RADIO TEST REPORT

Test Report No. : 27FE0369-HO-B

Applicant	:	**Panasonic Communications Co., Ltd.**
Type of Equipment	:	**Cordless Telephone (Base)**
Model No.	:	**BB-GT1540**
FCC ID	:	**ACJ96NBB-GT1540**
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: February 20 to March 2, 2007

Tested by:

Kenichi Adachi
EMC Services

Makoto Kosaka
EMC Services

Approved by :

Hironobu Shimoji
Assistant Manager 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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SECTION 1: Client information

Company Name	Panasonic Communications Co., Ltd.
Brand name	Panasonic
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	Cordless Telephone (Base)
Model No.	BB-GT1540
Serial No.	Air001 for Radiated Emission and Conducted emission test Ant001 for Antenna Terminal Conducted test
Country of Manufacture	Japan
Rating	AC120V / 60Hz (AC Adaptor: PQLV203)
Condition of EUT	Engineering prototype (Not for sale: This sample is equivalent to mass-produced items.)
Receipt Date of Sample	February 19, 2007
Modification of EUT	No modification by the test lab.

2.2 Product Description

Equipment Type	Transceiver
Frequency band	Lower Channel : 5741.865MHz Upper Channel : 5838.187MHz
Bandwidth & Channel spacing	Bandwidth: 97MHz(96.322MHz) Channel spacing: 892kHz
Type of Modulation	FHSS
Antenna Type	Collinear-Antenna
Antenna Gain	3dBi Typ.
Power Supply (RF Part)	DC4V
Method of Frequency Generation	Synthesizer
Operation Clock	Main clock 13.824 MHz

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)
The EUT provides stable voltage(DC3.6V) constantly to RF Module regardless of input voltage. Therefore, the 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	**FCC:** ANSI C63.4:2003 7. AC powerline conducted emission measurements	**FCC:** Section 15.207	-	N/A	11.2dB 14.91693Hz N, QP	Complied
2	Carrier Frequency Separation	**FCC:** ANSI C63.4:2003 13. Measurement of intentional radiators	**FCC:** Section15.247(a)(1)	Conducted	N/A	See data.	Complied
3	20dB Bandwidth	**FCC:** ANSI C63.4:2003 13. Measurement of intentional radiators	**FCC:** Section15.247(a)(1)	Conducted	N/A		Complied
4	Number of Hopping Frequency	**FCC:** ANSI C63.4:2003 13. Measurement of intentional radiators	**FCC:** Section15.247(a)(1)(ii)	Conducted	N/A		Complied
5	Dwell time	**FCC:** ANSI C63.4:2003 13. Measurement of intentional radiators	**FCC:** Section15.247(a)(1)(ii)	Conducted	N/A		Complied
6	Maximum Peak Output Power	**FCC:** ANSI C63.4:2003 13. Measurement of intentional radiators	**FCC:** Section15.247(b)(1)	Conducted	N/A		Complied
7	Band Edge Compliance	**FCC:** ANSI C63.4:2003 13. Measurement of intentional radiators	**FCC:** Section15.247(d)	Conducted	N/A		Complied
8	Spurious Emission	**FCC:** ANSI C63.4:2003 13. Measurement of intentional radiators	**FCC:** Section15.247(d)	Conducted/ Radiated	N/A	3.8 dB 127.991MHz, Vertical, QP	Complied
Note: UL Apex's EMI Work Procedures No.QPM05 and QPM15.							

*These tests were also referred to FCC Public Notice DA 00-705 "Guidance on Measurement for Frequency Hopping Spread Spectrum Systems".

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

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 ±2.66dB.
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 ±4.59dB(3m)/ ±4.58dB(10m).
The measurement uncertainty (with a 95% confidence level) for this test using Logperiodic antenna is ±4.62dB(3m)/ ±4.60dB(10m).
The measurement uncertainty (with a 95% confidence level) for this test using Horn antenna is ±5.27dB.
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 ±3.0dB.

3.5 Test Location

UL Apex Co., Ltd. Head Office EMC Lab. *NVLAP Lab. code: 200572-0
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone: +81 596 24 8116 Facsimile: +81 596 24 8124

	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.

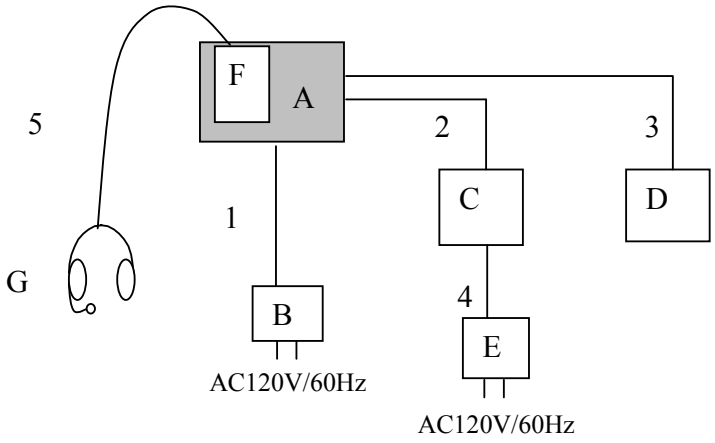
SECTION 4: Operation of E.U.T. during testing

4.1 Operating Modes

The mode is used : Transmitting mode
- Low Channel : 5741.865MHz
- Mid Channel : 5790.026MHz
- High Channel : 5838.187MHz

[Remarks]
The EUT has 2 antennas (Antenna 1 and 2). The Antenna 1 is used for the Antenna Terminal Conducted tests and Radiated emission test since Antenna 1 has the higher output power level than Antenna 2.
As for Conducted emission test, both Antenna 1 and 2 were used.

4.2 Configuration and peripherals



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

Description of EUT and Support equipment

No.	Item	Model number	Serial number	Manufacturer	Remarks
A	Cordless Telephone (Base)	BB-GT1540	Ant001*1) Air001 *2)	Panasonic Communications Co., Ltd.	EUT
B	AC Adapter	PQLV203	0639E	Panasonic Communications Co., Ltd.	-
C	10M 5 port HUB	LGH-M5P	16440726704980	Buffalo	-
D	Telephone	HI-A3	3204401	Hitachi	-
E	AC Adapter	DV-7580J	0702	Buffalo	-
F	Cordless Telephone (Handset) *3)	BB-GTA150	Air001	Panasonic Communications Co., Ltd.	-
G	Headphone *3)	KX-TCA88HA	-	Panasonic Communications Co., Ltd.	-

List of cables used

No.	Name	Length (m)	Shield	
			Cable	Connector
1	DC Cable	2.0	Unshielded	Unshielded
2	LAN cable	1.0	Unshielded	Unshielded
3	Telephone cable	1.8	Unshielded	Unshielded
4	DC Cable	1.8	Unshielded	Unshielded
5	Headset Cable *3)	1.45	Shielded	Shielded

*1) Used for Antenna Terminal Conducted test
*2) Used for Conducted Emission and Radiated Emission tests
*3) Used for Conducted Emission (with Handset batter-charged) test only

SECTION 5: Conducted Emission

Test Procedure and conditions

EUT was placed on a urethane platform of nominal size, 1.0m 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

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 2
Test result : Pass

[Radiated]
Test Procedure
EUT was placed on a urethane platform of nominal size, 1.0m by 1.0m, 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.

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 IF Bandwidth	QP: BW 120kHz	PK: RBW:1MHz/VBW: 1MHz AV: RBW:1MHz/VBW:10Hz

- The test was made on EUT at the normal use position.

Test data : APPENDIX 2
Test result : Pass

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: Carrier Frequency Separation

Test Procedure

The carrier frequency separation was measured with a spectrum analyzer connected to the antenna port.

Test data : **APPENDIX 2**
Test result : **Pass**

SECTION 10: Number of Hopping Frequency

Test Procedure

The Number of Hopping Frequency was measured with a spectrum analyzer connected to the antenna port.

Test data : **APPENDIX 2**
Test result : **Pass**

SECTION 11: Dwell time

Test Procedure

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

Test data : **APPENDIX 2**
Test result : **Pass**

APPENDIX 1: Photographs of test setup

Conducted Emission

(Without Handset battery-charged)

This page has been submitted in a separate sheet.

Conducted Emission

(With Handset battery-charged)

This page has been submitted in a separate sheet.

Spurious Emission (Radiated)

This page has been submitted in a separate sheet.

APPENDIX 2: Data of EMI test

Conducted Emission

(Tx, Ant1, Low, No Charging)

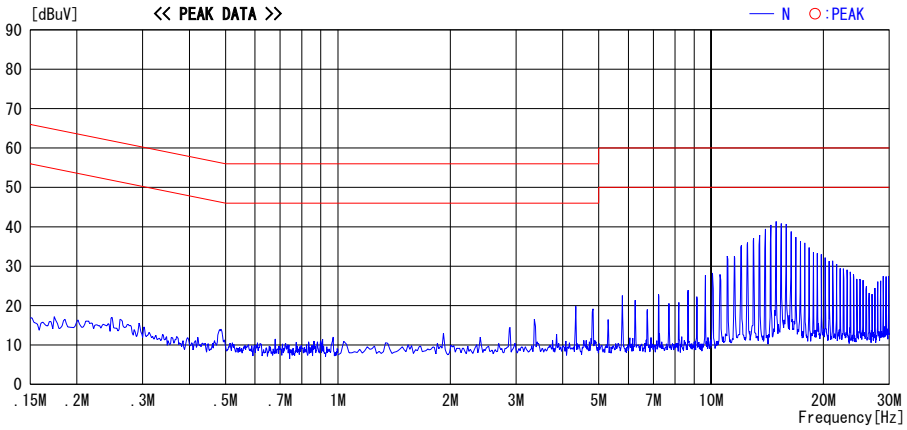
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2007/03/02

Company	: Panasonic Communications Co., Ltd.	Report No.	: 27FE0369-HO
Kind of EUT	: Cordless Telephone (Base)	Power	: AC 120V / 60Hz
Model No.	: BB-GT1540	Temp./Humi.	: 25 deg.C. / 30 %
Serial No.	: Air001	Operator	: Kenichi Adachi

Mode / Remarks : Tx Low 5741.865MHz, Worst-Ant-port: Ant1,

LIMIT : FCC15.207 QP
FCC15.207 AV



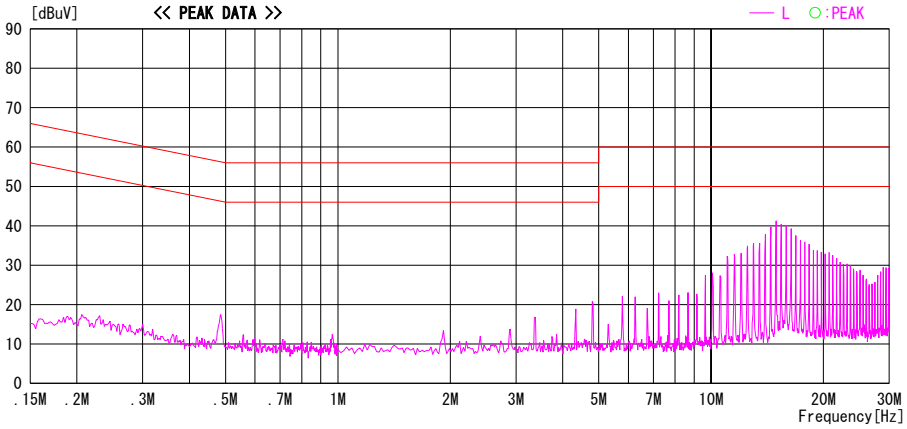


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted emission

(Tx, Ant2, Low, No Charging)

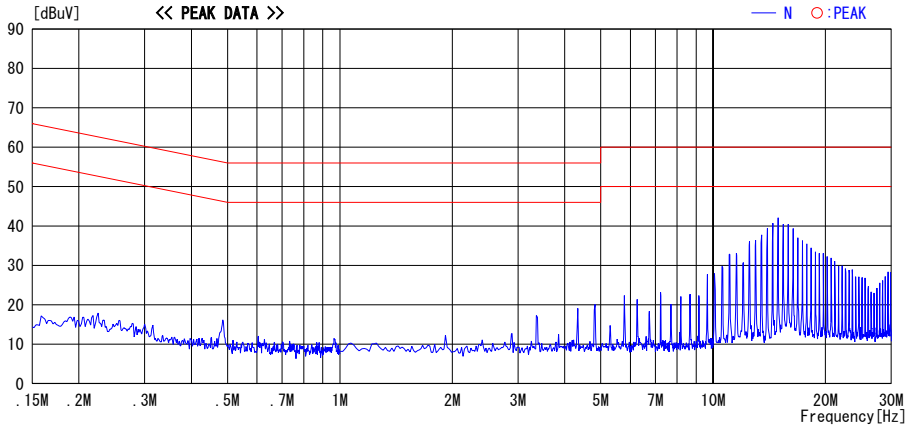
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2007/03/02

Company	: Panasonic Communications Co., Ltd.	Report No.	: 27FE0369-HO
Kind of EUT	: Cordless Telephone (Base)	Power	: AC 120V / 60Hz
Model No.	: BB-GT1540	Temp./Humi.	: 25 deg.C. / 30 %
Serial No.	: Air001	Operator	: Kenichi Adachi

Mode / Remarks : Tx Low 5741.865MHz, Ant-port: Ant2,

LIMIT : FCC15.207 QP
FCC15.207 AV



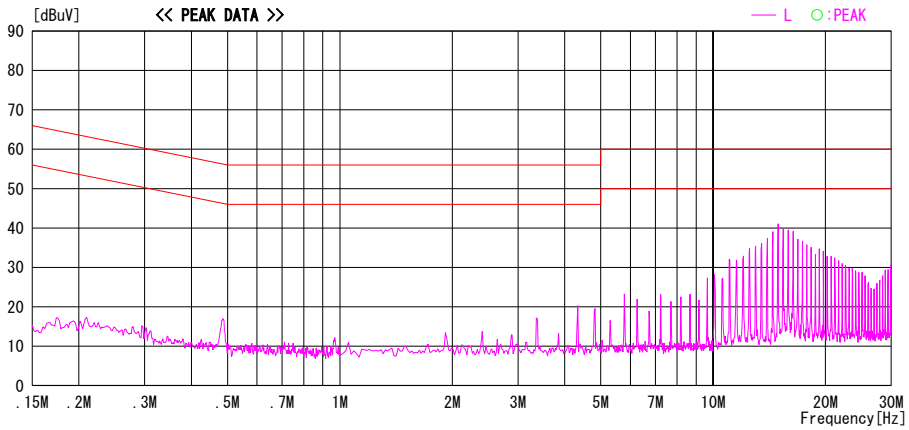


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted emission

(Tx, Ant1, Mid, No Charging)

