RADIO TEST REPORT

Test Report No. : 26KE0322-HO-A-1

Applicant	:	**Panasonic Communications Co.,Ltd.**
Type of Equipment	:	**Travel Phone**
Model No.	:	**KX-WP1050** **(KX-WPA100(Hand Unit))** **(KX-WPA102(Base Unit))**
FCC ID	:	**ACJ96NKX-WP1050A (KX-WPA100(Hand Unit))** **ACJ96NKX-WP1050 (KX-WPA102(Base Unit))**
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: July 24 – August 12, 2006

Tested by: Yutaka Yoshida, EMC Services; Kenichi Adachi, EMC Services

Yasuyuki Fukui, EMC Services

Approved by : Naoki Sakamoto, 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

UL Apex Co., Ltd.
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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	Travel Phone
Model No.	KX-WP1050 KX-WPA100(Hand Unit) / KX-WPA102(Base Unit)
Serial No.	EUT / S/N / Used Test Item: KX-WPA100 (Hand Unit) / 1 / Antenna Terminal Conducted Measurement (for the other tests except for Power test) Radiated Emission KX-WPA100 (Hand Unit) / 2 / Antenna Terminal Conducted Measurement (Power test) KX-WPA102 (Base Unit) / 1 / Conducted Emission Radiated Emission KX-WPA102 (Base Unit) / 2 / Antenna Terminal Conducted Measurement
Country of Manufacture	Japan
Condition of EUT	Engineering Prototype (Not for Sale: This sample is equivalent to mass-produced items.)
Operation Clock	(Hand Unit) CPU156MHz, Bus Clock 78MHz, RTC 32.768MHz, RFIC20MHz (Base Unit) CPU187MHz, Bus Clock 93.5MHz, RFIC20MHz
Rating	(Hand Unit) Battery : DC 3.6V, 730mAh (Base Unit)AC adaptor : AC100V – AC240V 50/60Hz (AC Adaptor: DC6V,1.5A)
Receipt Date of Sample	July 11, 2006
Modification of EUT	No modification by the test lab.

2.2 Product Description

Equipment Type	Transceiver
Frequency of Operation	2412-2462 MHz
Bandwidth & Channel spacing	22MHz&5MHz
Type of Modulation	DSSS / OFDM
Method of frequency generation	Crystal
Power Supply (Inner)	(Hand Unit) DC1.8V – 3.1%+3.0% DC3.2V +/- 5% (Base Unit) DC1.8V – 0.5%+0.8% DC3.3V – 1.6%+0.9%
Antenna type	1/4 lambda Monopole antenna
Antenna Connector Type	N/A
Antenna Gain	+1dBi max.

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

<Hand Unit>
FCC 15.31 (e)
This EUT provides stable voltage(DC1.8V, DC3.2V) constantly to RF Module regardless of input voltage. Therefore, this EUT complies with the requirement.

<Base Unit>
FCC 15.31 (e)
This EUT provides stable voltage(DC1.8V, DC3.3V) constantly to RF Module regardless of input voltage. Therefore, this EUT complies with the requirement.

<Hand Unit & Base Unit>
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

[DSSS and other forms of modulation]

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	<Base Unit> 8.6dB 3.96320MHz AV, N *1)	Complied
2	6dB Bandwidth	**FCC:** ANSI C63.4:2003 13. Measurement of intentional radiators	**FCC:** Section 15.247(a)(2)	Conducted	N/A	See data.	Complied
3	Maximum Peak Output Power	**FCC:** ANSI C63.4:2003 13. Measurement of intentional radiators	**FCC:** Section 15.247(b)(3)	Conducted	N/A		Complied
4	Restricted Band Edges	**FCC:** ANSI C63.4:2003 13. Measurement of intentional radiators	**FCC:** Section 15.247 (d)	Conducted/ Radiated	N/A		Complied
5	Power Density	**FCC:** ANSI C63.4:2003 13. Measurement of intentional radiators	**FCC:** Section 15.247 (e)	Conducted	N/A		Complied
6	Spurious Emission	**FCC:** ANSI C63.4:2003 13. Measurement of intentional radiators	**FCC:** Section15.247(d)	Conducted/ Radiated	N/A	<Hand Unit[Tx]> 2.2dB / 4824.07MHz AV, Vertical <Base Unit [Tx]> 1.6dB / 4924.03MHz AV, Vertical	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.
*1) The test of Hand Unit is not applicable since Hand Unit is connected to Base Unit during the test.

*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.

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 shielded room	-	-	6.0 x 6.0 x 3.9m	N/A	-
No.6 shielded room	-	-	4.0 x 4.5 x 2.7m	N/A	-
No.6 measurement room	-	-	4.75 x 5.4 x 3.0m	N/A	-
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

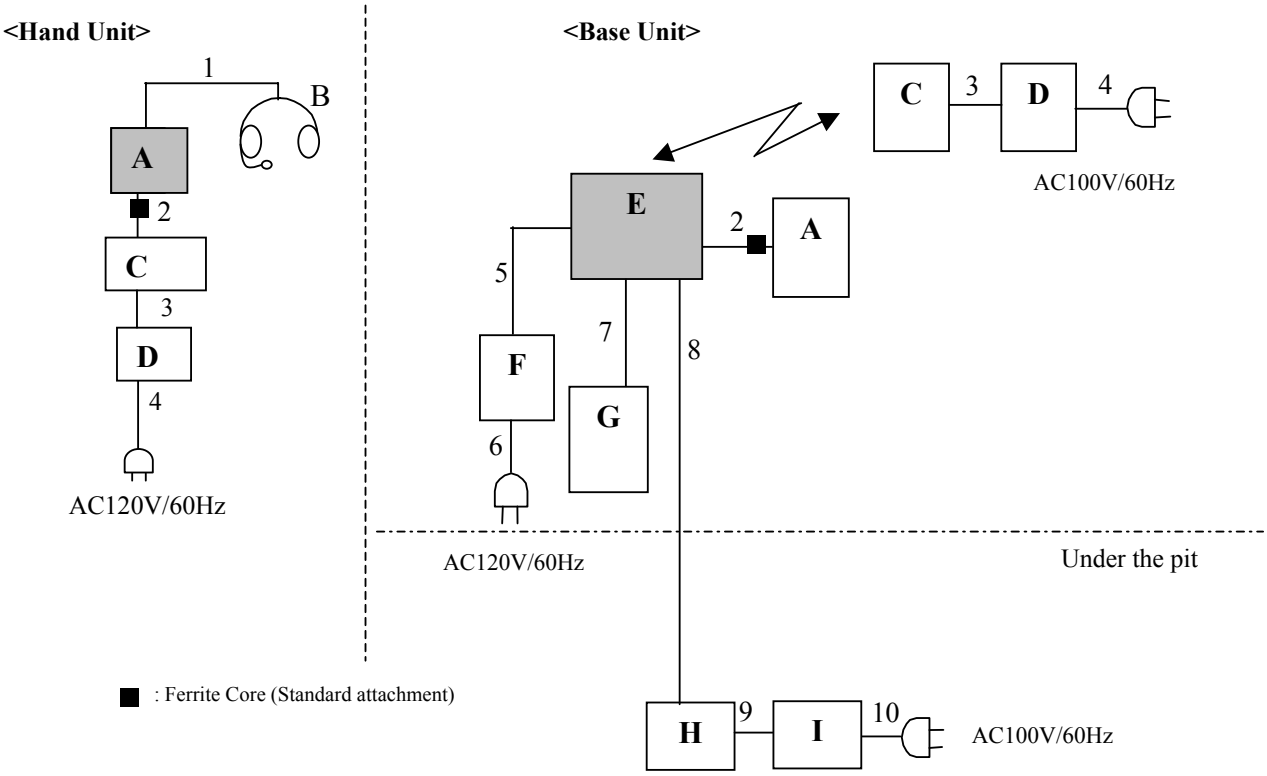
The mode used for test : [DSSS and other forms of modulation]
Transmitting mode 11b (DBPSK 1Mbps (Worst), Packet type: Maximum, Payload: Maximum)
Low Channel : 2412MHz(Ch1)
Mid Channel : 2437MHz(Ch6)
High Channel : 2462MHz(Ch11)

Transmitting mode 11g (BPSK 6Mbps (Worst), Packet type: Maximum, Payload: Maximum)
Low Channel : 2412MHz(Ch1)
Mid Channel : 2437MHz(Ch6)
High Channel : 2462MHz(Ch11)

*The test was made with the above modes which had the worst case.

4.2 Configuration and peripherals

Remarks: The above test mode was determined by the worst bit rate of average power



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

Description of Support equipment <Hand Unit>

No.	Item	Model number	Serial number	Manufacturer	Remark
A	Hand Unit of Travel Phone	KX-WPA100	1, 2	Panasonic Communications Co., Ltd.	EUT
B	Headset	KX-TCA88HA	-	Panasonic Communications Co., Ltd.	-
C	Personal Computer	CF-R1PWAXS	2HKSA01606	Panasonic	-
D	AC Adaptor	CF-AA1527 C3	C990820110A	Panasonic	-

List of cables used <Hand Unit>

No.	Name	Length (m)	Shield	
			Cable	Connector
1	Headset Cable	1.5	Unshielded	Unshielded
2	USB Cable	1.0	Shielded	Shielded
3	DC Cable	1.8	Unshielded	Unshielded
4	AC Cable	0.8	Unshielded	Unshielded

Description of Support equipment <Base Unit>

No.	Item	Model number	Serial number	Manufacturer	Remark
E	Base Unit of Travel Phone	KX-WPA102	1, 2	Panasonic Communications Co.,Ltd.	EUT
A	Hand Unit of Travel Phone	KX-WPA100	1	Panasonic Communications Co.,Ltd.	-
C	Personal Computer	CF-R1PWAXS	2HKSA01606	Panasonic	-
D	AC Adaptor	CF-AA1527 C3	C990820110A	Panasonic	-
F	AC Adaptor	PQWEWP1050	-	Panasonic Communications Co.,Ltd.	-
G	Personal Computer	PP05L	CN-095152-48643-49T-6492	DELL	-
H	Personal Computer	PAS403JB	29015483	Toshiba	-
I	AC Adaptor	PA2450U	9902C 1517466	Toshiba	-

List of cables used <Base Unit>

No.	Name	Length (m)	Shield	
			Cable	Connector
2	USB Cable	0.5	Shielded	Shielded
3	DC Cable	1.8	Unshielded	Unshielded
4	AC Cable	0.8	Unshielded	Unshielded
5	DC Cable	2.0	Unshielded	Unshielded
6	AC Cable	1.8	Unshielded	Unshielded
7	LAN Cable	3.0	Unshielded	Unshielded
8	LAN Cable	20.0	Unshielded	Unshielded
9	DC Cable	1.8	Unshielded	Unshielded
10	AC Cable	1.8	Unshielded	Unshielded

SECTION 5: Conducted Emission

Test Procedure and conditions

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

1) 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 resistively terminated in 50ohm when not connected to the measuring equipment.

The AC Mains Terminal Continuous disturbance Voltage has been measured with the EUT in a Semi Anechoic Chamber or a Measurement Room.
The EUT was connected to a LISN (AMN).
An overview sweep with peak detection has been performed.

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

Date: August 12, 2006 Test engineer: Kenichi Adachi

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 (Hand Unit) / 1.0m by 0.5m(Base Unit), 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 15.205. (FCC)

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

KX-WPA100 (Hand unit)
- 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.

KX-WPA102 (Base Unit)
The test was made on EUT at the normal use position.

Test data : APPENDIX 2
Test result : Pass

Date: July 24 to August 11, 2006

Test engineer: Kenichi Adachi
: Yasuyuki Fukui
: Yutaka Yoshida

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.

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

APPENDIX 2: Data of EMI test

Conducted Emission

Tx 11b, Low ch.

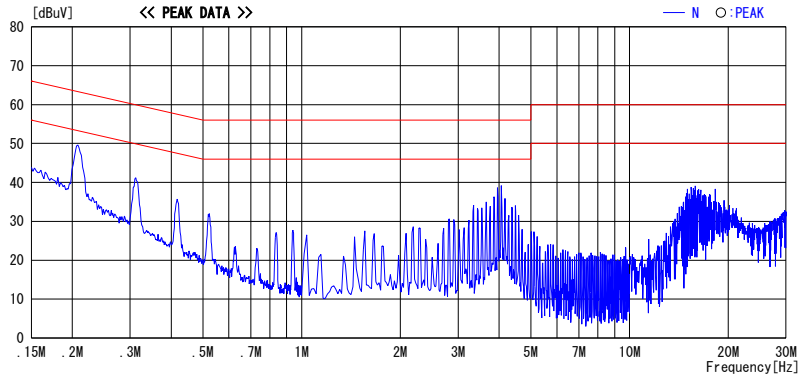
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/08/12 11:46:36

Company	: Panasonic Communications Co.,Ltd.	Report No.	: 26KE0322-HO
Kind of EUT	: Travel Phone (Base unit)	Power	: AC 120V / 60Hz
Model No.	: KX-WPA102	Temp./Humi.	: 24deg.C / 58%
Serial No.	: 1	Operator	: Kenichi Adachi

Mode / Remarks : 11b, Tx 2412MHz, Worst rate:1Mbps, Worst Ant102

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



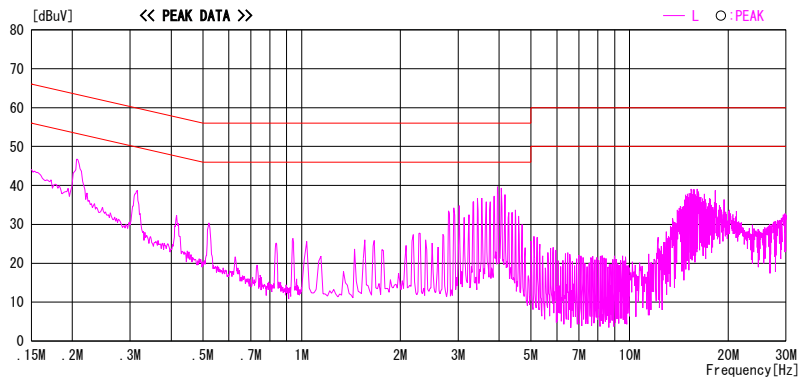


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

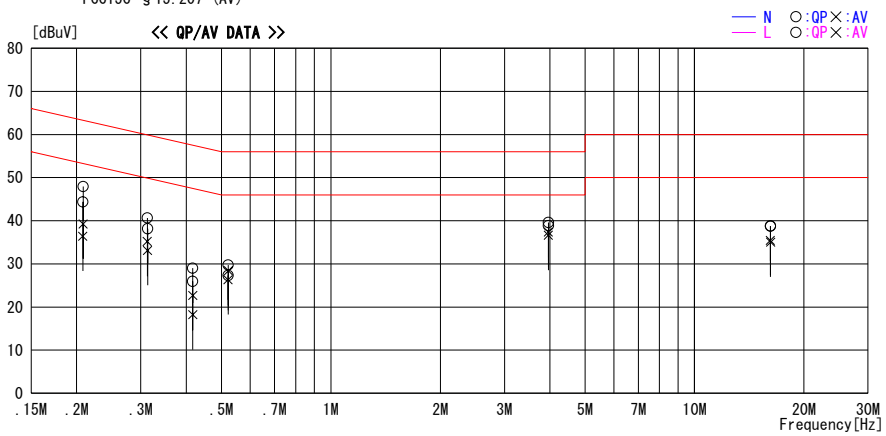
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/08/12 11:46:36

Company	: Panasonic Communications Co.,Ltd.	Report No.	: 26KE0322-HO
Kind of EUT	: Travel Phone (Base unit)	Power	: AC 120V / 60Hz
Model No.	: KX-WPA102	Temp./Humi.	: 24deg.C / 58%
Serial No.	: 1	Operator	: Kenichi Adachi

Mode / Remarks : 11b, Tx 2412MHz, Worst rate:1Mbps, Worst Ant102

LIMIT : FCC15C §15.207 (QP)
FCC15C §15.207 (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]	
0.20824	47.6	39.0	0.3	47.9	39.3	63.3	53.3	15.4	14.1	N
0.31254	40.3	34.8	0.4	40.7	35.2	59.9	49.9	19.2	14.7	N
0.41672	28.6	22.3	0.4	29.0	22.7	57.5	47.5	28.5	24.8	N
0.52189	29.3	28.1	0.4	29.7	28.5	56.0	46.0	26.3	17.6	N
3.96320	38.8	36.6	0.8	39.6	37.4	56.0	46.0	16.4	8.6	N
16.16746	36.8	33.6	1.9	38.7	35.5	60.0	50.0	21.3	14.5	N
0.20784	44.1	36.1	0.3	44.4	36.4	63.3	53.3	18.9	16.9	L
0.31319	37.8	32.7	0.4	38.2	33.1	59.9	49.9	21.7	16.8	L
0.41665	25.5	17.8	0.4	25.9	18.2	57.5	47.5	31.6	29.3	L
0.52146	26.9	25.9	0.4	27.3	26.3	56.0	46.0	28.7	19.7	L
3.96404	38.1	35.8	0.8	38.9	36.6	56.0	46.0	17.2	9.4	L
16.16858	36.9	33.2	1.9	38.8	35.1	60.0	50.0	21.2	14.9	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.

Conducted Emission

Tx 11b, Mid ch.

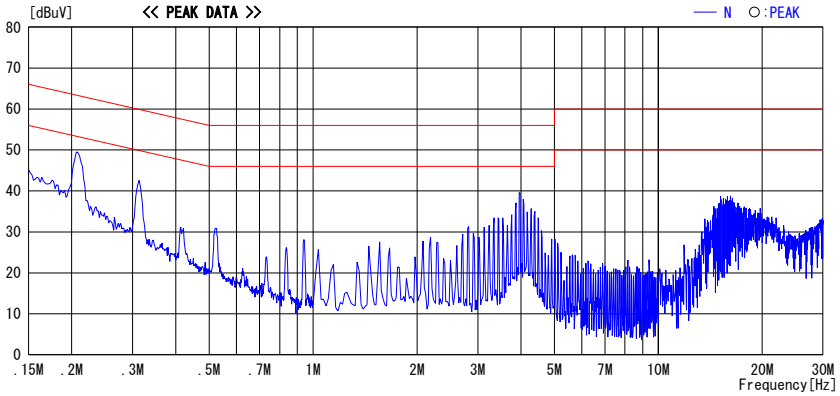
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/08/12 12:08:59

Company	: Panasonic Communications Co.,Ltd.	Report No.	: 26KE0322-HO
Kind of EUT	: Travel Phone (Base unit)	Power	: AC 120V / 60Hz
Model No.	: KX-WPA102	Temp./Humi.	: 24deg.C / 58%
Serial No.	: 1	Operator	: Kenichi Adachi

Mode / Remarks : 11b, Tx 2437MHz, Worst rate:1Mbps, Worst Ant102

LIMIT : FCC15C §15.207 (QP) / RSS-Gen / RSS-210
FCC15C §15.207 (AV)



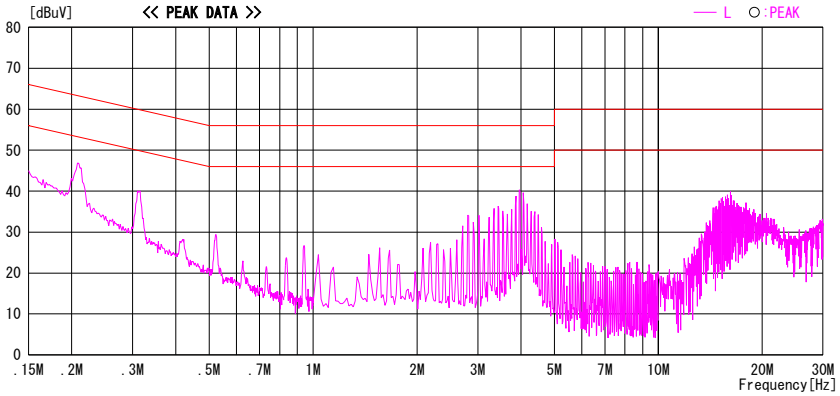


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

Tx 11b, High ch.

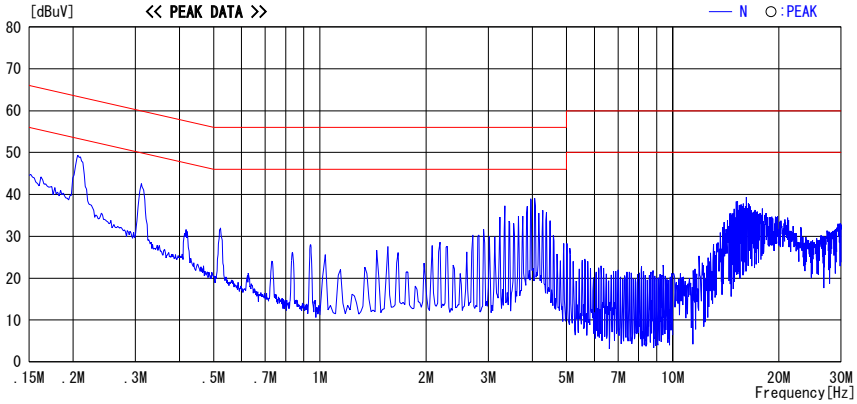
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/08/12 12:15:59

Company	: Panasonic Communications Co.,Ltd.	Report No.	: 26KE0322-HO
Kind of EUT	: Travel Phone (Base unit)	Power	: AC 120V / 60Hz
Model No.	: KX-WPA102	Temp./Humi.	: 24deg.C / 58%
Serial No.	: 1	Operator	: Kenichi Adachi

Mode / Remarks : 11b, Tx 2462MHz, Worst rate:1Mbps, Worst Ant102

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



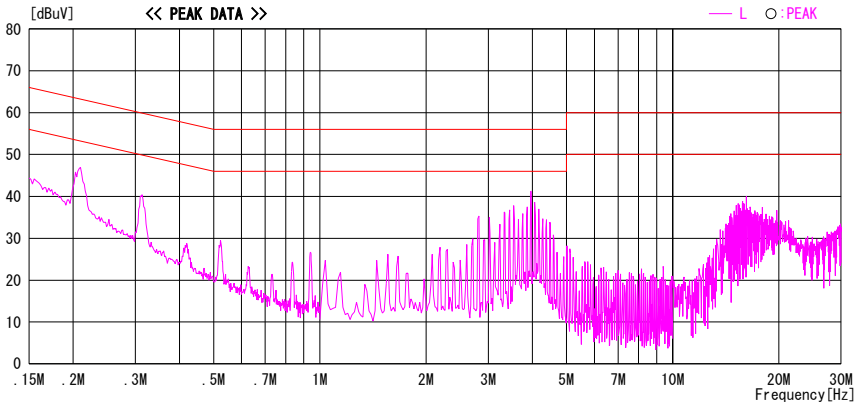


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

Tx 11g, Low ch.

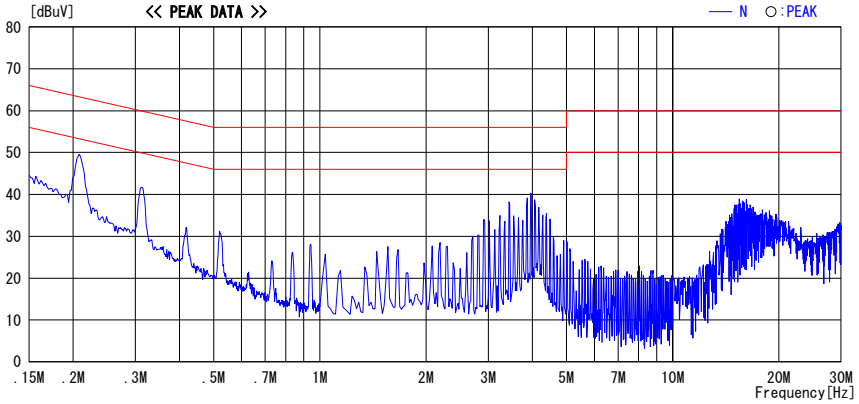
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/08/12 12:22:15

Company	: Panasonic Communications Co.,Ltd.	Report No.	: 26KE0322-HO
Kind of EUT	: Travel Phone (Base unit)	Power	: AC 120V / 60Hz
Model No.	: KX-WPA102	Temp./Humi.	: 24deg.C / 58%
Serial No.	: 1	Operator	: Kenichi Adachi

Mode / Remarks : 11g, Tx 2412MHz, Worst rate:6Mbps, Worst Ant102

LIMIT : FCC15C §15.207 (QP) / RSS-Gen / RSS-210
FCC15C §15.207 (AV)



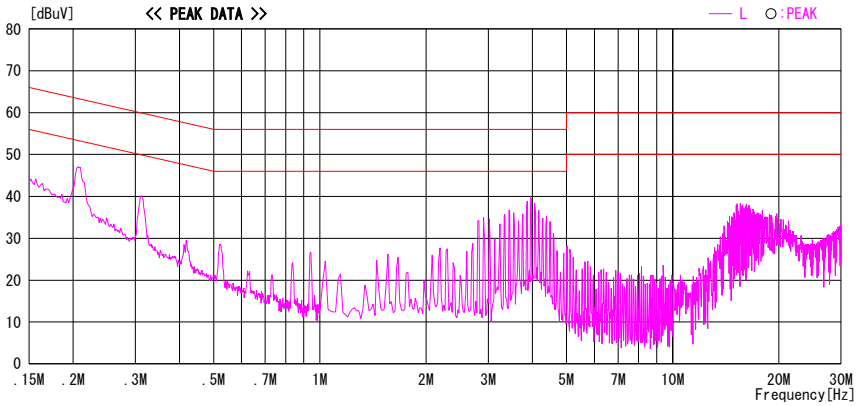


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

Tx 11g, Mid ch.

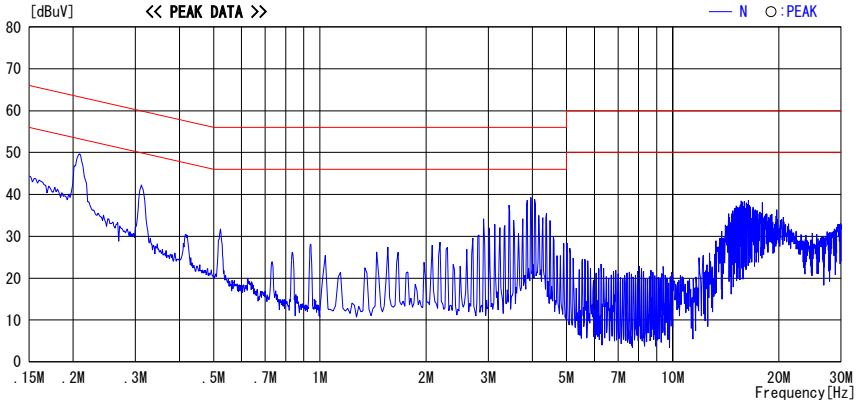
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/08/12 12:29:36

Company	: Panasonic Communications Co.,Ltd.	Report No.	: 26KE0322-HO
Kind of EUT	: Travel Phone (Base unit)	Power	: AC 120V / 60Hz
Model No.	: KX-WPA102	Temp./Humi.	: 24deg.C / 58%
Serial No.	: 1	Operator	: Kenichi Adachi

Mode / Remarks : 11g, Tx 2437MHz, Worst rate:6Mbps, Worst Ant102

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



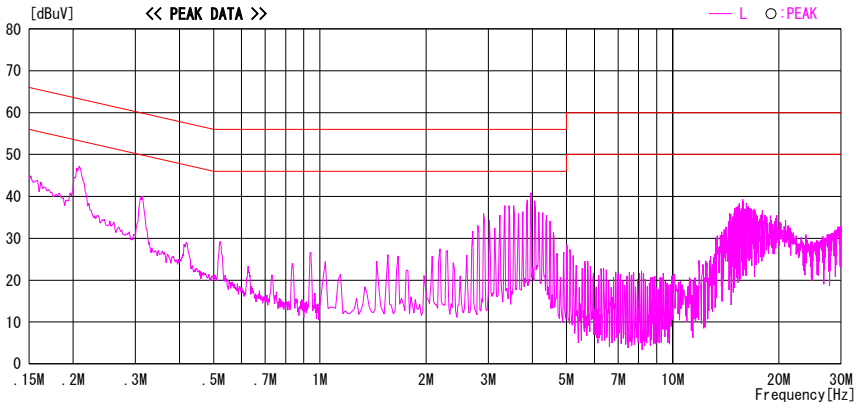


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

Tx 11g, High ch.

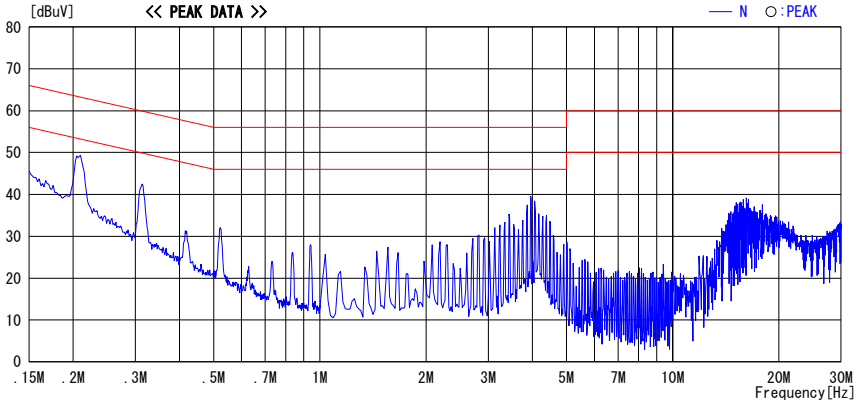
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/08/12 12:34:36

Company	: Panasonic Communications Co.,Ltd.	Report No.	: 26KE0322-HO
Kind of EUT	: Travel Phone (Base unit)	Power	: AC 120V / 60Hz
Model No.	: KX-WPA102	Temp./Humi.	: 24deg.C / 58%
Serial No.	: 1	Operator	: Kenichi Adachi

Mode / Remarks : 11g, Tx 2462MHz, Worst rate:6Mbps, Worst Ant102

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



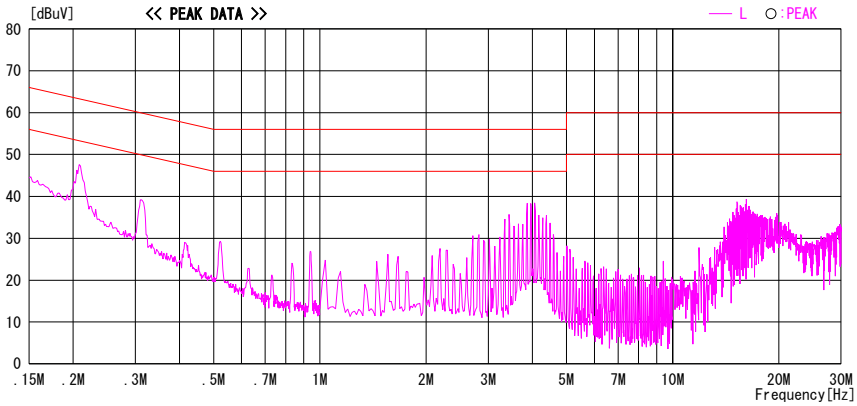


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission
Rx Mid ch.

