

Certification EMI TEST REPORT

Test Report No. : 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Type of equipment : DVD/VCR
Model number : SD-V392SU2
FCC ID : A7RM2E5B
Test standard : FCC Part 15 Subpart B
ICES-003 Issue No.4 Class B
Test result : Complied

Similar model :

Model No.	Brand name	Model No.	Brand name
SD-V392SC2	TOSHIBA	SD-K531SU2	TOSHIBA
SD-V320SU2	TOSHIBA	SD-K531SC2	TOSHIBA
SD-V320SC2	TOSHIBA	SD-K220SU2	TOSHIBA
SD-V396SU2	TOSHIBA	SD-K220SC2	TOSHIBA
SD-V396SC2	TOSHIBA	-	-

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 : September 7 to 12, 2004

Tested by:

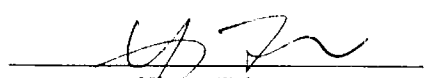


Tsubasa Takayama
EMC Service



Masaya Minami
EMC Service

Approved by:



Hiroya Tabata
Leader of EMC Service

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

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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 : TOSHIBA
Model number : SD-V392SU2
FCC ID : A7RM2E5B
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 : September 6, 2004
Condition of EUT : Production Prototype
(Not for Sale: This sample is equivalent to mass-produced items.)

2.2 Product description

Model: SD-V392SU2 (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

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

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 C63.4:2003 IEEE 213:1987	CISPR 22	17.2 dB (0.1500 MHz, N, DVD Play)	Complied
Radiated emission	ANSI C63.4:2003 IEEE 187:1990	30–88 MH: 100 uV/m 88–216 MHz: 150 uV/m 216–960 MHz: 200 uV/m above 960 MHz: 500 uV/m	5.2 dB (945.02 MHz, Vertical, DVD Play)	Complied
Antenna terminal voltage	ANSI C63.4:2003	2 nW (at 75 ohm)	20.6 dB (811.00450 MHz, CATV tuning)	Complied
RF output level	ANSI C63.4:2003	Video signal: 3000 uV Aural signal: 671 uV	2.8 dB (56.75 MHz, 3ch, AV Input 1 + Rec. 1Vp-p / 65.75 MHz, 3ch, AV Input 1 + Rec. 5Vp-p)	Complied
Spurious emission		94.8 uV	6.2 dB (54.1200 MHz, AV Input 2 + Rec. 1Vp-p, 3ch)	Complied
Transfer switch	ANSI C63.4:2003	9.5 dB	5.5 dB (183.7500 MHz, VCR Play, 3ch)	Complied
Picture sensitivity	ANSI C63.4:2003	8 dB	4.5 dB	Complied
Noise figure	FCC/OET MP:2:1986	14 dB	7.7 dB (133.25 MHz, 16ch)	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.

UL Apex Co., Ltd.
Yokowa EMC Lab.

108 Yokowa-cho, Ise-shi, Mie-ken 516-1106 JAPAN
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Facsimile: +81 596 39 0232

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 meets the limits unless the uncertainty is taken into consideration.

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.

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

TEL : +81 596 39 1485

FAX : +81 596 39 0232

Test room	Width x Depth x Height (m)	Test room	Width x Depth x Height (m)
No.1 shielded room	5.5 x 6.4 x 2.7	No.7 shielded room	9.3 x 3.4 x 2.7
No.2 shielded room	4.5 x 3.6 x 2.7	No.1 EMS lab. (Full-anechoic chamber)	5.0 x 8.0 x 3.5
No.3 shielded room	3.6 x 7.2 x 2.4	No.2 EMS lab. (Full-anechoic chamber)	4.0 x 7.0 x 3.5
No.4 shielded room	5.5 x 5.0 x 2.4		
No.5 shielded room	5.5 x 4.3 x 2.5		
No.6 shielded room	5.2 x 3.2 x 2.9		

No.1 and No.3 open site

These sites have 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.

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

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

4.1 Operating modes

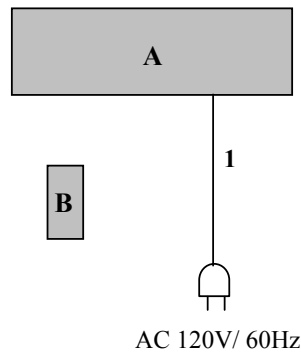
The EUT exercise program used during testing was designed exercise the various system components in a manner similar to typical use.

The sequence in used : * TV Reception + Rec. mode (0 dBmV input / 25 dBmV input)
* AV Input 1 / AV Input 2 + Rec. mode (1 Vp-p input / 5 Vp-p input)
* VCR Play 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	FCC ID	Remark
A	DVD/VCR	SD-V392SU2	—	Orion Electric Co., Ltd.	A7RM2E5B	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

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

Section 5 : Conducted emission

5.1 Operation environment

The test was carried out in No.3 shielded room.

Date : September 12, 2004
Temperature : See data
Humidity : See data

5.2 Test configuration

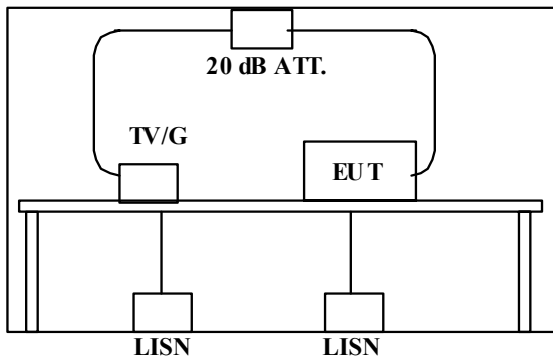
EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The rear of tabletop was located 40 cm to the vertical conducting plane. The rear of EUT was aligned and flushed with rear of tabletop. All other surfaces of tabletop was at least 80 cm from any 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. All unused 50 ohm connectors of the LISN were resistively terminated in 50 ohm when not connected to the measuring equipment.

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)

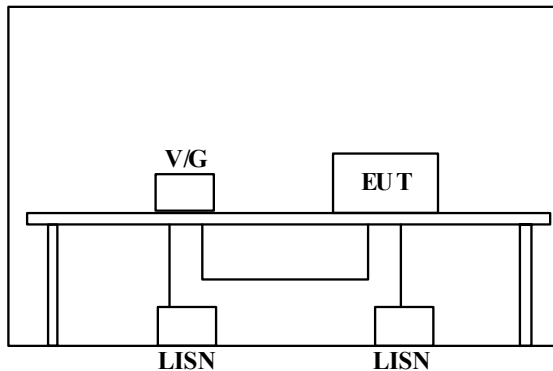
Shielded room



RF in: TV signal generator connected
Front video in: 75 ohm terminated
Front audio in: 47 k ohm terminated
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
Component out (Y/P_B/P_R): 75 ohm terminated with component cable
RF output: 75 ohm terminated with RF output cable
Coaxial out: 75 ohm terminated with coaxial cable
Rear video in: 75 ohm terminated
Rear audio in: 47 k ohm terminated

AV Input 1 / AV Input 2 + Rec. mode (1 Vp-p input / 5 Vp-p input)

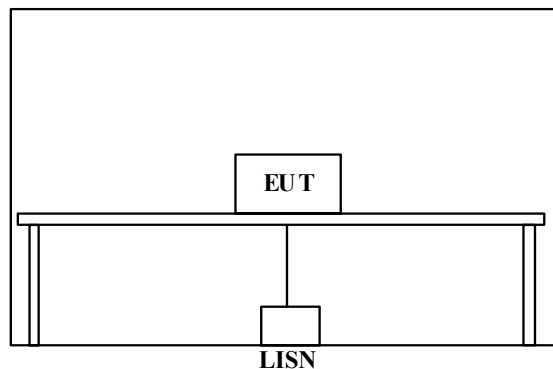
Shielded room



RF in: 75 ohm terminated
 Front video in: Video signal generator connected or 75 ohm terminated
 Front audio in: 47 k ohm terminated
 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
 Component out (Y/P_B/P_R): 75 ohm terminated with component cable
 RF output: 75 ohm terminated with RF output cable
 Coaxial out: 75 ohm terminated with coaxial cable
 Rear video in: 75 ohm terminated
 Rear audio in: 47 k ohm terminated

VCR Play mode

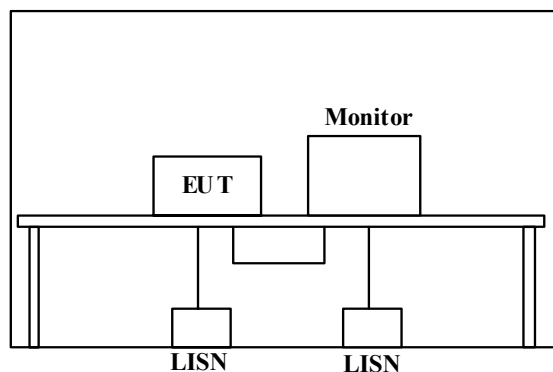
Shielded room



RF in: 75 ohm terminated with RF input cable
 Front video in: 75 ohm terminated with video cable
 Front audio in: 47 k ohm terminated with audio 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
 Component out (Y/P_B/P_R): 75 ohm terminated with component cable
 RF output: 75 ohm terminated with RF output cable
 Coaxial out: 75 ohm terminated with coaxial cable
 Rear video in: 75 ohm terminated with video cable
 Rear audio in: 47 k ohm terminated with audio cable

DVD Play mode

Shielded room



RF in: 75 ohm terminated with RF input cable
 Front video in: 75 ohm terminated with video cable
 Front audio in: 47 k ohm terminated with audio cable
 Rear video out: monitor connected
 Rear audio out: monitor connected
 S-Video out: 75 ohm terminated with S-Video cable
 Component out (Y/P_B/P_R): 75 ohm terminated with component cable
 RF output: 75 ohm terminated with RF output cable
 Coaxial out: 75 ohm terminated with coaxial cable
 Rear video in: 75 ohm terminated with video cable
 Rear audio in: 47 k ohm terminated with audio cable

5.3 Test conditions

Frequency range : 0.15 MHz – 30 MHz
EUT position : Table top
EUT operation mode : TV Reception + Rec., AV Input 1 / AV Input 2 + Rec., VCR Play, 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.

Test engineer: Masaya Minami

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

Section 6 : Radiated emission

6.1 Operation environment

The test was carried out in No.1 and No.3 open site.

Date : September 7 and 12, 2004

Temperature : See data

Humidity : See data

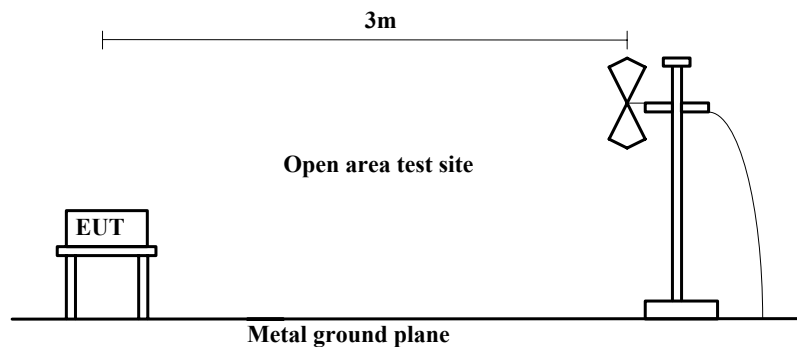
6.2 Test configuration

EUT was placed on a platform of nominal size, 1 m by 1.5 m (No.1 open site) or 1m by 2.3m (No.3 open site), 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.

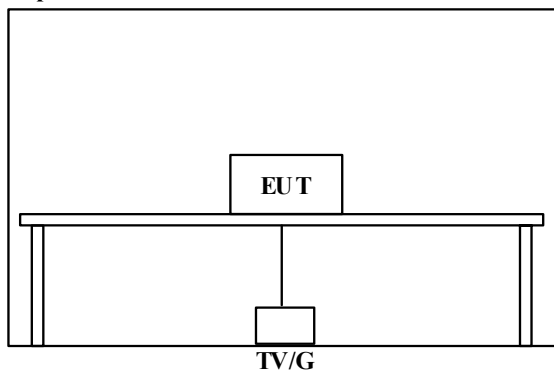
A drawing of the set up is shown in figure 2 and photographs in Appendix 1.

Figure 2. Radiated emission



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

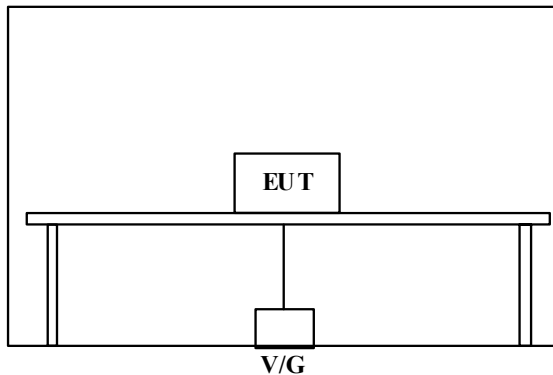
Open test site



RF in: TV signal generator connected or 75 ohm terminated
Front video in: 75 ohm terminated
Front audio in: 47 k ohm terminated
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
Component (Y/P_B/P_R): 75 ohm terminated with component cable
RF output: 75 ohm terminated with RF output cable
Coaxial out: 75 ohm terminated with coaxial cable
Rear video in: 75 ohm terminated
Rear audio in: 47 k ohm terminated

AV Input 1/ AV Input 2 + Rec. mode (1 Vp-p input / 5 Vp-p input)

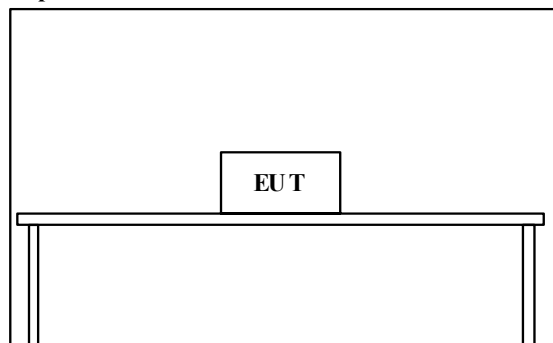
Open test site



RF in: 75 ohm terminated
Front video in: Video signal generator connected or 75 ohm terminated
Front audio in: 47 k ohm terminated
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
Component out (Y/P_B/P_R): 75 ohm terminated with component cable
RF output: 75 ohm terminated with RF output cable
Coaxial out: 75 ohm terminated with coaxial cable
Rear video in: 75 ohm terminated
Rear audio in: 47 k ohm terminated

VCR Play mode

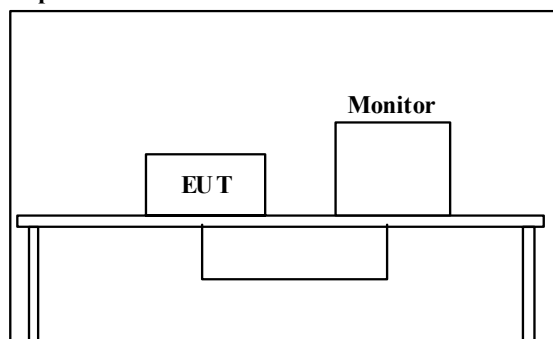
Open test site



RF in: 75 ohm terminated with RF input cable
Front video in: 75 ohm terminated with video cable
Front audio in: 47 k ohm terminated with audio 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
Component out (Y/P_B/P_R): 75 ohm terminated with component cable
RF output: 75 ohm terminated with RF output cable
Coaxial out: 75 ohm terminated with coaxial cable
Rear video in: 75 ohm terminated with video cable
Rear audio in: 47 k ohm terminated with audio cable

DVD Play mode

Open test site



RF in: 75 ohm terminated with RF input cable
Front video in: 75 ohm terminated with video cable
Front audio in: 47 k ohm terminated with audio cable
Rear video out: monitor connected
Rear audio out: monitor connected
S-Video out: 75 ohm terminated with S-Video cable
Component out (Y/P_B/P_R): 75 ohm terminated with component cable
RF output: 75 ohm terminated with RF output cable
Coaxial out: 75 ohm terminated with coaxial cable
Rear video in: 75 ohm terminated with video cable
Rear audio in: 47 k ohm terminated with audio cable

6.3 Test conditions

Frequency range : 30 MHz – 2000 MHz
Test distance : 3 m
EUT position : Table top
EUT operation mode : TV Reception + Rec., AV Input 1 / AV Input 2 + Rec., VCR Play, 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.

Test engineer: Tsubasa Takayama (September 7, 2004)
Masaya Minami (September 12, 2004)

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

Section 7 : Antenna terminal voltage

7.1 Operation environment

The test was carried out in No.7 shielded room.

Date : September 10, 2004

Temperature : See data

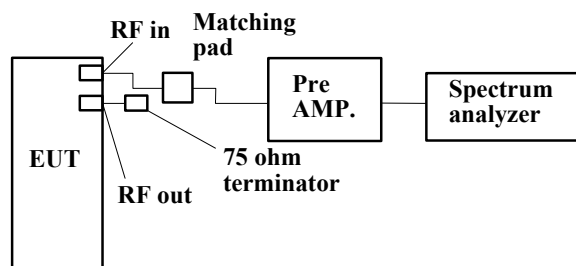
Humidity : See data

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

Section 8 : RF output level / spurious emission

8.1 Operation environment

The test was carried out in No.7 shielded room.

Date : September 9 and 10, 2004

Temperature : See data

Humidity : See data

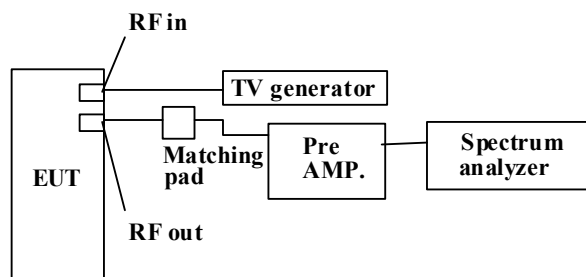
8.2 Test configuration

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

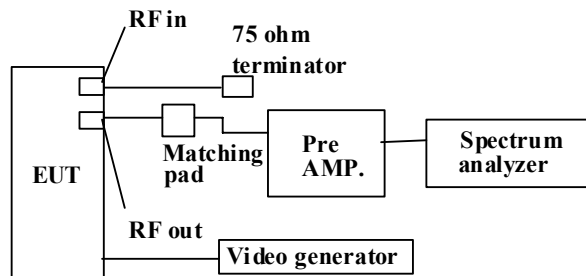
A drawing of the set up is shown in figure 4 and photographs in Appendix 1.

Figure 4. RF output level

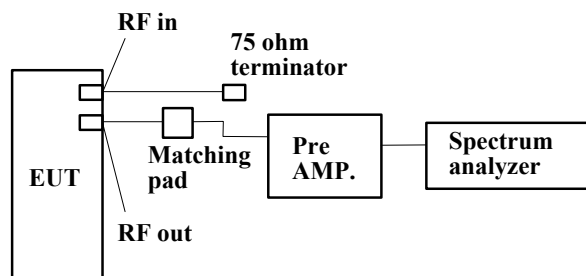
TV Reception + Rec. mode



AV Input 1/ AV Input 2 + Rec. mode (1 Vp-p input / 5 Vp-p input)



VCR Play mode and DVD Play mode



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

8.3 Test conditions

EUT position : Table top

EUT operation mode : TV Reception + Rec., AV Input + Rec., VCR Play, 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.

Test engineer: Tsubasa Takayama

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

Section 9 : Antenna transfer switch

9.1 Operation environment

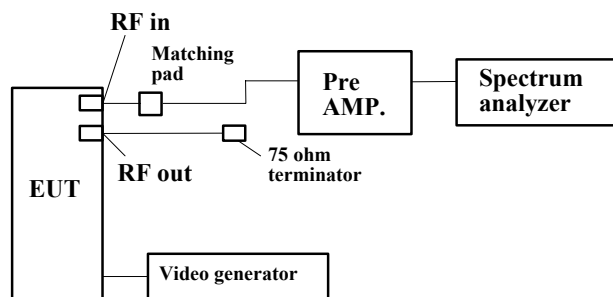
The test was carried out in No.7 shielded room.

Date : September 9, 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 : AV Input 1/ AV Input 2 + Rec., VCR Play, 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

Section 10 : Picture sensitivity

10.1 Operation environment

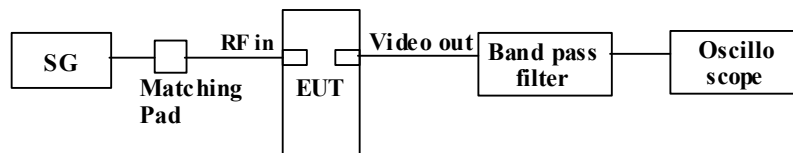
The test was carried out in No.7 shielded room.

Date : September 8, 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.

Test engineer: Tsubasa Takayama

Section 11 : Noise figure

11.1 Operating environment

The test was carried out in No.7 shielded room.

Date : September 8, 2004

Temperature : See data

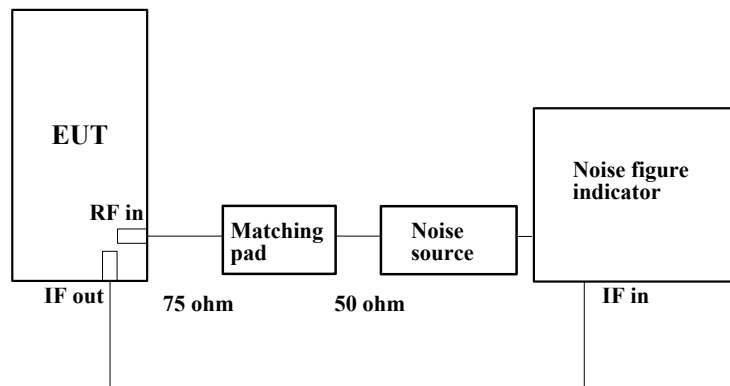
Humidity : See data

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.

Test engineer: Tsubasa Takayama

Appendix 1 : Photographs of test set up

Page 20 :	Test set up of conducted emission
Page 21 :	Test set up of radiated emission
Page 22 :	Test set up of antenna terminal voltage
Page 23 :	Test set up of RF output level / spurious emission
Page 24 :	Test set up of antenna transfer switch
Page 25 :	Test set up of picture sensitivity
Page 26 :	Test set up of noise figure

Appendix 2 : Data of EMI tests

Page 27 - 50 :	Conducted emission
Page 51 - 77 :	Radiated emission
Page 78 - 79 :	Antenna terminal voltage
Page 80 - 101 :	RF output level / spurious emission
Page 102 - 112 :	Antenna transfer switch
Page 113 :	Picture sensitivity
Page 114 :	Noise figure

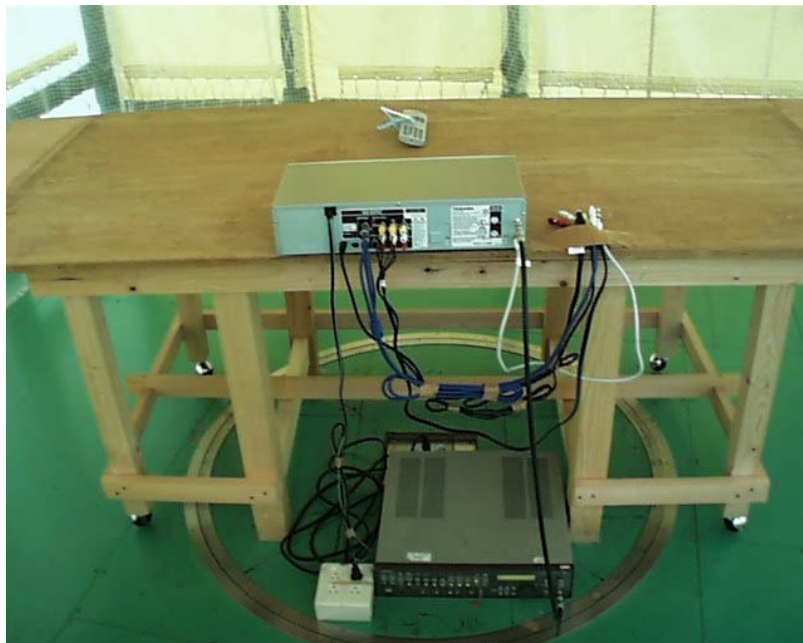
Appendix 3 : Test instruments

Page 115 :	Test instruments
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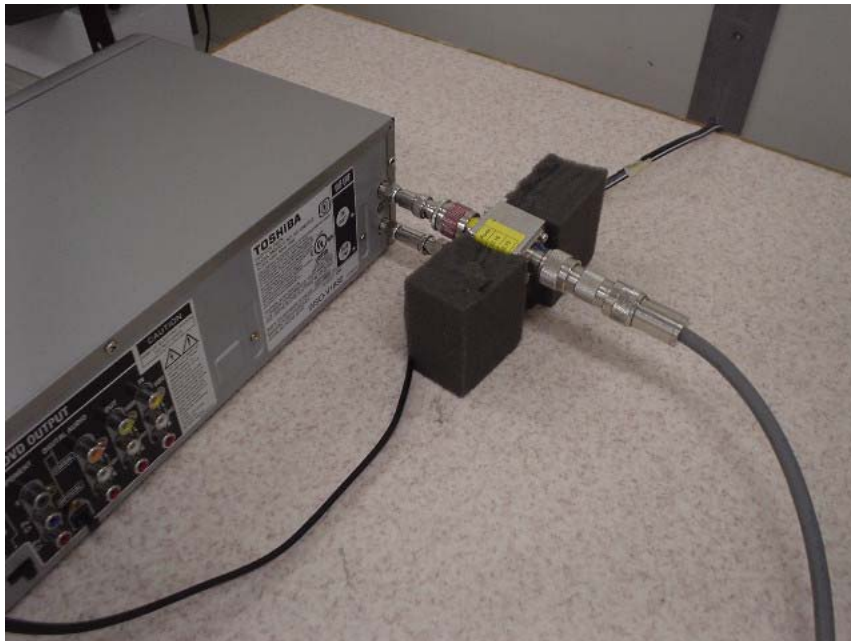
Conducted emission



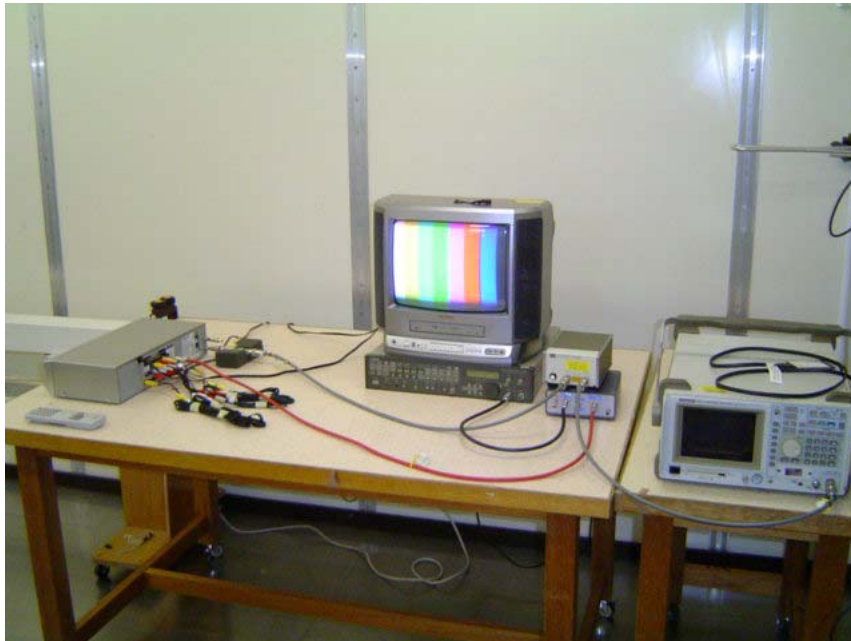
Radiated emission



Antenna terminal voltage



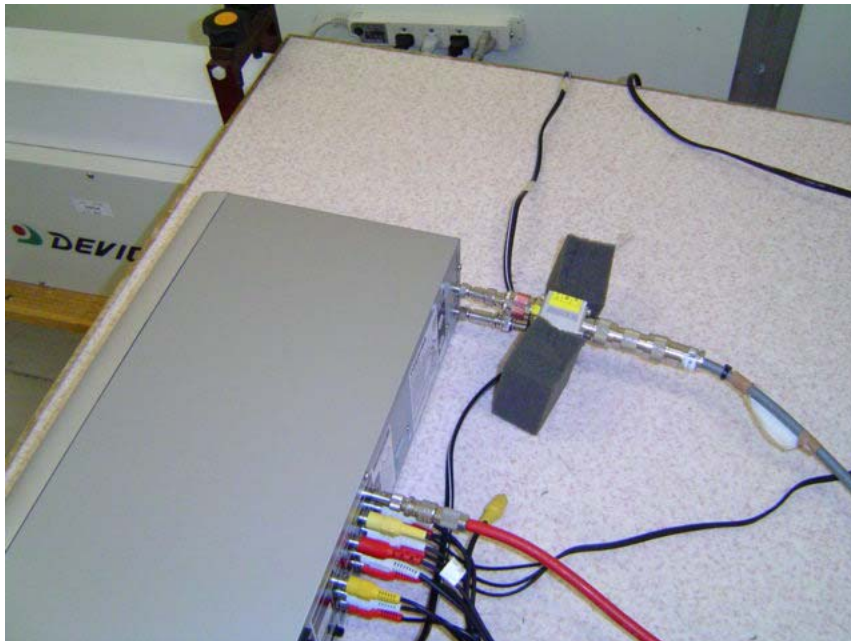
RF output level / spurious emission



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

Antenna transfer switch



UL Apex Co., Ltd.

