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

FOR

CELL PHONE WITH CDMA LTE 2 AND 4+BT LE+802.11BGN (HT20); NO PWR REDUCTION

MODEL NUMBER: MS770, LG-MS770, LGMS770, LW770, LG-LW770, LGLW770

FCC ID: ZNFMS770

REPORT NUMBER: 12U14456-4

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Prepared for
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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: LG ELECTRONICS MOBILECOMM U.S.A., INC.
1000 SYLVAN AVE.
ENGLEWOODS CLIFFS, NJ 07632

EUT DESCRIPTION: Cell Phone with CDMA LTE 2 and 4+BT LE+802.11bgn (HT20); NO PWR reduction.

MODEL: MS770, LG-MS770, LGMS770, LW770, LG-LW770, LGLW770

SERIAL NUMBER: 99000077000619

DATE TESTED: JUNE 6 TO 18, 2012

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC PART 22H, 24E, and 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.

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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 Cell Phone with CDMA LTE 2 and 4+BT LE+802.11bgn (HT20); NO PWR reduction.

5.2. MAXIMUM OUTPUT POWER

The measured conductive peak power values were within ± 0.5 dB of the original ones

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
824.7 – 848.31	CDMA 2000 1xRTT	29.24	839.5

Part 24 PCS Band			
Frequency range (MHz)	Modulation	EIRP	
		dBm	mW
1851.25-1908.75	CDMA 2000 1xRTT	28.01	632.4
	CDMA 2000 EVDO REV. A	29.52	895.4

Part 27 AWS Band			
Frequency range (MHz)	Modulation	EIRP	
		dBm	mW
1711.25-1753.75	CDMA 2000 1xRTT	27.27	533.3
	CDMA 2000 EVDO REV. A	28.29	674.5

Part 27 LTE Band 4 MODE (1.4 MHz BANDWIDTH)				
Frequency range (MHz)	Modulation	Start RB and RB offset	EIRP	
			dBm	mW
1710.7 - 1754.3	QPSK	1/0	28.46	701.5
		1/5	28.38	688.7
		3/2	28.71	743.0
		6/0	28.37	687.1
	16QAM	1/0	28.84	765.6
		1/5	28.77	753.4
		3/2	29.04	801.7
		6/0	28.86	769.1

Part 27 LTE Band 4 MODE (3.0 MHz BANDWIDTH)				
Frequency range (MHz)	Modulation	Start RB and RB offset	EIRP	
			dBm	mW
1711.5 - 1753.5	QPSK	1/0	28.51	709.6
		1/14	28.46	701.5
		8/4	27.85	609.5
		15/0	27.05	507.0
	16QAM	1/0	28.63	729.5
		1/14	28.84	765.6
		8/4	28.42	695.0
		15/0	27.62	578.1

Part 27 LTE Band 4 MODE (5.0 MHz BANDWIDTH)				
Frequency range (MHz)	Modulation	Start RB and RB offset	EIRP	
			dBm	mW
1712.5 - 1752.5	QPSK	1/0	28.46	701.5
		1/24	28.57	719.4
		12/6	27.80	602.6
		25/0	28.48	704.7
	16QAM	1/0	28.56	717.8
		1/24	28.67	736.2
		12/6	28.17	656.1
		25/0	28.72	744.7

Part 27 LTE Band 4 MODE (10.0 MHz BANDWIDTH)				
Frequency range (MHz)	Modulation	Start RB and RB offset	EIRP	
			dBm	mW
1715-1750	QPSK	1/0	27.36	544.5
		1/49	28.15	653.1
		25/12	28.02	633.9
		50/0	27.93	620.9
	16QAM	1/0	27.29	535.8
		1/49	28.31	677.6
		25/12	28.44	698.2
		50/0	28.51	709.6

Part 27 LTE Band 2 MODE (1.4 MHz BANDWIDTH)				
Frequency range (MHz)	Modulation	Start RB and RB offset	EIRP	
			dBm	mW
1850.7 - 1909.3	QPSK	1/0	27.65	582.1
		1/5	27.88	613.8
		3/2	28.08	642.7
		6/0	27.46	557.2
	16QAM	1/0	27.98	628.1
		1/5	28.20	660.7
		3/2	25.85	384.6
		6/0	27.81	603.9

Part 27 LTE Band 2 MODE (3.0 MHz BANDWIDTH)				
Frequency range (MHz)	Modulation	Start RB and RB offset	EIRP	
			dBm	mW
1851.5 - 1908.5	QPSK	1/0	28.35	683.9
		1/14	28.69	739.6
		8/4	28.02	633.9
		15/0	27.23	528.4
	16QAM	1/0	28.34	682.3
		1/14	28.84	765.6
		8/4	28.53	712.9
		15/0	27.63	579.4

Part 27 LTE Band 2 MODE (5.0 MHz BANDWIDTH)				
Frequency range (MHz)	Modulation	Start RB and RB offset	EIRP	
			dBm	mW
1852.5 - 1907.5	QPSK	1/0	27.02	503.5
		1/24	28.13	650.1
		12/6	27.01	502.3
		25/0	27.50	562.3
	16QAM	1/0	27.03	504.7
		1/24	28.31	677.6
		12/6	27.34	542.0
		25/0	27.98	628.1

Part 27 LTE Band 2 MODE (10.0 MHz BANDWIDTH)				
Frequency range (MHz)	Modulation	Start RB and RB offset	EIRP	
			dBm	mW
1855-1905	QPSK	1/0	27.25	530.9
		1/49	27.83	606.7
		25/12	27.52	564.9
		50/0	27.63	579.4
	16QAM	1/0	27.21	526.0
		1/49	28.07	641.2
		25/12	28.24	666.8
		50/0	28.36	685.5

5.3. DESCRIPTION OF CLASS II PERMISSIVE CHANGE

The change filed under this application has the following changes.

- Hardware Changes (Antenna Pattern and OCB Adjustments)
- Other Changes (Shield Can Shape, and components)

5.4. SOFTWARE AND FIRMWARE

The EUT software installed during testing was LAP8960IR120417.

The EUT is linked with Agilent 8960 and CMW500 Communication Test Sets.

5.5. WORST-CASE CONFIGURATION AND MODE

The worst-case is EUT on the highest power. Based on Peak Power measurement investigations, the following modes should be considered as worst-case scenario for all other measurements.

Worst-case modes:
- CDMA 2000 1xRTT
- CDMA 2000 EVDO REV. A
- LTE Band 2 and 4

For the fundamental investigation, since the EUT is a portable device that has three orientations; an X, Y and Z orientations and the worst among X, Y, and Z with AC/DC adapter and headset have been investigated. After the investigation the worst case was found to be a Z-position with AC/DC adapter and headset for 1xRTT Cell and X-Position without headset and an AC adapter for all other modes.

5.6. DESCRIPTION OF TEST SETUP

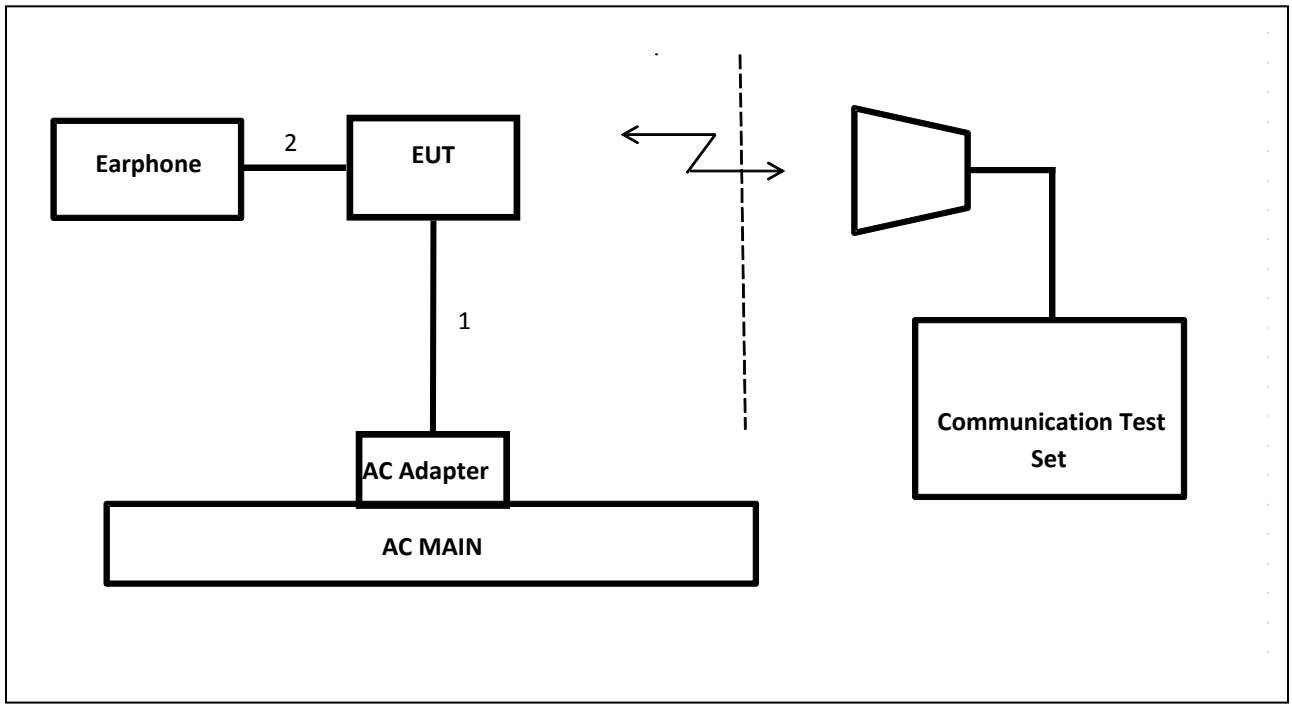
RADIATED TESTS SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	LG	MCS-01WR	RA2400010923	N/A
Headset	LG	N/A	N/A	N/A

I/O CABLES (RF Radiated Test)

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	DC	1	USB	UN-SHELDED	1.0m	Mic on Cable
2	Audio	1	Earphone	UN-SHELDED	1.0m	NA

RADIATED 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**
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C00986	03/22/13
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4440A	C01161	12/16/12
Antenna, Horn, 18 GHz	EMCO	3115	C00872	09/20/12
Antenna, Horn, 18 GHz	EMCO	3115	C00945	10/06/12
Antenna, Horn, 18 GHz	EMCO	3115	C00943	CNR
Antenna, Bilog, 30MHz-1 GHz	Sunol Sciences	JB1	C01011	03/23/13
Preamplifier, 26.5 GHz	Agilent / HP	8449B	C01063	07/12/12
Preamplifier, 26.5 GHz	Agilent / HP	8449B	C01052	07/13/12
Communications Test Set	Agilent / HP	E5515C	1000732	09/27/12
Communication Test Set	R & S	CMW500	None	12/16/12
Highpass Filter, 1.5 GHz	Micro-Tronics	HPM13193	N02689`	CNR
Highpass Filter, 2.7 GHz	Micro-Tronics	HPM13194	N02687	CNR
Directional Coupler, 4.2 GHz, 40 dB	A-R	DC7144A	C00983	CNR
Sleeve Dipole 1730~2030 MHz	ETS	3126-1880	C01157	08/01/12
Signal Generator, 20 GHz	Agilent / HP	83732B	C00774	07/14/12
Antenna, Tuned Dipole 400~1000 MHz	ETS	3121C DB4	C00993	07/16/12

7. RADIATED TEST RESULTS

7.1. RADIATED POWER (ERP & EIRP)

RULE PART(S)

FCC: §2.1046, §22.913, §24.232, §27.50(d) (2)

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 (c)(10) Portable stations (hand-held devices) transmitting in the 746–757 MHz, 758–763 MHz, 776–793 MHz, and 805–806 MHz bands are limited to 3 watts ERP.

27.50 (d)(4) The following power and antenna height requirements apply to stations transmitting in the 1710–1755 MHz and 2110–2155 MHz bands: Fixed, mobile, and portable (hand-held) stations operating in the 1710–1755 MHz band are limited to 1 watt EIRP.

TEST PROCEDURE

ANSI / TIA / EIA 603C Clause 2.2.17

MODES TESTED

- CDMA 2000 1xRTT
- CDMA 2000 EVDO REV. A
- LTE Band 2 and 4

RESULTS

CELLULAR BAND (ERP)

Mode	Channel	f (MHz)	ERP	
			dBm	mW
1xRTT	1013	824.70	28.32	679.20
	384	836.60	**29.24**	839.46
	777	848.31	27.67	584.79

PCS BAND (EIRP)

Mode	Channel	f (MHz)	EIRP	
			dBm	mW
1xRTT	25	1851.25	25.18	329.61
	600	1880.00	26.47	443.61
	1175	1908.75	**28.01**	632.41
EVDO REV. A	25	1851.25	28.20	660.69
	600	1880.00	**29.52**	895.36
	1175	1908.75	27.25	530.88

AWS BAND (EIRP)

Mode	Channel	f (MHz)	EIRP	
			dBm	mW
1xRTT	25	1711.25	25.93	391.74
	450	1732.50	25.43	349.14
	875	1753.75	**27.27**	533.33
EVDO REV. A	25	1711.25	22.74	187.93
	460	1732.50	**28.29**	674.53
	895	1753.75	24.22	264.24

ERP LTE Band 4 (1.4MHz BAND WIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP	
			dBm	mW
1.4 MHZ BAND QPSK	1/0	1710.70	23.73	236.05
		1732.50	**28.46**	701.46
		1754.30	25.80	380.19
	1/5	1710.70	23.70	234.42
		1732.50	**28.38**	688.65
		1754.30	25.73	374.11
	3/2	1710.70	24.00	251.19
		1732.50	**28.71**	743.02
		1754.30	26.04	401.79
	6/0	1710.70	23.60	229.09
		1732.50	**28.37**	687.07
		1754.30	25.81	381.07

Mode	RB/RB SIZE	f (MHz)	EIRP	
			dBm	mW
1.4 MHZ BAND 16QAM	1/0	1710.70	23.98	250.03
		1732.50	**28.84**	765.60
		1754.30	26.09	406.44
	1/5	1710.70	23.95	248.31
		1732.50	**28.77**	753.36
		1754.30	26.03	400.87
	3/2	1710.70	23.92	246.60
		1732.50	**29.04**	801.68
		1754.30	26.08	405.51
	6/0	1710.70	23.72	235.50
		1732.50	**28.86**	769.13
		1754.30	26.03	400.87

ERP LTE Band 4 (3.0MHz BAND WIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP	
			dBm	mW
3.0 MHZ BAND QPSK	1/0	1711.50	23.49	223.36
		1732.50	**28.51**	709.58
		1753.50	25.73	374.11
	1/14	1711.50	23.16	207.01
		1732.50	**28.46**	701.46
		1753.50	25.54	358.10
	8/4	1711.50	22.97	198.15
		1732.50	**27.85**	609.54
		1753.50	25.18	329.61
	15/0	1711.50	22.20	165.96
		1732.50	**27.05**	506.99
		1753.50	24.64	291.07

Mode	RB/RB SIZE	f (MHz)	EIRP	
			dBm	mW
3.0 MHZ BAND 16QAM	1/0	1711.50	23.52	224.91
		1732.50	**28.63**	729.46
		1753.50	25.87	386.37
	1/14	1711.50	23.20	208.93
		1732.50	**28.84**	765.60
		1753.50	25.60	363.08
	8/4	1711.50	23.07	202.77
		1732.50	**28.42**	695.02
		1753.50	25.47	352.37
	15/0	1711.50	22.51	178.24
		1732.50	**27.62**	578.10
		1753.50	24.88	307.61