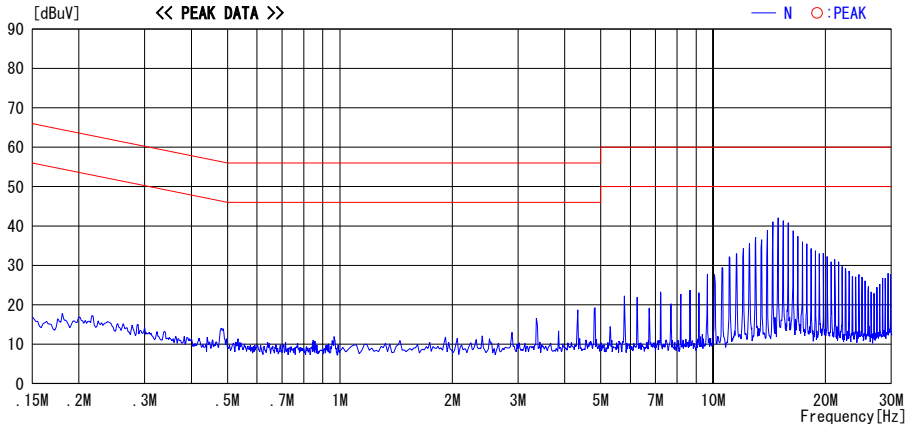
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2007/03/02

Company	: Panasonic Communications Co., Ltd.	Report No.	: 27FE0369-HO
Kind of EUT	: Cordless Telephone (Base)	Power	: AC 120V / 60Hz
Model No.	: BB-GT1540	Temp./Humi.	: 25 deg.C. / 30 %
Serial No.	: Air001	Operator	: Kenichi Adachi

Mode / Remarks : Tx Mid 5790.026MHz, Worst-Ant-port: Ant1,

LIMIT : FCC15.207 QP
FCC15.207 AV



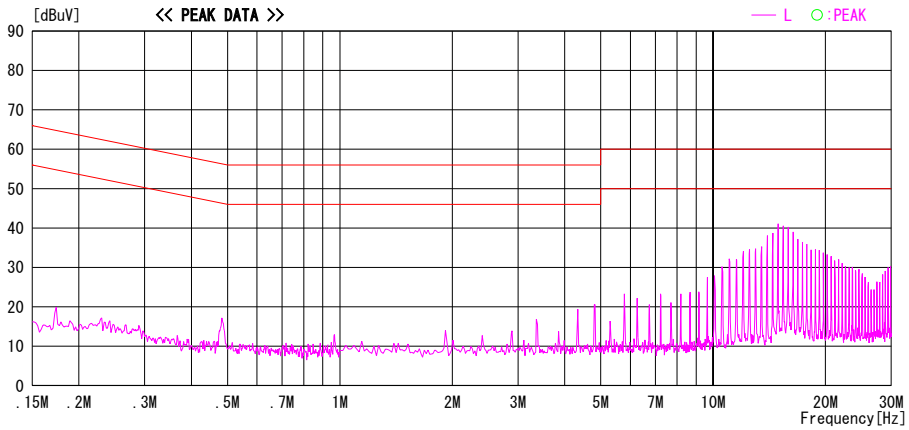


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted emission

(Tx, Ant1, Mid, No Charging)

DATA OF CONDUCTED EMISSION TEST

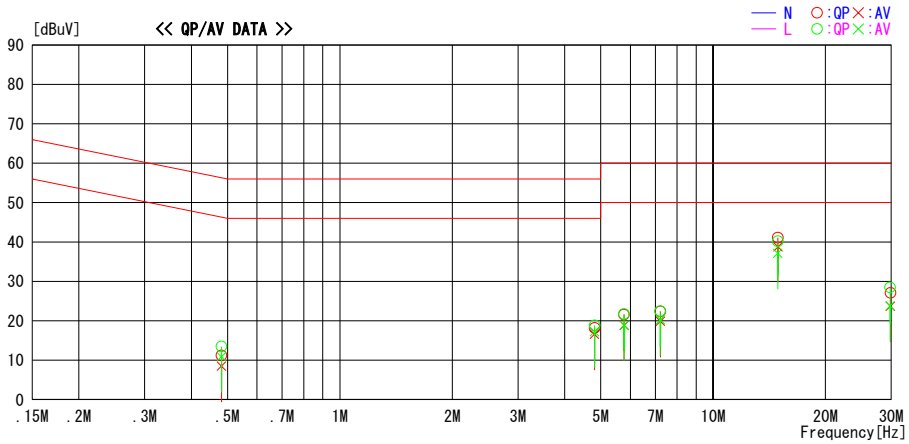
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2007/03/02

Company : Panasonic Communications Co., Ltd.
Kind of EUT : Cordless Telephone (Base)
Model No. : BB-GT1540
Serial No. : Air001

Report No. : 27FE0369-HO
Power : AC 120V / 60Hz
Temp./Humi. : 25 deg.C. / 30 %
Operator : Kenichi Adachi

Mode / Remarks : Tx Mid 5790.026MHz, Worst-Ant-port: Ant1,

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase
	QP	AV	Factor	QP	AV	QP	AV	QP	AV	
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]	
0.48187	10.9	8.2	0.3	11.2	8.5	56.3	46.3	45.1	37.8	N
4.81189	17.2	15.6	1.0	18.2	16.6	56.0	46.0	37.8	29.4	N
5.77476	20.4	17.7	1.2	21.6	18.9	60.0	50.0	38.4	31.1	N
7.21789	21.1	18.6	1.3	22.4	19.9	60.0	50.0	37.6	30.2	N
14.91693	39.2	36.9	1.9	41.1	38.8	60.0	50.0	18.9	11.2	N
29.83533	24.5	21.1	2.6	27.1	23.7	60.0	50.0	32.9	26.3	N
0.48187	13.2	10.6	0.3	13.5	10.9	56.3	46.3	42.8	35.4	L
4.80904	17.9	16.2	1.0	18.9	17.2	56.0	46.0	37.1	28.8	L
5.77134	20.5	17.7	1.2	21.7	18.9	60.0	50.0	38.3	31.1	L
7.21082	21.2	18.9	1.3	22.5	20.2	60.0	50.0	37.5	29.8	L
14.88962	38.3	35.2	1.9	40.2	37.1	60.0	50.0	19.8	12.9	L
29.79353	25.9	21.2	2.6	28.5	23.8	60.0	50.0	31.5	26.2	L

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.

*The limit is rounded down to one decimal place. *The test result is round off to one or two decimal places, so some differences might be observed.

Conducted emission

(Tx, Ant2, Mid, No Charging)

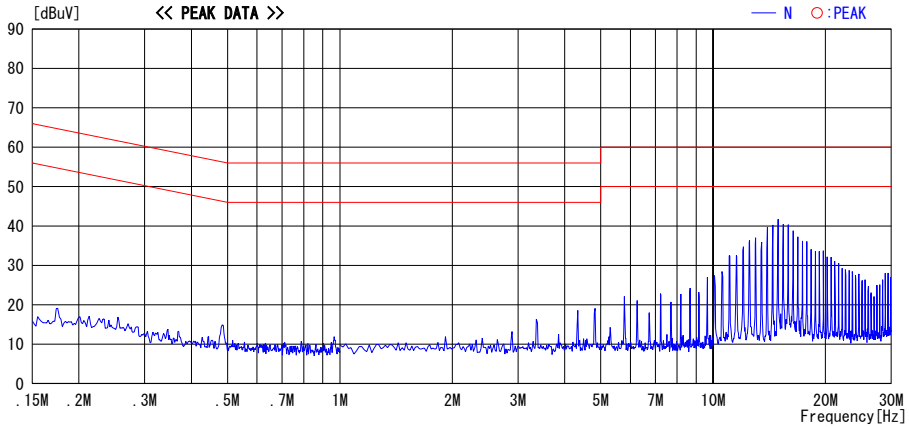
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2007/03/02

Company	: Panasonic Communications Co., Ltd.	Report No.	: 27FE0369-HO
Kind of EUT	: Cordless Telephone (Base)	Power	: AC 120V / 60Hz
Model No.	: BB-GT1540	Temp./Humi.	: 25 deg.C. / 30 %
Serial No.	: Air001	Operator	: Kenichi Adachi

Mode / Remarks : Tx Mid 5790.026MHz, Ant-port: Ant2,

LIMIT : FCC15.207 QP
FCC15.207 AV



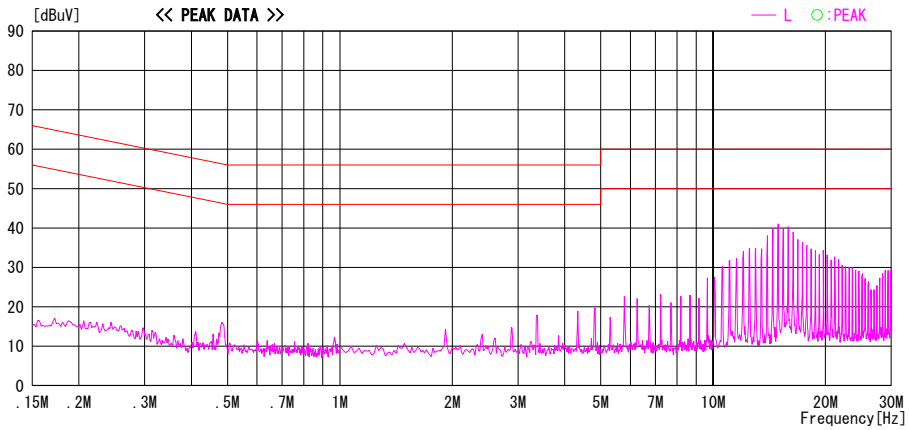


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted emission

(Tx, Ant1, High, No Charging)

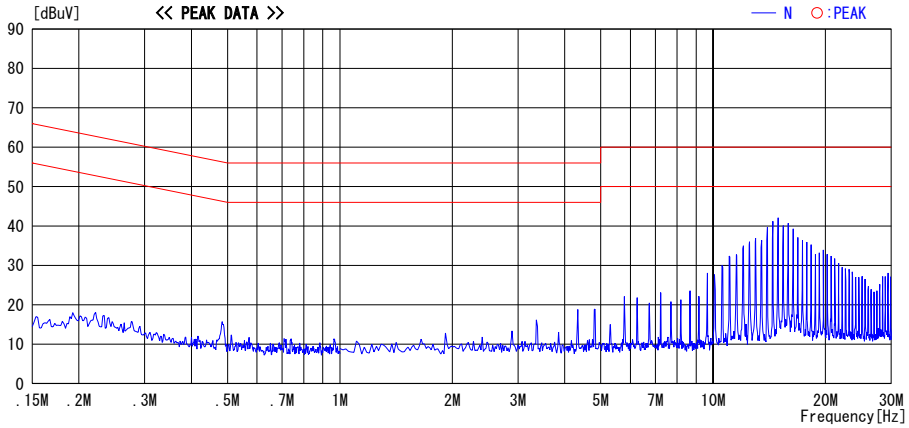
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2007/03/02

Company	: Panasonic Communications Co., Ltd.	Report No.	: 27FE0369-HO
Kind of EUT	: Cordless Telephone (Base)	Power	: AC 120V / 60Hz
Model No.	: BB-GT1540	Temp./Humi.	: 25 deg.C. / 30 %
Serial No.	: Air001	Operator	: Kenichi Adachi

Mode / Remarks : Tx High 5838.187MHz, Worst-Ant-port: Ant1,

LIMIT : FCC15.207 QP
FCC15.207 AV



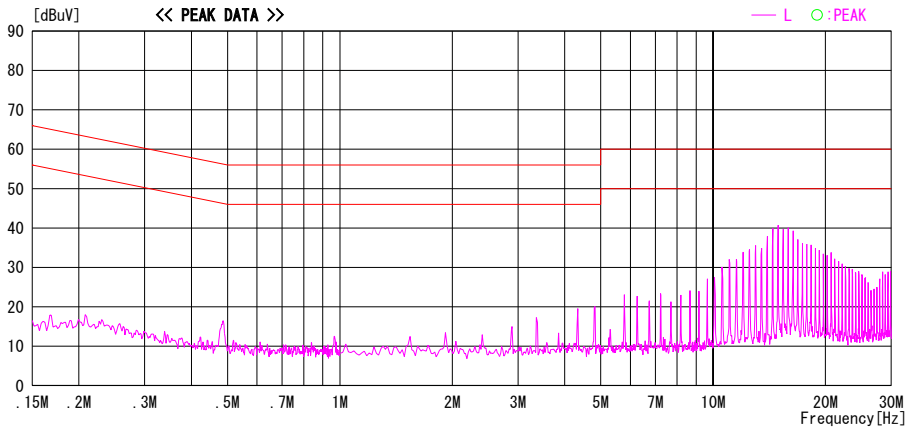


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted emission

(Tx, Ant2, High, No Charging)

