



UL Apex Co., Ltd.

Test report No. : 26GE0280-HO-1
Page : 1 of 44
Issued date : April 10, 2006
FCC ID : APYHRO00048

RADIO TEST REPORT

Test Report No.: 26GE0280-HO-1

Applicant : Sharp Corporation
Type of Equipment : WCDMA & Tri-band (900/1800/1900)
GSM Dual mode Mobile Phone / Bluetooth enable
Model No. : 705SH
FCC ID : APYHRO00048
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. We hereby certify that the data contain a true representation of the EMC profile.
4. The test results in this report are traceable to the national or international standards.

Date of test:

March 28 to April 2, 2006

Tested by:

Mitsuru Fujimura
EMC Services

Norihisa Hashimoto
EMC Services

Kenichi Adachi
EMC Services

Approved by:

Hironobu Shimaji
Group Leader of
EMC Services

UL Apex Co., Ltd.

Head Office EMC Lab.

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SECTION 1: Client information

Company Name : Sharp Corporation
Address : 2-13-1 Iida Hachihonmatsu HigashiHiroshima-City,
 Hiroshima-pref. Japan
Telephone Number : +81- 082-420-1592
Facsimile Number : +81- 082-420-1852
Contact Person : Keichou Arima

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

2.1 Identification of E.U.T.

Type of Equipment : WCDMA & Tri-band (900/1800/1900)
 GSM Dual mode Mobile Phone / Bluetooth enable
Model No. : 705SH
Serial No. : 004401/11/013025/5 for CE and RE tests
 004401/11/013044/6 for AT test
Rating : AC120V, DC4.0V(AC Adapter output)
Country of Manufacture : Japan
Receipt Date of Sample : March 28, 2006
Condition of EUT : Production prototype
(Not for Sale: This sample is equivalent to mass-produced items.)

2.2 Product Description

705SH(referred to as the EUT in this report) is Tri-Band GSM &WCDMA Mobile Cellular Phone.
The EUT has the function that Bluetooth wireless technology interface for establishing contact and transmitting data with certain devices.

Clock frequency(ies) in the system : CPU:13MHz, RTC:32.768KHz
Equipment Type : Transceiver
Frequency of Operation : 2402-2480MHz
Bandwidth & Channel spacing : 79MHz & 1MHz
Modulation : FHSS
ITU code : F1D (for Bluetooth part)
 F1E/F1W
Power Supply (inner) : DC2.9V
Antenna Type : Internal antenna
Antenna Gain : 0 dBi

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SECTION 3: Test specification, procedures & results

3.1 Test Specification

Test Specification : FCC Part15 Subpart C: 2006

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

FCC 15.31 (e)

The stable voltage (DC4.0V) is provided to the EUT and it is converted to DC2.9V and then constantly supplied to RF module part. 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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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	23.3dB 0.38820MHz, AV, N	Complied
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	[Tx] 6.1dB 2483.5MHz, Hor, AV Ch: High [Rx] 7.5dB 33.599MHz, Ver, QP	Complied

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

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

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

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

3.3 Addition to standards

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst margin	Results
1	99% Occupied Band Width	IC: RSS-Gen 4.4.1	IC: RSS-Gen 4.4.1	Conducted	N/A	N/A	N/A

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3.4 Uncertainty

Conducted Emission

The measurement uncertainty (with a 95% confidence level) for this test is $\pm 2.6\text{dB}$.
The data listed in this test report has enough margin, more than the site margin.

Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test using Biconical antenna is $\pm 4.59\text{dB}(3\text{m})/\pm 4.58\text{dB}(10\text{m})$.

The measurement uncertainty (with a 95% confidence level) for this test using Logperiodic antenna is $\pm 4.62\text{dB}(3\text{m})/\pm 4.60\text{dB}(10\text{m})$.

The measurement uncertainty (with a 95% confidence level) for this test using Horn antenna is $\pm 5.27\text{dB}$.
The data listed in this test report has enough margin, more than the site margin.

Other test except Conducted Emission and Spurious Emission (Radiated)

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

3.5 Test Location

UL Apex Co., Ltd. Head Office EMC Lab. *NVLAP Lab. code: 200572-0

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	FCC Registration Number	IC Registration Number	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Other rooms
No.1 semi-anechoic chamber	313583	IC4247A	19.2 x 11.2 x 7.7m	7.0 x 6.0m	Preparation room
No.2 semi-anechoic chamber	846015	IC4247A-2	7.5 x 5.8 x 5.2m	4.0 x 4.0m	-
No.3 measurement room	-	-	4.0 x 6.0 x 2.7m	N/A	-
No.4 measurement 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 preparation 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 and No.2 semi-anechoic and No.7 shielded room.

3.6 Test set up, Test instruments and Data of EMI

Refer to APPENDIX 1 to 3.

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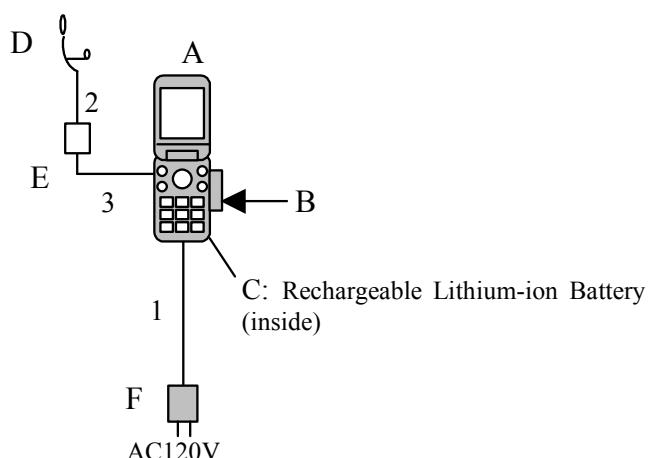
SECTION 4: Operation of E.U.T. during testing

4.1 Operating Modes

The mode used for test : Transmitting mode(Packet size DH5, Data packet: PRBS9)

- Low Channel : 2402MHz
 - Mid Channel : 2441MHz
 - High Channel : 2480MHz
- Receiving mode
- Mid Channel : 2441MHz
- Inquiry

4.2 Configuration and peripherals



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

Description of EUT and support equipment

No.	Item	Model number	Serial number	Manufacturer	Remarks
A	WCDMA & Tri-band (900/1800/1900) GSM Dual mode Mobile Phone / Bluetooth enable	705SH	004401/11/013025/5 *1) 004401/11/013044/6 *2)	Sharp Corporation	EUT
B	MicroSD Memory Card	SDSDQ-128	-	SanDisk	EUT
C	Lithium-ion Battery	SHBAL1	-	Sharp Corporation	EUT
D	Stereo Headset	XN-1HS90	-	Sharp Corporation	EUT
E	Handsfree Microphone Unit	XN-1HU90	-	Sharp Corporation	EUT
F	AC Adapter	SHCAA1	PAA	Sharp Corporation	EUT

*1) Used for Conducted and Radiated Spurious emission tests

*2) Used for Antenna Terminal Conducted test

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List of cables used

No.	Name	Length (m)	Shield
1	DC Cable	1.5	N
2	Stereo Headset Cable	0.9	N
3	Handsfree Microphone Unit	0.75	N

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SECTION 5: Conducted Emission

Test Procedure and conditions

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

For the tests on EUT itself (as a stand alone equipment)

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

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

The EUT was connected to a LISN (AMN).

An overview sweep with peak detection has been performed.

Detector : CISPR quasi-peak and average detector (IF BW 9 kHz)
Measurement range : 0.15-30MHz
Test data : APPENDIX 3
Test result : Pass

Date: April 2, 2006

Test engineer: Mitsuru Fujimura

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SECTION 6: Spurious Emission

[Conducted]

Test Procedure

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

Test data : APPENDIX 3

Test result : Pass

[Radiated]

Test Procedure

EUT was placed on a 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 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.

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

- 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

Date: March 31 and April 1, 2006

Test engineer: Kenichi Adachi

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SECTION 7: Bandwidth

Test Procedure

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

Test data : APPENDIX 3
Test result : Pass

SECTION 8: 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 9: 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 10: Number of Hopping Frequency

Test Procedure

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

Test data : APPENDIX 3
Test result : Pass

SECTION 11: Dwell time

Test Procedure

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

Test data : APPENDIX 3
Test result : Pass

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APPENDIX 1: Photographs of test setup

Conducted Emission

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Spurious Emission (Radiated)

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

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APPENDIX 2:Test instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MSA-04	Spectrum Analyzer	Agilent	E4448A	AT	2006/02/11 * 12
MAT-23	Attenuator(10dB)(above1GHz)	Orient Microwave	BX10-0476-00	AT	2006/03/18 * 12
MCC-05	Microwave Cable 1G-50GHz	Storm	421-011 (90- 1394-079)	AT	2006/01/04 * 12
MAEC-02	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE/CE	2005/04/11 * 12
MRENT-26	Spectrum Analyzer	Advantest	R3273	RE/CE	2006/02/15 * 12
MCC-16	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX 104	RE	2006/02/02 * 12
MPA-10	Pre Amplifier	Agilent	8449B	RE	2005/09/07 * 12
MCC-47	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	RE	2005/08/30 * 12
MHA-06	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2006/01/09 * 12
MHA-02	Horn Antenna	EMCO	3160-09	RE	2006/01/09 * 12
MTR-03	Test Receiver	Rohde & Schwarz	ESCI	RE	2006/03/04 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	RE	2006/02/23 * 12
MPA-09	Pre Amplifier	Agilent	8447D	RE	2005/09/07 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	RE	2005/12/16 * 12
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	RE	2005/10/10 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2005/10/14 * 12
MOS-02	Digital Humidity Indicator	N.T	NT-1800	RE/CE	2004/11/25 * 24
MCC-13	Coaxial Cable	Fujikura/Agilent	-	CE	2006/02/23 * 12
ML3-07	LISN(AMN)	Schwarzbeck	NSLK8127	CE	2006/02/06 * 12

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

Test Item:

CE: Conducted Emission

RE: Radiated Emission

AT: Antenna Terminal Conducted test

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APPENDIX 3: Data of EMI test

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/04/02 11:43:23

Company : Sharp Corporation Report No. : 26GE0280-HO
Kind of EUT : GSM & WCDMA Cellular Phone Power : DC 4.0V (AC adapter: AC120V/60Hz)
Model No. : 70SSH Temp. / Humi. : 21deg. C / 38%
Serial No. : 004401/11/013025/5 Operator : Mitsuru Fujimura

Mode / Remarks : Bluetooth Tx 2402MHz

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

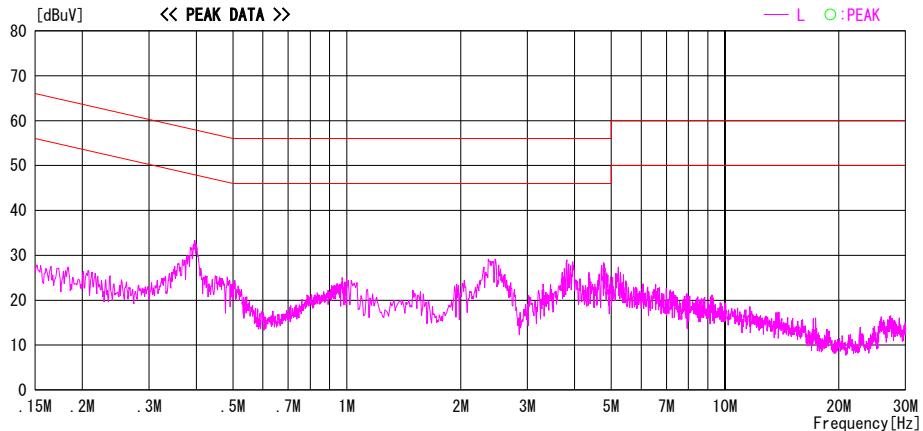
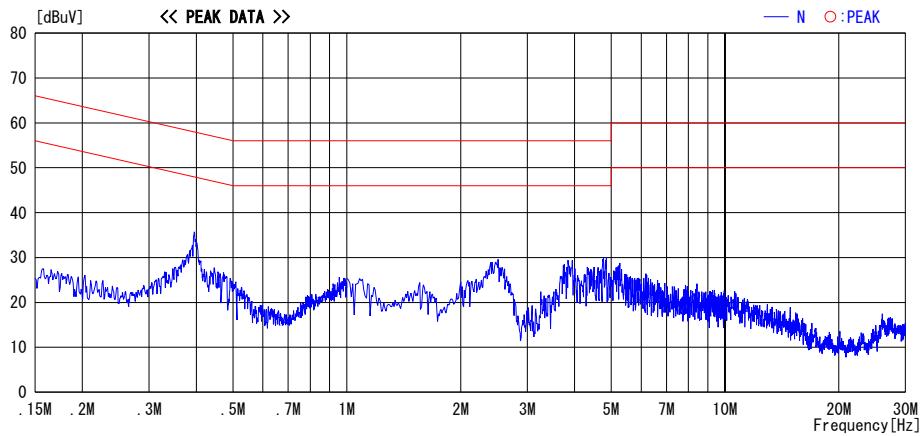