EIRP LTE Band 4 (5MHz BAND WIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP	
			dBm	mW
5.0 MHZ BAND QPSK	1/0	1712.50	23.58	228.03
		1732.50	**28.46**	701.46
		1752.50	25.74	374.97
	1/24	1712.50	22.98	198.61
		1732.50	**28.57**	719.45
		1752.50	25.49	354.00
	12/6	1712.50	22.72	187.07
		1732.50	**27.80**	602.56
		1752.50	25.81	381.07
	25/0	1712.50	23.27	212.32
		1732.50	**28.48**	704.69
		1752.50	26.19	415.91

Mode	RB/RB SIZE	f (MHz)	EIRP	
			dBm	mW
5.0 MHZ BAND 16QAM	1/0	1712.50	23.75	237.14
		1732.50	**28.56**	717.79
		1752.50	26.14	411.15
	1/24	1712.50	23.22	209.89
		1732.50	**28.67**	736.21
		1752.50	25.63	365.59
	12/6	1712.50	22.95	197.24
		1732.50	**28.17**	656.15
		1752.50	25.95	393.55
	25/0	1712.50	23.75	237.14
		1732.50	**28.72**	744.73
		1752.50	26.15	412.10

EIRP LTE Band 4 (10MHz BAND WIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	1715.00	23.71	234.96
		1732.50	**27.36**	544.50
		1750.00	26.14	411.15
	1/49	1715.00	23.36	216.77
		1732.50	**28.15**	653.13
		1750.00	25.51	355.63
	25/12	1715.00	24.17	261.22
		1732.50	**28.02**	633.87
		1750.00	25.77	377.57
	50/0	1715.00	23.76	237.68
		1732.50	**27.93**	620.87
		1750.00	25.91	389.94

Mode	RB/RB SIZE	f (MHz)	EIRP	
			dBm	mW
10.0 MHZ BAND 16QAM	1/0	1715.00	23.77	238.23
		1732.50	**27.29**	535.80
		1750.00	26.22	418.79
	1/49	1715.00	23.42	219.79
		1732.50	**28.31**	677.64
		1750.00	25.53	357.27
	25/12	1715.00	23.80	239.88
		1732.50	**28.44**	698.23
		1750.00	26.16	413.05
	50/0	1715.00	24.34	271.64
		1732.50	**28.51**	709.58
		1750.00	27.13	516.42

ERP LTE Band 2 (1.4MHz BAND WIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP	
			dBm	mW
1.4 MHZ BAND QPSK	1/0	1850.70	25.49	354.00
		1880.00	**27.65**	582.10
		1909.30	24.74	297.85
	1/5	1850.70	25.79	379.31
		1880.00	**27.88**	613.76
		1909.30	24.22	264.24
	3/2	1850.70	25.84	383.71
		1880.00	**28.08**	642.69
		1909.30	24.68	293.76
	6/0	1850.70	25.46	351.56
		1880.00	**27.46**	557.19
		1909.30	24.74	297.85

Mode	RB/RB SIZE	f (MHz)	EIRP	
			dBm	mW
1.4 MHZ BAND 16QAM	1/0	1850.70	25.64	366.44
		1880.00	**27.98**	628.06
		1909.30	24.89	308.32
	1/5	1850.70	25.83	382.82
		1880.00	**28.20**	660.69
		1909.30	24.32	270.40
	3/2	1850.70	**25.85**	384.59
		1880.00	24.24	265.46
		1909.30	24.79	301.30
	6/0	1850.70	25.62	364.75
		1880.00	**27.81**	603.95
		1909.30	24.80	302.00

ERP LTE Band 2 (3.0MHz BAND WIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP	
			dBm	mW
3.0 MHZ BAND QPSK	1/0	1851.50	24.96	313.33
		1880.00	**28.35**	683.91
		1908.50	26.31	427.56
	1/14	1851.50	25.60	363.08
		1880.00	**28.69**	739.61
		1908.50	24.87	306.90
	8/4	1851.50	25.00	316.23
		1880.00	**28.02**	633.87
		1908.50	25.41	347.54
	15/0	1851.50	24.27	267.30
		1880.00	**27.23**	528.45
		1908.50	24.73	297.17

Mode	RB/RB SIZE	f (MHz)	EIRP	
			dBm	mW
3.0 MHZ BAND 16QAM	1/0	1851.50	25.00	316.23
		1880.00	**28.34**	682.34
		1908.50	26.59	456.04
	1/14	1851.50	25.65	367.28
		1880.00	**28.84**	765.60
		1908.50	24.81	302.69
	8/4	1851.50	25.22	332.66
		1880.00	**28.53**	712.85
		1908.50	25.52	356.45
	15/0	1851.50	24.61	289.07
		1880.00	**27.63**	579.43
		1908.50	25.08	322.11

LTE Band 2 (5MHz BAND WIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP	
			dBm	mW
5.0 MHZ BAND QPSK	1/0	1852.50	24.54	284.45
		1880.00	**27.02**	503.50
		1907.50	26.76	474.24
	1/24	1852.50	25.72	373.25
		1880.00	**28.13**	650.13
		1907.50	24.24	265.46
	12/6	1852.50	24.68	293.76
		1880.00	**27.01**	502.34
		1907.50	25.33	341.19
	25/0	1852.50	25.32	340.41
		1880.00	**27.50**	562.34
		1907.50	26.76	474.24

Mode	RB/RB SIZE	f (MHz)	EIRP	
			dBm	mW
5.0 MHZ BAND 16QAM	1/0	1852.50	24.55	285.10
		1880.00	**27.03**	504.66
		1907.50	26.82	480.84
	1/24	1852.50	25.83	382.82
		1880.00	**28.31**	677.64
		1907.50	24.33	271.02
	12/6	1852.50	24.91	309.74
		1880.00	**27.34**	542.00
		1907.50	25.65	367.28
	25/0	1852.50	26.28	424.62
		1880.00	**27.98**	628.06
		1907.50	27.06	508.16

LTE Band 2 (10MHz BAND WIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	1855.00	27.09	511.68
		1880.00	**27.25**	530.88
		1905.00	26.88	487.53
	1/49	1855.00	27.45	555.90
		1880.00	**27.83**	606.74
		1905.00	25.38	345.14
	25/12	1855.00	27.03	504.66
		1880.00	**27.52**	564.94
		1905.00	26.37	433.51
	50/0	1855.00	26.83	481.95
		1880.00	**27.63**	579.43
		1905.00	27.33	540.75

Mode	RB/RB SIZE	f (MHz)	EIRP	
			dBm	mW
10.0 MHZ BAND 16QAM	1/0	1855.00	27.10	512.86
		1880.00	**27.21**	526.02
		1905.00	26.91	490.91
	1/49	1855.00	27.54	567.54
		1880.00	**28.07**	641.21
		1905.00	25.53	357.27
	25/12	1855.00	27.58	572.80
		1880.00	**28.24**	666.81
		1905.00	26.77	475.34
	50/0	1855.00	27.79	601.17
		1880.00	**28.36**	685.49
		1905.00	28.01	632.41

1xRTT 850 BAND

High Frequency Substitution Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/07/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT with AC Adapter
Mode: TX, 850 MHz BAND, CDMA 1xRTT MODE

Test Equipment:
Receiving: Sunol T122 and Chamber A N-type Cable (Setup this one for testing EUT)
Substitution: Dipole S/N: 00022117, 6ft SMA Cable (SN # 208947003) Warehouse.

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
824.70	28.82	V	0.5	0.0	28.32	38.5	-10.1	
824.70	16.73	H	0.5	0.0	16.23	38.5	-22.2	
836.52	29.74	V	0.5	0.0	29.24	38.5	-9.2	
836.52	16.39	H	0.5	0.0	15.89	38.5	-22.6	
848.31	28.17	V	0.5	0.0	27.67	38.5	-10.8	
848.31	16.25	H	0.5	0.0	15.75	38.5	-22.7	

Rev. 3.17.11

1xRTT 1900 BAND

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/12/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT with AC Adapter and Earphone
Mode: TX, 1900 MHz BAND, CDMA2000, 1xRTT

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.851	11.3	V	0.85	8.62	19.04	33.0	-14.0	
1.851	17.6	H	0.85	8.47	25.18	33.0	-7.8	
1.880	10.3	V	0.85	8.46	17.90	33.0	-15.1	
1.880	19.0	H	0.85	8.36	26.47	33.0	-6.5	
1.909	11.2	V	0.85	8.30	18.62	33.0	-14.4	
1.909	20.6	H	0.85	8.25	28.01	33.0	-5.0	

Rev. 3.17.11

1xRTT 1700 BAND

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/11/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, CDMA2000, 1xRTT AWS Band 15

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) 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	11.4	V	0.85	8.56	19.12	33.0	-13.9	
1.712	18.4	H	0.85	8.43	25.93	33.0	-7.1	
1.733	10.2	V	0.85	8.64	17.99	33.0	-15.0	
1.733	17.8	H	0.85	8.48	25.43	33.0	-7.6	
1.753	12.6	V	0.85	8.73	20.48	33.0	-12.5	
1.753	19.6	H	0.85	8.54	27.27	33.0	-5.7	

Rev. 3.17.11

EVDO REV A 1900 BAND

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/12/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT with AC Adapter and Earphone
Mode: TX, 1900 MHz BAND, CDMA2000, 1xRTT Mode

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.851	13.8	V	0.85	8.62	21.58	33.0	-11.4	
1.851	20.6	H	0.85	8.47	28.20	33.0	-4.8	
1.880	13.9	V	0.85	8.46	21.52	33.0	-11.5	
1.880	22.0	H	0.85	8.36	29.52	33.0	-3.5	
1.909	11.3	V	0.85	8.30	18.74	33.0	-14.3	
1.909	19.9	H	0.85	8.25	27.25	33.0	-5.8	

Rev. 3.17.11

EVDO REV A 1700 BAND

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/11/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT only
Mode: TX, CDMA2000, EVDO, AWS Band 15

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.712	9.4	V	0.85	8.56	17.15	33.0	-15.9	
1.712	15.2	H	0.85	8.43	22.74	33.0	-10.3	
Mid Ch								
1.733	12.4	V	0.85	8.64	20.23	33.0	-12.8	
1.733	20.7	H	0.85	8.48	28.29	33.0	-4.7	
High Ch								
1.753	9.8	V	0.85	8.73	17.67	33.0	-15.3	
1.753	16.5	H	0.85	8.54	24.22	33.0	-8.8	

Rev. 3.17.11

LTE QPSK Band 4 (1.4MHz BAND WIDTH)

RB1-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_1.4 MHz BW_QPSK_RB#1_0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.711	11.3	V	0.67	8.56	19.14	30.0	-10.9	
1.711	16.0	H	0.67	8.43	23.73	30.0	-6.3	
Mid Ch								
1.733	13.0	V	0.67	8.64	20.99	30.0	-9.0	
1.733	20.7	H	0.67	8.48	28.46	30.0	-1.5	
High Ch								
1.754	10.8	V	0.67	8.73	18.86	30.0	-11.1	
1.754	17.9	H	0.67	8.54	25.80	30.0	-4.2	

Rev. 1.24.7

RB1-5

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_1.4 MHz BW_QPSK_RB#1_5 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.711	11.1	V	0.67	8.56	19.00	30.0	-11.0	
1.711	15.9	H	0.67	8.43	23.70	30.0	-6.3	
Mid Ch								
1.733	13.0	V	0.67	8.64	21.01	30.0	-9.0	
1.733	20.6	H	0.67	8.48	28.38	30.0	-1.6	
High Ch								
1.754	10.6	V	0.67	8.73	18.66	30.0	-11.3	
1.754	17.9	H	0.67	8.54	25.73	30.0	-4.3	

Rev. 1.24.7

RB3-2

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_1.4 MHz BW_QPSK_RB3_2 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.711	11.4	V	0.67	8.56	19.26	30.0	-10.7	
1.711	16.2	H	0.67	8.43	24.00	30.0	-6.0	
Mid Ch								
1.733	13.3	V	0.67	8.64	21.22	30.0	-8.8	
1.733	20.9	H	0.67	8.48	28.71	30.0	-1.3	
High Ch								
1.754	11.0	V	0.67	8.73	19.04	30.0	-11.0	
1.754	18.2	H	0.67	8.54	26.04	30.0	-4.0	

Rev. 1.24.7

RB6-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_1.4 MHz BW_QPSK_RB6_0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.711	11.1	V	0.67	8.56	19.00	30.0	-11.0	
1.711	15.8	H	0.67	8.43	23.60	30.0	-6.4	
Mid Ch								
1.733	13.1	V	0.67	8.64	21.02	30.0	-9.0	
1.733	20.6	H	0.67	8.48	28.37	30.0	-1.6	
High Ch								
1.754	10.6	V	0.67	8.73	18.67	30.0	-11.3	
1.754	17.9	H	0.67	8.54	25.81	30.0	-4.2	

Rev. 1.24.7

ERP LTE 16QAM Band 4 (1.4MHz BAND WIDTH)

RB1-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_1.4 MHz BW_16QAM_RB#1_0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.711	11.6	V	0.67	8.56	19.46	30.0	-10.5	
1.711	16.2	H	0.67	8.43	23.98	30.0	-6.0	
Mid Ch								
1.733	13.4	V	0.67	8.64	21.36	30.0	-8.6	
1.733	21.0	H	0.67	8.48	28.84	30.0	-1.2	
High Ch								
1.754	11.1	V	0.67	8.73	19.19	30.0	-10.8	
1.754	18.2	H	0.67	8.54	26.09	30.0	-3.9	

Rev. 1.24.7

RB1-5

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_1.4 MHz BW_16QAM_RB#1_5 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.711	11.4	V	0.67	8.56	19.27	30.0	-10.7	
1.711	16.2	H	0.67	8.43	23.95	30.0	-6.1	
Mid Ch								
1.733	13.7	V	0.67	8.64	21.68	30.0	-8.3	
1.733	21.0	H	0.67	8.48	28.77	30.0	-1.2	
High Ch								
1.754	11.1	V	0.67	8.73	19.15	30.0	-10.9	
1.754	18.2	H	0.67	8.54	26.03	30.0	-4.0	

Rev. 1.24.7

RB3-2

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_1.4 MHz BW_16QAM_RB3_2 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.711	11.5	V	0.67	8.56	19.39	30.0	-10.6	
1.711	16.2	H	0.67	8.43	23.92	30.0	-6.1	
Mid Ch								
1.733	13.8	V	0.67	8.64	21.76	30.0	-8.2	
1.733	21.2	H	0.67	8.48	29.04	30.0	-1.0	
High Ch								
1.754	11.0	V	0.67	8.73	19.08	30.0	-10.9	
1.754	18.2	H	0.67	8.54	26.08	30.0	-3.9	

Rev. 1.24.7

RB6-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_1.4 MHz BW_16QAM_RB6_0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.711	11.3	V	0.67	8.56	19.19	30.0	-10.8	
1.711	16.0	H	0.67	8.43	23.72	30.0	-6.3	
Mid Ch								
1.733	13.5	V	0.67	8.64	21.51	30.0	-8.5	
1.733	21.1	H	0.67	8.48	28.86	30.0	-1.1	
High Ch								
1.754	11.0	V	0.67	8.73	19.05	30.0	-11.0	
1.754	18.2	H	0.67	8.54	26.03	30.0	-4.0	

Rev. 1.24.7

ERP LTE QPSK Band 4 (3.0MHz BAND WIDTH)

RB1-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_3 MHz BW_QPSK_RB1 0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.712	10.3	V	0.67	8.56	18.14	30.0	-11.9	
1.712	15.7	H	0.67	8.43	23.49	30.0	-6.5	
Mid Ch								
1.733	12.2	V	0.67	8.64	20.19	30.0	-9.8	
1.733	20.7	H	0.67	8.48	28.51	30.0	-1.5	
High Ch								
1.754	11.3	V	0.67	8.73	19.36	30.0	-10.6	
1.754	17.9	H	0.67	8.54	25.73	30.0	-4.3	

