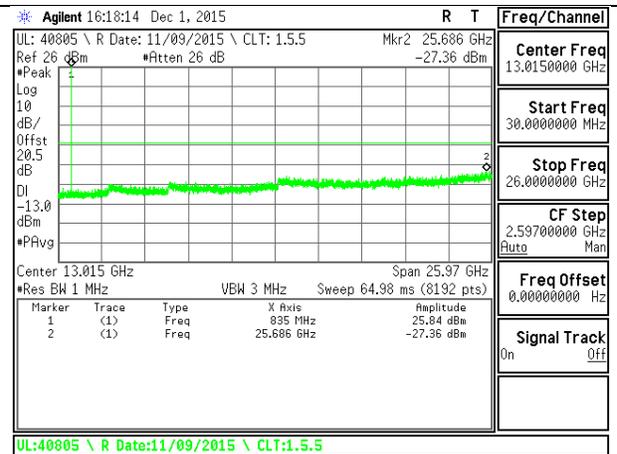
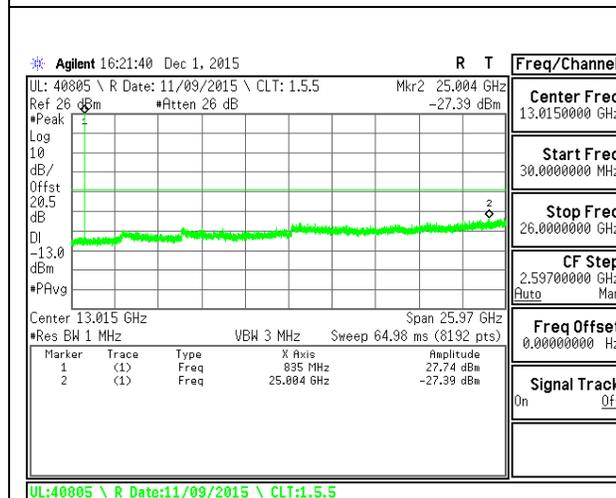


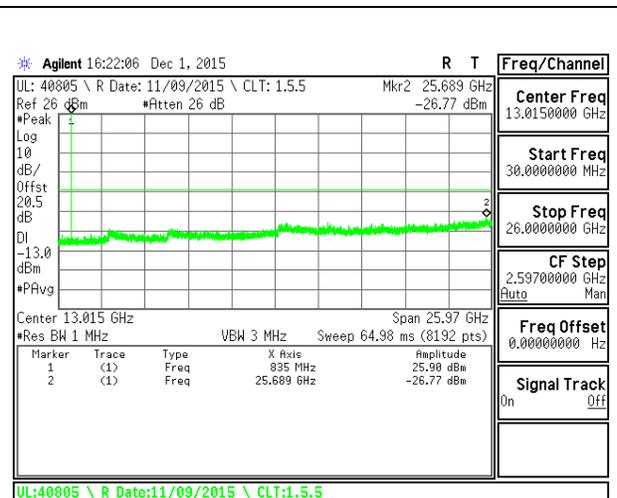
LTE B5 1.4MHz QPSK Mid Channel



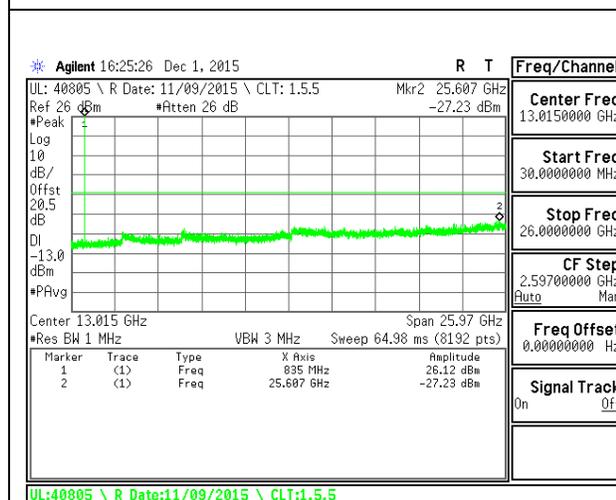
LTE B5 1.4MHz 16QAM Mid Channel



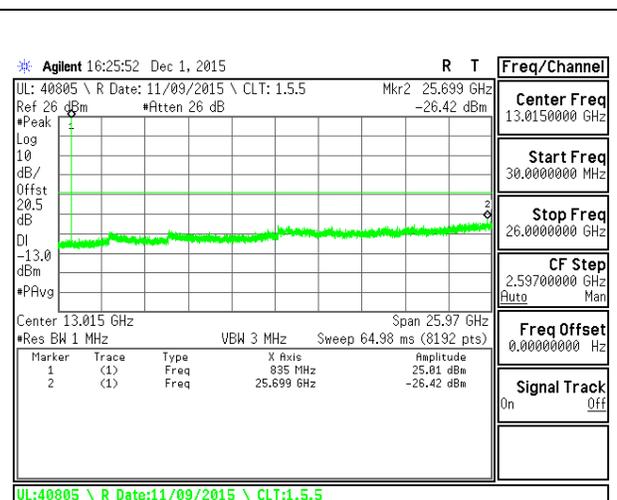
LTE B4 3MHz QPSK Mid Channel



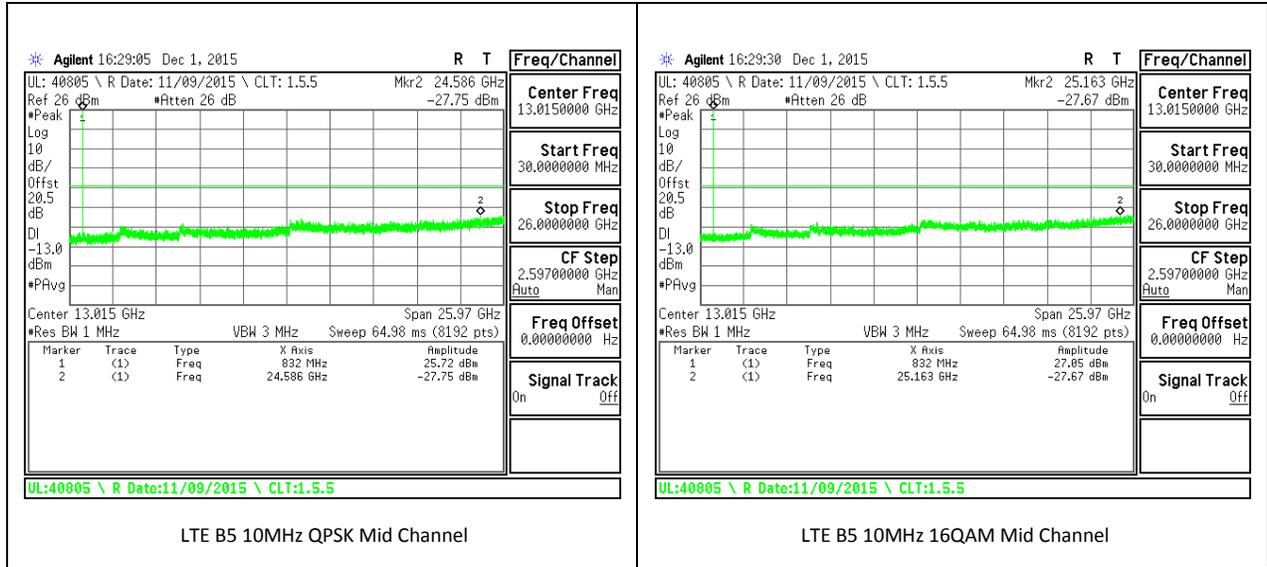
LTE B5 3MHz 16QAM Mid Channel



LTE B5 5MHz QPSK Mid Channel

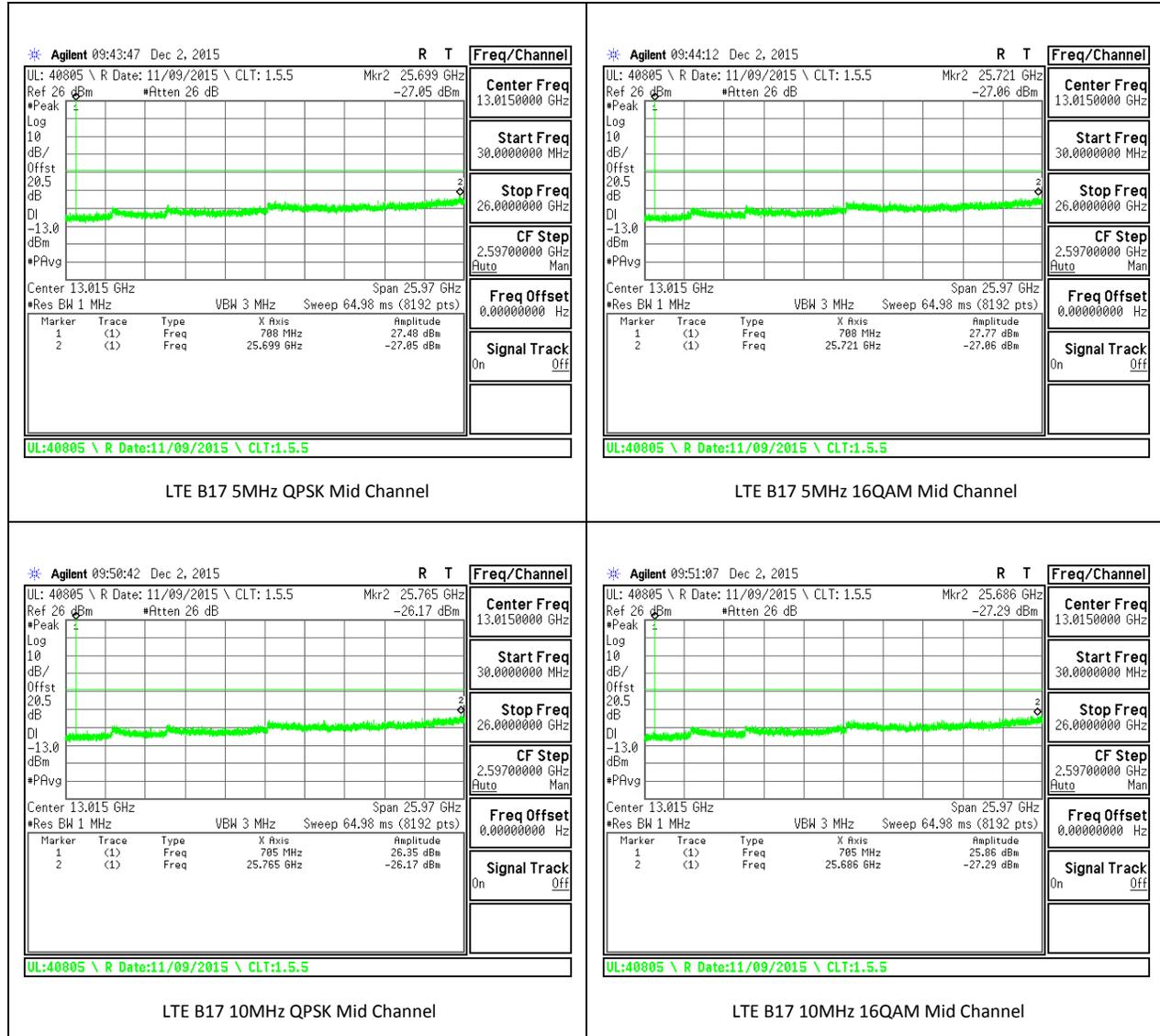


LTE B5 5MHz 16QAM Mid Channel



LTE Band 17

BW(MHz)	Mode	f (MHz)	Spur (dBm)	Spec (dBm)	Delta (dB)
5	QPSK	706.5	-27.638	-13	-14.638
		710	-27.05	-13	-14.05
		713.5	-26.785	-13	-13.785
	16QAM	706.5	-27.618	-13	-14.618
		710	-27.06	-13	-14.06
		713.5	-27.254	-13	-14.254
10	QPSK	709	-28.098	-13	-15.098
		710	-26.169	-13	-13.169
		711	-27.117	-13	-14.117
	16QAM	709	-27	-13	-14
		710	-27.29	-13	-14.29
		711	-27.154	-13	-14.154



13. FREQUENCY STABILITY

RULE PART(S)

FCC: §2.1055, §22.355, §24.235, §27.54

LIMITS

§22.355 - The carrier frequency shall not depart from the reference frequency in excess of ± 2.5 ppm for mobile stations.

§24.235 - The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

§27.54 - The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

§90.213 - The carrier frequency shall not depart from the reference frequency in excess of ± 2.5 ppm for mobile stations.

TEST PROCEDURE

Per KDB 971168 D01 Power Meas License Digital Systems v02r02

13.1.1. FREQUENCY STABILITY RESULTS

LTE Band 2

Reference Frequency: PCS Mid Channel Limit: to stay +/- 2.5 ppm =				
		1880	MHz @ 20°C	
		4700.000	Hz	
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	50	1879.999992	0.000	2.5
3.80	40	1879.999991	0.001	2.5
3.80	30	1879.999994	-0.001	2.5
3.80	20	1879.999992	0	2.5
3.80	10	1879.999995	-0.001	2.5
3.80	0	1879.999993	-0.001	2.5
3.80	-10	1879.999993	0.000	2.5
3.80	-20	1879.999992	0.000	2.5
3.80	-30	1879.999991	0.001	2.5

Reference Frequency: PCS Mid Channel Limit: to stay +/- 2.5 ppm =				
		1880	MHz @ 20°C	
		4700.000	Hz	
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	20	1879.999992	0	2.5
4.37	20	1879.999992	0.000	2.5
3.23(End of volt)	20	1879.999993	0.000	2.5

LTE Band 4

Reference Frequency: PCS Mid Channel Limit: to stay +/- 2.5 ppm =				
		1732.5	MHz @ 20°C	
		4331.250	Hz	
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	50	1732.500004	0.001	2.5
3.80	40	1732.500005	0.001	2.5
3.80	30	1732.500004	0.001	2.5
3.80	20	1732.500006	0	2.5
3.80	10	1732.500006	0.000	2.5
3.80	0	1732.500006	0.000	2.5
3.80	-10	1732.500005	0.001	2.5
3.80	-20	1732.500007	0.000	2.5
3.80	-30	1732.500007	0.000	2.5

Reference Frequency: PCS Mid Channel Limit: to stay +/- 2.5 ppm =				
		1732.5	MHz @ 20°C	
		4331.250	Hz	
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	20	1732.500006	0	2.5
4.37	20	1732.500006	0.000	2.5
3.23(End of volt)	20	1732.500006	0.000	2.5

LTE Band 5

Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	50	836.499995	0.011	2.5
3.80	40	836.499998	0.007	2.5
3.80	30	836.499999	0.006	2.5
3.80	20	836.500004	0	2.5
3.80	10	836.500003	0.001	2.5
3.80	0	836.500005	-0.001	2.5
3.80	-10	836.500003	0.001	2.5
3.80	-20	836.500005	-0.001	2.5
3.80	-30	836.500006	-0.002	2.5

Reference Frequency: PCS Mid Channel		836.5	MHz @ 20°C	
Limit: to stay +/- 2.5 ppm =		2091.250	Hz	
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	20	836.500004	0	2.5
4.37	20	836.500043	0.000	2.5
3.23(End of Volt)	20	836.500041	0.000	2.5

LTE Band 17

Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	50	709.999997	0.008	2.5
3.80	40	709.999998	0.007	2.5
3.80	30	710.000001	0.001	2.5
3.80	20	710.000002	0	2.5
3.80	10	710.000002	0.000	2.5
3.80	0	710.000004	-0.002	2.5
3.80	-10	710.000003	-0.001	2.5
3.80	-20	710.000003	-0.001	2.5
3.80	-30	710.000002	0.000	2.5

Reference Frequency: PCS Mid Channel		710	MHz @ 20°C	
Limit: to stay +/- 2.5 ppm =		1775.000	Hz	
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	20	710.000002	0	2.5
4.37	20	710.000011	0.002	2.5
3.23(End of volt)	20	710.000052	-0.004	2.5

14. RADIATED TEST RESULTS

14.1. RADIATED POWER (ERP & EIRP)

RULE PART(S)

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

LIMITS

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

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

27.50(b) - (10) Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP. (LTE B13)

27.50(c) - (10) Portable stations (hand-held devices) are limited to 3 watts ERP; (LTE B17)

27.50(d) - (4) Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.(Band 4)

27.50(h) - (2) Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.(LTE B41 & 7)

90.635(b) - The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw). (LTE B26)

In addition, when the transmitter power is measured in terms of average value, the peak-to-average ratio of the power shall not exceed 13dB.

TEST PROCEDURE

ANSI / TIA / EIA 603D Clause 2.2.17; PSA setting reference to 971168 D01 v02r02

For peak power measurement with a PSA:

a) Set the RBW \geq OBW; b) Set VBW $\geq 3 \times$ RBW; c) Set span $\geq 2 \times$ RBW; d) Sweep time = auto couple; e) Detector = peak; f) Ensure that the number of measurement points \geq span/RBW; g) Trace mode = max hold;

For average power measurement with a PSA:

a) Set span to at least 1.5 times the OBW; b) Set RBW = 1-5% of the OBW, not to exceed 1 MHz; c) Set VBW $\geq 3 \times$ RBW; d) Set number of points in sweep $\geq 2 \times$ span / RBW; e) Sweep time = auto-couple; f) Detector = RMS (power averaging); g) Use free run trigger If burst duty cycle ≥ 98 ; h) Use trigger to capture bursts If burst duty cycle < 98 ; i) Trace average at least 100 traces in power averaging (*i.e.*, RMS) mode. j) Compute the power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function.

