

DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 25IE0134-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception+Rec
Remarks : 0dBmV
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama

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.	675.00	BB	33.2	36.2	22.0	27.3	6.3	5.9	40.1	43.1	46.0	5.9	2.9

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

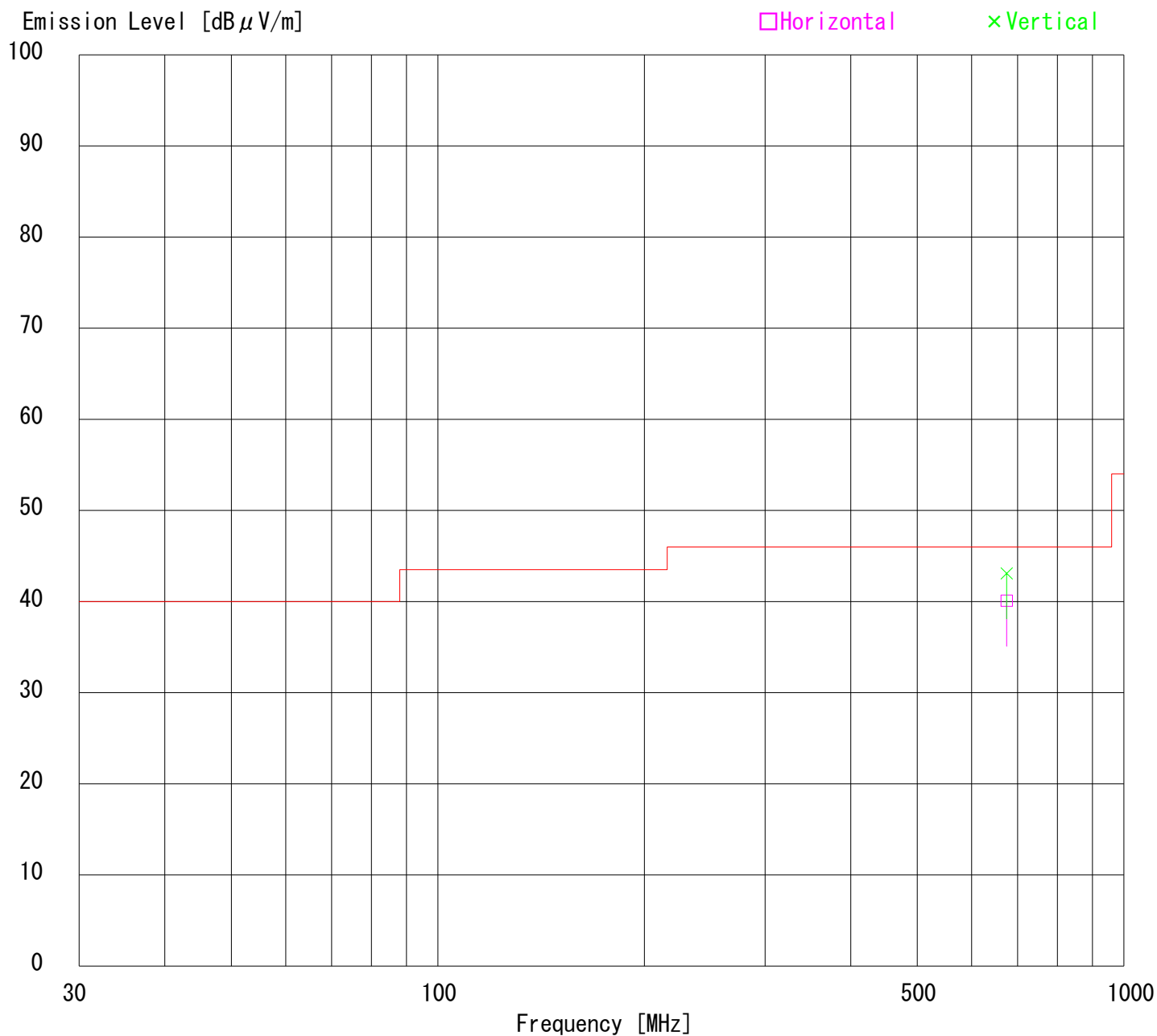
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 25IE0134-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception+Rec
Remarks : 0dBmV
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 25IE0134-YW-1

Applicant : Orion Electric Co., Ltd.
 Kind of Equipment : DVD/VCR
 Model No. : SD-V593SU
 Serial No. : -
 Power : AC120V/60Hz
 Mode : TV Reception+Rec
 Remarks : 25dBmV
 Date : 4/14/2005
 Test Distance : 3 m
 Temperature : 27 °C
 Humidity : 38 %
 Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama

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.	72.01	BB	29.6	41.1	6.5	28.1	1.8	5.9	15.7	27.2	40.0	24.3	12.8
2.	202.50	BB	37.1	29.9	17.1	27.8	3.1	5.9	35.4	28.2	43.5	8.1	15.3
3.	243.00	BB	39.3	33.5	13.4	27.8	3.5	5.9	34.3	28.5	46.0	11.7	17.5
4.	253.12	BB	38.0	37.5	14.0	27.8	3.6	5.9	33.7	33.2	46.0	12.3	12.8
5.	297.00	BB	37.9	28.8	16.4	27.8	3.9	6.0	36.4	27.3	46.0	9.6	18.7
6.	324.00	BB	35.6	32.3	16.9	27.9	4.1	6.0	34.7	31.4	46.0	11.3	14.6
7.	388.12	BB	38.2	30.4	17.7	28.0	4.6	6.0	38.5	30.7	46.0	7.5	15.3
8.	405.00	BB	34.8	39.2	17.9	28.0	4.7	5.9	35.3	39.7	46.0	10.7	6.3
9.	486.01	BB	35.6	33.1	19.2	28.1	5.2	5.9	37.8	35.3	46.0	8.2	10.7
10.	513.00	BB	35.7	34.1	19.5	28.0	5.4	5.9	38.5	36.9	46.0	7.5	9.1
11.	567.00	BB	26.5	32.8	20.2	27.8	5.7	5.9	30.5	36.8	46.0	15.5	9.2
12.	675.00	BB	33.8	36.5	22.0	27.3	6.3	5.9	40.7	43.4	46.0	5.3	2.6
13.	756.00	BB	26.0	24.8	22.8	27.2	6.7	5.9	34.2	33.0	46.0	11.8	13.0

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

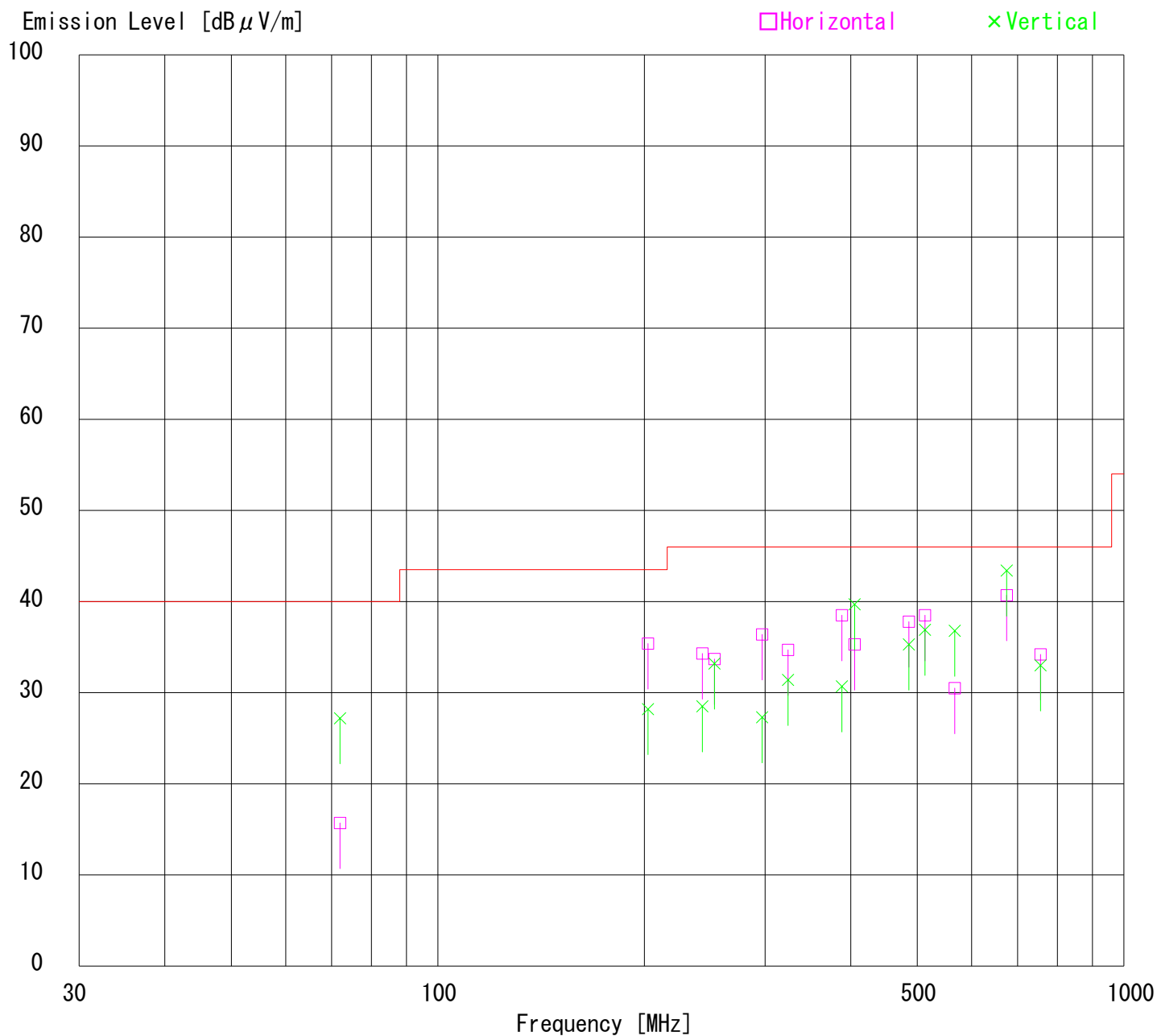
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 25IE0134-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception+Rec
Remarks : 25dBmV
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception+Rec
Remarks : 25dBmV
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C Engineer : Tsubasa Takayama
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Average Limit / Upper1GHz)

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.	1080.00	BB	34.6	42.6	24.0	40.0	3.4	0.0	22.0	30.0	54.0	32.0	24.0
2.	1148.20	BB	35.1	40.5	24.1	39.9	3.5	0.0	22.8	28.2	54.0	31.2	25.8
3.	1889.10	BB	35.9	43.3	24.4	38.7	4.8	0.0	26.4	33.8	54.0	27.6	20.2

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

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

DATA OF RADIATION TEST

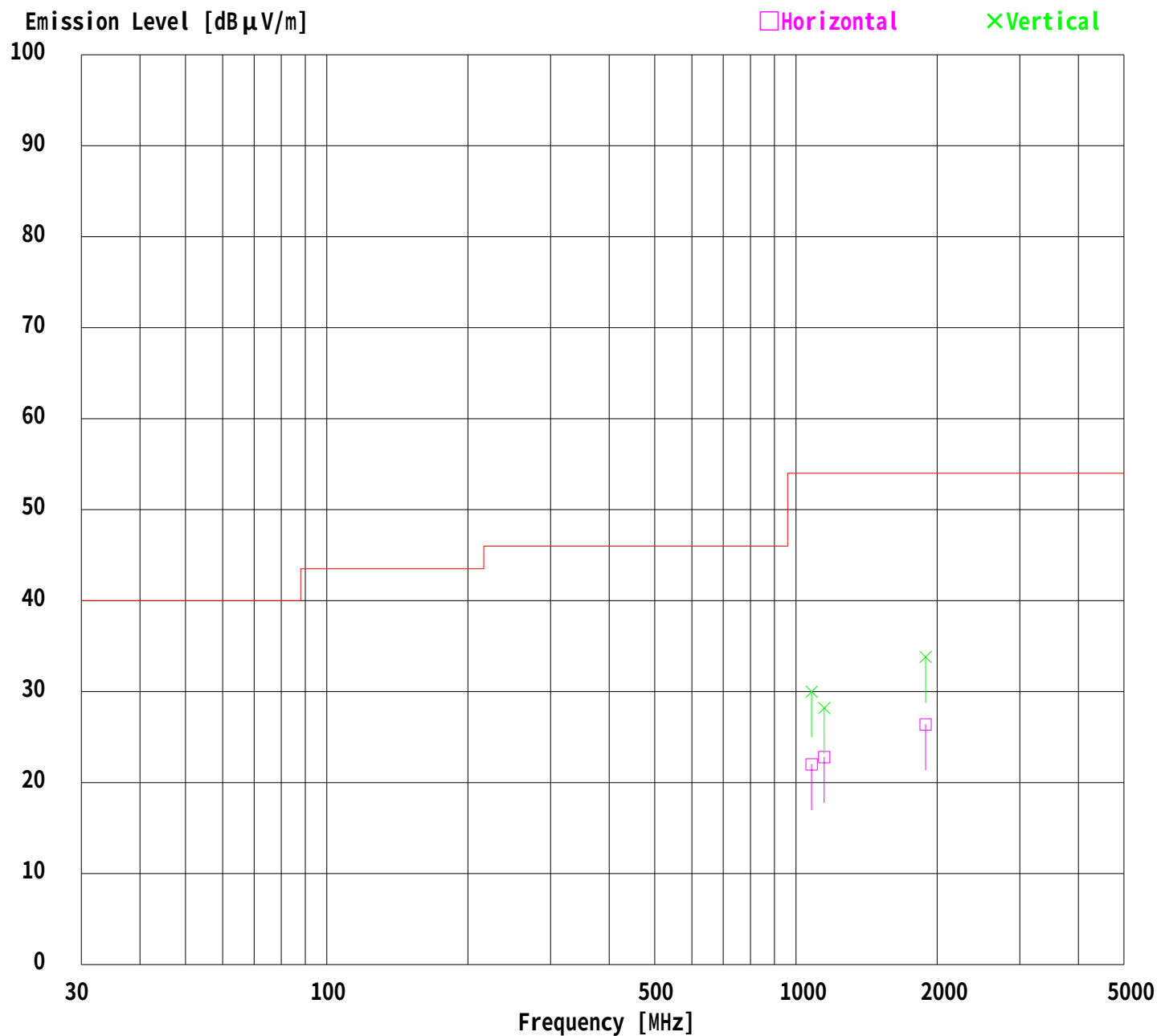
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception+Rec
Remarks : 25dBmV
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Average Limit / Upper1GHz)

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception+Rec
Remarks : 25dBmV
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C Engineer : Tsubasa Takayama
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Peak Limit / Upper1GHz)

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.	1080.00	BB	46.8	53.6	24.0	40.0	3.4	0.0	34.2	41.0	74.0	39.8	33.0
2.	1148.20	BB	47.2	50.9	24.1	39.9	3.5	0.0	34.9	38.6	74.0	39.1	35.4
3.	1889.10	BB	47.3	54.3	24.4	38.7	4.8	0.0	37.8	44.8	74.0	36.2	29.2

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

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

DATA OF RADIATION TEST

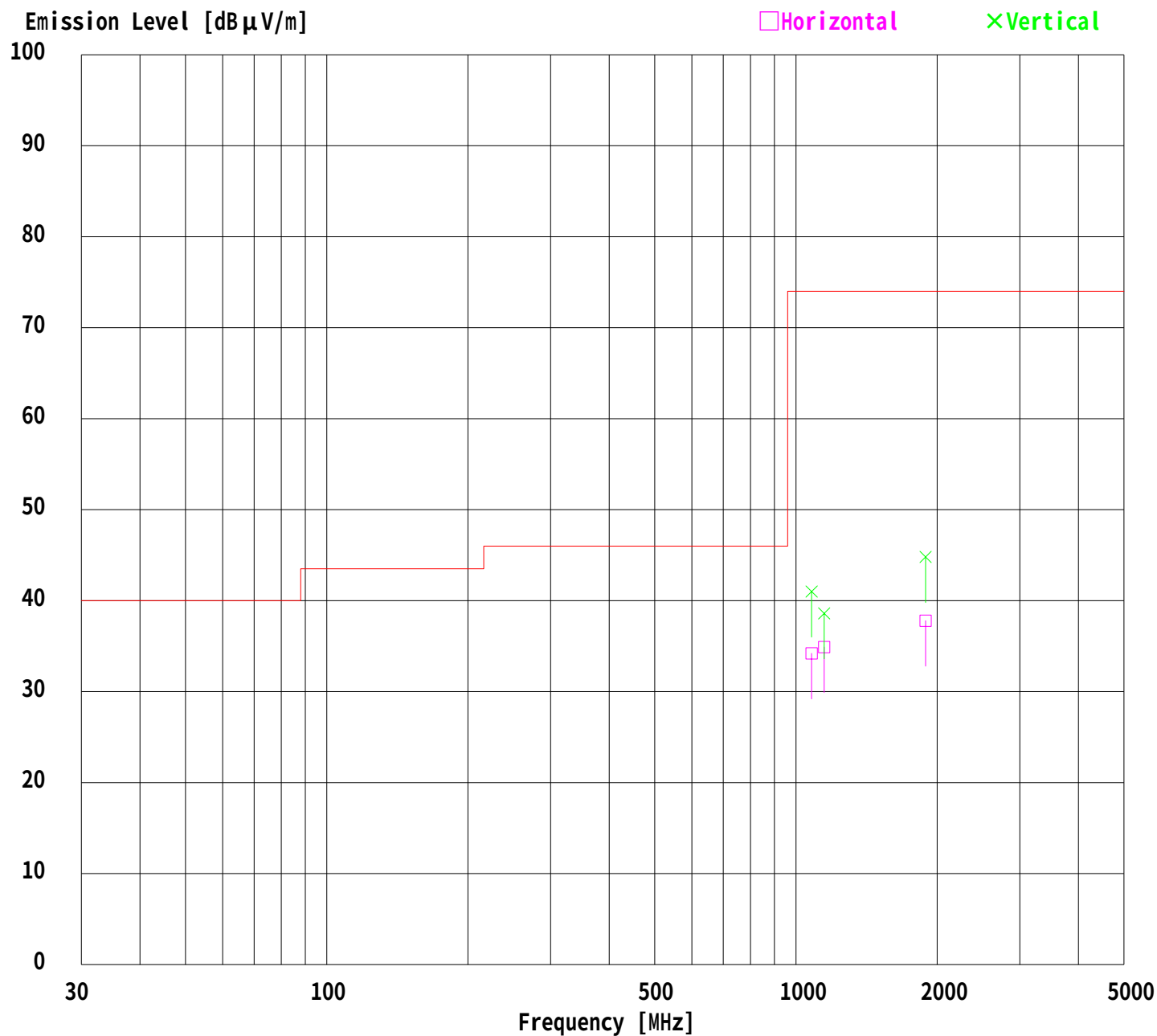
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception+Rec
Remarks : 25dBmV
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Peak Limit / Upper1GHz)

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 25IE0134-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input1+Rec
Remarks : 1Vp-p
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama

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.	675.00	BB	31.1	33.8	22.0	27.3	6.3	5.9	38.0	40.7	46.0	8.0	5.3

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

DATA OF RADIATION TEST

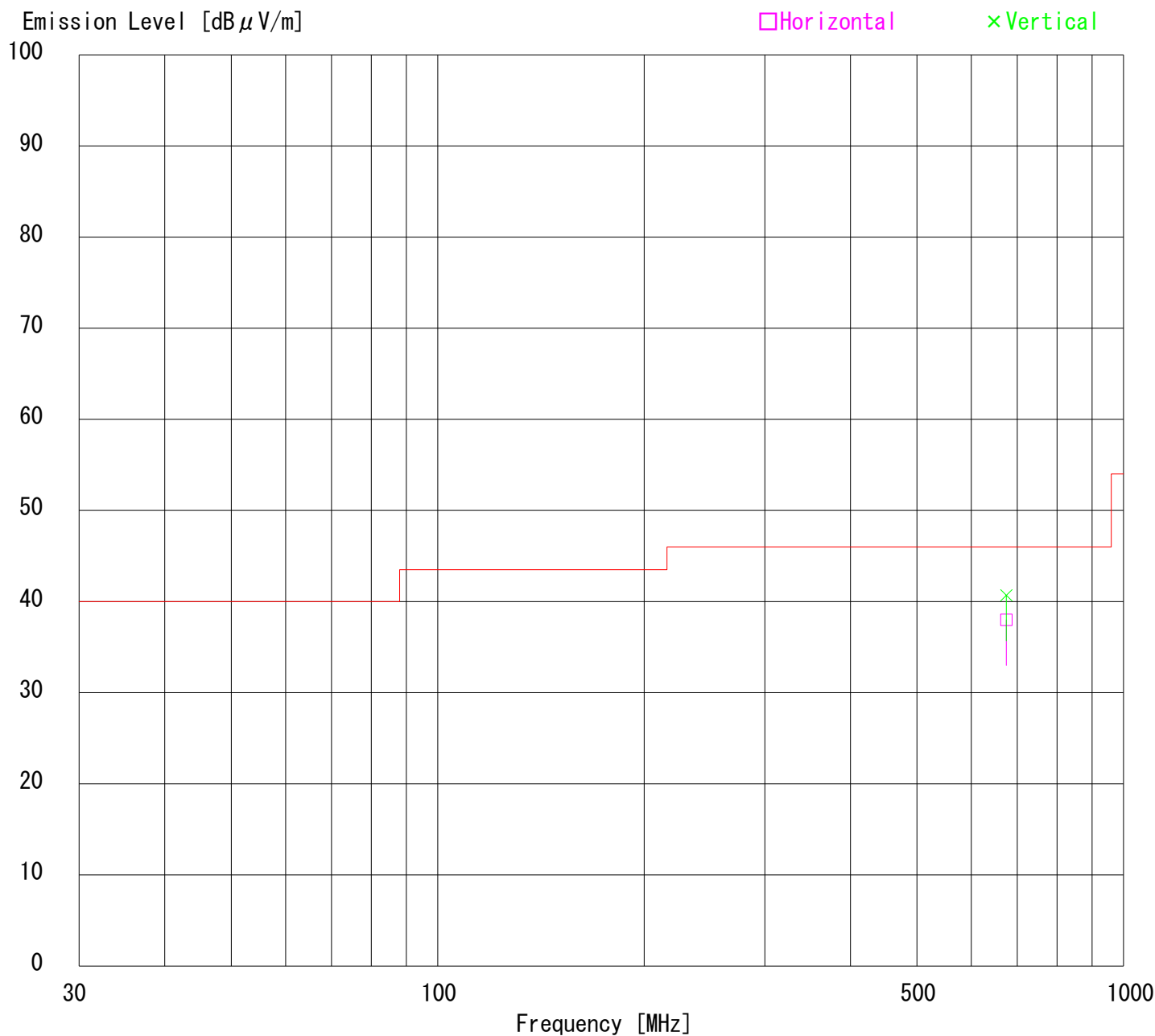
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 25IE0134-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input1+Rec
Remarks : 1Vp-p
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 25IE0134-YW-1

Applicant : Orion Electric Co., Ltd.
 Kind of Equipment : DVD/VCR
 Model No. : SD-V593SU
 Serial No. : -
 Power : AC120V/60Hz
 Mode : AV Input1+Rec
 Remarks : 5Vp-p
 Date : 4/14/2005
 Test Distance : 3 m
 Temperature : 27 °C
 Humidity : 38 %
 Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
			HOR [dB μ V]	VER [dB μ V]					HOR [dB μ V/m]	VER [dB μ V/m]	HOR [dB]	VER [dB]		
1.	65.71	BB	27.5	31.6	7.3	28.1	1.7	5.9	14.3	18.4	40.0	25.7	21.6	
2.	202.50	BB	32.5	31.1	17.1	27.8	3.1	5.9	30.8	29.4	43.5	12.7	14.1	
3.	243.00	BB	40.3	33.1	13.4	27.8	3.5	5.9	35.3	28.1	46.0	10.7	17.9	
4.	253.13	BB	38.0	37.5	14.0	27.8	3.6	5.9	33.7	33.2	46.0	12.3	12.8	
5.	297.00	BB	35.9	29.1	16.4	27.8	3.9	6.0	34.4	27.6	46.0	11.6	18.4	
6.	324.00	BB	36.1	34.3	16.9	27.9	4.1	6.0	35.2	33.4	46.0	10.8	12.6	
7.	405.00	BB	36.2	37.1	17.9	28.0	4.7	5.9	36.7	37.6	46.0	9.3	8.4	
8.	486.00	BB	35.8	31.5	19.2	28.1	5.2	5.9	38.0	33.7	46.0	8.0	12.3	
9.	567.00	BB	29.3	32.5	20.2	27.8	5.7	5.9	33.3	36.5	46.0	12.7	9.5	
10.	675.00	BB	31.9	33.8	22.0	27.3	6.3	5.9	38.8	40.7	46.0	7.2	5.3	
11.	756.00	BB	28.0	25.8	22.8	27.2	6.7	5.9	36.2	34.0	46.0	9.8	12.0	

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

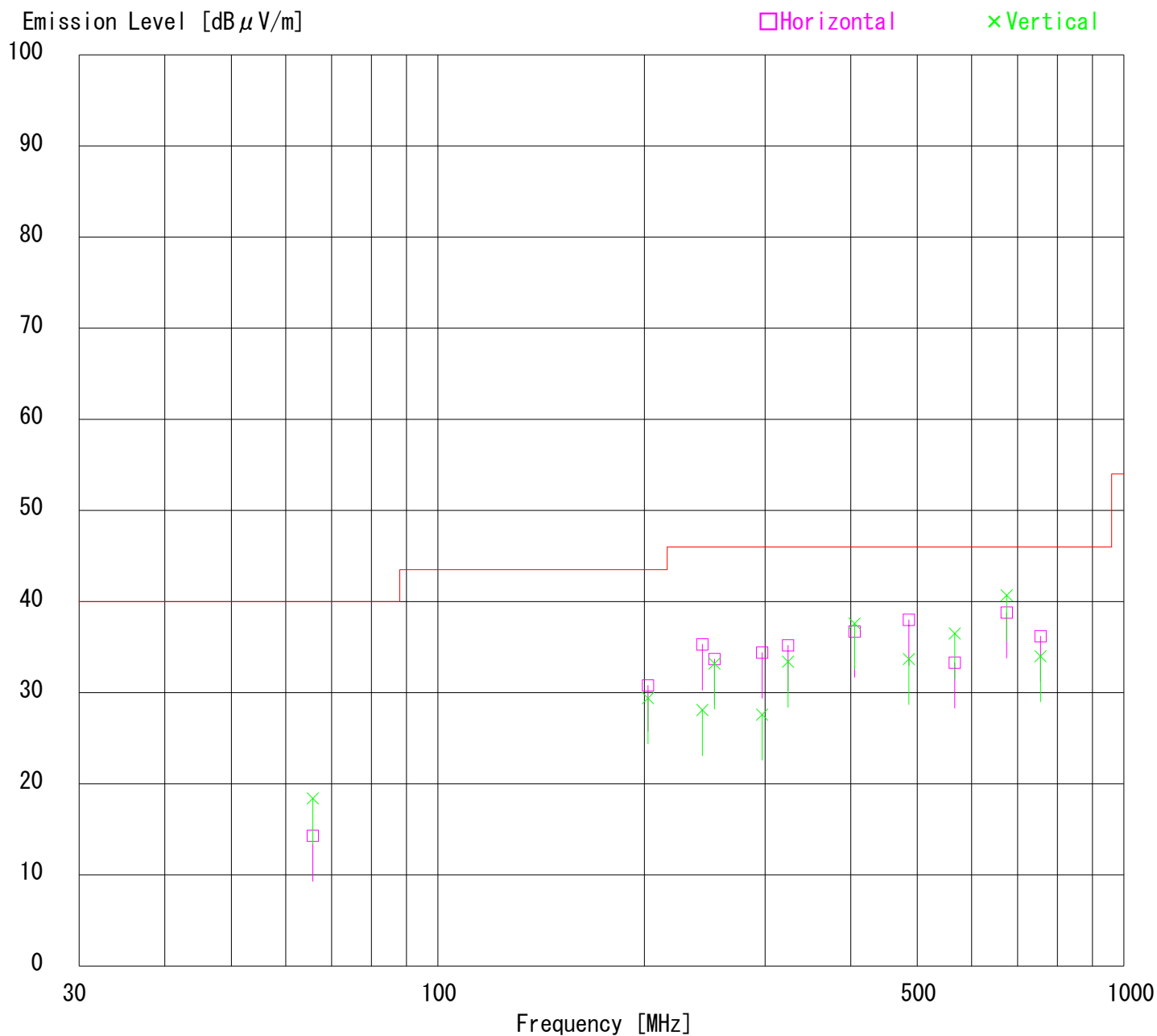
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 25IE0134-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input1+Rec
Remarks : 5Vp-p
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input1+Rec
Remarks : 5Vp-p
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C Engineer : Tsubasa Takayama
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Average Limit / Upper1GHz)

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.	1080.88	BB	38.9	44.4	24.0	40.0	3.4	0.0	26.3	31.8	54.0	27.7	22.2
2.	1147.68	BB	36.1	42.1	24.1	39.9	3.5	0.0	23.8	29.8	54.0	30.2	24.2
3.	1540.60	BB	35.4	39.0	24.3	39.3	4.2	0.0	24.6	28.2	54.0	29.4	25.8