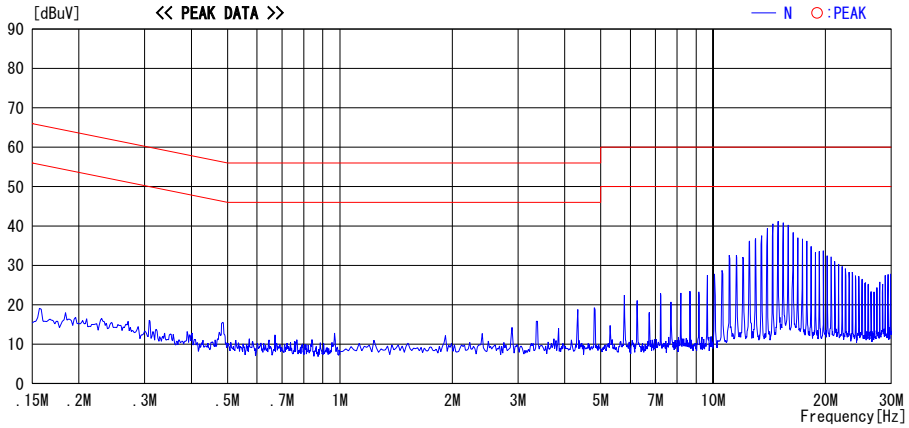
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2007/03/02

Company	: Panasonic Communications Co., Ltd.	Report No.	: 27FE0369-HO
Kind of EUT	: Cordless Telephone (Base)	Power	: AC 120V / 60Hz
Model No.	: BB-GT1540	Temp./Humi.	: 25 deg.C. / 30 %
Serial No.	: Air001	Operator	: Kenichi Adachi

Mode / Remarks : Tx High 5838.187MHz, Ant-port: Ant2,

LIMIT : FCC15.207 QP
FCC15.207 AV



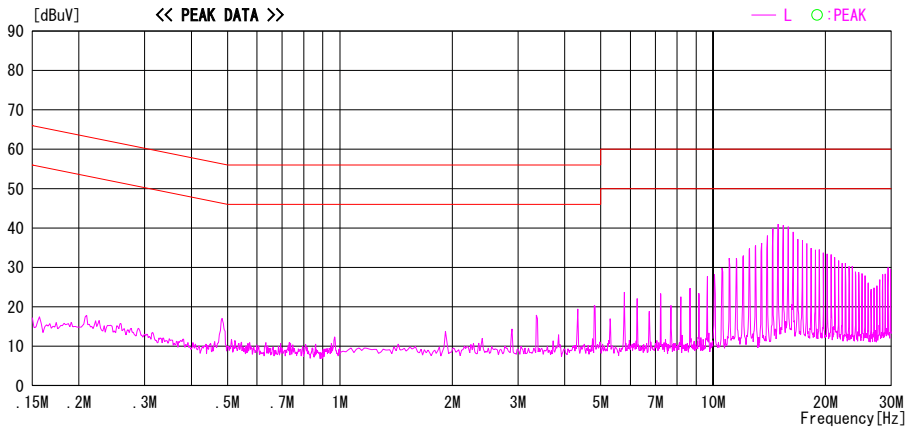


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted emission

(Tx, Ant1, Low, Charging)

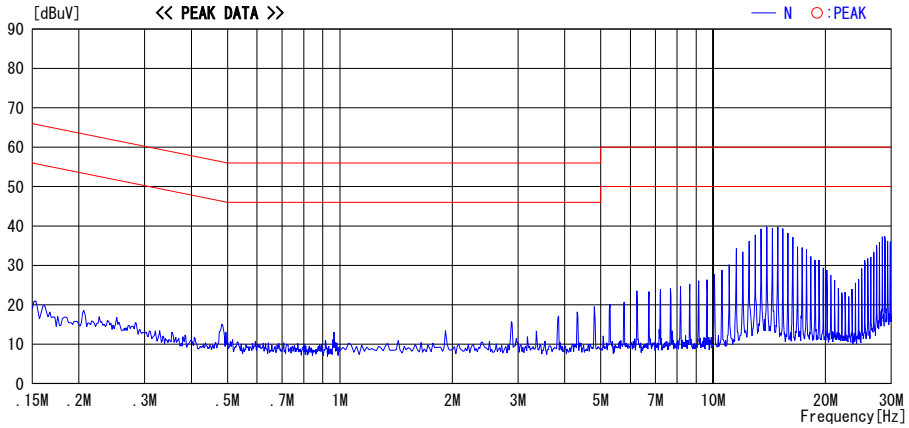
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2007/03/02

Company	: Panasonic Communications Co., Ltd.	Report No.	: 27FE0369-HO
Kind of EUT	: Cordless Telephone (Base)	Power	: AC 120V / 60Hz
Model No.	: BB-GT1540	Temp./Humi.	: 25 deg.C. / 30 %
Serial No.	: Air001	Operator	: Kenichi Adachi

Mode / Remarks : Tx Low 5741.865MHz, + charging, Worst-Ant-port: Ant1,

LIMIT : FCC15.207 QP
FCC15.207 AV



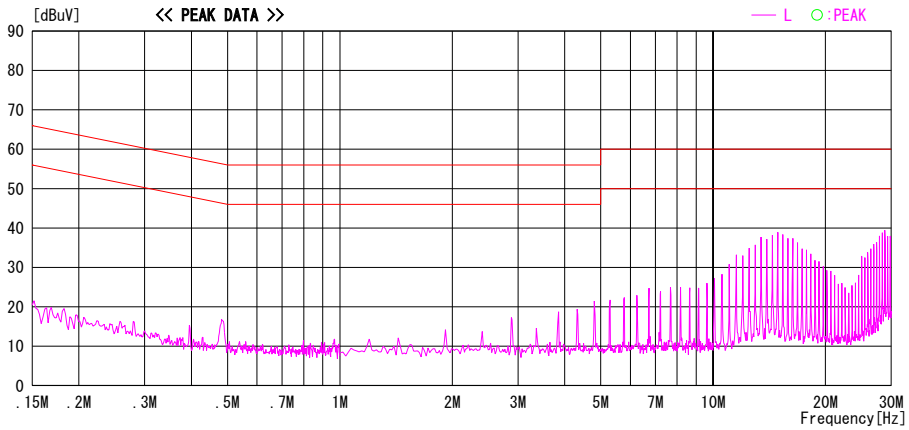


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted emission

(Tx, Ant1, Mid, Charging)

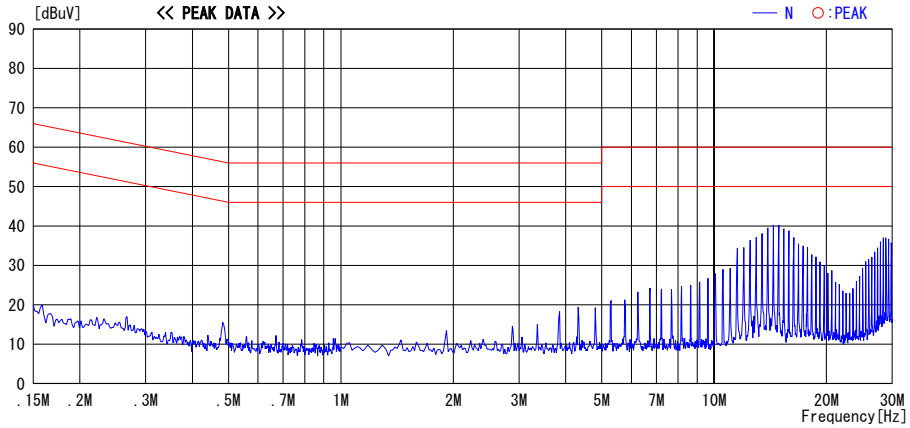
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2007/03/02

Company	: Panasonic Communications Co., Ltd.	Report No.	: 27FE0369-HO
Kind of EUT	: Cordless Telephone (Base)	Power	: AC 120V / 60Hz
Model No.	: BB-GT1540	Temp./Humi.	: 25 deg.C. / 30 %
Serial No.	: Air001	Operator	: Kenichi Adachi

Mode / Remarks : Tx Mid 5790.026MHz, + charging, Worst-Ant-port: Ant1,

LIMIT : FCC15.207 QP
FCC15.207 AV



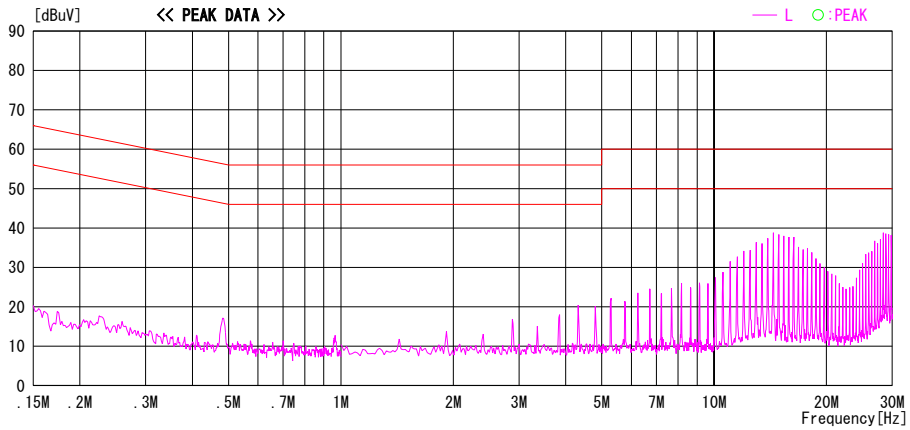


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted emission

(Tx, Ant1, High, Charging)

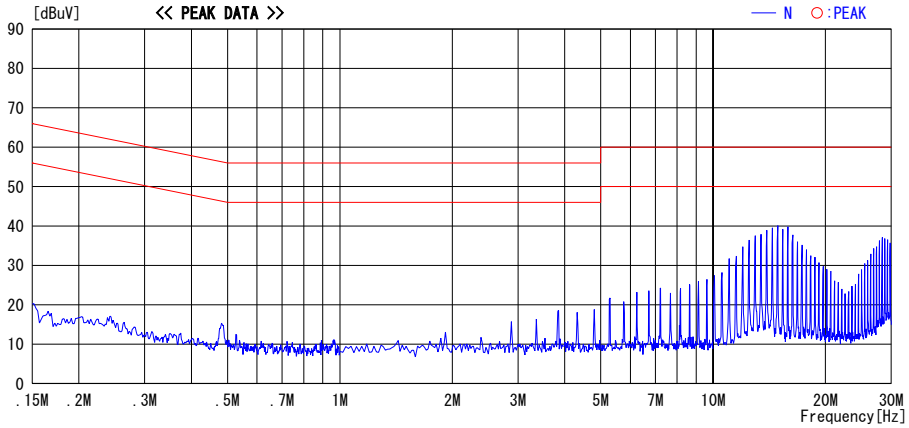
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2007/03/02

Company	: Panasonic Communications Co., Ltd.	Report No.	: 27FE0369-HO
Kind of EUT	: Cordless Telephone (Base)	Power	: AC 120V / 60Hz
Model No.	: BB-GT1540	Temp./Humi.	: 25 deg.C. / 30 %
Serial No.	: Air001	Operator	: Kenichi Adachi

Mode / Remarks : Tx High 5838.187MHz, + charging, Worst-Ant-port: Ant1,

LIMIT : FCC15.207 QP
FCC15.207 AV



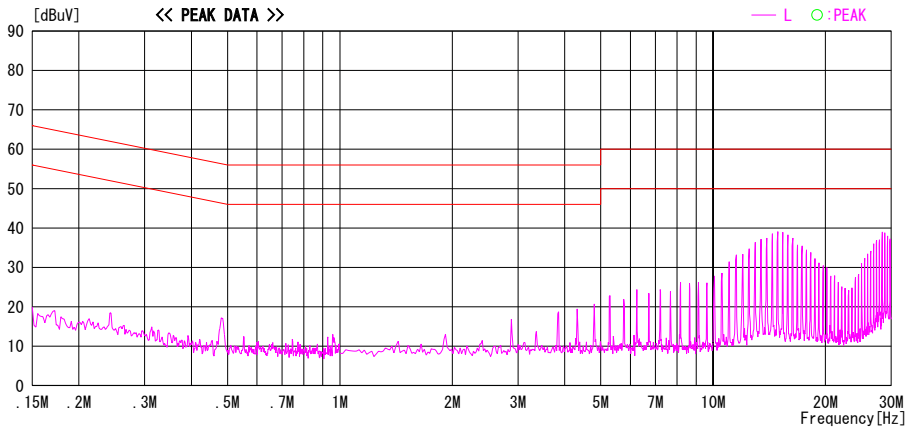


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Carrier Frequency Separation

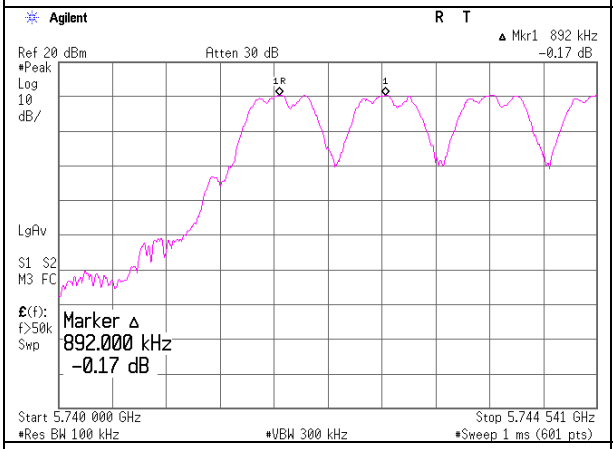
UL-Apex Co., Ltd.
Head Office EMC Lab. No.6 Shielded Room

Company	Panasonic Communications Co., Ltd.	Regulation	FCC 15.247(a)(1)(ii)
Equipment	Cordless Telephone (Base)	Test Distance	-
Model	BB-GT1540	Date	02/20/2007
S/N	Ant001	Temperature	25 deg.C.
Power	AC120V / 60Hz	Humidity	47 %
Mode	Tx (Hopping on), Ant1(Worst)	Engineer	Makoto Kosaka

