

Appendix 2 : Data of EMI tests

This section contains the following data.

Page 31 to Page 46 :	Conducted interference
Page 47 to Page 63 :	Radiated emission
Page 64 to Page 65 :	Antenna terminal voltage
Page 66 to Page 89 :	RF output level / spurious emission
Page 90 to Page 101 :	Antenna transfer switch
Page 102 :	Picture sensitivity
Page 103 :	Noise figure

DATA OF CONDUCTION

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

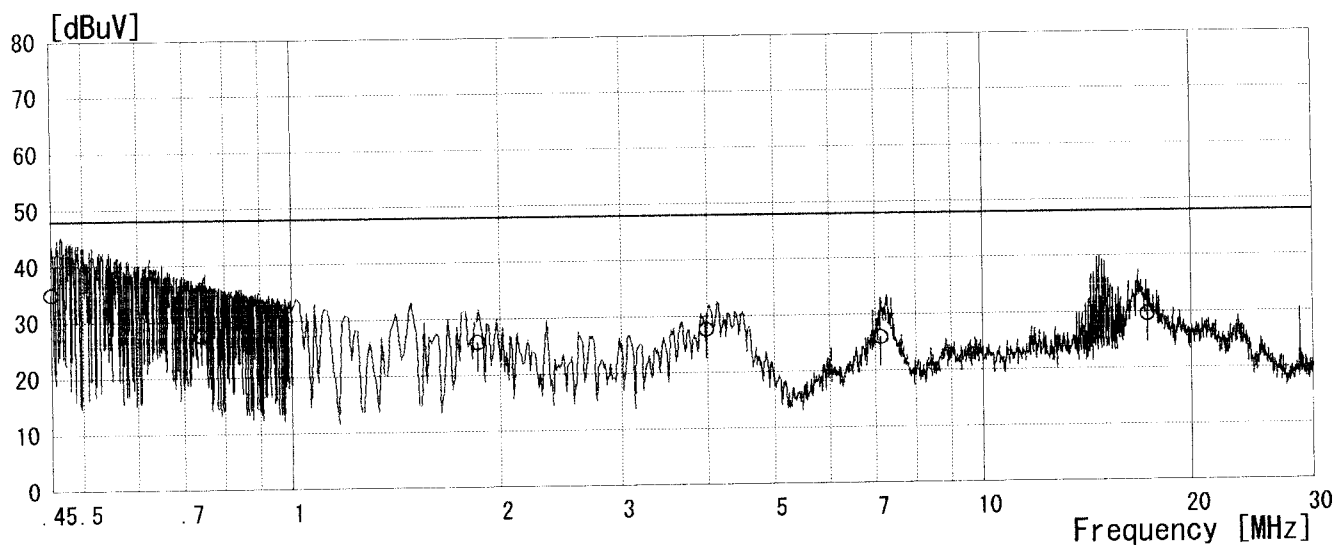
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : RECIEVE+VCR REC
POWER : AC120V/60Hz
LINE : N
REMARKS : 0dBmV input

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 07, 2002
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	34.4	----	0.5	34.9	----	48.0	----	13.1	----
2	0.740	27.0	----	0.4	27.4	----	48.0	----	20.6	----
3	1.856	25.3	----	0.4	25.7	----	48.0	----	22.3	----
4	3.982	27.1	----	0.5	27.6	----	48.0	----	20.4	----
5	7.110	25.3	----	0.6	25.9	----	48.0	----	22.1	----
6	17.283	28.8	----	0.8	29.6	----	48.0	----	18.4	----

RESULTS=READING+CABLE LOSS+LISN FACTOR



DATA OF CONDUCTION

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

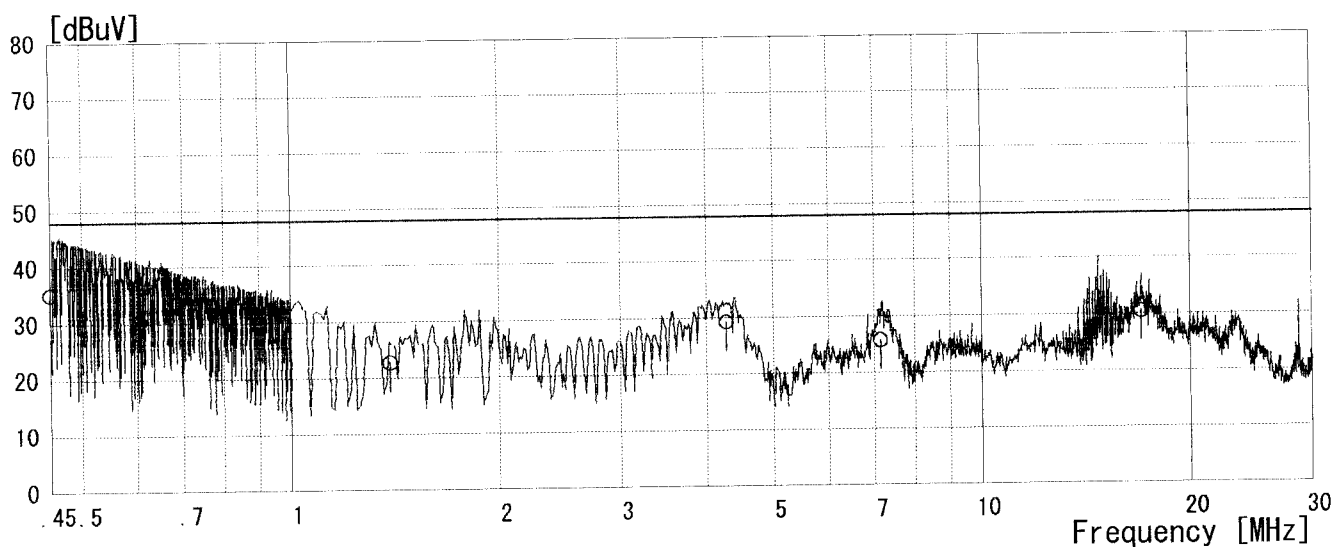
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : RECIEVE+VCR REC
POWER : AC120V/60Hz
LINE : L
REMARKS : 0dBmV input

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 07, 2002
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	34.6	----	0.5	35.1	----	48.0	----	12.9	----
2	0.605	29.8	----	0.4	30.2	----	48.0	----	17.8	----
3	1.392	22.3	----	0.4	22.7	----	48.0	----	25.3	----
4	4.269	28.7	----	0.5	29.2	----	48.0	----	18.8	----
5	7.137	25.1	----	0.6	25.7	----	48.0	----	22.3	----
6	17.016	29.5	----	1.0	30.5	----	48.0	----	17.5	----

RESULTS=READING+CABLE LOSS+LISN FACTOR



DATA OF CONDUCTION

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

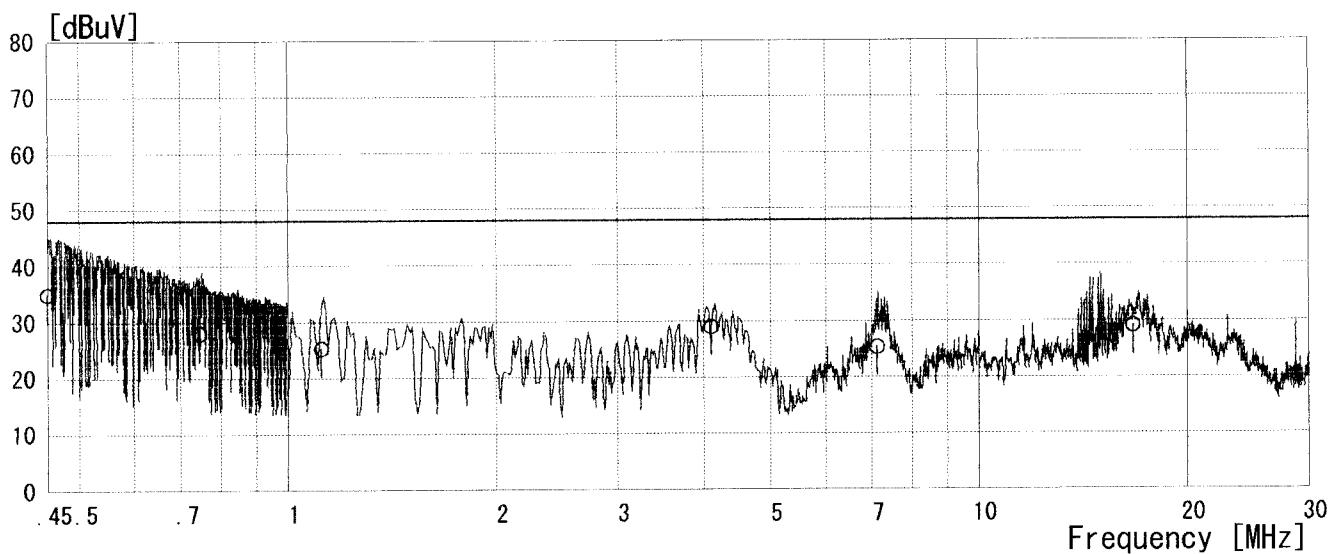
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : RECIEVE+VCR REC
POWER : AC120V/60Hz
LINE : N
REMARKS : 25dBmV input

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 07, 2002
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	34.4	----	0.5	34.9	----	48.0	----	13.1	----
2	0.747	27.5	----	0.4	27.9	----	48.0	----	20.1	----
3	1.119	24.8	----	0.4	25.2	----	48.0	----	22.8	----
4	4.105	28.4	----	0.5	28.9	----	48.0	----	19.1	----
5	7.128	24.7	----	0.6	25.3	----	48.0	----	22.7	----
6	16.700	28.2	----	0.8	29.0	----	48.0	----	19.0	----

RESULTS=READING+CABLE LOSS+LISN FACTOR



DATA OF CONDUCTION

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

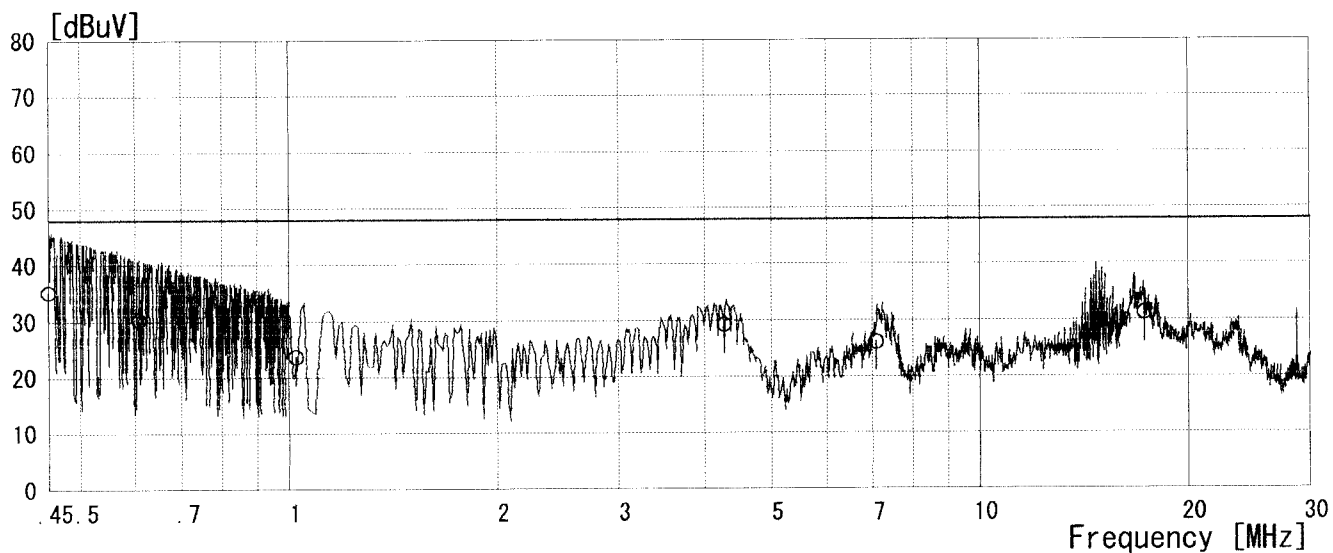
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : RECIEVE+VCR REC
POWER : AC120V/60Hz
LINE : L
REMARKS : 25dBmV input

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 07, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 3

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	34.6	----	0.5	35.1	----	48.0	----	12.9	----
2	0.608	29.8	----	0.4	30.2	----	48.0	----	17.8	----
3	1.023	23.2	----	0.4	23.6	----	48.0	----	24.4	----
4	4.269	28.7	----	0.5	29.2	----	48.0	----	18.8	----
5	7.083	25.5	----	0.6	26.1	----	48.0	----	21.9	----
6	17.280	30.2	----	1.0	31.2	----	48.0	----	16.8	----

RESULTS=READING+CABLE LOSS+LISN FACTOR



DATA OF CONDUCTION

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

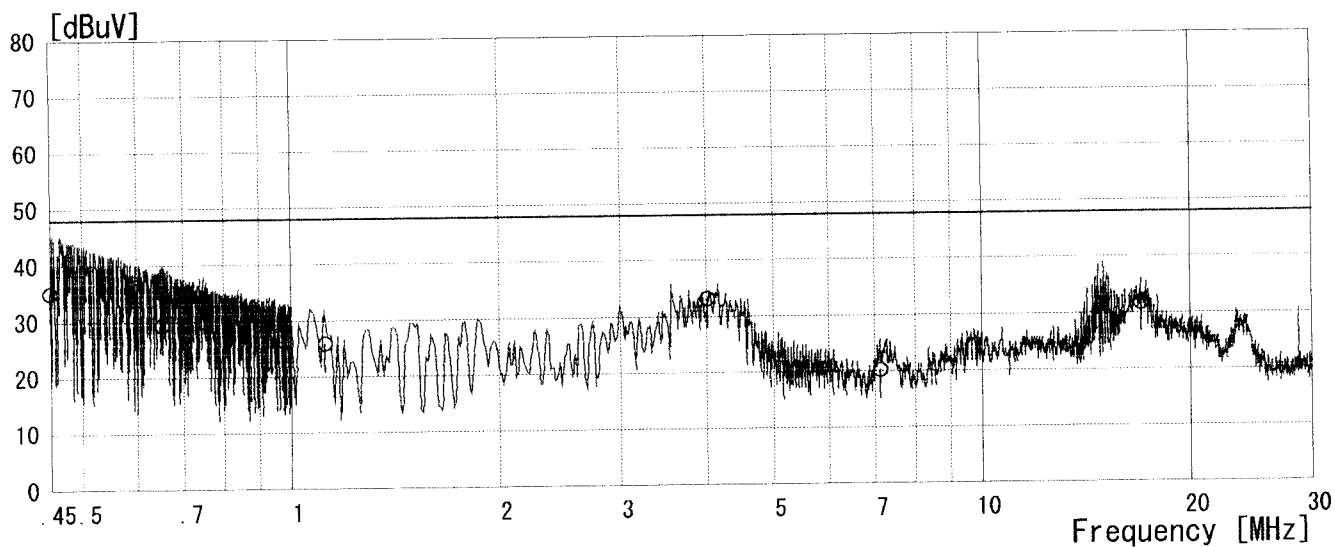
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV1+VCR REC
POWER : AC120V/60Hz
LINE : N
REMARKS : 1Vp-p input

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 07, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 5

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	34.5	----	0.5	35.0	----	48.0	----	13.0	----
2	0.653	28.8	----	0.4	29.2	----	48.0	----	18.8	----
3	1.122	25.4	----	0.4	25.8	----	48.0	----	22.2	----
4	4.016	32.6	----	0.5	33.1	----	48.0	----	14.9	----
5	7.126	19.5	----	0.6	20.1	----	48.0	----	27.9	----
6	17.000	31.0	----	0.8	31.8	----	48.0	----	16.2	----

RESULTS=READING+CABLE LOSS+LISN FACTOR



DATA OF CONDUCTION

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

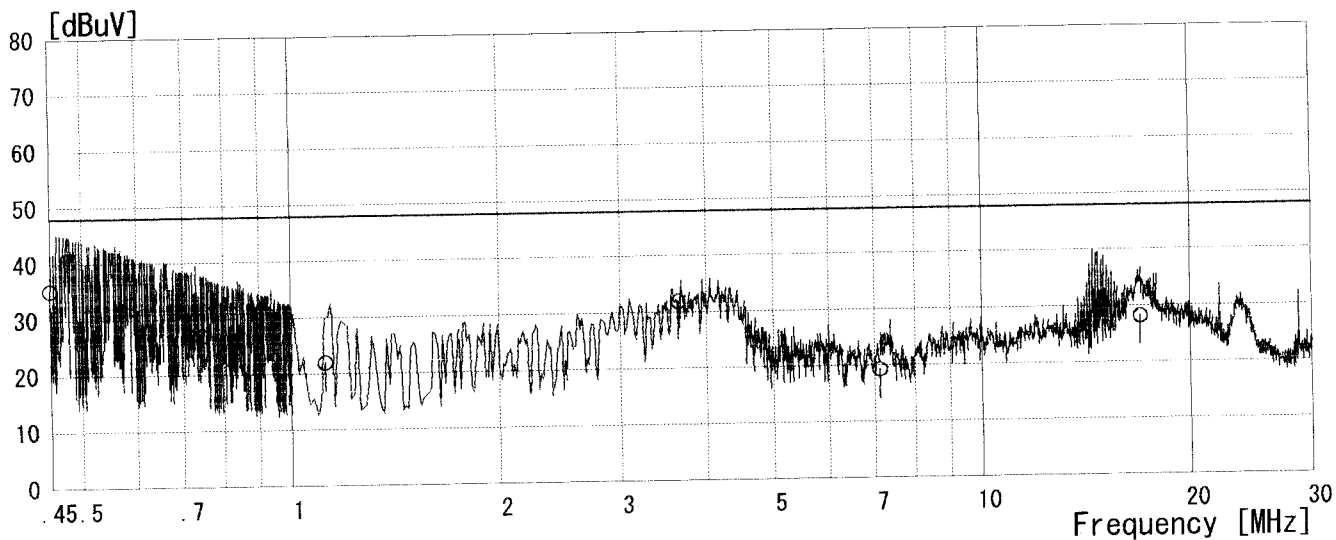
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV1+VCR REC
POWER : AC120V/60Hz
LINE : L
REMARKS : 1Vp-p input

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 07, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 7

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	34.7	---	0.5	35.2	---	48.0	---	12.8	---
2	0.744	26.5	---	0.4	26.9	---	48.0	---	21.1	---
3	1.120	21.5	---	0.4	21.9	---	48.0	---	26.1	---
4	3.641	31.4	---	0.5	31.9	---	48.0	---	16.1	---
5	7.110	18.6	---	0.6	19.2	---	48.0	---	28.8	---
6	16.950	27.2	---	1.0	28.2	---	48.0	---	19.8	---

RESULTS=READING+CABLE LOSS+LISN FACTOR



DATA OF CONDUCTION

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

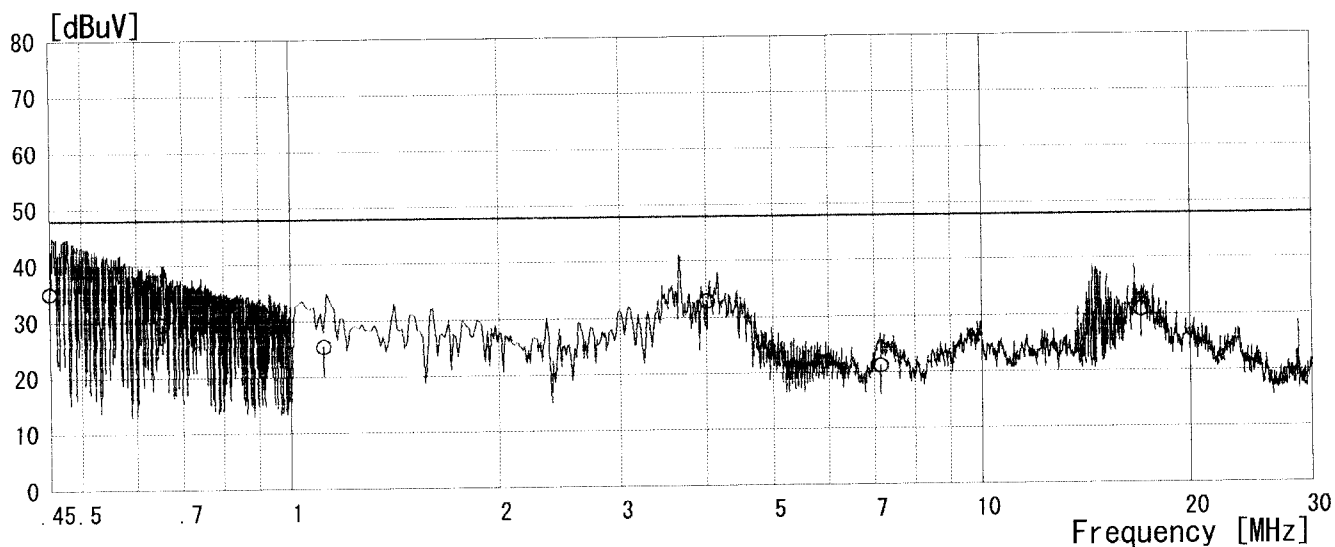
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV1+VCR REC
POWER : AC120V/60Hz
LINE : N
REMARKS : 5Vp-p input

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 07, 2002
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	0.450	34.5	----	0.5	35.0	----	48.0	----	13.0	----
2	0.654	29.0	----	0.4	29.4	----	48.0	----	18.6	----
3	1.118	24.9	----	0.4	25.3	----	48.0	----	22.7	----
4	4.016	32.4	----	0.5	32.9	----	48.0	----	15.1	----
5	7.148	20.5	----	0.6	21.1	----	48.0	----	26.9	----
6	17.010	30.0	----	0.8	30.8	----	48.0	----	17.2	----

RESULTS=READING+CABLE LOSS+LISN FACTOR



DATA OF CONDUCTION

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

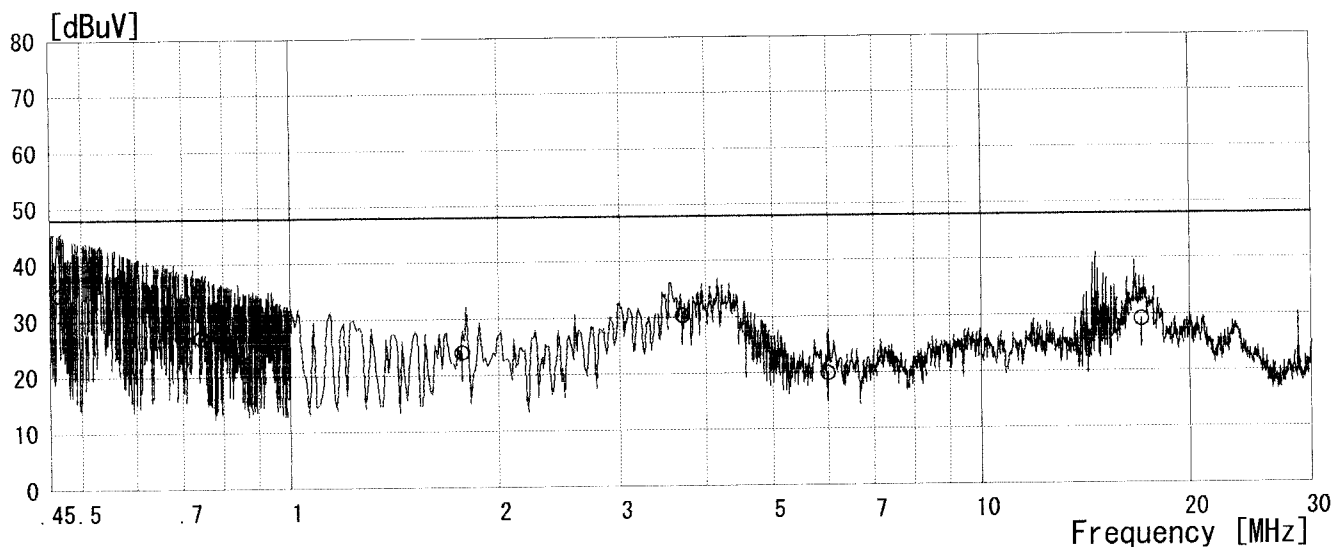
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV1+VCR REC
POWER : AC120V/60Hz
LINE : L
REMARKS : 5Vp-p input

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 07, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 8

[Signature]
TEST ENGINEER: H. SAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	0.467	34.1	----	0.5	34.6	----	48.0	----	13.4	----
2	0.744	26.5	----	0.4	26.9	----	48.0	----	21.1	----
3	1.773	23.6	----	0.4	24.0	----	48.0	----	24.0	----
4	3.695	29.8	----	0.5	30.3	----	48.0	----	17.7	----
5	5.997	19.3	----	0.6	19.9	----	48.0	----	28.1	----
6	17.040	28.2	----	1.0	29.2	----	48.0	----	18.8	----

