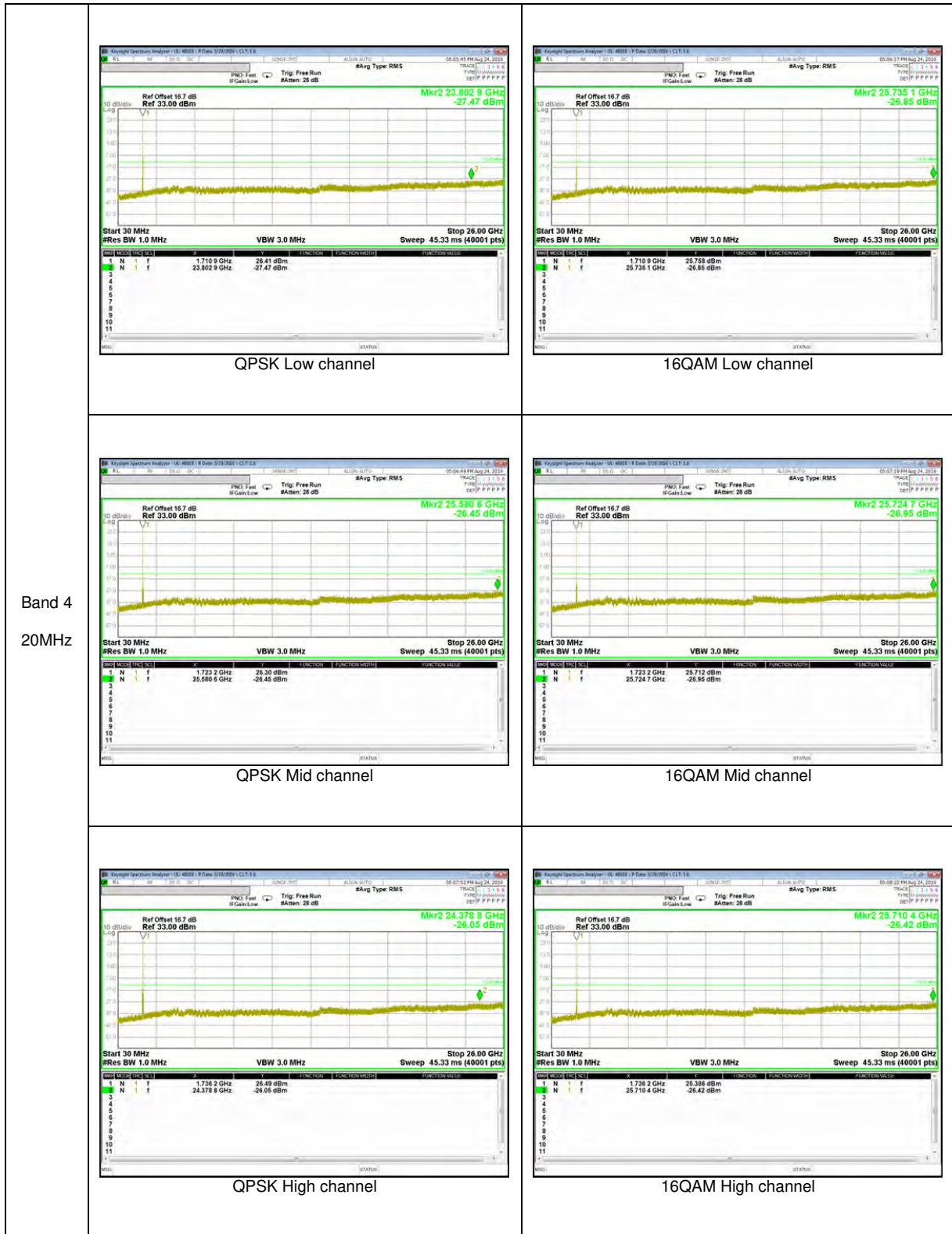
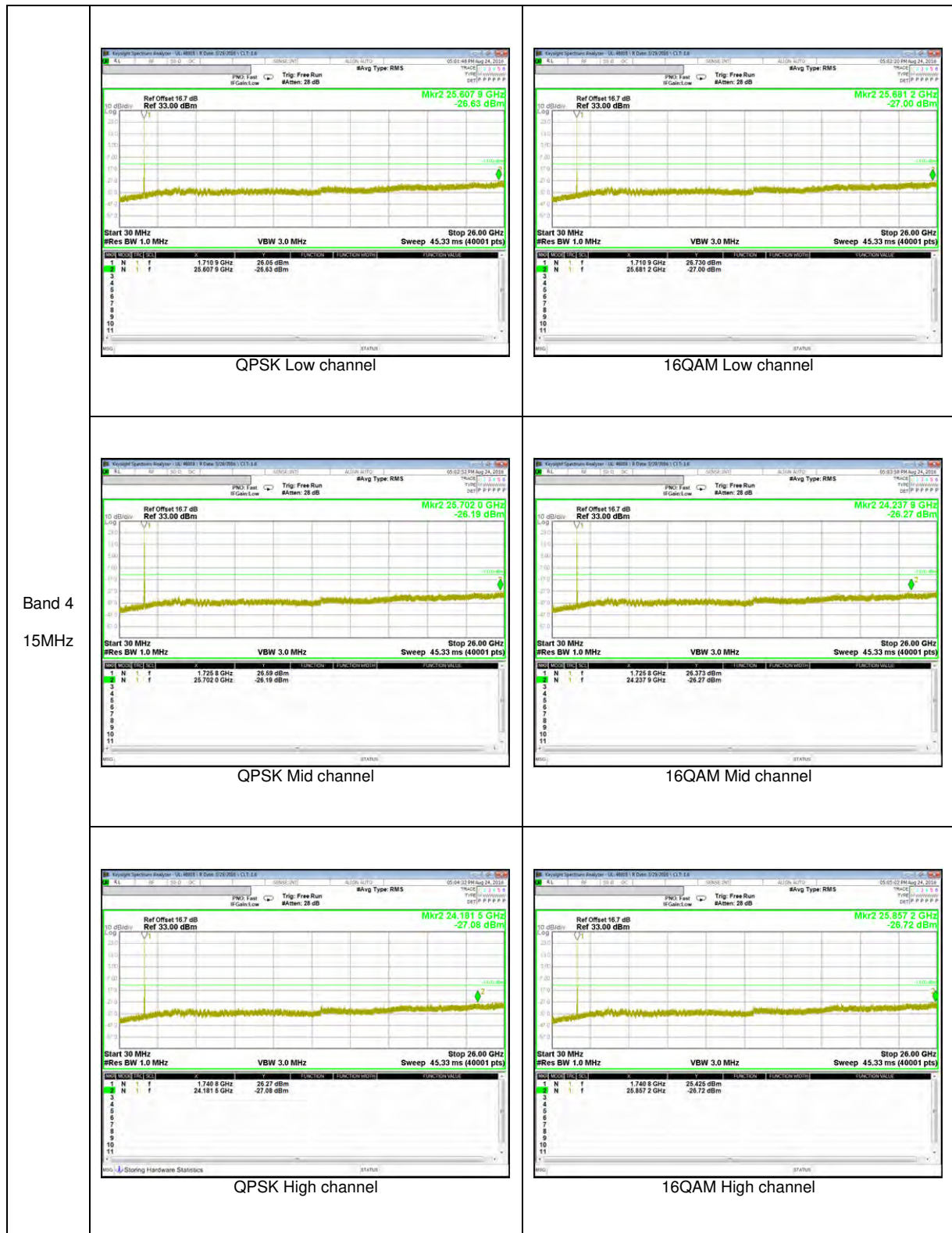
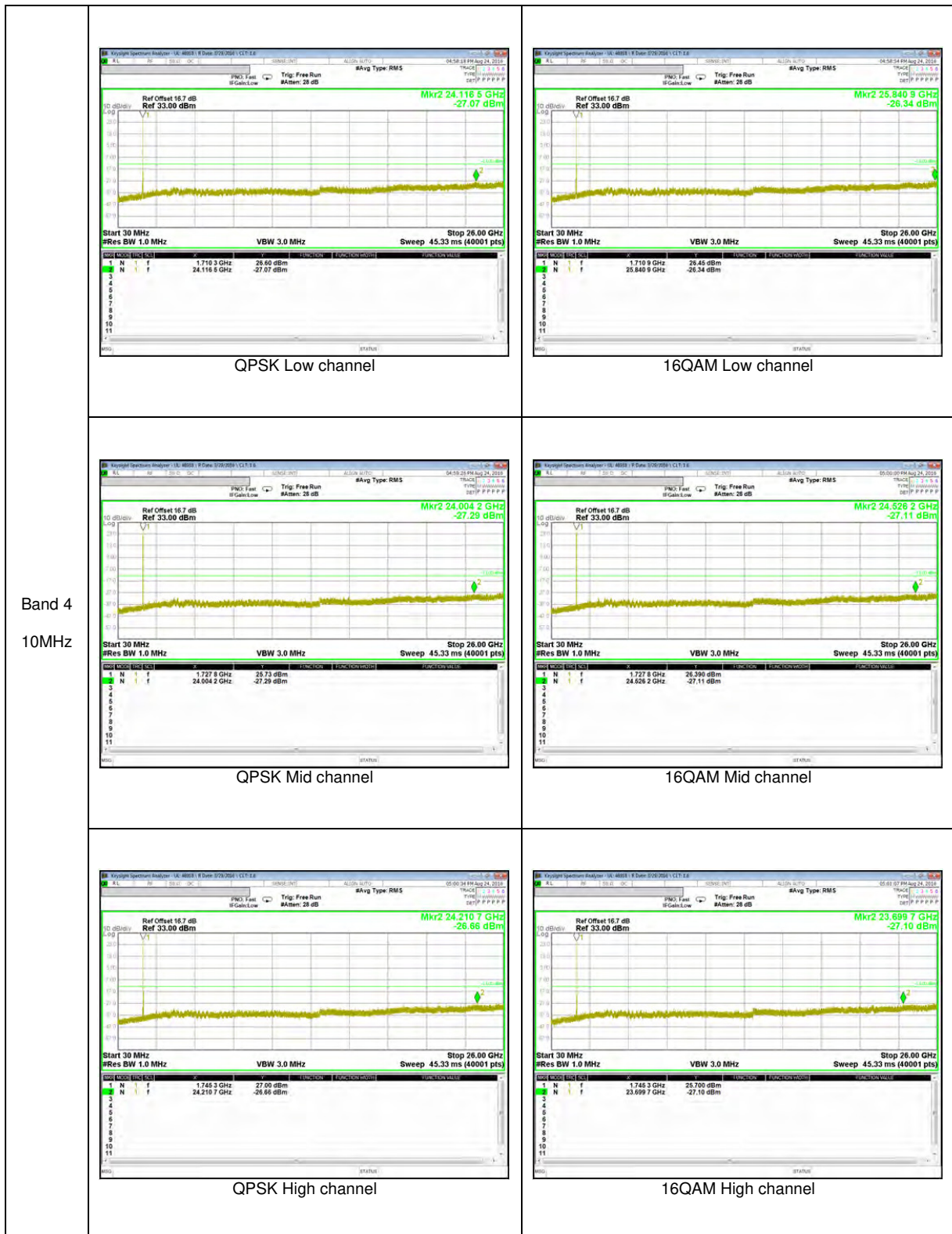
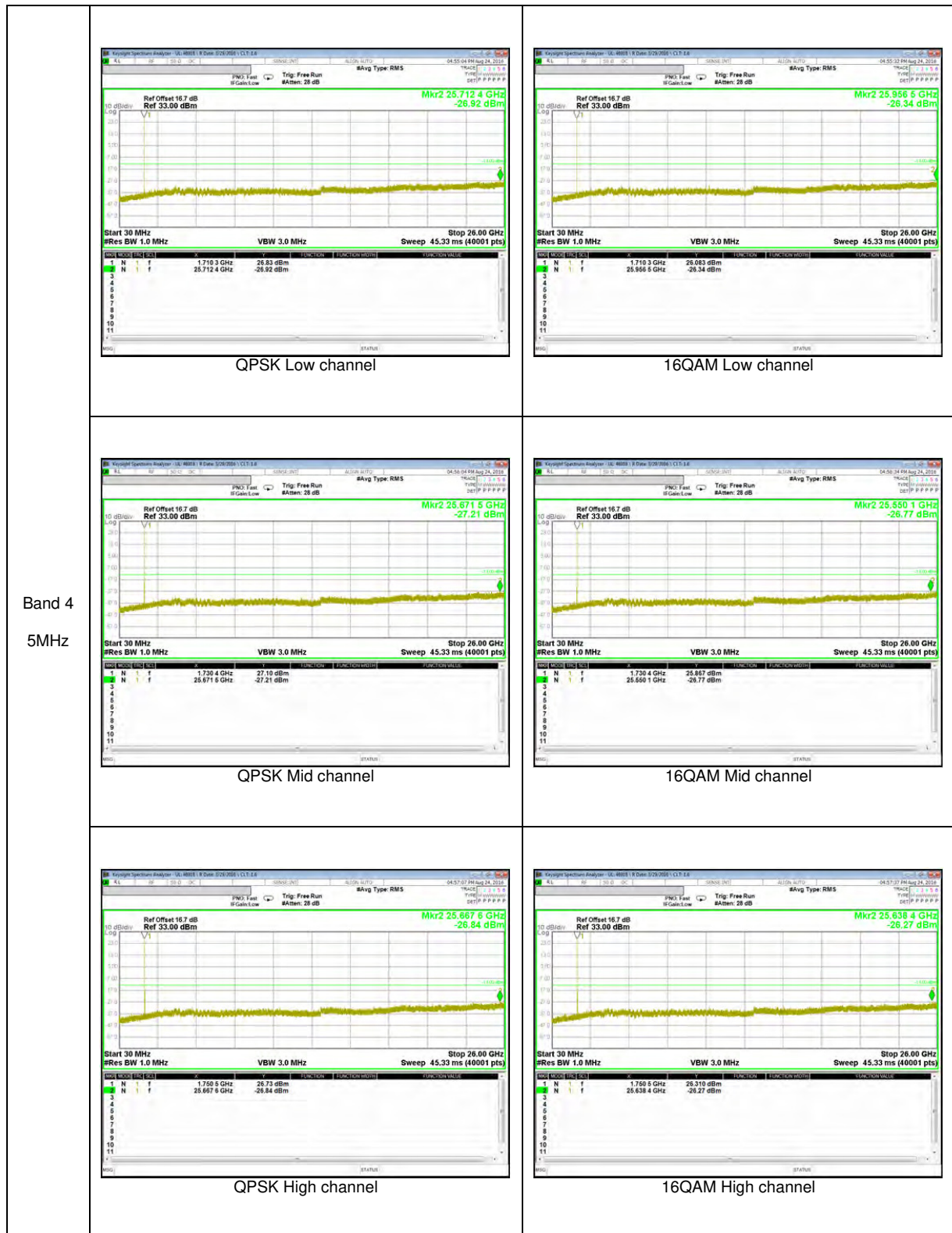


