Band

LTE41

5MHz

16QAM

High Frequency Substitution Measurement
UL Verification Services, Inc.

Company: LG Electronics
Project #: 15I21523
Date: 8/24/2015
Test Engineer: R.Alegre
Configuration: EUT only
Location: Chamber B
Mode: LTE_16QAM Band 41 Fundamentals, 5MHz Bandwidth

Test Equpment:
Receiving: Horn T345, and Chamber B SMA Cables
Substitution: Horn T59, Xft SMA Cable (SN # 506392) 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								
2498.50	4.94	V	0.9	9.5	13.51	33.0	-19.5	
2498.50	9.50	H	0.9	9.5	18.07	33.0	-14.9	
Mid Ch								
2593.00	5.84	V	0.9	9.5	14.45	33.0	-18.6	
2593.00	10.09	H	0.9	9.5	18.70	33.0	-14.3	
High Ch								
2687.50	6.04	V	0.9	9.7	14.89	33.0	-18.1	
2687.50	8.94	H	0.9	9.7	17.79	33.0	-15.2	

Band

LTE41

5MHz

QPSK

High Frequency Substitution Measurement
UL Verification Services, Inc.

Company:	LG Electronics
Project #:	15I21523
Date:	8/24/2015
Test Engineer:	R.Alegre
Configuration:	EUT only
Location:	Chamber B
Mode:	LTE_QPSK Band 41 Fundamentals, 5MHz Bandwidth

Test Equpment:
Receiving: Horn T345, and Chamber B SMA Cables
Substitution: Horn T59, Xft SMA Cable (SN # 506392) 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								
2498.50	5.80	V	0.9	9.5	14.37	33.0	-18.6	
2498.50	9.78	H	0.9	9.5	18.35	33.0	-14.6	
Mid Ch								
2593.00	6.88	V	0.9	9.5	15.49	33.0	-17.5	
2593.00	10.83	H	0.9	9.5	19.44	33.0	-13.6	
High Ch								
2687.50	6.98	V	0.9	9.7	15.83	33.0	-17.2	
2687.50	9.81	H	0.9	9.7	18.66	33.0	-14.3	

12.2. FIELD STRENGTH OF SPURIOUS RADIATION

RULE PART(S)

FCC: §2.1053, §22.917, §24.238, §27.53 and §90.691

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 that 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.

MODES TESTED

GSM, WCDMA, CDMA, and LTE

RESULTS

12.2.1. SPURIOUS RADIATION PLOTS

GSM

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG
Project #: 15I21523
Date: 8/22/2015
Test Engineer: Jude Semana
Configuration: X-pos EUT w/ AC Adapter + Headset
Location: Chamber A
Mode: GPRS 1900 MHz Harmonics

Band	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									
GSM 1900 EGPRS	3700.40	-12.5	V	3.0	35.9	1.0	-47.4	-13.0	-34.4	
	5550.60	-11.5	V	3.0	35.5	1.0	-46.0	-13.0	-33.0	
	7400.80	-10.9	V	3.0	35.7	1.0	-45.6	-13.0	-32.6	
	3700.40	-12.5	H	3.0	35.9	1.0	-47.4	-13.0	-34.4	
	5550.60	-10.5	H	3.0	35.5	1.0	-44.9	-13.0	-31.9	
	7400.80	-10.9	H	3.0	35.7	1.0	-45.6	-13.0	-32.6	
	Mid Ch, 1880									
	3760.00	-12.9	V	3.0	35.8	1.0	-47.7	-13.0	-34.7	
	5640.00	-10.8	V	3.0	35.5	1.0	-45.3	-13.0	-32.3	
	7520.00	-10.8	V	3.0	35.7	1.0	-45.5	-13.0	-32.5	
	3760.00	-12.5	H	3.0	35.8	1.0	-47.3	-13.0	-34.3	
	5640.00	-10.4	H	3.0	35.5	1.0	-44.9	-13.0	-31.9	
	7520.00	-10.9	H	3.0	35.7	1.0	-45.7	-13.0	-32.7	
	High Ch, 1909.8									
	3819.60	-12.7	V	3.0	35.8	1.0	-47.5	-13.0	-34.5	
	5729.40	-10.6	V	3.0	35.5	1.0	-45.1	-13.0	-32.1	
	7639.20	-11.1	V	3.0	35.8	1.0	-45.9	-13.0	-32.9	
	3819.60	-12.9	H	3.0	35.8	1.0	-47.6	-13.0	-34.6	
	5729.40	-10.2	H	3.0	35.5	1.0	-44.7	-13.0	-31.7	
	7639.20	-10.7	H	3.0	35.8	1.0	-45.5	-13.0	-32.5	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG
Project #: 15I21523
Date: 8/22/2015
Test Engineer: Jude Semana
Configuration: X-pos EUT w/ AC Adapter + Headset
Location: Chamber A
Mode: EGPRS 1900 MHz Harmonics

Band	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									
GSM1900 GPRS	3700.40	-17.1	V	3.0	35.9	1.0	-52.0	-13.0	-39.0	
	5550.60	-12.3	V	3.0	35.5	1.0	-46.8	-13.0	-33.8	
	7400.80	-11.8	V	3.0	35.7	1.0	-46.6	-13.0	-33.6	
	3700.40	-18.3	H	3.0	35.9	1.0	-53.2	-13.0	-40.2	
	5550.60	-11.6	H	3.0	35.5	1.0	-46.0	-13.0	-33.0	
	7400.80	-11.0	H	3.0	35.7	1.0	-45.7	-13.0	-32.7	
	Mid Ch, 1880									
	3760.00	-17.1	V	3.0	35.8	1.0	-51.9	-13.0	-38.9	
	5640.00	-11.8	V	3.0	35.5	1.0	-46.3	-13.0	-33.3	
	7520.00	-11.6	V	3.0	35.7	1.0	-46.3	-13.0	-33.3	
	3760.00	-17.2	H	3.0	35.8	1.0	-52.0	-13.0	-39.0	
	5640.00	-12.1	H	3.0	35.5	1.0	-46.6	-13.0	-33.6	
	7520.00	-10.8	H	3.0	35.7	1.0	-45.5	-13.0	-32.5	
	High Ch, 1909.8									
	3819.60	-17.2	V	3.0	35.8	1.0	-52.0	-13.0	-39.0	
	5729.40	-11.8	V	3.0	35.5	1.0	-46.3	-13.0	-33.3	
	7639.20	-11.8	V	3.0	35.8	1.0	-46.5	-13.0	-33.5	
	3819.60	-17.8	H	3.0	35.8	1.0	-52.6	-13.0	-39.6	
	5729.40	-11.4	H	3.0	35.5	1.0	-45.9	-13.0	-32.9	
	7639.20	-11.1	H	3.0	35.8	1.0	-45.9	-13.0	-32.9	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG
Project #: 15I21523
Date: 8/22/2015
Test Engineer: Jude Semana
Configuration: X-pos EUT w/ AC Adapter + Headset
Location: Chamber A
Mode: EGPRS 850 MHz Harmonics

Band

GSM 850

EGPRS

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	-16.9	V	3.0	37.0	1.0	-52.9	-13.0	-39.9	
2472.60	-8.3	V	3.0	36.4	1.0	-43.7	-13.0	-30.7	
3296.80	-14.9	V	3.0	36.2	1.0	-50.0	-13.0	-37.0	
1648.40	-18.3	H	3.0	37.0	1.0	-54.3	-13.0	-41.3	
2472.60	-19.2	H	3.0	36.4	1.0	-54.6	-13.0	-41.6	
3296.80	-22.4	H	3.0	36.2	1.0	-57.5	-13.0	-44.5	
Mid Ch, 836.6									
1673.20	-20.1	V	3.0	37.0	1.0	-56.1	-13.0	-43.1	
2509.80	-18.3	V	3.0	36.4	1.0	-53.7	-13.0	-40.7	
3346.40	-13.9	V	3.0	36.1	1.0	-49.0	-13.0	-36.0	
1673.20	-19.5	H	3.0	37.0	1.0	-55.4	-13.0	-42.4	
2509.80	-20.8	H	3.0	36.4	1.0	-56.2	-13.0	-43.2	
3346.40	-14.5	H	3.0	36.1	1.0	-49.6	-13.0	-36.6	
High Ch, 848.8									
1697.60	-27.9	V	3.0	37.0	1.0	-63.9	-13.0	-50.9	
2546.40	-24.9	V	3.0	36.4	1.0	-60.3	-13.0	-47.3	
3395.20	-22.1	V	3.0	36.1	1.0	-57.1	-13.0	-44.1	
1697.60	-28.5	H	3.0	37.0	1.0	-64.4	-13.0	-51.4	
2546.40	-23.9	H	3.0	36.4	1.0	-59.3	-13.0	-46.3	
3395.20	-21.5	H	3.0	36.1	1.0	-56.5	-13.0	-43.5	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG
Project #: 15I21523
Date: 8/22/2015
Test Engineer: Jude Semana
Configuration: X-pos EUT w/ AC Adapter + Headset
Location: Chamber A
Mode: GPRS 850 MHz Harmonics

Band

GSM 850

GPRS

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	-16.8	V	3.0	37.0	1.0	-52.8	-13.0	-39.8	
2472.60	-8.1	V	3.0	36.4	1.0	-43.5	-13.0	-30.5	
3296.80	-14.4	V	3.0	36.2	1.0	-49.6	-13.0	-36.6	
1648.40	-18.3	H	3.0	37.0	1.0	-54.3	-13.0	-41.3	
2472.60	-18.4	H	3.0	36.4	1.0	-53.9	-13.0	-40.9	
3296.80	-23.1	H	3.0	36.2	1.0	-58.3	-13.0	-45.3	
Mid Ch, 836.6									
1673.20	-20.3	V	3.0	37.0	1.0	-56.3	-13.0	-43.3	
2509.80	-17.8	V	3.0	36.4	1.0	-53.2	-13.0	-40.2	
3346.40	-13.8	V	3.0	36.1	1.0	-48.9	-13.0	-35.9	
1673.20	-19.6	H	3.0	37.0	1.0	-55.6	-13.0	-42.6	
2509.80	-19.4	H	3.0	36.4	1.0	-54.8	-13.0	-41.8	
3346.40	-14.0	H	3.0	36.1	1.0	-49.2	-13.0	-36.2	
High Ch, 848.8									
1697.60	-27.1	V	3.0	37.0	1.0	-63.0	-13.0	-50.0	
2546.40	-24.4	V	3.0	36.4	1.0	-59.8	-13.0	-46.8	
3395.20	-22.1	V	3.0	36.1	1.0	-57.2	-13.0	-44.2	
1697.60	-28.0	H	3.0	37.0	1.0	-63.9	-13.0	-50.9	
2546.40	-25.0	H	3.0	36.4	1.0	-60.4	-13.0	-47.4	
3395.20	-22.3	H	3.0	36.1	1.0	-57.4	-13.0	-44.4	

WCDMA

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG
Project #: 15I21523
Date: 8/22/2015
Test Engineer: Jude Semana
Configuration: X-pos EUT w/ AC Adapter + Headset
Location: Chamber A
Mode: HSDPA Band 2 Harmonics

Band

Band 2

HSDPA

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	-14.5	V	3.0	35.9	1.0	-49.4	-13.0	-36.4	
5557.20	-14.9	V	3.0	35.5	1.0	-49.3	-13.0	-36.3	
7409.60	-11.5	V	3.0	35.7	1.0	-46.2	-13.0	-33.2	
3704.80	-15.3	H	3.0	35.9	1.0	-50.2	-13.0	-37.2	
5557.20	-14.4	H	3.0	35.5	1.0	-48.9	-13.0	-35.9	
7409.60	-9.9	H	3.0	35.7	1.0	-44.6	-13.0	-31.6	
Mid Ch, 1880									
3760.00	-15.0	V	3.0	35.8	1.0	-49.8	-13.0	-36.8	
5640.00	-14.9	V	3.0	35.5	1.0	-49.4	-13.0	-36.4	
7520.00	-11.3	V	3.0	35.7	1.0	-46.0	-13.0	-33.0	
3760.00	-15.2	H	3.0	35.8	1.0	-50.0	-13.0	-37.0	
5640.00	-15.2	H	3.0	35.5	1.0	-49.7	-13.0	-36.7	
7520.00	-10.6	H	3.0	35.7	1.0	-45.4	-13.0	-32.4	
High Ch, 1907.6									
3815.20	-14.7	V	3.0	35.8	1.0	-49.4	-13.0	-36.4	
5722.80	-16.4	V	3.0	35.5	1.0	-50.9	-13.0	-37.9	
7630.40	-11.6	V	3.0	35.8	1.0	-46.4	-13.0	-33.4	
3815.20	-14.4	H	3.0	35.8	1.0	-49.2	-13.0	-36.2	
5722.80	-14.7	H	3.0	35.5	1.0	-49.2	-13.0	-36.2	
7630.40	-9.7	H	3.0	35.8	1.0	-44.5	-13.0	-31.5	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG
Project #: 15I21523
Date: 8/22/2015
Test Engineer: Jude Semana
Configuration: X-pos EUT w/ AC Adapter + Headset
Location: Chamber A
Mode: Rel99 Band 2 Harmonics

Band

Band 2

REL99

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	-12.5	V	3.0	35.9	1.0	-47.4	-13.0	-34.4	
5557.20	-13.3	V	3.0	35.5	1.0	-47.8	-13.0	-34.8	
7409.60	-13.5	V	3.0	35.7	1.0	-48.2	-13.0	-35.2	
3704.80	-14.5	H	3.0	35.9	1.0	-49.4	-13.0	-36.4	
5557.20	-13.4	H	3.0	35.5	1.0	-47.9	-13.0	-34.9	
7409.60	-12.9	H	3.0	35.7	1.0	-47.6	-13.0	-34.6	
Mid Ch, 1880									
3760.00	-12.3	V	3.0	35.8	1.0	-47.1	-13.0	-34.1	
5640.00	-13.5	V	3.0	35.5	1.0	-48.0	-13.0	-35.0	
7520.00	-13.4	V	3.0	35.7	1.0	-48.2	-13.0	-35.2	
3760.00	-14.3	H	3.0	35.8	1.0	-49.1	-13.0	-36.1	
5640.00	-13.0	H	3.0	35.5	1.0	-47.5	-13.0	-34.5	
7520.00	-12.4	H	3.0	35.7	1.0	-47.1	-13.0	-34.1	
High Ch, 1907.6									
3815.20	-12.7	V	3.0	35.8	1.0	-47.5	-13.0	-34.5	
5722.80	-13.5	V	3.0	35.5	1.0	-48.0	-13.0	-35.0	
7630.40	-13.4	V	3.0	35.8	1.0	-48.2	-13.0	-35.2	
3815.20	-14.8	H	3.0	35.8	1.0	-49.6	-13.0	-36.6	
5722.80	-12.8	H	3.0	35.5	1.0	-47.3	-13.0	-34.3	
7630.40	-12.6	H	3.0	35.8	1.0	-47.4	-13.0	-34.4	

Band

Band 4

HSDPA

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG
Project #: 15I21523
Date: 8/22/2015
Test Engineer: Jude Semana
Configuration: X-pos EUT w/ AC Adapter + Headset
Location: Chamber C
Mode: HSDPA Band 4 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, 1712.4									
3424.80	-16.8	V	3.0	35.9	1.0	-51.7	-13.0	-38.7	
5137.20	-11.3	V	3.0	35.5	1.0	-45.8	-13.0	-32.8	
6849.60	-14.2	V	3.0	35.7	1.0	-49.0	-13.0	-36.0	
3424.80	-16.0	H	3.0	35.9	1.0	-50.8	-13.0	-37.8	
5137.20	-13.5	H	3.0	35.5	1.0	-48.0	-13.0	-35.0	
6849.60	-13.4	H	3.0	35.7	1.0	-48.2	-13.0	-35.2	
Mid Ch, 1732.6									
3465.20	-16.5	V	3.0	35.8	1.0	-51.3	-13.0	-38.3	
5197.80	-11.1	V	3.0	35.5	1.0	-45.6	-13.0	-32.6	
6930.40	-13.8	V	3.0	35.7	1.0	-48.6	-13.0	-35.6	
3465.20	-15.6	H	3.0	35.8	1.0	-50.4	-13.0	-37.4	
5197.80	-13.4	H	3.0	35.5	1.0	-47.9	-13.0	-34.9	
6930.40	-13.6	H	3.0	35.7	1.0	-48.4	-13.0	-35.4	
High Ch, 1752.6									
3505.20	-16.3	V	3.0	35.8	1.0	-51.0	-13.0	-38.0	
5257.80	-10.8	V	3.0	35.5	1.0	-45.3	-13.0	-32.3	
7010.40	-14.4	V	3.0	35.8	1.0	-49.1	-13.0	-36.1	
3505.20	-16.0	H	3.0	35.8	1.0	-50.8	-13.0	-37.8	
5257.80	-13.9	H	3.0	35.5	1.0	-48.4	-13.0	-35.4	
7010.40	-13.1	H	3.0	35.8	1.0	-47.9	-13.0	-34.9	

Band

Band 4

REL99

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG
Project #: 15I21523
Date: 8/22/2015
Test Engineer: Jude Semana
Configuration: X-pos EUT w/ AC Adapter + Headset
Location: Chamber A
Mode: REL99 Band 4 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, 1712.4									
3424.80	-15.9	V	3.0	35.9	1.0	-50.8	-13.0	-37.8	
5137.20	-10.4	V	3.0	35.5	1.0	-44.9	-13.0	-31.9	
6849.60	-12.2	V	3.0	35.7	1.0	-46.9	-13.0	-33.9	
3424.80	-15.2	H	3.0	35.9	1.0	-50.1	-13.0	-37.1	
5137.20	-13.4	H	3.0	35.5	1.0	-47.9	-13.0	-34.9	
6849.60	-11.1	H	3.0	35.7	1.0	-45.8	-13.0	-32.8	
Mid Ch, 1732.6									
3465.20	-15.3	V	3.0	35.8	1.0	-50.2	-13.0	-37.2	
5197.80	-9.8	V	3.0	35.5	1.0	-44.3	-13.0	-31.3	
6930.40	-11.7	V	3.0	35.7	1.0	-46.5	-13.0	-33.5	
3465.20	-14.7	H	3.0	35.8	1.0	-49.5	-13.0	-36.5	
5197.80	-13.0	H	3.0	35.5	1.0	-47.4	-13.0	-34.4	
6930.40	-10.7	H	3.0	35.7	1.0	-45.5	-13.0	-32.5	
High Ch, 1752.6									
3505.20	-15.1	V	3.0	35.8	1.0	-49.9	-13.0	-36.9	
5257.80	-9.9	V	3.0	35.5	1.0	-44.4	-13.0	-31.4	
7010.40	-12.5	V	3.0	35.8	1.0	-47.3	-13.0	-34.3	
3505.20	-15.1	H	3.0	35.8	1.0	-49.8	-13.0	-36.8	
5257.80	-12.7	H	3.0	35.5	1.0	-47.2	-13.0	-34.2	
7010.40	-11.1	H	3.0	35.8	1.0	-45.8	-13.0	-32.8	

Band

Band 5

HSDPA

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG
Project #: 15I21523
Date: 8/22/2015
Test Engineer: Jude Semana
Configuration: X-pos EUT w/ AC Adapter + Headset
Location: Chamber A
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	-23.5	V	3.0	37.0	1.0	-59.6	-13.0	-46.6	
2479.20	-21.3	V	3.0	36.4	1.0	-56.8	-13.0	-43.8	
3305.60	-17.1	V	3.0	36.1	1.0	-52.2	-13.0	-39.2	
1652.80	-24.1	H	3.0	37.0	1.0	-60.1	-13.0	-47.1	
2479.20	-22.9	H	3.0	36.4	1.0	-58.4	-13.0	-45.4	
3305.60	-17.6	H	3.0	36.1	1.0	-52.8	-13.0	-39.8	
Mid Ch, 836.6									
1673.20	-23.2	V	3.0	37.0	1.0	-59.2	-13.0	-46.2	
2509.80	-20.8	V	3.0	36.4	1.0	-56.2	-13.0	-43.2	
3346.40	-16.8	V	3.0	36.1	1.0	-52.0	-13.0	-39.0	
1673.20	-23.5	H	3.0	37.0	1.0	-59.5	-13.0	-46.5	
2509.80	-22.6	H	3.0	36.4	1.0	-58.0	-13.0	-45.0	
3346.40	-16.7	H	3.0	36.1	1.0	-51.8	-13.0	-38.8	
High Ch, 846.6									
1693.20	-23.3	V	3.0	37.0	1.0	-59.3	-13.0	-46.3	
2539.80	-20.9	V	3.0	36.4	1.0	-56.3	-13.0	-43.3	
3386.40	-17.2	V	3.0	36.1	1.0	-52.3	-13.0	-39.3	
1693.20	-23.7	H	3.0	37.0	1.0	-59.7	-13.0	-46.7	
2539.80	-22.5	H	3.0	36.4	1.0	-58.0	-13.0	-45.0	
3386.40	-16.8	H	3.0	36.1	1.0	-51.9	-13.0	-38.9	

Band

Band 5

REL99

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG
Project #: 15I21523
Date: 8/22/2015
Test Engineer: Jude Semana
Configuration: X-pos EUT w/ AC Adapter + Headset
Location: Chamber A
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	-24.5	V	3.0	37.0	1.0	-60.5	-13.0	-47.5	
2479.20	-21.5	V	3.0	36.4	1.0	-56.9	-13.0	-43.9	
3305.60	-17.6	V	3.0	36.1	1.0	-52.7	-13.0	-39.7	
1652.80	-24.3	H	3.0	37.0	1.0	-60.3	-13.0	-47.3	
2479.20	-23.6	H	3.0	36.4	1.0	-59.0	-13.0	-46.0	
3305.60	-17.7	H	3.0	36.1	1.0	-52.8	-13.0	-39.8	
Mid Ch, 836.6									
1673.20	-24.1	V	3.0	37.0	1.0	-60.1	-13.0	-47.1	
2509.80	-21.6	V	3.0	36.4	1.0	-57.0	-13.0	-44.0	
3346.40	-16.4	V	3.0	36.1	1.0	-51.5	-13.0	-38.5	
1673.20	-23.9	H	3.0	37.0	1.0	-59.9	-13.0	-46.9	
2509.80	-23.1	H	3.0	36.4	1.0	-58.5	-13.0	-45.5	
3346.40	-18.2	H	3.0	36.1	1.0	-53.4	-13.0	-40.4	
High Ch, 846.6									
1693.20	-24.5	V	3.0	37.0	1.0	-60.4	-13.0	-47.4	
2539.80	-21.9	V	3.0	36.4	1.0	-57.3	-13.0	-44.3	
3386.40	-18.0	V	3.0	36.1	1.0	-53.1	-13.0	-40.1	
1693.20	-24.1	H	3.0	37.0	1.0	-60.1	-13.0	-47.1	
2539.80	-23.1	H	3.0	36.4	1.0	-58.5	-13.0	-45.5	
3386.40	-18.3	H	3.0	36.1	1.0	-53.4	-13.0	-40.4	

CDMA

Band

BC1

UL Verification Services Chamber C
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/26/2015
Test Engineer: R.Alegre
Configuration: EUT w/ AC Adapter + HS
Mode: EVDO BC1

Chamber	Pre-amplifer	Filter	Limit
3m Chamber	T34 8449B	Filter 1	Part 24

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1851.25 MHz									
3.703	-13.6	H	3.0	35.4	1.0	-48.0	-13.0	-35.0	
5.554	-12.9	H	3.0	34.7	1.0	-46.7	-13.0	-33.7	
7.405	-12.4	H	3.0	34.9	1.0	-46.3	-13.0	-33.3	
3.703	-11.1	V	3.0	35.4	1.0	-45.5	-13.0	-32.5	
5.554	-16.2	V	3.0	34.7	1.0	-50.0	-13.0	-37.0	
7.405	-13.3	V	3.0	34.9	1.0	-47.2	-13.0	-34.2	
Mid Ch, 1880 MHz									
3.760	-11.6	H	3.0	35.3	1.0	-46.0	-13.0	-33.0	
5.640	-16.6	H	3.0	34.7	1.0	-50.3	-13.0	-37.3	
7.520	-12.6	H	3.0	34.9	1.0	-46.5	-13.0	-33.5	
3.760	-15.7	V	3.0	35.3	1.0	-50.1	-13.0	-37.1	
5.640	-14.2	V	3.0	34.7	1.0	-47.9	-13.0	-34.9	
7.520	-13.2	V	3.0	34.9	1.0	-47.2	-13.0	-34.2	
High Ch, 1908.75 MHz									
3.818	-19.5	H	3.0	35.3	1.0	-53.8	-13.0	-40.8	
5.726	-14.1	H	3.0	34.7	1.0	-47.9	-13.0	-34.9	
7.635	-11.9	H	3.0	34.9	1.0	-45.9	-13.0	-32.9	
3.818	-15.5	V	3.0	35.3	1.0	-49.7	-13.0	-36.7	
5.726	-15.8	V	3.0	34.7	1.0	-49.5	-13.0	-36.5	
7.635	-13.0	V	3.0	34.9	1.0	-47.0	-13.0	-34.0	

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

Band

BC1

1xRTT

UL Verification Services Chamber C
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/26/2015
Test Engineer: R.Alegre
Configuration: EUT w/ AC Adapter + HS
Mode: RTT BC1 HARM