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C. F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

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Conducted Emission

DATA OF CONDUCTED EMISSION TEST

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

Date : 2006/04/02 13:01:06

Company	:	Sharp Corporation	Report No.	:	26GE0280-HO
Kind of EUT	:	GSM & WCDMA Cellular Phone	Power	:	DC 4.0V (AC adapter:AC120V/60Hz)
Model No.	:	705SH	Temp./Hum.	:	21deg.C / 38%
Serial No.	:	004401/11/013025/5	Operator	:	Mitsuru Fujimura

Mode / Remarks : Bluetooth Tx 2441MHz

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

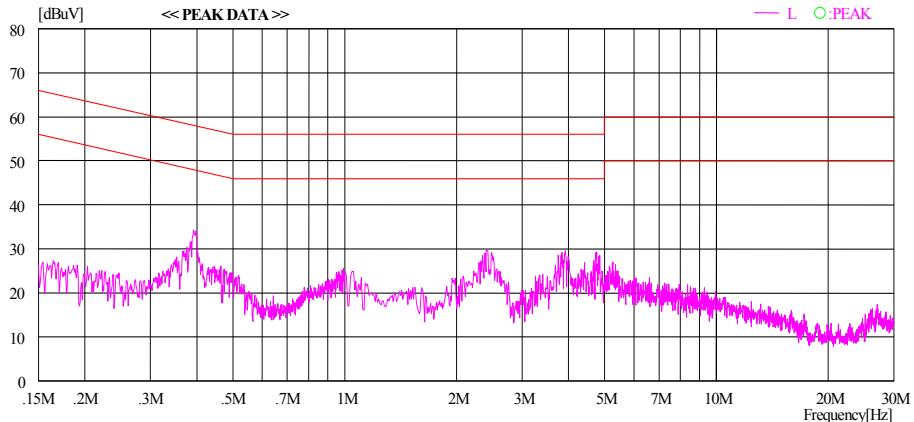
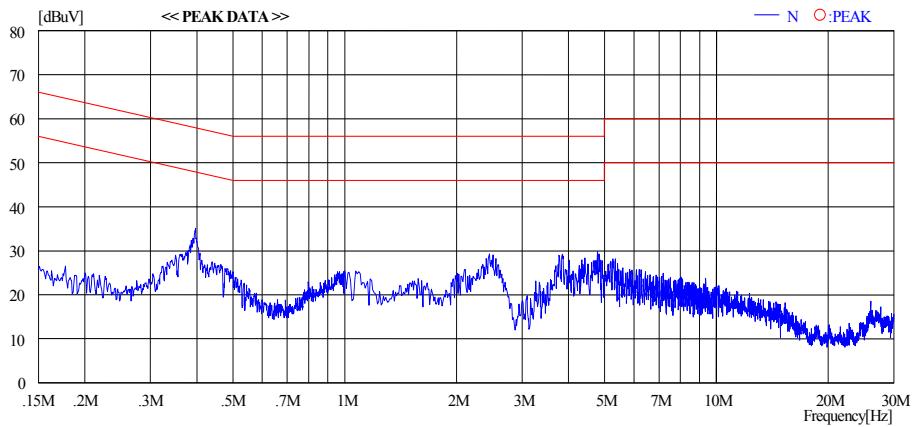


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

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Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/04/02 13:13:03

Company	:	Sharp Corporation	Report No.	:	26GE0280-HO
Kind of EUT	:	GSM & WCDMA Cellular Phone	Power	:	DC 4.0V (AC adapter:AC120V/60Hz)
Model No.	:	705SH	Temp./Humi.	:	21deg.C / 38%
Serial No.	:	004401/11/013025/5	Operator	:	Mitsuru Fujimura

Mode / Remarks : Bluetooth Tx 2480MHz

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

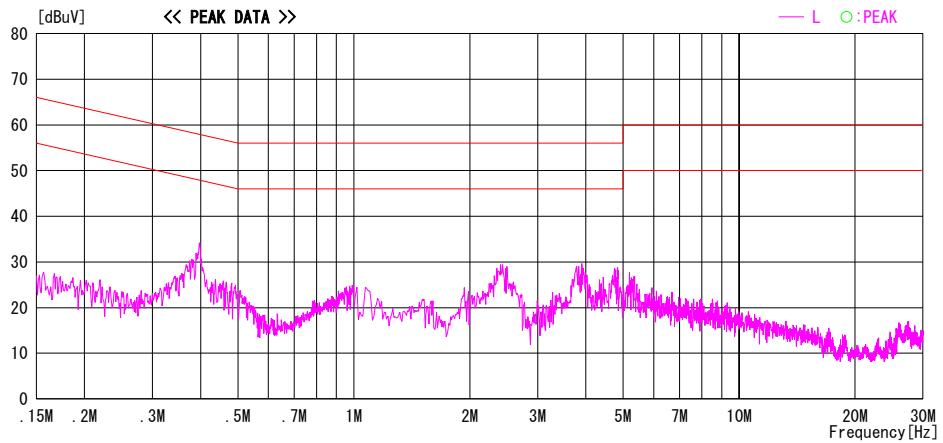
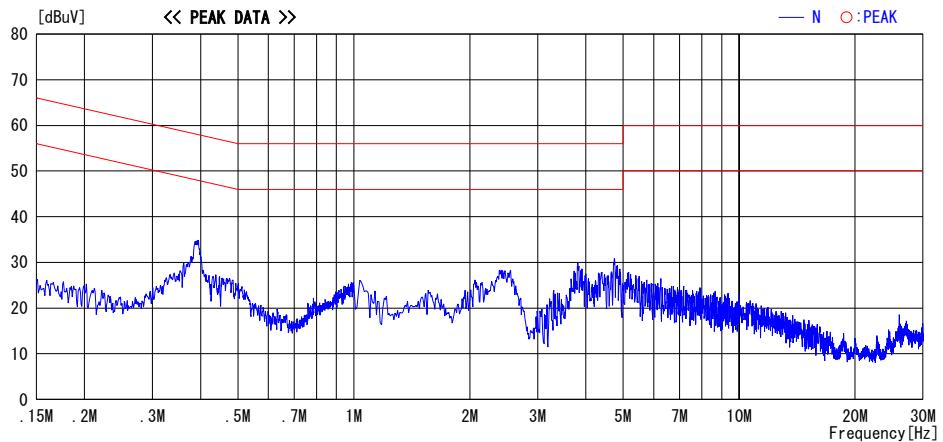


CHART:WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

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Conducted Emission

DATA OF CONDUCTED EMISSION TEST

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

Date : 2006/04/02 14:28:20

Company : Sharp Corporation	Report No. : 26GE0280-HO
Kind of EUT : GSM & WCDMA Cellular Phone	Power : DC 4.0V (AC adapter: AC120V/60Hz)
Model No. : 705SH	Temp. / Humi. : 21deg. C / 38%
Serial No. : 004401/11/013025/5	Operator : Mitsuru Fujimura

Mode / Remarks : Bluetooth Rx 2441MHz

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

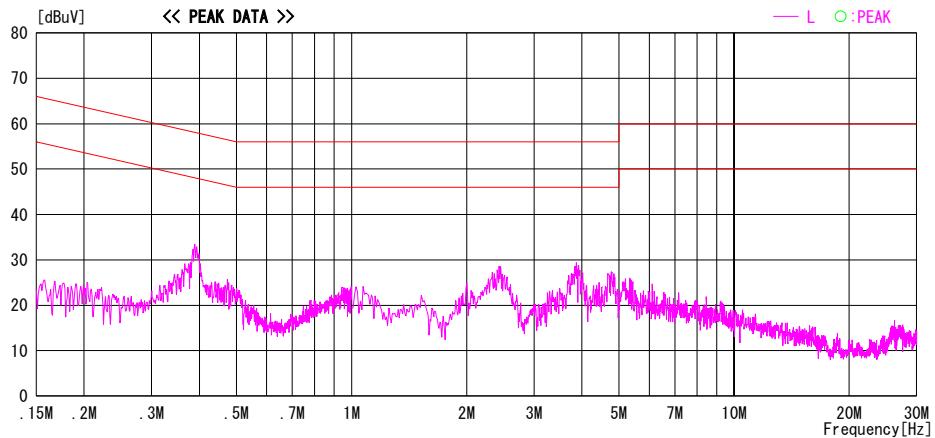
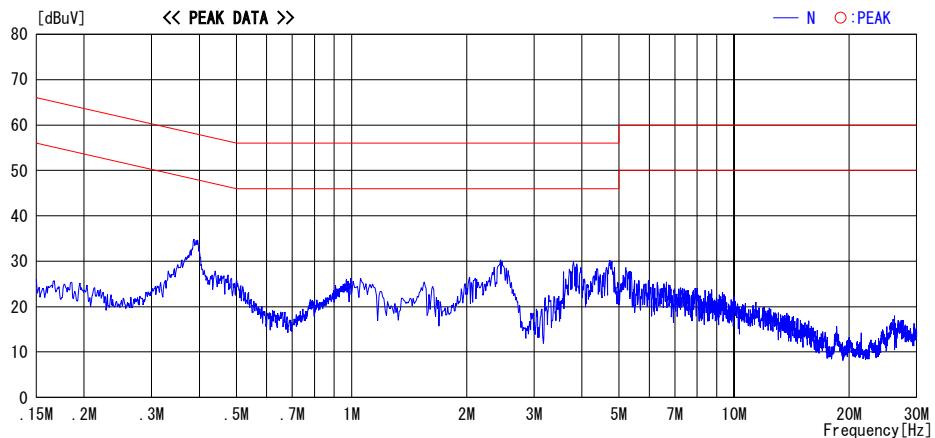


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C. F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

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Head Office EMC Lab.

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

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MF060b(01.06.05)

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

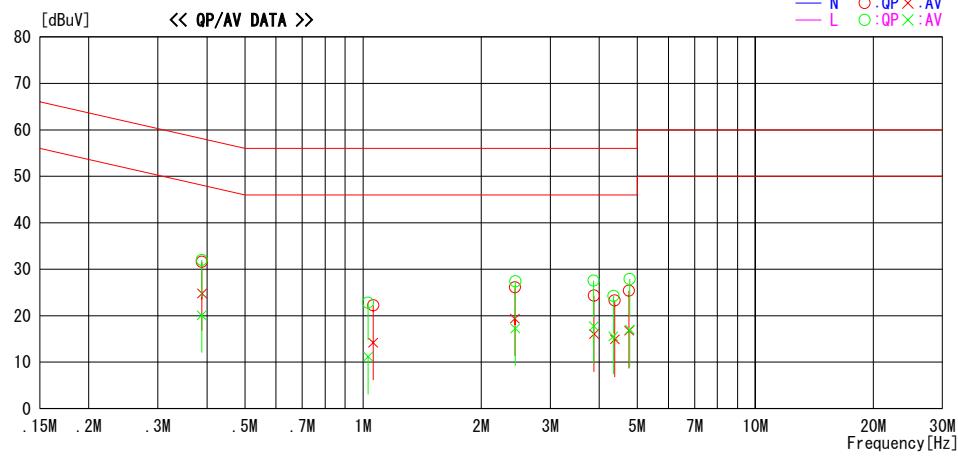
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/04/02 13:13:03

Company : Sharp Corporation
 Kind of EUT : GSM & WCDMA Cellular Phone
 Model No. : 705SH
 Serial No. : 004401/11/013025/5

Report No. : 26GE0280-HO
 Power : DC 4.0V (AC adapter: AC120V/60Hz)
 Temp./Hum. : 21deg.C / 38%
 Operator : Mitsu Fujimura