Rev. 1.24.7

RB1-14

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_3 MHz BW_QPSK_RB1 14 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.712	10.2	V	0.67	8.56	18.07	30.0	-11.9	
1.712	15.4	H	0.67	8.43	23.16	30.0	-6.8	
Mid Ch								
1.733	13.1	V	0.67	8.64	21.09	30.0	-8.9	
1.733	20.7	H	0.67	8.48	28.46	30.0	-1.5	
High Ch								
1.754	10.4	V	0.67	8.73	18.47	30.0	-11.5	
1.754	17.7	H	0.67	8.54	25.54	30.0	-4.5	

Rev. 1.24.7

RB8-4

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_3 MHz BW_QPSK_RB8 4 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.712	10.4	V	0.67	8.56	18.26	30.0	-11.7	
1.712	15.2	H	0.67	8.43	22.97	30.0	-7.0	
Mid Ch								
1.733	12.5	V	0.67	8.64	20.42	30.0	-9.6	
1.733	20.0	H	0.67	8.48	27.85	30.0	-2.2	
High Ch								
1.754	10.1	V	0.67	8.73	18.14	30.0	-11.9	
1.754	17.3	H	0.67	8.54	25.18	30.0	-4.8	

Rev. 1.24.7

RB15-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_3 MHz BW_QPSK_RB15 0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.712	9.7	V	0.67	8.56	17.60	30.0	-12.4	
1.712	14.4	H	0.67	8.43	22.20	30.0	-7.8	
Mid Ch								
1.733	11.7	V	0.67	8.64	19.70	30.0	-10.3	
1.733	19.2	H	0.67	8.48	27.05	30.0	-3.0	
High Ch								
1.754	9.4	V	0.67	8.73	17.50	30.0	-12.5	
1.754	16.8	H	0.67	8.54	24.64	30.0	-5.4	

Rev. 1.24.7

LTE 16QAM Band 4 (3.0MHz BAND WIDTH)

RB1-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_3 MHz BW_16QAM_RB1 0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.712	11.1	V	0.67	8.56	19.00	30.0	-11.0	
1.712	15.8	H	0.67	8.43	23.52	30.0	-6.5	
Mid Ch								
1.733	13.2	V	0.67	8.64	21.15	30.0	-8.9	
1.733	20.8	H	0.67	8.48	28.63	30.0	-1.4	
High Ch								
1.754	10.9	V	0.67	8.73	18.97	30.0	-11.0	
1.754	18.0	H	0.67	8.54	25.87	30.0	-4.1	

Rev. 1.24.7

RB1-14

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_3 MHz BW_16QAM_RB1_14 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.712	10.6	V	0.67	8.56	18.52	30.0	-11.5	
1.712	15.4	H	0.67	8.43	23.20	30.0	-6.8	
Mid Ch								
1.733	13.8	V	0.67	8.64	21.75	30.0	-8.3	
1.733	21.0	H	0.67	8.48	28.84	30.0	-1.2	
High Ch								
1.754	10.7	V	0.67	8.73	18.72	30.0	-11.3	
1.754	17.7	H	0.67	8.54	25.60	30.0	-4.4	

Rev. 1.24.7

RB8-4

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_3 MHz BW_16QAM_RB8 4 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.712	10.6	V	0.67	8.56	18.49	30.0	-11.5	
1.712	15.3	H	0.67	8.43	23.07	30.0	-6.9	
Mid Ch								
1.733	13.2	V	0.67	8.64	21.14	30.0	-8.9	
1.733	20.6	H	0.67	8.48	28.42	30.0	-1.6	
High Ch								
1.754	10.4	V	0.67	8.73	18.48	30.0	-11.5	
1.754	17.6	H	0.67	8.54	25.47	30.0	-4.5	

Rev. 1.24.7

RB15-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_3 MHz BW_16QAM_RB15_0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.712	10.0	V	0.67	8.56	17.89	30.0	-12.1	
1.712	14.8	H	0.67	8.43	22.51	30.0	-7.5	
Mid Ch								
1.733	12.1	V	0.67	8.64	20.03	30.0	-10.0	
1.733	19.8	H	0.67	8.48	27.62	30.0	-2.4	
High Ch								
1.754	10.2	V	0.67	8.73	18.30	30.0	-11.7	
1.754	17.0	H	0.67	8.54	24.88	30.0	-5.1	

Rev. 1.24.7

LTE QPSK Band 4 (5.0MHz BAND WIDTH)

RB1-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_5 MHz BW_QPSK_RB1 0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.713	10.4	V	0.67	8.56	18.28	30.0	-11.7	
1.713	15.8	H	0.67	8.43	23.58	30.0	-6.4	
Mid Ch								
1.733	12.8	V	0.67	8.64	20.74	30.0	-9.3	
1.733	20.7	H	0.67	8.48	28.46	30.0	-1.5	
High Ch								
1.753	11.2	V	0.67	8.73	19.21	30.0	-10.8	
1.753	17.9	H	0.67	8.54	25.74	30.0	-4.3	

Rev. 1.24.7

RB1-24

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_5 MHz BW_QPSK_RB1 24 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.713	9.8	V	0.67	8.56	17.68	30.0	-12.3	
1.713	15.2	H	0.67	8.43	22.98	30.0	-7.0	
Mid Ch								
1.733	12.9	V	0.67	8.64	20.85	30.0	-9.2	
1.733	20.8	H	0.67	8.48	28.57	30.0	-1.4	
High Ch								
1.753	10.9	V	0.67	8.73	18.96	30.0	-11.0	
1.753	17.6	H	0.67	8.54	25.49	30.0	-4.5	

Rev. 1.24.7

RB12-6

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_5 MHz BW_QPSK_RB12 6 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.713	9.5	V	0.67	8.56	17.42	30.0	-12.6	
1.713	15.0	H	0.67	8.43	22.72	30.0	-7.3	
Mid Ch								
1.733	12.1	V	0.67	8.64	20.08	30.0	-9.9	
1.733	20.0	H	0.67	8.48	27.80	30.0	-2.2	
High Ch								
1.753	11.2	V	0.67	8.73	19.28	30.0	-10.7	
1.753	17.9	H	0.67	8.54	25.81	30.0	-4.2	

Rev. 1.24.7

RB25-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_5 MHz BW_QPSK_RB25 0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.713	10.1	V	0.67	8.56	17.97	30.0	-12.0	
1.713	15.5	H	0.67	8.43	23.27	30.0	-6.7	
Mid Ch								
1.733	12.8	V	0.67	8.64	20.76	30.0	-9.2	
1.733	20.7	H	0.67	8.48	28.48	30.0	-1.5	
High Ch								
1.753	11.6	V	0.67	8.73	19.66	30.0	-10.3	
1.753	18.3	H	0.67	8.54	26.19	30.0	-3.8	

Rev. 1.24.7

LTE 16QAM Band 4 (5.0MHz BAND WIDTH)

RB1-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_5 MHz BW_16QAM_RB1 0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.713	10.6	V	0.67	8.56	18.45	30.0	-11.6	
1.713	16.0	H	0.67	8.43	23.75	30.0	-6.3	
Mid Ch								
1.733	12.9	V	0.67	8.64	20.84	30.0	-9.2	
1.733	20.8	H	0.67	8.48	28.56	30.0	-1.4	
High Ch								
1.753	11.6	V	0.67	8.73	19.61	30.0	-10.4	
1.753	18.3	H	0.67	8.54	26.14	30.0	-3.9	

Rev. 1.24.7

RB1-24

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_5 MHz BW_16QAM_RB1 24 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.713	10.0	V	0.67	8.56	17.92	30.0	-12.1	
1.713	15.5	H	0.67	8.43	23.22	30.0	-6.8	
Mid Ch								
1.733	13.0	V	0.67	8.64	20.95	30.0	-9.1	
1.733	20.9	H	0.67	8.48	28.67	30.0	-1.3	
High Ch								
1.753	11.0	V	0.67	8.73	19.10	30.0	-10.9	
1.753	17.8	H	0.67	8.54	25.63	30.0	-4.4	

Rev. 1.24.7

RB12-6

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_5 MHz BW_16QAM_RB12 6 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.713	9.8	V	0.67	8.56	17.65	30.0	-12.4	
1.713	15.2	H	0.67	8.43	22.95	30.0	-7.1	
Mid Ch								
1.733	12.5	V	0.67	8.64	20.45	30.0	-9.6	
1.733	20.4	H	0.67	8.48	28.17	30.0	-1.8	
High Ch								
1.753	11.4	V	0.67	8.73	19.42	30.0	-10.6	
1.753	18.1	H	0.67	8.54	25.95	30.0	-4.1	

Rev. 1.24.7

RB25-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_5 MHz BW_16QAM_RB25 0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.713	10.6	V	0.67	8.56	18.45	30.0	-11.6	
1.713	16.0	H	0.67	8.43	23.75	30.0	-6.3	
Mid Ch								
1.733	13.0	V	0.67	8.64	21.00	30.0	-9.0	
1.733	20.9	H	0.67	8.48	28.72	30.0	-1.3	
High Ch								
1.753	11.6	V	0.67	8.73	19.62	30.0	-10.4	
1.753	18.3	H	0.67	8.54	26.15	30.0	-3.9	

Rev. 1.24.7

LTE QPSK Band 4 (10.0MHz BAND WIDTH)

RB1-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_10 MHz BW_QPSK_RB1 0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.715	10.6	V	0.67	8.56	18.48	30.0	-11.5	
1.715	16.0	H	0.67	8.43	23.71	30.0	-6.3	
Mid Ch								
1.733	12.2	V	0.67	8.64	20.14	30.0	-9.9	
1.733	19.6	H	0.67	8.48	27.36	30.0	-2.6	
High Ch								
1.750	11.7	V	0.67	8.73	19.72	30.0	-10.3	
1.750	18.3	H	0.67	8.54	26.14	30.0	-3.9	

Rev. 1.24.7

RB1-49

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_10 MHz BW_QPSK_RB1 49 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.715	10.2	V	0.67	8.56	18.13	30.0	-11.9	
1.715	15.6	H	0.67	8.43	23.36	30.0	-6.6	
Mid Ch								
1.733	13.0	V	0.67	8.64	20.93	30.0	-9.1	
1.733	20.3	H	0.67	8.48	28.15	30.0	-1.9	
High Ch								
1.750	11.0	V	0.67	8.73	19.09	30.0	-10.9	
1.750	17.6	H	0.67	8.54	25.51	30.0	-4.5	

Rev. 1.24.7

RB25-12

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_10 MHz BW_QPSK_RB25 12 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.715	11.1	V	0.67	8.56	18.94	30.0	-11.1	
1.715	16.4	H	0.67	8.43	24.17	30.0	-5.8	
Mid Ch								
1.733	12.8	V	0.67	8.64	20.80	30.0	-9.2	
1.733	20.2	H	0.67	8.48	28.02	30.0	-2.0	
High Ch								
1.750	11.3	V	0.67	8.73	19.35	30.0	-10.7	
1.750	17.9	H	0.67	8.54	25.77	30.0	-4.2	

Rev. 1.24.7

RB50-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/12/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_10 MHz BW_QPSK_RB50 0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.715	10.6	V	0.67	8.56	18.53	30.0	-11.5	
1.715	16.0	H	0.67	8.43	23.76	30.0	-6.2	
Mid Ch								
1.733	12.7	V	0.67	8.64	20.71	30.0	-9.3	
1.733	20.1	H	0.67	8.48	27.93	30.0	-2.1	
High Ch								
1.750	11.4	V	0.67	8.73	19.49	30.0	-10.5	
1.750	18.0	H	0.67	8.54	25.91	30.0	-4.1	

Rev. 1.24.7

LTE 16QAM Band 4 (10.0MHz BAND WIDTH)

RB1-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_10 MHz BW_16QAM_RB1 0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch.								
1.715	10.7	V	0.67	8.56	18.54	30.0	-11.5	
1.715	16.0	H	0.67	8.43	23.77	30.0	-6.2	
Mid Ch.								
1.733	12.1	V	0.67	8.64	20.07	30.0	-9.9	
1.733	19.5	H	0.67	8.48	27.29	30.0	-2.7	
High Ch.								
1.750	11.7	V	0.67	8.73	19.80	30.0	-10.2	
1.750	18.4	H	0.67	8.54	26.22	30.0	-3.8	

Rev. 1.24.7

RB1-49

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_10 MHz BW_16QAM_RB1 49 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.715	10.3	V	0.67	8.56	18.19	30.0	-11.8	
1.715	15.7	H	0.67	8.43	23.42	30.0	-6.6	
Mid Ch								
1.733	13.1	V	0.67	8.64	21.09	30.0	-8.9	
1.733	20.5	H	0.67	8.48	28.31	30.0	-1.7	
High Ch								
1.750	11.1	V	0.67	8.73	19.11	30.0	-10.9	
1.750	17.7	H	0.67	8.54	25.53	30.0	-4.5	

Rev. 1.24.7

RB25-12

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_10 MHz BW_16QAM_RB25 12 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.715	10.7	V	0.67	8.56	18.57	30.0	-11.4	
1.715	16.0	H	0.67	8.43	23.80	30.0	-6.2	
Mid Ch								
1.733	13.3	V	0.67	8.64	21.22	30.0	-8.8	
1.733	20.6	H	0.67	8.48	28.44	30.0	-1.6	
High Ch								
1.750	11.7	V	0.67	8.73	19.74	30.0	-10.3	
1.750	18.3	H	0.67	8.54	26.16	30.0	-3.8	

Rev. 1.24.7

RB50-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/13/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH HEADSET and AC Adapter
Mode: TX, LTE BAND 4_10 MHz BW_16QAM_RB50 0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.715	11.2	V	0.67	8.56	19.11	30.0	-10.9	
1.715	16.6	H	0.67	8.43	24.34	30.0	-5.7	
Mid Ch								
1.733	13.3	V	0.67	8.64	21.29	30.0	-8.7	
1.733	20.7	H	0.67	8.48	28.51	30.0	-1.5	
High Ch								
1.750	12.7	V	0.67	8.73	20.71	30.0	-9.3	
1.750	19.3	H	0.67	8.54	27.13	30.0	-2.9	

Rev. 1.24.7

LTE QPSK Band 2 (1.4MHz BAND WIDTH)

RB1-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, 1.4MHz at RB1 0 QPSK

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.851	11.2	V	0.85	8.62	18.99	33.0	-14.0	
1.851	17.9	H	0.85	8.47	25.49	33.0	-7.5	
Mid Ch								
1.880	11.0	V	0.85	8.46	18.58	33.0	-14.4	
1.880	20.1	H	0.85	8.36	27.65	33.0	-5.4	
High Ch								
1.909	9.2	V	0.85	8.30	16.67	33.0	-16.3	
1.909	17.3	H	0.85	8.25	24.74	33.0	-8.3	

Rev. 3.17.11

RB1-5

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, 1.4MHz at RB1 5 QPSK

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.851	11.4	V	0.85	8.62	19.12	33.0	-13.9	
1.851	18.2	H	0.85	8.47	25.79	33.0	-7.2	
Mid Ch								
1.880	11.0	V	0.85	8.46	18.57	33.0	-14.4	
1.880	20.4	H	0.85	8.36	27.88	33.0	-5.1	
High Ch								
1.909	-0.2	V	0.85	8.30	7.23	33.0	-25.8	
1.909	16.8	H	0.85	8.25	24.22	33.0	-8.8	

Rev. 3.17.11

RB3-2

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, 1.4MHz at RB3 2 QPSK

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.851	11.4	V	0.85	8.62	19.18	33.0	-13.8	
1.851	18.2	H	0.85	8.47	25.84	33.0	-7.2	
Mid Ch								
1.880	11.2	V	0.85	8.46	18.81	33.0	-14.2	
1.880	20.6	H	0.85	8.36	28.08	33.0	-4.9	
High Ch								
1.909	9.0	V	0.85	8.30	16.46	33.0	-16.5	
1.909	17.3	H	0.85	8.25	24.68	33.0	-8.3	

