LTE Band 4

LTE Band 4 20MHz QPSK

UL Korea, Ltd Suwon Laboratory
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 15K22555
Date: 01-12-16
Test Engineer: Steven Kim
Configuration: EUT / AC Adapter / Ear Phone / X-Position
Mode: TX, LTE BAND 4, 20MHz BW, QPSK

Chamber	Pre-amplifer	Filter	Limit
Chamber 2	AFS42	Filter 1	FCC Part 27

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1720MHz)									
3.4400	-16.2	V	3.0	40.2	1.0	-55.4	-13.0	-42.4	
5.1600	-5.7	V	3.0	40.9	1.0	-45.6	-13.0	-32.6	
6.8800	3.8	V	3.0	41.0	1.0	-36.1	-13.0	-23.1	
3.4400	-16.4	H	3.0	40.2	1.0	-55.6	-13.0	-42.6	
5.1600	-3.3	H	3.0	40.9	1.0	-43.2	-13.0	-30.2	
6.8800	1.5	H	3.0	41.0	1.0	-38.5	-13.0	-25.5	
Mid Channel (1732.5MHz)									
3.4650	-17.0	V	3.0	40.3	1.0	-56.3	-13.0	-43.3	
5.1975	-1.2	V	3.0	40.9	1.0	-41.1	-13.0	-28.1	
6.9300	5.1	V	3.0	41.0	1.0	-34.9	-13.0	-21.9	
3.4650	-17.4	H	3.0	40.3	1.0	-56.7	-13.0	-43.7	
5.1975	-1.3	H	3.0	40.9	1.0	-41.2	-13.0	-28.2	
6.9300	4.3	H	3.0	41.0	1.0	-35.7	-13.0	-22.7	
High Channel (1745MHz)									
3.4900	-15.8	V	3.0	40.3	1.0	-55.1	-13.0	-42.1	
5.2350	-1.8	V	3.0	40.9	1.0	-41.7	-13.0	-28.7	
6.9800	3.1	V	3.0	41.0	1.0	-36.9	-13.0	-23.9	
3.4900	-16.2	H	3.0	40.3	1.0	-55.5	-13.0	-42.5	
5.2350	-1.7	H	3.0	40.9	1.0	-41.6	-13.0	-28.6	
6.9800	3.3	H	3.0	41.0	1.0	-36.7	-13.0	-23.7	

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

LTE Band 4 20MHz 16QAM

UL Korea, Ltd Suwon Laboratory
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 15K22555
Date: 01-12-16
Test Engineer: Steven Kim
Configuration: EUT / AC Adapter / Ear Phone / X-Position
Mode: TX, LTE BAND 4, 20MHz BW,16QAM

Chamber	Pre-amplifer	Filter	Limit
Chamber 2	AFS42	Filter 1	FCC Part 27

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1720MHz)									
3.4400	-18.2	V	3.0	40.2	1.0	-57.4	-13.0	-44.4	
5.1600	-7.3	V	3.0	40.9	1.0	-47.2	-13.0	-34.2	
6.8800	2.0	V	3.0	41.0	1.0	-38.0	-13.0	-25.0	
3.4400	-17.4	H	3.0	40.2	1.0	-56.6	-13.0	-43.6	
5.1600	-5.3	H	3.0	40.9	1.0	-45.2	-13.0	-32.2	
6.8800	-0.2	H	3.0	41.0	1.0	-40.2	-13.0	-27.2	
Mid Channel (1732.5MHz)									
3.4650	-17.9	V	3.0	40.3	1.0	-57.1	-13.0	-44.1	
5.1975	-3.6	V	3.0	40.9	1.0	-43.5	-13.0	-30.5	
6.9300	3.2	V	3.0	41.0	1.0	-36.8	-13.0	-23.8	
3.4650	-18.4	H	3.0	40.3	1.0	-57.7	-13.0	-44.7	
5.1975	-3.1	H	3.0	40.9	1.0	-43.0	-13.0	-30.0	
6.9300	2.6	H	3.0	41.0	1.0	-37.4	-13.0	-24.4	
High Channel (1745MHz)									
3.4900	-17.9	V	3.0	40.3	1.0	-57.2	-13.0	-44.2	
5.2350	-2.2	V	3.0	40.9	1.0	-42.1	-13.0	-29.1	
6.9800	1.0	V	3.0	41.0	1.0	-39.0	-13.0	-26.0	
3.4900	-16.6	H	3.0	40.3	1.0	-55.9	-13.0	-42.9	
5.2350	-3.3	H	3.0	40.9	1.0	-43.2	-13.0	-30.2	
6.9800	2.1	H	3.0	41.0	1.0	-37.9	-13.0	-24.9	

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

LTE Band 4 15MHz QPSK

UL Korea, Ltd Suwon Laboratory
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 15K22555
Date: 01-12-16
Test Engineer: Steven Kim
Configuration: EUT / AC Adapter / Ear Phone / X-Position
Mode: TX, LTE BAND 4, 15MHz BW,QPSK