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

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

DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

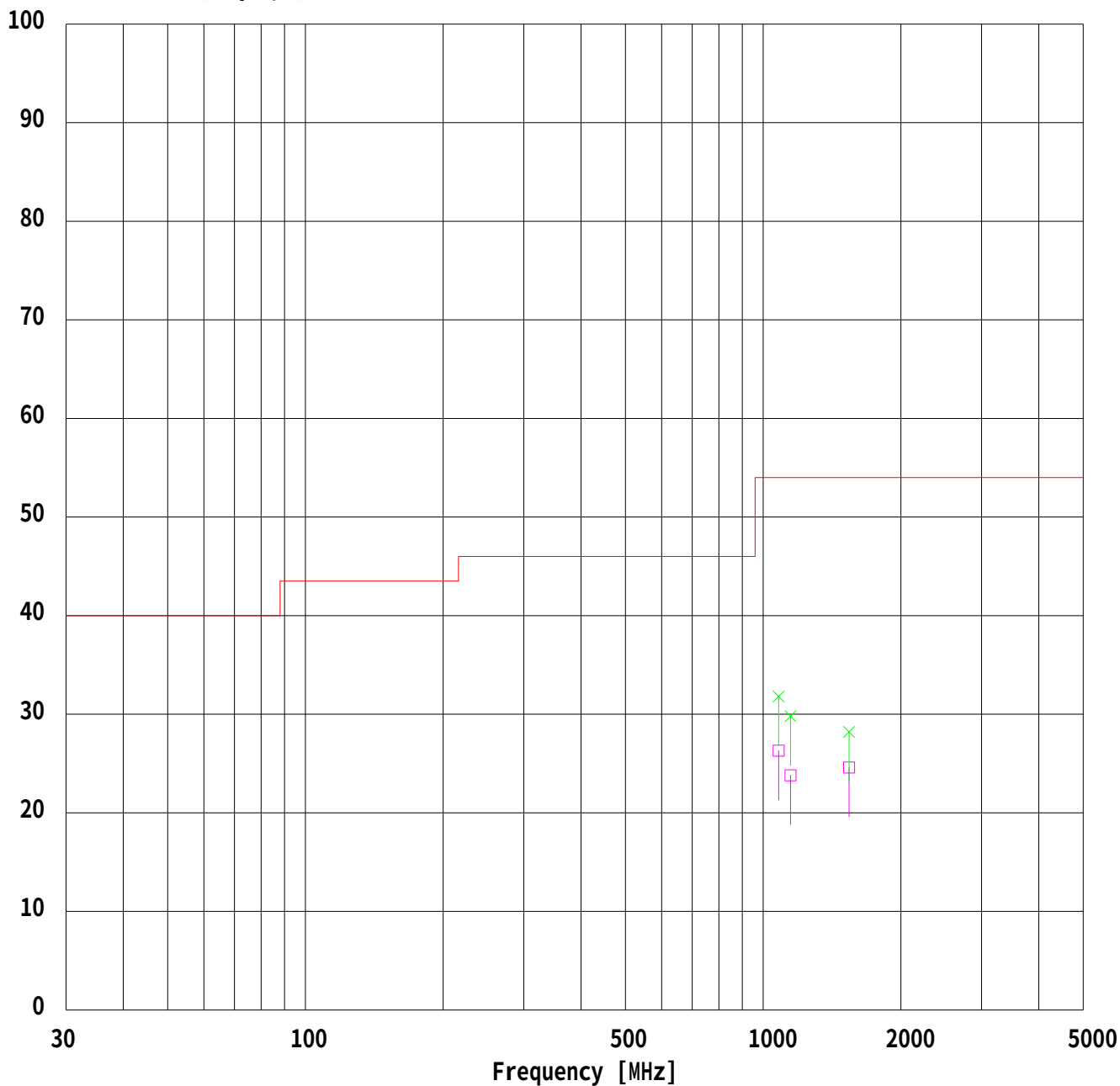
Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input1+Rec
Remarks : 5Vp-p
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Average Limit / Upper1GHz)

Engineer : Tsubasa Takayama

Emission Level [dB μ V/m]

□ Horizontal

× Vertical



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input1+Rec
Remarks : 5Vp-p
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Peak Limit / Upper1GHz)

Engineer : Tsubasa Takayama

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.	1080.88	BB	49.6	53.6	24.0	40.0	3.4	0.0	37.0	41.0	74.0	37.0	33.0
2.	1147.68	BB	48.2	53.4	24.1	39.9	3.5	0.0	35.9	41.1	74.0	38.1	32.9
3.	1540.60	BB	49.0	53.7	24.3	39.3	4.2	0.0	38.2	42.9	74.0	35.8	31.1

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

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

DATA OF RADIATION TEST

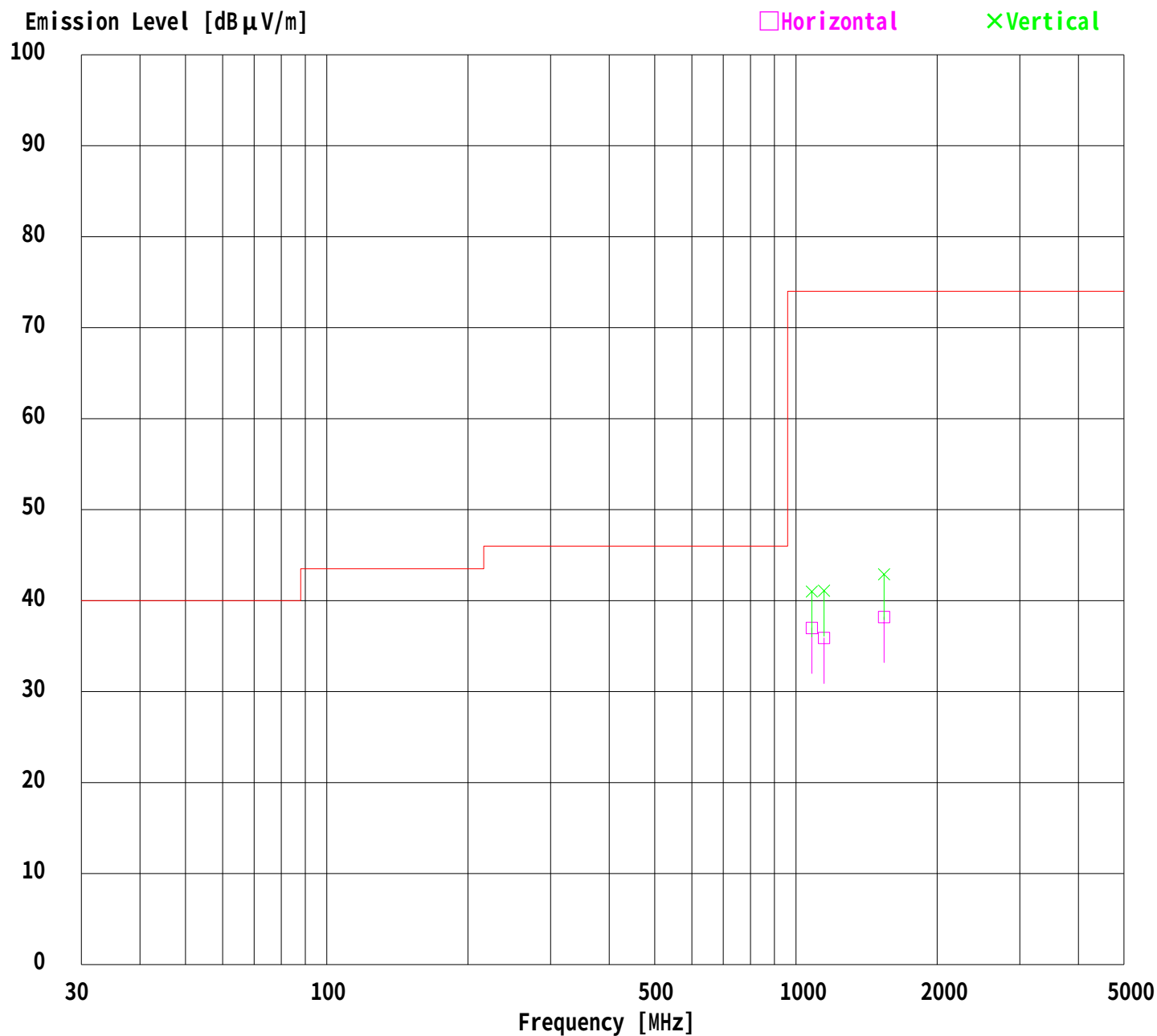
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input1+Rec
Remarks : 5Vp-p
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Peak Limit / Upper1GHz)

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 25IE0134-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input2+Rec
Remarks : 1Vp-p
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
			HOR [dB μ V]	VER [dB μ V]					HOR [dB μ V/m]	VER [dB μ V/m]			HOR [dB]	VER [dB]
1.	675.01	BB	33.0	35.8	22.0	27.3	6.3	5.9	39.9	42.7	46.0		6.1	3.3

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

DATA OF RADIATION TEST

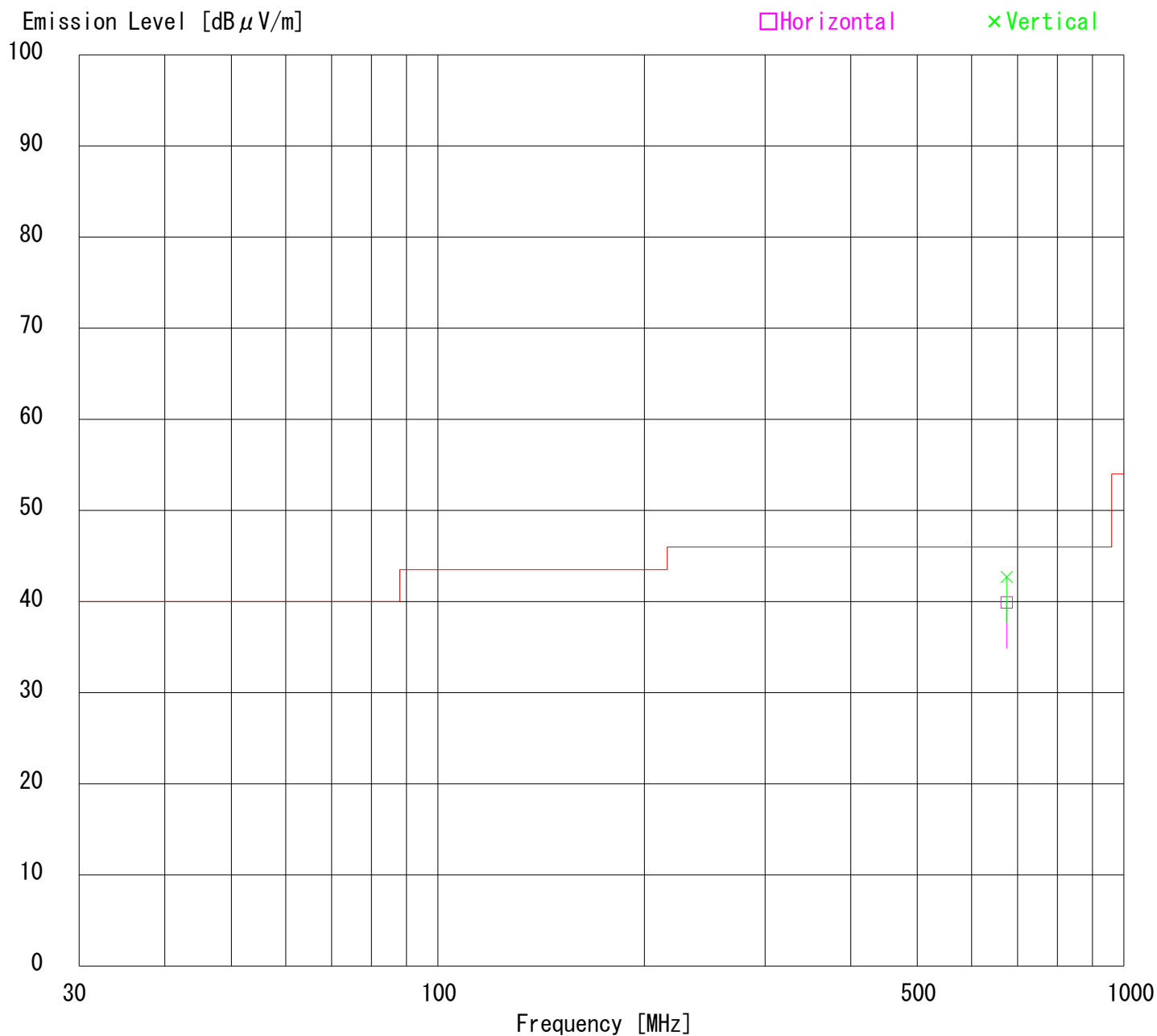
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 25IE0134-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input2+Rec
Remarks : 1Vp-p
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 25IE0134-YW-1

Applicant : Orion Electric Co., Ltd.
 Kind of Equipment : DVD/VCR
 Model No. : SD-V593SU
 Serial No. : -
 Power : AC120V/60Hz
 Mode : AV Input2+Rec
 Remarks : 5Vp-p
 Date : 4/14/2005
 Test Distance : 3 m
 Temperature : 27 °C
 Humidity : 38 %
 Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
			HOR [dB μ V]	VER [dB μ V]					HOR [dB μ V/m]	VER [dB μ V/m]	[dB μ V/m]	[dB μ V/m]	HOR [dB]	VER [dB]
1.	65.68	BB	29.2	34.3	7.3	28.1	1.7	5.9	16.0	21.1	40.0	24.0	18.9	
2.	202.51	BB	38.0	33.3	17.1	27.8	3.1	5.9	36.3	31.6	43.5	7.2	11.9	
3.	243.00	BB	41.2	34.8	13.4	27.8	3.5	5.9	36.2	29.8	46.0	9.8	16.2	
4.	253.13	BB	38.7	36.7	14.0	27.8	3.6	5.9	34.4	32.4	46.0	11.6	13.6	
5.	297.00	BB	38.1	30.7	16.4	27.8	3.9	6.0	36.6	29.2	46.0	9.4	16.8	
6.	324.00	BB	37.3	33.2	16.9	27.9	4.1	6.0	36.4	32.3	46.0	9.6	13.7	
7.	405.00	BB	34.8	39.3	17.9	28.0	4.7	5.9	35.3	39.8	46.0	10.7	6.2	
8.	486.00	BB	32.7	32.6	19.2	28.1	5.2	5.9	34.9	34.8	46.0	11.1	11.2	
9.	567.00	BB	31.0	30.9	20.2	27.8	5.7	5.9	35.0	34.9	46.0	11.0	11.1	
10.	675.01	BB	33.3	35.9	22.0	27.3	6.3	5.9	40.2	42.8	46.0	5.8	3.2	
11.	756.00	BB	27.6	24.5	22.8	27.2	6.7	5.9	35.8	32.7	46.0	10.2	13.3	

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

DATA OF RADIATION TEST

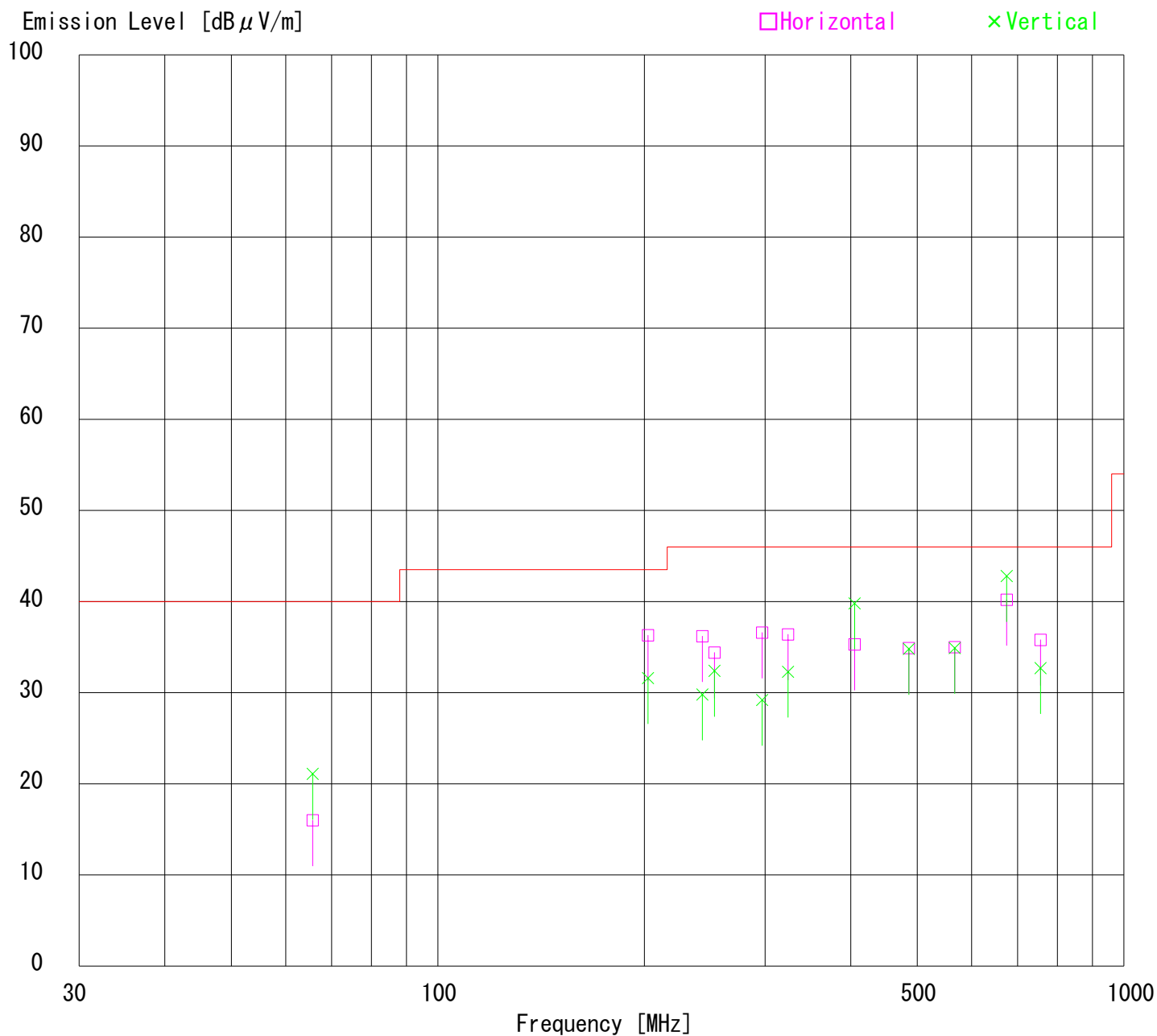
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 25IE0134-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input2+Rec
Remarks : 5Vp-p
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input2+Rec
Remarks : 5Vp-p
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C Engineer : Tsubasa Takayama
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Average Limit / Upper1GHz)

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.	1080.14	BB	39.1	40.7	24.0	40.0	3.4	0.0	26.5	28.1	54.0	27.5	25.9
2.	1150.13	BB	34.1	40.8	24.1	39.9	3.5	0.0	21.8	28.5	54.0	32.2	25.5
3.	1540.32	BB	33.6	35.7	24.3	39.3	4.2	0.0	22.8	24.9	54.0	31.2	29.1

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

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

DATA OF RADIATION TEST

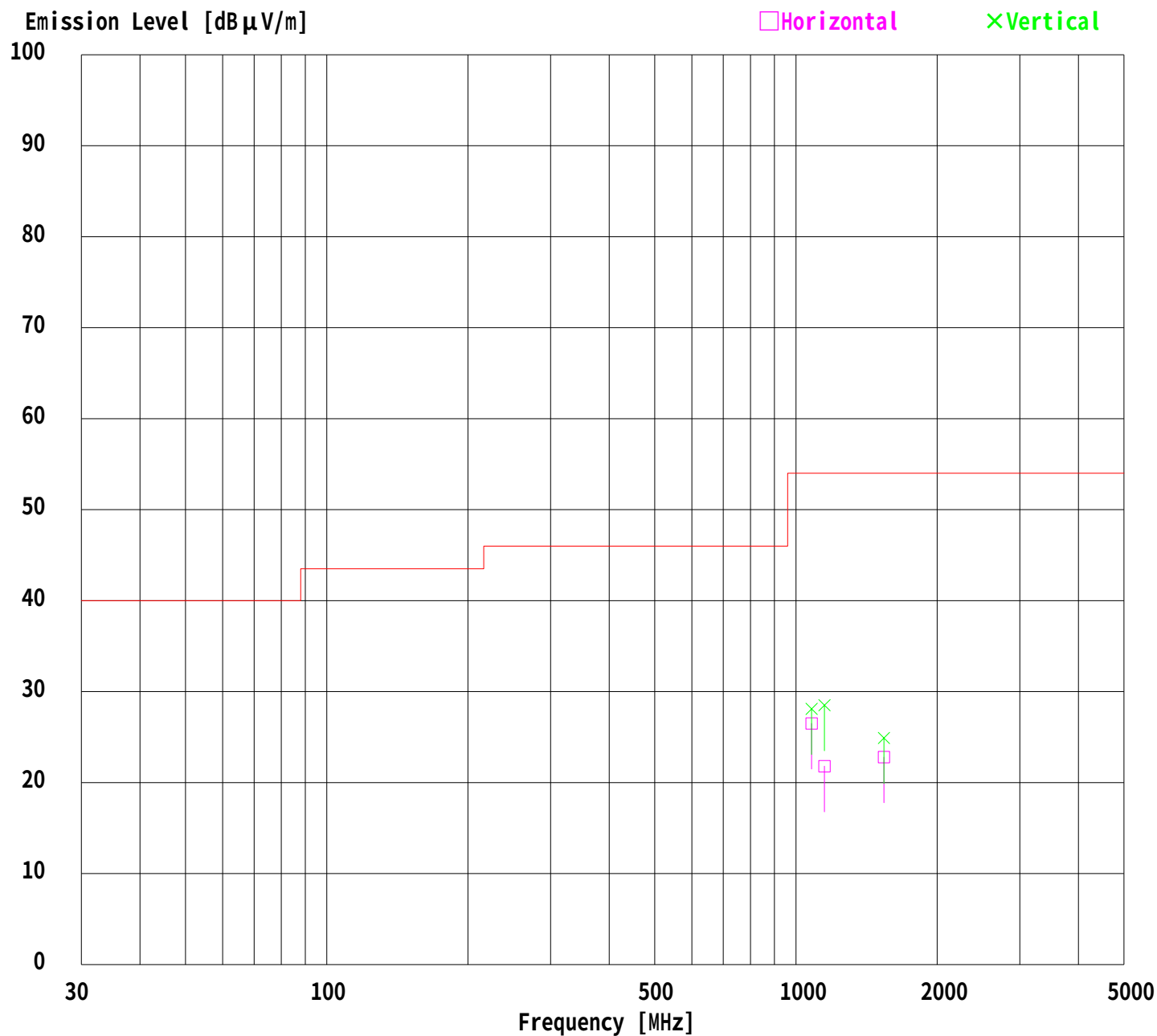
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input2+Rec
Remarks : 5Vp-p
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Average Limit / Upper1GHz)

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input2+Rec
Remarks : 5Vp-p
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C Engineer : Tsubasa Takayama
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Peak Limit / Upper1GHz)

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.	1080.14	BB	50.6	51.6	24.0	40.0	3.4	0.0	38.0	39.0	74.0	36.0	35.0
2.	1150.13	BB	47.0	51.8	24.1	39.9	3.5	0.0	34.7	39.5	74.0	39.3	34.5
3.	1540.32	BB	45.7	48.8	24.3	39.3	4.2	0.0	34.9	38.0	74.0	39.1	36.0

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

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

DATA OF RADIATION TEST

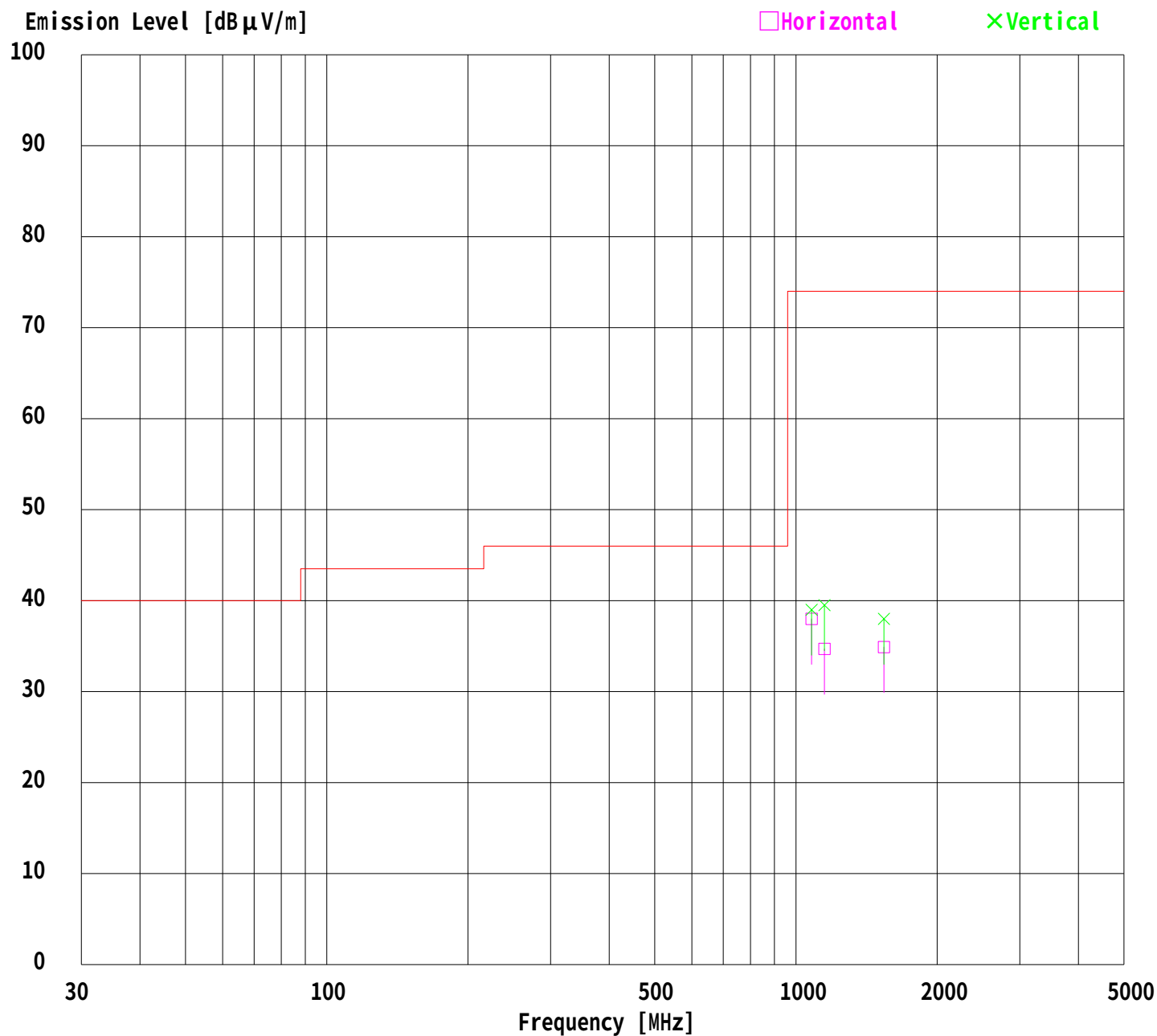
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input2+Rec
Remarks : 5Vp-p
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Peak Limit / Upper1GHz)

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 25IE0134-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : VCR Playback
Remarks :
Date : 4/14/2005
Test Distance : 3 m
Temperature : 24 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama

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					HOR [dB μ V/m]	VER		HOR [dB]	VER
1.	185.64	BB	37.7	29.5	16.5	27.9	2.9	5.9	35.1	26.9	43.5	8.4	16.6
2.	189.02	BB	34.6	31.6	16.7	27.9	3.0	5.9	32.3	29.3	43.5	11.2	14.2
3.	202.62	BB	38.4	29.5	17.1	27.8	3.1	5.9	36.7	27.8	43.5	6.8	15.7
4.	216.00	BB	38.3	30.9	17.2	27.8	3.2	5.9	36.8	29.4	43.5	6.7	14.1
5.	236.27	BB	42.7	33.2	17.3	27.8	3.4	5.9	41.5	32.0	46.0	4.5	14.0
6.	253.14	BB	41.6	29.9	17.5	27.8	3.6	5.9	40.8	29.1	46.0	5.2	16.9
7.	270.00	BB	40.5	35.4	18.5	27.8	3.7	6.0	40.9	35.8	46.0	5.1	10.2
8.	297.00	BB	36.8	30.8	20.2	27.8	3.9	6.0	39.1	33.1	46.0	6.9	12.9
9.	303.77	BB	37.3	30.0	16.6	27.9	4.0	6.0	36.0	28.7	46.0	10.0	17.3
10.	351.00	BB	39.2	30.3	17.2	27.9	4.3	6.0	38.8	29.9	46.0	7.2	16.1
11.	405.01	BB	35.8	38.4	17.9	28.0	4.7	5.9	36.3	38.9	46.0	9.7	7.1
12.	540.00	BB	32.0	34.0	19.8	27.9	5.5	5.9	35.3	37.3	46.0	10.7	8.7
13.	567.00	BB	30.2	32.6	20.2	27.8	5.7	5.9	34.2	36.6	46.0	11.8	9.4
14.	593.41	BB	30.2	36.8	20.4	27.7	5.8	5.9	34.6	41.2	46.0	11.4	4.8
15.	621.02	BB	33.0	37.5	20.9	27.6	6.0	5.9	38.2	42.7	46.0	7.8	3.3
16.	675.00	BB	35.6	38.1	22.0	27.3	6.3	5.9	42.5	45.0	46.0	3.5	1.0
17.	729.01	BB	29.4	34.0	22.6	27.2	6.6	5.9	37.3	41.9	46.0	8.7	4.1