14.1.1. ERP/EIRP RESULTS

GSM

Band	Mode	Channel	f(MHz)	ERP	
				dBm	mW
GSM850	GPRS	128	824.2	28.19	659.17
		190	836.6	29.92	981.75
		251	848.8	29.35	860.99
	EGPRS	128	824.2	23.09	203.70
		190	836.6	25.33	341.19
		251	848.8	24.52	283.14
GSM1900	GPRS	512	1850.2	30.79	1199.50
		661	1880	31.01	1261.83
		810	1909.8	30.31	1073.99
	EGPRS	512	1850.2	28.50	707.95
		661	1880	28.81	760.33
		810	1909.8	28.81	760.33

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:	LG Electronics							
Project #:	15I22343							
Date:	12/5/2015							
Test Engineer:	A. Escamilla							
Configuration:	X-pos EUT Only							
Location:	Chamber C							
Mode:	GPRS 850 MHz Fundamentals							
Test Equipment:								
Receiving: Hybrid T185, and Chamber C SMA Cables								
Substitution: Dipole T416, 6ft SMA Cable								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
824.20	23.09	V	0.9	0.0	22.19	38.5	-16.3	
824.20	29.09	H	0.9	0.0	28.19	38.5	-10.3	
Mid Ch								
836.60	24.46	V	0.9	0.0	23.56	38.5	-14.9	
836.60	30.82	H	0.9	0.0	29.92	38.5	-8.6	
High Ch								
848.80	23.56	V	0.9	0.0	22.66	38.5	-15.8	
848.80	30.25	H	0.9	0.0	29.35	38.5	-9.2	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:	LG Electronics							
Project #:	15I22343							
Date:	12/5/2015							
Test Engineer:	A. Escamilla							
Configuration:	X-pos EUT Only							
Location:	Chamber C							
Mode:	EGPRS 850 MHz Fundamentals							
Test Equipment:								
Receiving: Hybrid T185, and Chamber C SMA Cables								
Substitution: Dipole T416, 6ft SMA Cable								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
824.20	17.95	V	0.9	0.0	17.05	38.5	-21.5	
824.20	23.99	H	0.9	0.0	23.09	38.5	-15.4	
Mid Ch								
836.60	19.61	V	0.9	0.0	18.71	38.5	-19.8	
836.60	26.23	H	0.9	0.0	25.33	38.5	-13.2	
High Ch								
848.80	18.79	V	0.9	0.0	17.89	38.5	-20.6	
848.80	25.42	H	0.9	0.0	24.52	38.5	-14.0	

High Frequency Substitution Measurement UL Verification Services, Inc. Chamber C								
Company:	LG Electronics							
Project #:	15I22343							
Date:	12/04/15							
Test Engineer:	Jude Semana							
Configuration:	EUT Only (X-Position)							
Location:	Chamber C							
Mode:	GPRS 1900							
Test Equipment:								
Receiving: Horn T119 and Chamber C SMA Cables								
Substitution: Horn T60 Substitution, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
1850.20	20.01	V	0.9	8.0	27.12	33.0	-5.9	
1850.20	23.68	H	0.9	8.0	30.79	33.0	-2.2	
Mid Ch								
1880.00	20.97	V	0.9	8.0	28.08	33.0	-4.9	
1880.00	23.90	H	0.9	8.0	31.01	33.0	-2.0	
High Ch								
1909.80	21.30	V	0.9	8.0	28.41	33.0	-4.6	
1909.80	23.20	H	0.9	8.0	30.31	33.0	-2.7	
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

High Frequency Substitution Measurement UL Verification Services, Inc. Chamber C								
Company:	LG Electronics							
Project #:	15I22343							
Date:	12/04/15							
Test Engineer:	Jude Semana							
Configuration:	EUT Only (X-Position)							
Location:	Chamber C							
Mode:	EGPRS 1900							
Test Equipment:								
Receiving: Horn T119 and Chamber C SMA Cables								
Substitution: Horn T60 Substitution, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
1850.20	18.14	V	0.9	8.0	25.25	33.0	-7.8	
1850.20	21.39	H	0.9	8.0	28.50	33.0	-4.5	
Mid Ch								
1880.00	17.70	V	0.9	8.0	24.81	33.0	-8.2	
1880.00	21.70	H	0.9	8.0	28.81	33.0	-4.2	
High Ch								
1909.80	18.90	V	0.9	8.0	26.01	33.0	-7.0	
1909.80	21.70	H	0.9	8.0	28.81	33.0	-4.2	
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

WCDMA

Band	Mode	Channel	f(MHz)	EIRP	
				dBm	mW
Band 2	REL99	9262	1852.4	24.30	269.15
		9400	1880	24.86	306.20
		9538	1907.6	23.21	209.41
	HSDPA	9262	1852.4	24.04	253.51
		9400	1880	24.41	276.06
		9538	1907.6	22.68	185.35
Band 5	REL99	4132	826.4	20.53	112.98
		4183	836.6	21.0	125.89
		4233	846.6	21.09	128.53
	HSDPA	4132	826.4	19.31	85.31
		4183	836.6	19.95	98.86
		4233	846.6	20.23	105.44

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:	LG Electronics							
Project #:	15I22343							
Date:	12/04/15							
Test Engineer:	Jude Semana							
Configuration:	EUT Only (X-Position)							
Location:	Chamber C							
Mode:	Rel99 B2							
Test Equipment:								
Receiving: Horn T119, and Chamber C SMA Cables								
Substitution: Horn T60 Substitution, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
1852.40	14.17	V	0.9	8.0	21.28	33.0	-11.7	
1852.40	17.19	H	0.9	8.0	24.30	33.0	-8.7	
Mid Ch								
1880.00	14.08	V	0.9	8.0	21.19	33.0	-11.8	
1880.00	17.75	H	0.9	8.0	24.86	33.0	-8.1	
High Ch								
1907.60	12.17	V	0.9	8.0	19.28	33.0	-13.7	
1907.60	16.10	H	0.9	8.0	23.21	33.0	-9.8	
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:	LG Electronics							
Project #:	15I22343							
Date:	12/04/15							
Test Engineer:	Jude Semana							
Configuration:	EUT Only							
Location:	Chamber C							
Mode:	HSDPA B2							
Test Equipment:								
Receiving: Horn T119, and Chamber C SMA Cables								
Substitution: Horn T60 Substitution, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch								
1852.40	13.92	V	0.9	8.0	21.03	33.0	-12.0	
1852.40	16.93	H	0.9	8.0	24.04	33.0	-9.0	
Mid Ch								
1880.00	13.70	V	0.9	8.0	20.81	33.0	-12.2	
1880.00	17.30	H	0.9	8.0	24.41	33.0	-8.6	
High Ch								
1907.60	11.67	V	0.9	8.0	18.78	33.0	-14.2	
1907.60	15.57	H	0.9	8.0	22.68	33.0	-10.3	
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15I22343						
Date:		12/02/15						
Test Engineer:		Jude Semana						
Configuration:		EUT only (X-Position)						
Mode:		REL99 B5 FUND						
Test Equipment:								
Receiving: Sunol T185, and 3m Chamber C N-type Cable								
Substitution: Dipole T416, 4ft SMA Cable 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								
826.40	11.76	V	0.9	0.0	10.86	38.5	-27.6	
826.40	21.43	H	0.9	0.0	20.53	38.5	-17.9	
Mid Ch								
836.60	12.30	V	0.9	0.0	11.40	38.5	-27.0	
836.60	21.90	H	0.9	0.0	21.00	38.5	-17.4	
High Ch								
846.60	12.69	V	0.9	0.0	11.79	38.5	-26.7	
846.60	21.99	H	0.9	0.0	21.09	38.5	-17.4	
Rev. 3.17.11								
Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm								

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15I22343						
Date:		12/02/15						
Test Engineer:		Jude Semana						
Configuration:		EUT X-position						
Mode:		WCDMA Band 5 HSDPA						
Test Equipment:								
Receiving: Sunol T185, and 3m Chamber C N-type Cable								
Substitution: Dipole T416, 4ft SMA Cable 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								
826.40	10.80	V	0.9	0.0	9.90	38.5	-28.5	
826.40	20.21	H	0.9	0.0	19.31	38.5	-19.1	
Mid Ch								
836.60	11.36	V	0.9	0.0	10.46	38.5	-28.0	
836.60	20.85	H	0.9	0.0	19.95	38.5	-18.5	
High Ch								
846.60	11.50	V	0.9	0.0	10.60	38.5	-27.8	
846.60	21.13	H	0.9	0.0	20.23	38.5	-18.2	
Rev. 3.17.11								
Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm								



LTE Band 2

BW (MHz)	Mode	RB/RB Size	f(MHz)	EIRP	
				dBm	mW
1.4	QPSK	1/0	1850.7	27.34	542.00
		1/0	1880	25.53	357.27
		1/0	1909.3	26.42	438.53
	16QAM	1/0	1850.7	26.84	483.06
		1/0	1880	25.0	316.23
		1/0	1909.3	25.94	392.64
3	QPSK	1/0	1851.5	27.24	529.66
		1/0	1880	25.28	337.29
		1/0	1908.5	26.46	442.59
	16QAM	1/0	1851.5	26.74	472.06
		1/0	1880	24.89	308.32
		1/0	1908.5	25.94	392.64
5	QPSK	1/0	1852.5	26.90	489.78
		1/0	1880	25.10	323.59
		1/0	1907.5	25.61	363.92
	16QAM	1/0	1852.5	26.53	449.78
		1/0	1880	24.58	287.08
		1/0	1907.5	25.20	331.13
10	QPSK	1/0	1855	26.73	470.98
		1/0	1880	25.12	325.09
		1/0	1905	25.39	345.94
	16QAM	1/0	1855	26.27	423.64
		1/0	1880	24.77	299.92
		1/0	1905	24.94	311.89
15	QPSK	1/0	1857.5	26.88	487.53
		1/0	1880	25.49	354.00

	16QAM	1/0	1902.5	25.46	351.56
		1/0	1857.5	26.44	440.55
		1/0	1880	25.01	316.96
		1/0	1902.5	25.11	324.34
20	QPSK	1/0	1860	26.45	441.57
		1/0	1880	25.52	356.45
		1/0	1900	25.99	397.19
	16QAM	1/0	1860	25.99	397.19
		1/0	1880	25.17	328.85
		1/0	1900	25.49	354.00

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15i22343						
Date:		12/3/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only						
Location:		Chamber C						
Mode:		LTE_QPSK Band 2 Fundamentals, 1.4MHz Bandwidth						
Test Equipment:								
Receiving: Horn T119 and Chamber B SMA Cables								
Substitution: Horn T60 Substitution, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1850.70	16.80	V	0.9	8.0	23.91	33.0	-9.1	
1850.70	20.23	H	0.9	8.0	27.34	33.0	-5.7	
Mid Ch								
1880.00	14.32	V	0.9	8.0	21.43	33.0	-11.6	
1880.00	18.42	H	0.9	8.0	25.53	33.0	-7.5	
High Ch								
1909.30	15.48	V	0.9	8.0	22.59	33.0	-10.4	
1909.30	19.31	H	0.9	8.0	26.42	33.0	-6.6	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:	LG Electronics							
Project #:	15i22343							
Date:	12/3/2015							
Test Engineer:	Jude Semana							
Configuration:	EUT Only							
Location:	Chamber C							
Mode:	LTE_16QAM Band 2 Fundamentals, 1.4MHz Bandwidth							
Test Equipment:								
Receiving: Horn T119 and Chamber B SMA Cables								
Substitution: Horn T60 Substitution, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1850.70	16.33	V	0.9	8.0	23.44	33.0	-9.6	
1850.70	19.73	H	0.9	8.0	26.84	33.0	-6.2	
Mid Ch								
1880.00	13.88	V	0.9	8.0	20.99	33.0	-12.0	
1880.00	17.89	H	0.9	8.0	25.00	33.0	-8.0	
High Ch								
1909.30	15.08	V	0.9	8.0	22.19	33.0	-10.8	
1909.30	18.83	H	0.9	8.0	25.94	33.0	-7.1	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:	LG Electronics							
Project #:	15i22343							
Date:	12/3/2015							
Test Engineer:	Jude Semana							
Configuration:	EUT Only (X-Position)							
Location:	Chamber C							
Mode:	LTE_QPSK Band 2 Fundamentals, 3MHz Bandwidth							
Test Equipment:								
Receiving: Horn T119 and Chamber C SMA Cables								
Substitution: Horn T60 Substitution, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1851.50	16.10	V	0.9	8.0	23.21	33.0	-9.8	
1851.50	20.13	H	0.9	8.0	27.24	33.0	-5.8	
Mid Ch								
1880.00	14.90	V	0.9	8.0	22.01	33.0	-11.0	
1880.00	18.17	H	0.9	8.0	25.28	33.0	-7.7	
High Ch								
1908.50	15.50	V	0.9	8.0	22.61	33.0	-10.4	
1908.50	19.35	H	0.9	8.0	26.46	33.0	-6.5	

**High Frequency Substitution Measurement
 UL Verification Services, Inc.**

Company: LG Electronics
Project #: 15i22343
Date: 12/3/2015
Test Engineer: Jude Semana
Configuration: EUT Only (X-Position)
Location: Chamber C
Mode: LTE_16QAM Band 2 Fundamentals, 3MHz Bandwidth

Test Equipment:

Receiving: Horn T119 and Chamber C SMA Cables
Substitution: Horn T60 Substitution, 4ft SMA Cable Warehouse

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1851.50	15.50	V	0.9	8.0	22.61	33.0	-10.4	
1851.50	19.63	H	0.9	8.0	26.74	33.0	-6.3	
Mid Ch								
1880.00	13.60	V	0.9	8.0	20.71	33.0	-12.3	
1880.00	17.78	H	0.9	8.0	24.89	33.0	-8.1	
High Ch								
1908.50	14.97	V	0.9	8.0	22.08	33.0	-10.9	
1908.50	18.83	H	0.9	8.0	25.94	33.0	-7.1	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15i22343						
Date:		12/3/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only						
Location:		Chamber C						
Mode:		LTE_QPSK Band 2 Fundamentals, 5MHz Bandwidth						
Test Equipment:								
Receiving: Horn T185 and Chamber C SMA Cables								
Substitution: Horn T60 Substitution, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1852.50	15.52	V	0.9	8.0	22.63	33.0	-10.4	
1852.50	19.79	H	0.9	8.0	26.90	33.0	-6.1	
Mid Ch								
1880.00	13.70	V	0.9	8.0	20.81	33.0	-12.2	
1880.00	17.99	H	0.9	8.0	25.10	33.0	-7.9	
High Ch								
1907.50	14.20	V	0.9	8.0	21.31	33.0	-11.7	
1907.50	18.50	H	0.9	8.0	25.61	33.0	-7.4	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15i22343						
Date:		12/3/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only						
Location:		Chamber C						
Mode:		LTE_16QAM Band 2 Fundamentals, 5MHz Bandwidth						
Test Equipment:								
Receiving: Horn T185 and Chamber C SMA Cables								
Substitution: Horn T60 Substitution, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1852.50	15.00	V	0.9	8.0	22.11	33.0	-10.9	
1852.50	19.42	H	0.9	8.0	26.53	33.0	-6.5	
Mid Ch								
1880.00	13.52	V	0.9	8.0	20.63	33.0	-12.4	
1880.00	17.47	H	0.9	8.0	24.58	33.0	-8.4	
High Ch								
1907.50	13.63	V	0.9	8.0	20.74	33.0	-12.3	
1907.50	18.09	H	0.9	8.0	25.20	33.0	-7.8	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15I22343						
Date:		12/3/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only						
Location:		Chamber C						
Mode:		LTE_QPSK Band 2 Fundamentals, 10MHz Bandwidth						
Test Equipment:								
Receiving: Horn T185 and Chamber C SMA Cables								
Substitution: Horn T60 Substitution, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1855.00	15.20	V	0.9	8.0	22.31	33.0	-10.7	
1855.00	19.62	H	0.9	8.0	26.73	33.0	-6.3	
Mid Ch								
1880.00	13.70	V	0.9	8.0	20.81	33.0	-12.2	
1880.00	18.01	H	0.9	8.0	25.12	33.0	-7.9	
High Ch								
1905.00	14.42	V	0.9	8.0	21.53	33.0	-11.5	
1905.00	18.28	H	0.9	8.0	25.39	33.0	-7.6	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15I22343						
Date:		12/3/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only						
Location:		Chamber C						
Mode:		LTE_16QAM Band 2 Fundamentals, 10MHz Bandwidth						
Test Equipment:								
Receiving: Horn T185 and Chamber C SMA Cables								
Substitution: Horn T60 Substitution, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1855.00	14.90	V	0.9	8.0	22.01	33.0	-11.0	
1855.00	19.16	H	0.9	8.0	26.27	33.0	-6.7	
Mid Ch								
1880.00	13.22	V	0.9	8.0	20.33	33.0	-12.7	
1880.00	17.66	H	0.9	8.0	24.77	33.0	-8.2	
High Ch								
1905.00	13.60	V	0.9	8.0	20.71	33.0	-12.3	
1905.00	17.83	H	0.9	8.0	24.94	33.0	-8.1	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:	LG Electronics							
Project #:	15i22343							
Date:	12/3/2015							
Test Engineer:	Jude Semana							
Configuration:	EUT Only							
Location:	Chamber C							
Mode:	LTE_QPSK Band 2 Fundamentals, 15MHz Bandwidth							
Test Equipment:								
Receiving: Horn T345 and Chamber B SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1857.50	16.30	V	0.9	8.0	23.41	33.0	-9.6	
1857.50	19.77	H	0.9	8.0	26.88	33.0	-6.1	
Mid Ch								
1880.00	15.20	V	0.9	8.0	22.31	33.0	-10.7	
1880.00	18.38	H	0.9	8.0	25.49	33.0	-7.5	
High Ch								
1902.50	14.20	V	0.9	8.0	21.31	33.0	-11.7	
1902.50	18.35	H	0.9	8.0	25.46	33.0	-7.5	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:	LG Electronics							
Project #:	15i22343							
Date:	12/3/2015							
Test Engineer:	Jude Semana							
Configuration:	EUT Only							
Location:	Chamber C							
Mode:	LTE_16QAM Band 2 Fundamentals, 15MHz Bandwidth							
Test Equipment:								
Receiving: Horn T345 and Chamber B SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1857.50	15.90	V	0.9	8.0	23.01	33.0	-10.0	
1857.50	19.33	H	0.9	8.0	26.44	33.0	-6.6	
Mid Ch								
1880.00	14.89	V	0.9	8.0	22.00	33.0	-11.0	
1880.00	17.90	H	0.9	8.0	25.01	33.0	-8.0	
High Ch								
1902.50	13.70	V	0.9	8.0	20.81	33.0	-12.2	
1902.50	18.00	H	0.9	8.0	25.11	33.0	-7.9	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:	LG Electronics							
Project #:	15i22343							
Date:	12/3/2015							
Test Engineer:	Jude Semana							
Configuration:	EUT Only							
Location:	Chamber C							
Mode:	LTE_QPSK Band 2 Fundamentals, 20MHz Bandwidth							
Test Equipment:								
Receiving: Horn T185 and Chamber C SMA Cables								
Substitution: Horn T60 Substitution, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1860.00	15.12	V	0.9	8.0	22.23	33.0	-10.8	
1860.00	19.34	H	0.9	8.0	26.45	33.0	-6.6	
Mid Ch								
1880.00	15.10	V	0.9	8.0	22.21	33.0	-10.8	
1880.00	18.41	H	0.9	8.0	25.52	33.0	-7.5	
High Ch								
1900.00	15.09	V	0.9	8.0	22.20	33.0	-10.8	
1900.00	18.88	H	0.9	8.0	25.99	33.0	-7.0	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:	LG Electronics							
Project #:	15i22343							
Date:	12/3/2015							
Test Engineer:	Jude Semana							
Configuration:	EUT Only							
Location:	Chamber C							
Mode:	LTE_16QAM Band 2 Fundamentals, 20MHz Bandwidth							
Test Equipment:								
Receiving: Horn T185 and Chamber C SMA Cables								
Substitution: Horn T60 Substitution, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1860.00	14.50	V	0.9	8.0	21.61	33.0	-11.4	
1860.00	18.88	H	0.9	8.0	25.99	33.0	-7.0	
Mid Ch								
1880.00	14.53	V	0.9	8.0	21.64	33.0	-11.4	
1880.00	18.06	H	0.9	8.0	25.17	33.0	-7.8	
High Ch								
1900.00	14.73	V	0.9	8.0	21.84	33.0	-11.2	
1900.00	18.38	H	0.9	8.0	25.49	33.0	-7.5	

