



FCC CFR47 PART 22 SUBPART H
FCC CFR47 PART 24 SUBPART E
FCC CFR47 PART 27 SUBPART E
FCC CFR47 PART 27 SUBPART L

C2PC CERTIFICATION TEST REPORT

FOR

GSM/WCDMA/LTE Phone + Bluetooth, DTS/UNII a/b/g/n and NFC

MODEL NUMBER: LG-D725, D725, LGD725

FCC ID: ZNFD725

REPORT NUMBER: 14U18112-1

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: LG ELECTRONICS MOBILECOMM U.S.A., INC.
EUT DESCRIPTION: GSM/WCDMA/LTE Phone + Bluetooth, DTS/UNII a/b/g/n and NFC
MODEL: LG-D725, D725, LGD725
SERIAL NUMBER: 17T3W (Radiated)
DATE TESTED: JUNE 25 – 30, 2014

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 22H, 24E, 27E and 27L	PASS

UL Verification Services Inc. 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 Verification Services Inc. 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 Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. 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 22, FCC CFR Part 24, FCC CFR 47 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 Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at <http://www.ul.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:

$$\text{Field Strength (dBuV/m)} = \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} - \text{Preamp Gain (dB)}$$

$$36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} = 28.9 \text{ dBuV/m}$$

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 18000 MHz	4.94 dB

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a GSM/WCDMA/LTE Phone + Bluetooth, DTS/UNII a/b/g/n and NFC.

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum peak conducted and radiated ERP / EIRP output powers as follows:

FCC Part 22/24						
Band	Frequency Range(MHz)	Modulation Peak	Conducted		Radiated	
			Peak (dBm)	Peak (mW)	Peak (dBm)	Peak (mW)
GSM850	824~849	GMSK	33.1	2041.73		
	824~849	GPRS	32.9	1949.84	29.30	851.13
	824~849	EGPRS	26.7	467.73	27.39	548.27
GSM1900	1850~1910	GMSK	30.7	1174.89		
	1850~1910	GPRS	30.7	1174.89	27.95	623.73
	1850~1910	EGPRS	26.2	416.86	26.10	407.38

FCC Part 22/24						
Band	Frequency Range(MHz)	Modulation Peak	Conducted		Radiated	
			Avg (dBm)	Avg (mW)	Avg (dBm)	Avg (mW)
Band 5	824~849	REL99	24.7	295.12	21.56	143.21
	824~849	HSDPA	24.7	295.12	20.98	125.31
	824~849	HSUPA	24.3	269.15		
Band 2	1850~1910	REL99	24.2	263.02	22.65	184.07
	1850~1910	HSDPA	24.2	263.02	22.67	184.92
	1850~1910	HSUPA	24.1	257.03		

5.3. MAXIMUM OUTPUT POWER (LTE)

The transmitter has a maximum peak conducted and radiated ERP/EIRP output powers as follows:

FCC Part 27							
Band	Frequency Range(MHz)	BandWidth (MHz)	Modulation Peak	Conducted		Radiated	
				Avg (dBm)	Avg (mW)	Avg (dBm)	Avg (mW)
LTE17	704~716	10MHz	QPSK	24.56	285.75	21.09	128.52
	704~716	10MHz	16QAM	23.55	226.46	19.94	98.62

FCC Part 27							
Band	Frequency Range(MHz)	BandWidth (MHz)	Modulation Peak	Conducted		Radiated	
				Avg (dBm)	Avg (mW)	Avg (dBm)	Avg (mW)
LTE17	704~716	5MHz	QPSK	24.7	295.12	20.60	114.81
	704~716	5MHz	16QAM	23.66	232.27	19.80	95.49

FCC Part 22/2 4/27							
Band	Frequency Range(MHz)	BandWidth (MHz)	Modulation Peak	Conducted		Radiated	
				Avg (dBm)	Avg (mW)	Avg (dBm)	Avg (mW)
LTE7	2500~2570	20MHz	QPSK	24.1	257.03	20.78	119.67
	2500~2570	20MHz	16QAM	23.1	204.17	20.01	100.23

FCC Part 22/2 4/27							
Band	Frequency Range(MHz)	BandWidth (MHz)	Modulation Peak	Conducted		Radiated	
				Avg (dBm)	Avg (mW)	Avg (dBm)	Avg (mW)
LTE7	2500~2570	15MHz	QPSK	24.1	257.03	20.53	112.97
	2500~2570	15MHz	16QAM	22.8	190.54	19.90	97.72

FCC Part 22/2 4/27							
Band	Frequency Range(MHz)	BandWidth (MHz)	Modulation Peak	Conducted		Radiated	
				Avg (dBm)	Avg (mW)	Avg (dBm)	Avg (mW)
LTE7	2500~2570	10MHz	QPSK	24.2	263.02	20.86	121.89
	2500~2570	10MHz	16QAM	22.9	194.98	19.61	91.41

FCC Part 22/2 4/27							
Band	Frequency Range(MHz)	BandWidth (MHz)	Modulation Peak	Conducted		Radiated	
				Avg (dBm)	Avg (mW)	Avg (dBm)	Avg (mW)
LTE7	2500~2570	5MHz	QPSK	24.2	263.02	20.75	118.85
	2500~2570	5MHz	16QAM	22.8	190.54	19.51	89.33

FCC Part 27							
Band	Frequency Range(MHz)	BandWidth (MHz)	Modulation Peak	Conducted		Radiated	
				Avg (dBm)	Avg (mW)	Avg (dBm)	Avg (mW)
LTE5	824~849	10MHz	QPSK	24.66	292.41	21.88	154.17
	824~849	10MHz	16QAM	23.59	228.55	21.50	141.25

FCC Part 27							
Band	Frequency Range(MHz)	BandWidth (MHz)	Modulation Peak	Conducted		Radiated	
				Avg (dBm)	Avg (mW)	Avg (dBm)	Avg (mW)
LTE5	824~849	5MHz	QPSK	24.65	291.74	20.62	115.34
	824~849	5MHz	16QAM	23.52	224.90	19.82	95.94

FCC Part 27							
Band	Frequency Range(MHz)	BandWidth (MHz)	Modulation Peak	Conducted		Radiated	
				Avg (dBm)	Avg (mW)	Avg (dBm)	Avg (mW)
LTE4	1710~1755	10MHz	QPSK	24.53	283.79	25.63	365.59
	1710~1755	10MHz	16QAM	23.70	234.42	24.52	283.13

FCC Part 27							
Band	Frequency Range(MHz)	BandWidth (MHz)	Modulation Peak	Conducted		Radiated	
				Avg (dBm)	Avg (mW)	Avg (dBm)	Avg (mW)
LTE4	1710~1755	5MHz	QPSK	24.67	293.08	26.31	427.56
	1710~1755	5MHz	16QAM	23.56	226.98	25.95	393.55

FCC Part 24							
Band	Frequency Range(MHz)	BandWidth (MHz)	Modulation Peak	Conducted		Radiated	
				Avg (dBm)	Avg (mW)	Avg (dBm)	Avg (mW)
LTE2	1850~1910	10MHz	QPSK	24.70	295.12	24.65	291.74
	1850~1910	10MHz	16QAM	23.70	234.42	23.75	237.13

FCC Part 24							
Band	Frequency Range(MHz)	BandWidth (MHz)	Modulation Peak	Conducted		Radiated	
				Avg (dBm)	Avg (mW)	Avg (dBm)	Avg (mW)
LTE2	1850~1910	5MHz	QPSK	24.70	295.12	24.45	278.61
	1850~1910	5MHz	16QAM	23.70	234.42	23.45	221.30

5.4. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes a PIFA antenna for the [List the bands supported] with a maximum peak gain as follow:

Frequency (MHz)	Peak Gain (dBi)
Band 5, 824~849MHz	-2.08
Band 2, 1850~1910MHz	0.72
Band 4, 1710~1755MHz	0.03
Band 17, 704~716MHz	-2.35
LTE7, 2500~2570MHz	-4.28

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	LG ELECTRONICS	MCS-01WD	DB390078751	N/A
Earphone	LG ELECTRONICS	N/A	N/A	N/A

I/O CABLES (CONDUCTED SETUP)

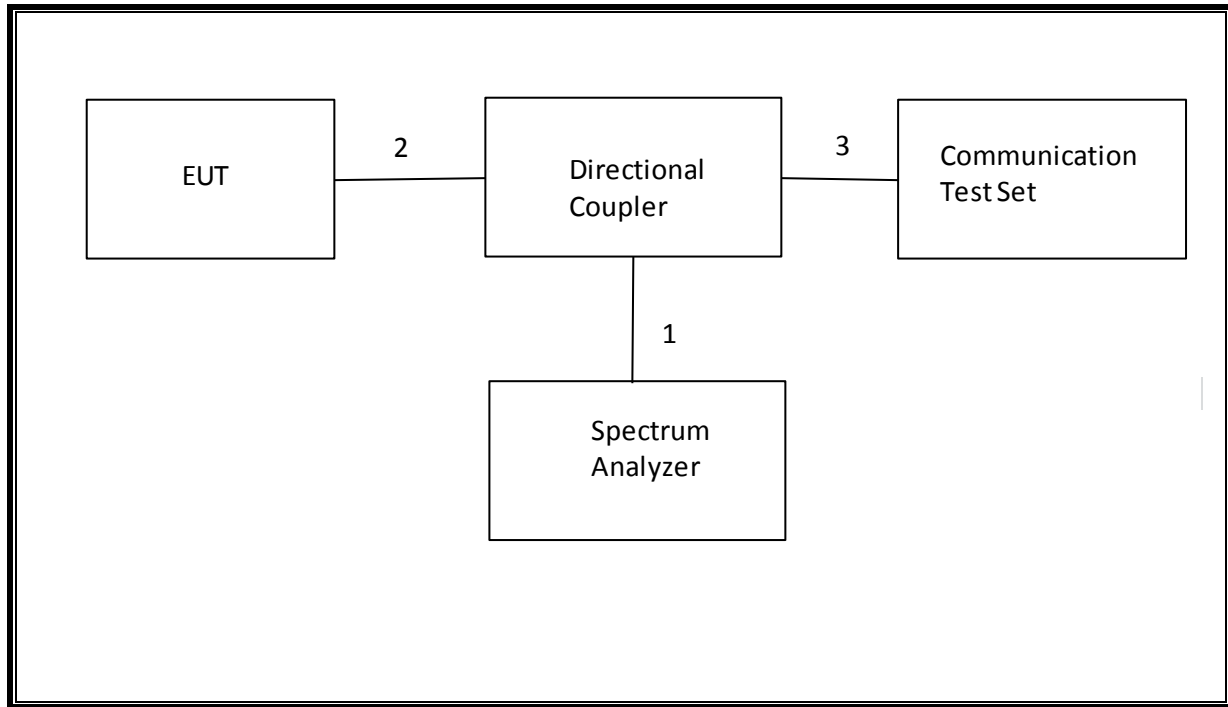
I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	RF Out	1	Spectrum Analyzer	Shielded	None	NA
2	Antenna Port	1	EUT	Shielded	0.1m	NA
3	RF In/Out	1	Communication Test Set	Shielded	1m	NA

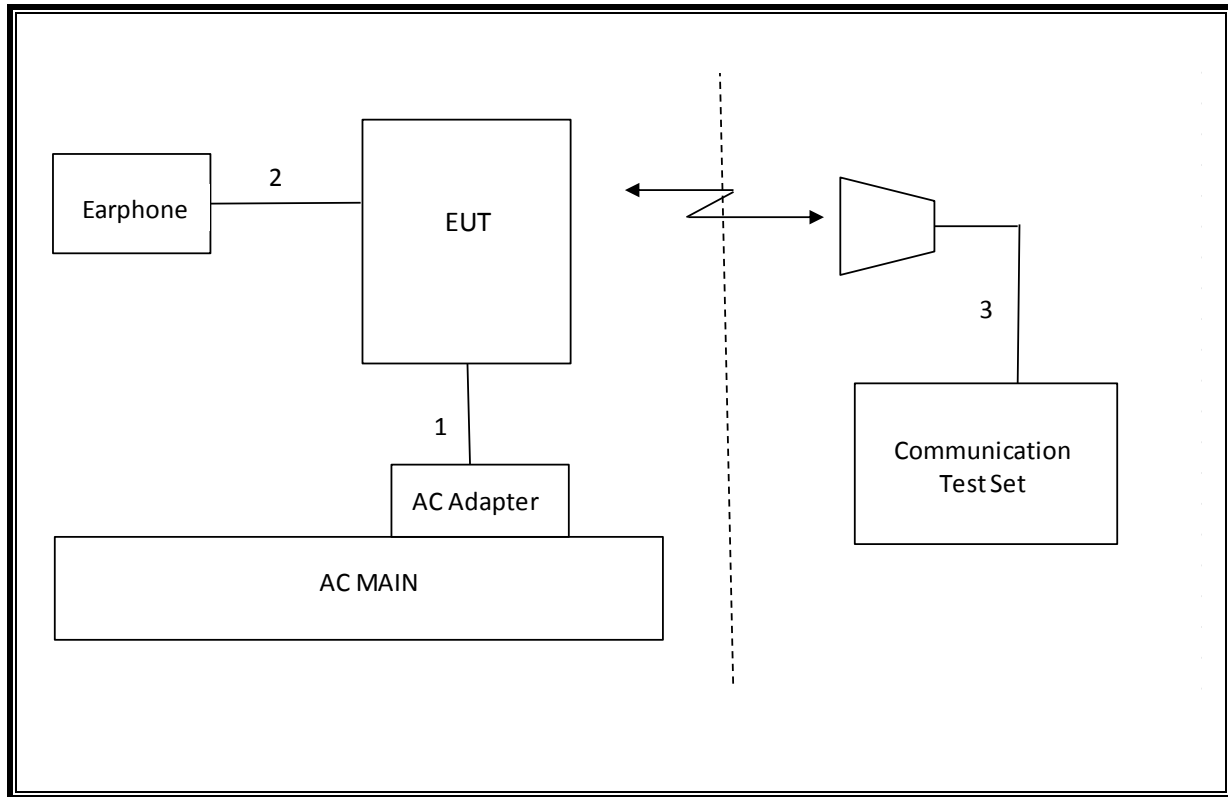
I/O CABLES (RADIATED SETUP)

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	USB	1	AC Adapter	Un-shielded	1.2m	No
2	Jack	1	Headset	Shielded	1m	No
3	RF In/out	1	Communication Test Set	Un-shielded	2m	Yes

TEST SETUP

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

SETUP DIAGRAM FOR TESTS (CONDUCTED TEST SETUP)

SETUP DIAGRAM FOR TESTS (RADIATED TEST SETUP)

6. TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST				
Description	Manufacturer	Model	Asset	Cal Due
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01179	02/26/15
Antenna, Bilog, 2 GHz	Sunol Sciences	JB1	C01011	08/14/14
Antenna, Horn, 18 GHz	EMCO	3115	C00783	10/25/14
Antenna, Horn, 18 GHz	EMCO	3115	C00784	09/25/14
Highpass Filter, 2.7 GHz	Micro-Tronics	HPM13194	N02687	CNR
Highpass Filter, 1.5 GHz	Micro-Tronics	HPM13193	N02688	CNR
Temperature / Humidity Chamber	Thermotron	SE 600-10-10	C00930	01/09/15
Communications Test Set	R&S	CMW500	T159	07/02/14
DC power supply, 8 V @ 3 A or 15 V	Agilent / HP	E3610A	None	CNR
Vector signal generator, 6 GHz	Agilent / HP	E4438C	None	07/06/14
Antenna, Tuned Dipole 400~1000	ETS	3121C DB4	C00993	02/14/15
Directional Coupler	RF-Lambda	RFDC5M06G15	None	CNR

7. Summary Table

FCC Part Section	RSS Section(s)	Test Description	Test Limit	Test Condition	Test Result	Worst Case
2.1049	N/A	Occupied Band width (99%)	N/A	Conducted	Pass	see original
22.917(a) 24.238(a) 27.53(g) 90.691	RSS-132(4.5.1) RSS-133(6.5.1) RSS-139(6.5.1)	Band Edge / Conducted Spurious Emission	-13dBm		Pass	see original
27.53(m)	RSS-199(4.5)		-25dBm		Pass	see original
2.1046	N/A	Conducted output power	N/A		Pass	see original
27.53(m)	RSS-199(4.5)	Emission Mask			Pass	see original
22.355 24.235 27.54 90.213	RSS-132(4.3) RSS-133(6.3) RSS-139(6.3) RSS-199(4.3)	Frequency Stability	2.5PPM		Pass	see original
22.913(a)(2)	RSS-132(4.4)	Effective Radiated Power	38 dBm	Radiated	Pass	29.30dBm
27.50(b)(10)	N/A		34.77 dBm		Pass	21.09dBm
24.232(c) 27.50(h)(2)	RSS-133(6.4) RSS-199(4.4)	Equivalent Isotropic Radiated Power	33dBm		Pass	27.95dBm
27.50(d)(4)	RSS-139(6.4)		30dBm		Pass	26.31dBm
22.917(a) 24.238(a) 27.53(g)	RSS-132(4.5.1) RSS-133(6.5.1) RSS-139(6.5.1)	Radiated Spurious Emission	-13dBm		Pass	-33.1dBm
27.53(m)	RSS-199(4.5)		-25dBm		Pass	-38dBm