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

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

DATA OF RADIATION TEST

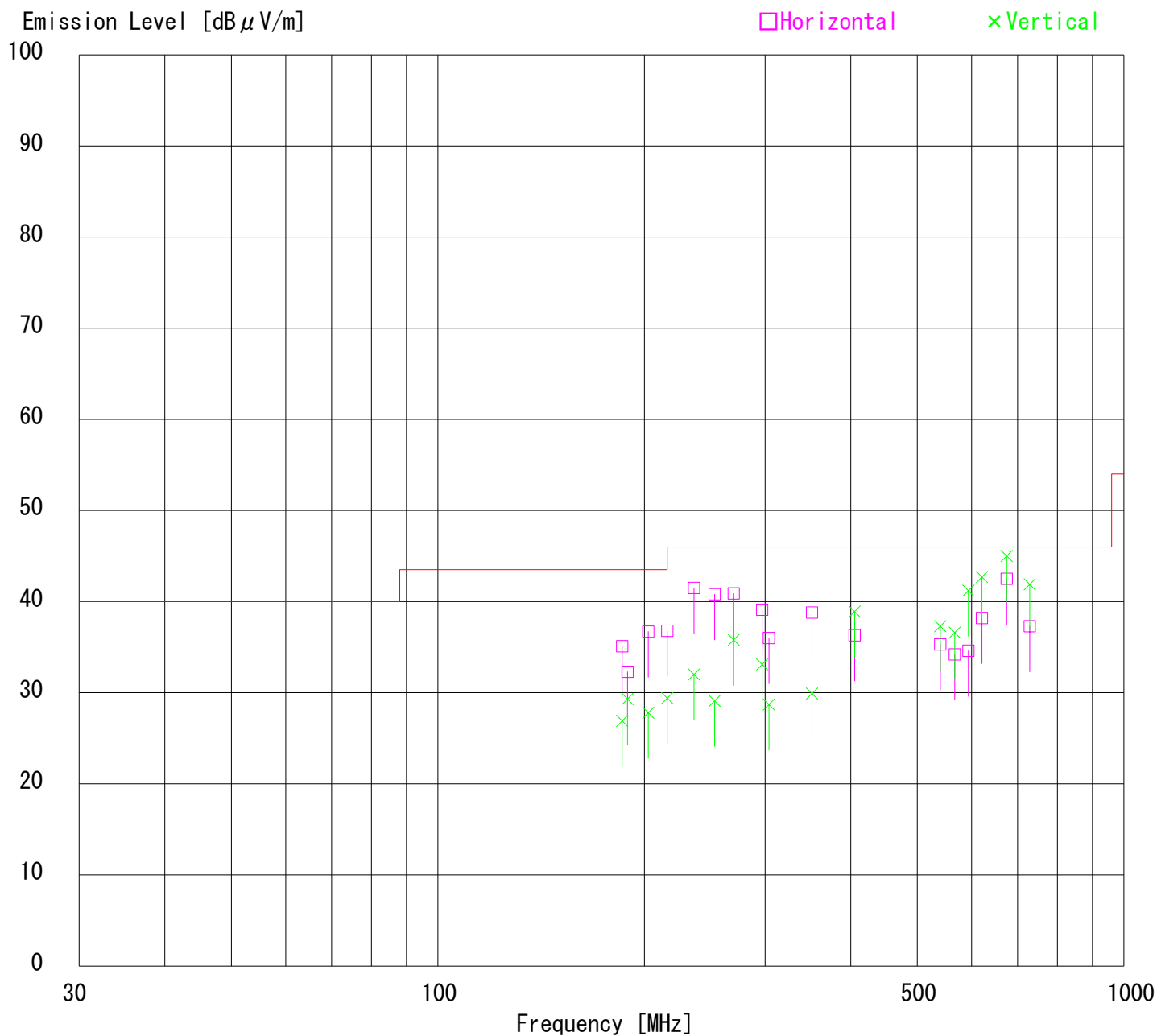
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 25IE0134-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : VCR Playback
Remarks :
Date : 4/14/2005
Test Distance : 3 m
Temperature : 24 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : VCR Playback
Remarks :
Date : 4/14/2005
Test Distance : 3 m
Temperature : 24 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama

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.	1080.11	BB	41.1	46.2	24.0	40.0	3.4	0.0	28.5	33.6	54.0	25.5	20.4
2.	1485.43	BB	41.3	43.2	24.3	39.3	4.1	0.0	30.4	32.3	54.0	23.6	21.7
3.	1539.45	BB	38.4	40.6	24.3	39.3	4.2	0.0	27.6	29.8	54.0	26.4	24.2

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

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

DATA OF RADIATION TEST

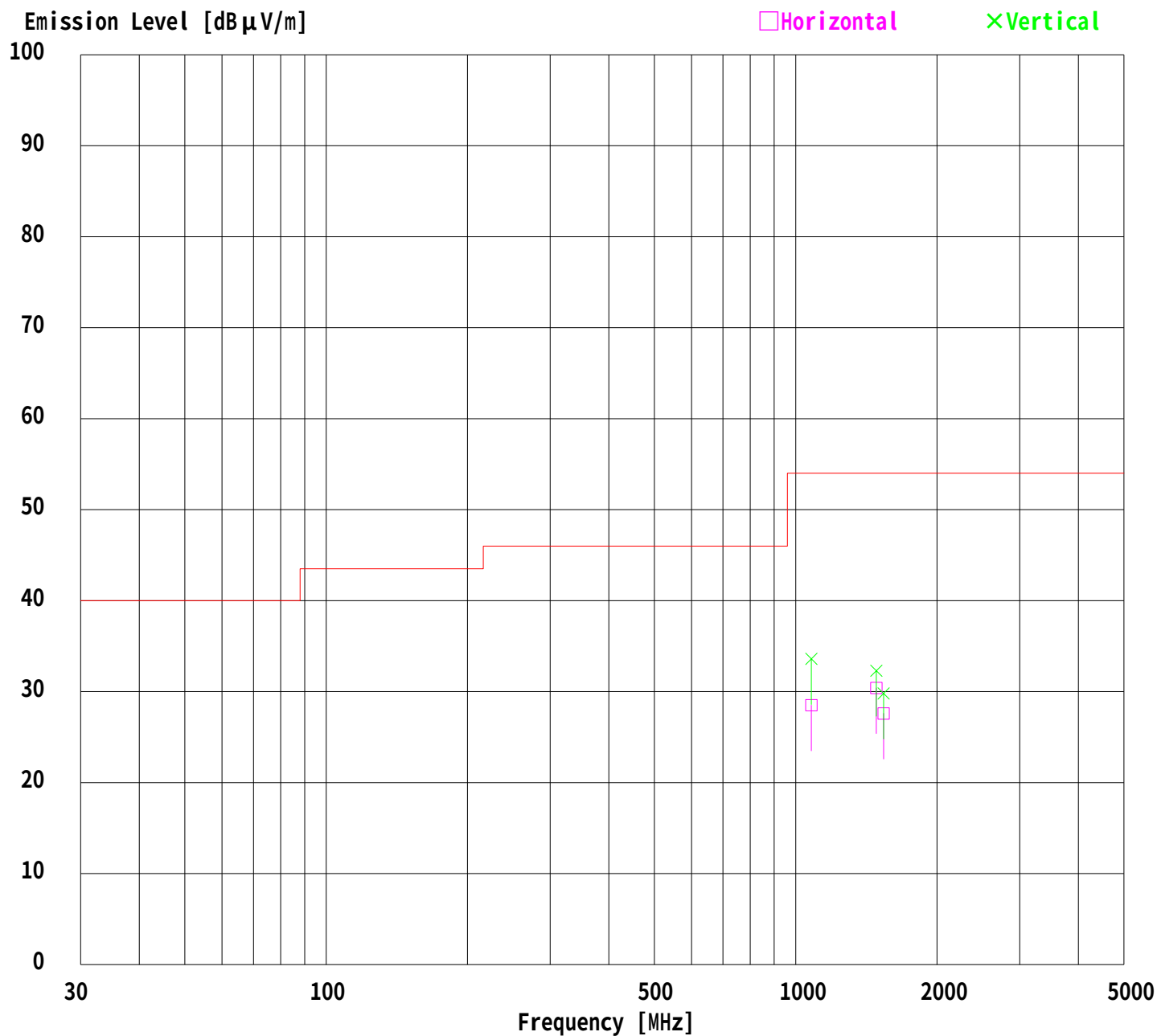
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : VCR Playback
Remarks :
Date : 4/14/2005
Test Distance : 3 m
Temperature : 24 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : VCR Playback
Remarks :
Date : 4/14/2005
Test Distance : 3 m
Temperature : 24 °C Engineer : Tsubasa Takayama
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Peak Limit / Upper1GHz)

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.	1080.11	BB	51.9	55.2	24.0	40.0	3.4	0.0	39.3	42.6	74.0	34.7	31.4
2.	1485.43	BB	51.6	55.3	24.3	39.3	4.1	0.0	40.7	44.4	74.0	33.3	29.6
3.	1539.45	BB	53.9	54.8	24.3	39.3	4.2	0.0	43.1	44.0	74.0	30.9	30.0

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

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

DATA OF RADIATION TEST

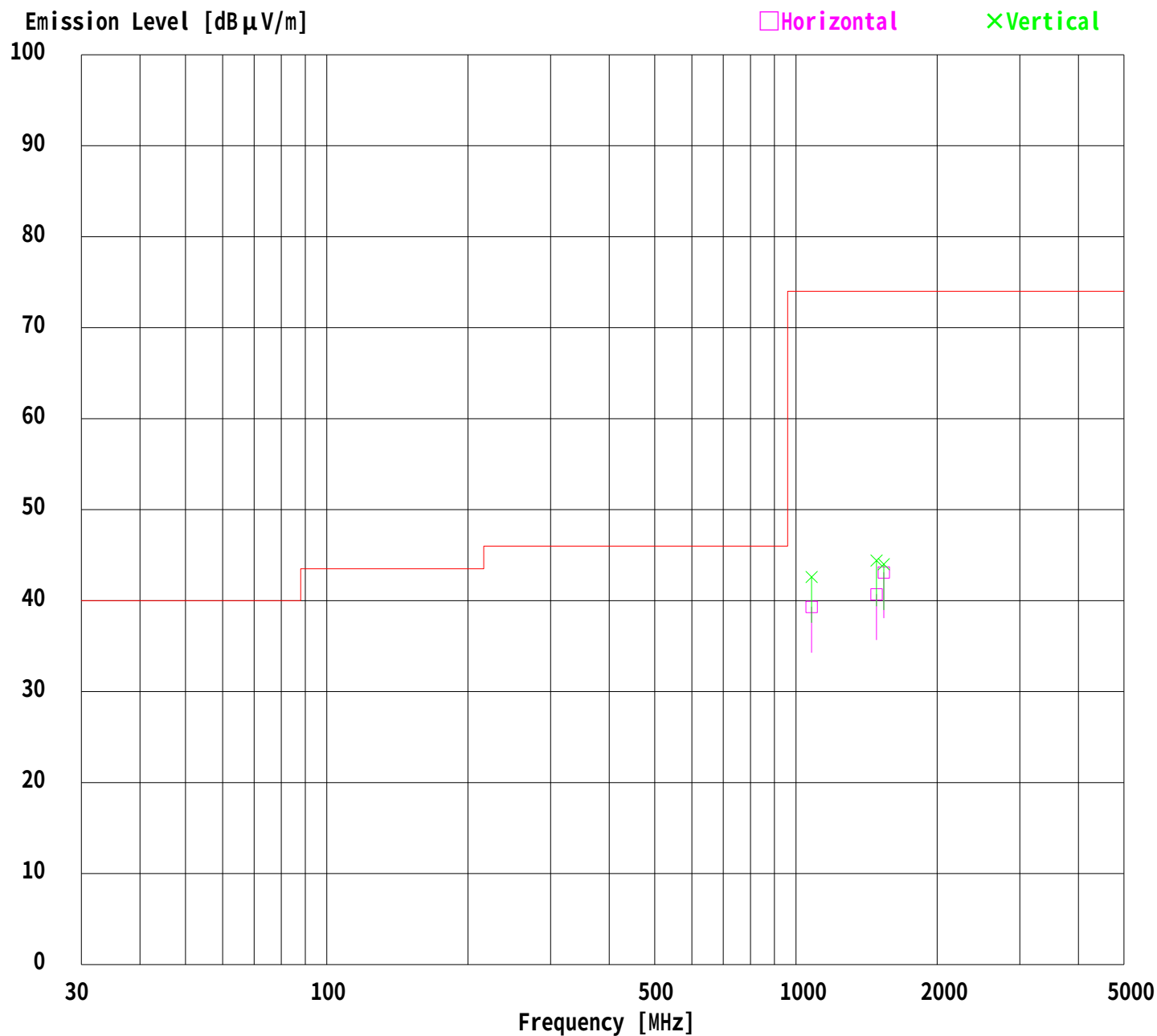
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : VCR Playback
Remarks :
Date : 4/14/2005
Test Distance : 3 m
Temperature : 24 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Peak Limit / Upper1GHz)

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 25IE0134-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks : HDMI OUTPUT
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama

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.	70.20	BB	39.4	37.2	6.5	28.1	1.7	5.9	25.4	23.2	40.0	14.6	16.8
2.	189.00	BB	35.1	28.1	16.7	27.9	3.0	5.9	32.8	25.8	43.5	10.7	17.7
3.	216.00	BB	39.6	33.6	17.2	27.8	3.2	5.9	38.1	32.1	43.5	5.4	11.4
4.	243.00	BB	40.0	32.4	17.3	27.8	3.5	5.9	38.9	31.3	46.0	7.1	14.7
5.	270.00	BB	37.4	34.3	18.5	27.8	3.7	6.0	37.8	34.7	46.0	8.2	11.3
6.	296.70	BB	40.8	37.2	20.2	27.8	3.9	6.0	43.1	39.5	46.0	2.9	6.5
7.	324.00	BB	27.3	29.6	16.9	27.9	4.1	6.0	26.4	28.7	46.0	19.6	17.3
8.	405.00	BB	32.4	32.6	17.9	28.0	4.7	5.9	32.9	33.1	46.0	13.1	12.9
9.	540.00	BB	32.5	31.2	19.8	27.9	5.5	5.9	35.8	34.5	46.0	10.2	11.5
10.	741.78	BB	32.6	33.9	22.7	27.2	6.6	5.9	40.6	41.9	46.0	5.4	4.1
11.	945.91	BB	21.6	22.1	26.2	27.1	7.8	6.0	34.5	35.0	46.0	11.5	11.0

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

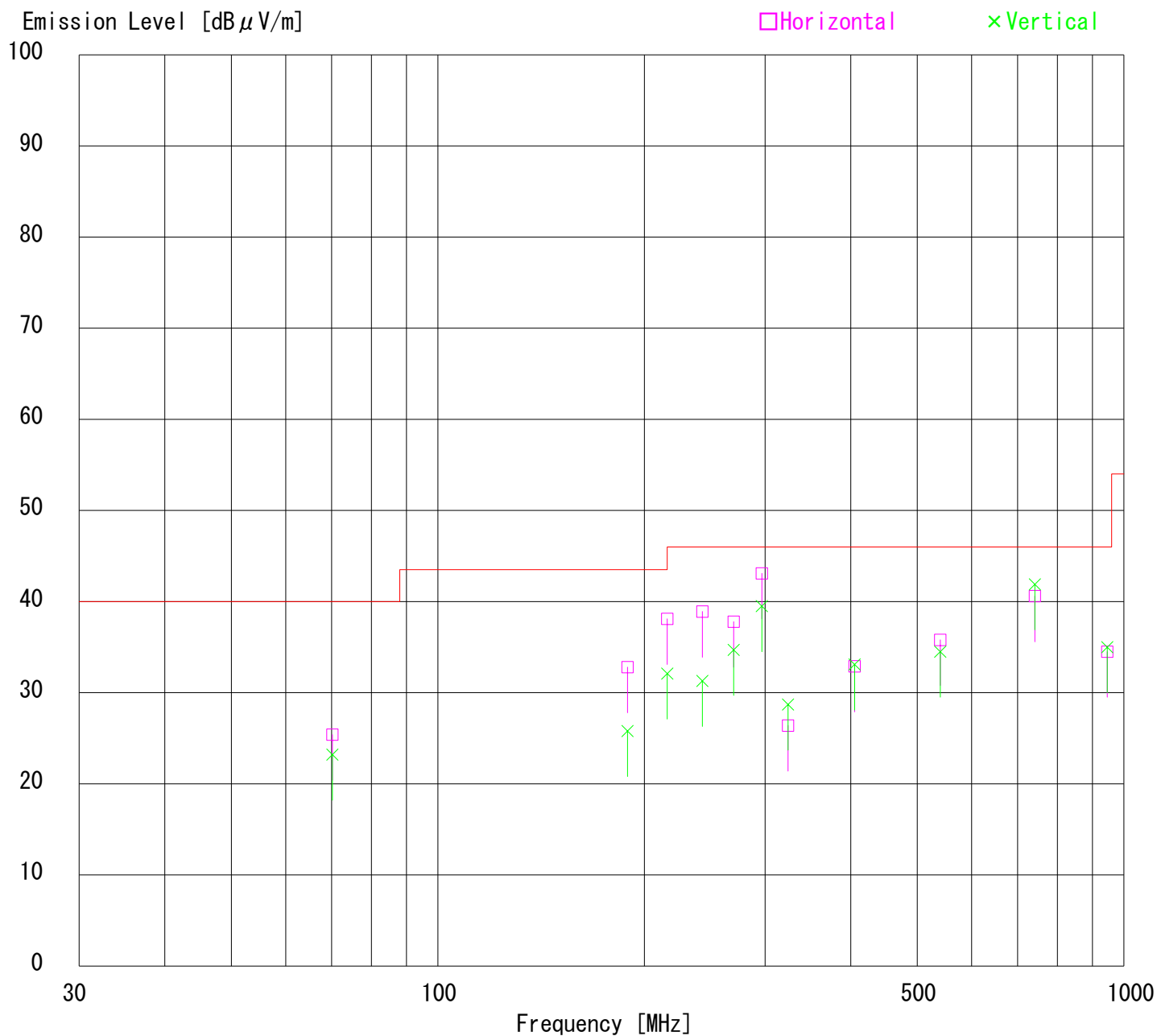
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 25IE0134-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks : HDMI OUTPUT
Date : 4/14/2005
Test Distance : 3 m
Temperature : 27 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks : HDMI Output
Date : 4/14/2005
Test Distance : 3 m
Temperature : 24 °C Engineer : Tsubasa Takayama
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Average Limit / Upper1GHz)

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.	1079.50	BB	42.9	44.9	24.0	40.0	3.4	0.0	30.3	32.3	54.0	23.7	21.7
2.	1186.83	BB	42.5	41.5	24.1	39.8	3.5	0.0	30.3	29.3	54.0	23.7	24.7
3.	1483.56	BB	50.6	52.5	24.3	39.3	4.1	0.0	39.7	41.6	54.0	14.3	12.4
4.	1813.83	BB	44.1	46.3	24.4	38.8	4.6	0.0	34.3	36.5	54.0	19.7	17.5

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

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

DATA OF RADIATION TEST

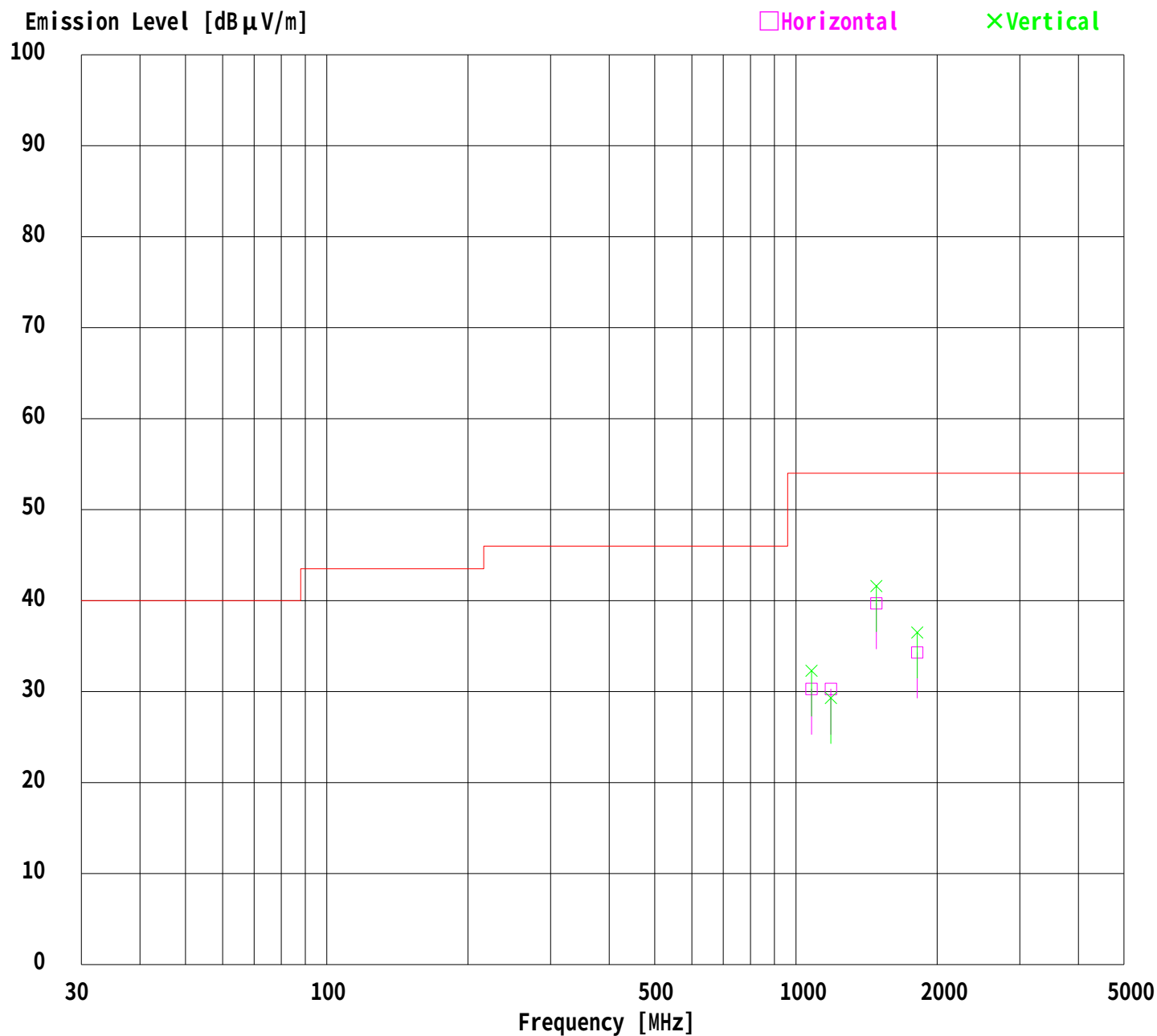
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks : HDMI Output
Date : 4/14/2005
Test Distance : 3 m
Temperature : 24 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Average Limit / Upper1GHz)

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks : HDMI Output
Date : 4/14/2005
Test Distance : 3 m
Temperature : 24 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Peak Limit / Upper1GHz)

Engineer : Tsubasa Takayama

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.	1079.50	BB	53.8	55.3	24.0	40.0	3.4	0.0	41.2	42.7	74.0	32.8	31.3
2.	1186.83	BB	51.9	51.7	24.1	39.8	3.5	0.0	39.7	39.5	74.0	34.3	34.5
3.	1483.56	BB	57.6	59.0	24.3	39.3	4.1	0.0	46.7	48.1	74.0	27.3	25.9
4.	1813.83	BB	50.7	52.4	24.4	38.8	4.6	0.0	40.9	42.6	74.0	33.1	31.4

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

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

DATA OF RADIATION TEST

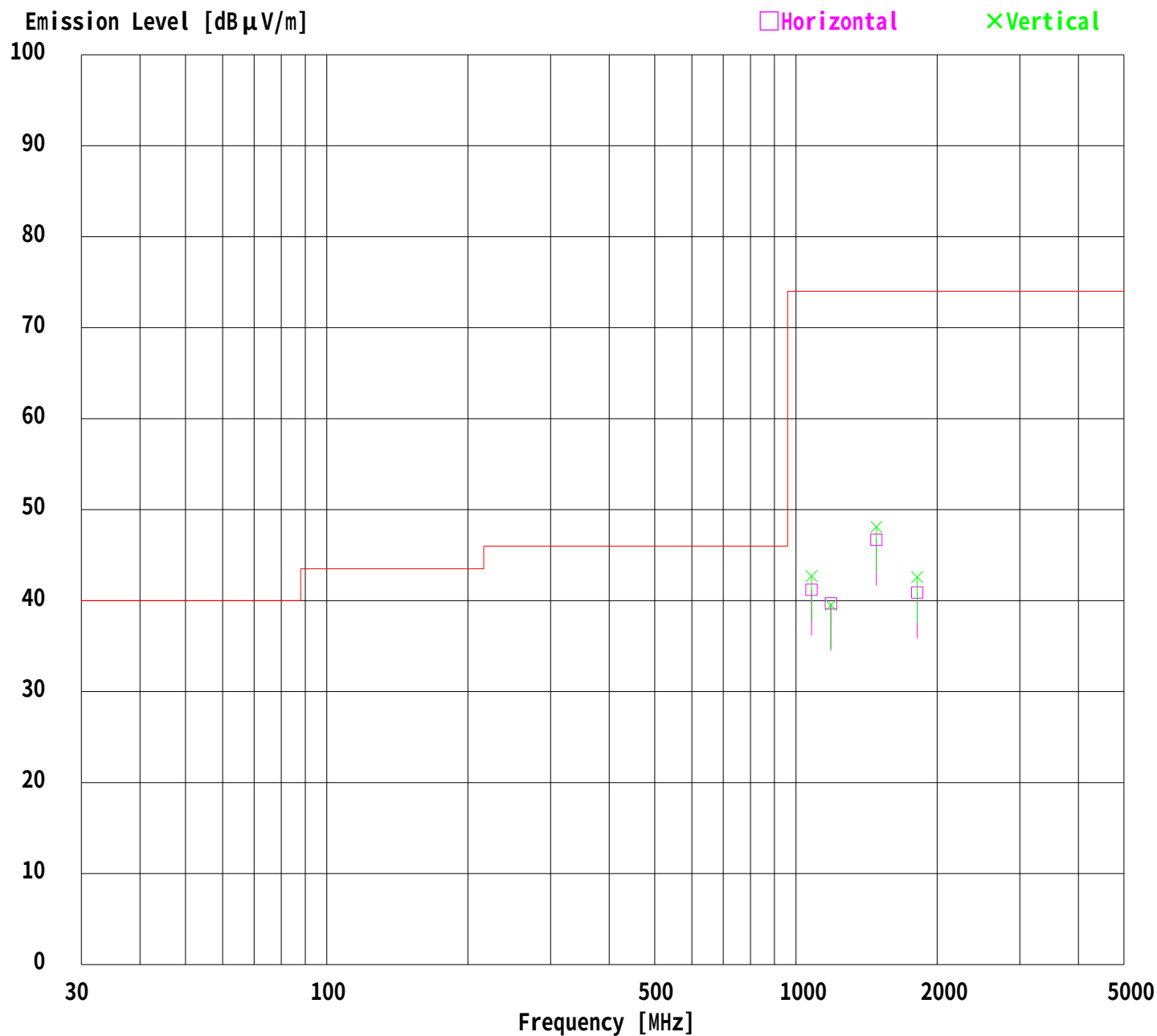
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks : HDMI Output
Date : 4/14/2005
Test Distance : 3 m
Temperature : 24 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Peak Limit / Upper1GHz)

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 251E0134-YW-1

Applicant : Orion Electric Co., Ltd.
 Kind of Equipment : DVD/VCR
 Model No. : SD-V593SU
 Serial No. : -
 Power : AC120V/60Hz
 Mode : Card
 Remarks :
 Date : 4/14/2005
 Test Distance : 3 m
 Temperature : 24 °C
 Humidity : 38 %
 Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama

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					HOR [dB μ V/m]	VER		HOR [dB]	VER
1.	189.02	BB	37.3	31.5	16.7	27.9	3.0	5.9	35.0	29.2	43.5	8.5	14.3
2.	216.00	BB	41.0	32.1	17.2	27.8	3.2	5.9	39.5	30.6	43.5	4.0	12.9
3.	253.14	BB	43.0	36.7	17.5	27.8	3.6	5.9	42.2	35.9	46.0	3.8	10.1
4.	270.00	BB	36.0	33.9	18.5	27.8	3.7	6.0	36.4	34.3	46.0	9.6	11.7
5.	297.00	BB	34.5	31.5	20.2	27.8	3.9	6.0	36.8	33.8	46.0	9.2	12.2
6.	320.64	BB	37.3	29.0	16.9	27.9	4.1	6.0	36.4	28.1	46.0	9.6	17.9
7.	351.00	BB	38.7	30.2	17.2	27.9	4.3	6.0	38.3	29.8	46.0	7.7	16.2
8.	405.01	BB	34.6	34.1	17.9	28.0	4.7	5.9	35.1	34.6	46.0	10.9	11.4
9.	540.00	BB	31.1	32.3	19.8	27.9	5.5	5.9	34.4	35.6	46.0	11.6	10.4
10.	567.00	BB	29.7	34.2	20.2	27.8	5.7	5.9	33.7	38.2	46.0	12.3	7.8
11.	593.41	BB	32.0	35.3	20.4	27.7	5.8	5.9	36.4	39.7	46.0	9.6	6.3
12.	621.02	BB	35.2	38.5	20.9	27.6	6.0	5.9	40.4	43.7	46.0	5.6	2.3
13.	648.00	BB	28.8	32.6	21.4	27.4	6.1	5.9	34.8	38.6	46.0	11.2	7.4
14.	667.58	BB	26.8	30.0	21.8	27.3	6.2	5.9	33.4	36.6	46.0	12.6	9.4
15.	675.00	BB	35.3	37.8	22.0	27.3	6.3	5.9	42.2	44.7	46.0	3.8	1.3
16.	729.01	BB	30.9	34.8	22.6	27.2	6.6	5.9	38.8	42.7	46.0	7.2	3.3

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

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

DATA OF RADIATION TEST

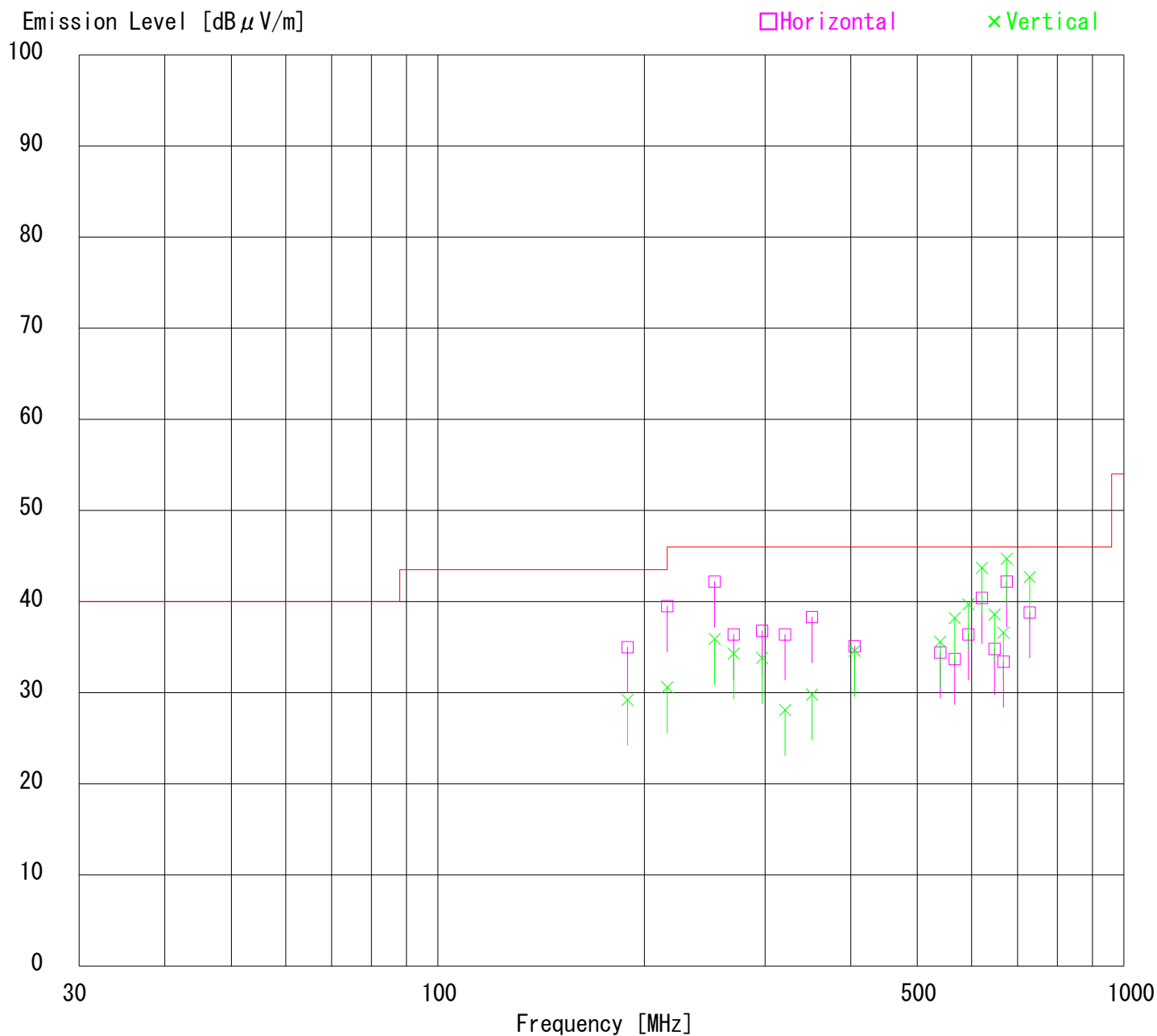
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 25IE0134-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : Card
Remarks :
Date : 4/14/2005
Test Distance : 3 m
Temperature : 24 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : Card
Remarks :
Date : 4/14/2005
Test Distance : 3 m
Temperature : 24 °C Engineer : Tsubasa Takayama
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Average Limit / Upper1GHz)