Chamber	Pre-amplifer	Filter	Limit
3m Chamber	T34 8449B	Filter 1	Part 24

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1851.25 MHz									
3.703	-13.5	H	3.0	35.4	1.0	-47.9	-13.0	-34.9	
5.554	-12.9	H	3.0	34.7	1.0	-46.6	-13.0	-33.6	
7.405	-12.5	H	3.0	34.9	1.0	-46.4	-13.0	-33.4	
3.703	-11.2	V	3.0	35.4	1.0	-45.6	-13.0	-32.6	
5.554	-16.3	V	3.0	34.7	1.0	-50.0	-13.0	-37.0	
7.405	-13.2	V	3.0	34.9	1.0	-47.1	-13.0	-34.1	
Mid Ch, 1880 MHz									
3.760	-11.5	H	3.0	35.3	1.0	-45.9	-13.0	-32.9	
5.640	-16.6	H	3.0	34.7	1.0	-50.3	-13.0	-37.3	
7.520	-12.5	H	3.0	34.9	1.0	-46.5	-13.0	-33.5	
3.760	-15.7	V	3.0	35.3	1.0	-50.1	-13.0	-37.1	
5.640	-14.5	V	3.0	34.7	1.0	-48.3	-13.0	-35.3	
7.520	-13.3	V	3.0	34.9	1.0	-47.2	-13.0	-34.2	
High Ch, 1908.75 MHz									
3.818	-19.5	H	3.0	35.3	1.0	-53.8	-13.0	-40.8	
5.726	-14.2	H	3.0	34.7	1.0	-47.9	-13.0	-34.9	
7.635	-11.8	H	3.0	34.9	1.0	-45.8	-13.0	-32.8	
3.818	-15.5	V	3.0	35.3	1.0	-49.8	-13.0	-36.8	
5.726	-15.7	V	3.0	34.7	1.0	-49.4	-13.0	-36.4	
7.635	-13.0	V	3.0	34.9	1.0	-46.9	-13.0	-33.9	

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

Band

BC0

UL Verification Services Chamber C
Above 1GHz High Frequency Substitution Measurement

Company: LG
Project #: 15I21523
Date: 8/26/2015
Test Engineer: A. Escamilla
Configuration: EUT w/ AC Adapter + HS
Mode: EVDO BC0

Chamber	Pre-amplifer	Filter	Limit
3m Chamber	T34 8449B	Filter 1	Part 22

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 824.7MHz									
1.649	-27.5	H	3.0	37.4	1.0	-63.9	-13.0	-50.9	
2.474	-24.5	H	3.0	36.4	1.0	-59.9	-13.0	-46.9	
3.299	-21.7	H	3.0	35.8	1.0	-56.5	-13.0	-43.5	
1.649	-27.7	V	3.0	37.4	1.0	-64.1	-13.0	-51.1	
2.474	-23.2	V	3.0	36.4	1.0	-58.6	-13.0	-45.6	
3.299	-21.3	V	3.0	35.8	1.0	-56.1	-13.0	-43.1	
Mid Ch, 836.52MHz									
1.673	-26.4	H	3.0	37.3	1.0	-62.8	-13.0	-49.8	
2.510	-24.0	H	3.0	36.4	1.0	-59.4	-13.0	-46.4	
3.346	-21.3	H	3.0	35.8	1.0	-56.1	-13.0	-43.1	
1.673	-27.1	V	3.0	37.3	1.0	-63.4	-13.0	-50.4	
2.510	-22.6	V	3.0	36.4	1.0	-58.0	-13.0	-45.0	
3.346	-21.4	V	3.0	35.8	1.0	-56.1	-13.0	-43.1	
High Ch, 848.31MHz									
1.697	-27.0	H	3.0	37.3	1.0	-63.3	-13.0	-50.3	
2.545	-24.1	H	3.0	36.3	1.0	-59.4	-13.0	-46.4	
3.393	-21.5	H	3.0	35.7	1.0	-56.2	-13.0	-43.2	
1.697	-27.0	V	3.0	37.3	1.0	-63.3	-13.0	-50.3	
2.545	-23.0	V	3.0	36.3	1.0	-58.3	-13.0	-45.3	
3.393	-21.5	V	3.0	35.7	1.0	-56.2	-13.0	-43.2	

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

UL Verification Services Chamber C
Above 1GHz High Frequency Substitution Measurement

Company: LG
Project #: 15I21523
Date: 8/26/2015
Test Engineer: A. Escamilla
Configuration: EUT w/ AC Adapter + HS
Mode: RTT BC0

Chamber	Pre-amplifer	Filter	Limit
3m Chamber	T34 8449B	Filter 1	Part 22

Band BC0 1xRTT

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 824.7MHz									
1.649	-26.9	H	3.0	37.4	1.0	-63.3	-13.0	-50.3	
2.474	-24.8	H	3.0	36.4	1.0	-60.2	-13.0	-47.2	
3.299	-21.2	H	3.0	35.8	1.0	-56.0	-13.0	-43.0	
1.649	-28.0	V	3.0	37.4	1.0	-64.3	-13.0	-51.3	
2.474	-22.8	V	3.0	36.4	1.0	-58.2	-13.0	-45.2	
3.299	-21.0	V	3.0	35.8	1.0	-55.8	-13.0	-42.8	
Mid Ch, 836.52MHz									
1.673	-26.0	H	3.0	37.3	1.0	-62.3	-13.0	-49.3	
2.510	-23.9	H	3.0	36.4	1.0	-59.2	-13.0	-46.2	
3.346	-21.1	H	3.0	35.8	1.0	-55.8	-13.0	-42.8	
1.673	-26.7	V	3.0	37.3	1.0	-63.0	-13.0	-50.0	
2.510	-22.8	V	3.0	36.4	1.0	-58.2	-13.0	-45.2	
3.346	-21.0	V	3.0	35.8	1.0	-55.7	-13.0	-42.7	
High Ch, 848.31MHz									
1.697	-27.3	H	3.0	37.3	1.0	-63.6	-13.0	-50.6	
2.545	-24.6	H	3.0	36.3	1.0	-60.0	-13.0	-47.0	
3.393	-21.2	H	3.0	35.7	1.0	-55.9	-13.0	-42.9	
1.697	-26.8	V	3.0	37.3	1.0	-63.1	-13.0	-50.1	
2.545	-22.8	V	3.0	36.3	1.0	-58.1	-13.0	-45.1	
3.393	-20.6	V	3.0	35.7	1.0	-55.3	-13.0	-42.3	

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

Band

BC10

UL Verification Services Chamber C
Above 1GHz High Frequency Substitution Measurement

Company: LG
Project #: 15I21523
Date: 8/26/2015
Test Engineer: A. Escamilla
Configuration: EUT w/ AC Adapter + HS
Mode: EVDO BC10

Chamber	Pre-amplifer	Filter	Limit
3m Chamber	T34 8449B	Filter 1	Part 22

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 817.9MHz									
1.636	-27.6	H	3.0	37.4	1.0	-64.0	-13.0	-51.0	
2.454	-24.8	H	3.0	36.4	1.0	-60.2	-13.0	-47.2	
3.272	-21.6	H	3.0	35.8	1.0	-56.4	-13.0	-43.4	
1.636	-27.6	V	3.0	37.4	1.0	-64.0	-13.0	-51.0	
2.454	-23.2	V	3.0	36.4	1.0	-58.6	-13.0	-45.6	
3.272	-21.6	V	3.0	35.8	1.0	-56.4	-13.0	-43.4	
Mid Ch, 820.50MHz									
1.641	-27.8	H	3.0	37.4	1.0	-64.2	-13.0	-51.2	
2.462	-24.2	H	3.0	36.4	1.0	-59.6	-13.0	-46.6	
3.282	-21.5	H	3.0	35.8	1.0	-56.3	-13.0	-43.3	
1.641	-27.5	V	3.0	37.4	1.0	-63.9	-13.0	-50.9	
2.462	-23.0	V	3.0	36.4	1.0	-58.4	-13.0	-45.4	
3.282	-21.3	V	3.0	35.8	1.0	-56.1	-13.0	-43.1	
High Ch, 823.10MHz									
1.646	-27.4	H	3.0	37.4	1.0	-63.8	-13.0	-50.8	
2.469	-24.5	H	3.0	36.4	1.0	-59.9	-13.0	-46.9	
3.292	-21.3	H	3.0	35.8	1.0	-56.2	-13.0	-43.2	
1.646	-27.5	V	3.0	37.4	1.0	-63.8	-13.0	-50.8	
2.469	-22.7	V	3.0	36.4	1.0	-58.1	-13.0	-45.1	
3.292	-21.4	V	3.0	35.8	1.0	-56.3	-13.0	-43.3	

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

UL Verification Services Chamber C
Above 1GHz High Frequency Substitution Measurement

Company: LG
Project #: 15I21523
Date: 8/26/2015
Test Engineer: A. Escamilla
Configuration: EUT w/ AC Adapter + HS
Mode: RTT BC10

Chamber	Pre-amplifer	Filter	Limit
3m Chamber	T34 8449B	Filter 1	Part 22

Band

BC10

1xRTT

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 817.9MHz									
1.636	-27.6	H	3.0	37.4	1.0	-64.0	-13.0	-51.0	
2.454	-24.4	H	3.0	36.4	1.0	-59.8	-13.0	-46.8	
3.272	-21.8	H	3.0	35.8	1.0	-56.6	-13.0	-43.6	
1.636	-27.5	V	3.0	37.4	1.0	-63.9	-13.0	-50.9	
2.454	-23.3	V	3.0	36.4	1.0	-58.8	-13.0	-45.8	
3.272	-21.4	V	3.0	35.8	1.0	-56.2	-13.0	-43.2	
Mid Ch, 820.50MHz									
1.641	-27.6	H	3.0	37.4	1.0	-63.9	-13.0	-50.9	
2.462	-24.8	H	3.0	36.4	1.0	-60.2	-13.0	-47.2	
3.282	-21.1	H	3.0	35.8	1.0	-55.9	-13.0	-42.9	
1.641	-27.5	V	3.0	37.4	1.0	-63.9	-13.0	-50.9	
2.462	-23.2	V	3.0	36.4	1.0	-58.6	-13.0	-45.6	
3.282	-21.3	V	3.0	35.8	1.0	-56.1	-13.0	-43.1	
High Ch, 823.10MHz									
1.646	-27.3	H	3.0	37.4	1.0	-63.7	-13.0	-50.7	
2.469	-24.1	H	3.0	36.4	1.0	-59.5	-13.0	-46.5	
3.292	-21.2	H	3.0	35.8	1.0	-56.0	-13.0	-43.0	
1.646	-27.7	V	3.0	37.4	1.0	-64.1	-13.0	-51.1	
2.469	-22.8	V	3.0	36.4	1.0	-58.2	-13.0	-45.2	
3.292	-21.3	V	3.0	35.8	1.0	-56.1	-13.0	-43.1	

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

LTE Band 2

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 2 Harmonics, 20MHz Bandwidth

Band LTE2 20MHz 16QAM

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	-17.8	V	3.0	35.8	1.0	-52.6	-13.0	-39.6	
5580.00	-16.7	V	3.0	35.5	1.0	-51.2	-13.0	-38.2	
7440.00	-13.2	V	3.0	35.7	1.0	-47.9	-13.0	-34.9	
3720.00	-17.7	H	3.0	35.8	1.0	-52.6	-13.0	-39.6	
5580.00	-16.0	H	3.0	35.5	1.0	-50.5	-13.0	-37.5	
7440.00	-11.6	H	3.0	35.7	1.0	-46.3	-13.0	-33.3	
Mid Ch, 1880									
3760.00	-15.1	V	3.0	35.8	1.0	-49.9	-13.0	-36.9	
5640.00	-15.3	V	3.0	35.5	1.0	-49.8	-13.0	-36.8	
7520.00	-13.2	V	3.0	35.7	1.0	-47.9	-13.0	-34.9	
3760.00	-17.0	H	3.0	35.8	1.0	-51.8	-13.0	-38.8	
5640.00	-15.4	H	3.0	35.5	1.0	-49.9	-13.0	-36.9	
7520.00	-12.1	H	3.0	35.7	1.0	-46.8	-13.0	-33.8	
High Ch, 1900									
3800.00	-13.4	V	3.0	35.8	1.0	-48.2	-13.0	-35.2	
5700.00	-15.8	V	3.0	35.5	1.0	-50.3	-13.0	-37.3	
7600.00	-12.3	V	3.0	35.8	1.0	-47.0	-13.0	-34.0	
3800.00	-13.4	H	3.0	35.8	1.0	-48.2	-13.0	-35.2	
5700.00	-15.1	H	3.0	35.5	1.0	-49.6	-13.0	-36.6	
7600.00	-11.8	H	3.0	35.8	1.0	-46.6	-13.0	-33.6	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 2 Harmonics, 20MHz Bandwidth

Band LTE2 20MHz QPSK

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	-16.7	V	3.0	35.8	1.0	-51.5	-13.0	-38.5	
5580.00	-16.5	V	3.0	35.5	1.0	-50.9	-13.0	-37.9	
7440.00	-12.8	V	3.0	35.7	1.0	-47.6	-13.0	-34.6	
3720.00	-17.6	H	3.0	35.8	1.0	-52.5	-13.0	-39.5	
5580.00	-15.5	H	3.0	35.5	1.0	-50.0	-13.0	-37.0	
7440.00	-12.4	H	3.0	35.7	1.0	-47.1	-13.0	-34.1	
Mid Ch, 1880									
3760.00	-15.0	V	3.0	35.8	1.0	-49.8	-13.0	-36.8	
5640.00	-15.2	V	3.0	35.5	1.0	-49.7	-13.0	-36.7	
7520.00	-13.1	V	3.0	35.7	1.0	-47.8	-13.0	-34.8	
3760.00	-17.0	H	3.0	35.8	1.0	-51.8	-13.0	-38.8	
5640.00	-16.0	H	3.0	35.5	1.0	-50.5	-13.0	-37.5	
7520.00	-12.1	H	3.0	35.7	1.0	-46.8	-13.0	-33.8	
High Ch, 1900									
3800.00	-13.9	V	3.0	35.8	1.0	-48.7	-13.0	-35.7	
5700.00	-15.4	V	3.0	35.5	1.0	-49.9	-13.0	-36.9	
7600.00	-12.7	V	3.0	35.8	1.0	-47.4	-13.0	-34.4	
3800.00	-13.4	H	3.0	35.8	1.0	-48.1	-13.0	-35.1	
5700.00	-15.4	H	3.0	35.5	1.0	-49.9	-13.0	-36.9	
7600.00	-12.2	H	3.0	35.8	1.0	-46.9	-13.0	-33.9	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 2 Harmonics, 15MHz Bandwidth

Band LTE2 15MHz 16QAM

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	-17.4	V	3.0	35.8	1.0	-52.2	-13.0	-39.2	
5572.50	-15.5	V	3.0	35.5	1.0	-49.9	-13.0	-36.9	
7430.00	-13.3	V	3.0	35.7	1.0	-48.0	-13.0	-35.0	
3715.00	-18.0	H	3.0	35.8	1.0	-52.9	-13.0	-39.9	
5572.50	-15.6	H	3.0	35.5	1.0	-50.1	-13.0	-37.1	
7430.00	-11.8	H	3.0	35.7	1.0	-46.6	-13.0	-33.6	
Mid Ch, 1880									
3760.00	-16.2	V	3.0	35.8	1.0	-51.0	-13.0	-38.0	
5640.00	-15.3	V	3.0	35.5	1.0	-49.8	-13.0	-36.8	
7520.00	-12.9	V	3.0	35.7	1.0	-47.7	-13.0	-34.7	
3760.00	-16.5	H	3.0	35.8	1.0	-51.3	-13.0	-38.3	
5640.00	-15.8	H	3.0	35.5	1.0	-50.3	-13.0	-37.3	
7520.00	-10.9	H	3.0	35.7	1.0	-45.7	-13.0	-32.7	
High Ch, 1902.5									
3805.00	-12.8	V	3.0	35.8	1.0	-47.6	-13.0	-34.6	
5707.50	-14.6	V	3.0	35.5	1.0	-49.1	-13.0	-36.1	
7610.00	-13.2	V	3.0	35.8	1.0	-48.0	-13.0	-35.0	
3805.00	-13.7	H	3.0	35.8	1.0	-48.5	-13.0	-35.5	
5707.50	-14.7	H	3.0	35.5	1.0	-49.2	-13.0	-36.2	
7610.00	-11.7	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 Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 2 Harmonics, 15MHz Bandwidth

Band
LTE2
15MHz
QPSK

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	-15.5	V	3.0	35.8	1.0	-50.3	-13.0	-37.3	
5572.50	-15.6	V	3.0	35.5	1.0	-50.1	-13.0	-37.1	
7430.00	-13.2	V	3.0	35.7	1.0	-47.9	-13.0	-34.9	
3715.00	-17.7	H	3.0	35.8	1.0	-52.6	-13.0	-39.6	
5572.50	-15.0	H	3.0	35.5	1.0	-49.5	-13.0	-36.5	
7430.00	-12.3	H	3.0	35.7	1.0	-47.0	-13.0	-34.0	
Mid Ch, 1880									
3760.00	-14.6	V	3.0	35.8	1.0	-49.4	-13.0	-36.4	
5640.00	-15.3	V	3.0	35.5	1.0	-49.7	-13.0	-36.7	
7520.00	-12.7	V	3.0	35.7	1.0	-47.5	-13.0	-34.5	
3760.00	-16.1	H	3.0	35.8	1.0	-50.9	-13.0	-37.9	
5640.00	-14.5	H	3.0	35.5	1.0	-49.0	-13.0	-36.0	
7520.00	-12.4	H	3.0	35.7	1.0	-47.2	-13.0	-34.2	
High Ch, 1902.5									
3805.00	-14.4	V	3.0	35.8	1.0	-49.2	-13.0	-36.2	
5707.50	-15.6	V	3.0	35.5	1.0	-50.1	-13.0	-37.1	
7610.00	-12.0	V	3.0	35.8	1.0	-46.8	-13.0	-33.8	
3805.00	-13.1	H	3.0	35.8	1.0	-47.9	-13.0	-34.9	
5707.50	-14.8	H	3.0	35.5	1.0	-49.2	-13.0	-36.2	
7610.00	-12.0	H	3.0	35.8	1.0	-46.8	-13.0	-33.8	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 2 Harmonics, 10MHz Bandwidth

Band
LTE2
10MHz
16QAM

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	-16.7	V	3.0	35.9	1.0	-51.6	-13.0	-38.6	
5565.00	-15.5	V	3.0	35.5	1.0	-50.0	-13.0	-37.0	
7420.00	-13.2	V	3.0	35.7	1.0	-47.9	-13.0	-34.9	
3710.00	-18.1	H	3.0	35.9	1.0	-52.9	-13.0	-39.9	
5565.00	-16.0	H	3.0	35.5	1.0	-50.4	-13.0	-37.4	
7420.00	-11.9	H	3.0	35.7	1.0	-46.6	-13.0	-33.6	
Mid Ch, 1880									
3760.00	-16.1	V	3.0	35.8	1.0	-50.9	-13.0	-37.9	
5640.00	-15.0	V	3.0	35.5	1.0	-49.4	-13.0	-36.4	
7520.00	-12.9	V	3.0	35.7	1.0	-47.7	-13.0	-34.7	
3760.00	-16.3	H	3.0	35.8	1.0	-51.1	-13.0	-38.1	
5640.00	-15.9	H	3.0	35.5	1.0	-50.3	-13.0	-37.3	
7520.00	-11.1	H	3.0	35.7	1.0	-45.8	-13.0	-32.8	
High Ch, 1905									
3810.00	-13.2	V	3.0	35.8	1.0	-48.0	-13.0	-35.0	
5715.00	-14.7	V	3.0	35.5	1.0	-49.2	-13.0	-36.2	
7620.00	-13.1	V	3.0	35.8	1.0	-47.9	-13.0	-34.9	
3810.00	-13.3	H	3.0	35.8	1.0	-48.1	-13.0	-35.1	
5715.00	-14.9	H	3.0	35.5	1.0	-49.4	-13.0	-36.4	
7620.00	-11.8	H	3.0	35.8	1.0	-46.6	-13.0	-33.6	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 2 Harmonics, 10MHz Bandwidth

Band LTE2 10MHz QPSK

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	-16.7	V	3.0	35.9	1.0	-51.6	-13.0	-38.6	
5565.00	-15.5	V	3.0	35.5	1.0	-50.0	-13.0	-37.0	
7420.00	-13.3	V	3.0	35.7	1.0	-48.0	-13.0	-35.0	
3710.00	-17.3	H	3.0	35.9	1.0	-52.1	-13.0	-39.1	
5565.00	-15.0	H	3.0	35.5	1.0	-49.5	-13.0	-36.5	
7420.00	-11.7	H	3.0	35.7	1.0	-46.5	-13.0	-33.5	
Mid Ch, 1880									
3760.00	-16.3	V	3.0	35.8	1.0	-51.1	-13.0	-38.1	
5640.00	-15.4	V	3.0	35.5	1.0	-49.9	-13.0	-36.9	
7520.00	-13.5	V	3.0	35.7	1.0	-48.2	-13.0	-35.2	
3760.00	-17.5	H	3.0	35.8	1.0	-52.3	-13.0	-39.3	
5640.00	-14.9	H	3.0	35.5	1.0	-49.4	-13.0	-36.4	
7520.00	-12.3	H	3.0	35.7	1.0	-47.1	-13.0	-34.1	
High Ch, 1905									
3810.00	-13.7	V	3.0	35.8	1.0	-48.5	-13.0	-35.5	
5715.00	-15.3	V	3.0	35.5	1.0	-49.8	-13.0	-36.8	
7620.00	-13.3	V	3.0	35.8	1.0	-48.1	-13.0	-35.1	
3810.00	-13.8	H	3.0	35.8	1.0	-48.6	-13.0	-35.6	
5715.00	-15.1	H	3.0	35.5	1.0	-49.6	-13.0	-36.6	
7620.00	-10.7	H	3.0	35.8	1.0	-45.5	-13.0	-32.5	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 2 Harmonics, 5MHz Bandwidth

Band LTE2 5MHz 16QAM

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	-15.2	V	3.0	35.9	1.0	-50.1	-13.0	-37.1	
5557.50	-15.2	V	3.0	35.5	1.0	-49.7	-13.0	-36.7	
7410.00	-13.1	V	3.0	35.7	1.0	-47.8	-13.0	-34.8	
3705.00	-16.0	H	3.0	35.9	1.0	-50.8	-13.0	-37.8	
5557.50	-14.8	H	3.0	35.5	1.0	-49.3	-13.0	-36.3	
7410.00	-11.9	H	3.0	35.7	1.0	-46.7	-13.0	-33.7	
Mid Ch, 1880									
3760.00	-17.9	V	3.0	35.8	1.0	-52.7	-13.0	-39.7	
5640.00	-15.8	V	3.0	35.5	1.0	-50.3	-13.0	-37.3	
7520.00	-12.6	V	3.0	35.7	1.0	-47.3	-13.0	-34.3	
3760.00	-18.4	H	3.0	35.8	1.0	-53.2	-13.0	-40.2	
5640.00	-15.6	H	3.0	35.5	1.0	-50.1	-13.0	-37.1	
7520.00	-11.8	H	3.0	35.7	1.0	-46.5	-13.0	-33.5	
High Ch, 1907.5									
3815.00	-11.8	V	3.0	35.8	1.0	-46.6	-13.0	-33.6	
5722.50	-15.4	V	3.0	35.5	1.0	-49.9	-13.0	-36.9	
7630.00	-13.0	V	3.0	35.8	1.0	-47.8	-13.0	-34.8	
3815.00	-12.3	H	3.0	35.8	1.0	-47.1	-13.0	-34.1	
5722.50	-15.4	H	3.0	35.5	1.0	-49.8	-13.0	-36.8	
7630.00	-11.5	H	3.0	35.8	1.0	-46.2	-13.0	-33.2	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 2 Harmonics, 5MHz Bandwidth

Band LTE2 5MHz QPSK

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	-15.2	V	3.0	35.9	1.0	-50.1	-13.0	-37.1	
5557.50	-15.3	V	3.0	35.5	1.0	-49.7	-13.0	-36.7	
7410.00	-13.3	V	3.0	35.7	1.0	-48.1	-13.0	-35.1	
3705.00	-17.1	H	3.0	35.9	1.0	-51.9	-13.0	-38.9	
5557.50	-16.2	H	3.0	35.5	1.0	-50.7	-13.0	-37.7	
7410.00	-11.0	H	3.0	35.7	1.0	-45.8	-13.0	-32.8	
Mid Ch, 1880									
3760.00	-18.6	V	3.0	35.8	1.0	-53.4	-13.0	-40.4	
5640.00	-15.0	V	3.0	35.5	1.0	-49.5	-13.0	-36.5	
7520.00	-12.9	V	3.0	35.7	1.0	-47.7	-13.0	-34.7	
3760.00	-18.1	H	3.0	35.8	1.0	-52.9	-13.0	-39.9	
5640.00	-14.9	H	3.0	35.5	1.0	-49.3	-13.0	-36.3	
7520.00	-11.9	H	3.0	35.7	1.0	-46.7	-13.0	-33.7	
High Ch, 1907.5									
3815.00	-11.7	V	3.0	35.8	1.0	-46.5	-13.0	-33.5	
5722.50	-14.9	V	3.0	35.5	1.0	-49.4	-13.0	-36.4	
7630.00	-13.1	V	3.0	35.8	1.0	-47.8	-13.0	-34.8	
3815.00	-12.0	H	3.0	35.8	1.0	-46.8	-13.0	-33.8	
5722.50	-14.1	H	3.0	35.5	1.0	-48.6	-13.0	-35.6	
7630.00	-12.4	H	3.0	35.8	1.0	-47.1	-13.0	-34.1	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 2 Harmonics, 3MHz Bandwidth

