

17.2.1. SPURIOUS RADIATION PLOTS

GSM

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: SOMC
 Project #: 11626381
 Date: 4/5/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Adapter
 Location: Chamber C
 Mode: GPRS 850 MHz Harmonics

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch. 824.2									
1648.40	-22.4	V	3.0	37.0	1.0	-58.4	-13.0	-45.4	
2472.60	-33.1	V	3.0	36.4	1.0	-68.5	-13.0	-55.5	
3296.80	-32.1	V	3.0	36.2	1.0	-67.3	-13.0	-54.3	
1648.40	-21.8	H	3.0	37.0	1.0	-57.8	-13.0	-44.8	
2472.60	-34.8	H	3.0	36.4	1.0	-70.2	-13.0	-57.2	
3296.80	-31.7	H	3.0	36.2	1.0	-66.8	-13.0	-53.8	
Mid Ch. 836.6									
1673.20	-20.8	V	3.0	37.0	1.0	-56.8	-13.0	-43.8	
2509.80	-33.0	V	3.0	36.4	1.0	-68.4	-13.0	-55.4	
3346.40	-31.0	V	3.0	36.1	1.0	-66.2	-13.0	-53.2	
1673.20	-22.1	H	3.0	37.0	1.0	-59.1	-13.0	-46.1	
2509.80	-32.9	H	3.0	36.4	1.0	-68.3	-13.0	-55.3	
3346.40	-31.1	H	3.0	36.1	1.0	-66.2	-13.0	-53.2	
High Ch. 848.8									
1697.60	-24.7	V	3.0	37.0	1.0	-60.7	-13.0	-47.7	
2546.40	-32.5	V	3.0	36.4	1.0	-68.0	-13.0	-55.0	
3395.20	-31.5	V	3.0	36.1	1.0	-66.5	-13.0	-53.5	
1697.60	-27.6	H	3.0	37.0	1.0	-63.6	-13.0	-50.6	
2546.40	-34.0	H	3.0	36.4	1.0	-69.4	-13.0	-56.4	
3395.20	-31.3	H	3.0	36.1	1.0	-66.3	-13.0	-53.3	

GSM850 GPRS

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: SOMC
 Project #: 11626381
 Date: 4/5/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Adapter
 Location: Chamber C
 Mode: EGPRS 850 MHz Harmonics

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch. 824.2									
1648.40	-27.9	V	3.0	37.0	1.0	-63.9	-13.0	-50.9	
2472.60	-33.3	V	3.0	36.4	1.0	-68.7	-13.0	-55.7	
3296.80	-32.2	V	3.0	36.2	1.0	-67.3	-13.0	-54.3	
1648.40	-22.0	H	3.0	37.0	1.0	-58.0	-13.0	-45.0	
2472.60	-35.0	H	3.0	36.4	1.0	-70.4	-13.0	-57.4	
3296.80	-32.5	H	3.0	36.2	1.0	-67.6	-13.0	-54.6	
Mid Ch. 836.6									
1673.20	-24.8	V	3.0	37.0	1.0	-60.8	-13.0	-47.8	
2509.80	-33.0	V	3.0	36.4	1.0	-68.4	-13.0	-55.4	
3346.40	-31.0	V	3.0	36.1	1.0	-66.2	-13.0	-53.2	
1673.20	-26.4	H	3.0	37.0	1.0	-62.4	-13.0	-49.4	
2509.80	-34.8	H	3.0	36.4	1.0	-70.2	-13.0	-57.2	
3346.40	-31.3	H	3.0	36.1	1.0	-66.4	-13.0	-53.4	
High Ch. 848.8									
1697.60	-24.4	V	3.0	37.0	1.0	-60.3	-13.0	-47.3	
2546.40	-32.5	V	3.0	36.4	1.0	-67.9	-13.0	-54.9	
3395.20	-31.6	V	3.0	36.1	1.0	-66.7	-13.0	-53.7	
1697.60	-26.4	H	3.0	37.0	1.0	-62.3	-13.0	-49.3	
2546.40	-34.1	H	3.0	36.4	1.0	-69.5	-13.0	-56.5	
3395.20	-31.9	H	3.0	36.1	1.0	-67.0	-13.0	-54.0	

GSM850 EGPRS

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

Company: SOMC
 Project #: 11626381 (PY7-08618T)
 Date: 4/5/2017
 Test Engineer: 43574 JS
 Configuration: EUT Only
 Location: Chamber B
 Mode: GPRS 1900 MHz Harmonics

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch. 1950.2									
3780.40	-11.7	V	3.0	35.9	1.0	-46.6	-13.0	-33.6	
5550.60	-10.3	V	3.0	35.5	1.0	-44.7	-13.0	-31.7	
7400.80	-8.3	V	3.0	35.7	1.0	-43.0	-13.0	-30.0	
3780.40	-12.8	H	3.0	35.9	1.0	-47.7	-13.0	-34.7	
5550.60	-9.2	H	3.0	35.5	1.0	-43.7	-13.0	-30.7	
7400.80	-7.0	H	3.0	35.7	1.0	-41.7	-13.0	-28.7	
Mid Ch. 1880									
3760.00	-11.8	V	3.0	35.8	1.0	-46.6	-13.0	-33.6	
5640.00	-9.7	V	3.0	35.5	1.0	-44.2	-13.0	-31.2	
7520.00	-8.3	V	3.0	35.7	1.0	-43.1	-13.0	-30.1	
3760.00	-11.9	H	3.0	35.8	1.0	-46.7	-13.0	-33.7	
5640.00	-9.2	H	3.0	35.5	1.0	-43.7	-13.0	-30.7	
7520.00	-8.8	H	3.0	35.7	1.0	-41.5	-13.0	-28.5	
High Ch. 1909.8									
3819.60	-11.1	V	3.0	35.8	1.0	-45.9	-13.0	-32.9	
5729.40	-10.1	V	3.0	35.5	1.0	-44.6	-13.0	-31.6	
7639.20	-8.4	V	3.0	35.8	1.0	-43.2	-13.0	-30.2	
3819.60	-12.1	H	3.0	35.8	1.0	-46.9	-13.0	-33.9	
5729.40	-8.4	H	3.0	35.5	1.0	-42.9	-13.0	-29.9	
7639.20	-6.9	H	3.0	35.8	1.0	-41.6	-13.0	-28.6	

GSM1900 GPRS

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

Company: SOMC
 Project #: 11626381 (PY7-08618T)
 Date: 4/5/2017
 Test Engineer: 43574 JS
 Configuration: EUT Only
 Location: Chamber B
 Mode: EGPRS 1900 MHz Harmonics

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch. 1850.2									
3700.40	-12.3	V	3.0	35.9	1.0	-47.2	-13.0	-34.2	
5550.60	-10.7	V	3.0	35.5	1.0	-45.1	-13.0	-32.1	
7400.80	-9.1	V	3.0	35.7	1.0	-43.8	-13.0	-30.8	
3700.40	-13.2	H	3.0	35.9	1.0	-48.1	-13.0	-35.1	
5550.60	-9.5	H	3.0	35.5	1.0	-44.0	-13.0	-31.0	
7400.80	-8.3	H	3.0	35.7	1.0	-43.0	-13.0	-30.0	
Mid Ch. 1880									
3760.00	-12.3	V	3.0	35.8	1.0	-47.1	-13.0	-34.1	
5640.00	-11.5	V	3.0	35.5	1.0	-46.0	-13.0	-33.0	
7520.00	-8.9	V	3.0	35.7	1.0	-43.7	-13.0	-30.7	
3760.00	-12.1	H	3.0	35.8	1.0	-46.9	-13.0	-33.9	
5640.00	-9.4	H	3.0	35.5	1.0	-43.9	-13.0	-30.9	
7520.00	-7.9	H	3.0	35.7	1.0	-42.6	-13.0	-29.6	
High Ch. 1909.8									
3819.60	-12.6	V	3.0	35.8	1.0	-47.3	-13.0	-34.3	
5729.40	-10.5	V	3.0	35.5	1.0	-45.0	-13.0	-32.0	
7639.20	-8.7	V	3.0	35.8	1.0	-43.4	-13.0	-30.4	
3819.60	-13.2	H	3.0	35.8	1.0	-48.0	-13.0	-35.0	
5729.40	-8.9	H	3.0	35.5	1.0	-43.4	-13.0	-30.4	
7639.20	-7.7	H	3.0	35.8	1.0	-42.4	-13.0	-29.4	

GSM1900 EGPRS

WCDMA

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

Company: SOMC
 Project #: 11626381
 Date: 4/5/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Adapter
 Location: Chamber C
 Mode: Rel99 Band 2 Harmonics

F Mhz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1852.4MHz									
3764.80	-27.4	V	3.0	35.9	1.0	-62.3	-13.0	-49.3	
5557.20	-26.4	V	3.0	35.5	1.0	-60.9	-13.0	-47.9	
7409.60	-25.1	V	3.0	35.7	1.0	-59.9	-13.0	-46.9	
3764.80	-26.5	H	3.0	35.9	1.0	-63.5	-13.0	-50.5	
5557.20	-26.0	H	3.0	35.5	1.0	-60.5	-13.0	-47.5	
7409.60	-24.1	H	3.0	35.7	1.0	-58.8	-13.0	-45.8	
Mid Ch, 1880MHz									
3760.00	-27.2	V	3.0	35.8	1.0	-62.0	-13.0	-49.0	
5640.00	-25.0	V	3.0	35.5	1.0	-59.5	-13.0	-46.5	
7520.00	-25.1	V	3.0	35.7	1.0	-59.9	-13.0	-46.9	
3760.00	-28.8	H	3.0	35.8	1.0	-63.6	-13.0	-50.6	
5640.00	-24.1	H	3.0	35.5	1.0	-58.6	-13.0	-45.6	
7520.00	-23.5	H	3.0	35.7	1.0	-58.3	-13.0	-45.3	
High Ch, 1907.6MHz									
3815.20	-27.9	V	3.0	35.8	1.0	-62.7	-13.0	-49.7	
5722.80	-26.0	V	3.0	35.5	1.0	-60.5	-13.0	-47.5	
7630.40	-25.0	V	3.0	35.8	1.0	-59.7	-13.0	-46.7	
3815.20	-28.5	H	3.0	35.8	1.0	-63.3	-13.0	-50.3	
5722.80	-24.6	H	3.0	35.5	1.0	-59.1	-13.0	-46.1	
7630.40	-23.1	H	3.0	35.8	1.0	-57.9	-13.0	-44.9	

B2 REL99

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

Company: SOMC
 Project #: 11626381
 Date: 4/5/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Adapter
 Location: Chamber C
 Mode: HSDPA Band 2 Harmonics

F Mhz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1852.4MHz									
3764.80	-28.6	V	3.0	35.9	1.0	-63.4	-13.0	-50.4	
5557.20	-26.4	V	3.0	35.5	1.0	-60.8	-13.0	-47.8	
7409.60	-24.6	V	3.0	35.7	1.0	-59.3	-13.0	-46.3	
3764.80	-29.1	H	3.0	35.9	1.0	-63.9	-13.0	-50.9	
5557.20	-25.9	H	3.0	35.5	1.0	-60.4	-13.0	-47.4	
7409.60	-23.7	H	3.0	35.7	1.0	-58.4	-13.0	-45.4	
Mid Ch, 1880MHz									
3760.00	-28.2	V	3.0	35.8	1.0	-63.0	-13.0	-50.0	
5640.00	-24.7	V	3.0	35.5	1.0	-59.2	-13.0	-46.2	
7520.00	-24.3	V	3.0	35.7	1.0	-59.1	-13.0	-46.1	
3760.00	-29.1	H	3.0	35.8	1.0	-63.9	-13.0	-50.9	
5640.00	-24.1	H	3.0	35.5	1.0	-58.5	-13.0	-45.5	
7520.00	-23.6	H	3.0	35.7	1.0	-58.3	-13.0	-45.3	
High Ch, 1907.6MHz									
3815.20	-28.2	V	3.0	35.8	1.0	-62.9	-13.0	-49.9	
5722.80	-25.6	V	3.0	35.5	1.0	-60.1	-13.0	-47.1	
7630.40	-23.9	V	3.0	35.8	1.0	-58.7	-13.0	-45.7	
3815.20	-28.2	H	3.0	35.8	1.0	-63.0	-13.0	-50.0	
5722.80	-24.7	H	3.0	35.5	1.0	-59.2	-13.0	-46.2	
7630.40	-22.8	H	3.0	35.8	1.0	-57.6	-13.0	-44.6	

B2 HSDPA

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

Company: SOMC
 Project #: 11626381
 Date: 4/5/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Charger
 Location: Chamber C
 Mode: Rel99 Band 4 Harmonics

F Mhz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1712.4MHz									
3424.80	-29.7	V	3.0	36.1	1.0	-64.7	-13.0	-51.7	
5132.20	-26.2	V	3.0	35.4	1.0	-60.6	-13.0	-47.6	
6849.60	-24.4	V	3.0	35.7	1.0	-59.0	-13.0	-46.0	
3424.80	-29.9	H	3.0	36.1	1.0	-64.9	-13.0	-51.9	
5132.20	-25.5	H	3.0	35.4	1.0	-59.9	-13.0	-46.9	
6849.60	-22.8	H	3.0	35.7	1.0	-57.4	-13.0	-44.4	
Mid Ch, 1732.6MHz									
3465.20	-29.2	V	3.0	36.0	1.0	-64.2	-13.0	-51.2	
5197.80	-25.8	V	3.0	35.4	1.0	-60.2	-13.0	-47.2	
6930.40	-24.9	V	3.0	35.7	1.0	-59.6	-13.0	-46.6	
3465.20	-29.3	H	3.0	36.0	1.0	-64.3	-13.0	-51.3	
5197.80	-24.8	H	3.0	35.4	1.0	-59.2	-13.0	-46.2	
6930.40	-23.3	H	3.0	35.7	1.0	-58.0	-13.0	-45.0	
High Ch, 1752.6MHz									
3505.20	-29.1	V	3.0	36.0	1.0	-64.1	-13.0	-51.1	
5257.80	-24.2	V	3.0	35.4	1.0	-58.7	-13.0	-45.7	
7010.40	-24.7	V	3.0	35.7	1.0	-59.4	-13.0	-46.4	
3505.20	-29.9	H	3.0	36.0	1.0	-64.9	-13.0	-51.9	
5257.80	-25.7	H	3.0	35.4	1.0	-60.1	-13.0	-47.1	
7010.40	-23.7	H	3.0	35.7	1.0	-58.4	-13.0	-45.4	

B4 REL99

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

Company: SOMC
 Project #: 11626381
 Date: 4/5/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Charger
 Location: Chamber C
 Mode: HSDPA Band 4 Harmonics

F Mhz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1712.4MHz									
3424.80	-29.2	V	3.0	36.1	1.0	-64.3	-13.0	-51.3	
5132.20	-25.5	V	3.0	35.4	1.0	-60.0	-13.0	-47.0	
6849.60	-23.7	V	3.0	35.7	1.0	-58.4	-13.0	-45.4	
3424.80	-29.5	H	3.0	36.1	1.0	-64.6	-13.0	-51.6	
5132.20	-25.2	H	3.0	35.4	1.0	-59.7	-13.0	-46.7	
6849.60	-22.7	H	3.0	35.7	1.0	-57.3	-13.0	-44.3	
Mid Ch, 1732.6MHz									
3465.20	-28.9	V	3.0	36.0	1.0	-63.9	-13.0	-50.9	
5197.80	-25.5	V	3.0	35.4	1.0	-59.9	-13.0	-46.9	
6930.40	-24.5	V	3.0	35.7	1.0	-59.2	-13.0	-46.2	
3465.20	-29.3	H	3.0	36.0	1.0	-64.3	-13.0	-51.3	
5197.80	-24.7	H	3.0	35.4	1.0	-59.1	-13.0	-46.1	
6930.40	-23.4	H	3.0	35.7	1.0	-58.1	-13.0	-45.1	
High Ch, 1752.6MHz									
3505.20	-29.6	V	3.0	36.0	1.0	-64.6	-13.0	-51.6	
5257.80	-25.4	V	3.0	35.4	1.0	-59.9	-13.0	-46.9	
7010.40	-24.7	V	3.0	35.7	1.0	-59.4	-13.0	-46.4	
3505.20	-29.8	H	3.0	36.0	1.0	-64.8	-13.0	-51.8	
5257.80	-25.2	H	3.0	35.4	1.0	-59.6	-13.0	-46.6	
7010.40	-23.8	H	3.0	35.7	1.0	-58.4	-13.0	-45.4	

B4 HSDPA

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement										
Company:		SOMC								
Project #:		11626381								
Date:		4/6/2017								
Test Engineer:		43575 OS								
Configuration:		EUT + HS + AC Adapter								
Location:		Chamber C								
Mode:		Rel99 Band 5 Harmonics								
F (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes	
Low Ch, 826.4MHz										
1652.80	-34.1	V	3.0	37.0	1.0	-70.2	-13.0	-57.2		
2479.20	-32.2	V	3.0	36.4	1.0	-68.7	-13.0	-55.7		
3305.60	-32.0	V	3.0	36.1	1.0	-67.1	-13.0	-54.1		
1652.80	-35.9	H	3.0	37.0	1.0	-72.0	-13.0	-59.0		
2479.20	-34.7	H	3.0	36.4	1.0	-70.1	-13.0	-57.1		
3305.60	-32.0	H	3.0	36.1	1.0	-67.1	-13.0	-54.1		
Mid Ch, 836.6MHz										
1673.20	-34.4	V	3.0	37.0	1.0	-70.4	-13.0	-57.4		
2509.80	-32.6	V	3.0	36.4	1.0	-68.0	-13.0	-55.0		
3346.40	-31.0	V	3.0	36.1	1.0	-66.2	-13.0	-53.2		
1673.20	-35.2	H	3.0	37.0	1.0	-71.2	-13.0	-58.2		
2509.80	-34.6	H	3.0	36.4	1.0	-70.0	-13.0	-57.0		
3346.40	-31.2	H	3.0	36.1	1.0	-66.3	-13.0	-53.3		
High Ch, 846.8MHz										
1693.20	-35.0	V	3.0	37.0	1.0	-71.0	-13.0	-58.0		
2539.80	-29.3	V	3.0	36.4	1.0	-64.7	-13.0	-51.7		
3386.40	-31.3	V	3.0	36.1	1.0	-66.4	-13.0	-53.4		
1693.20	-35.1	H	3.0	37.0	1.0	-71.0	-13.0	-58.0		
2539.80	-33.5	H	3.0	36.4	1.0	-68.9	-13.0	-55.9		
3386.40	-31.4	H	3.0	36.1	1.0	-66.5	-13.0	-53.5		

B5 REL99

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement										
Company:		SOMC								
Project #:		11626381								
Date:		4/6/2017								
Test Engineer:		43575 OS								
Configuration:		EUT + HS + AC Adapter								
Location:		Chamber C								
Mode:		HSDPA Band 5 Harmonics								
F (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes	
Low Ch, 826.4MHz										
1652.80	-37.1	V	3.0	37.0	1.0	-73.2	-13.0	-60.2		
2479.20	-32.5	V	3.0	36.4	1.0	-68.9	-13.0	-55.9		
3305.60	-32.1	V	3.0	36.1	1.0	-67.3	-13.0	-54.3		
1652.80	-37.2	H	3.0	37.0	1.0	-73.3	-13.0	-60.3		
2479.20	-35.0	H	3.0	36.4	1.0	-70.4	-13.0	-57.4		
3305.60	-32.1	H	3.0	36.1	1.0	-67.3	-13.0	-54.3		
Mid Ch, 836.6MHz										
1673.20	-36.9	V	3.0	37.0	1.0	-72.9	-13.0	-59.9		
2509.80	-32.4	V	3.0	36.4	1.0	-67.9	-13.0	-54.9		
3346.40	-31.4	V	3.0	36.1	1.0	-66.5	-13.0	-53.5		
1673.20	-37.1	H	3.0	37.0	1.0	-73.1	-13.0	-60.1		
2509.80	-34.8	H	3.0	36.4	1.0	-70.2	-13.0	-57.2		
3346.40	-31.3	H	3.0	36.1	1.0	-66.5	-13.0	-53.5		
High Ch, 846.8MHz										
1693.20	-36.3	V	3.0	37.0	1.0	-72.3	-13.0	-59.3		
2539.80	-32.9	V	3.0	36.4	1.0	-68.3	-13.0	-55.3		
3386.40	-31.6	V	3.0	36.1	1.0	-66.7	-13.0	-53.7		
1693.20	-36.6	H	3.0	37.0	1.0	-72.6	-13.0	-59.6		
2539.80	-34.1	H	3.0	36.4	1.0	-69.6	-13.0	-56.6		
3386.40	-31.6	H	3.0	36.1	1.0	-66.7	-13.0	-53.7		

B5 HSDPA

LTE Band 2

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

Company: SOMC
 Project #: 11626381
 Date: 4/5/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Adapter
 Location: Chamber C
 Mode: LTE_QPSK Band 2 Harmonics, 1.4MHz Bandwidth

