



EMI TEST REPORT

Test Report No. : 24KE0255-YW-1

Applicant : Orion Electric Co., Ltd.
Type of equipment : DVD/VCR
Model number : DVD2100-C
Test standard : FCC Part 15 Subpart B
ICES-003 Issue No.4 Class B
Test result : Complied

1. This test report shall not be reproduced except in full or partial, without the written approval of UL Apex Co., Ltd.
2. The results in this report apply only to the sample tested.
3. This equipment is in compliance with above regulation. We hereby certify that the data contain a true representation of the EMC profile.
4. The test results in this test report are traceable to the national or international standards.
5. This test report does not constitute an endorsement by NIST/NVLAP or U.S. Government.

Date of test : June 24 to 30, 2004

Tested by:

Tsubasa Takayama
EMC Service

Approved by:

Kazutoyo Nakanishi
Site Manager of EMC Service

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Contents

	Page
Section 1 : Client information	3
Section 2 : Equipment under test (E.U.T.)	3
Section 3 : Test specification, procedures & results	4
Section 4 : Operation of E.U.T. during tests	6
Section 5 : Conducted emission	7
Section 6 : Radiated emission	9
Section 7 : Antenna terminal voltage	12
Section 8 : RF output level / spurious emission	13
Section 9 : Antenna transfer switch	14
Section 10 : Picture sensitivity	15
Section 11 : Noise figure	16
 <u>Contents of Appendixes</u>	 17
Appendix 1 : Photographs of test set up	18
Appendix 2 : Data of EMI tests	25
Appendix 3: Test instruments	80

Section 1 : Client information

Company name : Orion Electric Co., Ltd.
Address : 41-1 Iehisa-cho, Takefu-shi, Fukui-ken, 915-8555 JAPAN
Telephone number : +81 778 23 0019
Facsimile number : +81 778 23 7799
Contact person : Hiroshi Tsujimoto

Section 2 : Equipment under test (E.U.T.)**2.1 Identification of E.U.T.**

Type of equipment : DVD/VCR
Brand Name : Disney
Model number : DVD2100-C
Rating : AC 120 V / 60 Hz
Manufacturer : 1. World Electric (Thailand) Ltd.
236 Moo 2 Nongchark, Banbung, Chonburi 20170, Thailand
2. Korat Denki Ltd.
149 Moo 10 Tambol Chokchai, Amphur Chokchai, Nakhonratchasima
30190, Thailand
228 Moo 3 Tambol Nongbuasala, Amphur Muang, Nakhonratchasima
30000, Thailand
3. Orion America, Inc.
Hwy 41 North, Orion Place, Princeton, Indiana 47670, U.S.A
Receipt Date of Sample : June 18, 2004
Condition of EUT : Production Prototype
(Not for Sale: This sample is equivalent to mass-produced items.)

2.2 Product description

Model: DVD2100-C (referred to as the EUT in this report) is a DVD/VCR.

The EUT specifications is as follows.

Tuner type : Quartz PLL frequency synthesized
I / F : 45.75 MHz (Picture), 41.25 MHz (Sound)
Receiving channel : VHF 2 – 13 ch / UHF 14 – 69 ch / CATV 1 – 125 ch
Antenna input : 75 ohm
Video signal : NTSC color
Power source : AC 120 V / 60 Hz, 18W
I / O terminal (Video) : RCA in 1Vp-p 75 ohm, RCA out 1 Vp-p 75 ohm
I / O terminal (Audio) : RCA in –8 dB 47 k ohm, RCA out –8 dB 1 k ohm

2.3 Similar apparatus

There are similar apparatuses as follows;

DVD2100-P

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Section 3 : Test specification, procedures and results

3.1 Test specification

Test specification: FCC Part 15 Subpart B
 Title : FCC 47 CFR Part 15 Radio Frequency Device
 Subpart B Unintentional Radiators

Test Specification : ICES-003 Issue No. 4
 Title : Spectrum Management
 Interference-Causing Equipment Standard
 Digital Apparatus
 *ICES-003 (Issue No. 4) is based on FCC Part 15.

3.2 Procedures & results

Item	Test procedure	Limits	Worst margin	Result
Conducted emission	ANSI C63.4:2001 IEEE 213:1987	CISPR 22	18.6 dB (0.1500 MHz, L1, VCR Playback)	Complied
Radiated emission	ANSI C63.4:2001 IEEE 187:1990	30–88 MHz: 100 uV/m 88–216 MHz: 150 uV/m 216–960 MHz: 200 uV/m above 960 MHz: 500 uV/m	7.1 dB (945.00 MHz, Vertical, VCR Playback/ 270.00 MHz, Horizontal, DVD Play)	Complied
Antenna terminal voltage	ANSI C63.4:2001	2 nW (at 75 ohm)	25.2 dB (627.71040 MHz, CATV Tuning)	Complied
RF output level	ANSI C63.4:2001	Video signal: 3000 uV Aural signal: 671 uV	5.0 dB (67.25 MHz, VCR Playback)	Complied
Spurious emission		94.8 uV	22.2 dB (331.4200 MHz, 3ch: TV Reception + Rec. 25dBmV)	Complied
Transfer switch	ANSI C63.4:2001	9.5 dB	7.0 dB (269.0000 MHz, VCR Playback: 4ch)	Complied
Picture sensitivity	ANSI C63.4:2001	8 dB	3.5 dB	Complied
Noise figure	FCC/OET MP:2:1986	14 dB	6.7 dB (615.25 MHz, 38ch)	Complied

For ICES-003, only the tests, which relate to the digital device of conducted emission and radiated emission, were performed.

3.3 Additions or deviations to standard

No addition, deviation or exclusion has been made from standards.

3.4 Confirmation

UL Apex Co., Ltd. hereby confirms that E.U.T., in the configuration tests, complies with the specifications
 FCC Part15 Subpart B and ICES-003 Issue No. 4.

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3.5 Uncertainty

Conducted emission (150 kHz – 30 MHz)

The measurement uncertainty (with a 95% confidence level) for this test was ± 1.74 dB.

The data listed in this test report has enough margin, more than site margin.

Radiated emission

The measurement uncertainty (with a 95% confidence level) for this test using Biconical antenna is ± 4.4 dB.

The measurement uncertainty (with a 95% confidence level) for this test using Logperiodic antenna is ± 4.8 dB.

The measurement uncertainty (with a 95% confidence level) for this test using Horn antenna is ± 5.8 dB.

The data listed in this test report has enough margin, more than site margin.

Antenna terminal voltage

The measurement uncertainty (with a 95% confidence level) for this test was ± 3.48 dB.

The data listed in this test report has enough margin, more than site margin.

RF output level test / spurious emission test

The measurement uncertainty (with a 95% confidence level) for this test was ± 3.48 dB.

The data listed in this test report has enough margin, more than site margin.

Antenna transfer switch

The measurement uncertainty (with a 95% confidence level) for this test was ± 3.48 dB.

The data listed in this test report has enough margin, more than site margin.

Picture sensitivity test

The measurement uncertainty (with a 95% confidence level) for this test was ± 1.0 dB.

The data listed in this test report has enough margin, more than site margin.

Noise Figure Test

The measurement uncertainty (with a 95% confidence level) for this test was ± 1.2 dB.

The data listed in this test report has enough margin, more than site margin.

3.7 Test location

UL Apex Co., Ltd. Yokowa EMC Lab. No.1, No.2, No.3 shielded room, No.2 and No.3 open site

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No.2 open site

This site has been fully described in a report submitted to FCC office, and listed on August 29, 2003.

(Registration number: 90411)

No.3 open site

This site has been fully described in a report submitted to FCC office, and listed on September 25, 2003.

(Registration number: 90412)

*NVLAP Lab. Code : 200109-0

3.8 Test setup, Data of EMI & Test instruments

Please refer to Appendix 1 to 3.

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Section 4 : Operation of E.U.T. during tests

4.1 Operating modes

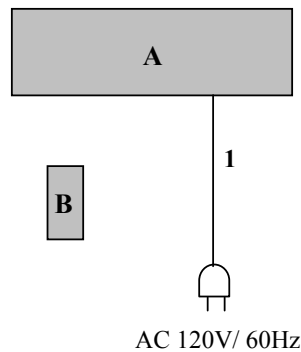
The EUT exercise program used during testing was designed exercise the various system components in a manner similar to typical use.

The sequence in used : * TV Reception + Rec. mode (0 dBmV input / 25 dBmV input)
 * VCR Playback mode
 * DVD Play mode

Operation : The EUT was tested at above operation mode.

Justification : The system was configured in typical fashion (as a customer would normally use it) for testing.

4.2 Configuration and peripherals



* Cabling was taken into consideration and test data was taken under worse case conditions.

Description of EUT and support equipment

Sign	Item	Model number	Serial number	Manufacturer	Remark
A	DVD/VCR	DVD2100-C	—	Orion Electric Co., Ltd.	EUT
B	Remote Controller	—	—	Orion Electric Co., Ltd.	EUT

List of cable used

No.	Item	Length (m)	Shield	Backshell material
1	AC Power Cable	1.6	Unshielded	Polyvinyl chloride

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Section 5 : Conducted emission

5.1 Operation environment

The test was carried out in a shielded room the size of 5.5 x 6.4 x 2.7m.

Date : June 29, 2004

Temperature : See data

Humidity : See data

5.2 Test configuration

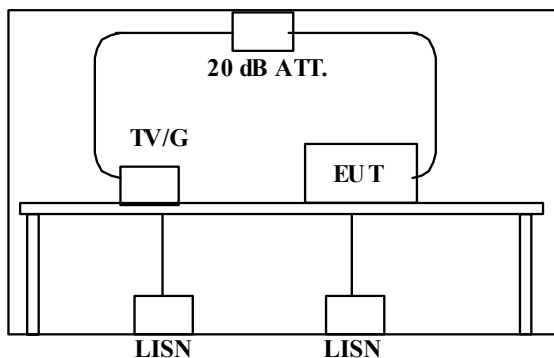
EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The rear of tabletop was located 40 cm to the vertical conducting plane. The rear of EUT was aligned and flushed with rear of tabletop. All other surfaces of tabletop was at least 80 cm from any other grounded conducting surface. I/O cables and AC cable were bundled in center. I/O cables were hanged at a 40cm height to the ground plane. Each EUT current-carrying power lead, except the ground (safety) lead, were individually connected through a LISN to the input power source.

A drawing of the set up is shown in figure 1 and photographs in Appendix 1.

Figure 1. Conducted emission

TV Reception + Rec. mode (0 dBmV input / 25 dBmV input)

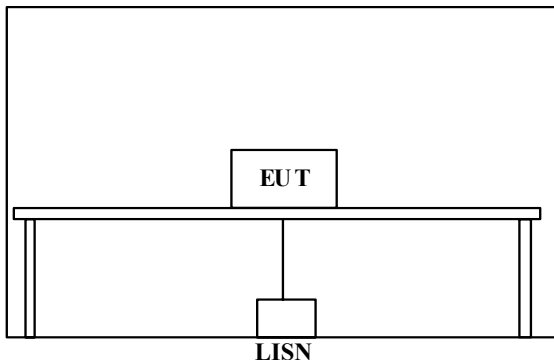
Shielded room



RF in: TV signal generator connected
 Rear video out: 75 ohm terminated with video cable
 Rear audio out: 1 k ohm terminated with audio cable
 S-Video out: 75 ohm terminated with S-Video cable
 RF output: 75 ohm terminated with RF output cable
 Coaxial out: 75 ohm terminated with coaxial cable

VCR Playback mode

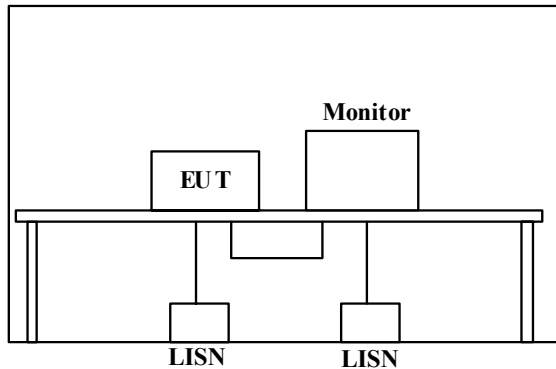
Shielded room



RF in: 75 ohm terminated with RF input cable
 Rear video out: 75 ohm terminated with video cable
 Rear audio out: 1 k ohm terminated with audio cable
 S-Video out: 75 ohm terminated with S-Video cable
 RF output: 75 ohm terminated with RF output cable
 Coaxial out: 75 ohm terminated with coaxial cable

DVD Play mode

Shielded room



RF in: 75 ohm terminated with RF input cable
Rear video out: monitor connected
Rear audio out: monitor connected
S-Video out: 75 ohm terminated with S-Video cable
RF output: 75 ohm terminated with RF output cable
Coaxial out: 75 ohm terminated with coaxial cable

5.3 Test conditions

Frequency range : 0.15 MHz – 30 MHz

EUT position : Table top

EUT operation mode: TV Reception + Rec., VCR Playback, DVD Play

5.4 Test procedure

The AC Mains Terminal Continuous disturbance Voltage has been measured with the EUT within a shielded room. The EUT was connected to a Line Impedance Stabilization Network (LISN). An overview sweep with peak detection has been performed. The measurements have been performed with a quasi-peak detector and if required, with an average detector.

EUT and desired signal generator should connect through 20 dB attenuator.

The conducted emission measurements were made with the following detector function of the test receiver.

Detector Type : QP

IF Bandwidth : 10 kHz

5.5 Test result

Passed

Please refer to summary of the test results in Appendix 2.

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Section 6 : Radiated emission

6.1 Operation environment

The test was carried out in an open site.

Date : June 24, 26 and 30, 2004

Temperature : See data

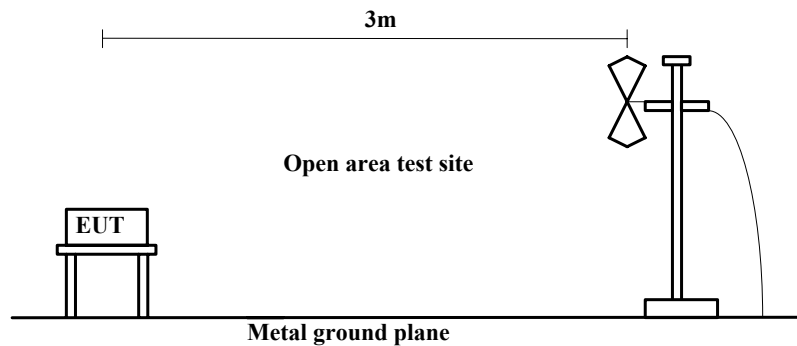
Humidity : See data

6.2 Test configuration

EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The rear of EUT was aligned and flushed with rear of tabletop. AC cable was bundled in center. I/O cables were hanged 40 cm height to the ground plane. Test was made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna was varied in height above the conducting ground plane to obtain the maximum signal strength.

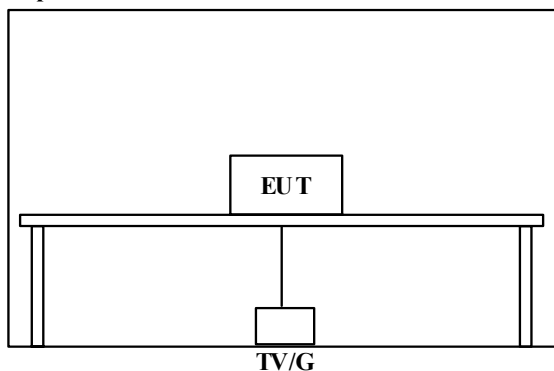
A drawing of the set up is shown in figure 2 and photographs in Appendix 1.

Figure 2. Radiated emission



TV Reception + Rec. mode (0 dBmV / 25 dBmV)

Open test site



RF in: TV signal generator connected

Rear video out: 75 ohm terminated with video cable

Rear audio out: 1 k ohm terminated with audio cable

S-Video out: 75 ohm terminated with S-Video cable

RF output: 75 ohm terminated with RF output cable

Coaxial out: 75 ohm terminated with coaxial cable

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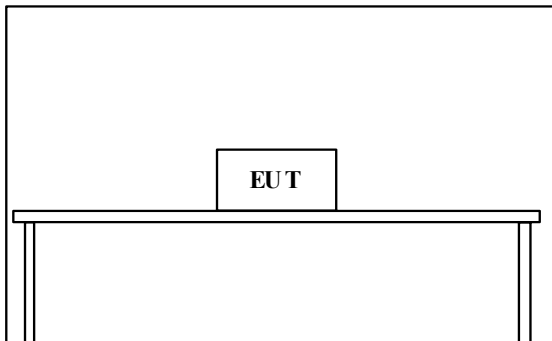
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VCR Playback mode

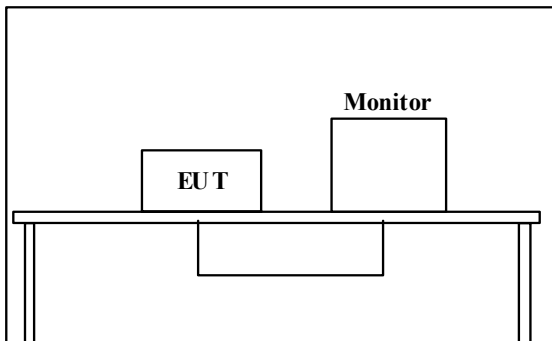
Open test site



RF in: 75 ohm terminated with RF input cable
Rear video out: 75 ohm terminated with video cable
Rear audio out: 1 k ohm terminated with audio cable
S-Video out: 75 ohm terminated with S-Video cable
RF output: 75 ohm terminated with RF output cable
Coaxial out: 75 ohm terminated with coaxial cable

DVD Play mode

Open test site



RF in: 75 ohm terminated with RF input cable
Rear video out: monitor connected
Rear audio out: monitor connected
S-Video out: 75 ohm terminated with S-Video cable
RF output: 75 ohm terminated with RF output cable
Coaxial out: 75 ohm terminated with coaxial cable

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6.3 Test conditions

Frequency range : 30 MHz – 2000 MHz
Test distance : 3 m
EUT position : Table top
EUT operation mode: TV Reception + Rec., VCR Playback, DVD Play

6.4 Test procedure

The Radiated Electric Field Strength intensity has been measured on an open test site with a ground plane and at a distance of 3 m.

Pre check measurements were performed within a search coil at high level of 80MHz – 90MHz, 270MHz – 290MHz and 500MHz – 700MHz in a shielded room to distinguish disturbances of EUT from the ambient noise. Measurements were performed with quasi-peak detector, peak detector and average detector. The measuring antenna height was varied between 1 and 4 m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity. The measurements were performed for both vertical and horizontal antenna polarization.

The radiated emission measurements were made with the following detector function of the test receiver and spectrum analyzer.

	<u>30-1000MHz (Test receiver)</u>	<u>1000-2000MHz (Spectrum analyzer)</u>
Detector Type	: QP	: PK : AV
IF Bandwidth	: 120kHz	: RBW 1MHz / VBW 1MHz : RBW 1MHz/ VBW 10Hz

6.5 Test result

Passed

Please refer to summary of the test results in Appendix 2.

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Section 7 : Antenna terminal voltage

7.1 Operation environment

The test was carried out in a shielded room the size of 4.5 x 3.6 x 2.7 m.

Date : June 29, 2004

Temperature : See data

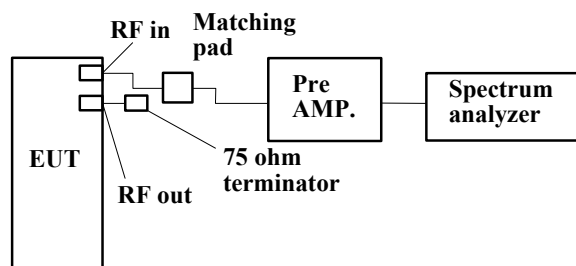
Humidity : See data

7.2 Test configuration

The EUT was placed on a non-metallic platform 0.8 m above a reference ground plane.

A drawing of the set up is shown in figure 3 and photographs in Appendix 1.

Figure 3. Antenna terminal voltage



7.3 Test conditions

Frequency range : 30 MHz – 2000 MHz

EUT position : Table top

EUT operation mode: Tuning (TV receiver / CATV receiver)

7.4 Test procedure

Connect EUT and spectrum analyzer through pre-amplifier. Set EUT to CH investigation mode then measure the voltage of local leakage from antenna terminal. Spectrum analyzer should be hold in maximum mode during the measurement.

Detector Type : Peak (30-2000 MHz)

7.5 Test result

Passed

Please refer to summary of the test results in Appendix 2.

Test engineer: Tsubasa Takayama

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Section 8 : RF output level / spurious emission

8.1 Operation environment

The test was carried out in a shielded room the size of 4.5 x 3.6 x 2.7 m.

Date : June 29, 2004

Temperature : See data

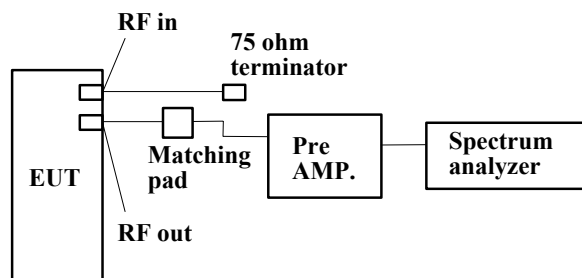
Humidity : See data

8.2 Test configuration

The EUT was placed on a non-metallic platform 0.8 m above a reference ground plane.

A drawing of the set up is shown in figure 4 and photographs in Appendix 1.

Figure 4. RF output level



8.3 Test conditions

EUT position : Table top

EUT operation mode: TV Reception + Rec., VCR Playback, DVD Play

8.4 Test procedure

EUT was connected spectrum analyzer through matching pad by accessory cable. RF channel selected 3ch or 4ch. Picture carrier, sound carrier and spurious levels are measured. Both sound carrier levels (upper and lower side bands) of modulator output are measured.

Detector Type : Peak

8.5 Test result

Passed

Please refer to summary of the test results in Appendix 2.

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Section 9 : Antenna transfer switch

9.1 Operation environment

The test was carried out in a shielded room the size of 4.5 x 3.6 x 2.7 m.

Date : June 29, 2004

Temperature : See data

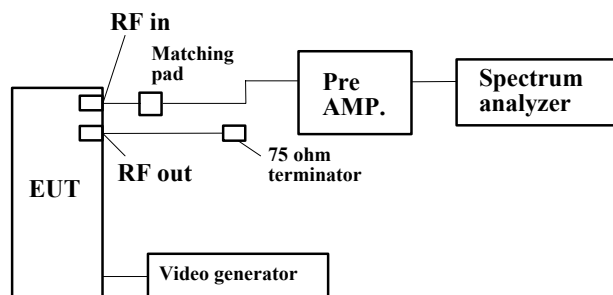
Humidity : See data

9.2 Test configuration

The EUT was placed on a non-metallic platform 0.8 m above a reference ground plane.

A drawing of the set up is shown in figure 5 and photographs in Appendix 1.

Figure 5. Transfer switch



9.3 Test conditions

EUT position : Table top

EUT operation mode: VCR Playback, DVD Play

9.4 Test procedure

EUT was connected spectrum analyzer through matching pad by accessory cable. RF channel selected 3ch or 4ch. The EUT exercised AV input + Rec. mode and Playback mode during the test, and interference signals were measured from RF input terminal.

Detector Type : Peak

9.5 Test result

Passed

Please refer to summary of the test results in Appendix 2.