Chamber	Pre-amplifer	Filter	Limit
Chamber 2	AFS42	Filter 1	FCC Part 27

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1717.5MHz)									
3.4350	-16.5	V	3.0	40.2	1.0	-55.7	-13.0	-42.7	
5.1525	-5.8	V	3.0	40.9	1.0	-45.7	-13.0	-32.7	
6.8700	3.9	V	3.0	41.0	1.0	-36.1	-13.0	-23.1	
3.4350	-16.6	H	3.0	40.2	1.0	-55.8	-13.0	-42.8	
5.1525	-3.2	H	3.0	40.9	1.0	-43.1	-13.0	-30.1	
6.8700	1.4	H	3.0	41.0	1.0	-38.6	-13.0	-25.6	
Mid Channel (1732.5MHz)									
3.4650	-17.1	V	3.0	40.3	1.0	-56.3	-13.0	-43.3	
5.1975	-1.9	V	3.0	40.9	1.0	-41.8	-13.0	-28.8	
6.9300	5.1	V	3.0	41.0	1.0	-34.9	-13.0	-21.9	
3.4650	-18.0	H	3.0	40.3	1.0	-57.3	-13.0	-44.3	
5.1975	-1.5	H	3.0	40.9	1.0	-41.4	-13.0	-28.4	
6.9300	4.2	H	3.0	41.0	1.0	-35.8	-13.0	-22.8	
High Channel (1747.5MHz)									
3.4950	-15.9	V	3.0	40.3	1.0	-55.2	-13.0	-42.2	
5.2425	-1.8	V	3.0	40.9	1.0	-41.7	-13.0	-28.7	
6.9900	3.2	V	3.0	41.0	1.0	-36.8	-13.0	-23.8	
3.4950	-16.3	H	3.0	40.3	1.0	-55.6	-13.0	-42.6	
5.2425	-1.7	H	3.0	40.9	1.0	-41.6	-13.0	-28.6	
6.9900	3.5	H	3.0	41.0	1.0	-36.5	-13.0	-23.5	

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

LTE Band 4 15MHz 16QAM

UL Korea, Ltd Suwon Laboratory
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 15K22555
Date: 01-12-16
Test Engineer: Steven Kim
Configuration: EUT / AC Adapter / Ear Phone / X-Position
Mode: TX, LTE BAND 4, 15MHz BW,16QAM

Chamber	Pre-amplifer	Filter	Limit
Chamber 2	AFS42	Filter 1	FCC Part 27

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1717.5MHz)									
3.4350	-18.0	V	3.0	40.2	1.0	-57.2	-13.0	-44.2	
5.1525	-7.6	V	3.0	40.9	1.0	-47.4	-13.0	-34.4	
6.8700	1.9	V	3.0	41.0	1.0	-38.1	-13.0	-25.1	
3.4350	-17.6	H	3.0	40.2	1.0	-56.9	-13.0	-43.9	
5.1525	-5.9	H	3.0	40.9	1.0	-45.8	-13.0	-32.8	
6.8700	0.0	H	3.0	41.0	1.0	-40.0	-13.0	-27.0	
Mid Channel (1732.5MHz)									
3.4650	-18.1	V	3.0	40.3	1.0	-57.3	-13.0	-44.3	
5.1975	-3.3	V	3.0	40.9	1.0	-43.2	-13.0	-30.2	
6.9300	2.5	V	3.0	41.0	1.0	-37.5	-13.0	-24.5	
3.4650	-18.4	H	3.0	40.3	1.0	-57.7	-13.0	-44.7	
5.1975	-3.6	H	3.0	40.9	1.0	-43.5	-13.0	-30.5	
6.9300	3.0	H	3.0	41.0	1.0	-37.0	-13.0	-24.0	
High Channel (1747.5MHz)									
3.4950	-17.8	V	3.0	40.3	1.0	-57.1	-13.0	-44.1	
5.2425	-2.9	V	3.0	40.9	1.0	-42.7	-13.0	-29.7	
6.9900	1.1	V	3.0	41.0	1.0	-38.9	-13.0	-25.9	
3.4950	-16.2	H	3.0	40.3	1.0	-55.5	-13.0	-42.5	
5.2425	-3.2	H	3.0	40.9	1.0	-43.0	-13.0	-30.0	
6.9900	2.2	H	3.0	41.0	1.0	-37.8	-13.0	-24.8	

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

LTE Band 4 10MHz QPSK

UL Korea, Ltd Suwon Laboratory
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 15K22555
Date: 01-12-16
Test Engineer: Steven Kim
Configuration: EUT / AC Adapter / Ear Phone / X-Position
Mode: TX, LTE BAND 4, 10MHz BW, QPSK

Chamber	Pre-amplifer	Filter	Limit
Chamber 2	AFS42	Filter 1	FCC Part 27

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1715MHz)									
3.4300	-16.3	V	3.0	40.2	1.0	-55.6	-13.0	-42.6	
5.1450	-5.7	V	3.0	40.9	1.0	-45.6	-13.0	-32.6	
6.8600	3.8	V	3.0	41.0	1.0	-36.2	-13.0	-23.2	
3.4300	-16.5	H	3.0	40.2	1.0	-55.8	-13.0	-42.8	
5.1450	-3.3	H	3.0	40.9	1.0	-43.2	-13.0	-30.2	
6.8600	2.0	H	3.0	41.0	1.0	-38.0	-13.0	-25.0	
Mid Channel (1732.5MHz)									
3.4650	-17.2	V	3.0	40.3	1.0	-56.4	-13.0	-43.4	
5.1975	-1.2	V	3.0	40.9	1.0	-41.1	-13.0	-28.1	
6.9300	5.0	V	3.0	41.0	1.0	-35.0	-13.0	-22.0	
3.4650	-17.4	H	3.0	40.3	1.0	-56.7	-13.0	-43.7	
5.1975	-1.8	H	3.0	40.9	1.0	-41.7	-13.0	-28.7	
6.9300	4.3	H	3.0	41.0	1.0	-35.7	-13.0	-22.7	
High Channel (1750MHz)									
3.5000	-15.7	V	3.0	40.3	1.0	-55.0	-13.0	-42.0	
5.2500	-1.8	V	3.0	40.9	1.0	-41.7	-13.0	-28.7	
7.0000	3.3	V	3.0	41.0	1.0	-36.7	-13.0	-23.7	
3.5000	-16.4	H	3.0	40.3	1.0	-55.7	-13.0	-42.7	
5.2500	-1.7	H	3.0	40.9	1.0	-41.6	-13.0	-28.6	
7.0000	2.8	H	3.0	41.0	1.0	-37.2	-13.0	-24.2	