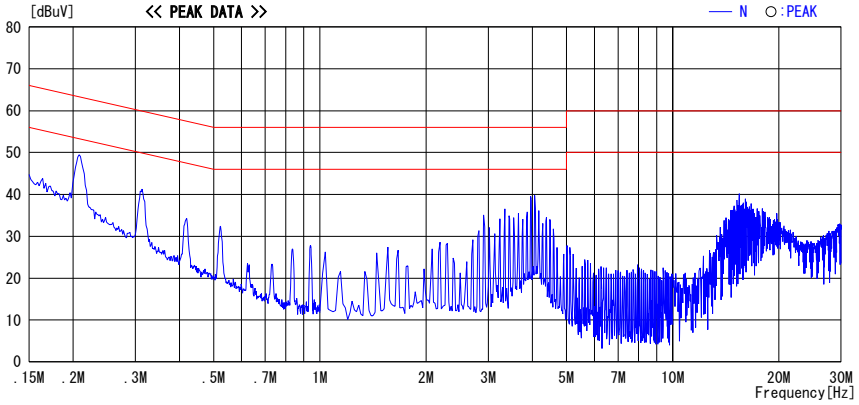
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/08/12 12:41:39

Company	: Panasonic Communications Co.,Ltd.	Report No.	: 26KE0322-HO
Kind of EUT	: Travel Phone (Base unit)	Power	: AC 120V / 60Hz
Model No.	: KX-WPA102	Temp./Humi.	: 24deg.C / 58%
Serial No.	: 1	Operator	: Kenichi Adachi

Mode / Remarks : Rx 2437MHz, Worst Ant102

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



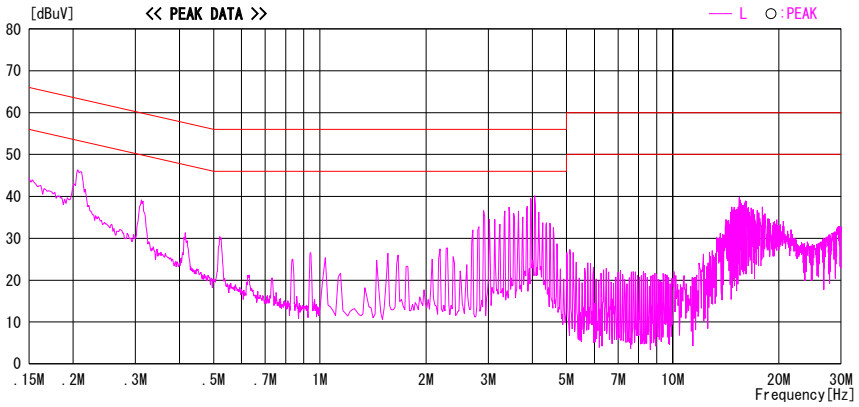


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

6dB Bandwidth

Hand unit

UL Apex Co., Ltd.
Head Office EMC Lab. No.8 measurement room

Company	: Panasonic Communications Co.,Ltd.	REPORT NO	: 26KE0322-HO
Equipment	: Travel Phone (Hand unit)	REGULATION	: FCC Part15 Subpart C 15.247(a)(2)
Model	: KX-WPA100	TEST DISTANCE	: -
Sample No.	: 1	DATE	: 08/01/2006
Power	: DC 3.6V	TEMPERATURE	: 25deg.C.
Mode	: Tx (ch1,6,11)	HUMIDITY	: 55%
		ENGINEER	: Kenichi Adachi

11b

Ch	Freq. [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
Low	2412.0	10.160	500.0
Mid	2437.0	10.140	500.0
High	2462.0	10.160	500.0

11g

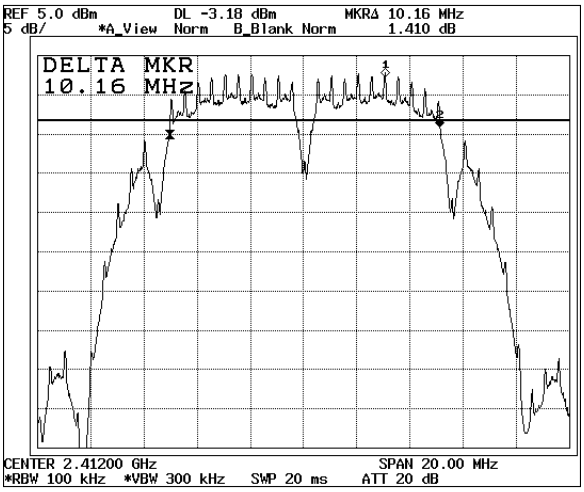
Ch	Freq. [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
Low	2412.0	16.480	500.0
Mid	2437.0	16.450	500.0
High	2462.0	16.480	500.0

6dB Bandwidth

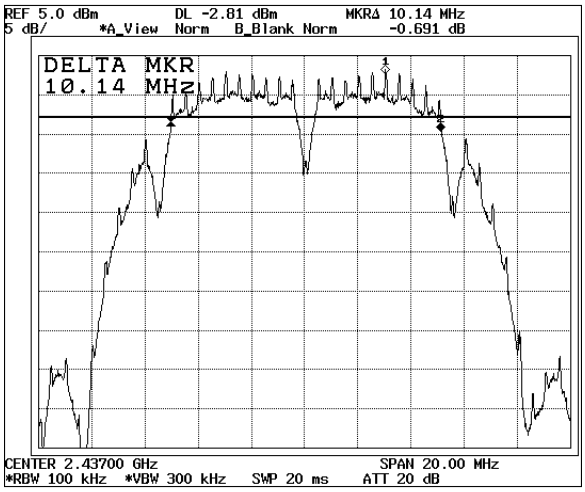
Hand unit

11b

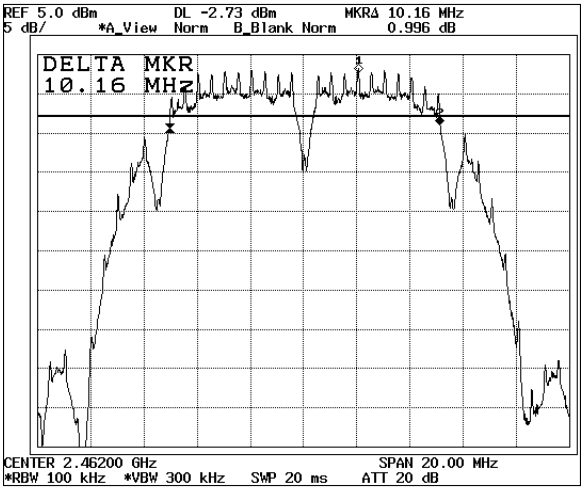
Ch:Low



Ch:Mid



Ch:High

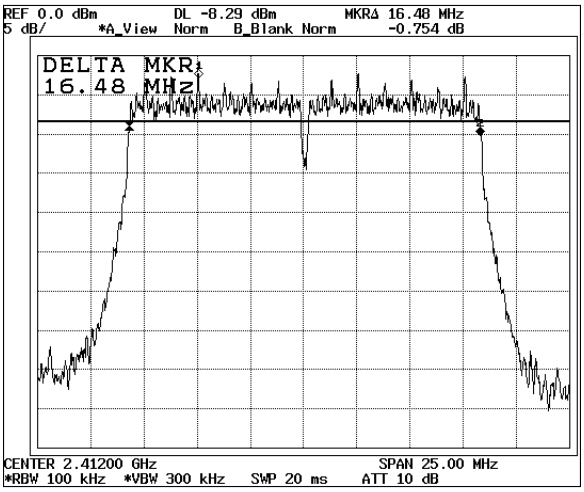


6dB Bandwidth

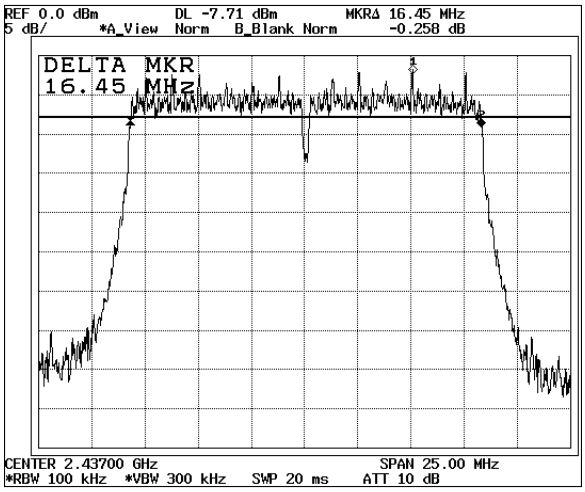
Hand unit

11g

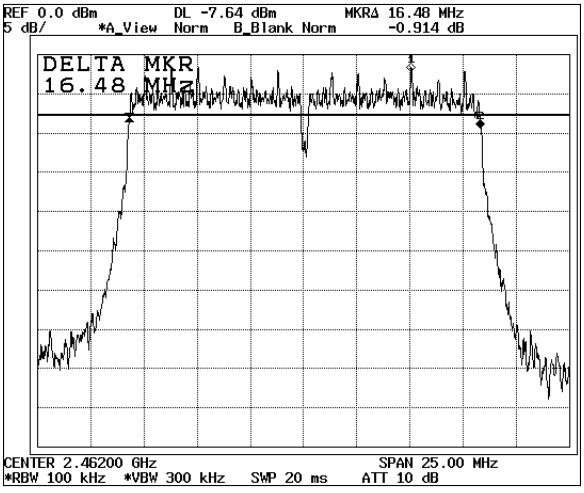
Ch:Low



Ch:Mid



Ch:High



6dB Bandwidth

Base Unit

UL Apex Co., Ltd.
Head Office EMC Lab. No.6 Semi Anechoic Chamber

Company	: Panasonic Communications Co.,Ltd.	REPORT NO	: 26KE0322-HO
Equipment	: Travel Phone (Base unit)	REGULATION	: FCC Part15 Subpart C 15.247(a)(2)
Model	: KX-WPA102	TEST DISTANCE	: -
Sample No.	: 2	DATE	: 08/07/2006
Power	: AC120V/60Hz	TEMPERATURE	: 23deg.C.
Mode	: Tx (ch1,6,11)	HUMIDITY	: 60%
		ENGINEER	: Kenichi Adachi

11b

Ch	Freq. [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
Low	2412.0	10.313	500.0
Mid	2437.0	10.313	500.0
High	2462.0	10.438	500.0

11g

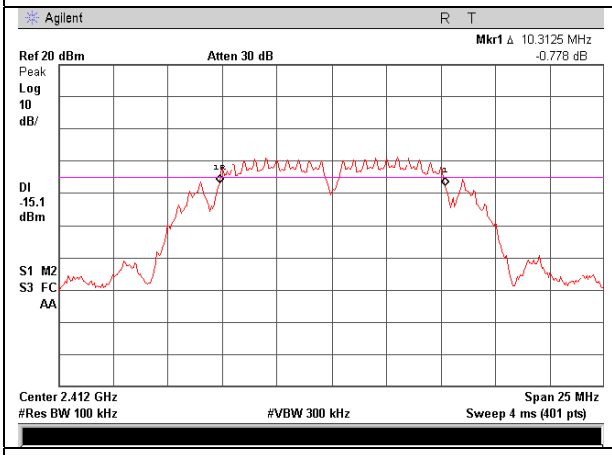
Ch	Freq. [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
Low	2412.0	16.500	500.0
Mid	2437.0	16.560	500.0
High	2462.0	16.438	500.0

6dB Bandwidth

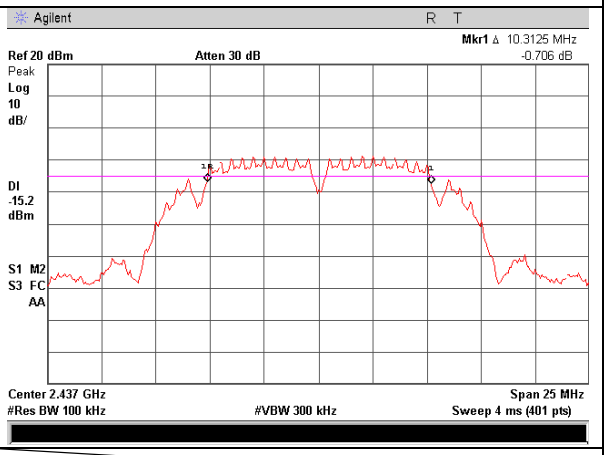
Base Unit

11b

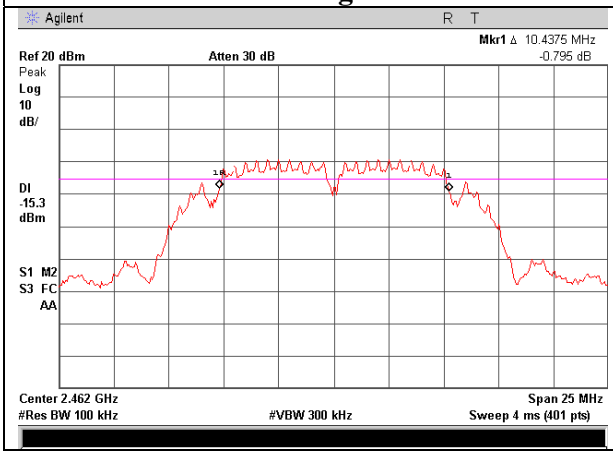
Ch:Low



Ch:Mid



Ch:High

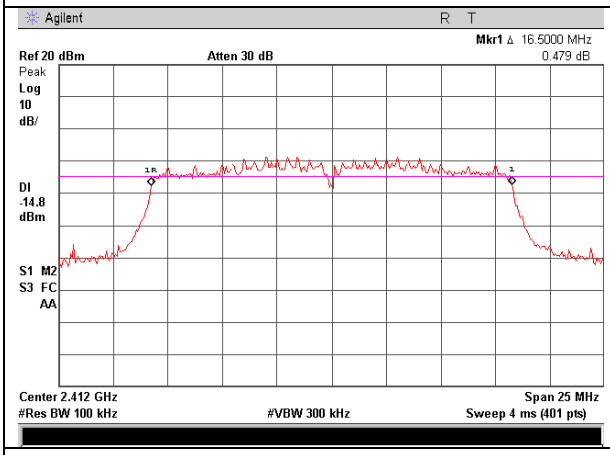


6dB Bandwidth

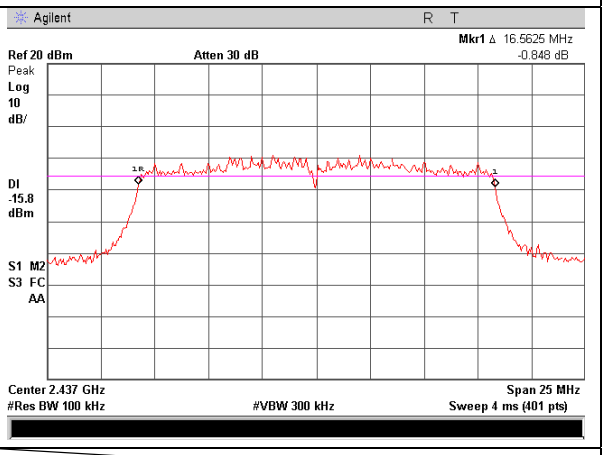
Base Unit

11g

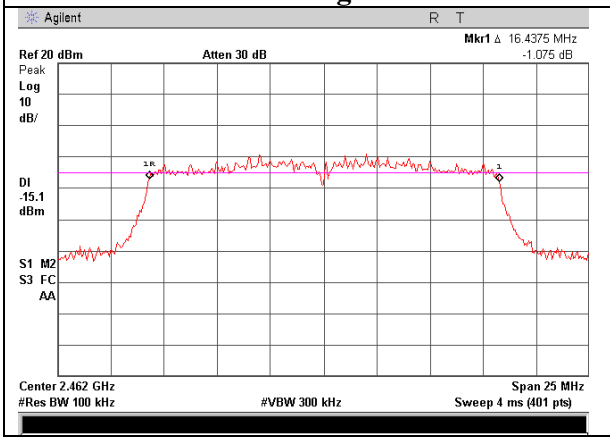
Ch:Low



Ch:Mid



Ch:High



Maximum Peak OutPut Power
Hand unit

UL Apex Co., Ltd.
Head Office EMC Lab. No.6 shielded room

Company	: Panasonic Communications Co.,Ltd.	REPORT NO	: 26KE0322-HO
Equipment	: Travel Phone (Hand unit)	REGULATION	: FCC Part15 Subpart C 15.247(b)(3)
Model	: KX-WPA100	TEST DISTANCE	: -
Sample No.	: 2	DATE	: 07/27/2006
Power	: DC 3.6V	TEMPERATURE	: 25deg.C.
Mode	: Tx (ch1,6,11)	HUMIDITY	: 60%
		ENGINEER	: Kenichi Adachi

[IEEE802.11b] Worst-ant: Ant1, Worst Data Rate: 1Mbps

Ch	Freq.	P / M Reading	Cable Loss	Atten.	Result		Limit		Margin
	[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
Low	2412.0	-4.33	1.00	20.00	16.67	46.45	30.00	1000	13.33
Mid	2437.0	-3.73	1.00	20.00	17.27	53.33	30.00	1000	12.73
High	2462.0	-3.57	1.00	20.00	17.43	55.34	30.00	1000	12.57

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] Worst-ant: Ant1, Worst Data Rate: 6Mbps

Ch	Freq.	P / M Reading	Cable Loss	Atten.	Result		Limit		Margin
	[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
Low	2412.0	0.16	1.00	20.00	21.16	130.62	30.00	1000	8.84
Mid	2437.0	-0.82	1.00	20.00	20.18	104.23	30.00	1000	9.82
High	2462.0	-0.48	1.00	20.00	20.52	112.72	30.00	1000	9.48

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.

Reference data of OutPut Power for SAR testing
Hand unit

UL Apex Co., Ltd.
Head Office EMC Lab. No.6 shielded room

Company	: Panasonic Communications Co.,Ltd.	REPORT NO	: 26KE0322-HO
Equipment	: Travel Phone (Hand unit)	REGULATION	: FCC Part15 Subpart C 15.247(b)(3)
Model	: KX-WPA100	TEST DISTANCE	: -
Sample No.	: 2	DATE	: 07/27/2006
Power	: DC 3.6V	TEMPERATURE	: 25deg.C.
Mode	: Tx (ch1,6,11)	HUMIDITY	: 60%
		ENGINEER	: Kenichi Adachi

[IEEE802.11b : 2437MHz]

Ch	Modulation (Data rate [bps])	PM PK Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Converted [mW]
6	DBPSK (1Mbps)	-3.73	1.00	20.00	17.27	53.33
6	DQPSK(2Mbps)	-3.79	1.00	20.00	17.21	52.60
6	CCK(5.5Mbps)	-3.77	1.00	20.00	17.23	52.84
6	CCK(11Mbps)	-3.76	1.00	20.00	17.24	52.97

[IEEE802.11g : 2437MHz]

Ch	Modulation (Data rate [bps])	PM PK Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Converted [mW]
6	BPSK (6Mbps)	-0.82	1.00	20.00	20.18	104.23
6	BPSK (9Mbps)	-1.47	1.00	20.00	19.53	89.74
6	QPSK(12Mbps)	-1.16	1.00	20.00	19.84	96.38
6	QPSK(18Mbps)	-1.20	1.00	20.00	19.80	95.50
6	16QAM(24Mbps)	-1.38	1.00	20.00	19.62	91.62
6	16QAM(36Mbps)	-1.12	1.00	20.00	19.88	97.27
6	64QAM(48Mbps)	-1.75	1.00	20.00	19.25	84.14
6	64QAM(54Mbps)	-1.66	1.00	20.00	19.34	85.90

Reference data of OutPut Power for SAR testing

Hand unit

UL Apex Co., Ltd.
Head Office EMC Lab. No.6 shielded room

Company	: Panasonic Communications Co.,Ltd.	REPORT NO	: 26KE0322-HO
Equipment	: Travel Phone (Hand unit)	REGULATION	: FCC Part15 Subpart C 15.247(b)(3)
Model	: KX-WPA100	TEST DISTANCE	: -
Sample No.	: 2	DATE	: 07/27/2006
Power	: DC 3.6V	TEMPERATURE	: 25deg.C.
Mode	: Tx (ch1,6,11)	HUMIDITY	: 60%
		ENGINEER	: Kenichi Adachi

[IEEE802.11b: 1Mbps] Average power

Ch	Freq. [MHz]	PM AVG Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Converted [mW]
1	2412	-8.03	1.00	20.00	12.97	19.82
6	2437	-7.49	1.00	20.00	13.51	22.44
11	2462	-7.39	1.00	20.00	13.61	22.96

[IEEE802.11g: 6Mbps] Average power

Ch	Freq. [MHz]	PM AVG Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Converted [mW]
1	2412	-10.80	1.00	20.00	10.20	10.47
6	2437	-10.59	1.00	20.00	10.41	10.99
11	2462	-10.29	1.00	20.00	10.71	11.78

[IEEE802.11b : 2437MHz] Average power

Ch	Modulation (Data rate [bps])	PM AVG Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Converted [mW]
6	DBPSK (1Mbps)	-7.49	1.00	20.00	13.51	22.44
6	DQPSK(2Mbps)	-7.61	1.00	20.00	13.39	21.83
6	CCK(5.5Mbps)	-7.77	1.00	20.00	13.23	21.04
6	CCK(11Mbps)	-8.11	1.00	20.00	12.89	19.45

[IEEE802.11g : 2437MHz] Average power

Ch	Modulation (Data rate [bps])	PM AVG Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Converted [mW]
6	BPSK (6Mbps)	-10.59	1.00	20.00	10.41	10.99
6	BPSK (9Mbps)	-11.22	1.00	20.00	9.78	9.51
6	QPSK(12Mbps)	-12.30	1.00	20.00	8.70	7.41
6	QPSK(18Mbps)	-13.88	1.00	20.00	7.12	5.15
6	16QAM(24Mbps)	-14.06	1.00	20.00	6.94	4.94
6	16QAM(36Mbps)	-16.53	1.00	20.00	4.47	2.80
6	64QAM(48Mbps)	-17.68	1.00	20.00	3.32	2.15
6	64QAM(54Mbps)	-17.92	1.00	20.00	3.08	2.03

Maximum Peak OutPut Power
Base Unit

UL Apex Co., Ltd.
Head Office EMC Lab. No.6 shielded room

Company	: Panasonic Communications Co.,Ltd.	REPORT NO	: 26KE0322-HO
Equipment	: Travel Phone (Base unit)	REGULATION	: FCC Part15 Subpart C 15.247(b)(3)
Model	: KX-WPA102	TEST DISTANCE	: -
Sample No.	: 2	DATE	: 08/08/2006
Power	: AC120V / 60Hz	TEMPERATURE	: 23deg.C.
Mode	: Tx (ch1,6,11)	HUMIDITY	: 60%
		ENGINEER	: Kenichi Adachi

[IEEE802.11b] Worst-ant: Ant1, Worst Data Rate: 1Mbps

Ch	Freq.	P / M Reading	Cable Loss	Atten.	Result		Limit		Margin
	[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
Low	2412.0	-4.05	0.50	20.00	16.45	44.16	30.00	1000	13.55
Mid	2437.0	-4.30	0.50	20.00	16.20	41.69	30.00	1000	13.80
High	2462.0	-4.37	0.50	20.00	16.13	41.02	30.00	1000	13.87

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] Worst-ant: Ant1, Worst Data Rate: 6Mbps

Ch	Freq.	P / M Reading	Cable Loss	Atten.	Result		Limit		Margin
	[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
Low	2412.0	-0.14	0.50	20.00	20.36	108.64	30.00	1000	9.64
Mid	2437.0	-0.56	0.50	20.00	19.94	98.63	30.00	1000	10.06
High	2462.0	-0.78	0.50	20.00	19.72	93.76	30.00	1000	10.28

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)

Hand unit, Tx, 11b, 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

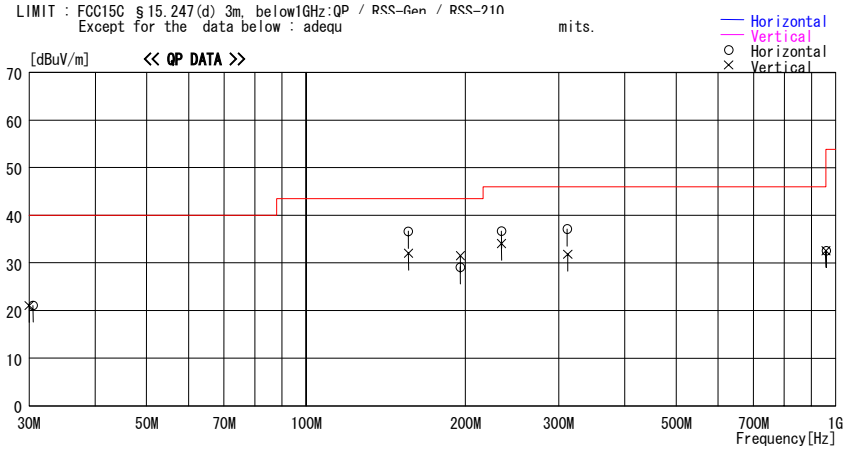
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2006/07/30 14:19:41

Company : Panasonic Communications Co.,Ltd.
Kind of EUT : Travel Phone (Hand unit)
Model No. : KX-WPA100
Serial No. : 1

Report No. : 26KE0322-HO
Power : DC 3.6V
Temp./Humi. : 21deg.C / 61%
Operator : Kenichi Adachi

Mode / Remarks : 11b Tx 2412MHz, EUT-max-axis(H : Y , V :Z)

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP / RSS-Gen / RSS-210
Except for the data below : adequ mits.



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]	
30.001	23.0	QP	18.8	-20.8	21.0	51	100	Vert.	40.0	19.0	
30.541	23.4	QP	18.5	-20.8	21.1	231	317	Hori.	40.0	18.9	
156.011	39.2	QP	15.7	-18.2	36.7	230	317	Hori.	43.5	6.8	
156.072	34.5	QP	15.7	-18.2	32.0	165	100	Vert.	43.5	11.5	
195.571	29.8	QP	17.0	-17.7	29.1	246	317	Hori.	43.5	14.4	
195.677	32.2	QP	17.0	-17.7	31.5	283	100	Vert.	43.5	12.0	
234.012	36.7	QP	17.2	-17.2	36.7	20	317	Hori.	46.0	9.3	
234.009	34.1	QP	17.2	-17.2	34.1	316	100	Vert.	46.0	11.9	
311.222	39.2	QP	14.6	-16.7	37.1	143	100	Hori.	46.0	8.9	
312.014	33.9	QP	14.6	-16.7	31.8	1	100	Vert.	46.0	14.2	
959.224	23.9	QP	22.7	-14.0	32.6	0	100	Hori.	46.0	13.4	
959.446	23.9	QP	22.7	-14.0	32.6	4	100	Vert.	46.0	13.4	

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)

Radiated Spurious Emission (below 1GHz)

Hand unit, Tx, 11b, 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

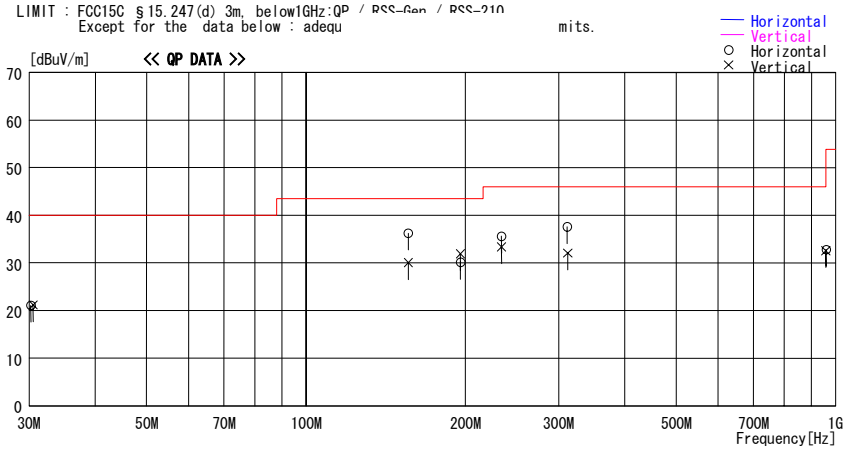
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2006/07/30 15:46:02

Company : Panasonic Communications Co.,Ltd.
Kind of EUT : Travel Phone (Hand unit)
Model No. : KX-WPA100
Serial No. : 1

Report No. : 26KE0322-HO
Power : DC 3.6V
Temp./Humi. : 21deg.C / 61%
Operator : Kenichi Adachi

Mode / Remarks : 11b Tx 2437MHz, EUT-max-axis(H : Y , V :Z)

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP / RSS-Gen / RSS-210
Except for the data below : adequ mits.