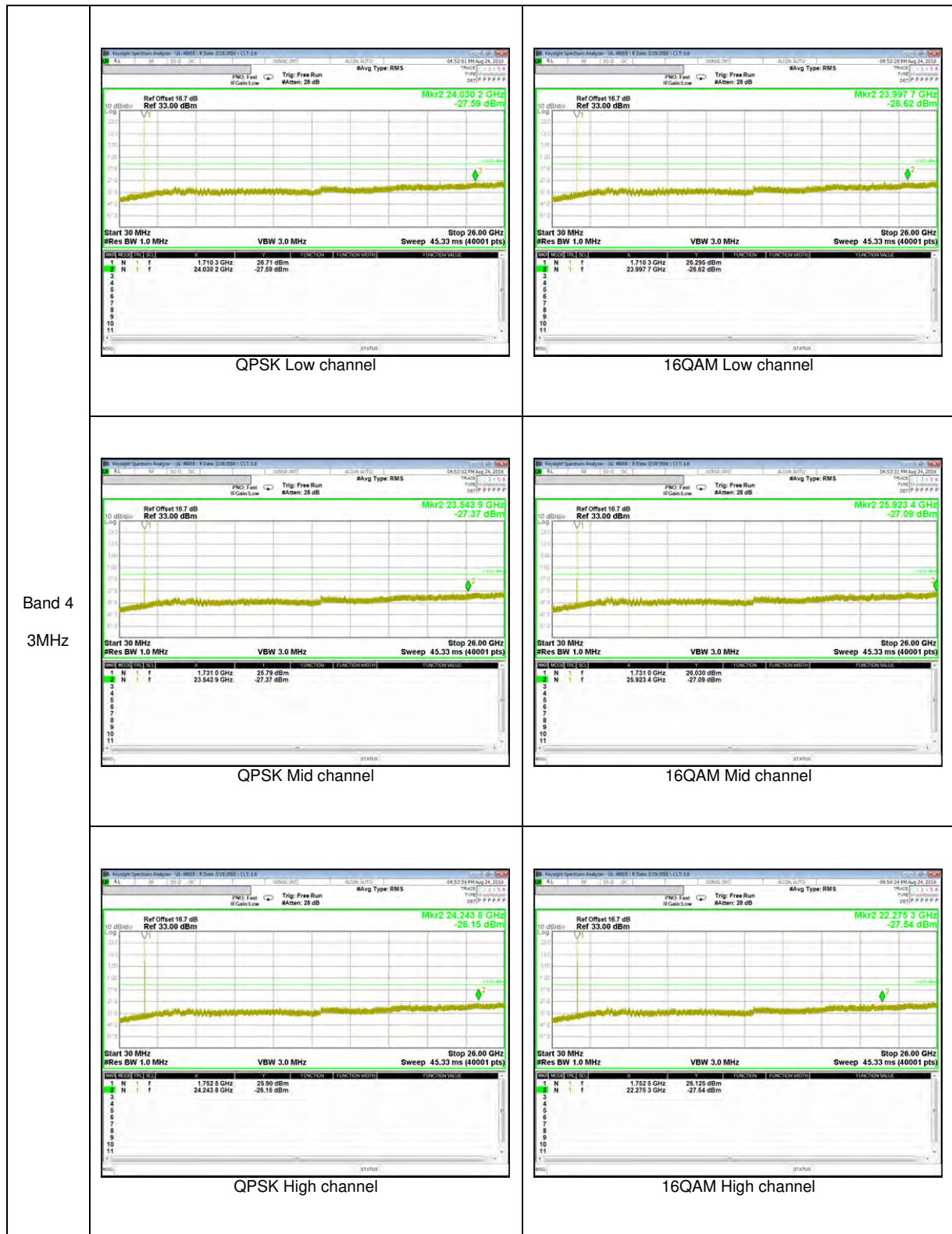
LTE Band 4

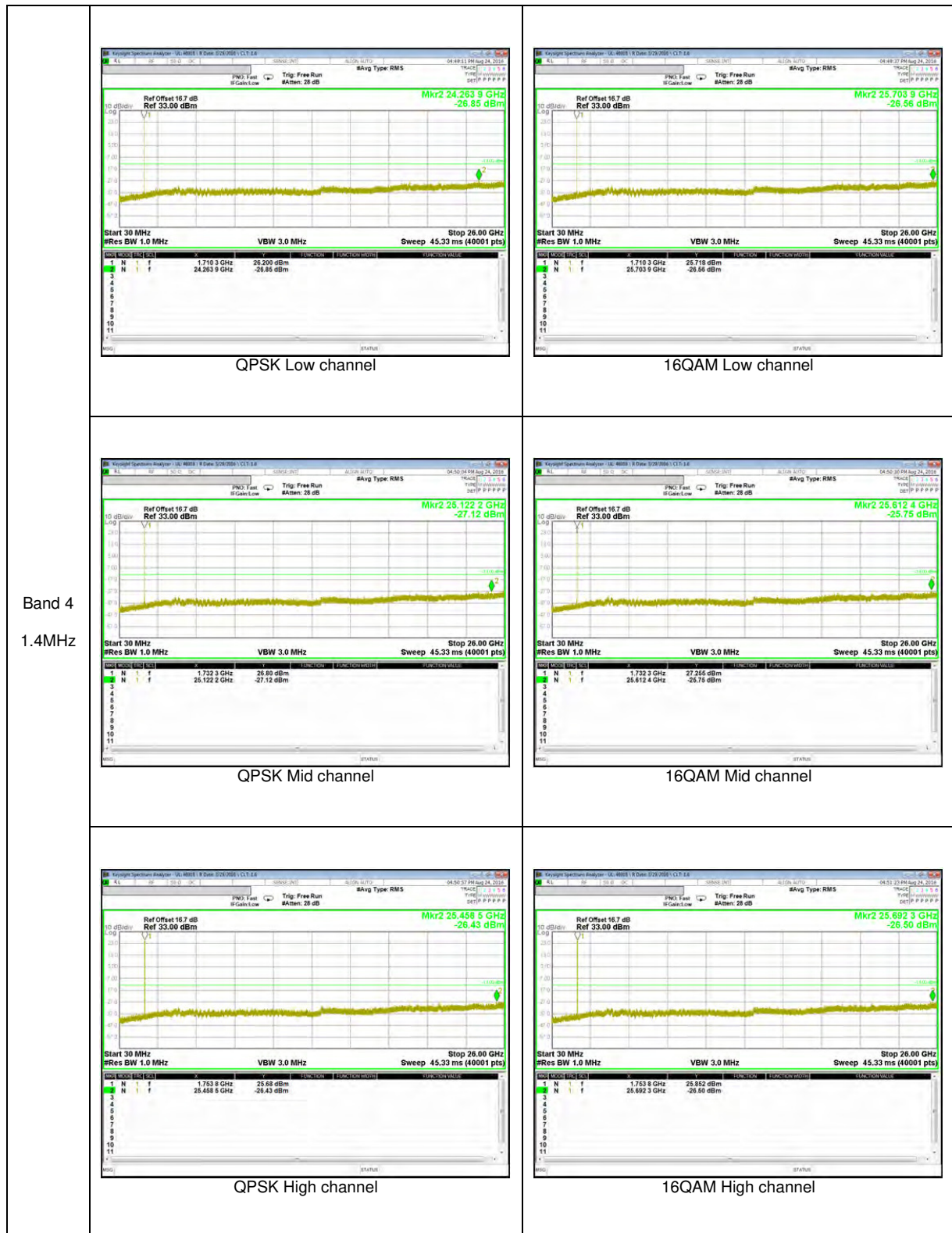




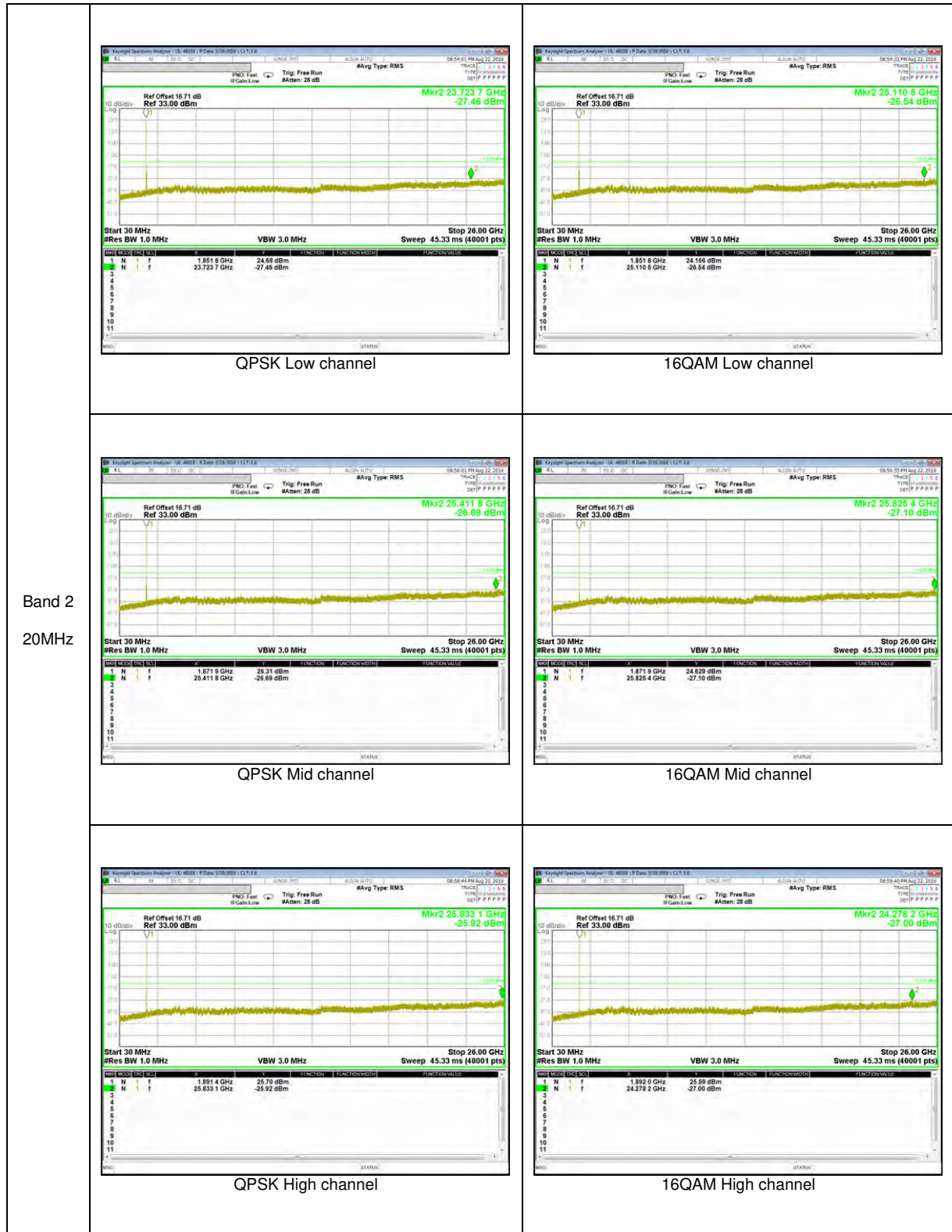


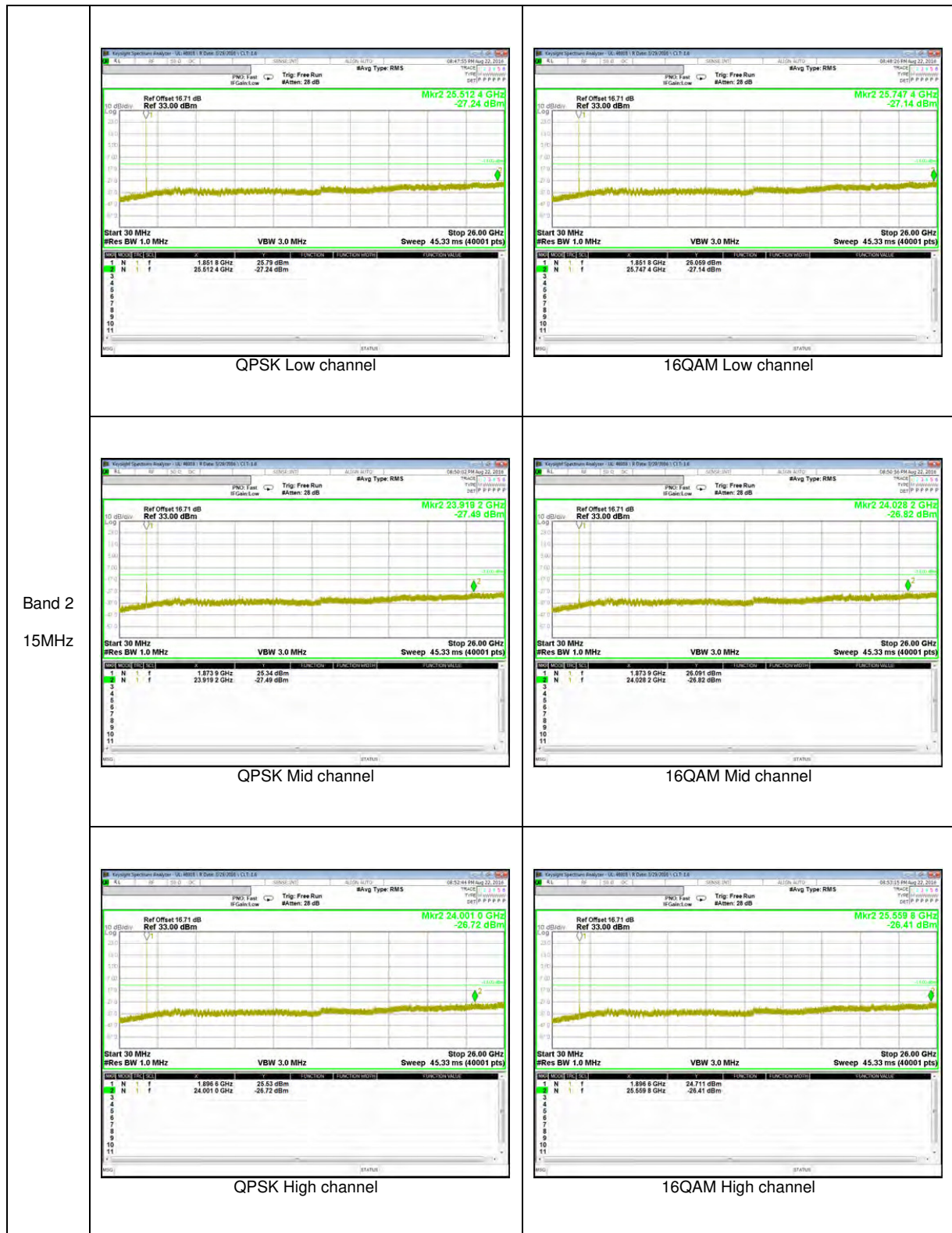


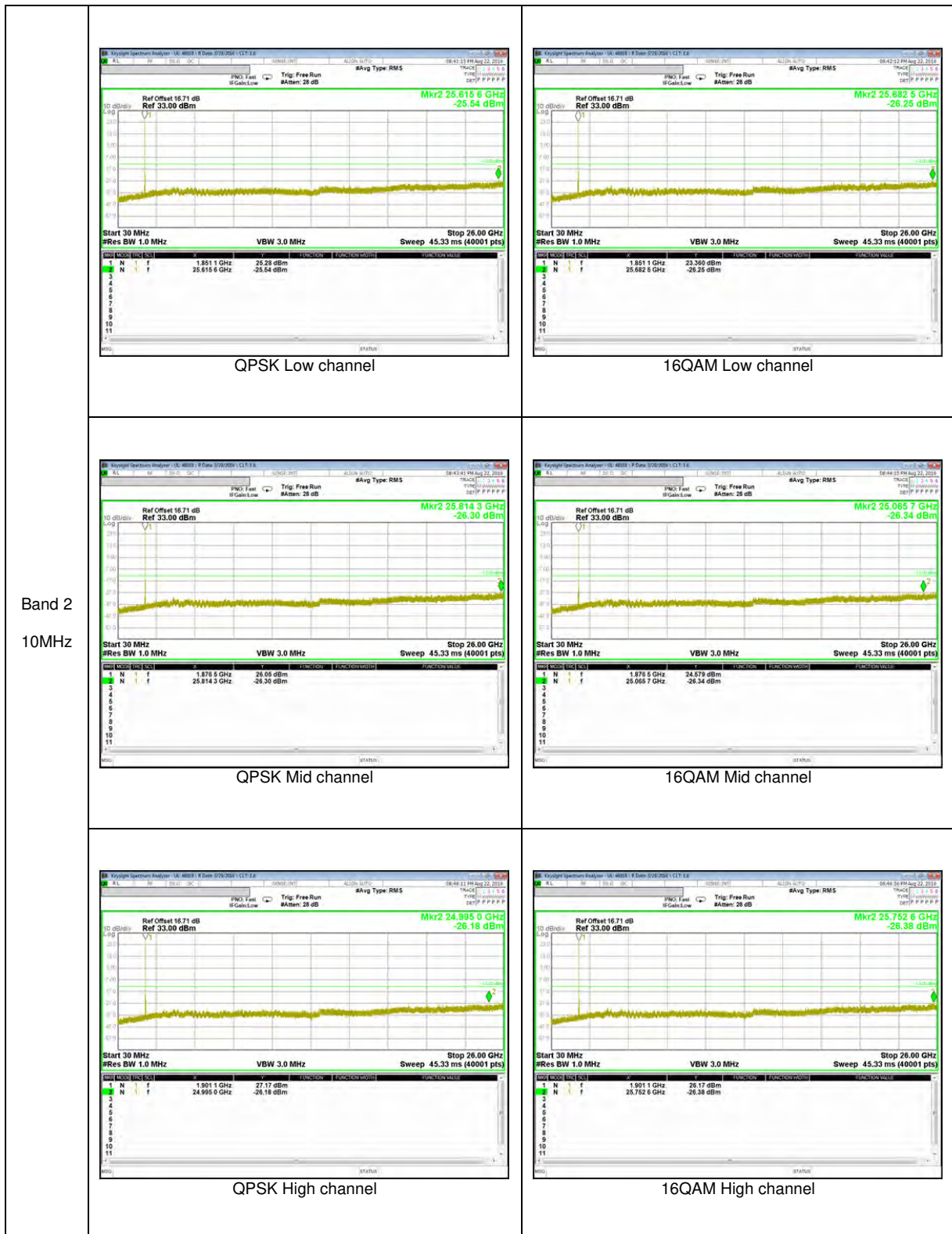


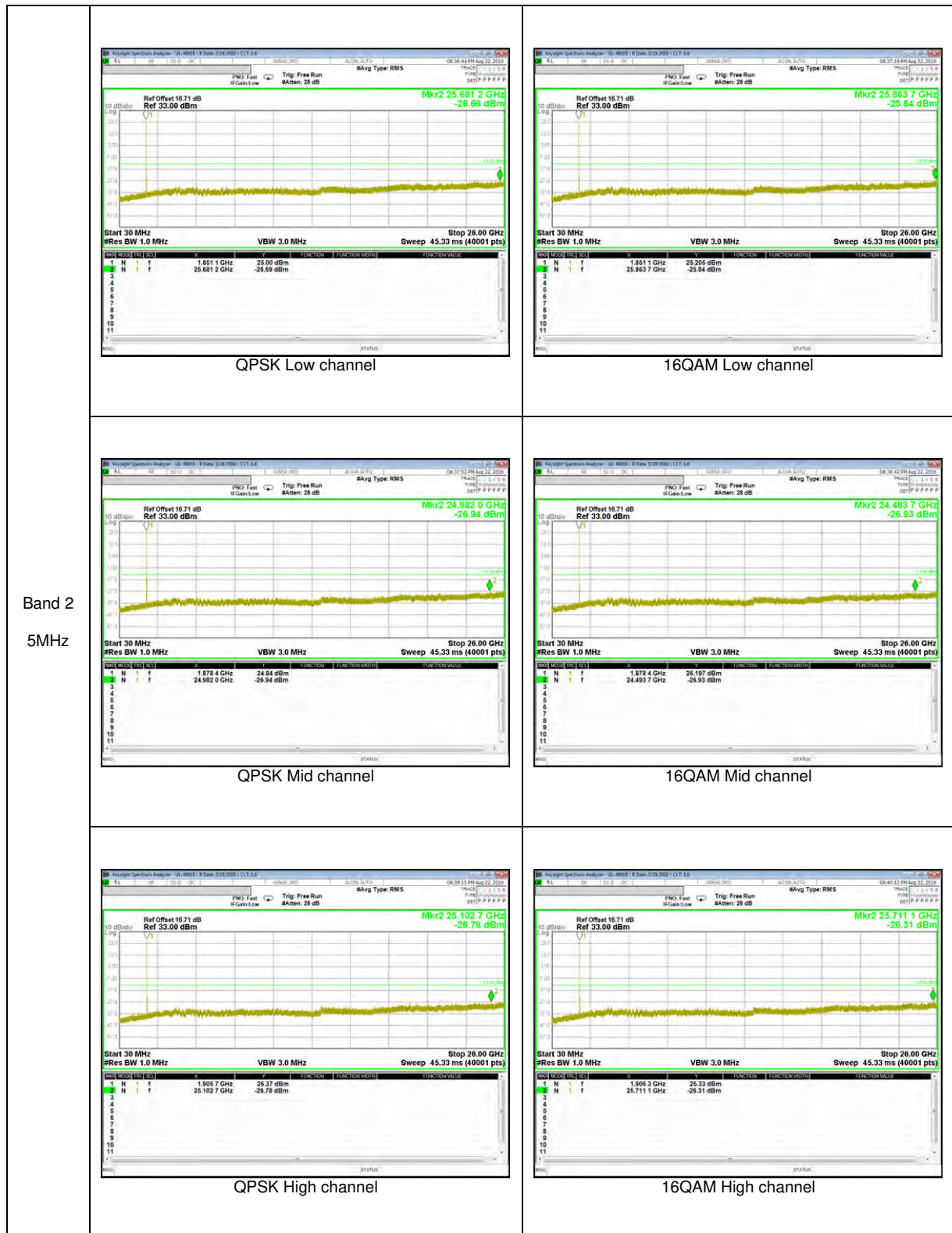


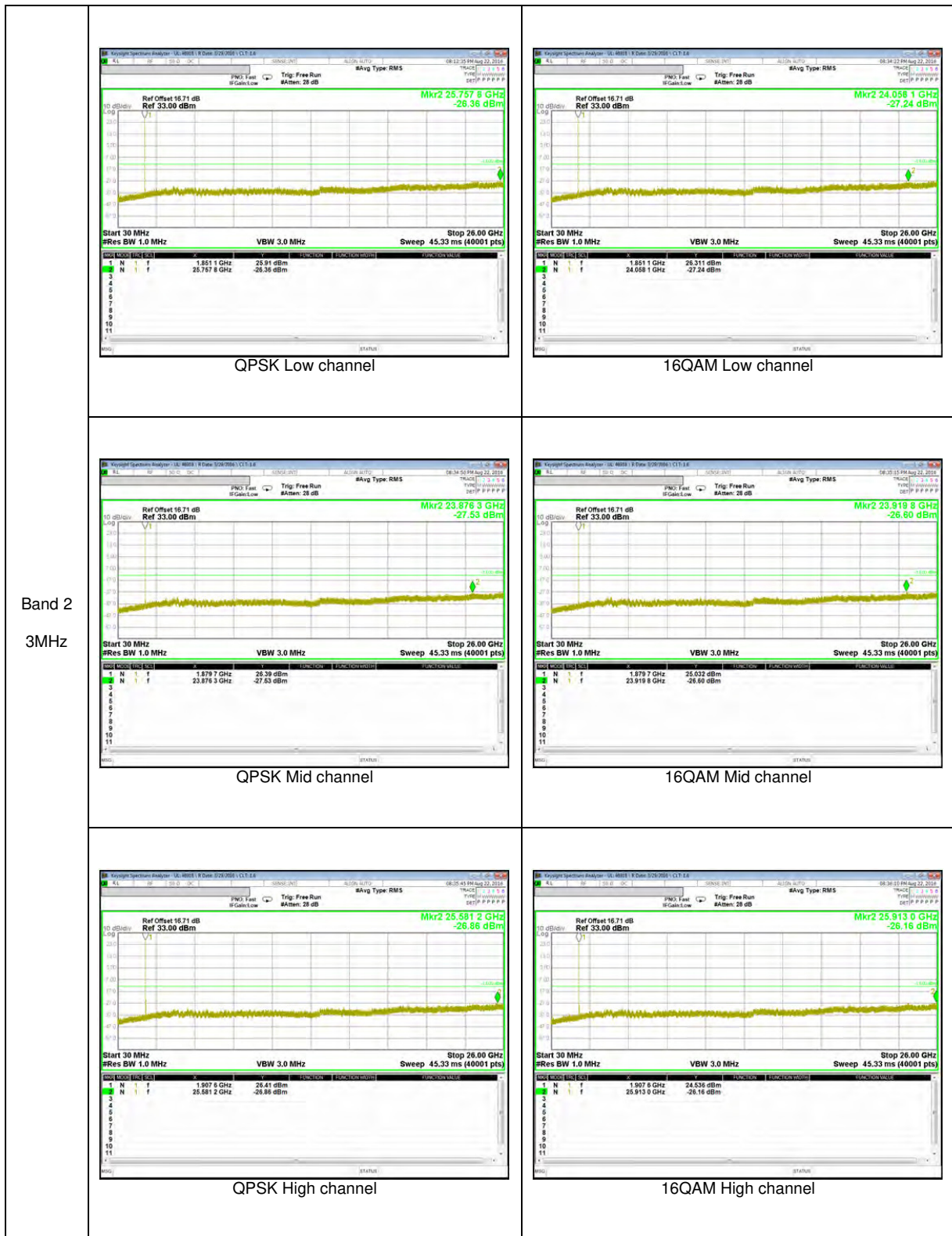
LTE Band 2

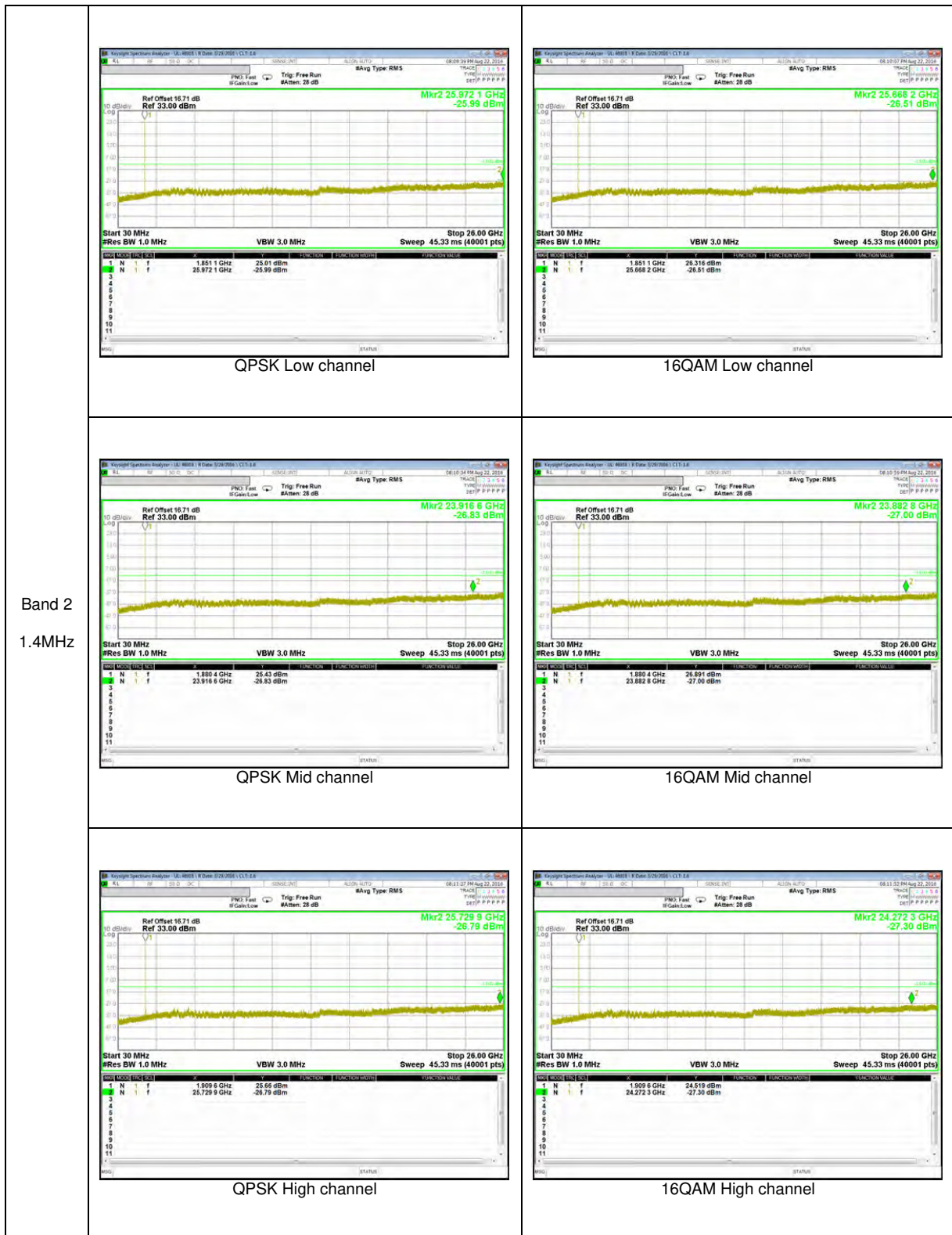












10.4. FREQUENCY STABILITY

RULE PART(S)

FCC: §2.1055, §22.355, §24.235 and §27.54

LIMITS

§22.355 - The carrier frequency shall not depart from the reference frequency in excess of ± 2.5 ppm for mobile stations.

§24.235 - The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

§27.54 - The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

TEST PROCEDURE

Per KDB 971168 D01 Power Meas License Digital Systems v02r02

RESULTS

See the following pages.

10.4.1. FREQUENCY STABILITY RESULTS

LTE Band 5, Channel 20524, Frequency 836.5 MHz

Reference Frequency: LTE Band 5 Mid Channel 836.5 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2091.250 Hz				
Power Supply [Vdc]	Environment Temperature [°C]	Frequency Deviation Measured with Time Elapse		
		[MHz]	Delta [ppm]	Limit [ppm]
3.85	50	836.5000442	0.000	2.5
3.85	40	836.5000528	-0.001	2.5
3.85	30	836.5000418	0.001	2.5
3.85	20	836.5000463	0	2.5
3.85	10	836.5000608	-0.002	2.5
3.85	0	836.5000677	-0.003	2.5
3.85	-10	836.5000624	-0.002	2.5
3.85	-20	836.5000609	-0.002	2.5
3.85	-30	836.5000704	-0.003	2.5

Reference Frequency: LTE Band 5 Mid Channel 836.5 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2091.250 Hz				
Power Supply [Vdc]	Environment Temperature [°C]	Frequency Deviation Measured with Time Elapse		
		[MHz]	Delta [ppm]	Limit [ppm]
3.85	20	836.5000463	0	2.5
4.20	20	836.5000435	0.000	2.5
3.60	20	836.5000408	0.001	2.5

LTE Band 4, Channel 20174, Frequency 1732.5 MHz

Reference Frequency: LTE Band 4 Mid Channel 1732.5 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2091.250 Hz				
Power Supply [Vdc]	Environment Temperature [°C]	Frequency Deviation Measured with Time Elapse		
		[MHz]	Delta [ppm]	Limit [ppm]
3.85	50	836.5000857	-0.001	2.5
3.85	40	836.5000983	-0.002	2.5
3.85	30	836.5000924	-0.001	2.5
3.85	20	836.5000803	0	2.5
3.85	10	836.5000741	0.001	2.5
3.85	0	836.5000873	-0.001	2.5
3.85	-10	836.5000936	-0.002	2.5
3.85	-20	836.5000968	-0.002	2.5
3.85	-30	836.5000914	-0.001	2.5

Reference Frequency: LTE Band 4 Mid Channel 1732.5 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2091.250 Hz				
Power Supply [Vdc]	Environment Temperature [°C]	Frequency Deviation Measured with Time Elapse		
		[MHz]	Delta [ppm]	Limit [ppm]
3.85	20	836.5000803	0	2.5
4.20	20	836.5000758	0.001	2.5
3.60	20	836.5001040	-0.003	2.5

LTE Band 2, Channel 18900, Frequency 1880.0 MHz

Reference Frequency: LTE Band 2 Mid Channel 1880 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2091.250 Hz				
Power Supply [Vdc]	Environment Temperature [°C]	Frequency Deviation Measured with Time Elapse		
		[MHz]	Delta [ppm]	Limit [ppm]
3.85	50	836.50001043	0.001	2.5
3.85	40	836.50000977	0.001	2.5
3.85	30	836.50000940	0.002	2.5
3.85	20	836.50001097	0	2.5
3.85	10	836.50001193	-0.001	2.5
3.85	0	836.50001007	0.001	2.5
3.85	-10	836.50001096	0.000	2.5
3.85	-20	836.50001276	-0.002	2.5
3.85	-30	836.50001250	-0.002	2.5

Reference Frequency: LTE Band 2 Mid Channel 1880 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2091.250 Hz				