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

LTE Band 4 10MHz 16QAM

UL Korea, Ltd Suwon Laboratory
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 15K22555
Date: 01-12-16
Test Engineer: Steven Kim
Configuration: EUT / AC Adapter / Ear Phone / X-Position
Mode: TX, LTE BAND 4, 10MHz BW,16QAM

Chamber	Pre-amplifer	Filter	Limit
Chamber 2	AFS42	Filter 1	FCC Part 27

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1715MHz)									
3.4300	-18.2	V	3.0	40.2	1.0	-57.5	-13.0	-44.5	
5.1450	-7.8	V	3.0	40.9	1.0	-47.7	-13.0	-34.7	
6.8600	1.6	V	3.0	41.0	1.0	-38.4	-13.0	-25.4	
3.4300	-17.4	H	3.0	40.2	1.0	-56.6	-13.0	-43.6	
5.1450	-5.3	H	3.0	40.9	1.0	-45.2	-13.0	-32.2	
6.8600	-0.1	H	3.0	41.0	1.0	-40.1	-13.0	-27.1	
Mid Channel (1732.5MHz)									
3.4650	-18.3	V	3.0	40.3	1.0	-57.6	-13.0	-44.6	
5.1975	-3.2	V	3.0	40.9	1.0	-43.1	-13.0	-30.1	
6.9300	3.1	V	3.0	41.0	1.0	-36.9	-13.0	-23.9	
3.4650	-19.0	H	3.0	40.3	1.0	-58.3	-13.0	-45.3	
5.1975	-3.2	H	3.0	40.9	1.0	-43.1	-13.0	-30.1	
6.9300	3.2	H	3.0	41.0	1.0	-36.8	-13.0	-23.8	
High Channel (1750MHz)									
3.5000	-17.9	V	3.0	40.3	1.0	-57.2	-13.0	-44.2	
5.2500	-2.1	V	3.0	40.9	1.0	-42.0	-13.0	-29.0	
7.0000	1.1	V	3.0	41.0	1.0	-38.9	-13.0	-25.9	
3.5000	-16.4	H	3.0	40.3	1.0	-55.7	-13.0	-42.7	
5.2500	-3.1	H	3.0	40.9	1.0	-43.0	-13.0	-30.0	
7.0000	1.8	H	3.0	41.0	1.0	-38.2	-13.0	-25.2	

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

LTE Band 4 5MHz QPSK

UL Korea, Ltd Suwon Laboratory
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 15K22555
Date: 01-12-16
Test Engineer: Steven Kim
Configuration: EUT / AC Adapter / Ear Phone / X-Position
Mode: TX, LTE BAND 4, 5MHz BW, QPSK

Chamber	Pre-amplifer	Filter	Limit
Chamber 2	AFS42	Filter 1	FCC Part 27

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1712.5MHz)									
3.4250	-16.5	V	3.0	40.2	1.0	-55.8	-13.0	-42.8	
5.1375	-5.8	V	3.0	40.9	1.0	-45.7	-13.0	-32.7	
6.5800	3.1	V	3.0	40.9	1.0	-36.8	-13.0	-23.8	
3.4250	-16.5	H	3.0	40.2	1.0	-55.7	-13.0	-42.7	
5.1375	-3.7	H	3.0	40.9	1.0	-43.6	-13.0	-30.6	
6.5800	1.0	H	3.0	40.9	1.0	-38.9	-13.0	-25.9	
Mid Channel (1732.5MHz)									
3.4650	-17.3	V	3.0	40.3	1.0	-56.5	-13.0	-43.5	
5.1975	-1.5	V	3.0	40.9	1.0	-41.4	-13.0	-28.4	
6.9300	4.9	V	3.0	41.0	1.0	-35.1	-13.0	-22.1	
3.4650	-17.9	H	3.0	40.3	1.0	-57.1	-13.0	-44.1	
5.1975	-1.3	H	3.0	40.9	1.0	-41.2	-13.0	-28.2	
6.9300	3.9	H	3.0	41.0	1.0	-36.1	-13.0	-23.1	
High Channel (1752.5MHz)									
3.5050	-16.0	V	3.0	40.3	1.0	-55.3	-13.0	-42.3	
5.2575	-1.6	V	3.0	40.9	1.0	-41.5	-13.0	-28.5	
7.0100	3.5	V	3.0	41.0	1.0	-36.6	-13.0	-23.6	
3.5050	-16.2	H	3.0	40.3	1.0	-55.5	-13.0	-42.5	
5.2575	-1.8	H	3.0	40.9	1.0	-41.7	-13.0	-28.7	
7.0100	2.9	H	3.0	41.0	1.0	-37.1	-13.0	-24.1	

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

LTE Band 4 5MHz 16QAM

UL Korea, Ltd Suwon Laboratory
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 15K22555
Date: 01-12-16
Test Engineer: Steven Kim
Configuration: EUT / AC Adapter / Ear Phone / X-Position
Mode: TX, LTE BAND 7, 5MHz BW,16QAM

