

RADIO TEST REPORT

Test Report No. : 27BE0234-HO

Applicant : Panasonic Communications Co., Ltd.
Type of Equipment : Network Camera
Model No. : BL-C131A
FCC ID : ACJ96NBL-C131
Test standard : FCC Part 15 Subpart C
Section 15.207, Section 15.247: 2006
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 the above regulation.
4. The test results in this report are traceable to the national or international standards.

Date of test:

October 30 to November 1, 2006

Tested by:

T. Shimada

Takumi Shimada
EMC Services

Approved by :

H. Shimoji

Hironobu Shimoji
Group Leader of
EMC Services



NVLAP LAB CODE: 200572-0

This laboratory is accredited by the NVLAP LAB CODE 200572-0, U.S.A. The tests reported herein have been performed in accordance with its terms of accreditation.

*As for the range of Accreditation in NVLAP, you may refer to the WEB address, <http://ulapex.jp/emc/nvlap.htm>

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Head Office EMC Lab.

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MF060b(14.06.06)

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SECTION 1: Client information

Company Name : Panasonic Communications Co., Ltd.
Address : 1-62, 4-chome, Minoshima, Hakata-ku, Fukuoka 812-8531, Japan
Telephone Number : +81--92-477-1405
Facsimile Number : +81--92-477-1487
Contact Person : Kunihiko Nawata

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

2.1 Identification of E.U.T.

Type of Equipment : Network Camera
Model No. : BL-C131A
Serial No. : E.S.3
Rating : AC120V/60Hz, Output DC9V (AC adaptor)
Country of Manufacture : Malaysia
Receipt Date of Sample : October 30, 2006
Condition of EUT : Engineering prototype
(Not for Sale: This sample is equivalent to mass-produced items.)
Modification of EUT : No modification by the test lab.

2.2 Product Description

Model No: BL-C131A (referred to as the EUT in this report) is the Network Camera.

Clock frequencies in the system : CPU: 48-108MHz, Ether: 25MHz,
RTC: 32.768kHz, MAC&BB: 40MHz, Camera:27MHz
Equipment Type : Transceiver
Frequency of Operation : 2412-2462MHz
Bandwidth & Channel spacing : 25MHz & 5MHz
Modulation : DSSS / OFDM
ITU code : 22M0G1D
Power Supply (inner) : DC9V(from AC adaptor)
Antenna Type : ½ lambda dipole Antenna
Antenna Connector Type : UFL-connector
Antenna Gain : 2.1dBi

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SECTION 3: Test specification, procedures & results

3.1 Test Specification

Test Specification : FCC Part15 Subpart C : 2006
Title : FCC 47CFR Part15 Radio Frequency Device Subpart C Intentional Radiators
Section 15.207 Conducted limits : 2006
Section 15.247 Operation within the bands 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz: 2006

FCC 15.31 (e)

This EUT provides stable voltage (DC9.0V) constantly to RF Module regardless of input voltage. Therefore, this EUT complies with the requirement.

FCC Part 15.203 Antenna requirement

It is impossible for end users to replace the antenna, because the antenna is mounted inside of the EUT. Therefore, the equipment complies with the antenna requirement of Section 15.203.

3.2 Procedures and results

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	15.6dB 0.69452MHz QP, N	Complied
2	6dB Bandwidth	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247(a)(2)	Conducted	N/A	N/A	Complied
3	Maximum Peak Output Power	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247(b)(3)	Conducted	N/A	6.57dB IEEE802.11g, Ch Mid	Complied
4	Restricted Band Edges	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247 (d) RSS-210 A8.5	Conducted/ Radiated	N/A	N/A	Complied
5	Power Density	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247 (e)	Conducted	N/A	12.5dB IEEE802.11b, Ch: Low	Complied
6	Spurious Emission	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(d)	Conducted/ Radiated	N/A	2.1dB 2483.5MHz Hor, AV (IEEE802.11g, Ch:High)	Complied

Note: UL Apex's EMI Work Procedures No.QPM05 and QPM15.

*0) The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*These tests were also referred to "Guidance on Measurement of Digital Transmission Systems Operating under 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 addition, deviation, nor exclusion has been made from standards.

3.4 Uncertainty

Conducted Emission

The measurement uncertainty (with a 95% confidence level) for this test is ± 2.66 dB.
The data listed in this test report has enough margin, more than the site margin.

Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test using Biconical antenna is ± 4.59 dB(3m).
The measurement uncertainty (with a 95% confidence level) for this test using Logperiodic antenna is ± 4.62 dB(3m).
The measurement uncertainty (with a 95% confidence level) for this test using Horn antenna is ± 5.27 dB.
The data listed in this report meets the limits unless the uncertainty is taken into consideration.

Other test except Conducted Emission and Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test is ± 3.0 dB.

3.5 Test Location

UL Apex Co., Ltd. Head Office EMC Lab. *NVLAP Lab. code: 200572-0
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	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	313583	IC4247A	19.2 x 11.2 x 7.7m	7.0 x 6.0m	Preparation room
No.2 semi-anechoic chamber	655103	IC4247A-2	7.5 x 5.8 x 5.2m	4.0 x 4.0m	-
No.3 semi-anechoic chamber	148738	IC4247A-3	12.0 x 8.5 x 5.9m	6.8 x 5.75m	
No.3 shielded room	-	-	4.0 x 6.0 x 2.7m	N/A	-
No.4 semi-anechoic chamber	134570	IC4247A-4	12.0 x 8.5 x 5.9m	6.8 x 5.75m	-
No.4 shielded room	-	-	4.0 x 6.0 x 2.7m	N/A	-
No.5 semi-anechoic chamber	-	-	6.0 x 6.0 x 3.9m	N/A	-
No.6 shielded room	-	-	4.0 x 4.5 x 2.7m	2.0 x 2.0 m	-
No.6 measurement room	-	-	4.75 x 5.4 x 3.0m	4.75 x 5.4 m	-
No.7 shielded room	-	-	4.7 x 7.5 x 2.7m	4.7 x 7.5m	-
No.8 measurement 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, No.2, No.3 and No.4 semi-anechoic chambers and No.7 shielded room.

3.6 Test set up, Test instruments and Data of EMI

Refer to APPENDIX 1 to 3.

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

4.1 Operating Modes

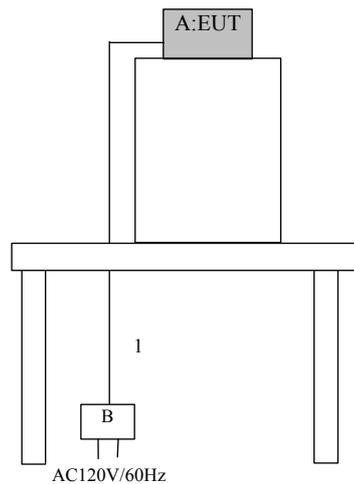
The mode used for test :

Transmitting mode 11b (CCK 11Mbps (max power rate), Packet type: Maximum, Payload: PN9)
Low Channel : 2412MHz (Ch 1)
Mid Channel : 2437MHz (Ch 6)
High Channel : 2462MHz (Ch 11)

Transmitting mode 11g (OFDM 54Mbps (max power rate), Packet type: Maximum, Payload: PN9)
Low Channel : 2412MHz (Ch 1)
Mid Channel : 2437MHz (Ch 6)
High Channel : 2462MHz (Ch 11)

*Conditions: As a result of preliminary test, the formal test was performed with the above modes, which had the max power rate.

4.2 Configuration and peripherals



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

Description of EUT

No.	Item	Model number	Serial number	Manufacturer	Remark
A	Network Camera	BL-C131A	E.S.3	Panasonic	EUT
B	Camera AC Adapter	PQLV206	-	Panasonic	-

List of cables used

No.	Name	Length (m)	Shield
1	Camera AC Adaptor DC cable	3.0	N

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SECTION 5: Conducted Emission

Test Procedure and conditions

EUT was placed on a urethane platform of nominal size, 1m by 0.5m, 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.

For the tests on EUT with other peripherals (as a whole system)

I/O cable and AC cables that were connected to the peripherals were bundled in center. They were folded back and forth forming a bundle 30cm to 40cm long and were hanged at a 40cm height to the ground plane. All unused 50ohm connectors of the LISN(AMN) were resistivity 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.

Detector	: CISPR quasi-peak and average detector (IF BW 9 kHz)
Measurement range	: 0.15-30MHz
Test data	: APPENDIX 2
Test result	: Pass

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SECTION 6: Spurious Emission

[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 urethane platform of nominal size, 1.0m by 0.5m, 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 linear mode).

The test was made with the detector (RBW/VBW) in the following table.

When using Spectrum analyzer, the test was made with adjusting span to zero by using peak hold.

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.

20dBc was applied to the frequency over the limit of FCC 15.209 and outside the restricted band of FCC15.205.

Frequency	Below 1GHz	Above 1GHz
Instrument used	Test Receiver / Spectrum Analyzer	Spectrum Analyzer
Detector	QP: BW 120kHz(T/R)	PK: RBW:1MHz/VBW: 1MHz
IF Bandwidth	20dBc : RBW: 100kHz VBW: 300kHz (S/A)	AV: RBW:1MHz/VBW:10Hz 20dBc : RBW:100kHz/VBW:300kHz

- The carrier level and noise levels were confirmed at each position of X, Y and Z axes of EUT to see the position of maximum noise, and the test was made at the position that has the maximum noise.

Test data : APPENDIX 2

Test result : Pass

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SECTION 7: Bandwidth

Test Procedure

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

Test data : APPENDIX 2
Test result : Pass

SECTION 8: Maximum Peak Output Power

Test Procedure

The Maximum Peak Output Power was measured with a power meter (tested bandwidth: 50MHz) connected to the antenna port.

Test data : APPENDIX 2
Test result : Pass

SECTION 9: Peak Power Density

[Conducted]

Test Procedure

The Peak Power Density was measured with a spectrum analyzer connected to the antenna port. It was measured based on "PSD option 1" of "Guidance on Measurement of Digital Transmission Systems Operating under Section15.247".

Test data : APPENDIX 2
Test result : Pass

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APPENDIX 1: Photographs of test setup

Conducted Emission

This page has been submitted for a separate exhibit.

Spurious Emission (Radiated)

This page has been submitted for a separate exhibit.

Worst Case Position (Horizontal: Y-axis/ Vertical:X-axis)

This page has been submitted for a separate exhibit

APPENDIX 2: Data of EMI test

**Conducted Emission
(IEEE802.11b Tx, Ch: Low)**

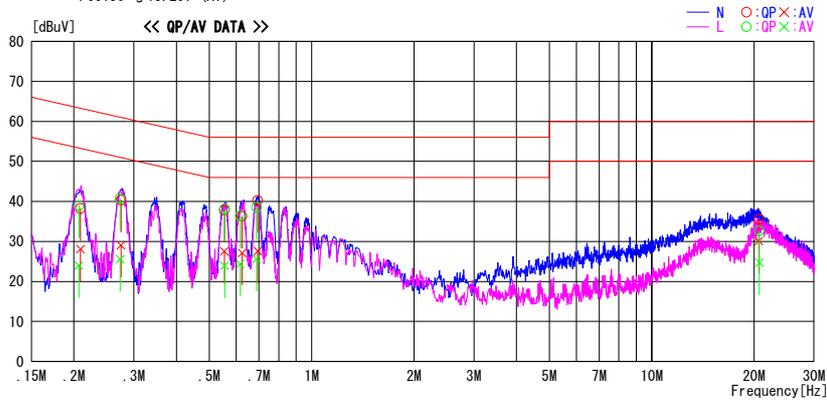
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/11/01 16:46:53

Company : Panasonic Communications Co., Ltd. Report No. : 27BE0234-HO
Kind of EUT : Network Camera Power : 120V/60Hz
Model No. : BL-C131A Temp./Humi. : 26deg.C / 41%
Serial No. : E. S. 3 Operator : Takumi Shimada

Mode / Remarks : 11b Tx 2412MHz, 11Mbps

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



Frequency [MHz]	Reading Level		Corr. Factor	Results		Limit		Margin		Phase
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]	
0.20885	37.9	27.8	0.3	38.2	28.1	63.3	53.3	25.1	25.2	N
0.27486	39.9	28.7	0.4	40.3	29.1	61.0	51.0	20.7	21.9	N
0.55324	37.4	27.1	0.4	37.8	27.5	56.0	46.0	18.2	18.5	N
0.62432	35.9	26.8	0.4	36.3	27.2	56.0	46.0	19.7	18.9	N
0.69360	39.9	27.2	0.4	40.3	27.6	56.0	46.0	15.7	18.4	N
20.65310	33.5	28.0	2.1	35.6	30.1	60.0	50.0	24.4	19.9	N
0.20676	38.7	23.7	0.3	39.0	24.0	63.3	53.3	24.4	29.3	L
0.27359	40.3	25.2	0.4	40.7	25.6	61.0	51.0	20.3	25.4	L
0.55493	37.8	23.5	0.4	38.2	23.9	56.0	46.0	17.8	22.1	L
0.61692	36.0	24.0	0.4	36.4	24.4	56.0	46.0	19.6	21.6	L
0.68892	38.2	25.2	0.4	38.6	25.6	56.0	46.0	17.5	20.4	L
20.71175	30.5	22.6	2.1	32.6	24.7	60.0	50.0	27.4	25.3	L

CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C.F.(L1SN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission
(IEEE802.11b Tx, Ch: Mid)

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
 Date : 2006/11/01 16:53:39

Company	: Panasonic Communications Co., Ltd.	Report No.	: 27BE0234-HO
Kind of EUT	: Network Camera	Power	: 120V/60Hz
Model No.	: BL-C131A	Temp./Humi.	: 26deg. C / 41%
Serial No.	: E.S.3	Operator	: Takumi Shimada

Mode / Remarks : 11b Tx 2437MHz, 11Mbps

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

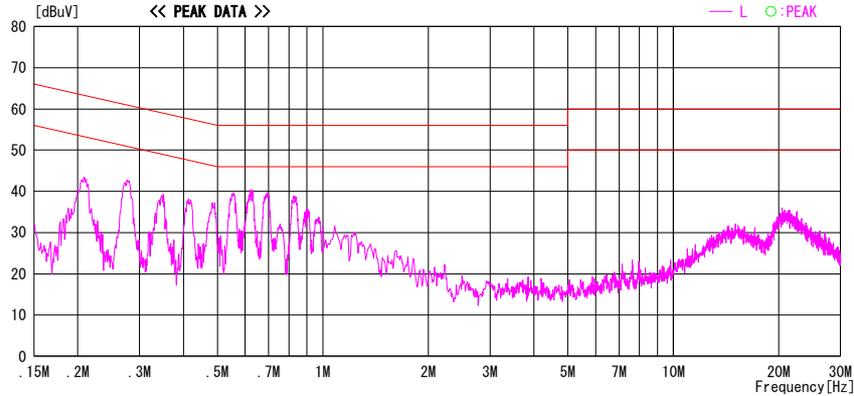
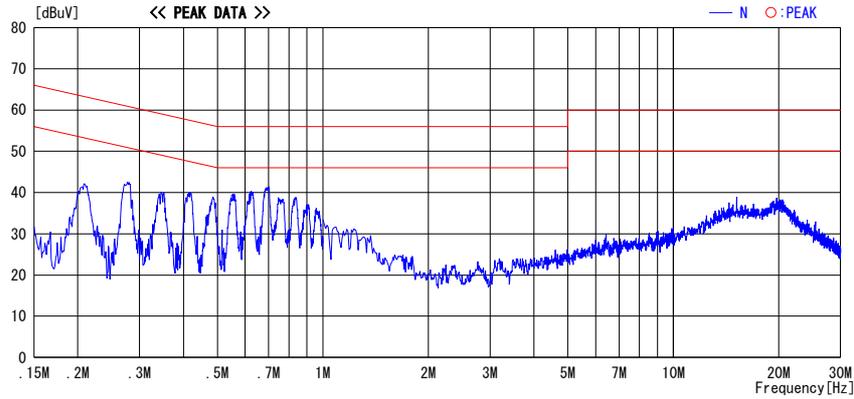


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C.F.(LISN LOSS+CABLE LOSS)
 Except for the above table : adequate margin data below the limits.

