TOSHIBA

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Date :October 18, 2002
Issued in : Tokyo, Japan

REPORT OF MEASUREMENT OF DIGITAL DEVICE

1. Manufacturer : Toshiba Corporation
Digital Media Network company, Ome Operations-Digital Media Network
2-9, Suehiro-cho, Ome-shi, Tokyo 198-8710 Japan
and/or
Toshiba America Information Systems, Inc., Irvine Works
9740 Irvine Boulevard, Irvine, CA 92618-1697 USA
and/or
Toshiba Europe GmbH, Regensburg Operations Center
Leibnitzstrasse 2, D-93055, Regensburg, Germany
and/or
Toshiba Computer Systems (Shanghai) Co., Ltd.
No. 33 Bldg., 351 Jinzang Road, Pudong New Area, Shanghai, China
and/or
Toshiba Information Equipment (Philippines), Inc.
103 East Main Avenue Extension, Special Export Processing Zone,
Laguna Technopark, Binan, Laguna,The Philippines

2. Description on device : Personal Computer
a) Category : Class B digital device
b) Trade name : TOSHIBA
c) Model No. : PP350U
d) Power supply : 15 Vdc, 3 A (supplied by AC Adaptor)

3. Date of measurement : October 13, 2002 (completed)

4. Regulation applied : FCC rules and regulations Part 15 Subpart B
Canada ICES-003

5. Measurement procedure : ANSI C63.4-1992

6. Measurement place : Anechoic Chamber No. 1 and No. 3 of Ome Operations, Toshiba Corporation.
(NVLAP Lab Code: 200107-0)

7. Measurement results : The results obtained from the measuring of the above-mentioned device are as shown in the attached sheets.
Test results in this test report are applicable to the sample tested.
Test results in this test report are traceable to the National/ International Standards.

I HEREBY CERTIFY THAT : The data shown in this report was made in accordance with the procedures given in ANSI C63.4-1992 and the energy emitted by the device was found to be within the applicable limits. This report was made in accordance with NVLAP requirements.

Document No.: OFD-H3395

NVLAP®
NVLAP LAB CODE 200107-0

K. Inada, Group Manager
Quality Assurance & Planning Section
Quality Assurance Dept.
Identify NVLAP Signatory

"The report must not be used by the client to claim product endorsement by NVLAP or any agency of U.S. Government."

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1. Measurement condition and configuration of EUT

The Personal Computer (EUT) with two memory expansion board was measured as a system consisting of the Equipment Under Test (EUT) and two USB, an External monitor port and a Microphone jack attached to operating Class B certified peripherals as indicated in the 9/18/86 clarification of rules for measuring computing devices (Public Notice) and a PC card slot, a SD card slot, a Compact Flash module slot, a LAN jack, a Modem jack and a Headphone jack attached to appropriate operating peripherals or cables.

During the measuring, all available modes, all cabling and peripheral layouts were arranged to achieve the "WORST" case emissions in accordance with FCC recommended notebook computer system measurement configuration. The measurement data presented is representative of the system measurement.

1.1. The Equipment Under Test (EUT) information

The measurement data in this report was taken under the following EUT.

[Product]	[Manufacturer]	[Model No.]
Personal Computer	Toshiba Corporation	PP350U

Notes:
The EUT was operated with an AC Adaptor (Model No. PA3153U-1ACA or PA3241U-1ACA) supplied by Toshiba Corporation.
A non-shielded DC output cable assembled with the AC Adaptor.
A non-shielded AC power cable is provided with the EUT.
Please refer to the Table 1 for EUT measurement configurations.

- Table 1, EUT configurations -

Data	Model No (Serial No.) [type of EUT]	Memory module	CPU module	HDD pack	W-LAN (Model)	Bluetooth (PA3235U)	Mode	AC Adaptor
A	PP350U (#401) [Commercial Sample]	512 MB x2	Pentium III 1.33 GHz	40 GB, Hitachi (DK23EB-40)	Yes (PA3189U)	Yes	Normal	45 W (PA3241U)
B	PP350U (#400) [Commercial Sample]	128 MB x2	Pentium III 1.33 GHz	40 GB, IBM (IC25N040ATCS05-0)	Yes (PA3236U)	Yes	Normal	45 W (PA3153U)
C	PP350U (#349) [Commercial Sample]	256MB x2	Pentium III 1.33 GHz	40 GB, Toshiba (HDD2171)	Yes (PA3189U)	Yes	Normal	75 W (PA3083U)
D	PP350U (#401) [Commercial Sample]	256 MB x2	Pentium III 1.33 GHz	30 GB, Hitachi (DK23EA-30)	Yes (PA3189U)	Yes	Normal	45 W (PA3241U)
E	PP350U (#401) [Commercial Sample]	256 MB x2	Pentium III 1.33 GHz	30 GB, Toshiba (HDD2181)	Yes (PA3189U)	Yes	Tablet	45 W (PA3241U)
F	PP350U (#401) [Commercial Sample]	256 MB x2	Pentium III 1.33 GHz	20 GB, Toshiba (HDD2168)	Yes (PA3189U)	Yes	Normal	45 W (PA3241U)
G	PP350U (#401) [Commercial Sample]	256 MB x2	Pentium III 1.33 GHz	60 GB, Toshiba (HDD2184)	Yes (PA3189U)	Yes	Tablet	45 W (PA3241U)

Notes: Details of alternative units refer to the Table 2.

1.2. Product information

(Model Designation of Personal Computer)

[Model No.]	[CPU]	[HDD Capacity]
PP350x-xxxxx or PP350Nxxxxxx	Mobile Pentium® III-1.33 GHz [*1]	20 GB or 30 GB or 40 GB or 60 GB

Notes:
The “x-xxxxx” or “xxxxxx” is suffix.
The capital letter of the alphabet, or Arabic Numeral is used into suffix.
The difference of suffix of model number is by installed units or components.
[*1]: with SpeedStep™ technology function

(Unit information which constitutes Personal Computer)

This Personal Computer consists of the following units.

* System Board (CPU mounted)	x 1
* DC IN Harness	x 1
* Sound Board	x 1
* Sound Relay Flexible Board	x 1
* Speaker	x 1
* Microphone	x 1
* Microphone Relay Harness	x 1
* Modem Daughter Card	x 1
* Modular Harness	x 1
* LED/FIR Board	x 1
* LED/FIR Relay Flexible Board 1	x 1
* LED/FIR Relay Flexible Board 2	x 1
* Touch Pad Unit	x 1
* Touch Pad Relay Flexible Board	x 1
* Power Switch Board	x 1
* Function Switch Board	x 1
* Keyboard Unit	x 1
* RTC Battery (Ni-MH)	x 1
* CPU Fan Module	x 1
* Main Battery Pack (Li-Ion)	x 1
* Digitizer Unit	x 1
* FL Inverter	x 1
* LCD (provided with FL)	x 1
* LCD and Utility Harness	x 1
* LCD Sensor Switch Board	x 1
* Hard Disk Drive: #	x 1
* Memory Module: #	x 1
* Wireless LAN Card: #	x 1
* Dualband Film Antenna for Wireless LAN (RX and TX/RX) or Dualband Film Antenna (Wideband Dual Anntenna for Wireless LAN (RX and TX/RX)	x 2
* Bluetooth Module	x 1
* BT Relay Flexible Board	x 1
* Antenna Board for Bluetooth	x 1
* Modem Modular Cable	x 1
* Toshiba Tablet Pen	x 1
* AC Adaptor (with AC power cable): #	x 1

Note:
#: This unit has alternative units. Information of alternative units refers to the Table 2.

- Table 2, Alternative Units -

Units	Manufacture or Distributor, or other Description (Model No.)			
Hard Disk Drive	20 GB, Toshiba (HDD2168)	30 GB, Toshiba (HDD2181)	30 GB, Hitachi Ltd. (DK23EA-30)	40 GB, Toshiba (HDD2171)
	40 GB, IBM (IC25N040ATCS05-0)	40 GB, Hitachi Ltd DK23EB-40	60 GB, Toshiba (HDD2184)	
Memory module	128 MB (PA3085U)	256 MB (PA3086U)	512 MB (PA3108U)	
Wireless LAN card	Wireless LAN card, Toshiba (PA3189U)	Wireless LAN card (802.11 a/b), Toshiba (PA3236U)		
AC Adaptor	45 W, Toshiba (PA3153U-1ACA)	45 W, Toshiba (PA3241U-1ACA)		

(Details of units)

Generated frequencies and radio suppression components of all units refer to the Appendix H.

(Photographs)

The units or option refer to the Appendix I.

(Option units)

This Personal Computer has option units as follows.

* PC133 128 MB Memory Kit
  - Model No. PA3085U (128 MB)
* PC133 256 MB Memory Kit
  - Model No. PA3086U (256 MB)
* PC133 512 MB Memory Kit
  - Model No. PA3108U (512 MB)
* Universal AC Adaptor
  - Model No. PA3241U/E-1ACA or
  - Model No. PA3153U/E-1ACA or
  - Model No. PA3083U/E-1ACA
* Battery Pack
  - Model No. PA3228U
* Battery Charger
  - Model No. PA3091U/E
* USB FDD Kit
  - Model No. PA3109U
* Wireless LAN Card Kit
  - Model No. PA3189U
* Wireless LAN Card Kit (802.11a/b)
  - Model No. PA3236U
* Bluetooth Module Kit
  - Model No. PA3235U
* Toshiba Tablet Pen
  - Model No. PA3242U

(System Block Diagram)

Please refer to the Appendix F

(Label Information)

Please refer to the Appendix G

1.3. The measurement was carried out with the following equipment connected:

- Table 3, Connecting peripherals -

Equipment No.	Kind of Equipment	Manufacturer or Distributor	Model No. (Serial No.)	FCC ID
1	External Monitor	Eizo Nanao Corp.	FlexScan L371 (61996041)	FCC DoC
2[*1]	USB CD-RW Drive	PLEXTOR	PX-W2410TU (503880 045940)	FCC DoC
3	USB FDD	Toshiba Corp	PA3109U (PC#1)	FCC DoC
4	Headphone	Toshiba Corp.	HR-SP1-W (PC#1)	N/A
5	Microphone	Foster Electric	M336E01T1711 (PC#1)	N/A
6	PC Card HDD	Calluna	CT260T2 (PC#1)	N/A
7	SD Card (64 MB)	Toshiba Corp.	SD-M6401M (PC#1)	N/A
8	Compact Flash card	Canon	FC-4M	N/A
9	Telecom emulator	LSI Japan Co,. Ltd.	TLE101-II (408549)	N/A
10[*2]	Other PC for communication	Toshiba Corp.	PT820U (PC) with PA3017U (10/100 Network Port Replicator II)	FCC DoC

Notes:

[*1]: The USB CD-RW Drive was operated with an AC Adaptor (Model SQ36W12P-03) supplied by PLEXTOR.

[*2]: The other PC for communication was operated with an AC Adaptor (Model PA3048U-1ACA) supplied by Toshiba Corp.

1.4. Information of installed or connected peripherals

- Table 4, Connecting information for peripherals and interface cables -

Connector name of EUT	Peripherals (Equipment No. *1)	Interface cable information		
	Data	Cable type	Connector type	Length [m]
	A to G	Supply method		
External Monitor port *2	1	Shielded	Metallic	1.7
		Provided with External Monitor		
USB port 1	2	Shielded	Metallic	1.0
		General USB cable		
USB port 2	3	Shielded	Metallic	0.15
		Assembled with USB FDD		
Headphone jack	4	Non-shielded	N/A	1.0
		Assembled with Headphone		
Microphone jack	5	Shielded	N/A	1.0
		Assembled with Microphone		
PC Card slot	6	N/A	N/A	Installed
SD card slot	7	N/A	N/A	Installed
Compact Flash module slot	8	N/A	N/A	Installed
Modem jack	9	Non-shielded	Plastic	2.0
		Provided with EUT		
LAN jack	10	Non-shielded	Plastic	2.0
		General LAN cable		

Notes:

*1 The Equipment numbers refers to the Table 3.

*2 The ferrite core that is attached to the interface cable by the manufacturer of the external monitor was removed prior to testing to determine its effect on the EUT emissions.

1.5. Operating conditions

(CPU clock speeds)

The EUT has two kinds of processing speed, however the CPU clock speed is not changed, only 1.33 GHz (Intel® Mobile Pentium® III incorporates a math coprocessor and 32 KB cache and used Intel ® SpeedStep™ technology). And also input clock speed is not changed only 133 MHz. This SpeedStep™ function of CPU can be switching between two following performance mode based on power source by automatic or easy user-controlled.

- Maximum performance mode:
- Battery optimized performance mode:
  - The best balance between performance and battery life.
  - Up to 46 % reduction in CPU power while maintaining 80 % of the Maximum Performance.

Where the Intel® Mobile Cerelon, the user s can choose the following performance speed by keyboard operation.

- Low mode
- High mode

The measurement data in our report represents emissions at Maximum/High performance mode (worst case).

(Display modes and Video modes)

This EUT supports many video modes. The users can choose the video mode by keyboard operation. Please refer to Appendix E (Appendix B of User's Manual for PORTEGE 3500 series). Therefore, the following conditions were checked to maximize emission. EUT was measured with non-interlaced scanning which enables both LCD and external monitor to operate concurrently in the XGA video mode, 1024 X 768 maximum resolutions (worst case).

Our report represents measurement data taken during the worst case EUT operations.

(Wireless LAN and Bluetooth radio output)

The Wireless LAN radio output is not category of FCC Part 15 Subpart B. Therefore, it not operated in this test.

(Operating programs)

The operating programs run following test as multi-task on standard operating system(Microsoft Windows XP Tablet PC Edition).

- Int. HDD, USB FDD, USB CD-RW, PC card HDD	:	write and read "H".
- LCD and Ext. Monitor	:	Display "H" (on full screen)
- Internal LAN	:	link test (100 Mbps)
- Internal modem	:	link test (56 kbps)
- Wireless LAN and Bluetooth	:	Radio output continuously

(Operating environment)

Power Supply (EUT and Peripherals): 120 Vac, 60 Hz

(Measurement set-up)

Please refer to page 71 to 73

- Sketches : Figure 1 to 3
- Photographs : Figure 4 to 7

2. Comment on the measurement

2.1. Measurement methodology

Both conduction and radiation measurement are performed in accordance with the procedures in ANSI 63.4-1992.

2.2. Deviation from standard

None

2.3. Measurement procedure

During the evaluation measurement, all available modes, all cabling and peripheral layouts were arranged to achieve the "WORST" case emissions.
The pre and final measurements were performed under the conditions (mode of operation and configuration) of EUT determined by evaluation measurement.
At least six highest emissions relative to the limits were recorded at the final measurement.

(Conduction measurement)

The investigated frequency range was 450 kHz to 30 MHz.
The pre-measurement was performed by peak detector function to determine the emission characteristics of the EUT. Based on the measurement results of the pre-measurement, the one EUT configuration, cable or wire configuration, and mode of operation that produces the emission that has the highest amplitude relative to the limit is selected for the final measurement by quasi-peak detector function.
The signal output port of the LISN (Model No. KNW341C) for peripherals was terminated with a 50-ohms termination.

(Radiation measurement)

The investigated frequency range was 30 MHz to 7 GHz.
The radiation measurement was performed at the measurement distance of 3 meter.
The pre-measurement was performed by peak detector function to determine the emission characteristics of the EUT. Based on the measurement results of the pre-measurement, the one EUT configuration, cable or wire configuration, and mode of operation that produces the emission that has the highest amplitude relative to the limit is selected for the final measurement by quasi-peak and peak detector functions.

2.4. Measurement place

Both conduction and radiation measurement was performed in the Anechoic Chamber (as follows:).

(Conduction and Radiation measurement)

Conduction: Anechoic Chamber No. 3 / Radiation: Anechoic Chamber No. 1 and No. 3

2.5. Measurement above 1 GHz

During the radiation measurements above 1 GHz, we found that all the data with a peak detector function satisfied the average limit (54 dBuV/m).

2.6. Ambient condition

The ambient conditions at the time the measurement was conducted were as follows:
- Temperature / Relative humidity: Please see [Measurement Results] in this report.

2.7. Uncertainty

Derived from ISO Guide to the Determination of Uncertainties with a Coverage Factor K=2.
- Conduction measurement : ± 2 dB
- Radiation measurement : ± 4 dB

2.8. Reference page of measurement results

Test	Data	Reference page of	
		Final measurement	Pre-measurement
Conduction	A	15	16 and 17
	B	18	19 and 20
	C	21	22 and 23
	D	24	25 and 26
	E	27	28 and 29
	F	30	31 and 32
	G	33	34 and 35
Radiation	A	36	37 to 40
	B	41	42 to 45
	C	46	47 to 50
	D	51	52 to 55
	E	56	57 to 60
	F	61	62 to 65
	G	66	67 to 70

2.9. Minimum margin to the limits

(Conduction)

Data	Rank	Margin (dB)	Frequency (MHz)	Line selection	Operating frequency
A	1	3.8	2/048	Other end & Gnd'd	Un-known
	2	4.0	2.048	One end & Gnd'd	Un-known
	3	7.5	6.142	Other end & Gnd'd	Un-known
	4	9.0	6.142	One end & Gnd'd	Un-known
	5	10.0	6.544	One end & Gnd'd	Un-known
	6	10.6	6.544	Other end & Gnd'd	Un-known
B	1	10.7	4.931	One end & Gnd'd	Un-known
	1	10.7	4.931	Other end & Gnd'd	Un-known
	3	12.1	4.613	One end & Gnd'd	Un-known
	4	12.9	4.613	Other end & Gnd'd	Un-known
	5	14.7	3.796	Other end & Gnd'd	Un-known
	6	16.1	3.796	Other end & Gnd'd	Un-known
C	1	3.1	2.049	Other end & Gnd'd	Un-known
	2	3.4	2.049	One end & Gnd'd	Un-known
	3	8.5	6.143	Other end & Gnd'd	Un-known
	4	8.8	6.143	One end & Gnd'd	Un-known
	5	14.2	0.898	Other end & Gnd'd	Un-known
	6	15.7	0.486	One end & Gnd'd	Un-known
D	1	3.6	2.049	One end & Gnd'd	Un-known
	2	3.7	2.049	Other end & Gnd'd	Un-known
	3	7.6	6.440	Other end & Gnd'd	Un-known
	4	7.9	6.498	Other end & Gnd'd	Un-known
	5	8.9	6.498	One end & Gnd'd	Un-known
	6	9.1	6.440	One end & Gnd'd	Un-known
E	1	1.8	2.049	Other end & Gnd'd	Un-known
	2	2.3	2.049	One end & Gnd'd	Un-known
	3	8.0	6.142	Other end & Gnd'd	Un-known
	4	9.5	6.142	One end & Gnd'd	Un-known
	5	11.3	4.097	Other end & Gnd'd	Un-known
	6	13.2	4.097	One end & Gnd'd	Un-known
F	1	1.8	2.048	Other end & Gnd'd	Un-known
	2	1.9	2.048	One end & Gnd'd	Un-known
	3	9.4	6.693	One end & Gnd'd	Un-known
	4	9.5	6.139	One end & Gnd'd	Un-known
	4	9.5	6.139	Other end & Gnd'd	Un-known
	6	12.3	6.693	Other end & Gnd'd	Un-known
G	1	2.6	2.049	Other end & Gnd'd	Un-known
	2	2.7	2.049	One end & Gnd'd	Un-known
	3	7.8	6.143	One end & Gnd'd	Un-known
	4	11.2	6.143	Other end & Gnd'd	Un-known
	5	13.0	5.886	Other end & Gnd'd	Un-known
	6	13.9	5.886	One end & Gnd'd	Un-known

(Radiation)

Data	Rank	Margin (dB)	Frequency (MHz)	Polarization	Operating frequency
A	1	3.4	73.73	Vertical	Un-known
	2	4.2	501.14	Vertical	Un-known
	3	6.6	73.73	Horizontal	Un-known
	4	7.5	211.34	Horizontal	Un-known
	5	8.0	59.36	Vertical	Un-known
	6	8.1	195.08	Horizontal	Un-known
B	1	4.7	501.13	Vertical	Un-known
	2	5.8	927.03	Horizontal	Un-known
	3	7.9	151.52	Horizontal	Un-known
	4	10.2	798.80	Horizontal	Un-known
	5	10.4	59.96	Vertical	Un-known
	6	11.3	73.68	Horizontal	Un-known
C	1	5.6	151.52	Horizontal	Un-known
	2	6.8	61.43	Vertical	Un-known
	3	7.9	155.59	Horizontal	Un-known
	4	9.0	101.87	Horizontal	Un-known
	5	9.7	73.72	Vertical	Un-known
	5	9.7	73.72	Horizontal	Un-known
D	1	4.3	73.72	Vertical	Un-known
	2	6.1	73.72	Horizontal	Un-known
	3	7.4	148.11	Horizontal	Un-known
	4	7.5	101.89	Horizontal	Un-known
	5	8.3	501.14	Vertical	Un-known
	6	8.5	61.41	Vertical	Un-known
E	1	4.3	501.13	Vertical	Un-known
	2	4.4	73.72	Vertical	Un-known
	3	6.8	73.72	Horizontal	Un-known
	4	7.1	151.54	Horizontal	Un-known
	5	7.2	101.88	Horizontal	Un-known
	6	8.1	59.39	Horizontal	Un-known
F	1	3.9	73.73	Vertical	Un-known
	2	6.2	73.73	Horizontal	Un-known
	3	7.2	101.88	Horizontal	Un-known
	4	7.5	59.40	Vertical	Un-known
	5	9.6	98.45	Horizontal	Un-known
	6	9.9	148.12	Horizontal	Un-known
G	1	7.0	151.54	Horizontal	Un-known
	2	7.6	73.73	Vertical	Un-known
	3	7.8	101.88	Horizontal	Un-known
	4	8.2	501.13	Vertical	Un-known
	5	8.4	249.38	Horizontal	Un-known
	6	8.6	73.73	Horizontal	Un-known

2.10. Sample of calculation

(Conduction Measurement)

The emission level on page 15 to 35 in the measurement data includes the following system factor.

