



UL Apex Co., Ltd.

Test report No. : 26BE0002-HO-1b
Page : 1 of 42
Issued date : November 7, 2005
Revised date : November 9, 2005
Revised date : November 14, 2005
FCC ID : APYHRO00044

EMI TEST REPORT

Test Report No. : 26BE0002-HO-1b

Applicant : Sharp Corporation
Type of Equipment : GSM & WCDMA Cellular Phone
Model No. : 804SH
FCC ID : APYHRO00044
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:

October 26 and 27, 2005

Tested by:

T. Shimada

Takumi Shimada
EMC Services

Approved by :

H. Shimoji

Hironobu Shimoji
Group Leader of EMC Services

UL Apex Co., Ltd.

Head Office EMC Lab.

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

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(01.06.05)

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SECTION 1: Client information

Company Name : Sharp Corporation
Brand Name : SHARP
Address : 2-13-1 Iida Hachihonmatsu HigashiHiroshima-City,Hiroshima 739-0192
Japan
Telephone Number : +81-82-420-1936
Facsimile Number : +81-82-420-1852
Contact Person : Kiyoharu Kaidou

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

2.1 Identification of E.U.T.

Type of Equipment : GSM & WCDMA Cellular Phone
Model No. : 804SH
Serial No. : 004400/01/629061/9,
004400/01/629060/1
Country of Manufacture : Japan
Condition of EUT : Production prototype
(Not for Sale: This sample is equivalent to mass-produced items.)
Receipt Date of Sample : October 24, 2005

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Head Office EMC Lab.

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2.2 Product Description

Model: 804SH (referred to as the EUT in this report) is GSM & WCDMA Cellular Phone.

The EUT has the function of Bluetooth wireless technology interfaces for establishing contact and transmitting data with certain device.

Clock frequency(ies) in the system	:	CPU:13MHz RTC:32.768kHz
Equipment Type	:	Transceiver
Frequency band	:	Lower limit: 2402MHz Upper limit: 2480MHz
Bandwidth & Channel spacing	:	1MHz & 1MHz
Modulation	:	FHSS
Mode of Operation	:	Simplex
ITU code	:	F1D/F1E/F1W
Power Supply	:	DC4.0V (EUT input) DC 2.9V (RF Module input)
Antenna Type	:	Internal Antenna
Antenna Connector Type	:	Spring connector
Antenna Gain	:	0dBi
Method of Frequency Generation	:	Synthesizer

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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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 *1)	ANSI C63.4:2003 7. AC powerline conducted emission measurements	Section 15.207	-	N/A	25.3dB (4.10590MHz, AV, L)	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	7.7dB (2483.5MHz, PK, Ver.)	Complied

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

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

*1) There is no difference in output levels of 3 Channels (Low/Mid/High) at both QP/AV data, and all the levels complied with the limit. Therefore, only the representative channel (High: 2480MHz) was tested.

*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-Gen 4.4.1	-	Conducted	N/A	N/A	N/A

3.4 Uncertainty

Conducted Emission

The measurement uncertainty (with a 95% confidence level) for this test is $\pm 1.3\text{dB}$.
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 $\pm 4.5\text{dB}(3\text{m})/\pm 4.7\text{dB}(10\text{m})$.
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 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
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8116
Facsimile : +81 596 24 8124

	FCC Registration Number	IC Registration Number	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Other rooms
No.1 semi-anechoic chamber	313583	IC4247A	19.2 x 11.2 x 7.7m	7.0 x 6.0m	Preparation room
No.2 semi-anechoic chamber	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.

3.6 Test set up, Test instruments and Data of EMI

Refer to APPENDIX 1 to 3.

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Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

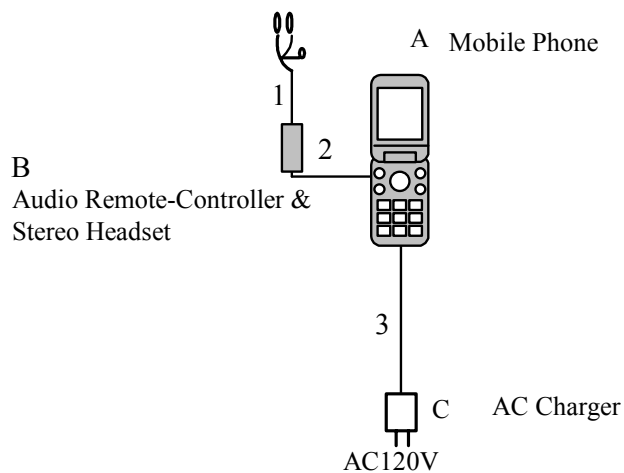
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SECTION 4: Operation of E.U.T. during testing

4.1 Operating Modes

The mode is used : 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/Remarks
A	GSM & WCDMA Cellular Phone	804SH	004400/01/629061/9 *1) 004400/01/629060/1 *2)	Sharp Corporation	APYHRO00044 (EUT)
B	Audio Remote-Controller & Stereo Headset	ZTBAA1	-	SHARP	EUT
C	AC Charger	SHCAA1	-	SHARP	-

*1) for Antenna Terminal tests

*2) for Radiated Emission and Conducted Emission

List of cables used

No.	Name	Length (m)	Shield
1	Stereo Headset	1.02	N
2	Audio Remote-Controller	0.8	N
3	AC Charger	1.5	N

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SECTION 5: Conducted Emission

Test Procedure and conditions

EUT was placed on a platform of nominal size, 1m by 0.5m, raised 80cm above the conducting ground plane. The rear of tabletop was located 40cm to the vertical conducting plane. The rear of EUT, including peripherals aligned and flushed with rear of tabletop. All other surfaces of tabletop were at least 80cm from any other grounded conducting surface. EUT was located 80cm from a Line Impedance Stabilization Network (LISN)/ Artificial mains Network (AMN) and excess AC cable was bundled in center.

For the tests on EUT 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 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 0.5m, 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.

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 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 (Y-axis:Horizontal / Z-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)
MRENT-21	Spectrum Analyzer	Advantest	R3273	AT	2005/08/19 * 12
MCC-22	Microwave Cable 1G-50GHz	Storm	421-011 (90-011-080)	AT	2005/04/29 * 12
MCC-46	Microwave Cable	Murata	MXGS83RK3000	AT	2005/06/30 * 12
MAT-23	Attenuator(10dB)(above1GHz)	Orient Microwave	BX10-0476-00	AT	2005/03/16 * 12
MAEC-02	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE / CE	2005/04/11 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	RE	2004/12/16 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	RE	2005/02/24 * 12
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	RE	2005/10/10 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2005/10/14 * 12
MPA-09	Pre Amplifier	Agilent	8447D	RE	2005/09/07 * 12
MHA-06	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2005/01/10 * 12
MCC-04	Microwave Cable 1G-50GHz	Storm	421-011 (90-1394-079)	RE	2005/01/05 * 12
MCC-18	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX 104	RE	2005/02/03 * 12
MPA-01	Pre Amplifier	Agilent	8449B	RE	2005/02/05 * 12
MHF-02	High Pass Filter	Tokimec	TF323DCA	RE	2005/09/27 * 12
MHA-02	Horn Antenna	EMCO	3160-09	CE	2005/01/10 * 12
MLS-06	LISN(AMN)	Schwarzbeck	NSLK8127	CE (EUT)	2005/02/04 * 12
MCC-13	Coaxial Cable	Fujikura/Agilent	-	RE /CE	2005/02/24 * 12
MTR-02	Test Receiver	Rohde & Schwarz	ESCS30	RE / CE	2005/02/02 * 12
MSA-04	Spectrum Analyzer	Agilent	E4448A	RE / CE	2005/05/19 * 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 tests

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

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

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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 : 2005/10/27 17:18:20

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular Phone
Model No. : 804SH
Serial No. : 004400/01/629060/1

Report No. : 26BE0002-HO
Power : DC4.0V (AC adapter: AC120V/60Hz)
Temp./Humi. : 22deg.C / 58%
Operator : Takumi Shimada

Mode / Remarks : Bluetooth Tx2402MHz

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

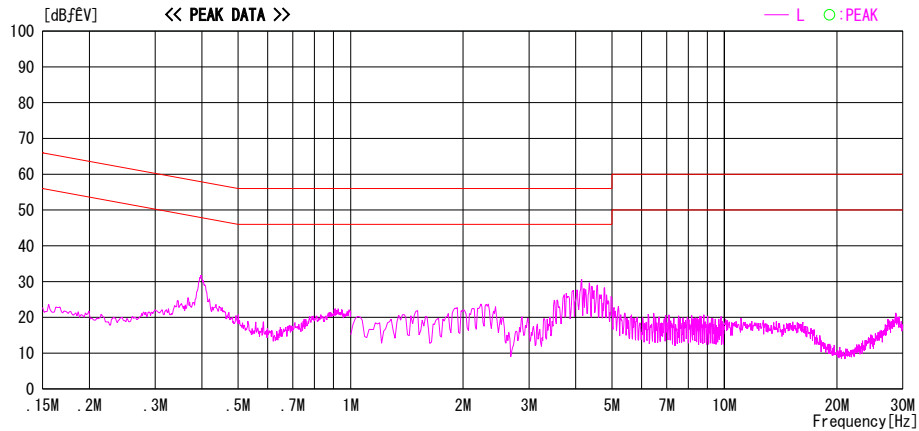
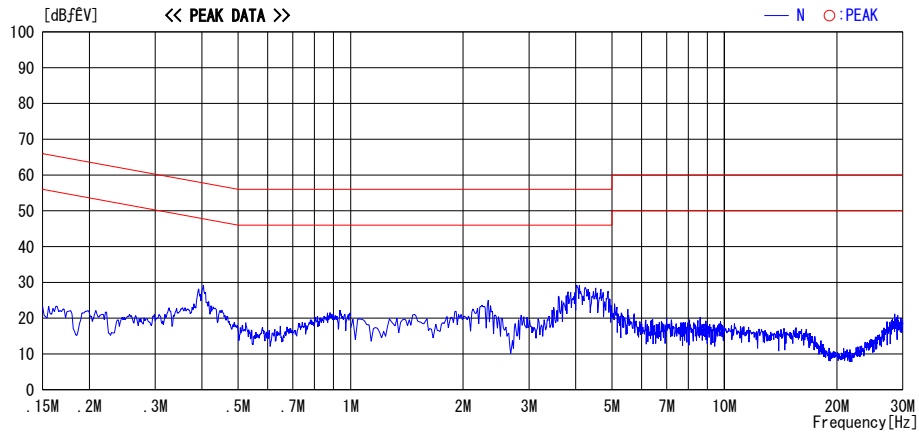


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCURATION: RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/10/27 17:23:53

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular Phone
Model No. : 804SH
Serial No. : 004400/01/629060/1

Report No. : 26BE0002-HO
Power : DC4.0V (AC adapter: AC120V/60Hz)
Temp./Humi. : 22deg.C / 58%
Operator : Takumi Shimada