RF POWER OUTPUT VERIFICATION

7.1. GSM/GPRS/EDGE

Function: Menu select > GSM Mobile Station > GSM 850/900/1800/1900
Press Connection control to choose the different menus
Press RESET > choose all to reset all settings
Connection Press Signal Off to turn off the signal and change settings
Network Support > GSM+GPRS or GSM+EGPRS
Main Service > Packet Data
Service selection > Test Mode A – Auto Slot Config. off
MS Signal Press Slot Config bottom on the right twice to select and change the number of time slots and power setting
 > Slot configuration > Uplink/Gamma
 > 33 dBm for GPRS 850/900
 > 30 dBm for GPRS1800/1900
BS Signal Enter the same channel number for TCH channel (test channel) and BCCH channel
Frequency Offset > + 0 Hz
Mode > BCCH and TCH
BCCH Level > -85 dBm (May need to adjust if link is not stable)
BCCH Channel > choose desire test channel [Enter the same channel number for TCH channel (test channel) and BCCH channel]
Channel Type > Off
P0> 4 dB
Slot Config > Unchanged (if already set under MS Signal)
TCH > choose desired test channel
Hopping > Off
Main Timeslot > 3 (Default)
Network Coding Scheme > CS4 (GPRS) and MCS5 ~ MCS9 (EGPRS)
Bit Stream > 2E9-1PSR Bit Pattern
AF/RF Enter appropriate offsets for Ext. Att. Output and Ext. Att. Input
Connection Press Signal On to turn on the signal and change settings

7.1.1. GSM OUTPUT POWER RESULT

Band	Mode	Ch.	f(MHz)	1 time slot	2 time slot
				Peak (dBm)	Peak (dBm)
GSM850	GMSK	128	824.2	32.9	
		190	836.6	32.8	
		251	848.8	33.1	
	GPRS	128	824.2	32.9	31.1
		190	836.6	32.8	31.0
		251	848.8	33.1	30.8
	EGPRS	128	824.2	26.7	24.4
		190	836.6	26.4	24.3
		251	848.8	26.4	24.2
GSM1900	GMSK	512	1850.2	30.7	
		661	1880	30.7	
		810	1909.8	30.7	
	GPRS	512	1850.2	30.7	28.0
		661	1880	30.7	28.1
		810	1909.8	30.7	28.1
	EGPRS	512	1850.2	26.2	23.7
		661	1880	26.1	23.7
		810	1909.8	26.1	23.7

7.2. UMTS REL 99

TEST PROCEDURE

The following summary of these settings are illustrated below:

WCDMA General Settings	Mode	Rel99
	Subtest	-
	Loopback Mode	Test Mode 1
	Rel99 RMC	12.2kbps RMC
	HSDPA FRC	Not Applicable
	HSUPA Test	Not Applicable
	Power Control Algorithm	Algorithm2
	β_c	Not Applicable
	β_d	Not Applicable
	β_{ec}	Not Applicable
	β_c/β_d	8/15
	β_{hs}	Not Applicable
	β_{ed}	Not Applicable

7.2.1. UMTS REL 99 OUTPUT POWER RESULT

Band	Mode	Ch.	f(MHz)	Conducted Power (dBm)
				Avg (dBm)
Band 5	REL99	4132	826.4	24.7
		4183	836.6	24.7
		4233	846.6	24.7
Band 2	REL99	9262	1852.4	24.2
		9400	1880	24.2
		9538	1907.6	24.2

7.3. UMTS HSDPA

The following 4 Sub-tests were completed according to Release 5 procedures in section 5.2 of 3GPP TS34.121. A summary of these settings are illustrated below:

	Mode	Rel5 HSDPA			
	Subtest	1	2	3	4
WCDMA General Settings	Loopback Mode	Test Mode 1			
	Rel99 RMC	12.2kbps RMC			
	HSDPA FRC	H-Set1			
	Power Control Algorithm	Algorithm 2			
	β_c	2/15	12/15	15/15	15/15
	β_d	15/15	15/15	8/15	4/15
	Bd (SF)	64			
	β_c/β_d	2/15	12/15	15/8	15/4
	β_{hs}	4/15	24/15	30/15	30/15
	MPR (dB)	0	0	0.5	0.5
HSDPA Specific Settings	D _{ACK}	8			
	D _{NAK}	8			
	DCQI	8			
	Ack-Nack repetition factor	3			
	CQI Feedback (Table 5.2B.4)	4ms			
	CQI Repetition Factor (Table 5.2B.4)	2			
	A _{hs} = β_{hs}/β_c	30/15			

7.3.1. UMTS HSDPA OUTPUT POWER RESULT

Band	Mode	Subset	Ch.	f(MHz)	Conducted Power (dBm)
					Avg (dBm)
Band 5	HSDPA	1	4132	826.4	24.7
			4183	836.6	24.6
			4233	846.6	24.6
		2	4132	826.4	24.7
			4183	836.6	24.6
			4233	846.6	24.7
		3	4132	826.4	24.2
			4183	836.6	24.2
			4233	846.6	24.2
		4	4132	826.4	24.2
			4183	836.6	24.2
			4233	846.6	24.2
Band 2	HSDPA	1	9262	1852.4	24.2

			9400	1880	24.2
			9538	1907.6	24.2
		2	9262	1852.4	24.2
			9400	1880	24.2
			9538	1907.6	24.2
		3	9262	1852.4	23.7
			9400	1880	23.7
			9538	1907.6	23.7
		4	9262	1852.4	23.7
			9400	1880	23.7
			9538	1907.6	23.7

7.3.2. UMTS HSUPA

TEST PROCEDURE

The following summary of these settings are illustrated below: (ETSI TS 134.121-1 Table C.11.1)

	Mode	Rel6 HSUPA	Rel6 HSUPA	Rel6 HSUPA	Rel6 HSUPA	Rel6 HSUPA
	Subtest	1	2	3	4	5
WCDMA General Settings	Loopback Mode	Test Mode 1				
	P-CPICH (dB)	-10				
	P-CCPCH (dB)	-12				
	SCH (dB)	-12				
	PICH(dB)	-15				
	DPCH (dB)	-9				
	HS-SCCH 1 (dB)	-8				
	HS-PDSCH (dB)	-3				
	Rel99 RMC	12.2kbps RMC				
	HSDPA FRC	H-Set1				
	HSUPA Test	HSUPA Loopback				
	Power Control Algorithm	Algorithm2				
	Bc	11/15	6/15	15/15	2/15	15/15
	Bd	15/15	15/15	9/15	15/15	15/15
	Bec	209/225	12/15	30/15	2/15	5/15
HSDPA Specific Settings	β_c/β_d	11/15	6/15	15/9	2/15	15/15
	Bhs	22/15	12/15	30/15	4/15	30/15
	β_{ed} (note1)	1309/225	94/75	47/15 47/15	56/75	134/15
	MPR	0	2	1	2	0
	DACK	8				
	DNAK	8				
	DCQI	8				
HSUPA Specific Settings	Ack-Nack repetition factor	3				
	CQI Feedback (Table 5.2B.4)	4ms				
	CQI Repetition Factor (Table 5.2B.4)	2				
	Ahs = β_{hs}/β_c	30/15				
	D E-DPCCH	6	8	8	5	7
	DHARQ	0	0	0	0	0
	AG Index	20	12	15	17	21
	Reference E-TFCIs	5	5	2	5	5
	ETFCI (from 34.121 Table C.11.1.3)	75	67	92	71	81
	Associated Max UL Data Rate kbps	242.1	174.9	482.8	205.8	308.9
	Reference E_TFCIs	E-TFCI 11 E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO 23 E-TFCI 75 E-TFCI PO 26 E-TFCI 81 E-TFCI PO 27		E-TFCI 11 E-TFCI PO 4 E-TFCI 92 E-TFCI PO 18	E-TFCI 11 E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO 23 E-TFCI 75 E-TFCI PO 26 E-TFCI 81 E-TFCI PO 27	

Note1: β_{ed} cannot be set directly, it is set by Absolute Grant Value.

7.3.3. UMTS HSUPA OUTPUT POWER RESULT

Band	Mode	Subset	Ch.	f(MHz)	Conducted Power (dBm)
					Avg (dBm)
Band 5	HSUPA	1	4132	826.4	24.0
			4183	836.6	24.3
			4233	846.6	24.3
		2	4132	826.4	22.7
			4183	836.6	22.7
			4233	846.6	22.7
		3	4132	826.4	23.4
			4183	836.6	23.2
			4233	846.6	23.5
		4	4132	826.4	22.7
			4183	836.6	22.7
			4233	846.6	22.7
		5	4132	826.4	24.6
			4183	836.6	24.6
			4233	846.6	24.6
Band 2	HSUPA	1	9262	1852.4	24.1
			9400	1880	23.8
			9538	1907.6	24.1
		2	9262	1852.4	22.2
			9400	1880	22.2
			9538	1907.6	22.2
		3	9262	1852.4	23.2
			9400	1880	23.2
			9538	1907.6	23.2
		4	9262	1852.4	22.2
			9400	1880	22.2
			9538	1907.6	22.2
		5	9262	1852.4	24.2
			9400	1880	24.2
			9538	1907.6	24.2

7.4. LTE OUTPUT VERIFICATION

7.4.1. LTE OUTPUT RESULT

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	Avg Pwr (dBm)		
						18650	18900	19150
						1855 MHz	1880 MHz	1905 MHz
LTE Band 2	10	QPSK	1	0	0	24.58	24.70	24.67
			1	25	0	24.48	24.70	24.68
			1	49	0	24.62	24.70	24.59
			25	0	1	23.70	23.70	23.70
			25	12	1	23.70	23.70	23.69
			25	25	1	23.70	23.70	23.69
			50	0	1	23.70	23.70	23.70
		16QAM	1	0	1	23.55	23.70	23.65
			1	25	1	23.44	23.70	23.59
			1	49	1	23.58	23.70	23.50
			25	0	2	22.70	22.70	22.70
			25	12	2	22.70	22.70	22.70
			25	25	2	22.70	22.70	22.70
			50	0	2	22.70	22.70	22.70
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	Avg Pwr (dBm)		
						18625	18900	19175
						1852.5 MHz	1880 MHz	1907.5 MHz
LTE Band 2	5	QPSK	1	0	0	24.58	24.70	24.63
			1	12	0	24.60	24.70	24.58
			1	24	0	24.55	24.70	24.56
			12	0	1	23.70	23.70	23.70
			12	6	1	23.70	23.70	23.70
			12	13	1	23.70	23.70	23.70
			25	0	1	23.70	23.70	23.70
		16QAM	1	0	1	23.70	23.70	23.70
			1	12	1	23.70	23.70	23.70
			1	24	1	23.70	23.70	23.70
			12	0	2	22.70	22.70	22.70
			12	6	2	22.70	22.70	22.70
			12	13	2	22.70	22.70	22.70
			25	0	2	22.70	22.70	22.70

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	Avg Pwr (dBm)		
						20000	20175	20350
						1715 MHz	1732.5 MHz	1750 MHz
LTE Band 4	10	QPSK	1	0	0	24.40	24.53	24.45
			1	25	0	24.30	24.54	24.46
			1	49	0	24.23	24.55	24.50
			25	0	1	23.50	23.56	23.59
			25	12	1	23.52	23.60	23.60
			25	25	1	23.40	23.56	23.62
			50	0	1	23.61	23.68	23.68
		16QAM	1	0	1	23.36	23.70	23.37
			1	25	1	23.24	23.70	23.38
			1	49	1	23.17	23.70	23.41
			25	0	2	22.47	22.65	22.63
			25	12	2	22.48	22.68	22.64
			25	25	2	22.43	22.61	22.67
			50	0	2	22.59	22.70	22.70
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	Avg Pwr (dBm)		
						19975	20175	20375
						1712.5 MHz	1732.5 MHz	1752.5 MHz
LTE Band 4	5	QPSK	1	0	0	24.42	24.67	24.52
			1	12	0	24.31	24.68	24.54
			1	24	0	24.33	24.62	24.62
			12	0	1	23.54	23.60	23.61
			12	6	1	23.44	23.58	23.59
			12	13	1	23.45	23.63	23.63
			25	0	1	23.45	23.57	23.63
		16QAM	1	0	1	23.36	23.56	23.39
			1	12	1	23.21	23.58	23.41
			1	24	1	23.28	23.51	23.47
			12	0	2	22.66	22.66	22.70
			12	6	2	22.54	22.70	22.70
			12	13	2	22.54	22.70	22.70
			25	0	2	22.60	22.64	22.70

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	Avg Pwr (dBm)		
						20450	20525	20600
						829 MHz	836.5 MHz	844 MHz
LTE Band 5	10	QPSK	1	0	0	24.66	24.60	24.61
			1	25	0	24.47	24.45	24.58
			1	49	0	24.47	24.59	24.62
			25	0	1	23.60	23.58	23.70
			25	12	1	23.53	23.59	23.70
			25	25	1	23.59	23.60	23.70
			50	0	1	23.64	23.57	23.70
		16QAM	1	0	1	23.59	23.44	23.54
			1	25	1	23.38	23.31	23.52
			1	49	1	23.36	23.46	23.55
			25	0	2	22.59	22.64	22.70
			25	12	2	22.61	22.65	22.70
			25	25	2	22.60	22.67	22.70
			50	0	2	22.62	22.58	22.69
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	Avg Pwr (dBm)		
						20425	20525	20625
						826.5 MHz	836.5 MHz	846.5 MHz
LTE Band 5	5	QPSK	1	0	0	24.65	24.60	24.62
			1	12	0	24.50	24.58	24.62
			1	24	0	24.50	24.70	24.69
			12	0	1	23.58	23.53	23.70
			12	6	1	23.56	23.55	23.70
			12	13	1	23.53	23.49	23.65
			25	0	1	23.63	23.56	23.70
		16QAM	1	0	1	23.47	23.52	23.47
			1	12	1	23.33	23.48	23.44
			1	24	1	23.36	23.59	23.48
			12	0	2	22.65	22.57	22.70
			12	6	2	22.62	22.59	22.70
			12	13	2	22.64	22.59	22.70
			25	0	2	22.70	22.51	22.70

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	Meas. MPR	Avg Pwr (dBm)		
							2510 MHz	2535 MHz	2560 MHz
LTE Band 7	20	QPSK	1	0	0	0	23.7	24.1	24.0
			1	49	0	0	23.7	24.0	24.0
			1	99	0	0	23.9	24.1	23.7
			50	0	1	1	22.7	23.0	23.0
			50	24	1	1	22.7	23.0	22.9
			50	50	1	1	22.7	22.9	22.8
			100	0	1	1	22.7	22.9	22.9
		16QAM	1	0	1	1	22.8	23.1	23.1
			1	49	1	1	22.8	23.0	23.0
			1	99	1	1	23.0	23.0	22.8
			50	0	2	2	21.8	22.1	22.0
			50	24	2	2	21.7	22.0	22.0
			50	50	2	2	21.8	22.1	21.9
			100	0	2	2	21.8	22.0	22.0
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	Meas. MPR	Avg Pwr (dBm)		
							2507.5 MHz	2535 MHz	2562.5 MHz
LTE Band 7	15	QPSK	1	0	0	0	23.8	24.1	24.1
			1	37	0	0	23.6	24.0	24.0
			1	74	0	0	23.9	24.1	23.8
			36	0	1	1	22.7	23.0	23.0
			36	20	1	1	22.7	23.0	23.0
			36	39	1	1	22.8	23.0	22.9
			75	0	1	1	22.7	23.0	23.0
		16QAM	1	0	1	1	22.6	22.8	22.8
			1	37	1	1	22.5	22.8	22.8
			1	74	1	1	22.6	22.9	22.6
			36	0	2	2	21.8	22.1	22.0
			36	20	2	2	21.7	22.0	22.0
			36	39	2	2	21.7	22.0	21.9
			75	0	2	2	21.7	22.0	22.0
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	Meas. MPR	Avg Pwr (dBm)		
							2505 MHz	2535 MHz	2565 MHz
LTE Band 7	10	QPSK	1	0	0	0	23.8	24.2	24.0
			1	25	0	0	23.7	24.1	23.9
			1	49	0	0	23.7	24.2	23.7
			25	0	1	0	22.7	23.1	22.9
			25	12	1	0	22.7	23.0	22.9
			25	25	1	0	22.7	23.0	22.8
			50	0	1	0	22.7	23.0	22.9
		16QAM	1	0	1	0	22.7	22.9	22.8
			1	25	1	0	22.6	22.8	22.7
			1	49	1	0	22.5	22.9	22.5
			25	0	2	0	21.8	22.2	22.0
			25	12	2	0	21.8	22.0	21.9
			25	25	2	0	21.7	22.1	21.8
			50	0	2	0	21.8	22.1	21.9

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	Meas. MPR	Avg Pwr (dBm)		
							2502.5 MHz	2535 MHz	2567.5 MHz
LTE Band 7	5	QPSK	1	0	0	0	23.8	24.2	24.0
			1	12	0	0	23.7	24.1	23.9
			1	24	0	0	23.8	24.2	23.8
			12	0	1	1	22.8	23.0	22.9
			12	6	1	1	22.8	23.0	22.9
			12	13	1	1	22.8	23.0	22.9
			25	0	1	1	22.7	23.0	22.9
		16QAM	1	0	1	1	22.6	22.8	22.7
			1	12	1	1	22.4	22.7	22.6
			1	24	1	1	22.6	22.8	22.6
			12	0	2	2	21.8	22.0	21.9
			12	6	2	2	21.8	22.1	22.0
			12	13	2	2	21.8	22.1	21.9
			25	0	2	2	21.8	22.2	21.9

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	Avg Pwr (dBm)
						23790
						710 MHz
LTE Band 17	10	QPSK	1	0	0	24.54
			1	25	0	24.56
			1	49	0	24.53
			25	0	1	23.62
			25	12	1	23.66
			25	25	1	23.70
			50	0	1	23.70
		16QAM	1	0	1	23.55
			1	25	1	23.54
			1	49	1	23.45
			25	0	2	22.65
			25	12	2	22.70
			25	25	2	22.64
			50	0	2	22.70
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	Avg Pwr (dBm)
						23790
						710 MHz
LTE Band 17	5	QPSK	1	0	0	24.70
			1	12	0	24.62
			1	24	0	24.69
			12	0	1	23.70
			12	7	1	23.65
			12	13	1	23.67
			25	0	1	23.66
		16QAM	1	0	1	23.66
			1	12	1	23.61
			1	24	1	23.65
			12	0	2	22.70
			12	7	2	22.68
			12	13	2	22.68
			25	0	2	22.67

8. RADIATED TEST RESULTS

8.1. RADIATED POWER (ERP & EIRP)

RULE PART(S)

FCC: §2.1046, §22.913, §24.232, and § 27

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.