- Final measurement and Pre-measurement

* System Factor (includes the LISN factor and system loss) : Appendix A
150 kHz - 30 MHz : Maximum factor is 1.6 [dB]

- Example

Sample of calculation at 2.048 MHz- One end & Gnd'd [Data A]:

Receiver reading		System Factor		Emission level
42.3	+	1.6	=	43.9 [dBμV] #

#: Refer to page 15.

(Radiation measurement)

The emission level on page 36 to 70 in the measurement data includes the following system factors.

- Final measurement

* System loss (includes the cable loss and/ or selector loss and / or Amplifier) : Appendix B
30 MHz - 18 GHz

* Antenna factor for:
- Tunable dipole antenna : Appendix C
30 MHz -500 MHz (Dipole Antenna: KBA-511A)
500 MHz - 1 GHz (Dipole Antenna: KBA-611)
- Broadband antenna : Appendix D
1 GHz - 18 GHz (Double Ridged Waveguide Horn Antenna: 3115)

- Example

Sample of calculation at 59.36 MHz- Vertical [Data A]:

Receiver reading		System loss + Antenna factor		Emission level
26.1	+	5.9	=	32.0 [dBμV/m] ##

##: Refer to page 36.

- Pre-measurement

* System loss (includes the cable loss and/or selector loss and/or Amplifier) : Appendix B
30 MHz - 18 GHz

* Antenna factor for broadband antenna : Appendix D
30 MHz - 1 GHz (BILOG Antenna: CBL6111A)
1 GHz - 18 GHz (Double Ridged Waveguide Horn Antenna: 3115)

- Example

Sample of calculation at 35.7 MHz- Vertical [Data A]:

Receiver reading		System loss		Antenna factor		Emission level
7.6	+	1.6	+	20.1	=	29.3 [dBμV/m] ###

###: Refer to page 37.

[Measurement results]

(Conduction)

[Final measurement result][Data A]

Measurement Results

for Conduction Measurement

EUT Name : PORTEGE 3500
Type : PP350U
Serial No. : #1, Normal mode
Memo : AC Adaptor: PA3241U-1ACA (45W)
Data No. : A
Limit : FCC Part 15 Class B

Frequency [MHz]	Receiver Reading [dBuV] Va QP	Va AV	Vb QP	Vb AV	Sys. Fact. [dB]	Emission Level [dBuV] Va QP	Va AV	Vb QP	Vb AV	Limit [dBuV] QP	Limit [dBuV] AV	Margin [dB] Va QP	Margin [dB] Va AV	Margin [dB] Vb QP	Margin [dB] Vb AV
# 2.048	42.3		42.5		1.6	43.9		44.1		47.9		4.0		3.8	
4.096	34.5		34.9		1.6	36.1		36.5		47.9		11.8		11.4	
6.142	37.3		38.8		1.6	38.9		40.4		47.9		9.0		7.5	
6.544	36.3		35.7		1.6	37.9		37.3		47.9		10.0		10.6	
15.642	28.1		28.3		1.6	29.7		29.9		47.9		18.2		18.0	
29.847	28.7		27.9		1.6	30.3		29.5		47.9		17.6		18.4	

Note : 1) The emission level is including the system factor (maximum factor) that consists of LISN (or AMN) factor and system loss.
2) Sample of calculation at 2.048 MHz (QP,Va):
42.3 + 1.6 = 43.9 [dBuV]

Comments : HDD: 40GB, Hitachi

Place : Anechoic Chamber No. 3
Date : October 8, 2002

Operator :
Y. Abe, Engineer
Toshiba Digital Media Engineering Corp.

Ver. 4.1c

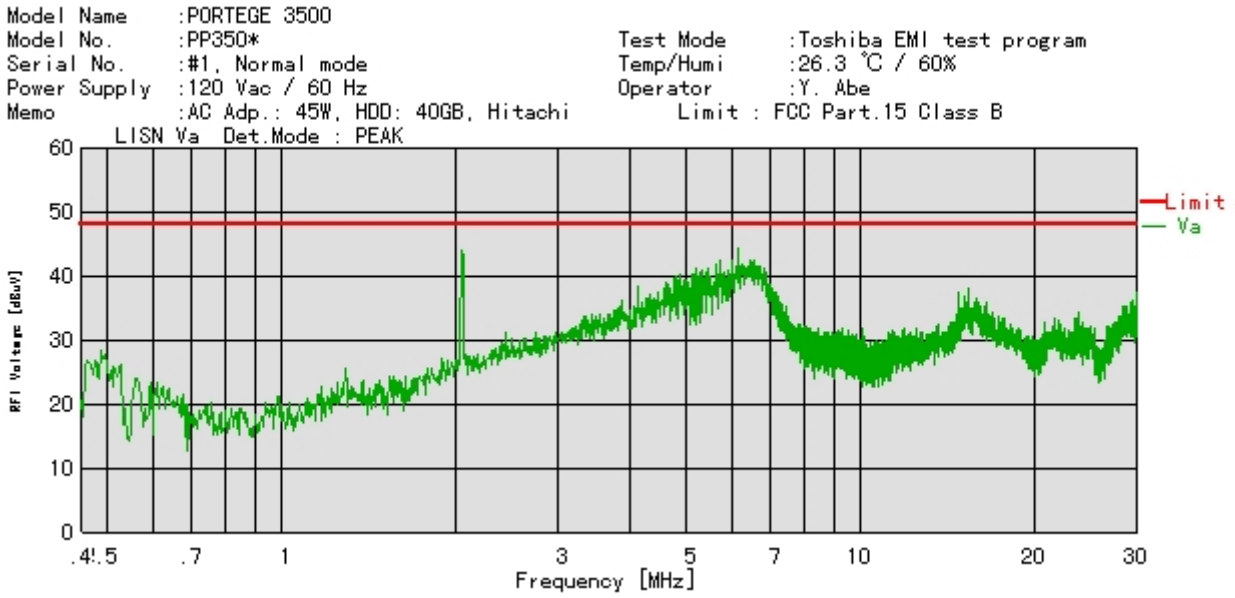
[Pre-measurement result (pick-up list)] [Data A]

Model No.	:	PP350U
Serial No.	:	#1, Normal mode
Power Supply	:	120Vac / 60 Hz
Test Mode	:	Toshiba Windows EMI test program
Temp/Humi	:	26.3 deg / 60.0 %
Operator	:	Y. Abe
Memo	:	AC ADP.: 45W, HDD: 40 GB
Limit1	:	FCC Part.15 Class B
Limit2	:	
Date	:	10/08/2002

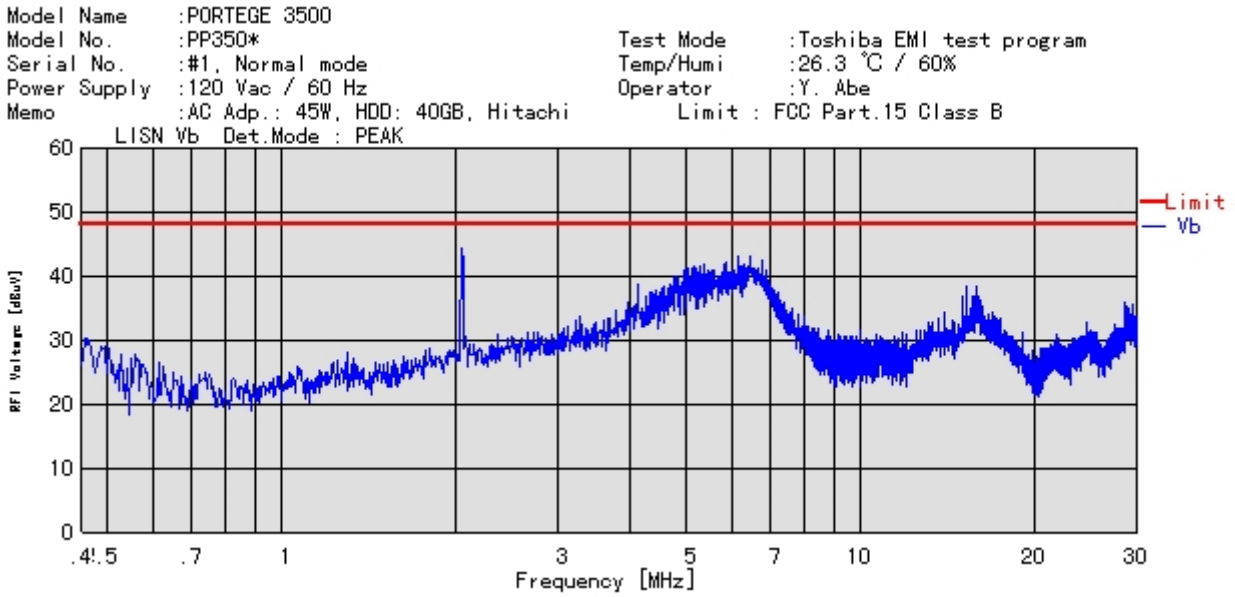
<< Peak List-Up Data List>>

Freq.		Level	Limit QP	Margin QP
[MHz]		[dBuV]	[dBuV]	[dB]
2.047	Va	44.2	48.0	3.8
4.116	Va	38.5	48.0	9.5
4.614	Va	39.1	48.0	8.9
4.789	Va	39.9	48.0	8.1
4.859	Va	40.2	48.0	7.8
4.981	Va	39.4	48.0	8.6
5.104	Va	40.2	48.0	7.8
5.156	Va	40.4	48.0	7.6
5.218	Va	41.3	48.0	6.7
5.261	Va	40.7	48.0	7.3
5.340	Va	41.0	48.0	7.0
5.463	Va	41.3	48.0	6.7
5.629	Va	41.9	48.0	6.1
5.699	Va	42.4	48.0	5.6
6.005	Va	42.6	48.0	5.4
6.154	Va	44.5	48.0	3.5
14.750	Va	37.6	48.0	10.4
15.314	Va	38.1	48.0	9.9
15.424	Va	37.6	48.0	10.4
29.955	Va	37.5	48.0	10.5
2.047	Vb	44.4	48.0	3.6
4.116	Vb	38.9	48.0	9.1
4.444	Vb	37.8	48.0	10.2
4.561	Vb	38.3	48.0	9.7
4.798	Vb	39.9	48.0	8.1
4.938	Vb	39.2	48.0	8.8
4.955	Vb	41.0	48.0	7.0
5.165	Vb	41.7	48.0	6.3
5.218	Vb	41.2	48.0	6.8
5.261	Vb	41.6	48.0	6.4
5.375	Vb	41.9	48.0	6.1
5.839	Vb	42.2	48.0	5.8
6.154	Vb	43.2	48.0	4.8
6.434	Vb	43.2	48.0	4.8
14.984	Vb	36.9	48.0	11.1
15.259	Vb	38.4	48.0	9.6
15.658	Vb	36.9	48.0	11.1
15.891	Vb	38.4	48.0	9.6
28.695	Vb	36.0	48.0	12.0
29.415	Vb	35.5	48.0	12.5

[Pre-measurement result (spectrum graph)] [Data A]
- Va (One end and Gnd'd)



- Vb (Other end and Gnd'd)

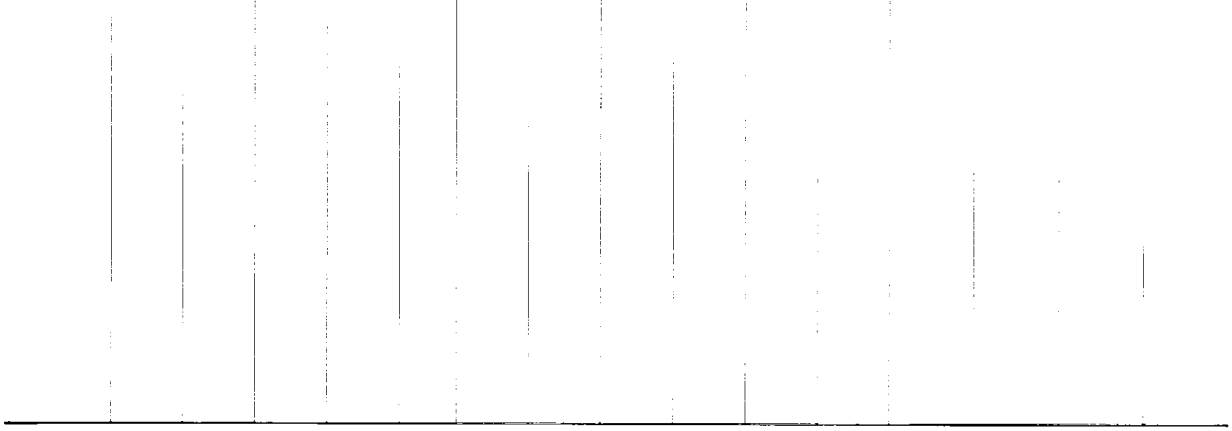


[Final measurement result] [Data B]

Measurement Results
for Conduction Measurement

EUT Name : PORTEGE 3500
Type : PP350U
Serial No. : #2, Normal mode
Memo : AC Adaptor: PA3153U-1ACA (45 W)
Data No. : B
Limit : FCC Part 15 Class B

Frequency [MHz]	Receiver Reading [dBuV] Va QP	Va AV	Vb QP	Vb AV	Sys. Fact. [dB]	Emission Level [dBuV] Va QP	Va AV	Vb QP	Vb AV	Limit [dBuV] QP	Limit [dBuV] AV	Margin [dB] Va QP	Margin [dB] Va AV	Margin [dB] Vb QP	Margin [dB] Vb AV
0.506	27.1		26.6		1.6	28.7		28.2		47.9		19.2		19.7	
1.012	25.6		26.0		1.6	27.2		27.6		47.9		20.7		20.3	
2.467	27.1		28.9		1.6	28.7		30.5		47.9		19.2		17.4	
3.796	30.2		31.6		1.6	31.8		33.2		47.9		16.1		14.7	
4.613	34.2		33.4		1.6	35.8		35.0		47.9		12.1		12.9	
4.931	35.6		35.6		1.6	37.2		37.2		47.9		10.7		10.7	



Note : 1) The emission level is including the system factor (maximum factor) that consists of LISN (or AMN) factor and system loss.
2) Sample of calculation at 0.506 MHz (QP,Va):
27.1 + 1.6 = 28.7 [dBuV]

Comments : HDD: 40 GB, IBM

Place : Anechoic Chamber No. 3
Date : October 8, 2002

Operator :
Y. Abe, Engineer
Toshiba Digital Media Engineering Corp.

Ver. 4.1c

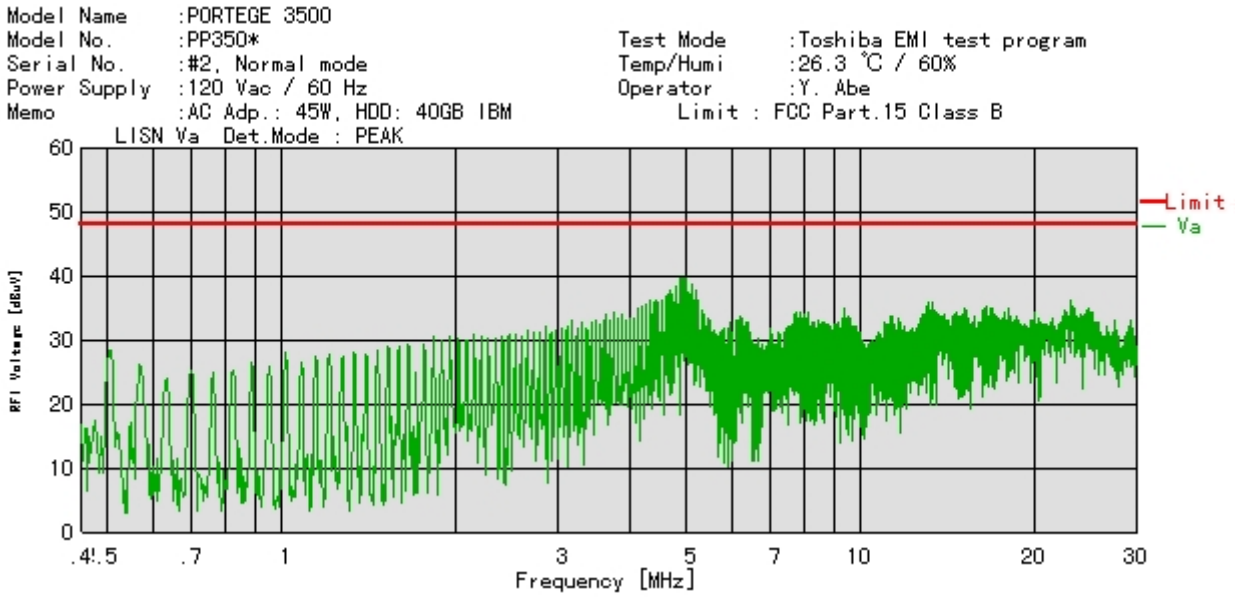
[Pre-measurement result (pick-up list)] [Data B]

Model Name	:	PORTEGE 3500
Model No.	:	PP350U
Serial No.	:	#2, Normal mode
Power Supply	:	120Vac / 60 Hz
Test Mode	:	Toshiba Windows EMI test program
Temp/Humi	:	26.3 deg / 60.0 %
Operator	:	Y. Abe
Memo	:	AC ADP.: 45W, HDD: 40 GB
Limit1	:	FCC Part.15 Class B
Limit2	:	
Date	:	10/08/2002