Mode / Remarks : Bluetooth Tx2441MHz

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

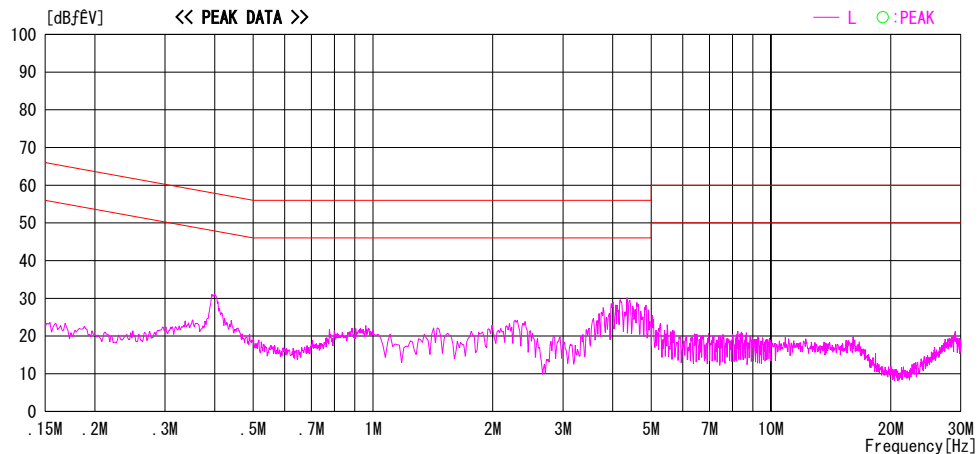
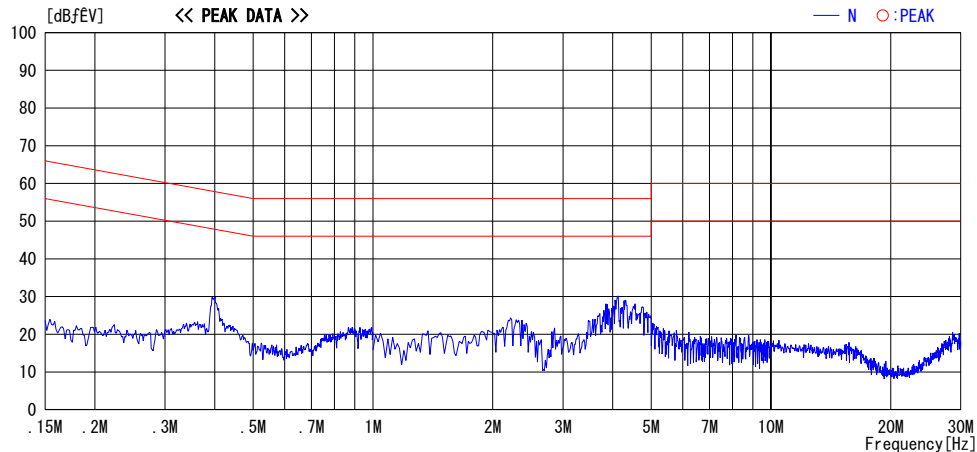


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

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Head Office EMC Lab.

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

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Facsimile : +81 596 24 8124

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Conducted Emission

DATA OF CONDUCTED EMISSION TEST

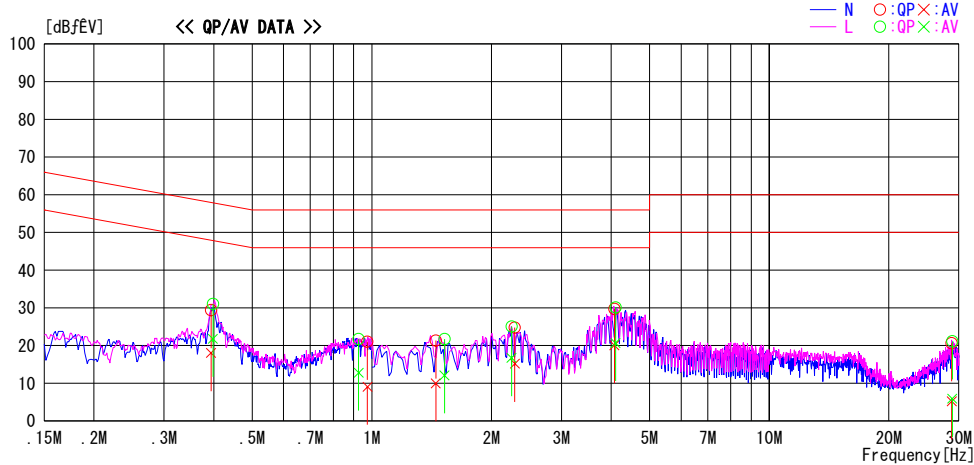
UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2005/10/27 17:28:05

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular Phone
Model No. : 804SH
Serial No. : 004400/01/629060/1

Report No. : 26BE0002-HO
Power : DC4.0V (AC adapter: AC120V/60Hz)
Temp./Humi. : 22deg.C / 58%
Operator : Takumi Shimada

Mode / Remarks : Bluetooth Tx2480MHz

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



Frequency	Reading Level		Corr. Factor	Results		Limit		Margin		Phase
	QP	AV		QP	AV	QP	AV	QP	AV	
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]	
0.39410	29.3	17.9	0.1	29.4	18.0	58.0	48.0	28.6	30.0	N
0.97440	20.7	8.8	0.3	21.0	9.1	56.0	46.0	35.0	36.9	N
1.44792	20.9	9.6	0.4	21.3	10.0	56.0	46.0	34.7	36.0	N
2.29050	24.3	14.7	0.5	24.8	15.2	56.0	46.0	31.2	30.8	N
4.07961	29.0	19.4	0.7	29.7	20.1	56.0	46.0	26.3	25.9	N
28.77750	18.4	3.0	2.2	20.6	5.2	60.0	50.0	39.4	44.8	N
0.39817	30.9	21.7	0.1	31.0	21.8	57.9	47.9	26.9	26.1	L
0.92618	21.4	12.5	0.3	21.7	12.8	56.0	46.0	34.3	33.2	L
1.52420	21.3	11.7	0.4	21.7	12.1	56.0	46.0	34.3	33.9	L
2.24670	24.6	16.2	0.5	25.1	16.7	56.0	46.0	30.9	29.3	L
4.10590	29.4	20.0	0.7	30.1	20.7	56.0	46.0	25.9	25.3	L
28.86750	18.9	3.7	2.2	21.1	5.9	60.0	50.0	38.9	44.1	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.

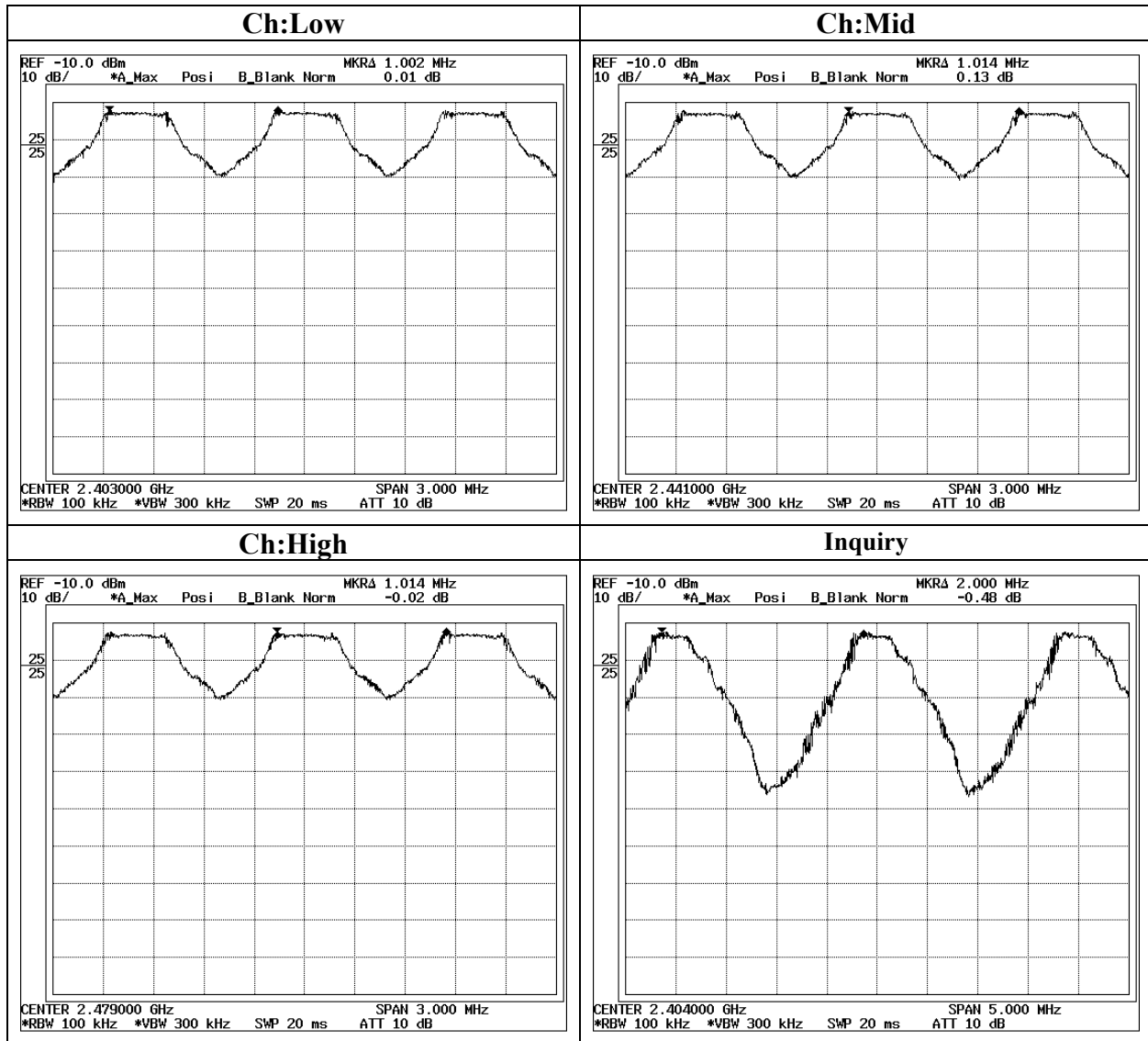
Carrier Frequency Separation

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	: 804SH	DATE	: 10/26/2005
S/ N	: 004400/01/629061/9	TEMPERATURE	: 24deg.C
POWER	: DC 4.0V	HUMIDITY	: 47%
MODE	: Tx(Hopping on)/Inquiry	ENGINEER	: Takumi Shimada

Ch	Freq. [MHz]	Channel separation [MHz]	Limit
Low	2402.0	1.002	>20dB Bandwidth and 25[kHz]
Mid	2441.0	1.014	>20dB Bandwidth and 25[kHz]
High	2480.0	1.014	>20dB Bandwidth and 25[kHz]
Inquiry	2404.0	2.000	>20dB Bandwidth and 25[kHz]

