Panasonic

Panasonic Shikoku Electronics Co., Ltd.
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Date: Jul. 13, 2005

REPORT OF MEASUREMENTS-(Part I)
REQUIRED IN (X) SUBPART B (TV INTERFACE DEVICE)

EXHIBIT # : 1
FCC ID : ACJ927139AH
OUR REF. : PSEC-SJ05-F003
MODEL NO. : PV-V4524S
Sheet 1 of 19 Sheets

Name of Manufacturer : Panasonic Shikoku Electronics Co., Ltd.
Address of Manufacturer : 247 Fukutake, Saijo, Ehime, Japan

Device Under Measurement
FCC ID : ACJ927139AH
Model No. : PV-V4524S
Trade Name : Panasonic
Applicant : Matsushita Electric Ind. Co., Ltd.
This device is a representative model of KG-24HG chassis group.

Data Also Applied To

FCC ID	Model No.(Trade Name)

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

Certification
On the basis of the measurement data contained in Part II, all devices bearing the aforementioned FCC ID (model No.. chassis No.. and trade names) are stated by the undersigned to be capable of complying with the applicable sections of Part 15 of the FCC rules governing restricted radiation devices at the time of manufacture and may be expected to continue to comply under normal conditions and with usual maintenance.
The undersigned also states that the device measured was an engineering prototype, pre production, or production unit. If changes are applied to future units and such changes adversely alter spurious radiation, an amended report of measurements will be supplied to the FCC.

K. Ishikawa

K. Ishikawa
Manager

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Tuner: ENG56D06G1
Part 15 Subpart B, (TV Interface Device)- Part

1)15.107 Power Line Conducted Voltage

Freq. (MHz)	Mode	Limits (dBuV)	Interference (dBuV)	
			V_A	V_B
0.162	Q-Peak	65.4	62.4	62.0
0.213	Q-Peak	63.1	45.1	45.1
0.213	Average	53.1	40.3	40.4
0.319	Average	59.7	33.5	35.0
0.426	Q-Peak	57.3	31.2	32.1
0.632	Q-Peak	56.0	29.4	29.7

Refer to Sheet 4, 5, 18 of 19 Sheets)

2)15.109 Radiated Emission(Including Tuner)

Freq. (MHz)	Limits (dBuV/m)	Emission (dBuV/m)	
		Horiz.	Vert.
49.95	40.0	<14.2	26.7
51.99	40.0	<11.8	24.9
53.69	43.5	<10.9	25.0
84.01	43.5	22.7	26.4
225.50	43.5	31.0	24.9
229.08	43.5	32.0	24.8

(Refer to Sheet 6, 19 of 19 Sheets)
Note: Without Laurel Antenna
With accessories

3) 15.111(a) Antenna Power Conducted Voltage

Freq. (MHz)	Limits (dBuV)	Conducted Voltage (dBuV)
1646.0	51.8	30.6
1654.0	51.8	31.7
1658.0	51.8	32.2
1666.0	51.8	32.9
1670.0	51.8	32.7
1678.0	51.8	31.5

(Refer to Sheet 7 of 19 Sheets)

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

Ch	Limits (dBuV)		Level (dBuV)	
	Visual	Aural	Visual	Aural
3	69.5	56.5	65.4	50.3
4	69.5	56.5	65.2	49.2

(Refer to Sheet 8 of 19 Sheets)

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

Ch	Freq. (MHz)	Limits (dBuV)	Interference (dBuV)
3	43.34	39.5	24.1
	47.70	39.5	21.6
	50.50	39.5	28.2
	72.00	39.5	27.2
	245.0	39.5	24.3
	490.0	39.5	28.3
4	49.39	39.5	23.1
	53.72	39.5	21.6
	56.50	39.5	27.4
	78.00	39.5	27.3
	269.00	39.5	28.0
	538.00	39.5	27.6

(Refer to Sheet 9, 10 of 19 Sheets)

6) 15.115(c) Transfer SW Isolation

Ch	Limits (dBuV)	Level (dBuV)
3	9.5	<3.9
4	9.5	4.2

(Refer to Sheet 11 of 19 Sheets)

MEASUERMENT SITE : MKS Site
MEASUERMENT PROCEDURE : ANSI C63.4-2003

Note:(1) Detailed report: Refer to attached sheets.
I HEREBY STATE THAT: The measurements shown in Part II of this form were made in accordance with the procedures indicated and the energy emitted by this equipment was found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements and vouch for the qualifications of all persons taking them.
I FURTHER STATE THAT: On the basis of the measurements made, the device tested is capable of operation in compliance with the requirements of Part 15 of the FCC Rules under normal use and maintenance.

