

A2-27

DATA OF TRANSFER SWITCHA-PEX INTERNATIONAL CO., LTD.
Kanto Office EMC Lab.

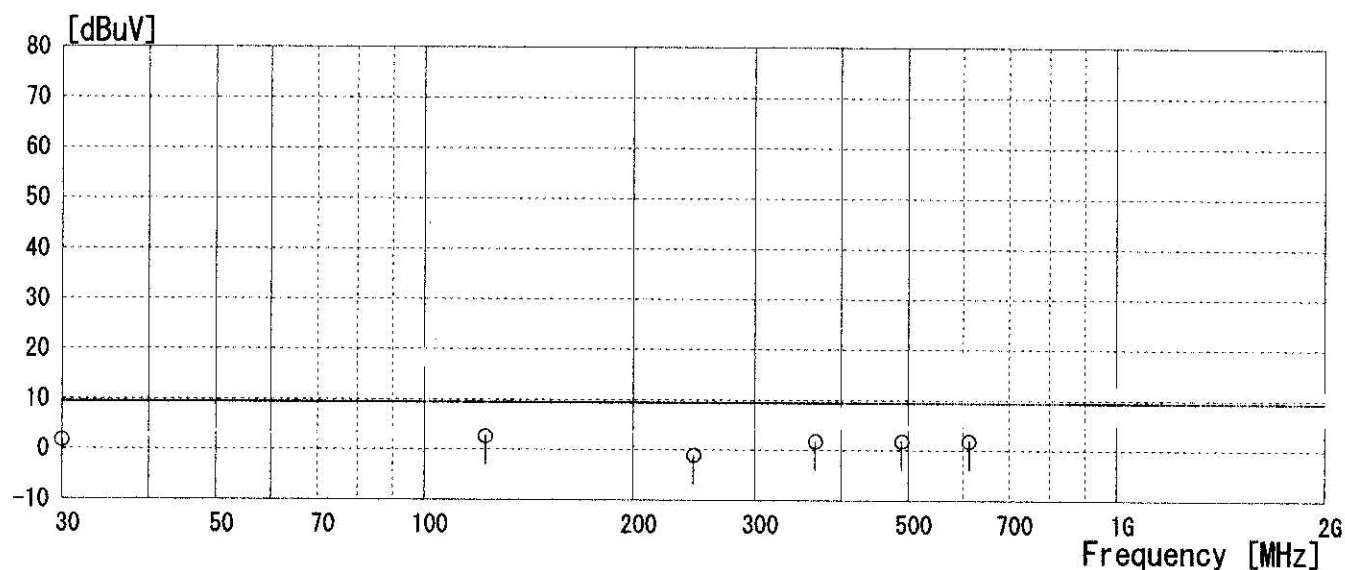
COMPANY : ORION ELECTRIC CO., LTD.
 EQUIPMENT : VIDEO CASSETTE RECORDER
 MODEL NAME : W501
 OPERATION MODE : REC MODE
 PORT : RF OUTPUT TERMINAL
 POWER : AC120V/50Hz
 REMARKS : 3CH (1Vp-p)
 :
 :

REPORT No. : 19D0031-04-1
 DATE : MAY 2, 2000
 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	30.000	21.8	—	-20.1	1.7	—	9.5	—	7.8	—
2	122.500	22.4	—	-19.8	2.6	—	9.5	—	6.9	—
3	245.000	18.3	—	-19.4	-1.1	—	9.5	—	10.6	—
4	367.500	20.9	—	-19.2	1.7	—	9.5	—	7.8	—
5	490.000	20.8	—	-19.1	1.7	—	9.5	—	7.8	—
6	612.500	20.6	—	-18.8	1.8	—	9.5	—	7.7	—

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



A2-28

DATA OF TRANSFER SWITCHA-PEX INTERNATIONAL CO., LTD.
Kanto Office EMC Lab.

