



EMI TEST REPORT

Test Report No. : 25HE0236-HO

Applicant : Sharp Corporation
Type of Equipment : GSM & WCDMA Cellular Phone
Model No. : 703SH
Test standard : FCC Part 15 Subpart C
Section 15.207, Section 15.247 : 2004
FCC ID : APYHRO00040
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 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:

April 11 and 12, 2005

Tested by:

Mitsuru Fujimura
EMC Service

Yutaka Yoshida
EMC Service

Approved
by :

Hironebu Shimoji
Group Leader of
EMC Service

UL Apex Co., Ltd.

Head Office EMC Lab.

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SECTION 1: Client information

Company Name : Sharp Corporation
Brand or Trade name : SHARP
Address : 2-13-1 Iida Hachihonmatsu HigashiHiroshima-City, Hiroshima-pref.,
739-0192 Japan
Telephone Number : +81-82-420-1592
Facsimile Number : +81-82-420-1852
Contact Person : Keichoh Arima

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

2.1 Identification of E.U.T.

Type of Equipment : GSM & WCDMA Cellular Phone
Model No. : 703SH
Serial No. : 004400/01/154532/2
004400/01/154533/0
Country of Manufacture : China
Receipt Date of Sample : April 11, 2005
Condition of EUT : Production prototype
(Not for Sale: This sample is equivalent to mass-produced items.)

2.2 Product Description

Clock frequencies in the system	CPU:13MHz/ RTC:32.768kHz
Feature of EUT	703SH(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 contract and transmitting data with certain devices.

Equipment Type	Transceiver
Frequency of Operation	2402MHz to 2480MHz
Bandwidth & Channel spacing	1MHz & 1MHz
Type of Modulation	FHSS
Antenna Type	Internal Antenna
Antenna Connector Type	Soldering
Antenna Gain	0 dBi
Mode of Operation	Simplex
ITU code	F1D, F1E, F1W
Operating voltage (Inner)	DC2.9V
Operating temperature	-10 to +55 deg.C.

FCC 15.31 (e)

This EUT provides stable voltage(DC4.0V) from Host, and it is constantly converted into and provided with DC2.9V for the Operational voltage within 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 : 2004
Title : FCC 47CFR Part15 Radio Frequency Device Subpart C Intentional Radiators
Section 15.207 Conducted limits : 2004
Section 15.247 Operation within the bands 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz : 2004

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	32.1dB 0.6306MHz, QP, N	Complied
2	Carrier Frequency Separation	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(a)(1)	Conducted	N/A	*See data.	Complied
3	20dB Bandwidth	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(a)(1)	Conducted	N/A		Complied
4	Number of Hopping Frequency	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(a)(1)(iii)	Conducted	N/A		Complied
5	Dwell time	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(a)(1)(iii)	Conducted	N/A		Complied
6	Maximum Peak Output Power	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(b)(1)	Conducted	N/A		Complied
7	Band Edge Compliance	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(d)	Conducted	N/A		Complied
8	Spurious Emission	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(d)	Conducted/ Radiated	N/A	3.6dB 24020MHz, AV, Horizontal/ Vertical	Complied

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

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

Uncertainty:

*In case of the margin below the EMC Head Office's uncertainty.

The data listed in this report meets the limits unless the uncertainty is taken into consideration.

Conducted Emission

The measurement uncertainty (with a 95% confidence level) for this test is ± 1.3 dB.

Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test using Biconical antenna is ± 4.5 dB(3m)/ ± 4.7 dB(10m).

The measurement uncertainty (with a 95% confidence level) for this test using Logperiodic antenna is ± 5.2 dB(3m)/ ± 3.8 dB(10m).

The measurement uncertainty (with a 95% confidence level) for this test using Horn antenna is ± 6.6 dB.

Other test except Conducted Emission and Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test is ± 3.0 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 Addition to standards

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst margin	Results
1	99% Occupied Band Width	RSS-210(issue 5): 2001 + Amendment:2002 + Amendment2:2003 + Amendment3:2004 + Amendment4: 2004	RSS-210(issue 5): 2001 + Amendment:2002 + Amendment2:2003 + Amendment3:2004 + Amendment4: 2004	Conducted	N/A	N/A	N/A

3.4 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	IC4247	19.2 x 11.2 x 7.7m	7.0 x 6.0m	Preparation room
No.2 semi-anechoic chamber	846015	IC4247-2	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.

3.5 Test set up, Test instruments and Data of EMI

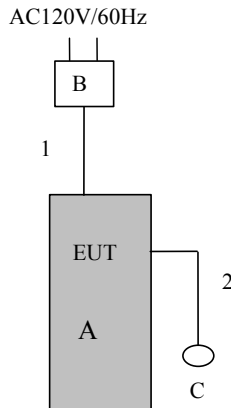
Refer to APPENDIX 1 to 3.

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

4.1 Operating Modes

The mode is used : [FHSS: Bluetooth]
Transmitting mode(PRBS9/Packet size DH5)
Low Channel :2402MHz
Mid Channel :2441MHz
High Channel :2480MHz
Inquiry

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	GSM & WCDMA Cellular Phone	703SH	004400/01/154532/2 (For Conducted tests) 004400/01/154533/0 (For Conducted emission and Radiated Spurious Emission)	Sharp Corporation	APYHRO00040
B	AC Charger	XN-1QC08	N/A	HOSIDEN	N/A
C	Earphone	N/A	N/A	Sharp Corporation	N/A

List of cables used

No.	Name	Length (m)	Shield	Backshell Material
1	AC Charger Cable	1.5	N	Polyvinyl chloride
2	Earphone Cable	1.8	N	Polyvinyl chloride

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SECTION 5: Conducted Emission

Test Procedure and conditions

EUT was placed on a platform of nominal size, 0.5m by 1.0m, raised 80cm above the conducting ground plane. The rear of tabletop was located 40cm to the vertical conducting plane. The rear of EUT, including peripherals aligned and flushed with rear of tabletop. All other surfaces of tabletop were at least 80cm from any other grounded conducting surface. EUT was located 80cm from a Line Impedance Stabilization Network (LISN)/ Artificial mains Network (AMN) and excess AC cable was bundled in center.

1) For the tests on EUT 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

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SECTION 6: Spurious Emission

[Conducted]

Test Procedure

The test 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.

***Delta Marker Method (Measurement for Band-edge)**

STEP 1) Perform an in-band field strength measurement of the fundamental emission using the RBW table below.

STEP 2) Choose a spectrum analyzer span that encompasses both the peak of the fundamental emission and the band-edge emission under investigation. Set the analyzer RBW to 1% of the total span, and measure the amplitude delta between the peak of the fundamental and the peak of the band-edge emission.

STEP 3) Subtract the delta measured in STEP 2) from the field strengths measured in STEP 1). The result is the field strength of band-edge.

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.

The result also satisfied with the general limits specified in section 15.209(a).

Frequency	Below 1GHz	Above 1GHz
Instrument used	Test Receiver	Spectrum Analyzer
Detector	QP: BW 120kHz	PK: RBW:1MHz/VBW: 1MHz
IF Bandwidth		AV: RBW:1MHz/VBW:10Hz

Test data : APPENDIX 3

Test result : Pass

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.

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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

This page has been submitted for a separate exhibit.

Spurious Emission (Radiated)

This page has been submitted for a separate exhibit.

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

This page has been submitted for a separate exhibit.

APPENDIX 2:Test instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MAEC-01	Anechoic Chamber	TDK	Semi Anechoic Chamber 10m	RE	2004/11/13 * 12
MTR-01	Test Receiver	Rohde & Schwarz	ESI40	RE/CE	2004/11/12 * 12
MCC-05	Microwave Cable	Storm	421-011	RE	2005/01/05 * 12
MCC-23	Microwave Cable	Storm	-	RE	2004/05/01 * 12
MPA-05	Pre Amplifier	TSJ	TSJ 1-26.5GHz PreAmp	RE	2004/06/12 * 12
MHA-05	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2005/01/10 * 12
MHA-01	Horn Antenna	EMCO	3160-09	RE (MW)	2005/01/10 * 12
MHF-02	High Pass Filter	Tokimec	TF323DCA	RE	2004/09/18 * 12
MBA-01	Biconical Antenna	Schwarzbeck	BBA9106	RE	2004/10/14 * 12
MLA-01	Logperiodic Antenna	Schwarzbeck	USLP9143	RE/RS	2004/10/14 * 12
MCC-01	Coaxial Cable 0.1-3000MHz	Suhner/storm/Agilent/TSJ	-	RE	2004/12/19 * 12
MAT-06	Attenuator(6dB)	Weinschel Corp	2	RE	2004/12/16 * 12
MPA-04	Pre Amplifier	Agilent	8447D	RE	2004/05/25 * 12
MLS-02	LISN(AMN)	Schwarzbeck	NSLK8127	CE	2004/11/10 * 12
MCC-03	Coaxial Cable	Fujikura/Suhner/Agilent/TSJ	-	CE	2004/12/24 * 12
MSA-03	Spectrum Analyzer	Agilent	E4448A	CFS/BW/ NHF/CSE/ BE	2004/06/12 * 12
MCC-06	Microwave Cable;	Suhner	SUCOFLEX 104	CFS/BW/ NHF/CSE/ BE	2005/04/11
MAT-22	Attenuator(10dB) (above1GHz)	Orient Microwave	BX10-0476-00	RE	2005/03/16 * 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,
CFS: Carrier Frequency Separation BW: 20dB Bandwidth
NHF: Number of Hopping Frequency CSE: Conducted Spurious Emission
BE: Band Edge Compliance

