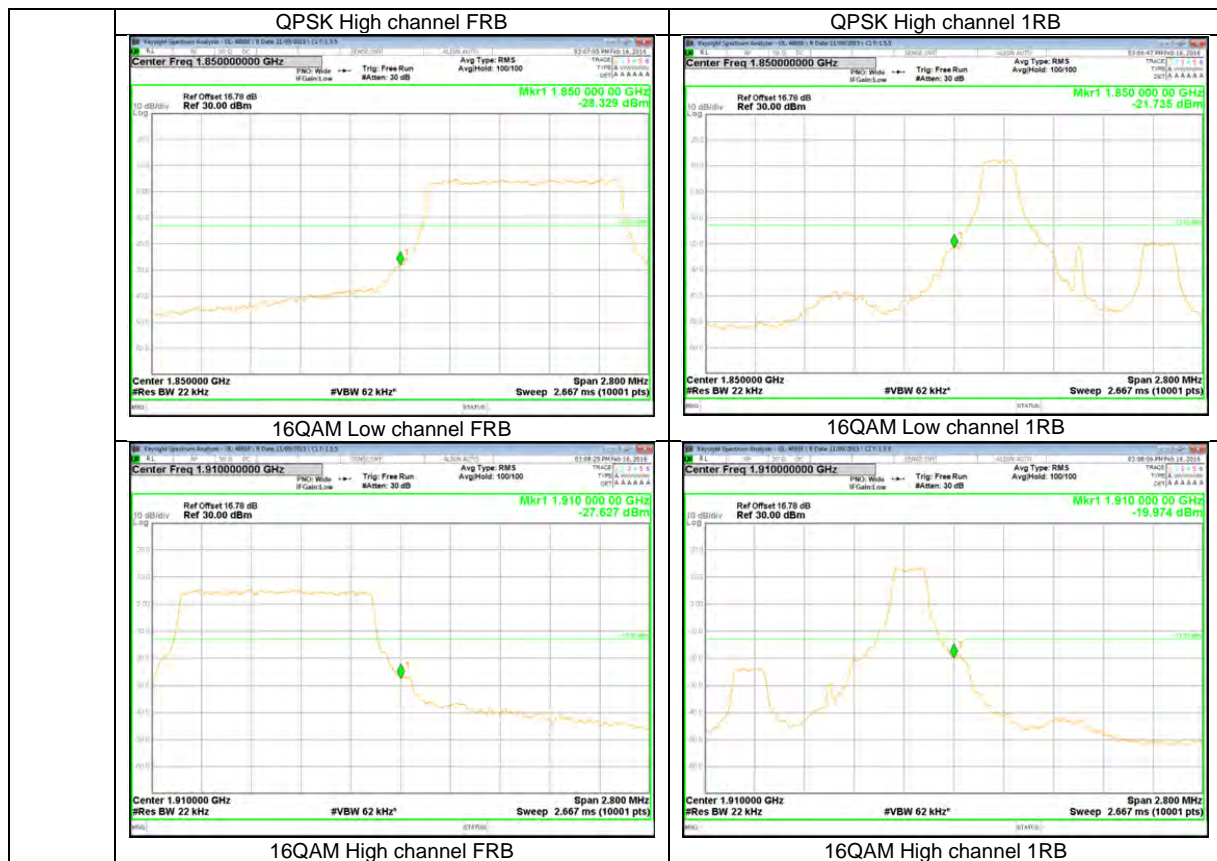


Band 2
 1.4MHz



10.3. OUT OF BAND EMISSIONS

RULE PART(S)

FCC: §2.1051, §22.901, §22.917, §24.238 and §27. 53

LIMITS

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

Per KDB 971168 D01 Power Meas License Digital Systems v02r02
 The RF output of the transmitter was connected to a spectrum analyzer through a calibrated coaxial cable. Sufficient scans were taken to show the out-of-band Emissions, if any, up to 10th harmonic. Multiple sweeps were recorded in maximum hold mode using a peak detector to ensure that the worst-case emissions were caught.

RESULTS

10.3.1. OUT OF BAND EMISSIONS RESULT

GSM

Band	Mode	f [MHz]	Spurious [dBm]	Limit [dBm]	Margin [dB]	
GSM850	GPRS	824.2	-22.36	-13.00	9.36	
		836.6	-22.76		9.76	
		848.8	-21.79		8.79	
	EGPRS	824.2	-22.08		9.08	
		836.6	-22.42		9.42	
		848.8	-22.33		9.33	
GSM1900	GPRS	1850.2	-22.60		-13.00	9.60
		1880.0	-22.51			9.51
		1909.8	-22.57			9.57
	EGPRS	1850.2	-22.41	9.41		
		1880.0	-22.08	9.08		
		1909.8	-22.61	9.61		

WCDMA

Band	Mode	f [MHz]	Spurious [dBm]	Limit [dBm]	Margin [dB]
Band 5	REL99	826.4	-33.09	-13.00	20.09
		836.6	-33.28		20.28
		846.6	-33.01		20.01
	HSDPA	826.4	-32.81		19.81
		836.6	-33.13		20.13
		846.6	-33.44		20.44
Band 4	REL99	1712.4	-33.17	-13.00	20.17
		1732.6	-31.77		18.77
		1752.6	-32.99		19.99
	HSDPA	1712.4	-32.46		19.46
		1732.6	-32.34		19.34
		1752.6	-32.22		19.22
Band 2	REL99	1852.4	-32.49	-13.00	19.49
		1880.0	-32.67		19.67
		1907.6	-33.12		20.12
	HSDPA	1852.4	-32.99		19.99
		1880.0	-33.05		20.05
		1907.6	-33.06		20.06

LTE 17

Bandwidth	Mode	f [MHz]	Spurious [dBm]	Limit [dBm]	Margin [dB]
10 MHz	QPSK	709.0	-27.68	-13.00	14.68
		710.0	-26.49		13.49
		711.0	-26.23		13.23
	16QAM	709.0	-27.32		14.32
		710.0	-27.57		14.57
		711.0	-27.55		14.55
5 MHz	QPSK	706.5	-27.29	-13.00	14.29
		710.0	-27.32		14.32
		713.5	-27.43		14.43
	16QAM	706.5	-26.98		13.98
		710.0	-26.77		13.77
		713.5	-26.42		13.42

LTE 5

Bandwidth	Mode	f [MHz]	Spurious [dBm]	Limit [dBm]	Margin [dB]
10 MHz	QPSK	829.0	-27.21	-13.00	14.21
		836.5	-27.93		14.93
		844.0	-26.45		13.45
	16QAM	829.0	-26.36		13.36
		836.5	-26.81		13.81
		844.0	-27.22		14.22
5 MHz	QPSK	826.5	-27.08		14.08
		836.5	-26.52		13.52
		846.5	-26.70		13.70
	16QAM	826.5	-27.27		14.27
		836.5	-27.42		14.42
		846.5	-28.02		15.02
3 MHz	QPSK	825.5	-27.53		14.53
		836.5	-27.48		14.48
		847.5	-27.09		14.09
	16QAM	825.5	-26.73		13.73
		836.5	-27.42		14.42
		847.5	-27.58		14.58
1.4 MHz	QPSK	824.7	-26.93	13.93	
		836.5	-26.76	13.76	
		848.3	-26.84	13.84	
	16QAM	824.7	-27.15	14.15	
		836.5	-26.67	13.67	
		848.3	-26.68	13.68	

LTE 4

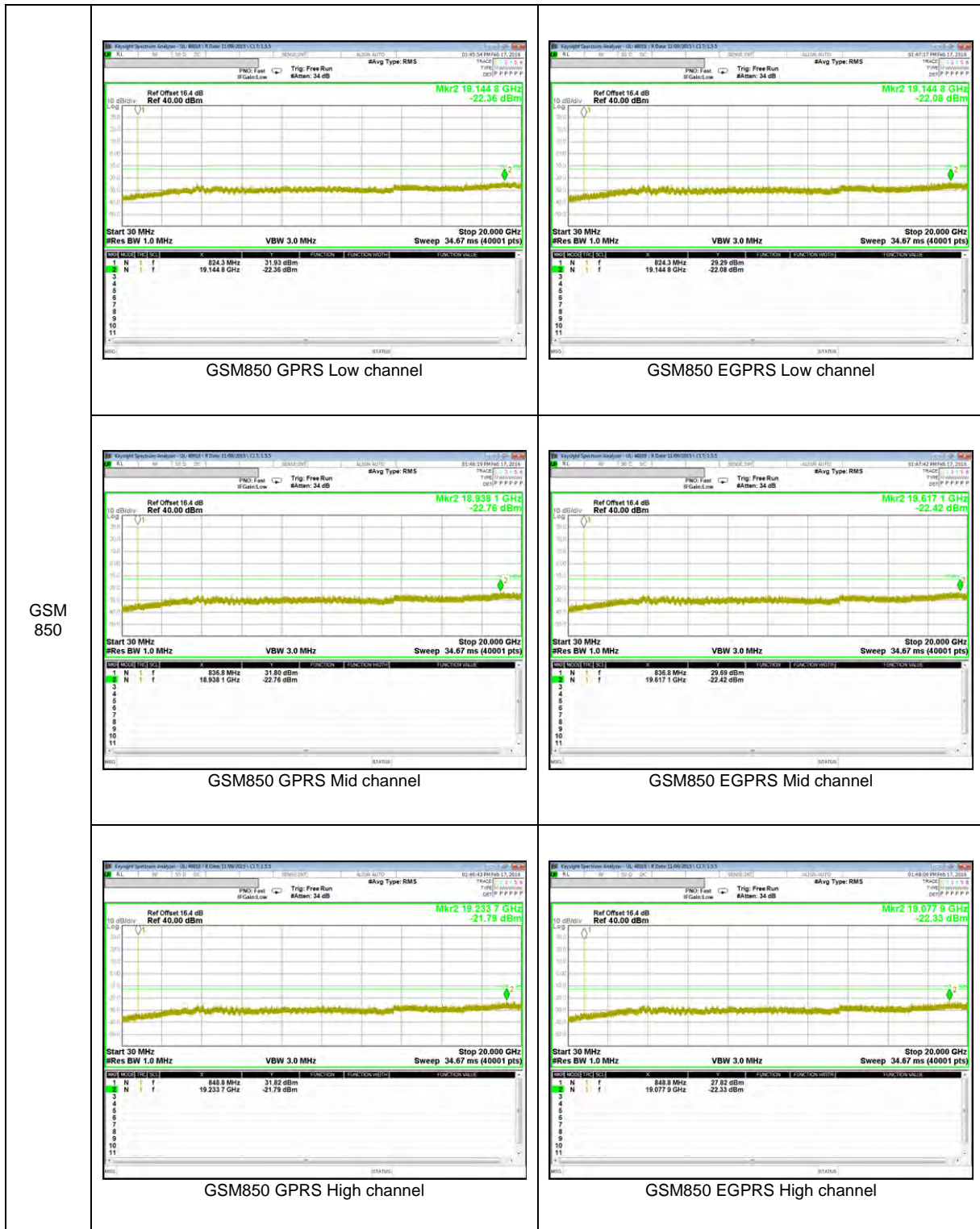
Bandwidth	Mode	f [MHz]	Spurious [dBm]	Limit [dBm]	Margin [dB]
20 MHz	QPSK	1720.0	-25.81	-13.00	12.81
		1732.5	-27.27		14.27
		1745.0	-26.63		13.63
	16QAM	1720.0	-26.70		13.70
		1732.5	-26.87		13.87
		1745.0	-26.69		13.69
15 MHz	QPSK	1717.5	-25.78		12.78
		1732.5	-27.18		14.18
		1747.5	-26.46		13.46
	16QAM	1717.5	-26.36		13.36
		1732.5	-27.13		14.13
		1747.5	-27.31		14.31
10 MHz	QPSK	1715.0	-26.24		13.24
		1732.5	-27.44		14.44
		1750.0	-27.29		14.29
	16QAM	1715.0	-27.18		14.18
		1732.5	-26.17		13.17
		1750.0	-26.52		13.52
5 MHz	QPSK	1712.5	-27.00	14.00	
		1732.5	-25.93	12.93	
		1752.5	-25.85	12.85	
	16QAM	1712.5	-26.78	13.78	
		1732.5	-27.19	14.19	
		1752.5	-26.60	13.60	
3 MHz	QPSK	1711.5	-25.60	12.60	
		1732.5	-26.82	13.82	
		1753.5	-26.08	13.08	
	16QAM	1711.5	-26.29	13.29	
		1732.5	-26.15	13.15	
		1753.5	-26.46	13.46	
1.4 MHz	QPSK	1710.7	-25.65	12.65	
		1732.5	-26.38	13.38	
		1754.3	-27.20	14.20	
	16QAM	1710.7	-26.25	13.25	
		1732.5	-26.62	13.62	
		1754.3	-26.75	13.75	

LTE 2

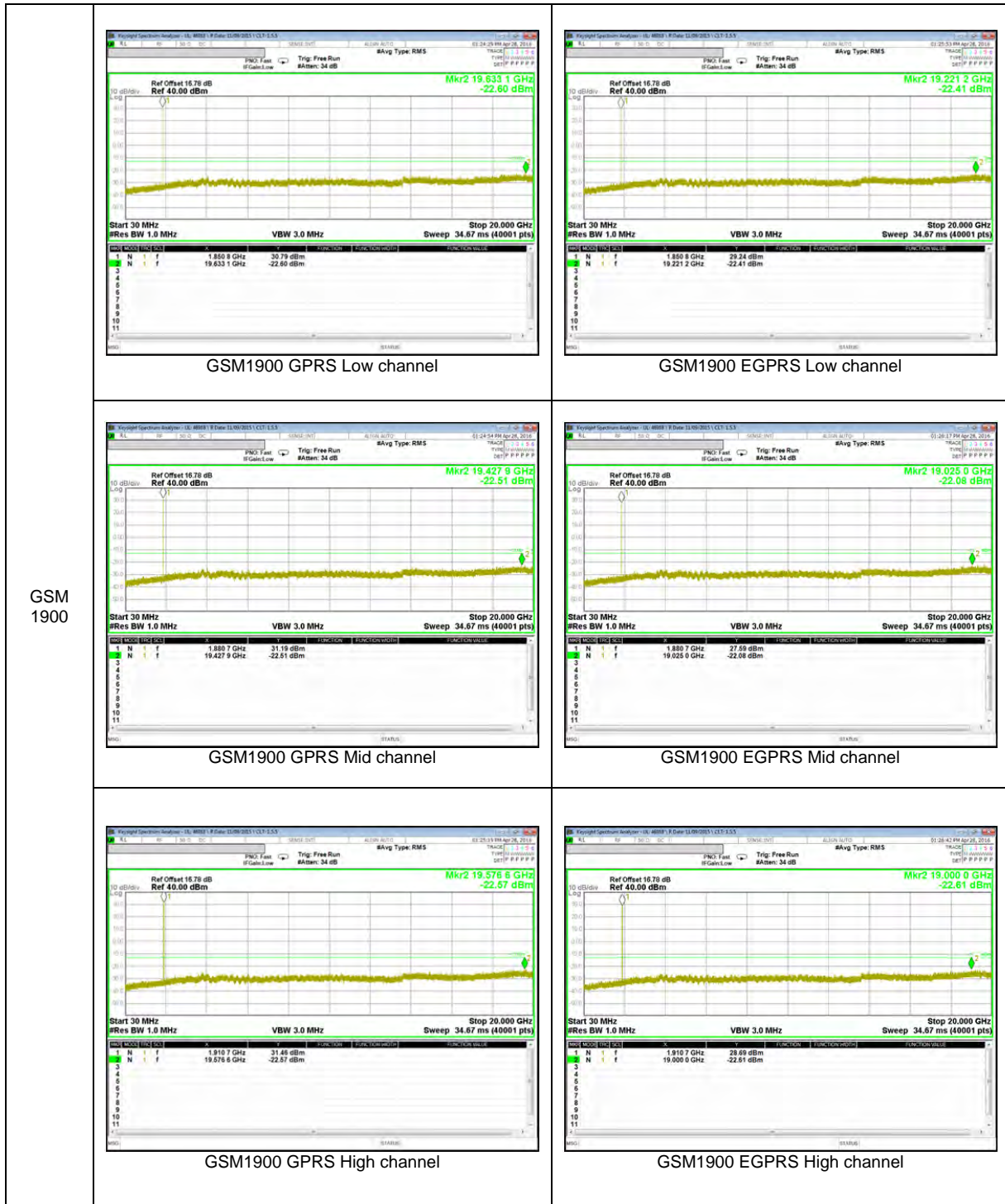
Bandwidth	Mode	f [MHz]	Spurious [dBm]	Limit [dBm]	Margin [dB]
20 MHz	QPSK	1860.0	-27.78	-13.00	14.78
		1880.0	-26.76		13.76
		1900.0	-26.76		13.76
	16QAM	1860.0	-26.12		13.12
		1880.0	-26.23		13.23
		1900.0	-26.38		13.38
15 MHz	QPSK	1857.5	-26.53		13.53
		1880.0	-26.36		13.36
		1902.5	-25.93		12.93
	16QAM	1857.5	-26.89		13.89
		1880.0	-26.51		13.51
		1902.5	-25.68		12.68
10 MHz	QPSK	1855.0	-26.72		13.72
		1880.0	-27.08		14.08
		1905.0	-26.52		13.52
	16QAM	1855.0	-26.08		13.08
		1880.0	-26.66		13.66
		1905.0	-26.93		13.93
5 MHz	QPSK	1852.5	-24.38	11.38	
		1880.0	-26.99	13.99	
		1907.5	-25.48	12.48	
	16QAM	1852.5	-26.55	13.55	
		1880.0	-26.69	13.69	
		1907.5	-26.33	13.33	
3 MHz	QPSK	1851.5	-26.66	13.66	
		1880.0	-26.51	13.51	
		1908.5	-27.22	14.22	
	16QAM	1851.5	-26.76	13.76	
		1880.0	-26.61	13.61	
		1908.5	-27.78	14.78	
1.4 MHz	QPSK	1850.7	-25.52	12.52	
		1880.0	-26.48	13.48	
		1909.3	-27.58	14.58	
	16QAM	1850.7	-26.27	13.27	
		1880.0	-26.30	13.30	
		1909.3	-26.38	13.38	

