

3 SYSTEM TEST CONFIGURATION

3.1 Justification

The system was configured for testing a typical fashion. (as a customer would normally use it.) Radiated testing in the range of 1 GHz to 4 GHz was investigated with the spectrum (peak detector function) under the FCC regulation section 15.209 (e) and 15.35 (b). The test performed at an antenna to EUT distance of 1 meter. The level of any unwanted emissions from EUT was not exceed the level of the fundamental emission (Compliance with 15.209 (c)). And test result found to be compliance with FCC regulation section 15.209 (a) Radiated emission limits (500 micro-volts/meter). Data is presented for the "worst case" measurements, that E.U.T was normal operated.

3.2 EUT Exercise Software

The EUT exercise program used during radiated and conducted testing was designed to exercise the various system components in a manner similar to a typical use. The color bar code is displayed on the Video Monitor.

3.3 Special Accessories

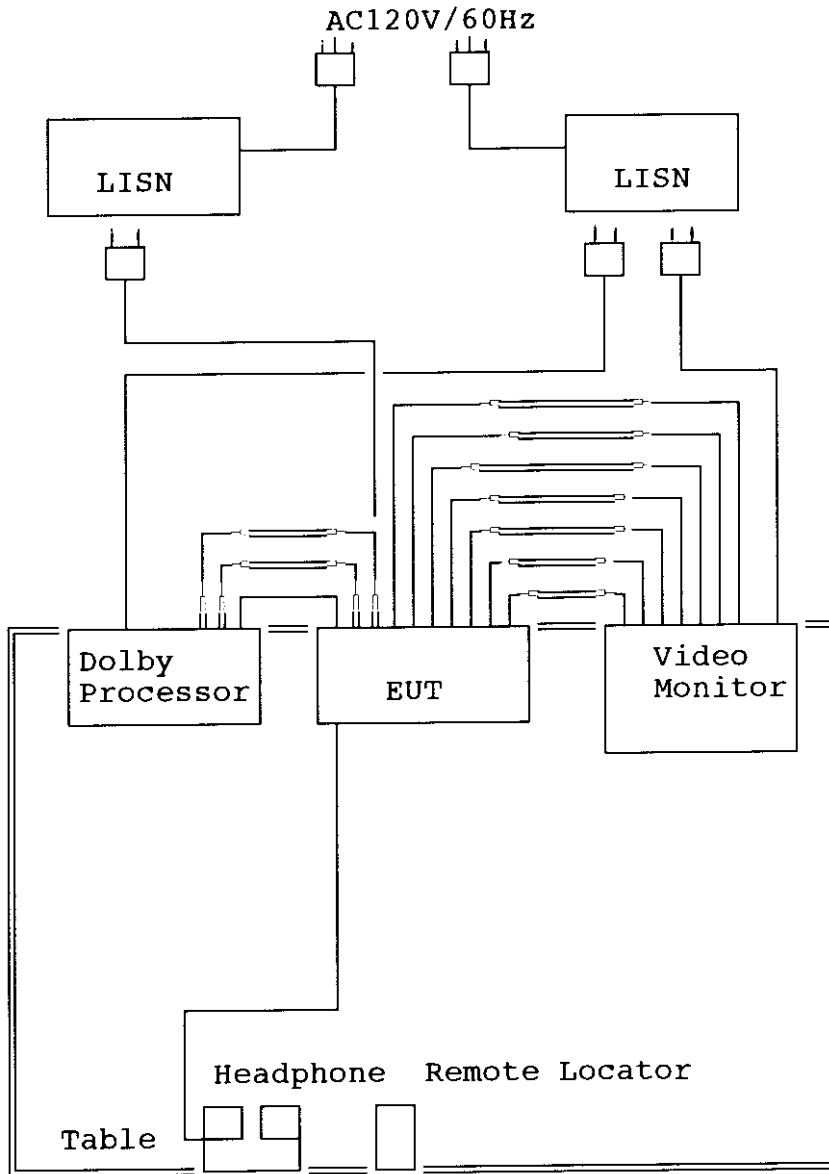
None.

3.4 Equipment Modifications

No modification have been carried out.

3.5 Configuration of Tested System

Figure 3.1 Configuration of Tested System



- CONDUCTED TEST CONFIGURATION : Figure 6.1
- RADIATED TEST CONFIGURATION : Figure 7.1 (9 kHz - 30 MHz)
- : Figure 7.2 (30 MHz - 1 GHz)
- : Figure 7.3 (1 GHz - 4 GHz)

4 BLOCK DIAGRAM(S) OF FCC ID: CJ6AT98-034

4.1 Block Diagram Description

Provided oscillators are described in the Block Diagram.

Figure 4.1 Block Diagram of FCC ID: CJ6AT98-034

See the Annex B.

5 ANTENNA REQUIREMENT

The transmitted antenna pattern provided on the main print circuit board in the DVD main unit and it found to be compliance with FCC regulation section 15.203.

6 CONDUCTED EMISSION DATA

6.1 Test Setup

The test setup was made according to ANSI STD C63.4-1992 clause 7 on a shielded room. The EUT and peripherals were located on the non-conductive wooden table top. Rear of EUT ,including peripherals, shall be all aligned and flush with rear of non-conductive wooden table top. The height of this table was 0.8 m and 1.5 m wide x 1.0 m deep size. Rear of EUT and table top were 40 cm removed from a vertical wall of the shielded room. (conducting plane that is bonded to the floor ground plane) Spacing between the each equipments maintain 10 cm. Connection of the EUT to the artificial mains network is required and the EUT is located so that the distance between the boundary of the EUT and the closet surface of the artificial mains network is 0.8 m. Connection of the all other equipment to the second artificial mains network is required and the equipments are located so that the distance between the boundary of the equipments and the closet surface of the artificial mains network is 0.8 m. Where a mains flexible cord is provided by the manufacture this is 1.8 m long and excess length of the EUT mains flexible cord was bundled to 0.8 m. Interconnecting cables of table top equipment that hang closer than 0.4 m to the ground plane shall be folded back and forth forming a bundle 30 to 40 cm long, hanging approximately in the middle between ground plane and table. The measurement has been conducted with both line and neutral power supply polarization. The highest voltage of the EUT has been recorded. By varying the configuration of the test sample and the cable routing it was attempted to maximize the voltage emission.

6.2 Instrumentation

List of the Instrumentation for the test.

1) Equipment	: Spectrum Analyzer (For the spectrum analysis)
Model No.	: FSA
S/N	: 827831/007
Manufacture	: Rhode & Schwarz
Frequency Range	: 0.15 MHz to 30 MHz
System Bandwidth	: 100kHz
Detector	: Peak
Last Calibrate	: 1998/08/05
Next Calibrate	: 1999/08/05

5.2 Instrumentation (Continued)

List of the Instrumentation for the test.

- 2) Equipment : Test Receiver (For the final measurement)
Model No. : ESHS10
S/N : 826865/006
Manufacture : Rhode & Schwarz
Frequency Range : 0.15 MHz to 30 MHz
System Bandwidth : 10kHz
Detector : Quasi-Peak
Last Calibrate : 1998/08/05
Next Calibrate : 1999/08/05
- 3) Equipment : LISN for EUT
Model No. : ESH2-5
S/N : 846953/012
Manufacture : Rhode & Schwarz
Frequency Range : 0.15 MHz to 30 MHz
RF Load : 50 ohm 50 micro henry
Last Calibrate : 1998/05/28
Next Calibrate : 1999/05/28
- 4) Equipment : LISN for Peripherals
Model No. : KNW-407
S/N : 8-1370-3
Manufacture : Kyoritsu
Frequency Range : 0.15 MHz to 30 MHz
RF Load : 50 ohm 50 micro henry
Last Calibrate : 1998/06/09
Next Calibrate : 1999/06/09

6.3 Measurement Data

See the pages 18 to 20
(Spectrum Chart is presented)

Summary of the measurement result (Worst measurement):
Phase L1, 0.45640MHz, 42.8dBuV Quasi-Peak Value and it have
5.2dB margin from the Limit (48.0dBuV).

Measurement Uncertainties: [Measurement Result dBuV] +/- 1.50dB

The measurement uncertainties have been determined at a confidence level of approximately 95 % (k=2). The uncertainty applies only to the measured values and gives no indication of the long term stability of the Conducted Emission Test Equipments.

Test Result: Pass

Disturbances other than those mentioned are
small or not detectable.

Model : DVD850AT
Serial No. : 2S-8
Standard : FCC Part15C
Condition File : 202
Remark :
: EUT NAME : DVD VIDEO PLAYER
: FCC ID : CJ6AT98-034
: FILE No. : 001
AC Power : 120 V 60 Hz
Temperature : 26 deg.
Humidity : 54 %
Operator : T.YAMAGUCHI



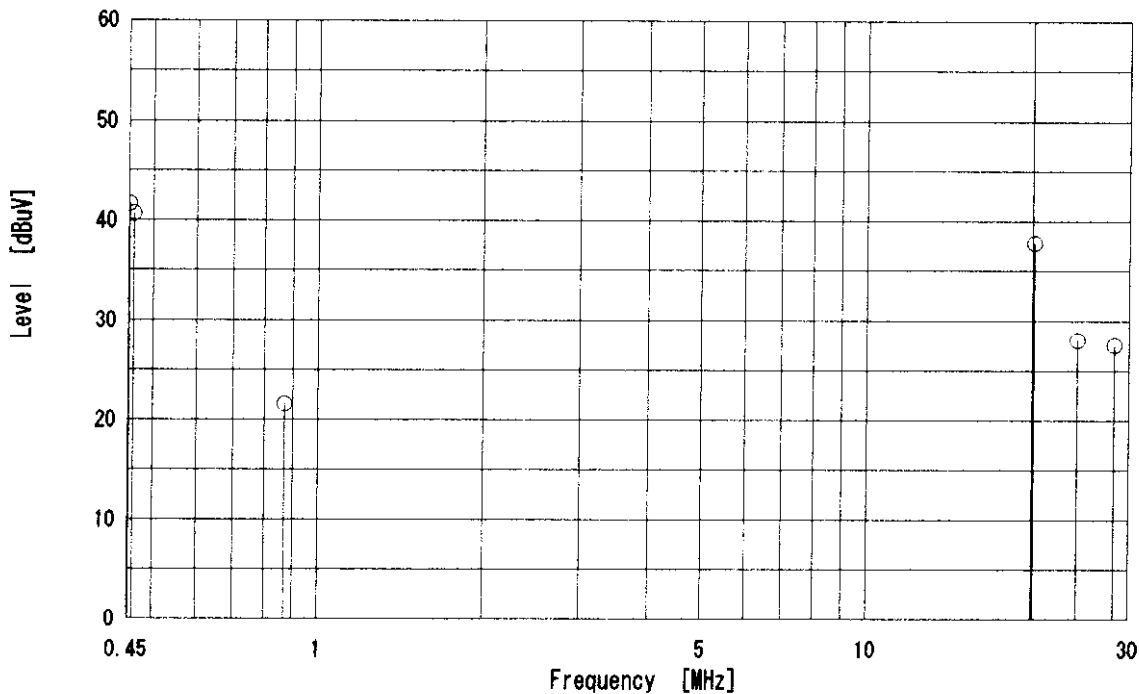
----- Results -----

No.	Frequency [MHz]	Reading [dBuV]	c.f. [dB]	Result [dBuV]	Limit [dBuV]	Margin [dB]
Phase N						
1	0.45160	31.6	10.0	41.6	48.0	6.4
2	0.45930	30.6	10.0	40.6	48.0	7.4
3	0.86960	11.5	10.0	21.5	48.0	26.5
4	20.12800	26.9	10.9	37.8	48.0	10.2
5	24.15340	17.2	10.8	28.0	48.0	20.0
6	28.17950	16.7	10.8	27.5	48.0	20.5
Phase L1						
1	0.45000	32.5	10.0	42.5	48.0	5.5
2	0.45640	32.8	10.0	42.8	48.0	5.2
3	0.87770	11.3	10.0	21.3	48.0	26.7
4	20.12890	27.4	10.9	38.3	48.0	9.7
5	24.15440	18.3	10.8	29.1	48.0	18.9
6	28.18050	18.2	10.8	29.0	48.0	19.0

