

Appendix 2 : Data of EMI tests

This section contains the following data.

Conducted interference	: <u>A2-1 to A2-10</u>
Radiated emission	: <u>A2-11 to A2-19</u>
Antenna terminal voltage	: <u>A2-20 to A2-21</u>
RF output level / spurious emission	: <u>A2-22 to A2-36</u>
Picture sensitivity	: <u>A2-37</u>
Noise figure	: <u>A2-38</u>

DATA OF CONDUCTION

A-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

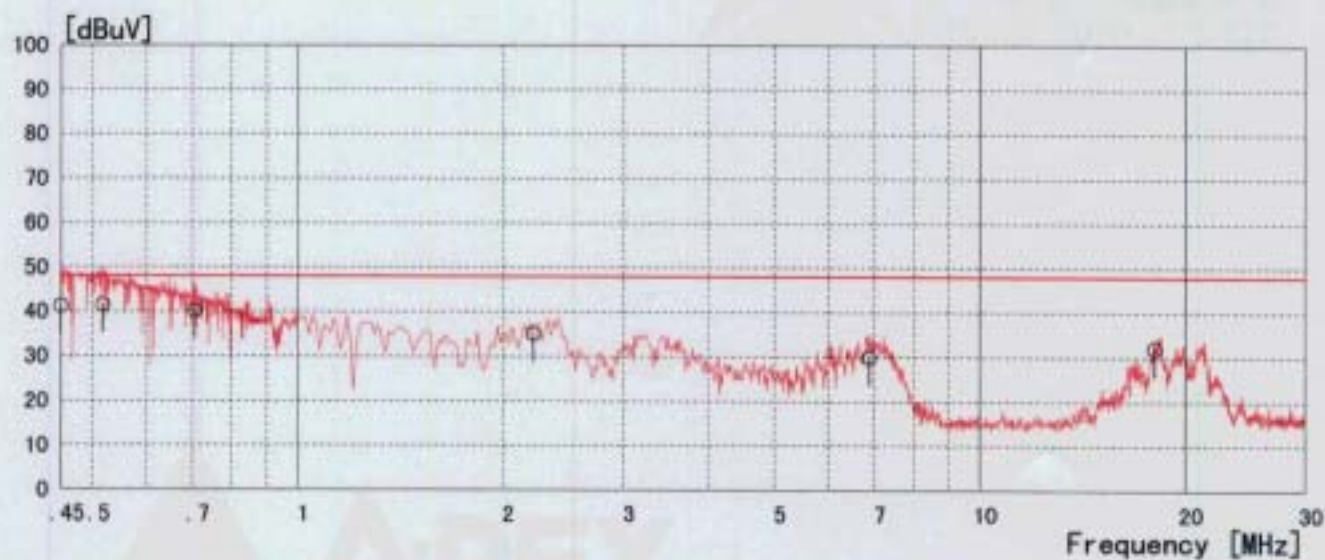
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : VIDEO CASSETTE RECORDER
MODEL NAME : MVR4041
OPERATION MODE : RECEIVE+REC
POWER : AC120V/60Hz
LINE : N
REMARKS : 0dBuV INPUT

REPORT No. : 21KE0002-KT
DATE : JUNE 07, 2001
REGULATION : FCC PART15 SUBPART B
TEST NO. : 1

TEST ENGINEER: HISAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	0.450	40.9	---	0.4	41.3	---	48.0	---	6.7	---
2	0.518	41.2	---	0.3	41.5	---	48.0	---	6.5	---
3	0.707	39.9	---	0.3	40.2	---	48.0	---	7.8	---
4	2.214	34.8	---	0.3	35.1	---	48.0	---	12.9	---
5	6.897	29.4	---	0.5	29.9	---	48.0	---	18.1	---
6	18.070	31.2	---	0.8	32.0	---	48.0	---	16.0	---

RESULT=READING+CABLE LOSS+CLAMP FACTOR



DATA OF CONDUCTIONA-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

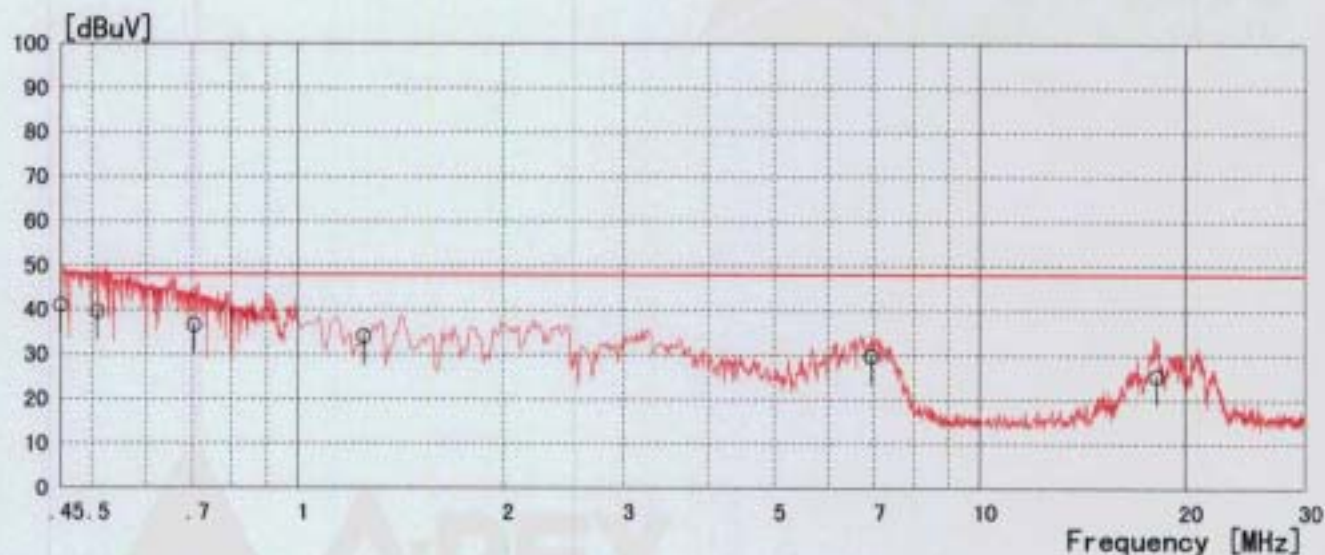
COMPANY : ORION ELECTRIC CO., LTD.
 EQUIPMENT : VIDEO CASSETTE RECORDER
 MODEL NAME : MVR4041
 OPERATION MODE : RECEIVE+REC
 POWER : AC120V/60Hz
 LINE : L
 REMARKS : OdBmV INPUT

REPORT No. : 21KE0002-KT
 DATE : JUNE 07, 2001
 REGULATION : FCC PART15 SUBPART B
 TEST NO. : 2

TEST ENGINEER: HISAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	0.450	40.6	----	0.4	41.0	----	48.0	----	7.0	----
2	0.509	39.3	----	0.3	39.6	----	48.0	----	8.4	----
3	0.706	36.3	----	0.3	36.6	----	48.0	----	11.4	----
4	1.251	33.9	----	0.2	34.1	----	48.0	----	13.9	----
5	6.943	29.2	----	0.5	29.7	----	48.0	----	18.3	----
6	18.190	24.5	----	0.8	25.3	----	48.0	----	22.7	----

RESULT=READING+CABLE LOSS+CLAMP FACTOR



DATA OF CONDUCTION

A-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

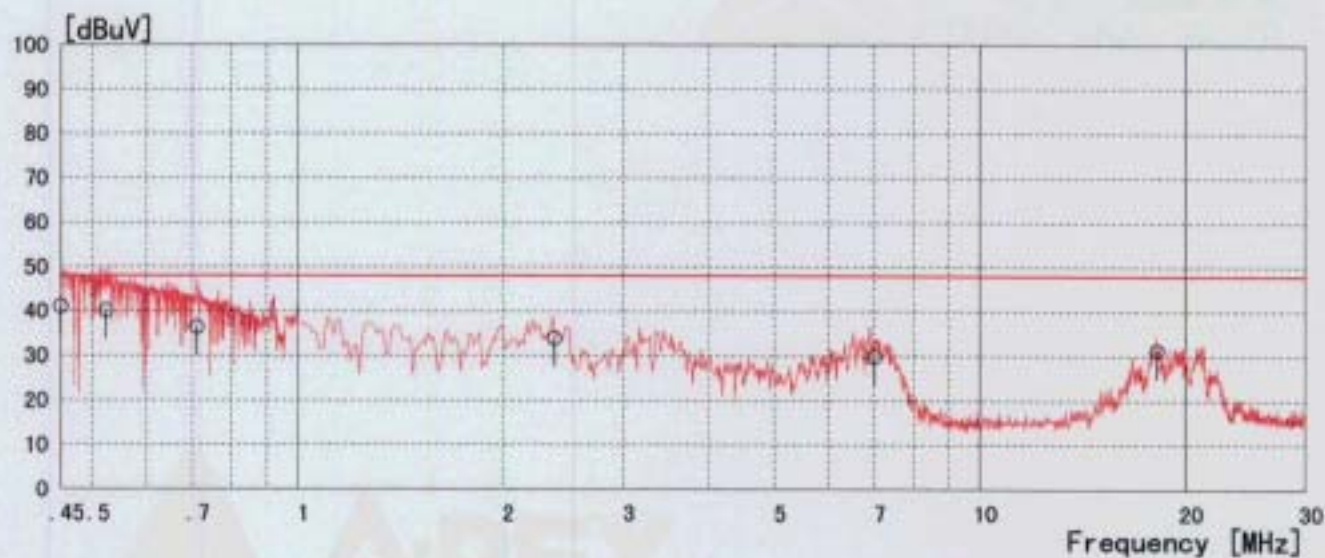
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : VIDEO CASSETTE RECORDER
MODEL NAME : MVR4041
OPERATION MODE : RECEIVE+REC
POWER : AC120V/60Hz
LINE : N
REMARKS : 25dBmV INPUT

REPORT No. : 21KE0002-KT
DATE : JUNE 07, 2001
REGULATION : FCC PART15 SUBPART B
TEST NO. : 3

TEST ENGINEER: HTSAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	0.450	40.7	—	0.4	41.1	—	48.0	—	6.9	—
2	0.524	39.8	—	0.3	40.1	—	48.0	—	7.9	—
3	0.712	36.1	—	0.3	36.4	—	48.0	—	11.6	—
4	2.381	33.6	—	0.3	33.9	—	48.0	—	14.1	—
5	7.011	29.3	—	0.5	29.8	—	48.0	—	18.2	—
6	18.200	30.4	—	0.8	31.2	—	48.0	—	16.8	—

RESULT=READING+CABLE LOSS+CLAMP FACTOR



DATA OF CONDUCTION

A-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

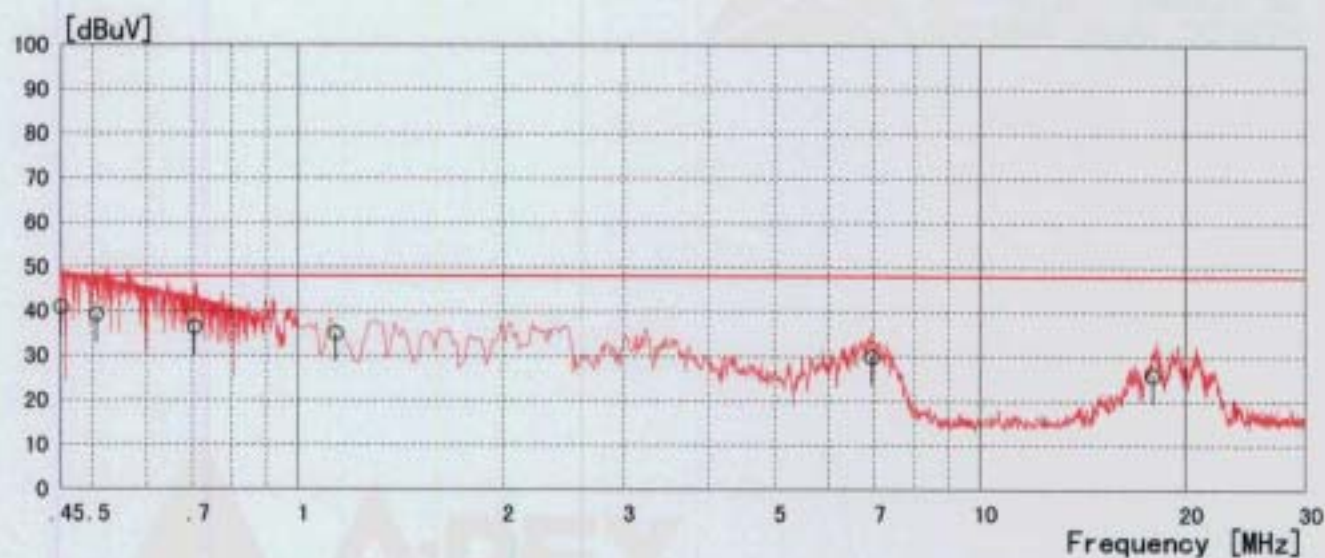
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : VIDEO CASSETTE RECORDER
MODEL NAME : MVR4041
OPERATION MODE : RECEIVE+REC
POWER : AC120V/60Hz
LINE : L
REMARKS : 25dBmV INPUT

REPORT No. : 21KE0002-KT
DATE : JUNE 07, 2001
REGULATION : FCC PART15 SUBPART B
TEST NO. : 4

TEST ENGINEER: HISAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	0.450	40.5	—	0.4	40.9	—	48.0	—	7.1	—
2	0.507	39.0	—	0.3	39.3	—	48.0	—	8.7	—
3	0.706	36.1	—	0.3	36.4	—	48.0	—	11.6	—
4	1.137	34.9	—	0.2	35.1	—	48.0	—	12.9	—
5	6.949	29.4	—	0.5	29.9	—	48.0	—	18.1	—
6	17.940	25.1	—	0.8	25.9	—	48.0	—	22.1	—