LTE Band 4

BW (MHz)	Mode	RB/RB Size	f(MHz)	EIRP	
				dBm	mW
1.4	QPSK	1/0	1710.7	23.43	220.29
		1/0	1732.5	23.53	225.42
		1/0	1754.3	23.94	247.74
	16QAM	1/0	1710.7	23.13	205.59
		1/0	1732.5	23.35	216.27
		1/0	1754.3	23.68	233.35
3	QPSK	1/0	1711.5	23.70	234.42
		1/0	1732.5	23.36	216.77
		1/0	1753.5	24.19	262.42
	16QAM	1/0	1711.5	23.37	217.27
		1/0	1732.5	23.04	201.37
		1/0	1753.5	23.78	238.78
5	QPSK	1/0	1712.5	23.58	228.03
		1/0	1732.5	23.63	230.67
		1/0	1752.5	23.82	240.99
	16QAM	1/0	1712.5	23.25	211.35
		1/0	1732.5	23.26	211.84
		1/0	1752.5	23.53	225.42
10	QPSK	1/0	1715	23.35	216.27
		1/0	1732.5	23.80	239.88
		1/0	1750	23.94	247.74
	16QAM	1/0	1715	23.07	202.77
		1/0	1732.5	23.32	214.78
		1/0	1750	23.54	225.94
15	QPSK	1/0	1717.5	23.37	217.27
		1/0	1732.5	23.85	242.66
		1/0	1747.5	24.55	285.10
	16QAM	1/0	1717.5	22.93	196.34
		1/0	1732.5	23.62	230.14
		1/0	1747.5	24.17	261.22
20	QPSK	1/0	1720	23.82	240.99
		1/0	1732.5	23.90	245.47
		1/0	1745	23.96	248.89
	16QAM	1/0	1720	23.58	228.03
		1/0	1732.5	23.62	230.14
		1/0	1745	23.79	239.33

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15i22343						
Date:		12/3/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only						
Location:		Chamber C						
Mode:		LTE_QPSK Band 4 Fundamentals, 1.4MHz Bandwidth						
Test Equipment:								
Receiving: Horn T119, and Chamber C SMA Cables								
Substitution: Horn T60, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1710.70	13.90	V	0.9	8.2	21.17	30.0	-8.8	
1710.70	16.16	H	0.9	8.2	23.43	30.0	-6.6	
Mid Ch								
1732.50	13.87	V	0.9	8.2	21.14	30.0	-8.9	
1732.50	16.26	H	0.9	8.2	23.53	30.0	-6.5	
High Ch								
1754.30	14.18	V	0.9	8.1	21.37	30.0	-8.6	
1754.30	16.75	H	0.9	8.1	23.94	30.0	-6.1	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15i22343						
Date:		12/3/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only (X-Position)						
Location:		Chamber C						
Mode:		LTE_16QAM Band 4 Fundamentals, 1.4MHz Bandwidth						
Test Equipment:								
Receiving: Horn T119, and Chamber C SMA Cables								
Substitution: Horn T60, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1710.70	13.45	V	0.9	8.2	20.72	30.0	-9.3	
1710.70	15.86	H	0.9	8.2	23.13	30.0	-6.9	
Mid Ch								
1732.50	13.63	V	0.9	8.2	20.90	30.0	-9.1	
1732.50	16.08	H	0.9	8.2	23.35	30.0	-6.6	
High Ch								
1754.30	13.67	V	0.9	8.1	20.86	30.0	-9.1	
1754.30	16.49	H	0.9	8.1	23.68	30.0	-6.3	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15i22343						
Date:		12/3/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only (X-Position)						
Location:		Chamber C						
Mode:		LTE_QPSK Band 4 Fundamentals, 3MHz Bandwidth						
Test Equipment:								
Receiving: Horn T119, and Chamber C SMA Cables								
Substitution: Horn T60, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1711.50	13.20	V	0.9	8.2	20.55	30.0	-9.5	
1711.50	16.35	H	0.9	8.2	23.70	30.0	-6.3	
Mid Ch								
1732.50	12.44	V	0.9	8.2	19.71	30.0	-10.3	
1732.50	16.09	H	0.9	8.2	23.36	30.0	-6.6	
High Ch								
1753.50	14.90	V	0.9	8.1	22.09	30.0	-7.9	
1753.50	17.00	H	0.9	8.1	24.19	30.0	-5.8	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15i22343						
Date:		12/3/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only (X-Position)						
Location:		Chamber C						
Mode:		LTE_16QAM Band 4 Fundamentals, 3MHz Bandwidth						
Test Equipment:								
Receiving: Horn T119, and Chamber C SMA Cables								
Substitution: Horn T60, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1711.50	13.12	V	0.9	8.2	20.47	30.0	-9.5	
1711.50	16.02	H	0.9	8.2	23.37	30.0	-6.6	
Mid Ch								
1732.50	12.11	V	0.9	8.2	19.38	30.0	-10.6	
1732.50	15.77	H	0.9	8.2	23.04	30.0	-7.0	
High Ch								
1753.50	14.57	V	0.9	8.1	21.76	30.0	-8.2	
1753.50	16.59	H	0.9	8.1	23.78	30.0	-6.2	

**High Frequency Substitution Measurement
 UL Verification Services, Inc.**

Company: LG Electronics
Project #: 15i22343
Date: 12/3/2015
Test Engineer: Jude Semana
Configuration: EUT Only
Location: Chamber C
Mode: LTE_QPSK Band 4 Fundamentals, 5MHz Bandwidth

Test Equipment:

Receiving: Horn T119, and Chamber C SMA Cables
Substitution: Horn T60, 4ft SMA Cable Warehouse

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1712.50	12.88	V	0.9	8.2	20.22	30.0	-9.8	
1712.50	16.24	H	0.9	8.2	23.58	30.0	-6.4	
Mid Ch								
1732.50	13.10	V	0.9	8.2	20.37	30.0	-9.6	
1732.50	16.36	H	0.9	8.2	23.63	30.0	-6.4	
High Ch								
1752.50	14.07	V	0.9	8.1	21.27	30.0	-8.7	
1752.50	16.62	H	0.9	8.1	23.82	30.0	-6.2	

**High Frequency Substitution Measurement
 UL Verification Services, Inc.**

Company: LG Electronics
Project #: 15i22343
Date: 12/3/2015
Test Engineer: Jude Semana
Configuration: EUT Only
Location: Chamber C
Mode: LTE_16QAM Band 4 Fundamentals, 5MHz Bandwidth

Test Equipment:

Receiving: Horn T119, and Chamber C SMA Cables
Substitution: Horn T60, 4ft SMA Cable Warehouse

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1712.50	12.53	V	0.9	8.2	19.87	30.0	-10.1	
1712.50	15.91	H	0.9	8.2	23.25	30.0	-6.7	
Mid Ch								
1732.50	12.80	V	0.9	8.2	20.07	30.0	-9.9	
1732.50	15.99	H	0.9	8.2	23.26	30.0	-6.7	
High Ch								
1752.50	13.42	V	0.9	8.1	20.62	30.0	-9.4	
1752.50	16.33	H	0.9	8.1	23.53	30.0	-6.5	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15i22343						
Date:		12/3/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only						
Location:		Chamber C						
Mode:		LTE_QPSK Band 4 Fundamentals, 10MHz Bandwidth						
Test Equipment:								
Receiving: Horn T119, and Chamber C SMA Cables								
Substitution: Horn T60, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1715.00	12.70	V	0.9	8.2	19.97	30.0	-10.0	
1715.00	16.08	H	0.9	8.2	23.35	30.0	-6.6	
Mid Ch								
1732.50	13.20	V	0.9	8.2	20.47	30.0	-9.5	
1732.50	16.53	H	0.9	8.2	23.80	30.0	-6.2	
High Ch								
1750.00	14.62	V	0.9	8.1	21.81	30.0	-8.2	
1750.00	16.75	H	0.9	8.1	23.94	30.0	-6.1	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15i22343						
Date:		12/3/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only						
Location:		Chamber C						
Mode:		LTE_16QAM Band 4 Fundamentals, 10MHz Bandwidth						
Test Equipment:								
Receiving: Horn T119, and Chamber C SMA Cables								
Substitution: Horn T60, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1715.00	13.01	V	0.9	8.2	20.28	30.0	-9.7	
1715.00	15.80	H	0.9	8.2	23.07	30.0	-6.9	
Mid Ch								
1732.50	12.50	V	0.9	8.2	19.77	30.0	-10.2	
1732.50	16.05	H	0.9	8.2	23.32	30.0	-6.7	
High Ch								
1750.00	13.97	V	0.9	8.1	21.16	30.0	-8.8	
1750.00	16.35	H	0.9	8.1	23.54	30.0	-6.5	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15i22343						
Date:		12/3/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only						
Location:		Chamber C						
Mode:		LTE_QPSK Band 4 Fundamentals, 15MHz Bandwidth						
Test Equipment:								
Receiving: Horn T119, and Chamber C SMA Cables								
Substitution: Horn T60, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1717.50	12.87	V	0.9	8.2	20.22	30.0	-9.8	
1717.50	16.02	H	0.9	8.2	23.37	30.0	-6.6	
Mid Ch								
1732.50	13.77	V	0.9	8.2	21.04	30.0	-9.0	
1732.50	16.58	H	0.9	8.2	23.85	30.0	-6.1	
High Ch								
1747.50	15.29	V	0.9	8.1	22.48	30.0	-7.5	
1747.50	17.36	H	0.9	8.1	24.55	30.0	-5.4	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15i22343						
Date:		12/3/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only						
Location:		Chamber C						
Mode:		LTE_16QAM Band 4 Fundamentals, 15MHz Bandwidth						
Test Equipment:								
Receiving: Horn T119, and Chamber C SMA Cables								
Substitution: Horn T60, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1717.50	12.34	V	0.9	8.2	19.69	30.0	-10.3	
1717.50	15.58	H	0.9	8.2	22.93	30.0	-7.1	
Mid Ch								
1732.50	13.30	V	0.9	8.2	20.57	30.0	-9.4	
1732.50	16.35	H	0.9	8.2	23.62	30.0	-6.4	
High Ch								
1747.50	14.40	V	0.9	8.1	21.59	30.0	-8.4	
1747.50	16.98	H	0.9	8.1	24.17	30.0	-5.8	

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Company:		LG Electronics						
Project #:		15i22343						
Date:		12/3/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only						
Location:		Chamber C						
Mode:		LTE_QPSK Band 4 Fundamentals, 20MHz Bandwidth						
Test Equipment:								
Receiving: Horn T119, and Chamber C SMA Cables								
Substitution: Horn T60, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1720.00	11.90	V	0.9	8.2	19.24	30.0	-10.8	
1720.00	16.48	H	0.9	8.2	23.82	30.0	-6.2	
Mid Ch								
1732.50	12.80	V	0.9	8.2	20.07	30.0	-9.9	
1732.50	16.63	H	0.9	8.2	23.90	30.0	-6.1	
High Ch								
1745.00	14.32	V	0.9	8.1	21.52	30.0	-8.5	
1745.00	16.76	H	0.9	8.1	23.96	30.0	-6.0	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15i22343						
Date:		12/3/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only						
Location:		Chamber C						
Mode:		LTE_16QAM Band 4 Fundamentals, 20MHz Bandwidth						
Test Equipment:								
Receiving: Horn T119, and Chamber C SMA Cables								
Substitution: Horn T60, 4ft SMA Cable Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1720.00	11.85	V	0.9	8.2	19.19	30.0	-10.8	
1720.00	16.24	H	0.9	8.2	23.58	30.0	-6.4	
Mid Ch								
1732.50	12.67	V	0.9	8.2	19.94	30.0	-10.1	
1732.50	16.35	H	0.9	8.2	23.62	30.0	-6.4	
High Ch								
1745.00	13.68	V	0.9	8.1	20.88	30.0	-9.1	
1745.00	16.59	H	0.9	8.1	23.79	30.0	-6.2	

LTE Band 5

BW (MHz)	Mode	RB/RB Size	f(MHz)	EIRP	
				dBm	mW
1.4	QPSK	1/0	824.7	21.43	139.00
		1/0	836.5	20.8	120.23
		1/0	848.3	21.64	145.88
	16QAM	1/0	824.7	21.0	125.89
		1/0	836.5	20.4	109.65
		1/0	848.3	21.1	128.82
3	QPSK	1/0	825.5	21.2	131.83
		1/0	836.5	20.8	120.23
		1/0	847.5	21.5	141.25
	16QAM	1/0	825.5	20.8	120.23
		1/0	836.5	20.4	109.65
		1/0	847.5	21.2	131.83
5	QPSK	1/0	826.5	21.2	125.89
		1/0	836.5	20.8	120.23
		1/0	846.5	21.8	151.36
	16QAM	1/0	826.5	20.7	117.49
		1/0	836.5	20.3	107.15
		1/0	846.5	21.4	138.04
10	QPSK	1/0	829	20.9	123.03
		1/0	836.5	20.6	114.82
		1/0	844	20.8	120.23
	16QAM	1/0	829	20.5	112.20
		1/0	836.5	20.3	107.15
		1/0	844	20.4	109.65

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15I22343						
Date:		12/2/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only (X-Position)						
Location:		Chamber C						
Mode:		LTE_QPSK Band 5 Fundamentals, 1.4MHz Bandwidth						
Test Equipment:								
Receiving: Sunol T185 and 3m Chamber C N-type Cable								
Substitution: Dipole T416, 4ft SMA Cable Warehouse.								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
824.70	14.50	V	0.9	0.0	13.60	38.5	-24.9	
824.70	22.33	H	0.9	0.0	21.43	38.5	-17.1	
Mid Ch								
836.50	13.90	V	0.9	0.0	13.00	38.5	-25.5	
836.50	21.70	H	0.9	0.0	20.80	38.5	-17.7	
High Ch								
848.30	14.93	V	0.9	0.0	14.03	38.5	-24.5	
848.30	22.54	H	0.9	0.0	21.64	38.5	-16.9	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15I22343						
Date:		12/2/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only						
Location:		Chamber C						
Mode:		LTE_16QAM Band 5 Fundamentals, 1.4MHz Bandwidth						
Test Equipment:								
Receiving: Sunol T185 and 3m Chamber C N-type Cable								
Substitution: Dipole T416, 4ft SMA Cable Warehouse.								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
824.70	14.30	V	0.9	0.0	13.40	38.5	-25.1	
824.70	21.90	H	0.9	0.0	21.00	38.5	-17.5	
Mid Ch								
836.50	13.40	V	0.9	0.0	12.50	38.5	-26.0	
836.50	21.30	H	0.9	0.0	20.40	38.5	-18.1	
High Ch								
848.30	13.80	V	0.9	0.0	12.90	38.5	-25.6	
848.30	22.00	H	0.9	0.0	21.10	38.5	-17.4	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15I22343						
Date:		12/2/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only (X-Position)						
Location:		Chamber C						
Mode:		LTE_QPSK Band 5 Fundamentals, 3MHz Bandwidth						
Test Equipment:								
Receiving: Sunol T185 and 3m Chamber C N-type Cable								
Substitution: Dipole T416, 4ft SMA Cable Warehouse.								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
825.50	14.70	V	0.9	0.0	13.80	38.5	-24.7	
825.50	22.10	H	0.9	0.0	21.20	38.5	-17.3	
Mid Ch								
836.50	13.70	V	0.9	0.0	12.80	38.5	-25.7	
836.50	21.70	H	0.9	0.0	20.80	38.5	-17.7	
High Ch								
847.50	14.00	V	0.9	0.0	13.10	38.5	-25.4	
847.50	22.40	H	0.9	0.0	21.50	38.5	-17.0	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15I22343						
Date:		12/2/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only (X-Position)						
Location:		Chamber C						
Mode:		LTE_16QAM Band 5 Fundamentals, 3MHz Bandwidth						
Test Equipment:								
Receiving: Sunol T185 and 3m Chamber C N-type Cable								
Substitution: Dipole T416, 4ft SMA Cable Warehouse.								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
825.50	14.10	V	0.9	0.0	13.20	38.5	-25.3	
825.50	21.70	H	0.9	0.0	20.80	38.5	-17.7	
Mid Ch								
836.50	12.90	V	0.9	0.0	12.00	38.5	-26.5	
836.50	21.30	H	0.9	0.0	20.40	38.5	-18.1	
High Ch								
847.50	13.90	V	0.9	0.0	13.00	38.5	-25.5	
847.50	22.10	H	0.9	0.0	21.20	38.5	-17.3	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15I22343						
Date:		12/2/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only (X-Position)						
Location:		Chamber C						
Mode:		LTE_QPSK Band 5 Fundamentals, 5MHz Bandwidth						
Test Equipment:								
Receiving: Sunol T185 and 3m Chamber C N-type Cable								
Substitution: Dipole T416, 4ft SMA Cable Warehouse.								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
826.50	14.30	V	0.9	0.0	13.40	38.5	-25.1	
826.50	22.10	H	0.9	0.0	21.20	38.5	-17.3	
Mid Ch								
836.50	13.70	V	0.9	0.0	12.80	38.5	-25.7	
836.50	21.70	H	0.9	0.0	20.80	38.5	-17.7	
High Ch								
846.50	15.10	V	0.9	0.0	14.20	38.5	-24.3	
846.50	22.70	H	0.9	0.0	21.80	38.5	-16.7	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15I22337						
Date:		12/3/2015						
Test Engineer:		A. Escamilla						
Configuration:		EUT Only (X-Position)						
Location:		Chamber C						
Mode:		LTE_16QAM Band 5 Fundamentals, 5MHz Bandwidth						
Test Equipment:								
Receiving: Sunol T185 and 3m Chamber C N-type Cable								
Substitution: Dipole T416, 4ft SMA Cable Warehouse.								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
826.50	14.00	V	0.9	0.0	13.10	38.5	-25.4	
826.50	21.60	H	0.9	0.0	20.70	38.5	-17.8	
Mid Ch								
836.50	13.30	V	0.9	0.0	12.40	38.5	-26.1	
836.50	21.20	H	0.9	0.0	20.30	38.5	-18.2	
High Ch								
846.50	14.30	V	0.9	0.0	13.40	38.5	-25.1	
846.50	22.30	H	0.9	0.0	21.40	38.5	-17.1	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15I22343						
Date:		12/2/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only (X-Position)						
Location:		Chamber C						
Mode:		LTE_QPSK Band 5 Fundamentals, 10MHz Bandwidth						
Test Equipment:								
Receiving: Sunol T185 and 3m Chamber C N-type Cable								
Substitution: Dipole T416, 4ft SMA Cable Warehouse.								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
829.00	14.10	V	0.9	0.0	13.20	38.5	-25.3	
829.00	21.80	H	0.9	0.0	20.90	38.5	-17.6	
Mid Ch								
836.50	13.50	V	0.9	0.0	12.60	38.5	-25.9	
836.50	21.50	H	0.9	0.0	20.60	38.5	-17.9	
High Ch								
844.00	14.10	V	0.9	0.0	13.20	38.5	-25.3	
844.00	21.70	H	0.9	0.0	20.80	38.5	-17.7	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG Electronics						
Project #:		15I22343						
Date:		12/2/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only (X-Position)						
Location:		Chamber C						
Mode:		LTE_16QAM Band 5 Fundamentals, 10MHz Bandwidth						
Test Equipment:								
Receiving: Sunol T185 and 3m Chamber C N-type Cable								
Substitution: Dipole T416, 4ft SMA Cable Warehouse.								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
829.00	13.70	V	0.9	0.0	12.80	38.5	-25.7	
829.00	21.40	H	0.9	0.0	20.50	38.5	-18.0	
Mid Ch								
836.50	13.30	V	0.9	0.0	12.40	38.5	-26.1	
836.50	21.20	H	0.9	0.0	20.30	38.5	-18.2	
High Ch								
844.00	13.40	V	0.9	0.0	12.50	38.5	-26.0	
844.00	21.30	H	0.9	0.0	20.40	38.5	-18.1	