T. Watanabe
Engineer

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EXHIBIT # : 1
FCC ID : ACJ927139AH
OUR REF. : PSEC-SJ05-F003
MODEL NO. : PV-V4524S
Sheet 3 of 19 Sheets

Tuner: 115-V-HA35AK
Part 15 Subpart B, (TV Interface Device)- Part

2)15.109 Radiated Emission(Including Tuner)

Freq. (MHz)	Limits (dBuV/m)	Emission (dBuV/m)	
		Horiz.	Vert.
49.95	40.0	<14.2	26.7
225.50	46.0	31.0	24.9
229.08	46.0	32.0	24.8
791.00	46.0	36.5	31.5
797.00	46.0	36.5	29.7
803.00	46.0	36.2	29.5

(Refer to Sheet 12, 18, 19 of 19 Sheets)
Note: Without Laurel Antenna
With accessories

3) 15.111 Antenna Power Conducted Voltage

Freq. (MHz)	Limits (dBuV)	Conducted Voltage (dBuV)
631.0	51.8	23.9
635.0	51.8	24.3
637.0	51.8	25.0
641.0	51.8	24.7
643.0	51.8	24.2
647.0	51.8	24.0

(Refer to Sheet 13 of 19 Sheets)

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

Ch	Limits (dBuV)		Level (dBuV)	
	Visual	Aural	Visual	Aural
3	69.5	56.5	66.3	50.1
4	69.5	56.5	66.0	49.7

(Refer to Sheet 14 of 19 Sheets)

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

Ch	Freq. (MHz)	Limits (dBuV)	Interference (dBuV)
3	43.34	39.5	24.6
	47.73	39.5	21.1
	50.50	39.5	30.0
	72.00	39.5	28.0
	79.13	39.5	22.7
	122.50	39.5	22.0
4	49.34	39.5	25.0
	53.70	39.5	21.1
	56.50	39.5	30.1
	78.00	39.5	28.0
	85.14	39.5	22.5
	201.75	39.5	22.3

(Refer to Sheet 15, 16 of 30 Sheets)

6) 15.115© Transfer SW Isolation

Ch	Limits (dBuV)	Level (dBuV)
3	9.5	<3.9
4	9.5	<3.9

(Refer to Sheet 17 of 19 Sheets)

MEASUERMENT SITE : MKS Site
MEASUERMENT PROCEDURE : ANSI C63.4-2003

Note:(1) Detailed report: Refer to attached sheets.
I HEREBY STATE THAT: The measurements shown in Part II of this form were made in accordance with the procedures indicated and the energy emitted by this equipment was found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements and vouch for the qualifications of all persons taking them.
I FURTHER STATE THAT: On the basis of the measurements made, the device tested is capable of operation in compliance with the requirements of Part 15 of the FCC Rules under normal use and maintenance.

T. Watanabe
Engineer

Tuner: ENG56D06G1

EXHIBIT # : 1
FCC ID : ACJ927139AH
OUR REF. : PSEC-SJ05-F003
MODEL NO. : PV-V4524S

Part 15 Subpart B, (TV Interface Device)