RESULT=READING+CABLE LOSS+CLAMP FACTOR



DATA OF CONDUCTION

A-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

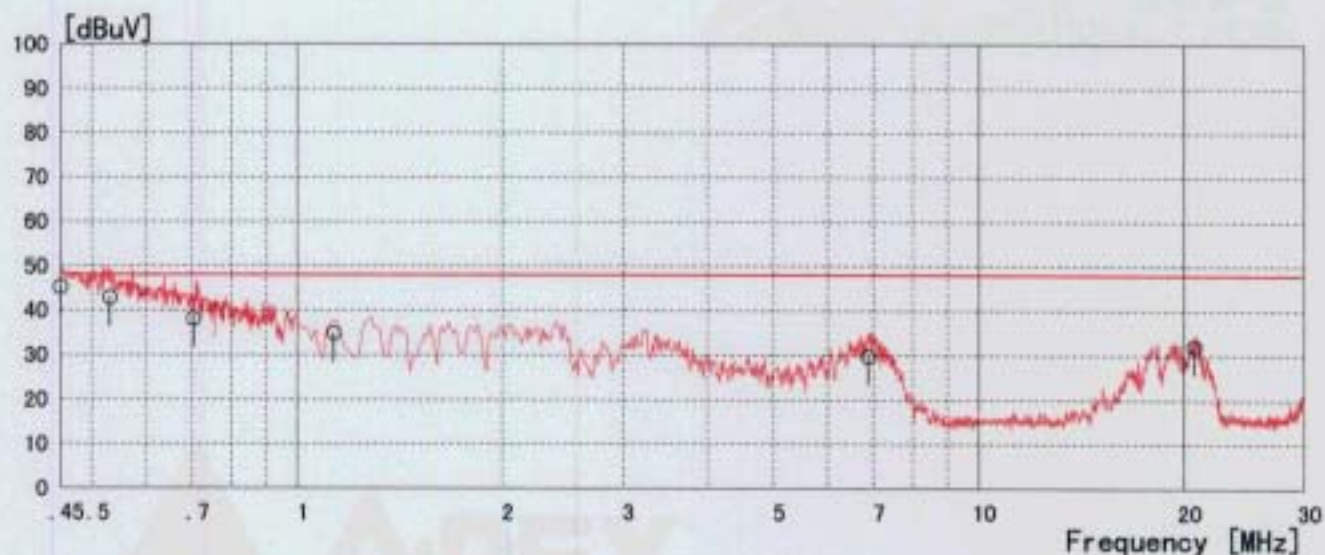
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : VIDEO CASSETTE RECORDER
MODEL NAME : MVR4041
OPERATION MODE : AV INPUT+REC
POWER : AC120V/60Hz
LINE : N
REMARKS : 1Vp-p INPUT

REPORT No. : 21KE0002-KT
DATE : JUNE 07, 2001
REGULATION : FCC PART15 SUBPART B
TEST NO. : 5

TEST ENGINEER: HITSAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV [dBuV]		QP	AV [dBuV]	QP	AV [dBuV]	QP	AV [dB]
1	0.450	44.8	—	0.4	45.2	—	48.0	—	2.8	—
2	0.532	42.5	—	0.3	42.8	—	48.0	—	5.2	—
3	0.705	37.8	—	0.3	38.1	—	48.0	—	9.9	—
4	1.131	34.6	—	0.2	34.8	—	48.0	—	13.2	—
5	6.894	29.2	—	0.5	29.7	—	48.0	—	18.3	—
6	20.730	31.2	—	0.8	32.0	—	48.0	—	16.0	—

RESULT=READING+CABLE LOSS+CLAMP FACTOR



DATA OF CONDUCTIONA-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

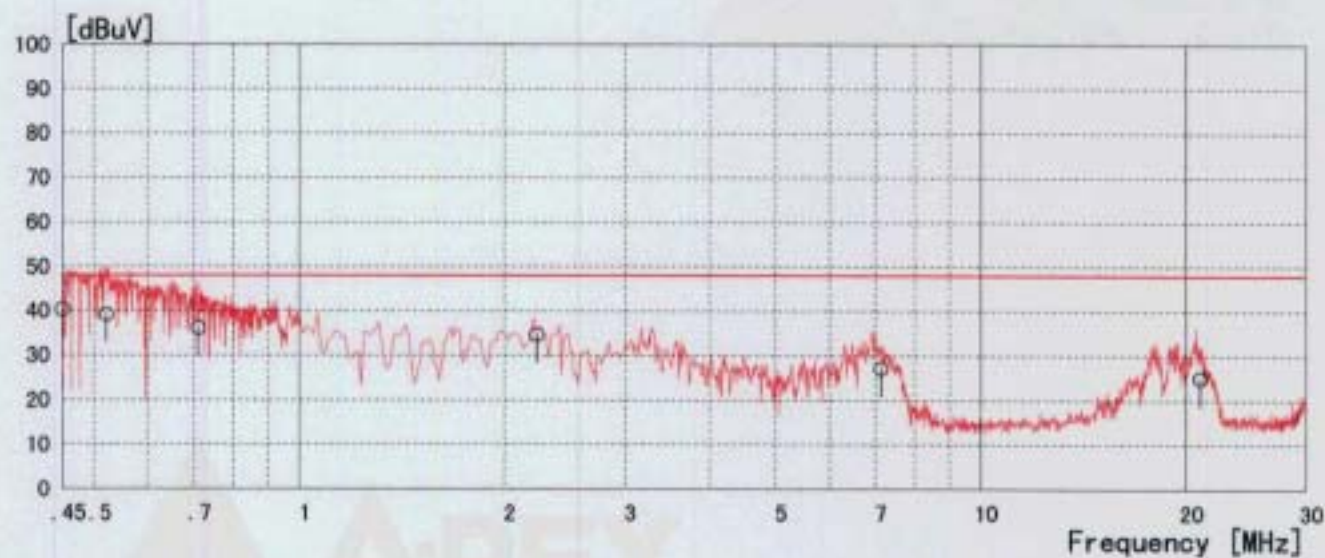
COMPANY : ORION ELECTRIC CO., LTD.
 EQUIPMENT : VIDEO CASSETTE RECORDER
 MODEL NAME : MVR4041
 OPERATION MODE : AV INPUT+REC
 POWER : AC120V/60Hz
 LINE : L
 REMARKS : 1Vp-p INPUT

REPORT No. : 21KE0002-KT
 DATE : JUNE 07, 2001
 REGULATION : FCC PART15 SUBPART B
 TEST NO. : 6

TEST ENGINEER: HISAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV [dBuV]		QP	AV [dBuV]	QP	AV [dBuV]	QP	AV [dB]
1	0.450	39.9	—	0.4	40.3	—	48.0	—	7.7	—
2	0.522	38.8	—	0.3	39.1	—	48.0	—	8.9	—
3	0.711	35.8	—	0.3	36.1	—	48.0	—	11.9	—
4	2.233	34.4	—	0.3	34.7	—	48.0	—	13.3	—
5	7.143	26.6	—	0.5	27.1	—	48.0	—	20.9	—
6	21.000	24.1	—	0.8	24.9	—	48.0	—	23.1	—

RESULT=READING+CABLE LOSS+CLAMP FACTOR



DATA OF CONDUCTION

A-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

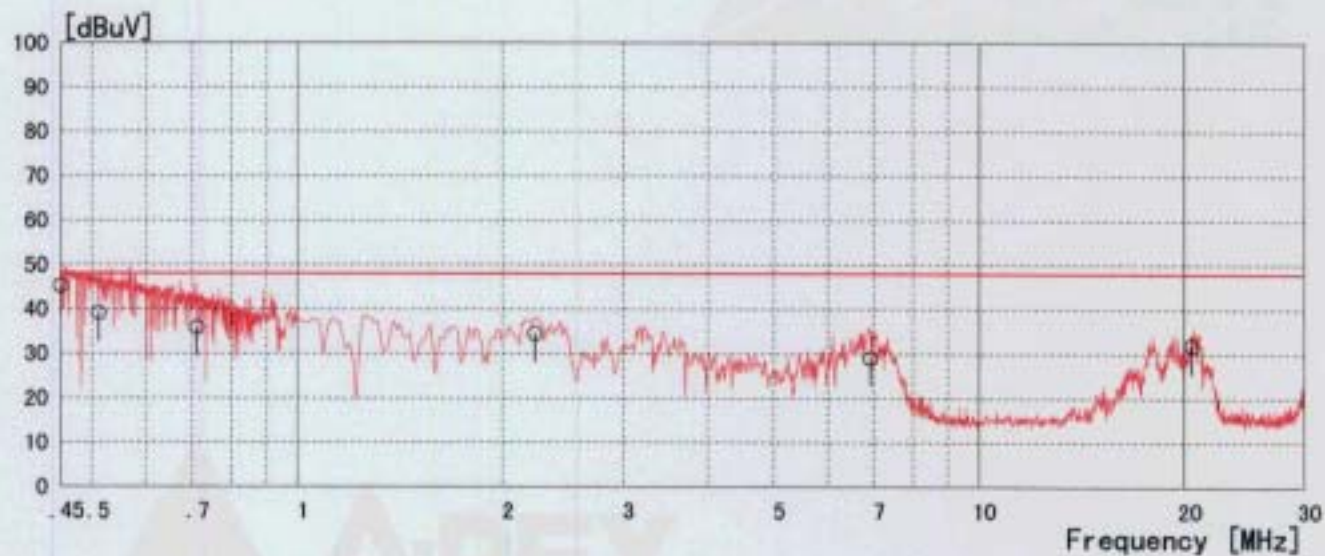
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : VIDEO CASSETTE RECORDER
MODEL NAME : MVR4041
OPERATION MODE : AV INPUT+REC
POWER : AC120V/60Hz
LINE : N
REMARKS : 5Vp-p INPUT

REPORT No. : 21KE0002-KT
DATE : JUNE 07, 2001
REGULATION : FCC PART15 SUBPART B
TEST NO. : 7

TEST ENGINEER: HISAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV [dBuV]		QP	AV [dBuV]	QP	AV [dBuV]	QP	AV [dB]
1	0.450	44.8	—	0.4	45.2	—	48.0	—	2.8	—
2	0.512	38.8	—	0.3	39.1	—	48.0	—	8.9	—
3	0.711	35.5	—	0.3	35.8	—	48.0	—	12.2	—
4	2.233	34.2	—	0.3	34.5	—	48.0	—	13.5	—
5	6.934	28.5	—	0.5	29.0	—	48.0	—	19.0	—
6	20.530	31.0	—	0.8	31.8	—	48.0	—	16.2	—

RESULT=READING+CABLE LOSS+CLAMP FACTOR



DATA OF CONDUCTIONA-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

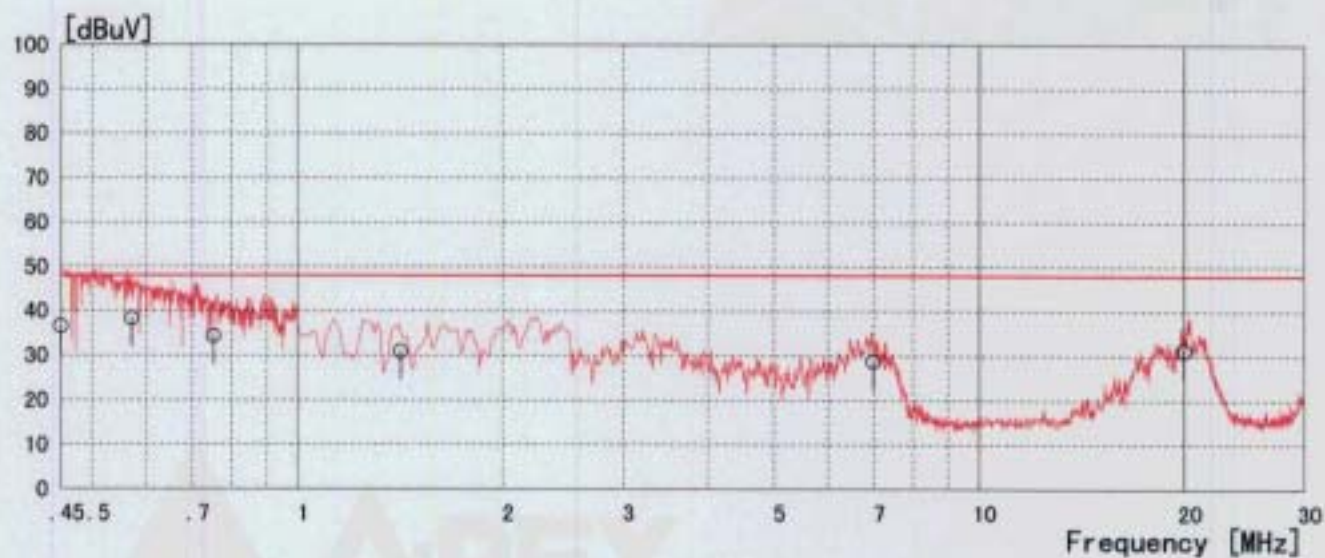
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPEMENT : VIDEO CASSETTE RECORDER
MODEL NAME : MVR4041
OPERATION MODE : AV INPUT+REC
POWER : AC120V/60Hz
LINE : L
REMARKS : 5Vp-p INPUT

REPORT No. : 21KE0002-KT
DATE : JUNE 07, 2001
REGULATION : FCC PART15 SUBPART B
TEST NO. : 8

TEST ENGINEER: HITSUYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	0.450	36.2	---	0.4	36.6	---	48.0	---	11.4	---
2	0.571	38.0	---	0.3	38.3	---	48.0	---	9.7	---
3	0.753	34.1	---	0.3	34.4	---	48.0	---	13.6	---
4	1.417	30.7	---	0.2	30.9	---	48.0	---	17.1	---
5	6.997	28.3	---	0.5	28.8	---	48.0	---	19.2	---
6	20.000	30.3	---	0.8	31.1	---	48.0	---	16.9	---