LTE Band 17

BW (MHz)	Mode	RB/RB Size	f(MHz)	EIRP	
				dBm	mW
5	QPSK	1/0	706.5	18.43	69.66
		1/0	710	18.57	71.94
		1/0	713.5	17.93	62.09
	16QAM	1/0	706.5	17.60	57.54
		1/0	710	17.95	62.37
		1/0	713.5	17.05	50.70
10	QPSK	1/0	709	18.13	65.01
		1/0	710	18.85	76.74
		1/0	711	18.60	72.44
	16QAM	1/0	709	17.58	57.28
		1/0	710	18.18	65.77
		1/0	711	17.63	57.94

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:	LG							
Project #:	15I22343							
Date:	12/4/2015							
Test Engineer:	Jude Semana							
Configuration:	EUT Only							
Location:	Chamber C							
Mode:	LTE_QPSK Band 17 Fundamentals, 5MHz Bandwidth							
Test Equipment:								
Receiving: Hybrid T185, and Chamber C SMA Cables								
Substitution: Dipole T416, 4ft SMA Cable (SN # 506392) Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
706.50	9.62	V	0.9	0.0	8.72	34.8	-26.1	
706.50	19.33	H	0.9	0.0	18.43	34.8	-16.3	
Mid Ch								
710.00	10.15	V	0.9	0.0	9.25	34.8	-25.5	
710.00	19.47	H	0.9	0.0	18.57	34.8	-16.2	
High Ch								
713.50	9.07	V	0.9	0.0	8.17	34.8	-26.6	
713.50	18.83	H	0.9	0.0	17.93	34.8	-16.8	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:	LG							
Project #:	15I22343							
Date:	12/4/2015							
Test Engineer:	Jude Semana							
Configuration:	EUT Only							
Location:	Chamber C							
Mode:	LTE_16QAM Band 17 Fundamentals, 5MHz Bandwidth							
Test Equipment:								
Receiving: Hybrid T185, and Chamber C SMA Cables								
Substitution: Dipole T416, 4ft SMA Cable (SN # 506392) Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
706.50	8.15	V	0.9	0.0	7.25	34.8	-27.5	
706.50	18.50	H	0.9	0.0	17.60	34.8	-17.2	
Mid Ch								
710.00	8.96	V	0.9	0.0	8.06	34.8	-26.7	
710.00	18.85	H	0.9	0.0	17.95	34.8	-16.8	
High Ch								
713.50	8.08	V	0.9	0.0	7.18	34.8	-27.6	
713.50	17.95	H	0.9	0.0	17.05	34.8	-17.7	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG						
Project #:		15I22343						
Date:		12/4/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only						
Location:		Chamber C						
Mode:		LTE_QPSK Band 17 Fundamentals, 10MHz Bandwidth						
Test Equipment:								
Receiving: Hybrid T185, and Chamber C SMA Cables								
Substitution: Dipole T416, 4ft SMA Cable (SN # 506392) Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
709.00	9.84	V	0.9	0.0	8.94	34.8	-25.8	
709.00	19.03	H	0.9	0.0	18.13	34.8	-16.6	
Mid Ch								
710.00	10.48	V	0.9	0.0	9.58	34.8	-25.2	
710.00	19.75	H	0.9	0.0	18.85	34.8	-15.9	
High Ch								
711.00	10.20	V	0.9	0.0	9.30	34.8	-25.5	
711.00	19.50	H	0.9	0.0	18.60	34.8	-16.2	

High Frequency Substitution Measurement UL Verification Services, Inc.								
Company:		LG						
Project #:		15I22343						
Date:		12/4/2015						
Test Engineer:		Jude Semana						
Configuration:		EUT Only						
Location:		Chamber C						
Mode:		LTE_16QAM Band 17 Fundamentals, 10MHz Bandwidth						
Test Equipment:								
Receiving: Hybrid T185, and Chamber C SMA Cables								
Substitution: Dipole T416, 4ft SMA Cable (SN # 506392) Warehouse								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
709.00	8.78	V	0.9	0.0	7.88	34.8	-26.9	
709.00	18.48	H	0.9	0.0	17.58	34.8	-17.2	
Mid Ch								
710.00	9.50	V	0.9	0.0	8.60	34.8	-26.2	
710.00	19.08	H	0.9	0.0	18.18	34.8	-16.6	
High Ch								
711.00	9.12	V	0.9	0.0	8.22	34.8	-26.6	
711.00	18.53	H	0.9	0.0	17.63	34.8	-17.1	

14.2. FIELD STRENGTH OF SPURIOUS RADIATION

RULE PART(S)

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

LIMIT

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

Part 27: (m)(4) (4) For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

TEST PROCEDURE

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

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

14.2.1. SPURIOUS RADIATION DATA RESULTS

GSM

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG Electronics							
Project #:		15I22343							
Date:		12/5/2015							
Test Engineer:		A. Escamilla							
Configuration:		X-pos EUT w/ AC Adapter + Headset							
Location:		Chamber C							
Mode:		GPRS 850 MHz Harmonics							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 824.2									
1648.40	-21.4	V	3.0	37.0	1.0	-57.4	-13.0	-44.4	
2472.60	-20.5	V	3.0	36.4	1.0	-55.9	-13.0	-42.9	
3296.80	-20.5	V	3.0	36.2	1.0	-55.7	-13.0	-42.7	
1648.40	-10.7	H	3.0	37.0	1.0	-46.7	-13.0	-33.7	
2472.60	-11.7	H	3.0	36.4	1.0	-47.2	-13.0	-34.2	
3296.80	-18.9	H	3.0	36.2	1.0	-54.0	-13.0	-41.0	
Mid Ch, 836.6									
1673.20	-17.3	V	3.0	37.0	1.0	-53.3	-13.0	-40.3	
2509.80	-20.5	V	3.0	36.4	1.0	-55.9	-13.0	-42.9	
3346.40	-21.0	V	3.0	36.1	1.0	-56.2	-13.0	-43.2	
1673.20	-14.9	H	3.0	37.0	1.0	-50.9	-13.0	-37.9	
2509.80	-19.3	H	3.0	36.4	1.0	-54.7	-13.0	-41.7	
3346.40	-19.6	H	3.0	36.1	1.0	-54.7	-13.0	-41.7	
High Ch, 848.8									
1697.60	-18.1	V	3.0	37.0	1.0	-54.1	-13.0	-41.1	
2546.40	-16.1	V	3.0	36.4	1.0	-51.6	-13.0	-38.6	
3395.20	-20.8	V	3.0	36.1	1.0	-55.9	-13.0	-42.9	
1697.60	-5.7	H	3.0	37.0	1.0	-41.6	-13.0	-28.6	
2546.40	-17.3	H	3.0	36.4	1.0	-52.7	-13.0	-39.7	
3395.20	-18.3	H	3.0	36.1	1.0	-53.3	-13.0	-40.3	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG Electronics							
Project #:		15I22343							
Date:		12/5/2015							
Test Engineer:		A. Escamilla							
Configuration:		X-pos EUT w/ AC Adapter + Headset							
Location:		Chamber C							
Mode:		GPRS 1900 MHz Harmonics							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1850.2									
3700.40	-8.3	V	3.0	35.9	1.0	-43.2	-13.0	-30.2	
5550.60	-12.9	V	3.0	35.5	1.0	-47.3	-13.0	-34.3	
7400.80	-13.4	V	3.0	35.7	1.0	-48.1	-13.0	-35.1	
3700.40	-14.9	H	3.0	35.9	1.0	-49.8	-13.0	-36.8	
5550.60	-8.7	H	3.0	35.5	1.0	-43.2	-13.0	-30.2	
7400.80	-12.3	H	3.0	35.7	1.0	-47.0	-13.0	-34.0	
Mid Ch, 1880									
3760.00	-10.3	V	3.0	35.8	1.0	-45.1	-13.0	-32.1	
5640.00	-15.3	V	3.0	35.5	1.0	-49.8	-13.0	-36.8	
7520.00	-10.8	V	3.0	35.7	1.0	-45.6	-13.0	-32.6	
3760.00	-14.6	H	3.0	35.8	1.0	-49.4	-13.0	-36.4	
5640.00	-7.8	H	3.0	35.5	1.0	-42.3	-13.0	-29.3	
7520.00	-9.9	H	3.0	35.7	1.0	-44.6	-13.0	-31.6	
High Ch, 1909.8									
3819.60	-9.9	V	3.0	35.8	1.0	-44.7	-13.0	-31.7	
5729.40	-15.1	V	3.0	35.5	1.0	-49.6	-13.0	-36.6	
7639.20	-12.0	V	3.0	35.8	1.0	-46.8	-13.0	-33.8	
3819.60	-11.8	H	3.0	35.8	1.0	-46.5	-13.0	-33.5	
5729.40	-9.0	H	3.0	35.5	1.0	-43.5	-13.0	-30.5	
7639.20	-11.6	H	3.0	35.8	1.0	-46.4	-13.0	-33.4	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG Electronics							
Project #:		15I22343							
Date:		12/5/2015							
Test Engineer:		A. Escamilla							
Configuration:		X-pos EUT w/ AC Adapter + Headset							
Location:		Chamber C							
Mode:		EGPRS 1900 MHz Harmonics							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1850.2									
3700.40	-8.9	V	3.0	35.9	1.0	-43.7	-13.0	-30.7	
5550.60	-14.1	V	3.0	35.5	1.0	-48.5	-13.0	-35.5	
7400.80	-12.6	V	3.0	35.7	1.0	-47.4	-13.0	-34.4	
3700.40	-15.9	H	3.0	35.9	1.0	-50.8	-13.0	-37.8	
5550.60	-12.7	H	3.0	35.5	1.0	-47.2	-13.0	-34.2	
7400.80	-12.3	H	3.0	35.7	1.0	-47.1	-13.0	-34.1	
Mid Ch, 1880									
3760.00	-11.2	V	3.0	35.8	1.0	-46.0	-13.0	-33.0	
5640.00	-15.9	V	3.0	35.5	1.0	-50.3	-13.0	-37.3	
7520.00	-12.7	V	3.0	35.7	1.0	-47.5	-13.0	-34.5	
3760.00	-16.9	H	3.0	35.8	1.0	-51.7	-13.0	-38.7	
5640.00	-12.8	H	3.0	35.5	1.0	-47.3	-13.0	-34.3	
7520.00	-12.0	H	3.0	35.7	1.0	-46.7	-13.0	-33.7	
High Ch, 1909.8									
3819.60	-10.9	V	3.0	35.8	1.0	-45.7	-13.0	-32.7	
5729.40	-16.3	V	3.0	35.5	1.0	-50.8	-13.0	-37.8	
7639.20	-13.3	V	3.0	35.8	1.0	-48.1	-13.0	-35.1	
3819.60	-14.1	H	3.0	35.8	1.0	-48.8	-13.0	-35.8	
5729.40	-12.2	H	3.0	35.5	1.0	-46.7	-13.0	-33.7	
7639.20	-12.4	H	3.0	35.8	1.0	-47.1	-13.0	-34.1	

WCDMA

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement										
Company:		LG								
Project #:		15I22343								
Date:		12/4/2015								
Test Engineer:		K.Kedida								
Configuration:		X-pos EUT, Ac Charger, Headset								
Location:		Chamber H								
Mode:		Rel99 Band 2 Harmonics								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	
Low Ch, 1852.4										
3704.80	-11.7	V	3.0	35.9	1.0	-46.6	-13.0	-33.6		
5557.20	-11.8	V	3.0	35.5	1.0	-46.3	-13.0	-33.3		
7409.60	-13.7	V	3.0	35.7	1.0	-48.4	-13.0	-35.4		
3704.80	-9.8	H	3.0	35.9	1.0	-44.7	-13.0	-31.7		
5557.20	-9.5	H	3.0	35.5	1.0	-43.9	-13.0	-30.9		
7409.60	-12.3	H	3.0	35.7	1.0	-47.0	-13.0	-34.0		
Mid Ch, 1880										
3760.00	-11.3	V	3.0	35.8	1.0	-46.1	-13.0	-33.1		
5640.00	-11.3	V	3.0	35.5	1.0	-45.8	-13.0	-32.8		
7520.00	-12.9	V	3.0	35.7	1.0	-47.7	-13.0	-34.7		
3760.00	-10.0	H	3.0	35.8	1.0	-44.8	-13.0	-31.8		
5640.00	-10.3	H	3.0	35.5	1.0	-44.8	-13.0	-31.8		
7520.00	-12.5	H	3.0	35.7	1.0	-47.3	-13.0	-34.3		
High Ch, 1907.6										
3815.20	-10.5	V	3.0	35.8	1.0	-45.3	-13.0	-32.3		
5722.80	-11.5	V	3.0	35.5	1.0	-46.0	-13.0	-33.0		
7630.40	-11.8	V	3.0	35.8	1.0	-46.5	-13.0	-33.5		
3815.20	-9.8	H	3.0	35.8	1.0	-44.5	-13.0	-31.5		
5722.80	-10.9	H	3.0	35.5	1.0	-45.4	-13.0	-32.4		
7630.40	-11.8	H	3.0	35.8	1.0	-46.5	-13.0	-33.5		

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement										
Company:		LG								
Project #:		15I22343								
Date:		12/4/2015								
Test Engineer:		K.Kedida								
Configuration:		X-pos EUT, Ac Charger, Headset								
Location:		Chamber H								
Mode:		HSDPA Band 2 Harmonics								
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	
Low Ch, 1852.4										
3704.80	-12.2	V	3.0	35.9	1.0	-47.0	-13.0	-34.0		
5557.20	-12.9	V	3.0	35.5	1.0	-47.4	-13.0	-34.4		
7409.60	-12.7	V	3.0	35.7	1.0	-47.5	-13.0	-34.5		
3704.80	-10.6	H	3.0	35.9	1.0	-45.4	-13.0	-32.4		
5557.20	-10.4	H	3.0	35.5	1.0	-44.8	-13.0	-31.8		
7409.60	-12.3	H	3.0	35.7	1.0	-47.0	-13.0	-34.0		
Mid Ch, 1880										
3760.00	-11.9	V	3.0	35.8	1.0	-46.7	-13.0	-33.7		
5640.00	-11.8	V	3.0	35.5	1.0	-46.3	-13.0	-33.3		
7520.00	-11.9	V	3.0	35.7	1.0	-46.7	-13.0	-33.7		
3760.00	-10.4	H	3.0	35.8	1.0	-45.2	-13.0	-32.2		
5640.00	-11.8	H	3.0	35.5	1.0	-46.3	-13.0	-33.3		
7520.00	-11.6	H	3.0	35.7	1.0	-46.4	-13.0	-33.4		
High Ch, 1907.6										
3815.20	-9.1	V	3.0	35.8	1.0	-43.8	-13.0	-30.8		
5722.80	-11.4	V	3.0	35.5	1.0	-45.9	-13.0	-32.9		
7630.40	-13.0	V	3.0	35.8	1.0	-47.7	-13.0	-34.7		
3815.20	-10.3	H	3.0	35.8	1.0	-45.1	-13.0	-32.1		
5722.80	-12.1	H	3.0	35.5	1.0	-46.6	-13.0	-33.6		
7630.40	-10.8	H	3.0	35.8	1.0	-45.5	-13.0	-32.5		