Power Supply [Vdc]	Environment Temperature [°C]	Frequency Deviation Measured with Time Elapse		
		[MHz]	Delta [ppm]	Limit [ppm]
3.85	20	836.50001097	0	2.5
4.20	20	836.50001029	0.001	2.5
3.60	20	836.50001177	-0.001	2.5

WCDMA Band 5, Channel 4183, Frequency 836.6 MHz

Reference Frequency: WCDMA B5 Mid Channel 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2091.500 Hz				
Power Supply (Vdc)	Environment Temperature (*C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.85	50	836.59999616	0.001	2.5
3.85	40	836.59999592	0.001	2.5
3.85	30	836.59999542	0.001	2.5
3.85	20	836.59999666	0	2.5
3.85	10	836.59999615	0.001	2.5
3.85	0	836.59999654	0.000	2.5
3.85	-10	836.59999539	0.002	2.5
3.85	-20	836.59999466	0.002	2.5
3.85	-30	836.59999402	0.003	2.5

Reference Frequency: WCDMA B5 Mid Channel 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2091.500 Hz				
Power Supply (Vdc)	Environment Temperature (*C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.85	20	836.59999666	0	2.5
4.20	20	836.59999581	0.001	2.5
3.60	20	836.59999635	0.000	2.5

WCDMA Band 4, Channel 1413, Frequency 1732.6 MHz

Reference Frequency: WCDMA B4 Mid Channel 1732.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2091.500 Hz				
Power Supply (Vdc)	Environment Temperature (*C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.85	50	836.59999101	0.003	2.5
3.85	40	836.59999274	0.001	2.5
3.85	30	836.59999246	0.001	2.5
3.85	20	836.59999334	0	2.5
3.85	10	836.59999307	0.000	2.5
3.85	0	836.59999218	0.001	2.5
3.85	-10	836.59999119	0.003	2.5
3.85	-20	836.59999165	0.002	2.5
3.85	-30	836.59999093	0.003	2.5

Reference Frequency: WCDMA B4 Mid Channel 1732.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2091.500 Hz				
Power Supply (Vdc)	Environment Temperature (*C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.85	20	836.59999334	0	2.5
4.20	20	836.59999328	0.000	2.5
3.60	20	836.59999436	-0.001	2.5

WCDMA Band 2, Channel 9400, Frequency 1880.0 MHz

Reference Frequency: WCDMA B2 Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700.000 Hz				
Power Supply (Vdc)	Environment Temperature (*C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.85	50	1879.99999381	0.000	2.5
3.85	40	1879.99999263	0.001	2.5
3.85	30	1879.99999231	0.001	2.5
3.85	20	1879.99999466	0	2.5
3.85	10	1879.99999306	0.001	2.5
3.85	0	1879.99999228	0.001	2.5
3.85	-10	1879.99999175	0.002	2.5
3.85	-20	1879.99999282	0.001	2.5
3.85	-30	1879.99999133	0.002	2.5

Reference Frequency: WCDMA B2 Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700.000 Hz				
Power Supply (Vdc)	Environment Temperature (*C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.85	20	1879.99999466	0	2.5
4.20	20	1879.99999289	0.001	2.5
3.60	20	1879.99999347	0.001	2.5

11. RADIATED TEST RESULTS

11.1. RADIATED POWER (ERP & EIRP)

RULE PART(S)

FCC: §2.1046, §22.913, §24.232 and §27.50

LIMITS

22.913(a) - The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

24.232(c) - Mobile/portable stations are limited to 2 watts e.i.r.p. peak power and the equipment must employ means to limit the power to the minimum necessary for successful communications.

27.50(d) - (4) Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.(Band 4)

In addition, when the transmitter power is measured in terms of average value, the peak-to-average ratio of the power shall not exceed 13dB.