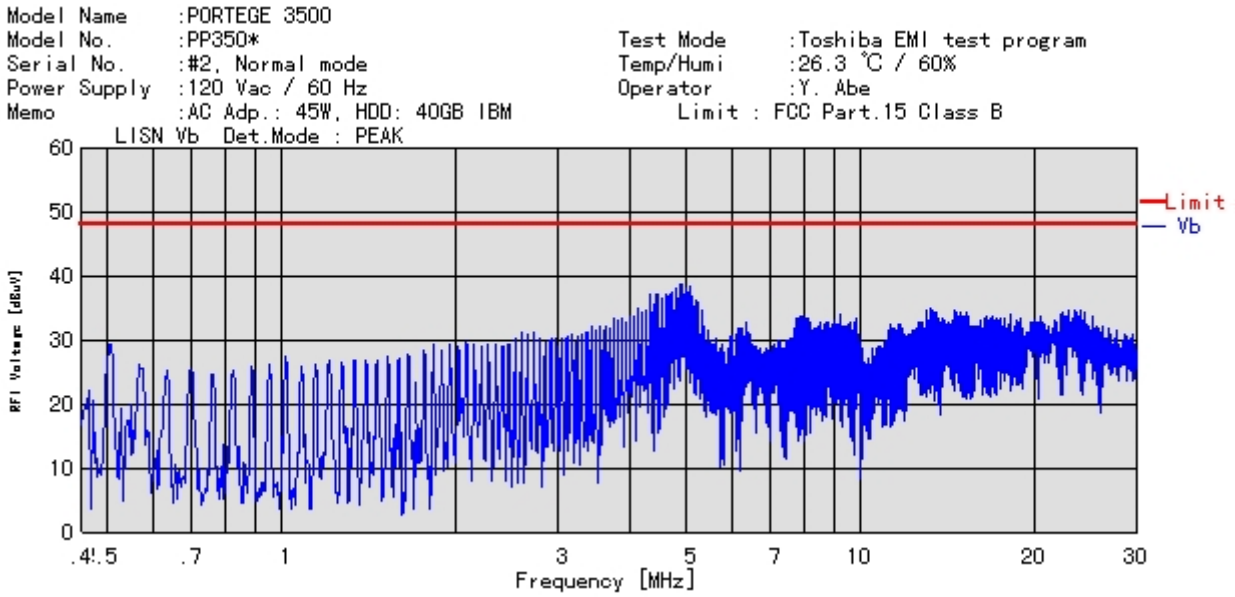
<< Peak List-Up Data List>>

Freq.		Level	Limit QP	Margin QP
[MHz]		[dBuV]	[dBuV]	[dB]
4.262	Va	35.6	48.0	12.4
4.318	Va	36.3	48.0	11.7
4.381	Va	35.9	48.0	12.1
4.444	Va	36.2	48.0	11.8
4.544	Va	36.4	48.0	11.6
4.605	Va	37.0	48.0	11.0
4.675	Va	37.9	48.0	10.1
4.736	Va	37.1	48.0	10.9
4.806	Va	38.5	48.0	9.5
4.867	Va	39.7	48.0	8.3
4.929	Va	39.8	48.0	8.2
4.999	Va	39.6	48.0	8.4
5.051	Va	37.4	48.0	10.6
5.121	Va	38.9	48.0	9.1
5.182	Va	37.7	48.0	10.3
5.244	Va	36.1	48.0	11.9
13.031	Va	35.4	48.0	12.6
13.100	Va	35.9	48.0	12.1
13.279	Va	35.8	48.0	12.2
23.122	Va	36.3	48.0	11.7
4.130	Vb	35.1	48.0	12.9
4.318	Vb	37.2	48.0	10.8
4.381	Vb	35.7	48.0	12.3
4.451	Vb	37.2	48.0	10.8
4.544	Vb	36.7	48.0	11.3
4.605	Vb	37.1	48.0	10.9
4.675	Vb	37.1	48.0	10.9
4.736	Vb	37.5	48.0	10.5
4.806	Vb	38.1	48.0	9.9
4.867	Vb	38.7	48.0	9.3
4.929	Vb	38.9	48.0	9.1
4.999	Vb	38.2	48.0	9.8
5.060	Vb	38.5	48.0	9.5
5.121	Vb	37.0	48.0	11.0
5.191	Vb	36.4	48.0	11.6
5.244	Vb	35.9	48.0	12.1
5.314	Vb	34.8	48.0	13.2
13.210	Vb	34.9	48.0	13.1
14.571	Vb	34.7	48.0	13.3
23.366	Vb	34.8	48.0	13.2

[Pre-measurement result (spectrum graph)] [Data B]
- Va (One end and Gnd'd)



- Vb (Other end and Gnd'd)



[Final measurement result] [Data C]

Measurement Results
for Conduction Measurement

EUT Name : PORTEGE 3500
Type : PP350U
Serial No. : #3, Normal mode
Memo : AC Adaptor: PA3083U-1ACA (75W)
Data No. : C
Limit : FCC Part 15 Class B

Frequency [MHz]	Receiver Reading [dBuV] Va QP	Va AV	Vb QP	Vb AV	Sys. Fact. [dB]	Emission Level [dBuV] Va QP	Va AV	Vb QP	Vb AV	Limit [dBuV] QP	AV	Margin [dB] Va QP	Va AV	Vb QP	Vb AV
0.486	30.5		29.8		1.7	32.2		31.5		47.9		15.7		16.4	
0.554	30.3		29.4		1.7	32.0		31.1		47.9		15.9		16.8	
0.898	29.2		32.0		1.7	30.9		33.7		47.9		17.0		14.2	
0.966	27.5		30.5		1.7	29.2		32.2		47.9		18.7		15.7	
2.049	42.8		43.1		1.7	44.5		44.8		47.9		3.4		3.1	
6.143	37.4		37.7		1.7	39.1		39.4		47.9		8.8		8.5	

Note : 1) The emission level is including the system factor (maximum factor) that consists of LISN (or AMN) factor and system loss.
2) Sample of calculation at 0.486 MHz (QP,Va):
30.5 + 1.7 = 32.2 [dBuV]

Comments : HDD: 40 GB, Toshiba

Place : Anechoic Chamber No. 3
Date : October 8, 2002

Operator : 
Y. Abe, Engineer
Toshiba Digital Media Engineering Corp.

Ver. 4.1c

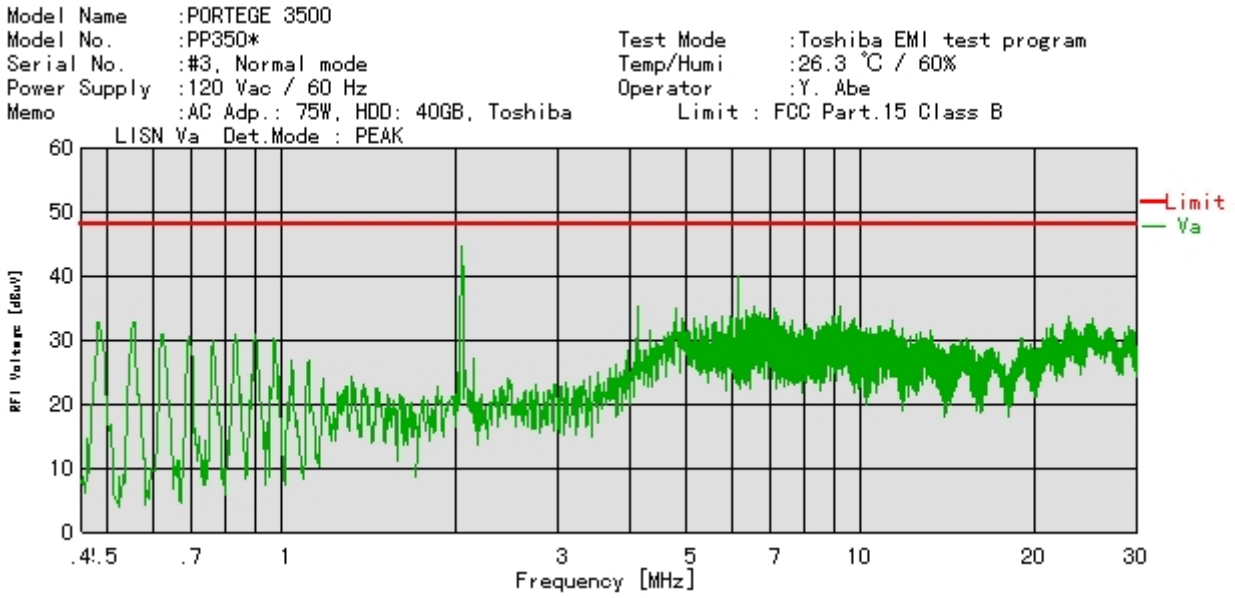
[Pre-measurement result (pick-up list)] [Data C]

Model Name : PORTEGE 3500
Model No. : PP350U
Serial No. : #3, Normal mode
Power Supply : 120Vac / 60 Hz
Test Mode : Toshiba Windows EMI test program
Temp/Humi : 26.3 deg / 60.0 %
Operator : Y. Abe
Memo : AC ADP.: 75W, HDD: 40 GB
Limit1 : FCC Part.15 Class B
Limit2 :
Date : 10/08/2002

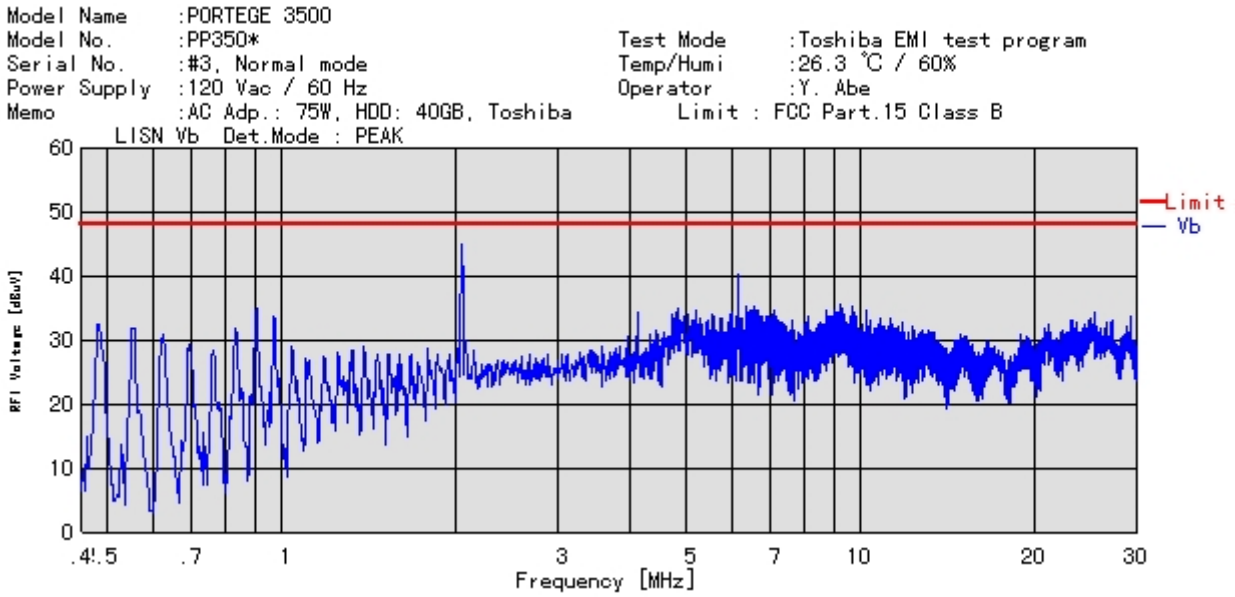
<< Peak List-Up Data List>>

Freq. [MHz]		Level [dBuV]	Limit QP [dBuV]	Margin QP [dB]
2.047	Va	44.8	48.0	3.2
4.116	Va	35.3	48.0	12.7
4.806	Va	35.0	48.0	13.0
5.769	Va	33.6	48.0	14.4
5.961	Va	33.8	48.0	14.2
6.154	Va	40.1	48.0	7.9
6.329	Va	34.8	48.0	13.2
6.390	Va	33.9	48.0	14.1
6.512	Va	34.0	48.0	14.0
6.574	Va	35.2	48.0	12.8
6.635	Va	33.9	48.0	14.1
6.696	Va	34.3	48.0	13.7
6.819	Va	34.1	48.0	13.9
7.073	Va	35.1	48.0	12.9
7.134	Va	34.4	48.0	13.6
8.940	Va	33.9	48.0	14.1
9.000	Va	33.9	48.0	14.1
9.130	Va	33.8	48.0	14.2
9.190	Va	35.2	48.0	12.8
22.814	Va	33.8	48.0	14.2
0.905	Vb	34.9	48.0	13.1
2.047	Vb	44.9	48.0	3.1
4.116	Vb	34.4	48.0	13.6
4.789	Vb	34.5	48.0	13.5
4.850	Vb	35.1	48.0	12.9
5.218	Vb	34.7	48.0	13.3
6.154	Vb	40.4	48.0	7.6
6.329	Vb	35.3	48.0	12.7
6.451	Vb	34.6	48.0	13.4
6.512	Vb	34.6	48.0	13.4
6.574	Vb	35.3	48.0	12.7
6.635	Vb	34.6	48.0	13.4
7.073	Vb	34.7	48.0	13.3
8.690	Vb	34.6	48.0	13.4
9.000	Vb	34.6	48.0	13.4
9.190	Vb	35.5	48.0	12.5
9.250	Vb	34.6	48.0	13.4
9.310	Vb	34.9	48.0	13.1
9.680	Vb	35.4	48.0	12.6
10.240	Vb	34.6	48.0	13.4

[Pre-measurement result (spectrum graph)] [Data C]
- Va (One end and Gnd'd)



- Vb (Other end and Gnd'd)

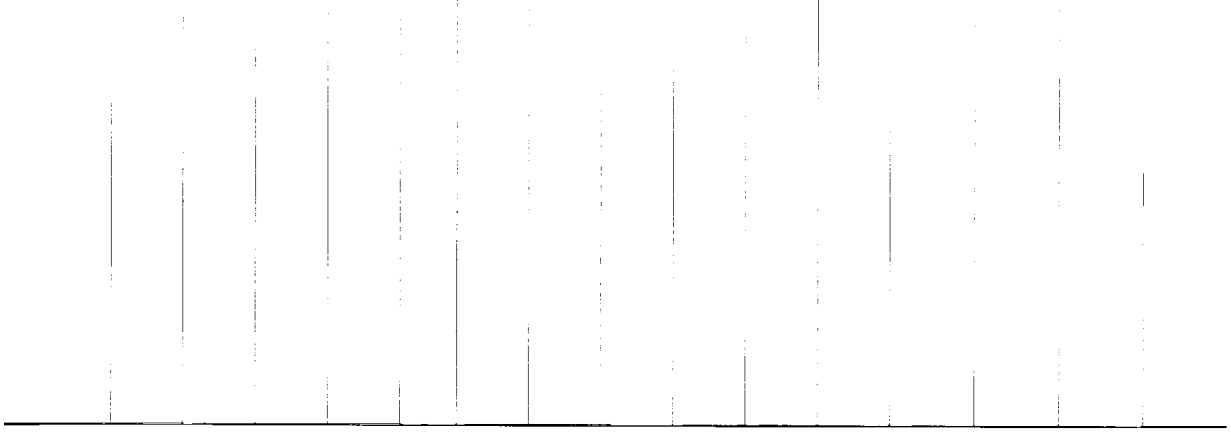


[Final measurement result] [Data D]

Measurement Results
for Conduction Measurement

EUT Name : PORTEGE 3500
Type : PP350U
Serial No. : #4, Normal mode
Memo : AC Adaptor: PA3241U-1ACA (45 W)
Data No. : D
Limit : FCC Part 15 Class B

Frequency [MHz]	Receiver Reading [dBuV] Va QP	Va AV	Vb QP	Vb AV	Sys. Fact. [dB]	Emission Level [dBuV] Va QP	Va AV	Vb QP	Vb AV	Limit [dBuV] QP	Limit [dBuV] AV	Margin [dB] Va QP	Margin [dB] Va AV	Margin [dB] Vb QP	Margin [dB] Vb AV
0.490	24.6		25.3		1.6	26.2		26.9		47.9		21.7		21.0	
2.049	42.7		42.6		1.6	44.3		44.2		47.9		3.6		3.7	
5.039	32.8		33.4		1.6	34.4		35.0		47.9		13.5		12.9	
6.440	37.2		38.7		1.6	38.8		40.3		47.9		9.1		7.6	
6.498	37.4		38.4		1.6	39.0		40.0		47.9		8.9		7.9	
15.498	27.4		28.1		1.6	29.0		29.7		47.9		18.9		18.2	



Note : 1) The emission level is including the system factor (maximum factor) that consists of LISN (or AMN) factor and system loss.
2) Sample of calculation at 0.49 MHz (QP,Va):
24.6 + 1.6 = 26.2 [dBuV]

Comments : HDD: 30 GB, Hitachi

Place : Anechoic Chamber No. 3
Date : October 8, 2002

Operator :
Y. Abe, Engineer
Toshiba Digital Media Engineering Corp.

