



EMI TEST REPORT

Test Report No.: 26DE0101-HO-1a

Applicant : Panasonic Communications Co., Ltd.
Type of Equipment : Cordless Telephone (Handset)
Model No. : KX-TGA570
FCC ID : ACJ96NKX-TG5771
Test standard : FCC Part 15 Subpart C
Section 15.207, Section 15.247: 2005
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. We hereby certify that the data contain a true representation of the EMC profile.
4. The test results in this report are traceable to the national or international standards.

Date of test:

November 11 to 28, 2005

Tested by:

Mitsuru Fujimura
EMC Services

Takumi Shimada
EMC Services

Norihisa Hashimoto
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Approved by:

Hironobu Shimoji
Group Leader of
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SECTION 1: Client information

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

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

2.1 Identification of E.U.T.

| | | |
|------------------------|--|-------------------------------|
| Type of Equipment | Cordless Telephone (Handset) | |
| Model No. | KX-TGA570 | |
| Serial No. | 1 (for Radiated emissions) 2 (for Antenna terminal conducted emissions) | |
| Country of Manufacture | Japan | |
| | Model Name : | HHR-P105 (Ni-MH Battery Pack) |
| | Rating : | DC2.4V/830mAh |
| | Manufacture | Panasonic |
| Condition of EUT | Engineering prototype (Not for sale: This sample is equivalent to mass-produced items.) | |
| Operation Clock | Main clock: 13.824 MHz | |
| Receipt Date of Sample | November 11, 2005 | |
| Category Identified | Portable device | |

2.2 Product Description

| | |
|--------------------------------|--|
| Equipment Type | Transceiver |
| Frequency band | Lower limit= 5725MHz, Upper limit= 5850MHz |
| Bandwidth & Channel spacing | Bandwidth: 79MHz Channel spacing: 891.87kHz |
| Type of Modulation | FHSS |
| Antenna Type | 5/8 lambda Pattern-Antenna |
| Antenna Connector Type | N/A |
| Antenna Gain | 4dBi (Typ.) |
| Mode of Operation | Duplex |
| ITU code | F1E |
| Power Supply (RF Part) | DC 3.1V |
| Method of Frequency Generation | Synthesizer |

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FCC 15.31 (e)

This EUT provides stable voltage (DC3.1V) constantly to RF Module regardless of input voltage. Therefore, this EUT complies with the requirement.

FCC Part 15.203 Antenna requirement

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

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SECTION 3: Test specification, procedures & results

3.1 Test Specification

Test Specification : FCC Part15 Subpart C : 2005

Title : FCC 47CFR Part15 Radio Frequency Device Subpart C Intentional Radiators
Section 15.207 Conducted limits : 2005
Section 15.247 Operation within the bands 902-928MHz,
2400-2483.5MHz, and 5725-5850MHz : 2005

3.2 Procedures and results

| No. | Item | Test Procedure | Specification | Remarks | Deviation | Worst Margin*0) | Results |
|-----|------------------------------|--|---------------------------|------------------------|-----------|-----------------|--------------------------------|
| 1 | Conducted emission | ANSI C63.4:2003 7. AC powerline conducted emission measurements | Section 15.207 | - | N/A | N/A | N/A*1) |
| 2 | Carrier Frequency Separation | ANSI C63.4:2003 13. Measurement of intentional radiators | Section 15.247(a)(1) | Conducted | N/A | See data. | Complied |
| 3 | 20dB Bandwidth | ANSI C63.4:2003 13. Measurement of intentional radiators | Section 15.247(a)(1) | Conducted | N/A | | Complied |
| 4 | Number of Hopping Frequency | ANSI C63.4:2003 13. Measurement of intentional radiators | Section 15.247(a)(1)(iii) | Conducted | N/A | | Complied |
| 5 | Dwell time | ANSI C63.4:2003 13. Measurement of intentional radiators | Section 15.247(a)(1)(iii) | Conducted | N/A | | Complied |
| 6 | Maximum Peak Output Power | ANSI C63.4:2003 13. Measurement of intentional radiators | Section 15.247(b)(1) | Conducted | N/A | | Complied |
| 7 | Band Edge Compliance | ANSI C63.4:2003 13. Measurement of intentional radiators | Section 15.247(d) | Conducted | N/A | | Complied |
| 8 | Spurious Emission | ANSI C63.4:2003 13. Measurement of intentional radiators | Section 15.247(d) | Conducted/ Radiated | N/A | | 3.7dB 5301.0MHz PK, Ver. |

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 is not applicable, because the EUT is not connected to the public utility (AC) power line.

Uncertainty:

Spurious Emission (Radiated)

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

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

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

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 $\pm 3.0\text{dB}$.

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

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

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3.3 Test Location

UL Apex Co., Ltd. Head Office EMC Lab. *NVLAP Lab. code: 200572-0
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| | FCC Registration Number | IC Registration Number | Width x Depth x Height (m) | Size of reference ground plane (m) / horizontal conducting plane | Other rooms |
|-------------------------------|-------------------------------|------------------------------|-------------------------------|--|---------------------|
| No.1 semi-anechoic chamber | 313583 | IC4247A | 19.2 x 11.2 x 7.7m | 7.0 x 6.0m | Preparation room |
| No.2 semi-anechoic chamber | 846015 | IC4247A-2 | 7.5 x 5.8 x 5.2m | 4.0 x 4.0m | - |
| No.3 shielded room | - | - | 4.7 x 7.5 x 2.7m | 4.7 x 7.5m | - |
| No.4 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 and No.2 semi-anechoic and No.3 shielded room.

3.4 Test set up, Test instruments and Data of EMI

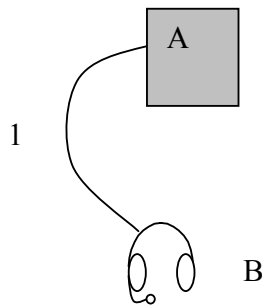
Refer to APPENDIX 1 to 3.

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

4.1 Operating Modes

The mode is used : [FHSS]
Transmitting mode
Low Channel : 5759.70240MHz
Mid Channel : 5798.05084MHz
High Channel : 5838.18697MHz

4.2 Configuration and peripherals



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

Description of EUT and Support equipment

| No. | Item | Model number | Serial number | Manufacturer | FCC ID |
|-----|------------------------------|--------------|--|--------------------------|-----------------|
| A | Cordless Telephone (Handset) | KX-TGA570 | 1 (for Radiated emissions) 2 (for Antenna terminal conducted emissions) | Panasonic Communications | ACJ96NKX-TG5771 |
| B | Headphone | KX-TCA88 | - | Panasonic Communications | - |

List of cables used

| No. | Name | Length (m) | Shield |
|-----|---------------|------------|--------|
| 1 | Headset Cable | 1.8 | N |

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SECTION 5: Spurious Emission

[Conducted]

Test Procedure

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

Test data : APPENDIX 3

Test result : Pass

[Radiated]

Test Procedure

EUT was placed on a platform of nominal size, 0.5m by 1.0m, raised 80cm above the conducting ground plane.

The Radiated Electric Field Strength intensity has been measured in a Semi Anechoic Chamber with a ground plane and at a distance of 3m(Below 18GHz) and 1m(Upper 18GHz) and 0.5m (Upper 26.5GHz).

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.

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

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

Test data : APPENDIX 3

Test result : Pass

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SECTION 6: Bandwidth

Test Procedure

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

Test data : APPENDIX 3
Test result : Pass

SECTION 7: Maximum Peak Output Power

Test Procedure

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

Test data : APPENDIX 3
Test result : Pass

SECTION 8: Carrier Frequency Separation

Test Procedure

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

Test data : APPENDIX 3
Test result : Pass

SECTION 9: Number of Hopping Frequency

Test Procedure

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

Test data : APPENDIX 3
Test result : Pass

SECTION 10: Dwell time

Test Procedure

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

Test data : APPENDIX 3
Test result : Pass

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APPENDIX 1: Photographs of test setup

Spurious Emission (Radiated)

Front



Right



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

X-axis



Y-axis



Z-axis



APPENDIX 2:Test instruments

EMI test equipment

| Control No. | Instrument | Manufacturer | Model No | Test Item | Calibration Date * Interval(month) |
|-------------|-------------------------------------|------------------|--------------------------|-----------|---------------------------------------|
| MAEC-02 | Anechoic Chamber | TDK | Semi Anechoic Chamber 3m | RE | 2005/04/11 * 12 |
| MRENT-21 | Spectrum Analyzer | Advantest | R3273 | RE | 2005/08/19 * 12 |
| MCC-04 | Microwave Cable 1G-50GHz | Storm | 421-011 (90-1394-079) | RE | 2005/01/05 * 12 |
| MCC-47 | Microwave Cable 1G-26.5GHz | Suhner | SUCOFLEX104 | RE | 2005/08/30 * 12 |
| MHA-06 | Horn Antenna | Schwarzbeck | BBHA9120D | RE | 2005/01/10 * 12 |
| MPA-01 | Pre Amplifier | Agilent | 8449B | RE | 2005/02/05 * 12 |
| MAT-22 | Attenuator(10dB)(above1GHz) | Orient Microwave | BX10-0476-00 | RE | 2005/03/16 * 12 |
| MCC-12 | Coaxial Cable | Fujikura/Agilent | - | RE | 2005/02/24 * 12 |
| MBA-01 | Biconical Antenna | Schwarzbeck | BBA9106 | RE | 2005/10/10 * 12 |
| MLA-01 | Logperiodic Antenna | Schwarzbeck | USLP9143 | RE | 2005/10/14 * 12 |
| MAT-07 | Attenuator(6dB) | Weinschel Corp | 2 | RE | 2004/12/16 * 12 |
| MPA-09 | Pre Amplifier | Agilent | 8447D | RE | 2005/09/07 * 12 |
| MSA-03 | Spectrum Analyzer | Agilent | E4448A | AT | 2005/09/16 * 12 |
| MCC-22 | Microwave Cable 1G-50GHz | Storm | 421-011 (90-011-080) | AT | 2005/04/29 * 12 |
| MAT-24 | Attenuator(10dB)(above1GHz) | Agilent | 8493C | AT | 2005/06/03 * 12 |
| MBF-03 | SHF Bandpass Filter | M-City | 13GHz BPF | RE | 2005/05/20 * 12 |
| MHA-02 | Horn Antenna | EMCO | 3160-09 | RE | 2005/01/10 * 12 |
| MSA-04 | Spectrum Analyzer | Agilent | E4448A | RE | 2005/05/19 * 12 |
| MHA-04 | Horn Antenna | EMCO | 3160-10 | RE | 2005/01/10 * 12 |
| MCC-27 | Microwave Cable 1G-50GHz | Suhner | SUCOFLEX101 | RE | 2005/08/30 * 12 |
| MPA-03 | Microwave System Power Amplifier | Agilent | 83050A | RE | 2005/05/11 * 12 |

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

Test Item:

RE: Radiated Spurious Emission

AT: Antenna Terminal Measurement

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APPENDIX 3: Data of EMI test

