.8     | 43.5   | <30.0                | 35.7     |
| 100.7                                 | <48.0         | 50.0     | 10.5              | -26.6     | 43.5   | <31.9                | 33.9     |
| 128.9                                 | <42.3         | 45.0     | 13.7              | -26.0     | 43.5   | <30.1                | 32.8     |
| 164.6                                 | 39.7          | <39.7    | 15.5              | -25.2     | 43.5   | 30.0                 | <30.0    |
| 535.0                                 | 32.8          | <32.0    | 19.9              | -20.7     | 46.0   | 32.0                 | <31.2    |

- NOTES: 1) Sample calculation at 36.8 MHz :  
 Field strength : Meter Reading + Antenna Fac. + Gain/Loss \*  
 30.0 [dBuV/m] : 43.0 [dBuV] + 16.2 [dB] + (-29.2) [dB]  
 \* Gain/Loss [dB] = Cable loss - Amp.Gain + Att.Pad loss, 6dB  
 Limits :  $100[\mu\text{V/m}] = 20 \log (100 [\mu\text{V/m}]) = 40 [\text{dBuV/m}]$
- 2) The spectrum was checked from 30 at 1000 MHz and all emissions not listed above were found to be more than 20 dB below the limits specified the commissions.
- 3) The symbol of '<' means 'or less'
- 4) Arrangement of the Interface Cables : Refer to the photographs.

# Section.15.109

## Results of Radiated Emission Measurements.

Measurement Method : FCC Rules and Regulations Part 15 (B)  
Measurement Distance : 3 m

EUT : Videocassette Recorder

Model No. : HR-VP674U

Serial No. : ES200027

Report No. : JY198013

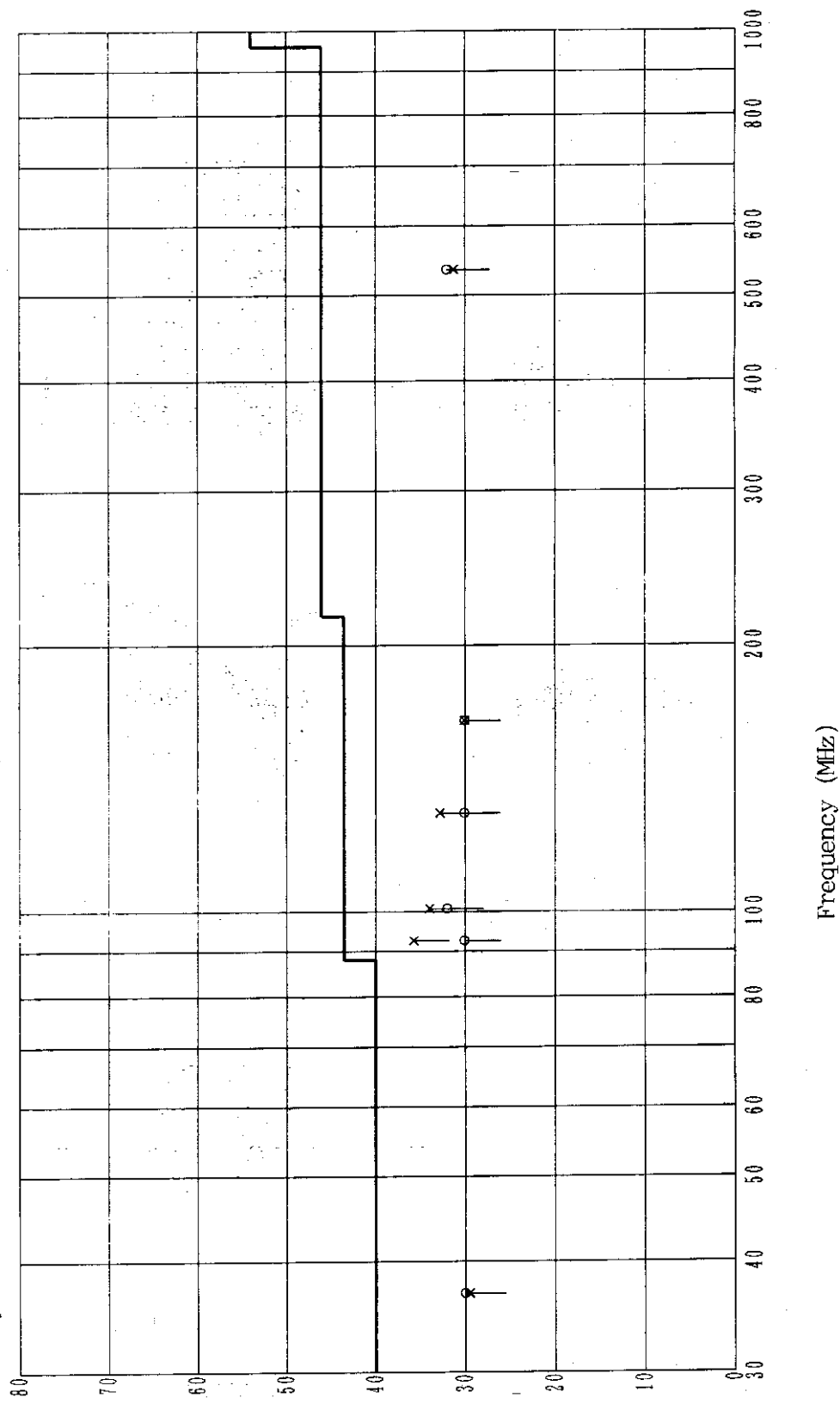
Date. : Sep 15, 1998

Video source connected to the EUT

: External(VITS at 1Vp-p) 'REC Mode'

RF Output Channels : #3 and #4

— Limit Line  
o : Vertical  
x : Horizontal



## Section.15.109 RADIATED RADIO EMISSION MEASUREMENT

Video source connected to the EUT : External(VITS at 5Vp-p) 'REC Mode'

RF Output Channels : #3 and #4

| Frequency of<br>the emission<br>[MHz] | Meter reading |          | Correction factor |           |        | Field strength at 3m |          |
|---------------------------------------|---------------|----------|-------------------|-----------|--------|----------------------|----------|
|                                       | [dBuV]        |          | [dB]              |           |        | [dBuV/m]             |          |
|                                       | Horizontal    | Vertical | Ant.Fac.          | Gain/Loss | Limits | Horizontal           | Vertical |
| 35.7                                  | <42.6         | 41.3     | 16.6              | -29.2     | 40.0   | <30.0                | 28.7     |
| 93.4                                  | <49.8         | 54.2     | 9.0               | -26.8     | 43.5   | <32.0                | 36.4     |
| 101.4                                 | <45.9         | 53.7     | 10.6              | -26.6     | 43.5   | <29.9                | 37.7     |
| 121.7                                 | <42.9         | 47.7     | 13.2              | -26.1     | 43.5   | <30.0                | 34.8     |
| 164.7                                 | 39.9          | 38.4     | 15.5              | -25.2     | 43.5   | 30.2                 | 28.7     |
| 645.3                                 | <30.0         | 35.4     | 21.6              | -19.5     | 46.0   | <32.1                | 37.5     |

- NOTES: 1) Sample calculation at 35.7 MHz :  
 Field strength : Meter Reading + Antenna Fac. + Gain/Loss \*  
 30.0 [dBuV/m] : 42.6 [dBuV] + 16.6 [dB] + (-29.2) [dB]  
 \* Gain/Loss [dB] = Cable loss - Amp.Gain + Att.Pad loss, 6dB  
 Limits :  $100[\mu\text{V/m}] = 20 \log (100 [\mu\text{V/m}]) = 40 [\text{dBuV/m}]$
- 2) The spectrum was checked from 30 at 1000 MHz and all emissions not listed above were found to be more than 20 dB below the limits specified the commissions.
- 3) The symbol of '<' means 'or less'
- 4) Arrangement of the Interface Cables : Refer to the photographs.

# Section.15.109

## Results of Radiated Emission Measurements.

Measurement Method : FCC Rules and Regulations Part 15 (B)  
Measurement Distance : 3 m

EUT : Videocassette Recorder

Model No. : HR-VP674U

Serial No. : ES200027

Report No. : JYT98013

Date. : Sep 15, 1998

Video source connected to the EUT

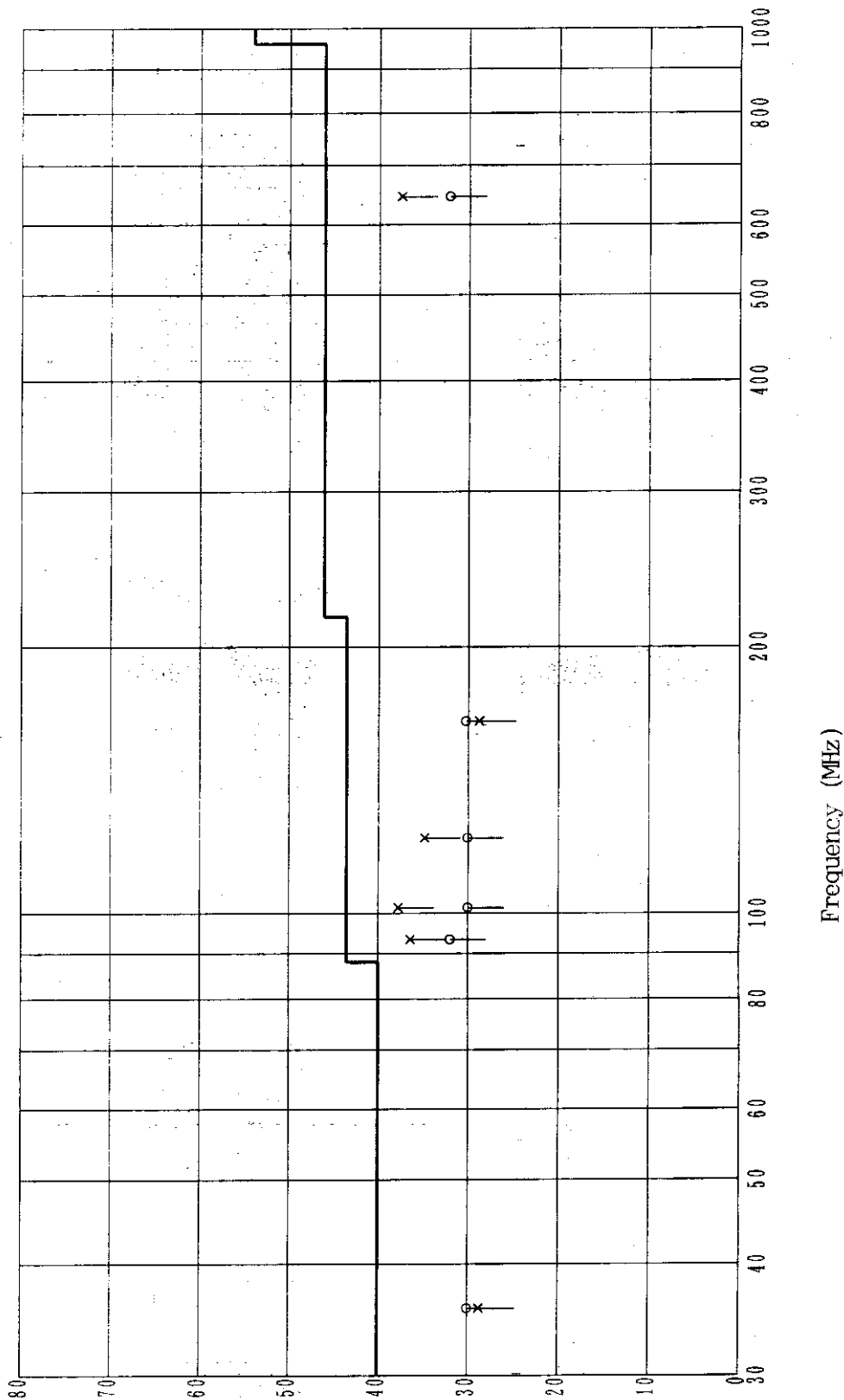
: External (VITS at 5Vp-p) 'RHC Mode'

RF Output Channels : #3 and #4

— Limit Line

o : Vertical

x : Horizontal



## Section.15.107

## POWER LINE CONDUCTED INTERFERENCE VOLTAGE MEASUREMENT

Video source connected to the EUT : Internal(Recorded Tape) 'PLAY Mode'

RF Output Channels : #3 and #4

| Frequency of<br>the emission<br>[MHz] | Meter reading |        | LISN<br>factor<br>[dB] | Limits<br>[dBuV] | Radio noise voltage |      |
|---------------------------------------|---------------|--------|------------------------|------------------|---------------------|------|
|                                       | Va            | Vb     |                        |                  | Va                  | Vb   |
|                                       | [dBuV]        | [dBuV] |                        |                  | [dBuV]              |      |
| 0.45                                  | 34.5          | 34.0   | 0.6                    | 48.0             | 35.1                | 34.6 |
| 0.54                                  | 31.1          | 31.4   | 0.6                    | 48.0             | 31.7                | 32.0 |
| 0.63                                  | 27.8          | 28.1   | 0.7                    | 48.0             | 28.5                | 28.8 |
| 0.75                                  | 24.3          | 24.8   | 0.8                    | 48.0             | 25.1                | 25.6 |
| 1.71                                  | 14.6          | 16.3   | 0.8                    | 48.0             | 15.4                | 17.1 |
| 2.55                                  | 25.1          | 22.8   | 0.7                    | 48.0             | 25.8                | 23.5 |
| 2.92                                  | 21.8          | 21.0   | 0.7                    | 48.0             | 22.5                | 21.7 |
| 11.38                                 | 20.7          | 20.2   | 0.5                    | 48.0             | 21.2                | 20.7 |
| 29.91                                 | 23.2          | 25.4   | 1.0                    | 48.0             | 24.2                | 26.4 |
| 29.05                                 | 19.9          | 23.5   | 1.0                    | 48.0             | 20.9                | 24.5 |

- NOTES: 1) Sample calculation at 0.45 MHz (Va) :  
 $34.5 \text{ (dBuV)} + 0.6 \text{ (dB)} = 35.1 \text{ (dBuV/m)}$   
 LISN factor [dB] = 0.6 [dB]  
 Limits :  $250 \text{ [uV]} = 20 \log (250 \text{ [uV]}) = 48 \text{ [dBuV]}$
- 2) The spectrum was checked from 0.45 at 30 MHz and all emissions not listed above were found to be more than 20 dB below the limits specified the commissions.
- 3) The symbol of '<' means 'or less'
- 4) Va: One-end & Grounded ; Vb : The other-end & grounded

# Section.15.107

## Results of Conducted Power Line Measurements.

Measurement Method : FCC Rules and Regulations Part 15 (B)

EUT : Videocassette Recorder

Model No. : HR-VP674U

Serial No. : ES200027

Report No. : JYT98013

Date. : Sep 15, 1998

Video source connected to the EUT

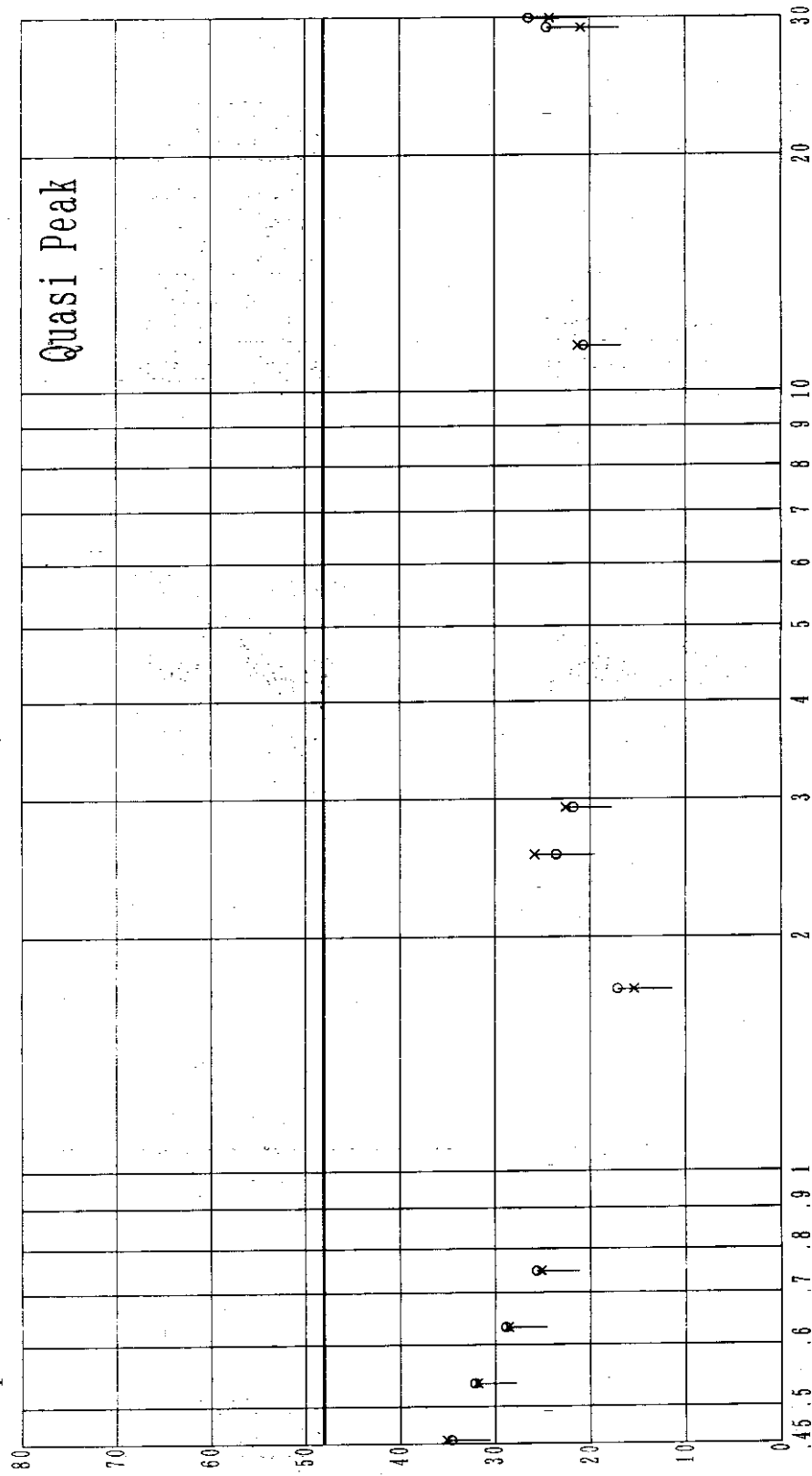
: Internal(Recorded Tape) 'PLAY Mode'

Rf Output Channels : #3 and #4

— Limit Line

x : Measured Value one end (Va)

o : Measured Value other end (Vb)



## Section.15.107

## POWER LINE CONDUCTED INTERFERENCE VOLTAGE MEASUREMENT

Video source connected to the EUT : External(VITS at 1Vp-p) 'REC Mode'

RF Output Channels : #3 and #4

| Frequency of<br>the emission<br>[MHz] | Meter reading |      | LISN<br>factor<br>[dB] | Limits<br>[dBuV] | Radio noise voltage |      |
|---------------------------------------|---------------|------|------------------------|------------------|---------------------|------|
|                                       | Va<br>[dBuV]  | Vb   |                        |                  | Va<br>[dBuV]        | Vb   |
| 0.46                                  | 34.6          | 35.9 | 0.6                    | 48.0             | 35.2                | 36.5 |
| 0.56                                  | 30.7          | 31.5 | 0.7                    | 48.0             | 31.4                | 32.2 |
| 0.68                                  | 28.3          | 30.2 | 0.8                    | 48.0             | 29.1                | 31.0 |
| 0.79                                  | 23.8          | 25.8 | 0.8                    | 48.0             | 24.6                | 26.6 |
| 0.90                                  | 27.1          | 28.8 | 0.8                    | 48.0             | 27.9                | 29.6 |
| 1.01                                  | 24.3          | 25.9 | 0.8                    | 48.0             | 25.1                | 26.7 |
| 1.45                                  | 26.8          | 28.1 | 0.8                    | 48.0             | 27.6                | 28.9 |
| 2.41                                  | 26.5          | 26.8 | 0.7                    | 48.0             | 27.2                | 27.5 |
| 3.37                                  | 22.4          | 20.4 | 0.7                    | 48.0             | 23.1                | 21.1 |
| 6.62                                  | 21.5          | 21.7 | 0.6                    | 48.0             | 22.1                | 22.3 |
| 18.52                                 | 20.8          | 20.8 | 0.6                    | 48.0             | 21.4                | 21.4 |
| 29.95                                 | 23.3          | 25.6 | 1.0                    | 48.0             | 24.3                | 26.6 |

- NOTES: 1) Sample calculation at 0.46 MHz (Va) :  
 $34.6 \text{ (dBuV)} + 0.6 \text{ (dB)} = 35.2 \text{ (dBuV/m)}$   
 $\text{LISN factor [dB]} = 0.6 \text{ [dB]}$   
 $\text{Limits : } 250[\mu\text{V}] = 20 \log (250 [\mu\text{V}]) = 48 \text{ [dBuV]}$
- 2) The spectrum was checked from 0.45 at 30 MHz and all emissions not listed above were found to be more than 20 dB below the limits specified the commissions.
- 3) The symbol of '<' means 'or less'
- 4) Va : One-end & Grounded , Vb : The other-end & grounded

# Section.15.107

## Results of Conducted Power Line Measurements.

Measurement Method : FCC Rules and Regulations Part 15 (B)

