

LTE Band 4 15MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 01-11-16 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 4, QPSK, 15MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1717.50	3.21	V	1.54	9.12	10.79	30.0	-19.2	
	1717.50	9.41	H	1.54	9.12	16.99	30.0	-13.0	
	Mid Ch								
	1732.50	3.03	V	1.55	9.31	10.79	30.0	-19.2	
	1732.50	10.85	H	1.55	9.31	18.61	30.0	-11.4	
	High Ch								
	1747.50	2.36	V	1.56	9.39	10.19	30.0	-19.8	
	1747.50	10.14	H	1.56	9.39	17.97	30.0	-12.0	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
LTE Band 4 15MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 01-11-16 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 4, 16QAM, 15MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1717.50	2.82	V	1.54	9.12	10.40	30.0	-19.6	
	1717.50	9.08	H	1.54	9.12	16.66	30.0	-13.3	
	Mid Ch								
	1732.50	2.65	V	1.55	9.31	10.41	30.0	-19.6	
	1732.50	10.57	H	1.55	9.31	18.33	30.0	-11.7	
	High Ch								
	1747.50	1.99	V	1.56	9.39	9.82	30.0	-20.2	
	1747.50	9.79	H	1.56	9.39	17.62	30.0	-12.4	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

LTE Band 4 10MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 01-11-16 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 4, QPSK, 10MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1715.00	1.82	V	1.54	9.12	9.40	30.0	-20.6	
	1715.00	9.98	H	1.54	9.12	17.56	30.0	-12.4	
	Mid Ch								
	1732.50	1.40	V	1.55	9.31	9.16	30.0	-20.8	
	1732.50	8.73	H	1.55	9.31	16.49	30.0	-13.5	
	High Ch								
	1750.00	3.41	V	1.56	9.40	11.25	30.0	-18.8	
	1750.00	9.97	H	1.56	9.40	17.81	30.0	-12.2	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
LTE Band 4 10MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 01-11-16 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 4 16QAM, 10MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1715.00	1.41	V	1.54	9.12	8.99	30.0	-21.0	
	1715.00	9.74	H	1.54	9.12	17.32	30.0	-12.7	
	Mid Ch								
	1732.50	1.07	V	1.55	9.31	8.83	30.0	-21.2	
	1732.50	8.30	H	1.55	9.31	16.06	30.0	-13.9	
	High Ch								
	1750.00	3.10	V	1.56	9.40	10.94	30.0	-19.1	
	1750.00	9.61	H	1.56	9.40	17.45	30.0	-12.6	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

LTE Band 4 5MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 01-11-16 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 4, QPSK , 5MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1712.50	1.68	V	1.54	9.12	9.26	30.0	-20.7	
	1712.50	9.85	H	1.54	9.12	17.43	30.0	-12.6	
	Mid Ch								
	1732.50	1.46	V	1.55	9.31	9.22	30.0	-20.8	
	1732.50	11.00	H	1.55	9.31	18.76	30.0	-11.2	
	High Ch								
	1752.50	3.50	V	1.56	9.39	11.33	30.0	-18.7	
	1752.50	10.02	H	1.56	9.39	17.85	30.0	-12.2	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
LTE Band 4 5MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 01-11-16 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 4 16QAM, 5MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1712.50	1.31	V	1.54	9.12	8.89	30.0	-21.1	
	1712.50	9.55	H	1.54	9.12	17.13	30.0	-12.9	
	Mid Ch								
	1732.50	1.03	V	1.55	9.31	8.79	30.0	-21.2	
	1732.50	10.56	H	1.55	9.31	18.32	30.0	-11.7	
	High Ch								
	1752.50	3.07	V	1.56	9.39	10.90	30.0	-19.1	
	1752.50	9.58	H	1.56	9.39	17.41	30.0	-12.6	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

LTE Band 4 3MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 01-11-16 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 4, QPSK , 3MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1711.50	4.95	V	1.54	9.12	12.53	30.0	-17.5	
	1711.50	8.78	H	1.54	9.12	16.36	30.0	-13.6	
	Mid Ch								
	1732.50	6.08	V	1.55	9.31	13.84	30.0	-16.2	
	1732.50	11.59	H	1.55	9.31	19.35	30.0	-10.7	
	High Ch								
	1753.50	3.79	V	1.56	9.38	11.61	30.0	-18.4	
	1753.50	9.50	H	1.56	9.38	17.32	30.0	-12.7	
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									
LTE Band 4 3MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 01-11-16 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 4 16QAM, 3MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1711.50	4.73	V	1.54	9.12	12.31	30.0	-17.7	
	1711.50	8.43	H	1.54	9.12	16.01	30.0	-14.0	
	Mid Ch								
	1732.50	5.64	V	1.55	9.31	13.40	30.0	-16.6	
	1732.50	11.12	H	1.55	9.31	18.88	30.0	-11.1	
	High Ch								
	1753.50	3.49	V	1.56	9.38	11.31	30.0	-18.7	
	1753.50	9.22	H	1.56	9.38	17.04	30.0	-13.0	
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									