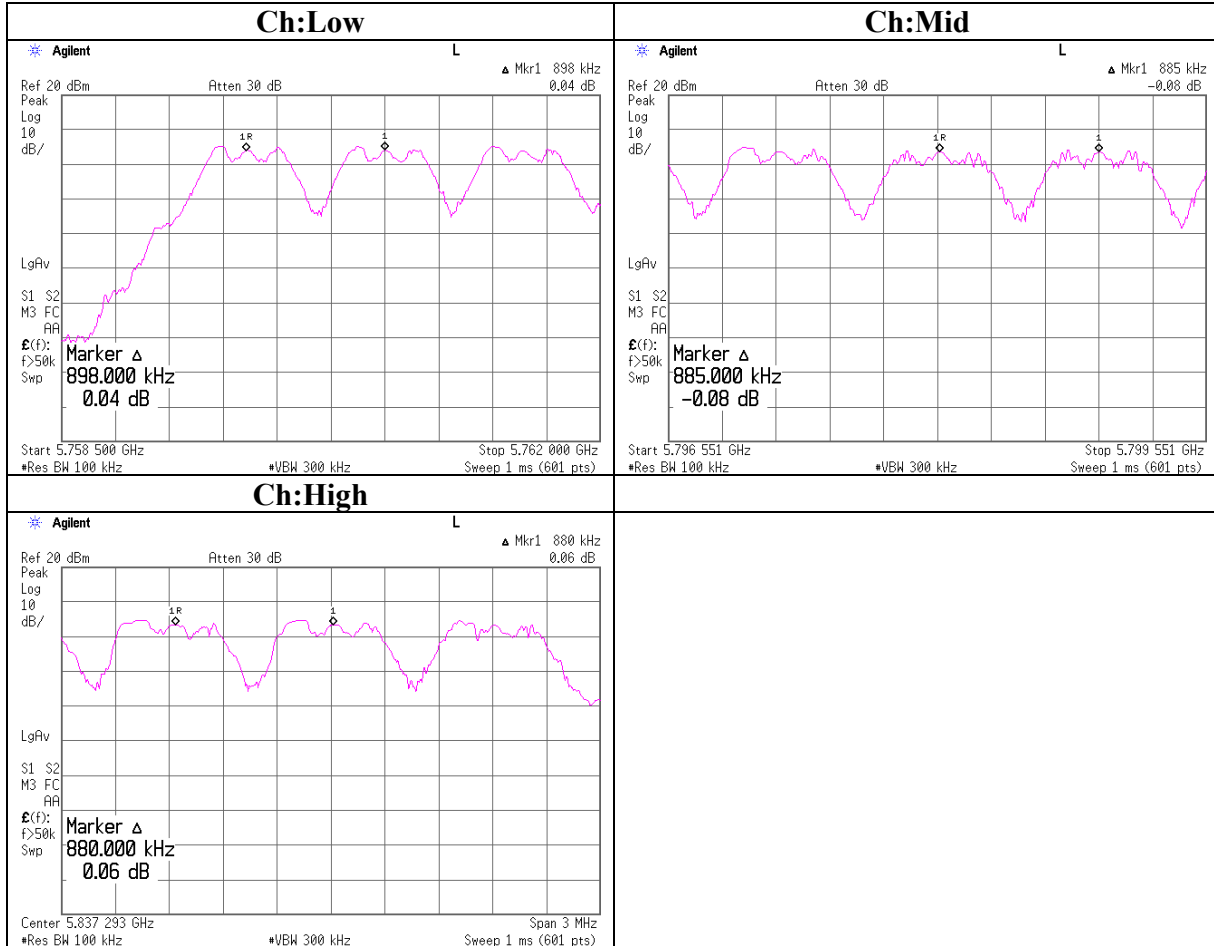
Carrier Frequency Separation

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Shielded Room

COMPANY : Panasonic Communications Co., Ltd. REGULATION : FCC Part15 Subpart C 15.247(a)(1)
EQUIPMENT : Cordless Telephone (Handset) TEST DISTANCE : -
MODEL : KX-TGA570 DATE : 11/23/2005
S/N : 2 TEMPERATURE : 25deg.C
POWER : DC 2.4 V HUMIDITY : 38%
MODE : Tx(Hopping on) ENGINEER : Takumi Shimada

| Ch | Freq. [MHz] | Channel separation [MHz] | Limit |
|------|----------------|-----------------------------|-----------------------------|
| Low | 5759.7 | 0.898 | >20dB Bandwidth and 25[kHz] |
| Mid | 5798.1 | 0.885 | >20dB Bandwidth and 25[kHz] |
| High | 5838.2 | 0.880 | >20dB Bandwidth and 25[kHz] |

Carrier Frequency Separation



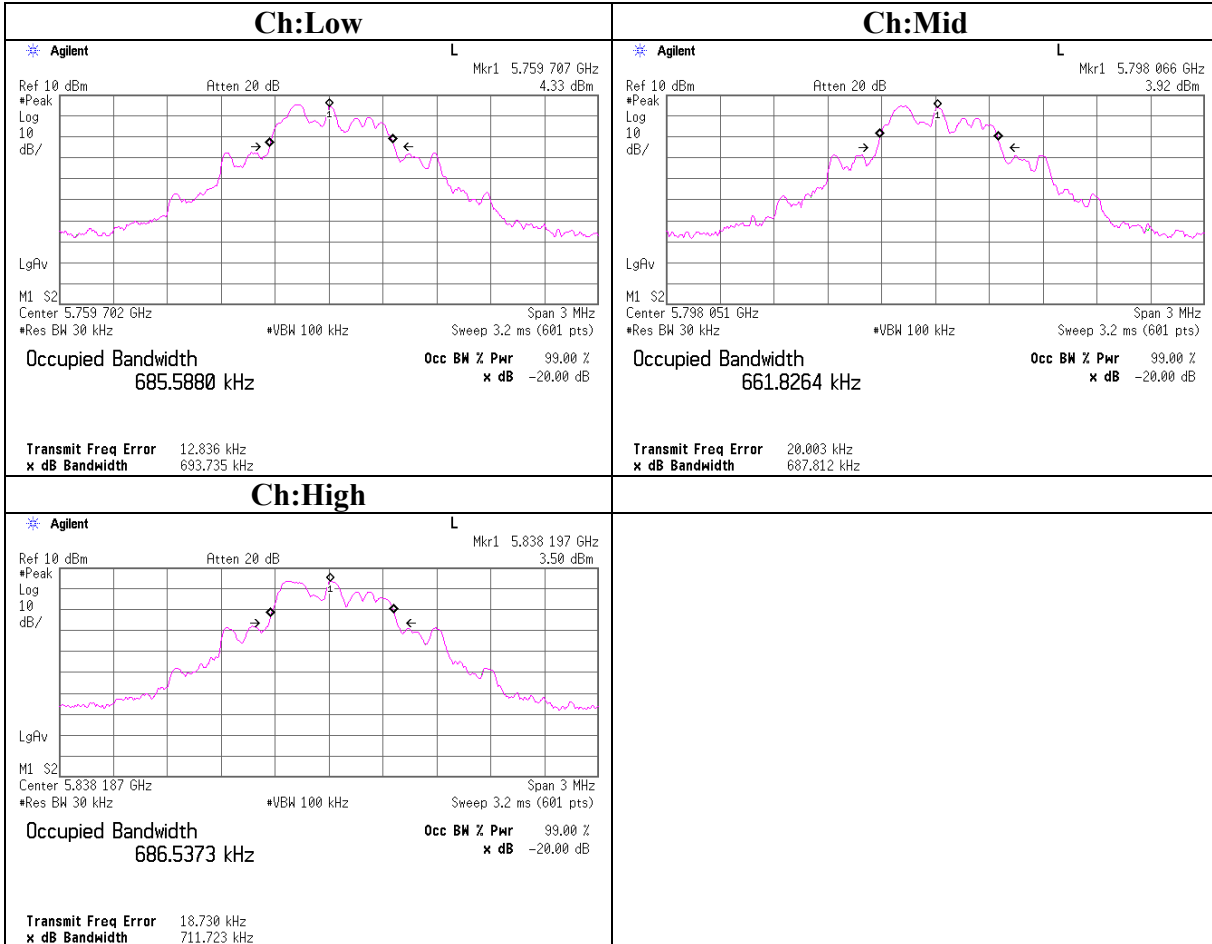
20dB Bandwidth

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Shielded Room

COMPANY : Panasonic Communications Co., Ltd. REGULATION : FCC Part15 Subpart C 15.247(a)(1)(ii)
EQUIPMENT : Cordless Telephone (Handset) TEST DISTANCE : -
MODEL : KX-TGA570 DATE : 11/11/2005
S/ N : 2 TEMPERATURE : 23deg.C
POWER : DC 2.4 V HUMIDITY : 44%
MODE : Tx(Hopping off) ENGINEER : Mitsuru Fujimura

| Ch | Freq. [MHz] | 20dB Bandwidth [MHz] | Limit [MHz] |
|------|----------------|-------------------------|----------------|
| Low | 5759.7 | 0.694 | ≤ 1 |
| Mid | 5798.1 | 0.688 | ≤ 1 |
| High | 5838.2 | 0.712 | ≤ 1 |

20dB Bandwidth



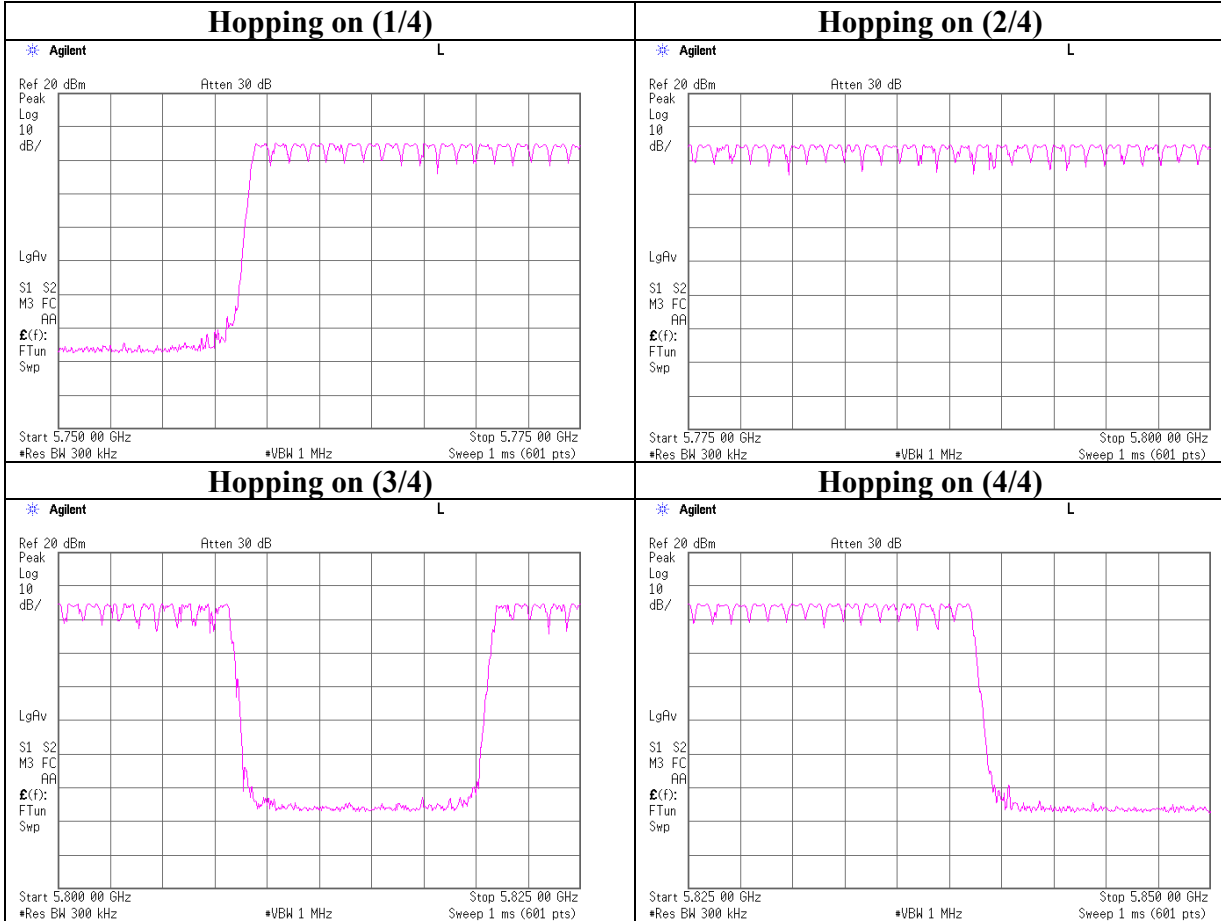
Number of Hopping Frequency

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Shielded Room

COMPANY : Panasonic Communications Co., Ltd. REGULATION : FCC Part15 Subpart C 15.247(a)(1)(ii)
EQUIPMENT : Cordless Telephone (Handset) TEST DISTANCE : -
MODEL : KX-TGA570 DATE : 11/23/2005
S/ N : 2 TEMPERATURE : 25deg.C
POWER : DC 2.4 V HUMIDITY : 38%
MODE : Tx(Hopping on) ENGINEER : Takumi Shimada

| Mode | Number of channel [time] | Limit [time] |
|---------------|-----------------------------|-----------------|
| Tx(Hoppng on) | 75 | $\cong 75$ |