EUT : Videocassette Recorder

Model No. : HR-VP674U

Serial No. : ES200027

Report No. : JYT98013

Date. : Sep 15, 1998

Video source connected to the EUT

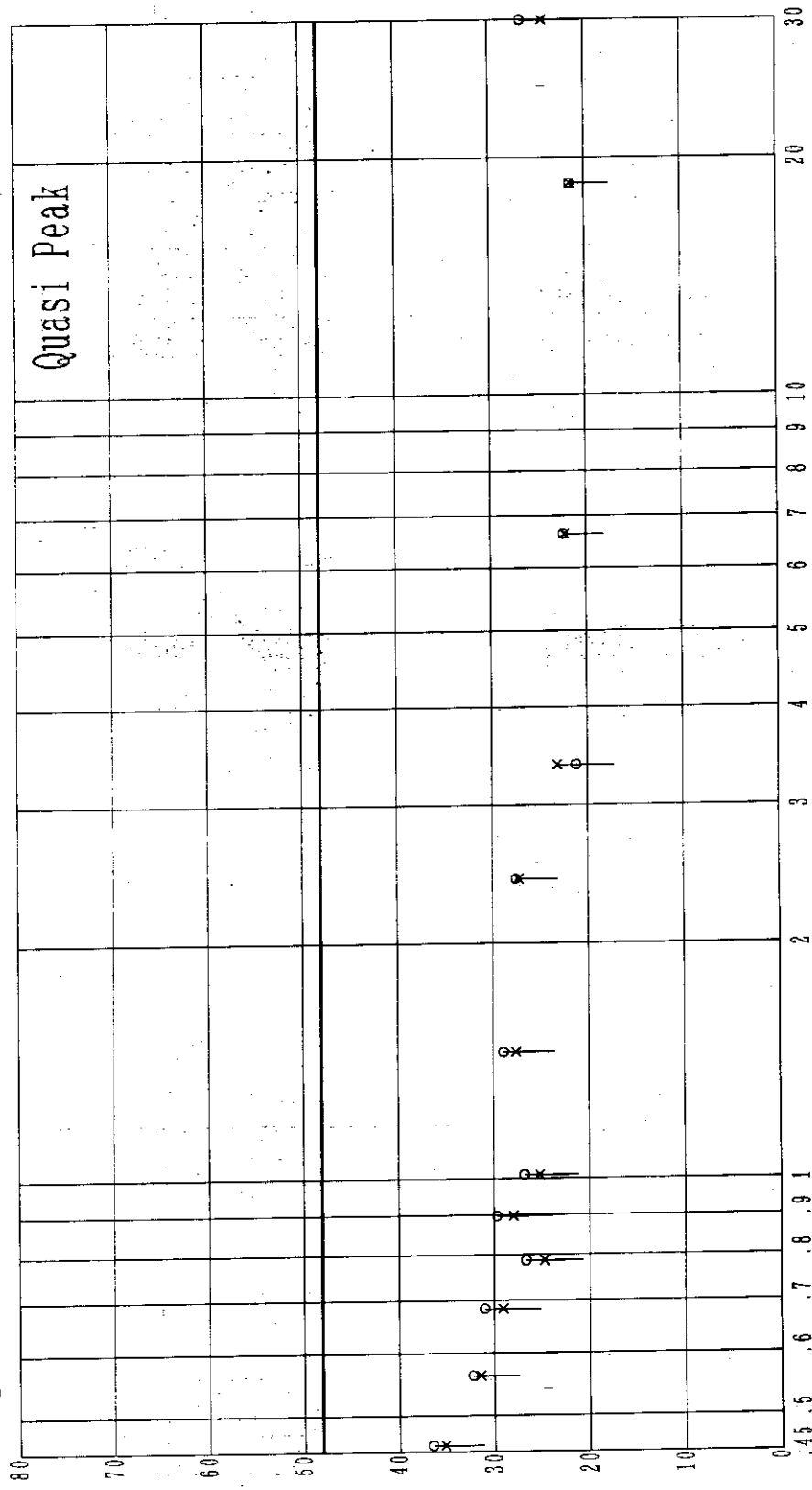
: External (VHS at 1Vp-p) 'REC Mode'

RF Output Channels : #3 and #4

— Limit Line

x : Measured Value one end (Va)

o : Measured Value other end (Vb)



Frequency (MHz)

## Section.15.107

## POWER LINE CONDUCTED INTERFERENCE VOLTAGE MEASUREMENT

Video source connected to the EUT : External(VITS at 5Vp-p) 'REC Mode'

RF Output Channels : #3 and #4

| Frequency of<br>the emission<br>[MHz] | Meter reading<br>[dBuV] |      | LISN<br>factor<br>[dB] | Limits<br>[dBuV] | Radio noise voltage<br>[dBuV] |      |
|---------------------------------------|-------------------------|------|------------------------|------------------|-------------------------------|------|
|                                       | Va                      | Vb   |                        |                  | Va                            | Vb   |
| 0.45                                  | 35.2                    | 35.5 | 0.6                    | 48.0             | 35.8                          | 36.1 |
| 0.56                                  | 30.8                    | 31.5 | 0.7                    | 48.0             | 31.5                          | 32.2 |
| 0.68                                  | 28.4                    | 29.9 | 0.8                    | 48.0             | 29.2                          | 30.7 |
| 0.79                                  | 23.5                    | 25.7 | 0.8                    | 48.0             | 24.3                          | 26.5 |
| 0.90                                  | 26.9                    | 29.5 | 0.8                    | 48.0             | 27.7                          | 30.3 |
| 1.02                                  | 23.6                    | 25.8 | 0.8                    | 48.0             | 24.4                          | 26.6 |
| 1.45                                  | 26.9                    | 28.0 | 0.8                    | 48.0             | 27.7                          | 28.8 |
| 2.42                                  | 26.4                    | 27.6 | 0.7                    | 48.0             | 27.1                          | 28.3 |
| 3.37                                  | 22.8                    | 19.6 | 0.7                    | 48.0             | 23.5                          | 20.3 |
| 6.60                                  | 21.3                    | 21.6 | 0.6                    | 48.0             | 21.9                          | 22.2 |
| 18.56                                 | 20.5                    | 18.9 | 0.6                    | 48.0             | 21.1                          | 19.5 |
| 29.92                                 | 23.4                    | 25.1 | 1.0                    | 48.0             | 24.4                          | 26.1 |

NOTES: 1) Sample calculation at 0.45 MHz (Va) :  
 $35.2 \text{ (dBuV)} + 0.6 \text{ (dB)} = 35.8 \text{ (dBuV/m)}$   
 LISN factor [dB] = 0.6 [dB]  
 Limits :  $250[\mu\text{V}] = 20 \log (250 [\mu\text{V}]) = 48 \text{ [dBuV]}$

2) The spectrum was checked from 0.45 at 30 MHz and all emissions not listed above were found to be more than 20 dB below the limits specified the commissions.

3) The symbol of '<' means 'or less'

4) Va : One-end & Grounded , Vb : The other-end & grounded

# Section.15.107 Results of Conducted Power Line Measurements.

Measurement Method : FCC Rules and Regulations Part 15 (B)

EUT : Videocassette Recorder

Model No. : HR-VP674U

Serial No. : ES200027

Report No. : JYT98013

Date. : Sep 15, 1998

Video source connected to the EUT

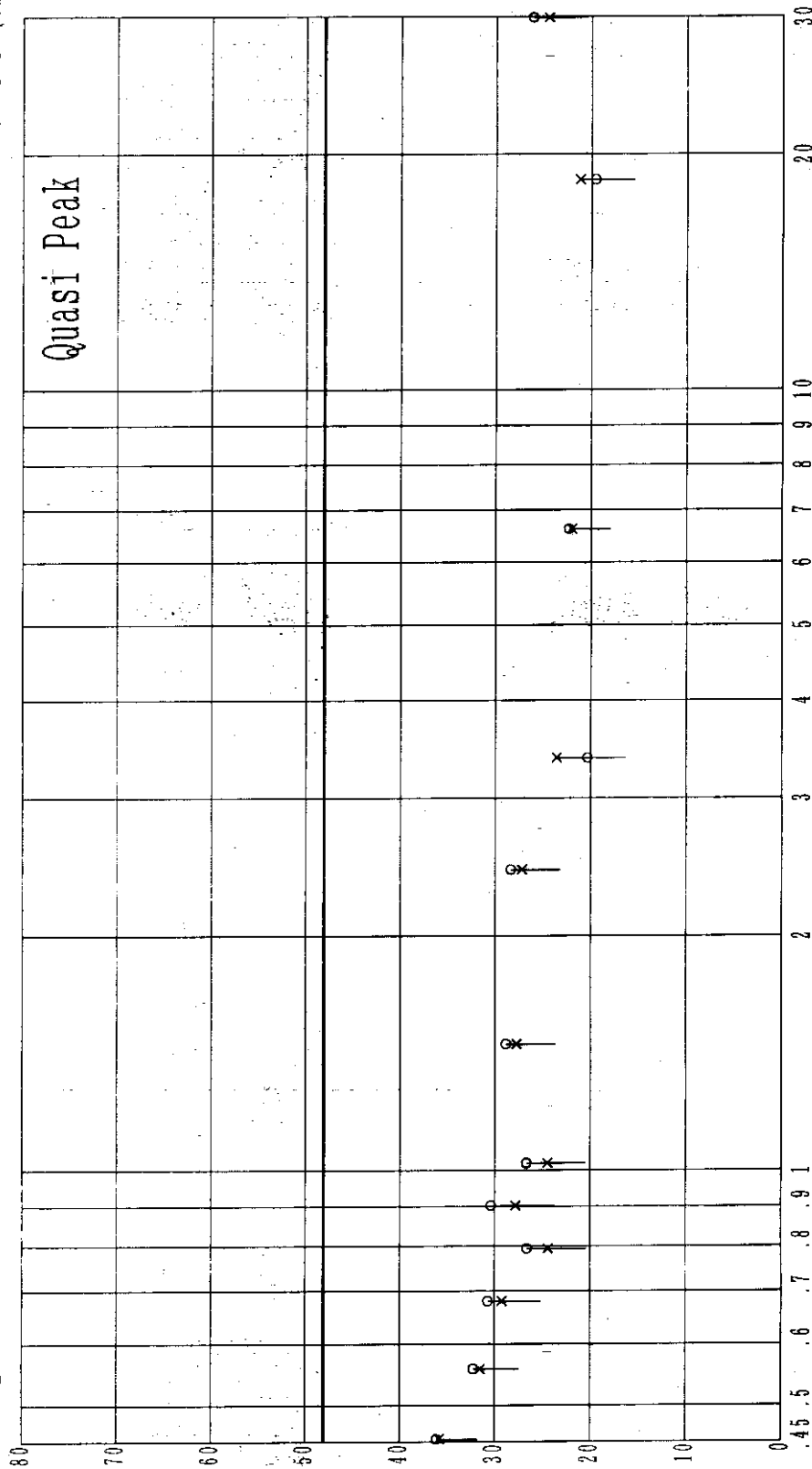
: External(VITS at 5Vp-p) 'RFC Mode'

RF Output Channels : #3 and #4

— Limit Line

x : Measured Value one end (Va)

o : Measured Value other end (Vb)



Frequency (MHz)

## Section.15.115 (b)(1) OUTPUT SIGNAL LEVEL

Video source connected to the EUT : Internal(Recorded Tape) 'PLAY Mode'

| RF<br>Output<br>channel | Measured<br>carrier freq.<br>[MHz] |       | Meter reading<br>[dBuV] |       | Matching<br>pad loss<br>[dB] | RF Output signal level<br>[dB] |        |        |       |
|-------------------------|------------------------------------|-------|-------------------------|-------|------------------------------|--------------------------------|--------|--------|-------|
|                         | Visual                             | Aural | Visual                  | Aural |                              | Limits                         | Visual | Limits | Aural |
|                         |                                    |       |                         |       |                              |                                |        |        |       |
| 3                       | 61.26                              | 65.75 | 59.2                    | 43.8  | 6.0                          | 69.5                           | 67.0   | 56.5   | 51.6  |
| 4                       | 67.28                              | 71.75 | 59.3                    | 44.4  | 6.0                          | 69.5                           | 67.1   | 56.5   | 52.2  |

Video source connected to the EUT : External(VITS at 1Vp-p) 'REC Mode'

| RF<br>Output<br>channel | Measured<br>carrier freq.<br>[MHz] |       | Meter reading<br>[dBuV] |       | Matching<br>pad loss<br>[dB] | RF Output signal level<br>[dB] |        |        |       |
|-------------------------|------------------------------------|-------|-------------------------|-------|------------------------------|--------------------------------|--------|--------|-------|
|                         | Visual                             | Aural | Visual                  | Aural |                              | Limits                         | Visual | Limits | Aural |
|                         |                                    |       |                         |       |                              |                                |        |        |       |
| 3                       | 61.26                              | 65.75 | 59.4                    | 44.7  | 6.0                          | 69.5                           | 67.2   | 56.5   | 52.5  |
| 4                       | 67.28                              | 71.75 | 59.3                    | 44.7  | 6.0                          | 69.5                           | 67.1   | 56.5   | 52.5  |

Video source connected to the EUT : External(VITS at 5Vp-p) 'REC Mode'

| RF<br>Output<br>channel | Measured<br>carrier freq.<br>[MHz] |       | Meter reading<br>[dBuV] |       | Matching<br>pad loss<br>[dB] | RF Output signal level<br>[dB] |        |        |       |
|-------------------------|------------------------------------|-------|-------------------------|-------|------------------------------|--------------------------------|--------|--------|-------|
|                         | Visual                             | Aural | Visual                  | Aural |                              | Limits                         | Visual | Limits | Aural |
|                         |                                    |       |                         |       |                              |                                |        |        |       |
| 3                       | 61.26                              | 65.75 | 59.3                    | 44.7  | 6.0                          | 69.5                           | 67.1   | 56.5   | 52.5  |
| 4                       | 67.28                              | 71.75 | 59.3                    | 44.7  | 6.0                          | 69.5                           | 67.1   | 56.5   | 52.5  |

NOTES: 1) Sample calculation at 61.26 MHz :  
 $59.2 \text{ (dBuV)} + 6.0 \text{ (dB)} + 1.76 \text{ (dB)} = 67.0 \text{ (dBuV)}$   
 (50ohm->75ohm)

2) The symbol of '<' means 'or less'

3) Spectrum Analyzer : SPAN : 10MHz SWP : 50ms  
 RES BW : 100kHz VBW : 300kHz

4) Impedance at the output terminal : 75 ohm (Unbalanced)

## Section.15.115 (b)(2)

## OUTPUT TERMINAL CONDUCTED SPURIOUS EMISSION MEASUREMENT

Video source connected to the EUT : Internal(Recorded Tape) 'PLAY Mode'

RF Output Channels : #3

| Frequency of<br>the emission<br>[MHz] | Meter<br>reading<br>[dBuV] | Matching<br>pad loss<br>[dB] | Gain of<br>pre amp.<br>[dB] | Limits<br>[dBuV] | Results<br>[dBuV] |
|---------------------------------------|----------------------------|------------------------------|-----------------------------|------------------|-------------------|
| 52.3                                  | 30.7                       | 6.0                          | 29.3                        | 39.5             | 9.1               |
| 52.8                                  | 29.6                       | 6.0                          | 29.3                        | 39.5             | 8.0               |
| 70.3                                  | 37.3                       | 6.0                          | 29.2                        | 39.5             | 15.8              |
| 110.6                                 | 29.7                       | 6.0                          | 29.1                        | 39.5             | 8.4               |
| 112.9                                 | 32.0                       | 6.0                          | 29.1                        | 39.5             | 10.7              |
| 113.9                                 | 28.8                       | 6.0                          | 29.1                        | 39.5             | 7.5               |
| 114.3                                 | 33.4                       | 6.0                          | 29.1                        | 39.5             | 12.1              |
| 115.5                                 | 37.2                       | 6.0                          | 29.1                        | 39.5             | 15.9              |
| 118.0                                 | 36.9                       | 6.0                          | 29.1                        | 39.5             | 15.6              |
| 300.0                                 | < 24.0                     | 6.0                          | 28.7                        | 39.5             | < 3.1             |
| 500.0                                 | < 24.0                     | 6.0                          | 28.8                        | 39.5             | < 3.0             |
| 1000.0                                | < 21.0                     | 6.0                          | 26.2                        | 39.5             | < 2.6             |

Video source connected to the EUT : Internal(Recorded Tape) 'PLAY Mode'

RF Output Channels : #4

| Frequency of<br>the emission<br>[MHz] | Meter<br>reading<br>[dBuV] | Matching<br>pad loss<br>[dB] | Gain of<br>pre amp.<br>[dB] | Limits<br>[dBuV] | Results<br>[dBuV] |
|---------------------------------------|----------------------------|------------------------------|-----------------------------|------------------|-------------------|
| 52.9                                  | 29.5                       | 6.0                          | 29.3                        | 39.5             | 7.9               |
| 58.3                                  | 29.9                       | 6.0                          | 29.3                        | 39.5             | 8.4               |
| 76.2                                  | 37.4                       | 6.0                          | 29.2                        | 39.5             | 16.0              |
| 81.6                                  | 28.5                       | 6.0                          | 29.2                        | 39.5             | 7.1               |
| 110.6                                 | 29.1                       | 6.0                          | 29.1                        | 39.5             | 7.8               |
| 112.9                                 | 40.5                       | 6.0                          | 29.1                        | 39.5             | 19.2              |
| 114.3                                 | 32.6                       | 6.0                          | 29.1                        | 39.5             | 11.3              |
| 115.5                                 | 36.6                       | 6.0                          | 29.1                        | 39.5             | 15.3              |
| 118.0                                 | 36.7                       | 6.0                          | 29.1                        | 39.5             | 15.4              |
| 134.5                                 | 31.0                       | 6.0                          | 29.0                        | 39.5             | 9.7               |
| 201.7                                 | 40.6                       | 6.0                          | 28.8                        | 39.5             | 19.6              |
| 300.0                                 | < 24.0                     | 6.0                          | 28.7                        | 39.5             | < 3.1             |
| 500.0                                 | < 24.0                     | 6.0                          | 28.8                        | 39.5             | < 3.0             |
| 1000.0                                | < 21.0                     | 6.0                          | 26.2                        | 39.5             | < 2.6             |

- NOTES: 1) Sample calculation at 52.9 MHz :  
 $29.5 \text{ (dBuV)} + 6.0 \text{ (dB)} - 29.3 \text{ (dB)} + 1.76 \text{ (dB)} = 7.9 \text{ (dBuV)}$   
 (50ohm→75ohm)
- 2) The spectrum was checked from 30 at 1000 MHz and all emissions not listed above were found to be more than 20 dB below the limits specified the commissions.
- 3) The symbol of '<' means 'or less'
- 4) Spectrum Analyzer : SPAN : 10MHz SWP : 50ms  
 RES BW : 100kHz VBW : 800kHz
- 5) Impedance at the output terminal : 75 ohm (Unbalanced)

# Section.15.115 (b)(2)

## Output Terminal Conducted Spurious Emission Measurements.

Measurement Method : FCC Rules and Regulations Part 15 (B)

EUT : Videocassette Recorder

Model No. : HR-VP674U

Serial No. : ES200027

Report No. : JYT98013

Date. : Sep 15, 1998

Video source connected to the EUT

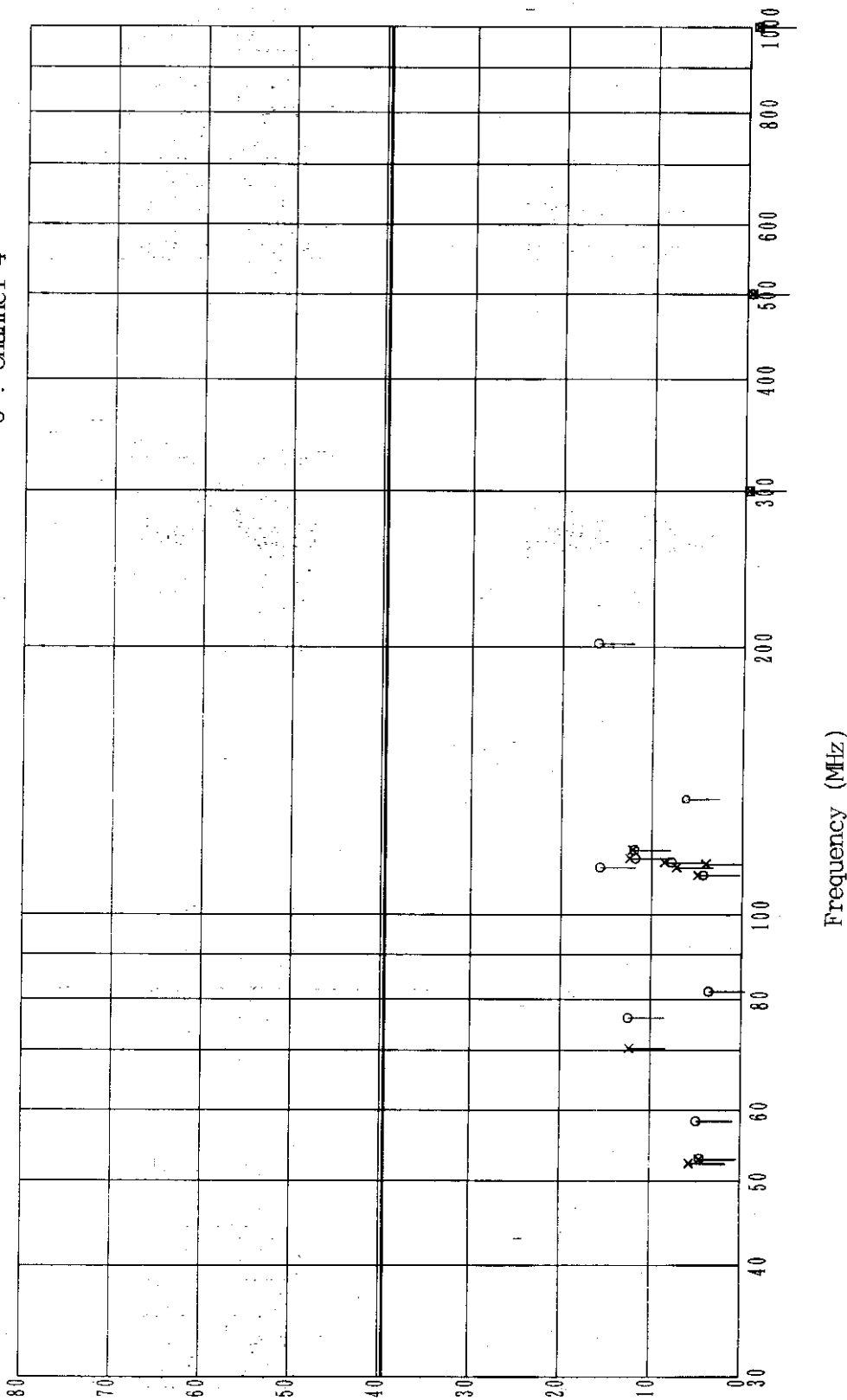
: Internal(Recorded Tape) 'PLAY Mode'