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.	1012.59	BB	44.8	41.4	24.0	40.1	3.2	0.0	31.9	28.5	54.0	22.1	25.5
2.	1080.11	BB	42.8	46.7	24.0	40.0	3.4	0.0	30.2	34.1	54.0	23.8	19.9
3.	2640.99	BB	36.4	36.3	26.3	38.6	6.0	0.0	30.1	30.0	54.0	23.9	24.0

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

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

DATA OF RADIATION TEST

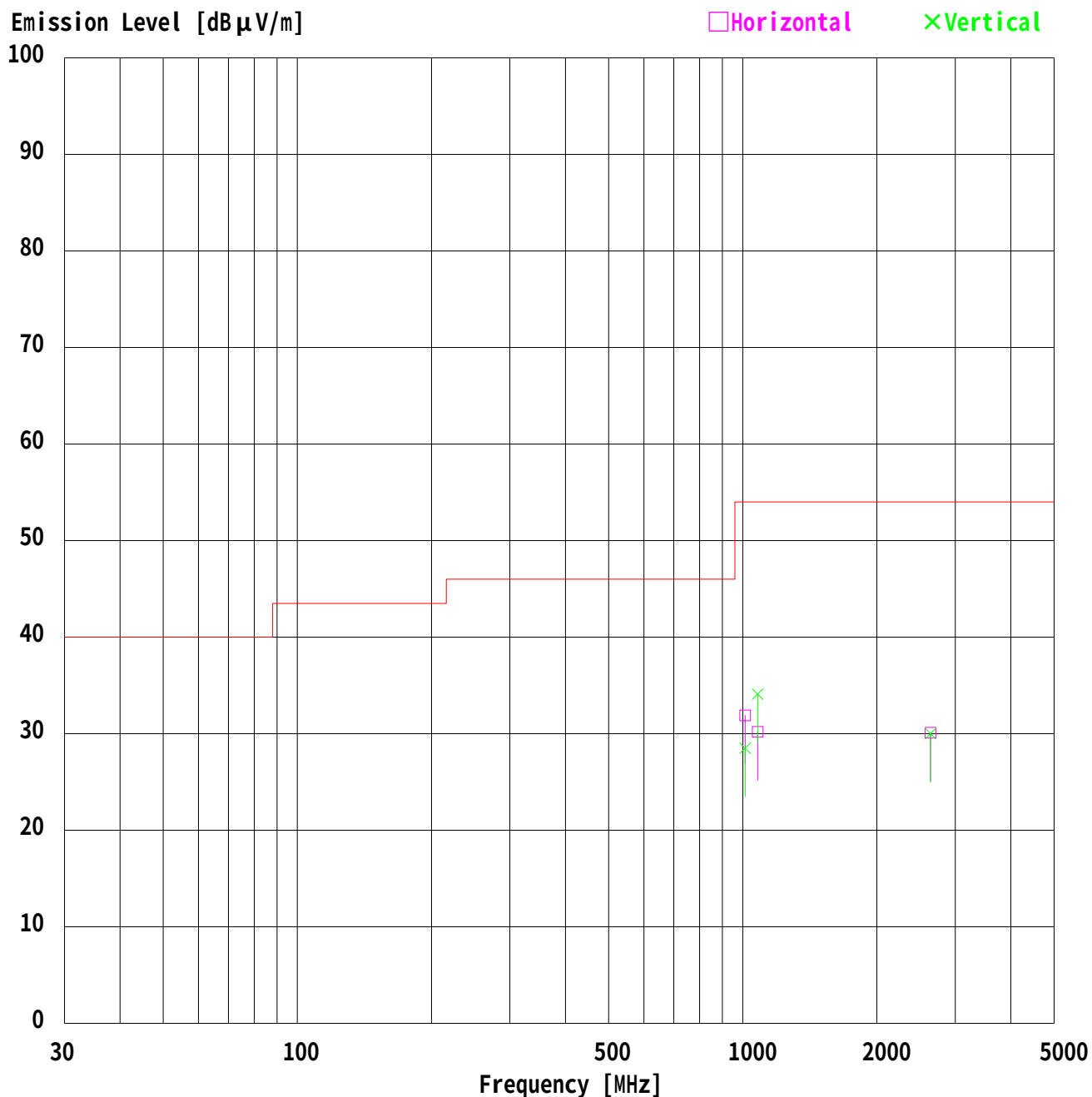
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : Card
Remarks :
Date : 4/14/2005
Test Distance : 3 m
Temperature : 24 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Average Limit / Upper1GHz)

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : Card
Remarks :
Date : 4/14/2005
Test Distance : 3 m
Temperature : 24 °C Engineer : Tsubasa Takayama
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Peak Limit / Upper1GHz)

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.	1012.59	BB	52.4	50.4	24.0	40.1	3.2	0.0	39.5	37.5	74.0	34.5	36.5
2.	1080.11	BB	53.9	55.1	24.0	40.0	3.4	0.0	41.3	42.5	74.0	32.7	31.5
3.	2640.99	BB	49.3	48.2	26.3	38.6	6.0	0.0	43.0	41.9	74.0	31.0	32.1

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

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

DATA OF RADIATION TEST

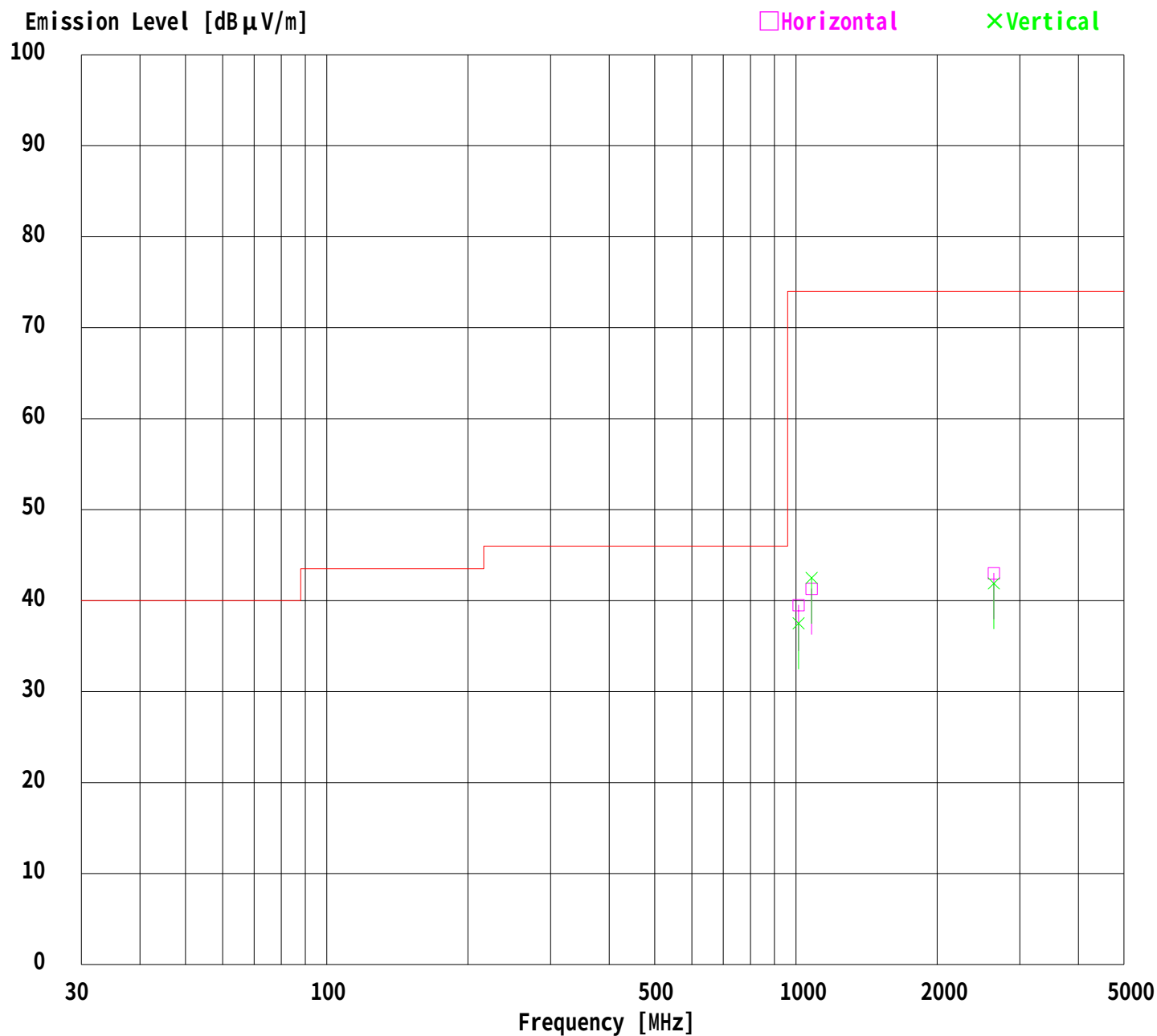
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25IE0134-YW-1

Applicant : Orion Electric Co.,Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120V/60Hz
Mode : Card
Remarks :
Date : 4/14/2005
Test Distance : 3 m
Temperature : 24 °C
Humidity : 38 %
Regulation : FCC Part15B CLASS B(Peak Limit / Upper1GHz)

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 251E0134-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120/60Hz
Mode : AV Input1+Rec
Remarks : Test Channel #3
Date : 4/14/2004
Test Distance : 3 m
Temperature : 21 °C
Humidity : 41 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama

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	24.3	25.1	8.2	28.1	1.6	5.9	11.9	12.7	40.0	28.1	27.3
2.	65.75	BB	23.3	23.6	7.3	28.1	1.7	5.9	10.1	10.4	40.0	29.9	29.6
3.	122.50	BB	23.6	23.1	13.7	27.9	2.3	5.9	17.6	17.1	43.5	25.9	26.4
4.	245.00	BB	24.2	24.0	17.3	27.8	3.5	5.9	23.1	22.9	46.0	22.9	23.1

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

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

DATA OF RADIATION TEST

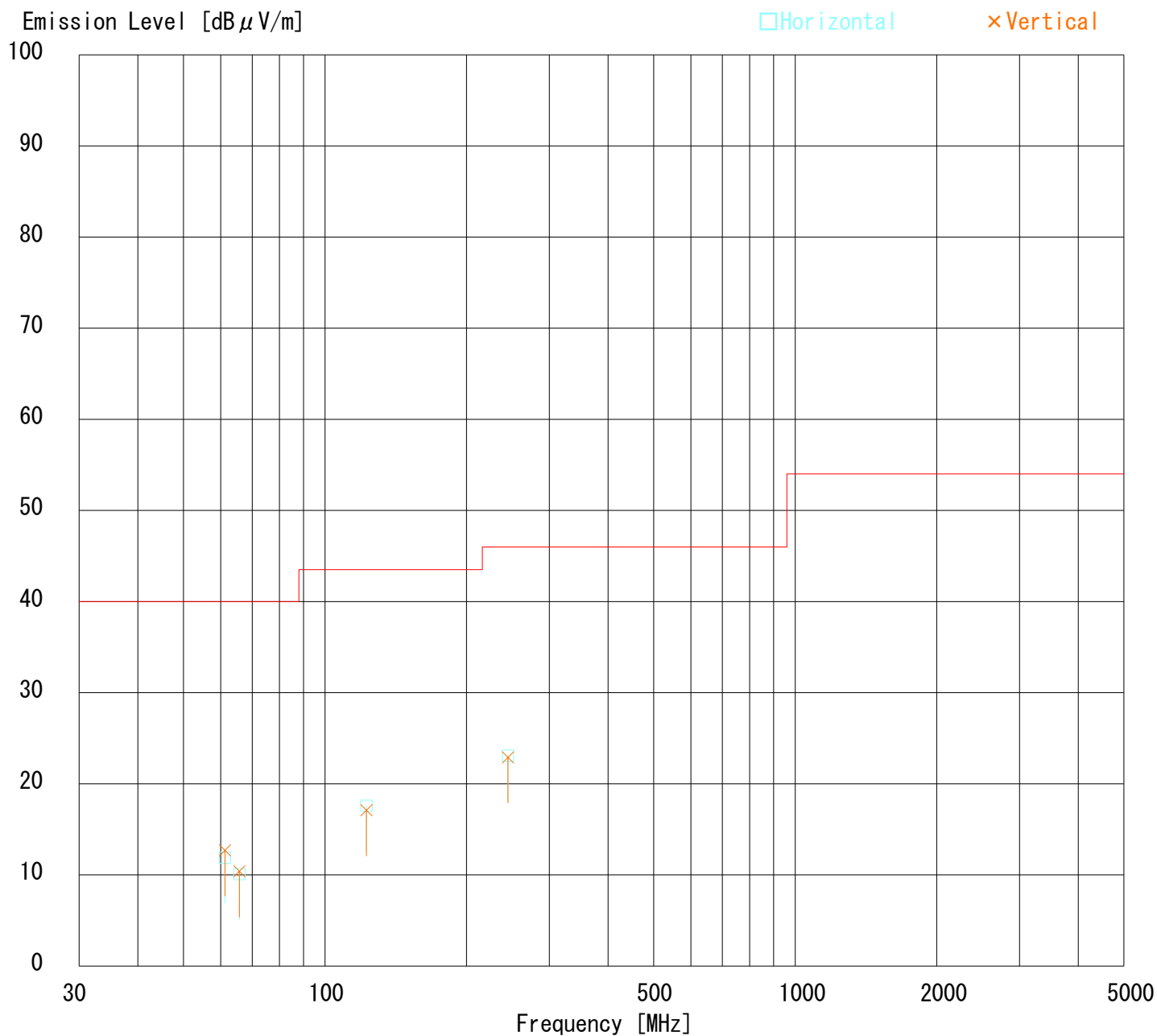
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 25IE0134-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120/60Hz
Mode : AV Input1+Rec
Remarks : Test Channel #3
Date : 4/14/2004
Test Distance : 3 m
Temperature : 21 °C
Humidity : 41 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 25IE0134-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120/60Hz
Mode : AV Input1+Rec
Remarks : Test Channel #4
Date : 4/14/2005
Test Distance : 3 m
Temperature : 23 °C
Humidity : 36 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama

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	23.3	23.1	7.0	28.1	1.7	5.9	9.8	9.6	40.0	30.2	30.4
2.	71.25	BB	23.6	23.0	6.5	28.1	1.8	5.9	9.7	9.1	40.0	30.3	30.9
3.	134.50	BB	24.1	21.9	14.4	27.9	2.4	5.9	18.9	16.7	43.5	24.6	26.8
4.	201.75	BB	22.3	22.3	17.1	27.8	3.1	5.9	20.6	20.6	43.5	22.9	22.9

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

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

DATA OF RADIATION TEST

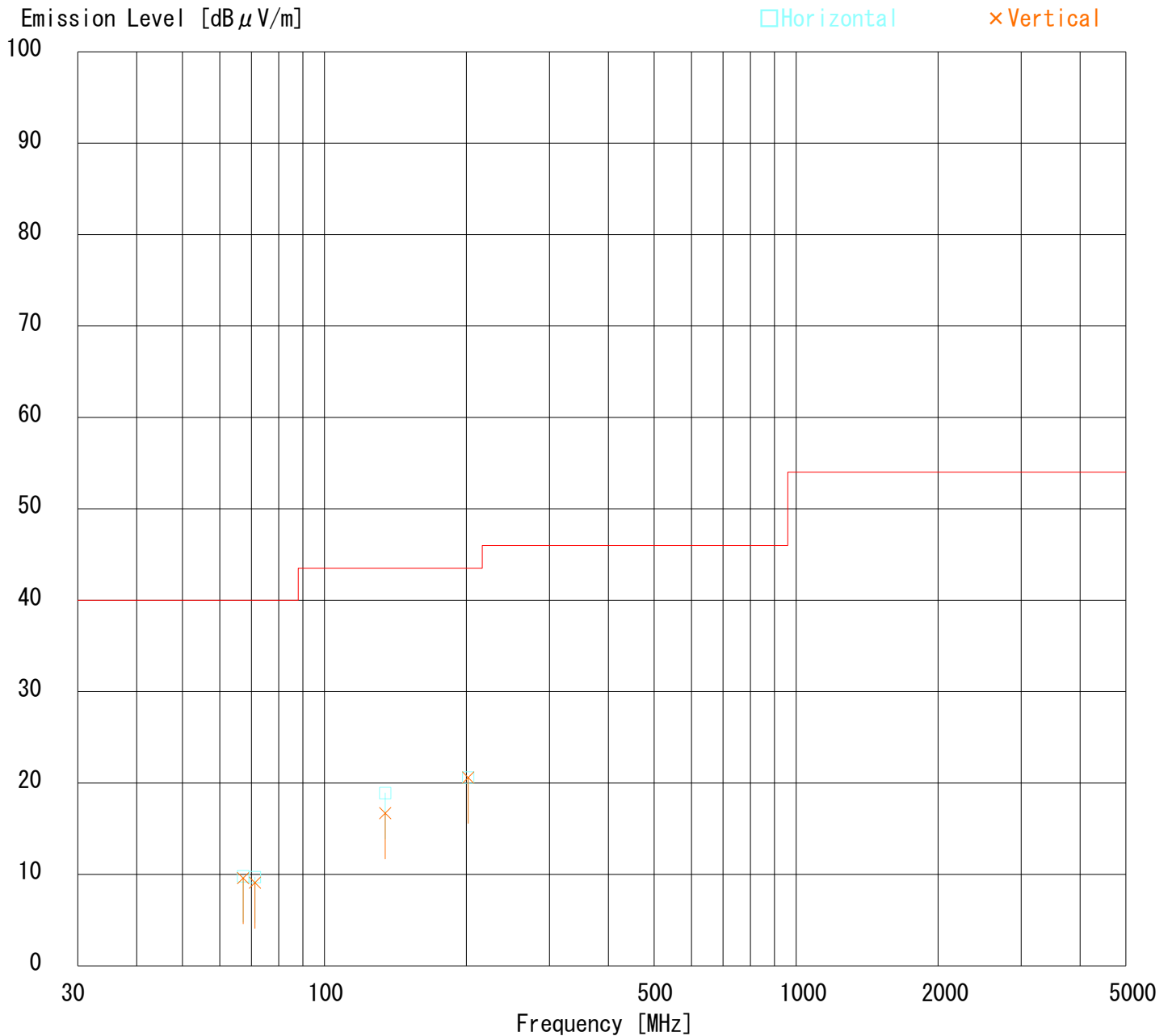
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 25IE0134-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V593SU
Serial No. : -
Power : AC120/60Hz
Mode : AV Input1+Rec
Remarks : Test Channel #4
Date : 4/14/2005
Test Distance : 3 m
Temperature : 23 °C
Humidity : 36 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF ANTENNA TERMINAL TEST

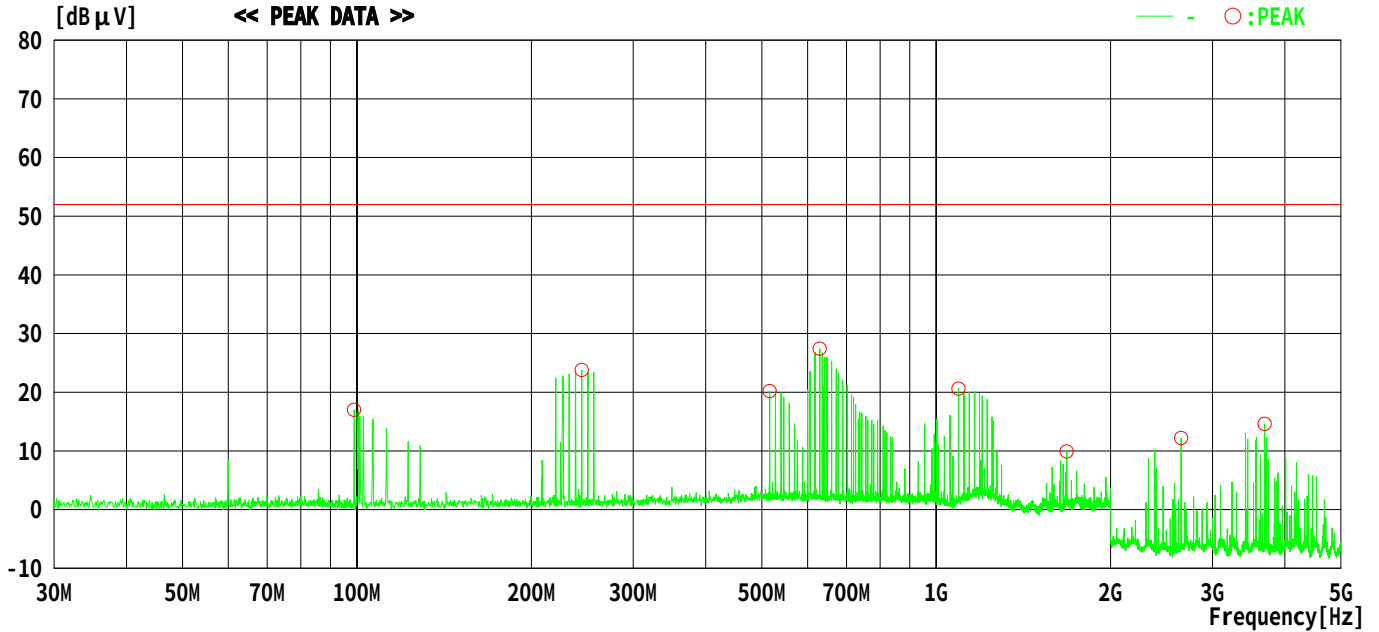
YOKOWA NO.7 S/R
Date : 2005/03/31 19:45:54

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL NO. : SD-V593SU
OPERATION MODE : TV Tuning Mode

Report No. : 251E0134-YW-1
DATE : March 31, 2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 24deg.C/31%

LIMIT : FCC 15B ANTENNA TERMINAL



NO	FREQ [MHz]	READING Peak [dB μV]	C.F [dB]	RESULT Peak [dB μV]	LIMIT Peak [dB μV]	MARGIN [dB]	PHASE
1	98.89899	37.5	-20.5	17.0	52.0	35.0	-
2	244.57400	44.2	-20.4	23.8	52.0	28.2	-
3	516.00470	40.5	-20.3	20.2	52.0	31.8	-
4	629.71550	47.8	-20.4	27.4	52.0	24.6	-
5	1092.85200	51.0	-30.4	20.6	52.0	31.4	-
6	1680.70100	40.0	-30.1	9.9	52.0	42.1	-
7	2647.10000	48.2	-36.0	12.2	52.0	39.8	-
8	3691.37800	50.8	-36.2	14.6	52.0	37.4	-

CALCULATION: READING + CORRECTION FACTOR
CORRECTION FACTOR = MATCHING PAD LOSS[dB μV] + CABLE LOSS[dB μV]

DATA OF ANTENNA TERMINAL TEST

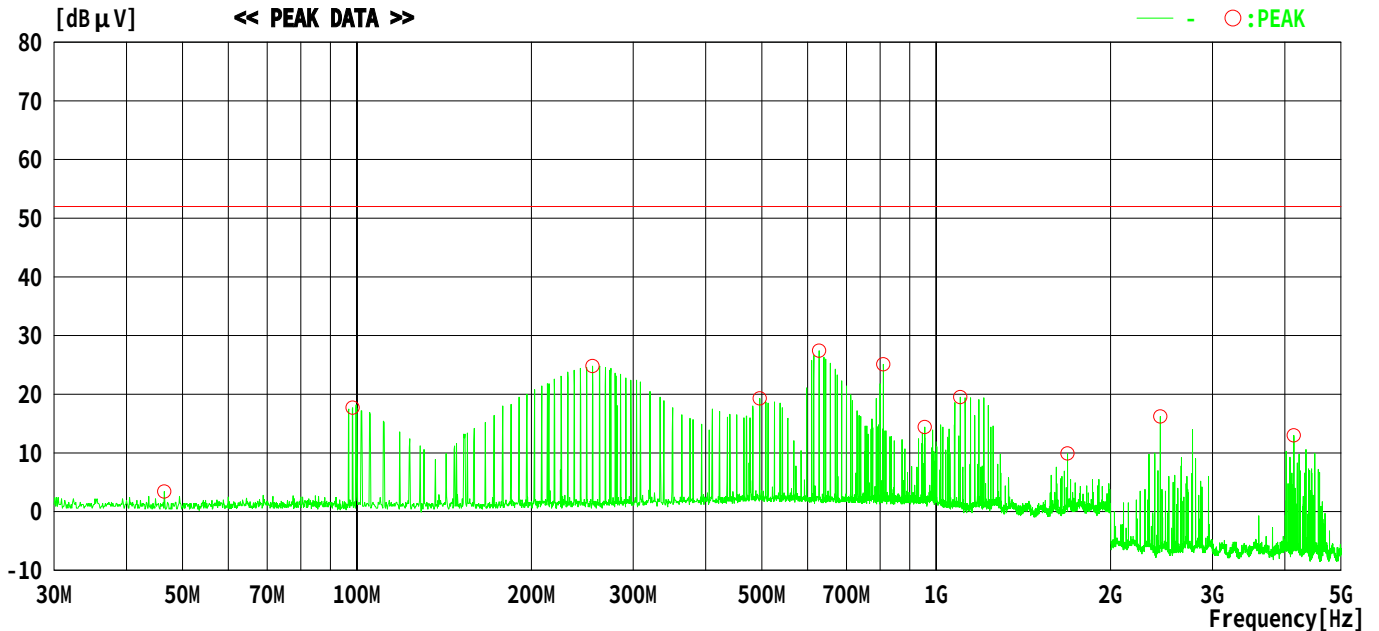
YOKOWA NO.7 S/R
Date : 2005/03/31 20:20:54

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL NO. : SD-V593SU
OPERATION MODE : CATV Tuning Mode

Report No. : 251E0134-YW-1
DATE : March 31, 2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 24deg.C/31%

LIMIT : FCC 15B ANTENNA TERMINAL



NO	FREQ [MHz]	READING Peak [dB μV]	C.F [dB]	RESULT Peak [dB μV]	LIMIT Peak [dB μV]	MARGIN Peak - [dB μV]	MARGIN [dB]	PHASE
1	46.49979	24.0	-20.6	3.4	52.0	----	48.6	----
2	98.29900	38.2	-20.5	17.7	52.0	----	34.3	----
3	255.14570	45.2	-20.4	24.8	52.0	----	27.2	----
4	496.00450	39.5	-20.2	19.3	52.0	----	32.7	----
5	628.00130	47.8	-20.4	27.4	52.0	----	24.6	----
6	810.57590	45.8	-20.7	25.1	52.0	----	26.9	----
7	955.86760	35.0	-20.6	14.4	52.0	----	37.6	----
8	1100.70900	49.8	-30.3	19.5	52.0	----	32.5	----
9	1686.41500	40.0	-30.1	9.9	52.0	----	42.1	----
10	2437.11500	52.2	-36.0	16.2	52.0	----	35.8	----
11	4144.28300	49.2	-36.2	13.0	52.0	----	39.0	----

CALCULATION: READING + CORRECTION FACTOR
CORRECTION FACTOR = MATCHING PAD LOSS[dB μV] + CABLE LOSS[dB μV]

RF Output Level

UL Apex Co.,Ltd.
Yokowa EMC Laboratory

Company : Orion Electric Co., Ltd.
Equipment : DVD/VCR
Model Number : SD-V593SU
Power : 120V/60Hz
Description : TV Reception + REC
Remarks : -

Report Number : 25IE0134-YW-1
Regulation : FCC15B SubpartB
Date : April 01, 2005
Temp / Humid : 23.8deg.C / 39%
Engineer : Tsubasa Takayama

TV Reception(0dBmV)

Ch	Frequency [MHz]	Meter Reading [dB μ V]	Correction Factor [dB]	Result [dB]	Limits [dB μ V]	Margin [dB]
Video Signal						
3	61.25	84.7	19.1	65.6	69.5	3.9
4	67.25	82.8	18.9	63.9	69.5	5.7
Audio Signal						
3	56.75	69.5	18.9	50.6	56.5	5.9
	65.75	68.2	19.0	49.2	56.5	7.3
4	62.75	68.7	19.0	49.7	56.5	6.8
	71.75	67.5	18.9	48.6	56.5	7.9

TV Reception(25dBmV)

Ch	Frequency [MHz]	Meter Reading [dB μ V]	Correction Factor [dB]	Result [dB]	Limits [dB μ V]	Margin [dB]
Video Signal						
3	61.25	83.6	19.1	64.5	69.5	5.0
4	67.25	83.9	18.9	65.0	69.5	4.5
Audio Signal						
3	56.75	69.4	18.9	50.5	56.5	6.0
	65.75	68.4	19.0	49.4	56.5	7.1
4	62.75	68.7	19.0	49.7	56.5	6.8
	71.75	67.6	18.9	48.7	56.5	7.8