Conducted Emission
(IEEE802.11b Tx, Ch: High)

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
 Date : 2006/11/01 16:58:27

Company	: Panasonic Communications Co., Ltd.	Report No.	: 27BE0234-HO
Kind of EUT	: Network Camera	Power	: 120V/60Hz
Model No.	: BL-C131A	Temp./Humi.	: 26deg. C / 41%
Serial No.	: E. S. 3	Operator	: Takumi Shimada

Mode / Remarks : 11b Tx 2462MHz, 11Mbps

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

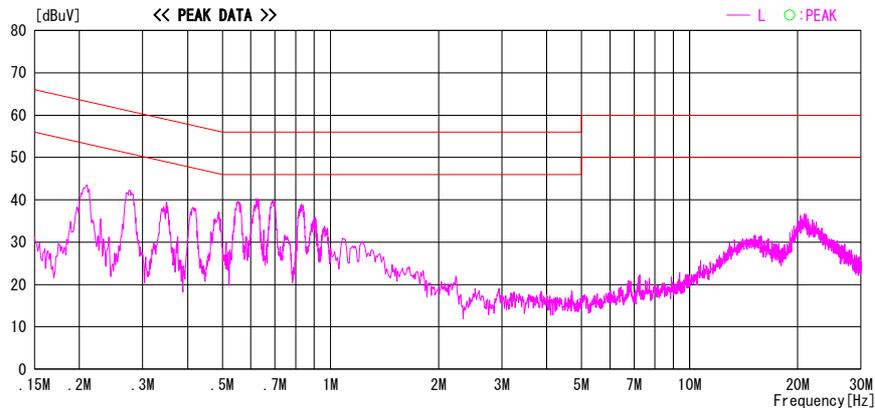
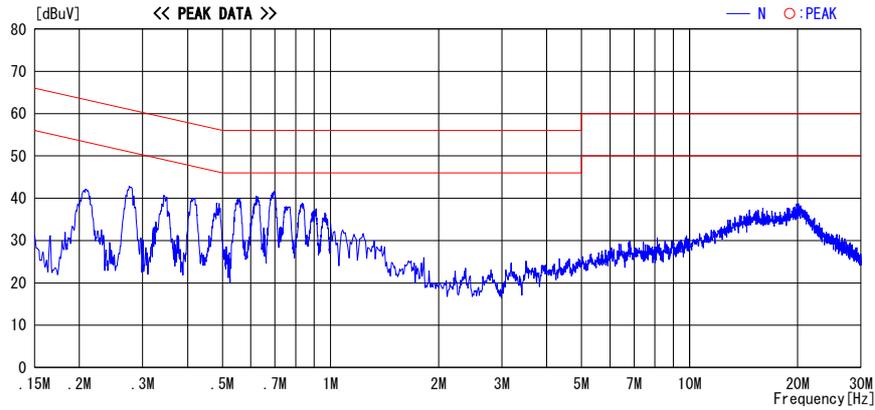


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCURATION: RESULT=READING+C. F(LISN LOSS+CABLE LOSS)
 Except for the above table : adequate margin data below the limits.

Conducted Emission
(IEEE802.11g Tx, Ch: Low)

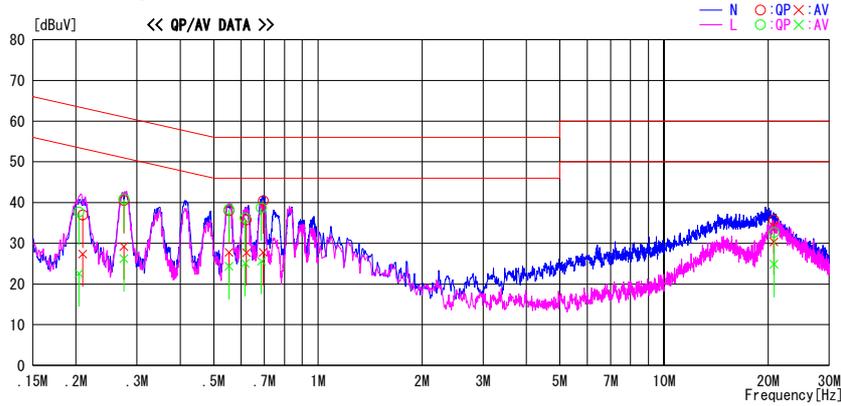
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/11/01 17:12:03

Company : Panasonic Communications Co., Ltd. Report No. : 27BE0234-HO
Kind of EUT : Network Camera Power : 120V/60Hz
Model No. : BL-C131A Temp./Humi. : 26deg.C / 41%
Serial No. : E. S. 3 Operator : Takumi Shimada

Mode / Remarks : 11g Tx 2412MHz, 54Mbps

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



Frequency [MHz]	Reading Level		Corr. Factor [dB]	Results		Limit		Margin		Phase
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]	
0.20913	36.6	27.1	0.3	36.9	27.4	63.2	53.2	26.3	25.8	N
0.27489	40.1	28.8	0.4	40.5	29.2	61.0	51.0	20.5	21.8	N
0.55349	37.6	27.4	0.4	38.0	27.8	56.0	46.0	18.1	18.2	N
0.62138	35.3	27.3	0.4	35.7	27.7	56.0	46.0	20.3	18.3	N
0.69452	40.1	27.4	0.4	40.5	27.8	56.0	46.0	15.6	18.3	N
20.75359	33.7	28.2	2.1	35.8	30.3	60.0	50.0	24.2	19.7	N
0.20398	37.3	22.3	0.3	37.6	22.6	63.4	53.4	25.8	30.8	L
0.27488	40.5	25.8	0.4	40.9	26.2	61.0	51.0	20.1	24.8	L
0.55368	37.9	24.0	0.4	38.3	24.4	56.0	46.0	17.7	21.6	L
0.61614	35.8	24.7	0.4	36.2	25.1	56.0	46.0	19.8	20.9	L
0.68669	38.4	25.2	0.4	38.8	25.6	56.0	46.0	17.3	20.4	L
20.77056	30.5	22.8	2.1	32.6	24.9	60.0	50.0	27.4	25.1	L

CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission
(IEEE802.11g Tx, Ch: Mid)

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
 Date : 2006/11/01 17:17:01

Company	: Panasonic Communications Co., Ltd.	Report No.	: 27BE0234-HO
Kind of EUT	: Network Camera	Power	: 120V/60Hz
Model No.	: BL-C131A	Temp./Humi.	: 26deg. C / 41%
Serial No.	: E. S. 3	Operator	: Takumi Shimada

Mode / Remarks : 11g Tx 2437MHz, 54Mbps

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

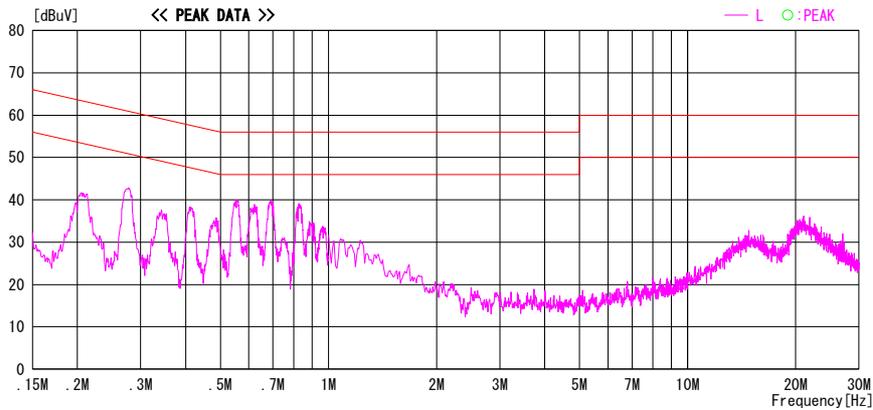
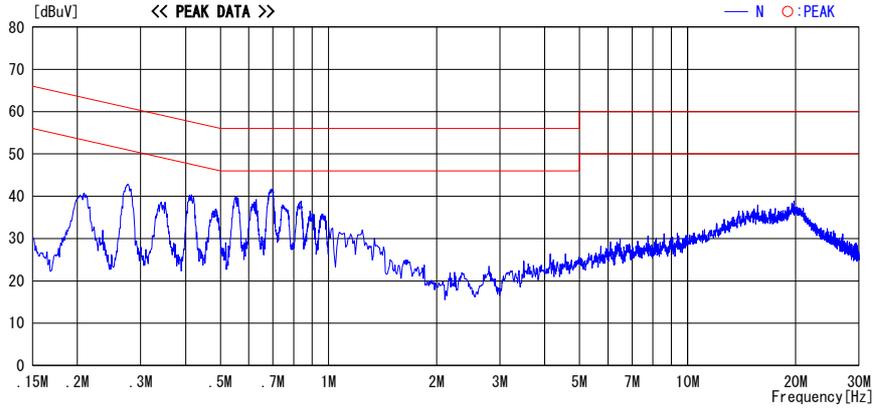


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCURATION: RESULT=READING+C. F(LISN LOSS+CABLE LOSS)
 Except for the above table : adequate margin data below the limits.

Conducted Emission
(IEEE802.11g Tx, Ch: High)

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
 Date : 2006/11/01 17:21:36

Company	: Panasonic Communications Co., Ltd.	Report No.	: 27BE0234-HO
Kind of EUT	: Network Camera	Power	: 120V/60Hz
Model No.	: BL-C131A	Temp./Humi.	: 26deg. C / 41%
Serial No.	: E.S.3	Operator	: Takumi Shimada

Mode / Remarks : 11g Tx 2462MHz, 54Mbps

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

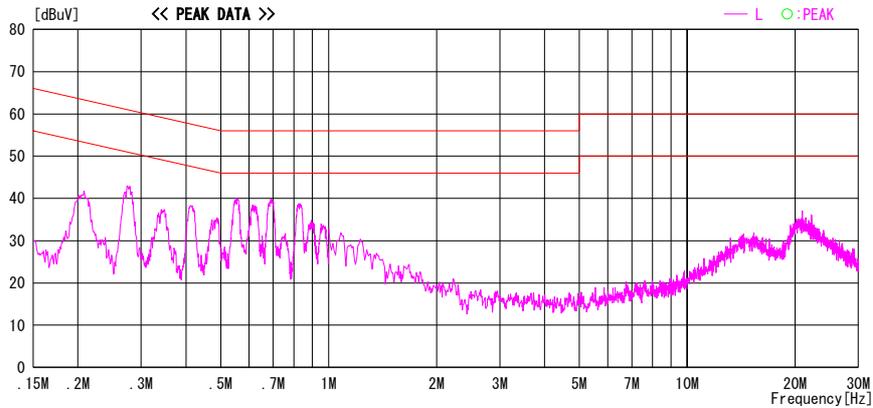
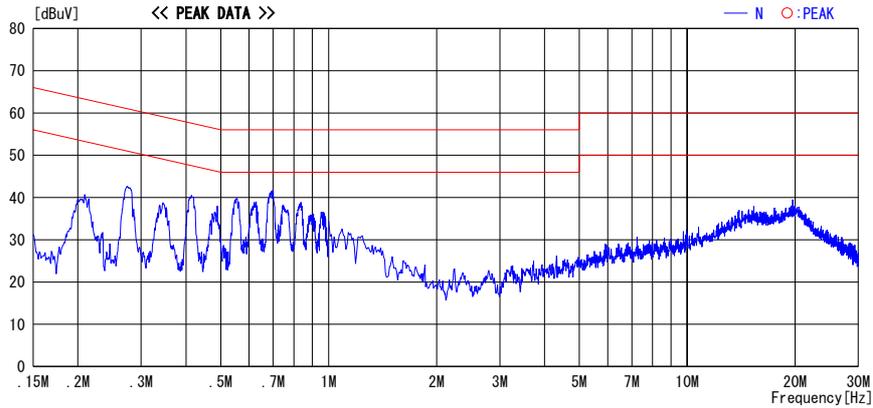


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCURATION: RESULT=READING+C.F (L I S N LOSS+CABLE LOSS)
 Except for the above table : adequate margin data below the limits.