TEST RESULTS

8.1.1. ERP/EIRP Results

Band	Mode	Channel	f(MHz)	ERP / EIRP	
				dBm	mW
Band 2	REL99	9262	1852.4	22.65	184.07
		9400	1880	22.58	181.13
		9538	1907.6	22.23	167.10
	HSDPA	9262	1852.4	22.35	171.79
		9400	1880	22.67	184.92
		9538	1907.6	22.23	167.10

Band	Mode	Channel	f(MHz)	ERP / EIRP	
				dBm	mW
Band 5	REL99	4132	826.4	20.65	116.14
		4183	836.6	21.56	143.21
		4233	846.6	20.99	125.60
	HSDPA	4132	826.4	20.46	111.17
		4183	836.6	20.98	125.31
		4233	846.6	20.84	121.33

Band	Mode	Channel	f(MHz)	ERP / EIRP	
				dBm	mW
GSM1900	GPRS	512	1850.2	27.64	580.76
		661	1880	27.95	623.73
		810	1909.8	25.19	330.36
	EGPRS	512	1850.2	25.59	362.24
		661	1880	26.10	407.38
		810	1909.8	23.50	223.87

Band	Mode	Channel	f(MHz)	ERP / EIRP	
				dBm	mW
GSM850	GPRS	128	824.2	28.94	783.42
		190	836.6	29.30	851.13
		251	848.8	29.13	818.46
	EGPRS	128	824.2	26.35	431.51
		190	836.6	27.07	509.33
		251	848.8	27.39	548.27

8.1.2. LTE ERP/EIRP Results

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE17	10	QPSK	1/0	709	20.54	113.24
			1/0	710	21.09	128.52
			1/0	711	20.82	120.78
		16QAM	1/0	709	19.83	96.16
			1/0	710	19.94	98.62
			1/0	711	19.80	95.49

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE17	5	QPSK	1/0	706.5	20.20	104.71
			1/0	710	20.60	114.81
			1/0	713.5	20.60	114.81
		16QAM	1/0	706.5	19.10	81.28
			1/0	710	19.80	95.49
			1/0	713.5	19.60	91.20

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE7	20	QPSK	1/0	2510	16.36	43.25
			1/0	2535	18.81	76.03
			1/0	2560	20.78	119.67
		16QAM	1/0	2510	19.38	86.69
			1/0	2535	19.30	85.11
			1/0	2560	20.01	100.23

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE7	15	QPSK	1/0	2507.5	20.53	112.97
			1/0	2535	19.48	88.71
			1/0	2562.5	19.51	89.33
		16QAM	1/0	2507.5	17.40	54.95
			1/0	2535	19.90	97.72
			1/0	2562.5	18.80	75.85

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE7	10	QPSK	1/0	2505	20.10	102.32
			1/0	2535	20.86	121.89
			1/0	2565	18.91	77.80
		16QAM	1/0	2505	19.30	85.11
			1/0	2535	19.61	91.41
			1/0	2565	17.69	58.74

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE7	5	QPSK	1/0	2502.5	19.71	93.54
			1/0	2535	20.12	102.80
			1/0	2567.5	20.75	118.85
		16QAM	1/0	2502.5	19.08	80.90
			1/0	2535	19.37	86.49
			1/0	2567.5	19.51	89.33

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE5	10	QPSK	1/0	829	21.88	154.17
			1/0	836.5	21.05	127.35
			1/0	844	20.02	100.46
		16QAM	1/0	829	21.50	141.25
			1/0	836.5	20.75	118.85
			1/0	844	21.11	129.12

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE5	5	QPSK	1/0	826.5	18.69	73.96
			1/0	836.5	18.53	71.28
			1/0	846.5	20.62	115.34
		16QAM	1/0	826.5	18.31	67.76
			1/0	836.5	17.74	59.42
			1/0	846.5	19.82	95.94

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE4	10	QPSK	1/0	1715	23.80	239.88
			1/0	1732.5	24.80	301.99
			1/0	1750	25.63	365.59
		16QAM	1/0	1715	22.73	187.49
			1/0	1732.5	23.69	233.88
			1/0	1750	24.52	283.13

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE4	5	QPSK	1/0	1712.5	24.62	289.73
			1/0	1732.5	26.13	410.20
			1/0	1752.5	26.31	427.56
		16QAM	1/0	1712.5	24.12	258.22
			1/0	1732.5	25.95	393.55
			1/0	1752.5	25.20	331.13

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE2	10	QPSK	1/0	1855	24.65	291.74
			1/0	1880	24.45	278.61
			1/0	1905	23.35	216.27
		16QAM	1/0	1855	23.75	237.13
			1/0	1880	23.65	231.73
			1/0	1905	22.25	167.88

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE2	5	QPSK	1/0	1852.5	24.45	278.61
			1/0	1880	24.15	260.01
			1/0	1907.5	22.45	175.79
		16QAM	1/0	1852.5	23.45	221.30
			1/0	1880	23.15	206.53
			1/0	1907.5	21.25	133.35

8.1.3. ERP/EIRP DATA

Band LTE17 5MHz 16QAM M	High Frequency Substitution Measurement UL Verification Services, Inc. Chamber C								
	Company:		LG						
	Project #:		14U18112						
	Date:		06/26/15						
	Test Engineer:		Bob Liu						
	Configuration:		EUT only						
	Mode:		LTE Band 17_5MHz_16QAM						
	Test Equipment:								
	Receiving: Sunol T407, and 3m Chamber N-type Cable (Setup this one for testing EUT)								
	Substitution: Dipole S/N: 00022117, 4ft SMA Cable (SN # 245200 001) Warehouse.								
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch									
	706.50	7.90	V	0.9	0.0	7.00	38.5	-31.4	
	706.50	20.00	H	0.9	0.0	19.10	38.5	-19.3	
Mid Ch									
	710.00	9.20	V	0.9	0.0	8.30	38.5	-30.1	
	710.00	20.70	H	0.9	0.0	19.80	38.5	-18.6	
High Ch									
	713.50	9.30	V	0.9	0.0	8.40	38.5	-30.0	
	713.50	20.50	H	0.9	0.0	19.60	38.5	-18.8	
Rev. 3.17.11									
Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm									

Band LTE17 5MHz QPSK	High Frequency Substitution Measurement UL Verification Services, Inc. Chamber C																																																																																																	
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Band LTE17 10MHz z 16QAM	High Frequency Substitution Measurement UL Verification Services, Inc. Chamber C								
	Company:		LG						
	Project #:		14U18112						
	Date:		06/26/15						
	Test Engineer:		Bob Liu						
	Configuration:		EUT only						
	Mode:		LTE Band 17_10MHz_16QAM						
	Test Equipment:								
	Receiving: Sunol T407, and 3m Chamber N-type Cable (Setup this one for testing EUT)								
	Substitution: Dipole S/N: 00022117, 4ft SMA Cable (SN # 245200 001) Warehouse.								
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Low Ch									
709.00	9.60	V	0.9	0.0	8.70	38.5	-29.7		
709.00	20.73	H	0.9	0.0	19.83	38.5	-18.6		
Mid Ch									
710.00	9.70	V	0.9	0.0	8.80	38.5	-29.6		
710.00	20.84	H	0.9	0.0	19.94	38.5	-18.5		
High Ch									
711.00	9.50	V	0.9	0.0	8.60	38.5	-29.8		
711.00	20.70	H	0.9	0.0	19.80	38.5	-18.6		
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Band LTE17 10MHz z QPSK	High Frequency Substitution Measurement UL Verification Services, Inc. Chamber C																																																																																																	
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Band LTE7 20MHz Z 16QAM M	High Frequency Substitution Measurement Compliance Certification Services Chamber C Company: LG Project #: 14U18112 Date: 06/27/14 Test Engineer: Steven Her Configuration: EUT only, X-position Mode: LTE B7 20M 16QAM Test Equipment: Receiving: Sunol T119, and 3m Chamber N-type Cable (Setup this one for testing EUT) Substitution: Horn T72 3115, 4ft SMA Cable (SN # 244640 002) <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>f MHz</th> <th>SG reading (dBm)</th> <th>Ant. Pol. (H/V)</th> <th>Cable Loss (dB)</th> <th>Antenna Gain (dBd)</th> <th>ERP (dBm)</th> <th>Limit (dBm)</th> <th>Margin (dB)</th> <th>Notes</th> </tr> </thead> <tbody> <tr> <td>Low Ch</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2510.00</td> <td>6.93</td> <td>V</td> <td>0.9</td> <td>9.5</td> <td>15.50</td> <td>38.5</td> <td>-23.0</td> <td></td> </tr> <tr> <td>2510.00</td> <td>10.81</td> <td>H</td> <td>0.9</td> <td>9.5</td> <td>19.38</td> <td>38.5</td> <td>-19.1</td> <td></td> </tr> <tr> <td>Mid Ch</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2535.00</td> <td>4.28</td> <td>V</td> <td>0.9</td> <td>9.5</td> <td>12.88</td> <td>38.5</td> <td>-25.6</td> <td></td> </tr> <tr> <td>2535.00</td> <td>10.70</td> <td>H</td> <td>0.9</td> <td>9.5</td> <td>19.30</td> <td>38.5</td> <td>-19.2</td> <td></td> </tr> <tr> <td>High Ch</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2560.00</td> <td>4.77</td> <td>V</td> <td>0.9</td> <td>9.7</td> <td>13.57</td> <td>38.5</td> <td>-24.9</td> <td></td> </tr> <tr> <td>2560.00</td> <td>11.21</td> <td>H</td> <td>0.9</td> <td>9.7</td> <td>20.01</td> <td>38.5</td> <td>-18.4</td> <td></td> </tr> </tbody> </table> Rev. 3.17.11	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes	Low Ch									2510.00	6.93	V	0.9	9.5	15.50	38.5	-23.0		2510.00	10.81	H	0.9	9.5	19.38	38.5	-19.1		Mid Ch									2535.00	4.28	V	0.9	9.5	12.88	38.5	-25.6		2535.00	10.70	H	0.9	9.5	19.30	38.5	-19.2		High Ch									2560.00	4.77	V	0.9	9.7	13.57	38.5	-24.9		2560.00	11.21	H	0.9	9.7	20.01	38.5	-18.4	
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Band LTE7 15MH z 16QA M	High Frequency Substitution Measurement UL Verification Services, Inc. Chamber C								
	Company: LG Project #: 14U18112 Date: 06/27/14 Test Engineer: Steven Her Configuration: EUT only, X-position Mode: LTE B7 15M 16QAM								
	Test Equipment: Receiving: Horn T119, and Chamber C SMA Cables Substitution: Horn T72 Substitution, 4ft SMA Cable Warehouse								
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
	Low Ch								
	2507.50	5.90	V	0.9	9.5	14.50	33.0	-18.5	
	2507.50	8.80	H	0.9	9.5	17.40	33.0	-15.6	
	Mid Ch								
	2535.00	5.90	V	0.9	9.5	14.50	33.0	-18.5	
	2535.00	11.30	H	0.9	9.5	19.90	33.0	-13.1	
High Ch									
2562.50	10.50	V	0.9	9.6	19.20	33.0	-13.8		
2562.50	10.10	H	0.9	9.6	18.80	33.0	-14.2		
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									

Band LTE7 15MHz z QPSK	High Frequency Substitution Measurement UL Verification Services, Inc. Chamber C																																																																																																		
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	<table border="1"> <thead> <tr> <th>f MHz</th> <th>SG reading (dBm)</th> <th>Ant. Pol. (H/V)</th> <th>Cable Loss (dB)</th> <th>Antenna Gain (dBd)</th> <th>EIRP (dBm)</th> <th>Limit (dBm)</th> <th>Margin (dB)</th> <th>Notes</th> </tr> </thead> <tbody> <tr> <td colspan="9">Low Ch</td> </tr> <tr> <td>2507.50</td> <td>6.25</td> <td>V</td> <td>0.9</td> <td>9.5</td> <td>14.85</td> <td>33.0</td> <td>-18.2</td> <td></td> </tr> <tr> <td>2507.50</td> <td>11.93</td> <td>H</td> <td>0.9</td> <td>9.5</td> <td>20.53</td> <td>33.0</td> <td>-12.5</td> <td></td> </tr> <tr> <td colspan="9">Mid Ch</td> </tr> <tr> <td>2535.00</td> <td>6.10</td> <td>V</td> <td>0.9</td> <td>9.5</td> <td>14.70</td> <td>33.0</td> <td>-18.3</td> <td></td> </tr> <tr> <td>2535.00</td> <td>10.88</td> <td>H</td> <td>0.9</td> <td>9.5</td> <td>19.48</td> <td>33.0</td> <td>-13.5</td> <td></td> </tr> <tr> <td colspan="9">High Ch</td> </tr> <tr> <td>2562.50</td> <td>10.72</td> <td>V</td> <td>0.9</td> <td>9.6</td> <td>19.42</td> <td>33.0</td> <td>-13.6</td> <td></td> </tr> <tr> <td>2562.50</td> <td>10.81</td> <td>H</td> <td>0.9</td> <td>9.6</td> <td>19.51</td> <td>33.0</td> <td>-13.5</td> <td></td> </tr> </tbody> </table>									f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes	Low Ch									2507.50	6.25	V	0.9	9.5	14.85	33.0	-18.2		2507.50	11.93	H	0.9	9.5	20.53	33.0	-12.5		Mid Ch									2535.00	6.10	V	0.9	9.5	14.70	33.0	-18.3		2535.00	10.88	H	0.9	9.5	19.48	33.0	-13.5		High Ch									2562.50	10.72	V	0.9	9.6	19.42	33.0	-13.6		2562.50	10.81	H	0.9	9.6	19.51	33.0	-13.5	
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes																																																																																										
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2562.50	10.72	V	0.9	9.6	19.42	33.0	-13.6																																																																																												
2562.50	10.81	H	0.9	9.6	19.51	33.0	-13.5																																																																																												
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm																																																																																																			

Band LTE7 10MHz z 16QAM M	High Frequency Substitution Measurement UL Verification Services, Inc. Chamber C								
	Company: LG Project #: 14U18112 Date: 06/26/14 Test Engineer: D. Sblendorio Configuration: EUT Mode: LTE7, 10MHz, 16QAM								
	Test Equipment: Receiving: Horn T119, and Chamber C SMA Cables Substitution: Horn T72 Substitution, 4ft SMA Cable Warehouse								
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
	Low Ch								
	2505.00	7.35	V	0.9	9.5	15.97	33.0	-17.0	
	2505.00	10.68	H	0.9	9.5	19.30	33.0	-13.7	
	Mid Ch								
	2535.00	8.90	V	0.9	9.5	17.52	33.0	-15.5	
	2535.00	10.99	H	0.9	9.5	19.61	33.0	-13.4	
High Ch									
2565.00	8.45	V	0.9	9.5	17.10	33.0	-15.9		
2565.00	9.04	H	0.9	9.5	17.69	33.0	-15.3		
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									

Band LTE7 10MHz z QPSK	High Frequency Substitution Measurement UL Verification Services, Inc. Chamber C								
	Company: LG Project #: 14U18112 Date: 06/26/14 Test Engineer: D. Sblendorio Configuration: EUT Mode: LTE7, 10MHz, QPSK								
	Test Equipment: Receiving: Horn T119, and Chamber C SMA Cables Substitution: Horn T72 Substitution, 4ft SMA Cable Warehouse								
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
	Low Ch								
	2505.00	6.84	V	0.9	9.5	15.46	33.0	-17.5	
	2505.00	11.48	H	0.9	9.5	20.10	33.0	-12.9	
	Mid Ch								
	2535.00	9.90	V	0.9	9.5	18.52	33.0	-14.5	
	2535.00	12.24	H	0.9	9.5	20.86	33.0	-12.1	
High Ch									
2565.00	9.52	V	0.9	9.5	18.17	33.0	-14.8		
2565.00	10.26	H	0.9	9.5	18.91	33.0	-14.1		
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									

Band

LTE5

10MHz

16QAM

High Frequency Substitution Measurement

UL Verification Services, Inc. Chamber C

Company: LG Electronics

Project #: 14U18112

Date: 6/26/14

Test Engineer: Bob Liu

Configuration: EUT ONLY

Mode: LTE5 10MHz FUND 16QAM

Test Equipment:

Receiving: Sunol T407, and 3m Chamber N-type Cable (Setup this one for testing EUT)

Substitution: Dipole S/N: 00022117, 4ft SMA Cable (SN # 245200 001) Warehouse.