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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.1 Semi Anechoic Chamber
Date : 2005/04/12 00:37:52

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular phone
Model No. : 703SH
Serial No. : 004400/01/154533/0

Report No. : 25HE0236-HO
Power : AC 120V / 60Hz (DC 4.0V)
Temp./Humi. : 24 deg. C / 54 %
Operator : Yutaka Yoshida

Mode / Remarks : Bluetooth, Tx 2402MHz, PRBS9, Packet DH5

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

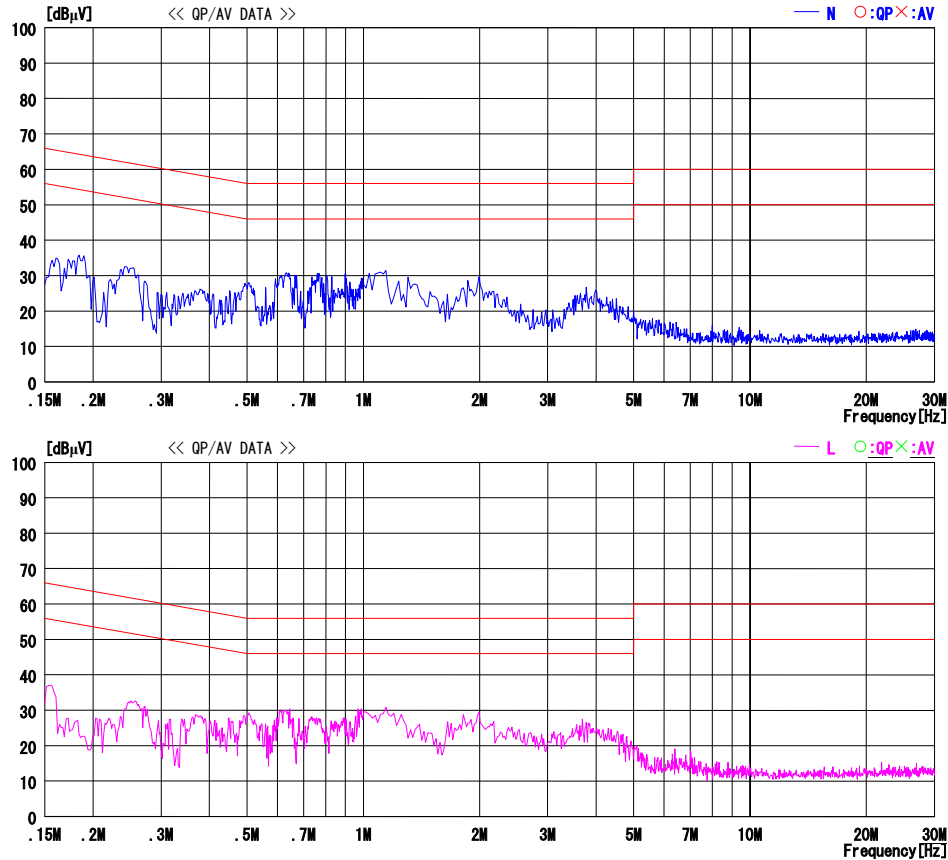


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C.F.(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

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DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2005/04/12 00:33:05

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular phone
Model No. : 703SH
Serial No. : 004400/01/154533/0

Report No. : 25HE0236-HO
Power : AC 120V / 60Hz (DC 4.0V)
Temp./Humi. : 24 deg.C / 54 %
Operator : Yutaka Yoshida

Mode / Remarks: Bluetooth, Tx 2441MHz, PRBS9, Packet DH5

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

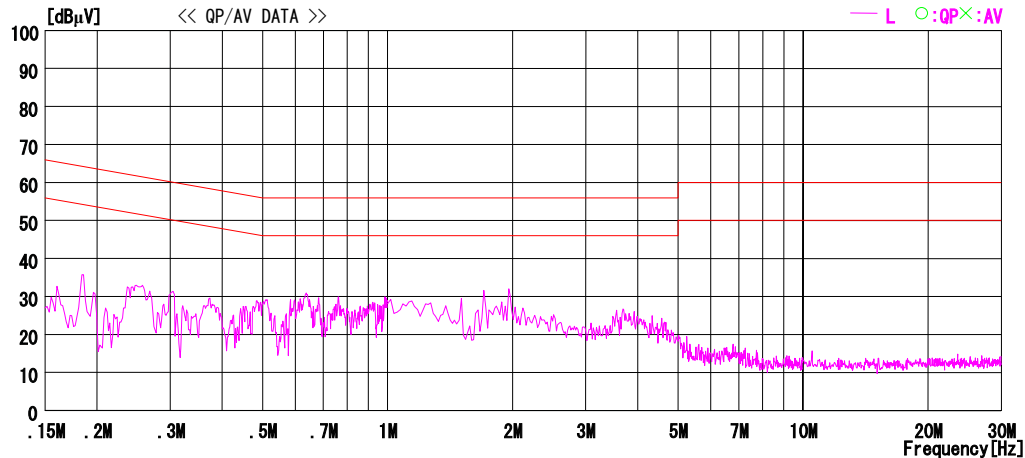
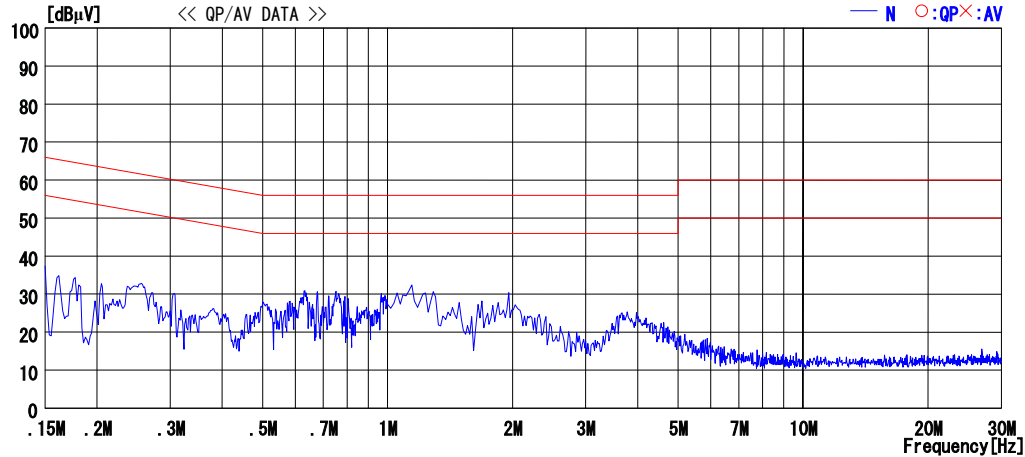


CHART:WITH FACTOR, Peak hold data. Data is uncorrected. CALCURATION: RESULT=READING+C.F (L ISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

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DATA OF CONDUCTED EMISSION TEST

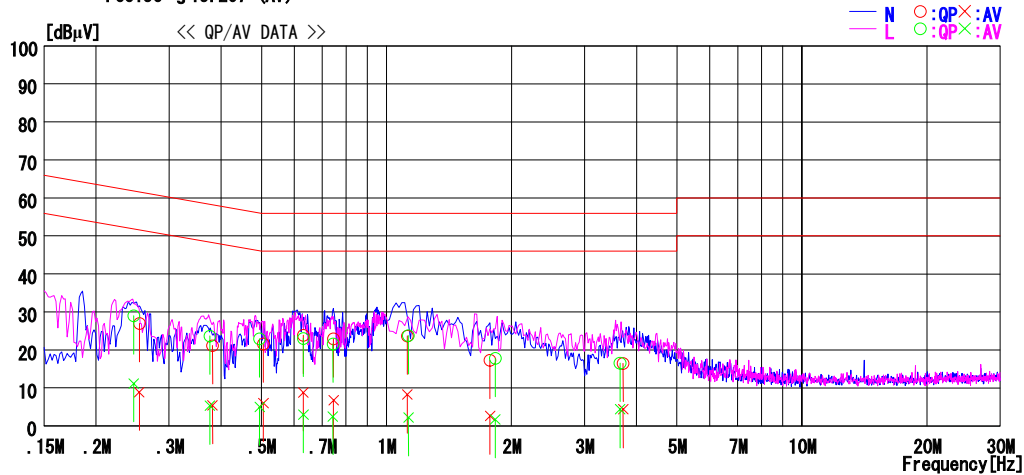
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2005/04/12 00:02:33

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular phone
Model No. : 703SH
Serial No. : 004400/01/154533/0

Report No. : 25HE0236-HO
Power : AC 120V / 60Hz (DC 4.0V)
Temp./Humi. : 24 deg.C / 54 %
Operator : Yutaka Yoshida