I P S OPEN SITE

Model : DVD850AT
 Serial No. : 2S-8
 Remarks : EUT NAME : DVD VIDEO PLAYER
 FCC ID : CJ6AT98-034
 FILE No. : 001

Standard : FCC Part15C
 Operator : T. YAMAGUCHI



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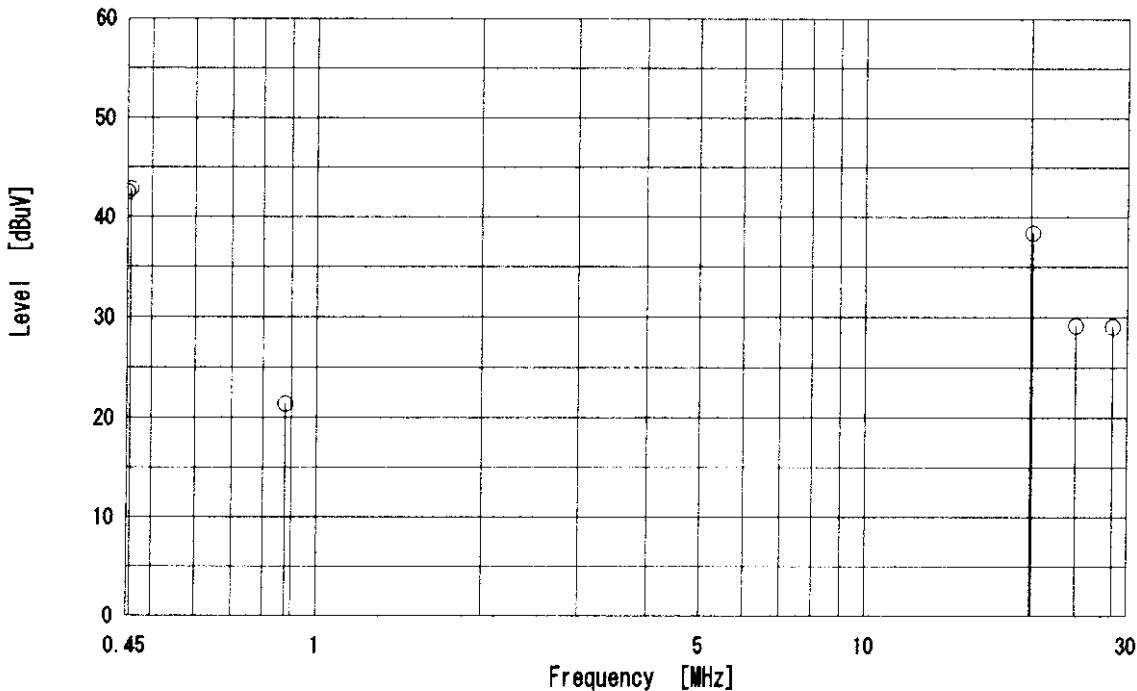
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FCC_15C

<Data>
 Line Phase
 N
 ○ QP

I P S OPEN SITE

Model : DVD850AT
 Serial No. : 2S-8
 Remarks : EUT NAME : DVD VIDEO PLAYER
 FCC ID : CJ6AT98-034
 FILE No. : 001

Standard : FCC Part15C
 Operator : T. YAMAGUCHI



<Limit Line>
QP

Limit:
FCC_15C

<Data>
 Line Phase
 L1
 ○ QP

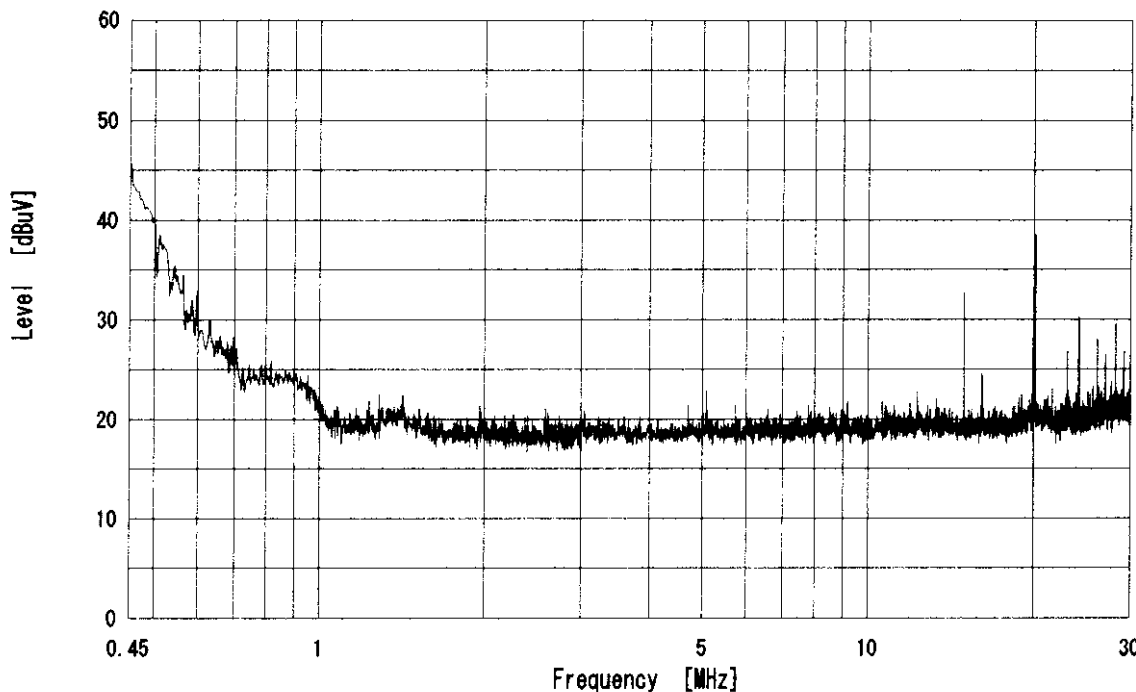
< I P S Corporation >
I P S OPEN SITE

<<< CONDUCTED EMISSION >>>

Date/Time : 25 August, 1998 09:53

Model : DVD850AT
Serial No. : 2S-8
Remarks : EUT NAME : DVD VIDEO PLAYER
FCC ID : CJ6AT98-034
FILE No. : 001

Standard : FCC Part15C
Operator : T.YAMAGUCHI



<peak>

<Limit Line>
QP

Limit:
FCC_15C

<Data>
Line Phase
N

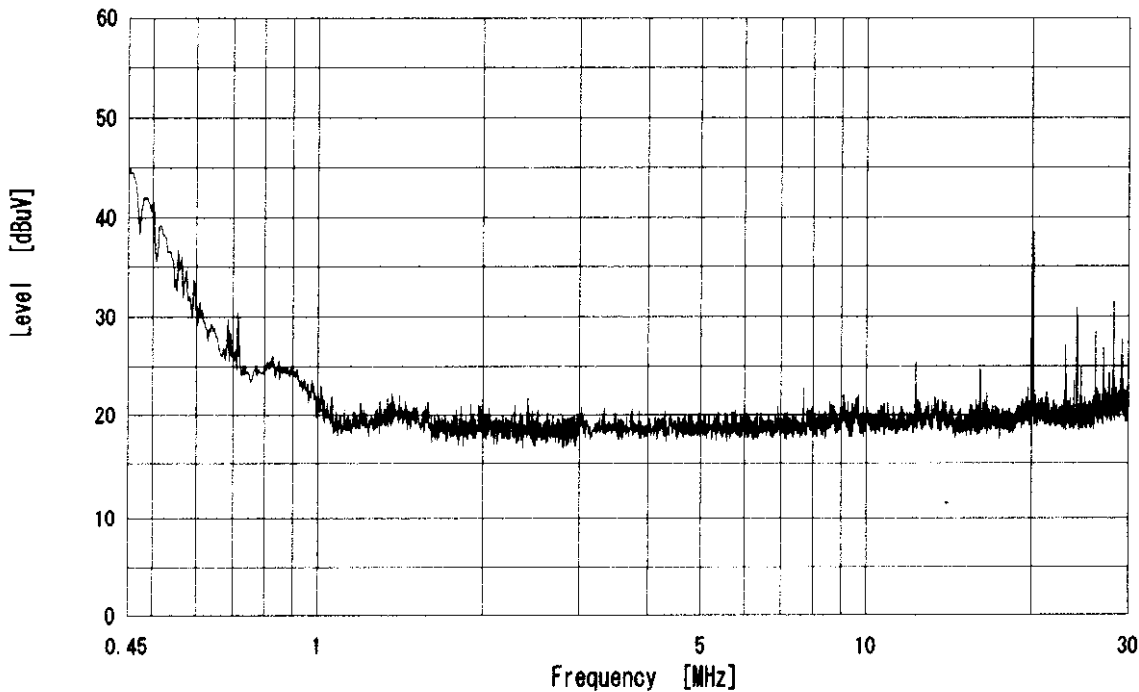
< I P S Corporation >
I P S OPEN SITE

<<< CONDUCTED EMISSION >>>

Date/Time : 25 August, 1998 10:00

Model : DVD850AT
Serial No. : 2S-8
Remarks : EUT NAME : DVD VIDEO PLAYER
FCC ID : CJ6AT98-034
FILE No. : 001

Standard : FCC Part15C
Operator : T.YAMAGUCHI



<peak>

<Limit Line>
QP

Limit:
FCC_15C

<Data>
Line Phase
L1

20/60

7 RADIATED EMISSION DATA

7.1 Test Setup

The test setup for the frequency range 9 kHz to 30MHz was on a shielded room, which allows a 3 m distance measurement. The test setup for the frequency range 30 MHz to 1GHz was made according to ANSI STD C63.4-1992 clause 8 on an open test site, which allows a 3 m distance measurement. The test setup for the frequency range 1GHz to 4 GHz was on a 3 m meter anechoic chamber, which allows a 1 m distance measurement. The EUT and peripherals shall be located on the non-conductive wooden table top and they are all aligned and flush with rear of this table top. The height of this table was 0.8 m and 1.5 m wide x 1.0 m deep size. Spacing between the each equipments maintain 10 cm. Connection of the EUT to the artificial mains network is required and artificial mains network is located under the turn table. Connection of the all other equipment to the second artificial mains network is required and artificial mains network is located under the turn table. The mains flexible cords were dropped to the floor and is routed over to receptacle. Interconnecting cables of table top equipment that hang closer than 0.4 m to the ground plane shall be folded back and forth forming a bundle 30 to 40 cm long, hanging approximately in the middle between ground plane and table. The measurement has been conducted with both horizontal and vertical antenna polarization. The turntable has been fully rotated. The highest radiation of the equipment has been recorded. By varying the configuration of the test sample and the cable routing it was attempted to maximize the radiated emission.

Distance between equipment and antenna: 3 m (9 kHz to 1GHz)
 : 1 m (1 GHz to 4 GHz)
 * due to Only for the
 spectrum investigation

Height of antenna : 1 m (9 kHz to 30 MHz)
 : 1 to 4 m (30 MHz to 1GHz)
 : 1 m (1 GHz to 4 GHz)
 * due to Only for the
 spectrum investigation

7.2 Instrumentation

List of the Instrumentation for the test.