F Mhz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1850.7MHz									
3701.40	-28.4	V	3.0	35.9	1.0	-63.2	-13.0	-50.2	
5552.10	-25.5	V	3.0	35.5	1.0	-60.9	-13.0	-47.9	
7402.80	-24.7	V	3.0	35.7	1.0	-59.4	-13.0	-46.4	
3701.40	-28.8	H	3.0	35.9	1.0	-63.7	-13.0	-50.7	
5552.10	-25.8	H	3.0	35.5	1.0	-60.3	-13.0	-47.3	
7402.80	-23.8	H	3.0	35.7	1.0	-58.6	-13.0	-45.6	
Mid Ch, 1880MHz									
3760.00	-27.5	V	3.0	35.8	1.0	-62.3	-13.0	-49.3	
5640.00	-25.1	V	3.0	35.5	1.0	-59.6	-13.0	-46.6	
7520.00	-25.1	V	3.0	35.7	1.0	-59.8	-13.0	-46.8	
3760.00	-28.9	H	3.0	35.8	1.0	-63.7	-13.0	-50.7	
5640.00	-24.3	H	3.0	35.5	1.0	-58.8	-13.0	-45.8	
7520.00	-23.8	H	3.0	35.7	1.0	-58.5	-13.0	-45.5	
High Ch, 1909.3MHz									
3818.60	-27.2	V	3.0	35.8	1.0	-62.0	-13.0	-49.0	
5727.90	-25.3	V	3.0	35.5	1.0	-59.8	-13.0	-46.8	
7637.20	-24.4	V	3.0	35.8	1.0	-59.1	-13.0	-46.1	
3818.60	-28.7	H	3.0	35.8	1.0	-63.4	-13.0	-50.4	
5727.90	-24.8	H	3.0	35.5	1.0	-59.3	-13.0	-46.3	
7637.20	-23.3	H	3.0	35.8	1.0	-58.1	-13.0	-45.1	

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

Company: SOMC
 Project #: 11626381
 Date: 4/5/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Adapter
 Location: Chamber C
 Mode: LTE_16QAM Band 2 Harmonics, 1.4MHz Bandwidth

F Mhz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1850.7MHz									
3701.40	-28.6	V	3.0	35.9	1.0	-63.5	-13.0	-50.5	
5552.10	-26.5	V	3.0	35.5	1.0	-61.0	-13.0	-48.0	
7402.80	-24.8	V	3.0	35.7	1.0	-59.5	-13.0	-46.5	
3701.40	-29.1	H	3.0	35.9	1.0	-64.0	-13.0	-51.0	
5552.10	-25.8	H	3.0	35.5	1.0	-60.2	-13.0	-47.2	
7402.80	-23.7	H	3.0	35.7	1.0	-58.4	-13.0	-45.4	
Mid Ch, 1880MHz									
3760.00	-27.8	V	3.0	35.8	1.0	-62.6	-13.0	-49.6	
5640.00	-25.0	V	3.0	35.5	1.0	-59.4	-13.0	-46.4	
7520.00	-25.0	V	3.0	35.7	1.0	-59.7	-13.0	-46.7	
3760.00	-28.9	H	3.0	35.8	1.0	-63.7	-13.0	-50.7	
5640.00	-25.7	H	3.0	35.5	1.0	-60.1	-13.0	-47.1	
7520.00	-23.5	H	3.0	35.7	1.0	-58.2	-13.0	-45.2	
High Ch, 1909.3MHz									
3818.60	-27.7	V	3.0	35.8	1.0	-62.5	-13.0	-49.5	
5727.90	-26.4	V	3.0	35.5	1.0	-60.9	-13.0	-47.9	
7637.20	-24.6	V	3.0	35.8	1.0	-59.4	-13.0	-46.4	
3818.60	-28.6	H	3.0	35.8	1.0	-63.4	-13.0	-50.4	
5727.90	-23.0	H	3.0	35.5	1.0	-57.5	-13.0	-44.5	
7637.20	-23.3	H	3.0	35.8	1.0	-58.1	-13.0	-45.1	

LTE B2 1.4MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/5/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Adapter
 Location: Chamber C
 Mode: LTE_QPSK Band 2 Harmonics, 3MHz Bandwidth

F Mhz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1851.5MHz									
3703.00	-27.2	V	3.0	35.9	1.0	-62.1	-13.0	-49.1	
5554.50	-26.7	V	3.0	35.5	1.0	-61.1	-13.0	-48.1	
7406.00	-25.8	V	3.0	35.7	1.0	-60.6	-13.0	-47.6	
3703.00	-29.1	H	3.0	35.9	1.0	-63.9	-13.0	-50.9	
5554.50	-25.6	H	3.0	35.5	1.0	-60.1	-13.0	-47.1	
7406.00	-23.9	H	3.0	35.7	1.0	-58.6	-13.0	-45.6	
Mid Ch, 1880MHz									
3760.00	-27.0	V	3.0	35.8	1.0	-61.8	-13.0	-48.8	
5640.00	-25.3	V	3.0	35.5	1.0	-59.8	-13.0	-46.8	
7520.00	-25.6	V	3.0	35.7	1.0	-60.4	-13.0	-47.4	
3760.00	-28.8	H	3.0	35.8	1.0	-63.6	-13.0	-50.6	
5640.00	-24.3	H	3.0	35.5	1.0	-58.8	-13.0	-45.8	
7520.00	-23.8	H	3.0	35.7	1.0	-58.5	-13.0	-45.5	
High Ch, 1908.5MHz									
3817.00	-28.1	V	3.0	35.8	1.0	-62.9	-13.0	-49.9	
5725.50	-26.1	V	3.0	35.5	1.0	-60.6	-13.0	-47.6	
7634.00	-25.2	V	3.0	35.8	1.0	-59.9	-13.0	-46.9	
3817.00	-28.4	H	3.0	35.8	1.0	-63.2	-13.0	-50.2	
5725.50	-25.2	H	3.0	35.5	1.0	-59.7	-13.0	-46.7	
7634.00	-23.1	H	3.0	35.8	1.0	-57.8	-13.0	-44.8	

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

Company: SOMC
 Project #: 11626381
 Date: 4/5/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Adapter
 Location: Chamber C
 Mode: LTE_16QAM Band 2 Harmonics, 3MHz Bandwidth

F Mhz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1851.5MHz									
3703.00	-27.7	V	3.0	35.9	1.0	-62.6	-13.0	-49.6	
5554.50	-26.6	V	3.0	35.5	1.0	-61.0	-13.0	-48.0	
7406.00	-25.7	V	3.0	35.7	1.0	-60.5	-13.0	-47.5	
3703.00	-29.2	H	3.0	35.9	1.0	-64.1	-13.0	-51.1	
5554.50	-25.7	H	3.0	35.5	1.0	-60.2	-13.0	-47.2	
7406.00	-23.6	H	3.0	35.7	1.0	-58.3	-13.0	-45.3	
Mid Ch, 1880MHz									
3760.00	-27.1	V	3.0	35.8	1.0	-61.9	-13.0	-48.9	
5640.00	-25.4	V	3.0	35.5	1.0	-59.9	-13.0	-46.9	
7520.00	-25.7	V	3.0	35.7	1.0	-60.4	-13.0	-47.4	
3760.00	-29.0	H	3.0	35.8	1.0	-63.8	-13.0	-50.8	
5640.00	-24.2	H	3.0	35.5	1.0	-58.6	-13.0	-45.6	
7520.00	-23.7	H	3.0	35.7	1.0	-58.5	-13.0	-45.5	
High Ch, 1908.5MHz									
3817.00	-28.2	V	3.0	35.8	1.0	-63.0	-13.0	-50.0	
5725.50	-26.3	V	3.0	35.5	1.0	-60.8	-13.0	-47.8	
7634.00	-25.2	V	3.0	35.8	1.0	-60.0	-13.0	-47.0	
3817.00	-28.7	H	3.0	35.8	1.0	-63.5	-13.0	-50.5	
5725.50	-24.0	H	3.0	35.5	1.0	-58.5	-13.0	-45.5	
7634.00	-23.2	H	3.0	35.8	1.0	-57.9	-13.0	-44.9	

LTE B2 3MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/5/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Adapter
 Location: Chamber C
 Mode: LTE_QPSK Band 2 Harmonics, 5MHz Bandwidth

F Mhz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1852.5MHz									
3705.00	-27.8	V	3.0	35.9	1.0	-62.6	-13.0	-49.6	
5557.50	-26.9	V	3.0	35.5	1.0	-61.4	-13.0	-48.4	
7410.00	-25.8	V	3.0	35.7	1.0	-60.5	-13.0	-47.5	
3705.00	-29.2	H	3.0	35.9	1.0	-64.1	-13.0	-51.1	
5557.50	-26.5	H	3.0	35.5	1.0	-60.9	-13.0	-47.9	
7410.00	-25.0	H	3.0	35.7	1.0	-59.7	-13.0	-46.7	
Mid Ch, 1880MHz									
3760.00	-27.0	V	3.0	35.8	1.0	-61.9	-13.0	-48.9	
5640.00	-25.2	V	3.0	35.5	1.0	-59.7	-13.0	-46.7	
7520.00	-25.3	V	3.0	35.7	1.0	-60.1	-13.0	-47.1	
3760.00	-28.6	H	3.0	35.8	1.0	-63.4	-13.0	-50.4	
5640.00	-24.4	H	3.0	35.5	1.0	-58.9	-13.0	-45.9	
7520.00	-24.7	H	3.0	35.7	1.0	-59.5	-13.0	-46.5	
High Ch, 1907.5MHz									
3815.00	-28.0	V	3.0	35.8	1.0	-62.8	-13.0	-49.8	
5722.50	-25.9	V	3.0	35.5	1.0	-60.4	-13.0	-47.4	
7630.00	-25.1	V	3.0	35.8	1.0	-59.8	-13.0	-46.8	
3815.00	-28.5	H	3.0	35.8	1.0	-63.3	-13.0	-50.3	
5722.50	-25.2	H	3.0	35.5	1.0	-59.7	-13.0	-46.7	
7630.00	-24.1	H	3.0	35.8	1.0	-58.8	-13.0	-45.8	

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

Company: SOMC
 Project #: 11626381
 Date: 4/5/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Adapter
 Location: Chamber C
 Mode: LTE_16QAM Band 2 Harmonics, 5MHz Bandwidth

F Mhz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1852.5MHz									
3705.00	-28.0	V	3.0	35.9	1.0	-62.9	-13.0	-49.9	
5557.50	-26.9	V	3.0	35.5	1.0	-61.4	-13.0	-48.4	
7410.00	-25.8	V	3.0	35.7	1.0	-60.5	-13.0	-47.5	
3705.00	-29.3	H	3.0	35.9	1.0	-64.2	-13.0	-51.2	
5557.50	-26.4	H	3.0	35.5	1.0	-60.9	-13.0	-47.9	
7410.00	-24.9	H	3.0	35.7	1.0	-59.6	-13.0	-46.6	
Mid Ch, 1880MHz									
3760.00	-27.0	V	3.0	35.8	1.0	-61.9	-13.0	-48.9	
5640.00	-25.4	V	3.0	35.5	1.0	-59.9	-13.0	-46.9	
7520.00	-25.4	V	3.0	35.7	1.0	-60.1	-13.0	-47.1	
3760.00	-28.6	H	3.0	35.8	1.0	-63.4	-13.0	-50.4	
5640.00	-24.8	H	3.0	35.5	1.0	-59.2	-13.0	-46.2	
7520.00	-24.8	H	3.0	35.7	1.0	-59.5	-13.0	-46.5	
High Ch, 1907.5MHz									
3815.00	-28.1	V	3.0	35.8	1.0	-62.8	-13.0	-49.8	
5722.50	-26.1	V	3.0	35.5	1.0	-60.6	-13.0	-47.6	
7630.00	-25.0	V	3.0	35.8	1.0	-59.8	-13.0	-46.8	
3815.00	-28.6	H	3.0	35.8	1.0	-63.4	-13.0	-50.4	
5722.50	-25.7	H	3.0	35.5	1.0	-60.2	-13.0	-47.2	
7630.00	-24.0	H	3.0	35.8	1.0	-58.8	-13.0	-45.8	

LTE B2 5MHz QPSK

LTE B2 5MHz 16QAM

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

Company: SOMC
 Project #: 11626381
 Date: 4/5/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Adapter
 Location: Chamber C
 Mode: LTE_QPSK Band 2 Harmonics, 10MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1855MHz									
3710.00	-28.3	V	3.0	35.9	1.0	-63.1	-13.0	-50.1	
5965.00	-26.8	V	3.0	35.5	1.0	-61.2	-13.0	-48.2	
7420.00	-26.2	V	3.0	35.7	1.0	-60.9	-13.0	-47.9	
3710.00	-29.3	H	3.0	35.9	1.0	-64.2	-13.0	-51.2	
5965.00	-26.1	H	3.0	35.5	1.0	-60.5	-13.0	-47.5	
7420.00	-25.3	H	3.0	35.7	1.0	-60.1	-13.0	-47.1	
Mid Ch, 1880MHz									
3760.00	-27.1	V	3.0	35.8	1.0	-62.0	-13.0	-49.0	
5640.00	-25.1	V	3.0	35.5	1.0	-59.6	-13.0	-46.6	
7520.00	-25.6	V	3.0	35.7	1.0	-60.4	-13.0	-47.4	
3760.00	-28.3	H	3.0	35.8	1.0	-63.1	-13.0	-50.1	
5640.00	-24.7	H	3.0	35.5	1.0	-59.2	-13.0	-46.2	
7520.00	-24.5	H	3.0	35.7	1.0	-59.3	-13.0	-46.3	
High Ch, 1905MHz									
3810.00	-27.7	V	3.0	35.8	1.0	-62.5	-13.0	-49.5	
5715.00	-25.7	V	3.0	35.5	1.0	-60.2	-13.0	-47.2	
7620.00	-25.0	V	3.0	35.8	1.0	-59.7	-13.0	-46.7	
3810.00	-28.2	H	3.0	35.8	1.0	-63.0	-13.0	-50.0	
5715.00	-25.1	H	3.0	35.5	1.0	-59.6	-13.0	-46.6	
7620.00	-24.0	H	3.0	35.8	1.0	-58.8	-13.0	-45.8	

LTE B2 10MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/5/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Adapter
 Location: Chamber C
 Mode: LTE_16QAM Band 2 Harmonics, 10MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1855MHz									
3710.00	-28.1	V	3.0	35.9	1.0	-62.9	-13.0	-49.9	
5965.00	-26.6	V	3.0	35.5	1.0	-61.1	-13.0	-48.1	
7420.00	-26.7	V	3.0	35.7	1.0	-60.9	-13.0	-47.9	
3710.00	-29.4	H	3.0	35.9	1.0	-64.3	-13.0	-51.3	
5965.00	-26.0	H	3.0	35.5	1.0	-60.5	-13.0	-47.5	
7420.00	-25.2	H	3.0	35.7	1.0	-60.5	-13.0	-46.5	
Mid Ch, 1880MHz									
3760.00	-26.8	V	3.0	35.8	1.0	-61.7	-13.0	-48.7	
5640.00	-25.4	V	3.0	35.5	1.0	-59.8	-13.0	-46.8	
7520.00	-25.6	V	3.0	35.7	1.0	-60.3	-13.0	-47.3	
3760.00	-28.8	H	3.0	35.8	1.0	-63.6	-13.0	-50.6	
5640.00	-24.6	H	3.0	35.5	1.0	-59.1	-13.0	-46.1	
7520.00	-24.7	H	3.0	35.7	1.0	-59.4	-13.0	-46.4	
High Ch, 1905MHz									
3810.00	-27.9	V	3.0	35.8	1.0	-62.7	-13.0	-49.7	
5715.00	-25.8	V	3.0	35.5	1.0	-60.3	-13.0	-47.3	
7620.00	-25.2	V	3.0	35.7	1.0	-59.9	-13.0	-46.9	
3810.00	-28.4	H	3.0	35.8	1.0	-63.2	-13.0	-50.2	
5715.00	-25.1	H	3.0	35.5	1.0	-59.6	-13.0	-46.6	
7620.00	-23.9	H	3.0	35.8	1.0	-58.7	-13.0	-45.7	

LTE B2 10MHz 16QAM

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

Company: SOMC
 Project #: 11626381
 Date: 4/5/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Adapter
 Location: Chamber C
 Mode: LTE_QPSK Band 2 Harmonics, 15MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1857.5MHz									
3715.00	-28.5	V	3.0	35.8	1.0	-63.3	-13.0	-50.3	
5572.50	-26.3	V	3.0	35.5	1.0	-60.8	-13.0	-47.8	
7430.00	-26.4	V	3.0	35.7	1.0	-61.1	-13.0	-48.1	
3715.00	-29.5	H	3.0	35.8	1.0	-64.3	-13.0	-51.3	
5572.50	-25.3	H	3.0	35.5	1.0	-59.8	-13.0	-46.8	
7430.00	-24.6	H	3.0	35.7	1.0	-59.3	-13.0	-46.3	
Mid Ch, 1880MHz									
3760.00	-26.9	V	3.0	35.8	1.0	-61.7	-13.0	-48.7	
5640.00	-25.4	V	3.0	35.5	1.0	-59.5	-13.0	-46.5	
7520.00	-25.5	V	3.0	35.7	1.0	-60.2	-13.0	-47.2	
3760.00	-28.3	H	3.0	35.8	1.0	-63.1	-13.0	-50.1	
5640.00	-24.4	H	3.0	35.5	1.0	-58.9	-13.0	-45.9	
7520.00	-24.1	H	3.0	35.7	1.0	-58.8	-13.0	-45.8	
High Ch, 1902.5MHz									
3805.00	-27.6	V	3.0	35.8	1.0	-62.4	-13.0	-49.4	
5707.50	-25.5	V	3.0	35.5	1.0	-60.0	-13.0	-47.0	
7610.00	-25.0	V	3.0	35.8	1.0	-59.7	-13.0	-46.7	
3805.00	-28.7	H	3.0	35.8	1.0	-63.4	-13.0	-50.4	
5707.50	-24.4	H	3.0	35.5	1.0	-58.9	-13.0	-45.9	
7610.00	-23.1	H	3.0	35.8	1.0	-57.9	-13.0	-44.9	

LTE B2 15MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/5/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Adapter
 Location: Chamber C
 Mode: LTE_16QAM Band 2 Harmonics, 15MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1857.5MHz									
3715.00	-28.4	V	3.0	35.8	1.0	-63.3	-13.0	-50.3	
5572.50	-26.2	V	3.0	35.5	1.0	-60.7	-13.0	-47.7	
7430.00	-26.2	V	3.0	35.7	1.0	-60.9	-13.0	-47.9	
3715.00	-29.5	H	3.0	35.8	1.0	-64.3	-13.0	-51.3	
5572.50	-25.3	H	3.0	35.5	1.0	-59.8	-13.0	-46.8	
7430.00	-24.4	H	3.0	35.7	1.0	-59.1	-13.0	-46.1	
Mid Ch, 1880MHz									
3760.00	-27.2	V	3.0	35.8	1.0	-62.0	-13.0	-49.0	
5640.00	-25.4	V	3.0	35.5	1.0	-59.9	-13.0	-46.9	
7520.00	-25.6	V	3.0	35.7	1.0	-60.3	-13.0	-47.3	
3760.00	-28.6	H	3.0	35.8	1.0	-63.4	-13.0	-50.4	
5640.00	-24.6	H	3.0	35.5	1.0	-59.1	-13.0	-46.1	
7520.00	-24.2	H	3.0	35.7	1.0	-58.9	-13.0	-45.9	
High Ch, 1902.5MHz									
3805.00	-27.8	V	3.0	35.8	1.0	-62.6	-13.0	-49.6	
5707.50	-25.5	V	3.0	35.5	1.0	-60.0	-13.0	-47.0	
7610.00	-24.9	V	3.0	35.8	1.0	-59.7	-13.0	-46.7	
3805.00	-28.6	H	3.0	35.8	1.0	-63.4	-13.0	-50.4	
5707.50	-24.6	H	3.0	35.5	1.0	-59.1	-13.0	-46.1	
7610.00	-23.1	H	3.0	35.8	1.0	-57.9	-13.0	-44.9	