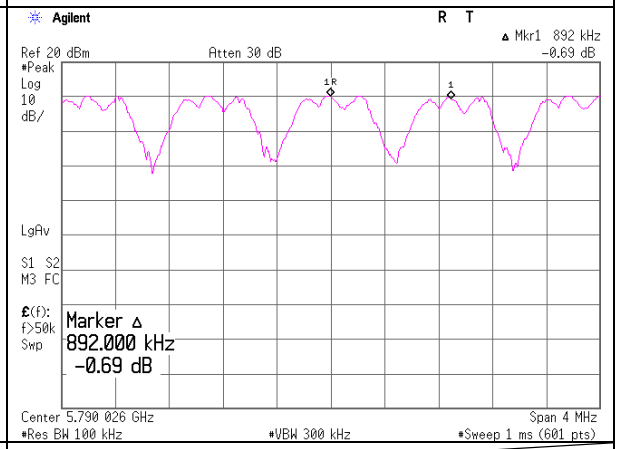
Ch	Freq. [MHz]	Channel separation [MHz]	Limit
Low	5759.702	0.892	> 0.733MHz (20dB Bandwidth) or 0.025MHz (whichever is greater)
Mid	5798.053	0.892	> 0.736MHz (20dB Bandwidth) or 0.025MHz (whichever is greater)
High	5838.187	0.892	> 0.805MHz (20dB Bandwidth) or 0.025MHz (whichever is greater)

Carrier Frequency Separation

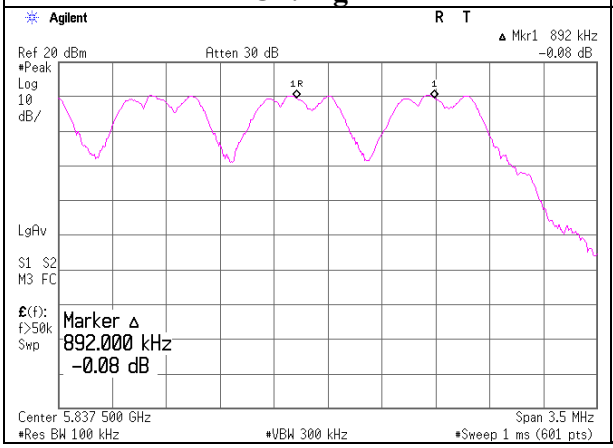
Ch:Low

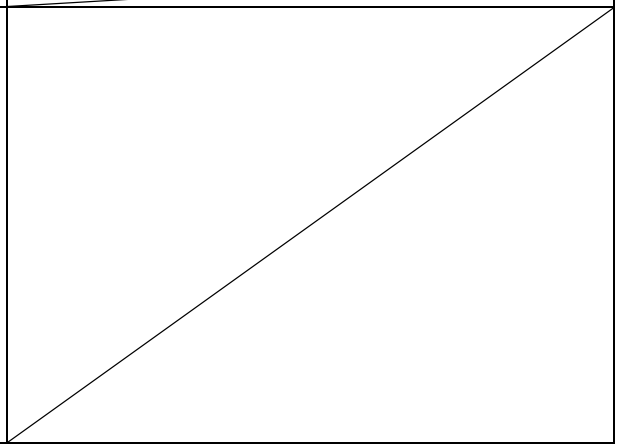


Ch:Mid



Ch:High





20dB Bandwidth

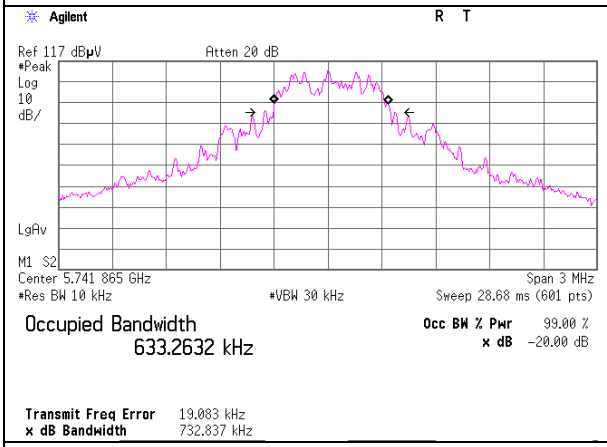
UL-Apex Co., Ltd.
Head Office EMC Lab. No.6 Shielded Room

Company	Panasonic Communications Co., Ltd.	Regulation	FCC15.247(a)(1)
Equipment	Cordless Telephone (Base)	Test Distance	-
Model	BB-GT1540	Date	02/20/2007
S/N	Ant001	Temperature	25 deg.C.
Power	AC120V / 60Hz	Humidity	47 %
Mode	Tx (Hopping off) , Ant1(Worst)	Engineer	Makoto Kosaka

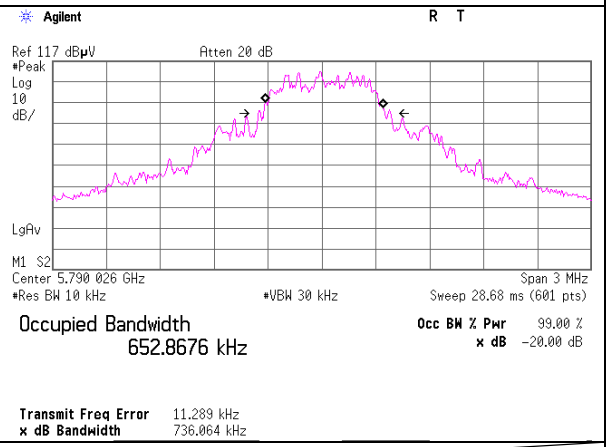
Ch	Freq. [MHz]	20dB Bandwidth [MHz]	Limit [MHz]
Low	5741.865	0.733	-
Mid	5790.026	0.736	-
High	5838.187	0.805	-

20dB Bandwidth

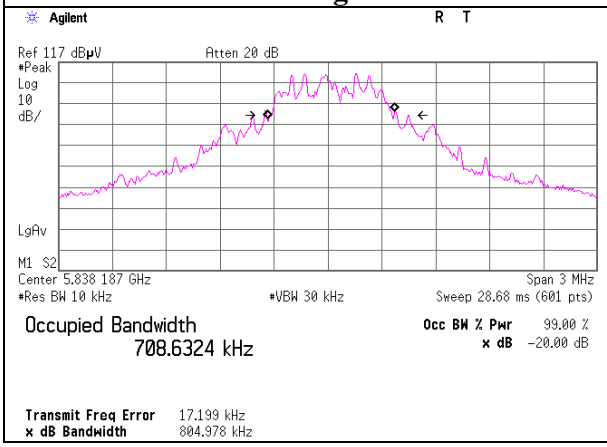
Ch:Low

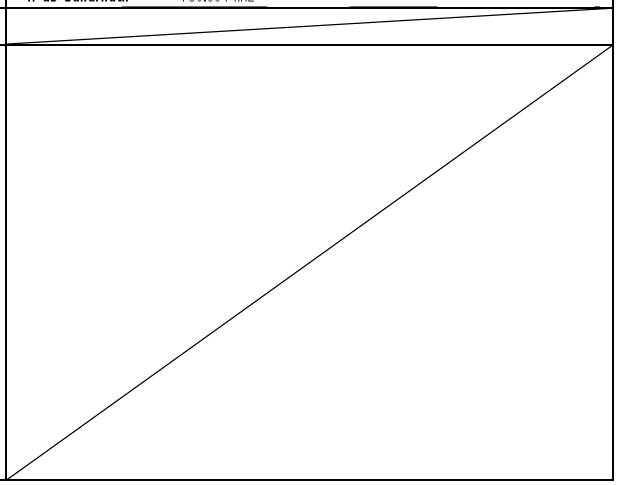


Ch:Mid



Ch:High





Number of Hopping Frequency

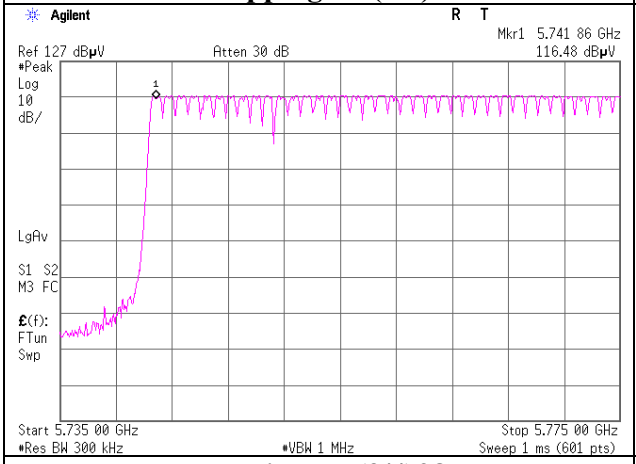
UL-Apex Co., Ltd.
Head Office EMC Lab. No.6 Shielded Room

Company	Panasonic Communications Co., Ltd.	Regulation	FCC15.247(a)(1)(ii)
Equipment	Cordless Telephone (Base)	Test Distance	-
Model	BB-GT1540	Date	02/20/2006
S/N	Ant001	Temperature	25 deg.C.
Power	AC120V / 60Hz	Humidity	47 %
Mode	Tx (Hopping on), Ant1(Worst)	Engineer	Makoto Kosaka

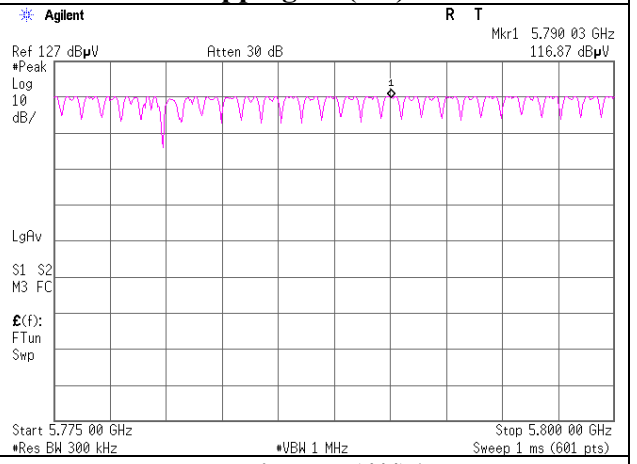
Mode	Number of channel [time]	Limit [time]
Tx(Hoppng on)	109	≧75

Number of Hopping Frequency

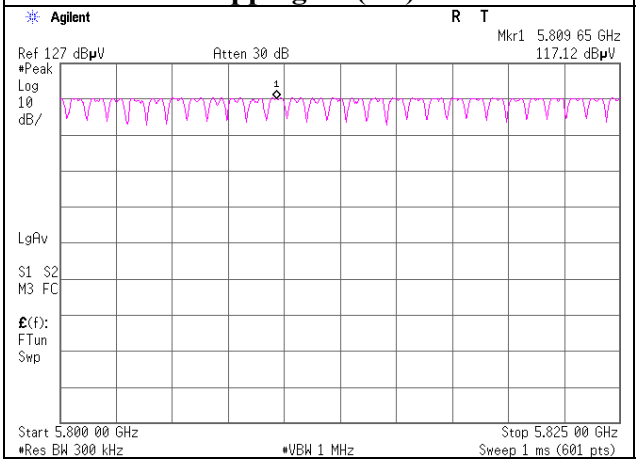
Hopping on (1/4)



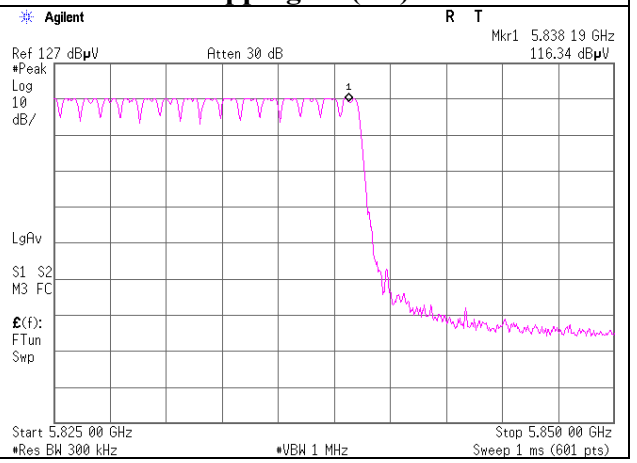
Hopping on (2/4) 29



Hopping on (3/4)28



Hopping on (4/4)15



Dwell time

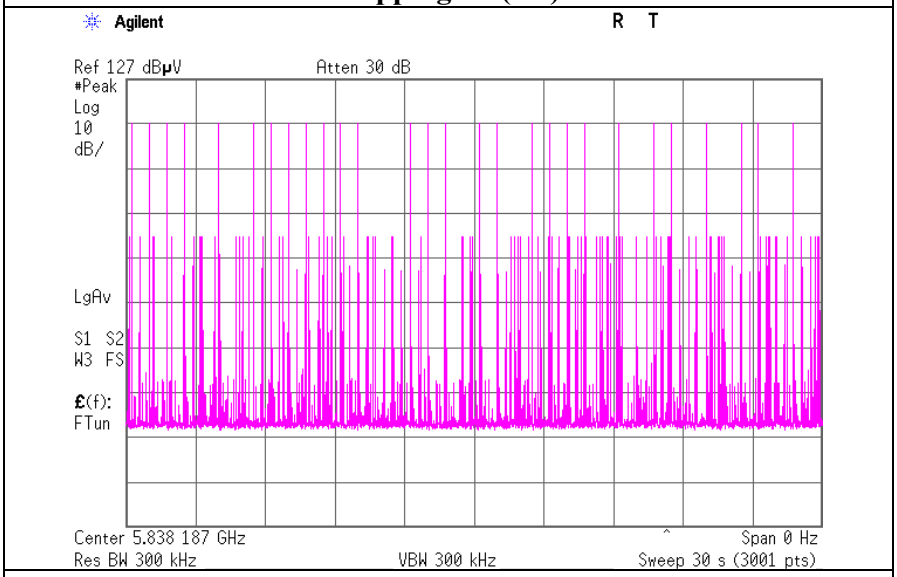
UL-Apex Co., Ltd.
Head Office EMC Lab. No.6 Shielded Room

Company	Panasonic Communications Co., Ltd.	Regulation	FCC15.247(a)(1)(ii)
Equipment	Cordless Telephone (Base)	Test Distance	-
Model	BB-GT1540	Date	02/21/2007
S/N	Ant001	Temperature	24 deg.C.
Power	AC120V / 60Hz	Humidity	40 %
Mode	Tx (Hopping on), Ant1(Worst)	Engineer	Makoto Kosaka