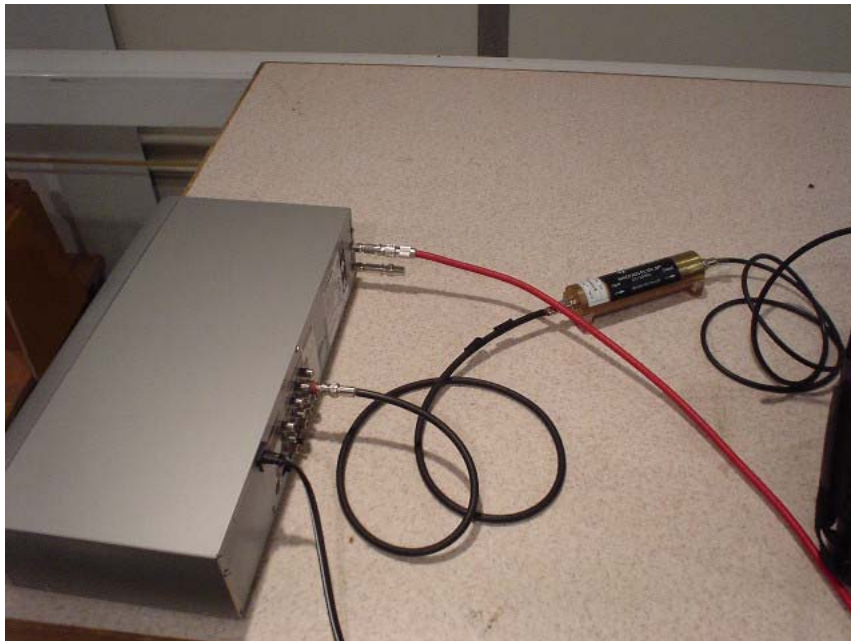
Yokowa EMC Lab.

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

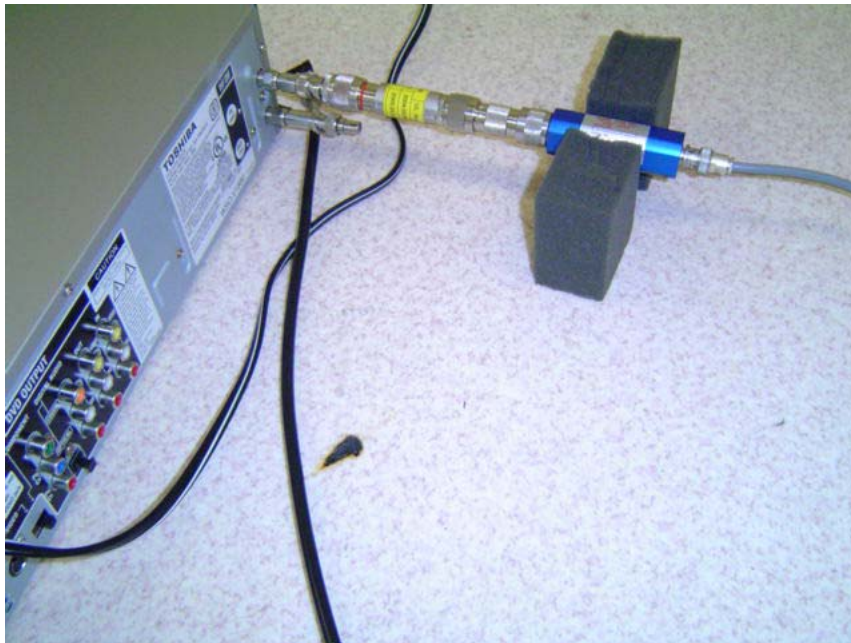
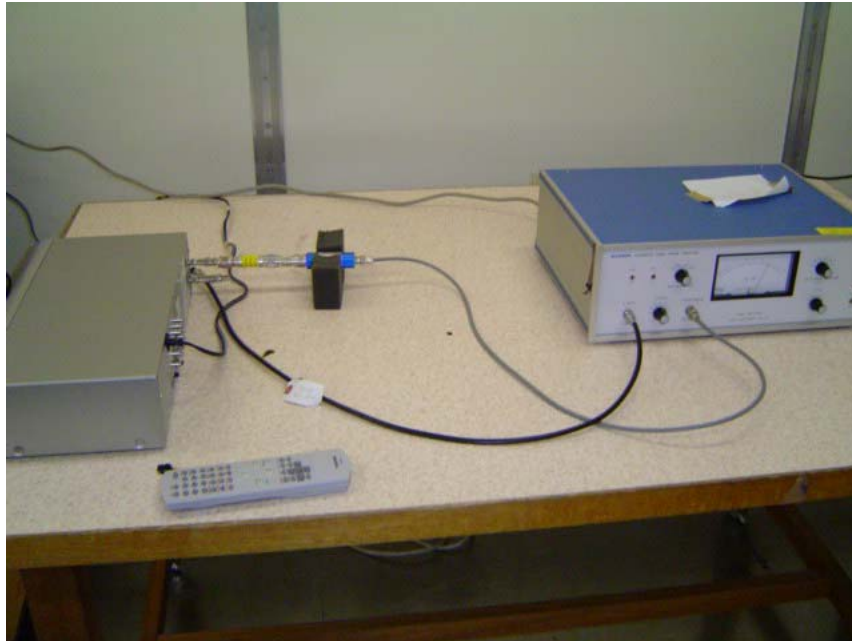
Telephone: +81 596 39 1485

Facsimile: +81 596 39 0232

Picture sensitivity



Noise figure



DATA OF CONDUCTION TEST

UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception + Rec
Remarks : 0dBmV
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation : FCC Part15B CLASS B(2003)

Engineer : Masaya Minami

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	48.1	-	48.2	-	0.1	0.1	0.0	48.4	-	66.0	56.0	17.6	-
2.	0.4540	26.8	-	27.0	-	0.1	0.1	0.0	27.2	-	56.8	46.8	29.6	-
3.	0.8163	26.7	-	26.8	-	0.2	0.1	0.0	27.1	-	56.0	46.0	28.9	-
4.	1.1198	26.2	-	25.6	-	0.2	0.1	0.0	26.5	-	56.0	46.0	29.5	-
5.	2.9851	28.6	-	26.2	-	0.2	0.2	0.0	29.0	-	56.0	46.0	27.0	-
6.	3.9986	30.1	-	29.1	-	0.2	0.2	0.0	30.5	-	56.0	46.0	25.5	-
7.	18.4318	25.3	-	25.3	-	1.1	0.4	0.0	26.8	-	60.0	50.0	33.2	-
8.	26.9988	20.2	-	11.7	-	0.9	0.5	0.0	21.6	-	60.0	50.0	38.4	-

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

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

DATA OF CONDUCTION TEST

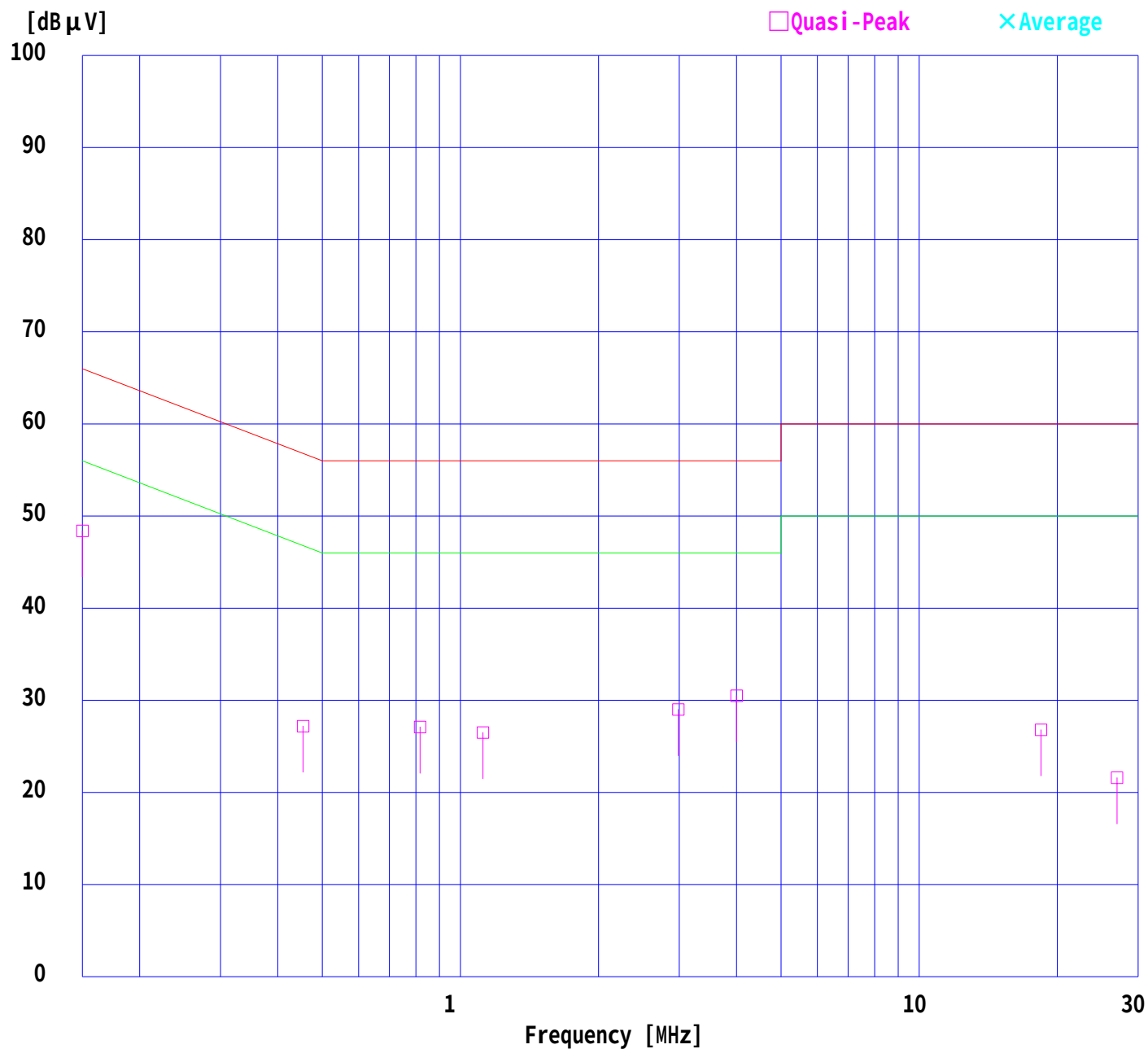
UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception + Rec
Remarks : 0dBmV
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation : FCC Part15B CLASS B(2003)

Engineer : Masaya Minami



DATA OF CONDUCTION TEST CHART

UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

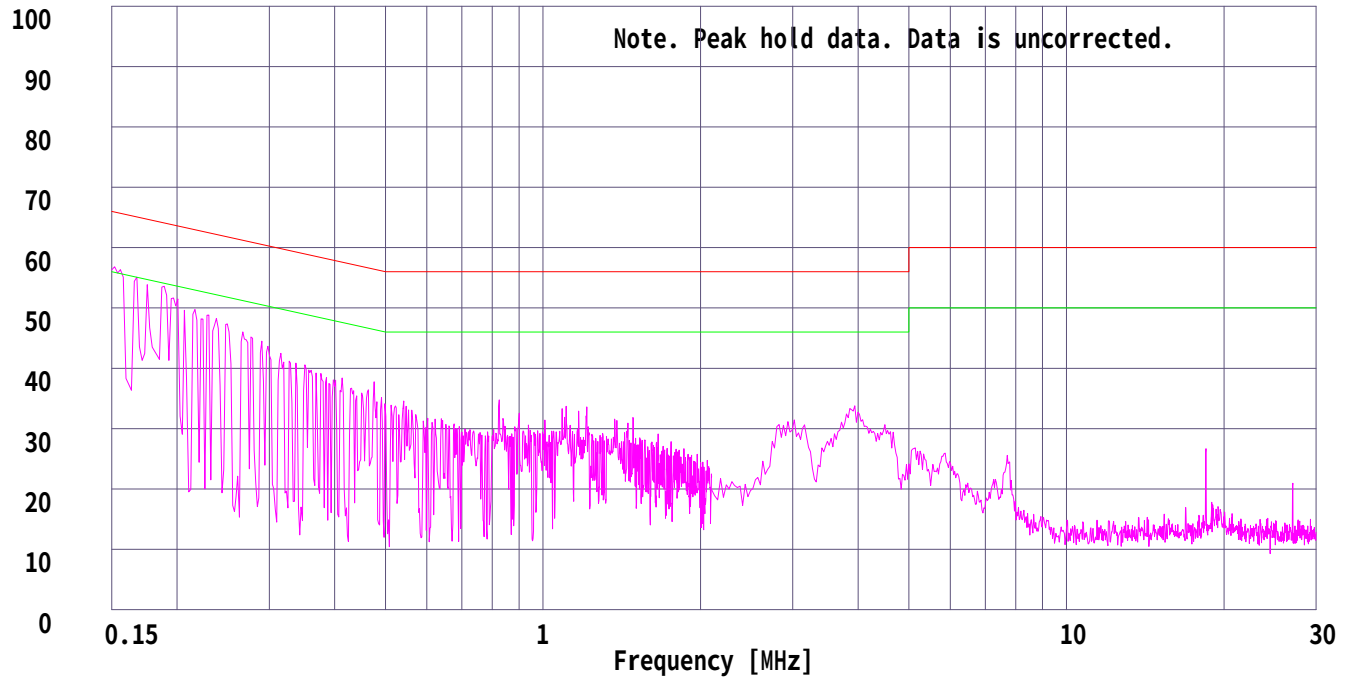
Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception + Rec
Remarks : 0dBmV
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation 1 : FCC Part15B CLASS B(2003)
Regulation 2 : None

Engineer : Masaya Minami

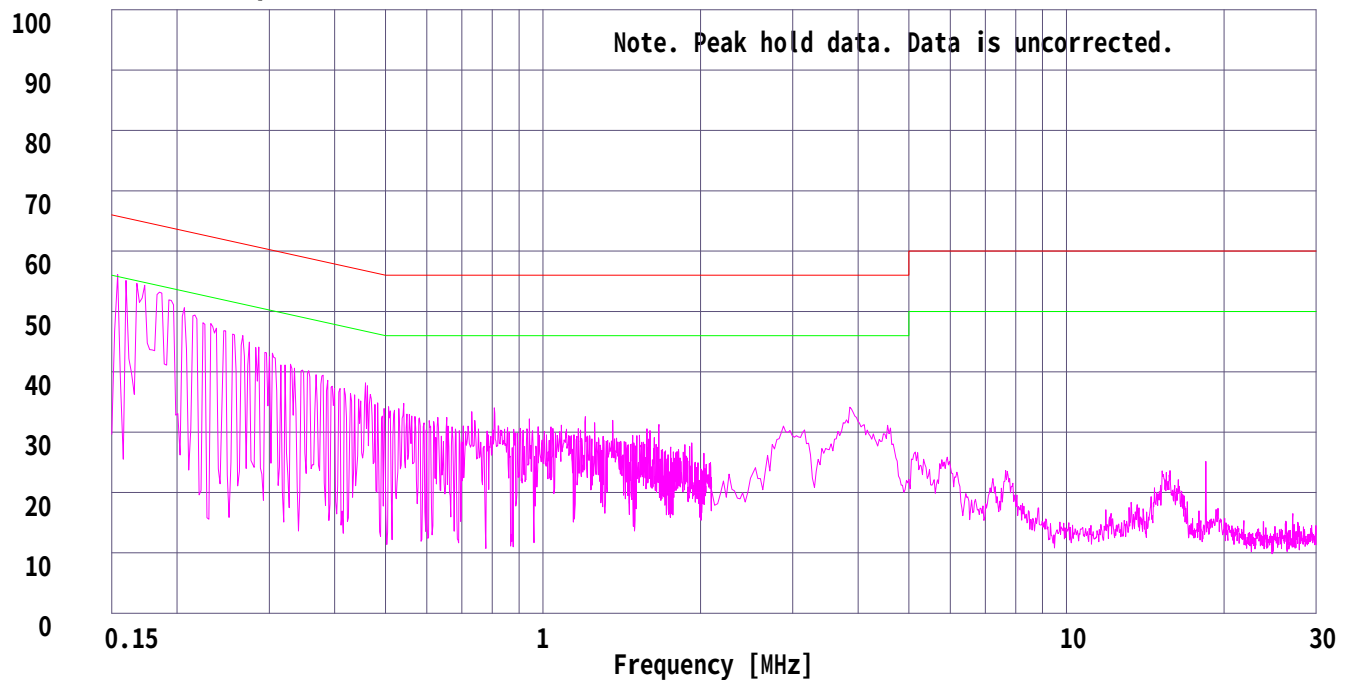
Emission Level [dBμV]

PHASE:N



Emission Level [dBμV]

PHASE:L1



DATA OF CONDUCTION TEST

UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception + Rec
Remarks : 25dBmV
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation : FCC Part15B CLASS B(2003)

Engineer : Masaya Minami

No.	FREQ. [MHz]	READING(N)		READING(L1)		LISN FACTOR [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
		QP [dB μV]	AV	QP [dB μV]	AV				QP [dB]	AV [dB μV]	QP [dB μV]	AV [dB μV]	QP [dB]	AV [dB]
1.	0.1500	48.1	-	48.2	-	0.1	0.1	0.0	48.4	-	66.0	56.0	17.6	-
2.	0.4538	26.7	-	27.2	-	0.1	0.1	0.0	27.4	-	56.8	46.8	29.4	-
3.	0.8196	26.8	-	27.1	-	0.2	0.1	0.0	27.4	-	56.0	46.0	28.6	-
4.	1.1207	25.7	-	24.8	-	0.2	0.1	0.0	26.0	-	56.0	46.0	30.0	-
5.	2.9817	27.4	-	26.7	-	0.2	0.2	0.0	27.8	-	56.0	46.0	28.2	-
6.	3.9975	30.1	-	29.5	-	0.2	0.2	0.0	30.5	-	56.0	46.0	25.5	-
7.	18.4325	25.5	-	25.3	-	1.1	0.4	0.0	27.0	-	60.0	50.0	33.0	-
8.	27.0004	20.1	-	11.3	-	0.9	0.5	0.0	21.5	-	60.0	50.0	38.5	-

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

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

DATA OF CONDUCTION TEST

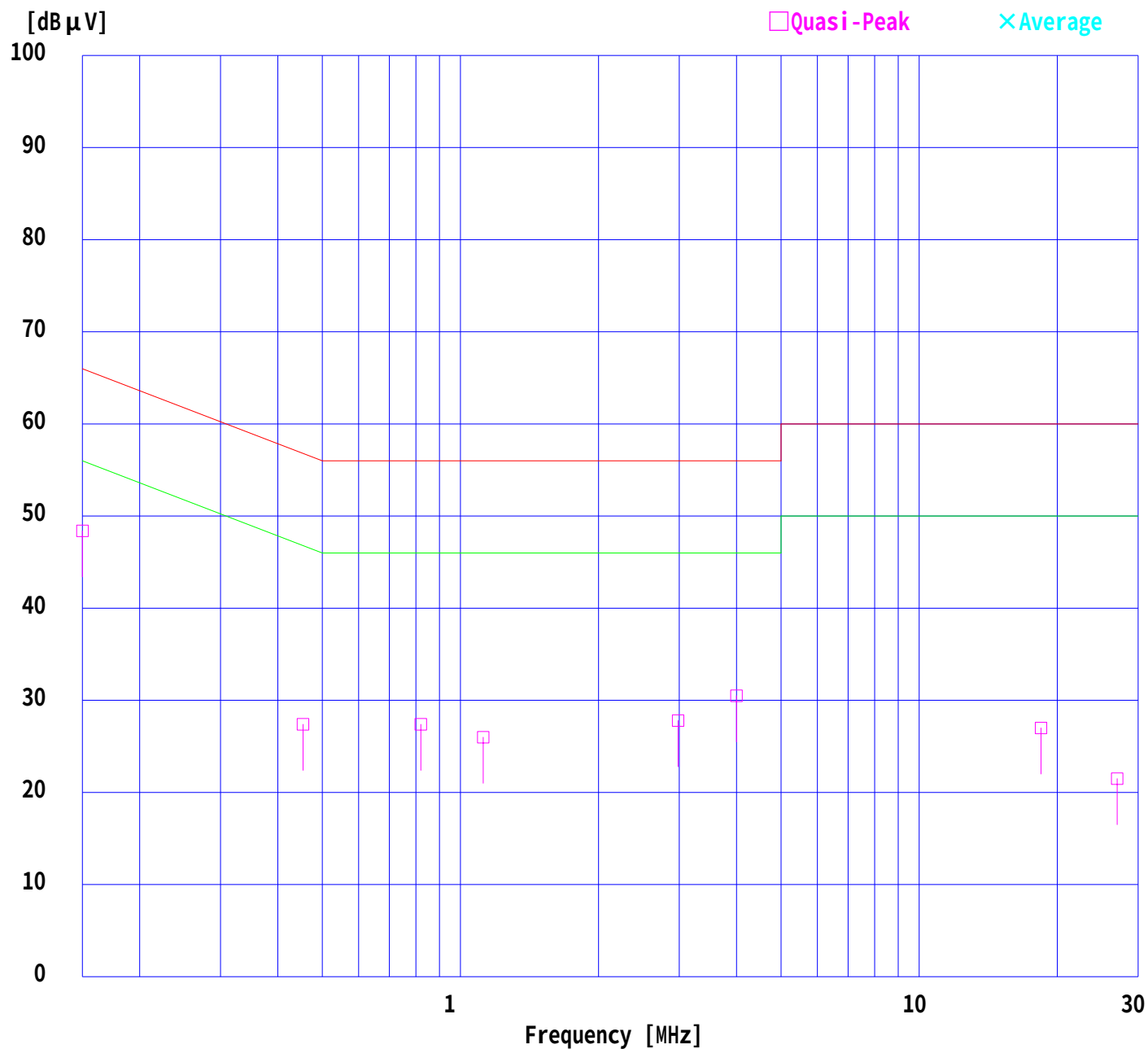
UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception + Rec
Remarks : 25dBmV
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation : FCC Part15B CLASS B(2003)

Engineer : Masaya Minami



DATA OF CONDUCTION TEST CHART

UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

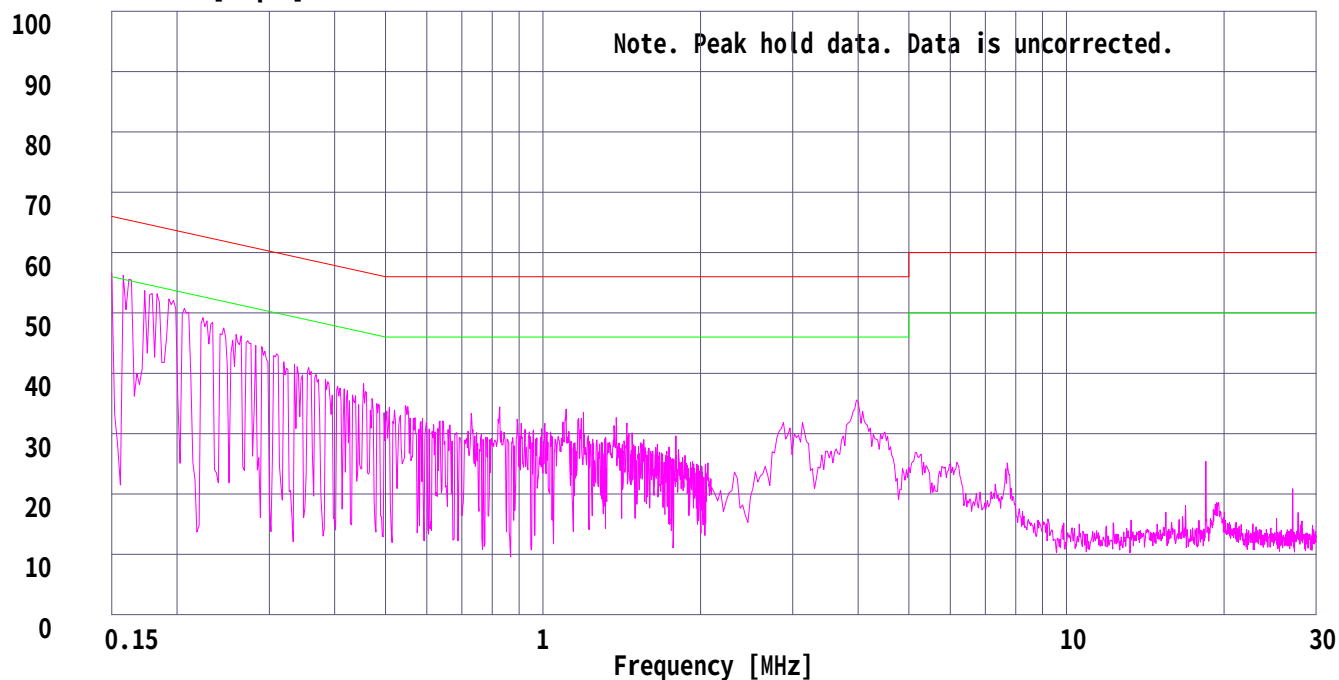
Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception + Rec
Remarks : 25dBmV
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation 1 : FCC Part15B CLASS B(2003)
Regulation 2 : None

Engineer : Masaya Minami

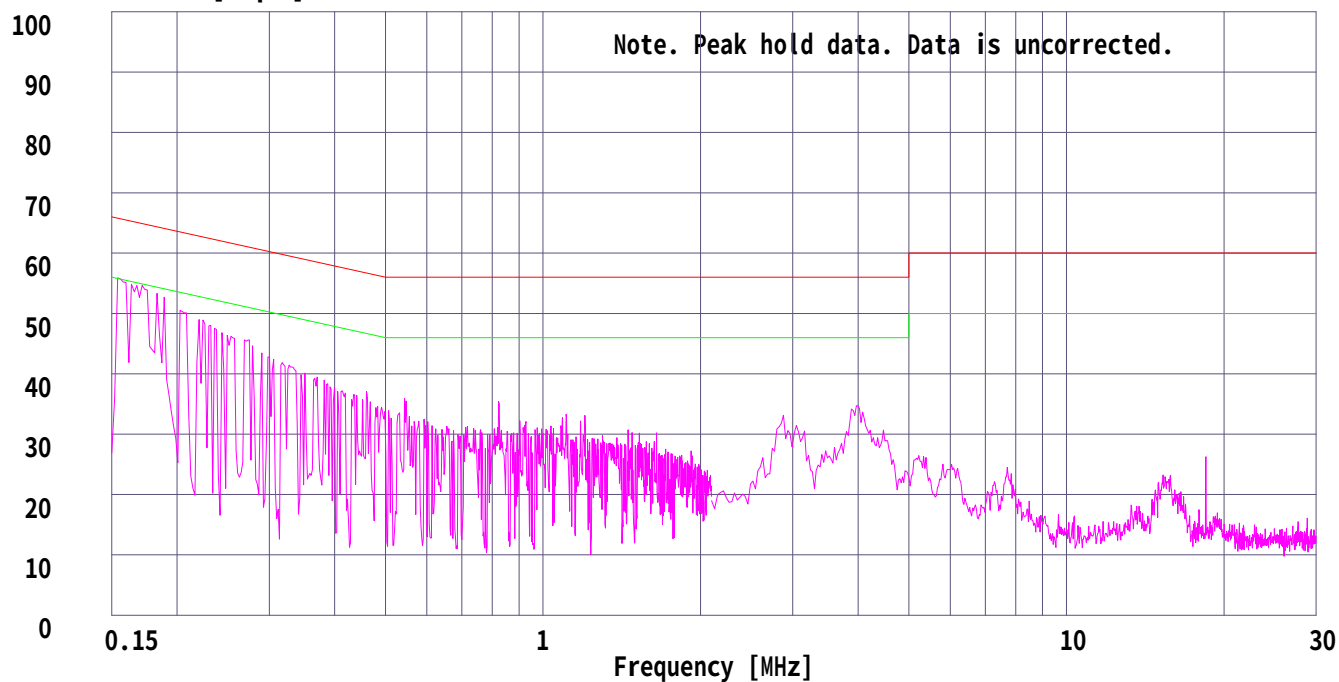
Emission Level [dBμV]

PHASE:N



Emission Level [dBμV]

PHASE:L1



DATA OF CONDUCTION TEST

UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input 1 + Rec
Remarks : 1Vp-p
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation : FCC Part15B CLASS B(2003)

Engineer : Masaya Minami

No.	FREQ. [MHz]	READING(N)		READING(L1)		LISN FACTOR [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
		QP [dB μV]	AV	QP [dB μV]	AV				QP [dB]	AV [dB μV]	QP [dB μV]	AV [dB μV]	QP [dB μV]	AV [dB]
1.	0.1500	47.9	-	47.8	-	0.1	0.1	0.0	48.1	-	66.0	56.0	17.9	-
2.	0.4562	25.6	-	25.6	-	0.1	0.1	0.0	25.8	-	56.8	46.8	31.0	-
3.	0.6811	24.9	-	24.6	-	0.2	0.1	0.0	25.2	-	56.0	46.0	30.8	-
4.	0.9181	23.6	-	22.7	-	0.2	0.1	0.0	23.9	-	56.0	46.0	32.1	-
5.	1.2290	24.0	-	22.7	-	0.2	0.1	0.0	24.3	-	56.0	46.0	31.7	-
6.	15.3586	19.1	-	16.8	-	0.9	0.4	0.0	20.4	-	60.0	50.0	39.6	-
7.	18.4311	15.5	-	14.9	-	1.1	0.4	0.0	17.0	-	60.0	50.0	43.0	-
8.	28.6355	19.7	-	19.6	-	0.9	0.5	0.0	21.1	-	60.0	50.0	38.9	-

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

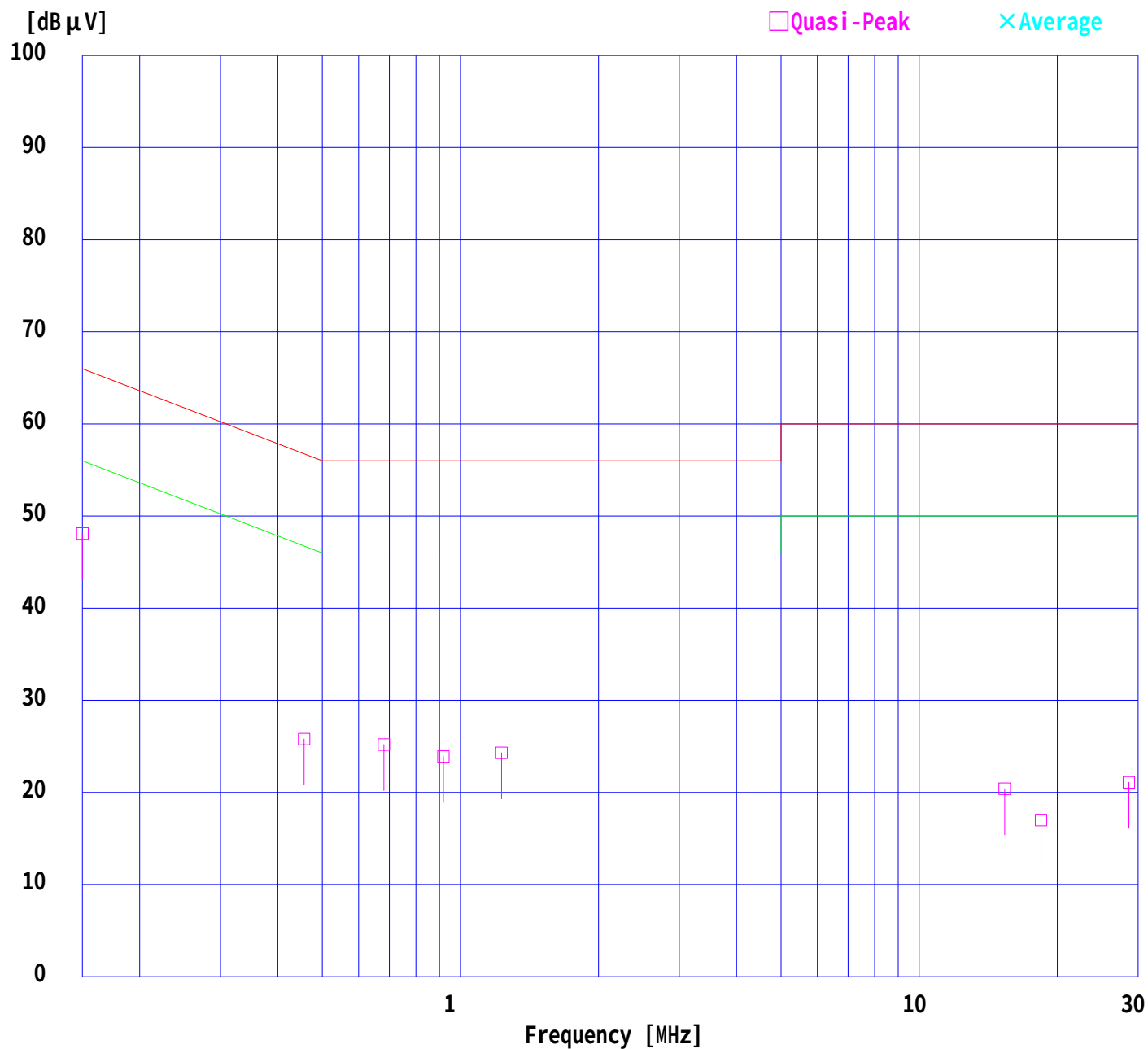
Except for the above table: adequate margin data below the limits.