RF Output Channels : #3 and #4

— Limit Line

x : Channel 3

o : Channel 4



## Section.15.115 (b)(2)

## OUTPUT TERMINAL CONDUCTED SPURIOUS EMISSION MEASUREMENT

Video source connected to the EUT : External(VITS at 1Vp-p) 'REC Mode'

RF Output Channels : #3

| Frequency of<br>the emission<br>[MHz] | Meter<br>reading<br>[dBuV] | Matching<br>pad loss<br>[dB] | Gain of<br>pre amp.<br>[dB] | Limits<br>[dBuV] | Results<br>[dBuV] |
|---------------------------------------|----------------------------|------------------------------|-----------------------------|------------------|-------------------|
| 52.3                                  | 30.5                       | 6.0                          | 29.3                        | 39.5             | 8.9               |
| 70.2                                  | 38.0                       | 6.0                          | 29.2                        | 39.5             | 16.5              |
| 110.6                                 | 32.2                       | 6.0                          | 29.1                        | 39.5             | 10.9              |
| 114.3                                 | 30.6                       | 6.0                          | 29.1                        | 39.5             | 9.3               |
| 115.5                                 | 34.4                       | 6.0                          | 29.1                        | 39.5             | 13.1              |
| 118.0                                 | 35.6                       | 6.0                          | 29.1                        | 39.5             | 14.3              |
| 122.5                                 | 34.6                       | 6.0                          | 29.0                        | 39.5             | 13.3              |
| 183.7                                 | 42.7                       | 6.0                          | 28.9                        | 39.5             | 21.6              |
| 188.3                                 | 29.1                       | 6.0                          | 28.8                        | 39.5             | 8.0               |
| 300.0                                 | < 24.0                     | 6.0                          | 28.7                        | 39.5             | < 3.1             |
| 500.0                                 | < 24.0                     | 6.0                          | 28.8                        | 39.5             | < 3.0             |
| 1000.0                                | < 21.0                     | 6.0                          | 26.2                        | 39.5             | < 2.6             |

Video source connected to the EUT : External(VITS at 1Vp-p) 'REC Mode'

RF Output Channels : #4

| Frequency of<br>the emission<br>[MHz] | Meter<br>reading<br>[dBuV] | Matching<br>pad loss<br>[dB] | Gain of<br>pre amp.<br>[dB] | Limits<br>[dBuV] | Results<br>[dBuV] |
|---------------------------------------|----------------------------|------------------------------|-----------------------------|------------------|-------------------|
| 58.3                                  | 30.2                       | 6.0                          | 29.3                        | 39.5             | 8.7               |
| 76.3                                  | 37.6                       | 6.0                          | 29.2                        | 39.5             | 16.2              |
| 110.6                                 | 32.2                       | 6.0                          | 29.1                        | 39.5             | 10.9              |
| 112.9                                 | 30.8                       | 6.0                          | 29.1                        | 39.5             | 9.5               |
| 114.3                                 | 33.6                       | 6.0                          | 29.1                        | 39.5             | 12.3              |
| 115.5                                 | 36.9                       | 6.0                          | 29.1                        | 39.5             | 15.6              |
| 118.0                                 | 36.3                       | 6.0                          | 29.1                        | 39.5             | 15.0              |
| 134.5                                 | 31.4                       | 6.0                          | 29.0                        | 39.5             | 10.1              |
| 201.7                                 | 40.8                       | 6.0                          | 28.8                        | 39.5             | 19.8              |
| 300.0                                 | < 24.0                     | 6.0                          | 28.7                        | 39.5             | < 3.1             |
| 5000.0                                | < 24.0                     | 6.0                          | 0.0                         | 0.0              | < 31.8            |
| 1000.0                                | < 21.0                     | 6.0                          | 26.2                        | 39.5             | < 2.6             |

- NOTES: 1) Sample calculation at 58.3 MHz :  
 $30.2 \text{ (dBuV)} + 6.0 \text{ (dB)} - 29.3 \text{ (dB)} + 1.76 \text{ (dB)} = 8.7 \text{ (dBuV)}$   
 (50ohm->75ohm)
- 2) The spectrum was checked from 30 at 1000 MHz and all emissions not listed above were found to be more than 20 dB below the limits specified the commissions.
- 3) The symbol of '<' means 'or less'
- 4) Spectrum Analyzer : SPAN : 10MHz SWP : 50ms  
 RES BW : 100kHz VBW : 800kHz
- 5) Impedance at the output terminal : 75 ohm (Unbalanced)

# Section.15.115 (b)(2)

## Output Terminal Conducted Spurious Emission Measurements.

Measurement Method : FCC Rules and Regulations Part 15 (B)

EUT : Videocassette Recorder

Model No. : HR-VP674U

Serial No. : ES200027

Report No. : JYT98013

Date. : Sep 15, 1998

Video source connected to the EUT

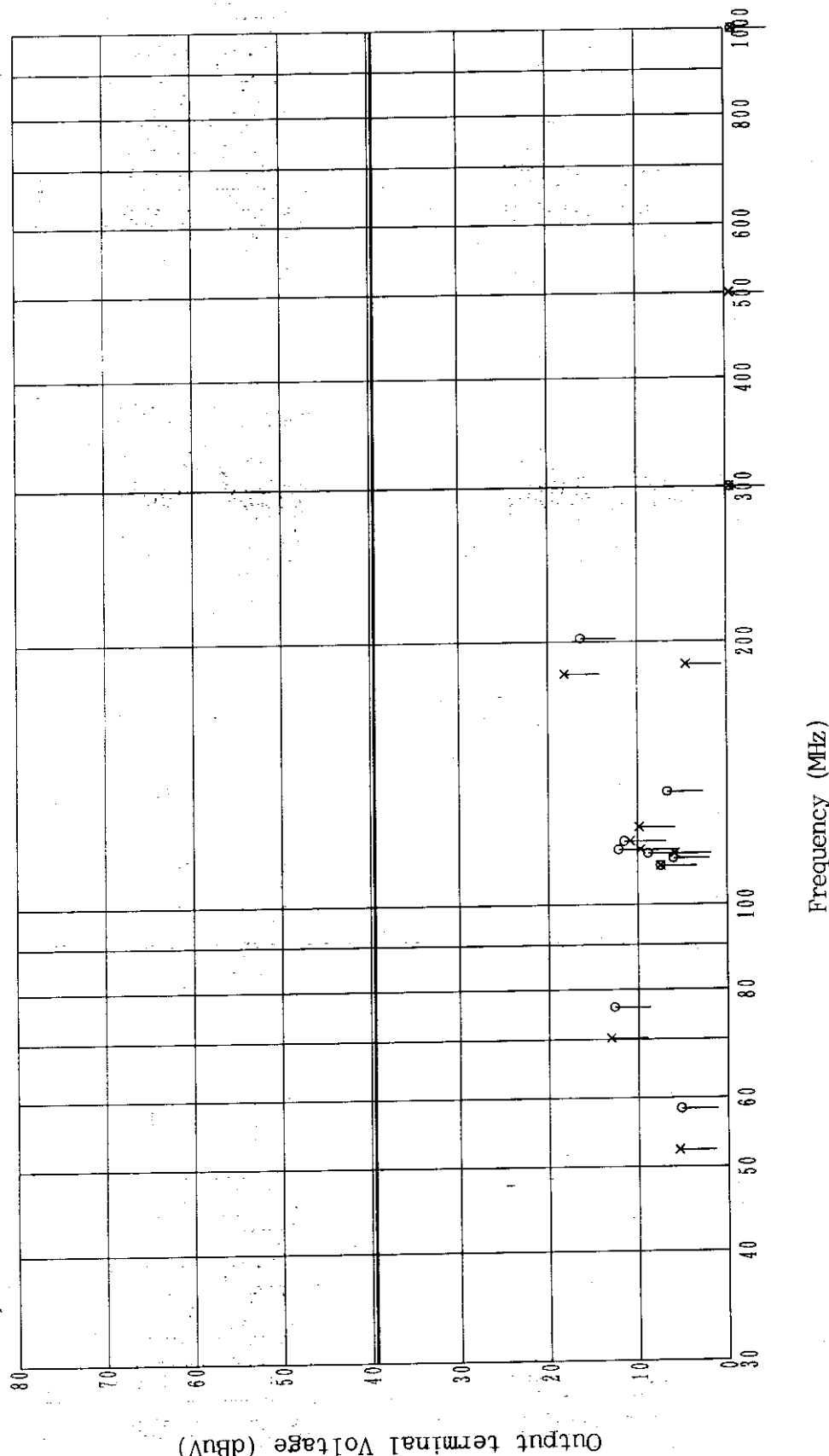
: External(VITS at 1Vp-p) 'REC Mode'

RF Output Channels : #3 and #4

— Limit Line

x : Channel 3

o : Channel 4



## Section.15.115 (b)(2)

## OUTPUT TERMINAL CONDUCTED SPURIOUS EMISSION MEASUREMENT

Video source connected to the EUT : External(VITS at 5Vp-p) 'REC Mode'

RF Output Channels : #3

| Frequency of<br>the emission<br>[MHz] | Meter<br>reading<br>[dBuV] | Matching<br>pad loss<br>[dB] | Gain of<br>pre amp.<br>[dB] | Limits<br>[dBuV] | Results<br>[dBuV] |
|---------------------------------------|----------------------------|------------------------------|-----------------------------|------------------|-------------------|
| 52.5                                  | 30.7                       | 6.0                          | 29.3                        | 39.5             | 9.1               |
| 70.3                                  | 37.4                       | 6.0                          | 29.2                        | 39.5             | 15.9              |
| 110.6                                 | 30.7                       | 6.0                          | 29.1                        | 39.5             | 9.4               |
| 112.9                                 | 31.1                       | 6.0                          | 29.1                        | 39.5             | 9.8               |
| 114.3                                 | 32.6                       | 6.0                          | 29.1                        | 39.5             | 11.3              |
| 115.5                                 | 35.1                       | 6.0                          | 29.1                        | 39.5             | 13.8              |
| 118.0                                 | 35.8                       | 6.0                          | 29.1                        | 39.5             | 14.5              |
| 122.5                                 | 34.7                       | 6.0                          | 29.0                        | 39.5             | 13.4              |
| 183.7                                 | 42.4                       | 6.0                          | 28.9                        | 39.5             | 21.3              |
| 300.0                                 | < 24.0                     | 6.0                          | 28.7                        | 39.5             | < 3.1             |
| 500.0                                 | < 24.0                     | 6.0                          | 28.8                        | 39.5             | < 3.0             |
| 1000.0                                | < 21.0                     | 6.0                          | 26.2                        | 39.5             | < 2.6             |

Video source connected to the EUT : External(VITS at 5Vp-p) 'REC Mode'

RF Output Channels : #4

| Frequency of<br>the emission<br>[MHz] | Meter<br>reading<br>[dBuV] | Matching<br>pad loss<br>[dB] | Gain of<br>pre amp.<br>[dB] | Limits<br>[dBuV] | Results<br>[dBuV] |
|---------------------------------------|----------------------------|------------------------------|-----------------------------|------------------|-------------------|
| 58.3                                  | 30.1                       | 6.0                          | 29.3                        | 39.5             | 8.6               |
| 76.3                                  | 37.2                       | 6.0                          | 29.2                        | 39.5             | 15.8              |
| 110.6                                 | 30.8                       | 6.0                          | 29.1                        | 39.5             | 9.5               |
| 112.9                                 | 28.8                       | 6.0                          | 29.1                        | 39.5             | 7.5               |
| 114.3                                 | 31.7                       | 6.0                          | 29.1                        | 39.5             | 10.4              |
| 115.5                                 | 36.8                       | 6.0                          | 29.1                        | 39.5             | 15.5              |
| 118.0                                 | 35.3                       | 6.0                          | 29.1                        | 39.5             | 14.0              |
| 134.5                                 | 31.6                       | 6.0                          | 29.0                        | 39.5             | 10.3              |
| 197.2                                 | 27.6                       | 6.0                          | 28.8                        | 39.5             | 6.6               |
| 201.7                                 | 40.3                       | 6.0                          | 28.8                        | 39.5             | 19.3              |
| 206.2                                 | 26.8                       | 6.0                          | 28.8                        | 39.5             | 5.8               |
| 300.0                                 | < 24.0                     | 6.0                          | 28.7                        | 39.5             | < 3.1             |
| 500.0                                 | < 24.0                     | 6.0                          | 28.8                        | 39.5             | < 3.0             |
| 1000.0                                | < 21.0                     | 6.0                          | 26.2                        | 39.5             | < 2.6             |

NOTES: 1) Sample calculation at 58.3 MHz :  
 $30.1 \text{ (dBuV)} + 6.0 \text{ (dB)} - 29.3 \text{ (dB)} + 1.76 \text{ (dB)} = 8.6 \text{ (dBuV)}$   
 (50ohm→75ohm)

2) The spectrum was checked from 30 at 1000 MHz and all emissions not listed above were found to be more than 20 dB below the limits specified the commissions.

3) The symbol of '<' means 'or less'

4) Spectrum Analyzer : SPAN : 10MHz SWP : 50ms  
 RES BW : 100kHz VBW : 800kHz

5) Impedance at the output terminal : 75 ohm (Unbalanced)

# Section.15.115 (b)(2) Output Terminal Conducted Spurious Emission Measurements.

Measurement Method : FCC Rules and Regulations Part 15 (B)

EUT : Videocassette Recorder

Model No. : HR-VP674U

Serial No. : ES200027

Report No. : JY198013

Date. : Sep 15, 1998

Video source connected to the EUT

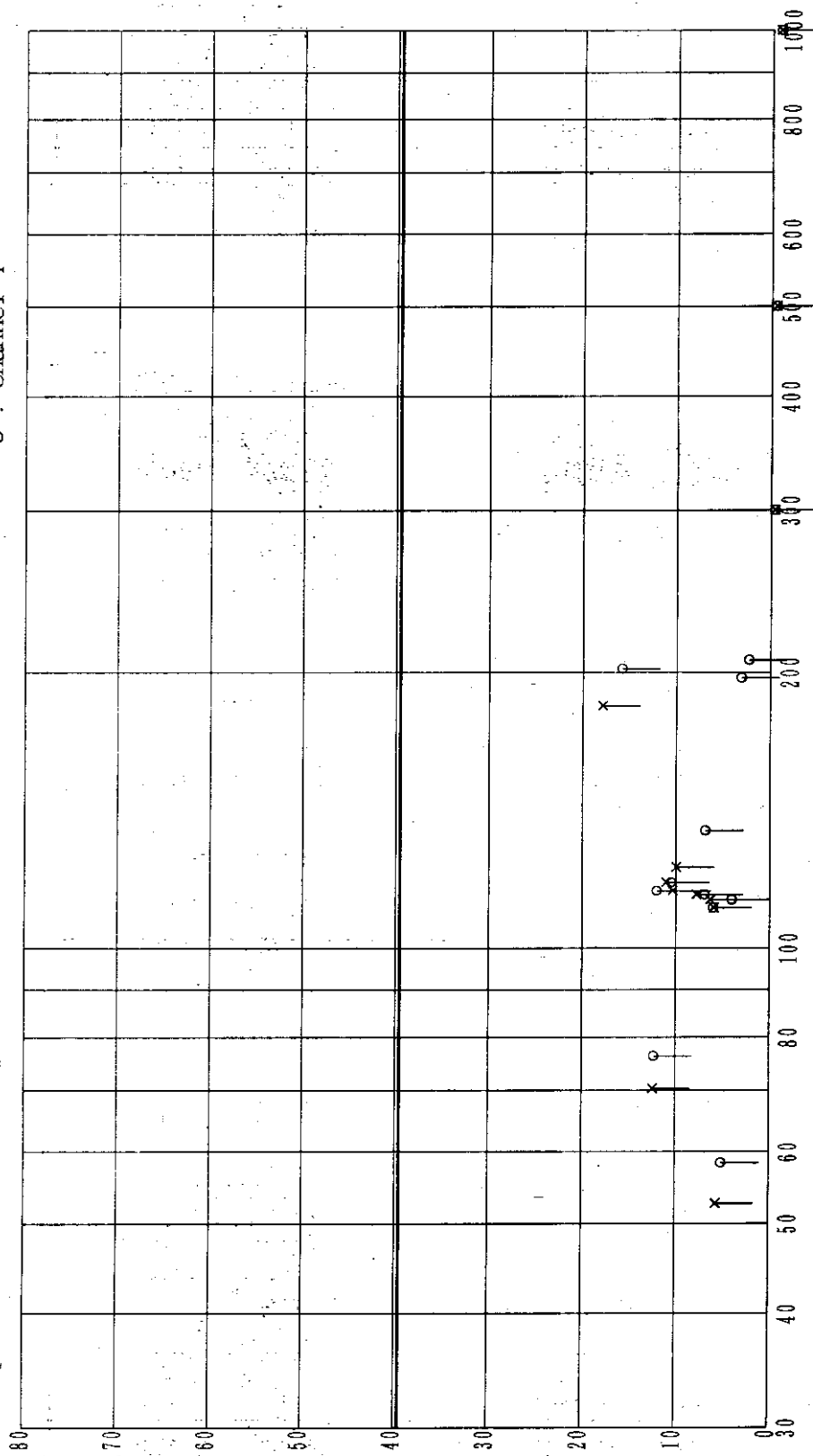
: External (VITS at 5Vp-p) 'REC Mode'

RF Output Channels : #3 and #4

— Limit Line

x : Channel 3

o : Channel 4



Frequency (MHz)

## Section.15.115 (b)(c) TRANSFER SWITCH ISOLATION MEASUREMENT

Video source connected to the EUT : Internal(Recorded Tape) 'PLAY Mode'

| RF Output channel | Measured carrier freq. [MHz] | Meter reading [dBuV] | Matching pad loss [dB] | Gain of pre amp. [dB] | Limits [dBuV] | Results [dBuV] |
|-------------------|------------------------------|----------------------|------------------------|-----------------------|---------------|----------------|
| 3                 | 61.26                        | 30.3                 | 6.0                    | 29.3                  | 9.5           | 8.8            |
| 4                 | 67.28                        | 24.8                 | 6.0                    | 29.3                  | 9.5           | 3.3            |

Video source connected to the EUT : External(VITS at 1Vp-p) 'REC Mode'

| RF Output channel | Measured carrier freq. [MHz] | Meter reading [dBuV] | Matching pad loss [dB] | Gain of pre amp. [dB] | Limits [dBuV] | Results [dBuV] |
|-------------------|------------------------------|----------------------|------------------------|-----------------------|---------------|----------------|
| 3                 | 61.26                        | 29.7                 | 6.0                    | 29.3                  | 9.5           | 8.2            |
| 4                 | 67.28                        | 24.7                 | 6.0                    | 29.3                  | 9.5           | 3.2            |

Video source connected to the EUT : External(VITS at 5Vp-p) 'REC Mode'

| RF Output channel | Measured carrier freq. [MHz] | Meter reading [dBuV] | Matching pad loss [dB] | Gain of pre amp. [dB] | Limits [dBuV] | Results [dBuV] |
|-------------------|------------------------------|----------------------|------------------------|-----------------------|---------------|----------------|
| 3                 | 61.26                        | 29.8                 | 6.0                    | 29.3                  | 9.5           | 8.3            |
| 4                 | 67.28                        | 24.9                 | 6.0                    | 29.3                  | 9.5           | 3.4            |

NOTES: 1) Sample calculation at 61.26 MHz :  
 $30.3 \text{ (dBuV)} + 6.0 \text{ (dB)} - 29.3 \text{ (dB)} + 1.76 \text{ (dB)} = 8.8 \text{ (dBuV)}$   
 (50ohm→75ohm)

2) The symbol of '<' means 'or less'

3) Spectrum Analyzer : SPAN : 10MHz SWP : 50ms  
 RES BW : 100kHz VBW : 300kHz

4) Impedance at the output terminal : 75 ohm (Unbalanced)

