



EMI TEST REPORT

Test Report No. : 29EE0228-HO

Applicant : Sharp Corporation, Communication Systems Group.
Type of Equipment : Cellular Phone
Model No. : CDMA SHY01
FCC ID : APYHRO00096
Test regulation : FCC Part 15 Subpart B 2009 Class B
Test Result : Complied

1. This test report shall not be reproduced in full or partial, without the written approval of UL Japan, Inc.
2. The results in this report apply only to the sample tested.
3. This sample tested is in compliance with the above regulation.
4. The test results in this report are traceable to the national or international standards.
5. This test report must not be used by the customer product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Date of test:

March 13, 2009

Tested by:

Motoya Imura
EMC Services

Approved by :

Minoru Yamanaka
Assistant Manager of EMC Services



NVLAP LAB CODE: 200572-0

This laboratory is accredited by the NVLAP LAB CODE 200572-0, U.S.A. The tests reported herein have been performed in accordance with its terms of accreditation.
*As for the range of Accreditation in NVLAP, you may refer to the WEB address,
<http://uljapan.co.jp/emc/nvlap.html>

UL Japan, Inc.

Head Office EMC Lab.

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MF060b (09.01.08)

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SECTION 1: Customer information

Company Name : Sharp Corporation, Communication Systems Group.
Brand Name : SHARP
Address : 2-13-1, Iida Hachihonmatsu, Higashi-Hiroshima City, Hiroshima,
739-0192 Japan
Telephone Number : +81-82-420-1630
Facsimile Number : +81-82-420-1624
Contact Person : Hachiroh Hidaka

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

2.1 Identification of E.U.T.

Type of Equipment : Cellular Phone
Model No. : CDMA SHY01
Serial No. : SSHCJ001733
Rating : AC 120V/60Hz, DC4.0V
Receipt Date of Sample : March 12, 2009
Country of Mass-production : Japan
Condition of EUT : Production prototype
(Not for Sale: This sample is equivalent to mass-produced items.)
Modification of EUT : No Modification by the test lab

2.2 Product Description

Model No: CDMA SHY01 is 1XEV-DO Hybrid CDMA Tri-Band Cellular Phone.

CDMA SHY01 has Bluetooth wireless interface technology for establishing contact and transmitting data with certain devices. FeliCa technology enabled easy changing and payments as Mobile Wallet. (Note: FeliCa does not operate in USA)

Clock frequency : 32.768kHz, 19.2MHz, 384MHz

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SECTION 3: Test specification, procedures & results

3.1 Test specification

Test Specification : FCC Part 15 Subpart B 2009, final revised on February 27, 2009
Title : FCC 47CFR Part15 Radio Frequency Device
Subpart B Unintentional Radiators

3.2 Procedures and results

Item	Test Procedure	Limits	Deviation	Worst margin	Result
Conducted emission	ANSI C63.4: 2003 7. AC powerline conducted emission measurements	Class B	N/A	[QP] 16.2dB, 0.15697MHz, L [AV] 9.9dB, 0.72384MHz, L	Complied
Radiated emission	ANSI C63.4: 2003 8. Radiated emission measurements	Class B	N/A	5.9dB, 110.640MHz, QP, Vertical	Complied

*Note: UL Japan, Inc's EMI Work Procedure QPM05.

3.3 Additions or deviations to standards

No addition, exclusion nor deviation has been made from the standard.

3.4 Uncertainty

EMI

The following uncertainties have been calculated to provide a confidence level of 95% using a coverage factor k=2.