RESULTS=READING+CABLE LOSS+LISN FACTOR



DATA OF CONDUCTION

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

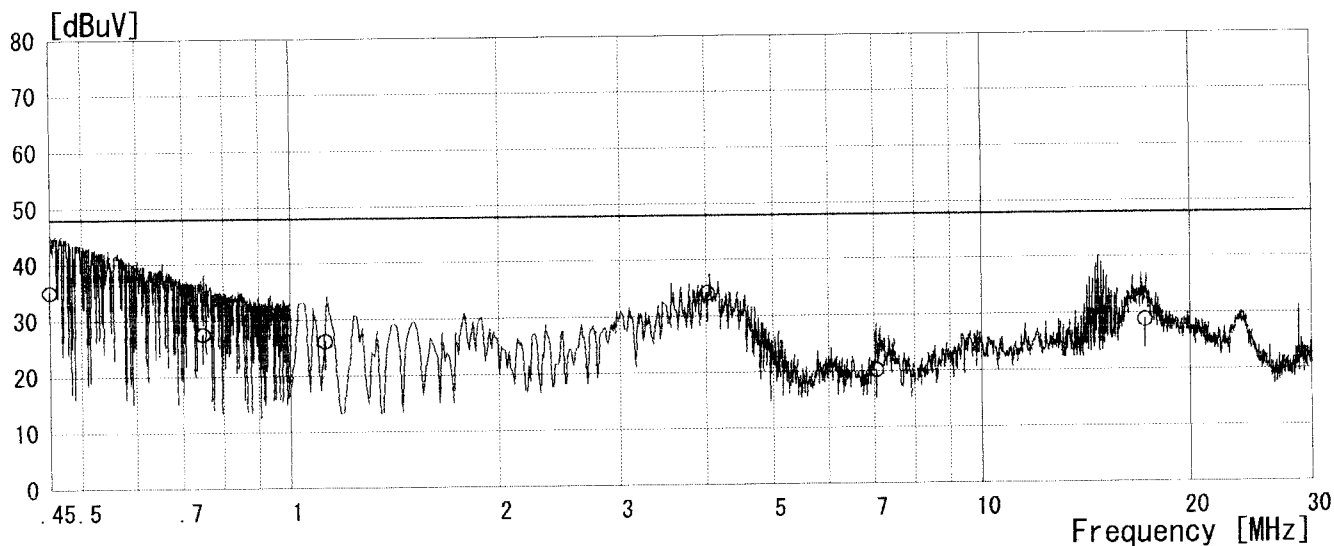
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV2+VCR REC
POWER : AC120V/60Hz
LINE : N
REMARKS : 1Vp-p input

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 07, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 11

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]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]
1	0.450	34.5	----	0.5	35.0	----	48.0	----	13.0	----
2	0.748	27.0	----	0.4	27.4	----	48.0	----	20.6	----
3	1.123	25.7	----	0.4	26.1	----	48.0	----	21.9	----
4	4.016	33.6	----	0.5	34.1	----	48.0	----	13.9	----
5	7.042	19.6	----	0.6	20.2	----	48.0	----	27.8	----
6	17.220	28.0	----	0.8	28.8	----	48.0	----	19.2	----

RESULTS=READING+CABLE LOSS+LISN FACTOR



DATA OF CONDUCTION

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

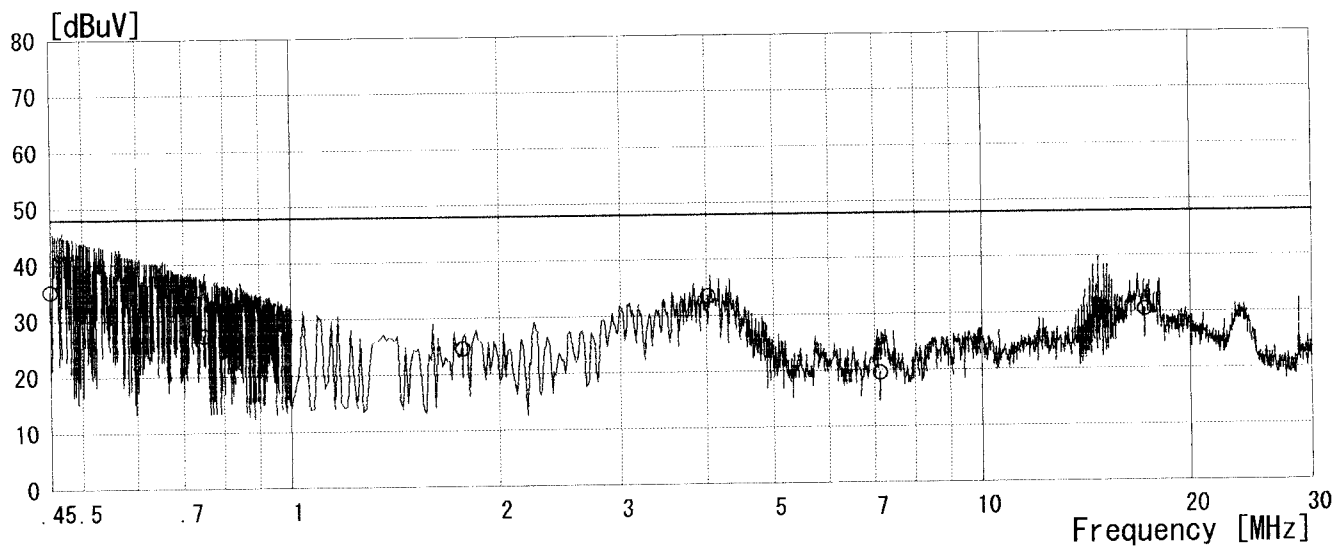
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV2+VCR REC
POWER : AC120V/60Hz
LINE : L
REMARKS : 1Vp-p input

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 07, 2002
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	34.7	----	0.5	35.2	----	48.0	----	12.8	----
2	0.749	26.7	----	0.4	27.1	----	48.0	----	20.9	----
3	1.771	24.1	----	0.4	24.5	----	48.0	----	23.5	----
4	4.016	33.0	----	0.5	33.5	----	48.0	----	14.5	----
5	7.117	18.9	----	0.6	19.5	----	48.0	----	28.5	----
6	17.190	29.5	----	1.0	30.5	----	48.0	----	17.5	----

RESULTS=READING+CABLE LOSS+LISN FACTOR



DATA OF CONDUCTION

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

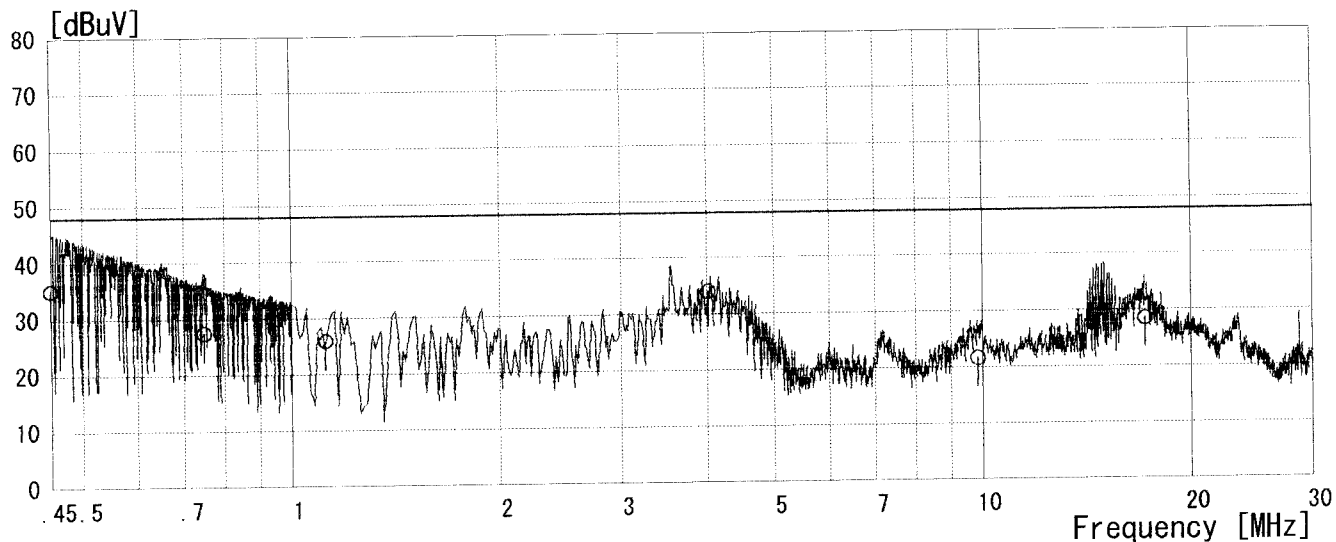
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV2+VCR REC
POWER : AC120V/60Hz
LINE : N
REMARKS : 5Vp-p input

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 07, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 12

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	34.5	---	0.5	35.0	---	48.0	---	13.0	---
2	0.749	26.9	---	0.4	27.3	---	48.0	---	20.7	---
3	1.122	25.4	---	0.4	25.8	---	48.0	---	22.2	---
4	4.016	33.4	---	0.5	33.9	---	48.0	---	14.1	---
5	9.848	20.9	---	0.7	21.6	---	48.0	---	26.4	---
6	17.200	27.6	---	0.8	28.4	---	48.0	---	19.6	---

RESULTS=READING+CABLE LOSS+LISN FACTOR



DATA OF CONDUCTION

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

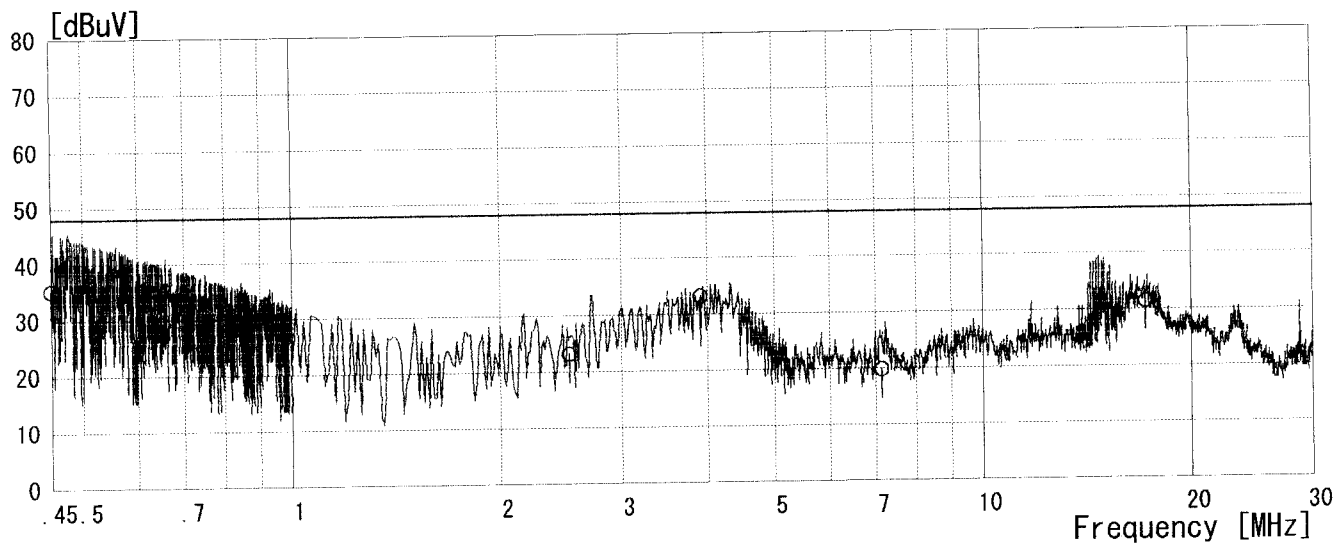
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE: AV2+VCR REC
POWER : AC120V/60Hz
LINE : L
REMARKS : 5Vp-p input

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 07, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 10

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	34.7	----	0.5	35.2	----	48.0	----	12.8	----
2	0.652	28.7	----	0.4	29.1	----	48.0	----	18.9	----
3	2.520	22.7	----	0.4	23.1	----	48.0	----	24.9	----
4	3.909	32.6	----	0.5	33.1	----	48.0	----	14.9	----
5	7.139	19.1	----	0.6	19.7	----	48.0	----	28.3	----
6	17.190	30.4	----	1.0	31.4	----	48.0	----	16.6	----

RESULTS=READING+CABLE LOSS+LISN FACTOR



DATA OF CONDUCTION

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

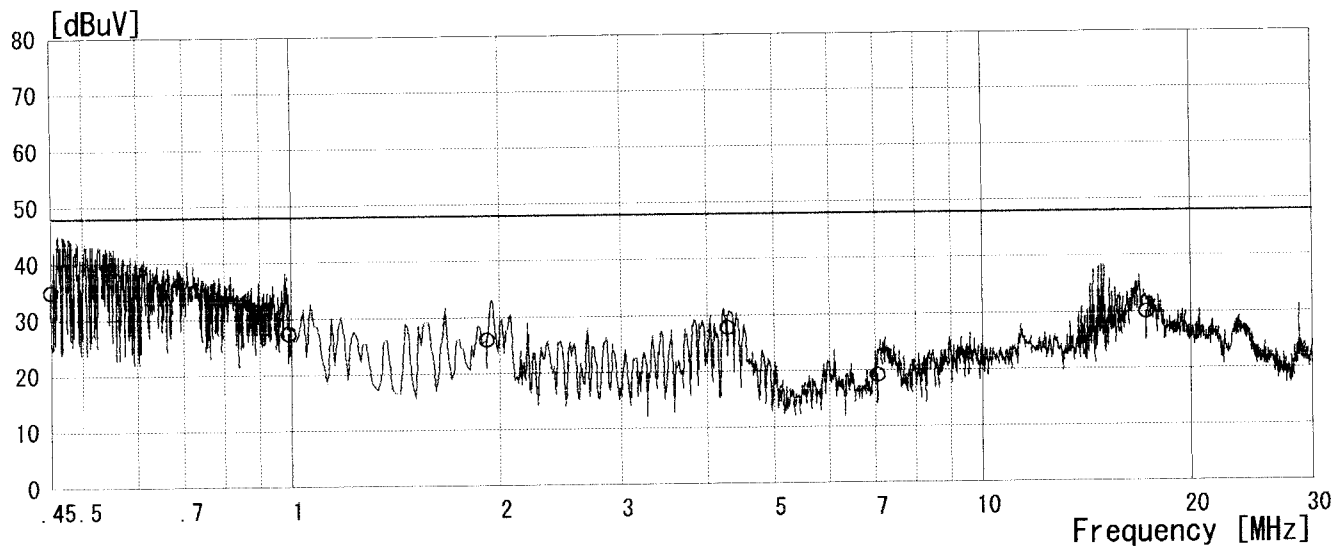
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : VCR PLAYBACK
POWER : AC120V/60Hz
LINE : N
REMARKS : -

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 07, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 13

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	34.4	----	0.5	34.9	----	48.0	----	13.1	----
2	0.992	26.8	----	0.4	27.2	----	48.0	----	20.8	----
3	1.919	25.5	----	0.4	25.9	----	48.0	----	22.1	----
4	4.284	27.2	----	0.5	27.7	----	48.0	----	20.3	----
5	7.054	18.5	----	0.6	19.1	----	48.0	----	28.9	----
6	17.275	29.2	----	0.8	30.0	----	48.0	----	18.0	----

RESULTS=READING+CABLE LOSS+LISN FACTOR



DATA OF CONDUCTION

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

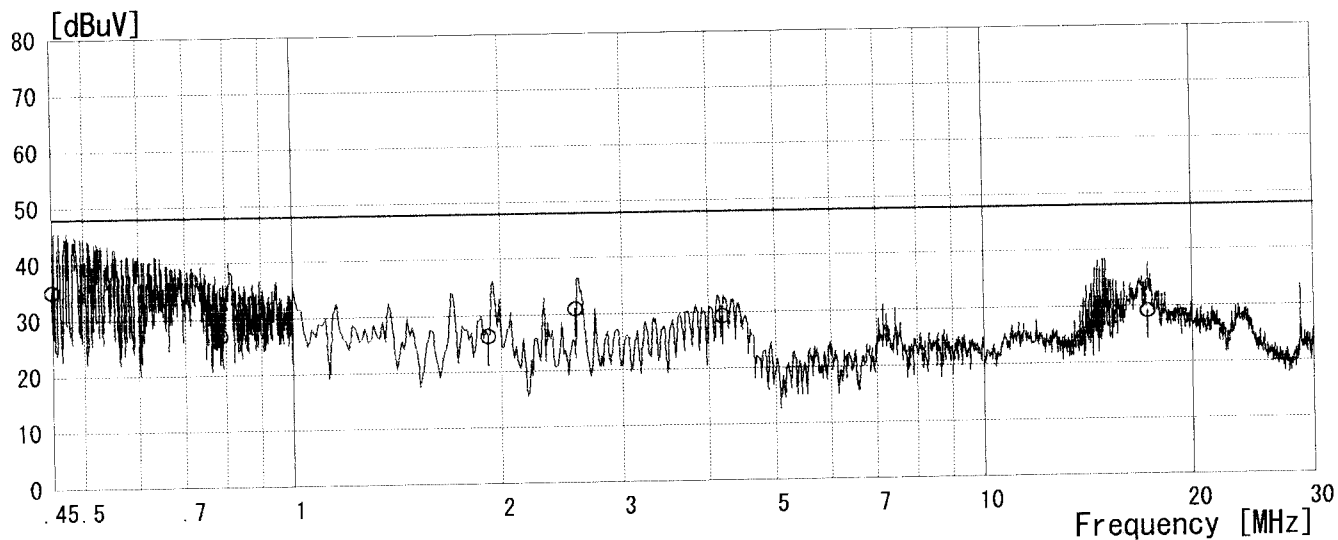
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : VCR PLAYBACK
POWER : AC120V/60Hz
LINE : L
REMARKS : -

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 07, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 14

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	34.5	—	0.5	35.0	—	48.0	—	13.0	—
2	0.787	26.5	—	0.4	26.9	—	48.0	—	21.1	—
3	1.919	25.8	—	0.4	26.2	—	48.0	—	21.8	—
4	2.567	30.5	—	0.4	30.9	—	48.0	—	17.1	—
5	4.188	28.8	—	0.5	29.3	—	48.0	—	18.7	—
6	17.269	28.1	—	1.0	29.1	—	48.0	—	18.9	—

RESULTS=READING+CABLE LOSS+LISN FACTOR



DATA OF CONDUCTION

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

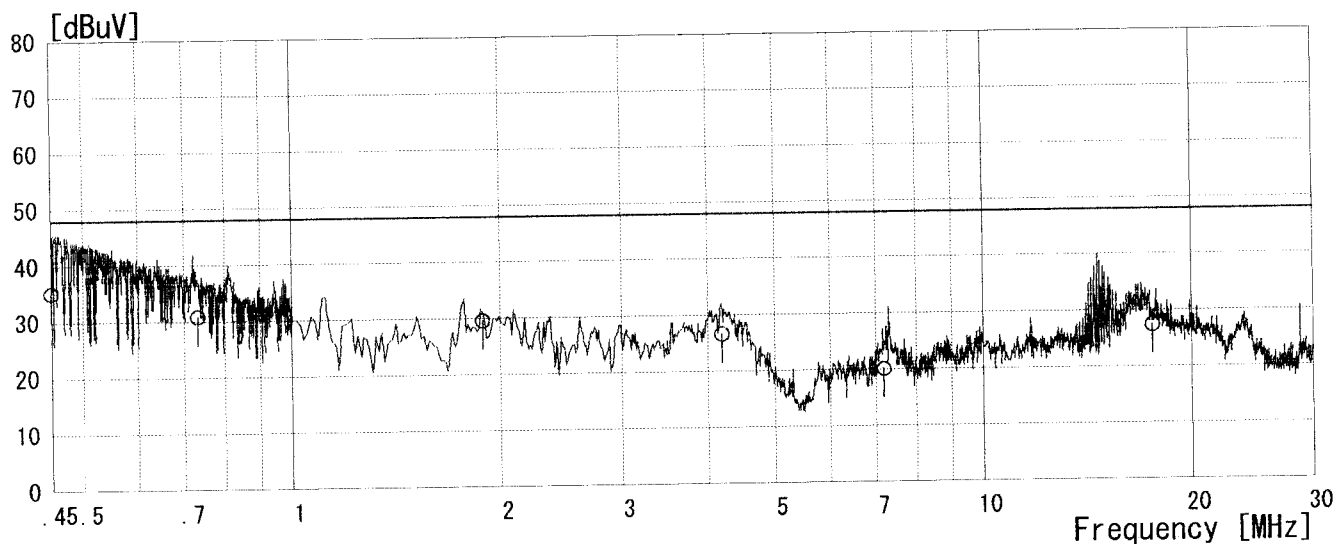
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : DVD PLAYBACK
POWER : AC120V/60Hz
LINE : N
REMARKS : -

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 07, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 16

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	34.6	----	0.5	35.1	----	48.0	----	12.9	----
2	0.732	30.3	----	0.4	30.7	----	48.0	----	17.3	----
3	1.888	29.1	----	0.4	29.5	----	48.0	----	18.5	----
4	4.188	26.0	----	0.5	26.5	----	48.0	----	21.5	----
5	7.181	19.4	----	0.6	20.0	----	48.0	----	28.0	----
6	17.550	26.5	----	0.8	27.3	----	48.0	----	20.7	----

RESULTS=READING+CABLE LOSS+LISN FACTOR



DATA OF CONDUCTION

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

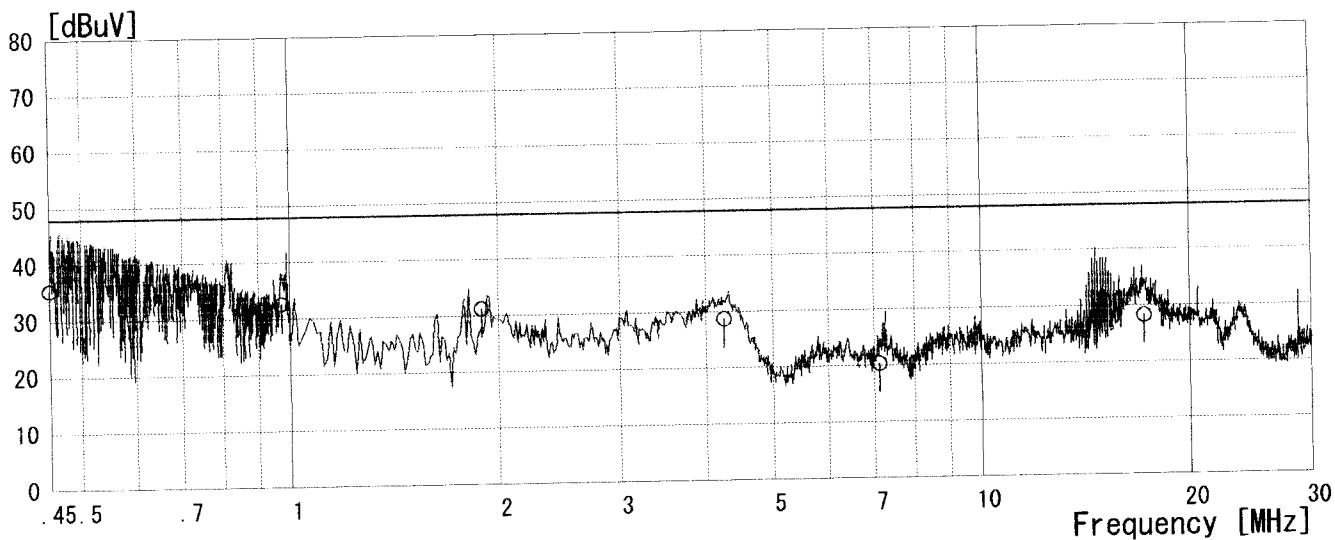
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : DVD PLAYBACK
POWER : AC120V/60Hz
LINE : L
REMARKS : -

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 07, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 15

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	34.8	----	0.5	35.3	----	48.0	----	12.7	----
2	0.972	32.1	----	0.4	32.5	----	48.0	----	15.5	----
3	1.892	30.8	----	0.4	31.2	----	48.0	----	16.8	----
4	4.243	28.2	----	0.5	28.7	----	48.0	----	19.3	----
5	7.113	19.7	----	0.6	20.3	----	48.0	----	27.7	----
6	17.200	27.3	----	1.0	28.3	----	48.0	----	19.7	----

RESULTS=READING+CABLE LOSS+LISN FACTOR



DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA NO.3 OPEN TEST SITE

COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL No. : SD-V280U
POWER : AC120V/60Hz
DESCRIPTION : TV RECEPTION+REC MODE

REPORT No. : 22EE0021-KT-1
REGULATION : FCC 15B
TEST DISTANCE : 3m
ATTENUATION : 101-847MHz 6dB
1034-1694MHz 0dB
DATE : December 25, 2001