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]	
30.541	23.5	QP	18.5	-20.8	21.2	73	100	Vert.	40.0	18.8	
30.233	23.2	QP	18.7	-20.8	21.1	346	316	Hori.	40.0	18.9	
156.013	38.7	QP	15.7	-18.2	36.2	220	316	Hori.	43.5	7.3	
156.000	32.5	QP	15.7	-18.2	30.0	129	100	Vert.	43.5	13.5	
195.670	30.8	QP	17.0	-17.7	30.1	52	316	Hori.	43.5	13.4	
195.690	32.6	QP	17.0	-17.7	31.9	96	100	Vert.	43.5	11.6	
234.016	35.6	QP	17.2	-17.2	35.6	37	316	Hori.	46.0	10.4	
233.987	33.4	QP	17.2	-17.2	33.4	57	100	Vert.	46.0	12.7	
311.222	39.7	QP	14.6	-16.7	37.6	117	100	Hori.	46.0	8.4	
312.026	34.2	QP	14.6	-16.7	32.1	1	100	Vert.	46.0	13.9	
959.230	24.1	QP	22.7	-14.0	32.8	11	100	Hori.	46.0	13.2	
958.334	23.9	QP	22.7	-14.0	32.6	334	100	Vert.	46.0	13.4	

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)

Radiated Spurious Emission (below 1GHz)

Hand unit, Tx, 11b, 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

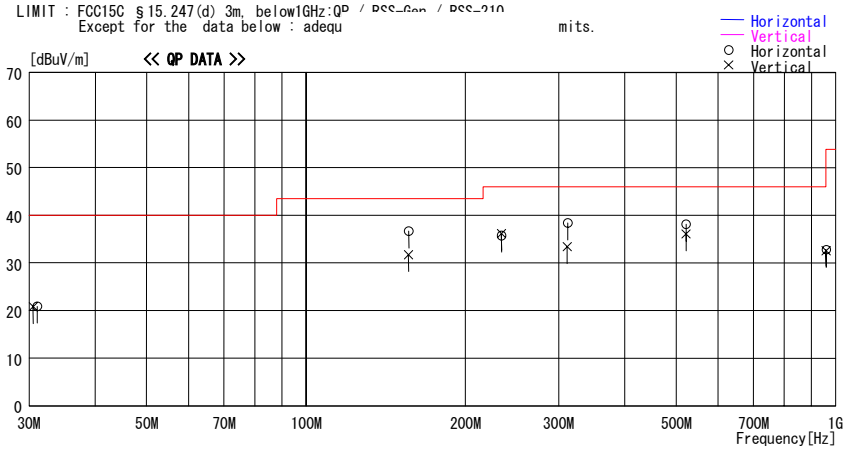
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2006/07/30 16:28:44

Company : Panasonic Communications Co.,Ltd.
Kind of EUT : Travel Phone (Hand unit)
Model No. : KX-WPA100
Serial No. : 1

Report No. : 26KE0322-HO
Power : DC 3.6V
Temp./Humi. : 21deg.C / 61%
Operator : Kenichi Adachi

Mode / Remarks : 11b Tx 2462MHz, EUT-max-axis(H : Y , V :Z)

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP / RSS-Gen / RSS-210
Except for the data below : adequ mits.



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]	
30.541	23.1	QP	18.5	-20.8	20.8	338	100	Vert.	40.0	19.2	
31.082	23.4	QP	18.2	-20.7	20.9	6	316	Hori.	40.0	19.1	
156.072	34.2	QP	15.7	-18.2	31.7	138	100	Vert.	43.5	11.8	
156.223	39.2	QP	15.7	-18.2	36.7	31	316	Hori.	43.5	6.8	
234.000	35.8	QP	17.2	-17.2	35.8	42	316	Hori.	46.0	10.2	
233.987	36.2	QP	17.2	-17.2	36.2	302	100	Vert.	46.0	9.8	
312.004	40.5	QP	14.6	-16.7	38.4	125	100	Hori.	46.0	7.6	
311.222	35.5	QP	14.6	-16.7	33.4	0	100	Vert.	46.0	12.6	
521.813	34.5	QP	18.1	-16.5	36.1	3	100	Vert.	46.0	9.9	
521.817	36.5	QP	18.1	-16.5	38.1	7	100	Hori.	46.0	7.9	
959.678	24.1	QP	22.7	-14.0	32.8	2	100	Hori.	46.0	13.2	
959.778	23.9	QP	22.7	-14.0	32.6	190	100	Vert.	46.0	13.4	

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)

Radiated Spurious Emission (below 1GHz)

Hand unit, Tx, 11g, 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

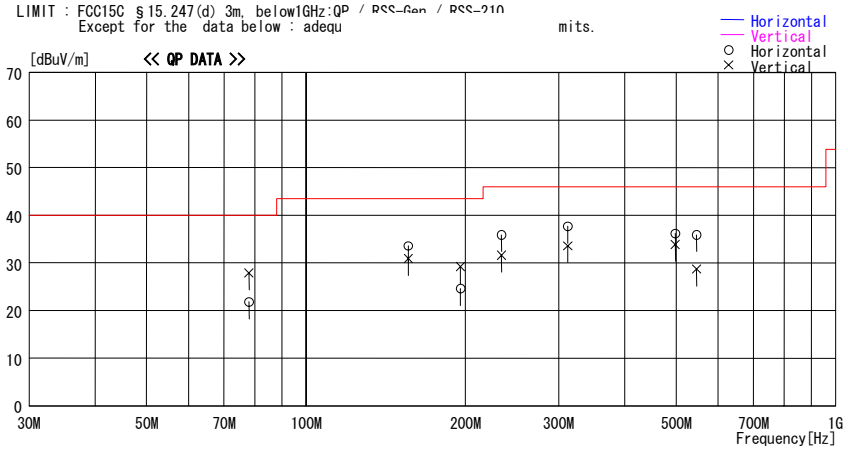
UL Apex Co., Ltd. Head Office EMC Lab. No.4 Semi Anechoic Chamber
Date : 2006/07/31 11:04:21

Company : Panasonic Communications Co.,Ltd.
Kind of EUT : Travel Phone (Hand unit)
Model No. : KX-WPA100
Serial No. : 1

Report No. : 26KE0322-HO
Power : DC 3.6V
Temp./Humi. : 26deg.C / 62%
Operator : Yasuyuki Fukui

Mode / Remarks : 11g 6Mbps Tx 2412MHz, EUT-max-axis(H : Y , V :Z)

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP / RSS-Gen / RSS-210
Except for the data below : adequ mits.



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]	
78.003	38.6	QP	7.3	-24.1	21.8	23	240	Hori.	40.0	18.2	
78.003	44.7	QP	7.3	-24.1	27.9	10	100	Vert.	40.0	12.1	
155.999	41.0	QP	15.6	-23.0	33.6	358	187	Hori.	43.5	9.9	
155.999	38.3	QP	15.6	-23.0	30.9	29	100	Vert.	43.5	12.6	
195.696	30.4	QP	16.9	-22.7	24.6	183	152	Hori.	43.5	18.9	
195.696	35.0	QP	16.9	-22.7	29.2	256	100	Vert.	43.5	14.3	
234.000	40.6	QP	17.6	-22.3	35.9	328	144	Hori.	46.0	10.1	
234.000	36.3	QP	17.6	-22.3	31.6	107	100	Vert.	46.0	14.4	
312.000	42.7	QP	16.9	-21.9	37.7	189	100	Hori.	46.0	8.3	
312.000	38.6	QP	16.9	-21.9	33.6	277	100	Vert.	46.0	12.4	
497.800	37.0	QP	19.9	-20.7	36.2	350	100	Hori.	46.0	9.8	
497.800	34.7	QP	19.9	-20.7	33.9	33	100	Vert.	46.0	12.1	
545.991	36.2	QP	20.2	-20.5	35.9	315	100	Hori.	46.0	10.1	
545.991	29.0	QP	20.2	-20.5	28.7	303	100	Vert.	46.0	17.3	

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)

Radiated Spurious Emission (below 1GHz)

Hand unit, Tx, 11g, 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

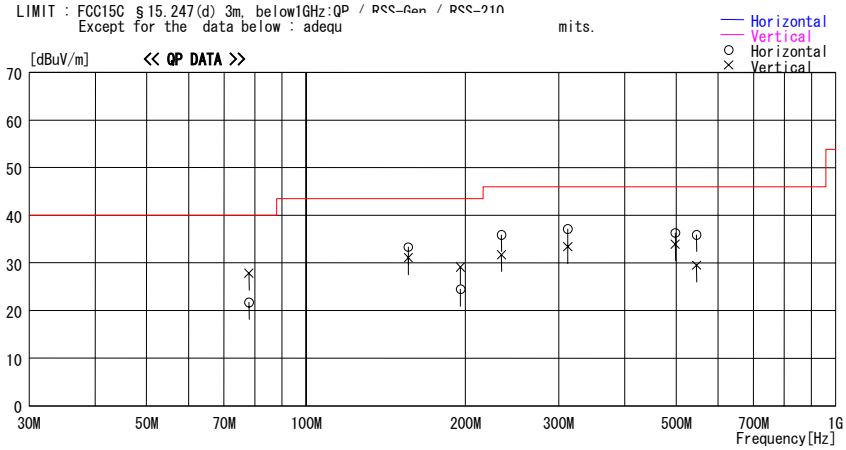
UL Apex Co., Ltd. Head Office EMC Lab. No.4 Semi Anechoic Chamber
Date : 2006/07/31 14:01:15

Company : Panasonic Communications Co.,Ltd.
Kind of EUT : Travel Phone (Hand unit)
Model No. : KX-WPA100
Serial No. : 1

Report No. : 26KE0322-HO
Power : DC 3.6V
Temp./Humi. : 26deg.C / 62%
Operator : Yasuyuki Fukui

Mode / Remarks : 11g 6Mbps Tx 2437MHz, EUT-max-axis(H : Y , V :Z)

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP / RSS-Gen / RSS-210
Except for the data below : adequ mits.



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]	
78.003	38.5	QP	7.3	-24.1	21.7	25	241	Hori.	40.0	18.3	
78.003	44.6	QP	7.3	-24.1	27.8	10	100	Vert.	40.0	12.2	
155.999	40.7	QP	15.6	-23.0	33.3	350	187	Hori.	43.5	10.2	
155.999	38.5	QP	15.6	-23.0	31.1	29	100	Vert.	43.5	12.4	
195.696	30.3	QP	16.9	-22.7	24.5	190	153	Hori.	43.5	19.0	
195.696	34.9	QP	16.9	-22.7	29.1	250	100	Vert.	43.5	14.4	
234.000	40.6	QP	17.6	-22.3	35.9	320	150	Hori.	46.0	10.1	
234.000	36.4	QP	17.6	-22.3	31.7	100	100	Vert.	46.0	14.3	
312.000	42.1	QP	16.9	-21.9	37.1	190	100	Hori.	46.0	8.9	
312.000	38.4	QP	16.9	-21.9	33.4	276	100	Vert.	46.0	12.6	
497.800	37.1	QP	19.9	-20.7	36.3	11	100	Hori.	46.0	9.7	
497.800	34.8	QP	19.9	-20.7	34.0	33	100	Vert.	46.0	12.0	
545.991	36.2	QP	20.2	-20.5	35.9	315	100	Hori.	46.0	10.1	
545.991	29.8	QP	20.2	-20.5	29.5	303	100	Vert.	46.0	16.5	

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)

Radiated Spurious Emission (below 1GHz)

Hand unit, Tx, 11g, 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

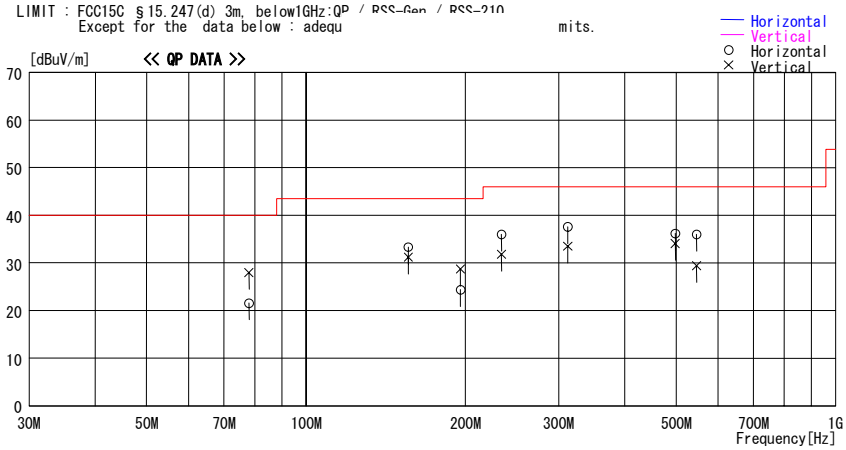
UL Apex Co., Ltd. Head Office EMC Lab. No.4 Semi Anechoic Chamber
Date : 2006/07/31 14:26:33

Company : Panasonic Communications Co.,Ltd.
Kind of EUT : Travel Phone (Hand unit)
Model No. : KX-WPA100
Serial No. : 1

Report No. : 26KE0322-HO
Power : DC 3.6V
Temp./Humi. : 26deg.C / 62%
Operator : Yasuyuki Fukui

Mode / Remarks : 11g 6Mbps Tx 2462MHz, EUT-max-axis(H : Y , V :Z)

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP / RSS-Gen / RSS-210
Except for the data below : adequ mits.



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]	
78.003	38.4	QP	7.3	-24.1	21.6	23	229	Hori.	40.0	18.4	
78.003	44.8	QP	7.3	-24.1	28.0	21	100	Vert.	40.0	12.0	
155.999	40.7	QP	15.6	-23.0	33.3	351	181	Hori.	43.5	10.2	
155.999	38.6	QP	15.6	-23.0	31.2	30	100	Vert.	43.5	12.3	
195.696	30.2	QP	16.9	-22.7	24.4	190	153	Hori.	43.5	19.1	
195.696	34.5	QP	16.9	-22.7	28.7	250	100	Vert.	43.5	14.8	
234.000	40.7	QP	17.6	-22.3	36.0	320	150	Hori.	46.0	10.0	
234.000	36.5	QP	17.6	-22.3	31.8	100	100	Vert.	46.0	14.2	
312.000	42.6	QP	16.9	-21.9	37.6	183	110	Hori.	46.0	8.4	
312.000	38.5	QP	16.9	-21.9	33.5	280	100	Vert.	46.0	12.5	
497.800	37.0	QP	19.9	-20.7	36.2	358	100	Hori.	46.0	9.8	
497.800	34.9	QP	19.9	-20.7	34.1	34	100	Vert.	46.0	11.9	
545.991	36.3	QP	20.2	-20.5	36.0	314	100	Hori.	46.0	10.0	
545.991	29.7	QP	20.2	-20.5	29.4	298	100	Vert.	46.0	16.6	

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)

Radiated Spurious Emission (below 1GHz)

Base Unit, Tx, 11b, 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

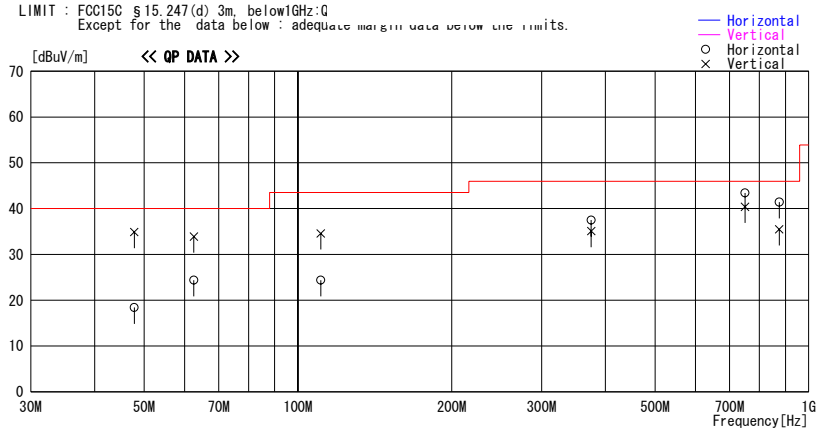
UL Apex Co., Ltd. Head Office EMC Lab. No.4 Semi Anechoic Chamber
Date : 2006/07/28 17:52:06

Company : Panasonic Communications Co.,Ltd.
Kind of EUT : Travel Phone (Base unit)
Model No. : KX-WPA102
Serial No. : 1

Report No. : 26KE0322-HO
Power : AC 120V / 60Hz
Temp./Humi. : 26deg.C / 61%
Operator : Kenichi Adachi

Mode / Remarks : 11b, Tx 2412MHz, EUT-Noraml-axis, Worst rate: 1Mbps, Worst Ant102,

LIMIT : FCC15C §15.247(d) 3m, below1GHz:Q
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna Factor	Loss& Gain	Level	Angle	Height	Polar.	Limit	Margin
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]
47.802	31.4	QP	11.5	-24.5	18.4	106	378	Hori.	40.0	21.6
47.802	47.9	QP	11.5	-24.5	34.9	194	100	Vert.	40.0	5.1
62.567	40.3	QP	8.4	-24.3	24.4	307	322	Hori.	40.0	15.6
62.567	49.8	QP	8.4	-24.3	33.9	169	100	Vert.	40.0	6.1
110.789	35.7	QP	12.3	-23.6	24.4	210	278	Hori.	43.5	19.1
110.789	45.9	QP	12.3	-23.6	34.6	158	100	Vert.	43.5	8.9
374.999	41.2	QP	17.7	-21.4	37.5	217	100	Hori.	46.0	8.5
374.999	38.8	QP	17.7	-21.4	35.1	184	160	Vert.	46.0	10.9
749.995	40.2	QP	22.5	-19.3	43.4	36	118	Hori.	46.0	2.6
749.995	37.2	QP	22.5	-19.3	40.4	133	100	Vert.	46.0	5.6
874.996	36.3	QP	23.3	-18.2	41.4	35	100	Hori.	46.0	4.6
874.996	30.4	QP	23.3	-18.2	35.5	0	100	Vert.	46.0	10.5

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)

Radiated Spurious Emission (below 1GHz)

Base Unit, Tx, 11b, 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

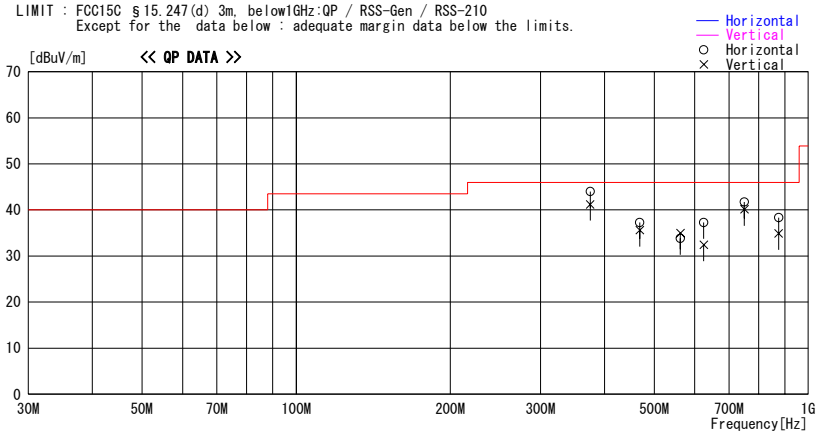
UL Apex Co., Ltd. Head Office EMC Lab. No.4 Semi Anechoic Chamber
Date : 2006/08/11 00:33:26

Company : Panasonic Communications Co.,Ltd.
Kind of EUT : Travel Phone (Base unit)
Model No. : KX-WPA102
Serial No. : 1

Report No. : 26KE0322-HO
Power : AC 120V / 60Hz
Temp./Humi. : 25deg.C / 63%
Operator : Kenichi Adachi

Mode / Remarks : 11b, Tx 2437MHz, EUT-Noraml-axis, Worst rate: 1Mbps, Worst Ant102,

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP / RSS-Gen / RSS-210
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna Factor	Loss& Gain	Level	Angle	Height	Polar.	Limit	Margin
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]
375.003	47.7	QP	17.7	-21.4	44.0	37	100	Hori.	46.0	2.0
375.003	44.9	QP	17.7	-21.4	41.2	121	137	Vert.	46.0	4.8
468.752	38.7	QP	19.4	-20.8	37.3	57	100	Hori.	46.0	8.7
468.752	37.0	QP	19.4	-20.8	35.6	168	119	Vert.	46.0	10.4
562.502	33.9	QP	20.3	-20.4	33.8	336	182	Hori.	46.0	12.2
562.502	35.1	QP	20.3	-20.4	35.0	172	112	Vert.	46.0	11.0
625.001	36.7	QP	20.8	-20.2	37.3	56	145	Hori.	46.0	8.7
625.001	31.8	QP	20.8	-20.2	32.4	211	100	Vert.	46.0	13.6
750.000	38.5	QP	22.5	-19.3	41.7	338	100	Hori.	46.0	4.3
750.000	36.9	QP	22.5	-19.3	40.1	127	100	Vert.	46.0	5.9
874.997	33.2	QP	23.3	-18.2	38.3	48	100	Hori.	46.0	7.7
874.997	29.8	QP	23.3	-18.2	34.9	271	100	Vert.	46.0	11.1

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)

Radiated Spurious Emission (below 1GHz)

Base Unit, Tx, 11b, 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

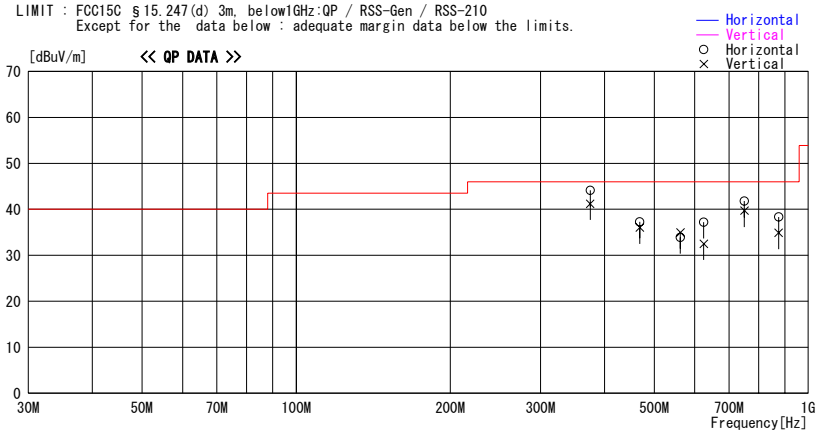
UL Apex Co., Ltd. Head Office EMC Lab. No.4 Semi Anechoic Chamber
Date : 2006/08/11 04:48:18

Company : Panasonic Communications Co.,Ltd.
Kind of EUT : Travel Phone (Base unit)
Model No. : KX-WPA102
Serial No. : 1

Report No. : 26KE0322-HO
Power : AC 120V / 60Hz
Temp./Humi. : 25deg.C / 63%
Operator : Kenichi Adachi

Mode / Remarks : 11b, Tx 2462MHz, EUT-Noraml-axis, Worst rate: 1Mbps, Worst Ant102,

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP / RSS-Gen / RSS-210
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna Factor	Loss& Gain	Level	Angle	Height	Polar.	Limit	Margin
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]
375.004	47.8	QP	17.7	-21.4	44.1	41	100	Hori.	46.0	1.9
375.004	44.9	QP	17.7	-21.4	41.2	126	136	Vert.	46.0	4.8
468.751	38.7	QP	19.4	-20.8	37.3	61	100	Hori.	46.0	8.7
468.751	37.4	QP	19.4	-20.8	36.0	167	128	Vert.	46.0	10.0
562.501	34.0	QP	20.3	-20.4	33.9	340	177	Hori.	46.0	12.1
562.501	35.1	QP	20.3	-20.4	35.0	166	100	Vert.	46.0	11.0
625.000	36.6	QP	20.8	-20.2	37.2	57	134	Hori.	46.0	8.8
625.000	31.9	QP	20.8	-20.2	32.5	213	100	Vert.	46.0	13.5
750.000	38.6	QP	22.5	-19.3	41.8	336	100	Hori.	46.0	4.2
750.000	36.5	QP	22.5	-19.3	39.7	127	100	Vert.	46.0	6.3
874.998	33.2	QP	23.3	-18.2	38.3	46	100	Hori.	46.0	7.7
874.998	29.8	QP	23.3	-18.2	34.9	271	100	Vert.	46.0	11.1

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)

Radiated Spurious Emission (below 1GHz)

Base Unit, Tx, 11g, 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

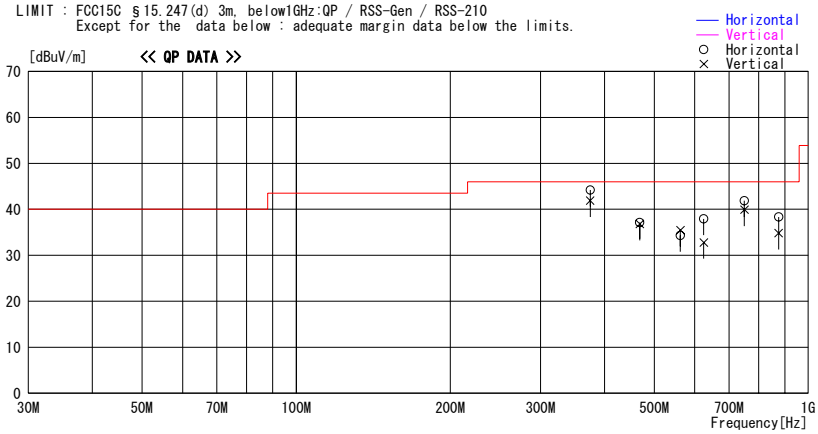
UL Apex Co., Ltd. Head Office EMC Lab. No.4 Semi Anechoic Chamber
Date : 2006/08/11 05:48:52

Company : Panasonic Communications Co.,Ltd.
Kind of EUT : Travel Phone (Base unit)
Model No. : KX-WPA102
Serial No. : 1

Report No. : 26KE0322-HO
Power : AC 120V / 60Hz
Temp./Humi. : 25deg.C / 63%
Operator : Kenichi Adachi

Mode / Remarks : 11g, Tx 2412MHz, EUT-Noraml-axis, Worst rate: 6Mbps, Worst Ant102,

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP / RSS-Gen / RSS-210
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna Factor	Loss& Gain	Level	Angle	Height	Polar.	Limit	Margin
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]
375.003	47.9	QP	17.7	-21.4	44.2	53	100	Hori.	46.0	1.8
375.003	45.6	QP	17.7	-21.4	41.9	128	139	Vert.	46.0	4.1
468.750	38.2	QP	19.4	-20.8	36.8	48	122	Vert.	46.0	9.2
468.750	38.5	QP	19.4	-20.8	37.1	59	100	Hori.	46.0	8.9
562.501	34.4	QP	20.3	-20.4	34.3	335	170	Hori.	46.0	11.7
562.501	35.6	QP	20.3	-20.4	35.5	183	100	Vert.	46.0	10.5
625.001	37.3	QP	20.8	-20.2	37.9	59	135	Hori.	46.0	8.1
625.001	32.2	QP	20.8	-20.2	32.8	214	100	Vert.	46.0	13.2
750.000	38.7	QP	22.5	-19.3	41.9	335	100	Hori.	46.0	4.1
750.000	36.7	QP	22.5	-19.3	39.9	126	100	Vert.	46.0	6.1
874.999	33.2	QP	23.3	-18.2	38.3	44	100	Hori.	46.0	7.7
874.999	29.7	QP	23.3	-18.2	34.8	272	100	Vert.	46.0	11.2

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)

Radiated Spurious Emission (below 1GHz)

Base Unit, Tx, 11g, 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

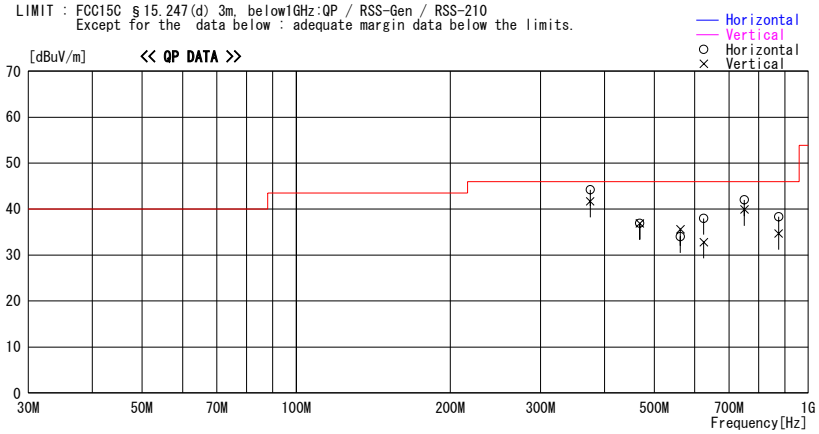
UL Apex Co., Ltd. Head Office EMC Lab. No.4 Semi Anechoic Chamber
Date : 2006/08/11 06:38:57

Company : Panasonic Communications Co.,Ltd.
Kind of EUT : Travel Phone (Base unit)
Model No. : KX-WPA102
Serial No. : 1

Report No. : 26KE0322-HO
Power : AC 120V / 60Hz
Temp./Humi. : 25deg.C / 63%
Operator : Kenichi Adachi

Mode / Remarks : 11g, Tx 2437MHz, EUT-Noraml-axis, Worst rate: 6Mbps, Worst Ant102,

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP / RSS-Gen / RSS-210
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna Factor	Loss& Gain	Level	Angle	Height	Polar.	Limit	Margin
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]
375.005	47.9	QP	17.7	-21.4	44.2	54	100	Hori.	46.0	1.8
375.005	45.4	QP	17.7	-21.4	41.7	127	135	Vert.	46.0	4.3
468.753	38.3	QP	19.4	-20.8	36.9	53	100	Hori.	46.0	9.1
468.753	38.3	QP	19.4	-20.8	36.9	48	117	Vert.	46.0	9.1
562.503	34.1	QP	20.3	-20.4	34.0	341	174	Hori.	46.0	12.0
562.503	35.7	QP	20.3	-20.4	35.6	188	100	Vert.	46.0	10.4
625.003	37.4	QP	20.8	-20.2	38.0	56	139	Hori.	46.0	8.0
625.003	32.2	QP	20.8	-20.2	32.8	216	100	Vert.	46.0	13.2
750.003	38.8	QP	22.5	-19.3	42.0	339	100	Hori.	46.0	4.0
750.003	36.7	QP	22.5	-19.3	39.9	124	100	Vert.	46.0	6.1
874.999	33.2	QP	23.3	-18.2	38.3	46	100	Hori.	46.0	7.7
874.999	29.6	QP	23.3	-18.2	34.7	270	100	Vert.	46.0	11.3

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)

Radiated Spurious Emission (below 1GHz)

Base Unit, Tx, 11g, 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

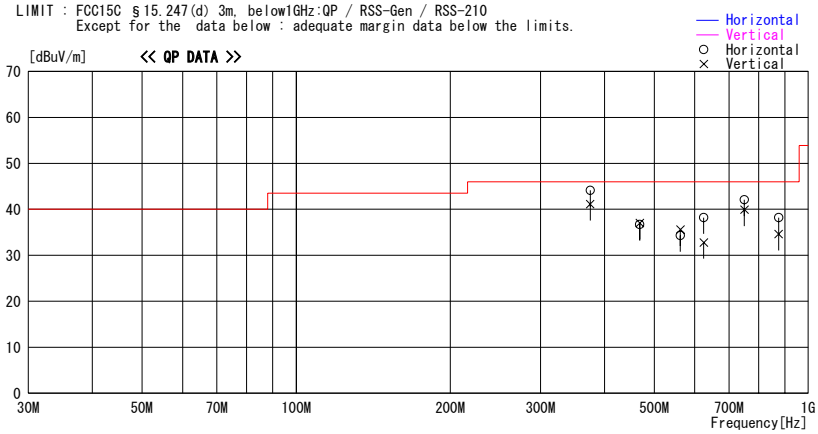
UL Apex Co., Ltd. Head Office EMC Lab. No.4 Semi Anechoic Chamber
Date : 2006/08/11 07:23:07