Mode / Remarks: Bluetooth, Tx 2480MHz, PRBS9, Packet DH5

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



NO	FREQ [MHz]	READING		C. F	RESULT		LIMIT		MARGIN		PHASE
		QP [dBμV]	AV [dBμV]		QP [dBμV]	AV [dBμV]	QP [dBμV]	AV [dBμV]	QP [dB]	AV [dB]	
1	0.2544	26.6	8.5	0.4	27.0	8.9	61.6	51.6	34.6	42.7	N
2	0.3814	20.9	5.2	0.2	21.1	5.4	58.2	48.2	37.1	42.8	N
3	0.5061	21.2	5.6	0.4	21.6	6.0	56.0	46.0	34.4	40.0	N
4	0.6306	23.4	8.3	0.5	23.9	8.8	56.0	46.0	32.1	37.2	N
5	0.7454	22.4	6.2	0.5	22.9	6.7	56.0	46.0	33.1	39.3	N
6	1.1233	23.1	7.7	0.5	23.6	8.2	56.0	46.0	32.4	37.8	N
7	1.7753	16.7	2.0	0.6	17.3	2.6	56.0	46.0	38.7	43.4	N
8	3.7125	15.8	3.7	0.7	16.5	4.4	56.0	46.0	39.5	41.6	N
9	0.2467	28.6	10.8	0.4	29.0	11.2	61.9	51.9	32.9	40.7	L
10	0.3762	23.4	5.1	0.2	23.6	5.3	58.4	48.4	34.8	43.1	L
11	0.4950	22.6	4.7	0.3	22.9	5.0	56.1	46.1	33.2	41.1	L
12	0.6311	22.5	2.5	0.5	23.0	3.0	56.0	46.0	33.0	43.0	L
13	0.7430	21.1	2.0	0.5	21.6	2.5	56.0	46.0	34.4	43.5	L
14	1.1296	23.3	1.7	0.5	23.8	2.2	56.0	46.0	32.2	43.8	L
15	1.8278	17.2	1.1	0.6	17.8	1.7	56.0	46.0	38.2	44.3	L
16	3.6520	15.9	3.7	0.7	16.6	4.4	56.0	46.0	39.4	41.6	L

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

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Carrier Frequency Separation

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

COMPANY	: Sharp Corporation	REGULATION	: Fcc Part15 Subpart C 15.247(a)(1)
EQUIPMENT	: GSM & WCDMA Cellular phone	TEST DISTANCE	: -
MODEL	: 703SH	DATE	: 04/11/2005
S/ N	: 004400/01/154532/2	TEMPERATURE	: 24deg.C
POWER	: AC120V/60Hz(DC4.0V)	HUMIDITY	: 54%
MODE	: Tx(Hopping on)/Inquiry	ENGINEER	: Yutaka Yoshida

Ch	Freq. [MHz]	Channel separation [MHz]	Limit
Low	2402.0	1.000	>20dB Bandwidth and 25[kHz]
Mid	2441.0	1.000	>20dB Bandwidth and 25[kHz]
High	2480.0	0.995	>20dB Bandwidth and 25[kHz]
Inquiry	2441.0	2.000	>20dB Bandwidth and 25[kHz]

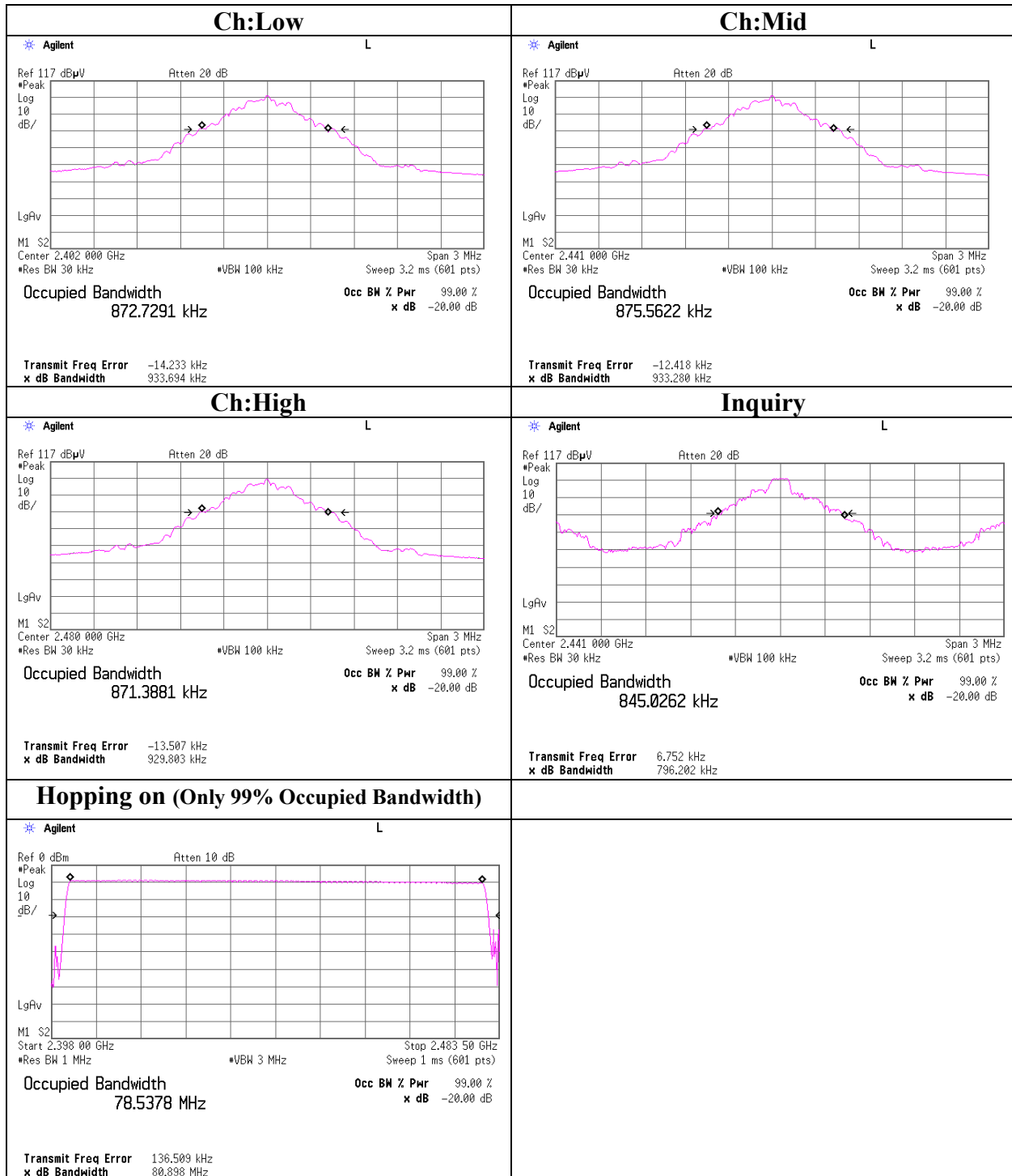
20dB Bandwidth

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

COMPANY	: Sharp Corporation	REGULATION	: Fcc Part15 Subpart C 15.247(a)(1)
EQUIPMENT	: GSM & WCDMA Cellular phone	TEST DISTANCE	: -
MODEL	: 703SH	DATE	: 04/11/2005
S/ N	: 004400/01/154532/2	TEMPERATURE	: 24deg.C
POWER	: AC120V/60Hz(DC4.0V)	HUMIDITY	: 54%
MODE	: Tx (Hopping off) /Inquiry	ENGINEER	: Yutaka Yoshida

Ch	Freq.	20dB Bandwidth	Limit
	[MHz]	[MHz]	[MHz]
Low	2402.0	0.934	-
Mid	2441.0	0.933	-
High	2480.0	0.930	-
Inquiry	2441.0	0.796	-

20dB Bandwidth (Reference: 99%Occupied Bandwidth)



Number of Hopping Frequency

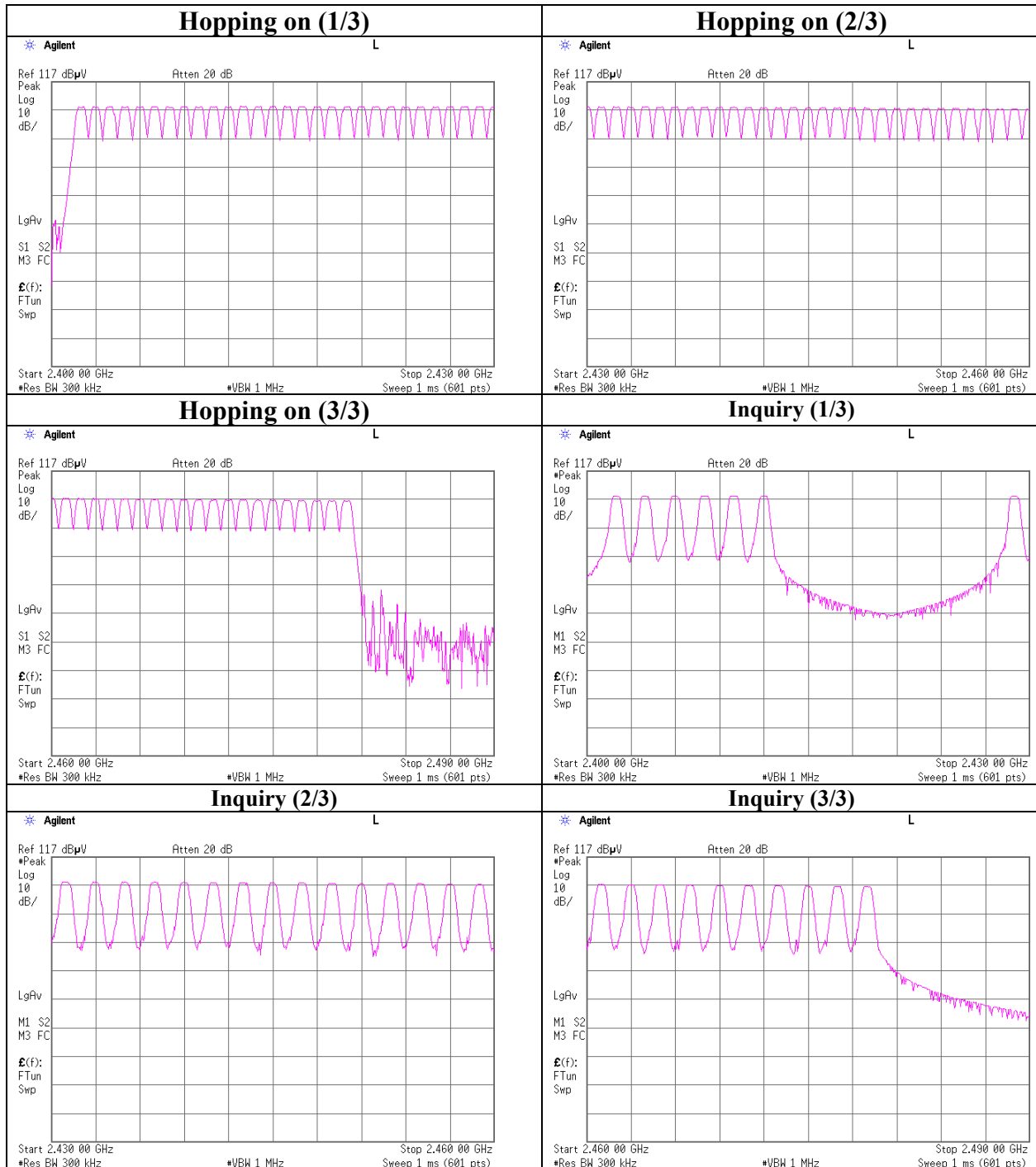
UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Shielded Room