DATA OF CONDUCTION TEST

UL Apex Co., Ltd.
YOKOWA No.3 SHIELD TEST ROOM
Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input 1 + Rec
Remarks : 1Vp-p
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation : FCC Part15B CLASS B(2003)

Engineer : Masaya Minami



DATA OF CONDUCTION TEST CHART

UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

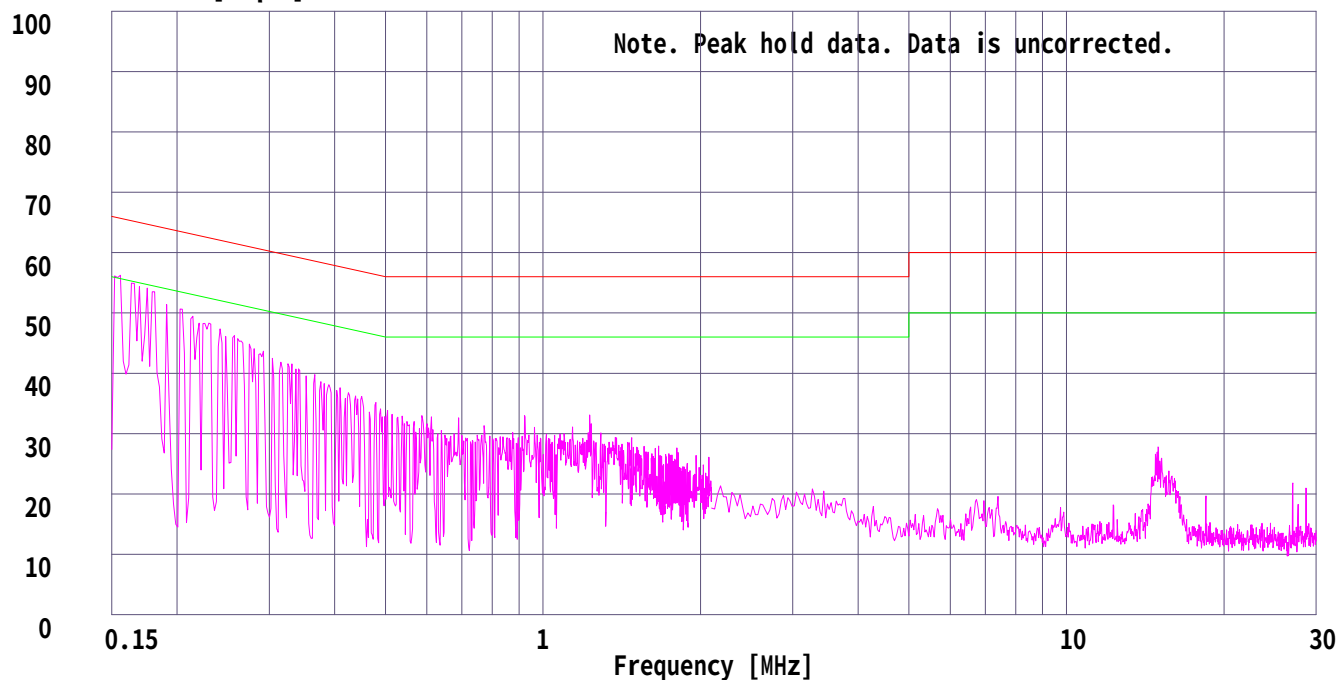
Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input 1 + Rec
Remarks : 1Vp-p
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation 1 : FCC Part15B CLASS B(2003)
Regulation 2 : None

Engineer : Masaya Minami

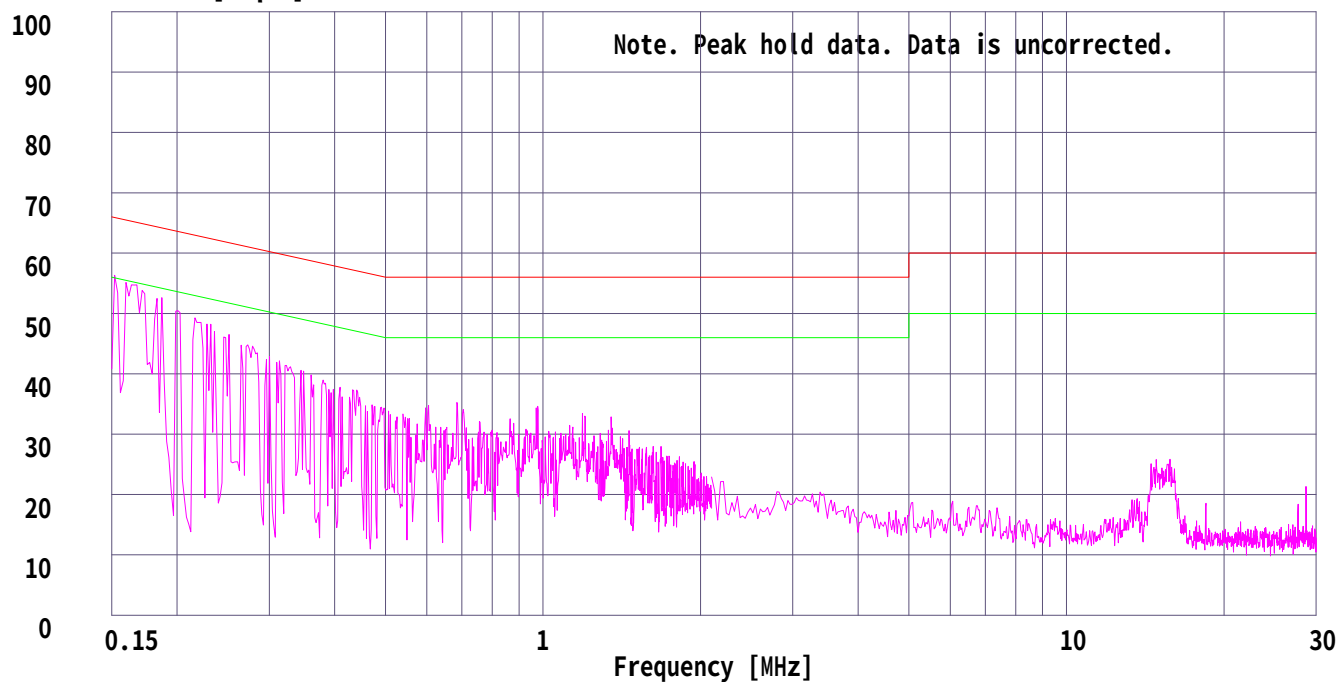
Emission Level [dB μ V]

PHASE:N



Emission Level [dB μ V]

PHASE:L1



DATA OF CONDUCTION TEST

UL Apex Co., Ltd.
YOKOWA No.3 SHIELD TEST ROOM
Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input 1 + Rec
Remarks : 5Vp-p
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation : FCC Part15B CLASS B(2003)

Engineer : Masaya Minami

No.	FREQ. [MHz]	READING(N)		READING(L1)		LISN FACTOR [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
		QP [dB μV]	AV	QP [dB μV]	AV				QP [dB]	AV [dB μV]	QP [dB μV]	AV [dB μV]	QP [dB μV]	AV [dB]
1.	0.1500	47.9	-	47.7	-	0.1	0.1	0.0	48.1	-	66.0	56.0	17.9	-
2.	0.4560	25.5	-	25.6	-	0.1	0.1	0.0	25.8	-	56.8	46.8	31.0	-
3.	0.6797	25.1	-	24.5	-	0.2	0.1	0.0	25.4	-	56.0	46.0	30.6	-
4.	0.9406	24.6	-	24.7	-	0.2	0.1	0.0	25.0	-	56.0	46.0	31.0	-
5.	6.9350	14.3	-	14.7	-	0.4	0.3	0.0	15.4	-	60.0	50.0	44.6	-
6.	15.3605	19.1	-	20.1	-	0.9	0.4	0.0	21.4	-	60.0	50.0	38.6	-
7.	18.4307	15.3	-	15.0	-	1.1	0.4	0.0	16.8	-	60.0	50.0	43.2	-
8.	28.6344	19.4	-	19.4	-	0.9	0.5	0.0	20.8	-	60.0	50.0	39.2	-

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

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

DATA OF CONDUCTION TEST

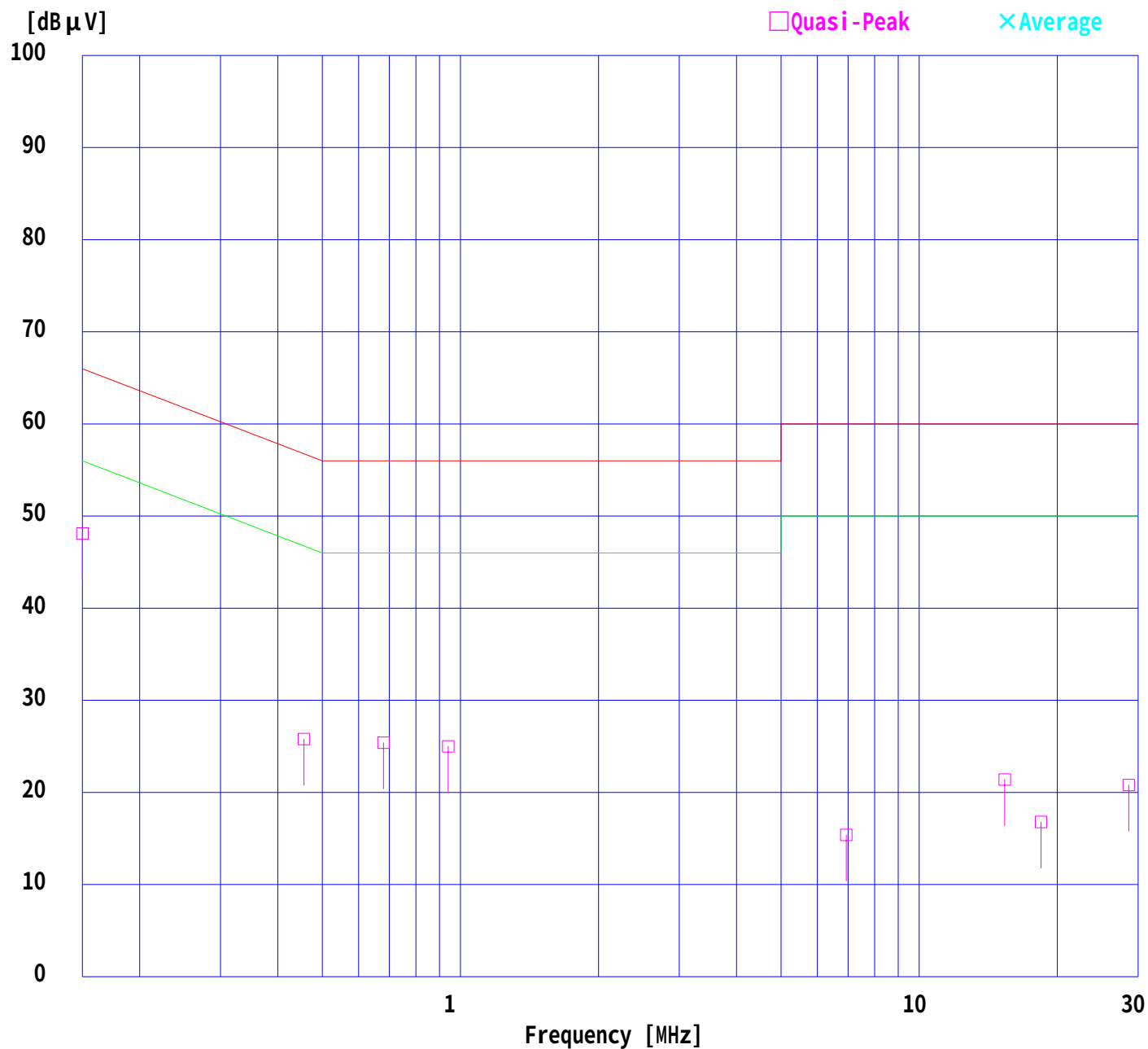
UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input 1 + Rec
Remarks : 5Vp-p
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation : FCC Part15B CLASS B(2003)

Engineer : Masaya Minami



DATA OF CONDUCTION TEST CHART

UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

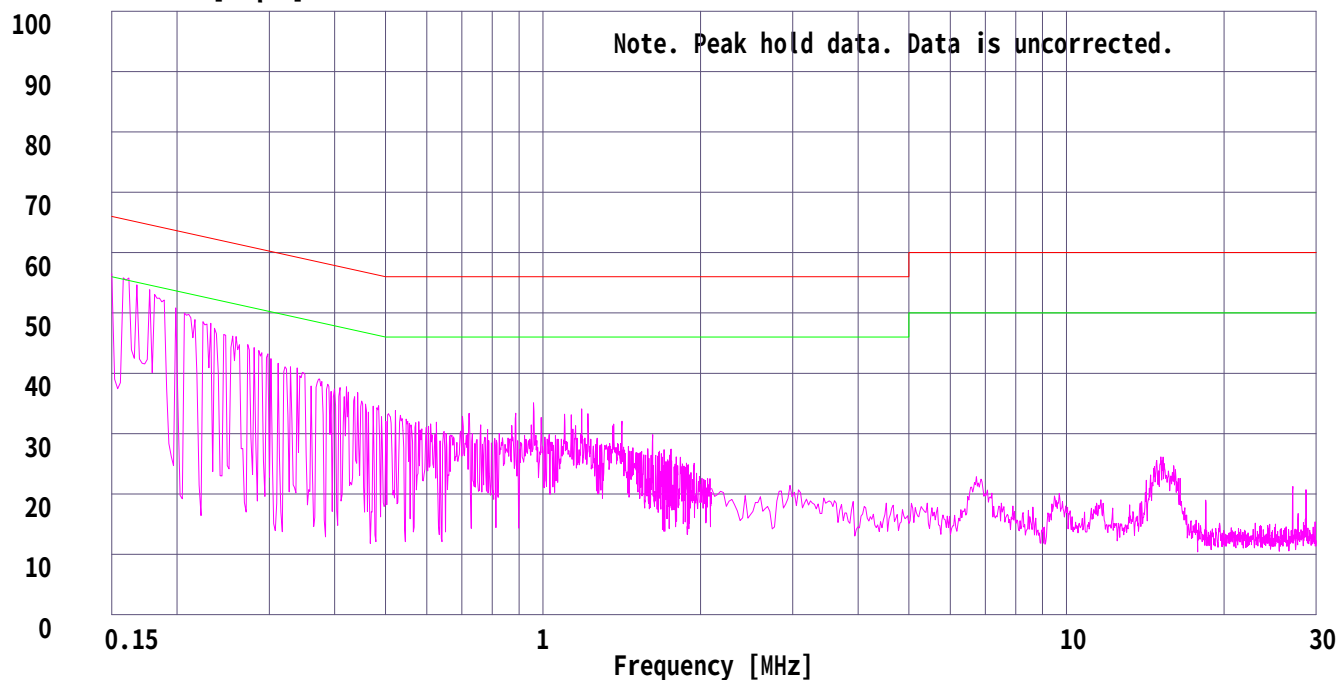
Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input 1 + Rec
Remarks : 5Vp-p
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation 1 : FCC Part15B CLASS B(2003)
Regulation 2 : None

Engineer : Masaya Minami

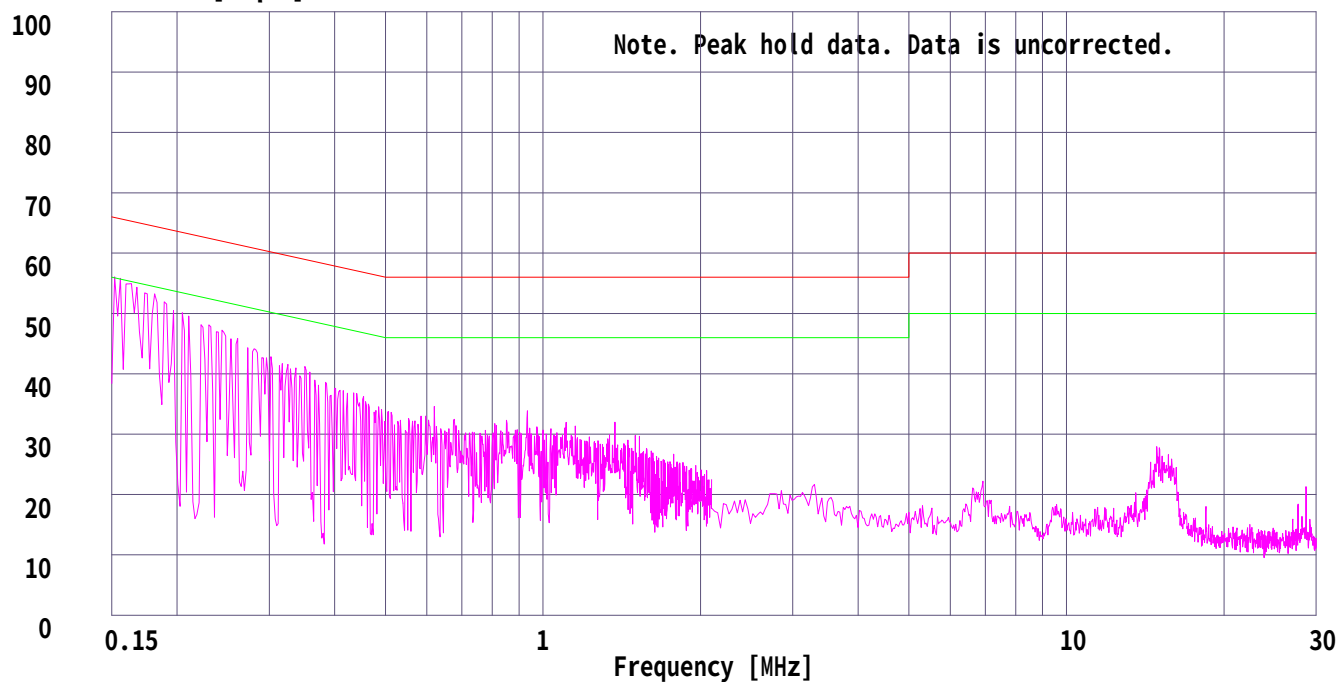
Emission Level [dB μ V]

PHASE:N



Emission Level [dB μ V]

PHASE:L1



DATA OF CONDUCTION TEST

UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input 2 + Rec
Remarks : 1Vp-p
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation : FCC Part15B CLASS B(2003)

Engineer : Masaya Minami

No.	FREQ. [MHz]	READING(N)		READING(L1)		LISN FACTOR [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
		QP [dB μV]	AV	QP [dB μV]	AV				QP [dB]	AV [dB μV]	QP [dB μV]	AV [dB μV]	QP [dB]	AV [dB]
1.	0.1500	48.0	-	47.7	-	0.1	0.1	0.0	48.2	-	66.0	56.0	17.8	-
2.	0.4613	25.4	-	25.4	-	0.1	0.1	0.0	25.6	-	56.7	46.7	31.1	-
3.	0.5943	23.4	-	24.4	-	0.2	0.1	0.0	24.7	-	56.0	46.0	31.3	-
4.	0.9321	25.1	-	24.5	-	0.2	0.1	0.0	25.4	-	56.0	46.0	30.6	-
5.	1.1271	24.3	-	24.6	-	0.2	0.1	0.0	24.9	-	56.0	46.0	31.1	-
6.	15.3826	15.1	-	17.0	-	0.9	0.4	0.0	18.3	-	60.0	50.0	41.7	-
7.	18.4325	16.7	-	16.2	-	1.1	0.4	0.0	18.2	-	60.0	50.0	41.8	-
8.	28.6349	18.9	-	19.0	-	0.9	0.5	0.0	20.4	-	60.0	50.0	39.6	-

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

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

DATA OF CONDUCTION TEST

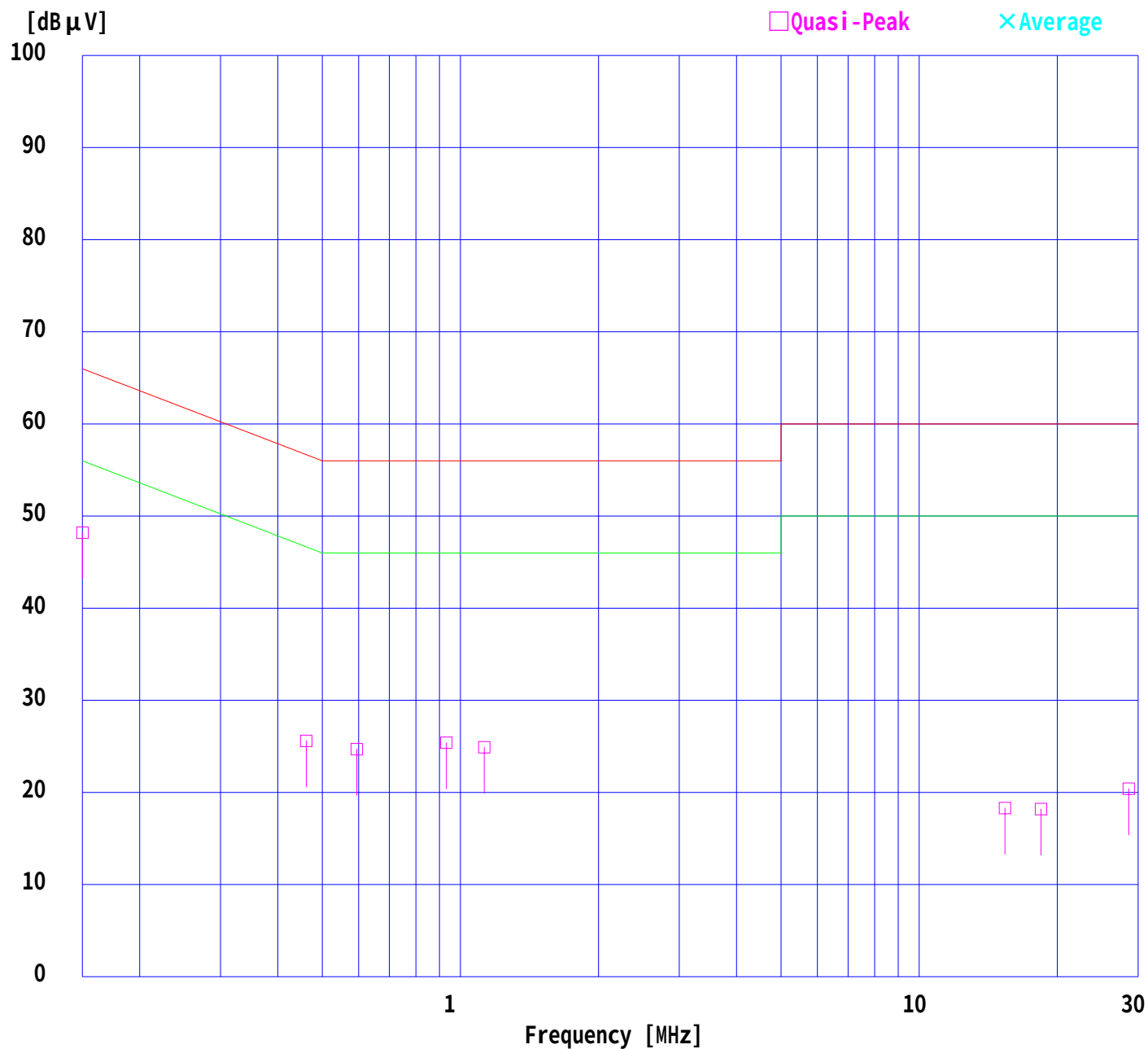
UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input 2 + Rec
Remarks : 1Vp-p
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation : FCC Part15B CLASS B(2003)