Rev. 3.17.11

RB6-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, 1.4MHz at RB6 0 QPSK

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.851	11.0	V	0.85	8.62	18.77	33.0	-14.2	
1.851	17.8	H	0.85	8.47	25.46	33.0	-7.5	
Mid Ch								
1.880	10.7	V	0.85	8.46	18.31	33.0	-14.7	
1.880	20.0	H	0.85	8.36	27.46	33.0	-5.5	
High Ch								
1.909	9.1	V	0.85	8.30	16.55	33.0	-16.5	
1.909	17.3	H	0.85	8.25	24.74	33.0	-8.3	

Rev. 3.17.11

LTE 16QAM Band 2 (1.4MHz BAND WIDTH)

RB1-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, 1.4MHz at RB1 0 16QAM

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.851	11.2	V	0.85	8.62	18.92	33.0	-14.1	
1.851	18.0	H	0.85	8.47	25.64	33.0	-7.4	
Mid Ch								
1.880	11.2	V	0.85	8.46	18.82	33.0	-14.2	
1.880	20.5	H	0.85	8.36	27.98	33.0	-5.0	
High Ch								
1.909	9.6	V	0.85	8.30	17.09	33.0	-15.9	
1.909	17.5	H	0.85	8.25	24.89	33.0	-8.1	

Rev. 3.17.11

RB1-5

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, 1.4MHz at RB1 5 16QAM

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.851	11.4	V	0.85	8.62	19.21	33.0	-13.8	
1.851	18.2	H	0.85	8.47	25.83	33.0	-7.2	
Mid Ch								
1.880	11.3	V	0.85	8.46	18.94	33.0	-14.1	
1.880	20.7	H	0.85	8.36	28.20	33.0	-4.8	
High Ch								
1.909	8.9	V	0.85	8.30	16.32	33.0	-16.7	
1.909	16.9	H	0.85	8.25	24.32	33.0	-8.7	

Rev. 3.17.11

RB3-2

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, 1.4MHz at RB3 2 16QAM

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.851	11.4	V	0.85	8.62	19.18	33.0	-13.8	
1.851	18.2	H	0.85	8.47	25.85	33.0	-7.2	
Mid Ch								
1.880	11.3	V	0.85	8.46	18.90	33.0	-14.1	
1.880	20.7	H	0.85	8.36	28.24	33.0	-4.8	
High Ch								
1.909	9.1	V	0.85	8.30	16.51	33.0	-16.5	
1.909	17.4	H	0.85	8.25	24.79	33.0	-8.2	

Rev. 3.17.11

RB6-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, 1.4MHz at RB6 0 16QAM

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.851	11.2	V	0.85	8.62	18.94	33.0	-14.1	
1.851	18.0	H	0.85	8.47	25.62	33.0	-7.4	
Mid Ch								
1.880	11.2	V	0.85	8.46	18.77	33.0	-14.2	
1.880	20.3	H	0.85	8.36	27.81	33.0	-5.2	
High Ch								
1.909	9.2	V	0.85	8.30	16.61	33.0	-16.4	
1.909	17.4	H	0.85	8.25	24.80	33.0	-8.2	

Rev. 3.17.11

LTE QPSK Band 2 (3.0MHz BAND WIDTH)

RB1-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, 3MHz at RB1 0 QPSK

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) 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	10.2	V	0.85	8.62	17.97	33.0	-15.0	
1.852	17.3	H	0.85	8.47	24.96	33.0	-8.0	
1.880	11.7	V	0.85	8.46	19.31	33.0	-13.7	
1.880	20.8	H	0.85	8.36	28.35	33.0	-4.7	
1.909	11.6	V	0.85	8.30	19.02	33.0	-14.0	
1.909	18.9	H	0.85	8.25	26.31	33.0	-6.7	

Rev. 3.17.11

RB1-14

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, 3MHz at RB1 14 QPSK

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) 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	10.9	V	0.85	8.62	18.71	33.0	-14.3	
1.852	18.0	H	0.85	8.47	25.60	33.0	-7.4	
1.880	12.3	V	0.85	8.46	19.92	33.0	-13.1	
1.880	21.2	H	0.85	8.36	28.69	33.0	-4.3	
1.909	9.8	V	0.85	8.30	17.21	33.0	-15.8	
1.909	17.5	H	0.85	8.25	24.87	33.0	-8.1	

Rev. 3.17.11

RB8-4

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, 3MHz at RB8 4 QPSK

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) 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	10.2	V	0.85	8.62	18.01	33.0	-15.0	
1.852	17.4	H	0.85	8.47	25.00	33.0	-8.0	
1.880	11.6	V	0.85	8.46	19.21	33.0	-13.8	
1.880	20.5	H	0.85	8.36	28.02	33.0	-5.0	
1.909	10.6	V	0.85	8.30	18.07	33.0	-14.9	
1.909	18.0	H	0.85	8.25	25.41	33.0	-7.6	

Rev. 3.17.11

RB15-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, 3MHz at RB15 0 QPSK

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) 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	9.5	V	0.85	8.62	17.31	33.0	-15.7	
1.852	16.7	H	0.85	8.47	24.27	33.0	-8.7	
1.880	10.7	V	0.85	8.46	18.33	33.0	-14.7	
1.880	19.7	H	0.85	8.36	27.23	33.0	-5.8	
1.909	9.9	V	0.85	8.30	17.33	33.0	-15.7	
1.909	17.3	H	0.85	8.25	24.73	33.0	-8.3	

Rev. 3.17.11

ERP LTE 16QAM Band 2 (3.0MHz BAND WIDTH)

RB1-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, 3MHz at RB1 0 16QAM

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) 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	10.1	V	0.85	8.62	17.91	33.0	-15.1	
1.852	17.4	H	0.85	8.47	25.00	33.0	-8.0	
1.880	11.8	V	0.85	8.46	19.36	33.0	-13.6	
1.880	20.8	H	0.85	8.36	28.34	33.0	-4.7	
1.909	11.9	V	0.85	8.30	19.31	33.0	-13.7	
1.909	19.2	H	0.85	8.25	26.59	33.0	-6.4	

Rev. 3.17.11

RB1-14

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, 3MHz at RB1 14 16QAM

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) 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	11.0	V	0.85	8.62	18.72	33.0	-14.3	
1.852	18.0	H	0.85	8.47	25.65	33.0	-7.4	
1.880	12.5	V	0.85	8.46	20.12	33.0	-12.9	
1.880	21.3	H	0.85	8.36	28.84	33.0	-4.2	
1.909	9.9	V	0.85	8.30	17.31	33.0	-15.7	
1.909	17.4	H	0.85	8.25	24.81	33.0	-8.2	

Rev. 3.17.11

RB8-4

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, 3MHz at RB8 4 16QAM

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) 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	10.4	V	0.85	8.62	18.18	33.0	-14.8	
1.852	17.6	H	0.85	8.47	25.22	33.0	-7.8	
1.880	11.9	V	0.85	8.46	19.51	33.0	-13.5	
1.880	21.0	H	0.85	8.36	28.53	33.0	-4.5	
1.909	10.8	V	0.85	8.30	18.21	33.0	-14.8	
1.909	18.1	H	0.85	8.25	25.52	33.0	-7.5	

Rev. 3.17.11

RB15-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, 3MHz at RB15 0 16QAM

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) 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	9.9	V	0.85	8.62	17.62	33.0	-15.4	
1.852	17.0	H	0.85	8.47	24.61	33.0	-8.4	
1.880	11.2	V	0.85	8.46	18.79	33.0	-14.2	
1.880	20.1	H	0.85	8.36	27.63	33.0	-5.4	
1.909	10.3	V	0.85	8.30	17.70	33.0	-15.3	
1.909	17.7	H	0.85	8.25	25.08	33.0	-7.9	

Rev. 3.17.11

ERP LTE QPSK Band 2 (5.0MHz BAND WIDTH)

RB1-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, LTE BAND 2_5 MHz BW_QPSK_RB1 0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.853	9.8	V	0.85	8.62	17.57	33.0	-15.4	
1.853	16.9	H	0.85	8.47	24.54	33.0	-8.5	
1.880	10.4	V	0.85	8.46	18.01	33.0	-15.0	
1.880	19.5	H	0.85	8.36	27.02	33.0	-6.0	
1.908	12.2	V	0.85	8.30	19.62	33.0	-13.4	
1.908	19.4	H	0.85	8.25	26.76	33.0	-6.2	

Rev. 3.17.11

RB1-24

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, LTE BAND 2_5 MHz BW_QPSK_RB1 24 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.853	11.0	V	0.85	8.62	18.81	33.0	-14.2	
1.853	18.1	H	0.85	8.47	25.72	33.0	-7.3	
1.880	11.7	V	0.85	8.46	19.32	33.0	-13.7	
1.880	20.6	H	0.85	8.36	28.13	33.0	-4.9	
1.908	9.2	V	0.85	8.30	16.61	33.0	-16.4	
1.908	16.8	H	0.85	8.25	24.24	33.0	-8.8	

Rev. 3.17.11

RB12-6

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, LTE BAND 2_5 MHz BW_QPSK_RB12 6 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.853	9.9	V	0.85	8.62	17.71	33.0	-15.3	
1.853	17.1	H	0.85	8.47	24.68	33.0	-8.3	
1.880	10.6	V	0.85	8.46	18.21	33.0	-14.8	
1.880	19.5	H	0.85	8.36	27.01	33.0	-6.0	
1.908	10.5	V	0.85	8.30	17.97	33.0	-15.0	
1.908	17.9	H	0.85	8.25	25.33	33.0	-7.7	

Rev. 3.17.11

RB25-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, LTE BAND 2_5 MHz BW_QPSK_RB25 0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.853	10.6	V	0.85	8.62	18.41	33.0	-14.6	
1.853	17.7	H	0.85	8.47	25.32	33.0	-7.7	
1.880	11.0	V	0.85	8.46	18.63	33.0	-14.4	
1.880	20.0	H	0.85	8.36	27.50	33.0	-5.5	
1.908	11.9	V	0.85	8.30	19.33	33.0	-13.7	
1.908	19.4	H	0.85	8.25	26.76	33.0	-6.2	

Rev. 3.17.11

LTE 16QAM Band 2 (10.0MHz BAND WIDTH)

RB1-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, 5MHz at RB1 0 16QAM

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.853	9.6	V	0.85	8.62	17.41	33.0	-15.6	
1.853	16.9	H	0.85	8.47	24.55	33.0	-8.5	
1.880	10.5	V	0.85	8.46	18.06	33.0	-14.9	
1.880	19.5	H	0.85	8.36	27.03	33.0	-6.0	
1.908	12.1	V	0.85	8.30	19.51	33.0	-13.5	
1.908	19.4	H	0.85	8.25	26.82	33.0	-6.2	

Rev. 3.17.11

RB1-24

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, 5MHz at RB1 24 16QAM

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.853	11.2	V	0.85	8.62	18.92	33.0	-14.1	
1.853	18.2	H	0.85	8.47	25.83	33.0	-7.2	
1.880	12.0	V	0.85	8.46	19.62	33.0	-13.4	
1.880	20.8	H	0.85	8.36	28.31	33.0	-4.7	
1.908	9.4	V	0.85	8.30	16.81	33.0	-16.2	
1.908	16.9	H	0.85	8.25	24.33	33.0	-8.7	

Rev. 3.17.11

RB12-6

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, 5MHz at RB12 6 16QAM

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.853	10.1	V	0.85	8.62	17.88	33.0	-15.1	
1.853	17.3	H	0.85	8.47	24.91	33.0	-8.1	
1.880	10.7	V	0.85	8.46	18.31	33.0	-14.7	
1.880	19.8	H	0.85	8.36	27.34	33.0	-5.7	
1.908	10.9	V	0.85	8.30	18.31	33.0	-14.7	
1.908	18.3	H	0.85	8.25	25.65	33.0	-7.4	

Rev. 3.17.11

RB25-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, 5MHz at RB25 0 16QAM

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.853	11.6	V	0.85	8.62	19.32	33.0	-13.7	
1.853	18.7	H	0.85	8.47	26.28	33.0	-6.7	
1.880	11.6	V	0.85	8.46	19.19	33.0	-13.8	
1.880	20.5	H	0.85	8.36	27.98	33.0	-5.0	
1.908	12.3	V	0.85	8.30	19.70	33.0	-13.3	
1.908	19.7	H	0.85	8.25	27.06	33.0	-5.9	

Rev. 3.17.11

ERP LTE QPSK Band 2 (10.0MHz BAND WIDTH)

RB1-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, LTE BAND 2_10 MHz BW_QPSK_RB1 0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.855	12.4	V	0.85	8.62	20.17	33.0	-12.8	
1.855	19.5	H	0.85	8.47	27.09	33.0	-5.9	
1.880	10.6	V	0.85	8.46	18.21	33.0	-14.8	
1.880	19.7	H	0.85	8.36	27.25	33.0	-5.8	
1.905	12.3	V	0.85	8.30	19.72	33.0	-13.3	
1.905	19.5	H	0.85	8.25	26.88	33.0	-6.1	

Rev. 3.17.11

RB1-49

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, LTE BAND 2_10 MHz BW_QPSK_RB1 49 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.855	12.7	V	0.85	8.62	20.51	33.0	-12.5	
1.855	19.8	H	0.85	8.47	27.45	33.0	-5.6	
1.880	11.4	V	0.85	8.46	19.02	33.0	-14.0	
1.880	20.3	H	0.85	8.36	27.83	33.0	-5.2	
1.905	10.3	V	0.85	8.30	17.71	33.0	-15.3	
1.905	18.0	H	0.85	8.25	25.38	33.0	-7.6	

Rev. 3.17.11

RB25-12

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, LTE BAND 2_10 MHz BW_QPSK_RB25 12 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.855	12.3	V	0.85	8.62	20.11	33.0	-12.9	
1.855	19.4	H	0.85	8.47	27.03	33.0	-6.0	
1.880	11.1	V	0.85	8.46	18.71	33.0	-14.3	
1.880	20.0	H	0.85	8.36	27.52	33.0	-5.5	
1.905	11.5	V	0.85	8.30	18.97	33.0	-14.0	
1.905	19.0	H	0.85	8.25	26.37	33.0	-6.6	

Rev. 3.17.11

RB50-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, LTE BAND 2_10 MHz BW_QPSK_RB50 0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.855	12.1	V	0.85	8.62	19.91	33.0	-13.1	
1.855	19.2	H	0.85	8.47	26.83	33.0	-6.2	
1.880	11.1	V	0.85	8.46	18.73	33.0	-14.3	
1.880	20.1	H	0.85	8.36	27.63	33.0	-5.4	
1.905	12.5	V	0.85	8.30	19.93	33.0	-13.1	
1.905	19.9	H	0.85	8.25	27.33	33.0	-5.7	

Rev. 3.17.11

LTE 16QAM Band 2 (10.0MHz BAND WIDTH)

RB1-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, LTE BAND 2_10 MHz BW_16QAM_RB1 0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.855	12.2	V	0.85	8.62	20.01	33.0	-13.0	
1.855	19.5	H	0.85	8.47	27.10	33.0	-5.9	
1.880	10.7	V	0.85	8.46	18.26	33.0	-14.7	
1.880	19.7	H	0.85	8.36	27.21	33.0	-5.8	
1.905	12.2	V	0.85	8.30	19.61	33.0	-13.4	
1.905	19.5	H	0.85	8.25	26.91	33.0	-6.1	

Rev. 3.17.11

RB1-49

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, LTE BAND 2_10 MHz BW_16QAM_RB1 49 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.855	12.9	V	0.85	8.62	20.62	33.0	-12.4	
1.855	19.9	H	0.85	8.47	27.54	33.0	-5.5	
1.880	11.8	V	0.85	8.46	19.42	33.0	-13.6	
1.880	20.6	H	0.85	8.36	28.07	33.0	-4.9	
1.905	10.6	V	0.85	8.30	18.01	33.0	-15.0	
1.905	18.1	H	0.85	8.25	25.53	33.0	-7.5	

Rev. 3.17.11

RB25-12

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, LTE BAND 2_10 MHz BW_16QAM_RB25 12 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.855	12.8	V	0.85	8.62	20.58	33.0	-12.4	
1.855	20.0	H	0.85	8.47	27.58	33.0	-5.4	
1.880	11.6	V	0.85	8.46	19.21	33.0	-13.8	
1.880	20.7	H	0.85	8.36	28.24	33.0	-4.8	
1.905	12.0	V	0.85	8.30	19.41	33.0	-13.6	
1.905	19.4	H	0.85	8.25	26.77	33.0	-6.2	

Rev. 3.17.11

RB50-0

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS
Project #: 12U1456
Date: 06/05/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT ALONE
Mode: TX, LTE BAND 2_10 MHz BW_16QAM_RB50 0 MODE

Test Equipment:
Receiving: Horn T73, and Camber A SMA Cables
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.855	13.1	V	0.85	8.62	20.82	33.0	-12.2	
1.855	20.2	H	0.85	8.47	27.79	33.0	-5.2	
1.880	12.0	V	0.85	8.46	19.59	33.0	-13.4	
1.880	20.9	H	0.85	8.36	28.36	33.0	-4.6	
1.905	13.3	V	0.85	8.30	20.70	33.0	-12.3	
1.905	20.6	H	0.85	8.25	28.01	33.0	-5.0	

Rev. 3.17.11

7.2. FIELD STRENGTH OF SPURIOUS RADIATION

RULE PART(S)

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

LIMIT

§22.917 (e) and §24.238 (a): Out of band emissions. 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.