Test engineer: Tsubasa Takayama

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Section 10 : Picture sensitivity

10.1 Operation environment

The test was carried out in a shielded room the size of 4.5 x 3.6 x 2.7 m.

Date : June 29, 2004

Temperature : See data

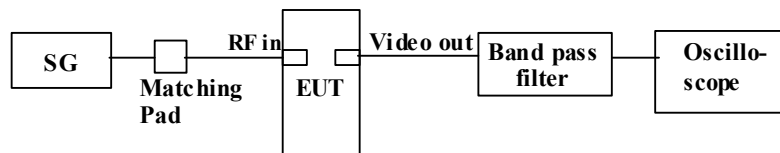
Humidity : See data

10.2 Test configuration

The EUT was placed on a non-metallic platform 0.8 m above a reference ground plane.

A drawing of the set up is shown in figure 6 and photographs in Appendix 1.

Figure 6. Picture sensitivity



10.3 Test conditions

EUT position : Table top

EUT operation mode: TV Reception

10.4 Test procedure

Signal generator setup is as follows, (Example: 2ch – 55.25 MHz, AM, 1 kHz, 30 %)

The EUT was tuned to appropriate channel.

Output level of signal generator was adjusted to near the frequency output level of EUT output.

EUT output level was adjusted to maximum output level by frequency adjustment of signal generator.

Signal generator output level was adjusted to reference output level of EUT and output level had read.

10.5 Test result

Passed

Please refer to summary of the test results in Appendix 2.

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Section 11 : Noise figure

11.1 Operating environment

The test was carried out in a shielded room the size of 4.5 x 3.6 x 2.7 m.

Date : June 29, 2004

Temperature : See data

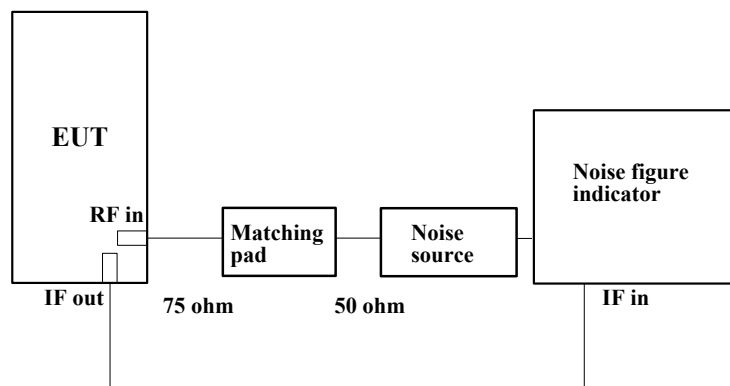
Humidity : See data

11.2 Test configuration

The EUT was placed on a non-metallic table.

A drawing of the set up is shown in figure 7 and photographs in Appendix 1.

Figure 7. Noise figure



11.3 Test condition

EUT position : Table top

EUT operation mode: TV Reception

11.4 Test procedure

This test should be performed in a shielded room or an low noise environment. Connect solid state noise source to antenna input terminal of EUT. Connect IF output terminal of EUT to noise meter through ceramic condenser. Measurement has been performed for VHF,UHF, Mid-band and Super-band receiver range.

11.5 Test result

Passed

Please refer to summary of the test results in Appendix 2.

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Appendix 1 : Photographs of test set up

Page 18 : Test set up of conducted emission

Page 19 : Test set up of radiated emission

Page 20 : Test set up of antenna terminal voltage

Page 21 : Test set up of RF output level / spurious emission

Page 22 : Test set up of antenna transfer switch

Page 23 : Test set up of picture sensitivity

Page 24 : Test set up of noise figure

Appendix 2 : Data of EMI tests

Page 25 - 36 : Conducted emission

Page 37 - 59 : Radiated emission

Page 60 - 61 : Antenna terminal voltage

Page 62 - 73 : RF output level / spurious emission

Page 74 - 77 : Antenna transfer switch

Page 78 : Picture sensitivity

Page 79 : Noise figure

Appendix 3 : Test instruments

Page 80 : Test instruments

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Conducted emission



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Radiated emission



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Antenna terminal voltage



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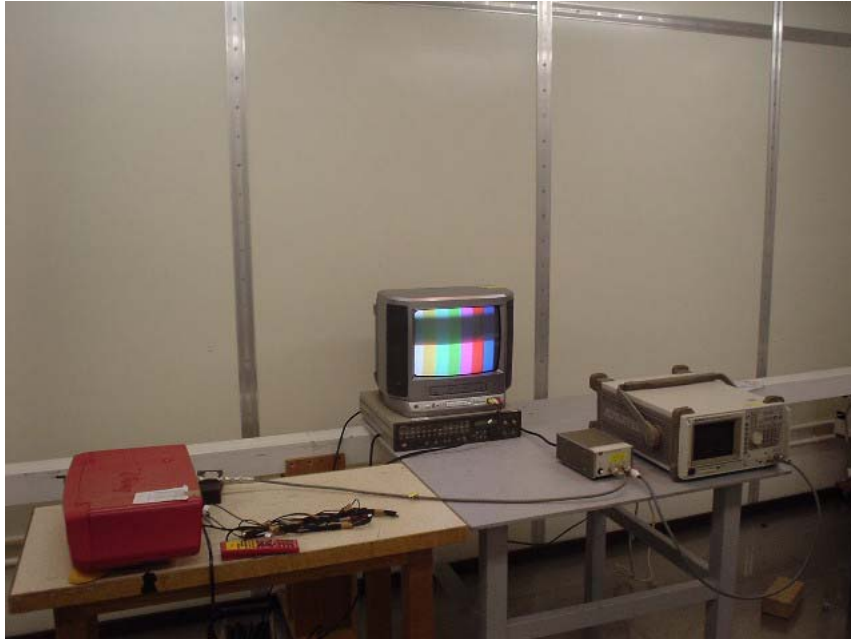
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RF output level / spurious emission



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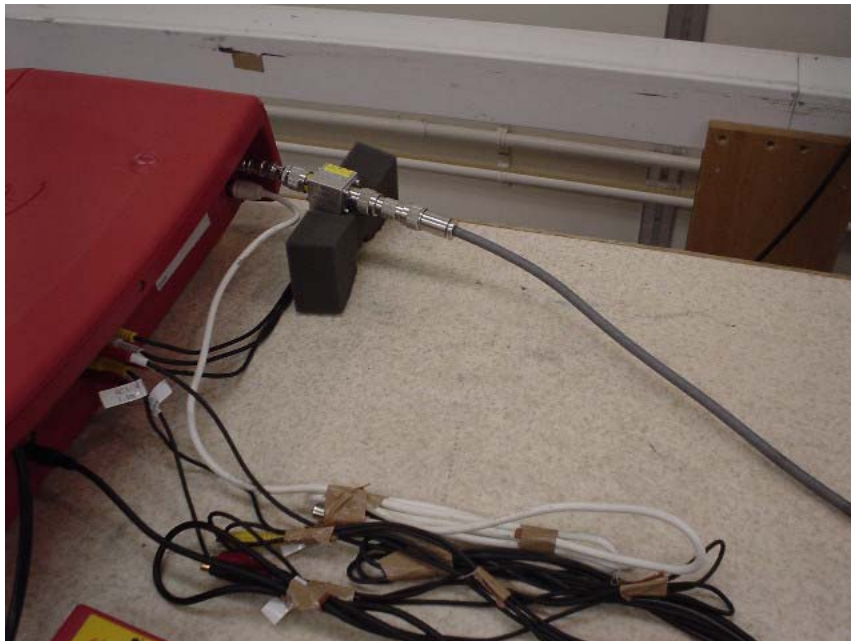
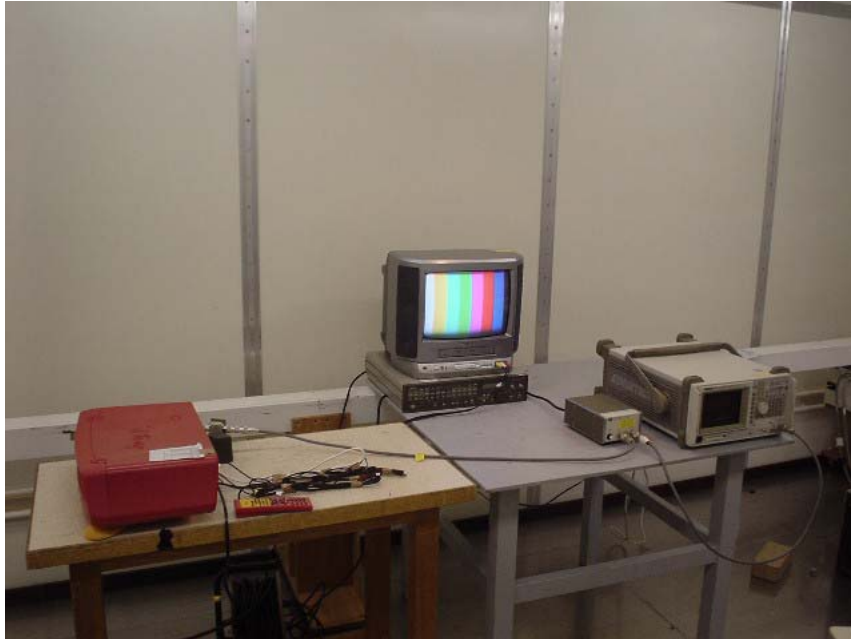
Yokowa EMC Lab.

108 Yokowa-cho, Ise-shi, Mie-ken 516-1106 JAPAN

Telephone: +81 596 39 1485

Facsimile: +81 596 39 0232

Antenna transfer switch



UL Apex Co., Ltd.

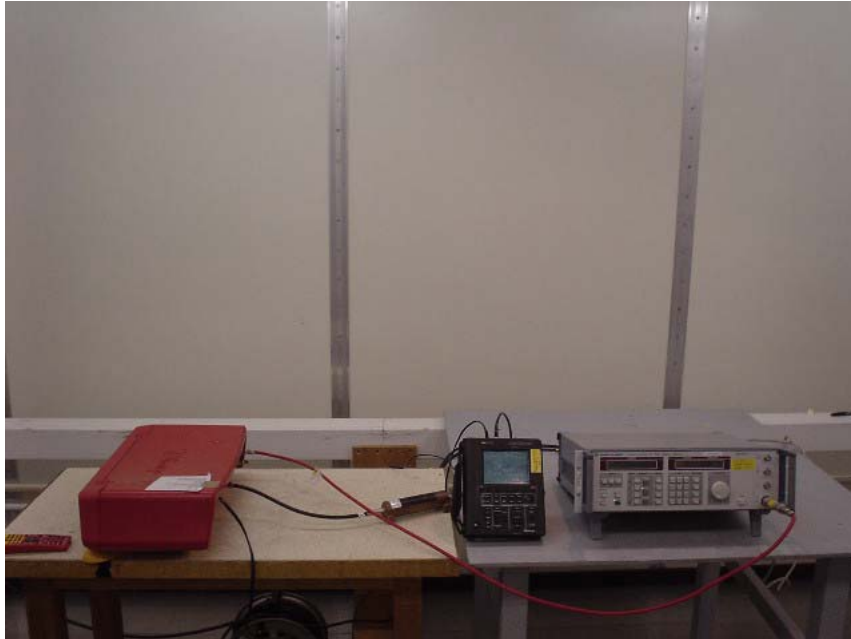
Yokowa EMC Lab.

108 Yokowa-cho, Ise-shi, Mie-ken 516-1106 JAPAN

Telephone: +81 596 39 1485

Facsimile: +81 596 39 0232

Picture sensitivity



UL Apex Co., Ltd.

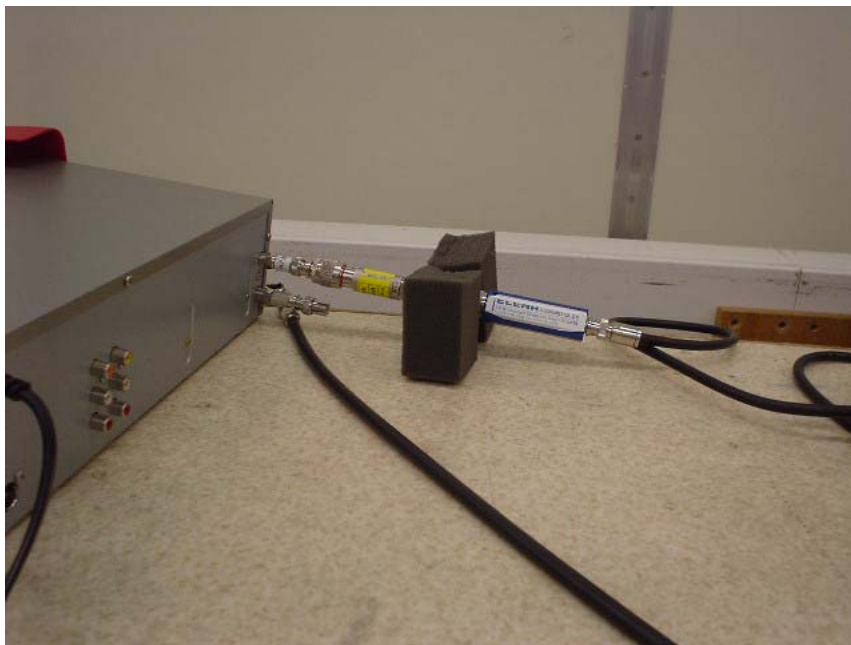
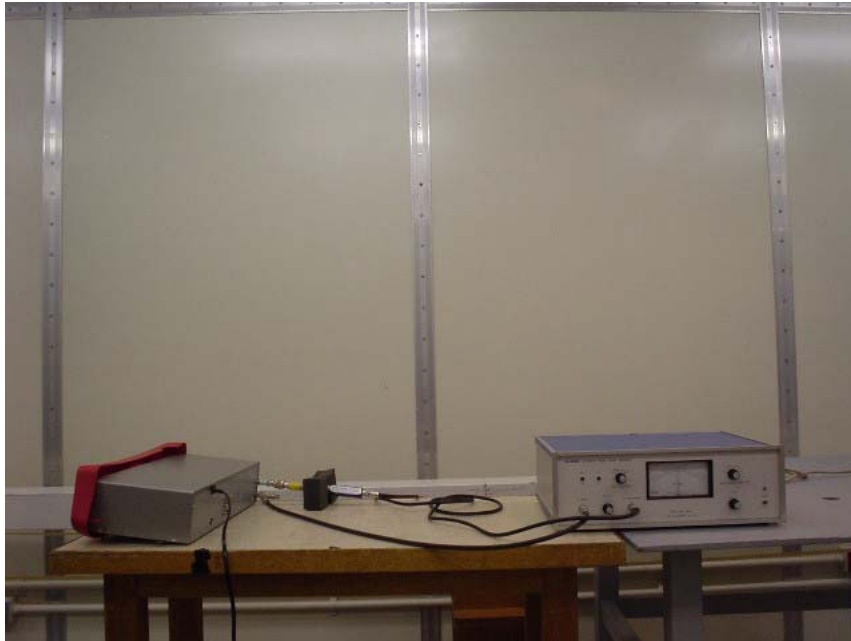
Yokowa EMC Lab.

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Noise figure



UL Apex Co., Ltd.

Yokowa EMC Lab.

108 Yokowa-cho, Ise-shi, Mie-ken 516-1106 JAPAN

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DATA OF CONDUCTION TEST

UL Apex Co., Ltd.

YOKOWA No.1 SHIELD ROOM

Report No. : 24KE0255-Y-1

Applicant : Orion Electric Co., Ltd.
 Kind of Equipment : DVD/VCR
 Model No. : DVD2100-C
 Serial No. : -
 Power : AC120V/60Hz
 Mode : TV Reception+Rec (0dBm)
 Remarks :
 Date : 6/29/2004
 Phase : Single Phase
 Temperature : 25 °C
 Humidity : 51 %
 Regulation : FCC Part15 CLASS B (2003)

Engineer : Tsubasa Takayama

No.	FREQ. [MHz]	READING (N)		READING (L1)		LISN FACTOR [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
		QP	AV	QP	AV				QP	AV	QP	AV	QP	AV
		[dB μV]		[dB μV]					[dB]		[dB μV]		[dB μV]	[dB]
1.	0.1500	46.7	-	47.1	-	0.1	0.1	0.0	47.3	-	66.0	56.0	18.7	-
2.	0.2308	37.8	-	38.2	-	0.2	0.1	0.0	38.5	-	62.4	52.4	23.9	-
3.	0.5025	22.9	-	24.4	-	0.2	0.2	0.0	24.8	-	56.0	46.0	31.2	-
4.	1.0621	25.2	-	25.8	-	0.2	0.2	0.0	26.2	-	56.0	46.0	29.8	-
5.	18.4321	28.4	-	28.5	-	1.6	0.7	0.0	30.8	-	60.0	50.0	29.2	-
6.	23.0406	25.6	-	25.3	-	1.7	0.8	0.0	28.1	-	60.0	50.0	31.9	-

CALCULATION: READING + LISN FACTOR + CABLE LOSS + ATTEN.

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

DATA OF CONDUCTION TEST

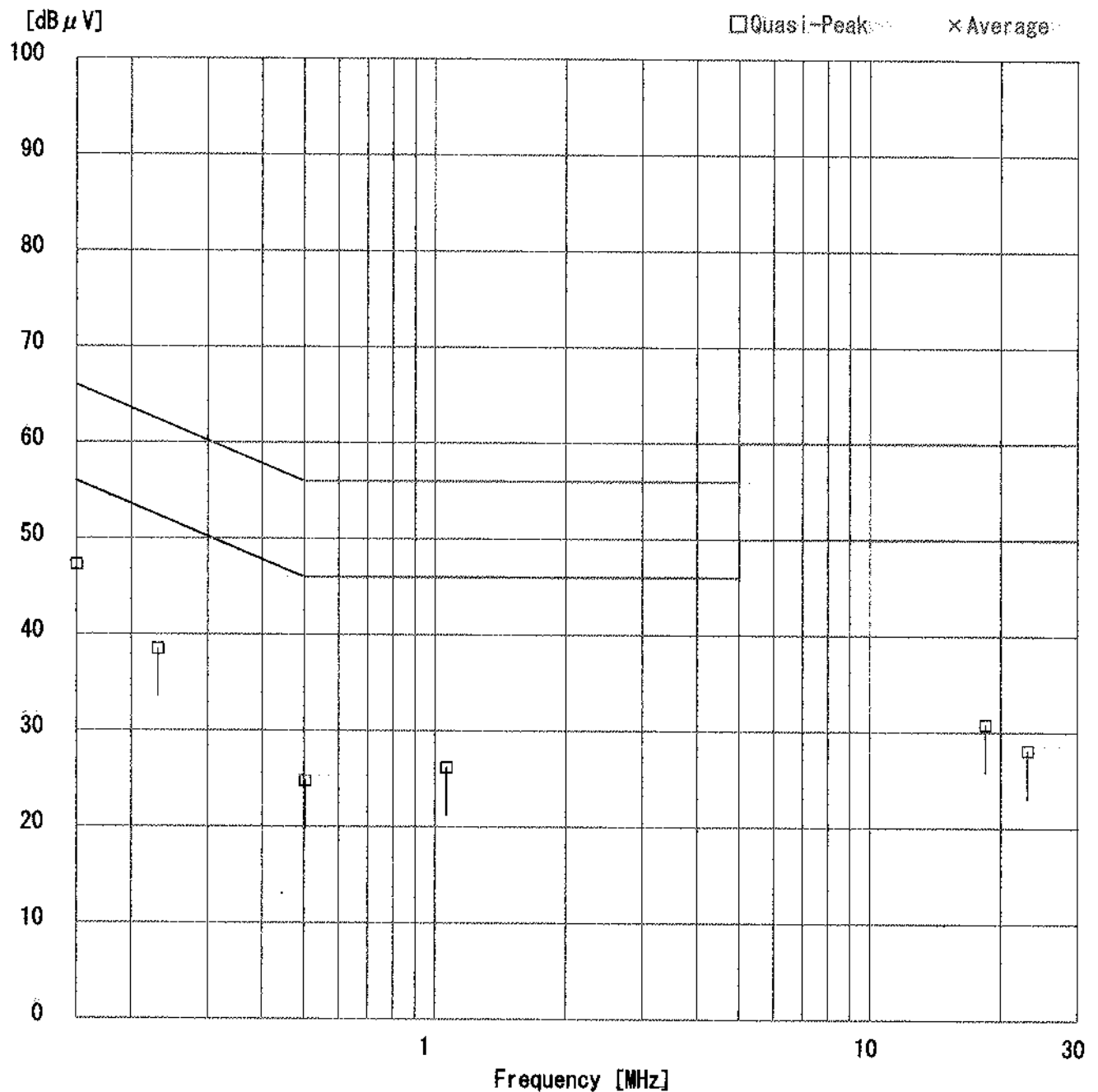
UL Apex Co., Ltd.

YOKOWA No.1 SHIELD ROOM

Report No. : 24KE0255-Y-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception+Rec (0dBm)
Remarks :
Date : 6/29/2004
Phase : Single Phase
Temperature : 25 °C
Humidity : 51 %
Regulation : FCC Part15 CLASS B (2003)

Engineer : Tsubasa Takayama



DATA OF CONDUCTION TEST CHART

UL Apex Co., Ltd.

