

		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2									
LTE Band 4 15MHz QPSK	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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes	
		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	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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
			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									

		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2							
LTE Band 4 10MHz QPSK	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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
	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	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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
	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									

High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2										
LTE Band 4 5MHz QPSK	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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes	
	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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes	
	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										

		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2							
LTE Band 4 3MHz QPSK	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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
	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	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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
	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									

High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2										
LTE Band 4 1.4MHz QPSK	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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes	
	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										
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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes		
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

		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2									
LTE Band 2 20MHz QPSK	Company:		Samsung								
	Project #:		15K22555								
	Date:		12-28-15								
	Test Engineer:		Steven Kim								
	Configuration:		EUT / X-Position								
	Mode:		LTE Band 2 QPSK, 20MHz								
	<u>Test Equipment:</u>										
	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											
		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2									
LTE Band 2 20MHz 16QAM	Company:		Samsung								
	Project #:		15K22555								
	Date:		12-28-15								
	Test Engineer:		Steven Kim								
	Configuration:		EUT / X-Position								
	Mode:		LTE Band 2 16QAM, 20MHz								
	<u>Test Equipment:</u>										
	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											

High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2										
LTE Band 2 15MHz QPSK	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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes	
	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	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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
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										

High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2										
LTE Band 2 10MHz QPSK	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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes	
	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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes	
	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										

		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2									
LTE Band 2 5MHz QPSK	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									
		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2									
LTE Band 2 5MHz 16QAM	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									

High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2										
LTE Band 2 3MHz QPSK	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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes	
	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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes	
	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										

		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2							
LTE Band 2 1.4MHz QPSK	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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
	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	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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
	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