RF Output Level

UL Apex Co.,Ltd.
Yokowa EMC Laboratory

Company : Orion Electric Co., Ltd.
Equipment : DVD/VCR
Model Number : SD-V593SU
Power : 120V/60Hz
Description : AV Input 1 + REC
Remarks : -

Report Number : 25IE0134-YW-1
Regulation : FCC15B SubpartB
Date : April 01, 2005
Temp / Humid : 23.8deg.C / 39%
Engineer : Tsubasa Takayama

AV Input1(1Vp-p)

Ch	Frequency [MHz]	Meter Reading [dB μ V]	Correction Factor [dB]	Result [dB]	Limits [dB μ V]	Margin [dB]
Video Signal						
3	61.25	83.9	19.1	64.8	69.5	4.7
4	67.25	82.4	18.9	63.5	69.5	6.0
Audio Signal						
3	56.75	69.6	18.9	50.7	56.5	5.8
	65.75	68.3	19.0	49.3	56.5	7.3
4	62.75	68.8	19.0	49.8	56.5	6.8
	71.75	67.5	18.9	48.6	56.5	7.9

AV Input1(5Vp-p)

Ch	Frequency [MHz]	Meter Reading [dB μ V]	Correction Factor [dB]	Result [dB]	Limits [dB μ V]	Margin [dB]
Video Signal						
3	61.25	83.1	19.1	64.0	69.5	5.5
4	67.25	83.9	18.9	65.0	69.5	4.5
Audio Signal						
3	56.75	69.8	18.9	50.9	56.5	5.6
	65.75	68.3	19.0	49.3	56.5	7.3
4	62.75	68.9	19.0	49.9	56.5	6.6
	71.75	67.5	18.9	48.6	56.5	7.9

RF Output Level

UL Apex Co.,Ltd.
Yokowa EMC Laboratory

Company : Orion Electric Co., Ltd.
Equipment : DVD/VCR
Model Number : SD-V593SU
Power : 120V/60Hz
Description : AV Input 2 + REC
Remarks : -

Report Number : 25IE0134-YW-1
Regulation : FCC15B SubpartB
Date : April 01, 2005
Temp / Humid : 23.8deg.C / 39%
Engineer : Tsubasa Takayama

AV Input2(1Vp-p)

Ch	Frequency [MHz]	Meter Reading [dB μ V]	Correction Factor [dB]	Result [dB]	Limits [dB μ V]	Margin [dB]
Video Signal						
3	61.25	83.4	19.1	64.3	69.5	5.2
4	67.25	82.5	18.9	63.6	69.5	5.9
Audio Signal						
3	56.75	69.7	18.9	50.8	56.5	5.7
	65.75	68.4	19.0	49.4	56.5	7.1
4	62.75	68.8	19.0	49.8	56.5	6.8
	71.75	67.5	18.9	48.6	56.5	7.9

AV Input2(5Vp-p)

Ch	Frequency [MHz]	Meter Reading [dB μ V]	Correction Factor [dB]	Result [dB]	Limits [dB μ V]	Margin [dB]
Video Signal						
3	61.25	84.8	19.1	65.7	69.5	3.8
4	67.25	83.9	18.9	65.0	69.5	4.5
Audio Signal						
3	56.75	69.4	18.9	50.5	56.5	6.0
	65.75	68.2	19.0	49.2	56.5	7.3
4	62.75	68.8	19.0	49.8	56.5	6.8
	71.75	67.8	18.9	48.9	56.5	7.6

RF Output Level

UL Apex Co.,Ltd.
Yokowa EMC Laboratory

Company : Orion Electric Co., Ltd.
Equipment : DVD/VCR
Model Number : SD-V593SU
Power : 120V/60Hz
Description : VCR PLAYBACK
Remarks : -

Report Number : 25IE0134-YW-1
Regulation : FCC15B SubpartB
Date : April 01, 2005
Temp / Humid : 23.8deg.C / 39%
Engineer : Tsubasa Takayama

Ch	Frequency [MHz]	Meter Reading [dB μ V]	Correction Factor [dB]	Result [dB]	Limits [dB μ V]	Margin [dB]
Video Signal						
3	61.25	83.2	19.1	64.1	69.5	5.4
4	67.25	82.2	18.9	63.3	69.5	6.2
Audio Signal						
3	56.75	69.5	18.9	50.6	56.5	5.9
	65.75	68.2	19.0	49.2	56.5	7.3
4	62.75	68.7	19.0	49.7	56.5	6.8
	71.75	67.4	18.9	48.5	56.5	8.0

RF Output Level

UL Apex Co.,Ltd.
Yokowa EMC Laboratory

Company : Orion Electric Co., Ltd.
Equipment : DVD/VCR
Model Number : SD-V593SU
Power : 120V/60Hz
Description : DVD PLAY(HDMI)
Remarks : -

Report Number : 25IE0134-YW-1
Regulation : FCC15B SubpartB
Date : April 01, 2005
Temp / Humid : 23.8deg.C / 39%
Engineer : Tsubasa Takayama

Ch	Frequency [MHz]	Meter Reading [dB μ V]	Correction Factor [dB]	Result [dB]	Limits [dB μ V]	Margin [dB]
Video Signal						
3	61.25	84.7	19.1	65.6	69.5	3.9
4	67.25	84.0	18.9	65.1	69.5	4.4
Audio Signal						
3	56.75	69.6	18.9	50.7	56.5	5.8
	65.75	68.3	19.0	49.3	56.5	7.3
4	62.75	68.9	19.0	49.9	56.5	6.6
	71.75	67.7	18.9	48.8	56.5	7.7

RF Output Level

UL Apex Co.,Ltd.
Yokowa EMC Laboratory

Company	: Orion Electric Co., Ltd.	Report Number	: 25IE0134-YW-1
Equipment	: DVD/VCR	Regulation	: FCC15B SubpartB
Model Number	: SD-V593SU	Date	: April 01, 2005
Power	: 120V/60Hz	Temp / Humid	: 23.8deg.C / 39%
Description	: CARD	Engineer	: Tsubasa Takayama
Remarks	: Compact Flash		

Ch	Frequency [MHz]	Meter Reading [dB μ V]	Correctio n Factor [dB]	Result [dB]	Limits [dB μ V]	Margin [dB]
Video Signal						
3	61.25	83.2	19.1	64.1	69.5	5.4
4	67.25	83.9	18.9	65.0	69.5	4.5
Audio Signal						
3	56.75	69.4	18.9	50.5	56.5	6.0
	65.75	68.2	19.0	49.2	56.5	7.3
4	62.75	68.7	19.0	49.7	56.5	6.8
	71.75	67.4	18.9	48.5	56.5	8.0

Data of RF Spurious Test

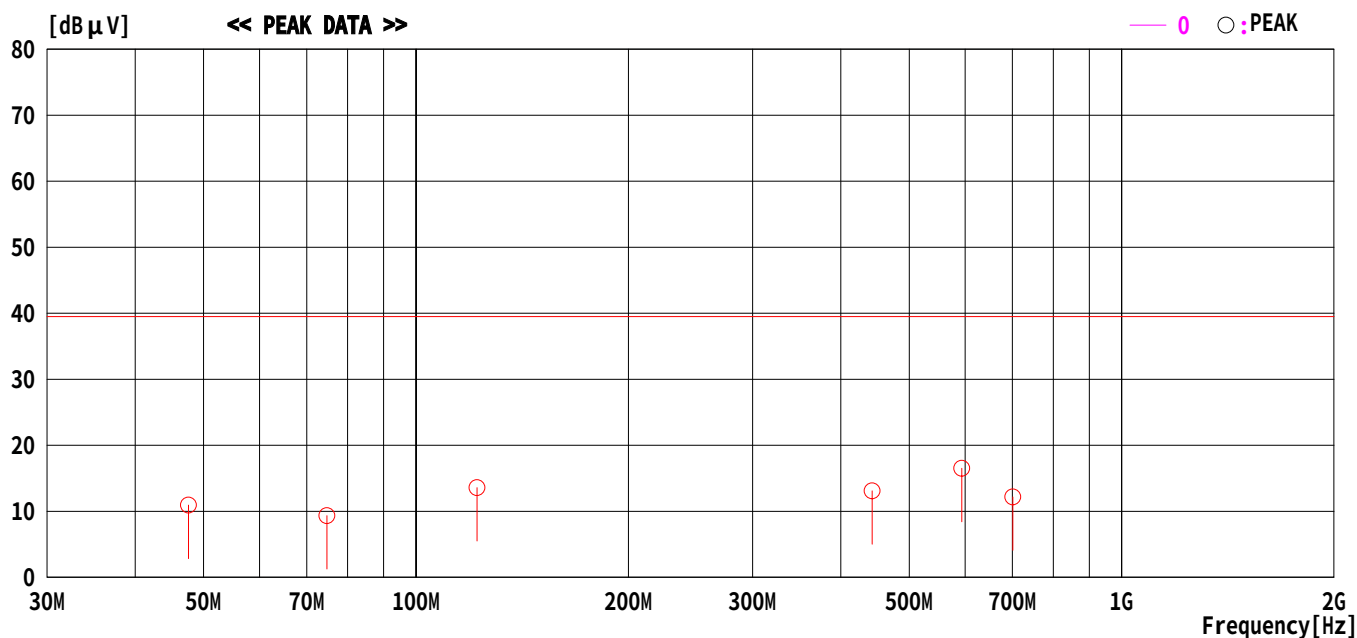
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : TV Reception + REC(0dBmV)-3ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC 15B RF OUT SPURIOUS



CALCULATION:READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of RF Spurious Test

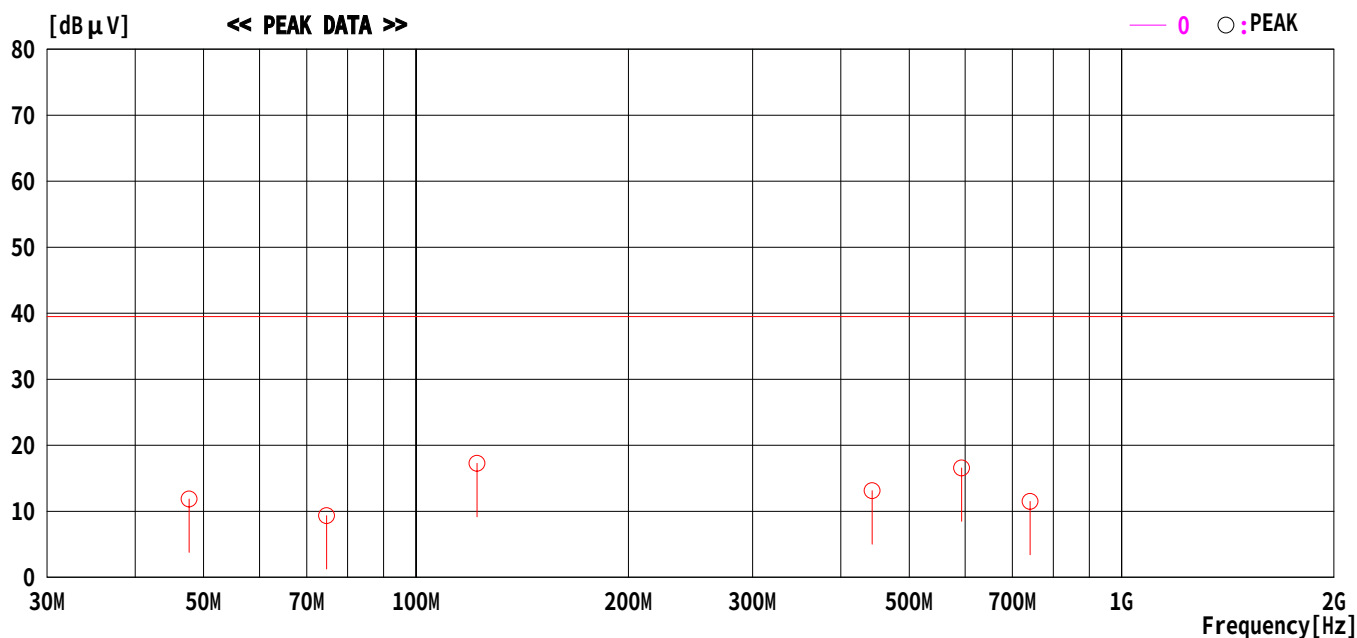
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : TV Reception + REC(25dBmV)-3ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC 15B RF OUT SPURIOUS



NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		Peak [dB μV]	- [dB μV]		Peak [dB μV]	- [dB μV]	Peak [dB μV]	- [dB μV]	[dB]	[dB]	
1	47.7000	32.5	----	-20.6	11.9	----	39.5	----	27.6	----	-
2	74.7000	29.7	----	-20.4	9.3	----	39.5	----	30.2	----	-
3	122.0000	37.9	----	-20.6	17.3	----	39.5	----	22.3	----	-
4	443.1000	33.4	----	-20.3	13.1	----	39.5	----	26.4	----	-
5	593.4000	37.0	----	-20.4	16.6	----	39.5	----	22.9	----	-
6	741.6000	32.2	----	-20.7	11.5	----	39.5	----	28.0	----	-

CALCULATION:READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of RF Spurious Test

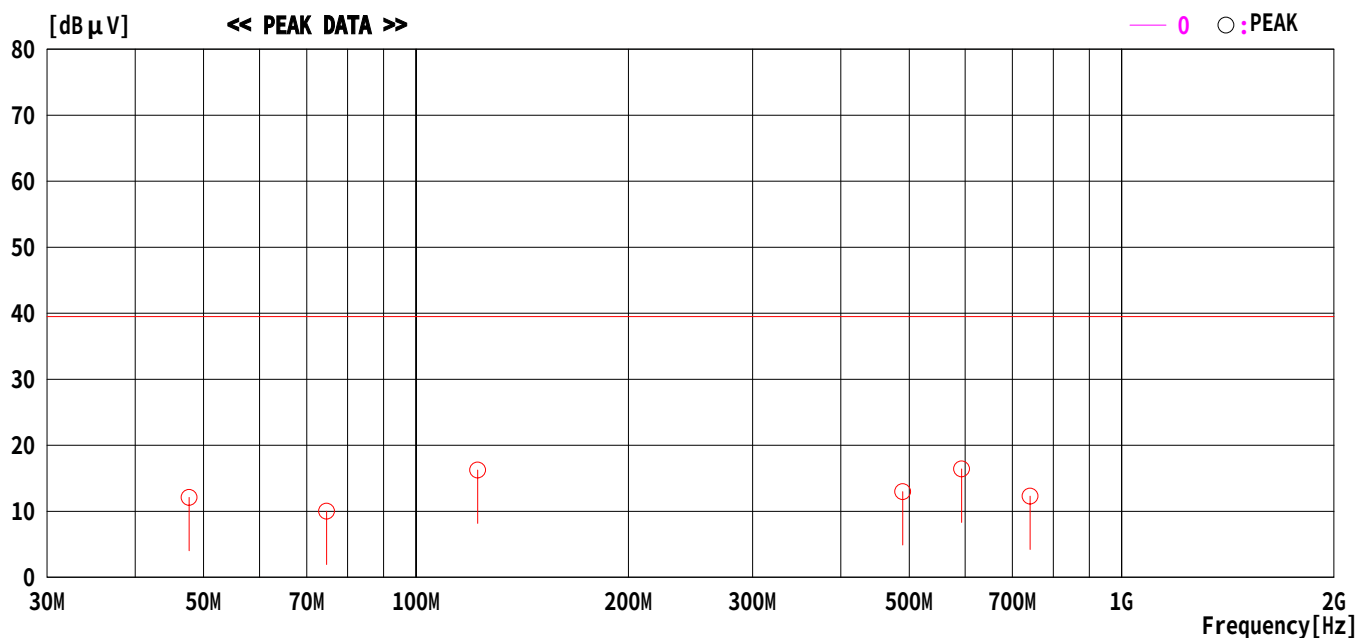
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : AV INPUT 1 + REC(1Vp-p)-3ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC 15B RF OUT SPURIOUS



CALCULATION:READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of RF Spurious Test

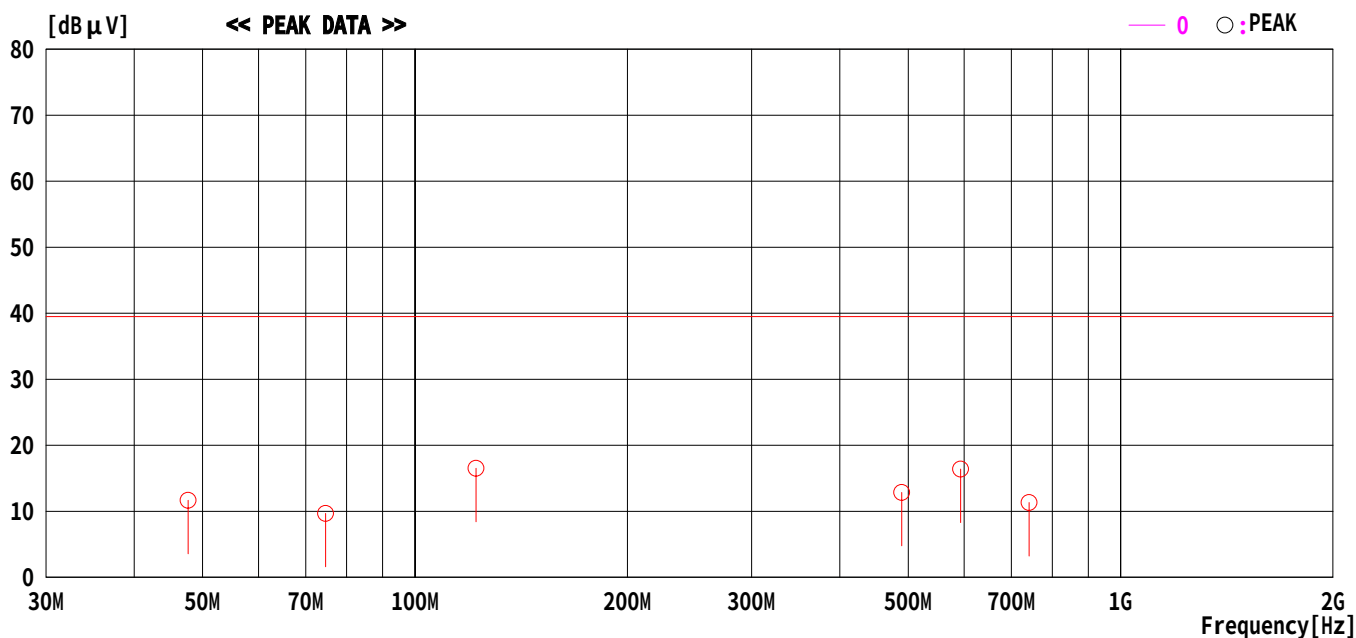
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : AV INPUT 1 + REC(5Vp-p)-3ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC 15B RF OUT SPURIOUS



CALCULATION:READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of RF Spurious Test

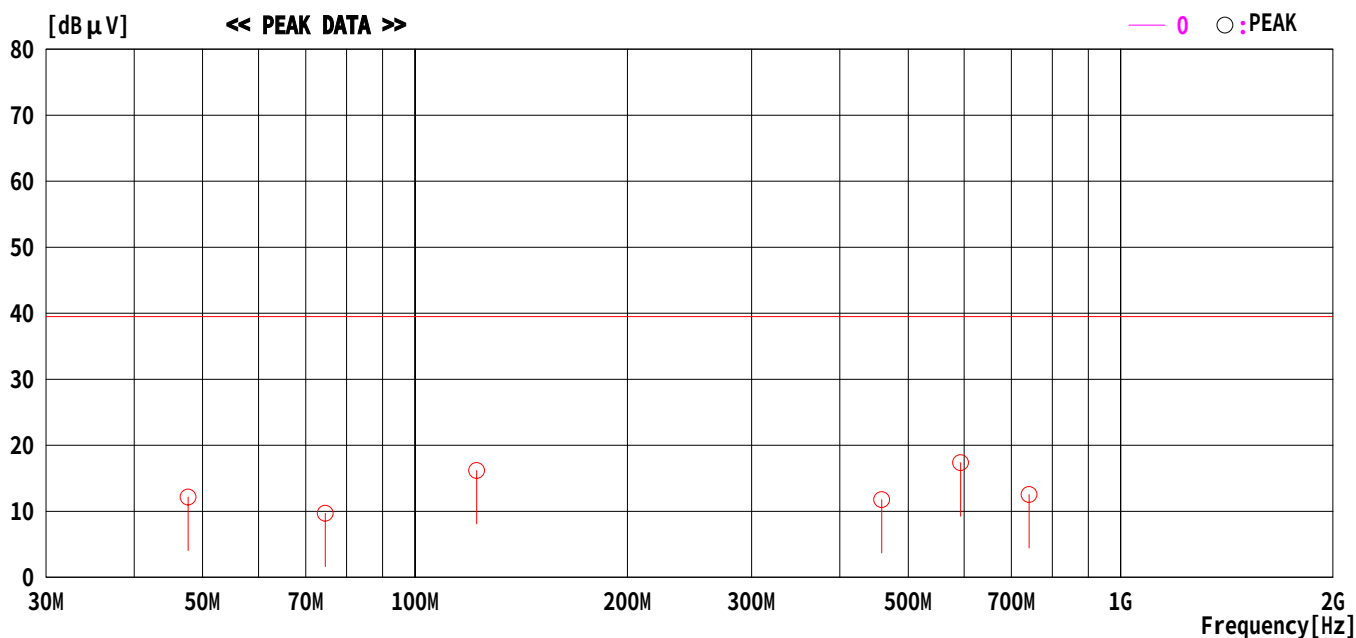
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : AV INPUT 2 + REC(1Vp-p)-3ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC 15B RF OUT SPURIOUS



CALCULATION:READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of RF Spurious Test

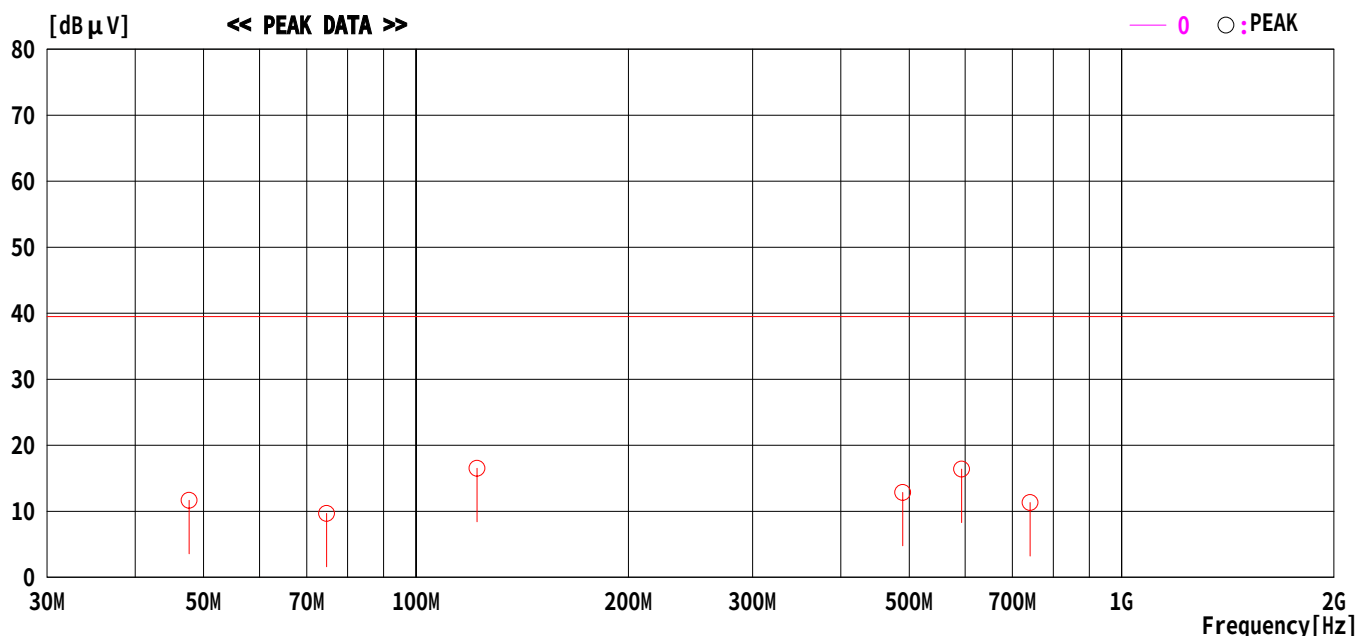
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : AV INPUT 1 + REC(5Vp-p)-3ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC 15B RF OUT SPURIOUS



CALCULATION:READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of RF Spurious Test

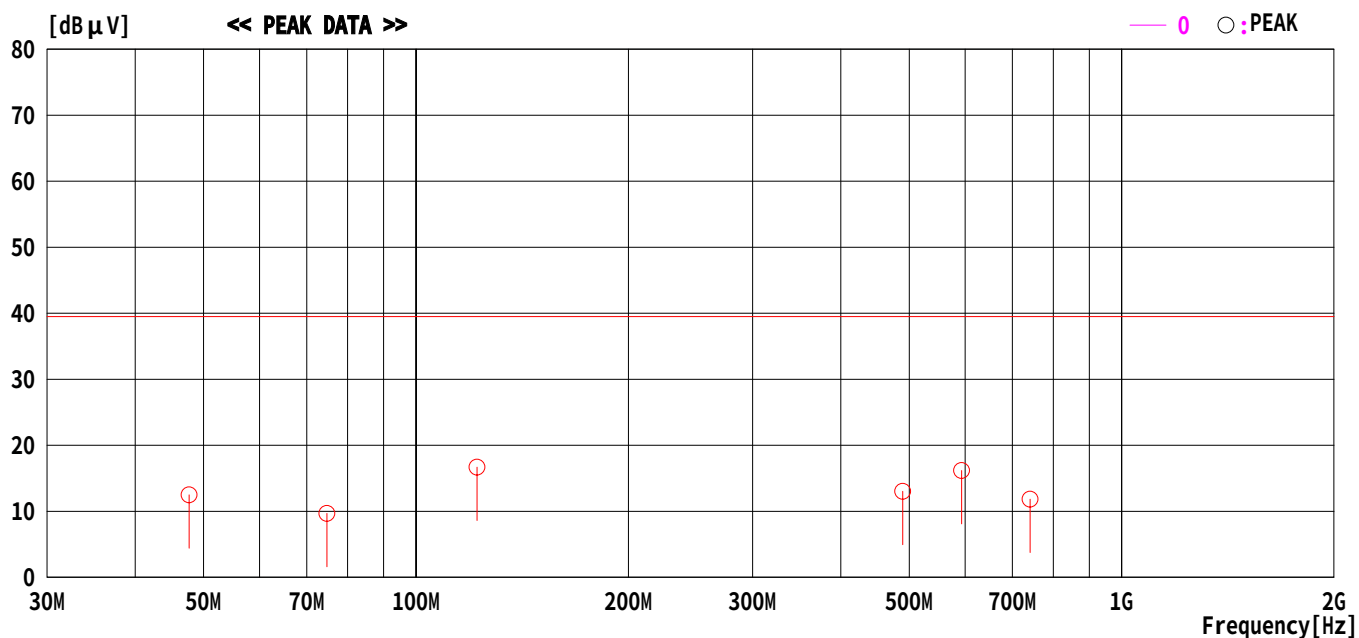
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : VCR PLAYBACK-3ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC 15B RF OUT SPURIOUS



NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		Peak [dB μV]	- [dB μV]		Peak [dB μV]	- [dB μV]	Peak [dB μV]	- [dB μV]	[dB]	[dB]	
1	47.7000	33.1	----	-20.6	12.5	----	39.5	----	27.0	----	-
2	74.8000	30.1	----	-20.4	9.7	----	39.5	----	29.8	----	-
3	122.0000	37.3	----	-20.6	16.7	----	39.5	----	22.8	----	-
4	489.4000	33.2	----	-20.2	13.0	----	39.5	----	26.5	----	-
5	593.4000	36.6	----	-20.4	16.2	----	39.5	----	23.3	----	-
6	741.6000	32.5	----	-20.7	11.8	----	39.5	----	27.7	----	-

CALCULATION: READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of RF Spurious Test

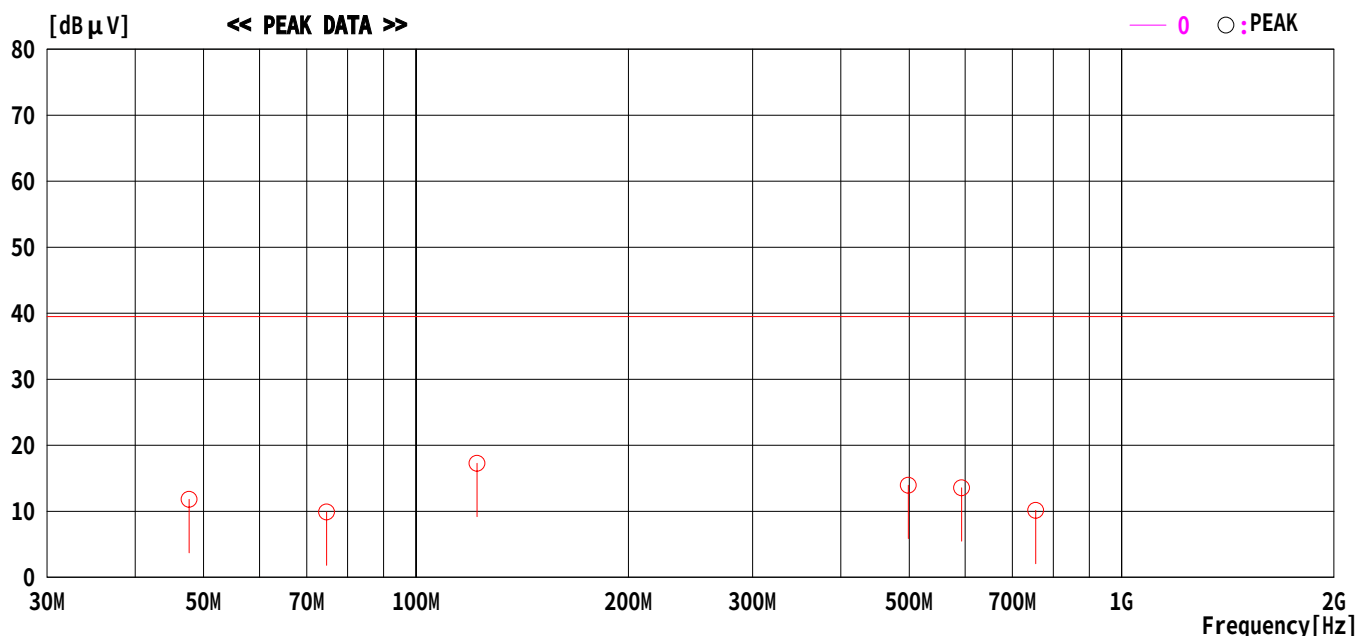
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : DVD PLAY(HDMI)-3ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC 15B RF OUT SPURIOUS