YOKOWA No.1 SHIELD ROOM

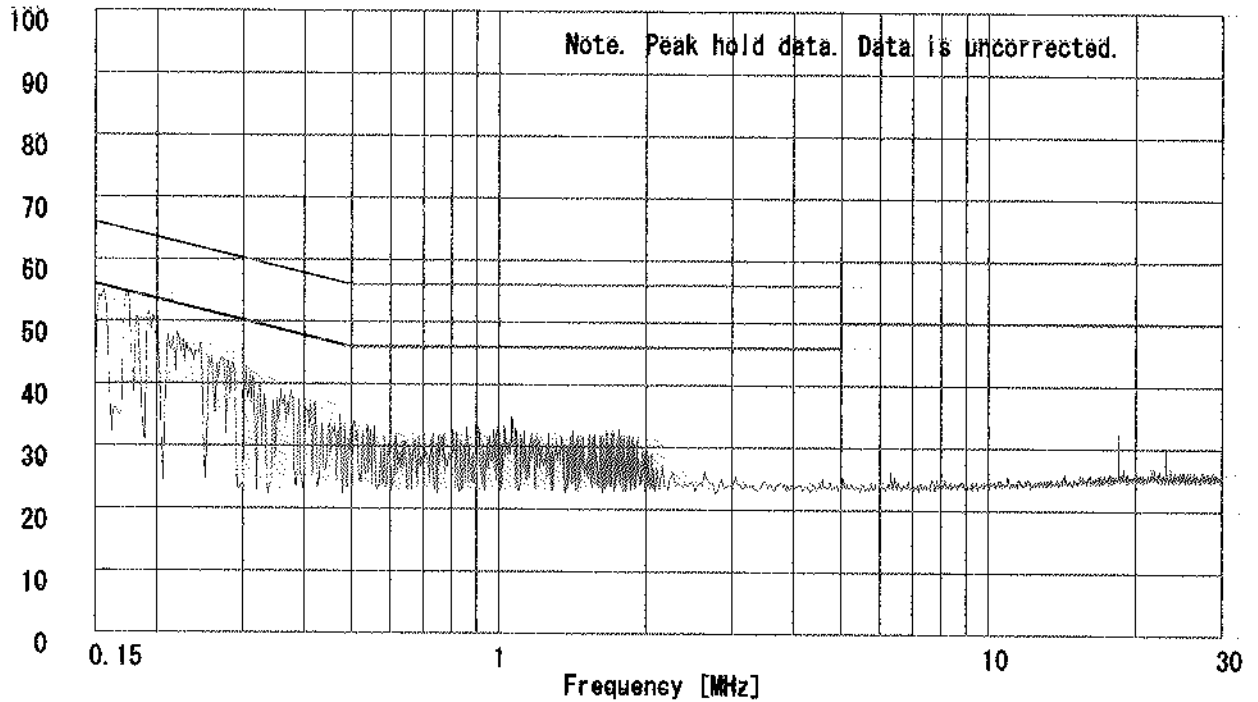
Report No. : 24KE0255-Y-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception+Rec (0dBm)
Remarks :
Date : 6/29/2004
Phase : Single Phase
Temperature : 25 °C
Humidity : 51 %
Regulation 1 : FCC Part15 CLASS B (2003)
Regulation 2 : None

Engineer : Tsubasa Takayama

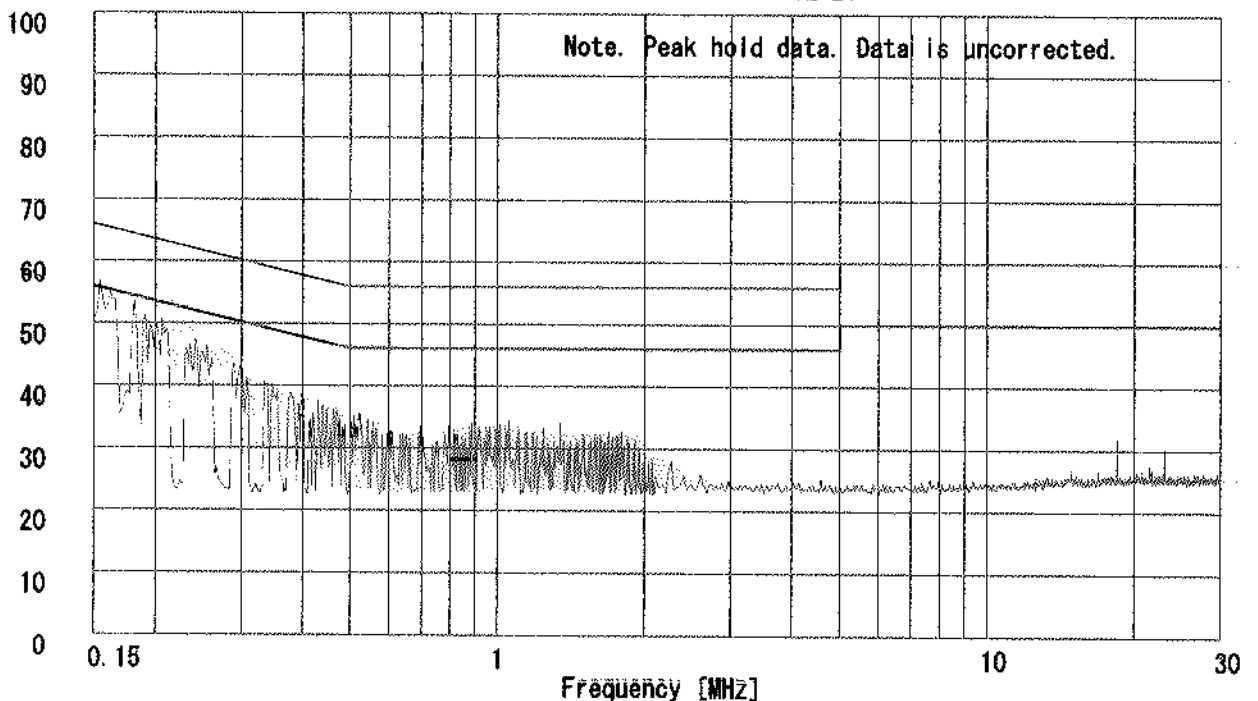
Emission Level [dB μ V]

PHASE:N



Emission Level [dB μ V]

PHASE:L1



DATA OF CONDUCTION TEST

UL Apex Co., Ltd.

YOKOWA No.1 SHIELD ROOM

Report No. : 24KE0255-Y-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception+Rec (25dBm)
Remarks :
Date : 6/29/2004
Phase : Single Phase
Temperature : 25 °C
Humidity : 51 %
Regulation : FCC Part15 CLASS B (2003)

Engineer : Tsubasa Takayama

No.	FREQ. [MHz]	READING (N)		READING (L1)		LISN FACTOR [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
		QP [dB μ V]	AV	QP [dB μ V]	AV				QP [dB]	AV [dB μ V]	QP [dB μ V]	AV [dB μ V]	QP [dB]	AV [dB]
1.	0.1500	46.7	-	47.0	-	0.1	0.1	0.0	47.2	-	66.0	56.0	18.8	-
2.	0.2316	37.6	-	38.0	-	0.2	0.1	0.0	38.3	-	62.4	52.4	24.1	-
3.	0.5023	22.8	-	24.3	-	0.2	0.2	0.0	24.7	-	56.0	46.0	31.3	-
4.	1.0601	26.3	-	25.9	-	0.2	0.2	0.0	26.7	-	56.0	46.0	29.3	-
5.	18.4316	28.4	-	28.3	-	1.6	0.7	0.0	30.7	-	60.0	50.0	29.3	-
6.	23.0406	25.7	-	25.4	-	1.7	0.8	0.0	28.2	-	60.0	50.0	31.8	-

CALCULATION: READING + LISN FACTOR + CABLE LOSS + ATTEN.

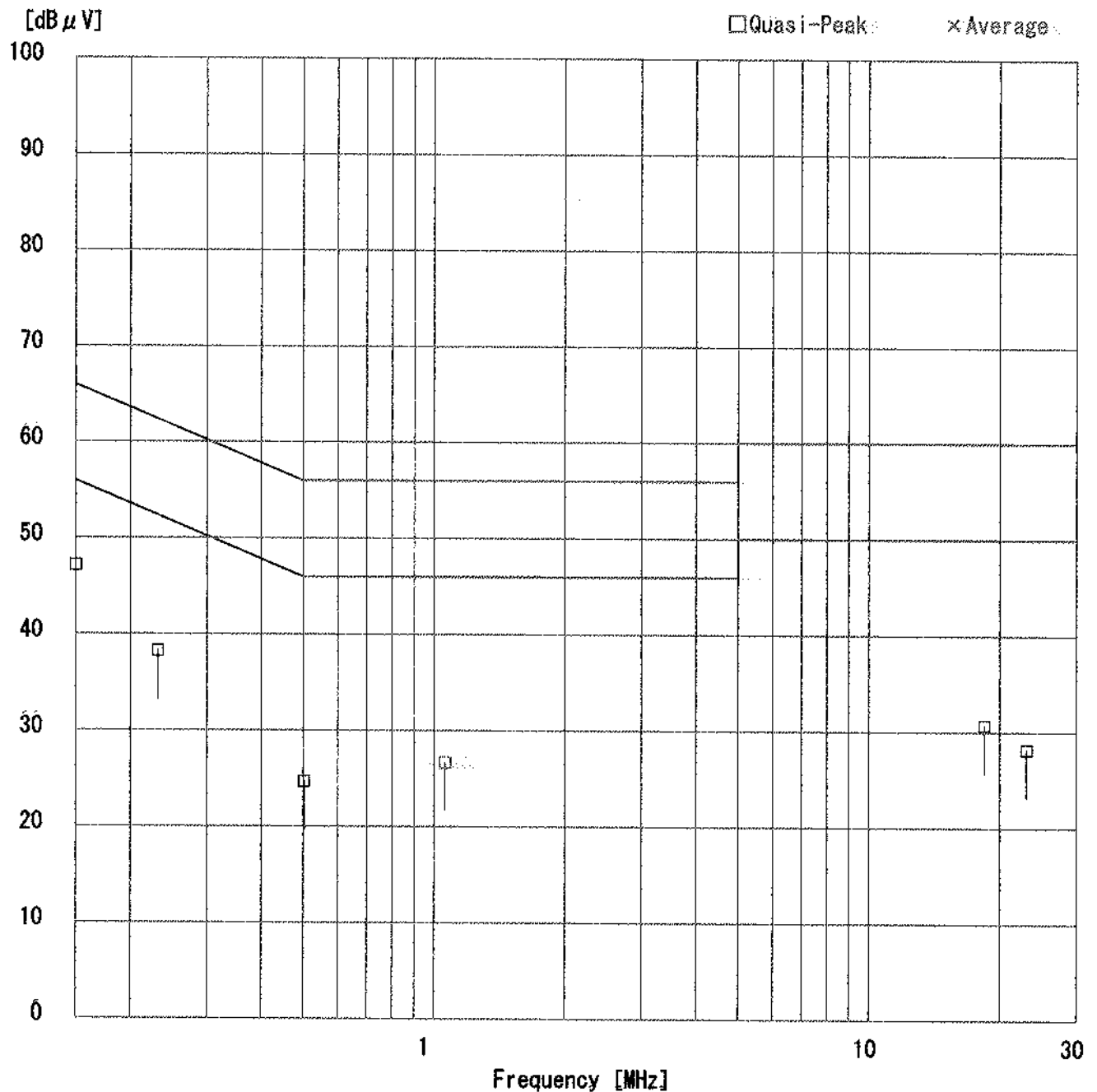
Except for the above table: adequate margin data below the limits.

DATA OF CONDUCTION TEST

UL Apex Co., Ltd.
YOKOWA No.1 SHIELD ROOM
Report No. : 24KE0255-Y-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception+Rec (25dBm)
Remarks :
Date : 6/29/2004
Phase : Single Phase
Temperature : 25 °C
Humidity : 51 %
Regulation : FCC Part15 CLASS B (2003)

Engineer : Tsubasa Takayama



DATA OF CONDUCTION TEST CHART

UL Apex Co., Ltd.

YOKOWA No.1 SHIELD ROOM

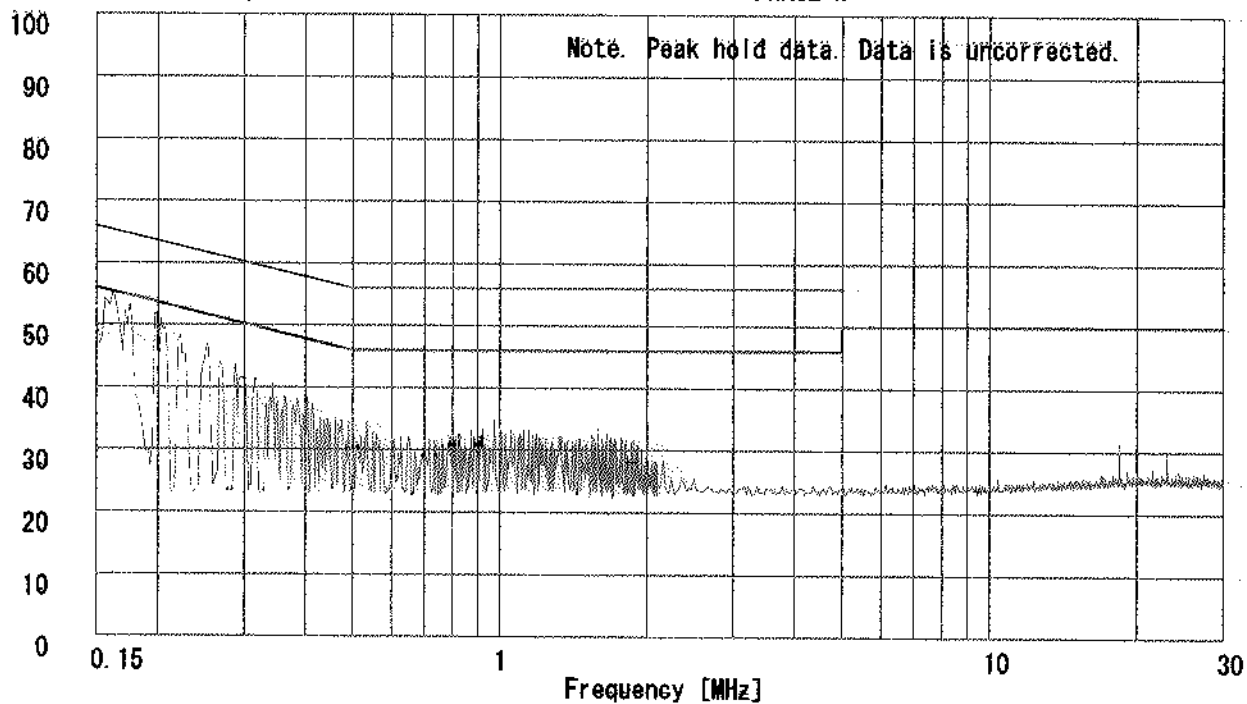
Report No. : 24KE0255-Y-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception+Rec (25dBm)
Remarks :
Date : 6/29/2004
Phase : Single Phase
Temperature : 25 °C
Humidity : 51 %
Regulation 1 : FCC Part15 CLASS B (2003)
Regulation 2 : None

Engineer : Tsubasa Takayama

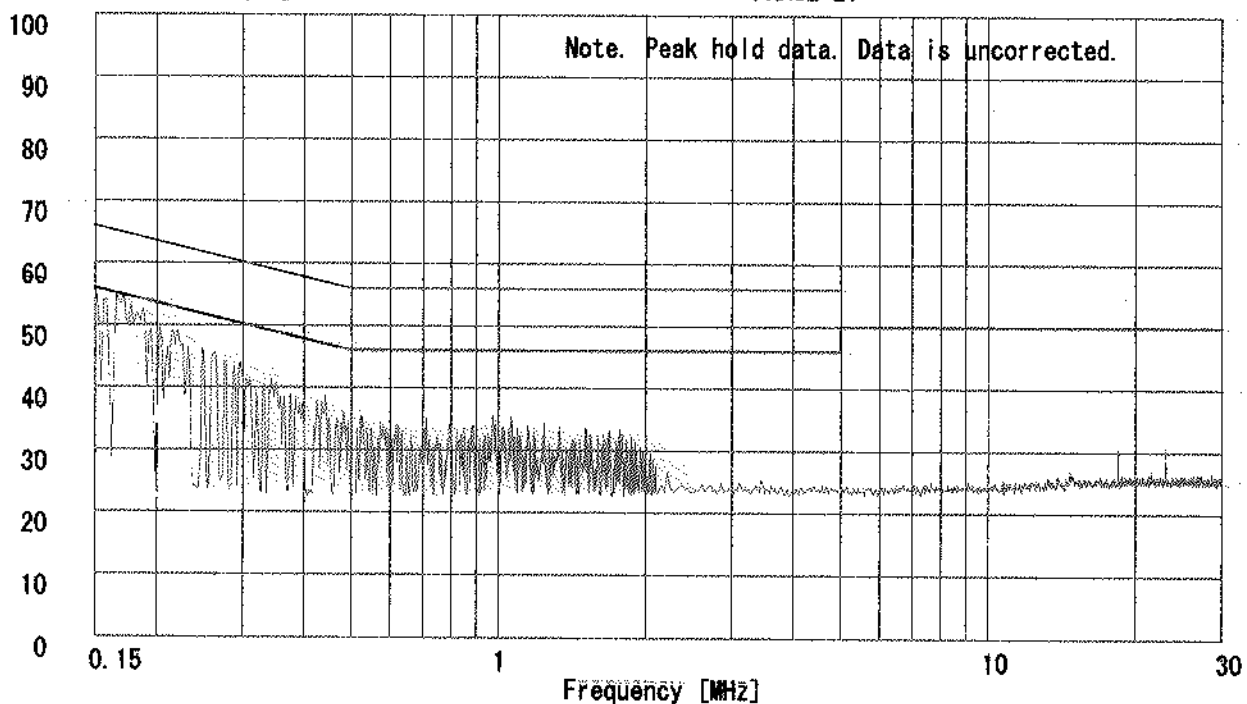
Emission Level [dB μ V]

PHASE:N



Emission Level [dB μ V]

PHASE:L1



DATA OF CONDUCTION TEST

UL Apex Co., Ltd.

YOKOWA No.1 SHIELD ROOM

Report No. : 24KE0255-Y-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : VCR Playback
Remarks :
Date : 6/29/2004
Phase : Single Phase
Temperature : 25 °C
Humidity : 51 %
Regulation : FCC Part15 CLASS B(2003)

Engineer : Tsubasa Takayama

No.	FREQ. [MHz]	READING (N)		READING (L1)		LISN FACTOR [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
		QP [dB μV]	AV [dB μV]	QP [dB μV]	AV [dB μV]				QP [dB]	AV [dB μV]	QP [dB μV]	AV [dB μV]	QP [dB μV]	AV [dB]
1.	0.1500	46.8	-	47.2	-	0.1	0.1	0.0	47.4	-	66.0	56.0	18.6	-
2.	0.2324	38.3	-	38.5	-	0.2	0.1	0.0	38.8	-	62.4	52.4	23.6	-
3.	0.5027	25.1	-	26.4	-	0.2	0.2	0.0	26.8	-	56.0	46.0	29.2	-
4.	1.2641	24.7	-	23.9	-	0.2	0.2	0.0	25.1	-	56.0	46.0	30.9	-
5.	13.2048	19.0	-	18.4	-	1.0	0.6	0.0	20.6	-	60.0	50.0	39.4	-
6.	28.6352	22.5	-	22.1	-	1.5	0.9	0.0	24.9	-	60.0	50.0	35.1	-

CALCULATION: READING + LISN FACTOR + CABLE LOSS + ATTEN.

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

DATA OF CONDUCTION TEST

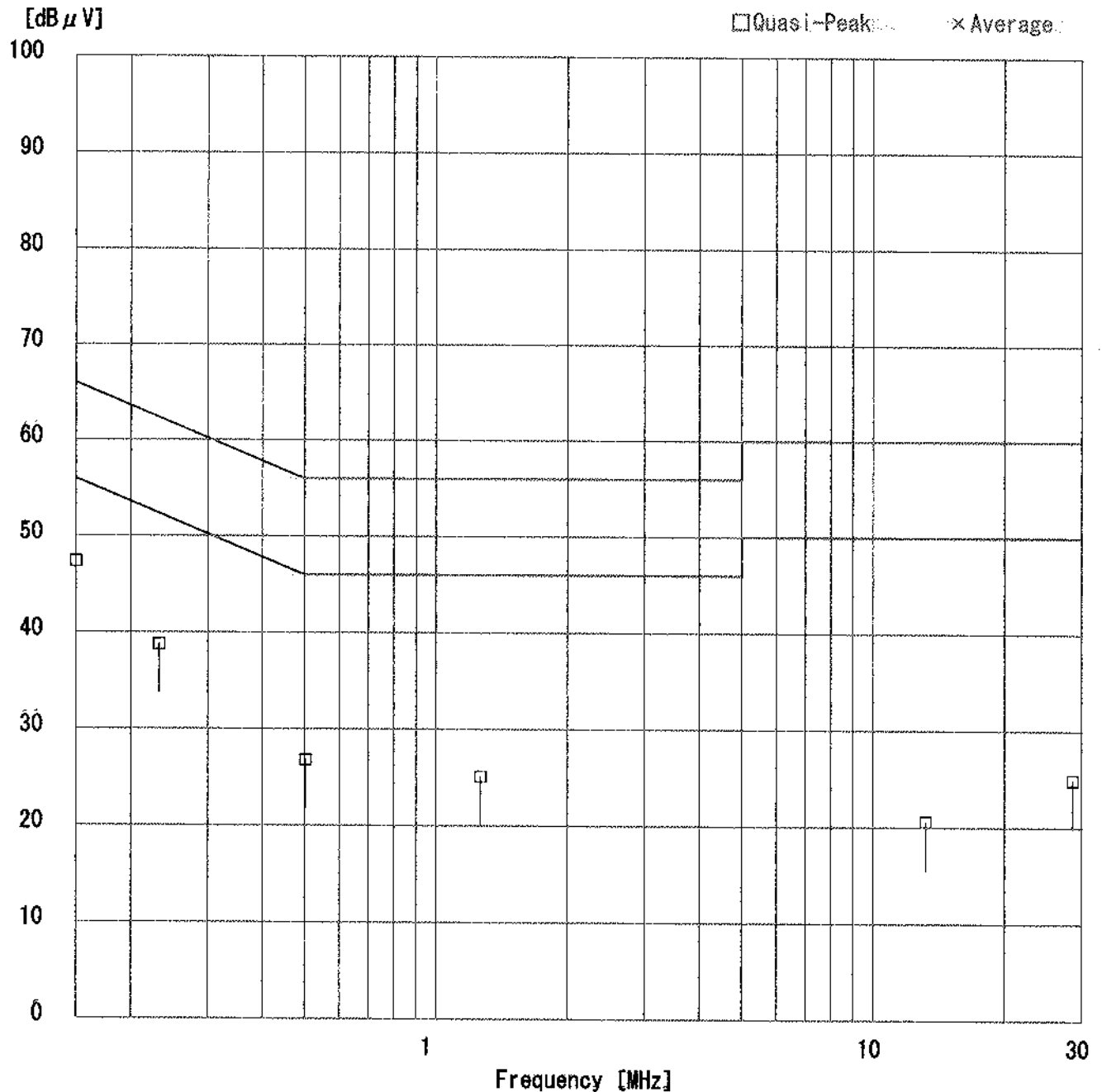
UL Apex Co., Ltd.

YOKOWA No.1 SHIELD ROOM

Report No. : 24KE0255-Y-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : VCR Playback
Remarks :
Date : 6/29/2004
Phase : Single Phase
Temperature : 25 °C
Humidity : 51 %
Regulation : FCC Part15 CLASS B (2003)

Engineer : Tsubasa Takayama



DATA OF CONDUCTION TEST CHART

UL Apex Co., Ltd.