## &lt;Radiated Emission&gt;

Caused by the local oscillator

| Channel | Freq<br>[MHz] | Meter<br>reading<br>[dBuV] | Ant fact<br>[dB] | C. fact<br>[dB] | Matching<br>pad<br>[dB] | Corrected<br>reading<br>[dBuV/m] | Polarization | Limit<br>[dBuV/m] |
|---------|---------------|----------------------------|------------------|-----------------|-------------------------|----------------------------------|--------------|-------------------|
| 2       | 101           | < 39.1                     | 10.84            | 25.49           | 6.0                     | < 30.5                           | Horizontal   | 43.5              |
|         | 202           | < 31.2                     | 16.82            | 24.03           |                         | < 30.0                           |              |                   |
|         | 303           | < 30.6                     | 16.43            | 22.98           |                         | < 30.0                           |              | 46.0              |
|         | 1010          | < 34.7                     | 26.71            | 27.38           |                         | < 40.0                           |              | 54.0              |
|         | 1616          | < 36.8                     | 29.41            | 27.23           |                         | < 45.0                           |              |                   |
| 4       | 113           | < 36.9                     | 12.46            | 25.31           | 6.0                     | < 30.0                           | Vertical     | 43.5              |
|         | 226           | < 30.1                     | 17.11            | 23.21           |                         | < 30.0                           |              | 46.0              |
|         | 339           | < 29.6                     | 16.79            | 22.35           |                         | < 30.0                           |              |                   |
|         | 1017          | < 34.7                     | 26.71            | 27.37           |                         | < 40.0                           |              | 54.0              |
|         | 1695          | < 37.8                     | 28.55            | 27.39           |                         | < 45.0                           |              |                   |
| 6       | 129           | < 34.9                     | 14.07            | 24.93           | 6.0                     | < 30.0                           | Horizontal   | 43.5              |
|         | 258           | < 29.5                     | 17.74            | 23.24           |                         | < 30.0                           |              | 46.0              |
|         | 387           | < 28.5                     | 17.27            | 21.81           |                         | < 30.0                           |              |                   |
|         | 1032          | < 34.6                     | 26.72            | 27.34           |                         | < 40.0                           |              | 54.0              |
|         | 1677          | < 37.6                     | 28.74            | 27.35           |                         | < 45.0                           |              |                   |
| 8       | 227           | < 30.1                     | 17.12            | 23.22           | 6.0                     | < 30.0                           | Horizontal   | 46.0              |
|         | 454           | < 26.5                     | 18.53            | 21.07           |                         | < 30.0                           |              |                   |
|         | 681           | < 19.7                     | 22.56            | 18.28           |                         | < 30.0                           |              | 54.0              |
|         | 1135          | < 33.8                     | 27.31            | 27.13           |                         | < 40.0                           |              |                   |
|         | 1589          | < 36.5                     | 29.70            | 27.18           |                         | < 45.0                           |              |                   |
| 10      | 239           | < 30.1                     | 17.27            | 23.37           | 6.0                     | < 30.0                           | Horizontal   | 46.0              |
|         | 478           | < 25.3                     | 19.04            | 20.33           |                         | < 30.0                           |              | 54.0              |
|         | 717           | < 24.0                     | 22.72            | 17.70           |                         | < 35.0                           |              |                   |
|         | 1195          | < 32.7                     | 28.28            | 27.01           |                         | < 40.0                           |              |                   |
|         | 1673          | < 37.6                     | 28.79            | 27.35           |                         | < 45.0                           |              |                   |
| 12      | 251           | < 30.0                     | 17.44            | 23.47           | 6.0                     | < 30.0                           | Horizontal   | 46.0              |
|         | 502           | < 24.2                     | 19.56            | 19.80           |                         | < 30.0                           |              |                   |
|         | 753           | < 23.3                     | 22.97            | 17.30           |                         | < 35.0                           |              | 54.0              |
|         | 1004          | < 34.7                     | 26.70            | 27.39           |                         | < 40.0                           |              |                   |
|         | 1506          | < 35.5                     | 30.54            | 27.01           |                         | < 45.0                           |              |                   |
| 14      | 517           | 33.4                       | 19.99            | 19.80           | 6.0                     | 39.5                             | Vertical     | 46.0              |
|         | 1034          | 38.4                       | 26.72            | 27.33           |                         | 43.8                             |              | 54.0              |
|         | 1551          | < 36.0                     | 30.08            | 27.10           |                         | < 45.0                           |              |                   |
| 20      | 553           | 31.6                       | 21.04            | 19.79           | 6.0                     | 38.8                             | Vertical     | 46.0              |
|         | 1106          | 36.1                       | 26.85            | 27.19           |                         | 41.8                             |              | 54.0              |
|         | 1659          | < 37.4                     | 28.94            | 27.32           |                         | < 45.0                           |              |                   |
| 26      | 589           | 32.7                       | 22.08            | 19.64           | 6.0                     | 41.2                             | Vertical     | 46.0              |
|         | 1178          | 37.0                       | 28.01            | 27.04           |                         | 44.0                             | Horizontal   | 54.0              |
| 27      | 595           | 33.4                       | 22.26            | 19.62           | 6.0                     | 42.1                             | Vertical     | 46.0              |
|         | 1190          | 37.0                       | 28.20            | 27.02           |                         | 44.2                             | Horizontal   | 54.0              |
| 28      | 601           | 33.3                       | 22.40            | 19.59           | 6.0                     | 42.1                             | Vertical     | 46.0              |
|         | 1202          | 37.5                       | 28.36            | 27.00           |                         | 44.9                             | Horizontal   | 54.0              |
| 29      | 607           | 32.3                       | 22.41            | 19.50           | 6.0                     | 41.2                             | Vertical     | 46.0              |
|         | 1214          | 38.0                       | 28.45            | 27.00           |                         | 45.4                             | Horizontal   | 54.0              |

C.fact = Correction factor (Pre amp. + Cable loss)

Corrected reading = Meter reading + Ant Fact + Matching pad 6dB - C.fact

## &lt;Radiated Emission&gt;

Caused by the local oscillator

| Channel | Freq<br>[MHz] | Meter<br>reading<br>[dBuV] | Ant fact<br>[dB] | C. fact<br>[dB] | Matching<br>pad<br>[dB] | Corrected<br>reading<br>[dBuV/m] | Polarization | Limit<br>[dBuV/m] |
|---------|---------------|----------------------------|------------------|-----------------|-------------------------|----------------------------------|--------------|-------------------|
| 30      | 613           | 33.1                       | 22.43            | 19.42           | 6.0                     | 42.1                             | Vertical     | 46.0              |
|         | 1226          | 37.6                       | 28.42            | 27.00           |                         | 45.0                             | Horizontal   | 54.0              |
| 31      | 619           | 33.1                       | 22.44            | 19.33           | 6.0                     | 42.2                             | Vertical     | 46.0              |
|         | 1238          | 36.5                       | 28.45            | 27.00           |                         | 43.9                             | Horizontal   | 54.0              |
| 32      | 625           | 32.3                       | 22.45            | 19.25           | 6.0                     | 41.5                             | Vertical     | 46.0              |
|         | 1250          | 35.2                       | 28.48            | 27.00           |                         | 42.7                             | Horizontal   | 54.0              |
| 33      | 631           | 32.1                       | 22.46            | 19.17           | 6.0                     | 41.4                             | Vertical     | 46.0              |
|         | 1262          | 35.6                       | 28.50            | 27.00           |                         | 43.1                             | Horizontal   | 54.0              |
| 34      | 637           | 31.1                       | 22.47            | 19.08           | 6.0                     | 40.5                             | Vertical     | 46.0              |
|         | 1274          | 34.9                       | 28.53            | 27.00           |                         | 42.5                             |              | 54.0              |
| 35      | 643           | 30.2                       | 22.49            | 19.00           | 6.0                     | 39.7                             | Vertical     | 46.0              |
|         | 1286          | < 34.4                     | 28.56            | 27.00           |                         | < 42.0                           |              | 54.0              |
| 36      | 649           | < 29.5                     | 22.50            | 18.91           | 6.0                     | < 39.1                           | Vertical     | 46.0              |
|         | 1298          | < 34.4                     | 28.59            | 27.00           |                         | < 42.0                           |              | 54.0              |
| 37      | 655           | 27.7                       | 22.51            | 18.80           | 6.0                     | 37.4                             | Vertical     | 46.0              |
|         | 1310          | < 34.2                     | 28.74            | 26.98           |                         | < 42.0                           |              | 54.0              |
| 45      | 703           | 25.9                       | 22.62            | 17.86           | 6.0                     | 36.7                             | Horizontal   | 46.0              |
|         | 1406          | < 35.7                     | 30.12            | 26.81           |                         | < 45.0                           |              | 54.0              |
| 52      | 745           | 28.6                       | 22.92            | 17.36           | 6.0                     | 40.2                             | Horizontal   | 46.0              |
|         | 1490          | 36.2                       | 30.55            | 26.98           |                         | 45.7                             | Vertical     | 54.0              |
| 53      | 751           | 30.0                       | 22.96            | 17.30           | 6.0                     | 41.7                             | Horizontal   | 46.0              |
|         | 1502          | 36.9                       | 30.58            | 27.00           |                         | 46.4                             | Vertical     | 54.0              |
| 54      | 757           | 29.8                       | 23.00            | 17.30           | 6.0                     | 41.5                             | Horizontal   | 46.0              |
|         | 1514          | 37.0                       | 30.46            | 27.03           |                         | 46.5                             | Vertical     | 54.0              |
| 55      | 763           | 28.7                       | 23.04            | 17.30           | 6.0                     | 40.4                             | Horizontal   | 46.0              |
|         | 1526          | 37.1                       | 30.34            | 27.05           |                         | 46.4                             | Vertical     | 54.0              |
| 61      | 799           | 26.3                       | 23.29            | 17.30           | 6.0                     | 38.3                             | Vertical     | 46.0              |
|         | 1598          | 37.2                       | 29.61            | 27.20           |                         | 45.6                             |              | 54.0              |
| 62      | 805           | 28.0                       | 23.39            | 17.25           | 6.0                     | 40.2                             | Horizontal   | 46.0              |
|         | 1610          | 37.7                       | 29.48            | 27.22           |                         | 45.9                             | Vertical     | 54.0              |
| 63      | 811           | 28.3                       | 23.50            | 17.19           | 6.0                     | 40.6                             | Vertical     | 46.0              |
|         | 1622          | 37.6                       | 29.35            | 27.24           |                         | 45.7                             |              | 54.0              |
| 64      | 817           | 28.7                       | 23.61            | 17.13           | 6.0                     | 41.2                             | Vertical     | 46.0              |
|         | 1634          | 38.9                       | 29.22            | 27.27           |                         | 46.8                             |              | 54.0              |
| 65      | 823           | 30.0                       | 23.71            | 17.07           | 6.0                     | 42.6                             | Horizontal   | 46.0              |
|         | 1646          | 40.0                       | 29.08            | 27.29           |                         | 47.8                             | Vertical     | 54.0              |
| 66      | 829           | 29.2                       | 23.82            | 17.01           | 6.0                     | 42.0                             | Horizontal   | 46.0              |
|         | 1658          | 42.2                       | 28.95            | 27.32           |                         | 49.8                             | Vertical     | 54.0              |
| 67      | 835           | 27.1                       | 23.93            | 16.95           | 6.0                     | 40.1                             | Horizontal   | 46.0              |
|         | 1670          | 41.1                       | 28.82            | 27.34           |                         | 48.6                             | Vertical     | 54.0              |
| 68      | 841           | 29.0                       | 24.04            | 16.89           | 6.0                     | 42.2                             | Horizontal   | 46.0              |
|         | 1682          | 40.6                       | 28.69            | 27.36           |                         | 47.9                             | Vertical     | 54.0              |
| 69      | 847           | 28.1                       | 24.15            | 16.83           | 6.0                     | 41.5                             | Horizontal   | 46.0              |
|         | 1694          | 37.7                       | 29.05            | 27.39           |                         | 45.4                             | Vertical     | 54.0              |

C.fact = Correction factor (Pre amp. + Cable loss)

Corrected reading = Meter reading + Ant Fact + Matching pad 6dB - C.fact

## &lt;Antenna power conduction for receivers&gt;

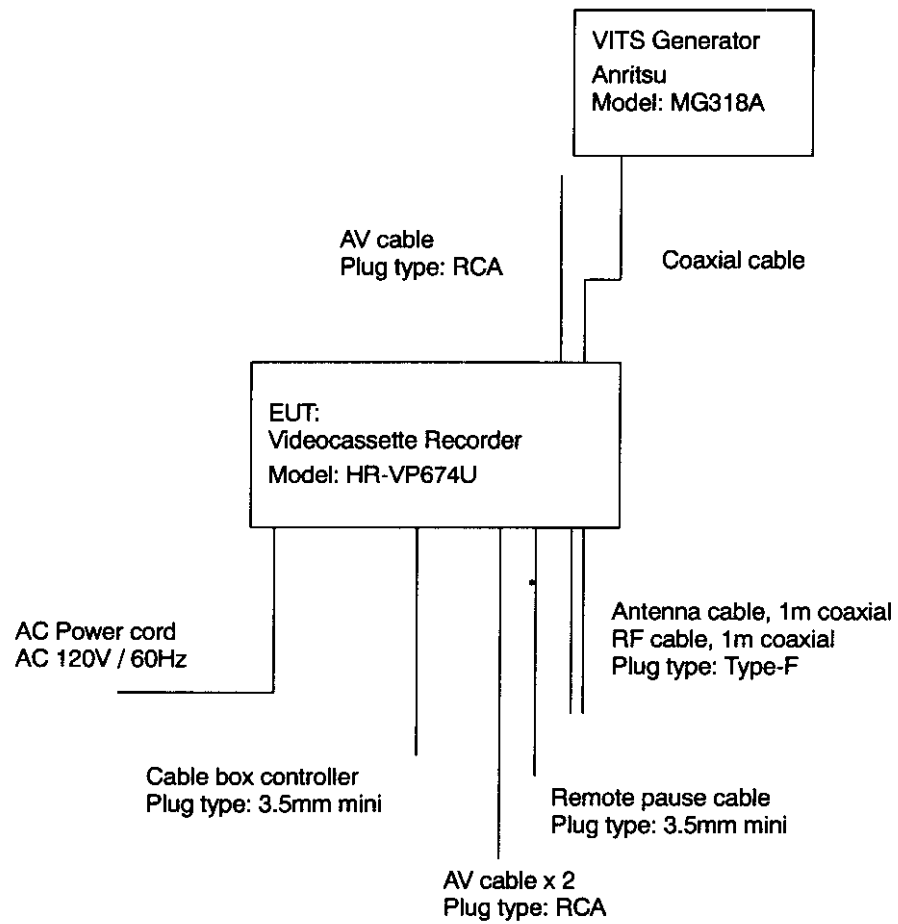
## Section 15.111(a)

| Channel | Freq<br>[MHz] | Meter<br>reading<br>[dBuV] | C. fact<br>[dB] | Corrected<br>reading<br>[dBuV/m] | Limit<br>[dBuV/m] |
|---------|---------------|----------------------------|-----------------|----------------------------------|-------------------|
| 2       | 101           | < 56.8                     | 28.80           | < 40.0                           | 52.0              |
|         | 202           | < 57.4                     | 29.39           | < 40.0                           |                   |
|         | 303           | < 58.1                     | 30.12           | < 40.0                           |                   |
|         | 1010          | < 55.2                     | 27.24           | < 40.0                           |                   |
|         | 1616          | < 55.5                     | 27.45           | < 40.0                           |                   |
| 4       | 113           | < 56.8                     | 28.75           | < 40.0                           | 52.0              |
|         | 226           | < 57.5                     | 29.46           | < 40.0                           |                   |
|         | 339           | < 58.1                     | 30.12           | < 40.0                           |                   |
|         | 1017          | < 55.2                     | 27.24           | < 40.0                           |                   |
|         | 1695          | < 54.5                     | 26.52           | < 40.0                           |                   |
| 6       | 129           | < 57.1                     | 29.11           | < 40.0                           | 52.0              |
|         | 258           | < 57.6                     | 29.63           | < 40.0                           |                   |
|         | 387           | < 58.1                     | 30.12           | < 40.0                           |                   |
|         | 1161          | < 55.1                     | 27.10           | < 40.0                           |                   |
|         | 1677          | < 54.7                     | 26.73           | < 40.0                           |                   |
| 7       | 221           | < 57.5                     | 29.45           | < 40.0                           | 52.0              |
|         | 442           | < 58.2                     | 30.19           | < 40.0                           |                   |
|         | 663           | < 57.4                     | 29.37           | < 40.0                           |                   |
|         | 1105          | < 55.2                     | 27.24           | < 40.0                           |                   |
|         | 1547          | < 54.9                     | 26.91           | < 40.0                           |                   |
| 8       | 227           | < 57.5                     | 29.47           | < 40.0                           | 52.0              |
|         | 454           | < 58.2                     | 30.21           | < 40.0                           |                   |
|         | 681           | < 57.3                     | 29.33           | < 40.0                           |                   |
|         | 1135          | < 55.2                     | 27.16           | < 40.0                           |                   |
|         | 1589          | < 55.5                     | 27.49           | < 40.0                           |                   |
| 9       | 233           | < 57.5                     | 29.49           | < 40.0                           | 52.0              |
|         | 466           | < 58.2                     | 30.23           | < 40.0                           |                   |
|         | 699           | < 57.3                     | 29.29           | < 40.0                           |                   |
|         | 1165          | < 55.1                     | 27.09           | < 40.0                           |                   |
|         | 1631          | < 55.3                     | 27.27           | < 40.0                           |                   |

| Channel | Freq<br>[MHz] | Meter<br>reading<br>[dBuV] | C. fact<br>[dB] | Corrected<br>reading<br>[dBuV/m] | Limit<br>[dBuV/m] |
|---------|---------------|----------------------------|-----------------|----------------------------------|-------------------|
| 10      | 239           | < 57.5                     | 29.50           | < 40.0                           | 52.0              |
|         | 478           | < 58.2                     | 30.24           | < 40.0                           |                   |
|         | 717           | < 57.1                     | 29.08           | < 40.0                           |                   |
|         | 1195          | < 55.0                     | 27.01           | < 40.0                           |                   |
|         | 1673          | < 54.8                     | 26.78           | < 40.0                           |                   |
| 12      | 251           | < 57.6                     | 29.55           | < 40.0                           | 52.0              |
|         | 502           | < 58.3                     | 30.26           | < 40.0                           |                   |
|         | 753           | < 56.6                     | 28.64           | < 40.0                           |                   |
|         | 1004          | < 55.2                     | 27.24           | < 40.0                           |                   |
| 14      | 517           | < 58.2                     | 30.15           | < 40.0                           | 52.0              |
|         | 1034          | < 55.2                     | 27.24           | < 40.0                           |                   |
|         | 1551          | < 55.0                     | 26.96           | < 40.0                           |                   |
| 20      | 553           | < 57.9                     | 29.87           | < 40.0                           | 52.0              |
|         | 1106          | < 55.2                     | 27.24           | < 40.0                           |                   |
|         | 1659          | < 54.9                     | 26.94           | < 40.0                           |                   |
| 28      | 601           | < 57.5                     | 29.51           | < 40.0                           | 52.0              |
|         | 1202          | < 55.0                     | 26.99           | < 40.0                           |                   |
| 36      | 649           | < 57.4                     | 29.40           | < 40.0                           | 52.0              |
|         | 1298          | < 54.4                     | 26.43           | < 40.0                           |                   |
| 45      | 703           | < 57.3                     | 29.25           | < 40.0                           | 52.0              |
|         | 1406          | 54.9                       | 26.86           | < 40.0                           |                   |
| 53      | 751           | < 56.7                     | 28.66           | < 40.0                           | 52.0              |
|         | 1502          | 54.3                       | 26.29           | < 40.0                           |                   |
| 61      | 799           | < 56.1                     | 28.07           | < 40.0                           | 52.0              |
|         | 1598          | 55.6                       | 27.61           | < 40.0                           |                   |
| 69      | 847           | < 56.1                     | 28.06           | < 40.0                           | 52.0              |
|         | 1694          | 54.5                       | 26.53           | < 40.0                           |                   |

C.fact = Correction factor (Pre amp. + Cable loss)

Corrected reading = Meter reading + Matching pad 6dB - C.fact + 1.76 (50-&gt;75 ohms conversion)

**Configuration of Tested System**

### Test Instrumentation Used

[illegible]

# [REPORT OF MEASUREMENTS ON TV INTERFACE DEVICE]

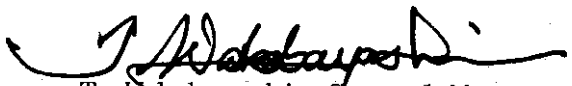
Date : September 18, 1998

Issued at : Kanagawa Japan

REPORT No. : JYT98014

1. Applicant : Victor Company of Japan, Ltd.  
12, 3-chome, Moriya-cho, Kanagawa-ku,  
Yokohama, Kanagawa 221-8528, JAPAN
2. Description of the Equipment  
Under Test (EUT) : Videocassette Recorder
  - 2.1 FCC ID : ASIP9K045
  - 2.2 Tuner/RF conv.type : QAU0115-x
  - 2.3 Brand (Trade Name) : JVC
  - 2.4 Model No. : HR-VP674U
  - 2.5 Serial No. : ES200026
  - 2.6 Designes for  
RF Output Channels : Channel #3 and Channel #4
  - 2.7 Number of  
RF Output Terminals : 1 (F-type Connector)
  - 2.8 RF Output Impedance : 75 ohms (Unbalanced)
  - 2.9 Power Supply : AC 120 V, 60Hz
  - 2.10 Date of Manufacturer : September, 1998
3. The Highest Frequency  
generated in the EUT : 71.75MHz
4. External Connectors :
  - A/V Input/Output ports, RCA type
  - Cable box port, 3.5 $\phi$ mini jack type
  - Pause control port, 3.5 $\phi$ mini jack type
5. Connected Accessories for  
the EUT :
  - Coaxial Cable with F-Type plug
  - Audio/Video Cables with RCA Plugs
  - Cable box controller with mini plug
  - Pause control cable with mini plug
6. Measuring Method : FCC Rules and Regulations Part 15 (B)
7. Measurement Procedure : ANSI C63.4-1992
8. Date of Measurement : Sep 15, 1998
9. Place of Measurement : Victor Company of Japan Ltd.  
JVC YOKOHAMA TEST SITE
10. Measurement Results : The results obtained from the measuring  
of the above-mentioned device are as  
shown in the attached sheets.

Victor Company of Japan Ltd.

