



EMI TEST REPORT

Test Report No. : 24IE0043-HO-2

Applicant : CANON INC.
Type of Equipment : Wireless LAN module
Model No. : K30242
Test standard : FCC Part 15 Subpart C 2003
Section 15.207, Section 15.247 (2003)
FCC ID : AZDK30242
Test Result : Complied

1. This test report shall not be reproduced 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 report are traceable to the national or international standards.

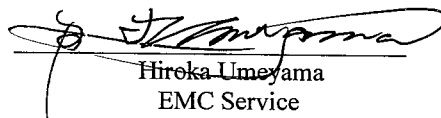
Date of test:

March 13, 17 and 20, 2004

Tested by:



Kenichi Adachi
EMC Service


Hiroka Umezama
EMC Service

Approved by :


Naoki Sakamoto
Group Leader of
EMC Service

UL Apex Co., Ltd.

Head Office EMC Lab.

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SECTION 1: Client information

Company Name : CANON INC.
Brand name : CANON
Address : 16-1, Shimonoge 3-chome, Takatsu-ku, Kawasaki-shi, Kanagawa,
213-8512 Japan
Telephone Number : +81-44-811-2111
Facsimile Number : +81-44-814-2856
Contact Person : Kenji Kurita

SECTION 2: Equipment under test (E.U.T.)

2.1 Identification of E.U.T.

Type of Equipment : Wireless LAN module
Model No. : K30242
Serial No. : 3(for Spurious Emission Radiated Test)
6(for Conducted Emission Test)
5(Except for Spurious Emission Radiated and Conducted Emission Test)
Rating : DC 5V
Country of Manufacture : Japan
Receipt Date of Sample : March 12, 2004
Condition of EUT : Production prototype
(Not for Sale: This sample is equivalent to mass-produced items.)

2.2 Product Description

Model No: K30242 is the Wireless LAN module.
The clock frequency of EUT is 12MHz(MCU), 40MHz (Wireless LAN chip) and 25MHz(LAN PHY chip).

[W-LAN:IEEE802.11b,g]

Equipment Type : Transceiver
Frequency of operation : 2412-2462MHz
Type of modulation : OFDM and DSSS
Bandwidth & Channel spacing : 5MHz/ch
Power control : No
Mode of operation : Simplex
Antenna Type : AH104F2450S1-T
Antenna Gain : -3.7dBi(MAX)
Antenna Connector Type : MICROWAVE COAXIAL CONNECTOR
Method of Frequency Generation : Crystal
Operating voltage (inner) : DC 5V
Operating Temperature : 0 deg.C.-+50 deg.C.

FCC 15.31 (e)

This EUT provides stable voltage (the used voltage is regulated by IC) constantly to RF Module regardless of input voltage. Therefore, this EUT complies with the requirement.

FCC Part 15.203 Antenna requirement

The antenna is not removable from EUT. Therefore, the equipment complies with the antenna requirement of Section 15.203.

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SECTION 3: Test specification, procedures & results

3.1 Test Specification

Test Specification : FCC Part15 Subpart C : 2003

Title : FCC 47CFR Part15 Radio Frequency Device Subpart C Intentional Radiators
Section 15.207 Conducted limits(2003)
Section 15.247 Operation within the bands 902-928MHz,
2400-2483.5MHz, and 5725-5850MHz(2003)

3.2 Procedures and results

[DSSS and other forms of modulation]

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst margin	Results
1	Conducted emission	ANSI C63.4:2003 7. AC powerline conducted emission measurements	Section 15.207	-	N/A	*See the worst margins(marked as shading) in the data sheet in APPENDIX 3.	Complied
2	6dB Bandwidth	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247(a)(2)	Conducted	N/A	See data	Complied
3	Maximum Peak Output Power	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247(b)(3)	Conducted	N/A	See data	Complied
4	Spurious Emission	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247 (c)	Conducted/ Radiated	N/A	*See the worst margins(marked as shading) in the data sheet in APPENDIX 3.	Complied
5	Restricted Band Edges	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247 (c)	Conducted	N/A	See data	Complied
6	Power Density	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247 (d)	Conducted	N/A	See data	Complied

Note: UL Apex's EMI Work Procedures No.QPM05.

Uncertainty:

*In case of the margin below the EMC Head Office's uncertainty.

The data listed in this report meets the limits unless the uncertainty is taken into consideration.

Conducted Emission

The measurement uncertainty (with a 95% confidence level) for this test is $\pm 1.3\text{dB}$.

Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test using Biconical antenna is $\pm 4.5\text{dB}(3\text{m})/\pm 4.7\text{dB}(10\text{m})$.

The measurement uncertainty (with a 95% confidence level) for this test using Logperiodic antenna is $\pm 5.2\text{dB}(3\text{m})/\pm 3.8\text{dB}(10\text{m})$.

The measurement uncertainty (with a 95% confidence level) for this test using Horn antenna is $\pm 6.6\text{dB}$.

Other test except Conducted Emission and Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test is $\pm 3.0\text{dB}$.

*These tests were also referred to "Guidance on Measurement for Digital Transmission Systems Section15.247".

*These tests were performed without any deviations from test procedure except for additions or exclusions.

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3.3 Addition to standards

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst margin	Results
1	99% Occupied Band Width	RSS210(issue 5): 2001 + Amendment:2002 + Amendment2:2003 + Amendment3:2004	RSS210(issue 5): 2001 + Amendment:2002 + Amendment2:2003 + Amendment3:2004	Conducted	N/A	N/A	N/A

3.4 Test Location

UL Apex Co., Ltd. Head Office EMC Lab. *NVLAP Lab. code: 200572-0
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	Listed date (for FCC)	FCC Registration Number	IC Registration Number	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Other rooms
No.1 semi-anechoic chamber	February 01, 2002	313583	IC4247	19.2 x 11.2 x 7.7m	7.0 x 6.0m	Preparation room
No.2 semi-anechoic chamber	June 05, 2002	846015	IC4247-2	7.5 x 5.8 x 5.2m	4.0 x 4.0m	-
No.3 shielded room	-	-	-	4.7 x 7.5 x 2.7m	4.7 x 7.5m	-
No.4 shielded room	-	-	-	3.1 x 5.0 x 2.7m	N/A	-

* Size of vertical conducting plane (for Conducted Emission test) : 2.0 x 2.0m for No.1 and No.2 semi-anechoic and No.3 shielded room.

3.5 Test set up, Test instruments and Data of EMI

Refer to APPENDIX 1 to 3.

SECTION 4: Operation of E.U.T. during testing

4.1 Operating Modes

The EUT was operating in a manner similar to typical use during the tests.

Packet type : Maximum

Payload : PN9

The mode is used :

Transmitting (IEEE 802.11b) 11Mbps

Low channel : 2412MHz

Middle channel : 2437MHz

High channel : 2462MHz

Transmitting (IEEE 802.11g) 54Mbps

Low channel : 2412MHz

Middle channel : 2437MHz

High channel : 2462MHz

The EUT was tested in all three orthogonal planes (X-axis, Y-axis, Z-axis) in order to determine worse case emissions. Channels at 2412MHz, 2437MHz and 2462MHz were tested and checked from 150kHz to 26GHz. Data for all three channels are presented in this report.

The EUT has an ability to provide some different modulation and data rates. Some of these modulation and data rates did not change in the spectrum envelopes of the EUT at conducted Measurement with the antenna terminal.

Therefore, the results of the final measurements were the IEEE 802.11b 11Mbps and IEEE 802.11g 54Mbps modulation as the highest data rate.

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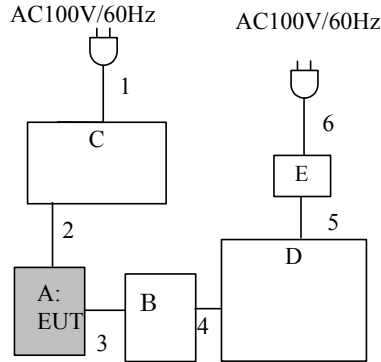
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4.2 Configuration and peripherals

4.2.1 Except for Conducted emission test



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

Description of EUT

No.	Item	Model number	Serial number	Manufacturer	FCC ID	Remark
A	Wireless LAN module	K30242	3*1 5*2	CANON INC.	AZDK30242	EUT

*1:for Spurious Emission Radiated Test *2:Except for Spurious Emission Radiated Test

Support equipment

No.	Item	Model number	Serial number	Manufacturer	FCC ID	Remark
B	LAN Board	-	1	FUJITSU DEVICES INC.	-	-
C	DC Power Supply	PMC35-2A	13090501	KIKUSUI	-	-
D	Note PC	FMVNE665W3	R1210393	FUJITSU	-	-
E	AC Adapter	CA01007-0810	01113505A	FUJITSU	-	-

List of cables used

No.	Name	Length (m)	Shield	Backshell Material
1	AC Power Cable	2.0	N	Polyvinyl chloride
2	DC Power Cable	1.0	N	Polyvinyl chloride
3	Signal Cable	0.1	N	Polyvinyl chloride
4	LAN Cable	1.0	N	Polyvinyl chloride
5	DC Power Cable	2.0	N	Polyvinyl chloride
6	AC Power Cable	2.0	N	Polyvinyl chloride

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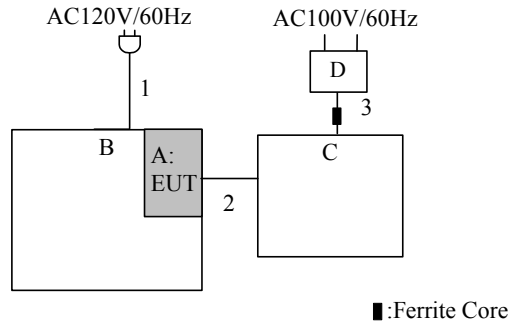
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4.2.2 For Conducted emission test



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

Description of EUT

No.	Item	Model number	Serial number	Manufacturer	FCC ID	Remark
A	Wireless LAN module	K30242	6	CANON INC.	AZDK30242	EUT

Support equipment

No.	Item	Model number	Serial number	Manufacturer	FCC ID	Remark
B	Printer	IP4000R	TA44901000	CANON INC.	-	-
C	Note PC	PP05L	443-2785	DELL	QDS-BRCM1007	-
D	AC Adapter	AA22850	43Q-040S	DELL	-	-

List of cables used

No.	Name	Length (m)	Shield	Backshell Material
1	AC Power Cable	1.6	N	Polyvinyl chloride
2	LAN Cable	3.0	N	Polyvinyl chloride
3	DC Power Cable	1.8	N	Polyvinyl chloride

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SECTION 5: Conducted Emission, Section 15.207

Test Procedure

EUT was placed on a platform of nominal size, 1m by 1.5m, raised 80cm above the conducting ground plane. The rear of tabletop was located 40cm to the vertical conducting plane. The rear of EUT, including peripherals aligned and flushed with rear of tabletop. All other surfaces of tabletop were at least 80cm from any other grounded conducting surface. EUT was located 80cm from a Line Impedance Stabilization Network (LISN)/ Artificial mains Network (AMN) and excess AC cable was bundled in center .

The EUT was set on the center of the table.

Each EUT current-carrying power lead, except the ground (safety) lead, was individually connected through a LISN /(AMN) to the input power source. All unused 50ohm connectors of the LISN(AMN) were resistively terminated in 50ohm when not connected to the measuring equipment.

The AC Mains Terminal Continuous disturbance Voltage has been measured with the EUT in a Semi Anechoic Chamber or a Measurement Room.

The EUT was connected to a LISN (AMN).

An overview sweep with peak detection has been performed.

The measurements have been performed with a CISPR quasi-peak detector (IF BW 9 kHz).

Measurement range: 0.15-30MHz

Test data : APPENDIX 3

Test result : Pass

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SECTION 6: Spurious Emission 15.247(c)

[Conducted]

Test Procedure

The Out of Band Emission was measured with a spectrum analyzer connected to the antenna port.

Test data : APPENDIX 3
Test result : Pass

[Radiated]

Test Procedure

EUT was placed on a platform of nominal size, 1m by 1.5m, raised 80cm above the conducting ground plane. The Radiated Electric Field Strength intensity has been measured in a Semi Anechoic Chamber with a ground plane and at a distance of 3m(Below 10GHz) and 1m(Upper 10GHz).

The height of the measuring varied between 1 and 4m 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 with the Test Receiver or the Spectrum Analyzer.

In any 100kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator confirmed 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on a radiated measurement.

The result also satisfied with the general limits specified in section 15.209(a).

Frequency	Below 1GHz	Above 1GHz
Instrument used	Test Receiver	Spectrum Analyzer
Detector	QP: BW 120kHz	PK: RBW:1MHz/VBW: 1MHz
IF Bandwidth		AV: RBW:1MHz/VBW:10Hz

Test data : APPENDIX 3
Test result : Pass

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SECTION 7: Bandwidth, Section 15.247(a)(1)(2)

Test Procedure

The bandwidth was measured with a spectrum analyzer connected to the antenna port.

Test data : APPENDIX 3
Test result : Pass

SECTION 8: Maximum Peak Output Power, Section 15.247(b)(1)(3)

Test Procedure

The Maximum Peak Output Power was measured with a spectrum analyzer connected to the antenna port.

Test data : APPENDIX 3
Test result : Pass

SECTION 9: Peak Power Density, Section 15.247 (d)

[Conducted]

Test Procedure

The Peak Power Density was measured with a spectrum analyzer connected to the antenna port.

Test data : APPENDIX 3
Test result : Pass

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APPENDIX 1: Photographs of test setup

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Issued date : June 18, 2004
Revised date : July 1, 2004
FCC ID : AZDK30242

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APPENDIX 2: Test instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MAEC-01	Anechoic Chamber	TDK	Semi Anechoic Chamber 10m	RE / CE	2003/12/27 * 12
MTR-01	Test Receiver	Rohde & Schwarz	ESI40	RE / CE	2003/11/12 * 12
MCC-05	Microwave Cable	Storm	421-011	RE	2004/01/06 * 12
MPA-01	Pre Amplifier	Agilent	8449B	RE	2004/02/06 * 12
MAT-22	Attenuator (10dB)	Orient Microwave	BX10-0476-00	RE	2004/03/30 * 12
MHF-02	High Pass Filter	Tokimec	TF323DCA	RE	2003/09/19 * 12
MCC-23	Microwave Cable	Storm	-	RE	2004/05/01 * 12
MHA-05	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2004/01/10 * 12
MHA-01	Horn Antenna	EMCO	3160-09	RE	2004/01/10 * 12
MDPS-03	DC Power Supply	Kikusui	PMC35-2A	RE	Pre Check
MAEC-02	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE	2004/04/12 * 12
MRENT-06	Spectrum Analyzer	Advantest	R3273	RE	2003/10/31 * 12
MTR-02	Test Receiver	Rohde & Schwarz	ESCS30	RE	2004/02/03 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	RE	2004/02/24 * 12
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	RE	2003/10/15 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2003/10/15 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	RE	2003/12/16 * 12
MPA-02	Pre Amplifier	Agilent	87405A	RE	2004/04/16 * 12
MRENT-09	Spectrum Analyzer	Advantest	R3273	AT / RE	2004/02/18 * 12
MAT-22	Attenuator (10dB)	Orient Microwave	BX10-0476-00	AT	2004/03/30 * 12
MCC-03	Coaxial Cable	Fujikura/Suhner/Agilent/T SJ	-	CE	2003/12/24 * 12
MLS-02	LISN(AMN)	Schwarzbeck	NSLK8127	CE (EUT)	2003/11/10 * 12
MLS-03	LISN(AMN)	Schwarzbeck	NSLK8127	CE (AE)	2003/11/10 * 12
MTA-04	Termination	MCL	NTRM-50	CE	2004/02/16 * 12

All equipment is calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

Test Item:

CE: Conducted emission,
RE: Spurious emission(Radiated),
AT: Antenna terminal disturbance voltage

APPENDIX 3: Data of EMI test

Conducted Emission(DSSS and other forms of modulation)

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/05/20 05:35:46

Applicant : CANON INC.
Kind of EUT : Wireless LAN Module (in Printer)
Model No. : K30242
Serial No. : 6
Report No. : 241E0042-H0
Power : AC 120V / 60Hz
Temp°C/Humi% : 21 / 58
Operator : Kenichi Adachi

Mode / Remarks : Standby mode

LIMIT : FCC15C §15.207 (QP)
FCC15C §15.207 (AV)

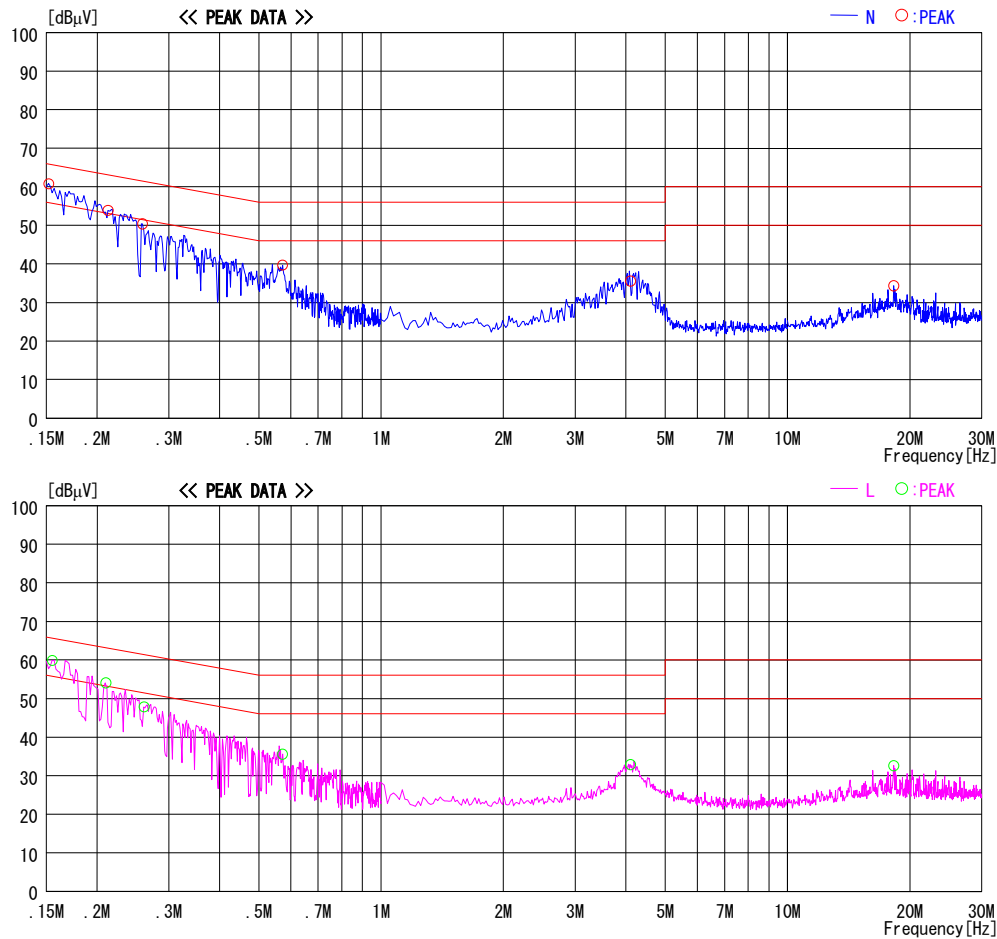


CHART:WITH FACTOR,Peak hold data.Data is uncorrected.
Except for the above table : adequate margin data below the limits.

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DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/05/20 06:25:47

Applicant : CANON INC.
Kind of EUT : Wireless LAN Module (in Printer)
Model No. : K30242
Serial No. : 6
Report No. : 241E0042-HO
Power : AC 120V / 60Hz
Temp°C/Humi% : 21 / 58
Operator : Kenichi Adachi

Mode / Remarks : Transmitting mode (11b, 11Mbps(CCK), Tx: 2412MHz)

LIMIT : FCC15C §15.207 (QP)
FCC15C §15.207 (AV)

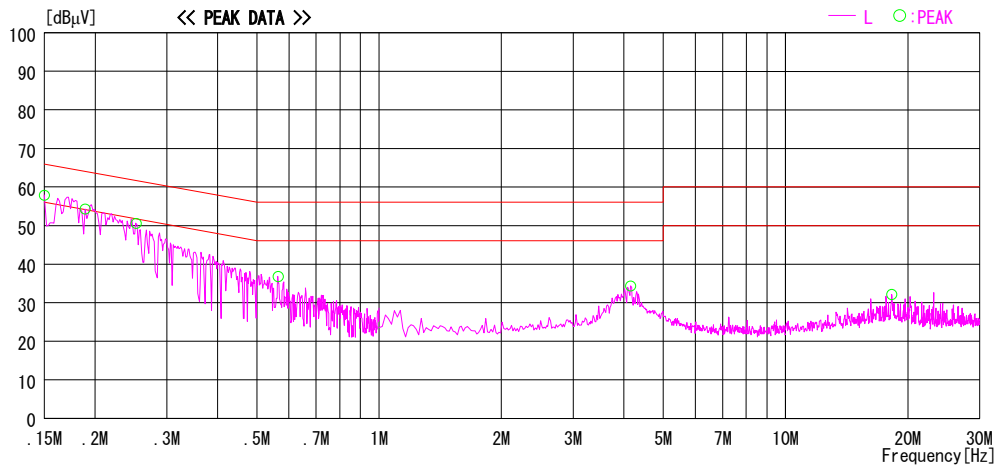
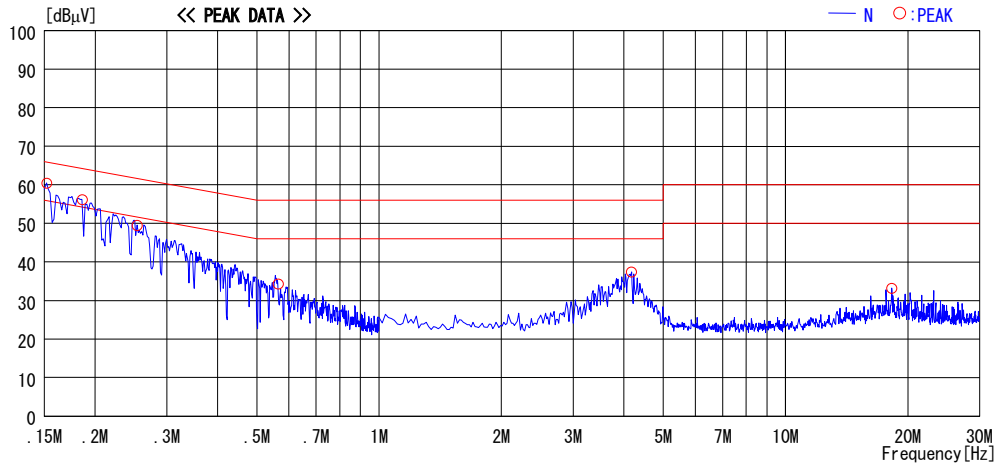


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DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/05/20 06:33:49

Applicant : CANON INC.
Kind of EUT : Wireless LAN Module (in Printer)
Model No. : K30242
Serial No. : 6
Report No. : 241E0042-HO
Power : AC 120V / 60Hz
Temp°C/Humi% : 21 / 58
Operator : Kenichi Adachi

