Certification EMI TEST REPORT

Test Report No. : 25GE0165-YW-1

Applicant : Orion Electric Co., Ltd.

Type of equipment : DVD Recorder with Video Cassette Recorder

Model number : D-VR4SU

FCC ID : A7RM2G1A

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
D-VKR4SU	TOSHIBA	-	-
D-VR4SC	TOSHIBA	-	-
D-VKR4SC	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 : February 16 to 26, 2005

Tested by:

Tsubasa Takayama
Engineer of 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

Contents

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 Recorder with Video Cassette Recorder
Brand Name	:	TOSHIBA
Model number	:	D-VR4SU
FCC ID	:	A7RM2G1A
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	:	February 16, 2005
Condition of EUT	:	Production Prototype (Not for Sale: This sample is equivalent to mass-produced items.)

2.2 Product description

Model: D-VR4SU (referred to as the EUT in this report) is a DVD Recorder with Video Cassette Recorder.
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, 29W
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

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	CISPR 22	5.7 dB (2.4300 MHz, N, AV, AV Input 2 + Rec. 5Vp-p)	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	2.7 dB (128.89 MHz, vertical, DVD Play + Rec.)	Complied
Antenna terminal voltage	ANSI C63.4:2003	2 nW (at 75 ohm)	24.5 dB (2578.53300 MHz, CATV tuning)	Complied
RF output level	ANSI C63.4:2003	Video signal: 3000 uV Aural signal: 671 uV	5.9 dB (61.25 MHz, 3ch, AV Input 1 + Rec.)	Complied
Spurious emission		94.8 uV	15.2 dB (847.4000 MHz, AV Input 2 + Rec. 1Vp-p, 4ch)	Complied
Transfer switch	ANSI C63.4:2003	9.5 dB	6.2 dB (122.5000 MHz, 3ch: AV Input 2 + Rec. 5Vp-p / DVD Play + Rec.) (403.5000 MHz, 4ch: AV Input 2 + Rec. 1Vp-p)	Complied
Picture sensitivity	ANSI C63.4:2003	8 dB	7.0 dB	Complied
Noise figure	FCC/OET MP:2:1986	14 dB	4.6 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.

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 meets the limits unless the uncertainty is taken into consideration.

Antenna terminal voltage

The measurement uncertainty (with a 95% confidence level) for this test was ± 3.48 dB.
The data listed in this test report has enough margin, more than site margin.

RF output level test / spurious emission test

The measurement uncertainty (with a 95% confidence level) for this test was ± 3.48 dB.
The data listed in this test report has enough margin, more than site margin.

Antenna transfer switch

The measurement uncertainty (with a 95% confidence level) for this test was ± 3.48 dB.
The data listed in this test report has enough margin, more than site margin.

Picture sensitivity test

The measurement uncertainty (with a 95% confidence level) for this test was ± 1.0 dB.
The data listed in this test report has enough margin, more than site margin.

Noise Figure Test

The measurement uncertainty (with a 95% confidence level) for this test was ± 1.2 dB.
The data listed in this test report has enough margin, more than site margin.

3.7 Test location

UL Apex Co., Ltd. Yokowa EMC Lab.
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.4 shielded room	5.5 x 5.0 x 2.4	No.2 EMS lab. (Full-anechoic chamber)	4.0 x 7.0 x 3.5
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.2 open site
This site has been fully described in a report submitted to FCC office, and listed on August 29, 2003.
(Registration number: 90411)

*NVLAP Lab. Code : 200109-0

3.8 Test setup, Data of EMI & Test instruments

Please refer to Appendix 1 to 3.

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

4.1 Operating modes

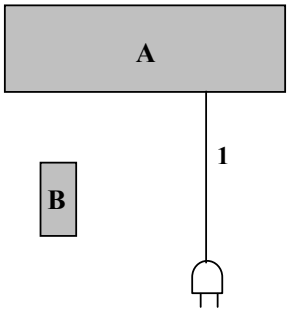
The EUT exercise program used during testing was designed exercise the various system components in a manner similar to typical use.

The sequence in used : * TV Reception + Rec. mode (0 dBmV input / 25 dBmV input)
* AV Input 1+ Rec. / AV Input 2 + Rec. mode (1 Vp-p input / 5 Vp-p input)
* VCR Play + Rec. mode
* DVD Play + Rec. 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



AC 120V/ 60Hz

* 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 Recorder with Video Cassette Recorder	D-VR4SU	–	Orion Electric Co., Ltd.	A7RM2G1A	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

Section 5 : Conducted emission

5.1 Operation environment

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

Date : February 23, 2005
Temperature : See data
Humidity : See data

5.2 Test configuration

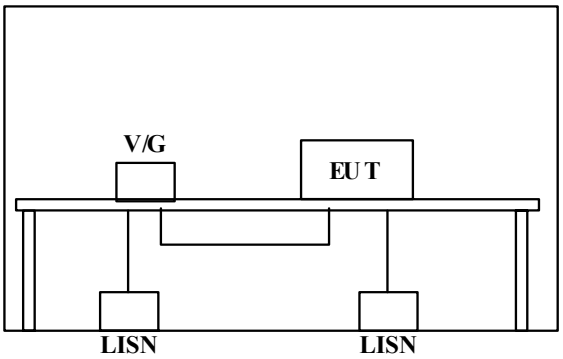
EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The rear of tabletop was located 40 cm to the vertical conducting plane. The rear of EUT was aligned and flushed with rear of tabletop. All other surfaces of tabletop was at least 80 cm from any 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)

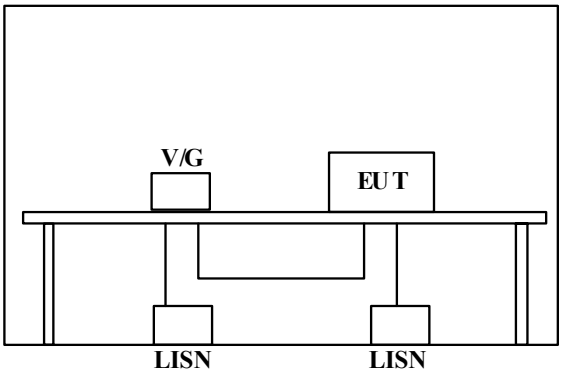
Shielded room



RF in: video generator connected with RF input cable
RF out: 75ohm terminated with RF output cable
Rear video in: 75 ohm terminated
Front video in: 75 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
Coaxial out: 75 ohm terminated with coaxial cable
Front audio in: 47k ohm terminated
Rear audio in: 47k ohm terminated
Component out: 75 ohm terminated with component cable

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

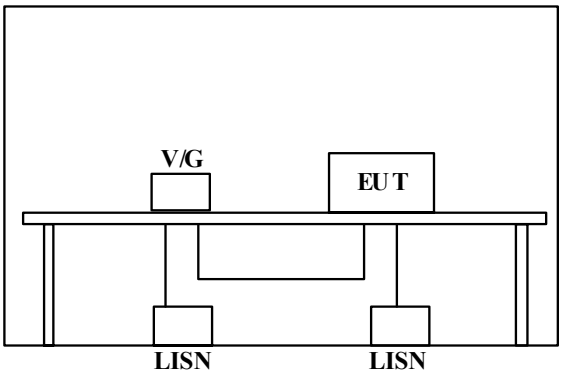
Shielded room



RF in: video generator connected
RF out: 75ohm terminated with RF output cable
Rear video in: 75 ohm terminated
Front video in: video generator connected with video 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
Coaxial out: 75 ohm terminated with coaxial cable
Front audio in: 47k ohm terminated
Rear audio in: 47k ohm terminated
Component out: 75 ohm terminated with component cable

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

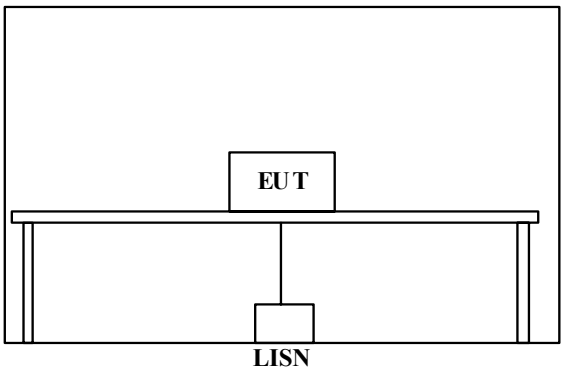
Shielded room



RF in: video generator connected
RF out: 75ohm terminated with RF output cable
Rear video in: video generator connected with video cable
Front video in: 75 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
Coaxial out: 75 ohm terminated with coaxial cable
Front audio in: 47k ohm terminated
Rear audio in: 47k ohm terminated
Component out: 75 ohm terminated with component cable

VCR Play + Rec. mode

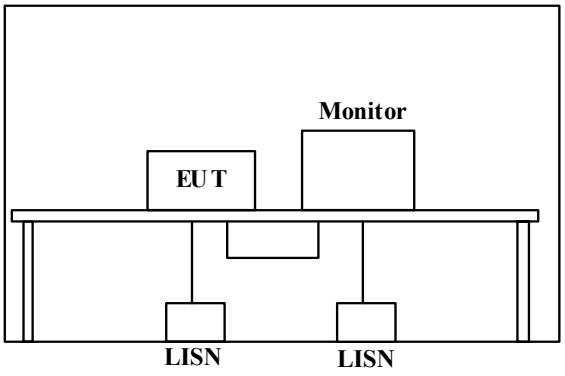
Shielded room



RF in: video generator connected with RF input cable
RF out: 75ohm terminated with RF output cable
Rear video in: 75 ohm terminated with video cable
Front video in: 75 ohm terminated with video 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
Coaxial out: 75 ohm terminated with coaxial cable
Front audio in: 47k ohm terminated with audio cable
Rear audio in: 47k ohm terminated audio cable
Front S-video in: 75 ohm terminated with S-video cable
Rear S-video in: 75 ohm terminated with S-video cable
Component out: 75 ohm terminated with component cable

DVD Play + Rec. mode

Shielded room



RF in: video generator connected with RF input cable
RF out: 75ohm terminated with RF output cable
Rear video in: 75 ohm terminated with video cable
Front video in: 75 ohm terminated with video cable
Rear video out: monitor connected with video cable
Rear audio out: monitor connected with audio cable
S-Video out: 75 ohm terminated with S-Video cable
Coaxial out: 75 ohm terminated with coaxial cable
Front audio in: 47k ohm terminated with audio cable
Rear audio in: 47k ohm terminated audio cable
Front S-video in: 75 ohm terminated with S-video cable
Rear S-video in: 75 ohm terminated with S-video cable
Component out: 75 ohm terminated with component 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+ Rec., AV Input 2 + Rec., VCR Play + Rec., DVD Play + Rec.

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.
The conducted emission measurements were made with the following detector function of the test receiver.
Detector Type : QP / AV
IF Bandwidth : 10 kHz / 10 kHz

5.5 Test result

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

Test engineer: Tsubasa Takayama

Section 6 : Radiated emission

6.1 Operation environment

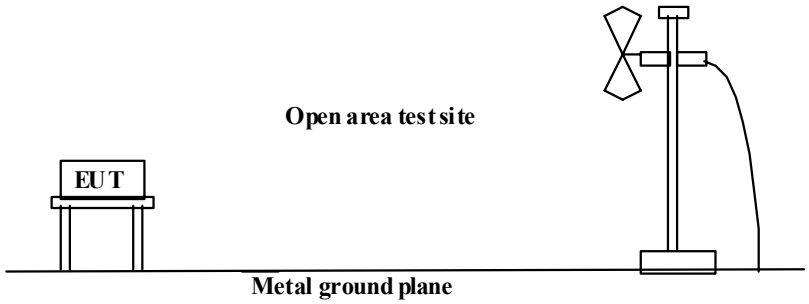
The test was carried out in No.2 open site.

Date : February 22, 2005
Temperature : See data
Humidity : See data

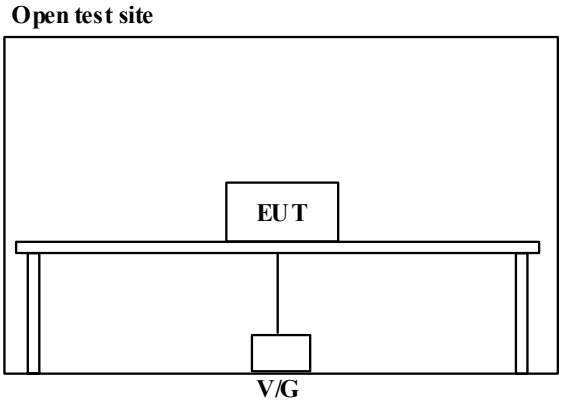
6.2 Test configuration

EUT was placed on a platform of nominal size, 1 m by 1.5 m or 1.8 m, raised 80 cm above the conducting ground plane. The rear of EUT was aligned and flushed with rear of tabletop. AC cable was bundled in center. I/O cables were hanged 40 cm height to the ground plane. Test was made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna was varied in height above the conducting ground plane to obtain the maximum signal strength.
A drawing of the set up is shown in figure 2 and photographs in Appendix 1.

Figure 2. Radiated emission



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



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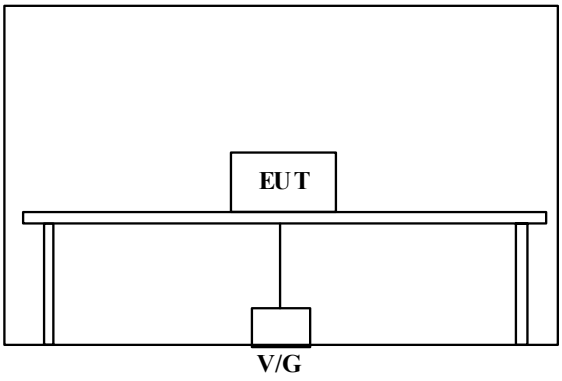
S-Video out: 75 ohm terminated with S-Video cable
Coaxial out: 75 ohm terminated with coaxial cable
Front audio in: 47k ohm terminated
Rear audio in: 47k ohm terminated
Component out: 75 ohm terminated with component cable

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

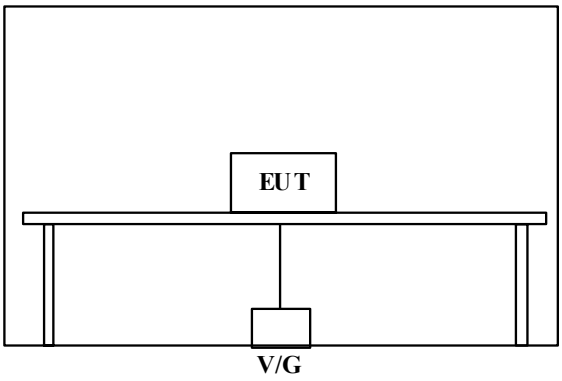
Open test site



RF in: video generator connected
RF out: 75ohm terminated with RF output cable
Rear video in: 75 ohm terminated
Front video in: video generator connected with video 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
Coaxial out: 75 ohm terminated with coaxial cable
Front audio in: 47k ohm terminated
Rear audio in: 47k ohm terminated
Component out: 75 ohm terminated with component cable

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

Open test site



RF in: video generator connected
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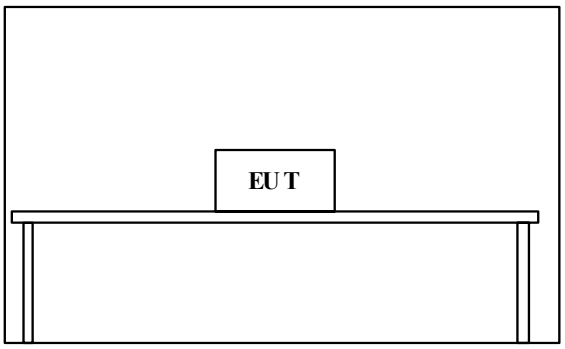
Front video in: 75 ohm terminated
Rear video out: 75 ohm terminated with video cable
Rear audio out: 1 k ohm terminated with audio cable
S-Video out: 75 ohm terminated with S-Video cable
Coaxial out: 75 ohm terminated with coaxial cable
Front audio in: 47k ohm terminated
Rear audio in: 47k ohm terminated
Component out: 75 ohm terminated with component cable

VCR Play + Rec. mode

Open test site



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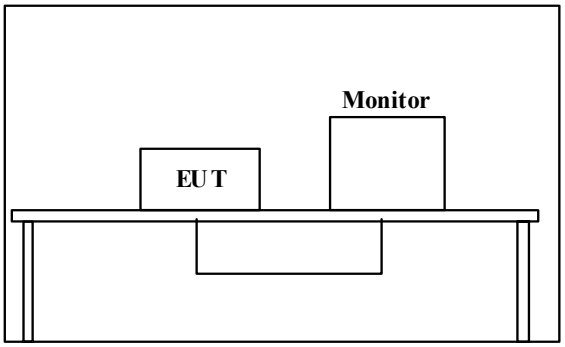
Rear audio out: 1 k ohm terminated with audio cable
S-Video out: 75 ohm terminated with S-Video cable
Coaxial out: 75 ohm terminated with coaxial cable
Front audio in: 47k ohm terminated with audio cable
Rear audio in: 47k ohm terminated audio cable
Front S-video in: 75 ohm terminated with S-video cable
Rear S-video in: 75 ohm terminated with S-video cable
Component out: 75 ohm terminated with component cable

DVD Play + Rec. mode

Open test site



RF in: video generator connected with RF input cable
RF out: 75ohm terminated with RF output cable
Rear video in: 75 ohm terminated with video cable
Front video in: 75 ohm terminated with video cable
Rear video out: monitor connected with video cable
Rear audio out: monitor connected with audio cable
S-Video out: 75 ohm terminated with S-Video cable
Coaxial out: 75 ohm terminated with coaxial cable
Front audio in: 47k ohm terminated with audio cable
Rear audio in: 47k ohm terminated audio cable
Front S-video in: 75 ohm terminated with S-video cable
Rear S-video in: 75 ohm terminated with S-video cable
Component out: 75 ohm terminated with component cable

6.3 Test conditions

Frequency range	:	30 MHz – 5000 MHz
Test distance	:	3 m
EUT position	:	Table top
EUT operation mode	:	TV Reception + Rec., AV Input 1+ Rec., AV Input 2 + Rec., VCR Play + Rec., DVD Play + Rec.

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.

	30-1000MHz (Test receiver)	1000-5000MHz (Spectrum analyzer)	
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

Section 7 : Antenna terminal voltage

7.1 Operation environment

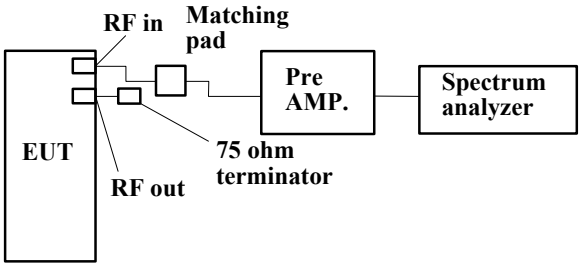
The test was carried out in No.7 shielded room.

Date : February 16, 2005
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 – 5000 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 (30-5000 MHz)

At frequency between 2000MHz and 5000 MHz, 75/50ohm conversion loss of impedance is used in speculation.

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.

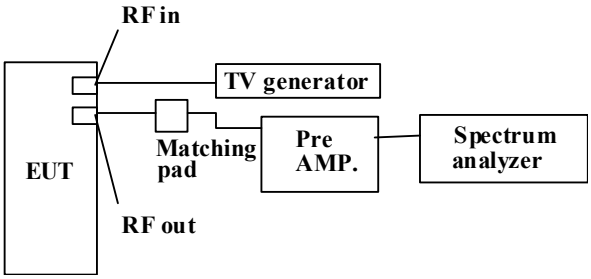
Date : February 22, 2005
Temperature : See data
Humidity : See data

8.2 Test configuration

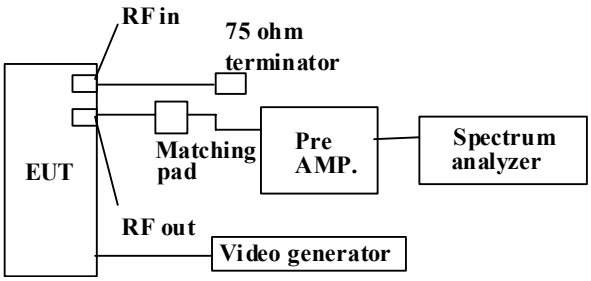
The EUT was placed on a non-metallic platform 0.8 m above a reference ground plane.
A drawing of the set up is shown in figure 4 and photographs in Appendix 1.

Figure 4. RF output level

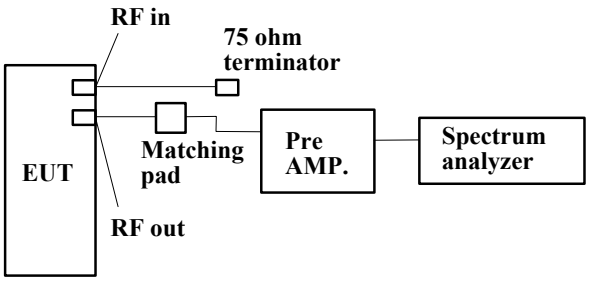
TV Reception + Rec. mode



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



VCR Play + Rec. mode and DVD Play + Rec. mode



8.3 Test conditions

EUT position : Table top
EUT operation mode : TV Reception + Rec., AV Input 1+ Rec., AV Input 2 + Rec., VCR Play + Rec., DVD Play + Rec.

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

Section 9 : Antenna transfer switch

9.1 Operation environment

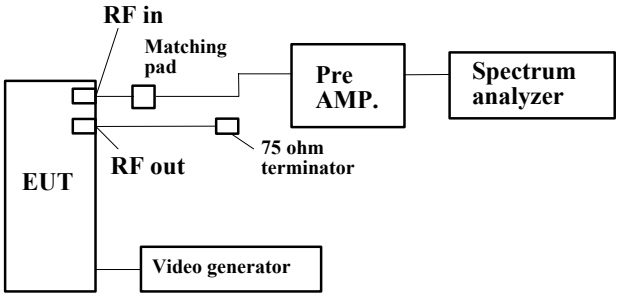
The test was carried out in No.7 shielded room.

Date : February 22, 2005
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 + Rec., AV Input 2 + Rec., VCR Play + Rec., DVD Play + Rec.

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

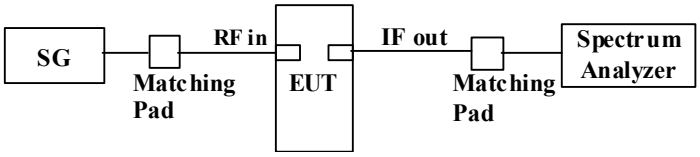
The test was carried out in No.7 shielded room.

Date : February 18, 2005
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

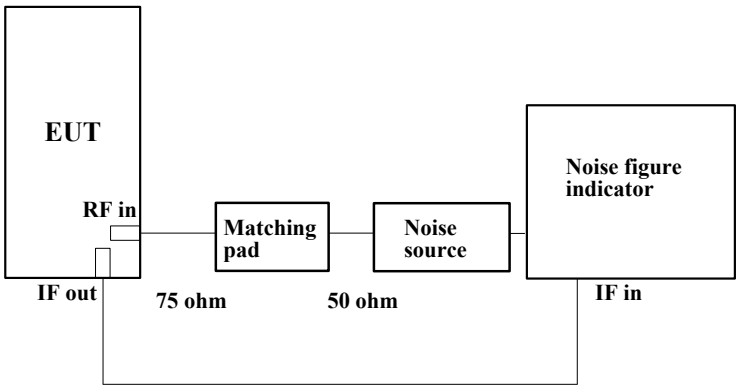
The test was carried out in No.7 shielded room.

Date : February 26, 2005
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. 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

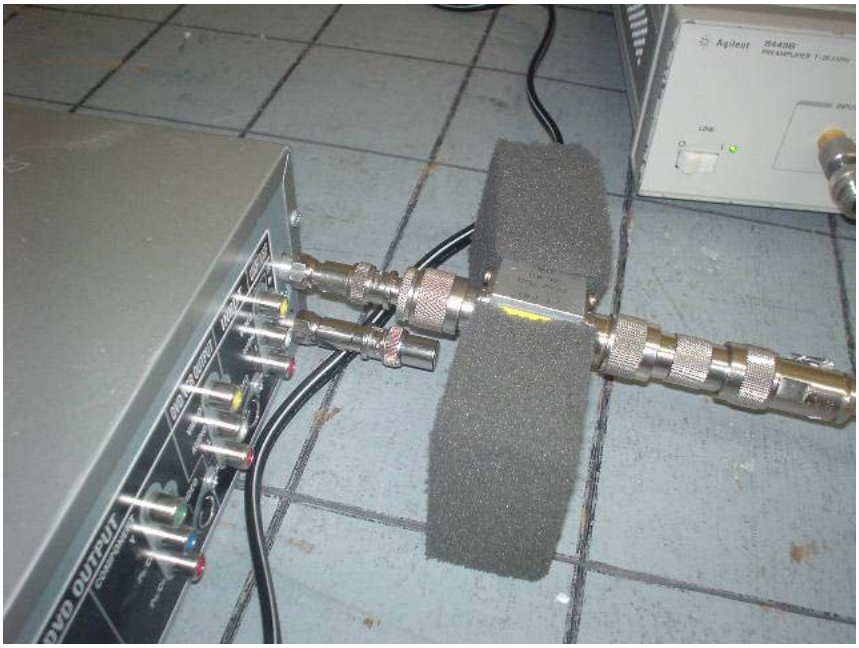
Appendix 2 : Data of EMI tests

Appendix 3 : Test instruments

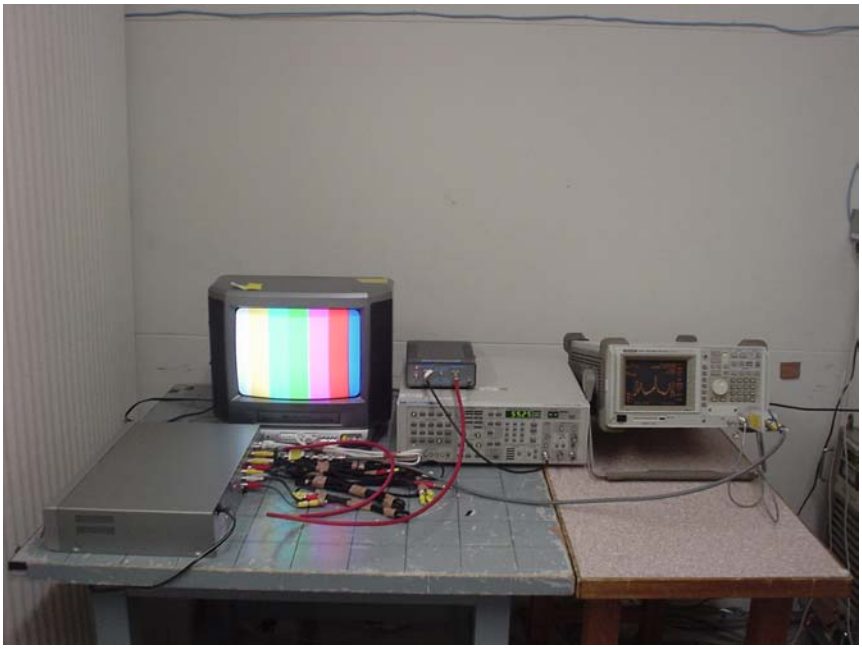
Conducted emission

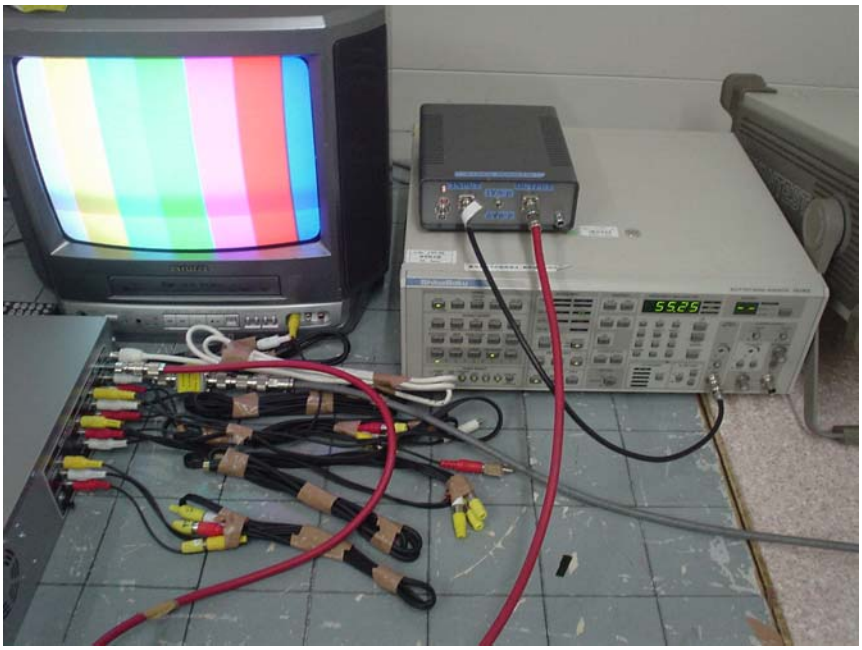
Radiated emission

Antenna terminal voltage



RF output level / spurious emission





UL Apex Co., Ltd.
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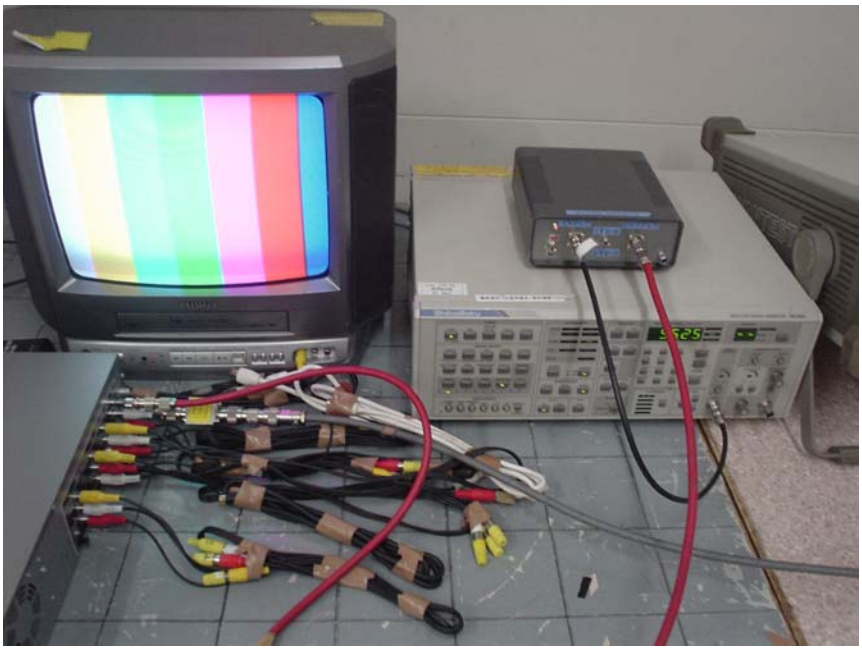
Telephone: +81 596 39 1485
Facsimile: +81 596 39 0232

Antenna transfer switch



Picture sensitivity

UL Apex Co., Ltd.
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Telephone: +81 596 39 1485
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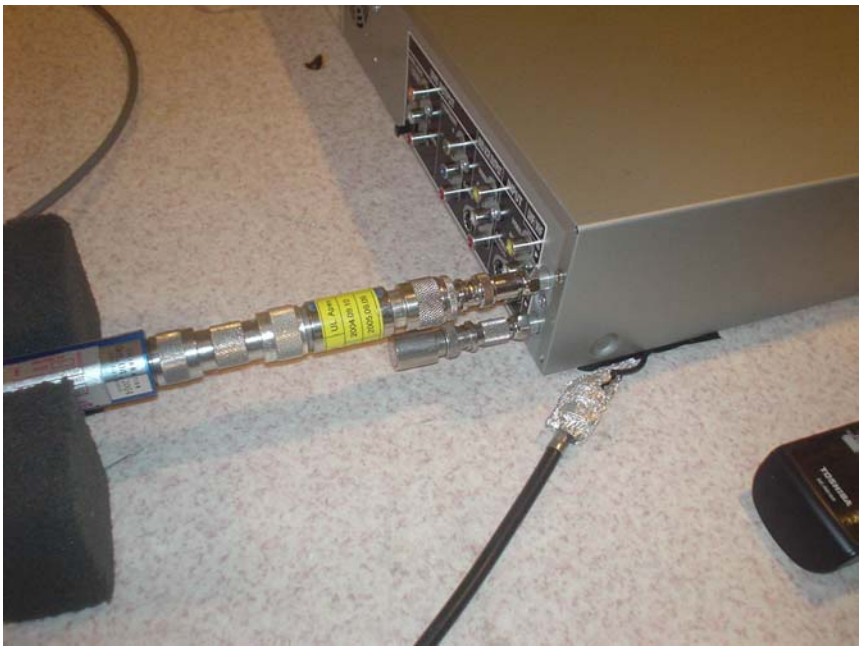
Noise figure



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Telephone: +81 596 39 1485
Facsimile: +81 596 39 0232

DATA OF CONDUCTION TEST

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD-Multi/VCR
Model No. : D-VR4SU
Serial No. : -
Power : AC120V/60Hz
Mode : TV Reception + Rec
Remarks : 0dBmV
Date : 2/23/2005
Phase : Single Phase
Temperature : 21 ℃ Engineer : Tsubasa Takayama
Humidity : 33 %
Regulation : FCC Part15B CLASS B(2003)

No.	FREQ.	READING(N)		READING(L1)		LISN	CABLE	ATTEN.	RESULT		LIMITS		MARGIN	
		QP	AV	QP	AV	FACTOR	LOSS		QP	AV	QP	AV	QP	AV
	[MHz]	[dBμV]		[dBμV]		[dB]	[dB]	[dB]	[dB]		[dBμV]		[dB]	
1.	0.1980	38.3	-	38.4	-	0.0	0.3	0.0	38.7	-	63.7	53.7	25.0	-
2.	0.5913	36.8	-	36.0	-	0.1	0.3	0.0	37.2	-	56.0	46.0	18.8	-
3.	0.7787	36.8	-	37.0	-	0.1	0.3	0.0	37.4	-	56.0	46.0	18.6	-
4.	1.1088	31.4	-	33.5	-	0.1	0.3	0.0	33.9	-	56.0	46.0	22.1	-
5.	16.6913	28.6	-	28.2	-	0.8	0.5	0.0	29.9	-	60.0	50.0	30.1	-
6.	29.5496	34.2	-	34.2	-	1.0	0.7	0.0	35.9	-	60.0	50.0	24.1	-

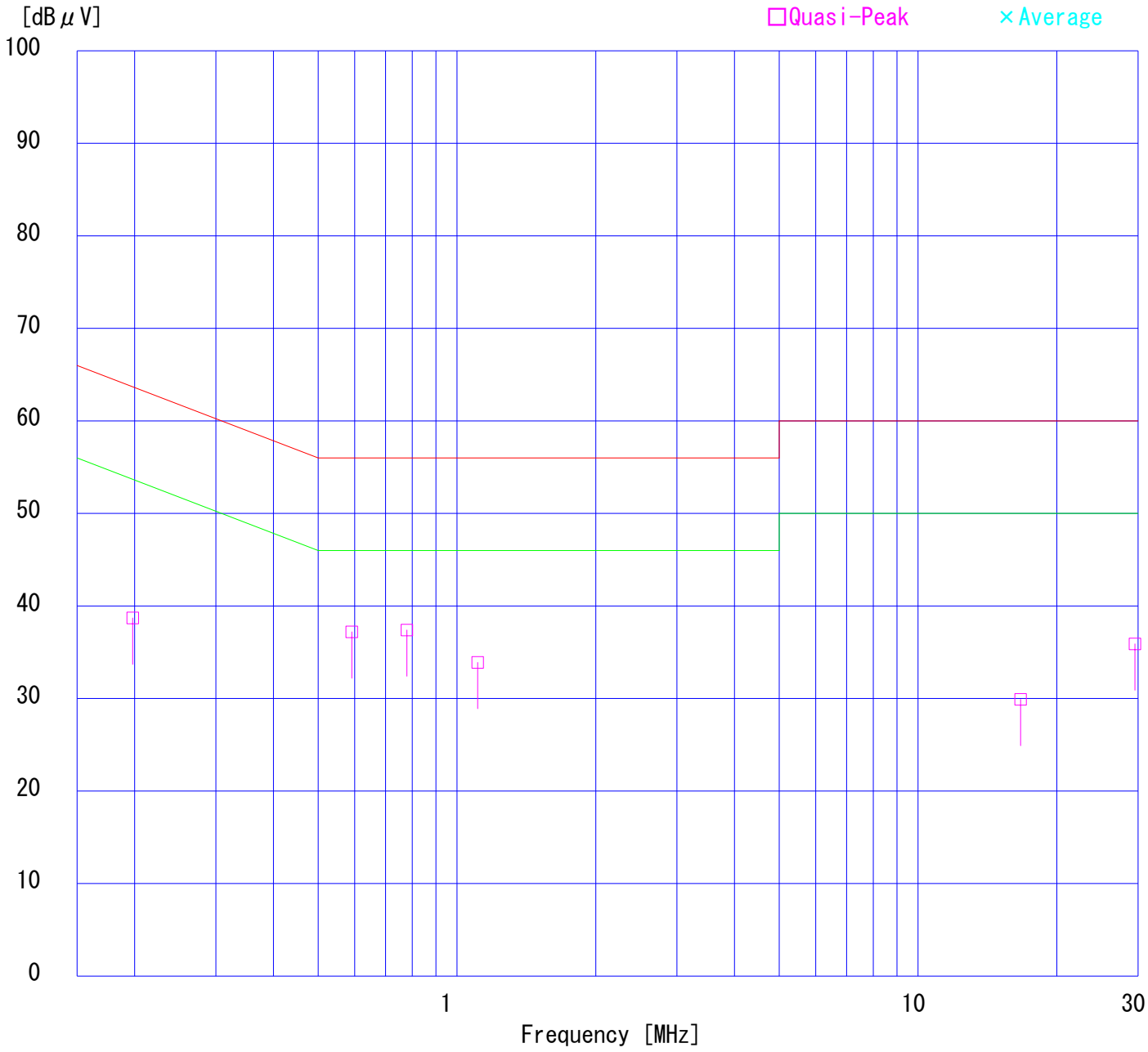
CALCULATION: READING + LISN FACTOR + CABLE LOSS + ATTEN.