COMPANY	: Sharp Corporation	REGULATION	: Fcc Part15 Subpart C 15.247(a)(1)(iii)
EQUIPMENT	: GSM & WCDMA Cellular phone	TEST DISTANCE	: -
MODEL	: 703SH	DATE	: 04/11/2005
S/ N	: 004400/01/154532/2	TEMPERATURE	: 24deg.C
POWER	: AC120V/60Hz(DC4.0V)	HUMIDITY	: 54%
MODE	: Tx (Hopping on) /Inquiry	ENGINEER	: Yutaka Yoshida

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

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

Number of Hopping Frequency



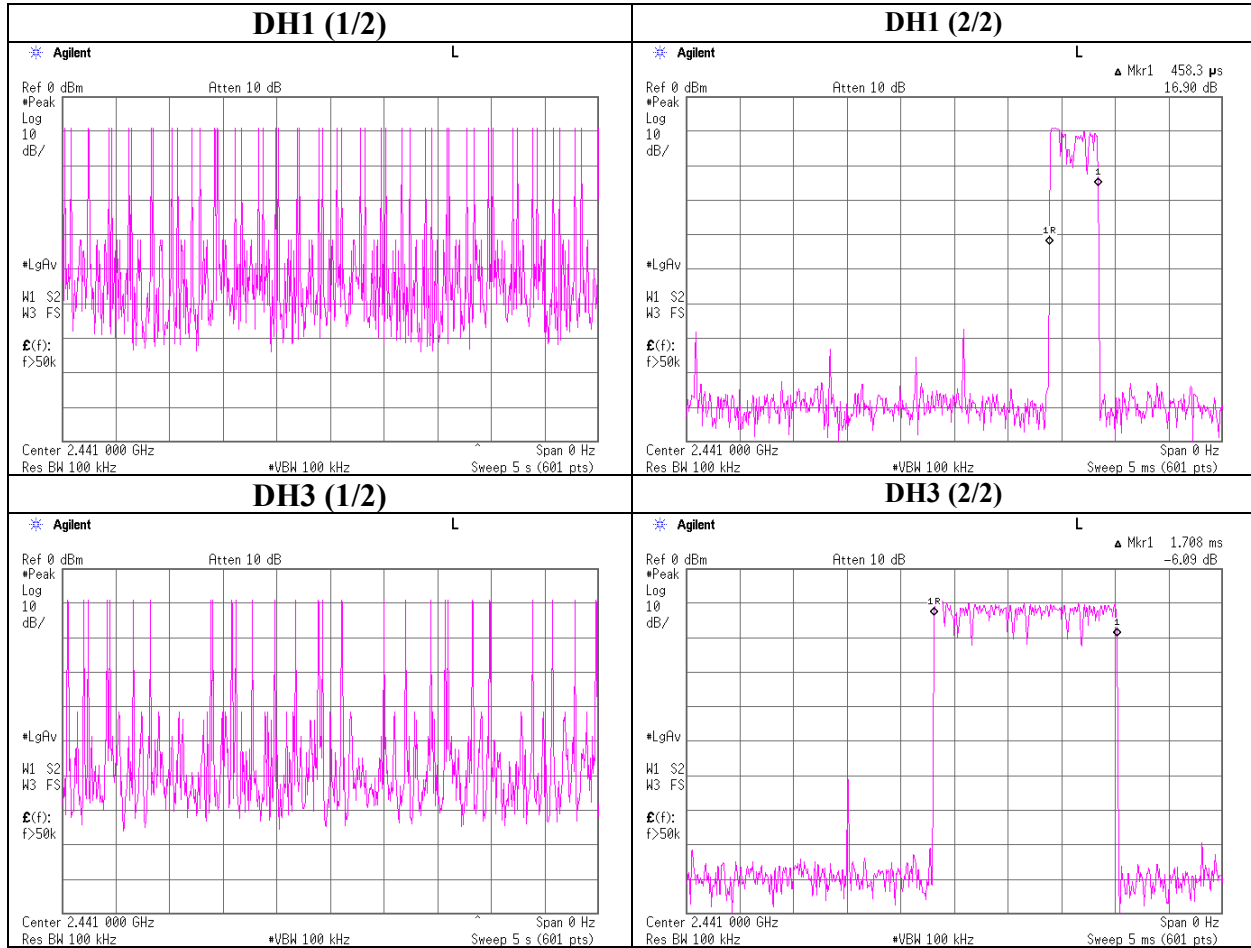
Dwell time

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

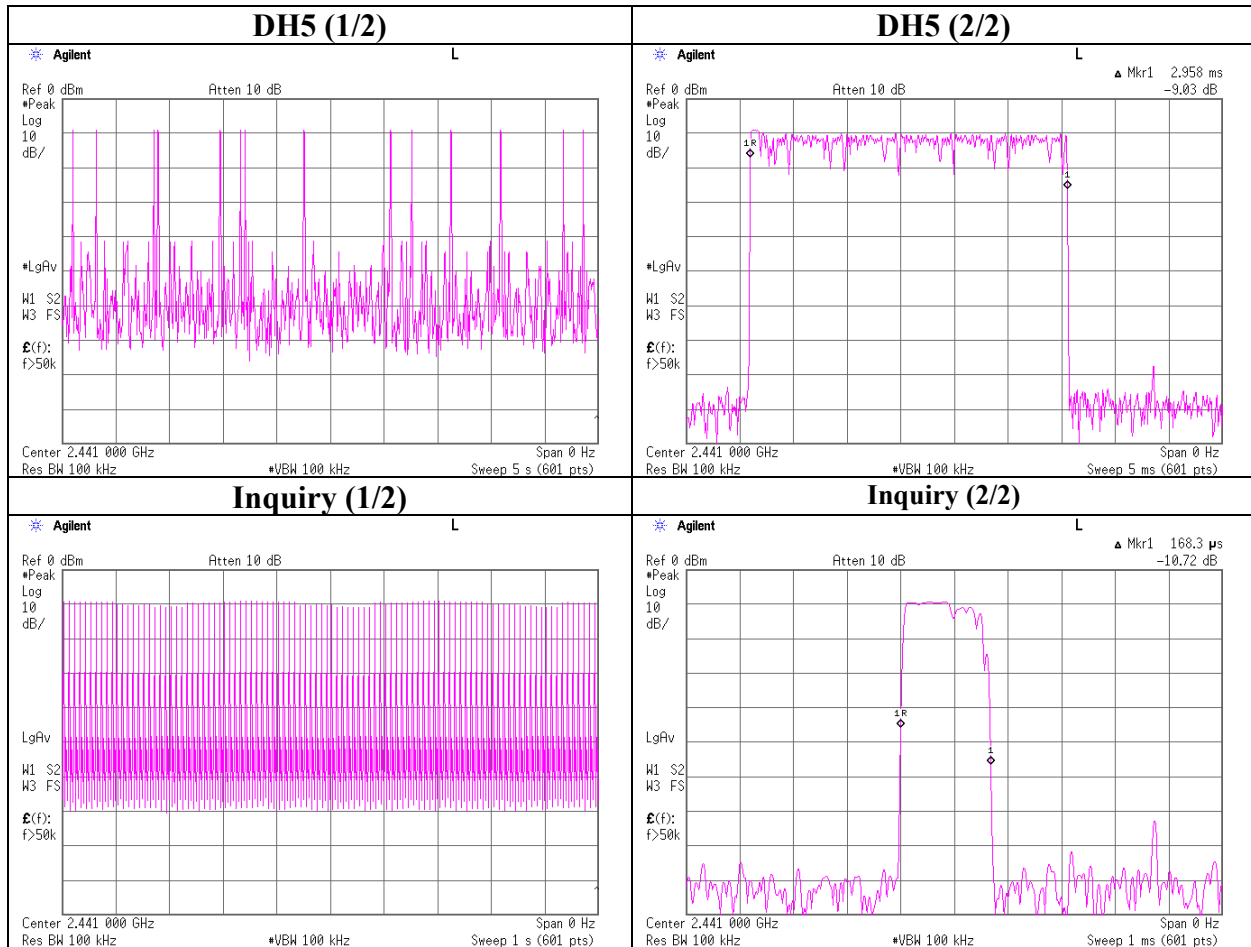
COMPANY	: Sharp Corporation	REGULATION	: Fcc Part15 Subpart C 15.247(a)(1)(iii)
EQUIPMENT	: GSM & WCDMA Cellular phone	TEST DISTANCE	: -
MODEL	: 703SH	DATE	: 04/12/2005
S/ N	: 004400/01/154532/2	TEMPERATURE	: 23deg.C
POWER	: AC120V/60Hz(DC4.0V)	HUMIDITY	: 39%
MODE	: Tx (Hopping on) /Inquiry	ENGINEER	: Mitsuru Fujimura