Mode / Remarks : Transmitting mode (11b, 11Mbps(CCK), Tx: 2437MHz)

LIMIT : FCC15C §15.207 (QP)
FCC15C §15.207 (AV)

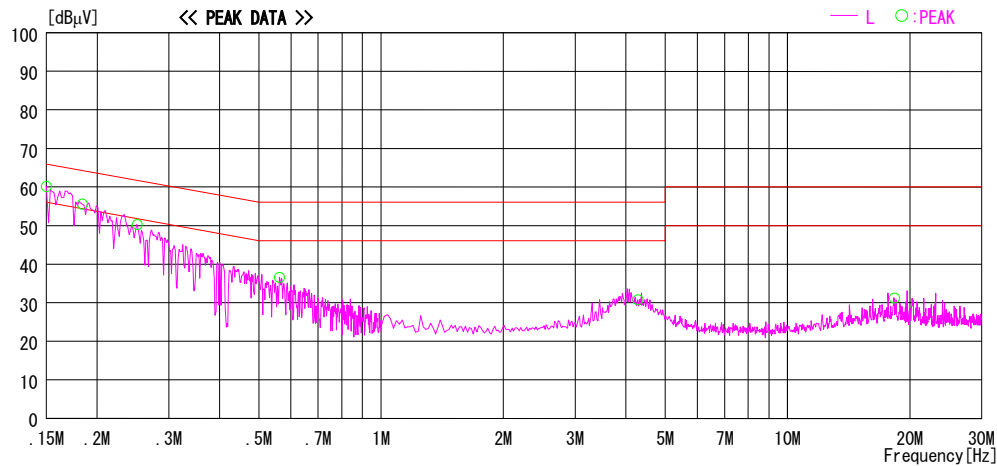
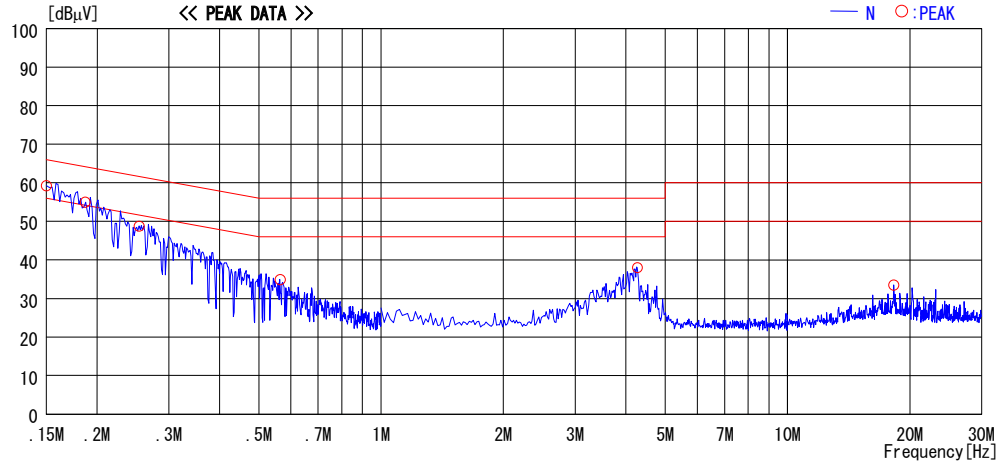


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DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/05/20 06:38:40

Applicant : CANON INC.
Kind of EUT : Wireless LAN Module (in Printer)
Model No. : K30242
Serial No. : 6
Report No. : 241E0042-HO
Power : AC 120V / 60Hz
Temp°C/Humi% : 21 / 58
Operator : Kenichi Adachi

Mode / Remarks : Transmitting mode (11b, 11Mbps(CCK), Tx: 2462MHz)

LIMIT : FCC15C §15.207 (QP)
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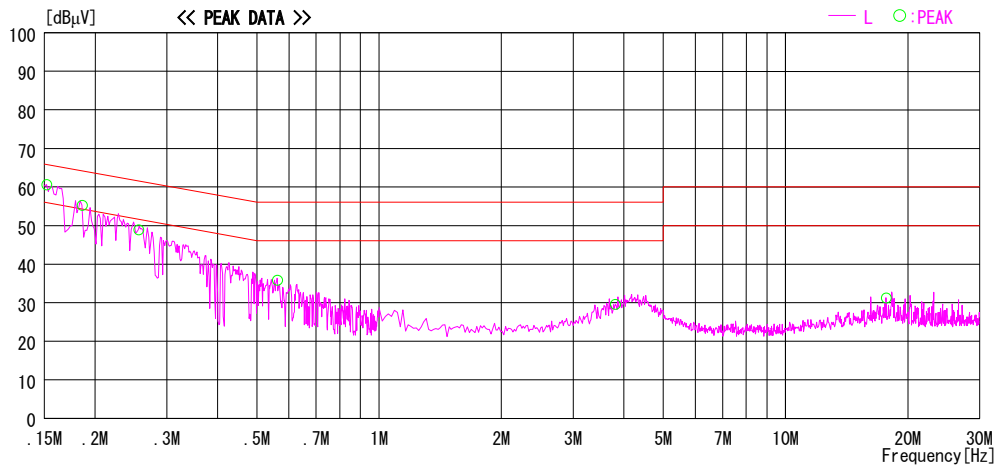
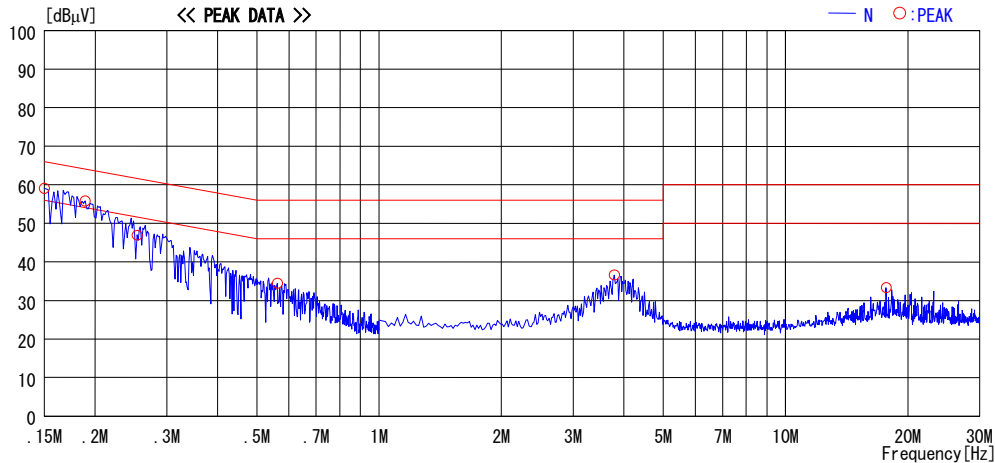


CHART:WITH FACTOR,Peak hold data.Data is uncorrected.
Except for the above table : adequate margin data below the limits.

UL Apex Co., Ltd.

Head Office EMC Lab.

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MF060b(10.04.03)

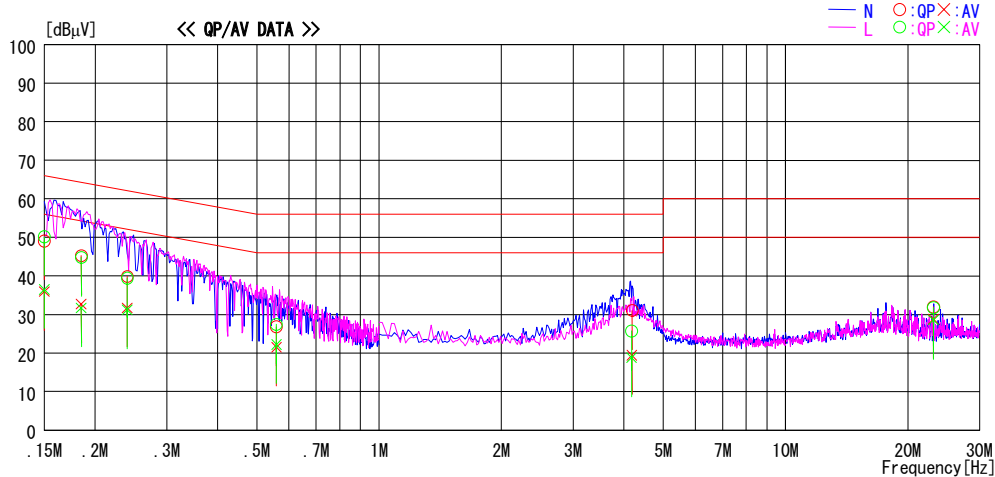
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/05/20 06:04:34

Applicant : CANON INC.
Kind of EUT : Wireless LAN Module (in Printer)
Model No. : K30242
Serial No. : 6
Report No. : 241E0042-HO
Power : AC 120V / 60Hz
Temp°C/Humi% : 21 / 58
Operator : Kenichi Adachi

Mode / Remarks : Transmitting mode (11g, 54Mbps(OFDM), Tx: 2412MHz)

LIMIT : FCC15C §15.207 (QP)
FCC15C §15.207 (AV)



NO	FREQ [MHz]	READING		C. F [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBμV]	AV [dBμV]		QP [dBμV]	AV [dBμV]	QP [dBμV]	AV [dBμV]	QP [dB]	AV [dB]	
1	0.1500	49.0	35.8	0.1	49.1	35.9	66.0	56.0	16.9	20.1	N
2	0.1850	45.0	32.5	0.2	45.2	32.7	64.3	54.3	19.1	21.6	N
3	0.2400	39.6	31.5	0.2	39.8	31.7	62.1	52.1	22.3	20.4	N
4	0.5589	26.2	20.9	0.6	26.8	21.5	56.0	46.0	29.2	24.5	N
5	4.1860	30.1	18.5	0.9	31.0	19.4	56.0	46.0	25.0	26.6	N
6	23.1286	29.6	26.4	2.4	32.0	28.8	60.0	50.0	28.0	21.2	N
7	0.1500	50.1	36.4	0.1	50.2	36.5	66.0	56.0	15.8	19.5	L
8	0.1850	44.6	31.5	0.2	44.8	31.7	64.3	54.3	19.5	22.6	L
9	0.2400	39.2	31.0	0.2	39.4	31.2	62.1	52.1	22.7	20.9	L
10	0.5589	26.8	21.6	0.6	27.4	22.2	56.0	46.0	28.6	23.8	L
11	4.1759	24.8	17.9	0.9	25.7	18.8	56.0	46.0	30.3	27.2	L
12	23.1286	29.4	26.1	2.4	31.8	28.5	60.0	50.0	28.2	21.5	L

CHART:WITH FACTOR,Peak hold data.Data is uncorrected.
Except for the above table : adequate margin data below the limits.

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MF060b(10.04.03)

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/05/20 06:13:59

Applicant : CANON INC.
Kind of EUT : Wireless LAN Module (in Printer)
Model No. : K30242
Serial No. : 6
Report No. : 24IE0042-HO
Power : AC 120V / 60Hz
Temp°C/Humi% : 21 / 58
Operator : Kenichi Adachi

Mode / Remarks : Transmitting mode (11g, 54Mbps(OFDM), Tx: 2437MHz)

LIMIT : FCC15C §15.207 (QP)
FCC15C §15.207 (AV)

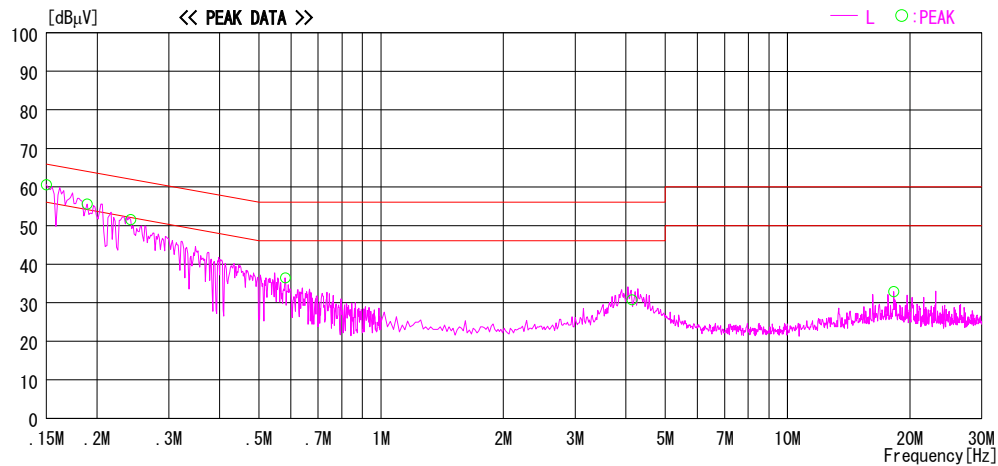
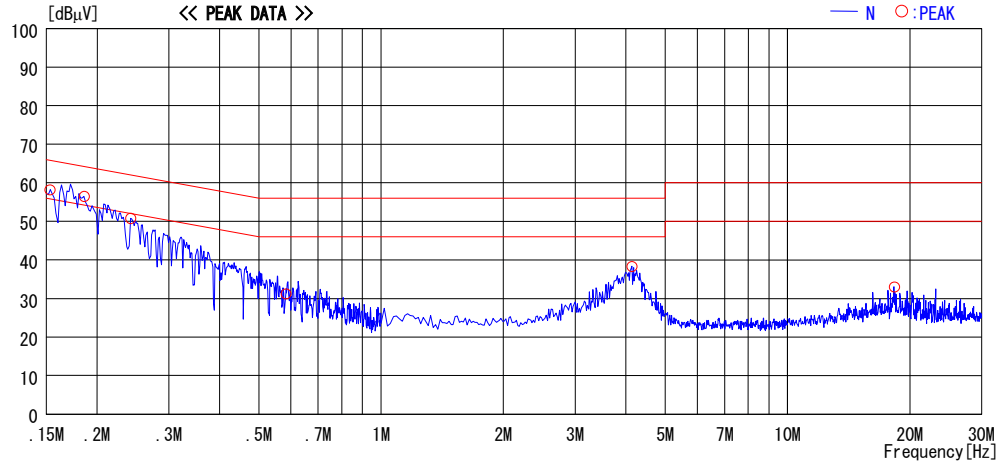


CHART:WITH FACTOR,Peak hold data.Data is uncorrected.
Except for the above table : adequate margin data below the limits.

UL Apex Co., Ltd.

Head Office EMC Lab.

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MF060b(10.04.03)

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/05/20 06:18:52

Applicant : CANON INC.
Kind of EUT : Wireless LAN Module (in Printer)
Model No. : K30242
Serial No. : 6
Report No. : 241E0042-HO
Power : AC 120V / 60Hz
Temp°C/Humi% : 21 / 58
Operator : Kenichi Adachi

Mode / Remarks : Transmitting mode (11g, 54Mbps(OFDM), Tx: 2462MHz)

LIMIT : FCC15C §15.207 (QP)
FCC15C §15.207 (AV)

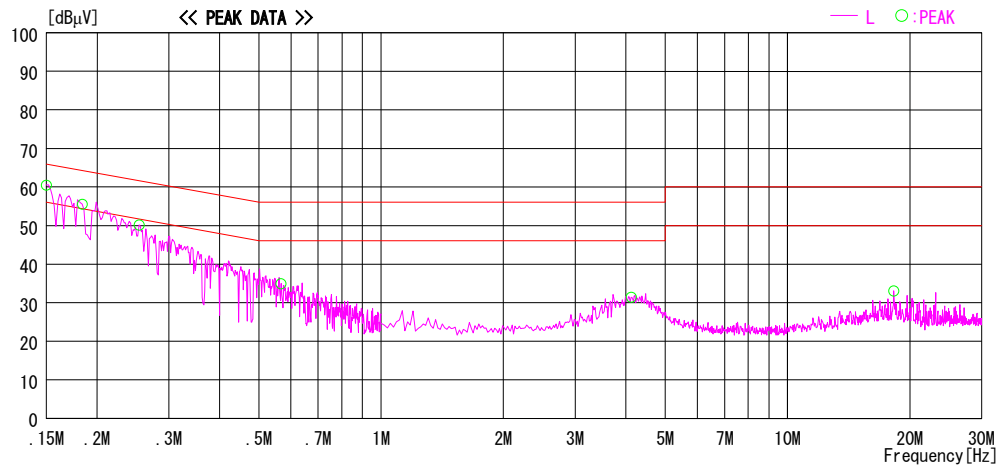
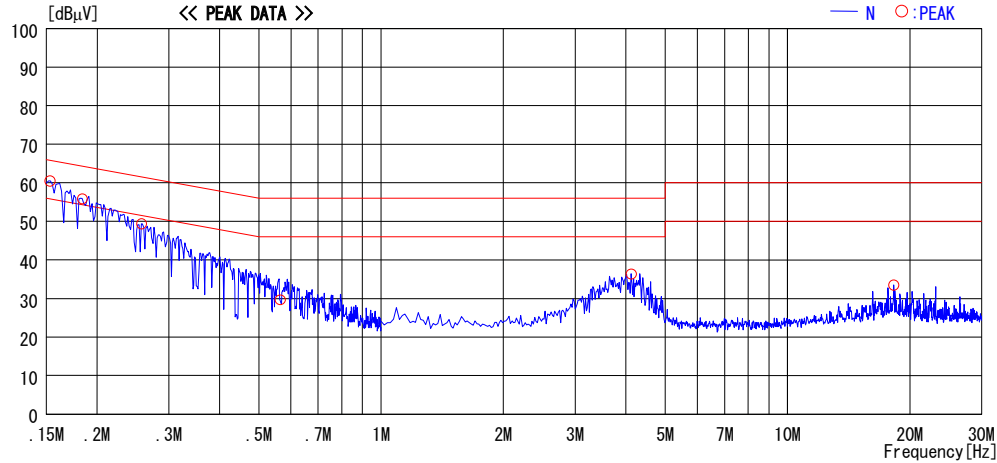


CHART:WITH FACTOR,Peak hold data.Data is uncorrected.
Except for the above table : adequate margin data below the limits.

UL Apex Co., Ltd.

Head Office EMC Lab.

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MF060b(10.04.03)

6dB Bandwidth(DSSS and other forms of modulation)

UL Apex Co., Ltd.
Head Office EMC Lab. No.4 Measurement Room

Company : CANON INC.
Equipment : Wireless LAN module
Model : K30242
Sample No. : 5
Power : DC 5.0 V
Mode : Tx (ch1,6,11)

REPORT NO : 24IE0043-HO
REGULATION : Fcc Part15 Subpart C 15.247(a)(2)
TEST DISTANCE : -
DATE : 05/17/2004
TEMPERATURE : 21℃
HUMIDITY : 60%
ENGINEER : Hiroka Umeyama

IEEE 802.11b, 11Mbps

(RBW:100kHz, VBW:300kHz, Sweep:Auto)

Ch	Freq. [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
Low	2412.0	11.520	500.0
Mid	2437.0	11.540	500.0
High	2462.0	11.520	500.0

IEEE 802.11g, 54Mbps

(RBW:100kHz, VBW:300kHz, Sweep:Auto)

Ch	Freq. [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
Low	2412.0	16.520	500.0
Mid	2437.0	16.500	500.0
High	2462.0	16.500	500.0

UL Apex Co., Ltd.

Head Office EMC Lab.

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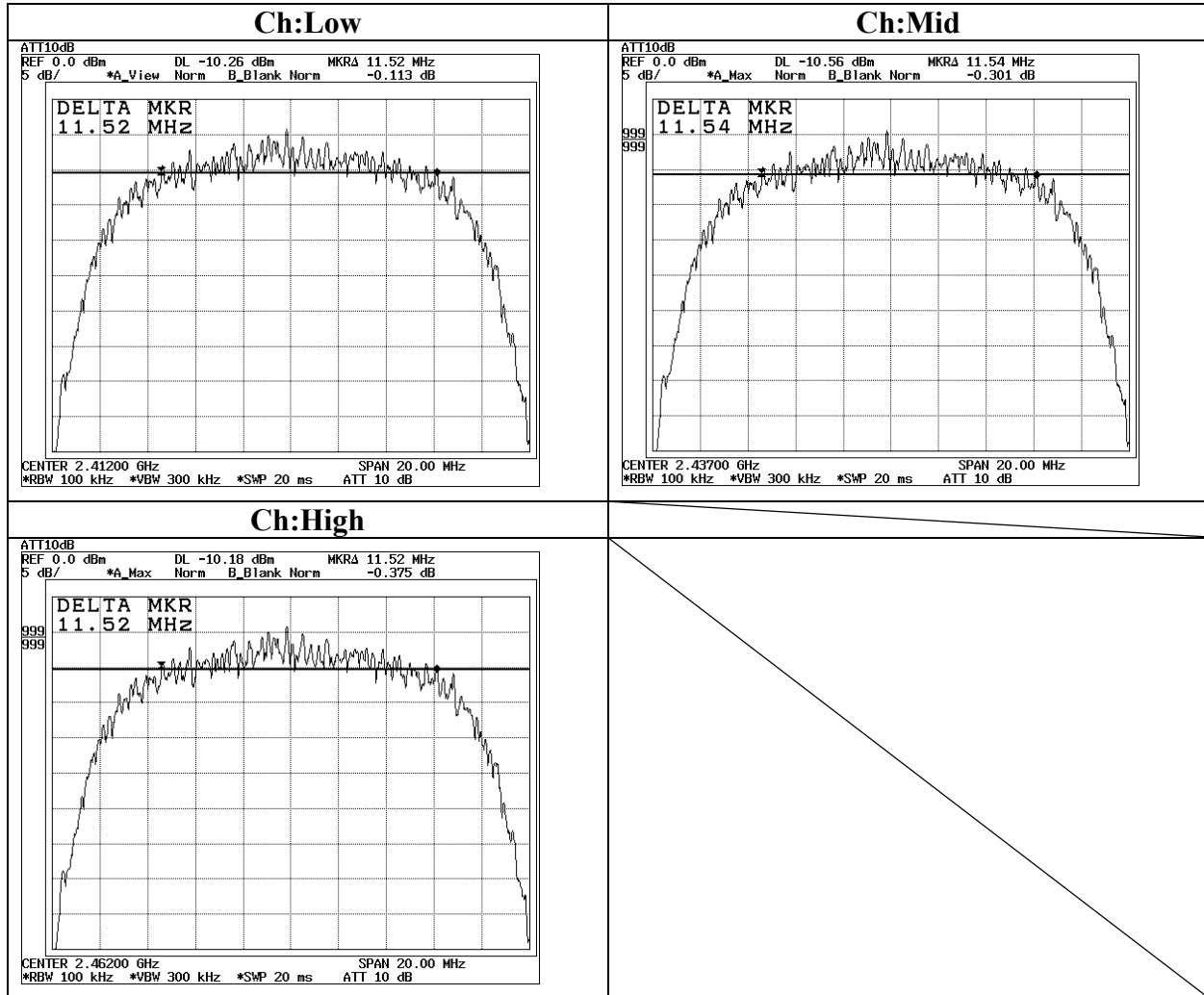
Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(10.04.03)