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

DATA OF CONDUCTION TEST

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

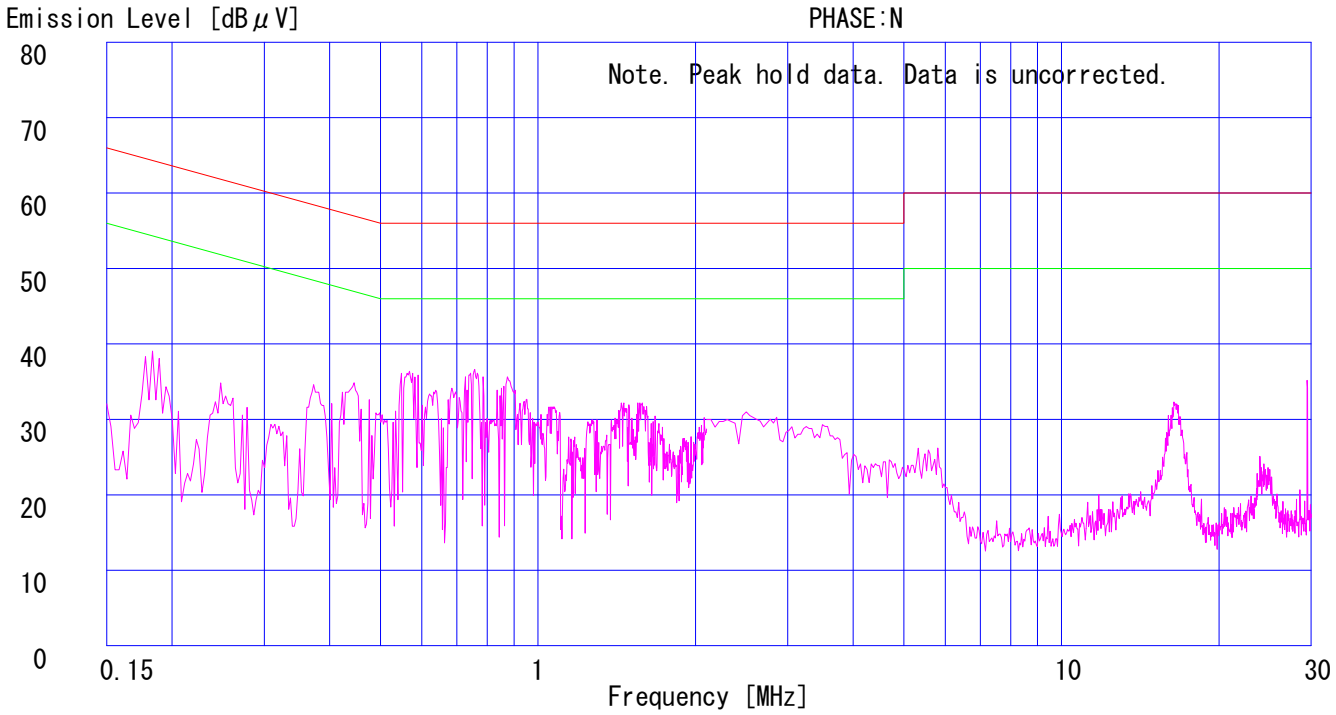
Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: TV Reception + Rec		
Remarks	: 0dBmV		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation	: FCC Part15B CLASS B(2003)		

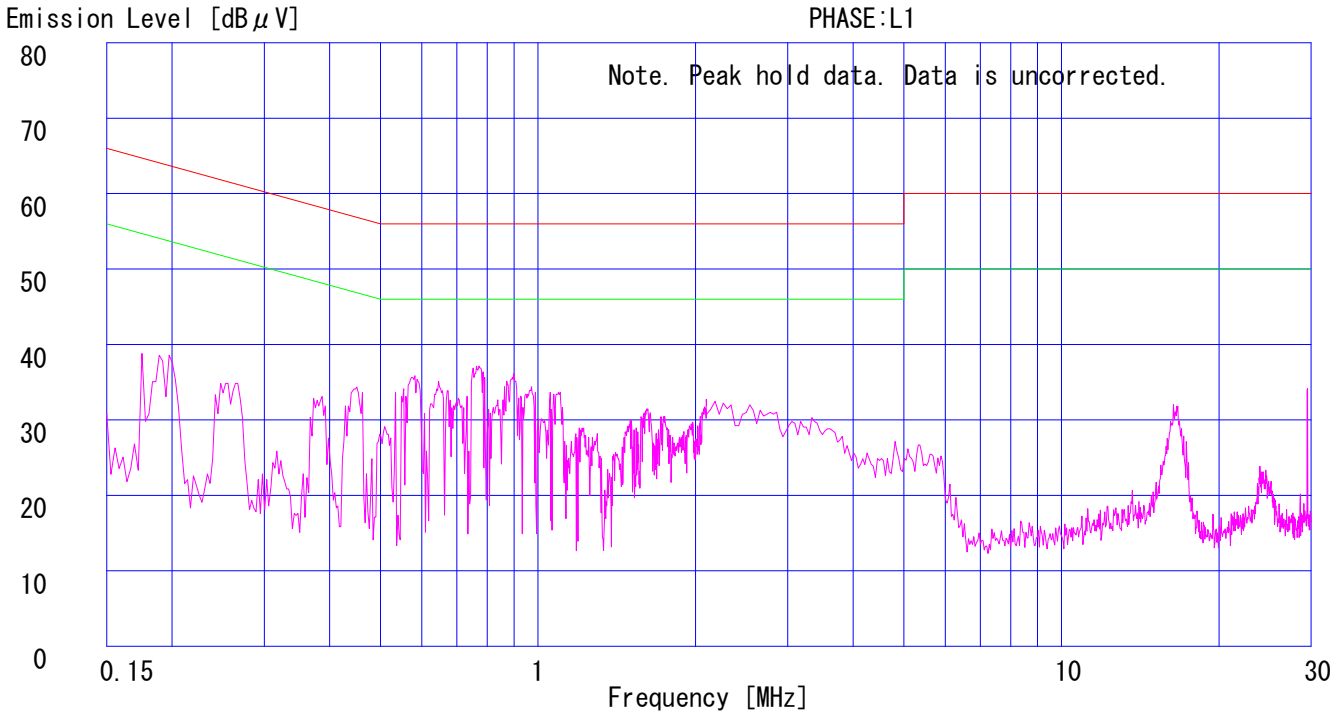


DATA OF CONDUCTION TEST CHART

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: TV Reception + Rec		
Remarks	: 0dBmV		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation 1	: FCC Part15B CLASS B(2003)		
Regulation 2	: None		





DATA OF CONDUCTION TEST

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: TV Reception + Rec		
Remarks	: 25dBmV		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation	: FCC Part15B CLASS B(2003)		

No.	FREQ.	READING(N)		READING(L1)		LISN	CABLE	ATTEN.	RESULT		LIMITS		MARGIN	
		QP	AV	QP	AV	FACTOR	LOSS		QP	AV	QP	AV	QP	AV
	[MHz]	[dBμV]		[dBμV]		[dB]	[dB]	[dB]	[dB]		[dBμV]		[dB]	
1.	0.1986	38.1	-	38.5	-	0.0	0.3	0.0	38.8	-	63.7	53.7	24.9	-
2.	0.5925	36.8	-	36.4	-	0.1	0.3	0.0	37.2	-	56.0	46.0	18.8	-
3.	0.7914	36.7	-	37.4	-	0.1	0.3	0.0	37.8	-	56.0	46.0	18.2	-
4.	1.1227	30.7	-	33.8	-	0.1	0.3	0.0	34.2	-	56.0	46.0	21.8	-
5.	16.7987	28.3	-	27.7	-	0.8	0.5	0.0	29.6	-	60.0	50.0	30.4	-
6.	29.5502	34.5	-	34.1	-	1.0	0.7	0.0	36.2	-	60.0	50.0	23.8	-

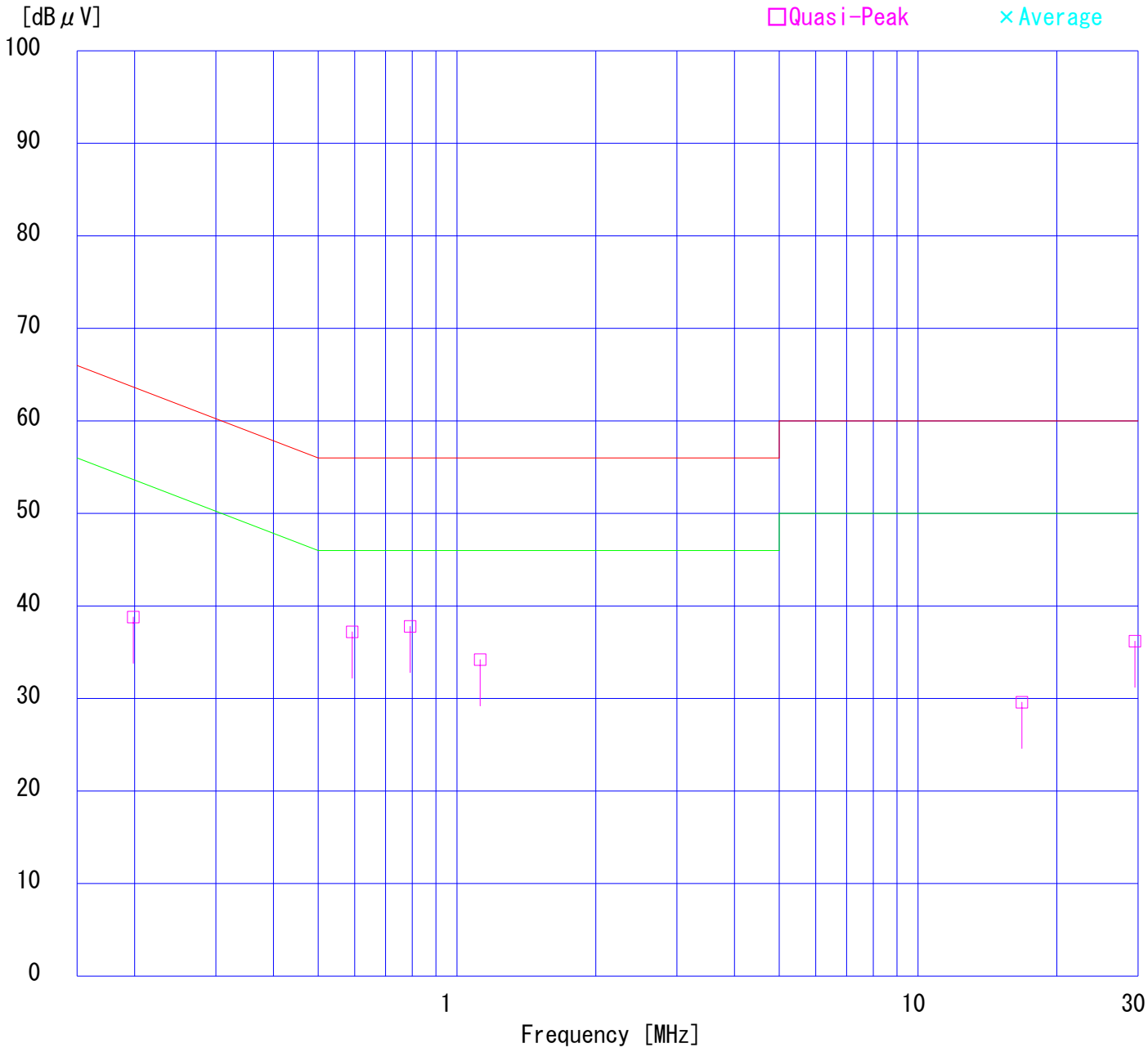
CALCULATION: READING + LISN FACTOR + CABLE LOSS + ATTEN.

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

DATA OF CONDUCTION TEST

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

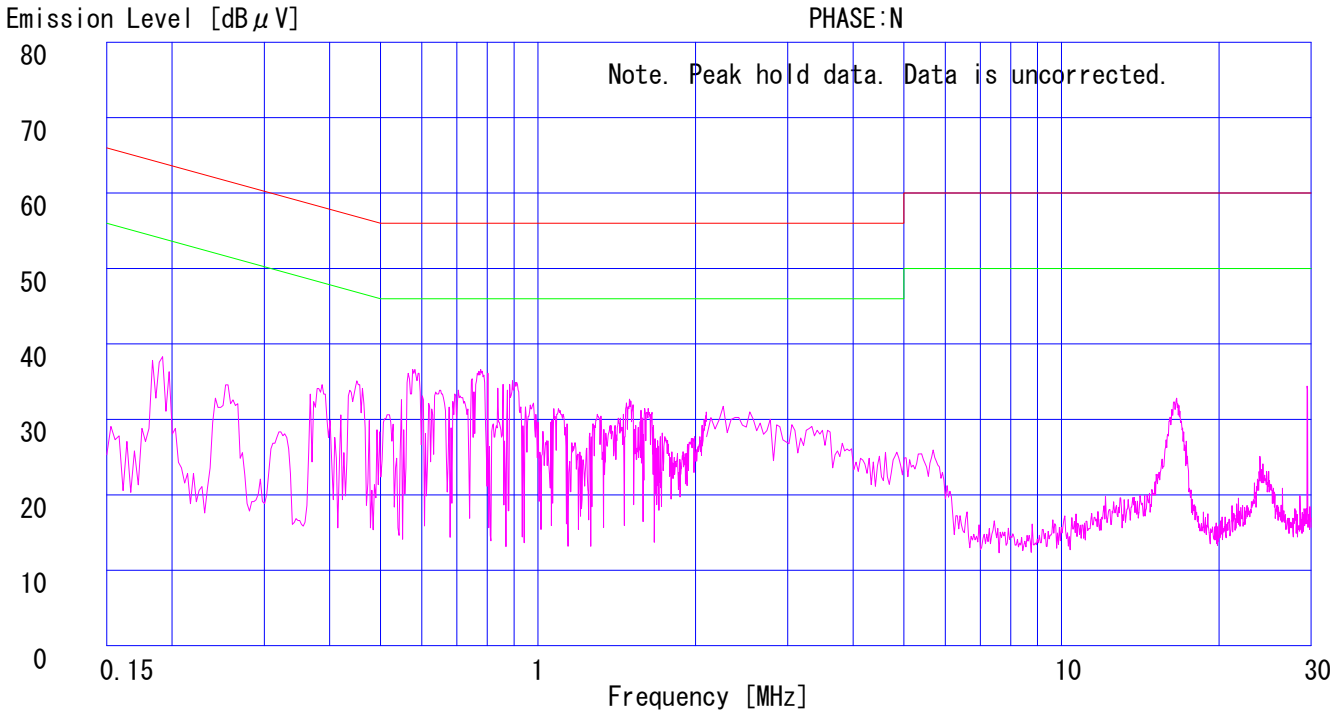
Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: TV Reception + Rec		
Remarks	: 25dBmV		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation	: FCC Part15B CLASS B(2003)		

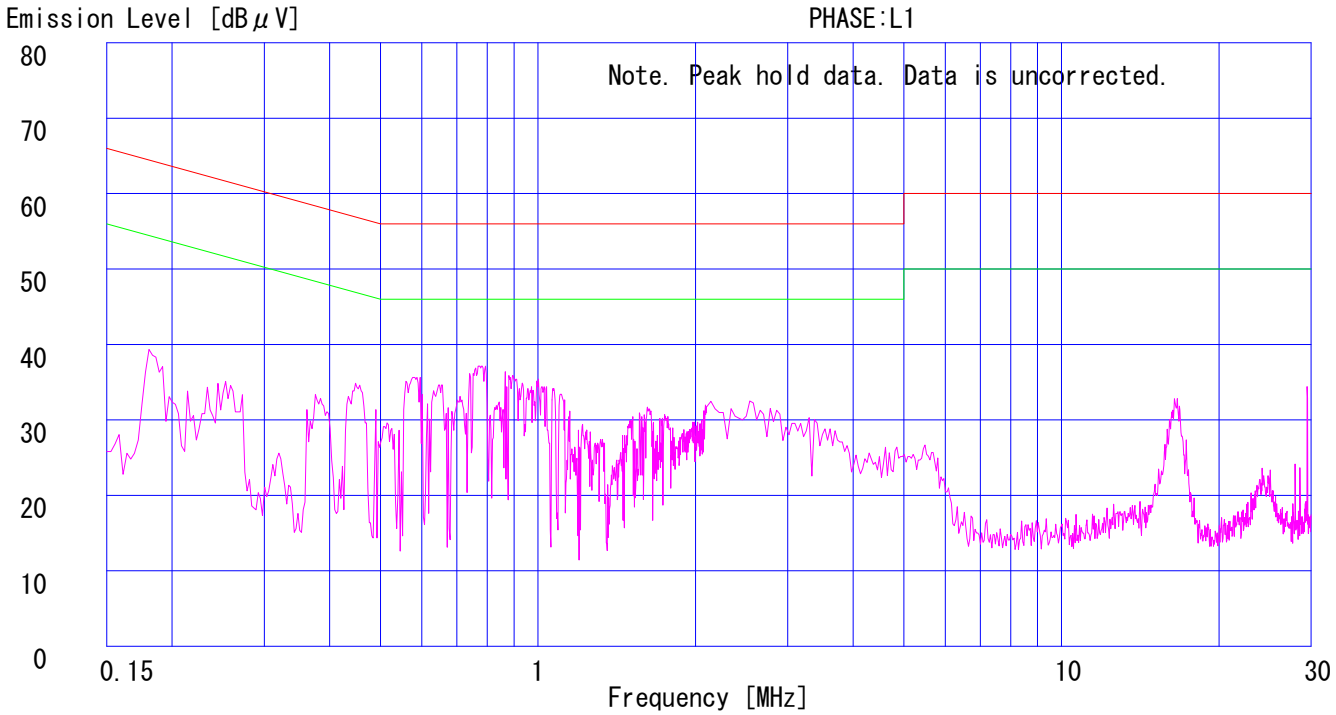


DATA OF CONDUCTION TEST CHART

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: TV Reception + Rec		
Remarks	: 25dBmV		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation 1	: FCC Part15B CLASS B(2003)		
Regulation 2	: None		





DATA OF CONDUCTION TEST

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: AV Input 1 + Rec		
Remarks	: 1Vp-p		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation	: FCC Part15B CLASS B(2003)		

No.	FREQ.	READING(N)		READING(L1)		LISN	CABLE	ATTEN.	RESULT		LIMITS		MARGIN	
		QP	AV	QP	AV	FACTOR	LOSS		QP	AV	QP	AV	QP	AV
	[MHz]	[dBμV]		[dBμV]		[dB]	[dB]	[dB]	[dB]		[dBμV]		[dB]	
1.	0.1987	38.5	-	37.6	-	0.0	0.3	0.0	38.8	-	63.7	53.7	24.9	-
2.	0.7800	36.9	-	37.7	-	0.1	0.3	0.0	38.1	-	56.0	46.0	17.9	-
3.	0.9138	35.0	-	35.7	-	0.1	0.3	0.0	36.1	-	56.0	46.0	19.9	-
4.	4.4589	37.2	-	36.5	-	0.2	0.4	0.0	37.8	-	56.0	46.0	18.2	-
5.	4.8813	39.6	30.8	39.7	30.4	0.2	0.4	0.0	40.3	31.4	56.0	46.0	15.7	14.6
6.	17.0450	27.1	-	26.6	-	0.8	0.6	0.0	28.5	-	60.0	50.0	31.5	-

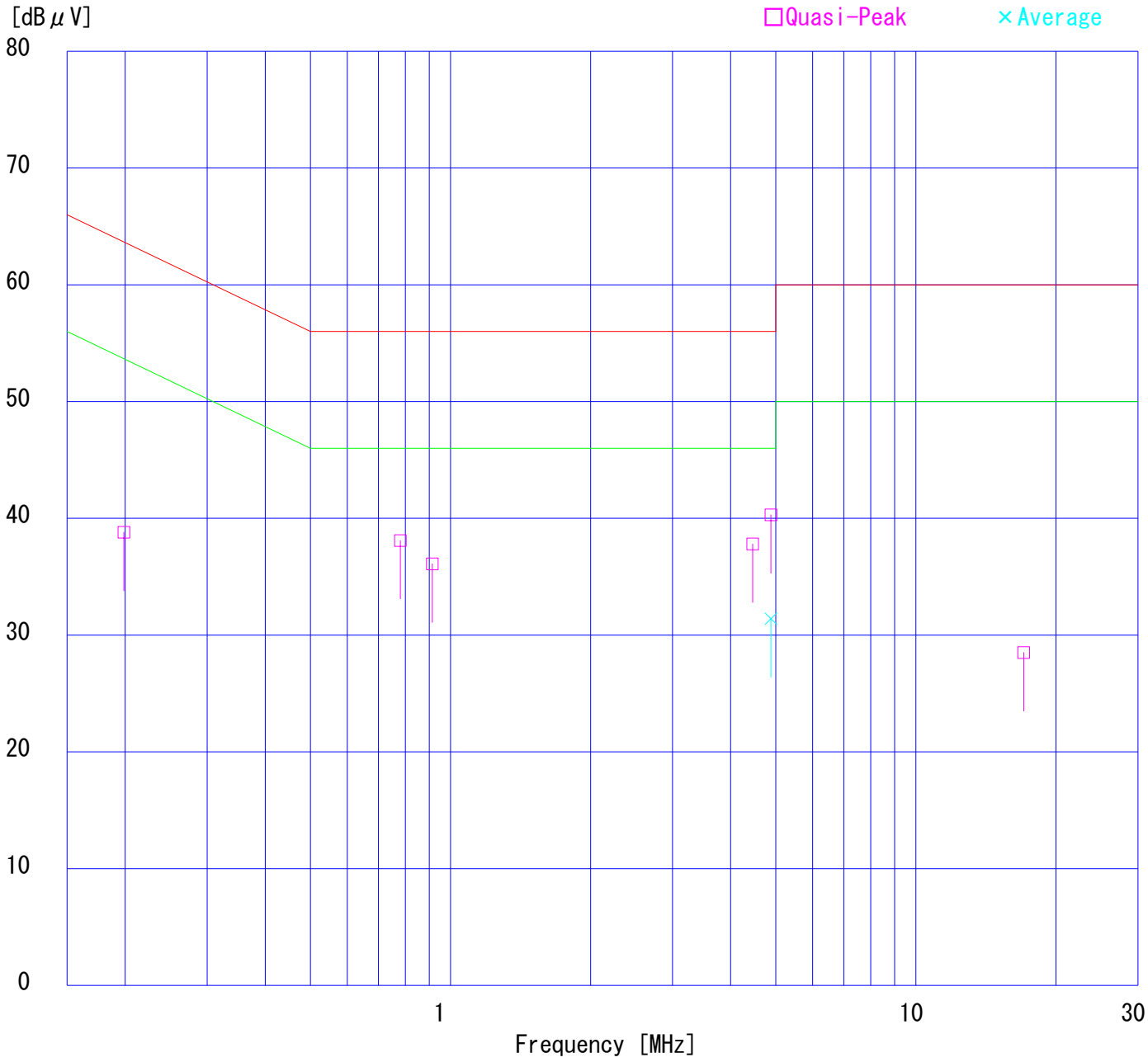
CALCULATION: READING + LISN FACTOR + CABLE LOSS + ATTEN.

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

DATA OF CONDUCTION TEST

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

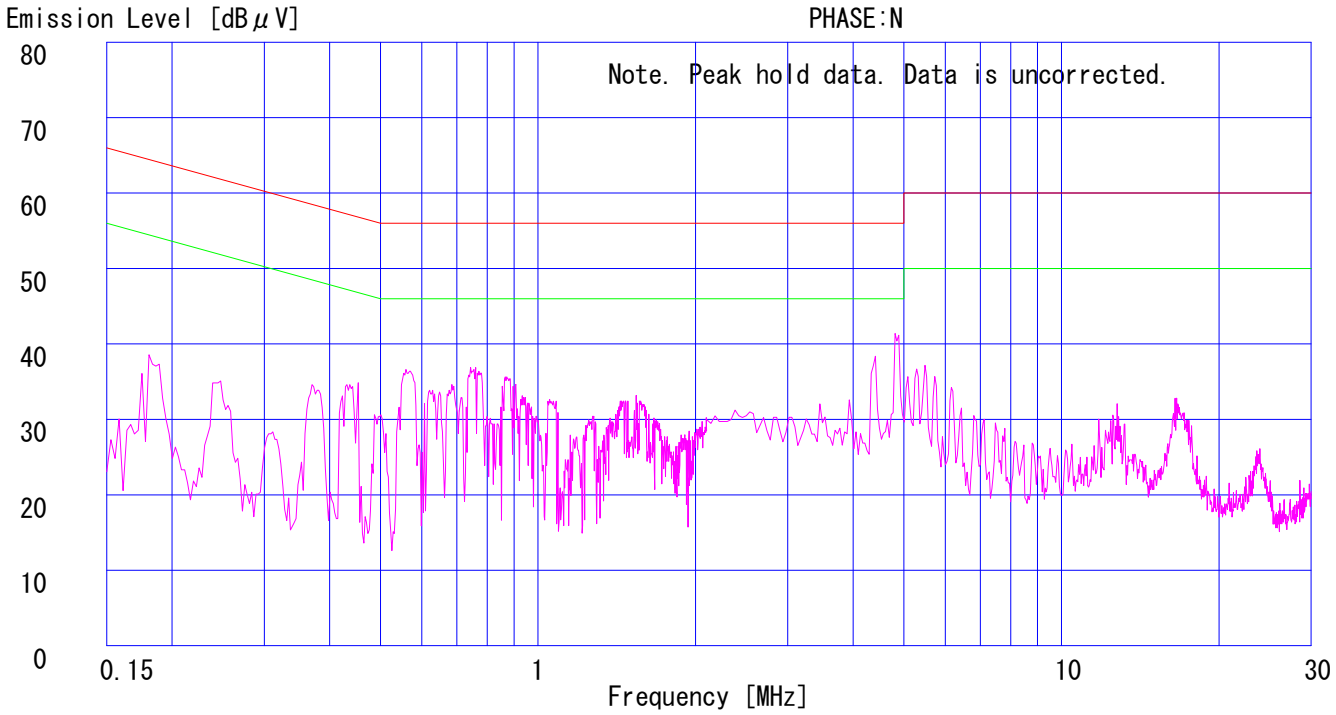
Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: AV Input 1 + Rec		
Remarks	: 1Vp-p		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation	: FCC Part15B CLASS B(2003)		

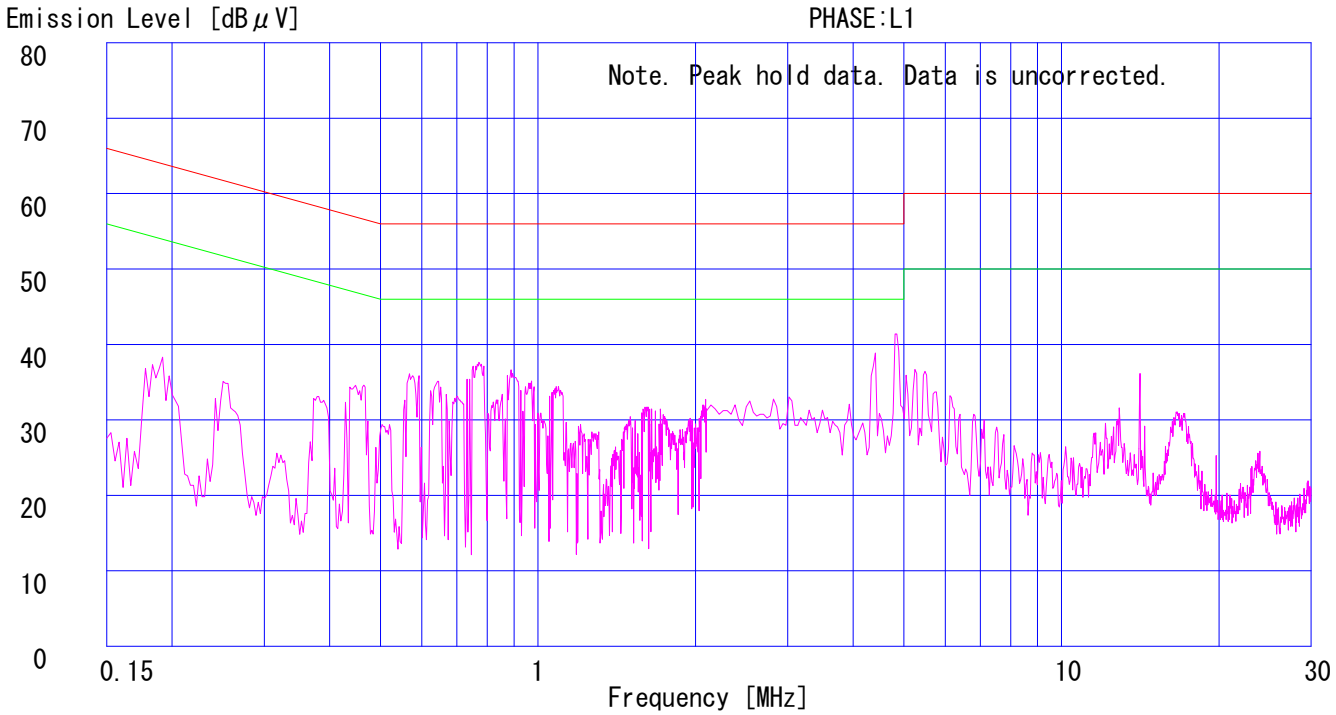


DATA OF CONDUCTION TEST CHART

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: AV Input 1 + Rec		
Remarks	: 1Vp-p		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation 1	: FCC Part15B CLASS B(2003)		
Regulation 2	: None		





DATA OF CONDUCTION TEST

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: AV Input 1 + Rec		
Remarks	: 5Vp-p		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation	: FCC Part15B CLASS B(2003)		

No.	FREQ.	READING(N)		READING(L1)		LISN	CABLE	ATTEN.	RESULT		LIMITS		MARGIN	
		QP	AV	QP	AV	FACTOR	LOSS		QP	AV	QP	AV	QP	AV
	[MHz]	[dBμV]		[dBμV]		[dB]	[dB]	[dB]	[dB]		[dBμV]		[dB]	
1.	0.1943	38.4	-	38.6	-	0.0	0.3	0.0	38.9	-	63.9	53.9	25.0	-
2.	0.5838	36.7	-	36.1	-	0.1	0.3	0.0	37.1	-	56.0	46.0	18.9	-
3.	0.7812	35.2	-	37.6	-	0.1	0.3	0.0	38.0	-	56.0	46.0	18.0	-
4.	2.6260	28.3	-	32.0	-	0.1	0.4	0.0	32.5	-	56.0	46.0	23.5	-
5.	4.7911	31.0	-	31.1	-	0.2	0.4	0.0	31.7	-	56.0	46.0	24.3	-
6.	16.7100	25.7	-	27.6	-	0.8	0.5	0.0	28.9	-	60.0	50.0	31.1	-

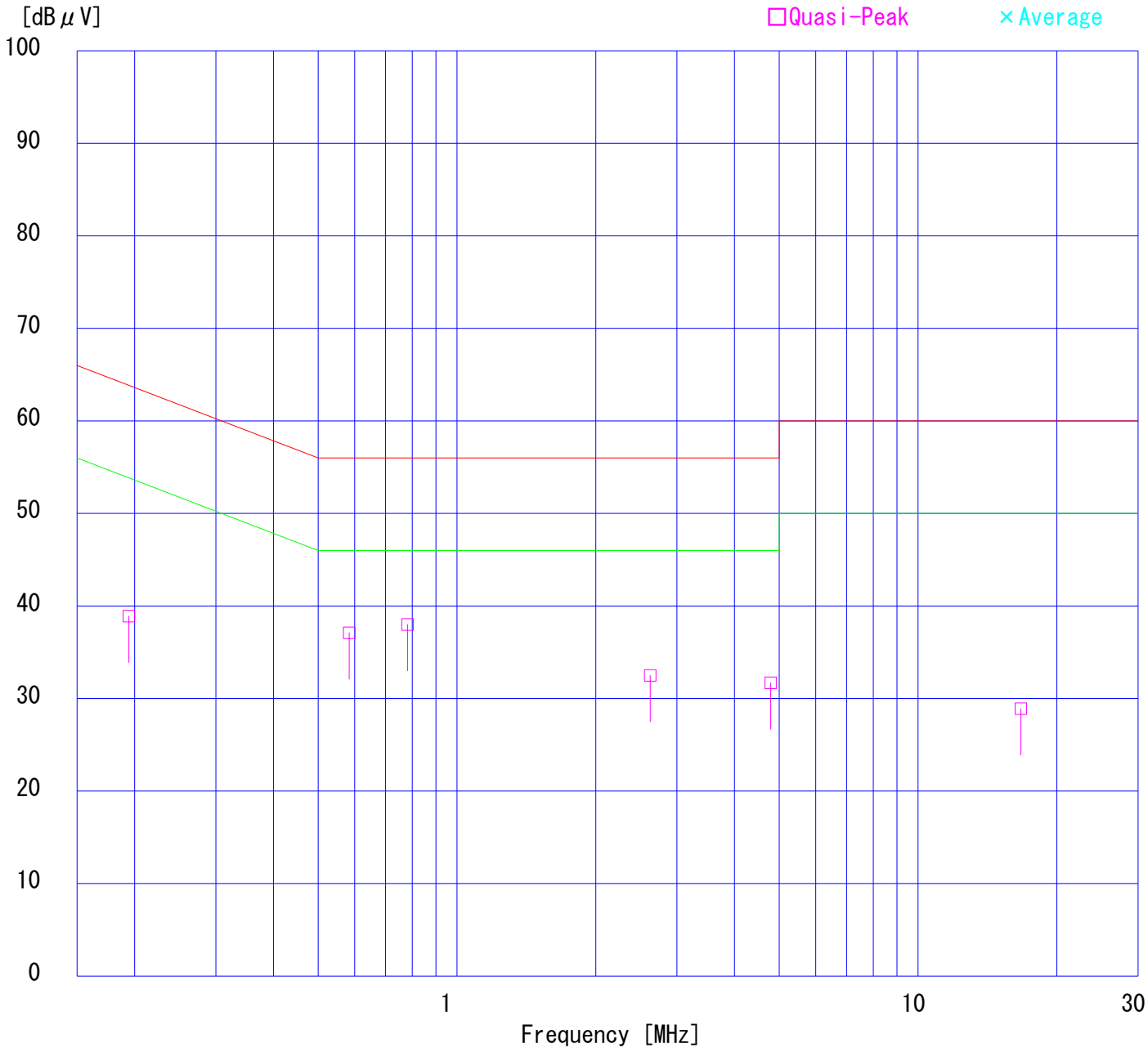
CALCULATION: READING + LISN FACTOR + CABLE LOSS + ATTEN.