TEST PROCEDURE

ANSI / TIA / EIA 603D Clause 2.2.17; MXA setting reference to 971168 D01 v02r02

For peak power measurement with a MXA:

a) Set the RBW \geq OBW; b) Set VBW $\geq 3 \times$ RBW; c) Set span $\geq 2 \times$ RBW; d) Sweep time = auto couple; e) Detector = peak; f) Ensure that the number of measurement points \geq span/RBW; g) Trace mode = max hold;

For average power measurement with a MXA:

a) Set span to at least 1.5 times the OBW; b) Set RBW = 1-5% of the OBW, not to exceed 1 MHz; c) Set VBW $\geq 3 \times$ RBW; d) Set number of points in sweep $\geq 2 \times$ span / RBW; e) Sweep time = auto-couple; f) Detector = RMS (power averaging); g) Use free run trigger If burst duty cycle ≥ 98 ; h) Use trigger to capture bursts If burst duty cycle < 98 ; i) Trace average at least 100 traces in power averaging (*i.e.*, RMS) mode. j) Compute the power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function.

TEST RESULTS

11.1.1. ERP/EIRP Results

WCDMA

Band	Mode	Channel	f [MHz]	ERP / EIRP	
				[dBm]	[mW]
Band 5	REL99	4132	826.4	2.41	1.74
		4183	836.6	0.30	1.07
		4233	846.6	-0.12	0.97
	HSDPA	4132	826.4	2.23	1.67
		4183	836.6	-0.12	0.97
		4233	846.6	-0.42	0.91
Band 4	REL99	1312	1712.4	14.73	29.72
		1413	1732.6	15.66	36.81
		1513	1752.6	15.96	39.45
	HSDPA	1312	1712.4	14.96	31.33
		1413	1732.6	15.90	38.90
		1513	1752.6	16.13	41.02
Band 2	REL99	9262	1852.4	16.36	43.25
		9400	1880.0	17.74	59.43
		9538	1907.6	17.52	56.49
	HSDPA	9262	1852.4	15.63	36.56
		9400	1880.0	17.49	56.10
		9538	1907.6	16.64	46.13

LTE Band 5

Band	BW [MHz]	Mode	RB/RB Size	f [MHz]	ERP / EIRP	
			Full RB		[dBm]	[mW]
Band 5	10	QPSK	50/0	829.0	-1.87	0.65
			50/0	836.5	-1.97	0.64
			50/0	844.0	-4.53	0.35
		16QAM	50/0	829.0	-2.87	0.52
			50/0	836.5	-3.30	0.47
			50/0	844.0	-5.50	0.28
	5	QPSK	25/0	826.5	-0.50	0.89
			25/0	836.5	-1.92	0.64
			25/0	846.5	-3.85	0.41
		16QAM	25/0	826.5	-1.45	0.72
			25/0	836.5	-3.00	0.50
			25/0	846.5	-4.38	0.36
	3	QPSK	15/0	825.5	-1.45	0.72
			15/0	836.5	-3.76	0.42
			15/0	847.5	-3.86	0.41
		16QAM	15/0	825.5	-2.18	0.61
			15/0	836.5	-4.81	0.33
			15/0	847.5	-4.40	0.36
	1.4	QPSK	6/0	824.7	-3.33	0.46
			6/0	836.5	-5.77	0.26
			6/0	848.3	-7.82	0.17
		16QAM	6/0	824.7	-4.26	0.37
			6/0	836.5	-6.52	0.22
			6/0	848.3	-8.32	0.15

LTE Band 4

Band	BW [MHz]	Mode	RB/RB Size	f [MHz]	ERP / EIRP	
			Full RB		[dBm]	[mW]
Band 4	20	QPSK	100/0	1720.0	15.28	33.73
			100/0	1732.5	15.51	35.56
			100/0	1745.0	15.12	32.51
		16QAM	100/0	1720.0	14.70	29.51
			100/0	1732.5	15.05	31.99
			100/0	1745.0	14.20	26.30
	15	QPSK	75/0	1717.5	13.19	20.84
			75/0	1732.5	14.09	25.64
			75/0	1747.5	14.86	30.62
		16QAM	75/0	1717.5	12.19	16.56
			75/0	1732.5	13.12	20.51
			75/0	1747.5	13.87	24.38
	10	QPSK	50/0	1715.0	14.02	25.23
			50/0	1732.5	15.86	38.55
			50/0	1750.0	15.94	39.26
		16QAM	50/0	1715.0	13.36	21.68
			50/0	1732.5	14.87	30.69
			50/0	1750.0	14.98	31.48
	5	QPSK	25/0	1712.5	14.74	29.79
			25/0	1732.5	15.65	36.73
			25/0	1752.5	15.89	38.82
		16QAM	25/0	1712.5	13.72	23.55
			25/0	1732.5	14.69	29.44
			25/0	1752.5	14.85	30.55
	3	QPSK	15/0	1711.5	13.78	23.88
			15/0	1732.5	14.62	28.97
			15/0	1753.5	14.44	27.80
		16QAM	15/0	1711.5	12.47	17.66
			15/0	1732.5	13.29	21.33
			15/0	1753.5	13.40	21.88
1.4	QPSK	6/0	1710.7	11.26	13.37	
		6/0	1732.5	12.17	16.48	
		6/0	1754.3	13.24	21.09	
	16QAM	6/0	1710.7	10.38	10.91	
		6/0	1732.5	11.16	13.06	
		6/0	1754.3	12.28	16.90	

LTE Band 2

Band	BW [MHz]	Mode	RB/RB Size	f [MHz]	ERP / EIRP	
			Full RB		[dBm]	[mW]
Band 2	20	QPSK	100/0	1860.0	15.88	38.73
			100/0	1880.0	15.00	31.62
			100/0	1900.0	15.86	38.55
		16QAM	100/0	1860.0	14.87	30.69
			100/0	1880.0	14.03	25.29
			100/0	1900.0	14.86	30.62
	15	QPSK	75/0	1857.5	15.64	36.64
			75/0	1880.0	15.96	39.45
			75/0	1902.5	14.67	29.31
		16QAM	75/0	1857.5	14.65	29.17
			75/0	1880.0	14.98	31.48
			75/0	1902.5	13.64	23.12
	10	QPSK	50/0	1955.0	15.63	36.56
			50/0	1880.0	16.08	40.55
			50/0	1905.0	15.97	39.54
		16QAM	50/0	1955.0	14.68	29.38
			50/0	1880.0	15.11	32.43
			50/0	1905.0	14.97	31.41
	5	QPSK	25/0	1852.5	15.22	33.27
			25/0	1880.0	15.32	34.04
			25/0	1907.5	14.84	30.48
		16QAM	25/0	1852.5	14.14	25.94
			25/0	1880.0	14.35	27.23
			25/0	1907.5	13.80	23.99
	3	QPSK	15/0	1815.5	13.73	23.60
			15/0	1880.0	13.79	23.93
			15/0	1908.5	14.66	29.24
		16QAM	15/0	1815.5	12.75	18.84
			15/0	1880.0	12.74	18.79
			15/0	1908.5	13.63	23.07
1.4	QPSK	6/0	1850.7	16.38	43.45	
		6/0	1880.0	14.48	28.05	
		6/0	1909.3	13.12	20.51	
	16QAM	6/0	1850.7	15.43	34.91	
		6/0	1880.0	13.46	22.18	
		6/0	1909.3	12.10	16.22	

11.1.2. ERP/EIRP DATA

WCDMA Band 5

		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
WCDMA Band 5 REL99	Company: Samsung Project #: 16K23793 Date: 08-26-16 Test Engineer: Chan Park Configuration: EUT ONLY, X Position Mode: Rel 99_850 MHz Test Equipment: Receiving: VULB9163-749, and 3m Chamber N-type Cable (Setup this one for testing EUT) Substitution: Dipole S/N: 00164753, 3m SMA Cable Warehouse.									
		f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	Limit	Margin	Notes
		MHz	(dBm)	(H/V)	(dB)	(dBd)	(dBm)	(dBm)	(dB)	
		Low Ch								
		826.40	5.02	V	1.1	-1.5	2.41	38.5	-36.0	
		826.40	-2.82	H	1.1	-1.5	-5.44	38.5	-43.9	
		Mid Ch								
		836.60	2.79	V	1.1	-1.4	0.30	38.5	-38.2	
		836.60	-6.49	H	1.1	-1.4	-8.99	38.5	-47.4	
		High Ch								
		846.60	2.27	V	1.1	-1.3	-0.12	38.5	-38.6	
		846.60	-3.77	H	1.1	-1.3	-6.16	38.5	-44.6	
	Rev. 3.17.11									
WCDMA Band 5 HSDPA	Company: Samsung Project #: 16K23793 Date: 08-26-16 Test Engineer: Chan Park Configuration: EUT ONLY, X Position Mode: HSDPA_850 MHz Test Equipment: Receiving: VULB9163-749, and 3m Chamber N-type Cable (Setup this one for testing EUT) Substitution: Dipole S/N: 00164753, 3m SMA Cable Warehouse.									
		f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	Limit	Margin	Notes
		MHz	(dBm)	(H/V)	(dB)	(dBd)	(dBm)	(dBm)	(dB)	
		Low Ch								
		826.40	4.84	V	1.1	-1.5	2.23	38.5	-36.2	
		826.40	-3.08	H	1.1	-1.5	-5.70	38.5	-44.1	
		Mid Ch								
		836.60	2.37	V	1.1	-1.4	-0.12	38.5	-38.6	
		836.60	-6.66	H	1.1	-1.4	-9.16	38.5	-47.6	
		High Ch								
		846.60	1.97	V	1.1	-1.3	-0.42	38.5	-38.9	
		846.60	-3.99	H	1.1	-1.3	-6.38	38.5	-44.8	
	Rev. 3.17.11									

WCDMA Band 4

		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2									
		Company: Samsung Project #: 16K23793 Date: 08-12-16 Test Engineer: YH Lim Configuration: EUT ONLY, Z Position Mode: Rel 99_1700 MHz <u>Test Equipment:</u> 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	
WCDMA Band 4 REL99	Low Ch	1712.40	3.71	V	1.54	9.20	11.37	30.0	-18.6		
		1712.40	7.07	H	1.54	9.20	14.73	30.0	-15.3		
	Mid Ch	1732.60	3.18	V	1.55	9.31	10.94	30.0	-19.1		
		1732.60	7.90	H	1.55	9.31	15.66	30.0	-14.3		
	High Ch	1752.60	1.81	V	1.56	9.38	9.63	30.0	-20.4		
		1752.60	8.14	H	1.56	9.38	15.96	30.0	-14.0		
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm										
	WCDMA Band 4 HSDPA	Low Ch	1712.40	3.76	V	1.54	9.20	11.42	30.0	-18.6	
			1712.40	7.30	H	1.54	9.20	14.96	30.0	-15.0	
		Mid Ch	1732.60	1.88	V	1.55	9.31	9.64	30.0	-20.4	
		1732.60	8.14	H	1.55	9.31	15.90	30.0	-14.1		
High Ch		1752.60	1.66	V	1.56	9.38	9.48	30.0	-20.5		
		1752.60	8.31	H	1.56	9.38	16.13	30.0	-13.9		
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm											

WCDMA Band 2

		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2							
WCDMA Band 2 REL99	Company:		Samsung						
	Project #:		16K23793						
	Date:		08-12-16						
	Test Engineer:		YH Lim						
	Configuration:		EUT ONLY, Z Position						
	Mode:		REL99_1900 MHz						
	<u>Test Equipment:</u>		Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Ware house						
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
	Low Ch								
	1852.40	2.28	V	1.60	8.79	9.47	33.0	-23.5	
	1852.40	9.17	H	1.60	8.79	16.36	33.0	-16.6	
	Mid Ch								
	1880.00	2.75	V	1.62	8.62	9.75	33.0	-23.2	
	1880.00	10.74	H	1.62	8.62	17.74	33.0	-15.3	
	High Ch								
1907.60	2.53	V	1.63	8.45	9.35	33.0	-23.6		
1907.60	10.70	H	1.63	8.45	17.52	33.0	-15.5		
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									
WCDMA Band 2 HSDPA	Company:		Samsung						
	Project #:		16K23793						
	Date:		12-16-08						
	Test Engineer:		YH Lim						
	Configuration:		EUT ONLY, Z Position						
	Mode:		HSDPA_1900 MHz						
	<u>Test Equipment:</u>		Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Ware house						
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
	Low Ch								
	1852.40	2.34	V	1.60	8.79	9.53	33.0	-23.5	
	1852.40	8.44	H	1.60	8.79	15.63	33.0	-17.4	
	Mid Ch								
	1880.00	2.56	V	1.62	8.62	9.56	33.0	-23.4	
	1880.00	10.49	H	1.62	8.62	17.49	33.0	-15.5	
	High Ch								
1907.60	2.22	V	1.63	8.45	9.04	33.0	-24.0		
1907.60	9.82	H	1.63	8.45	16.64	33.0	-16.4		
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									

LTE Band 5

		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2							
LTE Band 5 10MHz QPSK	Company:	Samsung							
	Project #:	16K23793							
	Date:	08-26-16							
	Test Engineer:	Chan Park							
	Configuration:	EUT ONLY, X Position							
	Mode:	TX, LTE BAND 5, 10MHz BW, QPSK							
	Test Equipment:								
	Receiving: VULB9163-749, and 3m Chamber N-type Cable (Setup this one for testing EUT)								
	Substitution: Dipole S/N: 00164753, 3m SMA Cable Warehouse.								
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
	Low Ch								
	829.00	0.71	V	1.1	-1.5	-1.87	38.5	-40.3	
	829.00	-5.33	H	1.1	-1.5	-7.91	38.5	-46.4	
	Mid Ch								
	836.50	0.53	V	1.1	-1.4	-1.97	38.5	-40.4	
836.50	-6.02	H	1.1	-1.4	-8.52	38.5	-47.0		
High Ch									
844.00	-2.14	V	1.1	-1.3	-4.53	38.5	-43.0		
844.00	-5.77	H	1.1	-1.3	-8.19	38.5	-46.6		
Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm									
LTE Band 5 10MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company:	Samsung							
	Project #:	16K23793							
	Date:	08-26-16							
	Test Engineer:	Chan Park							
	Configuration:	EUT ONLY, X Position							
	Mode:	LTE5 10MHz FUND 16QAM							
	Test Equipment:								
	Receiving: VULB9163-749, and 3m Chamber N-type Cable (Setup this one for testing EUT)								
	Substitution: Dipole S/N: 00164753, 3m SMA Cable Warehouse.								
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
	Low Ch								
	829.00	-0.29	V	1.1	-1.5	-2.87	38.5	-41.3	
	829.00	-6.36	H	1.1	-1.5	-8.94	38.5	-47.4	
	Mid Ch								
836.50	-0.79	V	1.1	-1.4	-3.30	38.5	-41.7		
836.50	-6.99	H	1.1	-1.4	-9.50	38.5	-47.9		
High Ch									
844.00	-3.08	V	1.1	-1.3	-5.50	38.5	-43.9		
844.00	-7.72	H	1.1	-1.3	-10.14	38.5	-48.6		
Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm									