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
829.00	18.98	V	0.9	0.0	18.08	38.5	-20.4	
829.00	22.40	H	0.9	0.0	21.50	38.5	-16.9	
Mid Ch								
836.50	20.37	V	0.9	0.0	19.47	38.5	-19.0	
836.50	21.65	H	0.9	0.0	20.75	38.5	-17.7	
High Ch								
844.00	21.02	V	0.9	0.0	20.12	38.5	-18.3	
844.00	22.01	H	0.9	0.0	21.11	38.5	-17.3	

Rev. 3.17.11

Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm

Band LTE5 10MHz QPSK	High Frequency Substitution Measurement UL Verification Services, Inc. Chamber C								
	Company: LG Electronics Project #: 14U18112 Date: 6/26/14 Test Engineer: Bob Liu Configuration: EUT ONLY Mode: LTE5 10MHz FUND QPSK								
	Test Equipment: Receiving: Sunol T407, and 3m Chamber N-type Cable (Setup this one for testing EUT) Substitution: Dipole S/N: 00022117, 4ft SMA Cable (SN # 245200 001) Warehouse.								
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
	Low Ch								
	829.00	18.55	V	0.9	0.0	17.65	38.5	-20.8	
	829.00	22.78	H	0.9	0.0	21.88	38.5	-16.6	
	Mid Ch								
	836.50	20.30	V	0.9	0.0	19.40	38.5	-19.0	
	836.50	21.95	H	0.9	0.0	21.05	38.5	-17.4	
High Ch									
844.00	20.11	V	0.9	0.0	19.21	38.5	-19.2		
844.00	20.92	H	0.9	0.0	20.02	38.5	-18.4		
Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm									

Band LTE5 5MHz 16QAM	High Frequency Substitution Measurement UL Verification Services, Inc. Chamber C								
	Company: LG Electronics Project #: 14U18112 Date: 4/22/14 Test Engineer: N. Sheridan Configuration: EUT ONLY Mode: LTE5 5MHz FUND 16QAM								
	Test Equipment: Receiving: Sunol T407, and 3m Chamber N-type Cable (Setup this one for testing EUT) Substitution: Dipole S/N: 00022117, 4ft SMA Cable (SN # 245200 001) Warehouse.								
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
	Low Ch								
	826.50	16.73	V	0.9	0.0	15.84	38.5	-22.6	
	826.50	19.21	H	0.9	0.0	18.31	38.5	-20.1	
	Mid Ch								
	836.50	14.01	V	0.9	0.0	13.11	38.5	-25.3	
	836.50	18.64	H	0.9	0.0	17.74	38.5	-20.7	
High Ch									
846.50	13.05	V	0.9	0.0	12.15	38.5	-26.3		
846.50	20.72	H	0.9	0.0	19.82	38.5	-18.6		
Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm									

Band

LTE5

5MHz

QPSK

High Frequency Substitution Measurement

UL Verification Services, Inc. Chamber C

Company: LG Electronics

Project #: 14U18112

Date: 6/27/14

Test Engineer: N. Sheridan

Configuration: EUT ONLY

Mode: LTE5 5MHz FUND QPSK

Test Equipment:

Receiving: Sunol T407, and 3m Chamber N-type Cable (Setup this one for testing EUT)

Substitution: Dipole S/N: 00022117, 4ft SMA Cable (SN # 245200 001) Warehouse.

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
826.50	17.42	V	0.9	0.0	16.53	38.5	-21.9	
826.50	19.59	H	0.9	0.0	18.69	38.5	-19.8	
Mid Ch								
836.50	14.85	V	0.9	0.0	13.95	38.5	-24.5	
836.50	19.43	H	0.9	0.0	18.53	38.5	-19.9	
High Ch								
846.50	14.48	V	0.9	0.0	13.58	38.5	-24.9	
846.50	21.52	H	0.9	0.0	20.62	38.5	-17.8	

Rev. 3.17.11

Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm

Band LTE4 10MHz Z 16QAM	High Frequency Substitution Measurement UL Verification Services, Inc. Chamber C							
	Company: LG Electronics Project #: 14U18112 Date: 06/26/14 Test Engineer: D. Sblendorio Configuration: EUT Only Mode: LTE B4 10MHz 16QAM							
	Test Equipment: Receiving: Horn T119, and Chamber C SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable Warehouse							
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin
	MHz	(dBm)	(H/V)	(dB)	(dBd)	(dBm)	(dBm)	(dB)
	Low Ch							
	1715.00	15.29	V	0.9	8.3	22.73	30.0	-7.3
	1715.00	14.47	H	0.9	8.3	21.91	30.0	-8.1
	Mid Ch							
	1732.50	14.09	V	0.9	8.2	21.44	30.0	-8.6
	1732.50	16.34	H	0.9	8.2	23.69	30.0	-6.3
	High Ch							
	1750.00	14.84	V	0.9	8.2	22.19	30.0	-7.8
	1750.00	17.17	H	0.9	8.2	24.52	30.0	-5.5
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

Band

LTE4

10MHz

z

QPSK

High Frequency Substitution Measurement
UL Verification Services, Inc. Chamber C

Company: LG Electronics
Project #: 14U18112
Date: 06/26/14
Test Engineer: D. Sblendorio
Configuration: EUT Only
Mode: LTE B4 10MHz QPSK

Test Equipment:
Receiving: Horn T119, and Chamber C SMA Cables
Substitution: Horn T59 Substitution, 4ft SMA Cable Warehouse

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
1715.00	16.36	V	0.9	8.3	23.80	30.0	-6.2	
1715.00	16.24	H	0.9	8.3	23.68	30.0	-6.3	
Mid Ch								
1732.50	16.36	V	0.9	8.2	23.71	30.0	-6.3	
1732.50	17.45	H	0.9	8.2	24.80	30.0	-5.2	
High Ch								
1750.00	15.78	V	0.9	8.2	23.13	30.0	-6.9	
1750.00	18.28	H	0.9	8.2	25.63	30.0	-4.4	

Rev. 3.17.11
Note: For Band 4 EIRP limit is 30dBm

Band

LTE4

5MHz

16QAM

M

High Frequency Substitution Measurement

UL Verification Services, Inc. Chamber C

Company: LG Electronics

Project #: 14U18112

Date: 06/26/14

Test Engineer: D. Sblendorio

Configuration: EUT Only

Mode: LTE B4 5MHz 16QAM

Test Equipment:

Receiving: Horn T119, and Chamber C SMA Cables

Substitution: Horn T59 Substitution, 4ft SMA Cable Warehouse

f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
MHz	(dBm)	(H/V)	(dB)	(dBd)	(dBm)	(dBm)	(dB)	
Low Ch								
1712.50	12.89	V	0.9	8.3	20.33	30.0	-9.7	
1712.50	16.68	H	0.9	8.3	24.12	30.0	-5.9	
Mid Ch								
1732.50	13.00	V	0.9	8.2	20.35	30.0	-9.7	
1732.50	18.60	H	0.9	8.2	25.95	30.0	-4.1	
High Ch								
1752.50	12.98	V	0.9	8.2	20.33	30.0	-9.7	
1752.50	17.85	H	0.9	8.2	25.20	30.0	-4.8	

Rev. 3.17.11

Note: For Band 4 EIRP limit is 30dBm

Band

LTE4

5MHz

QPSK

High Frequency Substitution Measurement

UL Verification Services, Inc. Chamber C

Company: LG Electronics

Project #: 14U18112

Date: 06/26/14

Test Engineer: D. Sblendorio

Configuration: EUT Only

Mode: LTE B4 5MHz QPSK

Test Equipment:

Receiving: Horn , and Chamber C SMA Cables

Substitution: Horn Substitution, 4ft SMA Cable Warehouse

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
1712.50	13.84	V	0.9	8.3	21.28	30.0	-8.7	
1712.50	17.18	H	0.9	8.3	24.62	30.0	-5.4	
Mid Ch								
1732.50	15.22	V	0.9	8.2	22.57	30.0	-7.4	
1732.50	18.78	H	0.9	8.2	26.13	30.0	-3.9	
High Ch								
1752.50	15.03	V	0.9	8.2	22.38	30.0	-7.6	
1752.50	18.96	H	0.9	8.2	26.31	30.0	-3.7	

Rev. 3.17.11

Note: For Band 4 EIRP limit is 30dBm

Band
LTE2
10MHz
Z
16QAM

High Frequency Substitution Measurement
UL Verification Services, Inc. Chamber B

Company: LG Electronics
Project #: 14U18112
Date: 06/26/14
Test Engineer: Kelvin Huynh
Configuration: EUT Only Z Position
Mode: LTE B2 10MHz 16QAM

Test Equipment:
Receiving: Horn T345, and Chamber C SMA Cables
Substitution: Horn T72 Substitution, 4ft SMA Cable Warehouse

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
1855.00	14.60	V	0.9	7.9	21.65	33.0	-11.4	
1855.00	16.70	H	0.9	7.9	23.75	33.0	-9.3	
Mid Ch								
1880.00	14.80	V	0.9	7.9	21.85	33.0	-11.2	
1880.00	16.60	H	0.9	7.9	23.65	33.0	-9.4	
High Ch								
1905.00	14.20	V	0.9	7.9	21.25	33.0	-11.8	
1905.00	15.20	H	0.9	7.9	22.25	33.0	-10.8	

Rev. 3.17.11
Note: For Band 4 EIRP limit is 30dBm

Band

LTE2

10MHz

z

QPSK

High Frequency Substitution Measurement
UL Verification Services, Inc. Chamber B

Company: LG Electronics
Project #: 14U18112
Date: 06/26/14
Test Engineer: Kelvin Huynh
Configuration: EUT Only Z Position
Mode: LTE B2 10MHz QPSK

Test Equipment:
Receiving: Horn T345, and Chamber C SMA Cables
Substitution: Horn T72 Substitution, 4ft SMA Cable Warehouse

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
1855.00	15.50	V	0.9	7.9	22.55	33.0	-10.5	
1855.00	17.60	H	0.9	7.9	24.65	33.0	-8.4	
Mid Ch								
1880.00	15.70	V	0.9	7.9	22.75	33.0	-10.3	
1880.00	17.40	H	0.9	7.9	24.45	33.0	-8.6	
High Ch								
1905.00	15.30	V	0.9	7.9	22.35	33.0	-10.7	
1905.00	16.30	H	0.9	7.9	23.35	33.0	-9.7	

Rev. 3.17.11
Note: For Band 4 EIRP limit is 30dBm

Band 2 HSDPA	High Frequency Substitution Measurement UL Verification Services, Inc. Chamber C							
	Company: LG Project #: 14U18112 Date: 06/26/14 Test Engineer: Bob Liu Configuration: Z Position, EUT only Mode: WCDMA_HSDPA_1900							
	Test Equipment: Receiving: Horn T119, and Chamber C SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable Warehouse							
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin
	MHz	(dBm)	(H/V)	(dB)	(dBd)	(dBm)	(dBm)	(dB)
	Low Ch							
	1852.40	13.77	V	0.85	7.9	20.77	33.0	-12.2
	1852.40	15.35	H	0.85	7.9	22.35	33.0	-10.7
	Mid Ch							
	1880.00	12.38	V	0.85	7.9	19.38	33.0	-13.6
	1880.00	15.67	H	0.85	7.9	22.67	33.0	-10.3
	High Ch							
	1907.60	15.56	V	0.85	7.9	22.56	33.0	-10.4
	1907.60	15.23	H	0.85	7.9	22.23	33.0	-10.8
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

Band Band 2 REL99	High Frequency Substitution Measurement UL Verification Services, Inc. Chamber C Company: LG Project #: 14U18112 Date: 06/26/14 Test Engineer: Bob Liu Configuration: Z Position, EUT only Mode: WCDMA_Rel 99_1900 Test Equipment: Receiving: Horn T119, and Chamber C SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable Warehouse <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>f MHz</th> <th>SG reading (dBm)</th> <th>Ant. Pol. (H/V)</th> <th>Cable Loss (dB)</th> <th>Antenna Gain (dBd)</th> <th>EIRP (dBm)</th> <th>Limit (dBm)</th> <th>Margin (dB)</th> <th>Notes</th> </tr> </thead> <tbody> <tr> <td>Low Ch</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1852.40</td> <td>13.45</td> <td>V</td> <td>0.85</td> <td>7.9</td> <td>20.45</td> <td>33.0</td> <td>-12.6</td> <td></td> </tr> <tr> <td>1852.40</td> <td>15.65</td> <td>H</td> <td>0.85</td> <td>7.9</td> <td>22.65</td> <td>33.0</td> <td>-10.4</td> <td></td> </tr> <tr> <td>Mid Ch</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1880.00</td> <td>13.67</td> <td>V</td> <td>0.85</td> <td>7.9</td> <td>20.67</td> <td>33.0</td> <td>-12.3</td> <td></td> </tr> <tr> <td>1880.00</td> <td>15.58</td> <td>H</td> <td>0.85</td> <td>7.9</td> <td>22.58</td> <td>33.0</td> <td>-10.4</td> <td></td> </tr> <tr> <td>High Ch</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1907.60</td> <td>15.06</td> <td>V</td> <td>0.85</td> <td>7.9</td> <td>22.06</td> <td>33.0</td> <td>-10.9</td> <td></td> </tr> <tr> <td>1907.60</td> <td>15.23</td> <td>H</td> <td>0.85</td> <td>7.9</td> <td>22.23</td> <td>33.0</td> <td>-10.8</td> <td></td> </tr> </tbody> </table> Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes	Low Ch									1852.40	13.45	V	0.85	7.9	20.45	33.0	-12.6		1852.40	15.65	H	0.85	7.9	22.65	33.0	-10.4		Mid Ch									1880.00	13.67	V	0.85	7.9	20.67	33.0	-12.3		1880.00	15.58	H	0.85	7.9	22.58	33.0	-10.4		High Ch									1907.60	15.06	V	0.85	7.9	22.06	33.0	-10.9		1907.60	15.23	H	0.85	7.9	22.23	33.0	-10.8	
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes																																																																																			
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Band 5 REL99	High Frequency Substitution Measurement UL Verification Services, Inc. Chamber B Company: LG Project #: 14U18112 Date: 06/26/14 Test Engineer: D. Soper Configuration: EUT only Mode: WCDMA_REL99_850 Test Equipment: Receiving: Sunol T243, and 3m Chamber N-type Cable (Setup this one for testing EUT) Substitution: Dipole S/N: 00022117, 4ft SMA Cable (SN # 245200 001) Warehouse. <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>f MHz</th> <th>SG reading (dBm)</th> <th>Ant. Pol. (H/V)</th> <th>Cable Loss (dB)</th> <th>Antenna Gain (dBd)</th> <th>ERP (dBm)</th> <th>Limit (dBm)</th> <th>Margin (dB)</th> <th>Notes</th> </tr> </thead> <tbody> <tr> <td>Low Ch</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>826.40</td> <td>13.64</td> <td>V</td> <td>0.9</td> <td>0.0</td> <td>12.74</td> <td>38.5</td> <td>-25.7</td> <td></td> </tr> <tr> <td>826.40</td> <td>21.55</td> <td>H</td> <td>0.9</td> <td>0.0</td> <td>20.65</td> <td>38.5</td> <td>-17.8</td> <td></td> </tr> <tr> <td>Mid Ch</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>836.60</td> <td>14.07</td> <td>V</td> <td>0.9</td> <td>0.0</td> <td>13.17</td> <td>38.5</td> <td>-25.3</td> <td></td> </tr> <tr> <td>836.60</td> <td>22.46</td> <td>H</td> <td>0.9</td> <td>0.0</td> <td>21.56</td> <td>38.5</td> <td>-16.9</td> <td></td> </tr> <tr> <td>High Ch</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>846.60</td> <td>14.23</td> <td>V</td> <td>0.9</td> <td>0.0</td> <td>13.33</td> <td>38.5</td> <td>-25.1</td> <td></td> </tr> <tr> <td>846.60</td> <td>21.89</td> <td>H</td> <td>0.9</td> <td>0.0</td> <td>20.99</td> <td>38.5</td> <td>-17.5</td> <td></td> </tr> </tbody> </table> Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes	Low Ch									826.40	13.64	V	0.9	0.0	12.74	38.5	-25.7		826.40	21.55	H	0.9	0.0	20.65	38.5	-17.8		Mid Ch									836.60	14.07	V	0.9	0.0	13.17	38.5	-25.3		836.60	22.46	H	0.9	0.0	21.56	38.5	-16.9		High Ch									846.60	14.23	V	0.9	0.0	13.33	38.5	-25.1		846.60	21.89	H	0.9	0.0	20.99	38.5	-17.5	
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes																																																																																			
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Band
GSM1
900
EGPRS

High Frequency Substitution Measurement
UL Verification Services, Inc. Chamber C

Company: LG
Project #: 14U18112
Date: 06/25/14
Test Engineer: Kelvin Huynh
Configuration: EUT only Z position
Mode: EGPRS 1900MHz

Test Equipment:

Receiving: Horn T119, and Chamber C SMA Cables
Substitution: Horn T345 Substitution, 4ft SMA Cable Warehouse

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
1850.20	20.38	V	0.85	4.4	23.93	33.0	-9.1	
1850.20	22.04	H	0.85	4.4	25.59	33.0	-7.4	
Mid Ch								
1880.00	20.52	V	0.85	4.4	24.07	33.0	-8.9	
1880.00	22.55	H	0.85	4.4	26.10	33.0	-6.9	
High Ch								
1909.80	18.27	V	0.85	4.4	21.82	33.0	-11.2	
1909.80	19.95	H	0.85	4.4	23.50	33.0	-9.5	

Rev. 3.17.11
Note: For Band 4 EIRP limit is 30dBm

Band GSM8 50 EGPRS	High Frequency Substitution Measurement Compliance Certification Services Chamber B																																																																																																
	Company:		LG																																																																																														
	Project #:		14U18112																																																																																														
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Band GSM8 50 GPRS	High Frequency Substitution Measurement Compliance Certification Services Chamber B																																																																																																	
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8.2. FIELD STRENGTH OF SPURIOUS RADIATION

RULE PART(S)

FCC: §2.1053, §22.917, §24.238, and §27

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

RESULTS

8.2.1. SPURIOUS RADIATION DATA

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U18112									
Date:	06/27/14									
Test Engineer:	Kelvin Huynh									
Configuration:	EUT with AC charger									
Mode:	TX, LTE B17 10MHz har 16QAM									
Chamber		Pre-amplifier		Filter		Limit				
5m Chamber A		T145 8449B		Filter 1						
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
LTE17 10MHz z 16QAM	Low Ch, (709MHz)									
	1.418	-21.5	V	3.0	33.1	1.0	-53.6	-13.0	-40.6	
	2.127	-23.5	V	3.0	31.6	1.0	-54.1	-13.0	-41.1	
	2.836	-28.5	V	3.0	31.0	1.0	-58.5	-13.0	-45.5	
	1.418	-19.2	H	3.0	33.1	1.0	-51.3	-13.0	-38.3	
	2.127	-29.1	H	3.0	31.6	1.0	-59.7	-13.0	-46.7	
	2.836	-29.2	H	3.0	31.0	1.0	-59.3	-13.0	-46.3	
	Mid Ch, (710MHz)									
	1.420	-21.8	V	3.0	33.1	1.0	-53.9	-13.0	-40.9	
	2.130	-22.5	V	3.0	31.6	1.0	-53.1	-13.0	-40.1	
	2.840	-28.5	V	3.0	31.0	1.0	-58.5	-13.0	-45.5	
	1.420	-19.5	H	3.0	33.1	1.0	-51.6	-13.0	-38.6	
	2.130	-24.4	H	3.0	31.6	1.0	-54.9	-13.0	-41.9	
	2.840	-27.4	H	3.0	31.0	1.0	-57.4	-13.0	-44.4	
	High Ch, (711MHz)									
	1.422	-22.6	V	3.0	33.1	1.0	-54.7	-13.0	-41.7	
	2.133	-21.4	V	3.0	31.6	1.0	-51.9	-13.0	-38.9	
	2.844	-28.5	V	3.0	31.0	1.0	-58.5	-13.0	-45.5	
1.422	-22.8	H	3.0	33.1	1.0	-54.9	-13.0	-41.9		
2.133	-27.7	H	3.0	31.6	1.0	-58.2	-13.0	-45.2		
2.844	-28.1	H	3.0	31.0	1.0	-58.1	-13.0	-45.1		
Rev. 03.03.09										
Note: No other emissions were detected above the system noise floor.										