CALCULATION:READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of RF Spurious Test

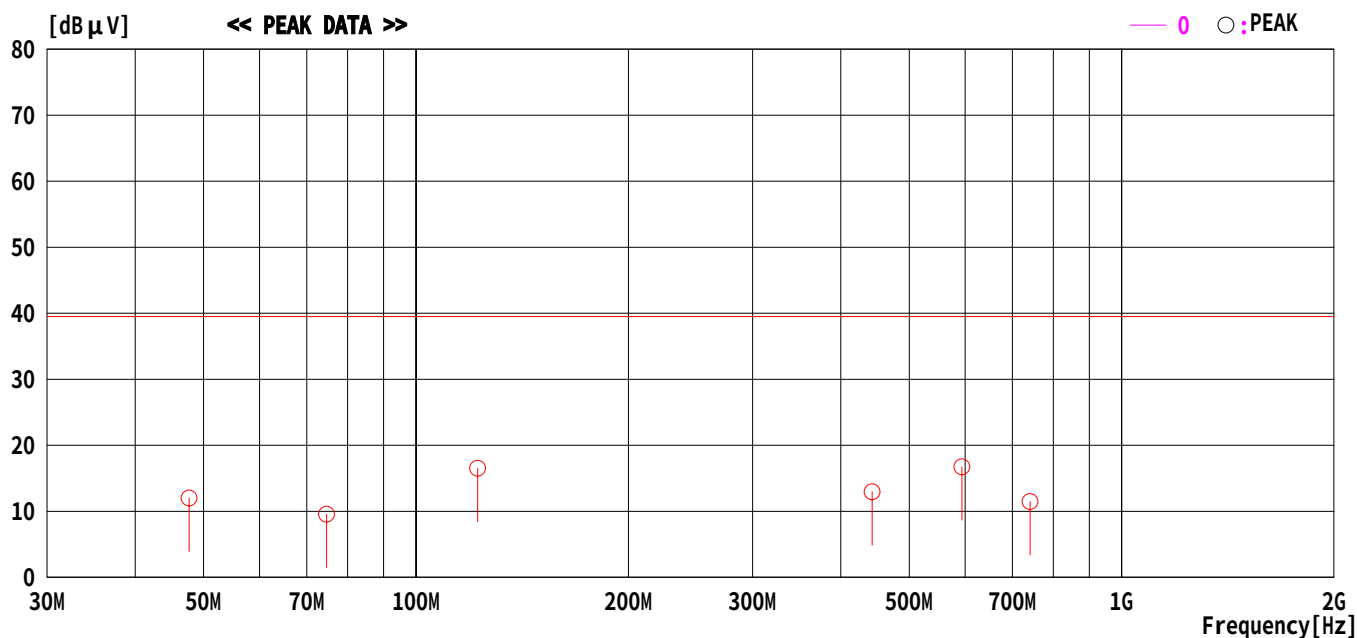
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : Card-3ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC 15B RF OUT SPURIOUS



CALCULATION:READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of RF Spurious Test

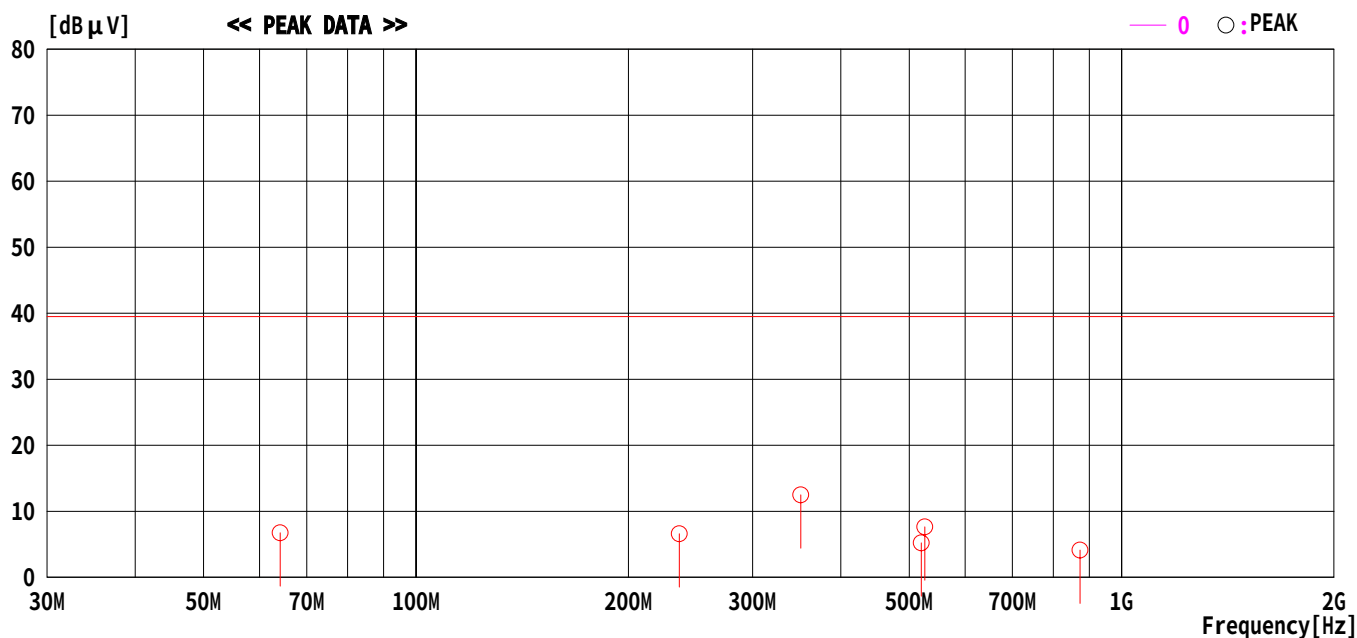
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : TV Reception + REC(0dBmV)-4ch

REPORT NO : 251E0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC 15B RF OUT SPURIOUS



CALCULATION:READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of RF Spurious Test

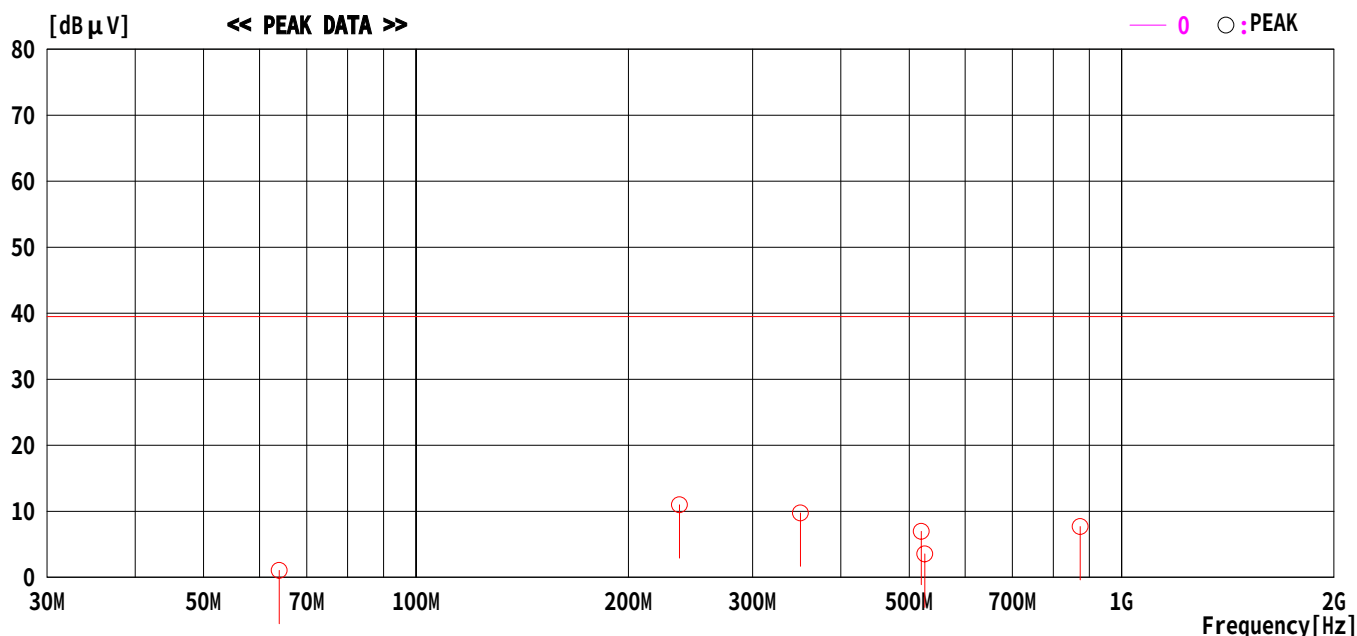
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : TV Reception + REC(25dBmV)-4ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC 15B RF OUT SPURIOUS



NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		Peak [dB μV]	- [dB μV]		Peak [dB μV]	- [dB μV]	Peak [dB μV]	- [dB μV]	[dB]	[dB]	
1	64.0000	21.5	----	-20.4	1.0	----	39.5	----	38.5	----	-
2	236.2600	31.4	----	-20.4	11.0	----	39.5	----	28.5	----	-
3	350.7600	30.1	----	-20.3	9.8	----	39.5	----	29.7	----	-
4	519.9900	27.3	----	-20.3	7.0	----	39.5	----	32.5	----	-
5	526.1700	23.8	----	-20.3	3.5	----	39.5	----	36.0	----	-
6	873.4200	28.3	----	-20.6	7.7	----	39.5	----	31.8	----	-

CALCULATION:READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of RF Spurious Test

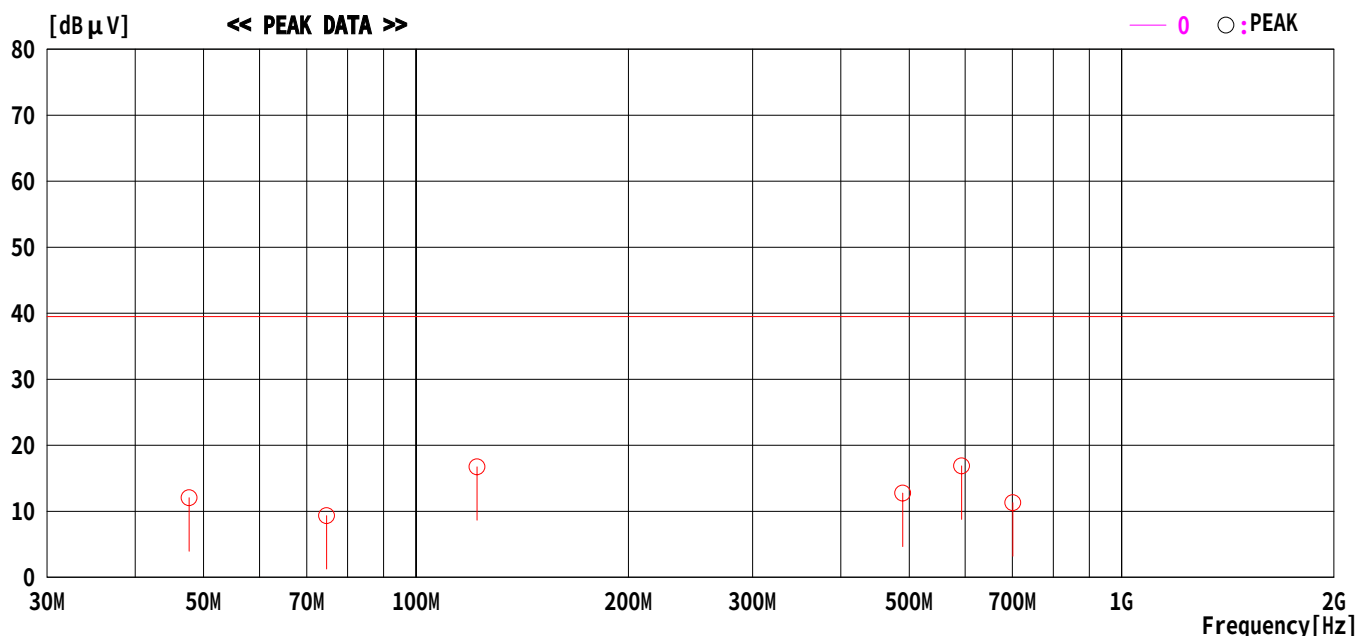
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : AV INPUT 1 + REC(1Vp-p)-4ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC 15B RF OUT SPURIOUS



CALCULATION:READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of RF Spurious Test

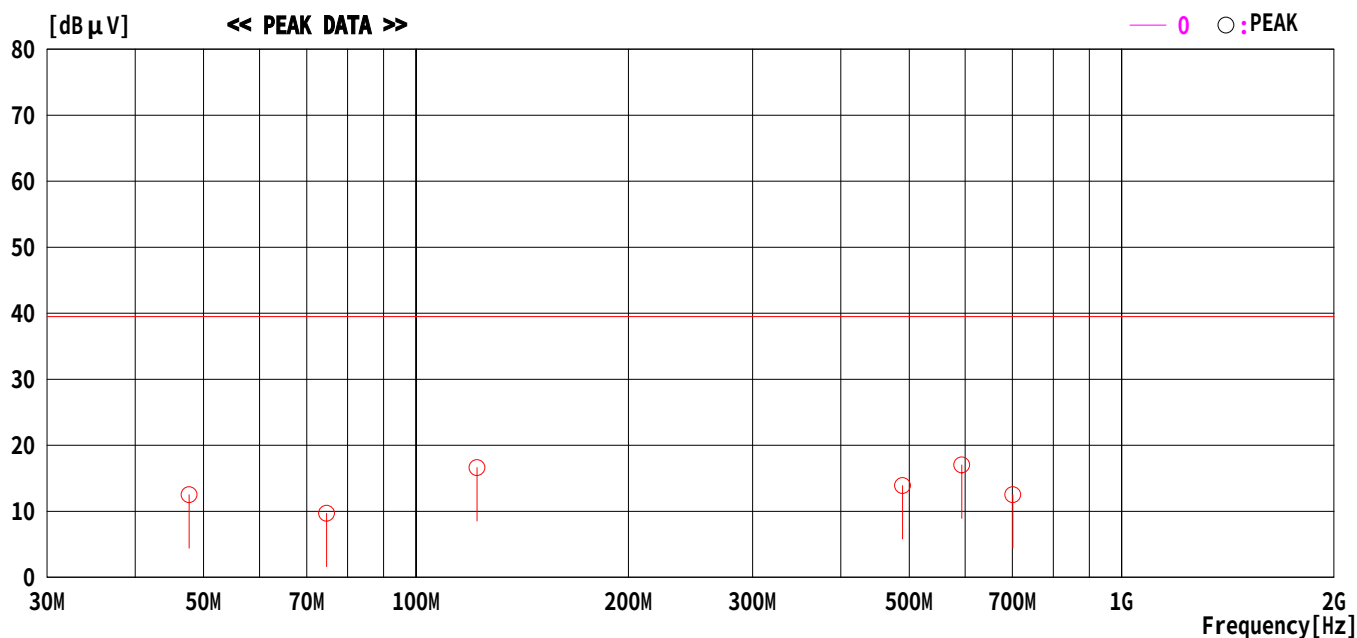
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : AV INPUT 1 + REC(5Vp-p)-4ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC 15B RF OUT SPURIOUS



NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		Peak [dB μV]	- [dB μV]		Peak [dB μV]	- [dB μV]	Peak [dB μV]	- [dB μV]	[dB]	[dB]	
1	47.6900	33.1	----	-20.6	12.5	----	39.5	----	27.0	----	-
2	74.7000	30.1	----	-20.4	9.7	----	39.5	----	29.8	----	-
3	122.0100	37.2	----	-20.6	16.6	----	39.5	----	22.9	----	-
4	489.3300	34.1	----	-20.2	13.9	----	39.5	----	25.6	----	-
5	593.5000	37.4	----	-20.4	17.0	----	39.5	----	22.5	----	-
6	701.2900	33.1	----	-20.6	12.5	----	39.5	----	27.0	----	-

CALCULATION:READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of RF Spurious Test

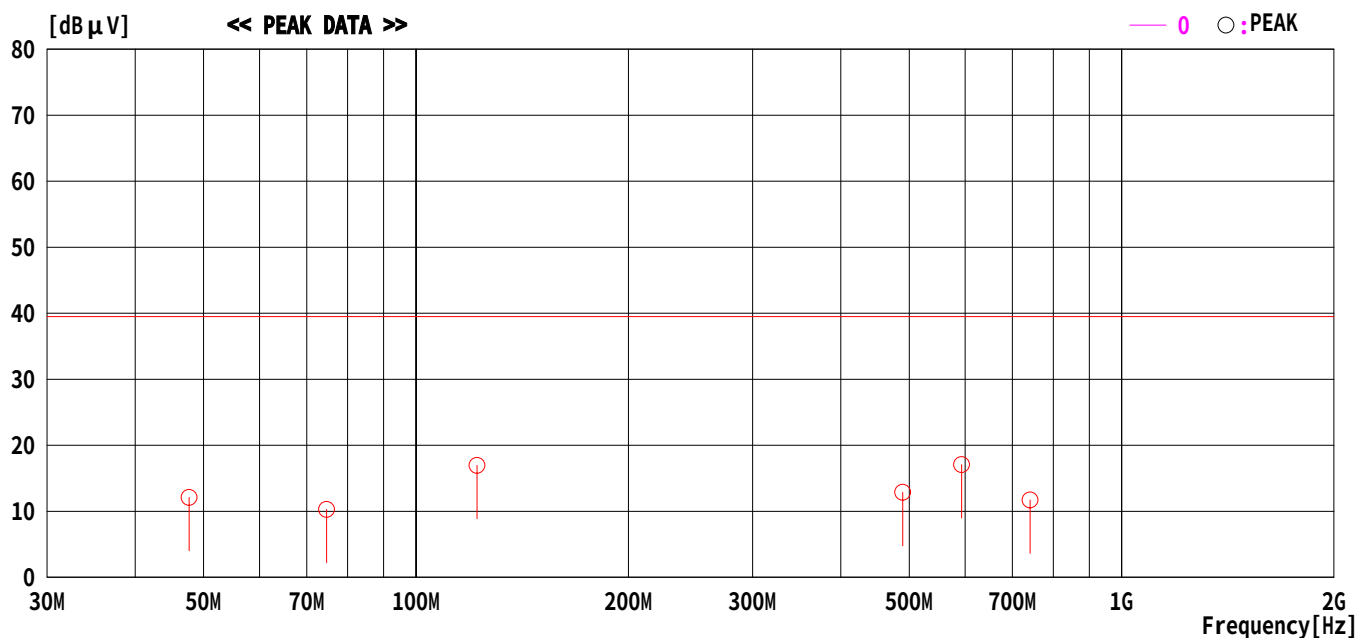
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : AV INPUT 2 + REC(1Vp-p)-4ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC 15B RF OUT SPURIOUS



CALCULATION:READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of RF Spurious Test

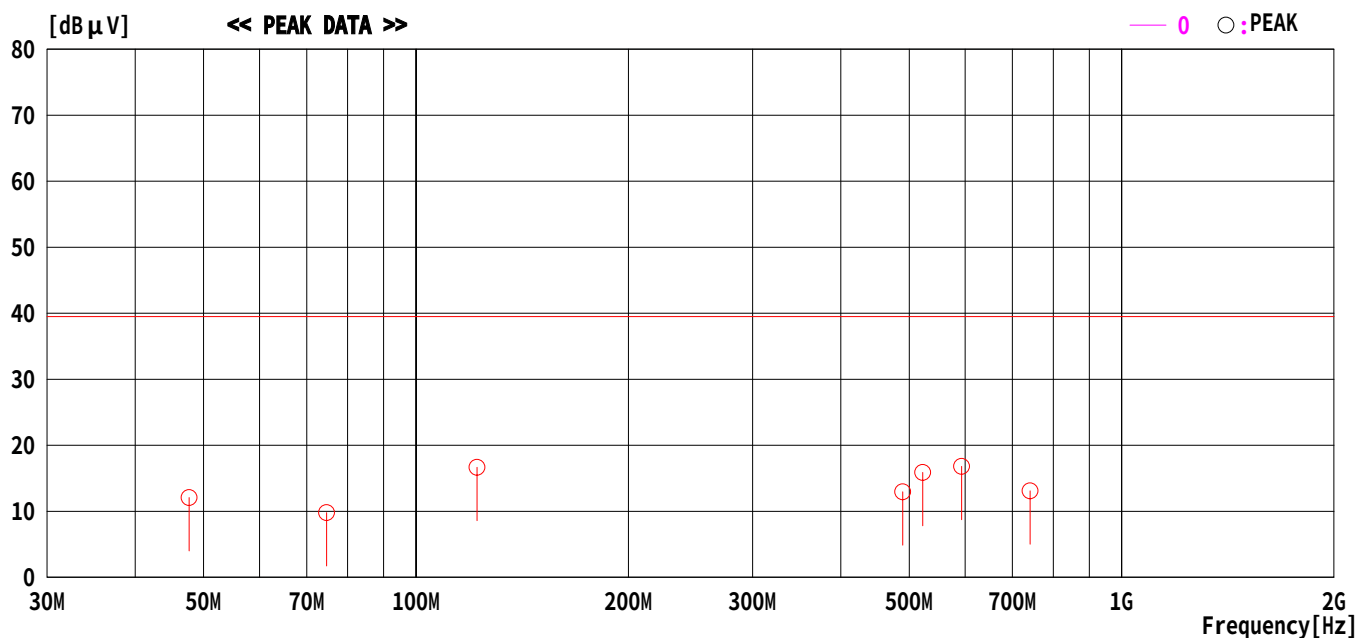
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : AV INPUT 2 + REC(5Vp-p)-4ch

REPORT NO : 251E0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC 15B RF OUT SPURIOUS



CALCULATION:READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of RF Spurious Test

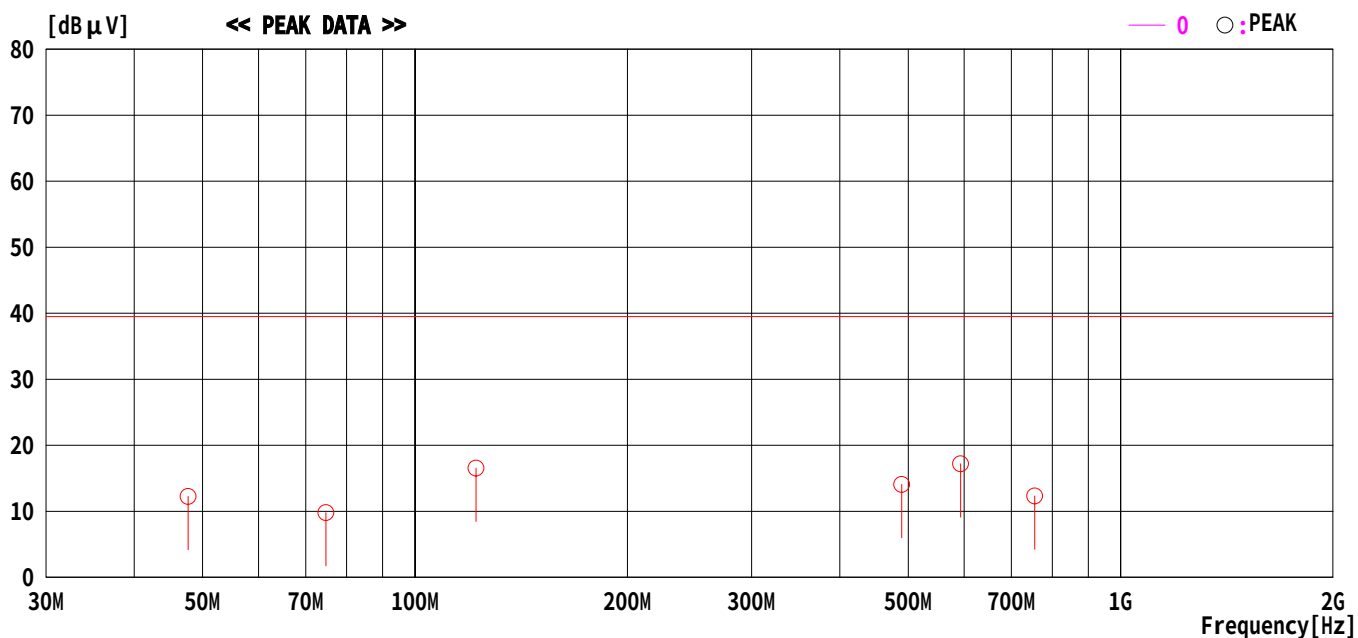
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : VCR PLAYBACK

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC 15B RF OUT SPURIOUS



CALCULATION:READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of RF Spurious Test

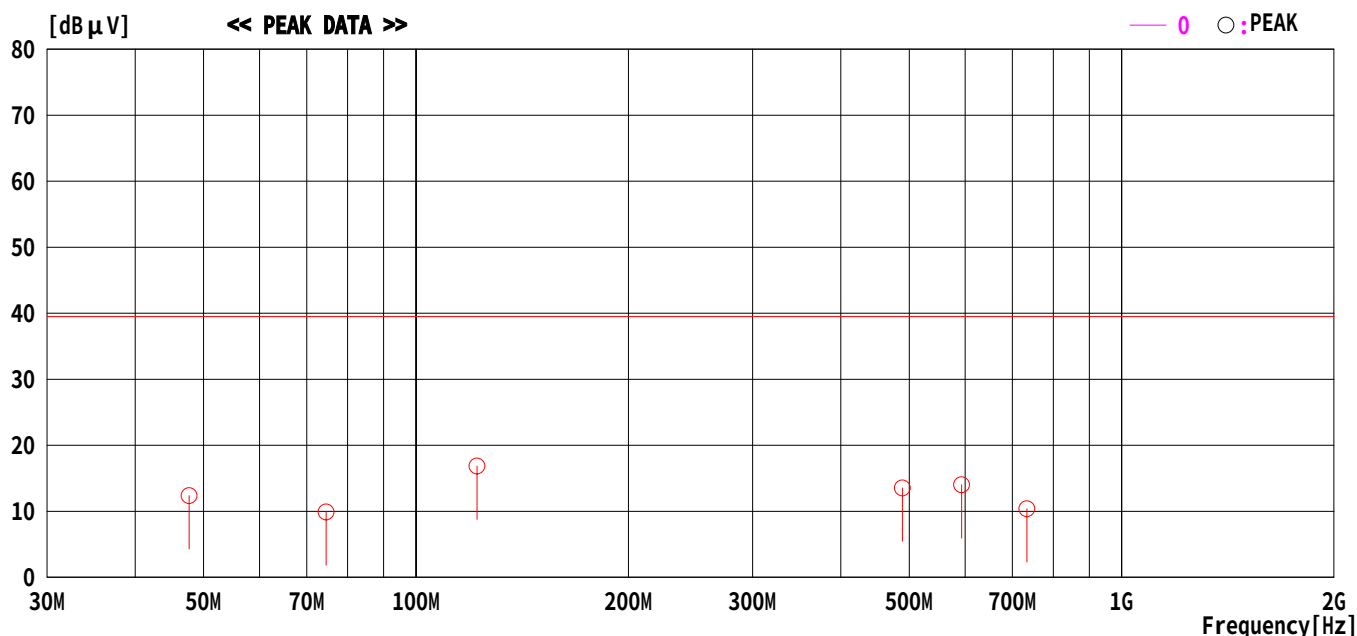
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : DVD PLAY(HDMI)

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC 15B RF OUT SPURIOUS



CALCULATION:READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of RF Spurious Test

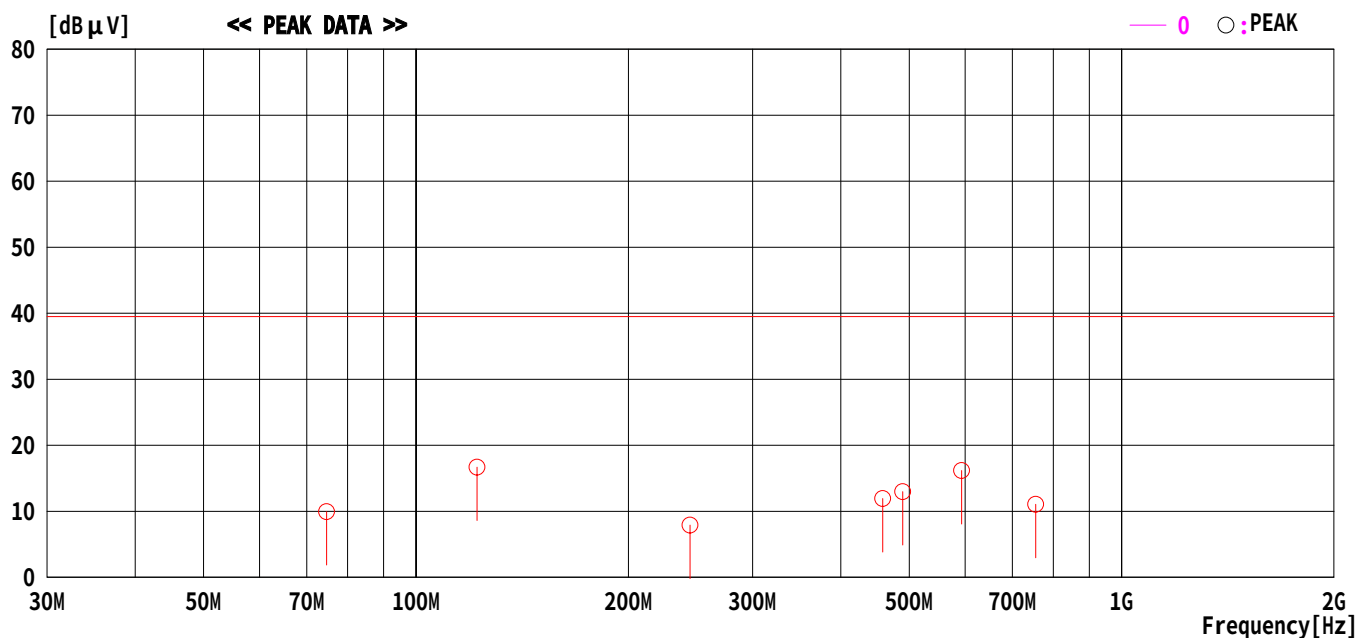
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : Card