§27.53 (g) For operations in the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB.

§27.53 (h) For operations in the 1710–1755 MHz and 2110–2155 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 + 10 log10(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

- CDMA 2000 1xRTT
- CDMA 2000 EVDO REV. A
- LTE Band 2 and 4

RESULTS

1XRTT 850 BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company:	LG ELECTRONICS
Project #:	12U14456
Date:	06/11/12
Test Engineer:	MENGISTU MEKURIA
Configuration:	EUT WITH AC ACAPTER AND HEADSET
Mode:	TX, CELL BAND 1xRTT MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber A	T144 8449B	Filter 1	FCC 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 Channel (824.7MHz)									
1.649	-11.5	V	3.0	38.2	1.0	-48.6	-13.0	-35.6	
2.474	-20.8	V	3.0	37.5	1.0	-57.3	-13.0	-44.3	
1.649	-14.9	H	3.0	38.2	1.0	-52.1	-13.0	-39.1	
2.474	-17.1	H	3.0	37.5	1.0	-53.5	-13.0	-40.5	
Mid Channel (836.52MHz)									
1.673	-6.6	V	3.0	38.1	1.0	-43.7	-13.0	-30.7	
2.510	-19.8	V	3.0	37.5	1.0	-56.3	-13.0	-43.3	
1.673	-8.3	H	3.0	38.1	1.0	-45.4	-13.0	-32.4	
2.510	-22.0	H	3.0	37.5	1.0	-58.4	-13.0	-45.4	
High Channel (848.31MHz)									
1.697	-9.2	V	3.0	38.1	1.0	-46.3	-13.0	-33.3	
2.545	-20.4	V	3.0	37.5	1.0	-56.9	-13.0	-43.9	
1.697	-3.0	H	3.0	38.1	1.0	-40.1	-13.0	-27.1	
2.545	-23.2	H	3.0	37.5	1.0	-59.6	-13.0	-46.6	

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

EIRP 1xRTT 1900 BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS INC
Project #: 12U14456
Date: 06/17/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT with ACadapter And Headset
Mode: TX, 1900 MHz BAND, CDMA 1xRTT MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber A	T144 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, 1851.25MHz									
3.703	-16.0	V	3.0	36.8	1.0	-51.8	-13.0	-38.8	
5.554	-15.7	V	3.0	36.3	1.0	-51.0	-13.0	-38.0	
7.405	-1.6	V	3.0	36.6	1.0	-37.2	-13.0	-24.2	
9.256	-6.5	V	3.0	37.0	1.0	-42.5	-13.0	-29.5	
3.703	-12.9	H	3.0	36.8	1.0	-48.7	-13.0	-35.7	
5.554	-15.7	H	3.0	36.3	1.0	-51.0	-13.0	-38.0	
7.405	-7.6	H	3.0	36.6	1.0	-43.2	-13.0	-30.2	
9.256	-10.6	H	3.0	37.0	1.0	-46.6	-13.0	-33.6	
Mid Ch, 1880MHz									
3.760	-17.7	V	3.0	36.8	1.0	-53.5	-13.0	-40.5	
7.520	-12.9	V	3.0	36.6	1.0	-48.5	-13.0	-35.5	
9.400	3.8	V	3.0	37.0	1.0	-32.3	-13.0	-19.3	
3.760	-11.0	H	3.0	36.8	1.0	-46.8	-13.0	-33.8	
5.640	-15.2	H	3.0	36.3	1.0	-50.5	-13.0	-37.5	
7.520	-7.0	H	3.0	36.6	1.0	-42.6	-13.0	-29.6	
9.400	-11.3	H	3.0	37.0	1.0	-47.4	-13.0	-34.4	
High Ch, 1908.75MHz									
3.817	-11.4	V	3.0	36.7	1.0	-47.1	-13.0	-34.1	
5.726	-17.4	V	3.0	36.3	1.0	-52.7	-13.0	-39.7	
7.635	-4.2	V	3.0	36.6	1.0	-39.8	-13.0	-26.8	
9.544	-10.3	V	3.0	37.1	1.0	-46.3	-13.0	-33.3	
3.817	-8.7	H	3.0	36.7	1.0	-44.4	-13.0	-31.4	
5.726	-15.8	H	3.0	36.3	1.0	-51.2	-13.0	-38.2	
7.635	-10.7	H	3.0	36.6	1.0	-46.3	-13.0	-33.3	
9.544	-10.8	H	3.0	37.1	1.0	-46.9	-13.0	-33.9	

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

EIRP 1xRTT 1700 BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS INC
Project #: 12U14456
Date: 06/17/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT with Acadapter And Headset
Mode: TX, AWS BAND 1xRTT MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber A	T144 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, 1711.25MHz									
3.423	-15.5	V	3.0	37.0	1.0	-51.5	-13.0	-38.5	
5.134	-15.1	V	3.0	36.3	1.0	-50.3	-13.0	-37.3	
6.845	-11.9	V	3.0	36.5	1.0	-47.4	-13.0	-34.4	
3.423	-13.8	H	3.0	37.0	1.0	-49.8	-13.0	-36.8	
5.134	-16.3	H	3.0	36.3	1.0	-51.5	-13.0	-38.5	
6.845	-13.4	H	3.0	36.5	1.0	-48.9	-13.0	-35.9	
Mid Ch, 1732.5MHz									
3.465	-9.1	V	3.0	37.0	1.0	-45.1	-13.0	-32.1	
5.198	-16.1	V	3.0	36.2	1.0	-51.3	-13.0	-38.3	
6.930	-15.1	V	3.0	36.5	1.0	-50.5	-13.0	-37.5	
3.465	-10.6	H	3.0	37.0	1.0	-46.6	-13.0	-33.6	
5.198	-17.0	H	3.0	36.2	1.0	-52.2	-13.0	-39.2	
6.930	-4.6	H	3.0	36.5	1.0	-40.0	-13.0	-27.0	
High Ch, 1753.75MHz									
3.508	-12.4	V	3.0	37.0	1.0	-48.3	-13.0	-35.3	
5.261	-15.3	V	3.0	36.3	1.0	-50.5	-13.0	-37.5	
7.015	-10.8	V	3.0	36.5	1.0	-46.3	-13.0	-33.3	
3.508	-10.6	H	3.0	37.0	1.0	-46.6	-13.0	-33.6	
5.261	-17.0	H	3.0	36.3	1.0	-52.3	-13.0	-39.3	
7.015	-14.3	H	3.0	36.5	1.0	-49.8	-13.0	-36.8	

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

EIRP EVDO REV. A. 1900 BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/11/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT with AC Adapter and Headset
Mode: TX, PCS BAND EVDO REV. A MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber A	T144 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, 1851.25MHz									
3.702	8.2	V	3.0	36.8	1.0	-27.6	-13.0	-14.6	
5.554	-6.3	V	3.0	36.3	1.0	-41.6	-13.0	-28.6	
7.405	-4.5	V	3.0	36.6	1.0	-40.1	-13.0	-27.1	
9.257	-4.2	V	3.0	37.0	1.0	-40.2	-13.0	-27.2	
3.702	4.9	H	3.0	36.8	1.0	-30.9	-13.0	-17.9	
5.554	-9.1	H	3.0	36.3	1.0	-44.4	-13.0	-31.4	
7.405	-8.1	H	3.0	36.6	1.0	-43.7	-13.0	-30.7	
9.257	-8.2	H	3.0	37.0	1.0	-44.2	-13.0	-31.2	
Mid Ch, 1880MHz									
3.760	8.6	V	3.0	36.8	1.0	-27.2	-13.0	-14.2	
5.640	-6.8	V	3.0	36.3	1.0	-42.1	-13.0	-29.1	
7.520	0.4	V	3.0	36.6	1.0	-35.2	-13.0	-22.2	
9.400	-4.2	V	3.0	37.0	1.0	-40.3	-13.0	-27.3	
13.160	-8.6	V	3.0	35.9	1.0	-43.5	-13.0	-30.5	
3.760	8.8	H	3.0	36.8	1.0	-26.9	-13.0	-13.9	
5.640	-10.0	H	3.0	36.3	1.0	-45.3	-13.0	-32.3	
7.520	-4.1	H	3.0	36.6	1.0	-39.7	-13.0	-26.7	
9.400	-10.9	H	3.0	37.0	1.0	-46.9	-13.0	-33.9	
High Ch, 1908.75MHz									
3.818	9.0	V	3.0	36.7	1.0	-26.8	-13.0	-13.8	
5.726	3.3	V	3.0	36.3	1.0	-32.0	-13.0	-19.0	
7.635	4.7	V	3.0	36.6	1.0	-30.9	-13.0	-17.9	
9.544	-2.5	V	3.0	37.1	1.0	-38.5	-13.0	-25.5	
13.361	-3.3	V	3.0	35.8	1.0	-38.0	-13.0	-25.0	
3.818	9.3	H	3.0	36.7	1.0	-26.4	-13.0	-13.4	
5.726	5.8	H	3.0	36.3	1.0	-29.5	-13.0	-16.5	
7.635	1.6	H	3.0	36.6	1.0	-34.0	-13.0	-21.0	
9.544	-8.2	H	3.0	37.1	1.0	-44.3	-13.0	-31.3	

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

EIRP EVDO REV. A. 1700 BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS
Project #: 12U14456
Date: 06/11/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT with AC Adapter and Headset
Mode: TX, AWS BAND EVDO REV. A MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber A	T144 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, 1711.25MHz									
3.423	-1.2	V	3.0	37.0	1.0	-37.3	-13.0	-24.3	
5.134	-1.4	V	3.0	36.3	1.0	-36.7	-13.0	-23.7	
6.845	-0.8	V	3.0	36.5	1.0	-36.3	-13.0	-23.3	
8.556	-1.8	V	3.0	36.8	1.0	-37.6	-13.0	-24.6	
11.979	-3.2	V	3.0	36.7	1.0	-38.9	-13.0	-25.9	
3.423	-1.7	H	3.0	37.0	1.0	-37.7	-13.0	-24.7	
5.134	-3.4	H	3.0	36.3	1.0	-38.7	-13.0	-25.7	
6.845	-4.0	H	3.0	36.5	1.0	-39.4	-13.0	-26.4	
8.556	-5.3	H	3.0	36.8	1.0	-41.1	-13.0	-28.1	
11.979	-8.2	H	3.0	36.7	1.0	-43.9	-13.0	-30.9	
Mid Ch, 1732.5MHz									
3.465	1.2	V	3.0	37.0	1.0	-34.8	-13.0	-21.8	
5.198	-3.0	V	3.0	36.2	1.0	-38.3	-13.0	-25.3	
6.930	4.2	V	3.0	36.5	1.0	-31.3	-13.0	-18.3	
8.663	-0.5	V	3.0	36.9	1.0	-36.3	-13.0	-23.3	
12.128	-5.7	H	3.0	36.6	1.0	-41.2	-13.0	-28.2	
3.465	4.9	V	3.0	37.0	1.0	-31.1	-13.0	-18.1	
5.198	-7.4	V	3.0	36.2	1.0	-42.6	-13.0	-29.6	
6.930	-2.7	V	3.0	36.5	1.0	-38.2	-13.0	-25.2	
8.663	-6.9	V	3.0	36.9	1.0	-42.7	-13.0	-29.7	
10.395	-12.5	H	3.0	37.1	1.0	-48.6	-13.0	-35.6	
12.128	-5.2	H	3.0	36.6	1.0	-40.8	-13.0	-27.8	
High Ch, 1753.75MHz									
3.508	-2.8	V	3.0	37.0	1.0	-38.7	-13.0	-25.7	
5.261	-0.1	V	3.0	36.3	1.0	-35.3	-13.0	-22.3	
7.015	0.6	V	3.0	36.5	1.0	-34.9	-13.0	-21.9	
8.769	-3.7	V	3.0	36.9	1.0	-39.6	-13.0	-26.6	
10.522	-13.2	H	3.0	37.0	1.0	-49.3	-13.0	-36.3	
12.276	-6.2	H	3.0	36.5	1.0	-41.6	-13.0	-28.6	
3.508	-1.0	V	3.0	37.0	1.0	-36.9	-13.0	-23.9	
5.261	-4.8	V	3.0	36.3	1.0	-40.0	-13.0	-27.0	
7.015	-4.8	V	3.0	36.5	1.0	-40.3	-13.0	-27.3	
8.769	-7.6	V	3.0	36.9	1.0	-43.5	-13.0	-30.5	
12.276	-5.9	H	3.0	36.5	1.0	-41.3	-13.0	-28.3	

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

LTE QPSK Band 4 (1.4 MHz BAND WIDTH)