YOKOWA No.1 SHIELD ROOM

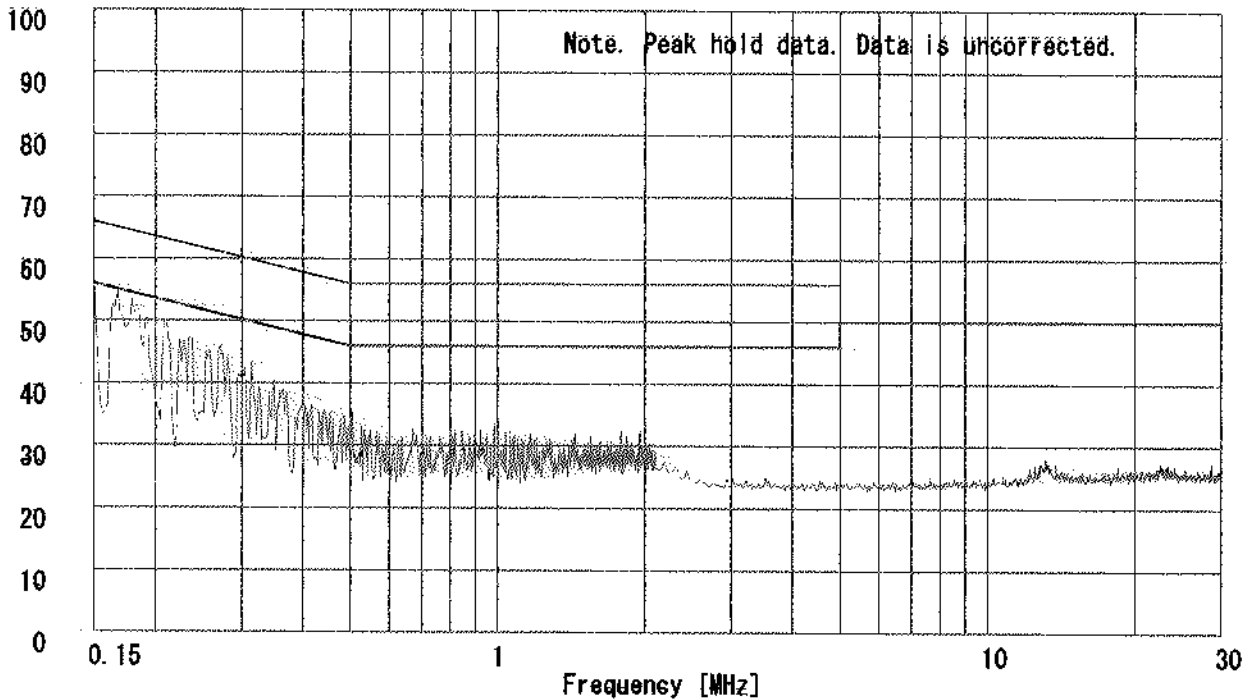
Report No. : 24KE0255-Y-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : VCR Playback
Remarks :
Date : 6/29/2004
Phase : Single Phase
Temperature : 25 °C
Humidity : 51 %
Regulation 1 : FCC Part15 CLASS B(2003)
Regulation 2 : None

Engineer : Tsubasa Takayama

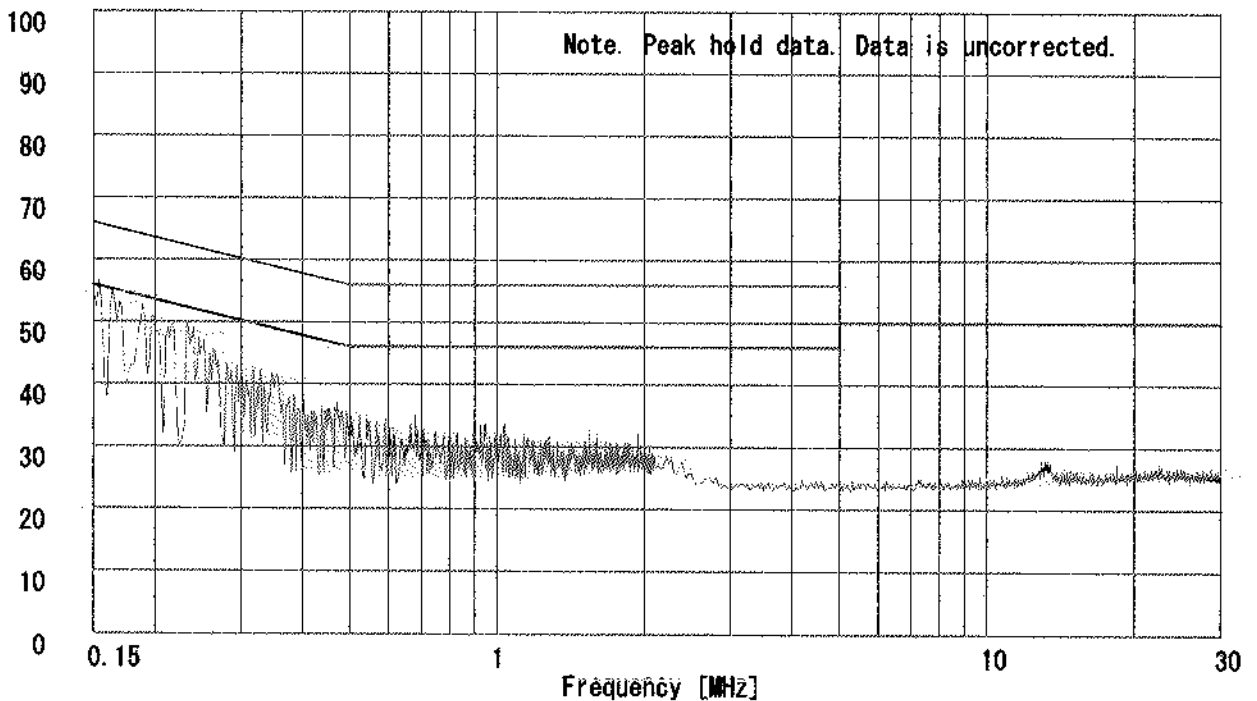
Emission Level [dB μ V]

PHASE:N



Emission Level [dB μ V]

PHASE:L1



DATA OF CONDUCTION TEST

UL Apex Co., Ltd.
YOKOWA No.1 SHIELD ROOM
Report No. : 24KE0255-Y-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks :
Date : 6/29/2004
Phase : Single Phase
Temperature : 25 °C
Humidity : 51 %
Regulation : FCC Part15 CLASS B(2003)

Engineer : Tsubasa Takayama

No.	FREQ. [MHz]	READING (N)		READING (L1)		LISN FACTOR [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
		QP [dB μ V]	AV [dB μ V]	QP [dB μ V]	AV [dB μ V]				QP [dB]	AV [dB μ V]	QP [dB μ V]	AV [dB μ V]	QP [dB]	AV [dB]
1.	0.1500	46.7	-	47.0	-	0.1	0.1	0.0	47.2	-	66.0	56.0	18.8	-
2.	0.2330	42.3	-	38.8	-	0.2	0.1	0.0	42.6	-	62.3	52.3	19.7	-
3.	0.5021	26.0	-	26.3	-	0.2	0.2	0.0	26.7	-	56.0	46.0	29.3	-
4.	1.0552	23.3	-	23.1	-	0.2	0.2	0.0	23.7	-	56.0	46.0	32.3	-
5.	13.1847	23.0	-	23.3	-	1.0	0.6	0.0	24.9	-	60.0	50.0	35.1	-
6.	28.6359	23.3	-	23.1	-	1.5	0.9	0.0	25.7	-	60.0	50.0	34.3	-

CALCULATION: READING + LISN FACTOR + CABLE LOSS + ATTEN.

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

DATA OF CONDUCTION TEST

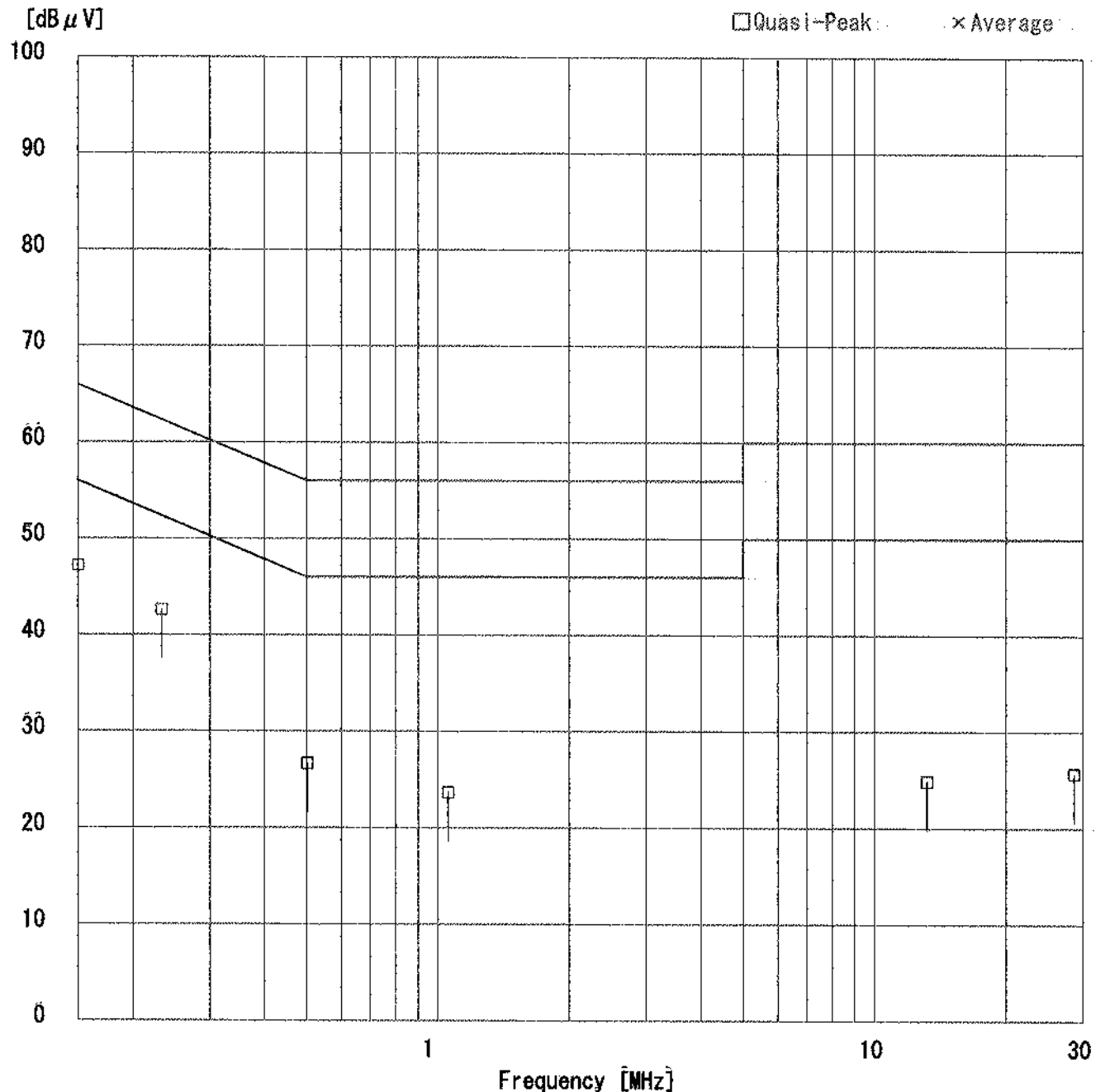
UL Apex Co., Ltd.

YOKOWA No.1 SHIELD ROOM

Report No. : 24KE0255-Y-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks :
Date : 6/29/2004
Phase : Single Phase
Temperature : 25 °C
Humidity : 51 %
Regulation : FCC Part15 CLASS B (2003)

Engineer : Tsubasa Takayama



DATA OF CONDUCTION TEST CHART

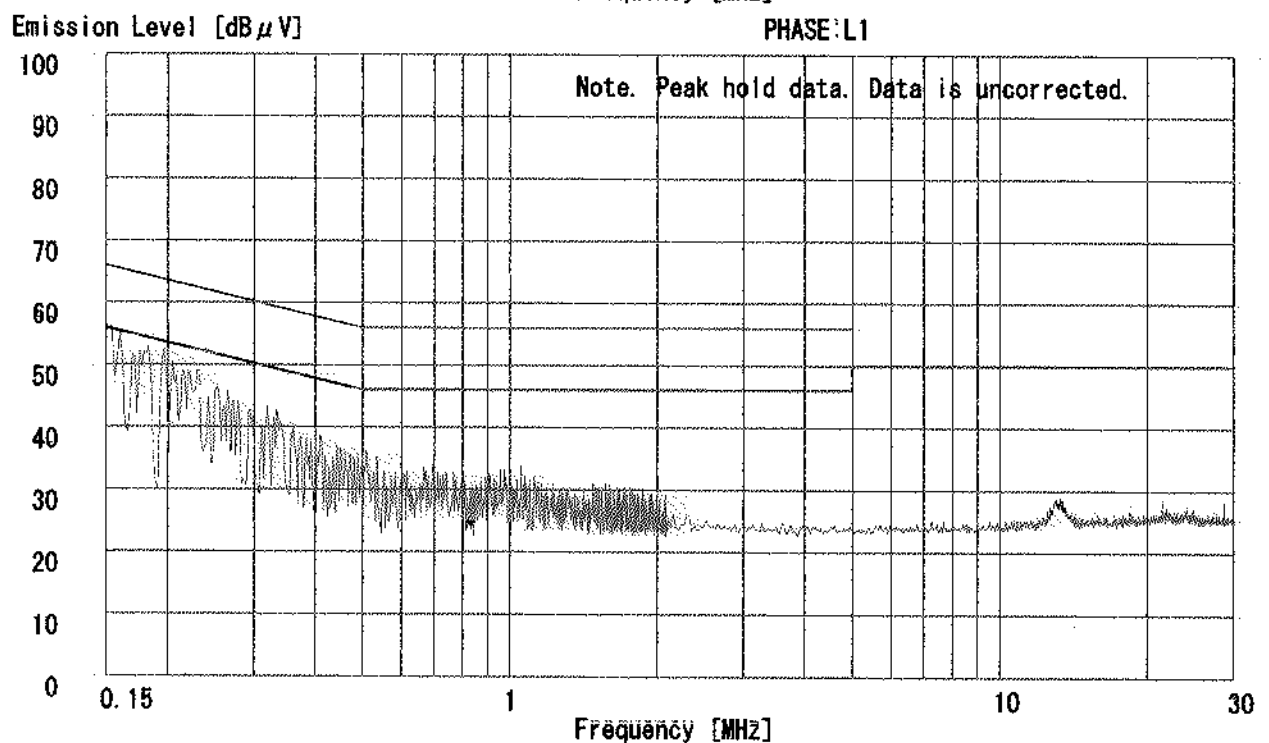
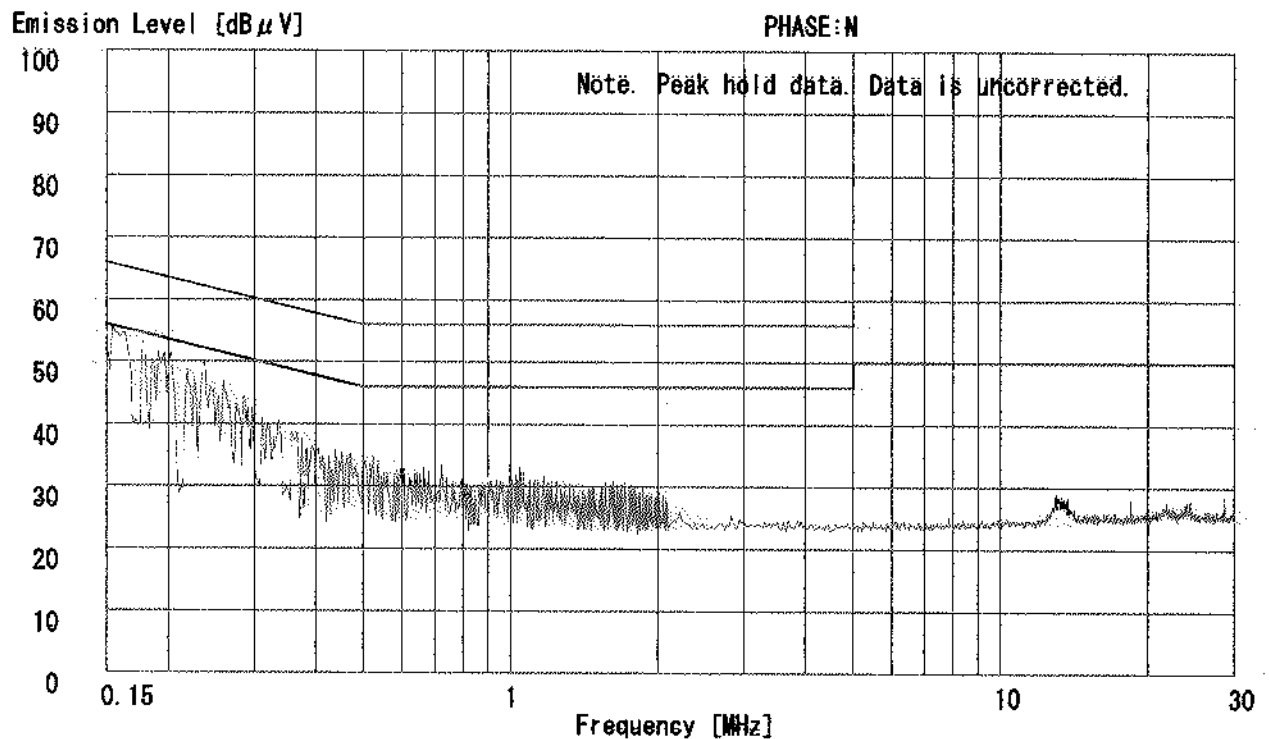
UL Apex Co., Ltd.

YOKOWA No.1 SHIELD ROOM

Report No. : 24KE0255-Y-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks :
Date : 6/29/2004
Phase : Single Phase
Temperature : 25 °C
Humidity : 51 %
Regulation 1 : FCC Part15 CLASS B(2003)
Regulation 2 : None

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.
Yokowa EMC No.2 Open Test Site

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL No. : DVD2100-C
POWER : AC120V/60Hz
DESCRIPTION : TV Reception

REPORT No. : 24KE0255-YW-I
REGULATION : FCC PART15 B
TEST DISTANCE : 3m
ATTENUATION : 101-847MHz 6dB
1030-1694MHz 0dB
DATE : June 26, 2004
TEMP/HUMID. : 27°C/42%
ENGINEER : Tsubasa Takayama

*C.Factor[dB]=ANT Factor + Cable Loss - Amp Gain

For the measurement above 1GHz, measurement of AV detector is performed only when the result of PK detector exceed the limit of AV.

CH.	FREQ	READING(QP)			ANT	C.Factor	RESULT(QP)			LIMIT		MARGIN(QP)			
	[MHz]	HOR.	VER.		TYPE	[dBuV]	HOR.	VER.		[QP]		HOR.	VER.		
		[dBuV]					[dBuV/m]			[dBuV/m]		[dB]			
VHF															
2	101	26.1	28.2			BC	-11.0	15.1	17.2			43.5			
	202	22.6	22.5			BC	-4.0	18.6	18.5			43.5		28.4 26.3	
	303					LO	-5.9					46.0		>15.0	
	404					LO	-4.2								46.0
	505					LO	-1.1								46.0
	606					LO	0.9								46.0
	707					LO	2.7								46.0
	808					LO	4.2								46.0
	909					LO	5.8								46.0
		READING(PK)	READING(AV)	ANT	C.Factor	RESULT(PK)	RESULT(AV)	LIMIT	LIMIT	MARGIN(PK)	MARGIN(AV)				
		HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[PK]	[AV]	HOR. VER.	HOR. VER.				
		[dBuV]		[dBuV]			[dBuV/m]		[dBuV/m]		[dB]		[dB]		
	1010			HO	-12.0			74.0	54.0	>27.0	>10.0				
	1111			HO	-11.4			74.0	54.0						
	1212			HO	-10.9			74.0	54.0						
	1313			HO	-10.4			74.0	54.0						
	1414			HO	-9.8			74.0	54.0						
1515	HO			-9.2	74.0			54.0							
1616	HO			-8.3	74.0			54.0							
CH.	FREQ	READING(QP)			ANT	C.Factor	RESULT(QP)			LIMIT		MARGIN(QP)			
	[MHz]	HOR.	VER.		TYPE	[dBuV]	HOR.	VER.		[QP]		HOR.	VER.		
		[dBuV]					[dBuV/m]			[dBuV/m]		[dB]			
3	107	25.9	25.9			BC	-10.0	15.9	15.9			43.5		27.6 27.6	
	214	22.8	22.7			BC	-3.8	19.0	18.9			43.5		24.5 24.6	
	321					LO	-5.6					46.0		>15.0	
	428					LO	-3.5								46.0
	535					LO	-0.5								46.0
	642					LO	1.5								46.0
	749					LO	3.3								46.0
	856					LO	4.7								46.0
	963					LO	7.8								54.0
		READING(PK)	READING(AV)	ANT	C.Factor	RESULT(PK)	RESULT(AV)	LIMIT	LIMIT	MARGIN(PK)	MARGIN(AV)				
		HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[PK]	[AV]	HOR. VER.	HOR. VER.				
		[dBuV]		[dBuV]			[dBuV/m]		[dBuV/m]		[dB]		[dB]		
	1070			HO	-11.7			74.0	54.0	>27.0	>10.0				
	1177			HO	-11.1			74.0	54.0						
	1284			HO	-10.5			74.0	54.0						
	1391			HO	-9.9			74.0	54.0						
	1498			HO	-9.4			74.0	54.0						
1605	HO			-8.4	74.0			54.0							
CH.	FREQ	READING(QP)			ANT	C.Factor	RESULT(QP)			LIMIT		MARGIN(QP)			
	[MHz]	HOR.	VER.		TYPE	[dBuV]	HOR.	VER.		[QP]		HOR.	VER.		
		[dBuV]					[dBuV/m]			[dBuV/m]		[dB]			
4	113	25.6	25.3			BC	-8.8	16.8	16.5			43.5		26.7 27.0	
	226					BC	-3.7					46.0		>15.0	
	339					LO	-5.4								46.0
	452					LO	-2.7								46.0
	565					LO	0.0								46.0
	678					LO	2.2								46.0
	791					LO	4.0								46.0
	904					LO	5.6								46.0
		READING(PK)	READING(AV)	ANT	C.Factor	RESULT(PK)	RESULT(AV)	LIMIT	LIMIT	MARGIN(PK)	MARGIN(AV)				
		HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[PK]	[AV]	HOR. VER.	HOR. VER.				
		[dBuV]		[dBuV]			[dBuV/m]		[dBuV/m]		[dB]		[dB]		
	1017			HO	-11.9			74.0	54.0	>27.0	>10.0				
	1130			HO	-11.3			74.0	54.0						
	1243			HO	-10.7			74.0	54.0						
	1356			HO	-10.1			74.0	54.0						
	1469			HO	-9.5			74.0	54.0						
	1582			HO	-8.6			74.0	54.0						

DATA OF RADIATION TEST

UL Apex Co., Ltd.
Yokowa EMC No.2 Open Test Site

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL No. : DVD2100-C
POWER : AC120V/60Hz
DESCRIPTION : TV Reception

REPORT No. : 24KE0255-YW-1
REGULATION : FCC PART15 B
TEST DISTANCE : 3m
ATTENUATION : 101-847MHz 6dB
1030-1694MHz 0dB
DATE : June 26, 2004
TEMP/HUMID : 27°C/42%
ENGINEER : Tsubasa Takayama

*C.Factor[dB]=ANT Factor + Cable Loss - Amp Gain

For the measurement above 1GHz, measurement of AV detector is performed only when the result of PK detector exceed the limit of AV.