ENGINEER : Hiroya Tabata

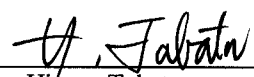
CH.	FREQ [MHz]	READING		ANT TYPE	ANT. FAC. [dB]	CABLE LOSS [dB]	AMP GAIN [dB]	RESULTS		LIMIT [dBuV/m]	MARGIN	
		HOR.	VER.					HOR.	VER.		HOR.	VER.
		[dBuV]						[dBuV/m]			[dB]	[dB]
VHF Fundamental												
2	101	26.4	24.3	BC	10.3	1.9	27.9	16.7	14.6	43.5	26.8	28.9
3	107	29.7	24.9	BC	11.2	2.0	27.9	21.0	16.2	43.5	22.5	27.3
4	113	26.8	24.0	BC	12.2	2.0	27.9	19.1	16.3	43.5	24.4	27.2
5	123	23.4	23.3	BC	13.4	2.1	27.9	17.0	16.9	43.5	26.5	26.6
6	129	24.0	25.4	BC	13.7	2.2	27.8	18.1	19.5	43.5	25.4	24.0
7	221	20.0	20.1	BC	16.5	3.0	27.8	17.7	17.8	46.0	28.3	28.2
8	227	26.2	20.3	BC	16.5	3.0	27.7	24.0	18.1	46.0	22.0	27.9
9	233	23.6	23.1	BC	16.5	3.1	27.7	21.5	21.0	46.0	24.5	25.0
10	239	26.5	26.5	BC	16.6	3.1	27.7	24.5	24.5	46.0	21.5	21.5
11	245	24.5	24.1	BC	16.6	3.2	27.7	22.6	22.2	46.0	23.4	23.8
12	251	21.6	21.6	BC	16.7	3.2	27.7	19.8	19.8	46.0	26.2	26.2
13	257	21.9	21.3	BC	17.0	3.2	27.7	20.4	19.8	46.0	25.6	26.2
VHF 2nd Harmonic												
2	202	22.5	22.3	BC	16.4	2.8	27.8	19.9	19.7	43.5	23.6	23.8
3	214	20.8	20.5	BC	16.5	2.9	27.8	18.4	18.1	43.5	25.1	25.4
4	226	21.0	19.9	BC	16.5	3.0	27.7	18.8	17.7	46.0	27.2	28.3
5	246	23.1	23.2	BC	16.6	3.2	27.7	21.2	21.3	46.0	24.8	24.7
6	258	23.3	23.0	BC	17.0	3.2	27.7	21.8	21.5	46.0	24.2	24.5
7	442	22.3	22.4	LP	16.5	4.5	27.6	21.7	21.8	46.0	24.3	24.2
8	454	22.0	22.6	LP	16.9	4.6	27.6	21.9	22.5	46.0	24.1	23.5
9	466	22.6	22.8	LP	17.2	4.7	27.6	22.9	23.1	46.0	23.1	22.9
10	478	21.8	21.6	LP	17.5	4.7	27.5	22.5	22.3	46.0	23.5	23.7
11	490	25.6	24.8	LP	17.8	4.7	27.5	26.6	25.8	46.0	19.4	20.2
12	502	22.6	23.3	LP	18.1	4.8	27.5	24.0	24.7	46.0	22.0	21.3
13	514	22.7	23.7	LP	18.2	4.9	27.5	24.3	25.3	46.0	21.7	20.7

DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA NO.3 OPEN TEST SITE

COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL No. : SD-V280U
POWER : AC120V/60Hz
DESCRIPTION : TV RECEPTION+REC MODE

REPORT No. : 22EE0021-KT-1
REGULATION : FCC 15B
TEST DISTANCE : 3m
ATTENUATION : 101-847MHz 6dB
1034-1694MHz 0dB
DATE : December 25, 2001


ENGINEER : Hifoya Tabata

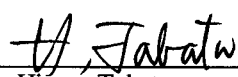
CH.	FREQ	READING		ANT TYPE	ANT. FAC.	CABLE LOSS	AMP GAIN	RESULTS		LIMIT	MARGIN	
	[MHz]	HOR.	VER.					[dBuV]	HOR.		VER.	[dB]
CATV Fundamental												
1	119	23.1	23.8	BC	13.1	2.1	27.9	16.4	17.1	43.5	27.1	26.4
95	137	23.1	23.5	BC	14.0	2.2	27.8	17.5	17.9	43.5	26.0	25.6
97	149	23.8	25.3	BC	14.4	2.4	27.8	18.8	20.3	43.5	24.7	23.2
99	161	24.9	24.1	BC	14.9	2.5	27.8	20.5	19.7	43.5	23.0	23.8
14	167	21.4	22.4	BC	15.2	2.5	27.8	17.3	18.3	43.5	26.2	25.2
18	191	22.1	21.1	BC	16.1	2.7	27.8	19.1	18.1	43.5	24.4	25.4
22	215	27.6	22.8	BC	16.5	2.9	27.8	25.2	20.4	43.5	18.3	23.1
23	263	21.6	21.7	BC	17.3	3.3	27.6	20.6	20.7	46.0	25.4	25.3
29	299	21.9	21.8	BC	19.2	3.5	27.6	23.0	22.9	46.0	23.0	23.1
36	341	26.9	25.1	LP	14.7	3.8	27.6	23.8	22.0	46.0	22.2	24.0
37	347	22.6	22.3	LP	14.8	3.8	27.7	19.5	19.2	46.0	26.5	26.8
65	515	21.7	21.7	LP	18.2	4.9	27.5	23.3	23.3	46.0	22.7	22.7
94	689	20.7	20.7	LP	20.4	5.7	27.0	25.8	25.8	46.0	20.2	20.2
100	695	20.4	20.4	LP	20.5	5.7	27.0	25.6	25.6	46.0	20.4	20.4
113	773	19.8	19.9	LP	21.0	6.0	26.7	26.1	26.2	46.0	19.9	19.8
125	845	19.6	19.5	LP	21.8	6.7	26.6	27.5	27.4	46.0	18.5	18.6
CATV 2nd Harmonic												
1	238	25.0	22.0	BC	16.6	3.1	27.7	23.0	20.0	46.0	23.0	26.0
95	274	22.2	22.3	BC	17.9	3.3	27.6	21.8	21.9	46.0	24.2	24.1
97	298	22.4	22.1	BC	19.2	3.5	27.6	23.5	23.2	46.0	22.5	22.8
99	322	22.0	21.5	LP	14.5	3.6	27.6	18.5	18.0	46.0	27.5	28.0
14	334	21.9	21.6	LP	14.6	3.7	27.6	18.6	18.3	46.0	27.4	27.7
18	382	21.7	21.4	LP	15.2	4.0	27.6	19.3	19.0	46.0	26.7	27.0
22	430	23.1	22.8	LP	16.2	4.4	27.6	22.1	21.8	46.0	23.9	24.2
23	526	21.3	21.3	LP	18.3	4.9	27.5	23.0	23.0	46.0	23.0	23.0
29	598	21.3	21.2	LP	18.8	5.2	27.3	24.0	23.9	46.0	22.0	22.1
36	682	21.9	20.7	LP	20.3	5.7	27.0	26.9	25.7	46.0	19.1	20.3
37	694	22.6	21.0	LP	20.5	5.7	27.0	27.8	26.2	46.0	18.2	19.8
65	1030	38.5	40.1	HO	23.7	4.4	35.4	31.2	32.8	54.0	22.8	21.2
94	1378	41.5	46.4	HO	24.8	5.1	34.9	36.5	41.4	54.0	17.5	12.6
100	1390	40.7	46.8	HO	24.8	5.1	34.9	35.7	41.8	54.0	18.3	12.2
113	1546	44.2	45.0	HO	25.4	5.4	34.7	40.3	41.1	54.0	13.7	12.9
125	1690	44.4	43.5	HO	26.2	5.7	34.6	41.7	40.8	54.0	12.3	13.2

DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA NO.3 OPEN TEST SITE

COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL No. : SD-V280U
POWER : AC120V/60Hz
DESCRIPTION : TV RECEPTION+REC MODE

REPORT No. : 22EE0021-KT-1
REGULATION : FCC 15B
TEST DISTANCE : 3m
ATTENUATION : 101-847MHz 6dB
1034-1694MHz 0dB
DATE : December 25, 2001

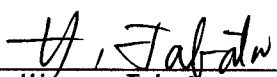

ENGINEER : Hiroya Tabata

CH.	FREQ	READING		ANT TYPE	ANT. FAC.	CABLE LOSS	AMP GAIN	RESULTS		LIMIT	MARGIN	
	[MHz]	HOR.	VER.					[dBuV]	HOR.		VER.	[dBuV/m]
UHF Fundamental												
14	517	24.8	27.0	LP	18.2	4.9	27.5	26.4	28.6	46.0	19.6	17.4
19	547	22.7	26.6	LP	18.4	5.0	27.5	24.6	28.5	46.0	21.4	17.5
28	601	25.1	24.1	LP	18.8	5.2	27.3	27.8	26.8	46.0	18.2	19.2
36	649	25.8	24.3	LP	19.7	5.5	27.1	29.9	28.4	46.0	16.1	17.6
44	697	24.1	23.4	LP	20.5	5.8	27.0	29.4	28.7	46.0	16.6	17.3
53	751	27.6	25.6	LP	20.9	5.9	26.8	33.6	31.6	46.0	12.4	14.4
61	799	31.2	25.8	LP	21.2	6.1	26.7	37.8	32.4	46.0	8.2	13.6
69	847	27.0	24.0	LP	21.8	6.7	26.6	34.9	31.9	46.0	11.1	14.1
UHF 2nd Harmonic												
14	1034	37.5	37.2	HO	23.7	4.5	35.4	30.3	30.0	54.0	23.7	24.0
19	1094	43.8	41.2	HO	23.9	4.6	35.3	37.0	34.4	54.0	17.0	19.6
28	1202	39.5	40.3	HO	24.2	4.8	35.1	33.4	34.2	54.0	20.6	19.8
36	1298	37.0	42.1	HO	24.6	4.9	35.0	31.5	36.6	54.0	22.5	17.4
44	1394	46.7	46.5	HO	24.9	5.1	34.9	41.8	41.6	54.0	12.2	12.4
53	1502	42.4	46.3	HO	25.2	5.3	34.7	38.2	42.1	54.0	15.8	11.9
61	1598	42.3	42.8	HO	25.7	5.5	34.6	38.9	39.4	54.0	15.1	14.6
69	1694	42.3	42.8	HO	26.2	5.7	34.6	39.6	40.1	54.0	14.4	13.9

DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.3 OPEN TEST SITE
Report No. : 22EE0021-KT-1

Applicant : ORION ELECTRIC CO., LTD.
Kind of Equipment : DVD/VCR
Model No. : SD-V280U
Serial No. :
Power : AC120V/60Hz
Mode : Maximum Operation
Remarks : Test Channel #3
Date : 12/22/2001
Test Distance : 3 m
Temperature : 16 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B


Engineer : Hiroya Tabata

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	25.3	29.5	7.3	29.9	1.6	5.7	10.0	14.2	40.0	30.0	25.8
2.	122.50	BB	29.2	28.2	13.2	29.8	2.4	5.7	20.7	19.7	43.5	22.8	23.8
3.	183.75	BB	27.6	25.5	15.8	29.9	3.1	5.7	22.3	20.2	43.5	21.2	23.3
4.	245.00	BB	22.8	23.1	16.4	29.9	3.7	5.7	18.7	19.0	46.0	27.3	27.0

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

DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.3 OPEN TEST SITE
Report No. : 22EE0021-KT-1

Applicant : ORION ELECTRIC CO., LTD.
Kind of Equipment : DVD/VCR
Model No. : SD-V280U
Serial No. :
Power : AC120V/60Hz
Mode : Maximum Operation
Remarks : Test Channel #3
Date : 12/22/2001
Test Distance : 3 m
Temperature : 16 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B

H. Tabata
Engineer : Hiroya Tabata

Emission Level [dB μ V/m]

□ Horizontal

× Vertical

70

60

50

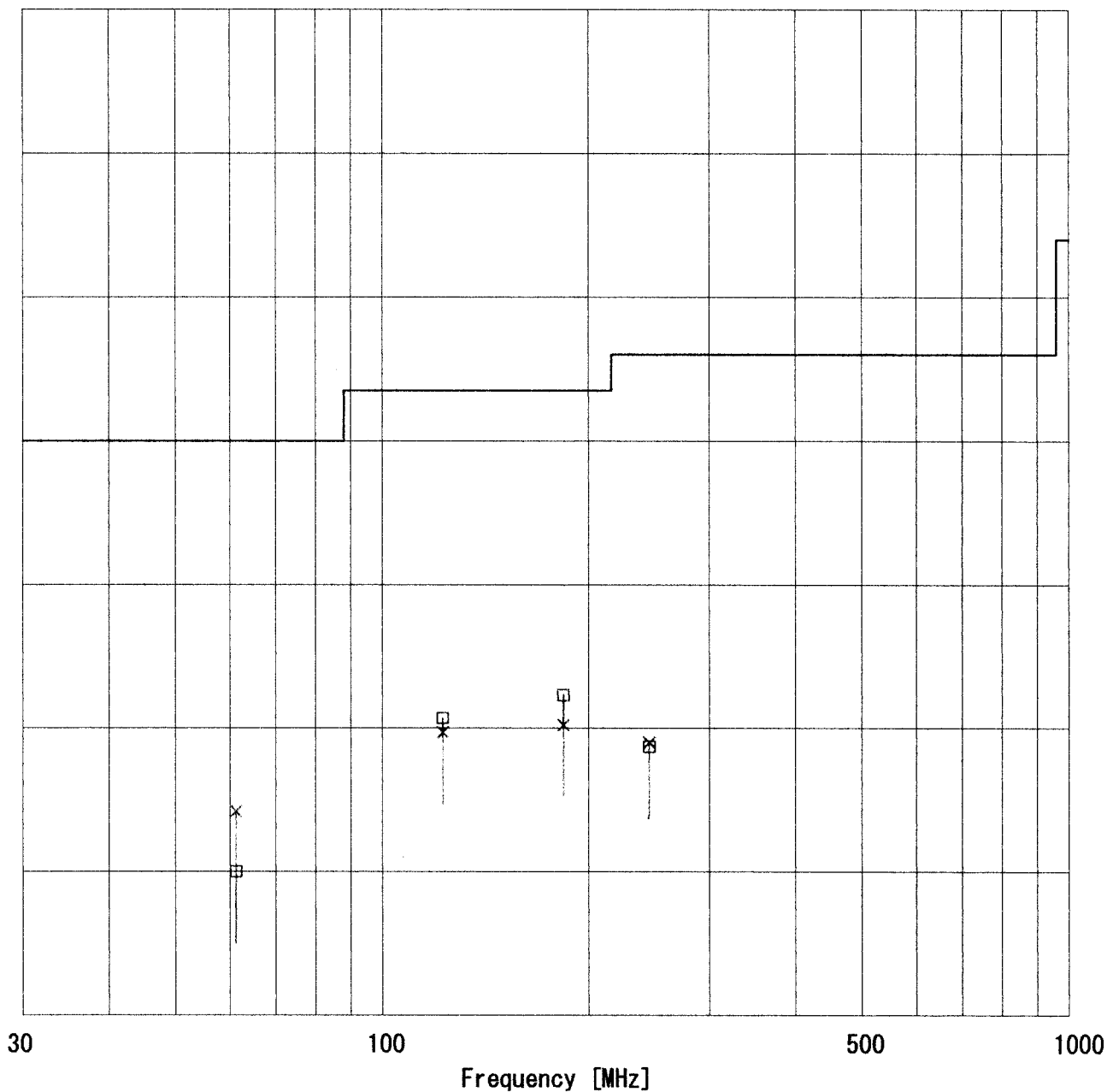
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10

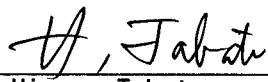
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DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.1 OPEN TEST SITE
Report No. : 22EE0021-KT-1

Applicant : ORION ELECTRIC CO., LTD.
Kind of Equipment : DVD/VCR
Model No. : SD-V280U
Serial No. :
Power : AC120V/60Hz
Mode : Maximum Operation
Remarks : Test Channel #4
Date : 12/22/2001
Test Distance : 3 m
Temperature : 16 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B


Engineer : Hiroya Tabata

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	26.4	25.9	6.5	29.9	1.7	5.7	10.4	9.9	40.0	29.6	30.1
2.	134.50	BB	24.6	23.9	13.7	29.8	2.6	5.7	16.8	16.1	43.5	26.7	27.4
3.	201.75	BB	23.5	24.0	15.9	29.8	3.2	5.7	18.5	19.0	43.5	25.0	24.5
4.	269.00	BB	22.7	22.1	17.4	29.9	3.9	5.7	19.8	19.2	46.0	26.2	26.8

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

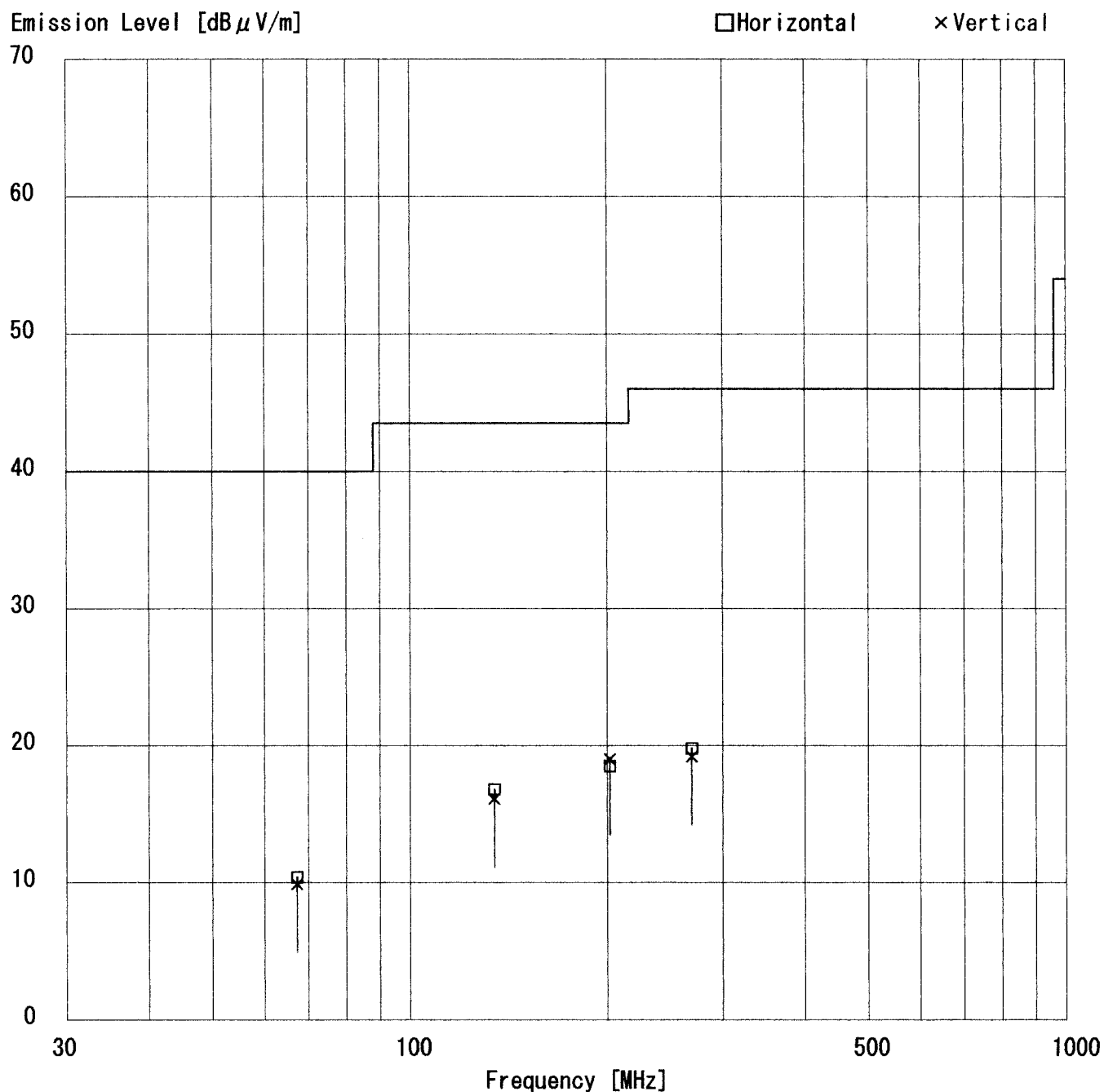
Except for the above table : adequate margin data below the limits.
ANT. TYPE: 30-300MHz Biconical , 300-1000MHz Logperiodic

DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.1 OPEN TEST SITE
Report No. : 22EE0021-KT-1

Applicant : ORION ELECTRIC CO., LTD.
Kind of Equipment : DVD/VCR
Model No. : SD-V280U
Serial No. :
Power : AC120V/60Hz
Mode : Maximum Operation
Remarks : Test Channel #4
Date : 12/22/2001
Test Distance : 3 m
Temperature : 16 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B

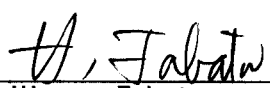
H. Tabata
Engineer : Hiroya Tabata



DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.1 OPEN TEST SITE
Report No. : 22EE0021-KT-1

Applicant : ORION ELECTRIC CO., LTD.
Kind of Equipment : DVD/VCR
Model No. : SD-V280U
Serial No. :
Power : AC120V/60Hz
Mode : TV RECEPTION+REC
Remarks : OTHER
Date : 12/22/2001
Test Distance : 3 m
Temperature : 16 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B


Engineer : Hiroya Tabata

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.	98.31	BB	44.4	40.3	9.5	29.9	2.1	5.7	31.8	27.7	43.5	11.7	15.8
2.	120.43	BB	33.4	33.0	13.1	29.8	2.4	5.7	24.8	24.4	43.5	18.7	19.1
3.	221.20	BB	34.2	35.6	16.2	29.8	3.4	5.7	29.7	31.1	46.0	16.3	14.9
4.	269.57	BB	30.3	35.0	17.4	29.9	3.9	5.7	27.4	32.1	46.0	18.6	13.9
5.	307.22	BB	28.7	30.0	16.5	30.0	4.1	5.7	25.0	26.3	46.0	21.0	19.7
6.	344.07	BB	36.5	34.5	17.2	30.1	4.5	5.7	33.8	31.8	46.0	12.2	14.2
7.	459.01	BB	31.0	29.6	18.7	30.2	5.1	5.7	30.3	28.9	46.0	15.7	17.1

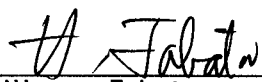
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

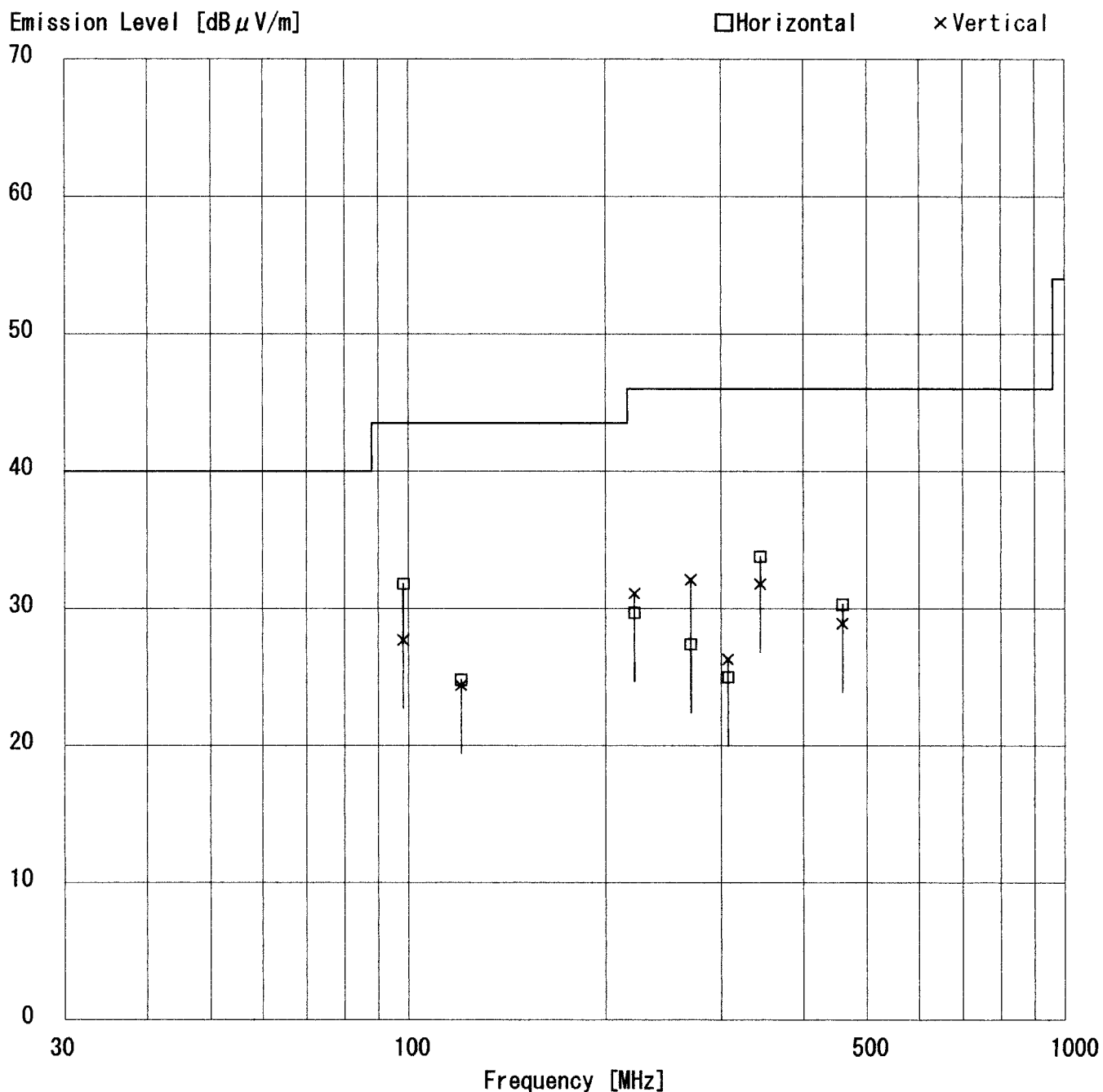
Except for the above table : adequate margin data below the limits.
ANT. TYPE: 30-300MHz Biconical , 300-1000MHz Logperiodic

DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.1 OPEN TEST SITE
Report No. : 22EE0021-KT-1

Applicant : ORION ELECTRIC CO., LTD.
Kind of Equipment : DVD/VCR
Model No. : SD-V280U
Serial No. :
Power : AC120V/60Hz
Mode : TV RECEPTION+REC
Remarks : OTHER
Date : 12/22/2001
Test Distance : 3 m
Temperature : 16 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B

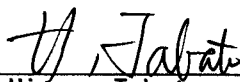

Engineer : Hiroya Tabata



DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.1 OPEN TEST SITE
Report No. : 22EE0021-KT-1

Applicant : ORION ELECTRIC CO., LTD.
Kind of Equipment : DVD/VCR
Model No. : SD-V280U
Serial No. :
Power : AC120V/60Hz
Mode : VIDEO INPUT+REC (FRONT)
Remarks : OTHER
Date : 12/22/2001
Test Distance : 3 m
Temperature : 16 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B


Engineer : Hiroya Tabata

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.	98.32	BB	43.0	33.3	9.5	29.9	2.1	5.7	30.4	20.7	43.5	13.1	22.8
2.	120.41	BB	35.0	29.2	13.1	29.8	2.4	5.7	26.4	20.6	43.5	17.1	22.9
3.	221.20	BB	36.9	34.2	16.2	29.8	3.4	5.7	32.4	29.7	46.0	13.6	16.3
4.	269.58	BB	30.3	33.5	17.4	29.9	3.9	5.7	27.4	30.6	46.0	18.6	15.4
5.	307.20	BB	29.5	29.3	16.5	30.0	4.1	5.7	25.8	25.6	46.0	20.2	20.4
6.	344.07	BB	35.3	43.0	17.2	30.1	4.5	5.7	32.6	40.3	46.0	13.4	5.7
7.	459.00	BB	31.2	28.6	18.7	30.2	5.1	5.7	30.5	27.9	46.0	15.5	18.1

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

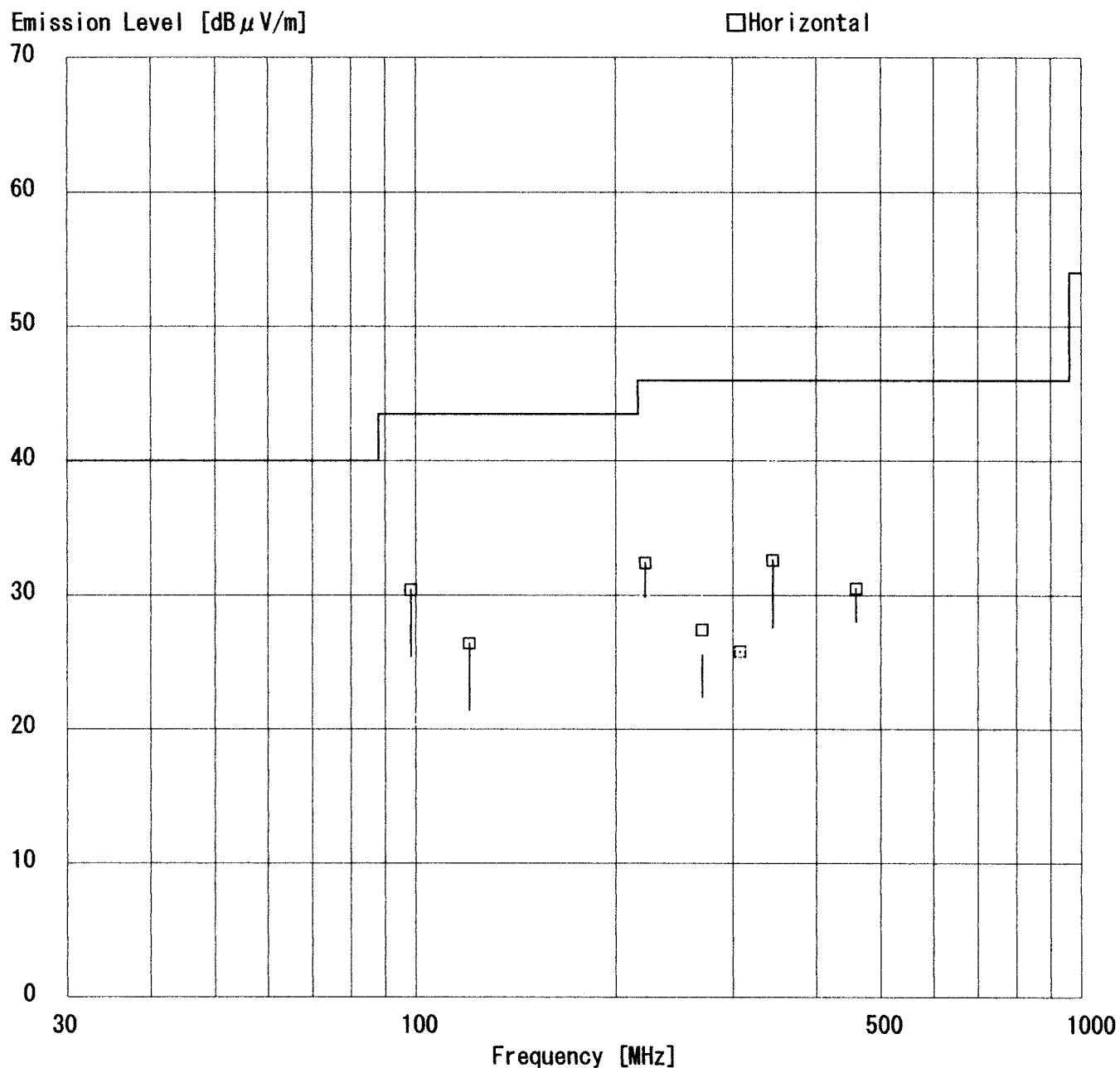
Except for the above table:adequate margin data below the limits.
ANT. TYPE: 30-300MHz Biconical ,300-1000MHz Logperiodic

DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.1 OPEN TEST SITE
Report No. : 22EE0021-KT-1

Applicant : ORION ELECTRIC CO., LTD.
Kind of Equipment : DVD/VCR
Model No. : SD-V280U
Serial No. :
Power : AC120V/60Hz
Mode : VIDEO INPUT+REC (FRONT)
Remarks : OTHER
Date : 12/22/2001
Test Distance : 3 m
Temperature : 16 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B

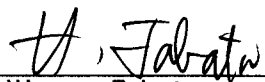
H. Tabata
Engineer : Hiroya Tabata



DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.1 OPEN TEST SITE
Report No. : 22EE0021-KT-1

Applicant : ORION ELECTRIC CO., LTD.
Kind of Equipment : DVD/VCR
Model No. : SD-V280U
Serial No. :
Power : AC120V/60Hz
Mode : VIDEO INPUT+REC (REAR)
Remarks : OTHER
Date : 12/22/2001
Test Distance : 3 m
Temperature : 16 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B


Engineer : Hiroya Tabata

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.	98.31	BB	43.7	33.6	9.5	29.9	2.1	5.7	31.1	21.0	43.5	12.4	22.5
2.	120.42	BB	34.8	29.6	13.1	29.8	2.4	5.7	26.2	21.0	43.5	17.3	22.5
3.	221.21	BB	37.1	34.2	16.2	29.8	3.4	5.7	32.6	29.7	46.0	13.4	16.3
4.	269.58	BB	30.7	35.4	17.4	29.9	3.9	5.7	27.8	32.5	46.0	18.2	13.5
5.	307.21	BB	30.1	29.5	16.5	30.0	4.1	5.7	26.4	25.8	46.0	19.6	20.2
6.	344.06	BB	36.6	43.5	17.2	30.1	4.5	5.7	33.9	40.8	46.0	12.1	5.2
7.	459.01	BB	31.0	28.6	18.7	30.2	5.1	5.7	30.3	27.9	46.0	15.7	18.1

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

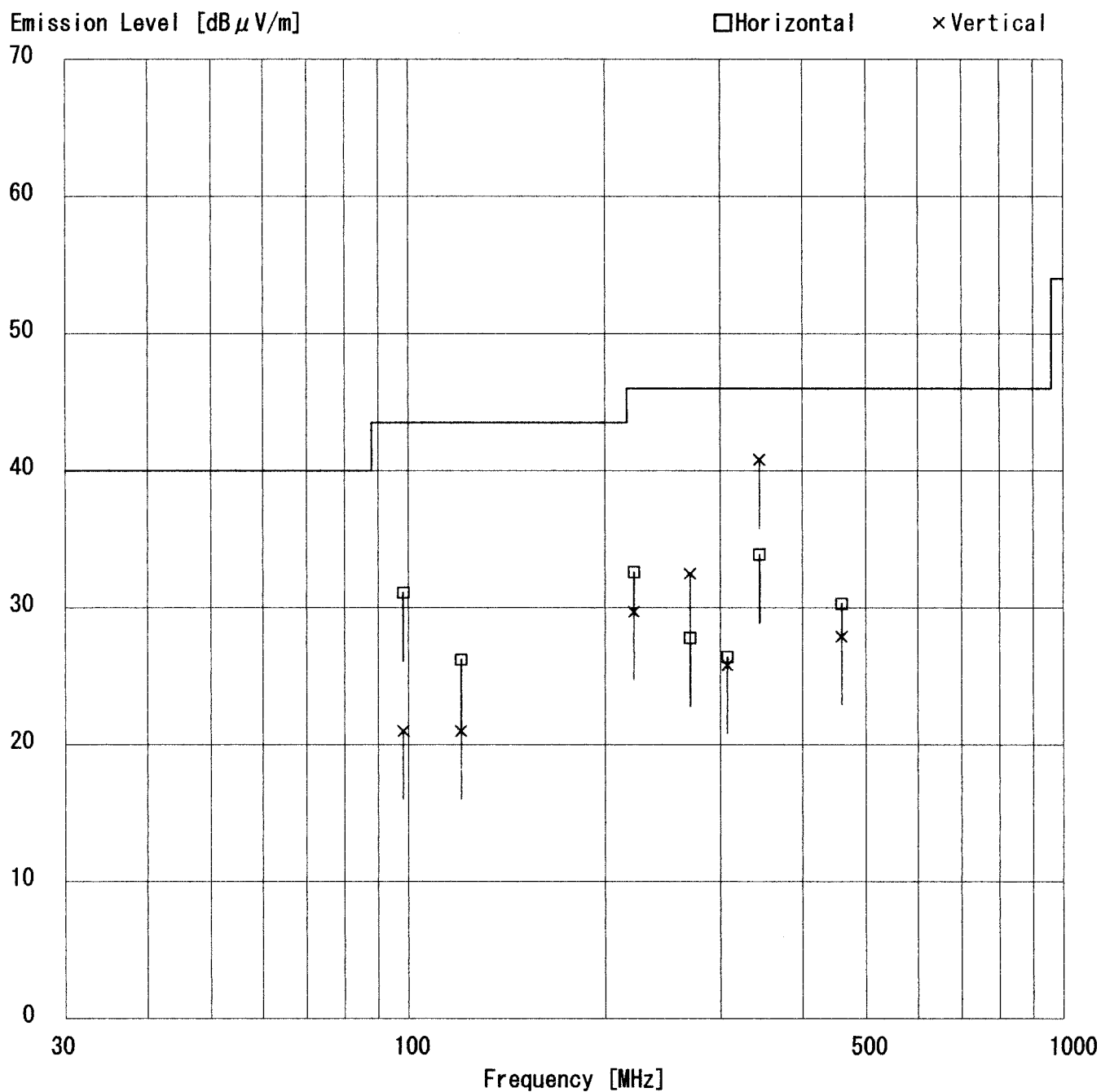
Except for the above table : adequate margin data below the limits.
ANT. TYPE: 30-300MHz Biconical , 300-1000MHz Logperiodic

DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.1 OPEN TEST SITE
Report No. : 22EE0021-KT-1

Applicant : ORION ELECTRIC CO., LTD.
Kind of Equipment : DVD/VCR
Model No. : SD-V280U
Serial No. :
Power : AC120V/60Hz
Mode : VIDEO INPUT+REC (REAR)
Remarks : OTHER
Date : 12/22/2001
Test Distance : 3 m
Temperature : 16 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B

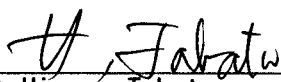
H. Tabata
Engineer : Hiroya Tabata



DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.1 OPEN TEST SITE
Report No. : 22EE0021-KT-1

Applicant : ORION ELECTRIC CO., LTD.
Kind of Equipment : DVD/VCR
Model No. : SD-V280U
Serial No. :
Power : AC120V/60Hz
Mode : PLAY BACK
Remarks : OTHER
Date : 12/22/2001
Test Distance : 3 m
Temperature : 16 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B


Engineer : Hiroya Tabata

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.	98.32	BB	44.5	39.7	9.5	29.9	2.1	5.7	31.9	27.1	43.5	11.6	16.4
2.	120.43	BB	35.0	32.0	13.1	29.8	2.4	5.7	26.4	23.4	43.5	17.1	20.1
3.	221.19	BB	39.2	35.4	16.2	29.8	3.4	5.7	34.7	30.9	46.0	11.3	15.1
4.	294.92	BB	27.6	28.3	18.6	30.0	4.1	5.7	26.0	26.7	46.0	20.0	19.3
5.	307.19	BB	28.7	31.1	16.5	30.0	4.1	5.7	25.0	27.4	46.0	21.0	18.6
6.	344.08	BB	33.9	31.1	17.2	30.1	4.5	5.7	31.2	28.4	46.0	14.8	17.6
7.	459.02	BB	31.0	29.1	18.7	30.2	5.1	5.7	30.3	28.4	46.0	15.7	17.6

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

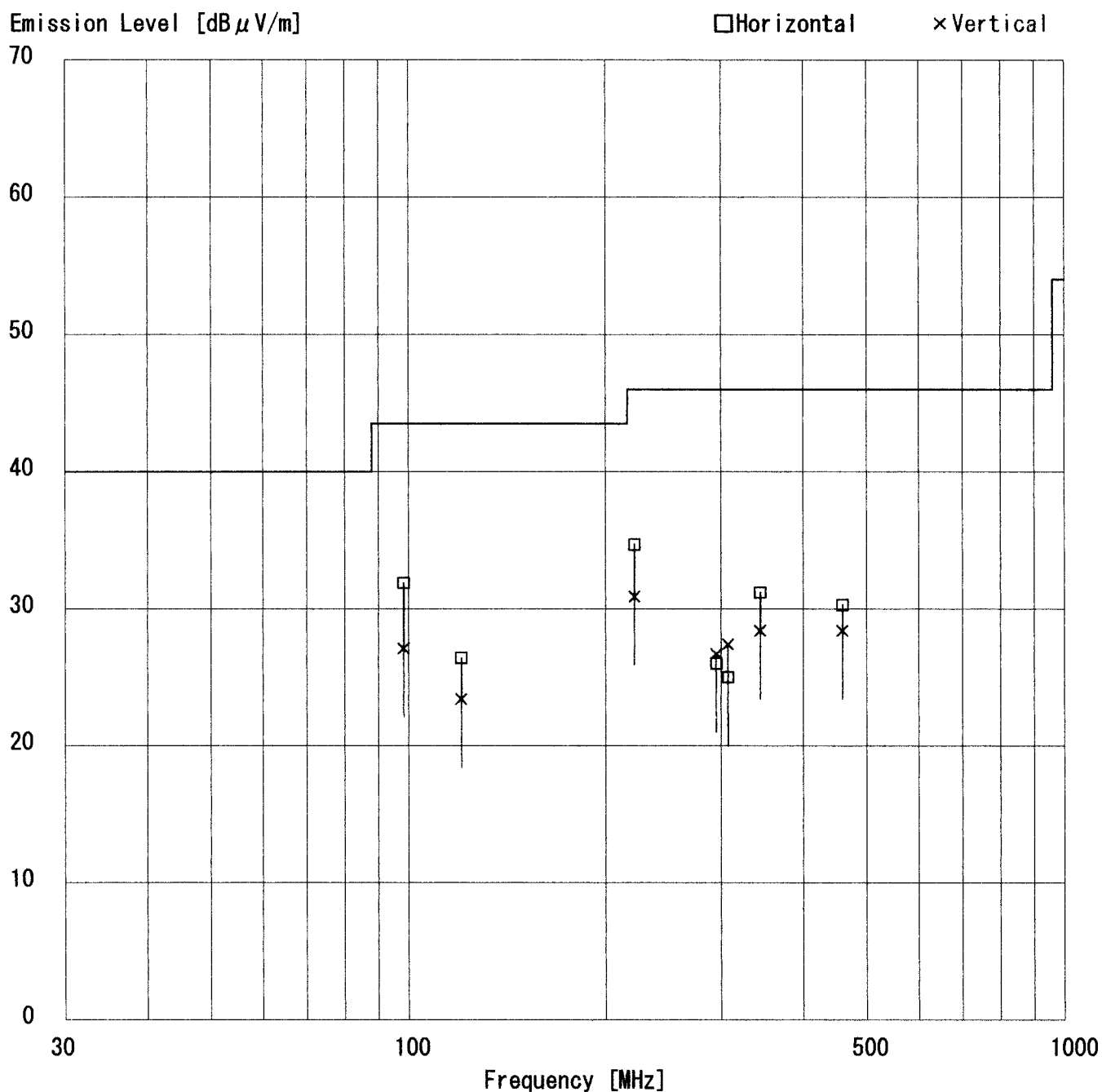
Except for the above table : adequate margin data below the limits.
ANT. TYPE: 30-300MHz Biconical , 300-1000MHz Logperiodic

DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.1 OPEN TEST SITE
Report No. : 22EE0021-KT-1

Applicant : ORION ELECTRIC CO., LTD.
Kind of Equipment : DVD/VCR
Model No. : SD-V280U
Serial No. :
Power : AC120V/60Hz
Mode : PLAY BACK
Remarks : OTHER
Date : 12/22/2001
Test Distance : 3 m
Temperature : 16 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B

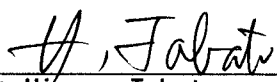
H. Tabata
Engineer : Hiroya Tabata



DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.1 OPEN TEST SITE
Report No. : 22EE0021-KT-1

Applicant : ORION ELECTRIC CO., LTD.
Kind of Equipment : DVD/VCR
Model No. : SD-V280U
Serial No. :
Power : AC120V/60Hz
Mode : DVD PLAY
Remarks : OTHER
Date : 12/22/2001
Test Distance : 3 m
Temperature : 16 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B


Engineer : Hiroya Tabata

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.	98.31	BB	37.6	41.7	9.5	29.9	2.1	5.7	25.0	29.1	43.5	18.5	14.4
2.	120.44	BB	34.8	33.2	13.1	29.8	2.4	5.7	26.2	24.6	43.5	17.3	18.9
3.	221.20	BB	37.2	37.3	16.2	29.8	3.4	5.7	32.7	32.8	46.0	13.3	13.2
4.	294.92	BB	27.0	28.9	18.6	30.0	4.1	5.7	25.4	27.3	46.0	20.6	18.7
5.	307.21	BB	33.2	32.0	16.5	30.0	4.1	5.7	29.5	28.3	46.0	16.5	17.7
6.	344.08	BB	33.2	30.2	17.2	30.1	4.5	5.7	30.5	27.5	46.0	15.5	18.5
7.	459.01	BB	30.8	30.9	18.7	30.2	5.1	5.7	30.1	30.2	46.0	15.9	15.8
8.	1195.03	BB	38.1	38.8	25.8	35.2	2.5	0.0	31.2	31.9	54.0	22.8	22.1
9.	1608.40	BB	33.1	32.7	28.0	34.6	3.0	0.0	29.5	29.1	54.0	24.5	24.9

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

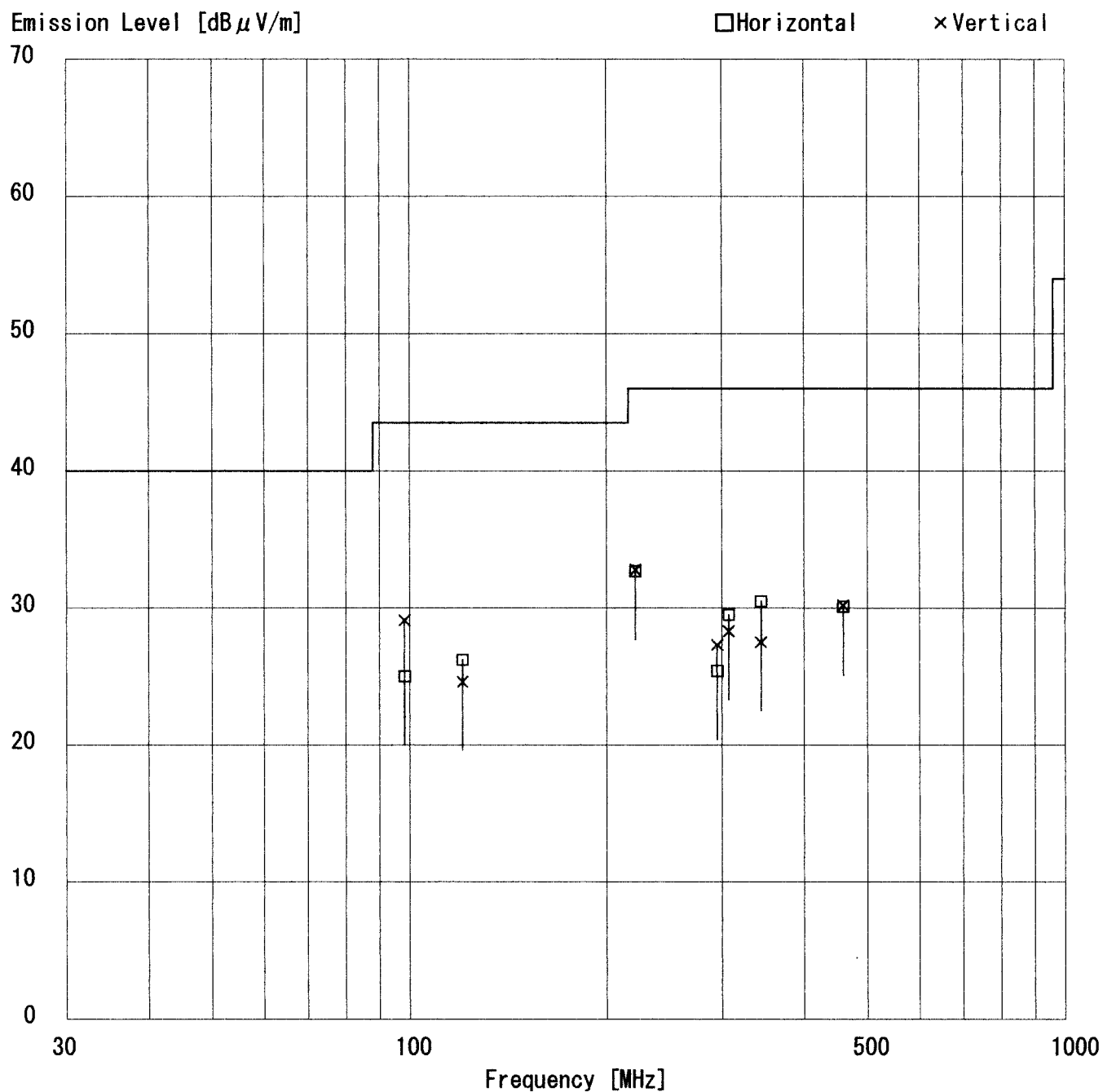
Except for the above table : adequate margin data below the limits.
ANT.TYPE:30-300MHz Biconical , 300-1000MHz Logperiodic

DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.1 OPEN TEST SITE
Report No. : 22EE0021-KT-1

Applicant : ORION ELECTRIC CO., LTD.
Kind of Equipment : DVD/VCR
Model No. : SD-V280U
Serial No. :
Power : AC120V/60Hz
Mode : DVD PLAY
Remarks : OTHER
Date : 12/22/2001
Test Distance : 3 m
Temperature : 16 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B

H. Tabata
Engineer : Hiroya Tabata



DATA OF ANTENNA TERMINAL TEST

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

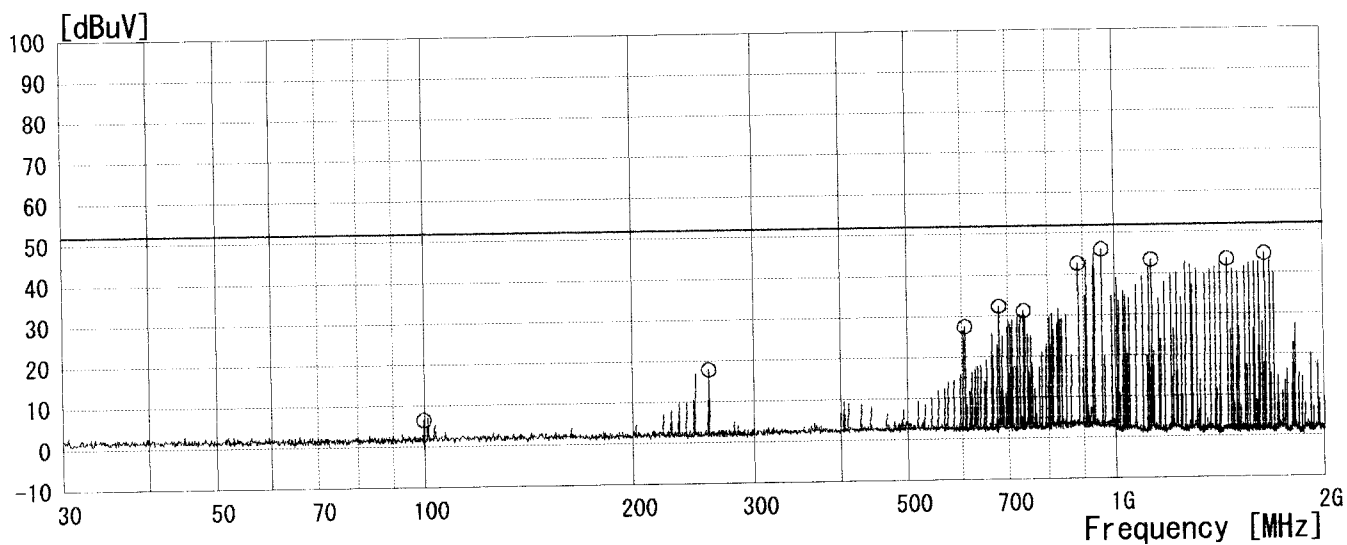
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : TUNING
PORT : ANTENNA TERMINAL
POWER : AC120V/60Hz
REMARKS : TV MODE