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

DATA OF CONDUCTION TEST

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

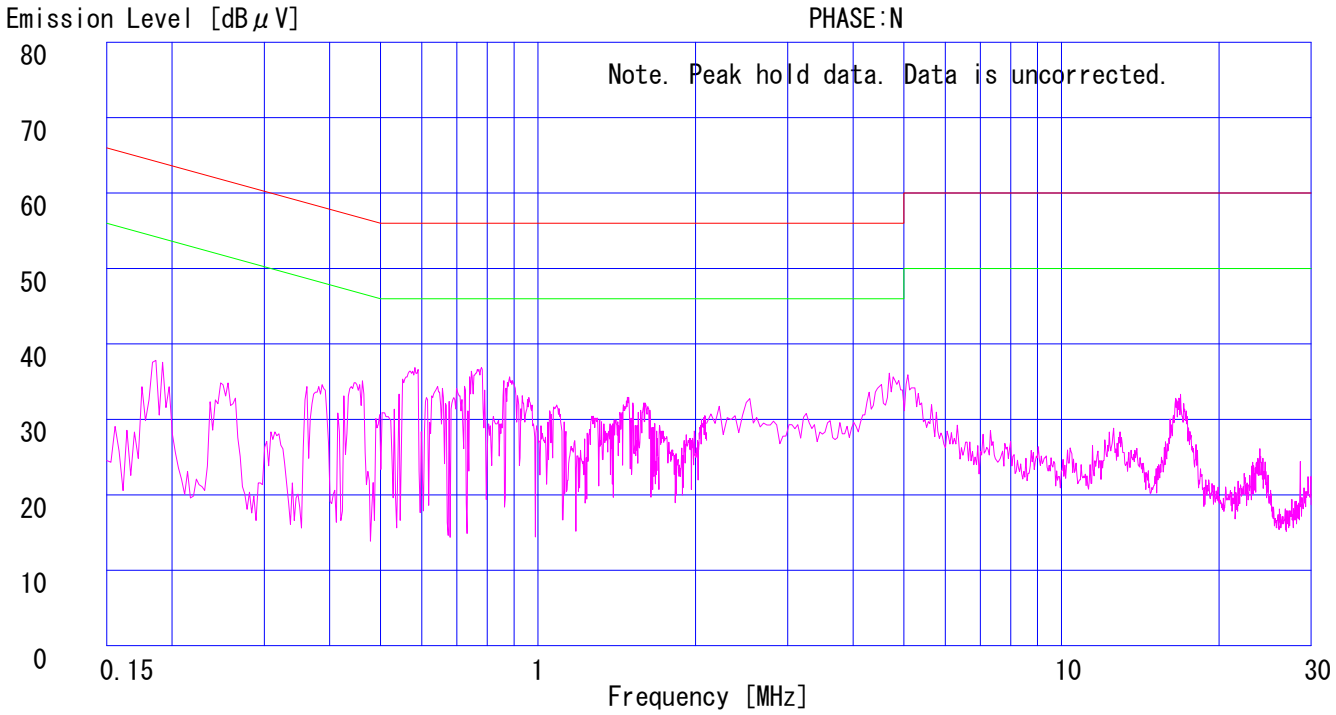
Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: AV Input 1 + Rec		
Remarks	: 5Vp-p		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation	: FCC Part15B CLASS B(2003)		

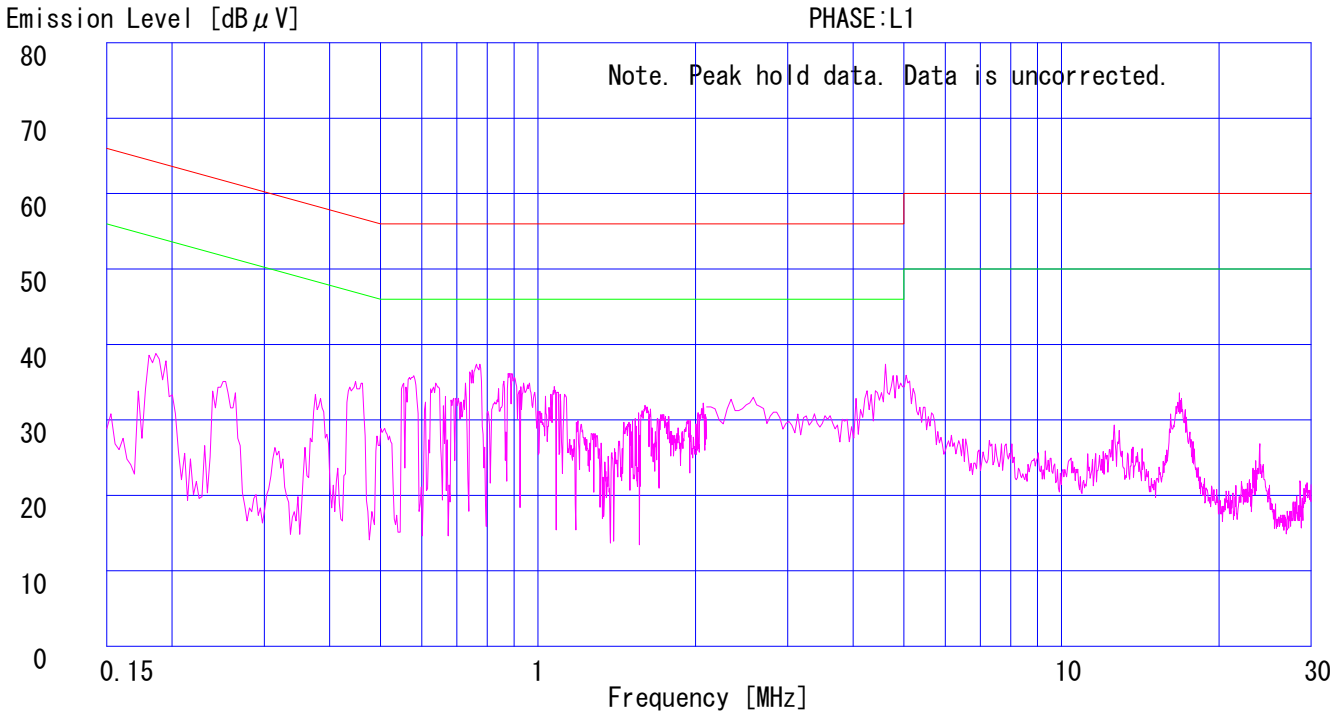


DATA OF CONDUCTION TEST CHART

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: AV Input 1 + Rec		
Remarks	: 5Vp-p		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation 1	: FCC Part15B CLASS B(2003)		
Regulation 2	: None		





DATA OF CONDUCTION TEST

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: AV Input 2 + Rec		
Remarks	: 1Vp-p		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation	: FCC Part15B CLASS B(2003)		

No.	FREQ.	READING(N)		READING(L1)		LISN	CABLE	ATTEN.	RESULT		LIMITS		MARGIN	
		QP	AV	QP	AV	FACTOR	LOSS		QP	AV	QP	AV	QP	AV
	[MHz]	[dBμV]		[dBμV]		[dB]	[dB]	[dB]	[dB]		[dBμV]		[dB]	
1.	0.1938	38.0	-	38.9	-	0.0	0.3	0.0	39.2	-	63.9	53.9	24.7	-
2.	0.8913	36.2	-	36.6	-	0.1	0.3	0.0	37.0	-	56.0	46.0	19.0	-
3.	2.4175	45.7	38.0	45.6	37.0	0.1	0.4	0.0	46.2	38.5	56.0	46.0	9.8	7.5
4.	6.1613	26.6	-	26.4	-	0.3	0.4	0.0	27.3	-	60.0	50.0	32.7	-
5.	17.3796	30.1	-	29.4	-	0.8	0.6	0.0	31.5	-	60.0	50.0	28.5	-
6.	29.6324	40.1	-	39.7	-	1.0	0.7	0.0	41.8	-	60.0	50.0	18.2	-

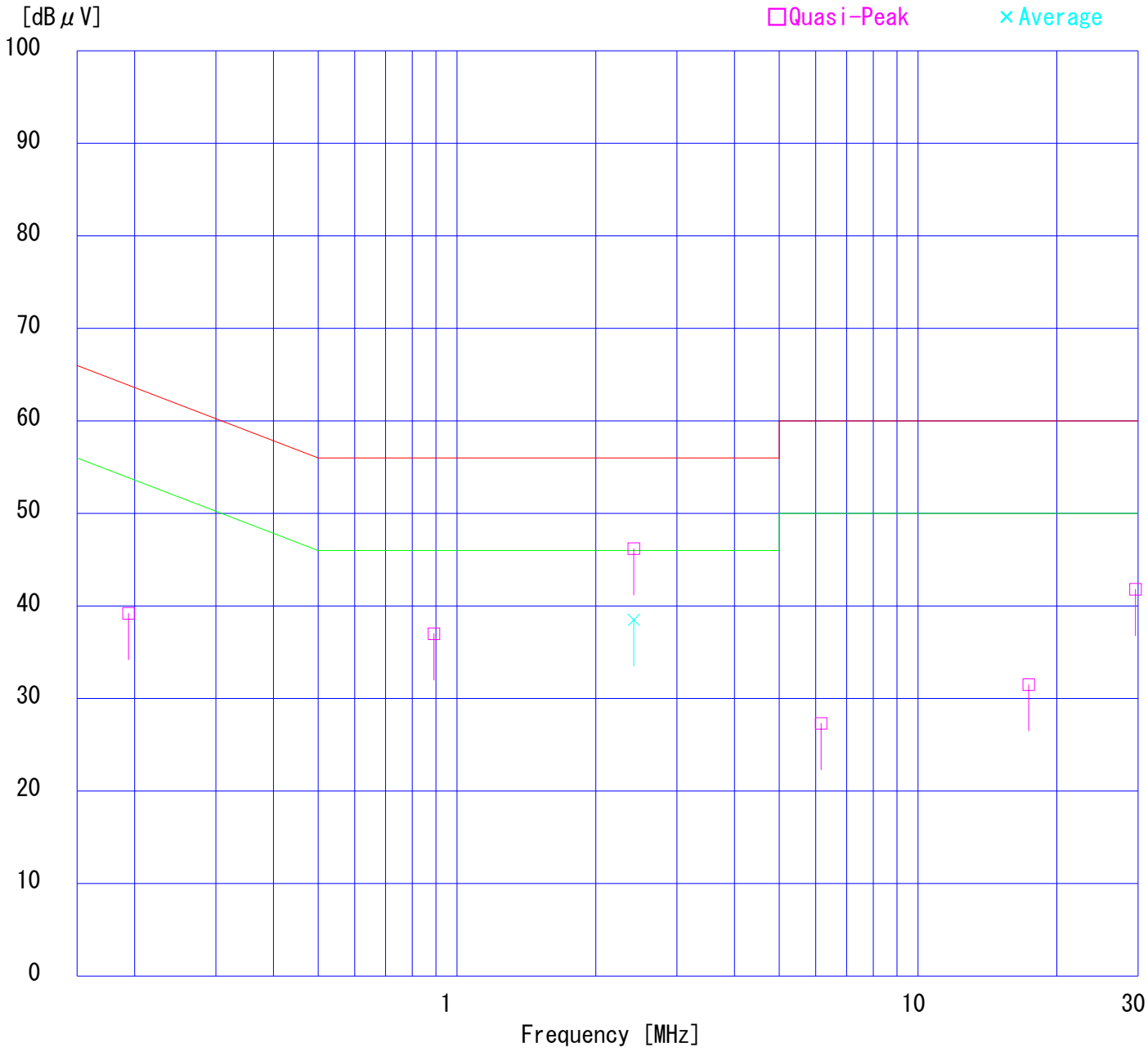
CALCULATION: READING + LISN FACTOR + CABLE LOSS + ATTEN.

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

DATA OF CONDUCTION TEST

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

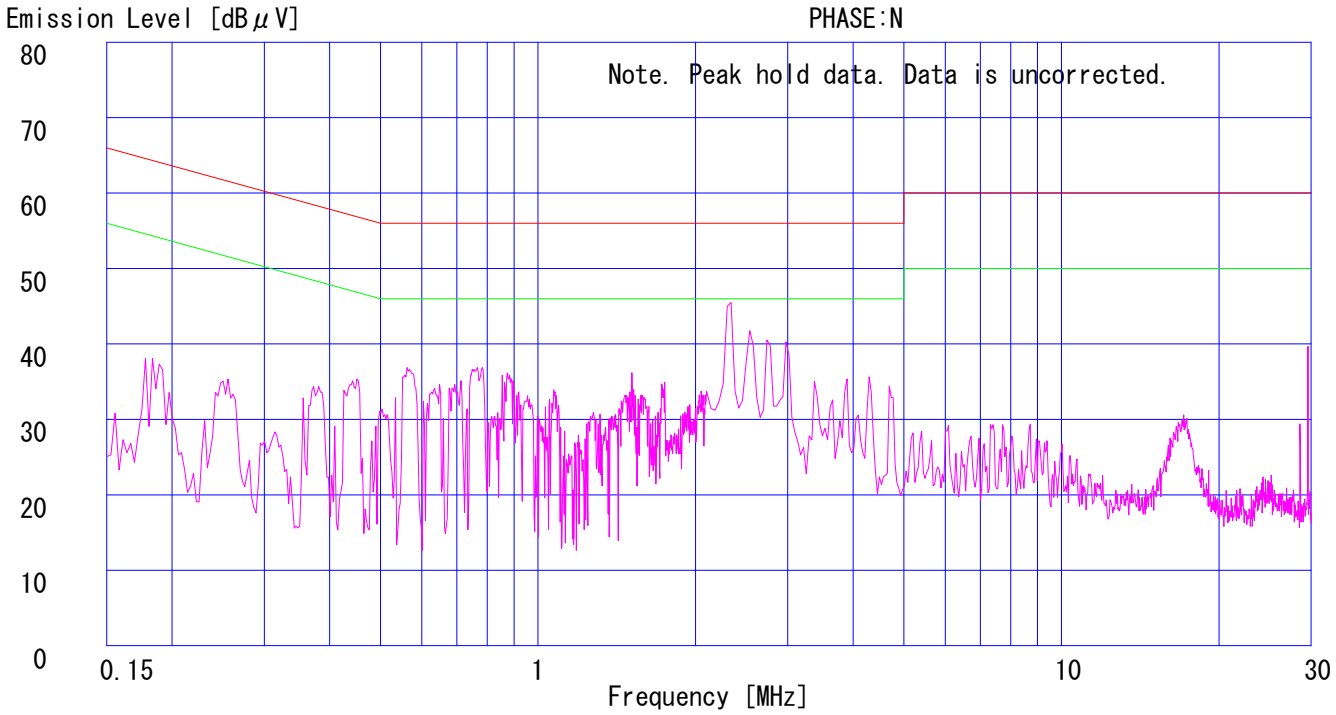
Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: AV Input 2 + Rec		
Remarks	: 1Vp-p		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation	: FCC Part15B CLASS B(2003)		

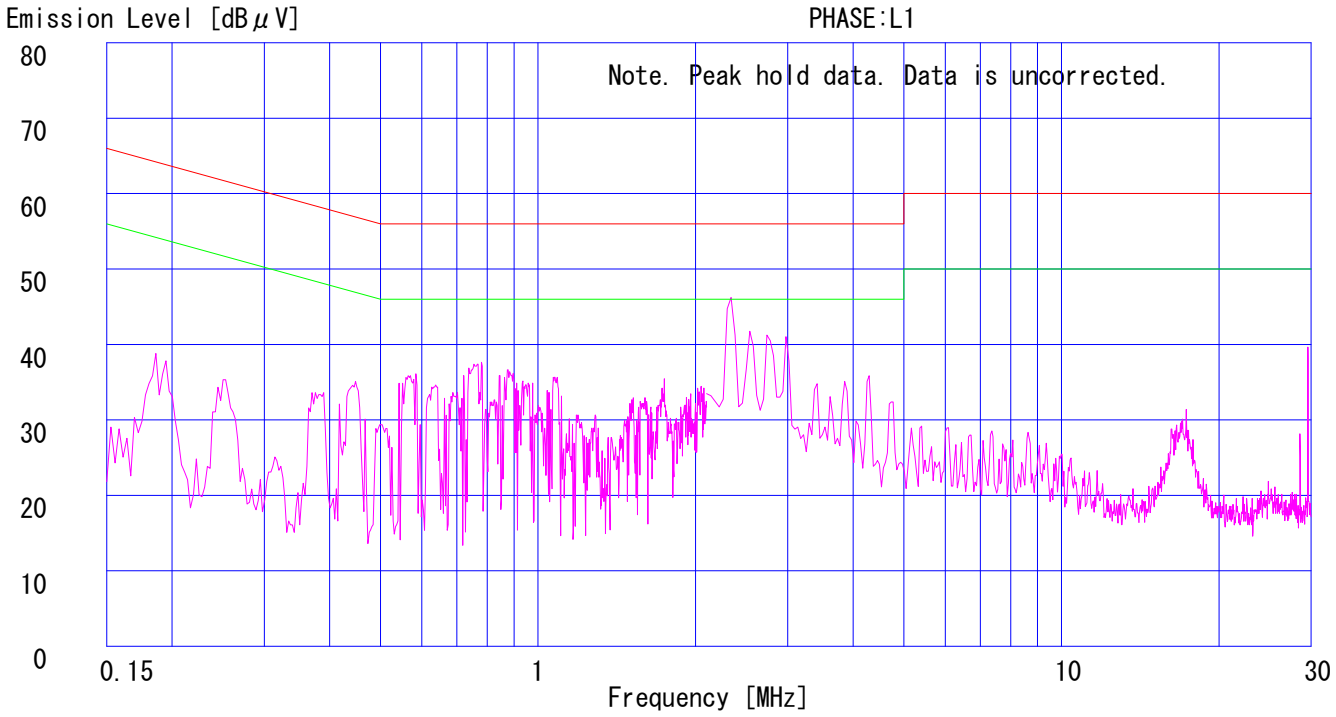


DATA OF CONDUCTION TEST CHART

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: AV Input 2 + Rec		
Remarks	: 1Vp-p		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation 1	: FCC Part15B CLASS B(2003)		
Regulation 2	: None		





DATA OF CONDUCTION TEST

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: AV Input 2 + Rec		
Remarks	: 5Vp-p		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation	: FCC Part15B CLASS B(2003)		

No.	FREQ.	READING(N)		READING(L1)		LISN	CABLE	ATTEN.	RESULT		LIMITS		MARGIN	
		QP	AV	QP	AV	FACTOR	LOSS		QP	AV	QP	AV	QP	AV
	[MHz]	[dBμV]		[dBμV]		[dB]	[dB]	[dB]	[dB]		[dBμV]		[dB]	
1.	0.1926	38.2	-	38.8	-	0.0	0.3	0.0	39.1	-	63.9	53.9	24.8	-
2.	0.5687	36.8	-	34.0	-	0.1	0.3	0.0	37.2	-	56.0	46.0	18.8	-
3.	0.7687	37.0	-	37.4	-	0.1	0.3	0.0	37.8	-	56.0	46.0	18.2	-
4.	2.4300	45.9	39.8	45.7	39.4	0.1	0.4	0.0	46.4	40.3	56.0	46.0	9.6	5.7
5.	4.7913	33.1	-	30.0	-	0.2	0.4	0.0	33.7	-	56.0	46.0	22.3	-
6.	16.8213	25.3	-	24.0	-	0.8	0.5	0.0	26.6	-	60.0	50.0	33.4	-
7.	29.6323	40.5	-	39.4	-	1.0	0.7	0.0	42.2	-	60.0	50.0	17.8	-

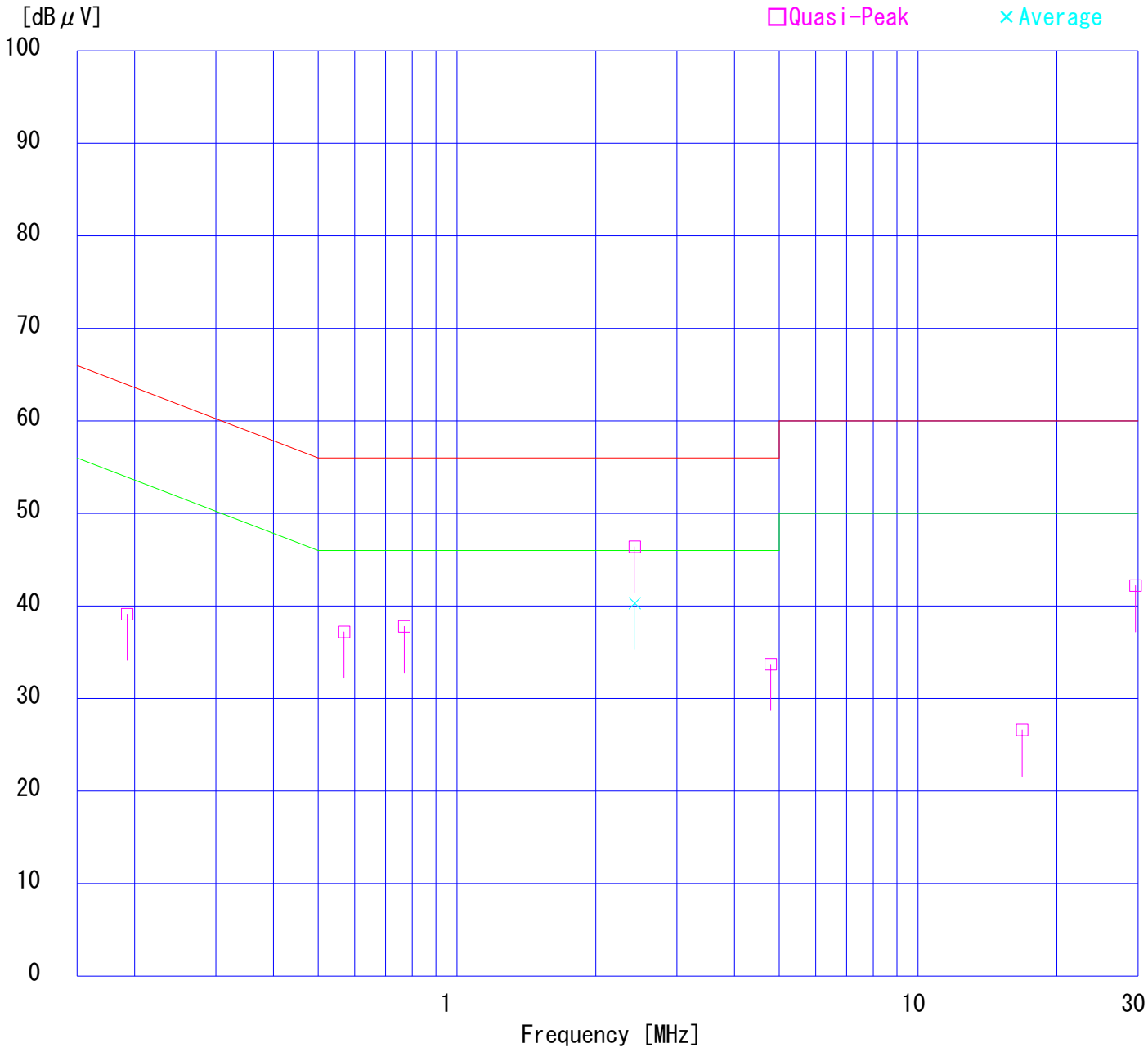
CALCULATION: READING + LISN FACTOR + CABLE LOSS + ATTEN.

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

DATA OF CONDUCTION TEST

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

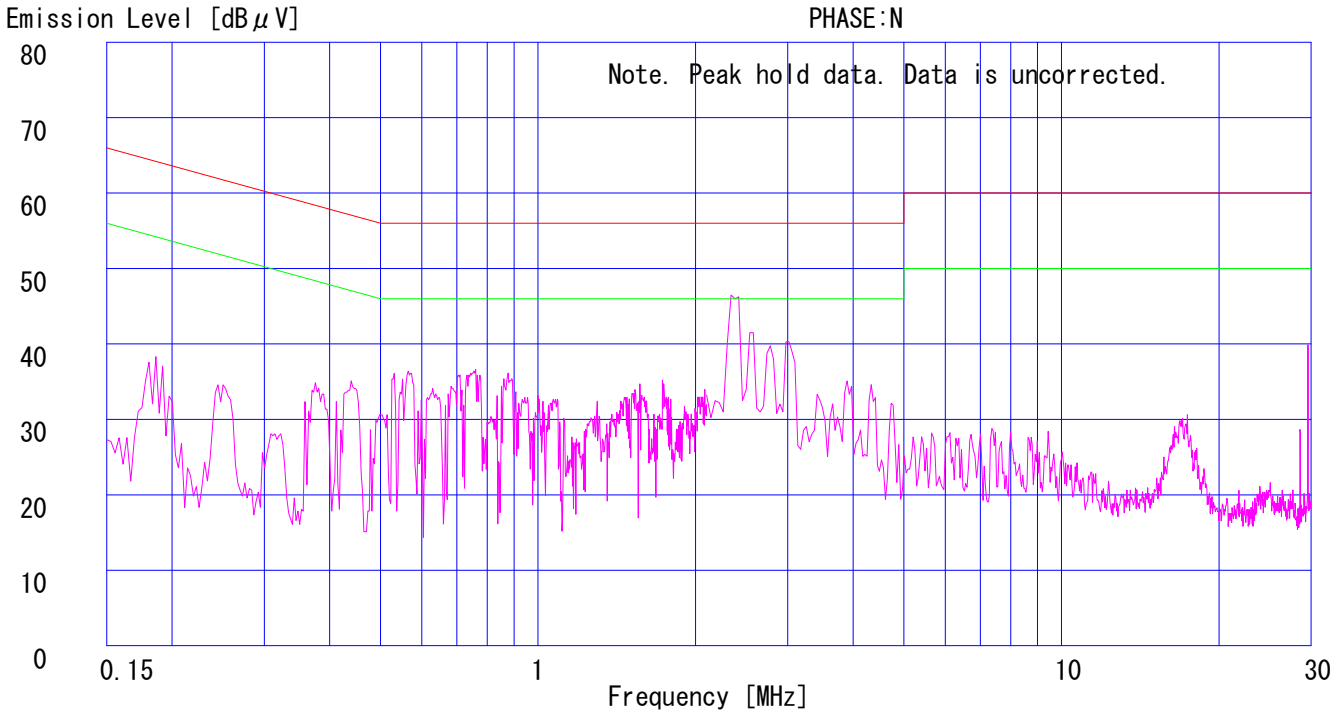
Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: AV Input 2 + Rec		
Remarks	: 5Vp-p		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation	: FCC Part15B CLASS B(2003)		

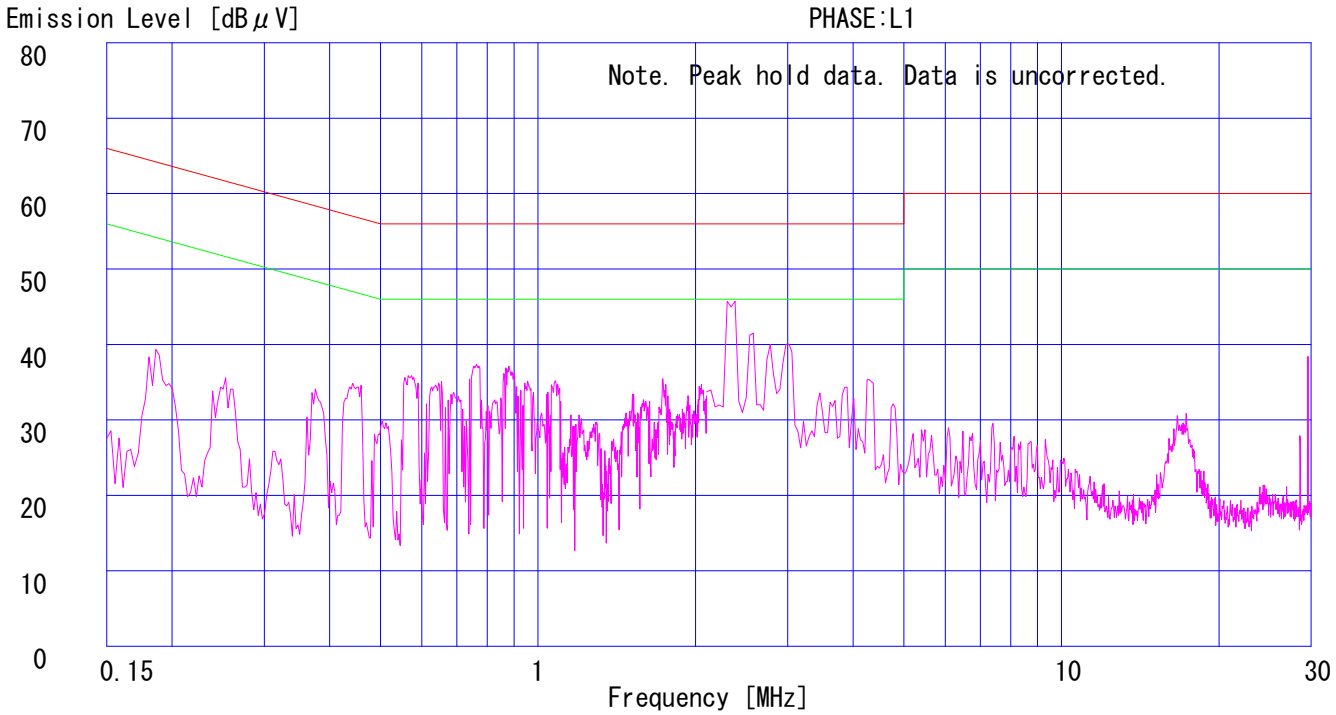


DATA OF CONDUCTION TEST CHART

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: AV Input 2 + Rec		
Remarks	: 5Vp-p		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation 1	: FCC Part15B CLASS B(2003)		
Regulation 2	: None		





DATA OF CONDUCTION TEST

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: VCR Playback + Rec		
Remarks	:		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation	: FCC Part15B CLASS B(2003)		

No.	FREQ.	READING(N)		READING(L1)		LISN	CABLE	ATTEN.	RESULT		LIMITS		MARGIN	
		QP	AV	QP	AV	FACTOR	LOSS		QP	AV	QP	AV	QP	AV
	[MHz]	[dBμV]		[dBμV]		[dB]	[dB]	[dB]	[dB]		[dBμV]		[dB]	
1.	0.1971	37.0	-	38.3	-	0.0	0.3	0.0	38.6	-	63.7	53.7	25.1	-
2.	0.6051	36.6	-	36.2	-	0.1	0.3	0.0	37.0	-	56.0	46.0	19.0	-
3.	0.8025	35.6	-	37.8	-	0.1	0.3	0.0	38.2	-	56.0	46.0	17.8	-
4.	2.1287	39.9	-	32.0	-	0.1	0.4	0.0	40.4	-	56.0	46.0	15.6	-
5.	16.5387	27.8	-	27.5	-	0.8	0.5	0.0	29.1	-	60.0	50.0	30.9	-
6.	29.6494	35.2	-	35.9	-	1.0	0.7	0.0	37.6	-	60.0	50.0	22.4	-

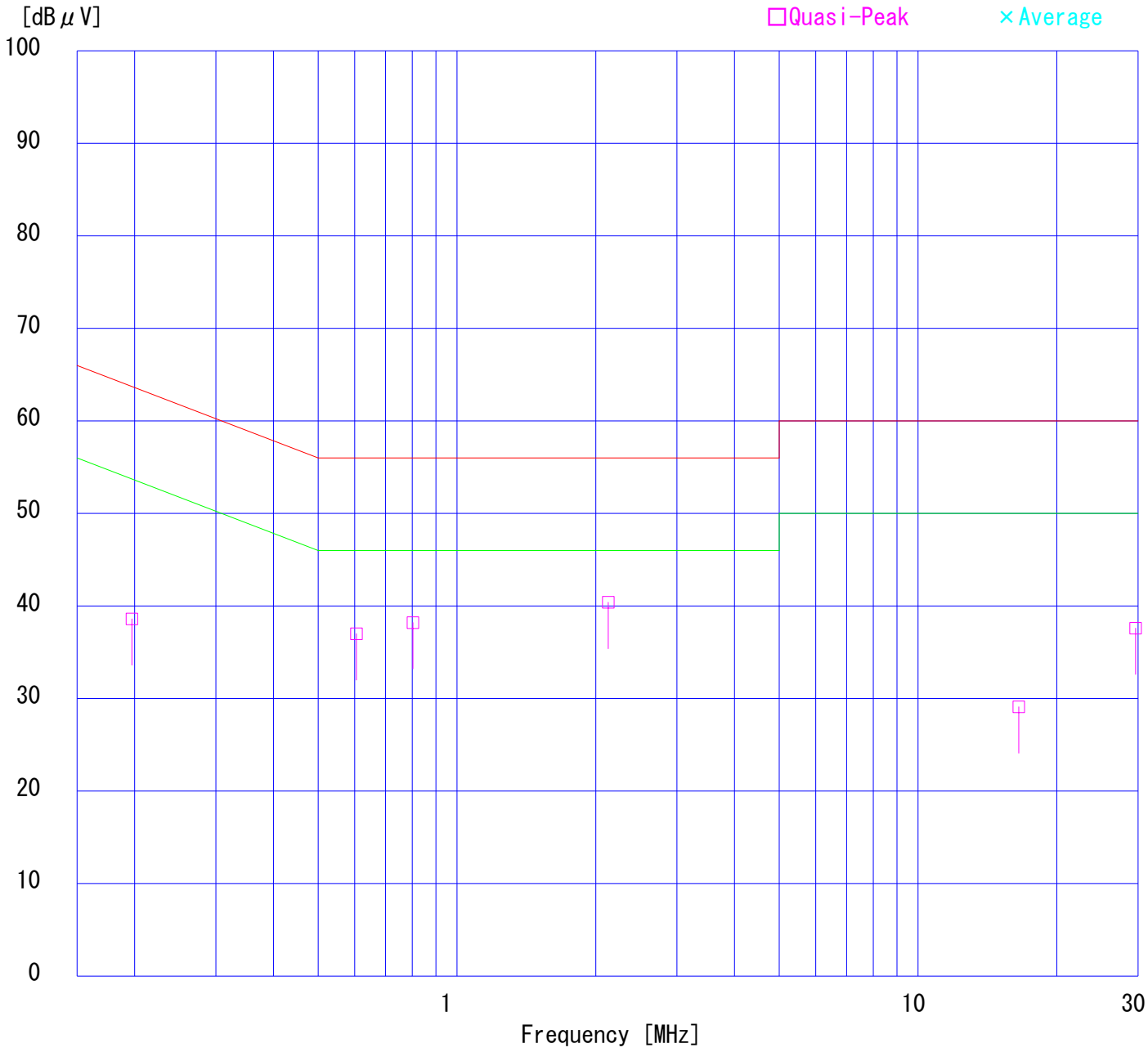
CALCULATION: READING + LISN FACTOR + CABLE LOSS + ATTEN.