6dB Bandwidth

UL Apex Co., Ltd.
Head Office EMC Lab. No.6 Shielded Room

Company : Panasonic Communications Co., Ltd.
Equipment : Network Camera
Model : BL-C131A
Sample No. : E.S.3
Power : AC120V/60Hz
Mode : Tx (ch L, M, H)
IEEE802.11b, 11g

REPORT NO : 27BE0234-HO
REGULATION : FCC15.247(a)(2)
TEST DISTANCE : -
DATE : 11/01/2006
TEMPERATURE : 24°C
HUMIDITY : 45%
ENGINEER : Takumi Shimada

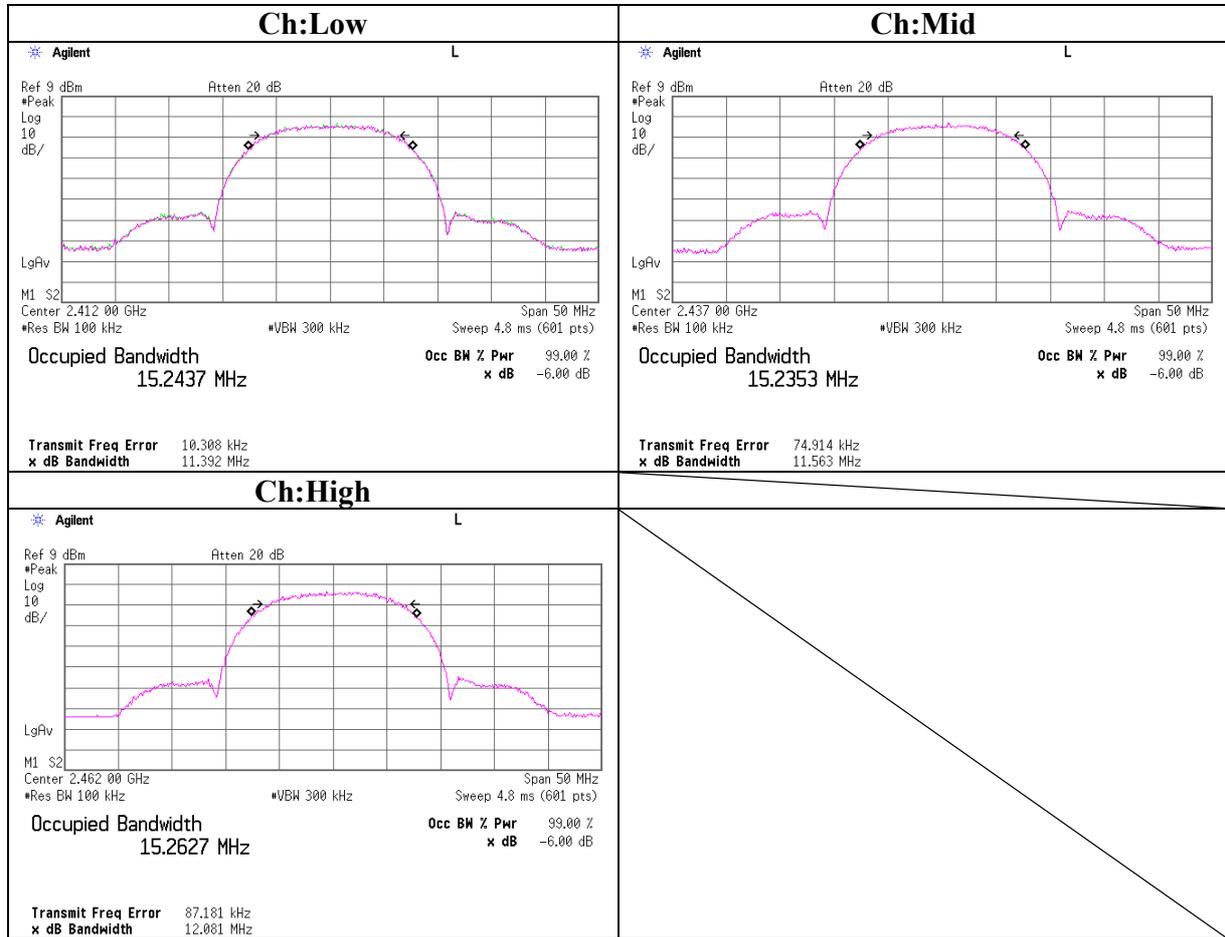
[IEEE 802.11b]

Ch	Freq. [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
Low	2412.0	11.392	>500
Mid	2437.0	11.563	>500
High	2462.0	12.081	>500

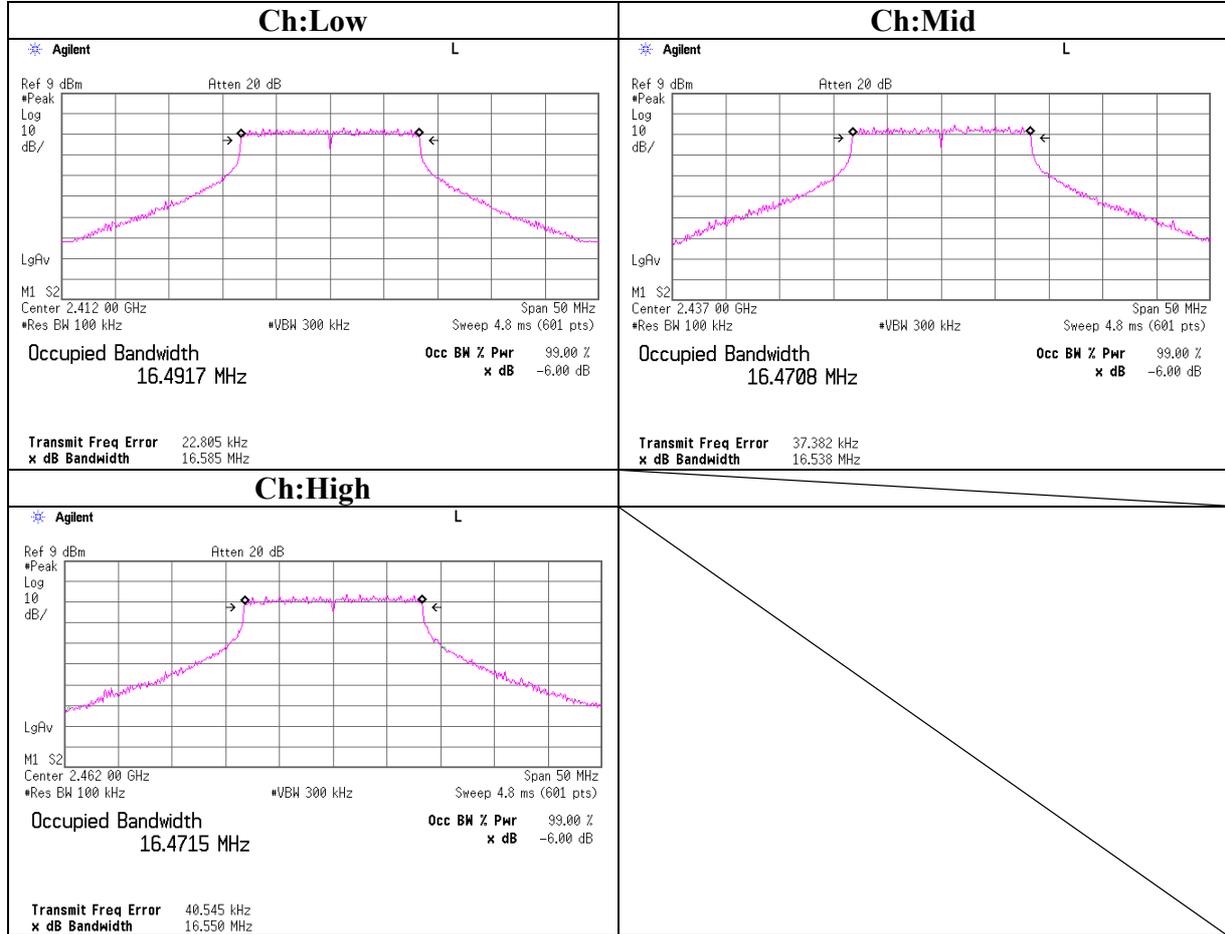
[IEEE 802.11g]

Ch	Freq. [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
Low	2412.0	16.585	>500
Mid	2437.0	16.538	>500
High	2462.0	16.550	>500

6dB Bandwidth
IEEE802.11b



6dB Bandwidth
IEEE802.11g



Maximum Peak Output Power

UL Apex Co., Ltd.
Head Office EMC Lab. No.6 Shielded Room

Company	: Panasonic Communications Co., Ltd.	REPORT NO	: 27BE0234-HO
Equipment	: Network Camera	REGULATION	: FCC15.247(b)(3)
Model	: BL-C131A	TEST DISTANCE	: -
Sample No.	: E.S.3	DATE	: 11/01/2006
Power	: AC120V/60Hz	TEMPERATURE	: 24°C
Mode	: Tx (ch1,6,11)	HUMIDITY	: 45%
		ENGINEER	: Takumi Shimada

[IEEE802.11b]

Ch	Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result		Limit		Margin [dB]
					[dBm]	[mW]	[dBm]	[mW]	
Low	2412.0	7.15	0.36	10.35	17.86	61.09	30.00	1000	12.14
Mid	2437.0	7.08	0.34	10.47	17.89	61.52	30.00	1000	12.11
High	2462.0	7.63	0.35	10.34	18.32	67.92	30.00	1000	11.68

Sample Calculation:

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

* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

[IEEE802.11g]

Ch	Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result		Limit		Margin [dB]
					[dBm]	[mW]	[dBm]	[mW]	
Low	2412.0	11.85	0.36	10.35	22.56	180.30	30.00	1000	7.44
Mid	2437.0	12.62	0.34	10.47	23.43	220.29	30.00	1000	6.57
High	2462.0	12.09	0.35	10.34	22.78	189.67	30.00	1000	7.22

Sample Calculation:

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

* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

Radiated Spurious Emission (below 1GHz)
(IEEE802.11b Tx, Ch: Low)

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

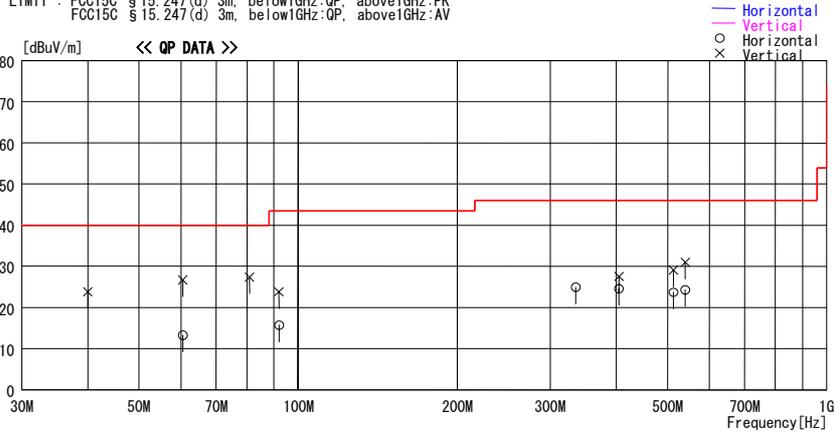
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/10/30 21:55:22

Applicant : Panasonic Communications Co., Ltd. Report No. : 27BE0234-HO
Kind of EUT : Network Camera Power : AC120V/60Hz
Model No. : BL-C131A Temp/C/Humi% : 24 deg. C / 62 %
Sample No. : E. S. 3 Operator : Takumi Shimada

Mode / Remarks : 11b Tx 2412MHz 11Mbps, Hor:Y Ver:X(Max-

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



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit	Margin	Comment
			Factor [dB/m]	Gain [dB]					[dBuV/m]	[dB]	
40.000	32.0	QP	13.8	-22.0	23.8	93	102	Vert.	40.0	16.2	
60.510	40.2	QP	8.2	-21.7	26.7	220	100	Vert.	40.0	13.3	
60.520	26.8	QP	8.2	-21.7	13.3	105	300	Hori.	40.0	26.7	
80.950	42.0	QP	6.8	-21.4	27.4	224	100	Vert.	40.0	12.6	
91.990	37.1	QP	8.0	-21.3	23.8	124	100	Vert.	43.5	19.7	
92.000	29.0	QP	8.0	-21.3	15.7	106	349	Hori.	43.5	27.8	
335.010	28.5	QP	15.8	-19.4	24.9	131	100	Hori.	46.0	21.1	
404.702	26.5	QP	17.9	-19.8	24.6	323	100	Hori.	46.0	21.4	
404.880	29.5	QP	17.9	-19.8	27.6	0	100	Vert.	46.0	18.4	
513.020	30.5	QP	18.6	-20.0	29.1	338	100	Vert.	46.0	16.9	
540.010	32.0	QP	18.9	-19.9	31.0	330	100	Vert.	46.0	15.0	
513.020	25.1	QP	18.6	-20.0	23.7	109	100	Hori.	46.0	22.3	
540.030	25.3	QP	18.9	-19.9	24.3	111	189	Hori.	46.0	21.7	

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN

Radiated Spurious Emission (below 1GHz)
(IEEE802.11b Tx, Ch: Mid)

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

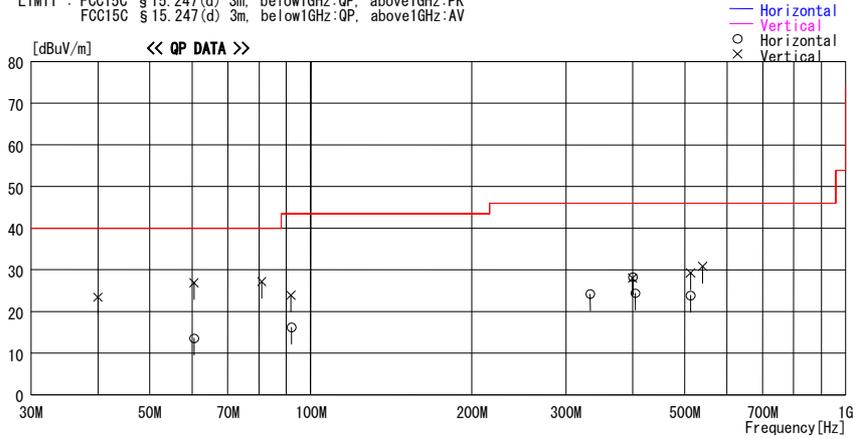
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2006/10/30 22:45:29