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 07, 2002
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	99.800	27.6	----	-21.2	6.4	----	52.0	----	45.6	----
2	258.300	38.9	----	-21.1	17.8	----	52.0	----	34.2	----
3	606.300	48.4	----	-21.0	27.5	----	52.0	----	24.5	----
4	678.900	53.4	----	-21.0	32.4	----	52.0	----	19.6	----
5	737.700	52.1	----	-20.9	31.2	----	52.0	----	20.8	----
6	884.300	62.9	----	-20.3	42.6	----	52.0	----	9.4	----
7	956.700	66.0	----	-20.0	46.0	----	52.0	----	6.0	----
8	1129.300	72.6	----	-29.2	43.4	----	52.0	----	8.6	----
9	1452.900	72.0	----	-28.6	43.3	----	52.0	----	8.7	----
10	1645.000	73.1	----	-28.4	44.7	----	52.0	----	7.3	----

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



DATA OF ANTENNA TERMINAL TEST

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

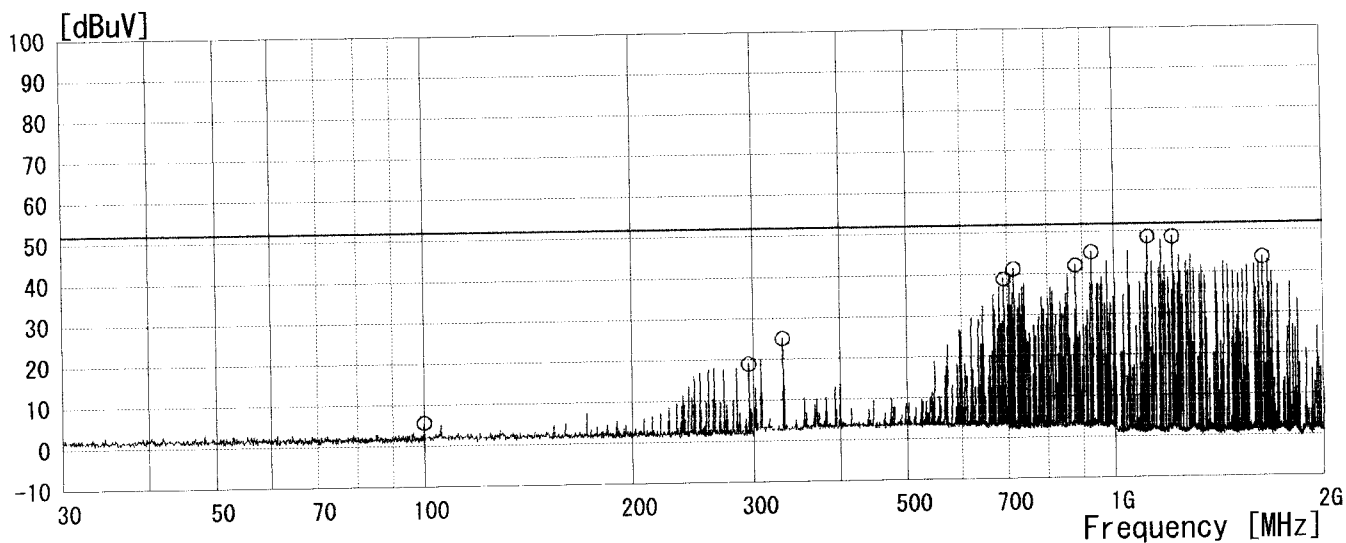
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : TUNING
PORT : ANTENNA TERMINAL
POWER : AC120V/60Hz
REMARKS : CATV MODE

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 07, 2002
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	99.900	26.8	---	-21.2	5.5	---	52.0	---	46.5	---
2	295.400	40.0	---	-21.1	18.9	---	52.0	---	33.1	---
3	330.900	46.0	---	-21.0	24.9	---	52.0	---	27.1	---
4	692.000	59.8	---	-21.1	38.8	---	52.0	---	13.2	---
5	715.000	62.2	---	-21.0	41.2	---	52.0	---	10.8	---
6	878.700	62.2	---	-20.3	41.9	---	52.0	---	10.1	---
7	926.700	65.2	---	-20.1	45.1	---	52.0	---	6.9	---
8	1117.900	77.9	---	-29.2	48.7	---	52.0	---	3.3	---
9	1213.600	77.7	---	-29.0	48.6	---	52.0	---	3.4	---
10	1638.600	71.9	---	-28.4	43.5	---	52.0	---	8.5	---

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



RF output level

A-PEX INTERNATIONAL CO., LTD.

Kanto office EMC Lab.

Company : ORION ELECTRIC CO.,LTD.

Report Number : 22EE0021-KT-1

Equipment : DVD/VCR

Regulation : FCC Part 15 Subpart B

Model number : SD-V280U

Date : January 08, 2002

Power : AC 120 V / 60 Hz

Description : Receive + Rec. mode (0 dBmV)

Engineer

: Hisayuki Kioka

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	88.2	20.4	67.8	69.5	1.7
4	67.25	86.4	20.4	66.0	69.5	3.5

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	73.0	20.4	52.6	56.5	3.9
	65.75	71.7	20.4	51.3	56.5	5.2
4	62.75	72.1	20.4	51.7	56.5	4.8
	71.75	70.1	20.4	49.7	56.5	6.8

RF output level

A-PEX INTERNATIONAL CO., LTD.

Kanto office EMC Lab. _____

Company : ORION ELECTRIC CO.,LTD.
 Equipment : DVD/VCR
 Model number : SD-V280U
 Power : AC 120 V / 60 Hz
 Description : Receive + Rec. mode (25 dBmV)

Report Number : 22EE0021-KT-1
 Regulation : FCC Part 15 Subpart B
 Date : January 08, 2002

Engineer _____

: Hisayuki Kioka

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	87.2	20.4	66.8	69.5	2.7
4	67.25	86.5	20.4	66.1	69.5	3.4

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	72.7	20.4	52.3	56.5	4.2
	65.75	71.6	20.4	51.2	56.5	5.3
4	62.75	72.1	20.4	51.7	56.5	4.8
	71.75	70.3	20.4	49.9	56.5	6.6

RF output level

A-PEX INTERNATIONAL CO., LTD.

Kanto office EMC Lab. _____

Company : ORION ELECTRIC CO.,LTD.

Report Number : 22EE0021-KT-1

Equipment : DVD/VCR

Regulation : FCC Part 15 Subpart B

Model number : SD-V280U

Date : January 08, 2002

Power : AC 120 V / 60 Hz

Description : AV 1 + Rec. mode (1 Vp-p)

Engineer _____


 : Hisayuki Kioka

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	85.7	20.4	65.3	69.5	4.2
4	67.25	87.4	20.4	67.0	69.5	2.5

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	72.5	20.4	52.1	56.5	4.4
	65.75	71.5	20.4	51.1	56.5	5.4
4	62.75	72.0	20.4	51.6	56.5	4.9
	71.75	70.4	20.4	50.0	56.5	6.5

RF output level

A-PEX INTERNATIONAL CO., LTD.

Kanto office EMC Lab. _____

Company : ORION ELECTRIC CO.,LTD.

Report Number : 22EE0021-KT-1

Equipment : DVD/VCR

Regulation : FCC Part 15 Subpart B

Model number : SD-V280U

Date : January 08, 2002

Power : AC 120 V / 60 Hz

Description : AV 1 + Rec. mode (5 Vp-p)

Engineer _____

: Hisayuki Kioka

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	87.2	20.4	66.8	69.5	2.8
4	67.25	87.5	20.4	67.1	69.5	2.4

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	72.5	20.4	52.1	56.5	4.4
	65.75	71.4	20.4	51.0	56.5	5.5
4	62.75	72.1	20.4	51.7	56.5	4.8
	71.75	70.2	20.4	49.8	56.5	6.7

RF output level

A-PEX INTERNATIONAL CO., LTD.

Kanto office EMC Lab. _____

Company : ORION ELECTRIC CO.,LTD.

Report Number : 22EE0021-KT-1

Equipment : DVD/VCR

Regulation : FCC Part 15 Subpart B

Model number : SD-V280U

Date : January 08, 2002

Power : AC 120 V / 60 Hz

Description : AV 2 + Rec. mode (1 Vp-p)

Engineer _____

: Hisayuki Kioka

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	86.9	20.4	66.5	69.5	3.0
4	67.25	86.4	20.4	66.0	69.5	3.5

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	72.4	20.4	52.0	56.5	4.5
	65.75	71.4	20.4	51.0	56.5	5.5
4	62.75	72.0	20.4	51.6	56.5	4.9
	71.75	70.1	20.4	49.7	56.5	6.8

RF output level

A-PEX INTERNATIONAL CO., LTD.

Kanto office EMC Lab. _____

Company : ORION ELECTRIC CO.,LTD.

Report Number : 22EE0021-KT-1

Equipment : DVD/VCR

Regulation : FCC Part 15 Subpart B

Model number : SD-V280U

Date : January 08, 2002

Power : AC 120 V / 60 Hz

Description : AV 2 + Rec. mode (5 Vp-p)

Engineer _____

: Hisayuki Kioka

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	87.0	20.4	66.6	69.5	2.9
4	67.25	86.9	20.4	66.5	69.5	3.0

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	72.4	20.4	52.0	56.5	4.5
	65.75	71.2	20.4	50.8	56.5	5.7
4	62.75	71.9	20.4	51.5	56.5	5.0
	71.75	70.2	20.4	49.8	56.5	6.7

RF output level

A-PEX INTERNATIONAL CO., LTD.

Kanto office EMC Lab. _____

Company : ORION ELECTRIC CO.,LTD.

Report Number : 22EE0021-KT-1

Equipment : DVD/VCR

Regulation : FCC Part 15 Subpart B

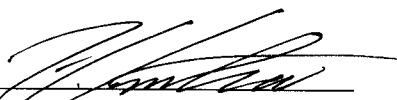
Model number : SD-V280U

Date : January 08, 2002

Power : AC 120 V / 60 Hz

Description : VCR playback mode

Engineer


 : Hisayuki Kioka

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	87.0	20.4	66.6	69.5	2.9
4	67.25	86.0	20.4	65.6	69.5	3.9

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	72.3	20.4	51.9	56.5	4.6
	65.75	71.3	20.4	50.9	56.5	5.6
4	62.75	72.1	20.4	51.7	56.5	4.8
	71.75	69.9	20.4	49.5	56.5	7.0

RF output level

A-PEX INTERNATIONAL CO., LTD.

Kanto office EMC Lab. _____

Company : ORION ELECTRIC CO.,LTD.

Report Number : 22EE0021-KT-1

Equipment : DVD/VCR

Regulation : FCC Part 15 Subpart B

Model number : SD-V280U

Date : January 08, 2002

Power : AC 120 V / 60 Hz

Description : DVD play mode

Engineer _____

: Hisayuki Kioka

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	86.8	20.4	66.4	69.5	3.1
4	67.25	87.5	20.4	67.1	69.5	2.4

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	72.3	20.4	51.9	56.5	4.6
	65.75	71.1	20.4	50.7	56.5	5.8
4	62.75	71.8	20.4	51.4	56.5	5.1
	71.75	70.2	20.4	49.8	56.5	6.7

SPURIOUS FROM RF OUTPUT TERMINAL

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

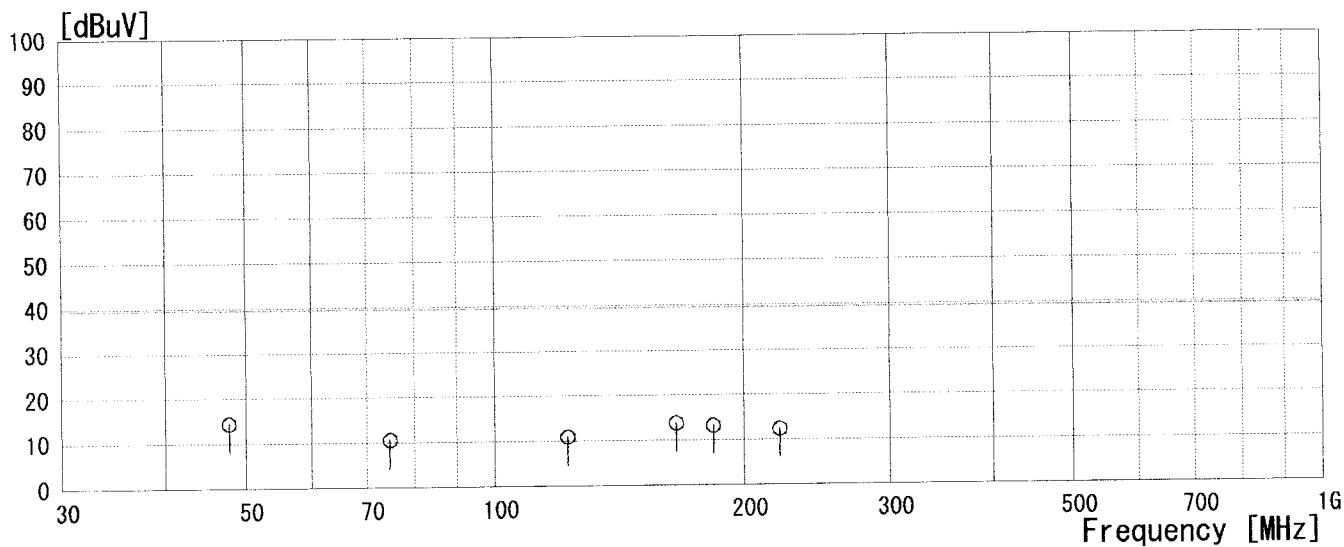
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : RECEIVE+REC (3CH OUTPUT)
LINE : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 0dBmV INPUT

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 1

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	47.820	34.7	----	-20.4	14.3	----	39.5	----	25.2	----
2	74.740	30.9	----	-20.4	10.5	----	39.5	----	29.0	----
3	122.560	31.2	----	-20.4	10.8	----	39.5	----	28.7	----
4	165.840	34.1	----	-20.4	13.8	----	39.5	----	25.7	----
5	183.750	33.6	----	-20.4	13.2	----	39.5	----	26.3	----
6	220.990	32.7	----	-20.4	12.3	----	39.5	----	27.2	----

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



SPURIOUS FROM RF OUTPUT TERMINAL

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

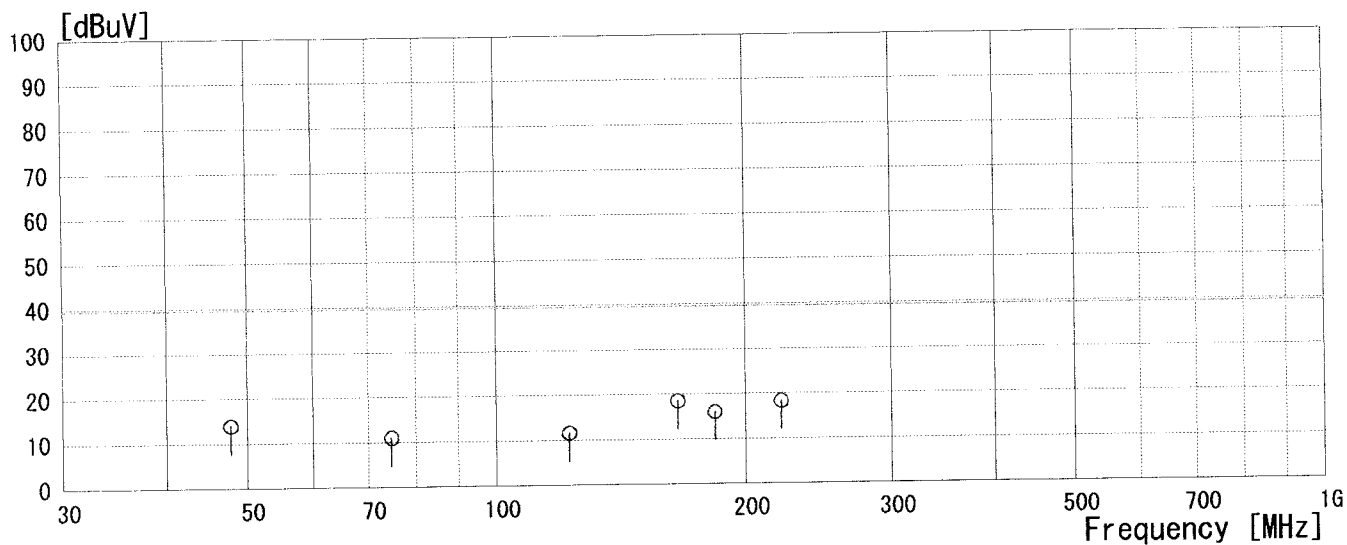
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : RECEIVE+REC (3CH OUTPUT)
LINE : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 25dBmV INPUT

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
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	47.840	34.2	----	-20.4	13.8	----	39.5	----	25.7	----
2	74.740	31.3	----	-20.4	10.9	----	39.5	----	28.6	----
3	122.520	31.9	----	-20.4	11.5	----	39.5	----	28.0	----
4	165.810	38.8	----	-20.4	18.4	----	39.5	----	21.1	----
5	183.780	36.3	----	-20.4	15.9	----	39.5	----	23.6	----
6	221.050	38.7	----	-20.4	18.3	----	39.5	----	21.2	----

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



SPURIOUS FROM RF OUTPUT TERMINAL

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

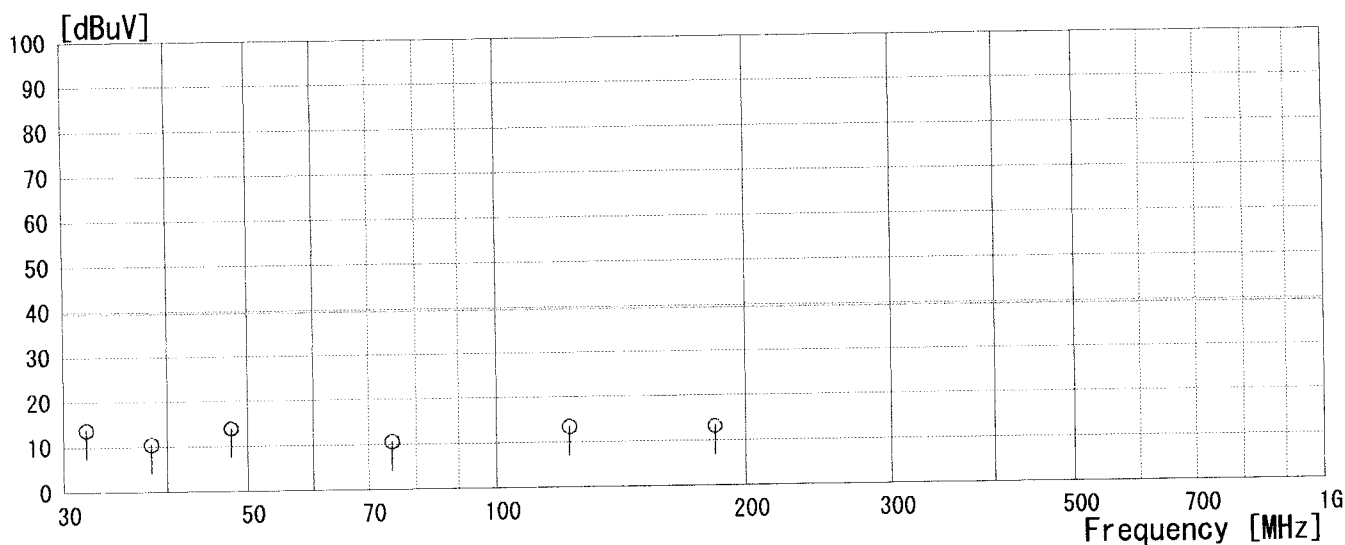
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV1+REC (3CH OUTPUT)
LINE : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 1Vp-p INPUT

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 5

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	32.000	34.0	----	-20.4	13.6	----	39.5	----	25.9	----
2	38.300	30.8	----	-20.4	10.4	----	39.5	----	29.1	----
3	47.810	34.2	----	-20.4	13.8	----	39.5	----	25.7	----
4	74.760	30.9	----	-20.4	10.5	----	39.5	----	29.0	----
5	122.610	33.7	----	-20.4	13.3	----	39.5	----	26.2	----
6	183.800	33.5	----	-20.4	13.1	----	39.5	----	26.4	----

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



SPURIOUS FROM RF OUTPUT TERMINAL

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

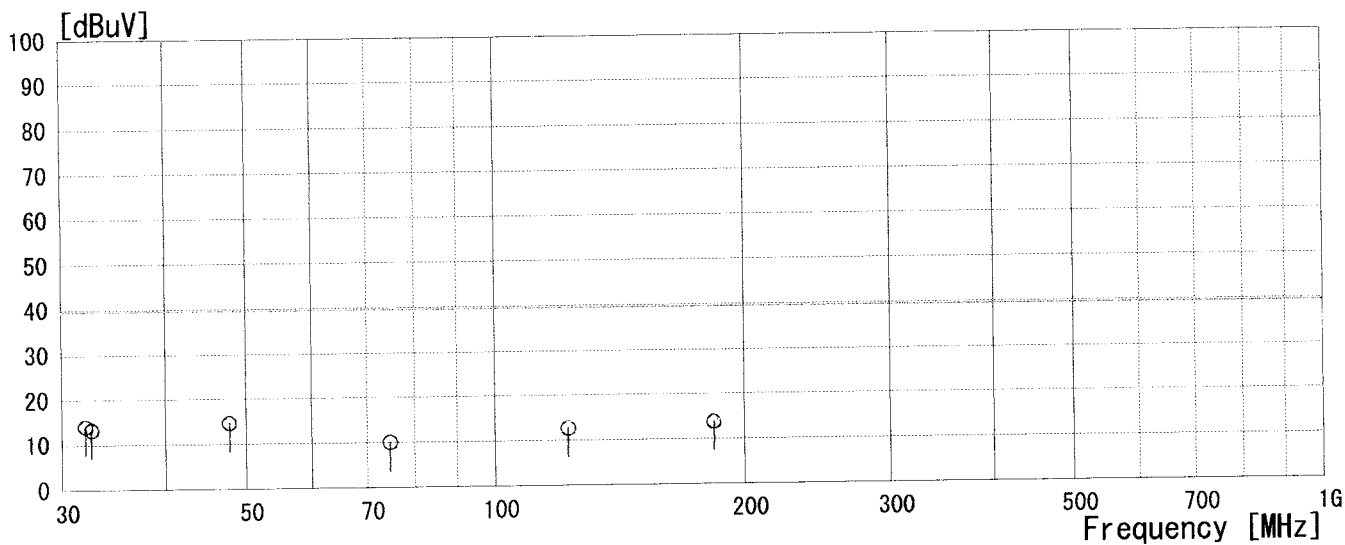
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV1+REC (3CH OUTPUT)
LINE : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 5Vp-p INPUT

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
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	32.040	34.4	---	-20.4	14.0	---	39.5	---	25.5	---
2	32.600	33.6	---	-20.4	13.2	---	39.5	---	26.3	---
3	47.810	35.0	---	-20.4	14.6	---	39.5	---	24.9	---
4	74.720	30.3	---	-20.4	9.9	---	39.5	---	29.6	---
5	122.590	33.0	---	-20.4	12.6	---	39.5	---	26.9	---
6	183.790	34.1	---	-20.4	13.7	---	39.5	---	25.8	---

