FCC CFR47 PART 22H, 24E, AND 27L
CLASS II PERMISSIVE CHANGE

CERTIFICATION TEST REPORT

FOR

GSM/WCDMA TRI-BAND PHONE WITH BLUETOOTH AND WLAN

MODEL NUMBER: LG-P769, LGP769, AND P769

FCC ID: ZNFP769

REPORT NUMBER: 12U14595-4

ISSUE DATE: SEPEMBER 25, 2012

Prepared for

LG ELECTRONICS MOBILECOMM U.S.A.
1000 SYLVAN AVENUE
ENGLEWOOD CLIFFS, NJ 07632

Prepared by

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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
---	09/25/12	Initial Issue	T. Chan

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME:	LG ELECTRONICS MOBILECOMM U.S.A 1000 SYLVAN AVENUE ENGLEWOOD CLIFFS, NJ 07632
EUT DESCRIPTION:	GSM/WCDMA TRI-BAND PHONE WITH BT & WLAN
MODEL:	LG-P769, LGP769, AND P769
SERIAL NUMBER:	045C2
DATE TESTED:	AUGUST 28 TO SEPTEMBER 25, 2012

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC PART 22H, 24E, & 27L	Pass

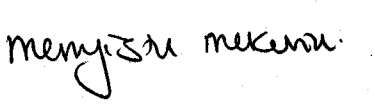
Compliance Certification Services (UL CCS) tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL CCS based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL CCS and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL CCS will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Approved & Released For UL CCS By:

THU CHAN
ENGINEERING MANAGER
UL CCS

Tested By:



MENGISTU MEKURIA
EMC ENGINEER
UL CCS

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with TIA-603-C, FCC CFR 47 Part 2, FCC CFR 47 Part 22, FCC CFR Part 24, and FCC Part 27.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

UL CCS is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at http://www.ccsemc.com.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards

.

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	3.52 dB
Radiated Disturbance, 30 to 1000 MHz	4.94 dB

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a GSM/WCDMA Tri-Band Phone with BT and WLAN capabilities that is manufactured by LG Electronics.

5.2. MAXIMUM OUTPUT POWER

The RF conducted measurement passed within ± 0.5dBm of the original output power.

The RF radiated measurement with maximum peak ERP / EIRP output powers are as follows:

Part 22 Cellular Band			
Frequency range (MHz)	Modulation	ERP	
		dBm	mW
824.2 – 848.8	GPRS	29.99	997.7
	EGPRS	25.36	343.6
826.4 – 846.6	UMTS, REL 99	24.02	252.3
	UMTS, HSUPA	24.19	262.4

Part 24 PCS Band			
Frequency range (MHz)	Modulation	EIRP	
		dBm	mW
1850.2-1909.8	GPRS	28.88	772.7
	EGPRS	25.84	383.7
1852.4-1907.6	UMTS, REL 99	25.40	346.7
	UMTS, HSUPA	25.64	366.4

Part 27 AWS Band			
Frequency range (MHz)	Modulation	EIRP	
		dBm	mW
1712.4-1752.5	UMTS, REL 99	25.16	328.1
	UMTS, HSUPA	26.30	426.6

5.3. SOFTWARE AND FIRMWARE

The EUT is linked with Agilent 8960/Anritsu Wireless Communication Test Set.

5.4. WORST-CASE CONFIGURATION AND MODE

The worst-case channel is determined as the channel with the highest output power.

Since the EUT is a portable device, in addition to the peak power measurements verification data shown below, the EUT also investigated on an X, Y and Z orientations and the worst-orientations among them with AC/DC adapter and headset. After the investigation X-Orientation without AC Adapter and headset for cell band and X-Orientation with AC Adapter for PCS band were turned out to be the worst cases.

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
AC Adapter	LG	MCS-01WD	DA2220700009	DoC
Heasdset	LG	N/A	N/A	N/A

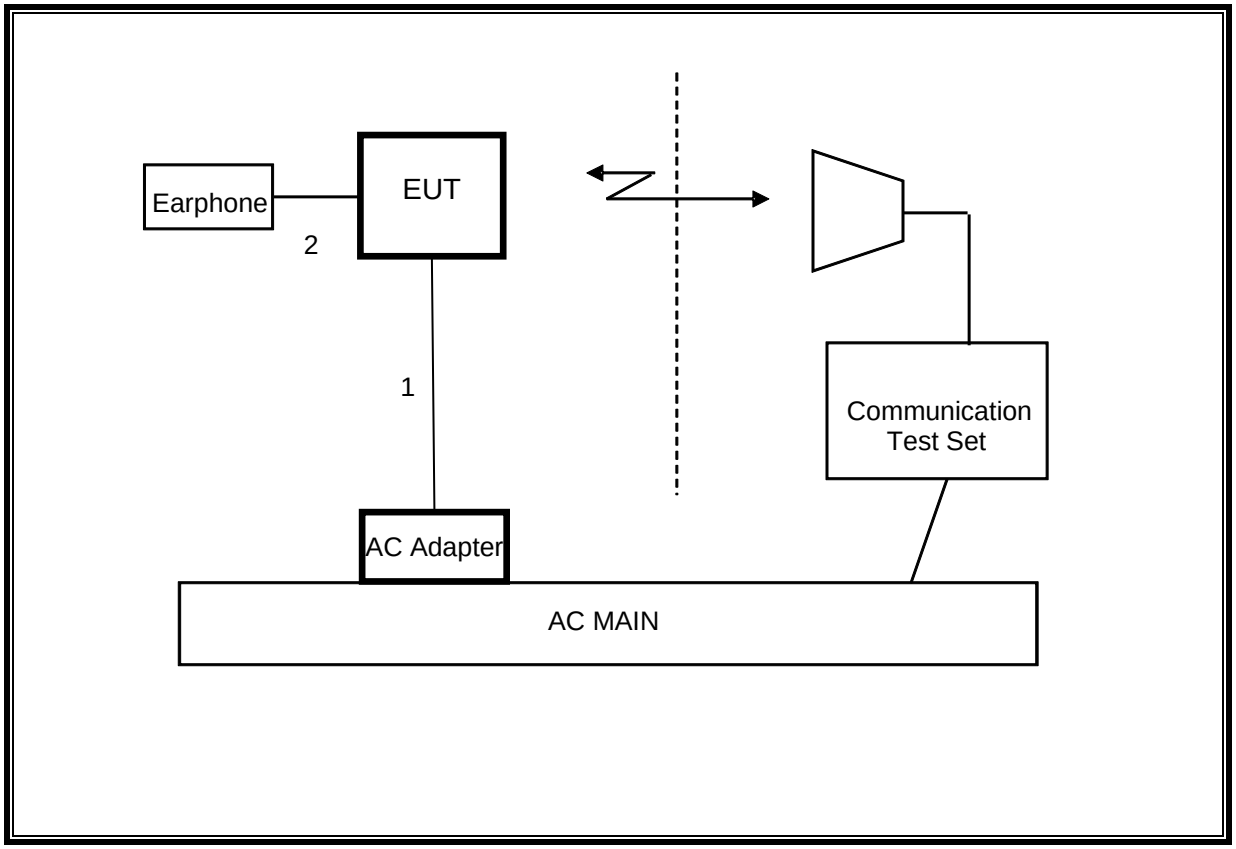
I/O CABLES (RADIATED SETUP)