Chamber	Pre-amplifer	Filter	Limit
Chamber 2	AFS42	Filter 1	FCC Part 27

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1712.5MHz)									
3.4250	-18.6	V	3.0	40.2	1.0	-57.8	-13.0	-44.8	
5.1375	-7.7	V	3.0	40.9	1.0	-47.6	-13.0	-34.6	
6.5800	1.1	V	3.0	40.9	1.0	-38.8	-13.0	-25.8	
3.4250	-17.6	H	3.0	40.2	1.0	-56.8	-13.0	-43.8	
5.1375	-5.2	H	3.0	40.9	1.0	-45.1	-13.0	-32.1	
6.5800	-0.9	H	3.0	40.9	1.0	-40.8	-13.0	-27.8	
Mid Channel (1732.5MHz)									
3.4650	-18.1	V	3.0	40.3	1.0	-57.4	-13.0	-44.4	
5.1975	-3.7	V	3.0	40.9	1.0	-43.6	-13.0	-30.6	
6.9300	3.3	V	3.0	41.0	1.0	-36.7	-13.0	-23.7	
3.4650	-19.0	H	3.0	40.3	1.0	-58.2	-13.0	-45.2	
5.1975	-3.2	H	3.0	40.9	1.0	-43.1	-13.0	-30.1	
6.9300	2.8	H	3.0	41.0	1.0	-37.2	-13.0	-24.2	
High Channel (1752.5MHz)									
3.5050	-17.9	V	3.0	40.3	1.0	-57.2	-13.0	-44.2	
5.2575	-2.2	V	3.0	40.9	1.0	-42.1	-13.0	-29.1	
7.0100	1.2	V	3.0	41.0	1.0	-38.8	-13.0	-25.8	
3.5050	-17.0	H	3.0	40.3	1.0	-56.3	-13.0	-43.3	
5.2575	-3.3	H	3.0	40.9	1.0	-43.2	-13.0	-30.2	
7.0100	1.9	H	3.0	41.0	1.0	-38.2	-13.0	-25.2	

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

LTE Band 4 3MHz QPSK

UL Korea, Ltd Suwon Laboratory
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 15K22555
Date: 01-12-16
Test Engineer: Steven Kim
Configuration: EUT / AC Adapter / Ear Phone / X-Position
Mode: TX, LTE BAND 4, 3MHz BW,QPSK

Chamber	Pre-amplifer	Filter	Limit
Chamber 2	AFS42	Filter 1	FCC Part 27

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1711.5MHz)									
3.4230	-16.6	V	3.0	40.2	1.0	-55.8	-13.0	-42.8	
5.1345	-6.0	V	3.0	40.9	1.0	-45.9	-13.0	-32.9	
6.8460	3.8	V	3.0	41.0	1.0	-36.2	-13.0	-23.2	
3.4230	-16.8	H	3.0	40.2	1.0	-56.0	-13.0	-43.0	
5.1345	-3.7	H	3.0	40.9	1.0	-43.6	-13.0	-30.6	
6.8460	1.8	H	3.0	41.0	1.0	-38.2	-13.0	-25.2	
Mid Channel (1732.5MHz)									
3.4650	-17.3	V	3.0	40.3	1.0	-56.6	-13.0	-43.6	
5.1975	-1.2	V	3.0	40.9	1.0	-41.1	-13.0	-28.1	
6.9300	5.2	V	3.0	41.0	1.0	-34.8	-13.0	-21.8	
3.4650	-17.4	H	3.0	40.3	1.0	-56.7	-13.0	-43.7	
5.1975	-1.0	H	3.0	40.9	1.0	-40.9	-13.0	-27.9	
6.9300	4.1	H	3.0	41.0	1.0	-35.9	-13.0	-22.9	
High Channel (1753.5MHz)									
3.5070	-16.0	V	3.0	40.3	1.0	-55.3	-13.0	-42.3	
5.2605	-1.5	V	3.0	40.9	1.0	-41.4	-13.0	-28.4	
7.0140	3.3	V	3.0	41.0	1.0	-36.8	-13.0	-23.8	
3.5070	-16.1	H	3.0	40.3	1.0	-55.4	-13.0	-42.4	
5.2605	-1.7	H	3.0	40.9	1.0	-41.6	-13.0	-28.6	
7.0140	3.1	H	3.0	41.0	1.0	-36.9	-13.0	-23.9	

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

LTE Band 4 3MHz 16QAM

UL Korea, Ltd Suwon Laboratory
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 15K22555
Date: 01-12-16
Test Engineer: Steven Kim
Configuration: EUT / AC Adapter / Ear Phone / X-Position
Mode: TX, LTE BAND 4, 3MHz BW,16QAM

Chamber	Pre-amplifer	Filter	Limit
Chamber 2	AFS42	Filter 1	FCC Part 27

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1711.5MHz)									
3.4230	-18.6	V	3.0	40.2	1.0	-57.9	-13.0	-44.9	
5.1345	-7.6	V	3.0	40.9	1.0	-47.4	-13.0	-34.4	
6.8460	1.4	V	3.0	41.0	1.0	-38.6	-13.0	-25.6	
3.4230	-17.6	H	3.0	40.2	1.0	-56.8	-13.0	-43.8	
5.1345	-5.4	H	3.0	40.9	1.0	-45.3	-13.0	-32.3	
6.8460	-0.1	H	3.0	41.0	1.0	-40.0	-13.0	-27.0	
Mid Channel (1732.5MHz)									
3.4650	-18.0	V	3.0	40.3	1.0	-57.2	-13.0	-44.2	
5.1975	-2.3	V	3.0	40.9	1.0	-42.2	-13.0	-29.2	
6.9300	3.7	V	3.0	41.0	1.0	-36.3	-13.0	-23.3	
3.4650	-18.2	H	3.0	40.3	1.0	-57.4	-13.0	-44.4	
5.1975	-2.3	H	3.0	40.9	1.0	-42.2	-13.0	-29.2	
6.9300	3.1	H	3.0	41.0	1.0	-36.9	-13.0	-23.9	
High Channel (1752.5MHz)									
3.5070	-17.7	V	3.0	40.3	1.0	-57.0	-13.0	-44.0	
5.2605	-2.7	V	3.0	40.9	1.0	-42.6	-13.0	-29.6	
7.0140	1.3	V	3.0	41.0	1.0	-38.8	-13.0	-25.8	
3.5070	-17.0	H	3.0	40.3	1.0	-56.2	-13.0	-43.2	
5.2605	-3.7	H	3.0	40.9	1.0	-43.6	-13.0	-30.6	
7.0140	1.9	H	3.0	41.0	1.0	-38.1	-13.0	-25.1	