Engineer : Masaya Minami



DATA OF CONDUCTION TEST CHART

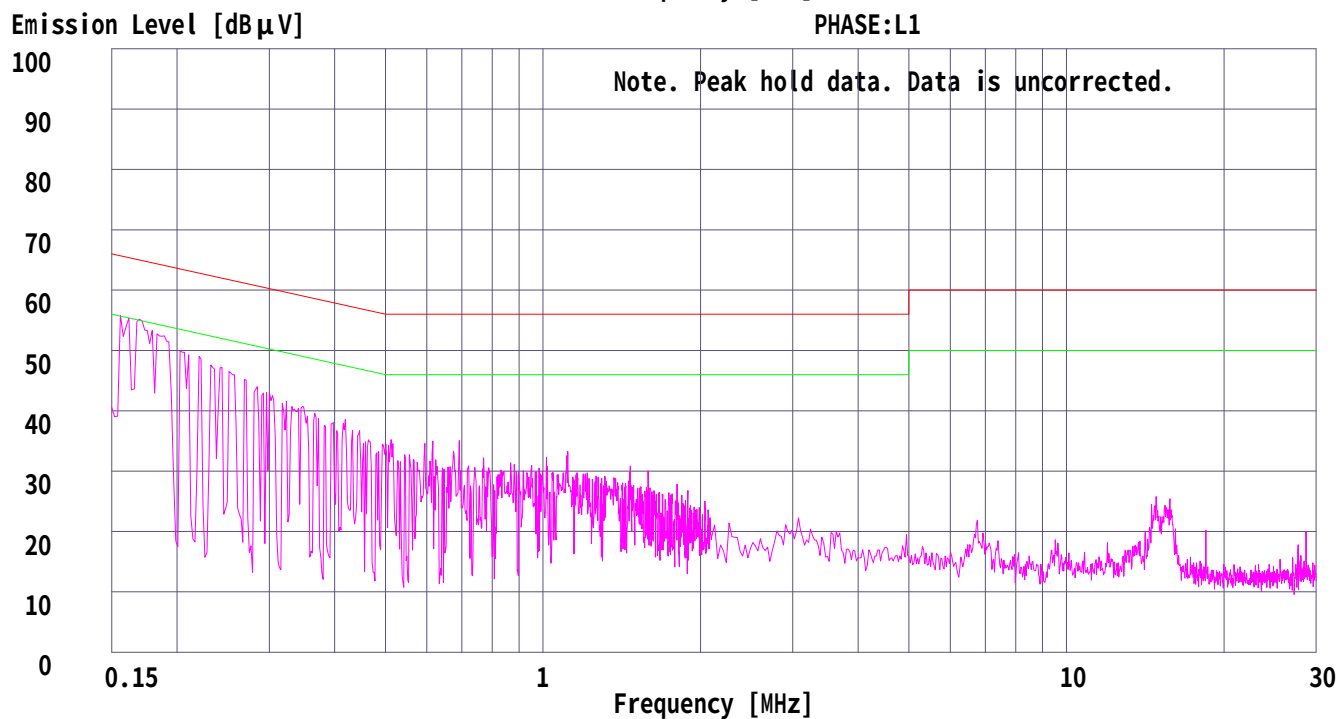
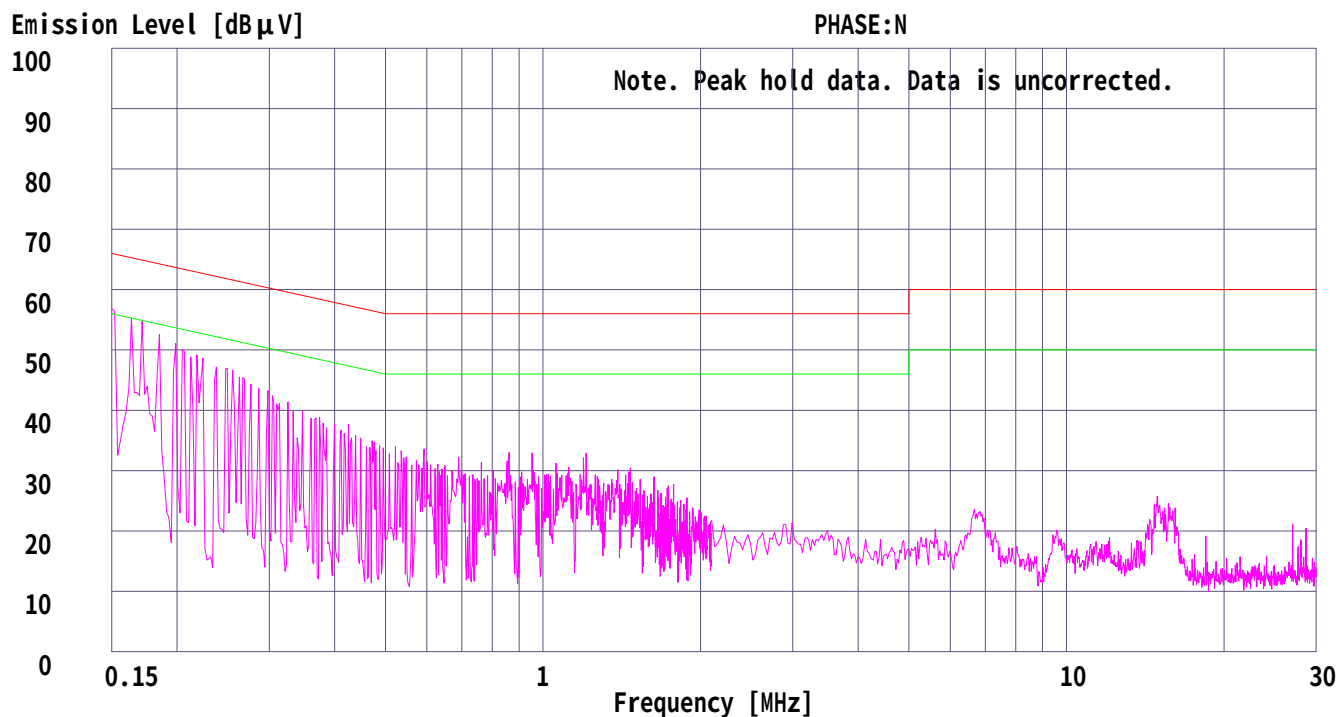
UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input 2 + Rec
Remarks : 1Vp-p
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation 1 : FCC Part15B CLASS B(2003)
Regulation 2 : None

Engineer : Masaya Minami



DATA OF CONDUCTION TEST

UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input 2 + Rec
Remarks : 5Vp-p
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation : FCC Part15B CLASS B(2003)

Engineer : Masaya Minami

No.	FREQ. [MHz]	READING(N)		READING(L1)		LISN FACTOR [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
		QP [dB μV]	AV	QP [dB μV]	AV				QP [dB]	AV [dB μV]	QP [dB μV]	AV [dB μV]	QP [dB μV]	AV [dB]
1.	0.1500	48.1	-	47.6	-	0.1	0.1	0.0	48.3	-	66.0	56.0	17.7	-
2.	0.4597	25.5	-	25.5	-	0.1	0.1	0.0	25.7	-	56.7	46.7	31.0	-
3.	0.5954	23.7	-	24.5	-	0.2	0.1	0.0	24.8	-	56.0	46.0	31.2	-
4.	0.9343	25.1	-	24.6	-	0.2	0.1	0.0	25.4	-	56.0	46.0	30.6	-
5.	1.1342	23.5	-	23.6	-	0.2	0.1	0.0	23.9	-	56.0	46.0	32.1	-
6.	15.3827	15.4	-	17.2	-	0.9	0.4	0.0	18.5	-	60.0	50.0	41.5	-
7.	18.4325	16.9	-	16.4	-	1.1	0.4	0.0	18.4	-	60.0	50.0	41.6	-
8.	28.6345	18.6	-	19.0	-	0.9	0.5	0.0	20.4	-	60.0	50.0	39.6	-

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

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

DATA OF CONDUCTION TEST

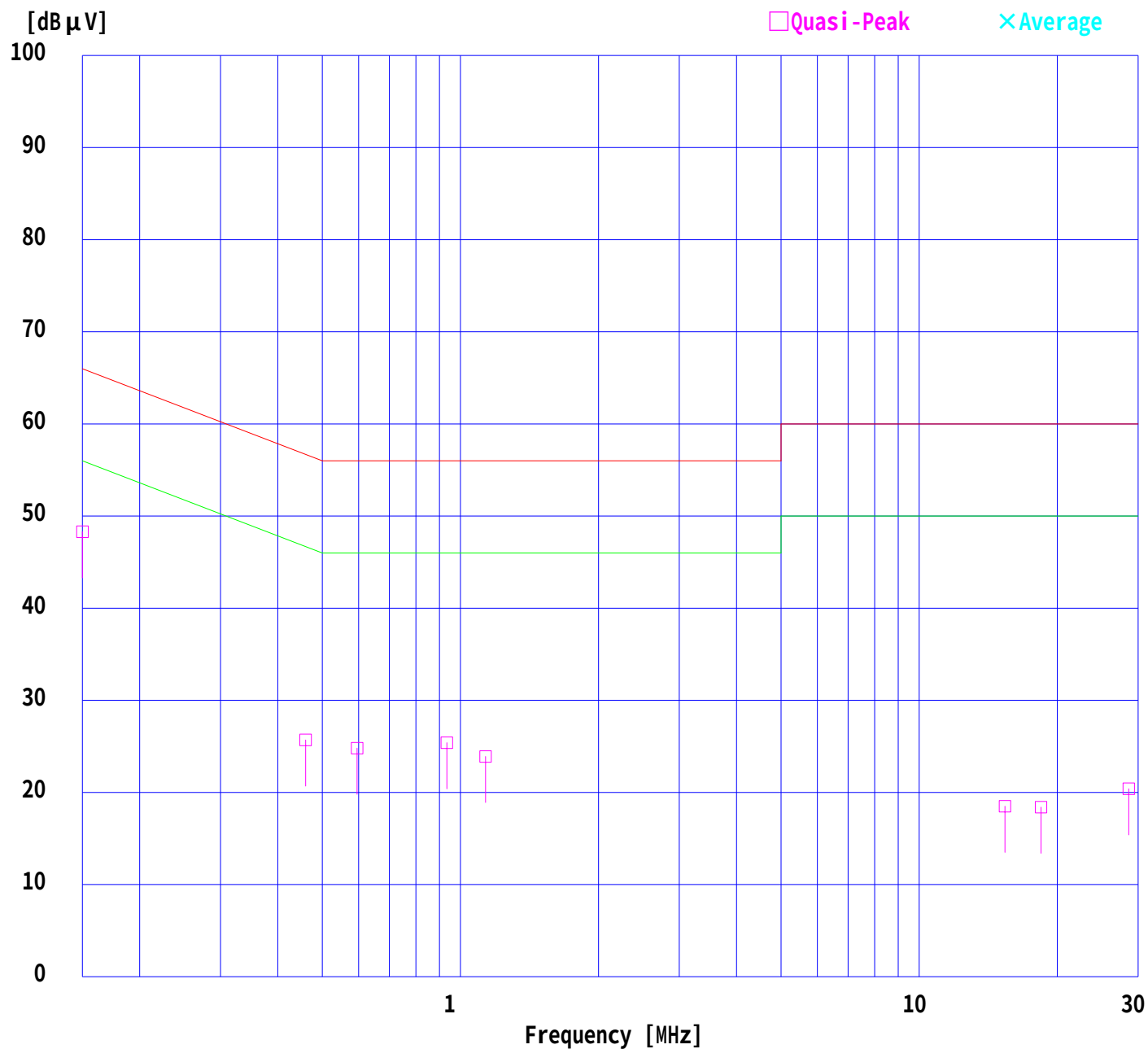
UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input 2 + Rec
Remarks : 5Vp-p
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation : FCC Part15B CLASS B(2003)

Engineer : Masaya Minami



DATA OF CONDUCTION TEST CHART

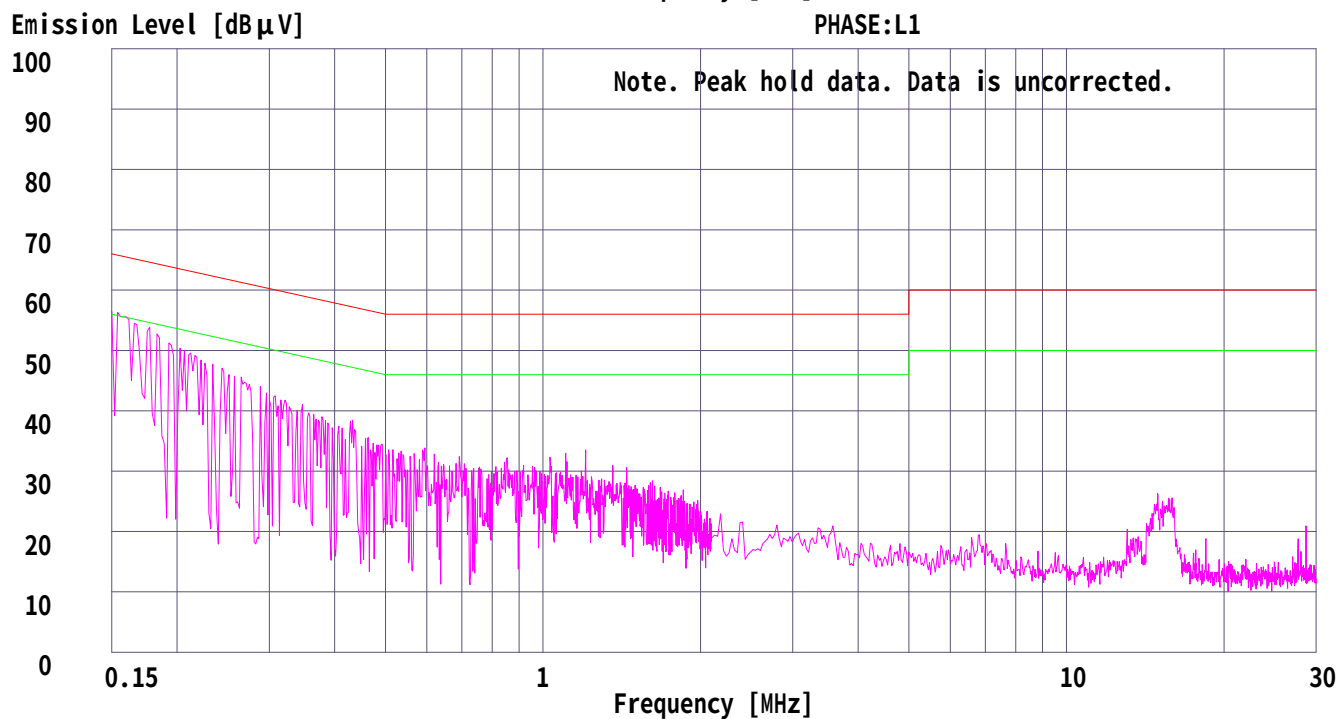
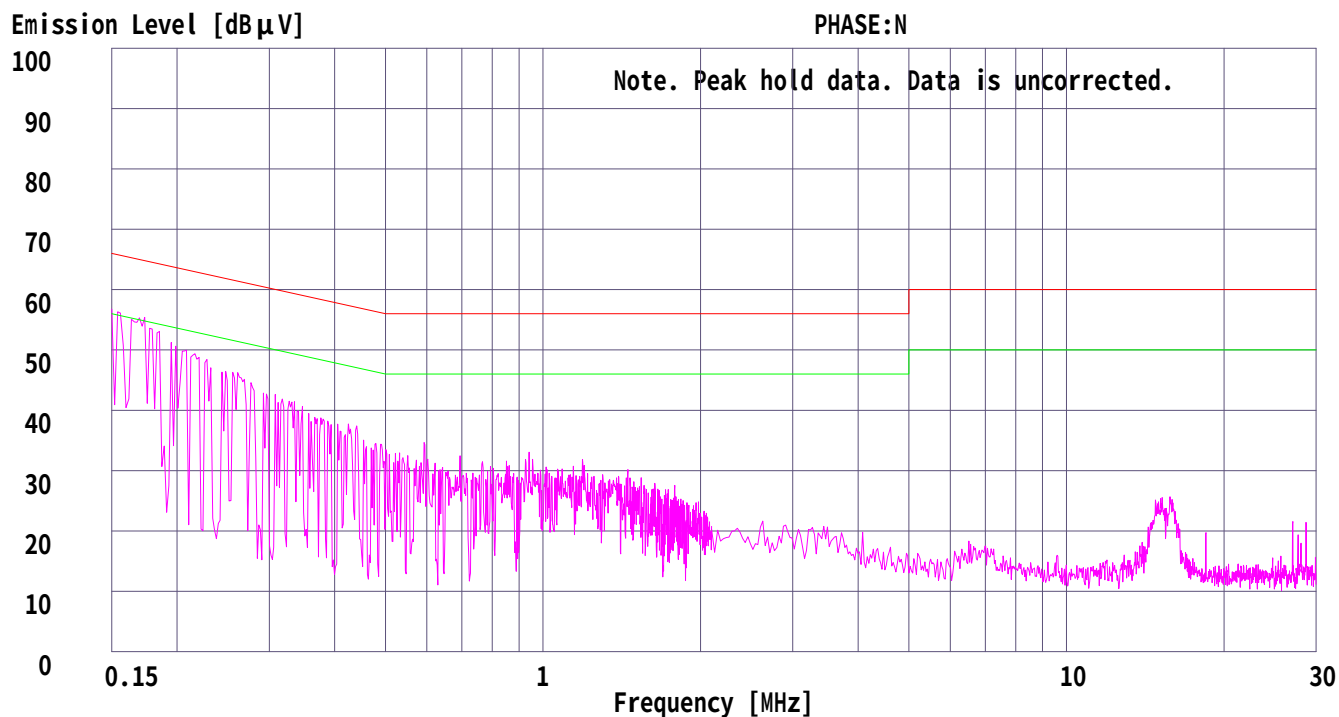
UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input 2 + Rec
Remarks : 5Vp-p
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation 1 : FCC Part15B CLASS B(2003)
Regulation 2 : None

Engineer : Masaya Minami



DATA OF CONDUCTION TEST

UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : VCR Playback
Remarks :
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation : FCC Part15B CLASS B(2003)

Engineer : Masaya Minami

No.	FREQ. [MHz]	READING(N)		READING(L1)		LISN FACTOR [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
		QP [dB μV]	AV	QP [dB μV]	AV				QP [dB]	AV [dB μV]	QP [dB μV]	AV [dB μV]	QP [dB μV]	AV [dB]
1.	0.1500	48.3	-	48.1	-	0.1	0.1	0.0	48.5	-	66.0	56.0	17.5	-
2.	0.2361	38.8	-	38.7	-	0.1	0.1	0.0	39.0	-	62.2	52.2	23.2	-
3.	0.4531	26.2	-	26.6	-	0.1	0.1	0.0	26.8	-	56.8	46.8	30.0	-
4.	0.7294	21.6	-	22.5	-	0.2	0.1	0.0	22.8	-	56.0	46.0	33.2	-
5.	0.8152	23.7	-	23.1	-	0.2	0.1	0.0	24.0	-	56.0	46.0	32.0	-
6.	1.1775	21.0	-	17.9	-	0.2	0.1	0.0	21.3	-	56.0	46.0	34.7	-
7.	15.2635	3.7	-	13.7	-	0.9	0.4	0.0	15.0	-	60.0	50.0	45.0	-
8.	18.4337	19.7	-	19.0	-	1.1	0.4	0.0	21.2	-	60.0	50.0	38.8	-

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

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

DATA OF CONDUCTION TEST

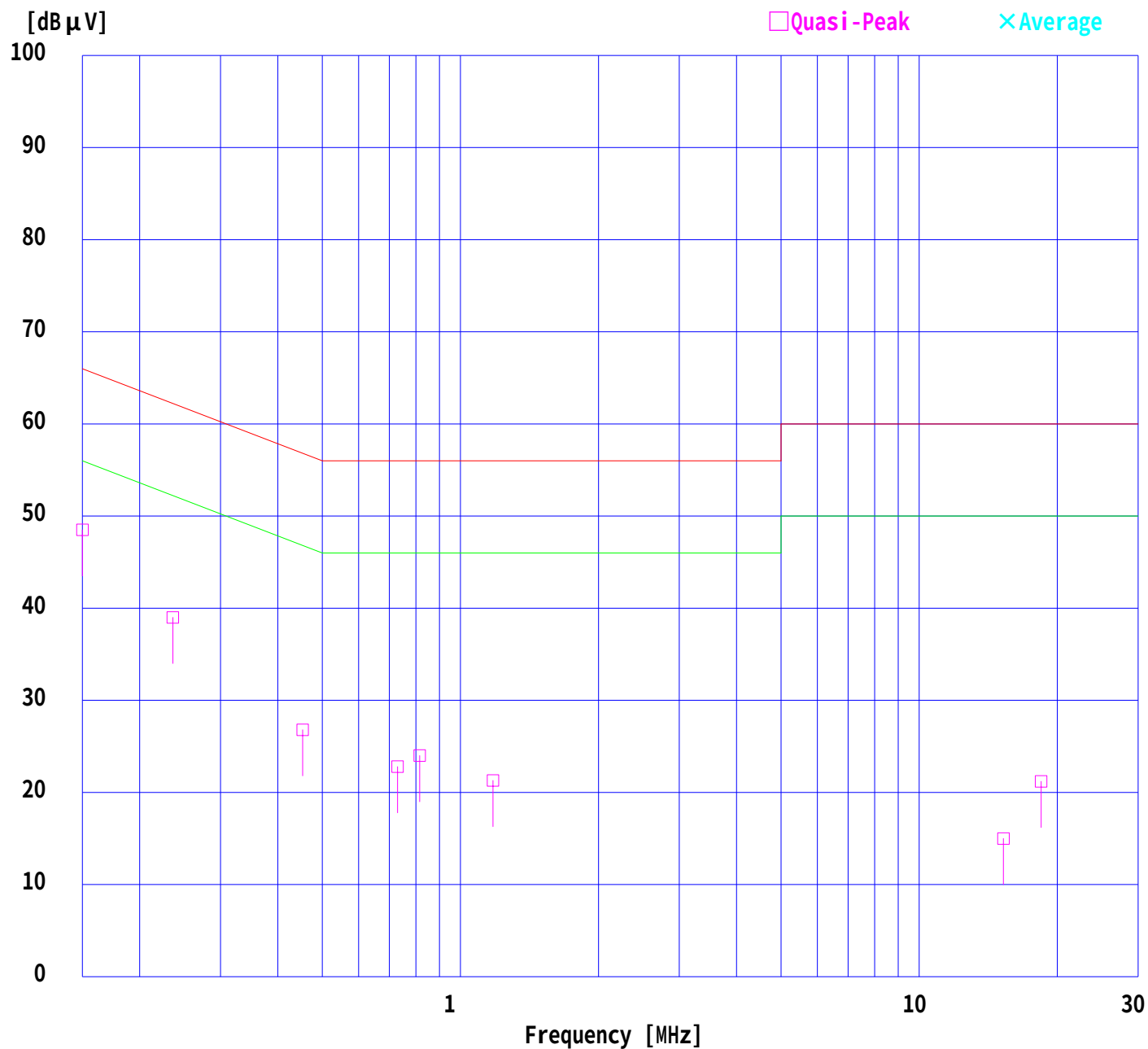
UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : VCR Playback
Remarks :
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation : FCC Part15B CLASS B(2003)

Engineer : Masaya Minami



DATA OF CONDUCTION TEST CHART

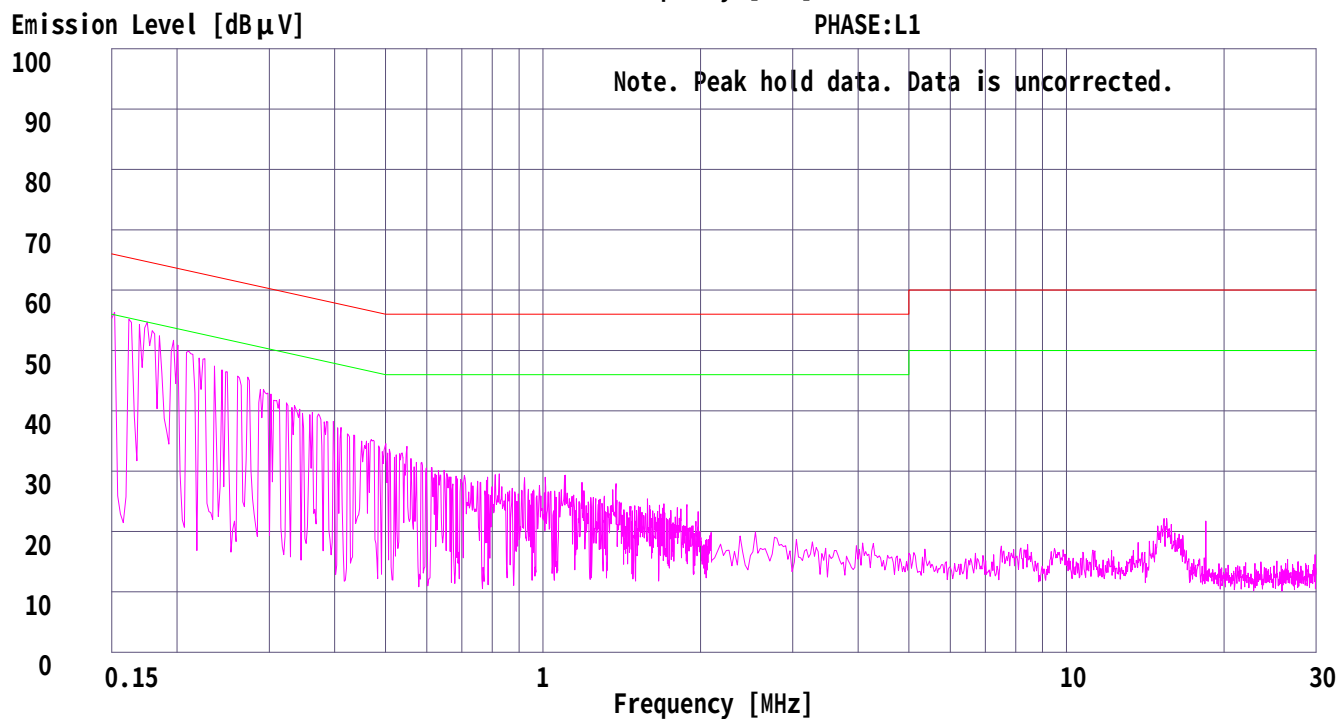
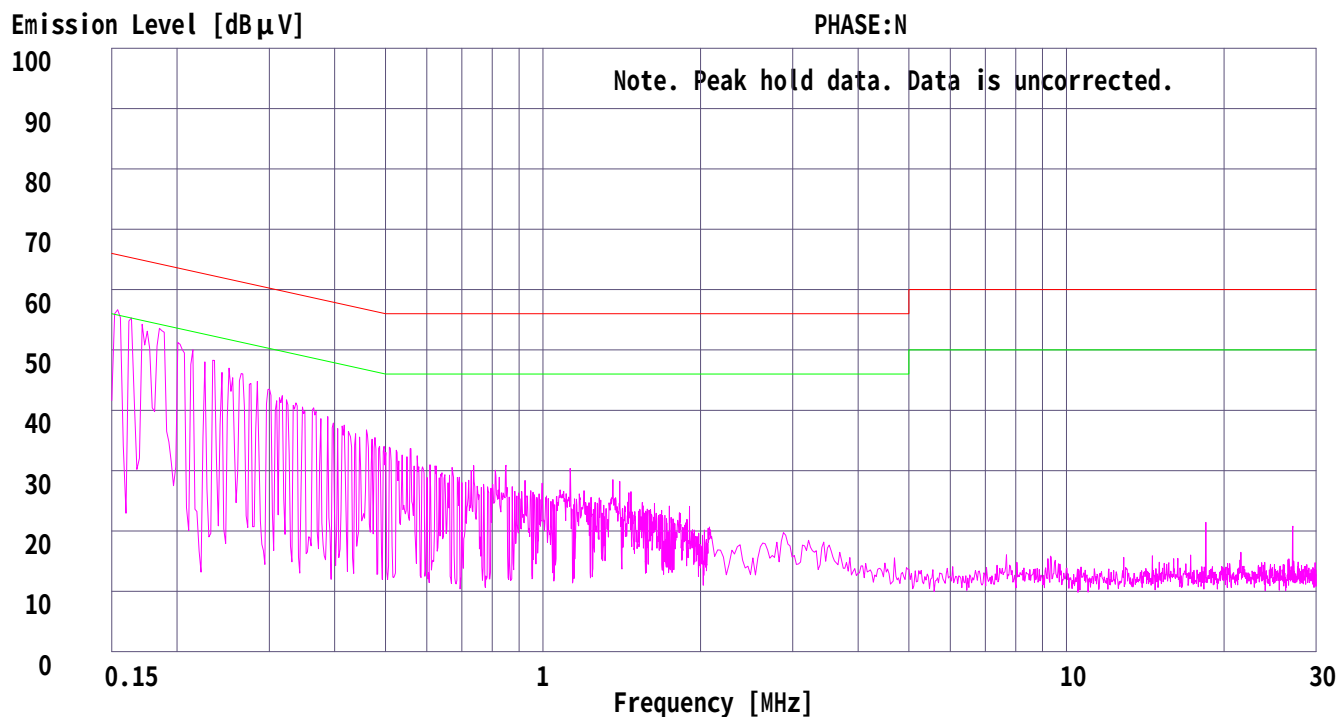
UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : VCR Playback
Remarks :
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation 1 : FCC Part15B CLASS B(2003)
Regulation 2 : None

Engineer : Masaya Minami



DATA OF CONDUCTION TEST

UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks :
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation : FCC Part15B CLASS B(2003)

Engineer : Masaya Minami

No.	FREQ. [MHz]	READING(N)		READING(L1)		LISN FACTOR [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
		QP [dB μV]	AV	QP [dB μV]	AV				QP [dB]	AV [dB μV]	QP [dB μV]	AV [dB μV]	QP [dB μV]	AV [dB]
1.	0.1500	48.6	-	48.5	-	0.1	0.1	0.0	48.8	-	66.0	56.0	17.2	-
2.	0.2343	39.9	-	39.8	-	0.1	0.1	0.0	40.1	-	62.3	52.3	22.2	-
3.	0.4533	26.8	-	26.7	-	0.1	0.1	0.0	27.0	-	56.8	46.8	29.8	-
4.	0.6903	25.9	-	26.3	-	0.2	0.1	0.0	26.6	-	56.0	46.0	29.4	-
5.	0.7844	25.8	-	24.9	-	0.2	0.1	0.0	26.1	-	56.0	46.0	29.9	-
6.	1.0103	25.1	-	24.3	-	0.2	0.1	0.0	25.4	-	56.0	46.0	30.6	-
7.	15.9349	28.3	-	27.7	-	0.9	0.4	0.0	29.6	-	60.0	50.0	30.4	-
8.	28.6360	32.9	-	32.8	-	0.9	0.5	0.0	34.3	-	60.0	50.0	25.7	-

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

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

DATA OF CONDUCTION TEST

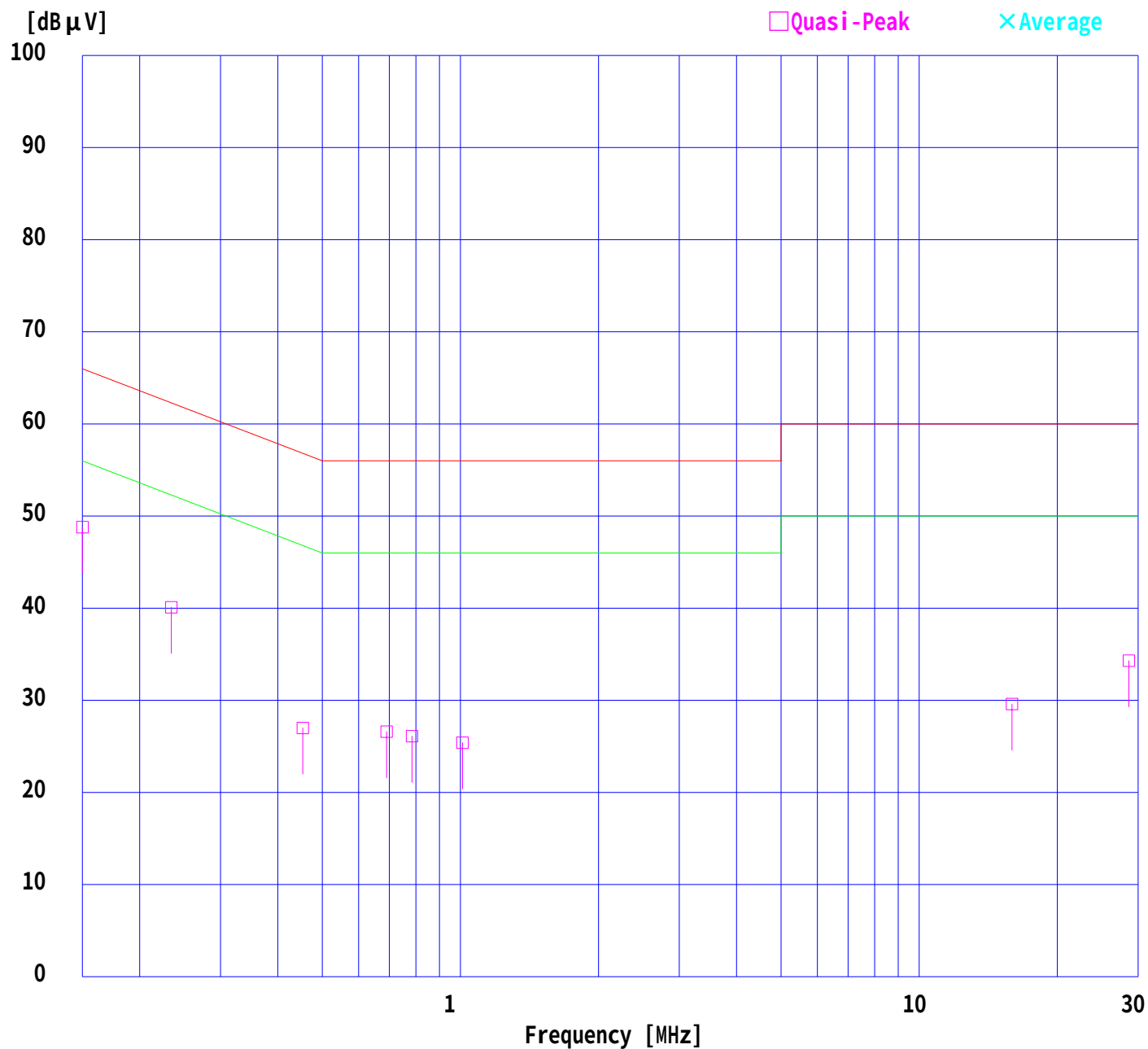
UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks :
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation : FCC Part15B CLASS B(2003)

Engineer : Masaya Minami



DATA OF CONDUCTION TEST CHART

UL Apex Co., Ltd.