Band LTE2 3MHz 16QAM

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	-16.0	V	3.0	35.9	1.0	-50.9	-13.0	-37.9	
5554.50	-16.4	V	3.0	35.5	1.0	-50.9	-13.0	-37.9	
7406.00	-13.4	V	3.0	35.7	1.0	-48.1	-13.0	-35.1	
3703.00	-17.1	H	3.0	35.9	1.0	-51.9	-13.0	-38.9	
5554.50	-15.9	H	3.0	35.5	1.0	-50.4	-13.0	-37.4	
7406.00	-12.2	H	3.0	35.7	1.0	-46.9	-13.0	-33.9	
Mid Ch, 1880									
3760.00	-18.1	V	3.0	35.8	1.0	-52.9	-13.0	-39.9	
5640.00	-15.9	V	3.0	35.5	1.0	-50.4	-13.0	-37.4	
7520.00	-13.0	V	3.0	35.7	1.0	-47.8	-13.0	-34.8	
3760.00	-18.9	H	3.0	35.8	1.0	-53.8	-13.0	-40.8	
5640.00	-15.6	H	3.0	35.5	1.0	-50.1	-13.0	-37.1	
7520.00	-11.6	H	3.0	35.7	1.0	-46.3	-13.0	-33.3	
High Ch, 1908.5									
3817.00	-11.0	V	3.0	35.8	1.0	-45.8	-13.0	-32.8	
5725.50	-14.7	V	3.0	35.5	1.0	-49.2	-13.0	-36.2	
7634.00	-12.3	V	3.0	35.8	1.0	-47.1	-13.0	-34.1	
3817.00	-11.8	H	3.0	35.8	1.0	-46.6	-13.0	-33.6	
5725.50	-15.6	H	3.0	35.5	1.0	-50.1	-13.0	-37.1	
7634.00	-11.8	H	3.0	35.8	1.0	-46.6	-13.0	-33.6	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 2 Harmonics, 3MHz Bandwidth

Band LTE2 3MHz QPSK

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	-16.0	V	3.0	35.9	1.0	-50.8	-13.0	-37.8	
5554.50	-16.8	V	3.0	35.5	1.0	-51.2	-13.0	-38.2	
7406.00	-13.2	V	3.0	35.7	1.0	-47.9	-13.0	-34.9	
3703.00	-16.8	H	3.0	35.9	1.0	-51.6	-13.0	-38.6	
5554.50	-15.4	H	3.0	35.5	1.0	-49.9	-13.0	-36.9	
7406.00	-12.5	H	3.0	35.7	1.0	-47.2	-13.0	-34.2	
Mid Ch, 1880									
3760.00	-18.4	V	3.0	35.8	1.0	-53.2	-13.0	-40.2	
5640.00	-16.4	V	3.0	35.5	1.0	-50.9	-13.0	-37.9	
7520.00	-12.6	V	3.0	35.7	1.0	-47.4	-13.0	-34.4	
3760.00	-19.1	H	3.0	35.8	1.0	-53.9	-13.0	-40.9	
5640.00	-15.4	H	3.0	35.5	1.0	-49.9	-13.0	-36.9	
7520.00	-11.6	H	3.0	35.7	1.0	-46.3	-13.0	-33.3	
High Ch, 1908.5									
3817.00	-11.0	V	3.0	35.8	1.0	-45.7	-13.0	-32.7	
5725.50	-15.1	V	3.0	35.5	1.0	-49.6	-13.0	-36.6	
7634.00	-12.5	V	3.0	35.8	1.0	-47.3	-13.0	-34.3	
3817.00	-11.6	H	3.0	35.8	1.0	-46.4	-13.0	-33.4	
5725.50	-15.4	H	3.0	35.5	1.0	-49.9	-13.0	-36.9	
7634.00	-12.0	H	3.0	35.8	1.0	-46.8	-13.0	-33.8	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 2 Harmonics, 1.4MHz Bandwidth

Band
LTE2
1.4MHz
16QAM

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	-16.3	V	3.0	35.9	1.0	-51.2	-13.0	-38.2	
5552.10	-16.3	V	3.0	35.5	1.0	-50.8	-13.0	-37.8	
7402.80	-12.8	V	3.0	35.7	1.0	-47.5	-13.0	-34.5	
3701.40	-17.5	H	3.0	35.9	1.0	-52.3	-13.0	-39.3	
5552.10	-16.0	H	3.0	35.5	1.0	-50.4	-13.0	-37.4	
7402.80	0.0	H	3.0	35.7	1.0	-34.7	-13.0	-21.7	
Mid Ch, 1880									
3760.00	-17.0	V	3.0	35.8	1.0	-51.8	-13.0	-38.8	
5640.00	-16.2	V	3.0	35.5	1.0	-50.7	-13.0	-37.7	
7520.00	-12.6	V	3.0	35.7	1.0	-47.4	-13.0	-34.4	
3760.00	-18.8	H	3.0	35.8	1.0	-53.6	-13.0	-40.6	
5640.00	-16.0	H	3.0	35.5	1.0	-50.5	-13.0	-37.5	
7520.00	-12.0	H	3.0	35.7	1.0	-46.7	-13.0	-33.7	
High Ch, 1909.3									
3818.60	-10.4	V	3.0	35.8	1.0	-45.2	-13.0	-32.2	
5727.90	-14.0	V	3.0	35.5	1.0	-48.5	-13.0	-35.5	
7637.20	-12.7	V	3.0	35.8	1.0	-47.5	-13.0	-34.5	
3818.60	-11.2	H	3.0	35.8	1.0	-45.9	-13.0	-32.9	
5727.90	-15.0	H	3.0	35.5	1.0	-49.5	-13.0	-36.5	
7637.20	-11.9	H	3.0	35.8	1.0	-46.6	-13.0	-33.6	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 2 Harmonics, 1.4MHz Bandwidth

Band
LTE2
1.4MHz
QPSK

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	-16.3	V	3.0	35.9	1.0	-51.1	-13.0	-38.1	
5552.10	-16.4	V	3.0	35.5	1.0	-50.9	-13.0	-37.9	
7402.80	-13.2	V	3.0	35.7	1.0	-48.0	-13.0	-35.0	
3701.40	-16.5	H	3.0	35.9	1.0	-51.3	-13.0	-38.3	
5552.10	-15.6	H	3.0	35.5	1.0	-50.1	-13.0	-37.1	
7402.80	-12.7	H	3.0	35.7	1.0	-47.4	-13.0	-34.4	
Mid Ch, 1880									
3760.00	-17.2	V	3.0	35.8	1.0	-52.0	-13.0	-39.0	
5640.00	-16.5	V	3.0	35.5	1.0	-51.0	-13.0	-38.0	
7520.00	-13.0	V	3.0	35.7	1.0	-47.8	-13.0	-34.8	
3760.00	-17.9	H	3.0	35.8	1.0	-52.7	-13.0	-39.7	
5640.00	-15.3	H	3.0	35.5	1.0	-49.8	-13.0	-36.8	
7520.00	-12.0	H	3.0	35.7	1.0	-46.7	-13.0	-33.7	
High Ch, 1909.3									
3818.60	-10.3	V	3.0	35.8	1.0	-45.1	-13.0	-32.1	
5727.90	-14.0	V	3.0	35.5	1.0	-48.5	-13.0	-35.5	
7637.20	-12.7	V	3.0	35.8	1.0	-47.4	-13.0	-34.4	
3818.60	-11.3	H	3.0	35.8	1.0	-46.1	-13.0	-33.1	
5727.90	-15.3	H	3.0	35.5	1.0	-49.8	-13.0	-36.8	
7637.20	-11.4	H	3.0	35.8	1.0	-46.2	-13.0	-33.2	

LTE Band 4

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 4 Harmonics, 20MHz Bandwidth

Band LTE4 20MHz 16QAM

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	-19.1	V	3.0	36.0	1.0	-54.2	-13.0	-41.2	
5160.00	-16.9	V	3.0	35.4	1.0	-51.4	-13.0	-38.4	
6880.00	-13.8	V	3.0	35.7	1.0	-48.4	-13.0	-35.4	
3440.00	-18.3	H	3.0	36.0	1.0	-53.3	-13.0	-40.3	
5160.00	-16.5	H	3.0	35.4	1.0	-51.0	-13.0	-38.0	
6880.00	-12.9	H	3.0	35.7	1.0	-47.6	-13.0	-34.6	
Mid Ch, 1732.5									
3465.00	-17.7	V	3.0	36.0	1.0	-52.7	-13.0	-39.7	
5197.50	-16.7	V	3.0	35.4	1.0	-51.2	-13.0	-38.2	
6930.00	-14.2	V	3.0	35.7	1.0	-48.9	-13.0	-35.9	
3465.00	-19.3	H	3.0	36.0	1.0	-54.3	-13.0	-41.3	
5197.50	-16.7	H	3.0	35.4	1.0	-51.1	-13.0	-38.1	
6930.00	-13.4	H	3.0	35.7	1.0	-48.1	-13.0	-35.1	
High Ch, 1745									
3490.00	-17.8	V	3.0	36.0	1.0	-52.8	-13.0	-39.8	
5235.00	-16.5	V	3.0	35.4	1.0	-50.9	-13.0	-37.9	
6980.00	-13.9	V	3.0	35.7	1.0	-48.6	-13.0	-35.6	
3490.00	-19.7	H	3.0	36.0	1.0	-54.8	-13.0	-41.8	
5235.00	-16.3	H	3.0	35.4	1.0	-50.7	-13.0	-37.7	
6980.00	-13.2	H	3.0	35.7	1.0	-47.9	-13.0	-34.9	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 4 Harmonics, 20MHz Bandwidth

Band LTE4 20MHz QPSK

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	-18.8	V	3.0	36.0	1.0	-53.8	-13.0	-40.8	
5160.00	-16.5	V	3.0	35.4	1.0	-50.9	-13.0	-37.9	
6880.00	-13.8	V	3.0	35.7	1.0	-48.4	-13.0	-35.4	
3440.00	-17.4	H	3.0	36.0	1.0	-52.5	-13.0	-39.5	
5160.00	-16.2	H	3.0	35.4	1.0	-50.6	-13.0	-37.6	
6880.00	-13.0	H	3.0	35.7	1.0	-47.7	-13.0	-34.7	
Mid Ch, 1732.5									
3465.00	-17.0	V	3.0	36.0	1.0	-52.0	-13.0	-39.0	
5197.50	-16.8	V	3.0	35.4	1.0	-51.2	-13.0	-38.2	
6930.00	-14.0	V	3.0	35.7	1.0	-48.7	-13.0	-35.7	
3465.00	-19.2	H	3.0	36.0	1.0	-54.2	-13.0	-41.2	
5197.50	-16.0	H	3.0	35.4	1.0	-50.4	-13.0	-37.4	
6930.00	-12.7	H	3.0	35.7	1.0	-47.4	-13.0	-34.4	
High Ch, 1745									
3490.00	-17.6	V	3.0	36.0	1.0	-52.6	-13.0	-39.6	
5235.00	-16.5	V	3.0	35.4	1.0	-50.9	-13.0	-37.9	
6980.00	-14.0	V	3.0	35.7	1.0	-48.7	-13.0	-35.7	
3490.00	-19.0	H	3.0	36.0	1.0	-54.0	-13.0	-41.0	
5235.00	-16.2	H	3.0	35.4	1.0	-50.6	-13.0	-37.6	
6980.00	-12.9	H	3.0	35.7	1.0	-47.6	-13.0	-34.6	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 4 Harmonics, 15MHz Bandwidth

Band
LTE4
15MHz
16QAM

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	-20.5	V	3.0	36.1	1.0	-55.6	-13.0	-42.6	
5152.50	-16.8	V	3.0	35.4	1.0	-51.2	-13.0	-38.2	
6870.00	-14.4	V	3.0	35.7	1.0	-49.1	-13.0	-36.1	
3435.00	-19.9	H	3.0	36.1	1.0	-55.0	-13.0	-42.0	
5152.50	-16.4	H	3.0	35.4	1.0	-50.8	-13.0	-37.8	
6870.00	-13.0	H	3.0	35.7	1.0	-47.6	-13.0	-34.6	
Mid Ch, 1732.5									
3465.00	-19.0	V	3.0	36.0	1.0	-54.1	-13.0	-41.1	
5197.50	-17.1	V	3.0	35.4	1.0	-51.5	-13.0	-38.5	
6930.00	-13.9	V	3.0	35.7	1.0	-48.6	-13.0	-35.6	
3465.00	-20.9	H	3.0	36.0	1.0	-55.9	-13.0	-42.9	
5197.50	-16.6	H	3.0	35.4	1.0	-51.1	-13.0	-38.1	
6930.00	-12.9	H	3.0	35.7	1.0	-47.6	-13.0	-34.6	
High Ch, 1747.5									
3495.00	-18.8	V	3.0	36.0	1.0	-53.8	-13.0	-40.8	
5242.50	-16.5	V	3.0	35.4	1.0	-51.0	-13.0	-38.0	
6990.00	-13.8	V	3.0	35.7	1.0	-48.5	-13.0	-35.5	
3495.00	-19.0	H	3.0	36.0	1.0	-54.0	-13.0	-41.0	
5242.50	-16.1	H	3.0	35.4	1.0	-50.5	-13.0	-37.5	
6990.00	-12.8	H	3.0	35.7	1.0	-47.5	-13.0	-34.5	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 4 Harmonics, 15MHz Bandwidth

Band
LTE4
15MHz
QPSK

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	-20.0	V	3.0	36.1	1.0	-55.0	-13.0	-42.0	
5152.50	-15.9	V	3.0	35.4	1.0	-50.3	-13.0	-37.3	
6870.00	-14.4	V	3.0	35.7	1.0	-49.1	-13.0	-36.1	
3435.00	-19.4	H	3.0	36.1	1.0	-54.5	-13.0	-41.5	
5152.50	-15.3	H	3.0	35.4	1.0	-49.7	-13.0	-36.7	
6870.00	-12.7	H	3.0	35.7	1.0	-47.4	-13.0	-34.4	
Mid Ch, 1732.5									
3465.00	-19.2	V	3.0	36.0	1.0	-54.3	-13.0	-41.3	
5197.50	-17.2	V	3.0	35.4	1.0	-51.6	-13.0	-38.6	
6930.00	-14.3	V	3.0	35.7	1.0	-48.9	-13.0	-35.9	
3465.00	-20.2	H	3.0	36.0	1.0	-55.2	-13.0	-42.2	
5197.50	-16.7	H	3.0	35.4	1.0	-51.1	-13.0	-38.1	
6930.00	-12.3	H	3.0	35.7	1.0	-47.0	-13.0	-34.0	
High Ch, 1747.5									
3495.00	-18.7	V	3.0	36.0	1.0	-53.7	-13.0	-40.7	
5242.50	-17.0	V	3.0	35.4	1.0	-51.4	-13.0	-38.4	
6990.00	-13.6	V	3.0	35.7	1.0	-48.2	-13.0	-35.2	
3495.00	-18.3	H	3.0	36.0	1.0	-53.3	-13.0	-40.3	
5242.50	-16.2	H	3.0	35.4	1.0	-50.6	-13.0	-37.6	
6990.00	-12.6	H	3.0	35.7	1.0	-47.3	-13.0	-34.3	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 4 Harmonics, 10MHz Bandwidth

Band LTE4 10MHz 16QAM

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	-20.2	V	3.0	36.1	1.0	-55.3	-13.0	-42.3	
5145.00	-17.1	V	3.0	35.4	1.0	-51.5	-13.0	-38.5	
6860.00	-14.5	V	3.0	35.7	1.0	-49.2	-13.0	-36.2	
3430.00	-20.5	H	3.0	36.1	1.0	-55.6	-13.0	-42.6	
5145.00	-16.7	H	3.0	35.4	1.0	-51.2	-13.0	-38.2	
6860.00	-13.6	H	3.0	35.7	1.0	-48.3	-13.0	-35.3	
Mid Ch, 1732.5									
3465.00	-19.7	V	3.0	36.0	1.0	-54.7	-13.0	-41.7	
5197.50	-16.5	V	3.0	35.4	1.0	-50.9	-13.0	-37.9	
6930.00	-14.2	V	3.0	35.7	1.0	-48.9	-13.0	-35.9	
3465.00	-20.8	H	3.0	36.0	1.0	-55.9	-13.0	-42.9	
5197.50	-16.1	H	3.0	35.4	1.0	-50.6	-13.0	-37.6	
6930.00	-12.8	H	3.0	35.7	1.0	-47.5	-13.0	-34.5	
High Ch, 1750									
3500.00	-18.1	V	3.0	36.0	1.0	-53.2	-13.0	-40.2	
5250.00	-16.5	V	3.0	35.4	1.0	-51.0	-13.0	-38.0	
7000.00	-14.3	V	3.0	35.7	1.0	-48.9	-13.0	-35.9	
3500.00	-18.7	H	3.0	36.0	1.0	-53.7	-13.0	-40.7	
5250.00	-16.0	H	3.0	35.4	1.0	-50.4	-13.0	-37.4	
7000.00	-13.0	H	3.0	35.7	1.0	-47.7	-13.0	-34.7	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 4 Harmonics, 10MHz Bandwidth

Band
LTE4
10MHz
QPSK

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	-20.2	V	3.0	36.1	1.0	-55.2	-13.0	-42.2	
5145.00	-16.9	V	3.0	35.4	1.0	-51.4	-13.0	-38.4	
6860.00	-14.3	V	3.0	35.7	1.0	-49.0	-13.0	-36.0	
3430.00	-21.1	H	3.0	36.1	1.0	-56.2	-13.0	-43.2	
5145.00	-16.9	H	3.0	35.4	1.0	-51.3	-13.0	-38.3	
6860.00	-13.0	H	3.0	35.7	1.0	-47.7	-13.0	-34.7	
Mid Ch, 1732.5									
3465.00	-19.4	V	3.0	36.0	1.0	-54.4	-13.0	-41.4	
5197.50	-16.1	V	3.0	35.4	1.0	-50.5	-13.0	-37.5	
6930.00	-14.3	V	3.0	35.7	1.0	-49.0	-13.0	-36.0	
3465.00	-20.7	H	3.0	36.0	1.0	-55.8	-13.0	-42.8	
5197.50	-16.6	H	3.0	35.4	1.0	-51.0	-13.0	-38.0	
6930.00	-13.2	H	3.0	35.7	1.0	-47.9	-13.0	-34.9	
High Ch, 1750									
3500.00	-16.3	V	3.0	36.0	1.0	-51.3	-13.0	-38.3	
5250.00	-17.0	V	3.0	35.4	1.0	-51.4	-13.0	-38.4	
7000.00	-14.3	V	3.0	35.7	1.0	-49.0	-13.0	-36.0	
3500.00	-18.3	H	3.0	36.0	1.0	-53.3	-13.0	-40.3	
5250.00	-16.3	H	3.0	35.4	1.0	-50.7	-13.0	-37.7	
7000.00	-12.8	H	3.0	35.7	1.0	-47.4	-13.0	-34.4	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 4 Harmonics, 5MHz Bandwidth

Band
LTE4
5MHz
16QAM

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	-19.9	V	3.0	36.1	1.0	-55.0	-13.0	-42.0	
5137.50	-16.0	V	3.0	35.4	1.0	-50.5	-13.0	-37.5	
6850.00	-14.5	V	3.0	35.7	1.0	-49.1	-13.0	-36.1	
3425.00	-20.5	H	3.0	36.1	1.0	-55.6	-13.0	-42.6	
5137.50	-16.7	H	3.0	35.4	1.0	-51.1	-13.0	-38.1	
6850.00	-13.0	H	3.0	35.7	1.0	-47.7	-13.0	-34.7	
Mid Ch, 1732.5									
3465.00	-21.3	V	3.0	36.0	1.0	-56.4	-13.0	-43.4	
5197.50	-17.2	V	3.0	35.4	1.0	-51.7	-13.0	-38.7	
6930.00	-14.5	V	3.0	35.7	1.0	-49.1	-13.0	-36.1	
3465.00	-21.0	H	3.0	36.0	1.0	-56.1	-13.0	-43.1	
5197.50	-16.8	H	3.0	35.4	1.0	-51.2	-13.0	-38.2	
6930.00	-13.3	H	3.0	35.7	1.0	-48.0	-13.0	-35.0	
High Ch, 1752.5									
3505.00	-18.1	V	3.0	36.0	1.0	-53.1	-13.0	-40.1	
5257.50	-16.4	V	3.0	35.4	1.0	-50.8	-13.0	-37.8	
7010.00	-14.3	V	3.0	35.7	1.0	-49.0	-13.0	-36.0	
3505.00	-21.2	H	3.0	36.0	1.0	-56.2	-13.0	-43.2	
5257.50	-16.8	H	3.0	35.4	1.0	-51.3	-13.0	-38.3	
7010.00	-13.0	H	3.0	35.7	1.0	-47.7	-13.0	-34.7	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 4 Harmonics, 5MHz Bandwidth

Band LTE4 5MHz QPSK

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	-18.7	V	3.0	36.1	1.0	-53.8	-13.0	-40.8	
5137.50	-16.2	V	3.0	35.4	1.0	-50.7	-13.0	-37.7	
6850.00	-14.5	V	3.0	35.7	1.0	-49.2	-13.0	-36.2	
3425.00	-20.8	H	3.0	36.1	1.0	-55.8	-13.0	-42.8	
5137.50	-16.9	H	3.0	35.4	1.0	-51.4	-13.0	-38.4	
6850.00	-13.3	H	3.0	35.7	1.0	-47.9	-13.0	-34.9	
Mid Ch, 1732.5									
3465.00	-20.5	V	3.0	36.0	1.0	-55.6	-13.0	-42.6	
5197.50	-17.2	V	3.0	35.4	1.0	-51.7	-13.0	-38.7	
6930.00	-13.8	V	3.0	35.7	1.0	-48.5	-13.0	-35.5	
3465.00	-21.6	H	3.0	36.0	1.0	-56.7	-13.0	-43.7	
5197.50	-16.7	H	3.0	35.4	1.0	-51.1	-13.0	-38.1	
6930.00	-13.6	H	3.0	35.7	1.0	-48.2	-13.0	-35.2	
High Ch, 1752.5									
3505.00	-16.2	V	3.0	36.0	1.0	-51.2	-13.0	-38.2	
5257.50	-16.0	V	3.0	35.4	1.0	-50.4	-13.0	-37.4	
7010.00	-14.0	V	3.0	35.7	1.0	-48.7	-13.0	-35.7	
3505.00	-21.3	H	3.0	36.0	1.0	-56.3	-13.0	-43.3	
5257.50	-16.8	H	3.0	35.4	1.0	-51.2	-13.0	-38.2	
7010.00	-12.5	H	3.0	35.7	1.0	-47.2	-13.0	-34.2	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 4 Harmonics, 3MHz Bandwidth

Band LTE4 3MHz 16QAM

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	-19.4	V	3.0	36.1	1.0	-54.5	-13.0	-41.5	
5134.50	-17.2	V	3.0	35.4	1.0	-51.6	-13.0	-38.6	
6846.00	-14.3	V	3.0	35.7	1.0	-49.0	-13.0	-36.0	
3423.00	-19.6	H	3.0	36.1	1.0	-54.7	-13.0	-41.7	
5134.50	-16.0	H	3.0	35.4	1.0	-50.4	-13.0	-37.4	
6846.00	-12.8	H	3.0	35.7	1.0	-47.5	-13.0	-34.5	
Mid Ch, 1732.5									
3465.00	-21.1	V	3.0	36.0	1.0	-56.2	-13.0	-43.2	
5197.50	-17.1	V	3.0	35.4	1.0	-51.5	-13.0	-38.5	
6930.00	-14.6	V	3.0	35.7	1.0	-49.2	-13.0	-36.2	
3465.00	-18.7	H	3.0	36.0	1.0	-53.8	-13.0	-40.8	
5197.50	-15.7	H	3.0	35.4	1.0	-50.1	-13.0	-37.1	
6930.00	-13.3	H	3.0	35.7	1.0	-48.0	-13.0	-35.0	
High Ch, 1753.5									
3507.00	-20.2	V	3.0	36.0	1.0	-55.2	-13.0	-42.2	
5260.50	-16.9	V	3.0	35.4	1.0	-51.4	-13.0	-38.4	
7014.00	-14.2	V	3.0	35.7	1.0	-48.9	-13.0	-35.9	
3507.00	-17.3	H	3.0	36.0	1.0	-52.3	-13.0	-39.3	
5260.50	-16.4	H	3.0	35.4	1.0	-50.9	-13.0	-37.9	
7014.00	-12.8	H	3.0	35.7	1.0	-47.5	-13.0	-34.5	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 4 Harmonics, 3MHz Bandwidth