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC 15B RF OUT SPURIOUS



NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		Peak [dB μV]	- [dB μV]		Peak [dB μV]	- [dB μV]	Peak [dB μV]	- [dB μV]	[dB]	[dB]	
1	74.7000	30.3	----	-20.4	9.9	----	39.5	----	29.6	----	-
2	122.0000	37.3	----	-20.6	16.7	----	39.5	----	22.8	----	-
3	244.6000	28.3	----	-20.4	7.9	----	39.5	----	31.6	----	-
4	458.6000	32.1	----	-20.2	11.9	----	39.5	----	27.6	----	-
5	489.4000	33.2	----	-20.2	13.0	----	39.5	----	26.5	----	-
6	593.4000	36.6	----	-20.4	16.2	----	39.5	----	23.3	----	-
7	755.3000	31.8	----	-20.7	11.1	----	39.5	----	28.5	----	-

CALCULATION:READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of Antenna Transfer Switch Test

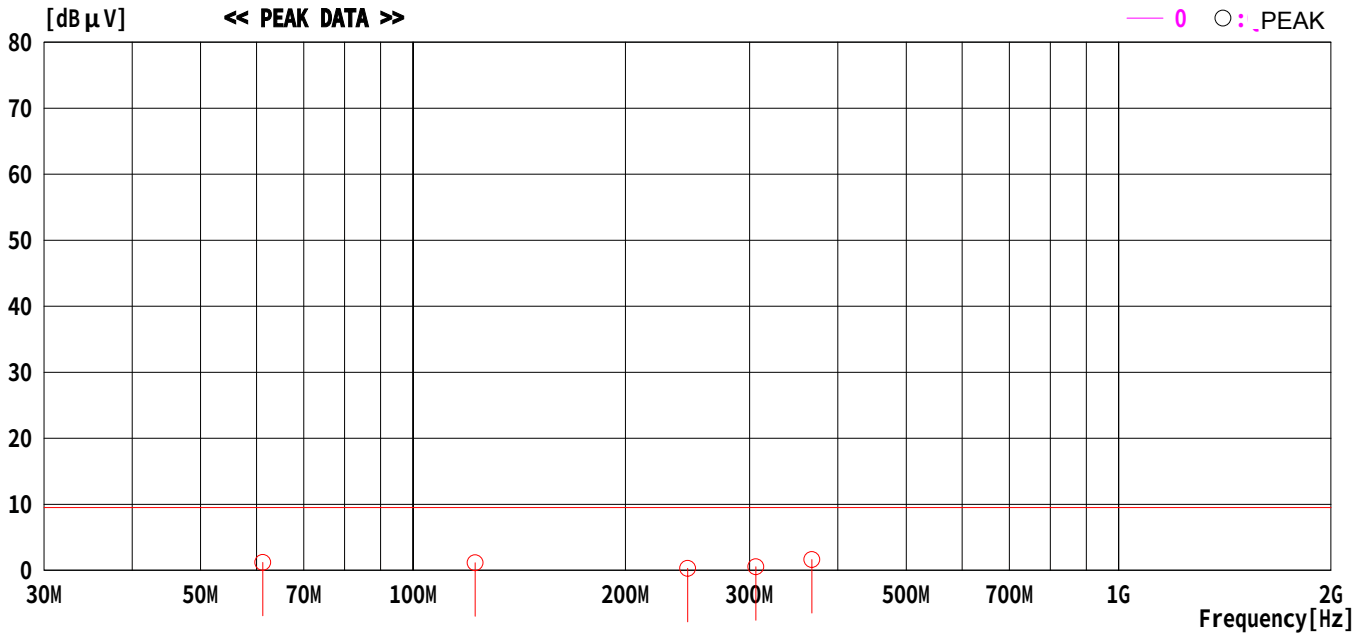
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : AV Input1 + Rec(1Vp-p)-3ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC15B ANTENNA TRANSFER SWITCH



NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		Peak [dB μV]	- [dB μV]		Peak [dB μV]	- [dB μV]	Peak [dB μV]	- [dB μV]	[dB]	[dB]	
1	61.2500	21.6	----	-20.4	1.2	----	9.5	----	8.3	----	-
2	122.5000	21.7	----	-20.6	1.1	----	9.5	----	8.4	----	-
3	183.7500	19.8	----	-20.5	-0.7	----	9.5	----	10.2	----	-
4	245.0000	20.7	----	-20.4	0.3	----	9.5	----	9.2	----	-
5	306.2500	20.9	----	-20.4	0.5	----	9.5	----	9.0	----	-
6	367.5000	21.9	----	-20.3	1.6	----	9.5	----	7.9	----	-

CALCULATION: READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of Antenna Transfer Switch Test

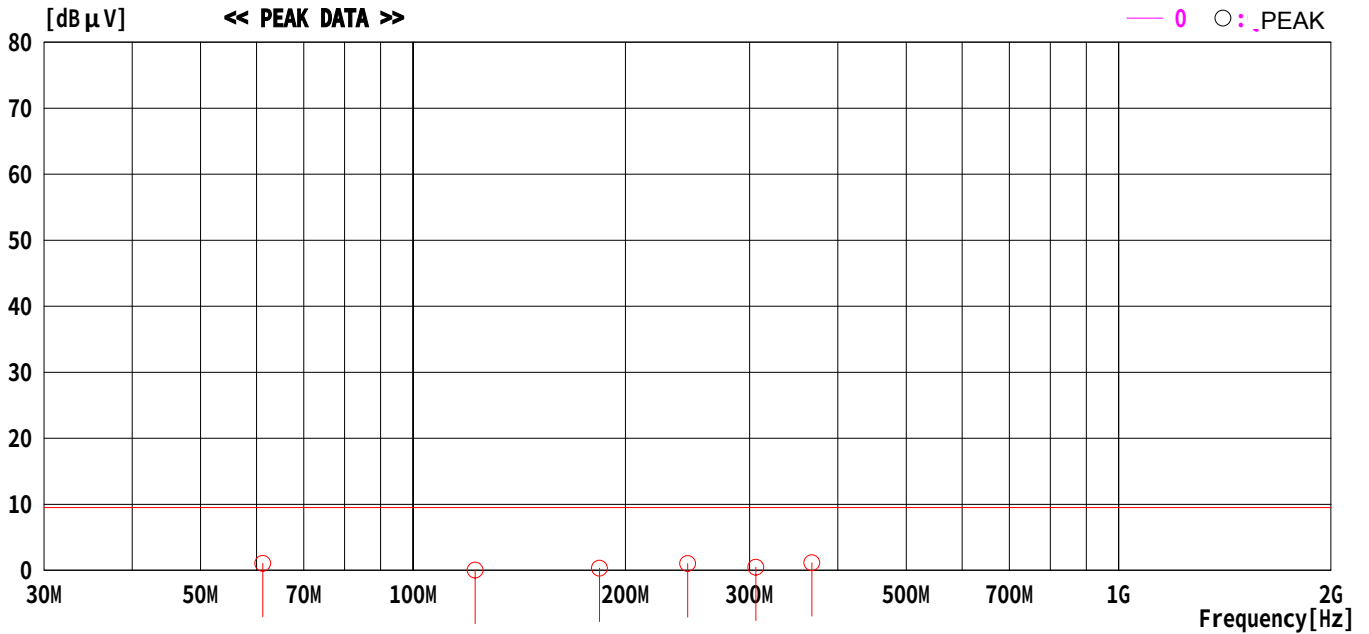
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : AV Input1 + Rec(5Vp-p)-3ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC15B ANTENNA TRANSFER SWITCH



NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		Peak [dB μV]	- [dB μV]		Peak [dB μV]	- [dB μV]	Peak [dB μV]	- [dB μV]	[dB]	[dB]	
1	61.2500	21.5	----	-20.4	1.1	----	9.5	----	8.4	----	-
2	122.5000	20.6	----	-20.6	0.0	----	9.5	----	9.5	----	-
3	183.7500	20.8	----	-20.5	0.3	----	9.5	----	9.2	----	-
4	245.0000	21.4	----	-20.4	1.0	----	9.5	----	8.5	----	-
5	306.2500	20.9	----	-20.4	0.5	----	9.5	----	9.0	----	-
6	367.5000	21.5	----	-20.3	1.2	----	9.5	----	8.3	----	-

CALCULATION: READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of Antenna Transfer Switch Test

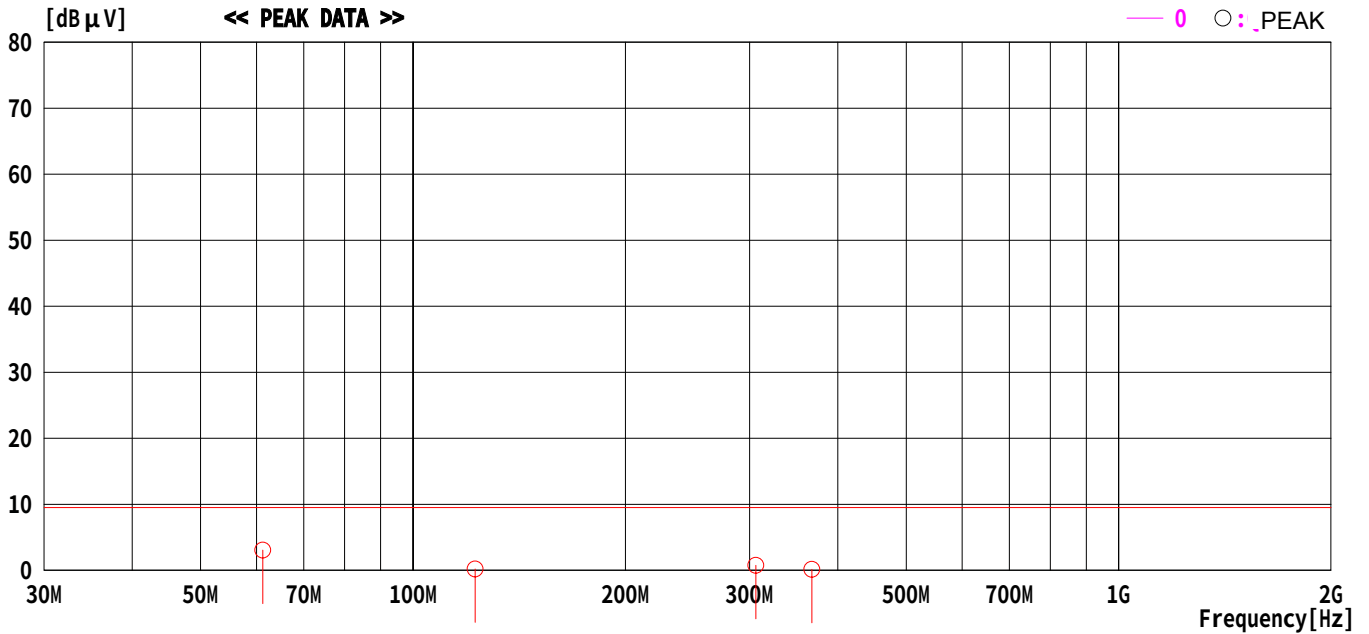
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : AV Input2 + Rec(1Vp-p)-3ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC15B ANTENNA TRANSFER SWITCH



NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		Peak [dB μV]	- [dB μV]		Peak [dB μV]	- [dB μV]	Peak [dB μV]	- [dB μV]	[dB]	[dB]	
1	61.2500	23.5	----	-20.4	3.0	----	9.5	----	6.5	----	-
2	122.5000	20.8	----	-20.6	0.2	----	9.5	----	9.3	----	-
3	183.7500	19.6	----	-20.5	-0.9	----	9.5	----	10.4	----	-
4	245.0000	20.3	----	-20.4	-0.1	----	9.5	----	9.6	----	-
5	306.2500	21.2	----	-20.4	0.8	----	9.5	----	8.8	----	-
6	367.5000	20.5	----	-20.3	0.2	----	9.5	----	9.3	----	-

CALCULATION: READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of Antenna Transfer Switch Test

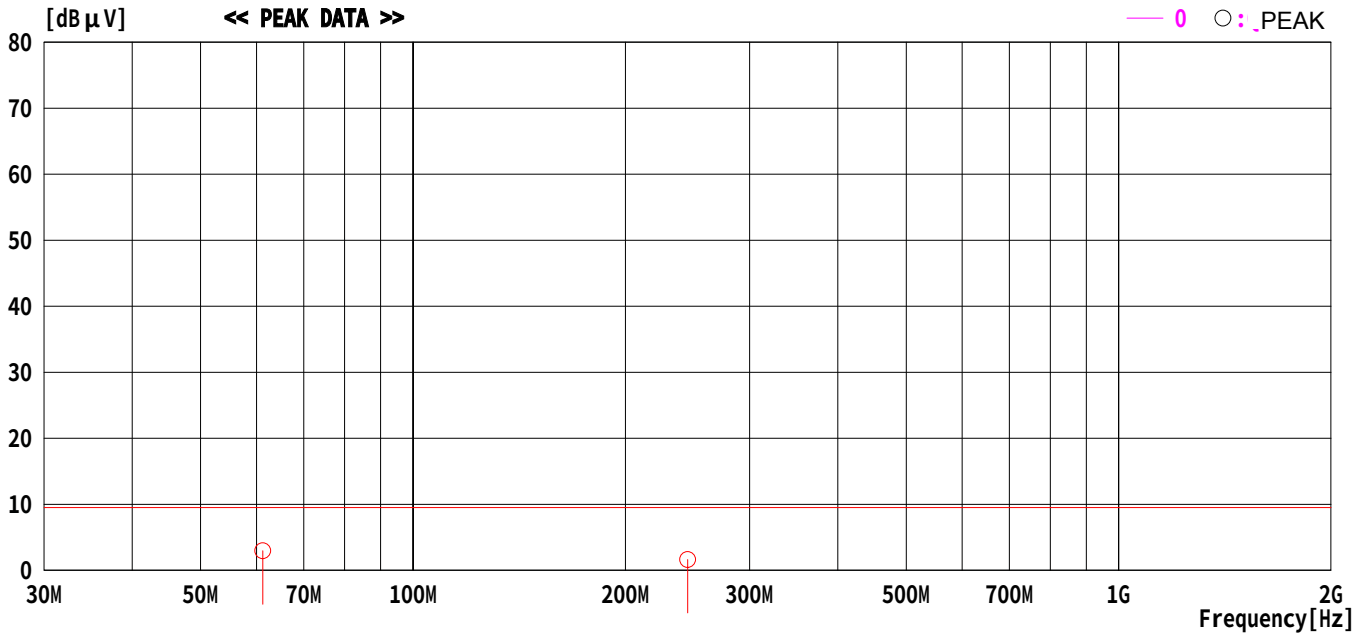
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : AV Input2 + Rec(5Vp-p)-3ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC15B ANTENNA TRANSFER SWITCH



NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		Peak [dB μV]	- [dB μV]		Peak [dB μV]	- [dB μV]	Peak [dB μV]	- [dB μV]	[dB]	[dB]	
1	61.2500	23.4	----	-20.4	2.9	----	9.5	----	6.6	----	-
2	122.5000	19.5	----	-20.6	-1.1	----	9.5	----	10.6	----	-
3	183.7500	19.6	----	-20.5	-0.9	----	9.5	----	10.4	----	-
4	245.0000	22.0	----	-20.4	1.6	----	9.5	----	7.9	----	-
5	306.2500	20.0	----	-20.4	-0.4	----	9.5	----	9.9	----	-
6	367.5000	20.3	----	-20.3	0.0	----	9.5	----	9.5	----	-

CALCULATION: READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of Antenna Transfer Switch Test

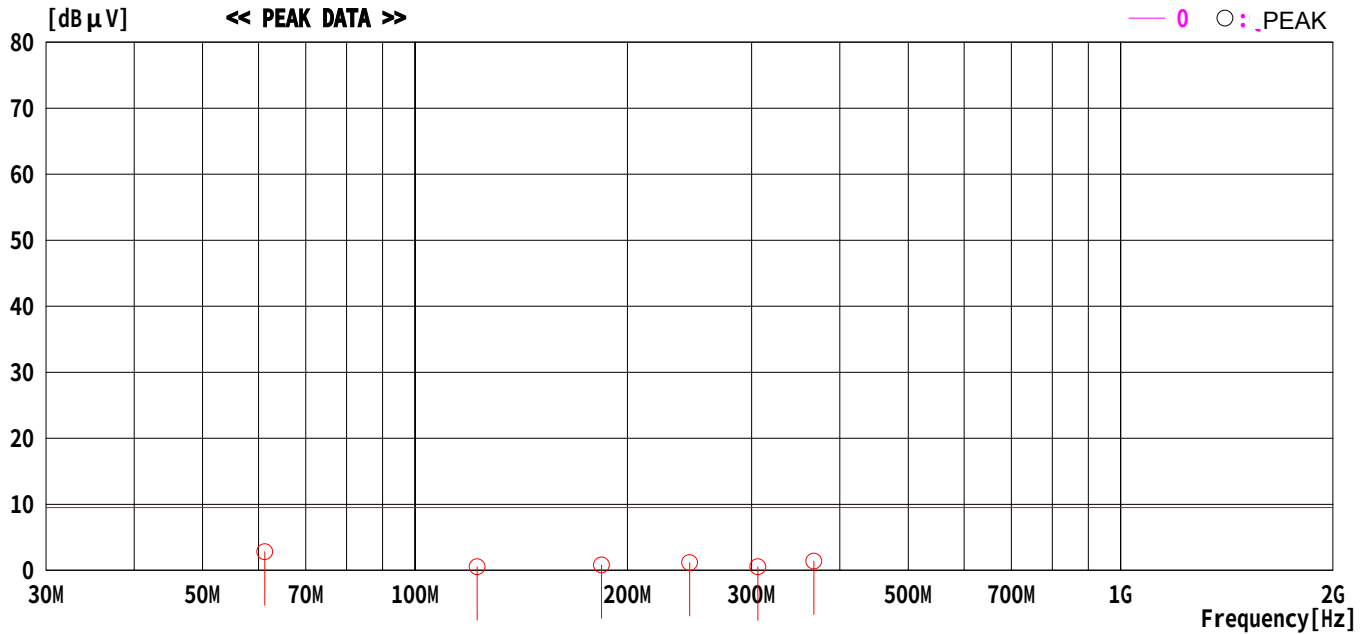
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : VCR PLAYBACK-3ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC15B ANTENNA TRANSFER SWITCH



NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		Peak [dB μV]	- [dB μV]		Peak [dB μV]	- [dB μV]	Peak [dB μV]	- [dB μV]	[dB]	[dB]	
1	61.2500	23.2	----	-20.4	2.8	----	9.5	----	6.7	----	-
2	122.5000	21.1	----	-20.6	0.5	----	9.5	----	9.0	----	-
3	183.7500	21.3	----	-20.5	0.8	----	9.5	----	8.7	----	-
4	245.0000	21.6	----	-20.4	1.2	----	9.5	----	8.3	----	-
5	306.2500	20.9	----	-20.4	0.5	----	9.5	----	9.0	----	-
6	367.5000	21.7	----	-20.3	1.4	----	9.5	----	8.1	----	-

CALCULATION: READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of Antenna Transfer Switch Test

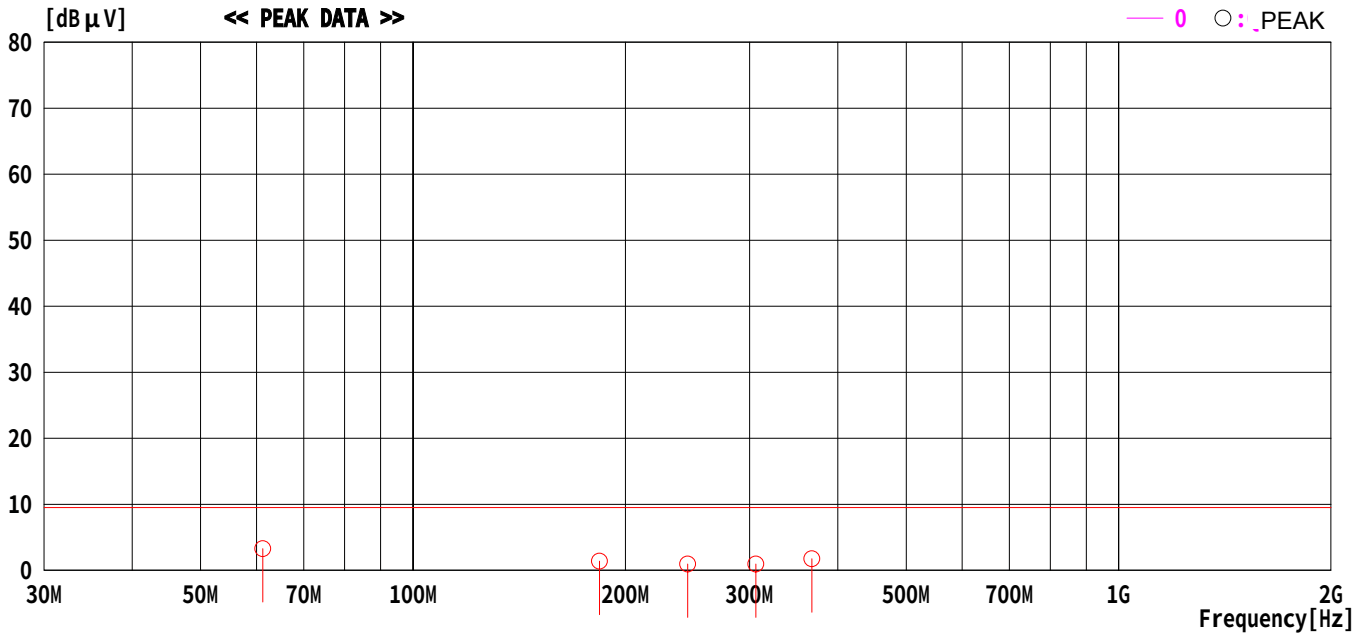
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : DVD PLAY(HDMI)-3ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC15B ANTENNA TRANSFER SWITCH



NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		Peak [dB μV]	- [dB μV]		Peak [dB μV]	- [dB μV]	Peak [dB μV]	- [dB μV]	[dB]	[dB]	
1	61.2500	23.7	----	-20.4	3.3	----	9.5	----	6.2	----	-
2	122.5000	20.0	----	-20.6	-0.6	----	9.5	----	10.1	----	-
3	183.7500	21.9	----	-20.5	1.4	----	9.5	----	8.1	----	-
4	245.0000	21.4	----	-20.4	1.0	----	9.5	----	8.5	----	-
5	306.2500	21.4	----	-20.4	1.0	----	9.5	----	8.5	----	-
6	367.5000	22.0	----	-20.3	1.7	----	9.5	----	7.8	----	-

CALCULATION: READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of Antenna Transfer Switch Test

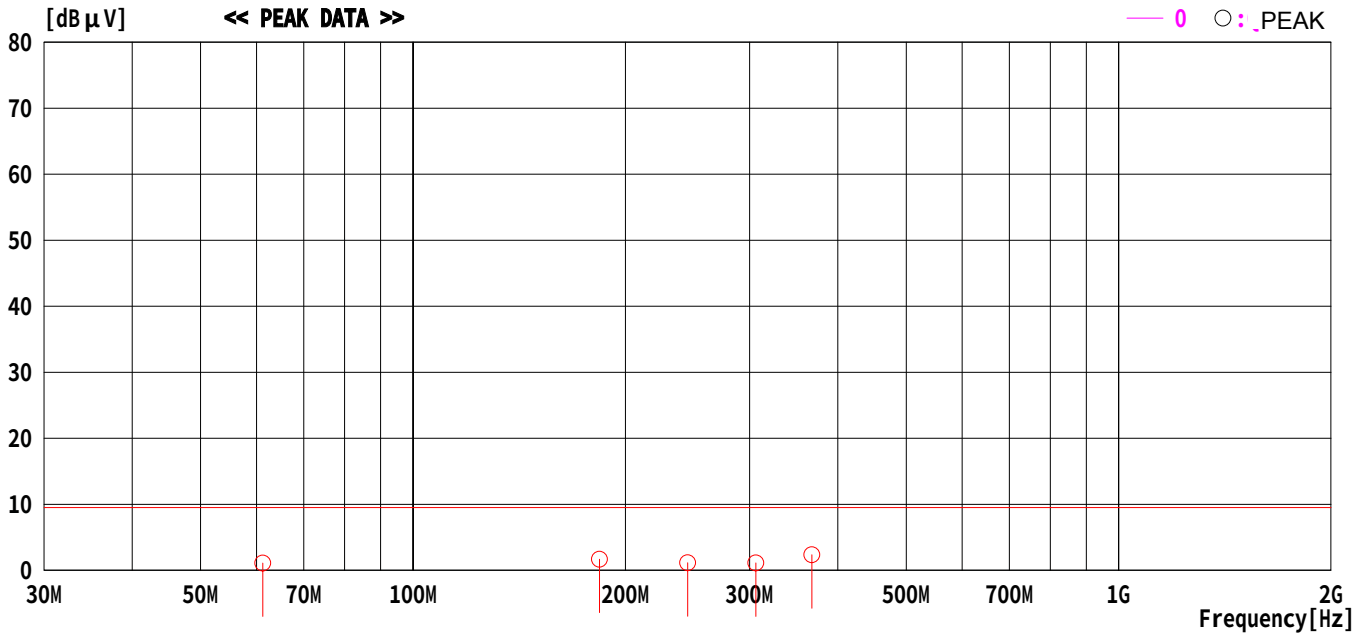
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : Card-3ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC15B ANTENNA TRANSFER SWITCH



NO	FREQ [MHz]	READING Peak [dB μV]	READING - [dB μV]	C.F [dB]	RESULT Peak [dB μV]	RESULT - [dB μV]	LIMIT Peak [dB μV]	LIMIT - [dB μV]	MARGIN [dB]	MARGIN [dB]	PHASE
1	61.2500	21.5	----	-20.4	1.1	----	9.5	----	8.4	----	-
2	122.5000	20.2	----	-20.6	-0.4	----	9.5	----	9.9	----	-
3	183.7500	22.2	----	-20.5	1.7	----	9.5	----	7.8	----	-
4	245.0000	21.5	----	-20.4	1.1	----	9.5	----	8.4	----	-
5	306.2500	21.5	----	-20.4	1.1	----	9.5	----	8.4	----	-
6	367.5000	22.6	----	-20.3	2.3	----	9.5	----	7.2	----	-

CALCULATION: READING + MATCHING PAD LOSS + CABLE LOSS - AMP. GAIN

Data of Antenna Transfer Switch Test

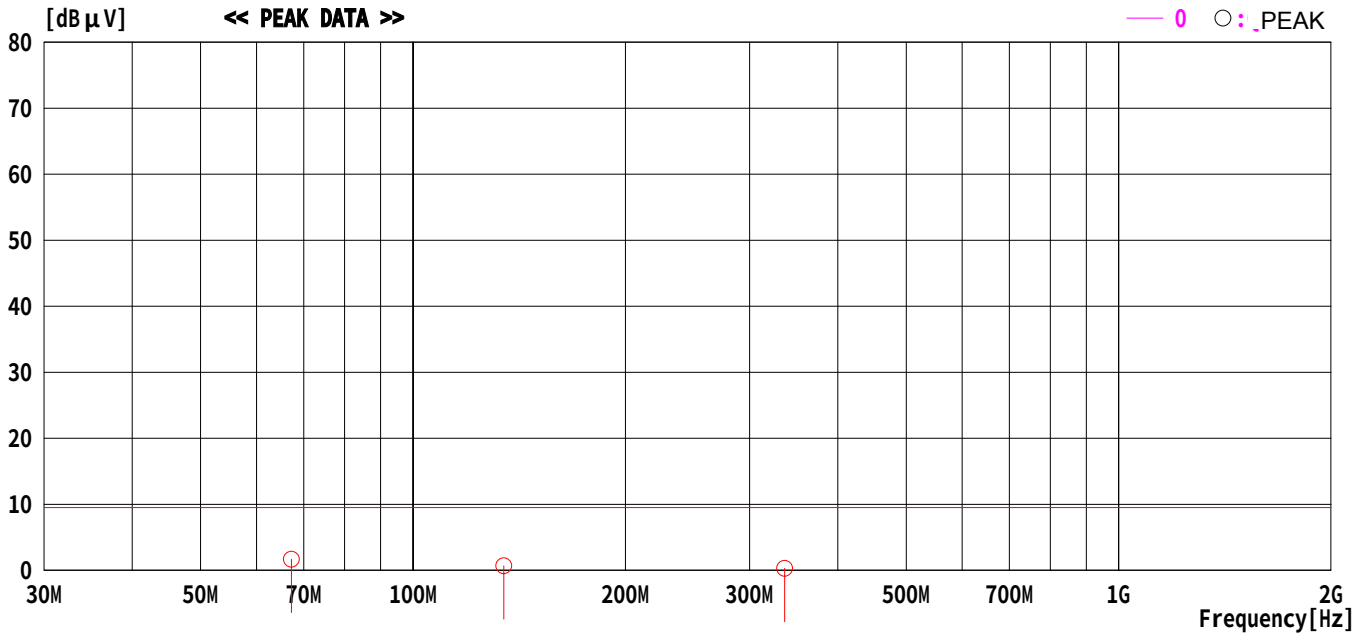
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : AV Input1 + Rec(1Vp-p)-4ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC15B ANTENNA TRANSFER SWITCH



NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		Peak [dB μV]	- [dB μV]		Peak [dB μV]	- [dB μV]	Peak [dB μV]	- [dB μV]	[dB]	[dB]	
1	67.2500	22.1	----	-20.4	1.7	----	9.5	----	7.8	----	-
2	134.5000	21.3	----	-20.6	0.7	----	9.5	----	8.8	----	-
3	201.7500	20.3	----	-20.4	-0.1	----	9.5	----	9.6	----	-
4	269.0000	19.2	----	-20.4	-1.2	----	9.5	----	10.7	----	-
5	336.2500	20.6	----	-20.3	0.3	----	9.5	----	9.2	----	-
6	403.5000	20.0	----	-20.3	-0.3	----	9.5	----	9.8	----	-

CALCULATION: READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of Antenna Transfer Switch Test

