

FCC TEST REPORT

Reference No. : G-45-2010-01874

Applicant : LG Electronics Inc.

Equipment Under Test (EUT) :

Product Name : PCS GSM Phone

Model Name : L-03C

Applied Standards : FCC Part 15 : 2009, Subpart B, Class B

ANSI C63.4 : 2003

CISPR 22 : 2006

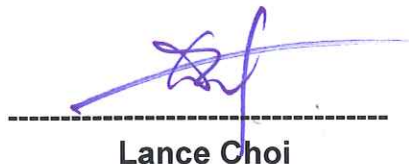
Date of Receipt : July 01, 2010

Date of Test : July 12, 2010

Date of Issue : July 14, 2010

Test Results : Complied

Tested by :


Lance Choi

Reviewed by :


Julia Choi

Remarks :

This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or Testing done by SGS International Electrical Approvals in connection with distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.



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1. General Information

1.1 Client Information

Applicant : LG Electronics Inc.
Address of Applicant : 60-39, Gasan-dong, Gumchon-gu, Seoul, 153-023, Korea
Manufacturer : LG Electronics Inc.
Address of Manufacturer : 60-39, Gasan-dong, Gumchon-gu, Seoul, 153-023, Korea

1.2 Test Laboratory

Name and Address : SGS Testing Korea Co., Ltd.
705, Dongchun-Dong, Yongin-City, Gyeonggi-Do,
Korea 449-840
18-34, Sanbon-dong, Gunpo, Gyeonggi-do, Korea
435-041

1.3 General Information of E.U.T.

Product Name : PCS GSM Phone
Model Name : L-03C
Serial No. : None
Test Voltage : AC 120V, 60Hz(Notebook Computer)

1.4 Operating Modes and Conditions

Operating mode	Operating condition
USB Mode	USB Data Communication

Note: EUT was exercised through Software(Dell Program) during testing.

1.5 Peripheral Equipments

Description	Model	Serial No.	Manufacturer
USB MOUSE	Basic Optical Mouse v2.0	-	Microsoft Corporation
USB KEYBOARD	Comfort Curve Keyboard 2000	-	Microsoft Corporation
LCD Monitor	CR22KS	N843H1NP701598N	Samsung
Notebook Computer	PCG-3AEP	282722857000775	Sony Corporation
Micro SD Card	1.0 GB	-	SanDisk

Note: Peripherals are DoC.

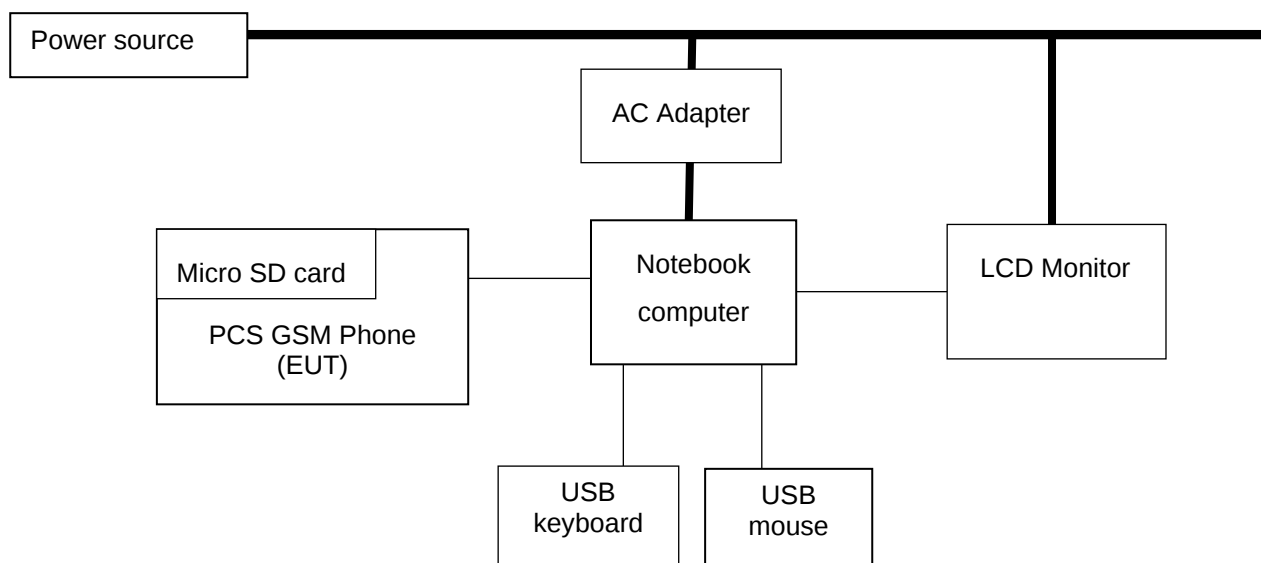
1.6 Cable List

Start		END		Cable Spec.	
Name	I/O Port	Name	I/O Port	Length	Shield
EUT	USB	Notebook computer	USB	1.2	Shielded
	Micro SD	Micro SD card	-	-	-
AC Adapter	DC OUT	Notebook computer	DC IN	1.8	Unshielded
	AC IN	Power source	-	1.0	Unshielded
Notebook computer	USB	EUT	USB	1.2	Shielded
	USB	USB keyboard	USB	1.5	Shielded
	USB	USB mouse	USB	1.8	Shielded
	RGB	LCD Monitor	RGB	1.8	Shielded
	DC IN	AC Adapter	DC OUT	1.8	Unshielded
LCD Monitor	RGB	EUT	RGB	1.8	Shielded
	AC IN	Power source	-	1.0	Unshielded