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

LTE Band 4 1.4MHz QPSK

UL Korea, Ltd Suwon Laboratory
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 15K22555
Date: 01-12-16
Test Engineer: Steven Kim
Configuration: EUT / AC Adapter / Ear Phone / X-Position
Mode: TX, LTE BAND 4, 1.4MHz BW, QPSK

Chamber	Pre-amplifer	Filter	Limit
Chamber 2	AFS42	Filter 1	FCC Part 27

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1710.7MHz)									
3.4214	-16.0	V	3.0	40.2	1.0	-55.2	-13.0	-42.2	
5.1321	-4.7	V	3.0	40.9	1.0	-44.6	-13.0	-31.6	
6.8428	5.9	V	3.0	41.0	1.0	-34.1	-13.0	-21.1	
3.4214	-15.8	H	3.0	40.2	1.0	-55.0	-13.0	-42.0	
5.1321	-2.8	H	3.0	40.9	1.0	-42.7	-13.0	-29.7	
6.8428	2.9	H	3.0	41.0	1.0	-37.0	-13.0	-24.0	
Mid Channel (1732.5MHz)									
3.4650	-16.4	V	3.0	40.3	1.0	-55.7	-13.0	-42.7	
5.1975	-0.4	V	3.0	40.9	1.0	-40.3	-13.0	-27.3	
6.9300	5.5	V	3.0	41.0	1.0	-34.5	-13.0	-21.5	
3.4650	-16.6	H	3.0	40.3	1.0	-55.9	-13.0	-42.9	
5.1975	-0.6	H	3.0	40.9	1.0	-40.5	-13.0	-27.5	
6.9300	4.5	H	3.0	41.0	1.0	-35.5	-13.0	-22.5	
High Channel (1754.3MHz)									
3.5086	-16.1	V	3.0	40.3	1.0	-55.4	-13.0	-42.4	
5.2629	-0.8	V	3.0	40.9	1.0	-40.7	-13.0	-27.7	
7.0172	4.1	V	3.0	41.0	1.0	-36.0	-13.0	-23.0	
3.5086	-15.0	H	3.0	40.3	1.0	-54.3	-13.0	-41.3	
5.2629	-1.1	H	3.0	40.9	1.0	-41.0	-13.0	-28.0	
7.0172	3.9	H	3.0	41.0	1.0	-36.1	-13.0	-23.1	

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

LTE Band 4 1.4MHz 16QAM

UL Korea, Ltd Suwon Laboratory
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 15K22555
Date: 01-12-16
Test Engineer: Steven Kim
Configuration: EUT / AC Adapter / Ear Phone / X-Position
Mode: TX, LTE BAND 4, 1.4MHz BW,16QAM

Chamber	Pre-amplifer	Filter	Limit
Chamber 2	AFS42	Filter 1	FCC Part 27

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1710.7MHz)									
3.4214	-17.2	V	3.0	40.2	1.0	-56.4	-13.0	-43.4	
5.1321	-6.1	V	3.0	40.9	1.0	-46.0	-13.0	-33.0	
6.8428	4.3	V	3.0	41.0	1.0	-35.6	-13.0	-22.6	
3.4214	-17.5	H	3.0	40.2	1.0	-56.7	-13.0	-43.7	
5.1321	-4.2	H	3.0	40.9	1.0	-44.1	-13.0	-31.1	
6.8428	0.9	H	3.0	41.0	1.0	-39.1	-13.0	-26.1	
Mid Channel (1732.5MHz)									
3.4650	-17.7	V	3.0	40.3	1.0	-57.0	-13.0	-44.0	
5.1975	-1.6	V	3.0	40.9	1.0	-41.5	-13.0	-28.5	
6.9300	4.2	V	3.0	41.0	1.0	-35.8	-13.0	-22.8	
3.4650	-18.3	H	3.0	40.3	1.0	-57.5	-13.0	-44.5	
5.1975	-2.8	H	3.0	40.9	1.0	-42.7	-13.0	-29.7	
6.9300	3.2	H	3.0	41.0	1.0	-36.8	-13.0	-23.8	
High Channel (1754.3MHz)									
3.5086	-17.6	V	3.0	40.3	1.0	-56.9	-13.0	-43.9	
5.2629	-2.2	V	3.0	40.9	1.0	-42.1	-13.0	-29.1	
7.0172	1.9	V	3.0	41.0	1.0	-38.2	-13.0	-25.2	
3.5086	-16.3	H	3.0	40.3	1.0	-55.6	-13.0	-42.6	
5.2629	-2.6	H	3.0	40.9	1.0	-42.5	-13.0	-29.5	
7.0172	2.4	H	3.0	41.0	1.0	-37.6	-13.0	-24.6	

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

LTE Band 2

LTE Band 2 20MHz QPSK

UL Korea, Ltd Suwon Laboratory
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 15K22555
Date: 01-11-16
Test Engineer: Steven Kim
Configuration: EUT / AC Adapter / Ear Phone / X-Position
Mode: TX, LTE BAND 2, 20MHz BW, QPSK