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	49 times /5sec. x 31.6 = 310 times	0.458	142	400
DH3	28 times / 5sec. x 31.6 = 177 times	1.708	303	400
DH5	14 times / 5 sec. x 31.6 = 89 times	2.958	264	400
Inquiry	100 times / 1sec. x 12.8 = 1280 times	0.168	215	400

Dwell time



Dwell time



Maximum Peak Output Power

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

COMPANY	: Sharp Corporation	REGULATION	: Fcc Part15 Subpart C 15.247(b)(1)
EQUIPMENT	: GSM & WCDMA Cellular phone	TEST DISTANCE	: -
MODEL	: 703SH	DATE	: 04/12/2005
S/N	: 004400/01/154532/2	TEMPERATURE	: 23deg.C
POWER	: AC120V/60Hz(DC4.0V)	HUMIDITY	: 39%
MODE	: Tx (Hopping off) /Inquiry	ENGINEER	: Mitsuru Fujimura

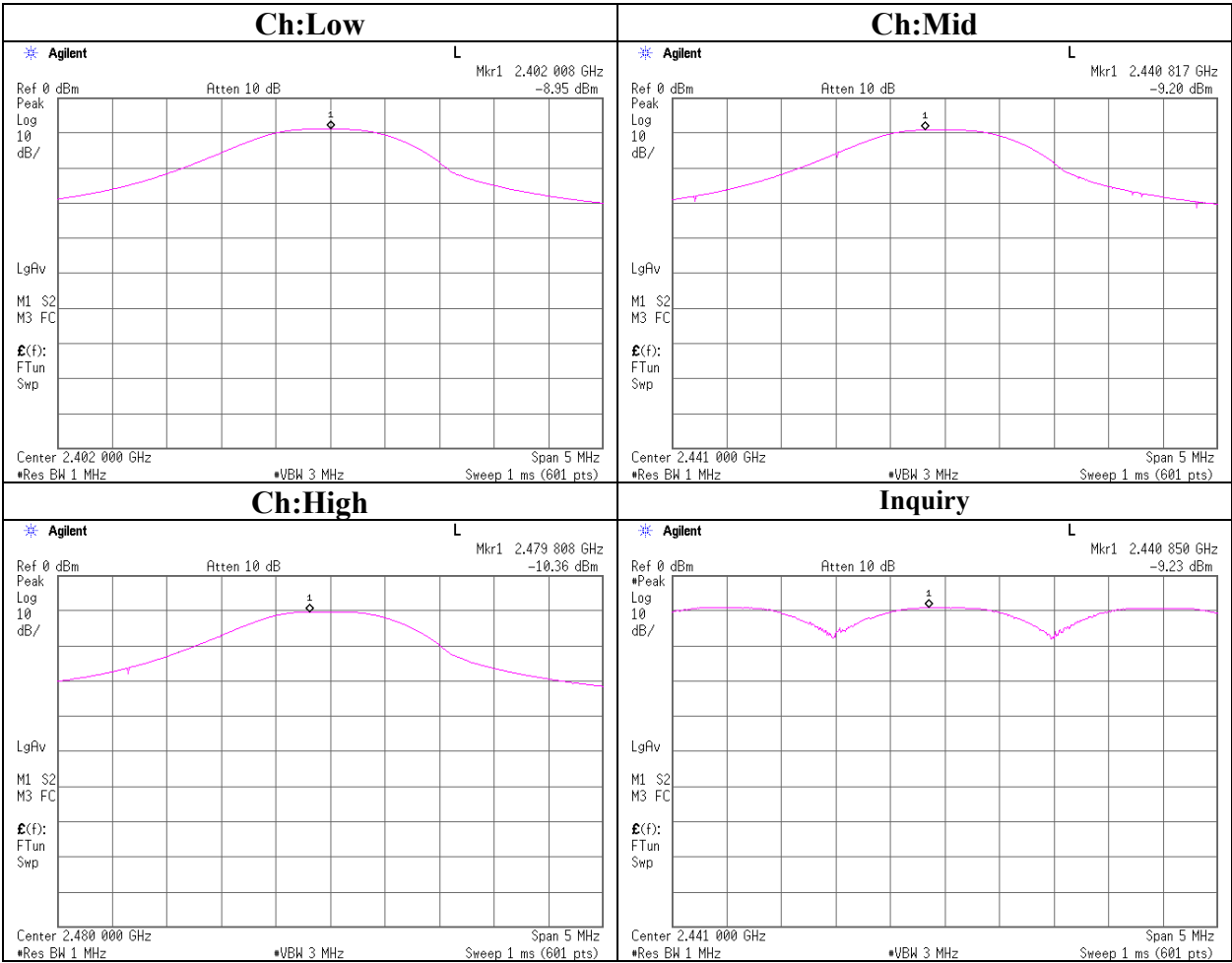
Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit (1W) [dBm]	Margin [dB]
Low	2402.0	-8.95	0.55	10.00	1.60	30.00	28.40
Mid	2441.0	-9.20	0.48	10.00	1.28	30.00	28.72
High	2480.0	-10.36	0.45	10.00	0.09	30.00	29.91
Inquiry	2441.0	-9.23	0.48	10.00	1.25	30.00	28.75

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.

Maximum Peak Output Power



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

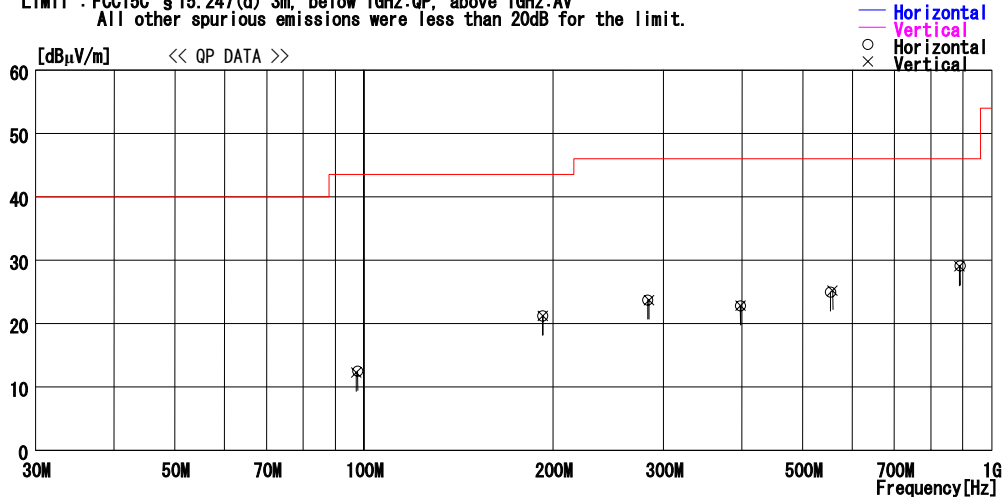
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2005/04/11 20:08:55

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular phone
Model No. : 703SH
Serial No. : 004400/01/154533/0

Report No. : 25HE0236-HO
Power : AC120V / 60Hz (DC 4.0V)
Temp°C/Humi% : 24°C / 54%
Operator : Yutaka Yoshida

Mode / Remarks: Bluetooth, Tx 2402MHz, PRBS9, Packet DH5

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:QP, above 1GHz:AV
All other spurious emissions were less than 20dB for the limit.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
Horizontal										
1	97.730	22.5	9.8	8.0	27.8	12.5	43.5	31.0	100	0
2	192.740	22.6	17.0	8.9	27.3	21.2	43.5	22.3	100	359
3	283.340	21.5	19.5	9.9	27.2	23.7	46.0	22.3	100	0
4	397.945	22.1	17.9	10.7	27.9	22.8	46.0	23.2	100	359
5	553.927	22.7	19.3	11.5	28.5	25.0	46.0	21.0	100	0
6	890.401	23.2	21.4	13.0	28.5	29.1	46.0	16.9	100	359
Vertical										
7	97.181	22.4	9.7	7.9	27.7	12.3	43.5	31.2	100	359
8	192.710	22.6	17.0	8.9	27.3	21.2	43.5	22.3	100	0
9	284.410	21.5	19.5	9.9	27.2	23.7	46.0	22.3	100	359
10	398.196	22.1	17.9	10.7	27.9	22.8	46.0	23.2	100	0
11	557.970	22.7	19.4	11.6	28.5	25.2	46.0	20.8	100	359
12	888.144	23.1	21.4	13.0	28.5	29.0	46.0	17.0	100	0

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)

UL Apex Co., Ltd.