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		14U18112							
Date:		06/27/14							
Test Engineer:		Kelvin Huynh							
Configuration:		EUT with AC charger							
Mode:		TX, LTE B17 10MHz har QPSK							
Chamber		Pre-amplifier			Filter		Limit		
5m Chamber A		T145 8449B			Filter 1				
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, (709MHz)									
1.418	-21.1	V	3.0	33.1	1.0	-53.2	-13.0	-40.2	
2.127	-23.6	V	3.0	31.6	1.0	-54.2	-13.0	-41.2	
2.836	-28.6	V	3.0	31.0	1.0	-58.6	-13.0	-45.6	
1.418	-19.2	H	3.0	33.1	1.0	-51.3	-13.0	-38.3	
2.127	-29.1	H	3.0	31.6	1.0	-59.7	-13.0	-46.7	
2.836	-29.2	H	3.0	31.0	1.0	-59.3	-13.0	-46.3	
Mid Ch, (710MHz)									
1.420	-21.9	V	3.0	33.1	1.0	-54.0	-13.0	-41.0	
2.130	-22.1	V	3.0	31.6	1.0	-52.7	-13.0	-39.7	
2.840	-28.6	V	3.0	31.0	1.0	-58.7	-13.0	-45.7	
1.420	-20.3	H	3.0	33.1	1.0	-52.3	-13.0	-39.3	
2.130	-25.2	H	3.0	31.6	1.0	-55.8	-13.0	-42.8	
2.840	-26.9	H	3.0	31.0	1.0	-56.9	-13.0	-43.9	
High Ch, (711MHz)									
1.422	-22.5	V	3.0	33.1	1.0	-54.5	-13.0	-41.5	
2.133	-21.6	V	3.0	31.6	1.0	-52.1	-13.0	-39.1	
2.844	-28.3	V	3.0	31.0	1.0	-58.3	-13.0	-45.3	
1.422	-19.9	H	3.0	33.1	1.0	-52.0	-13.0	-39.0	
2.133	-23.8	H	3.0	31.6	1.0	-54.4	-13.0	-41.4	
2.844	-26.6	H	3.0	31.0	1.0	-56.6	-13.0	-43.6	

Company: LG
Project #: 14U18112
Date: 06/27/14
Test Engineer: Kelvin Huynh
Configuration: EUT with AC charger
Mode: TX, LTE B17 5MHz har 16QAM

Chamber	Pre-amplifier	Filter	Limit
3m Chamber	T145 8449B	Filter 1	

Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
LTE17	Low Ch. (706.5MHz)									
	1.413	-24.3	V	3.0	33.1	1.0	-56.4	-13.0	-43.4	
	2.120	-23.8	V	3.0	31.6	1.0	-54.4	-13.0	-41.4	
5MHz	2.826	-22.8	V	3.0	31.0	1.0	-52.9	-13.0	-39.9	
	1.413	-19.9	H	3.0	33.1	1.0	-52.0	-13.0	-39.0	
	2.120	-20.3	H	3.0	31.6	1.0	-50.9	-13.0	-37.9	
16QA M	2.826	-23.4	H	3.0	31.0	1.0	-53.5	-13.0	-40.5	
	Mid Ch. (710MHz)									
	1.420	-26.0	V	3.0	33.1	1.0	-58.0	-13.0	-45.0	
	2.130	-19.9	V	3.0	31.6	1.0	-50.5	-13.0	-37.5	
	2.840	-22.7	V	3.0	31.0	1.0	-52.7	-13.0	-39.7	
	1.420	-21.2	H	3.0	33.1	1.0	-53.3	-13.0	-40.3	
	2.130	-18.3	H	3.0	31.6	1.0	-48.9	-13.0	-35.9	
	2.840	-23.5	H	3.0	31.0	1.0	-53.5	-13.0	-40.5	
	High Ch. (713.5MHz)									
	1.427	-25.4	V	3.0	33.1	1.0	-57.5	-13.0	-44.5	
	2.141	-22.6	V	3.0	31.6	1.0	-53.1	-13.0	-40.1	
	2.854	-22.4	V	3.0	31.0	1.0	-52.4	-13.0	-39.4	
	1.427	-21.0	H	3.0	33.1	1.0	-53.1	-13.0	-40.1	
	2.141	-17.5	H	3.0	31.6	1.0	-48.1	-13.0	-35.1	
	2.854	-23.2	H	3.0	31.0	1.0	-53.2	-13.0	-40.2	

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

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U18112									
Date:	06/27/14									
Test Engineer:	Kelvin Huynh									
Configuration:	EUT with AC charger									
Mode:	TX, LTE B17 5MHz har QPSK									
Chamber		Pre-amplifier		Filter		Limit				
3m Chamber		T145 8449B		Filter 1						
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
LTE17 5MHz QPSK	Low Ch, (706.5MHz)									
	1.413	-24.7	V	3.0	33.1	1.0	-56.7	-13.0	-43.7	
	2.120	-23.2	V	3.0	31.6	1.0	-53.8	-13.0	-40.8	
	2.826	-22.7	V	3.0	31.0	1.0	-52.7	-13.0	-39.7	
	1.413	-20.0	H	3.0	33.1	1.0	-52.1	-13.0	-39.1	
	2.120	-19.9	H	3.0	31.6	1.0	-50.5	-13.0	-37.5	
	2.826	-23.9	H	3.0	31.0	1.0	-54.0	-13.0	-41.0	
	Mid Ch, (710MHz)									
	1.420	-25.7	V	3.0	33.1	1.0	-57.8	-13.0	-44.8	
	2.130	-20.3	V	3.0	31.6	1.0	-50.9	-13.0	-37.9	
	2.840	-18.2	V	3.0	31.0	1.0	-48.2	-13.0	-35.2	
	1.420	-21.0	H	3.0	33.1	1.0	-53.1	-13.0	-40.1	
	2.130	-18.5	H	3.0	31.6	1.0	-49.1	-13.0	-36.1	
	2.840	-22.8	H	3.0	31.0	1.0	-52.9	-13.0	-39.9	
	High Ch, (713.5MHz)									
	1.427	-25.3	V	3.0	33.1	1.0	-57.4	-13.0	-44.4	
	2.141	-22.5	V	3.0	31.6	1.0	-53.1	-13.0	-40.1	
	2.854	-22.3	V	3.0	31.0	1.0	-52.3	-13.0	-39.3	
1.427	-20.3	H	3.0	33.1	1.0	-52.3	-13.0	-39.3		
2.141	-17.6	H	3.0	31.6	1.0	-48.1	-13.0	-35.1		
2.854	-22.6	H	3.0	31.0	1.0	-52.6	-13.0	-39.6		
Rev. 03.03.09										
Note: No other emissions were detected above the system noise floor.										

UL Verification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U18112									
Date:	06/27/14									
Test Engineer:	Kelvin Huynh									
Configuration:	EUT with AC charger									
Mode:	TX, LTE BAND 7, 20MHz BW, 16QAM									
Chamber Pre-amplifier Filter Limit 3m Chamber T34 8449B Filter 1 FCC Part 27										
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
LTE7 20MHz 16QAM	Low Channel (2510MHz)									
	5.010	-8.3	V	3.0	34.8	1.0	-42.1	-25.0	-17.1	
	7.515	-12.6	V	3.0	34.9	1.0	-46.6	-25.0	-21.6	
	10.020	-10.5	V	3.0	35.4	1.0	-44.8	-25.0	-19.8	
	5.010	-7.3	H	3.0	34.8	1.0	-41.1	-25.0	-16.1	
	7.515	-12.2	H	3.0	34.9	1.0	-46.1	-25.0	-21.1	
	10.020	-8.4	H	3.0	35.4	1.0	-42.8	-25.0	-17.8	
	Mid Channel (2535MHz)									
	5.070	-9.7	V	3.0	34.7	1.0	-43.4	-25.0	-18.4	
	7.605	-11.9	V	3.0	34.9	1.0	-45.8	-25.0	-20.8	
	10.122	-5.2	V	3.0	35.3	1.0	-39.5	-25.0	-14.5	
	5.070	-9.6	H	3.0	34.7	1.0	-43.3	-25.0	-18.3	
	7.605	-11.7	H	3.0	34.9	1.0	-45.7	-25.0	-20.7	
	10.122	-5.0	H	3.0	35.3	1.0	-39.3	-25.0	-14.3	
	High Channel (2560MHz)									
	5.120	-9.6	V	3.0	34.7	1.0	-43.3	-25.0	-18.3	
	7.680	-12.5	V	3.0	35.0	1.0	-46.5	-25.0	-21.5	
	10.240	-8.7	V	3.0	35.2	1.0	-42.9	-25.0	-17.9	
	5.120	-11.8	H	3.0	34.7	1.0	-45.6	-25.0	-20.6	
	7.680	-11.6	H	3.0	35.0	1.0	-45.5	-25.0	-20.5	
	10.240	-9.5	H	3.0	35.2	1.0	-43.8	-25.0	-18.8	
	Rev. 03.03.09									
	Note: No other emissions were detected above the system noise floor.									

UL Verification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U18112									
Date:	06/27/14									
Test Engineer:	Kelvin Huynh									
Configuration:	EUT with AC charger									
Mode:	TX, LTE BAND 7, 20MHz BW, QPSK									
Chamber 3m Chamber Pre-amplifier T34 8449B Filter Filter 1 Limit FCC Part 27										
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
LTE7 20MHz z QPSK	Low Channel (2510MHz)									
	5.010	-8.1	V	3.0	34.8	1.0	-41.8	-25.0	-16.8	
	7.515	-12.9	V	3.0	34.9	1.0	-46.8	-25.0	-21.8	
	10.020	-9.4	V	3.0	35.4	1.0	-43.8	-25.0	-18.8	
	5.010	-6.5	H	3.0	34.8	1.0	-40.3	-25.0	-15.3	
	7.515	-11.9	H	3.0	34.9	1.0	-45.9	-25.0	-20.9	
	10.020	-7.5	H	3.0	35.4	1.0	-41.9	-25.0	-16.9	
	Mid Channel (2535MHz)									
	5.070	-7.7	V	3.0	34.7	1.0	-41.4	-25.0	-16.4	
	7.605	-12.3	V	3.0	34.9	1.0	-46.2	-25.0	-21.2	
	10.122	-4.2	V	3.0	35.3	1.0	-38.5	-25.0	-13.5	
	5.070	-8.4	H	3.0	34.7	1.0	-42.1	-25.0	-17.1	
	7.605	-11.6	H	3.0	34.9	1.0	-45.5	-25.0	-20.5	
	10.122	-3.7	H	3.0	35.3	1.0	-38.0	-25.0	-13.0	
	High Channel (2560MHz)									
	5.120	-9.2	V	3.0	34.7	1.0	-42.9	-25.0	-17.9	
	7.680	-12.7	V	3.0	35.0	1.0	-46.6	-25.0	-21.6	
	10.240	-8.5	V	3.0	35.2	1.0	-42.7	-25.0	-17.7	
5.120	-10.6	H	3.0	34.7	1.0	-44.4	-25.0	-19.4		
7.680	-11.5	H	3.0	35.0	1.0	-45.5	-25.0	-20.5		
10.240	-9.3	H	3.0	35.2	1.0	-43.5	-25.0	-18.5		
Rev. 03.03.09										
Note: No other emissions were detected above the system noise floor.										

UL Verification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U18112									
Date:	06/27/14									
Test Engineer:	Bob Liu									
Configuration:	EUT with AC charger									
Mode:	TX, LTE BAND 7, 15MHz BW, 16QAM									
Chamber 3m Chamber Pre-amplifier T34 8449B Filter Filter 1 Limit FCC Part 27										
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
LTE7 15MHz z 16QAM M	Low Channel (2507.5MHz)									
	5.010	-8.2	V	3.0	34.8	1.0	-42.0	-25.0	-17.0	
	7.515	-13.8	V	3.0	34.9	1.0	-47.7	-25.0	-22.7	
	10.020	-10.7	V	3.0	35.4	1.0	-45.1	-25.0	-20.1	
	5.010	-10.9	H	3.0	34.8	1.0	-44.6	-25.0	-19.6	
	7.515	-13.3	H	3.0	34.9	1.0	-47.2	-25.0	-22.2	
	10.020	-10.4	H	3.0	35.4	1.0	-44.7	-25.0	-19.7	
	Mid Channel (2535MHz)									
	5.070	-16.0	V	3.0	34.7	1.0	-49.8	-25.0	-24.8	
	7.605	-14.1	V	3.0	34.9	1.0	-48.0	-25.0	-23.0	
	10.122	-9.5	V	3.0	35.3	1.0	-43.8	-25.0	-18.8	
	5.070	-14.7	H	3.0	34.7	1.0	-48.4	-25.0	-23.4	
	7.605	-12.5	H	3.0	34.9	1.0	-46.5	-25.0	-21.5	
	10.122	-11.1	H	3.0	35.3	1.0	-45.4	-25.0	-20.4	
	High Channel (2562.5MHz)									
	5.130	-16.4	V	3.0	34.7	1.0	-50.2	-25.0	-25.2	
	7.689	-12.2	V	3.0	35.0	1.0	-46.2	-25.0	-21.2	
	10.260	-10.1	V	3.0	35.2	1.0	-44.3	-25.0	-19.3	
	5.130	-14.1	H	3.0	34.7	1.0	-47.8	-25.0	-22.8	
	7.689	-12.6	H	3.0	35.0	1.0	-46.6	-25.0	-21.6	
10.260	-11.3	H	3.0	35.2	1.0	-45.5	-25.0	-20.5		
Rev. 03.03.09										
Note: No other emissions were detected above the system noise floor.										

UL Verification Services Above 1GHz High Frequency Substitution Measurement										
Company:		LG								
Project #:		14U18112								
Date:		06/27/14								
Test Engineer:		Bob Liu								
Configuration:		EUT with AC charger								
Mode:		TX, LTE BAND 7, 15MHz BW, QPSK								
Chamber		Pre-amplifier		Filter		Limit				
3m Chamber		T34 8449B		Filter 1		FCC Part 27				
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
LTE7 15MHz z QPSK	Low Channel (2507.5MHz)									
	5.010	-8.7	V	3.0	34.8	1.0	-42.5	-25.0	-17.5	
	7.515	-14.3	V	3.0	34.9	1.0	-48.2	-25.0	-23.2	
	10.020	-10.9	V	3.0	35.4	1.0	-45.2	-25.0	-20.2	
	5.010	-11.9	H	3.0	34.8	1.0	-45.7	-25.0	-20.7	
	7.515	-11.9	H	3.0	34.9	1.0	-45.9	-25.0	-20.9	
	10.020	-11.4	H	3.0	35.4	1.0	-45.8	-25.0	-20.8	
	Mid Channel (2535MHz)									
	5.070	-16.2	V	3.0	34.7	1.0	-49.9	-25.0	-24.9	
	7.605	-13.3	V	3.0	34.9	1.0	-47.3	-25.0	-22.3	
	10.122	-10.7	V	3.0	35.3	1.0	-45.0	-25.0	-20.0	
	5.070	-16.0	H	3.0	34.7	1.0	-49.8	-25.0	-24.8	
	7.605	-12.2	H	3.0	34.9	1.0	-46.2	-25.0	-21.2	
	10.122	-10.6	H	3.0	35.3	1.0	-44.9	-25.0	-19.9	
	High Channel (2562.5MHz)									
	5.130	-17.7	V	3.0	34.7	1.0	-51.4	-25.0	-26.4	
	7.689	-11.9	V	3.0	35.0	1.0	-45.8	-25.0	-20.8	
	10.260	-10.5	V	3.0	35.2	1.0	-44.7	-25.0	-19.7	
5.130	-14.6	H	3.0	34.7	1.0	-48.4	-25.0	-23.4		
7.689	-12.1	H	3.0	35.0	1.0	-46.0	-25.0	-21.0		
10.260	-10.4	H	3.0	35.2	1.0	-44.6	-25.0	-19.6		
Rev. 03.03.09										
Note: No other emissions were detected above the system noise floor.										