- 1) Facility : Open Test Site
Manufacture : IPS Corporation
Frequency Range : 30 MHz to 1000 MHz
Last Calibrate : 1998/05/01
Next Calibrate : 1998/11/01

- 2) Equipment : Spectrum Analyzer
(For the spectrum analysis 9 kHz to 1GHz)
Model No. : FSA
S/N : 827831/007
Manufacture : Rhode & Schwarz
Frequency Range : 9 kHz to 2000 MHz
System Bandwidth : 300Hz (9 kHz to 150 kHz)
: 10kHz (150 kHz to 30 MHz)
: 100kHz (30 MHz to 1000MHz)
Detector : Peak
Last Calibrate : 1998/08/05
Next Calibrate : 1999/08/05

- 3) Equipment : Spectrum Analyzer
(For the spectrum analysis 1 GHz to 4 GHz)
Model No. : 2784
S/N : B020190
Manufacture : Tektronix
Frequency Range : 9 kHz to 40 GHz
System Bandwidth : 1000kHz
Detector : Peak
Last Calibrate : 1998/02/12
Next Calibrate : 1999/02/12

- 4) Equipment : Test Receiver (For the final measurement)
Model No. : ESHS10
S/N : 826865/006
Manufacture : Rhode & Schwarz
Frequency Range : 9 kHz to 30 MHz
System Bandwidth : 200Hz (9 kHz to 150 kHz)
: 9kHz (150kHz to 30 MHz)
Detector : Quasi-Peak
Last Calibrate : 1998/08/05
Next Calibrate : 1999/08/05

7.2 Instrumentation (Continued)

List of the Instrumentation for the test.

- 5) Equipment : Test Receiver (For the final measurement)
Model No. : ESVS10
S/N : 828146/004
Manufacture : Rhode & Schwarz
Frequency Range : 30kHz to 1000 MHz
System Bandwidth : 120kHz
Detector : Quasi-Peak
Last Calibrate : 1998/08/05
Next Calibrate : 1999/08/05
- 6) Equipment : Loop Antenna
(For the spectrum analysis & final measurement)
Model No. : HFH2-Z2
S/N : 827945/011
Manufacture : Rohde & Schwarz
Frequency Range : 9 kHz to 30 MHz
Last Calibrate : 1997/09/03
Next Calibrate : 1998/09/03
- 7) Equipment : Bilog Antenna (For the spectrum analysis)
Model No. : CBL6111
S/N : 1279
Manufacture : Chase
Frequency Range : 30 MHz to 1000 MHz
Last Calibrate : 1997/09/06
Next Calibrate : 1998/09/06
- 8) Equipment : Tunable Dipole Antenna (For the final measurement)
Model No. : VHA9103
S/N : 91031513
Manufacture : Schwarzbeck
Frequency Range : 30 MHz to 300 MHz
Last Calibrate : 1997/09/03
Next Calibrate : 1998/09/03
- 9) Equipment : Tunable Dipole Antenna (For the final measurement)
Model No. : UHA9105
S/N : 91052108
Manufacture : Schwarzbeck
Frequency Range : 300 MHz to 1000 MHz
Last Calibrate : 1997/09/03
Next Calibrate : 1998/09/03

7.2 Instrumentation (Continued)

List of the Instrumentation for the test.

- 10) Equipment : Double Rigid Guide Antenna
Model No. : 3115
S/N : 4617
Manufacture : EMCO
Frequency Range : 1 GHz to 18GHz
Last Calibrate : 1998/08/19
Next Calibrate : 1999/08/19

- 11) Equipment : Step Attenuator (For the Pre-Amp. Saturation)
Model No. : HP8494B
S/N : 3308A33504
Manufacture : Hewlett Packard
Frequency Range : 30 MHz to 1000 MHz
Non Calibration Equipment.

- 12) Equipment : Cable System
Consists of : Attenuator, Pre-Amplifier, Switch Unit
and Cable.
Manufacture : IPS Corporation
Frequency Range : 30 MHz to 1000 MHz
Last Calibrate : 1998/05/01
Next Calibrate : 1998/11/01

- 13) Equipment : LISN for EUT & Peripherals
Model No. : A
S/N : 001 / 002
Manufacture : IPS
Frequency Range : 0.15 MHz to 30 MHz
RF Load : 50 ohm 50 micro henry
50 ohm terminated.
Located under the turn table.
Non calibration equipment.

7.3 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$\begin{aligned} \text{c.f.} &= \text{AF} + \text{CF} - \text{AG} \\ \text{FS} &= \text{RA} + \text{c.f.} \end{aligned}$$

where

- FS = Field Strength (Emission Level)
- RA = Receiver Amplitude (Reading Level)
- AF = Antenna Factor
- CF = Cable Attenuation Loss
- AG = Amplifier Gain

Assume a receiver reading of 52.5 dBuV is obtained. The Antenna Factor of 7.4 and a Cable Factor of 1.1 is added. The Amplifier Gain of 29.0 dB is subtracted, giving a field strength of 32.0 dBuV/m. The 32.0 dBuV/m value was mathematically converted to its corresponding level in uV/m.

$$\text{FS} = 52.5 + 7.4 + 1.1 - 29.0 = 32.0 \text{ dBuV/m}$$

$$\text{Level in uV/m} = \text{Common Antilogarithm} [(32.0 \text{ dBuV/m})/20] = 39.8 \text{ uV/m}$$

7.4 Measurement Data

1) Frequency Range 9 kHz to 30 MHz

See the Pages 30 to 32 (Spectrum Chart is presented)
Summary of the measurement result (Worst measurement):
0.01573MHz, 60.1dBuV/m Quasi-Peak Value and it have 63.6dB
margin from the Limit (123.7dBuV/m).

2) Frequency Range 30 MHz to 1000MHz

See the Pages 33 to 34
Summary of the measurement result (Worst measurement):
Horizontal Polarization, 297.007MHz, 45.5dBuV/m Quasi-Peak Value
and it have 0.5dB margin from the Limit (46.0dBuV/m).

Measurement Uncertainties:

30MHz - 300MHz

Horizontal Polarized - [Measurement Result dBuV/m] +,- 3.54dB

Vertical Polarized - [Measurement Result dBuV/m] +,- 3.91dB

300MHz - 1000MHz

Horizontal Polarized - [Measurement Result dBuV/m] +,- 3.19dB

Vertical Polarized - [Measurement Result dBuV/m] +,- 3.69dB

The measurement uncertainties have been determined at a confidence level of approximately 95 % (k=2). The uncertainty applies only to the measured values and gives no indication of the long term stability of the Electromagnetic Radiation Disturbance Test Equipments.

3) Frequency Range 1 GHz to 4 GHz

See the Spectrum Chart of Pages 35 to 39

Summary of the measurement result (Worst measurement):

The frequency range from 1 GHz to 4 GHz test performed at an antenna to EUT distance of 1 meter. The level of any unwanted emissions from EUT was not exceed the level of the fundamental emission (Compliance with 15.209 (c)). And test result found to be compliance with FCC regulation section 15.209 (a) Radiated emission limits (500 micro-volts/meter). (All unwanted emissions are measured with 10 dBuV/m or more (peak detector) below the limit)

Test Result: Pass

Disturbances other than those mentioned
are small or not detectable.

<<< MAGNETIC FIELD EMISSION >>>

25 August, 1998 13:17

Page 1

Model : DVD850AT
Serial No. : 2S-8
Standard : FCC Part15C
Condition File : 203

Remark : EUT NAME : DVD VIDEO PLAYER
: FCC ID : CJ6AT98-034
: FILE No. : 001

AC Power : 120 V 60 Hz

Temperature : 25 deg.

Humidity : 57 %

Operator : T.YAMAGUCHI



----- Results -----

No.	Frequency [MHz]	Reading [dBuV]	c.f. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]
1	0.01573	40.7	19.4	60.1	123.7	63.6
2	0.03274	31.8	19.4	51.2	117.3	66.1
3	0.04671	26.0	19.4	45.4	114.2	68.8
4	0.05335	22.1	19.4	41.5	113.1	71.6
5	0.06294	26.6	19.4	46.0	111.6	65.6
6	0.07866	22.9	19.4	42.3	109.7	67.4
7	0.09793	10.7	19.4	30.1	107.8	77.7
8	0.10671	18.3	19.4	37.7	107.0	69.3