LTE B2 15MHz 16QAM

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

Company: SOMC
 Project #: 11626381
 Date: 4/5/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Adapter
 Location: Chamber C
 Mode: LTE_QPSK Band 2 Harmonics, 20MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1860MHz									
3720.00	-28.9	V	3.0	35.8	1.0	-63.7	-13.0	-50.7	
5980.00	-25.9	V	3.0	35.5	1.0	-60.3	-13.0	-47.3	
7440.00	-26.2	V	3.0	35.7	1.0	-60.9	-13.0	-47.9	
3720.00	-29.4	H	3.0	35.8	1.0	-64.3	-13.0	-51.3	
5980.00	-24.9	H	3.0	35.5	1.0	-59.4	-13.0	-46.4	
7440.00	-24.3	H	3.0	35.7	1.0	-59.0	-13.0	-46.0	
Mid Ch, 1880MHz									
3760.00	-28.3	V	3.0	35.8	1.0	-63.1	-13.0	-50.1	
5640.00	-25.2	V	3.0	35.5	1.0	-59.7	-13.0	-46.7	
7520.00	-25.3	V	3.0	35.7	1.0	-60.1	-13.0	-47.1	
3760.00	-28.0	H	3.0	35.8	1.0	-62.8	-13.0	-49.8	
5640.00	-24.3	H	3.0	35.5	1.0	-58.8	-13.0	-45.8	
7520.00	-23.8	H	3.0	35.7	1.0	-58.6	-13.0	-45.6	
High Ch, 1900MHz									
3800.00	-27.3	V	3.0	35.8	1.0	-62.0	-13.0	-49.0	
5700.00	-25.1	V	3.0	35.5	1.0	-59.6	-13.0	-46.6	
7600.00	-24.9	V	3.0	35.8	1.0	-59.7	-13.0	-46.7	
3800.00	-28.4	H	3.0	35.8	1.0	-63.2	-13.0	-50.2	
5700.00	-24.5	H	3.0	35.5	1.0	-59.0	-13.0	-46.0	
7600.00	-22.9	H	3.0	35.8	1.0	-57.7	-13.0	-44.7	

LTE B2 20MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/5/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Adapter
 Location: Chamber C
 Mode: LTE_16QAM Band 2 Harmonics, 20MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1860MHz									
3720.00	-29.1	V	3.0	35.8	1.0	-63.9	-13.0	-50.9	
5980.00	-25.9	V	3.0	35.5	1.0	-60.4	-13.0	-47.4	
7440.00	-26.2	V	3.0	35.7	1.0	-60.9	-13.0	-47.9	
3720.00	-29.7	H	3.0	35.8	1.0	-64.5	-13.0	-51.5	
5980.00	-25.0	H	3.0	35.5	1.0	-59.4	-13.0	-46.4	
7440.00	-24.4	H	3.0	35.7	1.0	-59.1	-13.0	-46.1	
Mid Ch, 1880MHz									
3760.00	-27.5	V	3.0	35.8	1.0	-62.3	-13.0	-49.3	
5640.00	-25.0	V	3.0	35.5	1.0	-59.5	-13.0	-46.5	
7520.00	-25.7	V	3.0	35.7	1.0	-60.4	-13.0	-47.4	
3760.00	-28.5	H	3.0	35.8	1.0	-63.3	-13.0	-50.3	
5640.00	-24.3	H	3.0	35.5	1.0	-58.7	-13.0	-45.7	
7520.00	-23.8	H	3.0	35.7	1.0	-58.6	-13.0	-45.6	
High Ch, 1900MHz									
3800.00	-27.3	V	3.0	35.8	1.0	-62.1	-13.0	-49.1	
5700.00	-25.5	V	3.0	35.5	1.0	-60.0	-13.0	-47.0	
7600.00	-24.9	V	3.0	35.8	1.0	-59.7	-13.0	-46.7	
3800.00	-28.4	H	3.0	35.8	1.0	-63.2	-13.0	-50.2	
5700.00	-24.5	H	3.0	35.5	1.0	-59.0	-13.0	-46.0	
7600.00	-23.0	H	3.0	35.8	1.0	-57.8	-13.0	-44.8	

LTE B2 20MHz 16QAM

LTE Band 4

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

Company: SOMC
 Project #: 11626381 PY7-08618T
 Date: 3/13/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + 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)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1710.7MHz									
3421.40	-18.0	V	3.0	35.1	1.0	-53.0	-13.0	-40.0	
5132.10	-14.9	V	3.0	35.4	1.0	-49.3	-13.0	-36.3	
6842.80	-12.7	V	3.0	35.7	1.0	-47.6	-13.0	-34.6	
3421.40	-18.5	H	3.0	36.1	1.0	-53.6	-13.0	-40.6	
5132.10	-13.5	H	3.0	35.4	1.0	-47.9	-13.0	-34.9	
6842.80	-12.2	H	3.0	35.7	1.0	-46.9	-13.0	-33.9	
Mid Ch, 1732.5MHz									
3465.00	-18.7	V	3.0	36.0	1.0	-53.7	-13.0	-40.7	
5197.50	-14.4	V	3.0	35.4	1.0	-48.8	-13.0	-35.8	
6930.00	-13.3	V	3.0	35.7	1.0	-48.0	-13.0	-35.0	
3465.00	-20.1	H	3.0	36.0	1.0	-55.1	-13.0	-42.1	
5197.50	-14.4	H	3.0	35.4	1.0	-48.9	-13.0	-35.9	
6930.00	-12.3	H	3.0	35.7	1.0	-47.0	-13.0	-34.0	
High Ch, 1754.3MHz									
3508.60	-18.3	V	3.0	36.0	1.0	-53.3	-13.0	-40.3	
5262.90	-14.3	V	3.0	35.4	1.0	-48.7	-13.0	-35.7	
7017.20	-13.1	V	3.0	35.7	1.0	-47.8	-13.0	-34.8	
3508.60	-19.9	H	3.0	36.0	1.0	-54.9	-13.0	-41.9	
5262.90	-14.0	H	3.0	35.4	1.0	-48.5	-13.0	-35.5	
7017.20	-11.5	H	3.0	35.7	1.0	-46.2	-13.0	-33.2	

LTE B4 1.4MHz QPSK

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

Company: SOMC
 Project #: 11626381 PY7-08618T
 Date: 4/7/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_16QAM Band 4 Harmonics, 1.4MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1710.7MHz									
3421.40	-17.8	V	3.0	36.1	1.0	-52.9	-13.0	-39.9	
5132.10	-14.7	V	3.0	35.4	1.0	-49.1	-13.0	-36.1	
6842.80	-12.7	V	3.0	35.7	1.0	-47.4	-13.0	-34.4	
3421.40	-18.4	H	3.0	36.1	1.0	-53.4	-13.0	-40.4	
5132.10	-13.5	H	3.0	35.4	1.0	-47.9	-13.0	-34.9	
6842.80	-11.8	H	3.0	35.7	1.0	-46.5	-13.0	-33.5	
Mid Ch, 1732.5MHz									
3465.00	-18.3	V	3.0	36.0	1.0	-53.4	-13.0	-40.4	
5197.50	-15.0	V	3.0	35.4	1.0	-49.4	-13.0	-36.4	
6930.00	-13.0	V	3.0	35.7	1.0	-47.6	-13.0	-34.6	
3465.00	-18.2	H	3.0	36.0	1.0	-53.2	-13.0	-40.2	
5197.50	-14.4	H	3.0	35.4	1.0	-48.9	-13.0	-35.9	
6930.00	-12.1	H	3.0	35.7	1.0	-46.8	-13.0	-33.8	
High Ch, 1754.3MHz									
3508.60	-18.3	V	3.0	36.0	1.0	-53.3	-13.0	-40.3	
5262.90	-14.1	V	3.0	35.4	1.0	-48.5	-13.0	-35.5	
7017.20	-13.0	V	3.0	35.7	1.0	-47.7	-13.0	-34.7	
3508.60	-19.2	H	3.0	36.0	1.0	-54.2	-13.0	-41.2	
5262.90	-14.1	H	3.0	35.4	1.0	-48.5	-13.0	-35.5	
7017.20	-11.4	H	3.0	35.7	1.0	-46.1	-13.0	-33.1	

LTE B4 1.4MHz 16QAM

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

Company: SOMC
 Project #: 11626381 PY7-08618T
 Date: 4/7/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_QPSK Band 4 Harmonics, 3MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1711.5MHz									
3423.00	-18.5	V	3.0	36.1	1.0	-53.5	-13.0	-40.5	
5134.50	-15.9	V	3.0	35.4	1.0	-50.3	-13.0	-37.3	
6846.00	-14.5	V	3.0	35.7	1.0	-49.2	-13.0	-36.2	
3423.00	-19.2	H	3.0	36.1	1.0	-54.2	-13.0	-41.2	
5134.50	-15.0	H	3.0	35.4	1.0	-49.9	-13.0	-36.9	
6846.00	-12.9	H	3.0	35.7	1.0	-47.5	-13.0	-34.5	
Mid Ch, 1732.5MHz									
3465.00	-18.5	V	3.0	36.0	1.0	-53.5	-13.0	-40.5	
5197.50	-15.8	V	3.0	35.4	1.0	-50.2	-13.0	-37.2	
6930.00	-13.8	V	3.0	35.7	1.0	-48.4	-13.0	-35.4	
3465.00	-19.1	H	3.0	36.0	1.0	-54.1	-13.0	-41.1	
5197.50	-14.8	H	3.0	35.4	1.0	-49.0	-13.0	-36.0	
6930.00	-13.2	H	3.0	35.7	1.0	-47.9	-13.0	-34.9	
High Ch, 1753.5MHz									
3507.00	-18.3	V	3.0	36.0	1.0	-53.3	-13.0	-40.3	
5260.50	-15.4	V	3.0	35.4	1.0	-49.9	-13.0	-36.9	
7014.00	-13.7	V	3.0	35.7	1.0	-48.4	-13.0	-35.4	
3507.00	-19.0	H	3.0	36.0	1.0	-54.0	-13.0	-41.0	
5260.50	-14.8	H	3.0	35.4	1.0	-49.2	-13.0	-36.2	
7014.00	-12.5	H	3.0	35.7	1.0	-47.2	-13.0	-34.2	

LTE B4 3MHz QPSK

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

Company: SOMC
 Project #: 11626381 PY7-08618T
 Date: 4/7/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_16QAM Band 4 Harmonics, 3MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1711.5MHz									
3423.00	-18.1	V	3.0	36.1	1.0	-53.1	-13.0	-40.1	
5134.50	-15.9	V	3.0	35.4	1.0	-50.2	-13.0	-37.2	
6846.00	-14.4	V	3.0	35.7	1.0	-49.1	-13.0	-36.1	
3423.00	-19.0	H	3.0	36.1	1.0	-54.0	-13.0	-41.0	
5134.50	-15.1	H	3.0	35.4	1.0	-49.5	-13.0	-36.5	
6846.00	-13.2	H	3.0	35.7	1.0	-47.9	-13.0	-34.9	
Mid Ch, 1732.5MHz									
3465.00	-18.3	V	3.0	36.0	1.0	-53.4	-13.0	-40.4	
5197.50	-15.6	V	3.0	35.4	1.0	-50.0	-13.0	-37.0	
6930.00	-13.8	V	3.0	35.7	1.0	-48.5	-13.0	-35.5	
3465.00	-19.2	H	3.0	36.0	1.0	-54.3	-13.0	-41.3	
5197.50	-14.5	H	3.0	35.4	1.0	-48.9	-13.0	-35.9	
6930.00	-12.9	H	3.0	35.7	1.0	-47.6	-13.0	-34.6	
High Ch, 1753.5MHz									
3507.00	-18.0	V	3.0	36.0	1.0	-53.0	-13.0	-40.0	
5260.50	-15.4	V	3.0	35.4	1.0	-49.9	-13.0	-36.9	
7014.00	-13.6	V	3.0	35.7	1.0	-48.3	-13.0	-35.3	
3507.00	-19.2	H	3.0	36.0	1.0	-54.2	-13.0	-41.2	
5260.50	-14.4	H	3.0	35.4	1.0	-48.8	-13.0	-35.8	
7014.00	-12.4	H	3.0	35.7	1.0	-47.1	-13.0	-34.1	

LTE B4 3MHz 16QAM

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

Company: SOMC
 Project #: 11626381 PY7-08618T
 Date: 4/7/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_QPSK Band 4 Harmonics, 5MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1712.5MHz									
3425.00	-17.7	V	3.0	35.4	1.0	-52.8	-13.0	-39.8	
5137.50	-15.0	V	3.0	35.4	1.0	-49.7	-13.0	-36.7	
6850.00	-14.1	V	3.0	35.7	1.0	-48.8	-13.0	-35.8	
3425.00	-18.2	H	3.0	35.4	1.0	-53.3	-13.0	-40.3	
5137.50	-15.0	H	3.0	35.4	1.0	-49.4	-13.0	-36.4	
6850.00	-13.5	H	3.0	35.7	1.0	-48.1	-13.0	-35.1	
Mid Ch, 1732.5MHz									
3465.00	-17.7	V	3.0	35.0	1.0	-52.7	-13.0	-39.7	
5197.50	-15.1	V	3.0	35.4	1.0	-49.5	-13.0	-36.5	
6930.00	-14.0	V	3.0	35.7	1.0	-48.7	-13.0	-35.7	
3465.00	-18.0	H	3.0	35.0	1.0	-53.0	-13.0	-40.0	
5197.50	-14.9	H	3.0	35.4	1.0	-49.3	-13.0	-36.3	
6930.00	-13.2	H	3.0	35.7	1.0	-47.8	-13.0	-34.8	
High Ch, 1752.5MHz									
3505.00	-17.4	V	3.0	35.0	1.0	-52.4	-13.0	-39.4	
5257.50	-14.5	V	3.0	35.4	1.0	-49.0	-13.0	-36.0	
7010.00	-14.1	V	3.0	35.7	1.0	-48.7	-13.0	-35.7	
3505.00	-17.4	H	3.0	35.0	1.0	-52.4	-13.0	-39.4	
5257.50	-14.8	H	3.0	35.4	1.0	-49.2	-13.0	-36.2	
7010.00	-13.0	H	3.0	35.7	1.0	-47.6	-13.0	-34.6	

LTE B4 5MHz QPSK

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

Company: SOMC
 Project #: 11626381 PY7-08618T
 Date: 4/7/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_16QAM Band 4 Harmonics, 5MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1712.5MHz									
3425.00	-17.5	V	3.0	36.1	1.0	-52.6	-13.0	-39.6	
5137.50	-15.0	V	3.0	35.4	1.0	-49.5	-13.0	-36.5	
6850.00	-13.8	V	3.0	35.7	1.0	-48.5	-13.0	-35.5	
3425.00	-18.3	H	3.0	36.1	1.0	-53.3	-13.0	-40.3	
5137.50	-14.7	H	3.0	35.4	1.0	-49.2	-13.0	-36.2	
6850.00	-13.1	H	3.0	35.7	1.0	-47.8	-13.0	-34.8	
Mid Ch, 1732.5MHz									
3465.00	-17.9	V	3.0	36.0	1.0	-52.9	-13.0	-39.9	
5197.50	-15.1	V	3.0	35.4	1.0	-49.5	-13.0	-36.5	
6930.00	-14.1	V	3.0	35.7	1.0	-48.8	-13.0	-35.8	
3465.00	-19.0	H	3.0	36.0	1.0	-54.0	-13.0	-41.0	
5197.50	-14.6	H	3.0	35.4	1.0	-49.1	-13.0	-36.1	
6930.00	-12.9	H	3.0	35.7	1.0	-47.6	-13.0	-34.6	
High Ch, 1752.5MHz									
3505.00	-17.2	V	3.0	36.0	1.0	-52.2	-13.0	-39.2	
5257.50	-14.4	V	3.0	35.4	1.0	-48.9	-13.0	-35.9	
7010.00	-14.2	V	3.0	35.7	1.0	-48.8	-13.0	-35.8	
3505.00	-20.2	H	3.0	36.0	1.0	-55.2	-13.0	-42.2	
5257.50	-14.6	H	3.0	35.4	1.0	-49.0	-13.0	-36.0	
7010.00	-12.5	H	3.0	35.7	1.0	-47.2	-13.0	-34.2	

LTE B4 5MHz 16QAM

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

Company: SOMC
 Project #: 11626381 PY7-08618T
 Date: 4/7/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_QPSK Band 4 Harmonics, 10MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1715MHz									
3430.00	-17.8	V	3.0	36.1	1.0	-52.9	-13.0	-39.9	
5145.00	-14.6	V	3.0	35.4	1.0	-49.0	-13.0	-36.0	
6860.00	-13.9	V	3.0	35.7	1.0	-48.6	-13.0	-35.6	
3430.00	-18.6	H	3.0	36.1	1.0	-53.6	-13.0	-40.6	
5145.00	-13.5	H	3.0	35.4	1.0	-48.0	-13.0	-35.0	
6860.00	-12.6	H	3.0	35.7	1.0	-47.3	-13.0	-34.3	
Mid Ch, 1732.5MHz									
3465.00	-17.8	V	3.0	36.0	1.0	-52.8	-13.0	-39.8	
5197.50	-14.5	V	3.0	35.4	1.0	-48.9	-13.0	-35.9	
6930.00	-13.8	V	3.0	35.7	1.0	-48.4	-13.0	-35.4	
3465.00	-18.5	H	3.0	36.0	1.0	-53.6	-13.0	-40.6	
5197.50	-13.7	H	3.0	35.4	1.0	-48.1	-13.0	-35.1	
6930.00	-12.6	H	3.0	35.7	1.0	-47.3	-13.0	-34.3	
High Ch, 1750MHz									
3500.00	-17.6	V	3.0	36.0	1.0	-52.6	-13.0	-39.6	
5250.00	-14.6	V	3.0	35.4	1.0	-49.1	-13.0	-36.1	
7000.00	-13.5	V	3.0	35.7	1.0	-48.2	-13.0	-35.2	
3500.00	-18.5	H	3.0	36.0	1.0	-53.5	-13.0	-40.5	
5250.00	-13.7	H	3.0	35.4	1.0	-48.1	-13.0	-35.1	
7000.00	-10.2	H	3.0	35.7	1.0	-44.9	-13.0	-31.9	

LTE B4 10MHz QPSK

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

Company: SOMC
 Project #: 11626381 PY7-08618T
 Date: 4/7/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_16QAM Band 4 Harmonics, 10MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1715MHz									
3430.00	-18.2	V	3.0	36.1	1.0	-53.2	-13.0	-40.2	
5145.00	-14.3	V	3.0	35.4	1.0	-48.8	-13.0	-35.8	
6860.00	-10.8	V	3.0	35.7	1.0	-45.5	-13.0	-32.5	
3430.00	-18.8	H	3.0	36.1	1.0	-53.8	-13.0	-40.8	
5145.00	-14.8	H	3.0	35.4	1.0	-49.3	-13.0	-36.3	
6860.00	-12.9	H	3.0	35.7	1.0	-47.5	-13.0	-34.5	
Mid Ch, 1732.5MHz									
3465.00	-17.9	V	3.0	36.0	1.0	-53.0	-13.0	-40.0	
5197.50	-14.1	V	3.0	35.4	1.0	-48.6	-13.0	-35.6	
6930.00	-13.8	V	3.0	35.7	1.0	-48.5	-13.0	-35.5	
3465.00	-18.8	H	3.0	36.0	1.0	-53.8	-13.0	-40.8	
5197.50	-14.4	H	3.0	35.4	1.0	-48.8	-13.0	-35.8	
6930.00	-12.6	H	3.0	35.7	1.0	-47.3	-13.0	-34.3	
High Ch, 1750MHz									
3500.00	-17.9	V	3.0	36.0	1.0	-52.9	-13.0	-39.9	
5250.00	-14.7	V	3.0	35.4	1.0	-49.1	-13.0	-36.1	
7000.00	-13.6	V	3.0	35.7	1.0	-48.2	-13.0	-35.2	
3500.00	-18.9	H	3.0	36.0	1.0	-53.9	-13.0	-40.9	
5250.00	-14.0	H	3.0	35.4	1.0	-48.4	-13.0	-35.4	
7000.00	-10.1	H	3.0	35.7	1.0	-44.8	-13.0	-31.8	

LTE B4 10MHz 16QAM

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

Company: SOMC
 Project #: 11626381 PY7-08618T
 Date: 4/7/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_QPSK Band 4 Harmonics, 15MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1717.5MHz									
3435.00	-18.7	V	3.0	36.1	1.0	-53.8	-13.0	-40.8	
5152.50	-14.5	V	3.0	35.4	1.0	-49.0	-13.0	-36.0	
6870.00	-12.7	V	3.0	35.7	1.0	-47.4	-13.0	-34.4	
3435.00	-18.6	H	3.0	36.1	1.0	-53.6	-13.0	-40.6	
5152.50	-14.3	H	3.0	35.4	1.0	-48.7	-13.0	-35.7	
6870.00	-11.9	H	3.0	35.7	1.0	-46.6	-13.0	-33.6	
Mid Ch, 1732.5MHz									
3465.00	-18.7	V	3.0	36.0	1.0	-53.7	-13.0	-40.7	
5197.50	-14.3	V	3.0	35.4	1.0	-48.8	-13.0	-35.8	
6930.00	-14.2	V	3.0	35.7	1.0	-48.9	-13.0	-35.9	
3465.00	-18.4	H	3.0	36.0	1.0	-53.5	-13.0	-40.5	
5197.50	-14.6	H	3.0	35.4	1.0	-49.0	-13.0	-36.0	
6930.00	-13.1	H	3.0	35.7	1.0	-47.8	-13.0	-34.8	
High Ch, 1747.5MHz									
3495.00	-18.5	V	3.0	36.0	1.0	-53.6	-13.0	-40.6	
5242.50	-14.1	V	3.0	35.4	1.0	-48.5	-13.0	-35.5	
6990.00	-13.0	V	3.0	35.7	1.0	-47.7	-13.0	-34.7	
3495.00	-19.7	H	3.0	36.0	1.0	-54.7	-13.0	-41.7	
5242.50	-14.4	H	3.0	35.4	1.0	-48.8	-13.0	-35.8	
6990.00	-13.2	H	3.0	35.7	1.0	-47.9	-13.0	-34.9	