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



SPURIOUS FROM RF OUTPUT TERMINAL

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

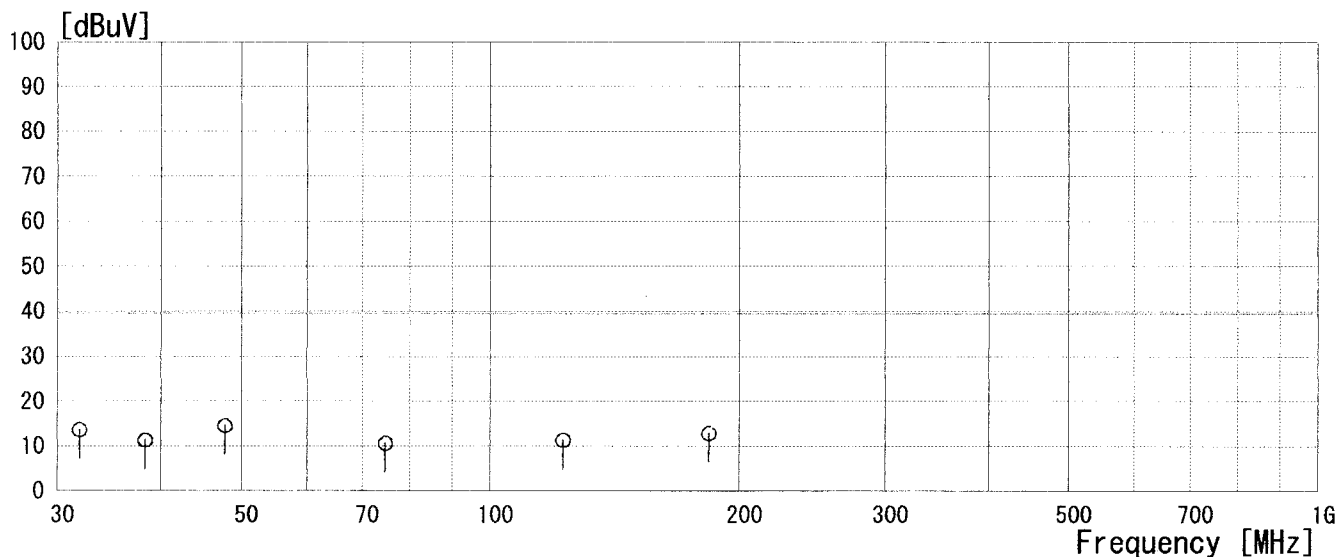
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV2+REC (3CH OUTPUT)
LINE : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 1Vp-p INPUT

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
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	31.950	33.8	----	-20.4	13.4	----	39.5	----	26.1	----
2	38.320	31.6	----	-20.4	11.2	----	39.5	----	28.3	----
3	47.840	34.8	----	-20.4	14.4	----	39.5	----	25.1	----
4	74.750	30.9	----	-20.4	10.5	----	39.5	----	29.0	----
5	122.590	31.6	----	-20.4	11.2	----	39.5	----	28.3	----
6	183.820	33.2	----	-20.4	12.8	----	39.5	----	26.7	----

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



SPURIOUS FROM RF OUTPUT TERMINAL

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

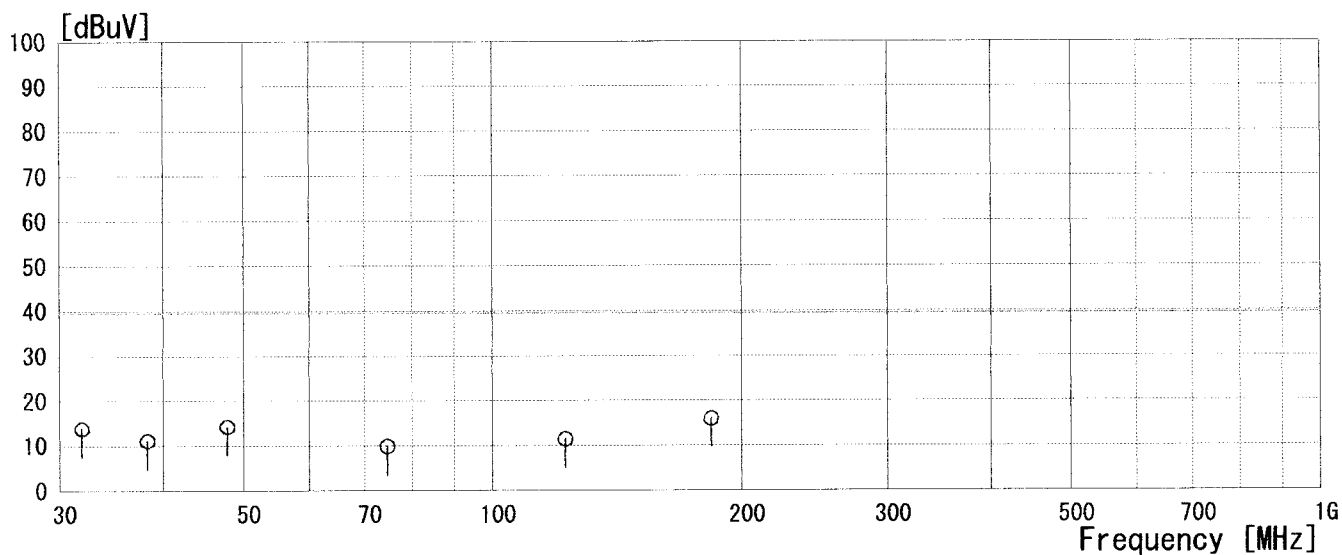
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV2+REC (3CH OUTPUT)
LINE : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 5Vp-p INPUT

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 10

TEST ENGINEER: *Hisayuki Kioka*
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	31.960	34.1	----	-20.4	13.7	----	39.5	----	25.8	----
2	38.310	31.4	----	-20.4	11.0	----	39.5	----	28.5	----
3	47.850	34.5	----	-20.4	14.1	----	39.5	----	25.4	----
4	74.710	30.2	----	-20.4	9.8	----	39.5	----	29.7	----
5	122.580	31.7	----	-20.4	11.3	----	39.5	----	28.2	----
6	183.850	36.3	----	-20.4	15.9	----	39.5	----	23.6	----

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



SPURIOUS FROM RF OUTPUT TERMINAL

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

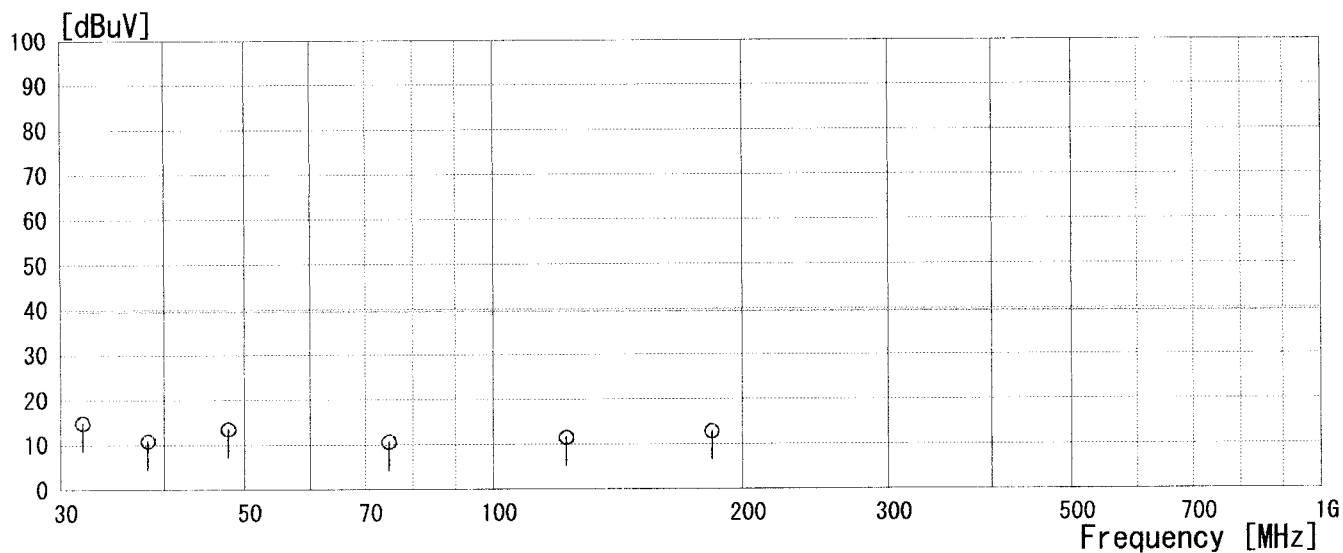
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : VCR PLAYBACK (3CH OUTPUT)
LINE : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : -

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 13

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	31.950	35.2	----	-20.4	14.8	----	39.5	----	24.7	----
2	38.290	31.1	----	-20.4	10.7	----	39.5	----	28.8	----
3	47.840	33.8	----	-20.4	13.4	----	39.5	----	26.1	----
4	74.760	30.9	----	-20.4	10.5	----	39.5	----	29.0	----
5	122.590	31.8	----	-20.4	11.4	----	39.5	----	28.1	----
6	183.750	33.2	----	-20.4	12.8	----	39.5	----	26.7	----

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



SPURIOUS FROM RF OUTPUT TERMINAL

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

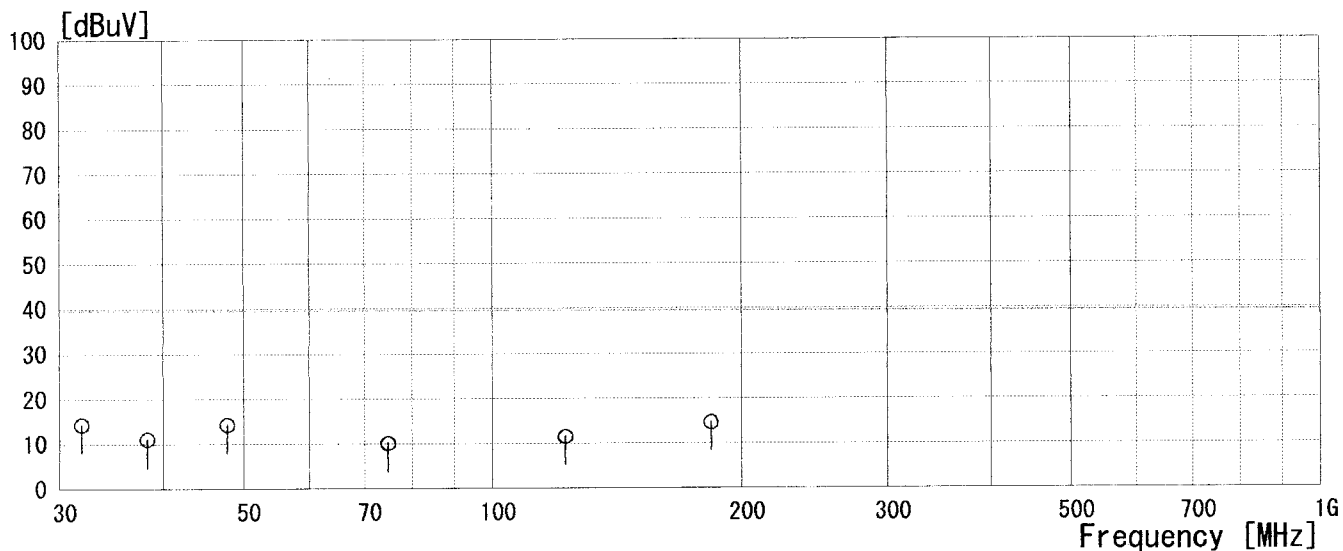
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : DVD PLAYBACK (3CH OUTPUT)
LINE : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : -

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 15

TEST ENGINEER: Hiroyuki Kioka

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	31.940	34.6	----	-20.4	14.2	----	39.5	----	25.3	----
2	38.310	31.3	----	-20.4	10.9	----	39.5	----	28.6	----
3	47.860	34.6	----	-20.4	14.2	----	39.5	----	25.3	----
4	74.770	30.4	----	-20.4	10.0	----	39.5	----	29.5	----
5	122.560	31.8	----	-20.4	11.4	----	39.5	----	28.1	----
6	183.830	35.0	----	-20.4	14.6	----	39.5	----	24.9	----

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



SPURIOUS FROM RF OUTPUT TERMINAL

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

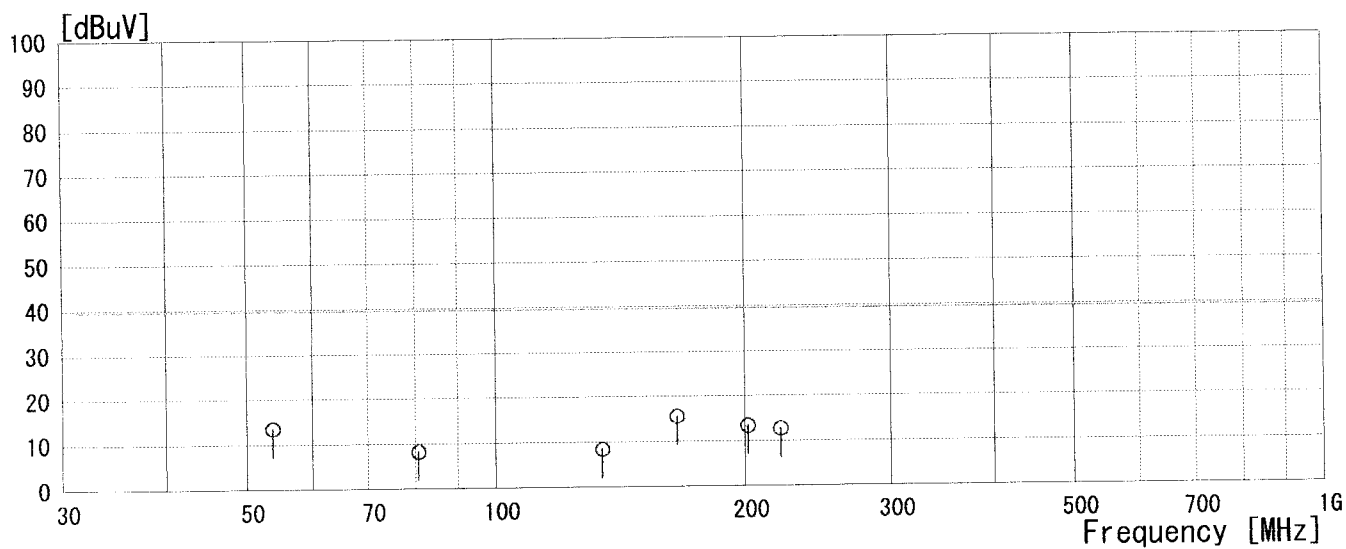
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : RECEIVE+REC (4CH OUTPUT)
LINE : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 0dBmV INPUT

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 3

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	53.820	33.8	----	-20.4	13.4	----	39.5	----	26.1	----
2	80.690	28.5	----	-20.4	8.1	----	39.5	----	31.4	----
3	134.580	28.7	----	-20.4	8.3	----	39.5	----	31.2	----
4	165.780	35.9	----	-20.4	15.5	----	39.5	----	24.0	----
5	201.760	33.7	----	-20.4	13.4	----	39.5	----	26.1	----
6	221.010	33.0	----	-20.4	12.6	----	39.5	----	26.9	----

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



SPURIOUS FROM RF OUTPUT TERMINAL

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

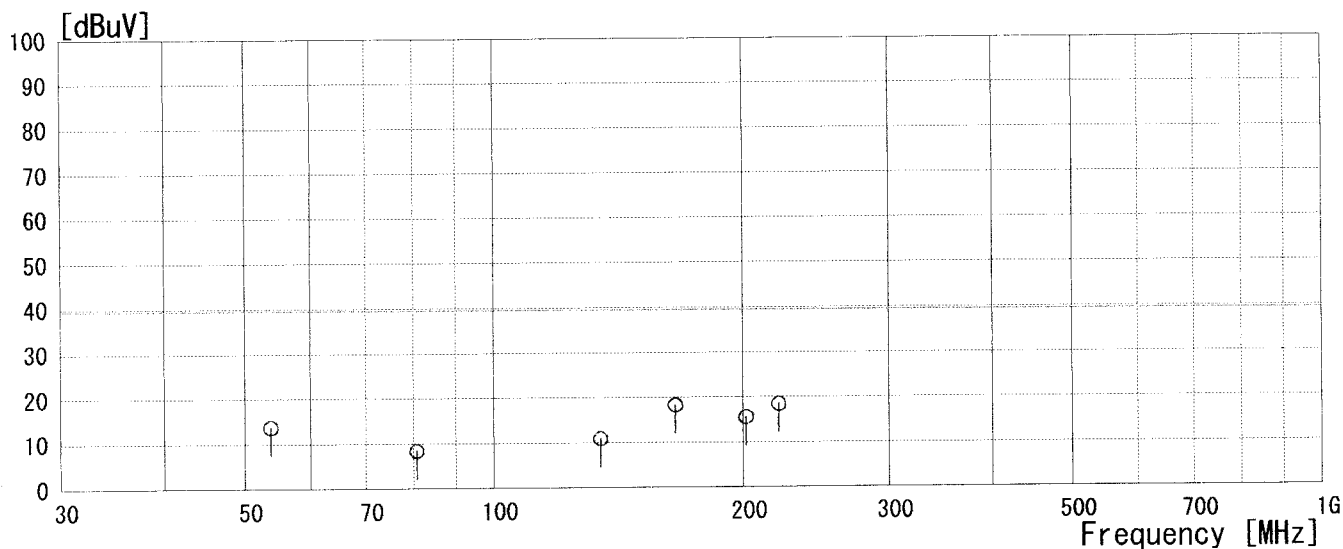
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : RECEIVE+REC (4CH OUTPUT)
LINE : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 25dBmV INPUT

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
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	53.820	34.0	----	-20.4	13.6	----	39.5	----	25.9	----
2	80.740	28.7	----	-20.4	8.3	----	39.5	----	31.2	----
3	134.620	31.2	----	-20.4	10.8	----	39.5	----	28.7	----
4	165.820	38.6	----	-20.4	18.2	----	39.5	----	21.3	----
5	201.820	35.9	----	-20.4	15.5	----	39.5	----	24.0	----
6	221.040	38.8	----	-20.4	18.4	----	39.5	----	21.1	----

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



SPURIOUS FROM RF OUTPUT TERMINAL

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

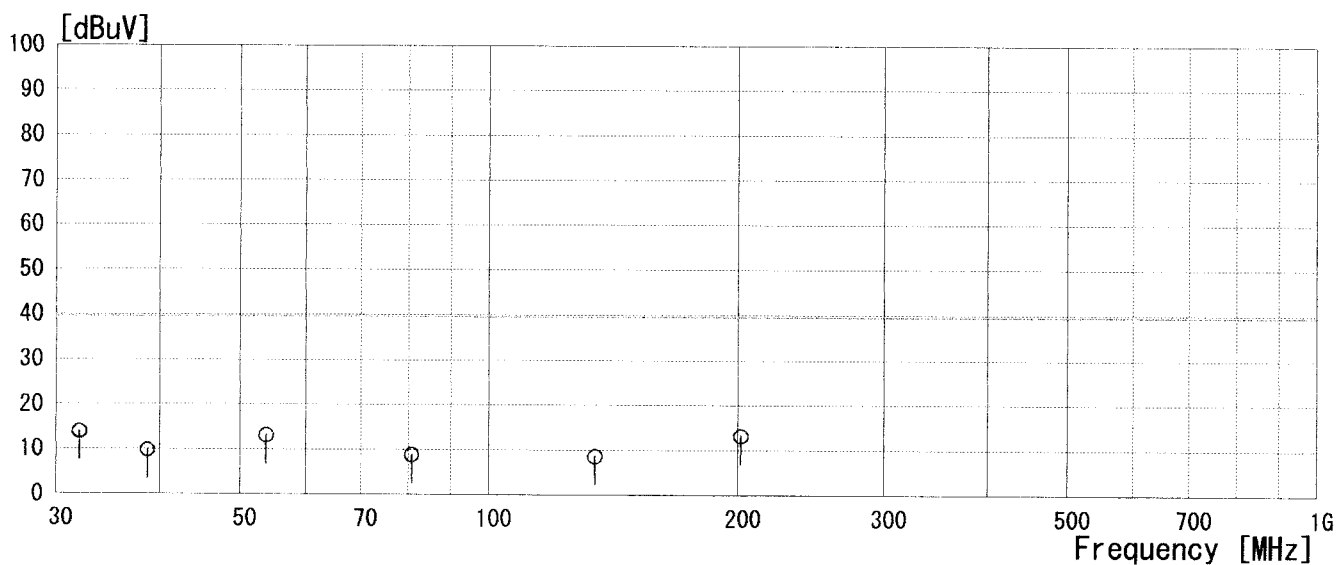
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV1+REC (4CH OUTPUT)
LINE : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 1Vp-p INPUT

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 7

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	32.040	34.2	----	-20.4	13.8	----	39.5	----	25.7	----
2	38.700	30.1	----	-20.4	9.7	----	39.5	----	29.8	----
3	53.820	33.4	----	-20.4	13.0	----	39.5	----	26.5	----
4	80.720	29.2	----	-20.4	8.8	----	39.5	----	30.7	----
5	134.490	28.9	----	-20.4	8.5	----	39.5	----	31.0	----
6	201.820	33.5	----	-20.4	13.1	----	39.5	----	26.4	----

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



SPURIOUS FROM RF OUTPUT TERMINAL

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

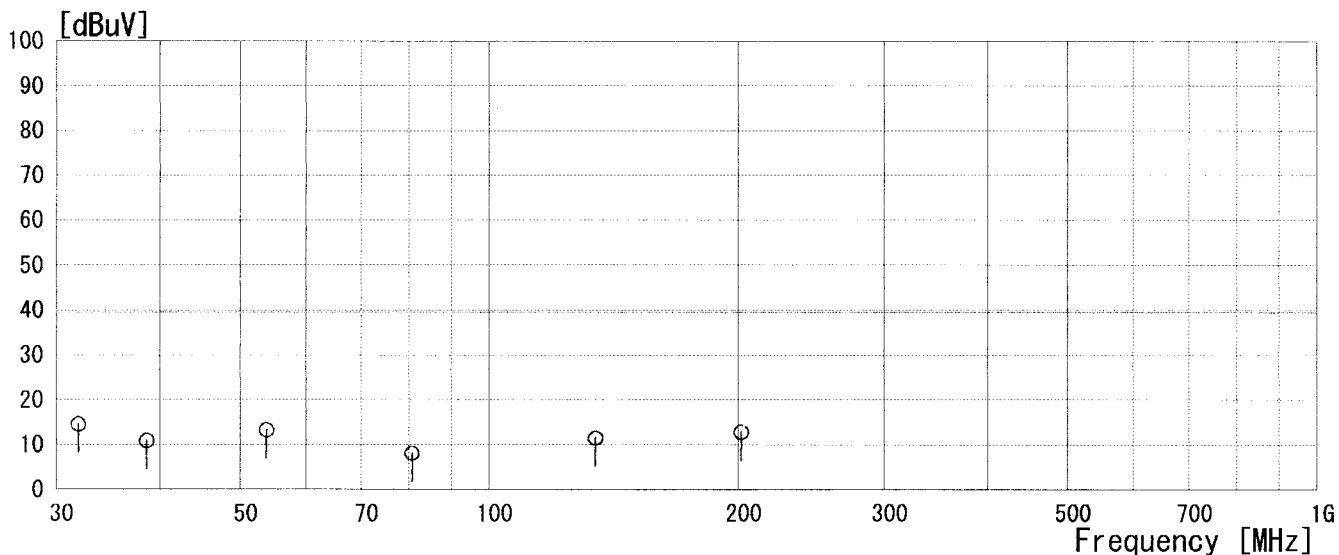
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV1+REC (4CH OUTPUT)
LINE : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 5Vp-p INPUT

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
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	31.950	34.9	----	-20.4	14.5	----	39.5	----	25.0	----
2	38.590	31.2	----	-20.4	10.8	----	39.5	----	28.7	----
3	53.850	33.6	----	-20.4	13.2	----	39.5	----	26.3	----
4	80.740	28.4	----	-20.4	8.0	----	39.5	----	31.5	----
5	134.510	31.8	----	-20.4	11.4	----	39.5	----	28.1	----
6	201.820	33.1	----	-20.4	12.7	----	39.5	----	26.8	----

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



SPURIOUS FROM RF OUTPUT TERMINAL

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

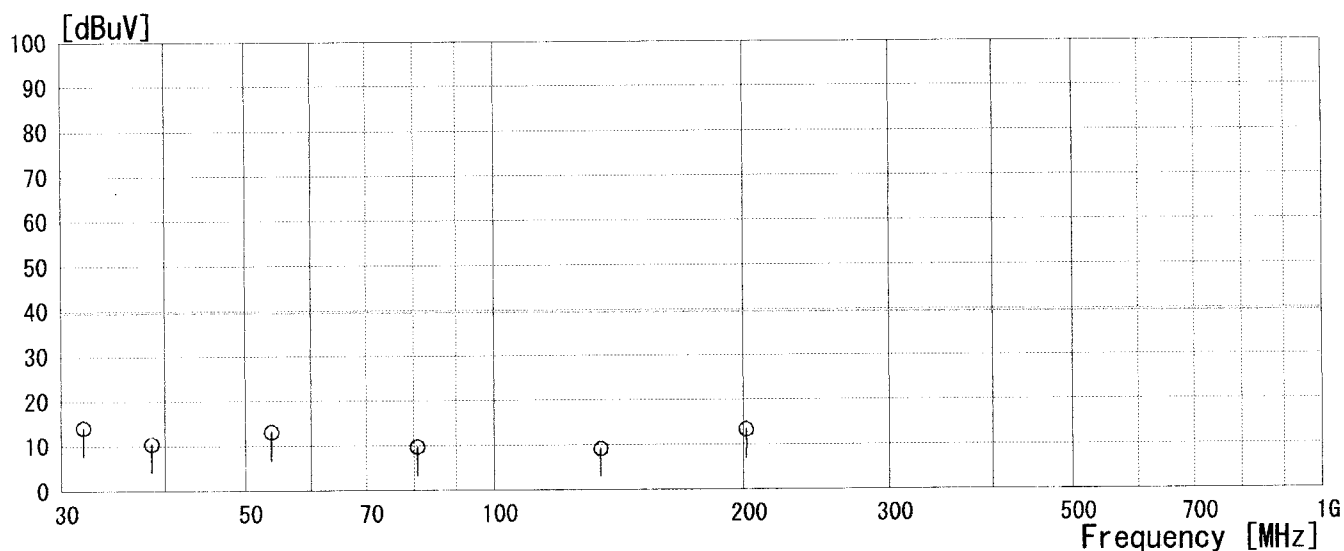
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE: AV2+REC (4CH OUTPUT)
LINE : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 1Vp-p INPUT