RESULT=READING+CABLE LOSS+CLAMP FACTOR



DATA OF CONDUCTIONA-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

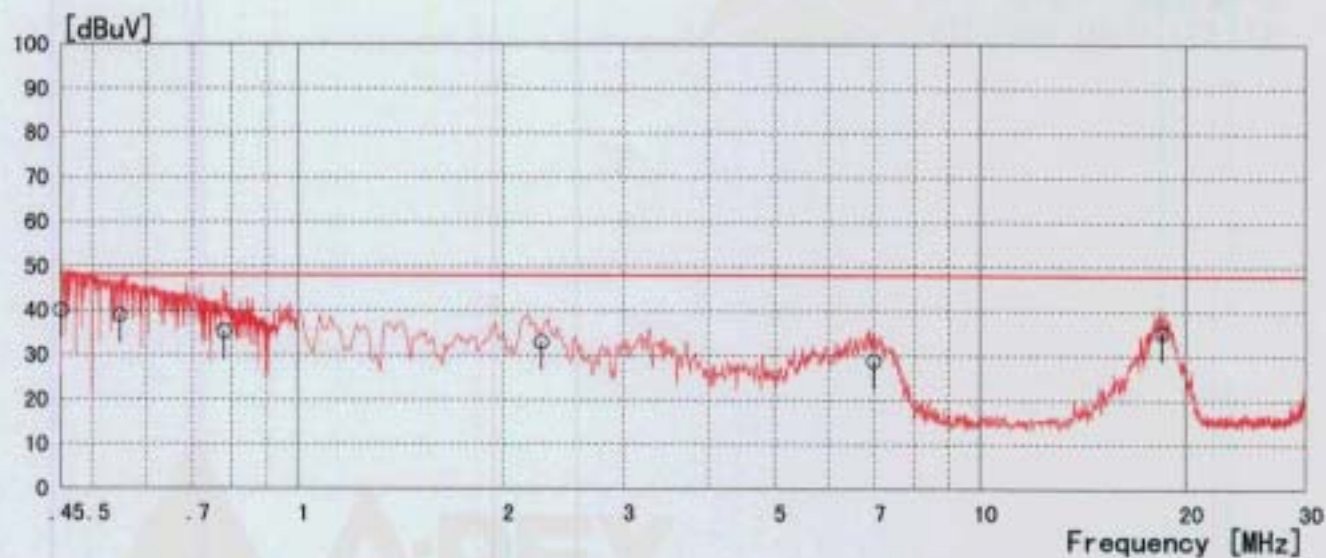
COMPANY : ORION ELECTRIC CO., LTD.
 EQUIPEMENT : VIDEO CASSETTE RECORDER
 MODEL NAME : MVR4041
 OPERATION MODE : PLAYBACK
 POWER : AC120V/60Hz
 LINE : N
 REMARKS : -

REPORT No. : 21KE0002-KT
 DATE : JUNE 07, 2001
 REGULATION : FCC PART15 SUBPART B
 TEST NO. : 10

TEST ENGINEER: HISAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	0.450	39.7	----	0.4	40.1	----	48.0	----	7.9	----
2	0.549	38.7	----	0.3	39.0	----	48.0	----	9.0	----
3	0.779	35.0	----	0.3	35.3	----	48.0	----	12.7	----
4	2.276	32.7	----	0.3	33.0	----	48.0	----	15.0	----
5	6.992	28.3	----	0.5	28.8	----	48.0	----	19.2	----
6	18.500	34.3	----	0.8	35.1	----	48.0	----	12.9	----

RESULT=READING+CABLE LOSS+CLAMP FACTOR



DATA OF CONDUCTIONA-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

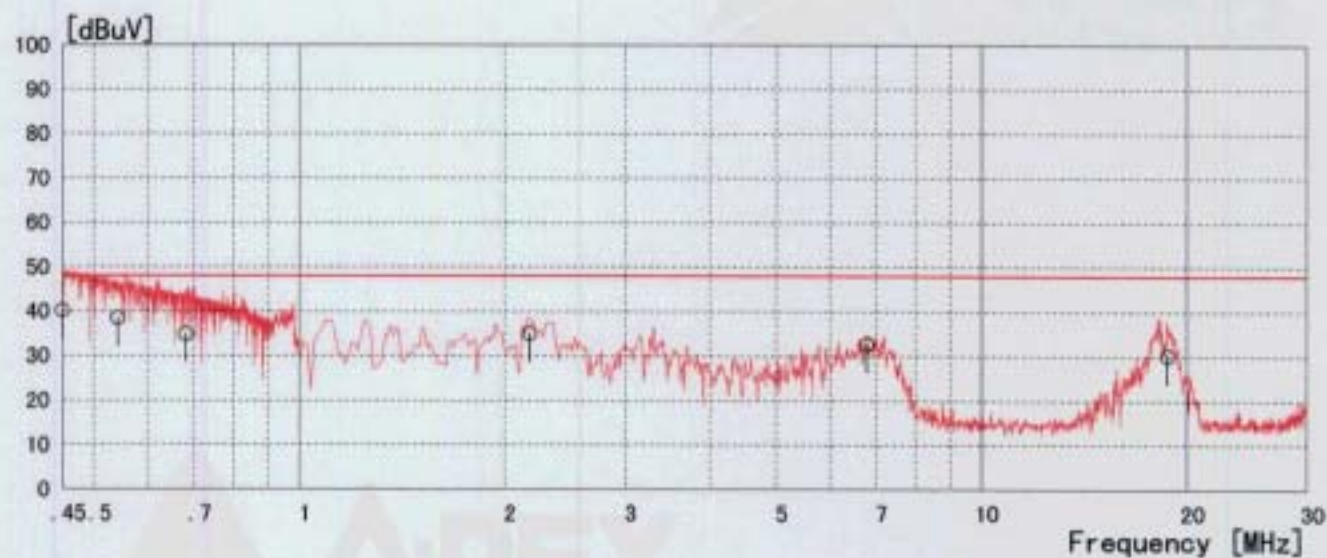
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : VIDEO CASSETTE RECORDER
MODEL NAME : MVR4041
OPERATION MODE : PLAYBACK
POWER : AC120V/60Hz
LINE : L
REMARKS : -

REPORT No. : 21KE0002-KT
DATE : JUNE 07, 2001
REGULATION : FCC PART15 SUBPART B
TEST NO. : 9

TEST ENGINEER: HISAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	0.450	39.8	---	0.4	40.2	---	48.0	---	7.8	---
2	0.542	38.2	---	0.3	38.5	---	48.0	---	9.5	---
3	0.682	34.6	---	0.3	34.9	---	48.0	---	13.1	---
4	2.176	34.7	---	0.3	35.0	---	48.0	---	13.0	---
5	6.797	32.2	---	0.5	32.7	---	48.0	---	15.3	---
6	18.730	29.4	---	0.8	30.2	---	48.0	---	17.8	---

RESULT=READING+CABLE LOSS+CLAMP FACTOR



DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
 YOKOWA No.1 OPEN TEST SITE
 Report No. : 21KE0002-KT

Applicant : ORION ELECTRIC CO., LTD.
 Kind of Equipment : VIDEO CASSETTE RECORDER
 Model No. : MVR4041
 Serial No. :
 Power : AC120V/60Hz
 Mode : MAXIMUM OPERATION
 Remarks : TEST CHANNEL #3
 Date : 6/15/2001
 Test Distance : 3 m
 Temperature : 20 °C
 Humidity : 60 %
 Regulation : FCC Part15B CLASS B


 Engineer : Seigo Kakehi

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER [dB μ V]					HOR [dB μ V/m]	VER [dB μ V/m]		HOR [dB]	VER [dB]
1.	61.25	BB	27.6	34.8	7.3	29.9	1.6	5.7	12.3	19.5	40.0	27.7	20.5
2.	65.75	BB	30.5	37.4	6.7	29.9	1.7	5.7	14.7	21.6	40.0	25.3	18.4
3.	122.50	BB	24.3	25.1	13.2	29.8	2.4	5.7	15.8	16.6	43.5	27.7	26.9
4.	245.00	BB	22.9	22.8	16.4	29.9	3.7	5.7	18.8	18.7	46.0	27.2	27.3

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

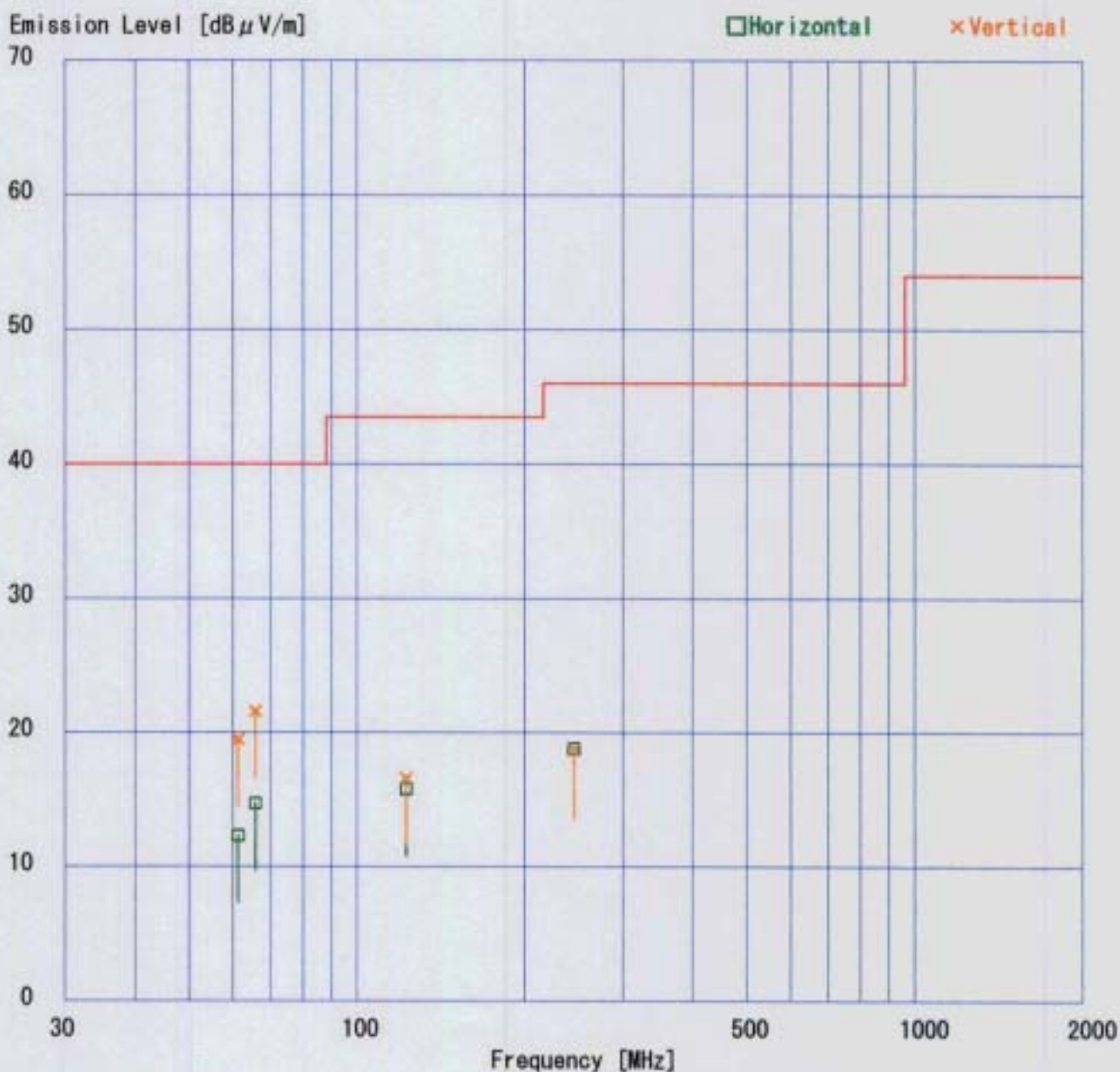
Except for the above table: adequate margin data below the limits.
 ANT. TYPE: 30-300MHz Biconical, 300-1000MHz Logperiodic, 1-2GHz Horn

DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.1 OPEN TEST SITE
Report No. : 21KE0002-KT

Applicant : ORION ELECTRIC CO., LTD.
Kind of Equipment : VIDEO CASSETTE RECORDER
Model No. : MVR4041
Serial No. :
Power : AC120V/60Hz
Mode : MAXIMUM OPERATION
Remarks : TEST CHANNEL #3
Date : 6/15/2001
Test Distance : 3 m
Temperature : 20 °C
Humidity : 60 %
Regulation : FCC Part15B CLASS B


Engineer : Seigo Kakehi



DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
 YOKOWA No.1 OPEN TEST SITE
 Report No. : 21KE0002-KT

Applicant : ORION ELECTRIC CO., LTD.
 Kind of Equipment : VIDEO CASSETTE RECORDER
 Model No. : MVR4041
 Serial No. :
 Power : AC120V/60Hz
 Mode : MAXIMUM OPERATION
 Remarks : TEST CHANNEL #4
 Date : 6/15/2001
 Test Distance : 3 m
 Temperature : 20 °C
 Humidity : 60 %
 Regulation : FCC Part15B CLASS B


 Engineer : Seigo Kakehi

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER [dB μ V]					HOR [dB μ V/m]	VER [dB μ V/m]		HOR [dB]	VER [dB]
1.	67.25	BB	32.7	31.6	6.5	29.9	1.7	5.7	16.7	15.6	40.0	23.3	24.4
2.	71.75	BB	36.4	35.0	6.1	29.9	1.8	5.7	20.1	18.7	40.0	19.9	21.3
3.	134.50	BB	24.1	26.6	13.7	29.8	2.6	5.7	16.3	18.8	43.5	27.2	24.7
4.	201.75	BB	21.5	21.6	15.9	29.8	3.2	5.7	16.5	16.6	43.5	27.0	26.9

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

Except for the above table: adequate margin data below the limits.