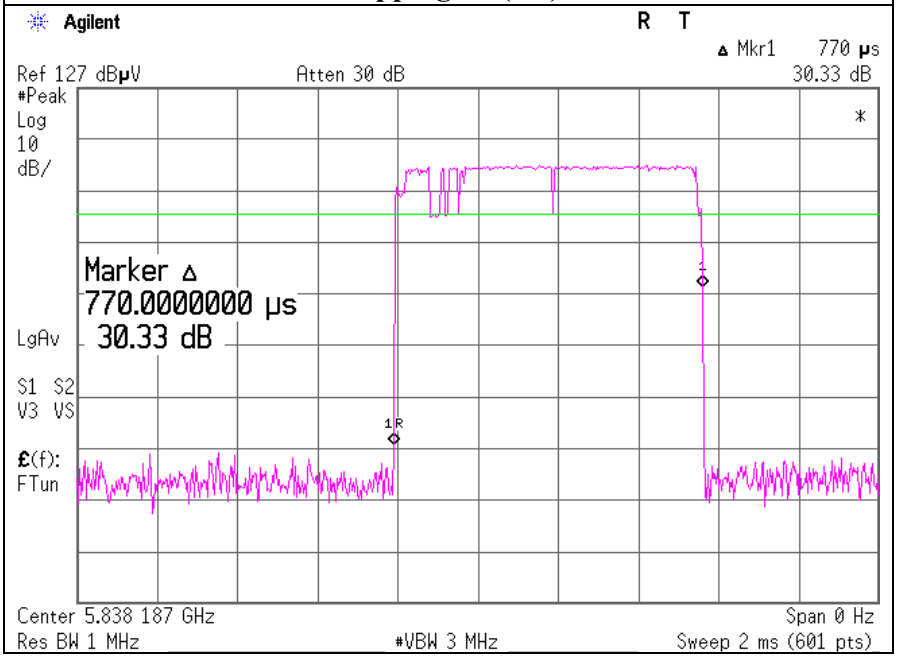
Mode	Number of transmission in a 30 second period	Length of transmission time [msec]	Result [msec]	Limit [msec]
Tx (Hopping on)	28 times / 30 sec. x 30.0 sec. = 28 times	0.770	22	400

Dwell time

Hopping on (1/2)



Hopping on (2/2)



Maximum Peak Output Power

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

Company	Panasonic Communications Co., Ltd.	Regulation	FCC15.247(b)(1)
Equipment	Cordless Telephone (Base)	Test Distance	-
Model	BB-GT1540	Date	02/19/2007
S/N	Ant001	Temperature	24 deg.C.
Power	AC120V / 60Hz	Humidity	35 %
Mode	Tx (Hopping off)	Engineer	Makoto Kosaka

Ant 1 (Worst)

Ch	Freq.	P/M (PK) Reading	Atten.+ Cable	Result		Limit		Margin
	[MHz]	[dBm]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
Low	5741.865	9.90	10.15	20.05	101.16	30.00	1000	9.95
Mid	5790.026	9.92	10.16	20.08	101.86	30.00	1000	9.92
High	5838.187	9.82	10.16	19.98	99.54	30.00	1000	10.02

Sample Calculation:
Result = Reading + Cable Loss + Attenuator
* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

Ant 2

Ch	Freq.	P/M (PK) Reading	Atten.+ Cable	Result		Limit		Margin
	[MHz]	[dBm]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
Low	5741.865	9.12	10.15	19.27	84.53	30.00	1000	10.73
Mid	5790.026	9.40	10.16	19.56	90.36	30.00	1000	10.44
High	5838.187	9.60	10.16	19.76	94.62	30.00	1000	10.24

Sample Calculation:
Result = Reading + Cable Loss + Attenuator
* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

Radiated Spurious Emission (below 1GHz)

(Tx, Ant1, Low)

DATA OF RADIATED EMISSION TEST

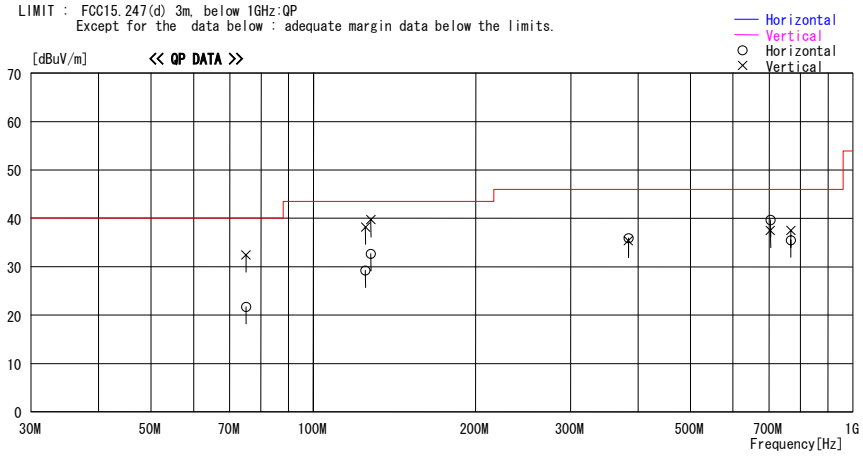
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2007/03/01

Company : Panasonic Communications Co.,Ltd.
Kind of EUT : Cordless Telephone (Base)
Model No. : BB-GT1540
Serial No. : Air001

Report No. : 27FE0369-HO
Power : AC120V / 60Hz
Temp./Humi. : 23deg.C / 30%
Operator : Kenichi Adachi

Mode / Remarks : Tx Low 5741.865MHz, EUT-Normal-axis, Worst-Ant-port: Ant1,

LIMIT : FCC15.247(d) 3m, below 1GHz:QP
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna Factor	Loss & Gain	Level	Angle	Height	Polar.	Limit	Margin	Comment
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]	
75.003	34.7	QP	6.7	-19.7	21.7	283	265	Hori.	40.0	18.3	
75.003	45.4	QP	6.7	-19.7	32.4	85	113	Vert.	40.0	7.6	
125.002	35.0	QP	13.2	-19.0	29.2	8	275	Hori.	43.5	14.3	
125.002	44.0	QP	13.2	-19.0	38.2	77	100	Vert.	43.5	5.3	
127.991	38.2	QP	13.4	-18.9	32.7	242	256	Hori.	43.5	10.8	
127.991	45.2	QP	13.4	-18.9	39.7	91	100	Vert.	43.5	3.8	
383.998	34.9	QP	17.5	-16.5	35.9	341	100	Hori.	46.0	10.1	
383.998	34.4	QP	17.5	-16.5	35.4	211	185	Vert.	46.0	10.6	
703.998	33.8	QP	20.9	-15.0	39.7	335	132	Hori.	46.0	6.3	
703.998	31.6	QP	20.9	-15.0	37.5	189	147	Vert.	46.0	8.5	
767.998	28.4	QP	21.6	-14.5	35.5	271	162	Hori.	46.0	10.5	
767.998	30.4	QP	21.6	-14.5	37.5	162	100	Vert.	46.0	8.5	

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)

*The limit is rounded down to one decimal place. *The test result is round off to one or two decimal places, so some differences might be observed.

Radiated Spurious Emission (below 1GHz)

(Tx, Ant1, Mid)

DATA OF RADIATED EMISSION TEST

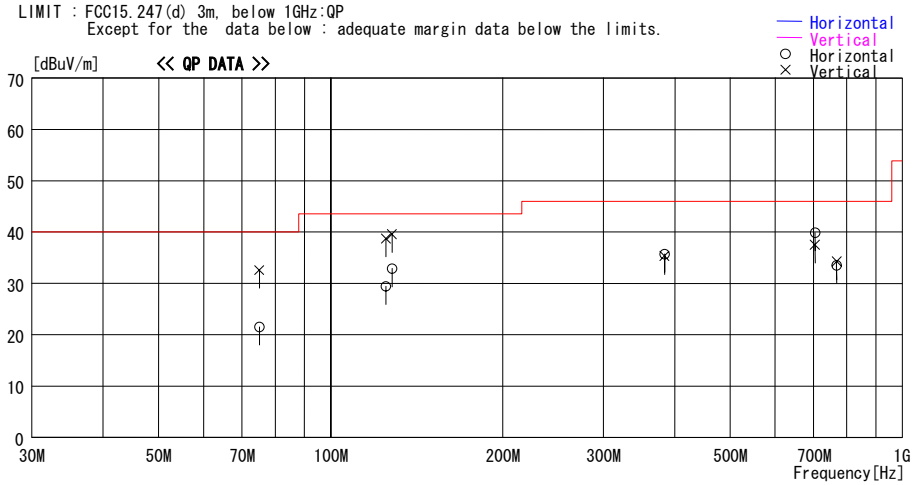
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2007/03/02

Company : Panasonic Communications Co.,Ltd.
Kind of EUT : Cordless Telephone (Base)
Model No. : BB-GT1540
Serial No. : Air001

Report No. : 27FE0369-HO
Power : AC120V / 60Hz
Temp./Humi. : 23deg.C / 30%
Operator : Kenichi Adachi

Mode / Remarks : Tx Mid 5790.026MHz, EUT-Normal-axis, Worst-Ant-port: Ant1,

LIMIT : FCC15.247(d) 3m, below 1GHz:QP
Except for the data below : adequate margin data below the limits.



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
75.003	34.5	QP	6.7	-19.7	21.5	291	261	Hori.	40.0	18.5	
75.003	45.6	QP	6.7	-19.7	32.6	73	114	Vert.	40.0	7.4	
125.002	35.2	QP	13.2	-19.0	29.4	9	276	Hori.	43.5	14.1	
125.002	44.5	QP	13.2	-19.0	38.7	76	100	Vert.	43.5	4.8	
127.996	38.4	QP	13.4	-18.9	32.9	227	255	Hori.	43.5	10.6	
127.996	45.1	QP	13.4	-18.9	39.6	88	100	Vert.	43.5	3.9	
383.994	34.7	QP	17.5	-16.5	35.7	341	100	Hori.	46.0	10.3	
383.994	34.3	QP	17.5	-16.5	35.3	221	186	Vert.	46.0	10.7	
703.996	34.0	QP	20.9	-15.0	39.9	343	131	Hori.	46.0	6.1	
703.996	31.6	QP	20.9	-15.0	37.5	182	148	Vert.	46.0	8.5	
767.996	26.4	QP	21.6	-14.5	33.5	266	162	Hori.	46.0	12.5	
767.996	27.2	QP	21.6	-14.5	34.3	167	100	Vert.	46.0	11.7	

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)

*The limit is rounded down to one decimal place. *The test result is round off to one or two decimal places, so some differences might be observed.

Radiated Spurious Emission (below 1GHz)

(Tx, Ant1, High)

DATA OF RADIATED EMISSION TEST

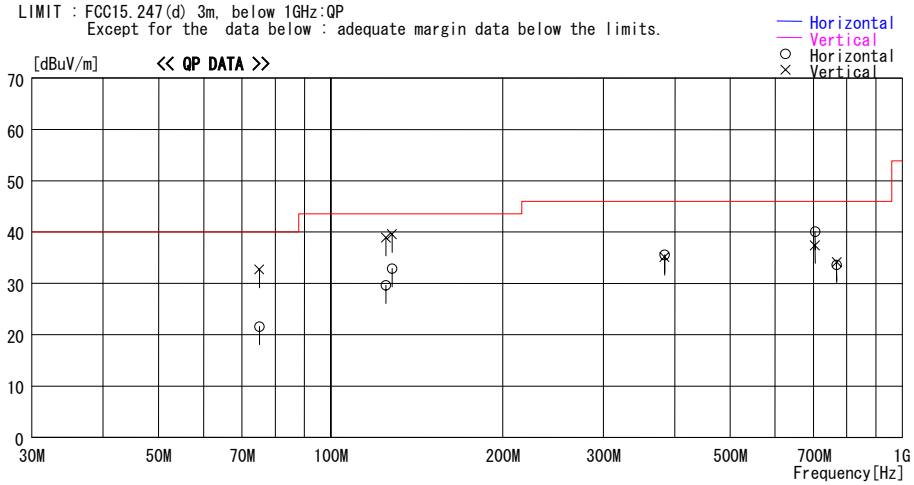
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2007/03/02

Company : Panasonic Communications Co.,Ltd.
Kind of EUT : Cordless Telephone (Base)
Model No. : BB-GT1540
Serial No. : Air001

Report No. : 27FE0369-HO
Power : AC120V / 60Hz
Temp./Humi. : 23deg.C / 30%
Operator : Kenichi Adachi

Mode / Remarks : Tx High 5838.187MHz, EUT-Normal-axis, Worst-Ant-port: Ant1,

LIMIT : FCC15.247(d) 3m, below 1GHz:QP
Except for the data below : adequate margin data below the limits.



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
75.002	34.6	QP	6.7	-19.7	21.6	286	269	Hori.	40.0	18.4	
75.002	45.7	QP	6.7	-19.7	32.7	86	113	Vert.	40.0	7.3	
125.001	35.4	QP	13.2	-19.0	29.6	4	275	Hori.	43.5	13.9	
125.001	44.7	QP	13.2	-19.0	38.9	87	100	Vert.	43.5	4.6	
127.996	38.4	QP	13.4	-18.9	32.9	227	259	Hori.	43.5	10.6	
127.996	45.1	QP	13.4	-18.9	39.6	90	100	Vert.	43.5	3.9	
383.993	34.6	QP	17.5	-16.5	35.6	345	100	Hori.	46.0	10.4	
383.993	34.1	QP	17.5	-16.5	35.1	213	186	Vert.	46.0	10.9	
703.997	34.2	QP	20.9	-15.0	40.1	339	134	Hori.	46.0	5.9	
703.997	31.5	QP	20.9	-15.0	37.4	179	152	Vert.	46.0	8.6	
767.997	26.5	QP	21.6	-14.5	33.6	273	163	Hori.	46.0	12.4	
767.997	27.0	QP	21.6	-14.5	34.1	172	100	Vert.	46.0	11.9	

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)

*The limit is rounded down to one decimal place. *The test result is round off to one or two decimal places, so some differences might be observed.