Test room	Conducted emission	Radiated emission (10m*)			Radiated emission (3m*)			Radiated emission (3m*)	
	150kHz-30MHz	9kHz-30MHz	30MHz-300MHz	300MHz-1GHz	9kHz-30MHz	30MHz-300MHz	300MHz-1GHz	1GHz-18GHz	18GHz-40GHz
No.1 semi-anechoic chamber (±)	3.7dB	3.1dB	4.4dB	4.2dB	3.2dB	3.8dB	3.9dB	5.9dB	6.1dB
No.2 semi-anechoic chamber (±)	3.7dB	-	-	-	3.2dB	4.4dB	4.0dB	5.9dB	6.1dB
No.3 semi-anechoic chamber (±)	3.7dB	-	-	-	3.2dB	4.6dB	4.0dB	5.9dB	6.1dB
No.4 semi-anechoic chamber (±)	3.7dB	-	-	-	3.2dB	3.9dB	3.9dB	5.9dB	6.1dB

*10m/3m = Measurement distance

Conducted emission test

The data listed in this test report has enough margin, more than the site margin.

Radiated emission test(3m)

The data listed in this test report has enough margin, more than the site margin.

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3.5 Test Location

UL Japan, Inc. Head Office EMC Lab. *NVLAP Lab. code: 200572-0
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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	2973C-1	19.2 x 11.2 x 7.7m	7.0 x 6.0m	No.1 Power source room
No.2 semi-anechoic chamber	655103	2973C-2	7.5 x 5.8 x 5.2m	4.0 x 4.0m	-
No.3 semi-anechoic chamber	148738	2973C-3	12.0 x 8.5 x 5.9m	6.8 x 5.75m	No.3 Preparation room
No.3 shielded room	-	-	4.0 x 6.0 x 2.7m	N/A	-
No.4 semi-anechoic chamber	134570	2973C-4	12.0 x 8.5 x 5.9m	6.8 x 5.75m	No.4 Preparation room
No.4 shielded room	-	-	4.0 x 6.0 x 2.7m	N/A	-
No.5 semi-anechoic chamber	-	-	6.0 x 6.0 x 3.9m	6.0 x 6.0m	-
No.6 shielded room	-	-	4.0 x 4.5 x 2.7m	4.75 x 5.4 m	-
No.6 measurement room	-	-	4.75 x 5.4 x 3.0m	4.75 x 4.15 m	-
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	-
No.9 measurement room	-	-	8.0 x 4.5 x 2.8m	2.0 x 2.0m	-
No.10 measurement room	-	-	2.6 x 2.8 x 2.5m	2.4 x 2.4m	-
No.11 measurement room	-	-	3.1 x 3.4 x 3.0m	2.4 x 3.4m	-

* Size of vertical conducting plane (for Conducted Emission test) : 2.0 x 2.0m for No.1, No.2, No.3, and No.4 semi-anechoic chambers and No.3 and No.4 shielded rooms.

3.6 Test set up, Data of EMI, and Test instruments

Refer to APPENDIX 1 to 3.

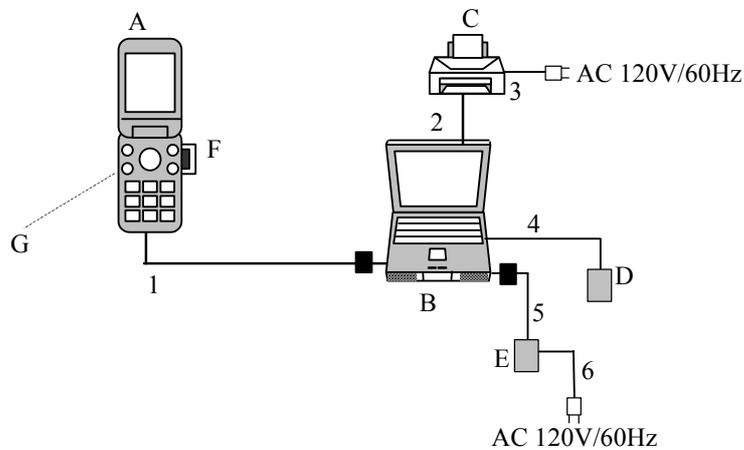
SECTION 4: Operation of E.U.T. during testing

4.1 Operating modes

Operating mode : 1) USB Data Com mode
2) Standby mode

Justification : The system was configured in typical fashion (as a customer would normally use it) for testing.