I/O CABLE LIST						
Cable No.	**Port**	**# of Identical Ports**	**Connector Type**	**Cable Type**	**Cable Length**	**Remarks**
1	DC Power	1	Mini-USB	Shielded	1.2 m	NA
2	Audio	1	Mini-Jack	Un-Shielded	1.5 m	NA

TEST SETUP

The EUT is continuously communicated to the call box during the tests.

SETUP DIAGRAM FOR TESTS (RADIATED TEST SETUP)



6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

TEST EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Asset**	**Cal Due**
Preamplifier, 26.5 GHz	Agilent / HP	8449B	C01063	11/07/12
Preamplifier, 26.5 GHz	Agilent / HP	8449B	C01064	11/11/12
Antenna, Bilog, 30MHz-1 GHz	Sunol Sciences	JB1	C01011	03/23/13
Antenna, Horn, 18 GHz	EMCO	3115	C00943	CNR
Antenna, Horn, 18 GHz	EMCO	3115	C00783	10/18/12
Antenna, Horn, 18 GHz	EMCO	3115	C00945	10/06/12
Antenna, Horn, 26.5 GHz	ARA	SWH-28	C01015	04/23/13
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C00986	03/22/13
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01069	12/15/12
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4440A	C01161	12/16/12
Radio Communication Analizer	Anritsu	MT8820C	1100481	07/13/13
Communications Test Set	Agilent / HP	E5515C	C01086	06/20/13
Communication Test Set	R & S	CMU 200	None	06/06/13
DC power supply, 8 V @ 3 A or 15 V	Agilent / HP	E3610A	None	CNR
Vector signal generator, 6 GHz	Agilent / HP	E4438C	None	07/06/13
Antenna, Tuned Dipole 400~1000	ETS	3121C DB4	C00993	10/16/12
Highpass Filter, 2.7 GHz	Micro-Tronics	HPM13194	N02686	CNR
Highpass Filter, 1.5 GHz	Micro-Tronics	HPM13193	N02688	CNR
Directional Coupler	RF-Lambda	RFDC5M06G15	None	CNR

7. RADIATED TEST LIMITS AND RESULTS

7.1. RADIATED POWER (ERP & EIRP)

RULE PART(S)

FCC: §2.1046, §22.913, §24.232, §27.50

LIMITS

22.913(a) - The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

24.232(c) - Mobile/portable stations are limited to 2 watts e.i.r.p. peak power and the equipment must employ means to limit the power to the minimum necessary for successful communications.

27.50 (d) (2) - Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band are limited to a peak EIRP of 1 watt.

TEST PROCEDURE

ANSI / TIA / EIA 603 Clause 2.2.17

MODES TESTED

- GPRS
- EGPRS
- UMTS, REL 99
- UMTS, HSUPA

RESULTS

Mode	Band	Channel	f (MHz)	ERP / EIRP	
				dBm	mW
GPRS	CELL	128	824.20	**29.99**	997.70
		190	836.60	29.41	872.97
		251	848.80	28.06	639.73
	PCS	512	1850.20	27.67	584.79
		661	1880.00	**28.88**	772.68
		810	1909.80	28.07	641.21
EGPRS	CELL	128	824.20	**25.36**	343.56
		190	836.60	24.99	315.50
		251	848.80	23.77	238.23
	PCS	512	1850.20	24.58	287.08
		661	1880.00	**25.84**	383.71
		810	1909.80	25.20	331.13

Mode	Band	Channel	f (MHz)	ERP / EIRP	
				dBm	mW
UMTS, REL 99	CELL	4357	826.40	**24.02**	252.35
		4405	836.00	23.49	223.36
		4455	846.00	21.26	133.66
	PCS	9662	1852.40	24.30	269.15
		9800	1880.00	**25.40**	346.74
		9938	1907.60	24.39	274.79
	AWS	1537	1712.40	24.92	310.46
		1637	1732.40	24.74	297.85
		2087	1752.40	**25.16**	328.10
UMTS, HSUPA	CELL	4357	826.40	**24.19**	262.42
		4405	836.00	23.56	226.99
		4455	846.00	21.87	153.82
	PCS	9662	1852.40	24.55	285.10
		9800	1880.00	**25.64**	366.44
		9938	1907.60	25.03	318.42
	AWS	1537	1712.40	26.10	407.38
		1637	1732.40	25.49	354.00
		2087	1752.40	**26.30**	426.58

ERP GPRS, 850MHz BAND

High Frequency Substitution Measurement
Compliance Certification Services Chamber B

Company: LG ELECTRONICS
Project #: 12U14595
Date: 09/25/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT only
Mode: TX, 850 MHz BAND, GPRS MODE

Test Equipment:
Receiving: Sunol T122, and 3m Chamber N-type Cable (Setup this one for testing EUT)
Substitution: Dipole S/N: 1629, 4ft SMA Cable (245182002) Warehouse.