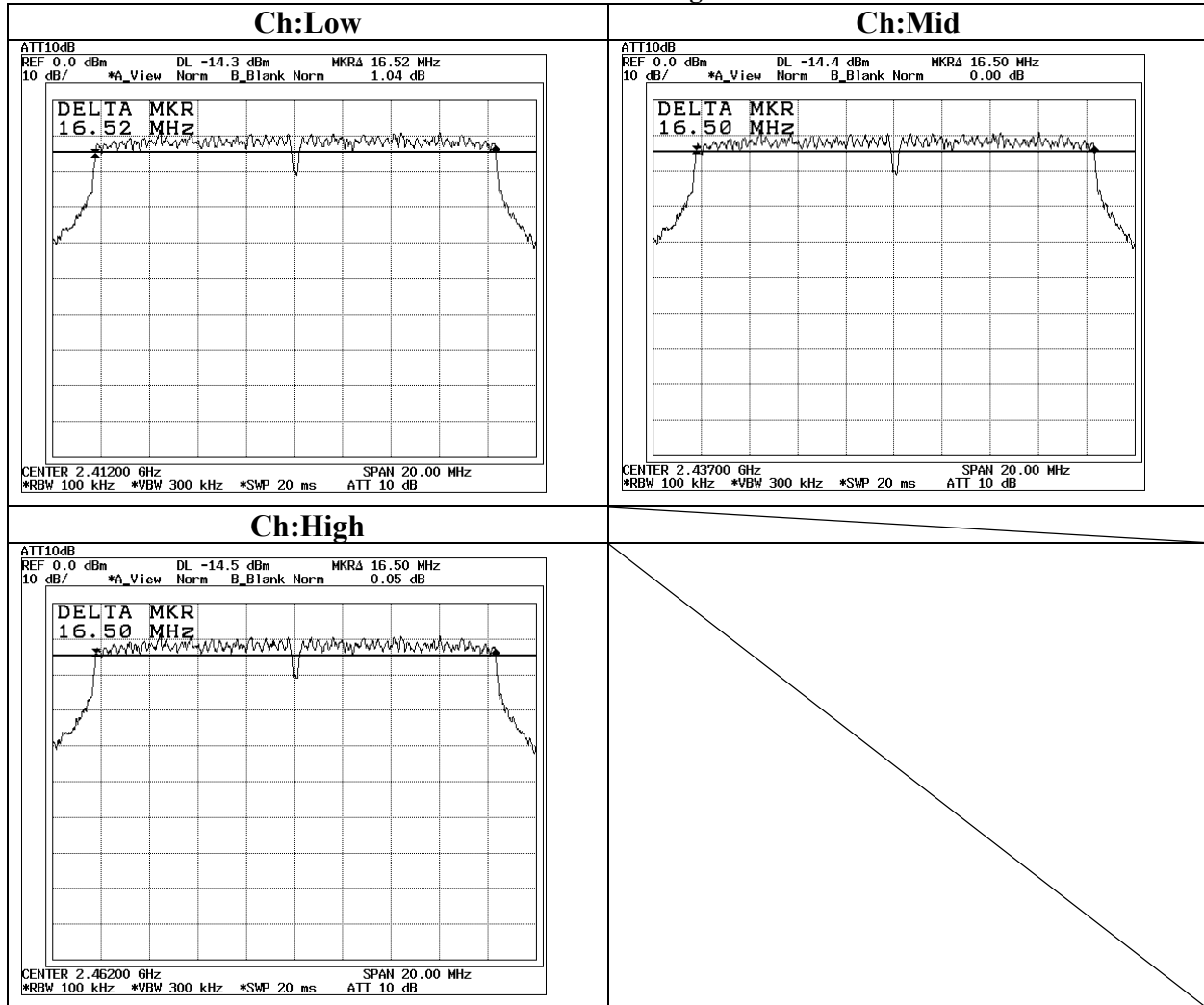
6dB Bandwidth(DSSS and other forms of modulation)

IEEE802.11b



6dB Bandwidth(DSSS and other forms of modulation)

IEEE802.11g



Maximum Peak OutPut Power (DSSS and other forms of modulation)

UL Apex Co., Ltd.
Head Office EMC Lab. No.4 Measurement Room

Company : CANON INC.
Equipment : Wireless LAN module
Model : K30242
Sample No. : 5
Power : DC 5.0 V
Mode : Tx(ch1,6,11)

REPORT NO : 24IE0043-HO
REGULATION : Fcc Part15 Subpart C 15.247(b)(3)
TEST DISTANCE : -
DATE : 05/17/2004
TEMPERATURE : 21℃
HUMIDITY : 60%
ENGINEER : Hiroka Umeyama

IEEE802.11b (11Mbps)

Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit (1W) [dBm]	Margin [dB]
Low	2412.0	5.82	2.00	10.00	17.82	30.00	12.18
Mid	2437.0	5.81	2.00	10.00	17.81	30.00	12.19
High	2462.0	5.49	2.00	10.00	17.49	30.00	12.51

IEEE802.11g (54Mbps)

Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit (1W) [dBm]	Margin [dB]
Low	2412.0	4.21	2.00	10.00	16.21	30.00	13.79
Mid	2437.0	4.24	2.00	10.00	16.24	30.00	13.76
High	2462.0	3.98	2.00	10.00	15.98	30.00	14.02

Sample Calculation:

Result = Reading + Cable Loss (supplied by customer) + Attenuator

* Atten. was not used for factor 0.0dB of the above table.

The test was made with the spectrum analyzer that has a function of channel-power measurement.

UL Apex Co., Ltd.

Head Office EMC Lab.

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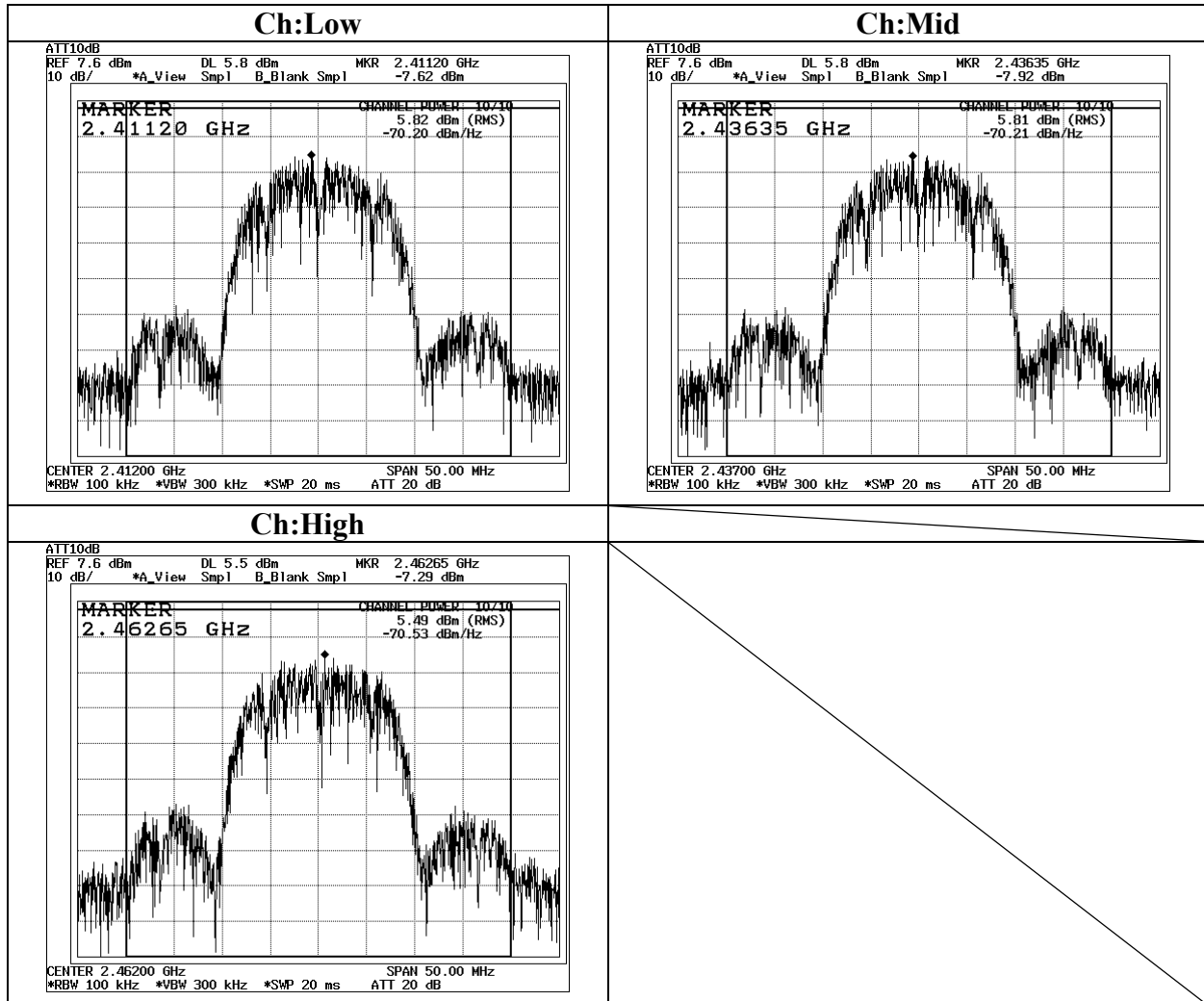
Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(10.04.03)

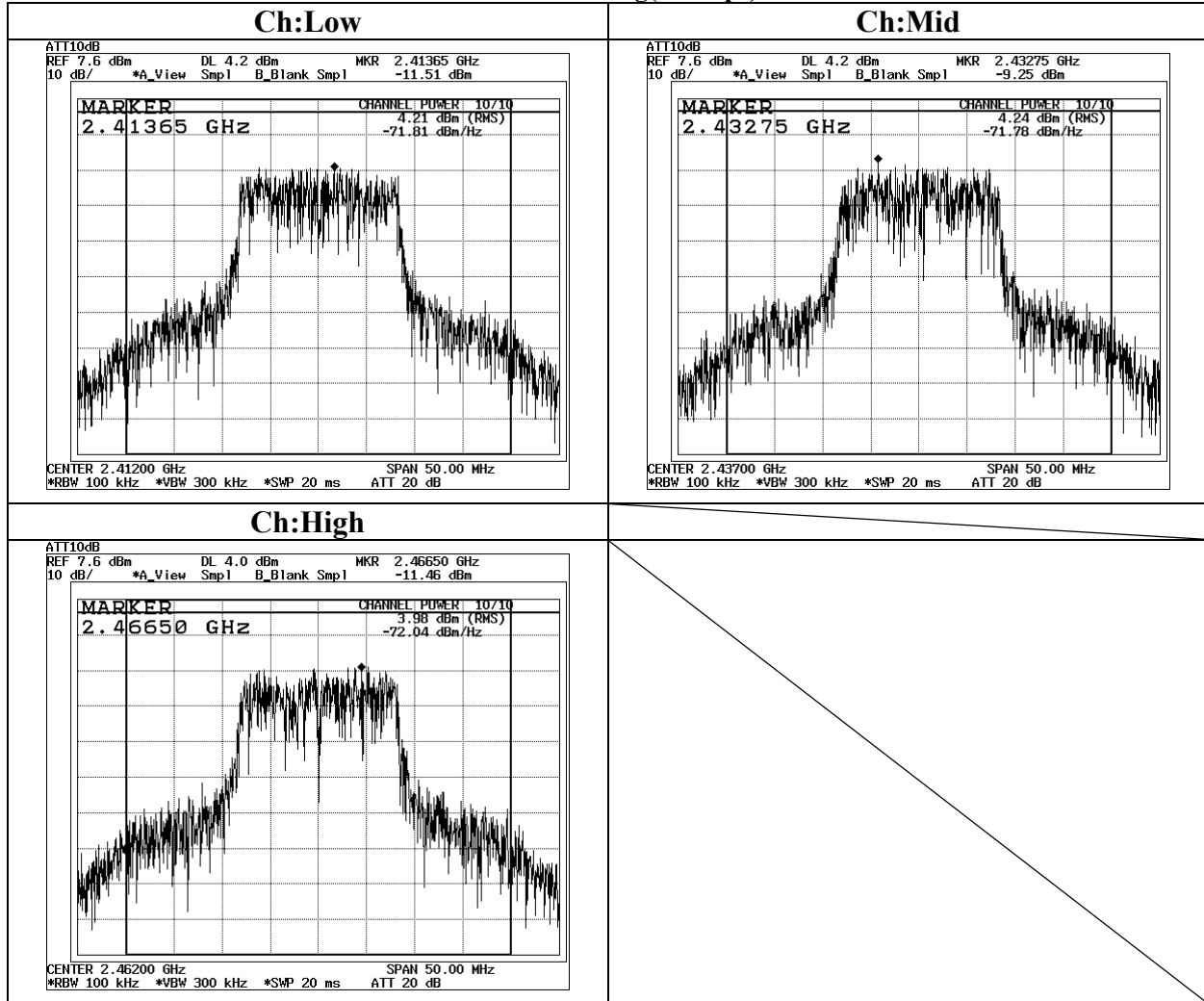
Maximum Peak OutPut Power (DSSS and other forms of modulation)

IEEE802.11b



Maximum Peak OutPut Power (DSSS and other forms of modulation)

IEEE802.11g(54Mbps)



Radiated Spurious Emission(DSSS and other forms of modulation)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber

Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 24IE0043-HO
Power : DC5V
Temp. / Humi. : 23 / 60 2004/05/17
Operator : Hiroka Umeyama

Mode / Remarks : Transmitting Mode MAX(Z)-axis / 11b 2412MHz

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
All other spurious emissions were less than 20dB for the limit.

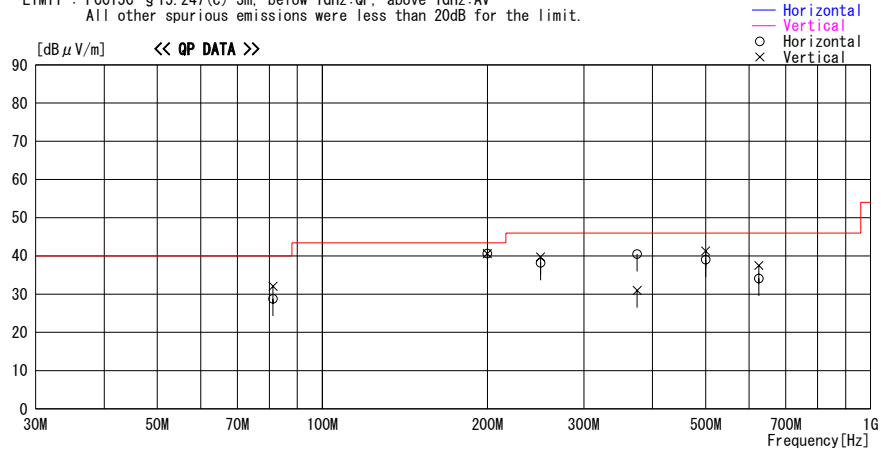


CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

DATA OF RADIATED EMISSION TEST

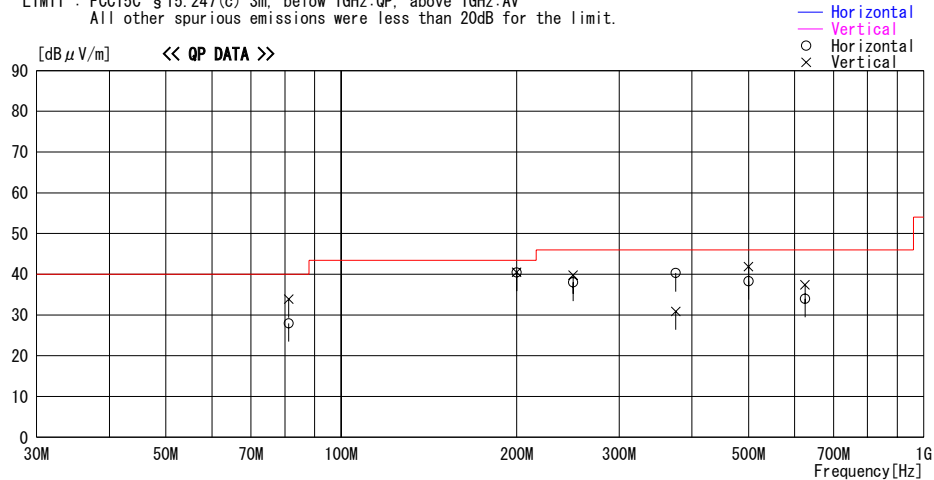
UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber

Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0043-HO
Power : DC5V
Temp./ Humi. : 23 / 60 2004/05/17
Operator : Hiroka Umeyama

Mode / Remarks : Transmitting Mode MAX(Z)-axis / 11b 2437MHz

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
All other spurious emissions were less than 20dB for the limit.



No.	FREQ [MHz]	READING QP [dB μ V]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dB μ V/m]	LIMIT [dB μ V/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	81.300	37.5	6.5	7.1	23.1	28.0	40.0	12.0	200	122
2	200.000	38.8	16.8	7.8	23.0	40.4	43.5	3.1	120	260
3	250.000	35.5	17.4	8.1	23.0	38.0	46.0	8.0	155	220
4	375.010	37.2	17.2	8.7	22.8	40.3	46.0	5.7	200	210
5	500.000	33.6	18.3	9.3	22.9	38.3	46.0	7.7	100	206
6	625.010	27.1	19.7	9.9	22.7	34.0	46.0	12.0	140	160
----- Vertical -----										
7	81.300	43.4	6.5	7.1	23.1	33.9	40.0	6.1	100	354
8	200.000	38.9	16.8	7.8	23.0	40.5	43.5	3.0	100	280
9	250.000	37.3	17.4	8.1	23.0	39.8	46.0	6.2	100	175
10	375.010	27.8	17.2	8.7	22.8	30.9	46.0	15.1	100	221
11	500.000	37.2	18.3	9.3	22.9	41.9	46.0	4.1	100	193
12	625.010	30.5	19.7	9.9	22.7	37.4	46.0	8.6	100	53

CHART: WITH FACTOR ANT TYPE : -30MHz- LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

UL Apex Co., Ltd.

Head Office EMC Lab.

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MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber

Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 24IE0043-HO
Power : DC5V
Temp./Humi. : 23 / 60 2004/05/17
Operator : Hiroka Umeyama

Mode / Remarks : Transmitting Mode MAX(Z)-axis / 11b 2462MHz

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
All other spurious emissions were less than 20dB for the limit.

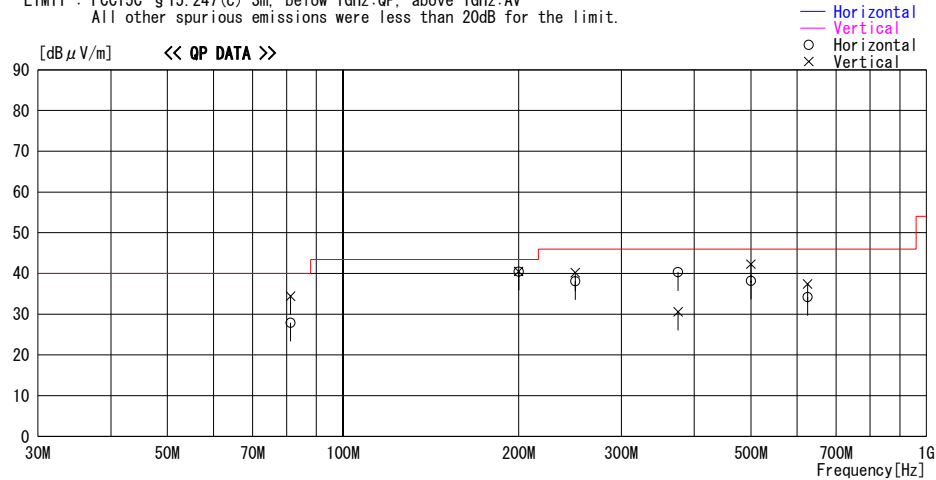


CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

UL Apex Co., Ltd.

Head Office EMC Lab.

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MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

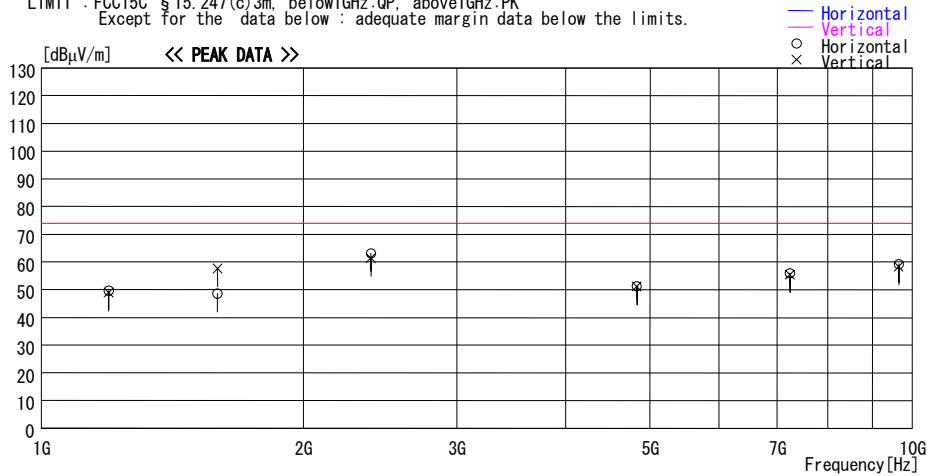
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/05/17

Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-H0
Power : DC5V
Temp°C/Humi% : 22 / 60
Operator : Hiroka Umeyama

Mode / Remarks: Transmitting Mode, 11b, 11Mbps, Tx2412MHz / EUT (MAX-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C §15.247(c)3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1194.700	51.3	23.0	14.4	36.9	51.8	74.0	22.2	100	270
2	1593.310	47.7	25.2	15.2	36.5	51.6	74.0	22.4	100	190
3	2390.000	44.4	30.8	16.4	36.3	55.3	74.0	18.7	100	170
4	4824.316	46.7	35.4	10.3	36.1	56.3	74.0	17.7	100	170
5	7236.100	44.7	38.0	12.3	35.6	59.4	74.0	14.6	100	170
6	9647.923	45.5	37.5	14.4	36.3	61.1	74.0	12.9	100	170
----- Vertical -----										
7	1195.070	48.7	23.0	14.4	36.9	49.2	74.0	24.8	180	190
8	1593.812	49.9	25.2	15.2	36.5	53.8	74.0	20.2	100	190
9	2390.000	44.7	30.8	16.4	36.3	55.6	74.0	18.4	100	278
10	4827.245	46.2	35.4	10.3	36.1	55.8	74.0	18.2	100	270
11	7235.990	44.9	38.0	12.3	35.6	59.6	74.0	14.4	100	170
12	9647.883	44.5	37.5	14.4	36.3	60.1	74.0	13.9	150	178

CHART: WITH FACTOR ANT TYPE: -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION: READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/05/17

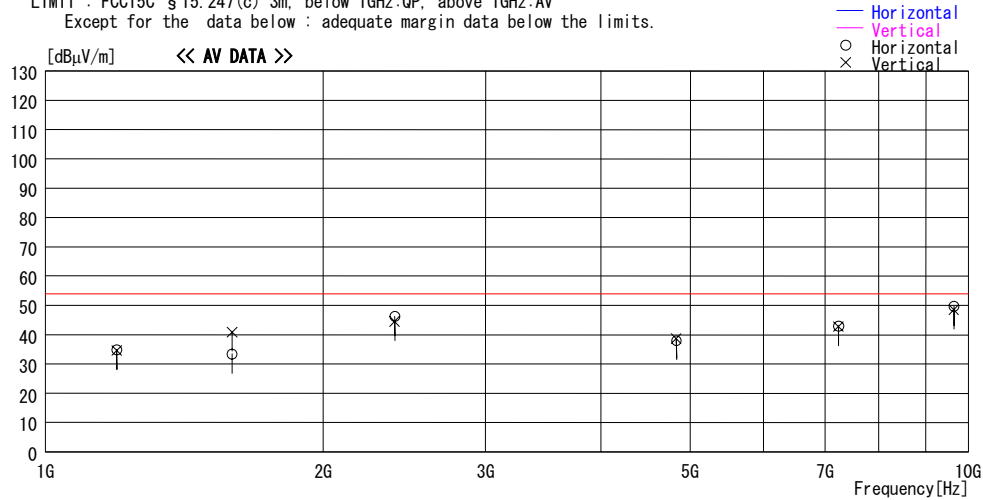
Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 24IE0042-H0
Power : DC5V
Temp°C/Humi% : 22 / 60
Operator : Hiroka Umeyama

Mode / Remarks : Transmitting Mode, 11b, 11Mbps, Tx2412MHz / EUT (MAX-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1194.742	37.6	23.0	14.4	36.9	38.1	54.0	15.9	100	270
2	1593.307	34.7	25.2	15.2	36.5	38.6	54.0	15.4	100	190
3	2390.000	33.2	30.8	16.5	36.3	44.1	54.0	9.9	100	170
4	4827.316	31.4	35.4	10.3	36.1	41.0	54.0	13.0	100	170
5	7236.100	29.2	38.0	12.3	35.6	43.9	54.0	10.1	100	170
6	9647.923	31.3	37.5	14.4	36.3	46.9	54.0	7.1	100	170
----- Vertical -----										
7	1195.070	36.5	23.0	14.4	36.9	37.0	54.0	17.0	180	190
8	1593.812	35.8	25.2	15.2	36.5	39.7	54.0	14.3	100	190
9	2390.000	33.4	30.8	16.4	36.3	44.3	54.0	9.7	100	278
10	4827.245	30.9	35.4	10.3	36.1	40.5	54.0	13.5	100	270
11	7235.990	30.5	38.0	12.3	35.6	45.2	54.0	8.8	100	170
12	9647.883	31.2	37.5	14.4	36.3	46.8	54.0	7.2	150	178

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

UL Apex Co., Ltd.