UL Verification Services Above 1GHz High Frequency Substitution Measurement										
Company: LG Project #: 14U17493 Date: 06/27/14 Test Engineer: Bob Liu Configuration: EUT with AC charger Mode: TX, LTE BAND 7, 10MHz BW, 16QAM										
Chamber		Pre-amplifier		Filter		Limit				
3m Chamber		T34 8449B		Filter 1		FCC Part 27				
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
LTE7 10MH z 16QA M	Low Channel (2505MHz)									
	5.010	-14.3	V	3.0	34.8	1.0	-48.1	-25.0	-23.1	
	7.515	-13.2	V	3.0	34.9	1.0	-47.2	-25.0	-22.2	
	10.020	-11.1	V	3.0	35.4	1.0	-45.5	-25.0	-20.5	
	5.010	-11.0	H	3.0	34.8	1.0	-44.8	-25.0	-19.8	
	7.515	-13.0	H	3.0	34.9	1.0	-47.0	-25.0	-22.0	
	10.020	-10.6	H	3.0	35.4	1.0	-44.9	-25.0	-19.9	
	Mid Channel (2535MHz)									
	5.070	-12.0	V	3.0	34.7	1.0	-45.7	-25.0	-20.7	
	7.605	-13.7	V	3.0	34.9	1.0	-47.7	-25.0	-22.7	
	10.122	-11.1	V	3.0	35.3	1.0	-45.4	-25.0	-20.4	
	5.070	-11.5	H	3.0	34.7	1.0	-45.2	-25.0	-20.2	
	7.605	-11.8	H	3.0	34.9	1.0	-45.7	-25.0	-20.7	
	10.122	-10.4	H	3.0	35.3	1.0	-44.7	-25.0	-19.7	
	High Channel (2565MHz)									
	5.130	-16.6	V	3.0	34.7	1.0	-50.3	-25.0	-25.3	
	7.689	-12.6	V	3.0	35.0	1.0	-46.5	-25.0	-21.5	
	10.260	-11.3	V	3.0	35.2	1.0	-45.5	-25.0	-20.5	
5.130	-14.3	H	3.0	34.7	1.0	-48.0	-25.0	-23.0		
7.689	-11.6	H	3.0	35.0	1.0	-45.6	-25.0	-20.6		
10.260	-9.8	H	3.0	35.2	1.0	-44.0	-25.0	-19.0		
Rev. 03.03.09										
Note: No other emissions were detected above the system noise floor.										

UL Verification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U17493									
Date:	06/27/14									
Test Engineer:	Bob Liu									
Configuration:	EUT with AC charger									
Mode:	TX, LTE BAND 7, 10MHz BW,QPSK									
Chamber Pre-amplifier Filter Limit 3m Chamber T34 8449B Filter 1 FCC Part 27										
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
LTE7 10MHz z QPSK	Low Channel (2505MHz)									
	5.010	-13.1	V	3.0	34.8	1.0	-46.9	-25.0	-21.9	
	7.515	-13.4	V	3.0	34.9	1.0	-47.4	-25.0	-22.4	
	10.020	-10.0	V	3.0	35.4	1.0	-44.3	-25.0	-19.3	
	5.010	-10.0	H	3.0	34.8	1.0	-43.7	-25.0	-18.7	
	7.515	-12.7	H	3.0	34.9	1.0	-46.6	-25.0	-21.6	
	10.020	-9.8	H	3.0	35.4	1.0	-44.2	-25.0	-19.2	
	Mid Channel (2535MHz)									
	5.070	-11.8	V	3.0	34.7	1.0	-45.5	-25.0	-20.5	
	7.605	-13.5	V	3.0	34.9	1.0	-47.5	-25.0	-22.5	
	10.122	-12.2	V	3.0	35.3	1.0	-46.5	-25.0	-21.5	
	5.070	-11.8	H	3.0	34.7	1.0	-45.6	-25.0	-20.6	
	7.605	-12.7	H	3.0	34.9	1.0	-46.6	-25.0	-21.6	
	10.122	-10.0	H	3.0	35.3	1.0	-44.3	-25.0	-19.3	
	High Channel (2565MHz)									
	5.130	-16.5	V	3.0	34.7	1.0	-50.2	-25.0	-25.2	
	7.689	-11.6	V	3.0	35.0	1.0	-45.6	-25.0	-20.6	
	10.260	-10.9	V	3.0	35.2	1.0	-45.2	-25.0	-20.2	
5.130	-13.4	H	3.0	34.7	1.0	-47.2	-25.0	-22.2		
7.689	-11.4	H	3.0	35.0	1.0	-45.4	-25.0	-20.4		
10.260	-9.8	H	3.0	35.2	1.0	-44.1	-25.0	-19.1		
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										

UL Verification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U17493									
Date:	06/27/14									
Test Engineer:	Bob Liu									
Configuration:	EUT with AC charger									
Mode:	TX, LTE BAND 7, 5MHz BW, 16QAM									
Chamber Pre-amplifier Filter Limit 3m Chamber T145 8449B Filter 1 FCC Part 27										
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
LTE7 5MHz 16QAM	Low Channel (2502.5MHz)									
	5.005	-9.6	V	3.0	35.3	1.0	-43.9	-25.0	-18.9	
	7.508	-12.4	V	3.0	35.7	1.0	-47.1	-25.0	-22.1	
	10.010	-10.9	V	3.0	35.5	1.0	-45.5	-25.0	-20.5	
	5.005	-8.6	H	3.0	35.3	1.0	-42.9	-25.0	-17.9	
	7.508	-12.1	H	3.0	35.7	1.0	-46.8	-25.0	-21.8	
	10.010	-10.2	H	3.0	35.5	1.0	-44.7	-25.0	-19.7	
	Mid Channel (2535MHz)									
	5.070	-15.7	V	3.0	35.3	1.0	-50.1	-25.0	-25.1	
	7.605	-13.7	V	3.0	35.7	1.0	-48.4	-25.0	-23.4	
	10.140	-11.3	V	3.0	35.4	1.0	-45.7	-25.0	-20.7	
	5.007	-11.7	H	3.0	35.3	1.0	-46.0	-25.0	-21.0	
	7.605	-12.6	H	3.0	35.7	1.0	-47.3	-25.0	-22.3	
	10.140	-10.9	H	3.0	35.4	1.0	-45.3	-25.0	-20.3	
	High Channel (2567.5MHz)									
	5.135	-12.4	V	3.0	35.3	1.0	-46.7	-25.0	-21.7	
	7.703	-12.2	V	3.0	35.7	1.0	-46.8	-25.0	-21.8	
	10.270	-11.3	V	3.0	35.3	1.0	-45.6	-25.0	-20.6	
5.135	-9.7	H	3.0	35.3	1.0	-44.1	-25.0	-19.1		
7.703	-11.4	H	3.0	35.7	1.0	-46.1	-25.0	-21.1		
10.270	-10.7	H	3.0	35.3	1.0	-45.0	-25.0	-20.0		
Rev. 03.03.09										
Note: No other emissions were detected above the system noise floor.										

UL Verification Services Above 1GHz High Frequency Substitution Measurement									
Company: LG Project #: 14U17493 Date: 06/27/14 Test Engineer: Bob Liu Configuration: EUT with AC charger Mode: TX, LTE BAND 7, 5MHz BW,QPSK									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber		T145 8449B		Filter 1		FCC Part 27			
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (2502.5MHz)									
5.005	-13.6	V	3.0	35.3	1.0	-48.0	-25.0	-23.0	
7.508	-13.1	V	3.0	35.7	1.0	-47.8	-25.0	-22.8	
10.010	-12.1	V	3.0	35.5	1.0	-46.6	-25.0	-21.6	
5.005	-13.7	H	3.0	35.3	1.0	-48.0	-25.0	-23.0	
7.508	-12.8	H	3.0	35.7	1.0	-47.5	-25.0	-22.5	
10.010	-11.0	H	3.0	35.5	1.0	-45.5	-25.0	-20.5	
Mid Channel (2535MHz)									
5.007	-14.2	V	3.0	35.3	1.0	-48.5	-25.0	-23.5	
7.605	-13.5	V	3.0	35.7	1.0	-48.2	-25.0	-23.2	
10.140	-10.5	V	3.0	35.4	1.0	-44.9	-25.0	-19.9	
5.007	-11.0	H	3.0	35.3	1.0	-45.3	-25.0	-20.3	
7.605	-12.2	H	3.0	35.7	1.0	-46.9	-25.0	-21.9	
10.140	-11.2	H	3.0	35.4	1.0	-45.6	-25.0	-20.6	
High Channel (2567.5MHz)									
5.135	-12.1	V	3.0	35.3	1.0	-46.4	-25.0	-21.4	
7.703	-12.6	V	3.0	35.7	1.0	-47.3	-25.0	-22.3	
10.270	-10.8	V	3.0	35.3	1.0	-45.2	-25.0	-20.2	
5.135	-9.5	H	3.0	35.3	1.0	-43.9	-25.0	-18.9	
7.703	-11.3	H	3.0	35.7	1.0	-46.0	-25.0	-21.0	
10.270	-9.8	H	3.0	35.3	1.0	-44.2	-25.0	-19.2	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U18112									
Date:	06/27/14									
Test Engineer:	N. Sheridan									
Configuration:	EUT with AC charger and Headset									
Mode:	TX, LTE BAND 5, 10MHz BW, 16QAM									
Chamber Pre-amplifier Filter Limit 3m Chamber T34 8449B Filter 1										
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
LTE5 10MHz 16QAM	Low Channel (829MHz)									
	1.658	-23.4	V	3.0	37.4	1.0	-59.8	-13.0	-46.8	
	2.487	-23.8	V	3.0	36.4	1.0	-59.1	-13.0	-46.1	
	3.316	-20.2	V	3.0	35.8	1.0	-54.9	-13.0	-41.9	
	1.658	-24.0	H	3.0	37.4	1.0	-60.4	-13.0	-47.4	
	2.487	-29.8	H	3.0	36.4	1.0	-65.2	-13.0	-52.2	
	3.316	-26.0	H	3.0	35.8	1.0	-60.7	-13.0	-47.7	
	Mid Channel (836.5MHz)									
	1.673	-20.1	V	3.0	37.3	1.0	-56.4	-13.0	-43.4	
	2.509	-23.2	V	3.0	36.4	1.0	-58.5	-13.0	-45.5	
	3.346	-22.2	V	3.0	35.8	1.0	-56.9	-13.0	-43.9	
	1.673	-16.4	H	3.0	37.3	1.0	-52.8	-13.0	-39.8	
	2.509	-24.9	H	3.0	36.4	1.0	-60.3	-13.0	-47.3	
	3.346	-21.9	H	3.0	35.8	1.0	-56.6	-13.0	-43.6	
	High Channel (844MHz)									
	1.688	-18.0	V	3.0	37.3	1.0	-54.4	-13.0	-41.4	
	2.532	-18.6	V	3.0	36.3	1.0	-54.0	-13.0	-41.0	
	3.376	-22.1	V	3.0	35.7	1.0	-56.8	-13.0	-43.8	
	1.688	-21.0	H	3.0	37.3	1.0	-57.3	-13.0	-44.3	
	2.532	-16.8	H	3.0	36.3	1.0	-52.1	-13.0	-39.1	
	3.376	-22.3	H	3.0	35.7	1.0	-57.0	-13.0	-44.0	
	Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.									

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U18112									
Date:	06/27/14									
Test Engineer:	N. Sheridan									
Configuration:	EUT with AC charger and Headset									
Mode:	TX, LTE BAND 5, 10MHz BW,QPSK									
Chamber Pre-amplifier Filter Limit 3m Chamber T34 8449B Filter 1										
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
LTE5 10MHz QPSK	Low Channel (829MHz)									
	1.658	-22.6	V	3.0	37.4	1.0	-59.0	-13.0	-46.0	
	2.487	-24.0	V	3.0	36.4	1.0	-59.4	-13.0	-46.4	
	3.316	-20.7	V	3.0	35.8	1.0	-55.4	-13.0	-42.4	
	1.658	-23.3	H	3.0	37.4	1.0	-59.7	-13.0	-46.7	
	2.487	-29.1	H	3.0	36.4	1.0	-64.5	-13.0	-51.5	
	3.316	-24.9	H	3.0	35.8	1.0	-59.7	-13.0	-46.7	
	Mid Channel (836.5MHz)									
	1.673	-19.9	V	3.0	37.3	1.0	-56.3	-13.0	-43.3	
	2.509	-21.7	V	3.0	36.4	1.0	-57.1	-13.0	-44.1	
	3.346	-21.5	V	3.0	35.8	1.0	-56.2	-13.0	-43.2	
	1.673	-16.1	H	3.0	37.3	1.0	-52.4	-13.0	-39.4	
	2.509	-24.1	H	3.0	36.4	1.0	-59.4	-13.0	-46.4	
	3.346	-22.1	H	3.0	35.8	1.0	-56.9	-13.0	-43.9	
	High Channel (844MHz)									
	1.688	-19.1	V	3.0	37.3	1.0	-55.4	-13.0	-42.4	
	2.532	-25.0	V	3.0	36.3	1.0	-60.4	-13.0	-47.4	
	3.376	-25.9	V	3.0	35.7	1.0	-60.6	-13.0	-47.6	
	1.688	-19.2	H	3.0	37.3	1.0	-55.5	-13.0	-42.5	
	2.532	99.2	H	3.0	36.3	1.0	63.9	-13.0	76.9	
	3.376	-22.3	H	3.0	35.7	1.0	-57.0	-13.0	-44.0	
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U18112									
Date:	06/27/14									
Test Engineer:	N. Sheridan									
Configuration:	EUT with AC charger									
Mode:	TX, LTE BAND 5, 5MHz BW, 16QAM									
Chamber Pre-amplifier Filter Limit 3m Chamber T34 8449B Filter 1										
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
LTE5 5MHz 16QAM	Low Channel (826.5MHz)									
	1.653	-21.1	V	3.0	37.4	1.0	-57.4	-13.0	-44.4	
	2.479	-27.1	V	3.0	36.4	1.0	-62.5	-13.0	-49.5	
	3.306	-23.4	V	3.0	35.8	1.0	-58.2	-13.0	-45.2	
	1.653	-18.5	H	3.0	37.4	1.0	-54.9	-13.0	-41.9	
	2.479	-19.9	H	3.0	36.4	1.0	-55.3	-13.0	-42.3	
	3.306	-21.7	H	3.0	35.8	1.0	-56.5	-13.0	-43.5	
	Mid Channel (836.5MHz)									
	1.673	-16.4	V	3.0	37.3	1.0	-52.7	-13.0	-39.7	
	2.509	-24.9	V	3.0	36.4	1.0	-60.3	-13.0	-47.3	
	3.346	-24.4	V	3.0	35.8	1.0	-59.2	-13.0	-46.2	
	1.673	-12.3	H	3.0	37.3	1.0	-48.6	-13.0	-35.6	
	2.509	-24.0	H	3.0	36.4	1.0	-59.4	-13.0	-46.4	
	3.346	-22.0	H	3.0	35.8	1.0	-56.8	-13.0	-43.8	
	High Channel (846.5MHz)									
	1.693	-16.2	V	3.0	37.3	1.0	-52.6	-13.0	-39.6	
	2.539	-27.0	V	3.0	36.3	1.0	-62.4	-13.0	-49.4	
	3.386	-24.5	V	3.0	35.7	1.0	-59.2	-13.0	-46.2	
	1.693	-18.3	H	3.0	37.3	1.0	-54.6	-13.0	-41.6	
	2.539	-22.0	H	3.0	36.3	1.0	-57.4	-13.0	-44.4	
	3.386	-21.8	H	3.0	35.7	1.0	-56.5	-13.0	-43.5	
	Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.									

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U18112									
Date:	06/27/14									
Test Engineer:	N. Sheridan									
Configuration:	EUT with AC charger									
Mode:	TX, LTE BAND 5, 5MHz BW,QPSK									
Chamber Pre-amplifier Filter Limit 3m Chamber T34 8449B Filter 1										
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
LTE5 5MHz QPSK	Low Channel (826.5MHz)									
	1.653	-19.8	V	3.0	37.4	1.0	-56.2	-13.0	-43.2	
	2.479	-26.6	V	3.0	36.4	1.0	-62.0	-13.0	-49.0	
	3.306	-24.1	V	3.0	35.8	1.0	-58.9	-13.0	-45.9	
	1.653	-18.5	H	3.0	37.4	1.0	-54.8	-13.0	-41.8	
	2.479	-21.1	H	3.0	36.4	1.0	-56.5	-13.0	-43.5	
	3.306	-22.0	H	3.0	35.8	1.0	-56.8	-13.0	-43.8	
	Mid Channel (836.5MHz)									
	1.673	-15.7	V	3.0	37.3	1.0	-52.0	-13.0	-39.0	
	2.509	-24.7	V	3.0	36.4	1.0	-60.1	-13.0	-47.1	
	3.346	-23.9	V	3.0	35.8	1.0	-58.7	-13.0	-45.7	
	1.673	-12.6	H	3.0	37.3	1.0	-48.9	-13.0	-35.9	
	2.509	-25.3	H	3.0	36.4	1.0	-60.6	-13.0	-47.6	
	3.346	-22.1	H	3.0	35.8	1.0	-56.8	-13.0	-43.8	
	High Channel (846.5MHz)									
	1.693	-16.9	V	3.0	37.3	1.0	-53.2	-13.0	-40.2	
	2.539	-25.5	V	3.0	36.3	1.0	-60.9	-13.0	-47.9	
	3.386	-25.2	V	3.0	35.7	1.0	-59.9	-13.0	-46.9	
	1.693	-18.0	H	3.0	37.3	1.0	-54.3	-13.0	-41.3	
	2.539	-23.2	H	3.0	36.3	1.0	-58.6	-13.0	-45.6	
	3.386	-21.4	H	3.0	35.7	1.0	-56.2	-13.0	-43.2	
	Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.									