Applicant : Panasonic Communications Co., Ltd. Report No. : 27BE0234-HO
Kind of EUT : Network Camera Power : AC120V/60Hz
Model No. : BL-C131A Temp°C/Humi% : 24 deg. C / 62 %
Sample No. : E. S. 3 Operator : Takumi Shimada

Mode / Remarks : 11b Tx 2437MHz 11Mbps, Hor:Y Ver:X(Max-

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



Frequency [MHz]	Reading [dBUV]	DET	Antenna		Level [dBUV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBUV/m]	Margin [dB]	Comment
			Factor [dB/m]	Loss&Gain [dB]							
60.510	27.1	QP	8.2	-21.7	13.6	105	300	Hori.	40.0	26.4	
92.010	29.5	QP	8.0	-21.3	16.2	106	349	Hori.	43.5	27.3	
332.980	27.9	QP	15.7	-19.4	24.2	131	100	Hori.	46.0	21.8	
400.090	30.1	QP	17.9	-19.8	28.2	323	100	Hori.	46.0	17.8	
513.010	25.2	QP	18.6	-20.0	23.8	109	100	Hori.	46.0	22.2	
404.680	26.3	QP	17.9	-19.8	24.4	323	189	Hori.	46.0	21.6	
40.000	31.6	QP	13.8	-22.0	23.4	93	102	Vert.	40.0	16.6	
60.520	40.4	QP	8.2	-21.7	26.9	220	100	Vert.	40.0	13.1	
80.990	41.8	QP	6.8	-21.4	27.2	224	100	Vert.	40.0	12.8	
91.830	37.2	QP	8.0	-21.3	23.9	124	100	Vert.	43.5	19.6	
400.010	29.9	QP	17.9	-19.8	28.0	359	100	Vert.	46.0	18.0	
513.000	30.7	QP	18.6	-20.0	29.3	338	100	Vert.	46.0	16.7	
540.000	31.8	QP	18.9	-19.9	30.8	330	100	Vert.	46.0	15.2	

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN

Radiated Spurious Emission (below 1GHz)
(IEEE802.11b Tx, Ch: High)

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

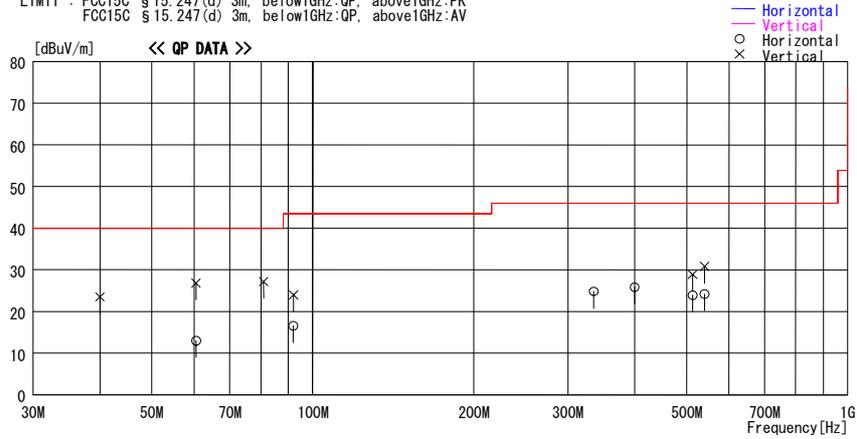
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2006/10/30 22:10:12

Applicant : Panasonic Communications Co., Ltd. Report No. : 27BE0234-HO
Kind of EUT : Network Camera Power : AC120V/60Hz
Model No. : BL-C131A Temp°C/Humi% : 24 deg. C / 62 %
Sample No. : E. S. 3 Operator : Takumi Shimada

Mode / Remarks : 11b Tx 2462MHz 11Mbps, Hor:Y Ver:X(Max-

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



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Loss&Gain [dB]							
40.000	31.7	QP	13.8	-22.0	23.5	93	102	Vert.	40.0	16.5	
60.510	26.5	QP	8.2	-21.7	13.0	105	300	Hori.	40.0	27.0	
60.520	40.3	QP	8.2	-21.7	26.8	220	100	Vert.	40.0	13.2	
80.950	41.8	QP	6.8	-21.4	27.2	224	100	Vert.	40.0	12.8	
91.930	29.9	QP	8.0	-21.3	16.6	106	349	Hori.	43.5	26.9	
92.050	37.2	QP	8.1	-21.3	24.0	124	100	Vert.	43.5	19.5	
335.010	28.4	QP	15.8	-19.4	24.8	131	100	Hori.	46.0	21.2	
400.010	27.8	QP	17.9	-19.8	25.9	323	100	Hori.	46.0	20.1	
513.020	25.3	QP	18.6	-20.0	23.9	109	100	Hori.	46.0	22.1	
513.020	30.3	QP	18.6	-20.0	28.9	338	100	Vert.	46.0	17.1	
540.020	25.2	QP	18.9	-19.9	24.2	111	189	Hori.	46.0	21.8	
540.000	31.8	QP	18.9	-19.9	30.8	330	100	Vert.	46.0	15.2	

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN

Radiated Spurious Emission (below 1GHz)
(IEEE802.11g Tx, Ch: Low)

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

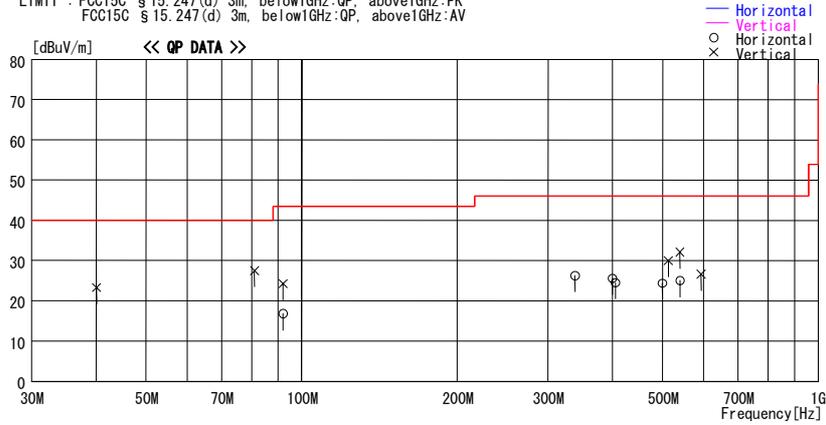
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2006/10/30 23:04:05

Applicant : Panasonic Communications Co., Ltd. Report No. : 27BE0234-HO
Kind of EUT : Network Camera Power : AC120V/60Hz
Model No. : BL-C131A Temp°C/Humi% : 24 deg. C / 62 %
Sample No. : E. S. 3 Operator : Takumi Shimada

Mode / Remarks : 11g Tx 2412MHz, Hor:Y Ver:X(Max-axis)

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



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Gain [dB]							
40.060	31.5	QP	13.8	-22.0	23.3	93	102	Vert.	40.0	16.7	
81.020	42.1	QP	6.8	-21.4	27.5	224	100	Vert.	40.0	12.5	
92.025	37.6	QP	8.0	-21.3	24.3	124	100	Vert.	43.5	19.2	
92.040	30.0	QP	8.1	-21.3	16.8	106	349	Hori.	43.5	26.7	
338.530	29.9	QP	15.9	-19.5	26.3	359	100	Hori.	46.0	19.7	
400.010	27.5	QP	17.9	-19.8	25.6	323	100	Hori.	46.0	20.4	
405.040	26.4	QP	17.9	-19.8	24.5	323	100	Hori.	46.0	21.5	
499.544	26.0	QP	18.5	-20.1	24.4	110	100	Hori.	46.0	21.6	
513.020	31.4	QP	18.6	-20.0	30.0	338	110	Vert.	46.0	16.0	
540.035	33.1	QP	18.9	-19.9	32.1	330	100	Vert.	46.0	13.9	
540.390	26.0	QP	18.9	-19.9	25.0	189	111	Hori.	46.0	21.0	
594.015	26.8	QP	19.4	-19.6	26.6	298	100	Vert.	46.0	19.4	

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN

Radiated Spurious Emission (below 1GHz)
(IEEE802.11g Tx, Ch: Mid)

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

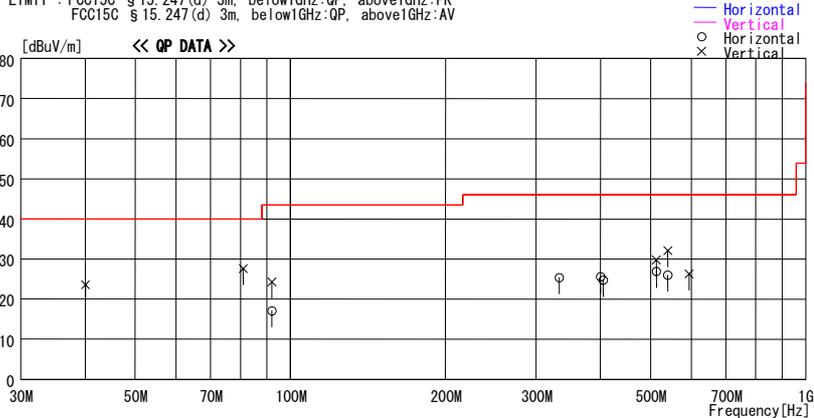
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/10/30 23:59:30

Applicant : Panasonic Communications Co., Ltd. Report No. : 27BE0234-HO
Kind of EUT : Network Camera Power : AC120V/60Hz
Model No. : BL-C131A Temp/C/Humi% : 24 deg. C / 62 %
Sample No. : E. S. 3 Operator : Takumi Shimada

Mode / Remarks: 11g Tx 2437MHz, Hor:Y Ver:X (Max-axis)

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



Frequency [MHz]	Reading [dBuV]	DET	Antenna Factor [dB/m]	Loss& Gain [dB]	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
92.031	30.3	QP	8.1	-21.3	17.1	349	106	Hori.	43.5	26.4	
332.480	29.1	QP	15.7	-19.4	25.4	131	100	Hori.	46.0	20.6	
400.000	27.5	QP	17.9	-19.8	25.6	323	100	Hori.	46.0	20.4	
405.032	26.6	QP	17.9	-19.8	24.7	323	100	Hori.	46.0	21.3	
513.020	28.3	QP	18.6	-20.0	26.9	109	100	Hori.	46.0	19.1	
540.030	27.0	QP	18.9	-19.9	26.0	111	189	Hori.	46.0	20.0	
40.052	31.8	QP	13.8	-22.0	23.6	93	102	Vert.	40.0	16.4	
81.011	42.2	QP	6.8	-21.4	27.6	224	100	Vert.	40.0	12.4	
92.021	37.6	QP	8.0	-21.3	24.3	124	100	Vert.	43.5	19.2	
513.010	31.2	QP	18.6	-20.0	29.8	338	110	Vert.	46.0	16.2	
540.029	33.1	QP	18.9	-19.9	32.1	330	100	Vert.	46.0	13.9	
594.020	26.5	QP	19.4	-19.6	26.3	298	100	Vert.	46.0	19.7	

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN

Radiated Spurious Emission (below 1GHz)
(IEEE802.11g Tx, Ch: High)

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

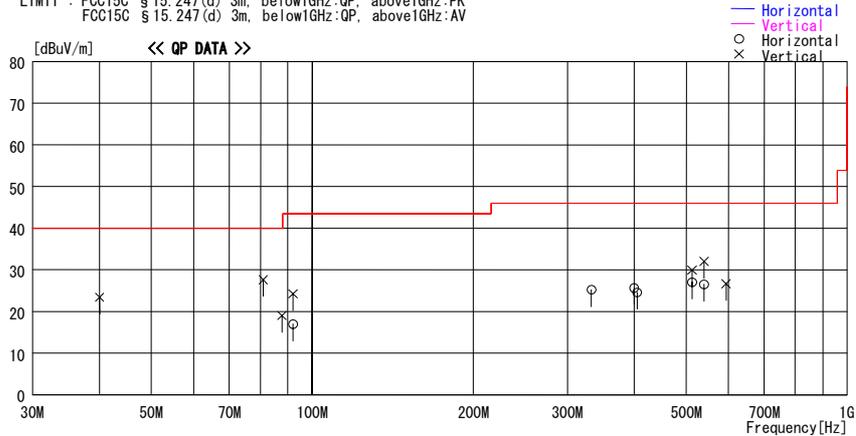
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/10/31 00:11:37

Applicant : Panasonic Communications Co., Ltd. Report No. : 27BE0234-HO
Kind of EUT : Network Camera Power : AC120V/60Hz
Model No. : BL-C131A Temp°C/Humi% : 24 deg. C / 62 %
Sample No. : E. S. 3 Operator : Takumi Shimada

Mode / Remarks : 11g Tx 2462MHz, Hor:Y Ver:X(Max-axis)

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



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Gain [dB]							
40.050	31.6	QP	13.8	-22.0	23.4	93	102	Vert.	40.0	16.6	
81.010	42.2	QP	6.8	-21.4	27.6	224	100	Vert.	40.0	12.4	
87.770	33.0	QP	7.3	-21.3	19.0	124	100	Vert.	40.0	21.0	
92.030	37.4	QP	8.1	-21.3	24.2	124	100	Vert.	43.5	19.3	
92.040	30.1	QP	8.1	-21.3	16.9	106	349	Hori.	43.5	26.6	
332.520	29.0	QP	15.7	-19.4	25.3	131	100	Hori.	46.0	20.8	
400.000	27.6	QP	17.9	-19.8	25.7	323	100	Hori.	46.0	20.3	
405.040	26.5	QP	17.9	-19.8	24.6	323	100	Hori.	46.0	21.4	
513.020	31.3	QP	18.6	-20.0	29.9	338	110	Vert.	46.0	16.1	
513.025	28.5	QP	18.6	-20.0	27.1	109	100	Hori.	46.0	18.9	
540.039	33.0	QP	18.9	-19.9	32.0	330	100	Vert.	46.0	14.0	
540.040	27.5	QP	18.9	-19.9	26.5	111	189	Hori.	46.0	19.5	
594.020	26.9	QP	19.4	-19.6	26.7	298	100	Vert.	46.0	19.3	