Number of Hopping Frequency



Dwell time

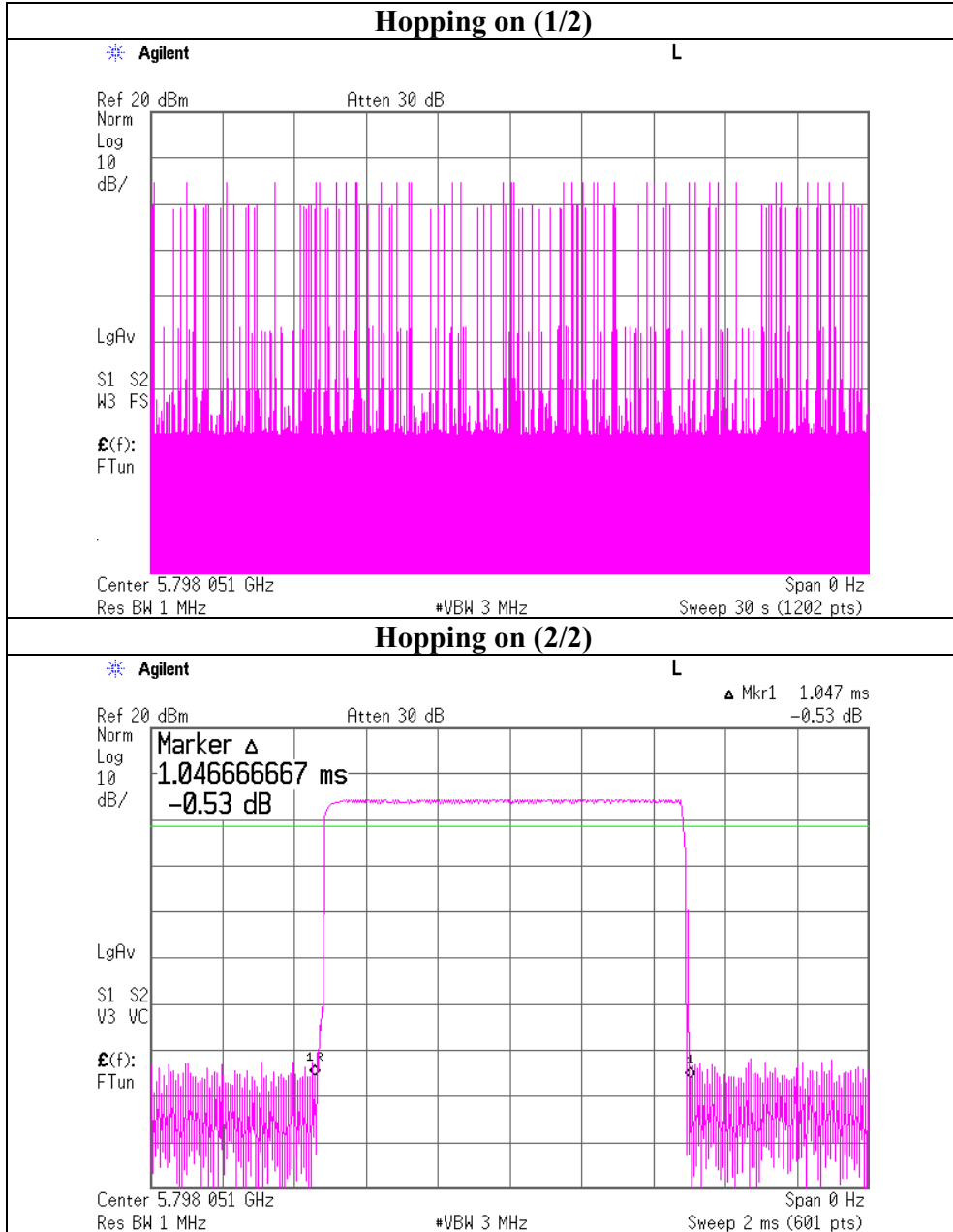
UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Shielded Room

COMPANY : Panasonic Communications Co.,Ltd. REGULATION : FCC Part15 Subpart C 15.247(a)(1)(ii)
EQUIPMENT : Cordless Telephone (Handset) TEST DISTANCE : -
MODEL : KX-TGA570 DATE : 11/28/2005
S/ N : 2 TEMPERATURE : 23deg.C
POWER : DC 2.4 V HUMIDITY : 38%
MODE : Tx(Hopping on) ENGINEER : Takumi Shimada

| Mode | Number of transmission in a 30sec | Length of transmission time [msec] | Result [msec] | Limit [msec] |
|---------------|---------------------------------------|--|------------------|-----------------|
| Tx Hopping on | 40.4times / 30 sec. x 30 = 40.4 times | 1.047 | 42 | 400 |

*40.4 is the average data of 5 tests.

Dwell time



Maximum Peak Output Power

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COMPANY : Panasonic Communications Co., Ltd. REGULATION : FCC Part15 Subpart C 15.247(b)(1)
EQUIPMENT : Cordless Telephone (Handset) TEST DISTANCE : -
MODEL : KX-TGA570 DATE : 11/11/2005
S/ N : 2 TEMPERATURE : 23deg.C
POWER : DC 2.4 V HUMIDITY : 44%
MODE : Tx(Hopping off) ENGINEER : Mitsuru Fujimura

| Ch | Freq. [MHz] | S/A Reading [dBm] | Cable Loss [dB] | Atten. [dB] | Result [dBm] | Limit [dBm] | Margin [dB] |
|------|----------------|-------------------------|-----------------------|----------------|-----------------|----------------|----------------|
| Low | 5759.5 | 5.43 | 2.90 | 9.77 | 18.10 | 30.00 | 11.90 |
| Mid | 5798.3 | 5.01 | 2.91 | 9.78 | 17.70 | 30.00 | 12.30 |
| High | 5838.0 | 4.66 | 2.92 | 9.79 | 17.37 | 30.00 | 12.63 |

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.

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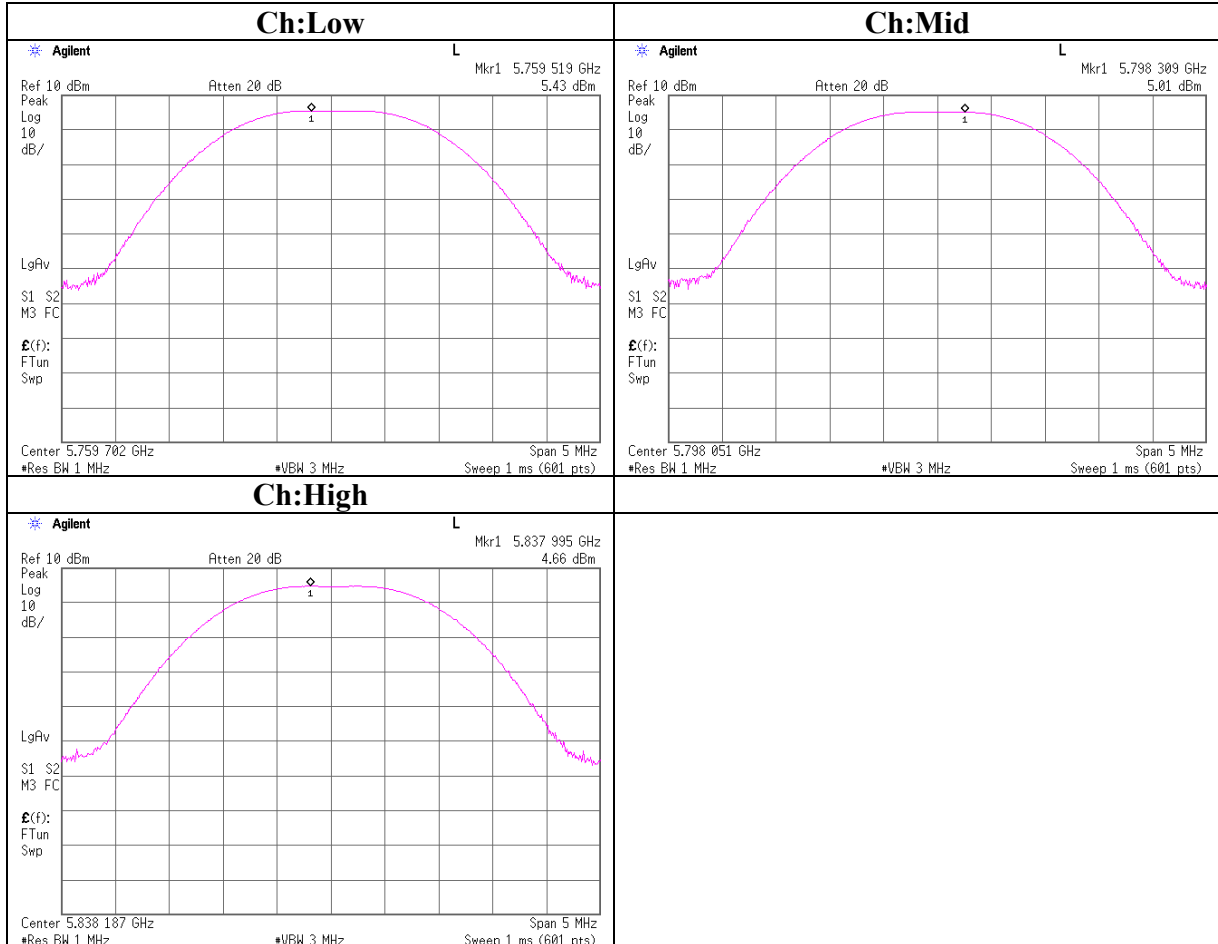
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Maximum Peak Output Power



Maximum Peak Output Power (EIRP)
Reference data for SAR Testing

Output power measurement method

- 1) EUT was placed on a platform of nominal size, 0.5m by 1.0m, raised 1.5m above the conducting ground plane. Test was made with the antenna positioned in both the horizontal and vertical planes of polarization. The Radiated Electric Field Strength intensity has been measured in semi anechoic chamber with absorbent materials lined (Type VHP 12) on a ground plane and at a distance of 3m.
The measuring antenna height was varied between 1 to 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.

- 2) Exchanged the EUT to the Substitution Antenna, the measurement was set for the same height 1.5m as the EUT. The frequency below 1GHz of the Substitution Antenna was used as the Half wave dipole Antenna, which is harmonized with the measured frequency in 1).
The frequency above 1GHz of the Substitution Antenna was used with Horn Antenna.
The Substitution Antenna was connected with the Signal Generator, and the polarized electromagnetic radiation of the Substitution Antenna was matched with the one of the measuring Antenna, which was set with the Signal Generator to the measured frequency in 1). Then, we set with the Output power (CW) of the Signal Generator where the measuring electromagnetic field is equal to the measured value in 1).
The measuring antenna height was varied between 1 to 4m to obtain the maximum receiving level.
Its Output power of Signal Generator was recorded.