Company : Panasonic Communications Co.,Ltd.
Kind of EUT : Travel Phone (Base unit)
Model No. : KX-WPA102
Serial No. : 1

Report No. : 26KE0322-HO
Power : AC 120V / 60Hz
Temp./Humi. : 25deg.C / 63%
Operator : Kenichi Adachi

Mode / Remarks : 11g, Tx 2462MHz, EUT-Noraml-axis, Worst rate: 6Mbps, Worst Ant102,

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP / RSS-Gen / RSS-210
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna Factor	Loss& Gain	Level	Angle	Height	Polar.	Limit	Margin
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]
375.006	47.8	QP	17.7	-21.4	44.1	47	100	Hori.	46.0	1.9
375.006	44.8	QP	17.7	-21.4	41.1	129	147	Vert.	46.0	4.9
468.753	38.1	QP	19.4	-20.8	36.7	59	100	Hori.	46.0	9.3
468.753	38.4	QP	19.4	-20.8	37.0	48	130	Vert.	46.0	9.0
562.503	34.4	QP	20.3	-20.4	34.3	337	168	Hori.	46.0	11.7
562.503	35.7	QP	20.3	-20.4	35.6	188	100	Vert.	46.0	10.4
625.002	37.6	QP	20.8	-20.2	38.2	57	149	Hori.	46.0	7.8
625.002	32.2	QP	20.8	-20.2	32.8	212	100	Vert.	46.0	13.2
750.002	36.7	QP	22.5	-19.3	39.9	124	100	Vert.	46.0	6.1
750.002	38.9	QP	22.5	-19.3	42.1	336	100	Hori.	46.0	3.9
874.999	33.1	QP	23.3	-18.2	38.2	44	100	Hori.	46.0	7.8
874.999	29.5	QP	23.3	-18.2	34.6	272	100	Vert.	46.0	11.4

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)

Radiated Spurious Emission (above 1GHz)

Hand unit, Tx, 11b, Low

UL-Apex Co.,Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

COMPANY	: Panasonic Communications Co.,Ltd.	REPORT No.	: 26KE0322-HO
EQUIPMENT	: Travel Phone	REGULATION	: FCC Part 15 Subpart C 15.247(d)
MODEL	: KX-WPA100	TEST DISTANCE	: 3m (1GHz to 10GHz) / 1m (10GHz to 26.5GHz)
S/N	: 1	DATE	: 07/24/2006
POWER	: DC3.6V	TEMPERATURE	: 26 deg.C.
MODE	: 11b Tx 2412MHz, 1Mbps, Ant1	HUMIDITY	: 61 %
AXIS	: H: Y-axis / V: Z-axis	ENGINEER	: Kenichi Adachi, Yutaka Yoshida

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

No.	Freq.	Reading		Ant F.	Amp G.	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark	Hor. A/T	Hor. T/T	Ver. A/T	Ver. T/T
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER		[cm]	[Deg.]	[cm]	[Deg.]
1	1608.11	52.1	51.5	25.89	-33.96	1.85	---	---	---	---	45.8	45.3	74.0	28.2	28.7		164	58	150	14
2	2390.00	50.8	48.1	30.55	-32.80	2.21	---	---	---	---	50.7	48.1	74.0	23.3	25.9		209	342	159	350
3*	2400.00	62.2	59.8	30.53	-32.79	2.21	---	---	---	---	62.1	59.7	74.0	---	---		209	342	159	350
4*	3215.98	53.0	53.0	31.66	-32.35	2.70	---	---	---	---	55.0	55.0	74.0	---	---		135	97	132	30
5	4824.07	48.6	48.1	35.31	-31.61	3.45	---	0.41	---	---	56.2	55.6	74.0	17.8	18.4		108	187	103	300
6	7236.01	45.3	45.2	37.67	-32.11	4.26	---	0.36	---	---	55.5	55.3	74.0	18.5	18.7		121	142	178	305
7	9648.02	43.9	45.3	36.55	-33.09	4.98	---	0.71	---	---	53.0	54.5	74.0	21.0	19.5		104	73	145	284
8	12060.00	No noise	No noise	40.21	-32.98	5.81	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
9	14472.00	No noise	No noise	42.73	-32.34	6.26	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
10	16884.00	No noise	No noise	45.87	-32.05	6.77	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
11	19296.00	No noise	No noise	39.46	-31.81	7.27	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
12	21708.00	No noise	No noise	39.78	-32.25	7.76	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
13	24120.00	41.8	43.0	39.76	-31.44	8.14	---	---	-9.54	---	48.8	49.9	74.0	25.2	24.1	*2	100	0	100	0

* Reference data

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

No.	Freq.	Reading		Ant F.	Amp G.	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER	
1	1608.11	48.19	47.75	25.89	-33.96	1.85	---	---	---	---	42.0	41.5	54.0	12.0	12.5	
2	2390.00	40.85	38.34	30.55	-32.80	2.21	---	---	---	---	40.8	38.3	54.0	13.2	15.7	
3*	2400.00	56.84	54.76	30.53	-32.79	2.21	---	---	---	---	56.8	54.7	54.0	---	---	
4*	3215.98	50.20	50.29	31.66	-32.35	2.70	---	---	---	---	52.2	52.3	54.0	---	---	
5	4824.07	44.14	44.21	35.31	-31.61	3.45	---	0.41	---	---	51.7	51.8	54.0	2.3	2.2	
6	7236.01	36.70	36.41	37.67	-32.11	4.26	---	0.36	---	---	46.9	46.6	54.0	7.1	7.4	
7	9648.02	31.77	37.01	36.55	-33.09	4.98	---	0.71	---	---	40.9	46.2	54.0	13.1	7.8	
8	12060.00	No noise	No noise	40.21	-32.98	5.81	---	---	-9.54	---	---	---	54.0	---	---	*2
9	14472.00	No noise	No noise	42.73	-32.34	6.26	---	---	-9.54	---	---	---	54.0	---	---	*2
10	16884.00	No noise	No noise	45.87	-32.05	6.77	---	---	-9.54	---	---	---	54.0	---	---	*2
11	19296.00	No noise	No noise	39.46	-31.81	7.27	---	---	-9.54	---	---	---	54.0	---	---	*2
12	21708.00	No noise	No noise	39.78	-32.25	7.76	---	---	-9.54	---	---	---	54.0	---	---	*2
13	24120.00	29.84	29.80	39.76	-31.44	8.14	---	---	-9.54	---	36.8	36.7	54.0	17.2	17.3	*2

* Reference data

20dBc(Fundamental to Spurious) (RBW: 100kHz , VBW:300kHz)

No.	Freq.	Reading		Ant F.	Amp G.	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark	Hor. A/T	Hor. T/T	Ver. A/T	Ver. T/T
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER		[cm]	[Deg.]	[cm]	[Deg.]
0	2412.00	101.27	100.35	30.50	-32.79	2.22	---	---	---	---	101.2	100.3	-	-	-	carrier	209	342	159	350
3	2400.00	57.05	55.35	30.53	-32.79	2.21	---	---	---	---	57.0	55.3	81.2	24.2	25.9		209	342	159	350
4	3215.98	51.10	50.86	31.66	-32.35	2.70	---	---	---	---	53.1	52.9	81.2	28.1	28.3		135	97	132	30

Ant F.=Antenna Factor // Amp G.=PreAmp Gain // Cable L.=Cable Loss // ATT=Attenuator Loss (or Filter Loss)
CALCULATION RESULT = Reading + Ant.F. + Amp.G. + Cable L. + Cable L. + ATT + Other1 + Other2
ANT Type below 30MHz=Loop // 30-300MHz=Biconical // 300-1000MHz=Logperiodic // above 1000MHz=Horn
Test Distance 1.0m (above 10GHz) : Other1 (Distance Factor(Dfa= 20 log (3 / 1) = 9.54 dB
*1) Except for the above table : All other spurious emissions were less than 20dB for the limit.
*2) In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.
*3) The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.
*4) Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission (above 1GHz)

Hand unit, Tx, 11b, Mid

UL-Apex Co.,Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

COMPANY	: Panasonic Communications Co.,Ltd.	REPORT No.	: 26KE0322-HO
EQUIPMENT	: Travel Phone	REGULATION	: FCC Part 15 Subpart C 15.247(d)
MODEL	: KX-WPA100	TEST DISTANCE	: 3m (1GHz to 10GHz) / 1m (10GHz to 26.5GHz)
S/N	: 1	DATE	: 07/24/2006
POWER	: DC3.6V	TEMPERATURE	: 26 deg.C.
MODE	: 11b Tx 2437MHz, 1Mbps, Ant1	HUMIDITY	: 61 %
AXIS	: H: Y-axis / V: Z-axis	ENGINEER	: Kenichi Adachi, Yutaka Yoshida

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

No.	Freq.	Reading		Ant F.	Amp	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark	Hor. A/T	Hor. T/T	Ver. A/T	Ver. T/T
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER		[cm]	[Deg.]	[cm]	[Deg.]
1	1624.67	50.7	49.8	26.12	-33.92	1.86	---	---	---	---	44.7	43.9	74.0	29.3	30.1		162	63	142	65
2*	3249.40	55.6	56.1	31.62	-32.34	2.72	---	---	---	---	57.6	58.1	74.0	---	---		132	99	139	57
3	4874.06	47.9	47.3	35.53	-31.59	3.47	---	0.40	---	---	55.7	55.1	74.0	18.3	18.9		110	189	110	299
4	7311.10	45.8	45.6	37.73	-32.16	4.28	---	0.47	---	---	56.1	55.9	74.0	17.9	18.1		120	144	177	302
5	9748.08	44.0	45.2	36.47	-33.14	5.01	---	0.73	---	---	53.1	54.3	74.0	20.9	19.7		105	80	144	278
6	12185.00	No noise	No noise	40.28	-32.92	5.83	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
7	14622.00	No noise	No noise	42.82	-32.37	6.29	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
8	17059.00	No noise	No noise	46.15	-31.96	6.82	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
9	19496.00	No noise	No noise	39.66	-31.86	7.31	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
10	21933.00	No noise	No noise	40.07	-32.14	7.81	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
11	24370.00	42.3	44.1	39.83	-31.13	8.19	---	---	-9.54	---	49.6	51.4	74.0	24.4	22.6	*2	100	0	100	0

* Reference data

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

No.	Freq.	Reading		Ant F.	Amp	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER	
1	1624.67	46.89	45.34	26.12	-33.92	1.86	---	---	---	---	40.9	39.4	54.0	13.1	14.6	
2*	3249.40	52.67	53.43	31.62	-32.34	2.72	---	---	---	---	54.7	55.4	54.0	-	-	
3	4874.06	43.25	43.00	35.53	-31.59	3.47	---	0.40	---	---	51.1	50.8	54.0	2.9	3.2	
4	7311.10	35.25	34.62	37.73	-32.16	4.28	---	0.47	---	---	45.6	44.9	54.0	8.4	9.1	
5	9748.08	32.05	36.97	36.47	-33.14	5.01	---	0.73	---	---	41.1	46.0	54.0	12.9	8.0	
6	12185.00	No noise	No noise	40.28	-32.92	5.83	---	---	-9.54	---	---	---	54.0	---	---	*2
7	14622.00	No noise	No noise	42.82	-32.37	6.29	---	---	-9.54	---	---	---	54.0	---	---	*2
8	17059.00	No noise	No noise	46.15	-31.96	6.82	---	---	-9.54	---	---	---	54.0	---	---	*2
9	19496.00	No noise	No noise	39.66	-31.86	7.31	---	---	-9.54	---	---	---	54.0	---	---	*2
10	21933.00	No noise	No noise	40.07	-32.14	7.81	---	---	-9.54	---	---	---	54.0	---	---	*2
11	24370.00	30.84	30.10	39.83	-31.13	8.19	---	---	-9.54	---	38.2	37.4	54.0	15.8	16.6	*2

* Reference data

20dBc(Fundamental to Spurious) (RBW: 100kHz , VBW:300kHz)

No.	Freq.	Reading		Ant F.	Amp	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark	Hor. A/T	Hor. T/T	Ver. A/T	Ver. T/T
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER		[cm]	[Deg.]	[cm]	[Deg.]
0	2437.00	101.04	100.33	30.45	-32.77	2.24	---	---	---	---	101.0	100.2	-	-	-	carrier	202	344	158	353
2	3249.40	54.78	54.34	31.62	-32.34	2.72	---	---	---	---	56.8	56.3	81.0	24.2	24.6		134	99	130	25

Ant F.=Antenna Factor // Amp G.=PreAmp Gain // Cable L.=Cable Loss // ATT=Attenuator Loss (or Filter Loss)
CALCULATION RESULT = Reading + Ant.F. + Amp.G. + Cable L. + Cable L. + ATT + Other1 + Other2
ANT Type below 30MHz=Loop // 30-300MHz=Biconical // 300-1000MHz=Logperiodic // above 1000MHz=Horn
Test Distance 1.0m (above 10GHz) : Other1 (Distance Factor = 20 log (3 / 1) = 9.54 dB
*1) Except for the above table : All other spurious emissions were less than 20dB for the limit.
*2) In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.
*3) The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.
*4) Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission (above 1GHz)

Hand unit, Tx, 11b, High

UL-Apex Co.,Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

COMPANY	: Panasonic Communications Co.,Ltd.	REPORT No.	: 26KE0322-HO
EQUIPMENT	: Travel Phone	REGULATION	: FCC Part 15 Subpart C 15.247(d)
MODEL	: KX-WPA100	TEST DISTANCE	: 3m (1GHz to 10GHz) / 1m (10GHz to 26.5GHz)
S/N	: 1	DATE	: 07/24/2006
POWER	: DC3.6V	TEMPERATURE	: 26 deg.C.
MODE	: 11b Tx 2462MHz, 1Mbps, Ant1	HUMIDITY	: 61 %
AXIS	: H: Y-axis / V: Z-axis	ENGINEER	: Kenichi Adachi, Yutaka Yoshida

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

No.	Freq.	Reading		Ant F.	Amp	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark	Hor. A/T	Hor. T/T	Ver. A/T	Ver. T/T
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER		[cm]	[Deg.]	[cm]	[Deg.]
1	1641.91	51.7	50.7	26.37	-33.88	1.87	---	---	---	---	46.0	45.0	74.0	28.0	29.0		160	49	150	14
2	2483.50	50.0	48.0	30.35	-32.75	2.34	---	---	---	---	49.9	48.0	74.0	24.1	26.0		204	344	157	348
3*	3287.98	52.2	52.0	31.58	-32.31	2.74	---	---	---	---	54.2	54.0	74.0	---	---		134	96	133	35
4	4824.07	48.4	48.0	35.31	-31.61	3.45	---	0.41	---	---	55.9	55.5	74.0	18.1	18.5		111	185	105	306
5	7236.01	45.1	45.1	37.67	-32.11	4.26	---	0.36	---	---	55.3	55.3	74.0	18.7	18.7		120	145	178	308
6	9648.02	45.0	44.9	36.55	-33.09	4.98	---	0.71	---	---	54.1	54.0	74.0	19.9	20.0		102	78	146	287
7	12310.00	No noise	No noise	40.36	-32.85	5.86	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
8	14772.00	No noise	No noise	42.90	-32.39	6.31	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
9	17234.00	No noise	No noise	46.36	-31.91	6.86	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
10	19696.00	No noise	No noise	39.53	-31.91	7.34	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
11	22158.00	No noise	No noise	40.13	-32.08	7.84	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
12	24620.00	41.8	41.1	39.92	-30.82	8.23	---	---	-9.54	---	49.6	48.9	74.0	24.4	25.1	*2	100	0	100	0

* Reference data

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

No.	Freq.	Reading		Ant F.	Amp	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER	
1	1641.91	48.05	47.45	26.37	-33.88	1.87	---	---	---	---	42.4	41.8	54.0	11.6	12.2	
2	2483.50	40.46	39.34	30.35	-32.75	2.34	---	---	---	---	40.4	39.3	54.0	13.6	14.7	
3*	3287.98	50.13	50.18	31.58	-32.31	2.74	---	---	---	---	52.1	52.2	54.0	-	-	
4	4824.07	44.04	44.13	35.31	-31.61	3.45	---	0.41	---	---	51.6	51.7	54.0	2.4	2.3	
5	7236.01	36.61	36.31	37.67	-32.11	4.26	---	0.36	---	---	46.8	46.5	54.0	7.2	7.5	
6	9648.02	31.47	36.91	36.55	-33.09	4.98	---	0.71	---	---	40.6	46.1	54.0	13.4	7.9	
7	12310.00	No noise	No noise	40.36	-32.85	5.86	---	---	-9.54	---	---	---	54.0	---	---	*2
8	14772.00	No noise	No noise	42.90	-32.39	6.31	---	---	-9.54	---	---	---	54.0	---	---	*2
9	17234.00	No noise	No noise	46.36	-31.91	6.86	---	---	-9.54	---	---	---	54.0	---	---	*2
10	19696.00	No noise	No noise	39.53	-31.91	7.34	---	---	-9.54	---	---	---	54.0	---	---	*2
11	22158.00	No noise	No noise	40.13	-32.08	7.84	---	---	-9.54	---	---	---	54.0	---	---	*2
12	24620.00	29.26	29.23	39.92	-30.82	8.23	---	---	-9.54	---	37.1	37.0	54.0	16.9	17.0	*2

* Reference data

20dBc(Fundamental to Spurious) (RBW: 100kHz , VBW:300kHz)

No.	Freq.	Reading		Ant F.	Amp	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark	Hor. A/T	Hor. T/T	Ver. A/T	Ver. T/T
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER		[cm]	[Deg.]	[cm]	[Deg.]
0	2462.00	101.03	100.17	30.39	-32.76	2.29	---	---	---	---	101.0	100.1	-	-	-	carrier	210	340	155	348
3	3287.98	50.97	50.76	31.58	-32.31	2.74	---	---	---	---	53.0	52.8	81.0	28.0	28.2		134	96	133	35

Ant F.=Antenna Factor // Amp G.=PreAmp Gain // Cable L.=Cable Loss // ATT=Attenuator Loss (or Filter Loss)
CALCULATION RESULT = Reading + Ant.F. + Amp.G. + Cable L. + Cable L. + ATT + Other1 + Other2
ANT Type below 30MHz=Loop // 30-300MHz=Biconical // 300-1000MHz=Logperiodic // above 1000MHz=Horn
Test Distance 1.0m (above 10GHz) : Other1 (Distance Facte= 20 log (3 / 1) = 9.54 dB
*1) Except for the above table : All other spurious emissions were less than 20dB for the limit.
*2) In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.
*3) The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.
*4) Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission (above 1GHz)

Hand unit, Tx, 11g, Low

UL-Apex Co.,Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

COMPANY	: Panasonic Communications Co.,Ltd.	REPORT No.	: 26KE0322-HO
EQUIPMENT	: Travel Phone	REGULATION	: FCC Part 15 Subpart C 15.247(d)
MODEL	: KX-WPA100	TEST DISTANCE	: 3m (1GHz to 10GHz) / 1m (10GHz to 26.5GHz)
S/N	: 1	DATE	: 07/24/2006
POWER	: DC3.6V	TEMPERATURE	: 26 deg.C.
MODE	: 11g Tx 2412MHz, 6Mbps, Ant1	HUMIDITY	: 61 %
AXIS	: H: Y-axis / V: Z-axis	ENGINEER	: Kenichi Adachi, Yutaka Yoshida

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

No.	Freq.	Reading		Ant F.	Amp	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark	Hor. A/T	Hor. T/T	Ver. A/T	Ver. T/T
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER		[cm]	[Deg.]	[cm]	[Deg.]
1	1608.02	53.3	50.4	25.89	-33.96	1.85	---	---	---	---	47.1	44.2	74.0	26.9	29.8		170	55	158	14
2	2390.00	54.4	52.8	30.55	-32.80	2.21	---	---	---	---	54.3	52.8	74.0	19.7	21.2		202	341	144	56
3*	2400.00	70.7	70.5	30.53	-32.79	2.21	---	---	---	---	70.6	70.5	74.0	-	-		202	341	144	56
4*	3215.98	54.8	54.0	31.66	-32.35	2.70	---	---	---	---	56.8	56.0	74.0	-	-		167	349	119	76
5	4824.04	48.9	44.2	35.31	-31.61	3.45	---	0.41	---	---	56.4	51.7	74.0	17.6	22.3		110	347	107	302
6	7236.01	51.4	48.9	37.67	-32.11	4.26	---	0.36	---	---	61.6	59.0	74.0	12.4	15.0		112	138	174	305
7	9648.02	43.9	45.4	36.55	-33.09	4.98	---	0.71	---	---	53.0	54.5	74.0	21.0	19.5		108	257	154	272
8	12060.00	No noise	No noise	40.21	-32.98	5.81	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
9	14472.00	No noise	No noise	42.73	-32.34	6.26	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
10	16884.00	No noise	No noise	45.87	-32.05	6.77	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
11	19296.00	No noise	No noise	39.46	-31.81	7.27	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
12	21708.00	No noise	No noise	39.78	-32.25	7.76	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
13	24120.00	41.6	41.6	39.76	-31.44	8.14	---	---	-9.54	---	48.5	48.5	74.0	25.5	25.5	*2	100	0	100	0

* Reference data

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

No.	Freq.	Reading		Ant F.	Amp	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER	
1	1608.02	50.06	47.75	25.89	-33.96	1.85	---	---	---	---	43.8	41.5	54.0	10.2	12.5	
2	2390.00	38.59	37.67	30.55	-32.80	2.21	---	---	---	---	38.5	37.6	54.0	15.5	16.4	
3*	2400.00	51.21	50.79	30.53	-32.79	2.21	---	---	---	---	51.2	50.7	54.0	---	---	
4*	3215.98	50.89	50.50	31.66	-32.35	2.70	---	---	---	---	52.9	52.5	54.0	---	---	
5	4824.04	35.59	31.64	35.31	-31.61	3.45	---	0.41	---	---	43.1	39.2	54.0	10.9	14.8	
6	7236.01	35.54	33.98	37.67	-32.11	4.26	---	0.36	---	---	45.7	44.2	54.0	8.3	9.8	
7	9648.02	31.47	35.23	36.55	-33.09	4.98	---	0.71	---	---	40.6	44.4	54.0	13.4	9.6	
8	12060.00	No noise	No noise	40.21	-32.98	5.81	---	---	-9.54	---	---	---	54.0	---	---	*2
9	14472.00	No noise	No noise	42.73	-32.34	6.26	---	---	-9.54	---	---	---	54.0	---	---	*2
10	16884.00	No noise	No noise	45.87	-32.05	6.77	---	---	-9.54	---	---	---	54.0	---	---	*2
11	19296.00	No noise	No noise	39.46	-31.81	7.27	---	---	-9.54	---	---	---	54.0	---	---	*2
12	21708.00	No noise	No noise	39.78	-32.25	7.76	---	---	-9.54	---	---	---	54.0	---	---	*2
13	24120.00	29.20	29.18	39.76	-31.44	8.14	---	---	-9.54	---	36.1	36.1	54.0	17.9	17.9	*2

* Reference data

20dBc(Fundamental to Spurious) (RBW: 100kHz , VBW:300kHz)

No.	Freq.	Reading		Ant F.	Amp	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark	Hor. A/T	Hor. T/T	Ver. A/T	Ver. T/T
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER		[cm]	[Deg.]	[cm]	[Deg.]
0	2412.00	95.36	94.56	30.50	-32.79	2.22	---	---	---	---	95.3	94.5	-	-	-	carrier	202	341	144	56
3	2400.00	54.45	53.78	30.53	-32.79	2.21	---	---	---	---	54.4	53.7	75.3	20.9	21.6		202	341	144	56
4	3215.98	52.85	52.75	31.66	-32.35	2.70	---	---	---	---	54.9	54.8	75.3	20.4	20.5		167	349	119	76

Ant F.=Antenna Factor // Amp G.=PreAmp Gain // Cable L.=Cable Loss // ATT=Attenuator Loss (or Filter Loss)
CALCULATION RESULT = Reading + Ant.F. + Amp.G. + Cable L. + Cable L. + ATT + Other1 + Other2
ANT Type below 30MHz=Loop // 30-300MHz=Biconical // 300-1000MHz=Logperiodic // above 1000MHz=Horn
Test Distance 1.0m (above 10GHz) : Other1 (Distance Factc= 20 log (3 / 1) = 9.54 dB
*1) Except for the above table : All other spurious emissions were less than 20dB for the limit.
*2) In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.
*3) The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.
*4) Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission (above 1GHz)

Hand unit, Tx, 11g, Mid

UL-Apex Co.,Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

COMPANY	: Panasonic Communications Co.,Ltd.	REPORT No.	: 26KE0322-HO
EQUIPMENT	: Travel Phone	REGULATION	: FCC Part 15 Subpart C 15.247(d)
MODEL	: KX-WPA100	TEST DISTANCE	: 3m (1GHz to 10GHz) / 1m (10GHz to 26.5GHz)
S/N	: 1	DATE	: 07/24/2006
POWER	: DC3.6V	TEMPERATURE	: 26 deg.C.
MODE	: 11g Tx 2437MHz, 6Mbps, Ant1	HUMIDITY	: 61 %
AXIS	: H: Y-axis / V: Z-axis	ENGINEER	: Kenichi Adachi, Yutaka Yoshida

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

No.	Freq.	Reading		Ant F.	Amp	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark	Hor. A/T	Hor. T/T	Ver. A/T	Ver. T/T
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER		[cm]	[Deg.]	[cm]	[Deg.]
1	1624.58	52.9	50.8	26.12	-33.92	1.86	---	---	---	---	46.9	44.8	74.0	27.1	29.2		166	57	159	16
2*	3249.36	53.8	53.5	31.62	-32.34	2.72	---	---	---	---	55.8	55.5	74.0	---	---		169	350	121	79
3	4874.02	48.7	44.6	35.53	-31.59	3.47	---	0.40	---	---	56.5	52.4	74.0	17.5	21.6		115	343	110	305
4	7311.03	51.1	49.1	37.73	-32.16	4.28	---	0.47	---	---	61.5	59.4	74.0	12.5	14.6		115	139	176	308
5	9748.08	44.1	45.4	36.47	-33.14	5.01	---	0.73	---	---	53.2	54.4	74.0	20.8	19.6		109	254	151	270
6	12185.00	No noise	No noise	40.28	-32.92	5.83	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
7	14622.00	No noise	No noise	42.82	-32.37	6.29	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
8	17059.00	No noise	No noise	46.15	-31.96	6.82	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
9	19496.00	No noise	No noise	39.66	-31.86	7.31	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
10	21933.00	No noise	No noise	40.07	-32.14	7.81	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
11	24370.00	41.9	43.0	39.83	-31.13	8.19	---	---	-9.54	---	49.3	50.3	74.0	24.7	23.7	*2	100	0	100	0

* Reference data

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

No.	Freq.	Reading		Ant F.	Amp	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER	
1	1624.58	50.06	47.75	26.12	-33.92	1.86	---	---	---	---	44.1	41.8	54.0	9.9	12.2	
2*	3249.36	50.89	50.50	31.62	-32.34	2.72	---	---	---	---	52.9	52.5	54.0	---	---	
3	4874.02	35.47	32.03	35.53	-31.59	3.47	---	0.40	---	---	43.3	39.8	54.0	10.7	14.2	
4	7311.03	35.44	34.01	37.73	-32.16	4.28	---	0.47	---	---	45.8	44.3	54.0	8.2	9.7	
5	9748.08	31.38	34.98	36.47	-33.14	5.01	---	0.73	---	---	40.4	44.0	54.0	13.6	10.0	
6	12185.00	No noise	No noise	40.28	-32.92	5.83	---	---	-9.54	---	---	---	54.0	---	---	*2
7	14622.00	No noise	No noise	42.82	-32.37	6.29	---	---	-9.54	---	---	---	54.0	---	---	*2
8	17059.00	No noise	No noise	46.15	-31.96	6.82	---	---	-9.54	---	---	---	54.0	---	---	*2
9	19496.00	No noise	No noise	39.66	-31.86	7.31	---	---	-9.54	---	---	---	54.0	---	---	*2
10	21933.00	No noise	No noise	40.07	-32.14	7.81	---	---	-9.54	---	---	---	54.0	---	---	*2
11	24370.00	29.95	29.98	39.83	-31.13	8.19	---	---	-9.54	---	37.3	37.3	54.0	16.7	16.7	*2

* Reference data

20dBc(Fundamental to Spurious) (RBW: 100kHz , VBW:300kHz)

No.	Freq.	Reading		Ant F.	Amp	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark	Hor. A/T	Hor. T/T	Ver. A/T	Ver. T/T
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER		[cm]	[Deg.]	[cm]	[Deg.]
0	2437.00	95.42	94.82	30.45	-32.77	2.24	---	---	---	---	95.3	94.7	-	-	-	carrier	200	344	146	55
2	3249.36	52.46	52.35	31.62	-32.34	2.72	---	---	---	---	54.5	54.4	75.3	20.9	21.0		169	350	121	79

Ant F.=Antenna Factor // Amp G.=PreAmp Gain // Cable L.=Cable Loss // ATT=Attenuator Loss (or Filter Loss)
CALCULATION RESULT = Reading + Ant.F. + Amp.G. + Cable L. + Cable L. + ATT + Other1 + Other2
ANT Type below 30MHz=Loop // 30-300MHz=Biconical // 300-1000MHz=Logperiodic // above 1000MHz=Horn
Test Distance 1.0m (above 10GHz) : Other1 (Distance Facto= 20 log (3 / 1) = 9.54 dB
*1) Except for the above table : All other spurious emissions were less than 20dB for the limit.
*2) In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.
*3) The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.
*4) Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission (above 1GHz)