Ver. 4.1c

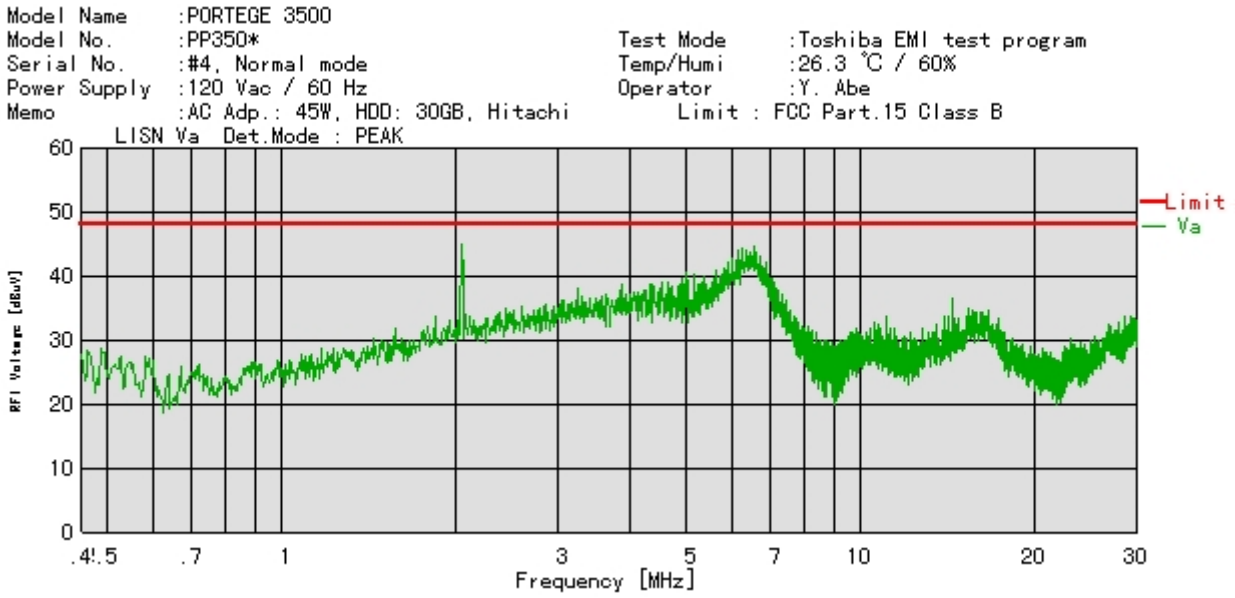
[Pre-measurement result (pick-up list)] [Data D]

Model Name : PORTEGE 3500
Model No. : PP350U
Serial No. : #4, Normal mode
Power Supply : 120Vac / 60 Hz
Test Mode : Toshiba Windows EMI test program
Temp/Humi : 26.3 deg / 60.0 %
Operator : Y. Abe
Memo : AC ADP.: 45W, HDD: 30 GB
Limit1 : FCC Part.15 Class B
Limit2 :
Date : 10/08/2002

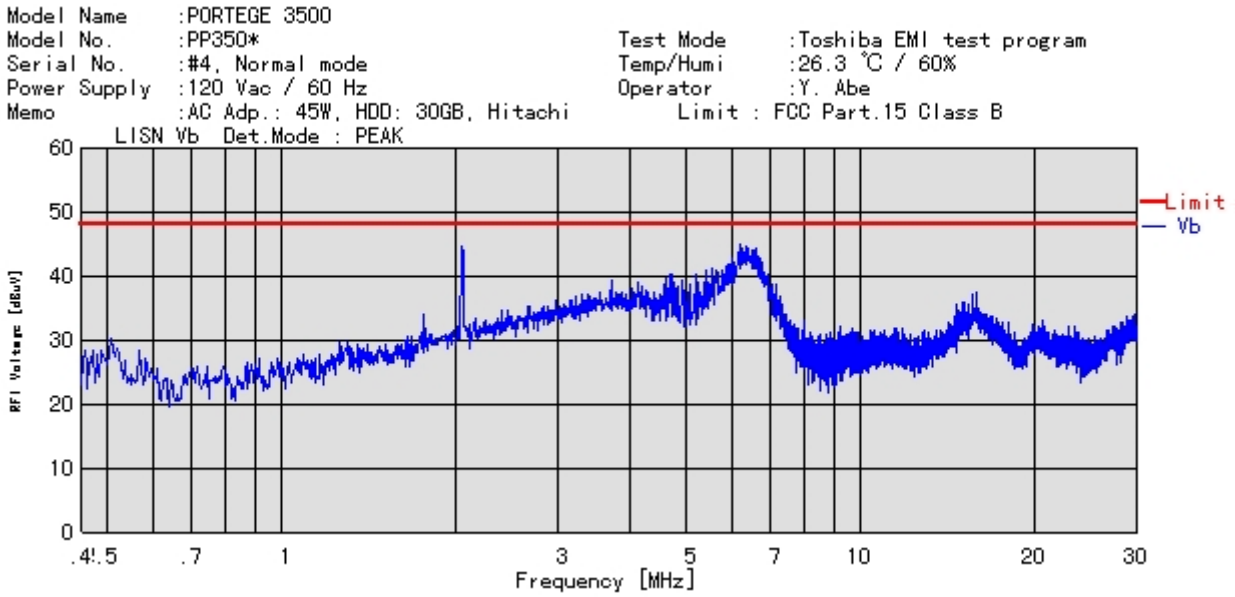
<< Peak List-Up Data List>>

Freq. [MHz]		Level [dBuV]	Limit QP [dBuV]	Margin QP [dB]
2.047	Va	44.2	48.0	3.8
4.116	Va	38.5	48.0	9.5
4.614	Va	39.1	48.0	8.9
4.789	Va	39.9	48.0	8.1
4.859	Va	40.2	48.0	7.8
4.981	Va	39.4	48.0	8.6
5.104	Va	40.2	48.0	7.8
5.156	Va	40.4	48.0	7.6
5.218	Va	41.3	48.0	6.7
5.261	Va	40.7	48.0	7.3
5.340	Va	41.0	48.0	7.0
5.463	Va	41.3	48.0	6.7
5.629	Va	41.9	48.0	6.1
5.699	Va	42.4	48.0	5.6
6.005	Va	42.6	48.0	5.4
6.154	Va	44.5	48.0	3.5
14.750	Va	37.6	48.0	10.4
15.314	Va	38.1	48.0	9.9
15.424	Va	37.6	48.0	10.4
29.955	Va	37.5	48.0	10.5
2.047	Vb	44.4	48.0	3.6
4.116	Vb	38.9	48.0	9.1
4.444	Vb	37.8	48.0	10.2
4.561	Vb	38.3	48.0	9.7
4.798	Vb	39.9	48.0	8.1
4.938	Vb	39.2	48.0	8.8
4.955	Vb	41.0	48.0	7.0
5.165	Vb	41.7	48.0	6.3
5.218	Vb	41.2	48.0	6.8
5.261	Vb	41.6	48.0	6.4
5.375	Vb	41.9	48.0	6.1
5.839	Vb	42.2	48.0	5.8
6.154	Vb	43.2	48.0	4.8
6.434	Vb	43.2	48.0	4.8
14.984	Vb	36.9	48.0	11.1
15.259	Vb	38.4	48.0	9.6
15.658	Vb	36.9	48.0	11.1
15.891	Vb	38.4	48.0	9.6
28.695	Vb	36.0	48.0	12.0
29.415	Vb	35.5	48.0	12.5

[Pre-measurement result (spectrum graph)] [Data D]
- Va (One end and Gnd'd)



- Vb (Other end and Gnd'd)



[Final measurement result] [Data E]

Measurement Results
for Conduction Measurement

EUT Name : PORTEGE 3500
Type : PP350U
Serial No. : #5, Tablet mode
Memo : AC Adaptor: PA3241U-1ACA
Data No. : E
Limit : FCC Part 15 Class B

Frequency [MHz]	Receiver Reading [dBuV]				Sys. Fact.	Emission Level [dBuV]				Limit [dBuV]		Margin [dB]			
	Va		Vb			Va		Vb				Va		Vb	
	QP	AV	QP	AV	[dB]	QP	AV	QP	AV	QP	AV	QP	AV	QP	AV
2.049	44.0		44.5		1.6	45.6		46.1		47.9		2.3		1.8	
4.097	33.1		35.0		1.6	34.7		36.6		47.9		13.2		11.3	
5.074	29.5		31.1		1.6	31.1		32.7		47.9		16.8		15.2	
6.142	36.8		38.3		1.6	38.4		39.9		47.9		9.5		8.0	
16.765	29.4		30.0		1.6	31.0		31.6		47.9		16.9		16.3	
17.161	28.1		28.4		1.6	29.7		30.0		47.9		18.2		17.9	

Note : 1) The emission level is including the system factor (maximum factor) that consists of LISN (or AMN) factor and system loss.
2) Sample of calculation at 2.049 MHz (QP,Va):
44.0 + 1.6 = 45.6 [dBuV]

Comments : HDD: 30 GB, Toshiba

Place : Anechoic Chamber No. 3
Date : October 9, 2002

Operator :
Y. Abe, Engineer
Toshiba Digital Media Engineering Corp.

Ver. 4.1c

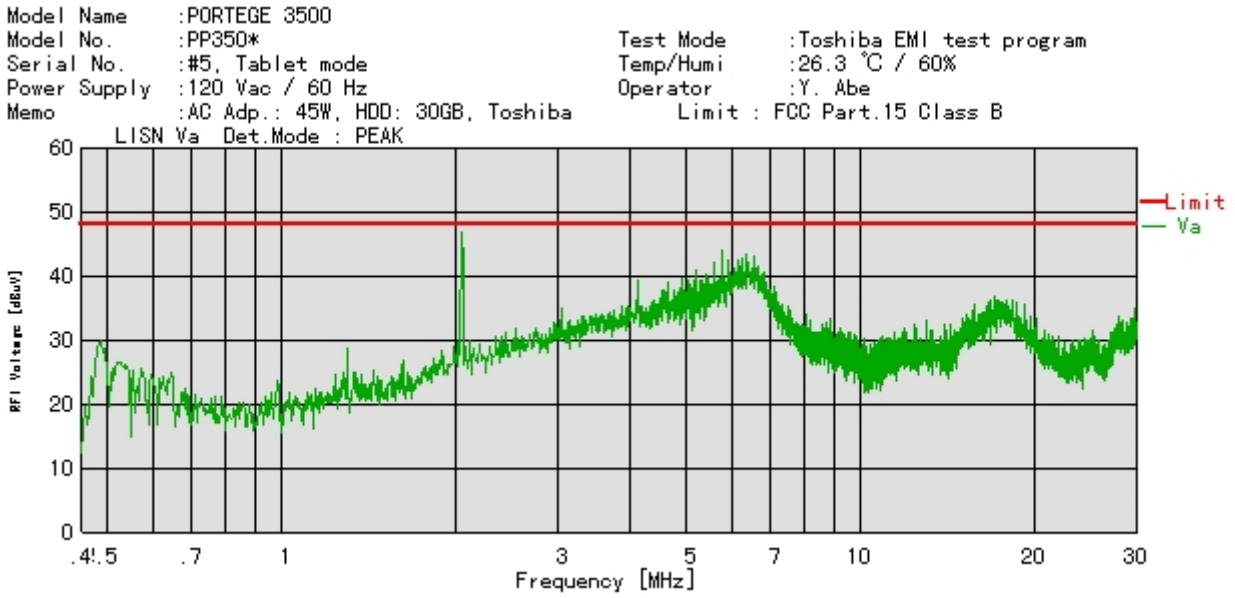
[Pre-measurement result (pick-up list)] [Data E]

Model Name	:	PORTEGE 3500
Model No.	:	PP350U
Serial No.	:	#5, Tablet mode
Power Supply	:	120Vac / 60 Hz
Test Mode	:	Toshiba Windows EMI test program
Temp/Humi	:	26.3 deg / 60.0 %
Operator	:	Y. Abe
Memo	:	AC ADP.: 45W, HDD: 30 GB
Limit1	:	FCC Part.15 Class B
Limit2	:	
Date	:	10/09/2002

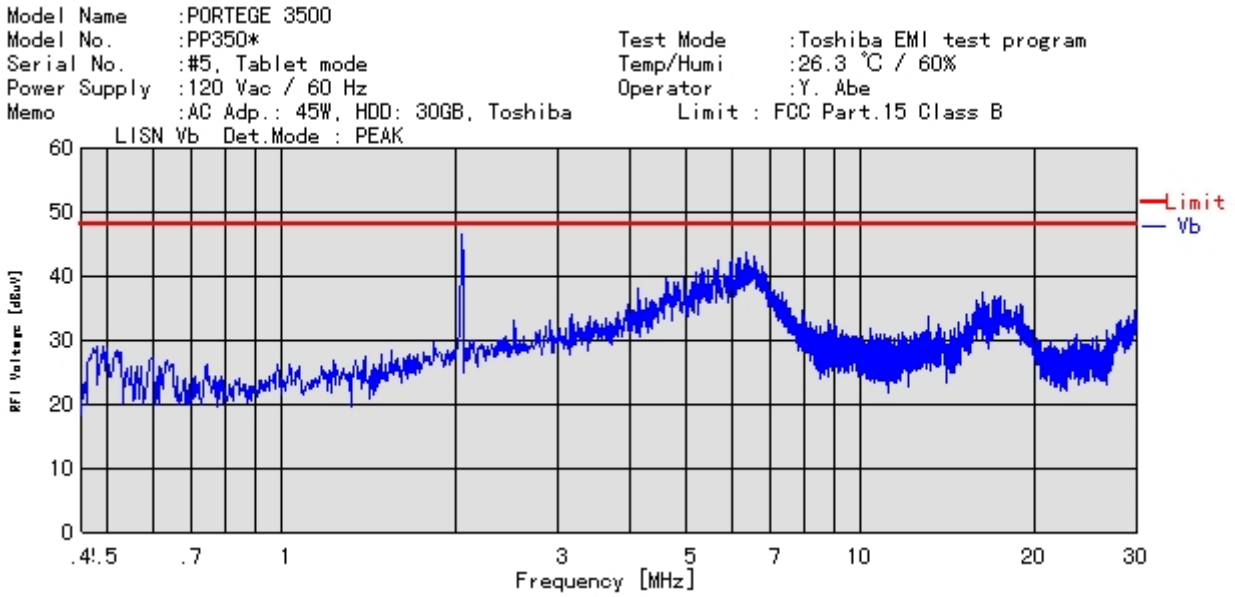
<< Peak List-Up Data List>>

Freq.		Level	Limit QP	Margin QP
[MHz]		[dBuV]	[dBuV]	[dB]
2.047	Va	46.9	48.0	1.1
4.116	Va	39.5	48.0	8.5
4.631	Va	39.1	48.0	8.9
4.867	Va	38.1	48.0	9.9
4.903	Va	39.7	48.0	8.3
5.051	Va	39.4	48.0	8.6
5.086	Va	38.8	48.0	9.2
5.156	Va	39.5	48.0	8.5
5.218	Va	41.0	48.0	7.0
5.305	Va	39.4	48.0	8.6
5.392	Va	40.4	48.0	7.6
5.594	Va	42.3	48.0	5.7
5.769	Va	44.0	48.0	4.0
5.909	Va	42.6	48.0	5.4
6.329	Va	43.4	48.0	4.6
15.740	Va	35.5	48.0	12.5
16.689	Va	36.0	48.0	12.0
17.005	Va	36.8	48.0	11.2
17.170	Va	36.3	48.0	11.7
18.589	Va	35.9	48.0	12.1
2.047	Vb	46.6	48.0	1.4
4.116	Vb	38.2	48.0	9.8
4.144	Vb	36.4	48.0	11.6
4.262	Vb	36.7	48.0	11.3
4.596	Vb	39.6	48.0	8.4
4.972	Vb	39.7	48.0	8.3
5.209	Vb	40.6	48.0	7.4
5.331	Vb	41.2	48.0	6.8
5.585	Vb	41.2	48.0	6.8
5.655	Vb	42.4	48.0	5.6
5.979	Vb	42.4	48.0	5.6
6.154	Vb	42.9	48.0	5.1
6.346	Vb	43.8	48.0	4.2
16.208	Vb	37.5	48.0	10.5
16.345	Vb	36.0	48.0	12.0
16.689	Vb	35.6	48.0	12.4
16.950	Vb	36.3	48.0	11.7
17.087	Vb	37.0	48.0	11.0
17.335	Vb	36.6	48.0	11.4
17.500	Vb	37.0	48.0	11.0

[Pre-measurement result (spectrum graph)] [Data E]
- Va (One end and Gnd'd)



- Vb (Other end and Gnd'd)

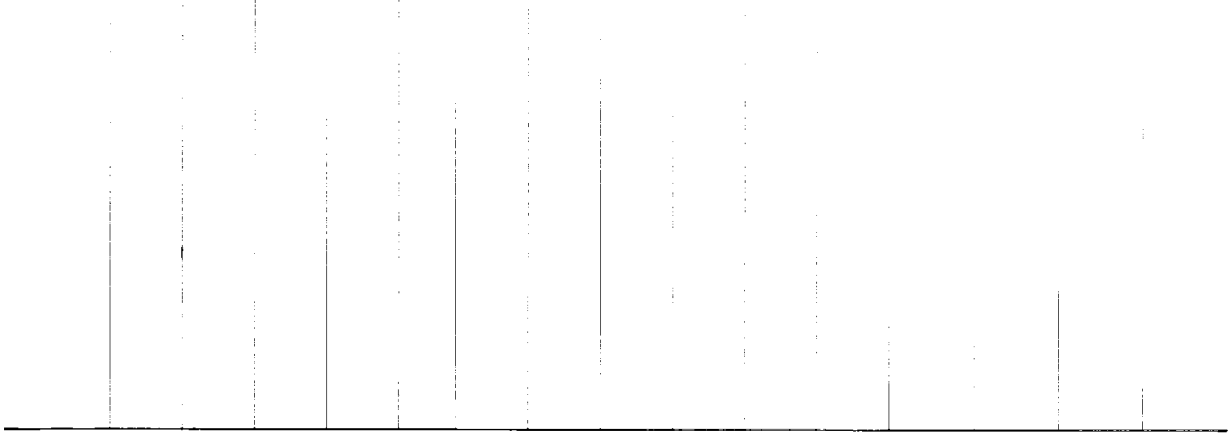


[Final measurement result] [Data F]

Measurement Results
for Conduction Measurement

EUT Name : PORTEGE 3500
Type : PP350U
Serial No. : #6, Normal mode
Memo : AC Adaptor: PA3241U-1ACA
Data No. : F
Limit : FCC Part 15 Class B

Frequency [MHz]	Receiver Reading [dBuV] Va		Vb		Sys. Fact.	Emission Level [dBuV] Va		Vb		Limit [dBuV]		Margin [dB] Va		Vb	
	QP	AV	QP	AV	[dB]	QP	AV	QP	AV	QP	AV	QP	AV	QP	AV
2.048	44.4		44.5		1.6	46.0		46.1		47.9		1.9		1.8	
5.802	31.6		32.1		1.6	33.2		33.7		47.9		14.7		14.2	
6.139	36.8		36.8		1.6	38.4		38.4		47.9		9.5		9.5	
6.693	36.9		34.0		1.6	38.5		35.6		47.9		9.4		12.3	
16.377	28.2		29.4		1.6	29.8		31.0		47.9		18.1		16.9	
17.655	28.4		28.2		1.6	30.0		29.8		47.9		17.9		18.1	



Note : 1) The emission level is including the system factor (maximum factor) that consists of LISN (or AMN) factor and system loss.
2) Sample of calculation at 2.048 MHz (QP,Va):
44.4 + 1.6 = 46.0 [dBuV]

Comments : HDD: 20 GB, Toshiba

Place : Anechoic Chamber No. 3
Date : October 9, 2002

Operator :
Y. Abe, Engineer
Toshiba Digital Media Engineering Corp.