Band LTE4 3MHz QPSK

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	-19.7	V	3.0	36.1	1.0	-54.8	-13.0	-41.8	
5134.50	-17.3	V	3.0	35.4	1.0	-51.7	-13.0	-38.7	
6846.00	-14.6	V	3.0	35.7	1.0	-49.3	-13.0	-36.3	
3423.00	-20.9	H	3.0	36.1	1.0	-55.9	-13.0	-42.9	
5134.50	-16.9	H	3.0	35.4	1.0	-51.3	-13.0	-38.3	
6846.00	-13.8	H	3.0	35.7	1.0	-48.5	-13.0	-35.5	
Mid Ch, 1732.5									
3465.00	-21.6	V	3.0	36.0	1.0	-56.7	-13.0	-43.7	
5197.50	-15.8	V	3.0	35.4	1.0	-50.2	-13.0	-37.2	
6930.00	-14.5	V	3.0	35.7	1.0	-49.2	-13.0	-36.2	
3465.00	-19.8	H	3.0	36.0	1.0	-54.9	-13.0	-41.9	
5197.50	-16.4	H	3.0	35.4	1.0	-50.8	-13.0	-37.8	
6930.00	-13.0	H	3.0	35.7	1.0	-47.7	-13.0	-34.7	
High Ch, 1753.5									
3507.00	-20.7	V	3.0	36.0	1.0	-55.7	-13.0	-42.7	
5260.50	-16.7	V	3.0	35.4	1.0	-51.1	-13.0	-38.1	
7014.00	-14.1	V	3.0	35.7	1.0	-48.8	-13.0	-35.8	
3507.00	-18.7	H	3.0	36.0	1.0	-53.7	-13.0	-40.7	
5260.50	-16.6	H	3.0	35.4	1.0	-51.0	-13.0	-38.0	
7014.00	-12.8	H	3.0	35.7	1.0	-47.5	-13.0	-34.5	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 4 Harmonics, 1.4MHz Bandwidth

Band
LTE4
1.4MHz
16QAM

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	-21.1	V	3.0	36.1	1.0	-56.2	-13.0	-43.2	
5132.10	-16.7	V	3.0	35.4	1.0	-51.1	-13.0	-38.1	
6842.80	-14.4	V	3.0	35.7	1.0	-49.1	-13.0	-36.1	
3421.40	-20.8	H	3.0	36.1	1.0	-55.8	-13.0	-42.8	
5132.10	-16.9	H	3.0	35.4	1.0	-51.3	-13.0	-38.3	
6842.80	-13.5	H	3.0	35.7	1.0	-48.1	-13.0	-35.1	
Mid Ch, 1732.5									
3465.00	-19.8	V	3.0	36.0	1.0	-54.8	-13.0	-41.8	
5197.50	-16.8	V	3.0	35.4	1.0	-51.2	-13.0	-38.2	
6930.00	-14.3	V	3.0	35.7	1.0	-49.0	-13.0	-36.0	
3465.00	-20.8	H	3.0	36.0	1.0	-55.9	-13.0	-42.9	
5197.50	-16.7	H	3.0	35.4	1.0	-51.1	-13.0	-38.1	
6930.00	-13.4	H	3.0	35.7	1.0	-48.1	-13.0	-35.1	
High Ch, 1754.3									
3508.60	-20.8	V	3.0	36.0	1.0	-55.8	-13.0	-42.8	
5262.90	-16.1	V	3.0	35.4	1.0	-50.5	-13.0	-37.5	
7017.20	-13.6	V	3.0	35.7	1.0	-48.3	-13.0	-35.3	
3508.60	-20.5	H	3.0	36.0	1.0	-55.5	-13.0	-42.5	
5262.90	-16.1	H	3.0	35.4	1.0	-50.6	-13.0	-37.6	
7017.20	-13.4	H	3.0	35.7	1.0	-48.1	-13.0	-35.1	

Band
LTE4
1.4MHz
QPSK

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
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	-20.7	V	3.0	36.1	1.0	-55.8	-13.0	-42.8	
5132.10	-16.6	V	3.0	35.4	1.0	-51.1	-13.0	-38.1	
6842.80	-13.9	V	3.0	35.7	1.0	-48.5	-13.0	-35.5	
3421.40	-21.4	H	3.0	36.1	1.0	-56.4	-13.0	-43.4	
5132.10	-16.2	H	3.0	35.4	1.0	-50.6	-13.0	-37.6	
6842.80	-12.9	H	3.0	35.7	1.0	-47.5	-13.0	-34.5	
Mid Ch, 1732.5									
3465.00	-19.5	V	3.0	36.0	1.0	-54.6	-13.0	-41.6	
5197.50	-17.0	V	3.0	35.4	1.0	-51.4	-13.0	-38.4	
6930.00	-13.8	V	3.0	35.7	1.0	-48.5	-13.0	-35.5	
3465.00	-20.2	H	3.0	36.0	1.0	-55.3	-13.0	-42.3	
5197.50	-16.8	H	3.0	35.4	1.0	-51.2	-13.0	-38.2	
6930.00	-13.5	H	3.0	35.7	1.0	-48.2	-13.0	-35.2	
High Ch, 1754.3									
3508.60	-19.8	V	3.0	36.0	1.0	-54.8	-13.0	-41.8	
5262.90	-16.3	V	3.0	35.4	1.0	-50.7	-13.0	-37.7	
7017.20	-14.1	V	3.0	35.7	1.0	-48.8	-13.0	-35.8	
3508.60	-19.9	H	3.0	36.0	1.0	-54.9	-13.0	-41.9	
5262.90	-16.1	H	3.0	35.4	1.0	-50.5	-13.0	-37.5	
7017.20	-12.3	H	3.0	35.7	1.0	-47.0	-13.0	-34.0	

LTE Band 5

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 5 Harmonics, 10MHz Bandwidth

Band
LTE5
10MHz
16QAM

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	-28.0	V	3.0	37.0	1.0	-64.0	-13.0	-51.0	
2487.00	-23.2	V	3.0	36.4	1.0	-58.7	-13.0	-45.7	
3316.00	-22.0	V	3.0	36.2	1.0	-57.2	-13.0	-44.2	
1658.00	-28.2	H	3.0	37.0	1.0	-64.2	-13.0	-51.2	
2487.00	-25.8	H	3.0	36.4	1.0	-61.2	-13.0	-48.2	
3316.00	-21.9	H	3.0	36.2	1.0	-57.1	-13.0	-44.1	
Mid Ch, 836.5									
1673.00	-27.1	V	3.0	37.0	1.0	-63.1	-13.0	-50.1	
2509.50	-23.2	V	3.0	36.4	1.0	-58.6	-13.0	-45.6	
3346.00	-21.0	V	3.0	36.1	1.0	-56.1	-13.0	-43.1	
1673.00	-27.9	H	3.0	37.0	1.0	-63.9	-13.0	-50.9	
2509.50	-25.0	H	3.0	36.4	1.0	-60.4	-13.0	-47.4	
3346.00	-21.9	H	3.0	36.1	1.0	-57.0	-13.0	-44.0	
High Ch, 844									
1688.00	-27.0	V	3.0	37.0	1.0	-63.0	-13.0	-50.0	
2532.00	-23.2	V	3.0	36.4	1.0	-58.6	-13.0	-45.6	
3376.00	-21.6	V	3.0	36.1	1.0	-56.7	-13.0	-43.7	
1688.00	-27.3	H	3.0	37.0	1.0	-63.3	-13.0	-50.3	
2532.00	-24.8	H	3.0	36.4	1.0	-60.2	-13.0	-47.2	
3376.00	-21.7	H	3.0	36.1	1.0	-56.8	-13.0	-43.8	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 5 Harmonics, 10MHz Bandwidth

Band LTE5 10MHz QPSK

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	-27.6	V	3.0	37.0	1.0	-63.6	-13.0	-50.6	
2487.00	-23.2	V	3.0	36.4	1.0	-58.6	-13.0	-45.6	
3316.00	-21.6	V	3.0	36.2	1.0	-56.8	-13.0	-43.8	
1658.00	-28.2	H	3.0	37.0	1.0	-64.2	-13.0	-51.2	
2487.00	-24.8	H	3.0	36.4	1.0	-60.3	-13.0	-47.3	
3316.00	-22.0	H	3.0	36.2	1.0	-57.1	-13.0	-44.1	
Mid Ch, 836.5									
1673.00	-26.8	V	3.0	37.0	1.0	-62.8	-13.0	-49.8	
2509.50	-23.2	V	3.0	36.4	1.0	-58.6	-13.0	-45.6	
3346.00	-21.0	V	3.0	36.1	1.0	-56.2	-13.0	-43.2	
1673.00	-27.3	H	3.0	37.0	1.0	-63.3	-13.0	-50.3	
2509.50	-24.9	H	3.0	36.4	1.0	-60.3	-13.0	-47.3	
3346.00	-21.6	H	3.0	36.1	1.0	-56.8	-13.0	-43.8	
High Ch, 844									
1688.00	-26.7	V	3.0	37.0	1.0	-62.7	-13.0	-49.7	
2532.00	-22.9	V	3.0	36.4	1.0	-58.3	-13.0	-45.3	
3376.00	-21.7	V	3.0	36.1	1.0	-56.8	-13.0	-43.8	
1688.00	-27.7	H	3.0	37.0	1.0	-63.7	-13.0	-50.7	
2532.00	-25.4	H	3.0	36.4	1.0	-60.8	-13.0	-47.8	
3376.00	-21.4	H	3.0	36.1	1.0	-56.5	-13.0	-43.5	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 5 Harmonics, 10MHz Bandwidth

Band
LTE5
10MHz
16QAM

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	-28.0	V	3.0	37.0	1.0	-64.0	-13.0	-51.0	
2487.00	-23.2	V	3.0	36.4	1.0	-58.7	-13.0	-45.7	
3316.00	-22.0	V	3.0	36.2	1.0	-57.2	-13.0	-44.2	
1658.00	-28.2	H	3.0	37.0	1.0	-64.2	-13.0	-51.2	
2487.00	-25.8	H	3.0	36.4	1.0	-61.2	-13.0	-48.2	
3316.00	-21.9	H	3.0	36.2	1.0	-57.1	-13.0	-44.1	
Mid Ch, 836.5									
1673.00	-27.1	V	3.0	37.0	1.0	-63.1	-13.0	-50.1	
2509.50	-23.2	V	3.0	36.4	1.0	-58.6	-13.0	-45.6	
3346.00	-21.0	V	3.0	36.1	1.0	-56.1	-13.0	-43.1	
1673.00	-27.9	H	3.0	37.0	1.0	-63.9	-13.0	-50.9	
2509.50	-25.0	H	3.0	36.4	1.0	-60.4	-13.0	-47.4	
3346.00	-21.9	H	3.0	36.1	1.0	-57.0	-13.0	-44.0	
High Ch, 844									
1688.00	-27.0	V	3.0	37.0	1.0	-63.0	-13.0	-50.0	
2532.00	-23.2	V	3.0	36.4	1.0	-58.6	-13.0	-45.6	
3376.00	-21.6	V	3.0	36.1	1.0	-56.7	-13.0	-43.7	
1688.00	-27.3	H	3.0	37.0	1.0	-63.3	-13.0	-50.3	
2532.00	-24.8	H	3.0	36.4	1.0	-60.2	-13.0	-47.2	
3376.00	-21.7	H	3.0	36.1	1.0	-56.8	-13.0	-43.8	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 5 Harmonics, 10MHz Bandwidth

Band LTE5 10MHz QPSK

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	-27.6	V	3.0	37.0	1.0	-63.6	-13.0	-50.6	
2487.00	-23.2	V	3.0	36.4	1.0	-58.6	-13.0	-45.6	
3316.00	-21.6	V	3.0	36.2	1.0	-56.8	-13.0	-43.8	
1658.00	-28.2	H	3.0	37.0	1.0	-64.2	-13.0	-51.2	
2487.00	-24.8	H	3.0	36.4	1.0	-60.3	-13.0	-47.3	
3316.00	-22.0	H	3.0	36.2	1.0	-57.1	-13.0	-44.1	
Mid Ch, 836.5									
1673.00	-26.8	V	3.0	37.0	1.0	-62.8	-13.0	-49.8	
2509.50	-23.2	V	3.0	36.4	1.0	-58.6	-13.0	-45.6	
3346.00	-21.0	V	3.0	36.1	1.0	-56.2	-13.0	-43.2	
1673.00	-27.3	H	3.0	37.0	1.0	-63.3	-13.0	-50.3	
2509.50	-24.9	H	3.0	36.4	1.0	-60.3	-13.0	-47.3	
3346.00	-21.6	H	3.0	36.1	1.0	-56.8	-13.0	-43.8	
High Ch, 844									
1688.00	-26.7	V	3.0	37.0	1.0	-62.7	-13.0	-49.7	
2532.00	-22.9	V	3.0	36.4	1.0	-58.3	-13.0	-45.3	
3376.00	-21.7	V	3.0	36.1	1.0	-56.8	-13.0	-43.8	
1688.00	-27.7	H	3.0	37.0	1.0	-63.7	-13.0	-50.7	
2532.00	-25.4	H	3.0	36.4	1.0	-60.8	-13.0	-47.8	
3376.00	-21.4	H	3.0	36.1	1.0	-56.5	-13.0	-43.5	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 5 Harmonics, 5MHz Bandwidth

Band LTE5 5MHz 16QAM

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	-27.1	V	3.0	37.0	1.0	-63.2	-13.0	-50.2	
2479.50	-23.6	V	3.0	36.4	1.0	-59.1	-13.0	-46.1	
3306.00	-21.4	V	3.0	36.2	1.0	-56.6	-13.0	-43.6	
1653.00	-27.4	H	3.0	37.0	1.0	-63.5	-13.0	-50.5	
2479.50	-24.5	H	3.0	36.4	1.0	-59.9	-13.0	-46.9	
3306.00	-21.8	H	3.0	36.2	1.0	-56.9	-13.0	-43.9	
Mid Ch, 836.5									
1673.00	-27.1	V	3.0	37.0	1.0	-63.1	-13.0	-50.1	
2509.50	-23.4	V	3.0	36.4	1.0	-58.8	-13.0	-45.8	
3346.00	-21.4	V	3.0	36.1	1.0	-56.6	-13.0	-43.6	
1673.00	-27.9	H	3.0	37.0	1.0	-63.9	-13.0	-50.9	
2509.50	-24.6	H	3.0	36.4	1.0	-60.1	-13.0	-47.1	
3346.00	-21.2	H	3.0	36.1	1.0	-56.3	-13.0	-43.3	
High Ch, 846.5									
1693.00	-27.5	V	3.0	37.0	1.0	-63.5	-13.0	-50.5	
2539.50	-23.7	V	3.0	36.4	1.0	-59.1	-13.0	-46.1	
3386.00	-20.8	V	3.0	36.1	1.0	-55.9	-13.0	-42.9	
1693.00	-27.7	H	3.0	37.0	1.0	-63.7	-13.0	-50.7	
2539.50	-24.7	H	3.0	36.4	1.0	-60.1	-13.0	-47.1	
3386.00	-21.3	H	3.0	36.1	1.0	-56.4	-13.0	-43.4	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 5 Harmonics, 5MHz Bandwidth

Band LTE5 5MHz QPSK

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	-27.0	V	3.0	37.0	1.0	-63.0	-13.0	-50.0	
2479.50	-23.2	V	3.0	36.4	1.0	-58.7	-13.0	-45.7	
3306.00	-21.1	V	3.0	36.2	1.0	-56.2	-13.0	-43.2	
1653.00	-27.2	H	3.0	37.0	1.0	-63.2	-13.0	-50.2	
2479.50	-25.0	H	3.0	36.4	1.0	-60.4	-13.0	-47.4	
3306.00	-21.9	H	3.0	36.2	1.0	-57.1	-13.0	-44.1	
Mid Ch, 836.5									
1673.00	-26.7	V	3.0	37.0	1.0	-62.7	-13.0	-49.7	
2509.50	-23.2	V	3.0	36.4	1.0	-58.6	-13.0	-45.6	
3346.00	-21.2	V	3.0	36.1	1.0	-56.4	-13.0	-43.4	
1673.00	-27.5	H	3.0	37.0	1.0	-63.6	-13.0	-50.6	
2509.50	-24.4	H	3.0	36.4	1.0	-59.9	-13.0	-46.9	
3346.00	-21.1	H	3.0	36.1	1.0	-56.3	-13.0	-43.3	
High Ch, 846.5									
1693.00	-27.5	V	3.0	37.0	1.0	-63.5	-13.0	-50.5	
2539.50	-22.7	V	3.0	36.4	1.0	-58.1	-13.0	-45.1	
3386.00	-21.1	V	3.0	36.1	1.0	-56.2	-13.0	-43.2	
1693.00	-27.6	H	3.0	37.0	1.0	-63.6	-13.0	-50.6	
2539.50	-25.4	H	3.0	36.4	1.0	-60.8	-13.0	-47.8	
3386.00	-21.4	H	3.0	36.1	1.0	-56.4	-13.0	-43.4	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 6 Harmonics, 3MHz Bandwidth

Band LTE5 3MHz 16QAM

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	-27.2	V	3.0	37.0	1.0	-63.2	-13.0	-50.2	
2476.50	-23.2	V	3.0	36.4	1.0	-58.7	-13.0	-45.7	
3302.00	-21.4	V	3.0	36.2	1.0	-56.6	-13.0	-43.6	
1651.00	-29.4	H	3.0	37.0	1.0	-65.5	-13.0	-52.5	
2476.50	-25.0	H	3.0	36.4	1.0	-60.5	-13.0	-47.5	
3302.00	-21.5	H	3.0	36.2	1.0	-56.7	-13.0	-43.7	
Mid Ch, 836.5									
1673.00	-27.3	V	3.0	37.0	1.0	-63.3	-13.0	-50.3	
2509.50	-23.2	V	3.0	36.4	1.0	-58.6	-13.0	-45.6	
3346.00	-21.2	V	3.0	36.1	1.0	-56.4	-13.0	-43.4	
1673.00	-27.7	H	3.0	37.0	1.0	-63.8	-13.0	-50.8	
2509.50	-25.0	H	3.0	36.4	1.0	-60.4	-13.0	-47.4	
3346.00	-21.4	H	3.0	36.1	1.0	-56.5	-13.0	-43.5	
High Ch, 847.5									
1695.00	-27.1	V	3.0	37.0	1.0	-63.0	-13.0	-50.0	
2542.50	-23.2	V	3.0	36.4	1.0	-58.6	-13.0	-45.6	
3390.00	-20.9	V	3.0	36.1	1.0	-56.0	-13.0	-43.0	
1695.00	-27.8	H	3.0	37.0	1.0	-63.7	-13.0	-50.7	
2542.50	-25.0	H	3.0	36.4	1.0	-60.4	-13.0	-47.4	
3390.00	-21.4	H	3.0	36.1	1.0	-56.5	-13.0	-43.5	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 5 Harmonics, 3MHz Bandwidth

Band LTE5 3MHz QPSK

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	-26.7	V	3.0	37.0	1.0	-62.8	-13.0	-49.8	
2476.50	-22.9	V	3.0	36.4	1.0	-58.4	-13.0	-45.4	
3302.00	-20.8	V	3.0	36.2	1.0	-55.9	-13.0	-42.9	
1651.00	-28.0	H	3.0	37.0	1.0	-64.1	-13.0	-51.1	
2476.50	-24.6	H	3.0	36.4	1.0	-60.0	-13.0	-47.0	
3302.00	-21.1	H	3.0	36.2	1.0	-56.3	-13.0	-43.3	
Mid Ch, 836.5									
1673.00	-26.4	V	3.0	37.0	1.0	-62.4	-13.0	-49.4	
2509.50	-23.0	V	3.0	36.4	1.0	-58.5	-13.0	-45.5	
3346.00	-20.5	V	3.0	36.1	1.0	-55.6	-13.0	-42.6	
1673.00	-28.0	H	3.0	37.0	1.0	-64.0	-13.0	-51.0	
2509.50	-24.8	H	3.0	36.4	1.0	-60.2	-13.0	-47.2	
3346.00	-20.8	H	3.0	36.1	1.0	-55.9	-13.0	-42.9	
High Ch, 847.5									
1695.00	-26.8	V	3.0	37.0	1.0	-62.8	-13.0	-49.8	
2542.50	-22.9	V	3.0	36.4	1.0	-58.3	-13.0	-45.3	
3390.00	-20.9	V	3.0	36.1	1.0	-56.0	-13.0	-43.0	
1695.00	-27.5	H	3.0	37.0	1.0	-63.5	-13.0	-50.5	
2542.50	-24.3	H	3.0	36.4	1.0	-59.7	-13.0	-46.7	
3390.00	-21.0	H	3.0	36.1	1.0	-56.1	-13.0	-43.1	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 5 Harmonics, 1.4MHz Bandwidth

Band LTE5 1.4MHz 16QAM

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	-27.3	V	3.0	37.0	1.0	-63.3	-13.0	-50.3	
2474.10	-23.3	V	3.0	36.4	1.0	-58.8	-13.0	-45.8	
3298.80	-21.2	V	3.0	36.2	1.0	-56.4	-13.0	-43.4	
1649.40	-28.0	H	3.0	37.0	1.0	-64.0	-13.0	-51.0	
2474.10	-25.2	H	3.0	36.4	1.0	-60.7	-13.0	-47.7	
3298.80	-21.5	H	3.0	36.2	1.0	-56.7	-13.0	-43.7	
Mid Ch, 836.5									
1673.00	-26.1	V	3.0	37.0	1.0	-62.1	-13.0	-49.1	
2509.50	-23.3	V	3.0	36.4	1.0	-58.7	-13.0	-45.7	
3346.00	-20.6	V	3.0	36.1	1.0	-55.7	-13.0	-42.7	
1673.00	-28.0	H	3.0	37.0	1.0	-64.0	-13.0	-51.0	
2509.50	-24.7	H	3.0	36.4	1.0	-60.1	-13.0	-47.1	
3346.00	-20.9	H	3.0	36.1	1.0	-56.0	-13.0	-43.0	
High Ch, 848.3									
1696.60	-26.3	V	3.0	37.0	1.0	-62.3	-13.0	-49.3	
2544.90	-23.4	V	3.0	36.4	1.0	-58.8	-13.0	-45.8	
3393.20	-20.6	V	3.0	36.1	1.0	-55.7	-13.0	-42.7	
1696.60	-27.8	H	3.0	37.0	1.0	-63.7	-13.0	-50.7	
2544.90	-25.0	H	3.0	36.4	1.0	-60.4	-13.0	-47.4	
3393.20	-20.9	H	3.0	36.1	1.0	-55.9	-13.0	-42.9	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 5 Harmonics, 1.4MHz Bandwidth

Band LTE5 1.4MHz QPSK

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	-26.9	V	3.0	37.0	1.0	-62.9	-13.0	-49.9	
2474.10	-23.0	V	3.0	36.4	1.0	-58.4	-13.0	-45.4	
3298.80	-21.0	V	3.0	36.2	1.0	-56.1	-13.0	-43.1	
1649.40	-28.2	H	3.0	37.0	1.0	-64.2	-13.0	-51.2	
2474.10	-25.1	H	3.0	36.4	1.0	-60.5	-13.0	-47.5	
3298.80	-21.0	H	3.0	36.2	1.0	-56.2	-13.0	-43.2	
Mid Ch, 836.5									
1673.00	-26.4	V	3.0	37.0	1.0	-62.4	-13.0	-49.4	
2509.50	-22.9	V	3.0	36.4	1.0	-58.3	-13.0	-45.3	
3346.00	-21.3	V	3.0	36.1	1.0	-56.4	-13.0	-43.4	
1673.00	-27.4	H	3.0	37.0	1.0	-63.4	-13.0	-50.4	
2509.50	-24.2	H	3.0	36.4	1.0	-59.6	-13.0	-46.6	
3346.00	-20.6	H	3.0	36.1	1.0	-55.8	-13.0	-42.8	
High Ch, 848.3									
1696.60	-27.1	V	3.0	37.0	1.0	-63.1	-13.0	-50.1	
2544.90	-22.8	V	3.0	36.4	1.0	-58.2	-13.0	-45.2	
3393.20	-20.9	V	3.0	36.1	1.0	-56.0	-13.0	-43.0	
1696.60	-27.9	H	3.0	37.0	1.0	-63.9	-13.0	-50.9	
2544.90	-24.4	H	3.0	36.4	1.0	-59.8	-13.0	-46.8	
3393.20	-21.1	H	3.0	36.1	1.0	-56.2	-13.0	-43.2	

LTE Band 7

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: R.Z
Configuration: EUT, AC Adapter, Headset
Location: Chamber A
Mode: LTE_16QAM Band 7 Harmonics, 20MHz Bandwidth

Band
LTE7
20MHz
16QAM

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2510									
5020.00	-15.1	V	3.0	35.5	1.0	-49.5	-25.0	-24.5	
7530.00	-14.2	V	3.0	35.7	1.0	-48.9	-25.0	-23.9	
10040.00	-11.2	V	3.0	36.0	1.0	-46.2	-25.0	-21.2	
5020.00	-15.2	H	3.0	35.5	1.0	-49.7	-25.0	-24.7	
7530.00	-13.6	H	3.0	35.7	1.0	-48.4	-25.0	-23.4	
10040.00	-10.6	H	3.0	36.0	1.0	-45.6	-25.0	-20.6	
Mid Ch, 2535									
5070.00	-15.7	V	3.0	35.4	1.0	-50.1	-25.0	-25.1	
7605.00	-13.9	V	3.0	35.8	1.0	-48.7	-25.0	-23.7	
10140.00	-11.1	V	3.0	36.0	1.0	-46.0	-25.0	-21.0	
5070.00	-15.5	H	3.0	35.4	1.0	-49.9	-25.0	-24.9	
7605.00	-12.9	H	3.0	35.8	1.0	-47.7	-25.0	-22.7	
10140.00	-10.1	H	3.0	36.0	1.0	-45.0	-25.0	-20.0	
High Ch, 2560									
5120.00	-15.6	V	3.0	35.4	1.0	-50.1	-25.0	-25.1	
7680.00	-13.9	V	3.0	35.8	1.0	-48.7	-25.0	-23.7	
10240.00	-11.0	V	3.0	35.9	1.0	-45.9	-25.0	-20.9	
5120.00	-15.2	H	3.0	35.4	1.0	-49.7	-25.0	-24.7	
7680.00	-13.0	H	3.0	35.8	1.0	-47.7	-25.0	-22.7	
10240.00	-10.7	H	3.0	35.9	1.0	-45.6	-25.0	-20.6	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: R.Z
Configuration: EUT, AC Adapter, Headset
Location: Chamber A
Mode: LTE_QPSK Band 7 Harmonics, 20MHz Bandwidth