LTE Band 4 1.4MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 01-11-16 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 4 QPSK, 1.4MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1710.70	2.11	V	1.54	9.12	9.69	30.0	-20.3	
	1710.70	8.13	H	1.54	9.12	15.71	30.0	-14.3	
	Mid Ch								
	1732.50	1.12	V	1.55	9.31	8.88	30.0	-21.1	
	1732.50	7.96	H	1.55	9.31	15.72	30.0	-14.3	
	High Ch								
	1754.30	1.60	V	1.56	9.37	9.41	30.0	-20.6	
	1754.30	6.77	H	1.56	9.37	14.58	30.0	-15.4	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
LTE Band 4 1.4MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 01-11-16 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 4 16QAM, 1.4MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1710.70	1.73	V	1.54	9.12	9.31	30.0	-20.7	
	1710.70	7.70	H	1.54	9.12	15.28	30.0	-14.7	
	Mid Ch								
	1732.50	0.73	V	1.55	9.31	8.49	30.0	-21.5	
	1732.50	7.49	H	1.55	9.31	15.25	30.0	-14.8	
	High Ch								
	1754.30	1.16	V	1.56	9.37	8.97	30.0	-21.0	
	1754.30	6.31	H	1.56	9.37	14.12	30.0	-15.9	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

LTE Band 2

LTE Band 2 20MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 12-28-15 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 2 QPSK, 20MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1860.00	6.66	V	1.60	9.12	14.18	33.0	-18.8	
	1860.00	12.18	H	1.60	9.12	19.70	33.0	-13.3	
	Mid Ch								
	1880.00	6.40	V	1.62	8.62	13.40	33.0	-19.6	
	1880.00	9.36	H	1.62	8.62	16.36	33.0	-16.6	
	High Ch								
	1900.00	8.25	V	1.63	8.50	15.12	33.0	-17.9	
	1900.00	10.64	H	1.63	8.50	17.51	33.0	-15.5	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
LTE Band 2 20MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 12-28-15 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 2 16QAM, 20MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1860.00	3.50	V	1.60	9.12	11.02	33.0	-22.0	
	1860.00	9.27	H	1.60	9.12	16.79	33.0	-16.2	
	Mid Ch								
	1880.00	4.06	V	1.62	8.62	11.06	33.0	-21.9	
	1880.00	8.11	H	1.62	8.62	15.11	33.0	-17.9	
	High Ch								
	1900.00	5.57	V	1.63	8.50	12.44	33.0	-20.6	
	1900.00	7.90	H	1.63	8.50	14.77	33.0	-18.2	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

LTE Band 2 15MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 12-28-15 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 2 QPSK, 15MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1857.50	5.94	V	1.60	9.12	13.46	33.0	-19.5	
	1857.50	11.37	H	1.60	9.12	18.89	33.0	-14.1	
	Mid Ch								
	1880.00	8.64	V	1.62	8.62	15.64	33.0	-17.4	
	1880.00	13.76	H	1.62	8.62	20.76	33.0	-12.2	
	High Ch								
	1902.50	6.60	V	1.63	8.49	13.46	33.0	-19.5	
	1902.50	12.22	H	1.63	8.49	19.08	33.0	-13.9	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
LTE Band 2 15MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 12-28-15 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 2 16QAM, 15MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1857.50	2.57	V	1.60	9.12	10.09	33.0	-22.9	
	1857.50	8.25	H	1.60	9.12	15.77	33.0	-17.2	
	Mid Ch								
	1880.00	6.49	V	1.62	8.62	13.49	33.0	-19.5	
	1880.00	11.45	H	1.62	8.62	18.45	33.0	-14.5	
	High Ch								
	1902.50	4.43	V	1.63	8.49	11.29	33.0	-21.7	
	1902.50	9.83	H	1.63	8.49	16.69	33.0	-16.3	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

LTE Band 2 10MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 12-28-15 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 2 QPSK, 10MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1855.00	6.30	V	1.60	9.12	13.82	33.0	-19.2	
	1855.00	12.10	H	1.60	9.12	19.62	33.0	-13.4	
	Mid Ch								
	1880.00	7.43	V	1.62	8.62	14.43	33.0	-18.6	
	1880.00	10.25	H	1.62	8.62	17.25	33.0	-15.7	
	High Ch								
	1905.00	7.86	V	1.63	8.47	14.70	33.0	-18.3	
	1905.00	11.40	H	1.63	8.47	18.24	33.0	-14.8	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
LTE Band 2 10MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 12-28-15 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 2 16QAM, 10MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1855.00	2.88	V	1.60	9.12	10.40	33.0	-22.6	
	1855.00	8.42	H	1.60	9.12	15.94	33.0	-17.1	
	Mid Ch								
	1880.00	5.57	V	1.62	8.62	12.57	33.0	-20.4	
	1880.00	8.47	H	1.62	8.62	15.47	33.0	-17.5	
	High Ch								
	1905.00	6.05	V	1.63	8.47	12.89	33.0	-20.1	
	1905.00	9.74	H	1.63	8.47	16.58	33.0	-16.4	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