Hand unit, Tx, 11g, High

UL-Apex Co.,Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

COMPANY : Panasonic Communications Co.,Ltd.
EQUIPMENT : Travel Phone
MODEL : KX-WPA100
S/N : 1
POWER : DC3.6V
MODE : 11g Tx 2462MHz, 6Mbps, Ant1
AXIS : H: Y-axis / V: Z-axis

REPORT No. : 26KE0322-HO
REGULATION : FCC Part 15 Subpart C 15.247(d)
TEST DISTANCE : 3m (1GHz to 10GHz) / 1m (10GHz to 26.5GHz)
DATE : 07/24/2006
TEMPERATURE : 26 deg.C.
HUMIDITY : 61 %
ENGINEER : Kenichi Adachi, Yutaka Yoshida

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

No.	Freq.	Reading		Ant F.	Amp	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark	Hor. A/T	Hor. T/T	Ver. A/T	Ver. T/T
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER		[cm]	[Deg.]	[cm]	[Deg.]
1	1641.32	54.7	54.2	26.36	-33.88	1.87	---	---	---	---	49.0	48.5	74.0	25.0	25.5		159	60	155	348
2	2483.50	57.8	55.6	30.35	-32.75	2.34	---	---	---	---	57.7	55.5	74.0	16.3	18.5		163	341	162	67
3*	3282.60	55.4	53.5	31.58	-32.32	2.74	---	---	---	---	57.4	55.5	74.0	---	---		160	350	141	138
4	4923.92	48.5	47.8	35.75	-31.58	3.49	---	0.39	---	---	56.6	55.8	74.0	17.4	18.2		121	343	115	301
5	7386.00	52.5	52.4	37.80	-32.22	4.30	---	0.58	---	---	63.0	62.9	74.0	11.0	11.1		107	177	173	304
6	9848.00	44.2	45.2	36.38	-33.19	5.04	---	0.74	---	---	53.2	54.2	74.0	20.8	19.8		107	212	153	261
7	12310.00	No noise	No noise	40.36	-32.85	5.86	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
8	14772.00	No noise	No noise	42.90	-32.39	6.31	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
9	17234.00	No noise	No noise	46.36	-31.91	6.86	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
10	19696.00	No noise	No noise	39.53	-31.91	7.34	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
11	22158.00	No noise	No noise	40.13	-32.08	7.84	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
12	24620.00	41.3	42.4	39.92	-30.82	8.23	---	---	-9.54	---	49.1	50.2	74.0	24.9	23.8	*2	100	0	100	0

* Reference data

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

No.	Freq.	Reading		Ant F.	Amp	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER	
1	1641.32	50.18	50.05	26.36	-33.88	1.87	---	---	---	---	44.5	44.4	54.0	9.5	9.6	
2	2483.50	40.78	39.14	30.35	-32.75	2.34	---	---	---	---	40.7	39.1	54.0	13.3	14.9	
3*	3282.60	52.17	50.13	31.58	-32.32	2.74	---	---	---	---	54.2	52.1	54.0	---	---	
4	4923.92	34.98	33.97	35.75	-31.58	3.49	---	0.39	---	---	43.0	42.0	54.0	11.0	12.0	
5	7386.00	34.37	34.19	37.80	-32.22	4.30	---	0.58	---	---	44.8	44.7	54.0	9.2	9.3	
6	9848.00	31.46	33.23	36.38	-33.19	5.04	---	0.74	---	---	40.4	42.2	54.0	13.6	11.8	
7	12310.00	No noise	No noise	40.36	-32.85	5.86	---	---	-9.54	---	---	---	54.0	---	---	*2
8	14772.00	No noise	No noise	42.90	-32.39	6.31	---	---	-9.54	---	---	---	54.0	---	---	*2
9	17234.00	No noise	No noise	46.36	-31.91	6.86	---	---	-9.54	---	---	---	54.0	---	---	*2
10	19696.00	No noise	No noise	39.53	-31.91	7.34	---	---	-9.54	---	---	---	54.0	---	---	*2
11	22158.00	No noise	No noise	40.13	-32.08	7.84	---	---	-9.54	---	---	---	54.0	---	---	*2
12	24620.00	29.16	29.23	39.92	-30.82	8.23	---	---	-9.54	---	37.0	37.0	54.0	17.0	17.0	*2

* Reference data

20dBc(Fundamental to Spurious) (RBW: 100kHz , VBW:300kHz)

No.	Freq.	Reading		Ant F.	Amp	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark	Hor. A/T	Hor. T/T	Ver. A/T	Ver. T/T
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER		[cm]	[Deg.]	[cm]	[Deg.]
0	2462.00	97.64	97.53	30.39	-32.76	2.29	---	---	---	---	97.6	97.5	-	-	-	carrier	163	341	144	56
3	3282.60	54.56	52.45	31.58	-32.32	2.74	---	---	---	---	56.6	54.4	77.6	21.0	23.1		167	349	119	76

Ant F.=Antenna Factor // Amp G.=PreAmp Gain // Cable L.=Cable Loss // ATT=Attenuator Loss (or Filter Loss)
CALCULATION RESULT = Reading + Ant.F. + Amp.G. + Cable L. + Cable L. + ATT + Other1 + Other2
ANT Type below 30MHz=Loop // 30-300MHz=Biconical // 300-1000MHz=Logperiodic // above 1000MHz=Horn
Test Distance 1.0m (above 10GHz) : Other1 (Distance Factc= 20 log (3 / 1) = 9.54 dB
*1) Except for the above table : All other spurious emissions were less than 20dB for the limit.
*2) In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.
*3) The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.
*4) Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission (above 1GHz)

Base Unit, Tx, 11b, Low

UL-Apex Co.,Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

COMPANY : Panasonic Communications Co.,Ltd.
EQUIPMENT : Travel Phone
MODEL : KX-WPA102
S/N : 1
POWER : AC120V / 60Hz
MODE : 11b Tx 2412MHz, 1Mbps, Ant102
AXIS : Normal aixs

REPORT No. : 26KE0322-HO
REGULATION : FCC Part 15 Subpart C 15.247(d)
TEST DISTANCE : 3m (1GHz to 10GHz) / 1m (10GHz to 26.5GHz)
DATE : 07/24/2006
TEMPERATURE : 26 deg.C.
HUMIDITY : 61 %
ENGINEER : Kenichi Adachi, Yutaka Yoshida

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

No.	Freq.	Reading		Ant F.	Amp G.	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark	Hor. A/T	Hor. T/T	Ver. A/T	Ver. T/T
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER		[cm]	[Deg.]	[cm]	[Deg.]
1	1078.25	64.4	63.8	23.38	-35.27	1.54	---	---	---	---	54.0	53.5	74.0	20.0	20.5		134	192	120	0
2	1608.01	48.9	49.2	25.89	-33.96	1.85	---	---	---	---	42.7	43.0	74.0	31.3	31.0		135	209	175	128
3	2387.48	49.6	49.5	30.56	-32.80	2.21	---	---	---	---	49.5	49.5	74.0	24.5	24.5		136	181	127	11
4*	2400.00	61.9	62.0	30.53	-32.79	2.21	---	---	---	---	61.8	62.0	74.0	---	---		136	181	127	11
5	3216.01	46.5	46.8	31.66	-32.35	2.70	---	---	---	---	48.5	48.8	74.0	25.5	25.2		147	124	127	155
6	4824.01	48.9	49.8	35.31	-31.61	3.45	---	0.41	---	---	56.5	57.3	74.0	17.5	16.7		141	355	109	153
7	7236.03	44.0	43.9	37.67	-32.11	4.26	---	0.36	---	---	54.2	54.1	74.0	19.8	19.9		124	193	110	216
8	9648.05	43.3	44.3	36.55	-33.09	4.98	---	0.71	---	---	52.5	53.5	74.0	21.5	20.5		176	353	148	38
9	12060.00	No noise	No noise	40.21	-32.98	5.81	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
10	14472.00	No noise	No noise	42.73	-32.34	6.26	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
11	16884.00	No noise	No noise	45.87	-32.05	6.77	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
12	19296.00	No noise	No noise	39.46	-31.81	7.27	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
13	21708.00	No noise	No noise	39.78	-32.25	7.76	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
14	24120.00	42.3	43.6	39.76	-31.44	8.14	---	---	-9.54	---	49.2	50.5	74.0	24.8	23.5	*2	100	0	100	0

* Reference data

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

No.	Freq.	Reading		Ant F.	Amp G.	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER	
1	1078.25	41.23	41.96	23.38	-35.27	1.54	---	---	---	---	30.9	31.6	54.0	23.1	22.4	
2	1608.01	40.61	42.43	25.89	-33.96	1.85	---	---	---	---	34.4	36.2	54.0	19.6	17.8	
3	2387.48	41.15	41.13	30.56	-32.80	2.21	---	---	---	---	41.1	41.1	54.0	12.9	12.9	
4*	2400.00	56.69	56.54	30.53	-32.79	2.21	---	---	---	---	56.6	56.5	54.0	-	-	
5	3216.01	40.39	41.23	31.66	-32.35	2.70	---	---	---	---	42.4	43.2	54.0	11.6	10.8	
6	4824.01	43.92	44.11	35.31	-31.61	3.45	---	0.41	---	---	51.5	51.7	54.0	2.5	2.3	
7	7236.03	32.07	31.75	37.67	-32.11	4.26	---	0.36	---	---	42.2	41.9	54.0	11.8	12.1	
8	9648.05	32.64	32.36	36.55	-33.09	4.98	---	0.71	---	---	41.8	41.5	54.0	12.2	12.5	
9	12060.00	No noise	No noise	40.21	-32.98	5.81	---	---	-9.54	---	---	---	54.0	---	---	*2
10	14472.00	No noise	No noise	42.73	-32.34	6.26	---	---	-9.54	---	---	---	54.0	---	---	*2
11	16884.00	No noise	No noise	45.87	-32.05	6.77	---	---	-9.54	---	---	---	54.0	---	---	*2
12	19296.00	No noise	No noise	39.46	-31.81	7.27	---	---	-9.54	---	---	---	54.0	---	---	*2
13	21708.00	No noise	No noise	39.78	-32.25	7.76	---	---	-9.54	---	---	---	54.0	---	---	*2
14	24120.00	30.95	30.95	39.76	-31.44	8.14	---	---	-9.54	---	37.9	37.9	54.0	16.1	16.1	*2

* Reference data

20dBc(Fundamental to Spurious) (RBW: 100kHz , VBW:300kHz)

No.	Freq.	Reading		Ant F.	Amp G.	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark	Hor. A/T	Hor. T/T	Ver. A/T	Ver. T/T
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER		[cm]	[Deg.]	[cm]	[Deg.]
0	2412.00	98.17	97.91	30.50	-32.79	2.22	---	---	---	---	98.1	97.8	-	-	-	carrier	136	181	127	11
4	2400.00	57.87	56.68	30.53	-32.79	2.21	---	---	---	---	57.8	56.6	78.1	20.3	21.5		136	181	127	11

Ant F.=Antenna Factor // Amp G.=PreAmp Gain // Cable L.=Cable Loss // ATT=Attenuator Loss (or Filter Loss)
CALCULATION RESULT = Reading + Ant.F. + Amp.G. + Cable L. + Cable L. + ATT + Other1 + Other2
ANT Type below 30MHz=Loop // 30-300MHz=Biconical // 300-1000MHz=Logperiodic // above 1000MHz=Horn
Test Distance 1.0m (above 10GHz) : Other1 (Distance Factor = 20 log (3 / 1) = 9.54 dB
*1) Except for the above table : All other spurious emissions were less than 20dB for the limit.
*2) In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.
*3) The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.
*4) Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission (above 1GHz)

Base Unit, Tx, 11b, Mid

UL-Apex Co.,Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

COMPANY	: Panasonic Communications Co.,Ltd.	REPORT No.	: 26KE0322-HO
EQUIPMENT	: Travel Phone	REGULATION	: FCC Part 15 Subpart C 15.247(d)
MODEL	: KX-WPA102	TEST DISTANCE	: 3m (1GHz to 10GHz) / 1m (10GHz to 26.5GHz)
S/N	: 1	DATE	: 07/24/2006
POWER	: AC120V / 60Hz	TEMPERATURE	: 26 deg.C.
MODE	: 11b Tx 2437MHz, 1Mbps, Ant102	HUMIDITY	: 61 %
AXIS	: Normal-axis	ENGINEER	: Kenichi Adachi, Yutaka Yoshida

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

No.	Freq.	Reading		Ant F.	Amp G.	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark	Hor. A/T	Hor. T/T	Ver. A/T	Ver. T/T
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/	HOR	VER		[cm]	[Deg.]	[cm]	[Deg.]
1	1078.25	64.2	63.6	23.38	-35.27	1.54	---	---	---	---	53.9	53.3	74.0	20.1	20.7		130	200	119	0
2	1624.78	48.6	49.1	26.12	-33.92	1.86	---	---	---	---	42.6	43.1	74.0	31.4	30.9		136	206	173	126
3	3249.37	45.3	46.7	31.62	-32.34	2.72	---	---	---	---	47.3	48.7	74.0	26.7	25.3		145	125	128	155
4	4874.04	47.8	47.6	35.53	-31.59	3.47	---	0.40	---	---	55.7	55.4	74.0	18.3	18.6		141	355	109	154
5	7311.78	43.5	43.9	37.73	-32.17	4.28	---	0.47	---	---	53.8	54.2	74.0	20.2	19.8		125	196	110	217
6	9748.05	43.8	43.7	36.47	-33.14	5.01	---	0.73	---	---	52.9	52.8	74.0	21.1	21.2		173	354	157	34
7	12185.00	No noise	No noise	40.28	-32.92	5.83	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
8	14622.00	No noise	No noise	42.82	-32.37	6.29	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
9	17059.00	No noise	No noise	46.15	-31.96	6.82	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
10	19496.00	No noise	No noise	39.66	-31.86	7.31	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
11	21933.00	No noise	No noise	40.07	-32.14	7.81	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
12	24370.00	42.9	43.1	39.83	-31.13	8.19	---	---	-9.54	---	50.3	50.5	74.0	23.7	23.5	*2	100	0	100	0

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

No.	Freq.	Reading		Ant F.	Amp G.	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/	HOR	VER	
1	1078.25	41.23	41.96	23.38	-35.27	1.54	---	---	---	---	30.9	31.6	54.0	23.1	22.4	
2	1624.78	40.61	42.43	26.12	-33.92	1.86	---	---	---	---	34.7	36.5	54.0	19.3	17.5	
3	3249.37	40.39	41.23	31.62	-32.34	2.72	---	---	---	---	42.4	43.2	54.0	11.6	10.8	
4	4874.04	44.46	44.17	35.53	-31.59	3.47	---	0.40	---	---	52.3	52.0	54.0	1.7	2.0	
5	7311.78	32.05	31.75	37.73	-32.17	4.28	---	0.47	---	---	42.4	42.1	54.0	11.6	11.9	
6	9748.05	33.62	33.71	36.47	-33.14	5.01	---	0.73	---	---	42.7	42.8	54.0	11.3	11.2	
7	12185.00	No noise	No noise	40.28	-32.92	5.83	---	---	-9.54	---	---	---	54.0	---	---	*2
8	14622.00	No noise	No noise	42.82	-32.37	6.29	---	---	-9.54	---	---	---	54.0	---	---	*2
9	17059.00	No noise	No noise	46.15	-31.96	6.82	---	---	-9.54	---	---	---	54.0	---	---	*2
10	19496.00	No noise	No noise	39.66	-31.86	7.31	---	---	-9.54	---	---	---	54.0	---	---	*2
11	21933.00	No noise	No noise	40.07	-32.14	7.81	---	---	-9.54	---	---	---	54.0	---	---	*2
12	24370.00	30.30	31.13	39.83	-31.13	8.19	---	---	-9.54	---	37.6	38.5	54.0	16.4	15.5	*2

Ant F.=Antenna Factor // Amp G.=PreAmp Gain // Cable L.=Cable Loss // ATT=Attenuator Loss (or Filter Loss)
CALCULATION RESULT = Reading + Ant.F. + Amp.G. + Cable L. + Cable L. + ATT + Other1 + Other2
ANT Type below 30MHz=Loop // 30-300MHz=Biconical // 300-1000MHz=Logperiodic // above 1000MHz=Horn
Test Distance 1.0m (above 10GHz) : Other1 (Distance Factor = 20 log (3 / 1) = 9.54 dB
*1) Except for the above table : All other spurious emissions were less than 20dB for the limit.
*2) In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.
*3) The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.
*4) Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission
Base Unit, Tx, 11b, High

UL-Apex Co.,Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

COMPANY : Panasonic Communications Co.,Ltd.
EQUIPMENT : Travel Phone
MODEL : KX-WPA102
S/N : 1
POWER : AC120V / 60Hz
MODE : 11b Tx 2462MHz, 1Mbps, Ant102
AXIS : Normal aixs

REPORT No. : 26KE0322-HO
REGULATION : FCC Part 15 Subpart C 15.247(d)
TEST DISTANCE : 3m (1GHz to 10GHz) / 1m (10GHz to 26.5GHz)
DATE : 07/24/2006
TEMPERATURE : 26 deg.C.
HUMIDITY : 61 %
ENGINEER : Kenichi Adachi, Yutaka Yoshida

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

No.	Freq.	Reading		Ant F.	Amp G.	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark	Hor. A/T	Hor. T/T	Ver. A/T	Ver. T/T
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/	HOR	VER		[cm]	[Deg.]	[cm]	[Deg.]
1	1078.25	64.0	63.5	23.38	-35.27	1.54	---	---	---	---	53.7	53.1	74.0	20.3	20.9		132	196	120	0
2	1687.28	48.4	49.0	27.00	-33.77	1.90	---	---	---	---	43.5	44.1	74.0	30.5	29.9		135	203	172	127
3	2484.84	45.7	46.8	30.34	-32.75	2.34	---	---	---	---	45.7	46.8	74.0	28.3	27.2		133	206	114	174
4	3282.72	46.0	45.9	31.58	-32.32	2.74	---	---	---	---	48.0	47.9	74.0	26.0	26.1		144	184	126	151
5	4924.03	47.5	47.3	35.75	-31.58	3.49	---	0.39	---	---	55.5	55.3	74.0	18.5	18.7		119	16	109	154
6	7386.05	43.5	43.9	37.80	-32.22	4.30	---	0.58	---	---	53.9	54.3	74.0	20.1	19.7		125	196	110	217
7	9848.04	43.5	43.2	36.38	-33.19	5.04	---	0.74	---	---	52.5	52.2	74.0	21.5	21.8		173	354	157	34
8	12310.00	No noise	No noise	40.36	-32.85	5.86	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
9	14772.00	No noise	No noise	42.90	-32.39	6.31	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
10	17234.00	No noise	No noise	46.36	-31.91	6.86	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
11	19696.00	No noise	No noise	39.53	-31.91	7.34	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
12	22158.00	No noise	No noise	40.13	-32.08	7.84	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
13	24620.00	42.4	42.0	39.92	-30.82	8.23	---	---	-9.54	---	50.2	49.8	74.0	23.8	24.2	*2	100	0	100	0

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

No.	Freq.	Reading		Ant F.	Amp G.	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/	HOR	VER	
1	1078.25	41.11	41.58	23.38	-35.27	1.54	---	---	---	---	30.8	31.2	54.0	23.2	22.8	
2	1687.28	40.74	42.22	27.00	-33.77	1.90	---	---	---	---	35.9	37.3	54.0	18.1	16.7	
3	2484.84	35.88	36.56	30.34	-32.75	2.34	---	---	---	---	35.8	36.5	54.0	18.2	17.5	
4	3282.72	41.29	41.13	31.58	-32.32	2.74	---	---	---	---	43.3	43.1	54.0	10.7	10.9	
5	4924.03	44.36	44.17	35.75	-31.58	3.49	---	0.39	---	---	52.4	52.2	54.0	1.6	1.8	
6	7386.05	31.95	31.69	37.80	-32.22	4.30	---	0.58	---	---	42.4	42.2	54.0	11.6	11.8	
7	9848.04	32.98	32.89	36.38	-33.19	5.04	---	0.74	---	---	41.9	41.9	54.0	12.1	12.1	
8	12310.00	No noise	No noise	40.36	-32.85	5.86	---	---	-9.54	---	---	---	54.0	---	---	*2
9	14772.00	No noise	No noise	42.90	-32.39	6.31	---	---	-9.54	---	---	---	54.0	---	---	*2
10	17234.00	No noise	No noise	46.36	-31.91	6.86	---	---	-9.54	---	---	---	54.0	---	---	*2
11	19696.00	No noise	No noise	39.53	-31.91	7.34	---	---	-9.54	---	---	---	54.0	---	---	*2
12	22158.00	No noise	No noise	40.13	-32.08	7.84	---	---	-9.54	---	---	---	54.0	---	---	*2
13	24620.00	29.59	29.57	39.92	-30.82	8.23	---	---	-9.54	---	37.4	37.4	54.0	16.6	16.6	*2

Ant F.=Antenna Factor // Amp G.=PreAmp Gain // Cable L.=Cable Loss // ATT=Attenuator Loss (or Filter Loss)
CALCULATION RESULT = Reading + Ant.F. + Amp.G. + Cable L. + Cable L. + ATT + Other1 + Other2
ANT Type below 30MHz=Loop // 30-300MHz=Biconical // 300-1000MHz=Logperiodic // above 1000MHz=Horn
Test Distance 1.0m (above 10GHz) : Other1 (Distance Factor = 20 log (3 / 1) = 9.54 dB
*1) Except for the above table : All other spurious emissions were less than 20dB for the limit.
*2) In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.
*3) The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.
*4) Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission
Base Unit, Tx, 11g, Low

UL-Apex Co.,Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

COMPANY : Panasonic Communications Co.,Ltd.
EQUIPMENT : Travel Phone
MODEL : KX-WPA102
S/N : 1
POWER : AC120V / 60Hz
MODE : 11g Tx 2412MHz, 6Mbps, Ant102
AXIS : Normal aixs

REPORT No. : 26KE0322-HO
REGULATION : FCC Part 15 Subpart C 15.247(d) 210
TEST DISTANCE : 3m (1GHz to 10GHz) / 1m (10GHz to 26.5GHz)
DATE : 07/24/2006
TEMPERATURE : 26 deg.C.
HUMIDITY : 61 %
ENGINEER : Kenichi Adachi, Yutaka Yoshida

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

No.	Freq.	Reading		Ant F.	Amp G.	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark	Hor. A/T	Hor. T/T	Ver. A/T	Ver. T/T
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER		[cm]	[Deg.]	[cm]	[Deg.]
1	1077.95	64.9	64.5	23.38	-35.27	1.54	---	---	---	---	54.6	54.2	74.0	19.4	19.8		132	209	120	0
2	1607.98	49.7	48.5	25.89	-33.96	1.85	---	---	---	---	43.5	42.3	74.0	30.5	31.7		130	170	238	131
3	2389.99	69.5	70.9	30.55	-32.80	2.21	---	---	---	---	69.5	70.8	74.0	4.5	3.2		136	188	113	182
4*	2400.00	79.8	80.9	30.53	-32.79	2.21	---	---	---	---	79.8	80.8	74.0	---	---		136	188	113	182
5	3216.07	46.3	49.0	31.66	-32.35	2.70	---	---	---	---	48.3	51.0	74.0	25.7	23.0		139	120	125	155
6	4824.07	48.1	49.0	35.31	-31.61	3.45	---	0.41	---	---	55.6	56.6	74.0	18.4	17.4		141	352	108	157
7	7236.00	49.5	48.5	37.67	-32.11	4.26	---	0.36	---	---	59.7	58.7	74.0	14.3	15.3		139	173	100	211
8	9648.00	44.7	45.5	36.55	-33.09	4.98	---	0.71	---	---	53.9	54.7	74.0	20.1	19.3		159	354	144	35
9	12060.00	No noise	No noise	40.21	-32.98	5.81	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
10	14472.00	No noise	No noise	42.73	-32.34	6.26	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
11	16884.00	No noise	No noise	45.87	-32.05	6.77	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
12	19296.00	No noise	No noise	39.46	-31.81	7.27	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
13	21708.00	No noise	No noise	39.78	-32.25	7.76	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
14	24120.00	41.9	41.4	39.76	-31.44	8.14	---	---	-9.54	---	48.8	48.4	74.0	25.2	25.6	*2	100	0	100	0

* Reference data

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

No.	Freq.	Reading		Ant F.	Amp G.	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER	
1	1077.95	43.06	44.76	23.38	-35.27	1.54	---	---	---	---	32.7	34.4	54.0	21.3	19.6	
2	1607.98	40.09	41.98	25.89	-33.96	1.85	---	---	---	---	33.9	35.8	54.0	20.1	18.2	
3	2389.99	48.76	47.16	30.55	-32.80	2.21	---	---	---	---	48.7	47.1	54.0	5.3	6.9	
4*	2400.00	58.28	58.90	30.53	-32.79	2.21	---	---	---	---	58.2	58.8	54.0	-	-	
5	3216.07	43.63	42.92	31.66	-32.35	2.70	---	---	---	---	45.6	44.9	54.0	8.4	9.1	
6	4824.07	33.77	33.75	35.31	-31.61	3.45	---	0.41	---	---	41.3	41.3	54.0	12.7	12.7	
7	7236.00	32.88	32.55	37.67	-32.11	4.26	---	0.36	---	---	43.0	42.7	54.0	11.0	11.3	
8	9648.00	31.98	32.66	36.55	-33.09	4.98	---	0.71	---	---	41.1	41.8	54.0	12.9	12.2	
9	12060.00	No noise	No noise	40.21	-32.98	5.81	---	---	-9.54	---	---	---	54.0	---	---	*2
10	14472.00	No noise	No noise	42.73	-32.34	6.26	---	---	-9.54	---	---	---	54.0	---	---	*2
11	16884.00	No noise	No noise	45.87	-32.05	6.77	---	---	-9.54	---	---	---	54.0	---	---	*2
12	19296.00	No noise	No noise	39.46	-31.81	7.27	---	---	-9.54	---	---	---	54.0	---	---	*2
13	21708.00	No noise	No noise	39.78	-32.25	7.76	---	---	-9.54	---	---	---	54.0	---	---	*2
14	24120.00	29.27	29.28	39.76	-31.44	8.14	---	---	-9.54	---	36.2	36.2	54.0	17.8	17.8	*2

* Reference data

20dBc(Fundamental to Spurious) (RBW: 100kHz , VBW:300kHz)

No.	Freq.	Reading		Ant F.	Amp G.	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark	Hor. A/T	Hor. T/T	Ver. A/T	Ver. T/T
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/m]	HOR	VER		[cm]	[Deg.]	[cm]	[Deg.]
0	2412.00	97.65	97.91	30.50	-32.79	2.22	---	---	---	---	97.6	97.8	-	-	-	carrier	136	188	113	182
4	2400.00	67.77	67.06	30.53	-32.79	2.21	---	---	---	---	67.7	67.0	77.8	10.1	10.8		136	188	113	182

Ant F.=Antenna Factor // Amp G.=PreAmp Gain // Cable L.=Cable Loss // ATT=Attenuator Loss (or Filter Loss)
CALCULATION RESULT = Reading + Ant.F. + Amp.G. + Cable L. + Cable L. + ATT + Other1 + Other2
ANT Type below 30MHz=Loop // 30-300MHz=Biconical // 300-1000MHz=Logperiodic // above 1000MHz=Horn
Test Distance 1.0m (above 10GHz) : Other1 (Distance Factor = 20 log (3 / 1) = 9.54 dB
*1) Except for the above table : All other spurious emissions were less than 20dB for the limit.
*2) In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.
*3) The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.
*4) Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission
Base Unit, Tx, 11g, Mid

UL-Apex Co.,Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

COMPANY	: Panasonic Communications Co.,Ltd.	REPORT No.	: 26KE0322-HO
EQUIPMENT	: Travel Phone	REGULATION	: FCC Part 15 Subpart C 15.247(d)
MODEL	: KX-WPA102	TEST DISTANCE	: 3m (1GHz to 10GHz) / 1m (10GHz to 26.5GHz)
S/N	: 1	DATE	: 07/24/2006
POWER	: AC120V / 60Hz	TEMPERATURE	: 26 deg.C.
MODE	: 11g Tx 2437MHz, 6Mbps, Ant102	HUMIDITY	: 61 %
AXIS	: Normal aixs	ENGINEER	: Kenichi Adachi, Yutaka Yoshida

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

No.	Freq.	Reading		Ant F.	Amp G.	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark	Hor. A/T	Hor. T/T	Ver. A/T	Ver. T/T
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/	HOR	VER		[cm]	[Deg.]	[cm]	[Deg.]
1	1078.04	64.5	63.7	23.38	-35.27	1.54	---	---	---	---	54.2	53.4	74.0	19.8	20.6		130	203	121	0
2	1624.71	51.1	51.1	26.12	-33.92	1.86	---	---	---	---	45.2	45.2	74.0	28.8	28.8		134	174	227	129
3	3249.53	47.7	46.8	31.62	-32.34	2.72	---	---	---	---	49.7	48.9	74.0	24.3	25.1		137	122	136	260
4	4874.03	49.1	48.2	35.53	-31.59	3.47	---	0.40	---	---	56.9	56.1	74.0	17.1	17.9		141	350	105	162
5	7311.07	51.4	50.9	37.73	-32.16	4.28	---	0.47	---	---	61.8	61.2	74.0	12.2	12.8		121	191	114	237
6	9748.07	44.7	44.4	36.47	-33.14	5.01	---	0.73	---	---	53.8	53.4	74.0	20.2	20.6		162	350	144	45
7	12185.00	No noise	No noise	40.28	-32.92	5.83	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
8	14622.00	No noise	No noise	42.82	-32.37	6.29	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
9	17059.00	No noise	No noise	46.15	-31.96	6.82	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
10	19496.00	No noise	No noise	39.66	-31.86	7.31	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
11	21933.00	No noise	No noise	40.07	-32.14	7.81	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
12	24370.00	42.1	42.8	39.83	-31.13	8.19	---	---	-9.54	---	49.5	50.1	74.0	24.5	23.9	*2	100	0	100	0