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
824.20	18.62	V	0.5	0.0	18.12	38.5	-20.3	
824.20	30.49	H	0.5	0.0	29.99	38.5	-8.5	
836.60	17.27	V	0.5	0.0	16.77	38.5	-21.7	
836.60	29.91	H	0.5	0.0	29.41	38.5	-9.0	
848.80	17.23	V	0.5	0.0	16.73	38.5	-21.7	
848.80	28.56	H	0.5	0.0	28.06	38.5	-10.4	

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EIRP GPRS, 1900MHz BAND

High Frequency Fundamental Measurement
Compliance Certification Services Chamber B

Company: LG ELECTRONICS
Project #: 12U14595
Date: 09/23/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH AC ADAPTER
Mode: TX, 1900 MHz BAND, GPRS MODE

Test Equipment:
Receiving: Horn T59, and Camber B SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (245182002) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.850	13.4	V	0.85	8.62	21.18	33.0	-11.8	
1.850	20.1	H	0.85	8.47	27.67	33.0	-5.3	
1.880	13.8	V	0.85	8.46	21.40	33.0	-11.6	
1.880	21.4	H	0.85	8.36	28.88	33.0	-4.1	
1.910	12.7	V	0.85	8.30	20.14	33.0	-12.9	
1.910	20.7	H	0.85	8.25	28.07	33.0	-4.9	

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ERP EGPRS, 850MHz BAND

High Frequency Substitution Measurement
Compliance Certification Services Chamber B

Company: LG ELECTRONICS
Project #: 12U14595
Date: 09/25/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT only
Mode: TX, 850 MHz BAND, EGPRS MODE

Test Equipment:
Receiving: Sunol T122, and 3m Chamber N-type Cable (Setup this one for testing EUT)
Substitution: Dipole S/N: 1629, 4ft SMA Cable (245182002) Warehouse.

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
824.20	16.17	V	0.5	0.0	15.67	38.5	-22.8	
824.20	25.86	H	0.5	0.0	25.36	38.5	-13.1	
836.60	14.80	V	0.5	0.0	14.30	38.5	-24.1	
836.60	25.49	H	0.5	0.0	24.99	38.5	-13.5	
848.80	16.03	V	0.5	0.0	15.53	38.5	-22.9	
848.80	24.27	H	0.5	0.0	23.77	38.5	-14.7	

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EIRP EGPRS, 1900MHz BAND

High Frequency Fundamental Measurement
Compliance Certification Services Chamber B

Company: LG ELECTRONICS
Project #: 12U14595
Date: 09/23/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH AC ADAPTER
Mode: TX, 1900 MHz BAND, EGPRS MODE

Test Equipment:
Receiving: Horn T59, and Camber B SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (245182002) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.850	10.7	V	0.85	8.62	18.47	33.0	-14.5	
1.850	17.0	H	0.85	8.47	24.58	33.0	-8.4	
1.880	10.5	V	0.85	8.46	18.15	33.0	-14.9	
1.880	18.3	H	0.85	8.36	25.84	33.0	-7.2	
1.910	9.7	V	0.85	8.30	17.16	33.0	-15.8	
1.910	17.8	H	0.85	8.25	25.20	33.0	-7.8	

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ERP UMTS REL 99, 850MHz BAND

High Frequency Substitution Measurement
Compliance Certification Services Chamber B

Company: LG ELECTRONICS
Project #: 12U14595
Date: 09/24/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH AC ADAPTER
Mode: TX, 850 MHz BAND, WCDMA MODE

Test Equipment:
Receiving: Sunol T122, and 3m Chamber N-type Cable (Setup this one for testing EUT)
Substitution: Dipole S/N: 1629, 4ft SMA Cable (245182002) Warehouse.

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
824.20	17.26	V	0.5	0.0	16.76	38.5	-21.7	
824.20	24.52	H	0.5	0.0	24.02	38.5	-14.4	
836.60	14.99	V	0.5	0.0	14.49	38.5	-24.0	
836.60	23.99	H	0.5	0.0	23.49	38.5	-15.0	
848.80	15.63	V	0.5	0.0	15.13	38.5	-23.3	
848.80	21.76	H	0.5	0.0	21.26	38.5	-17.2	

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EIRP UMTS REL 99, 1900MHz BAND

High Frequency Fundamental Measurement
Compliance Certification Services Chamber B

Company: LG ELECTRONICS
Project #: 12U14595
Date: 09/23/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH AC ADAPTER
Mode: TX, 1900 MHz BAND, UMTS REL 99 MODE

Test Equipment:
Receiving: Horn T59, and Camber B SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (245182002) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.852	11.6	V	0.85	8.62	19.33	33.0	-13.7	
1.852	16.7	H	0.85	8.47	24.30	33.0	-8.7	
1.880	11.3	V	0.85	8.46	18.88	33.0	-14.1	
1.880	17.9	H	0.85	8.36	25.40	33.0	-7.6	
1.908	9.4	V	0.85	8.30	16.82	33.0	-16.2	
1.908	17.0	H	0.85	8.25	24.39	33.0	-8.6	

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EIRP UMTS REL 99, 1700MHz BAND

High Frequency Fundamental Measurement
Compliance Certification Services Chamber B

Company: LG ELECTRONICS
Project #: 12U14595
Date: 09/24/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH AC ADAPTER
Mode: TX, 1700 MHz BAND, WCDMA MODE

Test Equipment:
Receiving: Horn T59, and Camber B SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (245182002) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.712	11.0	V	0.85	8.62	18.73	30.0	-11.3	
1.712	17.3	H	0.85	8.47	24.92	30.0	-5.1	
1.732	9.9	V	0.85	8.46	17.53	30.0	-12.5	
1.732	17.2	H	0.85	8.36	24.74	30.0	-5.3	
1.753	11.7	V	0.85	8.30	19.18	30.0	-10.8	
1.753	17.8	H	0.85	8.25	25.16	30.0	-4.8	

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ERP UMTS HSUPA, 850MHz BAND

High Frequency Substitution Measurement
Compliance Certification Services Chamber B

Company: LG ELECTRONICS
Project #: 12U14595
Date: 09/24/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH AC ADAPTER
Mode: TX, 850 MHz BAND, HSUPA MODE

Test Equipment:
Receiving: Sunol T122, and 3m Chamber N-type Cable (Setup this one for testing EUT)
Substitution: Dipole S/N: 1629, 4ft SMA Cable (245182002) Warehouse.