Mode / Remarks : Bluetooth Tx 2480MHz

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



Frequency [MHz]	Reading Level			Results		Limit		Margin		Phase
	QP [dBuV]	AV [dBuV]	Factor [dB]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]	
0.38785	31.6	19.7	0.4	32.0	20.1	58.1	48.1	26.1	28.0	L
0.38820	31.2	24.4	0.4	31.6	24.8	58.1	48.1	26.5	23.3	N
1.02976	22.4	10.8	0.4	22.8	11.2	56.0	46.0	33.2	34.8	L
1.06070	21.8	13.8	0.4	22.2	14.2	56.0	46.0	33.8	31.8	N
2.43900	25.5	18.8	0.6	26.1	19.4	56.0	46.0	29.9	26.6	N
2.44360	26.8	16.7	0.6	27.4	17.3	56.0	46.0	28.6	28.7	L
3.87261	26.8	17.0	0.8	27.6	17.8	56.0	46.0	28.5	28.2	L
3.88001	23.5	15.2	0.8	24.3	16.0	56.0	46.0	31.7	30.0	N
4.34792	23.4	14.6	0.9	24.3	15.5	56.0	46.0	31.7	30.5	L
4.38200	22.4	14.0	0.9	23.3	14.9	56.0	46.0	32.7	31.1	N
4.76519	24.5	15.8	0.9	25.4	16.7	56.0	46.0	30.6	29.3	N
4.78599	26.9	16.0	1.0	27.9	17.0	56.0	46.0	28.1	29.0	L

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

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MF060b(01.06.05)

Carrier Frequency Separation

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

COMPANY	: Sharp Corporation	REGULATION	: FCC Part15 Subpart C 15.247(a)(1)
EQUIPMENT	: GSM•WCDMA Cellular Phone	TEST DISTANCE	: -
MODEL	: 705SH	DATE	: 03/28/2006
S/N	: 004401/11/013044/6	TEMPERATURE	: 25deg.C
POWER	: DC4.0V	HUMIDITY	: 35%
MODE	: Tx(Hopping on)/Inquiry	ENGINEER	: Norihisa Hashimoto

Ch	Freq. [MHz]	Channel separation [MHz]	Limit
Low	2402.0	1.000	>two-thirds of the 20dB Bandwidth or 25[kHz](whichever is greater)
Mid	2441.0	1.005	>two-thirds of the 20dB Bandwidth or 25[kHz](whichever is greater)
High	2480.0	1.000	>two-thirds of the 20dB Bandwidth or 25[kHz](whichever is greater)
Inquiry	2441.0	2.000	>two-thirds of the 20dB Bandwidth or 25[kHz](whichever is greater)

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Head Office EMC Lab.

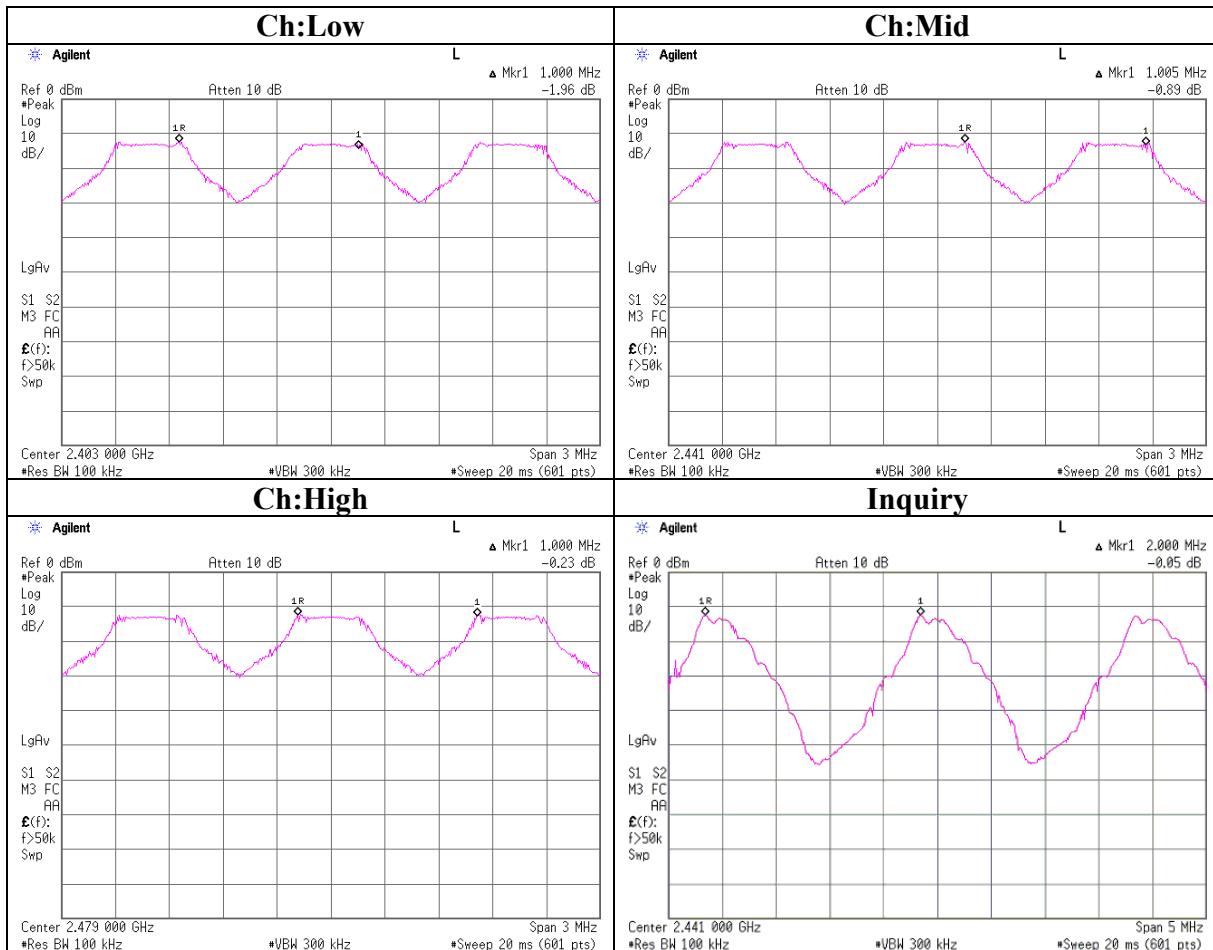
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Carrier Frequency Separation



UL Apex Co., Ltd.

Head Office EMC Lab.

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MF060b(01.06.05)

20dB Bandwidth

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

COMPANY	: Sharp Corporation	REGULATION	: FCC Part15 Subpart C 15.247(a)(1)
EQUIPMENT	: GSM・WCDMA Cellular Phone	TEST DISTANCE	: -
MODEL	: 705SH	DATE	: 03/28/2006
S/N	: 004401/11/013044/6	TEMPERATURE	: 25deg.C
POWER	: DC4.0V	HUMIDITY	: 35%
MODE	: Tx (Hopping off) /Inquiry	ENGINEER	: Norihisa Hashimoto

Ch	Freq. [MHz]	20dB Bandwidth [MHz]	Limit [MHz]
Low	2402.0	0.970	-
Mid	2441.0	0.960	-
High	2480.0	0.955	-
Inquiry	2441.0	0.840	-

UL Apex Co., Ltd.

Head Office EMC Lab.

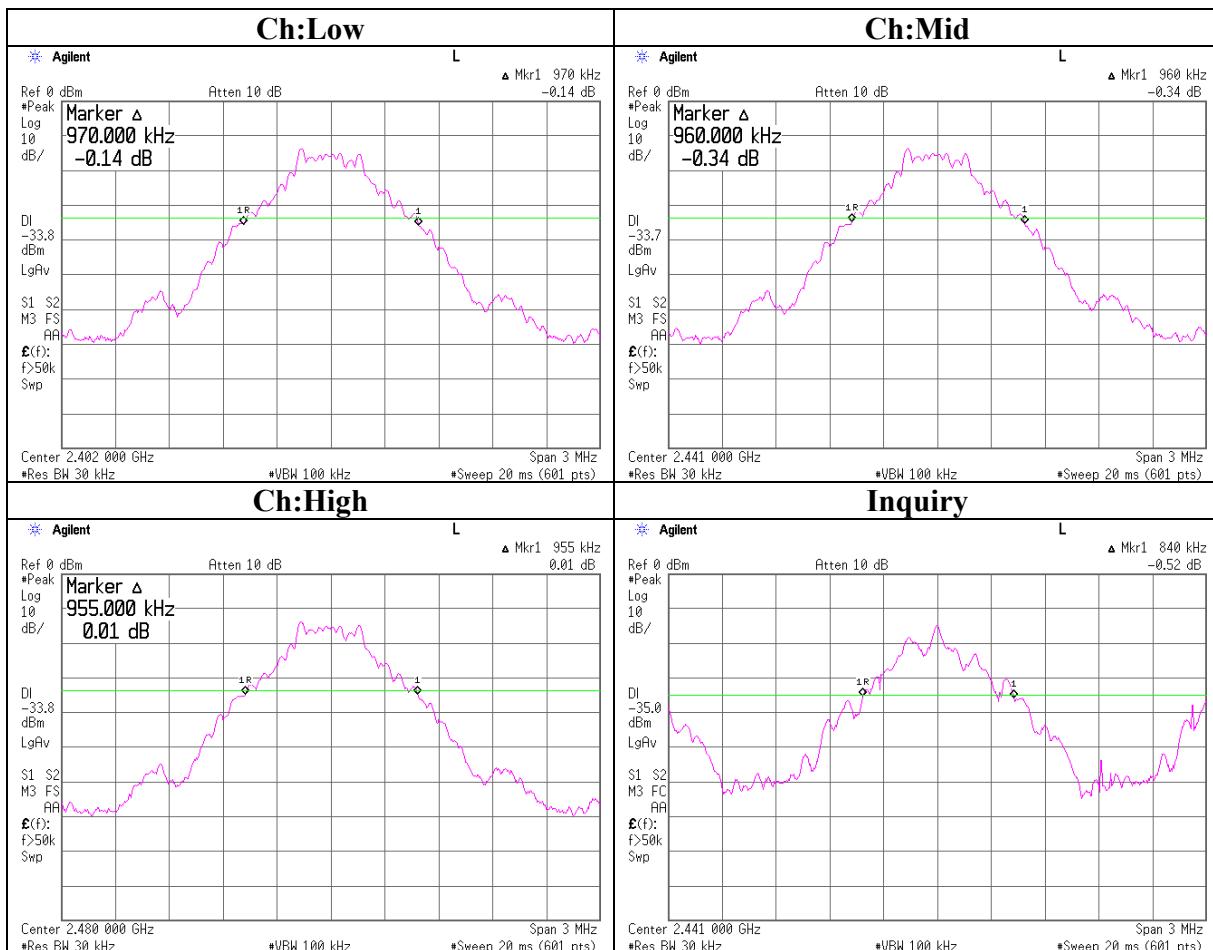
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MF060b(01.06.05)

20dB Bandwidth



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MF060b(01.06.05)

Number of Hopping Frequency

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

COMPANY	: Sharp Corporation	REGULATION	: FCC Part15 Subpart C 15.247(a)(1)(iii)
EQUIPMENT	: GSM-WCDMA Cellular Phone	TEST DISTANCE	: -
MODEL	: 705SH	DATE	: 03/28/2006
S/N	: 004401/11/013044/6	TEMPERATURE	: 25deg.C
POWER	: DC4.0V	HUMIDITY	: 35%
MODE	: Tx (Hopping on) /Inquiry	ENGINEER	: Norihisa Hashimoto

Mode	Number of channel [time]	Limit [time]
Tx(Hopping on)	79	≥15

Mode	Number of channel [time]	Limit [time]
Inquiry	32	≥15

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Head Office EMC Lab.