LTE Band 5 5MHz QPSK	<p align="center">High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2</p> <p>Company: Samsung Project #: 16K23793 Date: 08-26-16 Test Engineer: Chan Park Configuration: EUT ONLY, X Position Mode: LTE5 5MHz FUND QPSK</p> <p>Test Equipment: Receiving: VULB9163-749, and 3m Chamber N-type Cable (Setup this one for testing EUT) Substitution: Dipole S/N: 00164753, 3m SMA Cable Warehouse.</p> <table border="1"> <thead> <tr> <th>f MHz</th> <th>SG reading (dBm)</th> <th>Ant. Pol. (H/V)</th> <th>Cable Loss (dB)</th> <th>Antenna Gain (dBd)</th> <th>ERP (dBm)</th> <th>Limit (dBm)</th> <th>Margin (dB)</th> <th>Notes</th> </tr> </thead> <tbody> <tr> <td colspan="9">Low Ch</td> </tr> <tr> <td>826.50</td> <td>2.10</td> <td>V</td> <td>1.1</td> <td>-1.5</td> <td>-0.50</td> <td>38.5</td> <td>-39.0</td> <td></td> </tr> <tr> <td>826.50</td> <td>-4.95</td> <td>H</td> <td>1.1</td> <td>-1.5</td> <td>-7.55</td> <td>38.5</td> <td>-46.0</td> <td></td> </tr> <tr> <td colspan="9">Mid Ch</td> </tr> <tr> <td>836.50</td> <td>0.58</td> <td>V</td> <td>1.1</td> <td>-1.4</td> <td>-1.92</td> <td>38.5</td> <td>-40.4</td> <td></td> </tr> <tr> <td>836.50</td> <td>-5.31</td> <td>H</td> <td>1.1</td> <td>-1.4</td> <td>-7.81</td> <td>38.5</td> <td>-46.3</td> <td></td> </tr> <tr> <td colspan="9">High Ch</td> </tr> <tr> <td>846.50</td> <td>-0.97</td> <td>V</td> <td>1.6</td> <td>-1.3</td> <td>-3.85</td> <td>38.5</td> <td>-42.3</td> <td></td> </tr> <tr> <td>846.50</td> <td>-4.99</td> <td>H</td> <td>1.6</td> <td>-1.3</td> <td>-7.87</td> <td>38.5</td> <td>-46.3</td> <td></td> </tr> </tbody> </table> <p>Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm</p>									f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes	Low Ch									826.50	2.10	V	1.1	-1.5	-0.50	38.5	-39.0		826.50	-4.95	H	1.1	-1.5	-7.55	38.5	-46.0		Mid Ch									836.50	0.58	V	1.1	-1.4	-1.92	38.5	-40.4		836.50	-5.31	H	1.1	-1.4	-7.81	38.5	-46.3		High Ch									846.50	-0.97	V	1.6	-1.3	-3.85	38.5	-42.3		846.50	-4.99	H	1.6	-1.3	-7.87	38.5	-46.3	
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LTE Band 5 3MHz QPSK	<p align="center">High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2</p> <p>Company: Samsung Project #: 16K23793 Date: 08-26-16 Test Engineer: JH Park Configuration: EUT ONLY, X Position Mode: LTE5 3MHz FUND QPSK</p> <p>Test Equipment: Receiving: VULB9163-749, and 3m Chamber N-type Cable (Setup this one for testing EUT) Substitution: Dipole S/N: 00164753, 3m SMA Cable Warehouse.</p> <table border="1"> <thead> <tr> <th>f MHz</th> <th>SG reading (dBm)</th> <th>Ant. Pol. (H/V)</th> <th>Cable Loss (dB)</th> <th>Antenna Gain (dBd)</th> <th>ERP (dBm)</th> <th>Limit (dBm)</th> <th>Margin (dB)</th> <th>Notes</th> </tr> </thead> <tbody> <tr> <td colspan="9">Low Ch</td> </tr> <tr> <td>825.50</td> <td>1.15</td> <td>V</td> <td>1.1</td> <td>-1.5</td> <td>-1.45</td> <td>38.5</td> <td>-39.9</td> <td></td> </tr> <tr> <td>825.50</td> <td>-5.81</td> <td>H</td> <td>1.1</td> <td>-1.5</td> <td>-8.41</td> <td>38.5</td> <td>-46.9</td> <td></td> </tr> <tr> <td colspan="9">Mid Ch</td> </tr> <tr> <td>836.50</td> <td>-1.26</td> <td>V</td> <td>1.1</td> <td>-1.4</td> <td>-3.76</td> <td>38.5</td> <td>-42.2</td> <td></td> </tr> <tr> <td>836.50</td> <td>-7.16</td> <td>H</td> <td>1.1</td> <td>-1.4</td> <td>-9.66</td> <td>38.5</td> <td>-48.1</td> <td></td> </tr> <tr> <td colspan="9">High Ch</td> </tr> <tr> <td>847.50</td> <td>-0.98</td> <td>V</td> <td>1.6</td> <td>-1.3</td> <td>-3.86</td> <td>38.5</td> <td>-42.3</td> <td></td> </tr> <tr> <td>847.50</td> <td>-5.86</td> <td>H</td> <td>1.6</td> <td>-1.3</td> <td>-8.74</td> <td>38.5</td> <td>-47.2</td> <td></td> </tr> </tbody> </table> <p>Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm</p>									f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes	Low Ch									825.50	1.15	V	1.1	-1.5	-1.45	38.5	-39.9		825.50	-5.81	H	1.1	-1.5	-8.41	38.5	-46.9		Mid Ch									836.50	-1.26	V	1.1	-1.4	-3.76	38.5	-42.2		836.50	-7.16	H	1.1	-1.4	-9.66	38.5	-48.1		High Ch									847.50	-0.98	V	1.6	-1.3	-3.86	38.5	-42.3		847.50	-5.86	H	1.6	-1.3	-8.74	38.5	-47.2	
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LTE Band 5 3MHz 16QAM	<p align="center">High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2</p> <p>Company: Samsung Project #: 16K23793 Date: 08-26-16 Test Engineer: JH Park Configuration: EUT ONLY, X Position Mode: LTE5 3MHz FUND 16QAM</p> <p>Test Equipment: Receiving: VULB9163-749, and 3m Chamber N-type Cable (Setup this one for testing EUT) Substitution: Dipole S/N: 00164753, 3m SMA Cable Warehouse.</p> <table border="1"> <thead> <tr> <th>f MHz</th> <th>SG reading (dBm)</th> <th>Ant. Pol. (H/V)</th> <th>Cable Loss (dB)</th> <th>Antenna Gain (dBd)</th> <th>ERP (dBm)</th> <th>Limit (dBm)</th> <th>Margin (dB)</th> <th>Notes</th> </tr> </thead> <tbody> <tr> <td colspan="9">Low Ch</td> </tr> <tr> <td>825.50</td> <td>0.42</td> <td>V</td> <td>1.1</td> <td>-1.5</td> <td>-2.18</td> <td>38.5</td> <td>-40.6</td> <td></td> </tr> <tr> <td>825.50</td> <td>-6.89</td> <td>H</td> <td>1.1</td> <td>-1.5</td> <td>-9.49</td> <td>38.5</td> <td>-47.9</td> <td></td> </tr> <tr> <td colspan="9">Mid Ch</td> </tr> <tr> <td>836.50</td> <td>-2.31</td> <td>V</td> <td>1.1</td> <td>-1.4</td> <td>-4.81</td> <td>38.5</td> <td>-43.3</td> <td></td> </tr> <tr> <td>836.50</td> <td>-8.21</td> <td>H</td> <td>1.1</td> <td>-1.4</td> <td>-10.71</td> <td>38.5</td> <td>-49.2</td> <td></td> </tr> <tr> <td colspan="9">High Ch</td> </tr> <tr> <td>847.50</td> <td>-2.01</td> <td>V</td> <td>1.1</td> <td>-1.3</td> <td>-4.40</td> <td>38.5</td> <td>-42.8</td> <td></td> </tr> <tr> <td>847.50</td> <td>-6.91</td> <td>H</td> <td>1.1</td> <td>-1.3</td> <td>-9.30</td> <td>38.5</td> <td>-47.7</td> <td></td> </tr> </tbody> </table> <p>Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm</p>									f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes	Low Ch									825.50	0.42	V	1.1	-1.5	-2.18	38.5	-40.6		825.50	-6.89	H	1.1	-1.5	-9.49	38.5	-47.9		Mid Ch									836.50	-2.31	V	1.1	-1.4	-4.81	38.5	-43.3		836.50	-8.21	H	1.1	-1.4	-10.71	38.5	-49.2		High Ch									847.50	-2.01	V	1.1	-1.3	-4.40	38.5	-42.8		847.50	-6.91	H	1.1	-1.3	-9.30	38.5	-47.7	
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes																																																																																											
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825.50	0.42	V	1.1	-1.5	-2.18	38.5	-40.6																																																																																												
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836.50	-2.31	V	1.1	-1.4	-4.81	38.5	-43.3																																																																																												
836.50	-8.21	H	1.1	-1.4	-10.71	38.5	-49.2																																																																																												
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		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
LTE Band 5 1.4MHz QPSK	Company:		Samsung							
	Project #:		16K23793							
	Date:		08-26-16							
	Test Engineer:		JH Park							
	Configuration:		EUT ONLY, X Position							
	Mode:		LTE5 1.4MHz FUND QPSK							
	Test Equipment:									
	Receiving:		VULB9163-749, and 3m Chamber N-type Cable (Setup this one for testing EUT)							
	Substitution:		Dipole S/N: 00164753, 3m SMA Cable Warehouse.							
			f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	Limit	Margin
		MHz	(dBm)	(H/V)	(dB)	(dBd)	(dBm)	(dBm)	(dB)	
		Low Ch								
		824.70	-0.73	V	1.1	-1.5	-3.33	38.5	-41.8	
		824.70	-10.25	H	1.1	-1.5	-12.85	38.5	-51.3	
		Mid Ch								
		836.50	-3.27	V	1.1	-1.4	-5.77	38.5	-44.2	
		836.50	-8.33	H	1.1	-1.4	-10.83	38.5	-49.3	
		High Ch								
		848.30	-4.94	V	1.6	-1.3	-7.82	38.5	-46.3	
		848.30	-8.77	H	1.6	-1.3	-11.65	38.5	-50.1	
		Rev. 3.17.11								
		Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm								
		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
LTE Band 5 1.4MHz 16QAM	Company:		Samsung							
	Project #:		16K23793							
	Date:		08-26-16							
	Test Engineer:		JH Park							
	Configuration:		EUT ONLY, X Position							
	Mode:		LTE5 1.4MHz FUND 16QAM							
	Test Equipment:									
	Receiving:		VULB9163-749, and 3m Chamber N-type Cable (Setup this one for testing EUT)							
	Substitution:		Dipole S/N: 00164753, 3m SMA Cable Warehouse.							
			f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	Limit	Margin
		MHz	(dBm)	(H/V)	(dB)	(dBd)	(dBm)	(dBm)	(dB)	
		Low Ch								
		824.70	-1.66	V	1.1	-1.5	-4.26	38.5	-42.7	
		824.70	-11.21	H	1.1	-1.5	-13.81	38.5	-52.3	
		Mid Ch								
		836.50	-4.02	V	1.1	-1.4	-6.52	38.5	-45.0	
		836.50	-9.26	H	1.1	-1.4	-11.76	38.5	-50.2	
		High Ch								
		848.30	-5.93	V	1.1	-1.3	-8.32	38.5	-46.8	
		848.30	-9.79	H	1.1	-1.3	-12.18	38.5	-50.6	
		Rev. 3.17.11								
		Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm								

LTE Band 4

		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2							
LTE Band 4 20MHz QPSK	Company: Samsung Project #: 16K23793 Date: 08-12-16 Test Engineer: YH Lim Configuration: EUT ONLY, Z Position Mode: LTE Band 4, QPSK, 20MHz 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								
	1720.00	2.33	V	1.54	9.12	9.91	30.0	-20.1	
	1720.00	7.70	H	1.54	9.12	15.28	30.0	-14.7	
	Mid Ch								
	1732.50	2.20	V	1.55	9.31	9.96	30.0	-20.0	
	1732.50	7.75	H	1.55	9.31	15.51	30.0	-14.5	
	High Ch								
	1745.00	1.11	V	1.56	9.37	8.92	30.0	-21.1	
	1745.00	7.31	H	1.56	9.37	15.12	30.0	-14.9	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
	LTE Band 4 20MHz 16QAM	Company: Samsung Project #: 16K23793 Date: 08-12-16 Test Engineer: YH Lim Configuration: EUT ONLY, Z Position Mode: LTE Band 4, 16QAM, 20MHz 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)
Low Ch									
1720.00		1.36	V	1.54	9.12	8.94	30.0	-21.1	
1720.00		7.12	H	1.54	9.12	14.70	30.0	-15.3	
Mid Ch									
1732.50		1.22	V	1.55	9.31	8.98	30.0	-21.0	
1732.50		7.29	H	1.55	9.31	15.05	30.0	-15.0	
High Ch									
1745.00		0.15	V	1.56	9.37	7.96	30.0	-22.0	
1745.00		6.39	H	1.56	9.37	14.20	30.0	-15.8	
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 4 15MHz QPSK	Company:		Samsung								
	Project #:		16K23793								
	Date:		08-12-16								
	Test Engineer:		YH Lim								
	Configuration:		EUT ONLY, Z 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	2.34	V	1.54	9.12	9.92	30.0	-20.1			
	1717.50	5.61	H	1.54	9.12	13.19	30.0	-16.8			
Mid Ch											
1732.50	0.92	V	1.55	9.31	8.68	30.0	-21.3				
1732.50	6.33	H	1.55	9.31	14.09	30.0	-15.9				
High Ch											
1747.50	0.27	V	1.56	9.39	8.10	30.0	-21.9				
1747.50	7.03	H	1.56	9.39	14.86	30.0	-15.1				
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 15MHz 16QAM	Company:		Samsung								
	Project #:		16K23793								
	Date:		08-12-16								
	Test Engineer:		YH Lim								
	Configuration:		EUT ONLY, Z 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	1.36	V	1.54	9.12	8.94	30.0	-21.1			
	1717.50	4.61	H	1.54	9.12	12.19	30.0	-17.8			
Mid Ch											
1732.50	0.04	V	1.55	9.31	7.80	30.0	-22.2				
1732.50	5.36	H	1.55	9.31	13.12	30.0	-16.9				
High Ch											
1747.50	-0.72	V	1.56	9.39	7.11	30.0	-22.9				
1747.50	6.04	H	1.56	9.39	13.87	30.0	-16.1				
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 #:		16K23793							
	Date:		08-12-16							
	Test Engineer:		YH Lim							
	Configuration:		EUT ONLY, Z 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	1.88	V	1.54	9.12	9.46	30.0	-20.5		
1715.00	6.44	H	1.54	9.12	14.02	30.0	-16.0			
Mid Ch										
1732.50	1.31	V	1.55	9.31	9.07	30.0	-20.9			
1732.50	8.10	H	1.55	9.31	15.86	30.0	-14.1			
High Ch										
1750.00	0.12	V	1.56	9.40	7.96	30.0	-22.0			
1750.00	8.10	H	1.56	9.40	15.94	30.0	-14.1			
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 16QAM	Company:		Samsung							
	Project #:		16K23793							
	Date:		08-12-16							
	Test Engineer:		YH Lim							
	Configuration:		EUT ONLY, Z 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	0.91	V	1.54	9.12	8.49	30.0	-21.5		
1715.00	5.78	H	1.54	9.12	13.36	30.0	-16.6			
Mid Ch										
1732.50	0.31	V	1.55	9.31	8.07	30.0	-21.9			
1732.50	7.11	H	1.55	9.31	14.87	30.0	-15.1			
High Ch										
1750.00	-0.85	V	1.56	9.40	6.99	30.0	-23.0			
1750.00	7.14	H	1.56	9.40	14.98	30.0	-15.0			
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 5MHz QPSK	Company:		Samsung						
	Project #:		16K23793						
	Date:		08-12-16						
	Test Engineer:		YH Lim						
	Configuration:		EUT ONLY, Z 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	1.56	V	1.54	9.12	9.14	30.0	-20.9	
	1712.50	7.16	H	1.54	9.12	14.74	30.0	-15.3	
Mid Ch									
1732.50	0.87	V	1.55	9.31	8.63	30.0	-21.4		
1732.50	7.89	H	1.55	9.31	15.65	30.0	-14.4		
High Ch									
1752.50	-0.42	V	1.56	9.39	7.41	30.0	-22.6		
1752.50	8.06	H	1.56	9.39	15.89	30.0	-14.1		
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 16QAM	Company:		Samsung						
	Project #:		16K23793						
	Date:		08-12-16						
	Test Engineer:		YH Lim						
	Configuration:		EUT ONLY, Z 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	0.58	V	1.54	9.12	8.16	30.0	-21.8	
	1712.50	6.14	H	1.54	9.12	13.72	30.0	-16.3	
Mid Ch									
1732.50	-0.08	V	1.55	9.31	7.68	30.0	-22.3		
1732.50	6.93	H	1.55	9.31	14.69	30.0	-15.3		
High Ch									
1752.50	-1.42	V	1.56	9.39	6.41	30.0	-23.6		
1752.50	7.02	H	1.56	9.39	14.85	30.0	-15.2		
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 4 3MHz QPSK	Company: Samsung Project #: 16K23793 Date: 08-12-16 Test Engineer: YH Lim Configuration: EUT ONLY, Z 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	0.18	V	1.54	9.12	7.76	30.0	-22.2	
	1711.50	6.20	H	1.54	9.12	13.78	30.0	-16.2	
	Mid Ch								
	1732.50	-0.35	V	1.55	9.31	7.41	30.0	-22.6	
	1732.50	6.86	H	1.55	9.31	14.62	30.0	-15.4	
	High Ch								
	1753.50	-0.66	V	1.56	9.38	7.16	30.0	-22.8	
	1753.50	6.62	H	1.56	9.38	14.44	30.0	-15.6	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
	LTE Band 4 3MHz 16QAM	Company: Samsung Project #: 16K23793 Date: 08-12-16 Test Engineer: YH Lim Configuration: EUT ONLY, Z 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		-0.81	V	1.54	9.12	6.77	30.0	-23.2	
1711.50		4.89	H	1.54	9.12	12.47	30.0	-17.5	
Mid Ch									
1732.50		-1.43	V	1.55	9.31	6.33	30.0	-23.7	
1732.50		5.53	H	1.55	9.31	13.29	30.0	-16.7	
High Ch									
1753.50		-1.70	V	1.56	9.38	6.12	30.0	-23.9	
1753.50		5.58	H	1.56	9.38	13.40	30.0	-16.6	
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 1.4MHz QPSK	Company:		Samsung							
	Project #:		16K23793							
	Date:		08-12-16							
	Test Engineer:		YH Lim							
	Configuration:		EUT ONLY, Z 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	-0.18	V	1.54	9.12	7.40	30.0	-22.6		
	1710.70	3.68	H	1.54	9.12	11.26	30.0	-18.7		
	Mid Ch									
1732.50	-1.95	V	1.55	9.31	5.81	30.0	-24.2			
1732.50	4.41	H	1.55	9.31	12.17	30.0	-17.8			
High Ch										
1754.30	-2.21	V	1.56	9.37	5.60	30.0	-24.4			
1754.30	5.43	H	1.56	9.37	13.24	30.0	-16.8			
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 4 1.4MHz 16QAM	Company:		Samsung							
	Project #:		16K23793							
	Date:		08-12-16							
	Test Engineer:		YH Lim							
	Configuration:		EUT ONLY, Z 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	-1.20	V	1.54	9.12	6.38	30.0	-23.6		
	1710.70	2.80	H	1.54	9.12	10.38	30.0	-19.6		
	Mid Ch									
1732.50	-2.87	V	1.55	9.31	4.89	30.0	-25.1			
1732.50	3.40	H	1.55	9.31	11.16	30.0	-18.8			
High Ch										
1754.30	-3.30	V	1.56	9.37	4.51	30.0	-25.5			
1754.30	4.47	H	1.56	9.37	12.28	30.0	-17.7			
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 #: 16K23793 Date: 08-18-16 Test Engineer: JH Park Configuration: EUT / Z-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	0.54	V	1.60	9.12	8.06	33.0	-24.9		
	1860.00	8.36	H	1.60	9.12	15.88	33.0	-17.1		
	Mid Ch									
	1880.00	1.38	V	1.62	8.62	8.38	33.0	-24.6		
	1880.00	8.00	H	1.62	8.62	15.00	33.0	-18.0		
	High Ch									
	1900.00	0.89	V	1.63	8.50	7.76	33.0	-25.2		
	1900.00	8.99	H	1.63	8.50	15.86	33.0	-17.1		
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									
	LTE Band 2 20MHz 16QAM	Company: Samsung Project #: 16K23793 Date: 08-18-16 Test Engineer: JH Park Configuration: EUT / Z-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		-0.36	V	1.60	9.12	7.16	33.0	-25.8		
1860.00		7.35	H	1.60	9.12	14.87	33.0	-18.1		
Mid Ch										
1880.00		0.38	V	1.62	8.62	7.38	33.0	-25.6		
1880.00		7.03	H	1.62	8.62	14.03	33.0	-19.0		
High Ch										
1900.00		-0.10	V	1.63	8.50	6.77	33.0	-26.2		
1900.00		7.99	H	1.63	8.50	14.86	33.0	-18.1		
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 #:		16K23793							
	Date:		08-18-16							
	Test Engineer:		JH Park							
	Configuration:		EUT / Z-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
		MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
		Low Ch								
		1857.50	0.79	V	1.60	9.12	8.31	33.0	-24.7	
		1857.50	8.12	H	1.60	9.12	15.64	33.0	-17.4	
		Mid Ch								
		1880.00	2.33	V	1.62	8.62	9.33	33.0	-23.7	
		1880.00	8.96	H	1.62	8.62	15.96	33.0	-17.0	
		High Ch								
		1902.50	1.47	V	1.63	8.49	8.33	33.0	-24.7	
		1902.50	7.81	H	1.63	8.49	14.67	33.0	-18.3	
		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 15MHz 16QAM	Company:		Samsung							
	Project #:		16K23793							
	Date:		08-18-16							
	Test Engineer:		JH Park							
	Configuration:		EUT / Z-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
		MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
		Low Ch								
		1857.50	-0.21	V	1.60	9.12	7.31	33.0	-25.7	
		1857.50	7.13	H	1.60	9.12	14.65	33.0	-18.4	
		Mid Ch								
		1880.00	1.33	V	1.62	8.62	8.33	33.0	-24.7	
		1880.00	7.98	H	1.62	8.62	14.98	33.0	-18.0	
		High Ch								
		1902.50	0.46	V	1.63	8.49	7.32	33.0	-25.7	
		1902.50	6.78	H	1.63	8.49	13.64	33.0	-19.4	
		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 10MHz QPSK	Company: Samsung Project #: 16K23793 Date: 08-18-16 Test Engineer: JH Park Configuration: EUT ONLY, Z 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	1.69	V	1.60	9.12	9.21	33.0	-23.8	
	1855.00	8.11	H	1.60	9.12	15.63	33.0	-17.4	
	Mid Ch								
	1880.00	3.24	V	1.62	8.62	10.24	33.0	-22.8	
	1880.00	9.08	H	1.62	8.62	16.08	33.0	-16.9	
	High Ch								
	1905.00	3.42	V	1.63	8.47	10.26	33.0	-22.7	
	1905.00	9.13	H	1.63	8.47	15.97	33.0	-17.0	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
LTE Band 2 10MHz 16QAM	Company: Samsung Project #: 16K23793 Date: 08-18-16 Test Engineer: JH Park Configuration: EUT ONLY, Z 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	0.76	V	1.60	9.12	8.28	33.0	-24.7	
	1855.00	7.16	H	1.60	9.12	14.68	33.0	-18.3	
	Mid Ch								
	1880.00	2.26	V	1.62	8.62	9.26	33.0	-23.7	
	1880.00	8.11	H	1.62	8.62	15.11	33.0	-17.9	
	High Ch								
	1905.00	2.41	V	1.63	8.47	9.25	33.0	-23.7	
	1905.00	8.13	H	1.63	8.47	14.97	33.0	-18.0	
	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 QPSK	Company:		Samsung								
	Project #:		16K23793								
	Date:		08-18-16								
	Test Engineer:		YH Lim								
	Configuration:		EUT ONLY, Z Position								
	Mode:		LTE Band 2 QPSK, 5MHz								
	<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									
		1852.50	-0.63	V	1.60	9.12	6.89	33.0	-26.1		
		1852.50	7.70	H	1.60	9.12	15.22	33.0	-17.8		
		Mid Ch									
		1880.00	1.21	V	1.62	8.62	8.21	33.0	-24.8		
		1880.00	8.32	H	1.62	8.62	15.32	33.0	-17.7		
		High Ch									
		1907.50	-1.24	V	1.63	8.46	5.59	33.0	-27.4		
		1907.50	8.01	H	1.63	8.46	14.84	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									
		Company:		Samsung							
		Project #:		16K23793							
		Date:		08-18-16							
		Test Engineer:		YH Lim							
		Configuration:		EUT ONLY, Z Position							
		Mode:		LTE Band 2 16QAM, 5MHz							
		<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									
		1852.50	-1.65	V	1.60	9.12	5.87	33.0	-27.1		
		1852.50	6.62	H	1.60	9.12	14.14	33.0	-18.9		
		Mid Ch									
		1880.00	0.22	V	1.62	8.62	7.22	33.0	-25.8		
		1880.00	7.35	H	1.62	8.62	14.35	33.0	-18.6		
		High Ch									
		1907.50	-2.18	V	1.63	8.46	4.65	33.0	-28.3		
		1907.50	6.97	H	1.63	8.46	13.80	33.0	-19.2		
		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									
LTE Band 2 3MHz QPSK	Company:		Samsung								
	Project #:		16K23793								
	Date:		08-18-16								
	Test Engineer:		YH Lim								
	Configuration:		EUT ONLY, Z 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	2.46	V	1.60	9.12	9.98	33.0	-23.0		
		1851.50	6.21	H	1.60	9.12	13.73	33.0	-19.3		
		Mid Ch									
		1880.00	2.75	V	1.62	8.62	9.75	33.0	-23.2		
		1880.00	6.79	H	1.62	8.62	13.79	33.0	-19.2		
		High Ch									
		1908.50	2.83	V	1.63	8.45	9.65	33.0	-23.3		
		1908.50	7.84	H	1.63	8.45	14.66	33.0	-18.3		
		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 3MHz 16QAM	Company:		Samsung								
	Project #:		16K23793								
	Date:		08-18-16								
	Test Engineer:		YH Lim								
	Configuration:		EUT ONLY, Z 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	0.45	V	1.60	9.12	7.97	33.0	-25.0		
		1851.50	5.23	H	1.60	9.12	12.75	33.0	-20.3		
		Mid Ch									
		1880.00	1.57	V	1.62	8.62	8.57	33.0	-24.4		
		1880.00	5.74	H	1.62	8.62	12.74	33.0	-20.3		
		High Ch									
		1908.50	1.80	V	1.63	8.45	8.62	33.0	-24.4		
		1908.50	6.81	H	1.63	8.45	13.63	33.0	-19.4		
		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 1.4MHz QPSK	Company: Samsung Project #: 16K23793 Date: 08-12-16 Test Engineer: YH Lim Configuration: EUT ONLY, Z 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	0.26	V	1.60	9.12	7.78	33.0	-25.2	
	1850.70	8.86	H	1.60	9.12	16.38	33.0	-16.6	
	Mid Ch								
	1880.00	0.98	V	1.62	8.62	7.98	33.0	-25.0	
	1880.00	7.48	H	1.62	8.62	14.48	33.0	-18.5	
	High Ch								
	1909.30	1.23	V	1.63	8.44	8.04	33.0	-25.0	
	1909.30	6.31	H	1.63	8.44	13.12	33.0	-19.9	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
	LTE Band 2 1.4MHz 16QAM	Company: Samsung Project #: 16K23793 Date: 08-12-16 Test Engineer: YH Lim Configuration: EUT ONLY, Z 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)
Low Ch									
1850.70		-0.68	V	1.60	9.12	6.84	33.0	-26.2	
1850.70		7.91	H	1.60	9.12	15.43	33.0	-17.6	
Mid Ch									
1880.00		-0.02	V	1.62	8.62	6.98	33.0	-26.0	
1880.00		6.46	H	1.62	8.62	13.46	33.0	-19.5	
High Ch									
1909.30		0.22	V	1.63	8.44	7.03	33.0	-26.0	
1909.30		5.29	H	1.63	8.44	12.10	33.0	-20.9	
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