Carrier Frequency Separation



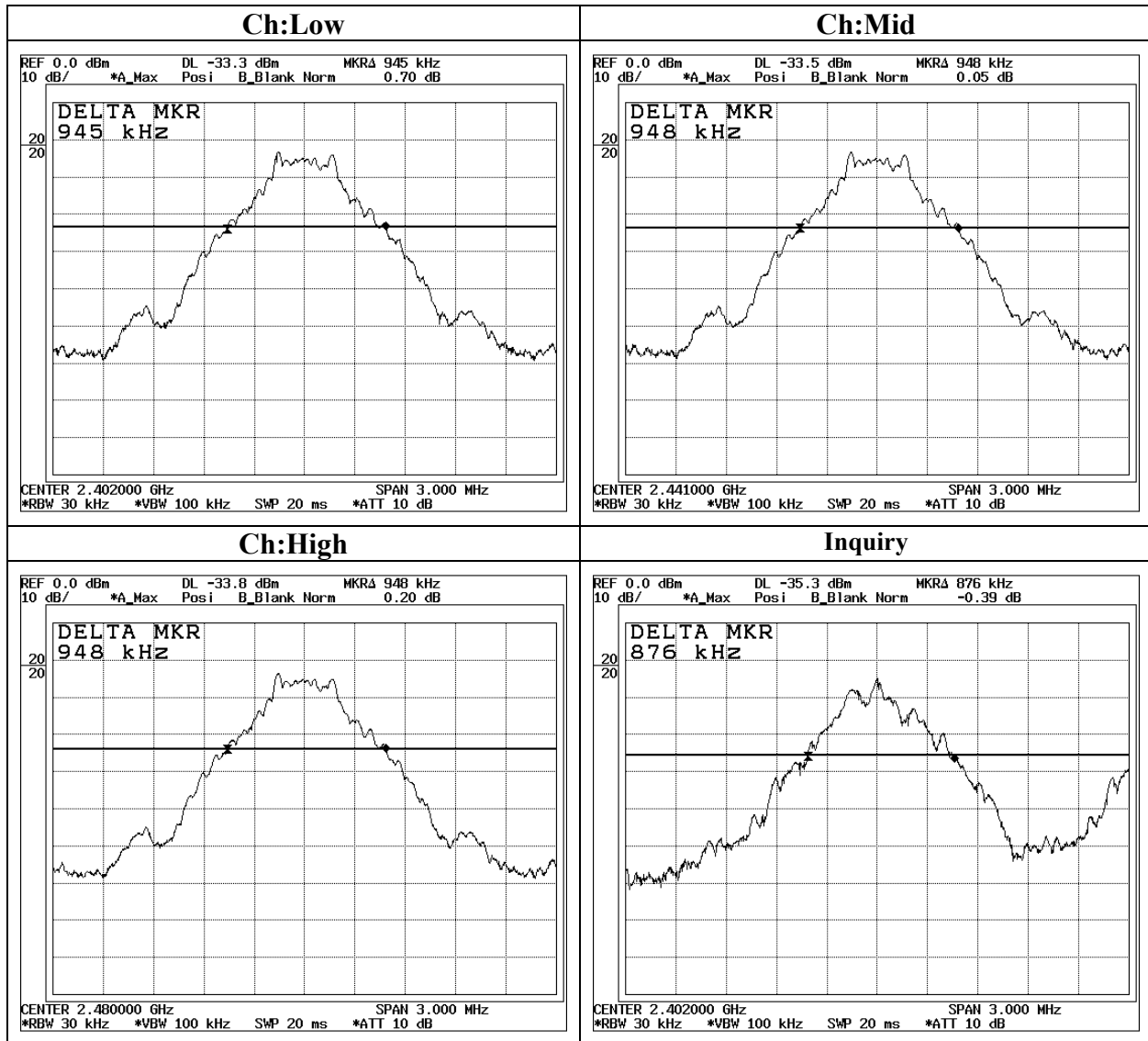
20dB Bandwidth

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	: 804SH	DATE	: 10/26/2005
S/ N	: 004400/01/629061/9	TEMPERATURE	: 24deg.C
POWER	: DC4.0V	HUMIDITY	: 47%
MODE	: Tx(Hopping on)/Inquiry	ENGINEER	: Takumi Shimada

Ch	Freq. [MHz]	20dB Bandwidth [MHz]	Limit [MHz]
Low	2402.0	0.945	-
Mid	2441.0	0.948	-
High	2480.0	0.948	-
Inquiry	2402.0	0.876	-

20dB Bandwidth



Number of Hopping Frequency

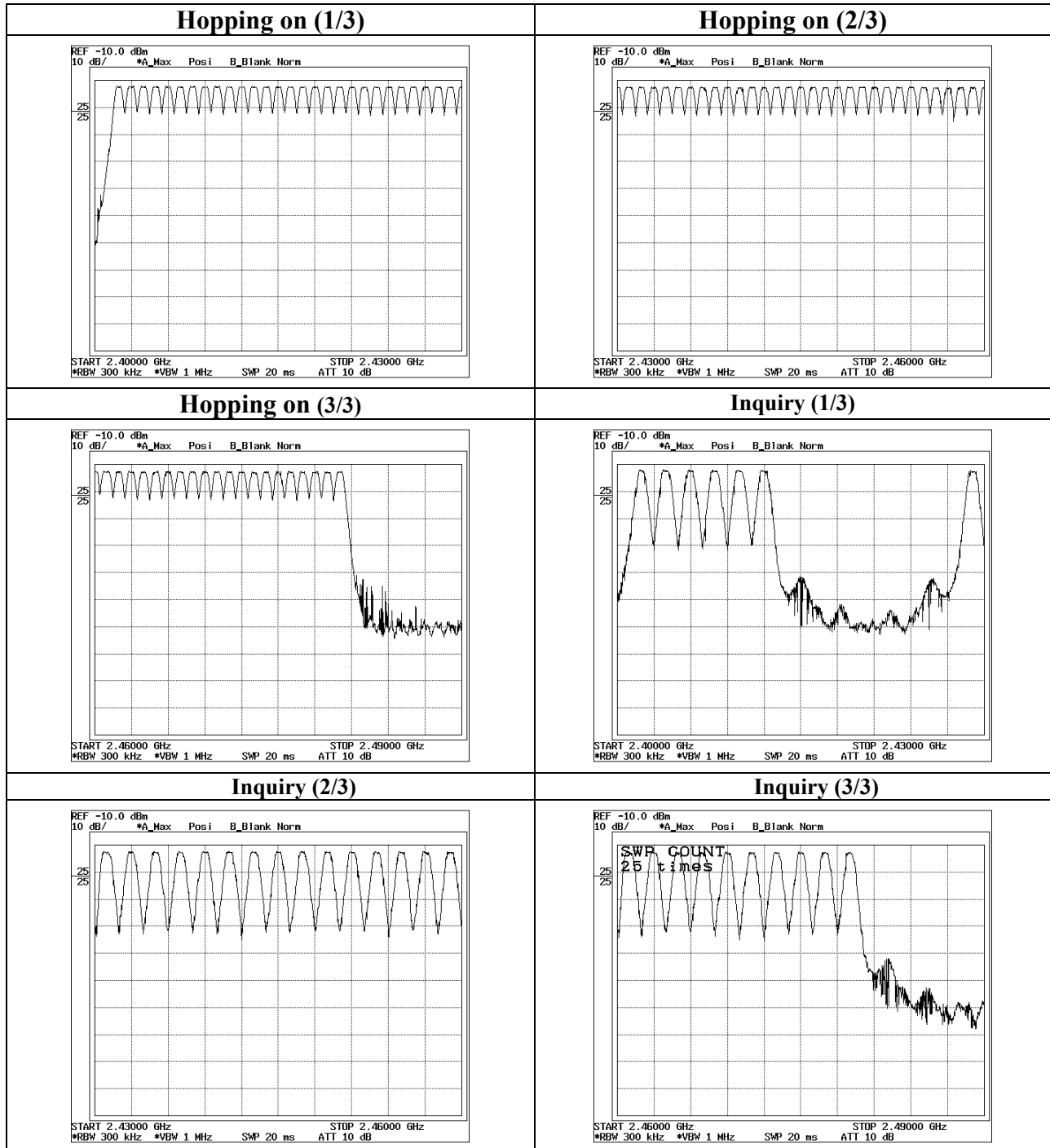
UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Shielded Room

COMPANY	: Sharp Corporation	REGULATION	: Fcc Part15 Subpart C 15.247(a)(1)(iii)
EQUIPMENT	: GSM & WCDMA Cellular Phone	TEST DISTANCE	: -
MODEL	: 804SH	DATE	: 10/26/2005
S/ N	: 004400/01/629061/9	TEMPERATURE	: 24deg.C
POWER	: DC 4.0V	HUMIDITY	: 47%
MODE	: Tx(Hopping on)/Inquiry	ENGINEER	: Takumi Shimada

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

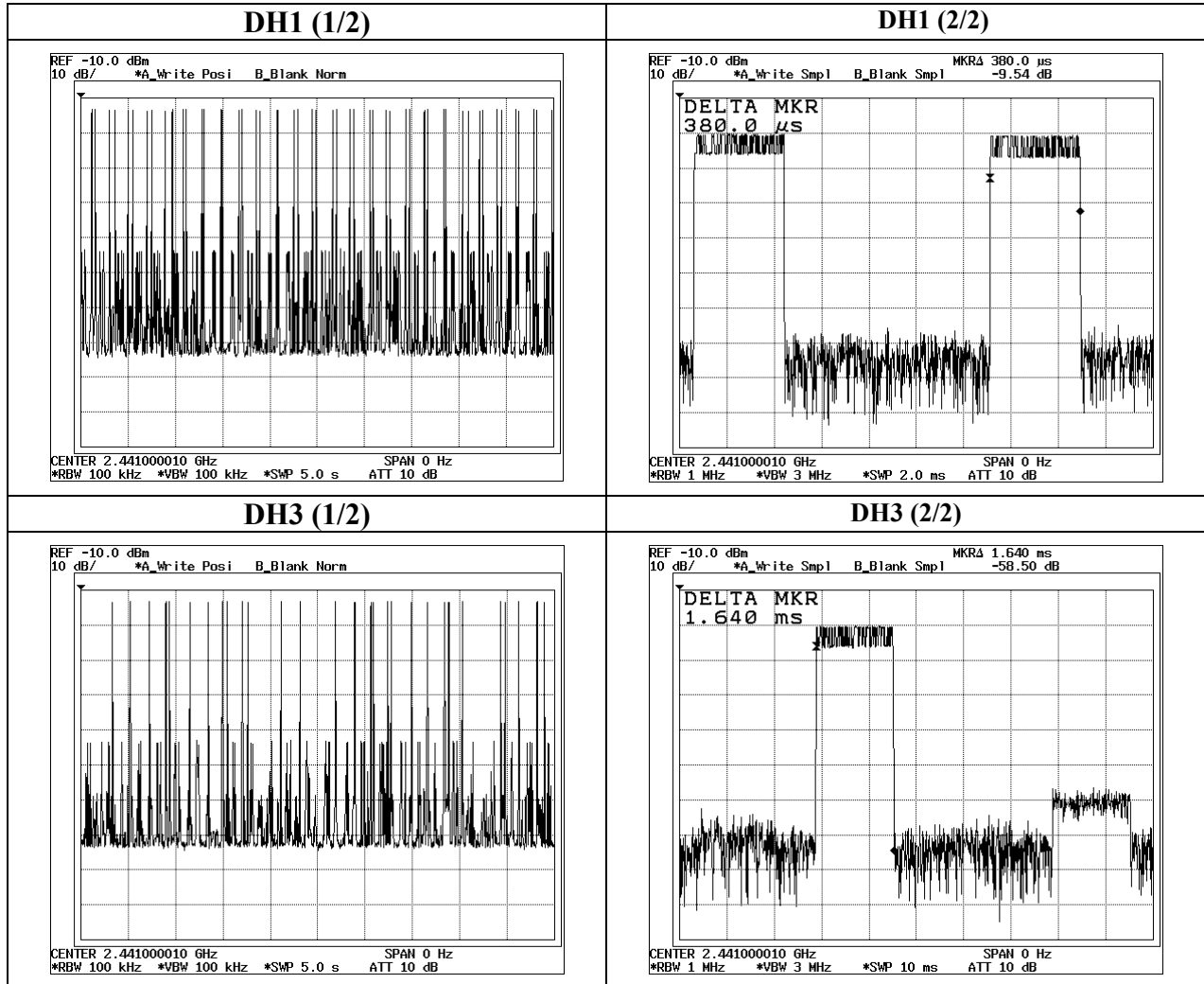
UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Shielded Room