10.3.2. OUT OF BAND EMISSIONS PLOTS

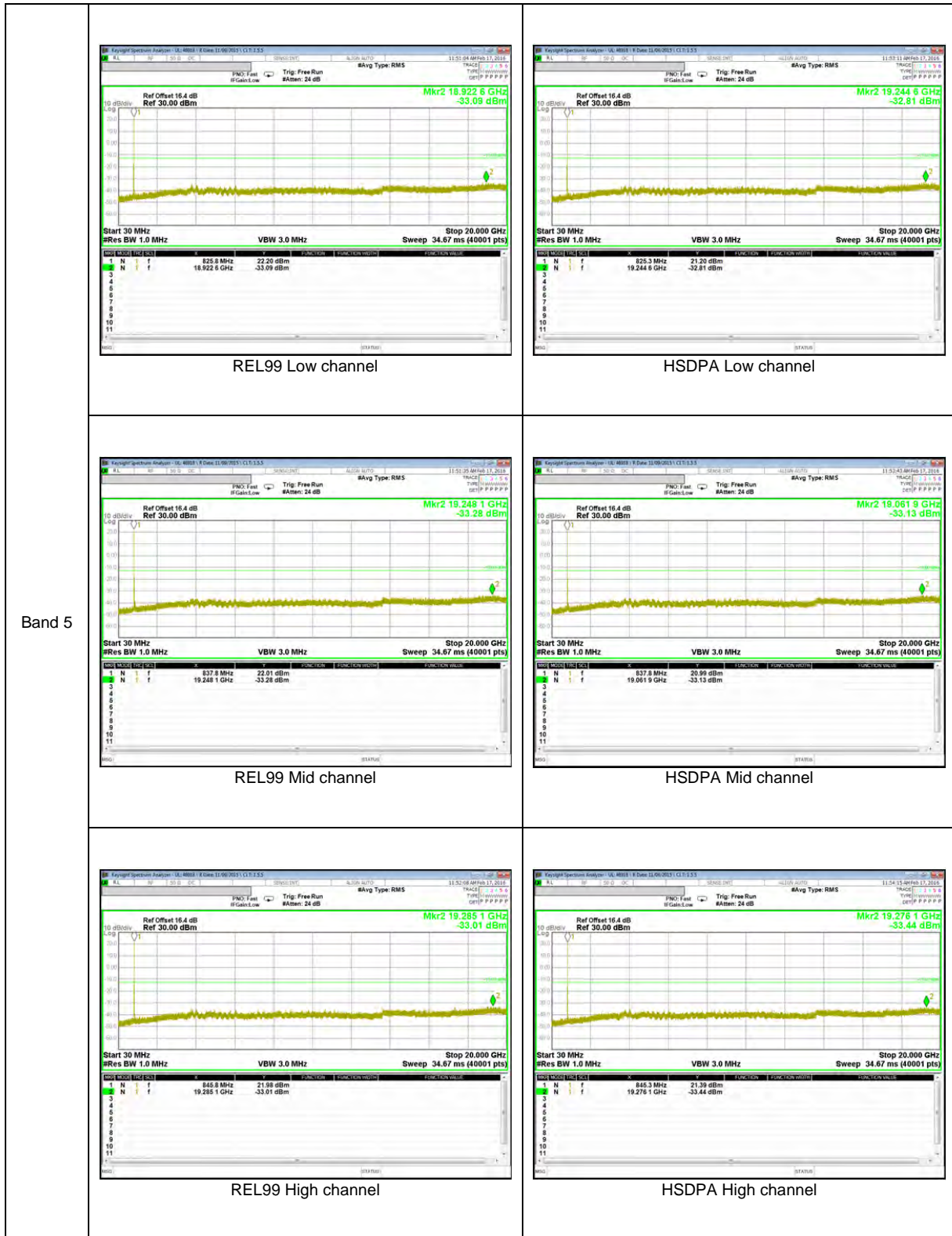
GSM 850



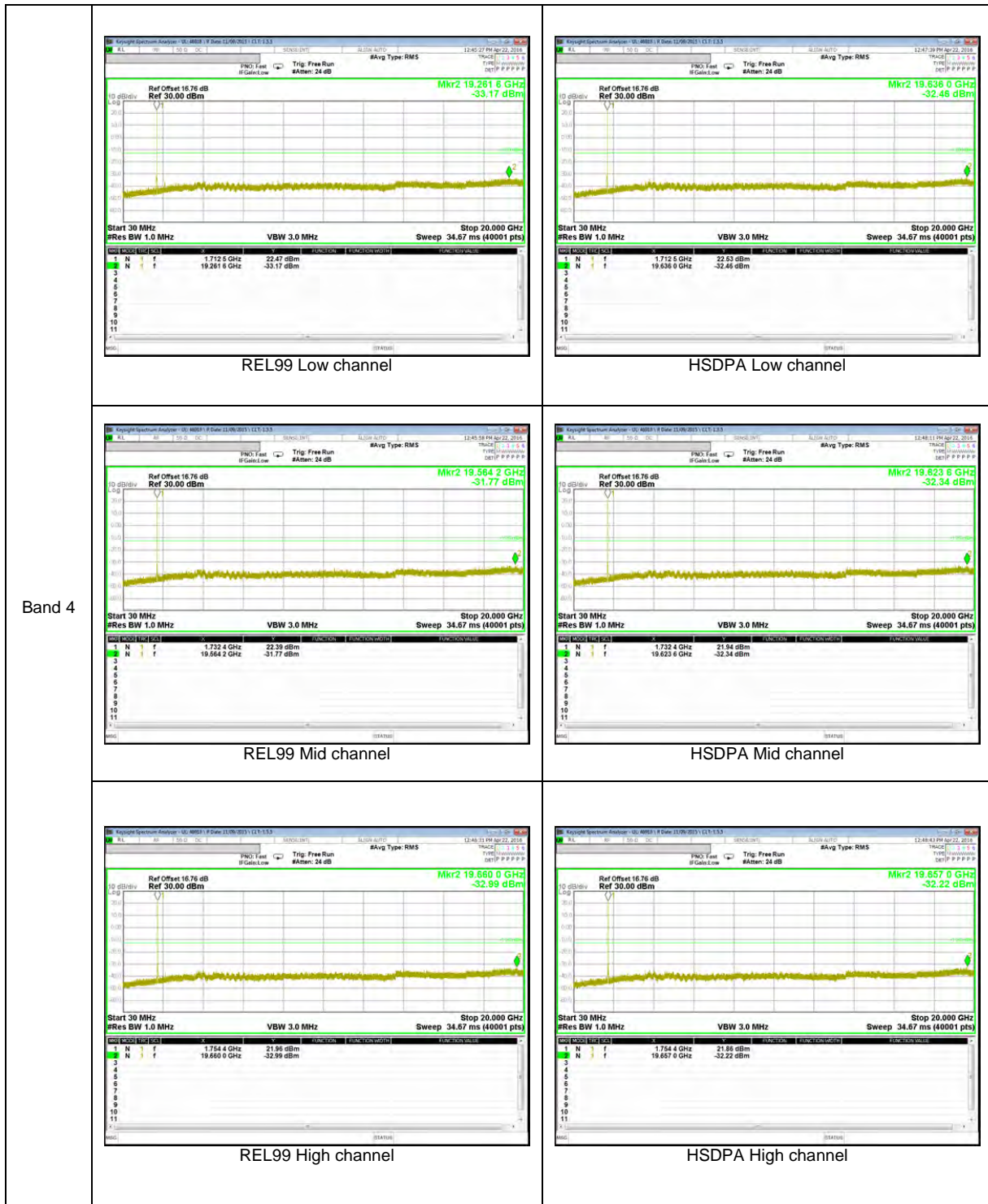
GSM 1900



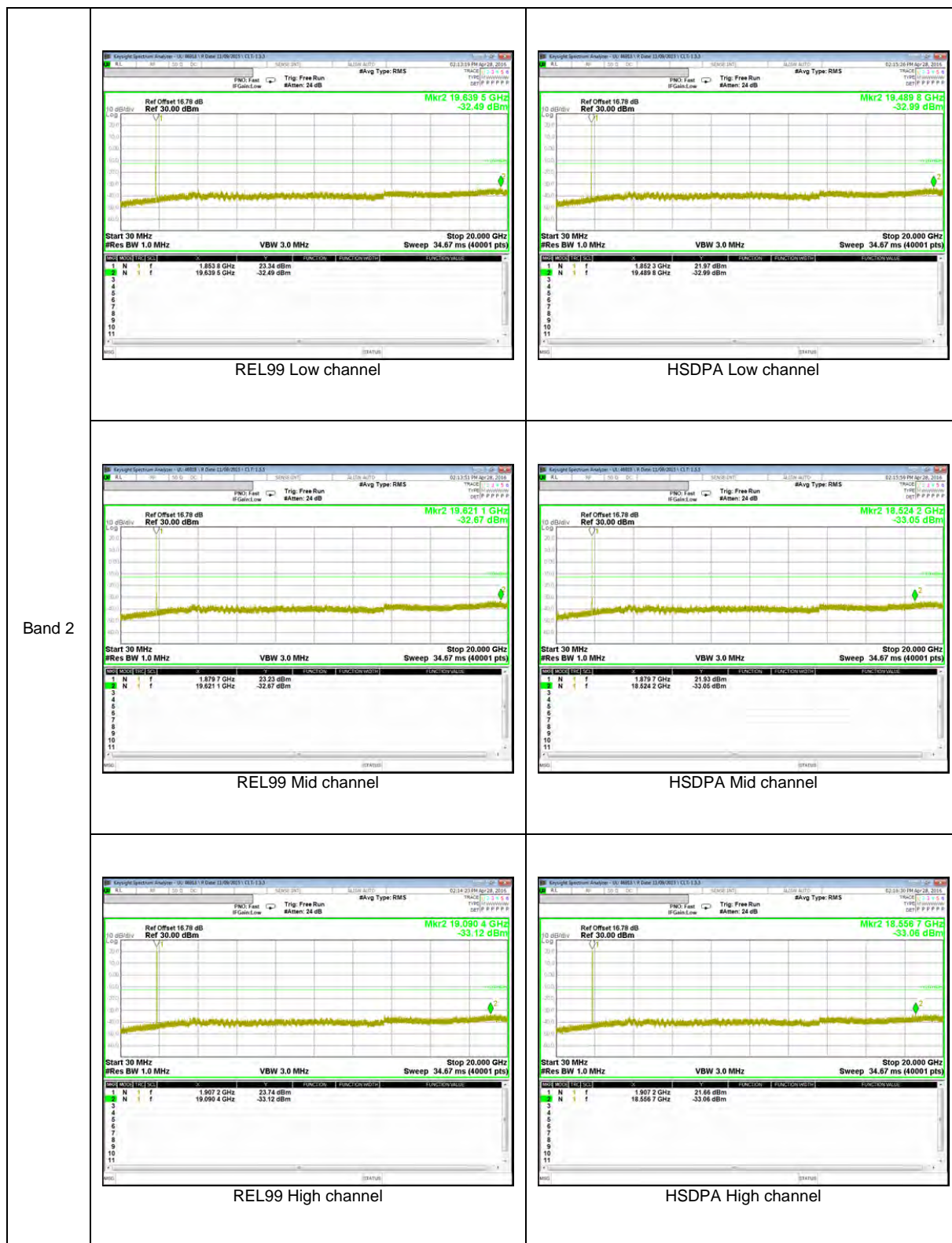
WCDMA B5



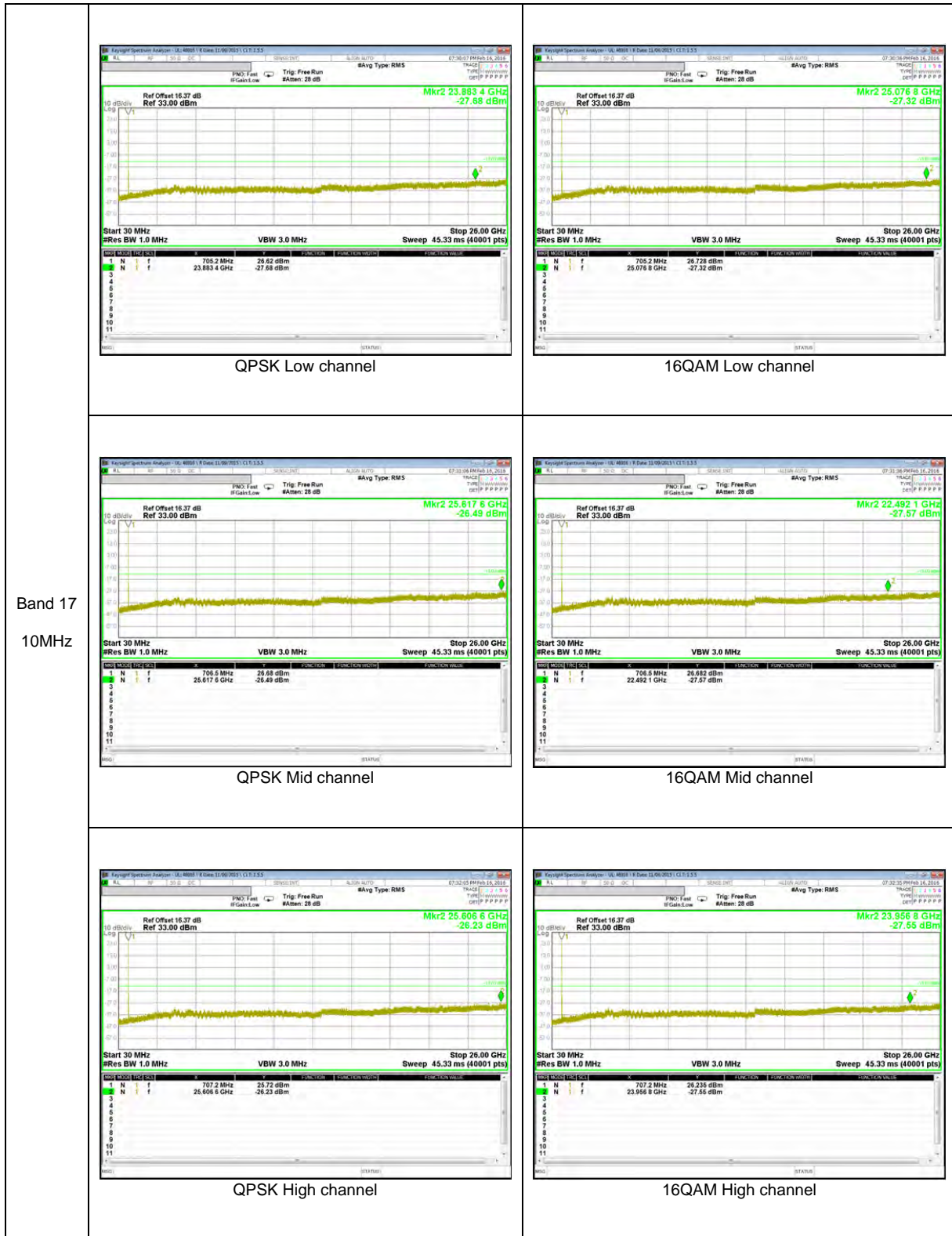
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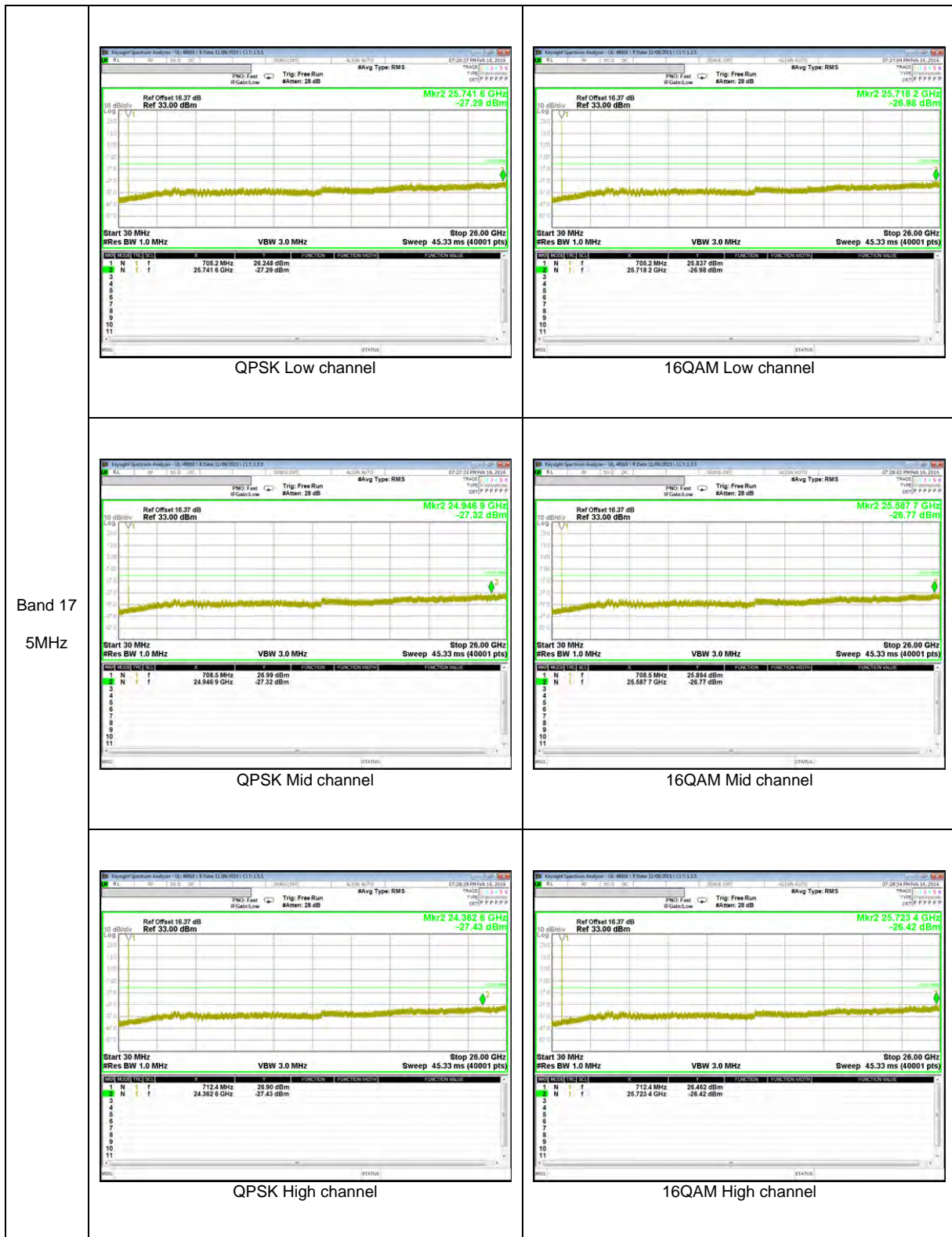