Radiated Spurious Emission (above 1GHz)

(Tx, Ant1, Low)

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

Company	Panasonic Communications Co., Ltd.	Regulation	FCC15.247(d)	
Equipment	Cordless Telephone (Base)	Test Distance	3m / 1m / 0.5m	
Model	BB-GT1540	Date	02/26/2007	02/27/2007
S/N	Air001	Temperature	25 deg.C.	23deg.C.
Power	AC 120V / 60Hz	Humidity	28 %	38 %
Mode	Tx Low 5741.865MHz	Engineer	Makoto Kosaka,	Kenichi Adachi
Position	Normal-axis, Worst Ant: Ant1			

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	PK	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	5460.00	43.6	43.3	31.8	31.5	5.0	0.0	48.9	48.6	73.9	25.0	25.3
2	5725.00	43.0	43.6	32.0	31.5	5.0	9.9	58.4	59.0	73.9	15.5	14.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
3	11483.73	45.8	47.5	40.2	31.1	6.9	0.7	53.0	54.7	73.9	20.9	19.2
4	17225.60	50.4	50.1	42.3	30.0	9.1	0.8	63.1	62.8	73.9	10.8	11.1
5	22967.46	54.0	56.7	41.0	30.7	10.4	0.0	65.2	67.9	73.9	8.7	6.0
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	28709.33	35.8	43.4	43.1	24.3	15.6	0.0	54.6	62.2	73.9	19.3	11.7
7	34451.19	39.8	41.6	43.4	24.6	16.4	0.0	59.4	61.2	73.9	14.5	12.7

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	AV	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	5460.00	28.5	28.6	31.8	31.5	5.0	0.0	33.8	33.9	53.9	20.1	20.0
2	5725.00	28.6	28.6	32.0	31.5	5.0	9.9	44.0	44.0	53.9	9.9	9.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
3	11483.73	31.2	31.5	40.2	31.1	6.9	0.7	38.4	38.7	53.9	15.5	15.2
4	17225.60	34.8	34.7	42.3	30.0	9.1	0.8	47.5	47.4	53.9	6.4	6.5
5	22967.46	35.5	36.8	41.0	30.7	10.4	0.0	46.7	48.0	53.9	7.2	5.9
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	28709.33	22.7	30.4	43.1	24.3	15.6	0.0	41.5	49.2	53.9	12.4	4.7
7	34451.19	27.3	27.5	43.4	24.6	16.4	0.0	46.9	47.1	53.9	7.0	6.8

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.54 dB
Test Distance 0.5m : Distance Factor(Dfac) = 20log(3/0.5) = 15.56 dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.
*The limit is rounded down to one decimal place.
*The test result is round off to one or two decimal places, so some differences might be observed.
*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission (above 1GHz)

(Tx, Ant1, Mid)

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

Company	Panasonic Communications Co., Ltd.	Regulation	FCC15.247(d)	
Equipment	Cordless Telephone (Base)	Test Distance	3m / 1m / 0.5m	
Model	BB-GT1540	Date	02/26/2007	02/27/2007
S/N	Air001	Temperature	25 deg.C.	23deg.C.
Power	AC 120V / 60Hz	Humidity	28 %	38 %
Mode	Tx Mid 5790.026MHz	Engineer	Makoto Kosaka	Kenichi Adachi
Position	Normal-axis, Worst Ant: Ant1			

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	PK	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	5460.00	43.5	43.4	31.8	31.5	5.0	0.0	48.8	48.7	73.9	25.1	25.2
2	5850.00	35.9	35.9	32.2	31.4	5.0	0.0	41.7	41.7	73.9	32.2	32.2
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
3	11580.05	48.2	48.6	40.0	31.1	7.0	0.7	55.3	55.7	73.9	18.6	18.2
4	17370.08	51.8	52.0	43.7	30.1	9.2	0.8	65.9	66.1	73.9	8.0	7.8
5	23160.10	53.7	56.1	41.0	30.7	10.4	0.0	64.9	67.3	73.9	9.0	6.6
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
7	28950.13	35.8	38.4	43.2	24.4	15.6	0.0	54.6	57.2	73.9	19.3	16.7
8	34740.16	41.5	42.7	43.3	24.5	16.5	0.0	61.2	62.4	73.9	12.7	11.5

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	AV	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	5460.00	28.6	28.6	31.8	31.5	5.0	0.0	33.9	33.9	53.9	20.0	20.0
2	5850.00	21.8	21.8	32.2	31.4	5.0	0.0	27.6	27.6	53.9	26.3	26.3
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
3	11580.05	32.2	32.4	40.0	31.1	7.0	0.7	39.3	39.5	53.9	14.6	14.4
4	17370.08	34.0	34.2	43.7	30.1	9.2	0.8	48.1	48.3	53.9	5.8	5.6
5	23160.10	35.2	36.4	41.0	30.7	10.4	0.0	46.4	47.6	53.9	7.5	6.3
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
7	28950.13	22.8	23.1	43.2	24.4	15.6	0.0	41.6	41.9	53.9	12.3	12.0
8	34740.16	28.1	28.3	43.3	24.5	16.5	0.0	47.8	48.0	53.9	6.1	5.9

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.54 dB
Test Distance 0.5m : Distance Factor(Dfac) = 20log(3/0.5) = 15.56 dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.
*The limit is rounded down to one decimal place.
*The test result is round off to one or two decimal places, so some differences might be observed.
*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission (above 1GHz)

(Tx, Ant1, High)

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

Company	Panasonic Communications Co., Ltd.	Regulation	FCC15.247(d)	
Equipment	Cordless Telephone (Base)	Test Distance	3m / 1m / 0.5m	
Model	BB-GT1540	Date	02/26/2007	02/27/2007
S/N	Air001	Temperature	25 deg.C.	23deg.C.
Power	AC 120V / 60Hz	Humidity	28 %	38 %
Mode	Tx High 5838.187MHz	Engineer	Makoto Kosaka	Kenichi Adachi
Position	Normal-axis, Worst Ant: Ant1			

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	PK	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	5460.00	43.7	43.3	31.8	31.5	5.0	0.0	49.0	48.6	73.9	24.9	25.3
2	5850.00	36.1	36.3	32.2	31.4	5.0	0.0	41.9	42.1	73.9	32.0	31.8
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
3	11676.37	47.8	48.4	39.8	31.1	7.1	0.7	54.8	55.4	73.9	19.1	18.5
4	17514.56	51.0	51.1	45.1	30.1	9.3	0.9	66.7	66.8	73.9	7.2	7.1
5	23352.75	53.6	56.4	40.9	30.7	10.5	0.0	64.8	67.6	73.9	9.1	6.3
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
7	29190.94	38.1	39.5	43.2	24.4	15.6	0.0	56.9	58.3	73.9	17.0	15.6
8	35029.12	40.3	42.4	43.3	24.4	16.6	0.0	60.2	62.3	73.9	13.7	11.6

* Reference data

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

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	AV	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	5460.00	28.6	28.6	31.8	31.5	5.0	0.0	33.9	33.9	53.9	20.0	20.0
2	5850.00	21.8	21.8	32.2	31.4	5.0	0.0	27.6	27.6	53.9	26.3	26.3
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
3	11676.37	32.0	32.3	39.8	31.1	7.1	0.7	39.0	39.3	53.9	14.9	14.6
4	17514.56	33.9	34.2	45.1	30.1	9.3	0.9	49.6	49.9	53.9	4.3	4.0
5	23352.75	35.3	36.7	40.9	30.7	10.5	0.0	46.5	47.9	53.9	7.4	6.0
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
7	29190.94	22.8	23.0	43.2	24.4	15.6	0.0	41.6	41.8	53.9	12.3	12.1
8	35029.12	29.0	29.2	43.3	24.4	16.6	0.0	48.9	49.1	53.9	5.0	4.8

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.54 dB
Test Distance 0.5m : Distance Factor(Dfac) = 20log(3/0.5) = 15.56 dB

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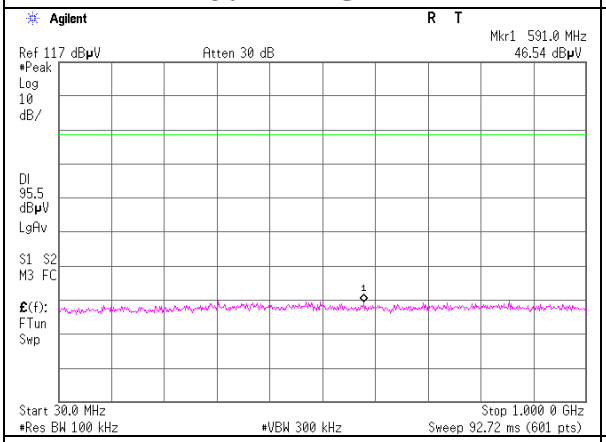
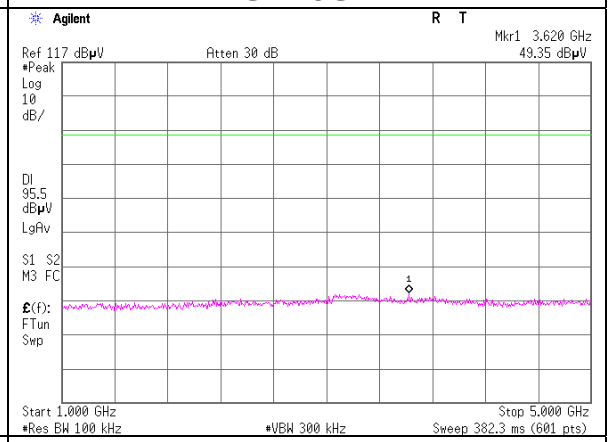
Conducted Spurious Emission
Ch:Low