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
824.20	19.34	V	0.5	0.0	18.84	38.5	-19.6	
824.20	24.69	H	0.5	0.0	24.19	38.5	-14.3	
836.60	17.17	V	0.5	0.0	16.67	38.5	-21.8	
836.60	24.06	H	0.5	0.0	23.56	38.5	-14.9	
848.80	16.11	V	0.5	0.0	15.61	38.5	-22.8	
848.80	22.37	H	0.5	0.0	21.87	38.5	-16.6	

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EIRP UMTS HSUPA, 1900MHz BAND

High Frequency Fundamental Measurement
Compliance Certification Services Chamber B

Company: LG ELECTRONICS
Project #: 12U14595
Date: 09/23/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH AC ADAPTER
Mode: TX, 1900 MHz BAND, UMTS HSUPA MODE

Test Equipment:
Receiving: Horn T59, and Camber B SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (245182002) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.852	11.6	V	0.85	8.62	19.35	33.0	-13.7	
1.852	16.9	H	0.85	8.47	24.55	33.0	-8.5	
1.880	11.7	V	0.85	8.46	19.34	33.0	-13.7	
1.880	18.1	H	0.85	8.36	25.64	33.0	-7.4	
1.908	10.1	V	0.85	8.30	17.54	33.0	-15.5	
1.908	17.6	H	0.85	8.25	25.03	33.0	-8.0	

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EIRP UMTS HSUPA, 1700MHz BAND

High Frequency Fundamental Measurement
Compliance Certification Services Chamber B

Company: LG ELECTRONICS
Project #: 12U14595
Date: 09/24/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH AC ADAPTER
Mode: TX, 1700 MHz BAND, HSUPA MODE

Test Equipment:
Receiving: Horn T59, and Camber B SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (245182002) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.712	11.9	V	0.85	8.62	19.67	30.0	-10.3	
1.712	18.5	H	0.85	8.47	26.10	30.0	-3.9	
1.732	11.6	V	0.85	8.46	19.21	30.0	-10.8	
1.732	18.0	H	0.85	8.36	25.49	30.0	-4.5	
1.753	12.3	V	0.85	8.30	19.70	30.0	-10.3	
1.753	18.9	H	0.85	8.25	26.30	30.0	-3.7	

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7.2. FIELD STRENGTH OF SPURIOUS RADIATION

RULE PART(S)

FCC: §2.1053, §22.917, §24.238, and §27.53

LIMIT

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

TEST PROCEDURE

For Cellular equipment - Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 100 kHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

For PCS equipment - Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 MHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

MODES TESTED

- GPRS
- EGPRS
- UMTS, REL 99
- UMTS, HSUPA

RESULTS

ERP GPRS, 850MHz BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS
Project #: 12U14595
Date: 08/31/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT with AC Adapter and Earphone
Mode: TX, 850MHz BAND GPRS MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber B	T145 8449B	Filter 1	Part 22