WCDMA B2

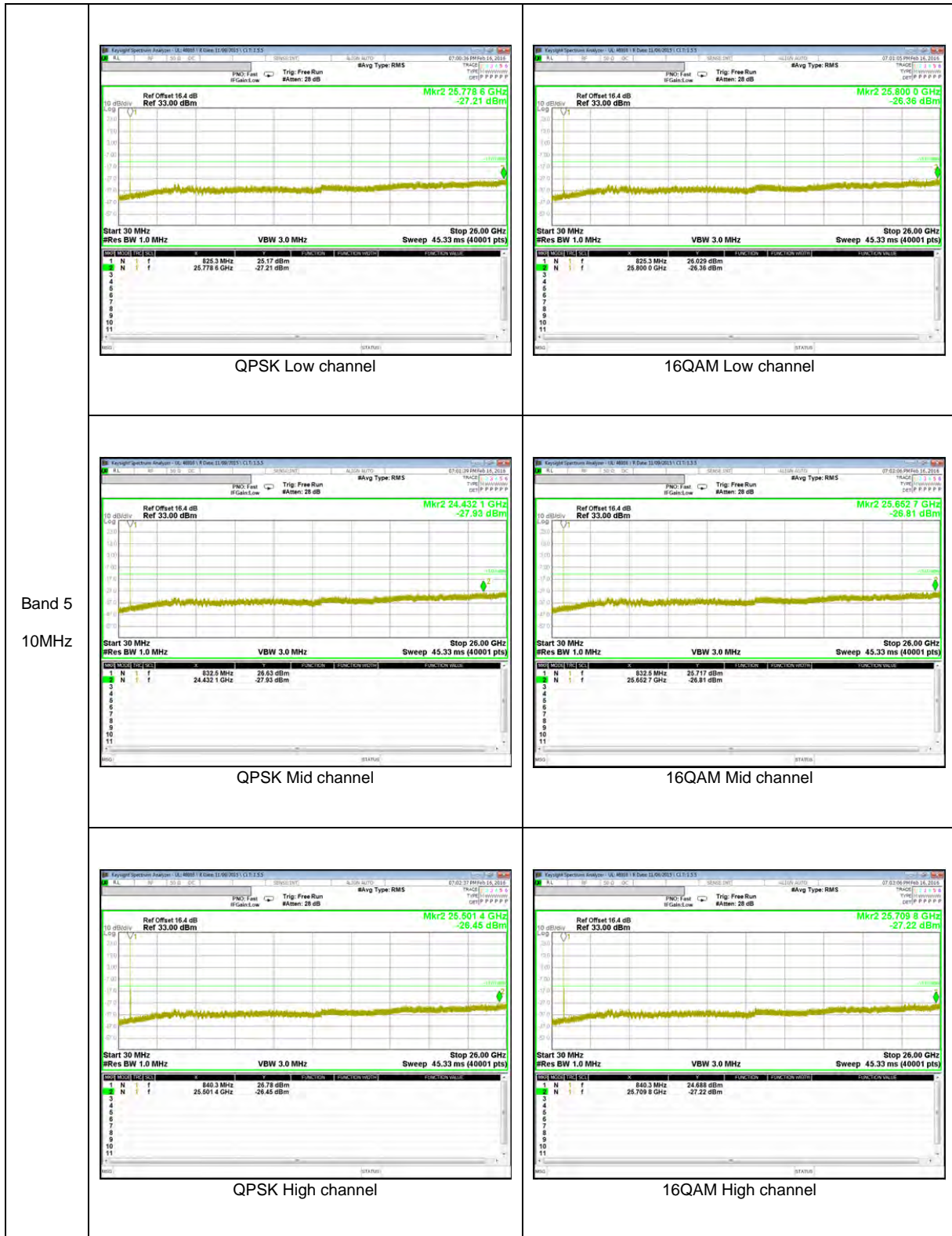


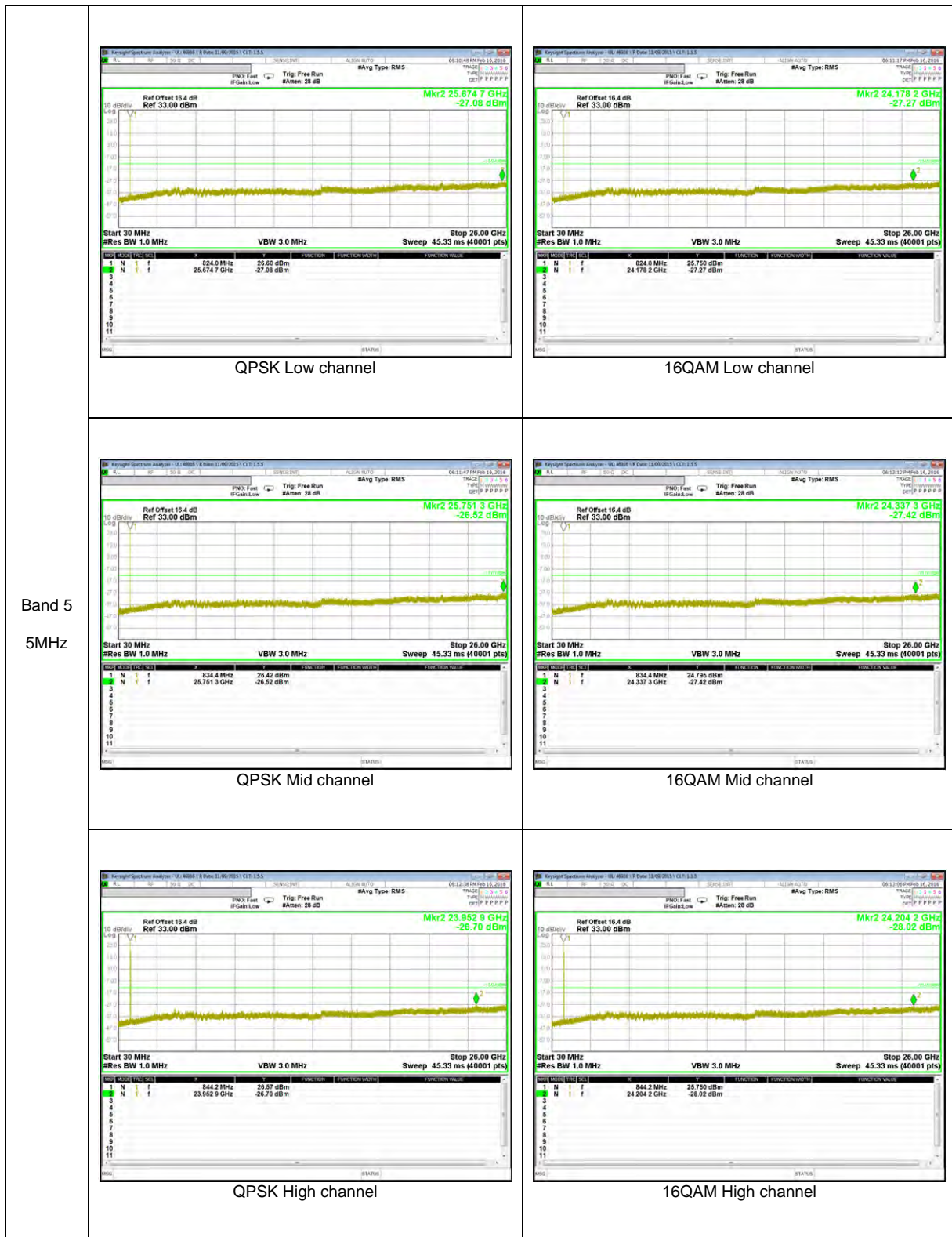
LTE Band 17

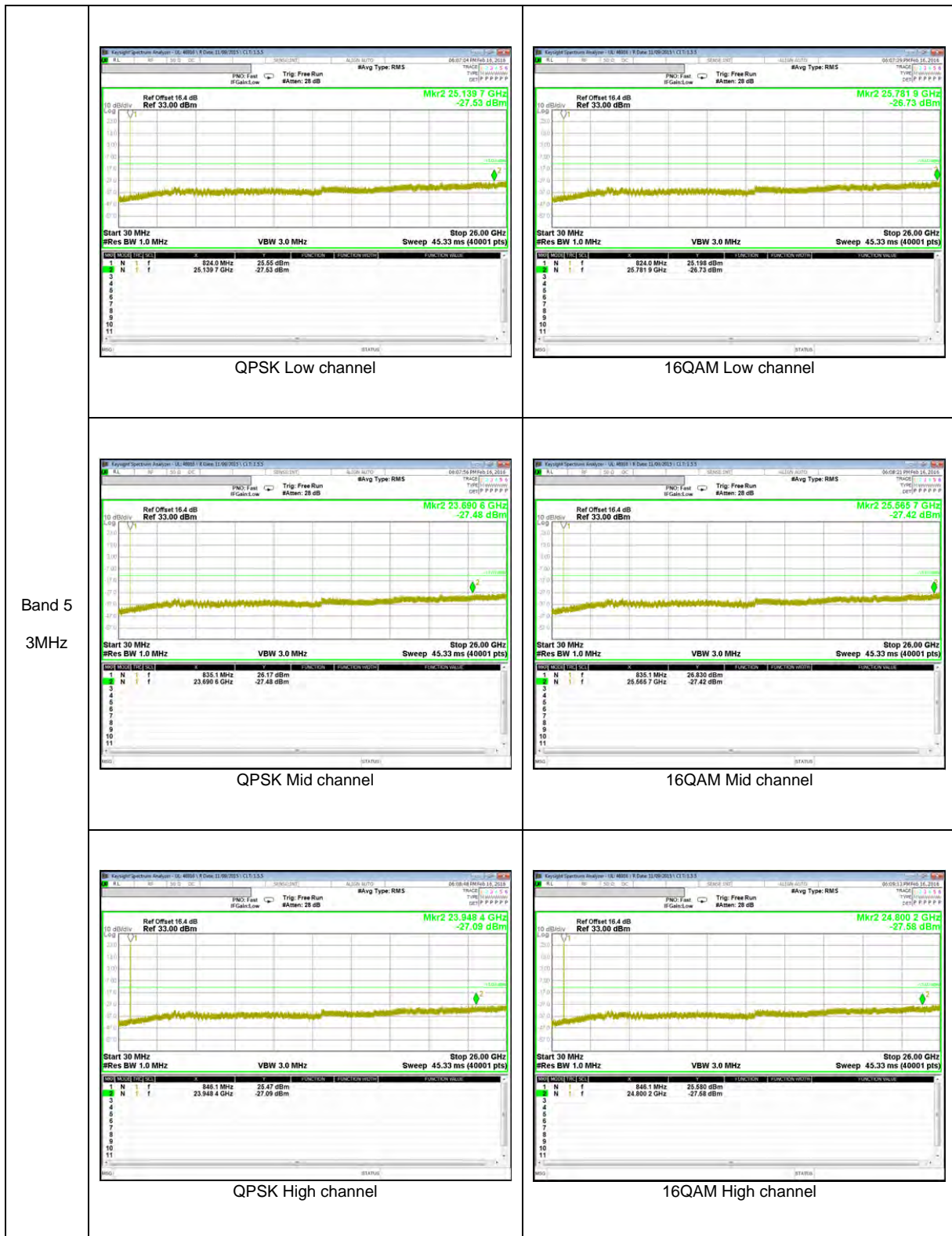


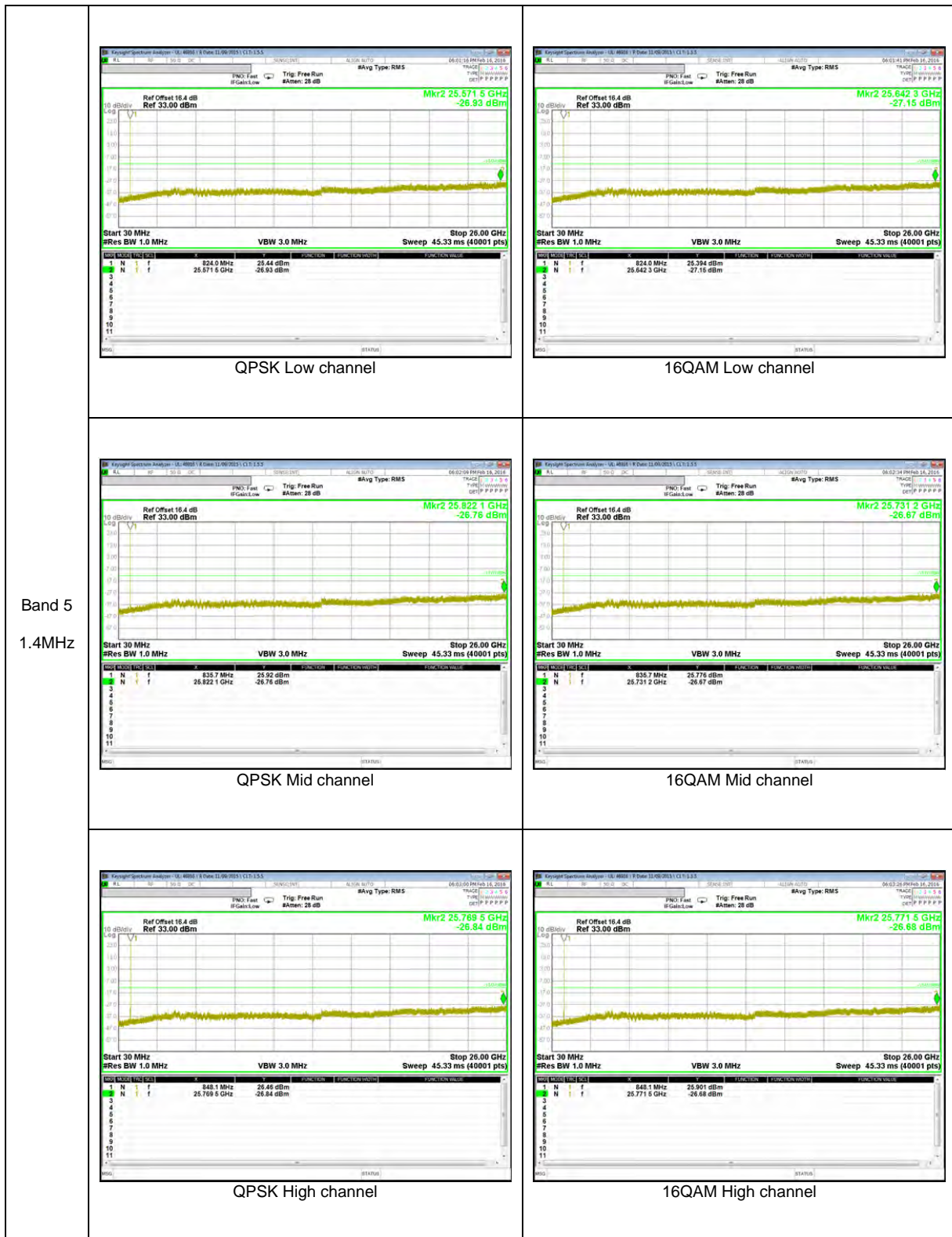


LTE Band 5

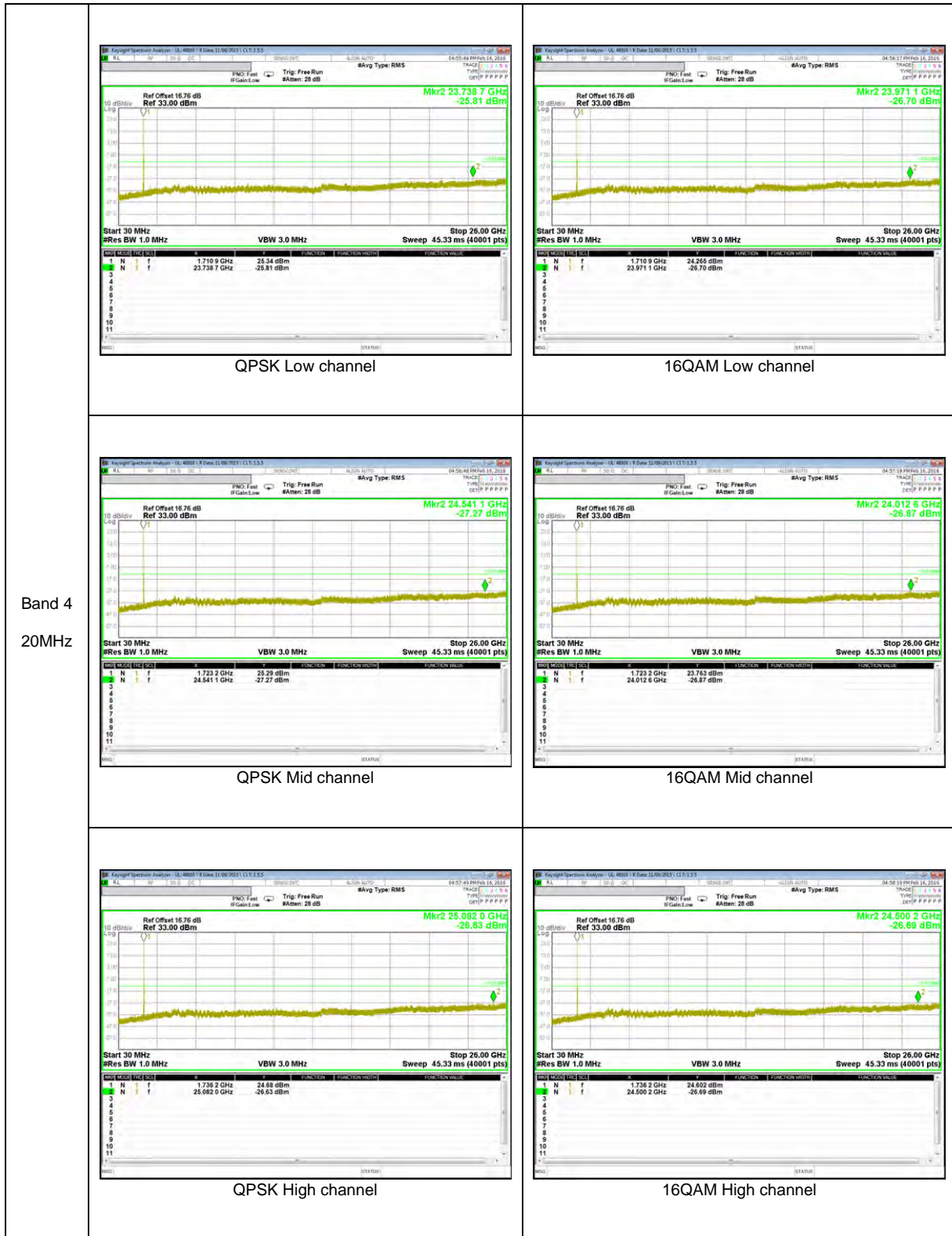


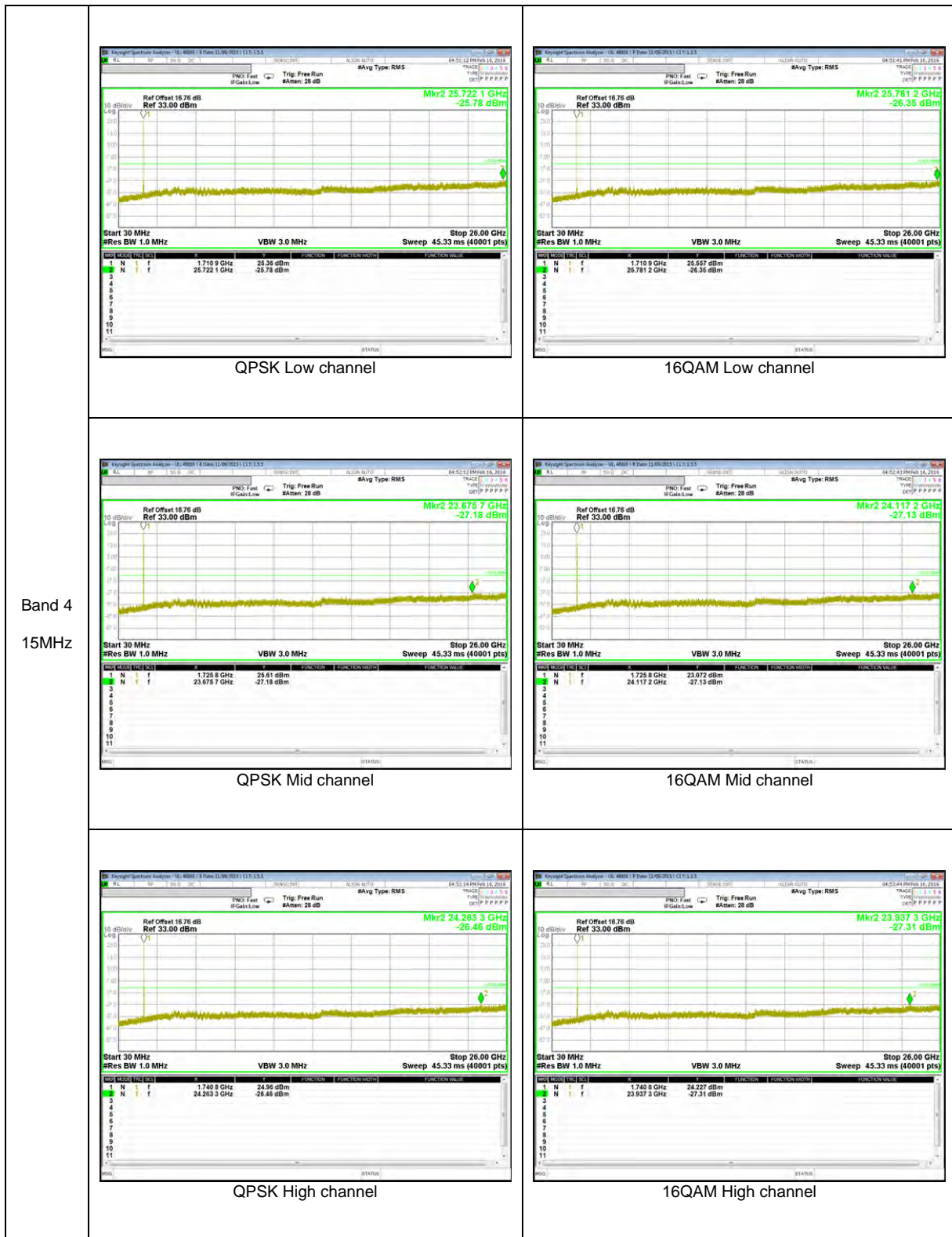


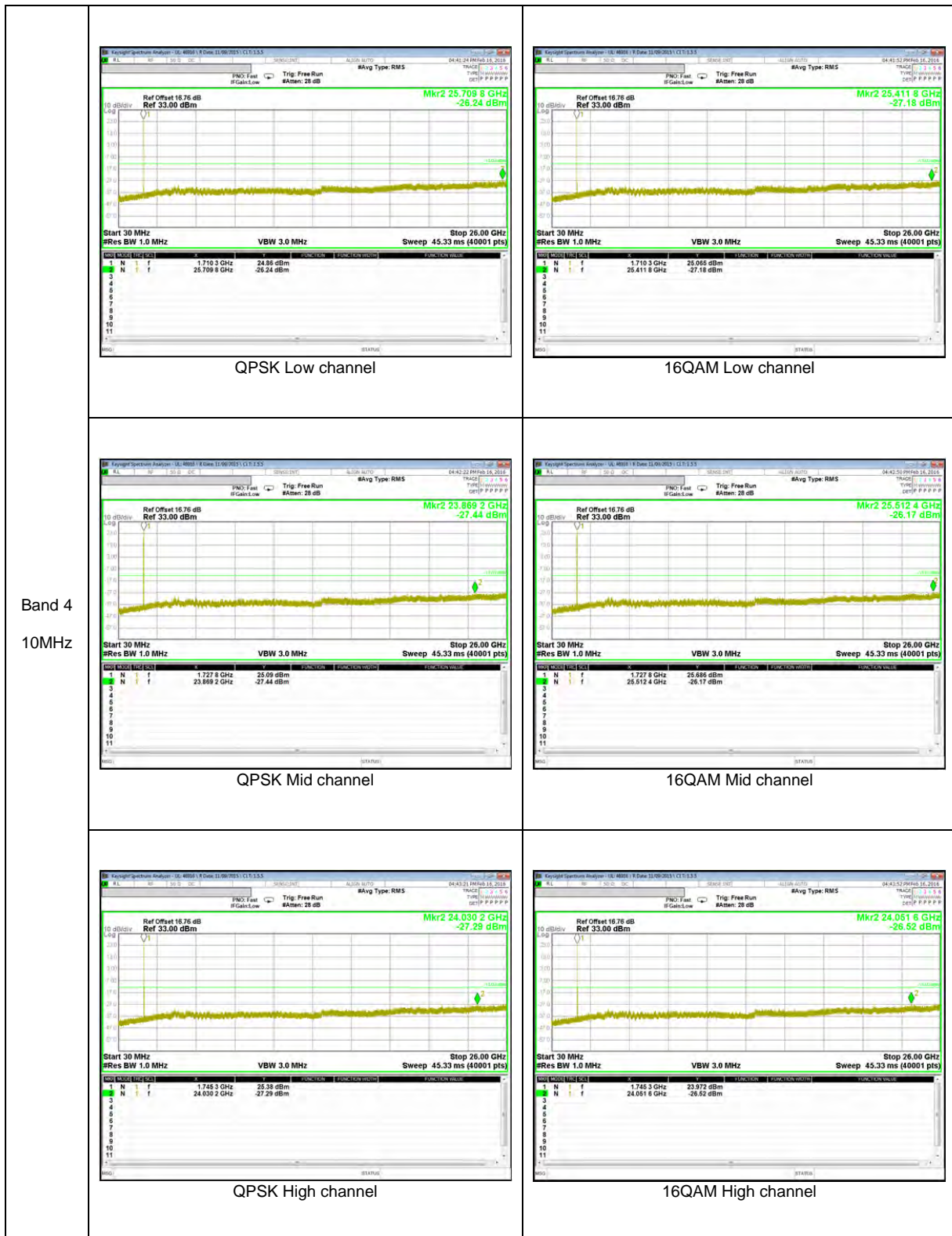


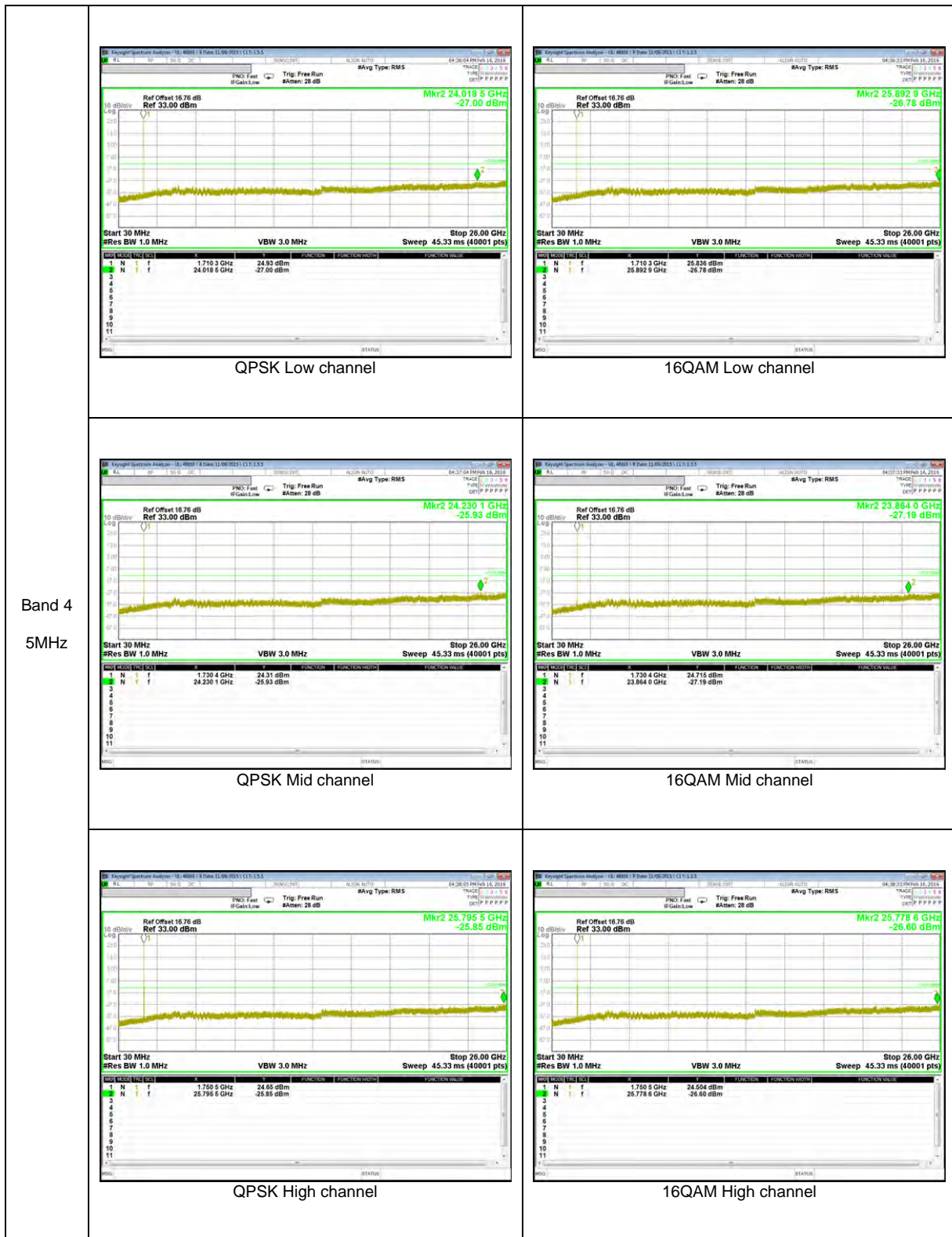


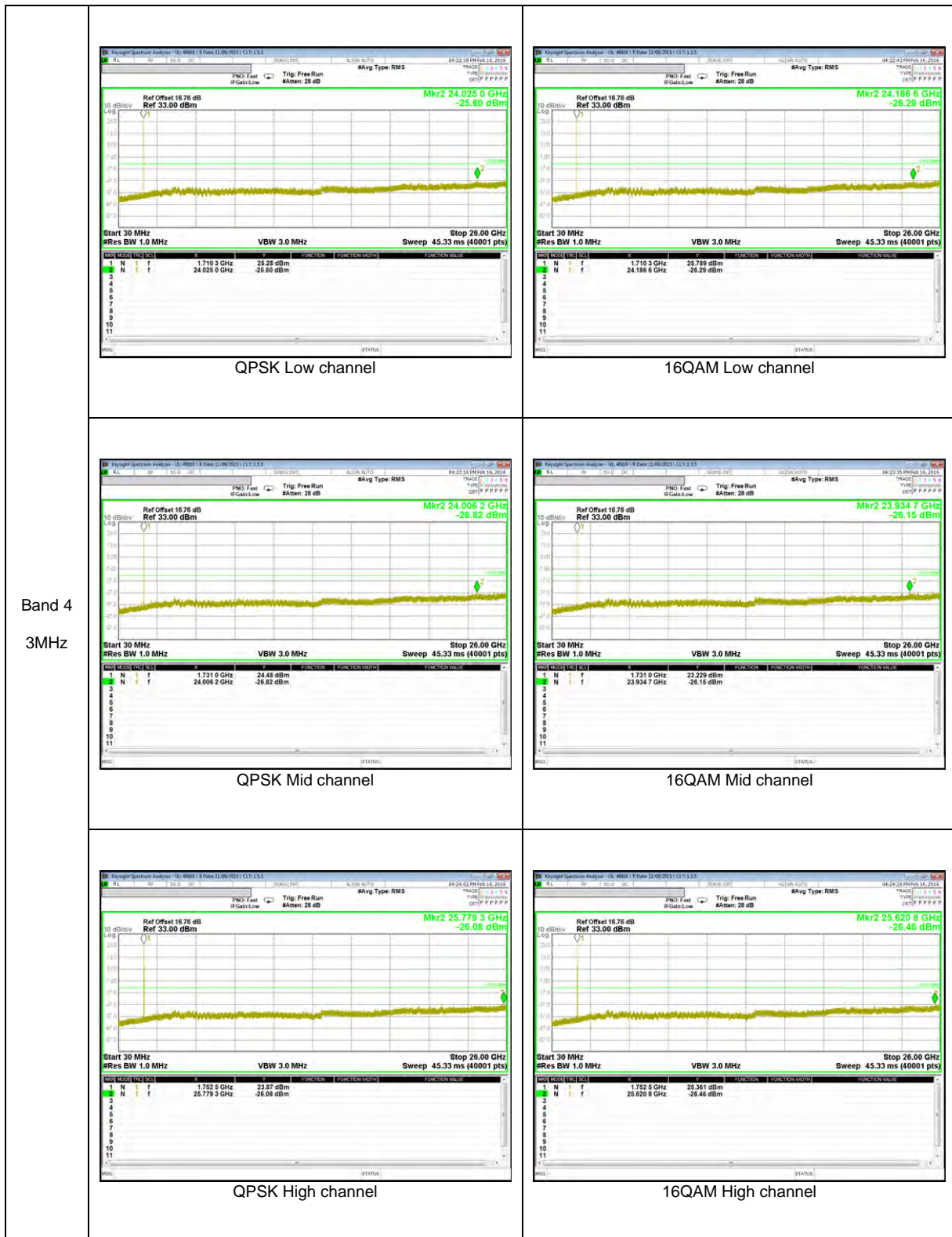
LTE Band 4

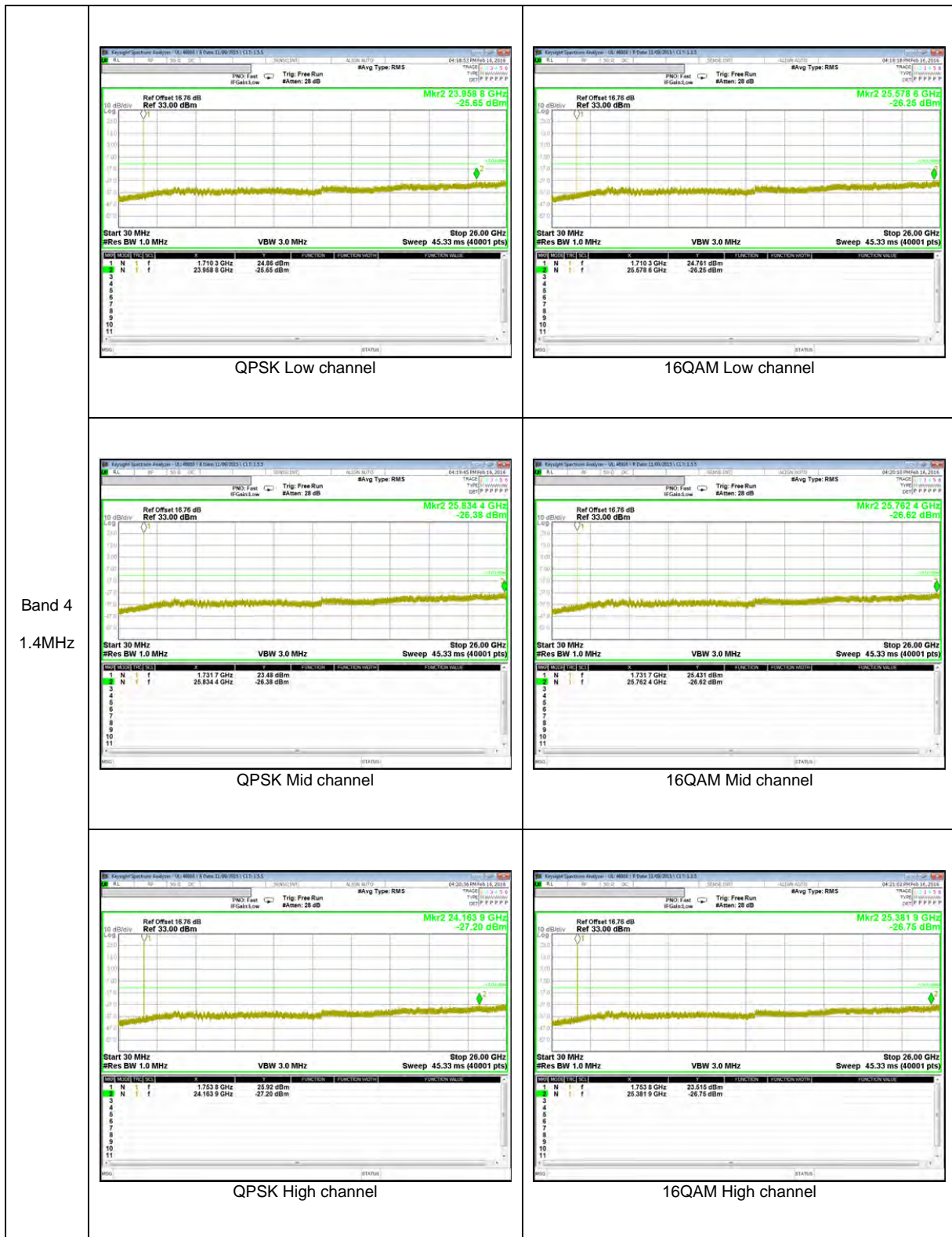




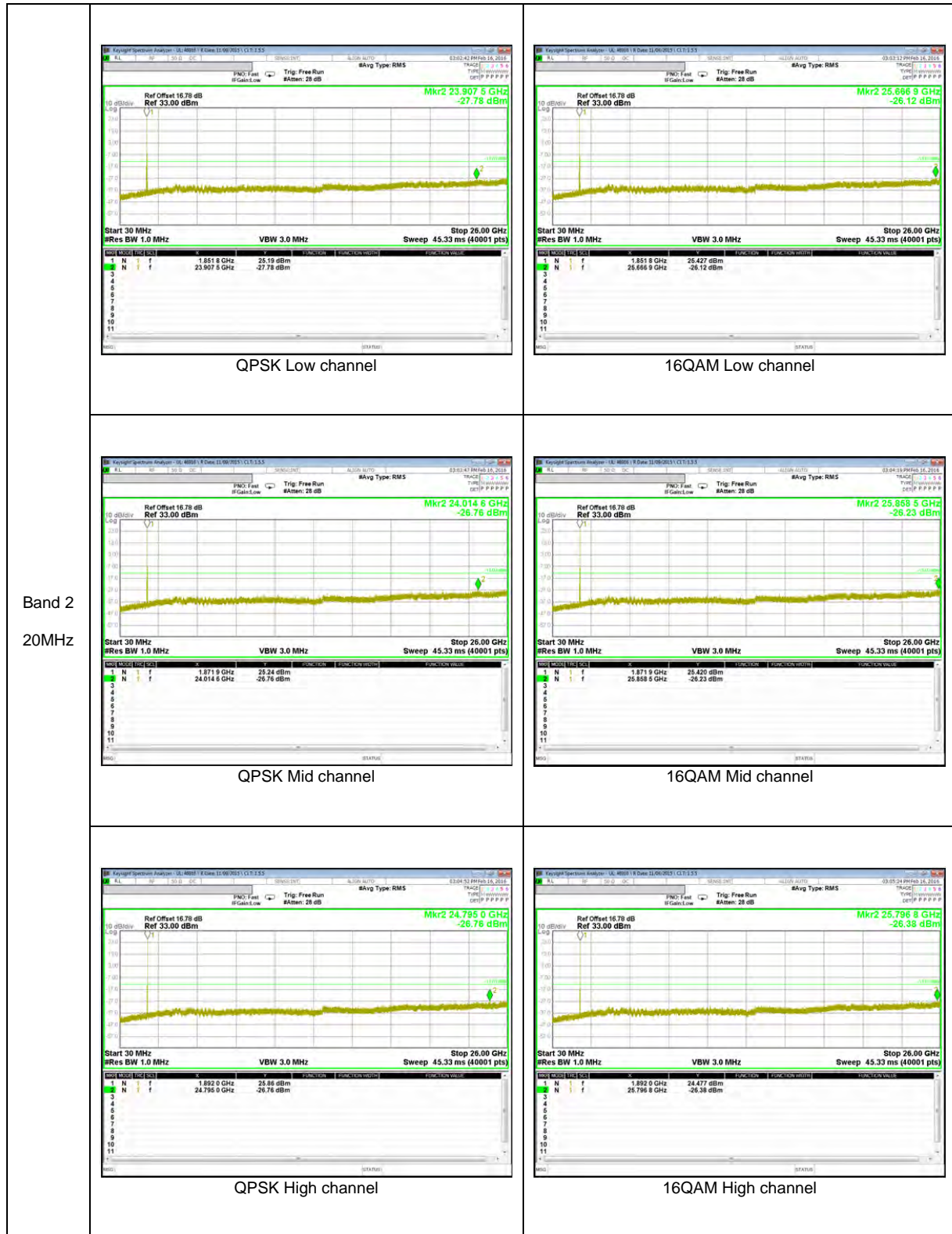


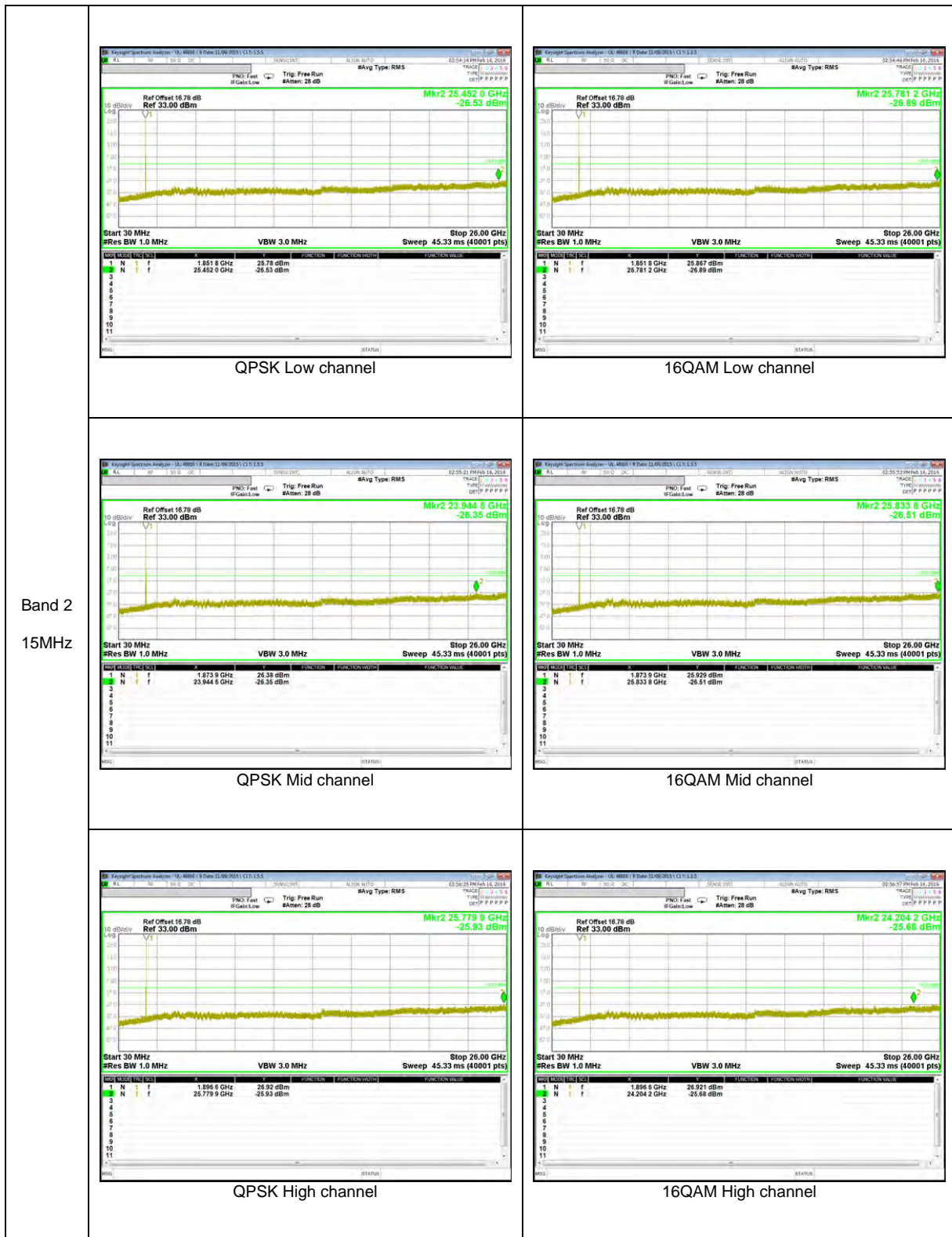


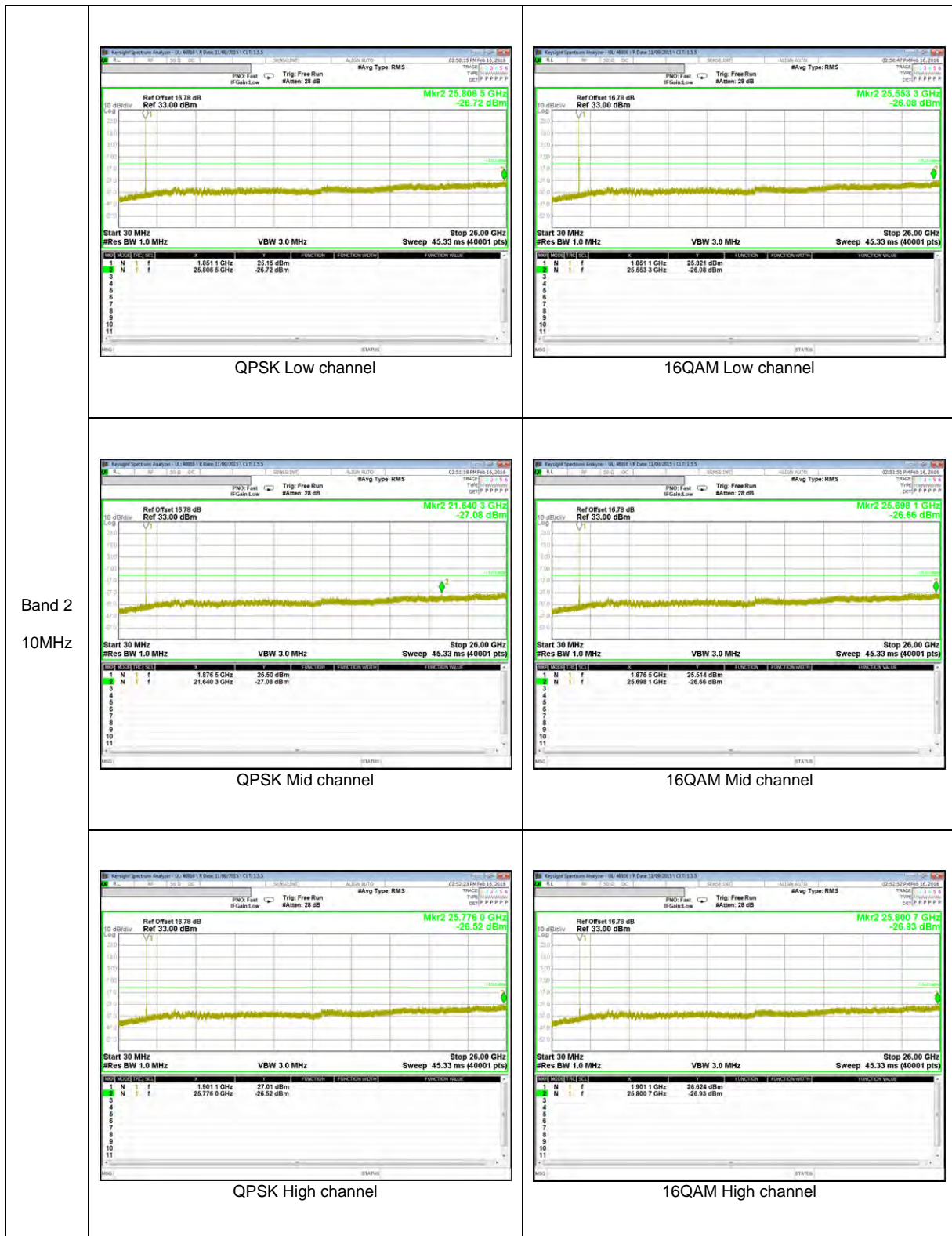


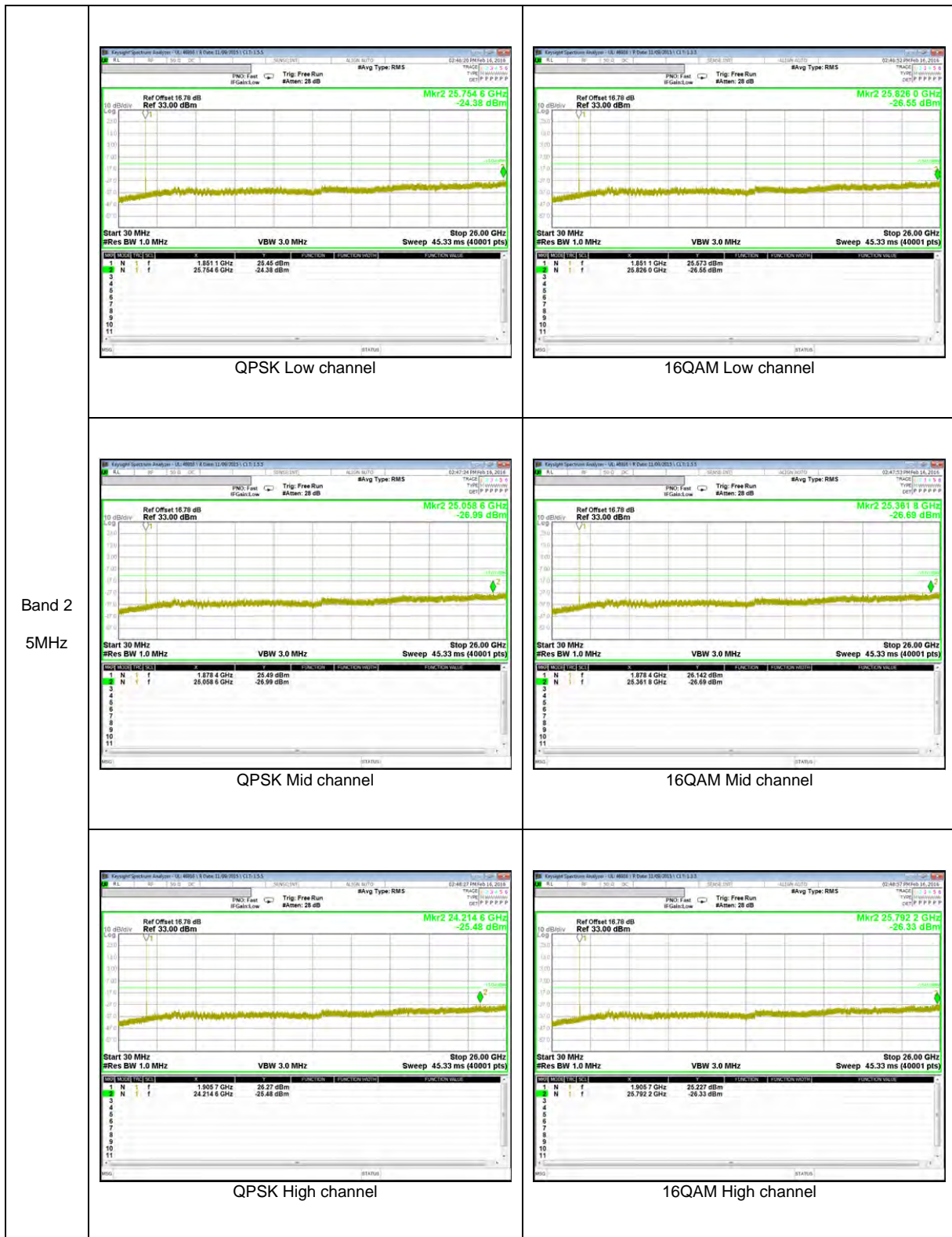


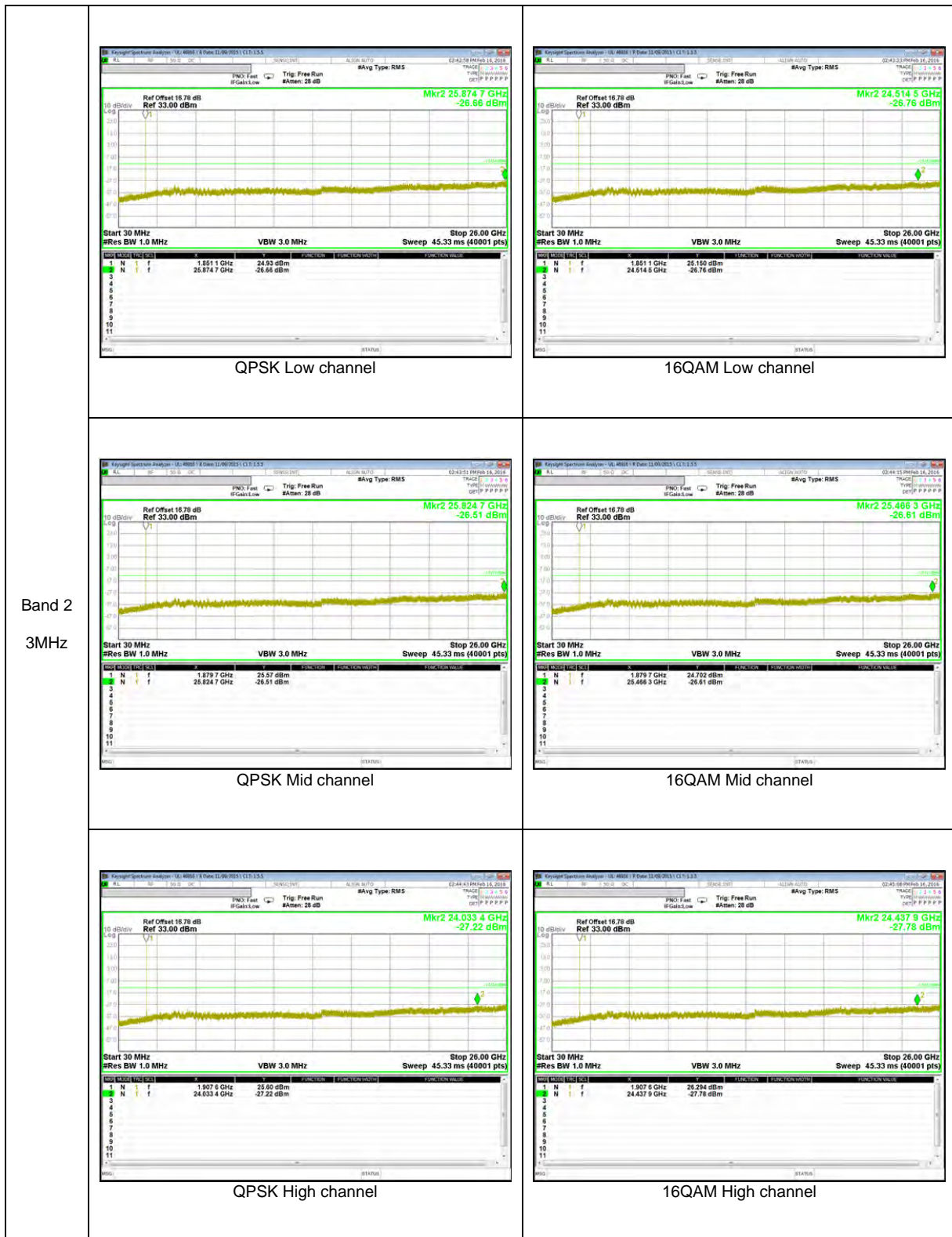
LTE Band 2



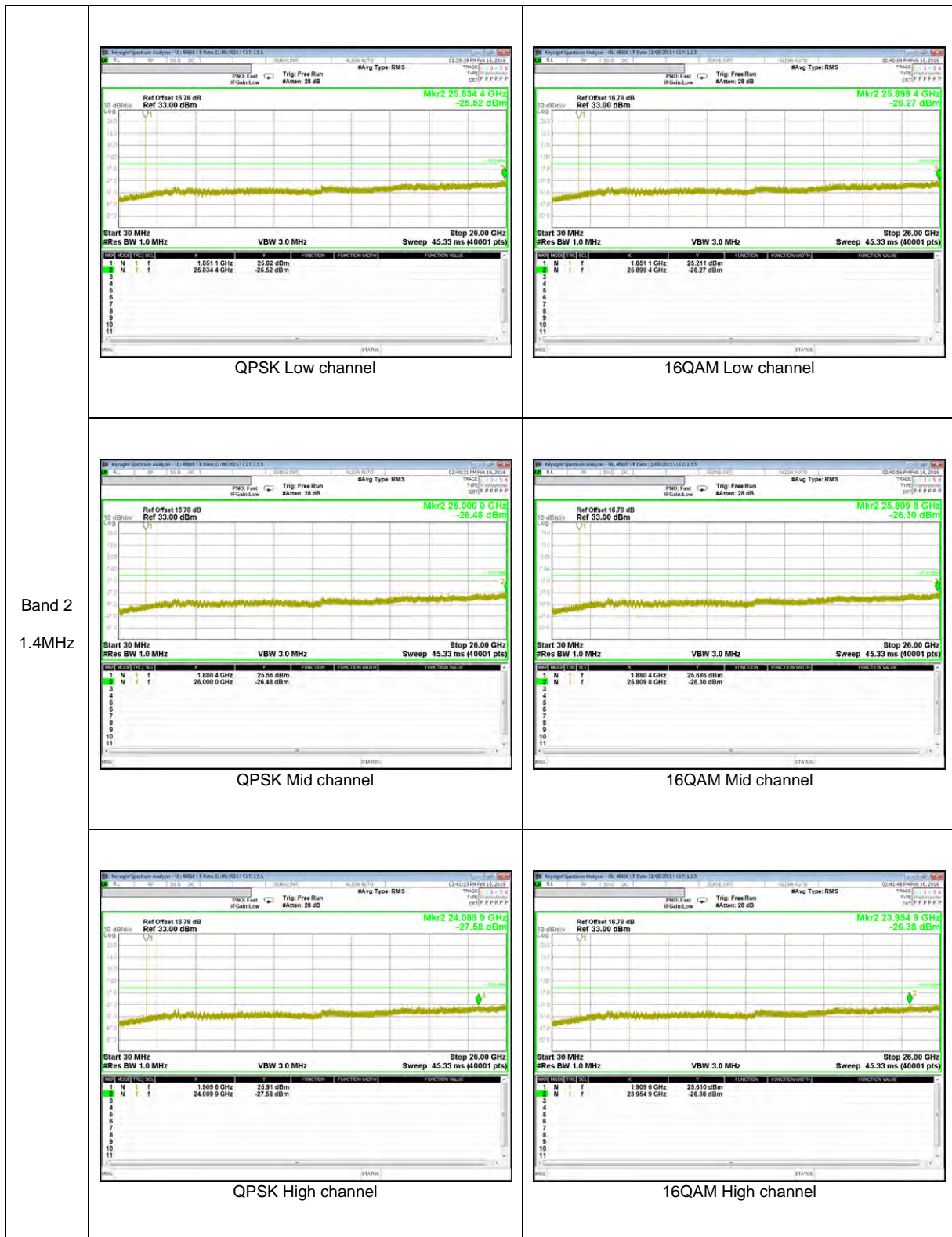








Band 2
 3MHz



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 17, Channel 23790, Frequency 710.0 MHz

Reference Frequency: LTE Band 17 Mid Channel 710.0 MHz @ 20°C				
Limit: +/- 2.5 ppm = 1775.000 Hz				
Power Supply [Vdc]	Environment Temperature [°C]	Frequency Deviation Measured with Time Elapse		
		[MHz]	Delta [ppm]	Limit [ppm]
3.80	50	709.99999720	0.001	2.5
3.80	40	709.99999744	0.000	2.5
3.80	30	709.99999761	0.000	2.5
3.80	20	709.99999758	0	2.5
3.80	10	709.99999648	0.002	2.5
3.80	0	709.99999511	0.003	2.5
3.80	-10	709.99999734	0.000	2.5
3.80	-20	709.99999754	0.000	2.5
3.80	-30	709.99999678	0.001	2.5

Reference Frequency: LTE Band 17 Mid Channel 710.0 MHz @ 20°C				
Limit: +/- 2.5 ppm = 1775.000 Hz				
Power Supply [Vdc]	Environment Temperature [°C]	Frequency Deviation Measured with Time Elapse		
		[MHz]	Delta [ppm]	Limit [ppm]
3.85	20	709.99999758	0	2.5