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MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/05/17

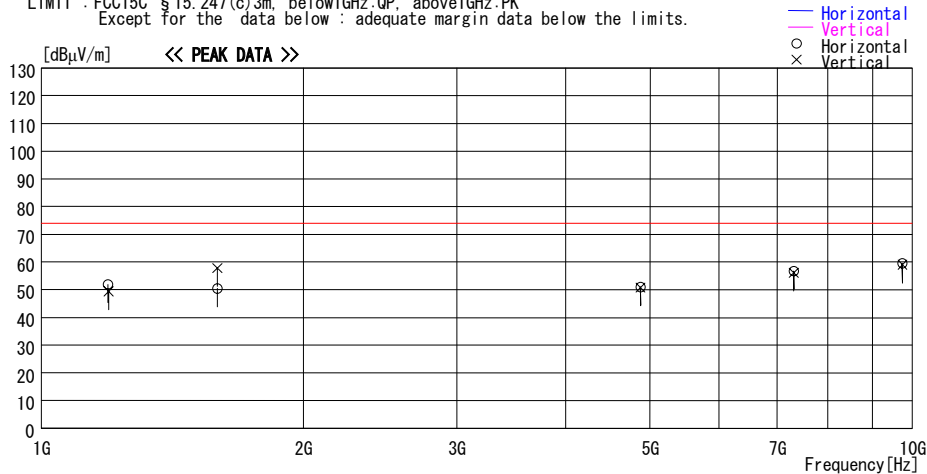
Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-H0
Power : DC5V
Temp°C/Humi% : 22 / 60
Operator : Hiroka Umeyama

Mode / Remarks: Transmitting Mode, 11b, 11Mbps, Tx2437MHz / EUT (MAX-axis): Hor.: Z-axis, Ver.: Y-axis

LIMIT : FCC15C §15.247(c)3m, below 1GHz:QP, above 1GHz:PK

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



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1192.767	51.0	23.0	14.4	36.9	51.5	74.0	22.5	100	270
2	1593.319	47.3	25.2	15.2	36.5	51.2	74.0	22.8	100	190
3	4875.485	44.8	35.6	10.5	36.1	54.8	74.0	19.2	100	170
4	7310.812	42.9	38.1	12.5	35.7	57.8	74.0	16.2	100	170
5	9747.915	45.2	37.3	14.5	36.3	60.7	74.0	13.3	180	170
----- Vertical -----										
6	1194.830	52.3	23.0	14.4	36.9	52.8	74.0	21.2	100	170
7	1593.343	53.9	25.2	15.2	36.5	57.8	74.0	16.2	100	190
8	4875.919	45.1	35.6	10.5	36.1	55.1	74.0	18.9	100	170
9	7310.262	44.5	38.1	12.5	35.7	59.4	74.0	14.6	100	170
10	9747.916	44.8	37.3	14.5	36.3	60.3	74.0	13.7	180	170

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

Page:

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

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MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

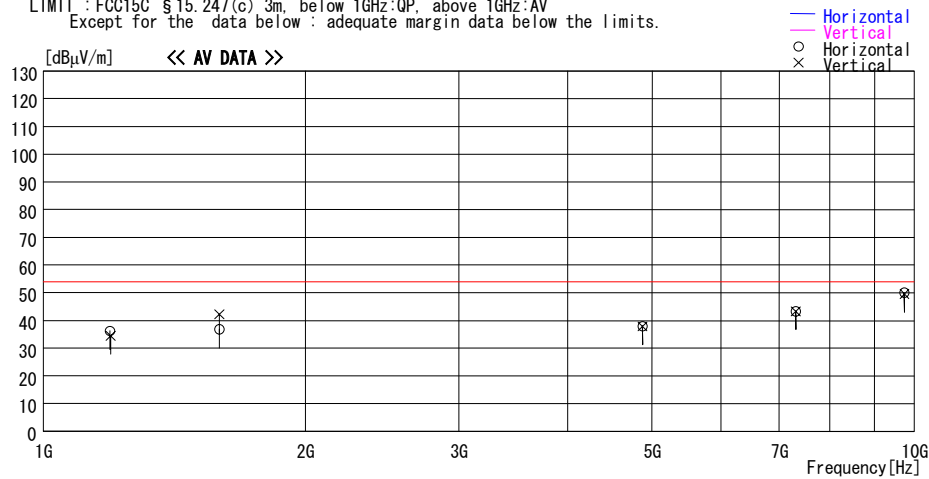
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/05/17

Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-H0
Power : DC5V
Temp°C/Humi% : 22 / 60
Operator : Hiroka Umeyama

Mode / Remarks: Transmitting Mode, 11b, 11Mbps, Tx2437MHz / EUT (MAX-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1192.767	37.4	23.0	14.4	36.9	37.9	54.0	16.1	100	270
2	1593.319	34.6	25.2	15.2	36.5	38.5	54.0	15.5	100	190
3	4875.485	30.9	35.4	10.3	36.1	40.5	54.0	13.5	100	170
4	7310.812	30.4	38.1	12.5	35.7	45.3	54.0	8.7	100	170
5	9747.915	31.1	37.3	14.5	36.3	46.6	54.0	7.4	180	170
----- Vertical -----										
6	1194.830	37.1	23.0	14.4	36.9	37.6	54.0	16.4	100	170
7	1593.343	37.3	25.2	15.2	36.5	41.2	54.0	12.8	100	190
8	4875.919	30.9	35.6	10.5	36.1	40.9	54.0	13.1	100	170
9	7310.262	30.3	38.1	12.5	35.7	45.2	54.0	8.8	100	170
10	9747.916	31.1	37.3	14.5	36.3	46.6	54.0	7.4	180	170

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

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MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/05/17

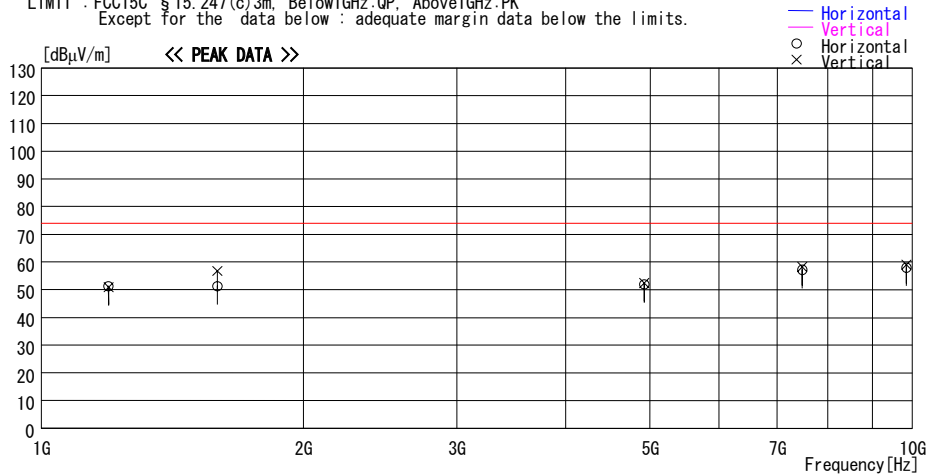
Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-H0
Power : DC5V
Temp°C/Humi% : 22 / 60
Operator : Hiroka Umeyama

Mode / Remarks: Transmitting Mode, 11b, 11Mbps, Tx2462MHz / EUT (MAX-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C §15.247(c)3m, Below1GHz:QP, Above1GHz:PK

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



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1193.981	51.6	23.0	14.4	36.9	52.1	74.0	21.9	100	278
2	1593.417	47.3	25.2	15.2	36.5	51.2	74.0	22.8	100	190
3	2483.519	45.6	31.0	16.5	36.2	56.9	74.0	17.1	145	278
4	4923.907	44.5	35.9	10.5	36.1	54.8	74.0	19.2	100	190
5	7473.783	44.2	38.3	12.5	35.7	59.3	74.0	14.7	100	170
6	9847.903	45.1	37.1	14.6	36.3	60.5	74.0	13.5	100	180
----- Vertical -----										
7	1195.009	50.8	23.0	14.4	36.9	51.3	74.0	22.7	100	190
8	1593.213	54.2	25.2	15.2	36.5	58.1	74.0	15.9	100	190
9	2483.526	45.9	31.0	16.5	36.2	57.2	74.0	16.8	100	278
10	4923.923	44.6	35.9	10.5	36.1	54.9	74.0	19.1	100	190
11	7473.984	44.9	38.3	12.5	35.7	60.0	74.0	14.0	100	170
12	9847.929	45.7	37.1	14.6	36.3	46.3	74.0	27.7	160	170

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

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MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/05/17

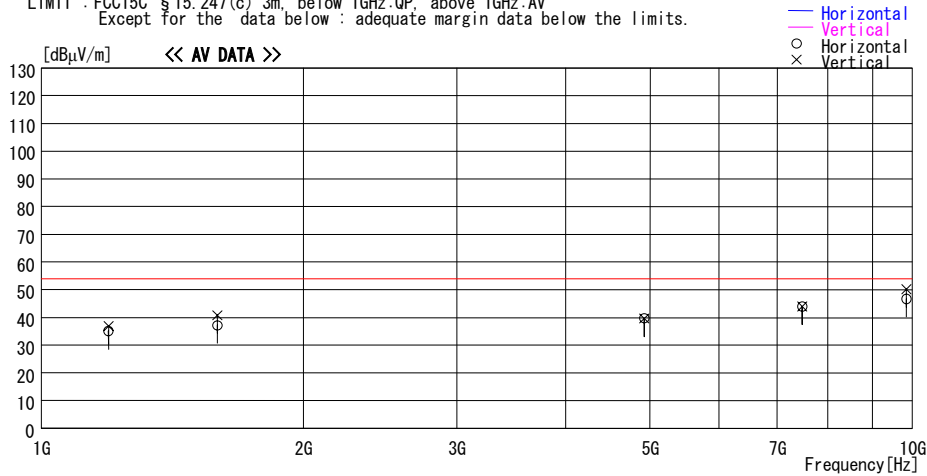
Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-H0
Power : DC5V
Temp°C/Humi% : 22 / 60
Operator : Hiroka Umeyama

Mode / Remarks: Transmitting Mode, 11b, 11Mbps, Tx2462MHz / EUT (MAX-axis): Hor.: Z-axis, Ver.: Y-axis

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1193.981	37.2	23.0	14.4	36.9	37.7	54.0	16.3	100	278
2	1593.417	34.6	25.2	15.2	36.5	38.5	54.0	15.5	100	190
3	2483.519	35.1	31.0	16.5	36.2	46.4	54.0	7.6	100	175
4	4923.907	30.6	35.9	10.5	36.1	40.9	54.0	13.1	100	190
5	7473.783	30.1	38.3	12.5	35.7	45.2	54.0	8.8	100	170
6	9847.903	30.9	37.1	14.6	36.3	46.3	54.0	7.7	100	180
----- Vertical -----										
7	1195.009	35.4	23.0	14.4	36.9	35.9	54.0	18.1	100	190
8	1593.213	37.8	25.2	15.2	36.5	41.7	54.0	12.3	100	190
9	2483.526	34.4	31.0	16.5	36.2	45.7	54.0	8.3	100	278
10	4923.923	30.6	35.9	10.5	36.1	40.9	54.0	13.1	100	190
11	7473.984	30.1	38.3	12.5	35.7	45.2	54.0	8.8	100	170
12	9847.929	30.9	37.1	14.6	36.3	46.3	54.0	7.7	160	170

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

Page:

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MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/05/17

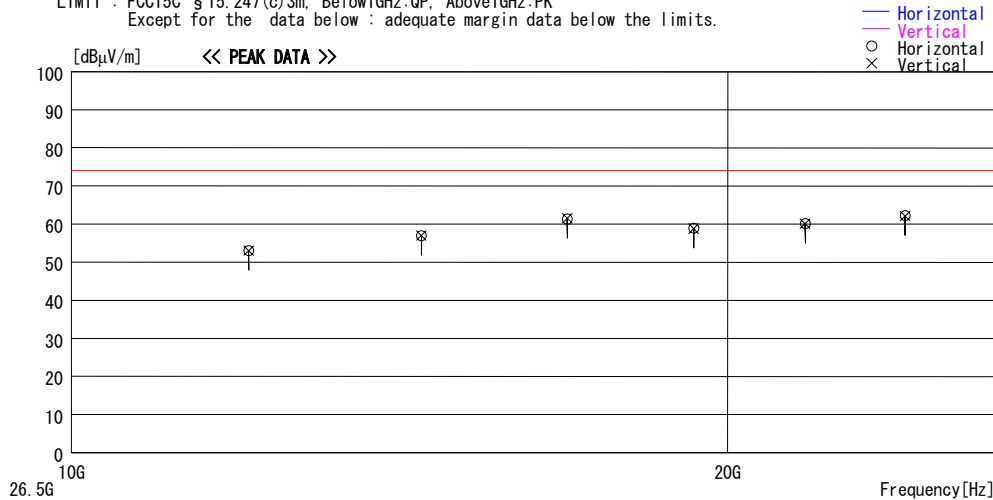
Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-H0
Power : DC5V
Temp°C/Humi% : 22 / 60
Operator : Hiroka Umeyama

Mode / Remarks : Transmitting Mode, 11b, 11Mbps, Tx2412MHz / EUT (MAX-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C § 15.247(c)3m, Below1GHz:QP, Above1GHz:PK

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



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	12060.000	43.5	40.8	4.5	35.7	53.1	74.0	20.9	100	0
2	14472.000	43.4	42.3	5.9	34.6	57.0	74.0	17.0	100	0
3	16884.000	43.0	46.4	7.5	35.5	61.4	74.0	12.6	100	0
4	19296.000	42.6	41.8	9.4	34.9	58.9	74.0	15.1	100	0
5	21708.000	43.8	40.9	10.8	35.3	60.2	74.0	13.8	100	0
6	24120.000	44.4	41.1	12.7	36.0	62.2	74.0	11.8	100	0
----- Vertical -----										
7	12060.000	43.4	40.8	4.5	35.7	53.0	74.0	21.0	100	0
8	14472.000	43.4	42.3	5.9	34.6	57.0	74.0	17.0	100	0
9	16884.000	43.1	46.4	7.5	35.5	61.5	74.0	12.5	100	0
10	19296.000	42.5	41.8	9.4	34.9	58.8	74.0	15.2	100	0
11	21708.000	43.7	40.9	10.8	35.3	60.1	74.0	13.9	100	0
12	24120.000	44.3	41.1	12.7	36.0	62.1	74.0	11.9	100	0

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

UL Apex Co., Ltd.

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MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

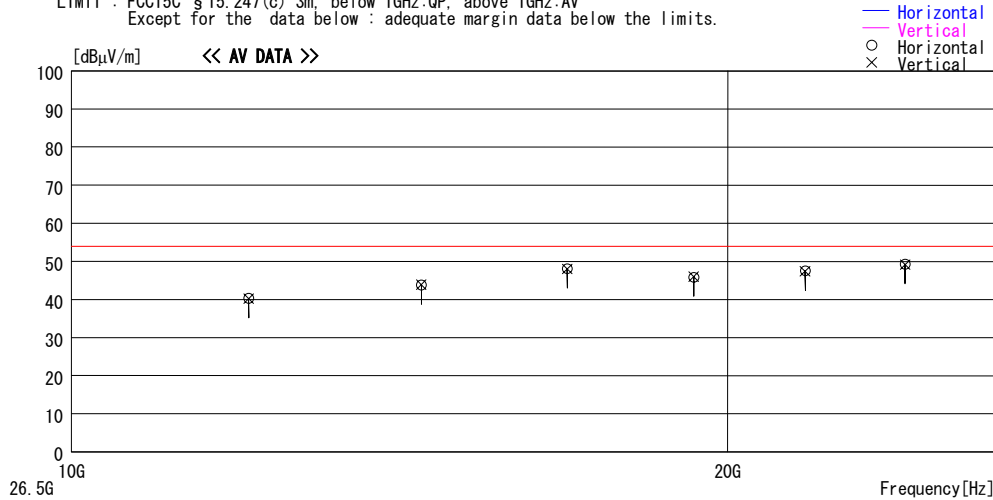
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/05/17

Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-H0
Power : DC5V
Temp°C/Humi% : 22 / 60
Operator : Hiroka Umeyama

Mode / Remarks : Transmitting Mode, 11b, 11Mbps, Tx2412MHz / EUT (Max-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C § 15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	12060.000	30.7	40.8	4.5	35.7	40.3	54.0	13.7	100	0
2	14472.000	30.2	42.3	5.9	34.6	43.8	54.0	10.2	100	0
3	16884.000	29.7	46.4	7.5	35.5	48.1	54.0	5.9	100	0
4	19296.000	29.6	41.8	9.4	34.9	45.9	54.0	8.1	100	0
5	21708.000	31.1	40.9	10.8	35.3	47.5	54.0	6.5	100	0
6	24120.000	31.5	41.1	12.7	36.0	49.3	54.0	4.7	100	0
----- Vertical -----										
7	12060.000	30.6	40.8	4.5	35.7	40.2	54.0	13.8	100	0
8	14472.000	30.3	42.3	5.9	34.6	43.9	54.0	10.1	100	0
9	16884.000	29.6	46.4	7.5	35.5	48.0	54.0	6.0	100	0
10	19296.000	29.7	41.8	9.4	34.9	46.0	54.0	8.0	100	0
11	21708.000	31.0	40.9	10.8	35.3	47.4	54.0	6.6	100	0
12	24120.000	31.4	41.1	12.7	36.0	49.2	54.0	4.8	100	0

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/05/17

Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

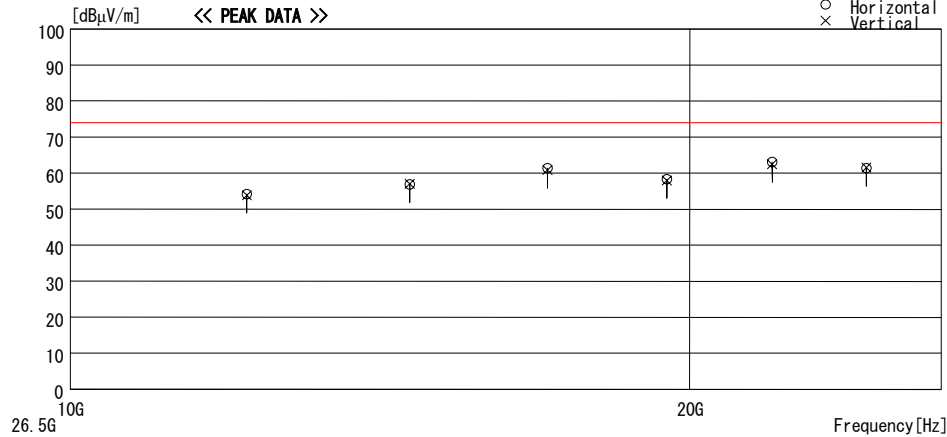
Report No. : 241E0042-H0
Power : DC5V
Temp°C/Humi% : 22 / 60
Operator : Hiroka Umeyama

Mode / Remarks: Transmitting Mode, 11b, 11Mbps, Tx2437MHz / EUT (MAX-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C §15.247(c)3m, Below1GHz:QP, Above1GHz:PK

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

— Horizontal
— Vertical
○ Horizontal
× Vertical



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	12185.000	43.8	41.4	4.6	35.6	54.2	74.0	19.8	100	0
2	14622.000	43.1	42.6	6.0	34.8	56.9	74.0	17.1	100	0
3	17059.000	42.7	46.6	7.5	35.4	61.4	74.0	12.6	100	0
4	19496.000	42.5	41.2	9.5	34.9	58.3	74.0	15.7	100	0
5	21933.000	45.8	41.0	11.3	35.0	63.1	74.0	10.9	100	0
6	24370.000	43.4	41.2	13.4	36.6	61.4	74.0	12.6	100	0
----- Vertical -----										
7	12185.000	43.5	41.4	4.6	35.6	53.9	74.0	20.1	100	0
8	14622.000	43.2	42.6	6.0	34.8	57.0	74.0	17.0	100	0
9	17059.000	42.1	46.6	7.5	35.4	60.8	74.0	13.2	100	0
10	19496.000	42.1	41.2	9.5	34.9	57.9	74.0	16.1	100	0
11	21933.000	45.1	41.0	11.3	35.0	62.4	74.0	11.6	100	0
12	24370.000	43.5	41.2	13.4	36.6	61.5	74.0	12.5	100	0

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

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MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/05/17