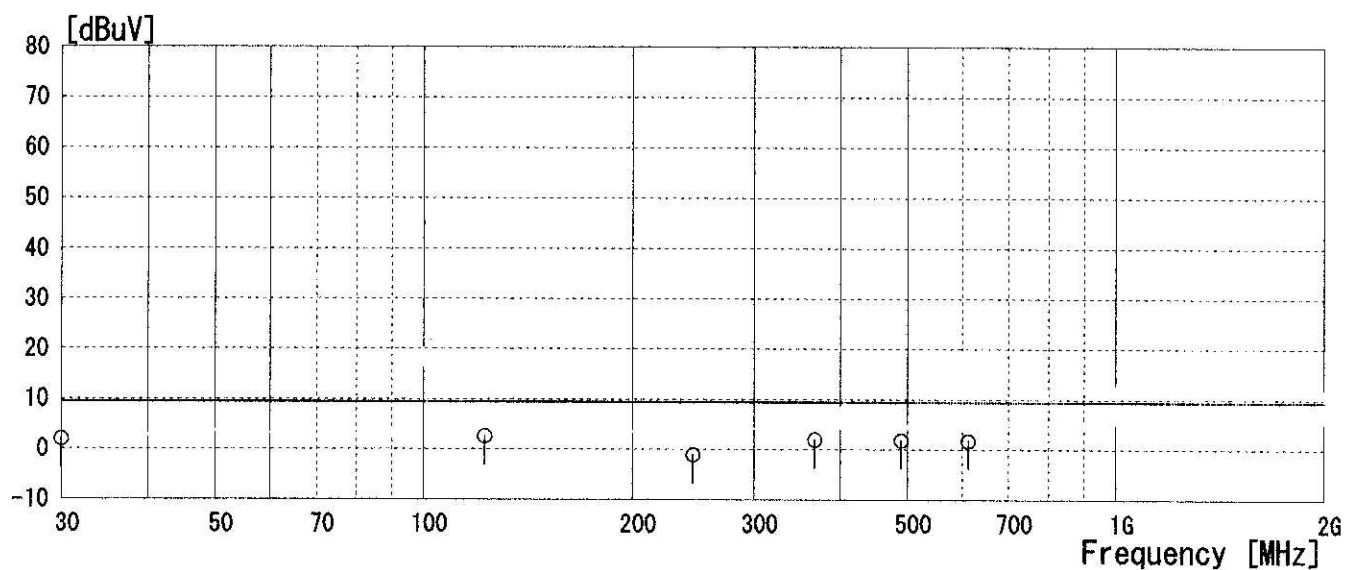
COMPANY : ORION ELECTRIC CO., LTD.
 EQUIPMENT : VIDEO CASSETTE RECORDER
 MODEL NAME : W501
 OPERATION MODE : REC MODE
 PORT : RF OUTPUT TERMINAL
 POWER : AC120V/50Hz
 REMARKS : 3CH (5Vp-p)

REPORT No. : 19D0031-04-1
 DATE : MAY 2, 2000
 REGULATION : FCC PART15 SUBPART B
 TEST No. : 1

TEST ENGINEER: HITSAYUKI KIOKA

No.	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN	
		QP	AV		QP	AV	QP	AV	QP	AV
		[dBuV]			[dBuV]		[dBuV]		[dB]	
1	30.000	22.0	—	-20.1	1.9	—	9.5	—	7.6	—
2	122.500	22.3	—	-19.8	2.5	—	9.5	—	7.0	—
3	245.000	18.3	—	-19.4	-1.1	—	9.5	—	10.6	—
4	367.500	21.1	—	-19.2	1.9	—	9.5	—	7.6	—
5	490.000	20.8	—	-19.1	1.7	—	9.5	—	7.8	—
6	612.500	20.5	—	-18.8	1.7	—	9.5	—	7.8	—

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



A2-29

DATA OF TRANSFER SWITCHA-PEX INTERNATIONAL CO., LTD.
Kanto Office EMC Lab.