1.7 System Configurations

Description	Model	Serial No.	Manufacturer
Main board	L-03C_MAIN	SPFY0233401_(3)	-
SUB board	SG3J2_CP1_PP2	-	-
OSD board	SG3J2_ST1	K5900A	-
Camera lens	-	-	-
Battery	L09	SBPL0101002 AACDC100528	LG Electronics

1.8 Test System Layout



1.9 Applicable Standards for Testing

Standards	Status	Deviation
FCC Part 15 : 2009, Subpart B ANSI C63.4 : 2003 CISPR 22 : 2006	Applicable	No Deviation

1.10 Summary of Test Results

Test Item	Standards	Results
Conducted Emission	FCC Part 15 : 2009, Subpart B ANSI C63.4 : 2003 CISPR 22 : 2006	Complied
Radiated Emission	FCC Part 15 : 2009, Subpart B ANSI C63.4 : 2003 CISPR 22 : 2006	Complied

EMISSION

2.1 Test Results

Test Items	Standards	Test Results
Conducted Emission	FCC Part 15 : 2009, Subpart B ANSI C63.4 : 2003 CISPR 22 : 2006	Complied
Radiated Emission	FCC Part 15 : 2009, Subpart B ANSI C63.4 : 2003 CISPR 22 : 2006	Complied

2.2 Test Equipments

Equipment	Model	Manufacturer	Last Cal. Date
Test Receiver	ESS	ROHDE&SCHWARZ	2010.07.08
LISN	ENV216	ROHDE&SCHWARZ	2010.02.02
LISN	ESH3-Z5	ROHDE&SCHWARZ	2010.05.10
Shielded Room	-	DAEIL EMC	-
Test Receiver	ESU26	Rohde & Schwarz	2010.04.08
Bilog Antenna	VULB9163	SCHWARZBECK MESS-ELEKTRONIK	2009.07.22
Horn Antenna	HF906	Rohde & Schwarz	2009.10.08
Preamplifier	8449B	Agilent	2010.03.31
RF Amplifier	8447F	HEWLETT PACKARD	2010.07.05

Note : Only the calibration period of Antennas is 2 years but the period of every equipment is 1 year.

2.3 Test Site

Conducted Emission: Shield Room in Yongin Laboratory

Radiated Emission: 3m Semi-Anechoic chamber in Gunpo Laboratory

2.4 Conducted Emission Test Data

The initial preliminary exploratory scans were performed using a max hold mode incorporating a Peak detector. The final test data was measured using a Quasi-Peak detector and Average detector.

Temperature : 24.7 ~ 24.9

Humidity : 44.0 % RH ~ 45.0 % RH

Atmospheric Pressure : 99.5 kPa ~ 99.5 kPa

FREQ. (MHz)	LINE	LEVEL(dBμV)		LIMIT(dBμV)		MARGIN(dB)	
		Q-Peak	Average	Q-Peak	Average	Q-Peak	Average
0.31	N	28.78	18.48	59.97	49.97	31.19	31.49
0.47	N	33.91	27.61	56.51	46.51	22.60	18.90
0.84	N	21.20	13.40	56.00	46.00	34.80	32.60
2.08	N	32.24	21.64	56.00	46.00	23.76	24.36
4.72	N	27.17	19.57	56.00	46.00	28.83	26.43
23.28	N	34.26	26.56	60.00	50.00	25.74	23.44
0.31	H	37.26	20.36	59.97	49.97	22.71	29.61
0.47	H	35.19	26.79	56.51	46.51	21.32	19.72
0.84	H	31.41	19.21	56.00	46.00	24.59	26.79
2.08	H	32.83	25.33	56.00	46.00	23.17	20.67
4.72	H	27.72	18.62	56.00	46.00	28.28	27.38
23.28	H	33.71	26.51	60.00	50.00	26.29	23.49

Note : • Line (H) : HOT

• Line (N) : NEUTRAL

• Margin = Limit - Level

See Appendix A (Test Data of HOT Line)

See Appendix B (Test Data of NEUTRAL Line)

2.5 Radiated Emission Test Data

The initial preliminary exploratory scans were performed using a max hold mode incorporating a Peak detector. The final test data was measured using a Quasi-Peak detector below 1GHz and a Average detector above 1GHz.