4.2 Configuration and peripherals



■ : Standard Ferrite Core

* 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	Remark
A	Cellular Phone	CDMA SHY01	SSHJC001733	SHARP	EUT
B	PC	DELL PP10L	8LH3H1X	DELL	-
C	Printer	BJF860	K10201	Canon	DOC
D	USB Mouse	DELL M05UOA	G0N00FiF	DELL	-
E	AC Adaptor(PC)	AA22850	-	DELL	-
F	micro SD Memory Card	64MB type	-	PANASONIC	-
G	Lithium-ion Battery	SHY01UAA	-	SHARP	3.7V, 800mA (3.0Wh)

List of cables used

No.	Name	Length (m)	Shield		Remark
			Cable	Connector	
1	USB Data Cable	0.8	Shielded	Shielded	-
2	Parallel Cable	2.0	Shielded	Shielded	-
3	AC Power Cable (Printer)	2.0	Unshielded	Unshielded	-
4	Mouse Cable	1.9	Unshielded	Unshielded	-
5	AC Charger Cable (PC)	1.9	Unshielded	Unshielded	-
6	AC Power Cable (PC)	0.9	Unshielded	Unshielded	-

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SECTION 5: Conducted Emission

5.1 Operating environment

Test place : No.2 semi anechoic chamber.
Temperature : See data
Humidity : See data

5.2 Test configuration

EUT was placed on a urethane platform of nominal size, 1.0m by 1.5m, raised 0.8m above the conducting ground plane. The rear of tabletop was located 40cm to the vertical conducting plane. The rear of EUT and its peripherals was 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 the LISN/AMN and excess AC cable was bundled in center. I/O cables that were connected to the other peripherals were bundled in center. They were folded back and forth forming a bundle 30cm to 40cm long and were hanged at a 40cm height to the ground plane. 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 50 ohm connectors of the LISN/AMN were resistivity terminated in 50 ohm when not connected to the measuring equipment. Photographs of the set up are shown in Appendix 1.

5.3 Test procedure

The AC Mains Terminal Continuous disturbance Voltage has been measured with the EUT within a semi anechoic chamber. The EUT was connected to a Line Impedance Stabilization Network (LISN)/ Artificial Mains network (AMN). An overview sweep with peak detection has been performed. The measurements have been performed with a quasi-peak detector and if required, with an average detector.

The conducted emission measurements were made with the following detector function of the test receiver.

Detector Type : Quasi-Peak and Average
IF Bandwidth : 9 kHz

5.4 Test result

Summary of the test results: Pass

Date: March 13, 2009

Test engineer: Motoya Imura

UL Japan, Inc.

Head Office EMC Lab.

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SECTION 6: Radiated Emission

6.1 Operating environment

Test place : No.2 semi anechoic chamber
Temperature : See data
Humidity : See data

6.2 Test configuration

EUT was placed on a urethane platform of nominal size, 1.0m by 1.5m, raised 0.8m above the conducting ground plane. The EUT was set on the edge of the tabletop. Test was made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna was varied in height above the conducting ground plane to obtain the maximum signal strength. Photographs of the set up are shown in Appendix 1.

6.3 Test conditions

Frequency range : 30MHz-300MHz (Biconical antenna) / 300MHz-1000MHz (Logperiodic antenna)
1000MHz -2000MHz (Horn antenna)
Test distance : 3m
EUT position : Table top
EUT operation mode : See Clause 4.1

6.4 Test procedure

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. The radiated emission measurements were made with the following detector function of the test receiver and the Spectrum analyzer.

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

*1) When using Spectrum analyzer, the test was made with adjusting span to zero by using peak hold.

- The 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.

6.5 Test result

Summary of the test results: Pass

Date: March 13, 2009

Test engineer: Motoya Imura

APPENDIX 1: Photographs of test setup

Conducted Emission

This page has been submitted for a separate exhibit.