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, (824.2MHz)									
1.648	-1.3	V	3.0	35.5	1.0	-35.8	-13.0	-22.8	
2.473	-7.5	V	3.0	35.4	1.0	-41.9	-13.0	-28.9	
3.297	-9.2	V	3.0	35.5	1.0	-43.8	-13.0	-30.8	
4.121	5.1	V	3.0	35.2	1.0	-29.2	-13.0	-16.2	
4.945	10.6	V	3.0	35.3	1.0	-23.7	-13.0	-10.7	
5.769	-11.9	V	3.0	35.5	1.0	-46.4	-13.0	-33.4	
6.594	-1.0	V	3.0	35.6	1.0	-35.6	-13.0	-22.6	
7.418	-9.1	V	3.0	35.7	1.0	-43.8	-13.0	-30.8	
8.242	-14.4	V	3.0	35.6	1.0	-49.1	-13.0	-36.1	
1.648	2.7	H	3.0	35.5	1.0	-31.9	-13.0	-18.9	
2.473	-4.9	H	3.0	35.4	1.0	-39.3	-13.0	-26.3	
3.297	-8.9	H	3.0	35.5	1.0	-43.4	-13.0	-30.4	
4.121	4.9	H	3.0	35.2	1.0	-29.3	-13.0	-16.3	
4.945	10.3	H	3.0	35.3	1.0	-24.0	-13.0	-11.0	
5.769	-16.1	H	3.0	35.5	1.0	-50.6	-13.0	-37.6	
6.594	-4.5	H	3.0	35.6	1.0	-39.2	-13.0	-26.2	
7.418	-12.0	H	3.0	35.7	1.0	-46.7	-13.0	-33.7	
8.242	-13.3	H	3.0	35.6	1.0	-47.9	-13.0	-34.9	
Mid Ch, (836.6MHz)									
1.673	-2.3	V	3.0	35.5	1.0	-36.8	-13.0	-23.8	
2.510	-7.8	V	3.0	35.4	1.0	-42.2	-13.0	-29.2	
3.346	-11.7	V	3.0	35.5	1.0	-46.2	-13.0	-33.2	
4.183	0.9	V	3.0	35.2	1.0	-33.3	-13.0	-20.3	
5.020	5.2	V	3.0	35.3	1.0	-29.1	-13.0	-16.1	
5.856	-6.2	V	3.0	35.5	1.0	-40.7	-13.0	-27.7	
6.693	-9.6	V	3.0	35.7	1.0	-44.3	-13.0	-31.3	
7.529	-15.5	V	3.0	35.7	1.0	-50.2	-13.0	-37.2	
8.366	-9.0	V	3.0	35.6	1.0	-43.6	-13.0	-30.6	
1.673	1.4	H	3.0	35.5	1.0	-33.1	-13.0	-20.1	
2.510	-7.4	H	3.0	35.4	1.0	-41.8	-13.0	-28.8	
3.346	-17.2	H	3.0	35.5	1.0	-51.7	-13.0	-38.7	
4.183	2.2	H	3.0	35.2	1.0	-32.0	-13.0	-19.0	
5.020	1.1	H	3.0	35.3	1.0	-33.2	-13.0	-20.2	
5.856	-8.2	H	3.0	35.5	1.0	-42.7	-13.0	-29.7	
6.693	-8.8	H	3.0	35.7	1.0	-43.4	-13.0	-30.4	
7.529	-12.3	H	3.0	35.7	1.0	-47.0	-13.0	-34.0	
8.366	-10.3	H	3.0	35.6	1.0	-44.9	-13.0	-31.9	
High Ch, (848.8MHz)									
1.698	-2.7	V	3.0	35.5	1.0	-37.2	-13.0	-24.2	
2.546	-7.4	V	3.0	35.4	1.0	-41.9	-13.0	-28.9	
3.395	-14.0	V	3.0	35.5	1.0	-48.5	-13.0	-35.5	
4.244	1.2	V	3.0	35.2	1.0	-33.1	-13.0	-20.1	
5.093	-1.2	V	3.0	35.3	1.0	-35.5	-13.0	-22.5	
5.942	-7.7	V	3.0	35.5	1.0	-42.2	-13.0	-29.2	
6.790	-13.7	V	3.0	35.7	1.0	-48.4	-13.0	-35.4	
7.639	-15.2	V	3.0	35.7	1.0	-49.9	-13.0	-36.9	
8.488	-14.0	V	3.0	35.6	1.0	-48.7	-13.0	-35.7	
1.698	-0.7	H	3.0	35.5	1.0	-35.3	-13.0	-22.3	
2.546	-6.6	H	3.0	35.4	1.0	-41.0	-13.0	-28.0	
3.395	-16.6	H	3.0	35.5	1.0	-51.1	-13.0	-38.1	
4.244	0.4	H	3.0	35.2	1.0	-33.8	-13.0	-20.8	
5.093	-4.9	H	3.0	35.3	1.0	-39.2	-13.0	-26.2	
5.942	-9.5	H	3.0	35.5	1.0	-44.0	-13.0	-31.0	
6.790	-14.4	H	3.0	35.7	1.0	-49.1	-13.0	-36.1	
7.639	-14.2	H	3.0	35.7	1.0	-48.9	-13.0	-35.9	
8.488	-12.2	H	3.0	35.6	1.0	-46.8	-13.0	-33.8	

Rev. 03.03.09
Note: No other emissions were detected above the system noise floor.

EIRP GPRS, 1900MHz BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS
Project #: 12U14595
Date: 08/31/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH AC ADAPTER AND HEAD SET
Mode: TX, 1900MHz BAND GPRS MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber B	T145 8449B	Filter 1	Part 24

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, (1850.20MHz)									
3.700	-0.9	V	3.0	35.4	1.0	-35.3	-13.0	-22.3	
5.551	-2.7	V	3.0	35.4	1.0	-37.1	-13.0	-24.1	
7.401	-12.6	V	3.0	35.7	1.0	-47.3	-13.0	-34.3	
9.251	-7.0	V	3.0	35.6	1.0	-41.6	-13.0	-28.6	
11.101	-8.2	V	3.0	34.8	1.0	-42.0	-13.0	-29.0	
12.951	3.3	V	3.0	34.0	1.0	-29.7	-13.0	-16.7	
14.802	-4.7	V	3.0	33.6	1.0	-37.3	-13.0	-24.3	
3.700	-4.9	H	3.0	35.4	1.0	-39.2	-13.0	-26.2	
5.551	-5.7	H	3.0	35.4	1.0	-40.1	-13.0	-27.1	
7.401	-13.0	H	3.0	35.7	1.0	-47.7	-13.0	-34.7	
9.251	-11.6	H	3.0	35.6	1.0	-46.2	-13.0	-33.2	
11.101	-12.4	H	3.0	34.8	1.0	-46.2	-13.0	-33.2	
12.951	-6.6	H	3.0	34.0	1.0	-39.6	-13.0	-26.6	
14.802	-3.8	H	3.0	33.6	1.0	-36.4	-13.0	-23.4	
Mid Ch, (1880.00MHz)									
3.760	-4.1	V	3.0	35.3	1.0	-38.4	-13.0	-25.4	
5.640	-5.8	V	3.0	35.4	1.0	-40.2	-13.0	-27.2	
7.520	-7.8	V	3.0	35.7	1.0	-42.5	-13.0	-29.5	
9.400	-4.9	V	3.0	35.6	1.0	-39.5	-13.0	-26.5	
11.280	3.5	V	3.0	34.7	1.0	-30.2	-13.0	-17.2	
13.160	1.7	V	3.0	34.0	1.0	-31.2	-13.0	-18.2	
15.040	-1.9	V	3.0	33.5	1.0	-34.5	-13.0	-21.5	
3.760	-4.0	H	3.0	35.3	1.0	-38.3	-13.0	-25.3	
5.640	-6.9	H	3.0	35.4	1.0	-41.3	-13.0	-28.3	
7.520	-12.9	H	3.0	35.7	1.0	-47.6	-13.0	-34.6	
9.400	-12.3	H	3.0	35.6	1.0	-46.8	-13.0	-33.8	
11.280	-1.0	H	3.0	34.7	1.0	-34.7	-13.0	-21.7	
13.160	-6.0	H	3.0	34.0	1.0	-38.9	-13.0	-25.9	
15.040	-6.2	H	3.0	33.5	1.0	-38.7	-13.0	-25.7	
High Ch, (1909.80MHz)									
3.820	-1.9	V	3.0	35.3	1.0	-36.2	-13.0	-23.2	
5.729	-3.4	V	3.0	35.4	1.0	-37.9	-13.0	-24.9	
7.639	-9.9	V	3.0	35.7	1.0	-44.6	-13.0	-31.6	
9.549	-4.8	V	3.0	35.6	1.0	-39.4	-13.0	-26.4	
11.459	4.6	V	3.0	34.6	1.0	-29.0	-13.0	-16.0	
13.369	-5.6	V	3.0	33.9	1.0	-38.5	-13.0	-25.5	
15.278	-5.2	V	3.0	33.4	1.0	-37.6	-13.0	-24.6	
3.820	-4.2	H	3.0	35.3	1.0	-38.5	-13.0	-25.5	
5.729	-3.3	H	3.0	35.4	1.0	-37.8	-13.0	-24.8	
7.639	-13.0	H	3.0	35.7	1.0	-47.6	-13.0	-34.6	
9.549	-8.2	H	3.0	35.6	1.0	-42.8	-13.0	-29.8	
11.459	-0.9	H	3.0	34.6	1.0	-34.5	-13.0	-21.5	
13.369	-10.1	H	3.0	33.9	1.0	-43.0	-13.0	-30.0	
15.278	-8.7	H	3.0	33.4	1.0	-41.1	-13.0	-28.1	