LTE B4 15MHz QPSK

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

Company: SOMC
 Project #: 11626381 PY7-08618T
 Date: 4/7/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_16QAM Band 4 Harmonics, 15MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1717.5MHz									
3435.00	-18.4	V	3.0	36.1	1.0	-53.5	-13.0	-40.5	
5152.50	-14.5	V	3.0	35.4	1.0	-48.9	-13.0	-35.9	
6870.00	-12.0	V	3.0	35.7	1.0	-46.6	-13.0	-33.6	
3435.00	-18.5	H	3.0	36.1	1.0	-53.6	-13.0	-40.6	
5152.50	-14.7	H	3.0	35.4	1.0	-49.1	-13.0	-36.1	
6870.00	-11.8	H	3.0	35.7	1.0	-46.5	-13.0	-33.5	
Mid Ch, 1732.5MHz									
3465.00	-18.2	V	3.0	36.0	1.0	-53.3	-13.0	-40.3	
5197.50	-15.4	V	3.0	35.4	1.0	-49.8	-13.0	-36.8	
6930.00	-13.8	V	3.0	35.7	1.0	-48.4	-13.0	-35.4	
3465.00	-18.4	H	3.0	36.0	1.0	-53.5	-13.0	-40.5	
5197.50	-15.1	H	3.0	35.4	1.0	-49.6	-13.0	-36.6	
6930.00	-12.1	H	3.0	35.7	1.0	-46.8	-13.0	-33.8	
High Ch, 1747.5MHz									
3495.00	-18.3	V	3.0	36.0	1.0	-53.3	-13.0	-40.3	
5242.50	-13.9	V	3.0	35.4	1.0	-48.3	-13.0	-35.3	
6990.00	-12.7	V	3.0	35.7	1.0	-47.4	-13.0	-34.4	
3495.00	-19.4	H	3.0	36.0	1.0	-54.4	-13.0	-41.4	
5242.50	-14.1	H	3.0	35.4	1.0	-48.6	-13.0	-35.6	
6990.00	-13.1	H	3.0	35.7	1.0	-47.7	-13.0	-34.7	

LTE B4 15MHz 16QAM

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

Company: SOMAC
 Project #: 11626381 PY7-08618T
 Date: 4/7/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_QPSK Band 4 Harmonics, 20MHz Bandwidth

f	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1720MHz									
3440.00	-18.6	V	3.0	36.0	1.0	-53.7	-13.0	-40.7	
5160.00	-15.3	V	3.0	35.4	1.0	-49.8	-13.0	-36.8	
6880.00	-14.4	V	3.0	35.7	1.0	-49.1	-13.0	-36.1	
3440.00	-18.5	H	3.0	36.0	1.0	-53.6	-13.0	-40.6	
5160.00	-15.2	H	3.0	35.4	1.0	-49.6	-13.0	-36.6	
6880.00	-13.1	H	3.0	35.7	1.0	-47.8	-13.0	-34.8	
Mid Ch, 1732.5MHz									
3465.00	-18.4	V	3.0	36.0	1.0	-53.5	-13.0	-40.5	
5197.50	-15.2	V	3.0	35.4	1.0	-49.6	-13.0	-36.6	
6930.00	-14.3	V	3.0	35.7	1.0	-48.9	-13.0	-35.9	
3465.00	-18.7	H	3.0	36.0	1.0	-53.7	-13.0	-40.7	
5197.50	-15.0	H	3.0	35.4	1.0	-49.5	-13.0	-36.5	
6930.00	-13.1	H	3.0	35.7	1.0	-47.8	-13.0	-34.8	
High Ch, 1745MHz									
3490.00	-18.6	V	3.0	36.0	1.0	-53.6	-13.0	-40.6	
5235.00	-14.9	V	3.0	35.4	1.0	-49.3	-13.0	-36.3	
6880.00	-13.8	V	3.0	35.7	1.0	-48.5	-13.0	-35.5	
3490.00	-18.8	H	3.0	36.0	1.0	-53.8	-13.0	-40.8	
5235.00	-15.5	H	3.0	35.4	1.0	-49.9	-13.0	-36.9	
6880.00	-12.9	H	3.0	35.7	1.0	-47.6	-13.0	-34.6	

LTE B4 20MHz QPSK

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

Company: SOMAC
 Project #: 11626381 PY7-08618T
 Date: 4/7/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_16QAM Band 4 Harmonics, 20MHz Bandwidth

f	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1720MHz									
3440.00	-18.0	V	3.0	36.0	1.0	-53.1	-13.0	-40.1	
5160.00	-15.3	V	3.0	35.4	1.0	-49.7	-13.0	-36.7	
6880.00	-14.0	V	3.0	35.7	1.0	-48.7	-13.0	-35.7	
3440.00	-18.4	H	3.0	36.0	1.0	-53.5	-13.0	-40.5	
5160.00	-15.3	H	3.0	35.4	1.0	-49.7	-13.0	-36.7	
6880.00	-13.2	H	3.0	35.7	1.0	-47.9	-13.0	-34.9	
Mid Ch, 1732.5MHz									
3465.00	-18.0	V	3.0	36.0	1.0	-53.1	-13.0	-40.1	
5197.50	-14.9	V	3.0	35.4	1.0	-49.4	-13.0	-36.4	
6930.00	-11.9	V	3.0	35.7	1.0	-46.6	-13.0	-33.6	
3465.00	-18.6	H	3.0	36.0	1.0	-53.7	-13.0	-40.7	
5197.50	-14.5	H	3.0	35.4	1.0	-48.9	-13.0	-35.9	
6930.00	-13.2	H	3.0	35.7	1.0	-47.9	-13.0	-34.9	
High Ch, 1745MHz									
3490.00	-18.4	V	3.0	36.0	1.0	-53.4	-13.0	-40.4	
5235.00	-14.7	V	3.0	35.4	1.0	-49.1	-13.0	-36.1	
6880.00	-13.8	V	3.0	35.7	1.0	-48.5	-13.0	-35.5	
3490.00	-18.8	H	3.0	36.0	1.0	-53.8	-13.0	-40.8	
5235.00	-15.4	H	3.0	35.4	1.0	-49.8	-13.0	-36.8	
6880.00	-12.8	H	3.0	35.7	1.0	-47.5	-13.0	-34.5	

LTE B4 20MHz 16QAM

LTE Band 5

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

Company: SOMC
 Project #: 11626381
 Date: 4/10/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_QPSK Band 5 Harmonics, 1.4MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 824.7									
1649.40	-29.1	V	3.0	36.4	1.0	-64.5	-13.0	-51.5	
2474.10	-24.5	V	3.0	35.0	1.0	-58.5	-13.0	-45.5	
3298.80	-25.0	V	3.0	34.3	1.0	-58.3	-13.0	-45.3	
1649.40	-27.3	H	3.0	36.4	1.0	-62.7	-13.0	-49.7	
2474.10	-26.6	H	3.0	35.0	1.0	-60.5	-13.0	-47.5	
3298.80	-25.2	H	3.0	34.3	1.0	-58.5	-13.0	-45.5	
Mid Ch, 836.5									
1673.00	-28.8	V	3.0	36.3	1.0	-64.1	-13.0	-51.1	
2509.50	-24.2	V	3.0	34.9	1.0	-58.2	-13.0	-45.2	
3346.00	-25.0	V	3.0	34.2	1.0	-58.2	-13.0	-45.2	
1673.00	-27.2	H	3.0	36.3	1.0	-62.5	-13.0	-49.5	
2509.50	-26.6	H	3.0	34.9	1.0	-60.5	-13.0	-47.5	
3346.00	-25.0	H	3.0	34.2	1.0	-58.2	-13.0	-45.2	
High Ch, 848.3									
1696.60	-28.6	V	3.0	36.3	1.0	-63.9	-13.0	-50.9	
2544.90	-24.5	V	3.0	34.9	1.0	-58.4	-13.0	-45.4	
3393.20	-25.2	V	3.0	34.2	1.0	-58.4	-13.0	-45.4	
1696.60	-27.5	H	3.0	36.3	1.0	-62.8	-13.0	-49.8	
2544.90	-26.7	H	3.0	34.9	1.0	-60.6	-13.0	-47.6	
3393.20	-25.0	H	3.0	34.2	1.0	-58.2	-13.0	-45.2	

LTE B5 1.4MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/10/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_16QAM Band 5 Harmonics, 1.4MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 824.7									
1649.40	-29.0	V	3.0	36.4	1.0	-64.3	-13.0	-51.3	
2474.10	-24.4	V	3.0	35.0	1.0	-58.4	-13.0	-45.4	
3298.80	-24.8	V	3.0	34.3	1.0	-58.1	-13.0	-45.1	
1649.40	-27.1	H	3.0	36.4	1.0	-62.4	-13.0	-49.4	
2474.10	-26.5	H	3.0	35.0	1.0	-60.3	-13.0	-47.3	
3298.80	-25.1	H	3.0	34.3	1.0	-58.4	-13.0	-45.4	
Mid Ch, 836.5									
1673.00	-28.5	V	3.0	36.3	1.0	-63.8	-13.0	-50.8	
2509.50	-24.4	V	3.0	34.9	1.0	-58.3	-13.0	-45.3	
3346.00	-24.6	V	3.0	34.2	1.0	-57.9	-13.0	-44.9	
1673.00	-26.9	H	3.0	36.3	1.0	-62.3	-13.0	-49.3	
2509.50	-26.4	H	3.0	34.9	1.0	-60.4	-13.0	-47.4	
3346.00	-24.9	H	3.0	34.2	1.0	-58.1	-13.0	-45.1	
High Ch, 848.3									
1696.60	-28.5	V	3.0	36.3	1.0	-63.8	-13.0	-50.8	
2544.90	-24.3	V	3.0	34.9	1.0	-58.2	-13.0	-45.2	
3393.20	-25.1	V	3.0	34.2	1.0	-58.2	-13.0	-45.2	
1696.60	-27.7	H	3.0	36.3	1.0	-63.0	-13.0	-50.0	
2544.90	-26.3	H	3.0	34.9	1.0	-60.3	-13.0	-47.3	
3393.20	-24.9	H	3.0	34.2	1.0	-58.0	-13.0	-45.0	

LTE B5 1.4MHz 16QAM

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

Company: SOMC
 Project #: 11626381
 Date: 4/10/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_QPSK Band 5 Harmonics, 3MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 825.5									
1651.00	-25.1	V	3.0	36.4	1.0	-60.5	-13.0	-47.5	
2476.50	-24.5	V	3.0	35.0	1.0	-58.4	-13.0	-45.4	
3302.00	-22.2	V	3.0	34.3	1.0	-55.5	-13.0	-42.5	
1651.00	-25.7	H	3.0	36.4	1.0	-61.1	-13.0	-48.1	
2476.50	-24.0	H	3.0	35.0	1.0	-58.0	-13.0	-45.0	
3302.00	-22.7	H	3.0	34.3	1.0	-56.0	-13.0	-43.0	
Mid Ch, 836.5									
1673.00	-24.8	V	3.0	36.3	1.0	-60.1	-13.0	-47.1	
2509.50	-24.5	V	3.0	34.9	1.0	-58.4	-13.0	-45.4	
3346.00	-22.1	V	3.0	34.2	1.0	-55.3	-13.0	-42.3	
1673.00	-25.6	H	3.0	36.3	1.0	-60.9	-13.0	-47.9	
2509.50	-24.2	H	3.0	34.9	1.0	-58.2	-13.0	-45.2	
3346.00	-22.7	H	3.0	34.2	1.0	-55.9	-13.0	-42.9	
High Ch, 847.5									
1695.00	-24.5	V	3.0	36.3	1.0	-59.8	-13.0	-46.8	
2542.50	-21.2	V	3.0	34.9	1.0	-55.1	-13.0	-42.1	
3390.00	-22.1	V	3.0	34.2	1.0	-55.2	-13.0	-42.2	
1695.00	-25.2	H	3.0	36.3	1.0	-60.5	-13.0	-47.5	
2542.50	-24.2	H	3.0	34.9	1.0	-58.1	-13.0	-45.1	
3390.00	-22.5	H	3.0	34.2	1.0	-55.7	-13.0	-42.7	

LTE B5 3MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/10/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_16QAM Band 5 Harmonics, 3MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 825.5									
1651.00	-24.7	V	3.0	36.4	1.0	-60.0	-13.0	-47.0	
2476.50	-24.0	V	3.0	35.0	1.0	-58.0	-13.0	-45.0	
3302.00	-19.2	V	3.0	34.3	1.0	-52.4	-13.0	-39.4	
1651.00	-25.4	H	3.0	36.4	1.0	-60.8	-13.0	-47.8	
2476.50	-23.7	H	3.0	35.0	1.0	-57.6	-13.0	-44.6	
3302.00	-22.6	H	3.0	34.3	1.0	-55.9	-13.0	-42.9	
Mid Ch, 836.5									
1673.00	-24.5	V	3.0	36.3	1.0	-59.8	-13.0	-46.8	
2509.50	-24.4	V	3.0	34.9	1.0	-58.3	-13.0	-45.3	
3346.00	-22.0	V	3.0	34.2	1.0	-55.2	-13.0	-42.2	
1673.00	-25.2	H	3.0	36.3	1.0	-60.5	-13.0	-47.5	
2509.50	-23.8	H	3.0	34.9	1.0	-57.8	-13.0	-44.8	
3346.00	-22.5	H	3.0	34.2	1.0	-55.7	-13.0	-42.7	
High Ch, 847.5									
1695.00	-24.4	V	3.0	36.3	1.0	-59.7	-13.0	-46.7	
2542.50	-21.1	V	3.0	34.9	1.0	-55.0	-13.0	-42.0	
3390.00	-22.0	V	3.0	34.2	1.0	-55.2	-13.0	-42.2	
1695.00	-25.0	H	3.0	36.3	1.0	-60.3	-13.0	-47.3	
2542.50	-23.7	H	3.0	34.9	1.0	-57.6	-13.0	-44.6	
3390.00	-22.3	H	3.0	34.2	1.0	-55.5	-13.0	-42.5	

LTE B5 3MHz 16QAM

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

Company: SOMC
 Project #: 11626381
 Date: 4/10/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_QPSK Band 5 Harmonics, 3MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 825.5									
1651.00	-24.6	V	3.0	36.4	1.0	-60.0	-13.0	-47.0	
2476.50	-25.0	V	3.0	35.0	1.0	-59.0	-13.0	-46.0	
3302.00	-22.5	V	3.0	34.3	1.0	-55.8	-13.0	-42.8	
1651.00	-25.9	H	3.0	36.4	1.0	-61.2	-13.0	-48.2	
2476.50	-24.6	H	3.0	35.0	1.0	-58.6	-13.0	-45.6	
3302.00	-22.9	H	3.0	34.3	1.0	-56.2	-13.0	-43.2	
Mid Ch, 836.5									
1673.00	-24.3	V	3.0	36.3	1.0	-59.6	-13.0	-46.6	
2509.50	-24.9	V	3.0	34.9	1.0	-58.8	-13.0	-45.8	
3346.00	-22.6	V	3.0	34.2	1.0	-55.8	-13.0	-42.8	
1673.00	-25.6	H	3.0	36.3	1.0	-60.9	-13.0	-47.9	
2509.50	-24.4	H	3.0	34.9	1.0	-58.3	-13.0	-45.3	
3346.00	-22.6	H	3.0	34.2	1.0	-55.8	-13.0	-42.8	
High Ch, 847.5									
1695.00	-24.2	V	3.0	36.3	1.0	-59.5	-13.0	-46.5	
2542.50	-21.1	V	3.0	34.9	1.0	-55.6	-13.0	-42.6	
3390.00	-22.4	V	3.0	34.2	1.0	-55.5	-13.0	-42.5	
1695.00	-25.2	H	3.0	36.3	1.0	-60.4	-13.0	-47.4	
2542.50	-24.2	H	3.0	34.9	1.0	-58.1	-13.0	-45.1	
3390.00	-22.4	H	3.0	34.2	1.0	-55.6	-13.0	-42.6	

LTE B5 5MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/10/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_16QAM Band 5 Harmonics, 3MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 825.5									
1651.00	-24.5	V	3.0	36.4	1.0	-59.8	-13.0	-46.8	
2476.50	-24.8	V	3.0	35.0	1.0	-58.7	-13.0	-45.7	
3302.00	-22.2	V	3.0	34.3	1.0	-55.4	-13.0	-42.4	
1651.00	-25.6	H	3.0	36.4	1.0	-61.0	-13.0	-48.0	
2476.50	-24.3	H	3.0	35.0	1.0	-58.3	-13.0	-45.3	
3302.00	-21.8	H	3.0	34.3	1.0	-55.0	-13.0	-42.0	
Mid Ch, 836.5									
1673.00	-24.2	V	3.0	36.3	1.0	-59.5	-13.0	-46.5	
2509.50	-24.6	V	3.0	34.9	1.0	-58.6	-13.0	-45.6	
3346.00	-22.4	V	3.0	34.2	1.0	-55.7	-13.0	-42.7	
1673.00	-25.2	H	3.0	36.3	1.0	-60.6	-13.0	-47.6	
2509.50	-24.2	H	3.0	34.9	1.0	-58.1	-13.0	-45.1	
3346.00	-22.3	H	3.0	34.2	1.0	-55.5	-13.0	-42.5	
High Ch, 847.5									
1695.00	-24.0	V	3.0	36.3	1.0	-59.3	-13.0	-46.3	
2542.50	-21.4	V	3.0	34.9	1.0	-56.3	-13.0	-43.3	
3390.00	-22.1	V	3.0	34.2	1.0	-55.3	-13.0	-42.3	
1695.00	-24.9	H	3.0	36.3	1.0	-60.2	-13.0	-47.2	
2542.50	-24.0	H	3.0	34.9	1.0	-57.9	-13.0	-44.9	
3390.00	-22.2	H	3.0	34.2	1.0	-55.4	-13.0	-42.4	

LTE B5 5MHz 16QAM

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

Company: SOMC
 Project #: 11626381
 Date: 4/10/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_QPSK Band 5 Harmonics, 10MHz Bandwidth

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ESRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 829									
1658.00	-25.0	V	3.0	36.4	1.0	-60.4	-13.0	-47.4	
2487.00	-24.9	V	3.0	35.9	1.0	-58.8	-13.0	-45.8	
3316.00	-21.6	V	3.0	34.3	1.0	-54.9	-13.0	-41.9	
1658.00	-25.1	H	3.0	36.4	1.0	-60.5	-13.0	-47.5	
2487.00	-24.7	H	3.0	35.0	1.0	-58.7	-13.0	-45.7	
3316.00	-22.3	H	3.0	34.3	1.0	-55.6	-13.0	-42.6	
Mid Ch, 836.5									
1673.00	-24.8	V	3.0	36.3	1.0	-60.1	-13.0	-47.1	
2509.50	-24.7	V	3.0	34.9	1.0	-58.6	-13.0	-45.6	
3346.00	-21.6	V	3.0	34.2	1.0	-54.8	-13.0	-41.8	
1673.00	-24.8	H	3.0	36.3	1.0	-60.2	-13.0	-47.2	
2509.50	-24.6	H	3.0	34.9	1.0	-58.5	-13.0	-45.5	
3346.00	-22.4	H	3.0	34.2	1.0	-55.6	-13.0	-42.6	
High Ch, 844									
1688.00	-24.6	V	3.0	36.3	1.0	-59.9	-13.0	-46.9	
2532.00	-24.6	V	3.0	34.9	1.0	-58.5	-13.0	-45.5	
3376.00	-24.8	V	3.0	34.2	1.0	-58.0	-13.0	-45.0	
1688.00	-24.8	H	3.0	36.3	1.0	-60.1	-13.0	-47.1	
2532.00	-24.5	H	3.0	34.9	1.0	-58.4	-13.0	-45.4	
3376.00	-22.6	H	3.0	34.2	1.0	-55.8	-13.0	-42.8	

LTE B5 10MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/10/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_16QAM Band 5 Harmonics, 10MHz Bandwidth