ANT. TYPE: 30-300MHz Biconical, 300-1000MHz Logperiodic, 1-2GHz Horn

DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
 YOKOWA No.1 OPEN TEST SITE
 Report No. : 21KE0002-KT

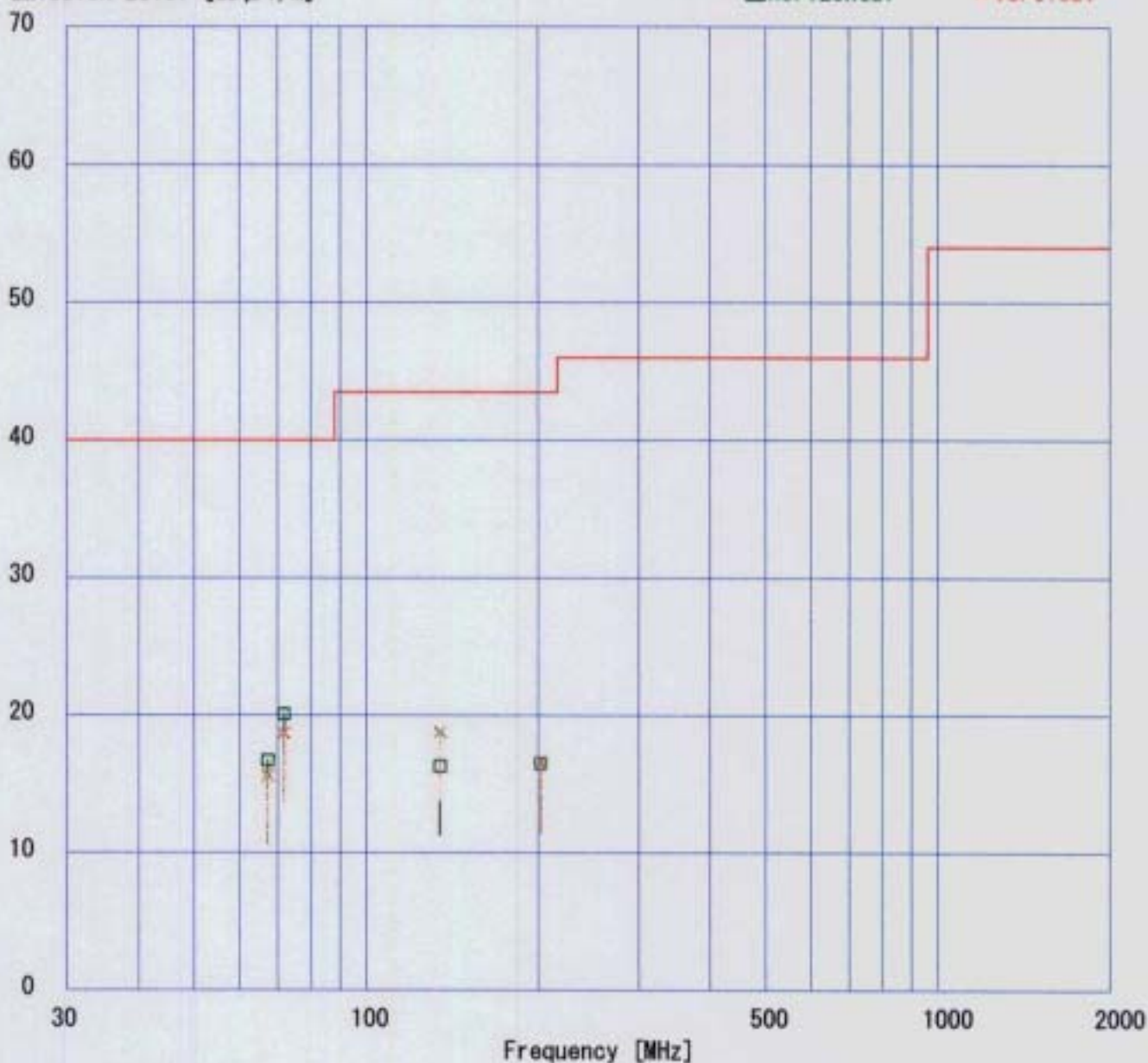
Applicant : ORION ELECTRIC CO., LTD.
 Kind of Equipment : VIDEO CASSETTE RECORDER
 Model No. : MVR4041
 Serial No. :
 Power : AC120V/60Hz
 Mode : MAXIMUM OPERATION
 Remarks : TEST CHANNEL #4
 Date : 6/15/2001
 Test Distance : 3 m
 Temperature : 20 °C
 Humidity : 60 %
 Regulation : FCC Part15B CLASS B


 Engineer : Seigo Kakehi

Emission Level [dB μ V/m]

□ Horizontal

× Vertical



DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
 YOKOWA No.1 OPEN TEST SITE
 Report No. : 21KE0002-KT

Applicant : ORION ELECTRIC CO., LTD.
 Kind of Equipment : VIDEO CASSETTE RECORDER
 Model No. : MVR4041
 Serial No. :
 Power : AC120V/60Hz
 Mode : MAXIMUM OPERATION
 Remarks : OTHER
 Date : 6/15/2001
 Test Distance : 3 m
 Temperature : 20 °C
 Humidity : 60 %
 Regulation : FCC Part15B CLASS B


 Engineer : Seigo Kakehi

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER [dB μ V]					HOR [dB μ V/m]	VER [dB μ V/m]		HOR [dB]	VER [dB]
1.	42.50	BB	33.6	35.6	13.7	30.0	1.3	5.7	24.3	26.3	40.0	15.7	13.7
2.	64.23	BB	34.1	40.4	6.9	29.9	1.7	5.7	18.5	24.8	40.0	21.5	15.2
3.	69.50	BB	33.9	41.3	6.2	29.9	1.7	5.7	17.6	25.0	40.0	22.4	15.0
4.	70.24	BB	34.0	35.1	6.1	29.9	1.7	5.7	17.6	18.7	40.0	22.4	21.3
5.	93.27	BB	39.8	41.3	8.4	29.9	2.1	5.7	26.1	27.6	43.5	17.4	15.9
6.	105.79	BB	29.1	34.3	10.8	29.9	2.2	5.7	17.9	23.1	43.5	25.6	20.4
7.	320.00	BB	22.7	22.8	16.5	30.1	4.2	5.7	19.0	19.1	46.0	27.0	26.9

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

Except for the above table: adequate margin data below the limits.
 ANT. TYPE: 30-300MHz Biconical, 300-1000MHz Logperiodic, 1-2GHz Horn

DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.1 OPEN TEST SITE
Report No. : 21KE0002-KT

Applicant : ORION ELECTRIC CO., LTD.
Kind of Equipment : VIDEO CASSETTE RECORDER
Model No. : MVR4041
Serial No. :
Power : AC120V/60Hz
Mode : MAXIMUM OPERATION
Remarks : OTHER
Date : 6/15/2001
Test Distance : 3 m
Temperature : 20 °C
Humidity : 60 %
Regulation : FCC Part15B CLASS B


Engineer : Seigo Kakehi

Emission Level [dB μ V/m]

□ Horizontal

× Vertical

70

60

50

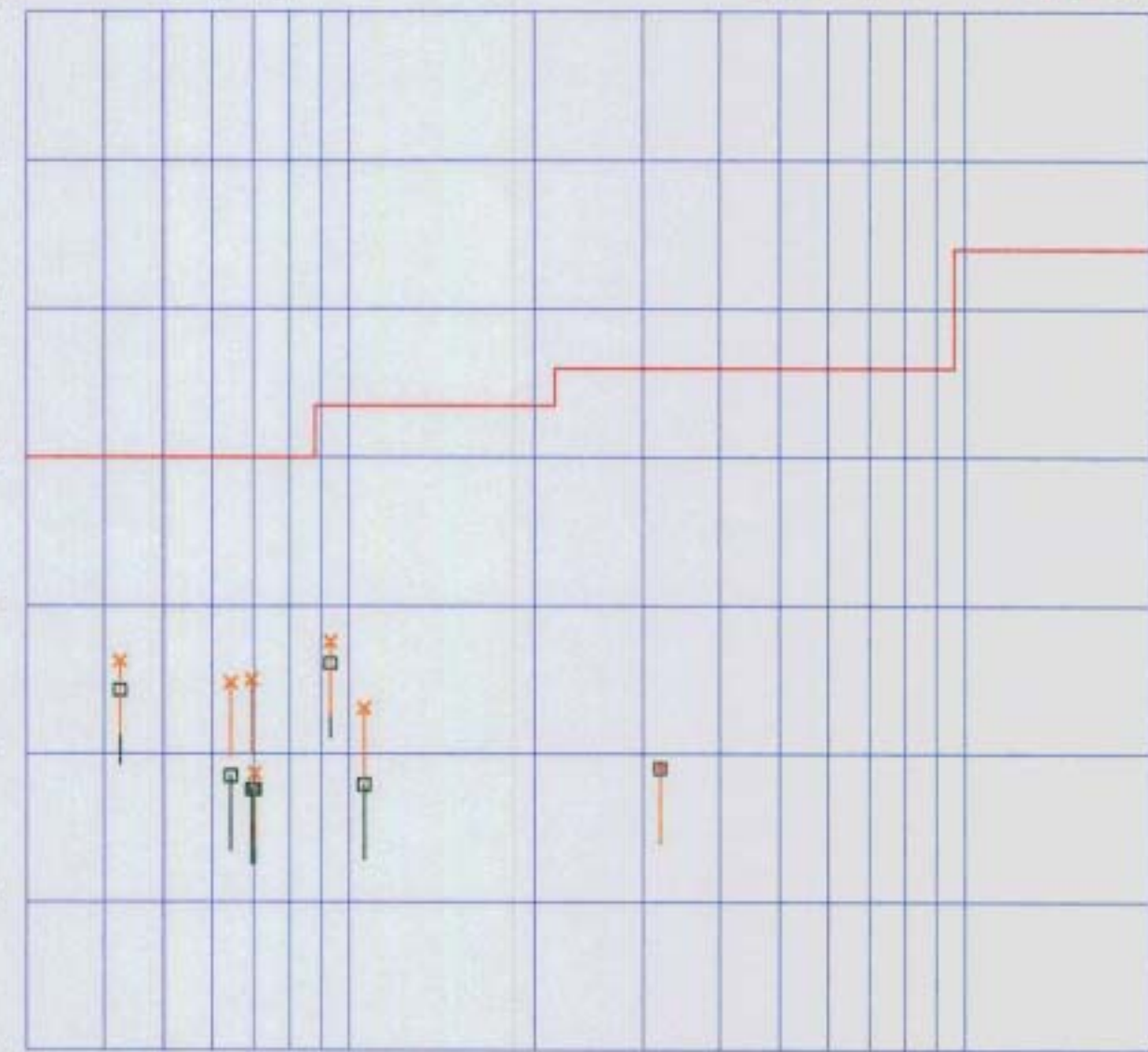
40

30

20

10

0



Frequency [MHz]

DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
 YOKOWA NO.1 OPEN TEST SITE

COMPANY : ORION ELECTRIC CO., LTD.
 EQUIPMENT : VIDEO CASSETTE RECORDER
 MODEL No. : MVR4041
 POWER : AC120V/60Hz
 DESCRIPTION : TV RECEPTION MODE

REPORT No. : 21KE0002-KT
 REGULATION : FCC PART15 B
 TEST DISTANCE : 3m
 ATTENUATION : 101-847MHz 6dB
 1034-1694MHz 0dB
 DATE : June 14, 2001


 ENGINEER : Seigo Kakehi

CH	FREQ	READING		ANT TYPE	ANT. FAC.	CABLE LOSS	AMP GAIN	RESULTS		LIMIT	MARGIN	
	[MHz]	HOR.	VER.					[dBuV]	HOR.		VER.	[dBuV/m]
VHF Fundamental												
2	101	24.8	25.3	BC	10.1	2.2	29.9	13.2	13.7	43.5	30.3	29.8
3	107	24.4	27.7	BC	11.0	2.3	29.9	13.8	17.1	43.5	29.7	26.4
4	113	25.4	28.4	BC	12.0	2.3	29.9	15.8	18.8	43.5	27.7	24.7
5	123	24.2	26.3	BC	13.2	2.5	29.8	16.1	18.2	43.5	27.4	25.3
6	129	23.7	24.5	BC	13.5	2.5	29.8	15.9	16.7	43.5	27.6	26.8
7	221	22.6	22.6	BC	16.2	3.4	29.8	18.4	18.4	46.0	27.6	27.6
8	227	22.7	22.5	BC	16.2	3.5	29.8	18.6	18.4	46.0	27.4	27.6
9	233	22.1	22.0	BC	16.3	3.5	29.9	18.0	17.9	46.0	28.0	28.1
10	239	22.1	22.1	BC	16.4	3.6	29.9	18.2	18.2	46.0	27.8	27.8
11	245	22.1	22.3	BC	16.4	3.7	29.9	18.3	18.5	46.0	27.7	27.5
12	251	22.1	22.0	BC	16.5	3.7	29.9	18.4	18.3	46.0	27.6	27.7
13	257	22.5	23.3	BC	16.8	3.8	29.9	19.2	20.0	46.0	26.8	26.0
VHF 2nd Harmonic												
2	202	21.8	21.9	BC	15.9	3.2	29.8	17.1	17.2	43.5	26.4	26.3
3	214	22.3	22.1	BC	16.1	3.3	29.8	17.9	17.7	43.5	25.6	25.8
4	226	22.4	22.4	BC	16.2	3.4	29.8	18.2	18.2	46.0	27.8	27.8
5	246	22.2	22.2	BC	16.5	3.7	29.9	18.5	18.5	46.0	27.5	27.5
6	258	21.9	21.9	BC	16.9	3.8	29.9	18.7	18.7	46.0	27.3	27.3
7	442	22.1	22.5	LP	18.4	5.1	30.1	21.5	21.9	46.0	24.5	24.1
8	454	21.9	21.9	LP	18.6	5.1	30.2	21.4	21.4	46.0	24.6	24.6
9	466	22.1	22.1	LP	18.9	5.2	30.2	22.0	22.0	46.0	24.0	24.0
10	478	22.1	23.0	LP	19.1	5.3	30.2	22.3	23.2	46.0	23.7	22.8
11	490	22.2	22.1	LP	19.3	5.4	30.2	22.7	22.6	46.0	23.3	23.4
12	502	22.6	22.9	LP	19.5	5.5	30.1	23.5	23.8	46.0	22.5	22.2
13	514	24.0	25.6	LP	19.6	5.6	30.1	25.1	26.7	46.0	20.9	19.3

DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA NO.1 OPEN TEST SITE

COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : VIDEO CASSETTE RECORDER
MODEL No. : MVR4041
POWER : AC120V/60Hz
DESCRIPTION : TV RECEPTION MODE

REPORT No. : 21KE0002-KT
REGULATION : FCC PART15 B
TEST DISTANCE : 3m
ATTENUATION : 101-847MHz 6dB
1034-1694MHz 0dB
DATE : June 14, 2001


ENGINEER : Seigo Kakehi

CH.	FREQ	READING		ANT TYPE	ANT. FAC.	CABLE LOSS	AMP GAIN	RESULTS		LIMIT	MARGIN	
	[MHz]	HOR.	VER.					[dBuV]	HOR.		VER.	[dBuV/m]
CATV Fundamental												
1	119	24.1	28.9	BC	12.9	2.4	29.8	15.6	20.4	43.5	27.9	23.1
95	137	24.2	25.9	BC	13.8	2.6	29.8	16.8	18.5	43.5	26.7	25.0
97	149	24.5	23.2	BC	14.4	2.7	29.8	17.8	16.5	43.5	25.7	27.0
99	161	22.7	22.6	BC	14.9	2.8	29.8	16.6	16.5	43.5	26.9	27.0
14	167	22.3	22.9	BC	15.2	2.9	29.9	16.5	17.1	43.5	27.0	26.4
18	191	22.2	22.5	BC	15.9	3.1	29.8	17.4	17.7	43.5	26.1	25.8
22	215	23.4	22.4	BC	16.1	3.3	29.8	19.0	18.0	43.5	24.5	25.5
23	263	22.0	22.0	BC	17.1	3.8	29.9	19.0	19.0	46.0	27.0	27.0
29	299	22.0	22.5	BC	18.8	4.1	30.0	20.9	21.4	46.0	25.1	24.6
36	341	22.1	22.0	LP	16.8	4.5	30.1	19.3	19.2	46.0	26.7	26.8
37	347	22.1	22.0	LP	16.9	4.6	30.1	19.5	19.4	46.0	26.5	26.6
65	515	22.6	22.8	LP	19.6	5.6	30.1	23.7	23.9	46.0	22.3	22.1
94	689	21.7	21.8	LP	21.9	6.7	30.3	26.0	26.1	46.0	20.0	19.9
100	695	21.4	21.4	LP	22.0	6.7	30.2	25.9	25.9	46.0	20.1	20.1
113	773	21.5	21.5	LP	23.3	7.2	29.8	28.2	28.2	46.0	17.8	17.8
125	845	21.5	21.6	LP	24.0	7.5	29.6	29.4	29.5	46.0	16.6	16.5
CATV 2nd Harmonic												
1	238	22.1	22.1	BC	16.4	3.6	29.9	18.2	18.2	46.0	27.8	27.8
95	274	21.8	21.8	BC	17.6	3.9	29.9	19.4	19.4	46.0	26.6	26.6
97	298	21.8	21.8	BC	18.7	4.1	30.0	20.6	20.6	46.0	25.4	25.4
99	322	21.8	21.8	LP	16.5	4.2	30.1	18.4	18.4	46.0	27.6	27.6
14	334	22.0	21.9	LP	16.7	4.4	30.1	19.0	18.9	46.0	27.0	27.1
18	382	21.9	21.8	LP	17.3	4.8	30.1	19.9	19.8	46.0	26.1	26.2
22	430	22.2	22.3	LP	18.2	5.1	30.1	21.4	21.5	46.0	24.6	24.5
23	526	21.9	21.8	LP	19.7	5.6	30.2	23.0	22.9	46.0	23.0	23.1
29	598	21.8	21.9	LP	20.1	6.1	30.3	23.7	23.8	46.0	22.3	22.2
36	682	22.1	21.9	LP	21.7	6.6	30.3	26.1	25.9	46.0	19.9	20.1
37	694	21.4	21.4	LP	22.0	6.7	30.2	25.9	25.9	46.0	20.1	20.1
65	1030	30.0	30.0	HO	23.7	4.4	35.4	22.7	22.7	54.0	31.3	31.3
94	1378	29.9	29.9	HO	24.8	5.1	34.9	24.9	24.9	54.0	29.1	29.1
100	1390	30.1	30.1	HO	24.8	5.1	34.9	25.1	25.1	54.0	28.9	28.9
113	1546	29.8	29.8	HO	25.4	5.4	34.7	25.9	25.9	54.0	28.1	28.1
125	1690	29.6	29.5	HO	26.2	5.7	34.6	26.9	26.8	54.0	27.1	27.2

DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA NO.1 OPEN TEST SITE

COMPANY : ORION ELECTRIC CO., LTD.
 EQUIPMENT : VIDEO CASSETTE RECORDER
 MODEL No. : MVR4041
 POWER : AC120V/60Hz
 DESCRIPTION : TV RECEPTION MODE

REPORT No. : 21KE0002-KT
 REGULATION : FCC PART15 B
 TEST DISTANCE : 3m
 ATTENUATION : 101-847MHz 6dB
 1034-1694MHz 0dB
 DATE : June 14, 2001


 ENGINEER : Seigo Kakehi

CH	FREQ	READINGG		ANT TYPE	ANT. FAC.	CABLE LOSS	AMP GAIN	RESULTS		LIMIT	MARGIN	
	[MHz]	HOR.	VER.					HOR.	VER.		HOR.	VER.
UHF Fundamental												
14	517	28.6	29.2	LP	19.6	5.6	30.1	29.7	30.3	46.0	16.3	15.7
19	547	24.1	26.9	LP	19.8	5.8	30.2	25.5	28.3	46.0	20.5	17.7
28	601	26.2	27.7	LP	20.1	6.1	30.3	28.1	29.6	46.0	17.9	16.4
36	649	26.0	28.4	LP	21.1	6.5	30.3	29.3	31.7	46.0	16.7	14.3
44	697	26.3	28.3	LP	22.0	6.7	30.2	30.8	32.8	46.0	15.2	13.2
53	751	25.7	27.5	LP	22.9	7.0	29.9	31.7	33.5	46.0	14.3	12.5
61	799	23.1	24.2	LP	23.7	7.2	29.6	30.4	31.5	46.0	15.6	14.5
69	847	24.1	26.4	LP	24.0	7.6	29.6	32.1	34.4	46.0	13.9	11.6
UHF 2nd Harmonic												
14	1034	34.5	35.2	HO	23.7	4.5	35.4	27.3	28.0	54.0	26.7	26.0
19	1094	40.9	38.1	HO	23.9	4.6	35.3	34.1	31.3	54.0	19.9	22.7
28	1202	49.3	49.8	HO	24.2	4.8	35.1	43.2	43.7	54.0	10.8	10.3
36	1298	42.3	40.3	HO	24.6	4.9	35.0	36.8	34.8	54.0	17.2	19.2
44	1394	38.1	42.1	HO	24.9	5.1	34.9	33.2	37.2	54.0	20.8	16.8
53	1502	46.0	45.1	HO	25.2	5.3	34.7	41.8	40.9	54.0	12.2	13.1
61	1598	45.3	44.5	HO	25.7	5.5	34.6	41.9	41.1	54.0	12.1	12.9
69	1694	38.6	37.8	HO	26.2	5.7	34.6	35.9	35.1	54.0	18.1	18.9

DATA OF ANTENNA TERMINAL TEST

A-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

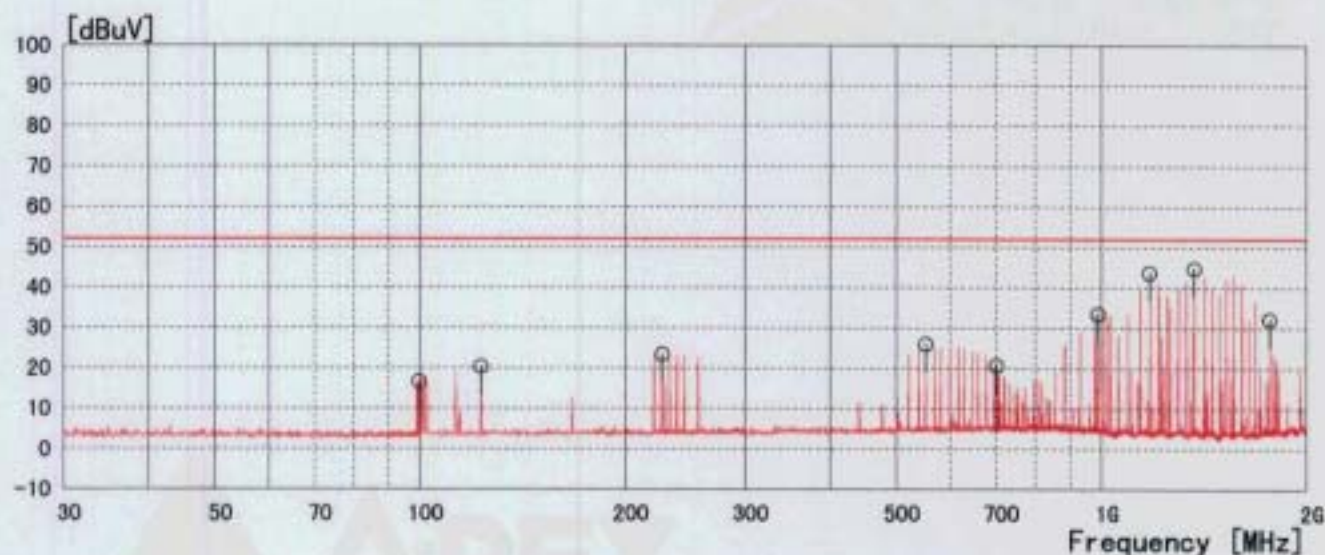
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : VIDEO CASSETTE RECORDER
MODEL NAME : MVR4041
OPERATION MODE: TUNING
PORT : ANTENNA TERMINAL
POWER : AC120V/60Hz
REMARKS : TV MODE

REPORT No. : 21KE0002-KT
DATE : JUNE 08, 2001
REGULATION : FCC PART15 SUBPART B
TEST NO. : 1

TEST ENGINEER: HITSAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV [dBuV]		QP	AV [dBuV]	QP	AV [dBuV]	QP	AV [dB]
1	99.700	36.5	—	-19.9	16.6	—	52.0	—	35.4	—
2	122.900	40.1	—	-19.8	20.3	—	52.0	—	31.7	—
3	226.900	42.9	—	-19.5	23.4	—	52.0	—	28.6	—
4	552.600	44.9	—	-18.9	25.9	—	52.0	—	26.1	—
5	702.600	39.4	—	-18.7	20.7	—	52.0	—	31.3	—
6	989.700	51.8	—	-18.4	33.4	—	52.0	—	18.6	—
7	1177.900	70.2	—	-26.6	43.6	—	52.0	—	8.4	—
8	1370.000	71.1	—	-26.4	44.7	—	52.0	—	7.3	—
9	1767.100	57.9	—	-25.8	32.2	—	52.0	—	19.8	—

RESULT=READING+CABLE LOSS+PAD LOSS-AMP. GAIN



DATA OF ANTENNA TERMINAL TEST

A-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

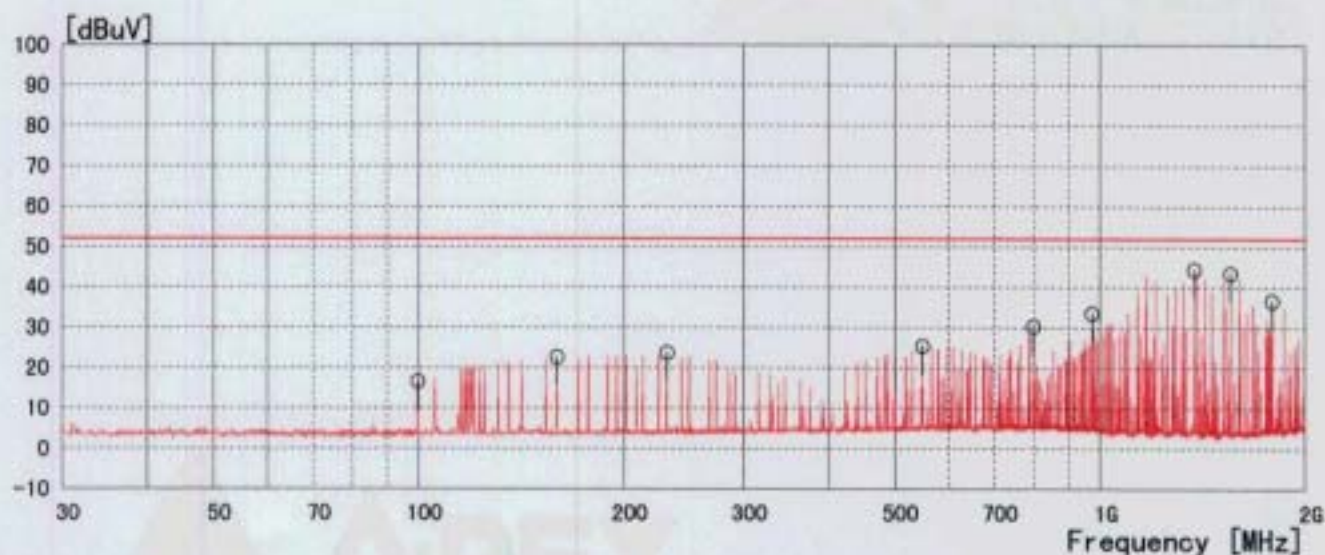
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : VIDEO CASSETTE RECORDER
MODEL NAME : MVR4041
OPERATION MODE : TUNING
PORT : ANTENNA TERMINAL
POWER : AC120V/60Hz
REMARKS : CATV MODE