Rev. 03.03.09
Note: No other emissions were detected above the system noise floor.

ERP EGPRS, 850MHz BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS
Project #: 12U14595
Date: 08/31/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT with AC Adapter and Earphone
Mode: TX, 850MHz BAND EGPRS MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber B	T145 8449B	Filter 1	Part 22

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, (824.2MHz)									
1.648	-10.2	V	3.0	35.5	1.0	-44.7	-13.0	-31.7	
2.473	-16.0	V	3.0	35.4	1.0	-50.4	-13.0	-37.4	
3.297	-14.6	V	3.0	35.5	1.0	-49.2	-13.0	-36.2	
4.121	-10.2	V	3.0	35.2	1.0	-44.4	-13.0	-31.4	
1.648	-13.0	H	3.0	35.5	1.0	-47.6	-13.0	-34.6	
2.473	-20.1	H	3.0	35.4	1.0	-54.6	-13.0	-41.6	
3.297	-9.4	H	3.0	35.5	1.0	-43.9	-13.0	-30.9	
4.121	-9.3	H	3.0	35.2	1.0	-43.5	-13.0	-30.5	
Mid Ch, (836.6MHz)									
1.673	-11.2	V	3.0	35.5	1.0	-45.7	-13.0	-32.7	
2.510	-16.3	V	3.0	35.4	1.0	-50.7	-13.0	-37.7	
3.346	-17.1	V	3.0	35.5	1.0	-51.6	-13.0	-38.6	
4.183	-14.3	V	3.0	35.2	1.0	-48.5	-13.0	-35.5	
1.673	-14.3	H	3.0	35.5	1.0	-48.8	-13.0	-35.8	
2.510	-22.6	H	3.0	35.4	1.0	-57.0	-13.0	-44.0	
3.346	-17.7	H	3.0	35.5	1.0	-52.2	-13.0	-39.2	
4.183	-12.0	H	3.0	35.2	1.0	-46.2	-13.0	-33.2	
High Ch, (848.8MHz)									
1.698	-11.6	V	3.0	35.5	1.0	-46.1	-13.0	-33.1	
2.546	-15.9	V	3.0	35.4	1.0	-50.3	-13.0	-37.3	
3.395	-19.3	V	3.0	35.5	1.0	-53.8	-13.0	-40.8	
4.244	-14.0	V	3.0	35.2	1.0	-48.3	-13.0	-35.3	
1.698	-16.4	H	3.0	35.5	1.0	-50.9	-13.0	-37.9	
2.546	-21.8	H	3.0	35.4	1.0	-56.2	-13.0	-43.2	
3.395	-17.1	H	3.0	35.5	1.0	-51.6	-13.0	-38.6	
4.244	-13.8	H	3.0	35.2	1.0	-48.0	-13.0	-35.0	

Rev. 03.03.09
Note: No other emissions were detected above the system noise floor.

EIRP EGPRS, 1900MHz BAND

Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS
Project #: 12U14595
Date: 08/31/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH AC ADAPTER AND HEAD SET
Mode: TX, 1900MHz BAND EGPRS MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber B	T145 8449B	Filter 1	Part 24

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, (1850.20MHz)									
3.705	-12.6	V	3.0	35.4	1.0	-46.9	-13.0	-33.9	
5.557	-18.0	V	3.0	35.4	1.0	-52.4	-13.0	-39.4	
3.705	-13.2	H	3.0	35.4	1.0	-47.5	-13.0	-34.5	
5.557	-16.1	H	3.0	35.4	1.0	-50.5	-13.0	-37.5	
Mid Ch, (1880.00MHz)									
3.760	-12.4	V	3.0	35.3	1.0	-46.8	-13.0	-33.8	
5.640	-17.9	V	3.0	35.4	1.0	-52.3	-13.0	-39.3	
3.760	-12.3	H	3.0	35.3	1.0	-46.6	-13.0	-33.6	
5.640	-17.3	H	3.0	35.4	1.0	-51.7	-13.0	-38.7	
High Ch, (1909.80MHz)									
3.815	-10.3	V	3.0	35.3	1.0	-44.6	-13.0	-31.6	
5.723	-15.5	V	3.0	35.4	1.0	-49.9	-13.0	-36.9	
3.815	-12.5	H	3.0	35.3	1.0	-46.9	-13.0	-33.9	
5.723	-13.7	H	3.0	35.4	1.0	-48.2	-13.0	-35.2	

Rev. 03.03.09
Note: No other emissions were detected above the system noise floor.