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ESRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 829									
1658.00	-24.9	V	3.0	36.4	1.0	-60.3	-13.0	-47.3	
2487.00	-24.6	V	3.0	35.0	1.0	-58.5	-13.0	-45.5	
3316.00	-21.4	V	3.0	34.3	1.0	-54.7	-13.0	-41.7	
1658.00	-25.0	H	3.0	36.4	1.0	-60.3	-13.0	-47.3	
2487.00	-24.6	H	3.0	35.0	1.0	-58.6	-13.0	-45.6	
3316.00	-22.0	H	3.0	34.3	1.0	-55.2	-13.0	-42.2	
Mid Ch, 836.5									
1673.00	-24.7	V	3.0	36.3	1.0	-60.0	-13.0	-47.0	
2509.50	-24.5	V	3.0	34.9	1.0	-58.5	-13.0	-45.5	
3346.00	-21.1	V	3.0	34.2	1.0	-54.4	-13.0	-41.4	
1673.00	-24.7	H	3.0	36.3	1.0	-60.1	-13.0	-47.1	
2509.50	-24.4	H	3.0	34.9	1.0	-58.3	-13.0	-45.3	
3346.00	-22.2	H	3.0	34.2	1.0	-55.4	-13.0	-42.4	
High Ch, 844									
1688.00	-24.3	V	3.0	36.3	1.0	-59.6	-13.0	-46.6	
2532.00	-24.4	V	3.0	34.9	1.0	-58.3	-13.0	-45.3	
3376.00	-24.6	V	3.0	34.2	1.0	-57.8	-13.0	-44.8	
1688.00	-24.7	H	3.0	36.3	1.0	-60.0	-13.0	-47.0	
2532.00	-24.3	H	3.0	34.9	1.0	-58.3	-13.0	-45.3	
3376.00	-22.4	H	3.0	34.2	1.0	-55.6	-13.0	-42.6	

LTE B5 10MHz 16QAM

LTE Band 7

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

Company: SOMC
 Project #: 11626381 PY7-08618T
 Date: 4/7/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_QPSK Band 7 Harmonics, 5MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2502.5									
5005.00	-17.0	V	3.0	33.2	1.0	-49.3	-25.0	-24.3	
7507.50	-19.1	V	3.0	32.8	1.0	-51.0	-25.0	-26.0	
10010.00	-20.0	V	3.0	32.8	1.0	-51.8	-25.0	-26.8	
5005.00	-18.6	H	3.0	33.2	1.0	-50.8	-25.0	-25.8	
7507.50	-19.1	H	3.0	32.8	1.0	-51.0	-25.0	-26.0	
10010.00	-20.1	H	3.0	32.8	1.0	-51.8	-25.0	-26.8	
Mid Ch, 2535									
5070.00	-20.9	V	3.0	33.2	1.0	-53.1	-25.0	-28.1	
7605.00	-17.6	V	3.0	32.8	1.0	-49.4	-25.0	-24.4	
10140.00	-18.8	V	3.0	32.7	1.0	-50.5	-25.0	-25.5	
5070.00	-20.5	H	3.0	33.2	1.0	-52.7	-25.0	-27.7	
7605.00	-18.2	H	3.0	32.8	1.0	-50.1	-25.0	-25.1	
10140.00	-18.9	H	3.0	32.7	1.0	-50.5	-25.0	-25.5	
High Ch, 2567.5									
5135.00	-18.8	V	3.0	33.2	1.0	-49.0	-25.0	-24.0	
7702.50	-19.0	V	3.0	32.8	1.0	-50.8	-25.0	-25.8	
10270.00	-18.9	V	3.0	32.6	1.0	-50.5	-25.0	-25.5	
5135.00	-20.5	H	3.0	33.2	1.0	-52.7	-25.0	-27.7	
7702.50	-18.3	H	3.0	32.8	1.0	-50.2	-25.0	-25.2	
10270.00	-19.5	H	3.0	32.6	1.0	-51.1	-25.0	-26.1	

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

Company: SOMC
 Project #: 11626381 PY7-08618T
 Date: 4/7/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_16QAM Band 7 Harmonics, 5MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2502.5									
5005.00	-15.4	V	3.0	33.2	1.0	-47.6	-25.0	-22.6	
7507.50	-16.1	V	3.0	32.8	1.0	-48.0	-25.0	-23.0	
10010.00	-18.8	V	3.0	32.8	1.0	-50.6	-25.0	-25.6	
5005.00	-20.3	H	3.0	33.2	1.0	-52.6	-25.0	-27.6	
7507.50	-17.0	H	3.0	32.8	1.0	-48.8	-25.0	-23.8	
10010.00	-18.8	H	3.0	32.8	1.0	-50.5	-25.0	-25.5	
Mid Ch, 2535									
5070.00	-19.2	V	3.0	33.2	1.0	-51.5	-25.0	-26.5	
7605.00	-15.9	V	3.0	32.8	1.0	-47.7	-25.0	-22.7	
10140.00	-17.6	V	3.0	32.7	1.0	-49.3	-25.0	-24.3	
5070.00	-20.0	H	3.0	33.2	1.0	-52.2	-25.0	-27.2	
7605.00	-16.7	H	3.0	32.8	1.0	-48.5	-25.0	-23.5	
10140.00	-17.8	H	3.0	32.7	1.0	-49.4	-25.0	-24.4	
High Ch, 2567.5									
5135.00	-15.2	V	3.0	33.2	1.0	-47.4	-25.0	-22.4	
7702.50	-16.3	V	3.0	32.8	1.0	-48.2	-25.0	-23.2	
10270.00	-17.4	V	3.0	32.6	1.0	-49.0	-25.0	-24.0	
5135.00	-18.9	H	3.0	33.2	1.0	-51.1	-25.0	-26.1	
7702.50	-17.2	H	3.0	32.8	1.0	-49.0	-25.0	-24.0	
10270.00	-17.4	H	3.0	32.6	1.0	-49.0	-25.0	-24.0	

LTE B7 5MHz QPSK

LTE B7 5MHz 16QAM

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

Company: SOMC
 Project #: 11626381 PY7-08618T
 Date: 4/7/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_16QAM Band 7 Harmonics, 5MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2502.5									
5005.00	-22.1	V	3.0	33.2	1.0	-54.4	-25.0	-29.4	
7507.50	-19.4	V	3.0	32.8	1.0	-51.3	-25.0	-26.3	
10010.00	-19.9	V	3.0	32.8	1.0	-51.6	-25.0	-26.6	
5005.00	-20.7	H	3.0	33.2	1.0	-52.9	-25.0	-27.9	
7507.50	-19.3	H	3.0	32.8	1.0	-51.1	-25.0	-26.1	
10010.00	-19.8	H	3.0	32.8	1.0	-51.6	-25.0	-26.6	
Mid Ch, 2535									
5070.00	-22.2	V	3.0	33.2	1.0	-54.4	-25.0	-29.4	
7605.00	-19.5	V	3.0	32.8	1.0	-51.3	-25.0	-26.3	
10140.00	-19.7	V	3.0	32.7	1.0	-51.3	-25.0	-26.3	
5070.00	-21.0	H	3.0	33.2	1.0	-53.2	-25.0	-28.2	
7605.00	-19.3	H	3.0	32.8	1.0	-51.2	-25.0	-26.2	
10140.00	-19.5	H	3.0	32.7	1.0	-51.2	-25.0	-26.2	
High Ch, 2567.5									
5135.00	-22.1	V	3.0	33.2	1.0	-54.3	-25.0	-29.3	
7702.50	-19.2	V	3.0	32.8	1.0	-51.1	-25.0	-26.1	
10270.00	-19.6	V	3.0	32.6	1.0	-51.2	-25.0	-26.2	
5135.00	-21.2	H	3.0	33.2	1.0	-53.4	-25.0	-28.4	
7702.50	-19.4	H	3.0	32.8	1.0	-51.2	-25.0	-26.2	
10270.00	-19.5	H	3.0	32.6	1.0	-51.1	-25.0	-26.1	

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

Company: SOMC
 Project #: 11626381 PY7-08618T
 Date: 4/7/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_16QAM Band 7 Harmonics, 10MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2505									
5010.00	-20.3	V	3.0	33.2	1.0	-52.5	-25.0	-27.5	
7515.00	-17.1	V	3.0	32.8	1.0	-48.9	-25.0	-23.9	
10020.00	-18.3	V	3.0	32.8	1.0	-50.1	-25.0	-25.1	
5010.00	-20.4	H	3.0	33.2	1.0	-52.6	-25.0	-27.6	
7515.00	-16.5	H	3.0	32.8	1.0	-48.4	-25.0	-23.4	
10020.00	-17.5	H	3.0	32.8	1.0	-49.2	-25.0	-24.2	
Mid Ch, 2535									
5070.00	-19.5	V	3.0	33.2	1.0	-51.8	-25.0	-26.8	
7605.00	-16.4	V	3.0	32.8	1.0	-48.2	-25.0	-23.2	
10140.00	-17.0	V	3.0	32.7	1.0	-48.7	-25.0	-23.7	
5070.00	-20.1	H	3.0	33.2	1.0	-52.4	-25.0	-27.4	
7605.00	-17.3	H	3.0	32.8	1.0	-49.1	-25.0	-24.1	
10140.00	-17.4	H	3.0	32.7	1.0	-49.0	-25.0	-24.0	
High Ch, 2565									
5130.00	-19.4	V	3.0	33.2	1.0	-51.6	-25.0	-26.6	
7695.00	-16.8	V	3.0	32.8	1.0	-48.2	-25.0	-23.2	
10260.00	-17.0	V	3.0	32.6	1.0	-48.6	-25.0	-23.6	
5130.00	-20.1	H	3.0	33.2	1.0	-52.3	-25.0	-27.3	
7695.00	-17.0	H	3.0	32.8	1.0	-48.8	-25.0	-23.8	
10260.00	-17.2	H	3.0	32.6	1.0	-48.8	-25.0	-23.8	

LTE B7 10MHz QPSK

LTE B7 10MHz 16QAM

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

Company: SOMC
 Project #: 11626381 PY7-08618T
 Date: 4/7/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_QPSK Band 7 Harmonics, 15MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2507.5									
5015.00	-21.9	V	3.0	33.2	1.0	-54.2	-25.0	-29.2	
7522.50	-18.4	V	3.0	32.8	1.0	-50.2	-25.0	-25.2	
10030.00	-19.8	V	3.0	32.8	1.0	-51.5	-25.0	-26.5	
5015.00	-22.4	H	3.0	33.2	1.0	-54.6	-25.0	-29.6	
7522.50	-18.7	H	3.0	32.8	1.0	-50.5	-25.0	-25.5	
10030.00	-20.9	H	3.0	32.8	1.0	-52.7	-25.0	-27.7	
Mid Ch, 2535									
5070.00	-21.9	V	3.0	33.2	1.0	-54.1	-25.0	-29.1	
7605.00	-18.6	V	3.0	32.8	1.0	-50.4	-25.0	-25.4	
10140.00	-19.1	V	3.0	32.7	1.0	-50.8	-25.0	-25.8	
5070.00	-21.9	H	3.0	33.2	1.0	-54.1	-25.0	-29.1	
7605.00	-18.4	H	3.0	32.8	1.0	-50.2	-25.0	-25.2	
10140.00	-20.0	H	3.0	32.7	1.0	-51.7	-25.0	-26.7	
High Ch, 2562.5									
5125.00	-22.0	V	3.0	33.2	1.0	-54.2	-25.0	-29.2	
7687.50	-18.8	V	3.0	32.6	1.0	-50.7	-25.0	-25.7	
10250.00	-20.1	V	3.0	32.6	1.0	-51.7	-25.0	-26.7	
5125.00	-21.7	H	3.0	33.2	1.0	-53.9	-25.0	-28.9	
7687.50	-18.4	H	3.0	32.8	1.0	-50.2	-25.0	-25.2	
10250.00	-20.5	H	3.0	32.6	1.0	-52.1	-25.0	-27.1	

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

Company: SOMC
 Project #: 11626381 PY7-08618T
 Date: 4/7/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_16QAM Band 7 Harmonics, 15MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2507.5									
5015.00	-19.8	V	3.0	33.2	1.0	-52.1	-25.0	-27.1	
7522.50	-16.3	V	3.0	32.8	1.0	-48.2	-25.0	-23.2	
10030.00	-18.4	V	3.0	32.8	1.0	-50.1	-25.0	-25.1	
5015.00	-19.3	H	3.0	33.2	1.0	-51.5	-25.0	-26.5	
7522.50	-16.6	H	3.0	32.8	1.0	-48.5	-25.0	-23.5	
10030.00	-18.0	H	3.0	32.8	1.0	-49.8	-25.0	-24.8	
Mid Ch, 2535									
5070.00	-19.6	V	3.0	33.2	1.0	-51.8	-25.0	-26.8	
7605.00	-16.2	V	3.0	32.8	1.0	-48.1	-25.0	-23.1	
10140.00	-17.6	V	3.0	32.7	1.0	-49.3	-25.0	-24.3	
5070.00	-19.5	H	3.0	33.2	1.0	-51.7	-25.0	-26.7	
7605.00	-16.4	H	3.0	32.8	1.0	-48.3	-25.0	-23.3	
10140.00	-17.5	H	3.0	32.7	1.0	-49.2	-25.0	-24.2	
High Ch, 2562.5									
5125.00	-19.8	V	3.0	33.2	1.0	-52.0	-25.0	-27.0	
7687.50	-16.2	V	3.0	32.8	1.0	-48.0	-25.0	-23.0	
10250.00	-17.6	V	3.0	32.6	1.0	-49.2	-25.0	-24.2	
5125.00	-19.2	H	3.0	33.2	1.0	-51.4	-25.0	-26.4	
7687.50	-16.9	H	3.0	32.8	1.0	-48.7	-25.0	-23.7	
10250.00	-18.1	H	3.0	32.6	1.0	-49.8	-25.0	-24.8	

LTE B7 15MHz QPSK

LTE B7 15MHz 16QAM

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

Company: SOMAC
 Project #: 11626381 PY7-08618T
 Date: 4/7/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_QPSK Band 7 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, 2510									
5020.00	-21.5	V	3.0	33.2	1.0	-53.7	-25.0	-28.7	
7530.00	-18.7	V	3.0	32.8	1.0	-50.5	-25.0	-25.5	
10040.00	-20.0	V	3.0	32.7	1.0	-51.7	-25.0	-26.7	
5020.00	-21.5	H	3.0	33.2	1.0	-53.8	-25.0	-28.8	
7530.00	-18.6	H	3.0	32.8	1.0	-50.5	-25.0	-25.5	
10040.00	-19.0	H	3.0	32.7	1.0	-50.7	-25.0	-25.7	
Mid Ch, 2535									
5070.00	-21.3	V	3.0	33.2	1.0	-53.5	-25.0	-28.5	
7695.00	-18.8	V	3.0	32.8	1.0	-50.6	-25.0	-25.6	
10140.00	-19.8	V	3.0	32.7	1.0	-51.4	-25.0	-26.4	
5070.00	-21.4	H	3.0	33.2	1.0	-53.6	-25.0	-28.6	
7695.00	-19.0	H	3.0	32.8	1.0	-50.8	-25.0	-25.8	
10140.00	-19.0	H	3.0	32.7	1.0	-50.6	-25.0	-25.6	
High Ch, 2560									
5120.00	-21.2	V	3.0	33.2	1.0	-53.4	-25.0	-28.4	
7680.00	-18.9	V	3.0	32.8	1.0	-50.7	-25.0	-25.7	
10240.00	-19.7	V	3.0	32.6	1.0	-51.4	-25.0	-26.4	
5120.00	-21.5	H	3.0	33.2	1.0	-53.7	-25.0	-28.7	
7680.00	-18.5	H	3.0	32.8	1.0	-50.4	-25.0	-25.4	
10240.00	-19.4	H	3.0	32.6	1.0	-51.0	-25.0	-26.0	

LTE B7 20MHz QPSK

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

Company: SOMAC
 Project #: 11626381 PY7-08618T
 Date: 4/7/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_16QAM Band 7 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, 2510									
5020.00	-19.5	V	3.0	33.2	1.0	-51.7	-25.0	-26.7	
7530.00	-15.8	V	3.0	32.8	1.0	-47.7	-25.0	-22.7	
10040.00	-14.0	V	3.0	32.7	1.0	-45.7	-25.0	-20.7	
5020.00	-19.0	H	3.0	33.2	1.0	-51.3	-25.0	-26.3	
7530.00	-19.9	H	3.0	32.8	1.0	-51.8	-25.0	-26.8	
10040.00	0.0	H	3.0	32.7	1.0	-31.7	-25.0	-6.7	
Mid Ch, 2535									
5070.00	-19.7	V	3.0	33.2	1.0	-51.9	-25.0	-26.9	
7695.00	-16.0	V	3.0	32.8	1.0	-47.8	-25.0	-22.8	
10140.00	-18.2	V	3.0	32.7	1.0	-49.9	-25.0	-24.9	
5070.00	-19.1	H	3.0	33.2	1.0	-51.3	-25.0	-26.3	
7695.00	-17.2	H	3.0	32.8	1.0	-49.0	-25.0	-24.0	
10140.00	-17.7	H	3.0	32.7	1.0	-49.3	-25.0	-24.3	
High Ch, 2560									
5120.00	-20.9	V	3.0	33.2	1.0	-53.1	-25.0	-28.1	
7680.00	-16.0	V	3.0	32.8	1.0	-47.9	-25.0	-22.9	
10240.00	-18.2	V	3.0	32.6	1.0	-49.8	-25.0	-24.8	
5120.00	-20.5	H	3.0	33.2	1.0	-52.7	-25.0	-27.7	
7680.00	-16.5	H	3.0	32.8	1.0	-48.4	-25.0	-23.4	
10240.00	-17.4	H	3.0	32.6	1.0	-49.0	-25.0	-24.0	

LTE B7 20MHz 16QAM

LTE Band 12

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

Company: SOMC
 Project #: 11626381
 Date: 4/6/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Charger
 Location: Chamber C
 Mode: LTE_QPSK Band 12 Harmonics, 14MHz 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, 699.7MHz									
1399.40	-33.1	V	3.0	37.4	1.0	-69.5	-13.0	-56.5	
2099.10	-32.8	V	3.0	36.6	1.0	-69.3	-13.0	-56.3	
2798.80	-32.0	V	3.0	36.4	1.0	-68.3	-13.0	-55.3	
1399.40	-35.7	H	3.0	37.4	1.0	-72.0	-13.0	-59.0	
2099.10	-34.7	H	3.0	36.6	1.0	-70.3	-13.0	-57.3	
2798.80	-33.7	H	3.0	36.4	1.0	-69.1	-13.0	-56.1	
Mid Ch, 707.5MHz									
1415.00	-31.8	V	3.0	37.4	1.0	-68.2	-13.0	-55.2	
2122.50	-28.3	V	3.0	36.6	1.0	-63.8	-13.0	-50.8	
2830.00	-32.8	V	3.0	36.4	1.0	-68.2	-13.0	-55.2	
1415.00	-32.9	H	3.0	37.4	1.0	-70.2	-13.0	-57.2	
2122.50	-30.2	H	3.0	36.6	1.0	-65.7	-13.0	-52.7	
2830.00	-33.5	H	3.0	36.4	1.0	-68.9	-13.0	-55.9	
High Ch, 715.3MHz									
1430.60	-33.0	V	3.0	37.3	1.0	-69.4	-13.0	-56.4	
2145.90	-29.9	V	3.0	36.6	1.0	-65.5	-13.0	-52.5	
2861.20	-32.4	V	3.0	36.4	1.0	-67.8	-13.0	-54.8	
1430.60	-36.6	H	3.0	37.3	1.0	-73.0	-13.0	-60.0	
2145.90	-32.9	H	3.0	36.6	1.0	-68.4	-13.0	-55.4	
2861.20	-33.0	H	3.0	36.4	1.0	-68.4	-13.0	-55.4	

LTE B12 1.4MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/6/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Charger
 Location: Chamber C
 Mode: LTE_QPSK Band 12 Harmonics, 3MHz Bandwidth

F Mhz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 700.5MHz									
1401.00	-32.3	V	3.0	37.4	1.0	-68.7	-13.0	-55.7	
2101.50	-32.8	V	3.0	36.6	1.0	-69.3	-13.0	-56.3	
2802.00	-32.9	V	3.0	36.4	1.0	-68.3	-13.0	-55.3	
1401.00	-34.9	H	3.0	37.4	1.0	-71.3	-13.0	-58.3	
2101.50	-34.6	H	3.0	36.6	1.0	-70.2	-13.0	-57.2	
2802.00	-33.7	H	3.0	36.4	1.0	-69.1	-13.0	-56.1	
Mid Ch, 707.5MHz									
1415.00	-32.0	V	3.0	37.4	1.0	-68.3	-13.0	-55.3	
2122.50	-27.5	V	3.0	36.6	1.0	-63.1	-13.0	-50.1	
2830.00	-32.7	V	3.0	36.4	1.0	-68.1	-13.0	-55.1	
1415.00	-33.5	H	3.0	37.4	1.0	-69.8	-13.0	-56.8	
2122.50	-30.2	H	3.0	36.6	1.0	-65.8	-13.0	-52.8	
2830.00	-33.4	H	3.0	36.4	1.0	-68.8	-13.0	-55.8	
High Ch, 714.3MHz									
1429.00	-32.5	V	3.0	37.3	1.0	-68.8	-13.0	-55.8	
2143.50	-29.9	V	3.0	36.6	1.0	-65.4	-13.0	-52.4	
2858.00	-32.5	V	3.0	36.4	1.0	-67.9	-13.0	-54.9	
1429.00	-36.8	H	3.0	37.3	1.0	-73.1	-13.0	-60.1	
2143.50	-32.6	H	3.0	36.6	1.0	-68.2	-13.0	-55.2	
2858.00	-33.0	H	3.0	36.4	1.0	-68.4	-13.0	-55.4	