4.20	20	709.99999733	0.000	2.5
3.40	20	709.99999721	0.001	2.5

LTE Band 5, Channel 20524, Frequency 836.5 MHz

WCDMA Band 5, Channel 4183, Frequency 836.6 MHz

GSM 850, Channel 190, Frequency 836.6 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]
3.80	50	836.5000246	-0.006	2.5
3.80	40	836.5000196	-0.006	2.5
3.80	30	836.49999640	0.001	2.5
3.80	20	836.49999718	0	2.5
3.80	10	836.49999651	0.001	2.5
3.80	0	836.49999502	0.003	2.5
3.80	-10	836.49999729	0.000	2.5
3.80	-20	836.49999648	0.001	2.5
3.80	-30	836.49999657	0.001	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	836.49999718	0	2.5
4.20	20	836.49999692	0.000	2.5
3.40	20	836.49999721	0.000	2.5

LTE Band 4, Channel 20174, Frequency 1732.5 MHz

WCDMA Band 4, Channel 1413, Frequency 1732.6 MHz

Reference Frequency: LTE Band 4 Mid Channel 1732.5 MHz @ 20°C				
Limit: +/- 2.5 ppm = 4331.250 Hz				
Power Supply [Vdc]	Environment Temperature [°C]	Frequency Deviation Measured with Time Elapse		
		[MHz]	Delta [ppm]	Limit [ppm]
3.80	50	1732.49999146	0.009	2.5
3.80	40	1732.49999260	0.009	2.5
3.80	30	1732.49998854	0.011	2.5
3.80	20	1732.50000784	0	2.5
3.80	10	1732.50000834	0.000	2.5
3.80	0	1732.49999169	0.009	2.5
3.80	-10	1732.50000875	-0.001	2.5
3.80	-20	1732.50000830	0.000	2.5
3.80	-30	1732.50001267	-0.003	2.5

Reference Frequency: LTE Band 4 Mid Channel 1732.5 MHz @ 20°C				
Limit: +/- 2.5 ppm = 4331.250 Hz				
Power Supply [Vdc]	Environment Temperature [°C]	Frequency Deviation Measured with Time Elapse		
		[MHz]	Delta [ppm]	Limit [ppm]
3.80	20	1732.50000784	0	2.5
4.20	20	1732.49998943	0.011	2.5
3.40	20	1732.49998946	0.011	2.5