< I P S Corporation >
I P S OPEN SITE

<< MAGNETIC FIELD EMISSION >>

Date: 25 August, 1998

Model : DVD850AT

Standard : FCC Part15C

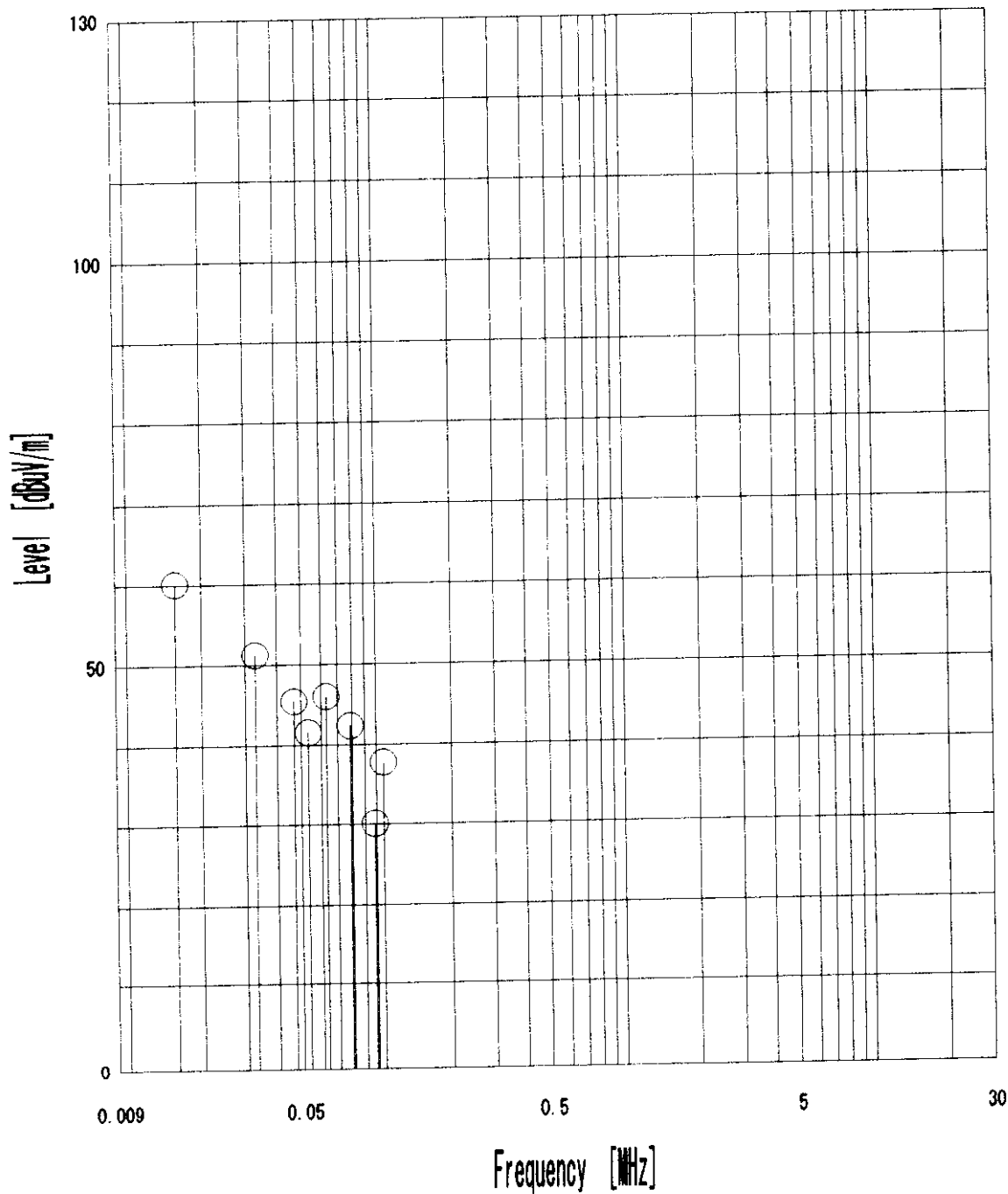
Serial No. : 2S-8

Operator : T. YAMAGUCHI

Remarks : EUT NAME : DVD VIDEO PLAYER

FCC ID : CJ6AT98-034

FILE No. : 001



<Limit Line>
QP

Limit:
FCC15C

<Data>
Line Phase
N
○ QP

< I P S Corporation >

<<< MAGNETIC FIELD EMISSION >>>

Date/Time : 25 August, 1998 11:29

I P S OPEN SITE

Model : DVD850AT

Standard : FCC Part15C

Serial No. : 2S-8

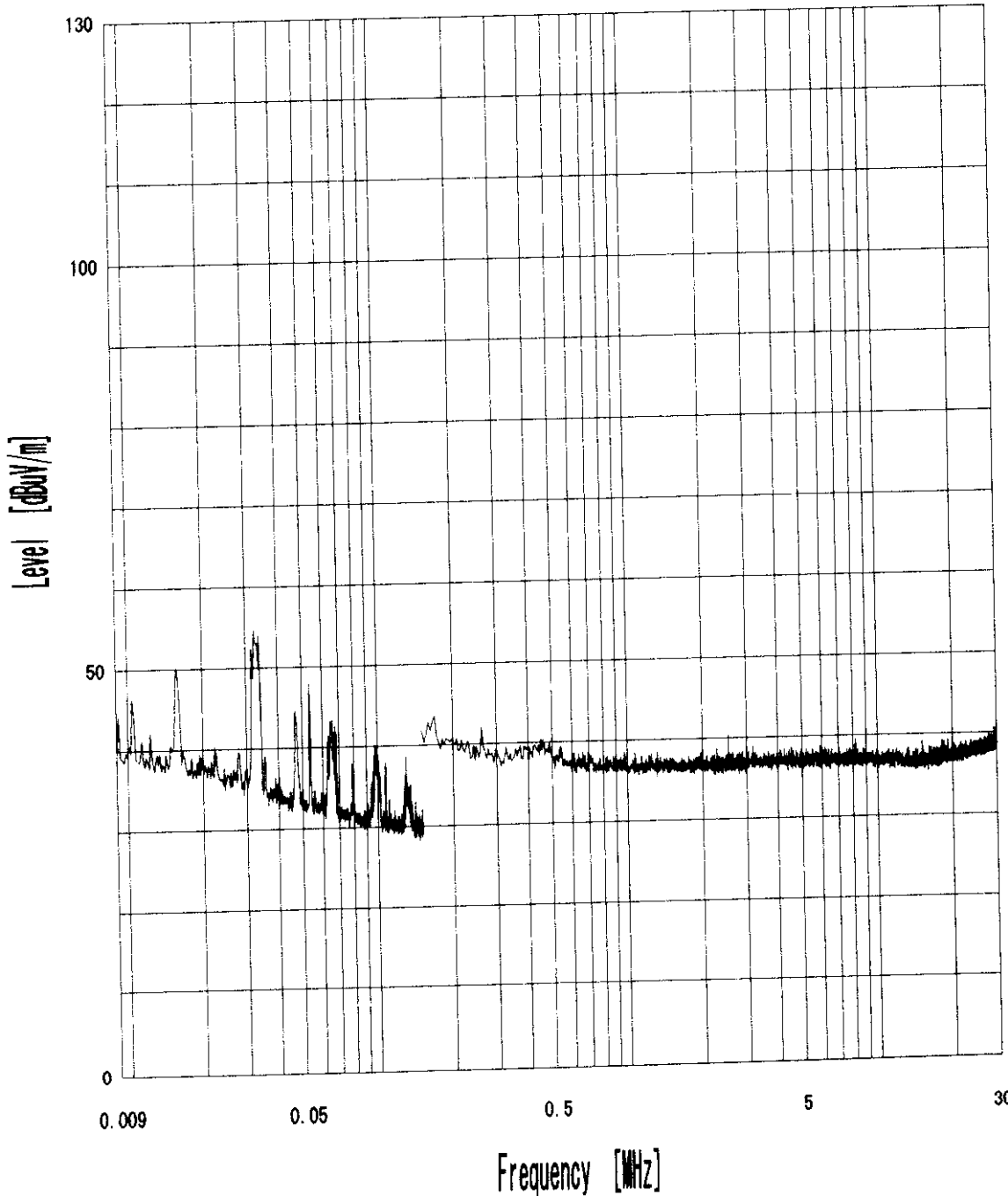
Operator : T. YAMAGUCHI

Remarks : EUT NAME : DVD VIDEO PLAYER

FCC ID : CJ6AT98-034

FILE No. : 001

< peak >



< Limit Line >
QP

Limit:
FCC15C

< Data >
Line Phase
N

Model : DVD850AT
 Serial No. : 2S-8
 Standard : FCC Part15C
 Condition File : 202D
 Condition :
 Remarks : EUT NAME : DVD VIDEO PLAYER
 : FCC ID : CJ6AT98-034
 : FILE No. : 001
 AC Power : 120 V 60 Hz
 Temperature : 28 deg.
 Humidity : 63 %
 Operator : T.YAMAGUCHI



 ----- Final Result -----

- Horizontal Polarization -

No.	Frequency [MHz]	Reading [dBuV]	c.f. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]
1	86.025	51.0	-15.0	36.0	40.0	4.0
2	110.607	48.5	-11.5	37.0	43.5	6.5
3	208.909	44.3	-4.0	40.3	43.5	3.2
4	258.061	47.2	-2.0	45.2	46.0	0.8
5	282.637	44.5	-0.9	43.6	46.0	2.4
6	297.007	45.7	-0.2	45.5	46.0	0.5
7	324.012	43.8	1.1	44.9	46.0	1.1
8	388.736	37.8	2.4	40.2	46.0	5.8

- Vertical Polarization -

No.	Frequency [MHz]	Reading [dBuV]	c.f. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]
9	49.162	41.2	-3.6	37.6	40.0	2.4
10	61.449	44.5	-7.9	36.6	40.0	3.4
11	86.032	54.3	-15.0	39.3	40.0	0.7
12	135.180	49.0	-8.8	40.2	43.5	3.3
13	147.468	48.5	-8.6	39.9	43.5	3.6
14	159.760	48.3	-8.2	40.1	43.5	3.4
15	258.067	45.6	-2.0	43.6	46.0	2.4

< I P S Corporation >

<<< RADIATED EMISSION >>>

Date/Time : 21 August, 1998 19:46

I P S OPEN SITE

Model : DVD850AT

Standard : FCC Part15C

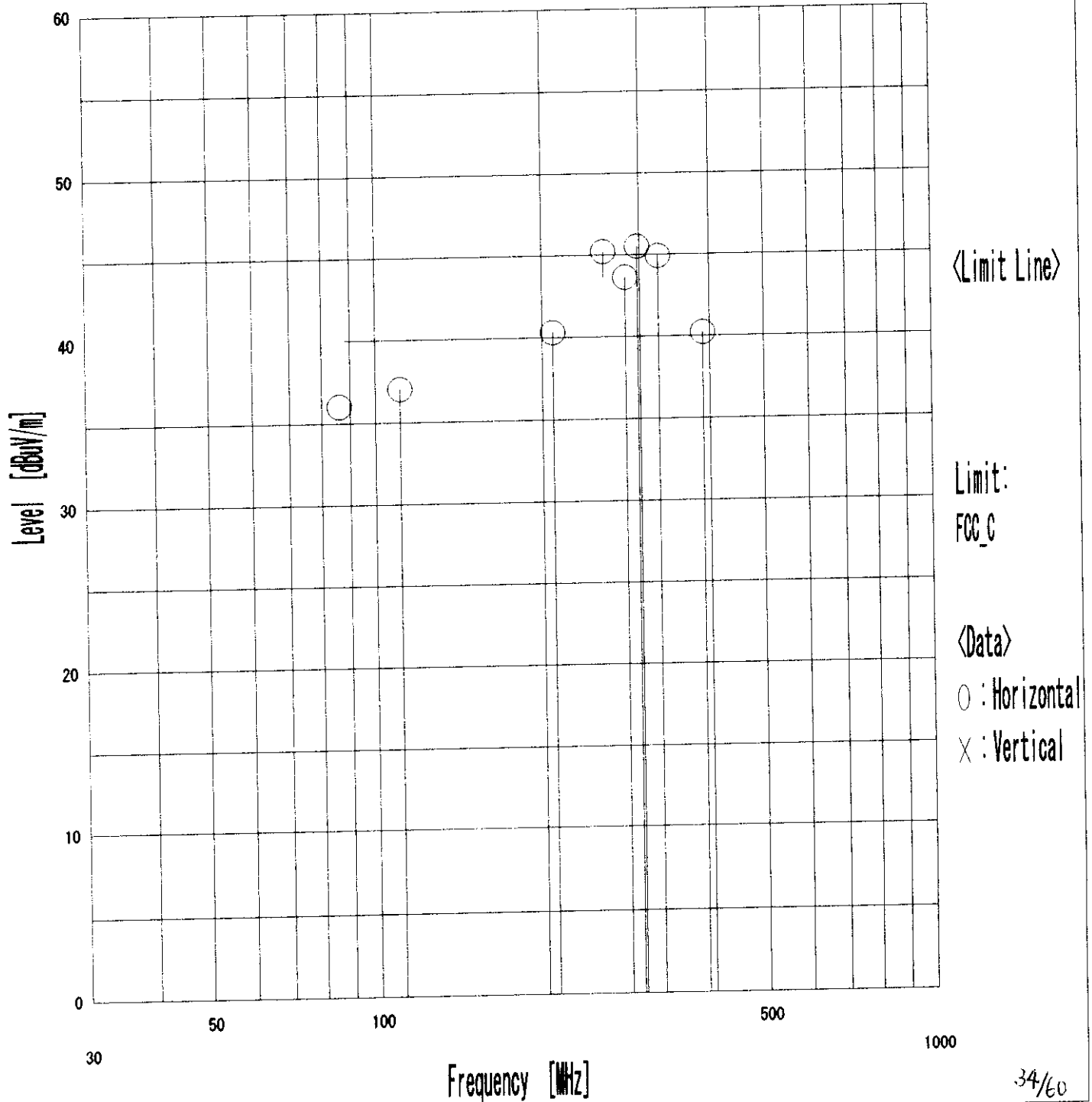
Serial No. : 2S-8

Operator : T. YAMAGUCHI

Remarks : EUT NAME : DVD VIDEO PLAYER

FCC ID : C16AT98-B34

FILE No. : 001



Model : DVD850AT
Serial No. : 2S-8
Standard : FCC Part15B
Condition File : C207G
Condition :
Remarks : EUT NAME : DVD VIDEO PLAYER
: FCC ID : CJ6AT98-034
: FILE No. : 001
AC Power : 120 V 60 Hz
Temperature : 20 deg.
Humidity : 56 %
Operator : Y.NAGAHARA



----- Final Result -----

- Horizontal Polarization -

No.	Frequency [MHz]	Reading [dBuV]	c.f. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]
1	1172.723	29.6	26.9	56.5	58.6	2.1

- Vertical Polarization -

No.	Frequency [MHz]	Reading [dBuV]	c.f. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]
2	1172.724	31.2	26.9	58.1	58.6	0.5