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MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

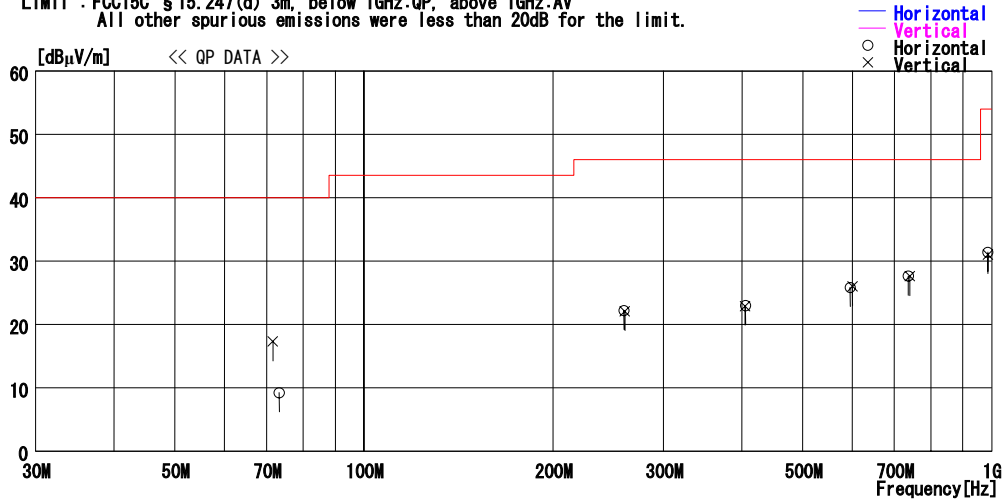
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2005/04/11 21:04:19

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular phone
Model No. : 703SH
Serial No. : 004400/01/154533/0

Report No. : 25HE0236-HO
Power : AC120V / 60Hz (DC 4.0V)
Temp°C/Humi% : 24°C / 54%
Operator : Yutaka Yoshida

Mode / Remarks: Bluetooth , Tx 2441MHz , PRBS9 , Packet DH5

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:QP, above 1GHz:AV
All other spurious emissions were less than 20dB for the limit.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
Horizontal										
1	73.287	22.5	6.8	7.6	27.7	9.2	40.0	30.8	120	359
2	259.418	21.6	18.0	9.7	27.1	22.2	46.0	23.8	295	0
3	405.210	22.2	18.0	10.7	27.9	23.0	46.0	23.0	100	285
4	594.590	23.0	19.8	11.8	28.8	25.8	46.0	20.2	100	280
5	736.276	23.1	20.9	12.4	28.8	27.6	46.0	18.4	100	134
6	985.980	23.3	23.2	13.3	28.4	31.4	54.0	22.6	100	328
Vertical										
7	71.591	30.6	6.9	7.5	27.7	17.3	40.0	22.7	364	359
8	260.435	21.5	18.0	9.7	27.1	22.1	46.0	23.9	100	267
9	404.866	22.1	18.0	10.7	27.9	22.9	46.0	23.1	100	0
10	600.168	23.1	19.9	11.8	28.8	26.0	46.0	20.0	100	359
11	740.642	22.9	21.0	12.5	28.8	27.6	46.0	18.4	100	0
12	985.980	22.9	23.2	13.3	28.4	31.0	54.0	23.0	100	67

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)

UL Apex Co., Ltd.

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MF060b(10.04.03)

DATA OF RADIATED EMISSION TEST

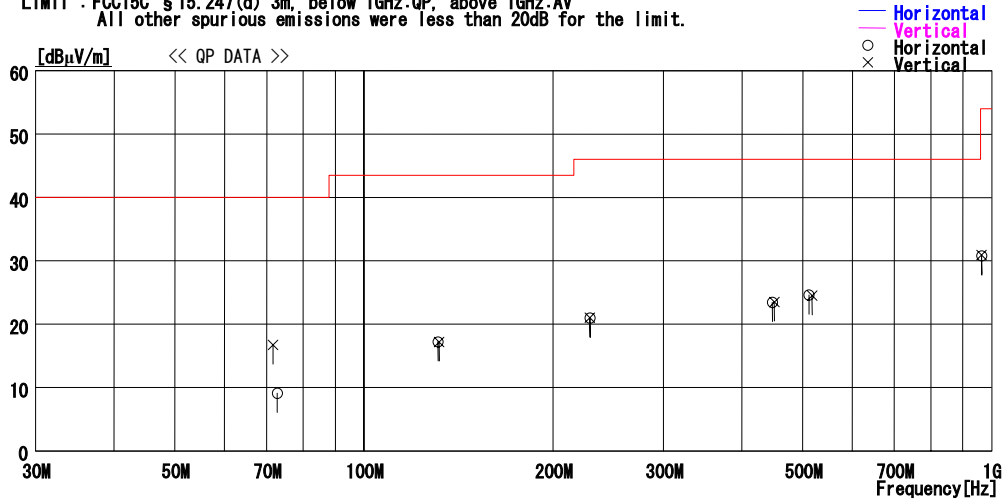
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2005/04/11 21:44:13

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular phone
Model No. : 703SH
Serial No. : 004400/01/154533/0

Report No. : 25HE0236-HO
Power : AC120V / 60Hz (DC 4.0V)
Temp°C/Humi% : 24°C / 54%
Operator : Yutaka Yoshida

Mode / Remarks: Bluetooth , Tx 2480MHz , PRBS9 , Packet DH5

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:QP, above 1GHz:AV
All other spurious emissions were less than 20dB for the limit.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
Horizontal										
1	72.745	22.4	6.8	7.6	27.7	9.1	40.0	30.9	300	4
2	131.183	22.5	13.8	8.5	27.6	17.2	43.5	26.3	254	359
3	229.117	21.6	17.3	9.5	27.4	21.0	46.0	25.0	100	0
4	447.294	22.4	18.3	10.9	28.1	23.5	46.0	22.5	100	359
5	511.823	23.0	18.8	11.3	28.5	24.6	46.0	21.4	100	206
6	963.535	23.3	22.7	13.3	28.5	30.8	54.0	23.2	100	0
Vertical										
7	71.663	30.0	6.9	7.5	27.7	16.7	40.0	23.3	400	359
8	131.724	22.5	13.8	8.5	27.6	17.2	43.5	26.3	100	3
9	229.117	21.6	17.3	9.5	27.4	21.0	46.0	25.0	100	100
10	450.482	22.4	18.3	10.9	28.1	23.5	46.0	22.5	100	0
11	517.434	22.9	18.8	11.3	28.5	24.5	46.0	21.5	100	339
12	963.535	23.4	22.7	13.3	28.5	30.9	54.0	23.1	100	355

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)

UL Apex Co., Ltd.

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MF060b(10.04.03)

Radiated Spurious Emission

UL Apex Co., Ltd.
Head Office EMC Lab. No.1 Semi Anechoic Chamber

Company : Sharp Corporation	REPORT NO : 25HE0236-HO	
Equipment : GSM & WCDMA Cellular Phone	REGULATION : Fcc Part15 Subpart C 15.247(d)	
Model : 703SH	TEST DISTANCE : 3/1m	
Sample No. : 004400/01/154533/0	DATE : 11/04/2005	
Power : AC 120 V / 60 Hz(DC 4.0V)	TEMPERATURE : 21deg.C	
Mode : Bluetooth, Tx 2402MHz	HUMIDITY : 51%	
Remarks : Max-axis(Hor : X-axis, Ver : X-axis)	ENGINEER : Mitsuru Fujimura	

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

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	65.7	65.4	31.0	39.9	5.5	0.0	62.3	62.0	74.0	11.7	12.0
2*	2400.0	83.4	82.8	30.9	39.9	5.5	0.0	79.9	79.3	74.0	-	-
3	4803.9	51.2	49.1	34.9	41.2	8.0	1.0	53.9	51.8	74.0	20.1	22.2
4	7206.0	47.1	46.4	37.6	40.4	10.0	0.4	54.7	54.0	74.0	19.3	20.0
5	9608.0	45.2	45.6	36.3	39.5	11.8	0.1	53.9	54.3	74.0	20.1	19.7
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12010.0	46.4	46.3	41.4	39.6	13.7	0.1	52.5	52.4	74.0	21.5	21.6
7	14412.0	45.2	45.5	41.7	41.0	15.6	0.2	52.2	52.5	74.0	21.8	21.5
8	16814.0	45.5	45.6	44.7	41.7	17.1	1.1	57.2	57.3	74.0	16.8	16.7
9	19216.0	43.1	42.7	41.7	40.3	18.7	0.0	53.7	53.3	74.0	20.3	20.7
10	21618.0	43.6	44.1	40.4	35.4	19.3	0.0	58.4	58.9	74.0	15.6	15.1
11	24020.0	43.4	43.7	41.0	32.9	21.5	0.0	63.5	63.8	74.0	10.6	10.2

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

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	35.8	35.8	31.0	39.9	5.5	0.0	32.4	32.4	54.0	21.6	21.6
2*	2400.0	57.7	57.1	30.9	39.9	5.5	0.0	54.2	53.6	54.0	-	-
3	4803.9	40.1	36.1	34.9	41.2	8.0	1.0	42.8	38.8	54.0	11.2	15.2
4	7206.0	33.5	33.5	37.6	40.4	10.0	0.4	41.1	41.1	54.0	12.9	12.9
5	9608.0	31.6	32.0	36.3	39.5	11.8	0.1	40.3	40.7	54.0	13.7	13.3
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12010.0	32.9	32.9	41.4	39.6	13.7	0.1	39.0	39.0	54.0	15.0	15.0
7	14412.0	32.4	32.4	41.7	41.0	15.6	0.2	39.4	39.4	54.0	14.6	14.6
8	16814.0	32.4	32.4	44.7	41.7	17.1	1.1	44.1	44.1	54.0	9.9	9.9
9	19216.0	29.8	29.8	41.7	40.3	18.7	0.0	40.4	40.4	54.0	13.6	13.6
10	21618.0	30.3	30.3	40.4	35.4	19.3	0.0	45.1	45.1	54.0	8.9	8.9
11	24020.0	30.3	30.3	41.0	32.9	21.5	0.0	50.4	50.4	54.0	3.6	3.6