COMPANY : Sharp Corporation
EQUIPMENT : GSM & WCDMA Cellular Phone
MODEL : 804SH
S/ N : 004400/01/629061/9
POWER : DC 4.0V
MODE : Tx(Hopping on)/Inquiry

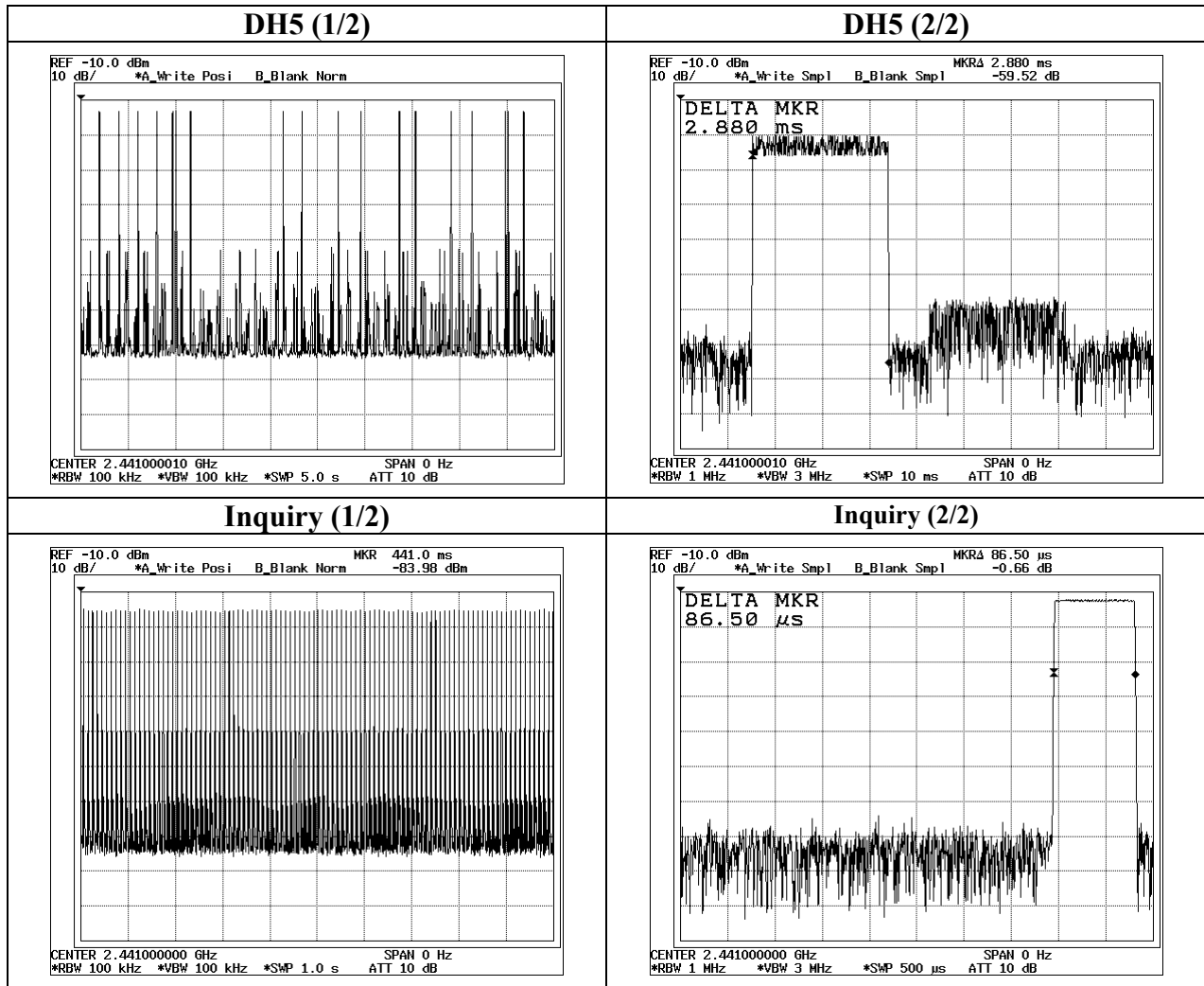
REGULATION : Fcc Part15 Subpart C 15.247(a)(1)(iii)
TEST DISTANCE : -
DATE : 10/26/2005
TEMPERATURE : 24deg.C
HUMIDITY : 47%
ENGINEER : Takumi Shimada

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	54 times / 5 sec. x 31.6 = 341 times	0.380	130	400
DH3	34 times / 5 sec. x 31.6 = 215 times	1.640	353	400
DH5	24 times / 5 sec. x 31.6 = 132times	2.880	380	400
Inquiry	101times / 1sec. x 12.8 = 1293 times	0.087	112	400

Dwell time



Dwell time



Maximum Peak Output Power

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

COMPANY : Sharp Corporation
EQUIPMENT : GSM & WCDMA Cellular Phone
MODEL : 804SH
S/ N : 004400/01/629061/9
POWER : DC 4.0V
MODE : Tx(Hopping on)/Inquiry

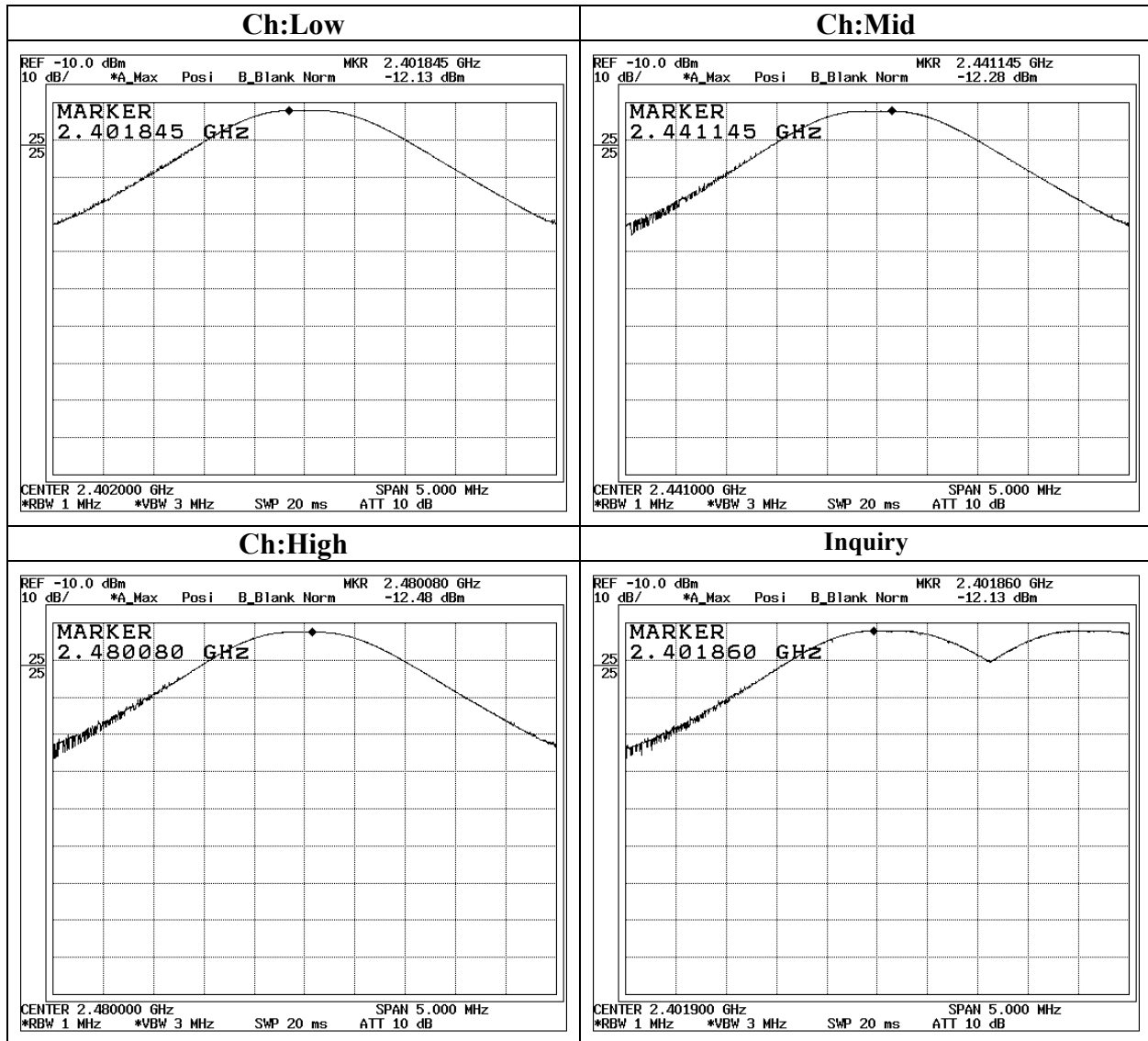
REGULATION : Fcc Part15 Subpart C 15.247(b)(1)
TEST DISTANCE : -
DATE : 10/26/2005
TEMPERATURE : 24deg.C
HUMIDITY : 47%
ENGINEER : Takumi Shimada

Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit (0.125W) [dBm]	Margin [dB]
Low	2402.0	-12.13	3.12	10.70	1.69	20.96	19.27
Mid	2441.0	-12.28	3.10	10.70	1.52	20.96	19.44
High	2480.0	-12.48	3.12	10.70	1.34	20.96	19.62
Inquiry	2402.0	-12.13	3.12	10.70	1.69	20.96	19.27

Sample Calculation:

Result = Reading + Cable Loss + Attenuator

Maximum Peak Output Power



DATA OF RADIATED EMISSION TEST

Radiated Spurious Emission

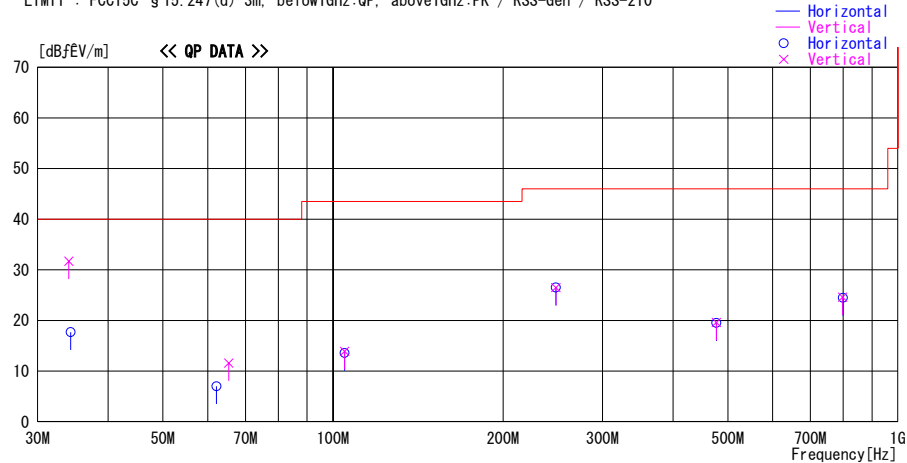
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/10/27 15:50:50