- 3) Effective radiated power was calculated by subtracting the cable loss and the attenuator loss connected between the Signal Generator and the Substitution Antenna from the Output power of the Signal Generator recorded in 2).
For the usage of the Antenna (Horn Antenna) except for the Half wave dipole Antenna (2.15dBi) for the Substitution Antenna, the Effective radiated power was calculated by compensating the finite difference in the Antenna gain of the Half wave dipole Antenna, and Substitution Antenna.

Spectrum Analyzer setting

Resolution bandwidth set to 1MHz and Video bandwidth to 3MHz.

| EIRP | | | |
|-------------|------------|----------------|-------|
| Ch | Freq. | E-field | EIRP |
| | [MHz] | [dB μ V/m] | [dBm] |
| Low | 5759.70240 | 124.50 | 20.4 |
| Mid. | 5798.05084 | 123.64 | 19.6 |
| High | 5838.18697 | 123.48 | 19.4 |

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Radiated Spurious Emission(30MHz-1GHz)
(Tx Low)

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

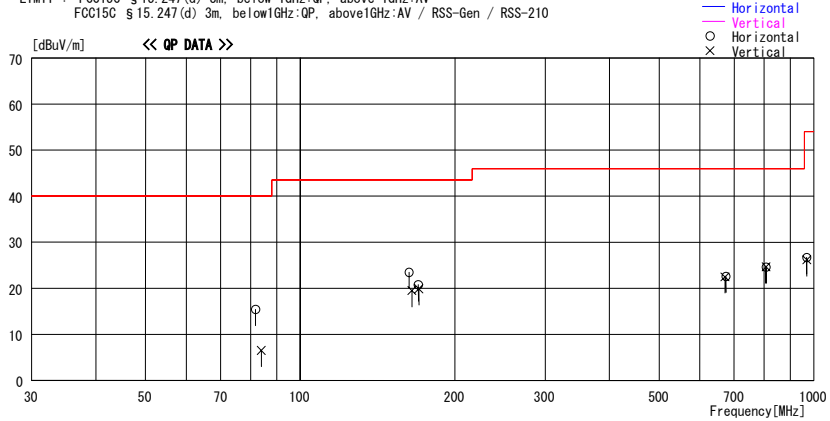
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
 Date : 2005/11/13 15:35:00

Applicant : Panasonic Communications Co.,Ltd. Report No. : 26DE0101-HO
 Kind of EUT : Cordless Telephone (Handset) Power : DC2.4V
 Model No. : KX-TGA570 Temp./Humi. : 20deg. C. / 50%
 Serial No. : 1 Operator : Norihisa Hashimoto

Mode / Remarks : Tx5759.7024MHz /EUT-axis:Hor Y-axis, Ver Z-axis (Max-axis)

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:QP, above 1GHz:AV
 FCC15C §15.247(d) 3m, below1GHz:QP, above1GHz:AV / RSS-Gen / RSS-210



| Frequency [MHz] | Reading [dBuV] | DET | Antenna | | Level [dBuV/m] | Angle [Deg] | Height [cm] | Polar. | Limit [dBuV/m] | Margin [dB] |
|--------------------|-------------------|-----|------------------|--------------------|-------------------|----------------|----------------|--------|-------------------|----------------|
| | | | Factor [dB/m] | Loss& Gain [dB] | | | | | | |
| 81.902 | 31.0 | QP | 6.6 | -22.2 | 15.4 | 271 | 300 | Hori. | 40.0 | 24.6 |
| 84.000 | 21.7 | QP | 6.9 | -22.1 | 6.5 | 354 | 100 | Vert. | 40.0 | 33.5 |
| 162.840 | 29.5 | QP | 15.3 | -21.3 | 23.5 | 318 | 296 | Hori. | 43.5 | 20.0 |
| 164.995 | 25.4 | QP | 15.4 | -21.3 | 19.5 | 257 | 133 | Vert. | 43.5 | 24.0 |
| 169.863 | 26.1 | QP | 15.6 | -20.9 | 20.8 | 311 | 264 | Hori. | 43.5 | 22.7 |
| 170.334 | 25.2 | QP | 15.6 | -20.9 | 19.9 | 7 | 100 | Vert. | 43.5 | 23.6 |
| 671.707 | 21.5 | QP | 20.2 | -19.2 | 22.5 | 353 | 100 | Vert. | 46.0 | 23.5 |
| 674.507 | 21.5 | QP | 20.3 | -19.2 | 22.6 | 279 | 308 | Hori. | 46.0 | 23.4 |
| 806.809 | 21.1 | QP | 21.4 | -17.9 | 24.6 | 30 | 270 | Hori. | 46.0 | 21.4 |
| 807.509 | 21.3 | QP | 21.4 | -18.0 | 24.7 | 188 | 100 | Vert. | 46.0 | 21.3 |
| 968.512 | 20.9 | QP | 23.0 | -17.2 | 26.7 | 99 | 278 | Hori. | 54.0 | 27.3 |
| 969.212 | 20.4 | QP | 23.0 | -17.2 | 26.2 | 143 | 100 | Vert. | 54.0 | 27.8 |

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(30MHz-1GHz)
(Tx Mid)

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

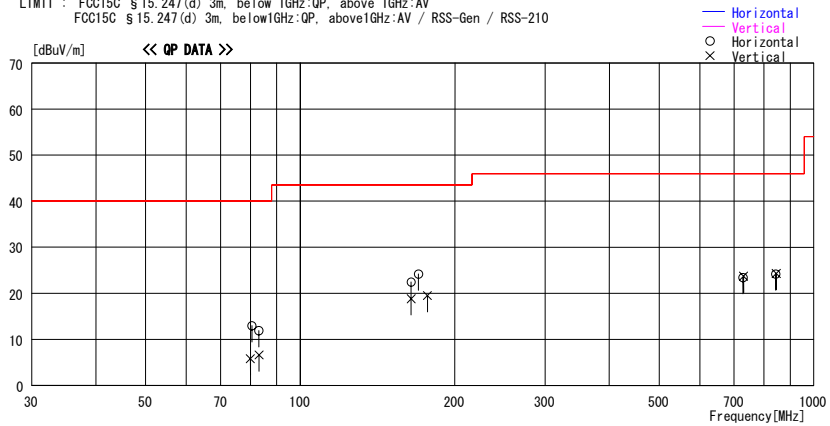
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
 Date : 2005/11/13 16:13:22

Applicant : Panasonic Communications Co.,Ltd. Report No. : 26DE0101-HO
 Kind of EUT : Cordless Telephone (Handset) Power : DC2.4V
 Model No. : KX-TGA570 Temp./Humi. : 20deg.C / 50%
 Serial No. : 1 Operator : Norihisa Hashimoto

Mode / Remarks : Tx5798.05084MHz /EUT-axis:Hor Y-axis, Ver Z-axis (Max-axis)

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:QP, above 1GHz:AV
 FCC15C §15.247(d) 3m, below1GHz:QP, above1GHz:AV / RSS-Gen / RSS-210



| Frequency [MHz] | Reading [dBuV] | DET | Antenna | | Level [dBuV/m] | Angle [Deg] | Height [cm] | Polar. | Limit [dBuV/m] | Margin [dB] |
|--------------------|-------------------|-----|------------------|--------------------|-------------------|----------------|----------------|--------|-------------------|----------------|
| | | | Factor [dB/m] | Loss& Gain [dB] | | | | | | |
| 79.950 | 21.8 | QP | 6.3 | -22.3 | 5.8 | 73 | 134 | Vert. | 40.0 | 34.2 |
| 80.490 | 29.0 | QP | 6.3 | -22.3 | 13.0 | 272 | 246 | Hori. | 40.0 | 27.0 |
| 83.123 | 27.3 | QP | 6.8 | -22.2 | 11.9 | 269 | 311 | Hori. | 40.0 | 28.1 |
| 83.190 | 22.0 | QP | 6.8 | -22.2 | 6.6 | 243 | 109 | Vert. | 40.0 | 33.4 |
| 164.460 | 28.4 | QP | 15.4 | -21.3 | 22.5 | 164 | 194 | Hori. | 43.5 | 21.0 |
| 164.528 | 24.7 | QP | 15.4 | -21.3 | 18.8 | 22 | 100 | Vert. | 43.5 | 24.7 |
| 169.852 | 29.5 | QP | 15.6 | -20.9 | 24.2 | 308 | 194 | Hori. | 43.5 | 19.3 |
| 176.951 | 24.7 | QP | 15.9 | -21.1 | 19.5 | 144 | 108 | Vert. | 43.5 | 24.0 |
| 727.708 | 21.4 | QP | 20.8 | -18.8 | 23.4 | 302 | 278 | Hori. | 46.0 | 22.6 |
| 730.508 | 21.5 | QP | 20.9 | -18.7 | 23.7 | 354 | 100 | Vert. | 46.0 | 22.3 |
| 843.210 | 21.0 | QP | 21.1 | -17.9 | 24.2 | 331 | 264 | Hori. | 46.0 | 21.8 |
| 845.310 | 21.1 | QP | 21.1 | -17.9 | 24.3 | 12 | 100 | Vert. | 46.0 | 21.7 |

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

Radiated Spurious Emission(30MHz-1GHz)
(Tx High)

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

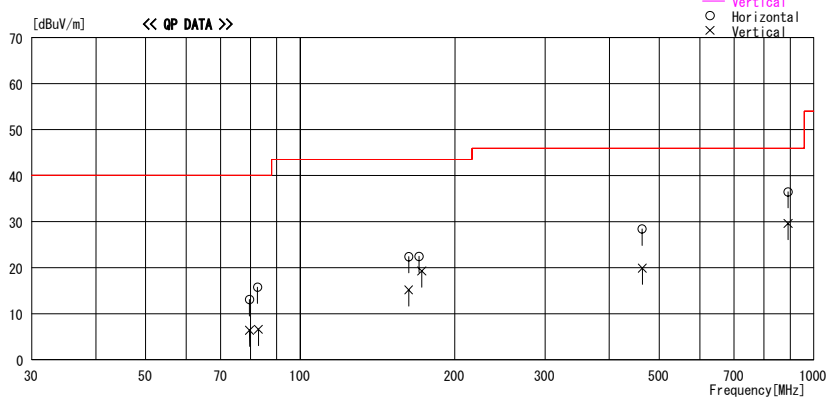
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
 Date : 2005/11/13 16:43:55

Applicant : Panasonic Communications Co.,Ltd. Report No. : 26DE0101-HO
 Kind of EUT : Cordless Telephone(Handset) Power : DC2.4V
 Model No. : KX-TGA570 Temp./Humi. : 20deg.C / 50%
 Serial No. : 1 Operator : Norihisa Hashimoto

Mode / Remarks : Tx5838.1867MHz /EUT-axis:Hor Y-axis, Ver Z-axis (Max-axis)