LTE Band 2, Channel 18900, Frequency 1880.0 MHz

WCDMA Band 2, Channel 9400, Frequency 1880.0 MHz

GSM 1900, Channel 661, Frequency 1880.0 MHz

Reference Frequency: LTE Band 2 Mid Channel 1880.0 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]
3.80	50	1879.99999283	-0.001	2.5
3.80	40	1879.99999268	-0.001	2.5
3.80	30	1879.99999316	-0.001	2.5
3.80	20	1879.99999140	0	2.5
3.80	10	1879.99999348	-0.001	2.5
3.80	0	1879.99999201	0.000	2.5
3.80	-10	1879.99999174	0.000	2.5
3.80	-20	1879.99999235	-0.001	2.5
3.80	-30	1879.99999292	-0.001	2.5

Reference Frequency: LTE Band 2 Mid Channel 1880.0 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	1879.99999140	0	2.5
4.20	20	1879.99999293	-0.001	2.5
3.40	20	1879.99999017	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(c) - (10) Portable stations (hand-held devices) are limited to 3 watts ERP; (LTE B17)

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 x RBW; c) Set span \geq 2 x 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 x RBW; d) Set number of points in sweep \geq 2 x span / RBW; e) Sweep time = auto-couple; f) Detector = RMS (power averaging); g) Use free run trigger If burst duty cycle \geq 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

GSM

Band	Mode	Channel	f [MHz]	ERP / EIRP	
				[dBm]	[mW]
GSM850	GPRS	128	824.2	29.85	966.05
		190	836.6	28.43	696.63
		251	848.8	27.83	606.74
	EGPRS	128	824.2	26.23	419.76
		190	836.6	24.30	269.15
		251	848.8	22.66	184.50
GSM1900	GPRS	512	1850.2	31.75	1496.24
		661	1880.0	30.30	1071.52
		810	1909.8	30.50	1122.02
	EGPRS	512	1850.2	27.99	629.51
		661	1880.0	27.58	572.80
		810	1909.8	27.19	523.60

WCDMA

Band	Mode	Channel	f [MHz]	ERP / EIRP	
				[dBm]	[mW]
Band 5	REL99	4132	826.4	19.09	81.10
		4183	836.6	17.84	60.81
		4233	846.6	17.58	57.28
	HSDPA	4132	826.4	20.45	110.92
		4183	836.6	19.25	84.14
		4233	846.6	18.44	69.82
Band 4	REL99	1312	1712.4	24.42	276.69
		1413	1732.6	21.71	148.25
		1513	1752.6	21.66	146.55
	HSDPA	1312	1712.4	23.45	221.31
		1413	1732.6	22.75	188.36
		1513	1752.6	22.69	185.78
Band 2	REL99	9262	1852.4	25.35	342.77
		9400	1880.0	22.89	194.54
		9538	1907.6	22.84	192.31
	HSDPA	9262	1852.4	22.27	168.66
		9400	1880.0	20.79	119.95
		9538	1907.6	21.05	127.35

LTE Band 17

Band	BW [MHz]	Mode	RB/RB Size	f [MHz]	ERP / EIRP	
			Full RB		[dBm]	[mW]
Band 17	10	QPSK	50/0	709.0	12.92	19.59
			50/0	710.0	12.74	18.79
			50/0	711.0	12.71	18.66
		16QAM	50/0	709.0	11.95	15.67
			50/0	710.0	11.73	14.89
			50/0	711.0	11.69	14.76
	5	QPSK	25/0	706.5	12.98	19.86
			25/0	710.0	11.92	15.56
			25/0	713.5	11.52	14.19
		16QAM	25/0	706.5	12.03	15.96
			25/0	710.0	10.97	12.50
			25/0	713.5	10.49	11.19

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	20.48	111.69
			50/0	836.5	19.96	99.08
			50/0	844.0	19.50	89.13
		16QAM	50/0	829.0	19.52	89.54
			50/0	836.5	18.97	78.89
			50/0	844.0	18.48	70.47
	5	QPSK	25/0	826.5	20.27	106.41
			25/0	836.5	19.80	95.50
			25/0	846.5	18.77	75.34
		16QAM	25/0	826.5	19.33	85.70
			25/0	836.5	18.76	75.16
			25/0	846.5	18.31	67.76
	3	QPSK	15/0	825.5	20.18	104.23
			15/0	836.5	19.98	99.54
			15/0	847.5	18.61	72.61
		16QAM	15/0	825.5	19.12	81.66
			15/0	836.5	18.79	75.68
			15/0	847.5	18.15	65.31
	1.4	QPSK	6/0	824.7	20.20	104.71
			6/0	836.5	19.81	95.72
			6/0	848.3	18.36	68.55
		16QAM	6/0	824.7	19.13	81.85
			6/0	836.5	18.60	72.44
			6/0	848.3	17.82	60.53

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	18.70	74.13
			100/0	1732.5	17.97	62.66
			100/0	1745.0	17.27	53.33
		16QAM	100/0	1720.0	17.63	57.94
			100/0	1732.5	16.99	50.00
			100/0	1745.0	16.20	41.69
	15	QPSK	75/0	1717.5	18.56	71.78
			75/0	1732.5	18.76	75.16
			75/0	1747.5	18.05	63.83
		16QAM	75/0	1717.5	17.64	58.08
			75/0	1732.5	17.75	59.57
			75/0	1747.5	17.15	51.88
	10	QPSK	50/0	1715.0	19.96	99.08
			50/0	1732.5	17.96	62.52
			50/0	1750.0	16.69	46.67
		16QAM	50/0	1715.0	18.83	76.38
			50/0	1732.5	16.97	49.77
			50/0	1750.0	15.00	31.62
	5	QPSK	25/0	1712.5	20.08	101.86
			25/0	1732.5	18.18	65.77
			25/0	1752.5	18.40	69.18
		16QAM	25/0	1712.5	19.13	81.85
			25/0	1732.5	16.80	47.86
			25/0	1752.5	17.32	53.95
	3	QPSK	15/0	1711.5	20.88	122.46
			15/0	1732.5	18.24	66.68
			15/0	1753.5	17.03	50.47
		16QAM	15/0	1711.5	19.83	96.16
			15/0	1732.5	17.20	52.48
			15/0	1753.5	18.04	63.68
1.4	QPSK	6/0	1710.7	18.27	67.14	
		6/0	1732.5	17.37	54.58	
		6/0	1754.3	15.83	38.28	
	16QAM	6/0	1710.7	17.34	54.20	
		6/0	1732.5	16.43	43.95	
		6/0	1754.3	14.80	30.20	

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	20.38	109.14
			100/0	1880.0	21.04	127.06
			100/0	1900.0	21.85	153.11
		16QAM	100/0	1860.0	19.34	85.90
			100/0	1880.0	20.18	104.23
			100/0	1900.0	21.00	125.89
	15	QPSK	75/0	1857.5	20.54	113.24
			75/0	1880.0	20.75	118.85
			75/0	1902.5	20.73	118.30
		16QAM	75/0	1857.5	19.58	90.78
			75/0	1880.0	19.83	96.16
			75/0	1902.5	19.82	95.94
	10	QPSK	50/0	1955.0	20.82	120.78
			50/0	1880.0	21.13	129.72
			50/0	1905.0	21.34	136.14
		16QAM	50/0	1955.0	19.87	97.05
			50/0	1880.0	20.13	103.04
			50/0	1905.0	20.33	107.89
	5	QPSK	25/0	1852.5	20.56	113.76
			25/0	1880.0	21.04	127.06
			25/0	1907.5	19.73	93.97
		16QAM	25/0	1852.5	19.47	88.51
			25/0	1880.0	20.05	101.16
			25/0	1907.5	18.85	76.74
	3	QPSK	15/0	1815.5	21.14	130.02
			15/0	1880.0	21.21	132.13
			15/0	1908.5	19.67	92.68
		16QAM	15/0	1815.5	20.15	103.51
			15/0	1880.0	20.17	103.99
			15/0	1908.5	18.73	74.64
1.4	QPSK	6/0	1850.7	19.12	81.66	
		6/0	1880.0	20.23	105.44	
		6/0	1909.3	18.57	71.94	
	16QAM	6/0	1850.7	17.92	61.94	
		6/0	1880.0	18.78	75.51	
		6/0	1909.3	17.75	59.57	

11.1.2. ERP/EIRP DATA

GSM 850

GSM GSM850 GPRS		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2							
		f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)
GSM GSM850 GPRS		Company: Samsung Project #: 16K22867 Date: 02-26-16 Test Engineer: Steven Kim Configuration: EUT ONLY, Y Position Mode: GPRS 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.							
		Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm							
		Company: Samsung Project #: 16K22867 Date: 02-26-16 Test Engineer: Steven Kim Configuration: EUT ONLY, Y Position Mode: EGPRS 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.							
		Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm							
		Company: Samsung Project #: 16K22867 Date: 02-26-16 Test Engineer: Steven Kim Configuration: EUT ONLY, Y Position Mode: EGPRS 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.							
		Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm							
		Company: Samsung Project #: 16K22867 Date: 02-26-16 Test Engineer: Steven Kim Configuration: EUT ONLY, Y Position Mode: EGPRS 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.							
		Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm							
		Company: Samsung Project #: 16K22867 Date: 02-26-16 Test Engineer: Steven Kim Configuration: EUT ONLY, Y Position Mode: EGPRS 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.							
		Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm							
		Company: Samsung Project #: 16K22867 Date: 02-26-16 Test Engineer: Steven Kim Configuration: EUT ONLY, Y Position Mode: EGPRS 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.							
		Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm							
		Company: Samsung Project #: 16K22867 Date: 02-26-16 Test Engineer: Steven Kim Configuration: EUT ONLY, Y Position Mode: EGPRS 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.							
		Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm							

GSM 1900

GSM GSM1900 GPRS	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23303 Date: 04-26-16 Test Engineer: YH Lim Configuration: EUT ONLY, X Position Mode: GPRS 1900MHz Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
	Low Ch								
	1850.20	20.3	V	1.60	8.80	27.54	33.0	-5.5	
	1850.20	24.6	H	1.60	8.80	31.75	33.0	-1.3	
	Mid Ch								
	1880.00	20.8	V	1.62	8.62	27.82	33.0	-5.2	
	1880.00	23.3	H	1.62	8.62	30.30	33.0	-2.7	
	High Ch								
	1909.80	20.8	V	1.63	8.44	27.63	33.0	-5.4	
	1909.80	23.7	H	1.63	8.44	30.50	33.0	-2.5	
	Rev. 3.17.11								
GSM GSM1900 EGPRS	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23303 Date: 04-26-16 Test Engineer: YH Lim Configuration: EUT ONLY, X Position Mode: EGPRS 1900MHz Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
	Low Ch								
	1850.20	14.4	V	1.60	8.80	21.58	33.0	-11.4	
	1850.20	20.8	H	1.60	8.80	27.99	33.0	-5.0	
	Mid Ch								
	1880.00	19.0	V	1.62	8.62	25.99	33.0	-7.0	
	1880.00	20.6	H	1.62	8.62	27.58	33.0	-5.4	
	High Ch								
	1909.80	17.5	V	1.63	8.44	24.26	33.0	-8.7	
	1909.80	20.4	H	1.63	8.44	27.19	33.0	-5.8	
	Rev. 3.17.11								

WCDMA B5

		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
		Company: Samsung		Project #: 16K22867		Date: 02-26-16		Test Engineer: Steven Kim		
WCDMA Band 5 REL99		Configuration: EUT ONLY, Y 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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch		826.40	21.70	V	1.1	-1.5	19.09	38.5	-19.4	
		826.40	12.80	H	1.1	-1.5	10.19	38.5	-28.3	
Mid Ch		836.60	20.33	V	1.1	-1.4	17.84	38.5	-20.6	
		836.60	12.39	H	1.1	-1.4	9.90	38.5	-28.6	
High Ch		846.60	19.96	V	1.1	-1.3	17.58	38.5	-20.9	
		846.60	13.87	H	1.1	-1.3	11.49	38.5	-27.0	
		Rev. 3.17.11								

		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
		Company: Samsung		Project #: 16K22867		Date: 02-26-16		Test Engineer: Steven Kim		
WCDMA Band 5 HSDPA		Configuration: EUT ONLY, Y 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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch		826.40	23.06	V	1.1	-1.5	20.45	38.5	-18.0	
		826.40	13.59	H	1.1	-1.5	10.98	38.5	-27.5	
Mid Ch		836.60	21.74	V	1.1	-1.4	19.25	38.5	-19.2	
		836.60	12.92	H	1.1	-1.4	10.43	38.5	-28.0	
High Ch		846.60	20.82	V	1.1	-1.3	18.44	38.5	-20.0	
		846.60	14.11	H	1.1	-1.3	11.73	38.5	-26.7	
		Rev. 3.17.11								

WCDMA B4

WCDMA Band 4 REL99		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2							
		f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
WCDMA Band 4 REL99		Company: Samsung Project #: 16K23303 Date: 04-20-16 Test Engineer: Steven Kim Configuration: EUT ONLY, Z Position Mode: Rel 99_1700 MHz Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse							
		Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm							
		Company: Samsung Project #: 16K23303 Date: 04-20-16 Test Engineer: Steven Kim Configuration: EUT ONLY, Z Position Mode: HSDPA_1700 MHz Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse							
		Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm							
		Company: Samsung Project #: 16K23303 Date: 04-20-16 Test Engineer: Steven Kim Configuration: EUT ONLY, Z Position Mode: Rel 99_1700 MHz Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse							
		Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm							
		Company: Samsung Project #: 16K23303 Date: 04-20-16 Test Engineer: Steven Kim Configuration: EUT ONLY, Z Position Mode: HSDPA_1700 MHz Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse							
		Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm							
		Company: Samsung Project #: 16K23303 Date: 04-20-16 Test Engineer: Steven Kim Configuration: EUT ONLY, Z Position Mode: Rel 99_1700 MHz Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse							
		Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm							
		Company: Samsung Project #: 16K23303 Date: 04-20-16 Test Engineer: Steven Kim Configuration: EUT ONLY, Z Position Mode: HSDPA_1700 MHz Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse							
		Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm							
		Company: Samsung Project #: 16K23303 Date: 04-20-16 Test Engineer: Steven Kim Configuration: EUT ONLY, Z Position Mode: HSDPA_1700 MHz Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse							
		Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm							

WCDMA B2

WCDMA Band 2 REL99		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2									
		Company: Samsung Project #: 16K23303 Date: 04-26-16 Test Engineer: YH Lim Configuration: EUT ONLY, X Position Mode: REL99_1900 MHz 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									
		1852.40	14.04	V	1.60	8.79	21.23	33.0	-11.8		
		1852.40	18.16	H	1.60	8.79	25.35	33.0	-7.7		
		Mid Ch									
		1880.00	14.00	V	1.62	8.62	21.00	33.0	-12.0		
		1880.00	15.89	H	1.62	8.62	22.89	33.0	-10.1		
		High Ch									
		1907.60	13.92	V	1.63	8.45	20.74	33.0	-12.3		
		1907.60	16.02	H	1.63	8.45	22.84	33.0	-10.2		
		Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									
WCDMA Band 2 HSDPA		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2									
		Company: Samsung Project #: 16K23303 Date: 04-26-16 Test Engineer: YH Lim Configuration: EUT ONLY, X Position Mode: HSDPA_1900 MHz 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									
		1852.40	11.12	V	1.60	8.79	18.31	33.0	-14.7		
		1852.40	15.08	H	1.60	8.79	22.27	33.0	-10.7		
		Mid Ch									
		1880.00	13.57	V	1.62	8.62	20.57	33.0	-12.4		
		1880.00	13.79	H	1.62	8.62	20.79	33.0	-12.2		
		High Ch									
		1907.60	13.03	V	1.63	8.45	19.85	33.0	-13.1		
		1907.60	14.23	H	1.63	8.45	21.05	33.0	-11.9		
		Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									

LTE Band 17

		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
LTE Band 17 10MHz QPSK	Company: Samsung Project #: 16K22867 Date: 03-05-16 Test Engineer: Steven.Kim Configuration: EUT / Y-Position Mode: LTE Band 17, QPSK, 10MHz									
	Test Equipment: Receiving: VULB9163-750, 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)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes	
	Low Ch									
	709.00	15.52	V	1.0	-1.6	12.92	34.8	-21.9		
	709.00	9.22	H	1.0	-1.6	6.62	34.8	-28.2		
	Mid Ch									
	710.00	15.34	V	1.0	-1.6	12.74	34.8	-22.0		
	710.00	9.18	H	1.0	-1.6	6.58	34.8	-28.2		
	High Ch									
	711.00	15.31	V	1.0	-1.6	12.71	34.8	-22.1		
	711.00	9.18	H	1.0	-1.6	6.58	34.8	-28.2		
	Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm									
	LTE Band 17 10MHz 16QAM	Company: Samsung Project #: 16K22867 Date: 03-05-16 Test Engineer: Steven.Kim Configuration: EUT / Y-Position Mode: LTE Band 17 16QAM, 10MHz								
Test Equipment: Receiving: VULB9163-750, 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)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes	
Low Ch										
709.00		14.55	V	1.0	-1.6	11.95	34.8	-22.8		
709.00		10.18	H	1.0	-1.6	7.58	34.8	-27.2		
Mid Ch										
710.00		14.33	V	1.0	-1.6	11.73	34.8	-23.0		
710.00		10.15	H	1.0	-1.6	7.55	34.8	-27.2		
High Ch										
711.00		14.29	V	1.0	-1.6	11.69	34.8	-23.1		
711.00		10.13	H	1.0	-1.6	7.53	34.8	-27.2		
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 17 5MHz QPSK	Company: Samsung Project #: 16K22867 Date: 03-05-16 Test Engineer: Steven.Kim Configuration: EUT / Y-Position Mode: LTE Band 17, QPSK , 5MHz Test Equipment: Receiving: VULB9163-750, 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)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes	
	Low Ch									
	706.50	15.58	V	1.0	-1.6	12.98	34.8	-21.8		
	706.50	10.04	H	1.0	-1.6	7.44	34.8	-27.3		
	Mid Ch									
	710.00	14.52	V	1.0	-1.6	11.92	34.8	-22.9		
	710.00	9.60	H	1.0	-1.6	7.00	34.8	-27.8		
	High Ch									
	713.50	14.12	V	1.0	-1.6	11.52	34.8	-23.3		
	713.50	9.81	H	1.0	-1.6	7.21	34.8	-27.6		
	Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm									
	LTE Band 17 5MHz 16QAM	Company: Samsung Project #: 16K22867 Date: 03-05-16 Test Engineer: Steven.Kim Configuration: EUT / Y-Position Mode: LTE Band 17 16QAM, 5MHz Test Equipment: Receiving: VULB9163-750, 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)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
		Low Ch								
706.50		14.63	V	1.0	-1.6	12.03	34.8	-22.7		
706.50		9.02	H	1.0	-1.6	6.42	34.8	-28.4		
Mid Ch										
710.00		13.57	V	1.0	-1.6	10.97	34.8	-23.8		
710.00		8.53	H	1.0	-1.6	5.93	34.8	-28.8		
High Ch										
713.50		13.09	V	1.0	-1.6	10.49	34.8	-24.3		
713.50		8.75	H	1.0	-1.6	6.15	34.8	-28.6		
Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm										