1) 15.107 Power Line Conducted Voltage

Video Signal	Freq. (MHz)	Mode	Meter Reading (dBuV)		LISN Factor (dB)		Interference (dBuV)		Limits (dBuV)	Margin (dB)	
			VA	VB	VA	VB	VA	VB		VA	VB
Multi Burst 1 V p-p	0.162	Q-Peak	60.1	60.0	0.2	0.2	60.3	60.2	65.4	5.1	5.2
	0.162	Average	21.4	21.6	0.2	0.2	21.6	21.8	55.4	33.8	33.6
	0.213	Q-Peak	44.4	44.1	0.2	0.2	44.6	44.3	63.1	18.5	18.8
	0.213	Average	39.8	39.9	0.2	0.2	40.0	40.1	53.1	13.1	13.0
	0.319	Average	34.1	34.7	0.1	0.1	34.2	34.8	59.7	25.5	24.9
	0.426	Q-Peak	30.6	31.0	0.0	0.1	30.6	31.1	57.3	26.7	26.2
	0.632	Q-Peak	28.8	29.2	0.0	0.0	28.8	29.2	56.0	27.2	26.8
	2.230	Q-Peak	26.9	27.6	0.1	0.1	27.0	27.7	56.0	29.0	28.3
Multi Burst 5 V p-p	0.162	Q-Peak	60.0	59.8	0.2	0.2	60.2	60.0	65.4	5.2	5.4
	0.162	Average	21.2	20.9	0.2	0.2	21.4	21.1	55.4	34.0	34.3
	0.213	Q-Peak	44.1	44.1	0.2	0.2	44.3	44.3	63.1	18.8	18.8
	0.213	Average	39.8	40.1	0.2	0.2	40.0	40.3	53.1	13.1	12.8
	0.319	Average	34.0	35.0	0.1	0.1	34.1	35.1	59.7	25.6	24.6
	0.426	Q-Peak	30.5	31.3	0.0	0.1	30.5	31.4	57.3	26.8	25.9
	0.632	Q-Peak	28.9	29.1	0.0	0.0	28.9	29.1	56.0	27.1	26.9
	2.230	Q-Peak	27.6	27.7	0.1	0.1	27.7	27.8	56.0	28.3	28.2
Internal Signal	**0.162**	Q-Peak	**62.2**	61.8	0.2	0.2	**62.4**	62.0	65.4	**3.0**	3.4
	0.162	Average	22.7	22.6	0.2	0.2	22.9	22.8	55.4	32.5	32.6
	0.213	Q-Peak	44.9	44.9	0.2	0.2	45.1	45.1	63.1	18.0	18.0
	0.213	Average	40.1	40.2	0.2	0.2	40.3	40.4	53.1	12.8	12.7
	0.319	Average	33.4	34.9	0.1	0.1	33.5	35.0	59.7	26.2	24.7
	0.426	Q-Peak	31.2	32.0	0.0	0.1	31.2	32.1	57.3	26.1	25.2
	0.632	Q-Peak	29.4	29.7	0.0	0.0	29.4	29.7	56.0	26.6	26.3
	2.230	Q-Peak	26.5	26.7	0.1	0.1	26.6	26.8	56.0	29.4	29.2
RF/CATV Signal Input	0.162	Q-Peak	60.9	60.8	0.2	0.2	61.1	61.0	65.4	4.3	4.4
	0.162	Average	21.7	22.1	0.2	0.2	21.9	22.3	55.4	33.5	33.1
	0.213	Q-Peak	43.7	44.1	0.2	0.2	43.9	44.3	63.1	19.2	18.8
	0.213	Average	40.4	40.9	0.2	0.2	40.6	41.1	53.1	12.5	12.0
	0.319	Average	33.8	34.6	0.1	0.1	33.9	34.7	59.7	25.8	25.0
	0.426	Q-Peak	32.6	33.1	0.0	0.1	32.6	33.2	57.3	24.7	24.1
	0.632	Q-Peak	30.0	30.1	0.0	0.0	30.0	30.1	56.0	26.0	25.9
	2.230	Q-Peak	26.8	27.2	0.1	0.1	26.9	27.3	56.0	29.1	28.7

Part 15 Subpart B, (TV Interface Device)
2) 15.107 Power Line Conducted Voltage

Note:

1. Sample calculation at
   M.B., 1 V p-p, V_A 0.162 MHz Q-Peak; 60.1 + 0.2 = 60.3 (dBuV)

2. Measuring Instruments:
   a) Field strength meter - Kyoritsu Electric Work Co., Ltd.
   Model : KNM-2403
   (1) Detector function : CISPR Q-Peak
   (2) IF band width : 9 kHz
   (3) Input impedance : 50 ohms
   b) Line impedance stabilized network (LISN)
   - Kyoritsu Electric Work Co., Ltd.
   Model : KNW-406
   50 ohms / 50 uH network
   c) Test Signal Generator - Shibasoku Co., Ltd.
   (Multi Burst) Model : 205

3. The spectrum was checked from 0.15 MHz to 30 MHz.
   Higher six points are underlined.

2) 15.109 Radiated Emission (Including Tuner)