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS INC
Project #: 12U14456
Date: 06/17/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT and AC Adapter and Headset
Mode: BAND 4_1.4 MHz BW_ QPSK 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, 1710.7MHz									
3.421	3.8	V	3.0	35.5	1.0	-30.7	-13.0	-17.7	
5.131	2.8	V	3.0	35.3	1.0	-31.5	-13.0	-18.5	
6.841	-0.7	V	3.0	35.7	1.0	-35.4	-13.0	-22.4	
8.551	-8.9	V	3.0	35.6	1.0	-43.5	-13.0	-30.5	
11.971	-1.6	V	3.0	34.2	1.0	-34.9	-13.0	-21.9	
3.421	-2.7	H	3.0	35.5	1.0	-37.2	-13.0	-24.2	
5.131	-2.1	H	3.0	35.3	1.0	-36.4	-13.0	-23.4	
6.841	-0.8	H	3.0	35.7	1.0	-35.5	-13.0	-22.5	
8.551	-7.7	H	3.0	35.6	1.0	-42.3	-13.0	-29.3	
11.971	-2.6	H	3.0	34.2	1.0	-35.8	-13.0	-22.8	
Mid Ch, 1732.50MHz									
3.464	-8.0	V	3.0	35.5	1.0	-42.5	-13.0	-29.5	
5.196	1.1	V	3.0	35.3	1.0	-33.2	-13.0	-20.2	
6.928	-5.3	V	3.0	35.7	1.0	-40.0	-13.0	-27.0	
8.660	-10.2	V	3.0	35.6	1.0	-44.8	-13.0	-31.8	
12.124	-1.6	V	3.0	34.2	1.0	-34.8	-13.0	-21.8	
3.464	-5.0	H	3.0	35.5	1.0	-39.5	-13.0	-26.5	
5.196	-6.8	H	3.0	35.3	1.0	-41.1	-13.0	-28.1	
6.928	-5.0	H	3.0	35.7	1.0	-39.7	-13.0	-26.7	
8.660	-8.3	H	3.0	35.6	1.0	-42.9	-13.0	-29.9	
12.124	-0.2	H	3.0	34.2	1.0	-33.4	-13.0	-20.4	
High Ch, 1754.3MHz									
3.508	-7.8	V	3.0	35.4	1.0	-42.2	-13.0	-29.2	
5.262	8.5	V	3.0	35.3	1.0	-25.8	-13.0	-12.8	
7.016	-1.8	V	3.0	35.7	1.0	-36.6	-13.0	-23.6	
8.770	-8.0	V	3.0	35.6	1.0	-42.7	-13.0	-29.7	
12.278	-0.4	V	3.0	34.2	1.0	-33.6	-13.0	-20.6	
3.508	-2.9	H	3.0	35.4	1.0	-37.3	-13.0	-24.3	
5.262	-4.2	H	3.0	35.3	1.0	-38.5	-13.0	-25.5	
7.016	0.2	H	3.0	35.7	1.0	-34.5	-13.0	-21.5	
8.770	-8.1	H	3.0	35.6	1.0	-42.7	-13.0	-29.7	
12.278	-1.5	H	3.0	34.2	1.0	-34.7	-13.0	-21.7	

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

LTE 16QAM Band 4 (1.4 MHz BAND WIDTH)

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS INC
Project #: 12U14456
Date: 06/17/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT and AC Adapter and Headset
Mode: BAND 4_1.4 MHz BW_ 16QAM 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, 1710.7MHz									
3.421	3.1	V	3.0	35.5	1.0	-31.4	-13.0	-18.4	
5.131	1.8	V	3.0	35.3	1.0	-32.5	-13.0	-19.5	
6.841	-2.7	V	3.0	35.7	1.0	-37.4	-13.0	-24.4	
8.551	2.4	V	3.0	35.5	1.0	-32.0	-13.0	-19.0	
11.971	1.6	V	3.0	35.3	1.0	-32.7	-13.0	-19.7	
3.421	-3.7	H	3.0	35.5	1.0	-38.2	-13.0	-25.2	
5.131	-2.8	H	3.0	35.3	1.0	-37.1	-13.0	-24.1	
6.841	-1.7	H	3.0	35.7	1.0	-36.4	-13.0	-23.4	
8.551	2.4	H	3.0	35.5	1.0	-32.0	-13.0	-19.0	
11.971	1.6	H	3.0	35.3	1.0	-32.7	-13.0	-19.7	
Mid Ch, 1732.50MHz									
3.464	-9.0	V	3.0	35.5	1.0	-43.5	-13.0	-30.5	
5.196	0.1	V	3.0	35.3	1.0	-34.2	-13.0	-21.2	
6.928	-6.3	V	3.0	35.7	1.0	-41.0	-13.0	-28.0	
8.660	-10.6	V	3.0	35.6	1.0	-45.2	-13.0	-32.2	
12.124	-1.8	V	3.0	34.2	1.0	-35.0	-13.0	-22.0	
3.464	-5.8	H	3.0	35.5	1.0	-40.3	-13.0	-27.3	
5.196	-7.7	H	3.0	35.3	1.0	-42.0	-13.0	-29.0	
6.928	-5.8	H	3.0	35.7	1.0	-40.5	-13.0	-27.5	
8.660	-8.6	H	3.0	35.6	1.0	-43.2	-13.0	-30.2	
12.124	0.8	H	3.0	34.2	1.0	-32.4	-13.0	-19.4	
High Ch, 1754.3MHz									
3.508	-8.8	V	3.0	35.4	1.0	-43.2	-13.0	-30.2	
5.262	7.5	V	3.0	35.3	1.0	-26.8	-13.0	-13.8	
7.016	-2.8	V	3.0	35.7	1.0	-37.6	-13.0	-24.6	
8.770	-7.6	V	3.0	35.6	1.0	-42.2	-13.0	-29.2	
12.278	0.2	V	3.0	34.2	1.0	-33.0	-13.0	-20.0	
3.508	-3.9	H	3.0	35.4	1.0	-38.3	-13.0	-25.3	
5.262	-4.4	H	3.0	35.3	1.0	-38.7	-13.0	-25.7	
7.016	0.0	H	3.0	35.7	1.0	-34.7	-13.0	-21.7	
8.770	-7.4	H	3.0	35.6	1.0	-42.0	-13.0	-29.0	
12.278	-1.2	H	3.0	34.2	1.0	-34.4	-13.0	-21.4	

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

LTE QPSK Band 4 (3.0 MHz BAND WIDTH)

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS INC
Project #: 12U14456
Date: 06/17/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT and AC Adapter and Headset
Mode: BAND 4_3 MHz BW_ QPSK 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, 1711.5MHz									
3.421	5.1	V	3.0	35.5	1.0	-29.4	-13.0	-16.4	
5.131	3.2	V	3.0	35.3	1.0	-31.1	-13.0	-18.1	
6.841	0.3	V	3.0	35.7	1.0	-34.4	-13.0	-21.4	
8.551	-9.7	V	3.0	35.6	1.0	-44.3	-13.0	-31.3	
11.971	-2.8	V	3.0	34.2	1.0	-36.0	-13.0	-23.0	
3.421	-2.3	H	3.0	35.5	1.0	-36.8	-13.0	-23.8	
5.131	-1.1	H	3.0	35.3	1.0	-35.4	-13.0	-22.4	
6.841	-0.4	H	3.0	35.7	1.0	-35.1	-13.0	-22.1	
8.551	-8.3	H	3.0	35.6	1.0	-43.0	-13.0	-30.0	
11.971	-3.8	H	3.0	34.2	1.0	-37.1	-13.0	-24.1	
Mid Ch, 1732.50MHz									
3.463	-8.1	V	3.0	35.5	1.0	-42.6	-13.0	-29.6	
5.196	2.1	V	3.0	35.3	1.0	-32.2	-13.0	-19.2	
6.925	-4.3	V	3.0	35.7	1.0	-39.0	-13.0	-26.0	
8.657	-10.7	V	3.0	35.6	1.0	-45.3	-13.0	-32.3	
12.119	-2.5	V	3.0	34.2	1.0	-35.6	-13.0	-22.6	
3.463	-5.5	H	3.0	35.5	1.0	-40.0	-13.0	-27.0	
5.196	-7.0	H	3.0	35.3	1.0	-41.3	-13.0	-28.3	
6.925	-1.8	H	3.0	35.7	1.0	-36.6	-13.0	-23.6	
8.657	-8.4	H	3.0	35.6	1.0	-43.0	-13.0	-30.0	
12.119	-2.2	H	3.0	34.2	1.0	-35.4	-13.0	-22.4	
High Ch, 1753.5MHz									
3.504	-6.8	V	3.0	35.4	1.0	-41.3	-13.0	-28.3	
5.257	7.3	V	3.0	35.3	1.0	-27.1	-13.0	-14.1	
7.009	-1.7	V	3.0	35.7	1.0	-36.4	-13.0	-23.4	
8.762	-8.7	V	3.0	35.6	1.0	-43.3	-13.0	-30.3	
12.267	-0.6	V	3.0	34.2	1.0	-33.8	-13.0	-20.8	
3.504	-3.1	H	3.0	35.4	1.0	-37.5	-13.0	-24.5	
5.257	-2.2	H	3.0	35.3	1.0	-36.5	-13.0	-23.5	
7.009	1.0	H	3.0	35.7	1.0	-33.7	-13.0	-20.7	
8.762	-7.7	H	3.0	35.6	1.0	-42.3	-13.0	-29.3	
12.267	-1.8	H	3.0	34.2	1.0	-34.9	-13.0	-21.9	

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

LTE 16QAM Band 4 (3.0 MHz BAND WIDTH)

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS INC
Project #: 12U14456
Date: 06/17/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT and AC Adapter and Headset
Mode: BAND 4_3 MHz BW_ 16QAM 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, 1711.5MHz									
3.421	4.1	V	3.0	35.5	1.0	-30.4	-13.0	-17.4	
5.131	2.8	V	3.0	35.3	1.0	-31.5	-13.0	-18.5	
6.841	-0.3	V	3.0	35.7	1.0	-35.0	-13.0	-22.0	
8.551	-9.7	V	3.0	35.6	1.0	-44.3	-13.0	-31.3	
11.971	-2.8	V	3.0	34.2	1.0	-36.0	-13.0	-23.0	
3.421	-2.7	H	3.0	35.5	1.0	-37.2	-13.0	-24.2	
5.131	-2.1	H	3.0	35.3	1.0	-36.4	-13.0	-23.4	
6.841	-0.7	H	3.0	35.7	1.0	-35.4	-13.0	-22.4	
8.551	-8.3	H	3.0	35.6	1.0	-43.0	-13.0	-30.0	
11.971	-3.8	H	3.0	34.2	1.0	-37.1	-13.0	-24.1	
Mid Ch, 1732.50MHz									
3.463	-8.9	V	3.0	35.5	1.0	-43.4	-13.0	-30.4	
5.196	1.6	V	3.0	35.3	1.0	-32.7	-13.0	-19.7	
6.925	-5.5	V	3.0	35.7	1.0	-40.2	-13.0	-27.2	
8.657	-10.7	V	3.0	35.6	1.0	-45.3	-13.0	-32.3	
12.119	-2.5	V	3.0	34.2	1.0	-35.6	-13.0	-22.6	
3.463	-6.0	H	3.0	35.5	1.0	-40.5	-13.0	-27.5	
5.196	-7.4	H	3.0	35.3	1.0	-41.7	-13.0	-28.7	
6.925	-2.0	H	3.0	35.7	1.0	-36.8	-13.0	-23.8	
8.657	-8.4	H	3.0	35.6	1.0	-43.0	-13.0	-30.0	
12.119	-2.2	H	3.0	34.2	1.0	-35.4	-13.0	-22.4	
High Ch, 1753.5MHz									
3.504	-7.8	V	3.0	35.4	1.0	-42.3	-13.0	-29.3	
5.257	6.5	V	3.0	35.3	1.0	-27.9	-13.0	-14.9	
7.009	-2.9	V	3.0	35.7	1.0	-37.6	-13.0	-24.6	
8.762	-8.7	V	3.0	35.6	1.0	-43.3	-13.0	-30.3	
12.267	-0.6	V	3.0	34.2	1.0	-33.8	-13.0	-20.8	
3.504	-4.1	H	3.0	35.4	1.0	-38.5	-13.0	-25.5	
5.257	-3.8	H	3.0	35.3	1.0	-38.1	-13.0	-25.1	
7.009	-0.5	H	3.0	35.7	1.0	-35.2	-13.0	-22.2	
8.762	-7.7	H	3.0	35.6	1.0	-42.3	-13.0	-29.3	
12.267	-1.8	H	3.0	34.2	1.0	-34.9	-13.0	-21.9	

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

LTE QPSK Band 4 (5.0 MHz BAND WIDTH)

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS INC
Project #: 12U14456
Date: 06/17/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT and AC Adapter and Headset
Mode: BAND 4_5 MHz BW_ QPSK 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, 1712.5MHz									
3.421	-2.9	V	3.0	35.5	1.0	-37.4	-13.0	-24.4	
5.131	4.8	V	3.0	35.3	1.0	-29.5	-13.0	-16.5	
6.842	-5.7	V	3.0	35.7	1.0	-40.4	-13.0	-27.4	
8.553	-9.7	V	3.0	35.6	1.0	-44.3	-13.0	-31.3	
11.974	-2.8	V	3.0	34.2	1.0	-36.0	-13.0	-23.0	
3.421	-6.3	H	3.0	35.5	1.0	-40.8	-13.0	-27.8	
5.131	-3.2	H	3.0	35.3	1.0	-37.5	-13.0	-24.5	
6.842	-1.7	H	3.0	35.7	1.0	-36.4	-13.0	-23.4	
8.553	-8.3	H	3.0	35.6	1.0	-43.0	-13.0	-30.0	
11.974	-3.8	H	3.0	34.2	1.0	-37.1	-13.0	-24.1	
Mid Ch, 1732.50MHz									
3.460	-9.0	V	3.0	35.5	1.0	-43.5	-13.0	-30.5	
5.191	4.1	V	3.0	35.3	1.0	-30.2	-13.0	-17.2	
6.925	-4.3	V	3.0	35.7	1.0	-39.0	-13.0	-26.0	
8.657	-10.7	V	3.0	35.6	1.0	-45.3	-13.0	-32.3	
12.119	-2.5	V	3.0	34.2	1.0	-35.6	-13.0	-22.6	
3.463	-4.5	H	3.0	35.5	1.0	-39.0	-13.0	-26.0	
5.196	-3.8	H	3.0	35.3	1.0	-38.1	-13.0	-25.1	
6.925	-0.6	H	3.0	35.7	1.0	-35.4	-13.0	-22.4	
8.657	-8.4	H	3.0	35.6	1.0	-43.0	-13.0	-30.0	
12.119	-2.2	H	3.0	34.2	1.0	-35.4	-13.0	-22.4	
High Ch, 1752.5MHz									
3.501	-3.8	V	3.0	35.4	1.0	-38.3	-13.0	-25.3	
5.251	6.5	V	3.0	35.3	1.0	-27.9	-13.0	-14.9	
7.002	-2.9	V	3.0	35.7	1.0	-37.6	-13.0	-24.6	
8.752	-8.7	V	3.0	35.6	1.0	-43.3	-13.0	-30.3	
12.267	-0.6	V	3.0	34.2	1.0	-33.8	-13.0	-20.8	
3.504	-1.9	H	3.0	35.4	1.0	-36.3	-13.0	-23.3	
5.257	-0.5	H	3.0	35.3	1.0	-34.8	-13.0	-21.8	
7.009	-0.1	H	3.0	35.7	1.0	-34.8	-13.0	-21.8	
8.762	-7.7	H	3.0	35.6	1.0	-42.3	-13.0	-29.3	
12.267	-1.8	H	3.0	34.2	1.0	-34.9	-13.0	-21.9	

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

LTE 16QAM Band 4 (5.0 MHz BAND WIDTH)