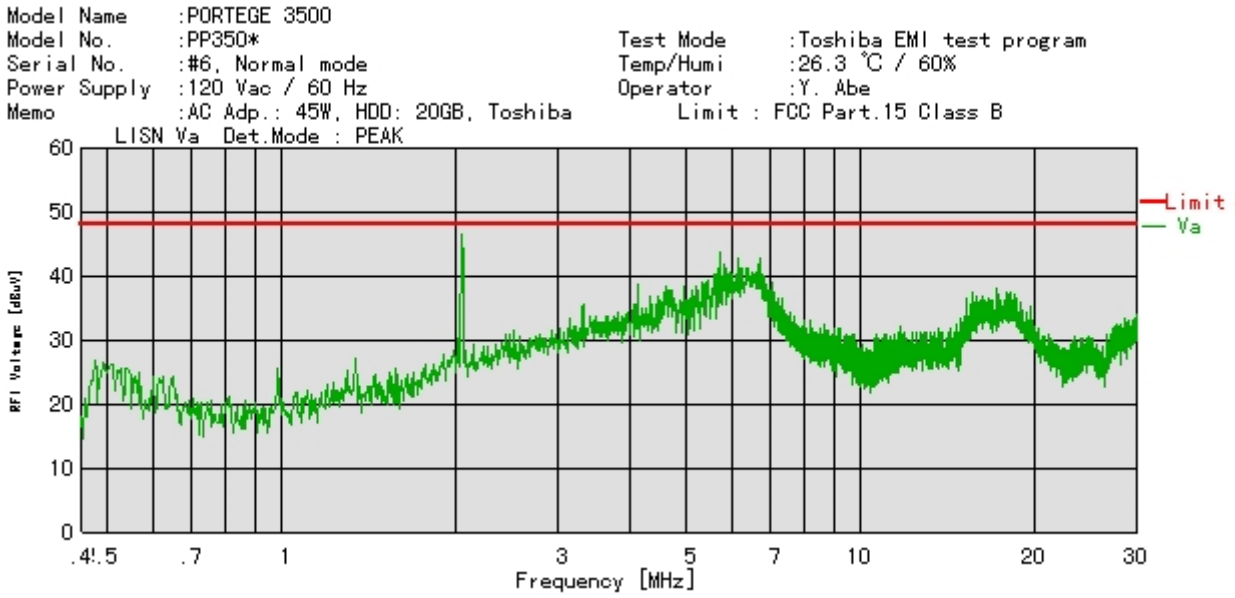
Ver. 4.1c

[Pre-measurement result (pick-up list)] [Data F]

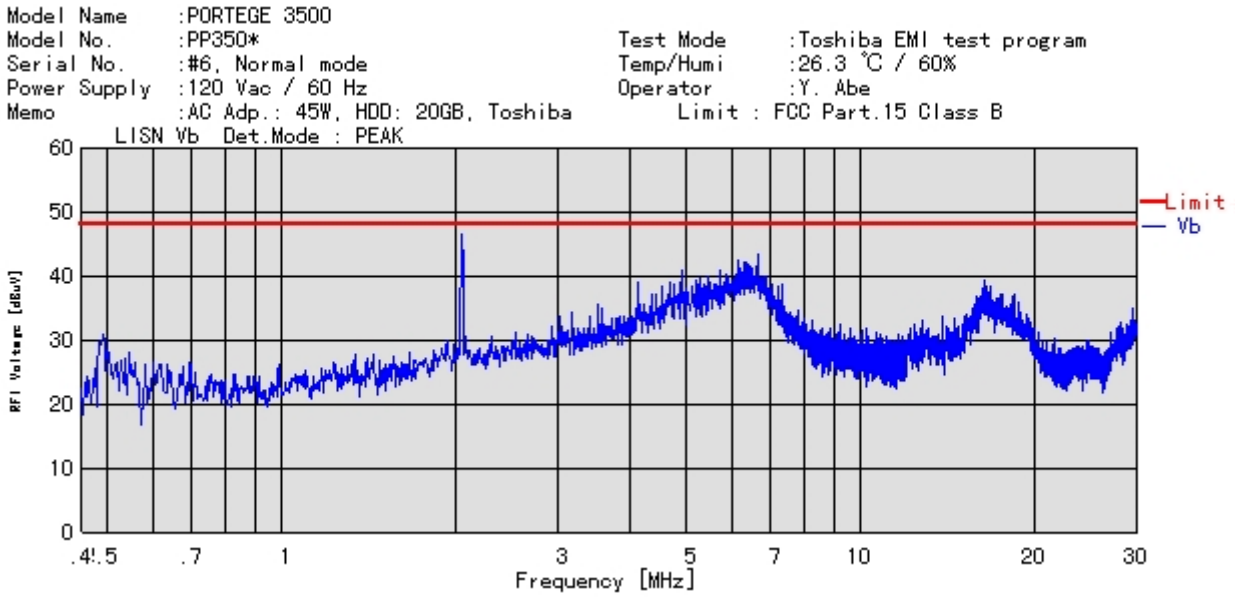
```
Model No.     :  PP350U
Serial No.    :  #6, Normal mode
Power Supply  :  120Vac / 60 Hz
Test Mode     :  Toshiba Windows EMI test program
Temp/Humi     :  26.3 deg / 60.0 %
Operator      :  Y. Abe
Memo          :  AC ADP.: 45W, HDD: 20 GB
Limit1        :  FCC Part.15 Class B
Limit2        :
Date          :  10/09/2002

<< Peak List-Up Data List>>
```

Freq. [MHz]		Level [dBuV]	Limit QP [dBuV]	Margin QP [dB]
2.047	Va	46.7	48.0	1.3
4.116	Va	38.9	48.0	9.1
4.318	Va	36.9	48.0	11.1
4.605	Va	38.4	48.0	9.6
4.964	Va	38.3	48.0	9.7
5.121	Va	37.9	48.0	10.1
5.182	Va	38.4	48.0	9.6
5.314	Va	39.0	48.0	9.0
5.471	Va	39.3	48.0	8.7
5.568	Va	40.2	48.0	7.8
5.664	Va	41.4	48.0	6.6
5.707	Va	43.8	48.0	4.2
5.821	Va	42.0	48.0	6.0
6.154	Va	42.7	48.0	5.3
6.705	Va	42.9	48.0	5.1
7.011	Va	39.2	48.0	8.8
15.547	Va	37.6	48.0	10.4
16.180	Va	36.9	48.0	11.1
17.239	Va	38.2	48.0	9.8
17.939	Va	37.6	48.0	10.4
2.047	Vb	46.7	48.0	1.3
4.116	Vb	39.0	48.0	9.0
4.353	Vb	37.1	48.0	10.9
4.535	Vb	38.3	48.0	9.7
4.684	Vb	39.2	48.0	8.8
4.762	Vb	38.7	48.0	9.3
4.911	Vb	41.0	48.0	7.0
5.182	Vb	39.4	48.0	8.6
5.261	Vb	39.6	48.0	8.4
5.716	Vb	40.9	48.0	7.1
6.154	Vb	42.4	48.0	5.6
6.635	Vb	43.3	48.0	4.7
7.195	Vb	38.4	48.0	9.6
7.318	Vb	38.9	48.0	9.1
15.850	Vb	37.0	48.0	11.0
16.400	Vb	39.4	48.0	8.6
16.716	Vb	38.3	48.0	9.7
17.549	Vb	37.2	48.0	10.8
18.296	Vb	36.8	48.0	11.2
18.442	Vb	37.2	48.0	10.8

[Pre-measurement result (spectrum graph)] [Data F]
- Va (One end and Gnd'd)



- Vb (Other end and Gnd'd)



[Final measurement result] [Data G]

Measurement Results
for Conduction Measurement

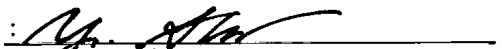
EUT Name : PORTEGE 3500
Type : PP350U
Serial No. : #7, Tablet mode
Memo : AC Apdator: PA3241U-1ACA
Data No. : G
Limit : FCC Part 15 Class B

Frequency [MHz]	Receiver Reading [dBuV] Va		Vb		Sys. Fact.	Emission Level [dBuV] Va		Vb		Limit [dBuV]		Margin [dB] Va		Vb	
	QP	AV	QP	AV	[dB]	QP	AV	QP	AV	QP	AV	QP	AV	QP	AV
2.049	43.6		43.7		1.6	45.2		45.3		47.9		2.7		2.6	
5.886	32.4		33.3		1.6	34.0		34.9		47.9		13.9		13.0	
6.143	38.5		35.1		1.6	40.1		36.7		47.9		7.8		11.2	
16.277	28.2		29.2		1.6	29.8		30.8		47.9		18.1		17.1	
17.397	28.2		28.0		1.6	29.8		29.6		47.9		18.1		18.3	
29.836	27.1		27.6		1.6	28.7		29.2		47.9		19.2		18.7	

Note : 1) The emission level is including the system factor (maximum factor) that consists of LISN (or AMN) factor and system loss.
2) Sample of calculation at 2.049 MHz (QP,Va):
43.6 + 1.6 = 45.2 [dBuV]

Comments : HDD: 60 GB, Toshiba

Place : Anechoic Chamber No. 3
Date : October 9, 2002

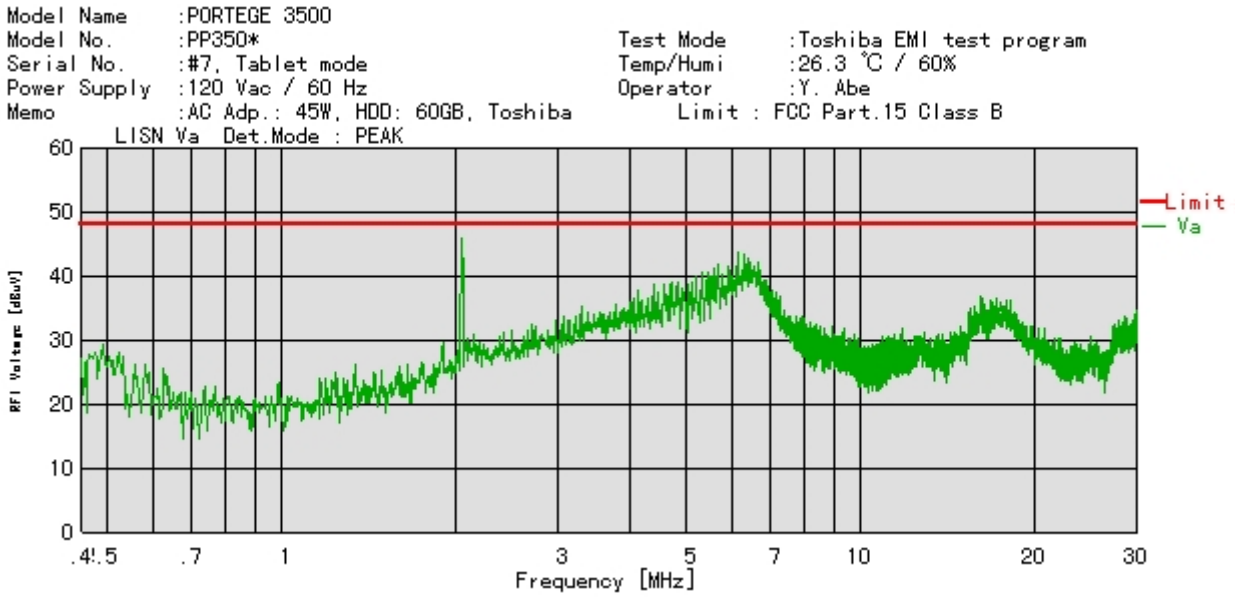
Operator : 
Y. Abe, Engineer
Toshiba Digital Media Engineering Corp.

Ver. 4.1c

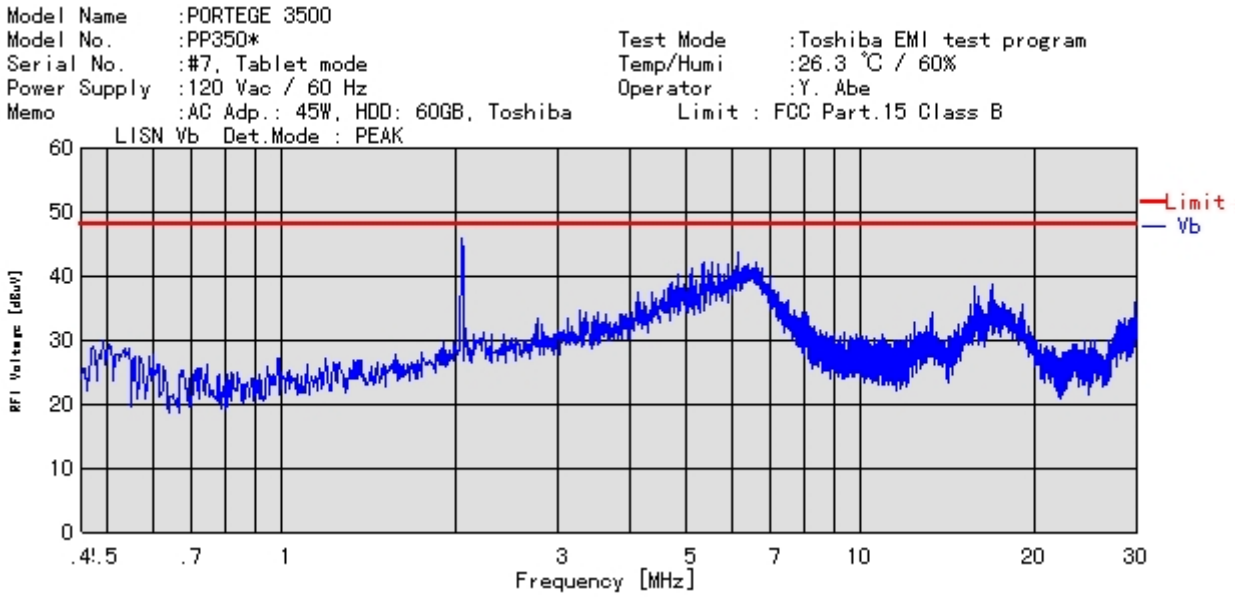
[Pre-measurement result (pick-up list)] [Data G]

```
Model No.     :  PP350U
Serial No.    :  #7, Tablet mode
Power Supply  :  120Vac / 60 Hz
Test Mode     :  Toshiba Windows EMI test program
Temp/Humi     :  26.3 deg / 60.0 %
Operator      :  Y. Abe
Memo          :  AC ADP.: 45W, HDD: 60 GB
Limit1        :  FCC Part.15 Class B
Limit2        :
Date          :  10/09/2002

<< Peak List-Up Data List>>
Freq.             Level   Limit   Margin
                          QP      QP
      [MHz]       [dBuV]  [dBuV]   [dB]
      2.047  Va     45.9    48.0     2.1
      3.305  Va     35.4    48.0    12.6
      4.060  Va     36.7    48.0    11.3
      4.116  Va     37.7    48.0    10.3
      4.381  Va     38.9    48.0     9.1
      4.561  Va     38.8    48.0     9.2
      4.727  Va     39.1    48.0     8.9
      4.850  Va     39.2    48.0     8.8
      4.903  Va     38.1    48.0     9.9
      5.095  Va     39.0    48.0     9.0
      5.200  Va     39.9    48.0     8.1
      5.323  Va     40.5    48.0     7.5
      5.445  Va     40.6    48.0     7.4
      5.568  Va     41.3    48.0     6.7
      5.664  Va     41.9    48.0     6.1
      6.154  Va     43.9    48.0     4.1
      6.294  Va     43.4    48.0     4.6
     16.166  Va     36.8    48.0    11.2
     17.142  Va     36.5    48.0    11.5
     29.895  Va     34.6    48.0    13.4
      2.047  Vb     45.8    48.0     2.2
      4.116  Vb     37.6    48.0    10.4
      4.367  Vb     37.4    48.0    10.6
      4.719  Vb     39.2    48.0     8.8
      4.841  Vb     40.4    48.0     7.6
      5.095  Vb     41.3    48.0     6.7
      5.130  Vb     40.4    48.0     7.6
      5.340  Vb     42.0    48.0     6.0
      5.375  Vb     42.3    48.0     5.7
      5.454  Vb     41.0    48.0     7.0
      5.532  Vb     42.1    48.0     5.9
      5.673  Vb     41.8    48.0     6.2
      6.154  Vb     43.6    48.0     4.4
     15.740  Vb     38.5    48.0     9.5
     16.042  Vb     36.9    48.0    11.1
     16.840  Vb     38.6    48.0     9.4
     17.019  Vb     36.2    48.0    11.8
     17.532  Vb     35.8    48.0    12.2
     19.076  Vb     35.7    48.0    12.3
     29.850  Vb     36.0    48.0    12.0
```

[Pre-measurement result (spectrum graph)] [Data G]
- Va (One end and Gnd'd)



- Vb (Other end and Gnd'd)



(Radiation)
[Final measurement result] [Data A]

Measurement Results
for Radiation Measurement

EUT Name : PORTEGE 3500
Type : PP350U
Serial No. : #1, Normal mode
Memo : AC Adaptor: PA3241U-1ACA (45W)
Data No. : A
Limit : FCC Part 15 Class B (3m)

	Frequency	Receiver Reading [dBuV/m]		System Factor	Emission Level [dBuV/m]		Limit	Margin [dB]	
	[MHz]	Horizontal	Vertical	[dB/m]	Horizontal	Vertical	[dBuV/m]	Horizontal	Vertical
##	59.36		26.1	5.9		32.0	40.0		8.0
	73.73	25.0	28.2	8.4	33.4	36.6	40.0	6.6	3.4
	98.46	23.9		11.4	35.3		43.5	8.2	
	101.89	22.9		12.0	34.9		43.5	8.6	
	195.08	16.9	12.8	18.5	35.4	31.3	43.5	8.1	12.2
	211.34	16.9	12.3	19.1	36.0	31.4	43.5	7.5	12.1
	332.39	9.8		23.3	33.1		46.0	12.9	
	501.14		12.3	29.5		41.8	46.0		4.2
	550.30		1.2	30.4		31.6	46.0		14.4

Note : 1) The emission level is including the system factor that consists of system loss and Antenna facto
2) Sample of calculation at 59.36 MHz (Vertical):
26.1 + 5.9 = 32.0 [dBuV/m]

Comments : HDD: 40GB, Hitachi

Place : Anechoic Chamber No. 3
Date : October 7, 2002

Operator :
Y. Abe, Engineer
Toshiba Digital Media Engineering Corp.

Ver. 4.1c

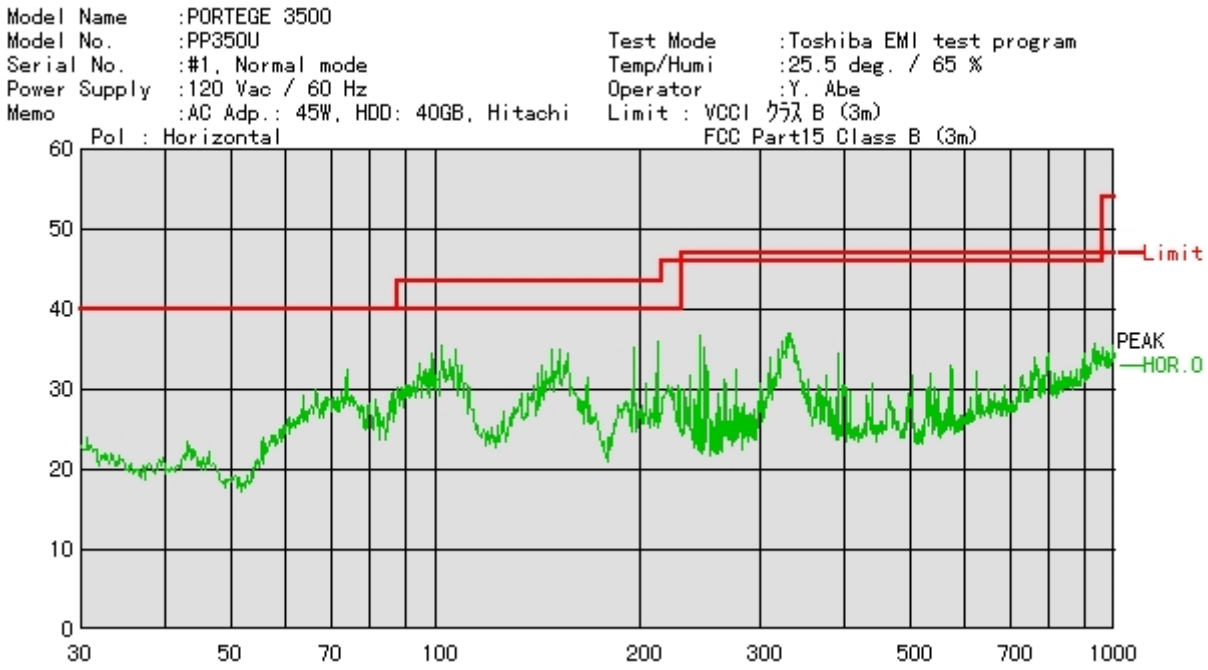
[Pre-measurement result (pick-up list)] [Data A]
for 30 MHz – 1000 MHz

Model Name	:	PORTEGE 3500
Model No.	:	PP350U
Serial No.	:	#1, Normal mode
Power Supply	:	120Vac / 60 Hz
Test Mode	:	Toshiba Windows EMI test program
Temp/Humi	:	25.5 deg / 65.0 %
Operator	:	Y. Abe
Memo	:	AC ADP.: 45W, HDD: 40 GB
Limit1	:	VCCI Class B (3m)
Limit2	:	FCC Part 15 Class B (3m)
Date	:	10/07/2002