Compliance Certification Services									
Above 1GHz High Frequency Substitution Measurement									
Company:		LG Electronics							
Project #:		15I22343							
Date:		12/5/2015							
Test Engineer:		A. Escamilla							
Configuration:		X-pos EUT w/ AC Adapter + Headset							
Location:		Chamber C							
Mode:		Rel99 Band 5 Harmonics							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 826.4									
1652.80	-26.2	V	3.0	37.0	1.0	-62.3	-13.0	-49.3	
2479.20	-22.7	V	3.0	36.4	1.0	-58.1	-13.0	-45.1	
3305.60	-20.5	V	3.0	36.1	1.0	-55.7	-13.0	-42.7	
1652.80	-25.4	H	3.0	37.0	1.0	-61.4	-13.0	-48.4	
2479.20	-24.8	H	3.0	36.4	1.0	-60.3	-13.0	-47.3	
3305.60	-21.4	H	3.0	36.1	1.0	-56.5	-13.0	-43.5	
Mid Ch, 836.6									
1673.20	-25.8	V	3.0	37.0	1.0	-61.8	-13.0	-48.8	
2509.80	-21.7	V	3.0	36.4	1.0	-57.1	-13.0	-44.1	
3346.40	-21.0	V	3.0	36.1	1.0	-56.1	-13.0	-43.1	
1673.20	-24.1	H	3.0	37.0	1.0	-60.1	-13.0	-47.1	
2509.80	-24.8	H	3.0	36.4	1.0	-60.2	-13.0	-47.2	
3346.40	-21.0	H	3.0	36.1	1.0	-56.2	-13.0	-43.2	
High Ch, 846.6									
1693.20	-24.8	V	3.0	37.0	1.0	-60.8	-13.0	-47.8	
2539.80	-20.4	V	3.0	36.4	1.0	-55.8	-13.0	-42.8	
3386.40	-20.4	V	3.0	36.1	1.0	-55.5	-13.0	-42.5	
1693.20	-23.7	H	3.0	37.0	1.0	-59.7	-13.0	-46.7	
2539.80	-24.9	H	3.0	36.4	1.0	-60.3	-13.0	-47.3	
3386.40	-20.8	H	3.0	36.1	1.0	-55.9	-13.0	-42.9	

Compliance Certification Services									
Above 1GHz High Frequency Substitution Measurement									
Company:		LG Electronics							
Project #:		15I22343							
Date:		12/5/2015							
Test Engineer:		A. Escamilla							
Configuration:		X-pos EUT w/ AC Adapter + Headset							
Location:		Chamber C							
Mode:		HSDPA Band 5 Harmonics							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 826.4									
1652.80	-27.1	V	3.0	37.0	1.0	-63.1	-13.0	-50.1	
2479.20	-23.5	V	3.0	36.4	1.0	-58.9	-13.0	-45.9	
3305.60	-21.3	V	3.0	36.1	1.0	-56.4	-13.0	-43.4	
1652.80	-24.9	H	3.0	37.0	1.0	-60.9	-13.0	-47.9	
2479.20	-24.4	H	3.0	36.4	1.0	-59.8	-13.0	-46.8	
3305.60	-20.6	H	3.0	36.1	1.0	-55.7	-13.0	-42.7	
Mid Ch, 836.6									
1673.20	-26.3	V	3.0	37.0	1.0	-62.3	-13.0	-49.3	
2509.80	-22.6	V	3.0	36.4	1.0	-58.0	-13.0	-45.0	
3346.40	-21.1	V	3.0	36.1	1.0	-56.3	-13.0	-43.3	
1673.20	-24.5	H	3.0	37.0	1.0	-60.5	-13.0	-47.5	
2509.80	-24.7	H	3.0	36.4	1.0	-60.1	-13.0	-47.1	
3346.40	-20.6	H	3.0	36.1	1.0	-55.7	-13.0	-42.7	
High Ch, 846.6									
1693.20	-26.3	V	3.0	37.0	1.0	-62.3	-13.0	-49.3	
2539.80	-22.6	V	3.0	36.4	1.0	-58.0	-13.0	-45.0	
3386.40	-20.9	V	3.0	36.1	1.0	-56.0	-13.0	-43.0	
1693.20	-23.6	H	3.0	37.0	1.0	-59.6	-13.0	-46.6	
2539.80	-24.2	H	3.0	36.4	1.0	-59.6	-13.0	-46.6	
3386.40	-19.3	H	3.0	36.1	1.0	-54.4	-13.0	-41.4	

LTE Band 2

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_QPSK Band 2 Harmonics, 1.4MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1850.7									
3701.40	0.0	V	3.0	35.9	1.0	-34.9	-13.0	-21.9	
5552.10	-11.0	V	3.0	35.5	1.0	-45.5	-13.0	-32.5	
7402.80	-14.6	V	3.0	35.7	1.0	-49.3	-13.0	-36.3	
3701.40	-1.8	H	3.0	35.9	1.0	-36.7	-13.0	-23.7	
5552.10	-8.4	H	3.0	35.5	1.0	-42.9	-13.0	-29.9	
7402.80	-14.9	H	3.0	35.7	1.0	-49.6	-13.0	-36.6	
Mid Ch, 1880									
3760.00	-1.2	V	3.0	35.8	1.0	-36.0	-13.0	-23.0	
5640.00	-15.4	V	3.0	35.5	1.0	-49.9	-13.0	-36.9	
7520.00	-15.4	V	3.0	35.7	1.0	-50.2	-13.0	-37.2	
3760.00	-1.9	H	3.0	35.8	1.0	-36.7	-13.0	-23.7	
5640.00	-11.2	H	3.0	35.5	1.0	-45.7	-13.0	-32.7	
7520.00	-14.6	H	3.0	35.7	1.0	-49.3	-13.0	-36.3	
High Ch, 1909.3									
3818.60	0.2	V	3.0	35.8	1.0	-34.5	-13.0	-21.5	
5727.90	-15.4	V	3.0	35.5	1.0	-49.9	-13.0	-36.9	
7637.20	-14.6	V	3.0	35.8	1.0	-49.3	-13.0	-36.3	
3818.60	-1.5	H	3.0	35.8	1.0	-36.3	-13.0	-23.3	
5727.90	-14.2	H	3.0	35.5	1.0	-48.7	-13.0	-35.7	
7637.20	-13.8	H	3.0	35.8	1.0	-48.5	-13.0	-35.5	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_16QAM Band 2 Harmonics, 1.4MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1850.7									
3701.40	-0.3	V	3.0	35.9	1.0	-35.1	-13.0	-22.1	
5552.10	-11.6	V	3.0	35.5	1.0	-46.1	-13.0	-33.1	
7402.80	-15.4	V	3.0	35.7	1.0	-50.2	-13.0	-37.2	
3701.40	-2.1	H	3.0	35.9	1.0	-36.9	-13.0	-23.9	
5552.10	-9.6	H	3.0	35.5	1.0	-44.0	-13.0	-31.0	
7402.80	-15.4	H	3.0	35.7	1.0	-50.2	-13.0	-37.2	
Mid Ch, 1880									
3760.00	-2.6	V	3.0	35.8	1.0	-37.5	-13.0	-24.5	
5640.00	-15.9	V	3.0	35.5	1.0	-50.4	-13.0	-37.4	
7520.00	-15.7	V	3.0	35.7	1.0	-50.4	-13.0	-37.4	
3760.00	-4.4	H	3.0	35.8	1.0	-39.2	-13.0	-26.2	
5640.00	-12.6	H	3.0	35.5	1.0	-47.1	-13.0	-34.1	
7520.00	-15.0	H	3.0	35.7	1.0	-49.8	-13.0	-36.8	
High Ch, 1909.3									
3818.60	0.0	V	3.0	35.8	1.0	-34.7	-13.0	-21.7	
5727.90	-15.7	V	3.0	35.5	1.0	-50.2	-13.0	-37.2	
7637.20	-14.8	V	3.0	35.8	1.0	-49.6	-13.0	-36.6	
3818.60	-1.8	H	3.0	35.8	1.0	-36.6	-13.0	-23.6	
5727.90	-14.8	H	3.0	35.5	1.0	-49.3	-13.0	-36.3	
7637.20	-14.7	H	3.0	35.8	1.0	-49.5	-13.0	-36.5	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_QPSK Band 2 Harmonics, 3MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1851.5									
3703.00	0.4	V	3.0	35.9	1.0	-34.4	-13.0	-21.4	
5554.50	-9.8	V	3.0	35.5	1.0	-44.3	-13.0	-31.3	
7406.00	-14.2	V	3.0	35.7	1.0	-48.9	-13.0	-35.9	
3703.00	-1.3	H	3.0	35.9	1.0	-36.1	-13.0	-23.1	
5554.50	-7.5	H	3.0	35.5	1.0	-42.0	-13.0	-29.0	
7406.00	-14.5	H	3.0	35.7	1.0	-49.2	-13.0	-36.2	
Mid Ch, 1880									
3760.00	-1.2	V	3.0	35.8	1.0	-36.0	-13.0	-23.0	
5640.00	-11.9	V	3.0	35.5	1.0	-46.4	-13.0	-33.4	
7520.00	-15.5	V	3.0	35.7	1.0	-50.3	-13.0	-37.3	
3760.00	-3.5	H	3.0	35.8	1.0	-38.3	-13.0	-25.3	
5640.00	-4.6	H	3.0	35.5	1.0	-39.1	-13.0	-26.1	
7520.00	-15.0	H	3.0	35.7	1.0	-49.7	-13.0	-36.7	
High Ch, 1908.5									
3817.00	-0.7	V	3.0	35.8	1.0	-35.5	-13.0	-22.5	
5725.50	-13.3	V	3.0	35.5	1.0	-47.8	-13.0	-34.8	
7634.00	-15.0	V	3.0	35.8	1.0	-49.7	-13.0	-36.7	
3817.00	-1.1	H	3.0	35.8	1.0	-35.9	-13.0	-22.9	
5725.50	-10.1	H	3.0	35.5	1.0	-44.6	-13.0	-31.6	
7634.00	-14.9	H	3.0	35.8	1.0	-49.7	-13.0	-36.7	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_16QAM Band 2 Harmonics, 3MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1851.5									
3703.00	-0.4	V	3.0	35.9	1.0	-35.3	-13.0	-22.3	
5554.50	-10.6	V	3.0	35.5	1.0	-45.0	-13.0	-32.0	
7406.00	-16.3	V	3.0	35.7	1.0	-51.0	-13.0	-38.0	
3703.00	-1.9	H	3.0	35.9	1.0	-36.7	-13.0	-23.7	
5554.50	-9.1	H	3.0	35.5	1.0	-43.6	-13.0	-30.6	
7406.00	-15.1	H	3.0	35.7	1.0	-49.8	-13.0	-36.8	
Mid Ch, 1880									
3760.00	-1.9	V	3.0	35.8	1.0	-36.7	-13.0	-23.7	
5640.00	-12.6	V	3.0	35.5	1.0	-47.1	-13.0	-34.1	
7520.00	-15.9	V	3.0	35.7	1.0	-50.7	-13.0	-37.7	
3760.00	-4.5	H	3.0	35.8	1.0	-39.3	-13.0	-26.3	
5640.00	-8.2	H	3.0	35.5	1.0	-42.6	-13.0	-29.6	
7520.00	-15.7	H	3.0	35.7	1.0	-50.5	-13.0	-37.5	
High Ch, 1908.5									
3817.00	-0.9	V	3.0	35.8	1.0	-35.6	-13.0	-22.6	
5725.50	-13.7	V	3.0	35.5	1.0	-48.2	-13.0	-35.2	
7634.00	-15.6	V	3.0	35.8	1.0	-50.3	-13.0	-37.3	
3817.00	-1.8	H	3.0	35.8	1.0	-36.6	-13.0	-23.6	
5725.50	-10.6	H	3.0	35.5	1.0	-45.1	-13.0	-32.1	
7634.00	-15.3	H	3.0	35.8	1.0	-50.1	-13.0	-37.1	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_QPSK Band 2 Harmonics, 5MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1852.5									
3705.00	1.1	V	3.0	35.9	1.0	-33.8	-13.0	-20.8	
5557.50	-10.3	V	3.0	35.5	1.0	-44.8	-13.0	-31.8	
7410.00	-12.6	V	3.0	35.7	1.0	-47.4	-13.0	-34.4	
3705.00	-1.0	H	3.0	35.9	1.0	-35.8	-13.0	-22.8	
5557.50	-9.9	H	3.0	35.5	1.0	-44.3	-13.0	-31.3	
7410.00	-15.0	H	3.0	35.7	1.0	-49.7	-13.0	-36.7	
Mid Ch, 1880									
3760.00	-3.4	V	3.0	35.8	1.0	-38.2	-13.0	-25.2	
5640.00	-13.0	V	3.0	35.5	1.0	-47.5	-13.0	-34.5	
7520.00	-14.0	V	3.0	35.7	1.0	-48.8	-13.0	-35.8	
3760.00	-4.4	H	3.0	35.8	1.0	-39.2	-13.0	-26.2	
5640.00	-6.9	H	3.0	35.5	1.0	-41.4	-13.0	-28.4	
7520.00	-15.3	H	3.0	35.7	1.0	-50.1	-13.0	-37.1	
High Ch, 1907.5									
3815.00	-5.6	V	3.0	35.8	1.0	-40.4	-13.0	-27.4	
5722.50	-12.9	V	3.0	35.5	1.0	-47.4	-13.0	-34.4	
7630.00	-14.4	V	3.0	35.8	1.0	-49.1	-13.0	-36.1	
3815.00	-5.3	H	3.0	35.8	1.0	-40.1	-13.0	-27.1	
5722.50	-13.5	H	3.0	35.5	1.0	-48.0	-13.0	-35.0	
7630.00	-13.7	H	3.0	35.8	1.0	-48.5	-13.0	-35.5	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_16QAM Band 2 Harmonics, 5MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1852.5									
3705.00	0.6	V	3.0	35.9	1.0	-34.3	-13.0	-21.3	
5557.50	-1.0	V	3.0	35.5	1.0	-35.4	-13.0	-22.4	
7410.00	-15.5	V	3.0	35.7	1.0	-50.3	-13.0	-37.3	
3705.00	-1.5	H	3.0	35.9	1.0	-36.3	-13.0	-23.3	
5557.50	-10.2	H	3.0	35.5	1.0	-44.7	-13.0	-31.7	
7410.00	-15.4	H	3.0	35.7	1.0	-50.1	-13.0	-37.1	
Mid Ch, 1880									
3760.00	-3.9	V	3.0	35.8	1.0	-38.7	-13.0	-25.7	
5640.00	-13.5	V	3.0	35.5	1.0	-48.0	-13.0	-35.0	
7520.00	-14.7	V	3.0	35.7	1.0	-49.4	-13.0	-36.4	
3760.00	-5.1	H	3.0	35.8	1.0	-39.9	-13.0	-26.9	
5640.00	-7.6	H	3.0	35.5	1.0	-42.0	-13.0	-29.0	
7520.00	-15.8	H	3.0	35.7	1.0	-50.6	-13.0	-37.6	
High Ch, 1907.5									
3815.00	-6.3	V	3.0	35.8	1.0	-41.1	-13.0	-28.1	
5722.50	-13.5	V	3.0	35.5	1.0	-48.0	-13.0	-35.0	
7630.00	-15.4	V	3.0	35.8	1.0	-50.2	-13.0	-37.2	
3815.00	-6.5	H	3.0	35.8	1.0	-41.2	-13.0	-28.2	
5722.50	-14.0	H	3.0	35.5	1.0	-48.5	-13.0	-35.5	
7630.00	-14.4	H	3.0	35.8	1.0	-49.2	-13.0	-36.2	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_QPSK Band 2 Harmonics, 10MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1855									
3710.00	0.8	V	3.0	35.9	1.0	-34.0	-13.0	-21.0	
5565.00	-7.2	V	3.0	35.5	1.0	-41.7	-13.0	-28.7	
7420.00	-14.4	V	3.0	35.7	1.0	-49.1	-13.0	-36.1	
3710.00	-0.2	H	3.0	35.9	1.0	-35.0	-13.0	-22.0	
5565.00	-7.2	H	3.0	35.5	1.0	-41.7	-13.0	-28.7	
7420.00	-14.2	H	3.0	35.7	1.0	-48.9	-13.0	-35.9	
Mid Ch, 1880									
3760.00	-3.9	V	3.0	35.8	1.0	-38.7	-13.0	-25.7	
5640.00	-8.0	V	3.0	35.5	1.0	-42.5	-13.0	-29.5	
7520.00	-15.2	V	3.0	35.7	1.0	-49.9	-13.0	-36.9	
3760.00	-4.0	H	3.0	35.8	1.0	-38.8	-13.0	-25.8	
5640.00	-9.5	H	3.0	35.5	1.0	-44.0	-13.0	-31.0	
7520.00	-13.2	H	3.0	35.7	1.0	-48.0	-13.0	-35.0	
High Ch, 1905									
3810.00	-4.1	V	3.0	35.8	1.0	-38.8	-13.0	-25.8	
5715.00	-9.9	V	3.0	35.5	1.0	-44.4	-13.0	-31.4	
7620.00	-11.4	V	3.0	35.8	1.0	-46.2	-13.0	-33.2	
3810.00	-3.9	H	3.0	35.8	1.0	-38.6	-13.0	-25.6	
5715.00	-11.3	H	3.0	35.5	1.0	-45.8	-13.0	-32.8	
7620.00	-14.5	H	3.0	35.8	1.0	-49.3	-13.0	-36.3	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_16QAM Band 2 Harmonics, 10MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1855									
3710.00	-1.1	V	3.0	35.9	1.0	-35.9	-13.0	-22.9	
5565.00	-9.0	V	3.0	35.5	1.0	-43.5	-13.0	-30.5	
7420.00	-15.6	V	3.0	35.7	1.0	-50.3	-13.0	-37.3	
3710.00	-2.1	H	3.0	35.9	1.0	-37.0	-13.0	-24.0	
5565.00	-9.9	H	3.0	35.5	1.0	-44.4	-13.0	-31.4	
7420.00	-15.4	H	3.0	35.7	1.0	-50.1	-13.0	-37.1	
Mid Ch, 1880									
3760.00	-5.1	V	3.0	35.8	1.0	-39.9	-13.0	-26.9	
5640.00	-10.6	V	3.0	35.5	1.0	-45.1	-13.0	-32.1	
7520.00	-15.9	V	3.0	35.7	1.0	-50.6	-13.0	-37.6	
3760.00	-4.8	H	3.0	35.8	1.0	-39.7	-13.0	-26.7	
5640.00	-12.0	H	3.0	35.5	1.0	-46.5	-13.0	-33.5	
7520.00	-14.4	H	3.0	35.7	1.0	-49.1	-13.0	-36.1	
High Ch, 1905									
3810.00	-5.0	V	3.0	35.8	1.0	-39.8	-13.0	-26.8	
5715.00	-10.8	V	3.0	35.5	1.0	-45.3	-13.0	-32.3	
7620.00	-15.4	V	3.0	35.8	1.0	-50.2	-13.0	-37.2	
3810.00	-5.0	H	3.0	35.8	1.0	-39.8	-13.0	-26.8	
5715.00	-13.1	H	3.0	35.5	1.0	-47.6	-13.0	-34.6	
7620.00	-15.2	H	3.0	35.8	1.0	-49.9	-13.0	-36.9	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_QPSK Band 2 Harmonics, 15MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1857.5									
3715.00	2.1	V	3.0	35.8	1.0	-32.8	-13.0	-19.8	
5572.50	-8.3	V	3.0	35.5	1.0	-42.8	-13.0	-29.8	
7430.00	-14.3	V	3.0	35.7	1.0	-49.1	-13.0	-36.1	
3715.00	-0.7	H	3.0	35.8	1.0	-35.6	-13.0	-22.6	
5572.50	-8.3	H	3.0	35.5	1.0	-42.7	-13.0	-29.7	
7430.00	-14.4	H	3.0	35.7	1.0	-49.2	-13.0	-36.2	
Mid Ch, 1880									
3760.00	-2.0	V	3.0	35.8	1.0	-36.8	-13.0	-23.8	
5640.00	-9.6	V	3.0	35.5	1.0	-44.1	-13.0	-31.1	
7520.00	-15.3	V	3.0	35.7	1.0	-50.0	-13.0	-37.0	
3760.00	-2.8	H	3.0	35.8	1.0	-37.6	-13.0	-24.6	
5640.00	-9.7	H	3.0	35.5	1.0	-44.2	-13.0	-31.2	
7520.00	-14.8	H	3.0	35.7	1.0	-49.5	-13.0	-36.5	
High Ch, 1902.5									
3805.00	-2.4	V	3.0	35.8	1.0	-37.1	-13.0	-24.1	
5707.50	-10.1	V	3.0	35.5	1.0	-44.6	-13.0	-31.6	
7610.00	-13.3	V	3.0	35.8	1.0	-48.1	-13.0	-35.1	
3805.00	-3.5	H	3.0	35.8	1.0	-38.2	-13.0	-25.2	
5707.50	-9.9	H	3.0	35.5	1.0	-44.4	-13.0	-31.4	
7610.00	-14.0	H	3.0	35.8	1.0	-48.8	-13.0	-35.8	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_16QAM Band 2 Harmonics, 15MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1857.5									
3715.00	0.8	V	3.0	35.8	1.0	-34.1	-13.0	-21.1	
5572.50	-10.0	V	3.0	35.5	1.0	-44.5	-13.0	-31.5	
7430.00	-15.9	V	3.0	35.7	1.0	-50.7	-13.0	-37.7	
3715.00	-2.5	H	3.0	35.8	1.0	-37.4	-13.0	-24.4	
5572.50	-10.1	H	3.0	35.5	1.0	-44.6	-13.0	-31.6	
7430.00	-15.0	H	3.0	35.7	1.0	-49.7	-13.0	-36.7	
Mid Ch, 1880									
3760.00	-3.1	V	3.0	35.8	1.0	-37.9	-13.0	-24.9	
5640.00	-10.9	V	3.0	35.5	1.0	-45.4	-13.0	-32.4	
7520.00	-16.5	V	3.0	35.7	1.0	-51.3	-13.0	-38.3	
3760.00	-3.4	H	3.0	35.8	1.0	-38.2	-13.0	-25.2	
5640.00	-10.1	H	3.0	35.5	1.0	-44.6	-13.0	-31.6	
7520.00	-15.2	H	3.0	35.7	1.0	-49.9	-13.0	-36.9	
High Ch, 1902.5									
3805.00	-4.2	V	3.0	35.8	1.0	-39.0	-13.0	-26.0	
5707.50	-13.1	V	3.0	35.5	1.0	-47.6	-13.0	-34.6	
7610.00	-15.2	V	3.0	35.8	1.0	-49.9	-13.0	-36.9	
3805.00	-5.0	H	3.0	35.8	1.0	-39.8	-13.0	-26.8	
5707.50	-12.1	H	3.0	35.5	1.0	-46.6	-13.0	-33.6	
7610.00	-14.8	H	3.0	35.8	1.0	-49.6	-13.0	-36.6	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_QPSK Band 2 Harmonics, 20MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1860									
3720.00	0.5	V	3.0	35.8	1.0	-34.4	-13.0	-21.4	
5580.00	-7.5	V	3.0	35.5	1.0	-42.0	-13.0	-29.0	
7440.00	-12.4	V	3.0	35.7	1.0	-47.2	-13.0	-34.2	
3720.00	-1.2	H	3.0	35.8	1.0	-36.0	-13.0	-23.0	
5580.00	-7.1	H	3.0	35.5	1.0	-41.6	-13.0	-28.6	
7440.00	-13.2	H	3.0	35.7	1.0	-47.9	-13.0	-34.9	
Mid Ch, 1880									
3760.00	-2.3	V	3.0	35.8	1.0	-37.1	-13.0	-24.1	
5640.00	-12.3	V	3.0	35.5	1.0	-46.8	-13.0	-33.8	
7520.00	-15.7	V	3.0	35.7	1.0	-50.5	-13.0	-37.5	
3760.00	-4.0	H	3.0	35.8	1.0	-38.8	-13.0	-25.8	
5640.00	-12.8	H	3.0	35.5	1.0	-47.3	-13.0	-34.3	
7520.00	-15.4	H	3.0	35.7	1.0	-50.1	-13.0	-37.1	
High Ch, 1900									
3800.00	-0.8	V	3.0	35.8	1.0	-35.6	-13.0	-22.6	
5700.00	-11.9	V	3.0	35.5	1.0	-46.4	-13.0	-33.4	
7600.00	-14.2	V	3.0	35.8	1.0	-48.9	-13.0	-35.9	
3800.00	-1.4	H	3.0	35.8	1.0	-36.2	-13.0	-23.2	
5700.00	-11.8	H	3.0	35.5	1.0	-46.3	-13.0	-33.3	
7600.00	-13.4	H	3.0	35.8	1.0	-48.2	-13.0	-35.2	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_16QAM Band 2 Harmonics, 20MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1860									
3720.00	-1.1	V	3.0	35.8	1.0	-35.9	-13.0	-22.9	
5580.00	-9.7	V	3.0	35.5	1.0	-44.1	-13.0	-31.1	
7440.00	-14.7	V	3.0	35.7	1.0	-49.4	-13.0	-36.4	
3720.00	-3.1	H	3.0	35.8	1.0	-37.9	-13.0	-24.9	
5580.00	-9.2	H	3.0	35.5	1.0	-43.7	-13.0	-30.7	
7440.00	-15.2	H	3.0	35.7	1.0	-49.9	-13.0	-36.9	
Mid Ch, 1880									
3760.00	-3.1	V	3.0	35.8	1.0	-37.9	-13.0	-24.9	
5640.00	-14.1	V	3.0	35.5	1.0	-48.6	-13.0	-35.6	
7520.00	-16.8	V	3.0	35.7	1.0	-51.6	-13.0	-38.6	
3760.00	-6.0	H	3.0	35.8	1.0	-40.9	-13.0	-27.9	
5640.00	-14.1	H	3.0	35.5	1.0	-48.6	-13.0	-35.6	
7520.00	-15.9	H	3.0	35.7	1.0	-50.6	-13.0	-37.6	
High Ch, 1900									
3800.00	-1.6	V	3.0	35.8	1.0	-36.4	-13.0	-23.4	
5700.00	-13.9	V	3.0	35.5	1.0	-48.4	-13.0	-35.4	
7600.00	-15.8	V	3.0	35.8	1.0	-50.5	-13.0	-37.5	
3800.00	-2.8	H	3.0	35.8	1.0	-37.6	-13.0	-24.6	
5700.00	-13.9	H	3.0	35.5	1.0	-48.4	-13.0	-35.4	
7600.00	-15.2	H	3.0	35.8	1.0	-50.0	-13.0	-37.0	