Video Signal	Frequency (MHz)	Meter Reading Open Volt. (dBuV)		Correction Factor (dB)	Emission & 3 meters(dBuV)	
		Horiz.	Vert.	Open Vol.	Horiz.	Vert.
Multi Burst 1 V p-p	49.95	<-1.0	10.7	15.2	<14.2	25.9
	51.99	<-1.0	11.0	12.8	<11.8	23.8
	53.69	<-1.0	13.1	11.9	<10.9	25.0
	84.01	12.2	16.1	9.4	21.6	25.5
	225.50	10.2	4.3	20.4	30.6	24.7
	229.08	11.0	4.0	20.6	31.6	24.6
Multi Burst 5 V p-p	49.95	<-1.0	11.5	15.2	<14.2	26.7
	51.99	<-1.0	12.1	12.8	<11.8	24.9
	53.69	<-1.0	13.1	11.9	<10.9	25.0
	84.01	13.3	17.0	9.4	22.7	26.4
	225.50	10.6	4.5	20.4	31.0	24.9
	229.08	11.4	4.2	20.6	32.0	24.8
Internal Signal	49.95	<-1.0	9.6	15.2	<14.2	24.8
	51.99	<-1.0	10.8	12.8	<11.8	23.6
	53.69	<-1.0	12.5	11.9	<10.9	24.4
	84.01	13.6	15.5	9.4	23.0	24.9
	225.50	10.3	4.1	20.4	30.7	24.5
	229.08	9.6	3.5	20.6	30.2	24.1
RF/CATV Signal Input	49.95	<-1.0	8.7	15.2	<14.2	23.9
	51.99	<-1.0	11.3	12.8	<11.8	24.1
	53.69	<-1.0	12.4	11.9	<10.9	24.3
	84.01	13.2	15.7	9.4	22.6	25.1
	225.50	9.6	4.5	20.4	30.0	24.9
	229.08	11.0	4.3	20.6	31.6	24.9

Note: 1. Sample calculation at
M.B., 1 V p-p, Vert. 49.95 MHz ; <-1.0 + 15.2 = <14.2 (dBuV/m)

2. Measuring Instruments:

a) Field strength meter
- Hewlett Packard company
Model: HP 8546A
(1) Frequency range : 9 kHz to 6.5 GHz
(2) RF Input : 50 ohm
(3) IF band width : 200 Hz/ 9 kHz/ 120 kHz/ 1MHz
(4) Detector function : Average/CISPR Q-Peak/Peak

b) Test Signal Generator (Multi Burst)
- Shibasoku Co., Ltd.
Model: TG-5, 2U2

c) Receiving antenna
- Schwarzbeck
Model: VHA9103 30 - 300 MHz
Model: UHALP9108A 300 - 1000 MHz
- The Electro-Mechanics Company
Model: 3115 1 – 18 GHz

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

3) 15.111 (a) Antenna Power Conducted Voltage

Frequency (MHz)	Meter Reading (dBuV)	Matc. Pad Loss (dB)	Interference (dBuV)
1646.0	21.8	8.8	30.6
1654.0	22.9	8.8	31.7
1658.0	23.4	8.8	32.2
1666.0	24.1	8.8	32.9
1670.0	23.9	8.8	32.7
1678.0	22.7	8.8	31.5

Antenna Input Impedance: 75 ohms (Unbalanced)

Note:
1. Sample calculation at 1646.0 MHz; 21.8 + 8.8 = 30.6 (dBuV)

2. Measuring Instrument:
   a) Spectrum Analyzer - ADVANTEST Co., Ltd.
      Model : R3261A
      (1) Detector function : Peak
      (2) Band width : 100 kHz
   b) Matching Pad - Anritsu Electric Co., Ltd.
      Model : MB-009
      (1) Frequency range : DC – 2 GHz

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

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

Video Signal	Ch	Measured Frequency(MHz)		Meter Reading (dBuV)		Pad Loss (dB)	Output Signal Level (dBuV)	
		Visual	Aural	Visual	Aural		Visual	Aural
Multi Burst 1 V p-p	3	61.25	65.75	63.1	48.0	2.3	65.4	50.3
	4	67.25	71.75	62.9	46.9	2.3	65.2	49.2
Multi Burst 5 V p-p	3	61.25	65.75	63.1	48.0	2.3	65.4	50.3
	4	67.25	71.75	62.9	46.9	2.3	65.2	49.2
Internal Signal	3	61.25	65.75	63.1	48.0	2.3	65.4	50.3
	4	67.25	71.75	62.9	46.9	2.3	65.2	49.2
RF/CATV Signal	3	61.25	65.75	63.1	48.0	2.3	65.4	50.3
	4	67.25	71.75	62.9	46.9	2.3	65.2	49.2