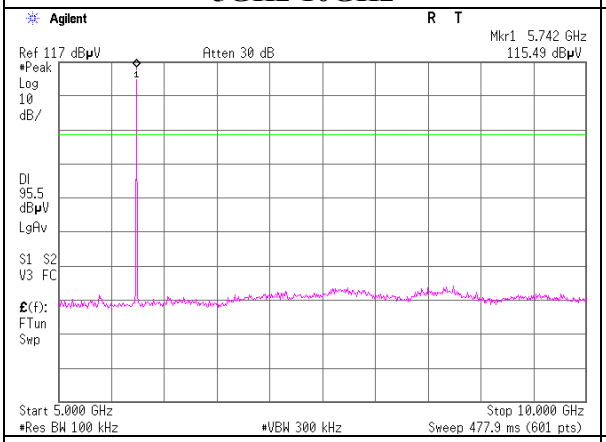
30MHz-1GHz



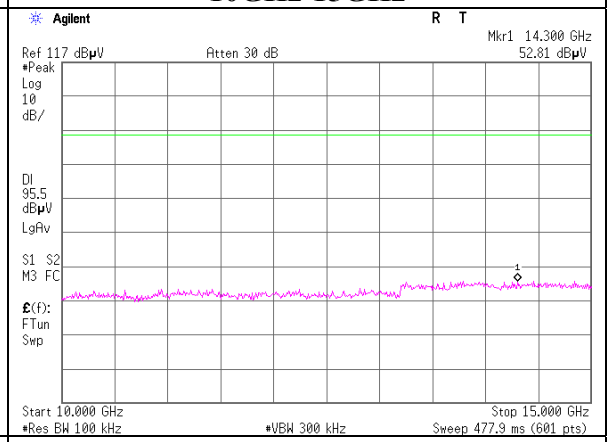
1GHz-5GHz



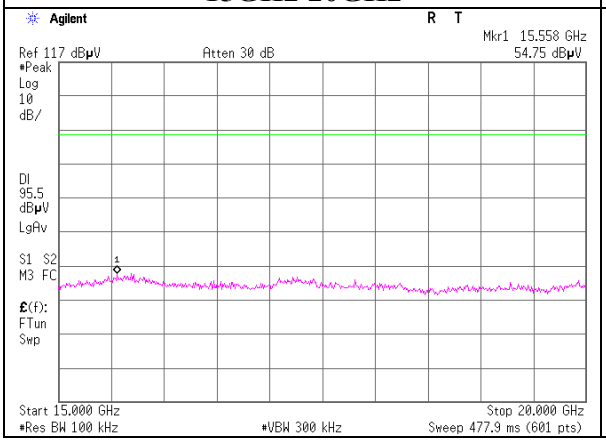
5GHz-10GHz



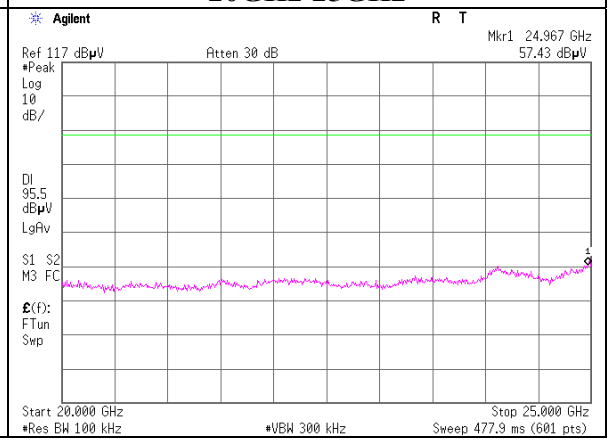
10GHz-15GHz



15GHz-20GHz



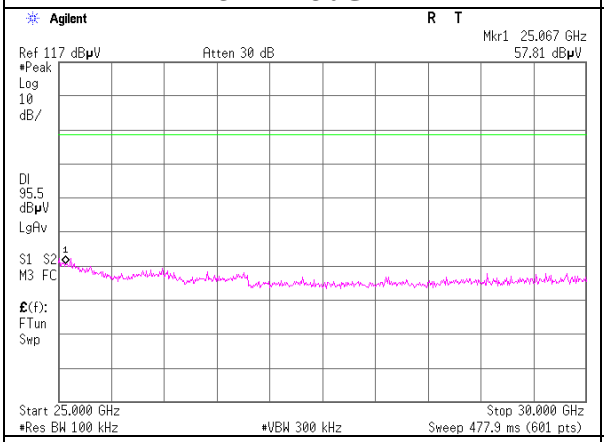
20GHz-25GHz



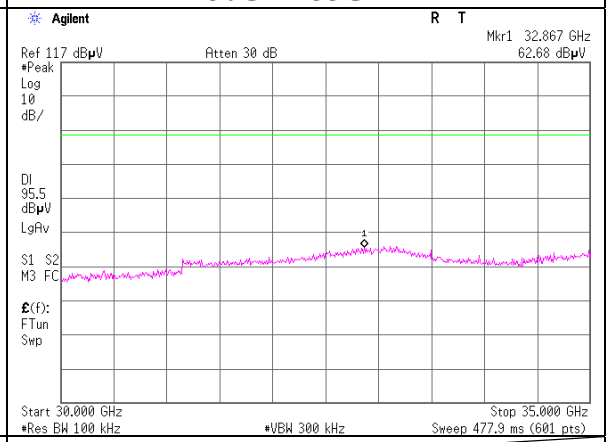
Conducted Spurious Emission

Ch:Low

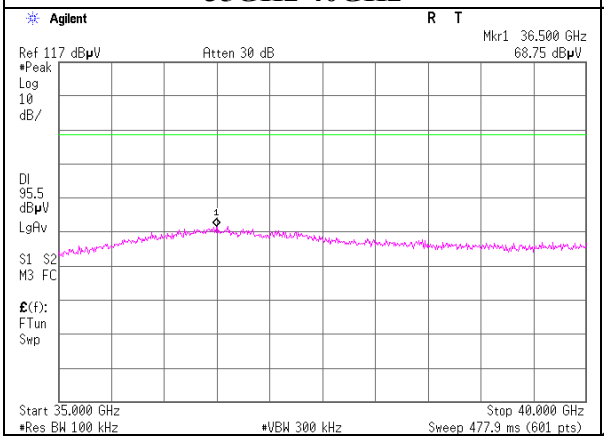
25MHz-30GHz

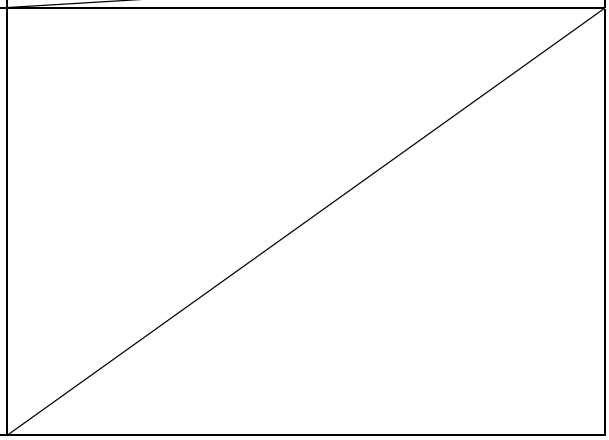


30GHz-35GHz



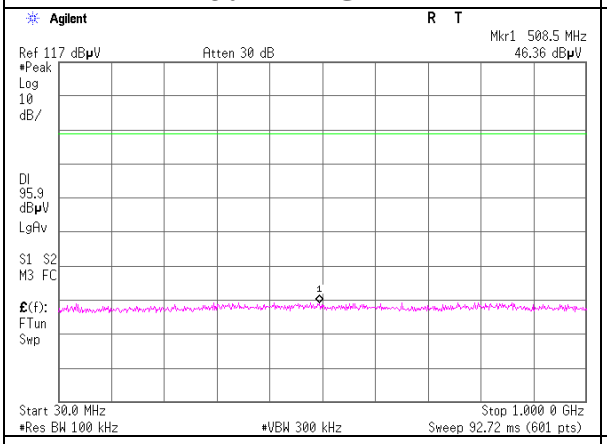
35GHz-40GHz



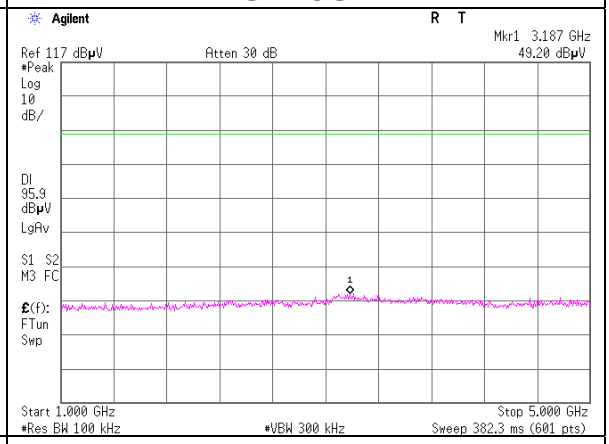


Conducted Spurious Emission
Ch:Mid

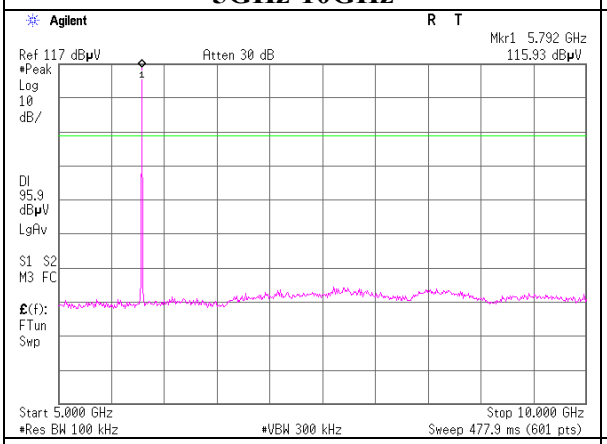
30MHz-1GHz



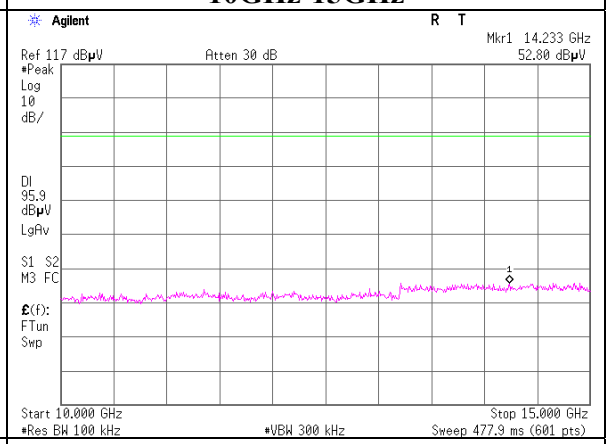
1GHz-5GHz



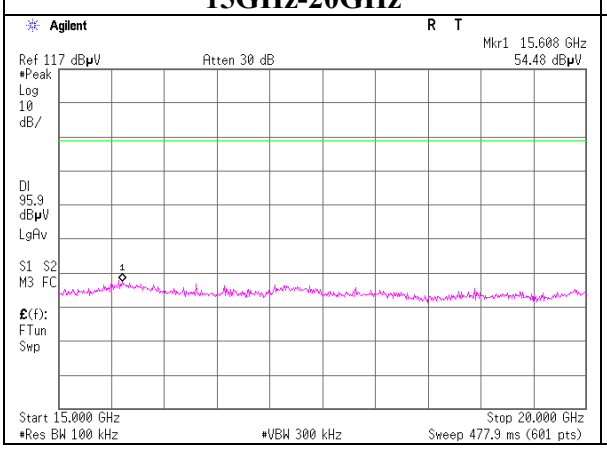
5GHz-10GHz



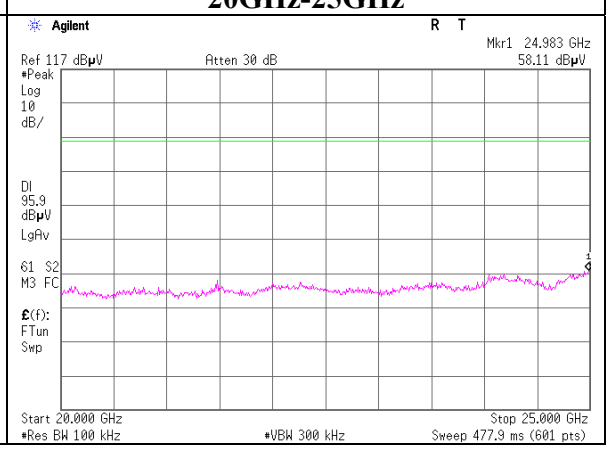
10GHz-15GHz



15GHz-20GHz

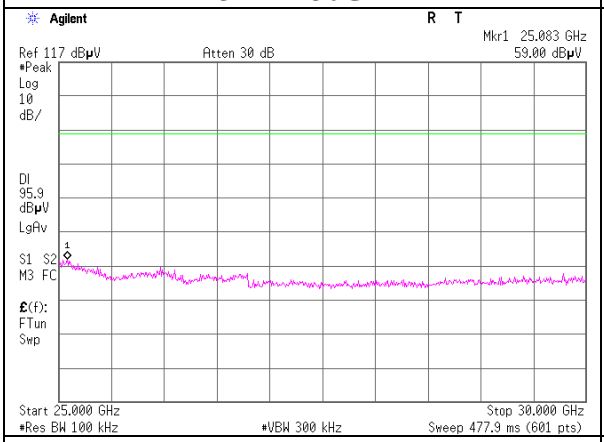


20GHz-25GHz

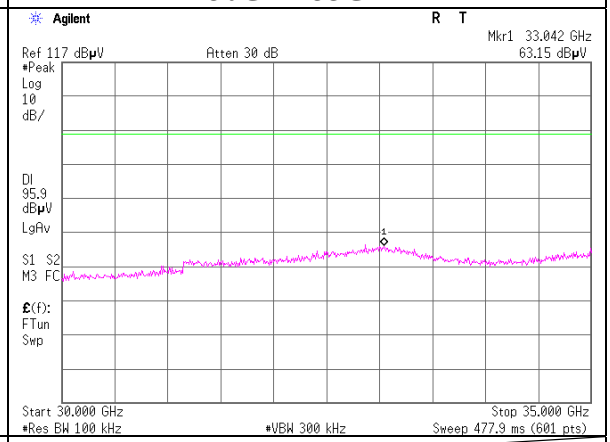


Conducted Spurious Emission
Ch:Mid

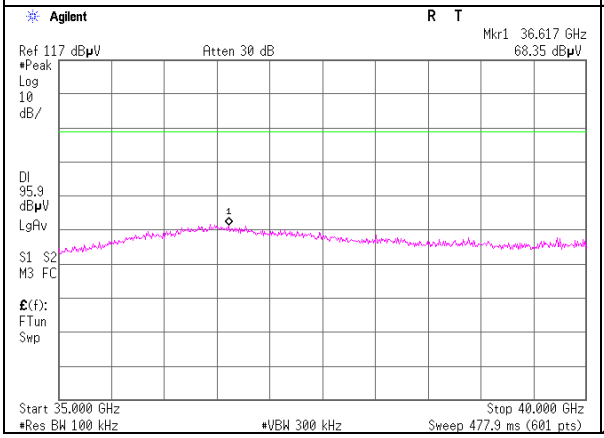
25MHz-30GHz

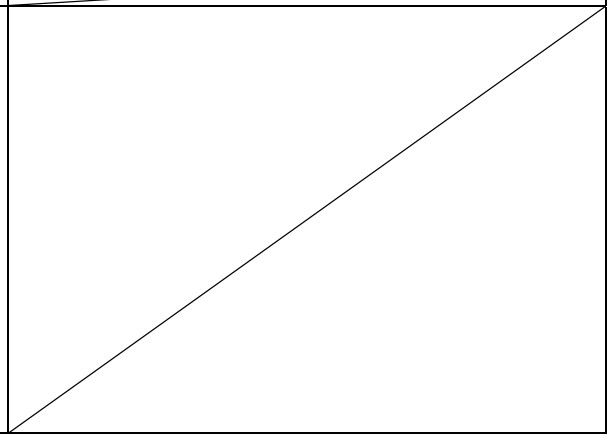


30GHz-35GHz



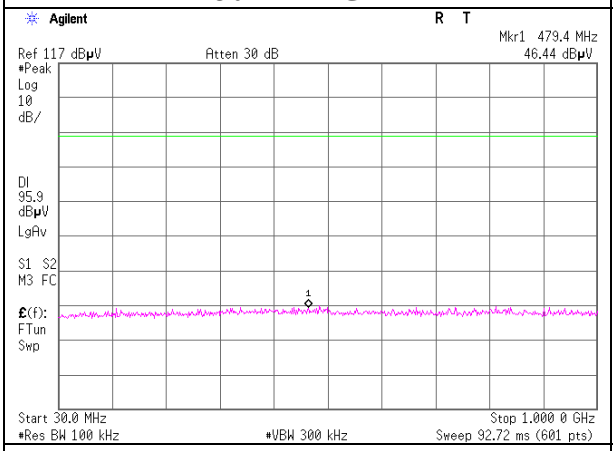
35GHz-40GHz



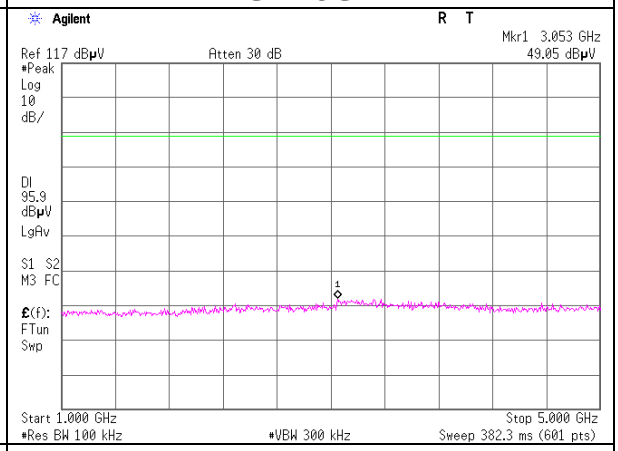


Conducted Spurious Emission
Ch:High

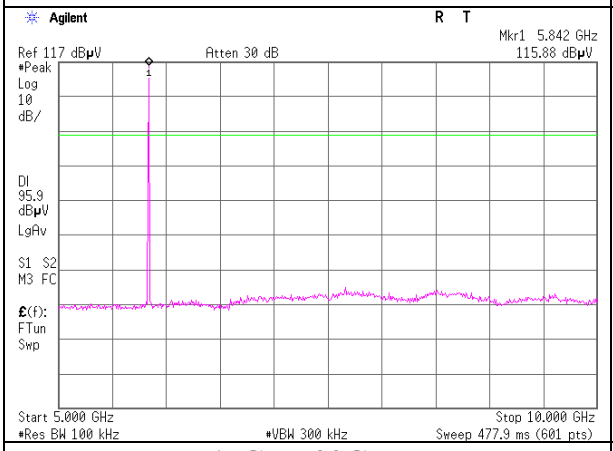
30MHz-1GHz



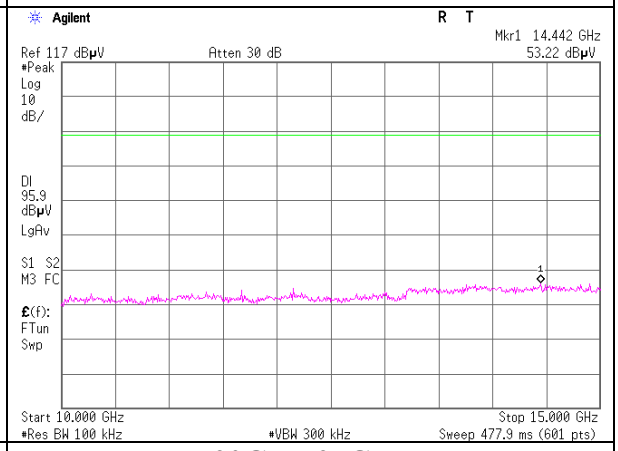
1GHz-5GHz



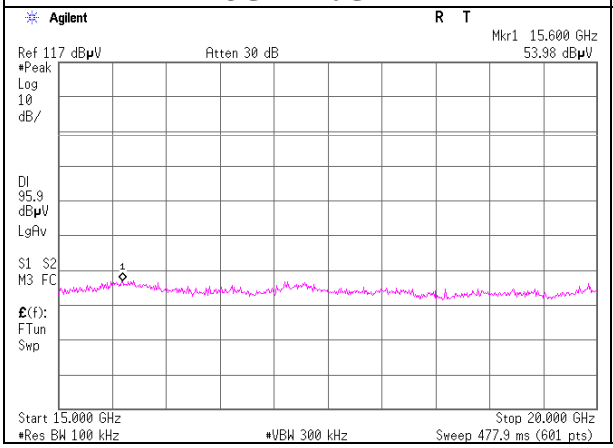
5GHz-10GHz



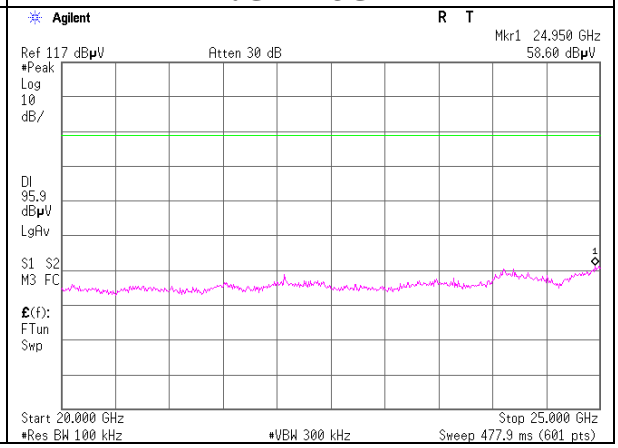
10GHz-15GHz



15GHz-20GHz

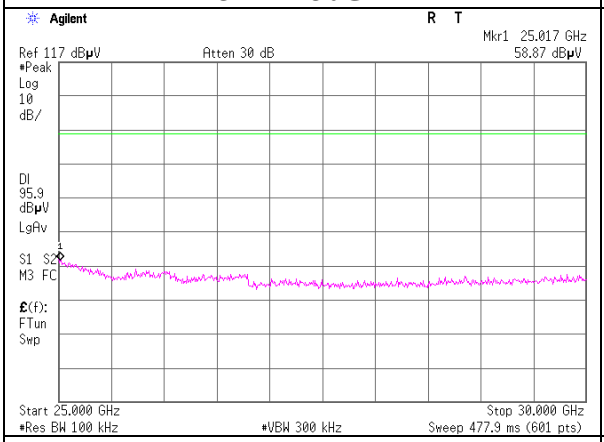


20GHz-25GHz

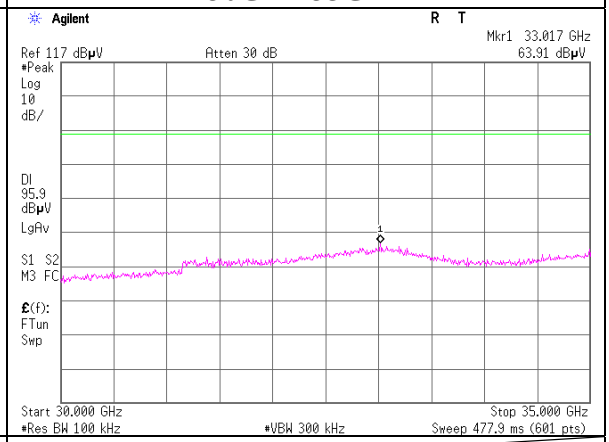


Conducted Spurious Emission
Ch:High

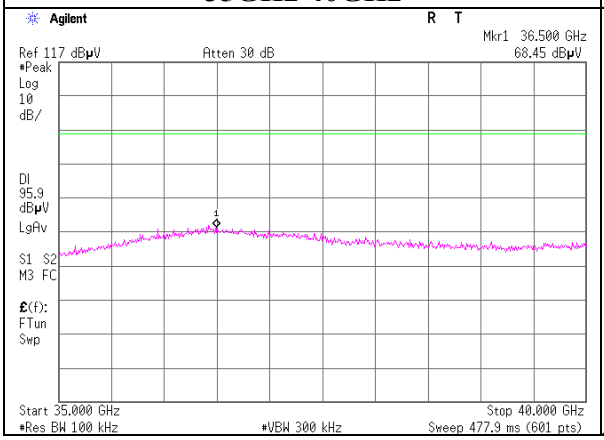
25MHz-30GHz

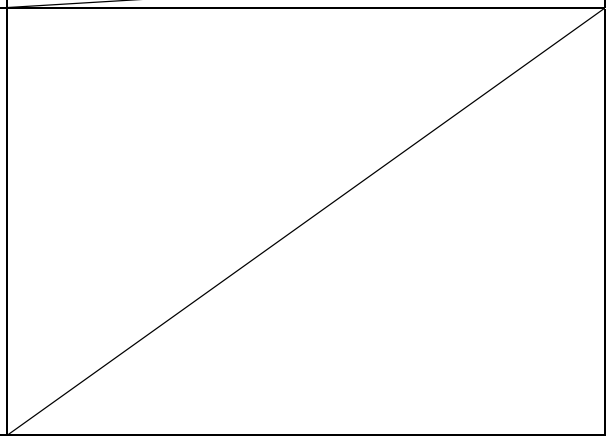


30GHz-35GHz



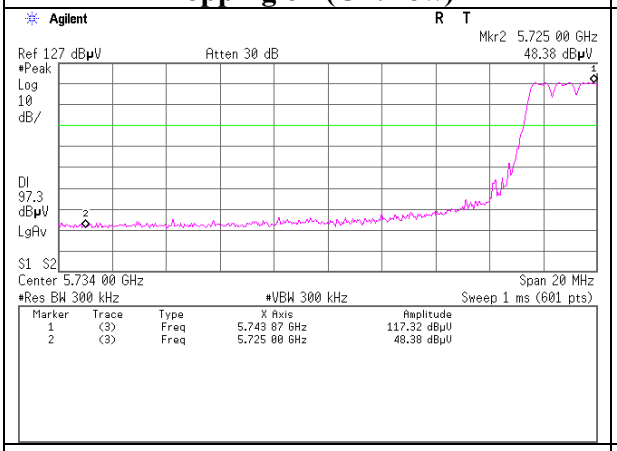
35GHz-40GHz



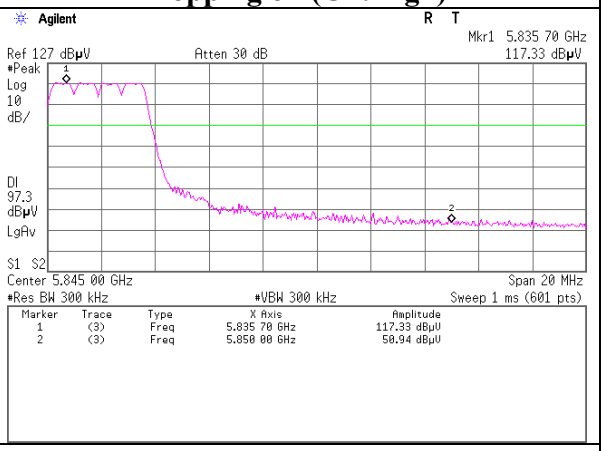


Conducted Spurious Emission
Band Edge compliance

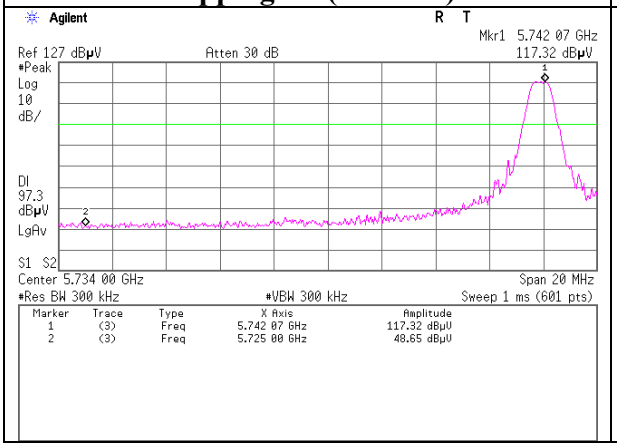
Hopping on (Ch:Low)



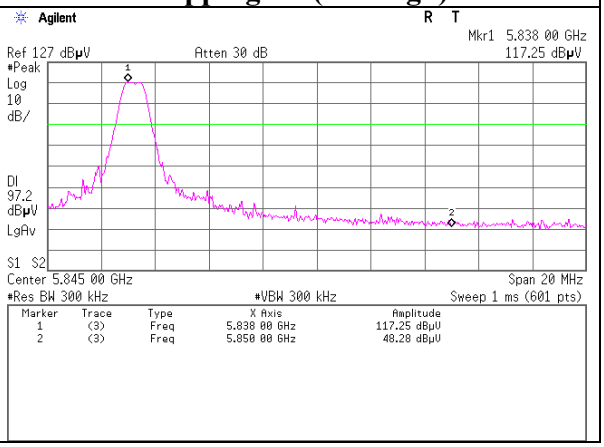
Hopping on (Ch:High)



Hopping off (Ch:Low)



Hopping off (Ch:High)



APPENDIX 3:Test instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MSA-03	Spectrum Analyzer	Agilent	E4448A	AT	2006/09/13 * 12