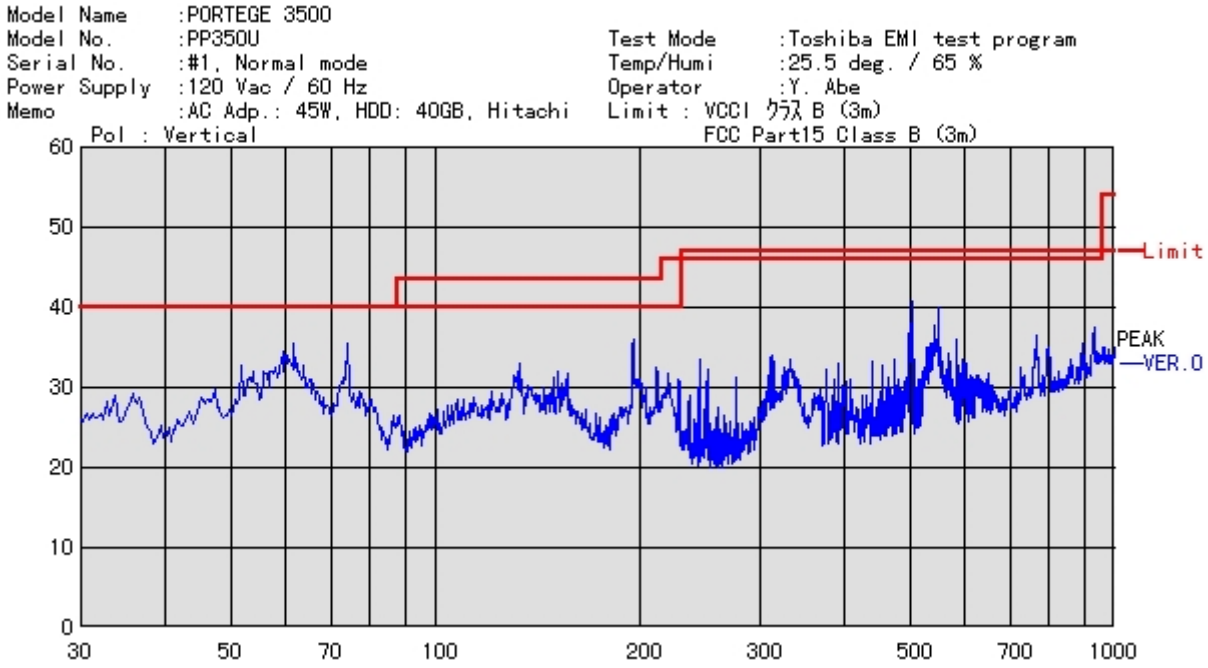
<< Peak List-Up Data List>>

	Freq. [MHz]	H/V	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]
###	35.700	V	29.3	40.0	10.7
	61.800	V	35.4	40.0	4.6
	74.100	V	35.4	40.0	4.6
	74.100	H	32.4	40.0	7.6
	77.400	V	29.4	40.0	10.6
	81.450	H	28.8	40.0	11.2
	102.000	H	35.4	40.0	4.6
	107.000	H	34.9	40.0	5.1
	109.000	H	32.9	40.0	7.1
	112.000	H	30.2	40.0	9.8
	132.900	V	33.0	40.0	7.0
	148.500	H	35.0	40.0	5.0
	151.500	V	32.0	40.0	8.0
	152.000	H	35.0	40.0	5.0
	167.000	H	31.5	40.0	8.5
	195.375	V	36.1	40.0	3.9
	195.500	H	35.3	40.0	4.7
	198.375	V	31.0	40.0	9.0
	204.000	H	30.7	40.0	9.3
	211.500	V	32.6	40.0	7.4
	212.000	H	36.0	40.0	4.0
	220.125	V	31.8	40.0	8.2
	227.625	V	31.0	40.0	9.0
	228.000	H	30.6	40.0	9.4
	244.500	H	36.8	47.0	10.2
	330.000	H	37.1	47.0	9.9
	502.500	V	40.8	47.0	6.2
	549.000	V	40.0	47.0	7.0
	586.500	V	36.1	47.0	10.9
	767.000	V	36.6	47.0	10.4

[Pre-measurement result (spectrum graph)] [Data A]
for 30 MHz – 1000 MHz
-Horizontal



-Vertical



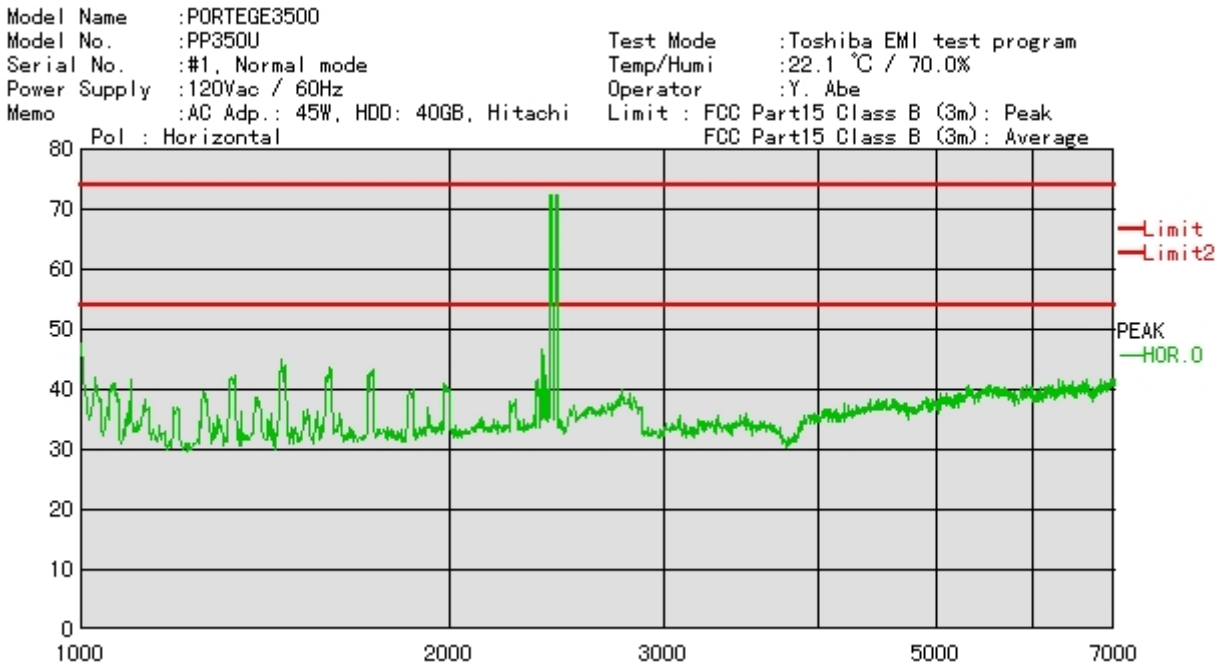
[Pre-measurement result (pick-up list)] [Data A]
for 1 GHz – 7 GHz

Model Name	:	PORTEGE 3500
Model No.	:	PP350U
Serial No.	:	#1, Normal mode
Power Supply	:	120Vac / 60 Hz
Test Mode	:	Toshiba Windows EMI test program
Temp/Humi	:	22.1 deg / 70.0 %
Operator	:	Y. Abe
Memo	:	AC ADP.: 45W, HDD: 40 GB
Limit1	:	FCC Part 15 Class B (3m): Peak
Limit2	:	FCC Part 15 Class B (3m): Average
Date	:	10/09/2002

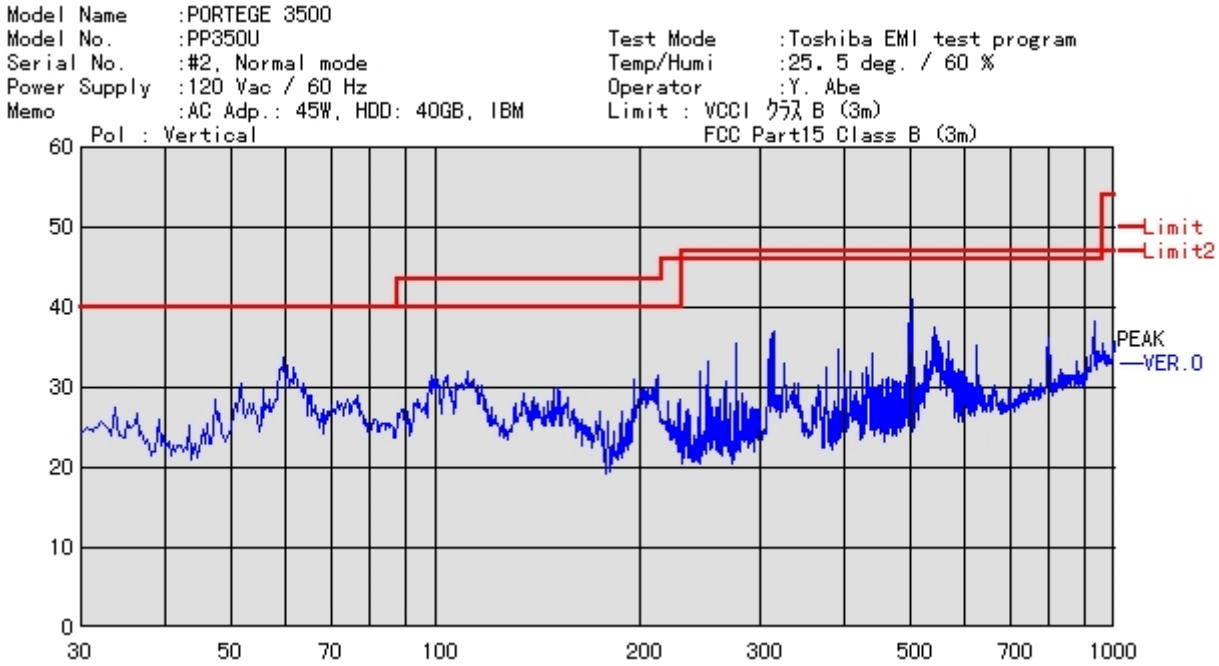
<< Peak List-Up Data List>>

Freq. [MHz]	H/V	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]
1000.000	H	47.8	74.0	26.2
1035.000	V	44.5	74.0	29.5
1057.500	V	46.7	74.0	27.3
1322.500	V	47.6	74.0	26.4
1460.000	H	45.1	74.0	28.9
1467.500	H	43.9	74.0	30.1
1587.500	V	46.7	74.0	27.3
1602.500	V	46.5	74.0	27.5
1727.500	V	48.0	74.0	26.0
1867.500	V	49.1	74.0	24.9
1985.000	V	48.4	74.0	25.6
2367.500	V	49.7	74.0	24.3
2375.000	V	47.5	74.0	26.5
2385.000	H	46.5	74.0	27.5
2420.000	V	68.6	74.0	5.4
2427.500	V	72.2	74.0	1.8
2430.000	H	72.2	74.0	1.8
2450.000	H	72.2	74.0	1.8
2457.500	V	48.9	74.0	25.1
2467.500	V	45.0	74.0	29.0

[Pre-measurement result (spectrum graph)] [Data A]
for 1 GHz – 7 GHz
- Horizontal



- Vertical



[Final measurement result] [Data B]

Measurement Results
for Radiation Measurement

EUT Name : PORTEGE 3500
Type : PP350U
Serial No. : #2, Normal mode
Memo : AC Adaptor: PA3153U-1ACA (45 W)
Data No. : B
Limit : FCC Part 15 Class B (3m)

Frequency	Receiver Reading [dBuV/m]		System Factor	Emission Level [dBuV/m]		Limit	Margin [dB]	
[MHz]	Horizontal	Vertical	[dB/m]	Horizontal	Vertical	[dBuV/m]	Horizontal	Vertical
59.96		23.7	5.9		29.6	40.0		10.4
73.68	20.3	19.2	8.4	28.7	27.6	40.0	11.3	12.4
99.97	15.3	16.2	11.4	26.7	27.6	43.5	16.8	15.9
151.52	19.6	15.2	16.0	35.6	31.2	43.5	7.9	12.3
211.33	11.5	9.9	19.1	30.6	29.0	43.5	12.9	14.5
501.13		11.8	29.5		41.3	46.0		4.7
798.80	1.4		34.4	35.8		46.0	10.2	
927.03	2.6		37.6	40.2		46.0	5.8	

Note : 1) The emission level is including the system factor that consists of system loss and Antenna facto
2) Sample of calculation at 59.96 MHz (Vertical):
23.7 + 5.9 = 29.6 [dBuV/m]

Comments : HDD: 40 GB, IBM

Place : Anechoic Chamber No. 3
Date : October 8, 2002

Operator :
Y. Abe, Engineer
Toshiba Digital Media Engineering Corp.

Ver. 4.1c

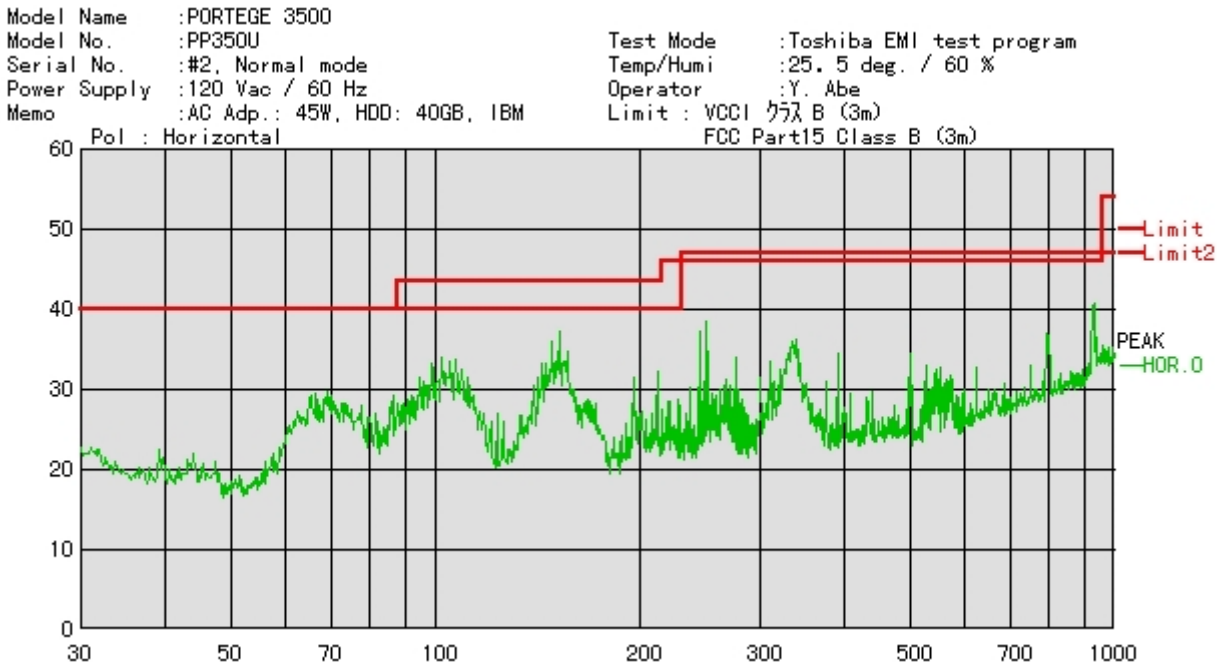
[Pre-measurement result (pick-up list)] [Data B]
for 30 MHz – 1000 MHz

Model Name	:	PORTEGE 3500
Model No.	:	PP350U
Serial No.	:	#2, Normal mode
Power Supply	:	120Vac / 60 Hz
Test Mode	:	Toshiba Windows EMI test program
Temp/Humi	:	25.5 deg / 65.0 %
Operator	:	Y. Abe
Memo	:	AC ADP.: 45W, HDD: 40 GB
Limit1	:	VCCI Class B (3m)
Limit2	:	FCC Part 15 Class B (3m)
Date	:	10/08/2002

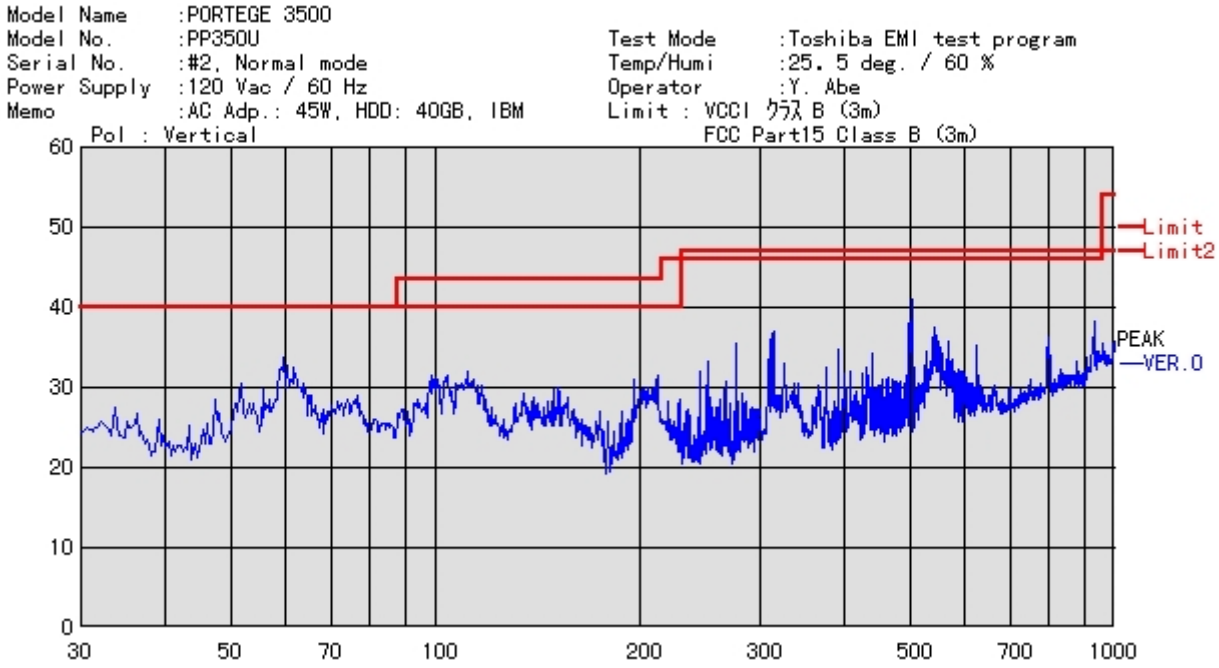
<< Peak List-Up Data List>>

Freq. [MHz]	H/V	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]
51.600	V	30.4	40.0	9.6
59.700	V	33.8	40.0	6.2
63.900	V	30.5	40.0	9.5
69.200	H	29.8	40.0	10.2
76.500	V	29.1	40.0	10.9
86.350	H	29.3	40.0	10.7
102.000	H	34.0	40.0	6.0
107.000	H	33.8	40.0	6.2
111.000	H	31.4	40.0	8.6
111.300	V	32.1	40.0	7.9
148.500	H	36.1	40.0	3.9
151.500	V	29.9	40.0	10.1
152.000	H	37.2	40.0	2.8
156.000	H	34.7	40.0	5.3
158.000	H	30.8	40.0	9.2
195.500	H	31.6	40.0	8.4
195.750	V	30.9	40.0	9.1
211.875	V	31.5	40.0	8.5
212.000	H	32.2	40.0	7.8
244.500	H	37.3	47.0	9.7
250.000	H	38.6	47.0	8.4
314.250	V	36.9	47.0	10.1
339.000	H	36.3	47.0	10.7
502.500	V	40.9	47.0	6.1
541.500	V	37.6	47.0	9.4
547.500	V	36.5	47.0	10.5
795.000	H	37.0	47.0	10.0
801.000	V	36.2	47.0	10.8
933.000	H	40.7	47.0	6.3
935.000	V	38.3	47.0	8.7

[Pre-measurement result (spectrum graph)] [Data B]
for 30 MHz – 1000 MHz
-Horizontal