YOKOWA No.3 SHIELD TEST ROOM

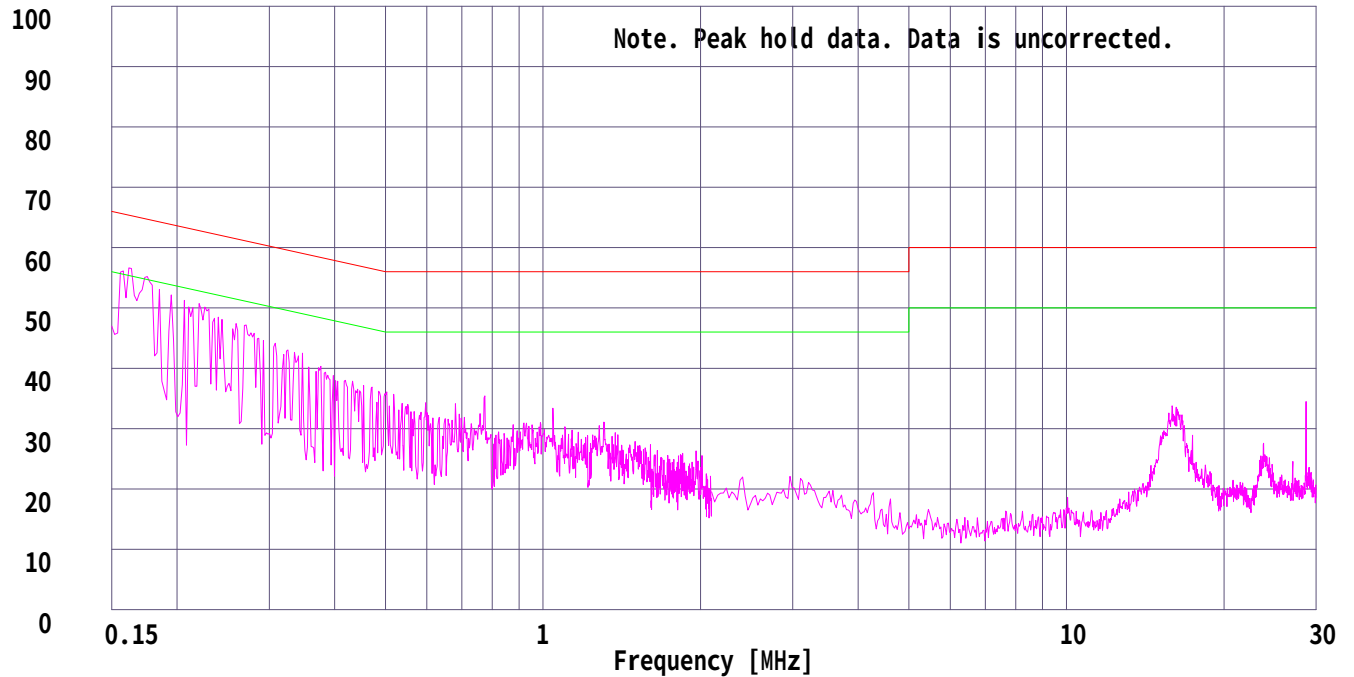
Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks :
Date : 9/12/2004
Phase : Single Phase
Temperature : 24 °C
Humidity : 43 %
Regulation 1 : FCC Part15B CLASS B(2003)
Regulation 2 : None

Engineer : Masaya Minami

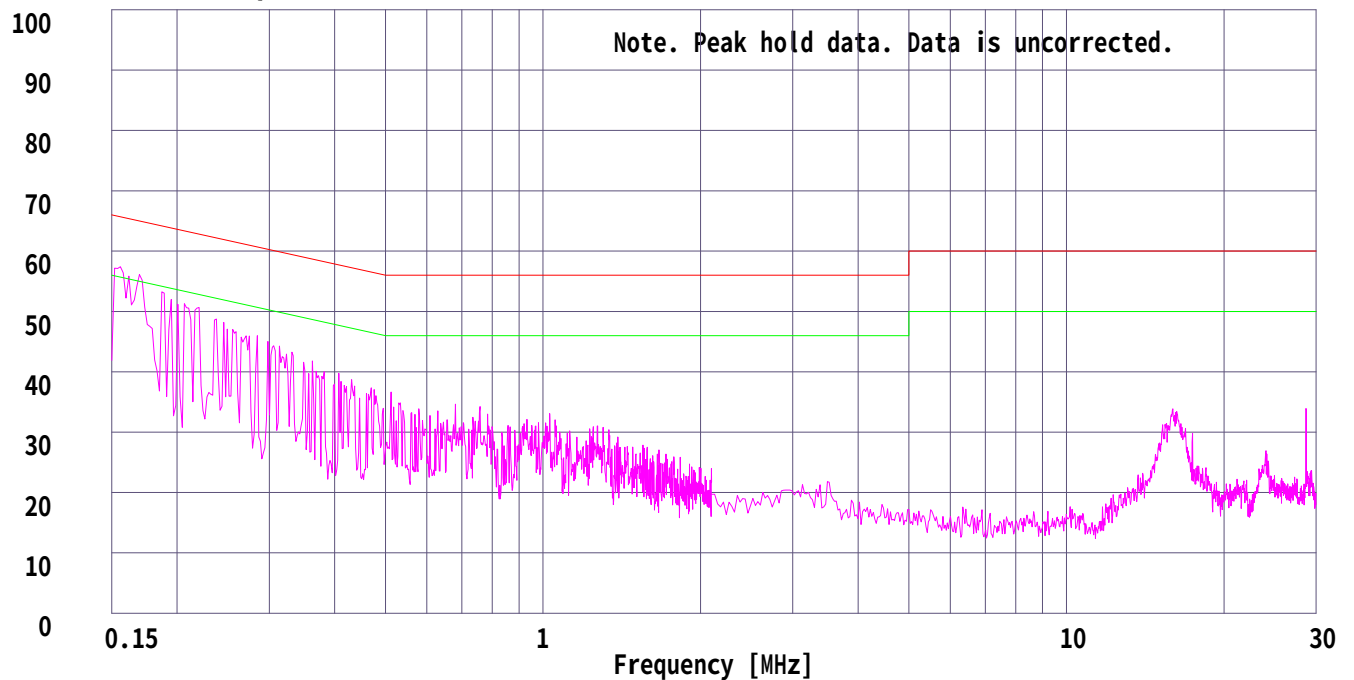
Emission Level [dB μ V]

PHASE:N



Emission Level [dB μ V]

PHASE:L1



DATA OF RADIATION TEST

UL Apex Co., Ltd.
Yokowa EMC No.3 Open Test Site

COMPANY : Orion Electric Co.,Ltd.
EQUIPMENT : DVD/VCR
MODEL No. : SD-V392SU2
POWER : AC120V/60Hz
DESCRIPTION : TV Reception + Rec

REPORT No. : 25BE0090-YW-1
REGULATION : FCC PART15 B
TEST DISTANCE : 3m
ATTENUATION : 101-847MHz 6dB
1030-1694MHz 0dB
DATE : 2004/09/12
TEMP./HUMID. : 25deg.C / 50%
ENGINEER : Masaya Minami

*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	22.6	23.4			BC	-9.8	12.8	13.6			43.5		30.7	29.9		
	202					BC						43.5		>15.0			
	303					LO						46.0					
	404					LO						46.0					
	505					LO						46.0					
	606					LO						46.0					
	707					LO						46.0					
	808					LO						46.0					
	909					LO						46.0					
		READING(PK)		READING(AV)		ANT	C.Factor	RESULT(PK)		RESULT(AV)		LIMIT	LIMIT	MARGIN(PK)		MARGIN(AV)	
		HOR.	VER.	HOR.	VER.	TYPE		HOR.	VER.	HOR.	VER.	[PK]	[AV]	HOR.	VER.	HOR.	VER.
							[dBuV]					[dBuV/m]	[dBuV/m]			[dB]	[dB]
	1010					HO						74.0	54.0	>27.0		>10.0	
	1111					HO						74.0	54.0				
	1212					HO						74.0	54.0				
	1313					HO						74.0	54.0				
	1414					HO						74.0	54.0				
	1515					HO						74.0	54.0				
	1616	HO	74.0	54.0													
CH.	FREQ	READING(QP)				ANT	C.Factor	RESULT(QP)				LIMIT		MARGIN(QP)			
	[MHz]	HOR.	VER.			TYPE		HOR.	VER.			[QP]		HOR.	VER.		
		[dBuV]					[dBuV]	[dBuV/m]				[dBuV/m]		[dB]			
3	107	22.7	22.7			BC	-8.9	13.8	13.8			43.5		29.7	29.7		
	214					BC						43.5		>15.0			
	321					LO						46.0					
	428					LO						46.0					
	535					LO						46.0					
	642					LO						46.0					
	749					LO						46.0					
	856					LO						46.0					
	963					LO						54.0					
		READING(PK)		READING(AV)		ANT	C.Factor	RESULT(PK)		RESULT(AV)		LIMIT	LIMIT	MARGIN(PK)		MARGIN(AV)	
		HOR.	VER.	HOR.	VER.	TYPE		HOR.	VER.	HOR.	VER.	[PK]	[AV]	HOR.	VER.	HOR.	VER.
							[dBuV]					[dBuV/m]	[dBuV/m]			[dB]	[dB]
	1070					HO						74.0	54.0	>27.0		>10.0	
	1177					HO						74.0	54.0				
	1284					HO						74.0	54.0				
	1391					HO						74.0	54.0				
	1498					HO						74.0	54.0				
	1605					HO						74.0	54.0				
	CH.	FREQ	READING(QP)				ANT	C.Factor	RESULT(QP)				LIMIT		MARGIN(QP)		
	[MHz]	HOR.	VER.			TYPE		HOR.	VER.			[QP]		HOR.	VER.		
		[dBuV]					[dBuV]	[dBuV/m]				[dBuV/m]		[dB]			
4	113	22.4	22.5			BC	-7.9	14.5	14.6			43.5		29.0	28.9		
	226					BC						46.0		>15.0			
	339					LO						46.0					
	452					LO						46.0					
	565					LO						46.0					
	678					LO						46.0					
	791					LO						46.0					
	904					LO						46.0					
						READING(PK)											READING(AV)
		HOR.	VER.	HOR.	VER.	TYPE		HOR.	VER.	HOR.	VER.	[PK]	[AV]	HOR.	VER.	HOR.	VER.
							[dBuV]					[dBuV/m]	[dBuV/m]			[dB]	[dB]
	1017					HO						74.0	54.0	>27.0		>10.0	
	1130					HO						74.0	54.0				
	1243					HO						74.0	54.0				
	1356					HO						74.0	54.0				
	1469					HO						74.0	54.0				
	1582					HO						74.0	54.0				

DATA OF RADIATION TEST

UL Apex Co., Ltd.
Yokowa EMC No.3 Open Test Site

COMPANY : Orion Electric Co.,Ltd.
EQUIPMENT : DVD/VCR
MODEL No. : SD-V392SU2
POWER : AC120V/60Hz
DESCRIPTION : TV Reception + Rec

REPORT No. : 25BE0090-YW-1
REGULATION : FCC PART15 B
TEST DISTANCE : 3m
ATTENUATION : 101-847MHz 6dB
1030-1694MHz 0dB
DATE : 2004/09/12
TEMP./HUMID. : 25deg.C / 50%
ENGINEER : Masaya Minami

*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] [dB]						
VHF																		
5	123	22.2	23.3			BC	-6.5	15.7	16.8			43.5		27.8	26.7			
	246					BC						46.0		>15.0				
	369				LO					46.0								
	492				LO					46.0								
	615				LO					46.0								
	738				LO					46.0								
	861				LO					46.0								
	984				LO					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] [dB]		MARGIN(AV) HOR. VER. [dB] [dB]		
		1107					HO						74.0	54.0	>27.0		>10.0	
1230					HO		74.0				54.0							
1353					HO		74.0				54.0							
1476					HO		74.0				54.0							
1599					HO		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] [dB]						
6	129	22.7	23.4			BC	-6.2	16.5	17.2			43.5		27.0	26.3			
	258					BC						46.0		>15.0				
	387				LO					46.0								
	516				LO					46.0								
	645				LO					46.0								
	774				LO					46.0								
	903				LO					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] [dB]		MARGIN(AV) HOR. VER. [dB] [dB]		
		1032					HO						74.0	54.0	>27.0		>10.0	
		1161				HO					74.0	54.0						
1290					HO		74.0				54.0							
1419					HO		74.0				54.0							
1548					HO		74.0				54.0							
1677					HO		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] [dB]						
7	221	22.3	22.0			BC	-2.1	20.2	19.9			46.0		25.8	26.1			
	442					LO						46.0		>15.0				
	663				LO					46.0								
	884				LO					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] [dB]		MARGIN(AV) HOR. VER. [dB] [dB]		
		1105					HO						74.0	54.0	>27.0		>10.0	
		1326				HO					74.0	54.0						
		1547				HO					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] [dB]						
8	227	22.0	22.0			BC	-2.1	19.9	19.9			46.0		26.1	26.1			
	454					LO						46.0		>15.0				
	681				LO					46.0								
	908				LO					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] [dB]		MARGIN(AV) HOR. VER. [dB] [dB]		
		1135					HO						74.0	54.0	>27.0		>10.0	
		1362				HO					74.0	54.0						
		1589				HO					74.0	54.0						

DATA OF RADIATION TEST

UL Apex Co., Ltd.
Yokowa EMC No.3 Open Test Site

COMPANY : Orion Electric Co.,Ltd.
EQUIPMENT : DVD/VCR
MODEL No. : SD-V392SU2
POWER : AC120V/60Hz
DESCRIPTION : TV Reception + Rec

REPORT No. : 25BE0090-YW-1
REGULATION : FCC PART15 B
TEST DISTANCE : 3m
ATTENUATION : 101-847MHz 6dB
1030-1694MHz 0dB
DATE : 2004/09/12
TEMP./HUMID. : 25deg.C / 50%
ENGINEER : Masaya Minami

*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]	[dB]			
VHF																	
9	233	22.0	21.9			BC	-1.9	20.1	20.0			46.0		25.9	26.0		
	466					LO						46.0		>15.0			
	699					LO						46.0					
	932					LO						46.0					
		READING(PK)		READING(AV)		ANT	C.Factor	RESULT(PK)		RESULT(AV)		LIMIT	LIMIT	MARGIN(PK)		MARGIN(AV)	
		HOR.	VER.	HOR.	VER.	TYPE		HOR.	VER.	HOR.	VER.	[PK]	[AV]	HOR.	VER.	HOR.	VER.
		[dBuV]		[dBuV]			[dBuV]	[dBuV/m]		[dBuV/m]		[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]
	1165					HO						74.0	54.0	>27.0		>10.0	
1398	HO					74.0						54.0					
1631	HO					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]	[dB]			
10	239	22.0	23.3			BC	-1.7	20.3	21.6			46.0		25.7	24.4		
	478					LO						46.0		>15.0			
	717					LO						46.0					
	956					LO						46.0					
		READING(PK)		READING(AV)		ANT	C.Factor	RESULT(PK)		RESULT(AV)		LIMIT	LIMIT	MARGIN(PK)		MARGIN(AV)	
		HOR.	VER.	HOR.	VER.	TYPE		HOR.	VER.	HOR.	VER.	[PK]	[AV]	HOR.	VER.	HOR.	VER.
		[dBuV]		[dBuV]			[dBuV]	[dBuV/m]		[dBuV/m]		[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]
	1195					HO						74.0	54.0	>27.0		>10.0	
1434	HO					74.0						54.0					
1673	HO					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]	[dB]			
11	245	21.8	21.7			BC	-1.6	20.2	20.1			46.0		25.8	25.9		
	490					LO						46.0		>15.0			
	735					LO						46.0					
	980					LO						54.0					
		READING(PK)		READING(AV)		ANT	C.Factor	RESULT(PK)		RESULT(AV)		LIMIT	LIMIT	MARGIN(PK)		MARGIN(AV)	
		HOR.	VER.	HOR.	VER.	TYPE		HOR.	VER.	HOR.	VER.	[PK]	[AV]	HOR.	VER.	HOR.	VER.
		[dBuV]		[dBuV]			[dBuV]	[dBuV/m]		[dBuV/m]		[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]
	1225					HO						74.0	54.0	>27.0		>10.0	
1470	HO					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]	[dB]			
12	251	22.0	21.7			BC	-1.4	20.6	20.3			46.0		25.4	25.7		
	502					LO						46.0		>15.0			
	753					LO						46.0					
		READING(PK)		READING(AV)		ANT	C.Factor	RESULT(PK)		RESULT(AV)		LIMIT	LIMIT	MARGIN(PK)		MARGIN(AV)	
		HOR.	VER.	HOR.	VER.	TYPE		HOR.	VER.	HOR.	VER.	[PK]	[AV]	HOR.	VER.	HOR.	VER.
		[dBuV]		[dBuV]			[dBuV]	[dBuV/m]		[dBuV/m]		[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]
	1004					HO						74.0	54.0	>27.0		>10.0	
	1255					HO						74.0	54.0				
1506	HO					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]	[dB]			
13	257	24.0	23.2			BC	-1.0	23.0	22.2			46.0		23.0	23.8		
	514					LO						46.0		>15.0			
	771					LO						46.0					
		READING(PK)		READING(AV)		ANT	C.Factor	RESULT(PK)		RESULT(AV)		LIMIT	LIMIT	MARGIN(PK)		MARGIN(AV)	
		HOR.	VER.	HOR.	VER.	TYPE		HOR.	VER.	HOR.	VER.	[PK]	[AV]	HOR.	VER.	HOR.	VER.
		[dBuV]		[dBuV]			[dBuV]	[dBuV/m]		[dBuV/m]		[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]
	1028					HO						74.0	54.0	>27.0		>10.0	
	1285					HO						74.0	54.0				
1542	HO					74.0						54.0					

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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]	
UHF											
14	517	22.9	23.2		LO	3.2	26.1	26.4		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]
	1034			HO	-11.7			74.0	54.0	>27.0	>10.0
	1551			HO	-7.5			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]	
19	547	22.8	23.4		LO	3.5	26.3	26.9		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]
	1094			HO	-11.3			74.0	54.0	>27.0	>10.0
	1641			HO	-5.8			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]	
28	601	26.1	25.3		LO	4.4	30.5	29.7		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]
	1202			HO	-10.6			74.0	54.0	>27.0	>10.0
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]	
36	649	23.9	25.3		LO	5.2	29.1	30.5		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]
	1298			HO	-9.8			74.0	54.0	>27.0	>10.0
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]	
44	697	21.1	24.2		LO	5.9	27.0	30.1		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]
	1394			HO	-9.1			74.0	54.0	>27.0	>10.0
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]	
53	751	21.5	23.8		LO	7.6	29.1	31.4		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]
	1502			HO	-8.4			74.0	54.0	>27.0	>10.0
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]	
61	799	20.6	22.7		LO	9.2	29.8	31.9		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]
	1598			HO	-6.6			74.0	54.0	>27.0	>10.0
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]	
69	847	22.3	24.3		LO	9.6	31.9	33.9		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]
	1694			HO	-4.9			74.0	54.0	>27.0	>10.0

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CH.	FREQ	READING(QP)				ANT	C.Factor	RESULT(QP)				LIMIT		MARGIN(QP)				
	[MHz]	[dBuV]				TYPE	[dBuV]	[dBuV/m]				[QP]		[dB]		[dB]		
CATV																		
1	119	22.4	23.1			BC	-7.0	15.4	16.1			43.5		28.1	27.4			
	238					BC						46.0		>15.0				
	357					LO						46.0						
	476					LO						46.0						
	595					LO						46.0						
	714					LO						46.0						
	833					LO						46.0						
	952	LO	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]	[dBuV/m]	[dBuV/m]	[dB]	[dB]								
	1071					HO						74.0	54.0	>27.0		>10.0		
1190	HO					74.0						54.0						
1309	HO					74.0						54.0						
1428	HO					74.0						54.0						
1547	HO					74.0						54.0						
1666	HO					74.0						54.0						
CH.	FREQ	READING(QP)				ANT	C.Factor	RESULT(QP)				LIMIT		MARGIN(QP)				
	[MHz]	[dBuV]				TYPE	[dBuV]	[dBuV/m]				[QP]		[dB]		[dB]		
95	137	22.1	22.3			BC	-5.5	16.6	16.8			43.5		26.9	26.7			
	274					BC						46.0		>15.0				
	411					LO						46.0						
	548					LO						46.0						
	685					LO						46.0						
	822					LO						46.0						
	959					LO						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]	[dBuV/m]	[dBuV/m]	[dB]	[dB]							
	1096					HO						74.0	54.0	>27.0		>10.0		
1233	HO					74.0						54.0						
1370	HO					74.0						54.0						
1507	HO					74.0						54.0						
1644	HO					74.0						54.0						
CH.	FREQ	READING(QP)				ANT	C.Factor	RESULT(QP)				LIMIT		MARGIN(QP)				
	[MHz]	[dBuV]				TYPE	[dBuV]	[dBuV/m]				[QP]		[dB]		[dB]		
97	149	22.5	22.9			BC	-4.8	17.7	18.1			43.5		25.8	25.4			
	298	5.0				BC						46.0		>15.0				
	447					LO						46.0						
	596					LO						46.0						
	745					LO						46.0						
	894					LO						46.0						
						READING(PK)						READING(AV)						ANT
		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]							
		1043					HO						74.0	54.0	>27.0		>10.0	
1192	HO	-					-						74.0	54.0				
1341	HO	-					-						74.0	54.0				
1490	HO	-					-						74.0	54.0				
1639	HO	-					-						74.0	54.0				
CH.	FREQ	READING(QP)				ANT	C.Factor	RESULT(QP)				LIMIT		MARGIN(QP)				
	[MHz]	[dBuV]				TYPE	[dBuV]	[dBuV/m]				[QP]		[dB]		[dB]		
99	161	21.9	22.0			BC	-4.2	17.7	17.8			43.5		25.8	25.7			
	322					LO						46.0		>15.0				
	483					LO						46.0						
	644					LO						46.0						
	805					LO						46.0						
	966					LO						46.0						
						READING(PK)						READING(AV)						ANT
		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]							
		1127					HO						74.0	54.0	>27.0		>10.0	
1288	HO	74.0					54.0											
1449	HO	74.0					54.0											
1610	HO	74.0					54.0											

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	[MHz]	HOR.	VER.			TYPE	[dBuV]	HOR.	VER.			[QP]	HOR.	VER.			
CATV																	
14	167	22.1	22.1			BC	-3.8	18.3	18.3			43.5		25.2	25.2		
	334					LO						46.0		>15.0			
	501					LO						46.0					
	668					LO						46.0					
	835					LO						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]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]				
	1002			HO				74.0	54.0	>27.0	>10.0						
	1169			HO				74.0	54.0								
1336	HO				74.0			54.0									
1503	HO				74.0			54.0									
1670	HO		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]		[dB]	
18	191	22.0	22.0			BC	-2.8	19.2	19.2			43.5		24.3	24.3		
	382					LO						46.0		>15.0			
	573					LO						46.0					
	764					LO						46.0					
	955					LO						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]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]				
	1146			HO				74.0	54.0	>27.0	>10.0						
	1337			HO				74.0	54.0								
1528	HO				74.0			54.0									
	HO				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]			
22	215	22.5	22.3			BC	-2.4	20.1	19.9			43.5		23.4	23.6		
	430					LO						46.0	>15.0				
	645					LO						46.0					
	860					LO						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]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]				
	1075			HO				74.0	54.0	>27.0	>10.0						
	1290			HO				74.0	54.0								
	1505			HO				74.0	54.0								
	HO				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]			
23	263	21.9	21.9			BC	-0.6	21.3	21.3			46.0	46.0	24.7	24.7		
	526					LO						46.0	46.0				
	789					LO						46.0	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]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]				
	1052			HO				74.0	54.0	>27.0	>10.0						
1315	HO				74.0			54.0									
1578	HO				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]			
29	299	21.6	21.4			BC	1.9	23.5	23.3			46.0	46.0	22.5	22.7		
	598					LO						46.0	46.0	>15.0			
	897					LO						46.0	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]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]				
1196			HO				74.0	54.0	>27.0	>10.0							
1495			HO				74.0	54.0									

DATA OF RADIATION TEST

UL Apex Co., Ltd.
Yokowa EMC No.3 Open Test Site

COMPANY : Orion Electric Co.,Ltd.
EQUIPMENT : DVD/VCR
MODEL No. : SD-V392SU2
POWER : AC120V/60Hz
DESCRIPTION : TV Reception + Rec

REPORT No. : 25BE0090-YW-1
REGULATION : FCC PART15 B
TEST DISTANCE : 3m
ATTENUATION : 101-847MHz 6dB
1030-1694MHz 0dB
DATE : 2004/09/12
TEMP./HUMID. : 25deg.C / 50%
ENGINEER : Masaya Minami