Radiated Emission

This page has been submitted for a separate exhibit.

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

This page has been submitted for a separate exhibit.

APPENDIX 2: Data of EMI test

Conducted Emission

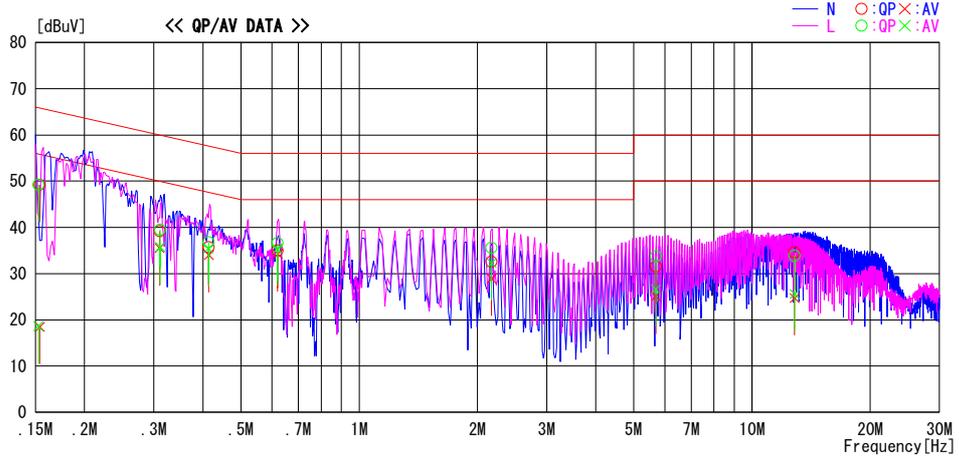
DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/03/13

Company : Sharp Corporation
Kind of EUT : Cellular phone
Model No. : CDMA SHY01
Serial No. : SSHCJ001733
Report No. : 29EE0228-HO
Power : AC 120V / 60Hz
Temp./Humi. : 25deg. C. / 38%
Engineer : Motoya Imura

Mode / Remarks : USB Date Com mode

LIMIT : FCC15.107(a) QP
FCC15.107(a) AV



Frequency [MHz]	Reading_Level		Corr. Factor [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.15372	48.9	18.2	0.3	49.2	18.5	65.8	55.8	16.6	37.3	N	
0.31031	38.9	35.2	0.3	39.2	35.5	60.0	50.0	20.8	14.5	N	
0.41420	35.4	33.7	0.3	35.7	34.0	57.6	47.6	21.9	13.6	N	
0.62012	34.6	33.8	0.4	35.0	34.2	56.0	46.0	21.0	11.8	N	
2.17228	32.1	28.4	0.5	32.6	28.9	56.0	46.0	23.4	17.1	N	
5.68880	30.6	24.2	0.9	31.5	25.1	60.0	50.0	28.5	24.9	N	
12.82430	33.1	23.2	1.5	34.6	24.7	60.0	50.0	25.4	25.3	N	
0.15258	48.9	18.3	0.3	49.2	18.6	65.9	55.9	16.7	37.3	L	
0.31164	39.2	35.4	0.3	39.5	35.7	59.9	49.9	20.4	14.2	L	
0.41366	36.5	35.1	0.3	36.8	35.4	57.6	47.6	20.8	12.2	L	
0.61968	36.2	35.0	0.4	36.6	35.4	56.0	46.0	19.4	10.6	L	
2.17168	35.1	31.8	0.5	35.6	32.3	56.0	46.0	20.4	13.7	L	
5.69008	32.8	25.7	0.9	33.7	26.6	60.0	50.0	26.3	23.4	L	
12.82500	32.4	24.1	1.5	33.9	25.6	60.0	50.0	26.1	24.4	L	

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

*The test result is rounded off to one or two decimal places, so some differences might be observed.