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular Phone
Model No. : 804SH
Serial No. : 004400/01/629060/1
Report No. : 26BE0002-HO
Power : DC 4.0V (AC adapter: AC120V/60Hz)
Temp./Humi. : 22deg.C / 58%
Operator : Takumi Shimada

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

LIMIT : FCC15C § 15.247(d) 3m, below1GHz:QP, above1GHz:PK / RSS-Gen / RSS-210



Frequency	Reading	DET	Antenna		Level	Angle	Height	Polar.	Limit	Margin
			Factor	Loss&Gain						
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]
34.328	24.1	QP	16.4	-22.8	17.7	103	254	Hori.	40.0	22.3
34.068	38.0	QP	16.5	-22.8	31.7	360	100	Vert.	40.0	8.3
65.413	26.9	QP	7.3	-22.6	11.6	133	100	Vert.	40.0	28.4
62.185	21.7	QP	7.8	-22.5	7.0	360	254	Hori.	40.0	33.0
104.867	24.9	QP	10.6	-21.9	13.6	360	175	Hori.	43.5	29.9
104.856	25.2	QP	10.6	-21.9	13.9	360	100	Vert.	43.5	29.6
248.167	29.7	QP	17.1	-20.3	26.5	204	100	Vert.	46.0	19.5
248.164	29.7	QP	17.1	-20.3	26.5	122	139	Hori.	46.0	19.5
477.174	21.6	QP	17.8	-19.9	19.5	360	100	Hori.	46.0	26.5
477.104	21.7	QP	17.8	-19.9	19.6	360	100	Vert.	46.0	26.4
798.299	21.0	QP	21.4	-17.8	24.6	360	100	Vert.	46.0	21.4
799.305	20.9	QP	21.4	-17.8	24.5	360	100	Hori.	46.0	21.5

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

Radiated Spurious Emission

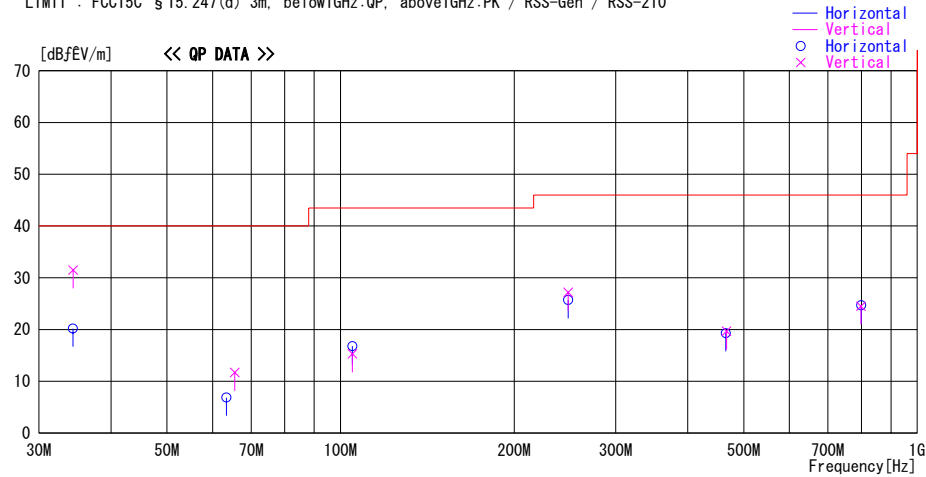
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2005/10/27 16:34:05

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular Phone
Model No. : 804SH
Serial No. : 004400/01/629060/1
Report No. : 26BE0002-HO
Power : DC 4.0V (AC adapter: AC120V/60Hz)
Temp./Humi. : 22deg. C / 58%
Operator : Takumi Shimada

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

LIMIT : FCC15C § 15.247(d) 3m, below1GHz:QP, above1GHz:PK / RSS-Gen / RSS-210



Frequency	Reading	DET	Antenna		Level	Angle	Height	Polar.	Limit	Margin
			Factor	Loss& Gain						
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]
34.366	26.6	QP	16.4	-22.8	20.2	130	250	Hori.	40.0	19.8
34.374	37.9	QP	16.4	-22.8	31.5	360	100	Vert.	40.0	8.5
63.430	21.9	QP	7.6	-22.6	6.9	360	250	Hori.	40.0	33.1
65.559	27.0	QP	7.3	-22.6	11.7	151	100	Vert.	40.0	28.3
104.887	28.1	QP	10.6	-21.9	16.8	360	175	Hori.	43.5	26.7
104.866	26.6	QP	10.6	-21.9	15.3	360	100	Vert.	43.5	28.2
248.181	30.4	QP	17.1	-20.3	27.2	222	100	Vert.	46.0	18.8
248.158	28.9	QP	17.1	-20.3	25.7	269	143	Hori.	46.0	20.3
465.665	21.4	QP	17.8	-19.9	19.3	360	100	Hori.	46.0	26.7
466.832	21.8	QP	17.8	-19.9	19.7	360	100	Vert.	46.0	26.3
799.337	21.1	QP	21.4	-17.8	24.7	360	100	Hori.	46.0	21.3
798.302	20.9	QP	21.4	-17.8	24.5	360	100	Vert.	46.0	21.5

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

Radiated Spurious Emission

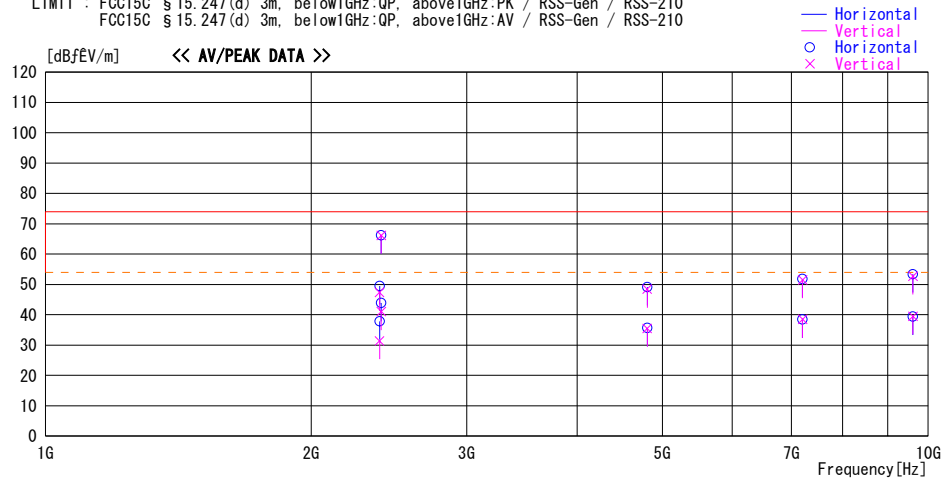
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2005/10/27 09:36:43

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular Phone
Model No. : 804SH
Serial No. : 004400/01/629060/1
Report No. : 26BE0002-HO
Power : DC 4.0V (AC adapter: AC120V/60Hz)
Temp./Humi. : 22deg. C / 58%
Operator : Takumi Shimada

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

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



Frequency	Reading	DET	Antenna	Loss&	Level	Polar.	Limit	Margin
			Factor	Gain				
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]		[dBuV/m]	[dB]
2390.000	51.7	PK	30.5	-32.7	49.5	Hori.	74.0	24.5
2390.000	49.6	PK	30.5	-32.7	47.4	Vert.	74.0	26.6
2390.000	40.1	AV	30.5	-32.7	37.9	Hori.	54.0	16.1
2390.000	33.6	AV	30.5	-32.7	31.4	Vert.	54.0	22.6
2400.000	68.4	PK	30.5	-32.7	66.2	Hori.	74.0	7.8
2400.000	68.4	PK	30.5	-32.7	66.2	Vert.	74.0	7.8
2400.000	46.1	AV	30.5	-32.7	43.9	Hori.	54.0	10.1
2400.000	43.2	AV	30.5	-32.7	41.0	Vert.	54.0	13.0
4804.000	30.2	AV	35.2	-29.8	35.6	Hori.	54.0	18.4
4804.000	30.1	AV	35.2	-29.8	35.5	Vert.	54.0	18.5
4804.000	43.7	PK	35.2	-29.8	49.1	Hori.	74.0	24.9
4804.000	43.0	PK	35.2	-29.8	48.4	Vert.	74.0	25.6
7206.000	29.9	AV	37.7	-29.1	38.5	Hori.	54.0	15.5
7206.000	29.9	AV	37.7	-29.1	38.5	Vert.	54.0	15.5
7206.000	43.2	PK	37.7	-29.1	51.8	Hori.	74.0	22.2
7206.000	42.9	PK	37.7	-29.1	51.5	Vert.	74.0	22.5
9608.000	30.1	AV	37.0	-27.7	39.4	Hori.	54.0	14.6
9608.000	30.2	AV	37.0	-27.7	39.5	Vert.	54.0	14.5
9608.000	44.1	PK	37.0	-27.7	53.4	Hori.	74.0	20.6
9608.000	43.4	PK	37.0	-27.7	52.7	Vert.	74.0	21.3

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

Radiated Spurious Emission

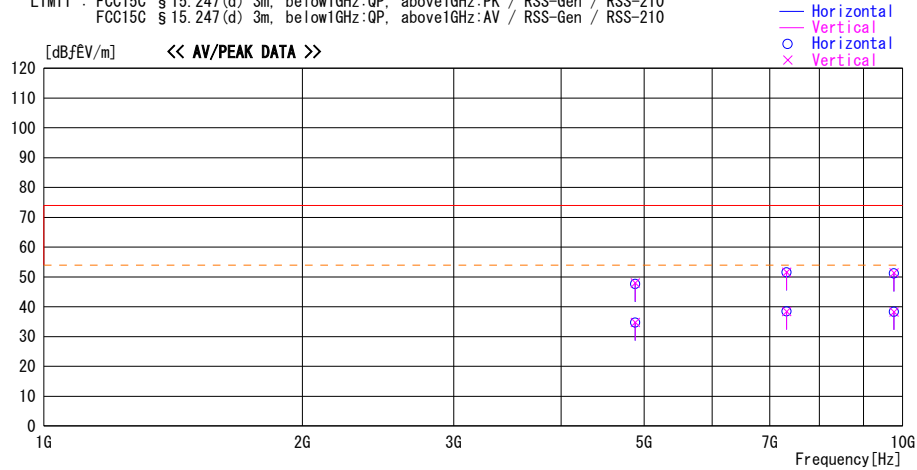
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/10/27 10:43:18