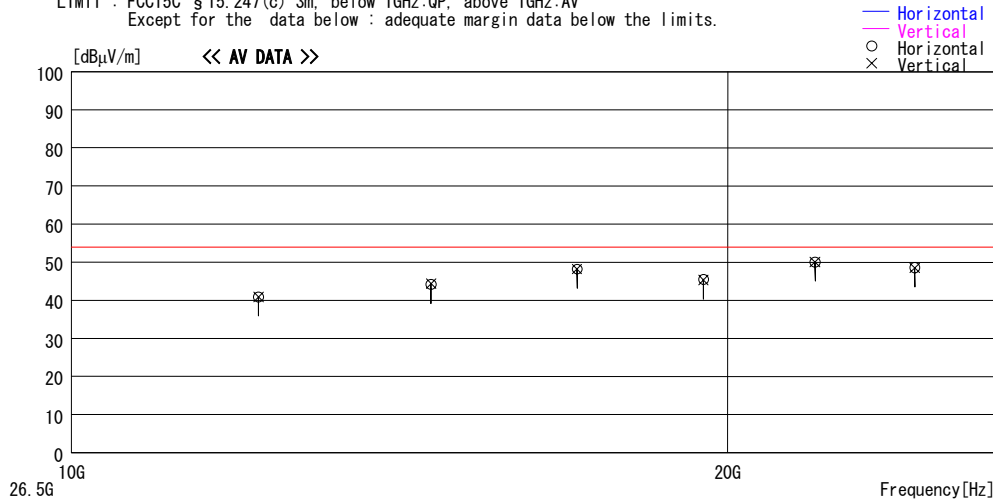
Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-H0
Power : DC5V
Temp°C/Humi% : 22 / 60
Operator : Hiroka Umeyama

Mode / Remarks : Transmitting Mode, 11b, 11Mbps, Tx2437MHz / EUT (MAX-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	12185.000	30.5	41.4	4.6	35.6	40.9	54.0	13.1	100	0
2	14622.000	30.4	42.6	6.0	34.8	44.2	54.0	9.8	100	0
3	17059.000	29.5	46.6	7.5	35.4	48.2	54.0	5.8	100	0
4	19496.000	29.7	41.2	9.5	34.9	45.5	54.0	8.5	100	0
5	21933.000	32.8	41.0	11.3	35.0	50.1	54.0	3.9	100	0
6	24370.000	30.6	41.2	13.4	36.6	48.6	54.0	5.4	100	0
----- Vertical -----										
7	12185.000	30.5	41.4	4.6	35.6	40.9	54.0	13.1	100	0
8	14622.000	30.5	42.6	6.0	34.8	44.3	54.0	9.7	100	0
9	17059.000	29.5	46.6	7.5	35.4	48.2	54.0	5.8	100	0
10	19496.000	29.6	41.2	9.5	34.9	45.4	54.0	8.6	100	0
11	21933.000	32.8	41.0	11.3	35.0	50.1	54.0	3.9	100	0
12	24370.000	30.5	41.2	13.4	36.6	48.5	54.0	5.5	100	0

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

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MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/05/17

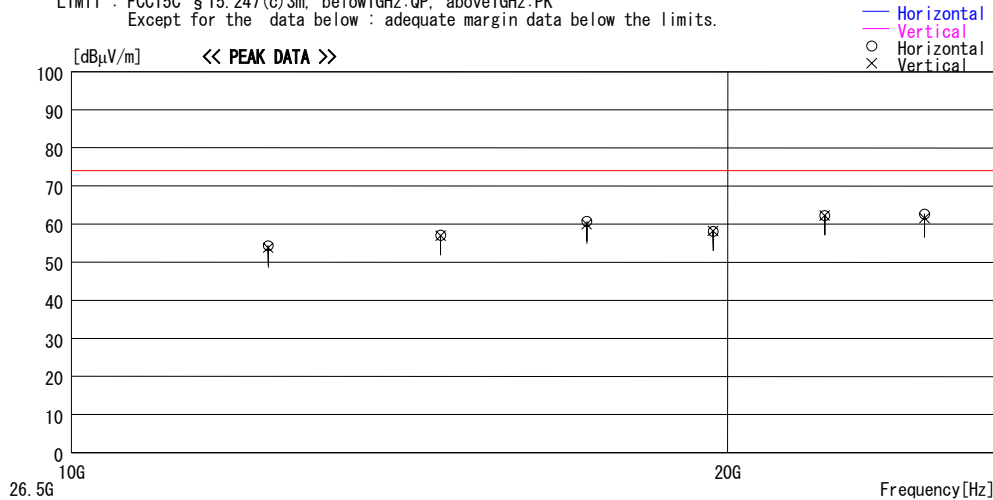
Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-H0
Power : DC5V
Temp°C/Humi% : 22 / 60
Operator : Hiroka Umeyama

Mode / Remarks : Transmitting Mode, 11b, 11Mbps, Tx2462MHz / EUT (MAX-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C §15.247(c)3m, below1GHz:QP, above1GHz:PK

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



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	12310.000	43.5	41.9	4.6	35.6	54.4	74.0	19.6	100	0
2	14772.000	43.1	42.8	6.1	34.9	57.1	74.0	16.9	100	0
3	17234.000	42.7	45.9	7.4	35.3	60.7	74.0	13.3	100	0
4	19696.000	42.6	41.2	9.7	35.4	58.1	74.0	15.9	100	0
5	22158.000	44.1	41.2	11.9	35.0	62.2	74.0	11.8	100	0
6	24620.000	44.2	41.3	13.9	36.8	62.6	74.0	11.4	100	0
----- Vertical -----										
7	12310.000	42.9	41.9	4.6	35.6	53.8	74.0	20.2	100	0
8	14772.000	43.0	42.8	6.1	34.9	57.0	74.0	17.0	100	0
9	17234.000	42.0	45.9	7.4	35.3	60.0	74.0	14.0	100	0
10	19696.000	42.7	41.2	9.7	35.4	58.2	74.0	15.8	100	0
11	22158.000	44.1	41.2	11.9	35.0	62.2	74.0	11.8	100	0
12	24620.000	43.2	41.3	13.9	36.8	61.6	74.0	12.4	100	0

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

UL Apex Co., Ltd.

Head Office EMC Lab.

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MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/05/17

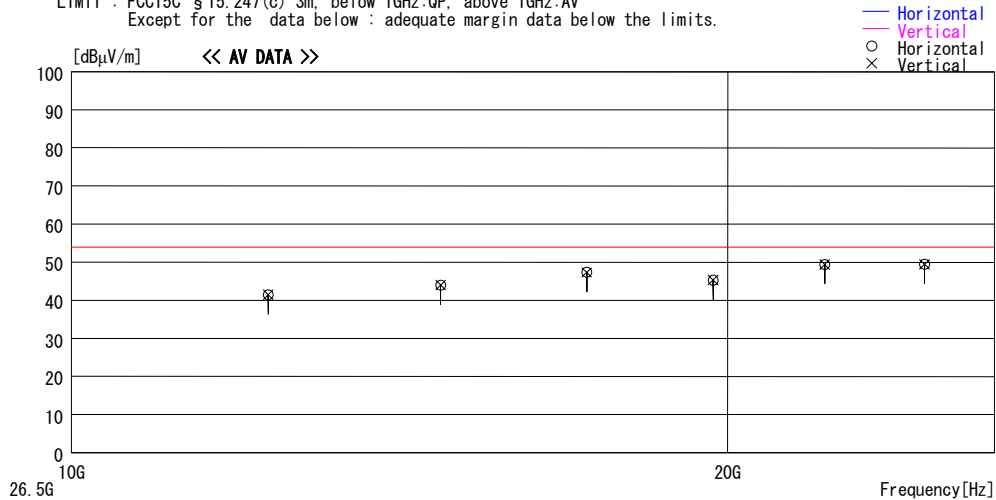
Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-H0
Power : DC5V
Temp°C/Humi% : 22 / 60
Operator : Hiroka Umeyama

Mode / Remarks : Transmitting Mode, 11b, 11Mbps, Tx2462MHz / EUT (MAX-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	12310.000	30.5	41.9	4.6	35.6	41.4	54.0	12.6	100	0
2	14772.000	30.0	42.8	6.1	34.9	44.0	54.0	10.0	100	0
3	17234.000	29.4	45.9	7.4	35.3	47.4	54.0	6.6	100	0
4	19696.000	29.8	41.2	9.7	35.4	45.3	54.0	8.7	100	0
5	22158.000	31.3	41.2	11.9	35.0	49.4	54.0	4.6	100	0
6	24620.000	31.1	41.3	13.9	36.8	49.5	54.0	4.5	100	0
----- Vertical -----										
7	12310.000	30.5	41.9	4.6	35.6	41.4	54.0	12.6	100	0
8	14772.000	30.0	42.8	6.1	34.9	44.0	54.0	10.0	100	0
9	17234.000	29.3	45.9	7.4	35.3	47.3	54.0	6.7	100	0
10	19696.000	29.8	41.2	9.7	35.4	45.3	54.0	8.7	100	0
11	22158.000	31.3	41.2	11.9	35.0	49.4	54.0	4.6	100	0
12	24620.000	31.1	41.3	13.9	36.8	49.5	54.0	4.5	100	0

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

UL Apex Co., Ltd.

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MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

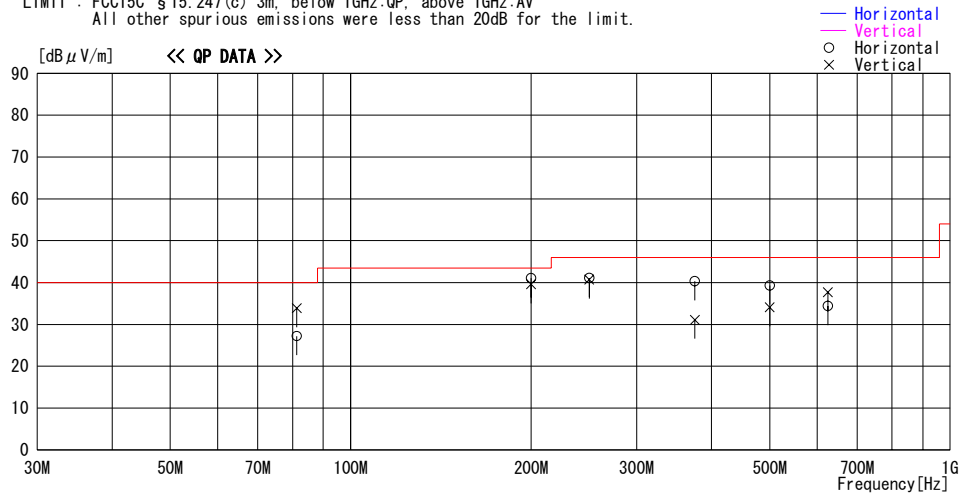
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 24IE0043-HO
Power : DC5V
Temp./ Humi. : 23 / 60 2004/05/17
Operator : Hiroka Umeyama

Mode / Remarks : Transmitting Mode MAX(Z)-axis / 11g 2412MHz

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
All other spurious emissions were less than 20dB for the limit.



No.	FREQ [MHz]	READING QP [dB μ V]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dB μ V/m]	LIMIT [dB μ V/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	81.300	36.7	6.5	7.1	23.1	27.2	40.0	12.8	200	122
2	200.000	39.4	16.8	7.8	23.0	41.0	43.5	2.5	120	260
3	250.000	38.6	17.4	8.1	23.0	41.1	46.0	4.9	155	220
4	375.010	37.2	17.2	8.7	22.8	40.3	46.0	5.7	200	210
5	500.000	34.6	18.3	9.3	22.9	39.3	46.0	6.7	100	206
6	625.010	27.5	19.7	9.9	22.7	34.4	46.0	11.6	140	160
----- Vertical -----										
7	81.300	43.4	6.5	7.1	23.1	33.9	40.0	6.1	100	354
8	200.000	38.0	16.8	7.8	23.0	39.6	43.5	3.9	100	280
9	250.000	38.2	17.4	8.1	23.0	40.7	46.0	5.3	100	175
10	375.010	28.0	17.2	8.7	22.8	31.1	46.0	14.9	100	221
11	500.000	29.4	18.3	9.3	22.9	34.1	46.0	11.9	100	193
12	625.010	30.8	19.7	9.9	22.7	37.7	46.0	8.3	100	53

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION:RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN(AMP)

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MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

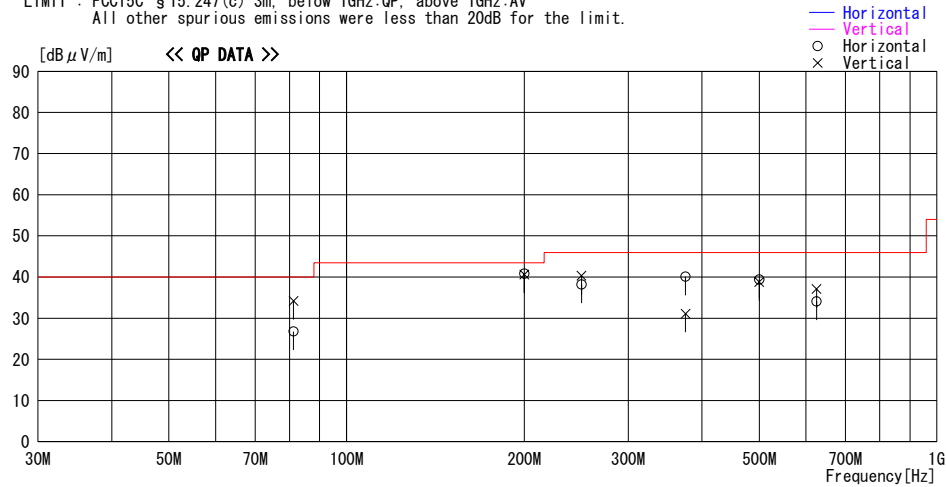
UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber

Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0043-HO
Power : DC5V
Temp./ Humi. : 23 / 60 2004/05/17
Operator : Hiroka Umeyama

Mode / Remarks : Transmitting Mode MAX(Z)-axis / 11g 2437MHz

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
All other spurious emissions were less than 20dB for the limit.



No.	FREQ [MHz]	READING QP [dB μV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dB μV/m]	LIMIT [dB μV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	81.300	36.3	6.5	7.1	23.1	26.8	40.0	13.2	200	122
2	200.000	39.2	16.8	7.8	23.0	40.8	43.5	2.7	120	260
3	250.000	35.7	17.4	8.1	23.0	38.2	46.0	7.8	155	220
4	375.010	37.0	17.2	8.7	22.8	40.1	46.0	5.9	200	210
5	500.000	34.7	18.3	9.3	22.9	39.4	46.0	6.6	100	206
6	625.010	27.2	19.7	9.9	22.7	34.1	46.0	11.9	140	160
----- Vertical -----										
7	81.300	43.7	6.5	7.1	23.1	34.2	40.0	5.8	100	354
8	200.000	39.0	16.8	7.8	23.0	40.6	43.5	2.9	100	280
9	250.000	37.8	17.4	8.1	23.0	40.3	46.0	5.7	100	175
10	375.010	28.0	17.2	8.7	22.8	31.1	46.0	14.9	100	221
11	500.000	34.1	18.3	9.3	22.9	38.8	46.0	7.2	100	193
12	625.010	30.2	19.7	9.9	22.7	37.1	46.0	8.9	100	53

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

DATA OF RADIATED EMISSION TEST

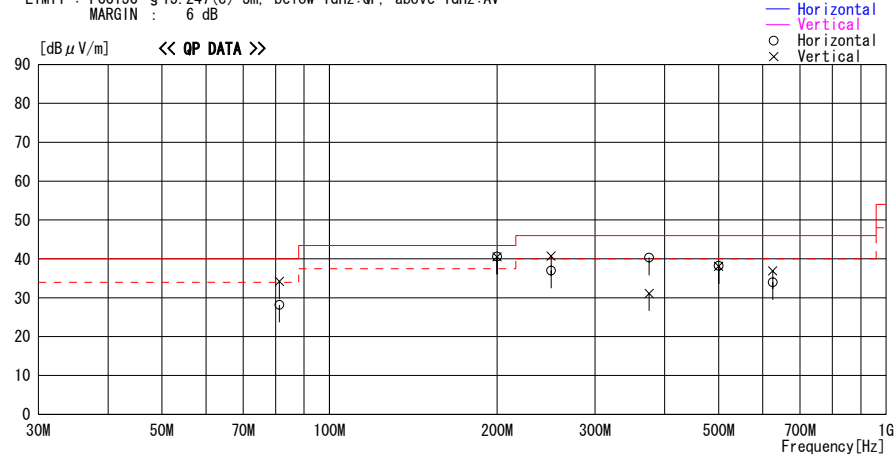
UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber

Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 24IE0043-HO
Power : DC5V
Temp. / Humi. : 23 / 60 2004/05/17
Operator : Hiroka Uneyama

Mode / Remarks : Transmitting Mode MAX(Z)-axis / 11g 2462MHz

LIMIT : FCC15C § 15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
MARGIN : 6 dB



No.	FREQ [MHz]	READING QP [dB μ V]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dB μ V/m]	LIMIT [dB μ V/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	81.300	37.7	6.5	7.1	23.1	28.2	40.0	11.8	200	122
2	200.000	39.0	16.8	7.8	23.0	40.6	43.5	2.9	120	260
3	250.000	34.5	17.4	8.1	23.0	37.0	46.0	9.0	155	220
4	375.010	37.2	17.2	8.7	22.8	40.3	46.0	5.7	100	215
5	500.000	33.5	18.3	9.3	22.9	38.2	46.0	7.8	100	206
6	625.015	27.1	19.7	9.9	22.7	34.0	46.0	12.0	140	160
----- Vertical -----										
7	81.300	43.7	6.5	7.1	23.1	34.2	40.0	5.8	100	354
8	200.000	38.9	16.8	7.8	23.0	40.5	43.5	3.0	100	280
9	250.000	38.2	17.4	8.1	23.0	40.7	46.0	5.3	100	175
10	375.010	28.0	17.2	8.7	22.8	31.1	46.0	14.9	100	190
11	500.000	33.4	18.3	9.3	22.9	38.1	46.0	7.9	100	193
12	625.015	30.0	19.7	9.9	22.7	36.9	46.0	9.1	100	53

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/05/13 12:04:44

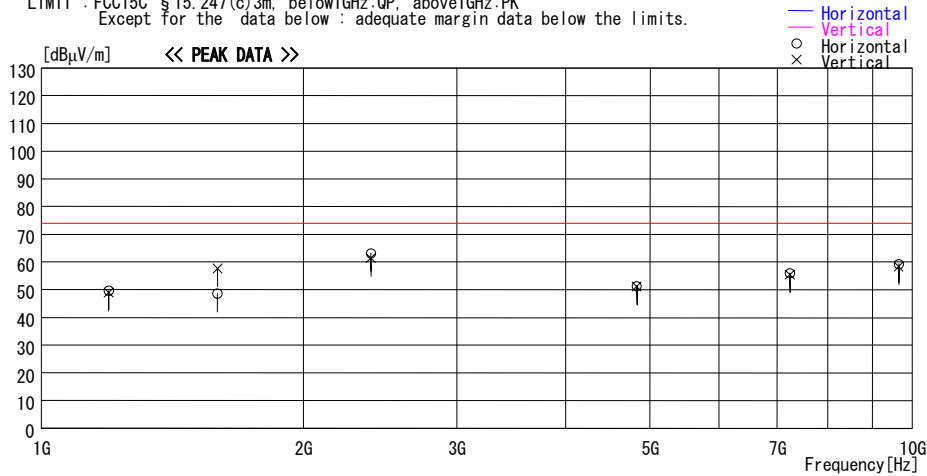
Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-HO
Power : DC5V
Temp°C/Humi% : 23 / 58
Operator : Kenichi Adachi

Mode / Remarks: Transmitting Mode, 11g, 54Mbps, Tx2412MHz / EUT (MAX-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C §15.247(c)3m, below1GHz:QP, above1GHz:PK

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



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1194.742	49.8	23.0	13.7	36.9	49.6	74.0	24.4	100	270
2	1593.307	45.5	25.3	14.3	36.5	48.6	74.0	25.4	100	190
3	2390.000	53.3	30.7	15.5	36.3	63.2	74.0	10.8	100	170
4	4827.316	43.2	35.2	9.0	36.1	51.3	74.0	22.7	100	170
5	7236.100	43.2	37.7	10.6	35.6	55.9	74.0	18.1	100	170
6	9647.923	46.0	37.1	12.4	36.3	59.2	74.0	14.8	100	170
----- Vertical -----										
7	1195.070	49.1	23.0	13.7	36.9	48.9	74.0	25.1	180	190
8	1593.812	54.5	25.3	14.3	36.5	57.6	74.0	16.4	100	190
9	2390.000	51.5	30.7	15.5	36.3	61.4	74.0	12.6	100	278
10	4827.245	43.0	35.2	9.0	36.1	51.1	74.0	22.9	100	270
11	7235.990	42.7	37.7	10.6	35.6	55.4	74.0	18.6	100	170
12	9647.883	45.1	37.1	12.4	36.3	58.3	74.0	15.7	150	178

CHART: WITH FACTOR ANT TYPE: -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION: READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

UL Apex Co., Ltd.

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MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/05/13 12:04:44

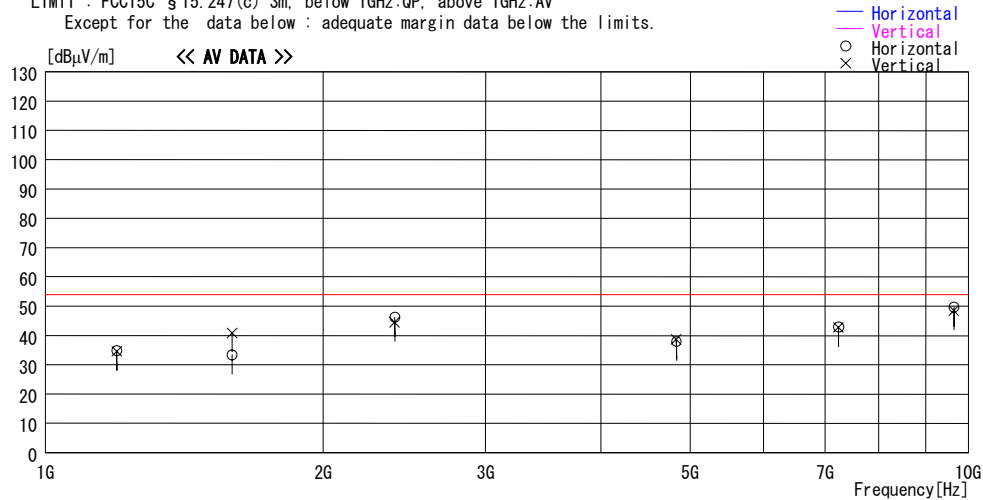
Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 24IE0042-HO
Power : DC5V
Temp°C/Humi% : 23 / 58
Operator : Kenichi Adachi

Mode / Remarks : Transmitting Mode, 11g, 54Mbps, Tx2412MHz / EUT (MAX-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1194.742	35.0	23.0	13.7	36.9	34.8	54.0	19.2	100	270
2	1593.307	30.3	25.3	14.3	36.5	33.4	54.0	20.6	100	190
3	2390.000	36.4	30.7	15.5	36.3	46.3	54.0	7.7	100	170
4	4827.316	29.9	35.2	9.0	36.1	38.0	54.0	16.0	100	170
5	7236.100	30.3	37.7	10.6	35.6	43.0	54.0	11.0	100	170
6	9647.923	36.5	37.1	12.4	36.3	49.7	54.0	4.3	100	170
----- Vertical -----										
7	1195.070	34.7	23.0	13.7	36.9	34.5	54.0	19.5	180	190
8	1593.812	37.8	25.3	14.3	36.5	40.9	54.0	13.1	100	190
9	2390.000	34.6	30.7	15.5	36.3	44.5	54.0	9.5	100	278
10	4827.245	30.5	35.2	9.0	36.1	38.6	54.0	15.4	100	270
11	7235.990	30.1	37.7	10.6	35.6	42.8	54.0	11.2	100	170
12	9647.883	35.3	37.1	12.4	36.3	48.5	54.0	5.5	150	178

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

UL Apex Co., Ltd.