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:QP, above 1GHz:AV
 FCC15C §15.247(d) 3m, below1GHz:QP, above1GHz:AV / RSS-Gen / RSS-210



| Frequency [MHz] | Reading [dBuV] | DET | Antenna | Loss& | Level | Angle | Height | Polar. | Limit | Margin |
|--------------------|-------------------|-----|---------|-------|----------|--------|--------|--------|----------|--------|
| | | | Factor | Gain | | | | | | |
| | | | [dB/m] | [dB] | [dBuV/m] | [Deg.] | [cm] | | [dBuV/m] | [dB] |
| 79.680 | 22.4 | QP | 6.3 | -22.3 | 6.4 | 44 | 100 | Vert. | 40.0 | 33.6 |
| 79.594 | 29.1 | QP | 6.3 | -22.3 | 13.1 | 308 | 241 | Hori. | 40.0 | 26.9 |
| 82.562 | 31.3 | QP | 6.7 | -22.2 | 15.8 | 73 | 218 | Hori. | 40.0 | 24.2 |
| 82.920 | 22.0 | QP | 6.8 | -22.2 | 6.6 | 212 | 100 | Vert. | 40.0 | 33.4 |
| 162.570 | 28.4 | QP | 15.3 | -21.3 | 22.4 | 333 | 201 | Hori. | 43.5 | 21.1 |
| 162.570 | 21.2 | QP | 15.3 | -21.3 | 15.2 | 55 | 100 | Vert. | 43.5 | 28.3 |
| 170.400 | 27.8 | QP | 15.6 | -20.9 | 22.5 | 334 | 203 | Hori. | 43.5 | 21.0 |
| 172.480 | 24.6 | QP | 15.7 | -21.0 | 19.3 | 1 | 100 | Vert. | 43.5 | 24.2 |
| 463.060 | 30.5 | QP | 17.8 | -19.9 | 28.4 | 100 | 245 | Hori. | 46.0 | 17.6 |
| 463.803 | 22.0 | QP | 17.8 | -19.9 | 19.9 | 5 | 100 | Vert. | 46.0 | 26.1 |
| 890.810 | 33.4 | QP | 20.9 | -17.8 | 36.5 | 267 | 182 | Hori. | 46.0 | 9.5 |
| 890.810 | 26.5 | QP | 20.9 | -17.8 | 29.6 | 30 | 100 | Vert. | 46.0 | 16.4 |

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(1GHz-40GHz)
(Tx Low)

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

| | | | |
|------------|-------------------------------------|---------------|---------------------------------------|
| Company | : Panasonic Communications Co.,Ltd. | REPORT NO | : 26DE0101-HO |
| Equipment | : Cordless Telephone (Handset) | REGULATION | : Fcc Part15 Subpart C 15.247(d) |
| Model | : KX-TGAS70 | TEST DISTANCE | : 3m/1m/0.5m |
| Sample No. | : 1 | DATE | : 11/12/2005, 11/15/2005, 11/23/2005, |
| Power | : DC2.4V | TEMPERATURE | : 23deg.C., 25deg.C., 20deg.C., |
| Mode | : Tx 5759.70240MHz | HUMIDITY | : 50%, 38% 34% |
| Remarks | : Hor : Y-axis / Ver : Z-axis | ENGINEER | : Takumi Shimada |

| PK DETECT (RBW: 1MHz, VBW: 1MHz) | | | | | | | | | | | | |
|--|---------------|-------------|------|-------------------------|---------------------|-----------------------|-----------------------------|--------|------|-------------------------|--------|------|
| No. | FREQ [MHz] | S/A READING | | ANT Factor [dB/m] | AMP GAIN [dB] | CABLE LOSS [dB] | Band-Pass Filter [dB] | RESULT | | Limit PK [dBuV/m] | MARGIN | |
| | | HOR | VER | | | | | HOR | VER | | HOR | VER |
| Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss | | | | | | | | | | | | |
| 1 | 2395.8 | 55.7 | 53.7 | 30.5 | 36.4 | 4.6 | 0.0 | 54.4 | 52.4 | 74.0 | 19.6 | 21.6 |
| 2 | 4791.7 | 53.4 | 53.0 | 35.1 | 36.0 | 6.6 | 0.0 | 59.1 | 58.7 | 74.0 | 14.9 | 15.3 |
| 3 | 5301.0 | 60.8 | 63.2 | 36.0 | 35.8 | 6.9 | 0.0 | 67.9 | 70.3 | 74.0 | 6.1 | 3.7 |
| 4 | 5437.9 | 49.4 | 52.7 | 35.9 | 35.8 | 7.0 | 0.0 | 56.5 | 59.8 | 74.0 | 17.5 | 14.2 |
| 5 | 5725.0 | 48.0 | 48.5 | 36.4 | 35.8 | 7.2 | 0.0 | 55.8 | 56.3 | 74.0 | 18.2 | 17.7 |
| 6 | 6217.5 | 58.7 | 56.5 | 36.8 | 35.8 | 7.5 | 0.0 | 67.2 | 65.0 | 74.0 | 6.8 | 9.0 |
| Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac | | | | | | | | | | | | |
| 7 | 11519.8 | 55.2 | 51.8 | 39.0 | 35.8 | 11.5 | 0.2 | 60.6 | 57.2 | 74.0 | 13.4 | 16.8 |
| 8* | 17278.5 | 49.2 | 50.9 | 44.8 | 35.0 | 14.3 | 4.7 | 68.5 | 70.2 | - | - | - |
| 9 | 23038.1 | 50.2 | 48.1 | 40.2 | 34.9 | 16.5 | 0.0 | 62.5 | 60.4 | 74.0 | 11.5 | 13.6 |
| Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac | | | | | | | | | | | | |
| 10 | 28798.5 | 42.9 | 22.6 | 41.3 | 24.3 | 11.3 | 0.0 | 55.6 | 35.3 | 74.0 | 18.4 | 38.7 |
| 11 | 34558.2 | 48.4 | 28.4 | 42.2 | 24.6 | 12.3 | 0.0 | 62.7 | 42.7 | 74.0 | 11.3 | 31.3 |

| AV DETECT (RBW: 1MHz, VBW: 10Hz) | | | | | | | | | | | | |
|--|---------------|-------------|------|-------------------------|---------------------|-----------------------|-----------------------------|--------|------|-------------------------|--------|------|
| No. | FREQ [MHz] | S/A READING | | ANT Factor [dB/m] | AMP GAIN [dB] | CABLE LOSS [dB] | Band-Pass Filter [dB] | RESULT | | Limit AV [dBuV/m] | MARGIN | |
| | | HOR | VER | | | | | HOR | VER | | HOR | VER |
| Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss | | | | | | | | | | | | |
| 1 | 2395.8 | 37.5 | 37.0 | 30.5 | 36.4 | 4.6 | 0.0 | 36.2 | 35.7 | 54.0 | 17.8 | 18.3 |
| 2 | 4791.7 | 35.4 | 35.3 | 35.1 | 36.0 | 6.6 | 0.0 | 41.1 | 41.0 | 54.0 | 12.9 | 13.0 |
| 3 | 5301.0 | 37.0 | 37.9 | 36.0 | 35.8 | 6.9 | 0.0 | 44.1 | 45.0 | 54.0 | 9.9 | 9.0 |
| 4 | 5437.9 | 34.4 | 35.6 | 35.9 | 35.8 | 7.0 | 0.0 | 41.5 | 42.7 | 54.0 | 12.5 | 11.3 |
| 5 | 5725.0 | 31.4 | 31.2 | 36.4 | 35.8 | 7.2 | 0.0 | 39.2 | 39.0 | 54.0 | 14.8 | 15.0 |
| 6 | 6217.5 | 35.2 | 34.3 | 36.8 | 35.8 | 7.5 | 0.0 | 43.7 | 42.8 | 54.0 | 10.3 | 11.2 |
| Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac | | | | | | | | | | | | |
| 7 | 11519.8 | 35.7 | 33.1 | 39.0 | 35.8 | 11.5 | 0.2 | 41.1 | 38.5 | 54.0 | 12.9 | 15.5 |
| 8* | 17278.5 | 33.8 | 34.4 | 44.8 | 35.0 | 14.3 | 4.7 | 53.1 | 53.7 | - | - | - |
| 9 | 23038.1 | 31.3 | 32.0 | 40.2 | 34.9 | 16.5 | 0.0 | 43.6 | 44.3 | 54.0 | 10.4 | 9.7 |
| Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac | | | | | | | | | | | | |
| 10 | 28798.5 | 23.3 | 22.6 | 41.3 | 24.3 | 11.3 | 0.0 | 36.0 | 35.3 | 54.0 | 18.0 | 18.7 |
| 11 | 34558.2 | 29.0 | 28.4 | 42.2 | 24.6 | 12.3 | 0.0 | 43.3 | 42.7 | 54.0 | 10.7 | 11.3 |

* Reference data

| 20dBc(Fundamental 5759.7MHz) (RBW: 100kHz, VBW: 300kHz) | | | | | | | | | | | | |
|---|---------------|-------------|-------|-------------------------|---------------------|-----------------------|------------------------------------|--------|-------|----------------------------|--------|------|
| No. | FREQ [MHz] | S/A READING | | ANT Factor [dB/m] | AMP GAIN [dB] | CABLE LOSS [dB] | Band-Pass Filter or ATT [dB] | RESULT | | Limit 20dBc [dBuV/m] | MARGIN | |
| | | HOR | VER | | | | | HOR | VER | | HOR | VER |
| Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss | | | | | | | | | | | | |
| 0 | 5759.7 | 104.7 | 105.8 | 36.4 | 35.8 | 7.2 | 10.0 | 122.5 | 123.6 | - | - | - |
| 8 | 17278.5 | 45.8 | 42.4 | 44.8 | 35.0 | 14.3 | 4.7 | 65.1 | 61.7 | Funda-20dB | 37.4 | 41.9 |

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

Test Distance 0.5m : Distance Factor(Dfac) = 20log(3/0.5) = 15.6dB

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

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

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

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

Radiated Spurious Emission(1GHz-40GHz)
(Tx Mid)

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

| | | | |
|------------|-------------------------------------|---------------|---------------------------------------|
| Company | : Panasonic Communications Co.,Ltd. | REPORT NO | : 26DE0101-HO |
| Equipment | : Cordless Telephone (Handset) | REGULATION | : Fcc Part15 Subpart C 15.247(d) |
| Model | : KX-TGA570 | TEST DISTANCE | : 3m/1m/0.5m |
| Sample No. | : 1 | DATE | : 11/12/2005, 11/15/2005, 11/23/2005, |
| Power | : DC2.4V | TEMPERATURE | : 23deg.C., 25deg.C, 20deg.C, |
| Mode | : Tx 5798.05084MHz | HUMIDITY | : 50%, 38% 34% |
| Remarks | : Hor : Y-axis / Ver : Z-axis | ENGINEER | : Takumi Shimada |

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

| No. | FREQ [MHz] | S/A READING | | ANT Factor [dB/m] | AMP GAIN [dB] | CABLE LOSS [dB] | Band-Pass Filter [dB] | RESULT | | Limit PK [dBuV/m] | MARGIN | |
|---|---------------|-------------|------|-------------------------|---------------------|-----------------------|-----------------------------|--------|------|-------------------------|--------|------|
| | | HOR | VER | | | | | HOR | VER | | HOR | VER |
| Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss | | | | | | | | | | | | |
| 1 | 2434.0 | 57.7 | 53.4 | 30.5 | 36.4 | 4.5 | 0.0 | 56.3 | 52.0 | 74.0 | 17.7 | 22.0 |
| 2 | 4868.1 | 53.8 | 55.3 | 35.5 | 36.0 | 6.6 | 0.0 | 59.9 | 61.4 | 74.0 | 14.1 | 12.6 |
| 3 | 5224.2 | 58.6 | 60.7 | 36.1 | 35.9 | 6.9 | 0.0 | 65.7 | 67.8 | 74.0 | 8.3 | 6.2 |
| 4 | 6370.7 | 53.5 | 53.9 | 36.6 | 35.8 | 7.6 | 0.0 | 61.9 | 62.3 | 74.0 | 12.1 | 11.7 |
| 5 | 6728.3 | 49.4 | 49.8 | 36.9 | 35.9 | 7.8 | 0.0 | 58.2 | 58.6 | 74.0 | 15.8 | 15.4 |
| Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac | | | | | | | | | | | | |
| 6 | 11595.7 | 55.9 | 53.4 | 39.4 | 35.9 | 11.7 | 0.2 | 61.8 | 59.3 | 74.0 | 12.2 | 14.7 |
| 7* | 17393.7 | 50.5 | 46.7 | 44.6 | 35.1 | 14.4 | 5.5 | 70.4 | 66.6 | - | - | - |
| 8 | 23038.1 | 50.2 | 48.1 | 40.2 | 34.9 | 16.5 | 0.0 | 62.5 | 60.4 | 74.0 | 11.5 | 13.6 |
| Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac | | | | | | | | | | | | |
| 9 | 28990.3 | 38.9 | 37.5 | 41.3 | 24.4 | 11.4 | 0.0 | 51.6 | 50.2 | 74.0 | 22.4 | 23.8 |
| 10 | 34788.3 | 48.4 | 41.0 | 42.1 | 24.5 | 12.4 | 0.0 | 62.8 | 55.4 | 74.0 | 11.2 | 18.6 |