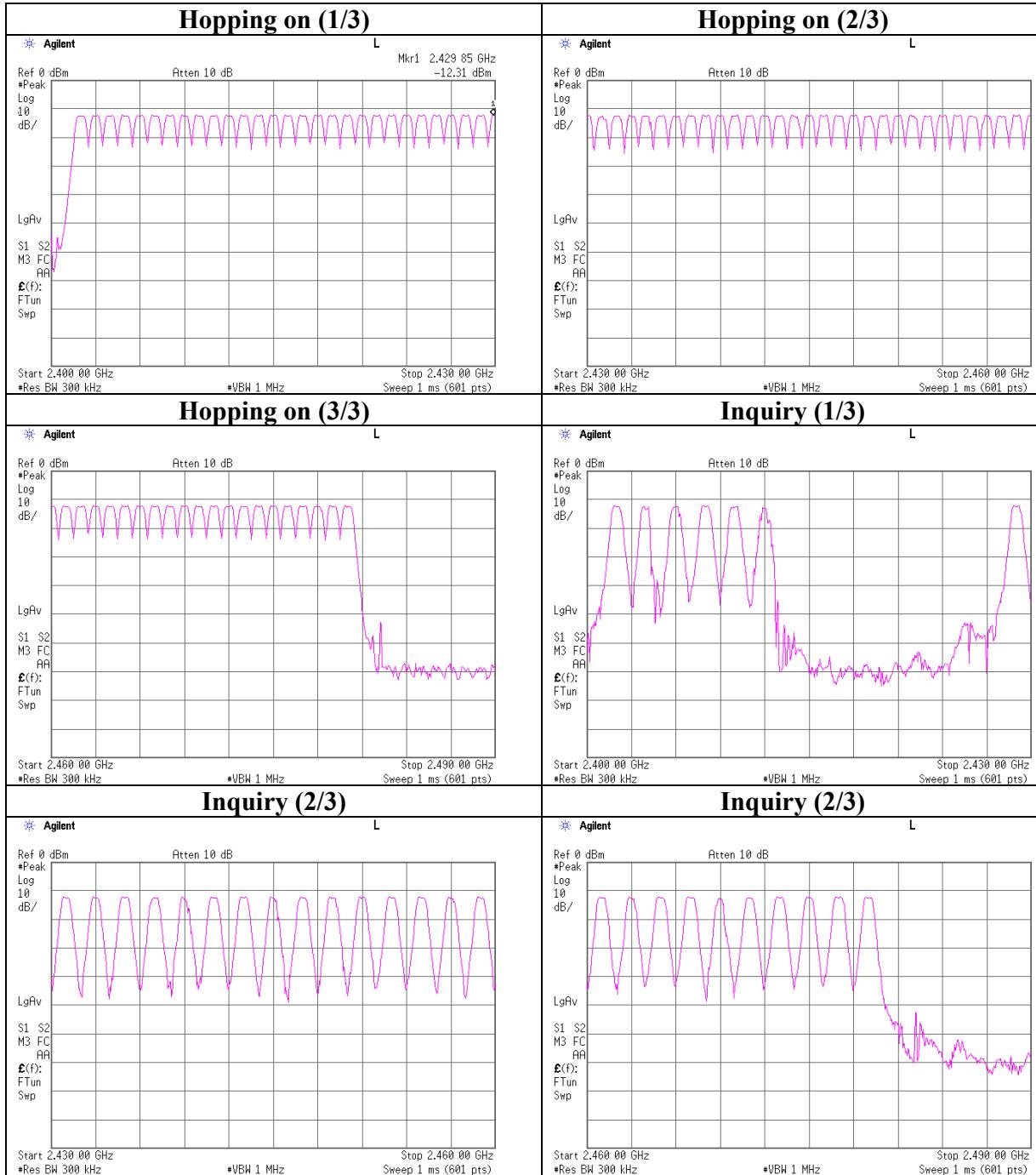
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Number of Hopping Frequency



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MF060b(01.06.05)

Dwell time

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

COMPANY	: Sharp Corporation	REGULATION	: FCC Part15 Subpart C 15.247(a)(1)(iii)
EQUIPMENT	: GSM・WCDMA Cellular Phone	TEST DISTANCE	: -
MODEL	: 705SH	DATE	: 03/28/2006
S/N	: 004401/11/013044/6	TEMPERATURE	: 25deg.C
POWER	: DC4.0V	HUMIDITY	: 35%
MODE	: Tx (Hopping on) /Inquiry	ENGINEER	: Norihisa Hashimoto

Mode	Number of transmission in a 31.6(79 Hopping x 0.4) / 12.8(32 Hopping x 0.4)second period	Length of transmission time [msec]	Result [msec]	Limit [msec]
DH1	51.6 times /5sec. x 31.6 = 326times *	0.380	124	400
DH3	30.6 times / 5sec. x 31.6 = 193times*	1.650	318	400
DH5	21.6 times / 5 sec. x 31.6 = 137 times *	2.850	390	400
Inquiry	100times / 1sec. x 12.8 = 1280 times	0.086	110	400

*Average data of 5 tests

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Head Office EMC Lab.

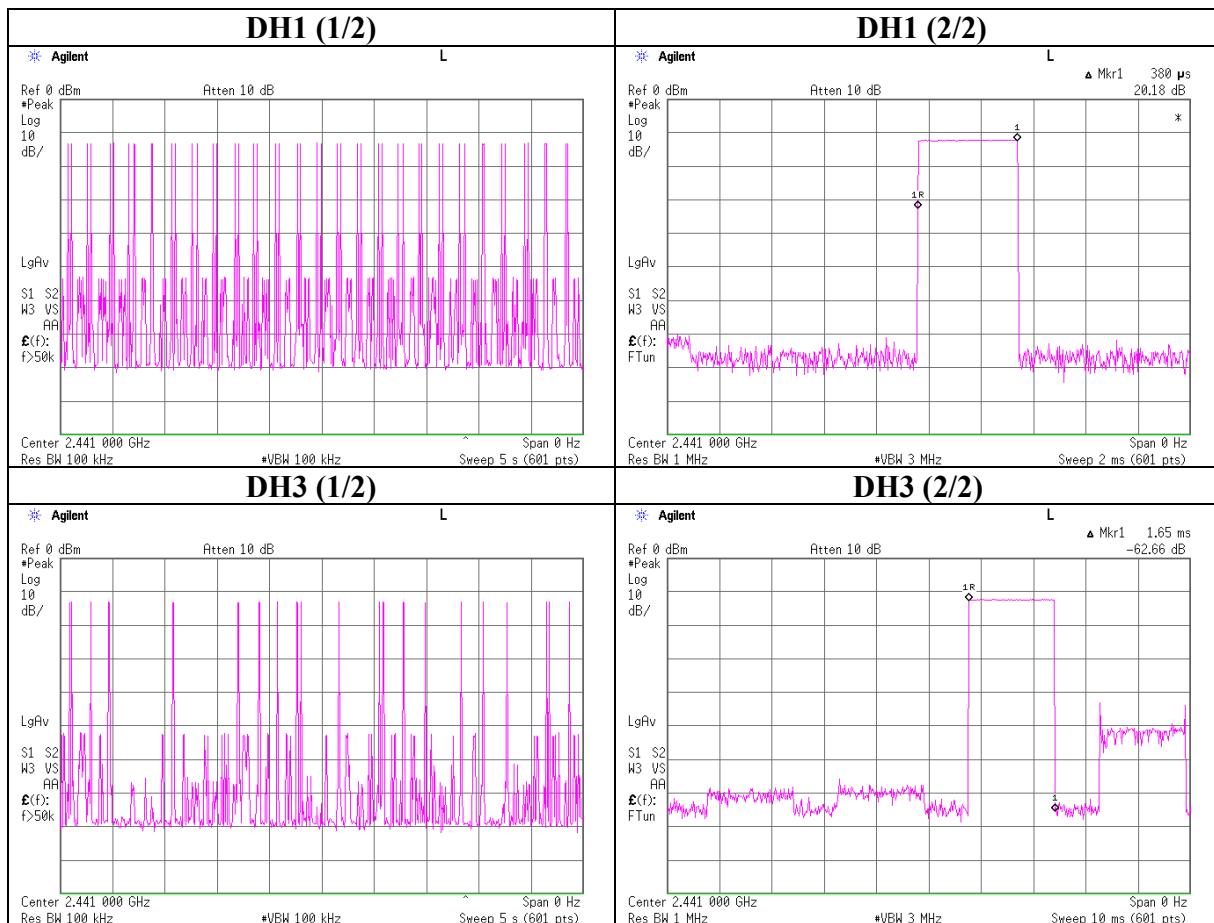
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Dwell time



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Head Office EMC Lab.

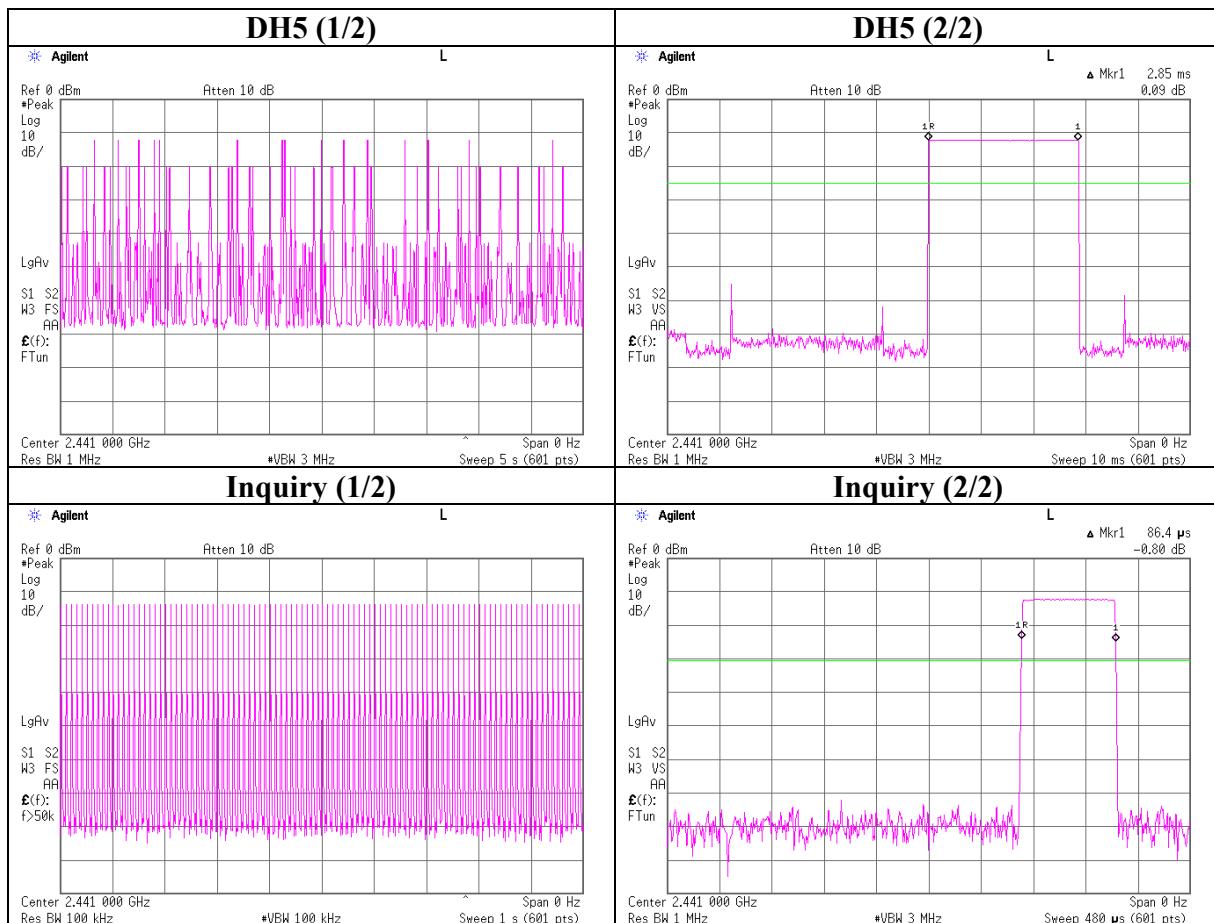
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MF060b(01.06.05)

Dwell time



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Maximum Peak Output Power

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

COMPANY	: Sharp Corporation	REGULATION	: FCC Part15 Subpart C 15.247(b)(1)
EQUIPMENT	: GSM•WCDMA Cellular Phone	TEST DISTANCE	: -
MODEL	: 705SH	DATE	: 03/28/2006
S/N	: 004401/11/013044/6	TEMPERATURE	: 25deg.C
POWER	: DC4.0V	HUMIDITY	: 35%
MODE	: Tx(Hopping Off)/Inquiry	ENGINEER	: Norihisa Hashimoto

Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result		Limit		Margin [dB]
					[dBm]	[mW]	[dBm]	[mW]	
Low	2402.0	-12.26	1.59	10.14	-0.53	0.89	30.00	1000	30.53
Mid	2441.0	-12.18	1.60	10.14	-0.44	0.90	30.00	1000	30.44
High	2480.0	-12.16	1.61	10.14	-0.41	0.91	30.00	1000	30.41
Inquiry	2441.0	-12.17	1.60	10.14	-0.43	0.91	20.97	125	21.40

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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Head Office EMC Lab.