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN

Radiated Spurious Emission (above 1GHz)
(IEEE802.11b Tx, Ch: Low)

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

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

Company : Panasonic Communications Co., Ltd. REPORT NO : 27BE0234-HO
Equipment : Network Camera REGULATION : FCC15.247(d)
Model : BL-C131A TEST DISTANCE : 3/1m
Sample No. : E.S.3 DATE : 10/30/2006
Power : AC 120 V / 60 Hz TEMPERATURE : 24deg.C
Mode : WLAN 11b 11Mbps 2412MHz HUMIDITY : 62%
Remarks : Hor Y , Ver X-axis ENGINEER : Takumi Shimada

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	51.1	51.1	30.6	32.3	3.5	0.0	52.9	52.9	74.0	21.1	21.1
2	3216.0	47.5	49.2	31.6	32.3	4.0	0.0	50.8	52.5	74.0	23.2	21.5
3	4824.0	41.9	41.2	35.8	31.6	4.8	0.1	51.0	50.3	74.0	23.0	23.7
4	7236.0	41.2	41.6	37.6	31.4	5.6	0.4	53.4	53.8	74.0	20.6	20.2
5	9648.0	43.3	43.6	36.6	31.9	6.4	0.7	55.1	55.4	74.0	18.9	18.6
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12060.0	-	-	-	-	-	-	-	-	74.0	-	-
7	14472.0	-	-	-	-	-	-	-	-	74.0	-	-
8	16884.0	-	-	-	-	-	-	-	-	74.0	-	-
9	19296.0	-	-	-	-	-	-	-	-	74.0	-	-
10	21708.0	-	-	-	-	-	-	-	-	74.0	-	-
11	24120.0	41.0	41.1	39.1	30.7	10.7	0.0	50.6	50.7	74.0	23.4	23.3

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	38.4	38.3	30.6	32.3	3.5	0.0	40.2	40.1	54.0	13.8	13.9
2	3216.0	42.8	44.8	31.6	32.3	4.0	0.0	46.1	48.1	54.0	7.9	5.9
3	4824.0	30.0	30.0	35.8	31.6	4.8	0.1	39.1	39.1	54.0	14.9	14.9
4	7236.0	30.0	30.8	37.6	31.4	5.6	0.4	42.2	43.0	54.0	11.8	11.0
5	9648.0	31.0	30.9	36.6	31.9	6.4	0.7	42.8	42.7	54.0	11.2	11.3
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12060.0	-	-	-	-	-	-	-	-	54.0	-	-
7	14472.0	-	-	-	-	-	-	-	-	54.0	-	-
8	16884.0	-	-	-	-	-	-	-	-	54.0	-	-
9	19296.0	-	-	-	-	-	-	-	-	54.0	-	-
10	21708.0	-	-	-	-	-	-	-	-	54.0	-	-
11	24120.0	31.4	31.4	39.1	30.7	10.7	0.0	41.0	41.0	54.0	13.0	13.0

20dBc(Fundamental 2412MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2412.0	101.2	101.3	30.6	32.3	3.6	0.0	103.1	103.2	-	-	-
2	2400.0	59.1	60.1	30.6	32.3	3.6	0.0	61.0	62.0	Funda-20dB	22.1	21.2

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB
*Except for the above table : All other spurious emissions were less than 20dB for the limit.
*In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.
*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.
*Hi-Pass Filter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission (above 1GHz)
(IEEE802.11b Tx, Ch:Mid)

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

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

Company : Panasonic Communications Co., Ltd. REPORT NO : 27BE0234-HO
Equipment : Network Camera REGULATION : FCC15.247(d)
Model : BL-C131A TEST DISTANCE : 3/1m
Sample No. : E.S.3 DATE : 10/30/2006
Power : AC 120 V / 60 Hz TEMPERATURE : 24deg.C
Mode : WLAN 11b 11Mbps 2437MHz HUMIDITY : 62%
Remarks : Hor Y , Ver X-axis ENGINEER : Takumi Shimada

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1540.2	52.7	45.9	24.7	33.1	2.7	0.0	47.0	40.2	74.0	27.0	33.8
2	4874.0	45.3	42.5	36.1	31.6	4.8	0.0	54.6	51.8	74.0	19.4	22.2
3	7311.0	42.2	42.0	37.8	31.4	5.6	0.4	54.6	54.4	74.0	19.4	19.6
4	9748.0	42.9	43.3	36.6	32.0	6.4	0.7	54.6	55.0	74.0	19.4	19.0
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12185.0	-	-	-	-	-	-	-	-	74.0	-	-
6	14622.0	-	-	-	-	-	-	-	-	74.0	-	-
7	17059.0	-	-	-	-	-	-	-	-	74.0	-	-
8	19496.0	-	-	-	-	-	-	-	-	74.0	-	-
9	21933.0	-	-	-	-	-	-	-	-	74.0	-	-
10	24370.0	42.9	43.5	39.1	30.6	10.7	0.0	52.6	53.2	74.0	21.4	20.8

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1540.2	43.6	34.6	24.7	33.1	2.7	0.0	37.9	28.9	54.0	16.1	25.1
2	4874.0	31.5	30.4	36.1	31.6	4.8	0.0	40.8	39.7	54.0	13.2	14.3
3	7311.0	30.0	31.8	37.8	31.4	5.6	0.4	42.4	44.2	54.0	11.6	9.8
4	9748.0	30.5	31.1	36.6	32.0	6.4	0.7	42.2	42.8	54.0	11.8	11.2
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12185.0	-	-	-	-	-	-	-	-	54.0	-	-
6	14622.0	-	-	-	-	-	-	-	-	54.0	-	-
7	17059.0	-	-	-	-	-	-	-	-	54.0	-	-
8	19496.0	-	-	-	-	-	-	-	-	54.0	-	-
9	21933.0	-	-	-	-	-	-	-	-	54.0	-	-
10	24370.0	32.2	32.2	39.1	30.6	10.7	0.0	41.9	41.9	54.0	12.1	12.1

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2437.0	104.5	102.0	30.5	32.3	2.7	0.0	105.4	102.9	-	-	-
2	3249.4	51.1	42.6	31.6	32.3	4.0	0.0	54.4	45.9	Funda-20dB	31.0	37.0

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB
*Except for the above table : All other spurious emissions were less than 20dB for the limit.
*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.
*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.
*Hi-Pass Filter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission (above 1GHz)
(IEEE802.11b Tx, Ch: High)

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

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

Company : Panasonic Communications Co., Ltd. REPORT NO : 27BE0234-HO
Equipment : Network Camera REGULATION : FCC15.247(d)
Model : BL-C131A TEST DISTANCE : 3/1m
Sample No. : E.S.3 DATE : 10/30/2006
Power : AC 120 V/60 Hz TEMPERATURE : 24deg.C
Mode : WLAN 11b 11Mbps 2462MHz HUMIDITY : 62%
Remarks : Hor Y, Ver X-axis ENGINEER : Takumi Shimada

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1578.2	55.0	52.2	25.3	33.0	2.7	0.0	50.0	47.2	74.0	24.0	26.8
2	2483.5	55.4	53.5	30.4	32.3	3.5	0.0	57.0	55.1	74.0	17.0	18.9
3	4924.0	42.3	43.1	36.4	31.6	4.9	0.0	52.0	52.8	74.0	22.0	21.2
4	7386.0	42.4	40.7	38.0	31.4	5.7	0.5	55.2	53.5	74.0	18.8	20.5
5	9848.0	43.1	41.8	36.5	32.0	6.4	0.7	54.7	53.4	74.0	19.3	20.6
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12310.0	-	-	-	-	-	-	-	-	74.0	-	-
7	14772.0	-	-	-	-	-	-	-	-	74.0	-	-
8	17234.0	-	-	-	-	-	-	-	-	74.0	-	-
9	19696.0	-	-	-	-	-	-	-	-	74.0	-	-
10	22158.0	-	-	-	-	-	-	-	-	74.0	-	-
11	24620.0	41.4	42.2	39.2	30.6	10.8	0.0	51.3	52.1	74.0	22.7	21.9

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1578.2	45.0	41.5	25.3	33.0	2.7	0.0	40.0	36.5	54.0	14.0	17.5
2	2483.5	41.4	40.6	30.4	32.3	3.5	0.0	43.0	42.2	54.0	11.0	11.8
3	4924.0	30.2	30.8	36.4	31.6	4.9	0.0	39.9	40.5	54.0	14.1	13.5
4	7386.0	30.6	29.0	38.0	31.4	5.7	0.5	43.4	41.8	54.0	10.6	12.2
5	9848.0	30.7	29.9	36.5	32.0	6.4	0.7	42.3	41.5	54.0	11.7	12.5
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12310.0	-	-	-	-	-	-	-	-	54.0	-	-
7	14772.0	-	-	-	-	-	-	-	-	54.0	-	-
8	17234.0	-	-	-	-	-	-	-	-	54.0	-	-
9	19696.0	-	-	-	-	-	-	-	-	54.0	-	-
10	22158.0	-	-	-	-	-	-	-	-	54.0	-	-
11	24620.0	31.9	32.0	39.2	30.6	10.8	0.0	41.8	41.9	54.0	12.2	12.1

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2462.0	104.8	103.2	30.5	32.3	3.5	0.0	106.5	104.9	-	-	-
2	3282.6	42.0	49.2	31.6	32.3	4.0	0.0	45.3	52.5	Funda-20dB	41.2	32.4

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB
*Except for the above table : All other spurious emissions were less than 20dB for the limit.
*In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.
*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.
*Hi-Pass Filter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission (above 1GHz)
(IEEE802.11g Tx, Ch: Low)

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

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

Company	: Panasonic Communications Co., Ltd.	REPORT NO	: 27BE0234-HO
Equipment	: Network Camera	REGULATION	: FCC15.247(d)
Model	: BL-C131A	TEST DISTANCE	: 3/1m
Sample No.	: E.S.3	DATE	: 10/30/2006
Power	: AC 120 V / 60 Hz	TEMPERATURE	: 24deg.C
Mode	: WLAN 11g 54Mbps 2412MHz	HUMIDITY	: 62%
Remarks	: Hor Y , Ver X-axis	ENGINEER	: Takumi Shimada

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	65.8	65.3	30.6	32.3	3.5	0.0	67.6	67.1	74.0	6.4	6.9
2	4824.0	48.1	41.8	35.8	31.6	4.8	0.1	57.2	50.9	74.0	16.8	23.1
3	7236.0	49.1	43.8	37.6	31.4	5.6	0.4	61.3	56.0	74.0	12.7	18.0
4	9648.0	49.8	43.1	36.6	31.9	6.4	0.7	61.6	54.9	74.0	12.4	19.1
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12060.0	-	-	-	-	-	-	-	-	74.0	-	-
6	14472.0	-	-	-	-	-	-	-	-	74.0	-	-
7	16884.0	-	-	-	-	-	-	-	-	74.0	-	-
8	19296.0	-	-	-	-	-	-	-	-	74.0	-	-
9	21708.0	-	-	-	-	-	-	-	-	74.0	-	-
10	24120.0	43.9	43.9	39.1	30.7	10.7	0.0	53.5	53.5	74.0	20.5	20.5

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	45.5	44.0	30.6	32.3	3.5	0.0	47.3	45.8	54.0	6.7	8.2
2	4824.0	36.6	30.1	35.8	31.6	4.8	0.1	45.7	39.2	54.0	8.3	14.8
3	7236.0	36.1	29.9	37.6	31.4	5.6	0.4	48.3	42.1	54.0	5.7	11.9
4	9648.0	36.8	30.7	36.6	31.9	6.4	0.7	48.6	42.5	54.0	5.4	11.5
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12060.0	-	-	-	-	-	-	-	-	54.0	-	-
6	14472.0	-	-	-	-	-	-	-	-	54.0	-	-
7	16884.0	-	-	-	-	-	-	-	-	54.0	-	-
8	19296.0	-	-	-	-	-	-	-	-	54.0	-	-
9	21708.0	-	-	-	-	-	-	-	-	54.0	-	-
10	24120.0	32.2	31.3	39.1	30.7	10.7	0.0	41.8	40.9	54.0	12.2	13.1

20dBc(Fundamental 2412MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2412.0	99.8	99.0	30.6	32.3	3.6	0.0	101.7	100.9	-	-	-
2	2400.0	70.2	69.3	30.6	32.3	0.6	0.0	69.1	68.2	Funda-20dB	12.6	12.7
3	3216.0	52.6	53.1	31.6	32.3	4.0	0.0	55.9	56.4	Funda-20dB	25.8	24.5

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB
*Except for the above table : All other spurious emissions were less than 20dB for the limit.
*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.
*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.
*Hi-Pass Filter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission (above 1GHz)
(IEEE802.11g Tx, Ch: Mid)

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

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

Company : Panasonic Communications Co., Ltd. REPORT NO : 27BE0234-HO
Equipment : Network Camera REGULATION : FCC15.247(d)
Model : BL-C131A TEST DISTANCE : 3/1m
Sample No. : E.S.3 DATE : 10/30/2006
Power : AC 120 V / 60 Hz TEMPERATURE : 24deg.C
Mode : WLAN 11g 54Mbps 2437MHz HUMIDITY : 62%
Remarks : Hor Y , Ver X-axis ENGINEER : Takumi Shimada

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1540.2	55.1	53.4	24.7	33.1	2.7	0.0	49.4	47.7	74.0	24.6	26.3
2	4874.0	41.2	42.0	36.1	31.6	4.8	0.0	50.5	51.3	74.0	23.5	22.7
3	7311.0	44.3	41.6	37.8	31.4	5.6	0.4	56.7	54.0	74.0	17.3	20.0
4	9748.0	43.0	41.5	36.6	32.0	6.4	0.7	54.7	53.2	74.0	19.3	20.8
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12185.0	-	-	-	-	-	-	-	-	74.0	-	-
6	14622.0	-	-	-	-	-	-	-	-	74.0	-	-
7	17059.0	-	-	-	-	-	-	-	-	74.0	-	-
8	19496.0	-	-	-	-	-	-	-	-	74.0	-	-
9	21933.0	-	-	-	-	-	-	-	-	74.0	-	-
10	24370.0	42.0	42.2	39.1	30.6	10.7	0.0	51.7	51.9	74.0	22.3	22.1