Company: LG
Project #: 14U18112
Date: 06/27/14
Test Engineer: Kelvin Huynh
Configuration: EUT, AC charger, and Earphone
Mode: TX, LTE band 4, 10MHz BW, 16QAM

Chamber	Pre-amplifier	Filter	Limit
3m Chamber	T145 8449B	Filter 1	

Band	f	SG reading	Ant. Pol.	Distance	Preamp	Filter	ERP	Limit	Delta	Notes
	GHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
LTE4	Low Ch, (1715 MHz)									
	3.430	-11.9	V	3.0	30.4	1.0	-41.4	-13.0	-28.4	
	5.145	-18.0	V	3.0	28.8	1.0	-45.7	-13.0	-32.7	
	6.860	-13.0	V	3.0	27.1	1.0	-39.1	-13.0	-26.1	
10MHz	3.430	-11.5	H	3.0	30.4	1.0	-40.9	-13.0	-27.9	
	5.145	-15.9	H	3.0	28.8	1.0	-43.7	-13.0	-30.7	
	6.860	-12.5	H	3.0	27.1	1.0	-38.6	-13.0	-25.6	
	Mid Ch, (1732.5 MHz)									
16QAM	3.465	-13.2	V	3.0	30.4	1.0	-42.6	-13.0	-29.6	
	5.198	-16.9	V	3.0	28.7	1.0	-44.7	-13.0	-31.7	
	6.930	-12.7	V	3.0	27.1	1.0	-38.7	-13.0	-25.7	
	3.465	-14.0	H	3.0	30.4	1.0	-43.4	-13.0	-30.4	
	5.198	-16.1	H	3.0	28.7	1.0	-43.8	-13.0	-30.8	
	6.930	-11.6	H	3.0	27.1	1.0	-37.7	-13.0	-24.7	
	High Ch, (1750 MHz)									
	3.500	-13.8	V	3.0	30.4	1.0	-43.2	-13.0	-30.2	
	5.250	-16.5	V	3.0	28.7	1.0	-44.1	-13.0	-31.1	
	7.000	-12.3	V	3.0	27.0	1.0	-38.3	-13.0	-25.3	
3.500	-14.4	H	3.0	30.4	1.0	-43.8	-13.0	-30.8		
5.250	-16.2	H	3.0	28.7	1.0	-43.8	-13.0	-30.8		
7.000	-11.3	H	3.0	27.0	1.0	-37.3	-13.0	-24.3		

Rev. 03.03.09

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

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company: Project #: Date: Test Engineer: Configuration: Mode:	LG 14U18112 06/27/14 Kelvin Huynh EUT, AC charger, and Earphone TX, LTE band 4, 10MHz BW, QPSK									
Chamber		Pre-amplifier		Filter		Limit				
3m Chamber		T145 8449B		Filter 1						
Band LTE4 10MHz z QPSK	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, (1715 MHz)										
	3.430	-12.2	V	3.0	30.4	1.0	-41.7	-13.0	-28.7	
	5.145	-17.3	V	3.0	28.8	1.0	-45.1	-13.0	-32.1	
	6.860	-13.0	V	3.0	27.1	1.0	-39.2	-13.0	-26.2	
	3.430	-11.7	H	3.0	30.4	1.0	-41.1	-13.0	-28.1	
	5.145	-16.4	H	3.0	28.8	1.0	-44.1	-13.0	-31.1	
	6.860	-12.6	H	3.0	27.1	1.0	-38.7	-13.0	-25.7	
Mid Ch, (1732.5 MHz)										
	3.465	-12.6	V	3.0	30.4	1.0	-42.0	-13.0	-29.0	
	5.198	-9.9	V	3.0	28.7	1.0	-37.6	-13.0	-24.6	
	6.930	-9.7	V	3.0	27.1	1.0	-35.8	-13.0	-22.8	
	3.465	-14.1	H	3.0	30.4	1.0	-43.5	-13.0	-30.5	
	5.198	-16.7	H	3.0	28.7	1.0	-44.4	-13.0	-31.4	
	6.930	-11.6	H	3.0	27.1	1.0	-37.7	-13.0	-24.7	
High Ch, (1750 MHz)										
	3.500	-14.0	V	3.0	30.4	1.0	-43.4	-13.0	-30.4	
	5.250	-16.3	V	3.0	28.7	1.0	-44.0	-13.0	-31.0	
	7.000	-12.4	V	3.0	27.0	1.0	-38.4	-13.0	-25.4	
	3.500	-14.5	H	3.0	30.4	1.0	-43.9	-13.0	-30.9	
	5.250	-16.7	H	3.0	28.7	1.0	-44.3	-13.0	-31.3	
	7.000	-11.4	H	3.0	27.0	1.0	-37.4	-13.0	-24.4	
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										

Company: LG
Project #: 14U18112
Date: 06/27/14
Test Engineer: Kelvin Huynh
Configuration: EUT, AC charger, and Earphone
Mode: TX, LTE band 4, 5MHz BW, 16 QAM

Chamber	Pre-amplifier	Filter	Limit
3m Chamber	T145 8449B	Filter 1	

Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
LTE4	Low Ch, (1712.5 MHz)									
	3.425	-12.5	V	3.0	30.4	1.0	-41.9	-13.0	-28.9	
	5.138	-12.7	V	3.0	28.8	1.0	-40.4	-13.0	-27.4	
5MHz	6.850	-9.8	V	3.0	27.1	1.0	-36.0	-13.0	-23.0	
	3.425	-13.2	H	3.0	30.4	1.0	-42.6	-13.0	-29.6	
16QA	5.138	-15.8	H	3.0	28.8	1.0	-43.6	-13.0	-30.6	
	6.850	-9.9	H	3.0	27.1	1.0	-36.0	-13.0	-23.0	
M	Mid Ch, (1732.5 MHz)									
	3.465	-13.9	V	3.0	30.4	1.0	-43.3	-13.0	-30.3	
	5.198	-9.4	V	3.0	28.7	1.0	-37.1	-13.0	-24.1	
	6.930	-12.7	V	3.0	27.1	1.0	-38.8	-13.0	-25.8	
	3.465	-15.5	H	3.0	30.4	1.0	-44.9	-13.0	-31.9	
	5.198	-12.1	H	3.0	28.7	1.0	-39.8	-13.0	-26.8	
	6.930	-11.7	H	3.0	27.1	1.0	-37.8	-13.0	-24.8	
	High Ch, (1752.5 MHz)									
	3.505	-12.7	V	3.0	30.4	1.0	-42.1	-13.0	-29.1	
	5.258	-8.1	V	3.0	28.6	1.0	-35.8	-13.0	-22.8	
	7.010	-7.1	V	3.0	27.0	1.0	-33.1	-13.0	-20.1	
	3.505	-13.9	H	3.0	30.4	1.0	-43.3	-13.0	-30.3	
5.258	-15.5	H	3.0	28.6	1.0	-43.2	-13.0	-30.2		
7.010	-7.9	H	3.0	27.0	1.0	-33.8	-13.0	-20.8		

Rev. 03.03.09

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

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U18112									
Date:	06/27/14									
Test Engineer:	Kelvin Huynh									
Configuration:	EUT, AC charger, and Earphone									
Mode:	TX, LTE band 4, 5MHz BW, QPSK									
Chamber		Pre-amplifier		Filter		Limit				
3m Chamber		T145 8449B		Filter 1						
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
LTE4 5MHz QPSK	Low Ch, (1712.5 MHz)									
	3.425	-12.4	V	3.0	30.4	1.0	-41.8	-13.0	-28.8	
	5.138	-13.2	V	3.0	28.8	1.0	-41.0	-13.0	-28.0	
	6.850	-9.0	V	3.0	27.1	1.0	-35.2	-13.0	-22.2	
	3.425	-13.1	H	3.0	30.4	1.0	-42.6	-13.0	-29.6	
	5.138	-16.7	H	3.0	28.8	1.0	-44.5	-13.0	-31.5	
	6.850	-13.0	H	3.0	27.1	1.0	-39.2	-13.0	-26.2	
	Mid Ch, (1732.5 MHz)									
	3.465	-14.1	V	3.0	30.4	1.0	-43.5	-13.0	-30.5	
	5.198	-10.8	V	3.0	28.7	1.0	-38.5	-13.0	-25.5	
	6.930	-12.7	V	3.0	27.1	1.0	-38.8	-13.0	-25.8	
	3.465	-15.5	H	3.0	30.4	1.0	-44.9	-13.0	-31.9	
	5.198	-13.4	H	3.0	28.7	1.0	-41.1	-13.0	-28.1	
	6.930	-11.6	H	3.0	27.1	1.0	-37.6	-13.0	-24.6	
	High Ch, (1752.5 MHz)									
	3.505	-12.9	V	3.0	30.4	1.0	-42.3	-13.0	-29.3	
	5.258	-8.3	V	3.0	28.6	1.0	-36.0	-13.0	-23.0	
	7.010	-7.2	V	3.0	27.0	1.0	-33.2	-13.0	-20.2	
3.505	-13.6	H	3.0	30.4	1.0	-43.0	-13.0	-30.0		
5.258	-14.0	H	3.0	28.6	1.0	-41.7	-13.0	-28.7		
7.010	-7.8	H	3.0	27.0	1.0	-33.8	-13.0	-20.8		
Rev. 03.03.09										
Note: No other emissions were detected above the system noise floor.										

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U18112									
Date:	06/27/14									
Test Engineer:	Bob Liu									
Configuration:	EUT with AC charger and headset									
Mode:	TX, LTE BAND 2, 10MHz BW, 16QAM									
Chamber Pre-amplifier Filter Limit 3m Chamber T34 8449B Filter 1 Part 24										
Band LTE2 10MHz z 16QAM	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1855 MHz)										
	3.710	-28.9	V	3.0	35.4	1.0	-63.3	-13.0	-50.3	
	5.565	-27.2	V	3.0	34.7	1.0	-60.9	-13.0	-47.9	
	7.420	-26.0	V	3.0	34.9	1.0	-59.9	-13.0	-46.9	
	3.710	-21.1	H	3.0	35.4	1.0	-55.4	-13.0	-42.4	
	5.565	-18.8	H	3.0	34.7	1.0	-52.5	-13.0	-39.5	
	7.420	-16.4	H	3.0	34.9	1.0	-50.3	-13.0	-37.3	
Mid Channel (1880MHz)										
	3.760	-25.4	V	3.0	35.3	1.0	-59.8	-13.0	-46.8	
	5.640	-27.3	V	3.0	34.7	1.0	-61.0	-13.0	-48.0	
	7.520	-23.6	V	3.0	34.9	1.0	-57.5	-13.0	-44.5	
	3.760	-27.4	H	3.0	35.3	1.0	-61.8	-13.0	-48.8	
	5.640	-26.7	H	3.0	34.7	1.0	-60.5	-13.0	-47.5	
	7.520	-23.6	H	3.0	34.9	1.0	-57.5	-13.0	-44.5	
High Channel (1905MHz)										
	3.810	-20.8	V	3.0	35.3	1.0	-55.1	-13.0	-42.1	
	5.715	-27.4	V	3.0	34.7	1.0	-61.1	-13.0	-48.1	
	7.620	-25.4	V	3.0	34.9	1.0	-59.3	-13.0	-46.3	
	3.810	-26.2	H	3.0	35.3	1.0	-60.5	-13.0	-47.5	
	5.715	-23.9	H	3.0	34.7	1.0	-57.7	-13.0	-44.7	
	7.620	-21.1	H	3.0	34.9	1.0	-55.0	-13.0	-42.0	
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U18112									
Date:	06/27/14									
Test Engineer:	Bob Liu									
Configuration:	EUT with AC charger and headset									
Mode:	TX, LTE BAND 2, 10MHz BW, QPSK									
Chamber Pre-amplifier Filter Limit 3m Chamber T34 8449B Filter 1 Part 24										
Band LTE2 10MHz z QPSK	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1855MHz)										
	3.710	-29.5	V	3.0	35.4	1.0	-63.9	-13.0	-50.9	
	5.565	-27.2	V	3.0	34.7	1.0	-60.9	-13.0	-47.9	
	7.420	-26.3	V	3.0	34.9	1.0	-60.2	-13.0	-47.2	
	3.710	-22.1	H	3.0	35.4	1.0	-56.5	-13.0	-43.5	
	5.565	-19.4	H	3.0	34.7	1.0	-53.1	-13.0	-40.1	
	7.420	-18.1	H	3.0	34.9	1.0	-52.0	-13.0	-39.0	
Mid Channel (1880MHz)										
	3.760	-26.1	V	3.0	35.3	1.0	-60.5	-13.0	-47.5	
	5.640	-27.8	V	3.0	34.7	1.0	-61.5	-13.0	-48.5	
	7.520	-25.8	V	3.0	34.9	1.0	-59.7	-13.0	-46.7	
	3.760	-26.6	H	3.0	35.3	1.0	-60.9	-13.0	-47.9	
	5.640	-26.7	H	3.0	34.7	1.0	-60.4	-13.0	-47.4	
	7.520	-23.6	H	3.0	34.9	1.0	-57.6	-13.0	-44.6	
High Channel (1905MHz)										
	3.810	-19.3	V	3.0	35.3	1.0	-53.6	-13.0	-40.6	
	5.715	-27.5	V	3.0	34.7	1.0	-61.2	-13.0	-48.2	
	7.620	-25.6	V	3.0	34.9	1.0	-59.6	-13.0	-46.6	
	3.810	-26.1	H	3.0	35.3	1.0	-60.4	-13.0	-47.4	
	5.715	-24.6	H	3.0	34.7	1.0	-58.3	-13.0	-45.3	
	7.620	-21.9	H	3.0	34.9	1.0	-55.9	-13.0	-42.9	
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U18112									
Date:	06/27/14									
Test Engineer:	Bob Liu									
Configuration:	EUT with AC charger and headset									
Mode:	TX, LTE BAND 2, 10MHz BW, 16QAM									
Chamber Pre-amplifier Filter Limit 3m Chamber T34 8449B Filter 1 Part 24										
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
LTE2	Low Channel (1852.5 MHz)									
5MHz	3.705	-10.8	V	3.0	35.4	1.0	-45.2	-13.0	-32.2	
16QA	5.558	-19.6	V	3.0	34.7	1.0	-53.3	-13.0	-40.3	
M	7.410	-6.4	V	3.0	34.9	1.0	-40.3	-13.0	-27.3	
	3.705	-20.0	H	3.0	35.4	1.0	-54.4	-13.0	-41.4	
	5.558	-15.2	H	3.0	34.7	1.0	-48.9	-13.0	-35.9	
	7.410	-9.4	H	3.0	34.9	1.0	-43.3	-13.0	-30.3	
	Mid Channel (1880MHz)									
	3.760	-22.2	V	3.0	35.3	1.0	-56.5	-13.0	-43.5	
	5.640	-17.1	V	3.0	34.7	1.0	-50.9	-13.0	-37.9	
	7.520	-16.1	V	3.0	34.9	1.0	-50.0	-13.0	-37.0	
	3.760	-21.1	H	3.0	35.3	1.0	-55.5	-13.0	-42.5	
	5.640	-20.0	H	3.0	34.7	1.0	-53.7	-13.0	-40.7	
	7.520	-18.9	H	3.0	34.9	1.0	-52.9	-13.0	-39.9	
	High Channel (1907.5MHz)									
	3.815	-21.7	V	3.0	35.3	1.0	-56.0	-13.0	-43.0	
	5.723	-17.3	V	3.0	34.7	1.0	-51.0	-13.0	-38.0	
	7.630	-14.3	V	3.0	34.9	1.0	-48.3	-13.0	-35.3	
	3.815	-16.4	H	3.0	35.3	1.0	-50.7	-13.0	-37.7	
	5.723	-13.2	H	3.0	34.7	1.0	-46.9	-13.0	-33.9	
	7.630	-20.4	H	3.0	34.9	1.0	-54.4	-13.0	-41.4	
Rev. 03.03.09										
Note: No other emissions were detected above the system noise floor.										