CH.	FREQ [MHz]	READING(QP) HOR. VER. [dBuV]				ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. VER. [dBuV/m]				LIMIT [QP] [dBuV/m]			MARGIN(QP) HOR. VER. [dB]			
VHF																		
5	123	27.1	27.3			BC	-7.5	19.6	19.8			43.5			23.9	23.7		
	246					BC	-3.5					46.0						
	369					LO	-4.7					46.0						
	492					LO	-1.5					46.0						
	615					LO	0.9					46.0						
	738					LO	3.2					46.0						
	861					LO	5.0					46.0						
	984					LO	8.5					54.0						
		READING(PK) HOR. VER. [dBuV]		READING(AV) HOR. VER. [dBuV]		ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. VER. [dBuV/m]		RESULT(AV) HOR. VER. [dBuV/m]		LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]		MARGIN(PK) HOR. VER. [dB]		MARGIN(AV) HOR. VER. [dB]	
	1107					HO	-11.4					74.0	54.0					
	1230					HO	-10.8					74.0	54.0					
	1353					HO	-10.2					74.0	54.0					
	1476					HO	-9.5					74.0	54.0					
	1599					HO	-8.4					74.0	54.0					
CH.	FREQ [MHz]	READING(QP) HOR. VER. [dBuV]				ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. VER. [dBuV/m]				LIMIT [QP] [dBuV/m]			MARGIN(QP) HOR. VER. [dB]			
6	129	25.1	25.6			BC	-7.0	18.1	18.6			43.5			25.4	24.9		
	258					BC	-3.1					46.0						
	387					LO	-4.4					46.0						
	516					LO	-1.0					46.0						
	645					LO	1.5					46.0						
	774					LO	3.7					46.0						
	903					LO	5.6					46.0						
		READING(PK) HOR. VER. [dBuV]		READING(AV) HOR. VER. [dBuV]		ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. VER. [dBuV/m]		RESULT(AV) HOR. VER. [dBuV/m]		LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]		MARGIN(PK) HOR. VER. [dB]		MARGIN(AV) HOR. VER. [dB]	
	1032					HO	-11.9					74.0	54.0					
	1161					HO	-11.2					74.0	54.0					
	1290					HO	-10.5					74.0	54.0					
	1419					HO	-9.8					74.0	54.0					
	1548					HO	-8.9					74.0	54.0					
	1677					HO	-7.7					74.0	54.0					
CH.	FREQ [MHz]	READING(QP) HOR. VER. [dBuV]				ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. VER. [dBuV/m]				LIMIT [QP] [dBuV/m]			MARGIN(QP) HOR. VER. [dB]			
7	221	22.5	22.7			BC	-3.8	18.7	18.9			46.0			27.3	27.1		
	442					LO	-3.1					46.0						
	663					LO	1.9					46.0						
	884					LO	5.5					46.0						
		READING(PK) HOR. VER. [dBuV]		READING(AV) HOR. VER. [dBuV]		ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. VER. [dBuV/m]		RESULT(AV) HOR. VER. [dBuV/m]		LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]		MARGIN(PK) HOR. VER. [dB]		MARGIN(AV) HOR. VER. [dB]	
	1105					HO	-11.5					74.0	54.0					
	1326					HO	-10.3					74.0	54.0					
	1547					HO	-8.9					74.0	54.0					
CH.	FREQ [MHz]	READING(QP) HOR. VER. [dBuV]				ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. VER. [dBuV/m]				LIMIT [QP] [dBuV/m]			MARGIN(QP) HOR. VER. [dB]			
8	227	23.1	23.3			BC	-3.7	19.4	19.6			46.0			26.6	26.4		
	454					LO	-2.6					46.0						
	681					LO	2.2					46.0						
	908					LO	5.8					46.0						
		READING(PK) HOR. VER. [dBuV]		READING(AV) HOR. VER. [dBuV]		ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. VER. [dBuV/m]		RESULT(AV) HOR. VER. [dBuV/m]		LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]		MARGIN(PK) HOR. VER. [dB]		MARGIN(AV) HOR. VER. [dB]	
	1135					HO	-11.3					74.0	54.0					
	1362					HO	-10.1					74.0	54.0					
	1589					HO	-8.5					74.0	54.0					

DATA OF RADIATION TEST

UL Apex Co., Ltd.
Yokawa EMC No.2 Open Test Site

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL No. : DVD2100-C
POWER : AC120V/60Hz
DESCRIPTION : TV Reception

REPORT No. : 24KE0255-YW-1
REGULATION : FCC PART15 B
TEST DISTANCE : 3m
ATTENUATION : 101-847MHz 6dB
1030-1694MHz 0dB
DATE : June 26, 2004
TEMP/HUMID. : 27°C/42%
ENGINEER : Tsubasa Takayama

*C.Factor[dB]=ANT Factor + Cable Loss - Amp Gain

For the measurement above 1GHz, measurement of AV detector is performed only when the result of PK detector exceed the limit of AV.

CH.	FREQ	READING(QP)	READING(AV)	ANT	C.Factor	RESULT(QP)	RESULT(AV)	LIMIT	MARGIN(QP)
	[MHz]	HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[Q] [V]	HOR. VER.
		[dBuV]	[dBuV]			[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB] [dB]
VHF									
9	233	25.1	24.5	BC	-3.6	21.5	20.9	46.0	24.5 25.1
	466			LO	-2.3			46.0	
	699			LO	2.6			46.0	
	932			LO	6.7			46.0	
		READING(PK)	READING(AV)	ANT	C.Factor	RESULT(PK)	RESULT(AV)	LIMIT	MARGIN(PK)
		HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[PK] [AV]	HOR. VER.
		[dBuV]	[dBuV]			[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB] [dB]
	1165			HO	-11.2			74.0	54.0
	1398			HO	-9.9			74.0	54.0
	1631			HO	-8.1			74.0	54.0
									>27.0
									>10.0
CH.	FREQ	READING(QP)	READING(AV)	ANT	C.Factor	RESULT(QP)	RESULT(AV)	LIMIT	MARGIN(QP)
	[MHz]	HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[Q] [V]	HOR. VER.
		[dBuV]	[dBuV]			[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB] [dB]
10	239	24.3	24.5	BC	-3.5	20.8	21.0	46.0	25.2 25.0
	478			LO	-2.0			46.0	
	717			LO	2.8			46.0	
	956			LO	7.5			46.0	
		READING(PK)	READING(AV)	ANT	C.Factor	RESULT(PK)	RESULT(AV)	LIMIT	MARGIN(PK)
		HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[PK] [AV]	HOR. VER.
		[dBuV]	[dBuV]			[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB] [dB]
	1195			HO	-11.1			74.0	54.0
	1434			HO	-9.8			74.0	54.0
	1673			HO	-7.8			74.0	54.0
									>27.0
									>10.0
CH.	FREQ	READING(QP)	READING(AV)	ANT	C.Factor	RESULT(QP)	RESULT(AV)	LIMIT	MARGIN(QP)
	[MHz]	HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[Q] [V]	HOR. VER.
		[dBuV]	[dBuV]			[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB] [dB]
11	245	25.2	24.3	BC	-3.5	21.7	20.8	46.0	24.3 25.2
	490			LO	-1.5			46.0	
	735			LO	3.2			46.0	
	980			LO	8.4			54.0	
		READING(PK)	READING(AV)	ANT	C.Factor	RESULT(PK)	RESULT(AV)	LIMIT	MARGIN(PK)
		HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[PK] [AV]	HOR. VER.
		[dBuV]	[dBuV]			[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB] [dB]
	1225			HO	-10.8			74.0	54.0
	1470			HO	-9.5			74.0	54.0
									>27.0
									>10.0
CH.	FREQ	READING(QP)	READING(AV)	ANT	C.Factor	RESULT(QP)	RESULT(AV)	LIMIT	MARGIN(QP)
	[MHz]	HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[Q] [V]	HOR. VER.
		[dBuV]	[dBuV]			[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB] [dB]
12	251	24.4	23.2	BC	-3.5	20.9	19.7	46.0	25.1 26.3
	502			LO	-1.2			46.0	
	753			LO	3.5			46.0	
		READING(PK)	READING(AV)	ANT	C.Factor	RESULT(PK)	RESULT(AV)	LIMIT	MARGIN(PK)
		HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[PK] [AV]	HOR. VER.
		[dBuV]	[dBuV]			[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB] [dB]
	1004			HO	-12.0			74.0	54.0
	1255			HO	-10.6			74.0	54.0
	1506			HO	-9.3			74.0	54.0
									>27.0
									>10.0
CH.	FREQ	READING(QP)	READING(AV)	ANT	C.Factor	RESULT(QP)	RESULT(AV)	LIMIT	MARGIN(QP)
	[MHz]	HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[Q] [V]	HOR. VER.
		[dBuV]	[dBuV]			[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB] [dB]
13	257	26.1	26.4	BC	-3.1	23.0	23.3	46.0	23.0 22.7
	514			LO	-1.0			46.0	
	771			LO	3.7			46.0	
		READING(PK)	READING(AV)	ANT	C.Factor	RESULT(PK)	RESULT(AV)	LIMIT	MARGIN(PK)
		HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[PK] [AV]	HOR. VER.
		[dBuV]	[dBuV]			[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB] [dB]
	1028			HO	-11.9			74.0	54.0
	1285			HO	-10.5			74.0	54.0
	1542			HO	-9.0			74.0	54.0
									>27.0
									>10.0

DATA OF RADIATION TEST

UL Apex Co., Ltd.
Yokohama EMC No.2 Open Test Site

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL No. : DVD2100-C
POWER : AC120V/60Hz
DESCRIPTION : TV Reception

REPORT No. : 24KE0255-YW-1
REGULATION : FCC PART15 B
TEST DISTANCE : 3m
ATTENUATION : 101-847MHz 6dB
1030-1694MHz 0dB
DATE : June 26, 2004
TEMP/HUMID. : 27°C/42%
ENGINEER : Tsubasa Takayama

*C.Factor[dB]=ANT Factor + Cable Loss - Amp Gain

For the measurement above 1GHz, measurement of AV detector is performed only when the result of PK detector exceed the limit of AV.

CH.	FREQ	READING(QP)	READING(AV)	ANT	C.Factor	RESULT(QP)	RESULT(AV)	LIMIT	LIMIT	MARGIN(QP)	MARGIN(AV)
	[MHz]	HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[dBuV/m]	[dBuV/m]	HOR. VER.	HOR. VER.
		[dBuV]	[dBuV]			[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]
UHF											
14	517	29.5	30.1	LO	-1.0	28.5	29.1	46.0	-	17.5	16.9
		READING(PK)	READING(AV)	ANT	C.Factor	RESULT(PK)	RESULT(AV)	LIMIT	LIMIT	MARGIN(PK)	MARGIN(AV)
		HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[PK]	[AV]	HOR. VER.	HOR. VER.
		[dBuV]	[dBuV]			[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]
	1034			HO	-11.9			74.0	54.0	>27.0	>10.0
	1551			HO	-8.9			74.0	54.0		
19	547	29.4	28.1	LO	-0.3	29.1	27.8	46.0	-	16.9	18.2
		READING(PK)	READING(AV)	ANT	C.Factor	RESULT(PK)	RESULT(AV)	LIMIT	LIMIT	MARGIN(PK)	MARGIN(AV)
		HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[PK]	[AV]	HOR. VER.	HOR. VER.
		[dBuV]	[dBuV]			[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]
	1094			HO	-11.5			74.0	54.0	>27.0	>10.0
	1641			HO	-8.0			74.0	54.0		
28	601	29.1	30.3	LO	0.7	29.8	31.0	46.0	-	16.2	15.0
		READING(PK)	READING(AV)	ANT	C.Factor	RESULT(PK)	RESULT(AV)	LIMIT	LIMIT	MARGIN(PK)	MARGIN(AV)
		HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[PK]	[AV]	HOR. VER.	HOR. VER.
		[dBuV]	[dBuV]			[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]
	1202			HO	-10.9			74.0	54.0	>27.0	>10.0
36	649	29.1	29.5	LO	1.6	30.7	31.1	46.0	-	15.3	14.9
		READING(PK)	READING(AV)	ANT	C.Factor	RESULT(PK)	RESULT(AV)	LIMIT	LIMIT	MARGIN(PK)	MARGIN(AV)
		HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[PK]	[AV]	HOR. VER.	HOR. VER.
		[dBuV]	[dBuV]			[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]
	1298			HO	-10.5			74.0	54.0	>27.0	>10.0
44	697	30.3	29.6	LO	2.6	32.9	32.2	46.0	-	13.1	13.8
		READING(PK)	READING(AV)	ANT	C.Factor	RESULT(PK)	RESULT(AV)	LIMIT	LIMIT	MARGIN(PK)	MARGIN(AV)
		HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[PK]	[AV]	HOR. VER.	HOR. VER.
		[dBuV]	[dBuV]			[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]
	1394			HO	-9.9			74.0	54.0	>27.0	>10.0
53	751	30.4	30.1	LO	3.4	33.8	33.5	46.0	-	12.2	12.5
		READING(PK)	READING(AV)	ANT	C.Factor	RESULT(PK)	RESULT(AV)	LIMIT	LIMIT	MARGIN(PK)	MARGIN(AV)
		HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[PK]	[AV]	HOR. VER.	HOR. VER.
		[dBuV]	[dBuV]			[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]
	1502			HO	-9.3			74.0	54.0	>27.0	>10.0
61	799	30.1	30.2	LO	4.1	34.2	34.3	46.0	-	11.8	11.7
		READING(PK)	READING(AV)	ANT	C.Factor	RESULT(PK)	RESULT(AV)	LIMIT	LIMIT	MARGIN(PK)	MARGIN(AV)
		HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[PK]	[AV]	HOR. VER.	HOR. VER.
		[dBuV]	[dBuV]			[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]
	1598			HO	-8.4			74.0	54.0	>27.0	>10.0
69	847	30.5	28.6	LO	4.5	35.0	33.1	46.0	-	11.0	12.9
		READING(PK)	READING(AV)	ANT	C.Factor	RESULT(PK)	RESULT(AV)	LIMIT	LIMIT	MARGIN(PK)	MARGIN(AV)
		HOR. VER.	HOR. VER.	TYPE	[dBuV]	HOR. VER.	HOR. VER.	[PK]	[AV]	HOR. VER.	HOR. VER.
		[dBuV]	[dBuV]			[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]
	1694			HO	-7.6			74.0	54.0	>27.0	>10.0

DATA OF RADIATION TEST

UL Apex Co., Ltd.
Yokowa EMC No.2 Open Test Site

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL No. : DVD2100-C
POWER : AC120V/60Hz
DESCRIPTION : TV Reception

REPORT No. : 24KE0255-YW-I
REGULATION : FCC PART15 B
TEST DISTANCE : 3m
ATTENUATION : 101-847MHz 6dB
1030-1694MHz 0dB
DATE : June 26, 2004
TEMP/HUMID. : 27°C/42%
ENGINEER : Tsubasa Takayama

*C.Factor[dB]=ANT Factor + Cable Loss - Amp Gain

For the measurement above 1GHz, measurement of AV detector is performed only when the result of PK detector exceed the limit of AV.

CH.	FREQ [MHz]	READING(QP) HOR. VER. [dBuV]		ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. VER. [dBuV/m]		LIMIT [QP] [dBuV/m]	MARGIN(QP) HOR. VER. [dB]				
CATV													
1	119	25.9	26.5			BC	-7.7	18.2	18.8	43.5	25.3	24.7	
	238					BC	-3.5			46.0			
	357					LO	-5.0			46.0			
	476					LO	-2.1			46.0			
	595					LO	0.6			46.0			
	714					LO	2.9			46.0			
	833					LO	4.6			46.0			
	952					LO	7.4			46.0			
		READING(PK) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]		
	1071			HO	-11.7			74.0	54.0				
	1190			HO	-11.1			74.0	54.0				
	1309			HO	-10.4			74.0	54.0				
	1428			HO	-9.8			74.0	54.0				
	1547			HO	-8.9			74.0	54.0				
	1666			HO	-7.8			74.0	54.0				
CH.	FREQ [MHz]	READING(QP) HOR. VER. [dBuV]		ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. VER. [dBuV/m]		LIMIT [QP] [dBuV/m]	MARGIN(QP) HOR. VER. [dB]				
95	137	27.5	28.1			BC	-6.4	21.1	21.7	43.5	22.4	21.8	
	274					BC	-2.2			46.0			
	411					LO	-4.0			46.0			
	548					LO	-0.3			46.0			
	685					LO	2.3			46.0			
	822					LO	4.4			46.0			
	959					LO	7.5			46.0			
		READING(PK) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]		
	1096			HO	-11.5			74.0	54.0				
	1233			HO	-10.8			74.0	54.0				
	1370			HO	-10.0			74.0	54.0				
	1507			HO	-9.2			74.0	54.0				
	1644			HO	-8.0			74.0	54.0				
	CH.	FREQ [MHz]	READING(QP) HOR. VER. [dBuV]		ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. VER. [dBuV/m]		LIMIT [QP] [dBuV/m]	MARGIN(QP) HOR. VER. [dB]			
	97	149	27.3	27.5			BC	-6.0	21.3	21.5	43.5	22.2	22.0
298						BC	-1.0			46.0			
447						LO	-2.8			46.0			
596						LO	0.6			46.0			
745						LO	3.3			46.0			
894						LO	5.5			46.0			
		READING(PK) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]		
1043				HO	-11.8			-	-	74.0	54.0		
1192				HO	-11.1			-	-	74.0	54.0		
1341				HO	-10.2			-	-	74.0	54.0		
1490				HO	-9.4			-	-	74.0	54.0		
1639				HO	-8.0			-	-	74.0	54.0		
CH.		FREQ [MHz]	READING(QP) HOR. VER. [dBuV]		ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. VER. [dBuV/m]		LIMIT [QP] [dBuV/m]	MARGIN(QP) HOR. VER. [dB]			
99		161	25.1	26.3			BC	-5.6	19.5	20.7	43.5	24.0	22.8
		322					LO	-5.6			46.0		
	483					LO	-1.7			46.0			
	644					LO	1.5			46.0			
	805					LO	4.2			46.0			
	966					LO	7.9			46.0			
		READING(PK) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]		
	1127			HO	-11.3			74.0	54.0				
	1288			HO	-10.5			74.0	54.0				
	1449			HO	-9.7			74.0	54.0				
	1610			HO	-8.3			74.0	54.0				

DATA OF RADIATION TEST

UL Apex Co., Ltd.
Yokowa EMC No.2 Open Test Site

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL No. : DVD2100-C
POWER : AC120V/60Hz
DESCRIPTION : TV Reception

REPORT No. : 24KB0255-YW-1
REGULATION : FCC PART15 B
TEST DISTANCE : 3m
ATTENUATION : 101-847MHz 6dB
1030-1694MHz 0dB
DATE : June 26, 2004
TEMP./HUMID. : 27°C/42%
ENGINEER : Tsubasa Takayama

*C.Factor[dB]=ANT Factor + Cable Loss - Amp Gain

For the measurement above 1GHz, measurement of AV detector is performed only when the result of PK detector exceed the limit of AV.

CH.	FREQ [MHz]	READING(QP) HOR. VER. [dBuV]				ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. VER. [dBuV/m]				LIMIT [QP] [dBuV/m]			MARGIN(QP) HOR. VER. [dB]				
CATV																			
14	167	27.3	28.5			BC	-5.1	22.2	23.4			43.5			21.3	20.1			
	334					LO	-5.4					46.0			>15.0				
	501					LO	-1.2					46.0							
	668					LO	2.1					46.0							
	835					LO	4.6					46.0							
		READING(PK) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]								
	1002				HO	-12.0			74.0	54.0	>27.0	>10.0							
	1169				HO	-11.2			74.0	54.0									
	1336				HO	-10.2			74.0	54.0									
	1503				HO	-9.3			74.0	54.0									
1670				HO	-7.8			74.0	54.0										
CH.	FREQ [MHz]	READING(QP) HOR. VER. [dBuV]				ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. VER. [dBuV/m]				LIMIT [QP] [dBuV/m]			MARGIN(QP) HOR. VER. [dB]				
18	191	27.3	25.1			BC	-3.8	23.5	21.3			43.5			20.0	22.2			
	382					LO	-4.4					46.0			>15.0				
	573					LO	0.2					46.0							
	764					LO	3.5					46.0							
	955					LO	7.5					46.0							
		READING(PK) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]								
	1146				HO	-11.2			74.0	54.0	>27.0	>10.0							
	1337				HO	-10.2			74.0	54.0									
	1528				HO	-9.1			74.0	54.0									
	CH.	FREQ [MHz]	READING(QP) HOR. VER. [dBuV]				ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. VER. [dBuV/m]				LIMIT [QP] [dBuV/m]			MARGIN(QP) HOR. VER. [dB]			
22	215	25.1	26.3			BC	-3.8	21.3	22.5			43.5			22.2	21.0			
	430					LO	-3.4					46.0			>15.0				
	645					LO	1.5					46.0							
	860					LO	4.9					46.0							
		READING(PK) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]								
	1075				HO	-11.6			74.0	54.0	>27.0	>10.0							
	1290				HO	-10.5			74.0	54.0									
	1505				HO	-9.3			74.0	54.0									
	CH.	FREQ [MHz]	READING(QP) HOR. VER. [dBuV]				ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. VER. [dBuV/m]				LIMIT [QP] [dBuV/m]			MARGIN(QP) HOR. VER. [dB]			
	23	263	26.1	25.7			BC	-2.8	23.3	22.9			46.0	46.0		22.7	23.1		
526						LO	-0.7					46.0	46.0						
789						LO	3.8					46.0	46.0						
		READING(PK) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]								
1052					HO	-11.8			74.0	54.0	>27.0	>10.0							
1315					HO	-10.4			74.0	54.0									
1578					HO	-8.6			74.0	54.0									
CH.		FREQ [MHz]	READING(QP) HOR. VER. [dBuV]				ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. VER. [dBuV/m]				LIMIT [QP] [dBuV/m]			MARGIN(QP) HOR. VER. [dB]			
29		299	27.3	24.5			BC	-0.9	26.4	23.6			46.0	46.0		19.6	22.4		
		598					LO	0.7					46.0	46.0		>15.0			
	897					LO	5.5					46.0	46.0						
		READING(PK) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]								
	1196				HO	-11.1			74.0	54.0	>27.0	>10.0							
	1495				HO	-9.4			74.0	54.0									

DATA OF RADIATION TEST

UL Apex Co., Ltd.
Yokowa EMC No.2 Open Test Site

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL No. : DVD2100-C
POWER : AC120V/60Hz
DESCRIPTION : TV Reception

REPORT No. : 24KE0255-YW-1
REGULATION : FCC PART15 B
TEST DISTANCE : 3m
ATTENUATION : 101-847MHz 6dB
1030-1694MHz 0dB
DATE : June 26, 2004
TEMP/HUMID. : 27°C/42%
ENGINEER : Tsubasa Takayama

*C.Factor[dB]=ANT Factor + Cable Loss - Amp Gain

For the measurement above 1GHz, measurement of AV detector is performed only when the result of PK detector exceed the limit of AV.