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

No.	Freq.	Reading		Ant F.	Amp G.	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/	HOR	VER	
1	1078.04	45.53	44.12	23.38	-35.27	1.54	---	---	---	---	35.2	33.8	54.0	18.8	20.2	
2	1624.71	44.23	45.41	26.12	-33.92	1.86	---	---	---	---	38.3	39.5	54.0	15.7	14.5	
3	3249.53	42.63	41.26	31.62	-32.34	2.72	---	---	---	---	44.6	43.3	54.0	9.4	10.7	
4	4874.03	34.35	32.78	35.53	-31.59	3.47	---	0.40	---	---	42.2	40.6	54.0	11.8	13.4	
5	7311.07	34.34	33.46	37.73	-32.16	4.28	---	0.47	---	---	44.7	43.8	54.0	9.3	10.2	
6	9748.07	31.78	30.92	36.47	-33.14	5.01	---	0.73	---	---	40.8	40.0	54.0	13.2	14.0	
7	12185.00	No noise	No noise	40.28	-32.92	5.83	---	---	-9.54	---	---	---	54.0	---	---	*2
8	14622.00	No noise	No noise	42.82	-32.37	6.29	---	---	-9.54	---	---	---	54.0	---	---	*2
9	17059.00	No noise	No noise	46.15	-31.96	6.82	---	---	-9.54	---	---	---	54.0	---	---	*2
10	19496.00	No noise	No noise	39.66	-31.86	7.31	---	---	-9.54	---	---	---	54.0	---	---	*2
11	21933.00	No noise	No noise	40.07	-32.14	7.81	---	---	-9.54	---	---	---	54.0	---	---	*2
12	24370.00	29.98	30.02	39.83	-31.13	8.19	---	---	-9.54	---	37.3	37.4	54.0	16.7	16.6	*2

Ant F.=Antenna Factor // Amp G.=PreAmp Gain // Cable L.=Cable Loss // ATT=Attenuator Loss (or Filter Loss)
CALCULATION RESULT = Reading + Ant.F. + Amp.G. + Cable L. + Cable L. + ATT + Other1 + Other2
ANT Type below 30MHz=Loop // 30-300MHz=Biconical // 300-1000MHz=Logperiodic // above 1000MHz=Horn
Test Distance 1.0m (above 10GHz) : Other1 (Distance Factor = 20 log (3 / 1) = 9.54 dB
*1) Except for the above table : All other spurious emissions were less than 20dB for the limit.
*2) In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.
*3) The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.
*4) Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission
Base Unit, Tx, 11g, High

UL-Apex Co.,Ltd.
Head Office EMC Lab. No.3 Semi Anechoic Chamber

COMPANY : Panasonic Communications Co.,Ltd.
EQUIPMENT : Travel Phone
MODEL : KX-WPA102
S/N : 1
POWER : AC120V / 60Hz
MODE : 11g Tx 2462MHz, 6Mbps, Ant102
AXIS : Normal aixs

REPORT No. : 26KE0322-HO
REGULATION : FCC Part 15 Subpart C 15.247(d)
TEST DISTANCE : 3m (1GHz to 10GHz) / 1m (10GHz to 26.5GHz)
DATE : 07/24/2006
TEMPERATURE : 26 deg.C.
HUMIDITY : 61 %
ENGINEER : Kenichi Adachi, Yutaka Yoshida

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

No.	Freq.	Reading		Ant F.	Amp G.	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark	**Hor.** A/T	**Hor.** T/T	**Ver.** A/T	**Ver.** T/T
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/	HOR	VER		[cm]	[Deg.]	[cm]	[Deg.]
1	1078.02	63.5	62.9	23.38	-35.27	1.54	---	---	---	---	53.1	52.5	74.0	20.9	21.5		165	230	120	0
2	1687.58	49.5	49.9	27.01	-33.77	1.90	---	---	---	---	44.7	45.1	74.0	29.3	28.9		131	179	222	132
3	2483.50	67.7	65.8	30.35	-32.75	2.34	---	---	---	---	67.7	65.7	74.0	6.3	8.3		136	120	113	182
4	3282.69	49.0	48.4	31.58	-32.32	2.74	---	---	---	---	51.0	50.4	74.0	23.0	23.6		139	124	123	151
5	4924.02	50.8	50.3	35.75	-31.58	3.49	---	0.39	---	---	58.8	58.3	74.0	15.2	15.7		135	355	108	147
6	7386.14	52.8	53.1	37.80	-32.22	4.30	---	0.58	---	---	63.3	63.5	74.0	10.7	10.5		136	196	100	207
7	9848.05	44.0	45.0	36.38	-33.19	5.04	---	0.74	---	---	52.9	54.0	74.0	21.1	20.0		121	200	146	41
8	12310.00	No noise	No noise	40.36	-32.85	5.86	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
9	14772.00	No noise	No noise	42.90	-32.39	6.31	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
10	17234.00	No noise	No noise	46.36	-31.91	6.86	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
11	19696.00	No noise	No noise	39.53	-31.91	7.34	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
12	22158.00	No noise	No noise	40.13	-32.08	7.84	---	---	-9.54	---	---	---	74.0	---	---	*2	100	0	100	0
13	24620.00	40.3	41.3	39.92	-30.82	8.23	---	---	-9.54	---	48.1	49.1	74.0	25.9	24.9	*2	100	0	100	0

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

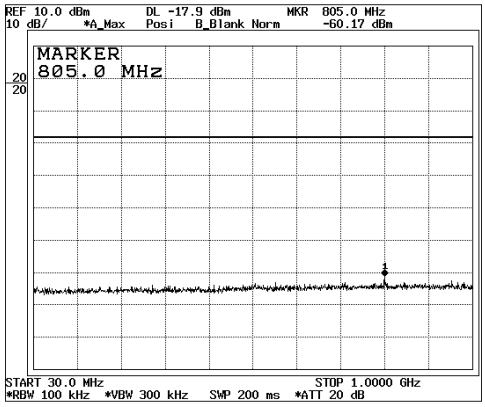
No.	Freq.	Reading		Ant F.	Amp G.	Cable	Cable	ATT	Other1	Other2	Result [dBuV/m]		Limit	Margin [dB]		Remark
	[MHz]	HOR	VER	[dB/m]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	HOR	VER	[dBuV/	HOR	VER	
1	1078.02	43.58	44.20	23.38	-35.27	1.54	---	---	---	---	33.2	33.8	54.0	20.8	20.2	
2	1687.58	42.46	42.44	27.01	-33.77	1.90	---	---	---	---	37.6	37.6	54.0	16.4	16.4	
3	2483.50	43.98	43.62	30.35	-32.75	2.34	---	---	---	---	43.9	43.6	54.0	10.1	10.4	
4	3282.69	43.75	43.07	31.58	-32.32	2.74	---	---	---	---	45.8	45.1	54.0	8.2	8.9	
5	4924.02	35.16	34.79	35.75	-31.58	3.49	---	0.39	---	---	43.2	42.8	54.0	10.8	11.2	
6	7386.14	34.82	35.16	37.80	-32.22	4.30	---	0.58	---	---	45.3	45.6	54.0	8.7	8.4	
7	9848.05	31.22	31.89	36.38	-33.19	5.04	---	0.74	---	---	40.2	40.9	54.0	13.8	13.1	
8	12310.00	No noise	No noise	40.36	-32.85	5.86	---	---	-9.54	---	---	---	54.0	---	---	*2
9	14772.00	No noise	No noise	42.90	-32.39	6.31	---	---	-9.54	---	---	---	54.0	---	---	*2
10	17234.00	No noise	No noise	46.36	-31.91	6.86	---	---	-9.54	---	---	---	54.0	---	---	*2
11	19696.00	No noise	No noise	39.53	-31.91	7.34	---	---	-9.54	---	---	---	54.0	---	---	*2
12	22158.00	No noise	No noise	40.13	-32.08	7.84	---	---	-9.54	---	---	---	54.0	---	---	*2
13	24620.00	28.26	28.29	39.92	-30.82	8.23	---	---	-9.54	---	36.1	36.1	54.0	17.9	17.9	*2

Ant F.=Antenna Factor // Amp G.=PreAmp Gain // Cable L.=Cable Loss // ATT=Attenuator Loss (or Filter Loss)
CALCULATION RESULT = Reading + Ant.F. + Amp.G. + Cable L. + Cable L. + ATT + Other1 + Other2
ANT Type below 30MHz=Loop // 30-300MHz=Biconical // 300-1000MHz=Logperiodic // above 1000MHz=Horn
Test Distance 1.0m (above 10GHz) : Other1 (Distance Factor = 20 log (3 / 1) = 9.54 dB
*1) Except for the above table : All other spurious emissions were less than 20dB for the limit.
*2) In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.
*3) The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.
*4) Hi-Pass Fiter was not used for factor 0.0dB of the above table.