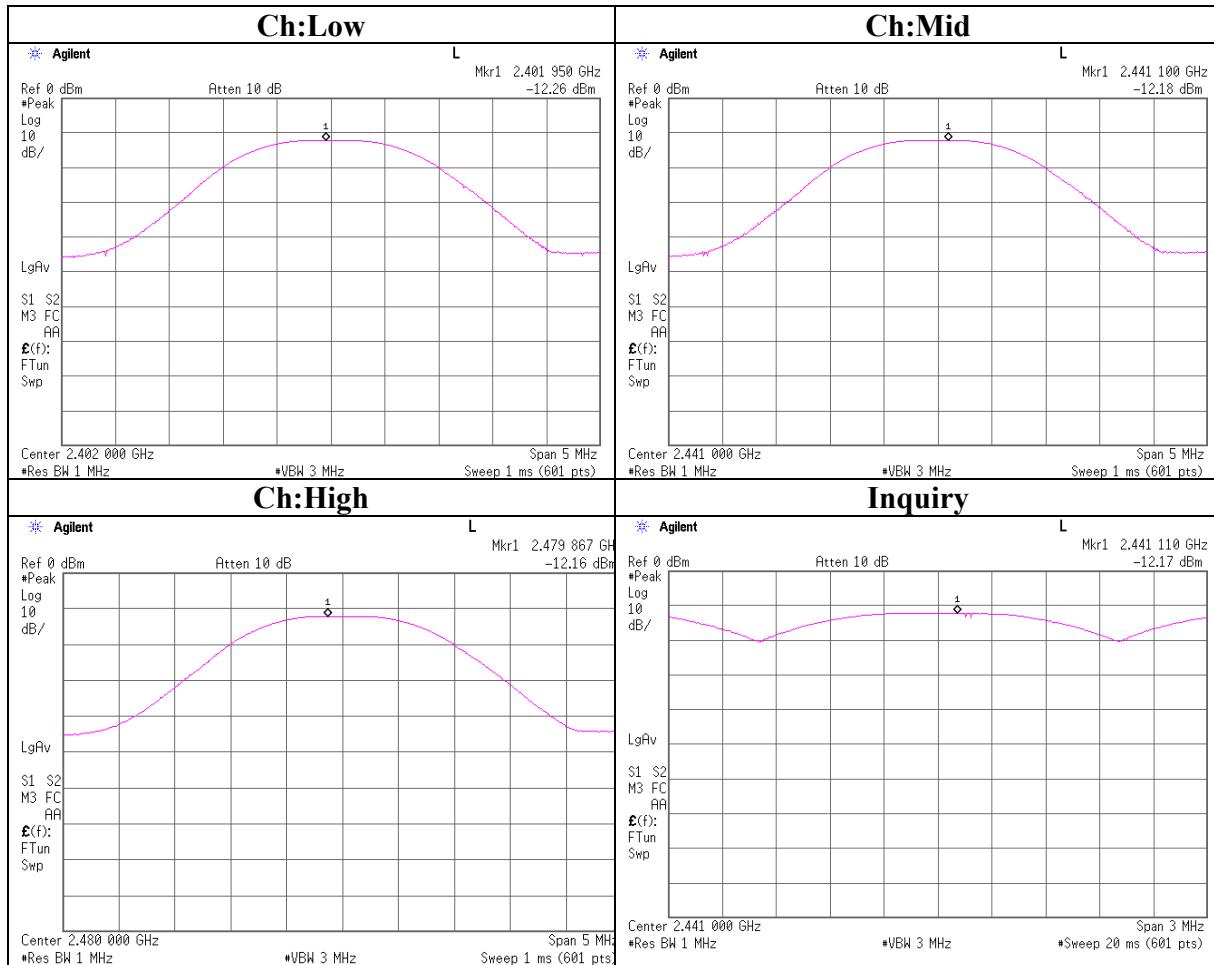
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Maximum Peak Output Power



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MF060b(01.06.05)

Radiated Spurious Emission

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

DATA OF RADIATED EMISSION TEST

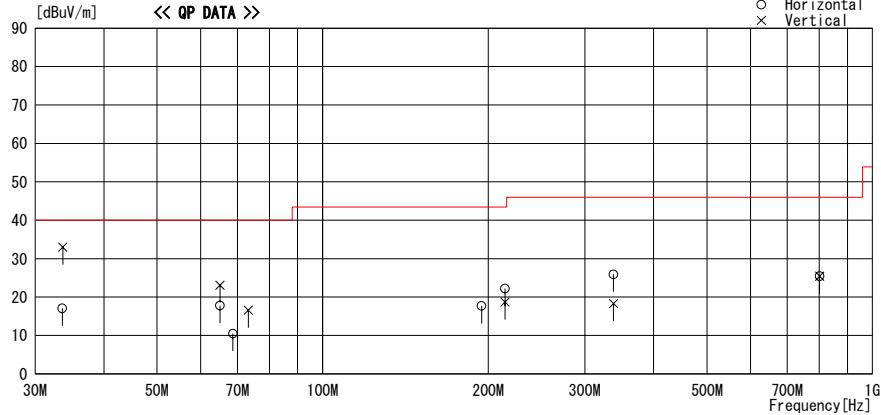
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
 Date : 2006/04/01 04:11:23

Applicant : Sharp Corporation Report No. : 26HE0280-HO
 Kind of EUT : GSM & WCDMA Cellular Phone Power : DC 4.0V (AC adapter: AC120V/60Hz)
 Model No. : 705SH Temp./Humid. : 24deg.C / 30%
 Serial No. : 004401/11/013025/5 Operator : Kenichi Adachi

Mode / Remarks : Bluetooth Tx 2402MHz, DH5, PRBS9, EUT max-axis (H:Y, V:Z)

LIMIT : FCC15C § 15.247(d) 3m, below 1GHz:QP / RSS-Gen / RSS-210
 Except for the data below : adequate margin data below the limits.

— Horizontal
 — Vertical
 ○ Horizontal
 × Vertical



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss& Factor	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]
			[dB/m]	[dB]						
33.610	22.5	QP	16.7	-22.1	17.1	90	300	Hori.	40.0	22.9
33.673	38.4	QP	16.7	-22.1	33.0	37	100	Vert.	40.0	7.0
65.042	37.6	QP	7.4	-21.9	23.1	119	100	Vert.	40.0	16.9
65.048	32.3	QP	7.4	-21.9	17.8	38	400	Hori.	40.0	22.2
68.678	25.4	QP	6.8	-21.7	10.5	230	400	Hori.	40.0	29.5
73.257	31.5	QP	6.5	-21.4	16.6	120	100	Vert.	40.0	23.4
194.500	21.6	QP	16.4	-20.3	17.7	0	100	Hori.	43.5	25.8
214.610	22.0	QP	16.8	-20.1	18.7	214	100	Vert.	43.5	24.8
214.640	25.5	QP	16.8	-20.1	22.2	235	149	Hori.	43.5	21.3
338.197	29.3	QP	15.6	-19.0	25.9	118	100	Hori.	46.0	20.1
338.201	21.7	QP	15.6	-19.0	18.3	245	110	Vert.	46.0	27.7
801.667	21.7	QP	21.4	-17.7	25.4	0	100	Vert.	46.0	20.6
801.667	21.7	QP	21.4	-17.7	25.4	0	100	Hori.	46.0	20.6

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)

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MF060b(01.06.05)

Radiated Spurious Emission

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

DATA OF RADIATED EMISSION TEST

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

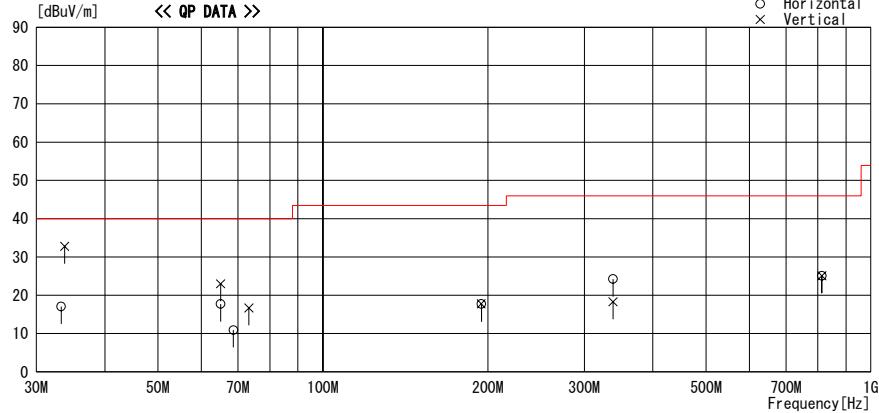
Date : 2006/04/01 04:06:26

Applicant	: Sharp Corporation	Report No.	: 26HE0280-HO
Kind of EUT	: GSM & WCDMA Cellular Phone	Power	: DC 4.0V (AC adapter: AC120V/60Hz)
Model No.	: 705SH	Temp./Hum.	: 24deg.C / 30%
Serial No.	: 004401/11/013025/5	Operator	: Kenichi Adachi

Mode / Remarks : Bluetooth Tx 2441MHz, DH5, PRBS9, EUT max-axis (H:Y, V:Z)

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





Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss& Gain	Level	Angle	Height	Polar.	Limit	Margin
			[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]	[dBuV/m]	[dB]	
33.300	22.4	QP	16.8	-22.1	17.1	90	300	Hori.	40.0	22.9
33.778	38.3	QP	16.6	-22.1	32.8	45	100	Vert.	40.0	7.2
65.052	32.2	QP	7.4	-21.9	17.7	40	400	Hori.	40.0	22.3
65.056	37.5	QP	7.4	-21.9	23.0	125	100	Vert.	40.0	17.0
68.678	25.8	QP	6.8	-21.7	10.9	216	400	Hori.	40.0	29.1
73.280	31.6	QP	6.5	-21.4	16.7	230	100	Vert.	40.0	23.3
194.500	21.7	QP	16.4	-20.3	17.8	168	100	Vert.	43.5	25.7
194.500	21.6	QP	16.4	-20.3	17.7	0	300	Hori.	43.5	25.8
338.420	27.7	QP	15.6	-19.1	24.2	107	100	Hori.	46.0	21.8
338.456	21.7	QP	15.7	-19.1	18.3	87	100	Vert.	46.0	27.7
813.667	21.7	QP	21.3	-17.9	25.1	0	100	Hori.	46.0	20.9
813.667	21.7	QP	21.3	-17.9	25.1	0	100	Vert.	46.0	20.9

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

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MF060b(01.06.05)

Radiated Spurious Emission

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

DATA OF RADIATED EMISSION TEST

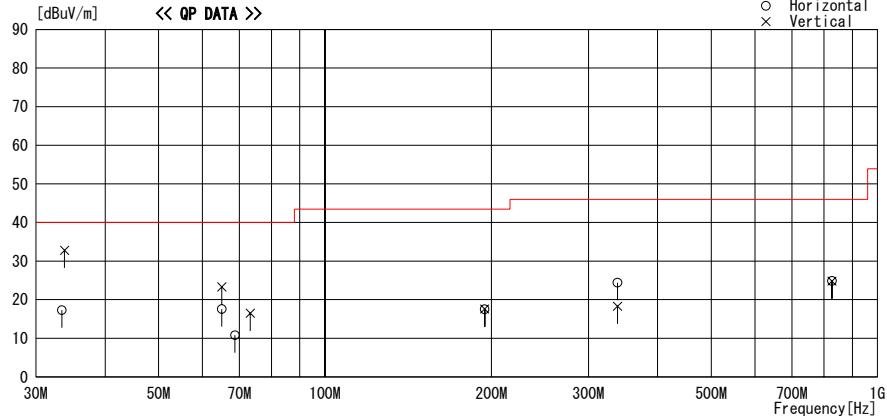
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/04/01 03:46:40

Applicant	: Sharp Corporation	Report No.	: 26HE0280-HO
Kind of EUT	: GSM & WCDMA Cellular Phone	Power	: DC 4.0V (AC adapter: AC120V/60Hz)
Model No.	: 705SH	Temp./Humi.	: 24deg.C / 30%
Serial No.	: 004401/11/013025/5	Operator	: Kenichi Adachi

Mode / Remarks : Bluetooth Tx 2480MHz, DH5, PRBS9, EUT max-axis (H:Y, V:Z)

LIMIT : FCC15C § 15.247(d) 3m, below 1GHz:QP / RSS-Gen / RSS-210
Except for the data below : adequate margin data below the limits.