  
T. Wakabayashi, General Manager  
Engineering Support Center  
Engineering Department  
Video Division

## Section.15.109 RADIATED RADIO EMISSION MEASUREMENT

Video source connected to the EUT : Internal(Recorded Tape) 'PLAY Mode'

RF Output Channels : #3 and #4

| Frequency of<br>the emission<br>[MHz] | Meter reading |          | Correction factor |           |        | Field strength at 3m |          |
|---------------------------------------|---------------|----------|-------------------|-----------|--------|----------------------|----------|
|                                       | [dBuV]        |          | [dB]              |           |        | [dBuV/m]             |          |
|                                       | Horizontal    | Vertical | Ant.Fac.          | Gain/Loss | Limits | Horizontal           | Vertical |
| 36.4                                  | <43.0         | 43.8     | 16.3              | -29.2     | 40.0   | <30.1                | 30.9     |
| 71.6                                  | <51.0         | 54.9     | 6.6               | -27.5     | 40.0   | <30.1                | 34.0     |
| 100.3                                 | <46.0         | 52.2     | 10.4              | -26.6     | 43.5   | <29.9                | 36.1     |
| 121.7                                 | <41.0         | 42.1     | 13.2              | -26.1     | 43.5   | <28.1                | 29.2     |
| 590.3                                 | 31.3          | <30.0    | 21.0              | -19.9     | 46.0   | 32.4                 | <31.1    |

- NOTES: 1) Sample calculation at 36.4 MHz :  
 Field strength : Meter Reading + Antenna Fac. + Gain/Loss \*  
 30.1 [dBuV/m] : 43.0 [dBuV] + 16.3 [dB] + (-29.2) [dB]  
 \* Gain/Loss [dB] = Cable loss - Amp.Gain + Att.Pad loss, 6dB  
 Limits :  $100[\mu\text{V/m}] = 20 \log (100 [\mu\text{V/m}]) = 40 [\text{dBuV/m}]$
- 2) The spectrum was checked from 30 at 1000 MHz and all emissions not listed above were found to be more than 20 dB below the limits specified the commissions.
- 3) The symbol of '<' means 'or less'
- 4) Arrangement of the Interface Cables : Refer to the photographs.

# Section.15.109

## Results of Radiated Emission Measurements.

Measurement Method : FCC Rules and Regulations Part 15 (B)  
Measurement Distance : 3 m

EUT : Videocassette Recorder

Model No. : HR-VP674U

Serial No. : ES200026

Report No. : JYT98014

Date. : Sep 15, 1998

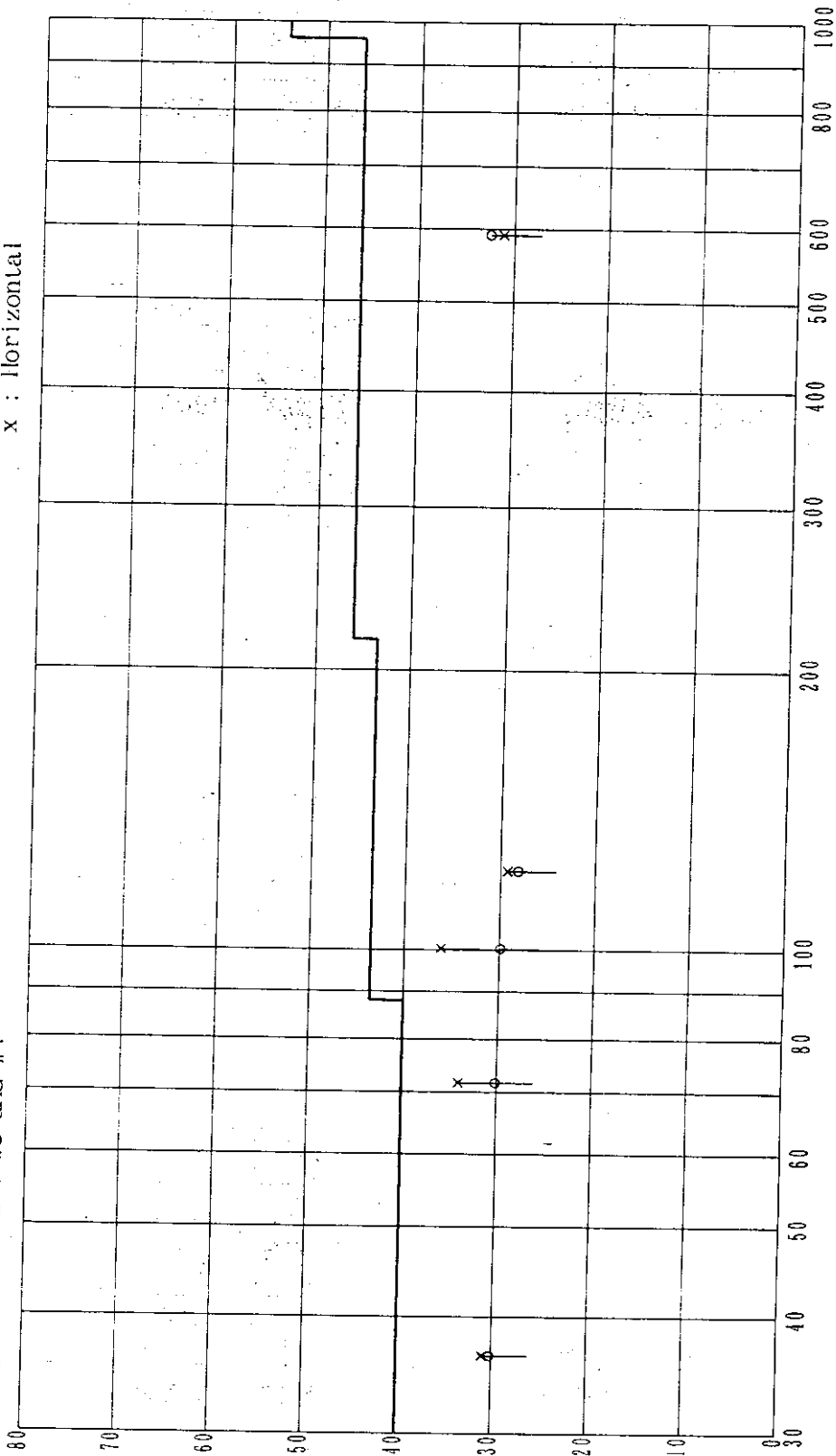
Video source connected to the EUT

RF Output Channels : #3 and #4

Limit Line

o : Vertical

x : Horizontal



Frequency (MHz)

RFI Field Strength (dBuV/m)

## Section.15.109 RADIATED RADIO EMISSION MEASUREMENT

Video source connected to the EUT : External(VITS at 1Vp-p) 'REC Mode'

RF Output Channels : #3 and #4

| Frequency of<br>the emission<br>[MHz] | Meter reading |          | Correction factor |           |        | Field strength at 3m |          |
|---------------------------------------|---------------|----------|-------------------|-----------|--------|----------------------|----------|
|                                       | [dBuV]        |          | [dB]              |           |        | [dBuV/m]             |          |
|                                       | Horizontal    | Vertical | Ant.Fac.          | Gain/Loss | Limits | Horizontal           | Vertical |
| 36.4                                  | <43.0         | 41.9     | 16.3              | -29.2     | 40.0   | <30.1                | 29.0     |
| 71.6                                  | <51.0         | 54.7     | 6.6               | -27.5     | 40.0   | <30.1                | 33.8     |
| 84.2                                  | <45.0         | 50.1     | 7.2               | -27.1     | 40.0   | <25.1                | 30.2     |
| 98.8                                  | <46.0         | 51.0     | 10.1              | -26.6     | 43.5   | <29.5                | 34.5     |
| 164.7                                 | 39.3          | <37.7    | 15.5              | -25.2     | 43.5   | 29.6                 | <28.0    |
| 534.8                                 | 34.7          | <33.0    | 19.9              | -20.8     | 46.0   | 33.9                 | <32.2    |

- NOTES: 1) Sample calculation at 36.4 MHz :  
 Field strength : Meter Reading + Antenna Fac. + Gain/Loss \*  
 30.1 [dBuV/m] : 43.0 [dBuV] + 16.3 [dB] + (-29.2) [dB]  
 \* Gain/Loss [dB] = Cable loss - Amp.Gain + Att.Pad loss, 6dB  
 Limits :  $100[\mu\text{V/m}] = 20 \log (100. [\mu\text{V/m}]) = 40 [\text{dBuV/m}]$
- 2) The spectrum was checked from 30 at 1000 MHz and all emissions not listed above were found to be more than 20 dB below the limits specified the commissions.
- 3) The symbol of '<' means 'or less'
- 4) Arrangement of the Interface Cables : Refer to the photographs.

## Section.15.109

### Results of Radiated Emission Measurements.

Measurement Method : FCC Rules and Regulations Part 15 (B)  
Measurement Distance : 3 m

EUT : Videocassette Recorder

Model No. : HR-VP674U

Serial No. : ES200026

Report No. : JYT98014

Date. : Sep 15, 1998

Video source connected to the EUT

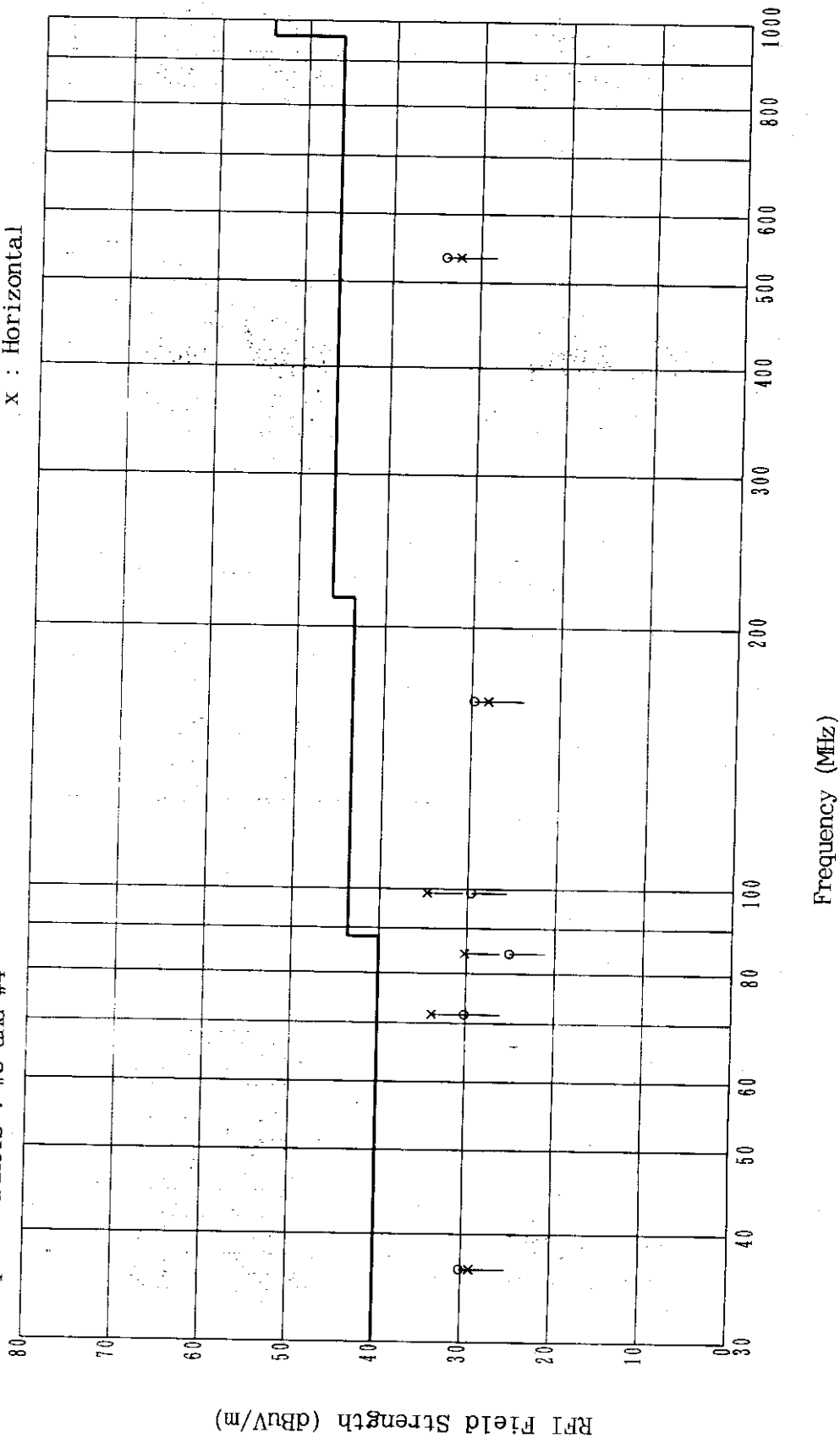
: External (VITS at 1Vp-p) 'REC Mode'

RF Output Channels : #3 and #4

— Limit Line

o : Vertical

x : Horizontal



## Section.15.109 RADIATED RADIO EMISSION MEASUREMENT

Video source connected to the EUT : External(VITS at 5Vp-p) 'REC Mode'

RF Output Channels : #3 and #4

| Frequency of<br>the emission<br>[MHz] | Meter reading |          | Correction factor |           |        | Field strength at 3m |          |
|---------------------------------------|---------------|----------|-------------------|-----------|--------|----------------------|----------|
|                                       | [dBuV]        |          | [dB]              |           |        | [dBuV/m]             |          |
|                                       | Horizontal    | Vertical | Ant.Fac.          | Gain/Loss | Limits | Horizontal           | Vertical |
| 35.9                                  | <43.0         | 43.2     | 16.5              | -29.2     | 40.0   | <30.3                | 30.5     |
| 71.6                                  | <51.0         | 55.0     | 6.6               | -27.5     | 40.0   | <30.1                | 34.1     |
| 85.9                                  | <50.0         | 51.2     | 7.5               | -27.1     | 40.0   | <30.4                | 31.6     |
| 99.2                                  | <46.0         | 48.1     | 10.2              | -26.6     | 43.5   | <29.6                | 31.7     |
| 164.7                                 | 39.0          | <38.0    | 15.5              | -25.2     | 43.5   | 29.3                 | <28.3    |
| 544.9                                 | 33.1          | <32.0    | 20.1              | -20.6     | 46.0   | 32.6                 | <31.5    |

- NOTES: 1) Sample calculation at 35.9 MHz :  
 Field strength : Meter Reading + Antenna Fac. + Gain/Loss \*  
 30.3 [dBuV/m] : 43.0 [dBuV] + 16.5 [dB] + (-29.2) [dB]  
 \* Gain/Loss [dB] = Cable loss - Amp.Gain + Att.Pad loss, 6dB  
 Limits :  $100[\mu\text{V/m}] = 20 \log (100. [\mu\text{V/m}]) = 40 [\text{dBuV/m}]$
- 2) The spectrum was checked from 30 at 1000 MHz and all emissions not listed above were found to be more than 20 dB below the limits specified the commissions.
- 3) The symbol of '<' means 'or less'
- 4) Arrangement of the Interface Cables : Refer to the photographs.

## Section.15.109

### Results of Radiated Emission Measurements.

Measurement Method : FCC Rules and Regulations Part 15 (B)  
Measurement Distance : 3 m

EUT : Videocassette Recorder

Model No. : HR-VP674U

Serial No. : ES200026

Report No. : JYT98014

Date. : Sep 15, 1998

Video source connected to the EUT

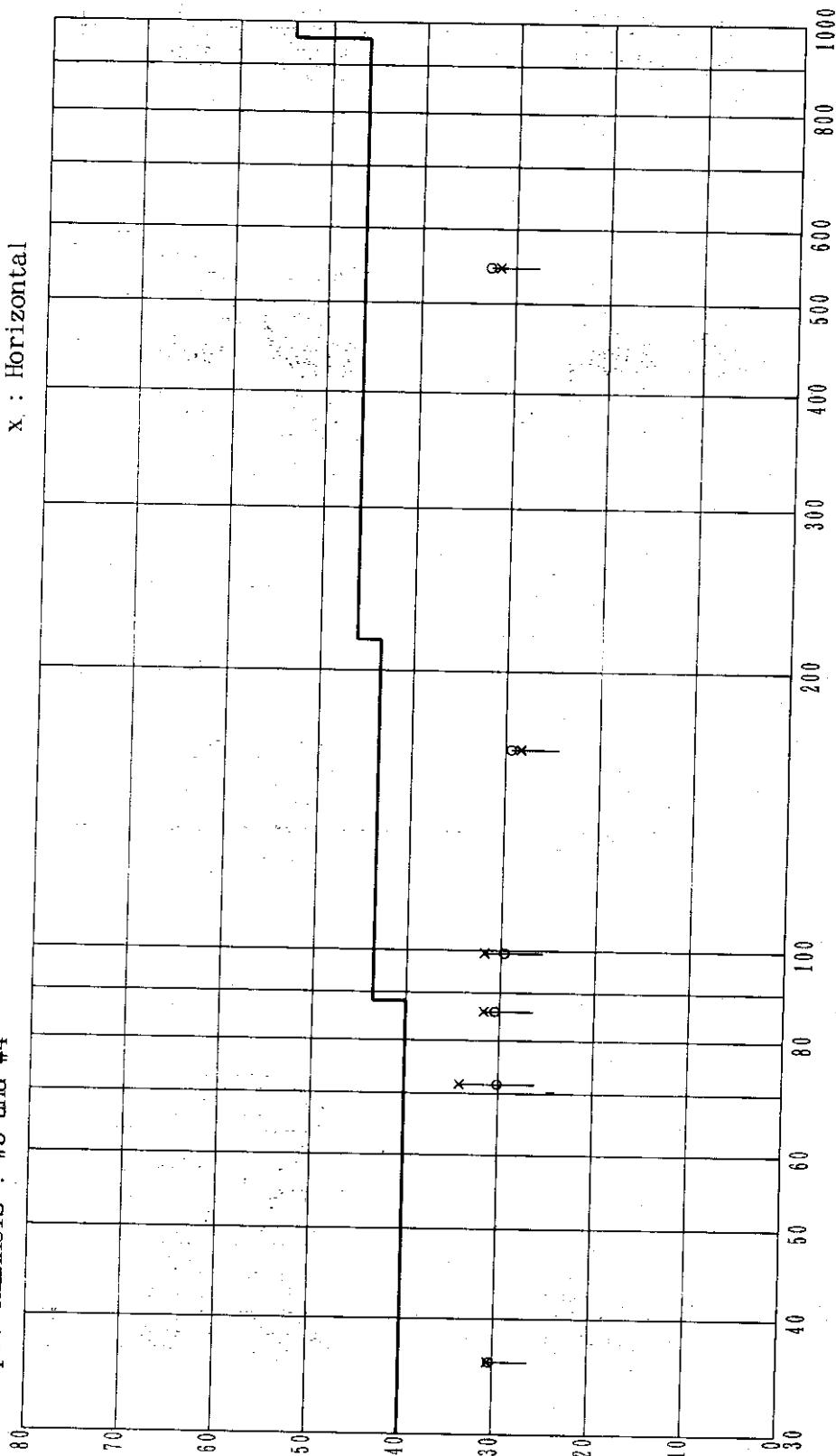
: External (VITS at 5Vp-p) 'REC Mode'

RF Output Channels : #3 and #4

— Limit Line

o : Vertical

x : Horizontal



Frequency (MHz)

## Section.15.107

## POWER LINE CONDUCTED INTERFERENCE VOLTAGE MEASUREMENT

Video source connected to the EUT : Internal(Recorded Tape) 'PLAY Mode'

RF Output Channels : #3 and #4

| Frequency of<br>the emission<br>[MHz] | Meter reading |        | LISN<br>factor<br>[dB] | Limits<br>[dBuV] | Radio noise voltage |      |
|---------------------------------------|---------------|--------|------------------------|------------------|---------------------|------|
|                                       | Va            | Vb     |                        |                  | Va                  | Vb   |
|                                       | [dBuV]        | [dBuV] |                        |                  | [dBuV]              |      |
| 0.45                                  | 34.8          | 35.9   | 0.6                    | 48.0             | 35.4                | 36.5 |
| 0.53                                  | 31.1          | 30.8   | 0.6                    | 48.0             | 31.7                | 31.4 |
| 0.64                                  | 27.8          | 27.8   | 0.7                    | 48.0             | 28.5                | 28.5 |
| 1.03                                  | 18.7          | 19.7   | 0.8                    | 48.0             | 19.5                | 20.5 |
| 1.26                                  | 19.5          | 19.2   | 0.8                    | 48.0             | 20.3                | 20.0 |
| 2.66                                  | 24.7          | 23.0   | 0.7                    | 48.0             | 25.4                | 23.7 |
| 2.87                                  | 23.1          | 22.9   | 0.7                    | 48.0             | 23.8                | 23.6 |
| 6.33                                  | 16.2          | 15.2   | 0.6                    | 48.0             | 16.8                | 15.8 |
| 11.54                                 | 19.3          | 20.4   | 0.5                    | 48.0             | 19.8                | 20.9 |
| 29.05                                 | 19.9          | 23.5   | 1.0                    | 48.0             | 20.9                | 24.5 |

- NOTES: 1) Sample calculation at 0.45 MHz (Va) :  
 $34.8 \text{ (dBuV)} + 0.6 \text{ (dB)} = 35.4 \text{ (dBuV/m)}$   
 LISN factor [dB] = 0.6 [dB]  
 Limits :  $250[\mu\text{V}] = 20 \log (250 [\mu\text{V}]) = 48 \text{ [dBuV]}$
- 2) The spectrum was checked from 0.45 at 30 MHz and all emissions not listed above were found to be more than 20 dB below the limits specified the commissions.
- 3) The symbol of '<' means 'or less'
- 4) Va : One-end & Grounded , Vb : The other-end & grounded

# Section.15.107

## Results of Conducted Power Line Measurements.

Measurement Method : FCC Rules and Regulations Part 15 (B)