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

DATA OF CONDUCTION TEST

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

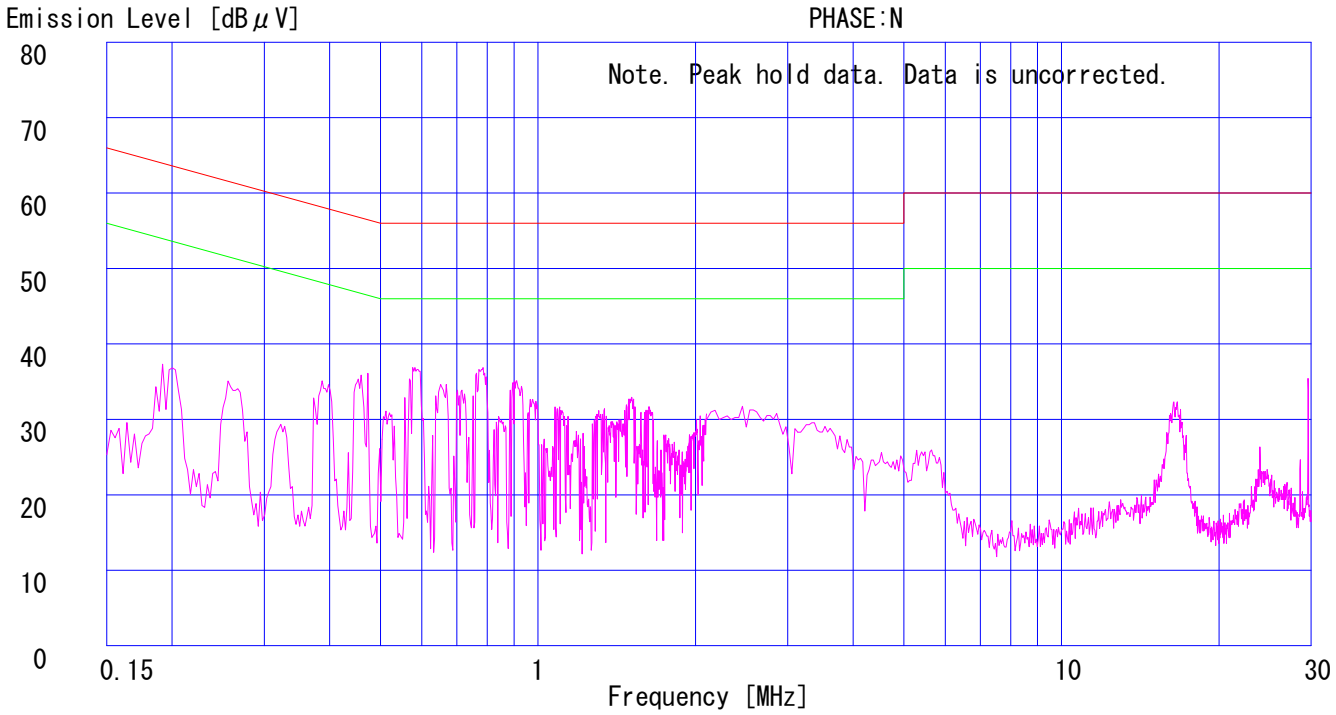
Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: VCR Playback + Rec		
Remarks	:		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation	: FCC Part15B CLASS B(2003)		

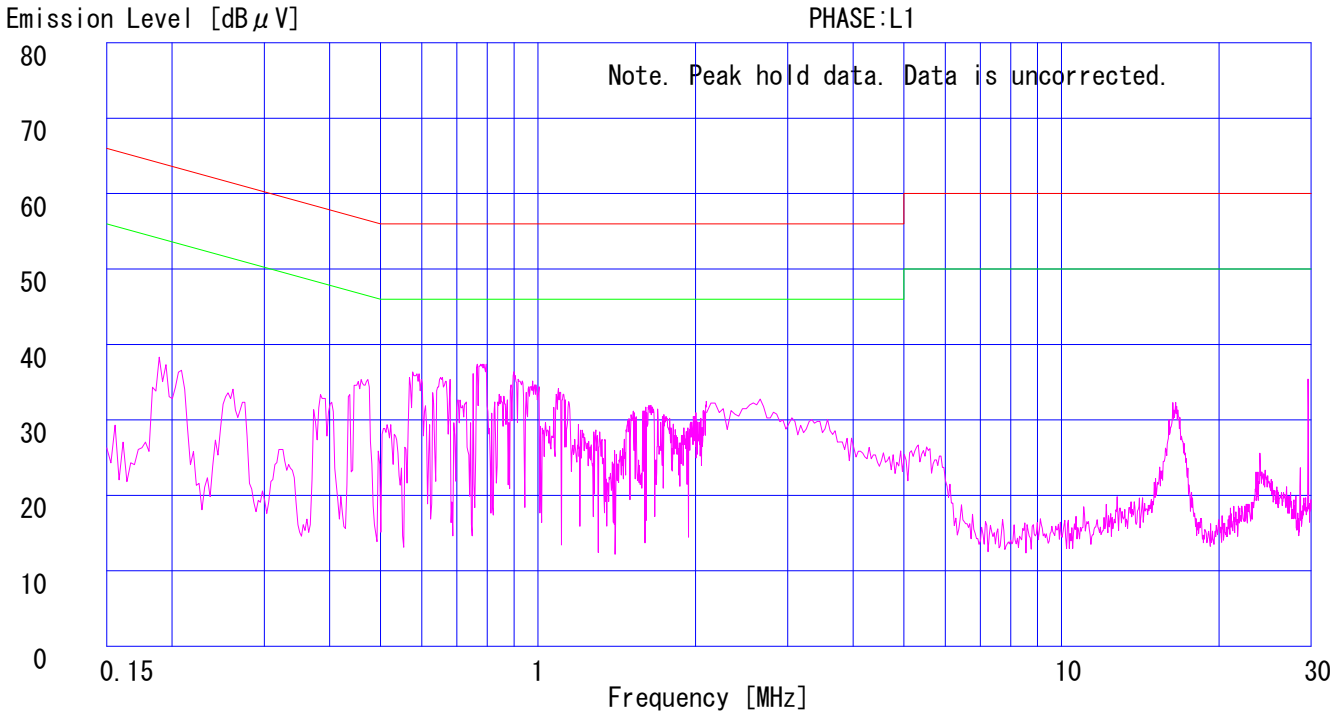


DATA OF CONDUCTION TEST CHART

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: VCR Playback + Rec		
Remarks	:		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation 1	: FCC Part15B CLASS B(2003)		
Regulation 2	: None		





DATA OF CONDUCTION TEST

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: DVD Play + Rec		
Remarks	:		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation	: FCC Part15B CLASS B(2003)		

No.	FREQ.	READING(N)		READING(L1)		LISN	CABLE	ATTEN.	RESULT		LIMITS		MARGIN	
		QP	AV	QP	AV	FACTOR	LOSS		QP	AV	QP	AV	QP	AV
	[MHz]	[dBμV]		[dBμV]		[dB]	[dB]	[dB]	[dB]		[dBμV]		[dB]	
1.	0.1928	38.6	-	38.6	-	0.0	0.3	0.0	38.9	-	63.9	53.9	25.0	-
2.	0.5920	35.6	-	35.8	-	0.1	0.3	0.0	36.2	-	56.0	46.0	19.8	-
3.	0.7838	36.0	-	37.2	-	0.1	0.3	0.0	37.6	-	56.0	46.0	18.4	-
4.	1.4806	31.3	-	27.9	-	0.1	0.3	0.0	31.7	-	56.0	46.0	24.3	-
5.	16.5775	27.1	-	27.1	-	0.8	0.5	0.0	28.4	-	60.0	50.0	31.6	-
6.	29.5913	36.0	-	36.4	-	1.0	0.7	0.0	38.1	-	60.0	50.0	21.9	-

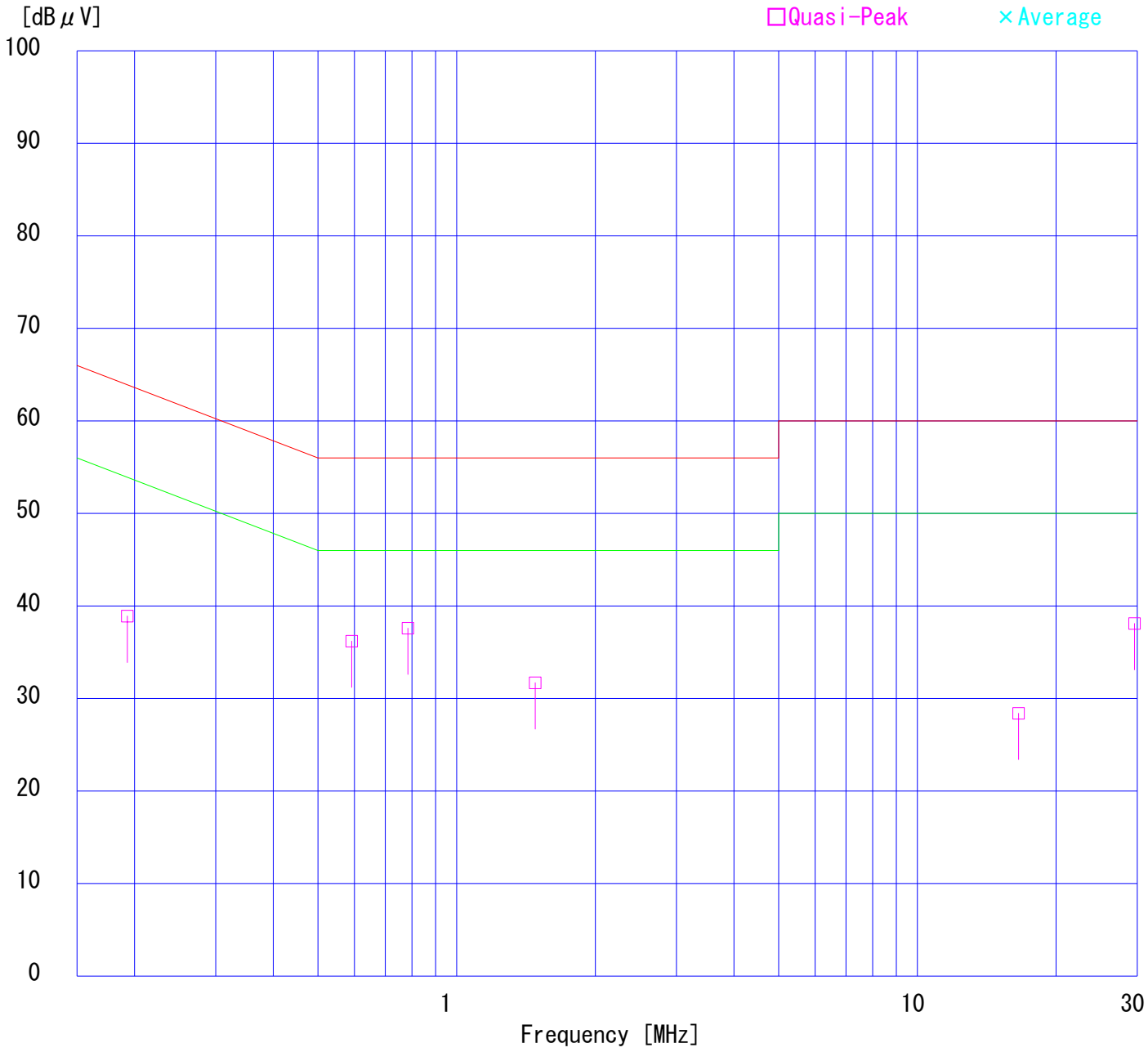
CALCULATION: READING + LISN FACTOR + CABLE LOSS + ATTEN.

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

DATA OF CONDUCTION TEST

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

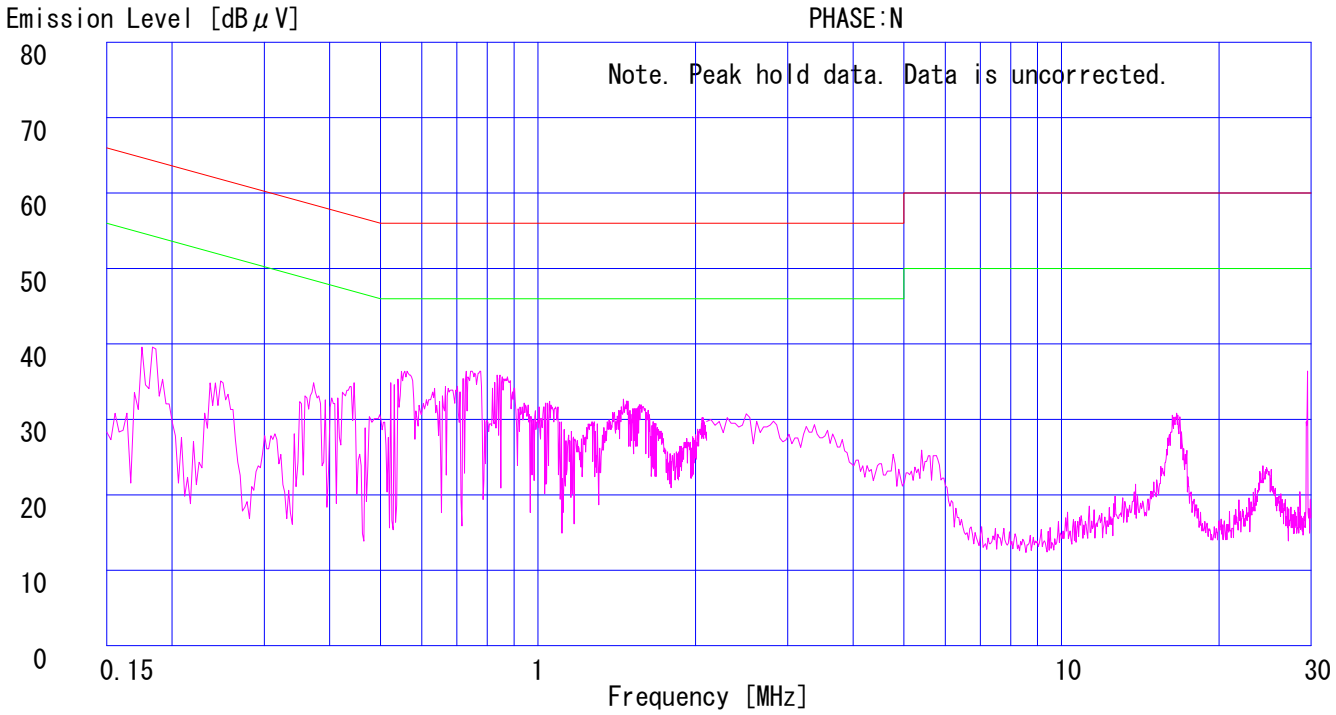
Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: DVD Play + Rec		
Remarks	:		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation	: FCC Part15B CLASS B(2003)		

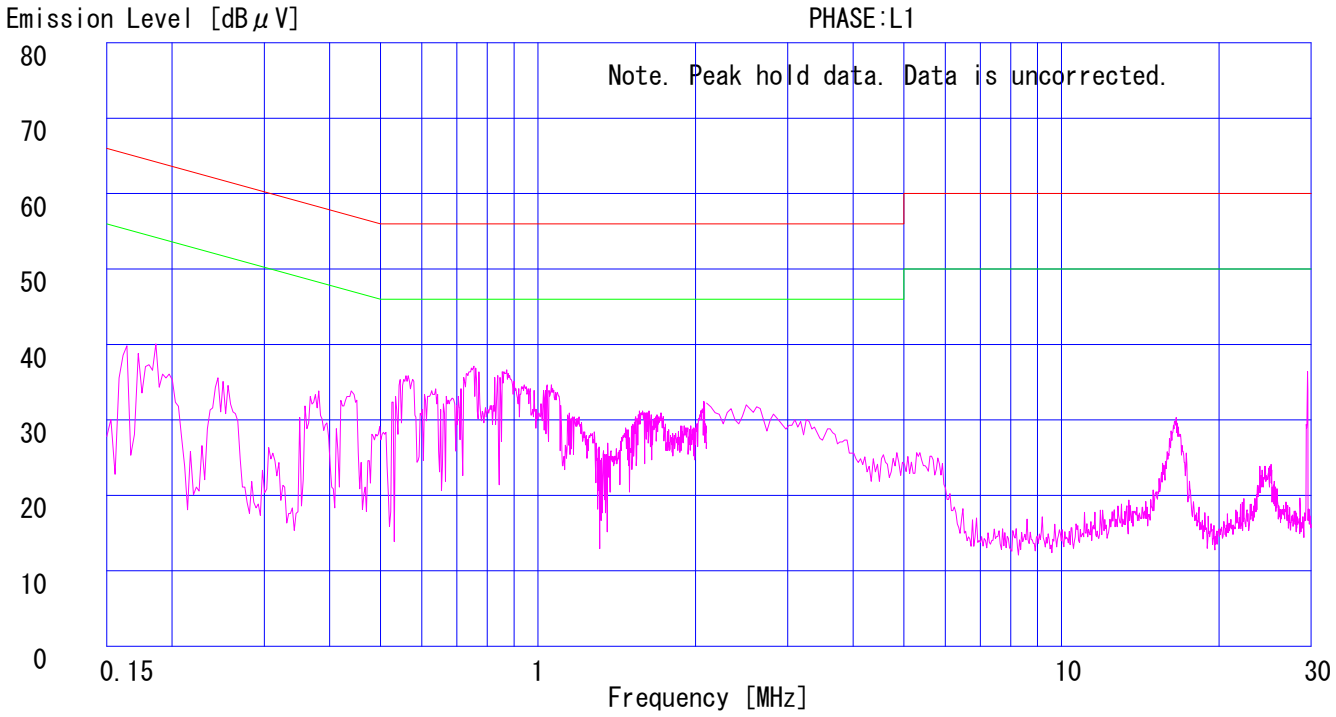


DATA OF CONDUCTION TEST CHART

UL Apex Co., Ltd.
YOKOWA No.7 SHIELD TEST ROOM
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: DVD Play + Rec		
Remarks	:		
Date	: 2/23/2005		
Phase	: Single Phase		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 33 %		
Regulation 1	: FCC Part15B CLASS B(2003)		
Regulation 2	: None		





DATA OF RADIATION TEST

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

COMPANY	: Orion Electric Co.,Ltd.	REPORT No.	: 25GE0165-YW-1
EQUIPMENT	: DVD-Multi/VCR	REGULATION	: FCC PART15 B
MODEL No.	: D-VR4SU	TEST DISTANCE	: 3m
POWER	: AC120V/60Hz	ATTENUATION	: 101-847MHz 6dB
DESCRIPTION	: TV Reception + Rec		1030-1694MHz 0dB
		DATE	: 2005/02/22
		TEMP./HUMID.	: 23deg.C / 50%
		ENGINEER	: Tsubasa Takayama

*C.Factor[dB]=ANT Factor + Cable Loss - Amp Gain
For the measurement above 1GHz, measurement of AV detector is performed only when the result of PK detector exceed the limit of AV.

CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]	LIMIT [QP] [dBuV/m]	MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]
VHF										
2	101	24.7	26.6	BC	-10.8	13.9	15.8	43.5	29.6	27.7
	202			BC				43.5		
	303			LO				46.0		
	404			LO				46.0		
	505			LO				46.0	>15.0	
	606			LO				46.0		
	707			LO				46.0		
	808			LO				46.0		
	909			LO				46.0		

	READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
1010					HO						74.0	54.0				
1111					HO						74.0	54.0				
1212					HO						74.0	54.0				
1313					HO						74.0	54.0	>27.0		>10.0	
1414					HO						74.0	54.0				
1515					HO						74.0	54.0				
1616					HO						74.0	54.0				

CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]	LIMIT [QP] [dBuV/m]	MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]
3	107	23.9	25.8	BC	-9.8	14.1	16.0	43.5	29.4	27.5
	214			BC				43.5		
	321			LO				46.0		
	428			LO				46.0		
	535			LO				46.0	＞15.0	
	642			LO				46.0		
	749			LO				46.0		
	856			LO				46.0		
	963			LO				54.0		

	READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
1070					HO						74.0	54.0				
1177					HO						74.0	54.0				
1284					HO						74.0	54.0				
1391					HO						74.0	54.0	>27.0		>10.0	
1498					HO						74.0	54.0				
1605					HO						74.0	54.0				

CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]	LIMIT [QP] [dBuV/m]	MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]
4	113	24.8	26.7	BC	-9.0	15.8	17.7	43.5	27.7	25.8
	226			BC				46.0		
	339			LO				46.0		
	452			LO				46.0		
	565			LO				46.0	＞15.0	
	678			LO				46.0		
	791			LO				46.0		
	904			LO				46.0		

	READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
1017					HO						74.0	54.0				
1130					HO						74.0	54.0				
1243					HO						74.0	54.0				
1356					HO						74.0	54.0	>27.0		>10.0	
1469					HO						74.0	54.0				
1582					HO						74.0	54.0				

DATA OF RADIATION TEST

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

COMPANY	: Orion Electric Co.,Ltd.	REPORT No.	: 25GE0165-YW-1
EQUIPMENT	: DVD-Multi/VCR	REGULATION	: FCC PART15 B
MODEL No.	: D-VR4SU	TEST DISTANCE	: 3m
POWER	: AC120V/60Hz	ATTENUATION	: 101-847MHz 6dB
DESCRIPTION	: TV Reception + Rec		1030-1694MHz 0dB
		DATE	: 2005/02/22
		TEMP./HUMID.	: 23deg.C / 50%
		ENGINEER	: Tsubasa Takayama

*C.Factor[dB]=ANT Factor + Cable Loss - Amp Gain
For the measurement above 1GHz, measurement of AV detector is performed only when the result of PK detector exceed the limit of AV.

CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]	LIMIT [QP] [dBuV/m]	MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]
VHF										
5	123	25.1	27.9	BC	-7.7	17.4	20.2	43.5	26.1	23.3
	246			BC				46.0		
	369			LO				46.0		
	492			LO				46.0		
	615			LO				46.0	>15.0	
	738			LO				46.0		
	861			LO				46.0		
	984			LO				54.0		

		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
	1107					HO						74.0	54.0				
	1230					HO						74.0	54.0				
	1353					HO						74.0	54.0	>27.0		>10.0	
	1476					HO						74.0	54.0				
	1599					HO						74.0	54.0				

CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]	LIMIT [QP] [dBuV/m]	MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]
6	129	24.6	28.3	BC	-7.2	17.4	21.1	43.5	26.1	22.4
	258			BC				46.0		
	387			LO				46.0		
	516			LO				46.0	>15.0	
	645			LO				46.0		
	774			LO				46.0		
	903			LO				46.0		

		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
	1032					HO						74.0	54.0				
	1161					HO						74.0	54.0				
	1290					HO						74.0	54.0	>27.0		>10.0	
	1419					HO						74.0	54.0				
	1548					HO						74.0	54.0				
	1677					HO						74.0	54.0				

CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]	LIMIT [QP] [dBuV/m]	MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]
7	221	22.3	25.5	BC	-3.5	18.8	22.0	46.0	27.2	24.0
	442			LO				46.0		
	663			LO				46.0	>15.0	
	884			LO				46.0		

		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
	1105					HO						74.0	54.0				
	1326					HO						74.0	54.0	>27.0		>10.0	
	1547					HO						74.0	54.0				

CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]	LIMIT [QP] [dBuV/m]	MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]
8	227	26.0	22.2	BC	-3.3	22.7	18.9	46.0	23.3	27.1
	454			LO				46.0		
	681			LO				46.0	>15.0	
	908			LO				46.0		

		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
	1135					HO						74.0	54.0				
	1362					HO						74.0	54.0	>27.0		>10.0	
	1589					HO						74.0	54.0				

DATA OF RADIATION TEST

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

COMPANY	: Orion Electric Co.,Ltd.	REPORT No.	: 25GE0165-YW-1
EQUIPMENT	: DVD-Multi/VCR	REGULATION	: FCC PART15 B
MODEL No.	: D-VR4SU	TEST DISTANCE	: 3m
POWER	: AC120V/60Hz	ATTENUATION	: 101-847MHz 6dB
DESCRIPTION	: TV Reception + Rec		1030-1694MHz 0dB
		DATE	: 2005/02/22
		TEMP./HUMID.	: 23deg.C / 50%
		ENGINEER	: Tsubasa Takayama

*C.Factor[dB]=ANT Factor + Cable Loss - Amp Gain
For the measurement above 1GHz, measurement of AV detector is performed only when the result of PK detector exceed the limit of AV.

CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]			ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]			LIMIT [QP] [dBuV/m]		MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]		
VHF																	
9	233	25.9	22.1			BC	-3.3	22.6	18.8			46.0		23.4	27.2		
	466					LO						46.0		＞15.0			
	699					LO						46.0					
	932					LO						46.0					
		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [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 [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]			ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]			LIMIT [QP] [dBuV/m]		MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]		
10	239	26.2	21.9			BC	-3.2	23.0	18.7			46.0		23.0	27.3		
	478					LO						46.0		＞15.0			
	717					LO						46.0					
	956					LO						46.0					
		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [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 [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]			ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]			LIMIT [QP] [dBuV/m]		MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]		
11	245	25.1	22.4			BC	-3.2	21.9	19.2			46.0		24.1	26.8		
	490					LO						46.0		＞15.0			
	735					LO						46.0					
	980					LO						54.0					
		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
	1225					HO						74.0	54.0	>27.0		>10.0	
	1470					HO						74.0	54.0				
CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]			ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]			LIMIT [QP] [dBuV/m]		MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]		
12	251	24.3	23.1			BC	-3.0	21.3	20.1			46.0		24.7	25.9		
	502					LO						46.0		＞15.0			
	753					LO						46.0					
		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [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 [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]			ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]			LIMIT [QP] [dBuV/m]		MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]		
13	257	23.4	23.5			BC	-2.7	20.7	20.8			46.0		25.3	25.2		
	514					LO						46.0		＞15.0			
	771					LO						46.0					
		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
	1028					HO						74.0	54.0	>27.0		>10.0	
	1285					HO						74.0	54.0				
	1542					HO						74.0	54.0				

DATA OF RADIATION TEST

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

COMPANY	: Orion Electric Co.,Ltd.	REPORT No.	: 25GE0165-YW-1
EQUIPMENT	: DVD-Multi/VCR	REGULATION	: FCC PART15 B
MODEL No.	: D-VR4SU	TEST DISTANCE	: 3m
POWER	: AC120V/60Hz	ATTENUATION	: 101-847MHz 6dB
DESCRIPTION	: TV Reception + Rec		1030-1694MHz 0dB
		DATE	: 2005/02/22
		TEMP./HUMID.	: 23deg.C / 50%
		ENGINEER	: Tsubasa Takayama

*C.Factor[dB]=ANT Factor + Cable Loss - Amp Gain
For the measurement above 1GHz, measurement of AV detector is performed only when the result of PK detector exceed the limit of AV.

CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]		ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]		LIMIT [QP] [dBuV/m]		MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]	
UHF														
14	517	24.0	25.6		LO	-0.5	23.5	25.1		46.0		22.5	20.9	
		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB] MARGIN(AV) VER. [dB]
	1034				HO	-11.0				74.0	54.0	>27.0		>10.0
	1551				HO	-7.0				74.0	54.0			
CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]		ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]		LIMIT [QP] [dBuV/m]		MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]	
19	547	23.6	24.3		LO	0.3	23.9	24.6		46.0		22.1	21.4	
		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB] MARGIN(AV) VER. [dB]
	1094				HO	-10.6				74.0	54.0	>27.0		>10.0
	1641				HO	-5.8				74.0	54.0			
CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]		ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]		LIMIT [QP] [dBuV/m]		MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]	
28	601	23.8	24.7		LO	1.8	25.6	26.5		46.0	-	20.4	19.5	
		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB] MARGIN(AV) VER. [dB]
	1202				HO	-9.8				74.0	54.0	>27.0		>10.0
CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]		ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]		LIMIT [QP] [dBuV/m]		MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]	
36	649	23.4	24.5		LO	3.0	26.4	27.5		46.0	-	19.6	18.5	
		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB] MARGIN(AV) VER. [dB]
	1298				HO	-9.1				74.0	54.0	>27.0		>10.0
CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]		ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]		LIMIT [QP] [dBuV/m]		MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]	
44	697	23.4	23.9		LO	4.1	27.5	28.0		46.0	-	18.5	18.0	
		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB] MARGIN(AV) VER. [dB]
	1394				HO	-8.4				74.0	54.0	>27.0		>10.0
CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]		ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]		LIMIT [QP] [dBuV/m]		MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]	
53	751	23.0	24.3		LO	4.8	27.8	29.1		46.0	-	18.2	16.9	
		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB] MARGIN(AV) VER. [dB]
	1502				HO	-7.6				74.0	54.0	>27.0		>10.0
CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]		ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]		LIMIT [QP] [dBuV/m]		MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]	
61	799	23.6	24.1		LO	5.1	28.7	29.2		46.0	-	17.3	16.8	
		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB] MARGIN(AV) VER. [dB]
	1598				HO	-6.3				74.0	54.0	>27.0		>10.0
CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]		ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]		LIMIT [QP] [dBuV/m]		MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]	
69	847	23.4	24.0		LO	5.8	29.2	29.8		46.0	-	16.8	16.2	
		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB] MARGIN(AV) VER. [dB]
	1694				HO	-5.1				74.0	54.0	>27.0		>10.0

DATA OF RADIATION TEST

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

COMPANY	: Orion Electric Co.,Ltd.	REPORT No.	: 25GE0165-YW-1
EQUIPMENT	: DVD-Multi/VCR	REGULATION	: FCC PART15 B
MODEL No.	: D-VR4SU	TEST DISTANCE	: 3m
POWER	: AC120V/60Hz	ATTENUATION	: 101-847MHz 6dB
DESCRIPTION	: TV Reception + Rec		1030-1694MHz 0dB
		DATE	: 2005/02/22
		TEMP./HUMID.	: 23deg.C / 50%
		ENGINEER	: Tsubasa Takayama

*C.Factor[dB]=ANT Factor + Cable Loss - Amp Gain
For the measurement above 1GHz, measurement of AV detector is performed only when the result of PK detector exceed the limit of AV.

CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]	LIMIT [QP] [dBuV/m]	MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]
CATV										
1	119	24.5	23.4	BC	-8.0	16.5	15.4	43.5	27.0	28.1
	238			BC				46.0		
	357			LO				46.0		
	476			LO				46.0		
	595			LO				46.0	>15.0	
	714			LO				46.0		
	833			LO				46.0		
	952			LO				46.0		

		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
	1071					HO						74.0	54.0				
	1190					HO						74.0	54.0				
	1309					HO						74.0	54.0	>27.0		>10.0	
	1428					HO						74.0	54.0				
	1547					HO						74.0	54.0				
	1666					HO						74.0	54.0				

CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]	LIMIT [QP] [dBuV/m]	MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]
95	137	22.9	23.2	BC	-6.5	16.4	16.7	43.5	27.1	26.8
	274			BC				46.0		
	411			LO				46.0		
	548			LO				46.0		
	685			LO				46.0	>15.0	
	822			LO				46.0		
	959			LO				46.0		

		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
	1096					HO						74.0	54.0				
	1233					HO						74.0	54.0				
	1370					HO						74.0	54.0	>27.0		>10.0	
	1507					HO						74.0	54.0				
	1644					HO						74.0	54.0				

CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]	LIMIT [QP] [dBuV/m]	MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]
97	149	24.0	23.8	BC	-5.7	18.3	18.1	43.5	25.2	25.4
	298			BC				46.0		
	447			LO				46.0		
	596			LO				46.0	>15.0	
	745			LO				46.0		
	894			LO				46.0		

		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
	1043					HO				-	-	74.0	54.0				
	1192					HO				-	-	74.0	54.0				
	1341					HO				-	-	74.0	54.0	>27.0		>10.0	
	1490					HO				-	-	74.0	54.0				
	1639					HO				-	-	74.0	54.0				

CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]	LIMIT [QP] [dBuV/m]	MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]
99	161	23.3	23.9	BC	-5.0	18.3	18.9	43.5	25.2	24.6
	322			LO				46.0		
	483			LO				46.0		
	644			LO				46.0	>15.0	
	805			LO				46.0		
	966			LO				46.0		

		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
	1127					HO						74.0	54.0				
	1288					HO						74.0	54.0				
	1449					HO						74.0	54.0	>27.0		>10.0	
	1610					HO						74.0	54.0				

DATA OF RADIATION TEST

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

COMPANY	: Orion Electric Co.,Ltd.	REPORT No.	: 25GE0165-YW-1
EQUIPMENT	: DVD-Multi/VCR	REGULATION	: FCC PART15 B
MODEL No.	: D-VR4SU	TEST DISTANCE	: 3m
POWER	: AC120V/60Hz	ATTENUATION	: 101-847MHz 6dB
DESCRIPTION	: TV Reception + Rec		1030-1694MHz 0dB
		DATE	: 2005/02/22
		TEMP./HUMID.	: 23deg.C / 50%
		ENGINEER	: Tsubasa Takayama

*C.Factor[dB]=ANT Factor + Cable Loss - Amp Gain
For the measurement above 1GHz, measurement of AV detector is performed only when the result of PK detector exceed the limit of AV.

CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]	READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [QP] [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
CATV																								
14	167	24.0	23.1					BC	-4.6	19.4	18.5					43.5			24.1	25.0				
	334							LO								46.0			>15.0					
	501							LO								46.0								
	668							LO								46.0								
	835							LO								46.0								
	1002							HO								74.0		54.0						
	1169							HO								74.0		54.0						
	1336							HO								74.0		54.0	>27.0				>10.0	
	1503							HO								74.0		54.0						
	1670							HO								74.0		54.0						
18	191	23.3	22.9					BC	-3.9	19.4	19.0					43.5			24.1	24.5				
	382							LO								46.0			>15.0					
	573							LO								46.0								
	764							LO								46.0								
	955							LO								46.0								
	1146							HO								74.0		54.0						
	1337							HO								74.0		54.0	>27.0				>10.0	
	1528							HO								74.0		54.0						
22	215	22.7	22.0					BC	-3.6	19.1	18.4					43.5			24.4	25.1				
	430							LO								46.0			>15.0					
	645							LO								46.0								
	860							LO								46.0								
	1075							HO								74.0		54.0						
	1290							HO								74.0		54.0	>27.0				>10.0	
	1505							HO								74.0		54.0						
23	263	22.1	21.6					BC	-2.3	19.8	19.3					46.0		46.0	26.2	26.7				
	526							LO								46.0		46.0						
	789							LO								46.0		46.0						
	1052							HO								74.0		54.0						
	1315							HO								74.0		54.0	>27.0				>10.0	
	1578							HO								74.0		54.0						
29	299	22.0	21.3					BC	-0.1	21.9	21.2					46.0		46.0	24.1	24.8				
	598							LO								46.0		46.0	>15.0					
	897							LO								46.0		46.0						
	1196							HO								74.0		54.0						
	1495							HO								74.0		54.0	>27.0				>10.0	

DATA OF RADIATION TEST

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

COMPANY	: Orion Electric Co.,Ltd.	REPORT No.	: 25GE0165-YW-1
EQUIPMENT	: DVD-Multi/VCR	REGULATION	: FCC PART15 B
MODEL No.	: D-VR4SU	TEST DISTANCE	: 3m
POWER	: AC120V/60Hz	ATTENUATION	: 101-847MHz 6dB
DESCRIPTION	: TV Reception + Rec		1030-1694MHz 0dB
		DATE	: 2005/02/22
		TEMP./HUMID.	: 23deg.C / 50%
		ENGINEER	: Tsubasa Takayama

*C.Factor[dB]=ANT Factor + Cable Loss - Amp Gain
For the measurement above 1GHz, measurement of AV detector is performed only when the result of PK detector exceed the limit of AV.

CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]			ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]			LIMIT [QP] [dBuV/m]		MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]	
CATV																
36	341	23.4	23.1			LO	-4.3	19.1	18.8			46.0	46.0	26.9	27.2	
	682					LO						46.0	46.0	>15.0		
		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
	1023					HO	-11.2					74.0	54.0	>27.0		>10.0	
	1364					HO	-8.7					74.0	54.0				
CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]			ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]			LIMIT [QP] [dBuV/m]		MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]	
37	347	23.1	24.3			LO	-4.3	18.8	20.0			46.0	46.0	27.2	26.0	
	694					LO						46.0	46.0	>15.0		
		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
	1041					HO	-11.0					74.0	54.0	>27.0		>10.0	
	1388					HO	-8.4					74.0	54.0				
CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]			ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]			LIMIT [QP] [dBuV/m]		MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]	
65	515	22.2	23.4			LO	-0.5	21.7	22.9			46.0	46.0	24.3	23.1	
		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
	1030					HO	-11.2					74.0	54.0	>27.0		>10.0	
	1545					HO	-7.1					74.0	54.0				
CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]			ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]			LIMIT [QP] [dBuV/m]		MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]	
94	689	22.7	23.1			LO	3.9	26.6	27.0			46.0	46.0	19.4	19.0	
		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
	1378					HO	-8.5					74.0	54.0	>27.0		>10.0	
CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]			ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]			LIMIT [QP] [dBuV/m]		MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]	
100	695	22.3	23.0			LO	4.1	26.4	27.1			46.0	46.0	19.6	18.9	
		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
	1390					HO	-8.4					74.0	54.0	>27.0		>10.0	
CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]			ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]			LIMIT [QP] [dBuV/m]		MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]	
113	773	21.8	22.5			LO	5.0	26.8	27.5			46.0	46.0	19.2	18.5	
		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
	1546					HO	-7.1					74.0	54.0	>27.0		>10.0	
CH.	FREQ [MHz]	READING(QP) HOR. [dBuV]	READING(QP) VER. [dBuV]			ANT TYPE	C.Factor [dBuV]	RESULT(QP) HOR. [dBuV/m]	RESULT(QP) VER. [dBuV/m]			LIMIT [QP] [dBuV/m]		MARGIN(QP) HOR. [dB]	MARGIN(QP) VER. [dB]	
125	845	21.3	21.1			LO	5.7	27.0	26.8			46.0	46.0	19.0	19.2	
		READING(PK) HOR. [dBuV]	READING(PK) VER. [dBuV]	READING(AV) HOR. [dBuV]	READING(AV) VER. [dBuV]	ANT TYPE	C.Factor [dBuV]	RESULT(PK) HOR. [dBuV/m]	RESULT(PK) VER. [dBuV/m]	RESULT(AV) HOR. [dBuV/m]	RESULT(AV) VER. [dBuV/m]	LIMIT [PK] [dBuV/m]	LIMIT [AV] [dBuV/m]	MARGIN(PK) HOR. [dB]	MARGIN(PK) VER. [dB]	MARGIN(AV) HOR. [dB]	MARGIN(AV) VER. [dB]
	1690					HO	-5.2					74.0	54.0	>27.0		>10.0	

DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant : **Orion Electric Co., Ltd.**
Kind of Equipment : **DVD-Multi/VCR**
Model No. : **D-VR4SU**
Serial No. : **-**
Power : **AC120V/60Hz**
Mode : **TV Reception + Rec**
Remarks : **0dBmV**
Date : **2/22/2005**
Test Distance : **3 m**
Temperature : **21 ℃** **Engineer : Tsubasa Takayama**
Humidity : **43 %**
Regulation : **FCC Part15B CLASS B**

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	569.32	BB	34.6	37.3	18.7	30.0	6.3	6.0	35.6	38.3	46.0	10.4	7.7

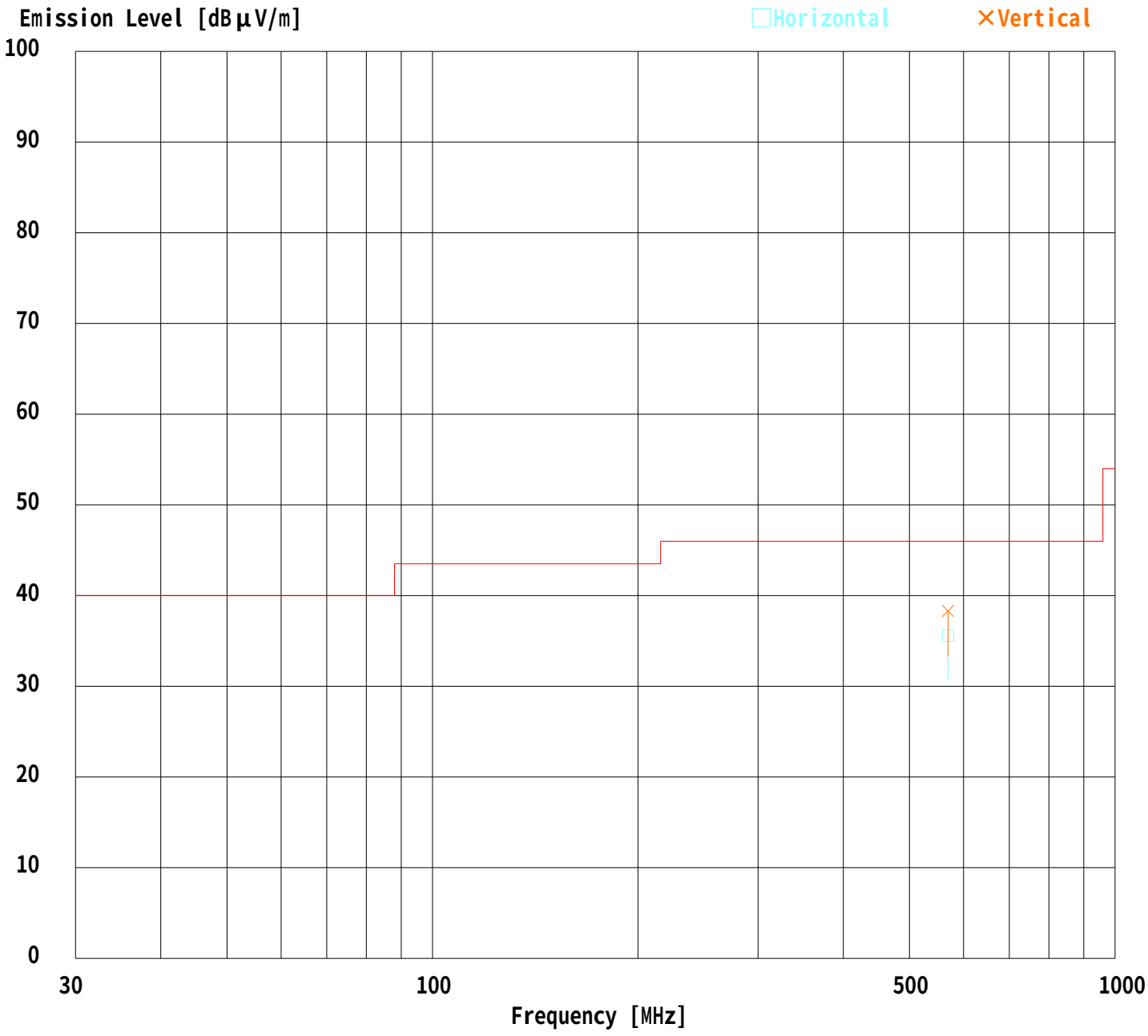
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

Expect 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.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: TV Reception + Rec		
Remarks	: 0dBmV		
Date	: 2/22/2005		
Test Distance	: 3 m		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 43 %		
Regulation	: FCC Part15B CLASS B		



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant : **Orion Electric Co., Ltd.**
Kind of Equipment : **DVD-Multi/VCR**
Model No. : **D-VR4SU**
Serial No. : **-**
Power : **AC120V/60Hz**
Mode : **TV Reception + Rec**
Remarks : **25dBmV**
Date : **2/22/2005**
Test Distance : **3 m**
Temperature : **21 ℃** **Engineer : Tsubasa Takayama**
Humidity : **43 %**
Regulation : **FCC Part15B CLASS B**

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	41.93	BB	25.1	32.8	13.4	29.9	1.5	5.9	16.0	23.7	40.0	24.0	16.3
2.	85.91	BB	44.8	41.1	7.9	29.7	2.1	5.9	31.0	27.3	40.0	9.0	12.7
3.	114.57	BB	32.0	38.9	12.6	29.7	2.4	5.9	23.2	30.1	43.5	20.3	13.4
4.	128.89	BB	34.0	35.7	14.1	29.8	2.6	5.9	26.8	28.5	43.5	16.7	15.0
5.	157.50	BB	37.6	38.1	15.9	29.8	2.9	5.9	32.5	33.0	43.5	11.0	10.5
6.	213.40	BB	27.0	23.1	17.0	29.9	3.4	5.9	23.4	19.5	43.5	20.1	24.0
7.	405.00	BB	39.9	37.2	16.2	30.0	5.1	6.0	37.2	34.5	46.0	8.8	11.5
8.	540.00	BB	35.5	37.4	18.2	30.1	6.1	6.0	35.7	37.6	46.0	10.3	8.4
9.	569.32	BB	34.6	37.5	18.7	30.0	6.3	6.0	35.6	38.5	46.0	10.4	7.5
10.	879.30	BB	23.4	29.7	21.7	29.4	8.2	6.0	29.9	36.2	46.0	16.1	9.8

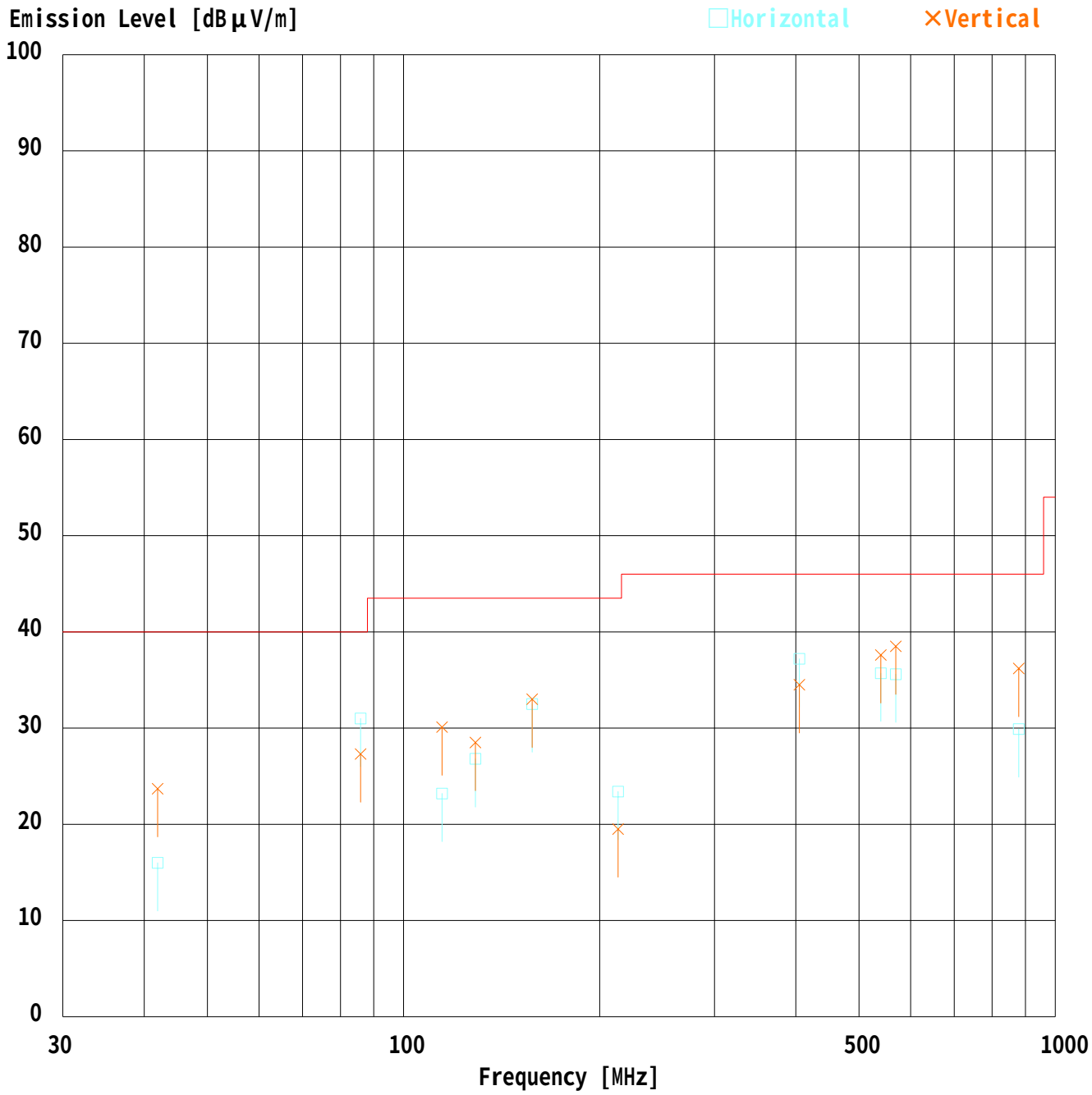
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

Expect 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.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: TV Reception + Rec		
Remarks	: 25dBmV		
Date	: 2/22/2005		
Test Distance	: 3 m		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 43 %		
Regulation	: FCC Part15B CLASS B		



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant : **Orion Electric Co., Ltd.**
Kind of Equipment : **DVD-Multi/VCR**
Model No. : **D-VR4SU**
Serial No. : **-**
Power : **A120V/60Hz**
Mode : **TV Reception + Rec**
Remarks : **25dBmV**
Date : **2/22/2005**
Test Distance : **3 m**
Temperature : **21 ℃** **Engineer : Tsubasa Takayama**
Humidity : **43 %**
Regulation : **FCC Part15B CLASS B(Average Limit / Upper1GHz)**

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	1080.00	BB	41.8	53.6	25.3	40.0	3.4	0.0	30.5	42.3	54.0	23.5	11.7
2.	1138.83	BB	45.0	54.6	25.6	39.9	3.5	0.0	34.2	43.8	54.0	19.8	10.2
3.	1485.00	BB	43.8	48.9	27.2	39.3	4.1	0.0	35.8	40.9	54.0	18.2	13.1

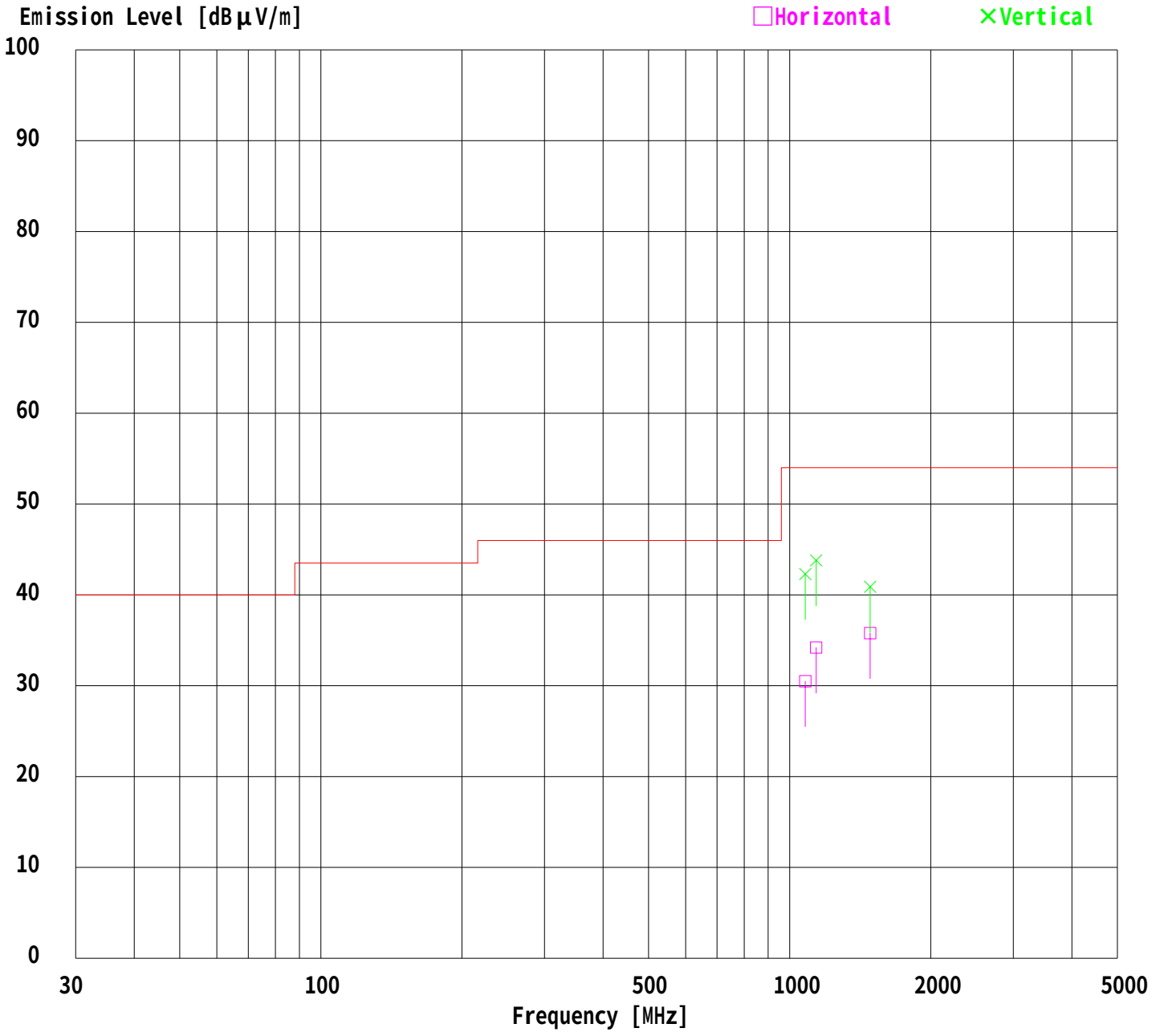
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

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

DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: A120V/60Hz		
Mode	: TV Reception + Rec		
Remarks	: 25dBmV		
Date	: 2/22/2005		
Test Distance	: 3 m		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 43 %		
Regulation	: FCC Part15B CLASS B(Average Limit / Upper1GHz)		



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant : **Orion Electric Co., Ltd.**
Kind of Equipment : **DVD-Multi/VCR**
Model No. : **D-VR4SU**
Serial No. : **-**
Power : **A120V/60Hz**
Mode : **TV Reception + Rec**
Remarks : **25dBmV**
Date : **2/22/2005**
Test Distance : **3 m**
Temperature : **21 ℃** **Engineer : Tsubasa Takayama**
Humidity : **43 %**
Regulation : **FCC Part15B CLASS B(Peak Limit / Upper1GHz)**

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	1080.00	BB	52.7	63.1	25.3	40.0	3.4	0.0	41.4	51.8	74.0	32.6	22.2
2.	1138.83	BB	52.5	58.2	25.6	39.9	3.5	0.0	41.7	47.4	74.0	32.3	26.6
3.	1485.00	BB	51.2	55.9	27.2	39.3	4.1	0.0	43.2	47.9	74.0	30.8	26.1

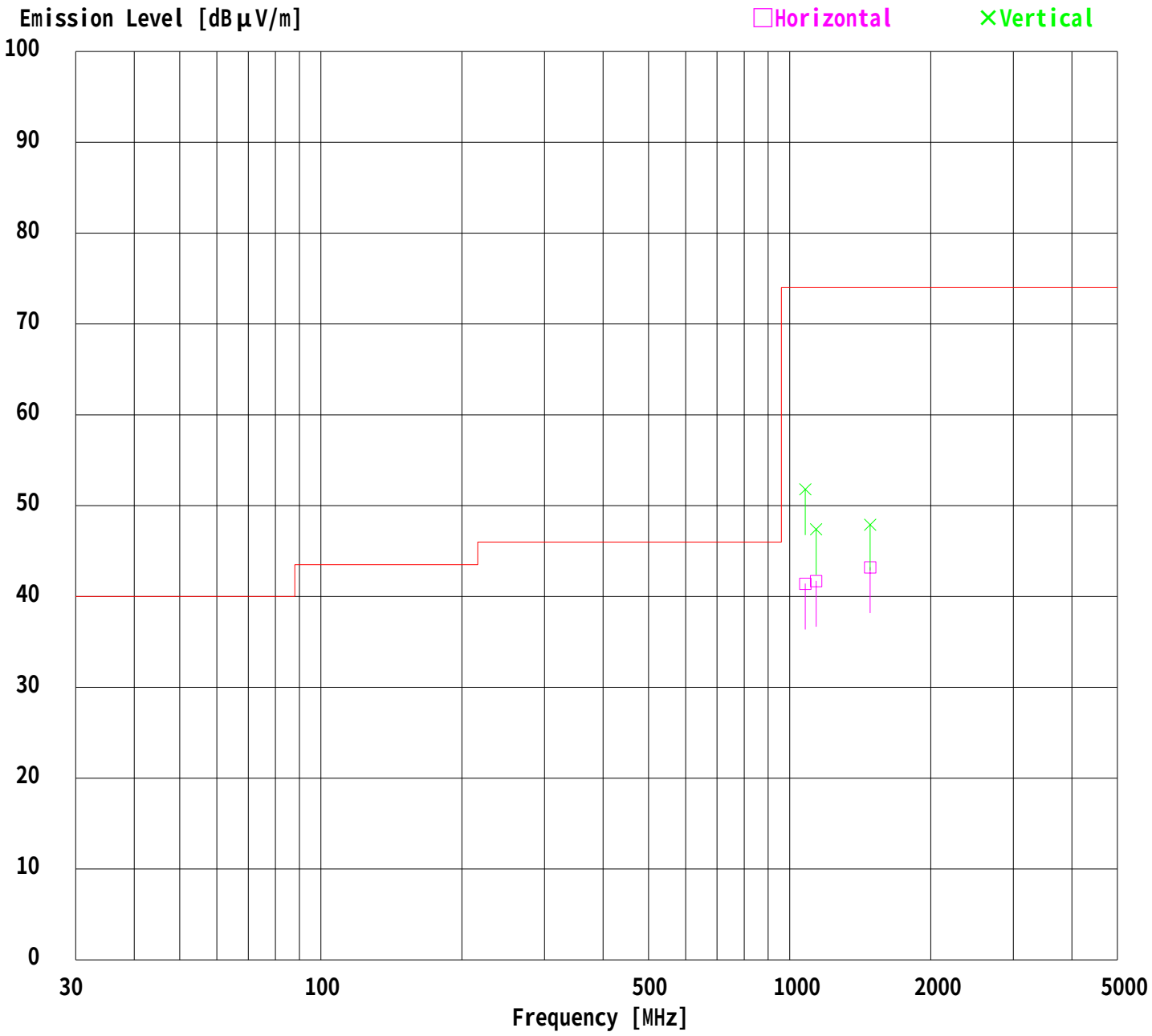
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

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

DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: A120V/60Hz		
Mode	: TV Reception + Rec		
Remarks	: 25dBmV		
Date	: 2/22/2005		
Test Distance	: 3 m		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 43 %		
Regulation	: FCC Part15B CLASS B(Peak Limit / Upper1GHz)		



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant : **Orion Electric Co., Ltd.**
Kind of Equipment : **DVD-Multi/VCR**
Model No. : **D-VR4SU**
Serial No. : **-**
Power : **AC120V/60Hz**
Mode : **AV Input 1 + Rec**
Remarks : **5Vp-p**
Date : **2/22/2005**
Test Distance : **3 m**
Temperature : **21 ℃** **Engineer : Tsubasa Takayama**
Humidity : **43 %**
Regulation : **FCC Part15B CLASS B**

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	569.31	BB	33.6	37.0	18.7	30.0	6.3	6.0	34.6	38.0	46.0	11.4	8.0

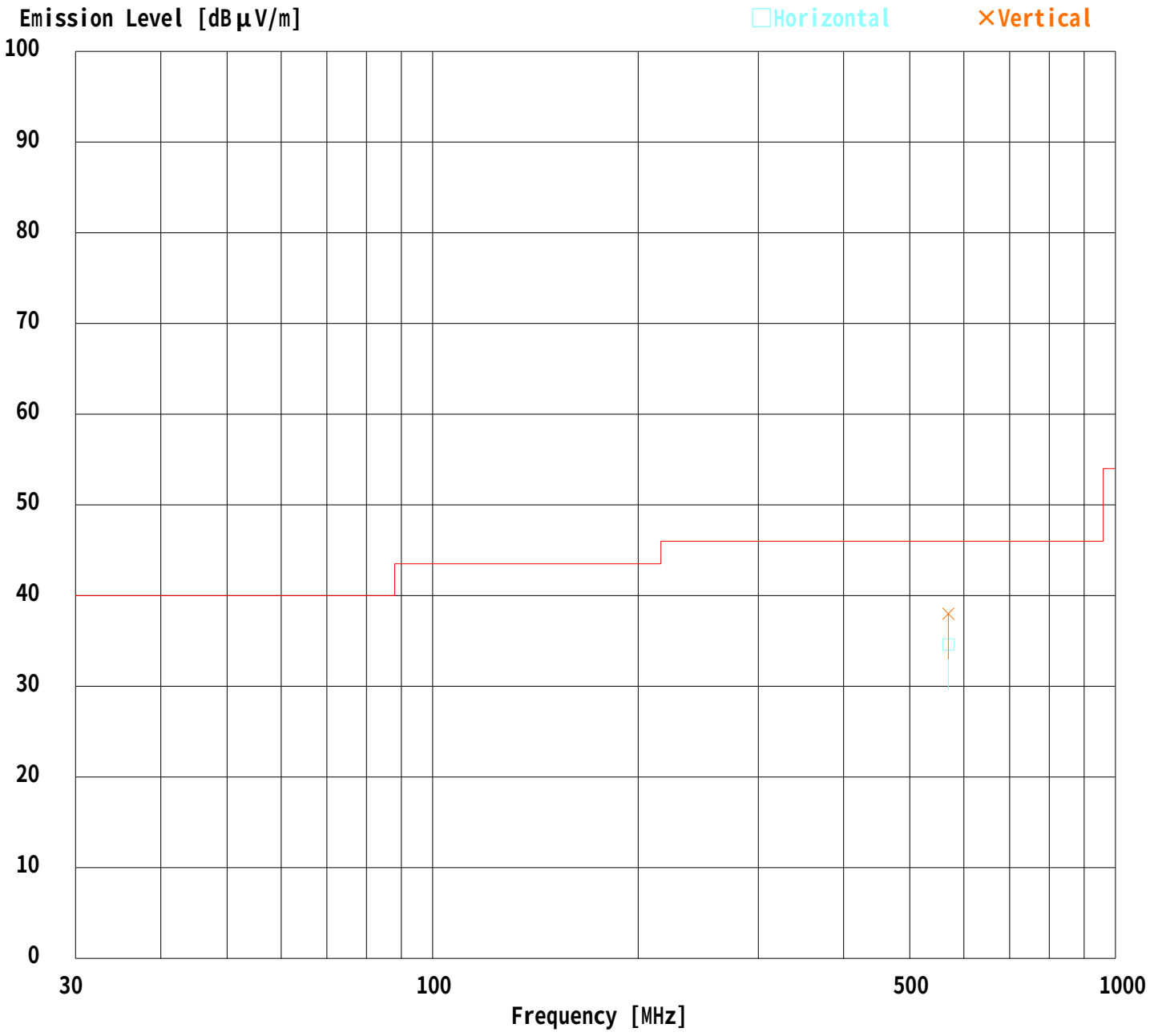
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

Expect 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.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: AV Input 1 + Rec		
Remarks	: 5Vp-p		
Date	: 2/22/2005		
Test Distance	: 3 m		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 43 %		
Regulation	: FCC Part15B CLASS B		



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant : **Orion Electric Co., Ltd.**
Kind of Equipment : **DVD-Multi/VCR**
Model No. : **D-VR4SU**
Serial No. : **-**
Power : **AC120V/60Hz**
Mode : **AV Input 1 + Rec**
Remarks : **5Vp-p**
Date : **2/22/2005**
Test Distance : **3 m**
Temperature : **21 ℃** **Engineer : Tsubasa Takayama**
Humidity : **43 %**
Regulation : **FCC Part15B CLASS B**

No.	FREQ.	ANT TYPE	READING HOR	READING VER	ANT FACTOR	AMP GAIN	CABLE LOSS	ATTEN.	RESULT HOR	RESULT VER	LIMITS	MARGIN HOR	MARGIN VER
	[MHz]		[dBμV]		[dB/m]	[dB]	[dB]	[dB]	[dBμV/m]		[dBμV/m]	[dB]	
1.	41.90	BB	26.2	25.9	13.4	29.9	1.5	5.9	17.1	16.8	40.0	22.9	23.2
2.	85.92	BB	42.4	39.3	7.9	29.7	2.1	5.9	28.6	25.5	40.0	11.4	14.5
3.	114.57	BB	35.2	27.9	12.6	29.7	2.4	5.9	26.4	19.1	43.5	17.1	24.4
4.	128.90	BB	33.4	35.8	14.1	29.8	2.6	5.9	26.2	28.6	43.5	17.3	14.9
5.	157.51	BB	35.6	37.8	15.9	29.8	2.9	5.9	30.5	32.7	43.5	13.0	10.8
6.	213.40	BB	27.1	23.0	17.0	29.9	3.4	5.9	23.5	19.4	43.5	20.0	24.1
7.	404.98	BB	28.6	37.6	16.2	30.0	5.1	6.0	25.9	34.9	46.0	20.1	11.1
8.	540.02	BB	35.6	37.0	18.2	30.1	6.1	6.0	35.8	37.2	46.0	10.2	8.8
9.	569.31	BB	33.7	37.2	18.7	30.0	6.3	6.0	34.7	38.2	46.0	11.3	7.8
10.	879.32	BB	24.1	29.5	21.7	29.4	8.2	6.0	30.6	36.0	46.0	15.4	10.0

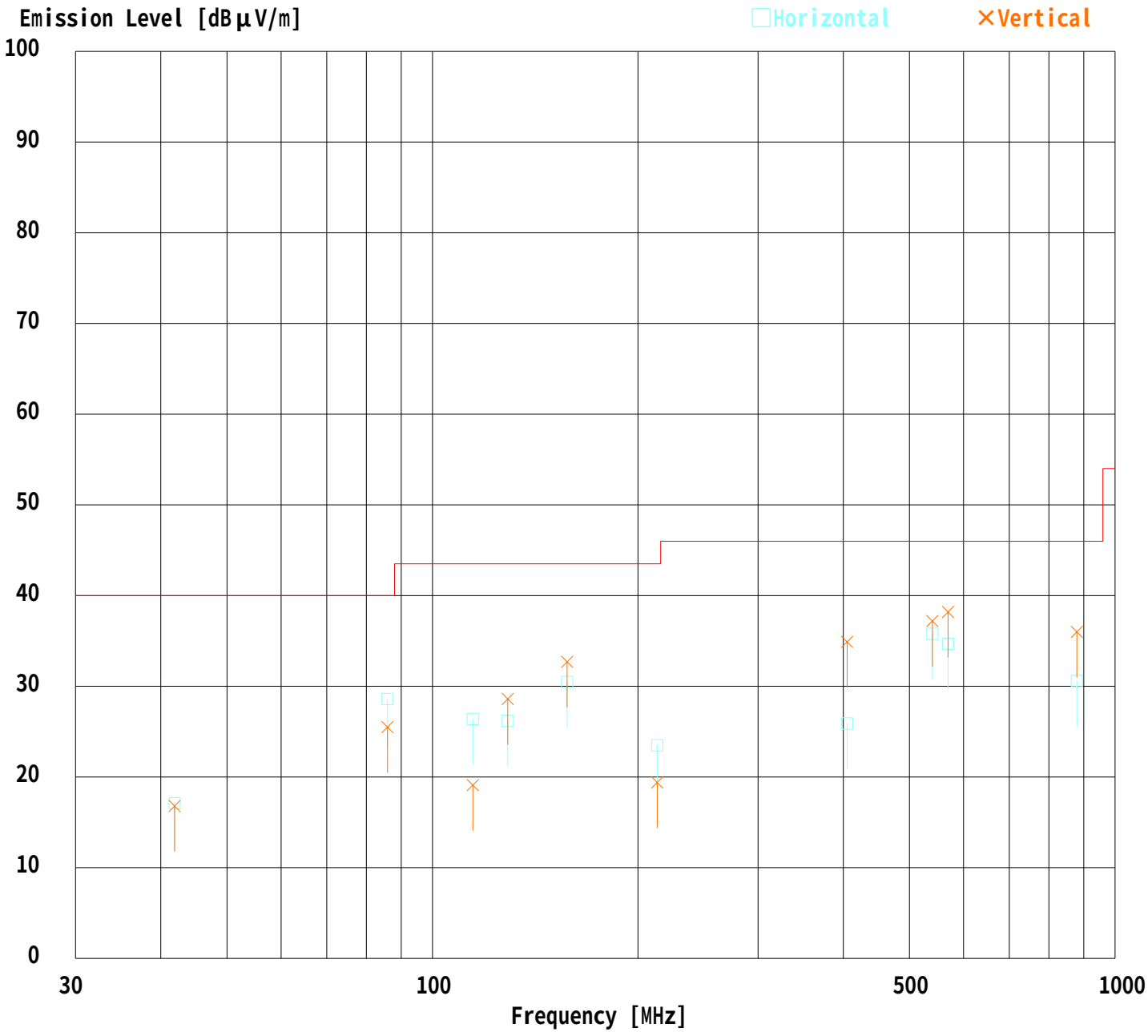
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

Expect 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.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: AV Input 1 + Rec		
Remarks	: 5Vp-p		
Date	: 2/22/2005		
Test Distance	: 3 m		
Temperature	: 21 °C	Engineer	: Tsubasa Takayama
Humidity	: 43 %		
Regulation	: FCC Part15B CLASS B		



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant : **Orion Electric Co., Ltd.**
Kind of Equipment : **DVD-Multi/VCR**
Model No. : **D-VR4SU**
Serial No. : **-**
Power : **A120V/60Hz**
Mode : **AV Input 1 + Rec**
Remarks : **5V p-p**
Date : **2/22/2005**
Test Distance : **3 m**
Temperature : **21 ℃** **Engineer : Tsubasa Takayama**
Humidity : **43 %**
Regulation : **FCC Part15B CLASS B(Average Limit / Upper1GHz)**

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	1080.00	BB	40.9	52.8	25.3	40.0	3.4	0.0	29.6	41.5	54.0	24.4	12.5
2.	1138.83	BB	45.3	54.5	25.6	39.9	3.5	0.0	34.5	43.7	54.0	19.5	10.3
3.	1485.00	BB	43.7	48.3	27.2	39.3	4.1	0.0	35.7	40.3	54.0	18.3	13.7

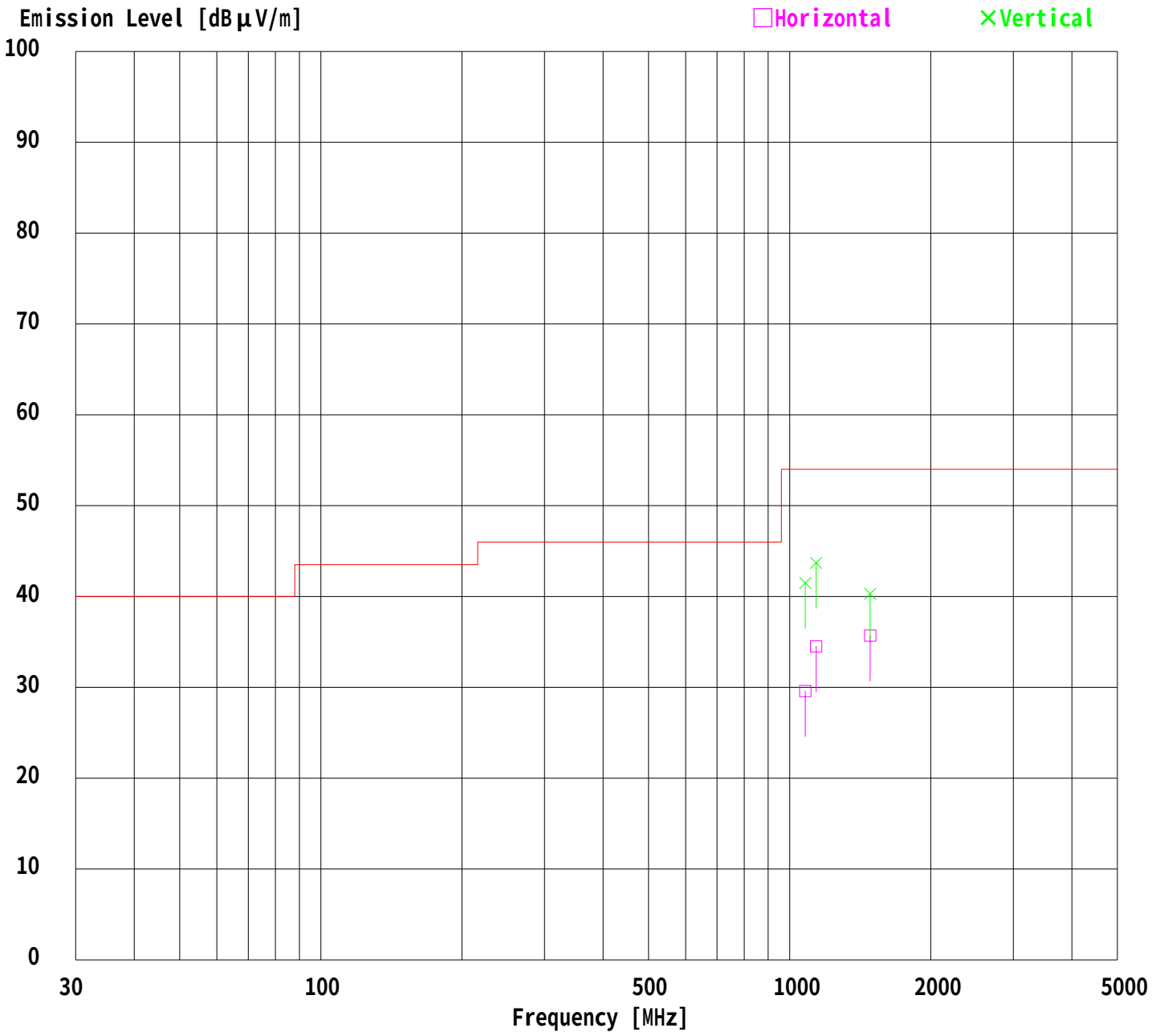
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

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

DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: A120V/60Hz		
Mode	: AV Input 1 + Rec		
Remarks	: 5V p-p		
Date	: 2/22/2005		
Test Distance	: 3 m		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 43 %		
Regulation	: FCC Part15B CLASS B(Average Limit / Upper1GHz)		



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant : **Orion Electric Co., Ltd.**
Kind of Equipment : **DVD-Multi/VCR**
Model No. : **D-VR4SU**
Serial No. : **-**
Power : **A120V/60Hz**
Mode : **AV Input 1 + Rec**
Remarks : **5V p-p**
Date : **2/22/2005**
Test Distance : **3 m**
Temperature : **21 ℃** **Engineer : Tsubasa Takayama**
Humidity : **43 %**
Regulation : **FCC Part15B CLASS B(Peak Limit / Upper1GHz)**