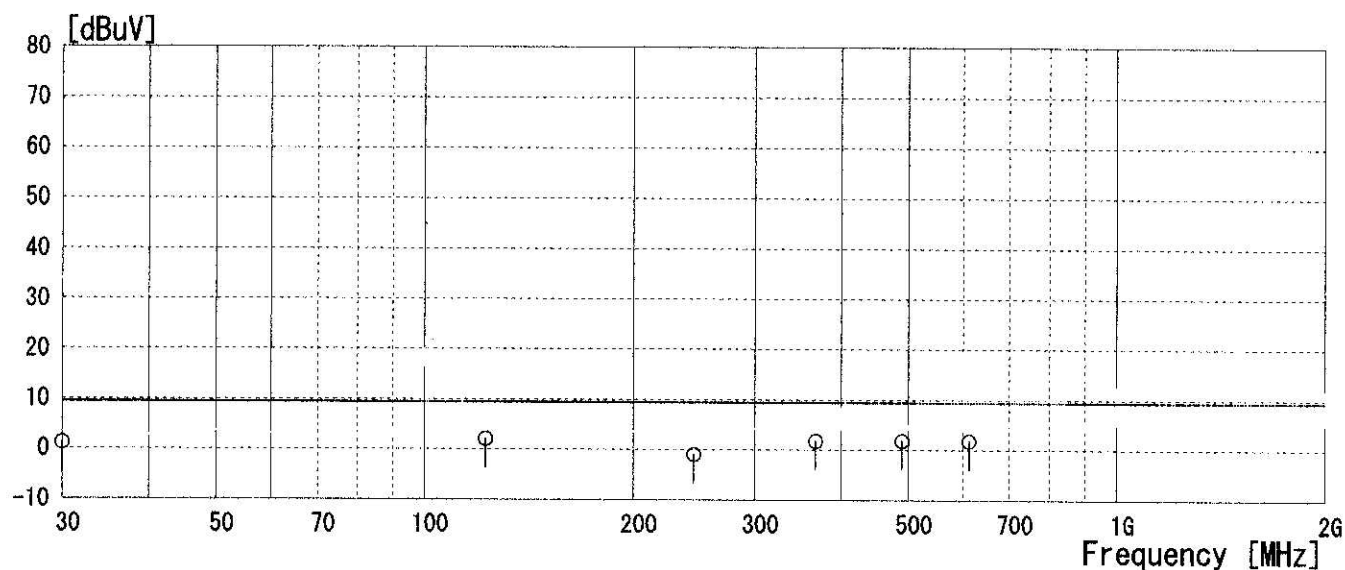
COMPANY : ORION ELECTRIC CO., LTD.
 EQUIPMENT : VIDEO CASSETTE RECORDER
 MODEL NAME : W501
 OPERATION MODE : PLAYBACK MODE
 PORT : RF OUTPUT TERMINAL
 POWER : AC120V/50Hz
 REMARKS : 3CH

REPORT No. : 19D0031-04-1
 DATE : MAY 2, 2000
 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	30.000	21.3	—	-20.1	1.2	—	9.5	—	8.3	—
2	122.500	21.8	—	-19.8	2.0	—	9.5	—	7.5	—
3	245.000	18.4	—	-19.4	-1.0	—	9.5	—	10.5	—
4	367.500	20.9	—	-19.2	1.7	—	9.5	—	7.8	—
5	490.000	20.8	—	-19.1	1.7	—	9.5	—	7.8	—
6	612.500	20.6	—	-18.8	1.8	—	9.5	—	7.7	—

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



A2-30

DATA OF TRANSFER SWITCHA-PEX INTERNATIONAL CO., LTD.
Kanto Office EMC Lab.

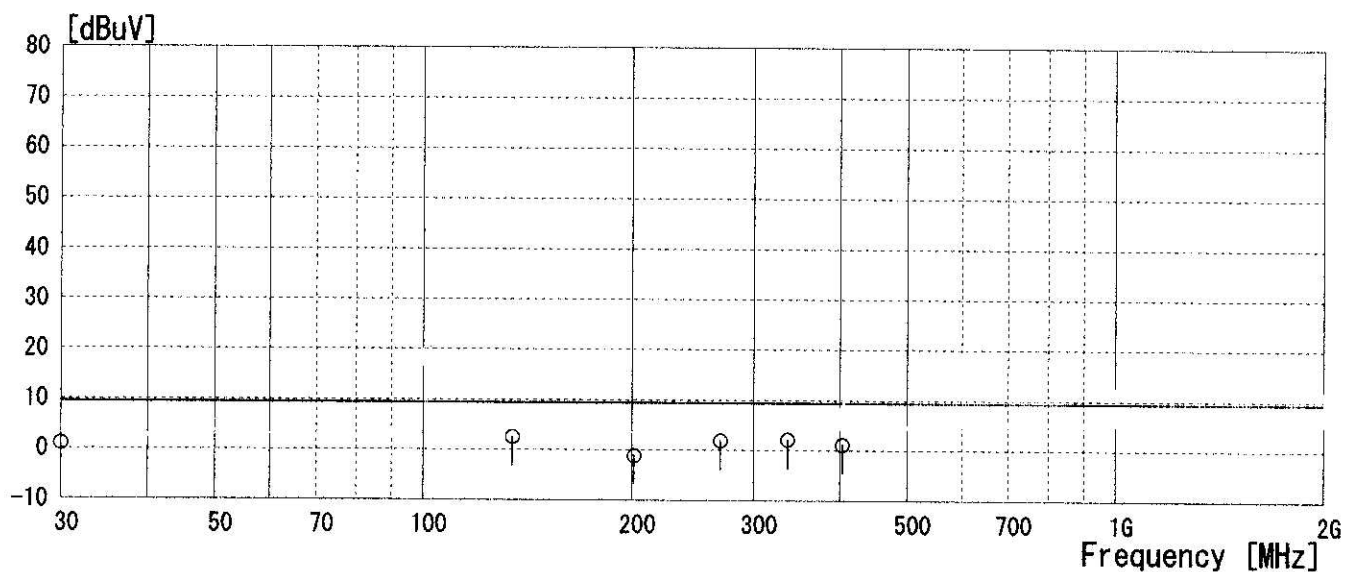
COMPANY : ORION ELECTRIC CO., LTD.
 EQUIPMENT : VIDEO CASSETTE RECORDER
 MODEL NAME : W501
 OPERATION MODE : REC MODE
 PORT : RF OUTPUT TERMINAL
 POWER : AC120V/50Hz
 REMARKS : 4CH (1Vp-p)