<I P S Corporation>

<< RADIATED EMISSION >>

Date/Time : 25 August, 1998 16:06

I P S EMC SITE

Model : DVD850AT

Standard : FCC Part15B

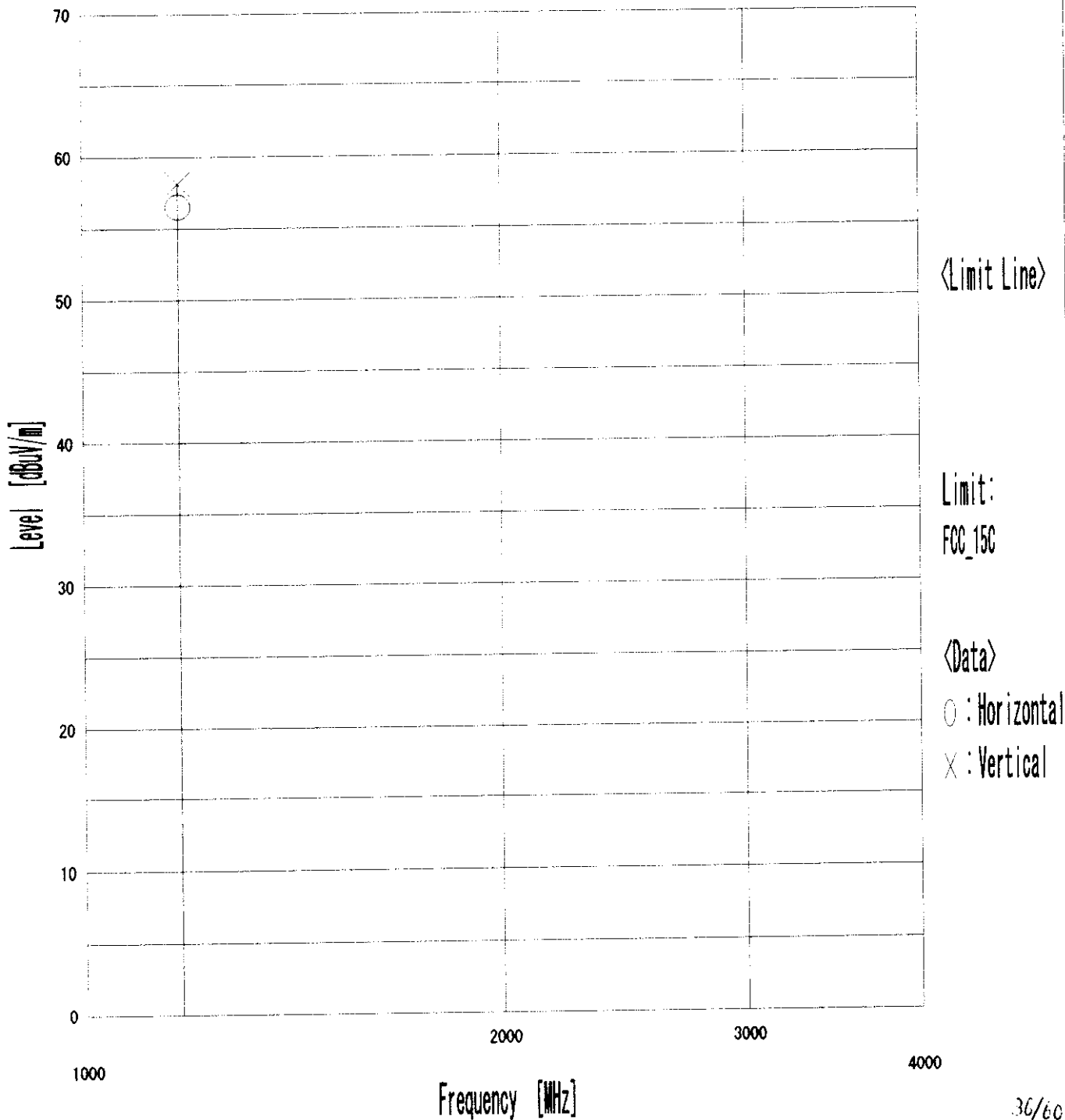
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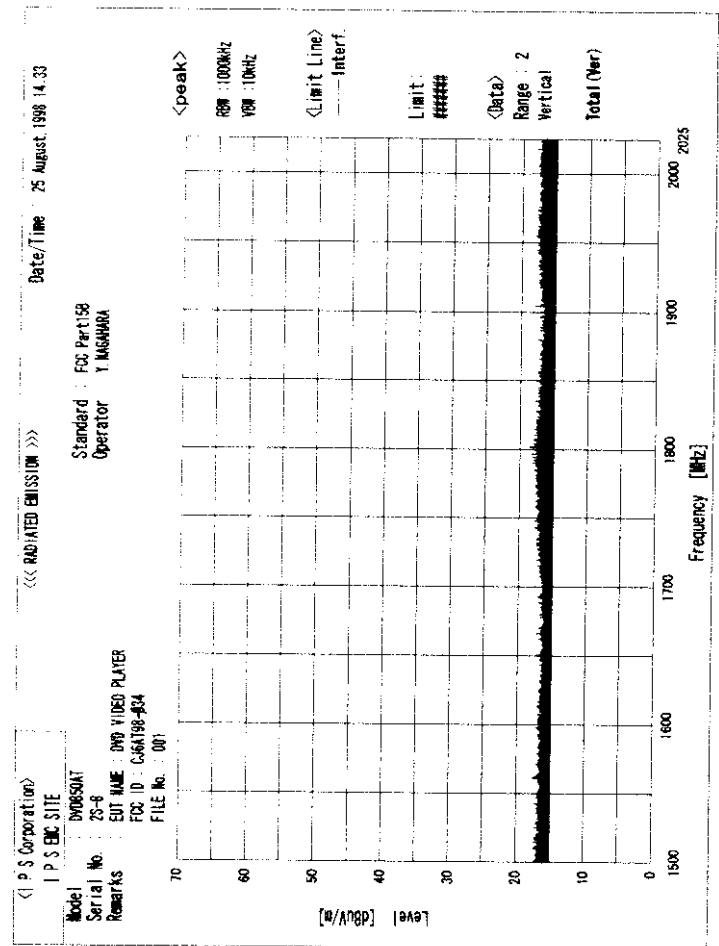
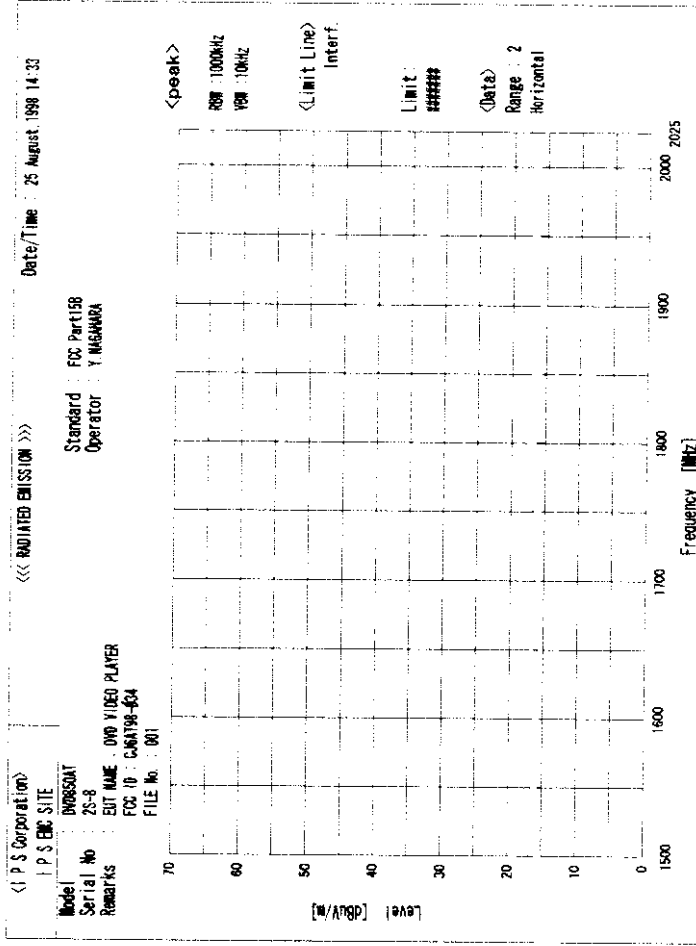
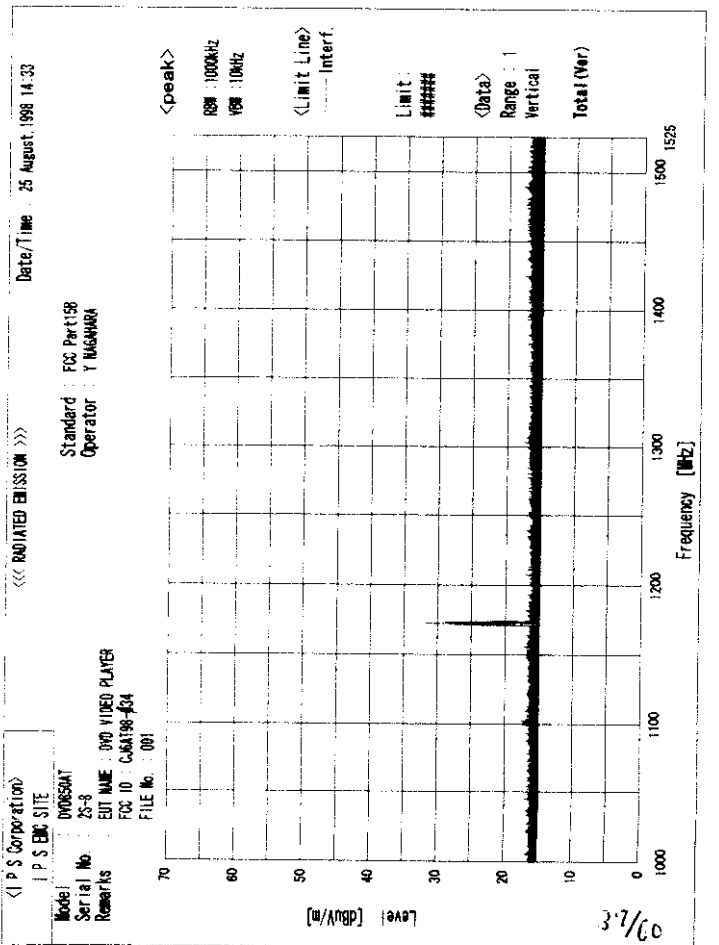
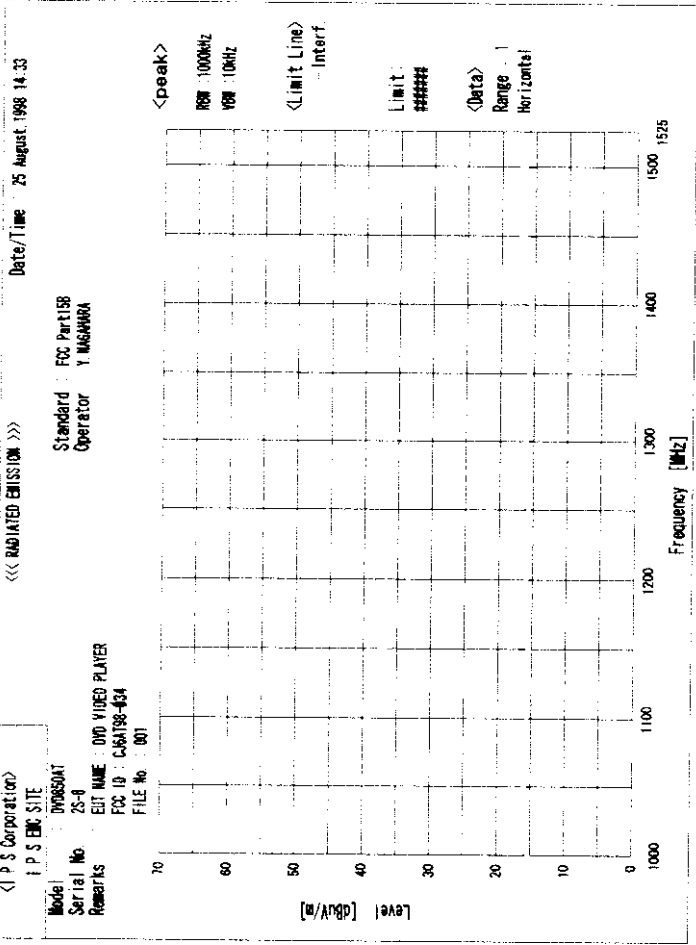
Operator : Y. NAGAHARA