Band: LTE7 20MHz QPSK

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2510									
5020.00	-14.9	V	3.0	35.5	1.0	-49.3	-25.0	-24.3	
7530.00	-14.3	V	3.0	35.7	1.0	-49.0	-25.0	-24.0	
10040.00	-11.3	V	3.0	36.0	1.0	-46.3	-25.0	-21.3	
5020.00	-14.8	H	3.0	35.5	1.0	-49.2	-25.0	-24.2	
7530.00	-14.2	H	3.0	35.7	1.0	-49.0	-25.0	-24.0	
10040.00	-11.2	H	3.0	36.0	1.0	-46.2	-25.0	-21.2	
Mid Ch, 2535									
5070.00	-15.9	V	3.0	35.4	1.0	-50.3	-25.0	-25.3	
7605.00	-13.7	V	3.0	35.8	1.0	-48.5	-25.0	-23.5	
10140.00	-11.4	V	3.0	36.0	1.0	-46.3	-25.0	-21.3	
5070.00	-15.1	H	3.0	35.4	1.0	-49.6	-25.0	-24.6	
7605.00	-12.7	H	3.0	35.8	1.0	-47.5	-25.0	-22.5	
10140.00	-10.1	H	3.0	36.0	1.0	-45.1	-25.0	-20.1	
High Ch, 2560									
5120.00	-15.8	V	3.0	35.4	1.0	-50.3	-25.0	-25.3	
7680.00	-14.2	V	3.0	35.8	1.0	-49.0	-25.0	-24.0	
10240.00	-10.3	V	3.0	35.9	1.0	-45.2	-25.0	-20.2	
5120.00	-15.3	H	3.0	35.4	1.0	-49.7	-25.0	-24.7	
7680.00	-12.7	H	3.0	35.8	1.0	-47.5	-25.0	-22.5	
10240.00	-10.9	H	3.0	35.9	1.0	-45.8	-25.0	-20.8	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: R.Z
Configuration: EUT, AC Adapter, Headset
Location: Chamber A
Mode: LTE_16QAM Band 7 Harmonics, 15MHz Bandwidth

Band: LTE7 15MHz 16QAM

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2507.5									
5015.00	-15.2	V	3.0	35.5	1.0	-49.7	-25.0	-24.7	
7522.50	-14.7	V	3.0	35.7	1.0	-49.5	-25.0	-24.5	
10030.00	-11.0	V	3.0	36.0	1.0	-46.0	-25.0	-21.0	
5015.00	-15.2	H	3.0	35.5	1.0	-49.7	-25.0	-24.7	
7522.50	-13.2	H	3.0	35.7	1.0	-47.9	-25.0	-22.9	
10030.00	-10.3	H	3.0	36.0	1.0	-45.4	-25.0	-20.4	
Mid Ch, 2535									
5070.00	-15.2	V	3.0	35.4	1.0	-49.6	-25.0	-24.6	
7605.00	-14.1	V	3.0	35.8	1.0	-48.9	-25.0	-23.9	
10140.00	-10.7	V	3.0	36.0	1.0	-45.6	-25.0	-20.6	
5070.00	-15.1	H	3.0	35.4	1.0	-49.6	-25.0	-24.6	
7605.00	-12.9	H	3.0	35.8	1.0	-47.7	-25.0	-22.7	
10140.00	-10.4	H	3.0	36.0	1.0	-45.4	-25.0	-20.4	
High Ch, 2562.5									
5125.00	-15.0	V	3.0	35.4	1.0	-49.4	-25.0	-24.4	
7687.50	-13.7	V	3.0	35.8	1.0	-48.5	-25.0	-23.5	
10250.00	-10.5	V	3.0	35.9	1.0	-45.4	-25.0	-20.4	
5125.00	-15.4	H	3.0	35.4	1.0	-49.8	-25.0	-24.8	
7687.50	-12.9	H	3.0	35.8	1.0	-47.6	-25.0	-22.6	
10250.00	-10.4	H	3.0	35.9	1.0	-45.3	-25.0	-20.3	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: R.Z
Configuration: EUT, AC Adapter, Headset
Location: Chamber A
Mode: LTE_QPSK Band 7 Harmonics, 15MHz Bandwidth

Band: LTE7 15MHz QPSK

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2507.5									
5015.00	-14.5	V	3.0	35.5	1.0	-49.0	-25.0	-24.0	
7522.50	-15.0	V	3.0	35.7	1.0	-49.7	-25.0	-24.7	
10030.00	-9.9	V	3.0	36.0	1.0	-44.9	-25.0	-19.9	
5015.00	-15.1	H	3.0	35.5	1.0	-49.6	-25.0	-24.6	
7522.50	-13.4	H	3.0	35.7	1.0	-48.2	-25.0	-23.2	
10030.00	-10.3	H	3.0	36.0	1.0	-45.3	-25.0	-20.3	
Mid Ch, 2535									
5070.00	-15.5	V	3.0	35.4	1.0	-49.9	-25.0	-24.9	
7605.00	-13.9	V	3.0	35.8	1.0	-48.7	-25.0	-23.7	
10140.00	-10.2	V	3.0	36.0	1.0	-45.1	-25.0	-20.1	
5070.00	-15.3	H	3.0	35.4	1.0	-49.7	-25.0	-24.7	
7605.00	-13.1	H	3.0	35.8	1.0	-47.9	-25.0	-22.9	
10140.00	-10.2	H	3.0	36.0	1.0	-45.2	-25.0	-20.2	
High Ch, 2562.5									
5125.00	-14.5	V	3.0	35.4	1.0	-49.0	-25.0	-24.0	
7687.50	-13.2	V	3.0	35.8	1.0	-48.0	-25.0	-23.0	
10250.00	-9.8	V	3.0	35.9	1.0	-44.7	-25.0	-19.7	
5125.00	-15.8	H	3.0	35.4	1.0	-50.2	-25.0	-25.2	
7687.50	-12.9	H	3.0	35.8	1.0	-47.7	-25.0	-22.7	
10250.00	-9.7	H	3.0	35.9	1.0	-44.6	-25.0	-19.6	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: R.Z
Configuration: EUT, AC Adapter, Headset
Location: Chamber A
Mode: LTE_16QAM Band 7 Harmonics, 10MHz Bandwidth

Band: LTE7 10MHz 16QAM

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2505									
5010.00	-15.5	V	3.0	35.5	1.0	-50.0	-25.0	-25.0	
7515.00	-14.8	V	3.0	35.7	1.0	-49.6	-25.0	-24.6	
10020.00	-10.8	V	3.0	36.0	1.0	-45.8	-25.0	-20.8	
5010.00	-15.2	H	3.0	35.5	1.0	-49.7	-25.0	-24.7	
7515.00	-13.2	H	3.0	35.7	1.0	-47.9	-25.0	-22.9	
10020.00	-9.8	H	3.0	36.0	1.0	-44.8	-25.0	-19.8	
Mid Ch, 2535									
5070.00	-14.6	V	3.0	35.4	1.0	-49.0	-25.0	-24.0	
7605.00	-13.6	V	3.0	35.8	1.0	-48.4	-25.0	-23.4	
10140.00	-10.4	V	3.0	36.0	1.0	-45.4	-25.0	-20.4	
5070.00	-15.3	H	3.0	35.4	1.0	-49.8	-25.0	-24.8	
7605.00	-13.1	H	3.0	35.8	1.0	-47.9	-25.0	-22.9	
10140.00	-9.5	H	3.0	36.0	1.0	-44.5	-25.0	-19.5	
High Ch, 2565									
5130.00	-15.4	V	3.0	35.4	1.0	-49.8	-25.0	-24.8	
7695.00	-14.0	V	3.0	35.8	1.0	-48.8	-25.0	-23.8	
10260.00	-10.5	V	3.0	35.9	1.0	-45.4	-25.0	-20.4	
5130.00	-15.1	H	3.0	35.4	1.0	-49.5	-25.0	-24.5	
7695.00	-13.0	H	3.0	35.8	1.0	-47.8	-25.0	-22.8	
10260.00	-10.0	H	3.0	35.9	1.0	-44.9	-25.0	-19.9	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: R.Z
Configuration: EUT, AC Adapter, Headset
Location: Chamber A
Mode: LTE_QPSK Band 7 Harmonics, 10MHz Bandwidth

Band: LTE7 10MHz QPSK

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2505									
5010.00	-15.7	V	3.0	35.5	1.0	-50.2	-25.0	-25.2	
7515.00	-15.1	V	3.0	35.7	1.0	-49.9	-25.0	-24.9	
10020.00	-10.9	V	3.0	36.0	1.0	-45.9	-25.0	-20.9	
5010.00	-14.4	H	3.0	35.5	1.0	-48.9	-25.0	-23.9	
7515.00	-13.2	H	3.0	35.7	1.0	-47.9	-25.0	-22.9	
10020.00	-9.6	H	3.0	36.0	1.0	-44.6	-25.0	-19.6	
Mid Ch, 2535									
5070.00	-15.3	V	3.0	35.4	1.0	-49.7	-25.0	-24.7	
7605.00	-13.1	V	3.0	35.8	1.0	-47.9	-25.0	-22.9	
10140.00	-10.6	V	3.0	36.0	1.0	-45.5	-25.0	-20.5	
5070.00	-15.0	H	3.0	35.4	1.0	-49.5	-25.0	-24.5	
7605.00	-13.1	H	3.0	35.8	1.0	-47.8	-25.0	-22.8	
10140.00	-10.5	H	3.0	36.0	1.0	-45.5	-25.0	-20.5	
High Ch, 2565									
5130.00	-15.6	V	3.0	35.4	1.0	-50.0	-25.0	-25.0	
7695.00	-13.8	V	3.0	35.8	1.0	-48.6	-25.0	-23.6	
10260.00	-10.0	V	3.0	35.9	1.0	-44.9	-25.0	-19.9	
5130.00	-15.3	H	3.0	35.4	1.0	-49.8	-25.0	-24.8	
7695.00	-12.3	H	3.0	35.8	1.0	-47.1	-25.0	-22.1	
10260.00	-10.5	H	3.0	35.9	1.0	-45.4	-25.0	-20.4	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: R.Z
Configuration: EUT, AC Adapter, Headset
Location: Chamber A
Mode: LTE_16QAM Band 7 Harmonics, 5MHz Bandwidth

Band: LTE7 5MHz 16QAM

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2502.5									
5005.00	-15.4	V	3.0	35.5	1.0	-49.9	-25.0	-24.9	
7507.50	-14.0	V	3.0	35.7	1.0	-48.8	-25.0	-23.8	
10010.00	-9.2	V	3.0	36.0	1.0	-44.2	-25.0	-19.2	
5005.00	-14.0	H	3.0	35.5	1.0	-48.5	-25.0	-23.5	
7507.50	-13.2	H	3.0	35.7	1.0	-47.9	-25.0	-22.9	
10010.00	-8.6	H	3.0	36.0	1.0	-43.6	-25.0	-18.6	
Mid Ch, 2535									
5070.00	-14.8	V	3.0	35.4	1.0	-49.2	-25.0	-24.2	
7605.00	-13.4	V	3.0	35.8	1.0	-48.2	-25.0	-23.2	
10140.00	-9.7	V	3.0	36.0	1.0	-44.6	-25.0	-19.6	
5070.00	-14.1	H	3.0	35.4	1.0	-48.6	-25.0	-23.6	
7605.00	-12.0	H	3.0	35.8	1.0	-46.8	-25.0	-21.8	
10140.00	-11.4	H	3.0	36.0	1.0	-46.4	-25.0	-21.4	
High Ch, 2567.5									
5135.00	-16.8	V	3.0	35.4	1.0	-51.2	-25.0	-26.2	
7702.50	-14.4	V	3.0	35.8	1.0	-49.2	-25.0	-24.2	
10270.00	-6.4	V	3.0	35.9	1.0	-41.3	-25.0	-16.3	
5135.00	-14.9	H	3.0	35.4	1.0	-49.4	-25.0	-24.4	
7702.50	-12.1	H	3.0	35.8	1.0	-46.9	-25.0	-21.9	
10270.00	-7.0	H	3.0	35.9	1.0	-41.9	-25.0	-16.9	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: R.Z
Configuration: EUT, AC Adapter, Headset
Location: Chamber A
Mode: LTE_QPSK Band 7 Harmonics, 5MHz Bandwidth

Band: LTE7 5MHz QPSK

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2502.5									
5005.00	-15.5	V	3.0	35.5	1.0	-50.0	-25.0	-25.0	
7507.50	-14.8	V	3.0	35.7	1.0	-49.6	-25.0	-24.6	
10010.00	-10.7	V	3.0	36.0	1.0	-45.7	-25.0	-20.7	
5005.00	-14.3	H	3.0	35.5	1.0	-48.8	-25.0	-23.8	
7507.50	-13.5	H	3.0	35.7	1.0	-48.2	-25.0	-23.2	
10010.00	-9.2	H	3.0	36.0	1.0	-44.2	-25.0	-19.2	
Mid Ch, 2535									
5070.00	-15.2	V	3.0	35.4	1.0	-49.6	-25.0	-24.6	
7605.00	-13.5	V	3.0	35.8	1.0	-48.3	-25.0	-23.3	
10140.00	-11.7	V	3.0	36.0	1.0	-46.6	-25.0	-21.6	
5070.00	-14.7	H	3.0	35.4	1.0	-49.2	-25.0	-24.2	
7605.00	-13.6	H	3.0	35.8	1.0	-48.4	-25.0	-23.4	
10140.00	-10.1	H	3.0	36.0	1.0	-45.1	-25.0	-20.1	
High Ch, 2567.5									
5135.00	-16.2	V	3.0	35.4	1.0	-50.6	-25.0	-25.6	
7702.50	-14.0	V	3.0	35.8	1.0	-48.7	-25.0	-23.7	
10270.00	-6.2	V	3.0	35.9	1.0	-41.1	-25.0	-16.1	
5135.00	-15.0	H	3.0	35.4	1.0	-49.5	-25.0	-24.5	
7702.50	-13.2	H	3.0	35.8	1.0	-48.0	-25.0	-23.0	
10270.00	-8.4	H	3.0	35.9	1.0	-43.3	-25.0	-18.3	

LTE Band 12

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 12 Harmonics, 10MHz Bandwidth

Band	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
	Low Ch,704									
LTE12	1408.00	-30.4	V	3.0	37.4	1.0	-66.8	-13.0	-53.8	
	2112.00	-23.9	V	3.0	36.6	1.0	-59.5	-13.0	-46.5	
10MHz	2816.00	-22.4	V	3.0	36.4	1.0	-57.8	-13.0	-44.8	
	1408.00	-29.7	H	3.0	37.4	1.0	-66.1	-13.0	-53.1	
16QAM	2112.00	-24.8	H	3.0	36.6	1.0	-60.4	-13.0	-47.4	
	2816.00	-23.6	H	3.0	36.4	1.0	-59.0	-13.0	-46.0	
	Mid Ch,707.5									
	1415.00	-30.7	V	3.0	37.3	1.0	-67.1	-13.0	-54.1	
	2122.50	-23.3	V	3.0	36.6	1.0	-58.8	-13.0	-45.8	
	2830.00	-22.5	V	3.0	36.4	1.0	-57.9	-13.0	-44.9	
	1415.00	-29.5	H	3.0	37.3	1.0	-65.9	-13.0	-52.9	
	2122.50	-24.3	H	3.0	36.6	1.0	-59.9	-13.0	-46.9	
	2830.00	-23.1	H	3.0	36.4	1.0	-58.4	-13.0	-45.4	
	High Ch,711									
	1422.00	-30.7	V	3.0	37.3	1.0	-67.0	-13.0	-54.0	
	2133.00	-22.9	V	3.0	36.6	1.0	-58.5	-13.0	-45.5	
	2844.00	-22.0	V	3.0	36.4	1.0	-57.4	-13.0	-44.4	
	1422.00	-29.7	H	3.0	37.3	1.0	-66.0	-13.0	-53.0	
	2133.00	-24.3	H	3.0	36.6	1.0	-59.8	-13.0	-46.8	
	2844.00	-22.9	H	3.0	36.4	1.0	-58.3	-13.0	-45.3	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 12 Harmonics, 10MHz Bandwidth

Band	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
	Low Ch,704									
LTE12	1408.00	-30.3	V	3.0	37.4	1.0	-66.7	-13.0	-53.7	
	2112.00	-23.8	V	3.0	36.6	1.0	-59.4	-13.0	-46.4	
10MHz	2816.00	-22.2	V	3.0	36.4	1.0	-57.6	-13.0	-44.6	
	1408.00	-29.5	H	3.0	37.4	1.0	-65.8	-13.0	-52.8	
QPSK	2112.00	-24.4	H	3.0	36.6	1.0	-60.0	-13.0	-47.0	
	2816.00	-22.9	H	3.0	36.4	1.0	-58.2	-13.0	-45.2	
	Mid Ch,707.5									
	1415.00	-30.7	V	3.0	37.3	1.0	-67.0	-13.0	-54.0	
	2122.50	-23.5	V	3.0	36.6	1.0	-59.1	-13.0	-46.1	
	2830.00	-22.3	V	3.0	36.4	1.0	-57.7	-13.0	-44.7	
	1415.00	-29.6	H	3.0	37.3	1.0	-66.0	-13.0	-53.0	
	2122.50	-24.4	H	3.0	36.6	1.0	-60.0	-13.0	-47.0	
	2830.00	-23.2	H	3.0	36.4	1.0	-58.6	-13.0	-45.6	
	High Ch,711									
	1422.00	-29.9	V	3.0	37.3	1.0	-66.3	-13.0	-53.3	
	2133.00	-22.7	V	3.0	36.6	1.0	-58.2	-13.0	-45.2	
	2844.00	-21.5	V	3.0	36.4	1.0	-56.8	-13.0	-43.8	
	1422.00	-29.1	H	3.0	37.3	1.0	-65.4	-13.0	-52.4	
	2133.00	-24.4	H	3.0	36.6	1.0	-59.9	-13.0	-46.9	
	2844.00	-22.9	H	3.0	36.4	1.0	-58.2	-13.0	-45.2	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 12 Harmonics, 5MHz Bandwidth

Band	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
	Low Ch, 701.50									
LTE12	1403.00	-30.9	V	3.0	37.4	1.0	-67.3	-13.0	-54.3	
	2104.50	-23.7	V	3.0	36.6	1.0	-59.3	-13.0	-46.3	
5MHz	2806.00	-22.6	V	3.0	36.4	1.0	-57.9	-13.0	-44.9	
	1403.00	-29.6	H	3.0	37.4	1.0	-65.9	-13.0	-52.9	
16QAM	2104.50	-24.8	H	3.0	36.6	1.0	-60.3	-13.0	-47.3	
	2806.00	-23.5	H	3.0	36.4	1.0	-58.9	-13.0	-45.9	
	Mid Ch, 707.50									
	1415.00	-30.8	V	3.0	37.3	1.0	-67.1	-13.0	-54.1	
	2122.50	-23.6	V	3.0	36.6	1.0	-59.2	-13.0	-46.2	
	2830.00	-22.3	V	3.0	36.4	1.0	-57.7	-13.0	-44.7	
	1415.00	-29.8	H	3.0	37.3	1.0	-66.1	-13.0	-53.1	
	2122.50	-24.5	H	3.0	36.6	1.0	-60.1	-13.0	-47.1	
	2830.00	-23.2	H	3.0	36.4	1.0	-58.6	-13.0	-45.6	
	High Ch, 713.50									
	1427.00	-30.5	V	3.0	37.3	1.0	-66.9	-13.0	-53.9	
	2140.50	-23.7	V	3.0	36.6	1.0	-59.2	-13.0	-46.2	
	2854.00	-22.1	V	3.0	36.4	1.0	-57.5	-13.0	-44.5	
	1427.00	-29.6	H	3.0	37.3	1.0	-65.9	-13.0	-52.9	
	2140.50	-24.8	H	3.0	36.6	1.0	-60.4	-13.0	-47.4	
	2854.00	-23.4	H	3.0	36.4	1.0	-58.8	-13.0	-45.8	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 12 Harmonics, 5MHz Bandwidth

Band	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
	Low Ch, 701.50									
LTE12	1403.00	-30.8	V	3.0	37.4	1.0	-67.1	-13.0	-54.1	
	2104.50	-23.4	V	3.0	36.6	1.0	-59.0	-13.0	-46.0	
5MHz	2806.00	-22.3	V	3.0	36.4	1.0	-57.7	-13.0	-44.7	
	1403.00	-29.8	H	3.0	37.4	1.0	-66.1	-13.0	-53.1	
QPSK	2104.50	-24.6	H	3.0	36.6	1.0	-60.2	-13.0	-47.2	
	2806.00	-23.5	H	3.0	36.4	1.0	-58.9	-13.0	-45.9	
	Mid Ch, 707.50									
	1415.00	-30.4	V	3.0	37.3	1.0	-66.8	-13.0	-53.8	
	2122.50	-22.9	V	3.0	36.6	1.0	-58.4	-13.0	-45.4	
	2830.00	-22.1	V	3.0	36.4	1.0	-57.5	-13.0	-44.5	
	1415.00	-29.7	H	3.0	37.3	1.0	-66.0	-13.0	-53.0	
	2122.50	-24.7	H	3.0	36.6	1.0	-60.3	-13.0	-47.3	
	2830.00	-23.0	H	3.0	36.4	1.0	-58.4	-13.0	-45.4	
	High Ch, 713.50									
	1427.00	-30.4	V	3.0	37.3	1.0	-66.7	-13.0	-53.7	
	2140.50	-23.4	V	3.0	36.6	1.0	-59.0	-13.0	-46.0	
	2854.00	-22.3	V	3.0	36.4	1.0	-57.7	-13.0	-44.7	
	1427.00	-29.4	H	3.0	37.3	1.0	-65.8	-13.0	-52.8	
	2140.50	-24.5	H	3.0	36.6	1.0	-60.0	-13.0	-47.0	
	2854.00	-23.3	H	3.0	36.4	1.0	-58.7	-13.0	-45.7	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 12 Harmonics, 3MHz Bandwidth

Band	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
	Low Ch, 700.5									
LTE12	1401.00	-30.9	V	3.0	37.4	1.0	-67.2	-13.0	-54.2	
	2101.50	-23.6	V	3.0	36.6	1.0	-59.2	-13.0	-46.2	
3MHz	2802.00	-22.7	V	3.0	36.4	1.0	-58.0	-13.0	-45.0	
	1401.00	-29.6	H	3.0	37.4	1.0	-66.0	-13.0	-53.0	
16QAM	2101.50	-24.9	H	3.0	36.6	1.0	-60.5	-13.0	-47.5	
	2802.00	-23.4	H	3.0	36.4	1.0	-58.7	-13.0	-45.7	
	Mid Ch, 707.50									
	1415.00	-30.6	V	3.0	37.3	1.0	-67.0	-13.0	-54.0	
	2122.00	-23.6	V	3.0	36.6	1.0	-59.2	-13.0	-46.2	
	2830.00	-22.1	V	3.0	36.4	1.0	-57.5	-13.0	-44.5	
	1415.00	-29.7	H	3.0	37.3	1.0	-66.0	-13.0	-53.0	
	2122.00	-24.6	H	3.0	36.6	1.0	-60.2	-13.0	-47.2	
	2830.00	-23.1	H	3.0	36.4	1.0	-58.4	-13.0	-45.4	
	High Ch, 714.5									
	1429.00	-30.6	V	3.0	37.3	1.0	-67.0	-13.0	-54.0	
	2143.50	-23.7	V	3.0	36.6	1.0	-59.3	-13.0	-46.3	
	2858.00	-22.3	V	3.0	36.4	1.0	-57.7	-13.0	-44.7	
	1429.00	-29.7	H	3.0	37.3	1.0	-66.0	-13.0	-53.0	
	2143.50	-25.1	H	3.0	36.6	1.0	-60.7	-13.0	-47.7	
	2858.00	-23.3	H	3.0	36.4	1.0	-58.7	-13.0	-45.7	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 12 Harmonics, 3MHz Bandwidth