LTE B12 3MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/6/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Charger
 Location: Chamber C
 Mode: LTE_QPSK Band 12 Harmonics, 5MHz Bandwidth

F Mhz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 701.5MHz									
1403.00	-31.8	V	3.0	37.4	1.0	-68.1	-13.0	-55.1	
2104.50	-32.5	V	3.0	36.6	1.0	-68.1	-13.0	-55.1	
2806.00	-32.9	V	3.0	36.4	1.0	-68.3	-13.0	-55.3	
1403.00	-35.0	H	3.0	37.4	1.0	-71.3	-13.0	-58.3	
2104.50	-34.0	H	3.0	36.6	1.0	-69.9	-13.0	-56.9	
2806.00	-33.6	H	3.0	36.4	1.0	-69.0	-13.0	-56.0	
Mid Ch, 707.5MHz									
1415.00	-32.6	V	3.0	37.4	1.0	-68.0	-13.0	-55.0	
2122.50	-28.1	V	3.0	36.6	1.0	-63.7	-13.0	-50.7	
2830.00	-32.6	V	3.0	36.4	1.0	-68.0	-13.0	-55.0	
1415.00	-33.8	H	3.0	37.4	1.0	-70.2	-13.0	-57.2	
2122.50	-30.9	H	3.0	36.6	1.0	-66.5	-13.0	-53.5	
2830.00	-32.3	H	3.0	36.4	1.0	-67.7	-13.0	-54.7	
High Ch, 713.5MHz									
1427.00	-33.2	V	3.0	37.3	1.0	-69.6	-13.0	-56.6	
2140.50	-29.9	V	3.0	36.6	1.0	-65.1	-13.0	-52.1	
2854.00	-32.4	V	3.0	36.4	1.0	-67.8	-13.0	-54.8	
1427.00	-36.3	H	3.0	37.3	1.0	-72.6	-13.0	-59.6	
2140.50	-32.5	H	3.0	36.6	1.0	-68.1	-13.0	-55.1	
2854.00	-32.9	H	3.0	36.4	1.0	-68.3	-13.0	-55.3	

LTE B12 5MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/6/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Charger
 Location: Chamber C
 Mode: LTE_16QAM Band 12 Harmonics, 14MHz 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, 699.7MHz									
1399.40	-33.8	V	3.0	37.4	1.0	-70.2	-13.0	-57.2	
2099.10	-33.9	V	3.0	36.6	1.0	-69.4	-13.0	-56.4	
2798.80	-32.9	V	3.0	36.4	1.0	-68.3	-13.0	-55.3	
1399.40	-35.8	H	3.0	37.4	1.0	-72.1	-13.0	-59.1	
2099.10	-34.7	H	3.0	36.6	1.0	-70.3	-13.0	-57.3	
2798.80	-33.6	H	3.0	36.4	1.0	-69.0	-13.0	-56.0	
Mid Ch, 707.5MHz									
1415.00	-32.8	V	3.0	37.4	1.0	-69.1	-13.0	-56.1	
2122.50	-28.2	V	3.0	36.6	1.0	-63.8	-13.0	-50.8	
2830.00	-32.7	V	3.0	36.4	1.0	-68.1	-13.0	-55.1	
1415.00	-34.5	H	3.0	37.4	1.0	-70.9	-13.0	-57.9	
2122.50	-30.2	H	3.0	36.6	1.0	-65.8	-13.0	-52.8	
2830.00	-33.5	H	3.0	36.4	1.0	-68.8	-13.0	-55.8	
High Ch, 715.3MHz									
1430.60	-33.8	V	3.0	37.3	1.0	-70.1	-13.0	-57.1	
2145.90	-29.9	V	3.0	36.6	1.0	-65.5	-13.0	-52.5	
2861.20	-32.4	V	3.0	36.4	1.0	-67.8	-13.0	-54.8	
1430.60	-37.2	H	3.0	37.3	1.0	-73.5	-13.0	-60.5	
2145.90	-33.1	H	3.0	36.6	1.0	-68.7	-13.0	-55.7	
2861.20	-33.0	H	3.0	36.4	1.0	-68.4	-13.0	-55.4	

LTE B12 1.4MHz 16QAM

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

Company: SOMC
 Project #: 11626381
 Date: 4/6/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Charger
 Location: Chamber C
 Mode: LTE_16QAM Band 12 Harmonics, 3MHz Bandwidth

F Mhz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 700.5MHz									
1401.00	-32.5	V	3.0	37.4	1.0	-68.9	-13.0	-55.9	
2101.50	-32.9	V	3.0	36.6	1.0	-69.5	-13.0	-56.5	
2802.00	-32.8	V	3.0	36.4	1.0	-68.2	-13.0	-55.2	
1401.00	-35.4	H	3.0	37.4	1.0	-71.8	-13.0	-58.8	
2101.50	-34.6	H	3.0	36.6	1.0	-70.2	-13.0	-57.2	
2802.00	-33.7	H	3.0	36.4	1.0	-69.0	-13.0	-56.0	
Mid Ch, 707.5MHz									
1415.00	-32.6	V	3.0	37.4	1.0	-68.9	-13.0	-55.9	
2122.50	-27.6	V	3.0	36.6	1.0	-63.1	-13.0	-50.1	
2830.00	-32.3	V	3.0	36.4	1.0	-67.6	-13.0	-54.6	
1415.00	-33.7	H	3.0	37.4	1.0	-70.1	-13.0	-57.1	
2122.50	-30.8	H	3.0	36.6	1.0	-66.4	-13.0	-53.4	
2830.00	-33.3	H	3.0	36.4	1.0	-68.7	-13.0	-55.7	
High Ch, 714.3MHz									
1429.00	-32.8	V	3.0	37.3	1.0	-69.1	-13.0	-56.1	
2143.50	-29.8	V	3.0	36.6	1.0	-64.4	-13.0	-51.4	
2858.00	-32.4	V	3.0	36.4	1.0	-67.6	-13.0	-54.6	
1429.00	-36.9	H	3.0	37.3	1.0	-73.3	-13.0	-60.3	
2143.50	-32.8	H	3.0	36.6	1.0	-68.3	-13.0	-55.3	
2858.00	-33.0	H	3.0	36.4	1.0	-68.3	-13.0	-55.3	

LTE B12 3MHz 16QAM

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

Company: SOMC
 Project #: 11626381
 Date: 4/6/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Charger
 Location: Chamber C
 Mode: LTE_16QAM Band 12 Harmonics, 5MHz Bandwidth

F Mhz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 701.5MHz									
1403.00	-32.4	V	3.0	37.4	1.0	-68.8	-13.0	-55.8	
2104.50	-32.7	V	3.0	36.6	1.0	-68.3	-13.0	-55.3	
2806.00	-33.0	V	3.0	36.4	1.0	-68.3	-13.0	-55.3	
1403.00	-35.0	H	3.0	37.4	1.0	-71.3	-13.0	-58.3	
2104.50	-34.2	H	3.0	36.6	1.0	-69.7	-13.0	-56.7	
2806.00	-33.6	H	3.0	36.4	1.0	-69.0	-13.0	-56.0	
Mid Ch, 707.5MHz									
1415.00	-32.5	V	3.0	37.4	1.0	-68.9	-13.0	-55.9	
2122.50	-27.9	V	3.0	36.6	1.0	-63.5	-13.0	-50.5	
2830.00	-32.6	V	3.0	36.4	1.0	-68.0	-13.0	-55.0	
1415.00	-34.1	H	3.0	37.4	1.0	-70.5	-13.0	-57.5	
2122.50	-30.8	H	3.0	36.6	1.0	-66.4	-13.0	-53.4	
2830.00	-33.3	H	3.0	36.4	1.0	-68.7	-13.0	-55.7	
High Ch, 713.5MHz									
1427.00	-33.6	V	3.0	37.3	1.0	-70.0	-13.0	-57.0	
2140.50	-30.4	V	3.0	36.6	1.0	-66.0	-13.0	-53.0	
2854.00	-32.3	V	3.0	36.4	1.0	-67.7	-13.0	-54.7	
1427.00	-36.9	H	3.0	37.3	1.0	-73.2	-13.0	-60.2	
2140.50	-31.7	H	3.0	36.6	1.0	-67.3	-13.0	-54.3	
2854.00	-33.0	H	3.0	36.4	1.0	-68.4	-13.0	-55.4	

LTE B12 5MHz 16QAM

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		SOMC							
Project #:		11626381							
Date:		4/6/2017							
Test Engineer:		43575 OS							
Configuration:		EUT + HS + AC Charger							
Location:		Chamber C							
Mode:		LTE_QPSK Band 12 Harmonics, 10MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ESRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 704MHz									
1408.00	-31.5	V	3.0	37.4	1.0	-67.9	-13.0	-54.9	
2112.00	-32.2	V	3.0	36.6	1.0	-68.8	-13.0	-55.8	
2816.00	-32.5	V	3.0	36.4	1.0	-67.9	-13.0	-54.9	
1408.00	-34.6	H	3.0	37.4	1.0	-71.0	-13.0	-58.0	
2112.00	-34.1	H	3.0	36.6	1.0	-69.7	-13.0	-56.7	
2816.00	-33.5	H	3.0	36.4	1.0	-68.9	-13.0	-55.9	
Mid Ch, 707.5MHz									
1415.00	-32.4	V	3.0	37.4	1.0	-68.8	-13.0	-55.8	
2122.50	-27.9	V	3.0	36.6	1.0	-63.5	-13.0	-50.5	
2830.00	-32.6	V	3.0	36.4	1.0	-68.0	-13.0	-55.0	
1415.00	-34.7	H	3.0	37.4	1.0	-71.0	-13.0	-58.0	
2122.50	-34.1	H	3.0	36.6	1.0	-69.7	-13.0	-56.7	
2830.00	-33.2	H	3.0	36.4	1.0	-68.6	-13.0	-55.6	
High Ch, 711MHz									
1422.00	-32.9	V	3.0	37.3	1.0	-69.2	-13.0	-56.2	
2133.00	-33.2	V	3.0	36.6	1.0	-68.7	-13.0	-55.7	
2844.00	-32.3	V	3.0	36.4	1.0	-67.6	-13.0	-54.6	
1422.00	-34.3	H	3.0	37.3	1.0	-70.6	-13.0	-57.6	
2133.00	-34.1	H	3.0	36.6	1.0	-69.7	-13.0	-56.7	
2844.00	-33.1	H	3.0	36.4	1.0	-68.5	-13.0	-55.5	

LTE B12 10MHz QPSK

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		SOMC							
Project #:		11626381							
Date:		4/6/2017							
Test Engineer:		43575 OS							
Configuration:		EUT + HS + AC Charger							
Location:		Chamber C							
Mode:		LTE_16QAM Band 12 Harmonics, 10MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ESRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 704MHz									
1408.00	-31.9	V	3.0	37.4	1.0	-68.2	-13.0	-55.2	
2112.00	-29.4	V	3.0	36.6	1.0	-65.0	-13.0	-52.0	
2816.00	-32.8	V	3.0	36.4	1.0	-68.1	-13.0	-55.1	
1408.00	-34.4	H	3.0	37.4	1.0	-70.8	-13.0	-57.8	
2112.00	-34.1	H	3.0	36.6	1.0	-69.6	-13.0	-56.6	
2816.00	-33.4	H	3.0	36.4	1.0	-68.8	-13.0	-55.8	
Mid Ch, 707.5MHz									
1415.00	-33.2	V	3.0	37.4	1.0	-69.6	-13.0	-56.6	
2122.50	-28.1	V	3.0	36.6	1.0	-63.7	-13.0	-50.7	
2830.00	-32.6	V	3.0	36.4	1.0	-68.0	-13.0	-55.0	
1415.00	-35.3	H	3.0	37.4	1.0	-71.6	-13.0	-58.6	
2122.50	-34.0	H	3.0	36.6	1.0	-69.6	-13.0	-56.6	
2830.00	-32.9	H	3.0	36.4	1.0	-68.3	-13.0	-55.3	
High Ch, 711MHz									
1422.00	-32.8	V	3.0	37.3	1.0	-69.2	-13.0	-56.2	
2133.00	-33.2	V	3.0	36.6	1.0	-68.8	-13.0	-55.8	
2844.00	-32.4	V	3.0	36.4	1.0	-67.8	-13.0	-54.8	
1422.00	-35.0	H	3.0	37.3	1.0	-71.3	-13.0	-58.3	
2133.00	-34.0	H	3.0	36.6	1.0	-69.5	-13.0	-56.5	
2844.00	-33.0	H	3.0	36.4	1.0	-68.4	-13.0	-55.4	

LTE B12 10MHz 16QAM

LTE Band 13

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

Company: SOMC
 Project #: 11626381
 Date: 4/6/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Charger
 Location: Chamber C
 Mode: LTE_QPSK Band 13 Harmonics, 5MHz Bandwidth

F Mhz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 779.5MHz									
1559.00	-36.5	V	3.0	37.1	1.0	-72.6	-13.0	-59.6	
2338.50	-33.5	V	3.0	36.5	1.0	-69.0	-13.0	-56.0	
3118.00	-32.2	V	3.0	36.3	1.0	-67.5	-13.0	-54.5	
1559.00	-35.2	H	3.0	37.1	1.0	-71.3	-13.0	-58.3	
2338.50	-34.8	H	3.0	36.5	1.0	-70.3	-13.0	-57.3	
3118.00	-32.7	H	3.0	36.3	1.0	-67.5	-13.0	-54.5	
Mid Ch, 782MHz									
1564.00	-35.4	V	3.0	37.1	1.0	-71.5	-13.0	-58.5	
2346.00	-33.5	V	3.0	36.5	1.0	-69.0	-13.0	-56.0	
3128.00	-31.8	V	3.0	36.3	1.0	-67.1	-13.0	-54.1	
1564.00	-35.7	H	3.0	37.1	1.0	-71.9	-13.0	-58.9	
2346.00	-35.0	H	3.0	36.5	1.0	-70.5	-13.0	-57.5	
3128.00	-32.0	H	3.0	36.3	1.0	-67.3	-13.0	-54.3	
High Ch, 784.5MHz									
1569.00	-35.4	V	3.0	37.1	1.0	-71.6	-13.0	-58.6	
2353.50	-33.6	V	3.0	36.5	1.0	-69.1	-13.0	-56.1	
3138.00	-31.7	V	3.0	36.3	1.0	-67.0	-13.0	-54.0	
1569.00	-35.9	H	3.0	37.1	1.0	-72.1	-13.0	-59.1	
2353.50	-34.7	H	3.0	36.5	1.0	-70.2	-13.0	-57.2	
3138.00	-31.9	H	3.0	36.3	1.0	-67.2	-13.0	-54.2	

LTE B13 5MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/6/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Charger
 Location: Chamber C
 Mode: LTE_16QAM Band 13 Harmonics, 5MHz Bandwidth

F Mhz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 779.5MHz									
1559.00	-36.5	V	3.0	37.1	1.0	-72.7	-13.0	-59.7	
2338.50	-33.4	V	3.0	36.5	1.0	-68.9	-13.0	-55.9	
3118.00	-32.3	V	3.0	36.3	1.0	-67.5	-13.0	-54.5	
1559.00	-35.6	H	3.0	37.1	1.0	-71.8	-13.0	-58.8	
2338.50	-34.7	H	3.0	36.5	1.0	-70.2	-13.0	-57.2	
3118.00	-32.3	H	3.0	36.3	1.0	-67.6	-13.0	-54.6	
Mid Ch, 782MHz									
1564.00	-35.5	V	3.0	37.1	1.0	-71.6	-13.0	-58.6	
2346.00	-33.5	V	3.0	36.5	1.0	-69.0	-13.0	-56.0	
3128.00	-31.6	V	3.0	36.3	1.0	-66.9	-13.0	-53.9	
1564.00	-36.2	H	3.0	37.1	1.0	-72.4	-13.0	-59.4	
2346.00	-34.9	H	3.0	36.5	1.0	-70.4	-13.0	-57.4	
3128.00	-32.0	H	3.0	36.3	1.0	-67.2	-13.0	-54.2	
High Ch, 784.5MHz									
1569.00	-35.8	V	3.0	37.1	1.0	-71.9	-13.0	-58.9	
2353.50	-33.6	V	3.0	36.5	1.0	-69.1	-13.0	-56.1	
3138.00	-31.8	V	3.0	36.3	1.0	-67.1	-13.0	-54.1	
1569.00	-36.4	H	3.0	37.1	1.0	-72.6	-13.0	-59.6	
2353.50	-34.9	H	3.0	36.5	1.0	-70.4	-13.0	-57.4	
3138.00	-31.9	H	3.0	36.3	1.0	-67.2	-13.0	-54.2	

LTE B13 5MHz 16QAM

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

Company: SOMC
 Project #: 11626381
 Date: 4/6/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Charger
 Location: Chamber C
 Mode: LTE_QPSK Band 13 Harmonics, 10MHz Bandwidth

F Mhz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Mid Ch, 782MHz									
1564.00	-35.4	V	3.0	37.1	1.0	-71.5	-13.0	-58.5	
2346.00	-33.6	V	3.0	36.5	1.0	-69.0	-13.0	-56.0	
3128.00	-31.9	V	3.0	36.3	1.0	-67.2	-13.0	-54.2	
1564.00	-36.7	H	3.0	37.1	1.0	-72.8	-13.0	-59.8	
2346.00	-34.7	H	3.0	36.5	1.0	-70.2	-13.0	-57.2	
3128.00	-31.9	H	3.0	36.3	1.0	-67.2	-13.0	-54.2	

LTE B13 10MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/6/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Charger
 Location: Chamber C
 Mode: LTE_16QAM Band 13 Harmonics, 10MHz Bandwidth

F Mhz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Mid Ch, 782MHz									
1564.00	-35.6	V	3.0	37.1	1.0	-71.7	-13.0	-58.7	
2346.00	-33.6	V	3.0	36.5	1.0	-69.1	-13.0	-56.1	
3128.00	-31.9	V	3.0	36.3	1.0	-67.2	-13.0	-54.2	
1564.00	-37.0	H	3.0	37.1	1.0	-73.1	-13.0	-60.1	
2346.00	-35.0	H	3.0	36.5	1.0	-70.5	-13.0	-57.5	
3128.00	-31.9	H	3.0	36.3	1.0	-67.1	-13.0	-54.1	

LTE B13 10MHz 16QAM

LTE Band 17

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

Company: SOMC
 Project #: 11626381
 Date: 4/6/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Charger
 Location: Chamber C
 Mode: LTE_QPSK Band 17 Harmonics, 5MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 706.5MHz									
1413.00	-39.0	V	3.0	37.4	1.0	-75.3	-13.0	-62.3	
2119.50	-28.1	V	3.0	36.6	1.0	-63.7	-13.0	-50.7	
2836.00	-32.5	V	3.0	36.4	1.0	-67.9	-13.0	-54.9	
1413.00	-33.6	H	3.0	37.4	1.0	-69.9	-13.0	-56.9	
2119.50	-30.6	H	3.0	36.6	1.0	-66.2	-13.0	-53.2	
2836.00	-32.7	H	3.0	36.4	1.0	-67.6	-13.0	-54.6	
Mid Ch, 710MHz									
1420.00	-38.8	V	3.0	37.3	1.0	-75.2	-13.0	-62.2	
2130.00	-28.5	V	3.0	36.6	1.0	-64.0	-13.0	-51.0	
2840.00	-32.4	V	3.0	36.4	1.0	-67.8	-13.0	-54.8	
1420.00	-33.5	H	3.0	37.3	1.0	-69.8	-13.0	-56.8	
2130.00	-30.5	H	3.0	36.6	1.0	-66.0	-13.0	-53.0	
2840.00	-33.0	H	3.0	36.4	1.0	-68.3	-13.0	-55.3	
High Ch, 713.5MHz									
1427.00	-38.0	V	3.0	37.3	1.0	-74.3	-13.0	-61.3	
2140.50	-28.1	V	3.0	36.6	1.0	-63.7	-13.0	-50.7	
2854.00	-32.4	V	3.0	36.4	1.0	-67.8	-13.0	-54.8	
1427.00	-34.4	H	3.0	37.3	1.0	-70.7	-13.0	-57.7	
2140.50	-28.9	H	3.0	36.6	1.0	-64.5	-13.0	-51.5	
2854.00	-33.0	H	3.0	36.4	1.0	-68.4	-13.0	-55.4	