RF Output Impedance: 75 ohms (Unbalanced)

Note:
1. Sample calculation at
M.B., 1 V p-p, Visual, 3 Ch ; 63.1 + 2.3 = 65.4 (dBuV)

2. Measuring Instrument:
a) Spectrum Analyzer - Anritsu Electric Co., Ltd.
Model : MS62B
(1) Detector function : Peak
(2) Band width : 100 kHz
b) Matching Pad - Anritsu Electric Co., Ltd.
Model : MP614A
(1) Frequency range : 10 - 1200 MHz
c) Test Signal Generator (Multi Burst) - Shibasoku Co., Ltd.
Model : 205

Part 15 Subpart B, (TV Interface Device)

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

Video Signal	Ch	Freq. (MHz)	Meter Read. (dBuV)	Matc. Pad Loss (dB)	Att. Pad Loss(dB)	Gain of Amp.(dB)	Interference (dBuV)
Multi Burst 1 V p-p	3	43.34	46.1	2.3	N/A	24.3	24.1
		47.70	43.6	2.3	N/A	24.3	21.6
		50.50	50.2	2.3	N/A	24.3	28.2
		72.00	49.3	2.3	N/A	24.4	27.2
		245.0	46.2	2.4	N/A	24.3	24.3
		490.0	49.3	2.8	N/A	23.8	28.3
	4	49.39	45.1	2.3	N/A	24.3	23.1
		53.72	43.6	2.3	N/A	24.3	21.6
		56.50	49.4	2.3	N/A	24.3	27.4
		78.00	49.4	2.3	N/A	24.4	27.3
		269.00	49.9	2.4	N/A	24.3	28.0
		538.00	48.0	2.9	N/A	23.3	27.6
Multi Burst 5 V p-p	3	43.34	46.1	2.3	N/A	24.3	24.1
		47.70	43.6	2.3	N/A	24.3	21.6
		50.50	50.2	2.3	N/A	24.3	28.2
		72.00	49.3	2.3	N/A	24.4	27.2
		245.0	46.2	2.4	N/A	24.3	24.3
		490.0	49.3	2.8	N/A	23.8	28.3
	4	49.39	45.1	2.3	N/A	24.3	23.1
		53.72	43.6	2.3	N/A	24.3	21.6
		56.50	49.4	2.3	N/A	24.3	27.4
		78.00	49.4	2.3	N/A	24.4	27.3
		269.00	49.9	2.4	N/A	24.3	28.0
		538.00	48.0	2.9	N/A	23.3	27.6
Internal Signal	3	43.34	46.1	2.3	N/A	24.3	24.1
		47.70	43.6	2.3	N/A	24.3	21.6
		50.50	50.2	2.3	N/A	24.3	28.2
		72.00	49.3	2.3	N/A	24.4	27.2
		245.0	46.2	2.4	N/A	24.3	24.3
		490.0	49.3	2.8	N/A	23.8	28.3
	4	49.39	45.1	2.3	N/A	24.3	23.1
		53.72	43.6	2.3	N/A	24.3	21.6
		56.50	49.4	2.3	N/A	24.3	27.4
		78.00	49.4	2.3	N/A	24.4	27.3
		269.00	49.9	2.4	N/A	24.3	28.0
		538.00	48.0	2.9	N/A	23.3	27.6
RF/CATV Signal Input	3	43.34	46.1	2.3	N/A	24.3	24.1
		47.70	43.6	2.3	N/A	24.3	21.6
		50.50	50.2	2.3	N/A	24.3	28.2
		72.00	49.3	2.3	N/A	24.4	27.2
		245.0	46.2	2.4	N/A	24.3	24.3
		490.0	49.3	2.8	N/A	23.8	28.3
	4	49.39	45.1	2.3	N/A	24.3	23.1
		53.72	43.6	2.3	N/A	24.3	21.6
		56.50	49.4	2.3	N/A	24.3	27.4
		78.00	49.4	2.3	N/A	24.4	27.3
		269.00	49.9	2.4	N/A	24.3	28.0
		538.00	48.0	2.9	N/A	23.3	27.6

RF Output Impedance: 75 ohms (Unbalanced)

Note:

1. Sample calculation at
   M.B., 1 V p-p, 3 Ch., 43.34 MHz ; 46.1 + 2.3 - 24.3 = 24.1 (dBuV)

2. Measuring Instrument:

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

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

6) 15.115 (c) Transfer Switch Isolation

Video Signal	Ch	Meter Read.(dBuV)	Matching Pad Loss(dB)	Gain of Amp.(dB)	Pad Loss (dB)	Level (dBuV)
Multi Burst 1 V p-p	3	<26.0	2.3	24.4	N/A	<3.9
	4	26.3	2.3	24.4	N/A	4.2
Multi Burst 5 V p-p	3	<26.0	2.3	24.4	N/A	<3.9
	4	26.3	2.3	24.4	N/A	4.2
Internal Signal	3	<26.0	2.3	24.4	N/A	<3.9
	4	26.3	2.3	24.4	N/A	4.2

RF Output Impedance: 75 ohms (Unbalanced)

Note:
1. Sample calculation at
M.B., 1 V p-p, Visual, 3 Ch ; <26.0 + 2.3 - 24.4 = <3.9 (dBuV)

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

2) 15.109 Radiated Emission (Including Tuner)

Video Signal	Frequency (MHz)	Meter Reading Open Volt. (dBuV)		Correction Factor (dB)	Emission & 3 meters(dBuV)	
		Horiz.	Vert.	Open Vol.	Horiz.	Vert.
Multi Burst 1 V p-p	49.95	<-1.0	10.7	15.2	<14.2	25.9
	225.50	10.2	5.1	20.4	30.6	25.5
	229.08	10.5	4.4	20.6	31.1	25.0
	791.00	10.6	5.6	25.9	36.5	31.5
	797.00	10.5	3.7	26.0	36.5	29.7
	803.00	10.1	3.4	26.1	36.2	29.5
Multi Burst 5 V p-p	49.95	<-1.0	11.5	15.2	<14.2	26.7
	225.50	10.6	4.5	20.4	31.0	24.9
	229.08	11.4	4.2	20.6	32.0	24.8
	791.00	10.6	5.6	25.9	36.5	31.5
	797.00	10.5	3.7	26.0	36.5	29.7
	803.00	10.1	3.4	26.1	36.2	29.5
Internal Signal	49.95	<-1.0	9.6	15.2	<14.2	24.8
	225.50	10.2	4.6	20.4	30.6	25.0
	229.08	10.8	4.2	20.6	31.4	24.8
	791.00	10.6	5.6	25.9	36.5	31.5
	797.00	10.5	3.7	26.0	36.5	29.7
	803.00	10.1	3.4	26.1	36.2	29.5
RF/CATV Signal Input	49.95	<-1.0	9.4	15.2	<14.2	24.6
	225.50	10.1	3.9	20.4	30.5	24.3
	229.08	10.1	3.5	20.6	30.7	24.1
	791.00	10.6	5.6	25.9	36.5	31.5
	797.00	10.5	3.7	26.0	36.5	29.7
	803.00	10.1	3.4	26.1	36.2	29.5

Note: 1. Sample calculation at
M.B., 1 V p-p, Vert. 49.95 MHz ; <-1.0 + 15.2 = <14.2 (dBuV/m)

2. Measuring Instruments:

a) Field strength meter - Hewlett Packard company
Model: HP 8546A
(1) Frequency range : 9 kHz to 6.5 GHz
(2) RF Input : 50 ohm
(3) IF band width : 200 Hz/ 9 kHz/ 120 kHz/ 1MHz
(4) Detector function : Average/CISPR Q-Peak/Peak

b) Test Signal Generator (Multi Burst) - Shibasoku Co., Ltd.
Model: TG-5, 2U2

c) Receiving antenna - Schwarzbeck
Model: VHA9103 30 - 300 MHz
Model: UHALP9108A 300 - 1000 MHz
- The Electro-Mechanics Company
Model: 3115 1 – 18 GHz

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

3) 15.111 (a) Antenna Power Conducted Voltage

Frequency (MHz)	Meter Reading (dBuV)	Matc. Pad Loss (dB)	Interference (dBuV)
631.0	15.1	8.8	23.9
635.0	15.5	8.8	24.3
637.0	16.2	8.8	25.0
641.0	15.9	8.8	24.7
643.0	15.4	8.8	24.2
647.0	15.2	8.8	24.0

Antenna Input Impedance: 75 ohms (Unbalanced)

Note:
1. Sample calculation at 631.0 MHz ; 15.1 + 8.8 = 23.9 (dBuV)