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS INC
Project #: 12U14456
Date: 06/17/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT and AC Adapter and Headset
Mode: BAND 4_5 MHz BW_ 16QAM 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, 1712.5MHz									
3.421	-4.9	V	3.0	35.5	1.0	-39.4	-13.0	-26.4	
5.131	4.3	V	3.0	35.3	1.0	-30.0	-13.0	-17.0	
6.842	-6.7	V	3.0	35.7	1.0	-41.4	-13.0	-28.4	
8.553	-9.7	V	3.0	35.6	1.0	-44.3	-13.0	-31.3	
11.974	-2.8	V	3.0	34.2	1.0	-36.0	-13.0	-23.0	
3.421	-7.7	H	3.0	35.5	1.0	-42.2	-13.0	-29.2	
5.131	-3.1	H	3.0	35.3	1.0	-37.4	-13.0	-24.4	
6.842	-3.7	H	3.0	35.7	1.0	-38.4	-13.0	-25.4	
8.553	-8.3	H	3.0	35.6	1.0	-43.0	-13.0	-30.0	
11.974	-3.8	H	3.0	34.2	1.0	-37.1	-13.0	-24.1	
Mid Ch, 1732.50MHz									
3.460	-10.0	V	3.0	35.5	1.0	-44.5	-13.0	-31.5	
5.191	1.1	V	3.0	35.3	1.0	-33.2	-13.0	-20.2	
6.925	-4.3	V	3.0	35.7	1.0	-39.0	-13.0	-26.0	
8.657	-10.7	V	3.0	35.6	1.0	-45.3	-13.0	-32.3	
12.119	-2.5	V	3.0	34.2	1.0	-35.6	-13.0	-22.6	
3.463	-7.2	H	3.0	35.5	1.0	-41.7	-13.0	-28.7	
5.196	-5.8	H	3.0	35.3	1.0	-40.1	-13.0	-27.1	
6.925	-1.0	H	3.0	35.7	1.0	-35.8	-13.0	-22.8	
8.657	-8.4	H	3.0	35.6	1.0	-43.0	-13.0	-30.0	
12.119	-2.2	H	3.0	34.2	1.0	-35.4	-13.0	-22.4	
High Ch, 1752.5MHz									
3.501	-6.1	V	3.0	35.4	1.0	-40.6	-13.0	-27.6	
5.251	5.2	V	3.0	35.3	1.0	-29.2	-13.0	-16.2	
7.002	-3.9	V	3.0	35.7	1.0	-38.6	-13.0	-25.6	
8.752	-8.7	V	3.0	35.6	1.0	-43.3	-13.0	-30.3	
12.267	-0.6	V	3.0	34.2	1.0	-33.8	-13.0	-20.8	
3.504	-2.2	H	3.0	35.4	1.0	-36.6	-13.0	-23.6	
5.257	-1.2	H	3.0	35.3	1.0	-35.5	-13.0	-22.5	
7.009	-1.0	H	3.0	35.7	1.0	-35.7	-13.0	-22.7	
8.762	-7.7	H	3.0	35.6	1.0	-42.3	-13.0	-29.3	
12.267	-1.8	H	3.0	34.2	1.0	-34.9	-13.0	-21.9	

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

LTE QPSK Band 4 (10.0 MHz BAND WIDTH)

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS INC
Project #: 12U14456
Date: 06/17/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT and AC Adapter and Headset
Mode: BAND 4_10 MHz BW_ QPSK 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, 1715MHz									
3.421	-4.9	V	3.0	35.5	1.0	-39.4	-13.0	-26.4	
5.131	3.8	V	3.0	35.3	1.0	-30.5	-13.0	-17.5	
6.842	2.3	V	3.0	35.7	1.0	-32.4	-13.0	-19.4	
8.553	-9.7	V	3.0	35.6	1.0	-44.3	-13.0	-31.3	
11.974	-2.8	V	3.0	34.2	1.0	-36.0	-13.0	-23.0	
3.421	-4.7	H	3.0	35.5	1.0	-39.2	-13.0	-26.2	
5.131	-0.1	H	3.0	35.3	1.0	-34.4	-13.0	-21.4	
6.842	4.3	H	3.0	35.7	1.0	-30.4	-13.0	-17.4	
8.553	-8.3	H	3.0	35.6	1.0	-43.0	-13.0	-30.0	
11.974	-3.8	H	3.0	34.2	1.0	-37.1	-13.0	-24.1	
Mid Ch, 1732.5MHz									
3.456	-11.0	V	3.0	35.5	1.0	-45.5	-13.0	-32.5	
5.184	5.1	V	3.0	35.3	1.0	-29.2	-13.0	-16.2	
6.913	-2.3	V	3.0	35.7	1.0	-37.1	-13.0	-24.1	
8.641	-10.7	V	3.0	35.6	1.0	-45.4	-13.0	-32.4	
12.097	-2.5	V	3.0	34.2	1.0	-35.7	-13.0	-22.7	
3.456	-6.1	H	3.0	35.5	1.0	-40.5	-13.0	-27.5	
5.184	3.0	H	3.0	35.3	1.0	-31.3	-13.0	-18.3	
6.913	-1.7	H	3.0	35.7	1.0	-36.4	-13.0	-23.4	
8.641	-8.4	H	3.0	35.6	1.0	-43.1	-13.0	-30.1	
12.097	-2.2	H	3.0	34.2	1.0	-35.4	-13.0	-22.4	
High Ch, 1750MHz									
3.491	-5.8	V	3.0	35.5	1.0	-40.3	-13.0	-27.3	
5.237	4.0	V	3.0	35.3	1.0	-30.4	-13.0	-17.4	
6.983	0.1	V	3.0	35.7	1.0	-34.6	-13.0	-21.6	
8.728	-8.7	V	3.0	35.6	1.0	-43.3	-13.0	-30.3	
12.220	-0.6	V	3.0	34.2	1.0	-33.8	-13.0	-20.8	
3.491	-1.9	H	3.0	35.5	1.0	-36.4	-13.0	-23.4	
5.237	-6.2	H	3.0	35.3	1.0	-40.6	-13.0	-27.6	
6.983	1.7	H	3.0	35.7	1.0	-33.1	-13.0	-20.1	
8.728	-7.8	H	3.0	35.6	1.0	-42.4	-13.0	-29.4	
12.220	-1.9	H	3.0	34.2	1.0	-35.0	-13.0	-22.0	

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

LTE 16QAM Band 4 (10.0 MHz BAND WIDTH)

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS INC
Project #: 12U14456
Date: 06/17/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT and AC Adapter and Headset
Mode: BAND 4_10 MHz BW_ 16QAM 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, 1715MHz									
3.421	-5.9	V	3.0	35.5	1.0	-40.4	-13.0	-27.4	
5.131	2.8	V	3.0	35.3	1.0	-31.5	-13.0	-18.5	
6.842	1.7	V	3.0	35.7	1.0	-33.0	-13.0	-20.0	
8.553	-9.7	V	3.0	35.6	1.0	-44.3	-13.0	-31.3	
11.974	-2.8	V	3.0	34.2	1.0	-36.0	-13.0	-23.0	
3.421	-5.3	H	3.0	35.5	1.0	-39.8	-13.0	-26.8	
5.131	-2.1	H	3.0	35.3	1.0	-36.4	-13.0	-23.4	
6.842	3.3	H	3.0	35.7	1.0	-31.4	-13.0	-18.4	
8.553	-8.3	H	3.0	35.6	1.0	-43.0	-13.0	-30.0	
11.974	-3.8	H	3.0	34.2	1.0	-37.1	-13.0	-24.1	
Mid Ch, 1732.5MHz									
3.456	-11.0	V	3.0	35.5	1.0	-45.5	-13.0	-32.5	
5.184	4.1	V	3.0	35.3	1.0	-30.2	-13.0	-17.2	
6.913	-3.3	V	3.0	35.7	1.0	-38.1	-13.0	-25.1	
8.641	-10.7	V	3.0	35.6	1.0	-45.4	-13.0	-32.4	
12.097	-2.5	V	3.0	34.2	1.0	-35.7	-13.0	-22.7	
3.456	-12.1	H	3.0	35.5	1.0	-46.5	-13.0	-33.5	
5.184	2.2	H	3.0	35.3	1.0	-32.1	-13.0	-19.1	
6.913	-3.1	H	3.0	35.7	1.0	-37.8	-13.0	-24.8	
8.641	-8.4	H	3.0	35.6	1.0	-43.1	-13.0	-30.1	
12.097	-2.2	H	3.0	34.2	1.0	-35.4	-13.0	-22.4	
High Ch, 1750MHz									
3.491	-6.4	V	3.0	35.5	1.0	-40.9	-13.0	-27.9	
5.237	3.5	V	3.0	35.3	1.0	-30.9	-13.0	-17.9	
6.983	-0.9	V	3.0	35.7	1.0	-35.6	-13.0	-22.6	
8.728	-8.7	V	3.0	35.6	1.0	-43.3	-13.0	-30.3	
12.220	-0.6	V	3.0	34.2	1.0	-33.8	-13.0	-20.8	
3.491	-2.5	H	3.0	35.5	1.0	-37.0	-13.0	-24.0	
5.237	-7.2	H	3.0	35.3	1.0	-41.6	-13.0	-28.6	
6.983	1.0	H	3.0	35.7	1.0	-33.8	-13.0	-20.8	
8.728	-7.8	H	3.0	35.6	1.0	-42.4	-13.0	-29.4	
12.220	-1.9	H	3.0	34.2	1.0	-35.0	-13.0	-22.0	

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

LTE QPSK Band 2 (1.4 MHz BAND WIDTH)

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS INC
Project #: 12U14456
Date: 06/17/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT and AC Adapter and Headset
Mode: BAND 2_1.4 MHz BW_ QPSK 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, 1850.7MHz									
3.701	-1.1	V	3.0	35.4	1.0	-35.5	-13.0	-22.5	
5.552	-0.5	V	3.0	35.4	1.0	-34.9	-13.0	-21.9	
7.403	-3.0	V	3.0	35.7	1.0	-37.7	-13.0	-24.7	
9.254	-4.8	V	3.0	35.6	1.0	-39.4	-13.0	-26.4	
12.955	-10.7	V	3.0	34.0	1.0	-43.7	-13.0	-30.7	
3.701	3.1	H	3.0	35.4	1.0	-31.3	-13.0	-18.3	
5.552	-7.6	H	3.0	35.4	1.0	-42.0	-13.0	-29.0	
7.403	-9.0	H	3.0	35.7	1.0	-43.7	-13.0	-30.7	
9.254	-10.6	H	3.0	35.6	1.0	-45.2	-13.0	-32.2	
Mid Ch, 1880.00MHz									
3.760	7.9	V	3.0	35.3	1.0	-26.4	-13.0	-13.4	
5.640	-3.6	V	3.0	35.4	1.0	-38.0	-13.0	-25.0	
7.520	1.0	V	3.0	35.7	1.0	-33.7	-13.0	-20.7	
9.400	-4.8	V	3.0	35.6	1.0	-39.4	-13.0	-26.4	
13.160	-10.2	V	3.0	34.0	1.0	-43.1	-13.0	-30.1	
3.760	9.4	H	3.0	35.3	1.0	-24.9	-13.0	-11.9	
5.640	-8.3	H	3.0	35.4	1.0	-42.7	-13.0	-29.7	
7.520	-1.6	H	3.0	35.7	1.0	-36.3	-13.0	-23.3	
9.400	-7.5	H	3.0	35.6	1.0	-42.1	-13.0	-29.1	
High Ch, 1909.3MHz									
3.819	4.1	V	3.0	35.3	1.0	-30.2	-13.0	-17.2	
5.728	6.0	V	3.0	35.4	1.0	-28.5	-13.0	-15.5	
7.637	4.7	V	3.0	35.7	1.0	-30.0	-13.0	-17.0	
9.547	-6.7	V	3.0	35.6	1.0	-41.3	-13.0	-28.3	
13.365	-7.6	V	3.0	33.9	1.0	-40.5	-13.0	-27.5	
3.819	1.6	H	3.0	35.3	1.0	-32.7	-13.0	-19.7	
5.728	4.4	H	3.0	35.4	1.0	-30.1	-13.0	-17.1	
7.637	0.3	H	3.0	35.7	1.0	-34.4	-13.0	-21.4	
9.547	-8.5	H	3.0	35.6	1.0	-43.0	-13.0	-30.0	

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

LTE 16QAM Band 2 (1.4 MHz BAND WIDTH)

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS INC
Project #: 12U14456
Date: 06/17/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT and AC Adapter and Headset
Mode: BAND 2_1.4 MHz BW_ 16QAM 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, 1850.7MHz									
3.701	-0.3	V	3.0	35.4	1.0	-34.6	-13.0	-21.6	
5.552	0.2	V	3.0	35.4	1.0	-34.2	-13.0	-21.2	
7.403	-2.5	V	3.0	35.7	1.0	-37.2	-13.0	-24.2	
9.254	-4.6	V	3.0	35.6	1.0	-39.2	-13.0	-26.2	
12.955	-10.0	V	3.0	34.0	1.0	-43.0	-13.0	-30.0	
3.701	3.7	H	3.0	35.4	1.0	-30.7	-13.0	-17.7	
5.552	-7.2	H	3.0	35.4	1.0	-41.6	-13.0	-28.6	
7.403	-8.9	H	3.0	35.7	1.0	-43.6	-13.0	-30.6	
9.254	-10.4	H	3.0	35.6	1.0	-45.0	-13.0	-32.0	
Mid Ch, 1880.00MHz									
3.760	8.6	V	3.0	35.3	1.0	-25.7	-13.0	-12.7	
5.640	-3.0	V	3.0	35.4	1.0	-37.4	-13.0	-24.4	
7.520	1.4	V	3.0	35.7	1.0	-33.3	-13.0	-20.3	
9.400	-4.7	V	3.0	35.6	1.0	-39.3	-13.0	-26.3	
13.160	-10.0	V	3.0	34.0	1.0	-42.9	-13.0	-29.9	
3.760	10.3	H	3.0	35.3	1.0	-24.1	-13.0	-11.1	
5.640	-7.6	H	3.0	35.4	1.0	-42.0	-13.0	-29.0	
7.520	-1.1	H	3.0	35.7	1.0	-35.8	-13.0	-22.8	
9.400	-7.3	H	3.0	35.6	1.0	-41.9	-13.0	-28.9	
High Ch, 1909.3MHz									
3.819	4.7	V	3.0	35.3	1.0	-29.6	-13.0	-16.6	
5.728	6.4	V	3.0	35.4	1.0	-28.1	-13.0	-15.1	
7.637	4.8	V	3.0	35.7	1.0	-29.9	-13.0	-16.9	
9.547	-6.1	V	3.0	35.6	1.0	-40.7	-13.0	-27.7	
13.365	-7.2	V	3.0	33.9	1.0	-40.1	-13.0	-27.1	
3.819	1.7	H	3.0	35.3	1.0	-32.6	-13.0	-19.6	
5.728	4.6	H	3.0	35.4	1.0	-29.9	-13.0	-16.9	
7.637	0.9	H	3.0	35.7	1.0	-33.8	-13.0	-20.8	
9.547	-8.1	H	3.0	35.6	1.0	-42.6	-13.0	-29.6	

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

LTE QPSK Band 2 (3.0 MHz BAND WIDTH)

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS INC
Project #: 12U14456
Date: 06/17/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT and AC Adapter and Headset
Mode: BAND 2_3 MHz BW_ QPSK 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, 1851.5MHz									
3.703	-1.6	V	3.0	35.4	1.0	-36.0	-13.0	-23.0	
5.555	-1.1	V	3.0	35.4	1.0	-35.5	-13.0	-22.5	
7.406	-2.2	V	3.0	35.7	1.0	-37.0	-13.0	-24.0	
9.258	-6.0	V	3.0	35.6	1.0	-40.6	-13.0	-27.6	
12.961	-10.2	V	3.0	34.0	1.0	-43.2	-13.0	-30.2	
3.703	3.3	H	3.0	35.4	1.0	-31.1	-13.0	-18.1	
5.555	-6.7	H	3.0	35.4	1.0	-41.1	-13.0	-28.1	
7.406	-8.6	H	3.0	35.7	1.0	-43.3	-13.0	-30.3	
9.258	-11.2	H	3.0	35.6	1.0	-45.7	-13.0	-32.7	
Mid Ch, 1880.00MHz									
3.760	7.0	V	3.0	35.3	1.0	-27.3	-13.0	-14.3	
5.640	-3.7	V	3.0	35.4	1.0	-38.1	-13.0	-25.1	
7.520	2.0	V	3.0	35.7	1.0	-32.7	-13.0	-19.7	
9.400	-5.1	V	3.0	35.6	1.0	-39.7	-13.0	-26.7	
13.160	-9.6	V	3.0	34.0	1.0	-42.6	-13.0	-29.6	
3.760	10.0	H	3.0	35.3	1.0	-24.3	-13.0	-11.3	
5.640	-8.8	H	3.0	35.4	1.0	-43.2	-13.0	-30.2	
7.520	-0.9	H	3.0	35.7	1.0	-35.6	-13.0	-22.6	
9.400	-8.1	H	3.0	35.6	1.0	-42.6	-13.0	-29.6	
High Ch, 1908.5MHz									
3.817	4.8	V	3.0	35.3	1.0	-29.5	-13.0	-16.5	
5.726	4.6	V	3.0	35.4	1.0	-29.9	-13.0	-16.9	
7.634	4.3	V	3.0	35.7	1.0	-30.4	-13.0	-17.4	
9.543	-6.1	V	3.0	35.6	1.0	-40.7	-13.0	-27.7	
13.360	-7.2	V	3.0	33.9	1.0	-40.2	-13.0	-27.2	
3.817	0.8	H	3.0	35.3	1.0	-33.5	-13.0	-20.5	
5.726	3.7	H	3.0	35.4	1.0	-30.7	-13.0	-17.7	
7.634	1.2	H	3.0	35.7	1.0	-33.5	-13.0	-20.5	
9.543	-8.0	H	3.0	35.6	1.0	-42.6	-13.0	-29.6	