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MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/05/13 14:30:38

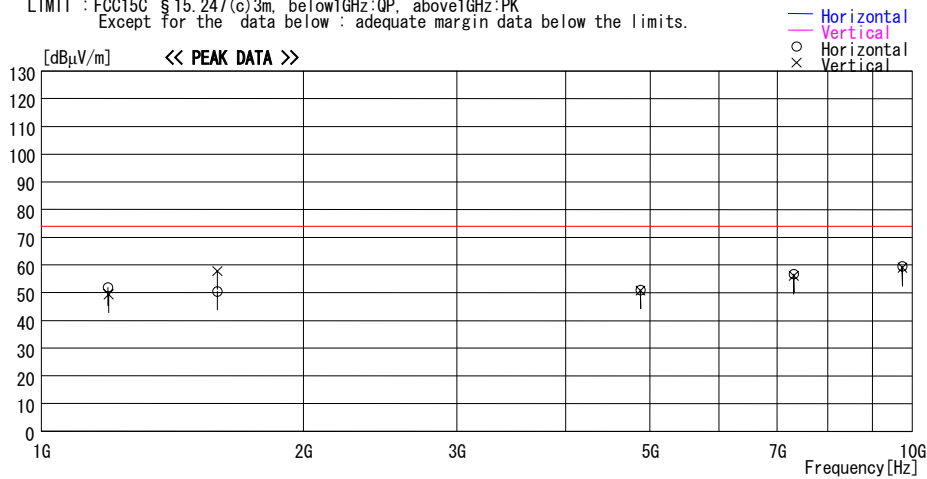
Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-H0
Power : DC5V
Temp°C/Humi% : 23 / 58
Operator : Kenichi Adachi

Mode / Remarks: Transmitting Mode, 11g, 54Mbps, Tx2437MHz / EUT (MAX-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C §15.247(c)3m, below1GHz:QP, above1GHz:PK

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



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1192.767	52.1	23.0	13.7	36.9	51.9	74.0	22.1	100	270
2	1593.319	47.3	25.3	14.3	36.5	50.4	74.0	23.6	100	190
3	4875.485	42.7	35.4	9.0	36.1	51.0	74.0	23.0	100	170
4	7310.812	43.8	37.9	10.7	35.7	56.7	74.0	17.3	100	170
5	9747.915	46.2	37.1	12.5	36.3	59.5	74.0	14.5	180	170
----- Vertical -----										
6	1194.830	49.6	23.0	13.7	36.9	49.4	74.0	24.6	100	170
7	1593.343	54.6	25.3	14.3	36.5	57.7	74.0	16.3	100	190
8	4875.919	42.5	35.4	9.0	36.1	50.8	74.0	23.2	100	170
9	7310.262	43.2	37.9	10.7	35.7	56.1	74.0	17.9	100	170
10	9747.916	45.7	37.1	12.5	36.3	59.0	74.0	15.0	180	170

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

Page:

UL Apex Co., Ltd.

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MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

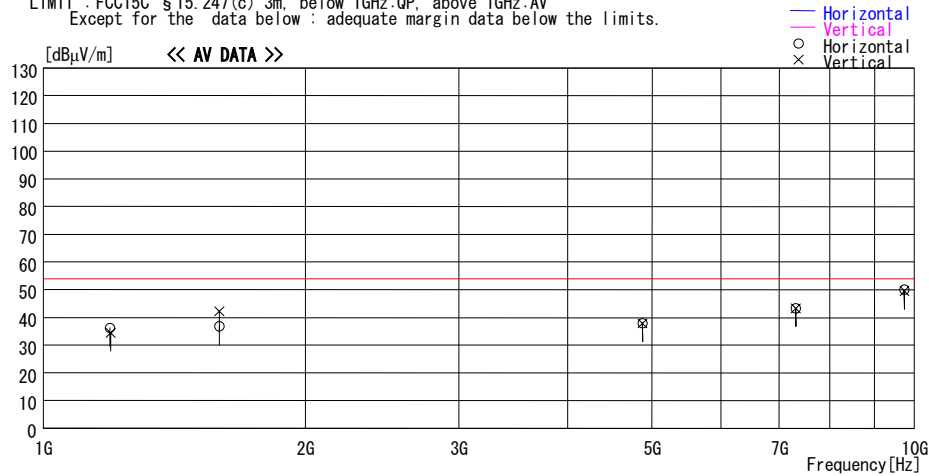
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/05/13 14:30:38

Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-H0
Power : DC5V
Temp°C/Humi% : 23 / 58
Operator : Kenichi Adachi

Mode / Remarks: Transmitting Mode, 11g, 54Mbps, Tx2437MHz / EUT (MAX-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1192.767	36.3	23.0	13.7	36.9	36.1	54.0	17.9	100	270
2	1593.319	33.6	25.3	14.3	36.5	36.7	54.0	17.3	100	190
3	4875.485	29.6	35.4	9.0	36.1	37.9	54.0	16.1	100	170
4	7310.812	30.4	37.9	10.7	35.7	43.3	54.0	10.7	100	170
5	9747.915	36.7	37.1	12.5	36.3	50.0	54.0	4.0	180	170
----- Vertical -----										
6	1194.830	34.6	23.0	13.7	36.9	34.4	54.0	19.6	100	170
7	1593.343	39.1	25.3	14.3	36.5	42.2	54.0	11.8	100	190
8	4875.919	29.5	35.4	9.0	36.1	37.8	54.0	16.2	100	170
9	7310.262	30.4	37.9	10.7	35.7	43.3	54.0	10.7	100	170
10	9747.916	36.2	37.1	12.5	36.3	49.5	54.0	4.5	180	170

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

Page:

UL Apex Co., Ltd.

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MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/05/13 15:49:27

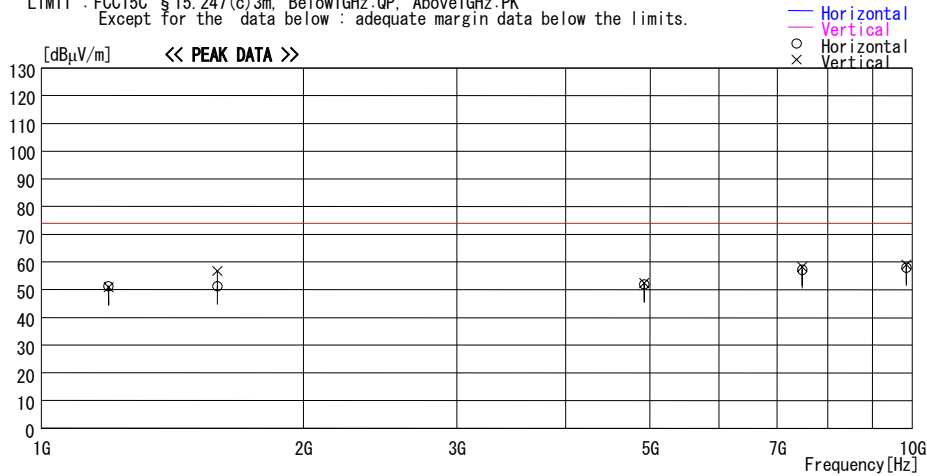
Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-H0
Power : DC5V
Temp°C/Humi% : 23 / 58
Operator : Kenichi Adachi

Mode / Remarks: Transmitting Mode, 11g, 54Mbps, Tx2462MHz / EUT (MAX-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C §15.247(c)3m, Below1GHz:QP, Above1GHz:PK

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



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1193.981	51.5	23.0	13.7	36.9	51.3	74.0	22.7	100	278
2	1593.417	48.2	25.3	14.3	36.5	51.3	74.0	22.7	100	190
3	2483.519	58.2	30.8	15.5	36.2	68.3	74.0	5.7	145	278
4	4923.907	43.2	35.6	9.2	36.1	51.9	74.0	22.1	100	190
5	7473.783	43.8	38.3	10.8	35.7	57.2	74.0	16.8	100	170
6	9847.903	44.8	37.0	12.5	36.3	58.0	74.0	16.0	100	180
----- Vertical -----										
7	1195.009	51.1	23.0	13.7	36.9	50.9	74.0	23.1	100	190
8	1593.213	53.6	25.3	14.3	36.5	56.7	74.0	17.3	100	190
9	2483.526	59.0	30.8	15.5	36.2	69.1	74.0	4.9	100	278
10	4923.923	43.6	35.7	9.2	36.1	52.4	74.0	21.6	100	190
11	7473.984	44.8	38.3	10.8	35.7	58.2	74.0	15.8	100	170
12	9847.929	45.8	37.0	12.5	36.3	59.0	74.0	15.0	160	170

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

Page:

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/05/13 15:49:27

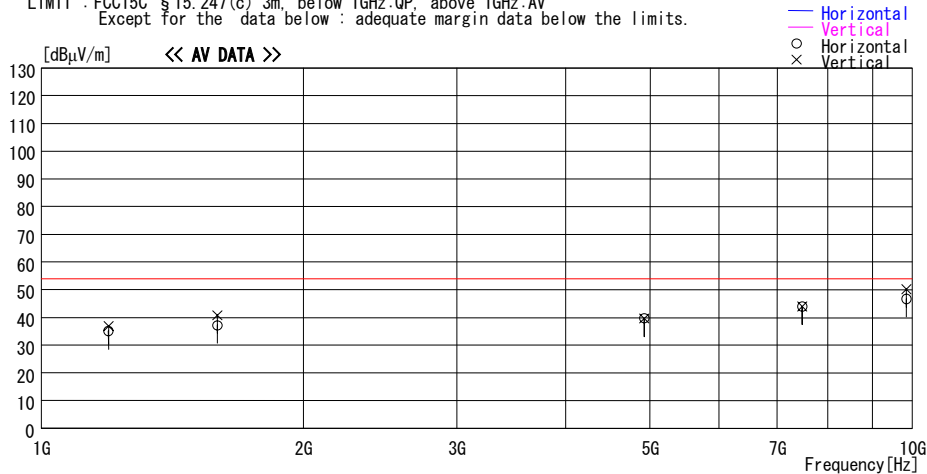
Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-H0
Power : DC5V
Temp°C/Humi% : 23 / 58
Operator : Kenichi Adachi

Mode / Remarks: Transmitting Mode, 11g, 54Mbps, Tx2462MHz / EUT (MAX-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1193.981	35.3	23.0	13.7	36.9	35.1	54.0	18.9	100	278
2	1593.417	34.1	25.3	14.3	36.5	37.2	54.0	16.8	100	190
3	2483.519	40.6	30.8	15.5	36.2	50.7	54.0	3.3	100	175
4	4923.907	31.0	35.6	9.2	36.1	39.7	54.0	14.3	100	190
5	7473.783	30.6	38.3	10.8	35.7	44.0	54.0	10.0	100	170
6	9847.903	33.5	37.0	12.5	36.3	46.7	54.0	7.3	100	180
----- Vertical -----										
7	1195.009	37.0	23.0	13.7	36.9	36.8	54.0	17.2	100	190
8	1593.213	37.7	25.3	14.3	36.5	40.8	54.0	13.2	100	190
9	2483.526	40.2	30.8	15.5	36.2	50.3	54.0	3.7	100	278
10	4923.923	30.8	35.7	9.2	36.1	39.6	54.0	14.4	100	190
11	7473.984	30.6	38.3	10.8	35.7	44.0	54.0	10.0	100	170
12	9847.929	37.0	37.0	12.5	36.3	50.2	54.0	3.8	160	170

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

Page:

UL Apex Co., Ltd.

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Facsimile : +81 596 24 8124

MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

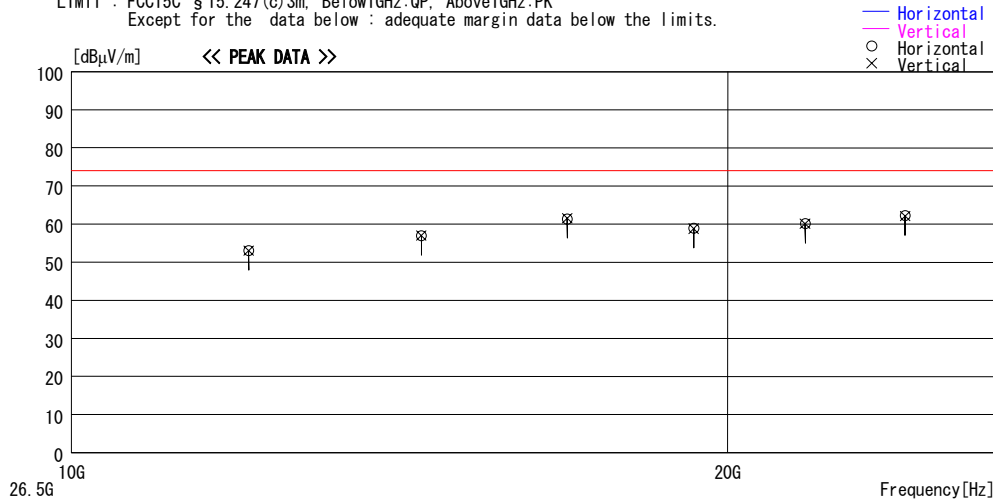
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/05/13 17:49:12

Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-HO
Power : DC5V
Temp°C/Humi% : 23 / 58
Operator : Kenichi Adachi

Mode / Remarks : Transmitting Mode, 11g, 54Mbps, Tx2412MHz / EUT (MAX-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C §15.247(c)3m, Below1GHz:QP, Above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	12060.000	43.5	40.8	4.5	35.7	53.1	74.0	20.9	100	0
2	14472.000	43.4	42.3	5.9	34.6	57.0	74.0	17.0	100	0
3	16884.000	43.0	46.4	7.5	35.5	61.4	74.0	12.6	100	0
4	19296.000	42.6	41.8	9.4	34.9	58.9	74.0	15.1	100	0
5	21708.000	43.8	40.9	10.8	35.3	60.2	74.0	13.8	100	0
6	24120.000	44.4	41.1	12.7	36.0	62.2	74.0	11.8	100	0
----- Vertical -----										
7	12060.000	43.4	40.8	4.5	35.7	53.0	74.0	21.0	100	0
8	14472.000	43.4	42.3	5.9	34.6	57.0	74.0	17.0	100	0
9	16884.000	43.1	46.4	7.5	35.5	61.5	74.0	12.5	100	0
10	19296.000	42.5	41.8	9.4	34.9	58.8	74.0	15.2	100	0
11	21708.000	43.7	40.9	10.8	35.3	60.1	74.0	13.9	100	0
12	24120.000	44.3	41.1	12.7	36.0	62.1	74.0	11.9	100	0

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN Page:

DATA OF RADIATED EMISSION TEST

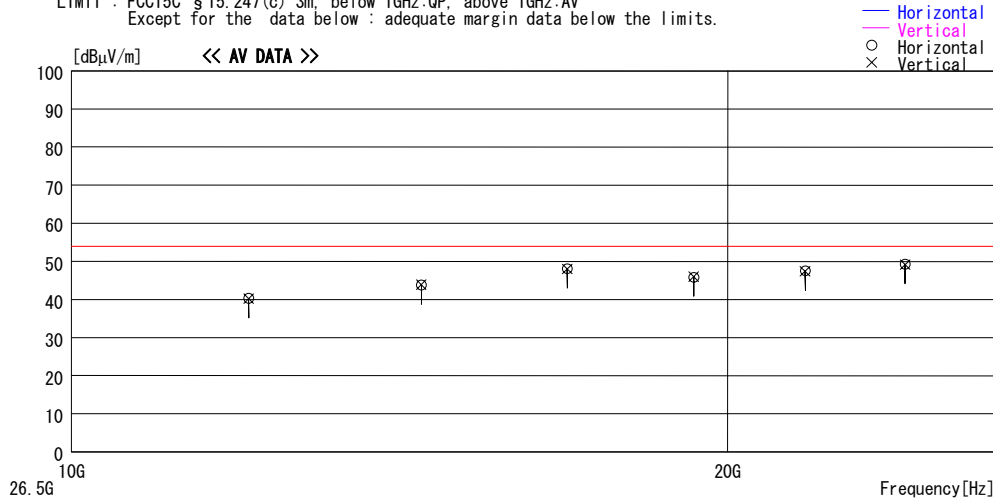
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/05/13 17:49:12

Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-HO
Power : DC5V
Temp°C/Humi% : 23 / 58
Operator : Kenichi Adachi

Mode / Remarks : Transmitting Mode, 11g, 54Mbps, Tx2412MHz / EUT (Max-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	12060.000	30.7	40.8	4.5	35.7	40.3	54.0	13.7	100	0
2	14472.000	30.2	42.3	5.9	34.6	43.8	54.0	10.2	100	0
3	16884.000	29.7	46.4	7.5	35.5	48.1	54.0	5.9	100	0
4	19296.000	29.6	41.8	9.4	34.9	45.9	54.0	8.1	100	0
5	21708.000	31.1	40.9	10.8	35.3	47.5	54.0	6.5	100	0
6	24120.000	31.5	41.1	12.7	36.0	49.3	54.0	4.7	100	0
----- Vertical -----										
7	12060.000	30.6	40.8	4.5	35.7	40.2	54.0	13.8	100	0
8	14472.000	30.3	42.3	5.9	34.6	43.9	54.0	10.1	100	0
9	16884.000	29.6	46.4	7.5	35.5	48.0	54.0	6.0	100	0
10	19296.000	29.7	41.8	9.4	34.9	46.0	54.0	8.0	100	0
11	21708.000	31.0	40.9	10.8	35.3	47.4	54.0	6.6	100	0
12	24120.000	31.4	41.1	12.7	36.0	49.2	54.0	4.8	100	0

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/05/13 17:23:08

Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-H0
Power : DC5V
Temp°C/Humi% : 23 / 58
Operator : Kenichi Adachi

Mode / Remarks: Transmitting Mode, 11g, 54Mbps, Tx2437MHz / EUT (MAX-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C §15.247(c)3m, Below1GHz:QP, Above1GHz:PK

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

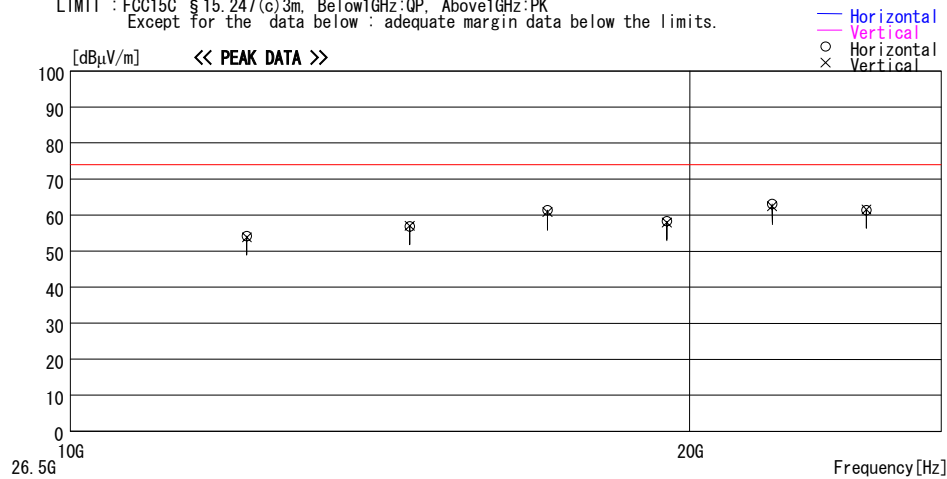


CHART: WITH FACTOR ANT TYPE: -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION: READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

UL Apex Co., Ltd.