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 11

TEST ENGINEER: H. sayuki Kioka

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	31.950	34.4	----	-20.4	14.0	----	39.5	----	25.5	----
2	38.610	30.8	----	-20.4	10.4	----	39.5	----	29.1	----
3	53.840	33.4	----	-20.4	13.0	----	39.5	----	26.5	----
4	80.750	30.0	----	-20.4	9.6	----	39.5	----	29.9	----
5	134.560	29.5	----	-20.4	9.1	----	39.5	----	30.4	----
6	201.760	33.7	----	-20.4	13.3	----	39.5	----	26.2	----

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



SPURIOUS FROM RF OUTPUT TERMINAL

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

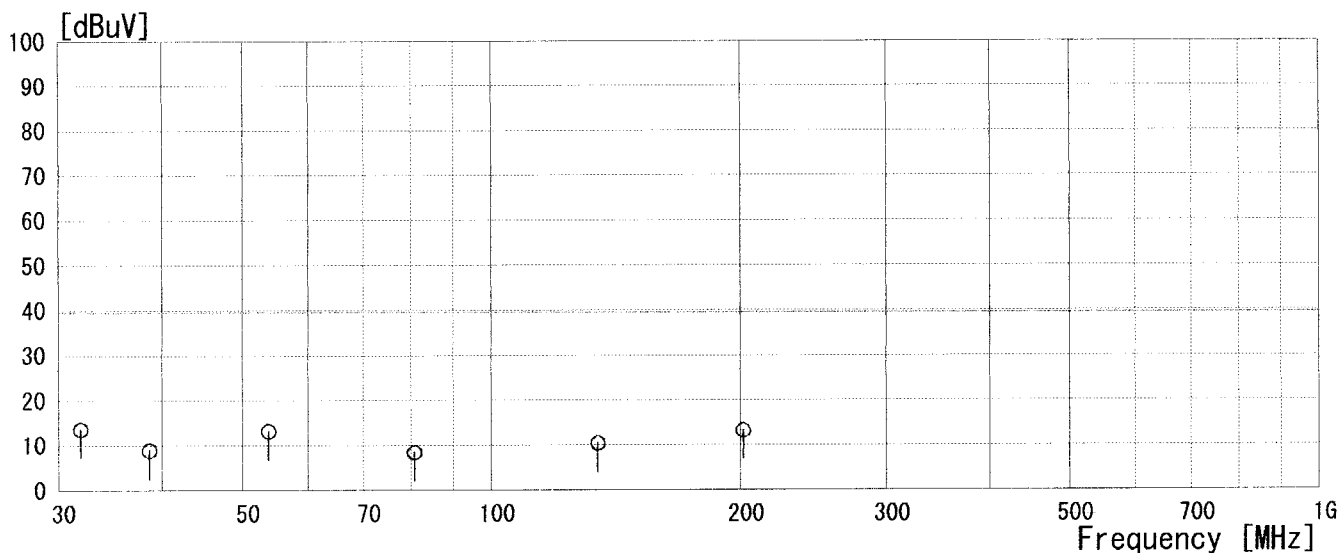
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV2+REC (4CH OUTPUT)
LINE : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 5Vp-p INPUT

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 12

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	31.950	33.9	----	-20.4	13.5	----	39.5	----	26.0	----
2	38.640	29.2	----	-20.4	8.8	----	39.5	----	30.7	----
3	53.860	33.4	----	-20.4	13.0	----	39.5	----	26.5	----
4	80.750	28.7	----	-20.4	8.3	----	39.5	----	31.2	----
5	134.590	30.7	----	-20.4	10.3	----	39.5	----	29.2	----
6	201.760	33.6	----	-20.4	13.2	----	39.5	----	26.3	----

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



SPURIOUS FROM RF OUTPUT TERMINAL

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

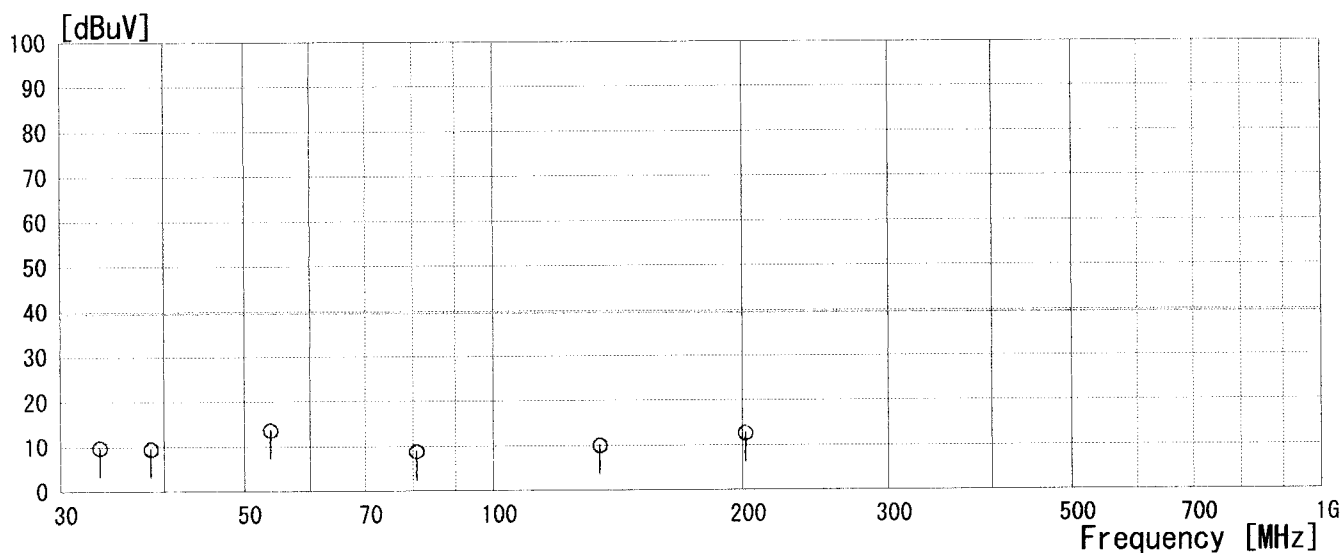
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : VCR PLAYBACK (4CH OUTPUT)
LINE : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : -

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 14

TEST ENGINEER: Hiroyuki Kioka

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	33.540	30.0	----	-20.4	9.6	----	39.5	----	29.9	----
2	38.630	29.8	----	-20.4	9.4	----	39.5	----	30.1	----
3	53.830	33.9	----	-20.4	13.5	----	39.5	----	26.0	----
4	80.770	29.1	----	-20.4	8.7	----	39.5	----	30.8	----
5	134.560	30.3	----	-20.4	9.9	----	39.5	----	29.6	----
6	201.790	33.0	----	-20.4	12.6	----	39.5	----	26.9	----

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



SPURIOUS FROM RF OUTPUT TERMINAL

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

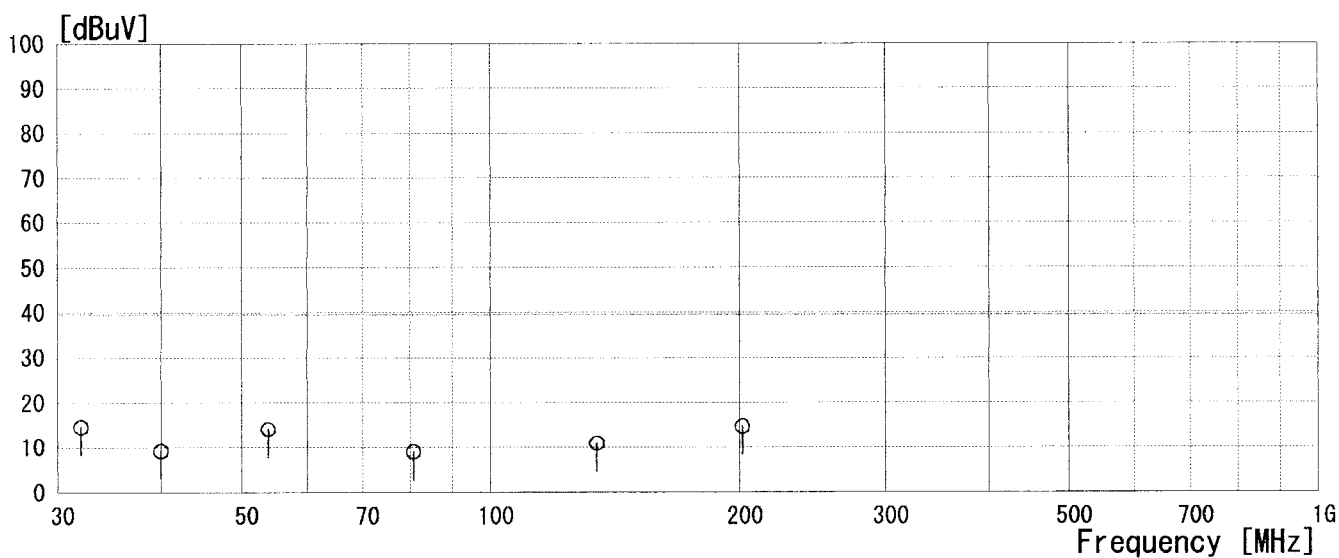
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : DVD PLAYBACK (4CH OUTPUT)
LINE : RF OUTPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : -

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 16

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	32.030	34.9	----	-20.4	14.5	----	39.5	----	25.0	----
2	40.010	29.5	----	-20.4	9.1	----	39.5	----	30.4	----
3	53.870	34.4	----	-20.4	14.0	----	39.5	----	25.5	----
4	80.740	29.3	----	-20.4	8.9	----	39.5	----	30.6	----
5	134.440	31.2	----	-20.4	10.8	----	39.5	----	28.7	----
6	201.790	35.0	----	-20.4	14.7	----	39.5	----	24.8	----

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



ANTENNA TRANSFER SWITCH

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

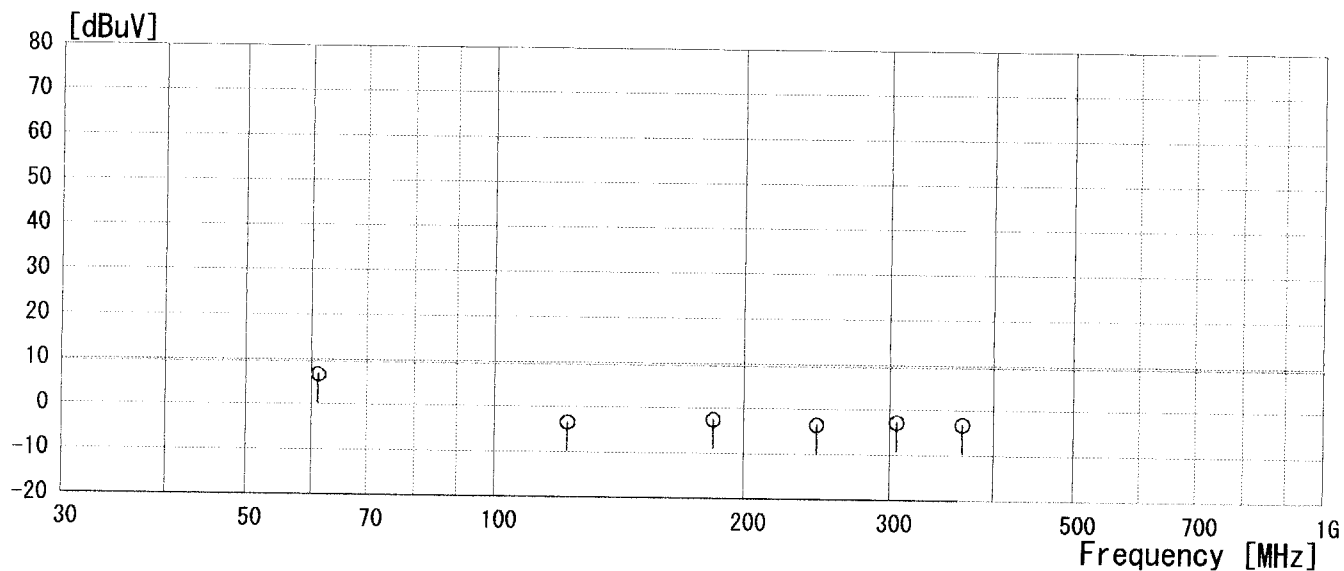
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV1 INPUT (3CH OUTPUT)
LINE : RF INPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 1Vp-p

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
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	61.250	26.7	----	-20.1	6.6	----	9.5	----	2.9	----
2	122.500	16.6	----	-20.1	-3.5	----	9.5	----	13.0	----
3	183.750	17.5	----	-20.1	-2.6	----	9.5	----	12.1	----
4	245.000	16.5	----	-20.1	-3.6	----	9.5	----	13.1	----
5	306.250	17.2	----	-20.1	-2.9	----	9.5	----	12.4	----
6	367.500	16.8	----	-20.1	-3.3	----	9.5	----	12.8	----

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



ANTENNA TRANSFER SWITCH

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

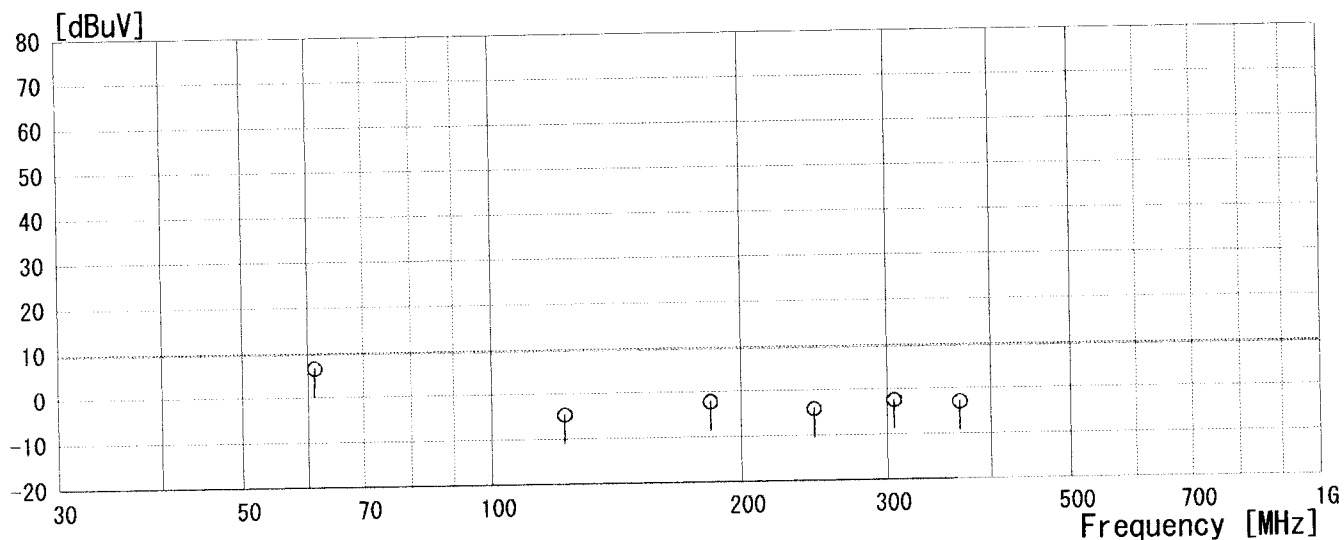
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV1 INPUT (3CH OUTPUT)
LINE : RF INPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 5Vp-p

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
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	61.250	26.5	----	-20.1	6.4	----	9.5	----	3.1	----
2	122.500	15.3	----	-20.1	-4.8	----	9.5	----	14.3	----
3	183.750	17.8	----	-20.1	-2.3	----	9.5	----	11.8	----
4	245.000	15.9	----	-20.1	-4.2	----	9.5	----	13.7	----
5	306.250	17.6	----	-20.1	-2.5	----	9.5	----	12.0	----
6	367.500	17.1	----	-20.1	-3.0	----	9.5	----	12.5	----

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



ANTENNA TRANSFER SWITCH

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

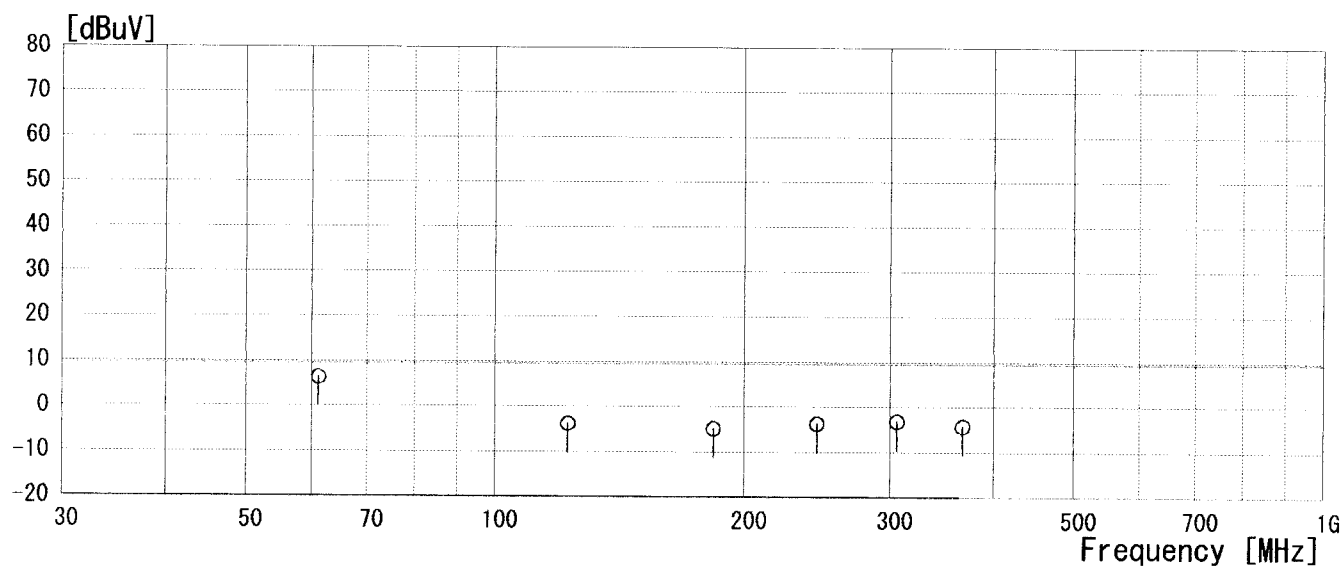
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE: AV2 INPUT (3CH OUTPUT)
LINE : RF INPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 1Vp-p

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 3

TEST ENGINEER: Hiroyuki Kioka

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	61.250	26.4	----	-20.1	6.3	----	9.5	----	3.2	----
2	122.500	16.2	----	-20.1	-3.9	----	9.5	----	13.4	----
3	183.750	15.1	----	-20.1	-5.0	----	9.5	----	14.5	----
4	245.000	16.2	----	-20.1	-3.9	----	9.5	----	13.4	----
5	306.250	16.8	----	-20.1	-3.3	----	9.5	----	12.8	----
6	367.500	15.7	----	-20.1	-4.4	----	9.5	----	13.9	----

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



ANTENNA TRANSFER SWITCH

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

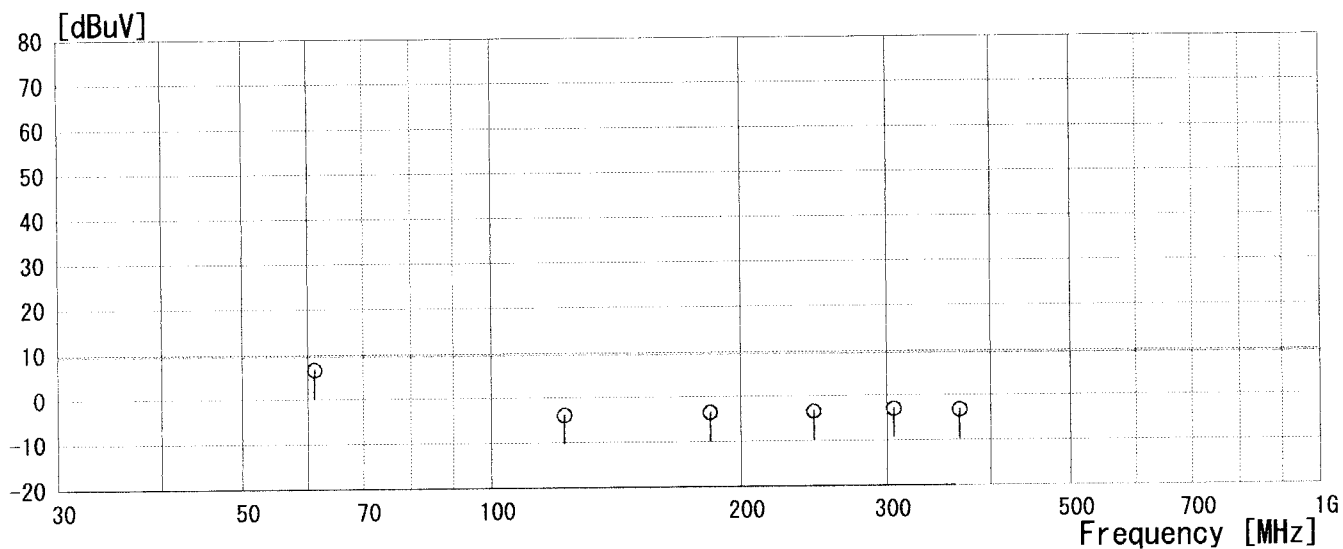
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV2 INPUT (3CH OUTPUT)
LINE : RF INPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 5Vp-p

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
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	61.250	26.6	---	-20.1	6.5	---	9.5	---	3.0	---
2	122.500	16.1	---	-20.1	-4.0	---	9.5	---	13.5	---
3	183.750	16.5	---	-20.1	-3.6	---	9.5	---	13.1	---
4	245.000	16.6	---	-20.1	-3.5	---	9.5	---	13.0	---
5	306.250	17.1	---	-20.1	-3.0	---	9.5	---	12.5	---
6	367.500	16.8	---	-20.1	-3.3	---	9.5	---	12.8	---

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



ANTENNA TRANSFER SWITCH

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

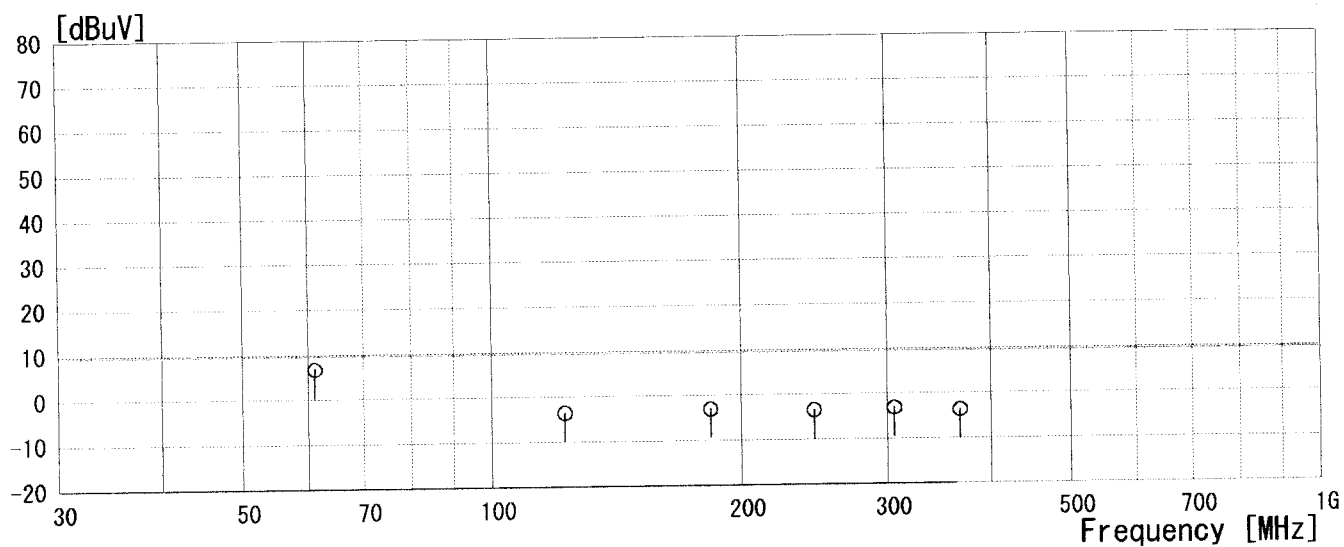
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : VCR PLAYBACK (3CH OUTPUT)
LINE : RF INPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : -

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 9

TEST ENGINEER: Hrsayuki Kioka

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	61.250	26.7	---	-20.1	6.6	---	9.5	---	2.9	---
2	122.500	16.4	---	-20.1	-3.7	---	9.5	---	13.2	---
3	183.750	17.0	---	-20.1	-3.1	---	9.5	---	12.6	---
4	245.000	16.5	---	-20.1	-3.6	---	9.5	---	13.1	---
5	306.250	16.9	---	-20.1	-3.2	---	9.5	---	12.7	---
6	367.500	16.3	---	-20.1	-3.8	---	9.5	---	13.3	---