CH.	FREQ [MHz]	READING(OP) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(OP) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [QP]	LIMIT [AV]	MARGIN(OP) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]
CATV											
36	341	24.0	23.5	LO	-5.4	18.6	18.1	46.0	46.0	27.4	27.9
	682			LO	2.2			46.0	46.0	>15.0	
		READING(PK) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [PK]	LIMIT [AV]	MARGIN(PK) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]
	1023			HO	-11.9			74.0	54.0	>27.0	>10.0
	1364			HO	-10.1			74.0	54.0		
CH.	FREQ [MHz]	READING(OP) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(OP) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [QP]	LIMIT [AV]	MARGIN(OP) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]
37	347	23.6	23.3	LO	-5.2	18.4	18.1	46.0	46.0	27.6	27.9
	694			LO	2.5			46.0	46.0	>15.0	
		READING(PK) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [PK]	LIMIT [AV]	MARGIN(PK) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]
	1041			HO	-11.8			74.0	54.0	>27.0	>10.0
	1388			HO	-9.9			74.0	54.0		
CH.	FREQ [MHz]	READING(OP) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(OP) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [QP]	LIMIT [AV]	MARGIN(OP) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]
65	515	27.6	28.1	LO	-1.0	26.6	27.1	46.0	46.0	19.4	18.9
		READING(PK) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [PK]	LIMIT [AV]	MARGIN(PK) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]
	1030			HO	-11.9			74.0	54.0	>27.0	>10.0
	1545			HO	-8.9			74.0	54.0		
CH.	FREQ [MHz]	READING(OP) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(OP) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [QP]	LIMIT [AV]	MARGIN(OP) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]
94	689	27.3	28.1	LO	2.4	29.7	30.5	46.0	46.0	16.3	15.5
		READING(PK) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [PK]	LIMIT [AV]	MARGIN(PK) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]
	1378			HO	-10.0			74.0	54.0	>27.0	>10.0
CH.	FREQ [MHz]	READING(OP) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(OP) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [QP]	LIMIT [AV]	MARGIN(OP) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]
100	695	28.8	27.6	LO	2.5	31.3	30.1	46.0	46.0	14.7	15.9
		READING(PK) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [PK]	LIMIT [AV]	MARGIN(PK) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]
	1390			HO	-9.9			74.0	54.0	>27.0	>10.0
CH.	FREQ [MHz]	READING(OP) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(OP) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [QP]	LIMIT [AV]	MARGIN(OP) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]
113	773	29.1	28.3	LO	3.7	32.8	32.0	46.0	46.0	13.2	14.0
		READING(PK) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [PK]	LIMIT [AV]	MARGIN(PK) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]
	1546			HO	-8.9			74.0	54.0	>27.0	>10.0
CH.	FREQ [MHz]	READING(OP) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(OP) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [QP]	LIMIT [AV]	MARGIN(OP) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]
125	845	27.4	27.5	LO	4.5	31.9	32.0	46.0	46.0	14.1	14.0
		READING(PK) HOR. VER. [dBuV]	READING(AV) HOR. VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. VER. [dBuV/m]	RESULT(AV) HOR. VER. [dBuV/m]	LIMIT [PK]	LIMIT [AV]	MARGIN(PK) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]
	1690			HO	-7.6			74.0	54.0	>27.0	>10.0

DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.3 OPEN TEST SITE
Report No. : 24KE0255-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception+Rec (0dBm)
Remarks :
Date : 6/24/2004
Test Distance : 3 m
Temperature : 24 °C
Humidity : 34 %
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	26.4	31.0	20.9	27.4	6.1	6.0	32.0	36.6	46.0	14.0	9.4

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

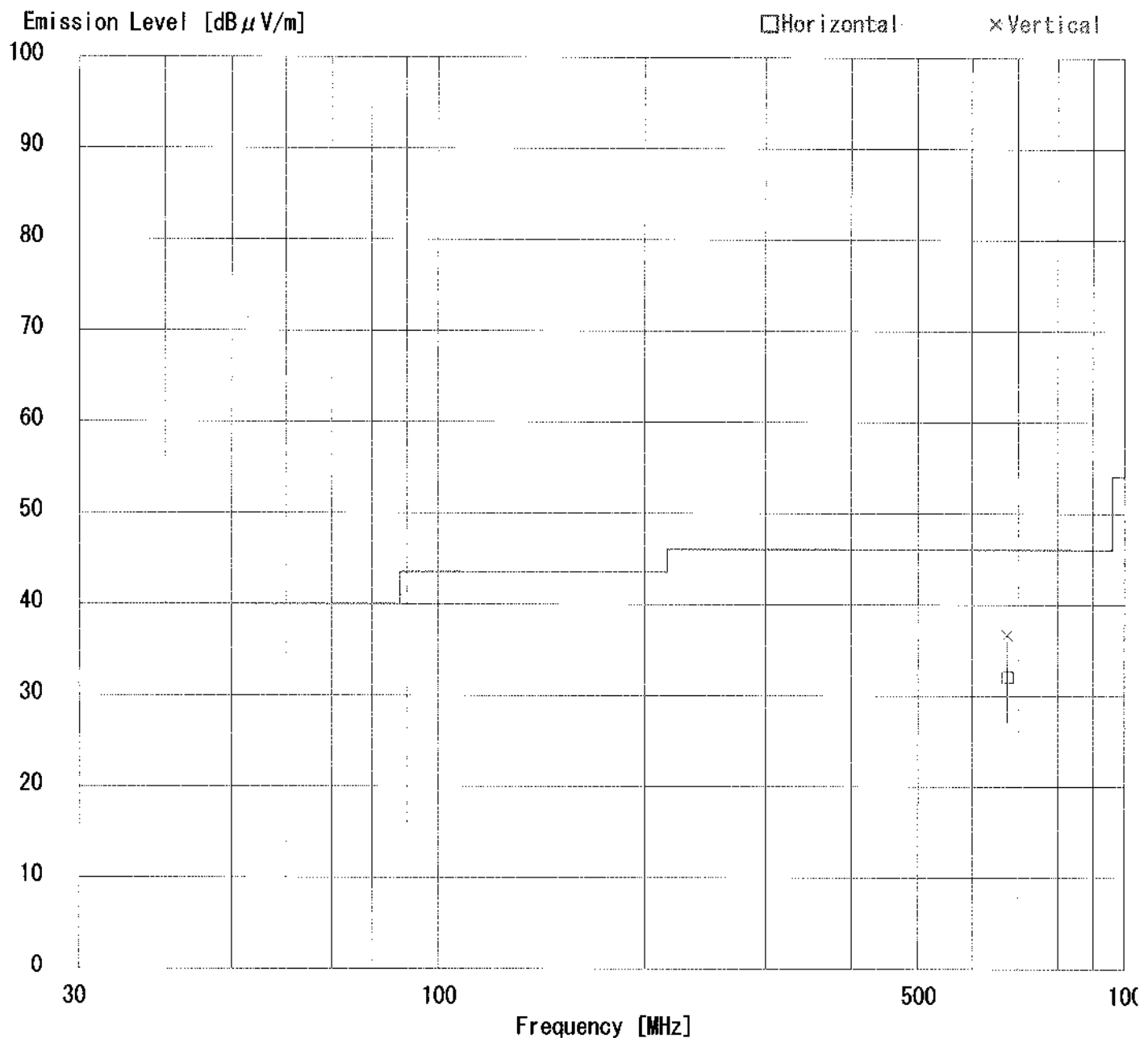
Except for the above table: adequate margin data below the limits.

DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.3 OPEN TEST SITE
Report No. : 24KE0255-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception+Rec (0dBm)
Remarks :
Date : 6/24/2004
Test Distance : 3 m
Temperature : 24 °C
Humidity : 34 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.3 OPEN TEST SITE
Report No. : 24KE0255-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception+Rec (25dBm)
Remarks :
Date : 6/24/2004
Test Distance : 3 m
Temperature : 24 °C
Humidity : 34 %
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.	85.90	BB	31.2	29.4	7.7	28.2	1.8	5.9	18.4	16.6	40.0	21.6	23.4
2.	135.00	BB	32.1	33.1	14.3	28.2	2.3	5.9	26.4	27.4	43.5	17.1	16.1
3.	219.39	BB	33.5	27.5	16.7	28.0	3.1	6.0	31.3	25.3	46.0	14.7	20.7
4.	270.00	BB	31.2	29.0	18.3	27.9	3.5	6.0	31.1	28.9	46.0	14.9	17.1
5.	337.50	BB	32.1	36.0	17.6	27.9	4.0	6.0	31.8	35.7	46.0	14.2	10.3
6.	405.00	BB	27.7	33.1	18.7	27.9	4.5	6.0	29.0	34.4	46.0	17.0	11.6
7.	540.00	BB	26.1	33.4	19.9	27.8	5.4	6.0	29.6	36.9	46.0	16.4	9.1
8.	675.00	BB	26.5	31.4	20.9	27.4	6.1	6.0	32.1	37.0	46.0	13.9	9.0
9.	945.00	BB	23.8	25.3	25.1	27.1	7.5	6.0	35.3	36.8	46.0	10.7	9.2

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

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

DATA OF RADIATION TEST

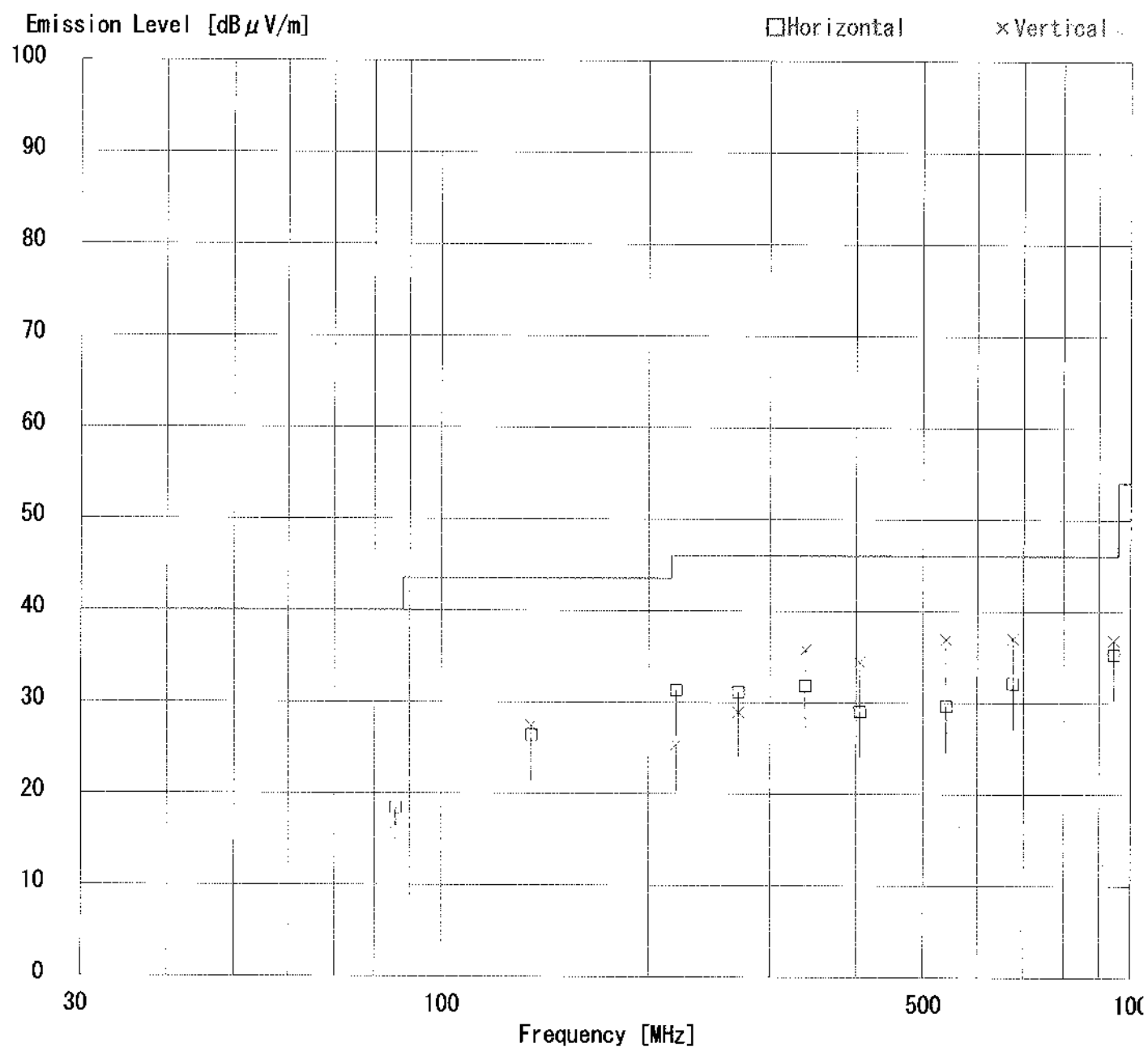
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 24KE0255-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. :
Power : AC120V/60Hz
Mode : TV Reception+Rec (25dBm)
Remarks :
Date : 6/24/2004
Test Distance : 3 m
Temperature : 24 °C
Humidity : 34 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.3 OPEN TEST SITE
Report No. : 24KE0255-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : VCR Playback
Remarks :
Date : 6/24/2004
Test Distance : 3 m
Temperature : 24 °C
Humidity : 34 %
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 μV/m]	MARGIN	
			HOR [dB μV]	VER [dB μV]					HOR [dB μV/m]	VER [dB μV/m]		HOR [dB]	VER [dB]
1.	85.90	BB	33.0	32.4	7.7	28.2	1.8	5.9	20.2	19.6	40.0	19.8	20.4
2.	135.00	BB	26.2	32.6	14.3	28.2	2.3	5.9	20.5	26.9	43.5	23.0	16.6
3.	188.99	BB	31.0	29.3	16.4	28.0	2.8	5.9	28.1	26.4	43.5	15.4	17.1
4.	219.39	BB	32.8	28.6	16.7	28.0	3.1	6.0	30.6	26.4	46.0	15.4	19.6
5.	270.00	BB	31.4	32.6	18.3	27.9	3.5	6.0	31.3	32.5	46.0	14.7	13.5
6.	320.60	BB	34.0	33.1	17.4	27.9	3.8	6.0	33.3	32.4	46.0	12.7	13.6
7.	405.00	BB	27.0	33.9	18.7	27.9	4.5	6.0	28.3	35.2	46.0	17.7	10.8
8.	540.00	BB	27.4	32.8	19.9	27.8	5.4	6.0	30.9	36.3	46.0	15.1	9.7
9.	675.00	BB	25.3	30.8	20.9	27.4	6.1	6.0	30.9	36.4	46.0	15.1	9.6
10.	945.00	BB	23.0	27.4	25.1	27.1	7.5	6.0	34.5	38.9	46.0	11.5	7.1

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

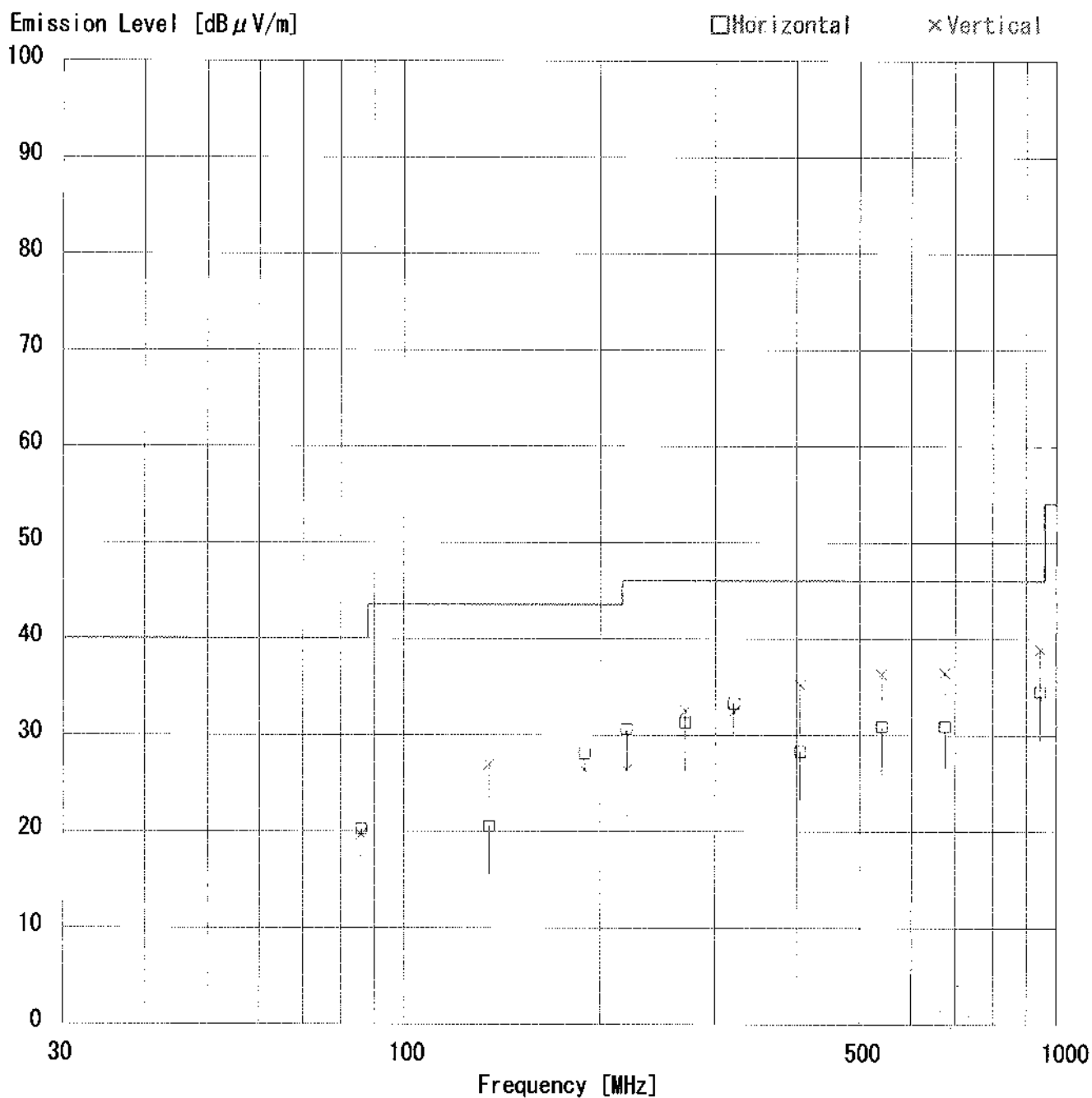
Except for the above table: adequate margin data below the limits.

DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.3 OPEN TEST SITE
Report No. : 24KE0255-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : VCR Playback
Remarks :
Date : 6/24/2004
Test Distance : 3 m
Temperature : 24 °C
Humidity : 34 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.3 OPEN TEST SITE
Report No. : 24KE0255-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks :
Date : 6/24/2004
Test Distance : 3 m
Temperature : 24 °C
Humidity : 34 %
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.	84.00	BB	43.3	42.8	7.3	28.2	1.8	5.9	30.1	29.6	40.0	9.9	10.4
2.	135.02	BB	32.5	36.4	14.3	28.2	2.3	5.9	26.8	30.7	43.5	16.7	12.8
3.	216.01	BB	37.5	35.1	16.7	28.0	3.0	5.9	35.1	32.7	46.0	10.9	13.3
4.	270.00	BB	39.0	38.8	18.3	27.9	3.5	6.0	38.9	38.7	46.0	7.1	7.3
5.	303.75	BB	30.9	36.2	17.1	27.9	3.7	6.0	29.8	35.1	46.0	16.2	10.9
6.	405.00	BB	31.0	32.8	18.7	27.9	4.5	6.0	32.3	34.1	46.0	13.7	11.9
7.	472.50	BB	31.0	31.5	19.4	27.9	5.0	6.0	33.5	34.0	46.0	12.5	12.0
8.	540.00	BB	27.4	32.0	19.9	27.8	5.4	6.0	30.9	35.5	46.0	15.1	10.5
9.	589.87	BB	25.8	31.4	20.2	27.6	5.6	6.0	30.0	35.6	46.0	16.0	10.4
10.	675.00	BB	26.6	28.4	20.9	27.4	6.1	6.0	32.2	34.0	46.0	13.8	12.0
11.	945.00	BB	24.0	24.0	25.1	27.1	7.5	6.0	35.5	35.5	46.0	10.5	10.5

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

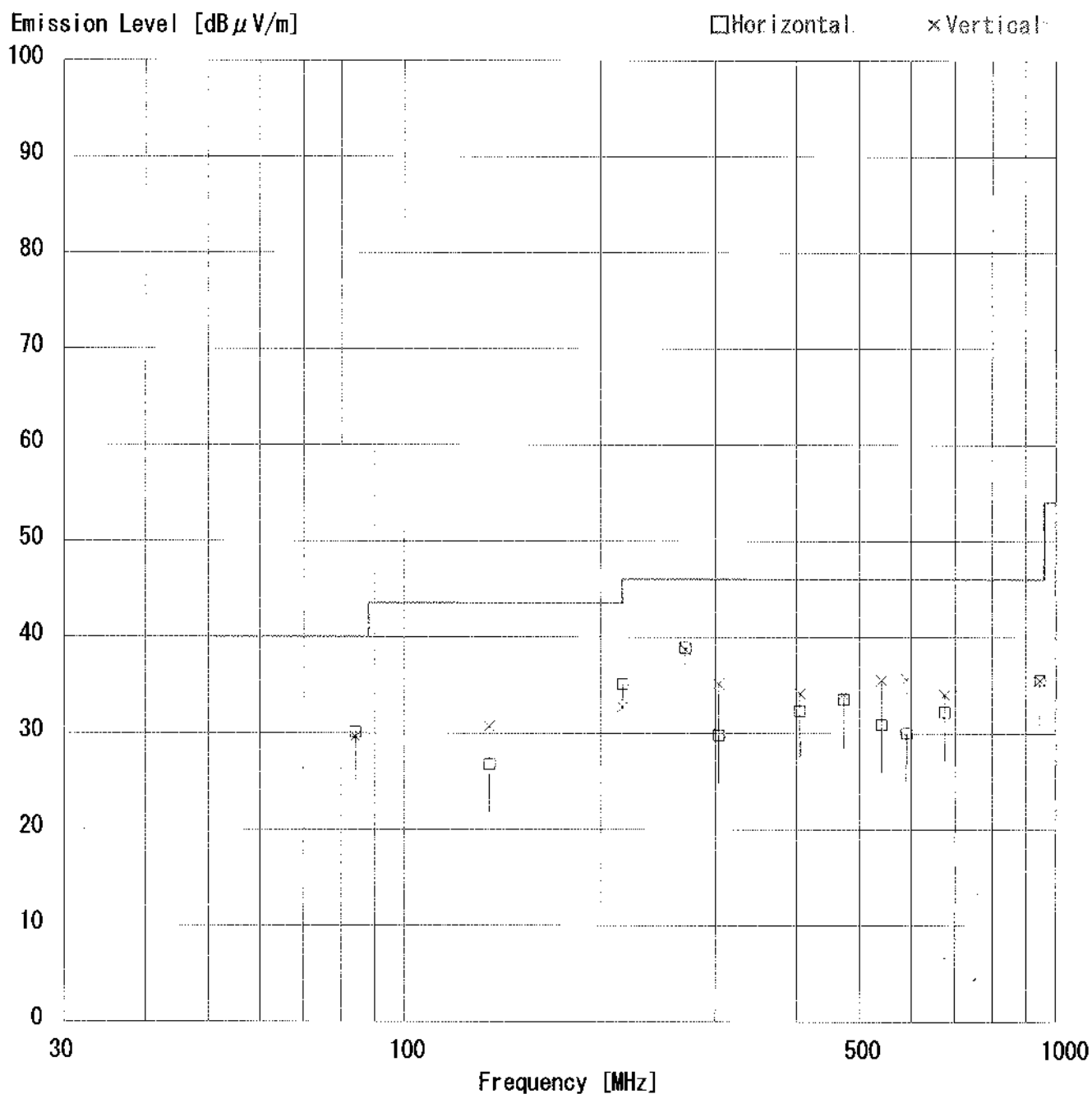
Except for the above table: adequate margin data below the limits.

DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.3 OPEN TEST SITE
Report No. : 24KE0255-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks :
Date : 6/24/2004
Test Distance : 3 m
Temperature : 24 °C
Humidity : 34 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.3 OPEN TEST SITE
Report No. : 24KE0255-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks : Test Channel #3
Date : 6/24/2004
Test Distance : 3 m
Temperature : 23 °C
Humidity : 34 %
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 μV/m]	MARGIN	
			HOR [dB μV]	VER [dB μV]					HOR [dB μV/m]	VER [dB μV/m]		HOR [dB]	VER [dB]
1.	61.25	BB	23.5	25.0	7.4	28.4	1.5	5.9	9.9	11.4	40.0	30.1	28.6
2.	65.75	BB	25.4	26.9	7.0	28.3	1.5	5.9	11.5	13.0	40.0	28.5	27.0
3.	122.50	BB	24.3	23.4	13.6	28.2	2.2	5.9	17.8	16.9	43.5	25.7	26.6
4.	245.00	BB	21.9	22.5	17.0	27.9	3.3	6.0	20.3	20.9	46.0	25.7	25.1

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

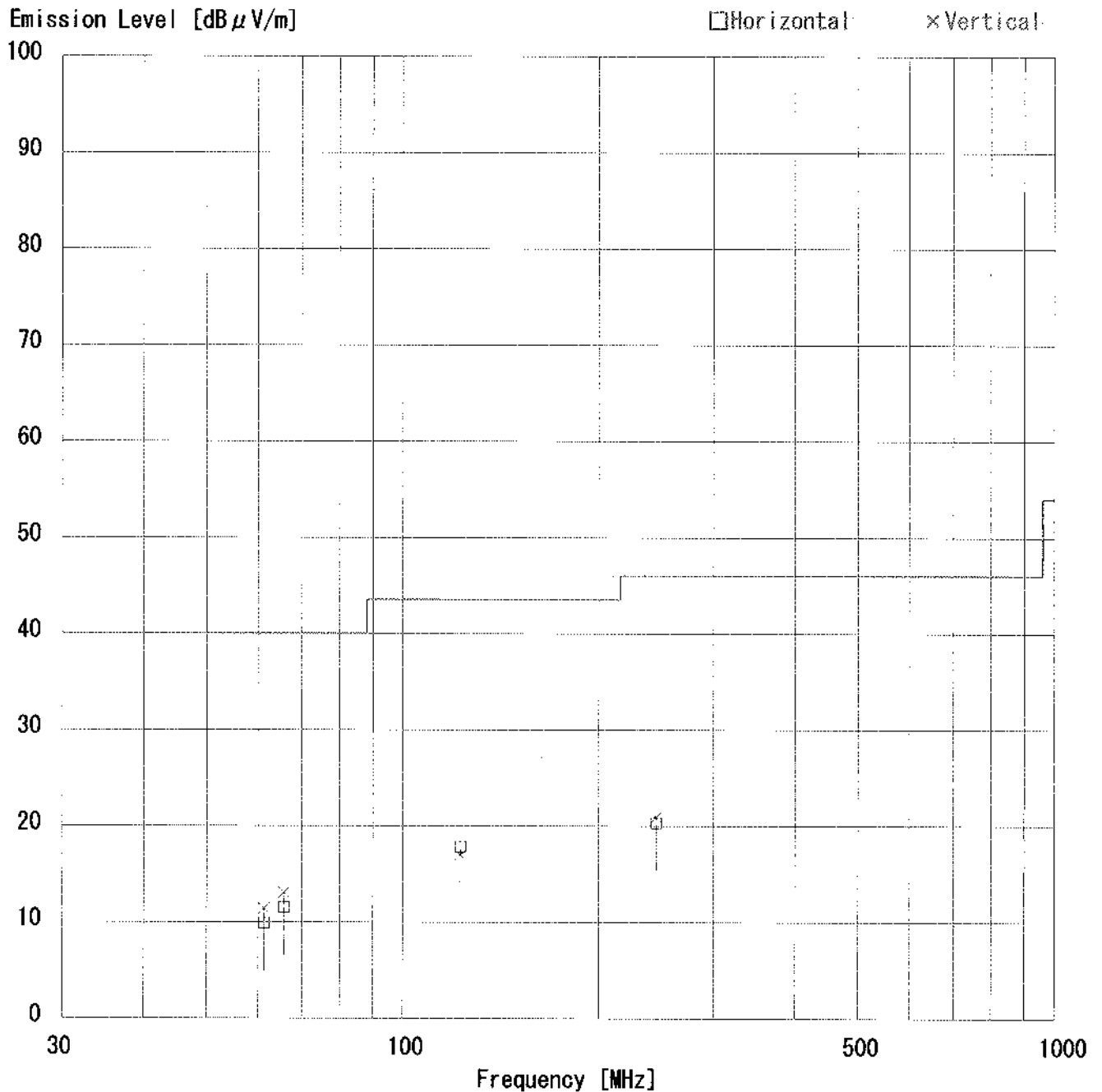
Except for the above table: adequate margin data below the limits.

DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.3 OPEN TEST SITE
Report No. : 24KE0255-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks : Test Channel #3
Date : 6/24/2004
Test Distance : 3 m
Temperature : 23 °C
Humidity : 34 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.3 OPEN TEST SITE
Report No. : 24KE0255-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks : Test Channel #4
Date : 6/24/2004
Test Distance : 3 m
Temperature : 23 °C
Humidity : 34 %
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	24.2	24.4	6.8	28.3	1.6	5.9	10.2	10.4	40.0	29.8	29.6
2.	71.75	BB	23.4	23.4	6.6	28.3	1.6	5.9	9.2	9.2	40.0	30.8	30.8
3.	134.50	BB	26.7	26.5	14.3	28.2	2.3	5.9	21.0	20.8	43.5	22.5	22.7
4.	201.75	BB	23.0	23.7	16.5	28.0	2.9	5.9	20.3	21.0	43.5	23.2	22.5

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

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

DATA OF RADIATION TEST

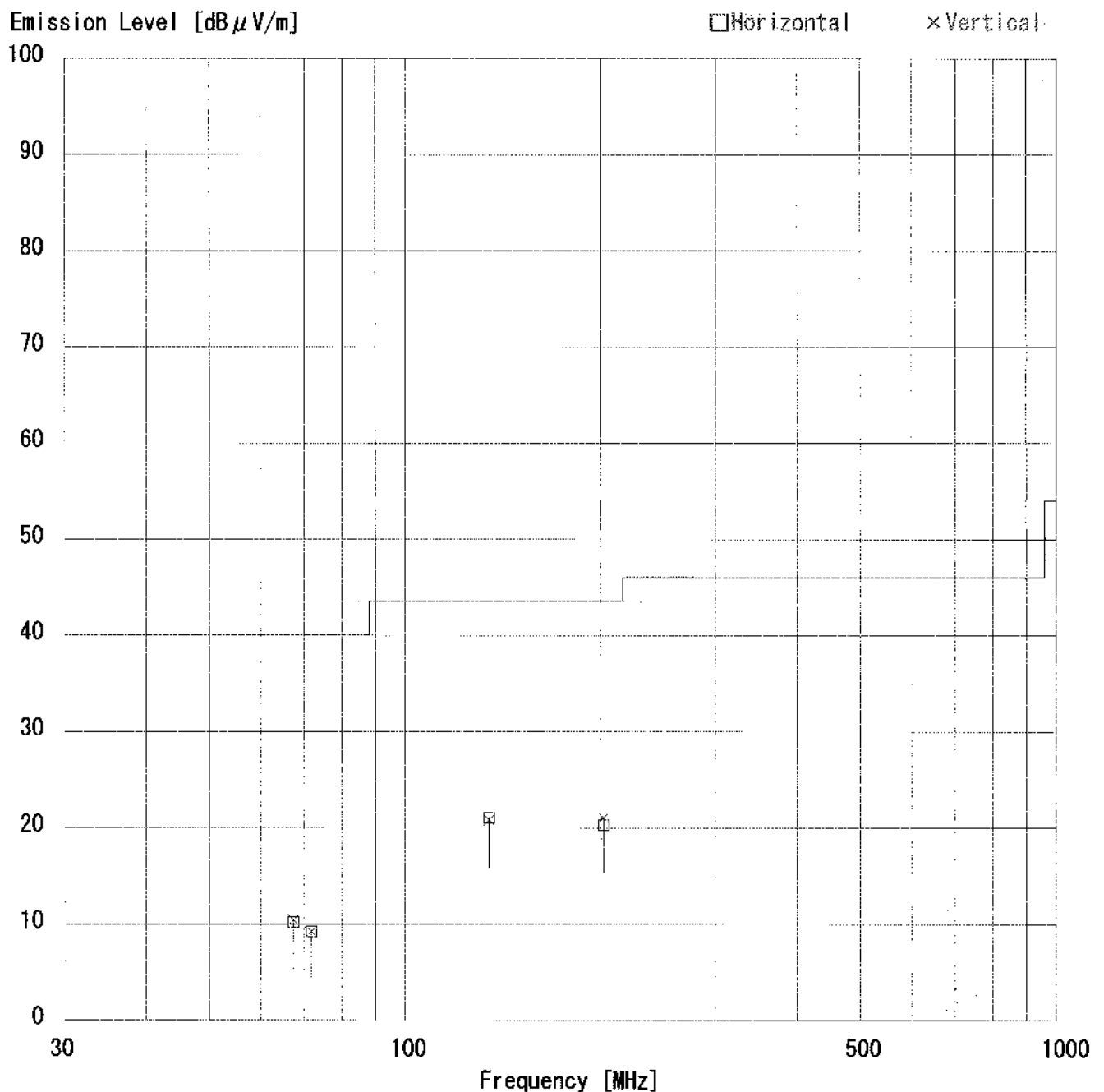
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No. : 24KE0255-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks : Test Channel #4
Date : 6/24/2004
Test Distance : 3 m
Temperature : 23 °C
Humidity : 34 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.1 OPEN TEST SITE

Report No. : 24KE0255-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks :
Date : 6/30/2004
Test Distance : 3 m
Temperature : 28 °C
Humidity : 60 %
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.	1214.99	BB	45.3	48.1	25.9	35.2	2.9	0.0	38.9	41.7	74.0	35.1	32.3
2.	1349.90	BB	42.5	48.2	26.6	35.0	3.1	0.0	37.2	42.9	74.0	36.8	31.1
3.	1889.00	BB	41.7	45.8	30.0	34.4	3.8	0.0	41.1	45.2	74.0	32.9	28.8

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

Except for the above table: adequate margin data below the limits.
ANT. TYPE: 1GHz-2GHz DRG Horn Antenna

DATA OF RADIATION TEST

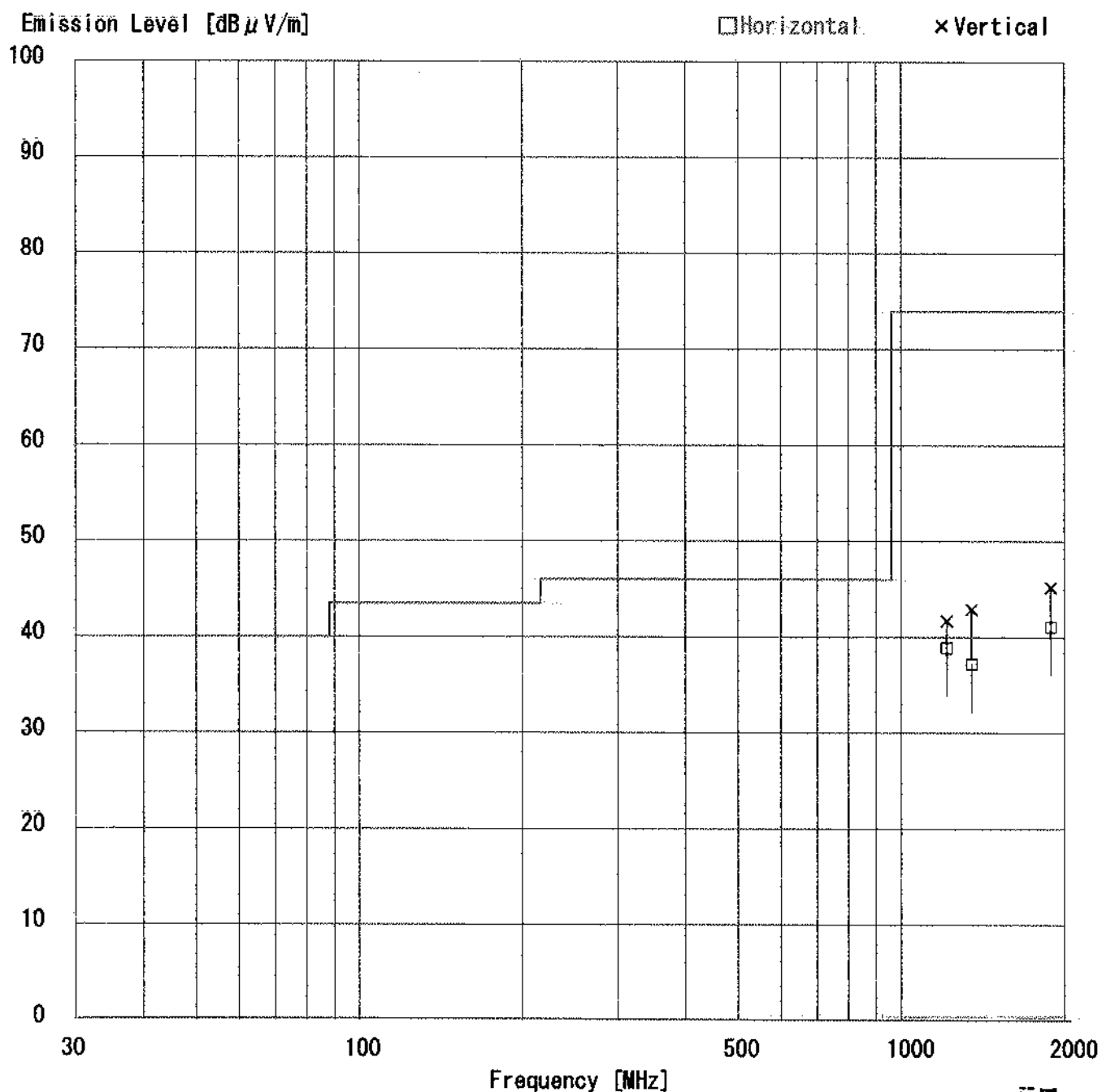
UL Apex Co., Ltd.

YOKOWA No.1 OPEN TEST SITE

Report No. : 24KE0255-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks :
Date : 6/30/2004
Test Distance : 3 m
Temperature : 28 °C
Humidity : 60 %
Regulation : FCC Part15B CLASS B(Peak Limit / Upper1GHz)

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.1 OPEN TEST SITE
Report No. : 24KE0255-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks :
Date : 6/30/2004
Test Distance : 3 m
Temperature : 28 °C
Humidity : 60 %
Regulation : FCC Part15B CLASS B(Average 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.	1214.99	BB	37.0	41.3	25.9	35.2	2.9	0.0	30.6	34.9	54.0	23.4	19.1
2.	1349.90	BB	34.2	38.5	26.6	35.0	3.1	0.0	28.9	33.2	54.0	25.1	20.8
3.	1889.00	BB	32.7	37.3	30.0	34.4	3.8	0.0	32.1	36.7	54.0	21.9	17.3

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

Except for the above table: adequate margin data below the limits.
ANT. TYPE:1GHz-2GHz DRG Horn Antenna

DATA OF RADIATION TEST

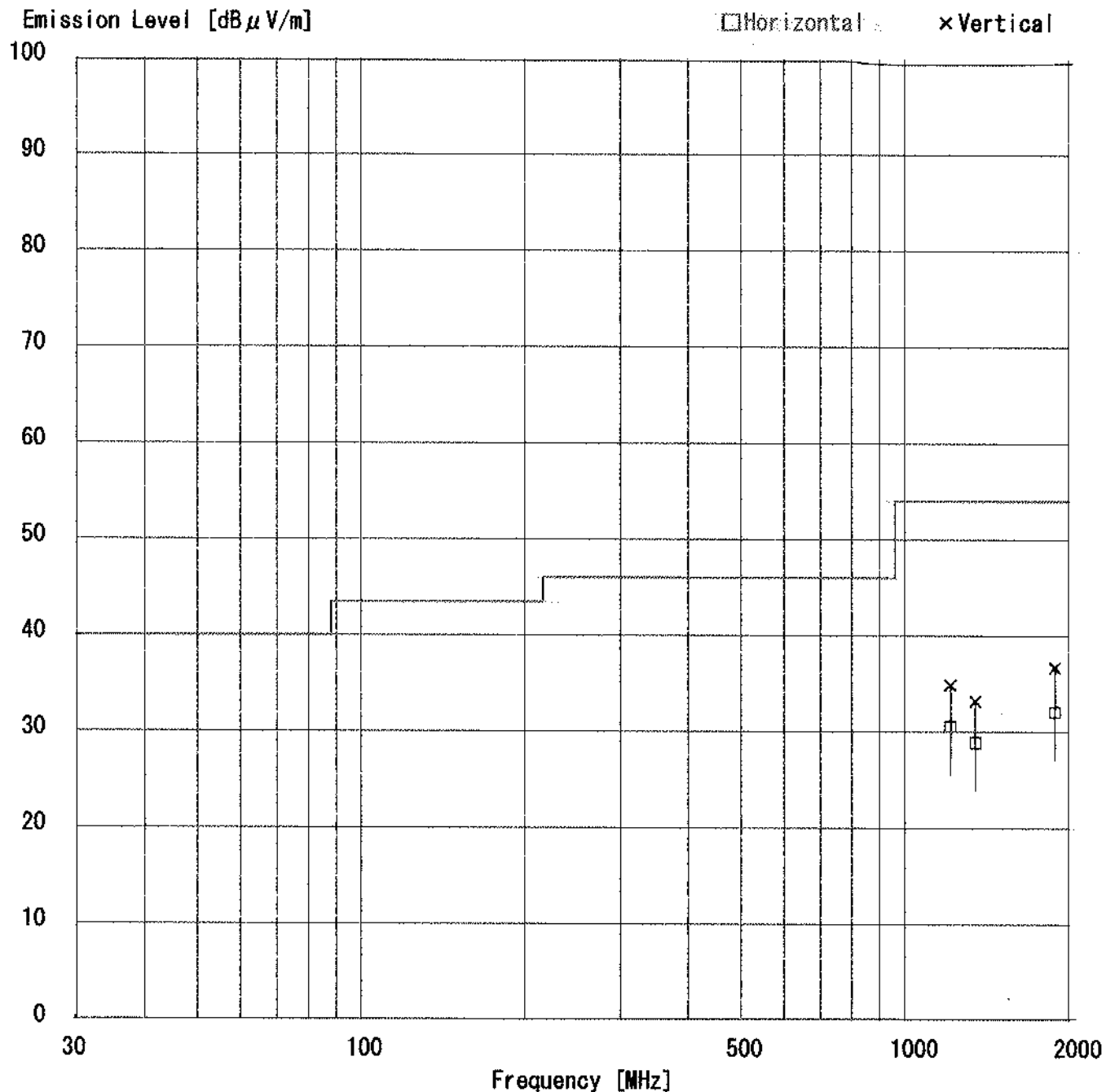
UL Apex Co., Ltd.

YOKOWA No.1 OPEN TEST SITE

Report No. : 24KE0255-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : DVD2100-C
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks :
Date : 6/30/2004
Test Distance : 3 m
Temperature : 28 °C
Humidity : 60 %
Regulation : FCC Part15B CLASS B(Average Limit / Upper1GHz)

Engineer : Tsubasa Takayama



DATA OF ANTENNA TERMINAL TEST

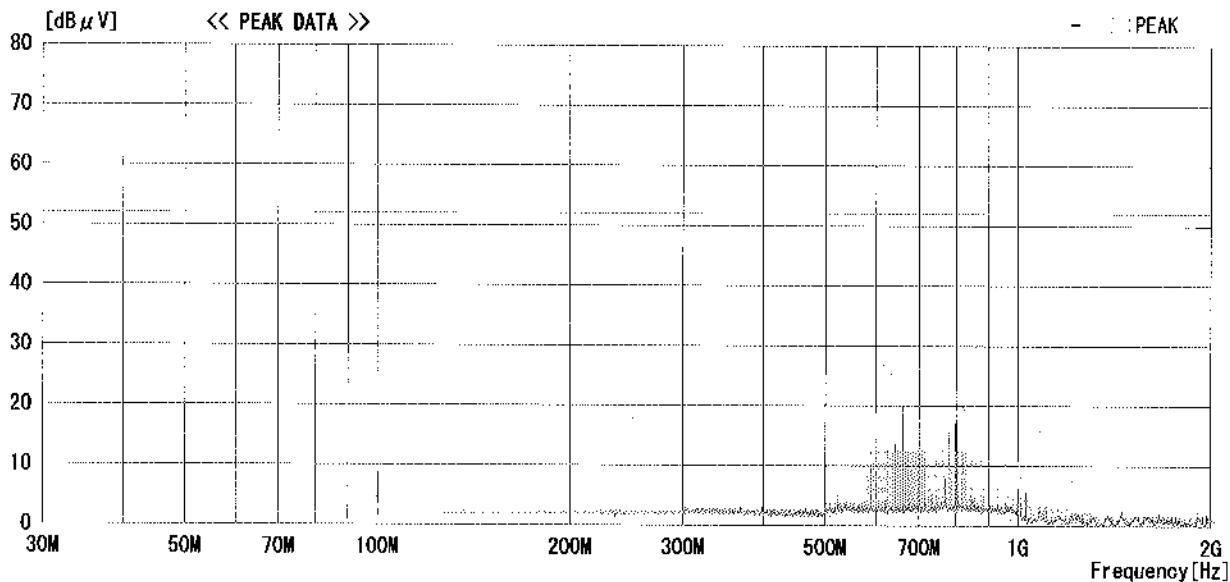
UL Apex Co., Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : DVD2100-C
OPERATION MODE : TV Tuning mode

REPORT NO : 24KE0255-YW-2
DATE : June 29, 2004
REGULATION : BETS-7 3.4
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 26°C/68%

LIMIT : FCC 15B ANTENNA TERMINAL



NO	FREQ [MHz]	READING PEAK [dB μ V]	C. F [dB]	RESULT [dB μ V]	LIMIT		MARGIN		PHASE
					QP [dB μ V]	AV [dB μ V]	QP [dB]	AV [dB]	
1	106.56390	36.5	-19.6	16.9	52.0	----	35.1	----	-
2	250.69350	37.8	-19.0	18.8	52.0	----	33.2	----	-
3	624.85330	46.2	-20.2	26.0	52.0	----	26.0	----	-
4	840.57710	39.5	-19.7	19.8	52.0	----	32.2	----	-
5	1081.42500	46.5	-29.8	16.7	52.0	----	35.3	----	-
6	1658.56000	40.8	-28.9	11.9	52.0	----	40.1	----	-

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

DATA OF ANTENNA TERMINAL TEST

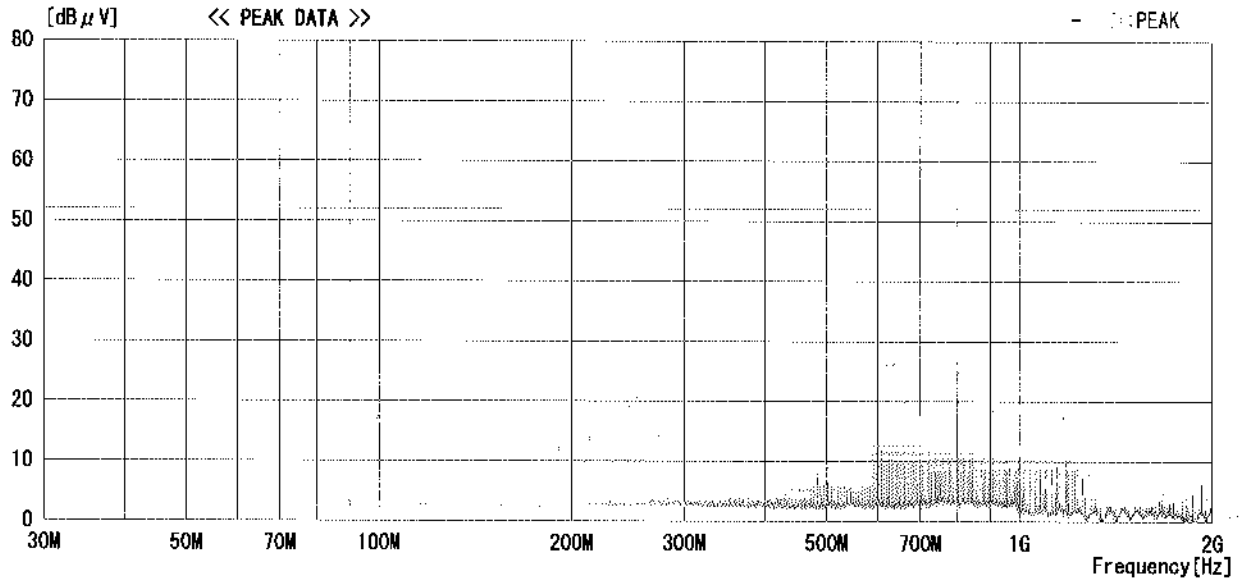
UL Apex Co., Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : DVD2100-C
OPERATION MODE : CATV Tuning mode

REPORT NO : 24KE0255-YW-1
DATE : June 29, 2004
REGULATION : FCC 15B
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 26°C/68%

LIMIT : FCC 15B ANTENNA TERMINAL



NO	FREQ [MHz]	READING PEAK [dB μ V]	C. F [dB]	RESULT [dB μ V]	LIMIT		MARGIN		PHASE
					QP [dB μ V]	AV [dB μ V]	QP [dB]	AV [dB]	
1	99.82113	37.5	-19.6	17.9	52.0	----	34.1	----	-
2	249.42920	38.8	-19.0	19.8	52.0	----	32.2	----	-
3	627.71040	47.0	-20.2	26.8	52.0	----	25.2	----	-
4	811.43310	45.5	-19.8	25.7	52.0	----	26.3	----	-
5	909.58000	39.0	-19.6	19.4	52.0	----	32.6	----	-
6	1147.13400	47.0	-29.7	17.3	52.0	----	34.7	----	-

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

RF output level

UL Apex Co., LTD.
YOKOWA EMC LAB.