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular Phone
Model No. : 804SH
Serial No. : 004400/01/629060/1
Report No. : 26BE0002-H0
Power : DC 4.0V (AC adapter: AC120V/60Hz)
Temp./Humi. : 22deg.C / 58%
Operator : Takumi Shimada

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

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



Frequency [MHz]	Reading [dBμV]	DET	Antenna		Level [dBμV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBμV/m]	Margin [dB]
			Factor [dB/m]	Loss & Gain [dB]						
4882.000	42.6	PK	35.6	-30.6	47.6	180	150	Hori.	74.0	26.4
4882.000	42.9	PK	35.6	-30.6	47.9	180	100	Vert.	74.0	26.1
4882.000	29.7	AV	35.6	-30.6	34.7	363	100	Hori.	54.0	19.3
4882.000	29.8	AV	35.6	-30.6	34.8	180	100	Vert.	54.0	19.2
7323.000	42.9	PK	37.9	-29.3	51.5	363	100	Hori.	74.0	22.5
7323.000	43.0	PK	37.9	-29.3	51.6	180	100	Vert.	74.0	22.4
7323.000	29.9	AV	37.9	-29.3	38.5	363	100	Hori.	54.0	15.5
7323.000	29.8	AV	37.9	-29.3	38.4	180	100	Vert.	54.0	15.6
9764.000	42.6	PK	36.8	-28.2	51.2	363	100	Hori.	74.0	22.8
9764.000	42.7	PK	36.8	-28.2	51.3	180	100	Vert.	74.0	22.7
9764.000	29.7	AV	36.8	-28.2	38.3	363	100	Hori.	54.0	15.7
9764.000	29.7	AV	36.8	-28.2	38.3	180	100	Vert.	54.0	15.7

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

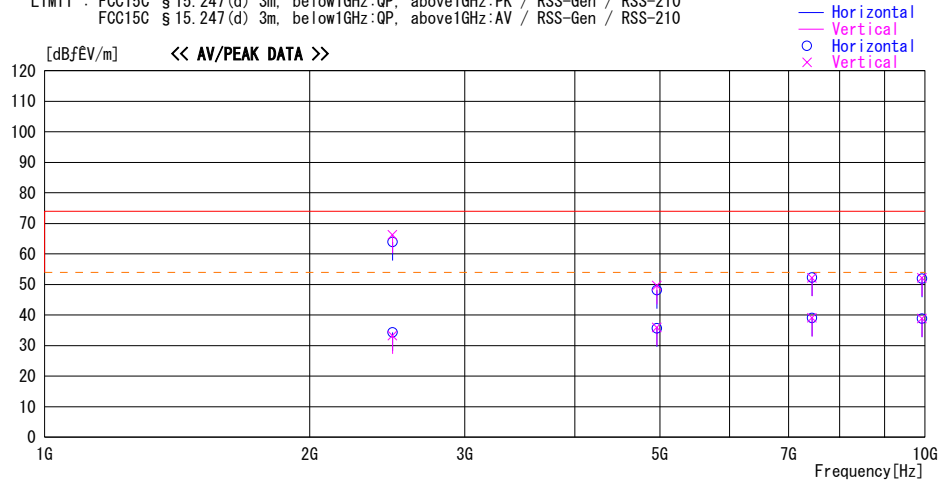
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2005/10/27 11:01:55

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular Phone
Model No. : 804SH
Serial No. : 004400/01/629060/1
Report No. : 26BE0002-HO
Power : DC 4.0V (AC adapter: AC120V/60Hz)
Temp./Humi. : 22deg. C / 58%
Operator : Takumi Shimada

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

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



Frequency	Reading	DET	Antenna	Loss&	Level	Polar.	Limit	Margin
			Factor	Gain				
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]		[dBuV/m]	[dB]
2483.500	66.1	PK	30.5	-32.7	63.9	Hori.	74.0	10.1
2483.500	68.5	PK	30.5	-32.7	66.3	Vert.	74.0	7.7
2483.500	36.5	AV	30.5	-32.7	34.3	Hori.	54.0	19.7
2483.500	35.5	AV	30.5	-32.7	33.3	Vert.	54.0	20.7
4960.000	41.7	PK	36.1	-29.7	48.1	Hori.	74.0	25.9
4960.000	43.2	PK	36.1	-29.7	49.6	Vert.	74.0	24.4
4960.000	29.3	AV	36.1	-29.7	35.7	Hori.	54.0	18.3
4960.000	29.6	AV	36.1	-29.7	36.0	Vert.	54.0	18.0
7440.000	42.9	PK	38.1	-28.7	52.3	Hori.	74.0	21.7
7440.000	42.8	PK	38.1	-28.7	52.2	Vert.	74.0	21.8
7440.000	29.7	AV	38.1	-28.7	39.1	Hori.	54.0	14.9
7440.000	29.7	AV	38.1	-28.7	39.1	Vert.	54.0	14.9
9920.000	42.9	PK	36.7	-27.7	51.9	Hori.	74.0	22.1
9920.000	43.2	PK	36.7	-27.7	52.2	Vert.	74.0	21.8
9920.000	29.8	AV	36.7	-27.7	38.8	Hori.	54.0	15.2
9920.000	29.9	AV	36.7	-27.7	38.9	Vert.	54.0	15.1

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

Radiated Spurious Emission

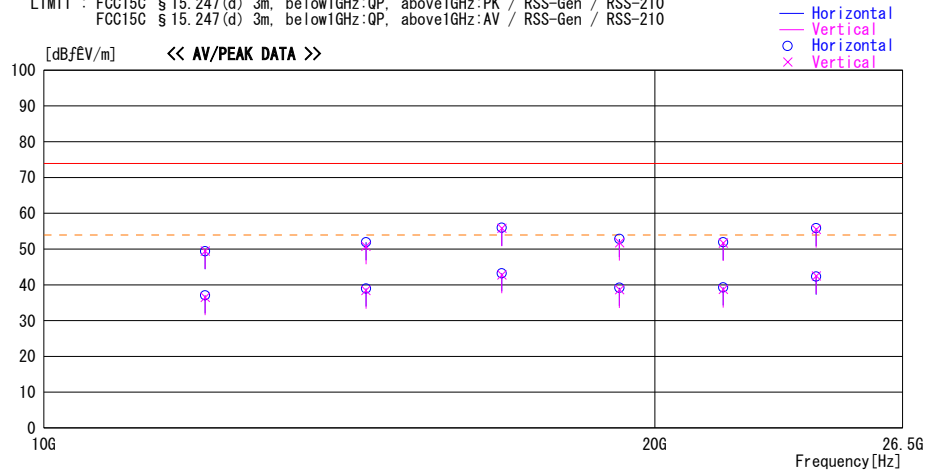
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/10/27 13:31:27

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular Phone
Model No. : 804SH
Serial No. : 004400/01/629060/1
Report No. : 26BE0002-H0
Power : DC 4.0V (AC adapter: AC120V/60Hz)
Temp./Humi. : 22deg.C / 58%
Operator : Takumi Shimada

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

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



Frequency [MHz]	Reading [dBμV]	DET	Antenna		Level [dBμV/m]	Polar.	Limit		Margin
			Factor [dB/m]	Loss & Gain [dB]			[dBμV/m]	[dB]	
12010.000	42.2	PK	41.6	-34.4	49.4	Hori.	74.0	24.6	
12010.000	42.3	PK	41.6	-34.4	49.5	Vert.	74.0	24.5	
12010.000	29.9	AV	41.6	-34.4	37.1	Hori.	54.0	16.9	
12010.000	29.4	AV	41.6	-34.4	36.6	Vert.	54.0	17.4	
14412.000	43.9	PK	41.7	-33.7	51.9	Hori.	74.0	22.1	
14412.000	42.8	PK	41.7	-33.7	50.8	Vert.	74.0	23.2	
14412.000	31.0	AV	41.7	-33.7	39.0	Hori.	54.0	15.0	
14412.000	30.4	AV	41.7	-33.7	38.4	Vert.	54.0	15.6	
16814.000	44.0	PK	45.1	-33.1	56.0	Hori.	74.0	18.0	
16814.000	43.8	PK	45.1	-33.1	55.8	Vert.	74.0	18.2	
16814.000	31.2	AV	45.1	-33.1	43.2	Hori.	54.0	10.8	
16814.000	30.8	AV	45.1	-33.1	42.8	Vert.	54.0	11.2	
19216.000	44.1	PK	40.1	-31.4	52.8	Hori.	74.0	21.2	
19216.000	43.1	PK	40.1	-31.4	51.8	Vert.	74.0	22.2	
19216.000	30.5	AV	40.1	-31.4	39.2	Hori.	54.0	14.8	
19216.000	29.9	AV	40.1	-31.4	38.6	Vert.	54.0	15.4	
21618.000	44.2	PK	39.8	-32.1	51.9	Hori.	74.0	22.1	
21618.000	44.0	PK	39.8	-32.1	51.7	Vert.	74.0	22.3	
21618.000	31.6	AV	39.8	-32.1	39.3	Hori.	54.0	14.7	
21618.000	31.0	AV	39.8	-32.1	38.7	Vert.	54.0	15.3	
24020.000	46.7	PK	40.4	-31.2	55.9	Hori.	74.0	18.1	
24020.000	46.3	PK	40.4	-31.2	55.5	Vert.	74.0	18.5	
24020.000	33.2	AV	40.4	-31.2	42.4	Hori.	54.0	11.6	
24020.000	33.3	AV	40.4	-31.2	42.5	Vert.	54.0	11.5	

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

Radiated Spurious Emission

DATA OF RADIATED EMISSION TEST

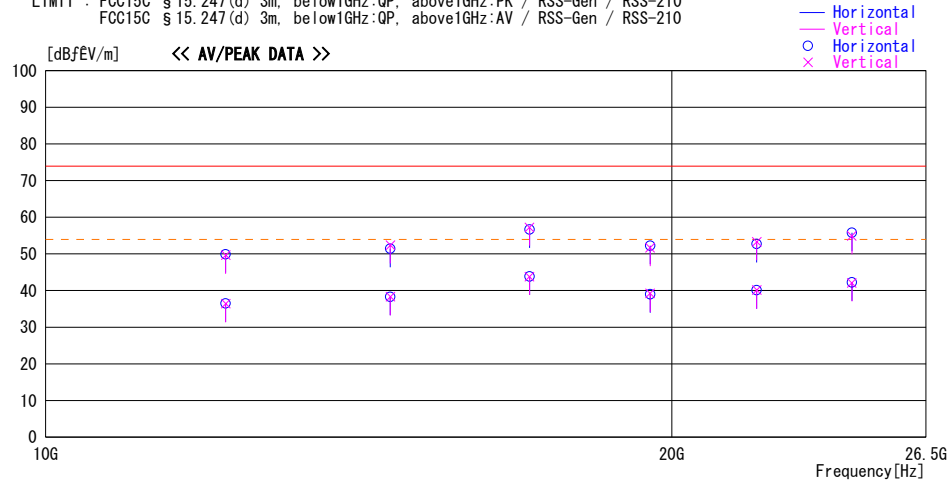
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/10/27 13:11:02

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular Phone
Model No. : 804SH
Serial No. : 004400/01/629060/1