Below 1GHz

Temperature : 23.6 ~ 23.9

Humidity : 44.0 % RH ~ 45.0 % RH

Atmospheric Pressure : 99.0 kPa ~ 99.0 kPa

FREQ. (MHz)	LEVEL (dBμV)	POL (H/V)	AF (dB)	CL (dB)	Amp (dB)	F/S (dBμV/m)	LIMIT (dBμV/m)	MARGIN (dB)
56.43	44.90	V	11.67	0.76	28.21	29.12	40.00	10.88
80.20	48.50	H	7.36	0.90	28.16	28.60	40.00	11.40
166.12	53.10	V	8.28	1.27	27.79	34.86	43.50	8.64
203.22	50.90	H	10.37	1.40	27.61	35.06	43.50	8.44
244.04	48.00	H	11.75	1.54	27.40	33.89	46.00	12.11
408.01	43.70	H	15.81	1.99	28.19	33.31	46.00	12.69

Note: • AF = Antenna Factor • CL = Cable Loss • F/S = Field Strength
 • POL H = Horizontal • POL V = Vertical • Amp = Amplifier Gain
 • Margin = Limit – F/S • F/S = Level + AF + CL – Amp

Above 1GHz

Temperature : 23.6 ~ 23.9

Humidity : 44.0 % RH ~ 45.0 % RH

Atmospheric Pressure : 99.0 kPa ~ 99.0 kPa

FREQ. (MHz)	LEVEL (dBμV)	POL (H/V)	AF (dB)	CL (dB)	Amp (dB)	F/S (dBμV/m)	LIMIT (dBμV/m)	MARGIN (dB)
Average Detector								
1800.20	35.60	V	26.75	4.14	34.80	31.69	54.00	22.31
1997.91	32.00	V	27.51	4.49	34.73	29.26	50.00	20.74

Note : • AF = Antenna Factor • CL = Cable Loss • F/S = Field Strength
 • POL H = Horizontal • POL V = Vertical • Amp = Amplifier Gain
 • Margin = Limit – F/S • F/S = Level + AF + CL - Amp

2.6 Modifications

There was no modified item during the test.

Appendix A : Mains Terminal Continuous Disturbance Voltage Test Data

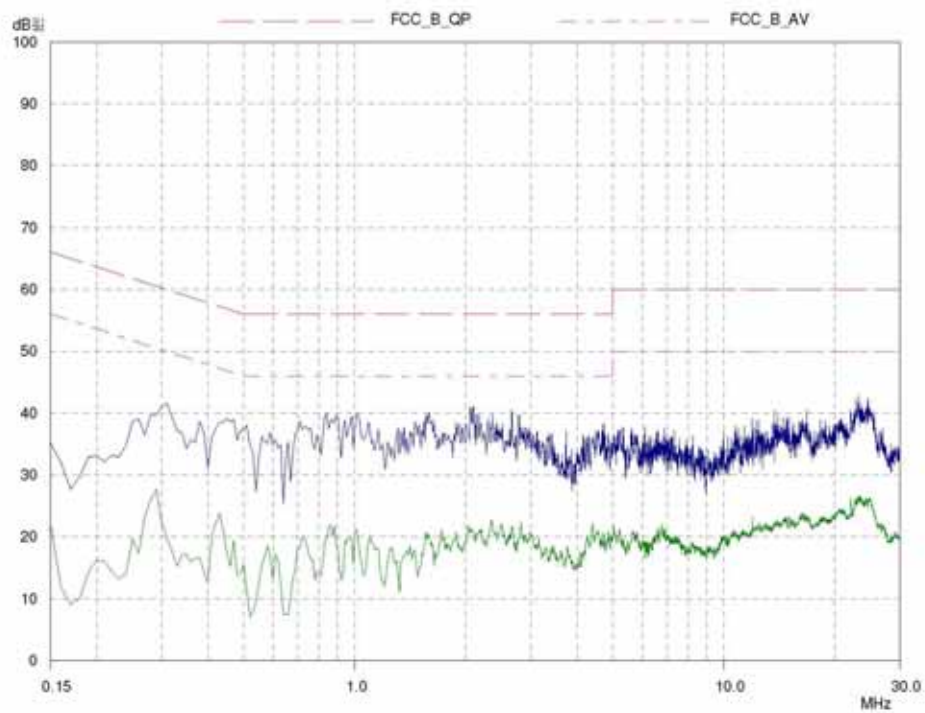
LG Electronics Inc.

L-03C

EUT: PCS GSM Phone
Manuf: LG Electronics Inc.
Op Cond: HOT
Operator: H.I.CHOI
Test Spec: FCC
Comment: USB

Result File: 1874-H.dat : New Measurement

Final Measurement: Detectors: X QP / + AV
Meas Time: 100msec
Peaks: 8
Acc Margin: 50 dB



Appendix B : Mains Terminal Continuous Disturbance Voltage Test Data

LG Electronics Inc.

L-03C

EUT: PCS GSM Phone
Manuf: LG Electronics Inc.
Op Cond: NEUTRAL
Operator: H.I.CHOI
Test Spec: FCC
Comment: USB

Result File: 1874-N.dat : New Measurement

Prescan Measurement: Detectors: X PK / + AV
Meas Time: see scan settings
Peaks: 8
Acc Margin: 50 dB