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

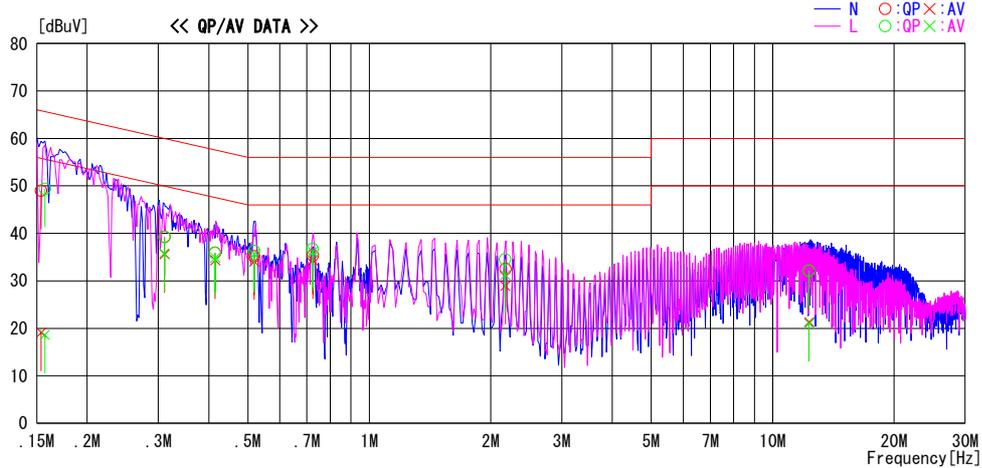
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/03/13

Company : Sharp Corporation
Kind of EUT : Cellular phone
Model No. : CDMA SHY01
Serial No. : SSHCJ001733

Report No. : 29EE0228-HO
Power : AC 120V / 60Hz
Temp./Humi. : 25deg.C. / 38%
Engineer : Motoya Imura

Mode / Remarks : Standby mode

LIMIT : FCC15.107(a) QP
FCC15.107(a) AV



Frequency [MHz]	Reading Level		Corr. [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.15370	48.7	18.8	0.3	49.0	19.1	65.8	55.8	16.8	36.7	N	
0.31068	39.0	35.3	0.3	39.3	35.6	60.0	50.0	20.7	14.4	N	
0.41485	35.6	34.0	0.3	35.9	34.3	57.6	47.6	21.7	13.3	N	
0.51856	34.9	33.8	0.3	35.2	34.1	56.0	46.0	20.8	11.9	N	
0.72442	34.9	33.9	0.4	35.3	34.3	56.0	46.0	20.7	11.7	N	
2.17296	32.0	28.4	0.5	32.5	28.9	56.0	46.0	23.5	17.1	N	
12.30200	30.5	19.8	1.5	32.0	21.3	60.0	50.0	28.0	28.7	N	
0.15697	49.1	18.3	0.3	49.4	18.6	65.6	55.6	16.2	37.0	L	
0.31062	38.9	35.5	0.3	39.2	35.8	60.0	50.0	20.8	14.2	L	
0.41480	35.6	34.6	0.3	35.9	34.9	57.6	47.6	21.7	12.7	L	
0.51860	36.0	35.3	0.3	36.3	35.6	56.0	46.0	19.7	10.4	L	
0.72384	36.3	35.7	0.4	36.7	36.1	56.0	46.0	19.3	9.9	L	
2.17240	34.0	30.7	0.5	34.5	31.2	56.0	46.0	21.5	14.8	L	
12.30950	30.6	19.6	1.5	32.1	21.1	60.0	50.0	27.9	28.9	L	

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

*The test result is rounded off to one or two decimal places, so some differences might be observed.