Band	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
	Low Ch, 700.5									
LTE12	1401.00	-30.3	V	3.0	37.4	1.0	-66.7	-13.0	-53.7	
	2101.50	-23.2	V	3.0	36.6	1.0	-58.8	-13.0	-45.8	
3MHz	2802.00	-22.5	V	3.0	36.4	1.0	-57.9	-13.0	-44.9	
	1401.00	-29.0	H	3.0	37.4	1.0	-65.4	-13.0	-52.4	
QPSK	2101.50	-24.7	H	3.0	36.6	1.0	-60.2	-13.0	-47.2	
	2802.00	-23.3	H	3.0	36.4	1.0	-58.7	-13.0	-45.7	
	Mid Ch, 707.50									
	1415.00	-30.6	V	3.0	37.3	1.0	-67.0	-13.0	-54.0	
	2122.00	-23.3	V	3.0	36.6	1.0	-58.8	-13.0	-45.8	
	2830.00	-21.9	V	3.0	36.4	1.0	-57.3	-13.0	-44.3	
	1415.00	-29.7	H	3.0	37.3	1.0	-66.0	-13.0	-53.0	
	2122.00	-24.4	H	3.0	36.6	1.0	-59.9	-13.0	-46.9	
	2830.00	-22.9	H	3.0	36.4	1.0	-58.2	-13.0	-45.2	
	High Ch, 714.5									
	1429.00	-30.6	V	3.0	37.3	1.0	-66.9	-13.0	-53.9	
	2143.50	-23.3	V	3.0	36.6	1.0	-58.9	-13.0	-45.9	
	2858.00	-22.3	V	3.0	36.4	1.0	-57.6	-13.0	-44.6	
	1429.00	-29.4	H	3.0	37.3	1.0	-65.8	-13.0	-52.8	
	2143.50	-24.8	H	3.0	36.6	1.0	-60.3	-13.0	-47.3	
	2858.00	-23.4	H	3.0	36.4	1.0	-58.8	-13.0	-45.8	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 12 Harmonics, 1.4MHz Bandwidth

Band	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
	Low Ch, 699.7									
LTE12	1399.40	-30.5	V	3.0	37.4	1.0	-66.8	-13.0	-53.8	
	2099.10	-23.7	V	3.0	36.6	1.0	-59.2	-13.0	-46.2	
1.4MHz	2798.80	-22.6	V	3.0	36.4	1.0	-58.0	-13.0	-45.0	
	1399.40	-29.6	H	3.0	37.4	1.0	-66.0	-13.0	-53.0	
16QAM	2099.10	-24.9	H	3.0	36.6	1.0	-60.4	-13.0	-47.4	
	2798.80	-22.9	H	3.0	36.4	1.0	-58.3	-13.0	-45.3	
	Mid Ch, 707.50									
	1415.00	-30.9	V	3.0	37.3	1.0	-67.3	-13.0	-54.3	
	2122.00	-23.5	V	3.0	36.6	1.0	-59.1	-13.0	-46.1	
	2830.00	-22.4	V	3.0	36.4	1.0	-57.8	-13.0	-44.8	
	1415.00	-29.2	H	3.0	37.3	1.0	-65.5	-13.0	-52.5	
	2122.00	-24.6	H	3.0	36.6	1.0	-60.2	-13.0	-47.2	
	2830.00	-23.2	H	3.0	36.4	1.0	-58.6	-13.0	-45.6	
	High Ch, 715.3									
	1430.60	-30.8	V	3.0	37.3	1.0	-67.2	-13.0	-54.2	
	2145.90	-23.6	V	3.0	36.6	1.0	-59.1	-13.0	-46.1	
	2861.20	-22.7	V	3.0	36.4	1.0	-58.1	-13.0	-45.1	
	1430.60	-29.3	H	3.0	37.3	1.0	-65.7	-13.0	-52.7	
	2145.90	-24.8	H	3.0	36.6	1.0	-60.3	-13.0	-47.3	
	2861.20	-23.1	H	3.0	36.4	1.0	-58.5	-13.0	-45.5	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 12 Harmonics, 1.4MHz Bandwidth

Band	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
	Low Ch, 699.7									
LTE12	1399.40	-30.3	V	3.0	37.4	1.0	-66.7	-13.0	-53.7	
	2099.10	-23.6	V	3.0	36.6	1.0	-59.1	-13.0	-46.1	
1.4MHz	2798.80	-22.3	V	3.0	36.4	1.0	-57.6	-13.0	-44.6	
	1399.40	-29.5	H	3.0	37.4	1.0	-65.8	-13.0	-52.8	
QPSK	2099.10	-25.1	H	3.0	36.6	1.0	-60.7	-13.0	-47.7	
	2798.80	-22.7	H	3.0	36.4	1.0	-58.1	-13.0	-45.1	
	Mid Ch, 707.50									
	1415.00	-30.6	V	3.0	37.3	1.0	-66.9	-13.0	-53.9	
	2122.00	-23.4	V	3.0	36.6	1.0	-59.0	-13.0	-46.0	
	2830.00	-22.3	V	3.0	36.4	1.0	-57.7	-13.0	-44.7	
	1415.00	-29.7	H	3.0	37.3	1.0	-66.0	-13.0	-53.0	
	2122.00	-24.8	H	3.0	36.6	1.0	-60.4	-13.0	-47.4	
	2830.00	-23.2	H	3.0	36.4	1.0	-58.6	-13.0	-45.6	
	High Ch, 715.3									
	1430.60	-30.6	V	3.0	37.3	1.0	-67.0	-13.0	-54.0	
	2145.90	-24.0	V	3.0	36.6	1.0	-59.5	-13.0	-46.5	
	2861.20	-22.4	V	3.0	36.4	1.0	-57.8	-13.0	-44.8	
	1430.60	-29.1	H	3.0	37.3	1.0	-65.4	-13.0	-52.4	
	2145.90	-24.6	H	3.0	36.6	1.0	-60.1	-13.0	-47.1	
	2861.20	-22.7	H	3.0	36.4	1.0	-58.1	-13.0	-45.1	

LTE Band 13

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 13 Harmonics, 10MHz Bandwidth

Band
LTE13
10MHz
16QAM

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Mid Ch, 782									
1564.00	-28.8	V	3.0	37.1	1.0	-65.0	-13.0	-52.0	
2346.00	-23.5	V	3.0	36.5	1.0	-59.0	-13.0	-46.0	
3128.00	-21.5	V	3.0	36.3	1.0	-56.8	-13.0	-43.8	
1564.00	-28.9	H	3.0	37.1	1.0	-65.0	-13.0	-52.0	
2346.00	-25.4	H	3.0	36.5	1.0	-60.9	-13.0	-47.9	
3128.00	-21.6	H	3.0	36.3	1.0	-56.9	-13.0	-43.9	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 13 Harmonics, 10MHz Bandwidth

Band
LTE13
10MHz
QPSK

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Mid Ch, 782									
1564.00	-28.6	V	3.0	37.1	1.0	-64.8	-13.0	-51.8	
2346.00	-23.8	V	3.0	36.5	1.0	-59.3	-13.0	-46.3	
3128.00	-21.4	V	3.0	36.3	1.0	-56.7	-13.0	-43.7	
1564.00	-28.8	H	3.0	37.1	1.0	-64.9	-13.0	-51.9	
2346.00	-25.0	H	3.0	36.5	1.0	-60.5	-13.0	-47.5	
3128.00	-21.5	H	3.0	36.3	1.0	-56.8	-13.0	-43.8	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 13 Harmonics, 5MHz Bandwidth

Band LTE13 5MHz 16QAM

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 779.5									
1559.00	-28.9	V	3.0	37.1	1.0	-65.1	-13.0	-52.1	
2338.50	-23.8	V	3.0	36.5	1.0	-59.3	-13.0	-46.3	
3118.00	-21.9	V	3.0	36.3	1.0	-57.2	-13.0	-44.2	
1559.00	-28.9	H	3.0	37.1	1.0	-65.0	-13.0	-52.0	
2338.50	-25.1	H	3.0	36.5	1.0	-60.6	-13.0	-47.6	
3118.00	-21.9	H	3.0	36.3	1.0	-57.2	-13.0	-44.2	
Mid Ch, 782									
1564.00	-28.9	V	3.0	37.1	1.0	-65.0	-13.0	-52.0	
2346.00	-23.9	V	3.0	36.5	1.0	-59.4	-13.0	-46.4	
3128.00	-21.8	V	3.0	36.3	1.0	-57.1	-13.0	-44.1	
1564.00	-29.1	H	3.0	37.1	1.0	-65.2	-13.0	-52.2	
2346.00	-25.4	H	3.0	36.5	1.0	-60.9	-13.0	-47.9	
3128.00	-21.7	H	3.0	36.3	1.0	-57.0	-13.0	-44.0	
High Ch, 784.5									
1569.00	-28.8	V	3.0	37.1	1.0	-64.9	-13.0	-51.9	
2353.50	-23.8	V	3.0	36.5	1.0	-59.3	-13.0	-46.3	
3138.00	-21.5	V	3.0	36.3	1.0	-56.8	-13.0	-43.8	
1569.00	-28.9	H	3.0	37.1	1.0	-65.1	-13.0	-52.1	
2353.50	-25.2	H	3.0	36.5	1.0	-60.6	-13.0	-47.6	
3138.00	-22.0	H	3.0	36.3	1.0	-57.3	-13.0	-44.3	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 13 Harmonics, 5MHz Bandwidth

Band LTE13 5MHz QPSK

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 779.5									
1559.00	-28.8	V	3.0	37.1	1.0	-65.0	-13.0	-52.0	
2338.50	-23.7	V	3.0	36.5	1.0	-59.2	-13.0	-46.2	
3118.00	-21.5	V	3.0	36.3	1.0	-56.8	-13.0	-43.8	
1559.00	-28.8	H	3.0	37.1	1.0	-64.9	-13.0	-51.9	
2338.50	-25.0	H	3.0	36.5	1.0	-60.5	-13.0	-47.5	
3118.00	-21.7	H	3.0	36.3	1.0	-57.0	-13.0	-44.0	
Mid Ch, 782									
1564.00	-28.7	V	3.0	37.1	1.0	-64.8	-13.0	-51.8	
2346.00	-23.3	V	3.0	36.5	1.0	-58.8	-13.0	-45.8	
3128.00	-21.7	V	3.0	36.3	1.0	-56.9	-13.0	-43.9	
1564.00	-29.0	H	3.0	37.1	1.0	-65.1	-13.0	-52.1	
2346.00	-25.6	H	3.0	36.5	1.0	-61.1	-13.0	-48.1	
3128.00	-21.5	H	3.0	36.3	1.0	-56.8	-13.0	-43.8	
High Ch, 784.5									
1569.00	-28.7	V	3.0	37.1	1.0	-64.9	-13.0	-51.9	
2353.50	-23.5	V	3.0	36.5	1.0	-59.0	-13.0	-46.0	
3138.00	-21.4	V	3.0	36.3	1.0	-56.7	-13.0	-43.7	
1569.00	-28.8	H	3.0	37.1	1.0	-64.9	-13.0	-51.9	
2353.50	-25.1	H	3.0	36.5	1.0	-60.6	-13.0	-47.6	
3138.00	-21.2	H	3.0	36.3	1.0	-56.5	-13.0	-43.5	

LTE Band 17

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 17 Harmonics, 10MHz Bandwidth

Band LTE17 10MHz 16QAM

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	-29.8	V	3.0	37.4	1.0	-66.2	-13.0	-53.2	
2127.00	-17.9	V	3.0	36.6	1.0	-53.4	-13.0	-40.4	
2836.00	-22.5	V	3.0	36.4	1.0	-57.9	-13.0	-44.9	
1418.00	-30.6	H	3.0	37.4	1.0	-66.9	-13.0	-53.9	
2127.00	-21.3	H	3.0	36.6	1.0	-56.9	-13.0	-43.9	
2836.00	-23.7	H	3.0	36.4	1.0	-59.1	-13.0	-46.1	
Mid Ch, 710									
1420.00	-30.7	V	3.0	37.3	1.0	-67.1	-13.0	-54.1	
2130.00	-18.4	V	3.0	36.6	1.0	-54.0	-13.0	-41.0	
2840.00	-22.6	V	3.0	36.4	1.0	-57.9	-13.0	-44.9	
1420.00	-30.4	H	3.0	37.3	1.0	-66.8	-13.0	-53.8	
2130.00	-21.0	H	3.0	36.6	1.0	-56.5	-13.0	-43.5	
2840.00	-23.7	H	3.0	36.4	1.0	-59.1	-13.0	-46.1	
High Ch, 711									
1422.00	-30.8	V	3.0	37.3	1.0	-67.1	-13.0	-54.1	
2133.00	-20.3	V	3.0	36.6	1.0	-55.9	-13.0	-42.9	
2844.00	-23.3	V	3.0	36.4	1.0	-58.7	-13.0	-45.7	
1422.00	-29.6	H	3.0	37.3	1.0	-66.0	-13.0	-53.0	
2133.00	-20.4	H	3.0	36.6	1.0	-56.0	-13.0	-43.0	
2844.00	-23.9	H	3.0	36.4	1.0	-59.3	-13.0	-46.3	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 17 Harmonics, 10MHz Bandwidth

Band LTE17 10MHz QPSK

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	-29.9	V	3.0	37.4	1.0	-66.2	-13.0	-53.2	
2127.00	-17.2	V	3.0	36.6	1.0	-52.8	-13.0	-39.8	
2836.00	-23.5	V	3.0	36.4	1.0	-58.9	-13.0	-45.9	
1418.00	-30.7	H	3.0	37.4	1.0	-67.0	-13.0	-54.0	
2127.00	-20.2	H	3.0	36.6	1.0	-55.7	-13.0	-42.7	
2836.00	-23.0	H	3.0	36.4	1.0	-58.4	-13.0	-45.4	
Mid Ch, 710									
1420.00	-30.5	V	3.0	37.3	1.0	-66.9	-13.0	-53.9	
2130.00	-18.2	V	3.0	36.6	1.0	-53.7	-13.0	-40.7	
2840.00	-22.7	V	3.0	36.4	1.0	-58.1	-13.0	-45.1	
1420.00	-29.6	H	3.0	37.3	1.0	-65.9	-13.0	-52.9	
2130.00	-20.3	H	3.0	36.6	1.0	-55.8	-13.0	-42.8	
2840.00	-23.6	H	3.0	36.4	1.0	-59.0	-13.0	-46.0	
High Ch, 711									
1422.00	-29.6	V	3.0	37.3	1.0	-66.0	-13.0	-53.0	
2133.00	-19.2	V	3.0	36.6	1.0	-54.8	-13.0	-41.8	
2844.00	-22.9	V	3.0	36.4	1.0	-58.3	-13.0	-45.3	
1422.00	-29.8	H	3.0	37.3	1.0	-66.1	-13.0	-53.1	
2133.00	-20.4	H	3.0	36.6	1.0	-56.0	-13.0	-43.0	
2844.00	-23.9	H	3.0	36.4	1.0	-59.3	-13.0	-46.3	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 17 Harmonics, 5MHz Bandwidth

Band LTE17 5MHz 16QAM

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	-30.5	V	3.0	37.4	1.0	-66.8	-13.0	-53.8	
2119.50	-19.5	V	3.0	36.6	1.0	-55.1	-13.0	-42.1	
2826.00	-23.4	V	3.0	36.4	1.0	-58.8	-13.0	-45.8	
1413.00	-29.7	H	3.0	37.4	1.0	-66.1	-13.0	-53.1	
2119.50	-22.0	H	3.0	36.6	1.0	-57.6	-13.0	-44.6	
2826.00	-23.6	H	3.0	36.4	1.0	-59.0	-13.0	-46.0	
Mid Ch, 710									
1420.00	-30.8	V	3.0	37.3	1.0	-67.1	-13.0	-54.1	
2130.00	-20.2	V	3.0	36.6	1.0	-55.8	-13.0	-42.8	
2840.00	-22.4	V	3.0	36.4	1.0	-57.8	-13.0	-44.8	
1420.00	-29.9	H	3.0	37.3	1.0	-66.3	-13.0	-53.3	
2130.00	-21.5	H	3.0	36.6	1.0	-57.0	-13.0	-44.0	
2840.00	-24.0	H	3.0	36.4	1.0	-59.3	-13.0	-46.3	
High Ch, 713.5									
1427.00	-30.8	V	3.0	37.3	1.0	-67.2	-13.0	-54.2	
2140.50	-20.2	V	3.0	36.6	1.0	-55.8	-13.0	-42.8	
2854.00	-23.0	V	3.0	36.4	1.0	-58.3	-13.0	-45.3	
1427.00	-29.8	H	3.0	37.3	1.0	-66.2	-13.0	-53.2	
2140.50	-22.9	H	3.0	36.6	1.0	-58.5	-13.0	-45.5	
2854.00	-23.1	H	3.0	36.4	1.0	-58.5	-13.0	-45.5	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 17 Harmonics, 5MHz Bandwidth

Band LTE17 5MHz QPSK

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	-30.2	V	3.0	37.4	1.0	-66.5	-13.0	-53.5	
2119.50	-18.4	V	3.0	36.6	1.0	-54.0	-13.0	-41.0	
2826.00	-22.7	V	3.0	36.4	1.0	-58.1	-13.0	-45.1	
1413.00	-29.7	H	3.0	37.4	1.0	-66.1	-13.0	-53.1	
2119.50	-22.0	H	3.0	36.6	1.0	-57.6	-13.0	-44.6	
2826.00	-24.3	H	3.0	36.4	1.0	-59.7	-13.0	-46.7	
Mid Ch, 710									
1420.00	-30.6	V	3.0	37.3	1.0	-67.0	-13.0	-54.0	
2130.00	-19.6	V	3.0	36.6	1.0	-55.2	-13.0	-42.2	
2840.00	-23.4	V	3.0	36.4	1.0	-58.8	-13.0	-45.8	
1420.00	-30.2	H	3.0	37.3	1.0	-66.6	-13.0	-53.6	
2130.00	-21.3	H	3.0	36.6	1.0	-56.9	-13.0	-43.9	
2840.00	-23.6	H	3.0	36.4	1.0	-59.0	-13.0	-46.0	
High Ch, 713.5									
1427.00	-30.4	V	3.0	37.3	1.0	-66.7	-13.0	-53.7	
2140.50	-20.1	V	3.0	36.6	1.0	-55.6	-13.0	-42.6	
2854.00	-22.4	V	3.0	36.4	1.0	-57.8	-13.0	-44.8	
1427.00	-30.0	H	3.0	37.3	1.0	-66.3	-13.0	-53.3	
2140.50	-21.6	H	3.0	36.6	1.0	-57.1	-13.0	-44.1	
2854.00	-24.0	H	3.0	36.4	1.0	-59.4	-13.0	-46.4	

LTE Band 25

Band

LTE25

20MHz

16QAM

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 25 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	-19.7	V	3.0	35.8	1.0	-54.5	-13.0	-41.5	
5580.00	-15.8	V	3.0	35.5	1.0	-50.2	-13.0	-37.2	
7440.00	-13.2	V	3.0	35.7	1.0	-47.9	-13.0	-34.9	
3720.00	-19.0	H	3.0	35.8	1.0	-53.9	-13.0	-40.9	
5580.00	-15.9	H	3.0	35.5	1.0	-50.3	-13.0	-37.3	
7440.00	-11.9	H	3.0	35.7	1.0	-46.6	-13.0	-33.6	
Mid Ch, 1882.5									
3765.00	-19.8	V	3.0	35.8	1.0	-54.6	-13.0	-41.6	
5647.50	-15.9	V	3.0	35.5	1.0	-50.4	-13.0	-37.4	
7530.00	-13.0	V	3.0	35.7	1.0	-47.8	-13.0	-34.8	
3765.00	-18.9	H	3.0	35.8	1.0	-53.7	-13.0	-40.7	
5647.50	-15.2	H	3.0	35.5	1.0	-49.7	-13.0	-36.7	
7530.00	-11.9	H	3.0	35.7	1.0	-46.7	-13.0	-33.7	
High Ch, 1905									
3810.00	-19.1	V	3.0	35.8	1.0	-53.9	-13.0	-40.9	
5715.00	-15.7	V	3.0	35.5	1.0	-50.2	-13.0	-37.2	
7620.00	-12.6	V	3.0	35.8	1.0	-47.4	-13.0	-34.4	
3810.00	-19.5	H	3.0	35.8	1.0	-54.3	-13.0	-41.3	
5715.00	-14.8	H	3.0	35.5	1.0	-49.3	-13.0	-36.3	
7620.00	-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 Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 25 Harmonics, 20MHz Bandwidth

Band LTE25 20MHz QPSK

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	-19.4	V	3.0	35.8	1.0	-54.3	-13.0	-41.3	
5580.00	-15.8	V	3.0	35.5	1.0	-50.3	-13.0	-37.3	
7440.00	-13.0	V	3.0	35.7	1.0	-47.7	-13.0	-34.7	
3720.00	-19.6	H	3.0	35.8	1.0	-54.4	-13.0	-41.4	
5580.00	-15.3	H	3.0	35.5	1.0	-49.8	-13.0	-36.8	
7440.00	-11.9	H	3.0	35.7	1.0	-46.7	-13.0	-33.7	
Mid Ch, 1882.5									
3765.00	-19.4	V	3.0	35.8	1.0	-54.2	-13.0	-41.2	
5647.50	-15.7	V	3.0	35.5	1.0	-50.1	-13.0	-37.1	
7530.00	-13.2	V	3.0	35.7	1.0	-47.9	-13.0	-34.9	
3765.00	-18.4	H	3.0	35.8	1.0	-53.2	-13.0	-40.2	
5647.50	-15.0	H	3.0	35.5	1.0	-49.5	-13.0	-36.5	
7530.00	-11.8	H	3.0	35.7	1.0	-46.6	-13.0	-33.6	
High Ch, 1905									
3810.00	-19.0	V	3.0	35.8	1.0	-53.8	-13.0	-40.8	
5715.00	-15.4	V	3.0	35.5	1.0	-49.9	-13.0	-36.9	
7620.00	-12.4	V	3.0	35.8	1.0	-47.1	-13.0	-34.1	
3810.00	-19.2	H	3.0	35.8	1.0	-54.0	-13.0	-41.0	
5715.00	-14.8	H	3.0	35.5	1.0	-49.3	-13.0	-36.3	
7620.00	-11.7	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 Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 25 Harmonics, 15MHz Bandwidth

Band
LTE25
15MHz
16QAM

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	-19.9	V	3.0	35.8	1.0	-54.7	-13.0	-41.7	
5572.50	-16.0	V	3.0	35.5	1.0	-50.5	-13.0	-37.5	
7430.00	-13.1	V	3.0	35.7	1.0	-47.9	-13.0	-34.9	
3715.00	-20.0	H	3.0	35.8	1.0	-54.9	-13.0	-41.9	
5572.50	-15.7	H	3.0	35.5	1.0	-50.2	-13.0	-37.2	
7430.00	-12.3	H	3.0	35.7	1.0	-47.0	-13.0	-34.0	
Mid Ch, 1882.5									
3815.00	-19.8	V	3.0	35.8	1.0	-54.6	-13.0	-41.6	
5722.50	-15.9	V	3.0	35.5	1.0	-50.4	-13.0	-37.4	
7630.00	-13.1	V	3.0	35.7	1.0	-47.8	-13.0	-34.8	
3815.00	-19.9	H	3.0	35.8	1.0	-54.7	-13.0	-41.7	
5722.50	-15.5	H	3.0	35.5	1.0	-49.9	-13.0	-36.9	
7630.00	-12.1	H	3.0	35.7	1.0	-46.8	-13.0	-33.8	
High Ch, 1907.5									
3815.00	-19.6	V	3.0	35.8	1.0	-54.3	-13.0	-41.3	
5722.50	-15.7	V	3.0	35.5	1.0	-50.2	-13.0	-37.2	
7630.00	-12.2	V	3.0	35.8	1.0	-46.9	-13.0	-33.9	
3815.00	-19.4	H	3.0	35.8	1.0	-54.2	-13.0	-41.2	
5722.50	-15.3	H	3.0	35.5	1.0	-49.8	-13.0	-36.8	
7630.00	-12.1	H	3.0	35.8	1.0	-46.9	-13.0	-33.9	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 25 Harmonics, 15MHz Bandwidth

Band LTE25 15MHz QPSK

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	-19.7	V	3.0	35.8	1.0	-54.6	-13.0	-41.6	
5572.50	-15.8	V	3.0	35.5	1.0	-50.3	-13.0	-37.3	
7430.00	-13.1	V	3.0	35.7	1.0	-47.9	-13.0	-34.9	
3715.00	-19.5	H	3.0	35.8	1.0	-54.4	-13.0	-41.4	
5572.50	-15.2	H	3.0	35.5	1.0	-49.7	-13.0	-36.7	
7430.00	-12.0	H	3.0	35.7	1.0	-46.7	-13.0	-33.7	
Mid Ch, 1882.5									
3765.00	-19.5	V	3.0	35.8	1.0	-54.3	-13.0	-41.3	
5647.50	-15.6	V	3.0	35.5	1.0	-50.1	-13.0	-37.1	
7530.00	-12.8	V	3.0	35.7	1.0	-47.6	-13.0	-34.6	
3765.00	-19.1	H	3.0	35.8	1.0	-53.9	-13.0	-40.9	
5647.50	-15.3	H	3.0	35.5	1.0	-49.8	-13.0	-36.8	
7530.00	-11.9	H	3.0	35.7	1.0	-46.6	-13.0	-33.6	
High Ch, 1907.5									
3815.00	-19.2	V	3.0	35.8	1.0	-54.0	-13.0	-41.0	
5722.50	-15.7	V	3.0	35.5	1.0	-50.2	-13.0	-37.2	
7630.00	-13.0	V	3.0	35.8	1.0	-47.8	-13.0	-34.8	
3815.00	-19.5	H	3.0	35.8	1.0	-54.3	-13.0	-41.3	
5722.50	-15.1	H	3.0	35.5	1.0	-49.6	-13.0	-36.6	
7630.00	-12.0	H	3.0	35.8	1.0	-46.7	-13.0	-33.7	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 25 Harmonics, 10MHz Bandwidth