ERP UMTS REL 99, CELL BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS
Project #: 12U14595
Date: 08/31/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH AC ADAPTER AND HEADSET
Mode: TX, 850MHz BAND WCDMA MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber B	T145 8449B	Filter 1	Part 22

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, (826.4MHz)									
1.653	-14.5	V	3.0	35.5	1.0	-49.1	-13.0	-36.1	
2.479	-13.8	V	3.0	35.4	1.0	-48.3	-13.0	-35.3	
3.306	-18.5	V	3.0	35.5	1.0	-53.0	-13.0	-40.0	
1.653	-9.0	H	3.0	35.5	1.0	-43.6	-13.0	-30.6	
2.479	-16.9	H	3.0	35.4	1.0	-51.4	-13.0	-38.4	
3.306	-19.9	H	3.0	35.5	1.0	-54.5	-13.0	-41.5	
Mid Ch, (836.6MHz)									
1.673	-20.0	V	3.0	35.5	1.0	-54.5	-13.0	-41.5	
2.510	-15.6	V	3.0	35.4	1.0	-50.0	-13.0	-37.0	
3.346	-13.7	V	3.0	35.5	1.0	-48.2	-13.0	-35.2	
1.673	-14.6	H	3.0	35.5	1.0	-49.1	-13.0	-36.1	
2.510	-18.6	H	3.0	35.4	1.0	-53.0	-13.0	-40.0	
3.346	-19.1	H	3.0	35.5	1.0	-53.6	-13.0	-40.6	
High Ch, (846.6MHz)									
1.693	-18.9	V	3.0	35.5	1.0	-53.4	-13.0	-40.4	
2.540	-12.3	V	3.0	35.4	1.0	-46.8	-13.0	-33.8	
3.386	-18.3	V	3.0	35.5	1.0	-52.8	-13.0	-39.8	
1.693	-12.9	H	3.0	35.5	1.0	-47.5	-13.0	-34.5	
2.540	-16.6	H	3.0	35.4	1.0	-51.0	-13.0	-38.0	
3.386	-19.5	H	3.0	35.5	1.0	-54.0	-13.0	-41.0	

Rev. 03.03.09
Note: No other emissions were detected above the system noise floor.

EIRP UMTS REL 99, PCS BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company:	LG ELECTRONICS
Project #:	12U14595
Date:	08/31/12
Test Engineer:	MENGISTU MEKURIA
Configuration:	EUT WITH AC ADAPTER AND HEADSET
Mode:	TX, 1900MHz BAND WCDMA MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber B	T145 8449B	Filter 1	Part 24

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, (18524MHz)									
3.705	-4.5	V	3.0	35.4	1.0	-38.8	-13.0	-25.8	
5.557	-14.4	V	3.0	35.4	1.0	-48.8	-13.0	-35.8	
7.410	-13.2	V	3.0	35.7	1.0	-47.9	-13.0	-34.9	
3.705	-7.3	H	3.0	35.4	1.0	-41.7	-13.0	-28.7	
5.557	-14.5	H	3.0	35.4	1.0	-48.9	-13.0	-35.9	
Mid Ch, (1880.00MHz)									
3.760	-7.1	V	3.0	35.3	1.0	-41.4	-13.0	-28.4	
5.640	-16.0	V	3.0	35.4	1.0	-50.5	-13.0	-37.5	
7.520	-14.2	V	3.0	35.7	1.0	-48.9	-13.0	-35.9	
3.760	-8.6	H	3.0	35.3	1.0	-43.0	-13.0	-30.0	
5.640	-16.3	H	3.0	35.4	1.0	-50.7	-13.0	-37.7	
High Ch, (1907.60MHz)									
3.815	-7.9	V	3.0	35.3	1.0	-42.2	-13.0	-29.2	
5.723	-16.5	V	3.0	35.4	1.0	-51.0	-13.0	-38.0	
7.630	-14.6	V	3.0	35.7	1.0	-49.3	-13.0	-36.3	
3.815	-8.7	V	3.0	35.3	1.0	-43.0	-13.0	-30.0	
5.723	-16.0	H	3.0	35.4	1.0	-50.5	-13.0	-37.5	

Rev. 03.03.09
Note: No other emissions were detected above the system noise floor.

EIRP UMTS REL 99, AWS BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS
Project #: 12U14595
Date: 08/31/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH AC ADAPTER AND HEADSET
Mode: TX, 1700MHz BAND WCDMA MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber B	T145 8449B	Filter 1	Part 27

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, (1712.4MHz)									
3.425	-1.0	V	3.0	35.5	1.0	-35.5	-13.0	-22.5	
5.137	-13.9	V	3.0	35.3	1.0	-48.2	-13.0	-35.2	
3.425	-6.9	H	3.0	35.5	1.0	-41.4	-13.0	-28.4	
5.137	-17.5	H	3.0	35.3	1.0	-51.8	-13.0	-38.8	
Mid Ch, (1732.4MHz)									
3.465	100.0	V	3.0	35.5	1.0	65.5	-13.0	78.5	
5.197	-10.1	V	3.0	35.3	1.0	-44.5	-13.0	-31.5	
3.465	-5.5	H	3.0	35.5	1.0	-39.9	-13.0	-26.9	
5.197	-14.5	H	3.0	35.3	1.0	-48.8	-13.0	-35.8	
High Ch, (1752.5MHz)									
3.505	-2.4	V	3.0	35.4	1.0	-36.9	-13.0	-23.9	
5.258	-15.0	V	3.0	35.3	1.0	-49.4	-13.0	-36.4	
3.505	-4.6	H	3.0	35.4	1.0	-39.1	-13.0	-26.1	
5.258	-17.1	H	3.0	35.3	1.0	-51.4	-13.0	-38.4	

Rev. 03.03.09
Note: No other emissions were detected above the system noise floor.