REPORT No. : 19D0031-04-1
 DATE : MAY 2, 2000
 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	30.000	21.1	—	-20.1	1.0	—	9.5	—	8.5	—
2	134.500	22.2	—	-19.7	2.5	—	9.5	—	7.0	—
3	201.750	18.3	—	-19.5	-1.2	—	9.5	—	10.7	—
4	269.000	21.2	—	-19.4	1.8	—	9.5	—	7.7	—
5	336.250	21.3	—	-19.3	2.0	—	9.5	—	7.5	—
6	403.500	20.2	—	-19.2	1.0	—	9.5	—	8.5	—

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



A2-31

DATA OF TRANSFER SWITCH

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

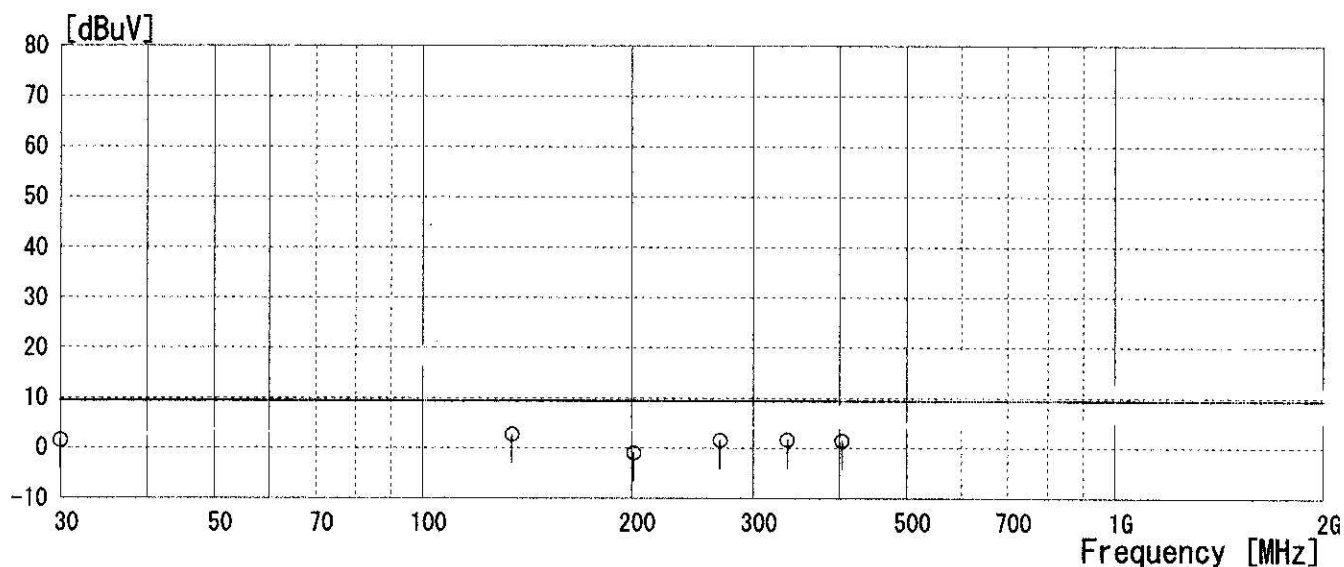
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : VIDEO CASSETTE RECORDER
MODEL NAME : W501
OPERATION MODE : REC MODE
PORT : RF OUTPUT TERMINAL
POWER : AC120V/50Hz
REMARKS : 4CH (5Vp-p)