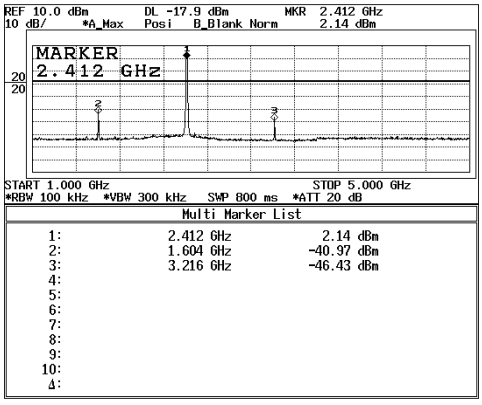
Conducted Spurious Emission

Hand unit, Tx, 11b, Ch: Low

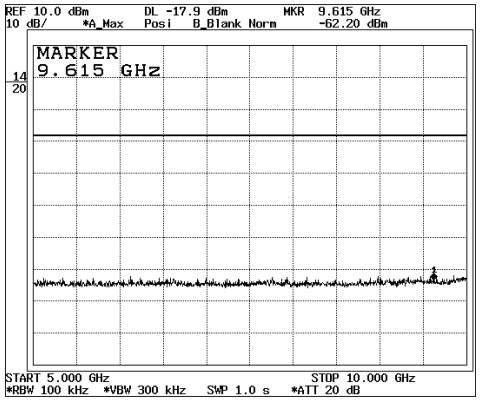
30MHz-1GHz



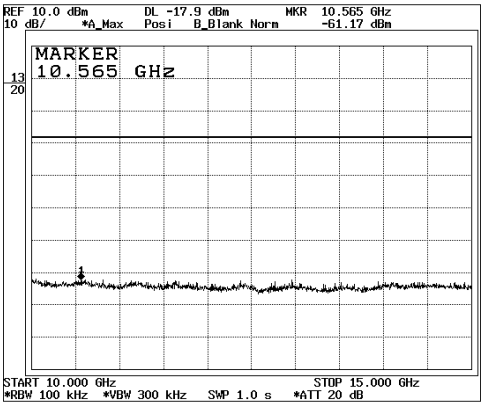
1GHz-5GHz



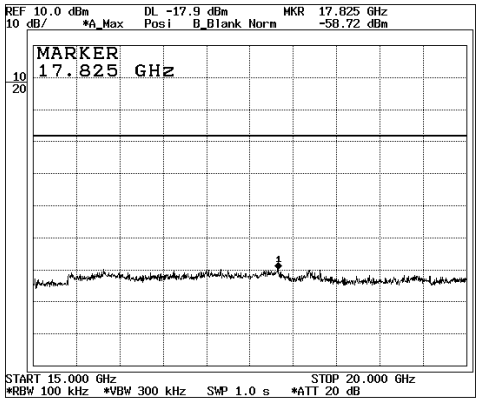
5GHz-10GHz



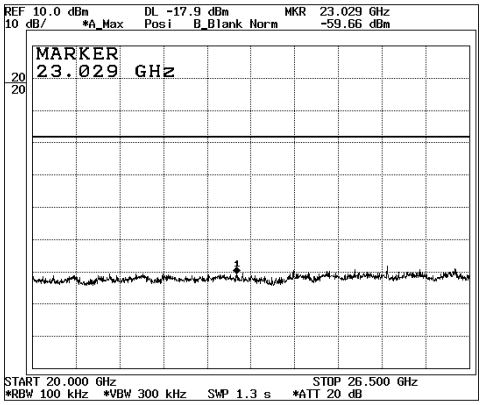
10GHz-15GHz



15GHz-20GHz



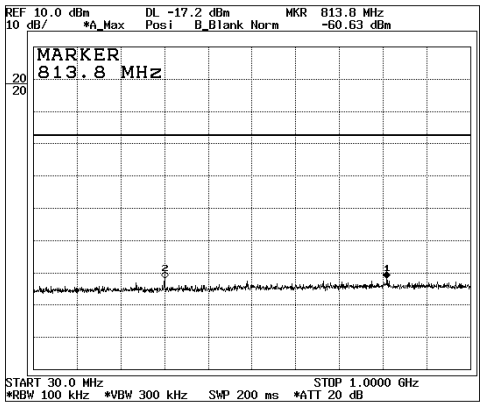
20GHz-25GHz



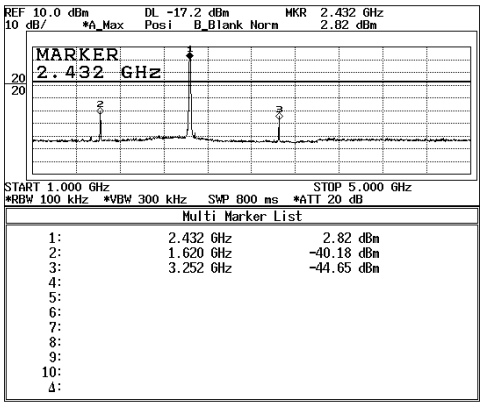
Conducted Spurious Emission

Hand unit, Tx, 11b, Ch: Mid

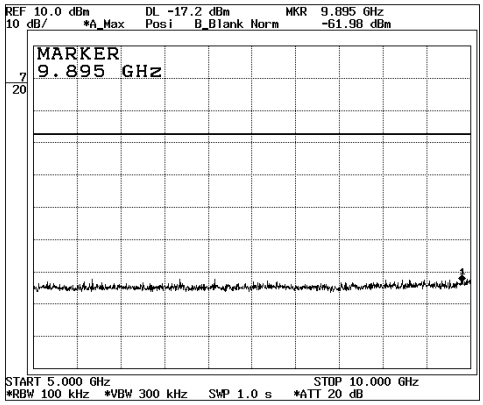
30MHz-1GHz



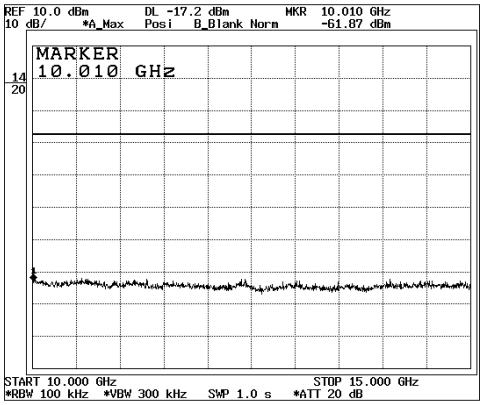
1GHz-5GHz



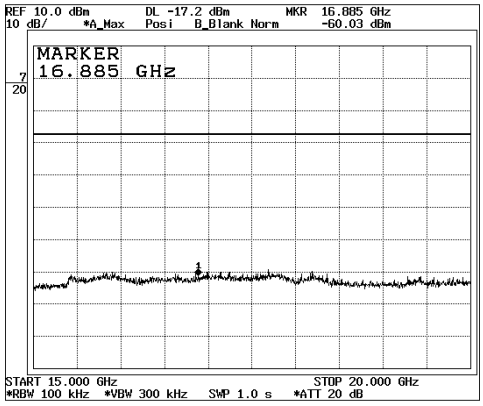
5GHz-10GHz



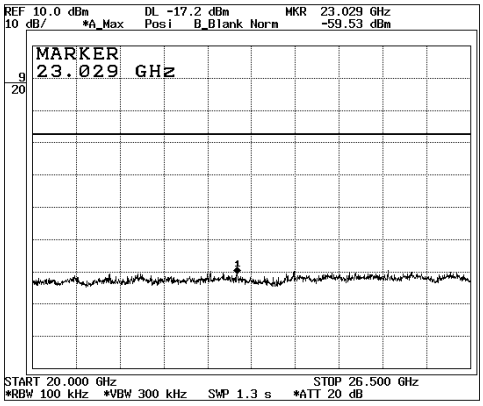
10GHz-15GHz



15GHz-20GHz

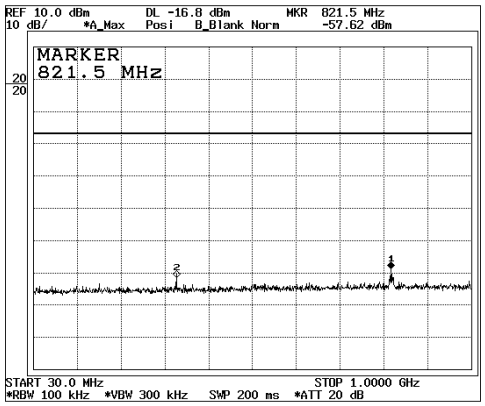


20GHz-25GHz

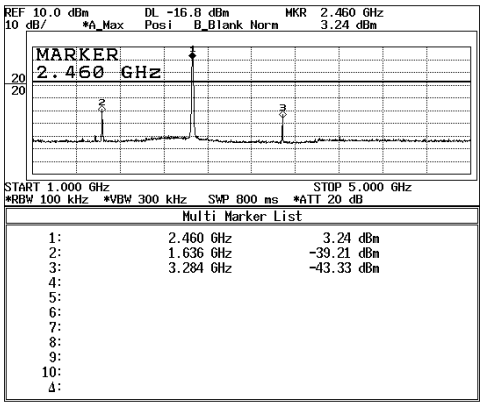


Conducted Spurious Emission
Hand unit, Tx, 11b, Ch: High

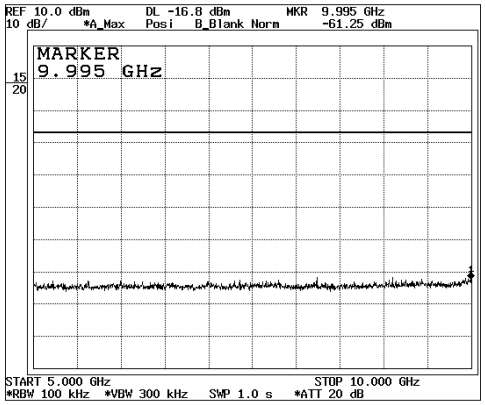
30MHz-1GHz



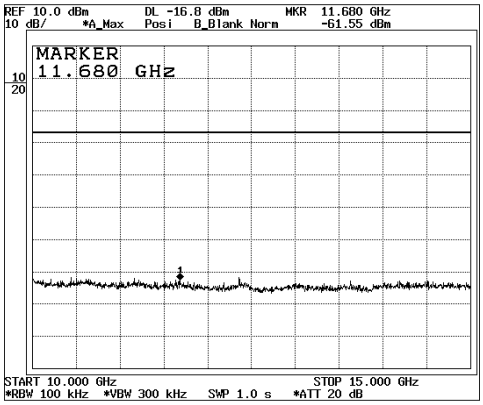
1GHz-5GHz



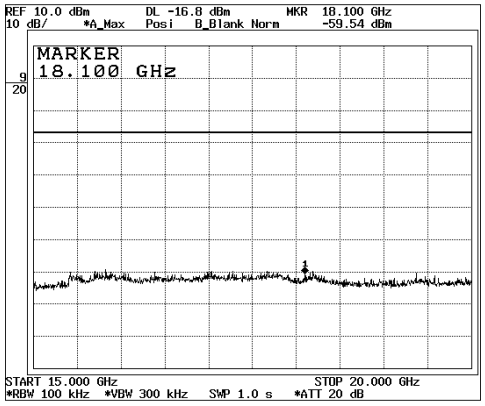
5GHz-10GHz



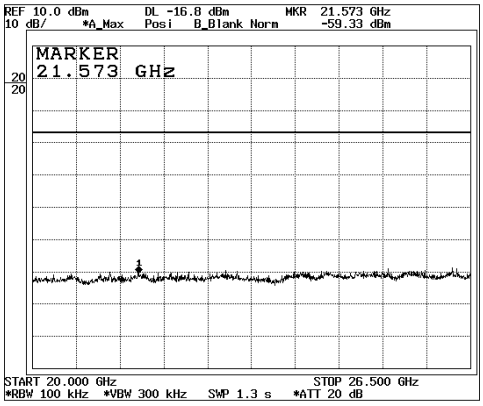
10GHz-15GHz



15GHz-20GHz

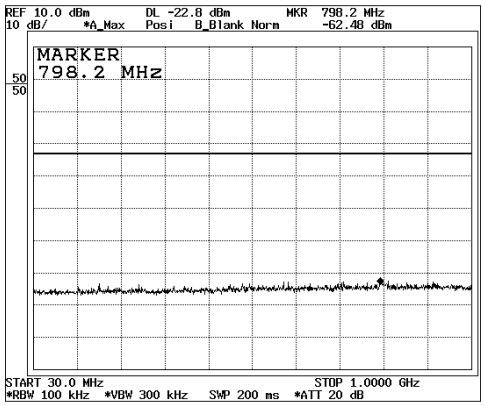


20GHz-25GHz

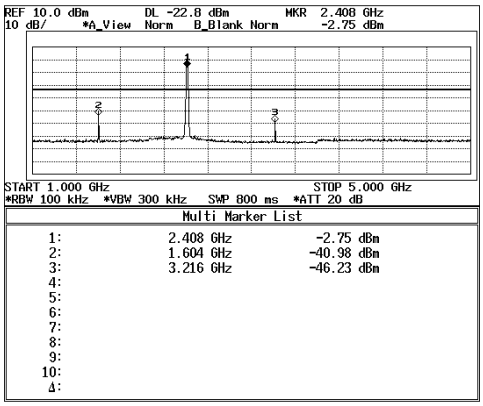


Conducted Spurious Emission
Hand unit, Tx, 11g, Ch: Low

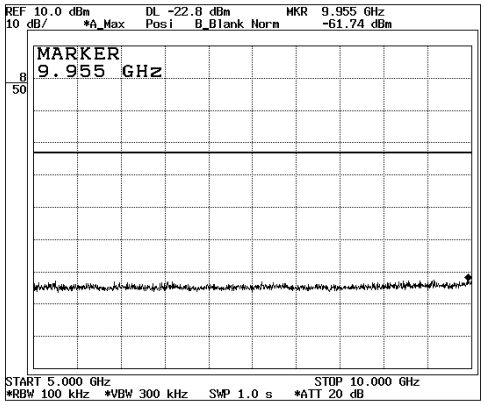
30MHz-1GHz



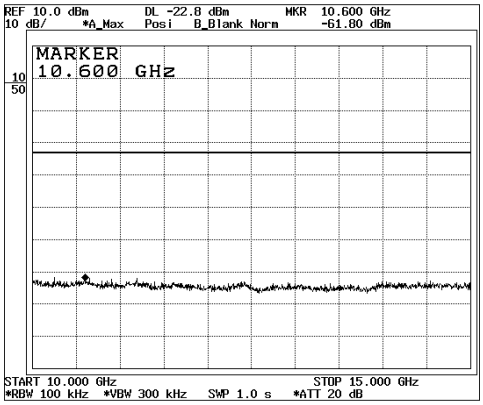
1GHz-5GHz



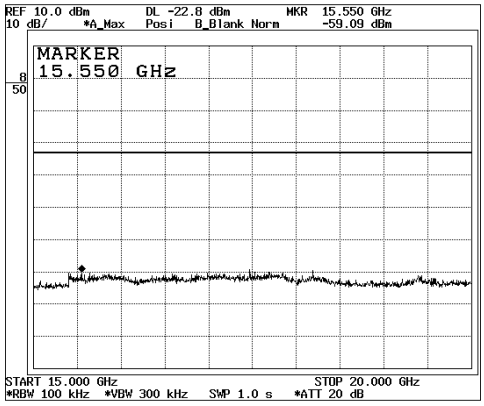
5GHz-10GHz



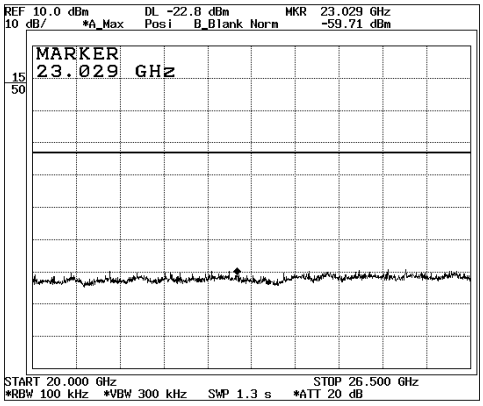
10GHz-15GHz



15GHz-20GHz

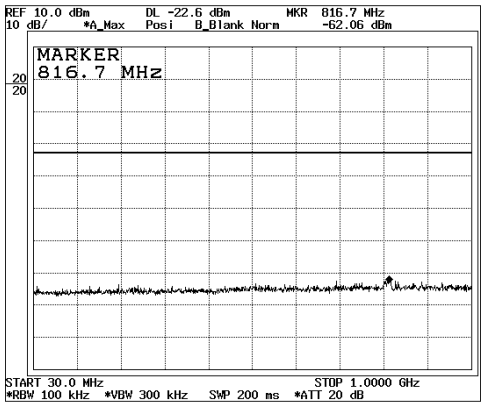


20GHz-25GHz

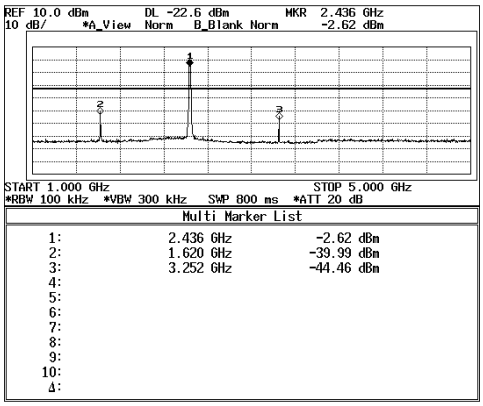


Conducted Spurious Emission
Hand unit, Tx, 11g, Ch: Mid

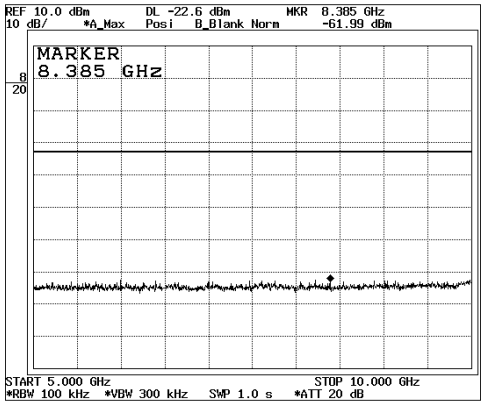
30MHz-1GHz



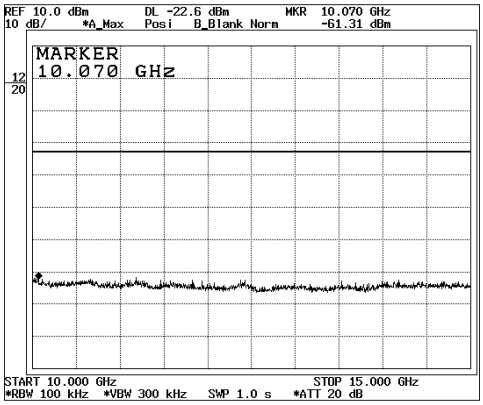
1GHz-5GHz



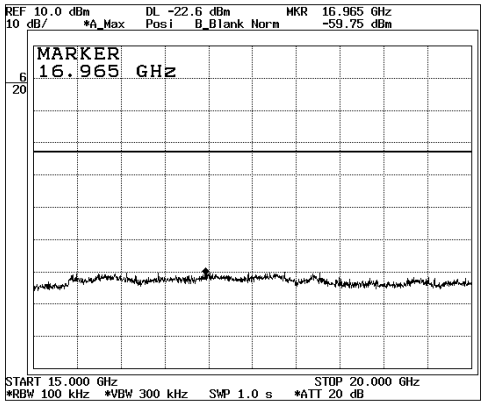
5GHz-10GHz



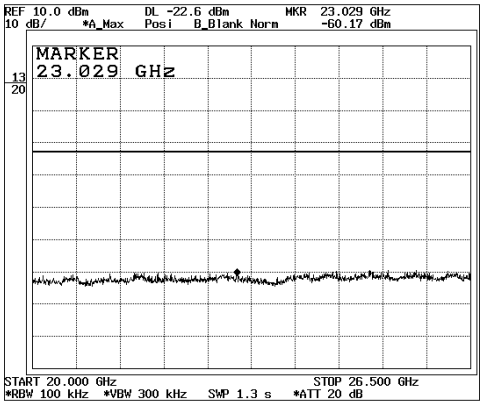
10GHz-15GHz



15GHz-20GHz

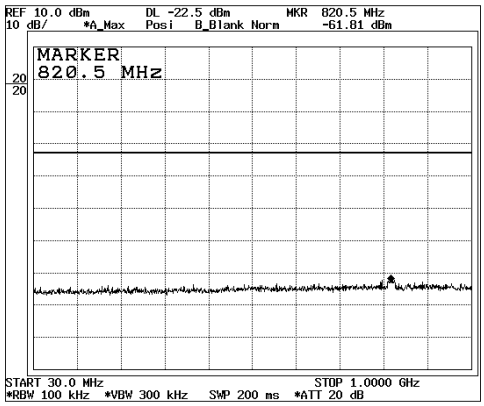


20GHz-25GHz

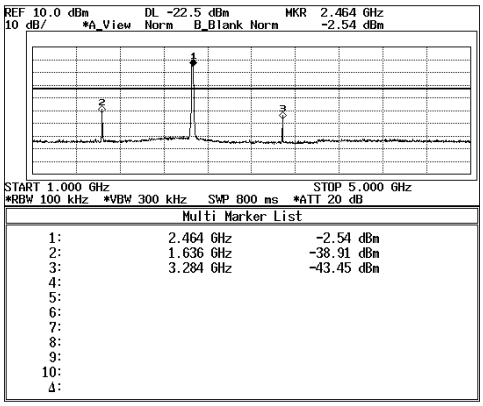


Conducted Spurious Emission
Hand unit, Tx, 11g, Ch: High

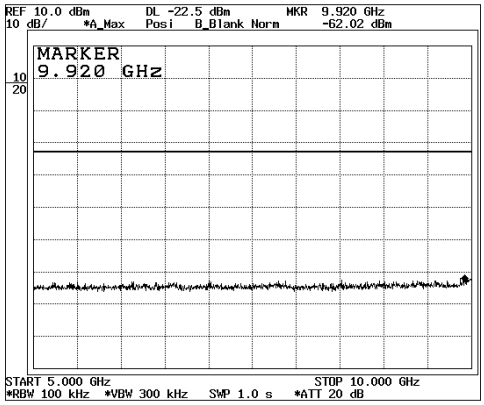
30MHz-1GHz



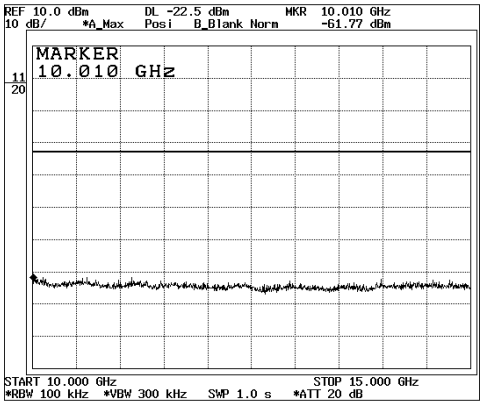
1GHz-5GHz



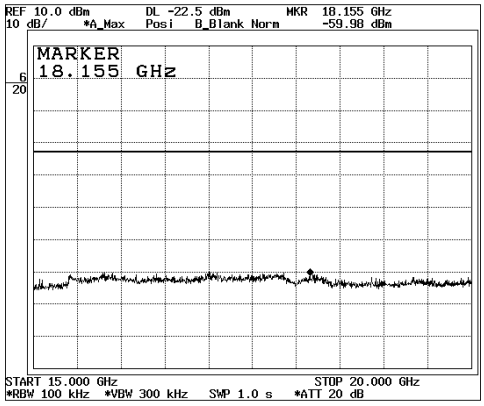
5GHz-10GHz



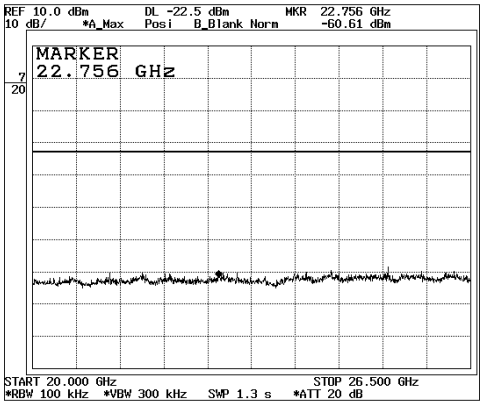
10GHz-15GHz



15GHz-20GHz

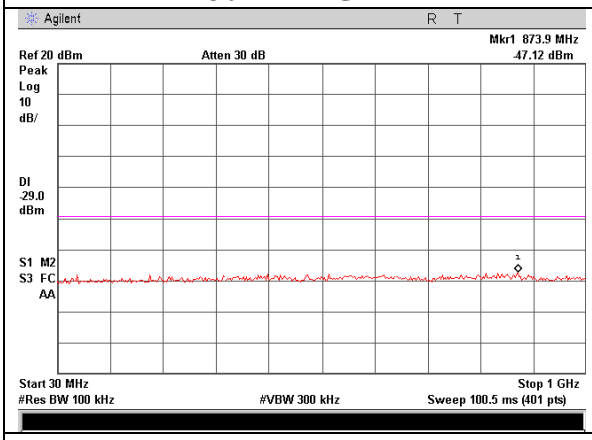


20GHz-25GHz

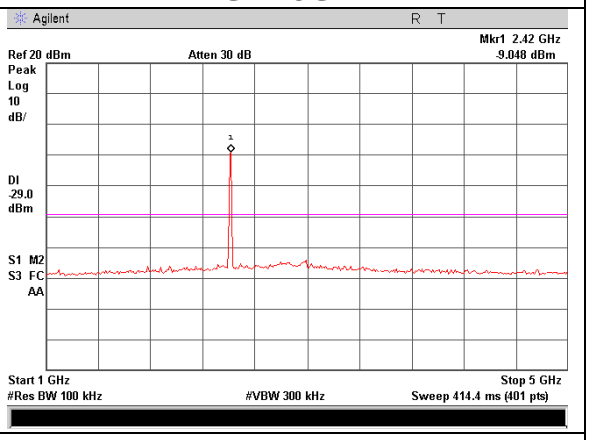


Conducted Spurious Emission
Base Unit, Tx, 11b, Ch: Low

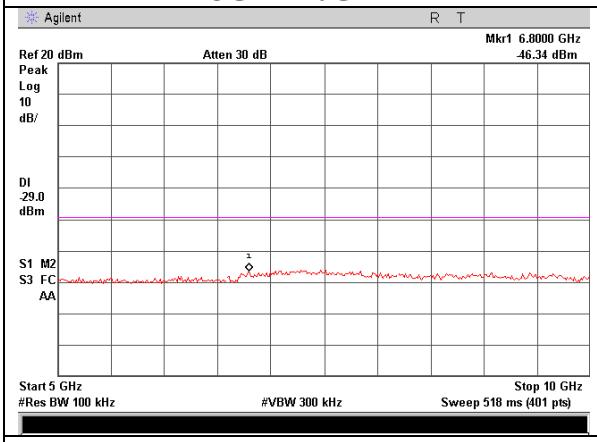
30MHz-1GHz



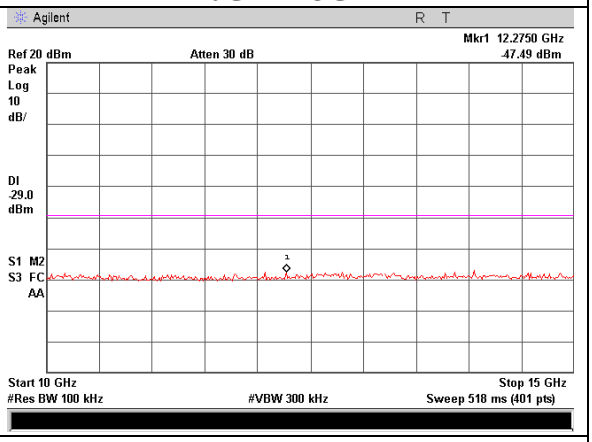
1GHz-5GHz



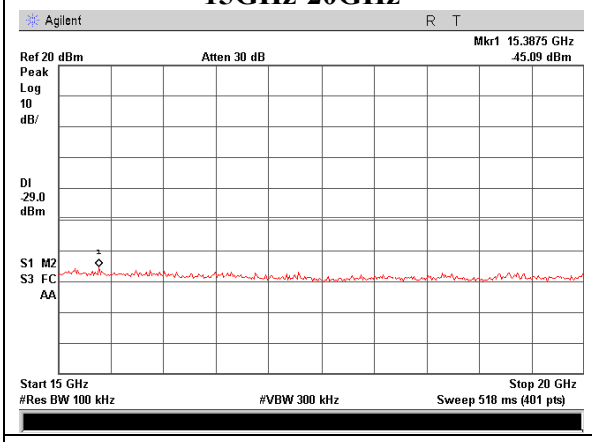
5GHz-10GHz



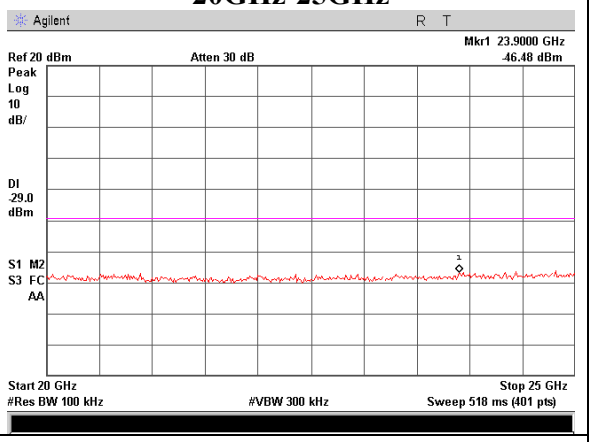
10GHz-15GHz



15GHz-20GHz



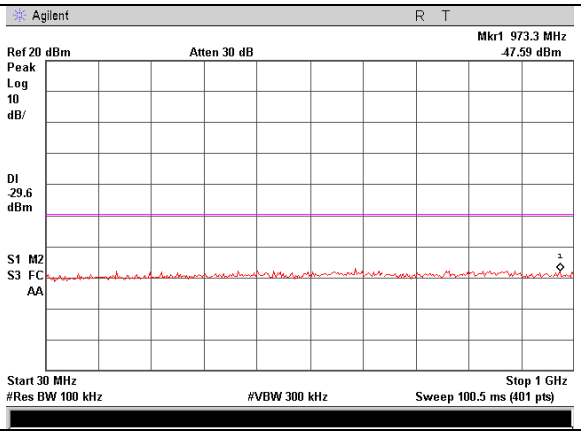
20GHz-25GHz



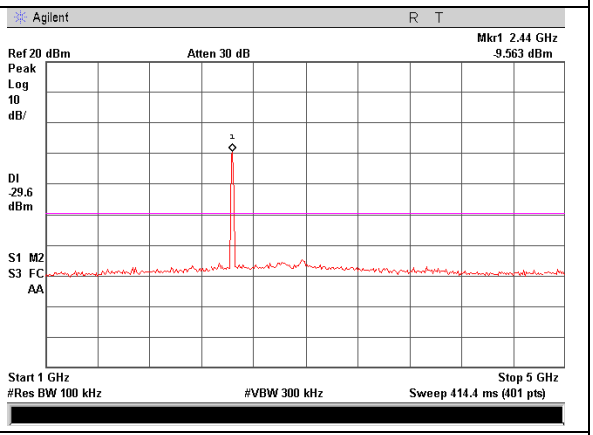
Conducted Spurious Emission

Base Unit, Tx, 11b, Ch: Mid

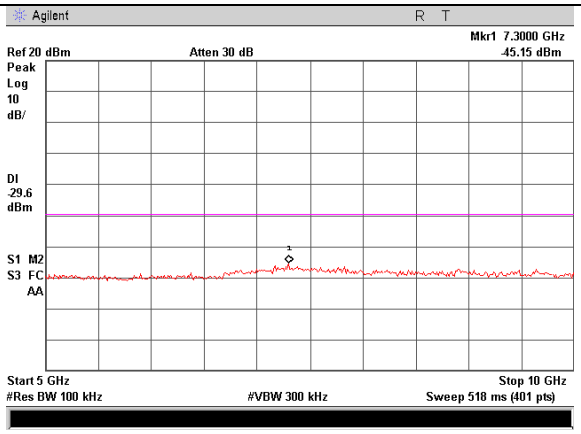
30MHz-1GHz



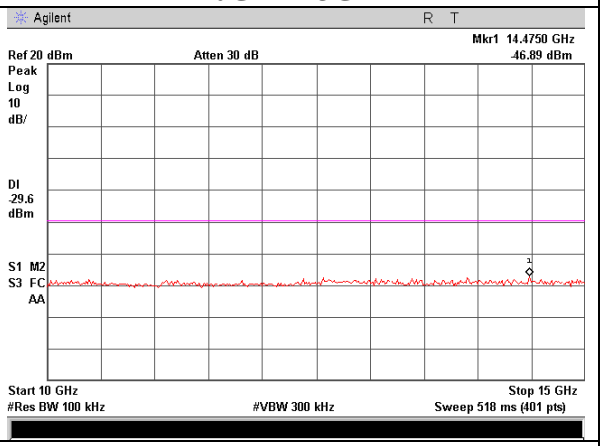
1GHz-5GHz



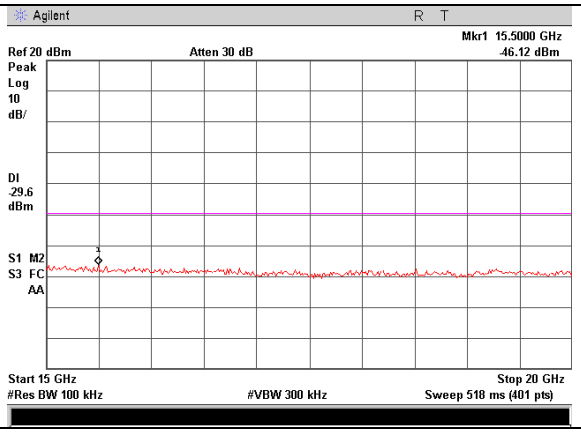
5GHz-10GHz



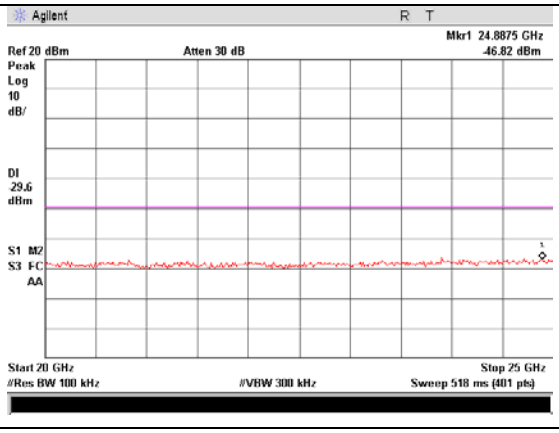
10GHz-15GHz



15GHz-20GHz



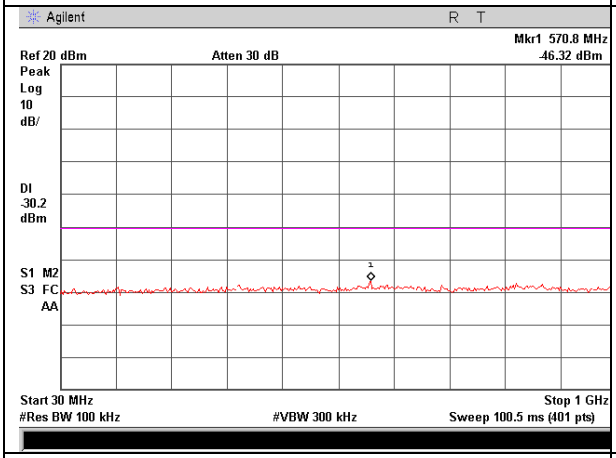
20GHz-25GHz



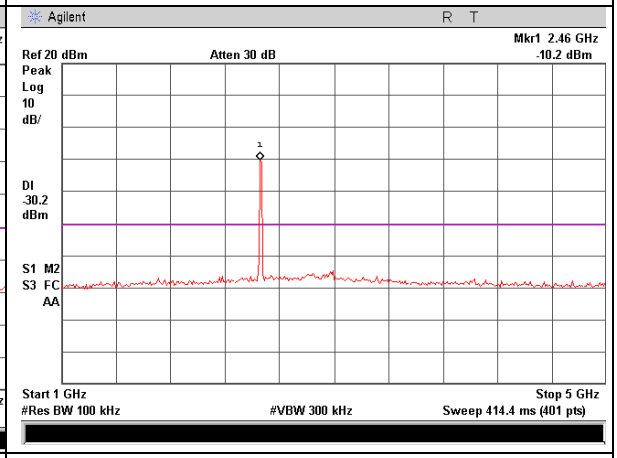
Conducted Spurious Emission

Base Unit, Tx, 11b, Ch: High

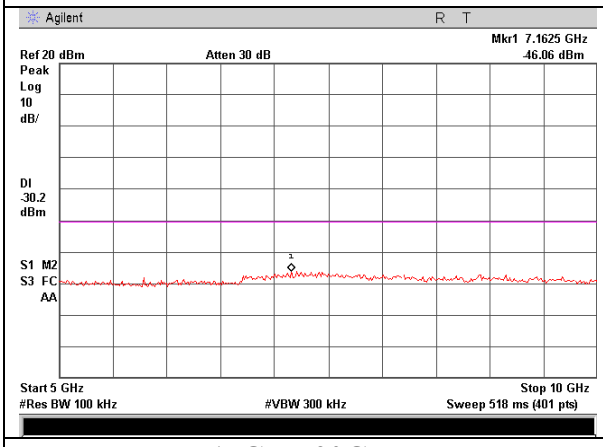
30MHz-1GHz



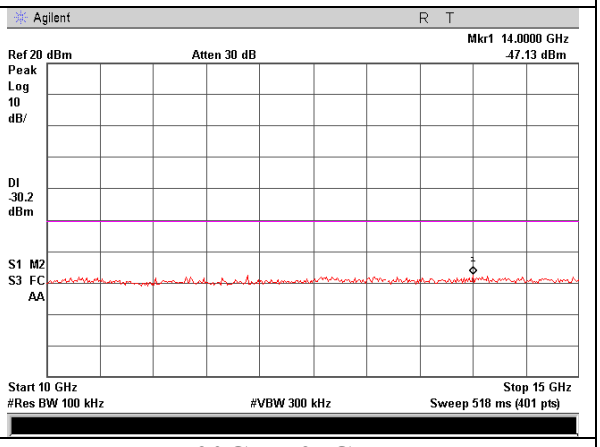
1GHz-5GHz



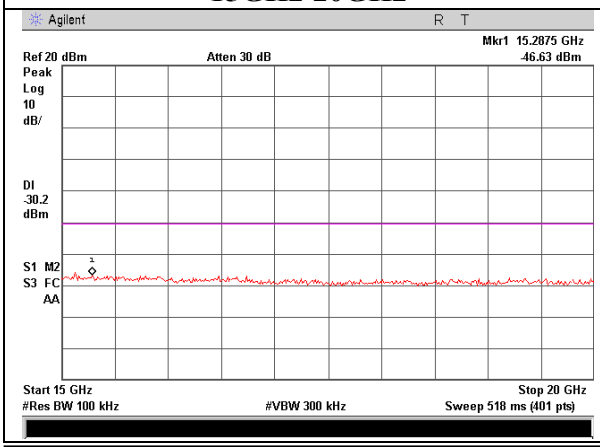
5GHz-10GHz



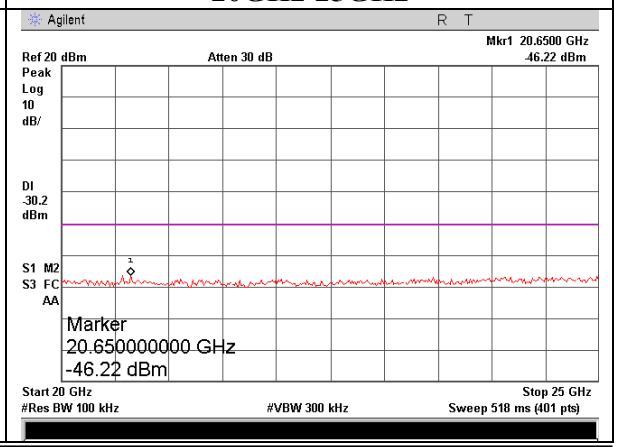
10GHz-15GHz



15GHz-20GHz



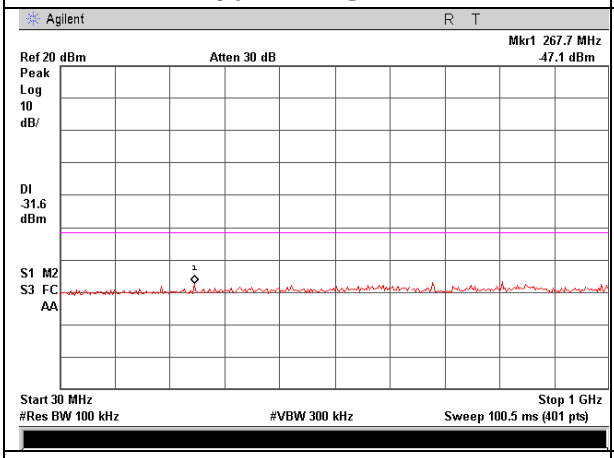
20GHz-25GHz



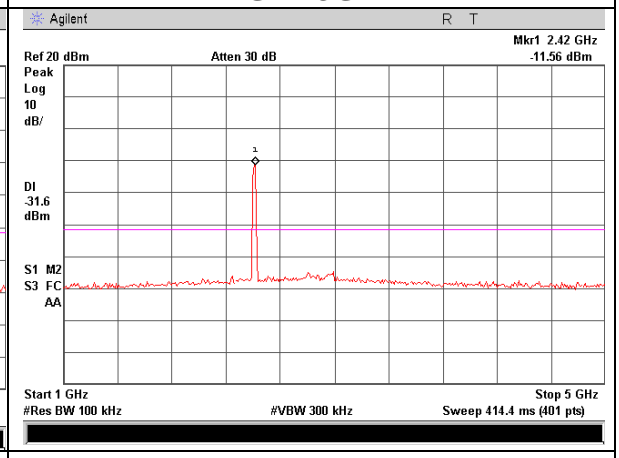
Conducted Spurious Emission

Base Unit, Tx, 11g, Ch: Low

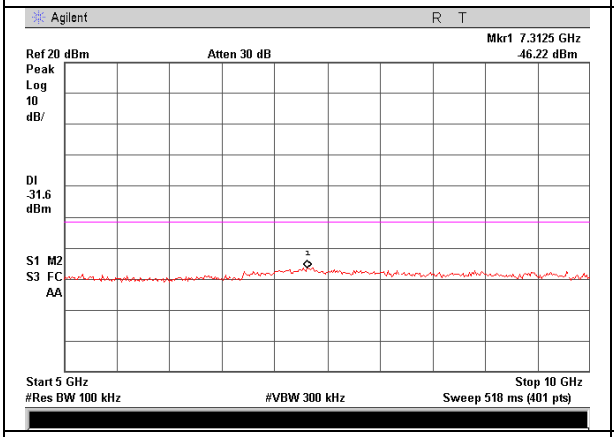
30MHz-1GHz



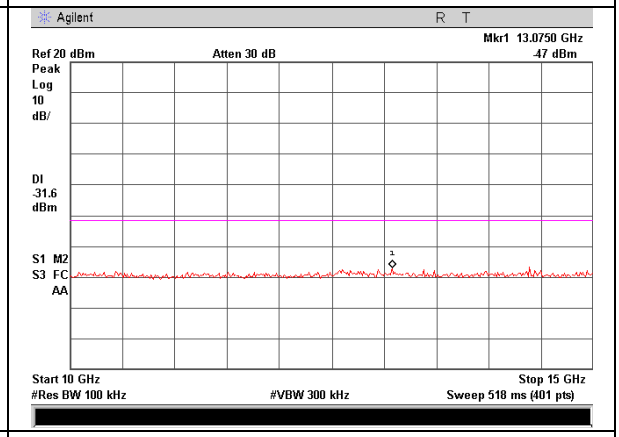
1GHz-5GHz



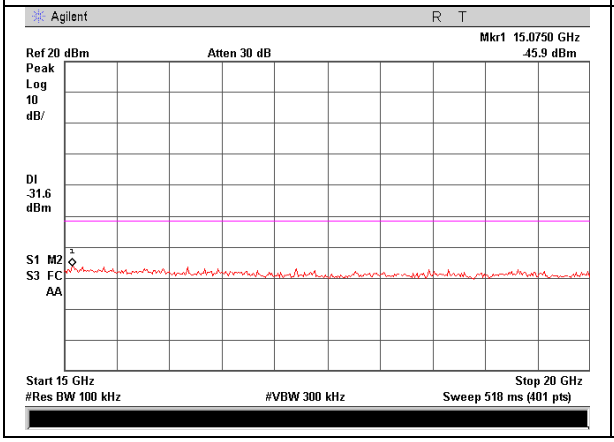
5GHz-10GHz



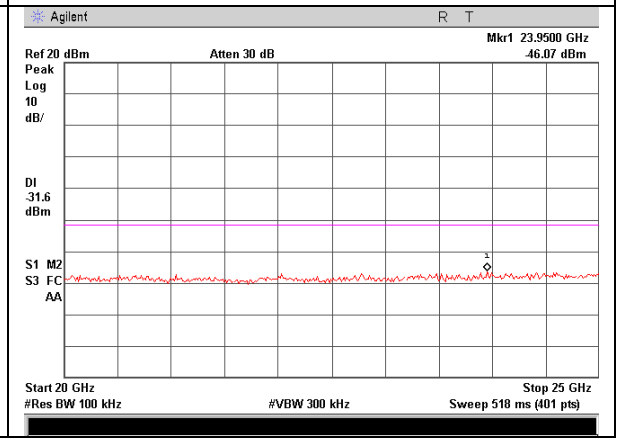
10GHz-15GHz



15GHz-20GHz

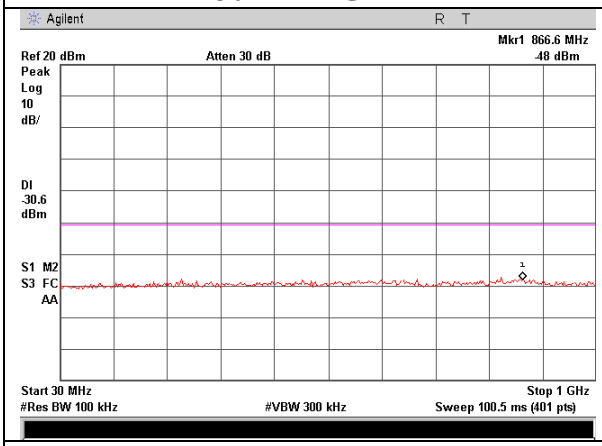


20GHz-25GHz

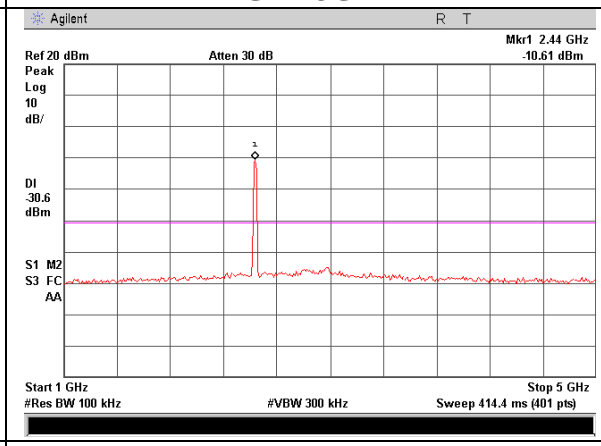


Conducted Spurious Emission
Base Unit, Tx, 11g, Ch: Mid

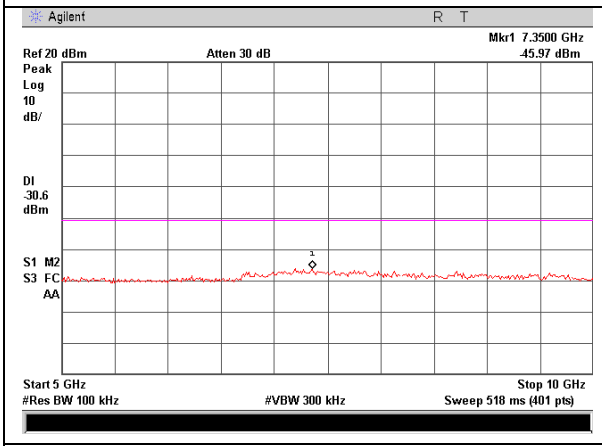
30MHz-1GHz



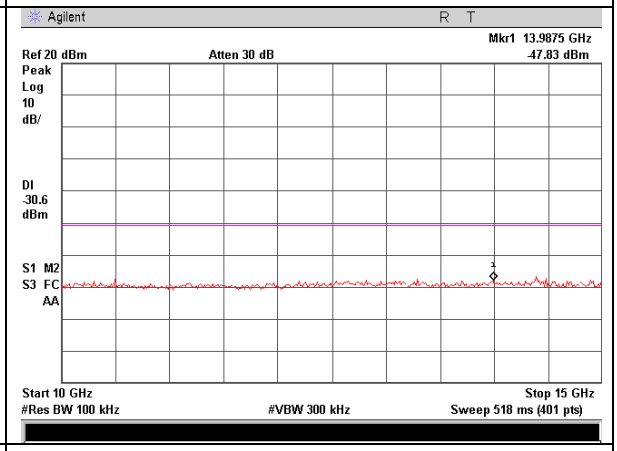
1GHz-5GHz



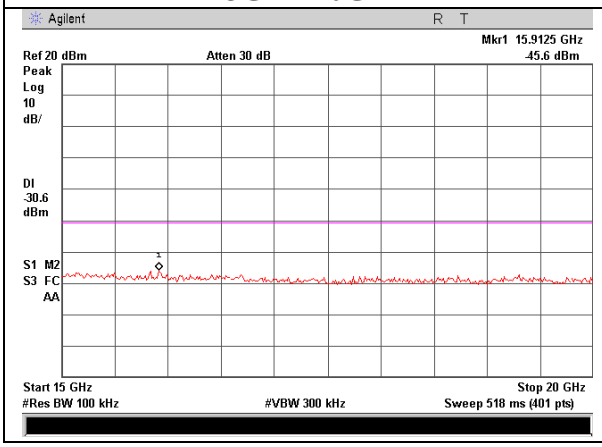
5GHz-10GHz



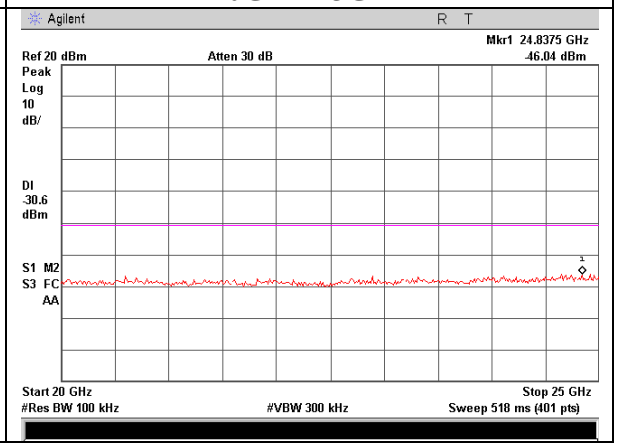
10GHz-15GHz



15GHz-20GHz



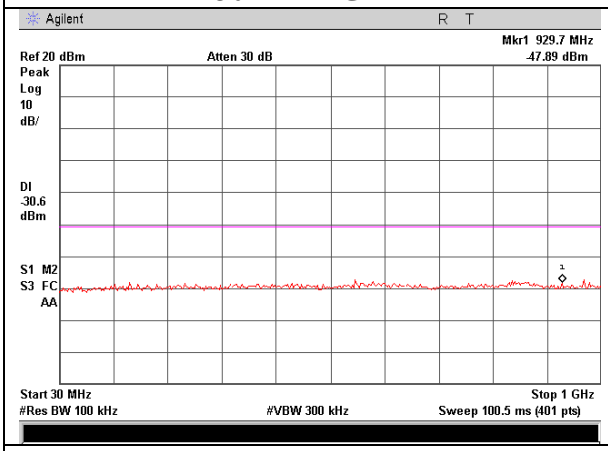
20GHz-25GHz



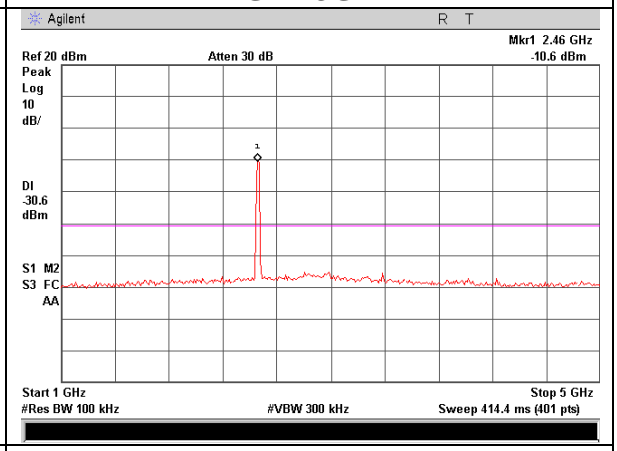
Conducted Spurious Emission

Base Unit, Tx, 11g, Ch: High

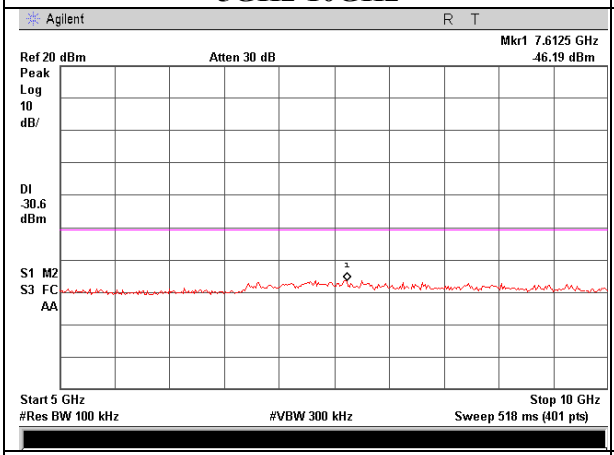
30MHz-1GHz



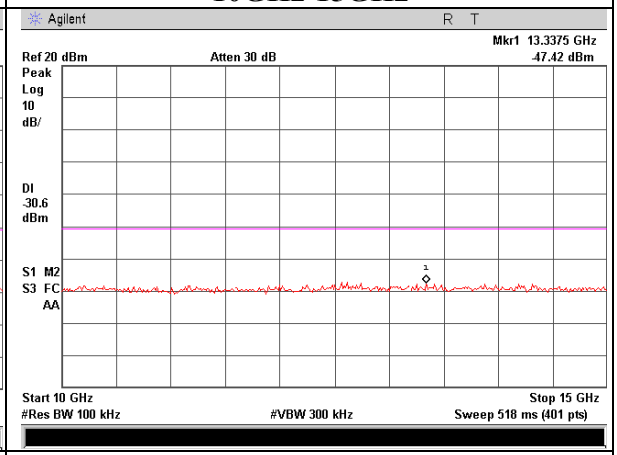
1GHz-5GHz



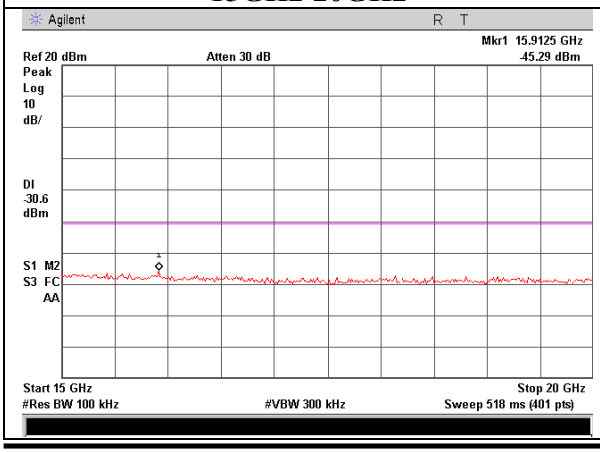
5GHz-10GHz



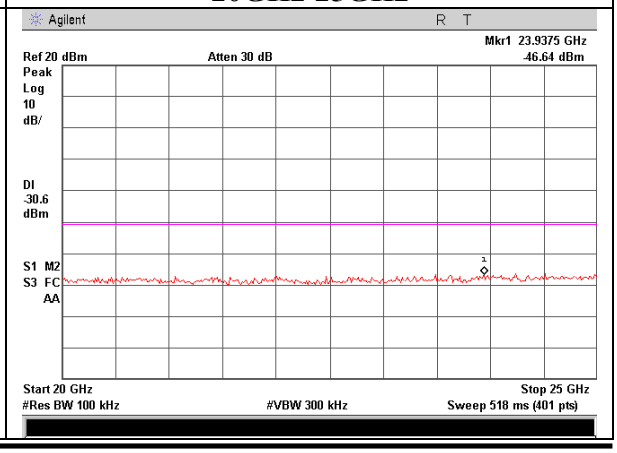
10GHz-15GHz



15GHz-20GHz



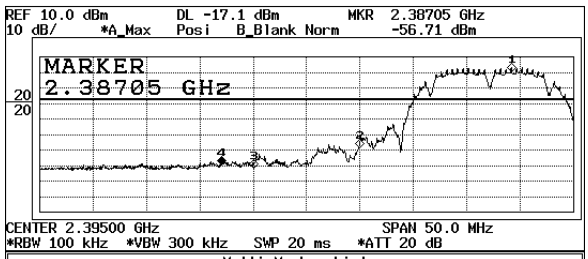
20GHz-25GHz



Conducted emission Band Edge compliance

Hand unit, Tx, 11b

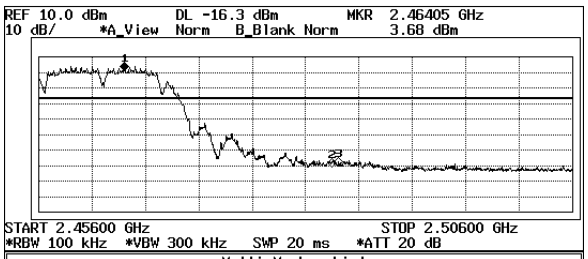
Ch:Low



Multi Marker List

1:	2.41415 GHz	2.93 dBm
2:	2.40000 GHz	-45.60 dBm
3:	2.39000 GHz	-59.06 dBm
4:	2.38705 GHz	-56.71 dBm
5:		
6:		
7:		
8:		
9:		
10:		
Δ:		

Ch:High

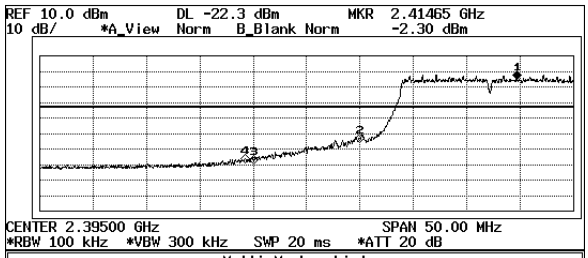


Multi Marker List

1:	2.46405 GHz	3.68 dBm
2:	2.48350 GHz	-58.40 dBm
3:	2.48410 GHz	-57.38 dBm
4:		
5:		
6:		
7:		
8:		
9:		
10:		
Δ:		

Hand unit, Tx, 11g

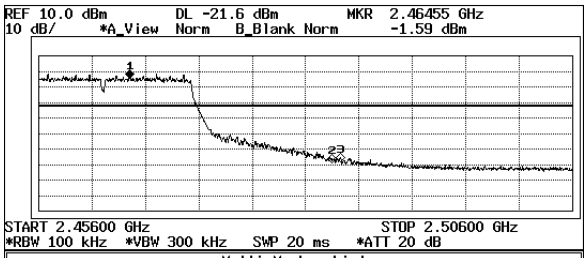
Ch:Low



Multi Marker List

1:	2.41465 GHz	-2.30 dBm
2:	2.40000 GHz	-43.09 dBm
3:	2.39000 GHz	-56.74 dBm
4:	2.38925 GHz	-56.34 dBm
5:		
6:		
7:		
8:		
9:		
10:		
Δ:		

Ch:High



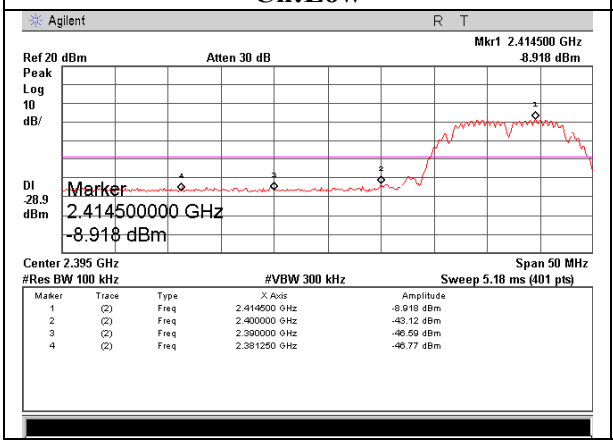
Multi Marker List

1:	2.46455 GHz	-1.59 dBm
2:	2.48350 GHz	-56.24 dBm
3:	2.48425 GHz	-55.47 dBm
4:		
5:		
6:		
7:		
8:		
9:		
10:		
Δ:		

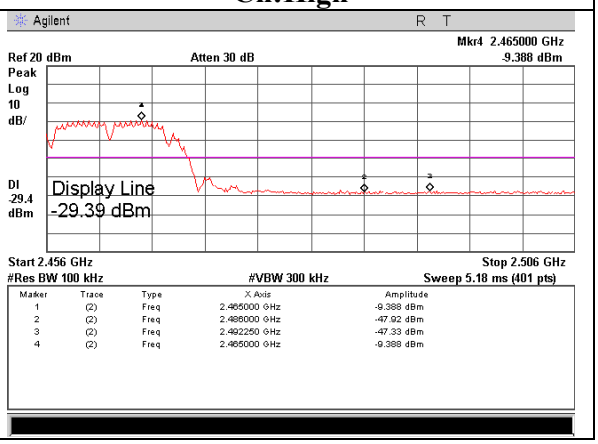
Conducted emission Band Edge Compliance

Base Unit, Tx, 11b

Ch:Low

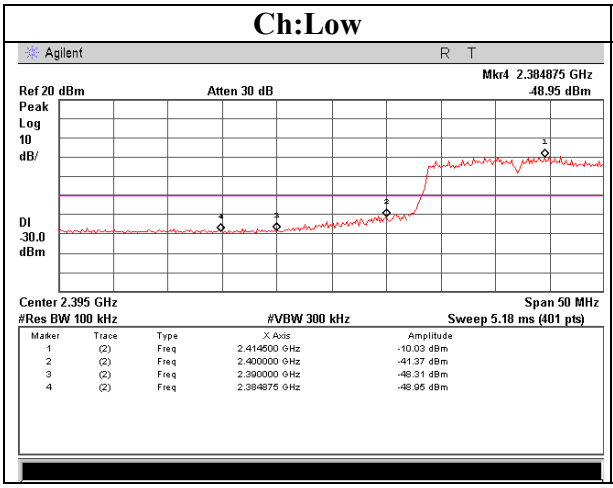


Ch:High