Radiated Emission

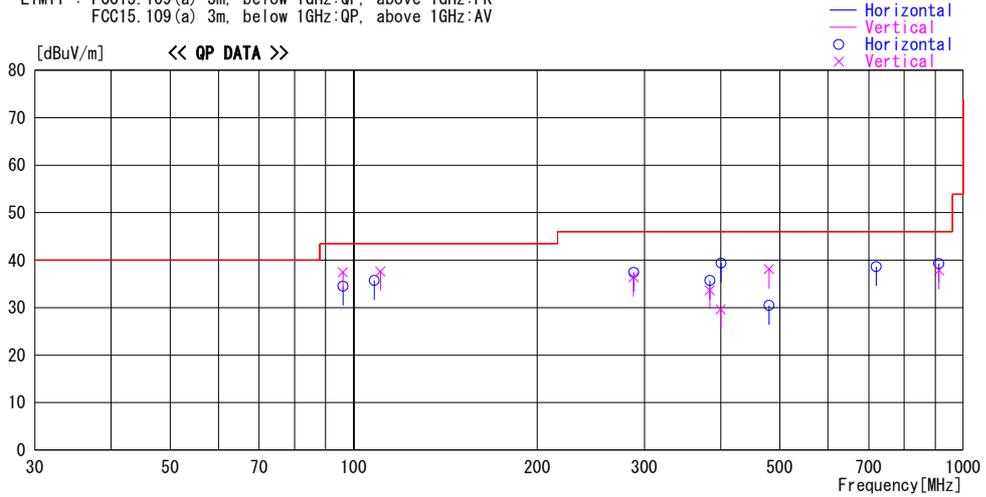
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2009/03/13

Company : Sharp Corporation
Kind of EUT : Cellular Phone
Model No. : CDMA SHY01
Serial No. : SSHCJ001733
Report No. : 29EE0228-HO
Power : AC 120V / 60Hz
Temp./Humid. : 25deg. C. / 38%
Engineer : Motoya Imura

Mode / Remarks : USB Data Com mode, Worst-axis(Hori:X , Vert:X)

LIMIT : FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:PK
FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:AV



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Gain [dB]							
96.008	46.0	QP	9.6	-21.1	34.5	55	323	Hori.	43.5	9.0	
96.012	49.0	QP	9.6	-21.1	37.5	62	148	Vert.	43.5	6.0	
108.161	45.2	QP	11.4	-20.9	35.7	348	289	Hori.	43.5	7.8	
110.640	46.7	QP	11.8	-20.9	37.6	283	100	Vert.	43.5	5.9	
287.850	36.0	QP	19.4	-19.0	36.4	37	102	Vert.	46.0	9.6	
288.006	37.0	QP	19.4	-19.0	37.4	326	263	Hori.	46.0	8.6	
383.999	38.0	QP	16.8	-19.1	35.7	166	114	Hori.	46.0	10.3	
384.016	36.0	QP	16.8	-19.1	33.7	195	113	Vert.	46.0	12.3	
400.046	31.2	QP	17.5	-19.1	29.6	144	100	Vert.	46.0	16.4	
400.962	41.0	QP	17.5	-19.1	39.4	180	167	Hori.	46.0	6.6	
479.983	31.3	QP	18.3	-19.1	30.5	115	200	Hori.	46.0	15.5	
479.998	38.9	QP	18.3	-19.1	38.1	155	100	Vert.	46.0	7.9	
720.004	36.6	QP	20.2	-18.2	38.6	117	189	Hori.	46.0	7.4	
912.002	32.9	QP	21.8	-16.8	37.9	291	100	Vert.	46.0	8.1	
912.010	34.3	QP	21.8	-16.8	39.3	69	100	Hori.	46.0	6.7	

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)

*The limit is rounded down to one decimal place.

*The test result is rounded off to one or two decimal places, so some differences might be observed.