Chamber	Pre-amplifer	Filter	Limit
Chamber 2	AFS42	Filter 1	FCC Part 24

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1860MHz)									
3.7200	-17.2	V	3.0	40.5	1.0	-56.7	-13.0	-43.7	
5.5800	0.5	V	3.0	40.8	1.0	-39.3	-13.0	-26.3	
7.4400	-0.6	V	3.0	40.8	1.0	-40.4	-13.0	-27.4	
3.7200	-16.3	H	3.0	40.5	1.0	-55.8	-13.0	-42.8	
5.5800	-4.0	H	3.0	40.8	1.0	-43.8	-13.0	-30.8	
7.4400	0.3	H	3.0	40.8	1.0	-39.4	-13.0	-26.4	
Mid Channel (1880MHz)									
3.7600	-16.9	V	3.0	40.5	1.0	-56.5	-13.0	-43.5	
5.6400	-2.5	V	3.0	40.8	1.0	-42.3	-13.0	-29.3	
7.5200	-7.4	V	3.0	40.7	1.0	-47.2	-13.0	-34.2	
3.7600	-20.7	H	3.0	40.5	1.0	-60.2	-13.0	-47.2	
5.6400	-6.8	H	3.0	40.8	1.0	-46.6	-13.0	-33.6	
7.520	-9.2	H	3.0	40.7	1.0	-48.9	-13.0	-35.9	
High Channel (1900MHz)									
3.8000	-14.1	V	3.0	40.6	1.0	-53.6	-13.0	-40.6	
5.7000	-1.0	V	3.0	40.8	1.0	-40.8	-13.0	-27.8	
7.6000	-4.7	V	3.0	40.7	1.0	-44.4	-13.0	-31.4	
3.8000	-18.3	H	3.0	40.6	1.0	-57.9	-13.0	-44.9	
5.7000	-4.9	H	3.0	40.8	1.0	-44.7	-13.0	-31.7	
7.6000	-6.1	H	3.0	40.7	1.0	-45.7	-13.0	-32.7	

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

LTE Band 2 20MHz 16QAM

UL Korea, Ltd Suwon Laboratory
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 15K22555
Date: 01-11-16
Test Engineer: Steven Kim
Configuration: EUT / AC Adapter / Ear Phone / X-Position
Mode: TX, LTE BAND 2, 20MHz BW,16QAM

Chamber	Pre-amplifer	Filter	Limit
Chamber 2	AFS42	Filter 1	FCC Part 24

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1860MHz)									
3.7200	-17.9	V	3.0	40.5	1.0	-57.4	-13.0	-44.4	
5.5800	-1.1	V	3.0	40.8	1.0	-40.9	-13.0	-27.9	
7.4400	-1.6	V	3.0	40.8	1.0	-41.4	-13.0	-28.4	
3.7200	-17.1	H	3.0	40.5	1.0	-56.6	-13.0	-43.6	
5.5800	-5.6	H	3.0	40.8	1.0	-45.5	-13.0	-32.5	
7.4400	-0.7	H	3.0	40.8	1.0	-40.5	-13.0	-27.5	
Mid Channel (1880MHz)									
3.7600	-17.6	V	3.0	40.5	1.0	-57.2	-13.0	-44.2	
5.6400	-4.2	V	3.0	40.8	1.0	-44.0	-13.0	-31.0	
7.5200	-7.9	V	3.0	40.7	1.0	-47.6	-13.0	-34.6	
3.7600	-20.8	H	3.0	40.5	1.0	-60.3	-13.0	-47.3	
5.6400	-8.2	H	3.0	40.8	1.0	-48.0	-13.0	-35.0	
7.5200	-9.6	H	3.0	40.7	1.0	-49.3	-13.0	-36.3	
High Channel (1900MHz)									
3.8000	-14.1	V	3.0	40.6	1.0	-53.7	-13.0	-40.7	
5.7000	-1.5	V	3.0	40.8	1.0	-41.3	-13.0	-28.3	
7.6000	-5.5	V	3.0	40.7	1.0	-45.2	-13.0	-32.2	
3.8000	-19.0	H	3.0	40.6	1.0	-58.6	-13.0	-45.6	
5.7000	-6.0	H	3.0	40.8	1.0	-45.8	-13.0	-32.8	
7.6000	-6.6	H	3.0	40.7	1.0	-46.3	-13.0	-33.3	

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

LTE Band 2 15MHz QPSK

UL Korea, Ltd Suwon Laboratory
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 15K22555
Date: 01-11-16
Test Engineer: Steven Kim
Configuration: EUT / AC Adapter / Ear Phone / X-Position
Mode: TX, LTE BAND 2, 15MHz BW, QPSK

Chamber	Pre-amplifer	Filter	Limit
Chamber 2	AFS42	Filter 1	FCC Part 24

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1857.5MHz)									
3.7150	-17.4	V	3.0	40.5	1.0	-56.9	-13.0	-43.9	
5.5725	2.5	V	3.0	40.8	1.0	-37.4	-13.0	-24.4	
7.4300	-0.5	V	3.0	40.8	1.0	-40.2	-13.0	-27.2	
3.7150	-14.9	H	3.0	40.5	1.0	-54.4	-13.0	-41.4	
5.5725	0.2	H	3.0	40.8	1.0	-39.6	-13.0	-26.6	
7.4300	-1.7	H	3.0	40.8	1.0	-41.5	-13.0	-28.5	
Mid Channel (1880MHz)									
3.7600	-17.8	V	3.0	40.5	1.0	-57.3	-13.0	-44.3	
5.6400	1.0	V	3.0	40.8	1.0	-38.8	-13.0	-25.8	
7.5200	-8.3	V	3.0	40.7	1.0	-48.0	-13.0	-35.0	
3.7600	-19.0	H	3.0	40.5	1.0	-58.6	-13.0	-45.6	
5.6400	0.4	H	3.0	40.8	1.0	-39.4	-13.0	-26.4	
7.5200	-6.4	H	3.0	40.7	1.0	-46.1	-13.0	-33.1	
High Channel (1902.5MHz)									
3.8050	-15.6	V	3.0	40.6	1.0	-55.2	-13.0	-42.2	
5.7075	0.6	V	3.0	40.8	1.0	-39.2	-13.0	-26.2	
7.6100	-7.6	V	3.0	40.7	1.0	-47.2	-13.0	-34.2	
3.8050	-14.8	H	3.0	40.6	1.0	-54.4	-13.0	-41.4	
5.7075	0.7	H	3.0	40.8	1.0	-39.1	-13.0	-26.1	
7.6100	-5.7	H	3.0	40.7	1.0	-45.3	-13.0	-32.3	