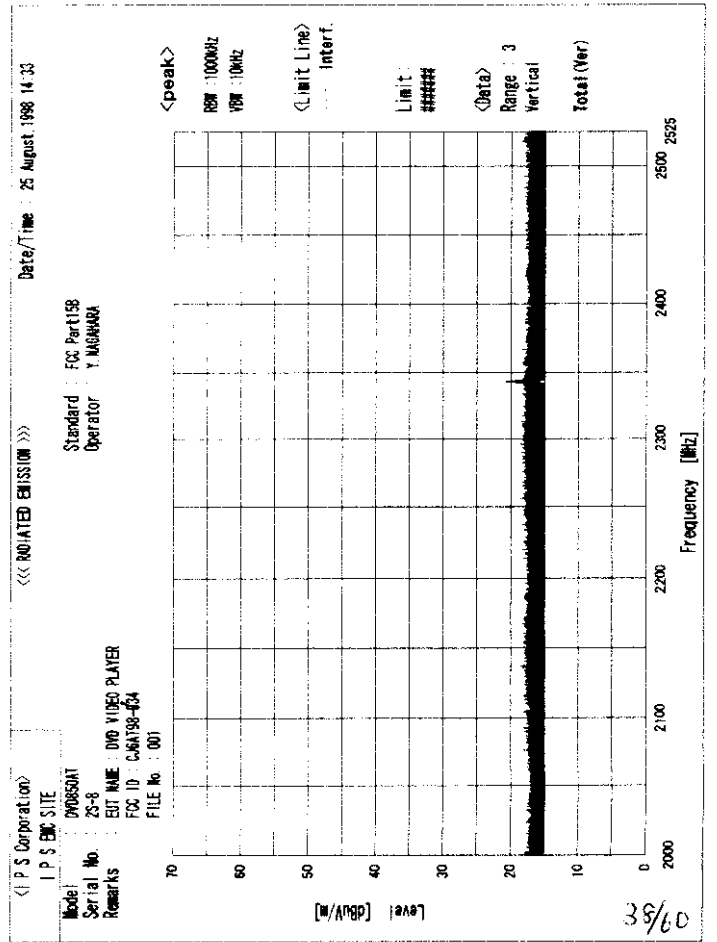
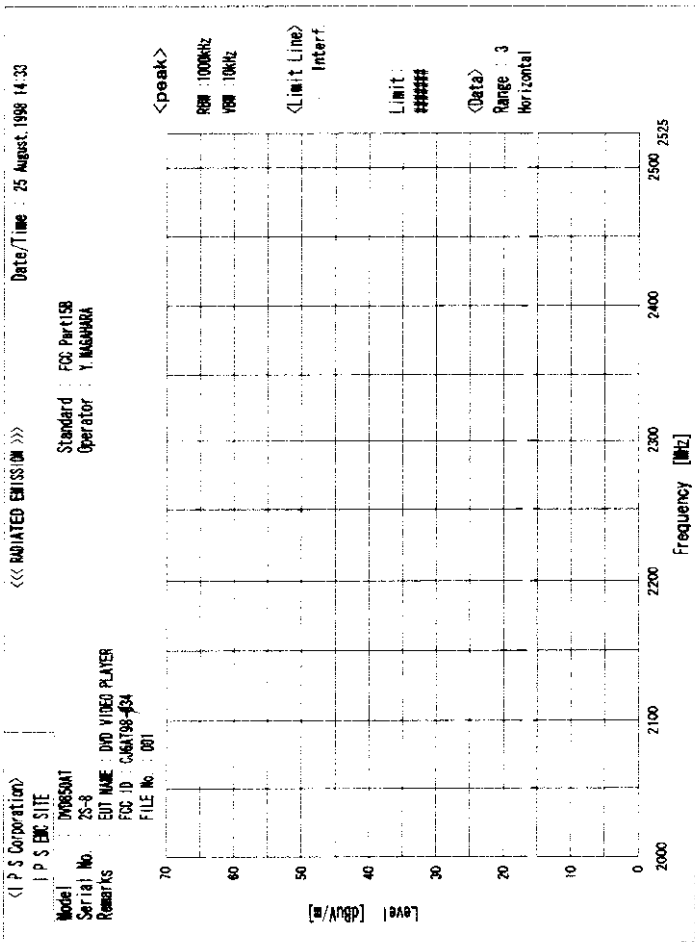
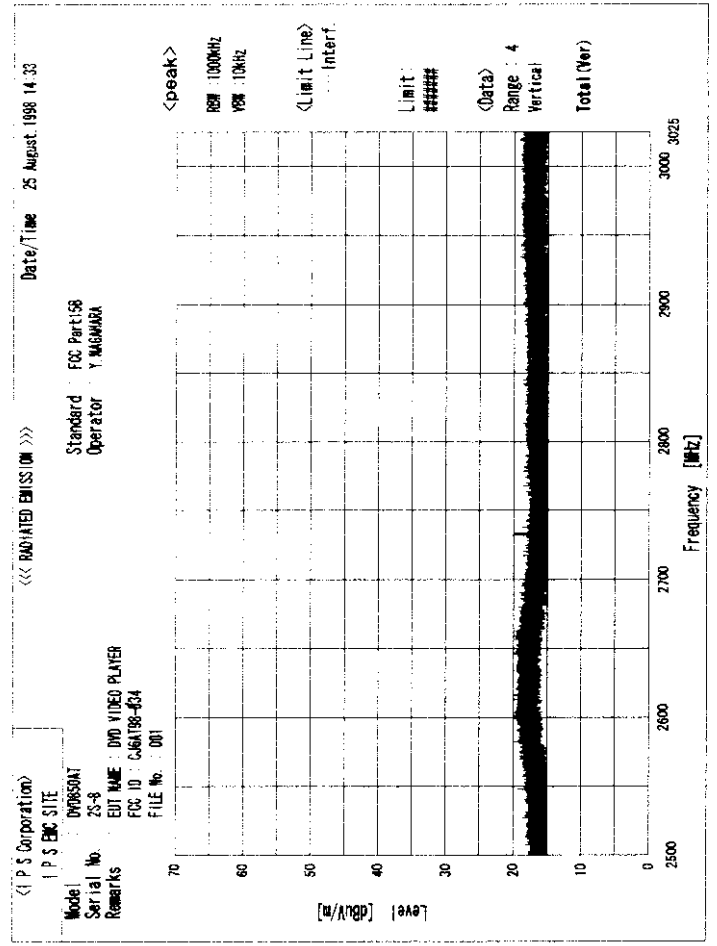
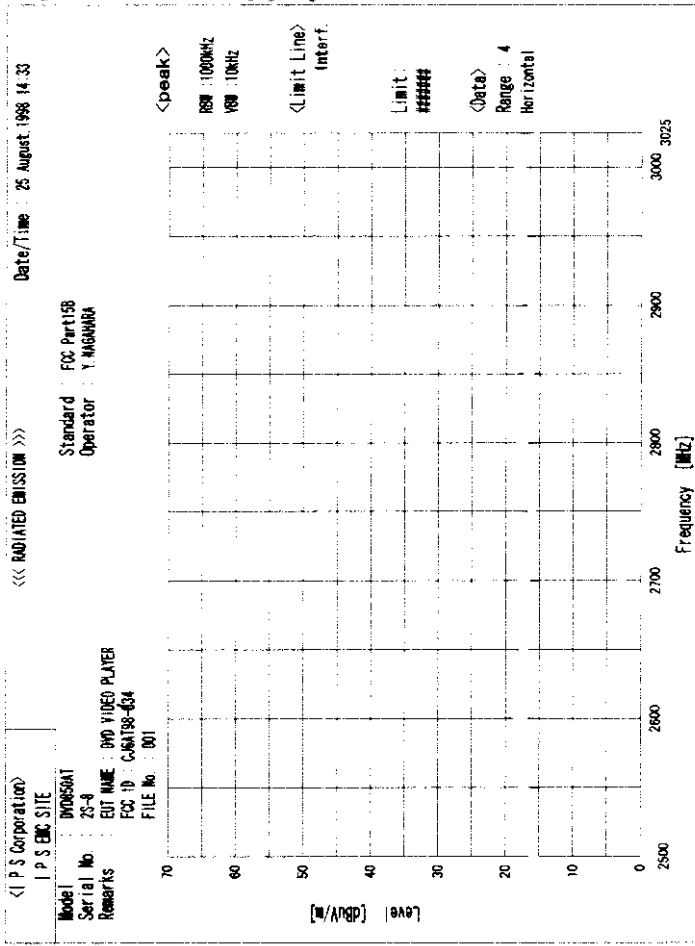
Remarks : EUT NAME : DVD VIDEO PLAYER