EUT : Videocassette Recorder

Model No. : HR-VP674U

Serial No. : ES200026

Report No. : JYT98014

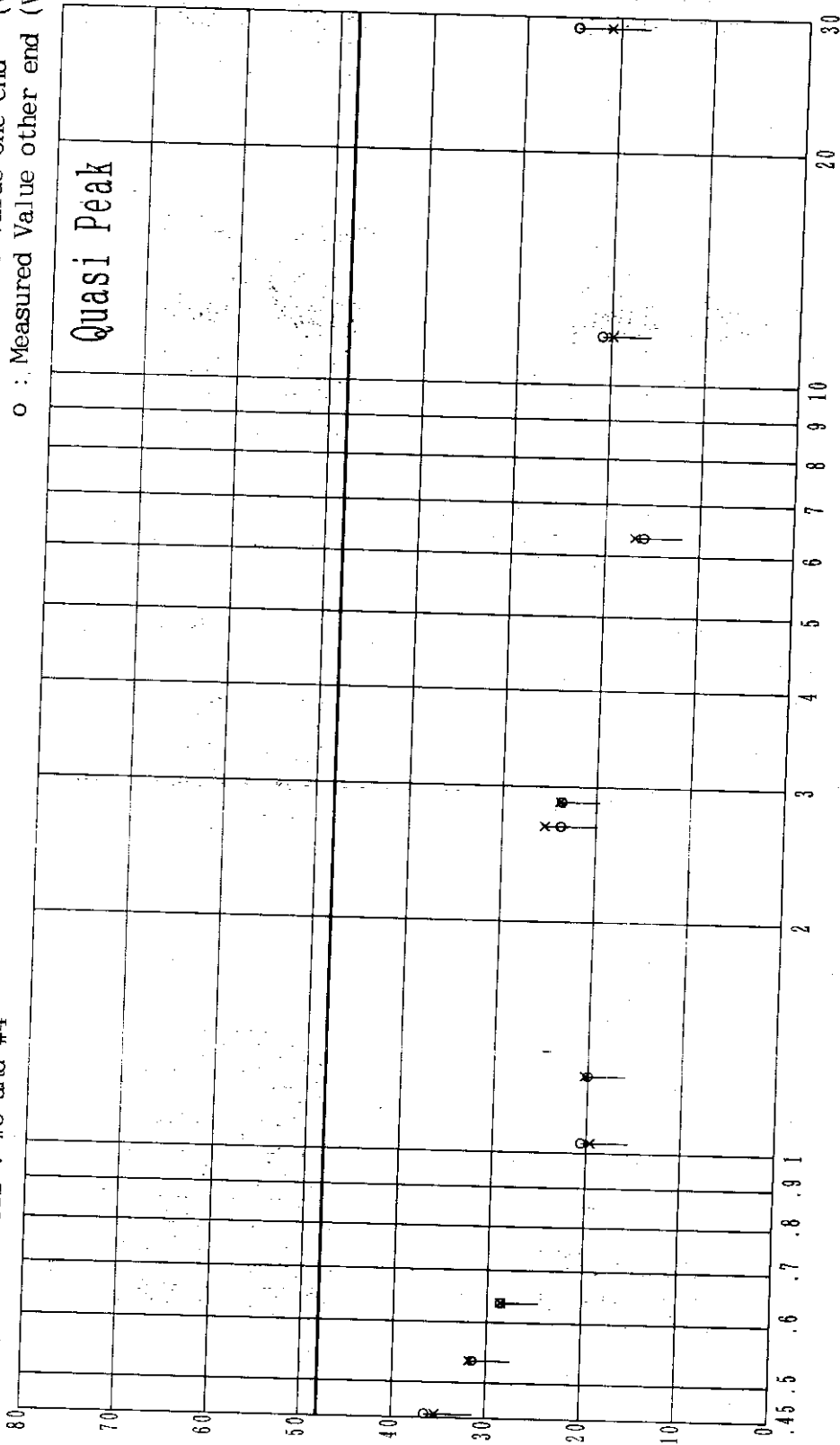
Date. : Sep 15, 1998

Video source connected to the EUT

: Internal(Recorded Tape) 'PLAY Mode'

RF Output Channels : #3 and #4

— Limit Line  
x : Measured Value one end (Va)  
o : Measured Value other end (Vb)



RFI Voltage (dBuV)

Frequency (MHz)

## Section.15.107

## POWER LINE CONDUCTED INTERFERENCE VOLTAGE MEASUREMENT

Video source connected to the EUT : External(VITS at 1Vp-p) 'REC Mode'

RF Output Channels : #3 and #4

| Frequency of<br>the emission<br>[MHz] | Meter reading |      | LISN<br>factor<br>[dB] | Limits<br>[dBuV] | Radio noise voltage |      |
|---------------------------------------|---------------|------|------------------------|------------------|---------------------|------|
|                                       | Va            | Vb   |                        |                  | Va                  | Vb   |
| 0.46                                  | 34.5          | 35.3 | 0.6                    | 48.0             | 35.1                | 35.9 |
| 0.56                                  | 30.7          | 31.7 | 0.7                    | 48.0             | 31.4                | 32.4 |
| 0.66                                  | 29.1          | 29.0 | 0.8                    | 48.0             | 29.9                | 29.8 |
| 0.89                                  | 27.0          | 27.7 | 0.8                    | 48.0             | 27.8                | 28.5 |
| 1.44                                  | 27.2          | 27.6 | 0.8                    | 48.0             | 28.0                | 28.4 |
| 1.86                                  | 23.3          | 21.4 | 0.7                    | 48.0             | 24.0                | 22.1 |
| 2.37                                  | 26.8          | 28.1 | 0.7                    | 48.0             | 27.5                | 28.8 |
| 3.38                                  | 22.6          | 22.0 | 0.7                    | 48.0             | 23.3                | 22.7 |
| 4.55                                  | 16.7          | 18.4 | 0.7                    | 48.0             | 17.4                | 19.1 |
| 6.43                                  | 20.8          | 20.5 | 0.6                    | 48.0             | 21.4                | 21.1 |
| 26.71                                 | 18.4          | 20.5 | 0.9                    | 48.0             | 19.3                | 21.4 |

- NOTES: 1) Sample calculation at 0.46 MHz (Va) :  
 $34.5 \text{ (dBuV)} + 0.6 \text{ (dB)} = 35.1 \text{ (dBuV/m)}$   
LISN factor [dB] = 0.6 [dB]  
Limits :  $250[\mu\text{V}] = 20 \log (250 [\mu\text{V}]) = 48 \text{ [dBuV]}$
- 2) The spectrum was checked from 0.45 at 30 MHz and all emissions not listed above were found to be more than 20 dB below the limits specified the commissions.
- 3) The symbol of '<' means 'or less'
- 4) Va : One-end & Grounded , Vb : The other-end & grounded

# Section.15.107

## Results of Conducted Power Line Measurements.

Measurement Method : FCC Rules and Regulations Part 15 (B)

EUT : Videocassette Recorder

Model No. : HR-VP674U

Serial No. : ES200026

Video source connected to the EUT

Rf Output Channels : #3 and #4

External (VITS at 1Vp-p) 'REC Mode'

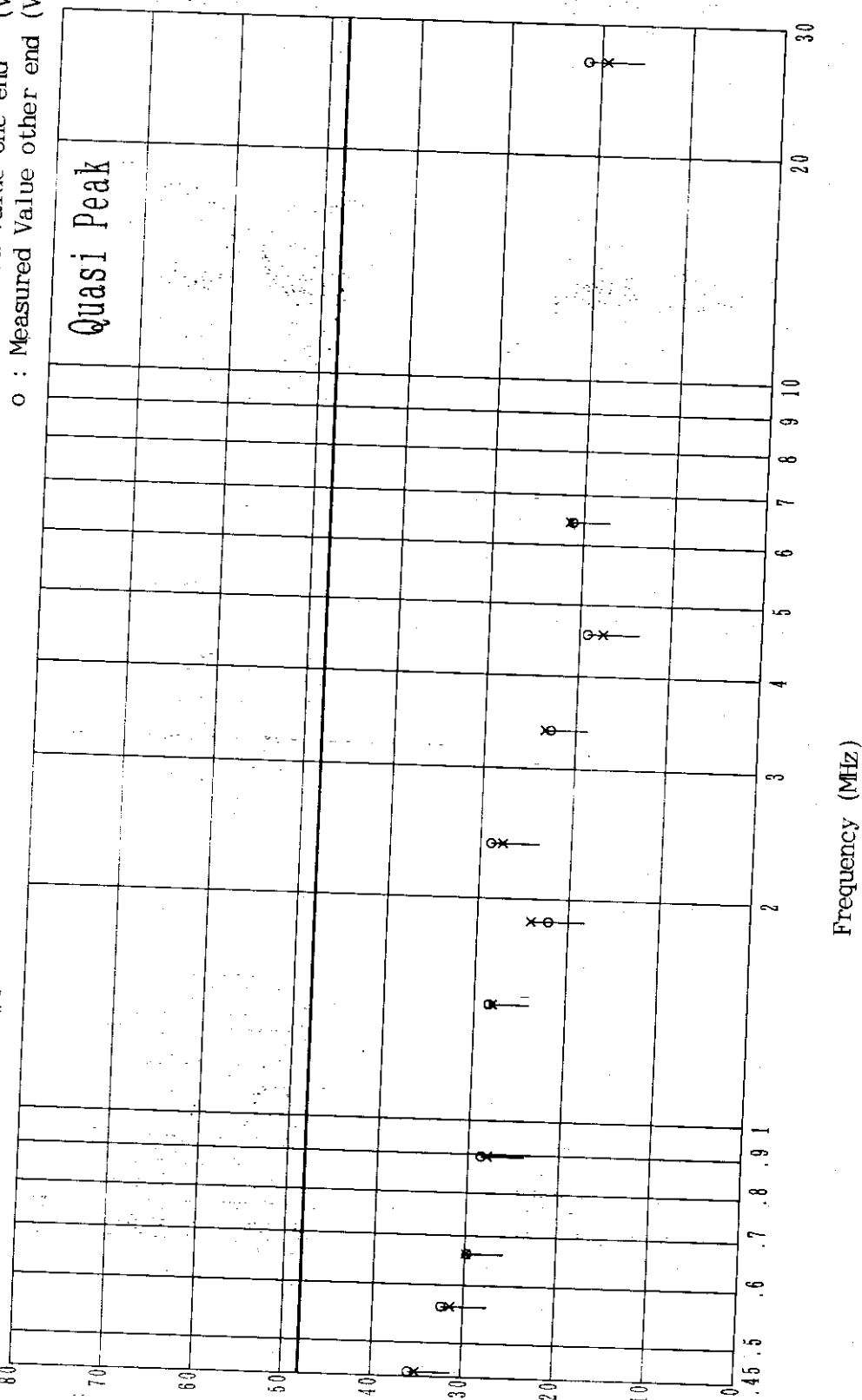
Report No. : JY198014

Date. : Sep 15, 1998

— Limit Line

x : Measured Value one end (Va)

o : Measured Value other end (Vb)



## Section.15.107

## POWER LINE CONDUCTED INTERFERENCE VOLTAGE MEASUREMENT

Video source connected to the EUT : External(VITS at 5Vp-p) 'REC Mode'

RF Output Channels : #3 and #4

| Frequency of<br>the emission<br>[MHz] | Meter reading<br>[dBuV] |      | LISN<br>factor<br>[dB] | Limits<br>[dBuV] | Radio noise voltage<br>[dBuV] |      |
|---------------------------------------|-------------------------|------|------------------------|------------------|-------------------------------|------|
|                                       | Va                      | Vb   |                        |                  | Va                            | Vb   |
| 0.45                                  | 35.2                    | 34.9 | 0.6                    | 48.0             | 35.8                          | 35.5 |
| 0.55                                  | 30.8                    | 31.7 | 0.7                    | 48.0             | 31.5                          | 32.4 |
| 0.66                                  | 29.3                    | 30.2 | 0.7                    | 48.0             | 30.0                          | 30.9 |
| 1.00                                  | 24.0                    | 27.3 | 0.8                    | 48.0             | 24.8                          | 28.1 |
| 1.45                                  | 25.8                    | 27.9 | 0.8                    | 48.0             | 26.6                          | 28.7 |
| 1.64                                  | 26.3                    | 22.2 | 0.8                    | 48.0             | 27.1                          | 23.0 |
| 2.37                                  | 27.0                    | 27.2 | 0.7                    | 48.0             | 27.7                          | 27.9 |
| 2.55                                  | 25.2                    | 25.4 | 0.7                    | 48.0             | 25.9                          | 26.1 |
| 3.38                                  | 21.8                    | 22.9 | 0.7                    | 48.0             | 22.5                          | 23.6 |
| 6.35                                  | 20.8                    | 20.9 | 0.6                    | 48.0             | 21.4                          | 21.5 |
| 11.13                                 | 19.3                    | 20.5 | 0.5                    | 48.0             | 19.8                          | 21.0 |
| 29.25                                 | 18.8                    | 19.7 | 1.0                    | 48.0             | 19.8                          | 20.7 |

- NOTES: 1) Sample calculation at 0.45 MHz (Va) :  
 $35.2 \text{ (dBuV)} + 0.6 \text{ (dB)} = 35.8 \text{ (dBuV/m)}$   
 LISN factor [dB] = 0.6 [dB]  
 Limits :  $250[\mu\text{V}] = 20 \log (250 [\mu\text{V}]) = 48 \text{ [dBuV]}$
- 2) The spectrum was checked from 0.45 at 30 MHz and all emissions not listed above were found to be more than 20 dB below the limits specified the commissions.
- 3) The symbol of '<' means 'or less'
- 4) Va : One-end & Grounded , Vb : The other-end & grounded

# Section.15.107

## Results of Conducted Power Line Measurements.

Measurement Method : FCC Rules and Regulations Part 15 (B)

EUT : Videocassette Recorder

Model No. : HR-VP674U

Serial No. : ES200026

Report No. : JYI98014

Date. : Sep 15, 1998

Video source connected to the EUT

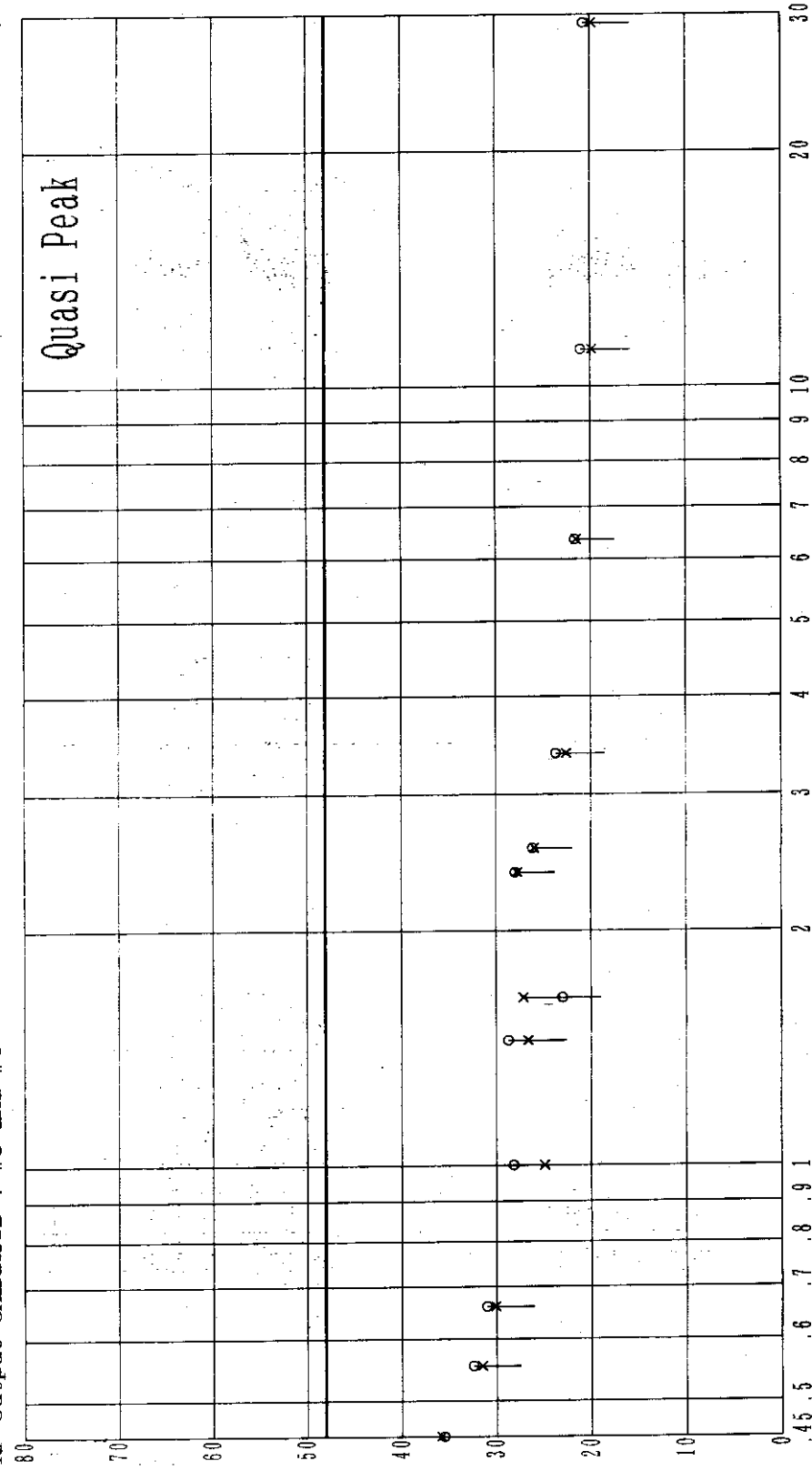
: External(VITS at 5Vp-p) 'REC Mode'

RF Output Channels : #3 and #4

— Limit Line

x : Measured Value one end (Va)

o : Measured Value other end (Vb)



Frequency (MHz)

RFI Voltage (dBuV)

## Section.15.115 (b)(1) OUTPUT SIGNAL LEVEL

Video source connected to the EUT : Internal(Recorded Tape) 'PLAY Mode'

| RF<br>Output<br>channel | Measured<br>carrier freq. |       | Meter reading |       | Matching<br>pad loss<br>[dB] | RF Output signal level |        |        |       |
|-------------------------|---------------------------|-------|---------------|-------|------------------------------|------------------------|--------|--------|-------|
|                         | [MHz]                     |       | [dBuV]        |       |                              | [dB]                   |        |        |       |
|                         | Visual                    | Aural | Visual        | Aural |                              | Limits                 | Visual | Limits | Aural |
| 3                       | 61.25                     | 65.74 | 59.8          | 45.2  | 6.0                          | 69.5                   | 67.6   | 56.5   | 53.0  |
| 4                       | 67.25                     | 71.76 | 59.8          | 44.7  | 6.0                          | 69.5                   | 67.6   | 56.5   | 52.5  |

Video source connected to the EUT : External(VITS at 1Vp-p) 'REC Mode'

| RF<br>Output<br>channel | Measured<br>carrier freq. |       | Meter reading |       | Matching<br>pad loss<br>[dB] | RF Output signal level |        |        |       |
|-------------------------|---------------------------|-------|---------------|-------|------------------------------|------------------------|--------|--------|-------|
|                         | [MHz]                     |       | [dBuV]        |       |                              | [dB]                   |        |        |       |
|                         | Visual                    | Aural | Visual        | Aural |                              | Limits                 | Visual | Limits | Aural |
| 3                       | 61.25                     | 65.74 | 59.8          | 45.6  | 6.0                          | 69.5                   | 67.6   | 56.5   | 53.4  |
| 4                       | 67.25                     | 71.76 | 59.8          | 45.4  | 6.0                          | 69.5                   | 67.6   | 56.5   | 53.2  |

Video source connected to the EUT : External(VITS at 5Vp-p) 'REC Mode'

| RF<br>Output<br>channel | Measured<br>carrier freq. |       | Meter reading |       | Matching<br>pad loss<br>[dB] | RF Output signal level |        |        |       |
|-------------------------|---------------------------|-------|---------------|-------|------------------------------|------------------------|--------|--------|-------|
|                         | [MHz]                     |       | [dBuV]        |       |                              | [dB]                   |        |        |       |
|                         | Visual                    | Aural | Visual        | Aural |                              | Limits                 | Visual | Limits | Aural |
| 3                       | 61.25                     | 65.74 | 59.8          | 45.7  | 6.0                          | 69.5                   | 67.6   | 56.5   | 53.5  |
| 4                       | 67.25                     | 71.76 | 59.8          | 45.4  | 6.0                          | 69.5                   | 67.6   | 56.5   | 53.2  |

NOTES: 1) Sample calculation at 61.25 MHz :  
 $59.8 \text{ (dBuV)} + 6.0 \text{ (dB)} + 1.76 \text{ (dB)} = 67.6 \text{ (dBuV)}$   
 (50ohm→75ohm)

2) The symbol of '<' means 'or less'

3) Spectrum Analyzer : SPAN : 10MHz SWP : 50ms  
 RES BW : 100kHz VBW : 300kHz

4) Impedance at the output terminal : 75 ohm (Unbalanced)

## Section.15.115 (b)(2)

## OUTPUT TERMINAL CONDUCTED SPURIOUS EMISSION MEASUREMENT

Video source connected to the EUT : Internal(Recorded Tape) 'PLAY Mode'

RF Output Channels : #3

| Frequency of<br>the emission<br>[MHz] | Meter<br>reading<br>[dBuV] | Matching<br>pad loss<br>[dB] | Gain of<br>pre amp.<br>[dB] | Limits<br>[dBuV] | Results<br>[dBuV] |
|---------------------------------------|----------------------------|------------------------------|-----------------------------|------------------|-------------------|
| 40.5                                  | 30.5                       | 6.0                          | 29.4                        | 39.5             | 8.8               |
| 47.8                                  | 33.0                       | 6.0                          | 29.4                        | 39.5             | 11.4              |
| 74.8                                  | 34.6                       | 6.0                          | 29.2                        | 39.5             | 13.1              |
| 110.6                                 | 33.9                       | 6.0                          | 29.1                        | 39.5             | 12.6              |
| 122.5                                 | 36.8                       | 6.0                          | 29.0                        | 39.5             | 15.5              |
| 179.3                                 | 29.6                       | 6.0                          | 28.9                        | 39.5             | 8.5               |
| 183.8                                 | 43.0                       | 6.0                          | 28.9                        | 39.5             | 21.9              |
| 188.3                                 | 30.4                       | 6.0                          | 28.8                        | 39.5             | 9.3               |
| 367.5                                 | 35.1                       | 6.0                          | 28.9                        | 39.5             | 14.0              |
| 428.7                                 | 37.1                       | 6.0                          | 28.9                        | 39.5             | 16.0              |
| 847.0                                 | 33.6                       | 6.0                          | 27.2                        | 39.5             | 14.1              |

Video source connected to the EUT : Internal(Recorded Tape) 'PLAY Mode'