Band
LTE25
10MHz
16QAM

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	-20.2	V	3.0	35.9	1.0	-55.0	-13.0	-42.0	
5565.00	-16.2	V	3.0	35.5	1.0	-50.7	-13.0	-37.7	
7420.00	-13.0	V	3.0	35.7	1.0	-47.7	-13.0	-34.7	
3710.00	-20.2	H	3.0	35.9	1.0	-55.1	-13.0	-42.1	
5565.00	-15.7	H	3.0	35.5	1.0	-50.1	-13.0	-37.1	
7420.00	-12.2	H	3.0	35.7	1.0	-46.9	-13.0	-33.9	
Mid Ch, 1882.5									
3765.00	-19.7	V	3.0	35.8	1.0	-54.6	-13.0	-41.6	
5647.50	-15.8	V	3.0	35.5	1.0	-50.3	-13.0	-37.3	
7530.00	-13.0	V	3.0	35.7	1.0	-47.7	-13.0	-34.7	
3765.00	-20.2	H	3.0	35.8	1.0	-55.0	-13.0	-42.0	
5647.50	-15.3	H	3.0	35.5	1.0	-49.8	-13.0	-36.8	
7530.00	-12.0	H	3.0	35.7	1.0	-46.7	-13.0	-33.7	
High Ch, 1910									
3820.00	-19.9	V	3.0	35.8	1.0	-54.7	-13.0	-41.7	
5730.00	-15.8	V	3.0	35.5	1.0	-50.3	-13.0	-37.3	
7640.00	-13.2	V	3.0	35.8	1.0	-48.0	-13.0	-35.0	
3820.00	-20.0	H	3.0	35.8	1.0	-54.8	-13.0	-41.8	
5730.00	-14.8	H	3.0	35.5	1.0	-49.3	-13.0	-36.3	
7640.00	-12.1	H	3.0	35.8	1.0	-46.9	-13.0	-33.9	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 25 Harmonics, 10MHz Bandwidth

Band
LTE25
10MHz
QPSK

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	-20.1	V	3.0	35.9	1.0	-54.9	-13.0	-41.9	
5565.00	-15.9	V	3.0	35.5	1.0	-50.4	-13.0	-37.4	
7420.00	-13.0	V	3.0	35.7	1.0	-47.8	-13.0	-34.8	
3710.00	-20.1	H	3.0	35.9	1.0	-55.0	-13.0	-42.0	
5565.00	-15.3	H	3.0	35.5	1.0	-49.8	-13.0	-36.8	
7420.00	-12.1	H	3.0	35.7	1.0	-46.8	-13.0	-33.8	
Mid Ch, 1882.5									
3765.00	-19.3	V	3.0	35.8	1.0	-54.1	-13.0	-41.1	
5647.50	-15.3	V	3.0	35.5	1.0	-49.8	-13.0	-36.8	
7530.00	-12.9	V	3.0	35.7	1.0	-47.6	-13.0	-34.6	
3765.00	-19.8	H	3.0	35.8	1.0	-54.6	-13.0	-41.6	
5647.50	-15.0	H	3.0	35.5	1.0	-49.5	-13.0	-36.5	
7530.00	-12.2	H	3.0	35.7	1.0	-46.9	-13.0	-33.9	
High Ch, 1910									
3820.00	-19.8	V	3.0	35.8	1.0	-54.6	-13.0	-41.6	
5730.00	-15.8	V	3.0	35.5	1.0	-50.3	-13.0	-37.3	
7640.00	-13.2	V	3.0	35.8	1.0	-47.9	-13.0	-34.9	
3820.00	-19.9	H	3.0	35.8	1.0	-54.6	-13.0	-41.6	
5730.00	-15.0	H	3.0	35.5	1.0	-49.5	-13.0	-36.5	
7640.00	-12.0	H	3.0	35.8	1.0	-46.7	-13.0	-33.7	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 25 Harmonics, 5MHz Bandwidth

Band LTE25 5MHz 16QAM

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	-19.9	V	3.0	35.9	1.0	-54.7	-13.0	-41.7	
5557.50	-16.7	V	3.0	35.5	1.0	-51.2	-13.0	-38.2	
7410.00	-12.9	V	3.0	35.7	1.0	-47.7	-13.0	-34.7	
3705.00	-19.6	H	3.0	35.9	1.0	-54.5	-13.0	-41.5	
5557.50	-15.6	H	3.0	35.5	1.0	-50.1	-13.0	-37.1	
7410.00	-11.9	H	3.0	35.7	1.0	-46.7	-13.0	-33.7	
Mid Ch, 1882.5									
3765.00	-19.8	V	3.0	35.8	1.0	-54.6	-13.0	-41.6	
5647.50	-15.6	V	3.0	35.5	1.0	-50.1	-13.0	-37.1	
7530.00	-12.9	V	3.0	35.7	1.0	-47.6	-13.0	-34.6	
3765.00	-19.1	H	3.0	35.8	1.0	-53.9	-13.0	-40.9	
5647.50	-15.9	H	3.0	35.5	1.0	-50.4	-13.0	-37.4	
7530.00	-12.2	H	3.0	35.7	1.0	-47.0	-13.0	-34.0	
High Ch, 1912.5									
3825.00	-19.6	V	3.0	35.8	1.0	-54.3	-13.0	-41.3	
5737.50	-15.6	V	3.0	35.5	1.0	-50.1	-13.0	-37.1	
7650.00	-12.3	V	3.0	35.8	1.0	-47.0	-13.0	-34.0	
3825.00	-18.8	H	3.0	35.8	1.0	-53.5	-13.0	-40.5	
5737.50	-15.0	H	3.0	35.5	1.0	-49.5	-13.0	-36.5	
7650.00	-11.7	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 Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 25 Harmonics, 5MHz Bandwidth

Band LTE25 5MHz QPSK

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	-20.0	V	3.0	35.9	1.0	-54.8	-13.0	-41.8	
5557.50	-16.1	V	3.0	35.5	1.0	-50.6	-13.0	-37.6	
7410.00	-13.0	V	3.0	35.7	1.0	-47.8	-13.0	-34.8	
3705.00	-19.9	H	3.0	35.9	1.0	-54.7	-13.0	-41.7	
5557.50	-15.6	H	3.0	35.5	1.0	-50.0	-13.0	-37.0	
7410.00	-12.0	H	3.0	35.7	1.0	-46.7	-13.0	-33.7	
Mid Ch, 1882.5									
3765.00	-19.7	V	3.0	35.8	1.0	-54.5	-13.0	-41.5	
5647.50	-15.7	V	3.0	35.5	1.0	-50.2	-13.0	-37.2	
7530.00	-12.7	V	3.0	35.7	1.0	-47.4	-13.0	-34.4	
3765.00	-18.5	H	3.0	35.8	1.0	-53.3	-13.0	-40.3	
5647.50	-15.9	H	3.0	35.5	1.0	-50.4	-13.0	-37.4	
7530.00	-12.0	H	3.0	35.7	1.0	-46.8	-13.0	-33.8	
High Ch, 1912.5									
3825.00	-19.4	V	3.0	35.8	1.0	-54.2	-13.0	-41.2	
5737.50	-15.2	V	3.0	35.5	1.0	-49.7	-13.0	-36.7	
7650.00	-12.4	V	3.0	35.8	1.0	-47.2	-13.0	-34.2	
3825.00	-18.8	H	3.0	35.8	1.0	-53.5	-13.0	-40.5	
5737.50	-14.5	H	3.0	35.5	1.0	-48.9	-13.0	-35.9	
7650.00	-11.5	H	3.0	35.8	1.0	-46.3	-13.0	-33.3	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 25 Harmonics, 3MHz Bandwidth

Band LTE25 3MHz 16QAM

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	-20.0	V	3.0	35.9	1.0	-54.9	-13.0	-41.9	
5554.50	-16.2	V	3.0	35.5	1.0	-50.7	-13.0	-37.7	
7406.00	-12.9	V	3.0	35.7	1.0	-47.6	-13.0	-34.6	
3703.00	-20.1	H	3.0	35.9	1.0	-54.9	-13.0	-41.9	
5554.50	-15.5	H	3.0	35.5	1.0	-50.0	-13.0	-37.0	
7406.00	-12.3	H	3.0	35.7	1.0	-47.0	-13.0	-34.0	
Mid Ch, 1882.5									
3765.00	-19.8	V	3.0	35.8	1.0	-54.6	-13.0	-41.6	
5647.50	-15.9	V	3.0	35.5	1.0	-50.4	-13.0	-37.4	
7530.00	-12.8	V	3.0	35.7	1.0	-47.6	-13.0	-34.6	
3765.00	-20.1	H	3.0	35.8	1.0	-54.9	-13.0	-41.9	
5647.50	-15.1	H	3.0	35.5	1.0	-49.6	-13.0	-36.6	
7530.00	-11.9	H	3.0	35.7	1.0	-46.7	-13.0	-33.7	
High Ch, 1913.5									
3827.00	-19.5	V	3.0	35.8	1.0	-54.3	-13.0	-41.3	
5740.50	-15.6	V	3.0	35.5	1.0	-50.1	-13.0	-37.1	
7654.00	-12.6	V	3.0	35.8	1.0	-47.3	-13.0	-34.3	
3827.00	-19.7	H	3.0	35.8	1.0	-54.5	-13.0	-41.5	
5740.50	-15.2	H	3.0	35.5	1.0	-49.7	-13.0	-36.7	
7654.00	-11.5	H	3.0	35.8	1.0	-46.3	-13.0	-33.3	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 25 Harmonics, 3MHz Bandwidth

Band LTE25 3MHz QPSK

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	-19.9	V	3.0	35.9	1.0	-54.7	-13.0	-41.7	
5554.50	-16.0	V	3.0	35.5	1.0	-50.5	-13.0	-37.5	
7406.00	-13.0	V	3.0	35.7	1.0	-47.7	-13.0	-34.7	
3703.00	-19.9	H	3.0	35.9	1.0	-54.8	-13.0	-41.8	
5554.50	-15.7	H	3.0	35.5	1.0	-50.2	-13.0	-37.2	
7406.00	-12.2	H	3.0	35.7	1.0	-46.9	-13.0	-33.9	
Mid Ch, 1882.5									
3765.00	-19.7	V	3.0	35.8	1.0	-54.5	-13.0	-41.5	
5647.50	-15.3	V	3.0	35.5	1.0	-49.8	-13.0	-36.8	
7530.00	-12.8	V	3.0	35.7	1.0	-47.5	-13.0	-34.5	
3765.00	-20.0	H	3.0	35.8	1.0	-54.8	-13.0	-41.8	
5647.50	-15.0	H	3.0	35.5	1.0	-49.5	-13.0	-36.5	
7530.00	-11.7	H	3.0	35.7	1.0	-46.5	-13.0	-33.5	
High Ch, 1913.5									
3827.00	-19.0	V	3.0	35.8	1.0	-53.8	-13.0	-40.8	
5740.50	-15.5	V	3.0	35.5	1.0	-50.0	-13.0	-37.0	
7654.00	-12.5	V	3.0	35.8	1.0	-47.2	-13.0	-34.2	
3827.00	-19.0	H	3.0	35.8	1.0	-53.8	-13.0	-40.8	
5740.50	-14.9	H	3.0	35.5	1.0	-49.4	-13.0	-36.4	
7654.00	-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 #: 15I21523
Date: 8/22/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 25 Harmonics, 1.4MHz Bandwidth

Band
LTE25
1.4MHz
16QAM

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	-20.0	V	3.0	35.9	1.0	-54.8	-13.0	-41.8	
5552.10	-16.0	V	3.0	35.5	1.0	-50.5	-13.0	-37.5	
7402.80	-12.7	V	3.0	35.7	1.0	-47.5	-13.0	-34.5	
3701.40	-20.2	H	3.0	35.9	1.0	-55.1	-13.0	-42.1	
5552.10	-15.5	H	3.0	35.5	1.0	-50.0	-13.0	-37.0	
7402.80	-12.3	H	3.0	35.7	1.0	-47.0	-13.0	-34.0	
Mid Ch, 1882.5									
3765.00	-19.8	V	3.0	35.8	1.0	-44.7	-13.0	-31.7	
5647.50	-15.6	V	3.0	35.5	1.0	-50.1	-13.0	-37.1	
7530.00	-12.9	V	3.0	35.7	1.0	-47.7	-13.0	-34.7	
3765.00	-19.8	H	3.0	35.8	1.0	-54.6	-13.0	-41.6	
5647.50	-14.1	H	3.0	35.5	1.0	-48.6	-13.0	-35.6	
7530.00	-11.9	H	3.0	35.7	1.0	-46.7	-13.0	-33.7	
High Ch, 1914.3									
3828.60	-19.5	V	3.0	35.8	1.0	-54.3	-13.0	-41.3	
5742.90	-15.4	V	3.0	35.5	1.0	-49.9	-13.0	-36.9	
7657.20	-12.8	V	3.0	35.8	1.0	-47.5	-13.0	-34.5	
3828.60	-19.9	H	3.0	35.8	1.0	-54.7	-13.0	-41.7	
5742.90	-15.1	H	3.0	35.5	1.0	-49.6	-13.0	-36.6	
7657.20	-12.1	H	3.0	35.8	1.0	-46.9	-13.0	-33.9	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company:	LG Electronics
Project #:	15I21523
Date:	8/22/2015
Test Engineer:	A. Escamilla
Configuration:	EUT, AC Adapter, Headset
Location:	Chamber C
Mode:	LTE_QPSK Band 25 Harmonics, 1.4MHz Bandwidth

Band LTE25 1.4MHz QPSK

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	-20.0	V	3.0	35.9	1.0	-54.9	-13.0	-41.9	
5552.10	-15.9	V	3.0	35.5	1.0	-50.4	-13.0	-37.4	
7402.80	-12.5	V	3.0	35.7	1.0	-47.3	-13.0	-34.3	
3701.40	-20.1	H	3.0	35.9	1.0	-55.0	-13.0	-42.0	
5552.10	-15.3	H	3.0	35.5	1.0	-49.8	-13.0	-36.8	
7402.80	-12.1	H	3.0	35.7	1.0	-46.8	-13.0	-33.8	
Mid Ch, 1882.5									
3765.00	-19.2	V	3.0	35.8	1.0	-54.0	-13.0	-41.0	
5647.50	-15.6	V	3.0	35.5	1.0	-50.1	-13.0	-37.1	
7530.00	-12.5	V	3.0	35.7	1.0	-47.3	-13.0	-34.3	
3765.00	-19.7	H	3.0	35.8	1.0	-54.5	-13.0	-41.5	
5647.50	-15.1	H	3.0	35.5	1.0	-49.5	-13.0	-36.5	
7530.00	-11.7	H	3.0	35.7	1.0	-46.4	-13.0	-33.4	
High Ch, 1914.3									
3828.60	-19.4	V	3.0	35.8	1.0	-54.1	-13.0	-41.1	
5742.90	-15.5	V	3.0	35.5	1.0	-50.0	-13.0	-37.0	
7657.20	-12.6	V	3.0	35.8	1.0	-47.3	-13.0	-34.3	
3828.60	-19.3	H	3.0	35.8	1.0	-54.1	-13.0	-41.1	
5742.90	-14.4	H	3.0	35.5	1.0	-48.9	-13.0	-35.9	
7657.20	-11.3	H	3.0	35.8	1.0	-46.0	-13.0	-33.0	

LTE Band 26

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: R.Z
Configuration: EUT, AC Adapter, Headset
Location: Chamber A
Mode: LTE_16QAM Band 26 Harmonics, 15MHz Bandwidth

Band
LTE26
15MHz
16QAM

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Mid Ch, 831.5									
1663.00	-27.6	V	3.0	37.0	1.0	-63.7	-13.0	-50.7	
2494.50	-22.6	V	3.0	36.4	1.0	-58.0	-13.0	-45.0	
3326.00	-20.5	V	3.0	36.2	1.0	-55.7	-13.0	-42.7	
1663.00	-27.8	H	3.0	37.0	1.0	-63.8	-13.0	-50.8	
2494.50	-23.5	H	3.0	36.4	1.0	-58.9	-13.0	-45.9	
3326.00	-20.4	H	3.0	36.2	1.0	-55.6	-13.0	-42.6	
Mid Ch, 836.5									
1673.00	-27.3	V	3.0	37.0	1.0	-63.3	-13.0	-50.3	
2509.50	-22.5	V	3.0	36.4	1.0	-57.9	-13.0	-44.9	
3346.00	-20.7	V	3.0	36.1	1.0	-55.8	-13.0	-42.8	
1673.00	-27.9	H	3.0	37.0	1.0	-63.9	-13.0	-50.9	
2509.50	-24.3	H	3.0	36.4	1.0	-59.7	-13.0	-46.7	
3346.00	-20.9	H	3.0	36.1	1.0	-56.0	-13.0	-43.0	
High Ch, 841.5									
1683.00	-27.4	V	3.0	37.0	1.0	-63.4	-13.0	-50.4	
2524.50	-22.3	V	3.0	36.4	1.0	-57.7	-13.0	-44.7	
3366.00	-20.7	V	3.0	36.1	1.0	-55.8	-13.0	-42.8	
1683.00	-27.5	H	3.0	37.0	1.0	-63.5	-13.0	-50.5	
2524.50	-24.6	H	3.0	36.4	1.0	-60.0	-13.0	-47.0	
3366.00	-21.1	H	3.0	36.1	1.0	-56.2	-13.0	-43.2	

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: R.Z
Configuration: EUT, AC Adapter, Headset
Location: Chamber A
Mode: LTE_QPSK Band 26 Harmonics, 15MHz Bandwidth

Band	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
	Mid Ch, 831.5									
LTE26	1663.00	-27.5	V	3.0	37.0	1.0	-63.6	-13.0	-50.6	
	2494.50	-22.8	V	3.0	36.4	1.0	-58.2	-13.0	-45.2	
15MHz	3326.00	-20.3	V	3.0	36.2	1.0	-55.5	-13.0	-42.5	
	1663.00	-28.0	H	3.0	37.0	1.0	-64.0	-13.0	-51.0	
	2494.50	-22.9	H	3.0	36.4	1.0	-58.4	-13.0	-45.4	
QPSK	3326.00	-20.2	H	3.0	36.2	1.0	-55.3	-13.0	-42.3	
	Mid Ch, 836.5									
	1673.00	-27.4	V	3.0	37.0	1.0	-63.4	-13.0	-50.4	
	2509.50	-22.7	V	3.0	36.4	1.0	-58.1	-13.0	-45.1	
	3346.00	-21.7	V	3.0	36.1	1.0	-56.9	-13.0	-43.9	
	1673.00	-27.8	H	3.0	37.0	1.0	-63.8	-13.0	-50.8	
	2509.50	-23.9	H	3.0	36.4	1.0	-59.4	-13.0	-46.4	
	3346.00	-21.2	H	3.0	36.1	1.0	-56.3	-13.0	-43.3	
	High Ch, 841.5									
	1683.00	-27.4	V	3.0	37.0	1.0	-63.4	-13.0	-50.4	
	2524.50	-22.9	V	3.0	36.4	1.0	-58.3	-13.0	-45.3	
	3366.00	-20.9	V	3.0	36.1	1.0	-56.0	-13.0	-43.0	
	1683.00	-27.4	H	3.0	37.0	1.0	-63.4	-13.0	-50.4	
	2524.50	-25.2	H	3.0	36.4	1.0	-60.6	-13.0	-47.6	
	3366.00	-20.9	H	3.0	36.1	1.0	-56.1	-13.0	-43.1	

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: R.Z
Configuration: EUT, AC Adapter, Headset
Location: Chamber A
Mode: LTE_16QAM Band 26 Harmonics, 10MHz Bandwidth

Band
LTE26
10MHz
16QAM

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 819									
1638.00	-27.3	V	3.0	37.0	1.0	-63.3	-13.0	-50.3	
2457.00	-23.0	V	3.0	36.4	1.0	-58.4	-13.0	-45.4	
3276.00	-19.2	V	3.0	36.2	1.0	-54.4	-13.0	-41.4	
1638.00	-27.4	H	3.0	37.0	1.0	-63.4	-13.0	-50.4	
2457.00	-24.0	H	3.0	36.4	1.0	-59.4	-13.0	-46.4	
3276.00	-21.0	H	3.0	36.2	1.0	-56.1	-13.0	-43.1	
Mid Ch, 831.5									
1663.00	-27.1	V	3.0	37.0	1.0	-63.1	-13.0	-50.1	
2494.50	-22.4	V	3.0	36.4	1.0	-57.8	-13.0	-44.8	
3326.00	-19.6	V	3.0	36.1	1.0	-54.7	-13.0	-41.7	
1663.00	-27.7	H	3.0	37.0	1.0	-63.7	-13.0	-50.7	
2494.50	-24.1	H	3.0	36.4	1.0	-59.6	-13.0	-46.6	
3326.00	-21.1	H	3.0	36.1	1.0	-56.2	-13.0	-43.2	
High Ch, 844									
1688.00	0.0	V	3.0	37.0	1.0	-36.0	-13.0	-23.0	
2532.00	-21.7	V	3.0	36.4	1.0	-57.1	-13.0	-44.1	
3376.00	-20.0	V	3.0	36.1	1.0	-55.1	-13.0	-42.1	
1688.00	-27.7	H	3.0	37.0	1.0	-63.7	-13.0	-50.7	
2532.00	-24.4	H	3.0	36.4	1.0	-59.8	-13.0	-46.8	
3376.00	-20.4	H	3.0	36.1	1.0	-55.5	-13.0	-42.5	

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: R.Z
Configuration: EUT, AC Adapter, Headset
Location: Chamber A
Mode: LTE_QPSK Band 26 Harmonics, 10MHz Bandwidth

Band
LTE26
10MHz
QPSK

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 819									
1638.00	-27.5	V	3.0	37.0	1.0	-63.5	-13.0	-50.5	
2457.00	-22.7	V	3.0	36.4	1.0	-58.1	-13.0	-45.1	
3276.00	-20.9	V	3.0	36.2	1.0	-56.1	-13.0	-43.1	
1638.00	-28.1	H	3.0	37.0	1.0	-64.2	-13.0	-51.2	
2457.00	-24.2	H	3.0	36.4	1.0	-59.7	-13.0	-46.7	
3276.00	-20.1	H	3.0	36.2	1.0	-55.3	-13.0	-42.3	
Mid Ch, 831.5									
1663.00	-27.1	V	3.0	37.0	1.0	-63.1	-13.0	-50.1	
2494.50	-21.6	V	3.0	36.4	1.0	-57.0	-13.0	-44.0	
3326.00	-19.9	V	3.0	36.1	1.0	-55.1	-13.0	-42.1	
1663.00	-28.4	H	3.0	37.0	1.0	-64.4	-13.0	-51.4	
2494.50	-24.6	H	3.0	36.4	1.0	-60.1	-13.0	-47.1	
3326.00	-20.9	H	3.0	36.1	1.0	-56.0	-13.0	-43.0	
High Ch, 844									
1688.00	-26.4	V	3.0	37.0	1.0	-62.4	-13.0	-49.4	
2532.00	-22.6	V	3.0	36.4	1.0	-58.0	-13.0	-45.0	
3376.00	-21.5	V	3.0	36.1	1.0	-56.6	-13.0	-43.6	
1688.00	-27.9	H	3.0	37.0	1.0	-63.8	-13.0	-50.8	
2532.00	-25.0	H	3.0	36.4	1.0	-60.4	-13.0	-47.4	
3376.00	-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 #: 15I21523
Date: 8/21/2015
Test Engineer: R.Z
Configuration: EUT, AC Adapter, Headset
Location: Chamber A
Mode: LTE_16QAM Band 26 Harmonics, 5MHz Bandwidth

Band LTE26 5MHz 16QAM

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 816.5									
1633.00	-26.4	V	3.0	37.0	1.0	-62.5	-13.0	-49.5	
2449.50	-22.3	V	3.0	36.4	1.0	-57.7	-13.0	-44.7	
3266.00	-20.0	V	3.0	36.2	1.0	-55.1	-13.0	-42.1	
1633.00	-27.1	H	3.0	37.0	1.0	-63.2	-13.0	-50.2	
2449.50	-22.9	H	3.0	36.4	1.0	-58.4	-13.0	-45.4	
3266.00	-20.3	H	3.0	36.2	1.0	-55.5	-13.0	-42.5	
Mid Ch, 831.5									
1663.00	-26.5	V	3.0	37.0	1.0	-62.5	-13.0	-49.5	
2494.50	-22.2	V	3.0	36.4	1.0	-57.6	-13.0	-44.6	
3326.00	-20.8	V	3.0	36.1	1.0	-55.9	-13.0	-42.9	
1663.00	-27.8	H	3.0	37.0	1.0	-63.8	-13.0	-50.8	
2494.50	-23.4	H	3.0	36.4	1.0	-58.8	-13.0	-45.8	
3326.00	-20.4	H	3.0	36.1	1.0	-55.5	-13.0	-42.5	
High Ch, 846.5									
1693.00	-26.7	V	3.0	37.0	1.0	-62.6	-13.0	-49.6	
2539.50	-22.0	V	3.0	36.4	1.0	-57.4	-13.0	-44.4	
3386.00	-20.4	V	3.0	36.1	1.0	-55.5	-13.0	-42.5	
1693.00	-27.2	H	3.0	37.0	1.0	-63.2	-13.0	-50.2	
2539.50	-23.8	H	3.0	36.4	1.0	-59.2	-13.0	-46.2	
3386.00	-20.5	H	3.0	36.1	1.0	-55.6	-13.0	-42.6	

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: R.Z
Configuration: EUT, AC Adapter, Headset
Location: Chamber A
Mode: LTE_QPSK Band 26 Harmonics, 5MHz Bandwidth