11.2.1. SPURIOUS RADIATION PLOTS

WCDMA Band 5

		UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement																																																																																																																																																																																																																																				
WCDMA Band 5 REL99	Company: Samsung Project #: 16K23793 Date: 08-26-16 Test Engineer: Chan Park Configuration: EUT / AC Adapter / Cradle / X Position Mode: Tx, REL99,850MHz	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">Chamber Chamber 2</div> <div style="border: 1px solid black; padding: 2px;">Pre-amplifier AFS42</div> <div style="border: 1px solid black; padding: 2px;">Filter Filter 1</div> <div style="border: 1px solid black; padding: 2px;">Limit Part 22</div> </div> <table border="1"> <thead> <tr> <th>f GHz</th> <th>SG reading (dBm)</th> <th>Ant. Pol. (H/V)</th> <th>Distance (m)</th> <th>Preamp (dB)</th> <th>Filter (dB)</th> <th>EIRP (dBm)</th> <th>Limit (dBm)</th> <th>Delta (dB)</th> <th>Notes</th> </tr> </thead> <tbody> <tr><td colspan="10">Low Ch, 826.40MHz</td></tr> <tr><td>1.6520</td><td>-17.9</td><td>V</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-56.0</td><td>-13.0</td><td>-43.0</td><td></td></tr> <tr><td>2.4790</td><td>-21.1</td><td>V</td><td>3.0</td><td>39.5</td><td>1.0</td><td>-59.7</td><td>-13.0</td><td>-46.7</td><td></td></tr> <tr><td>3.3056</td><td>-20.4</td><td>V</td><td>3.0</td><td>40.1</td><td>1.0</td><td>-59.5</td><td>-13.0</td><td>-46.5</td><td></td></tr> <tr><td>1.6520</td><td>-23.3</td><td>H</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-61.4</td><td>-13.0</td><td>-48.4</td><td></td></tr> <tr><td>2.4790</td><td>-21.5</td><td>H</td><td>3.0</td><td>39.5</td><td>1.0</td><td>-60.1</td><td>-13.0</td><td>-47.1</td><td></td></tr> <tr><td>3.3056</td><td>-20.9</td><td>H</td><td>3.0</td><td>40.1</td><td>1.0</td><td>-60.1</td><td>-13.0</td><td>-47.1</td><td></td></tr> <tr><td colspan="10">Mid Ch, 836.6MHz</td></tr> <tr><td>1.6732</td><td>-18.7</td><td>V</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-56.8</td><td>-13.0</td><td>-43.8</td><td></td></tr> <tr><td>2.5098</td><td>-20.9</td><td>V</td><td>3.0</td><td>39.5</td><td>1.0</td><td>-59.5</td><td>-13.0</td><td>-46.5</td><td></td></tr> <tr><td>3.3464</td><td>-20.5</td><td>V</td><td>3.0</td><td>40.1</td><td>1.0</td><td>-59.6</td><td>-13.0</td><td>-46.6</td><td></td></tr> <tr><td>1.6732</td><td>-22.9</td><td>H</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-61.0</td><td>-13.0</td><td>-48.0</td><td></td></tr> <tr><td>2.5098</td><td>-22.4</td><td>H</td><td>3.0</td><td>39.5</td><td>1.0</td><td>-60.9</td><td>-13.0</td><td>-47.9</td><td></td></tr> <tr><td>3.3464</td><td>-20.9</td><td>H</td><td>3.0</td><td>40.1</td><td>1.0</td><td>-60.1</td><td>-13.0</td><td>-47.1</td><td></td></tr> <tr><td colspan="10">High Ch, 846.6MHz</td></tr> <tr><td>1.6932</td><td>-24.5</td><td>V</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-62.6</td><td>-13.0</td><td>-49.6</td><td></td></tr> <tr><td>2.5390</td><td>-21.4</td><td>V</td><td>3.0</td><td>39.6</td><td>1.0</td><td>-60.0</td><td>-13.0</td><td>-47.0</td><td></td></tr> <tr><td>3.3860</td><td>-20.4</td><td>V</td><td>3.0</td><td>40.2</td><td>1.0</td><td>-59.6</td><td>-13.0</td><td>-46.6</td><td></td></tr> <tr><td>1.6932</td><td>-24.4</td><td>H</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-62.5</td><td>-13.0</td><td>-49.5</td><td></td></tr> <tr><td>2.5390</td><td>-22.5</td><td>H</td><td>3.0</td><td>39.6</td><td>1.0</td><td>-61.0</td><td>-13.0</td><td>-48.0</td><td></td></tr> <tr><td>3.3860</td><td>-20.9</td><td>H</td><td>3.0</td><td>40.2</td><td>1.0</td><td>-60.1</td><td>-13.0</td><td>-47.1</td><td></td></tr> </tbody> </table>									f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	Low Ch, 826.40MHz										1.6520	-17.9	V	3.0	39.1	1.0	-56.0	-13.0	-43.0		2.4790	-21.1	V	3.0	39.5	1.0	-59.7	-13.0	-46.7		3.3056	-20.4	V	3.0	40.1	1.0	-59.5	-13.0	-46.5		1.6520	-23.3	H	3.0	39.1	1.0	-61.4	-13.0	-48.4		2.4790	-21.5	H	3.0	39.5	1.0	-60.1	-13.0	-47.1		3.3056	-20.9	H	3.0	40.1	1.0	-60.1	-13.0	-47.1		Mid Ch, 836.6MHz										1.6732	-18.7	V	3.0	39.1	1.0	-56.8	-13.0	-43.8		2.5098	-20.9	V	3.0	39.5	1.0	-59.5	-13.0	-46.5		3.3464	-20.5	V	3.0	40.1	1.0	-59.6	-13.0	-46.6		1.6732	-22.9	H	3.0	39.1	1.0	-61.0	-13.0	-48.0		2.5098	-22.4	H	3.0	39.5	1.0	-60.9	-13.0	-47.9		3.3464	-20.9	H	3.0	40.1	1.0	-60.1	-13.0	-47.1		High Ch, 846.6MHz										1.6932	-24.5	V	3.0	39.1	1.0	-62.6	-13.0	-49.6		2.5390	-21.4	V	3.0	39.6	1.0	-60.0	-13.0	-47.0		3.3860	-20.4	V	3.0	40.2	1.0	-59.6	-13.0	-46.6		1.6932	-24.4	H	3.0	39.1	1.0	-62.5	-13.0	-49.5		2.5390	-22.5	H	3.0	39.6	1.0	-61.0	-13.0	-48.0		3.3860	-20.9	H	3.0	40.2	1.0	-60.1	-13.0	-47.1	
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2.5390	-22.5	H	3.0	39.6	1.0	-61.1	-13.0	-48.1																																																																																																																																																																																																																														
3.3860	-20.8	H	3.0	40.2	1.0	-60.0	-13.0	-47.0																																																																																																																																																																																																																														
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.																																																																																																																																																																																																																																						