LTE Band 5

		High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
LTE Band 5 10MHz QPSK	Company:		Samsung							
	Project #:		16K22867							
	Date:		03-07-16							
	Test Engineer:		Steven.Kim							
	Configuration:		EUT ONLY, Y 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	23.06	V	1.1	-1.5	20.48	38.5	-18.0		
	829.00	13.94	H	1.1	-1.5	11.36	38.5	-27.1		
	Mid Ch									
	836.50	22.45	V	1.1	-1.4	19.96	38.5	-18.5		
	836.50	13.84	H	1.1	-1.4	11.35	38.5	-27.1		
	High Ch									
844.00	21.89	V	1.1	-1.3	19.50	38.5	-19.0			
844.00	13.60	H	1.1	-1.3	11.18	38.5	-27.3			
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 10MHz 16QAM	Company:		Samsung							
	Project #:		16K22867							
	Date:		03-07-16							
	Test Engineer:		Steven.Kim							
	Configuration:		EUT ONLY, Y 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	22.10	V	1.1	-1.5	19.52	38.5	-18.9		
	829.00	12.92	H	1.1	-1.5	10.34	38.5	-28.1		
	Mid Ch									
	836.50	21.48	V	1.1	-1.4	18.97	38.5	-19.5		
	836.50	12.82	H	1.1	-1.4	10.31	38.5	-28.1		
	High Ch									
844.00	20.90	V	1.1	-1.3	18.48	38.5	-20.0			
844.00	12.62	H	1.1	-1.3	10.20	38.5	-28.2			
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 5MHz QPSK	Company:		Samsung							
	Project #:		16K22867							
	Date:		03-07-16							
	Test Engineer:		Steven.Kim							
	Configuration:		EUT ONLY, Y Position							
	Mode:		LTE5 5MHz 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 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	22.87	V	1.1	-1.5	20.27	38.5	-18.2		
	826.50	13.84	H	1.1	-1.5	11.24	38.5	-27.2		
	Mid Ch									
	836.50	22.29	V	1.1	-1.4	19.80	38.5	-18.7		
	836.50	13.67	H	1.1	-1.4	11.18	38.5	-27.3		
High Ch										
846.50	21.65	V	1.6	-1.3	18.77	38.5	-19.7			
846.50	13.86	H	1.6	-1.3	10.98	38.5	-27.5			
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 5MHz 16QAM	Company:		Samsung							
	Project #:		16K22867							
	Date:		03-07-16							
	Test Engineer:		Steven.Kim							
	Configuration:		EUT ONLY, Y Position							
	Mode:		LTE5 5MHz 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									
	826.50	21.93	V	1.1	-1.5	19.33	38.5	-19.1		
	826.50	12.82	H	1.1	-1.5	10.22	38.5	-28.2		
	Mid Ch									
	836.50	21.25	V	1.1	-1.4	18.76	38.5	-19.7		
	836.50	12.58	H	1.1	-1.4	10.09	38.5	-28.4		
High Ch										
846.50	20.69	V	1.1	-1.3	18.31	38.5	-20.1			
846.50	12.91	H	1.1	-1.3	10.53	38.5	-27.9			
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 3MHz QPSK	Company:		Samsung							
	Project #:		16K22867							
	Date:		03-07-16							
	Test Engineer:		Steven.Kim							
	Configuration:		EUT ONLY, Y Position							
	Mode:		LTE5 3MHz 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 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	22.78	V	1.1	-1.5	20.18	38.5	-18.3		
	825.50	13.72	H	1.1	-1.5	11.12	38.5	-27.3		
	Mid Ch									
	836.50	22.47	V	1.1	-1.4	19.98	38.5	-18.5		
	836.50	13.59	H	1.1	-1.4	11.10	38.5	-27.4		
High Ch										
847.50	21.49	V	1.6	-1.3	18.61	38.5	-19.8			
847.50	14.03	H	1.6	-1.3	11.15	38.5	-27.3			
Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm										
LTE Band 5 3MHz 16QAM	Company:		Samsung							
	Project #:		16K22867							
	Date:		03-07-16							
	Test Engineer:		Steven.Kim							
	Configuration:		EUT ONLY, Y Position							
	Mode:		LTE5 3MHz 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									
	825.50	21.72	V	1.1	-1.5	19.12	38.5	-19.3		
	825.50	12.71	H	1.1	-1.5	10.11	38.5	-28.3		
	Mid Ch									
	836.50	21.28	V	1.1	-1.4	18.79	38.5	-19.7		
	836.50	12.56	H	1.1	-1.4	10.07	38.5	-28.4		
High Ch										
847.50	20.53	V	1.1	-1.3	18.15	38.5	-20.3			
847.50	13.06	H	1.1	-1.3	10.68	38.5	-27.8			
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 QPSK	Company:		Samsung						
	Project #:		16K22867						
	Date:		03-07-16						
	Test Engineer:		Steven.Kim						
	Configuration:		EUT ONLY, Y 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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
	Low Ch								
	824.70	22.80	V	1.1	-1.5	20.20	38.5	-18.3	
	824.70	13.69	H	1.1	-1.5	11.09	38.5	-27.4	
	Mid Ch								
	836.50	22.30	V	1.1	-1.4	19.81	38.5	-18.6	
	836.50	13.90	H	1.1	-1.4	11.41	38.5	-27.0	
	High Ch								
848.30	21.24	V	1.6	-1.3	18.36	38.5	-20.1		
848.30	13.56	H	1.6	-1.3	10.68	38.5	-27.8		
Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm									
LTE Band 5 1.4MHz 16QAM	Company:		Samsung						
	Project #:		16K22867						
	Date:		03-07-16						
	Test Engineer:		Steven.Kim						
	Configuration:		EUT ONLY, Y 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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
	Low Ch								
	824.70	21.73	V	1.1	-1.5	19.13	38.5	-19.3	
	824.70	12.57	H	1.1	-1.5	9.97	38.5	-28.5	
	Mid Ch								
	836.50	21.09	V	1.1	-1.4	18.60	38.5	-19.9	
	836.50	13.07	H	1.1	-1.4	10.58	38.5	-27.9	
	High Ch								
848.30	20.20	V	1.1	-1.3	17.82	38.5	-20.6		
848.30	12.53	H	1.1	-1.3	10.15	38.5	-28.3		
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 #: 16K22867 Date: 03-04-16 Test Engineer: Steven.Kim Configuration: EUT / 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	7.28	V	1.54	9.12	14.86	30.0	-15.1		
	1720.00	11.12	H	1.54	9.12	18.70	30.0	-11.3		
	Mid Ch									
	1732.50	7.49	V	1.55	9.31	15.25	30.0	-14.8		
	1732.50	10.21	H	1.55	9.31	17.97	30.0	-12.0		
	High Ch									
	1745.00	7.58	V	1.56	9.37	15.39	30.0	-14.6		
	1745.00	9.46	H	1.56	9.37	17.27	30.0	-12.7		
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									
	LTE Band 4 20MHz 16QAM	Company: Samsung Project #: 16K22867 Date: 03-04-16 Test Engineer: Steven.Kim Configuration: EUT / 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)	Notes	
Low Ch										
1720.00		6.22	V	1.54	9.12	13.80	30.0	-16.2		
1720.00		10.05	H	1.54	9.12	17.63	30.0	-12.4		
Mid Ch										
1732.50		6.48	V	1.55	9.31	14.24	30.0	-15.8		
1732.50		9.23	H	1.55	9.31	16.99	30.0	-13.0		
High Ch										
1745.00		6.45	V	1.56	9.37	14.26	30.0	-15.7		
1745.00		8.39	H	1.56	9.37	16.20	30.0	-13.8		
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 #: 16K22867 Date: 03-04-16 Test Engineer: Steven.Kim Configuration: EUT / 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	7.97	V	1.54	9.12	15.55	30.0	-14.5	
	1717.50	10.98	H	1.54	9.12	18.56	30.0	-11.4	
	Mid Ch								
	1732.50	7.61	V	1.55	9.31	15.37	30.0	-14.6	
	1732.50	11.00	H	1.55	9.31	18.76	30.0	-11.2	
	High Ch								
	1747.50	8.36	V	1.56	9.39	16.19	30.0	-13.8	
	1747.50	10.22	H	1.56	9.39	18.05	30.0	-12.0	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
	LTE Band 4 15MHz 16QAM	Company: Samsung Project #: 16K22867 Date: 03-04-16 Test Engineer: Steven.Kim Configuration: EUT / 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		7.04	V	1.54	9.12	14.62	30.0	-15.4	
1717.50		10.06	H	1.54	9.12	17.64	30.0	-12.4	
Mid Ch									
1732.50		6.70	V	1.55	9.31	14.46	30.0	-15.5	
1732.50		9.99	H	1.55	9.31	17.75	30.0	-12.3	
High Ch									
1747.50		7.31	V	1.56	9.39	15.14	30.0	-14.9	
1747.50		9.32	H	1.56	9.39	17.15	30.0	-12.9	
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 4 10MHz QPSK	Company: Samsung Project #: 16K22867 Date: 03-04-16 Test Engineer: Steven.Kim Configuration: EUT / 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	7.59	V	1.54	9.12	15.17	30.0	-14.8	
	1715.00	12.38	H	1.54	9.12	19.96	30.0	-10.0	
	Mid Ch								
	1732.50	6.65	V	1.55	9.31	14.41	30.0	-15.6	
	1732.50	10.20	H	1.55	9.31	17.96	30.0	-12.0	
	High Ch								
	1750.00	5.99	V	1.56	9.40	13.83	30.0	-16.2	
	1750.00	8.85	H	1.56	9.40	16.69	30.0	-13.3	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
	LTE Band 4 10MHz 16QAM	Company: Samsung Project #: 16K22867 Date: 03-04-16 Test Engineer: Steven.Kim Configuration: EUT / 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		6.62	V	1.54	9.12	14.20	30.0	-15.8	
1715.00		11.25	H	1.54	9.12	18.83	30.0	-11.2	
Mid Ch									
1732.50		5.59	V	1.55	9.31	13.35	30.0	-16.7	
1732.50		9.21	H	1.55	9.31	16.97	30.0	-13.0	
High Ch									
1750.00		4.73	V	1.56	9.40	12.57	30.0	-17.4	
1750.00		7.16	H	1.56	9.40	15.00	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 #:		16K22867						
	Date:		03-04-16						
	Test Engineer:		Steven.Kim						
	Configuration:		EUT / 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	8.86	V	1.54	9.12	16.44	30.0	-13.6	
	1712.50	12.50	H	1.54	9.12	20.08	30.0	-9.9	
	Mid Ch								
	1732.50	8.09	V	1.55	9.31	15.85	30.0	-14.2	
	1732.50	10.42	H	1.55	9.31	18.18	30.0	-11.8	
	High Ch								
1752.50	8.67	V	1.56	9.39	16.50	30.0	-13.5		
1752.50	10.57	H	1.56	9.39	18.40	30.0	-11.6		
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									
LTE Band 4 5MHz 16QAM	Company:		Samsung						
	Project #:		16K22867						
	Date:		03-04-16						
	Test Engineer:		Steven.Kim						
	Configuration:		EUT / 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	7.91	V	1.54	9.12	15.49	30.0	-14.5	
	1712.50	11.55	H	1.54	9.12	19.13	30.0	-10.9	
	Mid Ch								
	1732.50	6.39	V	1.55	9.31	14.15	30.0	-15.9	
	1732.50	9.04	H	1.55	9.31	16.80	30.0	-13.2	
	High Ch								
1752.50	6.66	V	1.56	9.39	14.49	30.0	-15.5		
1752.50	9.49	H	1.56	9.39	17.32	30.0	-12.7		
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 #:		16K22867						
	Date:		03-04-16						
	Test Engineer:		Steven.Kim						
	Configuration:		EUT / 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	8.78	V	1.54	9.12	16.36	30.0	-13.6	
	1711.50	13.30	H	1.54	9.12	20.88	30.0	-9.1	
	Mid Ch								
	1732.50	8.42	V	1.55	9.31	16.18	30.0	-13.8	
	1732.50	10.48	H	1.55	9.31	18.24	30.0	-11.8	
High Ch									
1753.50	7.94	V	1.56	9.38	15.76	30.0	-14.2		
1753.50	9.21	H	1.56	9.38	17.03	30.0	-13.0		
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									
LTE Band 4 3MHz 16QAM	Company:		Samsung						
	Project #:		16K22867						
	Date:		03-04-16						
	Test Engineer:		Steven.Kim						
	Configuration:		EUT / 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	7.79	V	1.54	9.12	15.37	30.0	-14.6	
	1711.50	12.25	H	1.54	9.12	19.83	30.0	-10.2	
	Mid Ch								
	1732.50	7.35	V	1.55	9.31	15.11	30.0	-14.9	
	1732.50	9.44	H	1.55	9.31	17.20	30.0	-12.8	
High Ch									
1753.50	7.02	V	1.56	9.38	14.84	30.0	-15.2		
1753.50	10.22	H	1.56	9.38	18.04	30.0	-12.0		
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									

LTE Band 4 1.4MHz QPSK	Company: Samsung Project #: 16K22867 Date: 03-04-16 Test Engineer: Steven.Kim Configuration: EUT / 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	6.33	V	1.54	9.12	13.91	30.0	-16.1		
	1710.70	10.69	H	1.54	9.12	18.27	30.0	-11.7		
	Mid Ch									
	1732.50	6.19	V	1.55	9.31	13.95	30.0	-16.1		
	1732.50	9.61	H	1.55	9.31	17.37	30.0	-12.6		
	High Ch									
	1754.30	3.34	V	1.56	9.37	11.15	30.0	-18.9		
	1754.30	8.02	H	1.56	9.37	15.83	30.0	-14.2		
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									
	LTE Band 4 1.4MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
		Company: Samsung Project #: 16K22867 Date: 03-04-16 Test Engineer: Steven.Kim Configuration: EUT / 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		5.27	V	1.54	9.12	12.85	30.0	-17.2		
1710.70		9.76	H	1.54	9.12	17.34	30.0	-12.7		
Mid Ch										
1732.50		5.07	V	1.55	9.31	12.83	30.0	-17.2		
1732.50		8.67	H	1.55	9.31	16.43	30.0	-13.6		
High Ch										
1754.30		4.46	V	1.56	9.37	12.27	30.0	-17.7		
1754.30		6.99	H	1.56	9.37	14.80	30.0	-15.2		
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm										

LTE Band 2

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
<p style="text-align: center;">High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2</p> <p>Company: Samsung Project #: 16K22867 Date: 02-17-16 Test Engineer: Steven.Kim Configuration: EUT / X-Position Mode: LTE Band 2 QPSK, 20MHz</p> <p>Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse</p>								
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
<p style="text-align: center;">High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2</p> <p>Company: Samsung Project #: 16K22867 Date: 02-17-16 Test Engineer: Steven.Kim Configuration: EUT / X-Position Mode: LTE Band 2 16QAM, 20MHz</p> <p>Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse</p>								
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 #: 16K22867 Date: 02-17-16 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	13.02	V	1.60	9.12	20.54	33.0	-12.5	
		1857.50	12.48	H	1.60	9.12	20.00	33.0	-13.0	
		Mid Ch								
		1880.00	13.75	V	1.62	8.62	20.75	33.0	-12.2	
		1880.00	12.67	H	1.62	8.62	19.67	33.0	-13.3	
		High Ch								
		1902.50	13.87	V	1.63	8.49	20.73	33.0	-12.3	
		1902.50	13.69	H	1.63	8.49	20.55	33.0	-12.4	
		Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
	LTE Band 2 15MHz 16QAM	Company: Samsung Project #: 16K22867 Date: 02-17-16 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)
		Low Ch								
		1857.50	12.06	V	1.60	9.12	19.58	33.0	-13.4	
		1857.50	11.35	H	1.60	9.12	18.87	33.0	-14.1	
		Mid Ch								
		1880.00	12.83	V	1.62	8.62	19.83	33.0	-13.2	
		1880.00	11.83	H	1.62	8.62	18.83	33.0	-14.2	
		High Ch								
		1902.50	12.96	V	1.63	8.49	19.82	33.0	-13.2	
		1902.50	12.82	H	1.63	8.49	19.68	33.0	-13.3	
		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 #: 16K22867 Date: 03-02-16 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	11.69	V	1.60	9.12	19.21	33.0	-13.8		
		1855.00	13.30	H	1.60	9.12	20.82	33.0	-12.2		
		Mid Ch									
		1880.00	14.13	V	1.62	8.62	21.13	33.0	-11.9		
		1880.00	13.67	H	1.62	8.62	20.67	33.0	-12.3		
		High Ch									
		1905.00	14.39	V	1.63	8.47	21.23	33.0	-11.8		
		1905.00	14.50	H	1.63	8.47	21.34	33.0	-11.7		
		Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									
	LTE Band 2 10MHz 16QAM	Company: Samsung Project #: 16K22867 Date: 03-02-16 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	10.77	V	1.60	9.12	18.29	33.0	-14.7		
		1855.00	12.35	H	1.60	9.12	19.87	33.0	-13.1		
		Mid Ch									
		1880.00	13.13	V	1.62	8.62	20.13	33.0	-12.9		
		1880.00	12.65	H	1.62	8.62	19.65	33.0	-13.3		
		High Ch									
		1905.00	13.48	V	1.63	8.47	20.32	33.0	-12.7		
		1905.00	13.49	H	1.63	8.47	20.33	33.0	-12.7		
		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 #: 16K22867 Date: 03-02-16 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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
	Low Ch								
	1852.50	11.68	V	1.60	9.12	19.20	33.0	-13.8	
	1852.50	13.04	H	1.60	9.12	20.56	33.0	-12.4	
	Mid Ch								
	1880.00	14.04	V	1.62	8.62	21.04	33.0	-12.0	
	1880.00	13.61	H	1.62	8.62	20.61	33.0	-12.4	
	High Ch								
	1907.50	12.90	V	1.63	8.46	19.73	33.0	-13.3	
	1907.50	12.29	H	1.63	8.46	19.12	33.0	-13.9	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
	LTE Band 2 5MHz 16QAM	Company: Samsung Project #: 16K22867 Date: 03-02-16 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 MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Ch									
1852.50		10.59	V	1.60	9.12	18.11	33.0	-14.9	
1852.50		11.95	H	1.60	9.12	19.47	33.0	-13.5	
Mid Ch									
1880.00		13.05	V	1.62	8.62	20.05	33.0	-12.9	
1880.00		12.81	H	1.62	8.62	19.81	33.0	-13.2	
High Ch									
1907.50		12.02	V	1.63	8.46	18.85	33.0	-14.1	
1907.50		11.32	H	1.63	8.46	18.15	33.0	-14.8	
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 3MHz QPSK	Company:		Samsung							
	Project #:		16K22867							
	Date:		03-02-16							
	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	13.62	V	1.60	9.12	21.14	33.0	-11.9		
	1851.50	12.95	H	1.60	9.12	20.47	33.0	-12.5		
	Mid Ch									
	1880.00	14.21	V	1.62	8.62	21.21	33.0	-11.8		
1880.00	13.62	H	1.62	8.62	20.62	33.0	-12.4			
High Ch										
1908.50	10.15	V	1.63	8.45	16.97	33.0	-16.0			
1908.50	12.85	H	1.63	8.45	19.67	33.0	-13.3			
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm										
LTE Band 2 3MHz 16QAM	Company:		Samsung							
	Project #:		16K22867							
	Date:		03-02-16							
	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	12.63	V	1.60	9.12	20.15	33.0	-12.9		
	1851.50	11.83	H	1.60	9.12	19.35	33.0	-13.7		
	Mid Ch									
	1880.00	13.17	V	1.62	8.62	20.17	33.0	-12.8		
1880.00	12.82	H	1.62	8.62	19.82	33.0	-13.2			
High Ch										
1908.50	9.37	V	1.63	8.45	16.19	33.0	-16.8			
1908.50	11.91	H	1.63	8.45	18.73	33.0	-14.3			
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 1.4MHz QPSK	Company: Samsung Project #: 16K22867 Date: 03-03-16 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	10.44	V	1.60	9.12	17.96	33.0	-15.0	
	1850.70	11.60	H	1.60	9.12	19.12	33.0	-13.9	
	Mid Ch								
	1880.00	12.81	V	1.62	8.62	19.81	33.0	-13.2	
	1880.00	13.23	H	1.62	8.62	20.23	33.0	-12.8	
	High Ch								
	1909.30	9.06	V	1.63	8.44	15.87	33.0	-17.1	
	1909.30	11.76	H	1.63	8.44	18.57	33.0	-14.4	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
	LTE Band 2 1.4MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2							
		Company: Samsung Project #: 16K22867 Date: 03-03-16 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		9.70	V	1.60	9.12	17.22	33.0	-15.8	
1850.70		10.40	H	1.60	9.12	17.92	33.0	-15.1	
Mid Ch									
1880.00		11.51	V	1.62	8.62	18.51	33.0	-14.5	
1880.00		11.78	H	1.62	8.62	18.78	33.0	-14.2	
High Ch									
1909.30		8.24	V	1.63	8.44	15.05	33.0	-17.9	
1909.30		10.94	H	1.63	8.44	17.75	33.0	-15.2	
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

GSM 850

		UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement																																																																																																																																																																																																																																			
GSM GSM850 GPRS	Company: Samsung Project #: 16K22867 Date: 03-02-16 Test Engineer: Steven Kim Configuration: EUT / AC Adapter / Earphone, Y Position Mode: GPRS 850 MHz	<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" style="width: 100%; border-collapse: collapse;"> <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, 824.2MHz</td></tr> <tr><td>1.6484</td><td>-14.5</td><td>V</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-52.6</td><td>-13.0</td><td>-39.6</td><td></td></tr> <tr><td>2.4726</td><td>4.4</td><td>V</td><td>3.0</td><td>39.5</td><td>1.0</td><td>-34.1</td><td>-13.0</td><td>-21.1</td><td></td></tr> <tr><td>3.2968</td><td>-17.9</td><td>V</td><td>3.0</td><td>40.1</td><td>1.0</td><td>-57.0</td><td>-13.0</td><td>-44.0</td><td></td></tr> <tr><td>1.6484</td><td>-12.2</td><td>H</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-50.3</td><td>-13.0</td><td>-37.3</td><td></td></tr> <tr><td>2.4726</td><td>6.8</td><td>H</td><td>3.0</td><td>39.5</td><td>1.0</td><td>-31.8</td><td>-13.0</td><td>-18.8</td><td></td></tr> <tr><td>3.2968</td><td>-18.2</td><td>H</td><td>3.0</td><td>40.1</td><td>1.0</td><td>-57.3</td><td>-13.0</td><td>-44.3</td><td></td></tr> <tr><td colspan="10">Mid Ch, 836.6MHz</td></tr> <tr><td>1.6730</td><td>-14.2</td><td>V</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-52.3</td><td>-13.0</td><td>-39.3</td><td></td></tr> <tr><td>2.5098</td><td>-0.2</td><td>V</td><td>3.0</td><td>39.5</td><td>1.0</td><td>-38.7</td><td>-13.0</td><td>-25.7</td><td></td></tr> <tr><td>3.3464</td><td>-17.3</td><td>V</td><td>3.0</td><td>40.1</td><td>1.0</td><td>-56.4</td><td>-13.0</td><td>-43.4</td><td></td></tr> <tr><td>1.6730</td><td>-14.6</td><td>H</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-52.7</td><td>-13.0</td><td>-39.7</td><td></td></tr> <tr><td>2.5098</td><td>4.4</td><td>H</td><td>3.0</td><td>39.5</td><td>1.0</td><td>-34.1</td><td>-13.0</td><td>-21.1</td><td></td></tr> <tr><td>3.3464</td><td>-17.6</td><td>H</td><td>3.0</td><td>40.1</td><td>1.0</td><td>-56.8</td><td>-13.0</td><td>-43.8</td><td></td></tr> <tr><td colspan="10">High Ch, 848.8MHz</td></tr> <tr><td>1.6976</td><td>-13.8</td><td>V</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-51.9</td><td>-13.0</td><td>-38.9</td><td></td></tr> <tr><td>2.5466</td><td>7.6</td><td>V</td><td>3.0</td><td>39.6</td><td>1.0</td><td>-30.9</td><td>-13.0</td><td>-17.9</td><td></td></tr> <tr><td>3.3952</td><td>-17.3</td><td>V</td><td>3.0</td><td>40.2</td><td>1.0</td><td>-56.5</td><td>-13.0</td><td>-43.5</td><td></td></tr> <tr><td>1.6976</td><td>-16.7</td><td>H</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-54.8</td><td>-13.0</td><td>-41.8</td><td></td></tr> <tr><td>2.5466</td><td>5.1</td><td>H</td><td>3.0</td><td>39.6</td><td>1.0</td><td>-33.5</td><td>-13.0</td><td>-20.5</td><td></td></tr> <tr><td>3.3952</td><td>-17.7</td><td>H</td><td>3.0</td><td>40.2</td><td>1.0</td><td>-56.9</td><td>-13.0</td><td>-43.9</td><td></td></tr> </tbody> </table> <p>Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.</p>								f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	Low Ch, 824.2MHz										1.6484	-14.5	V	3.0	39.1	1.0	-52.6	-13.0	-39.6		2.4726	4.4	V	3.0	39.5	1.0	-34.1	-13.0	-21.1		3.2968	-17.9	V	3.0	40.1	1.0	-57.0	-13.0	-44.0		1.6484	-12.2	H	3.0	39.1	1.0	-50.3	-13.0	-37.3		2.4726	6.8	H	3.0	39.5	1.0	-31.8	-13.0	-18.8		3.2968	-18.2	H	3.0	40.1	1.0	-57.3	-13.0	-44.3		Mid Ch, 836.6MHz										1.6730	-14.2	V	3.0	39.1	1.0	-52.3	-13.0	-39.3		2.5098	-0.2	V	3.0	39.5	1.0	-38.7	-13.0	-25.7		3.3464	-17.3	V	3.0	40.1	1.0	-56.4	-13.0	-43.4		1.6730	-14.6	H	3.0	39.1	1.0	-52.7	-13.0	-39.7		2.5098	4.4	H	3.0	39.5	1.0	-34.1	-13.0	-21.1		3.3464	-17.6	H	3.0	40.1	1.0	-56.8	-13.0	-43.8		High Ch, 848.8MHz										1.6976	-13.8	V	3.0	39.1	1.0	-51.9	-13.0	-38.9		2.5466	7.6	V	3.0	39.6	1.0	-30.9	-13.0	-17.9		3.3952	-17.3	V	3.0	40.2	1.0	-56.5	-13.0	-43.5		1.6976	-16.7	H	3.0	39.1	1.0	-54.8	-13.0	-41.8		2.5466	5.1	H	3.0	39.6	1.0	-33.5	-13.0	-20.5		3.3952	-17.7	H	3.0	40.2	1.0	-56.9	-13.0	-43.9	
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1.6976	-21.0	H	3.0	39.1	1.0	-59.1	-13.0	-46.1																																																																																																																																																																																																																													
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3.3952	-17.8	H	3.0	40.2	1.0	-57.0	-13.0	-44.0																																																																																																																																																																																																																													

GSM 1900

		UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement									
		Company: Samsung		Project #: 16K23303		Date: 04-26-16		Test Engineer: YH Lim		Configuration: EUT / AC Adapter / Earphone, X Position	
GSM GSM1900 GPRS	Chamber		Pre-amplifier		Filter		Limit				
	Chamber 2		AFS42		Filter 1		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, 1850.2MHz											
3.7004	-1.8	V	3.0	40.5	1.0	-41.3	-13.0	-28.3			
5.5506	8.0	V	3.0	40.8	1.0	-31.8	-13.0	-18.8			
7.4008	-1.4	V	3.0	40.8	1.0	-41.2	-13.0	-28.2			
3.7000	-2.6	H	3.0	40.5	1.0	-42.1	-13.0	-29.1			
5.5506	1.0	H	3.0	40.8	1.0	-38.9	-13.0	-25.9			
7.4008	-6.8	H	3.0	40.8	1.0	-46.6	-13.0	-33.6			
Mid Ch, 1880.0MHz											
3.7600	-5.8	V	3.0	40.5	1.0	-45.4	-13.0	-32.4			
5.6400	7.2	V	3.0	40.8	1.0	-32.6	-13.0	-19.6			
7.5200	-4.1	V	3.0	40.7	1.0	-43.8	-13.0	-30.8			
3.7600	-9.0	H	3.0	40.5	1.0	-48.5	-13.0	-35.5			
5.6400	2.0	H	3.0	40.8	1.0	-37.8	-13.0	-24.8			
7.5200	-8.5	H	3.0	40.7	1.0	-48.2	-13.0	-35.2			
High Ch, 1909.8 MHz											
3.8196	-10.2	V	3.0	40.6	1.0	-49.8	-13.0	-36.8			
5.7294	3.2	V	3.0	40.8	1.0	-36.6	-13.0	-23.6			
7.6392	-4.8	V	3.0	40.7	1.0	-44.5	-13.0	-31.5			
3.8196	-12.2	H	3.0	40.6	1.0	-51.8	-13.0	-38.8			
5.7294	4.9	H	3.0	40.8	1.0	-34.9	-13.0	-21.9			
7.6392	-9.5	H	3.0	40.7	1.0	-49.1	-13.0	-36.1			
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									
		Company: Samsung		Project #: 16K23303		Date: 04-26-16		Test Engineer: YH Lim		Configuration: EUT / AC Adapter / Earphone, X Position	
GSM GSM1900 EGPRS	Chamber		Pre-amplifier		Filter		Limit				
	Chamber 2		AFS42		Filter 1		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, 1850.2MHz											
3.7004	-12.9	V	3.0	40.5	1.0	-52.4	-13.0	-39.4			
5.5506	1.6	V	3.0	40.8	1.0	-38.3	-13.0	-25.3			
7.4008	-9.9	V	3.0	40.8	1.0	-49.7	-13.0	-36.7			
3.7000	-12.8	H	3.0	40.5	1.0	-52.3	-13.0	-39.3			
5.5500	-4.2	H	3.0	40.8	1.0	-44.1	-13.0	-31.1			
7.4000	-11.1	H	3.0	40.8	1.0	-50.9	-13.0	-37.9			
Mid Ch, 1880.0MHz											
3.7600	-8.1	V	3.0	40.5	1.0	-47.7	-13.0	-34.7			
5.6400	0.8	V	3.0	40.8	1.0	-39.0	-13.0	-26.0			
7.5200	-9.9	V	3.0	40.7	1.0	-49.6	-13.0	-36.6			
3.7600	-15.7	H	3.0	40.5	1.0	-55.2	-13.0	-42.2			
5.6400	-6.0	H	3.0	40.8	1.0	-45.8	-13.0	-32.8			
7.5200	-11.3	H	3.0	40.7	1.0	-51.0	-13.0	-38.0			
High Ch, 1909.8 MHz											
3.8196	-6.3	V	3.0	40.6	1.0	-45.9	-13.0	-32.9			
5.7294	-5.0	V	3.0	40.8	1.0	-44.8	-13.0	-31.8			
7.6392	-8.7	V	3.0	40.7	1.0	-48.3	-13.0	-35.3			
3.8196	-11.0	H	3.0	40.6	1.0	-50.6	-13.0	-37.6			
5.7294	-4.3	H	3.0	40.8	1.0	-44.1	-13.0	-31.1			
7.6392	-10.9	H	3.0	40.7	1.0	-50.6	-13.0	-37.6			
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.											