*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											
36	341	21.6	21.6	LO	-0.2	21.4	21.4	46.0	46.0	24.6	24.6
	682	-	-	LO				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] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]
	1023			HO	-11.8			74.0	54.0	>27.0	>10.0
	1364			HO	-9.4			74.0	54.0		
37	347	22.0	21.8	LO	-0.1	21.9	21.7	46.0	46.0	24.1	24.3
	694			LO				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] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. VER. [dB]	MARGIN(AV) HOR. VER. [dB]
	1041			HO	-11.7			74.0	54.0	>27.0	>10.0
	1388			HO	-9.2			74.0	54.0		
65	515	22.0	21.8	LO	3.1	25.1	24.9	46.0	46.0	20.9	21.1
		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]
	1030			HO	-11.7			74.0	54.0	>27.0	>10.0
	1545			HO	-7.6			74.0	54.0		
		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]	
94	689	20.3	20.5	LO	5.8	26.1	26.3	46.0	46.0	19.9	19.7
		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]
	1378			HO	-9.2			74.0	54.0	>27.0	>10.0
100	695	20.6	20.5	LO	5.9	26.5	26.4	46.0	46.0	19.5	19.6
		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]
	1390			HO	-9.1			74.0	54.0	>27.0	>10.0
113	773	19.9	20.0	LO	8.3	28.2	28.3	46.0	46.0	17.8	17.7
		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]
	1546			HO	-7.6			74.0	54.0	>27.0	>10.0
125	845	20.2	23.3	LO	9.6	29.8	32.9	46.0	46.0	16.2	13.1
		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]
	1690			HO	-4.9			74.0	54.0	>27.0	>10.0

DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.1 OPEN TEST SITE

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception + Rec
Remarks : 0dBmV Input
Date : 9/7/2004
Test Distance : 3 m
Temperature : 25 °C
Humidity : 56 %
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.	135.00	BB	34.1	43.1	14.1	29.9	2.8	5.8	26.9	35.9	43.5	16.6	7.6
2.	945.02	BB	25.5	28.4	22.5	29.3	10.2	5.9	34.8	37.7	46.0	11.2	8.3

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

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

ANT.TYPE:30-300MHZ Biconical, 300-1000MHZ Logperiodic

DATA OF RADIATION TEST

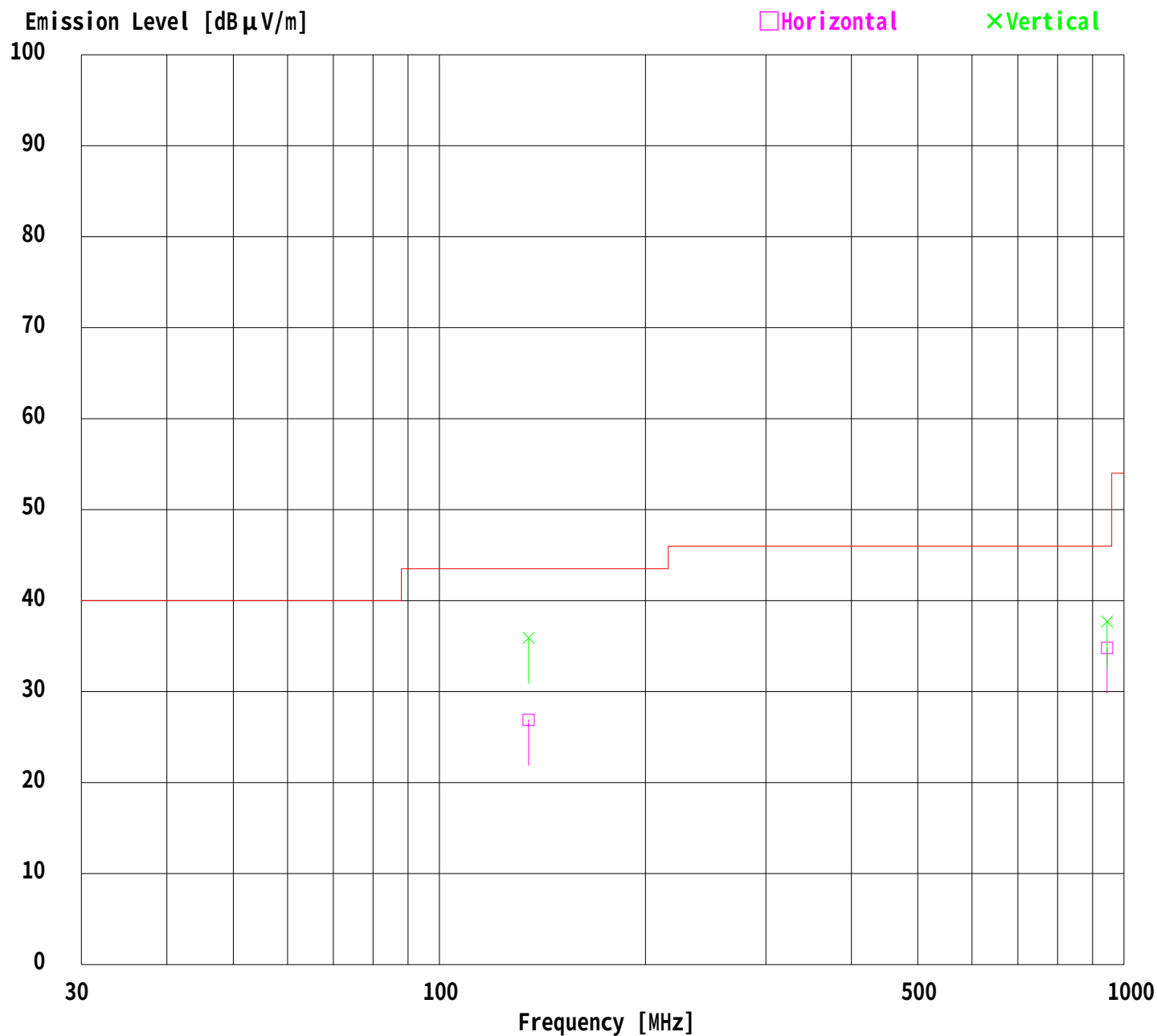
UL Apex Co., Ltd.

YOKOWA No.1 OPEN TEST SITE

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception + Rec
Remarks : 0dBmV Input
Date : 9/7/2004
Test Distance : 3 m
Temperature : 25 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.1 OPEN TEST SITE

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception + Rec
Remarks : 25dBmV Input
Date : 9/7/2004
Test Distance : 3 m
Temperature : 25 °C
Humidity : 56 %
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.	108.00	BB	38.5	42.2	11.3	29.9	2.5	5.8	28.2	31.9	43.5	15.3	11.6
2.	135.00	BB	34.2	43.3	14.1	29.9	2.8	5.8	27.0	36.1	43.5	16.5	7.4
3.	162.02	BB	25.3	30.0	15.1	29.9	3.1	5.8	19.4	24.1	43.5	24.1	19.4
4.	202.51	BB	33.5	32.9	17.1	30.0	3.6	5.8	30.0	29.4	43.5	13.5	14.1
5.	216.00	BB	37.8	34.3	17.1	30.0	3.8	5.8	34.5	31.0	43.5	9.0	12.5
6.	270.00	BB	36.2	28.6	18.3	30.0	4.5	5.8	34.8	27.2	46.0	11.2	18.8
7.	405.00	BB	31.9	37.5	16.5	30.2	5.7	5.9	29.8	35.4	46.0	16.2	10.6
8.	675.01	BB	29.0	31.5	20.0	30.2	8.1	5.9	32.8	35.3	46.0	13.2	10.7
9.	945.02	BB	25.7	28.8	22.5	29.3	10.2	5.9	35.0	38.1	46.0	11.0	7.9

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

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

ANT.TYPE:30-300MHz Biconical, 300-1000MHz Logperiodic

DATA OF RADIATION TEST

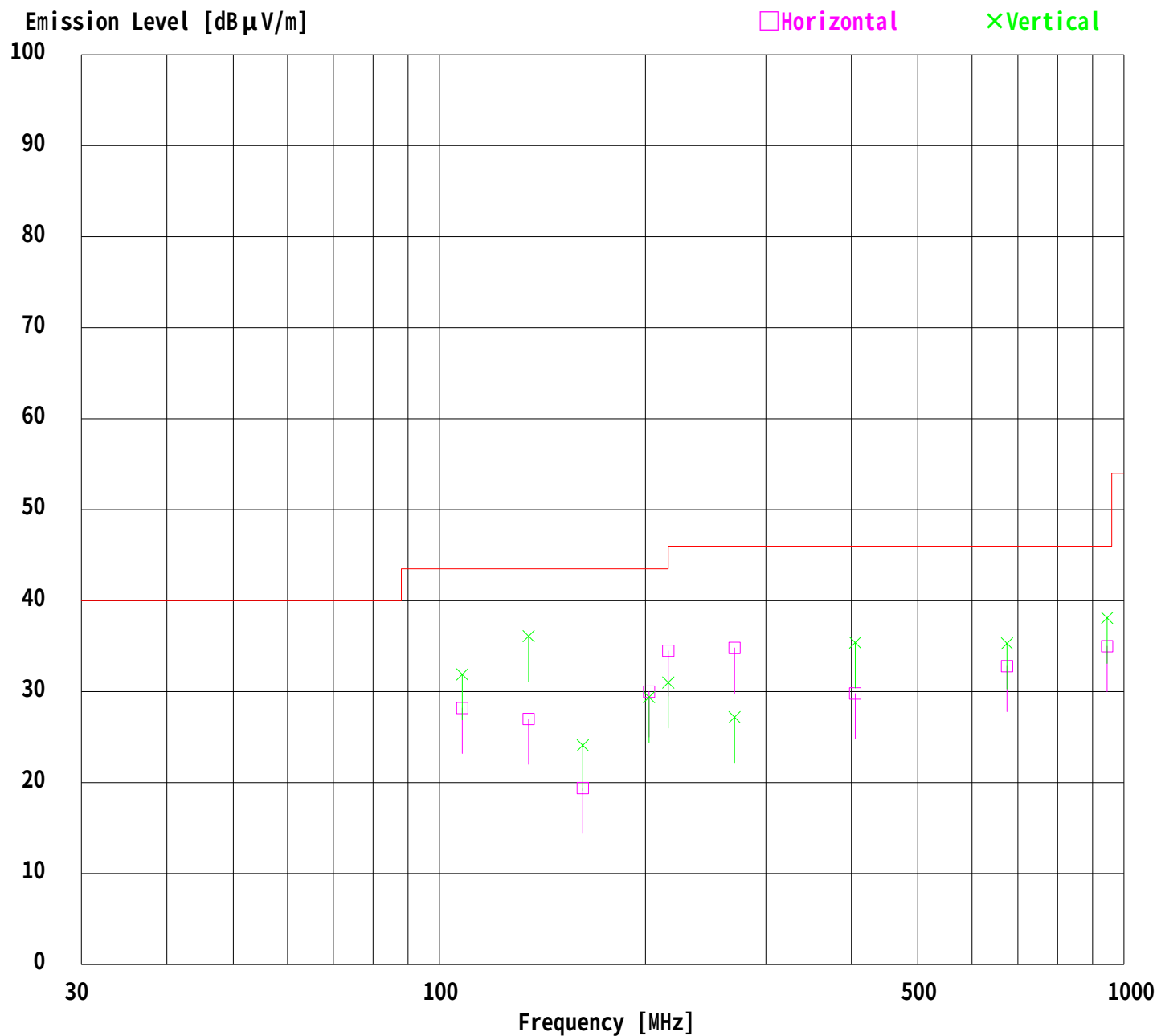
UL Apex Co., Ltd.

YOKOWA No.1 OPEN TEST SITE

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception + Rec
Remarks : 25dBmV Input
Date : 9/7/2004
Test Distance : 3 m
Temperature : 25 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.1 OPEN TEST SITE

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input 1 + Rec
Remarks : 1Vp-p Input
Date : 9/7/2004
Test Distance : 3 m
Temperature : 25 °C
Humidity : 56 %
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.	135.00	BB	36.0	42.5	14.1	29.9	2.8	5.8	28.8	35.3	43.5	14.7	8.2

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

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

DATA OF RADIATION TEST

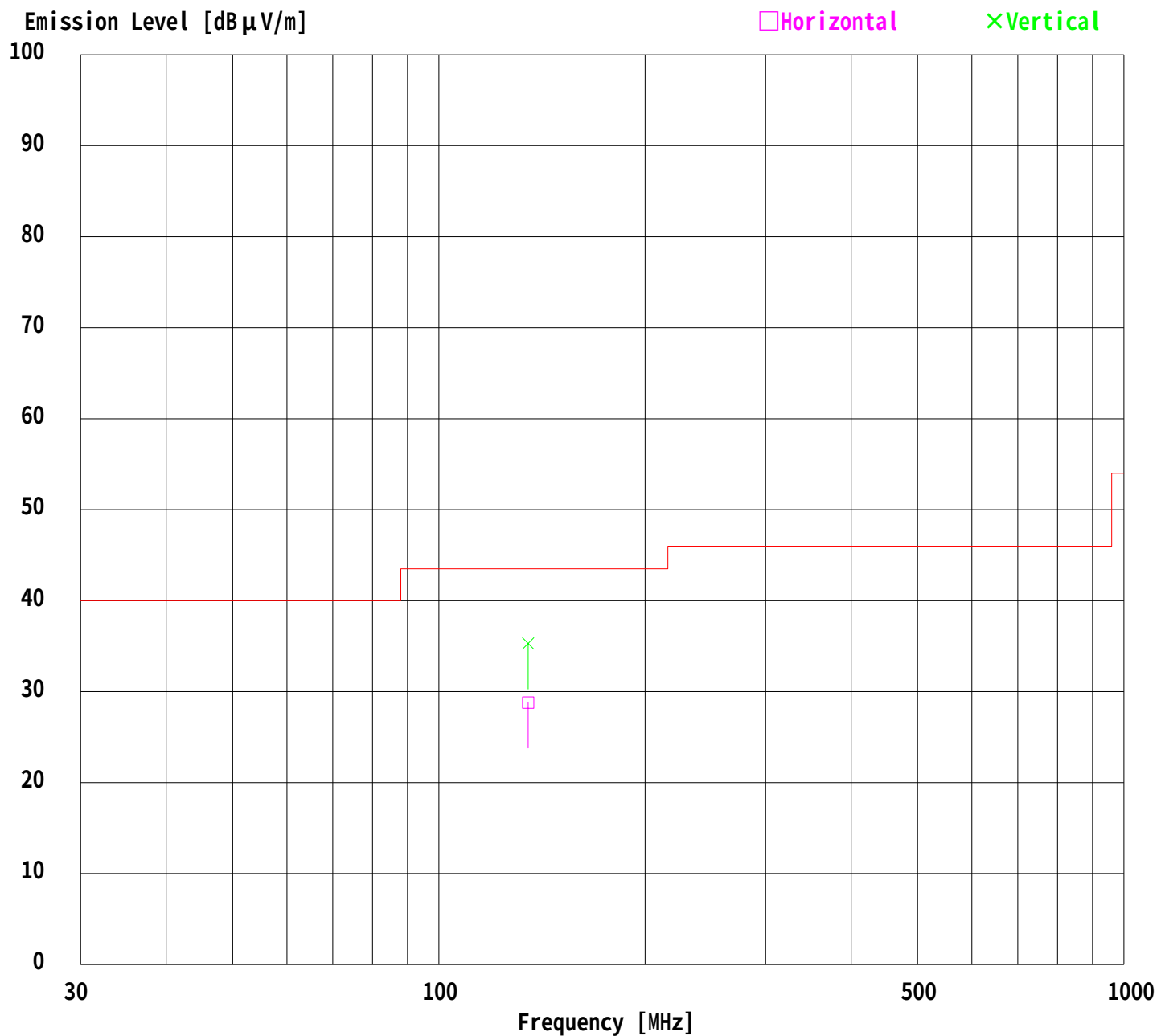
UL Apex Co., Ltd.

YOKOWA No.1 OPEN TEST SITE

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input 1 + Rec
Remarks : 1Vp-p Input
Date : 9/7/2004
Test Distance : 3 m
Temperature : 25 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.1 OPEN TEST SITE

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input 1 + Rec
Remarks : 5Vp-p Input
Date : 9/7/2004
Test Distance : 3 m
Temperature : 25 °C
Humidity : 56 %
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.	74.43	BB	35.4	36.2	6.3	29.9	2.0	5.8	19.6	20.4	40.0	20.4	19.6
2.	108.00	BB	35.0	41.8	11.3	29.9	2.5	5.8	24.7	31.5	43.5	18.8	12.0
3.	135.00	BB	36.0	42.7	14.1	29.9	2.8	5.8	28.8	35.5	43.5	14.7	8.0
4.	162.01	BB	26.1	30.8	15.1	29.9	3.1	5.8	20.2	24.9	43.5	23.3	18.6
5.	202.51	BB	35.2	28.4	17.1	30.0	3.6	5.8	31.7	24.9	43.5	11.8	18.6
6.	216.00	BB	36.1	31.8	17.1	30.0	3.8	5.8	32.8	28.5	43.5	10.7	15.0
7.	270.00	BB	38.2	33.0	18.3	30.0	4.5	5.8	36.8	31.6	46.0	9.2	14.4
8.	405.00	BB	31.9	37.6	16.5	30.2	5.7	5.9	29.8	35.5	46.0	16.2	10.5
9.	675.01	BB	28.2	31.8	20.0	30.2	8.1	5.9	32.0	35.6	46.0	14.0	10.4
10.	945.01	BB	27.3	27.6	22.5	29.3	10.2	5.9	36.6	36.9	46.0	9.4	9.1

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

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

DATA OF RADIATION TEST

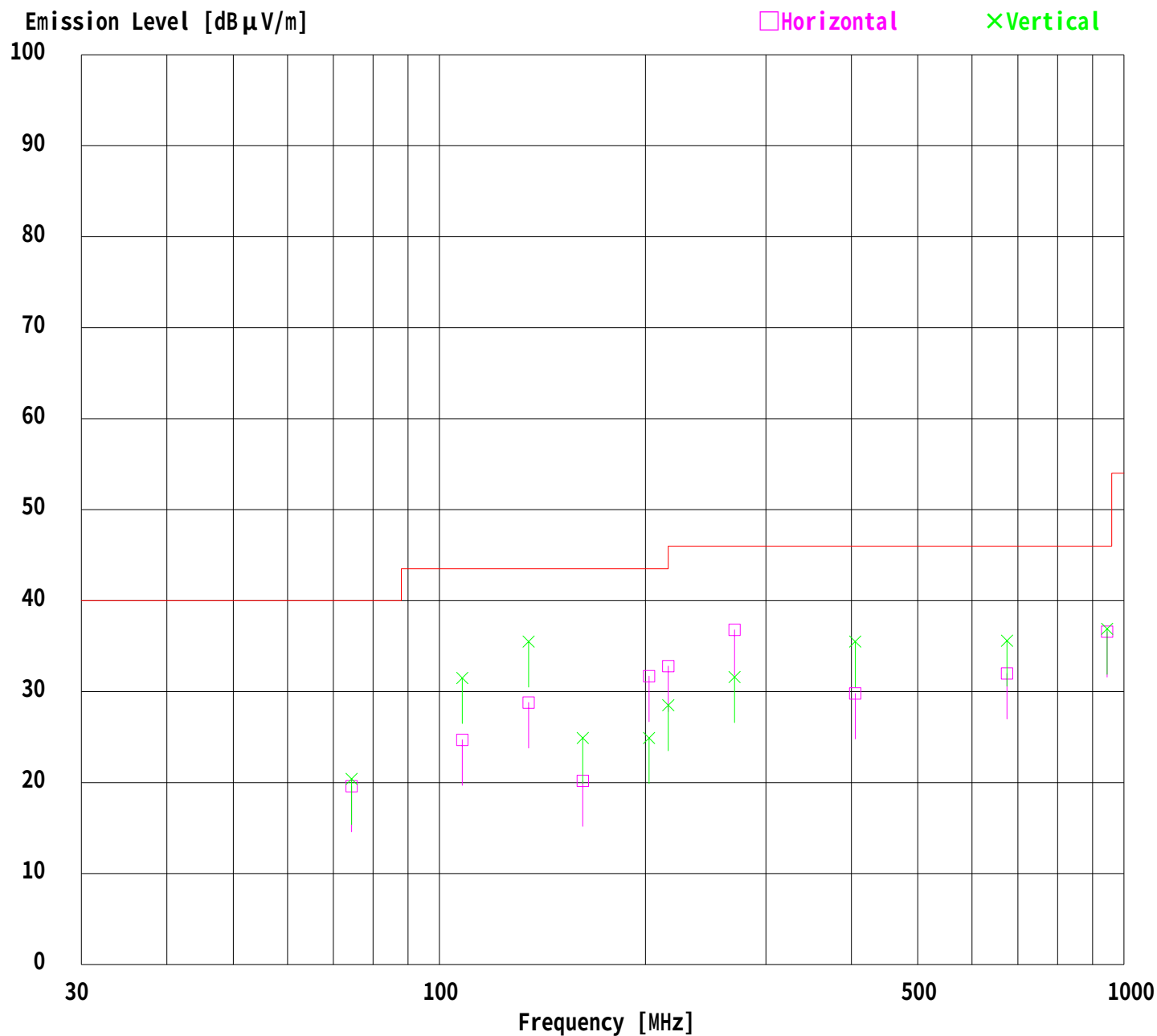
UL Apex Co., Ltd.

YOKOWA No.1 OPEN TEST SITE

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input 1 + Rec
Remarks : 5Vp-p Input
Date : 9/7/2004
Test Distance : 3 m
Temperature : 25 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.1 OPEN TEST SITE

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input 2 + Rec
Remarks : 1Vp-p Input
Date : 9/7/2004
Test Distance : 3 m
Temperature : 25 °C
Humidity : 56 %
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.	135.00	BB	35.2	42.2	14.1	29.9	2.8	5.8	28.0	35.0	43.5	15.5	8.5

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

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

DATA OF RADIATION TEST

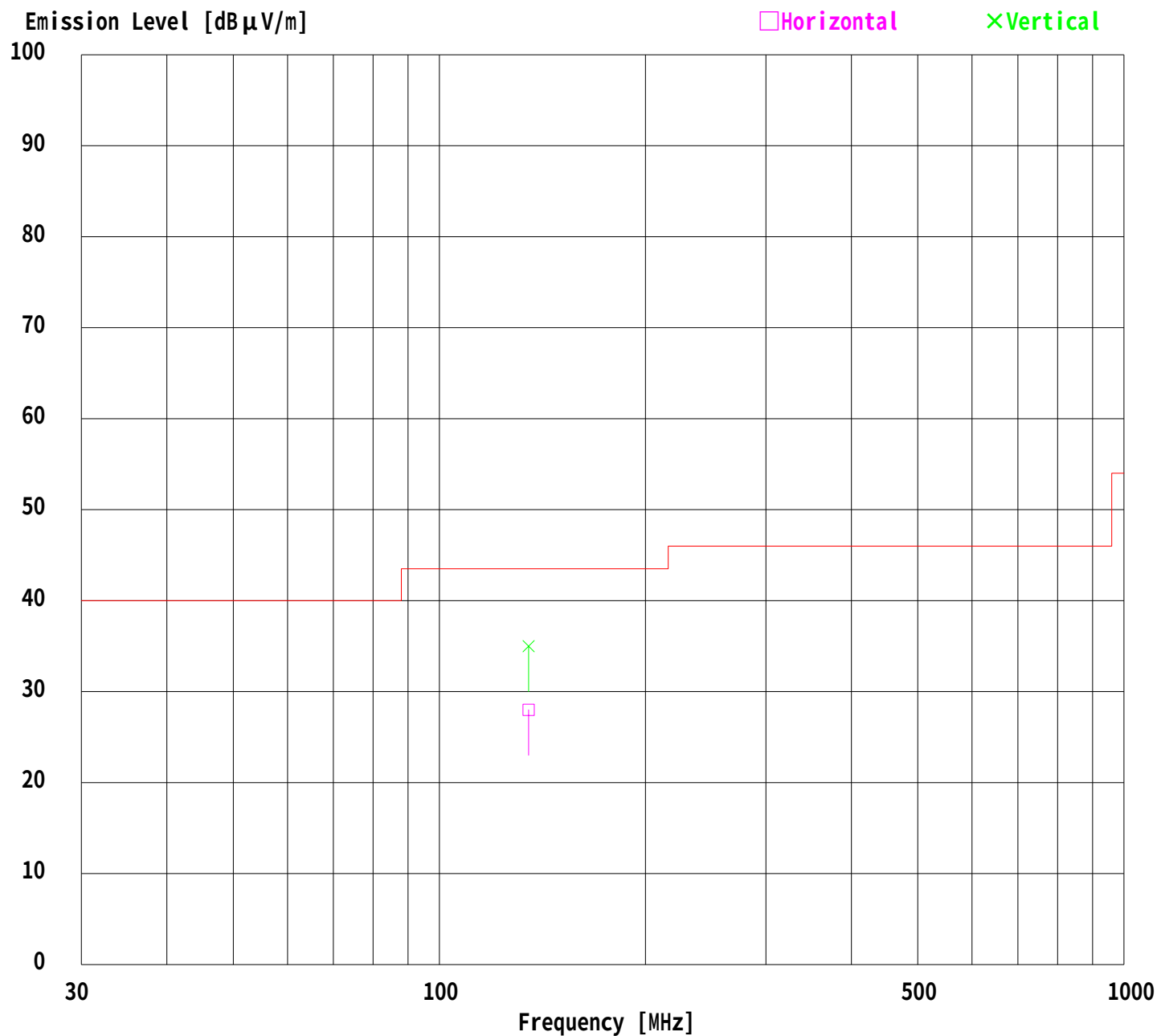
UL Apex Co., Ltd.

YOKOWA No.1 OPEN TEST SITE

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input 2 + Rec
Remarks : 1Vp-p Input
Date : 9/7/2004
Test Distance : 3 m
Temperature : 25 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.1 OPEN TEST SITE

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input 2 + Rec
Remarks : 5Vp-p Input
Date : 9/7/2004
Test Distance : 3 m
Temperature : 25 °C
Humidity : 56 %
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.	74.43	BB	35.2	36.2	6.3	29.9	2.0	5.8	19.4	20.4	40.0	20.6	19.6
2.	108.00	BB	35.1	41.8	11.3	29.9	2.5	5.8	24.8	31.5	43.5	18.7	12.0
3.	135.00	BB	35.6	42.2	14.1	29.9	2.8	5.8	28.4	35.0	43.5	15.1	8.5
4.	162.01	BB	26.4	30.4	15.1	29.9	3.1	5.8	20.5	24.5	43.5	23.0	19.0
5.	202.51	BB	35.0	28.3	17.1	30.0	3.6	5.8	31.5	24.8	43.5	12.0	18.7
6.	216.00	BB	36.5	31.2	17.1	30.0	3.8	5.8	33.2	27.9	43.5	10.3	15.6
7.	270.00	BB	38.3	33.2	18.3	30.0	4.5	5.8	36.9	31.8	46.0	9.1	14.2
8.	405.00	BB	32.2	37.5	16.5	30.2	5.7	5.9	30.1	35.4	46.0	15.9	10.6
9.	675.01	BB	28.3	32.2	20.0	30.2	8.1	5.9	32.1	36.0	46.0	13.9	10.0
10.	945.01	BB	27.1	27.5	22.5	29.3	10.2	5.9	36.4	36.8	46.0	9.6	9.2

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

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

DATA OF RADIATION TEST

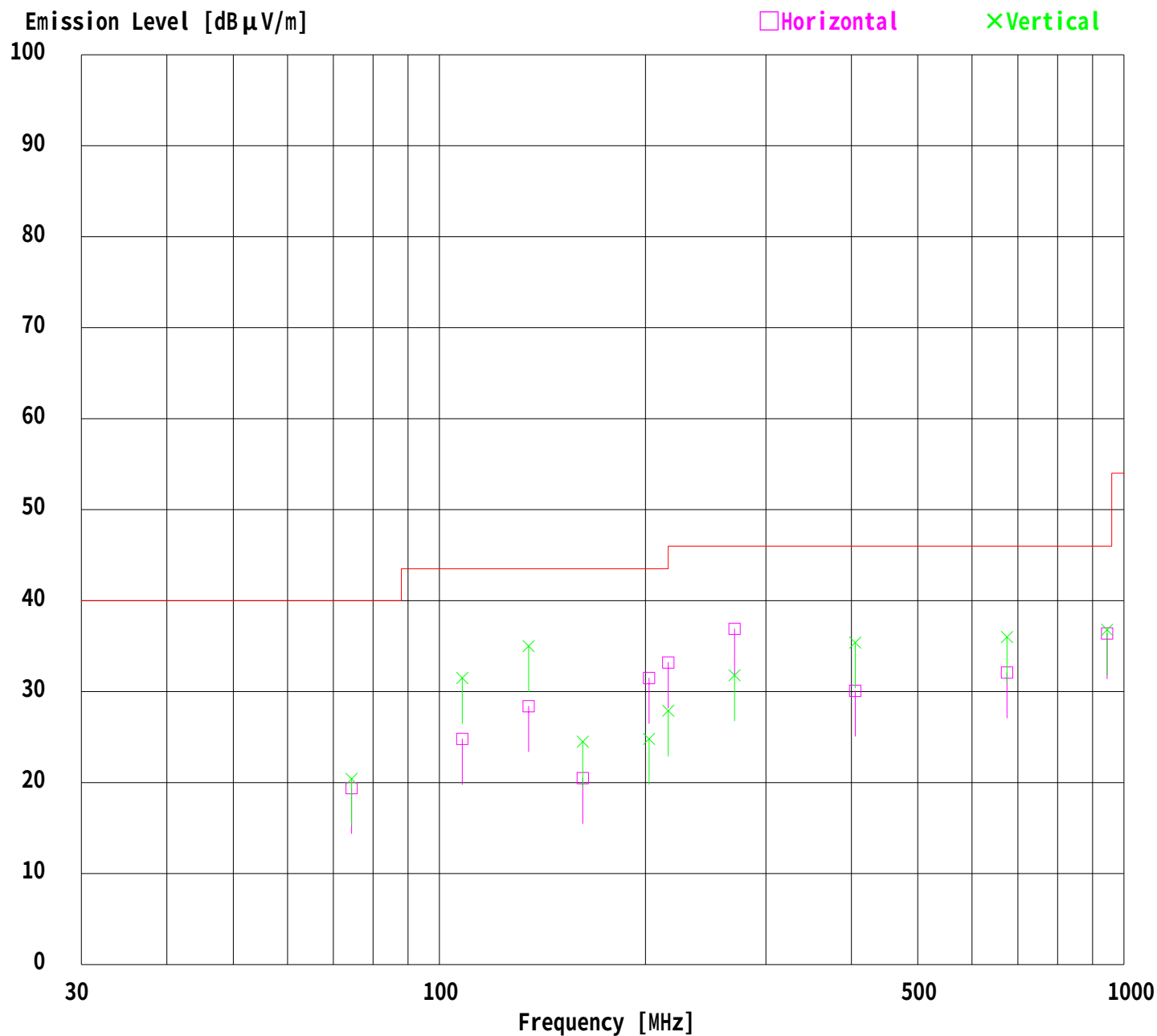
UL Apex Co., Ltd.