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1540.2	38.7	37.9	24.7	33.1	2.7	0.0	33.0	32.2	54.0	21.0	21.8
2	4874.0	30.1	30.1	36.1	31.6	4.8	0.0	39.4	39.4	54.0	14.6	14.6
3	7311.0	29.9	29.9	37.8	31.4	5.6	0.4	42.3	42.3	54.0	11.7	11.7
4	9748.0	30.3	30.4	36.6	32.0	6.4	0.7	42.0	42.1	54.0	12.0	11.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12185.0	-	-	-	-	-	-	-	-	54.0	-	-
6	14622.0	-	-	-	-	-	-	-	-	54.0	-	-
7	17059.0	-	-	-	-	-	-	-	-	54.0	-	-
8	19496.0	-	-	-	-	-	-	-	-	54.0	-	-
9	21933.0	-	-	-	-	-	-	-	-	54.0	-	-
10	24370.0	31.4	31.4	39.1	30.6	10.7	0.0	41.1	41.1	54.0	12.9	12.9

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2437.0	102.8	100.0	30.5	32.3	3.6	0.0	104.6	101.8	-	-	-
2	3249.4	50.5	40.1	31.6	32.3	4.0	0.0	53.8	43.4	Funda-20dB	30.8	38.4

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB
*Except for the above table : All other spurious emissions were less than 20dB for the limit.
*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.
*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.
*Hi-Pass Filter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission (above 1GHz)
(IEEE802.11g Tx, Ch: High)

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

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

Company	: Panasonic Communications Co., Ltd.	REPORT NO	: 27BE0234-HO
Equipment	: Network Camera	REGULATION	: FCC15.247(d)
Model	: BL-C131A	TEST DISTANCE	: 3/1m
Sample No.	: E.S.3	DATE	: 10/30/2006
Power	: AC 120 V / 60 Hz	TEMPERATURE	: 24deg.C
Mode	: WLAN 11g 54Mbps 2462MHz	HUMIDITY	: 62%
Remarks	: Hor Y , Ver X-axis	ENGINEER	: Takumi Shimada

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1578.2	61.1	51.4	25.3	33.0	2.7	0.0	56.1	46.4	74.0	17.9	27.6
2	2483.5	69.4	66.4	30.4	32.3	3.5	0.0	71.0	68.0	74.0	3.0	6.0
3	4924.0	41.7	42.5	36.4	31.6	4.9	0.0	51.4	52.2	74.0	22.6	21.8
4	7386.0	41.4	41.7	38.0	31.4	5.7	0.5	54.2	54.5	74.0	19.8	19.5
5	9848.0	43.1	42.5	36.5	32.0	6.4	0.7	54.7	54.1	74.0	19.3	19.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12310.0	-	-	-	-	-	-	-	-	74.0	-	-
7	14772.0	-	-	-	-	-	-	-	-	74.0	-	-
8	17234.0	-	-	-	-	-	-	-	-	74.0	-	-
9	19696.0	-	-	-	-	-	-	-	-	74.0	-	-
10	22158.0	-	-	-	-	-	-	-	-	74.0	-	-
11	24620.0	41.8	42.0	39.2	30.6	10.8	0.0	51.7	51.9	74.0	22.3	22.1

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1578.2	44.3	35.9	25.3	33.0	2.7	0.0	39.3	30.9	54.0	14.7	23.1
2	2483.5	50.3	46.8	30.4	32.3	3.5	0.0	51.9	48.4	54.0	2.1	5.6
3	4924.0	30.2	30.0	36.4	31.6	4.9	0.0	39.9	39.7	54.0	14.1	14.3
4	7386.0	30.5	29.9	38.0	31.4	5.7	0.5	43.3	42.7	54.0	10.7	11.3
5	9848.0	30.7	30.5	36.5	32.0	6.4	0.7	42.3	42.1	54.0	11.7	11.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12310.0	-	-	-	-	-	-	-	-	54.0	-	-
7	14772.0	-	-	-	-	-	-	-	-	54.0	-	-
8	17234.0	-	-	-	-	-	-	-	-	54.0	-	-
9	19696.0	-	-	-	-	-	-	-	-	54.0	-	-
10	22158.0	-	-	-	-	-	-	-	-	54.0	-	-
11	24620.0	32.0	31.9	39.2	30.6	10.8	0.0	41.9	41.8	54.0	12.1	12.2

20dBc(Fundamental 2462MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2462.0	101.9	100.2	30.5	32.3	3.5	0.0	103.6	101.9	-	-	-
2	3282.6	47.2	46.7	31.6	32.3	4.0	0.0	50.5	50.0	Funda-20dB	33.1	31.9

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

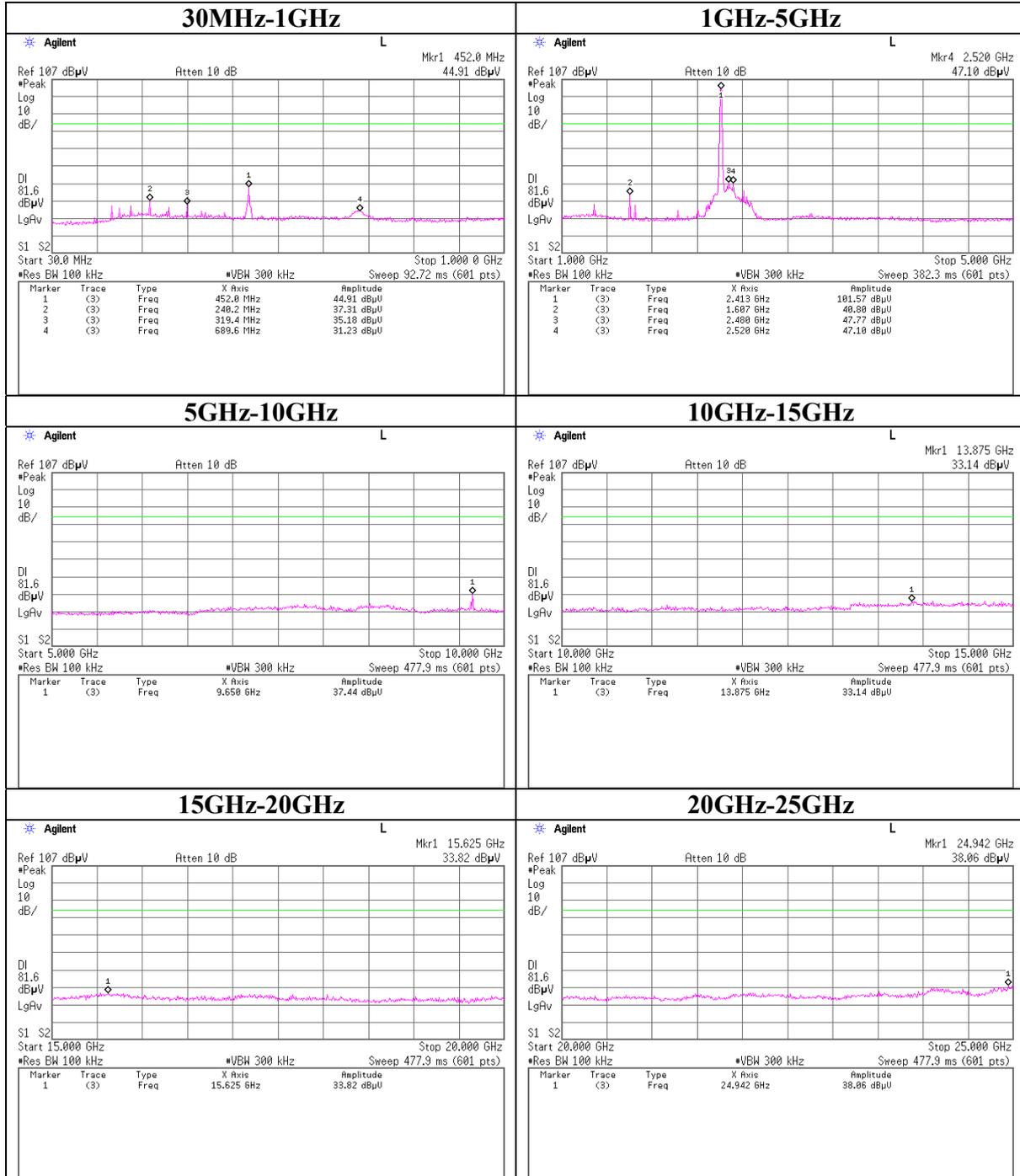
*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

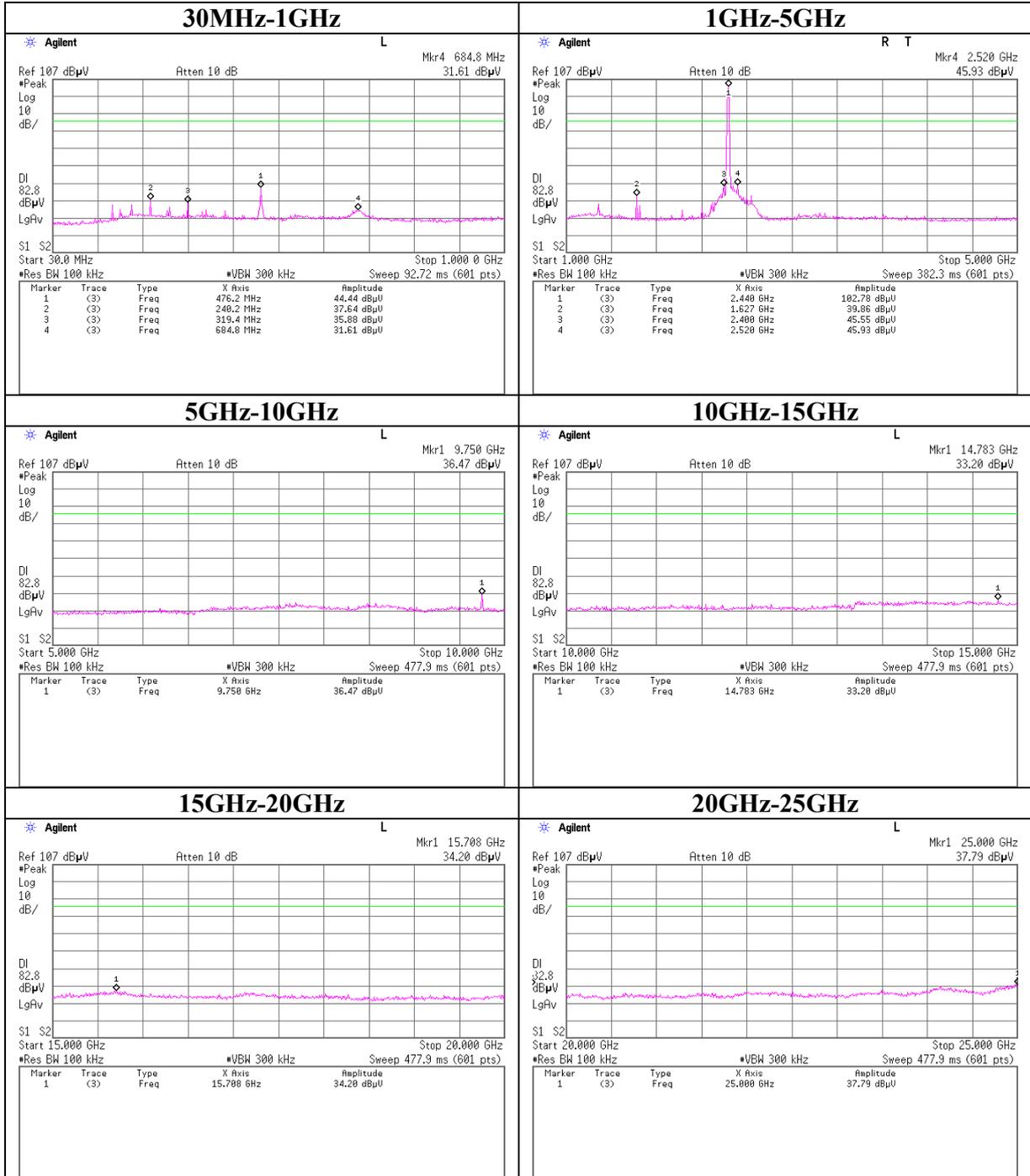
*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Filter was not used for factor 0.0dB of the above table.