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

| No. | FREQ [MHz] | S/A READING | | ANT Factor [dB/m] | AMP GAIN [dB] | CABLE LOSS [dB] | Band-Pass Filter [dB] | RESULT | | Limit AV [dBuV/m] | MARGIN | |
|---|---------------|-------------|------|-------------------------|---------------------|-----------------------|-----------------------------|--------|------|-------------------------|--------|------|
| | | HOR | VER | | | | | HOR | VER | | HOR | VER |
| Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss | | | | | | | | | | | | |
| 1 | 2434.0 | 40.5 | 36.6 | 30.5 | 36.4 | 4.5 | 0.0 | 39.1 | 35.2 | 54.0 | 14.9 | 18.8 |
| 2 | 4868.1 | 36.7 | 36.0 | 35.5 | 36.0 | 6.6 | 0.0 | 42.8 | 42.1 | 54.0 | 11.2 | 11.9 |
| 3 | 5224.2 | 36.4 | 36.7 | 36.1 | 35.9 | 6.9 | 0.0 | 43.5 | 43.8 | 54.0 | 10.5 | 10.2 |
| 4 | 6370.7 | 34.1 | 34.4 | 36.6 | 35.8 | 7.6 | 0.0 | 42.5 | 42.8 | 54.0 | 11.5 | 11.2 |
| 5 | 6728.3 | 34.7 | 34.8 | 36.9 | 35.9 | 7.8 | 0.0 | 43.5 | 43.6 | 54.0 | 10.5 | 10.4 |
| Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac | | | | | | | | | | | | |
| 6 | 11595.7 | 34.5 | 33.7 | 39.4 | 35.9 | 11.7 | 0.2 | 40.4 | 39.6 | 54.0 | 13.6 | 14.4 |
| 7* | 17393.7 | 33.3 | 32.4 | 44.6 | 35.1 | 14.4 | 5.5 | 53.2 | 52.3 | - | - | - |
| 8 | 23038.1 | 31.3 | 32.0 | 40.2 | 34.9 | 16.5 | 0.0 | 43.6 | 44.3 | 54.0 | 10.4 | 9.7 |
| Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac | | | | | | | | | | | | |
| 9 | 28990.3 | 22.0 | 22.0 | 41.3 | 24.4 | 11.4 | 0.0 | 34.7 | 34.7 | 54.0 | 19.3 | 19.3 |
| 10 | 34788.3 | 29.3 | 27.4 | 42.1 | 24.5 | 12.4 | 0.0 | 43.7 | 41.8 | 54.0 | 10.3 | 12.2 |

* Reference data

20dBc(Fundamental 5798.1MHz) (RBW: 100kHz, VBW: 300kHz)

| No. | FREQ [MHz] | S/A READING | | ANT Factor [dB/m] | AMP GAIN [dB] | CABLE LOSS [dB] | Band-Pass Filter or ATT [dB] | RESULT | | Limit 20dBc [dBuV/m] | MARGIN | |
|--|---------------|-------------|-------|-------------------------|---------------------|-----------------------|------------------------------------|--------|-------|----------------------------|--------|------|
| | | HOR | VER | | | | | HOR | VER | | HOR | VER |
| Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss | | | | | | | | | | | | |
| 0 | 5798.1 | 103.8 | 103.6 | 36.5 | 35.8 | 7.3 | 10.0 | 121.8 | 121.6 | - | - | - |
| 7 | 17393.7 | 48.1 | 39.1 | 44.6 | 35.1 | 14.4 | 5.5 | 68.0 | 59.0 | Funda-20dB | 33.8 | 42.6 |

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

Test Distance 0.5m : Distance Factor(Dfac) = 20log(3/0.5) = 15.6dB

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

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

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

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

Radiated Spurious Emission(1GHz-40GHz)
(Tx High)

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

Company : Panasonic Communications Co.,Ltd. REPORT NO : 26DE0101-HO
Equipment : Cordless Telephone (Handset) REGULATION : Fcc Part15 Subpart C 15.247(d)
Model : KX-TGA570 TEST DISTANCE : 3m/1m/0.5m
Sample No. : 1 DATE : 11/12/2005, 11/15/2005, 11/23/2005,
Power : DC2.4V TEMPERATURE : 23deg.C., 25deg.C., 20deg.C,
Mode : Tx 5838.18697MHz HUMIDITY : 50%, 38% 34%
Remarks : Hor : Y-axis / Ver : Z-axis ENGINEER : Takumi Shimada

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

| No. | FREQ [MHz] | S/A READING | | ANT Factor [dB/m] | AMP GAIN [dB] | CABLE LOSS [dB] | Band-Pass Filter [dB] | RESULT | | Limit PK [dBuV/m] | MARGIN | |
|--|---------------|-------------|------|-------------------------|---------------------|-----------------------|-----------------------------|--------|------|-------------------------|--------|------|
| | | HOR | VER | | | | | HOR | VER | | HOR | VER |
| Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss | | | | | | | | | | | | |
| 1 | 2473.8 | 58.0 | 54.4 | 30.5 | 36.4 | 4.6 | 0.0 | 56.7 | 53.1 | 74.0 | 17.3 | 20.9 |
| 2 | 4947.6 | 59.3 | 61.4 | 36.0 | 35.9 | 6.7 | 0.0 | 66.1 | 68.2 | 74.0 | 7.9 | 5.8 |
| 3 | 5144.0 | 56.5 | 56.6 | 36.2 | 35.9 | 6.8 | 0.0 | 63.6 | 63.7 | 74.0 | 10.4 | 10.3 |
| 4 | 5640.8 | 56.1 | 53.3 | 36.1 | 35.8 | 7.1 | 0.0 | 63.5 | 60.7 | 74.0 | 10.5 | 13.3 |
| 5 | 5852.0 | 54.4 | 53.8 | 36.7 | 35.8 | 7.3 | 0.0 | 62.6 | 62.0 | 74.0 | 11.4 | 12.0 |
| 6 | 6033.9 | 55.6 | 55.4 | 37.0 | 35.8 | 7.4 | 0.0 | 64.2 | 64.0 | 74.0 | 9.8 | 10.0 |
| 7 | 6728.3 | 53.4 | 51.6 | 36.9 | 35.9 | 7.8 | 0.0 | 62.2 | 60.4 | 74.0 | 11.8 | 13.6 |
| Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac | | | | | | | | | | | | |
| 8 | 11676.0 | 53.6 | 53.1 | 39.9 | 35.9 | 11.7 | 0.3 | 60.1 | 59.6 | 74.0 | 13.9 | 14.4 |
| 9* | 17514.0 | 51.3 | 45.7 | 44.4 | 35.1 | 14.5 | 6.2 | 71.8 | 66.2 | - | - | - |
| 10 | 23351.5 | 44.3 | 48.1 | 40.5 | 34.7 | 16.9 | 0.0 | 57.5 | 61.3 | 74.0 | 16.5 | 12.7 |
| Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac | | | | | | | | | | | | |
| 11 | 29190.9 | 39.5 | 39.5 | 41.3 | 24.4 | 11.4 | 0.0 | 52.2 | 52.2 | 74.0 | 21.8 | 21.8 |
| 12 | 35029.1 | 47.8 | 41.2 | 42.1 | 24.4 | 12.5 | 0.0 | 62.4 | 55.8 | 74.0 | 11.6 | 18.2 |

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

| No. | FREQ [MHz] | S/A READING | | ANT Factor [dB/m] | AMP GAIN [dB] | CABLE LOSS [dB] | Band-Pass Filter [dB] | RESULT | | Limit AV [dBuV/m] | MARGIN | |
|--|---------------|-------------|------|-------------------------|---------------------|-----------------------|-----------------------------|--------|------|-------------------------|--------|------|
| | | HOR | VER | | | | | HOR | VER | | HOR | VER |
| Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss | | | | | | | | | | | | |
| 1 | 2473.8 | 39.1 | 36.1 | 30.5 | 36.4 | 4.6 | 0.0 | 37.8 | 34.8 | 54.0 | 16.2 | 19.2 |
| 2 | 4947.6 | 36.5 | 35.8 | 36.0 | 35.9 | 6.7 | 0.0 | 43.3 | 42.6 | 54.0 | 10.7 | 11.4 |
| 3 | 5144.0 | 36.7 | 34.8 | 36.2 | 35.9 | 6.8 | 0.0 | 43.8 | 41.9 | 54.0 | 10.2 | 12.1 |
| 4 | 5640.8 | 35.6 | 32.2 | 36.1 | 35.8 | 7.1 | 0.0 | 43.0 | 39.6 | 54.0 | 11.0 | 14.4 |
| 5 | 5852.0 | 35.0 | 33.7 | 36.7 | 35.8 | 7.3 | 0.0 | 43.2 | 41.9 | 54.0 | 10.8 | 12.1 |
| 6 | 6033.9 | 34.4 | 33.2 | 37.0 | 35.8 | 7.4 | 0.0 | 43.0 | 41.8 | 54.0 | 11.0 | 12.2 |
| 7 | 6728.3 | 35.5 | 34.4 | 36.9 | 35.9 | 7.8 | 0.0 | 44.3 | 43.2 | 54.0 | 9.7 | 10.8 |
| Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac | | | | | | | | | | | | |
| 8 | 11676.0 | 33.9 | 33.8 | 39.9 | 35.9 | 11.7 | 0.3 | 40.4 | 40.3 | 54.0 | 13.6 | 13.7 |
| 9* | 17514.0 | 33.5 | 33.4 | 44.4 | 35.1 | 14.5 | 6.2 | 54.0 | 53.9 | - | - | - |
| 10 | 23351.5 | 31.6 | 32.2 | 40.5 | 34.7 | 16.9 | 0.0 | 44.8 | 45.4 | 54.0 | 9.2 | 8.6 |
| Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac | | | | | | | | | | | | |
| 11 | 29190.9 | 22.1 | 21.3 | 41.3 | 24.4 | 11.4 | 0.0 | 34.8 | 34.0 | 54.0 | 19.2 | 20.0 |
| 12 | 35029.1 | 29.5 | 28.2 | 42.1 | 24.4 | 12.5 | 0.0 | 44.1 | 42.8 | 54.0 | 9.9 | 11.2 |