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U18112									
Date:	06/27/14									
Test Engineer:	Bob Liu									
Configuration:	EUT with AC charger and headset									
Mode:	TX, LTE BAND 2, 10MHz BW, QPSK									
Chamber Pre-amplifier Filter Limit 3m Chamber T34 8449B Filter 1 Part 24										
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
LTE2	Low Channel (1852.5MHz)									
	3.705	-10.2	V	3.0	35.4	1.0	-44.6	-13.0	-31.6	
	5.558	-15.5	V	3.0	34.7	1.0	-49.2	-13.0	-36.2	
	7.410	-6.3	V	3.0	34.9	1.0	-40.2	-13.0	-27.2	
5MHz	3.705	-20.3	H	3.0	35.4	1.0	-54.7	-13.0	-41.7	
	5.558	-17.8	H	3.0	34.7	1.0	-51.5	-13.0	-38.5	
	7.410	-9.3	H	3.0	34.9	1.0	-43.2	-13.0	-30.2	
	Mid Channel (1880MHz)									
	3.760	-21.4	V	3.0	35.3	1.0	-55.7	-13.0	-42.7	
	5.640	-19.3	V	3.0	34.7	1.0	-53.0	-13.0	-40.0	
	7.520	-16.3	V	3.0	34.9	1.0	-50.3	-13.0	-37.3	
	3.760	-23.7	H	3.0	35.3	1.0	-58.1	-13.0	-45.1	
	5.640	-24.6	H	3.0	34.7	1.0	-58.3	-13.0	-45.3	
	7.520	-20.8	H	3.0	34.9	1.0	-54.8	-13.0	-41.8	
	High Channel (1907.5MHz)									
	3.815	-19.7	V	3.0	35.3	1.0	-54.0	-13.0	-41.0	
	5.723	-16.6	V	3.0	34.7	1.0	-50.3	-13.0	-37.3	
	7.630	-14.0	V	3.0	34.9	1.0	-47.9	-13.0	-34.9	
	3.815	-16.7	H	3.0	35.3	1.0	-51.0	-13.0	-38.0	
	5.723	-14.6	H	3.0	34.7	1.0	-48.3	-13.0	-35.3	
	7.630	-20.4	H	3.0	34.9	1.0	-54.3	-13.0	-41.3	
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:		LG								
Project #:		14U18112								
Date:		06/26/14								
Test Engineer:		Bob Liu								
Configuration:		EUT with AC charger								
Mode:		Tx, 1900MHz HSDPA								
Chamber		Pre-amplifier		Filter		Limit				
3m Chamber		T34 8449B		Filter 1		Part 24				
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Band 2 HSDPA	Low Ch, 1852.4MHz									
	3.705	-17.8	V	3.0	35.4	1.0	-52.2	-13.0	-39.2	
	5.557	-14.4	V	3.0	34.7	1.0	-48.2	-13.0	-35.2	
	7.409	-9.7	V	3.0	34.9	1.0	-43.6	-13.0	-30.6	
	3.705	-19.5	H	3.0	35.4	1.0	-53.9	-13.0	-40.9	
	5.557	-16.2	H	3.0	34.7	1.0	-50.0	-13.0	-37.0	
	7.409	-11.4	H	3.0	34.9	1.0	-45.4	-13.0	-32.4	
	Mid Ch, 1880MHz									
	3.760	-18.1	V	3.0	35.3	1.0	-52.4	-13.0	-39.4	
	5.640	-13.2	V	3.0	34.7	1.0	-46.9	-13.0	-33.9	
	7.520	-6.2	V	3.0	34.9	1.0	-40.2	-13.0	-27.2	
	3.760	-17.9	H	3.0	35.3	1.0	-52.3	-13.0	-39.3	
	5.640	-14.5	H	3.0	34.7	1.0	-48.2	-13.0	-35.2	
	7.520	-4.0	H	3.0	34.9	1.0	-37.9	-13.0	-24.9	
	High Ch, 1907.6MHz									
	3.815	-16.6	V	3.0	35.3	1.0	-50.9	-13.0	-37.9	
	5.723	-13.0	V	3.0	34.7	1.0	-46.7	-13.0	-33.7	
	7.630	-8.0	V	3.0	34.9	1.0	-42.0	-13.0	-29.0	
	3.815	-13.8	H	3.0	35.3	1.0	-48.1	-13.0	-35.1	
	5.723	-13.6	H	3.0	34.7	1.0	-47.4	-13.0	-34.4	
	7.630	-4.3	H	3.0	34.9	1.0	-38.3	-13.0	-25.3	

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Band 2 REL99	Company:		LG							
	Project #:		14U18112							
	Date:		06/26/14							
	Test Engineer:		Bob Liu							
	Configuration:		EUT with AC charger							
	Mode:		Tx, 1900MHz Rel 99							
	Chamber		Pre-amplifier		Filter		Limit			
	3m Chamber		T34 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, 1852.4MHz									
3.705	-16.1	V	3.0	35.4	1.0	-50.5	-13.0	-37.5		
5.557	-14.0	V	3.0	34.7	1.0	-47.7	-13.0	-34.7		
7.409	-7.5	V	3.0	34.9	1.0	-41.4	-13.0	-28.4		
3.705	-16.2	H	3.0	35.4	1.0	-50.6	-13.0	-37.6		
5.557	-16.5	H	3.0	34.7	1.0	-50.2	-13.0	-37.2		
7.409	-2.9	H	3.0	34.9	1.0	-36.8	-13.0	-23.8		
Mid Ch, 1880MHz										
3.760	-15.3	V	3.0	35.3	1.0	-49.7	-13.0	-36.7		
5.640	-14.4	V	3.0	34.7	1.0	-48.1	-13.0	-35.1		
7.520	-6.1	V	3.0	34.9	1.0	-40.0	-13.0	-27.0		
3.760	-14.5	H	3.0	35.3	1.0	-48.9	-13.0	-35.9		
5.640	-13.6	H	3.0	34.7	1.0	-47.3	-13.0	-34.3		
7.520	-3.5	H	3.0	34.9	1.0	-37.4	-13.0	-24.4		
High Ch, 1907.6MHz										
3.815	-14.6	V	3.0	35.3	1.0	-48.8	-13.0	-35.8		
5.723	-13.9	V	3.0	34.7	1.0	-47.7	-13.0	-34.7		
7.630	-7.1	V	3.0	34.9	1.0	-41.1	-13.0	-28.1		
3.815	-13.0	H	3.0	35.3	1.0	-47.3	-13.0	-34.3		
5.723	-10.0	H	3.0	34.7	1.0	-43.8	-13.0	-30.8		
7.630	-5.0	H	3.0	34.9	1.0	-38.9	-13.0	-25.9		
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U18112									
Date:	06/27/14									
Test Engineer:	Kelvin Huynh									
Configuration:	EUT with AC charger									
Mode:	WCDMA_HSDPA_850									
Chamber Pre-amplifier Filter Limit 3m Chamber T34 8449B Filter 1										
	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Band 5 HSDP A	Low Ch, 826.40MHz									
	1.652	-7.6	V	3.0	37.4	1.0	-43.9	-13.0	-30.9	
	2.479	-21.8	V	3.0	36.4	1.0	-57.1	-13.0	-44.1	
	3.306	-20.6	V	3.0	35.8	1.0	-55.4	-13.0	-42.4	
	1.652	-9.8	H	3.0	37.4	1.0	-46.2	-13.0	-33.2	
	2.479	-22.0	H	3.0	36.4	1.0	-57.4	-13.0	-44.4	
	3.306	-20.7	H	3.0	35.8	1.0	-55.5	-13.0	-42.5	
	Mid Ch, 836.6MHz									
	1.673	-8.4	V	3.0	37.3	1.0	-44.7	-13.0	-31.7	
	2.510	-22.4	V	3.0	36.4	1.0	-57.7	-13.0	-44.7	
	3.346	-20.4	V	3.0	35.8	1.0	-55.1	-13.0	-42.1	
	1.673	-12.3	H	3.0	37.3	1.0	-48.6	-13.0	-35.6	
	2.510	-22.7	H	3.0	36.4	1.0	-58.0	-13.0	-45.0	
	3.346	-21.1	H	3.0	35.8	1.0	-55.8	-13.0	-42.8	
	High Ch, 846.6MHz									
	1.693	-11.3	V	3.0	37.3	1.0	-47.6	-13.0	-34.6	
	2.539	-20.1	V	3.0	36.3	1.0	-55.4	-13.0	-42.4	
	3.386	-21.4	V	3.0	35.7	1.0	-56.1	-13.0	-43.1	
1.693	-13.2	H	3.0	37.3	1.0	-49.5	-13.0	-36.5		
2.539	-24.1	H	3.0	36.3	1.0	-59.4	-13.0	-46.4		
3.386	-21.0	H	3.0	35.7	1.0	-55.7	-13.0	-42.7		
Rev. 03.03.09										
Note: No other emissions were detected above the system noise floor.										

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:		LG								
Project #:		14U18112								
Date:		06/27/14								
Test Engineer:		Kelvin Huynh								
Configuration:		EUT with AC charger								
Mode:		WCDMA_Rel 99_ 850								
Chamber		Pre-amplifier		Filter		Limit				
3m Chamber		T34 8449B		Filter 1						
	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Band 5 REL99	Low Ch, 826.40MHz									
	1.652	-10.7	V	3.0	37.4	1.0	-47.1	-13.0	-34.1	
	2.479	-20.2	V	3.0	36.4	1.0	-55.5	-13.0	-42.5	
	3.306	-20.6	V	3.0	35.8	1.0	-55.4	-13.0	-42.4	
	1.652	-10.0	H	3.0	37.4	1.0	-46.4	-13.0	-33.4	
	2.479	-22.7	H	3.0	36.4	1.0	-58.1	-13.0	-45.1	
	3.306	-20.5	H	3.0	35.8	1.0	-55.3	-13.0	-42.3	
	Mid Ch, 836.6MHz									
	1.673	-12.3	V	3.0	37.3	1.0	-48.7	-13.0	-35.7	
	2.510	-20.1	V	3.0	36.4	1.0	-55.4	-13.0	-42.4	
	3.346	-21.4	V	3.0	35.8	1.0	-56.1	-13.0	-43.1	
	1.673	-8.3	H	3.0	37.3	1.0	-44.7	-13.0	-31.7	
2.510	-22.9	H	3.0	36.4	1.0	-58.2	-13.0	-45.2		
3.346	-21.3	H	3.0	35.8	1.0	-56.1	-13.0	-43.1		
High Ch, 846.6MHz										
1.693	-9.9	V	3.0	37.3	1.0	-46.2	-13.0	-33.2		
2.539	-21.6	V	3.0	36.3	1.0	-56.9	-13.0	-43.9		
3.386	-20.9	V	3.0	35.7	1.0	-55.6	-13.0	-42.6		
1.693	-9.5	H	3.0	37.3	1.0	-45.9	-13.0	-32.9		
2.539	-19.3	H	3.0	36.3	1.0	-54.7	-13.0	-41.7		
3.386	-20.9	H	3.0	35.7	1.0	-55.6	-13.0	-42.6		
Rev. 03.03.09										
Note: No other emissions were detected above the system noise floor.										

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U18112									
Date:	06/25/14									
Test Engineer:	Kelvin Huynh									
Configuration:	EUT with AC charger									
Mode:	EGPRS 1900									
Chamber Pre-amplifier Filter Limit 3m Chamber T343 8449B Filter 1 Part 24										
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
GSM1 900 EGPRS	Low Ch, 1850MHz									
	3.700	-9.6	V	3.0	35.4	1.0	-44.0	-13.0	-31.0	
	5.550	-16.8	V	3.0	34.7	1.0	-50.5	-13.0	-37.5	
	7.400	-15.3	V	3.0	34.9	1.0	-49.2	-13.0	-36.2	
	3.700	-10.0	H	3.0	35.4	1.0	-44.4	-13.0	-31.4	
	5.550	-16.0	H	3.0	34.7	1.0	-49.8	-13.0	-36.8	
	7.400	-14.0	H	3.0	34.9	1.0	-47.9	-13.0	-34.9	
	Mid Ch, 1880.0MHz									
	3.760	-6.3	V	3.0	35.3	1.0	-40.6	-13.0	-27.6	
	5.640	-8.8	V	3.0	34.7	1.0	-42.5	-13.0	-29.5	
	7.520	-15.4	V	3.0	34.9	1.0	-49.3	-13.0	-36.3	
	3.760	-7.9	H	3.0	35.3	1.0	-42.2	-13.0	-29.2	
	5.640	-11.7	H	3.0	34.7	1.0	-45.4	-13.0	-32.4	
	7.520	-15.1	H	3.0	34.9	1.0	-49.1	-13.0	-36.1	
	High Ch, 1909.8 MHz									
	3.820	-4.5	V	3.0	35.3	1.0	-38.8	-13.0	-25.8	
	5.729	-10.9	V	3.0	34.7	1.0	-44.6	-13.0	-31.6	
	7.639	-14.0	V	3.0	35.0	1.0	-48.0	-13.0	-35.0	
3.820	-16.9	H	3.0	35.3	1.0	-51.2	-13.0	-38.2		
5.729	-9.3	H	3.0	34.7	1.0	-43.1	-13.0	-30.1		
7.639	-13.2	H	3.0	35.0	1.0	-47.1	-13.0	-34.1		
Rev. 03.03.09										
Note: No other emissions were detected above the system noise floor.										

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U18112									
Date:	06/25/14									
Test Engineer:	Kelvin Huynh									
Configuration:	EUT with AC charger									
Mode:	GPRS 1900									
Chamber Pre-amplifier Filter Limit 3m Chamber T343 8449B Filter 1 Part 24										
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
GSM1 900	Low Ch, 1850MHz									
	3.700	-9.4	V	3.0	35.4	1.0	-43.8	-13.0	-30.8	
	5.550	-16.3	V	3.0	34.7	1.0	-50.0	-13.0	-37.0	
	7.400	-15.7	V	3.0	34.9	1.0	-49.6	-13.0	-36.6	
	3.700	-9.1	H	3.0	35.4	1.0	-43.5	-13.0	-30.5	
	5.550	-15.4	H	3.0	34.7	1.0	-49.2	-13.0	-36.2	
	7.400	-14.0	H	3.0	34.9	1.0	-47.9	-13.0	-34.9	
	Mid Ch, 1880.0MHz									
	3.760	-5.1	V	3.0	35.3	1.0	-39.4	-13.0	-26.4	
GPRS	5.640	-10.4	V	3.0	34.7	1.0	-44.1	-13.0	-31.1	
	7.520	-15.4	V	3.0	34.9	1.0	-49.3	-13.0	-36.3	
	3.760	-7.7	H	3.0	35.3	1.0	-42.1	-13.0	-29.1	
	5.640	-11.6	H	3.0	34.7	1.0	-45.4	-13.0	-32.4	
	7.520	-14.9	H	3.0	34.9	1.0	-48.9	-13.0	-35.9	
	High Ch, 1909.8 MHz									
	3.820	-4.4	V	3.0	35.3	1.0	-38.6	-13.0	-25.6	
	5.729	-11.5	V	3.0	34.7	1.0	-45.2	-13.0	-32.2	
	7.639	-15.7	V	3.0	35.0	1.0	-49.6	-13.0	-36.6	
3.820	-15.9	H	3.0	35.3	1.0	-50.2	-13.0	-37.2		
5.729	-9.2	H	3.0	34.7	1.0	-43.0	-13.0	-30.0		
7.639	-14.4	H	3.0	35.0	1.0	-48.4	-13.0	-35.4		
Rev. 03.03.09										
Note: No other emissions were detected above the system noise floor.										

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U17493									
Date:	04/25/14									
Test Engineer:	R. Alegre									
Configuration:	EUT with AC charger									
Mode:	EGPRS 850									
Chamber Pre-amplifier Filter Limit 3m Chamber T34 8449B Filter 1										
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
GSM8 50 EGPRS	Low Ch, 824.2MHz									
	1.648	-25.8	V	3.0	37.4	1.0	-62.2	-13.0	-49.2	
	2.473	-24.1	V	3.0	36.4	1.0	-59.5	-13.0	-46.5	
	3.297	-21.8	V	3.0	35.8	1.0	-56.6	-13.0	-43.6	
	1.648	-26.5	H	3.0	37.4	1.0	-62.9	-13.0	-49.9	
	2.473	-23.2	H	3.0	36.4	1.0	-58.6	-13.0	-45.6	
	3.297	-22.1	H	3.0	35.8	1.0	-56.9	-13.0	-43.9	
	Mid Ch, 836.6MHz									
	1.673	-28.2	V	3.0	37.3	1.0	-64.5	-13.0	-51.5	
	2.510	-24.9	V	3.0	36.4	1.0	-60.2	-13.0	-47.2	
	3.346	-22.2	V	3.0	35.8	1.0	-57.0	-13.0	-44.0	
	1.673	-26.3	H	3.0	37.3	1.0	-62.7	-13.0	-49.7	
	2.510	-26.3	H	3.0	36.4	1.0	-61.7	-13.0	-48.7	
	3.346	-22.0	H	3.0	35.8	1.0	-56.7	-13.0	-43.7	
	High Ch, 848.8MHz									
	1.698	-24.8	V	3.0	37.3	1.0	-61.1	-13.0	-48.1	
	2.547	-23.8	V	3.0	36.3	1.0	-59.2	-13.0	-46.2	
	3.395	-22.6	V	3.0	35.7	1.0	-57.3	-13.0	-44.3	
1.698	-26.5	H	3.0	37.3	1.0	-62.8	-13.0	-49.8		
2.547	-23.8	H	3.0	36.3	1.0	-59.2	-13.0	-46.2		
3.395	-23.2	H	3.0	35.7	1.0	-57.9	-13.0	-44.9		
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:	LG									
Project #:	14U17493									
Date:	04/25/14									
Test Engineer:	R. Alegre									
Configuration:	EUT with AC charger									
Mode:	GPRS 850									
Chamber Pre-amplifier Filter Limit 3m Chamber T34 8449B Filter 1										
Band	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
GSM8 50	Low Ch, 824.2MHz									
	1.648	-24.8	V	3.0	37.4	1.0	-61.2	-13.0	-48.2	
	2.473	-24.0	V	3.0	36.4	1.0	-59.4	-13.0	-46.4	
	3.297	-22.8	V	3.0	35.8	1.0	-57.6	-13.0	-44.6	
	1.648	-26.6	H	3.0	37.4	1.0	-63.0	-13.0	-50.0	
	2.473	-13.2	H	3.0	36.4	1.0	-48.6	-13.0	-35.6	
	3.297	-22.1	H	3.0	35.8	1.0	-56.9	-13.0	-43.9	
	Mid Ch, 836.6MHz									
	1.673	-28.1	V	3.0	37.3	1.0	-64.5	-13.0	-51.5	
	2.510	-24.8	V	3.0	36.4	1.0	-60.1	-13.0	-47.1	
	3.346	-23.1	V	3.0	35.8	1.0	-57.9	-13.0	-44.9	
	GPRS	1.673	-26.2	H	3.0	37.3	1.0	-62.5	-13.0	-49.5
2.510		-26.1	H	3.0	36.4	1.0	-61.5	-13.0	-48.5	
3.346		-22.0	H	3.0	35.8	1.0	-56.7	-13.0	-43.7	
High Ch, 848.8MHz										
1.698		-24.3	V	3.0	37.3	1.0	-60.6	-13.0	-47.6	
2.547		-23.8	V	3.0	36.3	1.0	-59.1	-13.0	-46.1	
3.395		-22.4	V	3.0	35.7	1.0	-57.1	-13.0	-44.1	
1.698		-26.6	H	3.0	37.3	1.0	-62.9	-13.0	-49.9	
2.547		-23.9	H	3.0	36.3	1.0	-59.2	-13.0	-46.2	
3.395		-23.1	H	3.0	35.7	1.0	-57.8	-13.0	-44.8	
Rev. 03.03.09										
Note: No other emissions were detected above the system noise floor.										