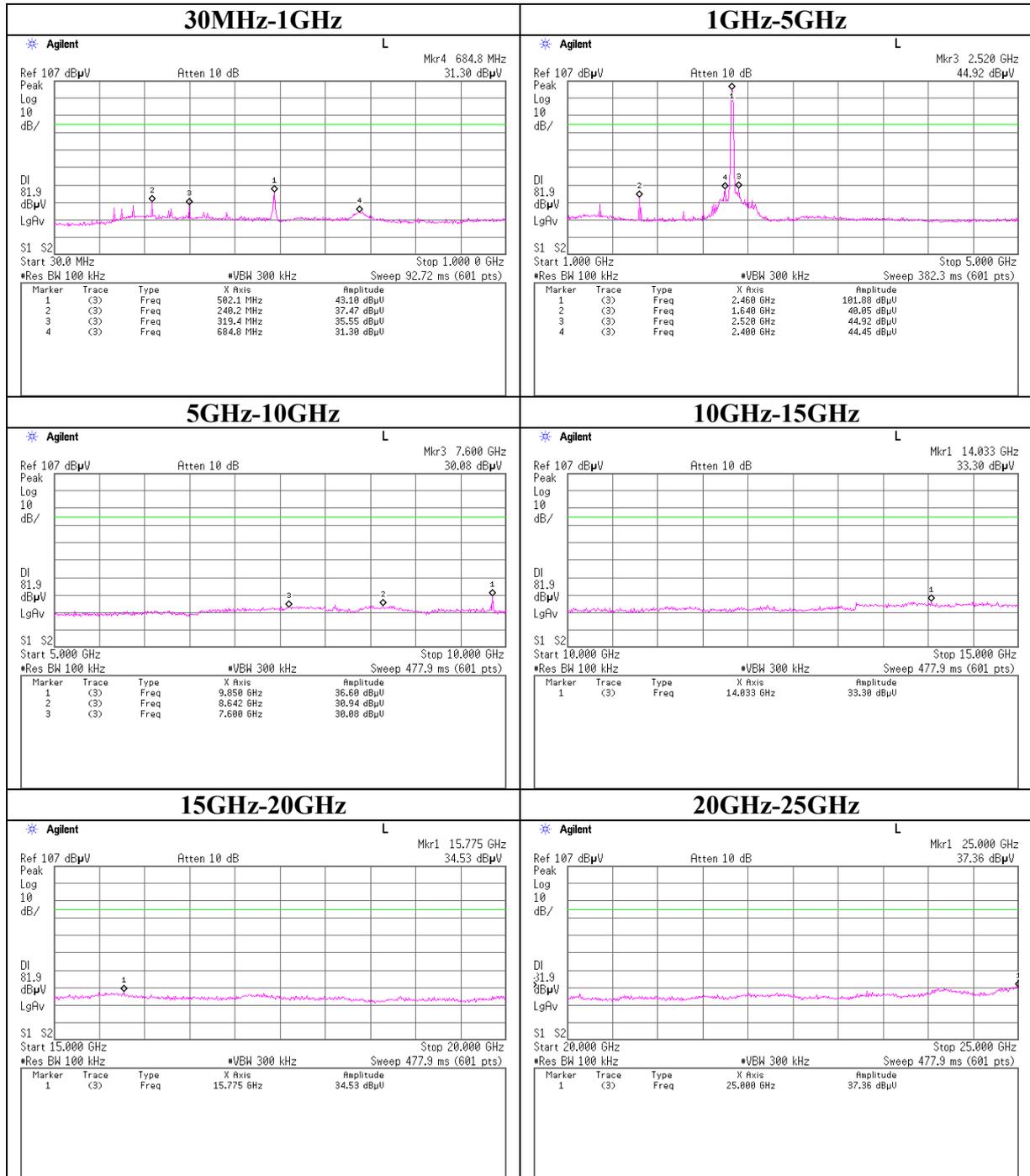
Conducted Spurious Emission
(IEEE802.11b Tx, Ch: Low)



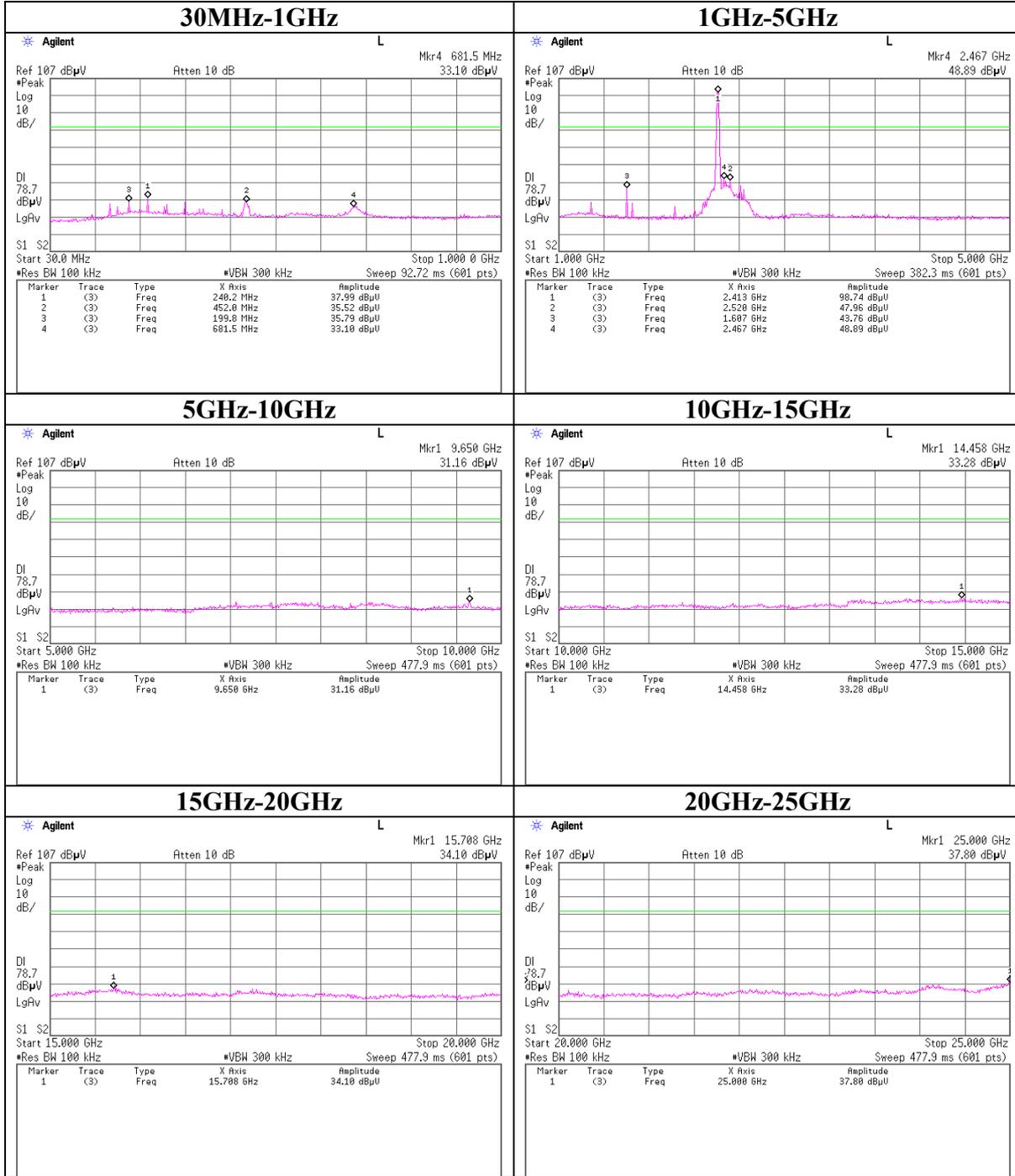
Conducted Spurious Emission
(IEEE 802.11b Tx, Ch: Mid)



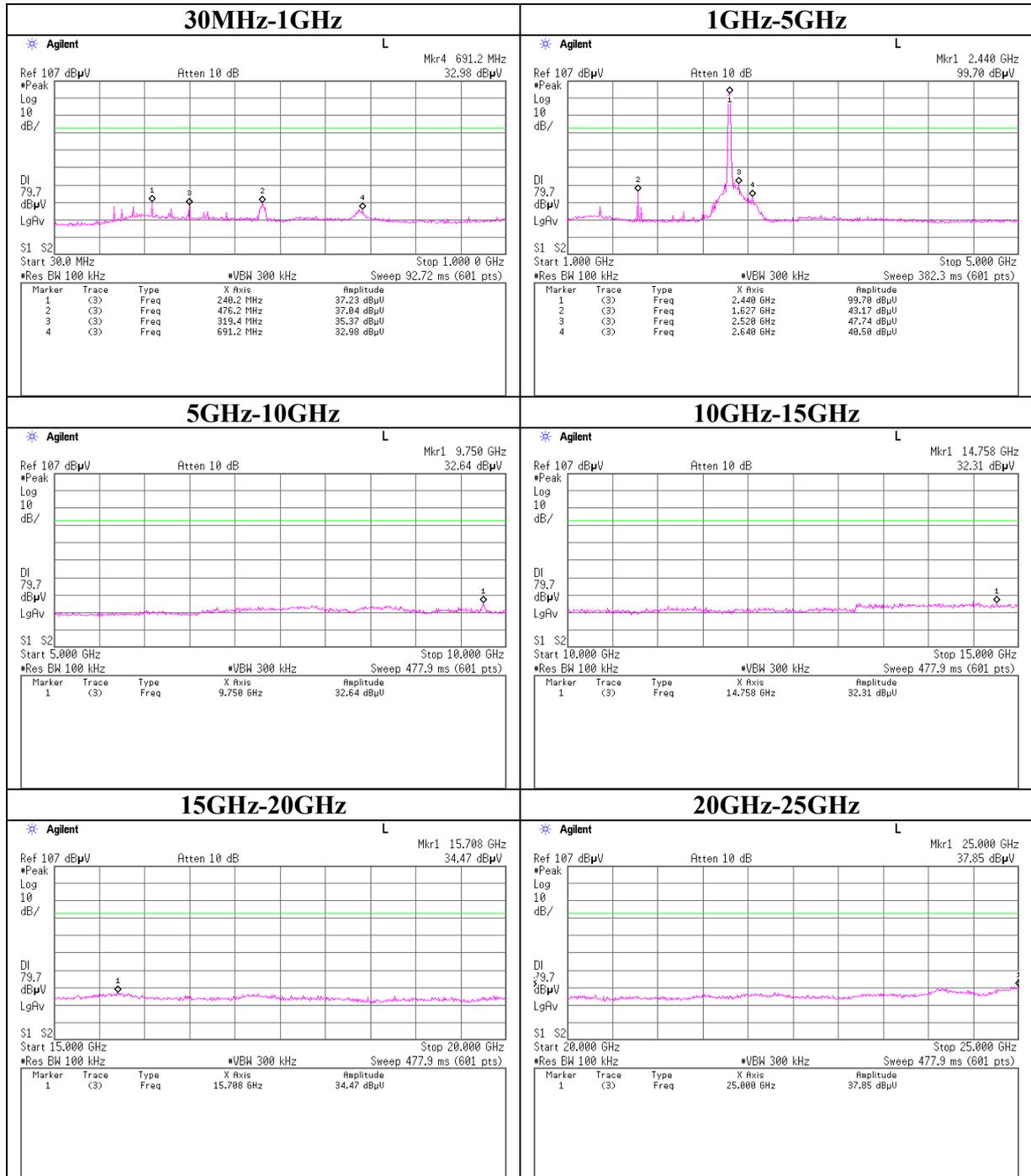
Conducted Spurious Emission
(IEEE 802.11b Tx, Ch:High)



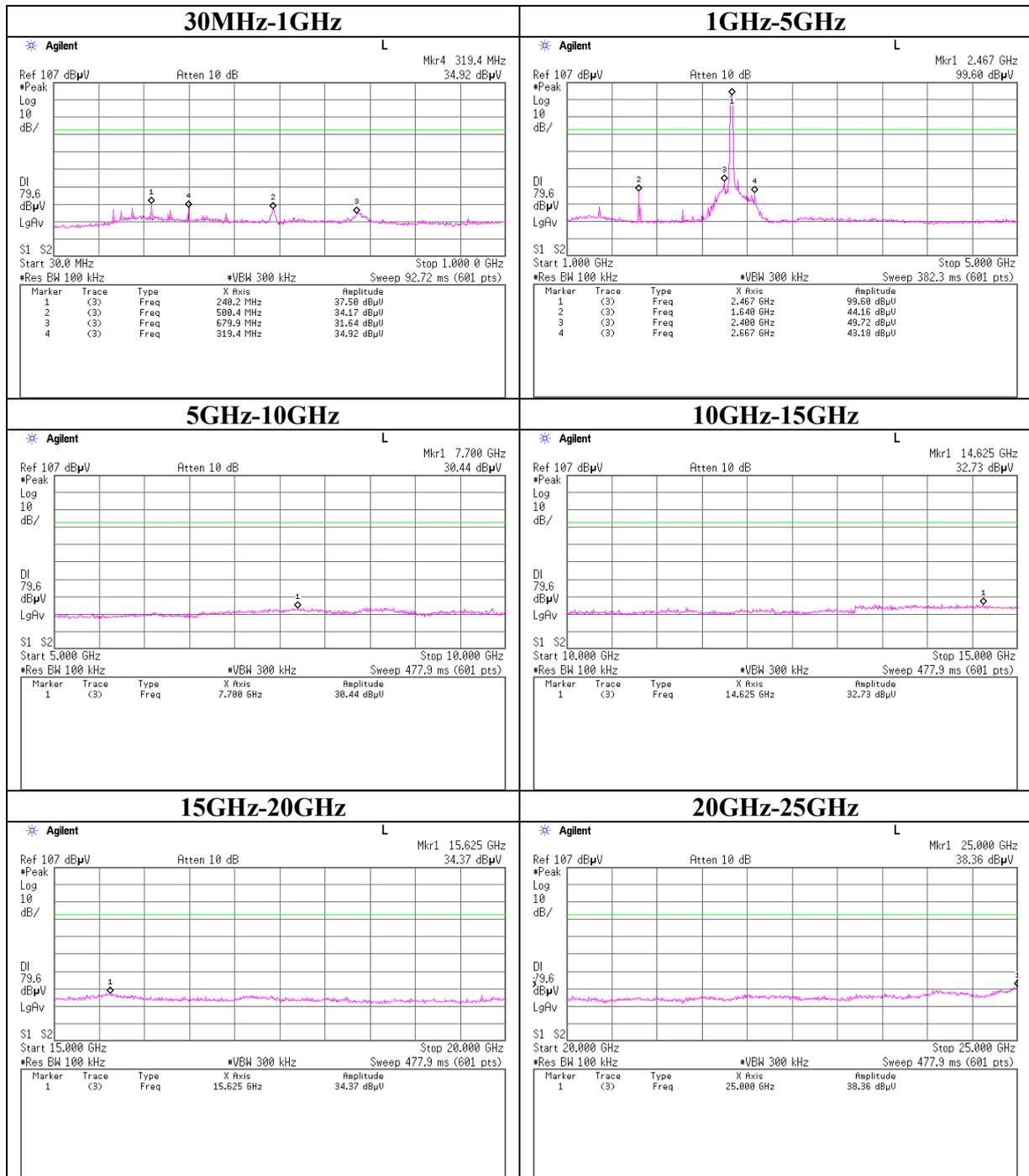
Conducted Spurious Emission
(IEEE 802.11g Tx, Ch: Low)