LTE Band 4

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_QPSK Band 4 Harmonics, 1.4MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1710.7									
3421.40	-11.3	V	3.0	36.1	1.0	-46.3	-13.0	-33.3	
5132.10	-8.7	V	3.0	35.4	1.0	-43.2	-13.0	-30.2	
6842.80	-14.4	V	3.0	35.7	1.0	-49.1	-13.0	-36.1	
3421.40	-9.6	H	3.0	36.1	1.0	-44.6	-13.0	-31.6	
5132.10	-8.0	H	3.0	35.4	1.0	-42.4	-13.0	-29.4	
6842.80	-14.6	H	3.0	35.7	1.0	-49.2	-13.0	-36.2	
Mid Ch, 1732.5									
3465.00	-10.3	V	3.0	36.0	1.0	-45.3	-13.0	-32.3	
5197.50	-10.4	V	3.0	35.4	1.0	-44.9	-13.0	-31.9	
6930.00	-16.1	V	3.0	35.7	1.0	-50.7	-13.0	-37.7	
3465.00	-9.4	H	3.0	36.0	1.0	-44.4	-13.0	-31.4	
5197.50	-7.2	H	3.0	35.4	1.0	-41.6	-13.0	-28.6	
6930.00	-15.3	H	3.0	35.7	1.0	-50.0	-13.0	-37.0	
High Ch, 1754.3									
3508.60	-13.4	V	3.0	36.0	1.0	-48.4	-13.0	-35.4	
5262.90	-10.9	V	3.0	35.4	1.0	-45.3	-13.0	-32.3	
7017.20	-11.4	V	3.0	35.7	1.0	-46.0	-13.0	-33.0	
3508.60	-11.9	H	3.0	36.0	1.0	-46.9	-13.0	-33.9	
5262.90	-8.0	H	3.0	35.4	1.0	-42.5	-13.0	-29.5	
7017.20	-13.4	H	3.0	35.7	1.0	-48.1	-13.0	-35.1	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_16QAM Band 4 Harmonics, 1.4MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1710.7									
3421.40	-12.8	V	3.0	36.1	1.0	-47.8	-13.0	-34.8	
5132.10	-10.3	V	3.0	35.4	1.0	-44.8	-13.0	-31.8	
6842.80	-16.8	V	3.0	35.7	1.0	-51.4	-13.0	-38.4	
3421.40	-10.9	H	3.0	36.1	1.0	-45.9	-13.0	-32.9	
5132.10	-10.1	H	3.0	35.4	1.0	-44.6	-13.0	-31.6	
6842.80	-16.0	H	3.0	35.7	1.0	-50.7	-13.0	-37.7	
Mid Ch, 1732.5									
3465.00	-11.4	V	3.0	36.0	1.0	-46.4	-13.0	-33.4	
5197.50	-11.7	V	3.0	35.4	1.0	-46.1	-13.0	-33.1	
6930.00	-17.1	V	3.0	35.7	1.0	-51.8	-13.0	-38.8	
3465.00	-10.2	H	3.0	36.0	1.0	-45.2	-13.0	-32.2	
5197.50	-9.0	H	3.0	35.4	1.0	-43.4	-13.0	-30.4	
6930.00	-16.3	H	3.0	35.7	1.0	-51.0	-13.0	-38.0	
High Ch, 1754.3									
3508.60	-15.1	V	3.0	36.0	1.0	-50.1	-13.0	-37.1	
5262.90	-13.6	V	3.0	35.4	1.0	-48.0	-13.0	-35.0	
7017.20	-14.5	V	3.0	35.7	1.0	-49.2	-13.0	-36.2	
3508.60	-13.1	H	3.0	36.0	1.0	-48.1	-13.0	-35.1	
5262.90	-9.7	H	3.0	35.4	1.0	-44.1	-13.0	-31.1	
7017.20	-14.6	H	3.0	35.7	1.0	-49.2	-13.0	-36.2	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_QPSK Band 4 Harmonics, 3MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1711.5									
3423.00	-10.4	V	3.0	36.1	1.0	-45.5	-13.0	-32.5	
5134.50	-6.7	V	3.0	35.4	1.0	-41.1	-13.0	-28.1	
6846.00	-14.4	V	3.0	35.7	1.0	-49.0	-13.0	-36.0	
3423.00	-8.0	H	3.0	36.1	1.0	-43.0	-13.0	-30.0	
5134.50	-8.4	H	3.0	35.4	1.0	-42.8	-13.0	-29.8	
6846.00	-14.4	H	3.0	35.7	1.0	-49.0	-13.0	-36.0	
Mid Ch, 1732.5									
3465.00	-10.2	V	3.0	36.0	1.0	-45.2	-13.0	-32.2	
5197.50	-7.2	V	3.0	35.4	1.0	-41.6	-13.0	-28.6	
6930.00	-16.4	V	3.0	35.7	1.0	-51.0	-13.0	-38.0	
3465.00	-11.2	H	3.0	36.0	1.0	-46.3	-13.0	-33.3	
5197.50	-8.2	H	3.0	35.4	1.0	-42.6	-13.0	-29.6	
6930.00	-14.1	H	3.0	35.7	1.0	-48.8	-13.0	-35.8	
High Ch, 1753.5									
3507.00	-12.6	V	3.0	36.0	1.0	-47.6	-13.0	-34.6	
5260.50	-8.5	V	3.0	35.4	1.0	-43.0	-13.0	-30.0	
7014.00	-13.5	V	3.0	35.7	1.0	-48.2	-13.0	-35.2	
3507.00	-12.5	H	3.0	36.0	1.0	-47.5	-13.0	-34.5	
5260.50	-7.0	H	3.0	35.4	1.0	-41.5	-13.0	-28.5	
7014.00	-14.2	H	3.0	35.7	1.0	-48.9	-13.0	-35.9	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_16QAM Band 4 Harmonics, 3MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1711.5									
3423.00	-11.2	V	3.0	36.1	1.0	-46.2	-13.0	-33.2	
5134.50	-9.4	V	3.0	35.4	1.0	-43.8	-13.0	-30.8	
6846.00	-15.9	V	3.0	35.7	1.0	-50.6	-13.0	-37.6	
3423.00	-9.3	H	3.0	36.1	1.0	-44.3	-13.0	-31.3	
5134.50	-10.5	H	3.0	35.4	1.0	-45.0	-13.0	-32.0	
6846.00	-15.7	H	3.0	35.7	1.0	-50.3	-13.0	-37.3	
Mid Ch, 1732.5									
3465.00	-10.9	V	3.0	36.0	1.0	-46.0	-13.0	-33.0	
5197.50	-8.7	V	3.0	35.4	1.0	-43.1	-13.0	-30.1	
6930.00	-17.3	V	3.0	35.7	1.0	-52.0	-13.0	-39.0	
3465.00	-12.7	H	3.0	36.0	1.0	-47.7	-13.0	-34.7	
5197.50	-10.0	H	3.0	35.4	1.0	-44.5	-13.0	-31.5	
6930.00	-15.6	H	3.0	35.7	1.0	-50.3	-13.0	-37.3	
High Ch, 1753.5									
3507.00	-13.5	V	3.0	36.0	1.0	-48.5	-13.0	-35.5	
5260.50	-9.8	V	3.0	35.4	1.0	-44.2	-13.0	-31.2	
7014.00	-15.1	V	3.0	35.7	1.0	-49.8	-13.0	-36.8	
3507.00	-13.4	H	3.0	36.0	1.0	-48.4	-13.0	-35.4	
5260.50	-8.7	H	3.0	35.4	1.0	-43.1	-13.0	-30.1	
7014.00	-15.6	H	3.0	35.7	1.0	-50.3	-13.0	-37.3	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_QPSK Band 4 Harmonics, 5MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1712.5									
3425.00	-11.7	V	3.0	36.1	1.0	-46.8	-13.0	-33.8	
5137.50	-6.5	V	3.0	35.4	1.0	-40.9	-13.0	-27.9	
6850.00	-14.7	V	3.0	35.7	1.0	-49.3	-13.0	-36.3	
3425.00	-10.5	H	3.0	36.1	1.0	-45.6	-13.0	-32.6	
5137.50	-5.5	H	3.0	35.4	1.0	-39.9	-13.0	-26.9	
6850.00	-14.5	H	3.0	35.7	1.0	-49.2	-13.0	-36.2	
Mid Ch, 1732.5									
3465.00	-10.8	V	3.0	36.0	1.0	-45.8	-13.0	-32.8	
5197.50	-8.6	V	3.0	35.4	1.0	-43.0	-13.0	-30.0	
6930.00	-14.1	V	3.0	35.7	1.0	-48.8	-13.0	-35.8	
3465.00	-11.7	H	3.0	36.0	1.0	-46.7	-13.0	-33.7	
5197.50	-5.2	H	3.0	35.4	1.0	-39.6	-13.0	-26.6	
6930.00	-14.6	H	3.0	35.7	1.0	-49.2	-13.0	-36.2	
High Ch, 1752.5									
3505.00	-10.0	V	3.0	36.0	1.0	-45.0	-13.0	-32.0	
5257.50	-7.3	V	3.0	35.4	1.0	-41.8	-13.0	-28.8	
7010.00	-14.5	V	3.0	35.7	1.0	-49.1	-13.0	-36.1	
3505.00	-11.5	H	3.0	36.0	1.0	-46.5	-13.0	-33.5	
5257.50	-6.9	H	3.0	35.4	1.0	-41.3	-13.0	-28.3	
7010.00	-11.8	H	3.0	35.7	1.0	-46.5	-13.0	-33.5	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_16QAM Band 4 Harmonics, 5MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1712.5									
3425.00	-12.9	V	3.0	36.1	1.0	-48.0	-13.0	-35.0	
5137.50	-7.7	V	3.0	35.4	1.0	-42.1	-13.0	-29.1	
6850.00	-16.0	V	3.0	35.7	1.0	-50.7	-13.0	-37.7	
3425.00	-11.9	H	3.0	36.1	1.0	-47.0	-13.0	-34.0	
5137.50	-6.5	H	3.0	35.4	1.0	-41.0	-13.0	-28.0	
6850.00	-15.8	H	3.0	35.7	1.0	-50.4	-13.0	-37.4	
Mid Ch, 1732.5									
3465.00	-11.6	V	3.0	36.0	1.0	-46.6	-13.0	-33.6	
5197.50	-9.9	V	3.0	35.4	1.0	-44.4	-13.0	-31.4	
6930.00	-15.2	V	3.0	35.7	1.0	-49.8	-13.0	-36.8	
3465.00	-12.4	H	3.0	36.0	1.0	-47.5	-13.0	-34.5	
5197.50	-6.8	H	3.0	35.4	1.0	-41.2	-13.0	-28.2	
6930.00	-15.6	H	3.0	35.7	1.0	-50.3	-13.0	-37.3	
High Ch, 1752.5									
3505.00	-11.2	V	3.0	36.0	1.0	-46.2	-13.0	-33.2	
5257.50	-8.3	V	3.0	35.4	1.0	-42.7	-13.0	-29.7	
7010.00	-15.0	V	3.0	35.7	1.0	-49.7	-13.0	-36.7	
3505.00	-12.3	H	3.0	36.0	1.0	-47.3	-13.0	-34.3	
5257.50	-8.6	H	3.0	35.4	1.0	-43.0	-13.0	-30.0	
7010.00	-14.4	H	3.0	35.7	1.0	-49.0	-13.0	-36.0	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_QPSK Band 4 Harmonics, 10MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1715									
3430.00	-10.4	V	3.0	36.1	1.0	-45.5	-13.0	-32.5	
5145.00	-5.7	V	3.0	35.4	1.0	-40.2	-13.0	-27.2	
6860.00	-13.3	V	3.0	35.7	1.0	-48.0	-13.0	-35.0	
3430.00	-8.8	H	3.0	36.1	1.0	-43.8	-13.0	-30.8	
5145.00	-5.4	H	3.0	35.4	1.0	-39.9	-13.0	-26.9	
6860.00	-14.6	H	3.0	35.7	1.0	-49.2	-13.0	-36.2	
Mid Ch, 1732.5									
3465.00	-9.8	V	3.0	36.0	1.0	-44.8	-13.0	-31.8	
5197.50	-6.0	V	3.0	35.4	1.0	-40.4	-13.0	-27.4	
6930.00	-14.2	V	3.0	35.7	1.0	-48.9	-13.0	-35.9	
3465.00	-11.1	H	3.0	36.0	1.0	-46.1	-13.0	-33.1	
5197.50	-5.8	H	3.0	35.4	1.0	-40.2	-13.0	-27.2	
6930.00	-13.9	H	3.0	35.7	1.0	-48.5	-13.0	-35.5	
High Ch, 1750									
3500.00	-10.1	V	3.0	36.0	1.0	-45.1	-13.0	-32.1	
5250.00	-6.7	V	3.0	35.4	1.0	-41.1	-13.0	-28.1	
7000.00	-13.2	V	3.0	35.7	1.0	-47.9	-13.0	-34.9	
3500.00	-11.4	H	3.0	36.0	1.0	-46.4	-13.0	-33.4	
5250.00	-6.8	H	3.0	35.4	1.0	-41.3	-13.0	-28.3	
7000.00	-14.5	H	3.0	35.7	1.0	-49.1	-13.0	-36.1	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_16QAM Band 4 Harmonics, 10MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1715									
3430.00	-11.1	V	3.0	36.1	1.0	-46.1	-13.0	-33.1	
5145.00	-7.2	V	3.0	35.4	1.0	-41.7	-13.0	-28.7	
6860.00	-15.0	V	3.0	35.7	1.0	-49.7	-13.0	-36.7	
3430.00	-9.9	H	3.0	36.1	1.0	-45.0	-13.0	-32.0	
5145.00	-6.9	H	3.0	35.4	1.0	-41.3	-13.0	-28.3	
6860.00	-15.7	H	3.0	35.7	1.0	-50.4	-13.0	-37.4	
Mid Ch, 1732.5									
3465.00	-10.9	V	3.0	36.0	1.0	-45.9	-13.0	-32.9	
5197.50	-6.9	V	3.0	35.4	1.0	-41.4	-13.0	-28.4	
6930.00	-16.0	V	3.0	35.7	1.0	-50.7	-13.0	-37.7	
3465.00	-11.8	H	3.0	36.0	1.0	-46.8	-13.0	-33.8	
5197.50	-6.6	H	3.0	35.4	1.0	-41.1	-13.0	-28.1	
6930.00	-15.8	H	3.0	35.7	1.0	-50.4	-13.0	-37.4	
High Ch, 1750									
3500.00	-11.2	V	3.0	36.0	1.0	-46.2	-13.0	-33.2	
5250.00	-8.1	V	3.0	35.4	1.0	-42.5	-13.0	-29.5	
7000.00	-15.0	V	3.0	35.7	1.0	-49.7	-13.0	-36.7	
3500.00	-12.1	H	3.0	36.0	1.0	-47.1	-13.0	-34.1	
5250.00	-7.9	H	3.0	35.4	1.0	-42.3	-13.0	-29.3	
7000.00	-15.8	H	3.0	35.7	1.0	-50.4	-13.0	-37.4	