-Vertical



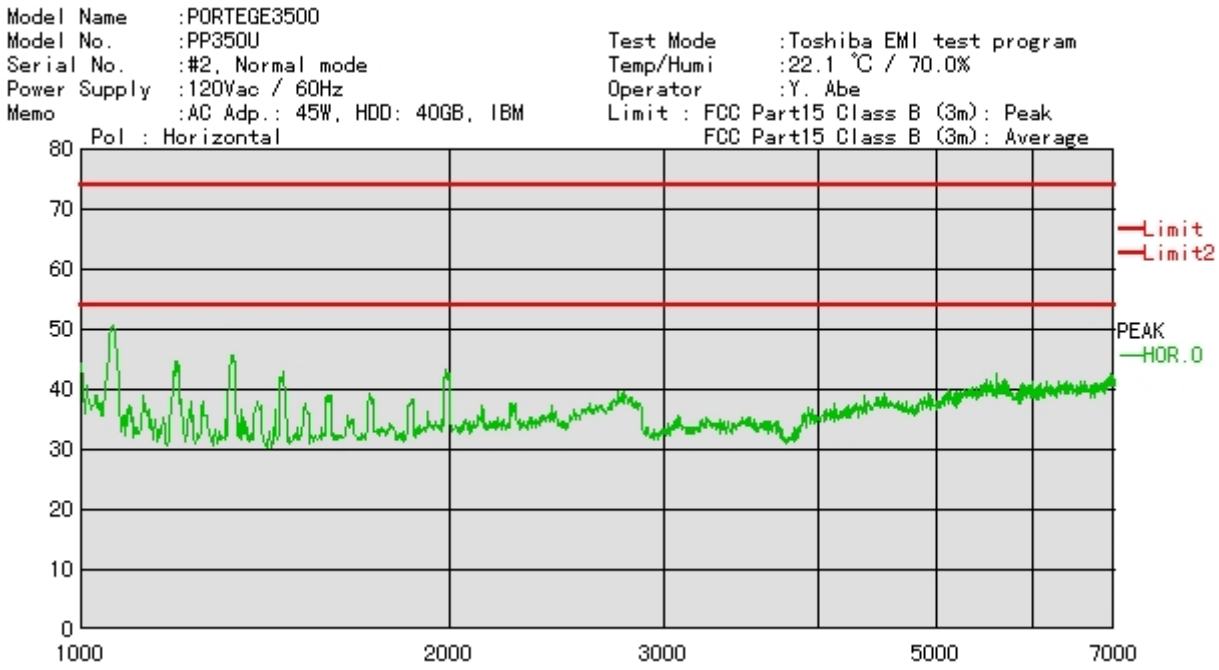
[Pre-measurement result (pick-up list)] [Data B]
for 1 GHz – 7 GHz

Model Name	:	PORTEGE 3500
Model No.	:	PP350U
Serial No.	:	#1, Normal mode
Power Supply	:	120Vac / 60 Hz
Test Mode	:	Toshiba Windows EMI test program
Temp/Humi	:	22.1 deg / 70.0 %
Operator	:	Y. Abe
Memo	:	AC ADP.: 45W, HDD: 40 GB
Limit1	:	FCC Part 15 Class B (3m): Peak
Limit2	:	FCC Part 15 Class B (3m): Average
Date	:	10/09/2002

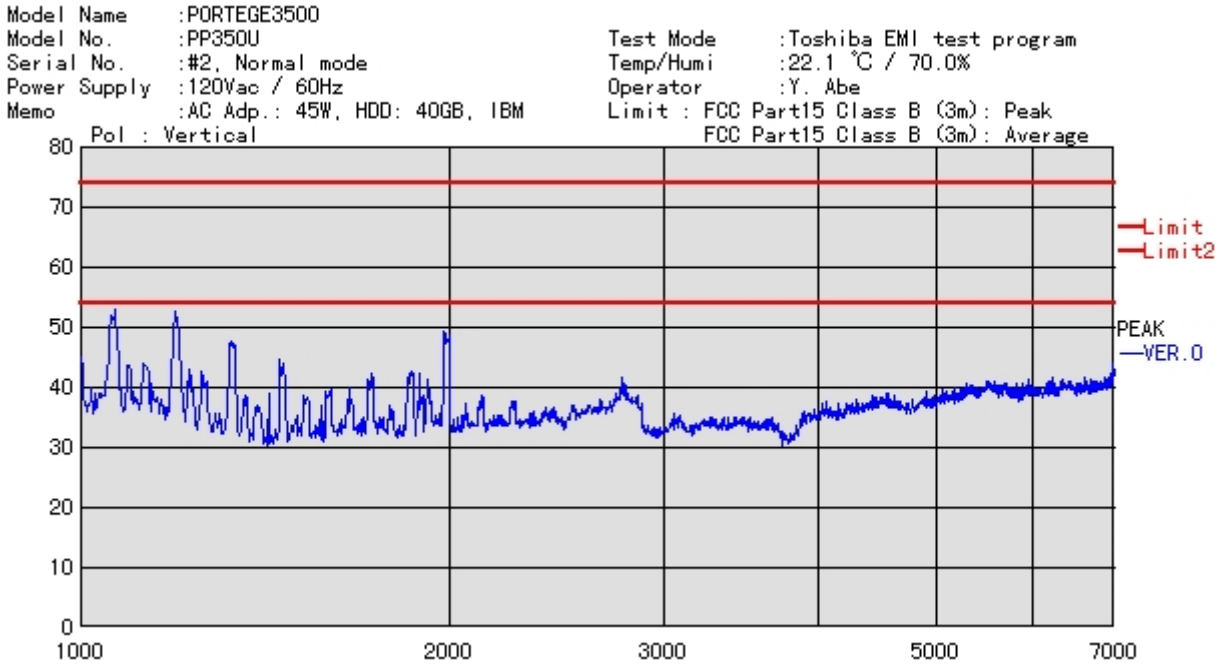
<< Peak List-Up Data List>>

Freq. [MHz]	H/V	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]
1000.000	V	44.9	74.0	29.1
1000.000	H	44.3	74.0	29.7
1062.500	H	50.5	74.0	23.5
1067.500	V	53.0	74.0	21.0
1095.000	V	43.6	74.0	30.4
1125.000	V	44.1	74.0	29.9
1192.500	H	44.8	74.0	29.2
1195.000	V	52.6	74.0	21.4
1225.000	V	42.9	74.0	31.1
1255.000	V	42.8	74.0	31.2
1325.000	V	47.7	74.0	26.3
1327.500	H	45.6	74.0	28.4
1455.000	V	44.8	74.0	29.2
1462.500	H	43.1	74.0	30.9
1725.000	V	42.3	74.0	31.7
1860.000	V	42.8	74.0	31.2
1892.500	V	42.3	74.0	31.7
1982.500	V	49.4	74.0	24.6
1987.500	H	43.2	74.0	30.8
5613.333	H	42.5	74.0	31.5

[Pre-measurement result (spectrum graph)] [Data B]
for 1 GHz – 7 GHz
- Horizontal



- Vertical



[Final measurement result] [Data C]

Measurement Results
for Radiation Measurement

EUT Name : PORTEGE 3500
Type : PP350U
Serial No. : #3, Normal mode
Memo : AC Adaptor: PA3083U-1ACA (75W)
Data No. : C
Limit : FCC Part 15 Class B (3m)

Frequency	Receiver Reading [dBuV/m]		System Factor	Emission Level [dBuV/m]		Limit	Margin [dB]	
[MHz]	Horizontal	Vertical	[dB/m]	Horizontal	Vertical	[dBuV/m]	Horizontal	Vertical
61.43		26.3	6.9		33.2	40.0		6.8
73.72	21.9	21.9	8.4	30.3	30.3	40.0	9.7	9.7
98.44	22.2		11.4	33.6		43.5	9.9	
101.87	22.5		12.0	34.5		43.5	9.0	
111.64		15.1	13.1		28.2	43.5		15.3
151.52	21.9	16.2	16.0	37.9	32.2	43.5	5.6	11.3
155.59	19.6		16.0	35.6		43.5	7.9	
211.34	14.6	11.1	19.1	33.7	30.2	43.5	9.8	13.3
501.13		1.7	29.5		31.2	46.0		14.8

Note : 1) The emission level is including the system factor that consists of system loss and Antenna facto
2) Sample of calculation at 61.43 MHz (Vertical):
26.3 + 6.9 = 33.2 [dBuV/m]

Comments : HDD: 40 GB, Toshiba

Place : Anechoic Chamber No. 3
Date : October 8, 2002

Operator :
Y. Abe, Engineer
Toshiba Digital Media Engineering Corp.

Ver. 4.1c

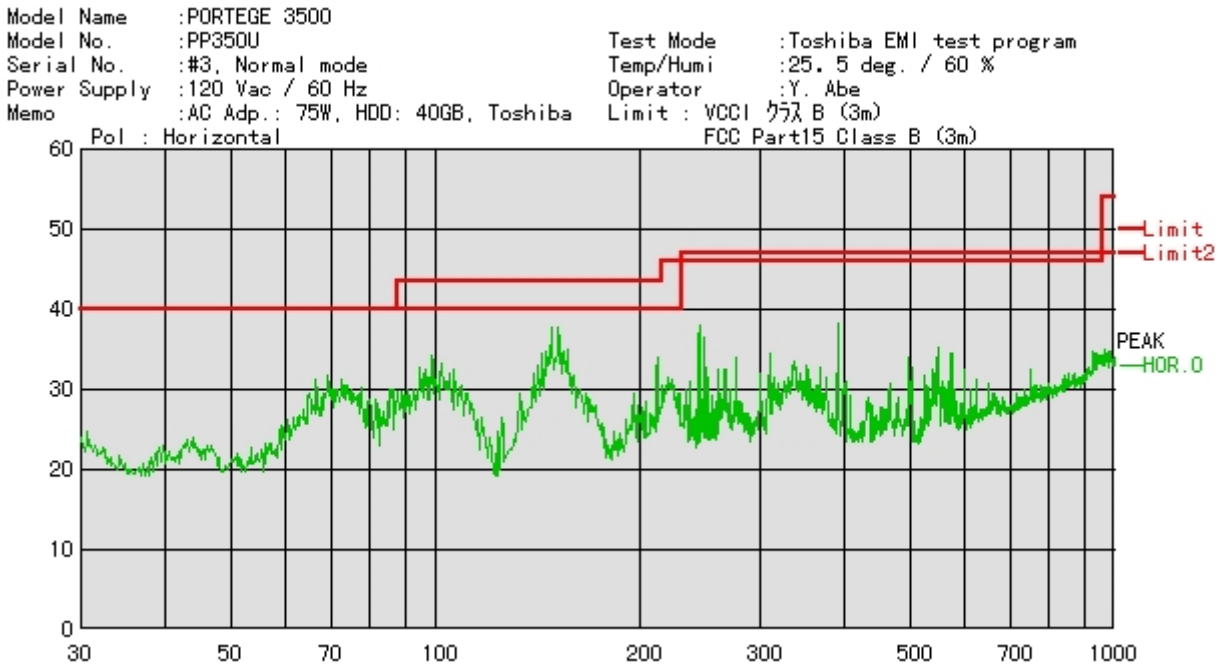
[Pre-measurement result (pick-up list)] [Data C]
for 30 MHz – 1000 MHz

Model Name	:	PORTEGE 3500
Model No.	:	PP350U
Serial No.	:	#3, Normal mode
Power Supply	:	120Vac / 60 Hz
Test Mode	:	Toshiba Windows EMI test program
Temp/Humi	:	25.5 deg / 60.0 %
Operator	:	Y. Abe
Memo	:	AC ADP.: 75W, HDD: 40 GB
Limit1	:	VCCI Class B (3m)
Limit2	:	FCC Part 15 Class B (3m)
Date	:	10/08/2002

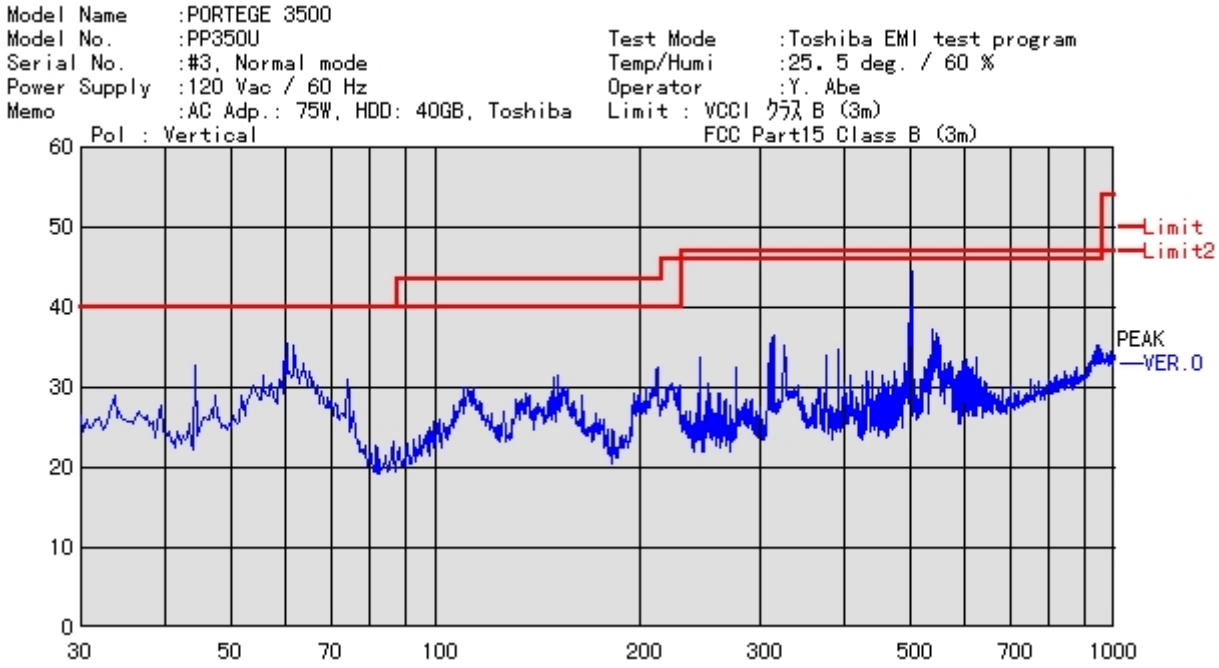
<< Peak List-Up Data List>>

Freq. [MHz]	H/V	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]
33.600	V	29.1	40.0	10.9
44.100	V	32.7	40.0	7.3
60.300	V	35.4	40.0	4.6
65.100	V	32.0	40.0	8.0
69.375	H	31.7	40.0	8.3
74.100	V	30.9	40.0	9.1
80.050	H	28.8	40.0	11.2
102.000	H	33.3	40.0	6.7
106.500	H	32.4	40.0	7.6
110.100	V	30.1	40.0	9.9
110.500	H	29.6	40.0	10.4
148.000	H	37.7	40.0	2.3
151.500	V	31.4	40.0	8.6
151.500	H	37.7	40.0	2.3
156.000	H	35.1	40.0	4.9
160.000	H	31.8	40.0	8.2
164.250	V	29.1	40.0	10.9
195.500	H	29.4	40.0	10.6
211.875	V	32.5	40.0	7.5
212.000	H	33.9	40.0	6.1
219.500	H	31.5	40.0	8.5
222.000	V	30.5	40.0	9.5
244.500	H	38.1	47.0	8.9
249.000	H	36.5	47.0	10.5
314.250	V	36.5	47.0	10.5
390.750	H	38.2	47.0	8.8
502.500	V	44.4	47.0	2.6
538.500	V	37.2	47.0	9.8
546.750	V	36.7	47.0	10.3
549.750	V	36.3	47.0	10.7

[Pre-measurement result (spectrum graph)] [Data C]
for 30 MHz – 1000 MHz
-Horizontal



-Vertical



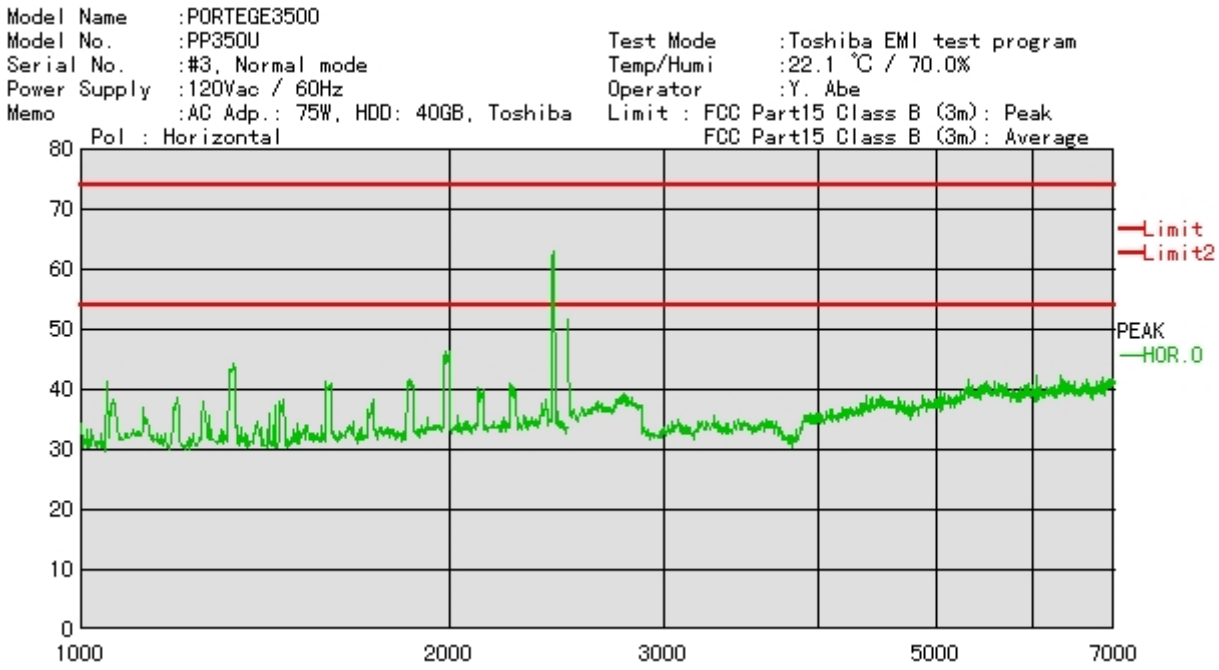
[Pre-measurement result (pick-up list)] [Data C]
for 1 GHz – 7 GHz

Model Name	:	PORTEGE 3500
Model No.	:	PP350U
Serial No.	:	#3, Normal mode
Power Supply	:	120Vac / 60 Hz
Test Mode	:	Toshiba Windows EMI test program
Temp/Humi	:	22.1 deg / 70.0 %
Operator	:	Y. Abe
Memo	:	AC ADP.: 75W, HDD: 40 GB
Limit1	:	FCC Part 15 Class B (3m): Peak
Limit2	:	FCC Part 15 Class B (3m): Average
Date	:	10/09/2002