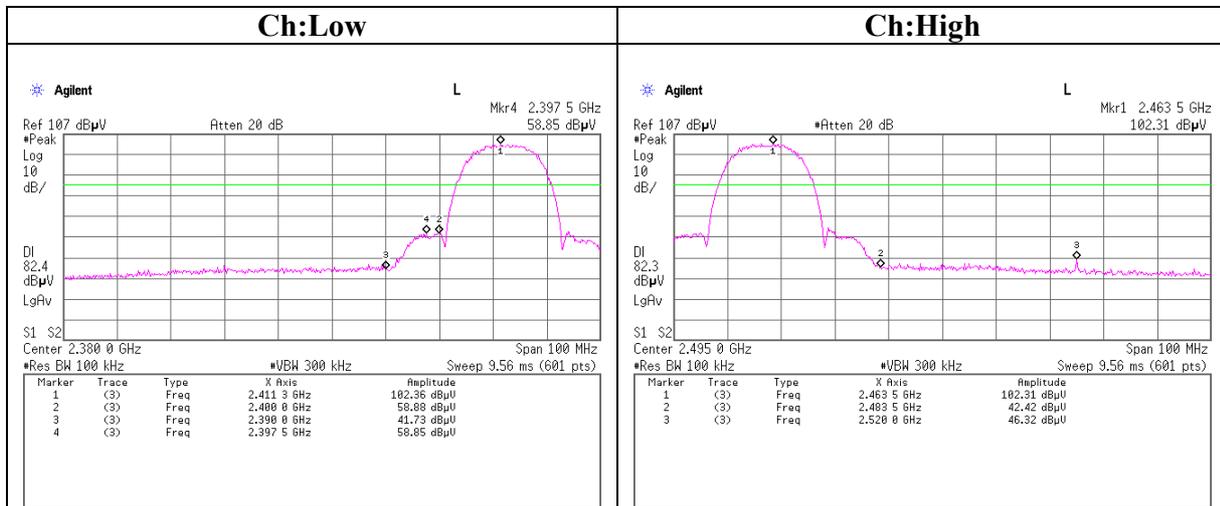
Conducted Spurious Emission
(IEEE 802.11g Tx, Ch: Mid)



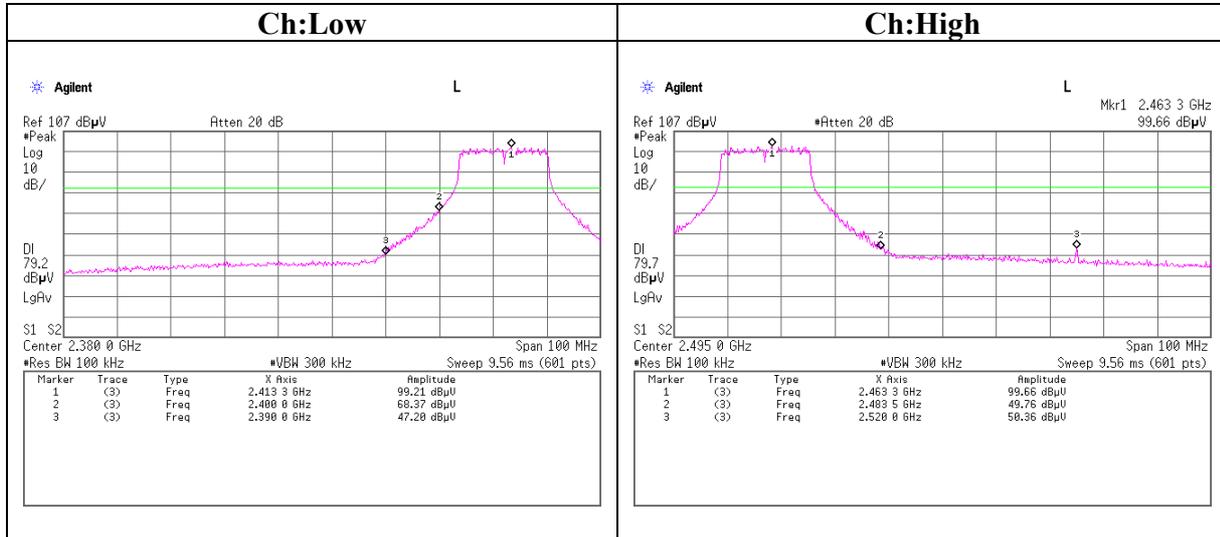
Conducted Spurious Emission
(IEEE 802.11g Tx, Ch: High)



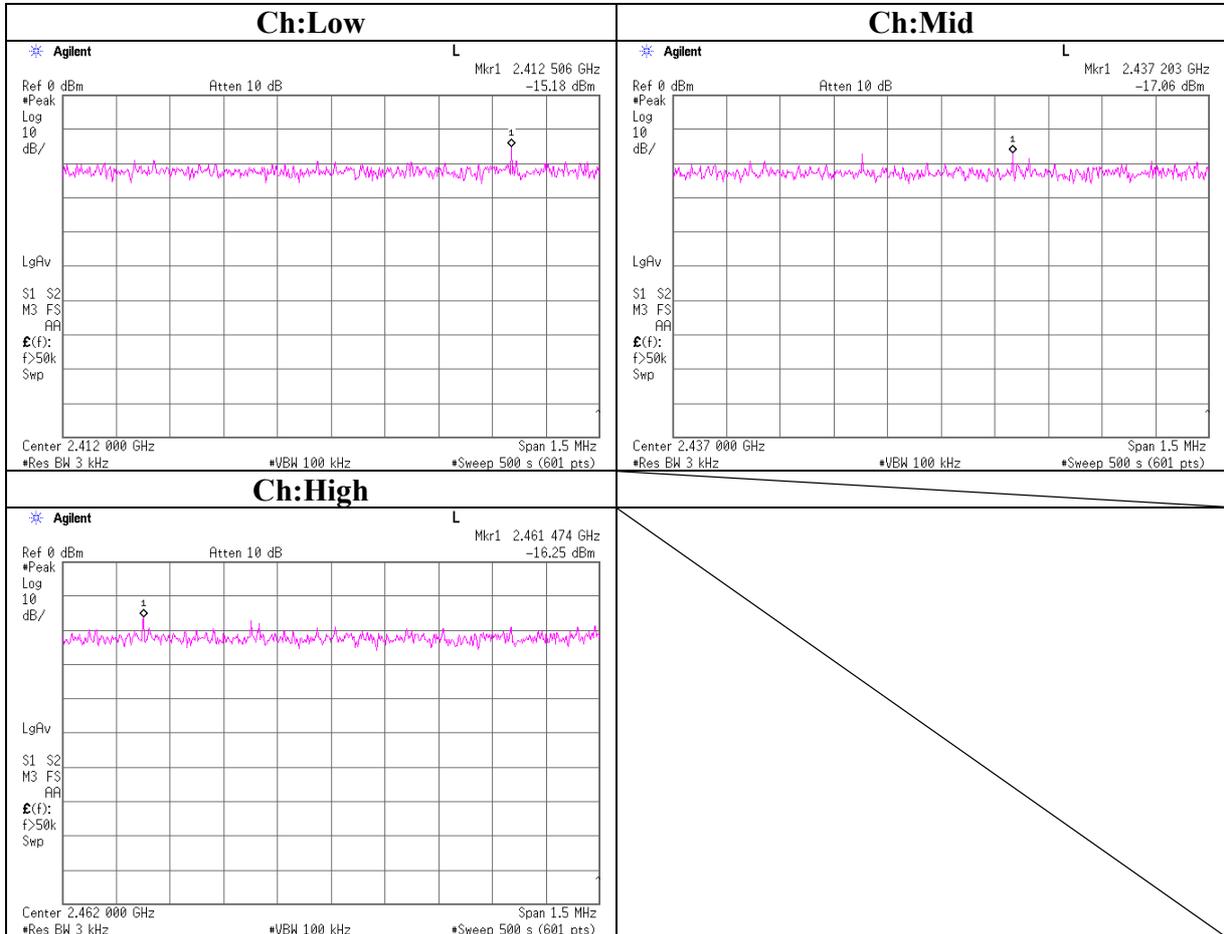
Conducted emission Band Edge compliance
IEEE 802.11b



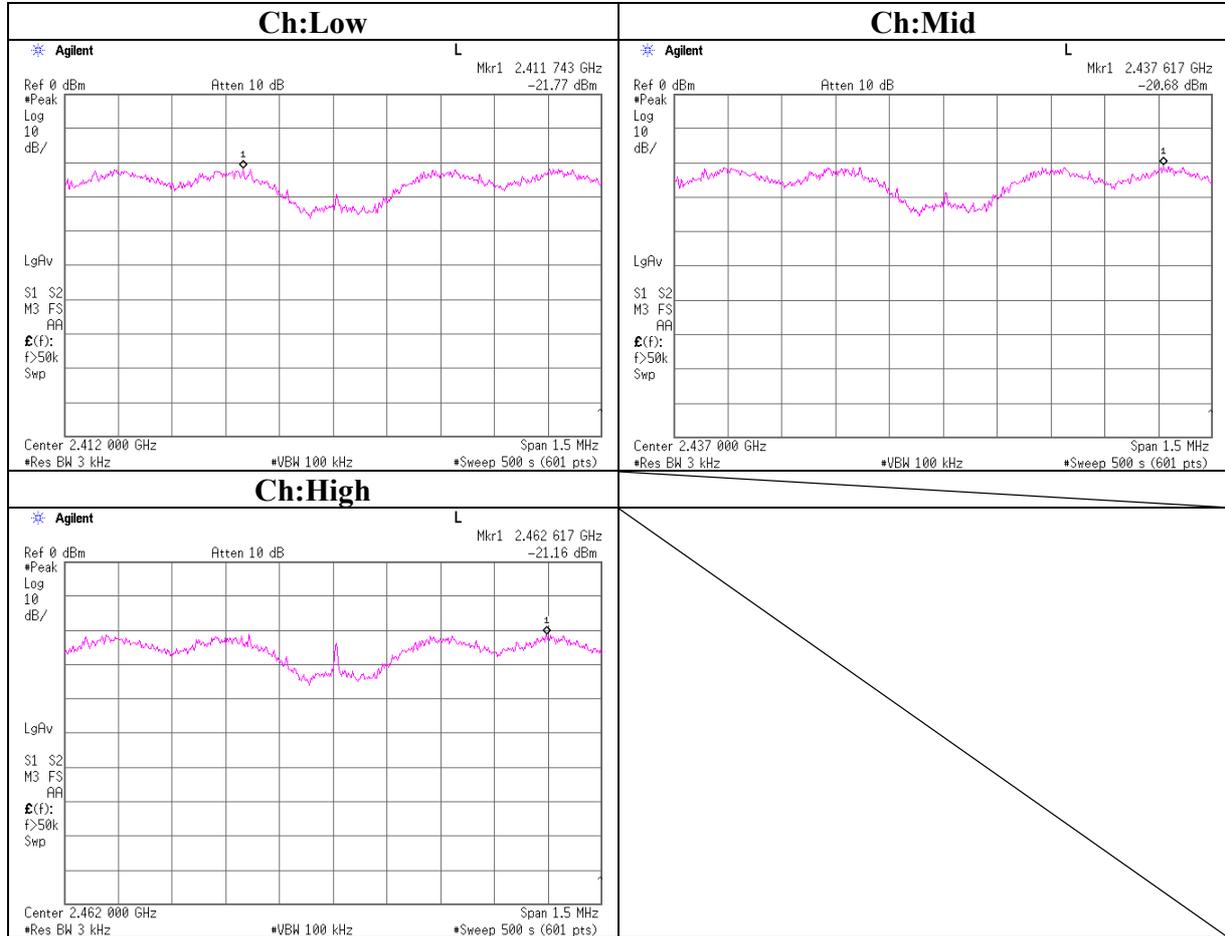
Conducted emission Band Edge compliance
IEEE 802.11g



Power Density
IEEE 802.11b



Power Density
IEEE 802.11g



APPENDIX 3:Test instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MAEC-02	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE / CE	2006/04/10 * 12
MRENT-39	Spectrum Analyzer	Advantest	R3273	RE / CE	2006/07/25 * 12
MHA-06	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2006/01/09 * 12
MCC-16	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX 104	RE	2006/02/02 * 12
MCC-47	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	RE	2006/08/29 * 12
MHF-06	High Pass Filter 3.5-24GHz	Tokimec	TF323DCA	RE	2006/05/20 * 12
MHA-02	Horn Antenna	EMCO	3160-09	RE	2006/01/09 * 12
MOS-02	Digital Humidity Indicator	N.T	NT-1800	RE / CE	2004/11/25 * 24
MJM-05	Measure	PROMART	SEN1955	RE / CE	-
MSTW-14	EMI measurement program	TSJ	TEPTO-DV	RE / CE	-
MTR-03	Test Receiver	Rohde & Schwarz	ESCI	RE / CE	2006/03/04 * 12
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	RE	2006/10/07 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2006/10/07 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	RE	2006/02/23 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	RE	2005/12/16 * 12
MPA-09	Pre Amplifier	Agilent	8447D	RE	2006/09/07 * 12
MPA-10	Pre Amplifier	Agilent	8449B	RE	2006/09/11 * 12
MBM-03	Barometer	Sunoh	SBR121	RE / CE	2006/02/13 * 36
MCC-13	Coaxial Cable	Fujikura/Agilent	-	CE	2006/02/23 * 12
MLS-06	LISN(AMN)	Schwarzbeck	NSLK8127	CE (AE)	2006/02/06 * 12
MLS-07	LISN(AMN)	Schwarzbeck	NSLK8127	CE (EUT)	2006/02/06 * 12
MTA-07	Terminator	MCL	BTRM-50	CE	2006/02/06 * 12
MRENT-36	Power Meter	Anritsu	ML2496A	AT	2006/04/25 * 12
MRENT-33	Power sensor	Anritsu	MA2411B	AT	2006/04/25 * 12
MSA-04	Spectrum Analyzer	Agilent	E4448A	AT	2006/06/02 * 12
MAT-22	Attenuator(10dB) DC-18GHz	Orient Microwave	BX10-0476-00	AT	2006/03/18 * 12
MOS-14	Thermo- Hygrometer	Custom	CTH-180	AT	2006/01/19 * 24
MAT-20	Attenuator(10dB)(a bove1GHz)	HIROSE ELECTRIC CO.,LTD.	AT-110	AT	2006/01/10 * 12

The expiration date of the calibration is the end of the expired month.

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

Test Item: CE: Conducted Emission RE: Radiated Emission
AT: Antenna Terminal Conducted test

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MF060b(14.06.06)