* Reference data

20dBc(Fundamental 2402MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
0	2402.0	103.8	103.2	30.9	39.9	5.5	0.0	100.3	99.7	-	-	-
2	2400.0	66.9	65.6	30.9	39.9	5.5	0.0	63.4	62.1	Funda-20dB	16.9	17.7

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

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

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

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

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

Radiated Spurious Emission

UL Apex Co., Ltd.
Head Office EMC Lab. No.1 Semi Anechoic Chamber

Company : Sharp Corporation	REPORT NO : 25HE0236-HO
Equipment : GSM & WCDMA Cellular Phone	REGULATION : Fcc Part15 Subpart C 15.247(d)
Model : 703SH	TEST DISTANCE : 3/1m
Sample No. : 004400/01/154533/0	DATE : 11/04/2005
Power : AC 120 V / 60 Hz(DC 4.0V)	TEMPERATURE : 21deg.C
Mode : Bluetooth, Tx 2441MHz	HUMIDITY : 51%
Remarks : Max-axis(Hor : X-axis, Ver : X-axis)	ENGINEER : Mitsuru Fujimura

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

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4881.7	49.7	49.9	35.3	41.2	8.0	1.0	52.8	53.0	74.0	21.2	21.0
2	7323.0	46.6	46.3	37.6	40.4	10.0	0.4	54.2	53.9	74.0	19.8	20.1
3	9764.0	44.3	44.8	36.2	39.6	12.0	0.2	53.1	53.6	74.0	20.9	20.4
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12205.0	46.6	46.4	41.5	39.8	13.8	0.3	52.9	52.7	74.0	21.1	21.3
5	14646.0	45.3	45.6	42.2	40.9	15.8	0.2	53.1	53.4	74.0	20.9	20.6
6	17087.0	44.8	44.4	44.5	41.8	17.1	1.1	56.2	55.8	74.0	17.8	18.2
7	19528.0	42.6	42.2	41.4	39.8	18.9	0.0	53.6	53.2	74.0	20.4	20.8
8	21969.0	45.4	45.2	40.5	35.9	19.2	0.0	59.7	59.5	74.0	14.3	14.5
9	24410.0	42.3	43.0	41.1	33.8	21.6	0.0	61.7	62.4	74.0	12.3	11.6

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

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4881.7	36.7	36.8	35.3	41.2	8.0	1.0	39.8	39.9	54.0	14.2	14.1
2	7323.0	33.5	33.5	37.6	40.4	10.0	0.4	41.1	41.1	54.0	12.9	12.9
3	9764.0	31.4	31.7	36.2	39.6	12.0	0.2	40.2	40.5	54.0	13.8	13.5
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12205.0	33.2	33.2	41.5	39.8	13.8	0.3	39.5	39.5	54.0	14.5	14.6
5	14646.0	32.3	32.3	42.2	40.9	15.8	0.2	40.1	40.1	54.0	13.9	13.9
6	17087.0	30.9	30.9	44.5	41.8	17.1	1.1	42.3	42.3	54.0	11.7	11.7
7	19528.0	29.1	29.1	41.4	39.8	18.9	0.0	40.1	40.1	54.0	13.9	13.9
8	21969.0	31.9	31.9	40.5	35.9	19.2	0.0	46.2	46.2	54.0	7.8	7.8
9	24410.0	28.9	29.0	41.1	33.8	21.6	0.0	48.3	48.4	54.0	5.7	5.7

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

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

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

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

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

Radiated Spurious Emission

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Company : Sharp Corporation REPORT NO : 25HE0236-HO
Equipment : GSM & WCDMA Cellular Phone REGULATION : Fcc Part15 Subpart C 15.247(d)
Model : 703SH TEST DISTANCE : 3/1m
Sample No. : 004400/01/154533/0 DATE : 11/04/2005
Power : AC 120 V / 60 Hz(DC 4.0V) TEMPERATURE : 21deg.C
Mode : Bluetooth, Tx 2480MHz HUMIDITY : 51%
Remarks : Max-axis(Hor : X-axis, Ver : X-axis) ENGINEER : Mitsuru Fujimura
PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1*	2483.5	78.2	73.4	30.8	40.0	5.5	0.0	74.5	69.7	74.0	-	-
2	4960.0	49.1	49.4	35.8	41.3	8.1	1.1	52.8	53.1	74.0	21.2	21.0
3	7440.0	46.3	47.0	37.9	40.3	10.2	0.7	54.8	55.5	74.0	19.2	18.5
4	9920.0	45.2	45.5	36.2	39.6	12.1	0.3	54.2	54.5	74.0	19.8	19.5
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12400.0	46.7	46.0	41.6	40.0	14.0	0.4	53.2	52.5	74.0	20.8	21.5
6	14880.0	45.2	46.6	42.6	40.9	15.9	0.5	53.8	55.2	74.0	20.2	18.8
7	17360.0	45.9	45.8	44.4	41.6	17.2	0.9	57.3	57.2	74.0	16.7	16.9
8	19840.0	42.2	41.5	41.1	39.4	19.3	0.0	53.7	53.0	74.0	20.3	21.0
9	22320.0	44.8	44.3	40.4	35.3	19.6	0.0	60.0	59.5	74.0	14.0	14.5
10	24800.0	43.0	43.0	41.1	34.6	21.5	0.0	61.5	61.5	74.0	12.5	12.5

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

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1*	2483.5	48.1	37.2	30.8	40.0	5.5	0.0	44.4	33.5	54.0	9.6	20.5
2	4960.0	35.9	36.7	35.8	41.3	8.1	1.1	39.6	40.4	54.0	14.4	13.6
3	7440.0	33.6	33.6	37.9	40.3	10.2	0.7	42.1	42.1	54.0	11.9	11.9
4	9920.0	32.4	32.6	36.2	39.6	12.1	0.3	41.4	41.6	54.0	12.7	12.4
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12400.0	33.2	33.2	41.6	40.0	14.0	0.4	39.7	39.7	54.0	14.4	14.3
6	14880.0	32.0	32.0	42.6	40.9	15.9	0.5	40.6	40.6	54.0	13.5	13.4
7	17360.0	32.4	32.4	44.4	41.6	17.2	0.9	43.8	43.8	54.0	10.2	10.2
8	19840.0	28.5	28.5	41.1	39.4	19.3	0.0	40.0	40.0	54.0	14.0	14.0
9	22320.0	31.6	31.6	40.4	35.3	19.6	0.0	46.8	46.8	54.0	7.2	7.2
10	24800.0	29.6	29.6	41.1	34.6	21.5	0.0	48.1	48.1	54.0	5.9	5.9

* Reference data

Marker-Delta Method (RBW:100kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
PK DETECT												
1	2483.5	60.0	57.8	30.8	40.0	5.5	0.0	56.3	54.1	74.0	17.7	19.9
AV DETECT												
1	2483.5	33.6	33.4	30.8	40.0	5.5	0.0	29.9	29.7	54.0	24.1	24.3

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

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

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

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

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

UL Apex Co., Ltd.

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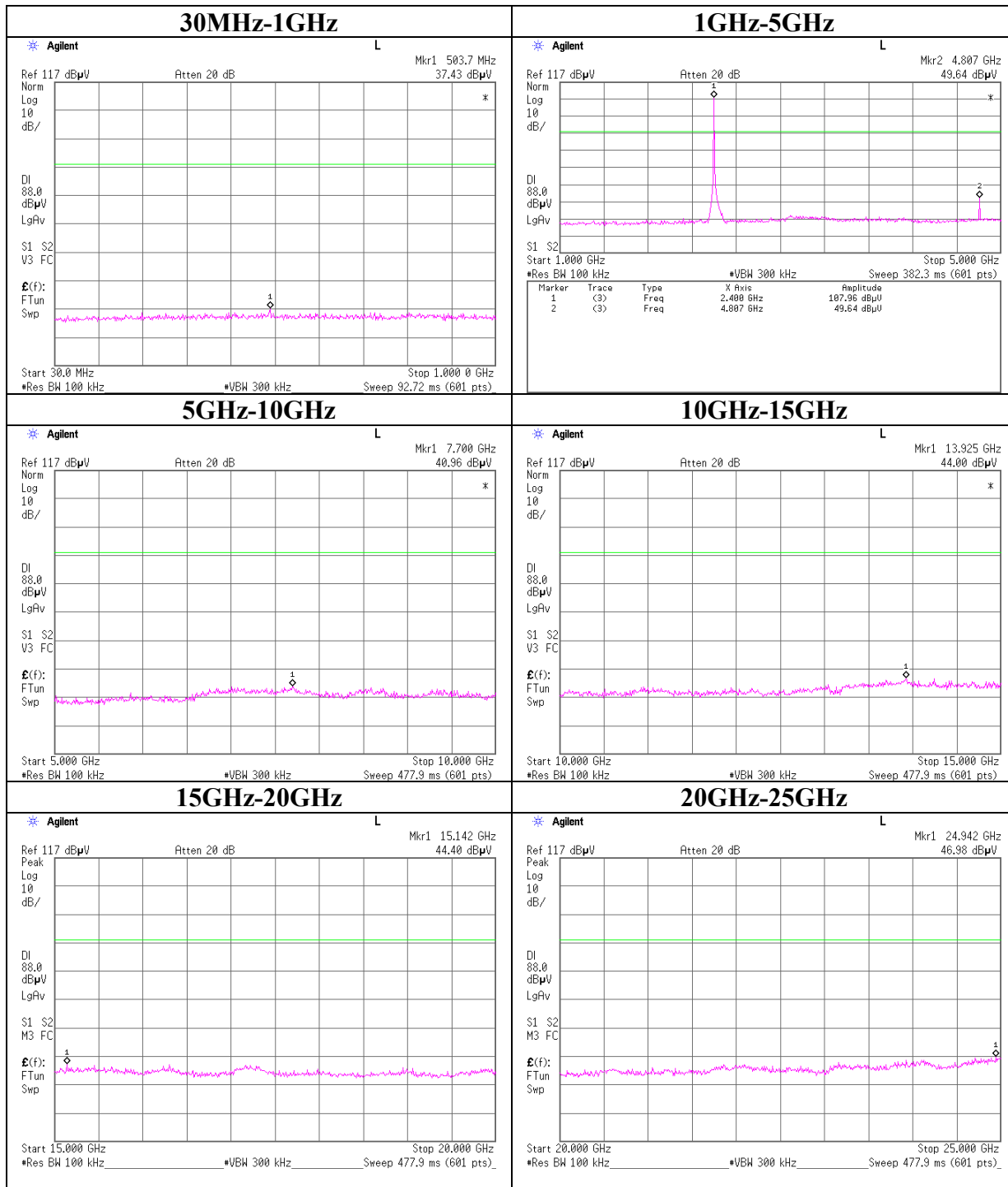
Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