YOKOWA No.1 OPEN TEST SITE

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : AV Input 2 + Rec
Remarks : 5Vp-p Input
Date : 9/7/2004
Test Distance : 3 m
Temperature : 25 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.1 OPEN TEST SITE

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : VCR Playback
Remarks : -
Date : 9/7/2004
Test Distance : 3 m
Temperature : 25 °C
Humidity : 56 %
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.	108.00	BB	36.4	41.0	11.3	29.9	2.5	5.8	26.1	30.7	43.5	17.4	12.8
2.	135.00	BB	37.6	43.3	14.1	29.9	2.8	5.8	30.4	36.1	43.5	13.1	7.4
3.	162.00	BB	28.0	32.0	15.1	29.9	3.1	5.8	22.1	26.1	43.5	21.4	17.4
4.	202.51	BB	31.2	28.2	17.1	30.0	3.6	5.8	27.7	24.7	43.5	15.8	18.8
5.	216.00	BB	35.8	31.7	17.1	30.0	3.8	5.8	32.5	28.4	43.5	11.0	15.1
6.	270.00	BB	38.9	32.2	18.3	30.0	4.5	5.8	37.5	30.8	46.0	8.5	15.2
7.	405.00	BB	30.6	36.5	16.5	30.2	5.7	5.9	28.5	34.4	46.0	17.5	11.6
8.	675.01	BB	28.1	32.2	20.0	30.2	8.1	5.9	31.9	36.0	46.0	14.1	10.0
9.	945.02	BB	26.4	28.7	22.5	29.3	10.2	5.9	35.7	38.0	46.0	10.3	8.0

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

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

ANT.TYPE:30-300MHz Biconical, 300-1000MHz Logperiodic

DATA OF RADIATION TEST

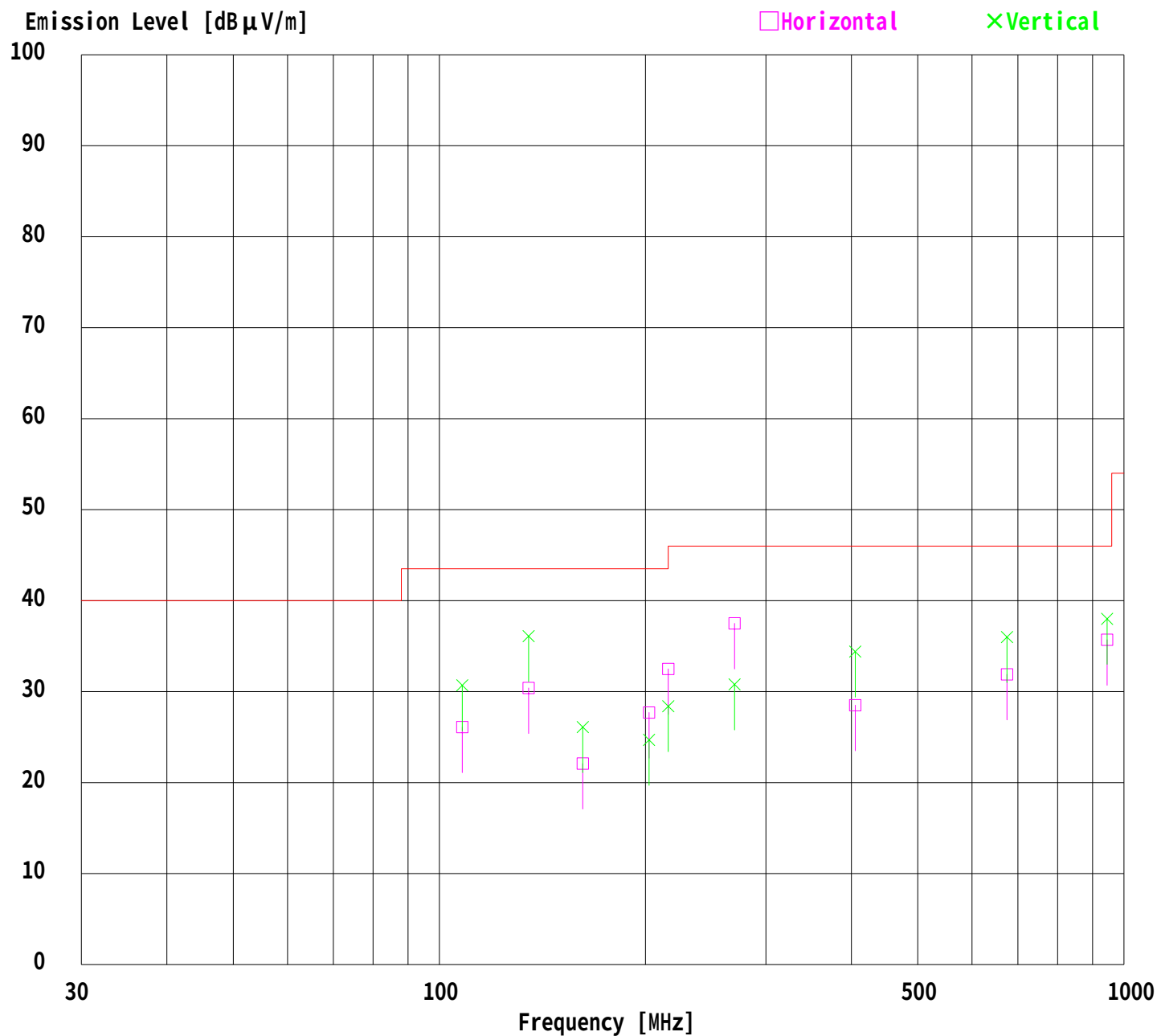
UL Apex Co., Ltd.

YOKOWA No.1 OPEN TEST SITE

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : VCR Playback
Remarks : -
Date : 9/7/2004
Test Distance : 3 m
Temperature : 25 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.1 OPEN TEST SITE

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks : -
Date : 9/7/2004
Test Distance : 3 m
Temperature : 25 °C
Humidity : 56 %
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.	43.83	BB	28.7	31.0	13.2	30.0	1.5	5.8	19.2	21.5	40.0	20.8	18.5
2.	108.00	BB	35.9	39.3	11.3	29.9	2.5	5.8	25.6	29.0	43.5	17.9	14.5
3.	135.00	BB	40.4	45.2	14.1	29.9	2.8	5.8	33.2	38.0	43.5	10.3	5.5
4.	162.00	BB	28.3	28.2	15.1	29.9	3.1	5.8	22.4	22.3	43.5	21.1	21.2
5.	202.51	BB	32.0	28.1	17.1	30.0	3.6	5.8	28.5	24.6	43.5	15.0	18.9
6.	216.00	BB	39.4	33.0	17.1	30.0	3.8	5.8	36.1	29.7	43.5	7.4	13.8
7.	270.00	BB	37.3	32.0	18.3	30.0	4.5	5.8	35.9	30.6	46.0	10.1	15.4
8.	405.00	BB	32.6	35.3	16.5	30.2	5.7	5.9	30.5	33.2	46.0	15.5	12.8
9.	675.01	BB	29.0	32.3	20.0	30.2	8.1	5.9	32.8	36.1	46.0	13.2	9.9
10.	945.02	BB	27.0	31.5	22.5	29.3	10.2	5.9	36.3	40.8	46.0	9.7	5.2

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

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

DATA OF RADIATION TEST

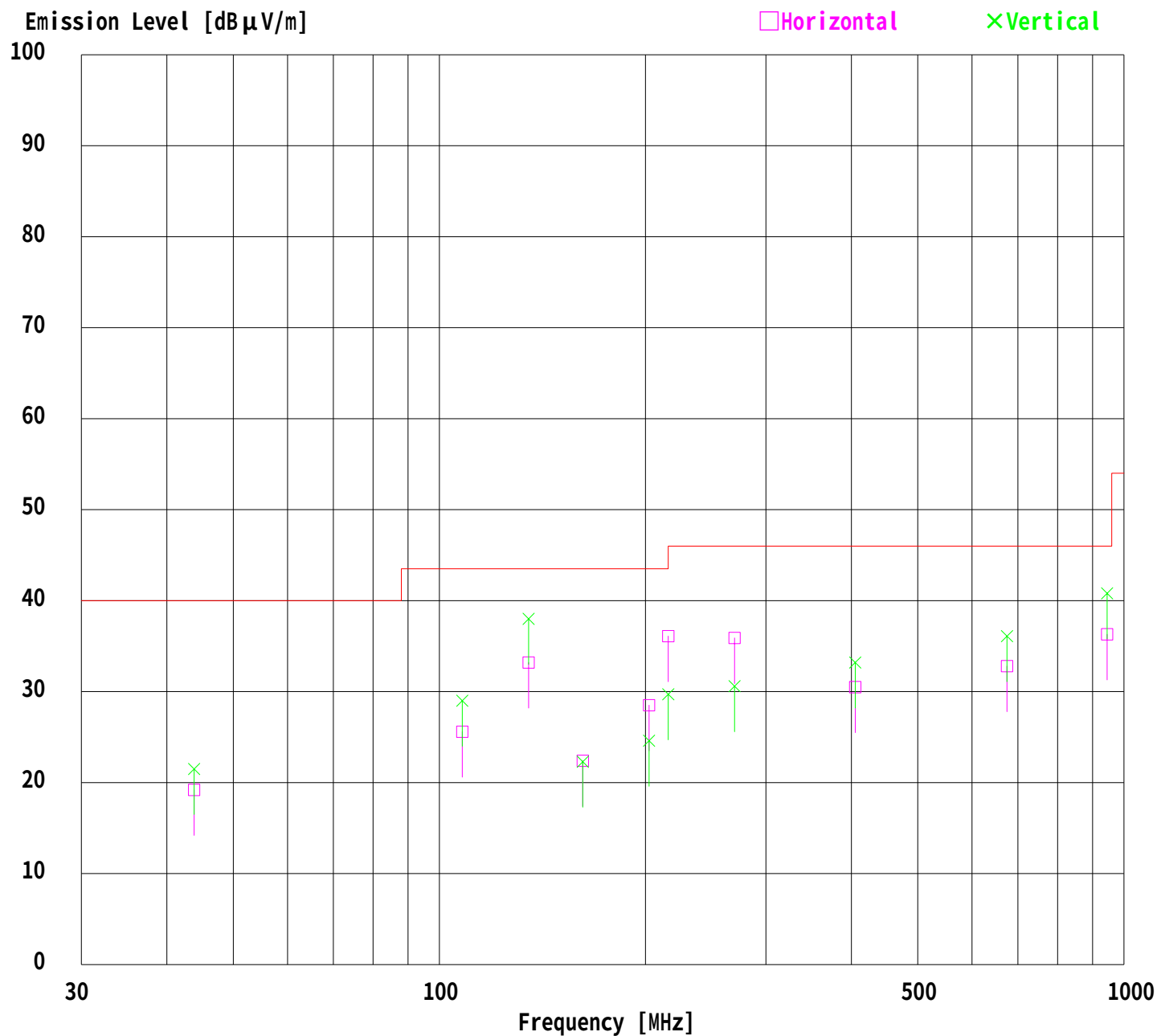
UL Apex Co., Ltd.

YOKOWA No.1 OPEN TEST SITE

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks : -
Date : 9/7/2004
Test Distance : 3 m
Temperature : 25 °C
Humidity : 56 %
Regulation : FCC Part15B CLASS B

Engineer : Tsubasa Takayama



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks :
Date : 9/12/2004
Test Distance : 3 m
Temperature : 25 °C Engineer : Masaya Minami
Humidity : 50 %
Regulation : FCC Part15B CLASS B(Average Limit / Upper1GHz)

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μV/m]	MARGIN	
			HOR [dB μV]	VER [dB μV]					HOR [dB μV/m]	VER [dB μV/m]		HOR [dB]	VER [dB]
1.	1046.28	BB	36.7	40.5	25.1	38.7	2.0	0.0	25.1	28.9	54.0	28.9	25.1
2.	1215.04	BB	44.7	45.9	26.0	38.5	2.2	0.0	34.4	35.6	54.0	19.6	18.4
3.	1890.00	BB	36.2	32.0	30.1	34.1	2.8	0.0	35.0	30.8	54.0	19.0	23.2

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

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

DATA OF RADIATION TEST

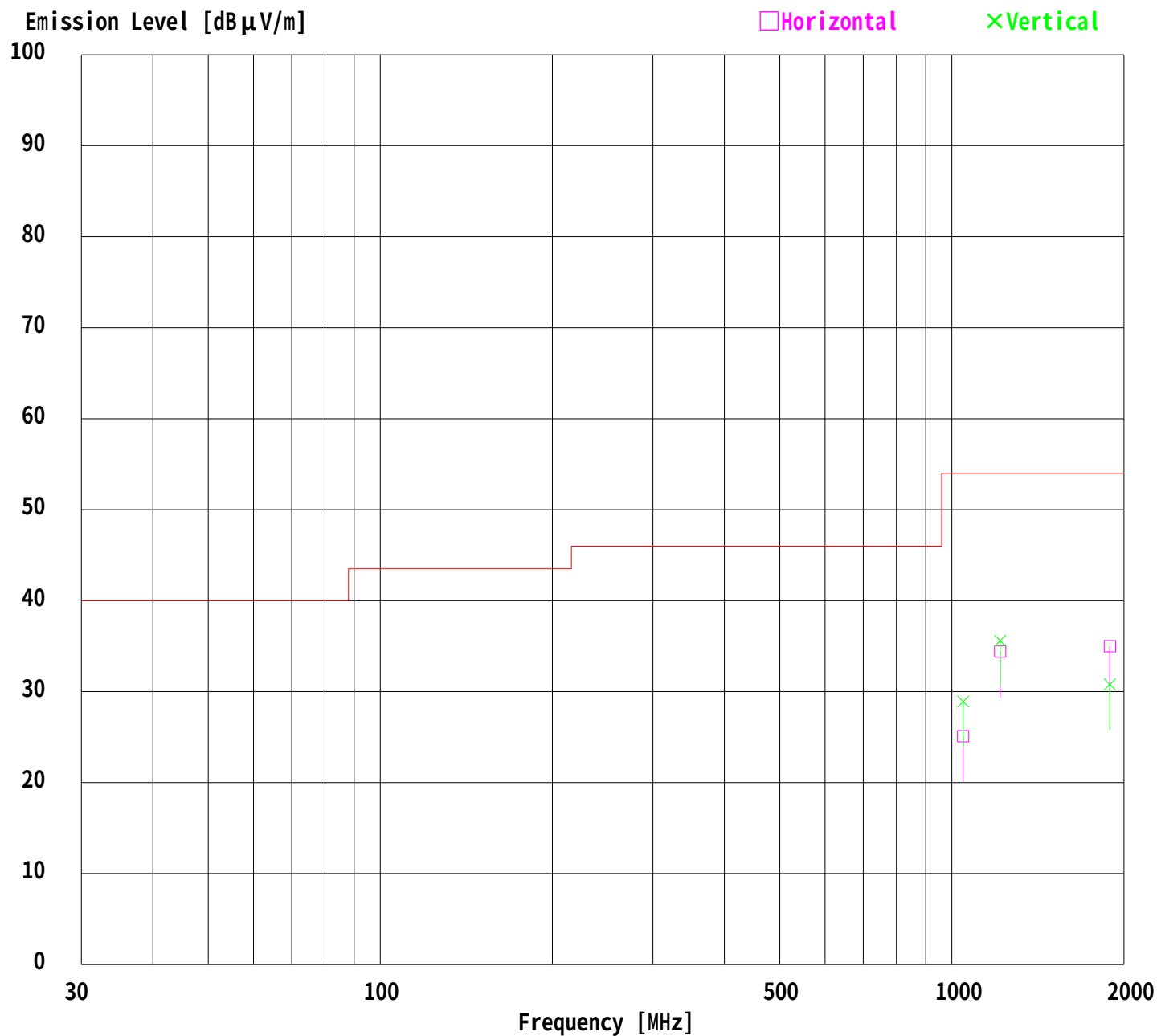
UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks :
Date : 9/12/2004
Test Distance : 3 m
Temperature : 25 °C
Humidity : 50 %
Regulation : FCC Part15B CLASS B(Average Limit / Upper1GHz)

Engineer : Masaya Minami



DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25BE0090-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks :
Date : 9/12/2004
Test Distance : 3 m
Temperature : 25 °C
Humidity : 50 %
Regulation : FCC Part15B CLASS B(Peak Limit / Upper1GHz)

Engineer : Masaya Minami

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.	1046.28	BB	48.2	58.3	25.1	38.7	2.0	0.0	36.6	46.7	74.0	37.4	27.3
2.	1215.04	BB	53.5	54.3	26.0	38.5	2.2	0.0	43.2	44.0	74.0	30.8	30.0
3.	1890.00	BB	47.6	45.5	30.1	34.1	2.8	0.0	46.4	44.3	74.0	27.6	29.7

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

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

DATA OF RADIATION TEST

UL Apex Co., Ltd.

YOKOWA No.3 OPEN TEST SITE

Report No.: 25BE0090-YW-1

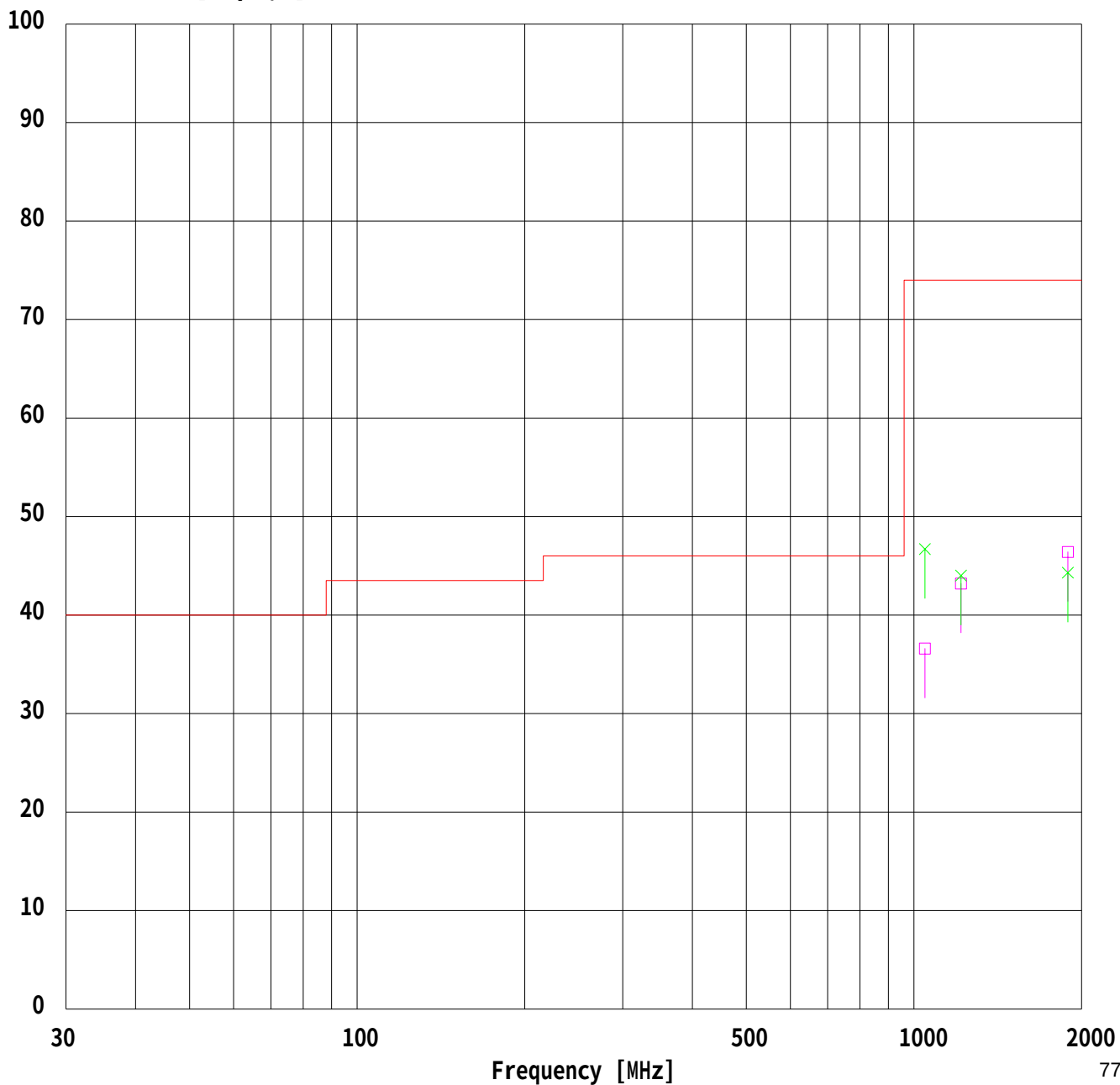
Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD/VCR
Model No. : SD-V392SU2
Serial No. : -
Power : AC120V/60Hz
Mode : DVD Play
Remarks :
Date : 9/12/2004
Test Distance : 3 m
Temperature : 25 °C
Humidity : 50 %
Regulation : FCC Part15B CLASS B(Peak Limit / Upper1GHz)

Engineer : Masaya Minami

Emission Level [dB μ V/m]

□ Horizontal

× Vertical



DATA OF ANTENNA TERMINAL VOLTAGE TEST

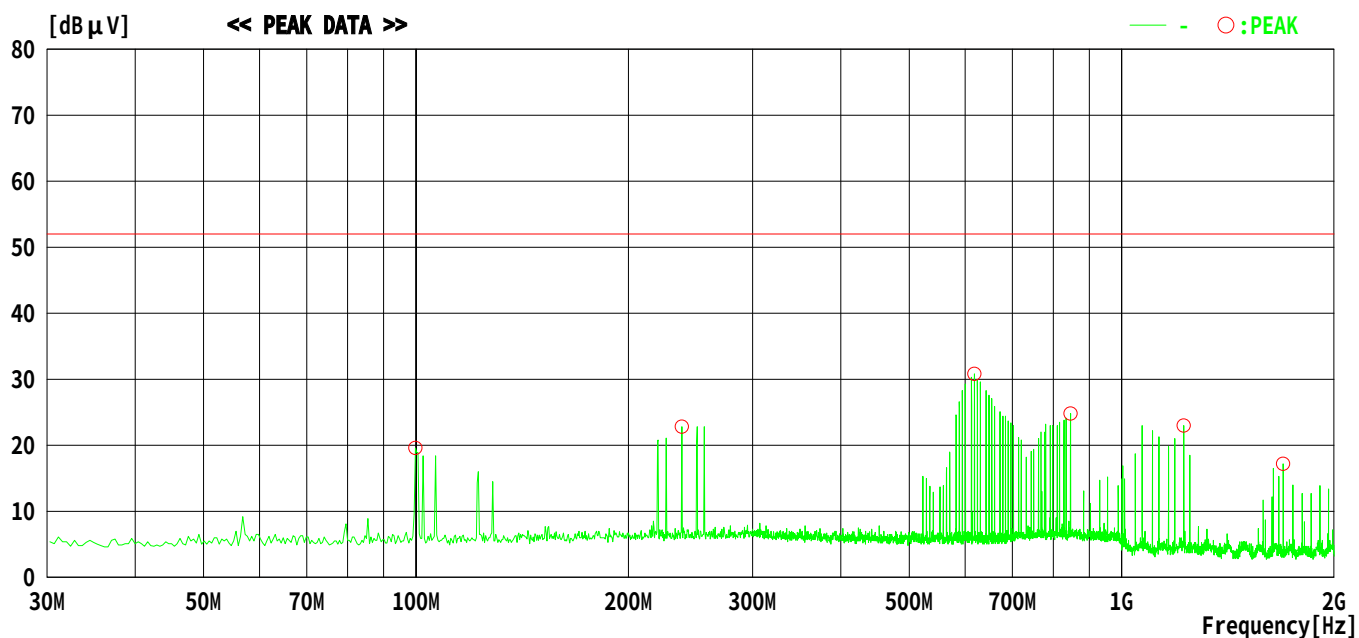
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 10, 2004
REGULATION : FCC 15B SubpartB
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : TV Tuning Mode

LIMIT : FCC 15B ANTENNA TERMINAL



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

DATA OF ANTENNA TERMINAL VOLTAGE TEST

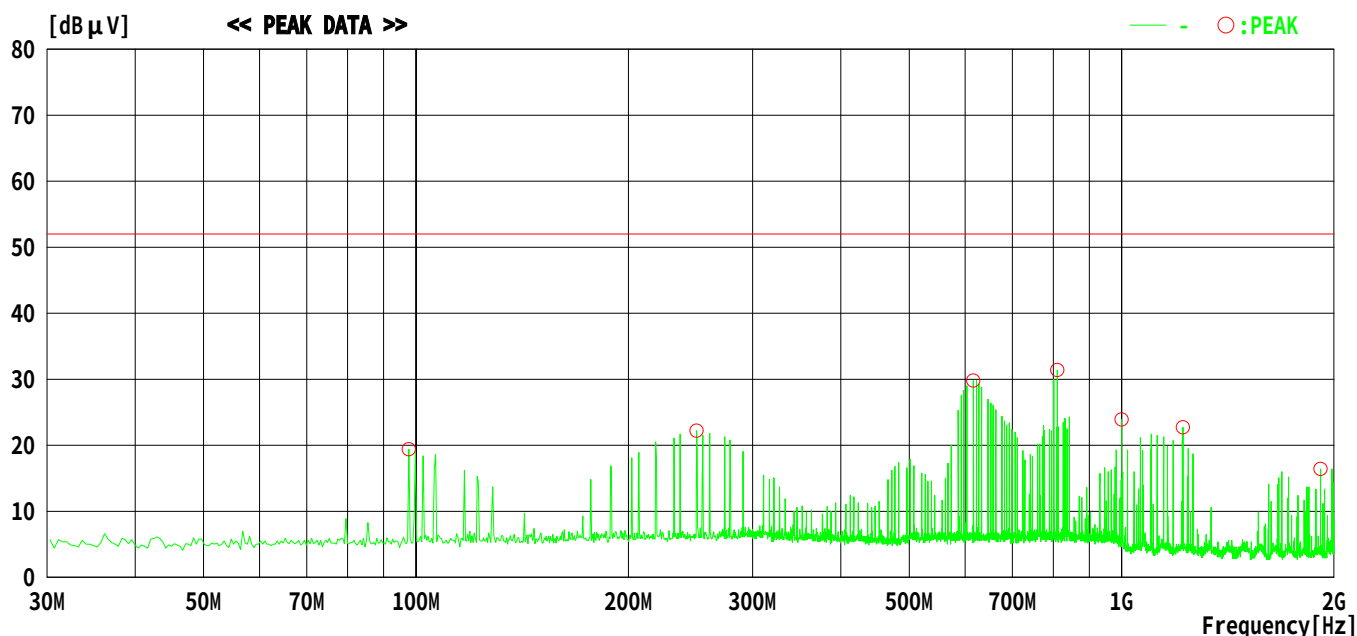
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 10, 2004
REGULATION : FCC 15B SubpartB
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : CATV Tuning Mode

LIMIT : FCC 15B ANTENNA TERMINAL



NO	FREQ [MHz]	READING PEAK [dB μV]	C.F [dB]	RESULT [dB μV]	LIMIT PEAK [dB μV]	MARGIN PEAK [dB]	PHASE
1	97.71400	39.0	-19.6	19.4	52.0	32.6	-
2	249.85060	41.2	-19.0	22.2	52.0	29.8	-
3	616.56790	50.0	-20.2	29.8	52.0	22.2	-
4	811.00450	51.2	-19.8	31.4	52.0	20.6	-
5	1000.00000	44.2	-20.3	23.9	52.0	28.1	-
6	1221.41400	52.2	-29.5	22.7	52.0	29.3	-
7	1914.15100	45.0	-28.6	16.4	52.0	35.6	-

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	: 25BE0090-YW-1
Equipment	: DVD/VCR	Regulation	: FCC Part15B Subpart B
Model number	: SD-V392SU2	Date	: September 10,2004
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	95.2	31.7	63.5	69.5	6.0
4	67.25	94.6	31.6	63.0	69.5	6.5

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	81.0	31.7	49.3	56.5	7.2
	65.75	80.0	31.6	48.4	56.5	8.1
4	62.75	81.3	31.7	49.6	56.5	6.9
	71.75	80.5	31.6	48.9	56.5	7.6

RF output level

UL Apex Co., LTD.
YOKOWA EMC LAB.