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

LTE Band 2 15MHz 16QAM

UL Korea, Ltd Suwon Laboratory
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 15K22555
Date: 01-11-16
Test Engineer: Steven Kim
Configuration: EUT / AC Adapter / Ear Phone / X-Position
Mode: TX, LTE BAND 2, 15MHz BW,16QAM

Chamber	Pre-amplifer	Filter	Limit
Chamber 2	AFS42	Filter 1	FCC Part 24

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1857.5MHz)									
3.7150	-18.4	V	3.0	40.5	1.0	-57.9	-13.0	-44.9	
5.5725	0.8	V	3.0	40.8	1.0	-39.0	-13.0	-26.0	
7.4300	-1.8	V	3.0	40.8	1.0	-41.6	-13.0	-28.6	
3.7150	-15.5	H	3.0	40.5	1.0	-55.0	-13.0	-42.0	
5.5725	-2.2	H	3.0	40.8	1.0	-42.1	-13.0	-29.1	
7.4300	-2.7	H	3.0	40.8	1.0	-42.4	-13.0	-29.4	
Mid Channel (1880MHz)									
3.7600	-18.1	V	3.0	40.5	1.0	-57.7	-13.0	-44.7	
5.6400	0.1	V	3.0	40.8	1.0	-39.7	-13.0	-26.7	
7.5200	-9.2	V	3.0	40.7	1.0	-48.9	-13.0	-35.9	
3.7600	-19.5	H	3.0	40.5	1.0	-59.0	-13.0	-46.0	
5.6400	-0.5	H	3.0	40.8	1.0	-40.3	-13.0	-27.3	
7.5200	-7.0	H	3.0	40.7	1.0	-46.7	-13.0	-33.7	
High Channel (1902.5MHz)									
3.8050	-16.5	V	3.0	40.6	1.0	-56.1	-13.0	-43.1	
5.7075	-1.0	V	3.0	40.8	1.0	-40.8	-13.0	-27.8	
7.6100	-8.5	V	3.0	40.7	1.0	-48.2	-13.0	-35.2	
3.8050	-15.2	H	3.0	40.6	1.0	-54.8	-13.0	-41.8	
5.7075	-0.1	H	3.0	40.8	1.0	-39.9	-13.0	-26.9	
7.6100	-6.4	H	3.0	40.7	1.0	-46.0	-13.0	-33.0	

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

LTE Band 2 10MHz QPSK

UL Korea, Ltd Suwon Laboratory
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 15K22555
Date: 01-11-16
Test Engineer: Steven Kim
Configuration: EUT / AC Adapter / Ear Phone / X-Position
Mode: TX, LTE BAND 2, 10MHz BW,QPSK

Chamber	Pre-amplifer	Filter	Limit
Chamber 2	AFS42	Filter 1	FCC Part 24

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1855MHz)									
3.7100	-17.7	V	3.0	40.5	1.0	-57.2	-13.0	-44.2	
5.5650	2.5	V	3.0	40.8	1.0	-37.3	-13.0	-24.3	
7.4200	-0.2	V	3.0	40.8	1.0	-39.9	-13.0	-26.9	
3.7100	-16.6	H	3.0	40.5	1.0	-56.1	-13.0	-43.1	
5.5650	1.5	H	3.0	40.8	1.0	-38.3	-13.0	-25.3	
7.4200	-1.1	H	3.0	40.8	1.0	-40.9	-13.0	-27.9	
Mid Channel (1880MHz)									
3.7600	-16.3	V	3.0	40.5	1.0	-55.8	-13.0	-42.8	
5.6400	0.4	V	3.0	40.8	1.0	-39.4	-13.0	-26.4	
7.5200	-7.8	V	3.0	40.7	1.0	-47.6	-13.0	-34.6	
3.7600	-16.8	H	3.0	40.5	1.0	-56.3	-13.0	-43.3	
5.6400	-3.7	H	3.0	40.8	1.0	-43.5	-13.0	-30.5	
7.5200	-7.6	H	3.0	40.7	1.0	-47.3	-13.0	-34.3	
High Channel (1905MHz)									
3.8100	-15.1	V	3.0	40.6	1.0	-54.7	-13.0	-41.7	
5.7150	2.2	V	3.0	40.8	1.0	-37.6	-13.0	-24.6	
7.6200	-9.9	V	3.0	40.7	1.0	-49.5	-13.0	-36.5	
3.8100	-16.5	H	3.0	40.6	1.0	-56.1	-13.0	-43.1	
5.7150	0.0	H	3.0	40.8	1.0	-39.8	-13.0	-26.8	
7.620	-7.2	H	3.0	40.7	1.0	-46.8	-13.0	-33.8	

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

LTE Band 2 10MHz 16QAM

UL Korea, Ltd Suwon Laboratory
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 15K22555
Date: 01-11-16
Test Engineer: Steven Kim
Configuration: EUT / AC Adapter / Ear Phone / X-Position
Mode: TX, LTE BAND 2, 10MHz BW,16QAM