Radiated Emission

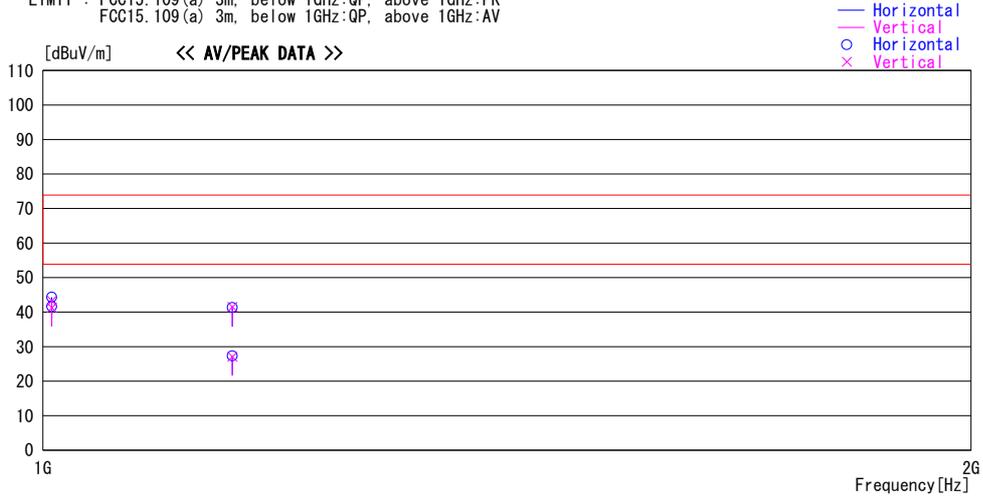
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/03/13

Company : Sharp Corporation	Report No. : 29EE0228-HO
Kind of EUT : Cellular Phone	Power : AC 120V / 60Hz
Model No. : CDMA SHY01	Temp./Humi. : 25deg.C. / 38%
Serial No. : SSHCJ001733	Engineer : Motoya Imura

Mode / Remarks : USB Data Com mode, Worst-axis(Hori:X , Vert:X)

LIMIT : FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:PK
FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:AV



Frequency	Reading	DET	Antenna	Loss&	Level	Angle	Height	Polar.	Limit	Margin	Comment
			Factor	Gain							
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]	
1006.647	51.2	PK	24.4	-32.3	43.3	128	100	Vert.	73.9	30.6	
1006.647	49.2	AV	24.4	-32.3	41.3	128	100	Vert.	53.9	12.6	
1006.658	52.2	PK	24.4	-32.3	44.3	256	139	Hori.	73.9	29.6	
1006.658	49.6	AV	24.4	-32.3	41.7	256	139	Hori.	53.9	12.2	
1152.000	48.4	PK	24.8	-31.9	41.3	256	120	Hori.	73.9	32.6	
1152.006	48.6	PK	24.8	-31.9	41.5	128	100	Vert.	73.9	32.4	
1152.000	34.5	AV	24.8	-31.9	27.4	256	120	Hori.	53.9	26.5	
1152.006	34.2	AV	24.8	-31.9	27.1	128	100	Vert.	53.9	26.8	

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

*The limit is rounded down to one decimal place.
*The test result is rounded off to one or two decimal places, so some differences might be observed.

Radiated Emission

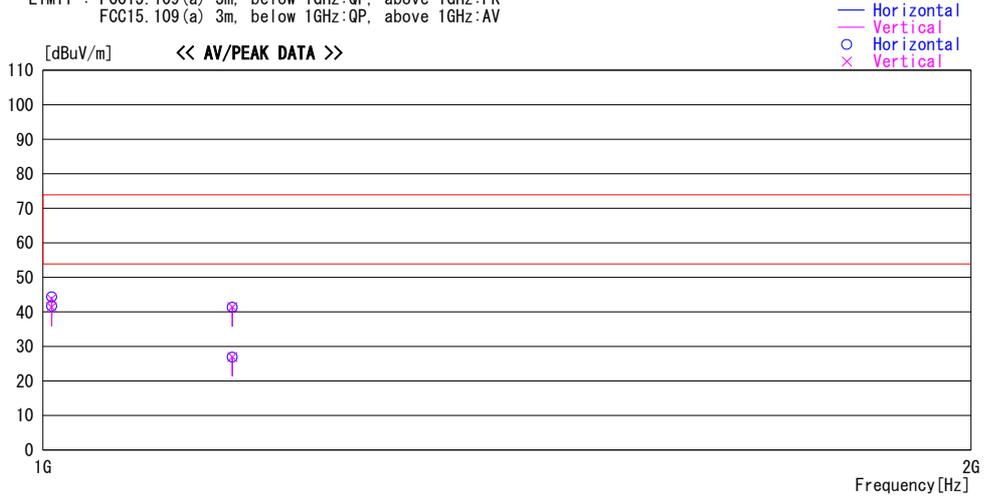
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/03/13