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



ANTENNA TRANSFER SWITCH

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

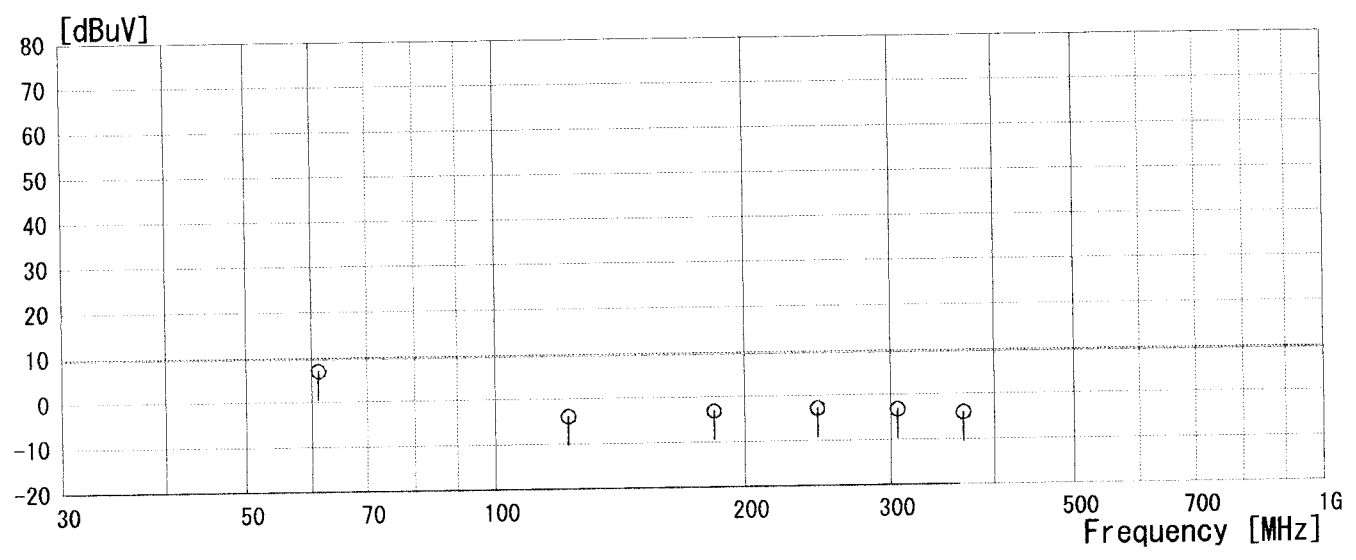
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : DVD PLAYBACK (3CH OUTPUT)
LINE : RF INPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : -

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 11

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	61.250	26.9	----	-20.1	6.8	----	9.5	----	2.7	----
2	122.500	16.1	----	-20.1	-4.0	----	9.5	----	13.5	----
3	183.750	16.9	----	-20.1	-3.2	----	9.5	----	12.7	----
4	245.000	17.2	----	-20.1	-2.9	----	9.5	----	12.4	----
5	306.250	16.8	----	-20.1	-3.3	----	9.5	----	12.8	----
6	367.500	15.9	----	-20.1	-4.2	----	9.5	----	13.7	----

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



ANTENNA TRANSFER SWITCH

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

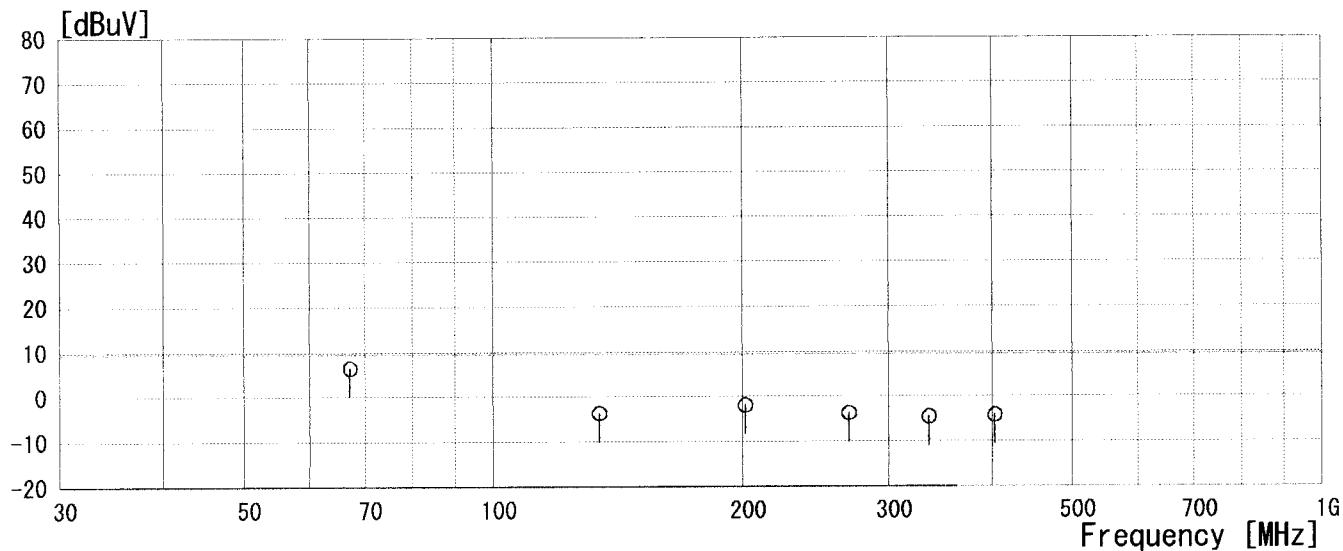
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV1 INPUT (4CH OUTPUT)
LINE : RF INPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 1Vp-p

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 5

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	67.250	26.5	----	-20.1	6.4	----	9.5	----	3.1	----
2	134.500	16.3	----	-20.1	-3.8	----	9.5	----	13.3	----
3	201.750	18.1	----	-20.1	-2.0	----	9.5	----	11.5	----
4	269.000	16.3	----	-20.1	-3.8	----	9.5	----	13.3	----
5	336.250	15.5	----	-20.1	-4.6	----	9.5	----	14.1	----
6	403.500	15.8	----	-20.0	-4.2	----	9.5	----	13.7	----

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



ANTENNA TRANSFER SWITCH

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

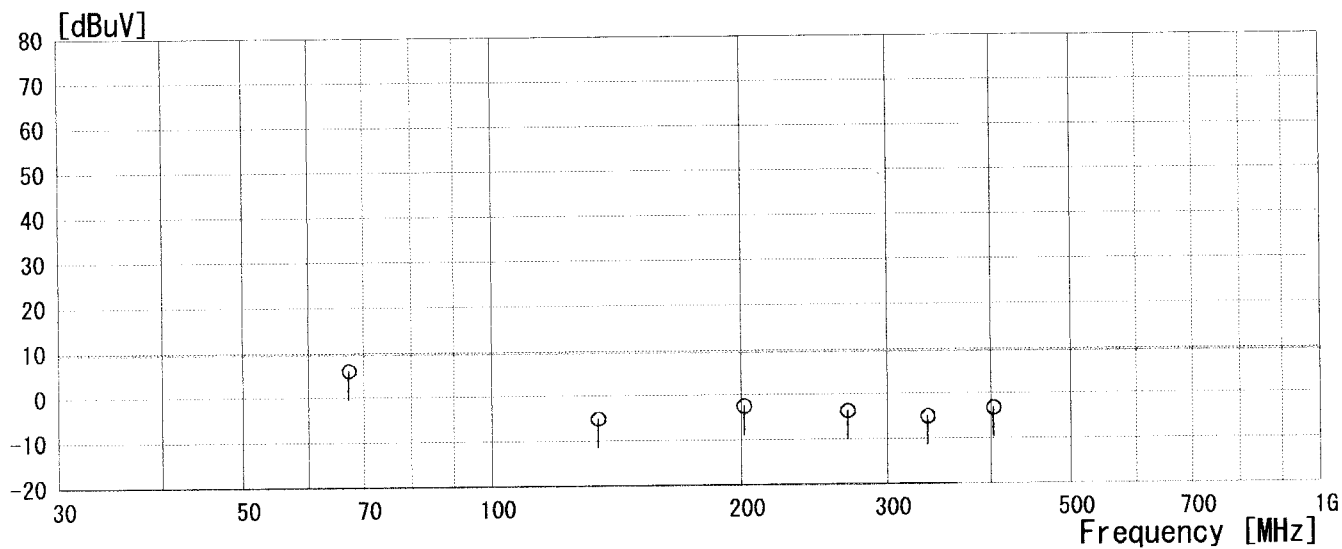
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV1 INPUT (4CH OUTPUT)
LINE : RF INPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 5Vp-p

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
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	67.250	26.0	----	-20.1	5.9	----	9.5	----	3.6	----
2	134.500	14.9	----	-20.1	-5.2	----	9.5	----	14.7	----
3	201.750	17.5	----	-20.1	-2.6	----	9.5	----	12.1	----
4	269.000	16.3	----	-20.1	-3.8	----	9.5	----	13.3	----
5	336.250	15.0	----	-20.1	-5.1	----	9.5	----	14.6	----
6	403.500	16.8	----	-20.0	-3.2	----	9.5	----	12.7	----

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



ANTENNA TRANSFER SWITCH

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

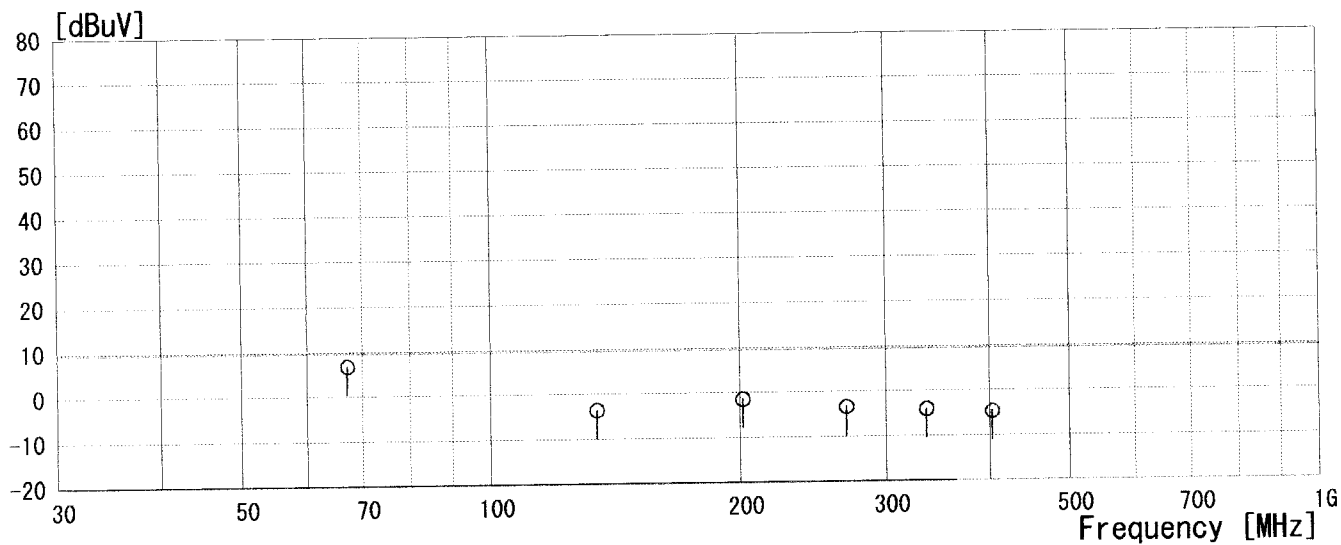
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV2 INPUT (4CH OUTPUT)
LINE : RF INPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 1Vp-p

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 7

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	67.250	26.8	---	-20.1	6.7	---	9.5	---	2.8	---
2	134.500	16.4	---	-20.1	-3.7	---	9.5	---	13.2	---
3	201.750	18.5	---	-20.1	-1.6	---	9.5	---	11.1	---
4	269.000	16.6	---	-20.1	-3.5	---	9.5	---	13.0	---
5	336.250	15.9	---	-20.1	-4.2	---	9.5	---	13.7	---
6	403.500	15.3	---	-20.0	-4.7	---	9.5	---	14.2	---

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



ANTENNA TRANSFER SWITCH

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

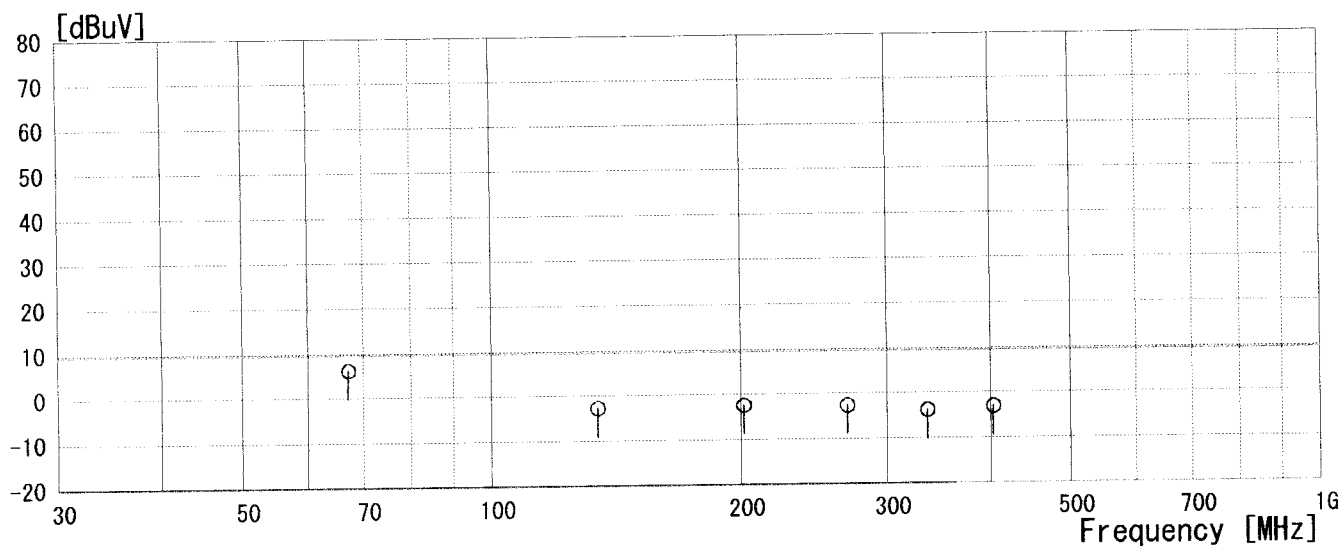
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : AV2 INPUT (4CH OUTPUT)
LINE : RF INPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : 5Vp-p

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
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	67.250	26.2	----	-20.1	6.1	----	9.5	----	3.4	----
2	134.500	17.2	----	-20.1	-2.9	----	9.5	----	12.4	----
3	201.750	17.6	----	-20.1	-2.5	----	9.5	----	12.0	----
4	269.000	17.4	----	-20.1	-2.7	----	9.5	----	12.2	----
5	336.250	16.2	----	-20.1	-3.9	----	9.5	----	13.4	----
6	403.500	16.9	----	-20.0	-3.1	----	9.5	----	12.6	----

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



ANTENNA TRANSFER SWITCH

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

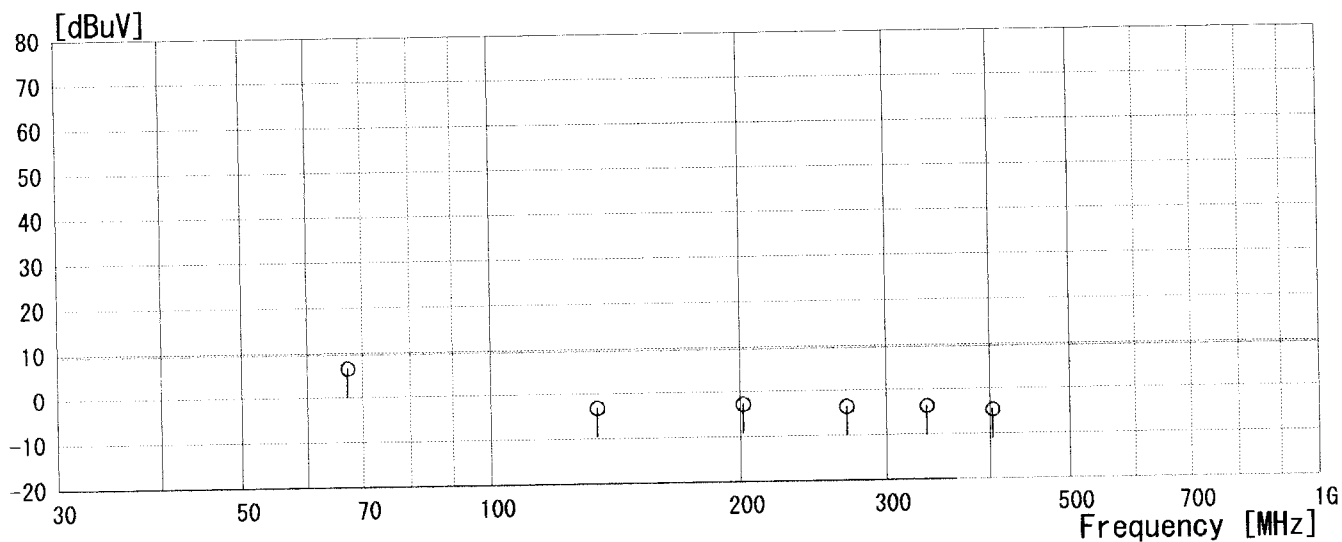
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : VCR PLAYBACK (4CH OUTPUT)
LINE : RF INPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : -

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
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	67.250	26.5	----	-20.1	6.4	----	9.5	----	3.1	----
2	134.500	16.8	----	-20.1	-3.3	----	9.5	----	12.8	----
3	201.750	17.2	----	-20.1	-2.9	----	9.5	----	12.4	----
4	269.000	16.4	----	-20.1	-3.7	----	9.5	----	13.2	----
5	336.250	16.3	----	-20.1	-3.8	----	9.5	----	13.3	----
6	403.500	15.3	----	-20.0	-4.7	----	9.5	----	14.2	----

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



ANTENNA TRANSFER SWITCH

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

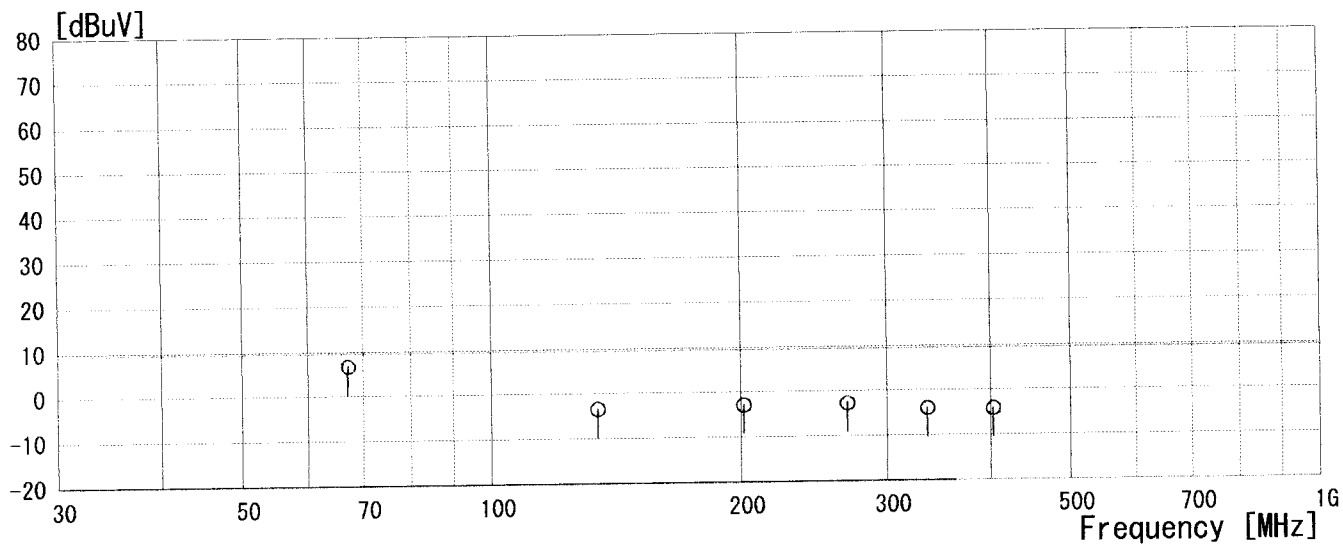
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : DVD/VCR
MODEL NAME : SD-V280U
OPERATION MODE : DVD PLAYBACK (4CH OUTPUT)
LINE : RF INPUT TERMINAL
POWER : AC120V/60Hz
REMARKS : -

REPORT No. : 22EE0021-KT-1
DATE : JANUARY 08, 2002
REGULATION : FCC PART15 SUBPART B
TEST No. : 12

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	67.250	26.7	----	-20.1	6.6	----	9.5	----	2.9	----
2	134.500	16.5	----	-20.1	-3.6	----	9.5	----	13.1	----
3	201.750	17.1	----	-20.1	-3.0	----	9.5	----	12.5	----
4	269.000	17.3	----	-20.1	-2.8	----	9.5	----	12.3	----
5	336.250	16.0	----	-20.1	-4.1	----	9.5	----	13.6	----
6	403.500	15.8	----	-20.0	-4.2	----	9.5	----	13.7	----

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



Kanto office EMC Laboratory

Description : Receive mode


: 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	20.6	10.7
3	61.25	19.6	9.5	20	507.25	20.9	11.0
4	67.25	19.9	9.8	26	543.25	20.9	11.0
5	77.25	20.2	10.2	32	579.25	21.4	11.7
6	83.25	20.2	10.2	38	615.25	21.4	11.7
7	175.25	18.3	8.2	44	651.25	21.6	12.0
8	181.25	18.1	8.0	50	687.25	21.8	12.3
9	187.25	18.1	8.0	56	723.25	22.4	13.1
10	193.25	18.0	7.9	62	759.25	22.4	13.1
11	199.25	18.0	7.9	69	801.25	22.7	13.6
12	205.25	18.0	7.9	-	-	-	-
13	211.25	18.0	7.9	-	-	-	-
Average VHF			8.8	Average UHF			12.0
Average UHF/VHF : $20 \log \text{UHF[uV]}/\text{VHF[uV]} = 2.7 \text{ dB}$							
[Limit : 8.0 dB]							

Noise figure test

A-PEX INTERNATIONAL CO., LTD.

Kanto office EMC Laboratory

Company : ORION ELECTRIC CO.,LTD.

Report Number : 22EE0021-KT-1

Equipment : DVD/VCR

Regulation : FCC Part 15 Subpart B

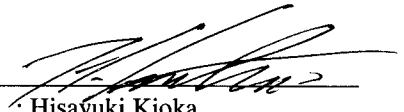
Model number : SD-V280U

Date : January 09, 2002

Power : AC 120 V / 60 Hz

Description : Receive mode

Engineer


 : Hisayuki Kioka

Ch.	Frequency [MHz]	Meter reading [dB]	Correction factor [dB]	Noise figure [dB]	Limits [dB]	Margin [dB]
TV VHF Fundamental						
2	55.25	5.7	0.2	5.5	14.0	8.5
3	61.25	5.5	0.2	5.3	14.0	8.7
4	67.25	6.5	0.2	6.3	14.0	7.7
5	77.25	7.5	0.2	7.3	14.0	6.7
6	83.25	7.8	0.2	7.6	14.0	6.4
7	175.25	4.3	0.2	4.1	14.0	9.9
8	181.25	4.5	0.2	4.3	14.0	9.7
9	187.25	4.7	0.2	4.5	14.0	9.5
10	193.25	4.8	0.2	4.6	14.0	9.4
11	199.25	4.9	0.2	4.7	14.0	9.3
12	205.25	5.0	0.2	4.8	14.0	9.2
13	211.25	5.1	0.2	4.9	14.0	9.1
TV UHF Fundamental						
14	471.25	6.3	0.3	6.0	14.0	8.0
20	507.25	7.0	0.3	6.7	14.0	7.3
26	543.25	7.7	0.3	7.4	14.0	6.6
32	579.25	8.3	0.3	8.0	14.0	6.0
38	615.25	8.7	0.3	8.4	14.0	5.6
44	651.25	9.3	0.3	9.0	14.0	5.0
50	687.25	9.4	0.3	9.1	14.0	4.9
56	723.25	9.4	0.4	9.0	14.0	5.0
62	759.25	9.5	0.4	9.1	14.0	4.9
69	801.25	9.4	0.4	9.0	14.0	5.0
Mid-band						
14	121.25	7.3	0.2	7.1	14.0	6.9
16	133.25	5.9	0.2	5.7	14.0	8.3
18	145.25	4.9	0.2	4.7	14.0	9.3
20	157.25	4.5	0.2	4.3	14.0	9.7
22	169.25	4.4	0.2	4.2	14.0	9.8
Super-band						
23	217.25	5.3	0.2	5.1	14.0	8.9
26	235.25	5.7	0.2	5.5	14.0	8.5
29	253.25	5.9	0.2	5.7	14.0	8.3
32	271.25	6.0	0.2	5.8	14.0	8.2
36	295.25	6.0	0.2	5.8	14.0	8.2