UL Verification Services, Inc.									
Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_QPSK Band 4 Harmonics, 15MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1717.5									
3435.00	-11.0	V	3.0	36.1	1.0	-46.0	-13.0	-33.0	
5152.50	-6.3	V	3.0	35.4	1.0	-40.8	-13.0	-27.8	
6870.00	-15.2	V	3.0	35.7	1.0	-49.9	-13.0	-36.9	
3435.00	-10.7	H	3.0	36.1	1.0	-45.8	-13.0	-32.8	
5152.50	-5.6	H	3.0	35.4	1.0	-40.0	-13.0	-27.0	
6870.00	-15.0	H	3.0	35.7	1.0	-49.7	-13.0	-36.7	
Mid Ch, 1732.5									
3465.00	-10.1	V	3.0	36.0	1.0	-45.2	-13.0	-32.2	
5197.50	-7.4	V	3.0	35.4	1.0	-41.8	-13.0	-28.8	
6930.00	-15.3	V	3.0	35.7	1.0	-50.0	-13.0	-37.0	
3465.00	-11.8	H	3.0	36.0	1.0	-46.8	-13.0	-33.8	
5197.50	-6.3	H	3.0	35.4	1.0	-40.7	-13.0	-27.7	
6930.00	-13.9	H	3.0	35.7	1.0	-48.6	-13.0	-35.6	
High Ch, 1747.5									
3495.00	-12.9	V	3.0	36.0	1.0	-47.9	-13.0	-34.9	
5242.50	-8.0	V	3.0	35.4	1.0	-42.4	-13.0	-29.4	
6990.00	-15.5	V	3.0	35.7	1.0	-50.2	-13.0	-37.2	
3495.00	-11.9	H	3.0	36.0	1.0	-47.0	-13.0	-34.0	
5242.50	-6.4	H	3.0	35.4	1.0	-40.9	-13.0	-27.9	
6990.00	-14.0	H	3.0	35.7	1.0	-48.7	-13.0	-35.7	

UL Verification Services, Inc.									
Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_16QAM Band 4 Harmonics, 15MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1717.5									
3435.00	-11.8	V	3.0	36.1	1.0	-46.9	-13.0	-33.9	
5152.50	-7.1	V	3.0	35.4	1.0	-41.5	-13.0	-28.5	
6870.00	-16.6	V	3.0	35.7	1.0	-51.2	-13.0	-38.2	
3435.00	-11.5	H	3.0	36.1	1.0	-46.5	-13.0	-33.5	
5152.50	-6.7	H	3.0	35.4	1.0	-41.1	-13.0	-28.1	
6870.00	-16.0	H	3.0	35.7	1.0	-50.6	-13.0	-37.6	
Mid Ch, 1732.5									
3465.00	-11.1	V	3.0	36.0	1.0	-46.1	-13.0	-33.1	
5197.50	-8.2	V	3.0	35.4	1.0	-42.7	-13.0	-29.7	
6930.00	-16.8	V	3.0	35.7	1.0	-51.5	-13.0	-38.5	
3465.00	-12.7	H	3.0	36.0	1.0	-47.7	-13.0	-34.7	
5197.50	-7.6	H	3.0	35.4	1.0	-42.0	-13.0	-29.0	
6930.00	-15.5	H	3.0	35.7	1.0	-50.2	-13.0	-37.2	
High Ch, 1747.5									
3495.00	-13.6	V	3.0	36.0	1.0	-48.7	-13.0	-35.7	
5242.50	-8.7	V	3.0	35.4	1.0	-43.2	-13.0	-30.2	
6990.00	-16.5	V	3.0	35.7	1.0	-51.2	-13.0	-38.2	
3495.00	-12.8	H	3.0	36.0	1.0	-47.8	-13.0	-34.8	
5242.50	-7.5	H	3.0	35.4	1.0	-41.9	-13.0	-28.9	
6990.00	-15.6	H	3.0	35.7	1.0	-50.3	-13.0	-37.3	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_QPSK Band 4 Harmonics, 20MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1720									
3440.00	-11.1	V	3.0	36.0	1.0	-46.1	-13.0	-33.1	
5160.00	-6.7	V	3.0	35.4	1.0	-41.1	-13.0	-28.1	
6880.00	-15.1	V	3.0	35.7	1.0	-49.8	-13.0	-36.8	
3440.00	-10.0	H	3.0	36.0	1.0	-45.1	-13.0	-32.1	
5160.00	-5.3	H	3.0	35.4	1.0	-39.8	-13.0	-26.8	
6880.00	-14.7	H	3.0	35.7	1.0	-49.3	-13.0	-36.3	
Mid Ch, 1732.5									
3465.00	-10.1	V	3.0	36.0	1.0	-45.1	-13.0	-32.1	
5197.50	-7.7	V	3.0	35.4	1.0	-42.1	-13.0	-29.1	
6930.00	-15.9	V	3.0	35.7	1.0	-50.6	-13.0	-37.6	
3465.00	-9.8	H	3.0	36.0	1.0	-44.8	-13.0	-31.8	
5197.50	-6.9	H	3.0	35.4	1.0	-41.3	-13.0	-28.3	
6930.00	-14.0	H	3.0	35.7	1.0	-48.6	-13.0	-35.6	
High Ch, 1745									
3490.00	-11.1	V	3.0	36.0	1.0	-46.1	-13.0	-33.1	
5235.00	-7.6	V	3.0	35.4	1.0	-42.0	-13.0	-29.0	
6980.00	-15.6	V	3.0	35.7	1.0	-50.3	-13.0	-37.3	
3490.00	-10.8	H	3.0	36.0	1.0	-45.8	-13.0	-32.8	
5235.00	-6.2	H	3.0	35.4	1.0	-40.6	-13.0	-27.6	
6980.00	-14.5	H	3.0	35.7	1.0	-49.2	-13.0	-36.2	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/4/2015							
Test Engineer:		G. Escano							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_16QAM Band 4 Harmonics, 20MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1720									
3440.00	-11.9	V	3.0	36.0	1.0	-46.9	-13.0	-33.9	
5160.00	-8.1	V	3.0	35.4	1.0	-42.5	-13.0	-29.5	
6880.00	-16.7	V	3.0	35.7	1.0	-51.3	-13.0	-38.3	
3440.00	-11.1	H	3.0	36.0	1.0	-46.1	-13.0	-33.1	
5160.00	-6.6	H	3.0	35.4	1.0	-41.0	-13.0	-28.0	
6880.00	-15.9	H	3.0	35.7	1.0	-50.5	-13.0	-37.5	
Mid Ch, 1732.5									
3465.00	-11.3	V	3.0	36.0	1.0	-46.4	-13.0	-33.4	
5197.50	-8.6	V	3.0	35.4	1.0	-43.0	-13.0	-30.0	
6930.00	-17.3	V	3.0	35.7	1.0	-51.9	-13.0	-38.9	
3465.00	-10.7	H	3.0	36.0	1.0	-45.7	-13.0	-32.7	
5197.50	-8.4	H	3.0	35.4	1.0	-42.8	-13.0	-29.8	
6930.00	-15.8	H	3.0	35.7	1.0	-50.4	-13.0	-37.4	
High Ch, 1745									
3490.00	-11.9	V	3.0	36.0	1.0	-46.9	-13.0	-33.9	
5235.00	-8.3	V	3.0	35.4	1.0	-42.7	-13.0	-29.7	
6980.00	-16.8	V	3.0	35.7	1.0	-51.5	-13.0	-38.5	
3490.00	-11.7	H	3.0	36.0	1.0	-46.7	-13.0	-33.7	
5235.00	-7.4	H	3.0	35.4	1.0	-41.8	-13.0	-28.8	
6980.00	-15.8	H	3.0	35.7	1.0	-50.5	-13.0	-37.5	