Report No. : 26BE0002-HO
Power : DC 4.0V (AC adapter: AC120V/60Hz)
Temp./Humi. : 22deg.C / 58%
Operator : Takumi Shimada

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

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



Frequency	Reading	DET	Antenna	Loss&	Level	Polar.	Limit	Margin
			Factor	Gain				
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]		[dBuV/m]	[dB]
12205.000	42.9	PK	41.6	-34.5	50.0	Hori.	74.0	24.0
12205.000	42.5	PK	41.6	-34.5	49.6	Vert.	74.0	24.4
12205.000	29.4	AV	41.6	-34.5	36.5	Hori.	54.0	17.5
12205.000	29.3	AV	41.6	-34.5	36.4	Vert.	54.0	17.6
14646.000	43.4	PK	42.2	-34.2	51.4	Hori.	74.0	22.6
14646.000	44.4	PK	42.2	-34.2	52.4	Vert.	74.0	21.6
14646.000	30.3	AV	42.2	-34.2	38.3	Hori.	54.0	15.7
14646.000	30.3	AV	42.2	-34.2	38.3	Vert.	54.0	15.7
17087.000	44.3	PK	45.2	-32.8	56.7	Hori.	74.0	17.4
17087.000	44.9	PK	45.2	-32.8	57.3	Vert.	74.0	16.7
17087.000	31.5	AV	45.2	-32.8	43.9	Hori.	54.0	10.1
17087.000	31.4	AV	45.2	-32.8	43.8	Vert.	54.0	10.2
19528.000	43.3	PK	40.3	-31.4	52.2	Hori.	74.0	21.8
19528.000	42.8	PK	40.3	-31.4	51.7	Vert.	74.0	22.3
19528.000	30.1	AV	40.3	-31.4	39.0	Hori.	54.0	15.0
19528.000	30.3	AV	40.3	-31.4	39.2	Vert.	54.0	14.8
21969.000	44.6	PK	39.8	-31.6	52.8	Hori.	74.0	21.2
21969.000	45.1	PK	39.8	-31.6	53.3	Vert.	74.0	20.7
21969.000	31.9	AV	39.8	-31.6	40.1	Hori.	54.0	13.9
21969.000	31.9	AV	39.8	-31.6	40.1	Vert.	54.0	13.9
24410.000	46.8	PK	40.4	-31.5	55.7	Hori.	74.0	18.3
24410.000	46.0	PK	40.4	-31.5	54.9	Vert.	74.0	19.1
24410.000	33.3	AV	40.4	-31.5	42.2	Hori.	54.0	11.8
24410.000	33.2	AV	40.4	-31.5	42.1	Vert.	54.0	11.9

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

UL Apex Co., Ltd.

Head Office EMC Lab.

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

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(01.06.05)

Radiated Spurious Emission

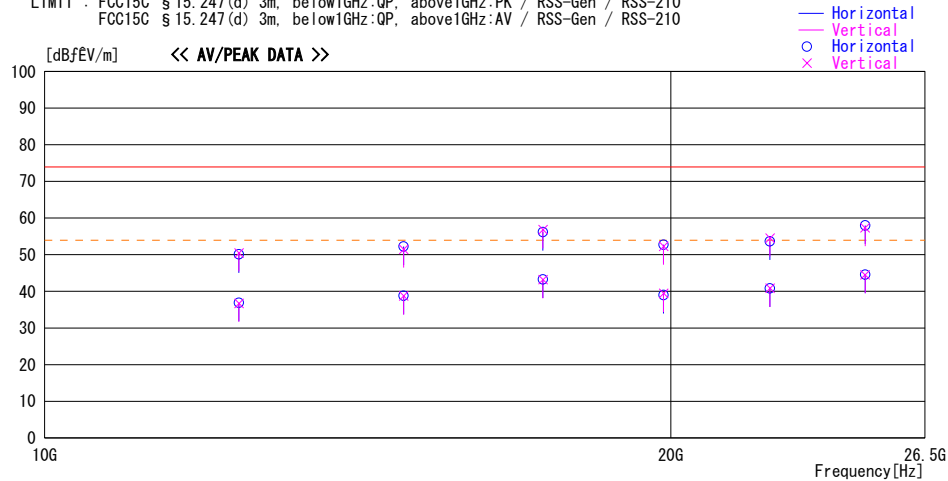
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2005/10/27 11:45:43

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular Phone
Model No. : 804SH
Serial No. : 004400/01/629060/1
Report No. : 26BE0002-HO
Power : DC 4.0V (AC adapter: AC120V/60Hz)
Temp./Humi. : 22deg. C / 58%
Operator : Takumi Shimada

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

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

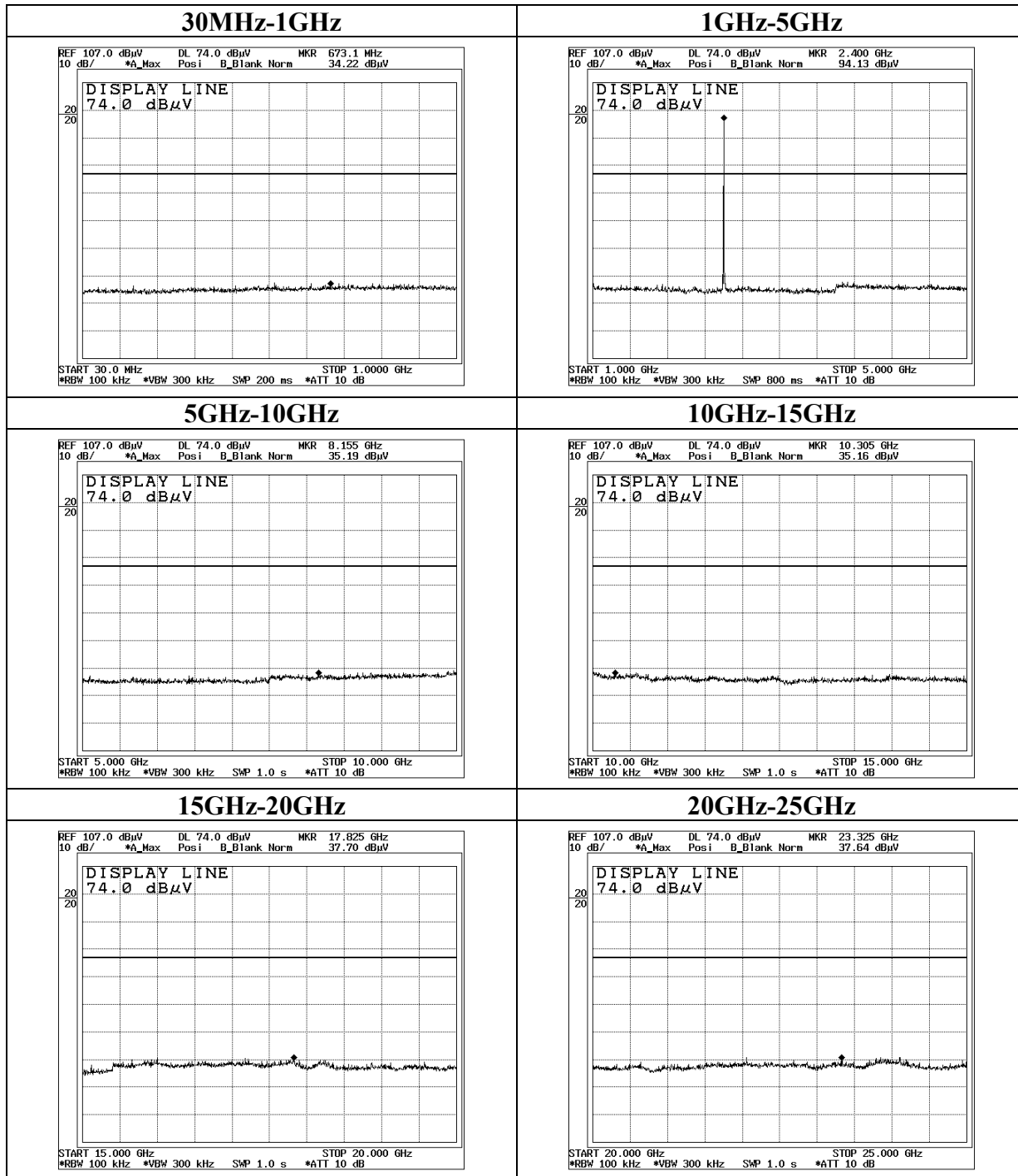


Frequency	Reading	DET	Antenna		Level	Polar.	Limit	Margin
			Factor	Loss& Gain				
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]		[dBuV/m]	[dB]
12400.000	42.9	PK	41.7	-34.5	50.1	Hori.	74.0	23.9
12400.000	43.3	PK	41.7	-34.5	50.5	Vert.	74.0	23.5
12400.000	29.7	AV	41.7	-34.5	36.9	Hori.	54.0	17.1
12400.000	29.6	AV	41.7	-34.5	36.8	Vert.	54.0	17.2
14880.000	44.3	PK	42.7	-34.8	52.2	Hori.	74.0	21.8
14880.000	43.6	PK	42.7	-34.8	51.5	Vert.	74.0	22.5
14880.000	30.9	AV	42.7	-34.8	38.8	Hori.	54.0	15.2
14880.000	30.8	AV	42.7	-34.8	38.7	Vert.	54.0	15.3
17360.000	44.2	PK	44.7	-32.7	56.2	Hori.	74.0	17.8
17360.000	44.8	PK	44.7	-32.7	56.8	Vert.	74.0	17.2
17360.000	31.2	AV	44.7	-32.7	43.2	Hori.	54.0	10.8
17360.000	31.2	AV	44.7	-32.7	43.2	Vert.	54.0	10.8
19840.000	44.2	PK	40.4	-31.8	52.8	Hori.	74.0	21.2
19840.000	43.7	PK	40.4	-31.8	52.3	Vert.	74.0	21.7
19840.000	30.4	AV	40.4	-31.8	39.0	Hori.	54.0	15.0
19840.000	30.8	AV	40.4	-31.8	39.4	Vert.	54.0	14.6
22320.000	45.1	PK	39.8	-31.2	53.7	Hori.	74.0	20.3
22320.000	46.0	PK	39.8	-31.2	54.6	Vert.	74.0	19.5
22320.000	32.3	AV	39.8	-31.2	40.9	Hori.	54.0	13.1
22320.000	32.3	AV	39.8	-31.2	40.9	Vert.	54.0	13.1
24800.000	48.0	PK	40.7	-30.7	58.0	Hori.	74.0	16.0
24800.000	47.4	PK	40.7	-30.7	57.4	Vert.	74.0	16.6
24800.000	34.6	AV	40.7	-30.7	44.6	Hori.	54.0	9.4
24800.000	34.5	AV	40.7	-30.7	44.5	Vert.	54.0	9.5