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	1080.00	BB	51.9	62.3	25.3	40.0	3.4	0.0	40.6	51.0	74.0	33.4	23.0
2.	1138.83	BB	51.9	58.5	25.6	39.9	3.5	0.0	41.1	47.7	74.0	32.9	26.3
3.	1485.00	BB	50.9	56.1	27.2	39.3	4.1	0.0	42.9	48.1	74.0	31.1	25.9

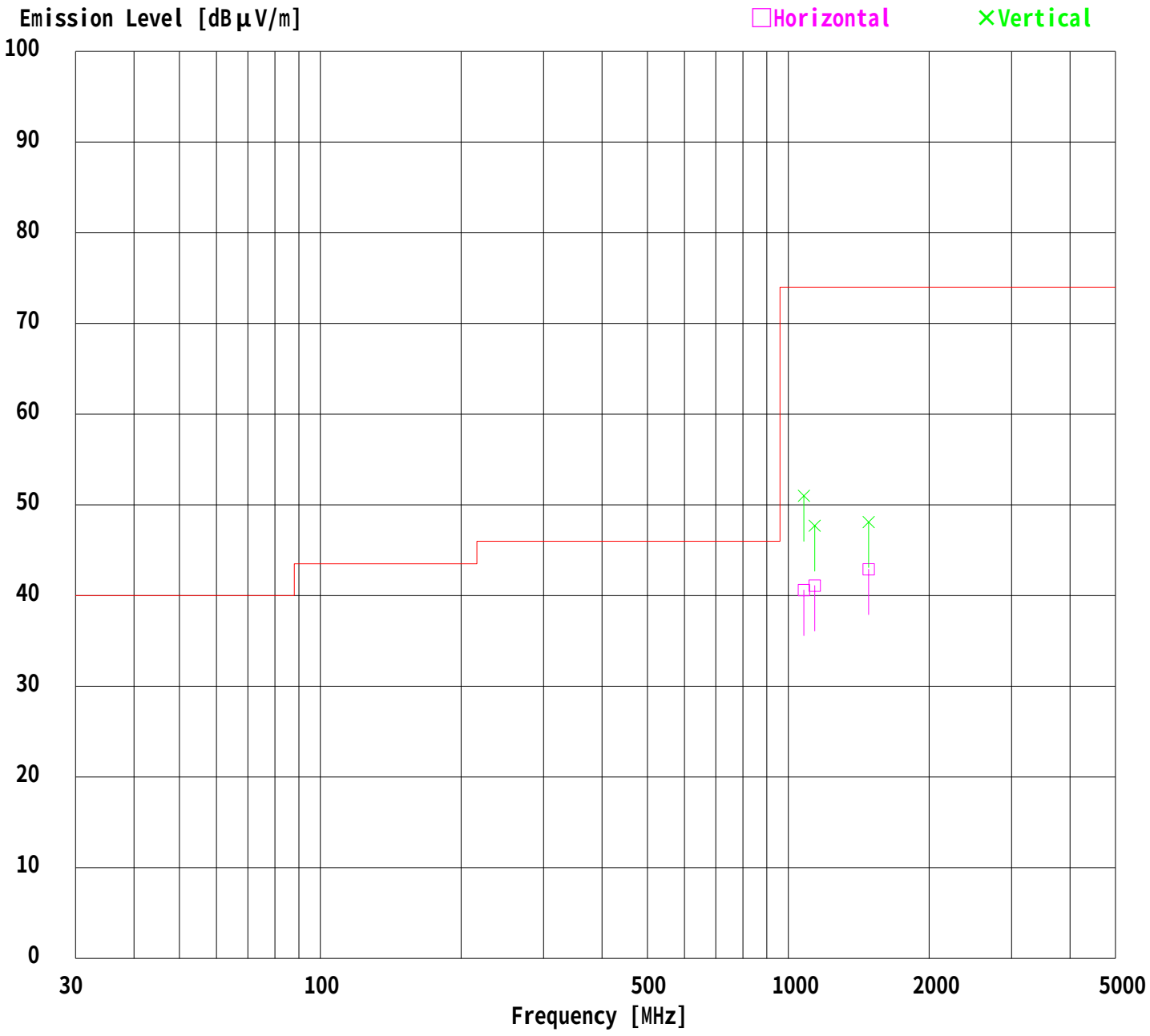
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

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

DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: A120V/60Hz		
Mode	: AV Input 1 + Rec		
Remarks	: 5V p-p		
Date	: 2/22/2005		
Test Distance	: 3 m		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 43 %		
Regulation	: FCC Part15B CLASS B(Peak Limit / Upper1GHz)		



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant : **Orion Electric Co., Ltd.**
Kind of Equipment : **DVD-Multi/VCR**
Model No. : **D-VR4SU**
Serial No. : **-**
Power : **AC120V/60Hz**
Mode : **AV Input 2 + Rec**
Remarks : **1Vp-p**
Date : **2/22/2005**
Test Distance : **3 m**
Temperature : **21 ℃** **Engineer : Tsubasa Takayama**
Humidity : **43 %**
Regulation : **FCC Part15B CLASS B**

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	569.32	BB	32.9	36.6	18.7	30.0	6.3	6.0	33.9	37.6	46.0	12.1	8.4

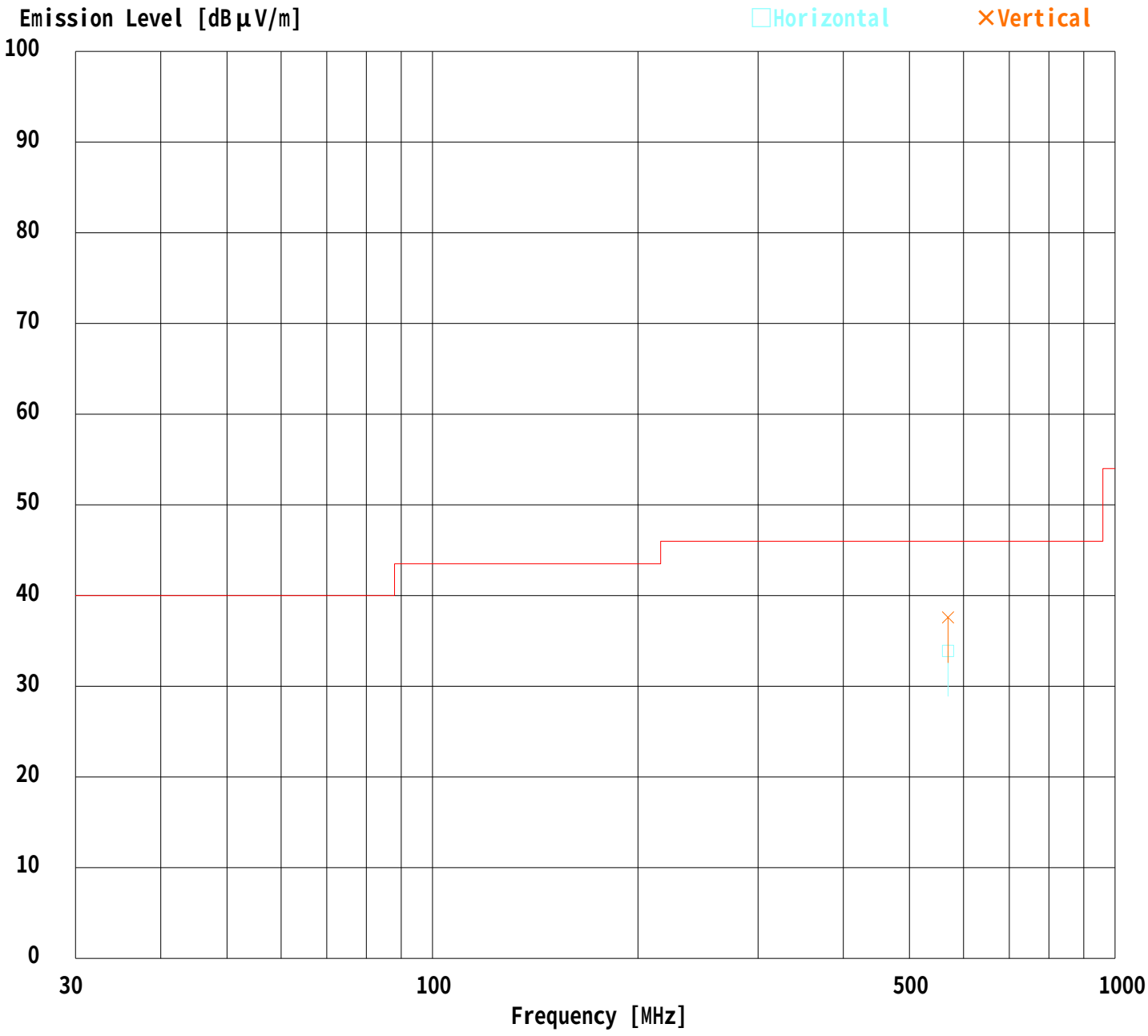
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

Expect 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.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: AV Input 2 + Rec		
Remarks	: 1Vp-p		
Date	: 2/22/2005		
Test Distance	: 3 m		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 43 %		
Regulation	: FCC Part15B CLASS B		



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant : **Orion Electric Co., Ltd.**
Kind of Equipment : **DVD-Multi/VCR**
Model No. : **D-VR4SU**
Serial No. : **-**
Power : **AC120V/60Hz**
Mode : **AV Input 2 + Rec**
Remarks : **5Vp-p**
Date : **2/22/2005**
Test Distance : **3 m**
Temperature : **21 ℃** **Engineer : Tsubasa Takayama**
Humidity : **43 %**
Regulation : **FCC Part15B CLASS B**

No.	FREQ.	ANT TYPE	READING HOR	READING VER	ANT FACTOR	AMP GAIN	CABLE LOSS	ATTEN.	RESULT HOR	RESULT VER	LIMITS	MARGIN HOR	MARGIN VER
	[MHz]		[dBμV]		[dB/m]	[dB]	[dB]	[dB]	[dBμV/m]		[dBμV/m]	[dB]	
1.	41.85	BB	26.7	36.4	13.4	29.9	1.5	5.9	17.6	27.3	40.0	22.4	12.7
2.	85.91	BB	41.1	38.9	7.9	29.7	2.1	5.9	27.3	25.1	40.0	12.7	14.9
3.	114.57	BB	34.2	37.8	12.6	29.7	2.4	5.9	25.4	29.0	43.5	18.1	14.5
4.	128.89	BB	32.1	34.8	14.1	29.8	2.6	5.9	24.9	27.6	43.5	18.6	15.9
5.	157.50	BB	34.1	36.1	15.9	29.8	2.9	5.9	29.0	31.0	43.5	14.5	12.5
6.	213.40	BB	27.1	23.1	17.0	29.9	3.4	5.9	23.5	19.5	43.5	20.0	24.0
7.	405.00	BB	38.7	37.2	16.2	30.0	5.1	6.0	36.0	34.5	46.0	10.0	11.5
8.	540.00	BB	35.2	36.5	18.2	30.1	6.1	6.0	35.4	36.7	46.0	10.6	9.3
9.	569.32	BB	33.4	37.0	18.7	30.0	6.3	6.0	34.4	38.0	46.0	11.6	8.0
10.	879.30	BB	24.1	29.5	21.7	29.4	8.2	6.0	30.6	36.0	46.0	15.4	10.0

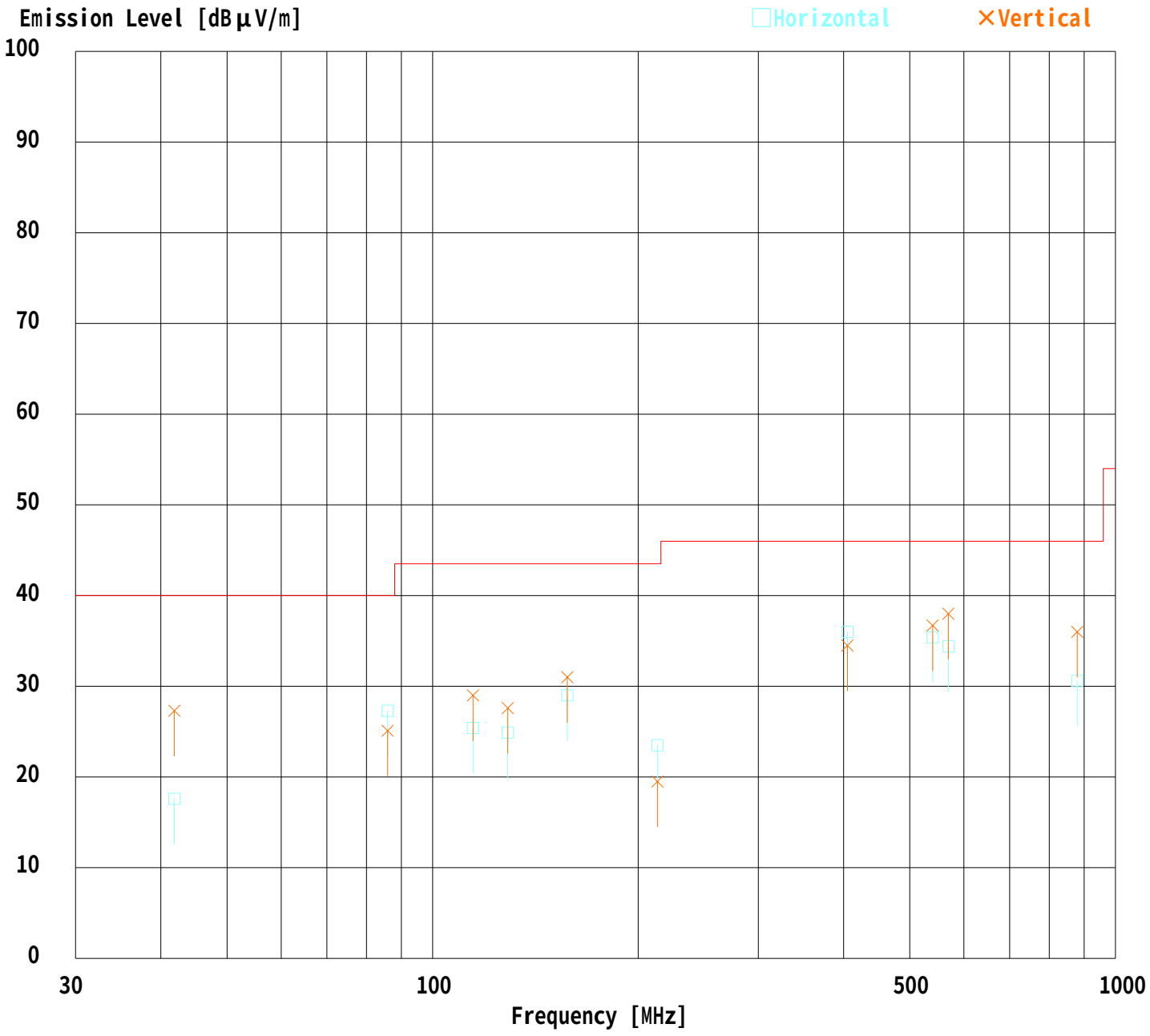
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

Expect 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.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120V/60Hz		
Mode	: AV Input 2 + Rec		
Remarks	: 5Vp-p		
Date	: 2/22/2005		
Test Distance	: 3 m		
Temperature	: 21 °C	Engineer	: Tsubasa Takayama
Humidity	: 43 %		
Regulation	: FCC Part15B CLASS B		



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant : **Orion Electric Co., Ltd.**
Kind of Equipment : **DVD-Multi/VCR**
Model No. : **D-VR4SU**
Serial No. : **-**
Power : **A120V/60Hz**
Mode : **AV Input 2 + Rec**
Remarks : **5Vp-p**
Date : **2/22/2005**
Test Distance : **3 m**
Temperature : **21 ℃** **Engineer : Tsubasa Takayama**
Humidity : **43 %**
Regulation : **FCC Part15B CLASS B(Average Limit / Upper1GHz)**

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	1080.00	BB	41.0	52.7	25.3	40.0	3.4	0.0	29.7	41.4	54.0	24.3	12.6
2.	1138.83	BB	45.2	54.2	25.6	39.9	3.5	0.0	34.4	43.4	54.0	19.6	10.6
3.	1485.00	BB	43.8	48.3	27.2	39.3	4.1	0.0	35.8	40.3	54.0	18.2	13.7

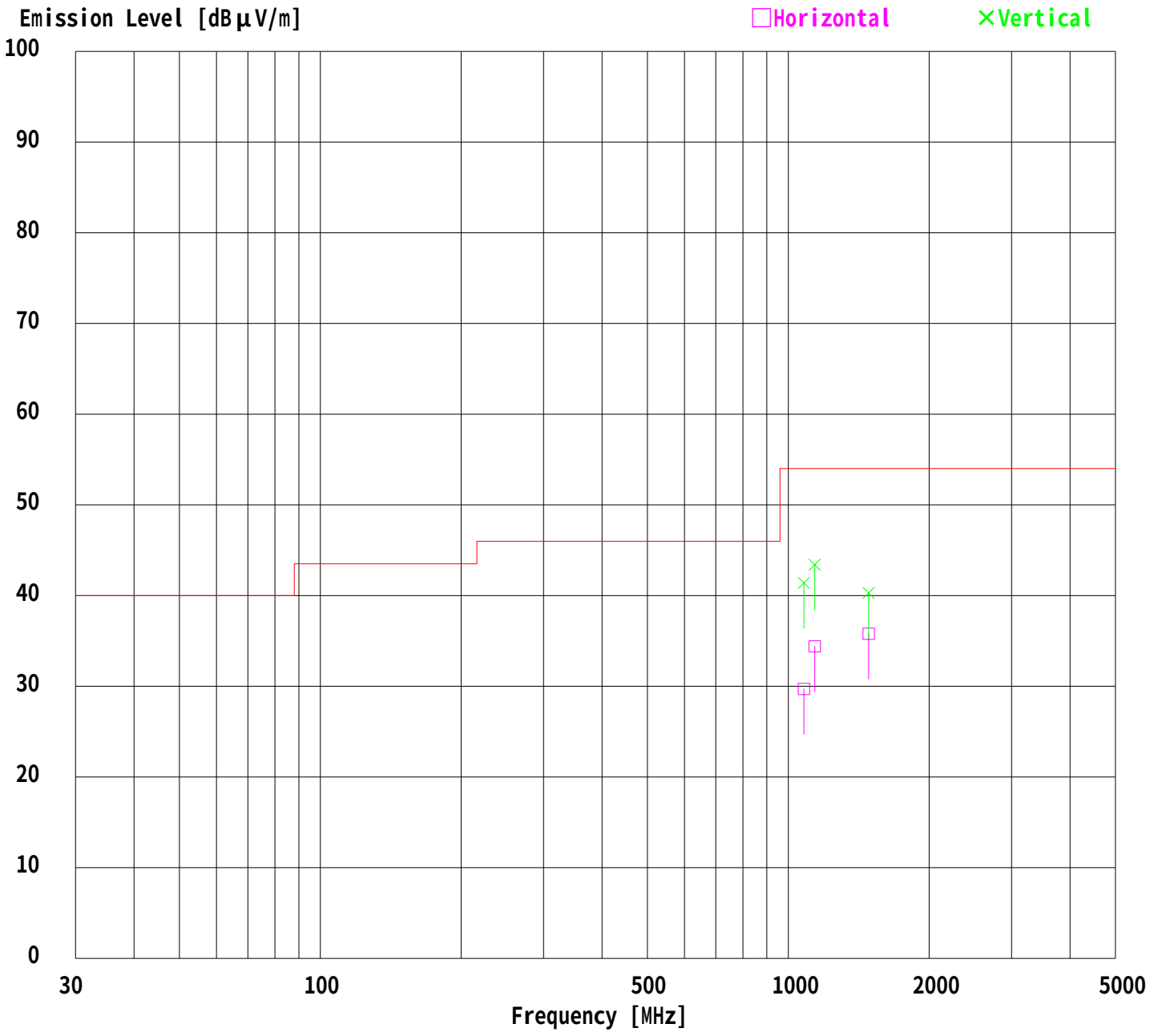
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

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

DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: A120V/60Hz		
Mode	: AV Input 2 + Rec		
Remarks	: 5Vp-p		
Date	: 2/22/2005		
Test Distance	: 3 m		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 43 %		
Regulation	: FCC Part15B CLASS B(Average Limit / Upper1GHz)		



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant : **Orion Electric Co., Ltd.**
Kind of Equipment : **DVD-Multi/VCR**
Model No. : **D-VR4SU**
Serial No. : **-**
Power : **A120V/60Hz**
Mode : **AV Input 2 + Rec**
Remarks : **5Vp-p**
Date : **2/22/2005**
Test Distance : **3 m**
Temperature : **21 ℃** **Engineer : Tsubasa Takayama**
Humidity : **43 %**
Regulation : **FCC Part15B CLASS B(Peak Limit / Upper1GHz)**

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	1080.00	BB	51.9	62.8	25.3	40.0	3.4	0.0	40.6	51.5	74.0	33.4	22.5
2.	1138.83	BB	52.3	58.2	25.6	39.9	3.5	0.0	41.5	47.4	74.0	32.5	26.6
3.	1485.00	BB	51.5	55.6	27.2	39.3	4.1	0.0	43.5	47.6	74.0	30.5	26.4

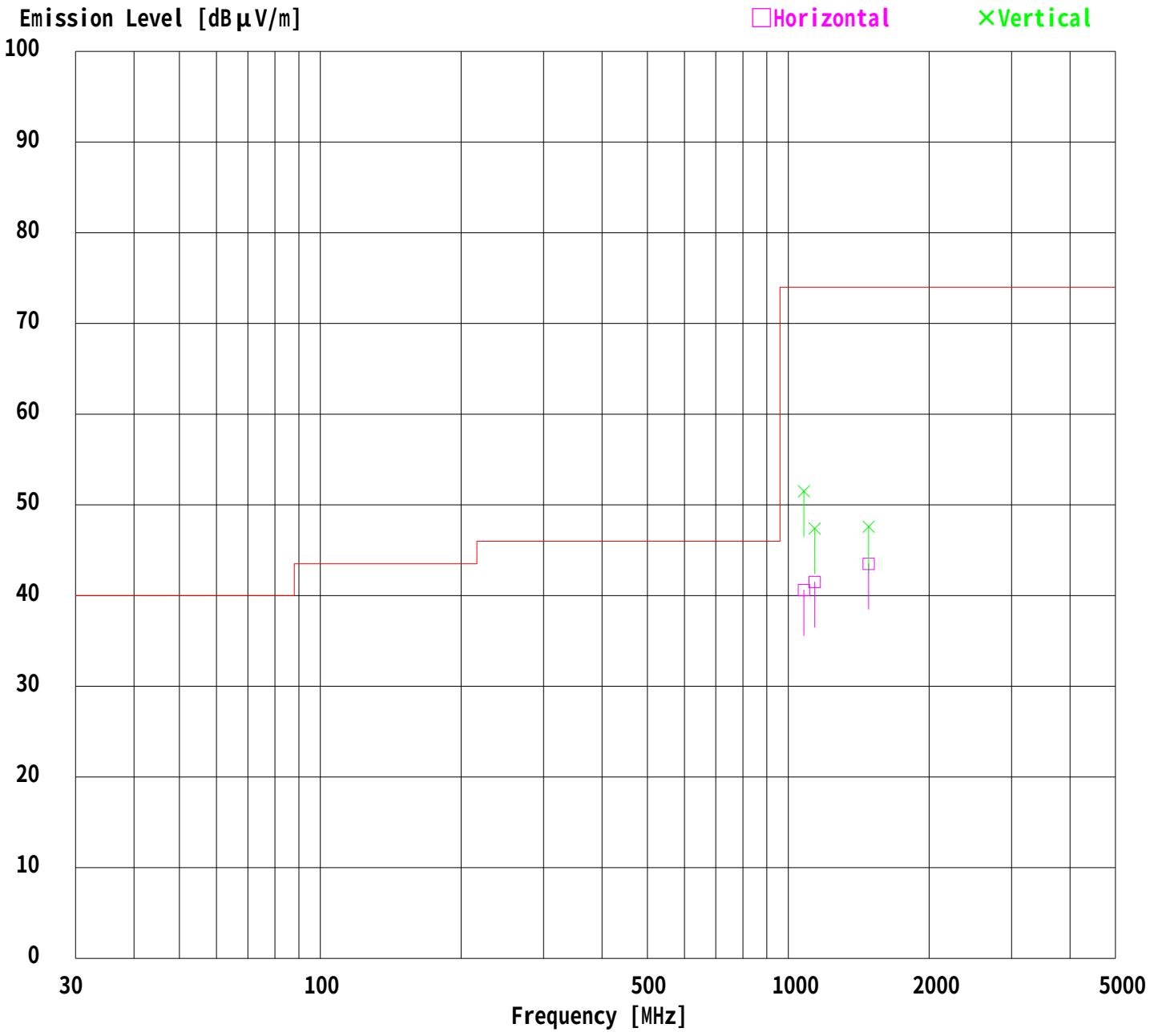
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

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

DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: A120V/60Hz		
Mode	: AV Input 2 + Rec		
Remarks	: 5Vp-p		
Date	: 2/22/2005		
Test Distance	: 3 m		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 43 %		
Regulation	: FCC Part15B CLASS B(Peak Limit / Upper1GHz)		



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant : Orion Electric Co., Ltd.
Kind of Equipment : DVD-Multi/VCR
Model No. : D-VR4SU
Serial No. : -
Power : A120V/60Hz
Mode : VCR Playback + Rec
Remarks : -
Date : 2/22/2005
Test Distance : 3 m
Temperature : 21 ℃ **Engineer : Tsubasa Takayama**
Humidity : 43 %
Regulation : FCC Part15B CLASS B

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	59.01	BB	26.0	33.0	8.8	29.8	1.8	5.9	12.7	19.7	40.0	27.3	20.3
2.	71.61	BB	45.4	41.3	6.9	29.8	2.0	5.9	30.4	26.3	40.0	9.6	13.7
3.	85.91	BB	43.3	38.3	7.9	29.7	2.1	5.9	29.5	24.5	40.0	10.5	15.5
4.	114.57	BB	41.1	34.6	12.6	29.7	2.4	5.9	32.3	25.8	43.5	11.2	17.7
5.	128.89	BB	41.1	34.6	14.1	29.8	2.6	5.9	33.9	27.4	43.5	9.6	16.1
6.	157.50	BB	28.4	30.3	15.9	29.8	2.9	5.9	23.3	25.2	43.5	20.2	18.3
7.	186.14	BB	35.8	31.0	16.9	29.9	3.2	5.9	31.9	27.1	43.5	11.6	16.4
8.	212.47	BB	29.0	26.0	17.0	29.9	3.4	5.9	25.4	22.4	43.5	18.1	21.1
9.	216.00	BB	34.2	26.2	17.0	29.9	3.5	5.9	30.7	22.7	43.5	12.8	20.8
10.	231.42	BB	36.0	26.2	17.1	29.9	3.6	5.9	32.7	22.9	46.0	13.3	23.1
11.	405.00	BB	36.5	35.2	16.2	30.0	5.1	6.0	33.8	32.5	46.0	12.2	13.5
12.	540.00	BB	31.1	35.8	18.2	30.1	6.1	6.0	31.3	36.0	46.0	14.7	10.0
13.	569.32	BB	32.7	37.2	18.7	30.0	6.3	6.0	33.7	38.2	46.0	12.3	7.8
14.	879.30	BB	23.6	29.4	21.7	29.4	8.2	6.0	30.1	35.9	46.0	15.9	10.1
15.	945.00	BB	26.0	29.4	22.5	28.9	8.6	6.0	34.2	37.6	46.0	11.8	8.4

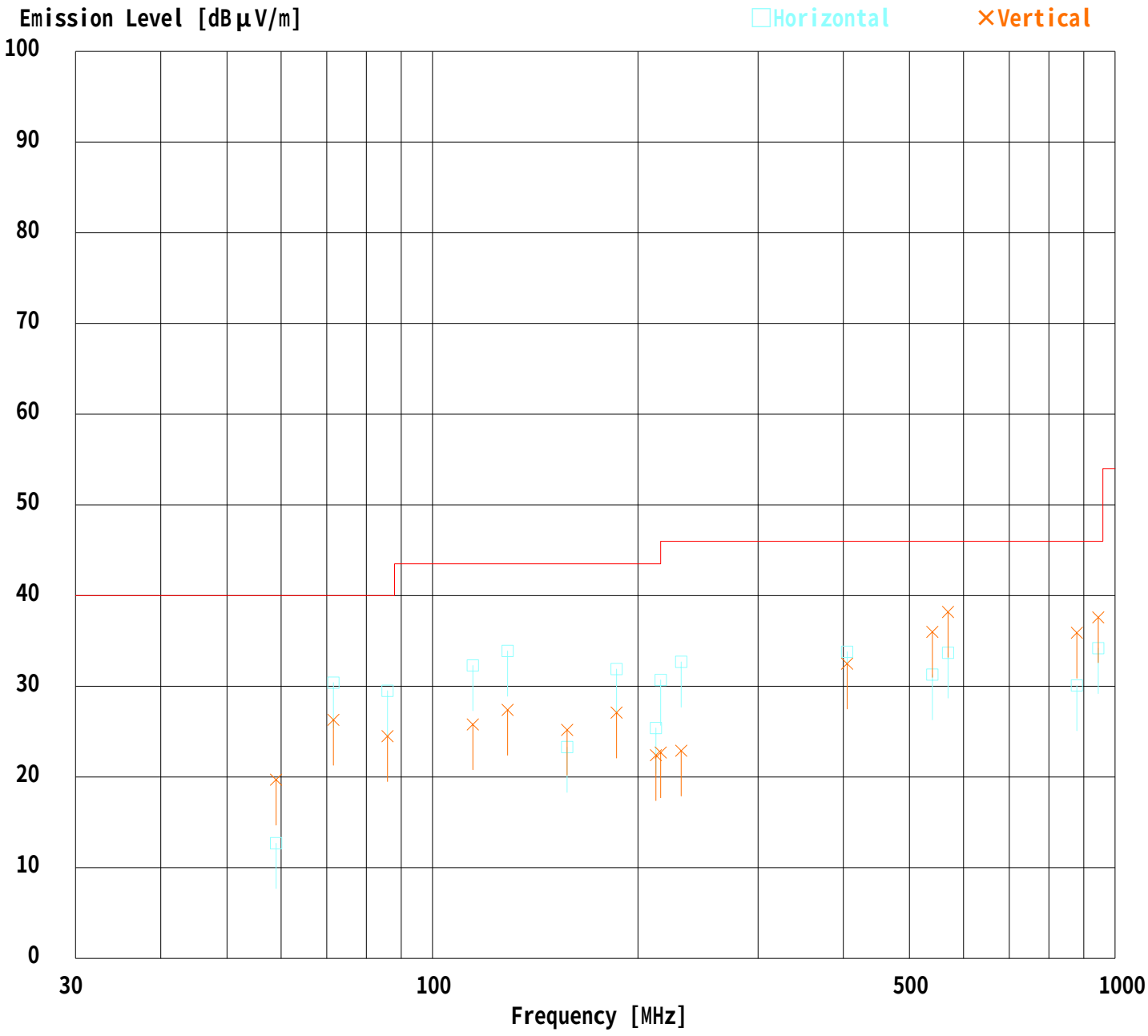
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

Expect 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.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: A120V/60Hz		
Mode	: VCR Playback + Rec		
Remarks	: -		
Date	: 2/22/2005		
Test Distance	: 3 m		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 43 %		
Regulation	: FCC Part15B CLASS B		



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant : **Orion Electric Co., Ltd.**
Kind of Equipment : **DVD-Multi/VCR**
Model No. : **D-VR4SU**
Serial No. : **-**
Power : **A120V/60Hz**
Mode : **VCR Playback + Rec**
Remarks : **-**
Date : **2/22/2005**
Test Distance : **3 m**
Temperature : **21 ℃** **Engineer : Tsubasa Takayama**
Humidity : **43 %**
Regulation : **FCC Part15B CLASS B(Average Limit / Upper1GHz)**

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	1080.00	BB	43.1	52.8	25.3	40.0	3.4	0.0	31.8	41.5	54.0	22.2	12.5
2.	1138.74	BB	46.9	52.5	25.6	39.9	3.5	0.0	36.1	41.7	54.0	17.9	12.3
3.	1485.00	BB	43.0	49.4	27.2	39.3	4.1	0.0	35.0	41.4	54.0	19.0	12.6

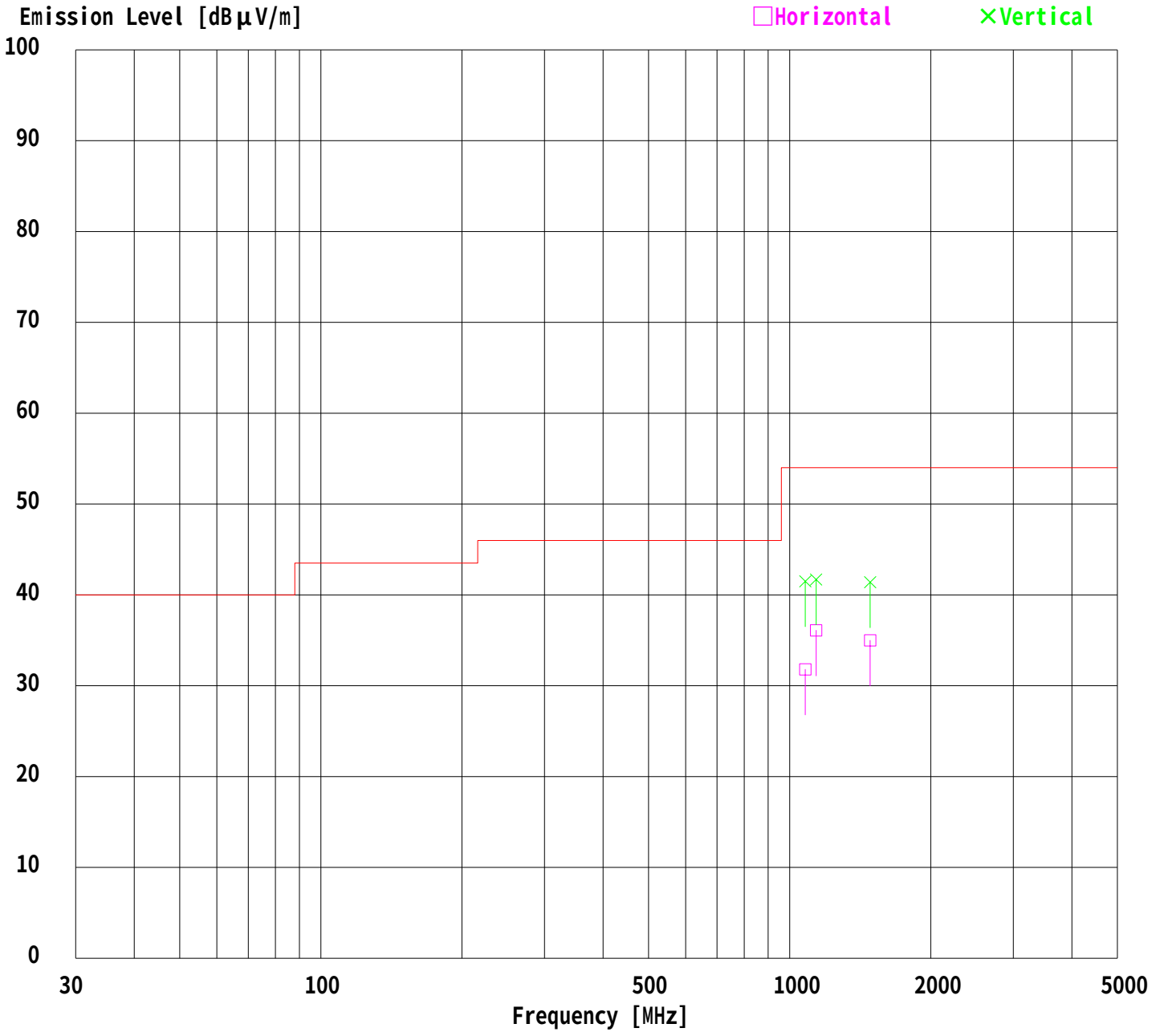
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

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

DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: A120V/60Hz		
Mode	: VCR Playback + Rec		
Remarks	: -		
Date	: 2/22/2005		
Test Distance	: 3 m		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 43 %		
Regulation	: FCC Part15B CLASS B(Average Limit / Upper1GHz)		



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant : **Orion Electric Co., Ltd.**
Kind of Equipment : **DVD-Multi/VCR**
Model No. : **D-VR4SU**
Serial No. : **-**
Power : **A120V/60Hz**
Mode : **VCR Playback + Rec**
Remarks : **-**
Date : **2/22/2005**
Test Distance : **3 m**
Temperature : **21 ℃** **Engineer : Tsubasa Takayama**
Humidity : **43 %**
Regulation : **FCC Part15B CLASS B(Peak Limit / Upper1GHz)**