REPORT No. : 21KE0002-KT
DATE : JUNE 08, 2001
REGULATION : FCC PART15 SUBPART B
TEST NO. : 2

TEST ENGINEER: HISAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	99.800	36.4	----	-19.9	16.6	----	52.0	----	35.4	----
2	159.700	42.2	----	-19.6	22.6	----	52.0	----	29.4	----
3	231.700	43.1	----	-19.4	23.7	----	52.0	----	28.3	----
4	549.100	44.3	----	-18.9	25.4	----	52.0	----	26.6	----
5	799.400	48.8	----	-18.6	30.2	----	52.0	----	21.8	----
6	974.700	51.9	----	-18.4	33.5	----	52.0	----	18.5	----
7	1375.700	70.8	----	-26.4	44.4	----	52.0	----	7.6	----
8	1555.000	69.7	----	-26.2	43.4	----	52.0	----	8.6	----
9	1790.700	62.3	----	-25.7	36.6	----	52.0	----	15.4	----

RESULT=READING+CABLE LOSS+PAD LOSS-AMP. GAIN



SRURIOUS FROM RF OUTPUT TERMINAL

A-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

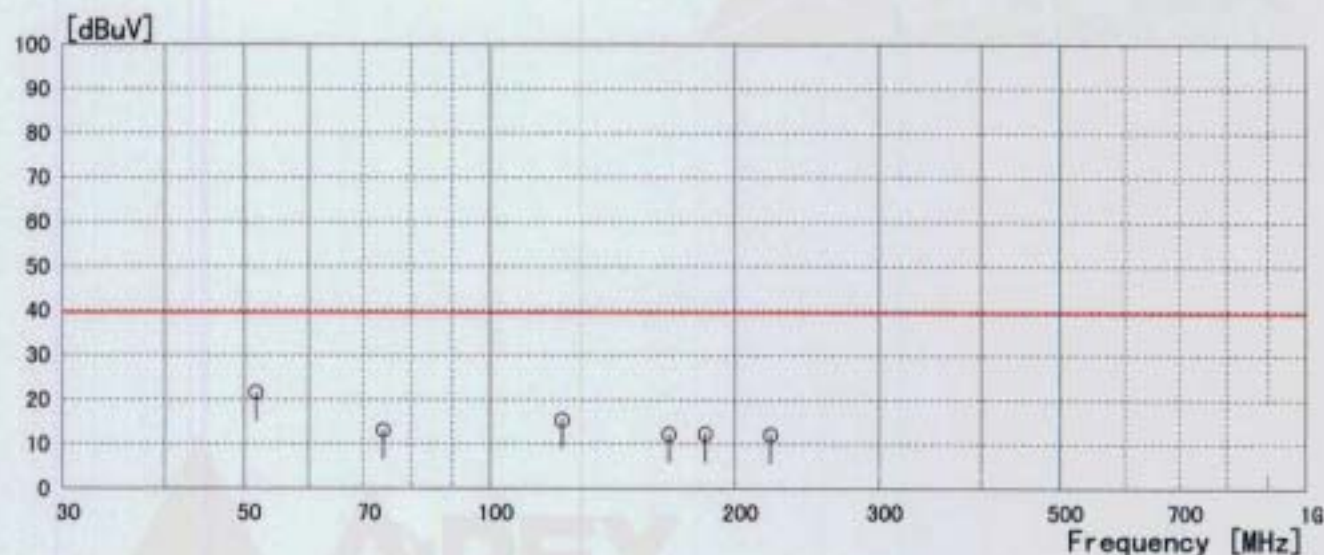
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : VIDEO CASSETTE RECORDER
MODEL NAME : MVR4041
OPERATION MODE : RECEIVE+REC (3CH OUTPUT)
PORT : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 0dBmV

REPORT No. : 21KE0002-KT
DATE : JUNE 08, 2001
REGULATION : FCC PART15 SUBPART B
TEST NO. : 1

TEST ENGINEER: HISAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	51.740	41.9	—	-20.4	21.5	—	39.5	—	18.0	—
2	74.110	33.4	—	-20.4	13.0	—	39.5	—	26.5	—
3	122.770	35.7	—	-20.4	15.4	—	39.5	—	24.1	—
4	166.030	32.5	—	-20.4	12.2	—	39.5	—	27.3	—
5	184.000	32.6	—	-20.4	12.3	—	39.5	—	27.2	—
6	221.230	32.4	—	-20.3	12.1	—	39.5	—	27.4	—

RESULT=READING+CABLE LOSS+PAD LOSS-AMP. GAIN



SRURIOUS FROM RF OUTPUT TERMINALA-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

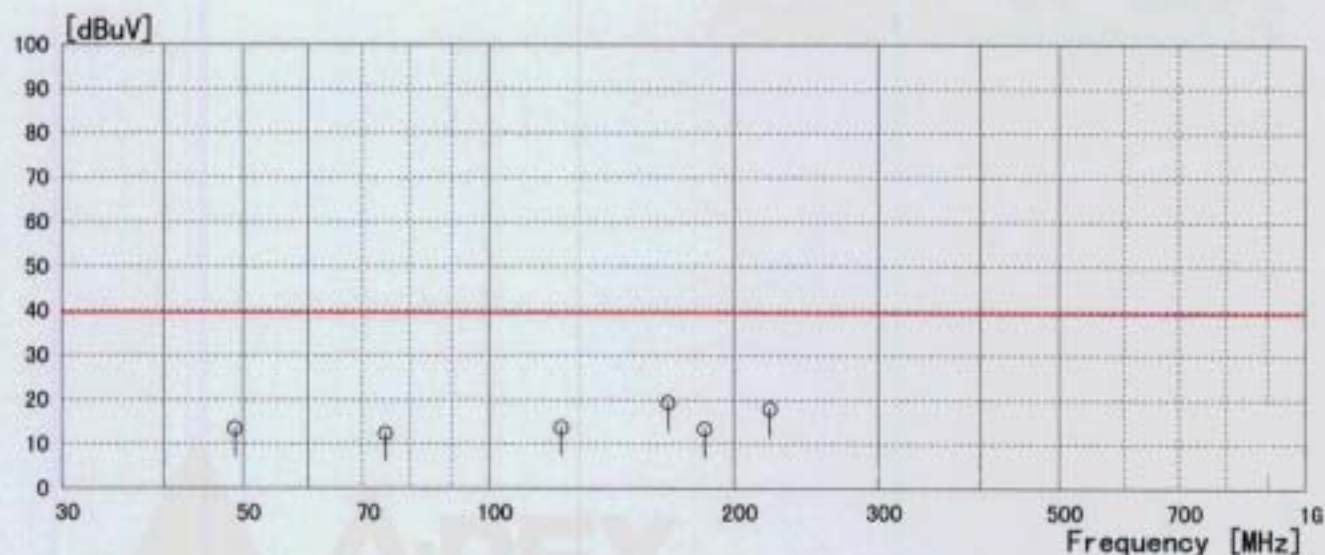
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPEMENT : VIDEO CASSETTE RECORDER
MODEL NAME : MVR4041
OPERATION MODE : RECEIVE+REC (3CH OUTPUT)
PORT : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 25dBmV
:

REPORT No. : 21KE0002-KT
DATE : JUNE 08, 2001
REGULATION : FCC PART15 SUBPART B
TEST NO. : 2

TEST ENGINEER: HISAYUKI KITOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV [dBuV]		QP	AV [dBuV]	QP	AV [dBuV]	QP	AV [dB]
1	48.880	33.8	—	-20.4	13.4	—	39.5	—	26.1	—
2	74.770	32.7	—	-20.4	12.4	—	39.5	—	27.2	—
3	122.740	34.0	—	-20.4	13.7	—	39.5	—	25.8	—
4	166.030	39.6	—	-20.4	19.3	—	39.5	—	20.2	—
5	184.030	33.7	—	-20.4	13.4	—	39.5	—	26.1	—
6	221.230	38.3	—	-20.3	17.9	—	39.5	—	21.6	—

RESULT=READING+CABLE LOSS+PAD LOSS-AMP. GAIN



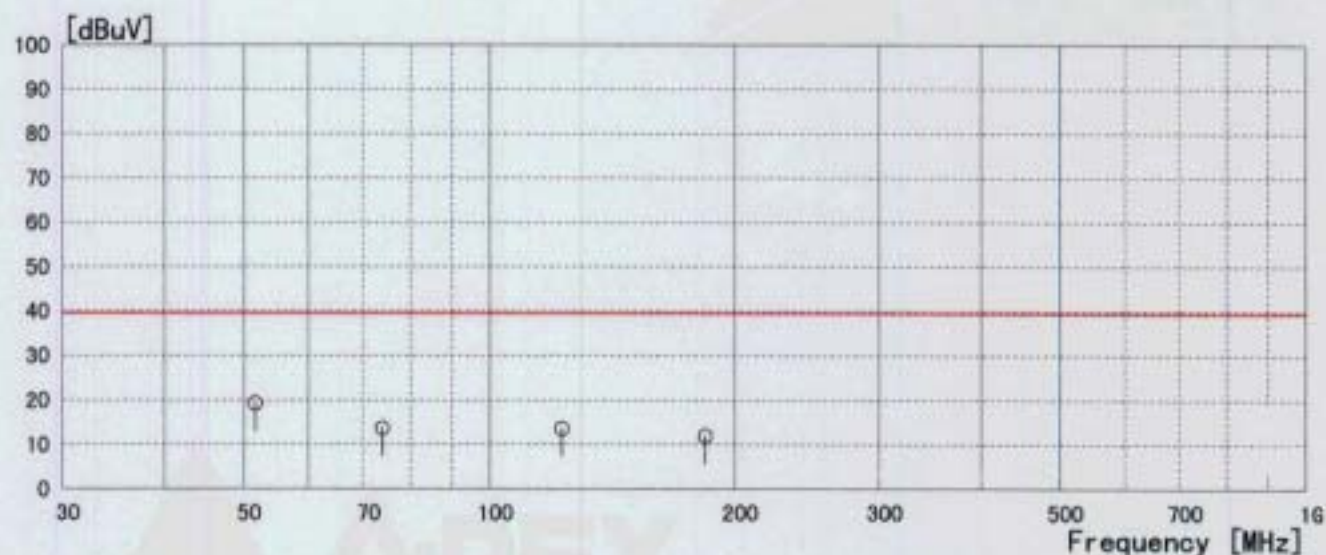
SRURIOUS FROM RF OUTPUT TERMINALA-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

COMPANY : ORION ELECTRIC CO., LTD.
 EQUIPEMENT : VIDEO CASSETTE RECORDER
 MODEL NAME : MVR4041
 OPERATION MODE : AV INPUT+REC (3CH OUTPUT)
 PORT : RF OUTPUT TERMINAL
 POWER : AC120V/60Hz
 REMARKS : 1Vp-p

REPORT No. : 21KE0002-KT
 DATE : JUNE 08, 2001
 REGULATION : FCC PART15 SUBPART B
 TEST NO. : 5

TEST ENGINEER: HTSAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	51.690	39.6	—	-20.4	19.2	—	39.5	—	20.3	—
2	73.980	34.0	—	-20.4	13.7	—	39.5	—	25.8	—
3	122.740	34.0	—	-20.4	13.6	—	39.5	—	25.9	—
4	184.000	32.3	—	-20.4	11.9	—	39.5	—	27.6	—

 RESULT=READING+CABLE LOSS+PAD LOSS-AMP. GAIN


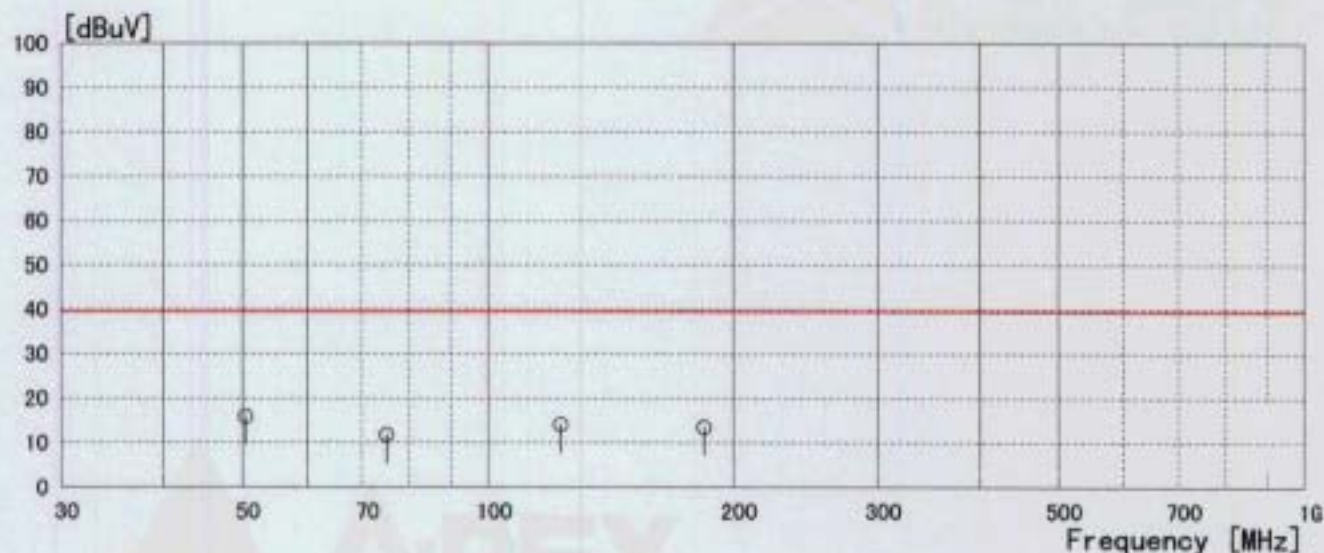
SRURIOUS FROM RF OUTPUT TERMINALA-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