WCDMA Band 4

		UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement									
WCDMA Band 4 REL99	Company: Samsung Project #: 16K23793 Date: 08-24-16 Test Engineer: Chan Park Configuration: EUT / AC Adapter / Cradle / X Position Mode: Tx, REL99,1700MHz	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">Chamber Chamber 2</div> <div style="border: 1px solid black; padding: 2px;">Pre-amplifier AFS42</div> <div style="border: 1px solid black; padding: 2px;">Filter Filter 1</div> <div style="border: 1px solid black; padding: 2px;">Limit Part 24</div> </div>									
	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	
	Low Ch, 1712.4MHz										
	3.4248	-10.4	V	3.0	40.2	1.0	-49.6	-13.0	-36.6		
	5.1372	-16.8	V	3.0	40.9	1.0	-56.7	-13.0	-43.7		
	6.8496	-8.4	V	3.0	41.0	1.0	-48.4	-13.0	-35.4		
	3.4248	-12.7	H	3.0	40.2	1.0	-51.9	-13.0	-38.9		
	5.1372	-13.6	H	3.0	40.9	1.0	-53.5	-13.0	-40.5		
	6.8496	-9.9	H	3.0	41.0	1.0	-49.9	-13.0	-36.9		
	Mid Ch, 1732.6MHz										
	3.4652	-12.6	V	3.0	40.3	1.0	-51.8	-13.0	-38.8		
	5.1978	-18.2	V	3.0	40.9	1.0	-58.1	-13.0	-45.1		
	6.9304	-14.4	V	3.0	41.0	1.0	-54.4	-13.0	-41.4		
	3.4652	-13.7	H	3.0	40.3	1.0	-53.0	-13.0	-40.0		
	5.1978	-15.9	H	3.0	40.9	1.0	-55.8	-13.0	-42.8		
	6.9304	-9.3	H	3.0	41.0	1.0	-49.3	-13.0	-36.3		
	High Ch, 1752.6MHz										
	3.5052	-10.7	V	3.0	40.3	1.0	-50.0	-13.0	-37.0		
	5.2578	-17.6	V	3.0	40.9	1.0	-57.5	-13.0	-44.5		
	7.0104	-10.6	V	3.0	41.0	1.0	-50.6	-13.0	-37.6		
3.5052	-11.4	H	3.0	40.3	1.0	-50.7	-13.0	-37.7			
5.2578	-15.9	H	3.0	40.9	1.0	-55.8	-13.0	-42.8			
7.0104	-7.0	H	3.0	41.0	1.0	-47.0	-13.0	-34.0			
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.											
WCDMA Band 4 HSDPA	Company: Samsung Project #: 16K23793 Date: 08-24-16 Test Engineer: Chan Park Configuration: EUT / AC Adapter / Cradle / X Position Mode: Tx, HSDPA,1700MHz	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">Chamber Chamber 2</div> <div style="border: 1px solid black; padding: 2px;">Pre-amplifier AFS42</div> <div style="border: 1px solid black; padding: 2px;">Filter Filter 1</div> <div style="border: 1px solid black; padding: 2px;">Limit Part 24</div> </div>									
	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	
	Low Ch, 1712.4MHz										
	3.4248	-9.5	V	3.0	40.2	1.0	-48.8	-13.0	-35.8		
	5.1372	-17.2	V	3.0	40.9	1.0	-57.1	-13.0	-44.1		
	6.8496	-7.9	V	3.0	41.0	1.0	-47.9	-13.0	-34.9		
	3.4248	-12.8	H	3.0	40.2	1.0	-52.1	-13.0	-39.1		
	5.1372	-13.9	H	3.0	40.9	1.0	-53.8	-13.0	-40.8		
	6.8496	-10.7	H	3.0	41.0	1.0	-50.7	-13.0	-37.7		
	Mid Ch, 1732.6MHz										
	3.4652	-10.5	V	3.0	40.3	1.0	-49.7	-13.0	-36.7		
	5.1978	-18.4	V	3.0	40.9	1.0	-58.3	-13.0	-45.3		
	6.9304	-13.3	V	3.0	41.0	1.0	-53.3	-13.0	-40.3		
	3.4652	-12.8	H	3.0	40.3	1.0	-52.0	-13.0	-39.0		
	5.1978	-16.5	H	3.0	40.9	1.0	-56.4	-13.0	-43.4		
	6.9304	-7.7	H	3.0	41.0	1.0	-47.7	-13.0	-34.7		
	High Ch, 1752.6MHz										
	3.5052	-10.1	V	3.0	40.3	1.0	-49.4	-13.0	-36.4		
	5.2578	-17.9	V	3.0	40.9	1.0	-57.7	-13.0	-44.7		
	7.0104	-12.4	V	3.0	41.0	1.0	-52.4	-13.0	-39.4		
3.5052	-10.6	H	3.0	40.3	1.0	-49.9	-13.0	-36.9			
5.2578	-16.3	H	3.0	40.9	1.0	-56.2	-13.0	-43.2			
7.0104	-7.4	H	3.0	41.0	1.0	-47.4	-13.0	-34.4			
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.											

WCDMA Band 2

		UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement									
WCDMA Band 2 REL99	Company: Samsung Project #: 16K23793 Date: 08-23-16 Test Engineer: Chan Park Configuration: EUT / AC Adapter / Cradle / X Position Mode: Tx, REL99,1900MHz	Chamber: Chamber 2		Pre-amplifier: AFS42		Filter: Filter 1		Limit: Part 24			
	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	
Low Ch, 1852.4MHz											
3.7048	-16.9	V	3.0	40.5	1.0	-56.4	-13.0	-43.4			
5.5572	-18.1	V	3.0	40.8	1.0	-57.9	-13.0	-44.9			
7.4096	-16.8	V	3.0	40.8	1.0	-56.6	-13.0	-43.6			
3.7048	-16.7	H	3.0	40.5	1.0	-56.2	-13.0	-43.2			
5.5572	-18.2	H	3.0	40.8	1.0	-58.0	-13.0	-45.0			
7.4096	-16.7	H	3.0	40.8	1.0	-56.5	-13.0	-43.5			
Mid Ch, 1880MHz											
3.7600	-16.9	V	3.0	40.5	1.0	-56.4	-13.0	-43.4			
5.6400	-17.5	V	3.0	40.8	1.0	-57.3	-13.0	-44.3			
7.5200	-16.5	V	3.0	40.7	1.0	-56.2	-13.0	-43.2			
3.7600	-15.6	H	3.0	40.5	1.0	-55.1	-13.0	-42.1			
5.6400	-17.9	H	3.0	40.8	1.0	-57.7	-13.0	-44.7			
7.5200	-16.4	H	3.0	40.7	1.0	-56.2	-13.0	-43.2			
High Ch, 1907.6MHz											
3.8152	-16.6	V	3.0	40.6	1.0	-56.2	-13.0	-43.2			
5.7228	-17.5	V	3.0	40.8	1.0	-57.3	-13.0	-44.3			
7.6304	-16.5	V	3.0	40.7	1.0	-56.2	-13.0	-43.2			
3.8152	-16.5	H	3.0	40.6	1.0	-56.1	-13.0	-43.1			
5.7228	-18.0	H	3.0	40.8	1.0	-57.8	-13.0	-44.8			
7.6304	-16.5	H	3.0	40.7	1.0	-56.2	-13.0	-43.2			
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.											
WCDMA Band 2 HSDPA	Company: Samsung Project #: 16K23793 Date: 08-23-16 Test Engineer: Chan Park Configuration: EUT / AC Adapter / Cradle / X Position Mode: Tx, HSDPA,1900MHz	Chamber: Chamber 2		Pre-amplifier: AFS42		Filter: Filter 1		Limit: Part 24			
	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	
Low Ch, 1852.4MHz											
3.7048	-16.0	V	3.0	40.5	1.0	-55.5	-13.0	-42.5			
5.5572	-18.0	V	3.0	40.8	1.0	-57.8	-13.0	-44.8			
7.4096	-16.8	V	3.0	40.8	1.0	-56.5	-13.0	-43.5			
3.7048	-15.5	H	3.0	40.5	1.0	-55.0	-13.0	-42.0			
5.5572	-18.3	H	3.0	40.8	1.0	-58.1	-13.0	-45.1			
7.4096	-16.8	H	3.0	40.8	1.0	-56.6	-13.0	-43.6			
Mid Ch, 1880MHz											
3.7600	-16.4	V	3.0	40.5	1.0	-55.9	-13.0	-42.9			
5.6400	-17.4	V	3.0	40.8	1.0	-57.2	-13.0	-44.2			
7.5200	-16.5	V	3.0	40.7	1.0	-56.2	-13.0	-43.2			
3.7600	-15.0	H	3.0	40.5	1.0	-54.5	-13.0	-41.5			
5.6400	-17.9	H	3.0	40.8	1.0	-57.7	-13.0	-44.7			
7.5200	-16.4	H	3.0	40.7	1.0	-56.1	-13.0	-43.1			
High Ch, 1907.6MHz											
3.8152	-16.0	V	3.0	40.6	1.0	-55.6	-13.0	-42.6			
5.7228	-17.5	V	3.0	40.8	1.0	-57.3	-13.0	-44.3			
7.6304	-16.5	V	3.0	40.7	1.0	-56.1	-13.0	-43.1			
3.8152	-15.1	H	3.0	40.6	1.0	-54.7	-13.0	-41.7			
5.7228	-17.9	H	3.0	40.8	1.0	-57.7	-13.0	-44.7			
7.6304	-16.6	H	3.0	40.7	1.0	-56.2	-13.0	-43.2			
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.											

LTE Band 5

		UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement										
LTE Band 5 10MHz QPSK	Company: Samsung Project #: 16K23793 Date: 08-26-16 Test Engineer: Chan Park Configuration: EUT / AC Adapter / Cradle / X Position Mode: TX, LTE BAND 5, 10MHz BW, QPSK											
	Chamber: Chamber 2 Pre-amplifier: AFS42 Filter: Filter 1 Limit: Part 22											
			f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
			Low Channel (829MHz)									
			1.6580	-16.5	V	3.0	39.1	1.0	-54.6	-13.0	-41.6	
			2.4870	-19.2	V	3.0	39.5	1.0	-57.8	-13.0	-44.8	
			3.3160	-19.7	V	3.0	40.1	1.0	-58.8	-13.0	-45.8	
			1.6580	-17.2	H	3.0	39.1	1.0	-55.3	-13.0	-42.3	
			2.4870	-17.7	H	3.0	39.5	1.0	-56.2	-13.0	-43.2	
			3.3160	-20.6	H	3.0	40.1	1.0	-59.7	-13.0	-46.7	
			Mid Channel (836.5MHz)									
			1.6730	-18.7	V	3.0	39.1	1.0	-56.8	-13.0	-43.8	
			2.5090	-16.5	V	3.0	39.5	1.0	-55.0	-13.0	-42.0	
			3.3460	-20.8	V	3.0	40.1	1.0	-60.0	-13.0	-47.0	
			1.6730	-7.1	H	3.0	39.1	1.0	-45.2	-13.0	-32.2	
		2.5090	-16.7	H	3.0	39.5	1.0	-55.2	-13.0	-42.2		
		3.3460	-21.2	H	3.0	40.1	1.0	-60.3	-13.0	-47.3		
		High Channel (844MHz)										
		1.6880	-8.9	V	3.0	39.1	1.0	-47.0	-13.0	-34.0		
		2.5320	-17.0	V	3.0	39.5	1.0	-55.6	-13.0	-42.6		
		3.3760	-20.6	V	3.0	40.2	1.0	-59.8	-13.0	-46.8		
		1.6880	-6.2	H	3.0	39.1	1.0	-44.3	-13.0	-31.3		
		2.5320	-15.4	H	3.0	39.5	1.0	-53.9	-13.0	-40.9		
		3.3760	-21.0	H	3.0	40.2	1.0	-60.2	-13.0	-47.2		
		Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										
LTE Band 5 10MHz 16QAM	Company: Samsung Project #: 16K23793 Date: 08-26-16 Test Engineer: Chan Park Configuration: EUT / AC Adapter / Cradle / X Position Mode: TX, LTE BAND 5, 10MHz BW, 16QAM											
	Chamber: Chamber 2 Pre-amplifier: AFS42 Filter: Filter 1 Limit: Part 22											
			f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
			Low Channel (829MHz)									
			1.6580	-16.8	V	3.0	39.1	1.0	-54.9	-13.0	-41.9	
			2.4870	-19.0	V	3.0	39.5	1.0	-57.5	-13.0	-44.5	
			3.3160	-19.6	V	3.0	40.1	1.0	-58.7	-13.0	-45.7	
			1.6580	-18.2	H	3.0	39.1	1.0	-56.3	-13.0	-43.3	
			2.4870	-19.4	H	3.0	39.5	1.0	-57.9	-13.0	-44.9	
			3.3160	-20.7	H	3.0	40.1	1.0	-59.8	-13.0	-46.8	
			Mid Channel (836.5MHz)									
			1.6730	-19.2	V	3.0	39.1	1.0	-57.3	-13.0	-44.3	
			2.5090	-17.2	V	3.0	39.5	1.0	-55.7	-13.0	-42.7	
			3.3460	-21.0	V	3.0	40.1	1.0	-60.1	-13.0	-47.1	
			1.6730	-9.0	H	3.0	39.1	1.0	-47.1	-13.0	-34.1	
		2.5090	-17.5	H	3.0	39.5	1.0	-56.1	-13.0	-43.1		
		3.3460	-21.1	H	3.0	40.1	1.0	-60.3	-13.0	-47.3		
		High Channel (844MHz)										
		1.6880	-9.5	V	3.0	39.1	1.0	-47.6	-13.0	-34.6		
		2.5320	-17.9	V	3.0	39.5	1.0	-56.5	-13.0	-43.5		
		3.3760	-20.6	V	3.0	40.2	1.0	-59.8	-13.0	-46.8		
		1.6880	-7.4	H	3.0	39.1	1.0	-45.6	-13.0	-32.6		
		2.5320	-16.2	H	3.0	39.5	1.0	-54.8	-13.0	-41.8		
		3.3760	-21.2	H	3.0	40.2	1.0	-60.4	-13.0	-47.4		
		Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										

		UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement										
LTE Band 5 5MHz QPSK	Company: Samsung Project #: 16K23793 Date: 08-26-16 Test Engineer: Chan Park Configuration: EUT / AC Adapter / Cradle / X Position Mode: TX LTE BAND 5, 5MHz BW,QPSK		Chamber Chamber 2		Pre-amplifier AFS42		Filter Filter 1		Limit Part 22			
	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes		
	Low Channel (826.5MHz)											
	1.6530	-12.0	V	3.0	39.1	1.0	-50.1	-13.0	-37.1			
	2.4790	-15.0	V	3.0	39.5	1.0	-53.5	-13.0	-40.5			
	3.3060	-21.2	V	3.0	40.1	1.0	-60.3	-13.0	-47.3			
	1.6530	-19.4	H	3.0	39.1	1.0	-57.5	-13.0	-44.5			
	2.4790	-18.2	H	3.0	39.5	1.0	-56.8	-13.0	-43.8			
	3.3060	-22.4	H	3.0	40.1	1.0	-61.5	-13.0	-48.5			
	Mid Channel (836.5MHz)											
	1.6730	-9.9	V	3.0	39.1	1.0	-48.1	-13.0	-35.1			
	2.5090	-16.1	V	3.0	39.5	1.0	-54.7	-13.0	-41.7			
	3.3460	-21.4	V	3.0	40.1	1.0	-60.6	-13.0	-47.6			
	1.6730	-18.9	H	3.0	39.1	1.0	-57.0	-13.0	-44.0			
	2.5090	-16.3	H	3.0	39.5	1.0	-56.9	-13.0	-43.9			
	3.3460	-22.0	H	3.0	40.1	1.0	-61.2	-13.0	-48.2			
	High Channel (846.5MHz)											
	1.6930	-13.3	V	3.0	39.1	1.0	-51.4	-13.0	-38.4			
	2.5390	-20.0	V	3.0	39.6	1.0	-58.5	-13.0	-45.5			
	3.3860	-21.1	V	3.0	40.2	1.0	-60.3	-13.0	-47.3			
	1.6930	-6.3	H	3.0	39.1	1.0	-44.4	-13.0	-31.4			
	2.5390	-21.3	H	3.0	39.6	1.0	-59.9	-13.0	-46.9			
	3.3860	-21.3	H	3.0	40.2	1.0	-60.5	-13.0	-47.5			
	Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.											
LTE Band 5 5MHz 16QAM	Company: Samsung Project #: 16K23793 Date: 08-26-16 Test Engineer: Chan Park Configuration: EUT / AC Adapter / Cradle / X Position Mode: TX LTE BAND 5, 5MHz BW,16QAM		Chamber Chamber 2		Pre-amplifier AFS42		Filter Filter 1		Limit Part 22			
	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes		
	Low Channel (826.5MHz)											
	1.6530	-12.7	V	3.0	39.1	1.0	-50.8	-13.0	-37.8			
	2.4790	-15.0	V	3.0	39.5	1.0	-53.5	-13.0	-40.5			
	3.3060	-21.8	V	3.0	40.1	1.0	-60.9	-13.0	-47.9			
	1.6530	-20.2	H	3.0	39.1	1.0	-58.3	-13.0	-45.3			
	2.4790	-19.1	H	3.0	39.5	1.0	-57.6	-13.0	-44.6			
	3.3060	-22.5	H	3.0	40.1	1.0	-61.6	-13.0	-48.6			
	Mid Channel (836.5MHz)											
	1.6730	-16.4	V	3.0	39.1	1.0	-55.0	-13.0	-42.0			
	2.5090	-21.0	V	3.0	39.5	1.0	-60.1	-13.0	-47.1			
	3.3460	-21.0	V	3.0	40.1	1.0	-60.1	-13.0	-47.1			
	1.6730	-20.5	H	3.0	39.1	1.0	-58.6	-13.0	-45.6			
	2.5090	-18.4	H	3.0	39.5	1.0	-56.9	-13.0	-43.9			
	3.3460	-21.8	H	3.0	40.1	1.0	-60.9	-13.0	-47.9			
	High Channel (846.5MHz)											
	1.6930	-14.1	V	3.0	39.1	1.0	-52.3	-13.0	-39.3			
	2.5390	-20.8	V	3.0	39.6	1.0	-59.4	-13.0	-46.4			
	3.3860	-21.1	V	3.0	40.2	1.0	-60.3	-13.0	-47.3			
	1.6930	-7.6	H	3.0	39.1	1.0	-45.7	-13.0	-32.7			
	2.5390	-22.5	H	3.0	39.6	1.0	-61.0	-13.0	-48.0			
	3.3860	-21.6	H	3.0	40.2	1.0	-60.8	-13.0	-47.8			
	Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.											

		UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement										
LTE Band 5 3MHz QPSK	Company: Samsung Project #: 16K23793 Date: 08-26-16 Test Engineer: Chan Park Configuration: EUT / AC Adapter / Cradle / X Position Mode: TX LTE BAND 5, 3MHz BW, QPSK											
	Chamber: Chamber 2 Pre-amplifier: AFS42 Filter: Filter 1 Limit: Part 22											
		f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	
		Low Channel (825.5MHz)										
		1.6510	-7.0	V	3.0	39.1	1.0	-45.1	-13.0	-32.1		
		2.4765	-17.4	V	3.0	39.5	1.0	-55.9	-13.0	-42.9		
		3.3020	-21.7	V	3.0	40.1	1.0	-60.8	-13.0	-47.8		
		1.6510	-11.9	H	3.0	39.1	1.0	-50.0	-13.0	-37.0		
		2.4765	-16.1	H	3.0	39.5	1.0	-54.6	-13.0	-41.6		
		3.3020	-22.5	H	3.0	40.1	1.0	-61.6	-13.0	-48.6		
		Mid Channel (836.5MHz)										
		1.6730	-9.1	V	3.0	39.1	1.0	-47.2	-13.0	-34.2		
		2.5090	-20.0	V	3.0	39.5	1.0	-58.6	-13.0	-45.6		
		3.3460	-19.9	V	3.0	40.1	1.0	-59.0	-13.0	-46.0		
		1.6730	-19.8	H	3.0	39.1	1.0	-57.9	-13.0	-44.9		
		2.5090	-19.1	H	3.0	39.5	1.0	-57.7	-13.0	-44.7		
		3.3460	-21.6	H	3.0	40.1	1.0	-60.7	-13.0	-47.7		
		High Channel (847.5MHz)										
		1.6950	-6.5	V	3.0	39.1	1.0	-44.6	-13.0	-31.6		
		2.5425	-17.8	V	3.0	39.6	1.0	-56.3	-13.0	-43.3		
		3.3900	-20.6	V	3.0	40.2	1.0	-59.8	-13.0	-46.8		
		1.6950	-6.4	H	3.0	39.1	1.0	-44.5	-13.0	-31.5		
		2.5425	-15.9	H	3.0	39.6	1.0	-54.5	-13.0	-41.5		
		3.3900	-21.5	H	3.0	40.2	1.0	-60.6	-13.0	-47.6		
	Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.											
LTE Band 5 3MHz 16QAM	Company: Samsung Project #: 16K23793 Date: 08-26-16 Test Engineer: Chan Park Configuration: EUT / AC Adapter / Cradle / X Position Mode: TX LTE BAND 5, 3MHz BW, 16QAM											
	Chamber: Chamber 2 Pre-amplifier: AFS42 Filter: Filter 1 Limit: Part 22											
		f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	
		Low Channel (825.5MHz)										
		1.6510	-7.0	V	3.0	39.1	1.0	-45.1	-13.0	-32.1		
		2.4765	-18.1	V	3.0	39.5	1.0	-56.7	-13.0	-43.7		
		3.3020	-21.9	V	3.0	40.1	1.0	-61.0	-13.0	-48.0		
		1.6510	-13.0	H	3.0	39.1	1.0	-51.1	-13.0	-38.1		
		2.4765	-16.3	H	3.0	39.5	1.0	-54.8	-13.0	-41.8		
		3.3020	-22.4	H	3.0	40.1	1.0	-61.5	-13.0	-48.5		
		Mid Channel (836.5MHz)										
		1.6730	-9.8	V	3.0	39.1	1.0	-47.9	-13.0	-34.9		
		2.5090	-20.6	V	3.0	39.5	1.0	-59.1	-13.0	-46.1		
		3.3460	-20.8	V	3.0	40.1	1.0	-60.0	-13.0	-47.0		
		1.6730	-20.6	H	3.0	39.1	1.0	-58.7	-13.0	-45.7		
		2.5090	-19.8	H	3.0	39.5	1.0	-58.3	-13.0	-45.3		
		3.3460	-21.5	H	3.0	40.1	1.0	-60.6	-13.0	-47.6		
		High Channel (847.5MHz)										
		1.6950	-6.6	V	3.0	39.1	1.0	-44.7	-13.0	-31.7		
		2.5425	-18.5	V	3.0	39.6	1.0	-57.1	-13.0	-44.1		
		3.3900	-20.7	V	3.0	40.2	1.0	-59.9	-13.0	-46.9		
		1.6950	-7.1	H	3.0	39.1	1.0	-45.2	-13.0	-32.2		
		2.5425	-15.7	H	3.0	39.6	1.0	-54.3	-13.0	-41.3		
		3.3900	-21.4	H	3.0	40.2	1.0	-60.6	-13.0	-47.6		
	Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.											

		UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement										
LTE Band 5 1.4MHz QPSK		Company: Samsung										
		Project #: 16K23793										
		Date: 08-26-16										
		Test Engineer: Chan Park										
		Configuration: EUT / AC Adapter / Cradle / X Position										
		Mode: TX, LTE BAND 5, 1.4MHz BW, QPSK										
		Chamber: Chamber 2		Pre-amplifier: AFS42		Filter: Filter 1		Limit: Part 22				
		f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	
		Low Channel (824.7MHz)										
		1.6494	-7.9	V	3.0	39.1	1.0	-46.0	-13.0	-33.0		
		2.4741	-17.9	V	3.0	39.5	1.0	-56.4	-13.0	-43.4		
		3.2988	-20.9	V	3.0	40.1	1.0	-60.0	-13.0	-47.0		
		1.6494	-11.9	H	3.0	39.1	1.0	-50.0	-13.0	-37.0		
		2.4741	-16.7	H	3.0	39.5	1.0	-55.2	-13.0	-42.2		
		3.2988	-21.5	H	3.0	40.1	1.0	-60.6	-13.0	-47.6		
		Mid Channel (836.5MHz)										
		1.6730	-13.9	V	3.0	39.1	1.0	-52.0	-13.0	-39.0		
		2.5090	-20.5	V	3.0	39.5	1.0	-59.0	-13.0	-46.0		
		3.3460	-20.5	V	3.0	40.1	1.0	-59.6	-13.0	-46.6		
		1.6730	-17.7	H	3.0	39.1	1.0	-55.8	-13.0	-42.8		
		2.5090	-20.0	H	3.0	39.5	1.0	-58.5	-13.0	-45.5		
		3.3460	-21.4	H	3.0	40.1	1.0	-60.5	-13.0	-47.5		
		High Channel (848.3MHz)										
		1.6966	-9.7	V	3.0	39.1	1.0	-47.8	-13.0	-34.8		
		2.5449	-18.2	V	3.0	39.6	1.0	-56.7	-13.0	-43.7		
		3.3932	-20.5	V	3.0	40.2	1.0	-59.7	-13.0	-46.7		
		1.6966	-13.0	H	3.0	39.1	1.0	-51.1	-13.0	-38.1		
		2.5449	-19.6	H	3.0	39.6	1.0	-58.1	-13.0	-45.1		
		3.3932	-21.4	H	3.0	40.2	1.0	-60.6	-13.0	-47.6		
		Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										
LTE Band 5 1.4MHz 16QAM		UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement										
		Company: Samsung										
		Project #: 16K23793										
		Date: 08-26-16										
		Test Engineer: Chan Park										
		Configuration: EUT / AC Adapter / Cradle / X Position										
		Mode: TX, LTE BAND 5, 1.4MHz BW, 16QAM										
		Chamber: Chamber 2		Pre-amplifier: AFS42		Filter: Filter 1		Limit: Part 22				
		f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	
		Low Channel (824.7MHz)										
		1.6494	-8.2	V	3.0	39.1	1.0	-46.3	-13.0	-33.3		
		2.4741	-18.5	V	3.0	39.5	1.0	-57.1	-13.0	-44.1		
		3.2988	-21.0	V	3.0	40.1	1.0	-60.1	-13.0	-47.1		
		1.6494	-12.9	H	3.0	39.1	1.0	-51.0	-13.0	-38.0		
		2.4741	-16.9	H	3.0	39.5	1.0	-55.4	-13.0	-42.4		
		3.2988	-21.6	H	3.0	40.1	1.0	-60.7	-13.0	-47.7		
		Mid Channel (836.5MHz)										
		1.6730	-15.2	V	3.0	39.1	1.0	-53.3	-13.0	-40.3		
		2.5090	-21.1	V	3.0	39.5	1.0	-59.7	-13.0	-46.7		
		3.3460	-20.4	V	3.0	40.1	1.0	-59.6	-13.0	-46.6		
		1.6730	-18.8	H	3.0	39.1	1.0	-56.9	-13.0	-43.9		
		2.5090	-20.4	H	3.0	39.5	1.0	-58.9	-13.0	-45.9		
		3.3460	-21.3	H	3.0	40.1	1.0	-60.4	-13.0	-47.4		
		High Channel (848.3MHz)										
		1.6966	-10.7	V	3.0	39.1	1.0	-48.8	-13.0	-35.8		
		2.5449	-18.9	V	3.0	39.6	1.0	-57.5	-13.0	-44.5		
		3.3932	-20.7	V	3.0	40.2	1.0	-59.9	-13.0	-46.9		
		1.6966	-12.8	H	3.0	39.1	1.0	-50.9	-13.0	-37.9		
		2.5449	-20.0	H	3.0	39.6	1.0	-58.6	-13.0	-45.6		
		3.3932	-21.3	H	3.0	40.2	1.0	-60.4	-13.0	-47.4		
		Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										

LTE Band 4

		UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement										
LTE Band 4 20MHz QPSK	Company: Samsung											
	Project #: 16K23793											
	Date: 08-25-16											
	Test Engineer: YH Lim											
	Configuration: EUT / AC Adapter / Cradle / Z Position											
	Mode: TX, LTE BAND 4, 20MHz BW, QPSK											
	Chamber		Pre-amplifier		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	-3.1	V	3.0	40.2	1.0	-42.3	-13.0	-29.3			
	5.1600	-9.2	V	3.0	40.9	1.0	-49.1	-13.0	-36.1			
	6.8800	0.4	V	3.0	41.0	1.0	-39.6	-13.0	-26.6			
	3.4400	-1.4	H	3.0	40.2	1.0	-40.6	-13.0	-27.6			
	5.1600	-12.6	H	3.0	40.9	1.0	-52.4	-13.0	-39.4			
	6.8800	4.1	H	3.0	41.0	1.0	-35.9	-13.0	-22.9			
	Mid Channel (1732.5MHz)											
	3.4650	-7.6	V	3.0	40.3	1.0	-46.8	-13.0	-33.8			
	5.1975	-15.5	V	3.0	40.9	1.0	-55.4	-13.0	-42.4			
	6.9300	-8.9	V	3.0	41.0	1.0	-48.9	-13.0	-35.9			
3.4650	-6.5	H	3.0	40.3	1.0	-45.7	-13.0	-32.7				
5.1975	-12.0	H	3.0	40.9	1.0	-51.9	-13.0	-38.9				
6.9300	-0.5	H	3.0	41.0	1.0	-40.5	-13.0	-27.5				
High Channel (1745MHz)												
3.4900	-4.7	V	3.0	40.3	1.0	-43.9	-13.0	-30.9				
5.2350	-11.1	V	3.0	40.9	1.0	-51.0	-13.0	-38.0				
6.9800	2.3	V	3.0	41.0	1.0	-37.7	-13.0	-24.7				
3.4900	-2.9	H	3.0	40.3	1.0	-42.1	-13.0	-29.1				
5.2350	-11.8	H	3.0	40.9	1.0	-51.7	-13.0	-38.7				
6.9800	4.1	H	3.0	41.0	1.0	-35.9	-13.0	-22.9				
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.												
LTE Band 4 20MHz 16QAM	Company: Samsung											
	Project #: 16K23793											
	Date: 08-25-16											
	Test Engineer: YH Lim											
	Configuration: EUT / AC Adapter / Cradle / Z Position											
	Mode: TX, LTE BAND 4, 20MHz BW, 16QAM											
	Chamber		Pre-amplifier		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	-3.2	V	3.0	40.2	1.0	-42.4	-13.0	-29.4			
	5.1600	-9.6	V	3.0	40.9	1.0	-49.5	-13.0	-36.5			
	6.8800	-0.3	V	3.0	41.0	1.0	-40.3	-13.0	-27.3			
	3.4400	-2.3	H	3.0	40.2	1.0	-41.5	-13.0	-28.5			
	5.1600	-10.4	H	3.0	40.9	1.0	-50.3	-13.0	-37.3			
	6.8800	4.2	H	3.0	41.0	1.0	-35.8	-13.0	-22.8			
	Mid Channel (1732.5MHz)											
	3.4650	-7.9	V	3.0	40.3	1.0	-47.2	-13.0	-34.2			
	5.1975	-15.5	V	3.0	40.9	1.0	-55.4	-13.0	-42.4			
	6.9300	-9.2	V	3.0	41.0	1.0	-49.2	-13.0	-36.2			
3.4650	-8.1	H	3.0	40.3	1.0	-47.4	-13.0	-34.4				
5.1975	-12.3	H	3.0	40.9	1.0	-52.2	-13.0	-39.2				
6.9300	0.2	H	3.0	41.0	1.0	-39.8	-13.0	-26.8				
High Channel (1745MHz)												
3.4900	-6.2	V	3.0	40.3	1.0	-45.4	-13.0	-32.4				
5.2350	-11.3	V	3.0	40.9	1.0	-51.2	-13.0	-38.2				
6.9800	1.4	V	3.0	41.0	1.0	-38.6	-13.0	-25.6				
3.4900	-3.0	H	3.0	40.3	1.0	-42.3	-13.0	-29.3				
5.2350	-11.9	H	3.0	40.9	1.0	-51.7	-13.0	-38.7				
6.9800	4.0	H	3.0	41.0	1.0	-36.0	-13.0	-23.0				
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.												

		UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement									
LTE Band 4 15MHz QPSK	Company: Samsung										
	Project#: 16K23793										
	Date: 08-25-16										
	Test Engineer: YH Lim										
	Configuration: EUT / AC Adapter / Cradle / Z Position										
	Mode: TX LTE BAND 4, 15MHz BW,QPSK										
	Chamber: Chamber 2		Pre-amplifier: AFS42		Filter: Filter 1		Limit: FCC Part 27				
	f GHz	SGreading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes	
	Low Channel (1717.5MHz)										
	3.4350	-1.8	V	3.0	40.2	1.0	-41.1	-13.0	-28.1		
	5.1525	-12.0	V	3.0	40.9	1.0	-51.9	-13.0	-38.9		
	6.8700	-1.0	V	3.0	41.0	1.0	-41.0	-13.0	-28.0		
	3.4350	-1.4	H	3.0	40.2	1.0	-40.7	-13.0	-27.7		
	5.1525	-9.7	H	3.0	40.9	1.0	-49.6	-13.0	-36.6		
	6.8700	-0.2	H	3.0	41.0	1.0	-40.2	-13.0	-27.2		
	Mid Channel (1732.5MHz)										
	3.4650	-6.5	V	3.0	40.3	1.0	-45.8	-13.0	-32.8		
	5.1975	-10.4	V	3.0	40.9	1.0	-50.3	-13.0	-37.3		
	6.9300	-2.4	V	3.0	41.0	1.0	-42.4	-13.0	-29.4		
	3.4650	-5.3	H	3.0	40.3	1.0	-44.6	-13.0	-31.6		
5.1975	-3.1	H	3.0	40.9	1.0	-43.0	-13.0	-30.0			
6.9300	6.2	H	3.0	41.0	1.0	-33.8	-13.0	-20.8			
High Channel (1747.5MHz)											
3.4950	-4.2	V	3.0	40.3	1.0	-43.5	-13.0	-30.5			
5.2425	-11.4	V	3.0	40.9	1.0	-51.3	-13.0	-38.3			
6.9900	-1.5	V	3.0	41.0	1.0	-41.5	-13.0	-28.5			
3.4950	-3.7	H	3.0	40.3	1.0	-43.0	-13.0	-30.0			
5.2425	-11.0	H	3.0	40.9	1.0	-50.9	-13.0	-37.9			
6.9900	2.5	H	3.0	41.0	1.0	-37.5	-13.0	-24.5			
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.											
LTE Band 4 15MHz 16QAM	Company: Samsung										
	Project#: 16K23793										
	Date: 08-25-16										
	Test Engineer: YH Lim										
	Configuration: EUT / AC Adapter / Cradle / Z Position										
	Mode: TX LTE BAND 4, 15MHz BW,16QAM										
	Chamber: Chamber 2		Pre-amplifier: AFS42		Filter: Filter 1		Limit: FCC Part 27				
	f GHz	SGreading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes	
	Low Channel (1717.5MHz)										
	3.4350	-2.3	V	3.0	40.2	1.0	-41.5	-13.0	-28.5		
	5.1525	-13.0	V	3.0	40.9	1.0	-52.8	-13.0	-39.8		
	6.8700	-1.1	V	3.0	41.0	1.0	-41.1	-13.0	-28.1		
	3.4350	-1.8	H	3.0	40.2	1.0	-41.0	-13.0	-28.0		
	5.1525	-9.9	H	3.0	40.9	1.0	-49.8	-13.0	-36.8		
	6.8700	-1.4	H	3.0	41.0	1.0	-41.4	-13.0	-28.4		
	Mid Channel (1732.5MHz)										
	3.4650	-7.5	V	3.0	40.3	1.0	-46.7	-13.0	-33.7		
	5.1975	-12.4	V	3.0	40.9	1.0	-52.2	-13.0	-39.2		
	6.9300	-2.6	V	3.0	41.0	1.0	-42.6	-13.0	-29.6		
	3.4650	-5.8	H	3.0	40.3	1.0	-45.1	-13.0	-32.1		
5.1975	-2.6	H	3.0	40.9	1.0	-42.5	-13.0	-29.5			
6.9300	5.4	H	3.0	41.0	1.0	-34.6	-13.0	-21.6			
High Channel (1747.5MHz)											
3.4950	-6.0	V	3.0	40.3	1.0	-45.3	-13.0	-32.3			
5.2425	-12.0	V	3.0	40.9	1.0	-51.9	-13.0	-38.9			
6.9900	-2.7	V	3.0	41.0	1.0	-42.7	-13.0	-29.7			
3.4950	-4.7	H	3.0	40.3	1.0	-44.0	-13.0	-31.0			
5.2425	-12.6	H	3.0	40.9	1.0	-52.4	-13.0	-39.4			
6.9900	0.8	H	3.0	41.0	1.0	-39.2	-13.0	-26.2			
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.											