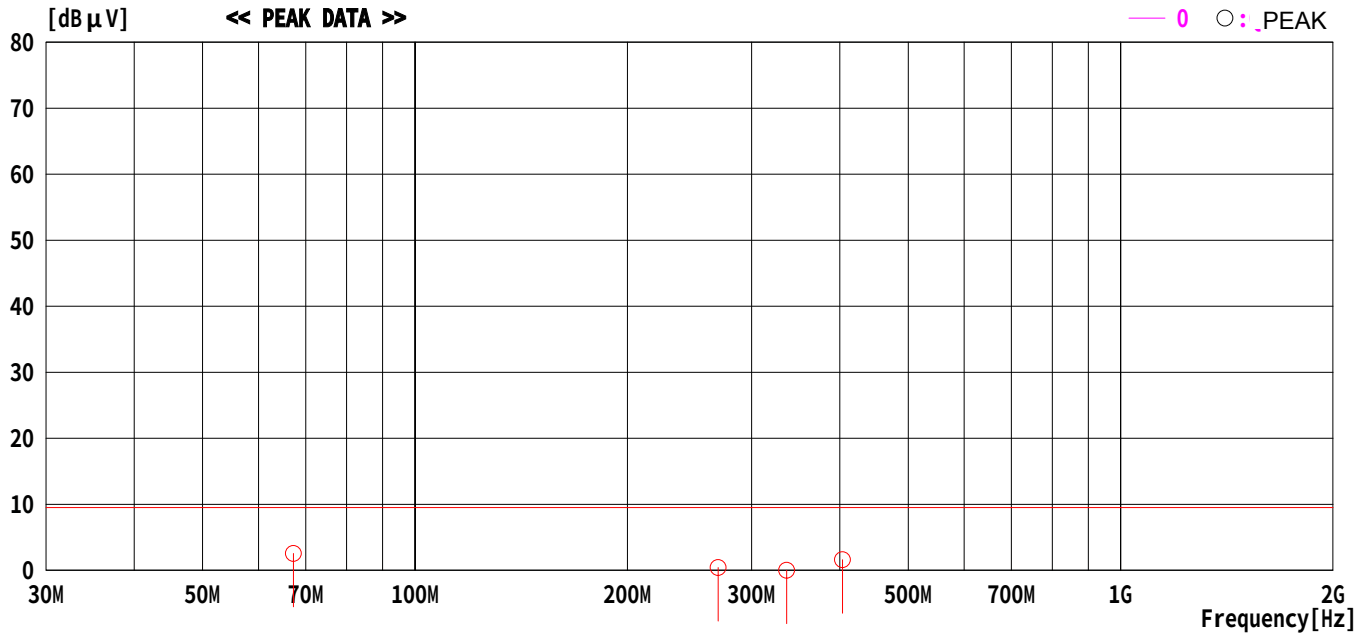
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : AV Input1 + Rec(5Vp-p)-4ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC15B ANTENNA TRANSFER SWITCH



NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		Peak [dB μV]	- [dB μV]		Peak [dB μV]	- [dB μV]	Peak [dB μV]	- [dB μV]	[dB]	[dB]	
1	67.2500	23.0	----	-20.4	2.5	----	9.5	----	7.0	----	-
2	134.5000	20.5	----	-20.6	-0.1	----	9.5	----	9.6	----	-
3	201.7500	20.3	----	-20.4	-0.1	----	9.5	----	9.6	----	-
4	269.0000	20.8	----	-20.4	0.4	----	9.5	----	9.1	----	-
5	336.2500	20.3	----	-20.3	0.0	----	9.5	----	9.5	----	-
6	403.5000	21.9	----	-20.3	1.6	----	9.5	----	7.9	----	-

CALCULATION: READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of Antenna Transfer Switch Test

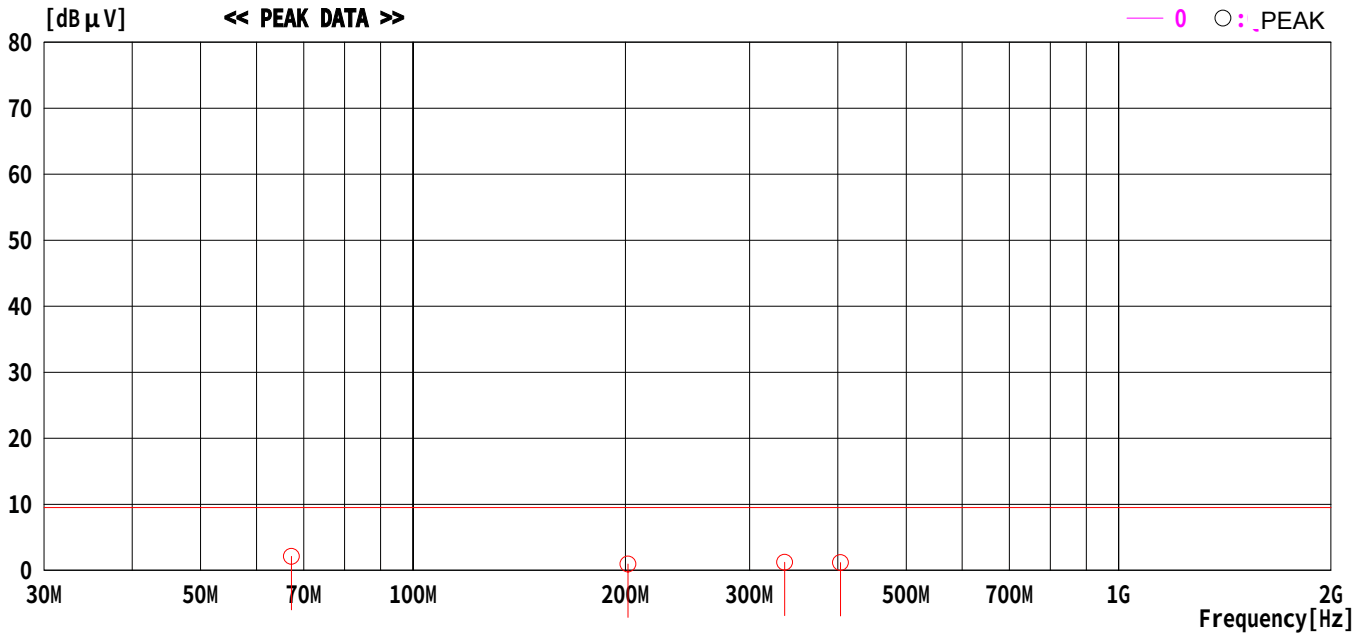
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : AV Input2 + Rec(1Vp-p)-4ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC15B ANTENNA TRANSFER SWITCH



NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		Peak [dB μV]	- [dB μV]		Peak [dB μV]	- [dB μV]	Peak [dB μV]	- [dB μV]	[dB]	[dB]	
1	67.2500	22.5	----	-20.4	2.1	----	9.5	----	7.4	----	-
2	134.5000	20.4	----	-20.6	-0.2	----	9.5	----	9.7	----	-
3	201.7500	21.4	----	-20.4	1.0	----	9.5	----	8.5	----	-
4	269.0000	19.4	----	-20.4	-1.0	----	9.5	----	10.5	----	-
5	336.2500	21.5	----	-20.3	1.2	----	9.5	----	8.3	----	-
6	403.5000	21.5	----	-20.3	1.2	----	9.5	----	8.3	----	-

CALCULATION: READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of Antenna Transfer Switch Test

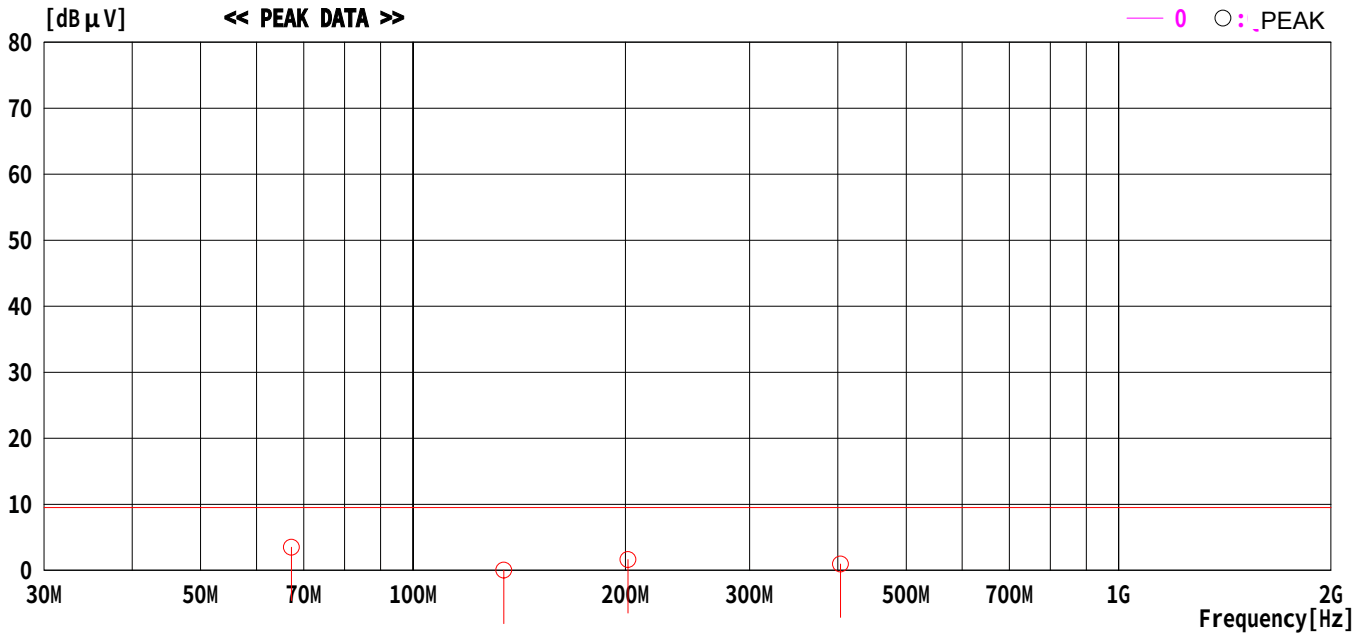
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : AV Input2 + Rec(5Vp-p)-4ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC15B ANTENNA TRANSFER SWITCH



NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		Peak [dB μV]	- [dB μV]		Peak [dB μV]	- [dB μV]	Peak [dB μV]	- [dB μV]	[dB]	[dB]	
1	67.2500	23.9	----	-20.4	3.5	----	9.5	----	6.0	----	-
2	134.5000	20.6	----	-20.6	0.0	----	9.5	----	9.5	----	-
3	201.7500	22.0	----	-20.4	1.6	----	9.5	----	7.9	----	-
4	269.0000	19.3	----	-20.4	-1.1	----	9.5	----	10.6	----	-
5	336.2500	20.0	----	-20.3	-0.3	----	9.5	----	9.8	----	-
6	403.5000	21.3	----	-20.3	1.0	----	9.5	----	8.5	----	-

CALCULATION: READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of Antenna Transfer Switch Test

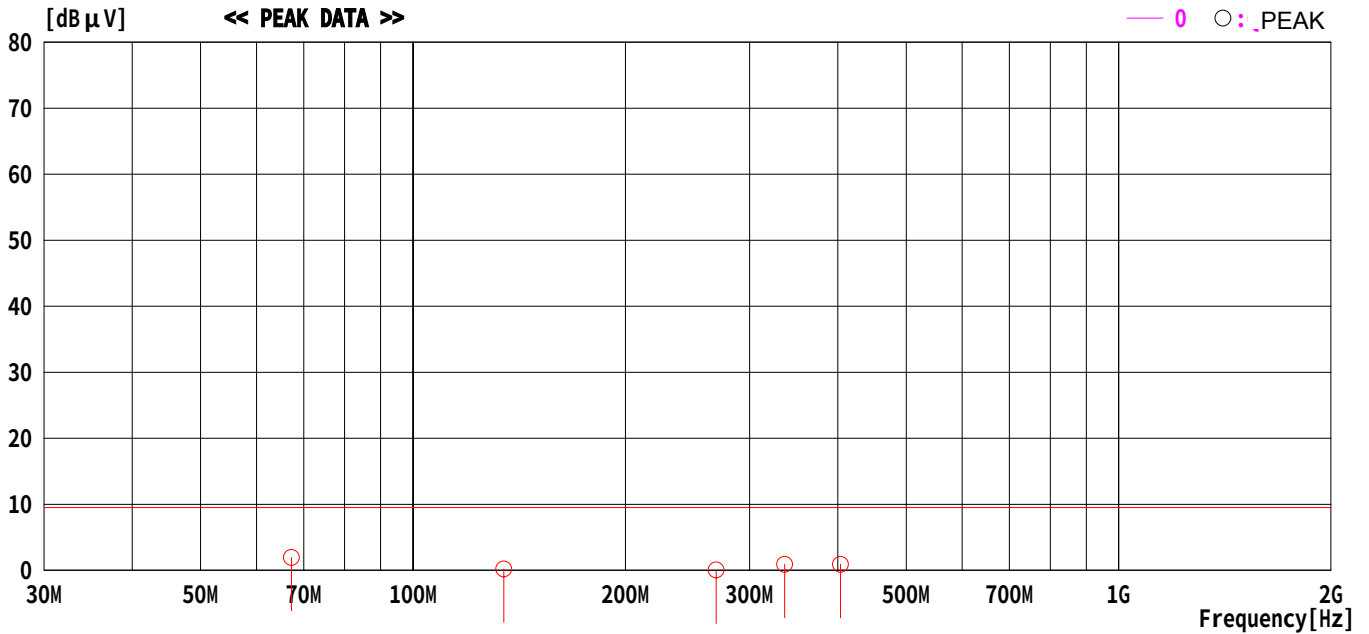
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : VCR PLAYBACK-4ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC15B ANTENNA TRANSFER SWITCH



NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		Peak [dB μV]	- [dB μV]		Peak [dB μV]	- [dB μV]	Peak [dB μV]	- [dB μV]	[dB]	[dB]	
1	67.2500	22.3	----	-20.4	1.9	----	9.5	----	7.6	----	-
2	134.5000	20.8	----	-20.6	0.2	----	9.5	----	9.3	----	-
3	201.7500	19.9	----	-20.4	-0.5	----	9.5	----	10.0	----	-
4	269.0000	20.5	----	-20.4	0.1	----	9.5	----	9.4	----	-
5	336.2500	21.2	----	-20.3	0.9	----	9.5	----	8.6	----	-
6	403.5000	21.2	----	-20.3	0.9	----	9.5	----	8.6	----	-

CALCULATION: READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of Antenna Transfer Switch Test

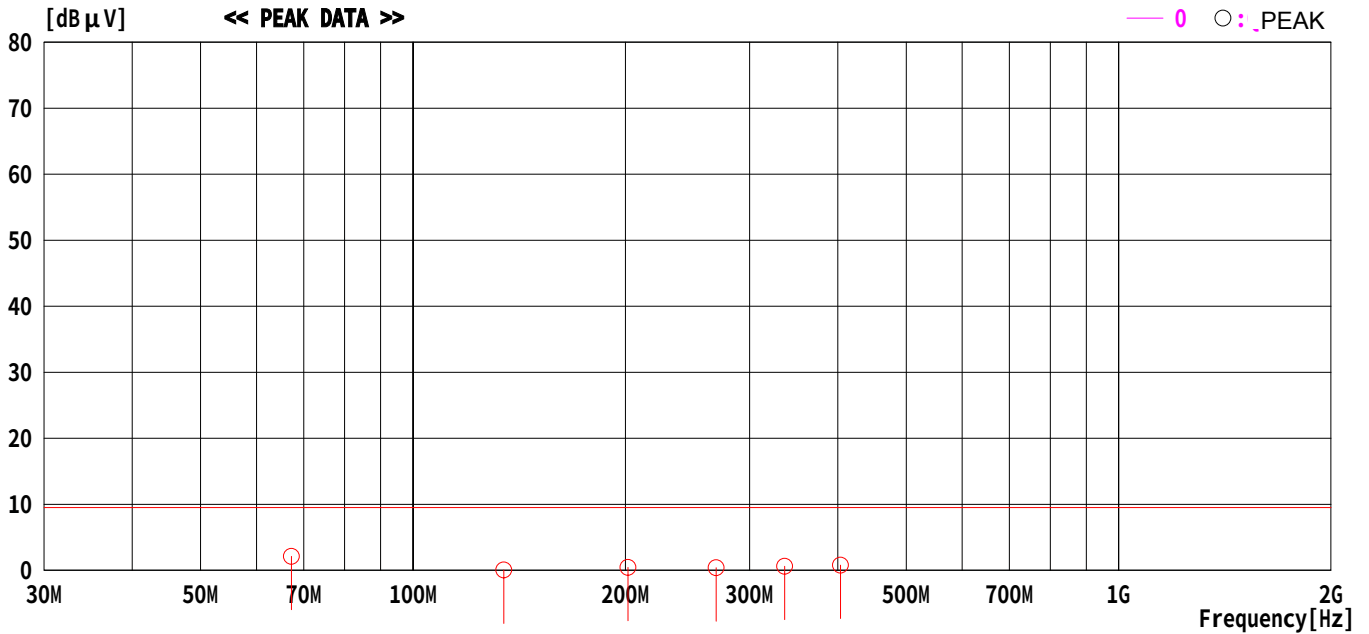
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : DVD PLAY(HDMI)-4ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC15B ANTENNA TRANSFER SWITCH



NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		Peak [dB μV]	- [dB μV]		Peak [dB μV]	- [dB μV]	Peak [dB μV]	- [dB μV]	[dB]	[dB]	
1	67.2500	22.5	----	-20.4	2.1	----	9.5	----	7.4	----	-
2	134.5000	20.7	----	-20.6	0.1	----	9.5	----	9.4	----	-
3	201.7500	20.8	----	-20.4	0.4	----	9.5	----	9.1	----	-
4	269.0000	20.8	----	-20.4	0.4	----	9.5	----	9.1	----	-
5	336.2500	20.9	----	-20.3	0.6	----	9.5	----	8.9	----	-
6	403.5000	21.1	----	-20.3	0.8	----	9.5	----	8.7	----	-

CALCULATION: READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Data of Antenna Transfer Switch Test

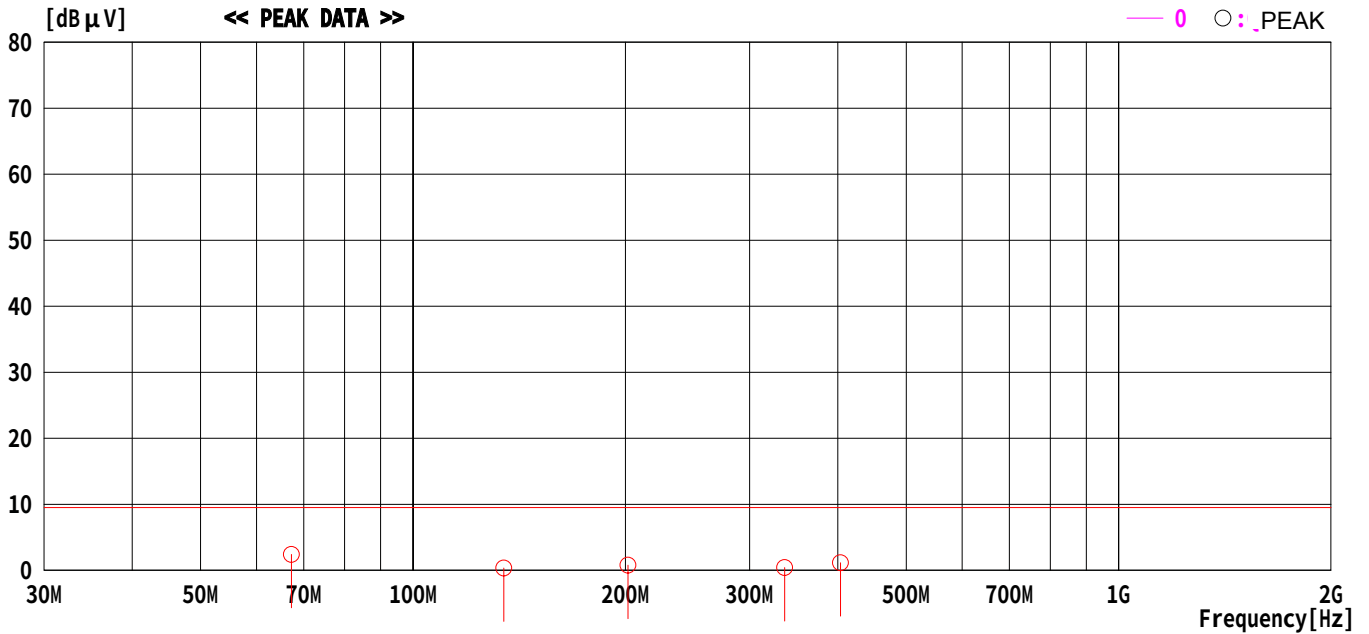
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V593SU
OPERATION MODE : Card-4ch

REPORT NO : 25IE0134-YW-1
DATE : April 01,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 23°C/39%

LIMIT : FCC15B ANTENNA TRANSFER SWITCH



NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		Peak [dB μV]	- [dB μV]		Peak [dB μV]	- [dB μV]	Peak [dB μV]	- [dB μV]	[dB]	[dB]	
1	67.2500	22.8	----	-20.4	2.4	----	9.5	----	7.1	----	-
2	134.5000	21.0	----	-20.6	0.4	----	9.5	----	9.1	----	-
3	201.7500	21.2	----	-20.4	0.8	----	9.5	----	8.7	----	-
4	269.0000	19.6	----	-20.4	-0.8	----	9.5	----	10.3	----	-
5	336.2500	20.7	----	-20.3	0.4	----	9.5	----	9.1	----	-
6	403.5000	21.5	----	-20.3	1.2	----	9.5	----	8.3	----	-

CALCULATION: READING+MATCHING PAD LOSS+CABLE LOSS-AMP.GAIN

Picture Sensitivity Test

UL Apex Co.,Ltd.
Yokowa EMC Laboratory

Company : Orion Electric Co., Ltd.
Equipment : DVD/VCR
Model Number : SD-V593SU
Power : 120V/60Hz
Description : TV Reception
Remarks : -

Report Number : 25IE0134-YW-1
Regulation : FCC Part15 SubpartB
Date : March 31, 2005
Temp / Humid : 24deg.C/ 31%
Engineer : Tsubasa Takayama

Ch [VHF]	Frequency [MHz]	Sensitivity [MHz]		Ch [UHF]	Frequency [MHz]	Sensitivity [MHz]	
		[dBμV]	[μV]			[dB μ V]	[μ V]
2	55.25	20.0	10.0	14	471.25	20.4	10.5
3	61.25	17.4	7.4	20	507.25	20.8	11.0
4	67.25	17.0	7.1	26	543.25	21.1	11.4
5	77.25	17.1	7.2	32	579.25	21.8	12.3
6	83.25	17.0	7.1	38	615.25	22.2	12.9
7	175.25	20.9	11.1	44	651.25	21.8	12.3
8	181.25	20.3	10.4	50	687.25	21.3	11.6
9	187.25	19.3	9.2	56	723.25	21.3	11.6
10	193.25	19.0	8.9	62	759.25	21.2	11.5
11	199.25	18.8	8.7	69	801.25	20.8	11.0
12	205.25	19.1	9.0	-	-	-	-
13	211.25	18.7	8.6	-	-	-	-
Average VHF			8.7	Average UHF			11.6
Average UHF/VHF : $20 \log \text{UHF}[\mu\text{V}] / \text{VHF}[\mu\text{V}] =$				2.5 [Limit : 8.0dB]			

Noise Figure Test

UL Apex Co.,Ltd.
Yokowa EMC Laboratory

Company : Orion Electric Co., Ltd.
Equipment : DVD/VCR
Model Number : SD-V593SU
Power : 120V/60Hz
Description : TV Reception
Remarks : -

Report Number : 25IE0134-YW-1
Regulation : FCC Part15 Subpart B
Date : March 31 ,2004
Temp / Humid : 23deg.C / 45%
Engineer : Tsubasa Takayama

Ch	Frequency [MHz]	Meter Reading [dB]	Correction Factor [dB]	Noise Figure [dB]	Limits [dB]	Margin [dB]
TV VHF Fundamental						
2	55.25	6.2	0.2	6.0	14.0	8.0
3	61.25	5.8	0.2	5.6	14.0	8.4
4	67.25	5.3	0.2	5.1	14.0	8.9
5	77.25	4.5	0.2	4.3	14.0	9.7
6	83.25	4.2	0.2	4.0	14.0	10.0
7	175.25	4.6	0.2	4.4	14.0	9.6
8	181.25	4.6	0.2	4.4	14.0	9.6
9	187.25	4.5	0.2	4.3	14.0	9.7
10	193.25	4.4	0.2	4.2	14.0	9.8
11	199.25	4.6	0.2	4.4	14.0	9.6
12	205.25	4.3	0.2	4.1	14.0	9.9
13	211.25	4.5	0.2	4.3	14.0	9.7
TV UHF Fundamental						
14	471.25	5.5	0.3	5.2	14.0	8.8
20	507.25	5.7	0.3	5.4	14.0	8.6
26	543.25	5.9	0.3	5.6	14.0	8.4
32	579.25	6.3	0.3	6.0	14.0	8.0
38	615.25	7.1	0.3	6.8	14.0	7.2
44	651.25	6.4	0.3	6.1	14.0	7.9
50	687.25	6.0	0.3	5.7	14.0	8.3
56	723.25	6.0	0.4	5.6	14.0	8.4
62	759.25	6.1	0.4	5.7	14.0	8.3
69	801.25	6.4	0.4	6.0	14.0	8.0
Mid band						
14	121.25	3.6	0.2	3.4	14.0	10.6
16	133.25	7.1	0.2	6.9	14.0	7.1
18	145.25	6.1	0.2	5.9	14.0	8.1
20	157.25	5.5	0.2	5.3	14.0	8.7
22	169.25	5.7	0.2	5.5	14.0	8.5
Super band						
23	217.25	4.6	0.2	4.4	14.0	9.6
26	235.25	4.4	0.2	4.2	14.0	9.8
29	253.25	4.6	0.2	4.4	14.0	9.6
32	271.25	4.4	0.2	4.2	14.0	9.8
36	295.25	4.5	0.2	4.3	14.0	9.7

Test Report No : 25IE0134-YW-1

APPENDIX 3

Test Instruments

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
APVBT01	VIDEO BOOSTER	UL Apex	-	RF, ATS	-
APTVG01	TV Generator	Leader	408NPS	RF, ATS	Pre Check
APSPA04	Spectrum Analyzer	Advantest	R3265	AT, RF, ATS	2004/05/14 * 12
IP-06	Matching Pad	TME	ZT-301	PS, NF	2004/05/06 * 12
IP-03	Matching Pad	TME	ZT-130	AT, RF, ATS	2004/09/10 * 12
APNFM01	Noise Figure Indicator	Elena	ENF-2005	NF	2004/10/04 * 12
APNFS01	Noise Source	Elena	MC1100	NF	-
AV01-01	Signal Generator	Rohde & Schwarz	SMY01	PS	2005/02/23 * 12
SS-05	Digitizing Oscilloscope	Sony Tektronix	2221	PS	2005/01/11 * 12
APBPF01	Band pass filter	Erika Fiedler	BP	PS	Pre Check
AF-05	Pre Amplifier	Hewlett Packard	8447D	AT, RF, ATS	2004/05/31 * 12
AF-06	Pre Amplifier	Agilent	HP8449B	AT	2005/01/18 * 12
APCBL-01	Coaxial Cable	Fujikura	5D-2W	AT, RF, ATS	2004/12/27 * 12
APCBL-02	Coaxial Cable	Fujikura	5D-2W	AT, RF, ATS	2004/12/27 * 12
OS-02	Digital Humidity Indicator	SATO	PC-5000TRH- II	RF, ATS, PS, NF	2004/04/06 * 24
LS-04	LISN(AMN)	Rohde & Schwarz	ESH3-Z5	CE (EUT)	2004/10/29 * 12
LS-10	LISN(AMN)	Schwarzbeck	NSLK8127	CE	2004/05/02 * 12
SA-07	Spectrum Analyzer	Advantest	R3273	CE	2004/07/26 * 12
TR-01	Test Receiver	Rohde & Schwarz	ESHS20	CE	2004/12/24 * 12
CC-1S	Yokowa No.1 shield coaxial(0.01MHz-1000M Hz)	UL Apex	CC-14,CC-15,CC-16,, CC-18,CC-19,SW-11, SW-12	CE	2005/03/25 * 12
OS-05	Digital Humidity Indicator	SATO	PC-5000TRH	CE	2004/04/22 * 24
AF-03	Pre Amplifier	Anritsu	MH648A	RE	2005/03/25 * 12
AF-07	Pre Amplifier	Agilent	HP8449B	RE	2005/03/15 * 12
AT-04	Attenuator	Anritsu	MP721B	RE	2005/03/22 * 12
BA-04	Biconical Antenna	Schwarzbeck	BBA9106	RE	2005/04/02 * 12
HA-02	Horn Antenna	A.H.Systems	SAS-200/571	RE	2005/04/06 * 12
LA-05	Logperiodic Antenna	Schwarzbeck	UHALP9108-A	RE	2004/10/18 * 12
SA-05	Spectrum Analyzer	Advantest	R3271	RE	2004/12/20 * 12
TR-04	Test Receiver	Rohde & Schwarz	ESVS10	RE	2004/12/22 * 12
CC-2ORC	Yokowa No.2 open coaxial(0.01-1000MHz)	UL Apex	CC-21,CC-22,CC-23, CC-24,CC-25,CC-26, CC-27,SW-21,SW-22	RE	2005/03/25 * 12
YOATS-02	Open Test Site	JSE	3m, 10m	RE	2005/03/06 * 12
OS-10	Digital Humidity Indicator	SATO	PC-5000TRH	RE	2004/05/06 * 24
AF-01	Pre Amplifier	Hewlett Packard	8447D	RE	2005/03/25 * 12
AF-07	Pre Amplifier	Agilent	HP8449B	RE	2005/03/15 * 12
AT-06	Attenuator	Anritsu	MP721B	RE	2005/03/22 * 12
BA-06	Biconical Antenna	Schwarzbeck	BBA9106	RE	2005/01/29 * 12
LA-07	Logperiodic Antenna	Schwarzbeck	UKLP9140-A	RE	2005/01/29 * 12
SA-06	Spectrum Analyzer	Advantest	R3273	RE	2004/11/02 * 12
CC-3ORC	Yokowa No.3 open coaxial(0.01-1000MHz)	UL Apex	CC-31,CC-32,CC-33, CC-34,CC-35,CC-36, CC-37,SW-31,SW-32	RE	2005/03/25 * 12
YOATS-03	Open Test Site	JSE	3m, 10m	RE	2004/08/15 * 12

CC-C3All equipment is calibrated with traceable calibrations . Each calibration is traceable to the national or international standards.

Test Item :

CE: Conducted emission
 RE: Radiated emission
 AT: Antenna terminal disturbance voltage
 RF: RF output level & spurious
 ATS: Antenna transfer switch
 PS: Picture sensitivity
 NF: Noise figure