COMPANY : ORION ELECTRIC CO., LTD.
 EQUIPMENT : VIDEO CASSETTE RECORDER
 MODEL NAME : MVR4041
 OPERATION MODE : AV INPUT+REC (3CH OUTPUT)
 PORT : RF OUTPUT TERMINAL
 POWER : AC120V/60Hz
 REMARKS : 5Vp-p

REPORT No. : 21KE0002-KT
 DATE : JUNE 08, 2001
 REGULATION : FCC PART15 SUBPART B
 TEST NO. : 6


 TEST ENGINEER: HISAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	50.460	36.2	—	-20.4	15.9	—	39.5	—	23.6	—
2	75.110	32.1	—	-20.4	11.8	—	39.5	—	27.8	—
3	122.730	34.5	—	-20.4	14.1	—	39.5	—	25.4	—
4	184.000	33.8	—	-20.4	13.4	—	39.5	—	26.1	—

 RESULT=READING+CABLE LOSS+PAD LOSS-AMP. GAIN


SRURIOUS FROM RF OUTPUT TERMINALA-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

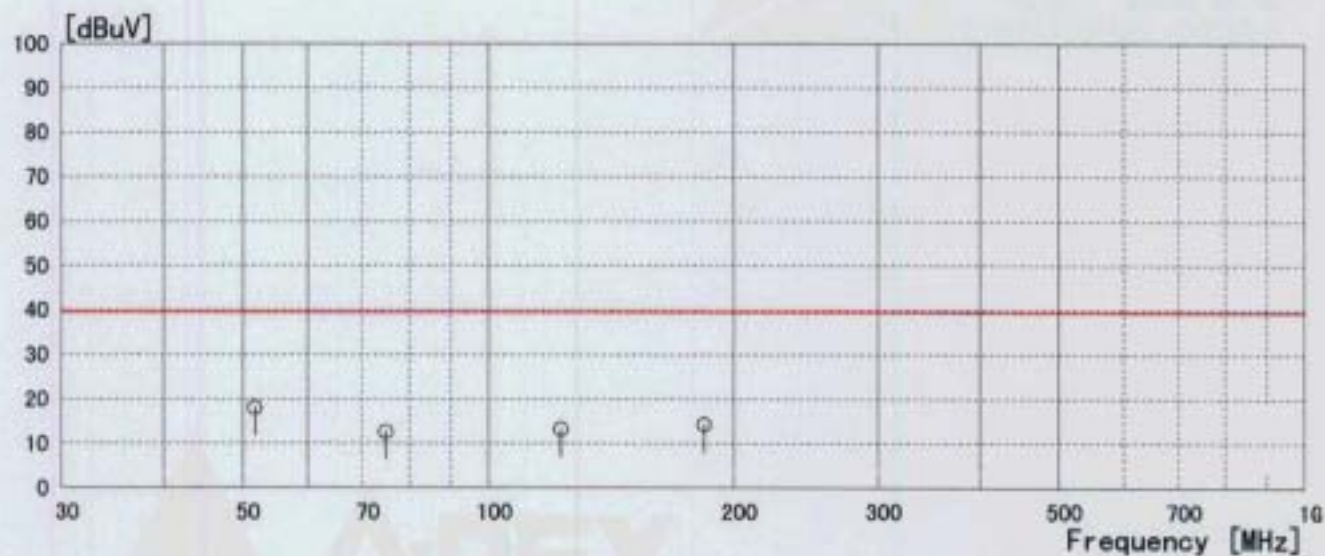
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : VIDEO CASSETTE RECORDER
MODEL NAME : MVR4041
OPERATION MODE : PLAYBACK (3CH OUTPUT)
PORT : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : -

REPORT No. : 21KE0002-KT
DATE : JUNE 08, 2001
REGULATION : FCC PART15 SUBPART B
TEST NO. : 9

TEST ENGINEER: RITSUYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	51.750	38.4	—	-20.4	18.0	—	39.5	—	21.5	—
2	74.940	33.0	—	-20.4	12.6	—	39.5	—	26.9	—
3	122.740	33.6	—	-20.4	13.2	—	39.5	—	26.3	—
4	183.970	34.5	—	-20.4	14.2	—	39.5	—	25.3	—

RESULT=READING+CABLE LOSS+PAD LOSS-AMP. GAIN



SRURIOUS FROM RF OUTPUT TERMINALA-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

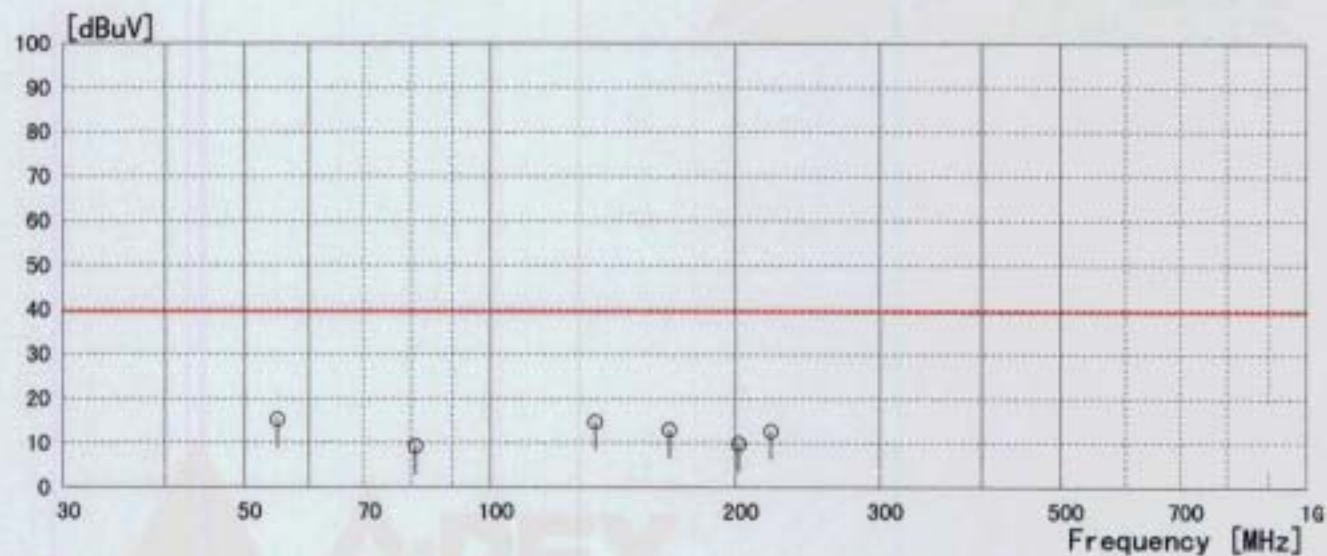
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : VIDEO CASSETTE RECORDER
MODEL NAME : MVR4041
OPERATION MODE : RECEIVE+REC (4CH OUTPUT)
PORT : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : OdBmV

REPORT No. : 21KE0002-KT
DATE : JUNE 08, 2001
REGULATION : FCC PART15 SUBPART B
TEST NO. : 3

TEST ENGINEER: HYSAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	54.910	35.6	—	-20.4	15.2	—	39.5	—	24.3	—
2	81.060	29.6	—	-20.4	9.3	—	39.5	—	30.3	—
3	134.620	35.1	—	-20.4	14.7	—	39.5	—	24.8	—
4	166.020	33.3	—	-20.4	12.9	—	39.5	—	26.6	—
5	201.960	30.2	—	-20.3	9.8	—	39.5	—	29.7	—
6	221.230	33.0	—	-20.3	12.7	—	39.5	—	26.8	—

RESULT=READING+CABLE LOSS+PAD LOSS-AMP. GAIN



SRURIOUS FROM RF OUTPUT TERMINALA-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

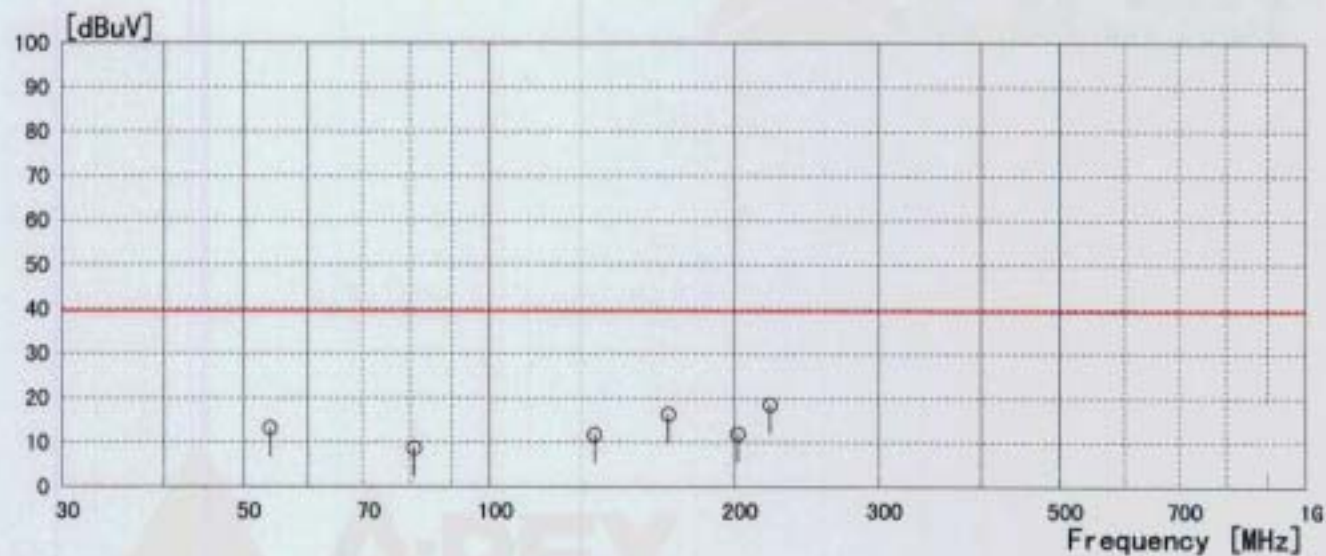
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : VIDEO CASSETTE RECORDER
MODEL NAME : MVR4041
OPERATION MODE : RECEIVE+REC (4CH OUTPUT)
PORT : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 25dBmV

REPORT No. : 21KE0002-KT
DATE : JUNE 08, 2001
REGULATION : FCC PART15 SUBPART B
TEST NO. : 4

TEST ENGINEER: HIRAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	53.940	33.5	—	-20.4	13.2	—	39.5	—	26.3	—
2	80.940	29.0	—	-20.4	8.7	—	39.5	—	30.8	—
3	134.710	32.1	—	-20.4	11.7	—	39.5	—	27.8	—
4	165.970	36.6	—	-20.4	16.3	—	39.5	—	23.2	—
5	201.950	32.2	—	-20.3	11.9	—	39.5	—	27.6	—
6	221.230	38.8	—	-20.3	18.5	—	39.5	—	21.0	—

RESULT=READING+CABLE LOSS+PAD LOSS-AMP. GAIN



SRURIOUS FROM RF OUTPUT TERMINALA-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

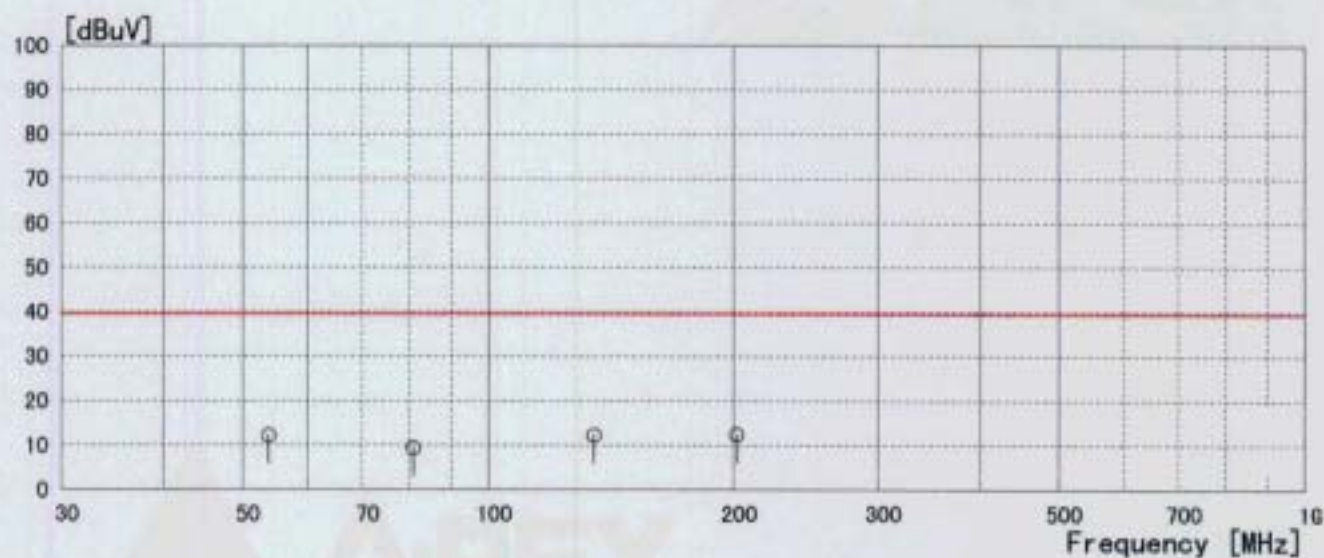
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPEMENT : VIDEO CASSETTE RECORDER
MODEL NAME : MVR4041
OPERATION MODE : AV INPUT+REC (4CH OUTPUT)
PORT : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 1Vp-p