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	1080.00	BB	52.3	60.1	25.3	40.0	3.4	0.0	41.0	48.8	74.0	33.0	25.2
2.	1138.74	BB	51.3	57.2	25.6	39.9	3.5	0.0	40.5	46.4	74.0	33.5	27.6
3.	1485.00	BB	51.1	56.1	27.2	39.3	4.1	0.0	43.1	48.1	74.0	30.9	25.9

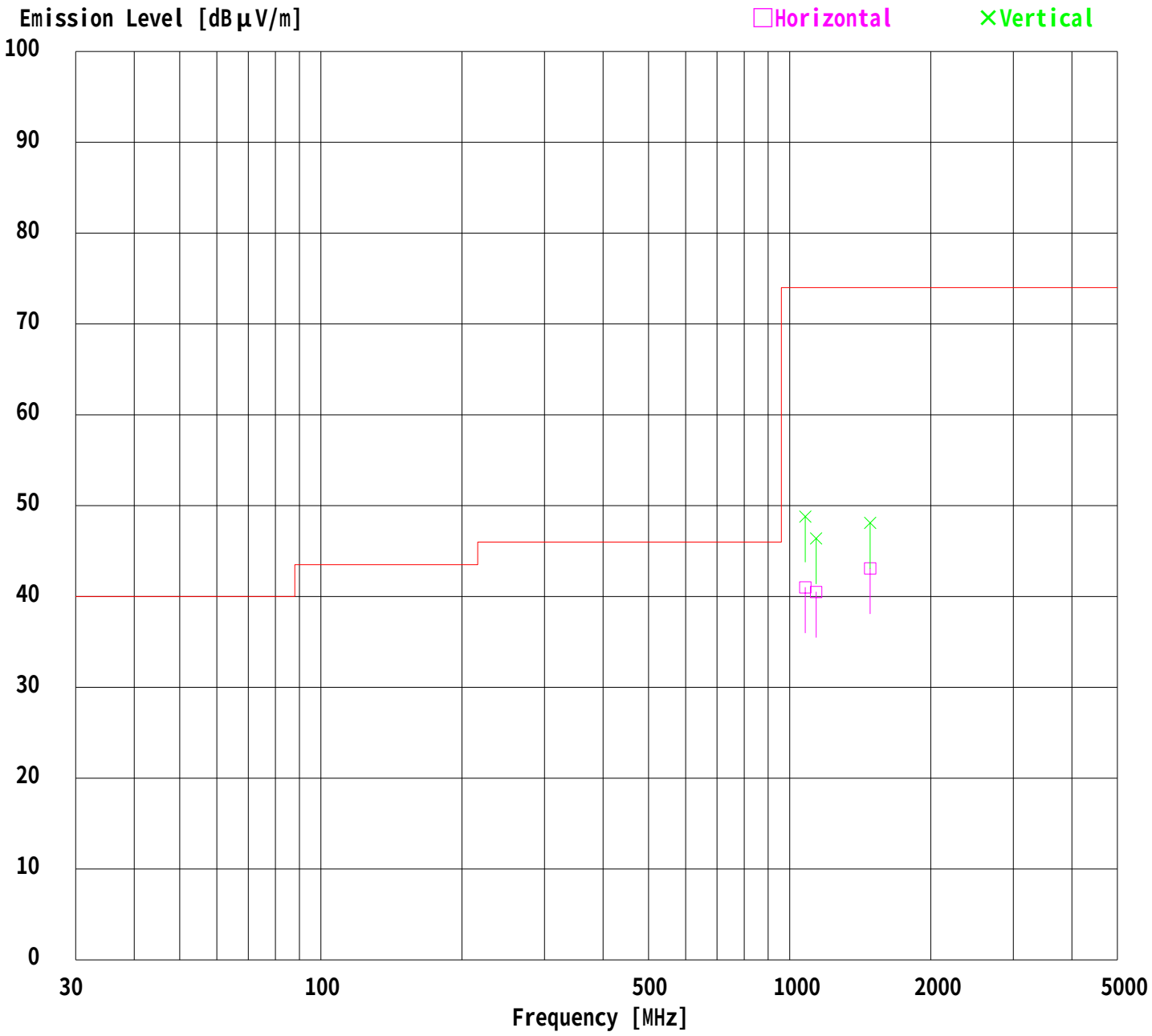
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

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

DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: A120V/60Hz		
Mode	: VCR Playback + Rec		
Remarks	: -		
Date	: 2/22/2005		
Test Distance	: 3 m		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 43 %		
Regulation	: FCC Part15B CLASS B(Peak Limit / Upper1GHz)		



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant : **Orion Electric Co., Ltd.**
Kind of Equipment : **DVD-Multi/VCR**
Model No. : **D-VR4SU**
Serial No. : **-**
Power : **A120V/60Hz**
Mode : **DVD Play + Rec**
Remarks : **-**
Date : **2/22/2005**
Test Distance : **3 m**
Temperature : **21 ℃** **Engineer : Tsubasa Takayama**
Humidity : **43 %**
Regulation : **FCC Part15B CLASS B**

No.	FREQ.	ANT TYPE	READING HOR	READING VER	ANT FACTOR	AMP GAIN	CABLE LOSS	ATTEN.	RESULT HOR	RESULT VER	LIMITS	MARGIN HOR	MARGIN VER
	[MHz]		[dBμV]		[dB/m]	[dB]	[dB]	[dB]	[dBμV/m]		[dBμV/m]	[dB]	
1.	51.57	BB	29.6	33.3	10.5	29.8	1.7	5.9	17.9	21.6	40.0	22.1	18.4
2.	71.61	BB	47.4	42.7	6.9	29.8	2.0	5.9	32.4	27.7	40.0	7.6	12.3
3.	85.91	BB	41.0	37.5	7.9	29.7	2.1	5.9	27.2	23.7	40.0	12.8	16.3
4.	114.57	BB	41.0	41.9	12.6	29.7	2.4	5.9	32.2	33.1	43.5	11.3	10.4
5.	128.89	BB	46.9	48.0	14.1	29.8	2.6	5.9	39.7	40.8	43.5	3.8	2.7
6.	157.50	BB	28.4	32.3	15.9	29.8	2.9	5.9	23.3	27.2	43.5	20.2	16.3
7.	180.00	BB	30.3	33.6	16.8	29.9	3.1	5.9	26.2	29.5	43.5	17.3	14.0
8.	186.14	BB	34.7	30.5	16.9	29.9	3.2	5.9	30.8	26.6	43.5	12.7	16.9
9.	212.87	BB	28.4	23.8	17.0	29.9	3.4	5.9	24.8	20.2	43.5	18.7	23.3
10.	216.00	BB	34.7	26.6	17.0	29.9	3.5	5.9	31.2	23.1	43.5	12.3	20.4
11.	231.42	BB	34.9	25.0	17.1	29.9	3.6	5.9	31.6	21.7	46.0	14.4	24.3
12.	405.00	BB	35.9	32.9	16.2	30.0	5.1	6.0	33.2	30.2	46.0	12.8	15.8
13.	540.00	BB	32.7	35.6	18.2	30.1	6.1	6.0	32.9	35.8	46.0	13.1	10.2
14.	569.32	BB	31.2	35.4	18.7	30.0	6.3	6.0	32.2	36.4	46.0	13.8	9.6
15.	879.30	BB	24.0	29.0	21.7	29.4	8.2	6.0	30.5	35.5	46.0	15.5	10.5
16.	945.00	BB	24.9	28.1	22.5	28.9	8.6	6.0	33.1	36.3	46.0	12.9	9.7

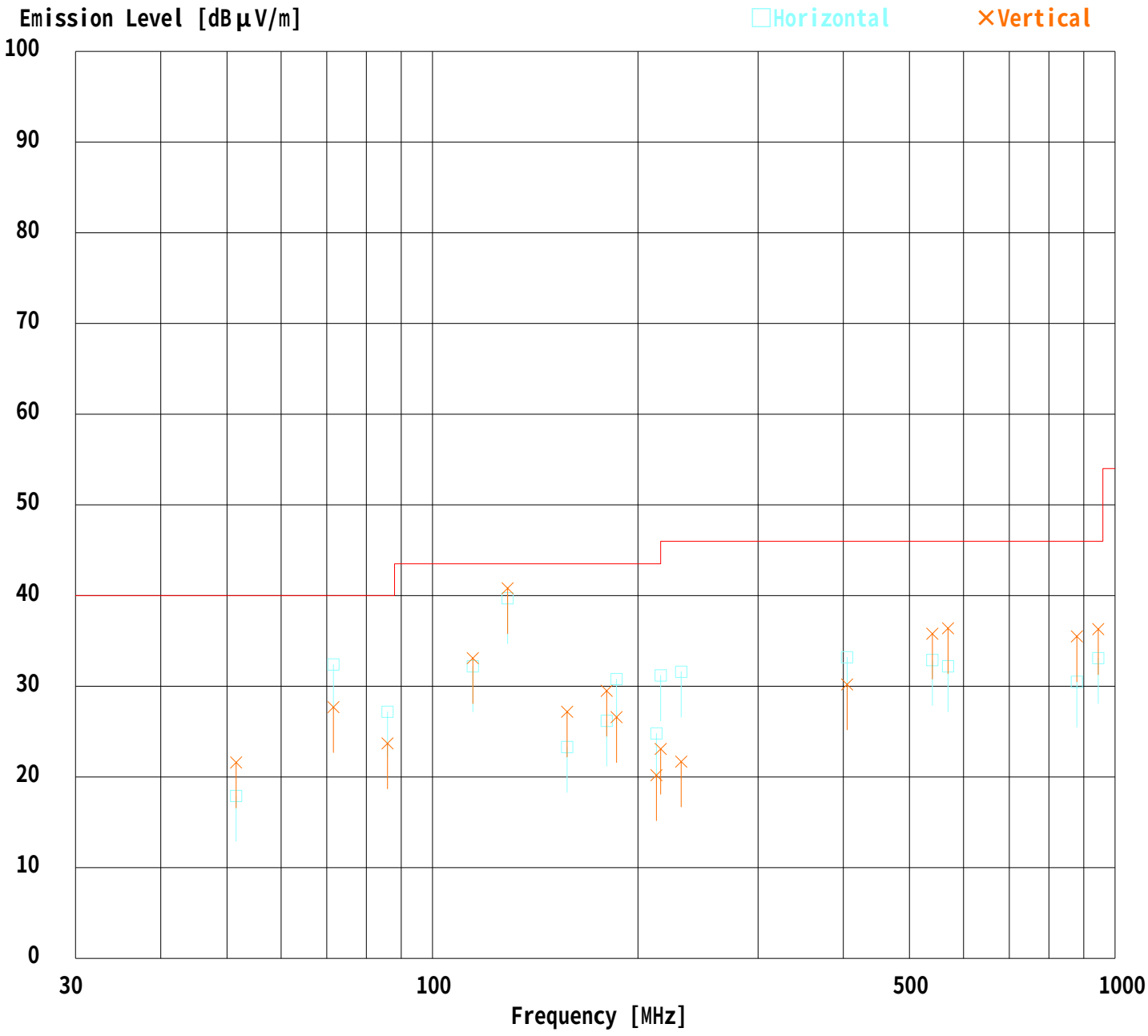
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

Expect 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.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: A120V/60Hz		
Mode	: DVD Play + Rec		
Remarks	: -		
Date	: 2/22/2005		
Test Distance	: 3 m		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 43 %		
Regulation	: FCC Part15B CLASS B		



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant : **Orion Electric Co., Ltd.**
Kind of Equipment : **DVD-Multi/VCR**
Model No. : **D-VR4SU**
Serial No. : **-**
Power : **A120V/60Hz**
Mode : **DVD Play + Rec**
Remarks : **-**
Date : **2/22/2005**
Test Distance : **3 m**
Temperature : **21 ℃** **Engineer : Tsubasa Takayama**
Humidity : **43 %**
Regulation : **FCC Part15B CLASS B(Average Limit / Upper1GHz)**

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	1080.00	BB	44.9	54.4	25.3	40.0	3.4	0.0	33.6	43.1	54.0	20.4	10.9
2.	1234.18	BB	44.8	47.2	26.0	39.7	3.6	0.0	34.7	37.1	54.0	19.3	16.9
3.	1485.00	BB	44.4	50.1	27.2	39.3	4.1	0.0	36.4	42.1	54.0	17.6	11.9

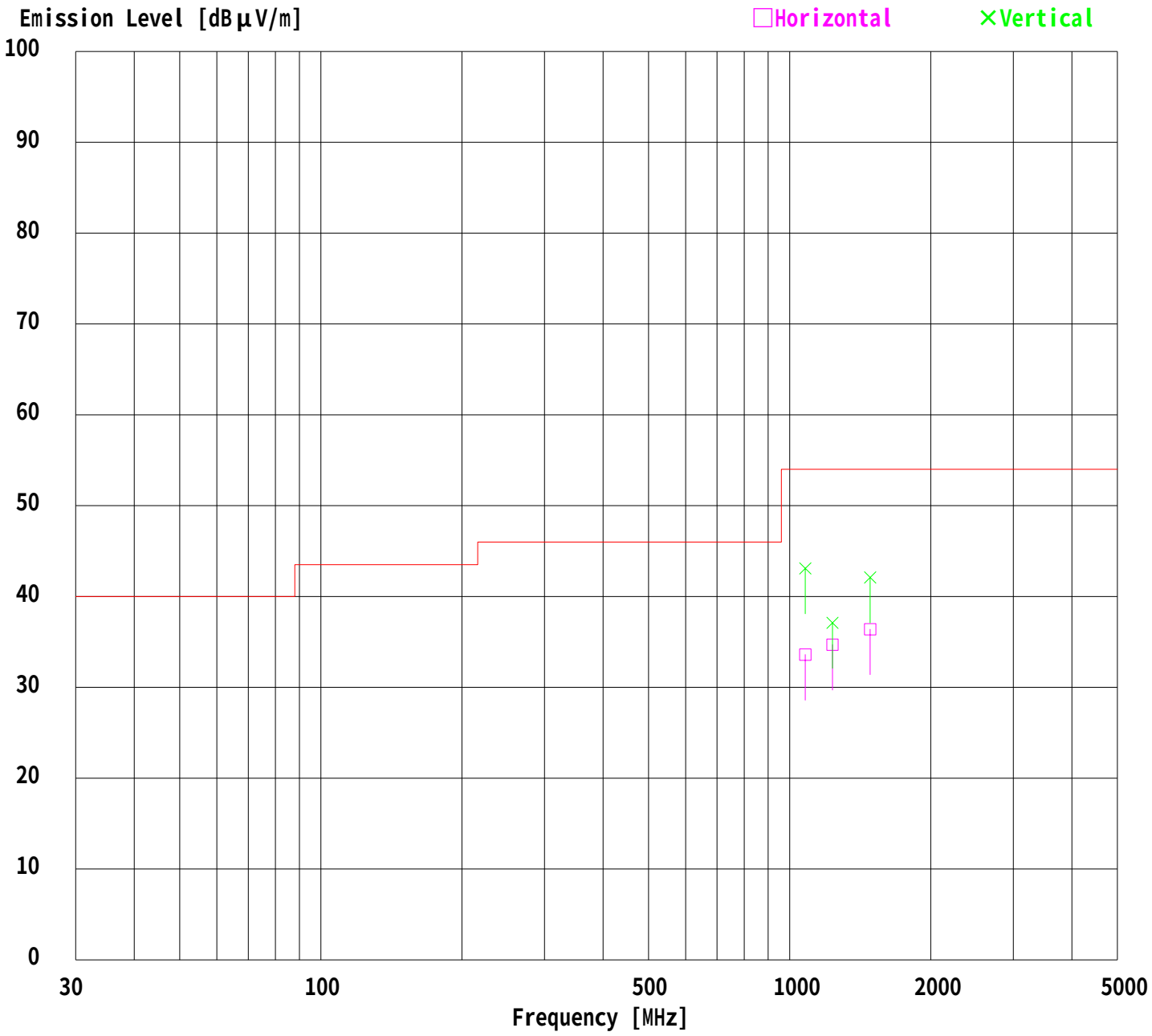
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

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

DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: A120V/60Hz		
Mode	: DVD Play + Rec		
Remarks	: -		
Date	: 2/22/2005		
Test Distance	: 3 m		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 43 %		
Regulation	: FCC Part15B CLASS B(Average Limit / Upper1GHz)		



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant : **Orion Electric Co., Ltd.**
Kind of Equipment : **DVD-Multi/VCR**
Model No. : **D-VR4SU**
Serial No. : **-**
Power : **A120V/60Hz**
Mode : **DVD Play + Rec**
Remarks : **-**
Date : **2/22/2005**
Test Distance : **3 m**
Temperature : **21 ℃** **Engineer : Tsubasa Takayama**
Humidity : **43 %**
Regulation : **FCC Part15B CLASS B(Peak Limit / Upper1GHz)**

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	1080.00	BB	54.6	62.7	25.3	40.0	3.4	0.0	43.3	51.4	74.0	30.7	22.6
2.	1234.18	BB	51.9	54.3	26.0	39.7	3.6	0.0	41.8	44.2	74.0	32.2	29.8
3.	1485.00	BB	52.0	58.5	27.2	39.3	4.1	0.0	44.0	50.5	74.0	30.0	23.5

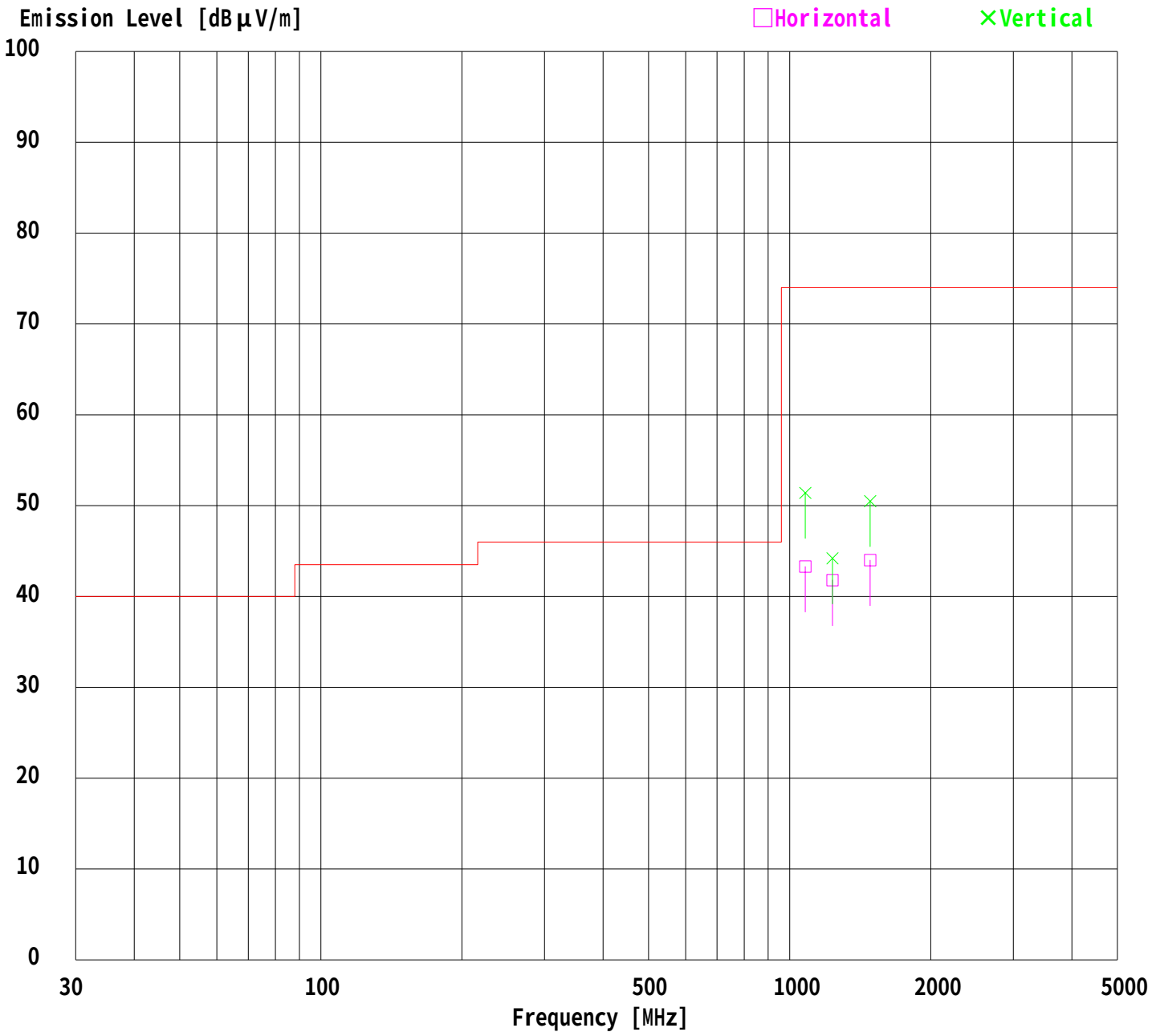
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

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

DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: A120V/60Hz		
Mode	: DVD Play + Rec		
Remarks	: -		
Date	: 2/22/2005		
Test Distance	: 3 m		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 43 %		
Regulation	: FCC Part15B CLASS B(Peak Limit / Upper1GHz)		



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant : **Orion Electric Co., Ltd.**
Kind of Equipment : **DVD-Multi/VCR**
Model No. : **D-VR4SU**
Serial No. : **-**
Power : **AC120/60Hz**
Mode : **DVD Play + Rec**
Remarks : **Test Channel #3**
Date : **2/22/2005**
Test Distance : **3 m**
Temperature : **21 ℃** **Engineer : Tsubasa Takayama**
Humidity : **41 %**
Regulation : **FCC Part15B CLASS B**

No.	FREQ.	ANT TYPE	READING HOR	READING VER	ANT FACTOR	AMP GAIN	CABLE LOSS	ATTEN.	RESULT HOR	RESULT VER	LIMITS	MARGIN HOR	MARGIN VER
	[MHz]		[dBμV]		[dB/m]	[dB]	[dB]	[dB]	[dBμV/m]		[dBμV/m]	[dB]	
1.	61.25	BB	26.7	25.6	8.4	29.8	1.8	5.9	13.0	11.9	40.0	27.0	28.1
2.	65.75	BB	25.6	24.7	7.6	29.8	1.9	5.9	11.2	10.3	40.0	28.8	29.7
3.	122.50	BB	24.9	23.6	13.6	29.7	2.5	5.9	17.2	15.9	43.5	26.3	27.6
4.	245.00	BB	23.4	23.1	17.1	29.9	3.7	5.9	20.2	19.9	46.0	25.8	26.1

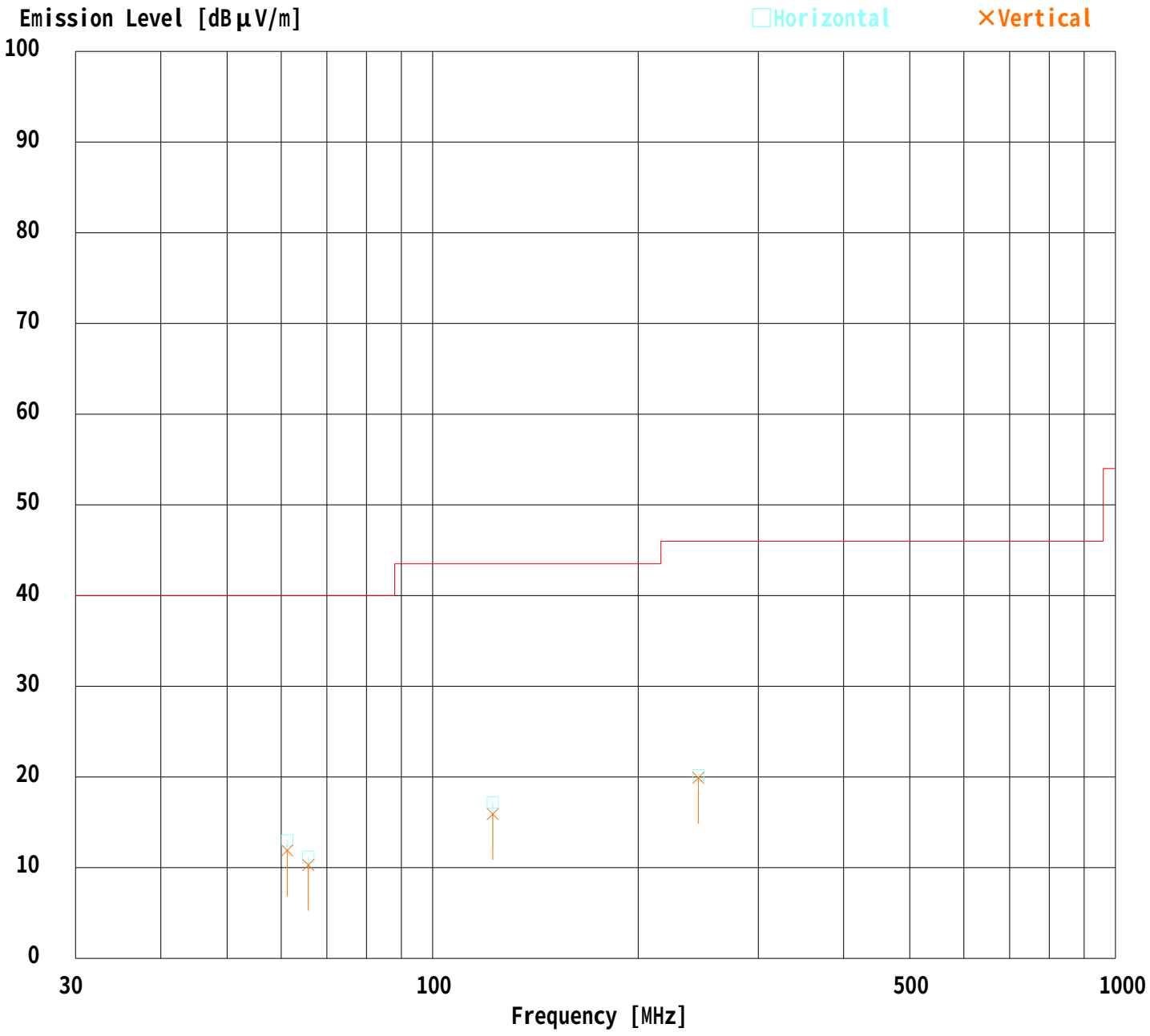
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

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

DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120/60Hz		
Mode	: DVD Play + Rec		
Remarks	: Test Channel #3		
Date	: 2/22/2005		
Test Distance	: 3 m		
Temperature	: 21 ℃	Engineer	: Tsubasa Takayama
Humidity	: 41 %		
Regulation	: FCC Part15B CLASS B		



DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant : **Orion Electric Co., Ltd.**
Kind of Equipment : **DVD-Multi/VCR**
Model No. : **D-VR4SU**
Serial No. : **-**
Power : **AC120/60Hz**
Mode : **DVD Play + Rec**
Remarks : **Test Channel #4**
Date : **2/22/2005**
Test Distance : **3 m**
Temperature : **23 ℃** **Engineer : Tsubasa Takayama**
Humidity : **58 %**
Regulation : **FCC Part15B CLASS B**

No.	FREQ.	ANT TYPE	READING HOR	READING VER	ANT FACTOR	AMP GAIN	CABLE LOSS	ATTEN.	RESULT HOR	RESULT VER	LIMITS	MARGIN HOR	MARGIN VER
	[MHz]		[dBμV]		[dB/m]	[dB]	[dB]	[dB]	[dBμV/m]		[dBμV/m]	[dB]	
1.	67.25	BB	24.3	23.9	7.4	29.8	1.9	5.9	9.7	9.3	40.0	30.3	30.7
2.	71.75	BB	24.5	24.1	6.9	29.8	2.0	5.9	9.5	9.1	40.0	30.5	30.9
3.	134.50	BB	23.4	23.9	14.5	29.8	2.6	5.9	16.6	17.1	43.5	26.9	26.4
4.	201.75	BB	23.1	23.3	17.0	29.9	3.3	5.9	19.4	19.6	43.5	24.1	23.9

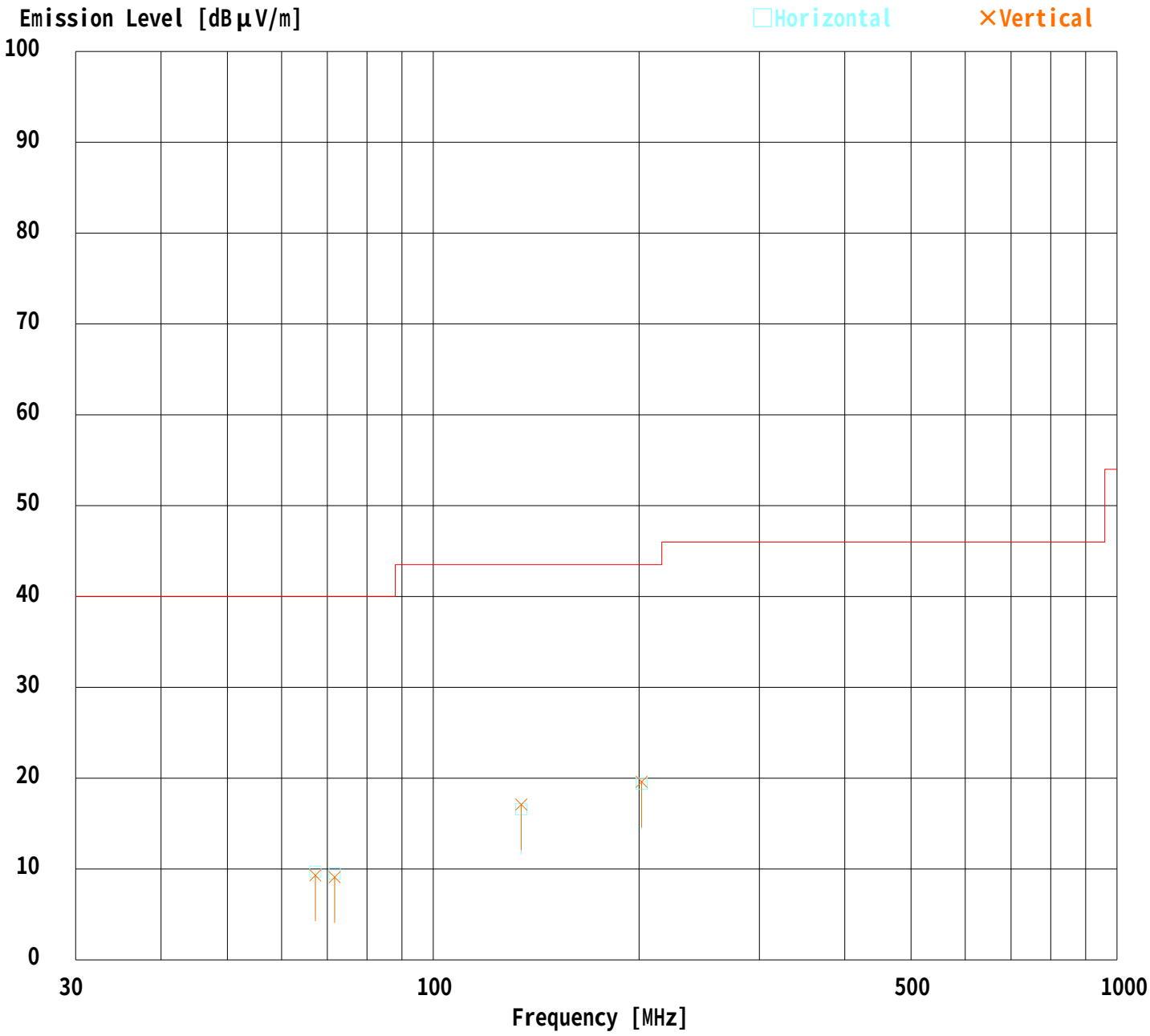
CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

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

DATA OF RADIATION TEST

UL Apex Co., Ltd.
YOKOWA No.2 OPEN TEST SITE
Report No.: 25GE0165-YW-1

Applicant	: Orion Electric Co., Ltd.		
Kind of Equipment	: DVD-Multi/VCR		
Model No.	: D-VR4SU		
Serial No.	: -		
Power	: AC120/60Hz		
Mode	: DVD Play + Rec		
Remarks	: Test Channel #4		
Date	: 2/22/2005		
Test Distance	: 3 m		
Temperature	: 23 ℃	Engineer	: Tsubasa Takayama
Humidity	: 58 %		
Regulation	: FCC Part15B CLASS B		



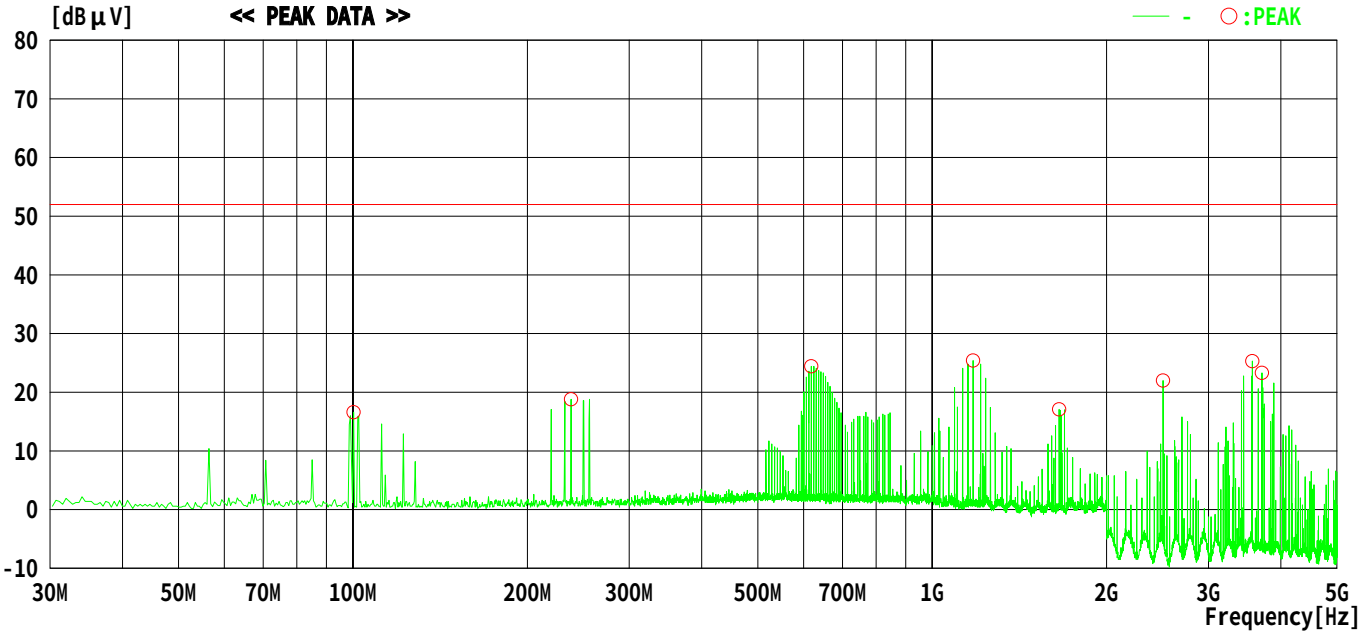
DATA OF ANTENNA TERMINAL TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co.,Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 16,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 SubpartB
OPERATION MODE	: TV Tuning mode	TEST ENGINEER	: Tsubasa Takayama

TEMP./HUMID. : 26°C/68%

LIMIT : FCC 15B ANTENNA TERMINAL



NO	FREQ [MHz]	READING Peak [dBµV]	C.F [dB]	RESULT Peak [dBµV]	LIMIT Peak [dBµV]	LIMIT - [dBµV]	MARGIN [dB]	MARGIN [dB]	PHASE
1	100.24260	37.2	-20.6	16.6	52.0	----	35.4	----	-
2	238.05050	39.2	-20.4	18.8	52.0	----	33.2	----	-
3	618.56780	44.8	-20.4	24.4	52.0	----	27.6	----	-
4	1177.13200	55.8	-30.4	25.4	52.0	----	26.6	----	-
5	1657.13100	47.2	-30.1	17.1	52.0	----	34.9	----	-
6	2504.25300	58.0	-36.0	22.0	52.0	----	30.0	----	-
7	3571.38700	61.5	-36.2	25.3	52.0	----	26.7	----	-
8	3708.52000	59.5	-36.2	23.3	52.0	----	28.7	----	-

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

DATA OF ANTENNA TERMINAL TEST

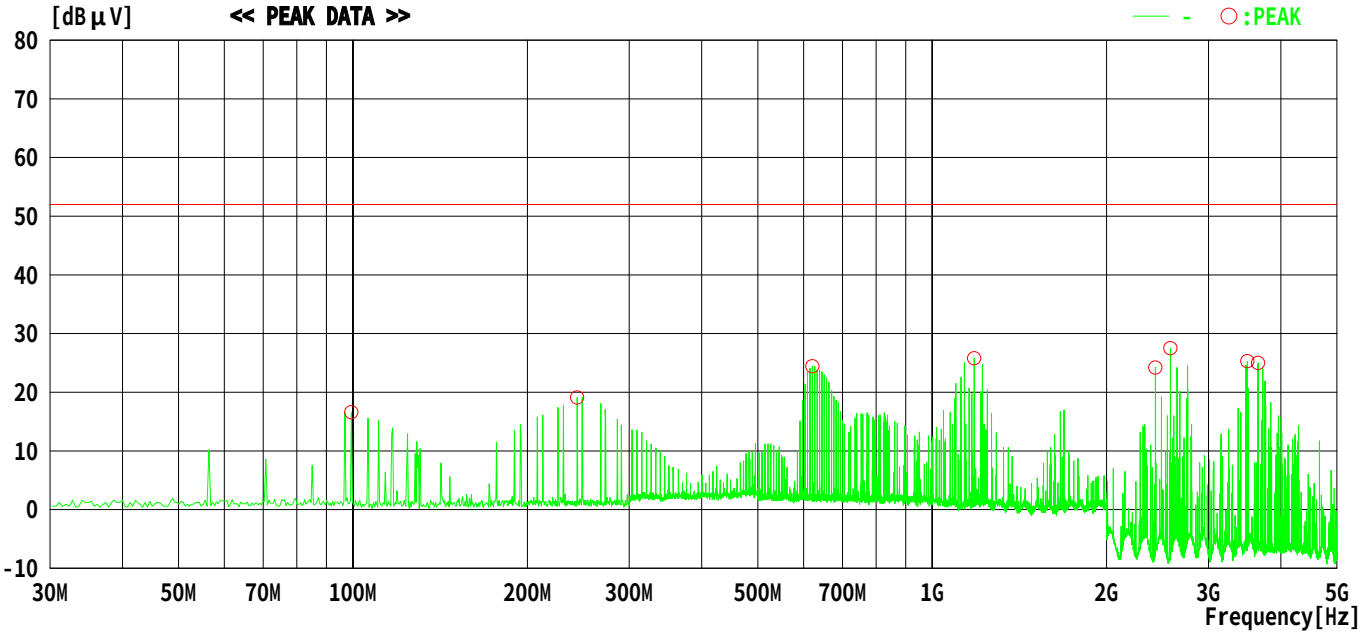
UL Apex Co.,Ltd.