* Reference data

20dBc(Fundamental 5838.2MHz) (RBW: 100kHz, VBW: 300kHz)

| No. | FREQ [MHz] | S/A READING | | ANT Factor [dB/m] | AMP GAIN [dB] | CABLE LOSS [dB] | Band-Pass Filter or ATT [dB] | RESULT | | Limit 20dBc [dBuV/m] | MARGIN | |
|---|---------------|-------------|-------|-------------------------|---------------------|-----------------------|------------------------------------|--------|-------|----------------------------|--------|------|
| | | HOR | VER | | | | | HOR | VER | | HOR | VER |
| Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss | | | | | | | | | | | | |
| 0 | 5838.2 | 103.9 | 105.0 | 36.6 | 35.8 | 7.3 | 10.0 | 122.0 | 123.1 | - | - | - |
| 9 | 17514.0 | 48.1 | 40.0 | 44.4 | 35.1 | 14.5 | 6.2 | 68.6 | 60.5 | Funda-20dB | 33.4 | 42.6 |

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

Test Distance 0.5m : Distance Factor(Dfac) = 20log(3/0.5) = 15.6dB

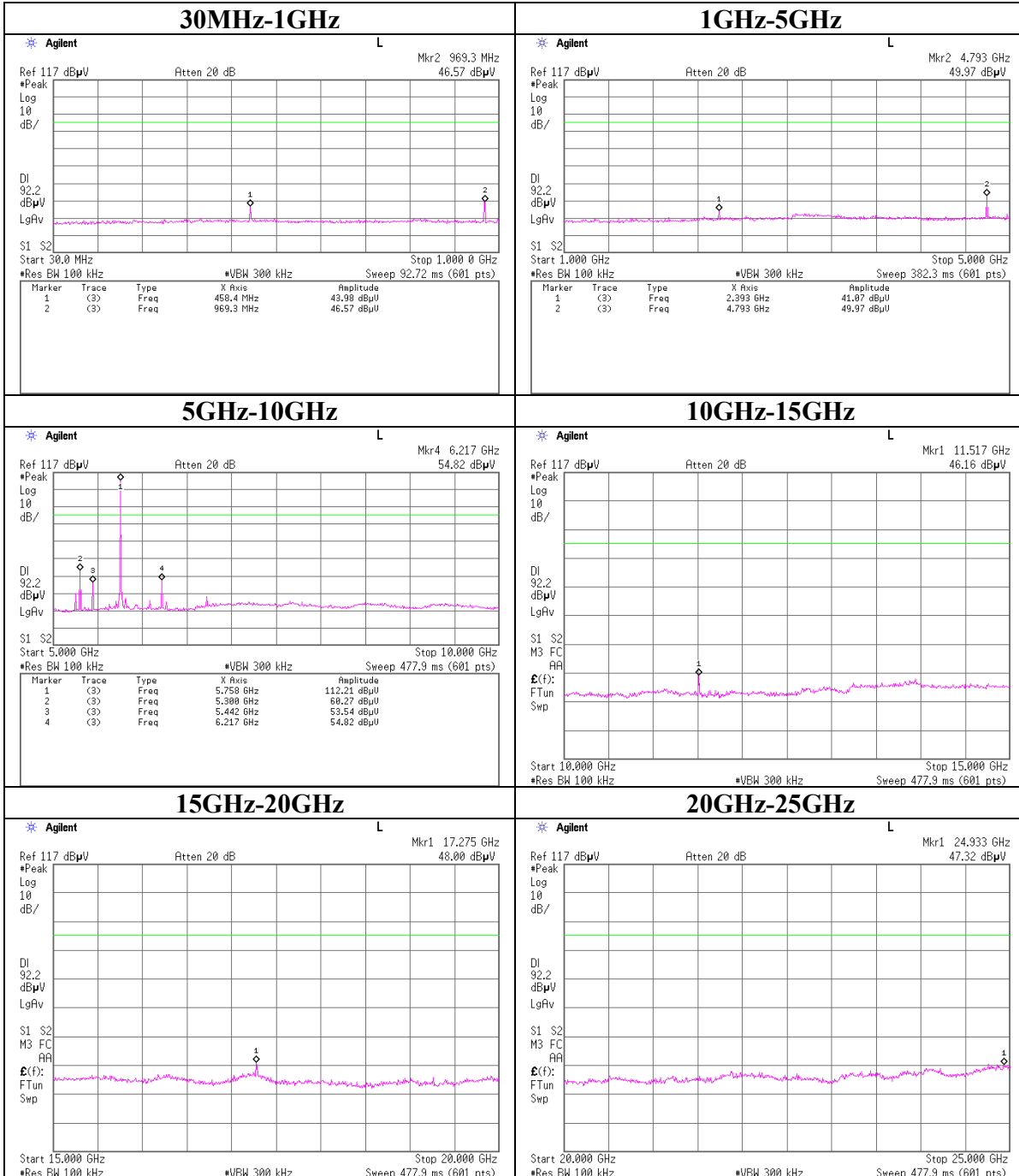
*Except for the above table : All other spurious emissions were less than 20dB for the limit.

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

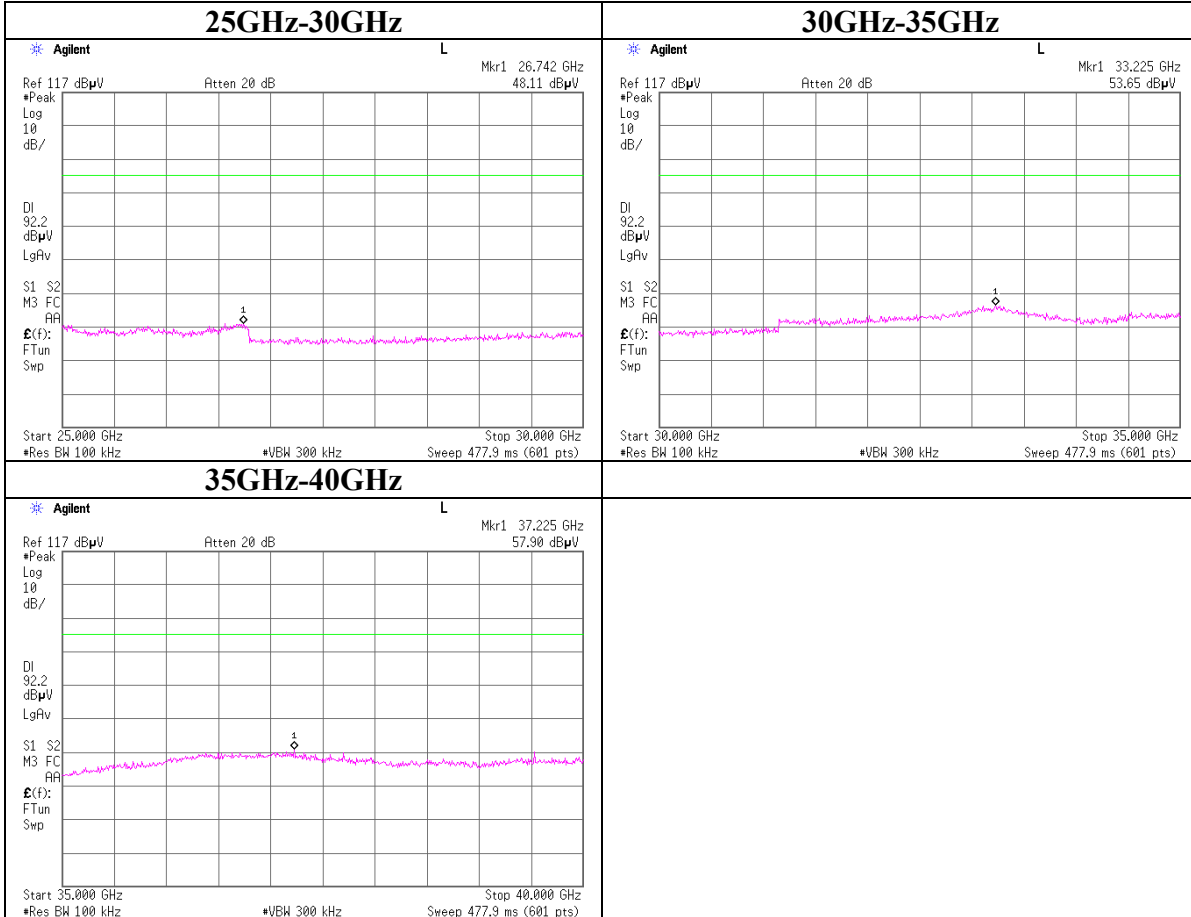
*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