REPORT No. : 19D0031-04-1
DATE : MAY 2, 2000
REGULATION : FCC PART15 SUBPART B
TEST No. : 6

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	30.000	21.6	—	-20.1	1.5	—	9.5	—	8.0	—
2	134.500	22.4	—	-19.7	2.7	—	9.5	—	6.8	—
3	201.750	18.5	—	-19.5	-1.0	—	9.5	—	10.5	—
4	269.000	20.9	—	-19.4	1.5	—	9.5	—	8.0	—
5	336.250	20.9	—	-19.3	1.6	—	9.5	—	7.9	—
6	403.500	20.6	—	-19.2	1.4	—	9.5	—	8.1	—

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



DATA OF TRANSFER SWITCH

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

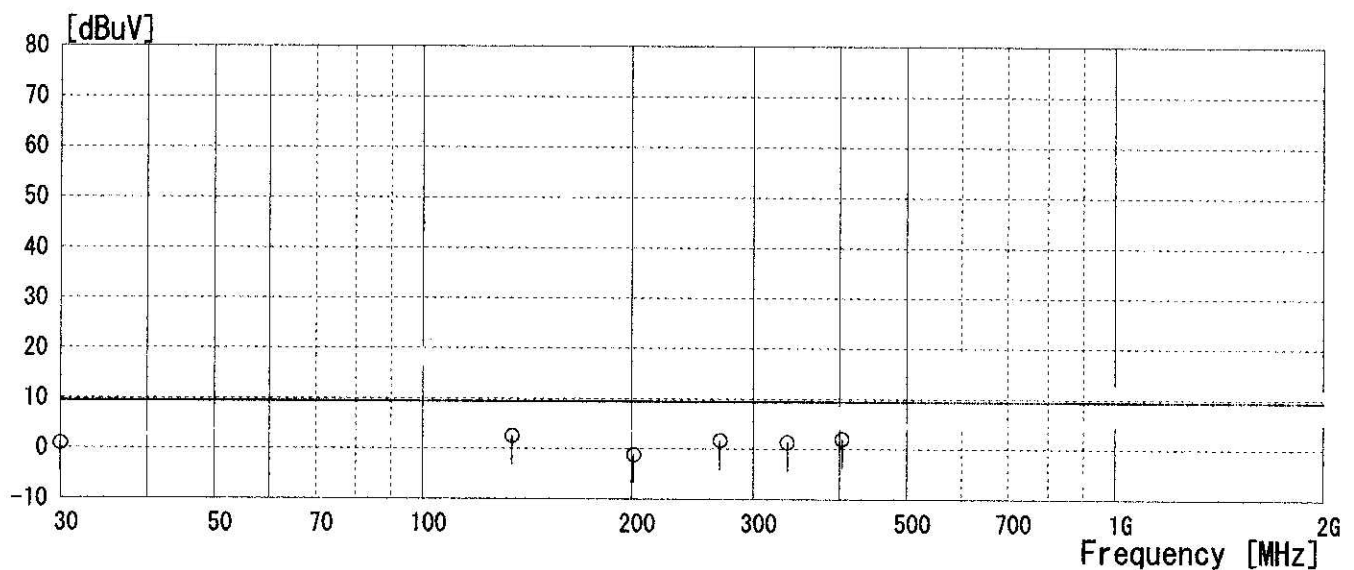
COMPANY : ORION ELECTRIC CO., LTD.
EQUIPMENT : VIDEO CASSETTE RECORDER
MODEL NAME : W501
OPERATION MODE : PLAYBACK MODE
PORT : RF OUTPUT TERMINAL
POWER : AC120V/50Hz
REMARKS : 4CH

REPORT No. : 19D0031-04-1
DATE : MAY 2, 2000
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	30.000	21.0	—	-20.1	0.9	—	9.5	—	8.6	—
2	134.500	22.2	—	-19.7	2.5	—	9.5	—	7.0	—
3	201.750	18.3	—	-19.5	-1.2	—	9.5	—	10.7	—
4	269.000	21.0	—	-19.4	1.6	—	9.5	—	7.9	—
5	336.250	20.5	—	-19.3	1.2	—	9.5	—	8.3	—
6	403.500	21.1	—	-19.2	1.9	—	9.5	—	7.6	—