WCDMA B5

		UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement									
WCDMA Band 5 REL99	Company: Samsung Project #: 16K22867 Date: 03-02-16 Test Engineer: Steven Kim Configuration: EUT / AC Adapter / Earphone, Y 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>										
		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	-19.0	V	3.0	39.1	1.0	-57.1	-13.0	-44.1	
		2.4790	-8.2	V	3.0	39.5	1.0	-46.8	-13.0	-33.8	
		3.3056	-16.1	V	3.0	40.1	1.0	-55.2	-13.0	-42.2	
		1.6520	-20.9	H	3.0	39.1	1.0	-59.0	-13.0	-46.0	
		2.4790	-15.7	H	3.0	39.5	1.0	-54.2	-13.0	-41.2	
		3.3056	-16.2	H	3.0	40.1	1.0	-55.3	-13.0	-42.3	
		Mid Ch, 836.6MHz									
		1.6732	-19.0	V	3.0	39.1	1.0	-57.1	-13.0	-44.1	
		2.5098	-8.6	V	3.0	39.5	1.0	-47.2	-13.0	-34.2	
		3.3464	-16.0	V	3.0	40.1	1.0	-55.1	-13.0	-42.1	
		1.6732	-20.3	H	3.0	39.1	1.0	-58.5	-13.0	-45.5	
		2.5098	-13.7	H	3.0	39.5	1.0	-52.2	-13.0	-39.2	
		3.3464	-16.2	H	3.0	40.1	1.0	-55.3	-13.0	-42.3	
		High Ch, 846.6MHz									
		1.6932	-18.9	V	3.0	39.1	1.0	-57.1	-13.0	-44.1	
		2.5390	-7.3	V	3.0	39.6	1.0	-45.9	-13.0	-32.9	
		3.3860	-15.9	V	3.0	40.2	1.0	-55.1	-13.0	-42.1	
		1.6932	-20.3	H	3.0	39.1	1.0	-58.4	-13.0	-45.4	
		2.5390	-14.3	H	3.0	39.6	1.0	-52.9	-13.0	-39.9	
		3.3860	-16.2	H	3.0	40.2	1.0	-55.4	-13.0	-42.4	
		Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.									
WCDMA Band 5 HSDPA	Company: Samsung Project #: 16K22867 Date: 03-02-16 Test Engineer: Steven Kim Configuration: EUT / AC Adapter / Earphone, Y Position Mode: Tx, HSDPA,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>										
		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	-19.0	V	3.0	39.1	1.0	-57.1	-13.0	-44.1	
		2.4790	-17.8	V	3.0	39.5	1.0	-56.3	-13.0	-43.3	
		3.3056	-16.2	V	3.0	40.1	1.0	-55.3	-13.0	-42.3	
		1.6520	-20.9	H	3.0	39.1	1.0	-59.0	-13.0	-46.0	
		2.4790	-18.2	H	3.0	39.5	1.0	-56.7	-13.0	-43.7	
		3.3056	-16.4	H	3.0	40.1	1.0	-55.5	-13.0	-42.5	
		Mid Ch, 836.6MHz									
		1.6732	-19.0	V	3.0	39.1	1.0	-57.2	-13.0	-44.2	
		2.5098	-17.7	V	3.0	39.5	1.0	-56.2	-13.0	-43.2	
		3.3464	-16.0	V	3.0	40.1	1.0	-55.1	-13.0	-42.1	
		1.6732	-20.7	H	3.0	39.1	1.0	-58.8	-13.0	-45.8	
		2.5098	-18.0	H	3.0	39.5	1.0	-56.6	-13.0	-43.6	
		3.3464	-16.2	H	3.0	40.1	1.0	-55.3	-13.0	-42.3	
		High Ch, 846.6MHz									
		1.6932	-19.3	V	3.0	39.1	1.0	-57.4	-13.0	-44.4	
		2.5390	-17.5	V	3.0	39.6	1.0	-56.1	-13.0	-43.1	
		3.3860	-16.0	V	3.0	40.2	1.0	-55.2	-13.0	-42.2	
		1.6932	-20.7	H	3.0	39.1	1.0	-58.8	-13.0	-45.8	
		2.5390	-17.9	H	3.0	39.6	1.0	-56.5	-13.0	-43.5	
		3.3860	-16.3	H	3.0	40.2	1.0	-55.5	-13.0	-42.5	
		Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.									

WCDMA B4

		UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement																																																																																																																																																																																																																																				
WCDMA Band 4 REL99	Company: Samsung Project #: 16K23303 Date: 04-20-16 Test Engineer: Steven Kim Configuration: EUT / AC Adapter / Earphone / Z 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> <table border="1" style="width: 100%; border-collapse: collapse;"> <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, 1712.4MHz</td></tr> <tr><td>3.4248</td><td>-12.4</td><td>V</td><td>3.0</td><td>40.2</td><td>1.0</td><td>-51.7</td><td>-13.0</td><td>-38.7</td><td></td></tr> <tr><td>5.1372</td><td>-11.0</td><td>V</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-50.9</td><td>-13.0</td><td>-37.9</td><td></td></tr> <tr><td>6.8496</td><td>-6.1</td><td>V</td><td>3.0</td><td>41.0</td><td>1.0</td><td>-46.1</td><td>-13.0</td><td>-33.1</td><td></td></tr> <tr><td>3.4248</td><td>-12.8</td><td>H</td><td>3.0</td><td>40.2</td><td>1.0</td><td>-52.0</td><td>-13.0</td><td>-39.0</td><td></td></tr> <tr><td>5.1372</td><td>-9.9</td><td>H</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-49.8</td><td>-13.0</td><td>-36.8</td><td></td></tr> <tr><td>6.8496</td><td>-0.5</td><td>H</td><td>3.0</td><td>41.0</td><td>1.0</td><td>-40.4</td><td>-13.0</td><td>-27.4</td><td></td></tr> <tr><td colspan="10">Mid Ch, 1732.6MHz</td></tr> <tr><td>3.4652</td><td>-12.2</td><td>V</td><td>3.0</td><td>40.3</td><td>1.0</td><td>-51.5</td><td>-13.0</td><td>-38.5</td><td></td></tr> <tr><td>5.1978</td><td>-10.6</td><td>V</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-50.5</td><td>-13.0</td><td>-37.5</td><td></td></tr> <tr><td>6.9304</td><td>-5.0</td><td>V</td><td>3.0</td><td>41.0</td><td>1.0</td><td>-45.0</td><td>-13.0</td><td>-32.0</td><td></td></tr> <tr><td>3.4652</td><td>-12.4</td><td>H</td><td>3.0</td><td>40.3</td><td>1.0</td><td>-51.6</td><td>-13.0</td><td>-38.6</td><td></td></tr> <tr><td>5.1978</td><td>-10.0</td><td>H</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-49.8</td><td>-13.0</td><td>-36.8</td><td></td></tr> <tr><td>6.9304</td><td>-0.9</td><td>H</td><td>3.0</td><td>41.0</td><td>1.0</td><td>-40.9</td><td>-13.0</td><td>-27.9</td><td></td></tr> <tr><td colspan="10">High Ch, 1752.6MHz</td></tr> <tr><td>3.5052</td><td>-12.2</td><td>V</td><td>3.0</td><td>40.3</td><td>1.0</td><td>-51.5</td><td>-13.0</td><td>-38.5</td><td></td></tr> <tr><td>5.2578</td><td>-10.9</td><td>V</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-50.8</td><td>-13.0</td><td>-37.8</td><td></td></tr> <tr><td>7.0104</td><td>-7.0</td><td>V</td><td>3.0</td><td>41.0</td><td>1.0</td><td>-47.1</td><td>-13.0</td><td>-34.1</td><td></td></tr> <tr><td>3.5052</td><td>-12.2</td><td>H</td><td>3.0</td><td>40.3</td><td>1.0</td><td>-51.5</td><td>-13.0</td><td>-38.5</td><td></td></tr> <tr><td>5.2578</td><td>-9.2</td><td>H</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-49.1</td><td>-13.0</td><td>-36.1</td><td></td></tr> <tr><td>7.0104</td><td>0.7</td><td>H</td><td>3.0</td><td>41.0</td><td>1.0</td><td>-39.3</td><td>-13.0</td><td>-26.3</td><td></td></tr> </tbody> </table> <p>Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.</p>									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	-12.4	V	3.0	40.2	1.0	-51.7	-13.0	-38.7		5.1372	-11.0	V	3.0	40.9	1.0	-50.9	-13.0	-37.9		6.8496	-6.1	V	3.0	41.0	1.0	-46.1	-13.0	-33.1		3.4248	-12.8	H	3.0	40.2	1.0	-52.0	-13.0	-39.0		5.1372	-9.9	H	3.0	40.9	1.0	-49.8	-13.0	-36.8		6.8496	-0.5	H	3.0	41.0	1.0	-40.4	-13.0	-27.4		Mid Ch, 1732.6MHz										3.4652	-12.2	V	3.0	40.3	1.0	-51.5	-13.0	-38.5		5.1978	-10.6	V	3.0	40.9	1.0	-50.5	-13.0	-37.5		6.9304	-5.0	V	3.0	41.0	1.0	-45.0	-13.0	-32.0		3.4652	-12.4	H	3.0	40.3	1.0	-51.6	-13.0	-38.6		5.1978	-10.0	H	3.0	40.9	1.0	-49.8	-13.0	-36.8		6.9304	-0.9	H	3.0	41.0	1.0	-40.9	-13.0	-27.9		High Ch, 1752.6MHz										3.5052	-12.2	V	3.0	40.3	1.0	-51.5	-13.0	-38.5		5.2578	-10.9	V	3.0	40.9	1.0	-50.8	-13.0	-37.8		7.0104	-7.0	V	3.0	41.0	1.0	-47.1	-13.0	-34.1		3.5052	-12.2	H	3.0	40.3	1.0	-51.5	-13.0	-38.5		5.2578	-9.2	H	3.0	40.9	1.0	-49.1	-13.0	-36.1		7.0104	0.7	H	3.0	41.0	1.0	-39.3	-13.0	-26.3	
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	5.2578	-10.9	V	3.0	40.9	1.0	-50.8	-13.0	-37.8																																																																																																																																																																																																																													
	7.0104	-7.0	V	3.0	41.0	1.0	-47.1	-13.0	-34.1																																																																																																																																																																																																																													
3.5052	-12.2	H	3.0	40.3	1.0	-51.5	-13.0	-38.5																																																																																																																																																																																																																														
5.2578	-9.2	H	3.0	40.9	1.0	-49.1	-13.0	-36.1																																																																																																																																																																																																																														
7.0104	0.7	H	3.0	41.0	1.0	-39.3	-13.0	-26.3																																																																																																																																																																																																																														
WCDMA Band 4 HSDPA	Company: Samsung Project #: 16K23303 Date: 04-20-16 Test Engineer: Steven Kim Configuration: EUT / AC Adapter / Earphone / Z 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> <table border="1" style="width: 100%; border-collapse: collapse;"> <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, 1712.4MHz</td></tr> <tr><td>3.4248</td><td>-12.9</td><td>V</td><td>3.0</td><td>40.2</td><td>1.0</td><td>-52.2</td><td>-13.0</td><td>-39.2</td><td></td></tr> <tr><td>5.1372</td><td>-9.2</td><td>V</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-49.1</td><td>-13.0</td><td>-36.1</td><td></td></tr> <tr><td>6.8496</td><td>-5.0</td><td>V</td><td>3.0</td><td>41.0</td><td>1.0</td><td>-45.0</td><td>-13.0</td><td>-32.0</td><td></td></tr> <tr><td>3.4248</td><td>-12.0</td><td>H</td><td>3.0</td><td>40.2</td><td>1.0</td><td>-51.3</td><td>-13.0</td><td>-38.3</td><td></td></tr> <tr><td>5.1372</td><td>-9.0</td><td>H</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-48.9</td><td>-13.0</td><td>-35.9</td><td></td></tr> <tr><td>6.8496</td><td>0.3</td><td>H</td><td>3.0</td><td>41.0</td><td>1.0</td><td>-39.7</td><td>-13.0</td><td>-26.7</td><td></td></tr> <tr><td colspan="10">Mid Ch, 1732.6MHz</td></tr> <tr><td>3.4652</td><td>-12.3</td><td>V</td><td>3.0</td><td>40.3</td><td>1.0</td><td>-51.5</td><td>-13.0</td><td>-38.5</td><td></td></tr> <tr><td>5.1978</td><td>-9.1</td><td>V</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-49.0</td><td>-13.0</td><td>-36.0</td><td></td></tr> <tr><td>6.9304</td><td>-4.0</td><td>V</td><td>3.0</td><td>41.0</td><td>1.0</td><td>-44.0</td><td>-13.0</td><td>-31.0</td><td></td></tr> <tr><td>3.4652</td><td>-12.1</td><td>H</td><td>3.0</td><td>40.3</td><td>1.0</td><td>-51.3</td><td>-13.0</td><td>-38.3</td><td></td></tr> <tr><td>5.1978</td><td>-9.2</td><td>H</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-49.1</td><td>-13.0</td><td>-36.1</td><td></td></tr> <tr><td>6.9304</td><td>-0.6</td><td>H</td><td>3.0</td><td>41.0</td><td>1.0</td><td>-40.6</td><td>-13.0</td><td>-27.6</td><td></td></tr> <tr><td colspan="10">High Ch, 1752.6MHz</td></tr> <tr><td>3.5052</td><td>-12.5</td><td>V</td><td>3.0</td><td>40.3</td><td>1.0</td><td>-51.8</td><td>-13.0</td><td>-38.8</td><td></td></tr> <tr><td>5.2578</td><td>-8.7</td><td>V</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-48.5</td><td>-13.0</td><td>-35.5</td><td></td></tr> <tr><td>7.0104</td><td>-5.8</td><td>V</td><td>3.0</td><td>41.0</td><td>1.0</td><td>-45.9</td><td>-13.0</td><td>-32.9</td><td></td></tr> <tr><td>3.5052</td><td>-11.6</td><td>H</td><td>3.0</td><td>40.3</td><td>1.0</td><td>-50.9</td><td>-13.0</td><td>-37.9</td><td></td></tr> <tr><td>5.2578</td><td>-8.5</td><td>H</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-48.4</td><td>-13.0</td><td>-35.4</td><td></td></tr> <tr><td>7.0104</td><td>1.9</td><td>H</td><td>3.0</td><td>41.0</td><td>1.0</td><td>-38.2</td><td>-13.0</td><td>-25.2</td><td></td></tr> </tbody> </table> <p>Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.</p>									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	-12.9	V	3.0	40.2	1.0	-52.2	-13.0	-39.2		5.1372	-9.2	V	3.0	40.9	1.0	-49.1	-13.0	-36.1		6.8496	-5.0	V	3.0	41.0	1.0	-45.0	-13.0	-32.0		3.4248	-12.0	H	3.0	40.2	1.0	-51.3	-13.0	-38.3		5.1372	-9.0	H	3.0	40.9	1.0	-48.9	-13.0	-35.9		6.8496	0.3	H	3.0	41.0	1.0	-39.7	-13.0	-26.7		Mid Ch, 1732.6MHz										3.4652	-12.3	V	3.0	40.3	1.0	-51.5	-13.0	-38.5		5.1978	-9.1	V	3.0	40.9	1.0	-49.0	-13.0	-36.0		6.9304	-4.0	V	3.0	41.0	1.0	-44.0	-13.0	-31.0		3.4652	-12.1	H	3.0	40.3	1.0	-51.3	-13.0	-38.3		5.1978	-9.2	H	3.0	40.9	1.0	-49.1	-13.0	-36.1		6.9304	-0.6	H	3.0	41.0	1.0	-40.6	-13.0	-27.6		High Ch, 1752.6MHz										3.5052	-12.5	V	3.0	40.3	1.0	-51.8	-13.0	-38.8		5.2578	-8.7	V	3.0	40.9	1.0	-48.5	-13.0	-35.5		7.0104	-5.8	V	3.0	41.0	1.0	-45.9	-13.0	-32.9		3.5052	-11.6	H	3.0	40.3	1.0	-50.9	-13.0	-37.9		5.2578	-8.5	H	3.0	40.9	1.0	-48.4	-13.0	-35.4		7.0104	1.9	H	3.0	41.0	1.0	-38.2	-13.0	-25.2	
	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes																																																																																																																																																																																																																												
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	6.9304	-0.6	H	3.0	41.0	1.0	-40.6	-13.0	-27.6																																																																																																																																																																																																																													
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3.5052	-11.6	H	3.0	40.3	1.0	-50.9	-13.0	-37.9																																																																																																																																																																																																																														
5.2578	-8.5	H	3.0	40.9	1.0	-48.4	-13.0	-35.4																																																																																																																																																																																																																														
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WCDMA B2

		UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement									
WCDMA Band 2 REL99	Company: Samsung Project #: 16K23303 Date: 04-26-16 Test Engineer: YH Lim Configuration: EUT / AC Adapter / Earphone / X Position Mode: Tx, REL99,1900MHz										
	<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, 1852.4MHz										
	3.7048	-7.0	V	3.0	40.5	1.0	-46.5	-13.0	-33.5		
	5.5572	5.0	V	3.0	40.8	1.0	-34.8	-13.0	-21.8		
	7.4096	-8.6	V	3.0	40.8	1.0	-48.4	-13.0	-35.4		
	3.7048	-11.1	H	3.0	40.5	1.0	-50.5	-13.0	-37.5		
	5.5572	-0.3	H	3.0	40.8	1.0	-40.2	-13.0	-27.2		
	7.4096	-9.7	H	3.0	40.8	1.0	-49.5	-13.0	-36.5		
Mid Ch, 1890MHz											
3.7600	-2.5	V	3.0	40.5	1.0	-42.0	-13.0	-29.0			
5.6400	2.7	V	3.0	40.8	1.0	-37.1	-13.0	-24.1			
7.5200	-8.6	V	3.0	40.7	1.0	-48.3	-13.0	-35.3			
3.7600	-8.3	H	3.0	40.5	1.0	-47.8	-13.0	-34.8			
5.6400	-2.3	H	3.0	40.8	1.0	-42.1	-13.0	-29.1			
7.5200	-9.4	H	3.0	40.7	1.0	-49.1	-13.0	-36.1			
High Ch, 1907.6MHz											
3.8152	-3.9	V	3.0	40.6	1.0	-43.5	-13.0	-30.5			
5.7228	5.2	V	3.0	40.8	1.0	-34.6	-13.0	-21.6			
7.6304	-7.0	V	3.0	40.7	1.0	-46.7	-13.0	-33.7			
3.8152	-8.7	H	3.0	40.6	1.0	-48.3	-13.0	-35.3			
5.7228	0.5	H	3.0	40.8	1.0	-39.3	-13.0	-26.3			
7.6304	-8.7	H	3.0	40.7	1.0	-48.3	-13.0	-35.3			
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.											
WCDMA Band 2 HSDPA	Company: Samsung Project #: 16K23303 Date: 04-26-16 Test Engineer: YH Lim Configuration: EUT / AC Adapter / Earphone / X Position Mode: Tx, HSDPA,1900MHz										
	<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, 1852.4MHz										
	3.7048	-9.0	V	3.0	40.5	1.0	-48.5	-13.0	-35.5		
	5.5572	-2.9	V	3.0	40.8	1.0	-42.7	-13.0	-29.7		
	7.4096	-6.5	V	3.0	40.8	1.0	-46.3	-13.0	-33.3		
	3.7048	-11.5	H	3.0	40.5	1.0	-51.0	-13.0	-38.0		
	5.5572	-3.7	H	3.0	40.8	1.0	-43.5	-13.0	-30.5		
	7.4096	-9.8	H	3.0	40.8	1.0	-49.6	-13.0	-36.6		
Mid Ch, 1890MHz											
3.7600	-7.3	V	3.0	40.5	1.0	-46.8	-13.0	-33.8			
5.6400	-1.1	V	3.0	40.8	1.0	-40.9	-13.0	-27.9			
7.5200	-8.1	V	3.0	40.7	1.0	-47.8	-13.0	-34.8			
3.7600	-8.9	H	3.0	40.5	1.0	-48.5	-13.0	-35.5			
5.6400	-4.5	H	3.0	40.8	1.0	-44.3	-13.0	-31.3			
7.5200	-9.3	H	3.0	40.7	1.0	-49.0	-13.0	-36.0			
High Ch, 1907.6MHz											
3.8152	-0.6	V	3.0	40.6	1.0	-40.2	-13.0	-27.2			
5.7228	1.3	V	3.0	40.8	1.0	-38.5	-13.0	-25.5			
7.6304	-8.0	V	3.0	40.7	1.0	-47.6	-13.0	-34.6			
3.8152	-8.9	H	3.0	40.6	1.0	-48.5	-13.0	-35.5			
5.7228	-3.2	H	3.0	40.8	1.0	-43.0	-13.0	-30.0			
7.6304	-9.3	H	3.0	40.7	1.0	-48.9	-13.0	-35.9			
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.											