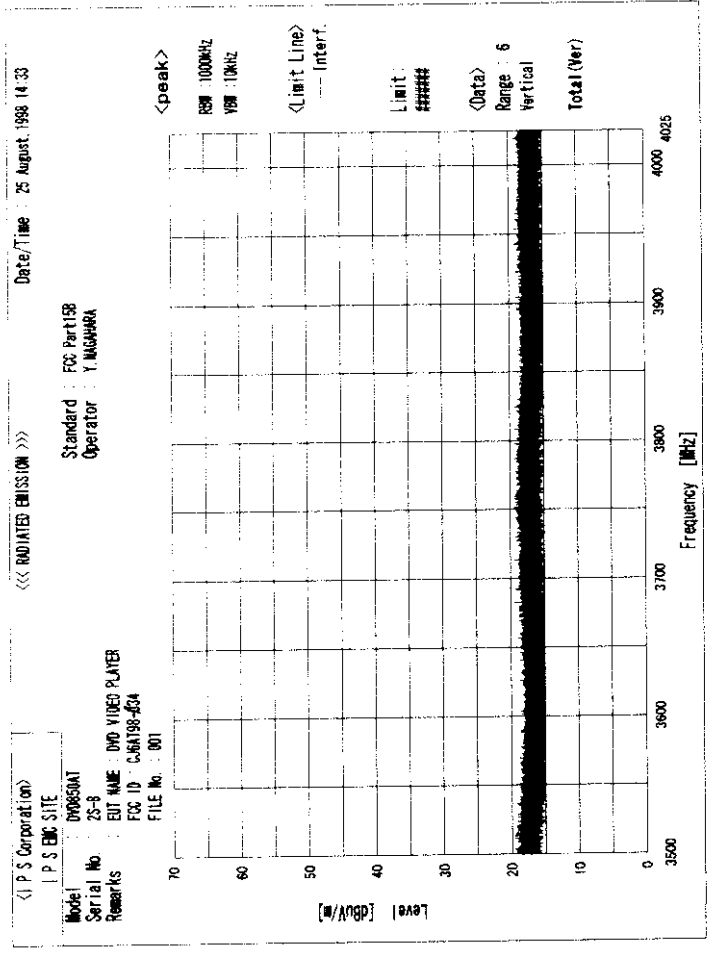
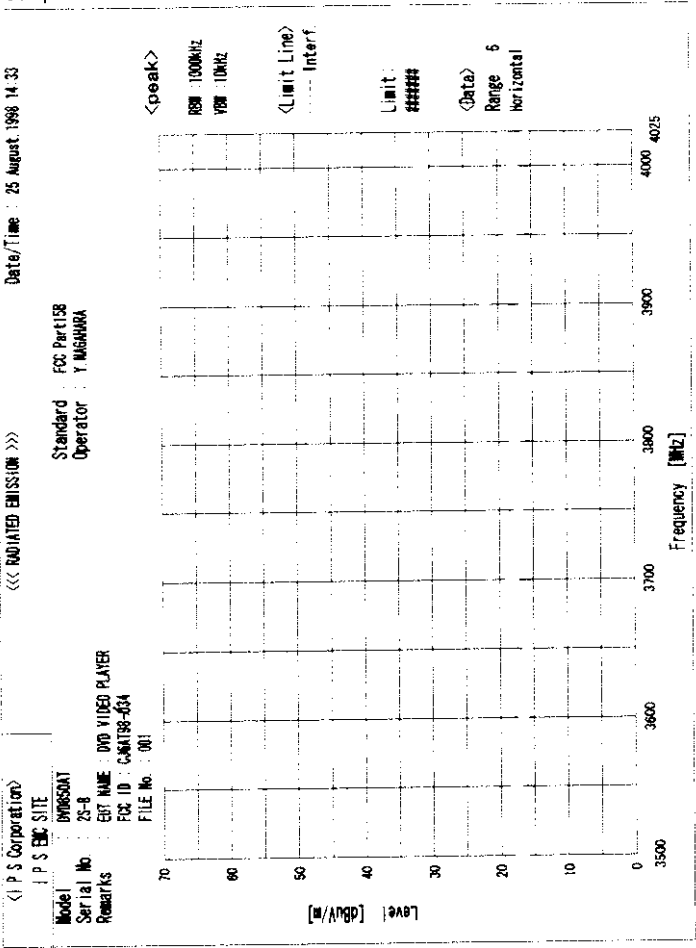
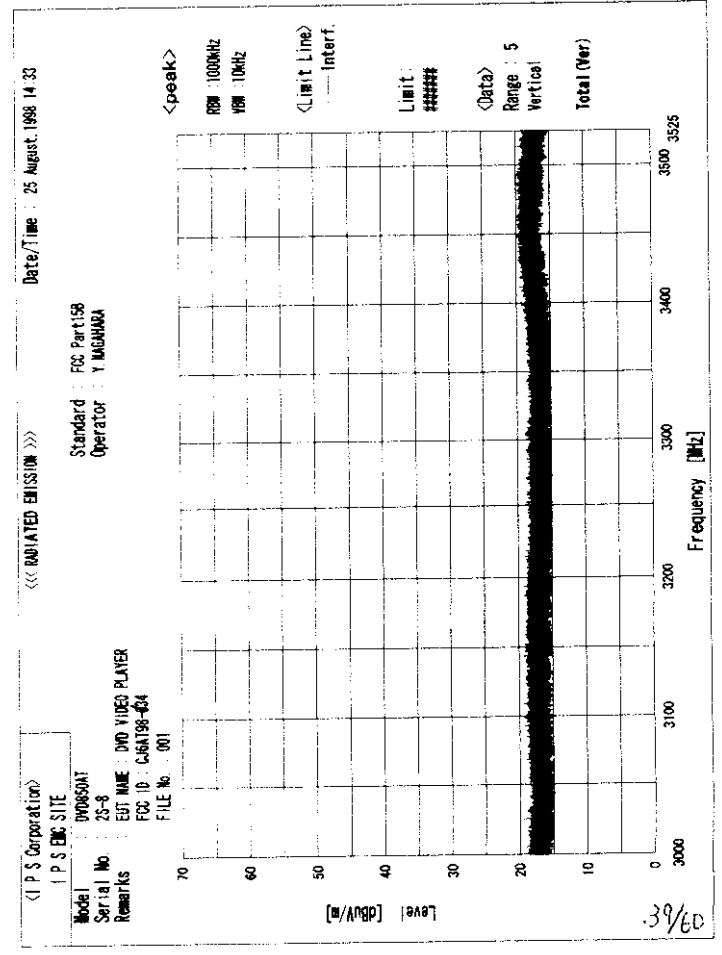
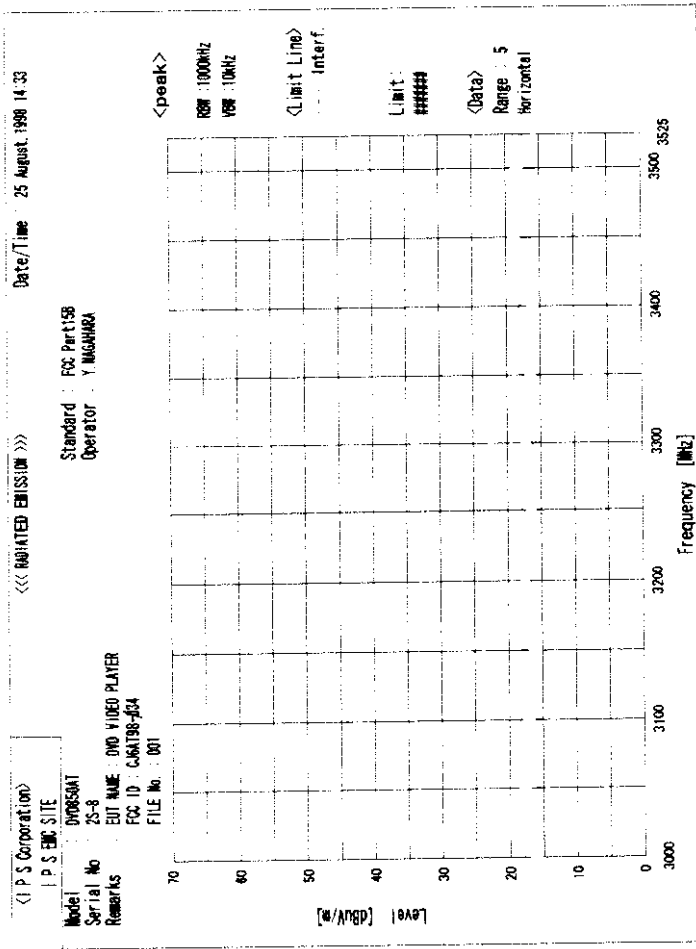
FCC ID : CJ6AT98-034

FILE No. : 001









Report No.: EMC9881*

*****<I P S Corporation>*****
<<< RADIAED EMISSION >>>

21 August, 1998 14:00
Page 1

Model : DVD850AT
Serial No. : 2S-8
Standard : FCC Part15C
Condition File : 210
Condition :
Remarks : EUT NAME : DVD VIDEO PLAYER
: FCC ID : CJ6AT98-034
: FILE No. : 001
AC Power : 120 V 60 Hz
Temperature : 29 deg.
Humidity : 63 %
Operator : T.YAMAGUCHI



----- Final Result -----

- Horizontal Polarization -

No.	Frequency [MHz]	Reading [dBuV]	c.f. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]
1	389.829	57.9	-1.9	56.0	78.6	22.6
2	390.012	57.9	-1.9	56.0	78.6	22.6

- Vertical Polarization -

No.	Frequency [MHz]	Reading [dBuV]	c.f. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]
3	389.831	53.1	-1.9	51.2	78.6	27.4
4	390.118	53.1	-1.9	51.2	78.6	27.4

8 PERIODIC OPERATION IN THE BAND 40.66-40.70 MHz AND ABOVE 70MHz (15.231)

8.1 15.231 (a) (1)

See the Pages 41

Summary of the measurement result: 4.133 seconds

8.2 15.231 (b)

See the Pages 42

Summary of the measurement result (Worst measurement):

Fundamental - Horizontal Polarization, 389.999MHz, 76.0dBuV/m Quasi-Peak Value and it have 2.6dB margin from the Limit (78.6dBuV/m).

Spurious - Horizontal Polarization, 779.953MHz, 54.0dBuV/m Quasi-Peak Value and it have 4.6dB margin from the Limit (58.6dBuV/m).

8.3 15.231 (c)

See the Pages 43 to 45

Summary of the measurement result:

The emission is no wider than 0.5% of the center frequency.

20dB down from the modulated carrier point -

Horizontal: 389.829MHz (-0.030%) & 390.012MHz (+0.009%)

Vertical : 389.831MHz (-0.037%) & 390.118MHz (+0.036%)

Test Result: Pass



TRG

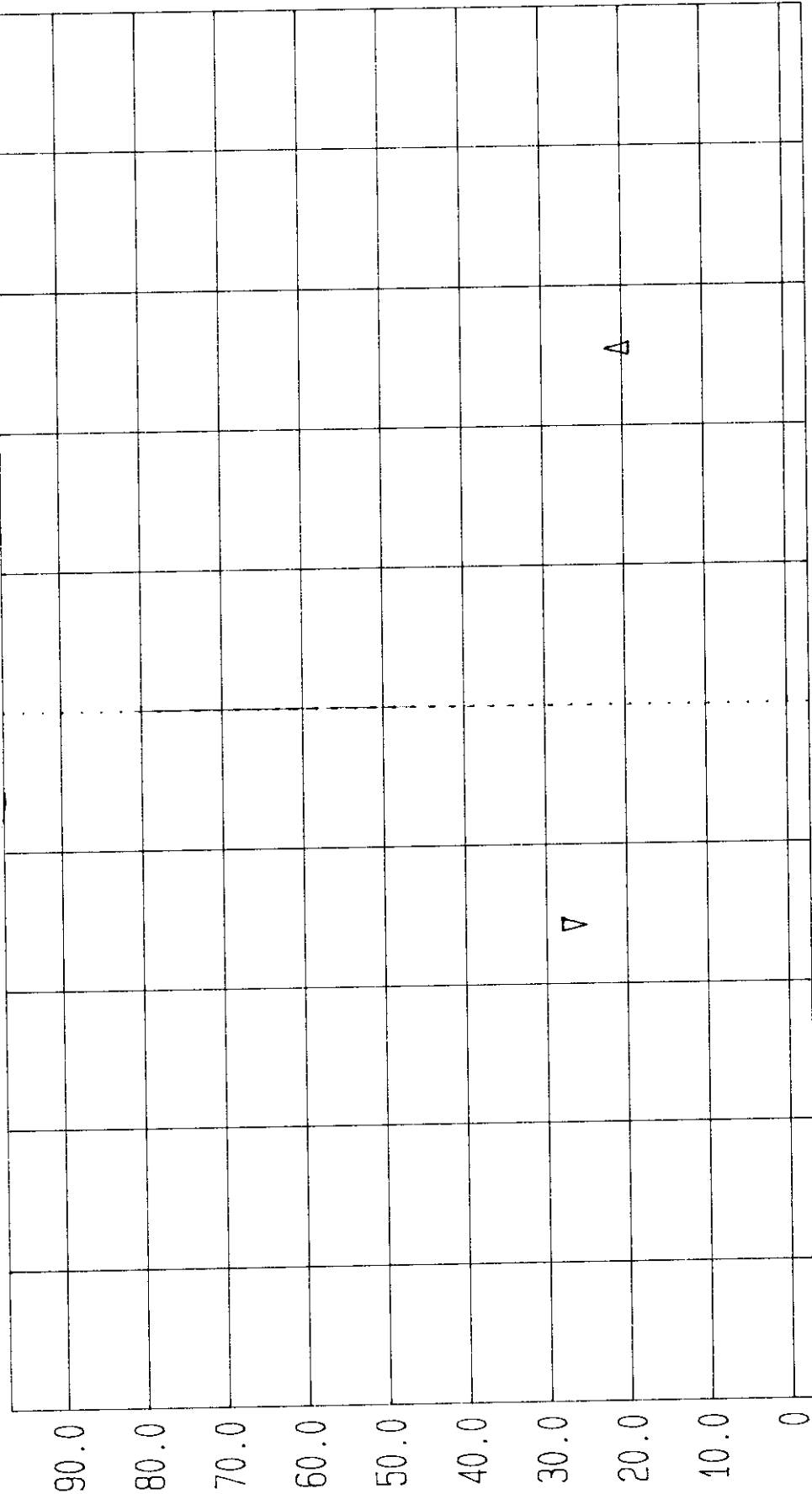
Date 25.Aug.'98 Time 10:43:25

Ref.Lvl Delta

97.00 dB μ V

-3.00 dB
4.133 s

Res.Bw 100.0 kHz [3dB] Vid.Bw 100 kHz
CF.Stp 10.000 kHz RF.Att 20 dB
Unit [dB μ V]