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



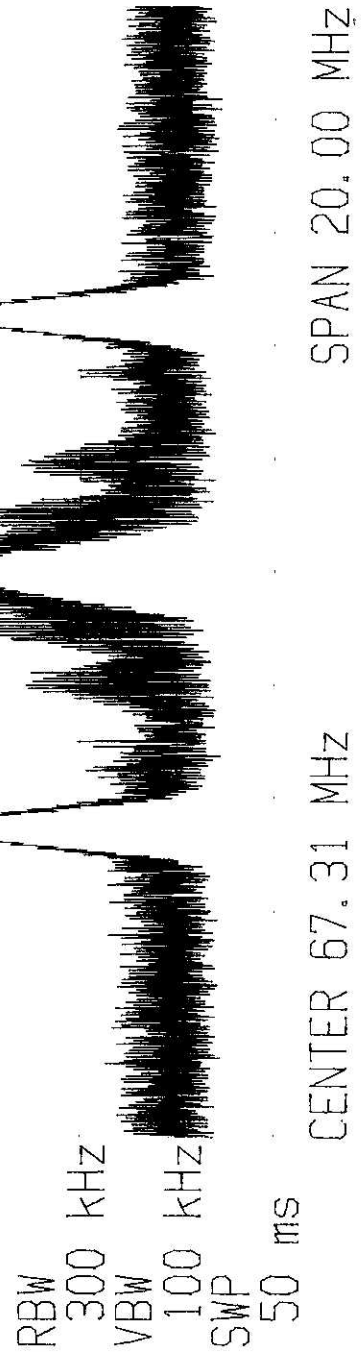
DATA OF INPUT LEVEL CONTROL

A2-33

REF 107.0 dB μ V
10dB/

Tue May 2 18:36:24 2000
ATT 10 dB
A_view B_blank

3 CH



[Handwritten signature]