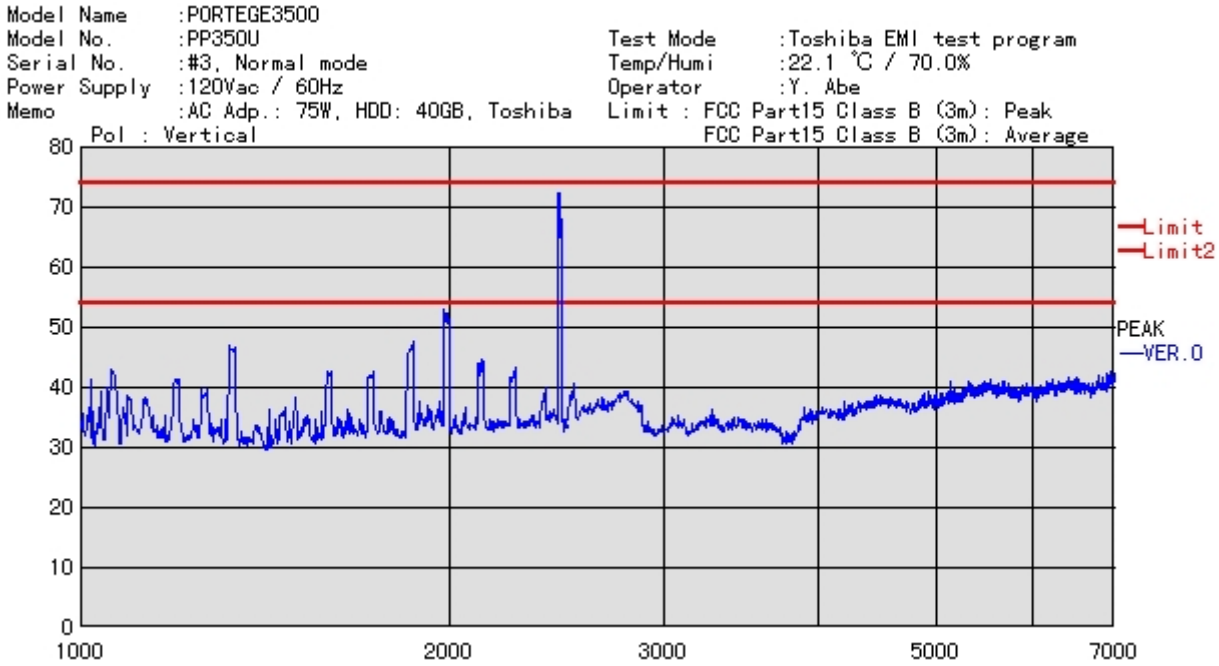
<< Peak List-Up Data List>>

Freq. [MHz]	H/V	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]
1060.000	V	43.0	74.0	31.0
1322.500	V	46.9	74.0	27.1
1332.500	H	44.2	74.0	29.8
1590.000	V	42.7	74.0	31.3
1732.500	V	42.5	74.0	31.5
1867.500	V	47.6	74.0	26.4
1980.000	V	53.1	74.0	20.9
2000.000	H	46.3	74.0	27.7
2122.500	V	44.5	74.0	29.5
2267.500	V	43.2	74.0	30.8
2430.000	H	62.2	74.0	11.8
2437.500	H	62.9	74.0	11.1
2462.500	V	72.3	74.0	1.7
2470.000	V	68.0	74.0	6.0
2500.000	H	51.7	74.0	22.3
5313.333	H	41.6	74.0	32.4
6053.333	H	42.4	74.0	31.6
6330.000	H	42.2	74.0	31.8
6520.000	V	41.7	74.0	32.3
6640.000	H	41.8	74.0	32.2

[Pre-measurement result (spectrum graph)] [Data C]
for 1 GHz – 7 GHz
- Horizontal



- Vertical



[Final measurement result] [Data D]

Measurement Results
for Radiation Measurement

EUT Name : PORTEGE 3500
Type : PP350U
Serial No. : #4, Normal mode
Memo : AC Adaptor: PA3241U-1ACA (45 W)
Data No. : D
Limit : FCC Part 15 Class B (3m)

Frequency	Receiver Reading [dBuV/m]		System Factor	Emission Level [dBuV/m]		Limit	Margin [dB]	
[MHz]	Horizontal	Vertical	[dB/m]	Horizontal	Vertical	[dBuV/m]	Horizontal	Vertical
61.41		24.6	6.9		31.5	40.0		8.5
73.72	25.5	27.3	8.4	33.9	35.7	40.0	6.1	4.3
98.48	23.4		11.4	34.8		43.5	8.7	
101.89	24.0		12.0	36.0		43.5	7.5	
133.31		13.8	14.6		28.4	43.5		15.1
148.11	20.8		15.3	36.1		43.5	7.4	
195.07	13.6	14.4	18.5	32.1	32.9	43.5	11.4	10.6
211.35	11.4		19.1	30.5		43.5	13.0	
501.14		8.2	29.5		37.7	46.0		8.3

Note : 1) The emission level is including the system factor that consists of system loss and Antenna facto
2) Sample of calculation at 61.41 MHz (Vertical):
24.6 + 6.9 = 31.5 [dBuV/m]

Comments : HDD: 30 GB, Hitachi

Place : Anechoic Chamber No. 3
Date : October 7, 2002

Operator :
Y. Abe, Engineer
Toshiba Digital Media Engineering Corp.

Ver. 4.1c

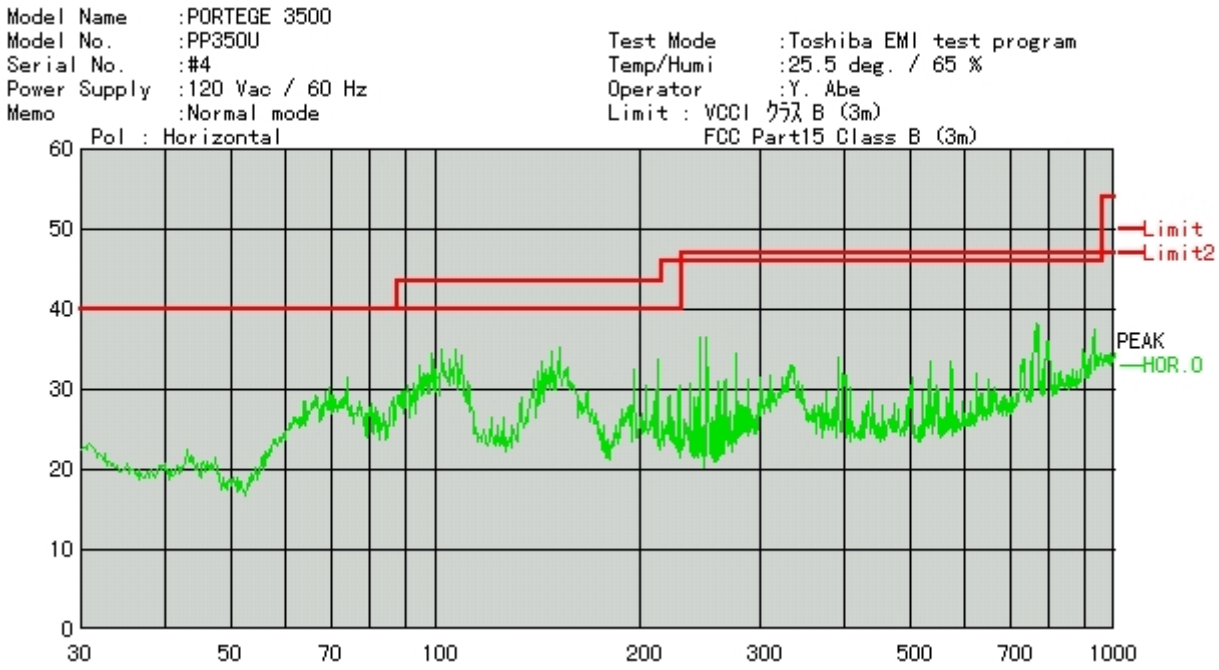
[Pre-measurement result (pick-up list)] [Data D]
for 30 MHz – 1000 MHz

Model Name	:	PORTEGE 3500
Model No.	:	PP350U
Serial No.	:	#4, Normal mode
Power Supply	:	120Vac / 60 Hz
Test Mode	:	Toshiba Windows EMI test program
Temp/Humi	:	25.5 deg / 60.0 %
Operator	:	Y. Abe
Memo	:	AC ADP.: 45W, HDD: 30 GB
Limit1	:	VCCI Class B (3m)
Limit2	:	FCC Part 15 Class B (3m)
Date	:	10/07/2002

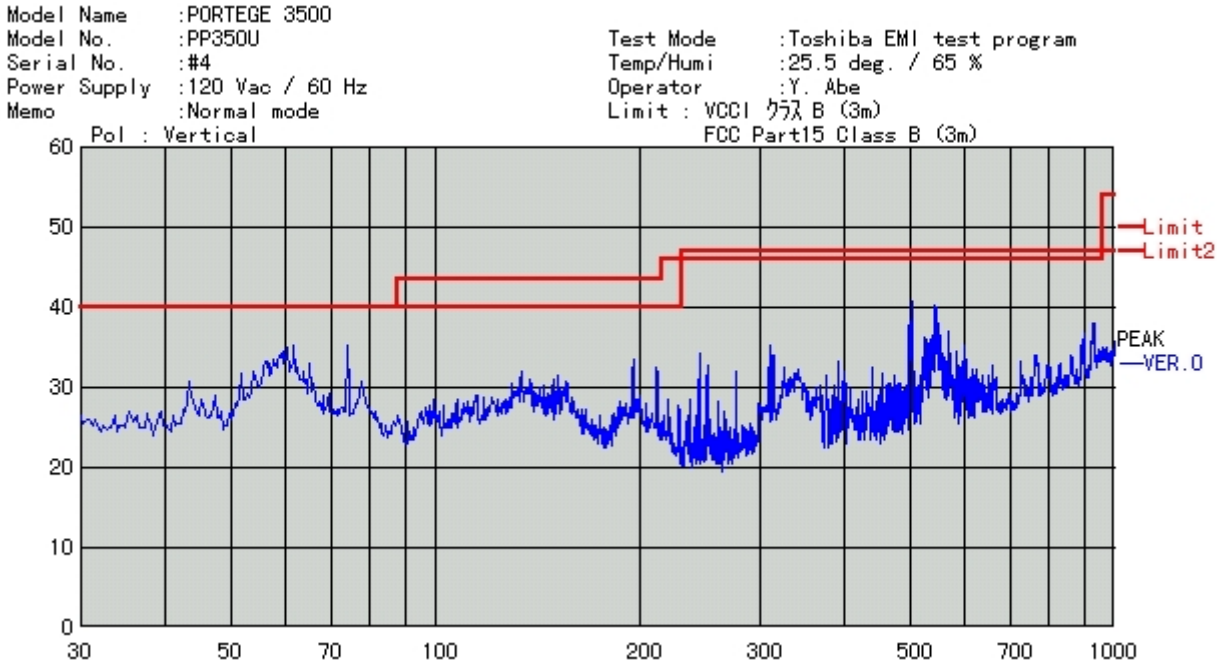
<< Peak List-Up Data List>>

Freq. [MHz]	H/V	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]
43.200	V	30.7	40.0	9.3
61.800	V	35.2	40.0	4.8
65.100	V	32.9	40.0	7.1
74.100	V	35.2	40.0	4.8
74.100	H	31.5	40.0	8.5
77.700	V	30.8	40.0	9.2
102.000	H	35.1	40.0	4.9
111.000	H	31.1	40.0	8.9
133.800	V	31.9	40.0	8.1
143.500	H	33.6	40.0	6.4
148.800	V	31.1	40.0	8.9
151.500	V	31.6	40.0	8.4
152.000	H	35.3	40.0	4.7
158.000	H	31.0	40.0	9.0
195.375	V	33.4	40.0	6.6
195.500	H	32.6	40.0	7.4
204.000	H	30.4	40.0	9.6
211.500	V	32.5	40.0	7.5
212.000	H	33.8	40.0	6.2
228.500	H	30.6	40.0	9.4
244.500	H	36.4	47.0	10.6
250.000	H	36.4	47.0	10.6
502.500	V	40.7	47.0	6.3
543.750	V	40.2	47.0	6.8
546.000	V	39.9	47.0	7.1
550.500	V	38.1	47.0	8.9
570.750	V	36.9	47.0	10.1
767.000	H	38.3	47.0	8.7
901.000	V	36.7	47.0	10.3
927.000	V	37.9	47.0	9.1

[Pre-measurement result (spectrum graph)] [Data D]
for 30 MHz – 1000 MHz
-Horizontal



-Vertical



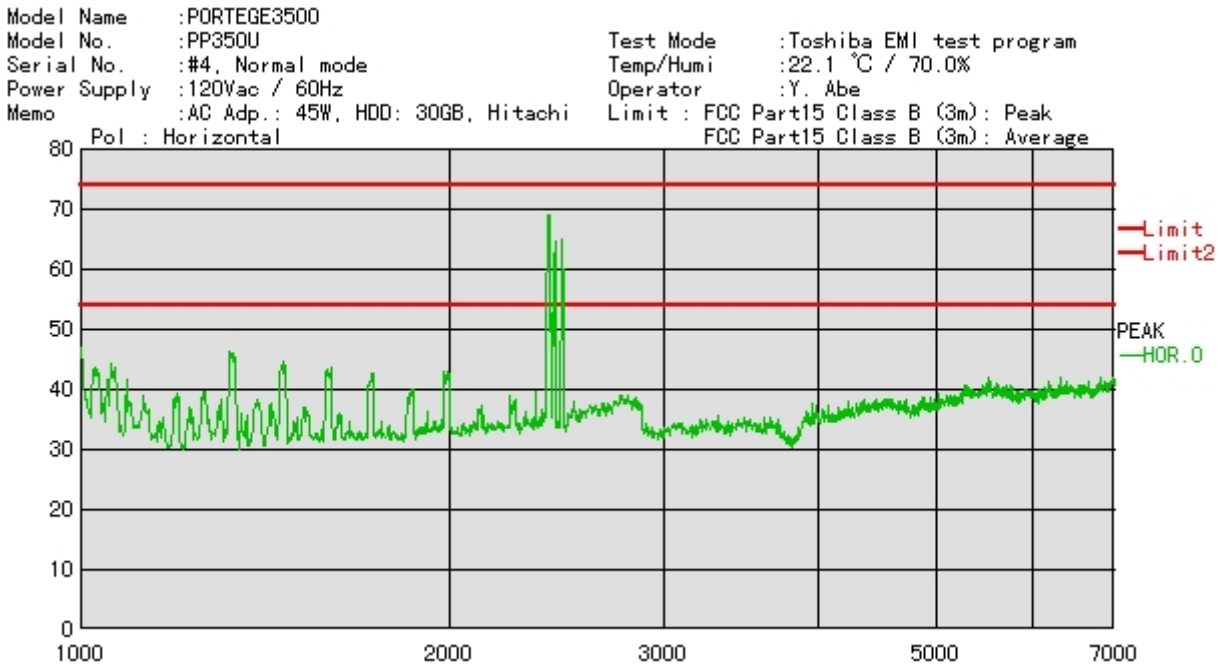
[Pre-measurement result (pick-up list)] [Data D]
for 1 GHz – 7 GHz

Serial No.	:	#4, Normal mode
Power Supply	:	120Vac / 60 Hz
Test Mode	:	Toshiba Windows EMI test program
Temp/Humi	:	22.1 deg / 70.0 %
Operator	:	Y. Abe
Memo	:	AC ADP.: 45W, HDD: 30 GB
Limit1	:	FCC Part 15 Class B (3m): Peak
Limit2	:	FCC Part 15 Class B (3m): Average
Date	:	10/09/2002

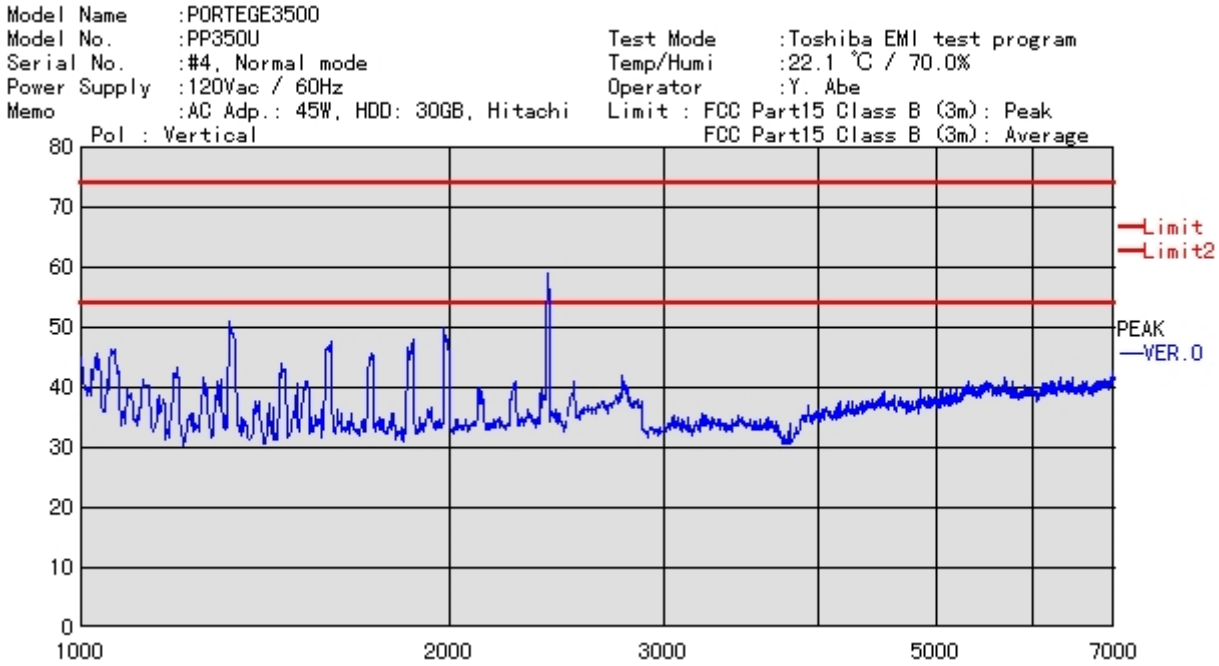
<< Peak List-Up Data List>>

Freq. [MHz]	H/V	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]
1000.000	H	46.9	74.0	27.1
1000.000	V	44.9	74.0	29.1
1030.000	V	45.6	74.0	28.4
1060.000	H	44.2	74.0	29.8
1065.000	V	46.3	74.0	27.7
1322.500	V	51.1	74.0	22.9
1322.500	H	46.4	74.0	27.6
1462.500	H	44.8	74.0	29.2
1600.000	V	47.6	74.0	26.4
1730.000	V	45.5	74.0	28.5
1867.500	V	47.9	74.0	26.1
1980.000	V	50.1	74.0	23.9
2000.000	V	46.3	74.0	27.7
2410.000	H	69.0	74.0	5.0
2410.000	V	59.0	74.0	15.0
2417.500	H	69.1	74.0	4.9
2430.000	H	52.7	74.0	21.3
2442.500	H	64.6	74.0	9.4
2470.000	H	65.0	74.0	9.0
2480.000	H	60.0	74.0	14.0

[Pre-measurement result (spectrum graph)] [Data D]
for 1 GHz – 7 GHz
- Horizontal



- Vertical



[Final measurement result] [Data E]

Measurement Results
for Radiation Measurement

EUT Name : PORTEGE 3500
Type : PP350U
Serial No. : #5, Tablet mode
Memo : AC Adaptor: PA3241U-1ACA
Data No. : E
Limit : FCC Part 15 Class B (3m)

Frequency	Receiver Reading [dBuV/m]		System Factor	Emission Level [dBuV/m]		Limit	Margin [dB]	
[MHz]	Horizontal	Vertical	[dB/m]	Horizontal	Vertical	[dBuV/m]	Horizontal	Vertical
59.39		26.0	5.9		31.9	40.0		8.1
73.72	24.8	27.2	8.4	33.2	35.6	40.0	6.8	4.4
98.47	23.9		11.4	35.3		43.5	8.2	
101.88	24.3		12.0	36.3		43.5	7.2	
137.21		20.1	14.6		34.7	43.5		8.8
151.54	20.4	16.0	16.0	36.4	32.0	43.5	7.1	11.5
501.13	6.9	12.2	29.5	36.4	41.7	46.0	9.6	4.3
932.53	-0.3	0.1	37.6	37.3	37.7	46.0	8.7	8.3

Note : 1) The emission level is including the system factor that consists of system loss and Antenna facto
2) Sample of calculation at 59.39 MHz (Vertical):
26.0 + 5.9 = 31.9 [dBuV/m]

Comments : HDD: 30 GB, Toshiba

Place : Anechoic Chamber No. 3
Date : October 7, 2002

Operator :
Y. Abe, Engineer
Toshiba Digital Media Engineering Corp.

Ver. 4.1c