LTE B17 5MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/6/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Charger
 Location: Chamber C
 Mode: LTE_16QAM Band 17 Harmonics, 5MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 706.5MHz									
1413.00	-38.9	V	3.0	37.4	1.0	-75.3	-13.0	-62.3	
2119.50	-28.3	V	3.0	36.6	1.0	-63.9	-13.0	-50.9	
2836.00	-32.4	V	3.0	36.4	1.0	-67.8	-13.0	-54.8	
1413.00	-33.9	H	3.0	37.4	1.0	-70.3	-13.0	-57.3	
2119.50	-29.0	H	3.0	36.6	1.0	-64.6	-13.0	-51.6	
2836.00	-33.0	H	3.0	36.4	1.0	-68.4	-13.0	-55.4	
Mid Ch, 710MHz									
1420.00	-38.7	V	3.0	37.3	1.0	-75.1	-13.0	-62.1	
2130.00	-28.9	V	3.0	36.6	1.0	-62.5	-13.0	-49.5	
2840.00	-32.4	V	3.0	36.4	1.0	-67.8	-13.0	-54.8	
1420.00	-33.6	H	3.0	37.3	1.0	-69.9	-13.0	-56.9	
2130.00	-30.4	H	3.0	36.6	1.0	-65.9	-13.0	-52.9	
2840.00	-32.3	H	3.0	36.4	1.0	-67.7	-13.0	-54.7	
High Ch, 713.5MHz									
1427.00	-35.6	V	3.0	37.3	1.0	-74.9	-13.0	-61.9	
2140.50	-28.3	V	3.0	36.6	1.0	-63.8	-13.0	-50.8	
2854.00	-32.4	V	3.0	36.4	1.0	-67.8	-13.0	-54.8	
1427.00	-34.2	H	3.0	37.3	1.0	-70.6	-13.0	-57.6	
2140.50	-28.9	H	3.0	36.6	1.0	-64.5	-13.0	-51.5	
2854.00	-33.0	H	3.0	36.4	1.0	-68.3	-13.0	-55.3	

LTE B17 5MHz 16QAM

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

Company: SOMC
 Project #: 11626381
 Date: 4/6/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Charger
 Location: Chamber C
 Mode: LTE_QPSK Band 17 Harmonics, 10MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 709MHz									
1418.00	-39.0	V	3.0	37.4	1.0	-75.3	-13.0	-62.3	
2127.00	-27.7	V	3.0	36.6	1.0	-63.3	-13.0	-50.3	
2836.00	-32.6	V	3.0	36.4	1.0	-68.0	-13.0	-55.0	
1418.00	-33.5	H	3.0	37.4	1.0	-69.8	-13.0	-56.8	
2127.00	-30.3	H	3.0	36.6	1.0	-65.9	-13.0	-52.9	
2836.00	-33.1	H	3.0	36.4	1.0	-68.5	-13.0	-55.5	
Mid Ch, 710MHz									
1420.00	-38.9	V	3.0	37.3	1.0	-75.2	-13.0	-62.2	
2130.00	-29.2	V	3.0	36.6	1.0	-64.8	-13.0	-51.8	
2840.00	-32.4	V	3.0	36.4	1.0	-67.8	-13.0	-54.8	
1420.00	-33.4	H	3.0	37.3	1.0	-69.8	-13.0	-56.8	
2130.00	-30.1	H	3.0	36.6	1.0	-65.7	-13.0	-52.7	
2840.00	-33.0	H	3.0	36.4	1.0	-68.4	-13.0	-55.4	
High Ch, 711MHz									
1422.00	-38.9	V	3.0	37.3	1.0	-75.2	-13.0	-62.2	
2133.00	-27.9	V	3.0	36.6	1.0	-63.4	-13.0	-50.4	
2844.00	-32.6	V	3.0	36.4	1.0	-67.9	-13.0	-54.9	
1422.00	-34.5	H	3.0	37.3	1.0	-70.8	-13.0	-57.8	
2133.00	-29.6	H	3.0	36.6	1.0	-65.2	-13.0	-52.2	
2844.00	-32.9	H	3.0	36.4	1.0	-68.3	-13.0	-55.3	

LTE B17 10MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/6/2017
 Test Engineer: 43575 OS
 Configuration: EUT + HS + AC Charger
 Location: Chamber C
 Mode: LTE_16QAM Band 17 Harmonics, 10MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 709MHz									
1418.00	-38.9	V	3.0	37.4	1.0	-75.3	-13.0	-62.3	
2127.00	-28.1	V	3.0	36.6	1.0	-63.7	-13.0	-50.7	
2836.00	-32.5	V	3.0	36.4	1.0	-67.9	-13.0	-54.9	
1418.00	-34.2	H	3.0	37.4	1.0	-70.6	-13.0	-57.6	
2127.00	-30.1	H	3.0	36.6	1.0	-65.7	-13.0	-52.7	
2836.00	-33.1	H	3.0	36.4	1.0	-68.4	-13.0	-55.4	
Mid Ch, 710MHz									
1420.00	-38.9	V	3.0	37.3	1.0	-75.2	-13.0	-62.2	
2130.00	-29.8	V	3.0	36.6	1.0	-65.4	-13.0	-52.4	
2840.00	-31.7	V	3.0	36.4	1.0	-67.1	-13.0	-54.1	
1420.00	-33.8	H	3.0	37.3	1.0	-70.2	-13.0	-57.2	
2130.00	-30.0	H	3.0	36.6	1.0	-65.5	-13.0	-52.5	
2840.00	-33.0	H	3.0	36.4	1.0	-68.4	-13.0	-55.4	
High Ch, 711MHz									
1422.00	-38.9	V	3.0	37.3	1.0	-75.3	-13.0	-62.3	
2133.00	-28.4	V	3.0	36.6	1.0	-64.0	-13.0	-51.0	
2844.00	-32.5	V	3.0	36.4	1.0	-67.9	-13.0	-54.9	
1422.00	-34.7	H	3.0	37.3	1.0	-71.1	-13.0	-58.1	
2133.00	-29.6	H	3.0	36.6	1.0	-65.1	-13.0	-52.1	
2844.00	-33.0	H	3.0	36.4	1.0	-68.4	-13.0	-55.4	

LTE B17 10MHz 16QAM

LTE Band 26

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

Company: SOMC
 Project #: 11626381
 Date: 4/10/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_QPSK Band 26 Harmonics, 1.4MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, B147									
1625.40	-24.7	V	3.0	36.4	1.0	-60.0	-13.0	-47.0	
2444.10	-25.1	V	3.0	35.0	1.0	-59.1	-13.0	-46.1	
3258.80	-26.3	V	3.0	34.3	1.0	-53.6	-13.0	-40.6	
1629.40	-25.9	H	3.0	36.4	1.0	-60.4	-13.0	-47.4	
2444.10	-24.8	H	3.0	35.0	1.0	-58.8	-13.0	-45.8	
3258.80	-21.8	H	3.0	34.3	1.0	-55.1	-13.0	-42.1	
Mid Ch, B31.5									
1963.00	-24.4	V	3.0	36.3	1.0	-59.7	-13.0	-46.7	
2494.50	-25.1	V	3.0	34.9	1.0	-59.1	-13.0	-46.1	
3326.00	-22.2	V	3.0	34.2	1.0	-55.4	-13.0	-42.4	
1963.00	-25.2	H	3.0	36.3	1.0	-60.6	-13.0	-47.6	
2494.50	-24.5	H	3.0	34.9	1.0	-58.5	-13.0	-45.5	
3326.00	-22.0	H	3.0	34.2	1.0	-55.2	-13.0	-42.2	
High Ch, B48.5									
1696.60	-24.1	V	3.0	36.3	1.0	-59.4	-13.0	-46.4	
2544.90	-24.9	V	3.0	34.9	1.0	-58.8	-13.0	-45.8	
3393.20	-19.1	V	3.0	34.2	1.0	-52.3	-13.0	-39.3	
1696.60	-25.0	H	3.0	36.3	1.0	-60.3	-13.0	-47.3	
2544.90	-24.4	H	3.0	34.9	1.0	-58.4	-13.0	-45.4	
3393.20	-22.1	H	3.0	34.2	1.0	-55.3	-13.0	-42.3	

LTE B26 1.4MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/10/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_16QAM Band 26 Harmonics, 1.4MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, B147									
1625.40	-24.5	V	3.0	36.4	1.0	-59.9	-13.0	-46.9	
2444.10	-24.6	V	3.0	35.0	1.0	-58.6	-13.0	-45.6	
3258.80	-20.0	V	3.0	34.3	1.0	-53.4	-13.0	-40.4	
1629.40	-24.6	H	3.0	36.4	1.0	-60.0	-13.0	-47.0	
2444.10	-24.4	H	3.0	35.0	1.0	-58.4	-13.0	-45.4	
3258.80	-21.6	H	3.0	34.3	1.0	-54.9	-13.0	-41.9	
Mid Ch, B31.5									
1963.00	-24.3	V	3.0	36.3	1.0	-59.6	-13.0	-46.6	
2494.50	-24.8	V	3.0	34.9	1.0	-58.7	-13.0	-45.7	
3326.00	-21.9	V	3.0	34.2	1.0	-55.2	-13.0	-42.2	
1963.00	-25.0	H	3.0	36.3	1.0	-60.3	-13.0	-47.3	
2494.50	-24.4	H	3.0	34.9	1.0	-58.3	-13.0	-45.3	
3326.00	-21.8	H	3.0	34.2	1.0	-55.0	-13.0	-42.0	
High Ch, B48.5									
1696.60	-23.9	V	3.0	36.3	1.0	-59.2	-13.0	-46.2	
2544.90	-24.5	V	3.0	34.9	1.0	-58.4	-13.0	-45.4	
3393.20	-18.9	V	3.0	34.2	1.0	-52.1	-13.0	-39.1	
1696.60	-24.7	H	3.0	36.3	1.0	-60.0	-13.0	-47.0	
2544.90	-24.1	H	3.0	34.9	1.0	-58.0	-13.0	-45.0	
3393.20	-21.6	H	3.0	34.2	1.0	-54.8	-13.0	-41.8	

LTE B26 1.4MHz 16QAM

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

Company: SOMC
 Project #: 11626381
 Date: 4/10/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_QPSK Band 26 Harmonics, 3MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, B15.5									
1631.00	-25.2	V	3.0	36.4	1.0	-60.5	-13.0	-47.5	
2445.50	-22.9	V	3.0	35.0	1.0	-58.0	-13.0	-45.0	
3262.00	-22.3	V	3.0	34.3	1.0	-55.6	-13.0	-42.6	
1631.00	-25.3	H	3.0	36.4	1.0	-60.7	-13.0	-47.7	
2445.50	-24.1	H	3.0	35.0	1.0	-58.1	-13.0	-45.1	
3262.00	-21.9	H	3.0	34.3	1.0	-55.2	-13.0	-42.2	
Mid Ch, B31.5									
1963.00	-24.9	V	3.0	36.3	1.0	-60.2	-13.0	-47.2	
2494.50	-23.8	V	3.0	34.9	1.0	-57.7	-13.0	-44.7	
3326.00	-22.2	V	3.0	34.2	1.0	-55.5	-13.0	-42.5	
1963.00	-25.0	H	3.0	36.3	1.0	-60.4	-13.0	-47.4	
2494.50	-24.1	H	3.0	34.9	1.0	-58.1	-13.0	-45.1	
3326.00	-22.1	H	3.0	34.2	1.0	-55.4	-13.0	-42.4	
High Ch, B47.5									
1695.00	-24.4	V	3.0	36.3	1.0	-59.7	-13.0	-46.7	
2542.50	-23.6	V	3.0	34.9	1.0	-57.5	-13.0	-44.5	
3396.00	-22.3	V	3.0	34.2	1.0	-55.4	-13.0	-42.4	
1695.00	-24.7	H	3.0	36.3	1.0	-60.0	-13.0	-47.0	
2542.50	-24.0	H	3.0	34.9	1.0	-57.9	-13.0	-44.9	
3396.00	-22.1	H	3.0	34.2	1.0	-55.3	-13.0	-42.3	

LTE B26 3MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/10/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_16QAM Band 26 Harmonics, 3MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, B15.5									
1631.00	-24.8	V	3.0	36.4	1.0	-60.2	-13.0	-47.2	
2445.50	-23.6	V	3.0	35.0	1.0	-57.6	-13.0	-44.6	
3262.00	-22.0	V	3.0	34.3	1.0	-55.1	-13.0	-42.3	
1631.00	-25.1	H	3.0	36.4	1.0	-60.5	-13.0	-47.5	
2445.50	-23.6	H	3.0	35.0	1.0	-57.7	-13.0	-44.7	
3262.00	-21.6	H	3.0	34.3	1.0	-54.9	-13.0	-41.9	
Mid Ch, B31.5									
1963.00	-24.5	V	3.0	36.3	1.0	-59.8	-13.0	-46.8	
2494.50	-23.5	V	3.0	34.9	1.0	-57.4	-13.0	-44.4	
3326.00	-21.8	V	3.0	34.2	1.0	-55.2	-13.0	-42.2	
1963.00	-24.9	H	3.0	36.3	1.0	-60.3	-13.0	-47.3	
2494.50	-23.7	H	3.0	34.9	1.0	-57.6	-13.0	-44.6	
3326.00	-21.8	H	3.0	34.2	1.0	-55.1	-13.0	-42.1	
High Ch, B47.5									
1695.00	-23.9	V	3.0	36.3	1.0	-59.2	-13.0	-46.2	
2542.50	-23.3	V	3.0	34.9	1.0	-57.2	-13.0	-44.2	
3396.00	-22.0	V	3.0	34.2	1.0	-55.2	-13.0	-42.2	
1695.00	-24.5	H	3.0	36.3	1.0	-59.8	-13.0	-46.8	
2542.50	-23.7	H	3.0	34.9	1.0	-57.6	-13.0	-44.6	
3396.00	-21.9	H	3.0	34.2	1.0	-55.0	-13.0	-42.0	

LTE B26 3MHz 16QAM

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

Company: SOMC
 Project #: 11626381
 Date: 4/10/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_QPSK Band 26 Harmonics, 5MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, B16.5									
1633.00	-24.5	V	3.0	36.4	1.0	-59.9	-13.0	-46.9	
2449.50	-24.5	V	3.0	35.0	1.0	-58.5	-13.0	-45.5	
3266.00	-21.4	V	3.0	34.3	1.0	-54.7	-13.0	-41.7	
1633.00	-25.3	H	3.0	36.4	1.0	-60.7	-13.0	-47.7	
2449.50	-24.7	H	3.0	35.0	1.0	-58.8	-13.0	-45.8	
3266.00	-23.0	H	3.0	34.3	1.0	-56.3	-13.0	-43.3	
Mid Ch, B31.5									
1963.00	-24.3	V	3.0	36.3	1.0	-59.7	-13.0	-46.7	
2494.50	-24.3	V	3.0	34.9	1.0	-58.2	-13.0	-45.2	
3326.00	-21.5	V	3.0	34.2	1.0	-54.8	-13.0	-41.8	
1963.00	-25.2	H	3.0	36.3	1.0	-60.5	-13.0	-47.5	
2494.50	-24.5	H	3.0	34.9	1.0	-58.5	-13.0	-45.5	
3326.00	-22.7	H	3.0	34.2	1.0	-56.0	-13.0	-43.0	
High Ch, B46.5									
1693.00	-24.5	V	3.0	36.3	1.0	-59.8	-13.0	-46.8	
2539.50	-24.1	V	3.0	34.9	1.0	-58.0	-13.0	-45.0	
3386.00	-22.0	V	3.0	34.2	1.0	-55.1	-13.0	-42.1	
1693.00	-24.8	H	3.0	36.3	1.0	-60.1	-13.0	-47.1	
2539.50	-24.5	H	3.0	34.9	1.0	-58.4	-13.0	-45.4	
3386.00	-22.6	H	3.0	34.2	1.0	-55.8	-13.0	-42.8	

LTE B26 5MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/10/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_16QAM Band 26 Harmonics, 5MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, B16.5									
1633.00	-24.8	V	3.0	36.4	1.0	-60.2	-13.0	-47.2	
2449.50	-24.8	V	3.0	35.0	1.0	-58.8	-13.0	-45.8	
3266.00	-21.8	V	3.0	34.3	1.0	-55.1	-13.0	-42.1	
1633.00	-25.6	H	3.0	36.4	1.0	-61.0	-13.0	-48.0	
2449.50	-25.2	H	3.0	35.0	1.0	-59.2	-13.0	-46.2	
3266.00	-23.5	H	3.0	34.3	1.0	-56.8	-13.0	-43.8	
Mid Ch, B31.5									
1963.00	-24.8	V	3.0	36.3	1.0	-60.1	-13.0	-47.1	
2494.50	-24.5	V	3.0	34.9	1.0	-58.5	-13.0	-45.5	
3326.00	-22.0	V	3.0	34.2	1.0	-55.2	-13.0	-42.2	
1963.00	-25.4	H	3.0	36.3	1.0	-60.7	-13.0	-47.7	
2494.50	-24.9	H	3.0	34.9	1.0	-58.8	-13.0	-45.8	
3326.00	-23.1	H	3.0	34.2	1.0	-56.4	-13.0	-43.4	
High Ch, B46.5									
1693.00	-24.8	V	3.0	36.3	1.0	-60.1	-13.0	-47.1	
2539.50	-24.4	V	3.0	34.9	1.0	-58.3	-13.0	-45.3	
3386.00	-22.4	V	3.0	34.2	1.0	-55.5	-13.0	-42.5	
1693.00	-25.1	H	3.0	36.3	1.0	-60.4	-13.0	-47.4	
2539.50	-24.9	H	3.0	34.9	1.0	-58.8	-13.0	-45.8	
3386.00	-23.1	H	3.0	34.2	1.0	-56.2	-13.0	-43.2	

LTE B26 5MHz 16QAM

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

Company: SOMC
 Project #: 11626381
 Date: 4/10/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_QPSK Band 26 Harmonics, 10MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 819									
1638.00	-24.5	V	3.0	36.4	1.0	-59.9	-13.0	-46.9	
2457.00	-24.9	V	3.0	35.0	1.0	-59.0	-13.0	-46.0	
3276.00	-21.3	V	3.0	34.3	1.0	-54.6	-13.0	-41.6	
1638.00	-25.5	H	3.0	36.4	1.0	-60.9	-13.0	-47.9	
2457.00	-25.0	H	3.0	35.0	1.0	-59.0	-13.0	-46.0	
3276.00	-21.9	H	3.0	34.3	1.0	-55.2	-13.0	-42.2	
Mid Ch, 831.5									
1663.00	-24.9	V	3.0	36.3	1.0	-60.2	-13.0	-47.2	
2494.50	-24.9	V	3.0	34.9	1.0	-58.8	-13.0	-45.8	
3326.00	-22.5	V	3.0	34.2	1.0	-55.7	-13.0	-42.7	
1663.00	-26.1	H	3.0	36.3	1.0	-61.5	-13.0	-48.5	
2494.50	-24.7	H	3.0	34.9	1.0	-58.6	-13.0	-45.6	
3326.00	-22.8	H	3.0	34.2	1.0	-56.1	-13.0	-43.1	
High Ch, 844									
1688.00	-24.1	V	3.0	36.3	1.0	-59.4	-13.0	-46.4	
2532.00	-24.7	V	3.0	34.9	1.0	-58.6	-13.0	-45.6	
3376.00	-21.8	V	3.0	34.2	1.0	-55.0	-13.0	-42.0	
1688.00	-25.0	H	3.0	36.3	1.0	-60.3	-13.0	-47.3	
2532.00	-24.9	H	3.0	34.9	1.0	-58.9	-13.0	-45.9	
3376.00	-22.3	H	3.0	34.2	1.0	-55.5	-13.0	-42.5	

LTE B26 10MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/10/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_16QAM Band 26 Harmonics, 10MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 819									
1638.00	-24.3	V	3.0	36.4	1.0	-59.7	-13.0	-46.7	
2457.00	-24.6	V	3.0	35.0	1.0	-58.6	-13.0	-45.6	
3276.00	-21.0	V	3.0	34.1	1.0	-54.3	-13.0	-41.3	
1638.00	-25.2	H	3.0	36.4	1.0	-60.6	-13.0	-47.6	
2457.00	-24.7	H	3.0	35.0	1.0	-58.8	-13.0	-45.8	
3276.00	-21.5	H	3.0	34.3	1.0	-54.8	-13.0	-41.8	
Mid Ch, 831.5									
1663.00	-24.5	V	3.0	36.3	1.0	-59.9	-13.0	-46.9	
2494.50	-24.6	V	3.0	34.9	1.0	-58.6	-13.0	-45.6	
3326.00	-22.1	V	3.0	34.2	1.0	-55.3	-13.0	-42.3	
1663.00	-25.8	H	3.0	36.3	1.0	-61.2	-13.0	-48.2	
2494.50	-23.4	H	3.0	34.9	1.0	-57.3	-13.0	-44.3	
3326.00	-22.6	H	3.0	34.2	1.0	-55.8	-13.0	-42.8	
High Ch, 844									
1688.00	-23.9	V	3.0	36.3	1.0	-59.2	-13.0	-46.2	
2532.00	-24.3	V	3.0	34.9	1.0	-58.2	-13.0	-45.2	
3376.00	-22.1	V	3.0	34.2	1.0	-54.5	-13.0	-41.5	
1688.00	-24.8	H	3.0	36.3	1.0	-60.1	-13.0	-47.1	
2532.00	-24.6	H	3.0	34.9	1.0	-58.5	-13.0	-45.5	
3376.00	-23.1	H	3.0	34.2	1.0	-56.3	-13.0	-43.3	