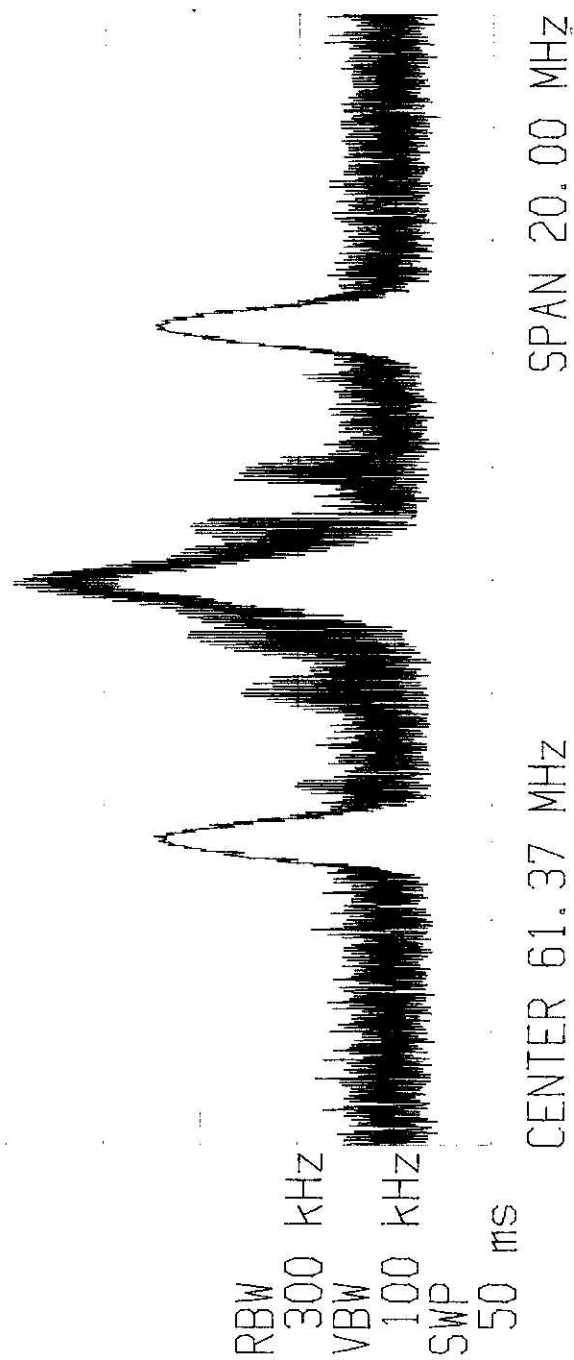
DATA OF INPUT LEVEL CONTROL

A2-34

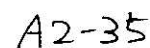
REF 107.0 dB μ V
10dB/

Tue May 2 18:33:01 2000
ATT 10 dB
A_view B_blank

4 CH



Handwritten signature



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

REPORT No. : 19D0031-04-1
REGULATION : FCC Part 15 Subpart B
DATE : May 06, 2000

: HISAYUKI. KIOKA

CH	FREQ.	SENSITIVITY		CH	FREQ	SENSITIVITY	
[VHF]	[MHz]	[dBuV]	[uV]	[UHF]	[MHz]	[dBuV]	[uV]
2	55.25	20.7	10.8	14	471.25	24.0	15.8
3	61.25	19.4	9.3	20	507.25	24.0	15.8
4	67.25	18.4	8.3	26	543.25	24.4	16.6
5	77.25	18.2	8.1	32	579.25	24.7	17.2
6	83.25	18.6	8.5	38	615.25	25.1	18.0
7	175.25	21.1	11.4	44	651.25	25.3	18.4
8	181.25	21.0	11.2	50	687.25	25.7	19.3
9	187.25	20.8	11.0	56	723.25	26.4	20.9
10	193.25	20.8	11.0	62	759.25	27.0	22.4
11	199.25	21.0	11.2	69	801.25	27.9	24.8
12	205.25	20.9	11.1	-	-	-	-
13	211.25	21.0	11.2	-	-	-	-
Average VHF			10.3	Average UHF			18.9
Average UHF/VHF : $20 \log \text{UHF}[\text{uV}]/\text{VHF}[\text{uV}] = 5.3 \text{ dB}$							

[Limit : 8 dB]

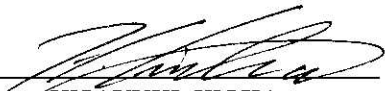
NOISE FIGURE TEST

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

COMPANY : ORION ELECTRIC CO.,LTD.
 EQUIPMENT : Video Cassette Recorder
 MODEL No. : W501
 POWER : AC 120 V / 60 Hz
 DESCRIPTION : TV RECEPTION MODE

REPORT No. : 19D0031-04-1
 REGULATION : FCC Part 15 Subpart B
 DATE : May 06, 2000

ENGINEER


 : HISAYUKI. KIOKA

CH.	FREQ [MHz]	METER READING [dB]	MACHING TR-LOSS [dB]	NOISE FIGURE [dB]	LIMIT [dB]	MARGIN [dB]
VHF						
2	55.25	8.0	0.2	7.8	14.0	6.2
3	61.25	7.0	0.2	6.8	14.0	7.2
4	67.25	7.0	0.2	6.8	14.0	7.2
5	77.25	7.5	0.2	7.3	14.0	6.7
6	83.25	7.5	0.2	7.3	14.0	6.7
7	175.25	7.6	0.2	7.4	14.0	6.6
8	181.25	7.6	0.2	7.4	14.0	6.6
9	187.25	7.7	0.2	7.5	14.0	6.5
10	193.25	7.8	0.2	7.6	14.0	6.4
11	199.25	8.0	0.2	7.8	14.0	6.2
12	205.25	8.0	0.2	7.8	14.0	6.2
13	211.25	8.1	0.2	7.9	14.0	6.1
UHF						
14	471.25	8.8	0.3	8.5	14.0	5.5
21	513.25	8.9	0.3	8.6	14.0	5.4
29	561.25	8.9	0.3	8.6	14.0	5.4
36	603.25	8.7	0.3	8.4	14.0	5.6
43	645.25	8.3	0.3	8.0	14.0	6.0
51	693.25	8.5	0.3	8.2	14.0	5.8
59	741.25	8.6	0.4	8.2	14.0	5.8
66	783.25	8.6	0.4	8.2	14.0	5.8
69	801.25	8.9	0.4	8.5	14.0	5.5
CATV						
A-5	91.25	7.5	0.2	7.3	14.0	6.7
A-2	109.25	7.9	0.2	7.7	14.0	6.3
B	127.25	8.4	0.2	8.2	14.0	5.8
C	133.25	8.9	0.2	8.7	14.0	5.3
F	151.25	8.9	0.2	8.7	14.0	5.3
P	253.25	8.7	0.2	8.5	14.0	5.5
W+4	319.25	8.9	0.2	8.7	14.0	5.3