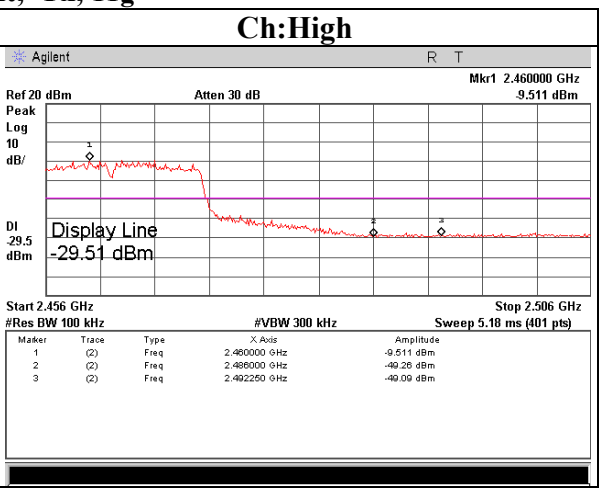


Base Unit, Tx, 11g

Ch:Low



Ch:High



Power Density
Hand unit

UL Apex Co., Ltd.
Head Office EMC Lab. No.8 measurement room

COMPANY	: Panasonic Communications Co.,Ltd.	REGULATION	: FCC Part15 Subpart C 15.247(e)
QUIPMENT	: Travel Phone (Hand unit)	TEST DISTANCE	: -
MODEL	: KX-WPA100	DATE	: 08/01/2006
SAMPLE NO.	: 1	TEMPERATURE	: 25deg.C.
POWER	: DC 3.6V	HUMIDITY	: 55%
MODE	: Tx (ch1,6,11)	ENGINEER	: Kenichi Adachi

[IEEE802.11b]

Ch	Freq. [MHz]	Reading [dBm]	Cable [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2409.2	-9.32	1.0	0.0	-8.3	8.0	16.3
Mid	2435.0	-8.96	1.0	0.0	-8.0	8.0	16.0
High	2460.1	-8.34	1.0	0.0	-7.3	8.0	15.3

Sample Calculation:
Result = Reading + Cable Loss (spplied by customer) + Attenuator

[IEEE802.11g]

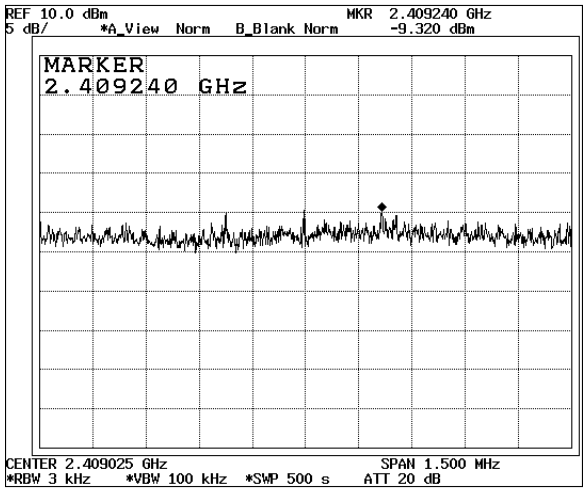
Ch	Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2407.6	-15.66	1.0	0.0	-14.7	8.0	22.7
Mid	2432.6	-15.22	1.0	0.0	-14.2	8.0	22.2
High	2457.6	-15.00	1.0	0.0	-14.0	8.0	22.0

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

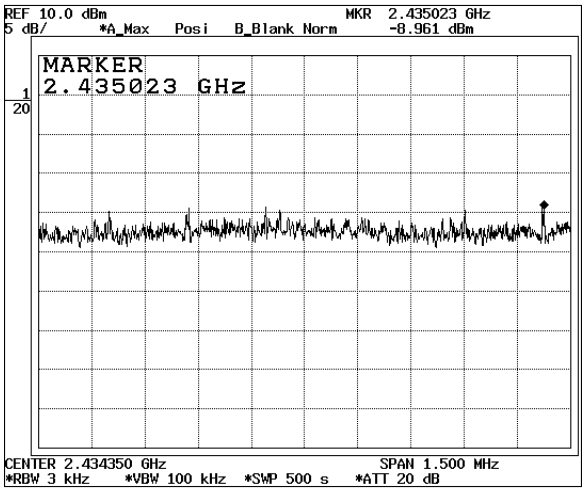
Power Density

Hand unit, 11b

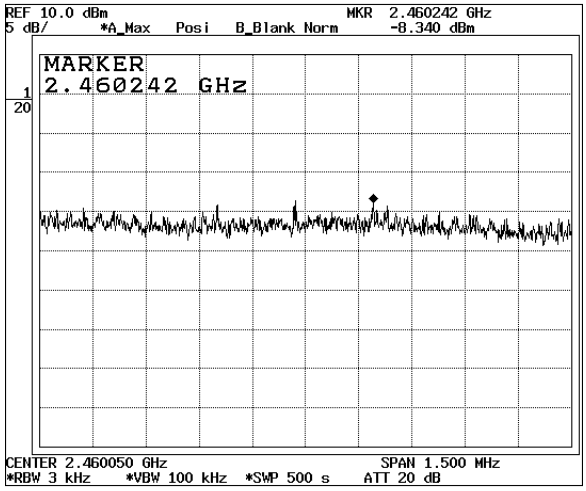
Ch:Low



Ch:Mid



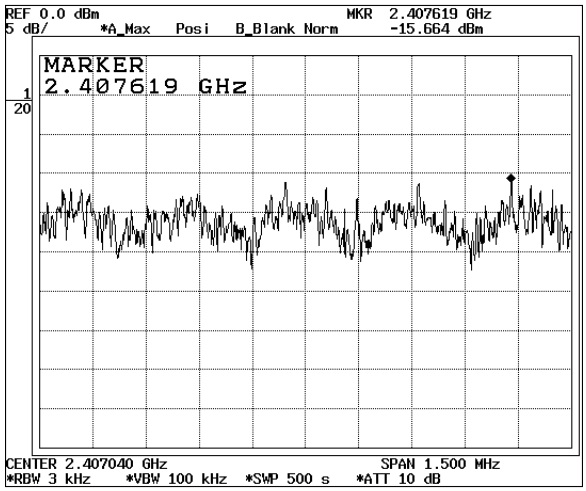
Ch:High



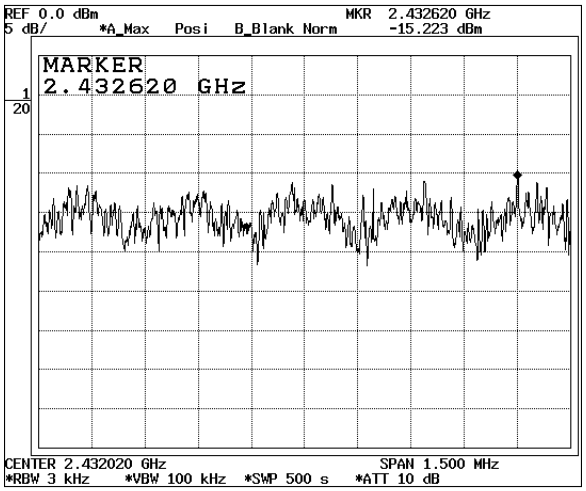
Power Density

Hand unit, 11g

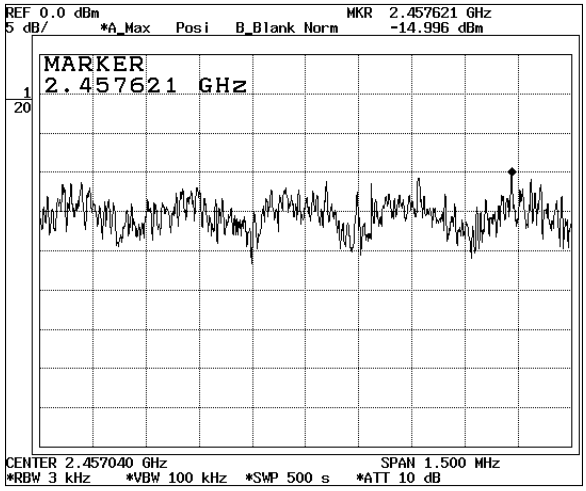
Ch:Low



Ch:Mid



Ch:High



Power Density
Base Unit

COMPANY	: Panasonic Communications Co.,Ltd.	REGULATION	: FCC Part15 Subpart C 15.247(e)
QUIPMENT	: Travel Phone (Base unit)	TEST DISTANCE	: -
MODEL	: KX-WPA102	DATE	: 08/08/2006
SAMPLE NO.	: 2	TEMPERATURE	: 23deg.C.
POWER	: AC120V/60Hz	HUMIDITY	: 60%
MODE	: Tx (ch1,6,11)	ENGINEER	: Kenichi Adachi

[IEEE802.11b]

Ch	Freq. [MHz]	Reading [dBm]	Cable [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2414.5	-20.31	2.3	9.9	-8.1	8.0	16.1
Mid	2439.0	-21.25	2.4	9.9	-9.0	8.0	17.0
High	2460.3	-22.17	2.4	9.9	-9.9	8.0	17.9

Sample Calculation:
Result = Reading + Cable Loss (spplied by customer) + Attenuator

[IEEE802.11g]

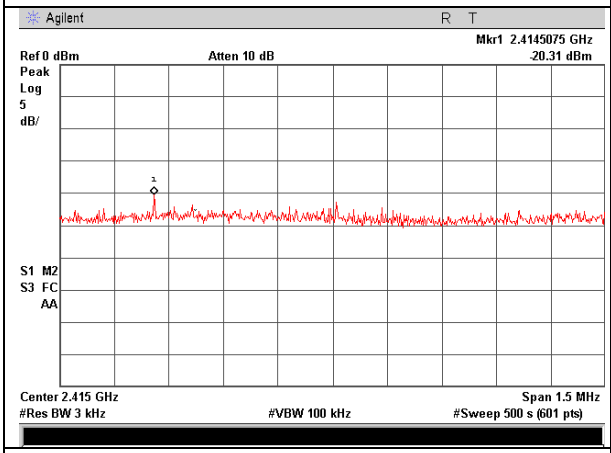
Ch	Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2410.9	-22.81	2.3	9.9	-10.6	8.0	18.6
Mid	2432.6	-22.61	2.4	9.9	-10.3	8.0	18.3
High	2458.9	-23.44	2.4	9.9	-11.1	8.0	19.1

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

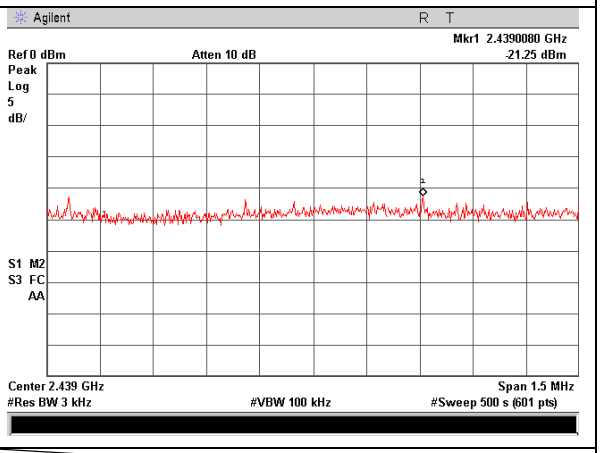
Power Density

Base Unit, 11b

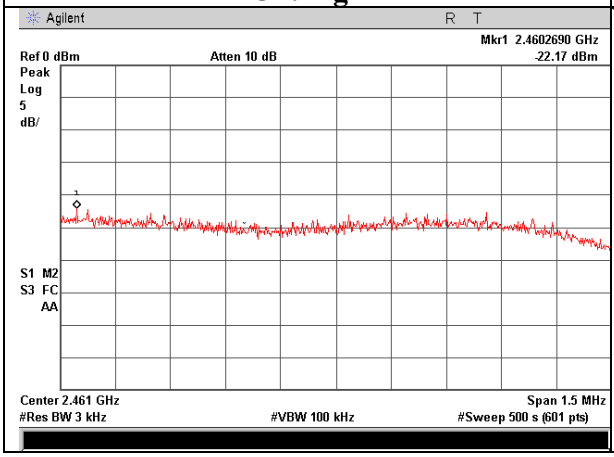
Ch:Low



Ch:Mid



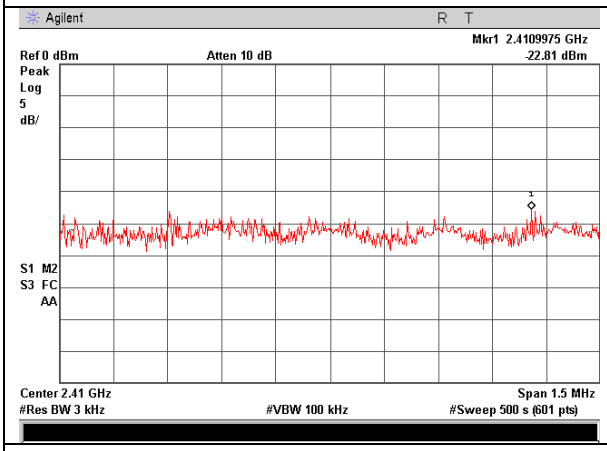
Ch:High



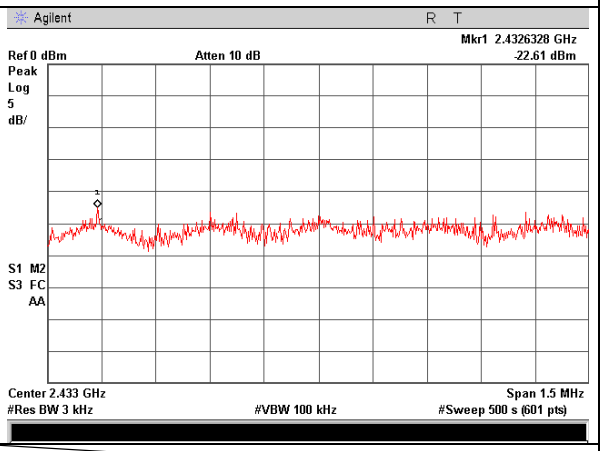
Power Density

Base Unit, 11g

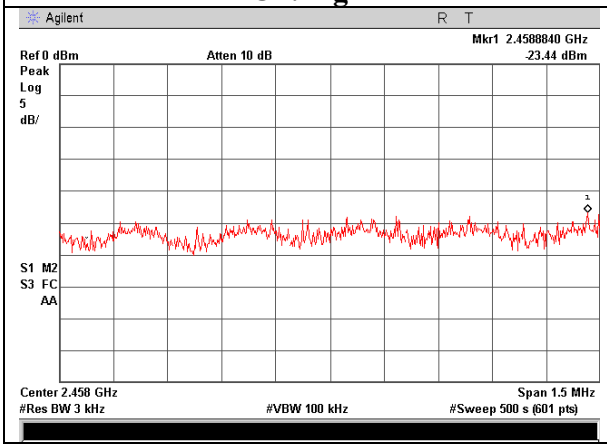
Ch:Low



Ch:Mid



Ch:High



APPENDIX 3:Test instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MAEC-03	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE	2006/03/03 * 12
MSA-05	Spectrum Analyzer	Advantest	R3273	RE	2006/05/20 * 12
MCC-56	Microwave Cable	Suhner	SUCOFLEX104	RE	2006/04/15 * 12
MPA-11	MicroWave System Amplifier	Agilent	83017A	RE	2006/03/27 * 12
MHA-05	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2006/01/09 * 12
MHF-07	High Pass Filter	Tokimec	TF323DCA	RE	2006/05/20 * 12
MOS-12	Thermo-Hygrometer	Custom	CTH-180	RE	2006/01/19 * 24
MSTW-14	EMI measurement program	TSJ	TEPTO-DV	RE /	-
MHA-01	Horn Antenna	EMCO	3160-09	RE	2006/01/09 * 12
MRENT-35	Power Meter	Anritsu	ML2496A	AT (Power)	2006/04/25 * 12
MRENT-34	Power sensor	Anritsu	MA2411B	AT (Power)	2006/04/25 * 12
MSA-06	Spectrum Analyzer	Agilent	E4407B	AT (Power)	2006/05/24 * 12
MAT-21	Attenuator(20dB)(above1GHz)	HIROSE ELECTRIC CO.,LTD.	AT-120	AT (Power)	2006/01/10 * 12
MAEC-04	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE	2006/03/06 * 12
MSA-03	Spectrum Analyzer	Agilent	E4448A	RE	2005/09/16 * 12
MTR-02	Test Receiver	Rohde & Schwarz	ESCS30	RE	2006/02/02 * 12
MCC-50	Coaxial cable	UL Apex	-	RE	2006/03/09 * 12
MAT-31	Attenuator(6dB)	TME	UFA-01	RE	2006/03/11 * 12
MBA-05	Biconical Antenna	Schwarzbeck	BBA9106	RE	2006/01/29 * 12
MLA-08	Logperiodic Antenna	Schwarzbeck	UKLP9140-A	RE	2006/01/29 * 12
MOS-15	Thermo-Hygrometer	Custom	CTH-180	RE	2006/01/19 * 24
MAEC-01	Anechoic Chamber	TDK	Semi Anechoic Chamber 10m	RE	2005/11/14 * 12
MTR-01	Test Receiver	Rohde & Schwarz	ESI40	RE	2005/11/10 * 12
MPA-04	Pre Amplifier	Agilent	8447D	RE	2006/05/27 * 12
MBA-01	Biconical Antenna	Schwarzbeck	BBA9106	RE	2005/10/10 * 12
MLA-01	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2005/10/14 * 12
MCC-01	Coaxial Cable 0.1-3000MHz	Suhner/storm/Agilent/TSJ	-	RE	2006/02/20 * 12
MOS-01	Digital Humidity Indicator	N.T	NT-1800	RE	2004/11/25 * 24
MAT-06	Attenuator(6dB)	Weinschel Corp	2	RE	2005/12/16 * 12
MRENT-39	Spectrum Analyzer	Advantest	R3273	AT	2006/07/25 * 12
MOS-03	Digital Humidity Indicator	N.T	NT-1800	AT	2004/11/25 * 24
MCC-22	Microwave Cable 1G-40GHz	Storm	421-011 (90-011-080)	AT	2006/05/12 * 12
MAT-22	Attenuator(10dB)(above1GHz)	Orient Microwave	BX10-0476-00	AT	2006/03/18 * 12
MSA-06	Spectrum Analyzer	Agilent	E4407B	AT	2006/05/24 * 12
MOS-16	Thermo-Hygrometer	Custom	CTH-180	AT	2006/01/19 * 24

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MPA-14	Pre Amplifier	SONOA INSTRUMENT	310	RE	2006/03/25 * 12
MAEC-02	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	CE	2006/04/10 * 12
MOS-02	Digital Humidity Indicator	N.T	NT-1800	CE	2004/11/25 * 24
MLS-07	LISN(AMN)	Schwarzbeck	NSLK8127	CE (EUT)	2006/02/06 * 12
MCC-13	Coaxial Cable	Fujikura/Agilent	-	CE	2006/02/23 * 12
MTA-06	Terminator	MCL	BTRM-50	CE	2006/02/06 * 12
MTR-03	Test Receiver	Rohde & Schwarz	ESCI	CE	2006/03/04 * 12

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

CE: AC Main Conducted Emission
AT: Antenna Terminal Conducted Spurious Emission
RE: Radiated Spurious Emission, Maximum Peak Output Power
6dB Bandwidth [DSSS], Peak Output Power Density [DSSS]