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

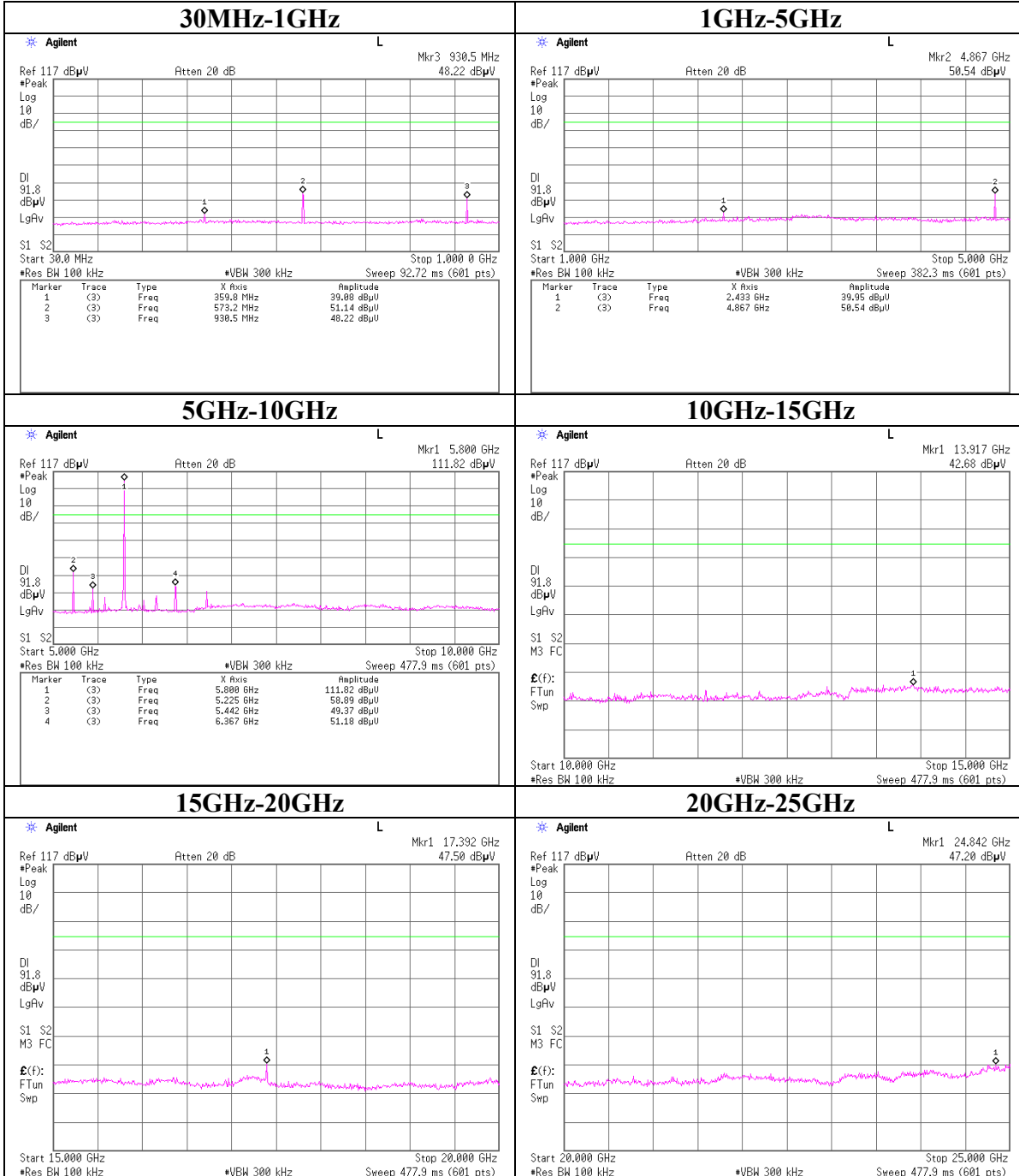
Conducted Spurious Emission
Ch:Low



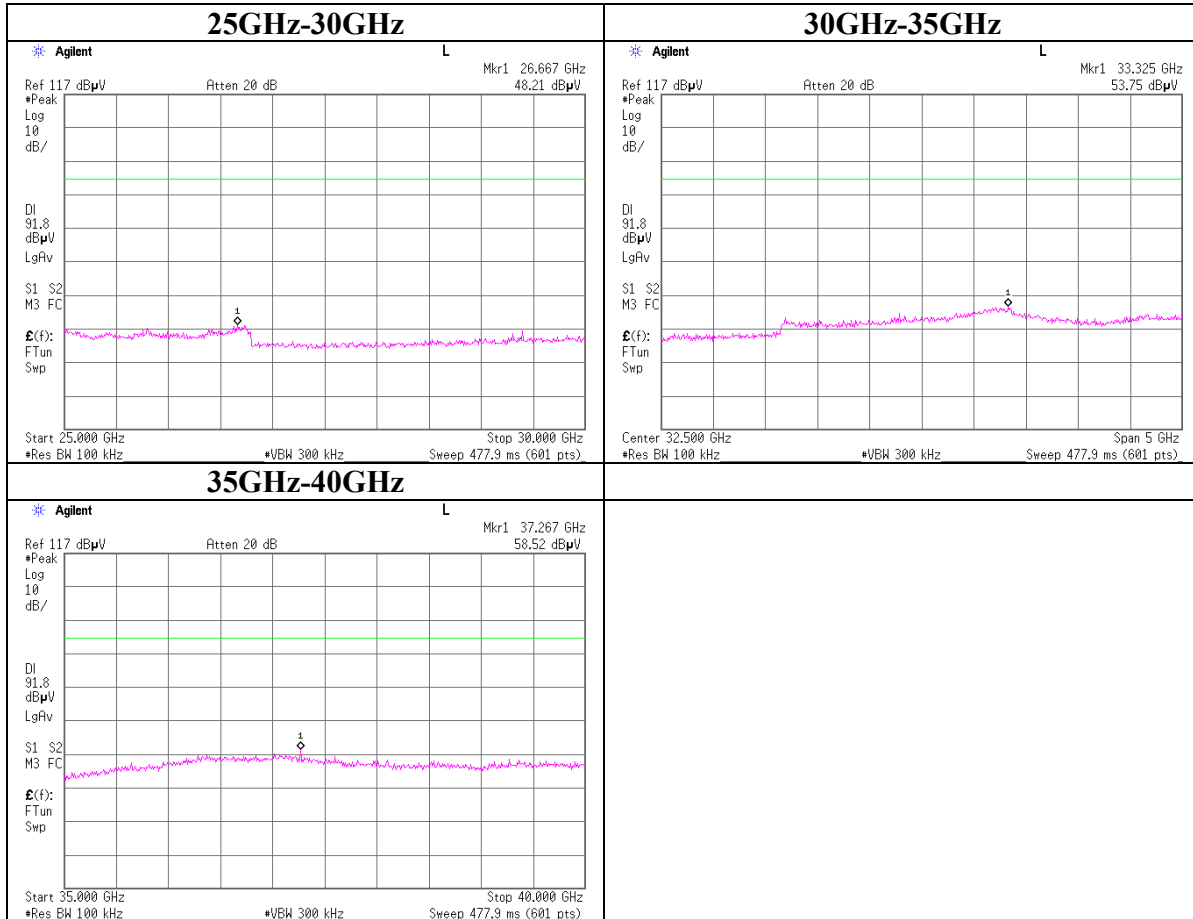
Conducted Spurious Emission
Ch:Low



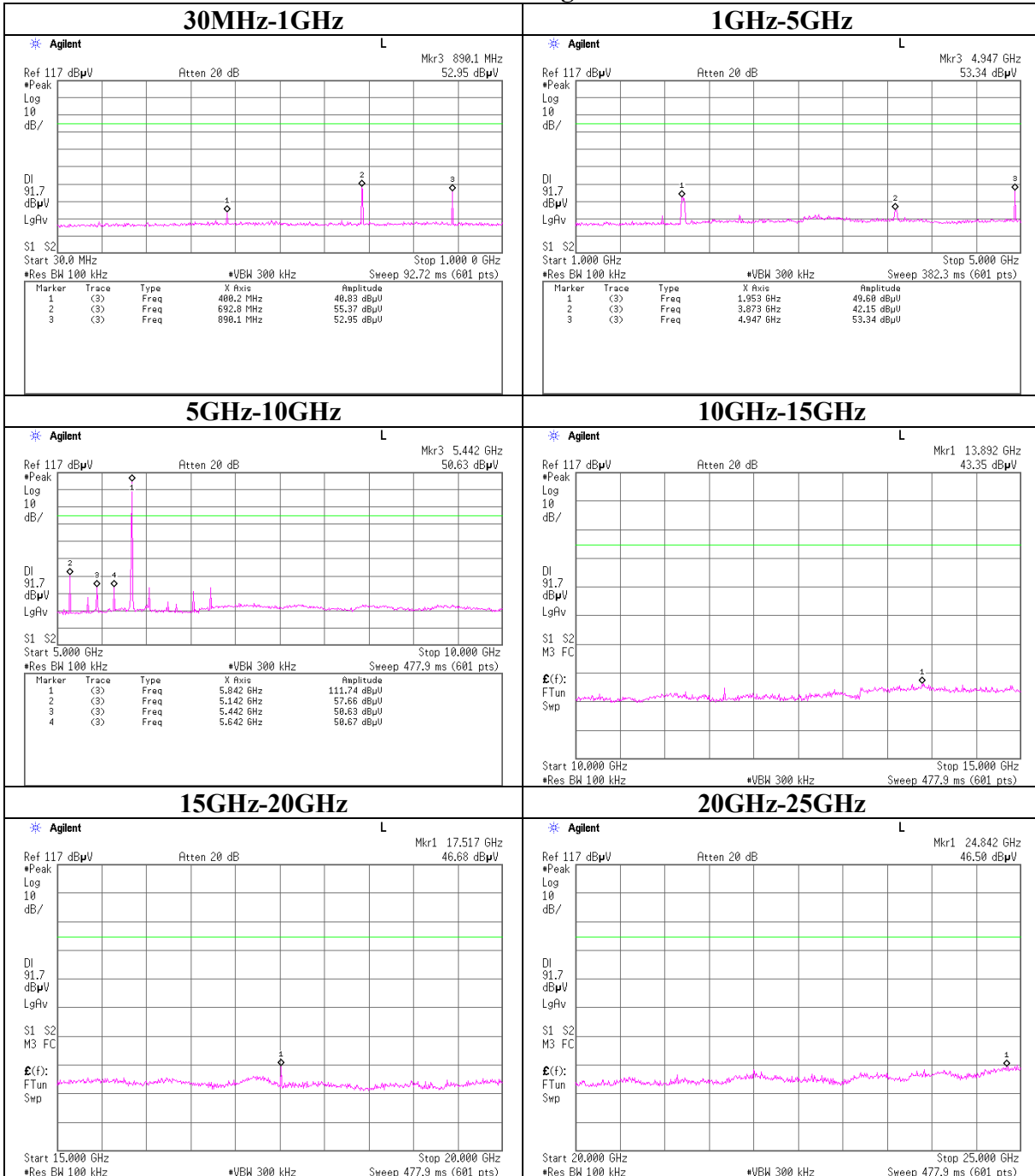
Conducted Spurious Emission
Ch:Mid



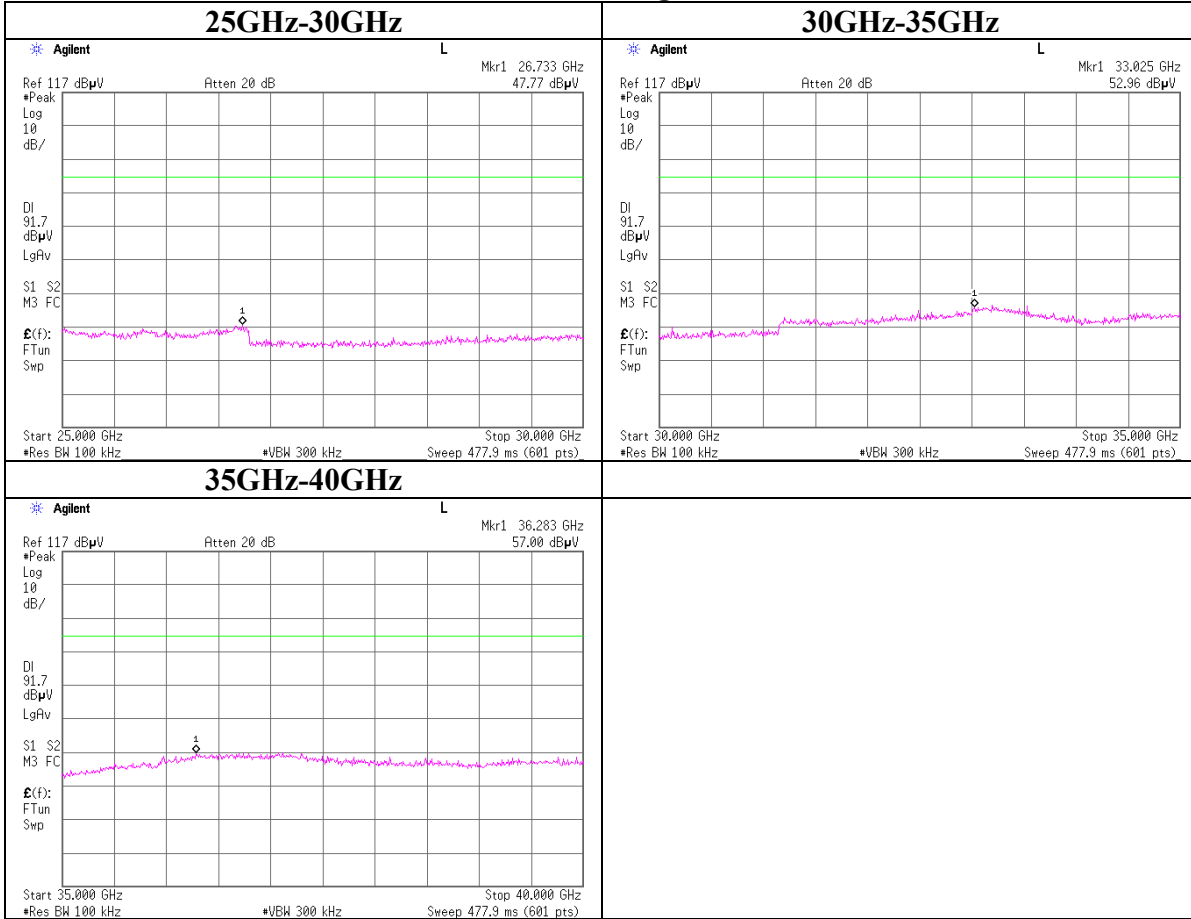
Conducted Spurious Emission
Ch:Mid



Conducted Spurious Emission
Ch:High



Conducted Spurious Emission
Ch:High



Conducted Spurious Emission
Band Edge compliance