Span 0 Hz Center 390.16111 MHz Sweep 10.0 s

Model : DVD850AT
Serial No. : 2S-8
Standard : FCC Part15C
Condition File : 210
Condition :
Remarks : EUT NAME : DVD VIDEO PLAYER
: FCC ID : CJ6AT98-034
: FILE No. : 001
AC Power : 120 V 60 Hz
Temperature : 29 deg.
Humidity : 63 %
Operator : T.YAMAGUCHI



----- Final Result -----

- Horizontal Polarization -

No.	Frequency [MHz]	Reading [dBuV]	c.f. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]
1	389.999	77.9	-1.9	76.0	78.6	2.6
2	779.953	47.2	6.8	54.0	58.6	4.6

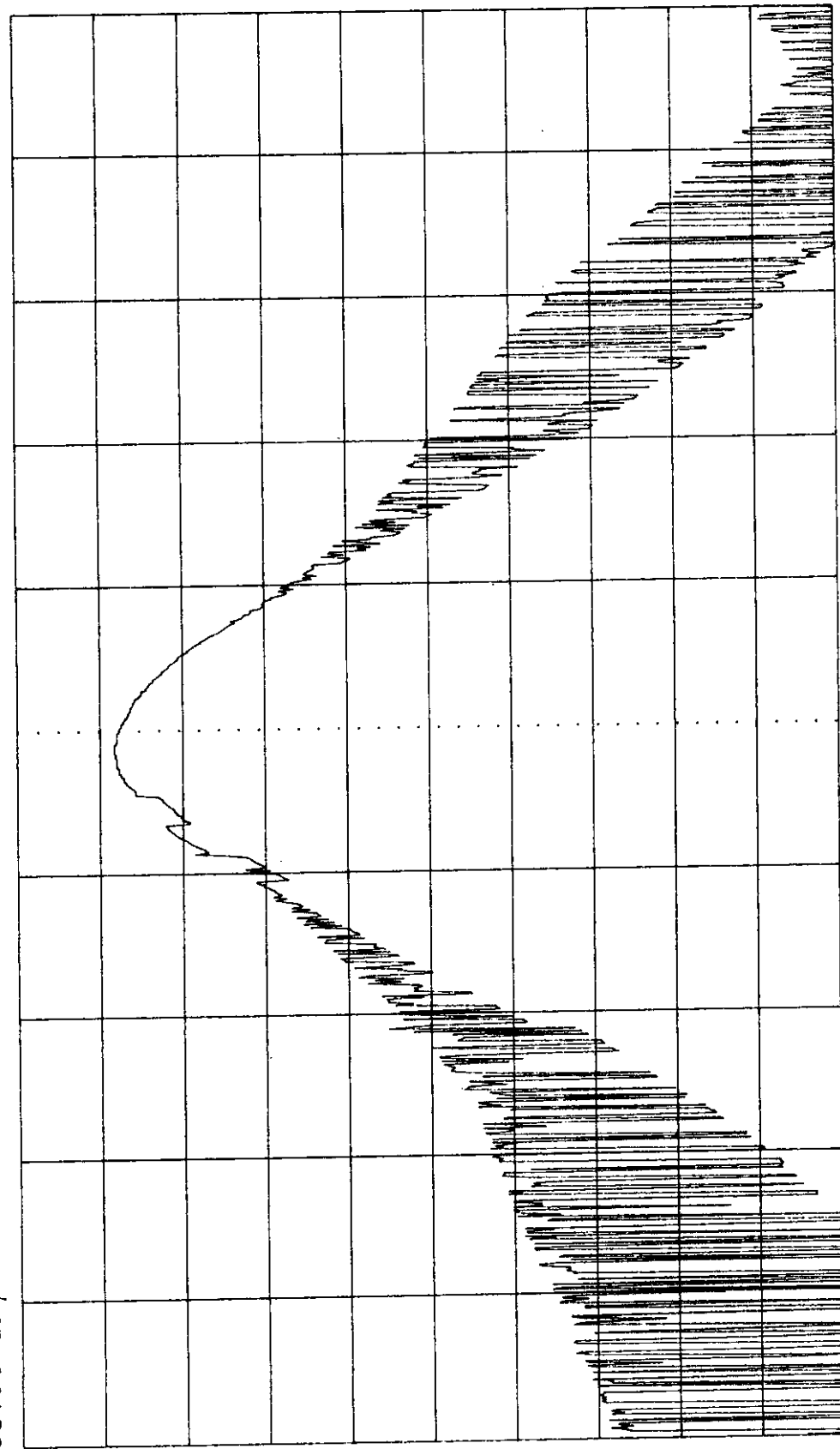
79.3

- Vertical Polarization -

No.	Frequency [MHz]	Reading [dBuV]	c.f. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]
3	389.983	73.1	-1.9	71.2	78.6	7.4
4	779.947	44.3	6.8	51.1	58.6	7.5

Horizontal
Date 21. Aug. '98 Time 14:29:35
Ref. Lvl
85.00 dBuV

Res. Bw 100.0 KHz [3dB] Vid. Bw 100 KHz
CF. Stp 100.000 KHz RF. Att 10 dB
Unit [dBuV]



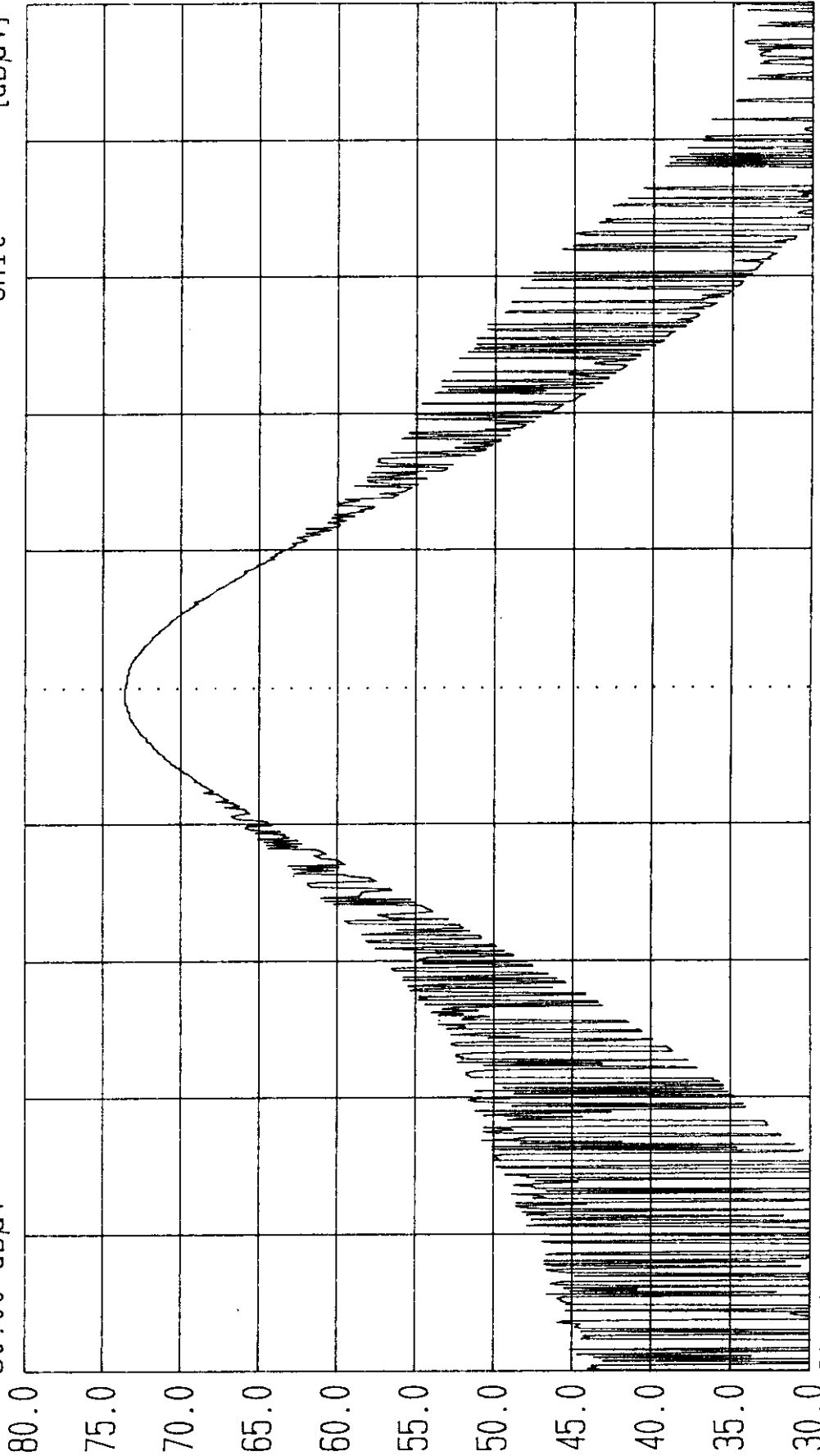
Start 389.475555 MHz Stop 390.475555 MHz
Span 1 MHz Center 389.975555 MHz Sweep 20 ms





Vertical
Date 21. Aug. '98 Time 14: 24: 18
Ref. Lvl
80.00 dB μ V

Res. Bw 100.0 kHz [3dB] Vid. Bw 100 kHz
CF. Stp 100.000 kHz RF. Att 10 dB
Unit [dB μ V]



Start 389.475555 MHz Span 1 MHz Center 389.975555 MHz Sweep 20 ms Stop 390.475555 MHz

9 APPLICANT AND MANUFACTURER INFORMATION

9.1 Engineering Statement

TYPE OF APPLICATION : Certification

APPLICABLE FCC RULES : 2.907; 15.201(b)

APPLICANT : Toshiba Corporation
1-1, Shibaura, 1-chome, Minato-ku,
Tokyo 105, Japan

TRADE NAME : Philips Magnavox

KIND OF EQUIPMENT : Part 15 Subpart C - Intentional Radiator
DVD Video Player

MODEL NUMBER : DVD850AT

MEASUREMENT PROCEDURE: ANSI C63.4-1992
METHODS OF MEASUREMENT OF RADIO-NOISE
EMISSIONS FROM LOW-VOLTAGE ELECTRICAL
AND ELECTRONIC EQUIPMENT IN THE RANGE
OF 9 kHz TO 40 GHz

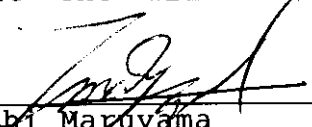
APPLICANT'S REPRESENTATIVE: Satoru Yoshimoto / Engineer

<ENGINEERING STATEMENT>

I HEREBY STATE THAT: The measurements shown in this application were made in accordance with the procedures indicated and the energy emitted by this equipment was found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements and vouch for the qualifications of all persons taking them. This report summarizes the results of a single investigation and test results relate only to tested sample performed on the described test object. This test report must not be used by the client to claim product endorsement by NVLAP, JAB or any agency of the U.S. and Japanese Government. We also hereby certify that no party to the applications authorized hereunder is subject to a denial of benefits, including FCC benefits, pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 853(a).

I FURTHER STATE THAT: On the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of Part 15 of the F.C.C. Rules under normal use and maintenance. The report shall not be reproduced except in full without the written approval of the IPS Corporation.

APPROVED BY:



Takashi Maruyama
Authorized Signature
IPS Corporation.