Frequency	Reading	DET	Antenna	Loss&Gain	Level	Angle	Height	Polar.	Limit	Margin
			Factor	[dB/m]						
33.400	22.6	QP	16.8	-22.1	17.3	100	300	Hori.	40.0	22.7
33.780	38.3	QP	16.6	-22.1	32.8	43	100	Vert.	40.0	7.2
65.040	37.8	QP	7.4	-21.9	23.3	115	100	Vert.	40.0	16.7
65.048	32.1	QP	7.4	-21.9	17.6	28	400	Hori.	40.0	22.4
68.700	25.7	QP	6.8	-21.7	10.8	225	400	Hori.	40.0	29.2
73.240	31.4	QP	6.5	-21.4	16.5	118	100	Vert.	40.0	23.5
194.500	21.4	QP	16.4	-20.3	17.5	249	300	Hori.	43.5	26.0
194.500	21.5	QP	16.4	-20.3	17.6	169	100	Vert.	43.5	25.9
338.445	27.8	QP	15.7	-19.1	24.4	98	100	Hori.	46.0	21.6
338.447	21.7	QP	15.7	-19.1	18.3	243	115	Vert.	46.0	27.7
826.667	21.7	QP	21.2	-18.1	24.8	0	100	Hori.	46.0	21.2
826.667	21.7	QP	21.2	-18.1	24.8	0	100	Vert.	46.0	21.2

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)

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Radiated Spurious Emission

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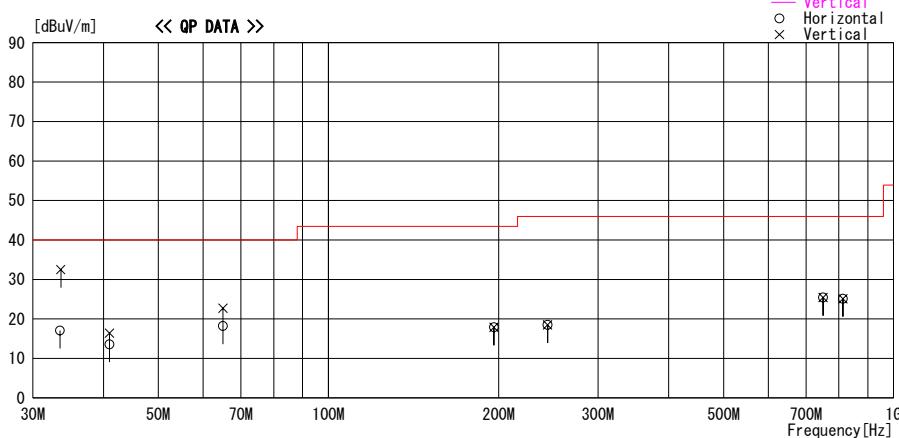
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/04/01 02:21:08

Applicant : Sharp Corporation Report No. : 26HE0280-HO
 Kind of EUT : GSM & WCDMA Cellular Phone Power : DC 4.0V (AC adapter: AC120V/60Hz)
 Model No. : 705SH Temp. / Humi. : 24deg.C / 30%
 Serial No. : 004401/11/013025/5 Operator : Kenichi Adachi

Mode / Remarks : Bluetooth Rx 2441MHz, EUT max-axis (H:Y, V:Z)

LIMIT : FCC Part15 Subpart B Class B(3m)/USA, below 1GHz:QP / RSS-210 / RSS-Gen
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna Factor		Loss& Gain [dB]	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]
			[dB/m]	[dB]							
33.500	22.5	QP	16.7	-22.1	17.1	95	300	Hori.	40.0	22.9	
33.599	37.9	QP	16.7	-22.1	32.5	33	100	Vert.	40.0	7.5	
40.997	25.2	QP	13.2	-22.0	16.4	256	100	Vert.	40.0	23.6	
41.000	22.4	QP	13.2	-22.0	13.6	355	300	Hori.	40.0	26.4	
65.041	37.2	QP	7.4	-21.9	22.7	98	100	Vert.	40.0	17.3	
65.052	32.7	QP	7.4	-21.9	18.2	44	400	Hori.	40.0	21.8	
196.200	21.6	QP	16.5	-20.2	17.9	86	100	Vert.	43.5	25.6	
196.200	21.6	QP	16.5	-20.2	17.9	201	280	Hori.	43.5	25.6	
244.100	21.4	QP	17.0	-19.9	18.5	90	100	Vert.	46.0	27.5	
244.100	21.4	QP	17.0	-19.9	18.5	196	291	Hori.	46.0	27.5	
750.050	21.7	QP	21.0	-17.3	25.4	0	100	Hori.	46.0	20.6	
750.050	21.7	QP	21.0	-17.3	25.4	0	100	Vert.	46.0	20.6	
813.667	21.7	QP	21.3	-17.9	25.1	0	100	Vert.	46.0	20.9	
813.667	21.7	QP	21.3	-17.9	25.1	0	100	Hori.	46.0	20.9	

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

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MF060b(01.06.05)

Radiated Spurious Emission (Tx Ch.:L)

Company	Sharp Corporation		REPORT NO	UL Apex Co., Ltd.	
Equipment	GSM & WCDMA Cellular Phone		REGULATION	Head Office EMC Lab. No.2 Semi Anechoic Chamber	
Model	705SH		TEST DISTANCE	26GE0280-HO	
Sample No.	004401/11/013025/5		DATE	Fcc Part15 Subpart C 15.247(d) / RSS-210	
Power	DC 4.0V (AC adapter: AC 120V / 60Hz)		TEMPERATURE	3m / 1m	
Mode	Bluetooth Tx 2402MHz, DH5, PRBS9		HUMIDITY	03/31/2006	
Remarks	Hor Y , Ver Z-axis		ENGINEER	24deg.C	
PK DETECT	(RBW: 1MHz, VBW: 1MHz)			Kenichi Adachi	

No.	FREQ	S/A READING		ANT Factor	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [MHz]	VER [dBuV]					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2389.1	46.2	45.3	30.6	32.4	3.3	0.0	47.7	46.8	74.0	26.3	27.2
2*	2400.0	70.0	69.4	30.6	32.4	3.3	0.0	71.5	70.9	74.0	-	-
3	4804.0	42.2	41.8	35.7	31.9	4.6	1.4	52.0	51.6	74.0	22.0	22.4
4	5765.9	48.7	46.2	36.5	31.7	5.2	0.0	58.7	56.2	74.0	15.3	17.8
5	7206.0	40.8	40.7	37.5	31.5	5.6	0.0	52.5	52.4	74.0	21.5	21.6
6	9608.0	41.4	41.8	36.6	31.7	6.5	0.0	52.8	53.2	74.0	21.2	20.8
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
7	12010.0	-	-	40.3	31.3	7.8	0.0	-	-	74.0	-	-
8	14412.0	-	-	43.2	31.0	8.7	0.0	-	-	74.0	-	-
9	16814.0	42.8	42.7	46.4	30.8	9.6	0.0	58.4	58.3	74.0	15.6	15.7
10	19216.0	-	-	39.0	30.0	10.5	0.0	-	-	74.0	-	-
11	21618.0	-	-	39.3	30.3	11.0	0.0	-	-	74.0	-	-
12	24020.0	43.6	43.5	39.1	30.4	11.2	0.0	54.0	53.9	74.0	20.0	20.1

No.	FREQ	S/A READING		ANT Factor	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [MHz]	VER [dBuV]					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2389.1	36.6	33.8	30.6	32.4	3.3	0.0	38.1	35.3	54.0	15.9	18.7
2*	2400.0	60.3	57.3	30.6	32.4	3.3	0.0	61.8	58.8	54.0	-	-
3	4804.0	28.6	28.5	35.7	31.9	4.6	1.4	38.4	38.3	54.0	15.6	15.7
4	5765.9	28.4	28.2	36.5	31.7	5.2	0.0	38.4	38.2	54.0	15.6	15.8
5	7206.0	28.3	28.2	37.5	31.5	5.6	0.0	40.0	39.9	54.0	14.0	14.1
6	9608.0	28.9	29.0	36.6	31.7	6.5	0.0	40.3	40.4	54.0	13.7	13.6
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
7	12010.0	-	-	40.3	31.3	7.8	0.0	-	-	54.0	-	-
8	14412.0	-	-	43.2	31.0	8.7	0.0	-	-	54.0	-	-
9	16814.0	30.1	30.0	46.4	30.8	9.6	0.0	45.7	45.6	54.0	8.3	8.4
10	19216.0	-	-	39.0	30.0	10.5	0.0	-	-	54.0	-	-
11	21618.0	-	-	39.3	30.3	11.0	0.0	-	-	54.0	-	-
12	24020.0	31.2	31.2	39.1	30.4	11.2	0.0	41.6	41.6	54.0	12.4	12.4

* Reference data

No.	FREQ	S/A READING		ANT Factor	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBe [dBuV/m]	MARGIN	
		HOR [MHz]	VER [dBuV]					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
0	2402.0	98.2	94.5	30.6	32.4	3.3	0.0	99.7	96.0	-	-	-
2	2400.0	43.8	41.4	30.6	32.4	3.3	0.0	45.2	42.9	Funda-20dB	34.4	33.1

*1) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.54 \text{ dB}$

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

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

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

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

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MF060b(01.06.05)

Radiated Spurious Emission (Tx Ch.:M)

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

Company	: Sharp Corporation	REPORT NO	: 26GE0280-HO
Equipment	: GSM & WCDMA Cellular Phone	REGULATION	: Fcc Part15 Subpart C 15.247(d) / RSS-210
Model	: 705SH	TEST DISTANCE	: 3m / 1m
Sample No.	: 004401/11/013025/	DATE	: 03/31/2006
Power	: DC 4.0V (AC adapter: AC 120V / 60Hz)	TEMPERATURE	: 24deg.C
Mode	: Bluetooth Tx 2441MHz, DH5, PRBS9	HUMIDITY	: 30%
Remarks	: Hor Y , Ver Z-axis	ENGINEER	: Kenichi Adachi

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

No.	FREQ [MHz]	S/A READING		ANT Factor	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]	[dB/m]					[dBuV/m]	[dBuV/m]		[dB]	[dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4884.0	42.0	41.8	36.2	31.8	4.7	1.4	52.5	52.3	74.0	21.5	21.7
2	5786.9	47.4	43.1	36.6	31.7	5.1	0.0	57.4	53.1	74.0	16.6	20.9
3	7323.0	40.7	40.6	37.9	31.7	5.7	0.0	52.6	52.5	74.0	21.4	21.5
4	9764.0	40.9	41.0	36.6	31.8	6.6	0.0	52.3	52.4	74.0	21.7	21.6

*3) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.54$ dB

No.	FREQ [MHz]	S/A READING		ANT Factor	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]	[dB/m]					[dBuV/m]	[dBuV/m]		[dB]	[dB]
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12205.0	-	-	40.4	31.0	7.9	0.0	-	-	74.0	-	-
6	14646.0	-	-	43.1	31.1	8.8	0.0	-	-	74.0	-	-
7	17087.0	43.0	43.1	46.1	30.7	9.7	0.0	58.6	58.7	74.0	15.4	15.3
8	19528.0	-	-	39.1	29.7	10.6	0.0	-	-	74.0	-	-
9	21969.0	-	-	39.5	30.7	11.0	0.0	-	-	74.0	-	-
10	24410.0	44.6	44.5	39.1	30.5	11.3	0.0	55.0	54.9	74.0	19.1	19.2

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

No.	FREQ [MHz]	S/A READING		ANT Factor	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]	[dB/m]					[dBuV/m]	[dBuV/m]		[dB]	[dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4884.0	28.7	28.6	36.2	31.8	4.7	1.4	39.2	39.1	54.0	14.8	14.9
2	5786.9	28.4	28.6	36.6	31.7	5.1	0.0	38.4	38.6	54.0	15.6	15.4
3	7323.0	28.2	28.2	37.9	31.7	5.7	0.0	40.1	40.1	54.0	13.9	13.9
4	9764.0	29.0	29.1	36.6	31.8	6.6	0.0	40.4	40.5	54.0	13.6	13.5

*3) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.54$ dB

No.	FREQ [MHz]	S/A READING		ANT Factor	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]	[dB/m]					[dBuV/m]	[dBuV/m]		[dB]	[dB]
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12205.0	-	-	40.4	31.0	7.9	0.0	-	-	54.0	-	-
6	14646.0	-	-	43.1	31.1	8.8	0.0	-	-	54.0	-	-
7	17087.0	30.3	30.4	46.1	30.7	9.7	0.0	45.9	46.0	54.0	8.1	8.0
8	19528.0	-	-	39.1	29.7	10.6	0.0	-	-	54.0	-	-
9	21969.0	-	-	39.5	30.7	11.0	0.0	-	-	54.0	-	-
10	24410.0	31.6	31.6	39.1	30.5	11.3	0.0	42.0	42.0	54.0	12.1	12.1