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MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

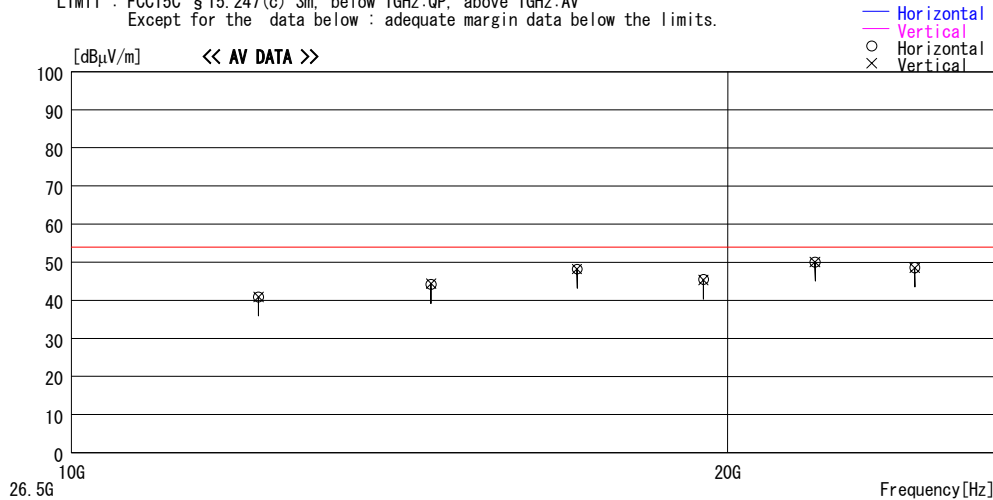
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/05/13 17:23:08

Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-HO
Power : DC5V
Temp°C/Humi% : 23 / 58
Operator : Kenichi Adachi

Mode / Remarks : Transmitting Mode, 11g, 54Mbps, Tx2437MHz / EUT (MAX-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	12185.000	30.5	41.4	4.6	35.6	40.9	54.0	13.1	100	0
2	14622.000	30.4	42.6	6.0	34.8	44.2	54.0	9.8	100	0
3	17059.000	29.5	46.6	7.5	35.4	48.2	54.0	5.8	100	0
4	19496.000	29.7	41.2	9.5	34.9	45.5	54.0	8.5	100	0
5	21933.000	32.8	41.0	11.3	35.0	50.1	54.0	3.9	100	0
6	24370.000	30.6	41.2	13.4	36.6	48.6	54.0	5.4	100	0
----- Vertical -----										
7	12185.000	30.5	41.4	4.6	35.6	40.9	54.0	13.1	100	0
8	14622.000	30.5	42.6	6.0	34.8	44.3	54.0	9.7	100	0
9	17059.000	29.5	46.6	7.5	35.4	48.2	54.0	5.8	100	0
10	19496.000	29.6	41.2	9.5	34.9	45.4	54.0	8.6	100	0
11	21933.000	32.8	41.0	11.3	35.0	50.1	54.0	3.9	100	0
12	24370.000	30.5	41.2	13.4	36.6	48.5	54.0	5.5	100	0

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

DATA OF RADIATED EMISSION TEST

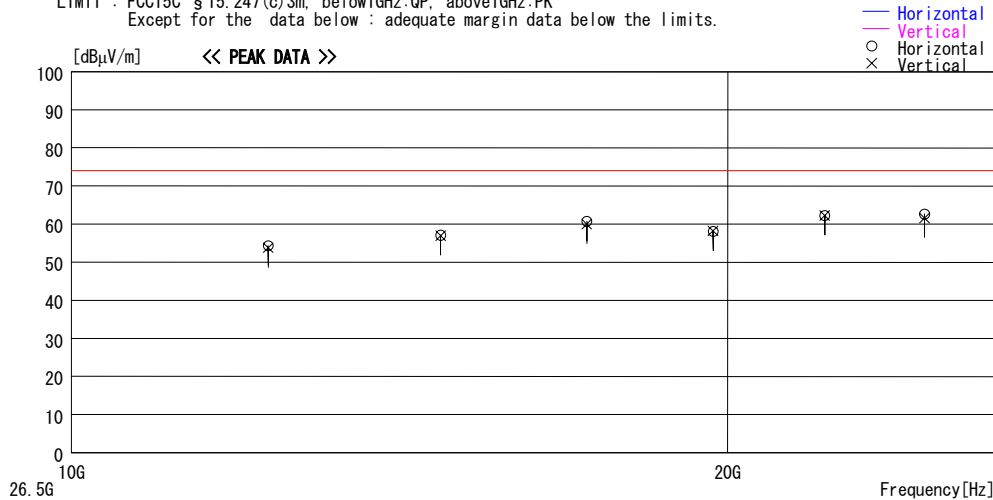
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/05/13 17:07:33

Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-HO
Power : DC5V
Temp°C/Humi% : 23 / 58
Operator : Kenichi Adachi

Mode / Remarks : Transmitting Mode, 11g, 54Mbps, Tx2462MHz / EUT (MAX-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C §15.247(c)3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	12310.000	43.5	41.9	4.6	35.6	54.4	74.0	19.6	100	0
2	14772.000	43.1	42.8	6.1	34.9	57.1	74.0	16.9	100	0
3	17234.000	42.7	45.9	7.4	35.3	60.7	74.0	13.3	100	0
4	19696.000	42.6	41.2	9.7	35.4	58.1	74.0	15.9	100	0
5	22158.000	44.1	41.2	11.9	35.0	62.2	74.0	11.8	100	0
6	24620.000	44.2	41.3	13.9	36.8	62.6	74.0	11.4	100	0
----- Vertical -----										
7	12310.000	42.9	41.9	4.6	35.6	53.8	74.0	20.2	100	0
8	14772.000	43.0	42.8	6.1	34.9	57.0	74.0	17.0	100	0
9	17234.000	42.0	45.9	7.4	35.3	60.0	74.0	14.0	100	0
10	19696.000	42.7	41.2	9.7	35.4	58.2	74.0	15.8	100	0
11	22158.000	44.1	41.2	11.9	35.0	62.2	74.0	11.8	100	0
12	24620.000	43.2	41.3	13.9	36.8	61.6	74.0	12.4	100	0

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

DATA OF RADIATED EMISSION TEST

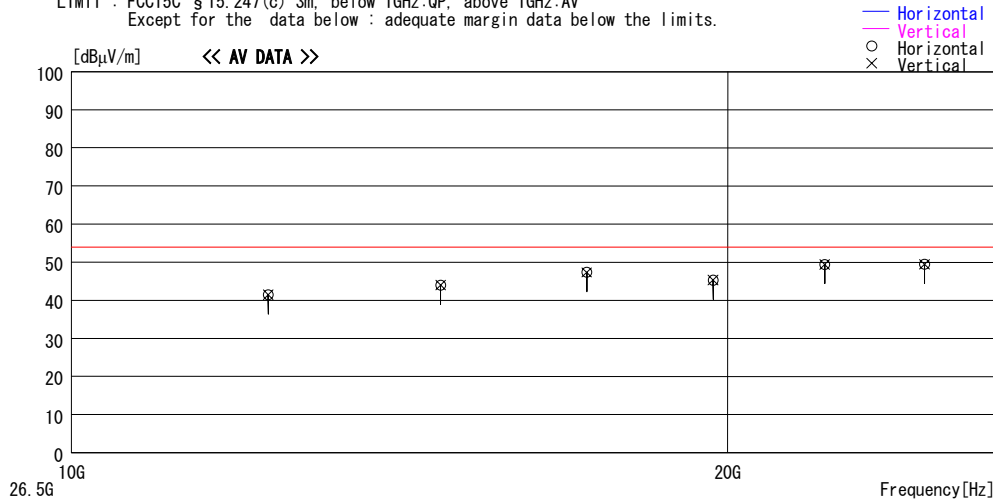
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/05/13 17:07:33

Applicant : CANON INC.
Kind of EUT : Wireless LAN module
Model No. : K30242
Serial No. : 3

Report No. : 241E0042-HO
Power : DC5V
Temp°C/Humi% : 23 / 58
Operator : Kenichi Adachi

Mode / Remarks : Transmitting Mode, 11g, 54Mbps, Tx2462MHz / EUT (MAX-axis): Hor.:Z-axis, Ver.:Y-axis

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.

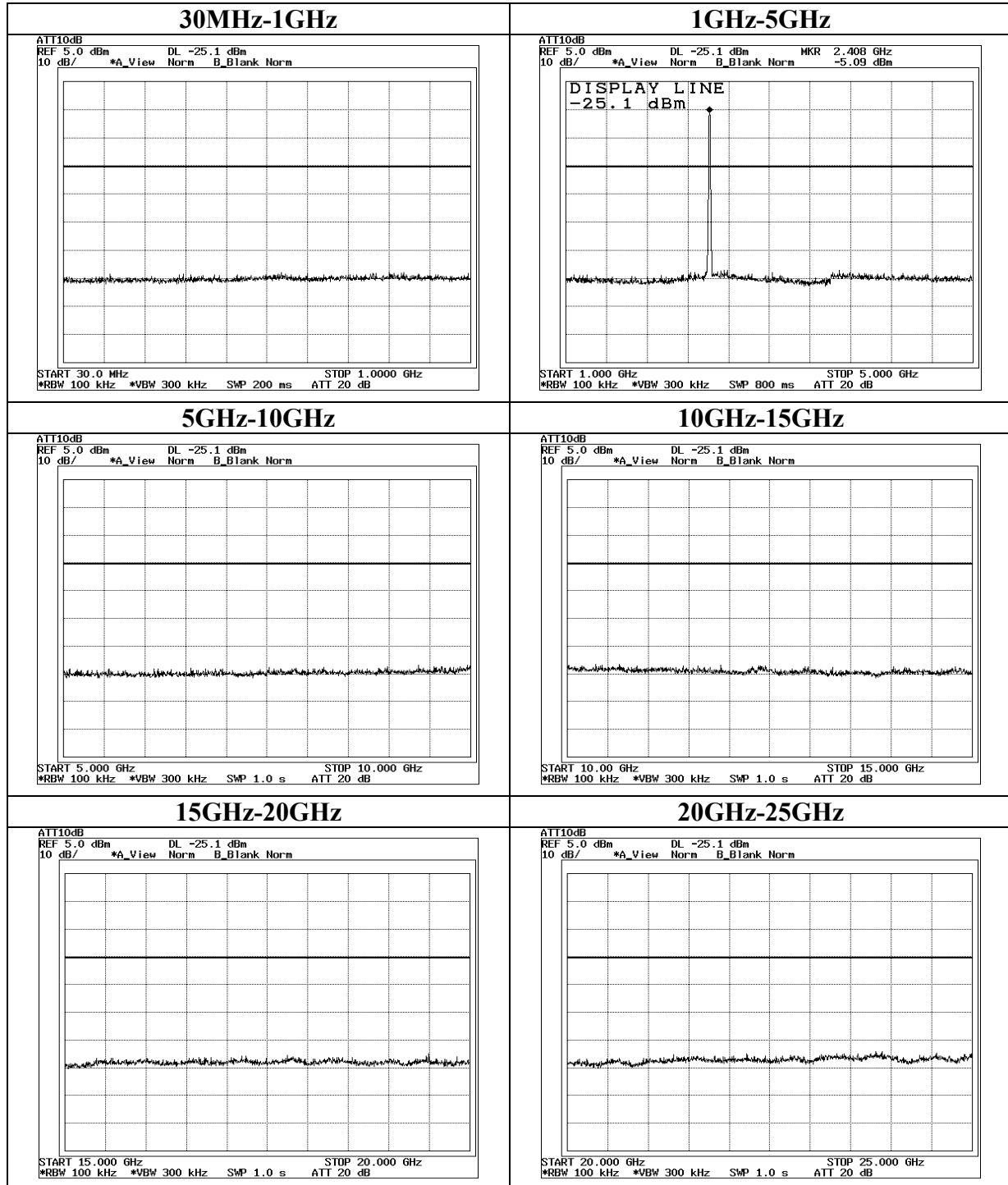


No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	12310.000	30.5	41.9	4.6	35.6	41.4	54.0	12.6	100	0
2	14772.000	30.0	42.8	6.1	34.9	44.0	54.0	10.0	100	0
3	17234.000	29.4	45.9	7.4	35.3	47.4	54.0	6.6	100	0
4	19696.000	29.8	41.2	9.7	35.4	45.3	54.0	8.7	100	0
5	22158.000	31.3	41.2	11.9	35.0	49.4	54.0	4.6	100	0
6	24620.000	31.1	41.3	13.9	36.8	49.5	54.0	4.5	100	0
----- Vertical -----										
7	12310.000	30.5	41.9	4.6	35.6	41.4	54.0	12.6	100	0
8	14772.000	30.0	42.8	6.1	34.9	44.0	54.0	10.0	100	0
9	17234.000	29.3	45.9	7.4	35.3	47.3	54.0	6.7	100	0
10	19696.000	29.8	41.2	9.7	35.4	45.3	54.0	8.7	100	0
11	22158.000	31.3	41.2	11.9	35.0	49.4	54.0	4.6	100	0
12	24620.000	31.1	41.3	13.9	36.8	49.5	54.0	4.5	100	0

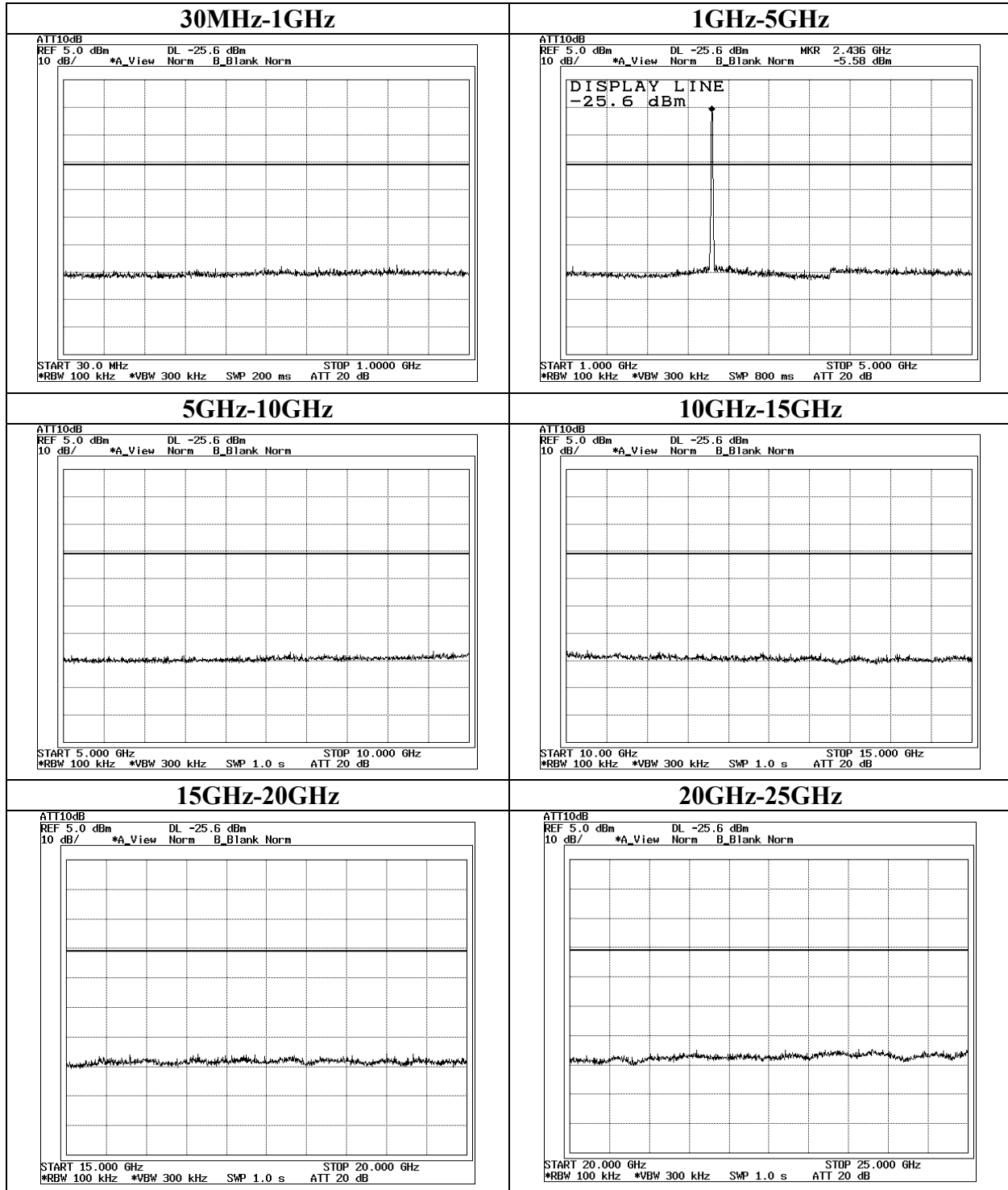
CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN Page:

Conducted Spurious Emission(DSSS and other forms of modulation)

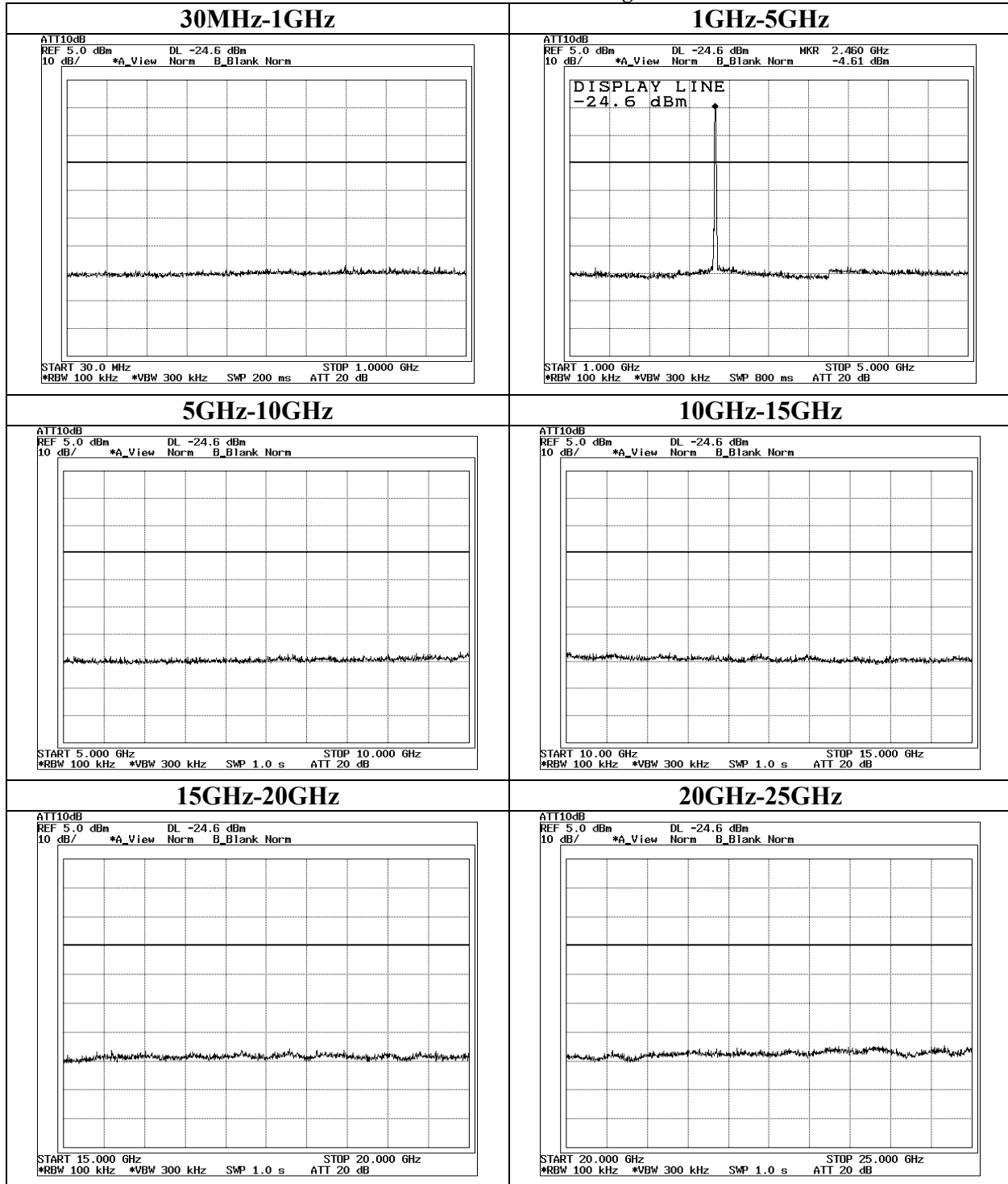
IEEE802.11b Ch : Low



Conducted Spurious Emission(DSSS and other forms of modulation)
IEEE802.11b Ch : Mid

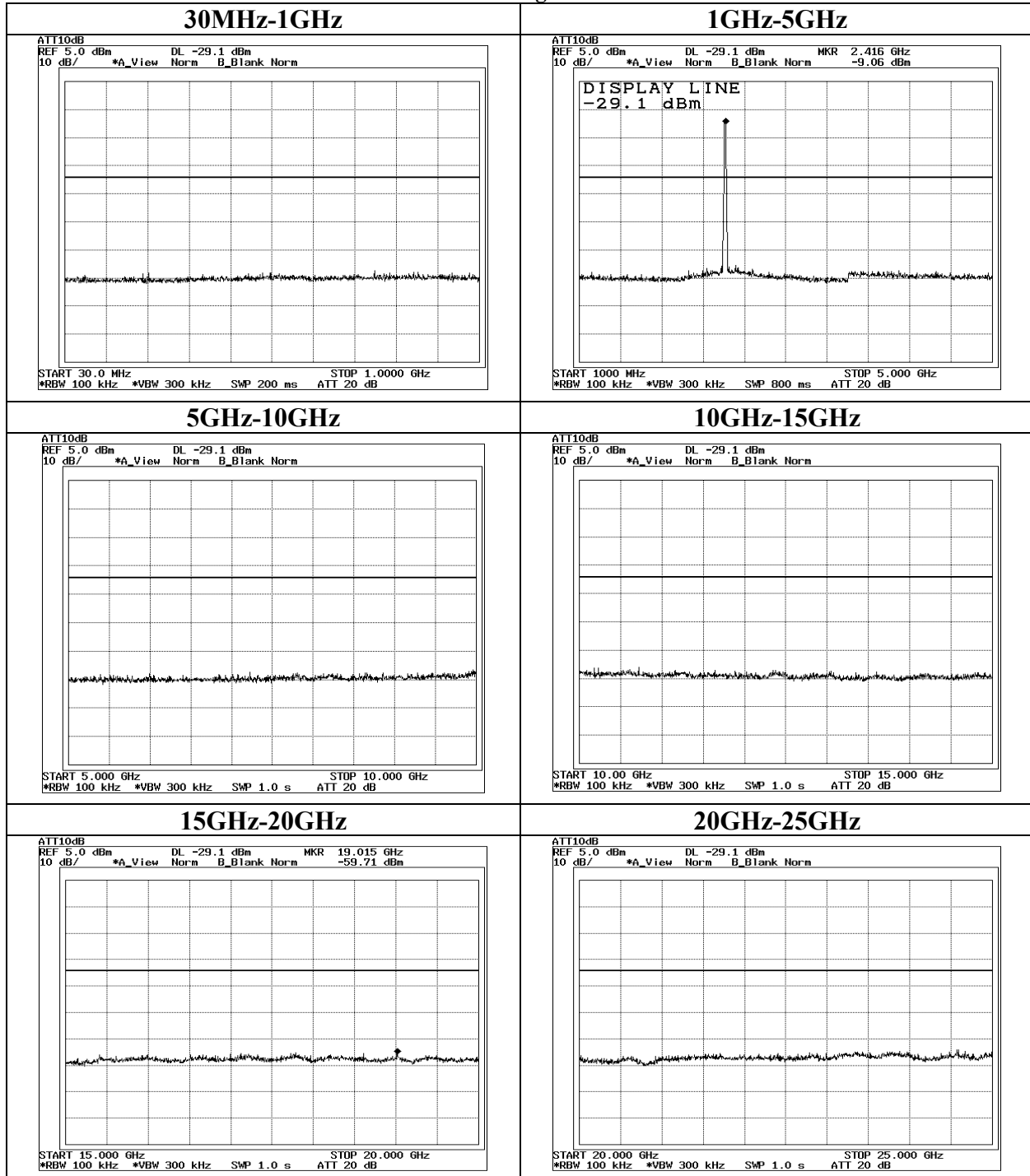


Conducted Spurious Emission(DSSS and other forms of modulation)
IEEE802.11b Ch : High