2. Measuring Instrument:
   a) Spectrum Analyzer - ADVANTEST Co., Ltd.
      Model : R3261A
      (1) Detector function : Peak
      (2) Band width : 100 kHz
   b) Matching Pad - Anritsu Electric Co., Ltd.
      Model : MB-009
      (1) Frequency range : DC – 2 GHz

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

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

Video Signal	Ch	Measured Frequency(MHz)		Meter Reading (dBuV)		Pad Loss (dB)	Output Signal Level (dBuV)	
		Visual	Aural	Visual	Aural		Visual	Aural
Multi Burst 1 V p-p	3	61.25	65.75	64.0	47.8	2.3	66.3	50.1
	4	67.25	71.75	63.7	47.4	2.3	66.0	49.7
Multi Burst 5 V p-p	3	61.25	65.75	64.0	47.8	2.3	66.3	50.1
	4	67.25	71.75	63.7	47.4	2.3	66.0	49.7
Internal Signal	3	61.25	65.75	64.0	47.8	2.3	66.3	50.1
	4	67.25	71.75	63.7	47.4	2.3	66.0	49.7
RF/CATV Signal	3	61.25	65.75	64.0	47.8	2.3	66.3	50.1
	4	67.25	71.75	63.7	47.4	2.3	66.0	49.7

RF Output Impedance: 75 ohms (Unbalanced)

Note:
1. Sample calculation at
M.B., 1 V p-p, Visual, 3 Ch ; 64.0 + 2.3 = 66.3 (dBuV)

2. Measuring Instrument:
a) Spectrum Analyzer - Anritsu Electric Co., Ltd.
Model : MS62B
(1) Detector function : Peak
(2) Band width : 100 kHz
b) Matching Pad - Anritsu Electric Co., Ltd.
Model : MP614A
(1) Frequency range : 10 - 1200 MHz
c) Test Signal Generator (Multi Burst) - Shibasoku Co., Ltd.
Model : 205

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

Video Signal	Ch	Freq. (MHz)	Meter Read. (dBuV)	Matc. Pad Loss (dB)	Att. Pad Loss(dB)	Gain of Amp.(dB)	Interference (dBuV)
Multi Burst 1 V p-p	3	43.34	46.6	2.3	N/A	24.3	24.6
		47.73	43.1	2.3	N/A	24.3	21.1
		50.50	52.0	2.3	N/A	24.3	30.0
		72.00	50.1	2.3	N/A	24.4	28.0
		79.13	44.8	2.3	N/A	24.4	22.7
		122.50	44.0	2.3	N/A	24.3	22.0
	4	49.34	47.0	2.3	N/A	24.3	25.0
		53.70	43.1	2.3	N/A	24.3	21.1
		56.50	52.1	2.3	N/A	24.3	30.1
		78.00	50.1	2.3	N/A	24.4	28.0
		85.14	44.6	2.3	N/A	24.4	22.5
		201.75	44.3	2.3	N/A	24.3	22.3
Multi Burst 5 V p-p	3	43.34	46.6	2.3	N/A	24.3	24.6
		47.73	43.1	2.3	N/A	24.3	21.1
		50.50	52.0	2.3	N/A	24.3	30.0
		72.00	50.1	2.3	N/A	24.4	28.0
		79.13	44.8	2.3	N/A	24.4	22.7
		122.50	44.0	2.3	N/A	24.3	22.0
	4	49.34	47.0	2.3	N/A	24.3	25.0
		53.70	43.1	2.3	N/A	24.3	21.1
		56.50	52.1	2.3	N/A	24.3	30.1
		78.00	50.1	2.3	N/A	24.4	28.0
		85.14	44.6	2.3	N/A	24.4	22.5
		201.75	44.3	2.3	N/A	24.3	22.3
Internal Signal	3	43.34	46.6	2.3	N/A	24.3	24.6
		47.73	43.1	2.3	N/A	24.3	21.1
		50.50	52.0	2.3	N/A	24.3	30.0
		72.00	50.1	2.3	N/A	24.4	28.0
		79.13	44.8	2.3	N/A	24.4	22.7
		122.50	44.0	2.3	N/A	24.3	22.0
	4	49.34	47.0	2.3	N/A	24.3	25.0
		53.70	43.1	2.3	N/A	24.3	21.1
		56.50	52.1	2.3	N/A	24.3	30.1
		78.00	50.1	2.3	N/A	24.4	28.0
		85.14	44.6	2.3	N/A	24.4	22.5
		201.75	44.3	2.3	N/A	24.3	22.3
RF/CATV Signal Input	3	43.34	46.6	2.3	N/A	24.3	24.6
		47.73	43.1	2.3	N/A	24.3	21.1
		50.50	52.0	2.3	N/A	24.3	30.0
		72.00	50.1	2.3	N/A	24.4	28.0
		79.13	44.8	2.3	N/A	24.4	22.7
		122.50	44.0	2.3	N/A	24.3	22.0
	4	49.34	47.0	2.3	N/A	24.3	25.0
		53.70	43.1	2.3	N/A	24.3	21.1
		56.50	52.1	2.3	N/A	24.3	30.1
		78.00	50.1	2.3	N/A	24.4	28.0
		85.14	44.6	2.3	N/A	24.4	22.5
		201.75	44.3	2.3	N/A	24.3	22.3