*1) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.54$ dB

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

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

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

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

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MF060b(01.06.05)

Radiated Spurious Emission (Tx Ch.:H)

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

Company	: Sharp Corporation	REPORT NO	: 26GE0280-HO
Equipment	: GSM & WCDMA Cellular Phone	REGULATION	: Fcc Part15 Subpart C 15.247(d) / RSS-210
Model	: 705SH	TEST DISTANCE	: 3m / 1m
Sample No.	: 004401/11/013025/	DATE	: 03/31/2006
Power	: DC 4.0V (AC adapter: AC 120V / 60Hz)	TEMPERATURE	: 24deg.C
Mode	: Bluetooth Tx 2480MHz, DHS, PRBS9	HUMIDITY	: 30%
Remarks	: Hor Y , Ver Z-axis	ENGINEER	: Kenichi Adachi

PK DETECT

(RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV]	VER [dBuV]					HOR [dBuV/m]	VER [dBuV/m]		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2483.5	60.4	59.1	30.4	32.4	3.5	0.0	61.9	60.6	74.0	12.1	13.4
2	4960.0	41.6	41.4	36.6	31.8	4.8	1.4	52.6	52.4	74.0	21.4	21.6
3	5797.5	45.4	44.5	36.6	31.7	5.2	0.0	55.5	54.6	74.0	18.5	19.4
4	7440.0	40.5	40.4	38.2	31.9	5.7	0.0	52.5	52.4	74.0	21.5	21.6
5	9920.0	41.5	41.4	36.5	32.0	6.7	0.0	52.7	52.6	74.0	21.3	21.4
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12400.0	-	-	40.5	30.7	8.0	0.0	-	-	74.0	-	-
7	14880.0	-	-	42.8	31.0	8.8	0.0	-	-	74.0	-	-
8	17360.0	43.8	43.7	46.2	31.0	9.9	0.0	59.4	59.3	74.0	14.6	14.7
9	19840.0	-	-	39.1	30.3	10.6	0.0	-	-	74.0	-	-
10	22320.0	-	-	39.5	30.7	11.0	0.0	-	-	74.0	-	-
11	24800.0	44.3	44.2	39.3	30.6	11.5	0.0	55.0	54.9	74.0	19.0	19.1

AV DETECT

(RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV]	VER [dBuV]					HOR [dBuV/m]	VER [dBuV/m]		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2483.5	46.4	44.5	30.4	32.4	3.5	0.0	47.9	46.0	54.0	6.1	8.0
2	4960.0	28.7	28.6	36.6	31.8	4.8	1.4	39.7	39.6	54.0	14.3	14.4
3	5797.5	28.3	28.2	36.6	31.7	5.2	0.0	38.4	38.3	54.0	15.6	15.7
4	7440.0	28.5	28.4	38.2	31.9	5.7	0.0	40.5	40.4	54.0	13.5	13.6
5	9920.0	29.4	29.4	36.5	32.0	6.7	0.0	40.6	40.6	54.0	13.4	13.4
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12400.0	-	-	40.5	30.7	8.0	0.0	-	-	54.0	-	-
7	14880.0	-	-	42.8	31.0	8.8	0.0	-	-	54.0	-	-
8	17360.0	31.5	31.5	46.2	31.0	9.9	0.0	47.1	47.1	54.0	6.9	6.9
9	19840.0	-	-	39.1	30.3	10.6	0.0	-	-	54.0	-	-
10	22320.0	-	-	39.5	30.7	11.0	0.0	-	-	54.0	-	-
11	24800.0	31.6	31.7	39.3	30.6	11.5	0.0	42.3	42.4	54.0	11.7	11.6

*1) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) =$

9.54 dB

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

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

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

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

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Radiated Spurious Emission (Rx Ch.:M)

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

Company	: Sharp Corporation	REPORT NO	: 26GE0280-HO
Equipment	: GSM & WCDMA Cellular Phone	REGULATION	: FCC Part15 Subpart B Class B / RSS-Gen
Model	: 705SH	TEST DISTANCE	: 3m / 1m
Sample No.	: 004401/11/013025/5	DATE	: 03/31/2006
Power	: DC 4.0V (AC adapter: AC 120V / 60Hz)	TEMPERATURE	: 24deg.C
Mode	: Bluetooth Rx 2441MHz	HUMIDITY	: 30%
Remarks	: Hor Y , Ver Z-axis	ENGINEER	: Kenichi Adachi

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

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]		[dBuV/m]	[dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2441.0	41.4	41.3	30.5	32.4	3.3	0.0	42.8	42.7	74.0	31.2	31.3
2	5764.3	47.9	44.4	36.5	31.7	5.1	0.0	57.8	54.3	74.0	16.2	19.7
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
3	12400.0	41.1	41.0	40.5	30.7	8.0	0.0	49.4	49.3	74.0	24.6	24.7

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

No.	FREQ [MHz]	S/A READING		ANT Factor [dBuV]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]		[dBuV/m]	[dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2441.0	29.6	29.5	30.5	32.4	3.3	0.0	31.0	30.9	54.0	23.0	23.1
2	5764.3	28.4	28.2	36.5	31.7	5.1	0.0	38.3	38.1	54.0	15.7	15.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
3	12400.0	28.9	28.9	40.5	30.7	8.0	0.0	37.2	37.2	54.0	16.8	16.8

*1) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.54$ dB

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

*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.

UL Apex Co., Ltd.

Head Office EMC Lab.

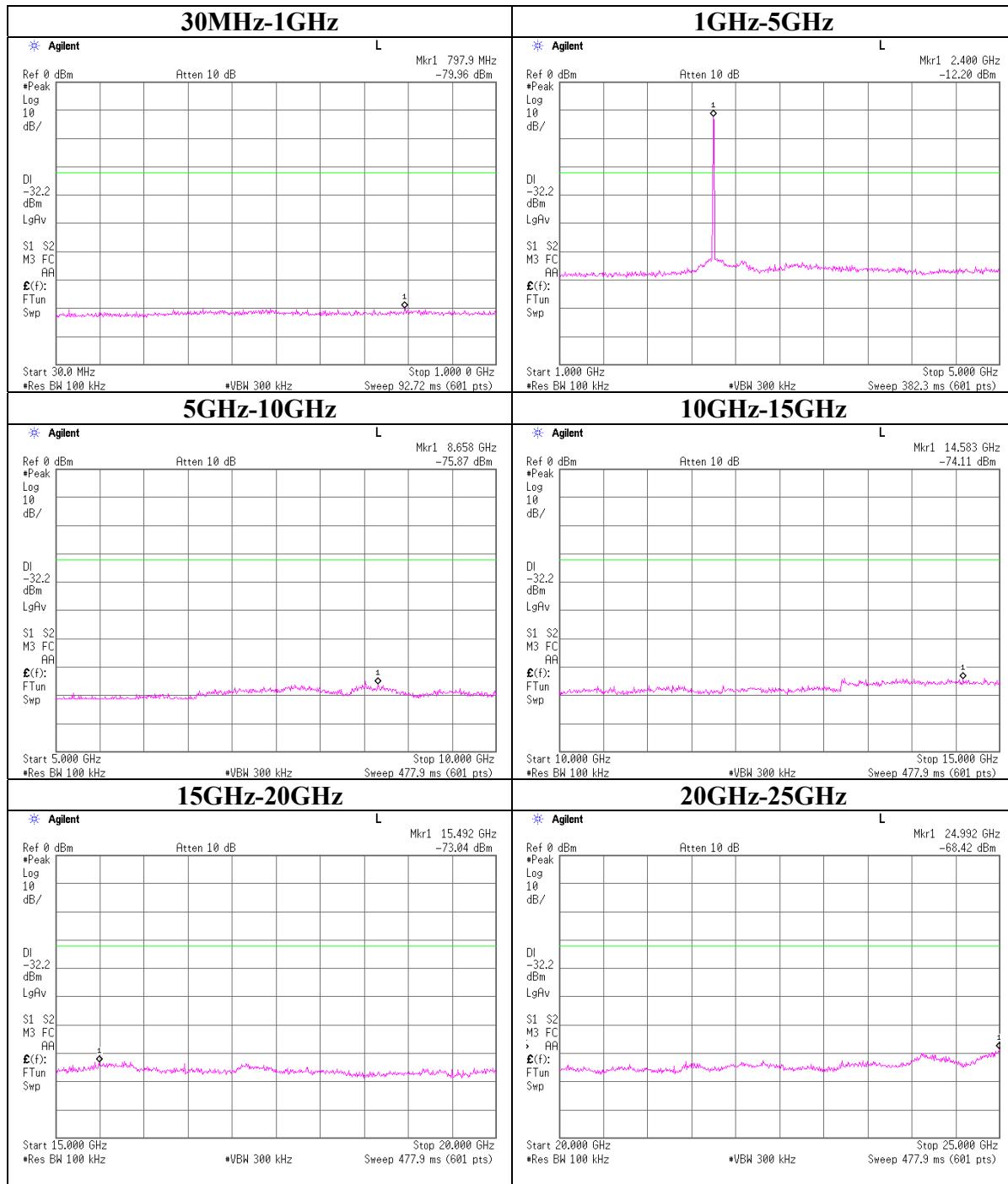
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Conducted Spurious Emission
Ch:Low



UL Apex Co., Ltd.

Head Office EMC Lab.

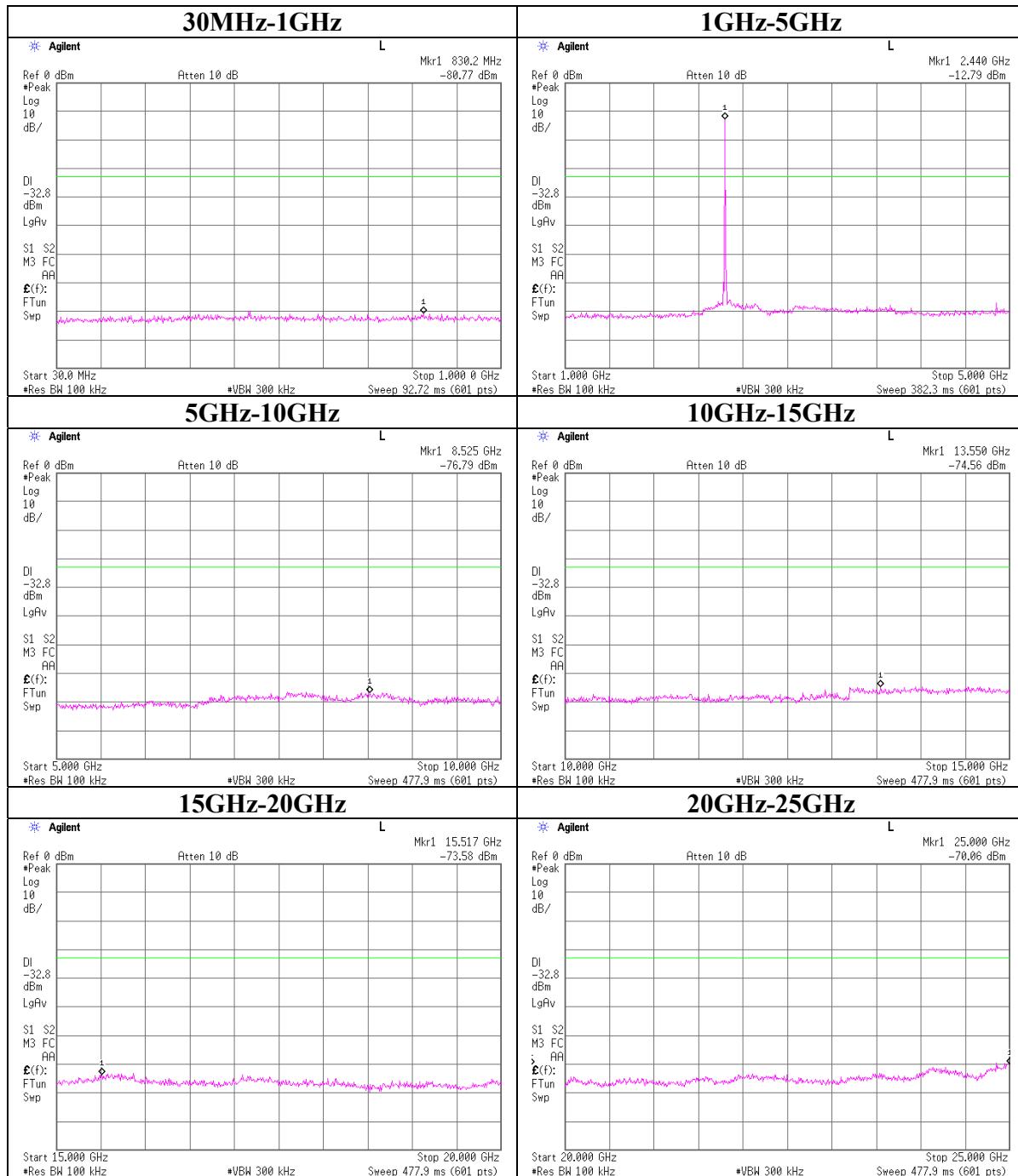
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Faxsimile : +81 596 24 8124