MAT-24	Attenuator(10dB)(above1GHz)	Agilent	8493C	AT	2006/06/02 * 12
MOS-14	Thermo-Hygrometer	Custom	CTH-180	AT	2006/01/19 * 24
MPM-08	Power Meter	Anritsu	ML2495A	AT	2006/09/20 * 12
MPSE-11	Power sensor	Anritsu	MA2411B	AT	2006/09/20 * 12
MAEC-01	Anechoic Chamber	TDK	Semi Anechoic Chamber 10m	RE / CE	2006/11/01 * 12
MOS-01	Digital Humidity Indicator	N.T	NT-1800	RE / CE	2006/11/27 * 12
MJM-01	Measure	KDS	ES19-55	RE / CE	-
MTR-01	Test Receiver	Rohde & Schwarz	ESI40	RE / CE	2006/10/14 * 12
MPA-04	Pre Amplifier	Agilent	8447D	RE	2007/01/24 * 12
MAEC-02	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE	2006/04/10 * 12
MHA-06	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2007/01/30 * 12
MCC-16	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX 104	RE	2007/02/22 * 12
MCC-47	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	RE	2006/08/29 * 12
MPA-10	Pre Amplifier	Agilent	8449B	RE	2006/09/11 * 12
MSA-04	Spectrum Analyzer	Agilent	E4448A	RE	2006/06/02 * 12
MOS-02	Digital Humidity Indicator	N.T	NT-1800	RE	2006/11/27 * 12
MJM-05	Measure	PROMART	SEN1955	RE	-
MHF-09	High Pass Filter 7-30GHz	TOKIMEC	TF37NCCA	RE	2006/06/21 * 12
MHA-02	Horn Antenna	EMCO	3160-09	RE	2007/01/30 * 12
MHA-04	Horn Antenna	EMCO	3160-10	RE	2007/01/30 * 12
MPA-03	Microwave System Power Amplifier	Agilent	83050A	RE	2006/05/16 * 12
MCC-27	Microwave Cable 1G-40GHz	Suhner	SUCOFLEX101	RE	2006/08/30 * 12
MCC-28	Microwave Cable 1G-40GHz	Suhner	SUCOFLEX101	RE	2006/08/30 * 12
MSTW-14	EMI measurement program	TSJ	TEPTO-DV	RE / CE	-
MCC-01	Coaxial Cable 0.1-3000MHz	Suhner/storm/Agilent/TSJ	-	RE	2007/02/27 * 12
MAT-06	Attenuator(6dB)	Weinschel Corp	2	RE	2006/12/27 * 12
MBA-01	Biconical Antenna	Schwarzbeck	BBA9106	RE	2006/10/07 * 12
MLA-01	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2006/10/07 * 12
MCC-03	Coaxial Cable	Fujikura/Suhner/Agilent /TSJ	-	CE	2006/12/28 * 12
MLS-02	LISN(AMN)	Schwarzbeck	NSLK8127	CE(EUT)	2006/06/01 * 12
MLS-03	LISN(AMN)	Schwarzbeck	NSLK8127	CE(AE)	2006/06/01 * 12
MTA-07	Terminator	MCL	BTRM-50	CE	2007/02/01 * 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: AC Main Conducted Emission test
RE: Radiated Spurious Emission test
AT: Antenna Terminal Conducted test