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

LTE 16QAM Band 2 (3.0 MHz BAND WIDTH)

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS INC
Project #: 12U14456
Date: 06/17/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT and AC Adapter and Headset
Mode: BAND 2_3 MHz BW_ 16QAM 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, 1851.5MHz									
3.703	0.4	V	3.0	35.4	1.0	-34.0	-13.0	-21.0	
5.555	-1.2	V	3.0	35.4	1.0	-35.6	-13.0	-22.6	
7.406	-2.8	V	3.0	35.7	1.0	-37.6	-13.0	-24.6	
9.258	-5.8	V	3.0	35.6	1.0	-40.4	-13.0	-27.4	
12.961	-9.5	V	3.0	34.0	1.0	-42.5	-13.0	-29.5	
3.703	3.9	H	3.0	35.4	1.0	-30.5	-13.0	-17.5	
5.555	-6.3	H	3.0	35.4	1.0	-40.7	-13.0	-27.7	
7.406	-8.5	H	3.0	35.7	1.0	-43.2	-13.0	-30.2	
9.258	-11.0	H	3.0	35.6	1.0	-45.5	-13.0	-32.5	
Mid Ch, 1880.00MHz									
3.760	8.0	V	3.0	35.3	1.0	-26.3	-13.0	-13.3	
5.640	-2.3	V	3.0	35.4	1.0	-36.7	-13.0	-23.7	
7.520	0.2	V	3.0	35.7	1.0	-34.5	-13.0	-21.5	
9.400	-4.3	V	3.0	35.6	1.0	-38.8	-13.0	-25.8	
13.160	-9.7	V	3.0	34.0	1.0	-42.7	-13.0	-29.7	
3.760	11.1	H	3.0	35.3	1.0	-23.2	-13.0	-10.2	
5.640	-8.1	H	3.0	35.4	1.0	-42.5	-13.0	-29.5	
7.520	-0.4	H	3.0	35.7	1.0	-35.1	-13.0	-22.1	
9.400	-7.9	H	3.0	35.6	1.0	-42.4	-13.0	-29.4	
High Ch, 1908.5MHz									
3.817	5.4	V	3.0	35.3	1.0	-28.9	-13.0	-15.9	
5.726	5.0	V	3.0	35.4	1.0	-29.5	-13.0	-16.5	
7.634	4.4	V	3.0	35.7	1.0	-30.3	-13.0	-17.3	
9.543	-6.7	V	3.0	35.6	1.0	-41.3	-13.0	-28.3	
13.360	-6.5	V	3.0	33.9	1.0	-39.4	-13.0	-26.4	
3.817	0.5	H	3.0	35.3	1.0	-33.8	-13.0	-20.8	
5.726	5.0	H	3.0	35.4	1.0	-29.4	-13.0	-16.4	
7.634	1.1	H	3.0	35.7	1.0	-33.6	-13.0	-20.6	
9.543	-7.2	H	3.0	35.6	1.0	-41.8	-13.0	-28.8	

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

LTE QPSK Band 2 (5.0 MHz BAND WIDTH)

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS INC
Project #: 12U14456
Date: 06/17/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT and AC Adapter and Headset
Mode: BAND 2_5 MHz BW_ QPSK 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, 1852.5MHz									
3.705	-2.0	V	3.0	35.4	1.0	-36.3	-13.0	-23.3	
5.558	-0.6	V	3.0	35.4	1.0	-35.0	-13.0	-22.0	
7.410	-2.0	V	3.0	35.7	1.0	-36.7	-13.0	-23.7	
9.263	-5.1	V	3.0	35.6	1.0	-39.7	-13.0	-26.7	
12.968	-10.1	V	3.0	34.0	1.0	-43.1	-13.0	-30.1	
3.705	3.7	H	3.0	35.4	1.0	-30.7	-13.0	-17.7	
5.558	-8.1	H	3.0	35.4	1.0	-42.5	-13.0	-29.5	
7.410	-8.4	H	3.0	35.7	1.0	-43.1	-13.0	-30.1	
9.263	-11.1	H	3.0	35.6	1.0	-45.7	-13.0	-32.7	
Mid Ch, 1880.00MHz									
3.760	8.6	V	3.0	35.3	1.0	-25.8	-13.0	-12.8	
5.640	-5.0	V	3.0	35.4	1.0	-39.4	-13.0	-26.4	
7.520	0.6	V	3.0	35.7	1.0	-34.1	-13.0	-21.1	
9.400	-4.2	V	3.0	35.6	1.0	-38.8	-13.0	-25.8	
13.160	-9.8	V	3.0	34.0	1.0	-42.8	-13.0	-29.8	
3.760	8.5	H	3.0	35.3	1.0	-25.8	-13.0	-12.8	
5.640	-9.0	H	3.0	35.4	1.0	-43.4	-13.0	-30.4	
7.520	-0.7	H	3.0	35.7	1.0	-35.4	-13.0	-22.4	
9.400	-7.1	H	3.0	35.6	1.0	-41.6	-13.0	-28.6	
High Ch, 1907.5MHz									
3.815	3.6	V	3.0	35.3	1.0	-30.7	-13.0	-17.7	
5.723	5.4	V	3.0	35.4	1.0	-29.1	-13.0	-16.1	
7.630	5.4	V	3.0	35.7	1.0	-29.3	-13.0	-16.3	
9.538	-8.0	V	3.0	35.6	1.0	-42.5	-13.0	-29.5	
13.353	-7.1	V	3.0	33.9	1.0	-40.1	-13.0	-27.1	
3.815	1.8	H	3.0	35.3	1.0	-32.5	-13.0	-19.5	
5.723	5.2	H	3.0	35.4	1.0	-29.2	-13.0	-16.2	
7.630	0.7	H	3.0	35.7	1.0	-34.0	-13.0	-21.0	
9.538	-9.0	H	3.0	35.6	1.0	-43.6	-13.0	-30.6	

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

LTE 16QAM Band 2 (5.0 MHz BAND WIDTH)

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS INC
Project #: 12U14456
Date: 06/17/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT and AC Adapter and Headset
Mode: BAND 2_3 MHz BW_ 16QAM 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, 1852.5MHz									
3.705	-0.9	V	3.0	35.4	1.0	-35.2	-13.0	-22.2	
5.558	0.9	V	3.0	35.4	1.0	-33.5	-13.0	-20.5	
7.410	-3.6	V	3.0	35.7	1.0	-38.3	-13.0	-25.3	
9.263	-4.1	V	3.0	35.6	1.0	-38.7	-13.0	-25.7	
12.968	-9.7	V	3.0	34.0	1.0	-42.7	-13.0	-29.7	
3.705	4.5	H	3.0	35.4	1.0	-29.8	-13.0	-16.8	
5.558	-7.7	H	3.0	35.4	1.0	-42.1	-13.0	-29.1	
7.410	-8.3	H	3.0	35.7	1.0	-43.0	-13.0	-30.0	
9.263	-10.9	H	3.0	35.6	1.0	-45.5	-13.0	-32.5	
Mid Ch, 1880.00MHz									
3.760	9.3	V	3.0	35.3	1.0	-25.1	-13.0	-12.1	
5.640	-4.4	V	3.0	35.4	1.0	-38.8	-13.0	-25.8	
7.520	1.0	V	3.0	35.7	1.0	-33.7	-13.0	-20.7	
9.400	-5.3	V	3.0	35.6	1.0	-39.9	-13.0	-26.9	
13.160	-9.3	V	3.0	34.0	1.0	-42.2	-13.0	-29.2	
3.760	9.1	H	3.0	35.3	1.0	-25.3	-13.0	-12.3	
5.640	-7.2	H	3.0	35.4	1.0	-41.6	-13.0	-28.6	
7.520	-0.9	H	3.0	35.7	1.0	-35.6	-13.0	-22.6	
9.400	-6.4	H	3.0	35.6	1.0	-41.0	-13.0	-28.0	
High Ch, 1907.5MHz									
3.815	5.4	V	3.0	35.3	1.0	-28.9	-13.0	-15.9	
5.723	5.0	V	3.0	35.4	1.0	-29.5	-13.0	-16.5	
7.630	4.4	V	3.0	35.7	1.0	-30.3	-13.0	-17.3	
9.538	-7.4	V	3.0	35.6	1.0	-41.9	-13.0	-28.9	
13.353	-6.7	V	3.0	33.9	1.0	-39.7	-13.0	-26.7	
3.815	1.9	H	3.0	35.3	1.0	-32.4	-13.0	-19.4	
5.723	5.4	H	3.0	35.4	1.0	-29.0	-13.0	-16.0	
7.630	1.3	H	3.0	35.7	1.0	-33.4	-13.0	-20.4	
9.538	-8.6	H	3.0	35.6	1.0	-43.2	-13.0	-30.2	

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

LTE QPSK Band 2 (10.0 MHz BAND WIDTH)

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS INC
Project #: 12U14456
Date: 06/17/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT and AC Adapter and Headset
Mode: BAND 2_10 MHz BW_ QPSK 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, 1855.0MHz									
3.710	-0.5	V	3.0	35.4	1.0	-34.8	-13.0	-21.8	
5.565	-1.9	V	3.0	35.4	1.0	-36.3	-13.0	-23.3	
7.420	-3.3	V	3.0	35.7	1.0	-38.0	-13.0	-25.0	
9.275	-4.2	V	3.0	35.6	1.0	-38.8	-13.0	-25.8	
12.985	-10.3	V	3.0	34.0	1.0	-43.3	-13.0	-30.3	
3.710	2.2	H	3.0	35.4	1.0	-32.1	-13.0	-19.1	
5.565	-8.2	H	3.0	35.4	1.0	-42.6	-13.0	-29.6	
7.420	-8.1	H	3.0	35.7	1.0	-42.8	-13.0	-29.8	
9.275	-10.1	H	3.0	35.6	1.0	-44.7	-13.0	-31.7	
Mid Ch, 1880.00MHz									
3.760	7.4	V	3.0	35.3	1.0	-26.9	-13.0	-13.9	
5.640	-4.2	V	3.0	35.4	1.0	-38.6	-13.0	-25.6	
7.520	1.7	V	3.0	35.7	1.0	-33.0	-13.0	-20.0	
9.400	-6.0	V	3.0	35.6	1.0	-40.6	-13.0	-27.6	
13.160	-9.7	V	3.0	34.0	1.0	-42.7	-13.0	-29.7	
3.760	9.6	H	3.0	35.3	1.0	-24.7	-13.0	-11.7	
5.640	-7.5	H	3.0	35.4	1.0	-41.9	-13.0	-28.9	
7.520	-1.2	H	3.0	35.7	1.0	-35.9	-13.0	-22.9	
9.400	-8.1	H	3.0	35.6	1.0	-42.6	-13.0	-29.6	
High Ch, 1905.0MHz									
3.810	3.2	V	3.0	35.3	1.0	-31.1	-13.0	-18.1	
5.715	5.9	V	3.0	35.4	1.0	-28.6	-13.0	-15.6	
7.620	5.6	V	3.0	35.7	1.0	-29.1	-13.0	-16.1	
9.525	-7.1	V	3.0	35.6	1.0	-41.7	-13.0	-28.7	
13.335	-7.1	V	3.0	33.9	1.0	-40.0	-13.0	-27.0	
3.810	2.2	H	3.0	35.3	1.0	-32.1	-13.0	-19.1	
5.715	3.9	H	3.0	35.4	1.0	-30.6	-13.0	-17.6	
7.620	1.0	H	3.0	35.7	1.0	-33.7	-13.0	-20.7	
9.525	-9.1	H	3.0	35.6	1.0	-43.6	-13.0	-30.6	

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

LTE 16QAM Band 2 (10.0 MHz BAND WIDTH)

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS INC
Project #: 12U14456
Date: 06/17/12
Test Engineer: MENGISTU MEKURIA
Configuration: EUT and AC Adapter and Headset
Mode: BAND 2_10 MHz BW_ 16QAM 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, 1855.0MHz									
3.710	0.4	V	3.0	35.4	1.0	-33.9	-13.0	-20.9	
5.565	-1.2	V	3.0	35.4	1.0	-35.6	-13.0	-22.6	
7.420	-2.8	V	3.0	35.7	1.0	-37.5	-13.0	-24.5	
9.275	-5.2	V	3.0	35.6	1.0	-39.8	-13.0	-26.8	
12.985	-9.2	V	3.0	34.0	1.0	-42.2	-13.0	-29.2	
3.710	2.5	H	3.0	35.4	1.0	-31.9	-13.0	-18.9	
5.565	-6.7	H	3.0	35.4	1.0	-41.1	-13.0	-28.1	
7.420	-8.7	H	3.0	35.7	1.0	-43.4	-13.0	-30.4	
9.275	-9.5	H	3.0	35.6	1.0	-44.1	-13.0	-31.1	
Mid Ch, 1880.00MHz									
3.760	9.3	V	3.0	35.3	1.0	-25.1	-13.0	-12.1	
5.640	-4.4	V	3.0	35.4	1.0	-38.8	-13.0	-25.8	
7.520	1.0	V	3.0	35.7	1.0	-33.7	-13.0	-20.7	
9.400	-5.9	V	3.0	35.6	1.0	-40.5	-13.0	-27.5	
13.160	-9.5	V	3.0	34.0	1.0	-42.5	-13.0	-29.5	
3.760	10.5	H	3.0	35.3	1.0	-23.8	-13.0	-10.8	
5.640	-6.8	H	3.0	35.4	1.0	-41.2	-13.0	-28.2	
7.520	-0.7	H	3.0	35.7	1.0	-35.4	-13.0	-22.4	
9.400	-7.9	H	3.0	35.6	1.0	-42.4	-13.0	-29.4	
High Ch, 1905.0MHz									
3.810	4.1	V	3.0	35.3	1.0	-30.2	-13.0	-17.2	
5.715	7.1	V	3.0	35.4	1.0	-27.4	-13.0	-14.4	
7.620	3.6	V	3.0	35.7	1.0	-31.1	-13.0	-18.1	
9.525	-5.7	V	3.0	35.6	1.0	-40.3	-13.0	-27.3	
13.335	-7.0	V	3.0	33.9	1.0	-39.9	-13.0	-26.9	
3.810	2.6	H	3.0	35.3	1.0	-31.8	-13.0	-18.8	
5.715	4.1	H	3.0	35.4	1.0	-30.4	-13.0	-17.4	
7.620	1.6	H	3.0	35.7	1.0	-33.1	-13.0	-20.1	
9.525	-8.7	H	3.0	35.6	1.0	-43.2	-13.0	-30.2	

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