ERP UMTS HSUPA, CELL BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS
Project #: 12U14595
Date: 08/31/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH AC ADAPTER AND HEADSET
Mode: TX, 850MHz BAND HSUPA MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber A	T144 8449B	Filter 1	Part 22

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, (826.4MHz)									
1.653	-10.6	V	3.0	38.1	1.0	-47.7	-13.0	-34.7	
2.479	-13.2	V	3.0	37.5	1.0	-49.7	-13.0	-36.7	
3.306	-18.7	V	3.0	37.1	1.0	-54.8	-13.0	-41.8	
1.653	-10.3	H	3.0	38.1	1.0	-47.4	-13.0	-34.4	
2.479	-16.5	H	3.0	37.5	1.0	-53.0	-13.0	-40.0	
3.306	-19.8	H	3.0	37.1	1.0	-55.9	-13.0	-42.9	
Mid Ch, (836.6MHz)									
1.673	-18.5	V	3.0	38.1	1.0	-55.7	-13.0	-42.7	
2.510	-15.2	V	3.0	37.5	1.0	-51.6	-13.0	-38.6	
3.346	-15.2	V	3.0	37.1	1.0	-51.3	-13.0	-38.3	
1.673	-15.3	H	3.0	38.1	1.0	-52.4	-13.0	-39.4	
2.510	-18.7	H	3.0	37.5	1.0	-55.2	-13.0	-42.2	
3.346	-19.3	H	3.0	37.1	1.0	-55.3	-13.0	-42.3	
High Ch, (846.6MHz)									
1.693	-14.1	V	3.0	38.1	1.0	-51.2	-13.0	-38.2	
2.540	-13.3	V	3.0	37.5	1.0	-49.8	-13.0	-36.8	
3.386	-16.2	V	3.0	37.1	1.0	-52.2	-13.0	-39.2	
1.693	-14.6	H	3.0	38.1	1.0	-51.7	-13.0	-38.7	
2.540	-17.2	H	3.0	37.5	1.0	-53.7	-13.0	-40.7	
3.386	-19.9	H	3.0	37.1	1.0	-56.0	-13.0	-43.0	

Rev. 03.03.09
Note: No other emissions were detected above the system noise floor.

EIRP UMTS HSUPA, PCS BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company:	LG ELECTRONICS
Project #:	12U14580
Date:	08/21/12
Test Engineer:	MENGISTU MEKURIA
Configuration:	EUT WITH AC ADAPTER AND HEADSET
Mode:	TX, 1900MHz BAND HSUPA MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber B	T145 8449B	Filter 1	Part 24

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, (1852.40MHz)									
3.705	-6.7	V	3.0	35.4	1.0	-41.0	-13.0	-28.0	
5.557	-10.7	V	3.0	35.4	1.0	-45.1	-13.0	-32.1	
3.705	-9.2	H	3.0	35.4	1.0	-43.6	-13.0	-30.6	
5.557	-12.0	H	3.0	35.4	1.0	-46.4	-13.0	-33.4	
Mid Ch, (1880.00MHz)									
3.760	-8.3	V	3.0	35.3	1.0	-42.6	-13.0	-29.6	
5.640	-15.9	V	3.0	35.4	1.0	-50.3	-13.0	-37.3	
3.760	-10.1	H	3.0	35.3	1.0	-44.4	-13.0	-31.4	
5.640	-15.5	H	3.0	35.4	1.0	-50.0	-13.0	-37.0	
High Ch, (1907.60MHz)									
3.815	-7.3	V	3.0	35.3	1.0	-41.6	-13.0	-28.6	
5.723	-16.3	V	3.0	35.4	1.0	-50.8	-13.0	-37.8	
3.815	-9.6	H	3.0	35.3	1.0	-43.9	-13.0	-30.9	
5.723	-15.4	H	3.0	35.4	1.0	-49.8	-13.0	-36.8	

Rev. 03.03.09
Note: No other emissions were detected above the system noise floor.

EIRP UMTS HSUPA, AWS BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS
Project #: 12U14595
Date: 08/31/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH AC ADAPTER AND HEADSET
Mode: TX, 1700MHz BAND HSUPA MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber B	T145 8449B	Filter 1	Part 27

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, (1712.40MHz)									
3.425	0.7	V	3.0	35.5	1.0	-33.8	-13.0	-20.8	
5.137	-13.0	V	3.0	35.3	1.0	-47.3	-13.0	-34.3	
6.850	-13.7	V	3.0	35.7	1.0	-48.4	-13.0	-35.4	
3.425	-7.5	H	3.0	35.5	1.0	-41.9	-13.0	-28.9	
5.137	-14.6	H	3.0	35.3	1.0	-48.9	-13.0	-35.9	
Mid Ch, (1732.40MHz)									
3.465	-1.6	V	3.0	35.5	1.0	-36.1	-13.0	-23.1	
5.197	-6.9	V	3.0	35.3	1.0	-41.2	-13.0	-28.2	
6.930	-14.5	V	3.0	35.7	1.0	-49.2	-13.0	-36.2	
3.465	-8.0	V	3.0	35.5	1.0	-42.5	-13.0	-29.5	
5.197	-12.6	V	3.0	35.3	1.0	-46.9	-13.0	-33.9	
High Ch, (1752.50MHz)									
3.505	-2.0	V	3.0	35.4	1.0	-36.4	-13.0	-23.4	
5.258	-13.3	V	3.0	35.3	1.0	-47.6	-13.0	-34.6	
7.010	-13.1	V	3.0	35.7	1.0	-47.8	-13.0	-34.8	
3.505	-8.8	H	3.0	35.4	1.0	-43.2	-13.0	-30.2	
5.258	-14.0	H	3.0	35.3	1.0	-48.3	-13.0	-35.3	

Rev. 03.03.09
Note: No other emissions were detected above the system noise floor.