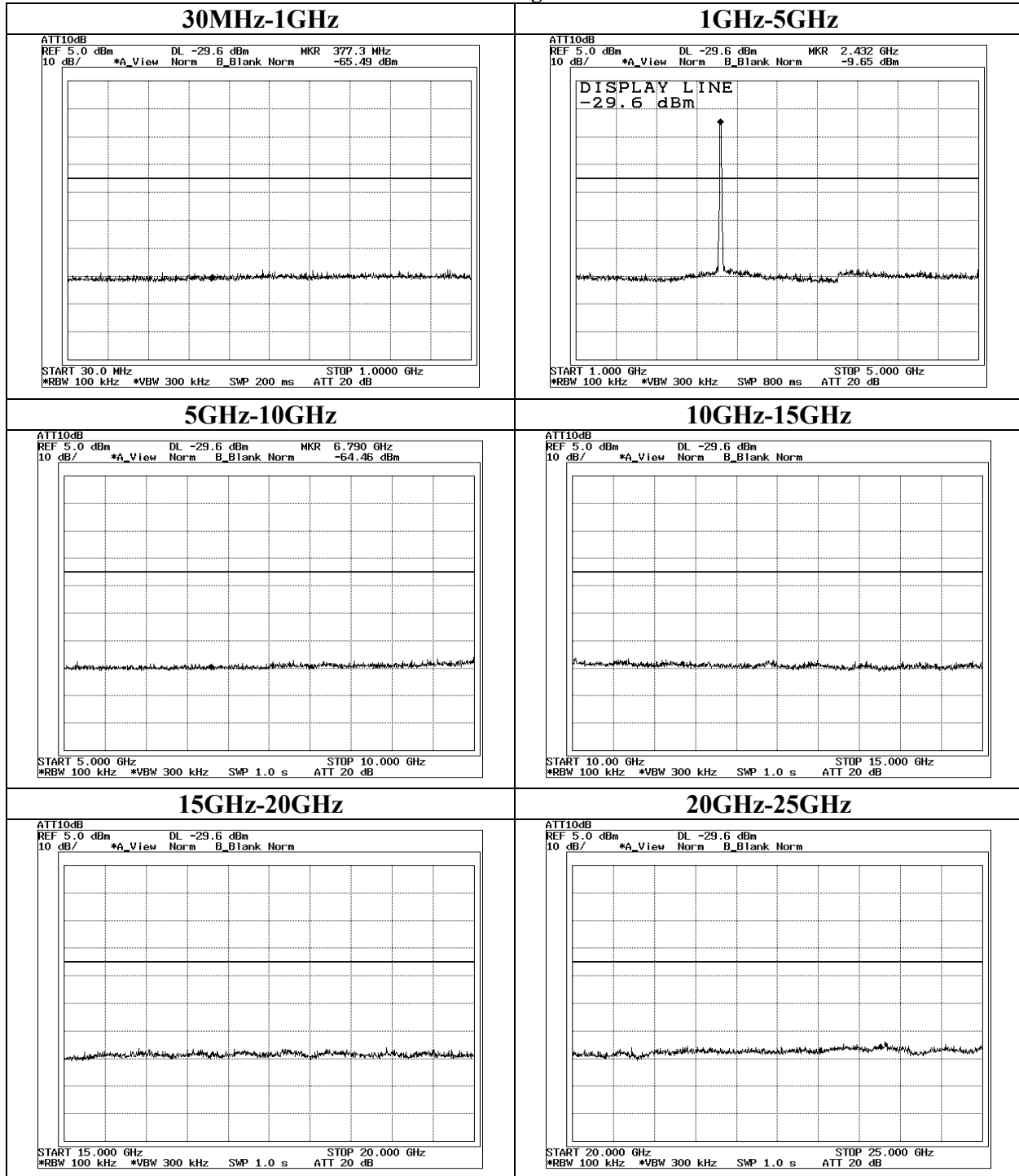
Conducted Spurious Emission(DSSS and other forms of modulation)

IEEE802.11g Ch : Low



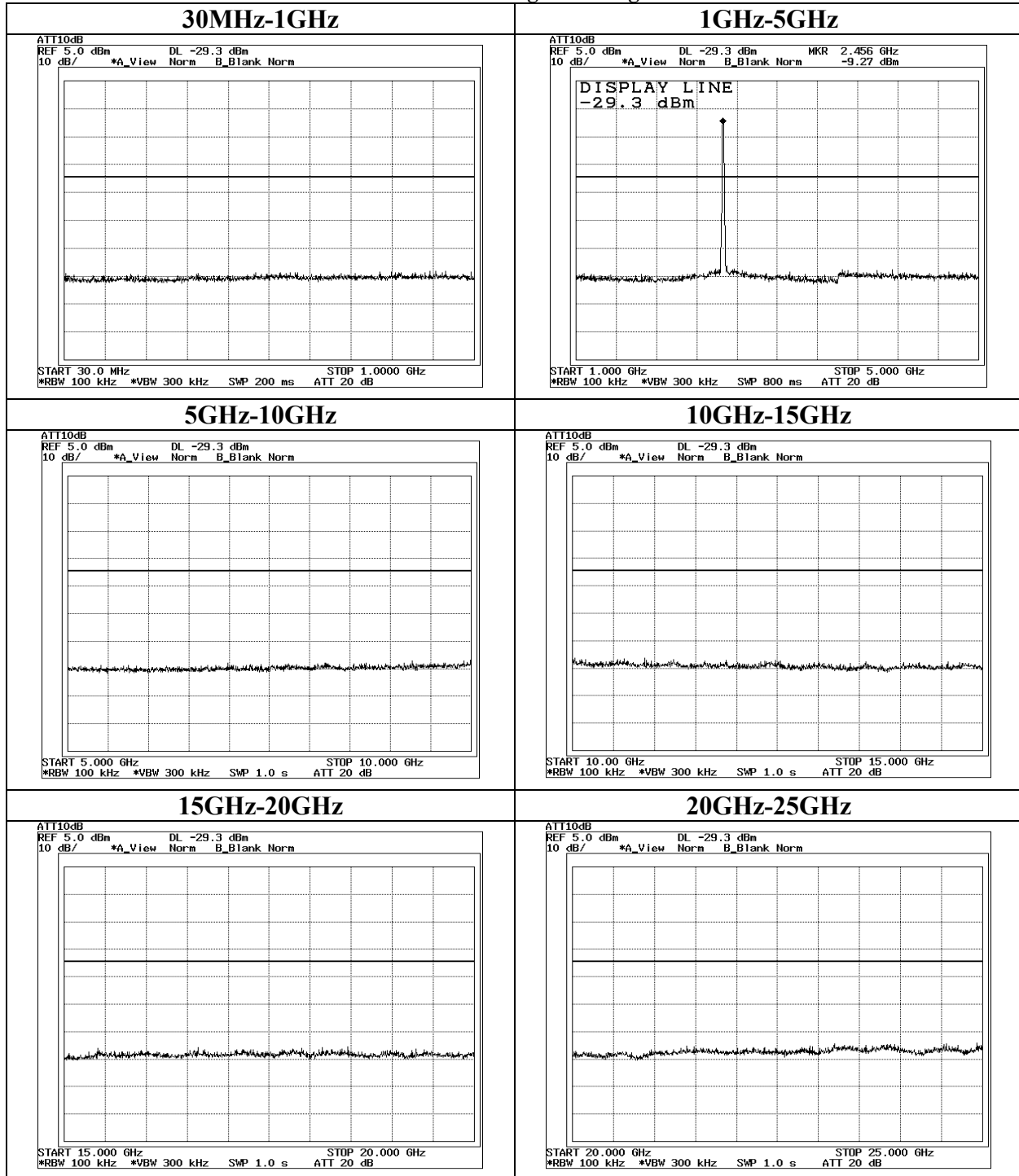
Conducted Spurious Emission(DSSS and other forms of modulation)

IEEE802.11g Ch : Mid



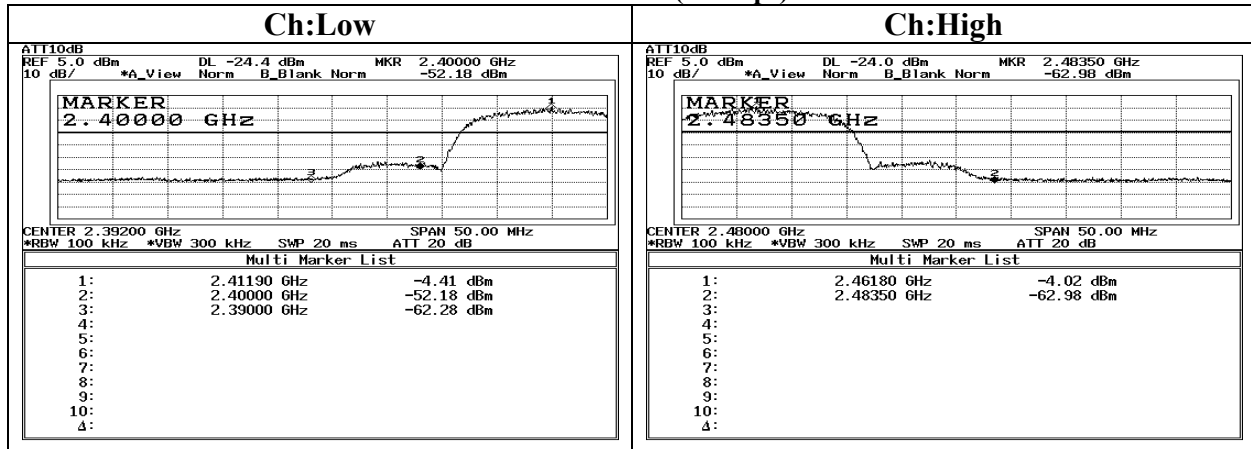
Conducted Spurious Emission(DSSS and other forms of modulation)

IEEE802.11g Ch : High

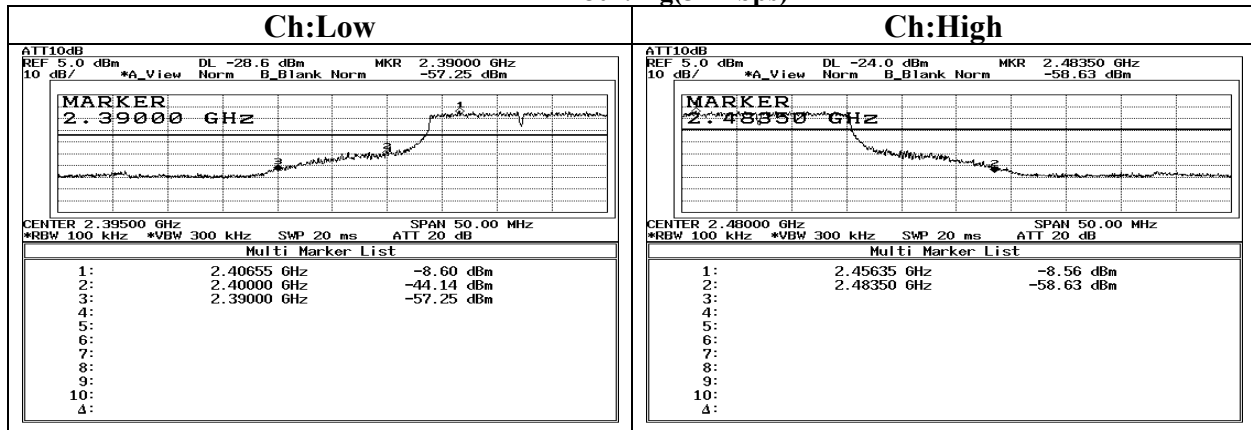


Conducted emission Band Edge compliance (DSSS and other forms of modulation)

IEEE802.11b(11Mbps)



IEEE802.11g(54Mbps)



Power Density (DSSS and other forms of modulation)

UL Apex Co., Ltd.
Head Office EMC Lab. No.4 Measurement Room

COMPANY	: CANON INC	REGULATION	: Fcc Part15 Subpart C 15.247(d)
EQUIPMENT	: Wireless LAN module	TEST DISTANCE	: -
MODEL	: K30242	DATE	: 05/17/2004
SAMPLE NO.	: 5	TEMPERATURE	: 21℃
POWER	: DC 5.0 V	HUMIDITY	: 60%
MODE	: Tx (ch1,6,11)	ENGINEER	: Hiroka Umeyama

IEEE802.11b

Ch	Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2412.0	-17.81	2.0	10.0	-5.8	8.0	13.8
Mid	2437.0	-17.43	2.0	10.0	-5.4	8.0	13.4
High	2462.0	-17.15	2.0	10.0	-5.2	8.0	13.2

IEEE802.11g

Ch	Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2412.0	-22.48	2.0	10.0	-10.5	8.0	18.5
Mid	2437.0	-22.06	2.0	10.0	-10.1	8.0	18.1
High	2462.0	-22.21	2.0	10.0	-10.2	8.0	18.2

Sample Calculation:

Result = Reading + Cable Loss (supplied by customer) + Attenuator

* Atten. was not used for factor 0.0dB of the above table.

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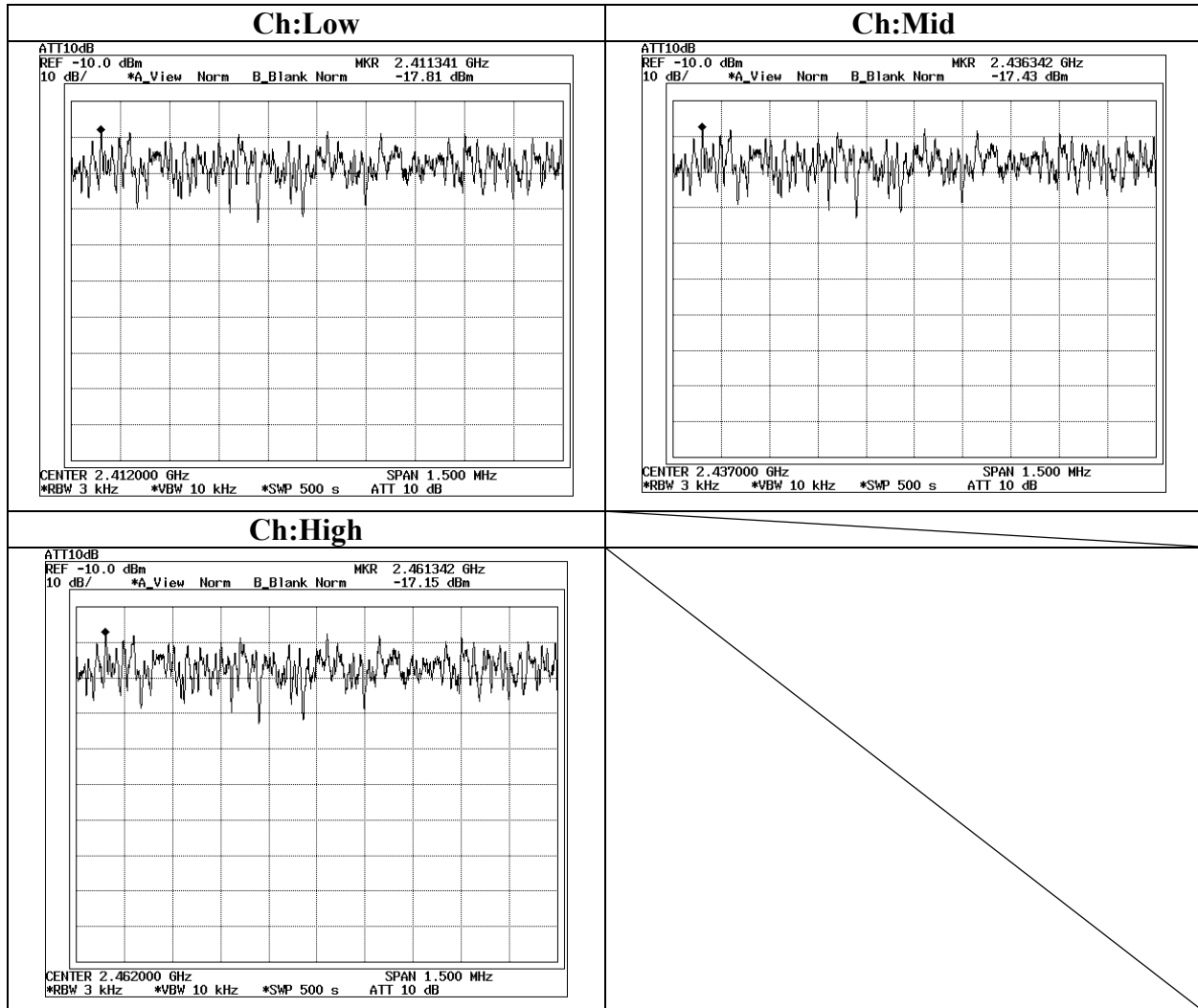
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MF060b(10.04.03)

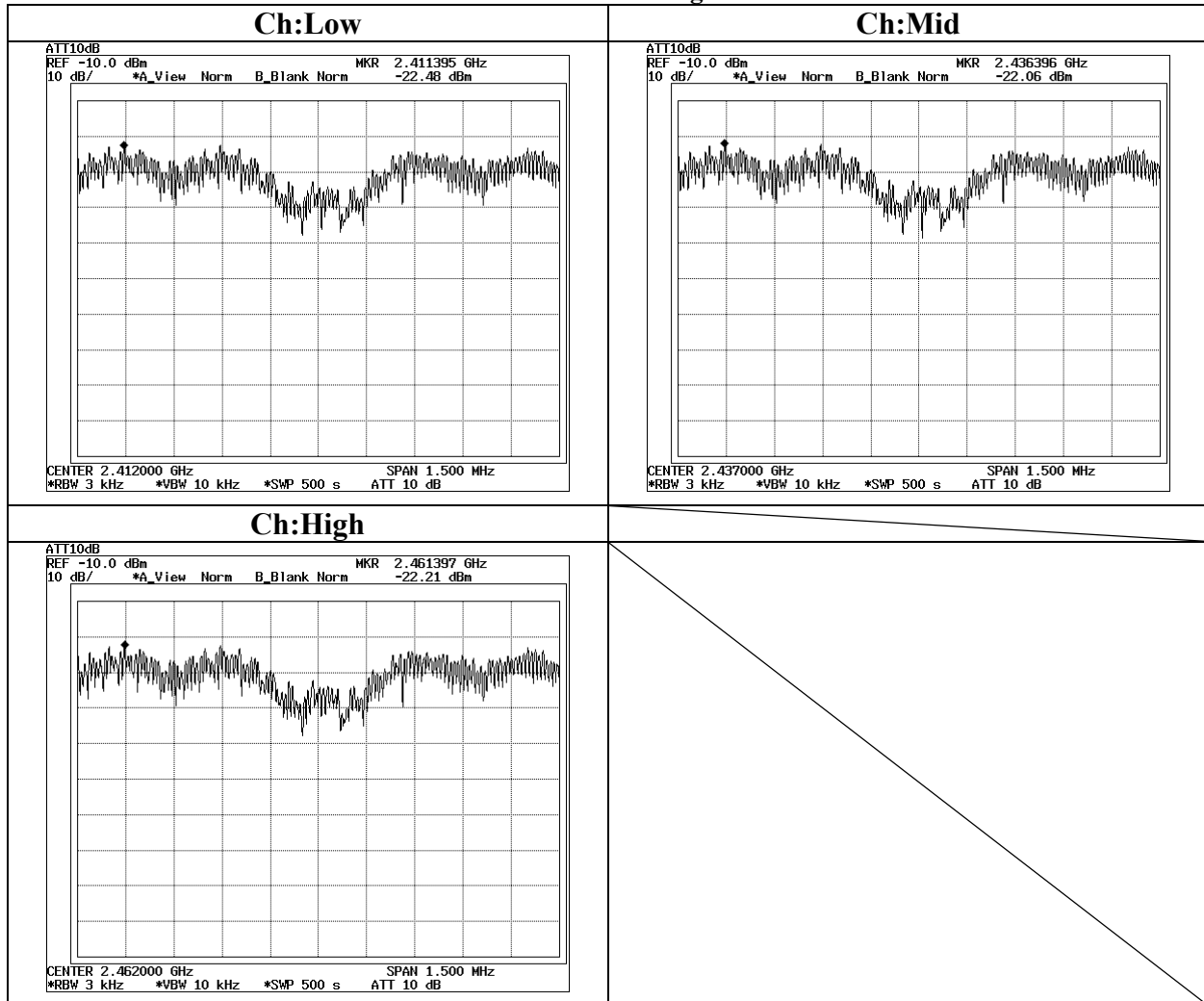
Power Density(DSSS and other forms of modulation)

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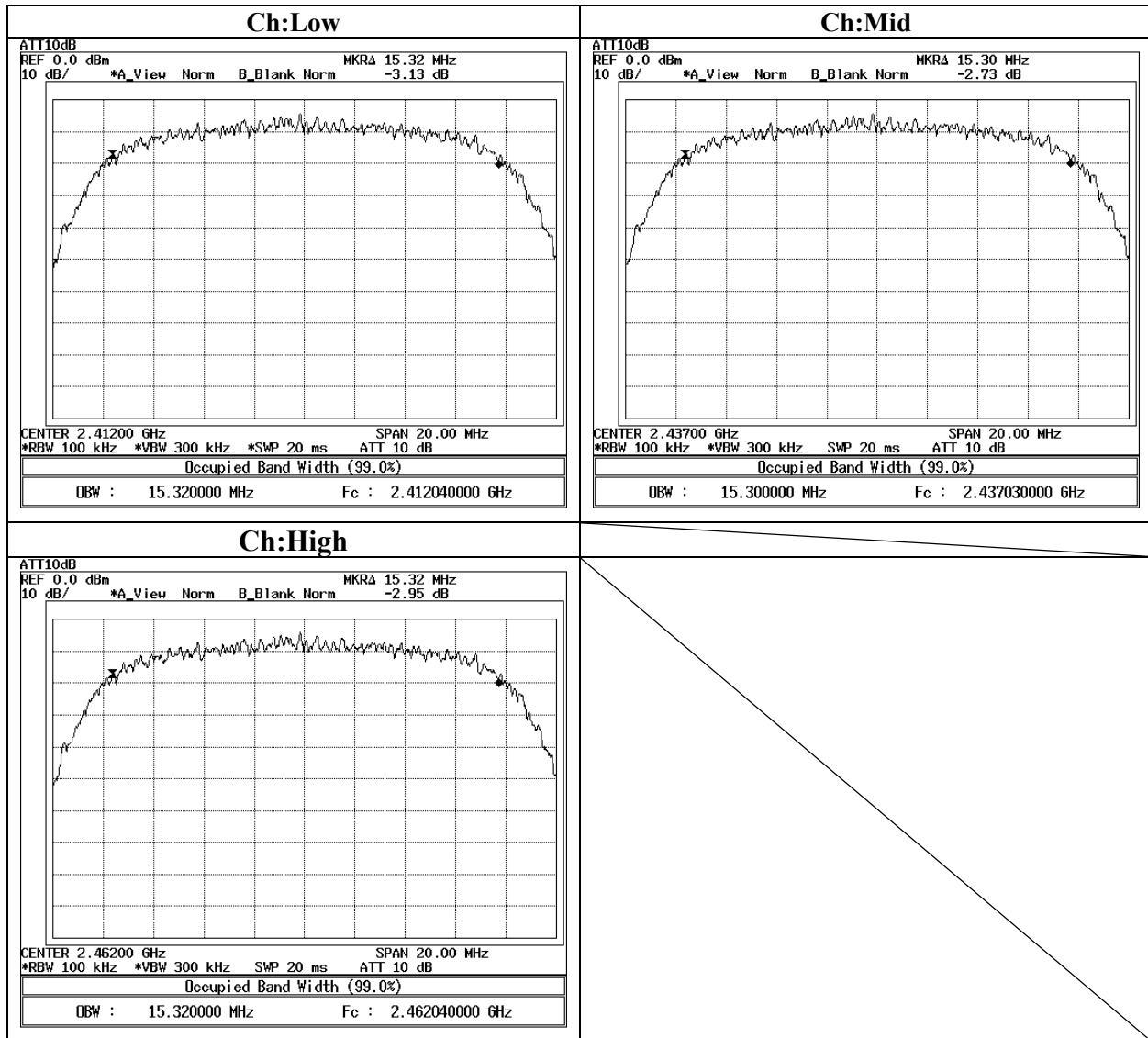
Power Density(DSSS and other forms of modulation)

IEEE802.11g



99% Occupied Bandwidth(DSSS and other forms of modulation)

IEEE802.11b



99% Occupied Bandwidth (DSSS and other forms of modulation)

IEEE802.11g