RF Output Channels : #4

| Frequency of<br>the emission<br>[MHz] | Meter<br>reading<br>[dBuV] | Matching<br>pad loss<br>[dB] | Gain of<br>pre amp.<br>[dB] | Limits<br>[dBuV] | Results<br>[dBuV] |
|---------------------------------------|----------------------------|------------------------------|-----------------------------|------------------|-------------------|
| 40.5                                  | 30.8                       | 6.0                          | 29.4                        | 39.5             | 9.1               |
| 47.8                                  | 33.3                       | 6.0                          | 29.4                        | 39.5             | 11.7              |
| 74.8                                  | 34.9                       | 6.0                          | 29.2                        | 39.5             | 13.4              |
| 75.6                                  | 29.3                       | 6.0                          | 29.2                        | 39.5             | 7.9               |
| 110.3                                 | 32.3                       | 6.0                          | 29.1                        | 39.5             | 11.0              |
| 110.6                                 | 37.4                       | 6.0                          | 29.1                        | 39.5             | 16.1              |
| 114.3                                 | 32.5                       | 6.0                          | 29.1                        | 39.5             | 11.2              |
| 115.5                                 | 33.7                       | 6.0                          | 29.1                        | 39.5             | 12.4              |
| 122.5                                 | 36.7                       | 6.0                          | 29.0                        | 39.5             | 15.4              |
| 179.3                                 | 29.9                       | 6.0                          | 28.9                        | 39.5             | 8.8               |
| 183.8                                 | 42.9                       | 6.0                          | 28.9                        | 39.5             | 21.8              |
| 188.3                                 | 30.4                       | 6.0                          | 28.8                        | 39.5             | 9.3               |
| 367.5                                 | 35.5                       | 6.0                          | 28.9                        | 39.5             | 14.4              |
| 428.8                                 | 37.4                       | 6.0                          | 28.9                        | 39.5             | 16.3              |
| 847.0                                 | 34.0                       | 6.0                          | 27.2                        | 39.5             | 14.5              |

- NOTES: 1) Sample calculation at 40.5 MHz :  
 $30.8 \text{ (dBuV)} + 6.0 \text{ (dB)} - 29.4 \text{ (dB)} + 1.76 \text{ (dB)} = 9.1 \text{ (dBuV)}$   
 (50ohm->75ohm)
- 2) The spectrum was checked from 30 at 1000 MHz and all emissions not listed above were found to be more than 20 dB below the limits specified the commissions.
- 3) The symbol of '<' means 'or less'
- 4) Spectrum Analyzer : SPAN : 10MHz SWP : 50ms  
 RES BW : 100kHz VBW : 800kHz
- 5) Impedance at the output terminal : 75 ohm (Unbalanced)

# Section 15.115 (b)(2)

## Output Terminal Conducted Spurious Emission Measurements.

Measurement Method : FCC Rules and Regulations Part 15 (B)

EUT : Videocassette Recorder

Model No. : HR-VP674U

Serial No. : ES200026

Video source connected to the EUT

: Internal (Recorded Tape) 'PLAY Mode'

RF Output Channels : #3 and #4

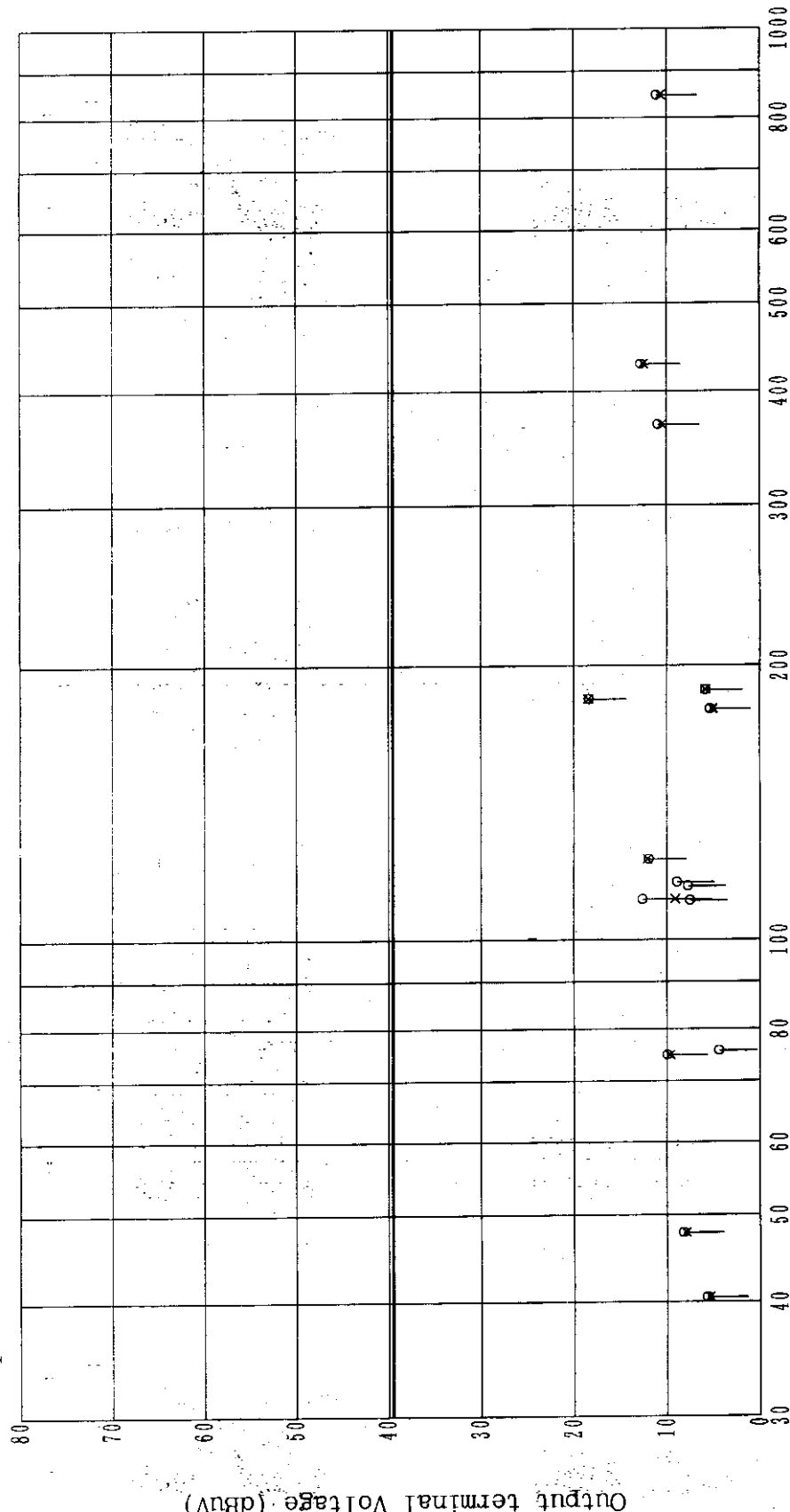
Report No. : JYI98014

Date. : Sep 15, 1998

— Limit Line

x : Channel 3

o : Channel 4



Frequency (MHz)

## Section.15.115 (b)(2)

## OUTPUT TERMINAL CONDUCTED SPURIOUS EMISSION MEASUREMENT

Video source connected to the EUT : External(VITS at 1Vp-p) 'REC Mode'

RF Output Channels : #3

| Frequency of<br>the emission<br>[MHz] | Meter<br>reading<br>[dBuV] | Matching<br>pad loss<br>[dB] | Gain of<br>pre amp.<br>[dB] | Limits<br>[dBuV] | Results<br>[dBuV] |
|---------------------------------------|----------------------------|------------------------------|-----------------------------|------------------|-------------------|
| 40.5                                  | 30.4                       | 6.0                          | 29.4                        | 39.5             | 8.7               |
| 47.8                                  | 33.0                       | 6.0                          | 29.4                        | 39.5             | 11.4              |
| 74.8                                  | 34.9                       | 6.0                          | 29.2                        | 39.5             | 13.4              |
| 110.6                                 | 30.5                       | 6.0                          | 29.1                        | 39.5             | 9.2               |
| 112.9                                 | 32.5                       | 6.0                          | 29.1                        | 39.5             | 11.2              |
| 114.3                                 | 33.2                       | 6.0                          | 29.1                        | 39.5             | 11.9              |
| 115.5                                 | 37.1                       | 6.0                          | 29.1                        | 39.5             | 15.8              |
| 118.0                                 | 34.8                       | 6.0                          | 29.1                        | 39.5             | 13.5              |
| 122.5                                 | 36.4                       | 6.0                          | 29.0                        | 39.5             | 15.1              |
| 179.3                                 | 30.0                       | 6.0                          | 28.9                        | 39.5             | 8.9               |
| 183.8                                 | 42.8                       | 6.0                          | 28.9                        | 39.5             | 21.7              |
| 188.3                                 | 30.5                       | 6.0                          | 28.8                        | 39.5             | 9.4               |
| 367.5                                 | 35.8                       | 6.0                          | 28.9                        | 39.5             | 14.7              |
| 428.8                                 | 37.3                       | 6.0                          | 28.9                        | 39.5             | 16.2              |
| 1000.0                                | < 21.0                     | 6.0                          | 26.2                        | 39.5             | < 2.6             |

Video source connected to the EUT : External (VITS at 1Vp-p) 'REC Mode'

RF Output Channels : #4

| Frequency of<br>the emission<br>[MHz] | Meter<br>reading<br>[dBuV] | Matching<br>pad loss<br>[dB] | Gain of<br>pre amp.<br>[dB] | Limits<br>[dBuV] | Results<br>[dBuV] |
|---------------------------------------|----------------------------|------------------------------|-----------------------------|------------------|-------------------|
| 40.5                                  | 30.8                       | 6.0                          | 29.4                        | 39.5             | 9.1               |
| 53.8                                  | 34.1                       | 6.0                          | 29.3                        | 39.5             | 12.5              |
| 80.8                                  | 33.4                       | 6.0                          | 29.2                        | 39.5             | 12.0              |
| 110.6                                 | 30.5                       | 6.0                          | 29.1                        | 39.5             | 9.2               |
| 112.9                                 | 31.2                       | 6.0                          | 29.1                        | 39.5             | 9.9               |
| 115.5                                 | 32.3                       | 6.0                          | 29.1                        | 39.5             | 11.0              |
| 118.0                                 | 31.8                       | 6.0                          | 29.1                        | 39.5             | 10.5              |
| 134.5                                 | 34.7                       | 6.0                          | 29.0                        | 39.5             | 13.4              |
| 197.3                                 | 30.3                       | 6.0                          | 28.8                        | 39.5             | 9.3               |
| 201.7                                 | 41.9                       | 6.0                          | 28.8                        | 39.5             | 20.9              |
| 336.2                                 | 38.5                       | 6.0                          | 28.8                        | 39.5             | 17.5              |
| 403.5                                 | 34.3                       | 6.0                          | 29.0                        | 39.5             | 13.1              |
| 470.7                                 | 33.8                       | 6.0                          | 28.8                        | 39.5             | 12.8              |
| 500.0                                 | < 24.0                     | 6.0                          | 28.8                        | 39.5             | < 3.0             |
| 1000.0                                | < 21.0                     | 6.0                          | 26.2                        | 39.5             | < 2.6             |

- NOTES: 1) Sample calculation at 40.5 MHz :  
 $30.8 \text{ (dBuV)} + 6.0 \text{ (dB)} - 29.4 \text{ (dB)} + 1.76 \text{ (dB)} = 9.1 \text{ (dBuV)}$   
 (50ohm→75ohm)
- 2) The spectrum was checked from 30 at 1000 MHz and all emissions not listed above were found to be more than 20 dB below the limits specified the commissions.
- 3) The symbol of '<' means 'or less'
- 4) Spectrum Analyzer : SPAN : 10MHz SWP : 50ms  
 RES BW : 100kHz VBW : 800kHz
- 5) Impedance at the output terminal : 75 ohm (Unbalanced)

# Section.15.115 (b)(2) Output Terminal Conducted Spurious Emission Measurements.

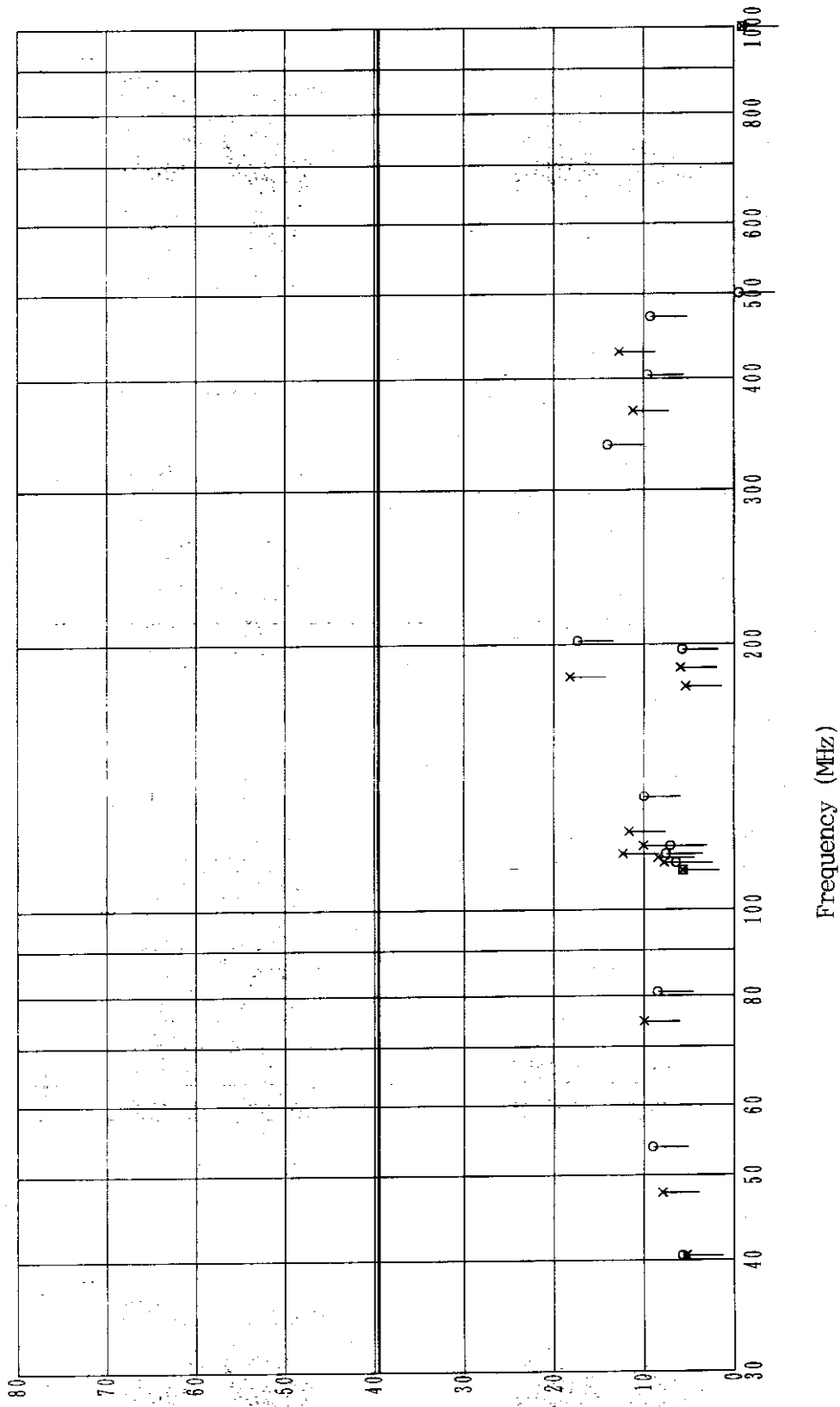
Measurement Method : FCC Rules and Regulations Part 15 (B)

EUT : Videocassette Recorder  
Model No. : HR-VP674U  
Serial No. : ES200026

Report No. : JY198014  
Date. : Sep 15, 1998

Video source connected to the EUT  
: External (VITS at 1Vp-p) 'REC Mode'  
RF Output Channels : #3 and #4

— Limit Line  
x : Channel 3  
o : Channel 4



## Section.15.115 (b)(2)

## OUTPUT TERMINAL CONDUCTED SPURIOUS EMISSION MEASUREMENT

Video source connected to the EUT : External(VITS at 5Vp-p) 'REC Mode'

RF Output Channels : #3

| Frequency of<br>the emission<br>[MHz] | Meter<br>reading<br>[dBuV] | Matching<br>pad loss<br>[dB] | Gain of<br>pre amp.<br>[dB] | Limits<br>[dBuV] | Results<br>[dBuV] |
|---------------------------------------|----------------------------|------------------------------|-----------------------------|------------------|-------------------|
| 40.5                                  | 30.7                       | 6.0                          | 29.4                        | 39.5             | 9.0               |
| 47.8                                  | 33.1                       | 6.0                          | 29.4                        | 39.5             | 11.5              |
| 74.8                                  | 35.0                       | 6.0                          | 29.2                        | 39.5             | 13.5              |
| 110.6                                 | 34.8                       | 6.0                          | 29.1                        | 39.5             | 13.5              |
| 112.9                                 | 30.5                       | 6.0                          | 29.1                        | 39.5             | 9.2               |
| 114.3                                 | 32.0                       | 6.0                          | 29.1                        | 39.5             | 10.7              |
| 115.5                                 | 35.1                       | 6.0                          | 29.1                        | 39.5             | 13.8              |
| 122.5                                 | 36.8                       | 6.0                          | 29.0                        | 39.5             | 15.5              |
| 183.7                                 | 42.4                       | 6.0                          | 28.9                        | 39.5             | 21.3              |
| 188.3                                 | 30.5                       | 6.0                          | 28.8                        | 39.5             | 9.4               |
| 367.5                                 | 35.3                       | 6.0                          | 28.9                        | 39.5             | 14.2              |
| 428.8                                 | 37.0                       | 6.0                          | 28.9                        | 39.5             | 15.9              |
| 847.0                                 | 33.9                       | 6.0                          | 27.2                        | 39.5             | 14.4              |

Video source connected to the EUT : External(VITS at 5Vp-p) 'REC Mode'

RF Output Channels : #4

| Frequency of<br>the emission<br>[MHz] | Meter<br>reading<br>[dBuV] | Matching<br>pad loss<br>[dB] | Gain of<br>pre amp.<br>[dB] | Limits<br>[dBuV] | Results<br>[dBuV] |
|---------------------------------------|----------------------------|------------------------------|-----------------------------|------------------|-------------------|
| 40.5                                  | 31.2                       | 6.0                          | 29.4                        | 39.5             | 9.5               |
| 53.8                                  | 34.5                       | 6.0                          | 29.3                        | 39.5             | 12.9              |
| 80.8                                  | 33.3                       | 6.0                          | 29.2                        | 39.5             | 11.9              |
| 110.6                                 | 35.7                       | 6.0                          | 29.1                        | 39.5             | 14.4              |
| 112.9                                 | 31.3                       | 6.0                          | 29.1                        | 39.5             | 10.0              |
| 114.3                                 | 31.5                       | 6.0                          | 29.1                        | 39.5             | 10.2              |
| 134.5                                 | 35.0                       | 6.0                          | 29.0                        | 39.5             | 13.7              |
| 201.7                                 | 42.1                       | 6.0                          | 28.8                        | 39.5             | 21.1              |
| 336.3                                 | 38.2                       | 6.0                          | 28.8                        | 39.5             | 17.2              |
| 403.5                                 | 34.2                       | 6.0                          | 29.0                        | 39.5             | 13.0              |
| 470.7                                 | 31.3                       | 6.0                          | 28.8                        | 39.5             | 10.3              |
| 847.0                                 | 34.4                       | 6.0                          | 27.2                        | 39.5             | 14.9              |

- NOTES: 1) Sample calculation at 40.5 MHz :  
 $31.2 \text{ (dBuV)} + 6.0 \text{ (dB)} - 29.4 \text{ (dB)} + 1.76 \text{ (dB)} = 9.5 \text{ (dBuV)}$   
 (50ohm→75ohm)
- 2) The spectrum was checked from 30 at 1000 MHz and all emissions not listed above were found to be more than 20 dB below the limits specified the commissions.
- 3) The symbol of '<' means 'or less'
- 4) Spectrum Analyzer : SPAN : 10MHz SWP : 50ms  
 RES BW : 100kHz VBW : 800kHz
- 5) Impedance at the output terminal : 75 ohm (Unbalanced)

# Section.15.115 (b)(2)

## Output Terminal Conducted Spurious Emission Measurements.

Measurement Method : FCC Rules and Regulations Part 15 (B)