Chamber	Pre-amplifer	Filter	Limit
Chamber 2	AFS42	Filter 1	FCC Part 24

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1855MHz)									
3.7100	-18.6	V	3.0	40.5	1.0	-58.1	-13.0	-45.1	
5.5650	-0.1	V	3.0	40.8	1.0	-39.9	-13.0	-26.9	
7.4200	-1.4	V	3.0	40.8	1.0	-41.2	-13.0	-28.2	
3.7100	-17.1	H	3.0	40.5	1.0	-56.6	-13.0	-43.6	
5.5650	0.2	H	3.0	40.8	1.0	-39.6	-13.0	-26.6	
7.4200	-1.9	H	3.0	40.8	1.0	-41.7	-13.0	-28.7	
Mid Channel (1880MHz)									
3.7600	-16.7	V	3.0	40.5	1.0	-56.3	-13.0	-43.3	
5.6400	-1.2	V	3.0	40.8	1.0	-41.0	-13.0	-28.0	
7.5200	-8.8	V	3.0	40.7	1.0	-48.5	-13.0	-35.5	
3.7600	-17.8	H	3.0	40.5	1.0	-57.4	-13.0	-44.4	
5.6400	-5.5	H	3.0	40.8	1.0	-45.3	-13.0	-32.3	
7.5200	-8.5	H	3.0	40.7	1.0	-48.2	-13.0	-35.2	
High Channel (1905MHz)									
3.8100	-16.3	V	3.0	40.6	1.0	-55.9	-13.0	-42.9	
5.7150	0.2	V	3.0	40.8	1.0	-39.6	-13.0	-26.6	
7.6200	-11.3	V	3.0	40.7	1.0	-51.0	-13.0	-38.0	
3.8100	-18.1	H	3.0	40.6	1.0	-57.7	-13.0	-44.7	
5.7150	-2.6	H	3.0	40.8	1.0	-42.4	-13.0	-29.4	
7.6200	-8.4	H	3.0	40.7	1.0	-48.1	-13.0	-35.1	

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

LTE Band 2 5MHz QPSK

UL Korea, Ltd Suwon Laboratory
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 15K22555
Date: 12-26-15
Test Engineer: Steven Kim
Configuration: EUT / AC Adapter / Ear Phone / X-Position
Mode: TX, LTE BAND 2, 5MHz BW, QPSK

Chamber	Pre-amplifer	Filter	Limit
Chamber 2	AFS42	Filter 1	FCC Part 24

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1852.5MHz)									
3.7050	-15.0	V	3.0	40.5	1.0	-54.5	-13.0	-41.5	
5.5575	0.4	V	3.0	40.8	1.0	-39.4	-13.0	-26.4	
7.4100	-2.1	V	3.0	40.8	1.0	-41.8	-13.0	-28.8	
3.7050	-14.5	H	3.0	40.5	1.0	-54.0	-13.0	-41.0	
5.5575	-1.2	H	3.0	40.8	1.0	-41.0	-13.0	-28.0	
7.4100	-1.3	H	3.0	40.8	1.0	-41.1	-13.0	-28.1	
Mid Channel (1880MHz)									
3.7600	-14.6	V	3.0	40.5	1.0	-54.1	-13.0	-41.1	
5.6400	-1.9	V	3.0	40.8	1.0	-41.7	-13.0	-28.7	
7.5200	-9.1	V	3.0	40.7	1.0	-48.9	-13.0	-35.9	
3.7600	-14.5	H	3.0	40.5	1.0	-54.1	-13.0	-41.1	
5.6400	-3.3	H	3.0	40.8	1.0	-43.1	-13.0	-30.1	
7.5200	-8.7	H	3.0	40.7	1.0	-48.4	-13.0	-35.4	
High Channel (1907.5MHz)									
3.8150	-11.0	V	3.0	40.6	1.0	-50.6	-13.0	-37.6	
5.7225	0.2	V	3.0	40.8	1.0	-39.6	-13.0	-26.6	
7.6300	-7.3	V	3.0	40.7	1.0	-47.0	-13.0	-34.0	
3.8150	-10.2	H	3.0	40.6	1.0	-49.8	-13.0	-36.8	
5.7225	-1.4	H	3.0	40.8	1.0	-41.2	-13.0	-28.2	
7.6300	-9.2	H	3.0	40.7	1.0	-48.9	-13.0	-35.9	

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

LTE Band 2 5MHz 16QAM

UL Korea, Ltd Suwon Laboratory
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 15K22555
Date: 12-26-15
Test Engineer: Steven Kim
Configuration: EUT / AC Adapter / Ear Phone / X-Position
Mode: TX, LTE BAND 2, 5MHz BW,16QAM

Chamber	Pre-amplifer	Filter	Limit
Chamber 2	AFS42	Filter 1	FCC Part 24

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Channel (1852.5MHz)									
3.7050	-16.5	V	3.0	40.5	1.0	-56.0	-13.0	-43.0	
5.5575	-1.2	V	3.0	40.8	1.0	-41.0	-13.0	-28.0	
7.4100	-3.7	V	3.0	40.8	1.0	-43.5	-13.0	-30.5	
3.7050	-15.8	H	3.0	40.5	1.0	-55.3	-13.0	-42.3	
5.5575	-2.6	H	3.0	40.8	1.0	-42.5	-13.0	-29.5	
7.4100	-2.8	H	3.0	40.8	1.0	-42.6	-13.0	-29.6	
Mid Channel (1880MHz)									
3.7600	-15.7	V	3.0	40.5	1.0	-55.2	-13.0	-42.2	
5.6400	-4.7	V	3.0	40.8	1.0	-44.5	-13.0	-31.5	
7.5200	-9.7	V	3.0	40.7	1.0	-49.4	-13.0	-36.4	
3.7600	-16.7	H	3.0	40.5	1.0	-56.2	-13.0	-43.2	
5.6400	-6.1	H	3.0	40.8	1.0	-45.9	-13.0	-32.9	
7.5200	-9.4	H	3.0	40.7	1.0	-49.1	-13.0	-36.1	
High Channel (1907.5MHz)									
3.8150	-13.3	V	3.0	40.6	1.0	-52.9	-13.0	-39.9	
5.7225	-1.7	V	3.0	40.8	1.0	-41.5	-13.0	-28.5	
7.6300	-8.0	V	3.0	40.7	1.0	-47.6	-13.0	-34.6	
3.8150	-12.1	H	3.0	40.6	1.0	-51.7	-13.0	-38.7	
5.7225	-3.7	H	3.0	40.8	1.0	-43.5	-13.0	-30.5	
7.6300	-9.7	H	3.0	40.7	1.0	-49.4	-13.0	-36.4	

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