MF060b(01.06.05)

Conducted Spurious Emission Ch:Mid



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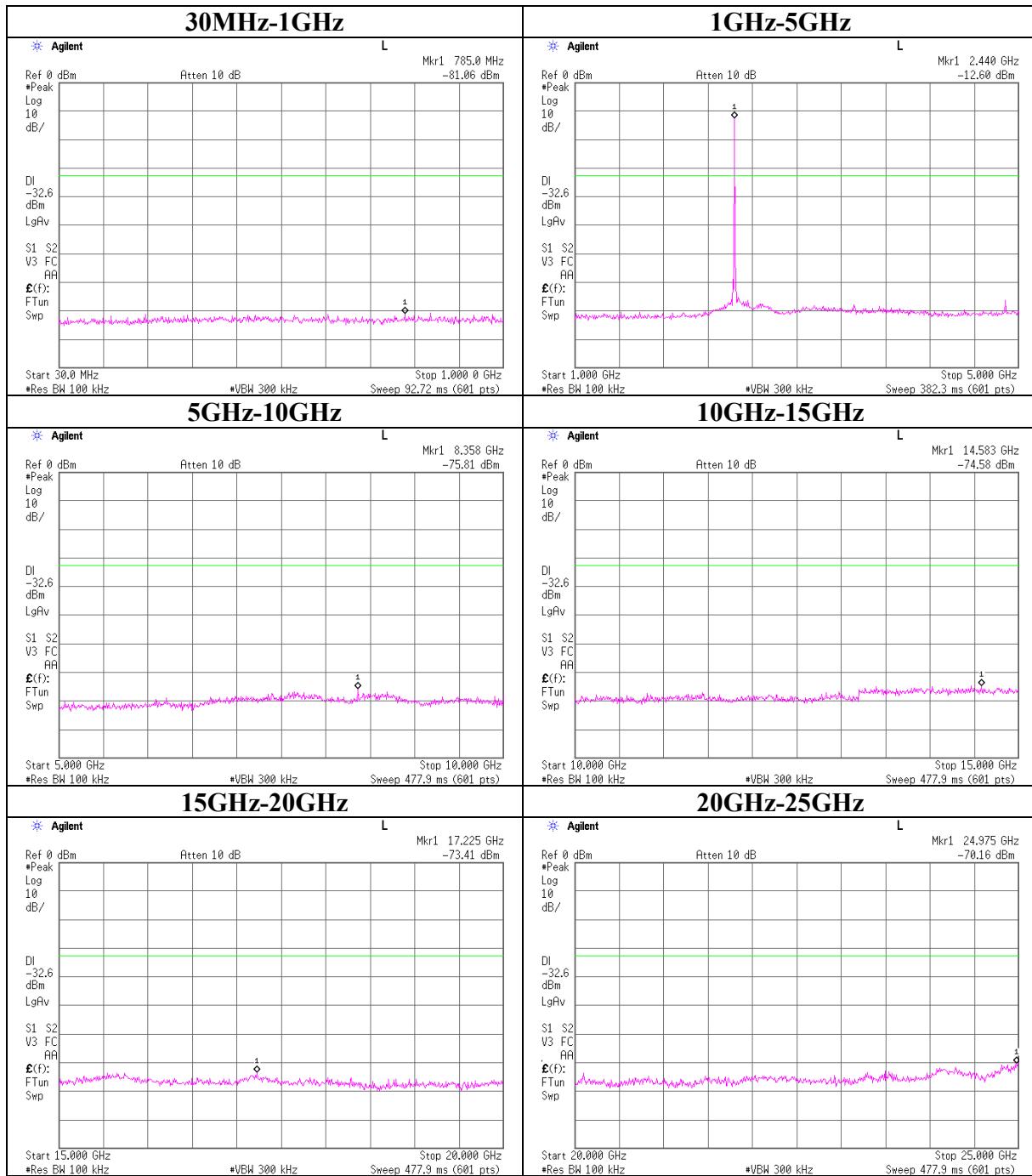
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Conducted Spurious Emission Ch:High



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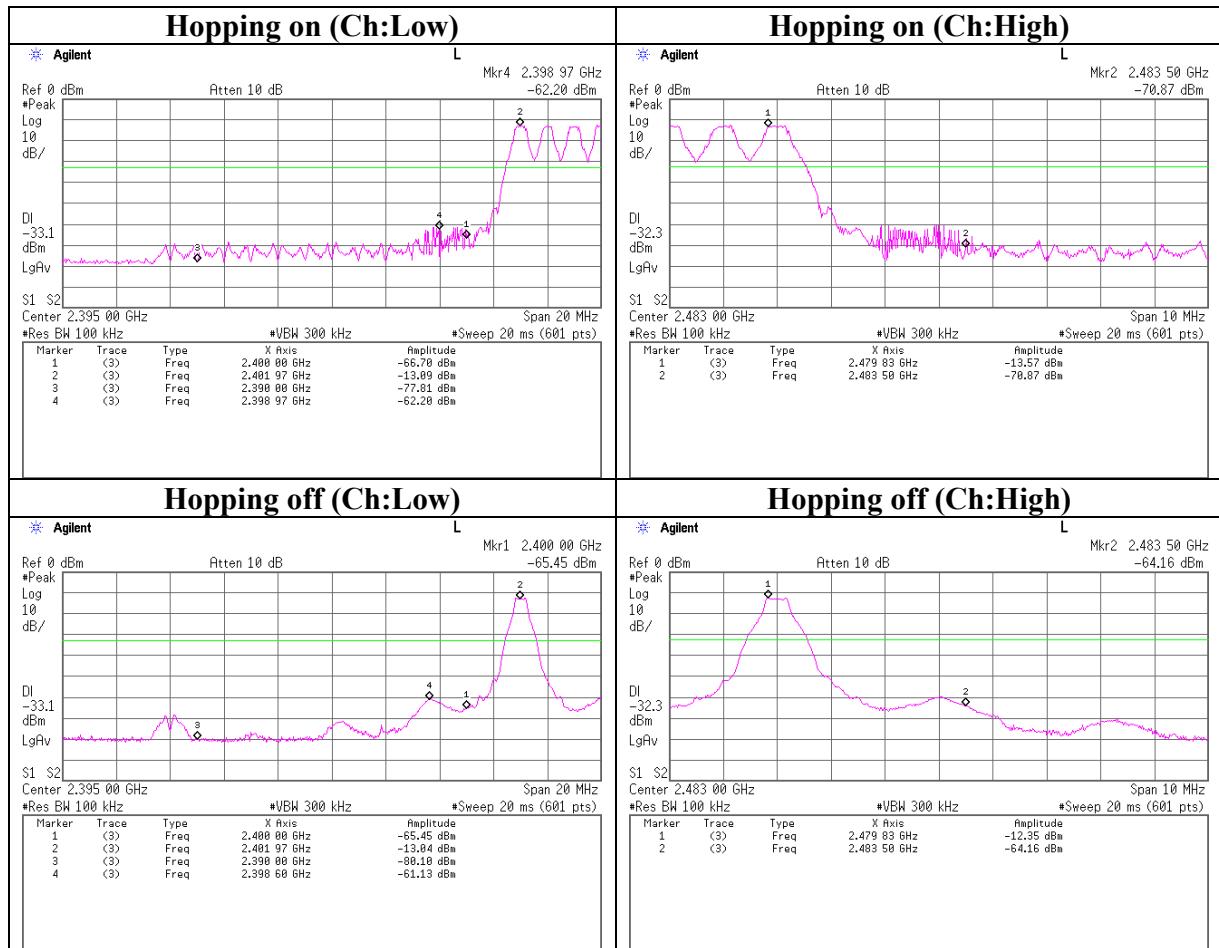
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Conducted Spurious Emission Band Edge compliance



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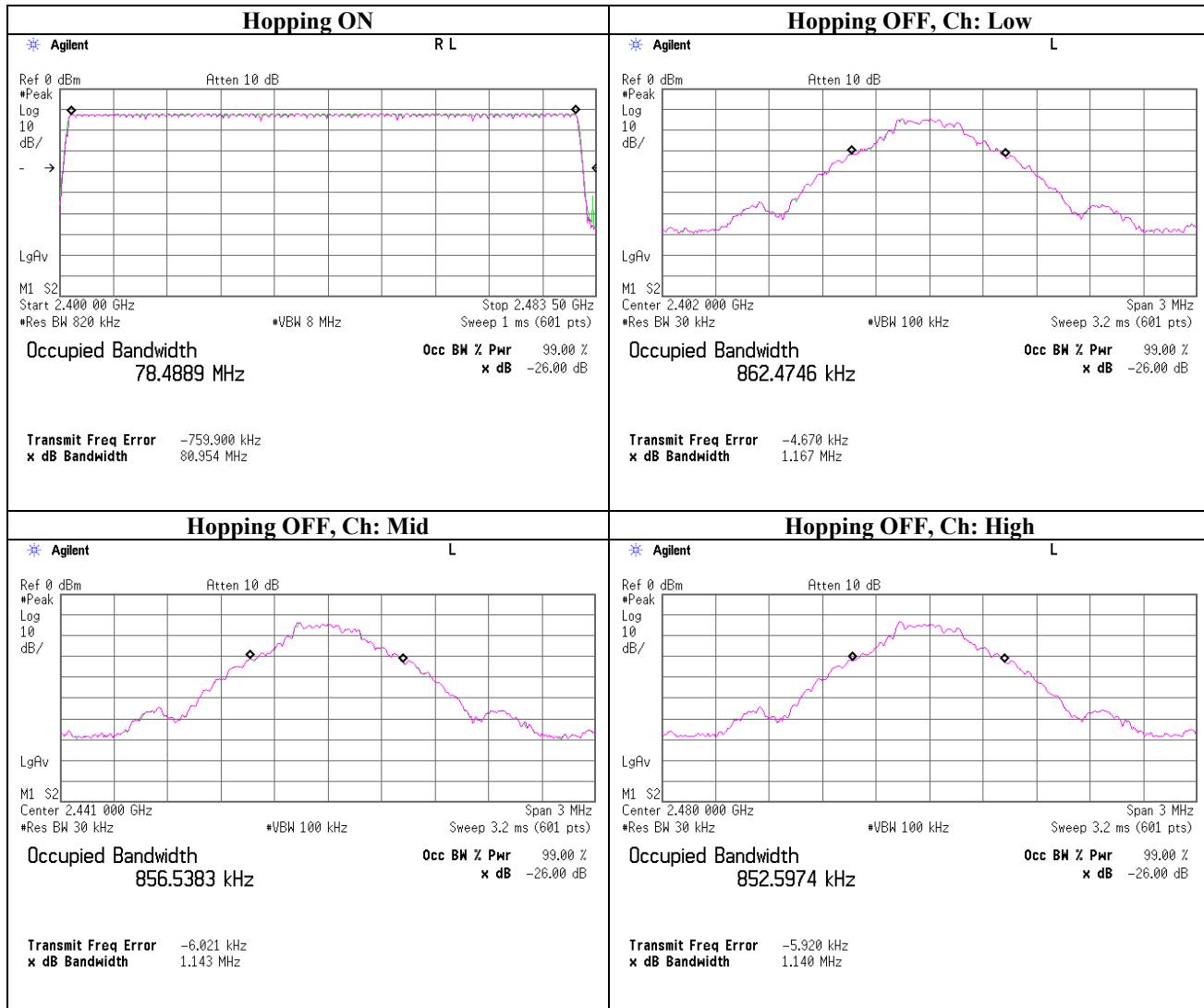
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99% Occupied Bandwidth



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