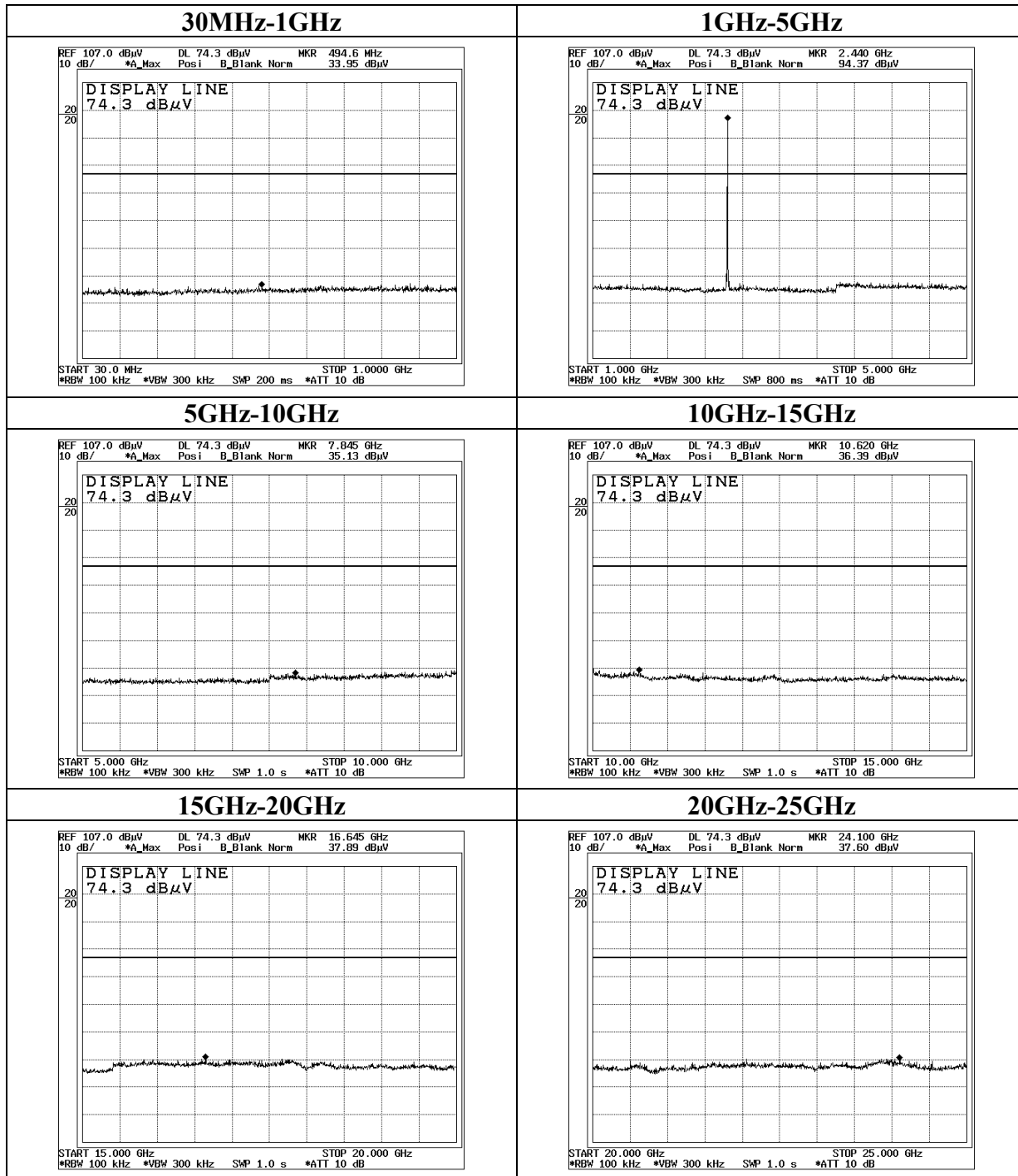
CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

Conducted Spurious Emission

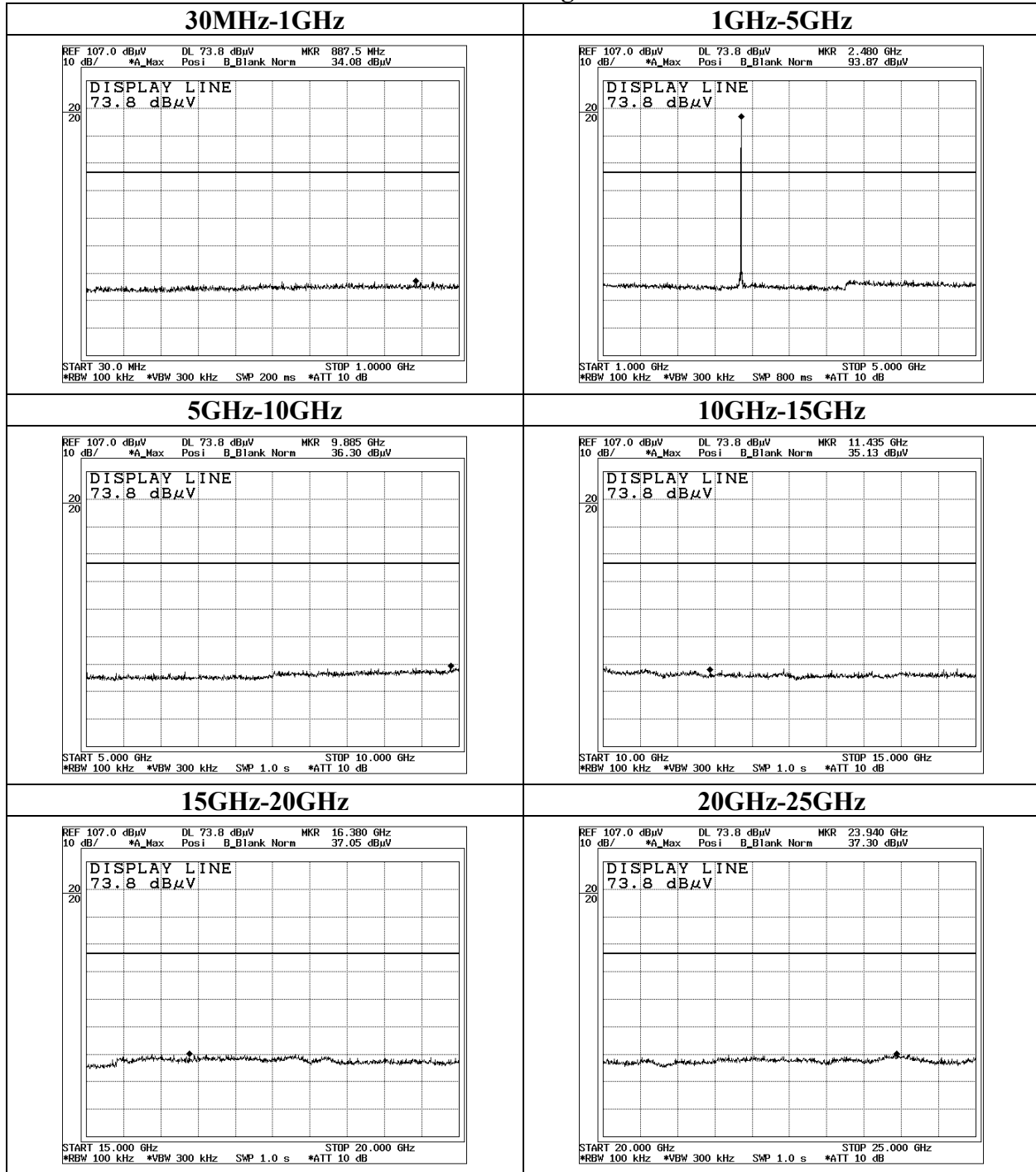
Ch:Low



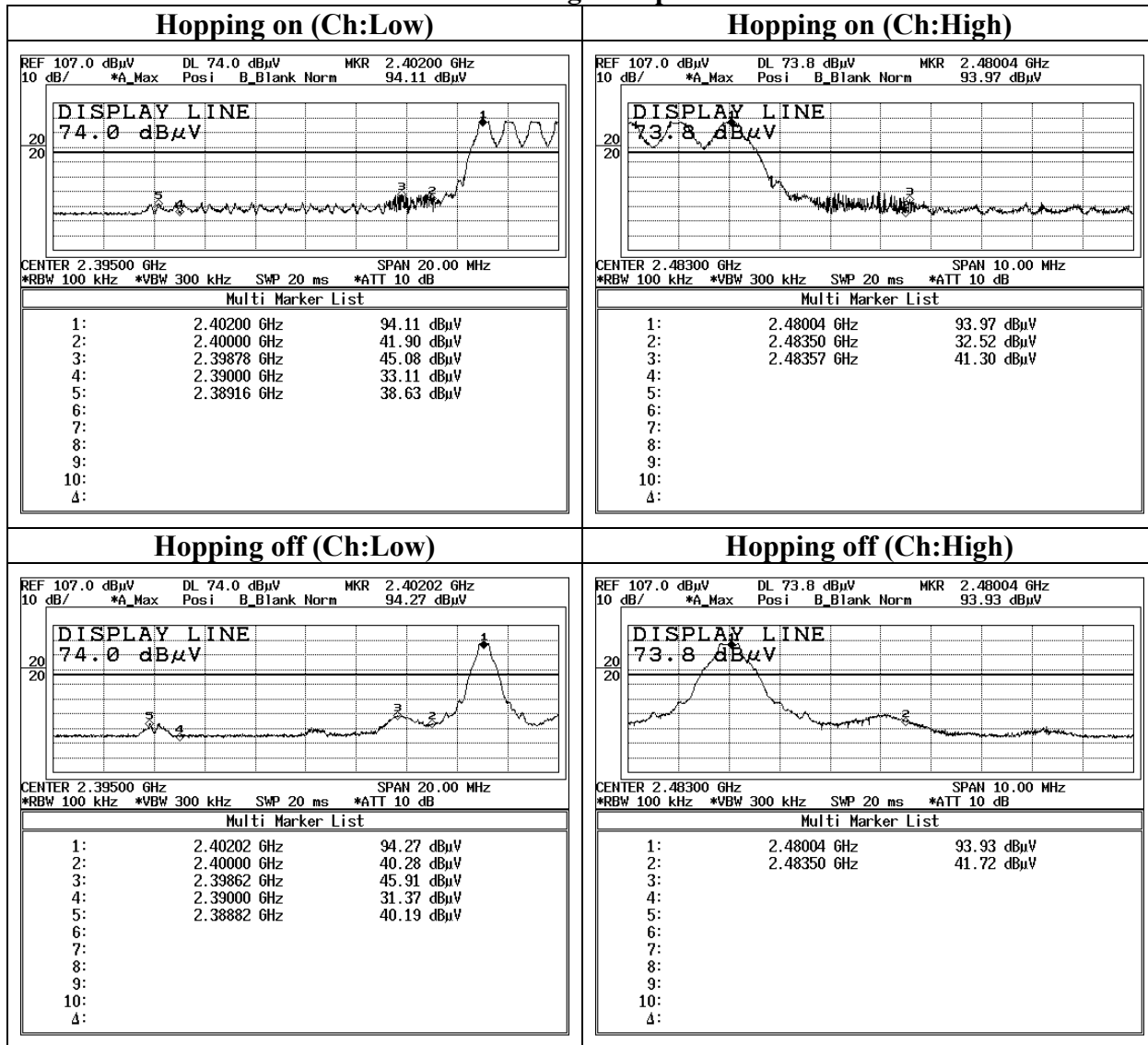
Conducted Spurious Emission
Ch:Mid



Conducted Spurious Emission
Ch:High



Conducted Spurious Emission Band Edge compliance



99% Occupied Bandwidth