Band LTE26 5MHz QPSK

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 816.5									
1633.00	-27.3	V	3.0	37.0	1.0	-63.4	-13.0	-50.4	
2449.50	-22.6	V	3.0	36.4	1.0	-58.0	-13.0	-45.0	
3266.00	-20.1	V	3.0	36.2	1.0	-55.2	-13.0	-42.2	
1633.00	-27.9	H	3.0	37.0	1.0	-64.0	-13.0	-51.0	
2449.50	-23.2	H	3.0	36.4	1.0	-58.7	-13.0	-45.7	
3266.00	-20.2	H	3.0	36.2	1.0	-55.4	-13.0	-42.4	
Mid Ch, 831.5									
1663.00	-27.3	V	3.0	37.0	1.0	-63.3	-13.0	-50.3	
2494.50	-22.5	V	3.0	36.4	1.0	-57.9	-13.0	-44.9	
3326.00	-21.1	V	3.0	36.1	1.0	-56.3	-13.0	-43.3	
1663.00	-27.9	H	3.0	37.0	1.0	-63.9	-13.0	-50.9	
2494.50	-24.1	H	3.0	36.4	1.0	-59.6	-13.0	-46.6	
3326.00	-21.7	H	3.0	36.1	1.0	-56.8	-13.0	-43.8	
High Ch, 846.5									
1693.00	-26.4	V	3.0	37.0	1.0	-62.3	-13.0	-49.3	
2539.50	-22.3	V	3.0	36.4	1.0	-57.7	-13.0	-44.7	
3386.00	-20.9	V	3.0	36.1	1.0	-56.0	-13.0	-43.0	
1693.00	-27.4	H	3.0	37.0	1.0	-63.4	-13.0	-50.4	
2539.50	-24.3	H	3.0	36.4	1.0	-59.7	-13.0	-46.7	
3386.00	-20.7	H	3.0	36.1	1.0	-55.8	-13.0	-42.8	

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: R.Z
Configuration: EUT, AC Adapter, Headset
Location: Chamber A
Mode: LTE_16QAM Band 26 Harmonics, 3MHz Bandwidth

Band LTE26 3MHz 16QAM

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 815.5									
1631.00	-27.4	V	3.0	37.0	1.0	-63.4	-13.0	-50.4	
2446.50	-22.5	V	3.0	36.4	1.0	-58.0	-13.0	-45.0	
3262.00	-19.3	V	3.0	36.2	1.0	-54.5	-13.0	-41.5	
1631.00	-27.4	H	3.0	37.0	1.0	-63.5	-13.0	-50.5	
2446.50	-24.1	H	3.0	36.4	1.0	-59.6	-13.0	-46.6	
3262.00	0.0	H	3.0	36.2	1.0	-35.2	-13.0	-22.2	
Mid Ch, 831.5									
1663.00	-27.1	V	3.0	37.0	1.0	-63.1	-13.0	-50.1	
2494.50	-22.7	V	3.0	36.4	1.0	-58.1	-13.0	-45.1	
3326.00	-20.6	V	3.0	36.1	1.0	-55.8	-13.0	-42.8	
1663.00	-27.3	H	3.0	37.0	1.0	-63.3	-13.0	-50.3	
2494.50	-24.4	H	3.0	36.4	1.0	-59.9	-13.0	-46.9	
3326.00	-21.0	H	3.0	36.1	1.0	-56.1	-13.0	-43.1	
High Ch, 847.5									
1695.00	-26.4	V	3.0	37.0	1.0	-62.3	-13.0	-49.3	
2542.50	-22.4	V	3.0	36.4	1.0	-57.8	-13.0	-44.8	
3390.00	-20.6	V	3.0	36.1	1.0	-55.7	-13.0	-42.7	
1695.00	-27.1	H	3.0	37.0	1.0	-63.1	-13.0	-50.1	
2542.50	-24.2	H	3.0	36.4	1.0	-59.6	-13.0	-46.6	
3390.00	-21.3	H	3.0	36.1	1.0	-56.4	-13.0	-43.4	

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/21/2015
Test Engineer: R.Z
Configuration: EUT, AC Adapter, Headset
Location: Chamber A
Mode: LTE_QPSK Band 26 Harmonics, 3MHz Bandwidth

Band LTE26 3MHz QPSK

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 815.5									
1631.00	-27.3	V	3.0	37.0	1.0	-63.3	-13.0	-50.3	
2446.50	-22.6	V	3.0	36.4	1.0	-58.0	-13.0	-45.0	
3262.00	-18.6	V	3.0	36.2	1.0	-53.8	-13.0	-40.8	
1631.00	-25.9	H	3.0	37.0	1.0	-62.0	-13.0	-49.0	
2446.50	-23.8	H	3.0	36.4	1.0	-59.2	-13.0	-46.2	
3262.00	-19.9	H	3.0	36.2	1.0	-55.1	-13.0	-42.1	
Mid Ch, 831.5									
1663.00	-27.0	V	3.0	37.0	1.0	-63.0	-13.0	-50.0	
2494.50	-23.0	V	3.0	36.4	1.0	-58.4	-13.0	-45.4	
3326.00	-20.9	V	3.0	36.1	1.0	-56.1	-13.0	-43.1	
1663.00	-27.2	H	3.0	37.0	1.0	-63.2	-13.0	-50.2	
2494.50	-24.7	H	3.0	36.4	1.0	-60.2	-13.0	-47.2	
3326.00	-21.5	H	3.0	36.1	1.0	-56.6	-13.0	-43.6	
High Ch, 847.5									
1695.00	-26.2	V	3.0	37.0	1.0	-62.2	-13.0	-49.2	
2542.50	-23.4	V	3.0	36.4	1.0	-58.8	-13.0	-45.8	
3390.00	-21.0	V	3.0	36.1	1.0	-56.1	-13.0	-43.1	
1695.00	-27.0	H	3.0	37.0	1.0	-63.0	-13.0	-50.0	
2542.50	-24.7	H	3.0	36.4	1.0	-60.1	-13.0	-47.1	
3390.00	-21.9	H	3.0	36.1	1.0	-57.0	-13.0	-44.0	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG
Project #: 15I21523
Date: 8/26/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 26 Harmonics, 1.4MHz Bandwidth

Band LTE26 1.4MHz 16QAM

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 814.7									
1629.40	-27.3	V	3.0	37.1	1.0	-63.3	-13.0	-50.3	
2444.10	-22.9	V	3.0	36.4	1.0	-58.3	-13.0	-45.3	
3258.80	-21.6	V	3.0	36.2	1.0	-56.8	-13.0	-43.8	
1629.40	-27.8	H	3.0	37.1	1.0	-63.8	-13.0	-50.8	
2444.10	-25.0	H	3.0	36.4	1.0	-60.5	-13.0	-47.5	
3258.80	-21.2	H	3.0	36.2	1.0	-56.4	-13.0	-43.4	
Mid Ch, 831.5									
1663.00	-27.0	V	3.0	37.0	1.0	-63.1	-13.0	-50.1	
2494.50	-22.8	V	3.0	36.4	1.0	-58.2	-13.0	-45.2	
3326.00	-21.2	V	3.0	36.1	1.0	-56.3	-13.0	-43.3	
1663.00	-26.7	H	3.0	37.0	1.0	-62.7	-13.0	-49.7	
2494.50	-25.0	H	3.0	36.4	1.0	-60.4	-13.0	-47.4	
3326.00	-21.2	H	3.0	36.1	1.0	-56.3	-13.0	-43.3	
High Ch, 848.3									
1696.60	-26.8	V	3.0	37.0	1.0	-62.8	-13.0	-49.8	
2544.90	-23.0	V	3.0	36.4	1.0	-58.4	-13.0	-45.4	
3393.20	-21.4	V	3.0	36.1	1.0	-56.4	-13.0	-43.4	
1696.60	-27.3	H	3.0	37.0	1.0	-63.3	-13.0	-50.3	
2544.90	-24.6	H	3.0	36.4	1.0	-60.0	-13.0	-47.0	
3393.20	-21.3	H	3.0	36.1	1.0	-56.4	-13.0	-43.4	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG
Project #: 15I21523
Date: 8/26/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 26 Harmonics, 1.4MHz Bandwidth

Band LTE26 1.4MHz QPSK

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 814.7									
1629.40	-27.1	V	3.0	37.1	1.0	-63.2	-13.0	-50.2	
2444.10	-23.1	V	3.0	36.4	1.0	-58.5	-13.0	-45.5	
3258.80	-21.4	V	3.0	36.2	1.0	-56.5	-13.0	-43.5	
1629.40	-27.6	H	3.0	37.1	1.0	-63.7	-13.0	-50.7	
2444.10	-24.7	H	3.0	36.4	1.0	-60.1	-13.0	-47.1	
3258.80	-21.3	H	3.0	36.2	1.0	-56.5	-13.0	-43.5	
Mid Ch, 831.5									
1663.00	-27.1	V	3.0	37.0	1.0	-63.1	-13.0	-50.1	
2494.50	-22.5	V	3.0	36.4	1.0	-57.9	-13.0	-44.9	
3326.00	-21.4	V	3.0	36.1	1.0	-56.5	-13.0	-43.5	
1663.00	-26.7	H	3.0	37.0	1.0	-62.7	-13.0	-49.7	
2494.50	-24.8	H	3.0	36.4	1.0	-60.3	-13.0	-47.3	
3326.00	-20.9	H	3.0	36.1	1.0	-56.0	-13.0	-43.0	
High Ch, 848.3									
1696.60	-26.7	V	3.0	37.0	1.0	-62.7	-13.0	-49.7	
2544.90	-22.7	V	3.0	36.4	1.0	-58.2	-13.0	-45.2	
3393.20	-21.3	V	3.0	36.1	1.0	-56.4	-13.0	-43.4	
1696.60	-27.7	H	3.0	37.0	1.0	-63.6	-13.0	-50.6	
2544.90	-24.5	H	3.0	36.4	1.0	-59.9	-13.0	-46.9	
3393.20	-21.1	H	3.0	36.1	1.0	-56.2	-13.0	-43.2	

LTE Band 41

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/19/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 41 Harmonics, 20MHz Bandwidth

Band LTE41 20MHz 16QAM

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2506									
5012.00	-16.8	V	3.0	35.5	1.0	-51.2	-25.0	-26.2	
7518.00	-9.8	V	3.0	35.7	1.0	-44.6	-25.0	-19.6	
10024.00	-2.1	V	3.0	36.0	1.0	-37.2	-25.0	-12.2	
5012.00	-16.8	H	3.0	35.5	1.0	-51.2	-25.0	-26.2	
7518.00	-11.3	H	3.0	35.7	1.0	-46.1	-25.0	-21.1	
10024.00	-9.9	H	3.0	36.0	1.0	-44.9	-25.0	-19.9	
Mid Ch, 2593									
5186.00	-16.3	V	3.0	35.4	1.0	-50.7	-25.0	-25.7	
7779.00	-9.0	V	3.0	35.8	1.0	-43.8	-25.0	-18.8	
10372.00	-1.0	V	3.0	35.8	1.0	-35.9	-25.0	-10.9	
5186.00	-16.3	H	3.0	35.4	1.0	-50.7	-25.0	-25.7	
7779.00	-10.8	H	3.0	35.8	1.0	-45.6	-25.0	-20.6	
10372.00	-6.3	H	3.0	35.8	1.0	-41.1	-25.0	-16.1	
High Ch, 2680									
5360.00	-16.8	V	3.0	35.4	1.0	-51.2	-25.0	-26.2	
8040.00	-11.5	V	3.0	35.8	1.0	-46.3	-25.0	-21.3	
10720.00	-6.1	V	3.0	35.7	1.0	-40.7	-25.0	-15.7	
5360.00	-15.8	H	3.0	35.4	1.0	-50.2	-25.0	-25.2	
8040.00	-11.2	H	3.0	35.8	1.0	-46.0	-25.0	-21.0	
10720.00	-2.4	H	3.0	35.7	1.0	-37.1	-25.0	-12.1	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/19/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 41 Harmonics, 20MHz Bandwidth

Band LTE41 20MHz QPSK

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2506									
5012.00	-16.4	V	3.0	35.5	1.0	-50.9	-25.0	-25.9	
7518.00	-11.4	V	3.0	35.7	1.0	-46.1	-25.0	-21.1	
10024.00	-6.7	V	3.0	36.0	1.0	-41.7	-25.0	-16.7	
5012.00	-16.5	H	3.0	35.5	1.0	-50.9	-25.0	-25.9	
7518.00	-11.1	H	3.0	35.7	1.0	-45.8	-25.0	-20.8	
10024.00	-10.3	H	3.0	36.0	1.0	-45.3	-25.0	-20.3	
Mid Ch, 2593									
5186.00	-16.0	V	3.0	35.4	1.0	-50.5	-25.0	-25.5	
7779.00	-11.1	V	3.0	35.8	1.0	-45.9	-25.0	-20.9	
10372.00	-5.5	V	3.0	35.8	1.0	-40.4	-25.0	-15.4	
5186.00	-16.1	H	3.0	35.4	1.0	-50.6	-25.0	-25.6	
7779.00	-10.7	H	3.0	35.8	1.0	-45.5	-25.0	-20.5	
10372.00	-8.5	H	3.0	35.8	1.0	-43.4	-25.0	-18.4	
High Ch, 2680									
5360.00	-16.5	V	3.0	35.4	1.0	-51.0	-25.0	-26.0	
8040.00	-11.7	V	3.0	35.8	1.0	-46.5	-25.0	-21.5	
10720.00	-8.0	V	3.0	35.7	1.0	-42.7	-25.0	-17.7	
5360.00	-16.3	H	3.0	35.4	1.0	-50.8	-25.0	-25.8	
8040.00	-11.5	H	3.0	35.8	1.0	-46.3	-25.0	-21.3	
10720.00	-7.1	H	3.0	35.7	1.0	-41.8	-25.0	-16.8	

Band

LTE41

15MHz

16QAM

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/19/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 41 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, 2503.5									
5007.00	-17.2	V	3.0	35.5	1.0	-51.7	-25.0	-26.7	
7510.50	-11.9	V	3.0	35.7	1.0	-46.7	-25.0	-21.7	
10014.00	-4.4	V	3.0	36.0	1.0	-39.5	-25.0	-14.5	
5007.00	-16.5	H	3.0	35.5	1.0	-51.0	-25.0	-26.0	
7510.50	-11.7	H	3.0	35.7	1.0	-46.4	-25.0	-21.4	
10014.00	-9.7	H	3.0	36.0	1.0	-44.7	-25.0	-19.7	
Mid Ch, 2593									
5186.00	-16.7	V	3.0	35.4	1.0	-51.1	-25.0	-26.1	
7779.00	-11.2	V	3.0	35.8	1.0	-46.0	-25.0	-21.0	
10372.00	-3.5	V	3.0	35.8	1.0	-38.3	-25.0	-13.3	
5186.00	-16.4	H	3.0	35.4	1.0	-50.8	-25.0	-25.8	
7779.00	-11.0	H	3.0	35.8	1.0	-45.8	-25.0	-20.8	
10372.00	-6.5	H	3.0	35.8	1.0	-41.3	-25.0	-16.3	
High Ch, 2682.5									
5365.00	-16.6	V	3.0	35.4	1.0	-51.1	-25.0	-26.1	
8047.50	-12.1	V	3.0	35.8	1.0	-46.9	-25.0	-21.9	
10730.00	-8.2	V	3.0	35.7	1.0	-42.9	-25.0	-17.9	
5365.00	-16.3	H	3.0	35.4	1.0	-50.7	-25.0	-25.7	
8047.50	-11.0	H	3.0	35.8	1.0	-45.8	-25.0	-20.8	
10730.00	-5.6	H	3.0	35.7	1.0	-40.3	-25.0	-15.3	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/19/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 41 Harmonics, 15MHz Bandwidth

Band LTE41 15MHz QPSK

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2503.5									
5007.00	-16.9	V	3.0	35.5	1.0	-51.3	-25.0	-26.3	
7510.50	-11.2	V	3.0	35.7	1.0	-46.0	-25.0	-21.0	
10014.00	-5.8	V	3.0	36.0	1.0	-40.8	-25.0	-15.8	
5007.00	-15.6	H	3.0	35.5	1.0	-50.0	-25.0	-25.0	
7510.50	-11.3	H	3.0	35.7	1.0	-46.1	-25.0	-21.1	
10014.00	-9.8	H	3.0	36.0	1.0	-44.8	-25.0	-19.8	
Mid Ch, 2593									
5186.00	-16.6	V	3.0	35.4	1.0	-51.0	-25.0	-26.0	
7779.00	-12.0	V	3.0	35.8	1.0	-46.8	-25.0	-21.8	
10372.00	-5.0	V	3.0	35.8	1.0	-39.8	-25.0	-14.8	
5186.00	-15.9	H	3.0	35.4	1.0	-50.3	-25.0	-25.3	
7779.00	-11.0	H	3.0	35.8	1.0	-45.7	-25.0	-20.7	
10372.00	-7.8	H	3.0	35.8	1.0	-42.6	-25.0	-17.6	
High Ch, 2682.5									
5365.00	-16.7	V	3.0	35.4	1.0	-51.2	-25.0	-26.2	
8047.50	-11.8	V	3.0	35.8	1.0	-46.6	-25.0	-21.6	
10730.00	-8.8	V	3.0	35.7	1.0	-43.5	-25.0	-18.5	
5365.00	-15.7	H	3.0	35.4	1.0	-50.1	-25.0	-25.1	
8047.50	-11.0	H	3.0	35.8	1.0	-45.8	-25.0	-20.8	
10730.00	-7.2	H	3.0	35.7	1.0	-41.9	-25.0	-16.9	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/19/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 41 Harmonics, 10MHz Bandwidth

Band
LTE41
10MHz
16QAM

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2501									
5002.00	-16.8	V	3.0	35.5	1.0	-51.3	-25.0	-26.3	
7503.00	-11.0	V	3.0	35.7	1.0	-45.7	-25.0	-20.7	
10004.00	-10.7	V	3.0	36.0	1.0	-45.7	-25.0	-20.7	
5002.00	-16.2	H	3.0	35.5	1.0	-50.7	-25.0	-25.7	
7503.00	-11.0	H	3.0	35.7	1.0	-45.7	-25.0	-20.7	
10004.00	-7.7	H	3.0	36.0	1.0	-42.8	-25.0	-17.8	
Mid Ch, 2593									
5186.00	-16.5	V	3.0	35.4	1.0	-50.9	-25.0	-25.9	
7779.00	-10.2	V	3.0	35.8	1.0	-44.9	-25.0	-19.9	
10372.00	-7.6	V	3.0	35.8	1.0	-42.5	-25.0	-17.5	
5186.00	-15.9	H	3.0	35.4	1.0	-50.3	-25.0	-25.3	
7779.00	-9.7	H	3.0	35.8	1.0	-44.5	-25.0	-19.5	
10372.00	-9.4	H	3.0	35.8	1.0	-44.3	-25.0	-19.3	
High Ch, 2685									
5370.00	-15.7	V	3.0	35.4	1.0	-50.2	-25.0	-25.2	
8055.00	-12.1	V	3.0	35.8	1.0	-46.9	-25.0	-21.9	
10740.00	-2.2	V	3.0	35.7	1.0	-36.9	-25.0	-11.9	
5370.00	-16.4	H	3.0	35.4	1.0	-50.9	-25.0	-25.9	
8055.00	-11.3	H	3.0	35.8	1.0	-46.1	-25.0	-21.1	
10740.00	-10.1	H	3.0	35.7	1.0	-44.8	-25.0	-19.8	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company:	LG Electronics
Project #:	15I21523
Date:	8/19/2015
Test Engineer:	A. Escamilla
Configuration:	EUT, AC Adapter, Headset
Location:	Chamber C
Mode:	LTE_QPSK Band 41 Harmonics, 10MHz Bandwidth

Band LTE41 10MHz QPSK

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2501									
5002.00	-17.2	V	3.0	35.5	1.0	-51.6	-25.0	-26.6	
7503.00	-11.1	V	3.0	35.7	1.0	-45.8	-25.0	-20.8	
10004.00	-10.1	V	3.0	36.0	1.0	-45.2	-25.0	-20.2	
5002.00	-16.5	H	3.0	35.5	1.0	-50.9	-25.0	-25.9	
7503.00	-10.5	H	3.0	35.7	1.0	-45.3	-25.0	-20.3	
10004.00	-8.1	H	3.0	36.0	1.0	-43.1	-25.0	-18.1	
Mid Ch, 2593									
5186.00	-16.3	V	3.0	35.4	1.0	-50.7	-25.0	-25.7	
7779.00	-10.2	V	3.0	35.8	1.0	-45.0	-25.0	-20.0	
10372.00	-8.6	V	3.0	35.8	1.0	-43.4	-25.0	-18.4	
5186.00	-15.6	H	3.0	35.4	1.0	-50.0	-25.0	-25.0	
7779.00	-9.2	H	3.0	35.8	1.0	-43.9	-25.0	-18.9	
10372.00	-9.1	H	3.0	35.8	1.0	-44.0	-25.0	-19.0	
High Ch, 2685									
5370.00	-15.9	V	3.0	35.4	1.0	-50.4	-25.0	-25.4	
8055.00	-12.0	V	3.0	35.8	1.0	-46.8	-25.0	-21.8	
10740.00	-2.9	V	3.0	35.7	1.0	-37.6	-25.0	-12.6	
5370.00	-16.2	H	3.0	35.4	1.0	-50.6	-25.0	-25.6	
8055.00	-11.1	H	3.0	35.8	1.0	-45.9	-25.0	-20.9	
10740.00	-9.7	H	3.0	35.7	1.0	-44.3	-25.0	-19.3	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/19/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_16QAM Band 41 Harmonics, 5MHz Bandwidth

Band LTE41 5MHz 16QAM

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2498.5									
4997.00	-16.1	V	3.0	35.5	1.0	-50.6	-25.0	-25.6	
7495.50	-12.9	V	3.0	35.7	1.0	-47.7	-25.0	-22.7	
9994.00	-6.3	V	3.0	36.0	1.0	-41.3	-25.0	-16.3	
4997.00	-17.0	H	3.0	35.5	1.0	-51.5	-25.0	-26.5	
7495.50	-11.4	H	3.0	35.7	1.0	-46.2	-25.0	-21.2	
9994.00	-10.0	H	3.0	36.0	1.0	-45.0	-25.0	-20.0	
Mid Ch, 2593									
5186.00	-16.8	V	3.0	35.4	1.0	-51.3	-25.0	-26.3	
7779.00	-10.7	V	3.0	35.8	1.0	-45.4	-25.0	-20.4	
10372.00	-2.8	V	3.0	35.8	1.0	-37.6	-25.0	-12.6	
5186.00	-16.2	H	3.0	35.4	1.0	-50.6	-25.0	-25.6	
7779.00	-9.8	H	3.0	35.8	1.0	-44.6	-25.0	-19.6	
10372.00	-9.1	H	3.0	35.8	1.0	-44.0	-25.0	-19.0	
High Ch, 2687.5									
5375.00	-16.0	V	3.0	35.4	1.0	-50.4	-25.0	-25.4	
8062.50	-12.5	V	3.0	35.8	1.0	-47.3	-25.0	-22.3	
10750.00	-5.0	V	3.0	35.7	1.0	-39.7	-25.0	-14.7	
5375.00	-16.5	H	3.0	35.4	1.0	-50.9	-25.0	-25.9	
8062.50	-11.0	H	3.0	35.8	1.0	-45.8	-25.0	-20.8	
10750.00	-9.9	H	3.0	35.7	1.0	-44.6	-25.0	-19.6	

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: LG Electronics
Project #: 15I21523
Date: 8/19/2015
Test Engineer: A. Escamilla
Configuration: EUT, AC Adapter, Headset
Location: Chamber C
Mode: LTE_QPSK Band 41 Harmonics, 5MHz Bandwidth

Band LTE41 5MHz QPSK

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2498.5									
4997.00	-16.5	V	3.0	35.5	1.0	-50.9	-25.0	-25.9	
7495.50	-12.9	V	3.0	35.7	1.0	-47.7	-25.0	-22.7	
9994.00	-4.7	V	3.0	36.0	1.0	-39.7	-25.0	-14.7	
4997.00	-16.4	H	3.0	35.5	1.0	-50.9	-25.0	-25.9	
7495.50	-11.3	H	3.0	35.7	1.0	-46.1	-25.0	-21.1	
9994.00	-10.5	H	3.0	36.0	1.0	-45.5	-25.0	-20.5	
Mid Ch, 2593									
5186.00	-16.4	V	3.0	35.4	1.0	-50.8	-25.0	-25.8	
7779.00	-10.7	V	3.0	35.8	1.0	-45.5	-25.0	-20.5	
10372.00	-3.9	V	3.0	35.8	1.0	-38.8	-25.0	-13.8	
5186.00	-16.1	H	3.0	35.4	1.0	-50.6	-25.0	-25.6	
7779.00	-10.0	H	3.0	35.8	1.0	-44.7	-25.0	-19.7	
10372.00	-9.2	H	3.0	35.8	1.0	-44.0	-25.0	-19.0	
High Ch, 2687.5									
5375.00	-15.5	V	3.0	35.4	1.0	-49.9	-25.0	-24.9	
8062.50	-12.0	V	3.0	35.8	1.0	-46.8	-25.0	-21.8	
10750.00	-5.3	V	3.0	35.7	1.0	-40.0	-25.0	-15.0	
5375.00	-16.3	H	3.0	35.4	1.0	-50.8	-25.0	-25.8	
8062.50	-11.4	H	3.0	35.8	1.0	-46.2	-25.0	-21.2	
10750.00	-9.7	H	3.0	35.7	1.0	-44.4	-25.0	-19.4	