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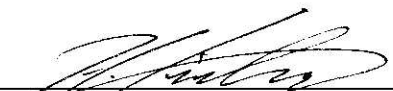
ADJACENT CHANNEL INTERFERENCE

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

COMPANY : ORION ELECTRIC CO.,LTD.
EQUIPMENT : VIDEO CASSETTE RECORDER
MODEL No. : W501
POWER : AC120V/60Hz
DESCRIPTION : TV RECEPTION MODE

REPORT No. : 19D0031-04-1
REGULATION : FCC PART15B
DATE : May 5, 6, 2000

ENGINEER


: HISAYUKI KIOKA

CH	PICTURE FREQ. MHz	DESIRED SIGNAL LEVEL dBuV	LIMIT dB	RESULT dB
3	61.25	60	55	< 55
14	121.25	60	55	< 55
10	193.25	60	55	< 55
30	259.25	60	55	< 55
40	319.25	60	55	< 55
50	379.25	60	55	< 55
60	439.25	60	55	< 55
70	499.25	60	55	< 55
80	559.25	60	55	< 55
100	649.25	60	55	< 55
120	769.25	60	55	< 55

Note : Refer to attached data.

IMAGE CHANNEL INTERFERENCE TEST

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

COMPANY : ORION ELECTRIC CO.,LTD.
EQUIPMENT : VIDEO CASSETTE RECORDER
MODEL No. : W501
POWER : AC120V/60Hz
DESCRIPTION : TV RECEPTION MODE

REPORT No. : 19D0031-04-1
REGULATION : FCC PART15B
DATE : May 5, 6, 2000

ENGINEER : 
: HISAYUKI KIOKA

CH	PICTURE FREQ. MHz	DESIRED SIGNAL LEVEL dBuV	LIMIT dB	RESULT dB
3	61.25	60	60	< 60
14	121.25	60	60	< 60
10	193.25	60	60	< 60
30	259.25	60	60	< 60
40	319.25	60	60	< 60
50	379.25	60	60	< 60
60	439.25	60	60	< 60
70	499.25	60	60	< 60
80	559.25	60	60	< 60
100	649.25	60	60	< 60
120	769.25	60	50	< 60

Note : Refer to attached data.

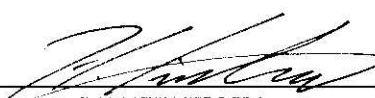
A2-39

DIRECT PICK-UP INTERFERENCE

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

COMPANY : ORION ELECTRIC CO.,LTD.
EQUIPMENT : VIDEO CASSETTE RECORDER
MODEL No. : W501
POWER : AC120V/60Hz
DESCRIPTION : TV RECEPTION

REPORT No. : 19D0031-04-1
REGULATION : BETS-7
DATE : May 4, 2000

ENGINEER :  : HISAYUKI KIOKA

CH	PICTURE FREQ. MHz	DESIRED SIGNAL LEVEL dBuV	RESULT dB		LIMIT dB		MARGIN dB	
			D/U	AVE.	D/U	AVE.	D/U	AVE.
3	61.25	60	58.28	54.26	45	50	13.28	4.26
5	77.25	60	58.31		45		13.31	
8	181.25	60	50.75		45		5.75	
12	205.25	60	45.78		45		0.78	
30	567.25	60	55.03		45		10.03	
60	747.25	60	51.00		45		6.00	

NOTE :

Test pattern : Full field color bar
Exposed side : Rear
Ant. orientation : Horizontal
Test chamber : Anechoic Chamber

TUNER OVER LOAD

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

COMPANY : ORION ELECTRIC CO.,LTD.
EQUIPMENT : VIDEO CASSETTE RECORDER
MODEL No. : W501
POWER : AC120V/60Hz
DESCRIPTION : TV RECEPTION MODE

REPORT No. : 19D0031-04-1
REGULATION : FCC PART15B
DATE : May 9, 2000

ENGINEER

: HISAYUKI KIOKA

CH	PICTURE FREQ. MHz	DESIRED SIGNAL LEVEL dBuV	LIMIT dB	RESULT dB
17	139.25	75	55	< 55
10	193.25	75	55	< 55
30	259.25	75	55	< 55
40	319.25	75	55	< 55
50	379.25	75	55	< 55
60	439.25	75	55	< 55
70	499.25	75	55	< 55
79	553.25	75	51	< 55
100	649.25	75	51	< 55
110	709.25	75	51	< 55

Note : Refer to attached data.