LTE B26 10MHz 16QAM

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

Company: SOMC
 Project #: 11626381
 Date: 4/10/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_QPSK Band 26 Harmonics, 15MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 831.5									
1663.00	-24.1	V	3.0	36.3	1.0	-59.5	-13.0	-46.5	
2494.50	-25.1	V	3.0	34.9	1.0	-59.1	-13.0	-46.1	
3326.00	-21.8	V	3.0	34.2	1.0	-55.0	-13.0	-42.0	
1663.00	-24.6	H	3.0	36.3	1.0	-59.9	-13.0	-46.9	
2494.50	-24.9	H	3.0	34.9	1.0	-58.8	-13.0	-45.8	
3326.00	-21.3	H	3.0	34.2	1.0	-54.6	-13.0	-41.6	
Mid Ch, 836.5									
1673.00	-24.1	V	3.0	36.3	1.0	-59.4	-13.0	-46.4	
2509.50	-25.1	V	3.0	34.9	1.0	-59.0	-13.0	-46.0	
3346.00	-22.4	V	3.0	34.2	1.0	-55.6	-13.0	-42.6	
1673.00	-24.6	H	3.0	36.3	1.0	-59.9	-13.0	-46.9	
2509.50	-24.7	H	3.0	34.9	1.0	-58.7	-13.0	-45.7	
3346.00	-21.5	H	3.0	34.2	1.0	-54.8	-13.0	-41.8	
High Ch, 841.5									
1683.00	-24.1	V	3.0	36.3	1.0	-59.4	-13.0	-46.4	
2524.50	-25.1	V	3.0	34.9	1.0	-59.0	-13.0	-46.0	
3366.00	-21.8	V	3.0	34.2	1.0	-55.0	-13.0	-42.0	
1683.00	-24.4	H	3.0	36.3	1.0	-59.8	-13.0	-46.8	
2524.50	-24.9	H	3.0	34.9	1.0	-58.8	-13.0	-45.8	
3366.00	-21.4	H	3.0	34.2	1.0	-54.7	-13.0	-41.7	

LTE B26 15MHz QPSK

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

Company: SOMC
 Project #: 11626381
 Date: 4/10/2017
 Test Engineer: 43574 JS
 Configuration: EUT + AC + Headset
 Location: Chamber C
 Mode: LTE_16QAM Band 26 Harmonics, 15MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 831.5									
1663.00	-23.8	V	3.0	36.3	1.0	-59.1	-13.0	-46.1	
2494.50	-24.7	V	3.0	34.9	1.0	-58.6	-13.0	-45.6	
3326.00	-21.4	V	3.0	34.2	1.0	-54.7	-13.0	-41.7	
1663.00	-24.2	H	3.0	36.3	1.0	-59.5	-13.0	-46.5	
2494.50	-24.5	H	3.0	34.9	1.0	-58.5	-13.0	-45.5	
3326.00	-20.9	H	3.0	34.2	1.0	-54.1	-13.0	-41.1	
Mid Ch, 836.5									
1673.00	-23.9	V	3.0	36.3	1.0	-59.2	-13.0	-46.2	
2509.50	-24.7	V	3.0	34.9	1.0	-58.7	-13.0	-45.7	
3346.00	-22.0	V	3.0	34.2	1.0	-55.2	-13.0	-42.2	
1673.00	-24.2	H	3.0	36.3	1.0	-59.5	-13.0	-46.5	
2509.50	-21.4	H	3.0	34.9	1.0	-55.4	-13.0	-42.4	
3346.00	-21.2	H	3.0	34.2	1.0	-54.4	-13.0	-41.4	
High Ch, 841.5									
1683.00	-23.9	V	3.0	36.3	1.0	-59.2	-13.0	-46.2	
2524.50	-24.9	V	3.0	34.9	1.0	-58.8	-13.0	-45.8	
3366.00	-21.3	V	3.0	34.2	1.0	-54.6	-13.0	-41.6	
1683.00	-24.2	H	3.0	36.3	1.0	-59.5	-13.0	-46.5	
2524.50	-24.5	H	3.0	34.9	1.0	-58.4	-13.0	-45.4	
3366.00	-20.9	H	3.0	34.2	1.0	-54.1	-13.0	-41.1	

LTE B26 15MHz 16QAM

LTE Band 41

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

Company: SOMC
 Project #: 11626381 (PY7-08618T)
 Date: 4/5/2017
 Test Engineer: 43574 JS
 Configuration: EUT Only
 Location: Chamber B
 Mode: LTE_QPSK Band 41 Harmonics, 5MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2498.50									
4997.00	-11.8	V	3.0	35.5	1.0	-46.2	-25.0	-21.2	
7495.50	-8.4	V	3.0	35.7	1.0	-43.1	-25.0	-18.1	
9994.00	-6.5	V	3.0	36.0	1.0	-41.5	-25.0	-16.5	
4997.00	-11.7	H	3.0	35.5	1.0	-46.2	-25.0	-21.2	
7495.50	-7.7	H	3.0	35.7	1.0	-42.5	-25.0	-17.5	
9994.00	-5.1	H	3.0	36.0	1.0	-40.1	-25.0	-15.1	
Mid Ch, 2593									
5186.00	-11.4	V	3.0	35.4	1.0	-45.8	-25.0	-20.8	
7779.00	-8.1	V	3.0	35.8	1.0	-42.9	-25.0	-17.9	
10372.00	-5.8	V	3.0	35.8	1.0	-40.6	-25.0	-15.6	
5186.00	-11.1	H	3.0	35.4	1.0	-45.5	-25.0	-20.5	
7779.00	-7.0	H	3.0	35.8	1.0	-41.7	-25.0	-16.7	
10372.00	-4.8	H	3.0	35.8	1.0	-39.7	-25.0	-14.7	
High Ch, 2682.50									
5375.00	-11.0	V	3.0	35.4	1.0	-45.5	-25.0	-20.5	
8062.50	-7.7	V	3.0	35.8	1.0	-42.5	-25.0	-17.5	
10750.00	-5.5	V	3.0	35.7	1.0	-40.2	-25.0	-15.2	
5375.00	-12.2	H	3.0	35.4	1.0	-46.6	-25.0	-21.6	
8062.50	-7.0	H	3.0	35.8	1.0	-41.8	-25.0	-16.8	
10750.00	-5.1	H	3.0	35.7	1.0	-39.7	-25.0	-14.7	

LTE B41 5MHz QPSK

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

Company: SOMC
 Project #: 11626381 (PY7-08618T)
 Date: 4/5/2017
 Test Engineer: 43574 JS
 Configuration: EUT Only
 Location: Chamber B
 Mode: LTE_QPSK Band 41 Harmonics, 10MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2501									
5002.00	-11.9	V	3.0	35.5	1.0	-46.4	-25.0	-21.4	
7500.00	-7.6	V	3.0	35.7	1.0	-42.4	-25.0	-17.4	
10040.00	-6.9	V	3.0	36.0	1.0	-41.5	-25.0	-16.5	
5002.00	-11.8	H	3.0	35.5	1.0	-46.3	-25.0	-21.3	
7500.00	-7.4	H	3.0	35.7	1.0	-42.1	-25.0	-17.1	
10040.00	-5.7	H	3.0	36.0	1.0	-40.7	-25.0	-15.7	
Mid Ch, 2593									
5186.00	-11.2	V	3.0	35.4	1.0	-45.6	-25.0	-20.6	
7779.00	-6.9	V	3.0	35.8	1.0	-41.7	-25.0	-16.7	
10372.00	-4.4	V	3.0	35.8	1.0	-41.3	-25.0	-16.3	
5186.00	-11.0	H	3.0	35.4	1.0	-45.5	-25.0	-20.5	
7779.00	-7.2	H	3.0	35.8	1.0	-42.0	-25.0	-17.0	
10372.00	-5.4	H	3.0	35.8	1.0	-40.2	-25.0	-15.2	
High Ch, 2685									
5370.00	-11.0	V	3.0	35.4	1.0	-45.5	-25.0	-20.5	
8095.00	-6.8	V	3.0	35.8	1.0	-41.6	-25.0	-16.6	
10740.00	-4.5	V	3.0	35.7	1.0	-41.2	-25.0	-16.2	
5370.00	-10.7	H	3.0	35.4	1.0	-45.2	-25.0	-20.2	
8055.00	-7.0	H	3.0	35.8	1.0	-41.8	-25.0	-16.8	
10740.00	-5.1	H	3.0	35.7	1.0	-39.8	-25.0	-14.8	

LTE B41 10MHz QPSK

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

Company: SOMC
 Project #: 11626381 (PY7-08618T)
 Date: 4/5/2017
 Test Engineer: 43574 JS
 Configuration: EUT Only
 Location: Chamber B
 Mode: LTE_QPSK Band 41 Harmonics, 15MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2503									
5006.00	-13.1	V	3.0	35.5	1.0	-47.6	-25.0	-22.6	
7509.00	-8.7	V	3.0	35.7	1.0	-43.5	-25.0	-18.5	
10012.00	-7.5	V	3.0	36.0	1.0	-42.6	-25.0	-17.6	
5006.00	-13.1	H	3.0	35.5	1.0	-47.6	-25.0	-22.6	
7509.00	-8.0	H	3.0	35.7	1.0	-42.7	-25.0	-17.7	
10012.00	-7.7	H	3.0	36.0	1.0	-42.7	-25.0	-17.7	
Mid Ch, 2593									
5186.00	-12.6	V	3.0	35.4	1.0	-47.0	-25.0	-22.0	
7779.00	-9.2	V	3.0	35.8	1.0	-44.0	-25.0	-19.0	
10372.00	-7.1	V	3.0	35.8	1.0	-41.9	-25.0	-16.9	
5186.00	-12.7	H	3.0	35.4	1.0	-47.2	-25.0	-22.2	
7779.00	-7.8	H	3.0	35.8	1.0	-42.6	-25.0	-17.6	
10372.00	-7.1	H	3.0	35.8	1.0	-42.0	-25.0	-17.0	
High Ch, 2682.50									
5365.00	-12.6	V	3.0	35.4	1.0	-47.0	-25.0	-22.0	
8047.50	-8.9	V	3.0	35.8	1.0	-43.7	-25.0	-18.7	
10730.00	-7.3	V	3.0	35.7	1.0	-42.0	-25.0	-17.0	
5365.00	-12.2	H	3.0	35.4	1.0	-46.6	-25.0	-21.6	
8047.50	-7.1	H	3.0	35.8	1.0	-42.0	-25.0	-17.0	
10730.00	-7.7	H	3.0	35.7	1.0	-42.4	-25.0	-17.4	

LTE B41 15MHz QPSK

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

Company: SOMC
 Project #: 11626381 (PY7-08618T)
 Date: 4/5/2017
 Test Engineer: 43574 JS
 Configuration: EUT Only
 Location: Chamber B
 Mode: LTE_16QAM Band 41 Harmonics, 5MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2498.50									
4997.00	-11.6	V	3.0	35.5	1.0	-46.1	-25.0	-21.1	
7495.50	-8.2	V	3.0	35.7	1.0	-42.9	-25.0	-17.9	
9994.00	-6.5	V	3.0	36.0	1.0	-41.5	-25.0	-16.5	
4997.00	-11.8	H	3.0	35.5	1.0	-46.1	-25.0	-21.1	
7495.50	-7.7	H	3.0	35.7	1.0	-42.4	-25.0	-17.4	
9994.00	-5.1	H	3.0	36.0	1.0	-40.2	-25.0	-15.2	
Mid Ch, 2593									
5186.00	-11.2	V	3.0	35.4	1.0	-45.6	-25.0	-20.6	
7779.00	-7.7	V	3.0	35.8	1.0	-42.4	-25.0	-17.4	
10372.00	-5.9	V	3.0	35.8	1.0	-40.7	-25.0	-15.7	
5186.00	-11.1	H	3.0	35.4	1.0	-45.5	-25.0	-20.5	
7779.00	-6.7	H	3.0	35.8	1.0	-41.4	-25.0	-16.4	
10372.00	-5.3	H	3.0	35.8	1.0	-40.1	-25.0	-15.1	
High Ch, 2682.50									
5375.00	-11.2	V	3.0	35.4	1.0	-45.6	-25.0	-20.6	
8062.50	-8.0	V	3.0	35.8	1.0	-42.8	-25.0	-17.8	
10750.00	-5.8	V	3.0	35.7	1.0	-40.5	-25.0	-15.5	
5375.00	-12.2	H	3.0	35.4	1.0	-46.6	-25.0	-21.6	
8062.50	-7.9	H	3.0	35.8	1.0	-42.7	-25.0	-17.7	
10750.00	-4.9	H	3.0	35.7	1.0	-39.6	-25.0	-14.6	

LTE B41 5MHz 16QAM

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

Company: SOMC
 Project #: 11626381 (PY7-08618T)
 Date: 4/5/2017
 Test Engineer: 43574 JS
 Configuration: EUT Only
 Location: Chamber B
 Mode: LTE_16QAM Band 41 Harmonics, 10MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2501									
5002.00	-12.1	V	3.0	35.5	1.0	-46.5	-25.0	-21.5	
7500.00	-7.5	V	3.0	35.7	1.0	-42.2	-25.0	-17.2	
10040.00	-7.2	V	3.0	36.0	1.0	-42.2	-25.0	-17.2	
5002.00	-12.3	H	3.0	35.5	1.0	-46.8	-25.0	-21.8	
7500.00	-7.3	H	3.0	35.7	1.0	-42.0	-25.0	-17.0	
10040.00	-5.8	H	3.0	36.0	1.0	-40.8	-25.0	-15.8	
Mid Ch, 2593									
5186.00	-11.4	V	3.0	35.4	1.0	-45.9	-25.0	-20.9	
7779.00	-7.0	V	3.0	35.8	1.0	-41.7	-25.0	-16.7	
10372.00	-6.8	V	3.0	35.8	1.0	-41.6	-25.0	-16.6	
5186.00	-11.1	H	3.0	35.4	1.0	-45.6	-25.0	-20.6	
7779.00	-7.5	H	3.0	35.8	1.0	-42.3	-25.0	-17.3	
10372.00	-6.0	H	3.0	35.8	1.0	-40.9	-25.0	-15.9	
High Ch, 2685									
5370.00	-10.4	V	3.0	35.4	1.0	-44.8	-25.0	-19.8	
8095.00	-6.7	V	3.0	35.8	1.0	-41.5	-25.0	-16.5	
10740.00	-4.8	V	3.0	35.8	1.0	-41.5	-25.0	-16.5	
5370.00	-10.9	H	3.0	35.4	1.0	-45.3	-25.0	-20.3	
8055.00	-7.2	H	3.0	35.8	1.0	-42.0	-25.0	-17.0	
10740.00	-5.5	H	3.0	35.7	1.0	-40.2	-25.0	-15.2	

LTE B41 10MHz 16QAM

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

Company: SOMC
 Project #: 11626381 (PY7-08618T)
 Date: 4/5/2017
 Test Engineer: 43574 JS
 Configuration: EUT Only
 Location: Chamber B
 Mode: LTE_16QAM Band 41 Harmonics, 15MHz Bandwidth

F MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2503									
5006.00	-13.1	V	3.0	35.5	1.0	-47.6	-25.0	-22.6	
7509.00	-8.9	V	3.0	35.7	1.0	-43.6	-25.0	-18.6	
10012.00	-7.3	V	3.0	36.0	1.0	-42.3	-25.0	-17.3	
5006.00	-13.2	H	3.0	35.5	1.0	-47.6	-25.0	-22.6	
7509.00	-8.0	H	3.0	35.7	1.0	-42.7	-25.0	-17.7	
10012.00	-7.4	H	3.0	36.0	1.0	-42.4	-25.0	-17.4	
Mid Ch, 2593									
5186.00	-13.1	V	3.0	35.4	1.0	-47.6	-25.0	-22.6	
7779.00	-9.1	V	3.0	35.8	1.0	-43.9	-25.0	-18.9	
10372.00	-7.3	V	3.0	35.8	1.0	-42.2	-25.0	-17.2	
5186.00	-13.0	H	3.0	35.4	1.0	-47.4	-25.0	-22.4	
7779.00	-7.6	H	3.0	35.8	1.0	-42.4	-25.0	-17.4	
10372.00	-7.5	H	3.0	35.8	1.0	-42.3	-25.0	-17.3	
High Ch, 2682.50									
5365.00	-12.7	V	3.0	35.4	1.0	-47.2	-25.0	-22.2	
8047.50	-8.8	V	3.0	35.8	1.0	-43.6	-25.0	-18.6	
10730.00	-7.5	V	3.0	35.7	1.0	-42.2	-25.0	-17.2	
5365.00	-12.5	H	3.0	35.4	1.0	-46.9	-25.0	-21.9	
8047.50	-7.1	H	3.0	35.8	1.0	-41.9	-25.0	-16.9	
10730.00	-7.9	H	3.0	35.7	1.0	-42.6	-25.0	-17.6	

LTE B41 15MHz 16QAM

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

Company: SOAC
 Project #: 11626381 (PY7-08618T)
 Date: 4/5/2017
 Test Engineer: 43574 JS
 Configuration: EUT Only
 Location: Chamber B
 Mode: LTE_QPSK Band 41 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, 2506									
5012.00	-13.3	V	3.0	35.5	1.0	47.8	-25.0	-22.8	
7518.00	-9.0	V	3.0	35.7	1.0	43.8	-25.0	-18.8	
10024.00	-8.4	V	3.0	36.0	1.0	43.5	-25.0	-18.5	
5012.00	-12.1	H	3.0	35.5	1.0	46.6	-25.0	-21.6	
7518.00	-8.6	H	3.0	35.7	1.0	43.3	-25.0	-18.3	
10024.00	-7.8	H	3.0	36.0	1.0	42.0	-25.0	-17.0	
Mid Ch, 2593									
5186.00	-12.9	V	3.0	35.4	1.0	47.3	-25.0	-22.3	
7779.00	-9.1	V	3.0	35.8	1.0	43.9	-25.0	-18.9	
10372.00	-7.7	V	3.0	35.8	1.0	42.6	-25.0	-17.6	
5186.00	-11.8	H	3.0	35.4	1.0	46.2	-25.0	-21.2	
7779.00	-8.4	H	3.0	35.8	1.0	43.2	-25.0	-18.2	
10372.00	-7.2	H	3.0	35.8	1.0	42.1	-25.0	-17.1	
High Ch, 2680									
5360.00	-12.8	V	3.0	35.4	1.0	47.3	-25.0	-22.3	
8040.00	-9.0	V	3.0	35.8	1.0	43.8	-25.0	-18.8	
10720.00	-7.4	V	3.0	35.7	1.0	42.1	-25.0	-17.1	
5360.00	-11.7	H	3.0	35.4	1.0	46.1	-25.0	-21.1	
8040.00	-8.1	H	3.0	35.8	1.0	42.9	-25.0	-17.9	
10720.00	-6.4	H	3.0	35.7	1.0	41.1	-25.0	-16.1	

LTE B41 20MHz QPSK

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

Company: SOAC
 Project #: 11626381 (PY7-08618T)
 Date: 4/5/2017
 Test Engineer: 43574 JS
 Configuration: EUT Only
 Location: Chamber B
 Mode: LTE_16QAM Band 41 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, 2506									
5012.00	-13.2	V	3.0	35.5	1.0	47.7	-25.0	-22.7	
7518.00	-8.8	V	3.0	35.7	1.0	43.6	-25.0	-18.6	
10024.00	-8.5	V	3.0	36.0	1.0	43.5	-25.0	-18.5	
5012.00	-12.4	H	3.0	35.5	1.0	46.8	-25.0	-21.8	
7518.00	-8.4	H	3.0	35.7	1.0	43.1	-25.0	-18.1	
10024.00	-7.4	H	3.0	36.0	1.0	42.4	-25.0	-17.4	
Mid Ch, 2593									
5186.00	-12.9	V	3.0	35.4	1.0	47.3	-25.0	-22.3	
7779.00	-9.4	V	3.0	35.8	1.0	44.2	-25.0	-19.2	
10372.00	-7.3	V	3.0	35.8	1.0	42.2	-25.0	-17.2	
5186.00	-12.3	H	3.0	35.4	1.0	46.8	-25.0	-21.8	
7779.00	-8.4	H	3.0	35.8	1.0	43.2	-25.0	-18.2	
10372.00	-6.9	H	3.0	35.8	1.0	41.8	-25.0	-16.8	
High Ch, 2680									
5360.00	-12.8	V	3.0	35.4	1.0	47.3	-25.0	-22.3	
8040.00	-9.0	V	3.0	35.8	1.0	43.8	-25.0	-18.8	
10720.00	-7.4	V	3.0	35.7	1.0	42.1	-25.0	-17.1	
5360.00	-11.7	H	3.0	35.4	1.0	46.1	-25.0	-21.1	
8040.00	-8.1	H	3.0	35.8	1.0	42.9	-25.0	-17.9	
10720.00	-6.4	H	3.0	35.7	1.0	41.1	-25.0	-16.1	

LTE B41 20MHz 16QAM