Company	: Orion Electric Co.,Ltd.	Report Number	: 24KE0255-YW-1
Equipment	: DVD/VCR	Regulation	: FCC Part15B Subpart B
Model number	: DVD2100-C	Date	: June 29, 2004
Power	: AC 120 V / 60 Hz	Temp./Humid	: 24°C/34%
Description	: TV Reception + Rec(0dBmV)	Engineer	: Tsubasa Takayama

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	82.2	20.0	62.2	69.5	7.3
4	67.25	83.9	19.9	64.0	69.5	5.5

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	68.4	20.0	48.4	56.5	8.1
	65.75	67.2	20.0	47.2	56.5	9.3
4	62.75	68.2	20.0	48.2	56.5	8.3
	71.75	67.0	20.0	47.0	56.5	9.5

RF output level

UL Apex Co., LTD.
YOKOWA EMC LAB.

Company	: Orion Electric Co.,Ltd.	Report Number	: 24KE0255-YW-1
Equipment	: DVD/VCR	Regulation	: FCC Part15B Subpart B
Model number	: DVD2100-C	Date	: June 29, 2004
Power	: AC 120 V / 60 Hz	Temp./Humid	: 24°C/34%
Description	: TV Reception + Rec(25dBmV)	Engineer	: Tsubasa Takayama

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	82.9	20.0	62.9	69.5	6.6
4	67.25	84.0	19.9	64.1	69.5	5.4

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	68.4	20.0	48.4	56.5	8.1
	65.75	67.3	20.0	47.3	56.5	9.2
4	62.75	68.8	20.0	48.8	56.5	7.7
	71.75	67.8	20.0	47.8	56.5	8.7

RF output level

UL Apex Co., LTD.
YOKOWA EMC LAB.

Company	: Orion Electric Co.,Ltd.	Report Number	: 24KE0255-YW-1
Equipment	: DVD/VCR	Regulation	: FCC Part15B Subpart B
Model number	: DVD2100-C	Date	: June 29, 2004
Power	: AC 120 V / 60 Hz	Temp./Humid	: 24°C/34%
Description	: VCR Playback	Engineer	: Tsubasa Takayama

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	83.1	20.0	63.1	69.5	6.4
4	67.25	84.4	19.9	64.5	69.5	5.0

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	68.2	20.0	48.2	56.5	8.3
	65.75	67.1	20.0	47.1	56.5	9.4
4	62.75	68.2	20.0	48.2	56.5	8.3
	71.75	67.2	20.0	47.2	56.5	9.3

RF output level

UL Apex Co., LTD.
YOKOWA EMC LAB.

Company	: Orion Electric Co.,Ltd.	Report Number	: 24KE0255-YW-1
Equipment	: DVD/VCR	Regulation	: FCC Part 15B Subpart B
Model number	: DVD2100-C	Date	: June 29, 2004
Power	: AC 120 V / 60 Hz	Temp./Humid	: 24°C/34%
Description	: DVD Play	Engineer	: Tsubasa Takayama

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	83.2	20.0	63.2	69.5	6.3
4	67.25	84.1	19.9	64.2	69.5	5.3

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	68.3	20.0	48.3	56.5	8.2
	65.75	67.2	20.0	47.2	56.5	9.3
4	62.75	68.4	20.0	48.4	56.5	8.1
	71.75	67.7	20.0	47.7	56.5	8.8

DATA OF RF SUPRIOUS TEST

UL Apex Co., Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : DVD2100-C
TEMP./HUMID. : 23°C/43%

REPORT NO : 24KE0255-YW-1
DATE : June 29, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : TV Reception+Rec(OdBmV) : 3ch

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ [MHz]	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		QP [dB μV]	AV [dB μV]		QP [dB μV]	AV [dB μV]	QP [dB μV]	AV [dB μV]	QP [dB]	AV [dB]	
1	32.6200	33.7	-----	-20.2	13.5	-----	39.5	-----	26.0	-----	-
2	47.8400	31.4	-----	-20.0	11.4	-----	39.5	-----	28.1	-----	-
3	89.9200	29.2	-----	-19.8	9.4	-----	39.5	-----	30.1	-----	-
4	122.3100	33.0	-----	-19.5	13.5	-----	39.5	-----	26.0	-----	-
5	331.4200	36.1	-----	-19.1	17.0	-----	39.5	-----	22.5	-----	-
6	734.7300	32.0	-----	-20.0	12.0	-----	39.5	-----	27.5	-----	-

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

DATA OF RF SUPRIOUS TEST

UL Apex Co., Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : DVD2100-C
TEMP./HUMID. : 23°C/43%

REPORT NO : 24KE0255-YW-1
DATE : June 29, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : TV Reception+Rec(25dBmV) : 3ch

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ [MHz]	READING		C. F [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBμV]	AV [dBμV]		QP [dBμV]	AV [dBμV]	QP [dBμV]	AV [dBμV]	QP [dB]	AV [dB]	
1	32.6200	33.6	—	-20.2	13.4	—	39.5	—	26.1	—	-
2	47.8400	32.4	—	-20.0	12.4	—	39.5	—	27.1	—	-
3	89.9200	29.0	—	-19.8	9.2	—	39.5	—	30.3	—	-
4	122.3100	33.3	—	-19.5	13.8	—	39.5	—	25.7	—	-
5	331.4200	36.4	—	-19.1	17.3	—	39.5	—	22.2	—	-
6	734.7300	32.3	—	-20.0	12.3	—	39.5	—	27.2	—	-

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

DATA OF RF SUPRIOUS TEST

UL Apex Co., Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : DV02100-C
TEMP./HUMID. : 23°C/43%

REPORT NO : 24KE0255-YW-1
DATE : June 29, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : VCR Playback : 3ch

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBμV]	AV [dBμV]		QP [dBμV]	AV [dBμV]	QP [dBμV]	AV [dBμV]	QP [dB]	AV [dB]	
1	32.6200	30.6	—	-20.2	10.4	—	39.5	—	29.1	—	-
2	47.8400	32.3	—	-20.0	12.3	—	39.5	—	27.2	—	-
3	89.9200	28.0	—	-19.8	8.2	—	39.5	—	31.3	—	-
4	122.3100	30.8	—	-19.5	11.3	—	39.5	—	28.2	—	-
5	489.7600	30.3	—	-20.1	10.2	—	39.5	—	29.3	—	-
6	734.7300	33.6	—	-20.0	13.6	—	39.5	—	25.9	—	-

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

DATA OF RF SUPRIOUS TEST

UL Apex Co., Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : DVD2100-C
TEMP./HUMID. : 23°C/43%

REPORT NO : 24KE0255-YW-1
DATE : June 29, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : DVD play : 3ch

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ [MHz]	READING		C. F [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dB μV]	AV [dB μV]		QP [dB μV]	AV [dB μV]	QP [dB μV]	AV [dB μV]	QP [dB]	AV [dB]	
1	54.2300	35.5	—	-20.0	15.5	—	39.5	—	24.0	—	-
2	47.8400	32.0	—	-20.0	12.0	—	39.5	—	27.5	—	-
3	74.8200	30.3	—	-19.9	10.4	—	39.5	—	29.1	—	-
4	122.3100	31.5	—	-19.5	12.0	—	39.5	—	27.5	—	-
5	489.7600	30.3	—	-20.1	10.2	—	39.5	—	29.3	—	-
6	734.7300	33.6	—	-20.0	13.6	—	39.5	—	25.9	—	-

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

DATA OF RF SUPRIOUS TEST

UL Apex Co., Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : DVD2100-C
TEMP./HUMID. : 23°C/43%

REPORT NO : 24KE0255-YW-1
DATE : June 29, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : TV Reception + Rec(0dBmV) : 4ch

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBμV]	AV [dBμV]		QP [dBμV]	AV [dBμV]	QP [dBμV]	AV [dBμV]	QP [dB]	AV [dB]	
1	38.6200	34.5	—	-20.1	14.4	—	39.5	—	25.1	—	-
2	53.0000	32.1	—	-20.0	12.1	—	39.5	—	27.4	—	-
3	80.8300	32.3	—	-19.9	12.4	—	39.5	—	27.1	—	-
4	134.5000	32.0	—	-19.5	12.5	—	39.5	—	27.0	—	-
5	489.7200	29.0	—	-20.1	8.9	—	39.5	—	30.6	—	-
6	672.3000	31.2	—	-20.1	11.1	—	39.5	—	28.4	—	-

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

DATA OF RF SUPRIOUS TEST

UL Apex Co., Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : DVD2100-C
TEMP./HUMID. : 23°C/43%

REPORT NO : 24KE0255-YW-1
DATE : June 29, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : TV Reception + Rec(25dBmV) : 4ch

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBμV]	AV [dBμV]		QP [dBμV]	AV [dBμV]	QP [dBμV]	AV [dBμV]	QP [dB]	AV [dB]	
1	38.6200	33.4	—	-20.1	13.3	—	39.5	—	26.2	—	-
2	53.0000	32.6	—	-20.0	12.6	—	39.5	—	26.9	—	-
3	80.8300	32.3	—	-19.9	12.4	—	39.5	—	27.1	—	-
4	134.5000	31.8	—	-19.5	12.3	—	39.5	—	27.2	—	-
5	489.7200	28.3	—	-20.1	8.2	—	39.5	—	31.3	—	-
6	672.3000	32.1	—	-20.1	12.0	—	39.5	—	27.5	—	-

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

DATA OF RF SUPRIOUS TEST

UL Apex Co., Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : DVD2100-C
TEMP./HUMID. : 23°C/43%

REPORT NO : 24KE0255-YW-1
DATE : June 29, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : VCR playback : 4ch

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dB μ V]	AV [dB μ V]		QP [dB μ V]	AV [dB μ V]	QP [dB μ V]	AV [dB μ V]	QP [dB]	AV [dB]	
1	38.6200	31.9	----	-20.1	11.8	----	39.5	----	27.7	----	-
2	53.0000	31.9	----	-20.0	11.9	----	39.5	----	27.6	----	-
3	80.8300	30.0	----	-19.9	10.1	----	39.5	----	29.4	----	-
4	134.5000	31.3	----	-19.5	11.8	----	39.5	----	27.7	----	-
5	489.7200	27.2	----	-20.1	7.1	----	39.5	----	32.4	----	-
6	672.3000	31.9	----	-20.1	11.8	----	39.5	----	27.7	----	-

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

DATA OF RF SUPRIOUS TEST

UL Apex Co., Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : DVD2100-C
TEMP./HUMID. : 23°C/43%

REPORT NO : 24KE0255-YW-1
DATE : June 29, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : DVD play : 4ch

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dB μV]	AV [dB μV]		QP [dB μV]	AV [dB μV]	QP [dB μV]	AV [dB μV]	QP [dB]	AV [dB]	
1	53.8300	32.0	—	-20.0	12.0	—	39.5	—	27.5	—	-
2	60.1200	35.1	—	-20.0	15.1	—	39.5	—	24.4	—	-
3	80.7800	28.6	—	-19.9	8.7	—	39.5	—	30.8	—	-
4	134.5000	31.3	—	-19.5	11.8	—	39.5	—	27.7	—	-
5	479.7500	27.0	—	-20.0	7.0	—	39.5	—	32.5	—	-
6	672.3400	32.3	—	-20.1	12.2	—	39.5	—	27.3	—	-

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 : DVD2100-G
TEMP./HUMID. : 23°C/43%

REPORT NO : 24KE0255-YW-1
DATE : June 29, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : VCR Playback : 3ch

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBμV]	AV [dBμV]		QP [dBμV]	AV [dBμV]	QP [dBμV]	AV [dBμV]	QP [dB]	AV [dB]	
1	61.2500	22.1	—	-20.0	2.1	—	9.5	—	7.4	—	-
2	122.5000	21.4	—	-19.5	1.9	—	9.5	—	7.6	—	-
3	183.7500	21.1	—	-19.2	1.9	—	9.5	—	7.6	—	-
4	245.0000	21.1	—	-19.0	2.1	—	9.5	—	7.4	—	-
5	306.2500	20.1	—	-19.0	1.1	—	9.5	—	8.4	—	-
6	367.5000	19.9	—	-19.3	0.6	—	9.5	—	8.9	—	-

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 : DVD2100-C
TEMP./HUMID. : 23°C/43%

REPORT NO : 24KE0255-YW-1
DATE : June 29, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : DVD Play : 3ch

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBμV]	AV [dBμV]		QP [dBμV]	AV [dBμV]	QP [dBμV]	AV [dBμV]	QP [dB]	AV [dB]	
1	61.2500	22.3	—	-20.0	2.3	—	9.5	—	7.2	—	-
2	122.5000	21.4	—	-19.5	1.9	—	9.5	—	7.6	—	-
3	183.7500	21.1	—	-19.2	1.9	—	9.5	—	7.6	—	-
4	245.0000	21.0	—	-19.0	2.0	—	9.5	—	7.5	—	-
5	306.2500	20.1	—	-19.0	1.1	—	9.5	—	8.4	—	-
6	367.5000	19.9	—	-19.3	0.6	—	9.5	—	8.9	—	-

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 : DVD2100-C
TEMP./HUMID. : 23°C/43%

REPORT NO : 24KE0255-YW-1
DATE : June 29, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : VCR Playback : 4ch

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ [MHz]	READING		C.F [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBμV]	AV [dBμV]		QP [dBμV]	AV [dBμV]	QP [dBμV]	AV [dBμV]	QP [dB]	AV [dB]	
1	67.2500	21.0	—	-19.9	1.1	—	9.5	—	8.4	—	-
2	134.5000	21.2	—	-19.5	1.7	—	9.5	—	7.8	—	-
3	201.7500	21.2	—	-19.1	2.1	—	9.5	—	7.4	—	-
4	269.0000	21.4	—	-18.9	2.5	—	9.5	—	7.0	—	-
5	336.2500	20.2	—	-19.1	1.1	—	9.5	—	8.4	—	-
6	403.5000	20.0	—	-19.6	0.4	—	9.5	—	9.1	—	-

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 : DVD2100-C
TEMP./HUMID. : 23°C/43%

REPORT NO : 24KE0255-YW-1
DATE : June 29, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : DVD Play : 4ch

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ [MHz]	READING		C. F [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dB μ V]	AV [dB μ V]		QP [dB μ V]	AV [dB μ V]	QP [dB μ V]	AV [dB μ V]	QP [dB]	AV [dB]	
1	67.2500	21.1	----	-19.9	1.2	----	9.5	----	8.3	----	-
2	134.5000	21.2	----	-19.5	1.7	----	9.5	----	7.8	----	-
3	201.7500	21.0	----	-19.1	1.9	----	9.5	----	7.6	----	-
4	269.0000	21.2	----	-18.9	2.3	----	9.5	----	7.2	----	-
5	336.2500	20.0	----	-19.1	0.9	----	9.5	----	8.6	----	-
6	403.5000	20.0	----	-19.6	0.4	----	9.5	----	9.1	----	-

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 : DVD2100-C
Power : AC120 V / 60Hz
Description : TV Reception
Remarks : -

Report Number : 24KE0255-YW-1
Regulation : FCC Part15 SubpartB
Date : June 29,2004
Temp / Humid : 26°/ 46%
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	21.1	11.4
3	61.25	16.5	6.7	20	507.25	21.8	12.3
4	67.25	16.1	6.4	26	543.25	22.0	12.6
5	77.25	16.8	6.9	32	579.25	23.2	14.5
6	83.25	17.4	7.4	38	615.25	24.1	16.0
7	175.25	18.8	8.7	44	651.25	24.1	16.0
8	181.25	18.8	8.7	50	687.25	24.1	16.0
9	187.25	18.7	8.6	56	723.25	21.9	12.4
10	193.25	18.9	8.8	62	759.25	22.2	12.9
11	199.25	18.5	8.4	69	801.25	22.2	12.9
12	205.25	18.4	8.3	-	-	-	-
13	211.25	18.6	8.5	-	-	-	-
Average VHF			8.1	Average UHF			13.7
Average UHF/VHF : 20 log UHF[μV] / VHF[μV]=				4.5	[Limit : 8.0dB]		

Noise Figure Test

UL Apex Co.,Ltd.
Yokowa EMC Laboratory

Company : Orion Electric Co., Ltd.
Equipment : DVD/VCR
Model Number : DVD2100-C
Power : AC120 V / 60Hz
Description : TV Reception
Remarks : -

Report Number : 24KE0255-YW-1
Regulation : FCC Part15 SubpartB
Date : June 29,2004
Temp / Humid : 26°/ 46%
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	7.0	0.2	6.8	14.0	7.2
3	61.25	4.9	0.2	4.7	14.0	9.3
4	67.25	4.3	0.2	4.1	14.0	9.9
5	77.25	4.7	0.2	4.5	14.0	9.5
6	83.25	4.8	0.2	4.6	14.0	9.4
7	175.25	4.2	0.2	4.0	14.0	10.0
8	181.25	4.2	0.2	4.0	14.0	10.0
9	187.25	4.0	0.2	3.8	14.0	10.2
10	193.25	4.0	0.2	3.8	14.0	10.2
11	199.25	4.0	0.2	3.8	14.0	10.2
12	205.25	3.8	0.2	3.6	14.0	10.4
13	211.25	3.8	0.2	3.6	14.0	10.4
TV UHF Fundamental						
14	471.25	5.8	0.3	5.5	14.0	8.5
20	507.25	5.6	0.3	5.3	14.0	8.7
26	543.25	6.0	0.3	5.7	14.0	8.3
32	579.25	7.0	0.3	6.7	14.0	7.3
38	615.25	7.6	0.3	7.3	14.0	6.7
44	651.25	7.0	0.3	6.7	14.0	7.3
50	687.25	6.5	0.3	6.2	14.0	7.8
56	723.25	6.0	0.4	5.6	14.0	8.4
62	759.25	5.8	0.4	5.4	14.0	8.6
69	801.25	5.8	0.4	5.4	14.0	8.6
Mid band						
14	121.25	3.0	0.2	2.8	14.0	11.2
16	133.25	6.0	0.2	5.8	14.0	8.2
18	145.25	5.0	0.2	4.8	14.0	9.2
20	157.25	4.2	0.2	4.0	14.0	10.0
22	169.25	4.0	0.2	3.8	14.0	10.2
Super band						
23	217.25	3.8	0.2	3.6	14.0	10.4
26	235.25	3.9	0.2	3.7	14.0	10.3
29	253.25	3.9	0.2	3.7	14.0	10.3
32	271.25	4.0	0.2	3.8	14.0	10.2
36	295.25	4.0	0.2	3.8	14.0	10.2

Test Report No : 24KE0255-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
APMAT05	Matching Pad	TME	ZT-130	AT, RF, ATS	2003/12/16 * 12
APNFM01	Noise Figure Indicator	Elena	ENF-2005	NF	2002/09/27 * 24
APNFS01	Noise Source	Elena	MC1100	NF	-
AV01-01	Signal Generator	Rohde & Schwarz	SMY01	PS	2004/02/19 * 12
SS-05	Digitizing Oscilloscope	Sony Tektronix	2221	PS	2004/01/22 * 12
APBPF01	Band pass filter	Erika Fiedler	BP	PS	Pre Check
APPRA01	Pre Amplifier	Anritsu	MH648A	AT, RF, ATS	2003/10/03 * 12
APPRA05	Pre Amplifier	Hewlett Packard	8449B	AT	2003/12/10 * 12
APCBL-01	Coaxial Cable	Fujikura	5D-2W	AT, RF, ATS	2004/01/08 * 12
APCBL-02	Coaxial Cable	Fujikura	5D-2W	AT, RF, ATS	2004/01/08 * 12
OS-15	Digital Humidity Indicator	SATO	PC-5000TRH	RF, ATS, PS, NF	2004/05/06 * 12
AF-04	Pre Amplifier	Hewlett Packard	8449B	RE	2003/11/04 * 12
LS-01	LISN(AMN)	Rohde & Schwarz	ESH2-Z5	CE	2003/10/31 * 12
SA-07	Spectrum Analyzer	Advantest	R3273	CE	2003/12/08 * 12
TR-01	Test Receiver	Rohde & Schwarz	ESHS20	CE	2004/05/11 * 12
CC-1S	Yokowa No.1 shield coaxial(0.01MHz-1000MHz)	UL Apex	CC-14,CC-15,CC-16,CC-18,CC-19,SW-11,SW-12	CE	2004/03/28 * 12
OS-05	Digital Humidity Indicator	SATO	PC-5000TRH	CE	2004/04/22 * 12
AF-03	Pre Amplifier	Anritsu	MH648A	RE	2004/03/28 * 12
AT-04	Attenuator	Anritsu	MP721B	RE	2004/03/26 * 12
BA-04	Biconical Antenna	Schwarzbeck	BBA9108	RE	2004/04/10 * 12
HA-01	Horn Antenna	A.H.Systems	SAS-200/571	RE	2004/04/10 * 12
LA-05	Logperiodic Antenna	Schwarzbeck	UHALP9108-A	RE	2003/10/19 * 12
LS-03	LISN(AMN)	Schwarzbeck	NSLK8127	CE (EUT)	2003/10/31 * 12
SA-05	Spectrum Analyzer	Advantest	R3271	RE	2003/12/21 * 12
TA-04	Terminator	TME	CT-01	CE	2004/05/02 * 12
TR-04	Test Receiver	Rohde & Schwarz	ESVS10	RE	2004/05/21 * 12
CC-20RC	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	2004/03/28 * 12
YOATS-02	Open Test Site	JSE	3m, 10m	RE	2003/08/14 * 12
OS-10	Digital Humidity Indicator	SATO	PC-5000TRH	RE	2004/05/06 * 12
CC-C15	Microwave Cable	Suhner	SUCOFLEX	RE	2004/05/02 * 12
CC-C17	Microwave Cable	Suhner	SUCOFLEX	RE	2004/05/02 * 12
APTVG04	TV Generator	Leader	408	CE	Pre Check

All 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