EUT : Videocassette Recorder

Model No. : HR-VP674U

Serial No. : ES200026

Report No. : JY198014

Date. : Sep 15, 1998

Video source connected to the EUT

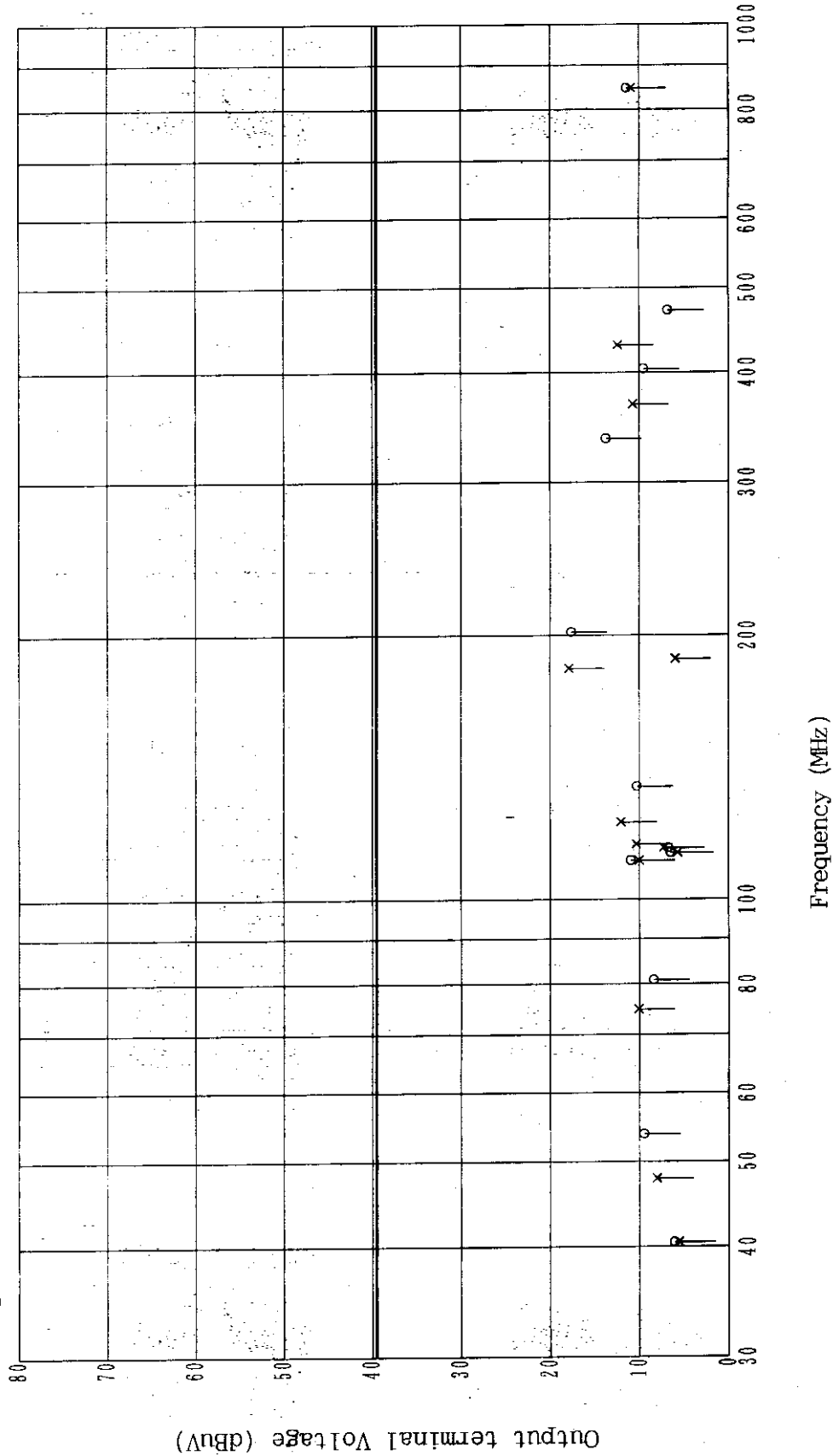
: External (VITS at 5Vp-p) 'REC Mode'

RF Output Channels : #3 and #4

— Limit Line

x : Channel 3

o : Channel 4



## Section.15.115 (b)(c) TRANSFER SWITCH ISOLATION MEASUREMENT

Video source connected to the EUT : Internal(Recorded Tape) 'PLAY Mode'

| RF Output channel | Measured carrier freq. [MHz] | Meter reading [dBuV] | Matching pad loss [dB] | Gain of pre amp. [dB] | Limits [dBuV] | Results [dBuV] |
|-------------------|------------------------------|----------------------|------------------------|-----------------------|---------------|----------------|
| 3                 | 61.25                        | 29.4                 | 6.0                    | 29.3                  | 9.5           | 7.9            |
| 4                 | 67.25                        | 29.8                 | 6.0                    | 29.3                  | 9.5           | 8.3            |

Video source connected to the EUT : External(VITS at 1Vp-p) 'REC Mode'

| RF Output channel | Measured carrier freq. [MHz] | Meter reading [dBuV] | Matching pad loss [dB] | Gain of pre amp. [dB] | Limits [dBuV] | Results [dBuV] |
|-------------------|------------------------------|----------------------|------------------------|-----------------------|---------------|----------------|
| 3                 | 61.25                        | 29.6                 | 6.0                    | 29.3                  | 9.5           | 8.1            |
| 4                 | 67.25                        | 29.6                 | 6.0                    | 29.3                  | 9.5           | 8.1            |

Video source connected to the EUT : External(VITS at 5Vp-p) 'REC Mode'

| RF Output channel | Measured carrier freq. [MHz] | Meter reading [dBuV] | Matching pad loss [dB] | Gain of pre amp. [dB] | Limits [dBuV] | Results [dBuV] |
|-------------------|------------------------------|----------------------|------------------------|-----------------------|---------------|----------------|
| 3                 | 61.25                        | 29.7                 | 6.0                    | 29.3                  | 9.5           | 8.2            |
| 4                 | 67.25                        | 29.8                 | 6.0                    | 29.3                  | 9.5           | 8.3            |

NOTES: 1) Sample calculation at 61.25 MHz :  
 $29.4 \text{ (dBuV)} + 6.0 \text{ (dB)} - 29.3 \text{ (dB)} + 1.76 \text{ (dB)} = 7.9 \text{ (dBuV)}$   
 (50ohm→75ohm)

2) The symbol of '<' means 'or less'

3) Spectrum Analyzer : SPAN : 10MHz SWP : 50ms  
 RES BW : 100kHz VBW : 300kHz

4) Impedance at the output terminal : 75 ohm (Unbalanced)

## &lt;Radiated Emission&gt;

Caused by the local oscillator

| Channel | Freq<br>[MHz] | Meter<br>reading<br>[dBuV] | Ant fact<br>[dB] | C. fact<br>[dB] | Matching<br>pad<br>[dB] | Corrected<br>reading<br>[dBuV/m] | Polarization | Limit<br>[dBuV/m] |
|---------|---------------|----------------------------|------------------|-----------------|-------------------------|----------------------------------|--------------|-------------------|
| 2       | 101           | < 38.7                     | 10.84            | 25.49           | 6.0                     | < 30.0                           | Vertical     | 43.5              |
|         | 202           | < 26.2                     | 16.82            | 24.03           |                         | < 25.0                           |              | 46.0              |
|         | 303           | < 30.6                     | 16.43            | 22.98           |                         | < 30.0                           |              |                   |
|         | 1010          | < 34.7                     | 26.71            | 27.38           |                         | < 40.0                           |              | 54.0              |
|         | 1616          | < 36.8                     | 29.41            | 27.23           |                         | < 45.0                           |              |                   |
| 4       | 113           | < 36.9                     | 12.46            | 25.31           | 6.0                     | < 30.0                           | Horizontal   | 43.5              |
|         | 226           | < 30.1                     | 17.11            | 23.21           |                         | < 30.0                           |              | 46.0              |
|         | 339           | < 29.6                     | 16.79            | 22.35           |                         | < 30.0                           |              |                   |
|         | 1017          | < 34.7                     | 26.71            | 27.37           |                         | < 40.0                           |              | 54.0              |
|         | 1695          | < 37.8                     | 28.55            | 27.39           |                         | < 45.0                           |              |                   |
| 6       | 129           | < 34.9                     | 14.07            | 24.93           | 6.0                     | < 30.0                           | Horizontal   | 43.5              |
|         | 258           | < 29.5                     | 17.74            | 23.24           |                         | < 30.0                           |              | 46.0              |
|         | 387           | < 28.5                     | 17.27            | 21.81           |                         | < 30.0                           |              |                   |
|         | 1032          | < 34.6                     | 26.72            | 27.34           |                         | < 40.0                           |              | 54.0              |
|         | 1677          | < 37.6                     | 28.74            | 27.35           |                         | < 45.0                           |              |                   |
| 8       | 227           | < 30.1                     | 17.12            | 23.22           | 6.0                     | < 30.0                           | Horizontal   | 46.0              |
|         | 454           | < 36.5                     | 18.53            | 31.07           |                         | < 30.0                           |              |                   |
|         | 681           | < 24.7                     | 22.56            | 18.28           |                         | < 35.0                           |              |                   |
|         | 1135          | < 33.8                     | 27.31            | 27.13           |                         | < 40.0                           |              | 54.0              |
|         | 1589          | < 36.5                     | 29.70            | 27.18           |                         | < 45.0                           |              |                   |
| 10      | 239           | < 30.1                     | 17.27            | 23.37           | 6.0                     | < 30.0                           | Horizontal   | 46.0              |
|         | 478           | < 25.3                     | 19.04            | 20.33           |                         | < 30.0                           |              |                   |
|         | 717           | < 24.0                     | 22.72            | 17.70           |                         | < 35.0                           |              |                   |
|         | 1195          | < 32.7                     | 28.28            | 27.01           |                         | < 40.0                           |              | 54.0              |
|         | 1673          | < 37.6                     | 28.79            | 27.35           |                         | < 45.0                           |              |                   |
| 12      | 251           | < 30.0                     | 17.44            | 23.47           | 6.0                     | < 30.0                           | Vertical     | 46.0              |
|         | 502           | < 24.2                     | 19.56            | 19.80           |                         | < 30.0                           |              |                   |
|         | 753           | < 23.3                     | 22.97            | 17.30           |                         | < 35.0                           |              |                   |
|         | 1004          | < 34.7                     | 26.70            | 27.39           |                         | < 40.0                           |              | 54.0              |
|         | 1506          | < 35.5                     | 30.54            | 27.01           |                         | < 45.0                           |              |                   |
| 14      | 517           | < 28.8                     | 19.99            | 19.80           | 6.0                     | < 35.0                           | Vertical     | 46.0              |
|         | 1034          | 29.6                       | 26.72            | 27.33           |                         | < 35.0                           |              | 54.0              |
|         | 1551          | < 36.0                     | 30.08            | 27.10           |                         | < 45.0                           |              |                   |
| 20      | 553           | < 27.8                     | 21.04            | 19.79           | 6.0                     | < 35.0                           | Vertical     | 46.0              |
|         | 1106          | 37.0                       | 26.85            | 27.19           |                         | 42.7                             |              | 54.0              |
|         | 1659          | < 37.4                     | 28.94            | 27.32           |                         | < 45.0                           |              |                   |
| 28      | 601           | 24.2                       | 22.40            | 19.59           | 6.0                     | 33.0                             | Horizontal   | 46.0              |
|         | 1202          | 36.0                       | 28.36            | 27.00           |                         | 43.4                             | Vertical     | 54.0              |
| 36      | 649           | < 25.4                     | 22.50            | 18.91           | 6.0                     | < 35.0                           | Horizontal   | 46.0              |
|         | 1298          | < 35.8                     | 28.59            | 27.00           |                         | < 43.4                           |              | 54.0              |

C.fact = Correction factor (Pre amp. + Cable loss)

Corrected reading = Meter reading + Ant Fact + Matching pad 6dB - C.fact

## &lt;Radiated Emission&gt;

Caused by the local oscillator

| Channel | Freq<br>[MHz] | Meter<br>reading<br>[dBuV] | Ant fact<br>[dB] | C. fact<br>[dB] | Matching<br>pad<br>[dB] | Corrected<br>reading<br>[dBuV/m] | Polarization | Limit<br>[dBuV/m] |
|---------|---------------|----------------------------|------------------|-----------------|-------------------------|----------------------------------|--------------|-------------------|
| 45      | 703           | 24.2                       | 22.62            | 17.86           | 6.0                     | < 35.0                           | Horizontal   | 46.0              |
|         | 1406          | 36.2                       | 30.12            | 26.81           |                         | 45.6                             | Vertical     | 54.0              |
| 53      | 751           | 25.0                       | 22.96            | 17.30           | 6.0                     | 36.7                             | Horizontal   | 46.0              |
|         | 1502          | < 35.4                     | 30.58            | 27.00           |                         | < 45.0                           |              | 54.0              |
| 61      | 799           | 21.2                       | 23.29            | 17.30           | 6.0                     | 33.2                             | Vertical     | 46.0              |
|         | 1598          | 36.9                       | 29.61            | 27.20           |                         | 45.3                             |              | 54.0              |
| 68      | 841           | 24.5                       | 24.04            | 16.89           | 6.0                     | 37.7                             | Horizontal   | 46.0              |
|         | 1682          | 38.3                       | 28.69            | 27.36           |                         | 45.7                             | Vertical     | 54.0              |
| 69      | 847           | 25.8                       | 24.15            | 16.83           | 6.0                     | 39.1                             | Horizontal   | 46.0              |
|         | 1694          | 37.5                       | 29.05            | 27.39           |                         | 45.1                             | Vertical     | 54.0              |

C.fact = Correction factor (Pre amp. + Cable loss)

Corrected reading = Meter reading + Ant Fact + Matching pad 6dB - C.fact

## &lt;Antenna power conduction for receivers&gt;

## Section 15.111(a)

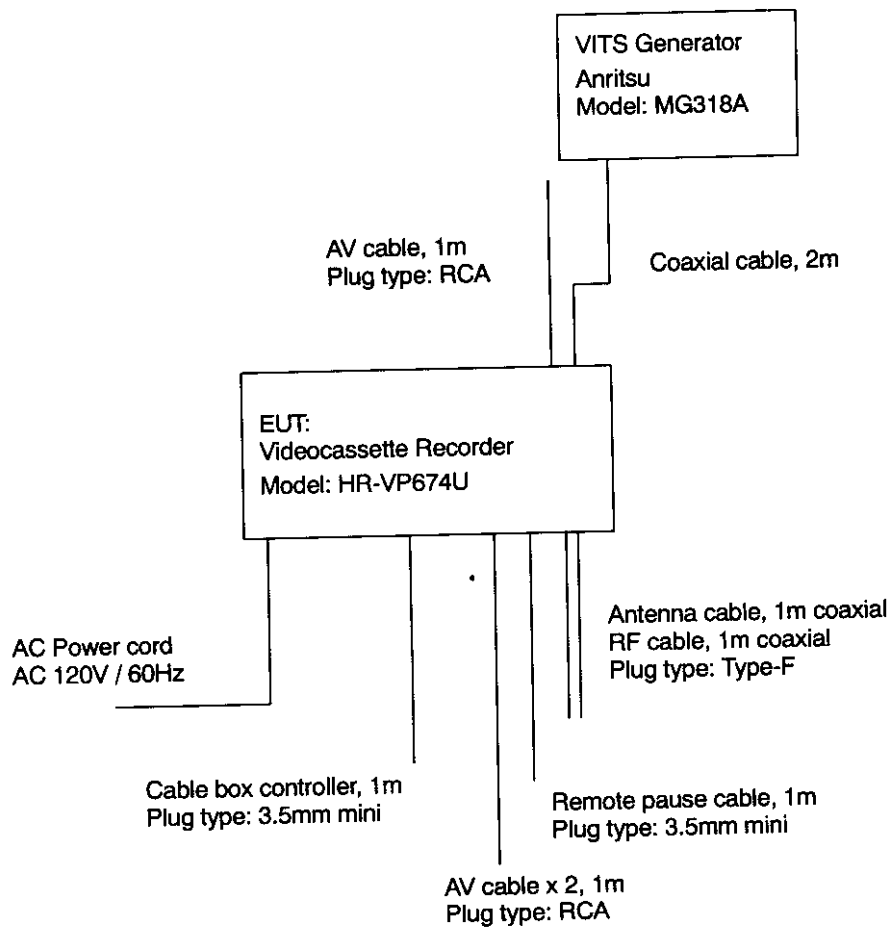
| Channel | Freq [MHz] | Meter reading [dBuV] | C. fact [dB] | Corrected reading [dBuV/m] | Limit [dBuV/m] |
|---------|------------|----------------------|--------------|----------------------------|----------------|
| 2       | 101        | < 56.8               | 28.80        | < 40.0                     | 52.0           |
|         | 202        | < 57.4               | 29.39        | < 40.0                     |                |
|         | 303        | < 58.1               | 30.12        | < 40.0                     |                |
|         | 1010       | < 55.2               | 27.24        | < 40.0                     |                |
|         | 1616       | < 55.5               | 27.45        | < 40.0                     |                |
|         |            |                      |              |                            |                |
| 4       | 113        | < 56.8               | 28.75        | < 40.0                     | 52.0           |
|         | 226        | < 57.5               | 29.46        | < 40.0                     |                |
|         | 339        | < 58.1               | 30.12        | < 40.0                     |                |
|         | 1017       | < 55.2               | 27.24        | < 40.0                     |                |
|         | 1695       | < 54.5               | 26.52        | < 40.0                     |                |
|         |            |                      |              |                            |                |
| 6       | 129        | < 57.1               | 29.11        | < 40.0                     | 52.0           |
|         | 258        | < 47.6               | 29.63        | < 30.0                     |                |
|         | 387        | < 48.1               | 30.12        | < 30.0                     |                |
|         | 1161       | < 45.1               | 27.10        | < 30.0                     |                |
|         | 1290       | 53.8                 | 26.48        | 39.3                       |                |
|         | 1419       | < 44.8               | 26.78        | < 30.0                     |                |
|         | 1677       | < 44.7               | 26.73        | < 30.0                     |                |
|         |            |                      |              |                            |                |
| 7       | 221        | < 47.5               | 29.45        | < 30.0                     | 52.0           |
|         | 442        | < 48.2               | 30.19        | < 30.0                     |                |
|         | 663        | < 47.4               | 29.37        | < 30.0                     |                |
|         | 1105       | < 45.2               | 27.24        | < 30.0                     |                |
|         | 1326       | < 54.1               | 26.54        | < 39.6                     |                |
|         | 1547       | < 44.9               | 26.91        | < 30.0                     |                |
|         |            |                      |              |                            |                |
| 8       | 227        | < 47.5               | 29.47        | < 30.0                     | 52.0           |
|         | 454        | < 48.2               | 30.21        | < 30.0                     |                |
|         | 681        | < 47.3               | 29.33        | < 30.0                     |                |
|         | 1135       | < 45.2               | 27.16        | < 30.0                     |                |
|         | 1362       | 55.9                 | 26.72        | 41.2                       |                |
|         | 1589       | < 45.5               | 27.49        | < 30.0                     |                |
| 9       | 233        | < 47.5               | 29.49        | < 30.0                     | 52.0           |
|         | 466        | < 48.2               | 30.23        | < 30.0                     |                |
|         | 699        | < 47.3               | 29.29        | < 30.0                     |                |
|         | 1165       | < 45.1               | 27.09        | < 30.0                     |                |
|         | 1398       | 56.1                 | 26.89        | 41.2                       |                |
|         | 1631       | < 45.3               | 27.27        | < 30.0                     |                |
| 10      | 239        | < 47.5               | 29.50        | < 30.0                     | 52.0           |
|         | 478        | < 48.2               | 30.24        | < 30.0                     |                |
|         | 717        | < 47.1               | 29.08        | < 30.0                     |                |
|         | 1195       | < 45.0               | 27.01        | < 30.0                     |                |
|         | 1434       | 53.7                 | 26.68        | 39.1                       |                |
|         | 1673       | < 44.8               | 26.78        | < 30.0                     |                |

| Channel | Freq [MHz] | Meter reading [dBuV] | C. fact [dB] | Corrected reading [dBuV/m] | Limit [dBuV/m] |
|---------|------------|----------------------|--------------|----------------------------|----------------|
| 12      | 251        | < 47.6               | 29.55        | < 30.0                     | 52.0           |
|         | 502        | < 48.3               | 30.26        | < 30.0                     |                |
|         | 753        | < 46.6               | 28.64        | < 30.0                     |                |
|         | 1004       | < 45.2               | 27.24        | < 30.0                     |                |
| 14      | 517        | < 48.2               | 30.15        | < 30.0                     | 52.0           |
|         | 1034       | < 45.2               | 27.24        | < 30.0                     |                |
|         | 1551       | < 45.0               | 26.96        | < 30.0                     |                |
| 20      | 553        | < 57.9               | 29.87        | < 40.0                     | 52.0           |
|         | 1106       | < 55.2               | 27.24        | < 40.0                     |                |
|         | 1659       | < 54.9               | 26.94        | < 40.0                     |                |
| 28      | 601        | < 57.5               | 29.51        | < 40.0                     | 52.0           |
|         | 1202       | < 55.0               | 26.99        | < 40.0                     |                |
| 36      | 649        | < 57.4               | 29.40        | < 40.0                     | 52.0           |
|         | 1298       | < 54.4               | 26.43        | < 40.0                     |                |
| 45      | 703        | < 57.3               | 29.25        | < 40.0                     | 52.0           |
|         | 1406       | 53.8                 | 26.86        | 38.9                       |                |
| 46      | 709        | < 47.2               | 29.18        | < 30.0                     | 52.0           |
|         | 1418       | 54.7                 | 26.78        | 39.9                       |                |
| 47      | 715        | < 47.1               | 29.11        | < 30.0                     | 52.0           |
|         | 1430       | 54.9                 | 26.71        | 40.2                       |                |
| 48      | 721        | < 47.0               | 29.03        | < 30.0                     | 52.0           |
|         | 1442       | 55.7                 | 26.63        | 41.0                       |                |
| 49      | 727        | < 47.0               | 28.96        | < 30.0                     | 52.0           |
|         | 1454       | 56.4                 | 26.55        | 41.9                       |                |
| 50      | 733        | < 46.9               | 28.88        | < 30.0                     | 52.0           |
|         | 1466       | 55.8                 | 26.48        | 41.3                       |                |
| 51      | 739        | < 46.8               | 28.81        | < 30.0                     | 52.0           |
|         | 1478       | 55.8                 | 26.40        | 41.4                       |                |
| 52      | 745        | < 46.7               | 28.74        | < 30.0                     | 52.0           |
|         | 1490       | 55.6                 | 26.32        | 41.3                       |                |
| 53      | 751        | < 46.7               | 28.66        | < 30.0                     | 52.0           |
|         | 1502       | 53.9                 | 26.29        | 39.6                       |                |
| 61      | 799        | < 46.1               | 28.07        | < 30.0                     | 52.0           |
|         | 1598       | 54.3                 | 27.61        | 38.6                       |                |
| 69      | 847        | < 46.1               | 28.06        | < 30.0                     | 52.0           |
|         | 1694       | 53.2                 | 26.53        | 38.7                       |                |

C.fact = Correction factor (Pre amp. + Cable loss)

Corrected reading = Meter reading + Matching pad 6dB - C.fact + 1.76 (50-&gt;75 ohms conversion)

## **Configuration of Tested System**



### Test Instrumentation Used

[illegible]