LTE Band 5

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/03/15							
Test Engineer:		O. Stoelting							
Configuration:		X-pos EUT, AC Charger, HS							
Location:		Chamber C							
Mode:		LTE_QPSK Band 5 Harmonics, 1.4MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 824.7									
1649.40	-17.6	V	3.0	37.0	1.0	-53.6	-13.0	-40.6	
2474.10	-21.6	V	3.0	36.4	1.0	-57.0	-13.0	-44.0	
3298.80	-19.6	V	3.0	36.2	1.0	-54.8	-13.0	-41.8	
1649.40	-11.5	H	3.0	37.0	1.0	-47.5	-13.0	-34.5	
2474.10	-23.1	H	3.0	36.4	1.0	-58.6	-13.0	-45.6	
3298.80	-19.0	H	3.0	36.2	1.0	-54.1	-13.0	-41.1	
Mid Ch, 836.5									
1673.00	-2.8	V	3.0	37.0	1.0	-38.8	-13.0	-25.8	
2509.50	-15.9	V	3.0	36.4	1.0	-51.4	-13.0	-38.4	
3346.00	-17.3	V	3.0	36.1	1.0	-52.4	-13.0	-39.4	
1673.00	-11.1	H	3.0	37.0	1.0	-47.1	-13.0	-34.1	
2509.50	-23.1	H	3.0	36.4	1.0	-58.5	-13.0	-45.5	
3346.00	-15.7	H	3.0	36.1	1.0	-50.9	-13.0	-37.9	
High Ch, 848.3									
1696.60	-6.5	V	3.0	37.0	1.0	-42.4	-13.0	-29.4	
2544.90	-19.6	V	3.0	36.4	1.0	-55.0	-13.0	-42.0	
3393.20	-17.3	V	3.0	36.1	1.0	-52.4	-13.0	-39.4	
1696.60	-12.8	H	3.0	37.0	1.0	-48.7	-13.0	-35.7	
2544.90	-22.5	H	3.0	36.4	1.0	-57.9	-13.0	-44.9	
3393.20	-14.0	H	3.0	36.1	1.0	-49.1	-13.0	-36.1	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/03/15							
Test Engineer:		O. Stoelting							
Configuration:		X-pos EUT, AC Charger, HS							
Location:		Chamber C							
Mode:		LTE_16QAM Band 5 Harmonics, 1.4MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 824.7									
1649.40	-16.4	V	3.0	37.0	1.0	-52.4	-13.0	-39.4	
2474.10	-20.9	V	3.0	36.4	1.0	-56.3	-13.0	-43.3	
3298.80	-19.5	V	3.0	36.2	1.0	-54.7	-13.0	-41.7	
1649.40	-11.7	H	3.0	37.0	1.0	-47.8	-13.0	-34.8	
2474.10	-22.7	H	3.0	36.4	1.0	-58.2	-13.0	-45.2	
3298.80	-19.5	H	3.0	36.2	1.0	-54.6	-13.0	-41.6	
Mid Ch, 836.5									
1673.00	-3.0	V	3.0	37.0	1.0	-39.0	-13.0	-26.0	
2509.50	-16.2	V	3.0	36.4	1.0	-51.6	-13.0	-38.6	
3346.00	-17.4	V	3.0	36.1	1.0	-52.5	-13.0	-39.5	
1673.00	-11.2	H	3.0	37.0	1.0	-47.2	-13.0	-34.2	
2509.50	-22.8	H	3.0	36.4	1.0	-58.2	-13.0	-45.2	
3346.00	-15.7	H	3.0	36.1	1.0	-50.8	-13.0	-37.8	
High Ch, 848.3									
1696.60	-6.4	V	3.0	37.0	1.0	-42.4	-13.0	-29.4	
2544.90	-20.6	V	3.0	36.4	1.0	-56.0	-13.0	-43.0	
3393.20	-16.6	V	3.0	36.1	1.0	-51.7	-13.0	-38.7	
1696.60	-13.0	H	3.0	37.0	1.0	-48.9	-13.0	-35.9	
2544.90	-22.9	H	3.0	36.4	1.0	-58.3	-13.0	-45.3	
3393.20	-14.2	H	3.0	36.1	1.0	-49.3	-13.0	-36.3	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15122343							
Date:		12/3/2015							
Test Engineer:		O. Stoelting							
Configuration:		X-pos EUT, AC Charger, HS							
Location:		Chamber C							
Mode:		LTE_QPSK Band 5 Harmonics, 3MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 825.5									
1651.00	-4.3	V	3.0	37.0	1.0	-40.3	-13.0	-27.3	
2476.50	-19.0	V	3.0	36.4	1.0	-54.5	-13.0	-41.5	
3302.00	-19.7	V	3.0	36.2	1.0	-54.9	-13.0	-41.9	
1651.00	-11.6	H	3.0	37.0	1.0	-47.6	-13.0	-34.6	
2476.50	-22.4	H	3.0	36.4	1.0	-57.8	-13.0	-44.8	
3302.00	-19.9	H	3.0	36.2	1.0	-55.1	-13.0	-42.1	
Mid Ch, 836.5									
1673.00	-3.7	V	3.0	37.0	1.0	-39.7	-13.0	-26.7	
2509.50	-13.5	V	3.0	36.4	1.0	-48.9	-13.0	-35.9	
3346.00	-16.7	V	3.0	36.1	1.0	-51.8	-13.0	-38.8	
1673.00	-13.0	H	3.0	37.0	1.0	-49.0	-13.0	-36.0	
2509.50	-22.4	H	3.0	36.4	1.0	-57.8	-13.0	-44.8	
3346.00	-15.8	H	3.0	36.1	1.0	-50.9	-13.0	-37.9	
High Ch, 847.5									
1695.00	-9.3	V	3.0	37.0	1.0	-45.3	-13.0	-32.3	
2542.50	-19.1	V	3.0	36.4	1.0	-54.5	-13.0	-41.5	
3390.00	-18.0	V	3.0	36.1	1.0	-53.1	-13.0	-40.1	
1695.00	-10.3	H	3.0	37.0	1.0	-46.3	-13.0	-33.3	
2542.50	-20.7	H	3.0	36.4	1.0	-56.1	-13.0	-43.1	
3390.00	-19.8	H	3.0	36.1	1.0	-54.8	-13.0	-41.8	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15122343							
Date:		12/3/2015							
Test Engineer:		O. Stoelting							
Configuration:		X-pos EUT, AC Charger, HS							
Location:		Chamber C							
Mode:		LTE_16QAM Band 5 Harmonics, 3MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 825.5									
1651.00	-4.7	V	3.0	37.0	1.0	-40.7	-13.0	-27.7	
2476.50	-19.3	V	3.0	36.4	1.0	-54.7	-13.0	-41.7	
3302.00	-19.8	V	3.0	36.2	1.0	-55.0	-13.0	-42.0	
1651.00	-10.9	H	3.0	37.0	1.0	-47.0	-13.0	-34.0	
2476.50	-23.3	H	3.0	36.4	1.0	-58.7	-13.0	-45.7	
3302.00	-19.8	H	3.0	36.2	1.0	-55.0	-13.0	-42.0	
Mid Ch, 836.5									
1673.00	-3.4	V	3.0	37.0	1.0	-39.4	-13.0	-26.4	
2509.50	-13.5	V	3.0	36.4	1.0	-48.9	-13.0	-35.9	
3346.00	-15.7	V	3.0	36.1	1.0	-50.8	-13.0	-37.8	
1673.00	-12.6	H	3.0	37.0	1.0	-48.6	-13.0	-35.6	
2509.50	-21.0	H	3.0	36.4	1.0	-56.4	-13.0	-43.4	
3346.00	-16.1	H	3.0	36.1	1.0	-51.2	-13.0	-38.2	
High Ch, 847.5									
1695.00	-8.9	V	3.0	37.0	1.0	-44.9	-13.0	-31.9	
2542.50	-18.7	V	3.0	36.4	1.0	-54.1	-13.0	-41.1	
3390.00	-17.0	V	3.0	36.1	1.0	-52.1	-13.0	-39.1	
1695.00	-10.1	H	3.0	37.0	1.0	-46.0	-13.0	-33.0	
2542.50	-22.1	H	3.0	36.4	1.0	-57.5	-13.0	-44.5	
3390.00	-19.6	H	3.0	36.1	1.0	-54.7	-13.0	-41.7	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/3/2015							
Test Engineer:		O. Stoelting							
Configuration:		X-pos EUT, AC Charger, HS							
Location:		Chamber C							
Mode:		LTE_QPSK Band 5 Harmonics, 5MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 826.5									
1653.00	-4.6	V	3.0	37.0	1.0	-40.6	-13.0	-27.6	
2479.50	-19.9	V	3.0	36.4	1.0	-55.3	-13.0	-42.3	
3306.00	-19.2	V	3.0	36.1	1.0	-54.4	-13.0	-41.4	
1653.00	-11.7	H	3.0	37.0	1.0	-47.8	-13.0	-34.8	
2479.50	-22.4	H	3.0	36.4	1.0	-57.8	-13.0	-44.8	
3306.00	-20.0	H	3.0	36.1	1.0	-55.1	-13.0	-42.1	
Mid Ch, 836.5									
1673.00	-4.0	V	3.0	37.0	1.0	-40.0	-13.0	-27.0	
2509.50	-14.5	V	3.0	36.4	1.0	-49.9	-13.0	-36.9	
3346.00	-16.4	V	3.0	36.1	1.0	-51.5	-13.0	-38.5	
1673.00	-13.3	H	3.0	37.0	1.0	-49.3	-13.0	-36.3	
2509.50	-22.3	H	3.0	36.4	1.0	-57.7	-13.0	-44.7	
3346.00	-16.6	H	3.0	36.1	1.0	-51.7	-13.0	-38.7	
High Ch, 846.5									
1693.00	-5.2	V	3.0	37.0	1.0	-41.1	-13.0	-28.1	
2539.50	-20.2	V	3.0	36.4	1.0	-55.6	-13.0	-42.6	
3386.00	-17.0	V	3.0	36.1	1.0	-52.1	-13.0	-39.1	
1693.00	-9.5	H	3.0	37.0	1.0	-45.4	-13.0	-32.4	
2539.50	-22.8	H	3.0	36.4	1.0	-58.2	-13.0	-45.2	
3386.00	-20.1	H	3.0	36.1	1.0	-55.2	-13.0	-42.2	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/3/2015							
Test Engineer:		O. Stoelting							
Configuration:		X-pos EUT, AC Charger, HS							
Location:		Chamber C							
Mode:		LTE_16QAM Band 5 Harmonics, 5MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 826.5									
1653.00	-5.5	V	3.0	37.0	1.0	-41.5	-13.0	-28.5	
2479.50	-19.8	V	3.0	36.4	1.0	-55.2	-13.0	-42.2	
3306.00	-19.9	V	3.0	36.1	1.0	-55.0	-13.0	-42.0	
1653.00	-12.0	H	3.0	37.0	1.0	-48.1	-13.0	-35.1	
2479.50	-23.0	H	3.0	36.4	1.0	-58.4	-13.0	-45.4	
3306.00	-19.5	H	3.0	36.1	1.0	-54.7	-13.0	-41.7	
Mid Ch, 836.5									
1673.00	-4.1	V	3.0	37.0	1.0	-40.0	-13.0	-27.0	
2509.50	-14.3	V	3.0	36.4	1.0	-49.7	-13.0	-36.7	
3346.00	-16.8	V	3.0	36.1	1.0	-51.9	-13.0	-38.9	
1673.00	-13.6	H	3.0	37.0	1.0	-49.6	-13.0	-36.6	
2509.50	-21.4	H	3.0	36.4	1.0	-56.8	-13.0	-43.8	
3346.00	-17.3	H	3.0	36.1	1.0	-52.4	-13.0	-39.4	
High Ch, 846.5									
1693.00	-5.8	V	3.0	37.0	1.0	-41.8	-13.0	-28.8	
2539.50	-20.7	V	3.0	36.4	1.0	-56.1	-13.0	-43.1	
3386.00	-18.2	V	3.0	36.1	1.0	-53.3	-13.0	-40.3	
1693.00	-8.7	H	3.0	37.0	1.0	-44.7	-13.0	-31.7	
2539.50	-22.4	H	3.0	36.4	1.0	-57.8	-13.0	-44.8	
3386.00	-19.5	H	3.0	36.1	1.0	-54.6	-13.0	-41.6	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/3/2015							
Test Engineer:		O. Stoelting							
Configuration:		X-pos EUT, AC Charger, HS							
Location:		Chamber C							
Mode:		LTE_QPSK Band 5 Harmonics, 10MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 829									
1658.00	-5.2	V	3.0	37.0	1.0	-41.2	-13.0	-28.2	
2487.00	-20.7	V	3.0	36.4	1.0	-56.1	-13.0	-43.1	
3316.00	-19.8	V	3.0	36.1	1.0	-54.9	-13.0	-41.9	
1658.00	-12.6	H	3.0	37.0	1.0	-48.6	-13.0	-35.6	
2487.00	-22.8	H	3.0	36.4	1.0	-58.2	-13.0	-45.2	
3316.00	-19.9	H	3.0	36.1	1.0	-55.0	-13.0	-42.0	
Mid Ch, 836.5									
1673.00	-3.1	V	3.0	37.0	1.0	-39.1	-13.0	-26.1	
2509.50	-16.0	V	3.0	36.4	1.0	-51.4	-13.0	-38.4	
3346.00	-15.7	V	3.0	36.1	1.0	-50.9	-13.0	-37.9	
1673.00	-14.4	H	3.0	37.0	1.0	-50.4	-13.0	-37.4	
2509.50	-22.9	H	3.0	36.4	1.0	-58.3	-13.0	-45.3	
3346.00	-16.6	H	3.0	36.1	1.0	-51.8	-13.0	-38.8	
High Ch, 844									
1688.00	-5.6	V	3.0	37.0	1.0	-41.6	-13.0	-28.6	
2532.00	-19.1	V	3.0	36.4	1.0	-54.5	-13.0	-41.5	
3376.00	-18.0	V	3.0	36.1	1.0	-53.1	-13.0	-40.1	
1688.00	-10.9	H	3.0	37.0	1.0	-46.9	-13.0	-33.9	
2532.00	-21.8	H	3.0	36.4	1.0	-57.2	-13.0	-44.2	
3376.00	-19.4	H	3.0	36.1	1.0	-54.5	-13.0	-41.5	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/3/2015							
Test Engineer:		O. Stoelting							
Configuration:		X-pos EUT, AC Charger, HS							
Location:		Chamber C							
Mode:		LTE_16QAM Band 5 Harmonics, 10MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 829									
1658.00	-4.7	V	3.0	37.0	1.0	-40.7	-13.0	-27.7	
2487.00	-21.0	V	3.0	36.4	1.0	-56.4	-13.0	-43.4	
3316.00	-19.3	V	3.0	36.1	1.0	-54.4	-13.0	-41.4	
1658.00	-11.8	H	3.0	37.0	1.0	-47.8	-13.0	-34.8	
2487.00	-22.0	H	3.0	36.4	1.0	-57.4	-13.0	-44.4	
3316.00	-19.5	H	3.0	36.1	1.0	-54.7	-13.0	-41.7	
Mid Ch, 836.5									
1673.00	-3.4	V	3.0	37.0	1.0	-39.4	-13.0	-26.4	
2509.50	-16.2	V	3.0	36.4	1.0	-51.6	-13.0	-38.6	
3346.00	-17.3	V	3.0	36.1	1.0	-52.5	-13.0	-39.5	
1673.00	-13.6	H	3.0	37.0	1.0	-49.6	-13.0	-36.6	
2509.50	-22.5	H	3.0	36.4	1.0	-57.9	-13.0	-44.9	
3346.00	-16.7	H	3.0	36.1	1.0	-51.8	-13.0	-38.8	
High Ch, 844									
1688.00	-5.7	V	3.0	37.0	1.0	-41.6	-13.0	-28.6	
2532.00	-19.1	V	3.0	36.4	1.0	-54.6	-13.0	-41.6	
3376.00	-18.7	V	3.0	36.1	1.0	-53.7	-13.0	-40.7	
1688.00	-10.7	H	3.0	37.0	1.0	-46.6	-13.0	-33.6	
2532.00	-21.7	H	3.0	36.4	1.0	-57.1	-13.0	-44.1	
3376.00	-19.5	H	3.0	36.1	1.0	-54.6	-13.0	-41.6	

LTE Band 17

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/5/2015							
Test Engineer:		K.Kedida							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_QPSK Band 17 Harmonics, 5MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 706.5									
1413.00	-18.5	V	3.0	37.4	1.0	-54.9	-13.0	-41.9	
2119.50	-18.9	V	3.0	36.6	1.0	-54.5	-13.0	-41.5	
2826.00	-21.0	V	3.0	36.4	1.0	-56.4	-13.0	-43.4	
1413.00	-19.6	H	3.0	37.4	1.0	-56.0	-13.0	-43.0	
2119.50	-21.7	H	3.0	36.6	1.0	-57.2	-13.0	-44.2	
2826.00	-21.9	H	3.0	36.4	1.0	-57.3	-13.0	-44.3	
Mid Ch, 710									
1420.00	-16.6	V	3.0	37.3	1.0	-53.0	-13.0	-40.0	
2130.00	-19.8	V	3.0	36.6	1.0	-55.4	-13.0	-42.4	
2840.00	-20.6	V	3.0	36.4	1.0	-56.0	-13.0	-43.0	
1420.00	-18.8	H	3.0	37.3	1.0	-55.2	-13.0	-42.2	
2130.00	-22.2	H	3.0	36.6	1.0	-57.8	-13.0	-44.8	
2840.00	-21.5	H	3.0	36.4	1.0	-56.9	-13.0	-43.9	
High Ch, 713.5									
1427.00	-15.0	V	3.0	37.3	1.0	-51.3	-13.0	-38.3	
2140.50	-19.3	V	3.0	36.6	1.0	-54.8	-13.0	-41.8	
2854.00	-21.0	V	3.0	36.4	1.0	-56.3	-13.0	-43.3	
1427.00	-19.4	H	3.0	37.3	1.0	-55.7	-13.0	-42.7	
2140.50	-21.0	H	3.0	36.6	1.0	-56.5	-13.0	-43.5	
2854.00	-21.0	H	3.0	36.4	1.0	-56.3	-13.0	-43.3	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/5/2015							
Test Engineer:		K.Kedida							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_16QAM Band 17 Harmonics, 5MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 706.5									
1413.00	-18.0	V	3.0	37.4	1.0	-54.3	-13.0	-41.3	
2119.50	-19.2	V	3.0	36.6	1.0	-54.8	-13.0	-41.8	
2826.00	-20.7	V	3.0	36.4	1.0	-56.1	-13.0	-43.1	
1413.00	-20.3	H	3.0	37.4	1.0	-56.6	-13.0	-43.6	
2119.50	-22.5	H	3.0	36.6	1.0	-58.0	-13.0	-45.0	
2826.00	-22.1	H	3.0	36.4	1.0	-57.5	-13.0	-44.5	
Mid Ch, 710									
1420.00	-17.7	V	3.0	37.3	1.0	-54.1	-13.0	-41.1	
2130.00	-20.5	V	3.0	36.6	1.0	-56.1	-13.0	-43.1	
2840.00	-20.4	V	3.0	36.4	1.0	-55.8	-13.0	-42.8	
1420.00	-19.4	H	3.0	37.3	1.0	-55.8	-13.0	-42.8	
2130.00	-23.6	H	3.0	36.6	1.0	-59.2	-13.0	-46.2	
2840.00	-22.1	H	3.0	36.4	1.0	-57.5	-13.0	-44.5	
High Ch, 713.5									
1427.00	-15.6	V	3.0	37.3	1.0	-51.9	-13.0	-38.9	
2140.50	-20.5	V	3.0	36.6	1.0	-56.1	-13.0	-43.1	
2854.00	-20.4	V	3.0	36.4	1.0	-55.8	-13.0	-42.8	
1427.00	-20.0	H	3.0	37.3	1.0	-56.3	-13.0	-43.3	
2140.50	-21.4	H	3.0	36.6	1.0	-56.9	-13.0	-43.9	
2854.00	-22.3	H	3.0	36.4	1.0	-57.7	-13.0	-44.7	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/5/2015							
Test Engineer:		K.Kedida							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_QPSK Band 17 Harmonics, 10MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 709									
1418.00	-18.4	V	3.0	37.4	1.0	-54.7	-13.0	-41.7	
2127.00	-19.4	V	3.0	36.6	1.0	-54.9	-13.0	-41.9	
2836.00	-19.5	V	3.0	36.4	1.0	-54.9	-13.0	-41.9	
1418.00	-20.2	H	3.0	37.4	1.0	-56.5	-13.0	-43.5	
2127.00	-20.4	H	3.0	36.6	1.0	-56.0	-13.0	-43.0	
2836.00	-21.6	H	3.0	36.4	1.0	-57.0	-13.0	-44.0	
Mid Ch, 710									
1420.00	-17.1	V	3.0	37.3	1.0	-53.5	-13.0	-40.5	
2130.00	-19.3	V	3.0	36.6	1.0	-54.8	-13.0	-41.8	
2840.00	-20.6	V	3.0	36.4	1.0	-56.0	-13.0	-43.0	
1420.00	-20.1	H	3.0	37.3	1.0	-56.4	-13.0	-43.4	
2130.00	-20.7	H	3.0	36.6	1.0	-56.3	-13.0	-43.3	
2840.00	-20.5	H	3.0	36.4	1.0	-55.8	-13.0	-42.8	
High Ch, 711									
1422.00	-17.0	V	3.0	37.3	1.0	-53.4	-13.0	-40.4	
2133.00	-18.9	V	3.0	36.6	1.0	-54.5	-13.0	-41.5	
2844.00	-19.3	V	3.0	36.4	1.0	-54.7	-13.0	-41.7	
1422.00	-20.0	H	3.0	37.3	1.0	-56.4	-13.0	-43.4	
2133.00	-20.5	H	3.0	36.6	1.0	-56.0	-13.0	-43.0	
2844.00	-21.8	H	3.0	36.4	1.0	-57.2	-13.0	-44.2	

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		LG							
Project #:		15I22343							
Date:		12/5/2015							
Test Engineer:		K.Kedida							
Configuration:		X-pos EUT, Ac Charger, Headset							
Location:		Chamber A							
Mode:		LTE_16QAM Band 17 Harmonics, 10MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 709									
1418.00	-18.8	V	3.0	37.4	1.0	-55.2	-13.0	-42.2	
2127.00	-20.5	V	3.0	36.6	1.0	-56.0	-13.0	-43.0	
2836.00	-20.8	V	3.0	36.4	1.0	-56.2	-13.0	-43.2	
1418.00	-19.5	H	3.0	37.4	1.0	-55.8	-13.0	-42.8	
2127.00	-21.6	H	3.0	36.6	1.0	-57.1	-13.0	-44.1	
2836.00	-21.8	H	3.0	36.4	1.0	-57.2	-13.0	-44.2	
Mid Ch, 710									
1420.00	-17.0	V	3.0	37.3	1.0	-53.3	-13.0	-40.3	
2130.00	-20.3	V	3.0	36.6	1.0	-55.9	-13.0	-42.9	
2840.00	-21.3	V	3.0	36.4	1.0	-56.7	-13.0	-43.7	
1420.00	-20.7	H	3.0	37.3	1.0	-57.0	-13.0	-44.0	
2130.00	-21.5	H	3.0	36.6	1.0	-57.1	-13.0	-44.1	
2840.00	-21.2	H	3.0	36.4	1.0	-56.6	-13.0	-43.6	
High Ch, 711									
1422.00	-17.9	V	3.0	37.3	1.0	-54.2	-13.0	-41.2	
2133.00	-20.1	V	3.0	36.6	1.0	-55.7	-13.0	-42.7	
2844.00	-20.4	V	3.0	36.4	1.0	-55.8	-13.0	-42.8	
1422.00	-21.0	H	3.0	37.3	1.0	-57.3	-13.0	-44.3	
2133.00	-21.2	H	3.0	36.6	1.0	-56.8	-13.0	-43.8	
2844.00	-22.2	H	3.0	36.4	1.0	-57.6	-13.0	-44.6	