LTE Band 2 5MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 12-28-15 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 2 QPSK, 5MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1852.50	6.77	V	1.60	9.12	14.29	33.0	-18.7	
	1852.50	9.53	H	1.60	9.12	17.05	33.0	-16.0	
	Mid Ch								
	1880.00	6.45	V	1.62	8.62	13.45	33.0	-19.5	
	1880.00	10.75	H	1.62	8.62	17.75	33.0	-15.2	
	High Ch								
	1907.50	4.01	V	1.63	8.46	10.84	33.0	-22.2	
	1907.50	12.13	H	1.63	8.46	18.96	33.0	-14.0	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
LTE Band 2 5MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 12-28-15 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 2 16QAM, 5MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1852.50	3.46	V	1.60	9.12	10.98	33.0	-22.0	
	1852.50	8.10	H	1.60	9.12	15.62	33.0	-17.4	
	Mid Ch								
	1880.00	4.68	V	1.62	8.62	11.68	33.0	-21.3	
	1880.00	8.99	H	1.62	8.62	15.99	33.0	-17.0	
	High Ch								
	1907.50	1.91	V	1.63	8.46	8.74	33.0	-24.3	
	1907.50	10.24	H	1.63	8.46	17.07	33.0	-15.9	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

LTE Band 2 3MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 12-28-15 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 2 QPSK, 3MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1851.50	6.54	V	1.60	9.12	14.06	33.0	-18.9	
	1851.50	10.30	H	1.60	9.12	17.82	33.0	-15.2	
	Mid Ch								
	1880.00	7.22	V	1.62	8.62	14.22	33.0	-18.8	
	1880.00	10.83	H	1.62	8.62	17.83	33.0	-15.2	
	High Ch								
	1908.50	6.51	V	1.63	8.45	13.33	33.0	-19.7	
	1908.50	10.79	H	1.63	8.45	17.61	33.0	-15.4	
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									
LTE Band 2 3MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 12-28-15 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 2 16QAM, 3MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1851.50	3.53	V	1.60	9.12	11.05	33.0	-22.0	
	1851.50	7.29	H	1.60	9.12	14.81	33.0	-18.2	
	Mid Ch								
	1880.00	5.35	V	1.62	8.62	12.35	33.0	-20.6	
	1880.00	9.27	H	1.62	8.62	16.27	33.0	-16.7	
	High Ch								
	1908.50	4.34	V	1.63	8.45	11.16	33.0	-21.8	
	1908.50	8.42	H	1.63	8.45	15.24	33.0	-17.8	
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									

LTE Band 2 1.4MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 12-28-15 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 2 QPSK, 1.4MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1850.70	3.54	V	1.60	9.12	11.06	33.0	-21.9	
	1850.70	9.16	H	1.60	9.12	16.68	33.0	-16.3	
	Mid Ch								
	1880.00	5.95	V	1.62	8.62	12.95	33.0	-20.0	
	1880.00	8.63	H	1.62	8.62	15.63	33.0	-17.4	
	High Ch								
	1909.30	4.23	V	1.63	8.44	11.04	33.0	-22.0	
	1909.30	9.53	H	1.63	8.44	16.34	33.0	-16.7	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
LTE Band 2 1.4MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 15K22555 Date: 12-28-15 Test Engineer: Steven Kim Configuration: EUT / X-Position Mode: LTE Band 2 16QAM, 1.4MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1850.70	1.25	V	1.60	9.12	8.77	33.0	-24.2	
	1850.70	6.88	H	1.60	9.12	14.40	33.0	-18.6	
	Mid Ch								
	1880.00	4.73	V	1.62	8.62	11.73	33.0	-21.3	
	1880.00	7.36	H	1.62	8.62	14.36	33.0	-18.6	
	High Ch								
	1909.30	2.03	V	1.63	8.44	8.84	33.0	-24.2	
	1909.30	7.32	H	1.63	8.44	14.13	33.0	-18.9	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

11.2. FIELD STRENGTH OF SPURIOUS RADIATION

RULE PART(S)

FCC: §2.1053, §22.917, §24.238 and §27. 53

LIMIT

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

TEST PROCEDURE

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

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

RESULTS