COMPANY : Orion Electric Co.,Ltd.
EQUIPMENT : DVD/VCR
MODEL : D-VR4SU
OPERATION MODE : CATV Tuning mode

REPORT NO : 25GE0165-YW-1
DATE : February 16,2005
REGULATION : FCC Part15 SubpartB
TEST ENGINEER : Tsubasa Takayama

TEMP./HUMID. : 26°C/68%

LIMIT : FCC 15B ANTENNA TERMINAL



NO	FREQ [MHz]	READING Peak [dBμV]	C.F [dB]	RESULT Peak [dBμV]	LIMIT Peak [dBμV]	LIMIT - [dBμV]	MARGIN [dB]	MARGIN [dB]	PHASE
1	99.39970	37.2	-20.6	16.6	52.0	----	35.4	----	-
2	243.95050	39.5	-20.4	19.1	52.0	----	32.9	----	-
3	621.42490	44.8	-20.4	24.4	52.0	----	27.6	----	-
4	1182.13200	56.2	-30.4	25.8	52.0	----	26.2	----	-
5	2428.54400	60.2	-36.0	24.2	52.0	----	27.8	----	-
6	2578.53300	63.5	-36.0	27.5	52.0	----	24.5	----	-
7	3499.96300	61.5	-36.2	25.3	52.0	----	26.7	----	-
8	3654.23800	61.2	-36.2	25.0	52.0	----	27.0	----	-

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

RF Output Level

UL Apex Co.,Ltd.
Yokowa EMC Laboratory

Company	: Orion Electric Co., Ltd.	Report Number	: 25GE0165-YW-1
Equipment	: DVD-MULTI/VCR	Regulation	: FCC15B SubpartB
Model Number	: D-VR4SU	Date	: February 21, 2005
Power	: 120V/60Hz	Temp / Humid	: 24deg.C/39%
Description	: TV Reception + REC	Engineer	: Tsubasa Takayama
Remarks	: -		

TV Reception(0dBmV)

Ch	Frequency [MHz]	Meter Reading [dB μ V]	Correction Factor [dB]	Result [dB]	Limits [dB μ V]	Margin [dB]
Video Signal						
3	61.25	84.0	20.9	63.1	69.5	6.4
4	67.25	82.6	20.9	61.7	69.5	7.8
Audio Signal						
3	56.75	69.2	20.9	48.3	56.5	8.2
	65.75	67.8	20.9	46.9	56.5	9.6
4	62.75	68.3	20.9	47.4	56.5	9.1
	71.75	67.0	20.9	46.1	56.5	10.4

TV Reception(25dBmV)

Ch	Frequency [MHz]	Meter Reading [dB μ V]	Correction Factor [dB]	Result [dB]	Limits [dB μ V]	Margin [dB]
Video Signal						
3	61.25	82.8	20.9	61.9	69.5	7.7
4	67.25	82.8	20.9	61.9	69.5	7.6
Audio Signal						
3	56.75	69.0	20.9	48.1	56.5	8.4
	65.75	67.8	20.9	46.9	56.5	9.6
4	62.75	68.3	20.9	47.4	56.5	9.1
	71.75	67.1	20.9	46.2	56.5	10.3

RF Output Level

UL Apex Co.,Ltd.
Yokowa EMC Laboratory

Company	: Orion Electric Co., Ltd.	Report Number	: 25GE0165-YW-1
Equipment	: DVD-MULTI/VCR	Regulation	: FCC15B SubpartB
Model Number	: D-VR4SU	Date	: February 21, 2005
Power	: 120V/60Hz	Temp / Humid	: 24deg.C/39%
Description	: AV Input 1 + REC	Engineer	: Tsubasa Takayama
Remarks	: -		

AV Input1(1Vp-p)

Ch	Frequency [MHz]	Meter Reading [dB μ V]	Correction Factor [dB]	Result [dB]	Limits [dB μ V]	Margin [dB]
Video Signal						
3	61.25	84.5	20.9	63.6	69.5	5.9
4	67.25	82.7	20.9	61.8	69.5	7.7
Audio Signal						
3	56.75	69.5	20.9	48.6	56.5	7.9
	65.75	68.3	20.9	47.4	56.5	9.1
4	62.75	68.2	20.9	47.3	56.5	9.2
	71.75	67.0	20.9	46.1	56.5	10.4

AV Input1(5Vp-p)

Ch	Frequency [MHz]	Meter Reading [dB μ V]	Correction Factor [dB]	Result [dB]	Limits [dB μ V]	Margin [dB]
Video Signal						
3	61.25	83.2	20.9	62.3	69.5	7.2
4	67.25	82.3	20.9	61.4	69.5	8.1
Audio Signal						
3	56.75	69.1	20.9	48.2	56.5	8.3
	65.75	67.8	20.9	46.9	56.5	9.6
4	62.75	68.3	20.9	47.4	56.5	9.2
	71.75	67.0	20.9	46.1	56.5	10.4

RF Output Level

UL Apex Co.,Ltd.
Yokowa EMC Laboratory

Company	: Orion Electric Co., Ltd.	Report Number	: 25GE0165-YW-1
Equipment	: DVD-MULTI/VCR	Regulation	: FCC15B SubpartB
Model Number	: D-VR4SU	Date	: February 21, 2005
Power	: 120V/60Hz	Temp / Humid	: 24deg.C/39%
Description	: AV Input 2 + REC	Engineer	: Tsubasa Takayama
Remarks	: -		

AV Input2(1Vp-p)

Ch	Frequency [MHz]	Meter Reading [dB μ V]	Correction Factor [dB]	Result [dB]	Limits [dB μ V]	Margin [dB]
Video Signal						
3	61.25	82.7	20.9	61.8	69.5	7.7
4	67.25	83.4	20.9	62.5	69.5	7.0
Audio Signal						
3	56.75	69.3	20.9	48.4	56.5	8.1
	65.75	67.8	20.9	46.9	56.5	9.6
4	62.75	68.3	20.9	47.4	56.5	9.1
	71.75	67.3	20.9	46.4	56.5	10.1

AV Input2(5Vp-p)

Ch	Frequency [MHz]	Meter Reading [dB μ V]	Correction Factor [dB]	Result [dB]	Limits [dB μ V]	Margin [dB]
Video Signal						
3	61.25	83.0	20.9	62.1	69.5	7.4
4	67.25	82.1	20.9	61.2	69.5	8.3
Audio Signal						
3	56.75	69.1	20.9	48.2	56.5	8.3
	65.75	67.8	20.9	46.9	56.5	9.6
4	62.75	68.3	20.9	47.4	56.5	9.1
	71.75	67.0	20.9	46.1	56.5	10.4

RF Output Level

UL Apex Co.,Ltd.
Yokowa EMC Laboratory

Company	: Orion Electric Co., Ltd.	Report Number	: 25GE0165-YW-1
Equipment	: DVD-MULTI/VCR	Regulation	: FCC15B SubpartB
Model Number	: D-VR4SU	Date	: February 21, 2005
Power	: 120V/60Hz	Temp / Humid	: 24deg.C/39%
Description	: VCR Playback + REC	Engineer	: Tsubasa Takayama
Remarks	: -		

Ch	Frequency [MHz]	Meter Reading [dB μ V]	Correction Factor [dB]	Result [dB]	Limits [dB μ V]	Margin [dB]
Video Signal						
3	61.25	84.4	20.9	63.5	69.5	6.0
4	67.25	83.3	20.9	62.4	69.5	7.1
Audio Signal						
3	56.75	69.1	20.9	48.2	56.5	8.3
	65.75	67.8	20.9	46.9	56.5	9.6
4	62.75	68.3	20.9	47.4	56.5	9.2
	71.75	67.2	20.9	46.3	56.5	10.2

RF Output Level

UL Apex Co.,Ltd.
Yokowa EMC Laboratory

Company	: Orion Electric Co., Ltd.	Report Number	: 25GE0165-YW-1
Equipment	: DVD-MULTI/VCR	Regulation	: FCC15B SubpartB
Model Number	: D-VR4SU	Date	: February 21, 2005
Power	: 120V/60Hz	Temp / Humid	: 24deg.C/39%
Description	: DVD Play + REC	Engineer	: Tsubasa Takayama
Remarks	: -		

Ch	Frequency [MHz]	Meter Reading [dB μ V]	Correction Factor [dB]	Result [dB]	Limits [dB μ V]	Margin [dB]
Video Signal						
3	61.25	83.0	20.9	62.1	69.5	7.4
4	67.25	82.2	20.9	61.3	69.5	8.2
Audio Signal						
3	56.75	69.2	20.9	48.3	56.5	8.2
	65.75	68.0	20.9	47.1	56.5	9.4
4	62.75	68.4	20.9	47.5	56.5	9.0
	71.75	67.2	20.9	46.3	56.5	10.2

DATA OF RF SPURIOUS TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	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
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	47.7100	32.8	----	-20.6	12.2	----	39.5	----	27.3	----	-
2	85.8900	29.0	----	-20.4	8.6	----	39.5	----	30.9	----	-
3	122.5000	34.5	----	-20.6	13.9	----	39.5	----	25.6	----	-
4	244.9000	26.5	----	-20.4	6.1	----	39.5	----	33.4	----	-
5	655.1000	31.5	----	-20.5	11.0	----	39.5	----	28.5	----	-
6	732.1000	30.2	----	-20.6	9.6	----	39.5	----	29.9	----	-

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

DATA OF RF SPURIOUS TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	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
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	47.7900	32.5	----	-20.6	11.9	----	39.5	----	27.6	----	-
2	85.9100	28.5	----	-20.4	8.1	----	39.5	----	31.4	----	-
3	122.5000	34.2	----	-20.6	13.6	----	39.5	----	25.9	----	-
4	244.9000	27.0	----	-20.4	6.6	----	39.5	----	32.9	----	-
5	655.1000	32.5	----	-20.5	12.0	----	39.5	----	27.5	----	-
6	732.1000	30.0	----	-20.6	9.4	----	39.5	----	30.1	----	-

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

DATA OF RF SPURIOUS TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : AV Input1+Rec(1Vp-p:3ch)

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	47.7900	32.3	----	-20.6	11.7	----	39.5	----	27.8	----	-
2	85.9100	27.5	----	-20.4	7.1	----	39.5	----	32.4	----	-
3	122.5700	34.4	----	-20.6	13.8	----	39.5	----	25.7	----	-
4	180.0000	25.6	----	-20.5	5.1	----	39.5	----	34.4	----	-
5	651.0000	30.4	----	-20.5	9.9	----	39.5	----	29.6	----	-
6	732.1000	30.2	----	-20.6	9.6	----	39.5	----	29.9	----	-

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

DATA OF RF SPURIOUS TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : AV Input1+Rec(5Vp-p:3ch)

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	47.7900	32.5	----	-20.6	11.9	----	39.5	----	27.6	----	-
2	85.9100	26.6	----	-20.4	6.2	----	39.5	----	33.3	----	-
3	122.5000	34.0	----	-20.6	13.4	----	39.5	----	26.1	----	-
4	236.1000	26.3	----	-20.4	5.9	----	39.5	----	33.7	----	-
5	651.0000	30.4	----	-20.5	9.9	----	39.5	----	29.6	----	-
6	732.1000	29.9	----	-20.6	9.3	----	39.5	----	30.2	----	-

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

DATA OF RF SPURIOUS TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : AV Input2+Rec(1Vp-p:3ch)

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	47.7900	32.4	----	-20.6	11.8	----	39.5	----	27.7	----	-
2	85.9100	28.3	----	-20.4	7.9	----	39.5	----	31.6	----	-
3	122.5000	34.4	----	-20.6	13.8	----	39.5	----	25.7	----	-
4	244.9000	26.6	----	-20.4	6.2	----	39.5	----	33.3	----	-
5	655.1000	32.5	----	-20.5	12.0	----	39.5	----	27.5	----	-
6	734.3000	29.9	----	-20.6	9.3	----	39.5	----	30.2	----	-

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

DATA OF RF SPURIOUS TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : AV Input2+Rec(5Vp-p:3ch)

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	47.7900	32.5	----	-20.6	11.9	----	39.5	----	27.6	----	-
2	85.8900	28.1	----	-20.4	7.7	----	39.5	----	31.8	----	-
3	122.5700	34.5	----	-20.6	13.9	----	39.5	----	25.6	----	-
4	244.9000	27.1	----	-20.4	6.7	----	39.5	----	32.8	----	-
5	655.1000	31.8	----	-20.5	11.3	----	39.5	----	28.2	----	-
6	732.1000	30.4	----	-20.6	9.8	----	39.5	----	29.7	----	-

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

DATA OF RF SPURIOUS TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : VCR Playback+Rec(3ch)

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	47.7900	32.3	----	-20.6	11.7	----	39.5	----	27.8	----	-
2	85.9100	28.5	----	-20.4	8.1	----	39.5	----	31.4	----	-
3	122.5000	34.5	----	-20.6	13.9	----	39.5	----	25.6	----	-
4	244.9000	26.8	----	-20.4	6.4	----	39.5	----	33.1	----	-
5	655.1000	32.2	----	-20.5	11.7	----	39.5	----	27.8	----	-
6	734.3000	29.5	----	-20.6	8.9	----	39.5	----	30.6	----	-

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

DATA OF RF SPURIOUS TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : DVD Play(3ch)

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	47.7900	33.0	----	-20.6	12.4	----	39.5	----	27.1	----	-
2	85.9100	29.0	----	-20.4	8.6	----	39.5	----	30.9	----	-
3	122.5000	34.4	----	-20.6	13.8	----	39.5	----	25.7	----	-
4	244.9000	27.2	----	-20.4	6.8	----	39.5	----	32.7	----	-
5	655.1000	31.3	----	-20.5	10.8	----	39.5	----	28.7	----	-
6	732.1000	29.7	----	-20.6	9.1	----	39.5	----	30.4	----	-

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

DATA OF RF SPURIOUS TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	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
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	57.2900	36.4	----	-20.5	15.9	----	39.5	----	23.6	----	-
2	80.6900	28.0	----	-20.3	7.7	----	39.5	----	31.8	----	-
3	134.5000	34.0	----	-20.6	13.4	----	39.5	----	26.1	----	-
4	160.0000	37.1	----	-20.6	16.5	----	39.5	----	23.0	----	-
5	672.0000	30.9	----	-20.5	10.4	----	39.5	----	29.1	----	-
6	806.3000	28.8	----	-20.7	8.1	----	39.5	----	31.4	----	-

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

DATA OF RF SPURIOUS TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	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
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	57.2900	35.9	----	-20.5	15.4	----	39.5	----	24.1	----	-
2	80.6900	28.5	----	-20.3	8.2	----	39.5	----	31.3	----	-
3	134.5000	34.9	----	-20.6	14.3	----	39.5	----	25.2	----	-
4	160.0000	38.2	----	-20.6	17.6	----	39.5	----	21.9	----	-
5	552.0000	33.4	----	-20.3	13.1	----	39.5	----	26.4	----	-
6	886.3000	30.0	----	-20.5	9.5	----	39.5	----	30.0	----	-

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

DATA OF RF SPURIOUS TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : AV Input1+Rec (1V p-p:4ch)

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	57.2900	36.4	----	-20.5	15.9	----	39.5	----	23.6	----	-
2	80.7100	30.0	----	-20.3	9.7	----	39.5	----	29.8	----	-
3	134.5700	33.8	----	-20.6	13.2	----	39.5	----	26.3	----	-
4	160.0000	28.6	----	-20.6	8.0	----	39.5	----	31.5	----	-
5	672.0000	31.0	----	-20.5	10.5	----	39.5	----	29.0	----	-
6	847.4000	44.9	----	-20.7	24.2	----	39.5	----	15.3	----	-

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

DATA OF RF SPURIOUS TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : AV Input1+Rec (5V p-p:4ch)

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	57.2900	36.3	----	-20.5	15.8	----	39.5	----	23.7	----	-
2	80.7100	28.7	----	-20.3	8.4	----	39.5	----	31.1	----	-
3	134.5700	34.4	----	-20.6	13.8	----	39.5	----	25.7	----	-
4	157.5000	29.9	----	-20.6	9.3	----	39.5	----	30.2	----	-
5	672.0000	30.4	----	-20.5	9.9	----	39.5	----	29.6	----	-
6	847.4000	44.9	----	-20.7	24.2	----	39.5	----	15.3	----	-

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

DATA OF RF SPURIOUS TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : AV Input2+Rec (1V p-p:4ch)

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	57.2900	37.1	----	-20.5	16.6	----	39.5	----	22.9	----	-
2	80.7100	29.2	----	-20.3	8.9	----	39.5	----	30.6	----	-
3	134.5000	35.0	----	-20.6	14.4	----	39.5	----	25.1	----	-
4	157.5000	29.7	----	-20.6	9.1	----	39.5	----	30.4	----	-
5	672.0000	31.6	----	-20.5	11.1	----	39.5	----	28.4	----	-
6	847.4000	45.0	----	-20.7	24.3	----	39.5	----	15.2	----	-

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

DATA OF RF SPURIOUS TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : AV Input2+Rec (5V p-p:4ch)

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	57.2900	36.8	----	-20.5	16.3	----	39.5	----	23.2	----	-
2	80.7100	29.0	----	-20.3	8.7	----	39.5	----	30.8	----	-
3	134.5000	34.5	----	-20.6	13.9	----	39.5	----	25.6	----	-
4	160.0000	31.0	----	-20.6	10.4	----	39.5	----	29.1	----	-
5	672.0000	30.4	----	-20.5	9.9	----	39.5	----	29.6	----	-
6	847.4000	44.6	----	-20.7	23.9	----	39.5	----	15.6	----	-

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

DATA OF RF SPURIOUS TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : VCR Playback+Rec(4ch)

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	57.2900	36.1	----	-20.5	15.6	----	39.5	----	23.9	----	-
2	80.7100	29.3	----	-20.3	9.0	----	39.5	----	30.5	----	-
3	134.5000	34.0	----	-20.6	13.4	----	39.5	----	26.1	----	-
4	157.5000	25.0	----	-20.6	4.4	----	39.5	----	35.1	----	-
5	655.1000	31.5	----	-20.5	11.0	----	39.5	----	28.5	----	-
6	806.3000	29.2	----	-20.7	8.5	----	39.5	----	31.0	----	-

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

DATA OF RF SPURIOUS TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : DVD Play(4ch)

LIMIT : FCC 15B RF OUT SPURIOUS

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	57.2900	36.3	----	-20.5	15.8	----	39.5	----	23.7	----	-
2	80.7100	27.9	----	-20.3	7.6	----	39.5	----	31.9	----	-
3	134.5000	34.2	----	-20.6	13.6	----	39.5	----	25.9	----	-
4	268.7000	26.0	----	-20.4	5.6	----	39.5	----	33.9	----	-
5	655.1000	31.2	----	-20.5	10.7	----	39.5	----	28.8	----	-
6	806.3000	29.2	----	-20.7	8.5	----	39.5	----	31.0	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : Av Input1+Rec (1V p-p:3ch)

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	61.2500	22.8	----	-20.5	2.3	----	9.5	----	7.2	----	-
2	122.5000	22.7	----	-20.6	2.1	----	9.5	----	7.4	----	-
3	183.7500	22.8	----	-20.5	2.3	----	9.5	----	7.2	----	-
4	245.0000	23.0	----	-20.4	2.6	----	9.5	----	6.9	----	-
5	306.2500	22.6	----	-20.4	2.2	----	9.5	----	7.3	----	-
6	367.5000	20.0	----	-20.3	-0.3	----	9.5	----	9.8	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : Av Input1+Rec (5V p-p:3ch)

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	61.2500	23.6	----	-20.5	3.1	----	9.5	----	6.4	----	-
2	122.5000	22.0	----	-20.6	1.4	----	9.5	----	8.1	----	-
3	183.7500	22.2	----	-20.5	1.7	----	9.5	----	7.8	----	-
4	245.0000	21.8	----	-20.4	1.4	----	9.5	----	8.1	----	-
5	306.2500	21.0	----	-20.4	0.6	----	9.5	----	8.9	----	-
6	367.5000	20.5	----	-20.3	0.2	----	9.5	----	9.3	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : Av Input2+Rec (1V p-p:3ch)

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	61.2500	22.7	----	-20.5	2.2	----	9.5	----	7.3	----	-
2	122.5000	23.3	----	-20.6	2.7	----	9.5	----	6.8	----	-
3	183.7500	22.2	----	-20.5	1.7	----	9.5	----	7.8	----	-
4	245.0000	22.4	----	-20.4	2.0	----	9.5	----	7.5	----	-
5	306.2500	22.6	----	-20.4	2.2	----	9.5	----	7.3	----	-
6	367.5000	23.3	----	-20.3	3.0	----	9.5	----	6.5	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : Av Input2+Rec (5V p-p:3ch)

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	61.2500	22.4	----	-20.5	1.9	----	9.5	----	7.6	----	-
2	122.5000	23.9	----	-20.6	3.3	----	9.5	----	6.2	----	-
3	183.7500	22.8	----	-20.5	2.3	----	9.5	----	7.2	----	-
4	245.0000	22.1	----	-20.4	1.7	----	9.5	----	7.8	----	-
5	306.2500	22.3	----	-20.4	1.9	----	9.5	----	7.6	----	-
6	367.5000	23.0	----	-20.3	2.7	----	9.5	----	6.8	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : VCR Playback+Rec(3ch)

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	61.2500	23.5	----	-20.5	3.0	----	9.5	----	6.5	----	-
2	122.5000	23.0	----	-20.6	2.4	----	9.5	----	7.1	----	-
3	183.7500	22.9	----	-20.5	2.4	----	9.5	----	7.1	----	-
4	245.0000	22.1	----	-20.4	1.7	----	9.5	----	7.8	----	-
5	306.2500	21.9	----	-20.4	1.5	----	9.5	----	8.0	----	-
6	367.5000	22.5	----	-20.3	2.2	----	9.5	----	7.3	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : DVD Play+Rec(3ch)

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	61.2500	22.9	----	-20.5	2.4	----	9.5	----	7.1	----	-
2	122.5000	23.9	----	-20.6	3.3	----	9.5	----	6.2	----	-
3	183.7500	23.3	----	-20.5	2.8	----	9.5	----	6.7	----	-
4	245.0000	23.0	----	-20.4	2.6	----	9.5	----	6.9	----	-
5	306.2500	20.9	----	-20.4	0.5	----	9.5	----	9.0	----	-
6	367.5000	21.7	----	-20.3	1.4	----	9.5	----	8.1	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : AV Input1+Rec(1Vp-p:4ch)

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	67.2500	23.6	----	-20.4	3.2	----	9.5	----	6.3	----	-
2	134.5000	22.9	----	-20.6	2.3	----	9.5	----	7.2	----	-
3	201.7500	22.2	----	-20.4	1.8	----	9.5	----	7.7	----	-
4	269.0000	23.0	----	-20.4	2.6	----	9.5	----	6.9	----	-
5	336.2500	22.6	----	-20.3	2.3	----	9.5	----	7.2	----	-
6	403.5000	22.7	----	-20.3	2.4	----	9.5	----	7.1	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : AV Input1+Rec(5Vp-p:4ch)

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	67.2500	23.1	----	-20.4	2.7	----	9.5	----	6.8	----	-
2	134.5000	22.8	----	-20.6	2.2	----	9.5	----	7.3	----	-
3	201.7500	23.3	----	-20.4	2.9	----	9.5	----	6.6	----	-
4	269.0000	23.3	----	-20.4	2.9	----	9.5	----	6.6	----	-
5	336.2500	23.0	----	-20.3	2.7	----	9.5	----	6.8	----	-
6	403.5000	22.2	----	-20.3	1.9	----	9.5	----	7.6	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : AV Input2+Rec(1Vp-p:4ch)

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	67.2500	23.5	----	-20.4	3.1	----	9.5	----	6.4	----	-
2	134.5000	23.1	----	-20.6	2.5	----	9.5	----	7.0	----	-
3	201.7500	22.6	----	-20.4	2.2	----	9.5	----	7.3	----	-
4	269.0000	22.7	----	-20.4	2.3	----	9.5	----	7.2	----	-
5	336.2500	23.0	----	-20.3	2.7	----	9.5	----	6.8	----	-
6	403.5000	23.6	----	-20.3	3.3	----	9.5	----	6.2	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : AV Input2+Rec(5Vp-p:4ch)

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	67.2500	23.2	----	-20.4	2.8	----	9.5	----	6.7	----	-
2	134.5000	23.0	----	-20.6	2.4	----	9.5	----	7.1	----	-
3	201.7500	23.4	----	-20.4	3.0	----	9.5	----	6.5	----	-
4	269.0000	23.5	----	-20.4	3.1	----	9.5	----	6.4	----	-
5	336.2500	22.9	----	-20.3	2.6	----	9.5	----	6.9	----	-
6	403.5000	22.4	----	-20.3	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.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : VCR Playback+Rec(4ch)

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	67.2500	23.3	----	-20.4	2.9	----	9.5	----	6.6	----	-
2	134.5000	22.0	----	-20.6	1.4	----	9.5	----	8.1	----	-
3	201.7500	21.8	----	-20.4	1.4	----	9.5	----	8.1	----	-
4	269.0000	23.4	----	-20.4	3.0	----	9.5	----	6.5	----	-
5	336.2500	23.1	----	-20.3	2.8	----	9.5	----	6.7	----	-
6	403.5000	22.8	----	-20.3	2.5	----	9.5	----	7.0	----	-

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

DATA OF ANTENNA TRANSFER SWITCH TEST

UL Apex Co.,Ltd.

COMPANY	: Orion Electric Co., Ltd.	REPORT NO	: 25GE0165-YW-1
EQUIPMENT	: DVD/VCR	DATE	: February 22 ,2005
MODEL	: D-VR4SU	REGULATION	: FCC Part15 Subpart B
TEMP./HUMID.	: 26°C/68%	TEST ENGINEER	: Tsubasa Takayama

OPERATION MODE : DVD Play+Rec(4ch)

LIMIT : FCC15B ANTENNA TRANSFER SWITCH

NO	FREQ	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		Peak	-		Peak	-	Peak	-			
	[MHz]	[dBµV]	[dBµV]	[dB]	[dBµV]	[dBµV]	[dBµV]	[dBµV]	[dB]	[dB]	
1	67.2500	23.0	----	-20.4	2.6	----	9.5	----	6.9	----	-
2	134.5000	21.8	----	-20.6	1.2	----	9.5	----	8.3	----	-
3	201.7500	21.5	----	-20.4	1.1	----	9.5	----	8.4	----	-
4	269.0000	23.0	----	-20.4	2.6	----	9.5	----	6.9	----	-
5	336.2500	22.2	----	-20.3	1.9	----	9.5	----	7.6	----	-
6	403.5000	23.1	----	-20.3	2.8	----	9.5	----	6.7	----	-

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

Picture Sensitvity Test

UL Apex Co.,Ltd.
Yokowa EMC Laboratory

Company	: Orion Electric Co., Ltd.	Report Number	: 25GE0166-YW-1
Equipment	: DVD-RW/VCR	Regulation	: FCC Part15 Subpart B
Model Number	: D-VR4SU	Date	: February 18, 2005
Power	: 120V/60Hz	Temp / Humid	: 23deg.C / 45%
Description	: TV Reception	Engineer	: Tsubasa Takayama
Remarks	: -		

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	18.2	8.1	20	507.25	20.5	10.6
4	67.25	17.0	7.1	26	543.25	21.0	11.2
5	77.25	16.7	6.8	32	579.25	21.1	11.4
6	83.25	16.4	6.6	38	615.25	21.8	12.3
7	175.25	21.7	12.2	44	651.25	20.6	10.7
8	181.25	20.0	10.0	50	687.25	20.6	10.7
9	187.25	20.0	10.0	56	723.25	20.6	10.7
10	193.25	21.0	11.2	62	759.25	20.3	10.4
11	199.25	20.0	10.0	69	801.25	20.0	10.0
12	205.25	21.3	11.6	-	-	-	
13	211.25	21.1	11.4	-	-	-	-
Average VHF			9.6	Average UHF			10.8
Average UHF/VHF : 20 log UHF[μV] / VHF[μV]=			1.0			[Limit : 8.0dB]	

Noise Figure Test

UL Apex Co.,Ltd.
Yokowa EMC Laboratory

Company	: Orion Electric Co.,Ltd.	Report Number	: 25GE0165-YW-1
Equipment	: DVD/VCR	Regulation	: FCC Part15 SubpartB
Model Number	: D-VR4SU	Date	: February 26, 2005
Power	: 120V/60Hz	Temp / Humid	: 23deg.C / 32%
Description	: TV Reception	Engineer	: Tomoyuki Yamashita
Remarks	: -		

Ch	Frequency [MHz]	Meter Reading [dB]	Correction Factor [dB]	Noise Figure [dB]	Limits [dB]	Margin [dB]
TV VHF Fundamental						
2	55.25	6.3	0.2	6.1	14.0	7.9
3	61.25	4.6	0.2	4.4	14.0	9.6
4	67.25	3.8	0.2	3.6	14.0	10.4
5	77.25	3.2	0.2	3.0	14.0	11.0
6	83.25	3.5	0.2	3.3	14.0	10.7
7	175.25	5.7	0.2	5.5	14.0	8.5
8	181.25	5.5	0.2	5.3	14.0	8.7
9	187.25	5.3	0.2	5.1	14.0	8.9
10	193.25	5.3	0.2	5.1	14.0	8.9
11	199.25	5.2	0.2	5.0	14.0	9.0
12	205.25	5.2	0.2	5.0	14.0	9.0
13	211.25	5.2	0.2	5.0	14.0	9.0
TV UHF Fundamental						
14	471.25	5.6	0.3	5.3	14.0	8.7
20	507.25	5.6	0.3	5.3	14.0	8.7
26	543.25	5.6	0.3	5.3	14.0	8.7
32	579.25	5.9	0.3	5.6	14.0	8.4
38	615.25	7.2	0.3	6.9	14.0	7.1
44	651.25	6.5	0.3	6.2	14.0	7.8
50	687.25	6.0	0.3	5.7	14.0	8.3
56	723.25	5.8	0.4	5.4	14.0	8.6
62	759.25	5.8	0.4	5.4	14.0	8.6
69	801.25	6.4	0.4	6.0	14.0	8.0
Mid band						
14	121.25	3.4	0.2	3.2	14.0	10.8
16	133.25	9.6	0.2	9.4	14.0	4.6
18	145.25	5.5	0.2	5.3	14.0	8.7
20	157.25	6.9	0.2	6.7	14.0	7.3
22	169.25	6.5	0.2	6.3	14.0	7.7
Super band						
23	217.25	5.2	0.2	5.0	14.0	9.0
26	235.25	5.3	0.2	5.1	14.0	8.9
29	253.25	5.3	0.2	5.1	14.0	8.9
32	271.25	5.4	0.2	5.2	14.0	8.8
36	295.25	5.4	0.2	5.2	14.0	8.8

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	CE, AT, RF, ATS	2004/05/14 * 12
IP-06	Matching Pad	TME	ZT-301	PS, NF	2004/05/06 * 12
IP-03	Matching Pad	TME	ZT-130	AT, RF, ATS, PS	2004/09/10 * 12
APNFM01	Noise Figure Indicator	Elena	ENF-2005	NF	2004/10/04 * 12
APNFS01	Noise Source	Elena	MC1100	NF	-
AV01-01	Signal Generator	Rohde & Schwarz	SMY01	PS	2005/02/23 * 12
AF-05	Pre Amplifier	Hewlett Packard	8447D	AT, RF, ATS	2004/05/31 * 12
APPRA05	Pre Amplifier	Hewlett Packard	8449B	AT	2004/12/04 * 12
APCBL-01	Coaxial Cable	Fujikura	5D-2W	AT, RF, ATS	2004/12/27 * 12
APCBL-02	Coaxial Cable	Fujikura	5D-2W	AT, RF, ATS	2004/12/27 * 12
OS-02	Digital Humidity Indicator	SATO	PC-5000TRH-Ⅱ	AT, RF, ATS, PS, NF	2004/04/06 * 12
AF-03	Pre Amplifier	Anritsu	MH648A	RE	2004/03/28 * 12
AF-04	Pre Amplifier	Hewlett Packard	8449B	RE	2005/01/18 * 12
AT-04	Attenuator	Anritsu	MP721B	RE	2004/03/26 * 12
BA-04	Biconical Antenna	Schwarzbeck	BBA9106	RE	2004/04/10 * 12
LA-05	Logperiodic Antenna	Schwarzbeck	UHALP9108-A	RE	2004/10/18 * 12
LS-02	LISN(AMN)	Rohde & Schwarz	ESH3-Z5	CE (EUT)	2004/10/29 * 12
LS-03	LISN(AMN)	Schwarzbeck	NSLK8127	CE	2004/10/29 * 12
SA-05	Spectrum Analyzer	Advantest	R3271	RE, PS	2004/12/20 * 12
TA-06	Terminator	TME	CT-01	CE	2004/05/02 * 12
TR-04	Test Receiver	Rohde & Schwarz	ESVS10	RE	2004/12/22 * 12
APRCV05	Test Receiver	Rohde & Schwarz	ESS	CE	2004/06/10 * 12
RT-05	Signal Genelator	SHIBASOKU	TG19CC	CE	Pre Check
CC-2ORC	Yokowa No.2 open coaxial(0.01-1000MHz)	UL Apex	CC-21,CC-22,CC-23, CC-24,CC-25,CC-26, CC-27,SW-21,SW-22	RE	2004/03/28 * 12
CC-2S	Yokowa No.2 shield coaxial(0.01MHz-1000MHz)	UL Apex	CC-24,CC-25,CC-26, CC-28,CC-29,SW-21, SW-22	CE	2004/03/28 * 12
YOATS-02	Open Test Site	JSE	3m、10m	RE	2004/08/15 * 12
OS-10	Digital Humidity Indicator	SATO	PC-5000TRH	RE	2004/05/06 * 12
CC-C1	Microwave Cable	Suhner/storm	-	RE	2004/12/15 * 12
OS-15	Digital Humidity Indicator	SATO	PC-5000TRH	CE	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