Company	: Orion Electric Co.,Ltd.	Report Number	: 25BE0090-YW-1
Equipment	: DVD/VCR	Regulation	: FCC Part15B Subpart B
Model number	: SD-V392SU2	Date	: September 10,2004
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	96.2	31.7	64.5	69.5	5.0
4	67.25	95.8	31.6	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	83.1	31.7	51.4	56.5	5.1
	65.75	82.2	31.6	50.6	56.5	5.9
4	62.75	82.3	31.7	50.6	56.5	5.9
	71.75	81.2	31.6	49.6	56.5	6.9

RF output level

UL Apex Co., LTD.
YOKOWA EMC LAB.

Company	: Orion Electric Co.,Ltd.	Report Number	: 25BE0090-YW-1
Equipment	: DVD/VCR	Regulation	: FCC Part15B Subpart B
Model number	: SD-V392SU2	Date	: September 10,2004
Power	: AC 120 V / 60 Hz	Temp./Humid	: 24℃/34%
Description	: AV Input1 + Rec(1Vp-p)	Engineer	: Tsubasa Takayama

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	96.0	31.7	64.3	69.5	5.2
4	67.25	95.5	31.6	63.9	69.5	5.6

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	85.4	31.7	53.7	56.5	2.8
	65.75	84.4	31.6	52.8	56.5	3.7
4	62.75	84.7	31.7	53.0	56.5	3.5
	71.75	83.7	31.6	52.1	56.5	4.4

RF output level

UL Apex Co., LTD.
YOKOWA EMC LAB.

Company	: Orion Electric Co.,Ltd.	Report Number	: 25BE0090-YW-1
Equipment	: DVD/VCR	Regulation	: FCC Part15B Subpart B
Model number	: SD-V392SU2	Date	: September 10,2004
Power	: AC 120 V / 60 Hz	Temp./Humid	: 24°C/34%
Description	: AV Input1 + Rec(5Vp-p)	Engineer	: Tsubasa Takayama

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	96.4	31.7	64.7	69.5	4.8
4	67.25	95.4	31.6	63.8	69.5	5.7

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	83.6	31.7	51.9	56.5	4.6
	65.75	85.3	31.6	53.7	56.5	2.8
4	62.75	84.4	31.7	52.7	56.5	3.8
	71.75	83.5	31.6	51.9	56.5	4.6

RF output level

UL Apex Co., LTD.
YOKOWA EMC LAB.

Company	: Orion Electric Co.,Ltd.	Report Number	: 25BE0090-YW-1
Equipment	: DVD/VCR	Regulation	: FCC Part15B Subpart B
Model number	: SD-V392SU2	Date	: September 10,2004
Power	: AC 120 V / 60 Hz	Temp./Humid	: 24°C/34%
Description	: AV Input2 + Rec(1Vp-p)	Engineer	: Tsubasa Takayama

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	96.0	31.7	64.3	69.5	5.2
4	67.25	95.4	31.6	63.8	69.5	5.7

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	85.3	31.7	53.6	56.5	2.9
	65.75	84.4	31.6	52.8	56.5	3.7
4	62.75	84.7	31.7	53.0	56.5	3.5
	71.75	83.3	31.6	51.7	56.5	4.8

RF output level

UL Apex Co., LTD.
YOKOWA EMC LAB.

Company	: Orion Electric Co.,Ltd.	Report Number	: 25BE0090-YW-1
Equipment	: DVD/VCR	Regulation	: FCC Part15B Subpart B
Model number	: SD-V392SU2	Date	: September 10,2004
Power	: AC 120 V / 60 Hz	Temp./Humid	: 24°C/34%
Description	: AV Input2+ Rec (5Vp-p)	Engineer	: Tsubasa Takayama

Video signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	61.25	95.8	31.7	64.1	69.5	5.4
4	67.25	95.2	31.6	63.6	69.5	5.9

Audio signal

Ch.	Frequency [MHz]	Meter reading [dBuV]	Correction factor [dB]	Result [dB]	Limits [dBuV]	Margin [dB]
3	56.75	83.5	31.7	51.8	56.5	4.7
	65.75	82.1	31.6	50.5	56.5	6.0
4	62.75	82.4	31.7	50.7	56.5	5.8
	71.75	81.7	31.6	50.1	56.5	6.4

RF output level

UL Apex Co., LTD.
YOKOWA EMC LAB.

Company	: Orion Electric Co.,Ltd.	Report Number	: 25BE0090-YW-1
Equipment	: DVD/VCR	Regulation	: FCC Part15B Subpart B
Model number	: SD-V392SU2	Date	: September 10,2004
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	96.4	31.7	64.7	69.5	4.8
4	67.25	95.8	31.6	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	81.2	31.7	49.5	56.5	7.0
	65.75	80.3	31.6	48.7	56.5	7.8
4	62.75	80.8	31.7	49.1	56.5	7.4
	71.75	79.5	31.6	47.9	56.5	8.6

RF output level

UL Apex Co., LTD.
YOKOWA EMC LAB.

Company	: Orion Electric Co.,Ltd.	Report Number	: 25BE0090-YW-1
Equipment	: DVD/VCR	Regulation	: FCC Part15B Subpart B
Model number	: SD-V392SU2	Date	: September 10,2004
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	96.2	31.7	64.5	69.5	5.1
4	67.25	95.7	31.6	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	82.4	31.7	50.7	56.5	5.8
	65.75	81.4	31.6	49.8	56.5	6.7
4	62.75	82.2	31.7	50.5	56.5	6.1
	71.75	80.8	31.6	49.2	56.5	7.3

DATA OF RF SUPRIIOUS TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : TV Reception + Rec (0dBmV) : 3ch

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	32.6000	34.2	----	-20.9	13.3	----	39.5	----	26.2	----	-
2	47.8200	34.4	----	-20.8	13.6	----	39.5	----	25.9	----	-
3	55.2300	35.2	----	-20.8	14.4	----	39.5	----	25.1	----	-
4	122.5000	37.2	----	-20.3	16.9	----	39.5	----	22.6	----	-
5	499.7400	31.0	----	-20.6	10.4	----	39.5	----	29.1	----	-
6	674.9200	33.1	----	-20.2	12.9	----	39.5	----	26.6	----	-
7	809.3400	34.3	----	-19.7	14.6	----	39.5	----	24.9	----	-

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

DATA OF RF SUPRIIOUS TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 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	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	32.6000	34.6	----	-20.9	13.7	----	39.5	----	25.8	----	-
2	47.8200	34.4	----	-20.8	13.6	----	39.5	----	25.9	----	-
3	55.2300	35.9	----	-20.8	15.1	----	39.5	----	24.4	----	-
4	122.5000	37.7	----	-20.3	17.4	----	39.5	----	22.1	----	-
5	499.7400	31.0	----	-20.6	10.4	----	39.5	----	29.1	----	-
6	674.9200	33.4	----	-20.2	13.2	----	39.5	----	26.3	----	-
7	809.3400	34.5	----	-19.7	14.8	----	39.5	----	24.7	----	-

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

DATA OF RF SUPRIIOUS TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : AV Input 1 + Rec (1V p-p) : 3ch

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	32.7300	34.2	----	-20.9	13.3	----	39.5	----	26.2	----	-
2	47.8500	35.3	----	-20.8	14.5	----	39.5	----	25.0	----	-
3	54.1300	36.6	----	-20.8	15.8	----	39.5	----	23.7	----	-
4	122.5000	36.2	----	-20.3	15.9	----	39.5	----	23.6	----	-
5	499.4300	31.2	----	-20.6	10.6	----	39.5	----	28.9	----	-
6	674.9300	34.6	----	-20.2	14.4	----	39.5	----	25.1	----	-
7	809.3200	34.9	----	-19.7	15.2	----	39.5	----	24.3	----	-

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

DATA OF RF SUPRIIOUS TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : AV Input 1 + Rec (5V p-p) : 3ch

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	32.7300	33.1	----	-20.9	12.2	----	39.5	----	27.3	----	-
2	47.8500	35.3	----	-20.8	14.5	----	39.5	----	25.0	----	-
3	54.1300	45.1	----	-20.8	24.3	----	39.5	----	15.2	----	-
4	122.5000	36.2	----	-20.3	15.9	----	39.5	----	23.6	----	-
5	499.4300	31.0	----	-20.6	10.4	----	39.5	----	29.1	----	-
6	674.9300	34.9	----	-20.2	14.7	----	39.5	----	24.8	----	-
7	809.3200	35.4	----	-19.7	15.7	----	39.5	----	23.8	----	-

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

DATA OF RF SUPRIIOUS TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : AV Input 2 + Rec (1V p-p) : 3ch

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	32.7300	34.5	----	-20.9	13.6	----	39.5	----	25.9	----	-
2	47.8500	35.2	----	-20.8	14.4	----	39.5	----	25.1	----	-
3	54.1300	36.6	----	-20.8	15.8	----	39.5	----	23.7	----	-
4	122.5000	36.6	----	-20.3	16.3	----	39.5	----	23.2	----	-
5	499.4300	31.4	----	-20.6	10.8	----	39.5	----	28.7	----	-
6	674.9300	35.2	----	-20.2	15.0	----	39.5	----	24.5	----	-
7	809.3200	35.0	----	-19.7	15.3	----	39.5	----	24.2	----	-

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

DATA OF RF SUPRIIOUS TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : AV Input 2 + Rec (1V p-p) : 3ch

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	47.1000	46.0	----	-20.8	25.2	----	39.5	----	14.3	----	-
2	50.5400	46.4	----	-20.8	25.6	----	39.5	----	13.9	----	-
3	54.1200	54.1	----	-20.8	33.3	----	39.5	----	6.2	----	-
4	75.5400	44.3	----	-20.5	23.8	----	39.5	----	15.7	----	-
5	122.5000	36.3	----	-20.3	16.0	----	39.5	----	23.5	----	-
6	499.3400	31.4	----	-20.6	10.8	----	39.5	----	28.7	----	-
7	674.5300	34.7	----	-20.2	14.5	----	39.5	----	25.0	----	-
8	809.3200	36.7	----	-19.7	17.0	----	39.5	----	22.5	----	-

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

DATA OF RF SUPRIIOUS TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : VCR Playback : 3ch

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	32.7300	32.8	----	-20.9	11.9	----	39.5	----	27.6	----	-
2	47.7400	34.5	----	-20.8	13.7	----	39.5	----	25.8	----	-
3	74.8300	32.4	----	-20.5	11.9	----	39.5	----	27.6	----	-
4	122.5000	36.7	----	-20.3	16.4	----	39.5	----	23.1	----	-
5	499.4500	31.8	----	-20.6	11.2	----	39.5	----	28.3	----	-
6	674.6400	36.1	----	-20.2	15.9	----	39.5	----	23.6	----	-
7	809.3400	36.3	----	-19.7	16.6	----	39.5	----	22.9	----	-

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

DATA OF RF SUPRIIOUS TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : DVD Play : 3ch

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	47.8400	34.8	----	-20.8	14.0	----	39.5	----	25.5	----	-
2	74.7400	32.3	----	-20.5	11.8	----	39.5	----	27.7	----	-
3	122.5000	36.8	----	-20.3	16.5	----	39.5	----	23.0	----	-
4	489.6400	30.6	----	-20.5	10.1	----	39.5	----	29.4	----	-
5	539.7400	35.3	----	-20.5	14.8	----	39.5	----	24.7	----	-
6	809.3700	35.8	----	-19.7	16.1	----	39.5	----	23.4	----	-

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

DATA OF RF SUPRIIOUS TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 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	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	38.5200	36.3	----	-20.9	15.4	----	39.5	----	24.1	----	-
2	55.2300	37.0	----	-20.8	16.2	----	39.5	----	23.3	----	-
3	80.7400	31.8	----	-20.5	11.3	----	39.5	----	28.2	----	-
4	134.5000	35.3	----	-20.2	15.1	----	39.5	----	24.4	----	-
5	499.1200	31.0	----	-20.6	10.4	----	39.5	----	29.1	----	-
6	672.3400	32.5	----	-20.2	12.3	----	39.5	----	27.2	----	-
7	809.2300	35.6	----	-19.7	15.9	----	39.5	----	23.6	----	-

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

DATA OF RF SUPRIIOUS TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 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	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	38.5200	36.8	----	-20.9	15.9	----	39.5	----	23.6	----	-
2	55.2300	36.7	----	-20.8	15.9	----	39.5	----	23.6	----	-
3	80.7400	32.1	----	-20.5	11.6	----	39.5	----	27.9	----	-
4	134.5000	35.3	----	-20.2	15.1	----	39.5	----	24.4	----	-
5	499.1200	30.4	----	-20.6	9.8	----	39.5	----	29.7	----	-
6	672.3400	33.6	----	-20.2	13.4	----	39.5	----	26.1	----	-
7	809.2300	36.2	----	-19.7	16.5	----	39.5	----	23.0	----	-

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

DATA OF RF SUPRIIOUS TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : AV Input 1 + Rec (1Vp-p) : 4ch

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	38.7400	36.4	----	-20.9	15.5	----	39.5	----	24.0	----	-
2	53.7600	36.3	----	-20.8	15.5	----	39.5	----	24.0	----	-
3	80.7200	32.2	----	-20.5	11.7	----	39.5	----	27.8	----	-
4	143.5000	35.9	----	-20.2	15.7	----	39.5	----	23.8	----	-
5	499.4700	30.2	----	-20.6	9.6	----	39.5	----	29.9	----	-
6	672.0000	33.8	----	-20.2	13.6	----	39.5	----	25.9	----	-
7	943.2000	35.2	----	-19.5	15.7	----	39.5	----	23.8	----	-

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

DATA OF RF SUPRIIOUS TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : AV Input 1 + Rec (5Vp-p) : 4ch

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	38.7400	35.8	----	-20.9	14.9	----	39.5	----	24.6	----	-
2	53.7600	35.9	----	-20.8	15.1	----	39.5	----	24.4	----	-
3	80.7200	32.4	----	-20.5	11.9	----	39.5	----	27.6	----	-
4	143.5000	36.0	----	-20.2	15.8	----	39.5	----	23.7	----	-
5	499.4700	31.0	----	-20.6	10.4	----	39.5	----	29.1	----	-
6	672.0000	34.0	----	-20.2	13.8	----	39.5	----	25.7	----	-
7	943.2000	35.7	----	-19.5	16.2	----	39.5	----	23.3	----	-

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

DATA OF RF SUPRIIOUS TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : VCR Playback : 4ch

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	38.6400	34.4	----	-20.9	13.5	----	39.5	----	26.0	----	-
2	53.8700	35.7	----	-20.8	14.9	----	39.5	----	24.6	----	-
3	80.7300	32.7	----	-20.5	12.2	----	39.5	----	27.3	----	-
4	134.5000	35.7	----	-20.2	15.5	----	39.5	----	24.0	----	-
5	499.7200	32.1	----	-20.6	11.5	----	39.5	----	28.0	----	-
6	672.0000	34.2	----	-20.2	14.0	----	39.5	----	25.5	----	-
7	809.3400	36.7	----	-19.7	17.0	----	39.5	----	22.5	----	-

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

DATA OF RF SUPRIIOUS TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : DVD Play : 4ch

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	53.9000	33.9	----	-20.8	13.1	----	39.5	----	26.4	----	-
2	80.8300	31.7	----	-20.5	11.2	----	39.5	----	28.3	----	-
3	134.5000	36.2	----	-20.2	16.0	----	39.5	----	23.5	----	-
4	499.7200	30.2	----	-20.6	9.6	----	39.5	----	29.9	----	-
5	674.6400	35.4	----	-20.2	15.2	----	39.5	----	24.3	----	-
6	809.3200	36.2	----	-19.7	16.5	----	39.5	----	23.0	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : AV Input 2 + Rec (1V p-p) : 3ch

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	61.2500	23.1	----	-20.8	2.3	----	9.5	----	7.2	----	-
2	122.5000	22.1	----	-20.3	1.8	----	9.5	----	7.7	----	-
3	183.7500	23.5	----	-19.7	3.8	----	9.5	----	5.7	----	-
4	245.0000	23.0	----	-19.6	3.4	----	9.5	----	6.1	----	-
5	306.2500	22.1	----	-19.5	2.6	----	9.5	----	6.9	----	-
6	367.5000	21.2	----	-19.8	1.4	----	9.5	----	8.1	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : AV Input 2 + Rec (1V p-p) : 3ch

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	61.2500	23.3	----	-20.8	2.5	----	9.5	----	7.0	----	-
2	122.5000	22.3	----	-20.3	2.0	----	9.5	----	7.5	----	-
3	183.7500	23.3	----	-19.7	3.6	----	9.5	----	5.9	----	-
4	245.0000	23.1	----	-19.6	3.5	----	9.5	----	6.0	----	-
5	306.2500	22.3	----	-19.5	2.8	----	9.5	----	6.7	----	-
6	367.5000	21.4	----	-19.8	1.6	----	9.5	----	7.9	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : AV Input 1 + Rec (5V p-p) : 3ch

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	61.2500	23.3	----	-20.8	2.5	----	9.5	----	7.0	----	-
2	122.5000	22.3	----	-20.3	2.0	----	9.5	----	7.5	----	-
3	183.7500	23.1	----	-19.7	3.4	----	9.5	----	6.1	----	-
4	245.0000	23.1	----	-19.6	3.5	----	9.5	----	6.0	----	-
5	306.2500	22.1	----	-19.5	2.6	----	9.5	----	6.9	----	-
6	367.5000	21.2	----	-19.8	1.4	----	9.5	----	8.1	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : VCR Playback : 3ch

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	61.2500	23.6	----	-20.8	2.8	----	9.5	----	6.7	----	-
2	122.5000	22.3	----	-20.3	2.0	----	9.5	----	7.5	----	-
3	183.7500	23.7	----	-19.7	4.0	----	9.5	----	5.5	----	-
4	245.0000	23.3	----	-19.6	3.7	----	9.5	----	5.8	----	-
5	306.2500	22.3	----	-19.5	2.8	----	9.5	----	6.7	----	-
6	367.5000	21.2	----	-19.8	1.4	----	9.5	----	8.1	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : DVD Play : 3ch

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	61.2500	23.4	----	-20.8	2.6	----	9.5	----	6.9	----	-
2	122.5000	22.3	----	-20.3	2.0	----	9.5	----	7.5	----	-
3	183.7500	23.0	----	-19.7	3.3	----	9.5	----	6.2	----	-
4	245.0000	23.3	----	-19.6	3.7	----	9.5	----	5.8	----	-
5	306.2500	22.1	----	-19.5	2.6	----	9.5	----	6.9	----	-
6	367.5000	21.3	----	-19.8	1.5	----	9.5	----	8.0	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : AV Input 1 + Rec (1Vp-p) : 4ch

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	67.2500	23.4	----	-20.5	2.9	----	9.5	----	6.6	----	-
2	128.5000	22.6	----	-20.2	2.4	----	9.5	----	7.1	----	-
3	189.7500	23.4	----	-19.7	3.7	----	9.5	----	5.8	----	-
4	251.0000	22.7	----	-19.6	3.1	----	9.5	----	6.4	----	-
5	312.2500	22.4	----	-19.6	2.8	----	9.5	----	6.7	----	-
6	373.5000	21.3	----	-19.9	1.4	----	9.5	----	8.1	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : AV Input 1 + Rec (5Vp-p) : 4ch

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	67.2500	23.4	----	-20.5	2.9	----	9.5	----	6.6	----	-
2	128.5000	22.5	----	-20.2	2.3	----	9.5	----	7.2	----	-
3	189.7500	23.6	----	-19.7	3.9	----	9.5	----	5.6	----	-
4	251.0000	22.8	----	-19.6	3.2	----	9.5	----	6.3	----	-
5	312.2500	22.3	----	-19.6	2.7	----	9.5	----	6.8	----	-
6	373.5000	21.3	----	-19.9	1.4	----	9.5	----	8.1	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : AV Input 2 + Rec (1Vp-p) : 4ch

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	67.2500	24.0	----	-20.5	3.5	----	9.5	----	6.0	----	-
2	128.5000	22.5	----	-20.2	2.3	----	9.5	----	7.2	----	-
3	189.7500	23.4	----	-19.7	3.7	----	9.5	----	5.8	----	-
4	251.0000	22.5	----	-19.6	2.9	----	9.5	----	6.6	----	-
5	312.2500	22.4	----	-19.6	2.8	----	9.5	----	6.7	----	-
6	373.5000	21.3	----	-19.9	1.4	----	9.5	----	8.1	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : AV Input 2 + Rec (5Vp-p) : 4ch

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	67.2500	23.8	----	-20.5	3.3	----	9.5	----	6.2	----	-
2	128.5000	22.7	----	-20.2	2.5	----	9.5	----	7.0	----	-
3	189.7500	23.5	----	-19.7	3.8	----	9.5	----	5.7	----	-
4	251.0000	22.4	----	-19.6	2.8	----	9.5	----	6.7	----	-
5	312.2500	22.2	----	-19.6	2.6	----	9.5	----	6.9	----	-
6	373.5000	22.0	----	-19.9	2.1	----	9.5	----	7.4	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 25BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : VCR Playback : 4ch

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	67.2500	23.6	----	-20.5	3.1	----	9.5	----	6.4	----	-
2	128.5000	22.3	----	-20.2	2.1	----	9.5	----	7.4	----	-
3	189.7500	23.4	----	-19.7	3.7	----	9.5	----	5.8	----	-
4	251.0000	23.2	----	-19.6	3.6	----	9.5	----	5.9	----	-
5	312.2500	22.3	----	-19.6	2.7	----	9.5	----	6.8	----	-
6	373.5000	21.3	----	-19.9	1.4	----	9.5	----	8.1	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY : Orion Electric Co., Ltd.
EQUIPMENT : DVD/VCR
MODEL : SD-V392SU2
TEMP./HUMID. : 23°C/43%

REPORT NO : 24BE0090-YW-1
DATE : September 9, 2004
REGULATION : FCC Part15 Subpart B
TEST ENGINEER : Tsubasa Takayama

OPERATION MODE : DVD Play : 4ch

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		PK			PK		PK		PK		
	[MHz]	[dBμV]	[dBμV]	[dB]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dB]	[dB]	
1	67.2500	23.6	----	-20.5	3.1	----	9.5	----	6.4	----	-
2	128.5000	22.3	----	-20.2	2.1	----	9.5	----	7.4	----	-
3	189.7500	23.5	----	-19.7	3.8	----	9.5	----	5.7	----	-
4	251.0000	23.2	----	-19.6	3.6	----	9.5	----	5.9	----	-
5	312.2500	22.3	----	-19.6	2.7	----	9.5	----	6.8	----	-
6	373.5000	21.3	----	-19.9	1.4	----	9.5	----	8.1	----	-

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 : SD-V392SU2
Power : 120V/60Hz
Description : TV Reception
Remarks : -

Report Number : 25BE0090-YW-1
Regulation : FCC Part15 SubpartB
Date : September 08, 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	20.0	10.0
3	61.25	16.8	6.9	20	507.25	20.6	10.7
4	67.25	15.2	5.8	26	543.25	21.1	11.4
5	77.25	16.7	6.8	32	579.25	22.1	12.7
6	83.25	17.2	7.2	38	615.25	23.2	14.5
7	175.25	19.2	9.1	44	651.25	22.1	12.7
8	181.25	19.0	8.9	50	687.25	22.1	12.7
9	187.25	18.7	8.6	56	723.25	21.0	11.2
10	193.25	18.4	8.3	62	759.25	21.7	12.2
11	199.25	18.2	8.1	69	801.25	21.7	12.2
12	205.25	18.9	8.8	-	-	-	-
13	211.25	18.4	8.3	-	-	-	-
Average VHF			8.1	Average UHF			12.0
Average UHF/VHF : $20 \log \text{UHF}[\mu\text{V}] / \text{VHF}[\mu\text{V}] =$				3.5 [Limit : 8.0dB]			

Noise Figure Test

UL Apex Co.,Ltd.
Yokowa EMC Laboratory

Company : Orion electric Co., Ltd.
Equipment : DVD/VCR
Model Number : SD-V392SU2
Power : 120V/60Hz
Description : TV Reception
Remarks : -

Report Number : 25BE0090-YW-1
Regulation : FCC Part15 SubpartB
Date : September 08, 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	6.0	0.2	5.8	14.0	8.2
3	61.25	2.8	0.2	2.6	14.0	11.4
4	67.25	2.0	0.2	1.8	14.0	12.2
5	77.25	2.7	0.2	2.5	14.0	11.5
6	83.25	2.1	0.2	1.9	14.0	12.1
7	175.25	3.6	0.2	3.4	14.0	10.6
8	181.25	3.3	0.2	3.1	14.0	10.9
9	187.25	3.2	0.2	3.0	14.0	11.0
10	193.25	3.2	0.2	3.0	14.0	11.0
11	199.25	3.1	0.2	2.9	14.0	11.1
12	205.25	3.1	0.2	2.9	14.0	11.1
13	211.25	3.1	0.2	2.9	14.0	11.1
TV UHF Fundamental						
14	471.25	4.3	0.3	4.0	14.0	10.0
20	507.25	4.5	0.3	4.2	14.0	9.8
26	543.25	4.6	0.3	4.3	14.0	9.7
32	579.25	5.3	0.3	5.0	14.0	9.0
38	615.25	6.4	0.3	6.1	14.0	7.9
44	651.25	5.1	0.3	4.8	14.0	9.2
50	687.25	4.3	0.3	4.0	14.0	10.0
56	723.25	4.0	0.4	3.6	14.0	10.4
62	759.25	3.9	0.4	3.5	14.0	10.5
69	801.25	4.1	0.4	3.7	14.0	10.3
Mid band						
14	121.25	1.4	0.2	1.2	14.0	12.8
16	133.25	6.5	0.2	6.3	14.0	7.7
18	145.25	5.1	0.2	4.9	14.0	9.1
20	157.25	4.4	0.2	4.2	14.0	9.8
22	169.25	4.4	0.2	4.2	14.0	9.8
Super band						
23	217.25	3.2	0.2	3.0	14.0	11.0
26	235.25	3.3	0.2	3.1	14.0	10.9
29	253.25	3.3	0.2	3.1	14.0	10.9
32	271.25	3.3	0.2	3.1	14.0	10.9
36	295.25	3.3	0.2	3.1	14.0	10.9

Test Report No : 25BE0090-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-02	Pre Amplifier	Anritsu	MH648A	RE	2004/03/28 * 12
AT-03	Attenuator	Anritsu	MP721B	RE	2004/03/22 * 12
BA-10	Biconical Antenna	Schwarzbeck	BBA9106	RE	2003/10/31 * 12
SA-07	Spectrum Analyzer	Advantest	R3273	RE	2004/07/26 * 12
TR-02	Test Receiver	Rohde & Schwarz	ESVS30	RE	2004/05/11 * 12
CC-10RC	Yokowa No.1 open coaxial(0.01-1000MHz)	UL Apex	CC-11,CC-12,CC-14,CC-15,CC-16,,SW-11,SW-12	RE	2004/03/28 * 12
YOATS-01	Open Test Site	JSE	3m, 10m	RE	2004/08/15 * 12
OS-06	Digital Humidity Indicator	SATO	PC-5000TRH	RE	2004/04/01 * 12
AF-01	Pre Amplifier	Hewlett Packard	8447D	RE	2004/03/28 * 12
AF-06	Pre Amplifier	Agilent	HP8449B	RE	2003/12/17 * 12
AT-06	Attenuator	Anritsu	MP721B	RE	2004/03/27 * 12
BA-06	Biconical Antenna	Schwarzbeck	BBA9106	RE	2004/01/31 * 12
LA-07	Logperiodic Antenna	Schwarzbeck	UKLP9140-A	RE	2004/01/31 * 12
LS-04	LISN(AMN)	Rohde & Schwarz	ESH3-Z5	CE	2003/10/31 * 12
LS-10	LISN(AMN)	Schwarzbeck	NSLK8127	CE	2004/05/02 * 12
SA-06	Spectrum Analyzer	Advantest	R3273	CE, RE	2003/11/13 * 12
TA-07	Terminator	TME	CT-01		2004/05/02 * 12
TR-05	Test Receiver	Rohde & Schwarz	ESHS10	CE	2004/09/10 * 12
TR-06	Test Receiver	Rohde & Schwarz	ESVS10	RE	2003/10/28 * 12
CC-30RC	Yokowa No.3 open coaxial(0.01-1000MHz)	UL Apex	CC-31,CC-32,CC-33,CC-34,CC-35,CC-36,CC-37,SW-31,SW-32	RE	2004/03/28 * 12
CC-3S	Yokowa No.3 shield coaxial(0.01-1000MHz)	UL Apex	CC-34,CC-35,CC-36,CC-38,SW-31,SW-32	CE	2004/03/28 * 12
CC-C6	Microwave Cable	Suhner	SUCOFLEX	RE	2004/01/07 * 12
CC-C11	Microwave Cable	Storm	421-014(4mx2)	RE	2003/12/18 * 12
YOATS-03	Open Test Site	JSE	3m, 10m	RE	2004/08/15 * 12
OS-11	Digital Humidity Indicator	SATO	PC-5000TRH	CE	2004/04/20 * 12
OS-16	Digital Humidity Indicator	SATO	PC-5000TRH	RE	2004/05/07 * 12
IP-06	Matching Pad	TME	ZT-301	PS, NF	2004/05/06 * 12
HA-01	Horn Antenna	A.H.Systems	SAS-200/571	RE	2004/04/10 * 12

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