REPORT No. : 21KE0002-KT
DATE : JUNE 08, 2001
REGULATION : FCC PART15 SUBPART B
TEST NO. : 7

TEST ENGINEER: HYSAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	53.830	32.5	—	-20.4	12.2	—	39.5	—	27.3	—
2	80.970	29.7	—	-20.4	9.3	—	39.5	—	30.2	—
3	134.730	32.6	—	-20.4	12.2	—	39.5	—	27.3	—
4	201.820	32.8	—	-20.3	12.4	—	39.5	—	27.1	—

RESULT=READING+CABLE LOSS+PAD LOSS-AMP. GAIN



SRURIOUS FROM RF OUTPUT TERMINALA-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

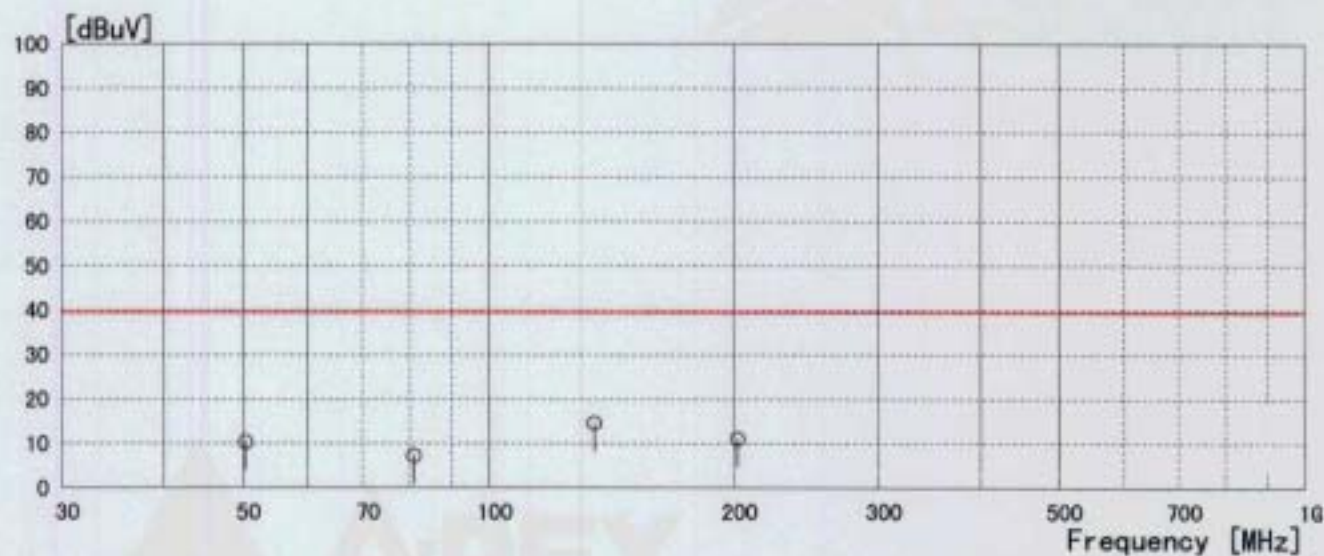
COMPANY : ORION ELECTRIC CO., LTD.
 EQUIPEMENT : VIDEO CASSETTE RECORDER
 MODEL NAME : MVR4041
 OPERATION MODE : AV INPUT+REC (4CH OUTPUT)
 PORT : RF OUTPUT TERMINAL
 POWER : AC120V/60Hz
 REMARKS : 5Vp-p

REPORT No. : 21KE0002-KT
 DATE : JUNE 08, 2001
 REGULATION : FCC PART15 SUBPART B
 TEST NO. : 8

TEST ENGINEER: HISAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	50.340	30.6	—	-20.4	10.3	—	39.5	—	29.2	—
2	80.940	27.6	—	-20.4	7.3	—	39.5	—	32.3	—
3	134.690	34.9	—	-20.4	14.5	—	39.5	—	25.0	—
4	201.950	31.4	—	-20.3	11.0	—	39.5	—	28.5	—

RESULT=READING+CABLE LOSS+PAD LOSS-AMP. GAIN



SRURIOUS FROM RF OUTPUT TERMINALA-PEX INTERNATIONAL CO., LTD.
KANTO OFFICE EMC LAB.

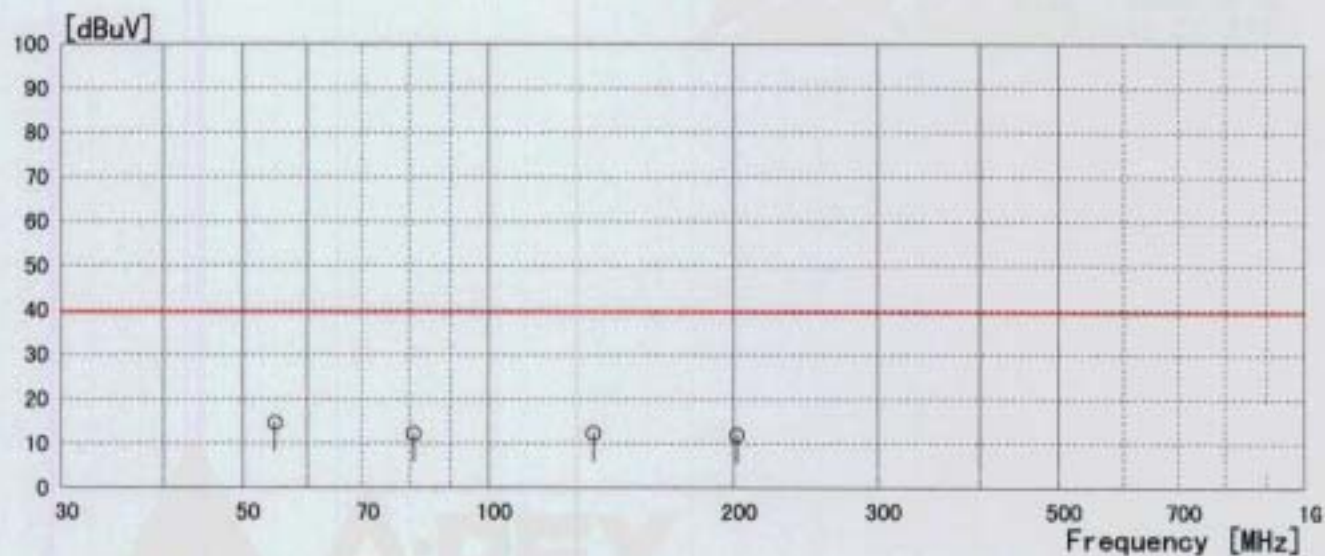
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : VIDEO CASSETTE RECORDER
MODEL NAME : MVR4041
OPERATION MODE : PLAYBACK (4CH OUTPUT)
PORT : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : -

REPORT No. : 21KE0002-KT
DATE : JUNE 08, 2001
REGULATION : FCC PART15 SUBPART B
TEST NO. : 10

TEST ENGINEER: HISAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	54.830	34.9	—	-20.4	14.6	—	39.5	—	24.9	—
2	81.110	32.5	—	-20.4	12.1	—	39.5	—	27.4	—
3	134.620	32.7	—	-20.4	12.3	—	39.5	—	27.2	—
4	201.960	32.2	—	-20.3	11.9	—	39.5	—	27.6	—

RESULT=READING+CABLE LOSS+PAD LOSS-AMP. GAIN



RF output level

A-PEX INTERNATIONAL CO., LTD.

Kanto office EMC Lab.

Company : ORION ELECTRIC CO.,LTD.
 Equipment : Video Cassette Recorder
 Model number : MVR4041
 Power : AC 120 V / 60 Hz
 Description : Receive + Rec. mode (0 dBmV)

Report Number : 21KE0002-KT
 Regulation : FCC Part 15 Subpart B
 Date : June 08, 2001

Engineer


 : Hisayuki Kioka

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	85.8	20.4	65.4	69.5	4.1
4	67.25	86.3	20.4	65.9	69.5	3.6

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	69.6	20.4	49.2	56.5	7.3
	65.75	70.2	20.4	49.8	56.5	6.7
4	62.75	69.6	20.4	49.2	56.5	7.3
	71.75	69.6	20.4	49.2	56.5	7.3

RF output level

A-PEX INTERNATIONAL CO., LTD.
 Kanto office EMC Lab. _____

Company : ORION ELECTRIC CO.,LTD.
 Equipment : Video Cassette Recorder
 Model number : MVR4041
 Power : AC 120 V / 60 Hz
 Description : Receive + Rec. mode (25 dBmV)

Report Number : 21KE0002-KT
 Regulation : FCC Part 15 Subpart B
 Date : June 08, 2001

Engineer _____

: Hisayuki Kioka

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	84.2	20.4	63.8	69.5	5.7
4	67.25	86.1	20.4	65.7	69.5	3.8

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	69.2	20.4	48.8	56.5	7.7
	65.75	70.0	20.4	49.6	56.5	6.9
4	62.75	69.6	20.4	49.2	56.5	7.3
	71.75	69.6	20.4	49.2	56.5	7.3

RF output level

A-PEX INTERNATIONAL CO., LTD.
 Kanto office EMC Lab.

Company : ORION ELECTRIC CO.,LTD.
 Equipment : Video Cassette Recorder
 Model number : MVR4041
 Power : AC 120 V / 60 Hz
 Description : AV Input + Rec. mode (1 Vp-p)

Report Number : 21KE0002-KT
 Regulation : FCC Part 15 Subpart B
 Date : June 08, 2001

Engineer


 Hisayuki Kioka

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	85.9	20.4	65.5	69.5	4.0
4	67.25	85.1	20.4	64.7	69.5	4.8

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	69.6	20.4	49.2	56.5	7.3
	65.75	70.2	20.4	49.8	56.5	6.7
4	62.75	69.6	20.4	49.2	56.5	7.3
	71.75	69.6	20.4	49.2	56.5	7.3

RF output level

A-PEX INTERNATIONAL CO., LTD.
 Kanto office EMC Lab.

Company : ORION ELECTRIC CO.,LTD.
 Equipment : Video Cassette Recorder
 Model number : MVR4041
 Power : AC 120 V / 60 Hz
 Description : AV Input + Rec. mode (5 Vp-p)

Report Number : 21KE0002-KT
 Regulation : FCC Part 15 Subpart B
 Date : June 08, 2001

Engineer


 Hisayuki Kioka

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	85.9	20.4	65.5	69.5	4.0
4	67.25	84.3	20.4	63.9	69.5	5.6

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	69.6	20.4	49.2	56.5	7.3
	65.75	70.1	20.4	49.7	56.5	6.8
4	62.75	69.7	20.4	49.3	56.5	7.2
	71.75	69.6	20.4	49.2	56.5	7.3

RF output level

A-PEX INTERNATIONAL CO., LTD.

Kanto office EMC Lab.

Company : ORION ELECTRIC CO.,LTD.

Equipment : Video Cassette Recorder

Model number : MVR4041

Power : AC 120 V / 60 Hz

Description : Playback mode

Report Number : 21KE0002-KT

Regulation : FCC Part 15 Subpart B

Date : June 08, 2001

Engineer


 Hisayuki Kioka

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	84.7	20.4	64.3	69.5	5.2
4	67.25	84.6	20.4	64.2	69.5	5.3

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	69.5	20.4	49.1	56.5	7.4
	65.75	70.8	20.4	50.4	56.5	6.1
4	62.75	69.9	20.4	49.5	56.5	7.0
	71.75	69.9	20.4	49.5	56.5	7.0



Picture sensitivity test

A-PEX INTERNATIONAL CO., LTD.

Kanto office EMC Lab.

Company : ORION ELECTRIC CO., LTD.

Equipment : Video Cassette Recorder

Model number : MVR4041

Power : AC 120 V / 60 Hz

Description : Receive mode

Report Number : 21KE0002-KT

Regulation : FCC Part 15 Subpart B

Date : June 11, 2001

Engineer

Hisayuki Kioka

Ch.	Frequency	Sensitivity		Ch.	Frequency	Sensitivity	
[VHF]	[MHz]	[dBuV]	[uV]	[UHF]	[MHz]	[dBuV]	[uV]
2	55.25	20.0	10.0	14	471.25	29.4	29.5
6	83.25	22.0	12.6	44	651.25	29.2	28.8
7	175.25	22.2	12.9	69	801.25	29.0	30.2
13	211.25	23.2	14.5				
Average VHF			12.5	Average UHF			29.5
Average UHF/VHF : $20 \log \text{UHF}[\text{uV}]/\text{VHF}[\text{uV}] = 7.4 \text{ dB}$							
[Limit : 8.0 dB]							

Noise figure test

A-PEX INTERNATIONAL CO., LTD.
 Kanto office EMC Lab.

Company : ORION ELECTRIC CO.,LTD.
 Equipment : Video Cassette Recorder
 Model number : MVR4041
 Power : AC 120 V / 60 Hz
 Description : Receive mode

Report Number : 21KE0002-KT
 Regulation : FCC Part 15 Subpart B
 Date : June 11, 2001

Engineer


 : Hisayuki Kioka

Ch.	Frequency [MHz]	Meter reading [dB]	Correction factor [dB]	Noise figure [dB]	Limits [dB]	Margin [dB]
TV UHF Fundamental						
14	471.25	6.6	0.8	5.8	14.0	8.2
20	507.25	6.8	0.8	6.0	14.0	8.0
26	543.25	7.0	0.8	6.2	14.0	7.8
32	576.25	7.3	0.9	6.4	14.0	7.6
28	615.25	7.2	0.9	6.3	14.0	7.7
44	651.25	8.1	0.9	7.2	14.0	6.8
50	687.25	8.5	1.0	7.5	14.0	6.5
56	723.25	9.0	1.0	8.0	14.0	6.0
62	759.25	9.2	1.1	8.1	14.0	5.9
69	801.25	9.6	1.1	8.5	14.0	5.5