RF Output Impedance: 75 ohms (Unbalanced)

Note:

1. Sample calculation at
   M.B., 1 V p-p, 3 Ch., 43.34 MHz ; 46.6 + 2.3 - 24.3 = 24.6 (dBuV)

2. Measuring Instrument:

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

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

6) 15.115 (c) Transfer Switch Isolation

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

RF Output Impedance: 75 ohms (Unbalanced)

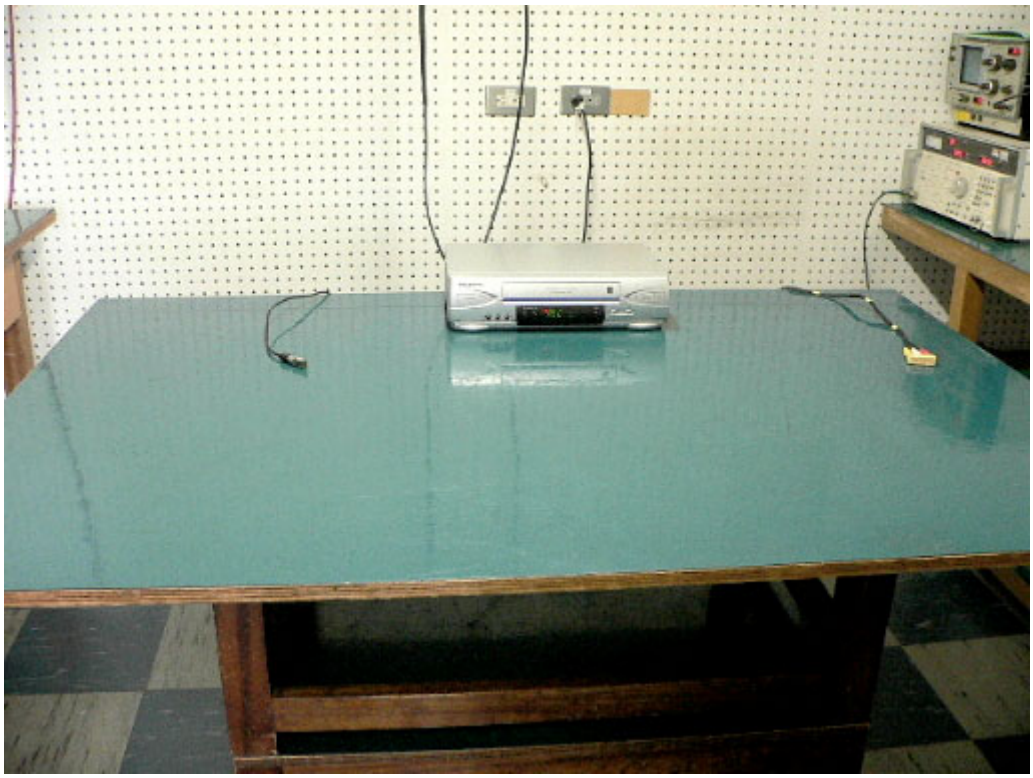
Note:
1. Sample calculation at
M.B., 1 V p-p, Visual, 3 Ch ; <26.0 + 2.3 - 24.4 = <3.9 (dBuV)

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

15.107 POWER LINE CONDUCTED VOLTAGE

- CONFIGURATION OF THE EQUIPMENT UNDER TEST -

(Arrangement of interface cable on the test table)



15.109 RADIATED EMISSION
- CONFIGURATION OF THE EQUIPMENT UNDER TEST -
(Arrangement of interface cable on the test table)