Company : Sharp Corporation
Kind of EUT : Cellular Phone
Model No. : CDMA SHY01
Serial No. : SSHCJ001733
Report No. : 29EE0228-HO
Power : AC 120V / 60Hz
Temp./Humi. : 25deg. C. / 38%
Engineer : Motoya Imura

Mode / Remarks : Standby mode, Worst-axis(Hori:X , Vert:X)

LIMIT : FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:PK
FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:AV



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Gain [dB]							
1006.610	51.8	PK	24.4	-32.3	43.9	130	100	Vert.	73.9	30.0	
1006.610	49.3	AV	24.4	-32.3	41.4	130	100	Vert.	53.9	12.5	
1006.620	52.3	PK	24.4	-32.3	44.4	220	143	Hori.	73.9	29.5	
1006.620	49.6	AV	24.4	-32.3	41.7	220	143	Hori.	53.9	12.2	
1152.000	48.5	PK	24.8	-31.9	41.4	137	118	Hori.	73.9	32.5	
1152.000	34.0	AV	24.8	-31.9	26.9	137	118	Hori.	53.9	27.0	
1152.000	48.5	PK	24.8	-31.9	41.4	250	100	Vert.	73.9	32.5	
1152.000	34.1	AV	24.8	-31.9	27.0	250	100	Vert.	53.9	26.9	

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)

*The limit is rounded down to one decimal place.
*The test result is rounded off to one or two decimal places, so some differences might be observed.

APPENDIX 3: Test instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
MAEC-02	Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-06902	CE/RE	2008/04/17 * 12
MOS-22	Thermo-Hygrometer	Custom	CTH-201	0003	CE/RE	2009/02/05 * 12
MJM-05	Measure	PROMART	SEN1955	-	CE/RE	-
CUST-MSTW-14	EMI measurement program	TSJ	TEPTO-DV	-	CE/RE	-
MTR-03	Test Receiver	Rohde & Schwarz	ESCI	100300	CE/RE	2008/04/02 * 12
MLS-06	LISN(AMN)	Schwarzbeck	NSLK8127	8127363	CE(EUT)	2009/02/18 * 12
MLS-07	LISN(AMN)	Schwarzbeck	NSLK8127	8127364	CE(AE)	2009/02/18 * 12
MTA-07	Terminator	MCL	BTRM-50	1 9944	CE	2009/02/17 * 12
MCC-13	Coaxial Cable	Fujikura/Agilent	-	-	CE	2009/02/16 * 12
MRENT-62	Spectrum Analyzer	Agilent	E4448A	MY46180856	CE/RE	2008/11/25 * 12
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	VHA91032008	RE	2008/10/18 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	201	RE	2008/10/18 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	-	RE	2009/02/16 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	BK7970	RE	2008/11/14 * 12
MPA-09	Pre Amplifier	Agilent	8447D	2944A10845	RE	2008/09/04 * 12
MCC-47	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	295123(5m) / 287573(1m)	RE	2008/11/27 * 12
MPA-10	Pre Amplifier	Agilent	8449B	3008A02142	RE	2008/09/17 * 12
MHA-05	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	253	RE	2009/01/31 * 12

The expiration date of the calibration is the end of the expired month.

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

As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.

Test Item:

CE: Conducted emission

RE: Radiated emission

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