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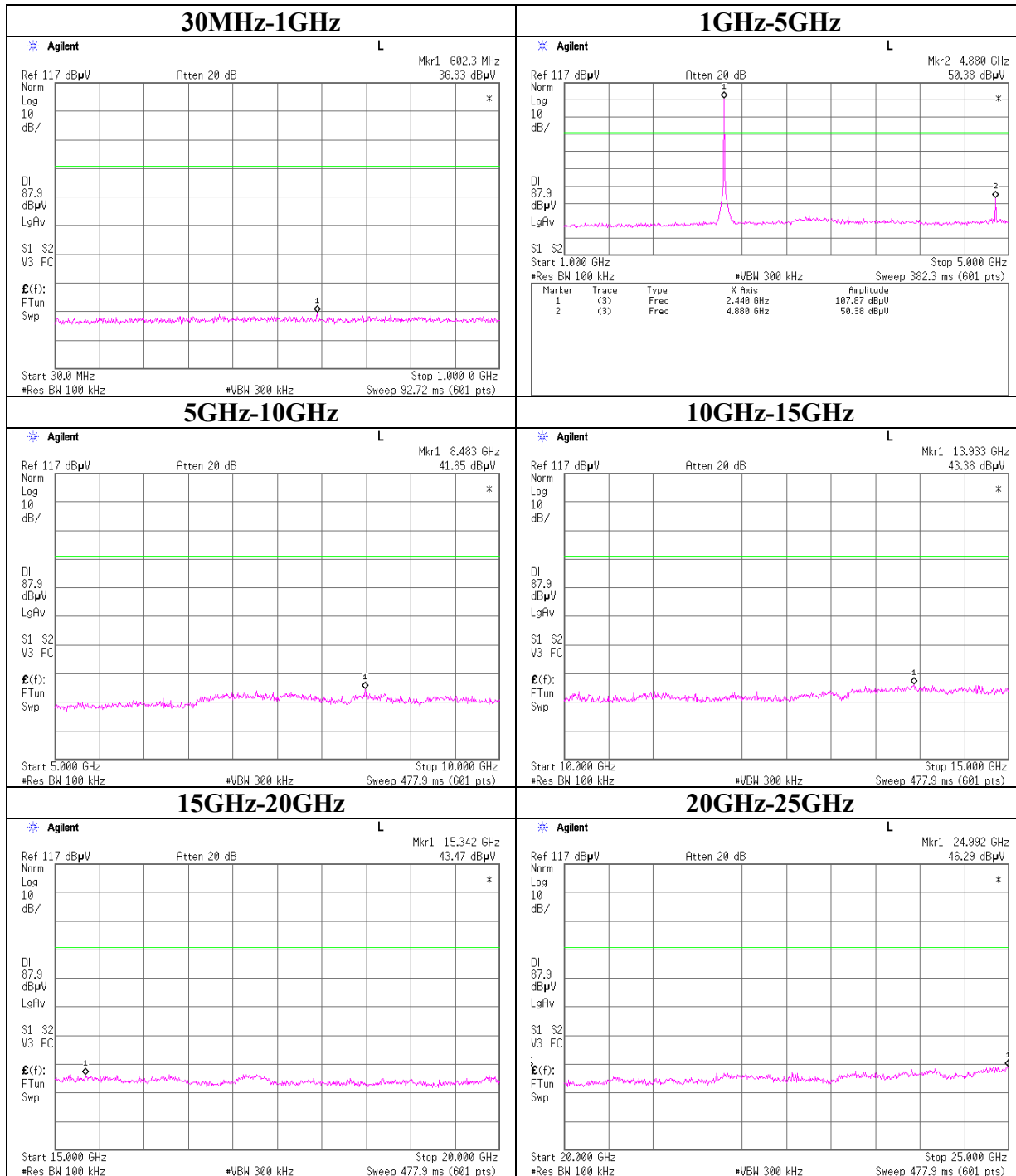
Conducted Spurious Emission

Ch:Low



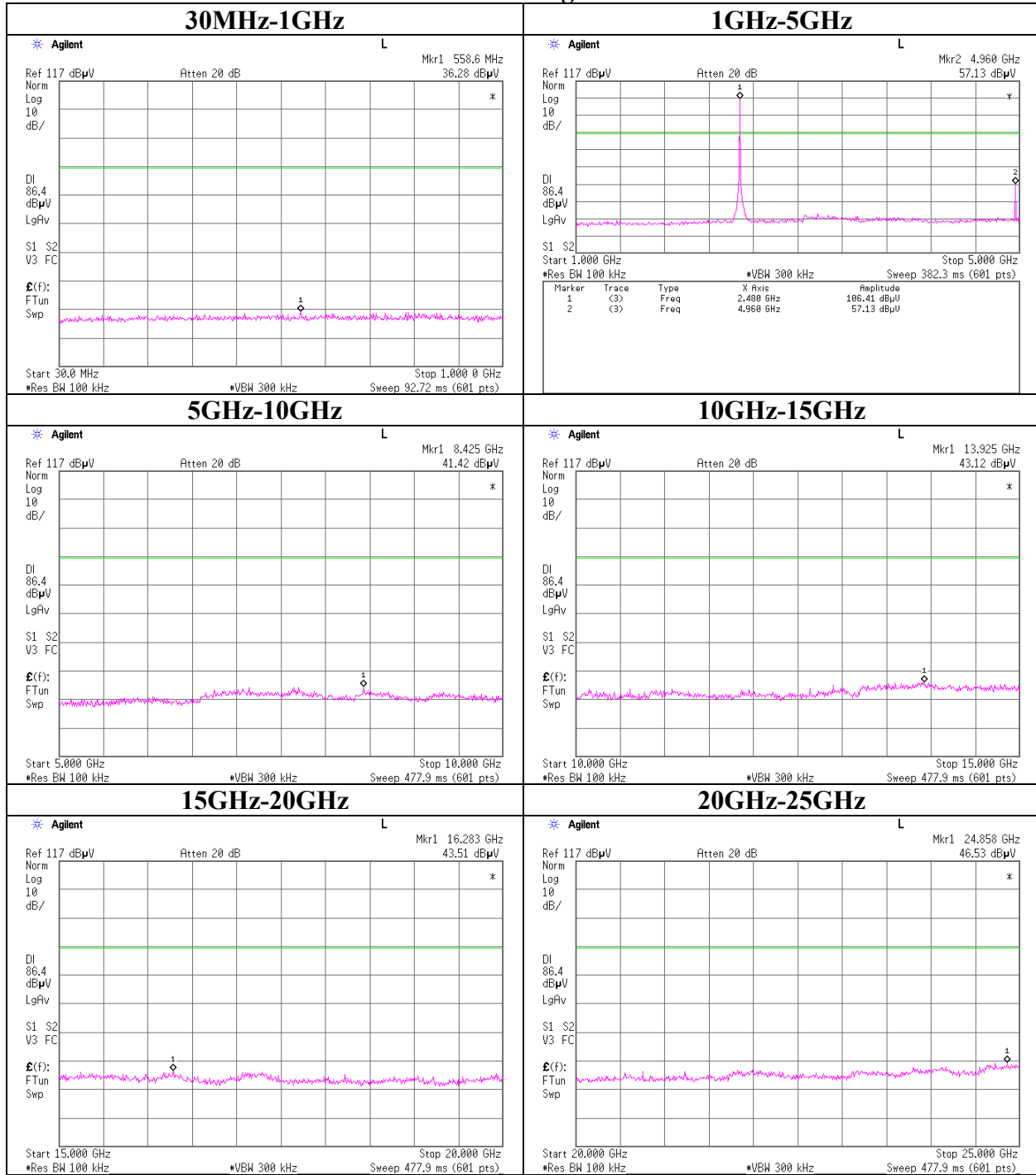
Conducted Spurious Emission

Ch:Mid



Conducted Spurious Emission

Ch:High



Conducted Spurious Emission Band Edge compliance