LTE Band 17

		UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement									
LTE Band 17 10MHz QPSK	Company: Samsung Project #: 16K22867 Date: 03-05-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Earphone, Y Position Mode: TX, LTE BAND 17, 10MHz BW, QPSK										
	<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 FCC Part 27</div> </div>										
	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes	
	Low Channel (709MHz)										
	1.4180	-16.4	V	3.0	39.0	1.0	-54.4	-13.0	-41.4		
	2.1270	-11.0	V	3.0	39.3	1.0	-49.3	-13.0	-36.3		
	2.8360	-23.3	V	3.0	39.7	1.0	-62.0	-13.0	-49.0		
	1.4180	-22.2	H	3.0	39.0	1.0	-60.2	-13.0	-47.2		
	2.1270	-13.9	H	3.0	39.3	1.0	-52.2	-13.0	-39.2		
	2.8360	-23.3	H	3.0	39.7	1.0	-62.0	-13.0	-49.0		
	Mid Channel (710MHz)										
	1.4200	-16.6	V	3.0	39.0	1.0	-54.6	-13.0	-41.6		
	2.1300	-11.5	V	3.0	39.3	1.0	-49.8	-13.0	-36.8		
	2.8400	-23.5	V	3.0	39.7	1.0	-62.3	-13.0	-49.3		
	1.4200	-22.4	H	3.0	39.0	1.0	-60.4	-13.0	-47.4		
2.1300	-14.3	H	3.0	39.3	1.0	-52.6	-13.0	-39.6			
2.8400	-23.4	H	3.0	39.7	1.0	-62.2	-13.0	-49.2			
High Channel (711MHz)											
1.4220	-16.8	V	3.0	39.0	1.0	-54.8	-13.0	-41.8			
2.1330	-11.3	V	3.0	39.3	1.0	-49.7	-13.0	-36.7			
2.8440	-23.6	V	3.0	39.7	1.0	-62.3	-13.0	-49.3			
1.4220	-22.7	H	3.0	39.0	1.0	-60.7	-13.0	-47.7			
2.1330	-14.7	H	3.0	39.3	1.0	-53.0	-13.0	-40.0			
2.8440	-23.6	H	3.0	39.7	1.0	-62.3	-13.0	-49.3			
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.											
LTE Band 17 10MHz 16QAM	Company: Samsung Project #: 16K22867 Date: 03-05-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Earphone, Y Position Mode: TX, LTE BAND 17, 10MHz BW, 16QAM										
	<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 FCC Part 27</div> </div>										
	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes	
	Low Channel (709MHz)										
	1.4180	-17.3	V	3.0	39.0	1.0	-55.3	-13.0	-42.3		
	2.1270	-11.3	V	3.0	39.3	1.0	-49.7	-13.0	-36.7		
	2.8360	-23.3	V	3.0	39.7	1.0	-62.0	-13.0	-49.0		
	1.4180	-23.2	H	3.0	39.0	1.0	-61.2	-13.0	-48.2		
	2.1270	-15.1	H	3.0	39.3	1.0	-53.5	-13.0	-40.5		
	2.8360	-23.3	H	3.0	39.7	1.0	-62.0	-13.0	-49.0		
	Mid Channel (710MHz)										
	1.4200	-18.2	V	3.0	39.0	1.0	-56.2	-13.0	-43.2		
	2.1300	-13.9	V	3.0	39.3	1.0	-52.2	-13.0	-39.2		
	2.8400	-23.5	V	3.0	39.7	1.0	-62.2	-13.0	-49.2		
	1.4200	-23.4	H	3.0	39.0	1.0	-61.5	-13.0	-48.5		
2.1300	-16.2	H	3.0	39.3	1.0	-54.6	-13.0	-41.6			
2.8400	-23.5	H	3.0	39.7	1.0	-62.2	-13.0	-49.2			
High Channel (711MHz)											
1.4220	-17.9	V	3.0	39.0	1.0	-55.9	-13.0	-42.9			
2.1330	-12.8	V	3.0	39.3	1.0	-51.1	-13.0	-38.1			
2.8440	-23.6	V	3.0	39.7	1.0	-62.3	-13.0	-49.3			
1.4220	-23.9	H	3.0	39.0	1.0	-61.9	-13.0	-48.9			
2.1330	-15.9	H	3.0	39.3	1.0	-54.2	-13.0	-41.2			
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	2.8260	-23.3	V	3.0	39.7	1.0	-62.0	-13.0	-49.0																																																																																																																																																																																																																					
	1.4130	-22.8	H	3.0	39.0	1.0	-60.8	-13.0	-47.8																																																																																																																																																																																																																					
	2.1195	-15.0	H	3.0	39.3	1.0	-53.3	-13.0	-40.3																																																																																																																																																																																																																					
2.8260	-23.4	H	3.0	39.7	1.0	-62.1	-13.0	-49.1																																																																																																																																																																																																																						
Mid Channel (710MHz)																																																																																																																																																																																																																														
1.4200	-17.8	V	3.0	39.0	1.0	-55.8	-13.0	-42.8																																																																																																																																																																																																																						
2.1300	-13.5	V	3.0	39.3	1.0	-51.8	-13.0	-38.8																																																																																																																																																																																																																						
2.8400	-23.5	V	3.0	39.7	1.0	-62.2	-13.0	-49.2																																																																																																																																																																																																																						
1.4200	-23.0	H	3.0	39.0	1.0	-61.0	-13.0	-48.0																																																																																																																																																																																																																						
2.1300	-15.8	H	3.0	39.3	1.0	-54.1	-13.0	-41.1																																																																																																																																																																																																																						
2.8400	-23.5	H	3.0	39.7	1.0	-62.2	-13.0	-49.2																																																																																																																																																																																																																						
High Channel (713.5MHz)																																																																																																																																																																																																																														
1.4270	-17.6	V	3.0	39.0	1.0	-55.6	-13.0	-42.6																																																																																																																																																																																																																						
2.1405	-12.3	V	3.0	39.3	1.0	-50.6	-13.0	-37.6																																																																																																																																																																																																																						
2.8540	-23.6	V	3.0	39.7	1.0	-62.4	-13.0	-49.4																																																																																																																																																																																																																						
1.4270	-23.6	H	3.0	39.0	1.0	-61.7	-13.0	-48.7																																																																																																																																																																																																																						
2.1405	-15.5	H	3.0	39.3	1.0	-53.8	-13.0	-40.8																																																																																																																																																																																																																						
2.8540	-23.6	H	3.0	39.7	1.0	-62.3	-13.0	-49.3																																																																																																																																																																																																																						
	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 #: 16K22867 Date: 03-05-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Earphone, Y Position Mode: TX, LTE BAND 5, 10MHz BW, QPSK										
	<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>										
		f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Notes
		GHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
		Low Channel (829MHz)									
		1.6580	-19.7	V	3.0	39.1	1.0	-57.8	-13.0	-44.8	
		2.4870	-18.2	V	3.0	39.5	1.0	-56.7	-13.0	-43.7	
		3.3160	-21.7	V	3.0	40.1	1.0	-60.8	-13.0	-47.8	
		1.6580	-17.7	H	3.0	39.1	1.0	-55.8	-13.0	-42.8	
		2.4870	-16.4	H	3.0	39.5	1.0	-54.9	-13.0	-41.9	
	3.3160	-21.9	H	3.0	40.1	1.0	-61.0	-13.0	-48.0		
	Mid Channel (836.5MHz)										
	1.6730	-16.8	V	3.0	39.1	1.0	-55.0	-13.0	-42.0		
	2.5090	-12.3	V	3.0	39.5	1.0	-50.9	-13.0	-37.9		
	3.3460	-21.8	V	3.0	40.1	1.0	-61.0	-13.0	-48.0		
	1.6730	-20.5	H	3.0	39.1	1.0	-58.6	-13.0	-45.6		
	2.5090	-13.4	H	3.0	39.5	1.0	-51.9	-13.0	-38.9		
	3.3460	-22.2	H	3.0	40.1	1.0	-61.3	-13.0	-48.3		
	High Channel (844MHz)										
	1.6880	-20.7	V	3.0	39.1	1.0	-58.8	-13.0	-45.8		
	2.5320	-18.8	V	3.0	39.5	1.0	-57.3	-13.0	-44.3		
	3.3760	-22.3	V	3.0	40.2	1.0	-61.4	-13.0	-48.4		
	1.6880	-19.9	H	3.0	39.1	1.0	-58.1	-13.0	-45.1		
	2.5320	-13.3	H	3.0	39.5	1.0	-51.8	-13.0	-38.8		
	3.3760	-22.8	H	3.0	40.2	1.0	-62.0	-13.0	-49.0		
	Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										
LTE Band 5 10MHz 16QAM	Company: Samsung Project #: 16K22867 Date: 03-05-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Earphone, Y Position Mode: TX, LTE BAND 5, 10MHz BW, 16QAM										
	<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>										
		f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Notes
		GHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
		Low Channel (829MHz)									
		1.6580	-20.5	V	3.0	39.1	1.0	-58.7	-13.0	-45.7	
		2.4870	-18.8	V	3.0	39.5	1.0	-57.3	-13.0	-44.3	
		3.3160	-21.7	V	3.0	40.1	1.0	-60.8	-13.0	-47.8	
		1.6580	-18.5	H	3.0	39.1	1.0	-56.6	-13.0	-43.6	
		2.4870	-17.5	H	3.0	39.5	1.0	-56.0	-13.0	-43.0	
	3.3160	-22.0	H	3.0	40.1	1.0	-61.1	-13.0	-48.1		
	Mid Channel (836.5MHz)										
	1.6730	-18.0	V	3.0	39.1	1.0	-56.1	-13.0	-43.1		
	2.5090	-13.5	V	3.0	39.5	1.0	-52.0	-13.0	-39.0		
	3.3460	-21.9	V	3.0	40.1	1.0	-61.0	-13.0	-48.0		
	1.6730	-21.3	H	3.0	39.1	1.0	-59.4	-13.0	-46.4		
	2.5090	-14.8	H	3.0	39.5	1.0	-53.3	-13.0	-40.3		
	3.3460	-22.2	H	3.0	40.1	1.0	-61.3	-13.0	-48.3		
	High Channel (844MHz)										
	1.6880	-21.9	V	3.0	39.1	1.0	-60.0	-13.0	-47.0		
	2.5320	-20.0	V	3.0	39.5	1.0	-58.6	-13.0	-45.6		
	3.3760	-22.3	V	3.0	40.2	1.0	-61.5	-13.0	-48.5		
	1.6880	-20.7	H	3.0	39.1	1.0	-58.9	-13.0	-45.9		
	2.5320	-15.2	H	3.0	39.5	1.0	-53.7	-13.0	-40.7		
	3.3760	-22.8	H	3.0	40.2	1.0	-62.0	-13.0	-49.0		
	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 5 5MHz QPSK	Company: Samsung Project #: 16K22867 Date: 03-05-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Earphone, Y 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	-20.3	V	3.0	39.1	1.0	-58.5	-13.0	-45.5		
			2.4790	-19.0	V	3.0	39.5	1.0	-57.5	-13.0	-44.5		
			3.3060	-21.7	V	3.0	40.1	1.0	-60.8	-13.0	-47.8		
			1.6530	-18.6	H	3.0	39.1	1.0	-56.7	-13.0	-43.7		
			2.4790	-17.2	H	3.0	39.5	1.0	-55.7	-13.0	-42.7		
			3.3060	-21.9	H	3.0	40.1	1.0	-61.0	-13.0	-48.0		
			Mid Channel (836.5MHz)										
			1.6730	-17.7	V	3.0	39.1	1.0	-55.9	-13.0	-42.9		
			2.5090	-13.0	V	3.0	39.5	1.0	-51.5	-13.0	-38.5		
			3.3460	-21.7	V	3.0	40.1	1.0	-60.8	-13.0	-47.8		
			1.6730	-21.0	H	3.0	39.1	1.0	-59.2	-13.0	-46.2		
			2.5090	-15.2	H	3.0	39.5	1.0	-53.8	-13.0	-40.8		
		3.3460	-22.1	H	3.0	40.1	1.0	-61.3	-13.0	-48.3			
		High Channel (846.5MHz)											
		1.6930	-20.5	V	3.0	39.1	1.0	-58.6	-13.0	-45.6			
		2.5390	-18.7	V	3.0	39.6	1.0	-57.2	-13.0	-44.2			
		3.3860	-22.3	V	3.0	40.2	1.0	-61.5	-13.0	-48.5			
		1.6930	-19.6	H	3.0	39.1	1.0	-57.7	-13.0	-44.7			
		2.5390	-13.1	H	3.0	39.6	1.0	-51.6	-13.0	-38.6			
		3.3860	-22.7	H	3.0	40.2	1.0	-61.9	-13.0	-48.9			
		Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.											
LTE Band 5 5MHz 16QAM	Company: Samsung Project #: 16K22867 Date: 03-05-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Earphone, Y 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	-21.5	V	3.0	39.1	1.0	-59.6	-13.0	-46.6		
			2.4790	-20.4	V	3.0	39.5	1.0	-58.9	-13.0	-45.9		
			3.3060	-21.7	V	3.0	40.1	1.0	-60.8	-13.0	-47.8		
			1.6530	-19.9	H	3.0	39.1	1.0	-58.0	-13.0	-45.0		
			2.4790	-18.3	H	3.0	39.5	1.0	-56.8	-13.0	-43.8		
			3.3060	-21.9	H	3.0	40.1	1.0	-61.0	-13.0	-48.0		
			Mid Channel (836.5MHz)										
			1.6730	-18.9	V	3.0	39.1	1.0	-57.0	-13.0	-44.0		
			2.5090	-13.8	V	3.0	39.5	1.0	-52.3	-13.0	-39.3		
			3.3460	-21.8	V	3.0	40.1	1.0	-60.9	-13.0	-47.9		
			1.6730	-22.1	H	3.0	39.1	1.0	-60.3	-13.0	-47.3		
			2.5090	-16.4	H	3.0	39.5	1.0	-54.9	-13.0	-41.9		
		3.3460	-22.2	H	3.0	40.1	1.0	-61.3	-13.0	-48.3			
		High Channel (846.5MHz)											
		1.6930	-21.8	V	3.0	39.1	1.0	-60.0	-13.0	-47.0			
		2.5390	-19.8	V	3.0	39.6	1.0	-58.4	-13.0	-45.4			
		3.3860	-22.2	V	3.0	40.2	1.0	-61.4	-13.0	-48.4			
		1.6930	-20.6	H	3.0	39.1	1.0	-58.7	-13.0	-45.7			
		2.5390	-14.3	H	3.0	39.6	1.0	-52.9	-13.0	-39.9			
		3.3860	-22.8	H	3.0	40.2	1.0	-61.9	-13.0	-48.9			
		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 #: 16K22867 Date: 03-05-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Earphone, Y Position Mode: TX, LTE BAND 5, 3MHz BW,QPSK										
	<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>										
		f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Notes
		GHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
		Low Channel (825.5MHz)									
		1.6510	-20.0	V	3.0	39.1	1.0	-58.1	-13.0	-45.1	
		2.4675	-18.4	V	3.0	39.5	1.0	-56.9	-13.0	-43.9	
		3.3020	-21.7	V	3.0	40.1	1.0	-60.8	-13.0	-47.8	
		1.6510	-17.8	H	3.0	39.1	1.0	-55.9	-13.0	-42.9	
		2.4675	-16.5	H	3.0	39.5	1.0	-55.0	-13.0	-42.0	
	3.3020	-21.9	H	3.0	40.1	1.0	-61.0	-13.0	-48.0		
	Mid Channel (836.5MHz)										
	1.6730	-17.1	V	3.0	39.1	1.0	-55.2	-13.0	-42.2		
	2.5090	-12.2	V	3.0	39.5	1.0	-50.7	-13.0	-37.7		
	3.3460	-21.8	V	3.0	40.1	1.0	-60.9	-13.0	-47.9		
	1.6730	-20.6	H	3.0	39.1	1.0	-58.7	-13.0	-45.7		
	2.5090	-14.2	H	3.0	39.5	1.0	-52.7	-13.0	-39.7		
	3.3460	-22.1	H	3.0	40.1	1.0	-61.2	-13.0	-48.2		
	High Channel (847.5MHz)										
	1.6950	-20.2	V	3.0	39.1	1.0	-58.4	-13.0	-45.4		
	2.5425	-18.3	V	3.0	39.6	1.0	-56.9	-13.0	-43.9		
	3.3900	-22.2	V	3.0	40.2	1.0	-61.4	-13.0	-48.4		
	1.6950	-19.6	H	3.0	39.1	1.0	-57.8	-13.0	-44.8		
	2.5425	-12.9	H	3.0	39.6	1.0	-51.5	-13.0	-38.5		
	3.3900	-22.6	H	3.0	40.2	1.0	-61.8	-13.0	-48.8		
		Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.									
LTE Band 5 3MHz 16QAM	Company: Samsung Project #: 16K22867 Date: 03-05-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Earphone, Y Position Mode: TX, LTE BAND 5, 3MHz BW,16QAM										
	<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>										
		f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Notes
		GHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
		Low Channel (825.5MHz)									
		1.6510	-20.9	V	3.0	39.1	1.0	-59.0	-13.0	-46.0	
		2.4675	-19.2	V	3.0	39.5	1.0	-57.7	-13.0	-44.7	
		3.3020	-21.7	V	3.0	40.1	1.0	-60.8	-13.0	-47.8	
		1.6510	-18.6	H	3.0	39.1	1.0	-56.7	-13.0	-43.7	
		2.4675	-18.1	H	3.0	39.5	1.0	-56.6	-13.0	-43.6	
	3.3020	-21.9	H	3.0	40.1	1.0	-61.0	-13.0	-48.0		
	Mid Channel (836.5MHz)										
	1.6730	-17.9	V	3.0	39.1	1.0	-56.0	-13.0	-43.0		
	2.5090	-12.9	V	3.0	39.5	1.0	-51.5	-13.0	-38.5		
	3.3460	-21.7	V	3.0	40.1	1.0	-60.8	-13.0	-47.8		
	1.6730	-21.5	H	3.0	39.1	1.0	-59.6	-13.0	-46.6		
	2.5090	-15.3	H	3.0	39.5	1.0	-53.8	-13.0	-40.8		
	3.3460	-22.1	H	3.0	40.1	1.0	-61.2	-13.0	-48.2		
	High Channel (847.5MHz)										
	1.6950	-21.1	V	3.0	39.1	1.0	-59.3	-13.0	-46.3		
	2.5425	-19.5	V	3.0	39.6	1.0	-58.0	-13.0	-45.0		
	3.3900	-22.3	V	3.0	40.2	1.0	-61.5	-13.0	-48.5		
	1.6950	-20.6	H	3.0	39.1	1.0	-58.7	-13.0	-45.7		
	2.5425	-13.8	H	3.0	39.6	1.0	-52.4	-13.0	-39.4		
	3.3900	-22.7	H	3.0	40.2	1.0	-61.9	-13.0	-48.9		
		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 #: 16K22867 Date: 03-05-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Earphone, Y 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	-19.8	V	3.0	39.1	1.0	-57.9	-13.0	-44.9		
	2.4741	-18.6	V	3.0	39.5	1.0	-57.1	-13.0	-44.1		
	3.2988	-21.8	V	3.0	40.1	1.0	-60.9	-13.0	-47.9		
	1.6494	-17.9	H	3.0	39.1	1.0	-56.0	-13.0	-43.0		
	2.4741	-16.7	H	3.0	39.5	1.0	-55.2	-13.0	-42.2		
	3.2988	-22.0	H	3.0	40.1	1.0	-61.1	-13.0	-48.1		
Mid Channel (836.5MHz)											
	1.6730	-17.2	V	3.0	39.1	1.0	-55.3	-13.0	-42.3		
	2.5090	-12.4	V	3.0	39.5	1.0	-50.9	-13.0	-37.9		
	3.3460	-21.9	V	3.0	40.1	1.0	-61.0	-13.0	-48.0		
	1.6730	-20.7	H	3.0	39.1	1.0	-58.8	-13.0	-45.8		
	2.5090	-14.4	H	3.0	39.5	1.0	-53.0	-13.0	-40.0		
	3.3460	-22.1	H	3.0	40.1	1.0	-61.2	-13.0	-48.2		
High Channel (848.3MHz)											
	1.6966	-20.0	V	3.0	39.1	1.0	-58.2	-13.0	-45.2		
	2.5449	-18.3	V	3.0	39.6	1.0	-56.8	-13.0	-43.8		
	3.3932	-22.2	V	3.0	40.2	1.0	-61.4	-13.0	-48.4		
	1.6966	-19.2	H	3.0	39.1	1.0	-57.4	-13.0	-44.4		
	2.5449	-12.7	H	3.0	39.6	1.0	-51.3	-13.0	-38.3		
	3.3932	-22.6	H	3.0	40.2	1.0	-61.8	-13.0	-48.8		
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.											
LTE Band 5 1.4MHz 16QAM	Company: Samsung Project #: 16K22867 Date: 03-05-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Earphone, Y 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	-21.0	V	3.0	39.1	1.0	-59.1	-13.0	-46.1		
	2.4741	-19.6	V	3.0	39.5	1.0	-58.1	-13.0	-45.1		
	3.2988	-21.8	V	3.0	40.1	1.0	-60.9	-13.0	-47.9		
	1.6494	-19.0	H	3.0	39.1	1.0	-57.1	-13.0	-44.1		
	2.4741	-17.9	H	3.0	39.5	1.0	-56.4	-13.0	-43.4		
	3.2988	-21.9	H	3.0	40.1	1.0	-61.0	-13.0	-48.0		
Mid Channel (836.5MHz)											
	1.6730	-18.4	V	3.0	39.1	1.0	-56.5	-13.0	-43.5		
	2.5090	-13.3	V	3.0	39.5	1.0	-51.9	-13.0	-38.9		
	3.3460	-21.8	V	3.0	40.1	1.0	-61.0	-13.0	-48.0		
	1.6730	-21.8	H	3.0	39.1	1.0	-59.9	-13.0	-46.9		
	2.5090	-15.5	H	3.0	39.5	1.0	-54.1	-13.0	-41.1		
	3.3460	-22.1	H	3.0	40.1	1.0	-61.2	-13.0	-48.2		
High Channel (848.3MHz)											
	1.6966	-21.1	V	3.0	39.1	1.0	-59.3	-13.0	-46.3		
	2.5449	-19.2	V	3.0	39.6	1.0	-57.8	-13.0	-44.8		
	3.3932	-22.2	V	3.0	40.2	1.0	-61.4	-13.0	-48.4		
	1.6966	-20.3	H	3.0	39.1	1.0	-58.4	-13.0	-45.4		
	2.5449	-13.9	H	3.0	39.6	1.0	-52.5	-13.0	-39.5		
	3.3932	-22.6	H	3.0	40.2	1.0	-61.8	-13.0	-48.8		
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 #: 16K22867 Date: 03-04-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Ear Phone / Z-Position Mode: TX, LTE BAND 4, 20MHz BW, QPSK										
	<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 FCC Part 27</div> </div>										
		f GHz	SGreading (dBm)	Ant. Pol. (HV)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
		Low Channel (1720MHz)									
		3.4400	-16.6	V	3.0	40.2	1.0	-55.8	-13.0	-42.8	
		5.1600	-16.0	V	3.0	40.9	1.0	-55.9	-13.0	-42.9	
		6.8800	-8.4	V	3.0	41.0	1.0	-48.4	-13.0	-35.4	
		3.4400	-16.4	H	3.0	40.2	1.0	-55.6	-13.0	-42.6	
		5.1600	-12.0	H	3.0	40.9	1.0	-51.9	-13.0	-38.9	
		6.8800	1.3	H	3.0	41.0	1.0	-38.7	-13.0	-25.7	
		Mid Channel (1732.5MHz)									
		3.4650	-17.5	V	3.0	40.3	1.0	-56.7	-13.0	-43.7	
		5.1975	-16.4	V	3.0	40.9	1.0	-56.3	-13.0	-43.3	
		6.9300	-7.7	V	3.0	41.0	1.0	-47.7	-13.0	-34.7	
		3.4650	-16.1	H	3.0	40.3	1.0	-55.4	-13.0	-42.4	
	5.1975	-13.8	H	3.0	40.9	1.0	-53.7	-13.0	-40.7		
	6.9300	1.1	H	3.0	41.0	1.0	-38.9	-13.0	-25.9		
	High Channel (1745MHz)										
	3.4900	-16.6	V	3.0	40.3	1.0	-55.9	-13.0	-42.9		
	5.2350	-16.3	V	3.0	40.9	1.0	-56.1	-13.0	-43.1		
	6.9800	-7.1	V	3.0	41.0	1.0	-47.1	-13.0	-34.1		
	3.4900	-14.6	H	3.0	40.3	1.0	-53.9	-13.0	-40.9		
	5.2350	-11.9	H	3.0	40.9	1.0	-51.8	-13.0	-38.8		
	6.9800	2.4	H	3.0	41.0	1.0	-37.6	-13.0	-24.6		
	Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										
LTE Band 4 20MHz 16QAM	Company: Samsung Project #: 16K22867 Date: 03-04-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Ear Phone / Z-Position Mode: TX, LTE BAND 4, 20MHz BW, 16QAM										
	<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 FCC Part 27</div> </div>										
		f GHz	SGreading (dBm)	Ant. Pol. (HV)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
		Low Channel (1720MHz)									
		3.4400	-17.8	V	3.0	40.2	1.0	-57.1	-13.0	-44.1	
		5.1600	-17.3	V	3.0	40.9	1.0	-57.2	-13.0	-44.2	
		6.8800	-10.2	V	3.0	41.0	1.0	-50.2	-13.0	-37.2	
		3.4400	-17.8	H	3.0	40.2	1.0	-57.1	-13.0	-44.1	
		5.1600	-12.9	H	3.0	40.9	1.0	-52.8	-13.0	-39.8	
		6.8800	-0.6	H	3.0	41.0	1.0	-40.6	-13.0	-27.6	
		Mid Channel (1732.5MHz)									
		3.4650	-18.1	V	3.0	40.3	1.0	-57.4	-13.0	-44.4	
		5.1975	-17.3	V	3.0	40.9	1.0	-57.2	-13.0	-44.2	
		6.9300	-8.9	V	3.0	41.0	1.0	-48.9	-13.0	-35.9	
		3.4650	-17.5	H	3.0	40.3	1.0	-56.7	-13.0	-43.7	
	5.1975	-14.5	H	3.0	40.9	1.0	-54.4	-13.0	-41.4		
	6.9300	-0.3	H	3.0	41.0	1.0	-40.3	-13.0	-27.3		
	High Channel (1745MHz)										
	3.4900	-17.6	V	3.0	40.3	1.0	-56.9	-13.0	-43.9		
	5.2350	-16.6	V	3.0	40.9	1.0	-56.5	-13.0	-43.5		
	6.9800	-8.1	V	3.0	41.0	1.0	-48.2	-13.0	-35.2		
	3.4900	-15.8	H	3.0	40.3	1.0	-55.1	-13.0	-42.1		
	5.2350	-12.6	H	3.0	40.9	1.0	-52.5	-13.0	-39.5		
	6.9800	1.1	H	3.0	41.0	1.0	-38.9	-13.0	-25.9		
	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 #: 16K22867 Date: 03-04-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Ear Phone / Z-Position Mode: TX, LTE BAND 4, 15MHz BW, QPSK										
	<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 FCC Part 27</div> </div>										
		f GHz	SG reading (dBm)	Ant. Pol. (HV)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
		Low Channel (1717.5MHz)									
		3.4350	-16.3	V	3.0	40.2	1.0	-55.5	-13.0	-42.5	
		5.1525	-16.7	V	3.0	40.9	1.0	-56.6	-13.0	-43.6	
		6.8700	-7.0	V	3.0	41.0	1.0	-47.0	-13.0	-34.0	
		3.4350	-14.8	H	3.0	40.2	1.0	-54.1	-13.0	-41.1	
		5.1525	-13.6	H	3.0	40.9	1.0	-53.5	-13.0	-40.5	
		6.8700	1.2	H	3.0	41.0	1.0	-38.8	-13.0	-25.8	
		Mid Channel (1732.5MHz)									
		3.4650	-18.5	V	3.0	40.3	1.0	-57.7	-13.0	-44.7	
		5.1975	-17.3	V	3.0	40.9	1.0	-57.2	-13.0	-44.2	
		6.9300	-7.2	V	3.0	41.0	1.0	-47.2	-13.0	-34.2	
		3.4650	-16.9	H	3.0	40.3	1.0	-56.2	-13.0	-43.2	
		5.1975	-14.0	H	3.0	40.9	1.0	-53.9	-13.0	-40.9	
		6.9300	1.0	H	3.0	41.0	1.0	-39.0	-13.0	-26.0	
		High Channel (1747.5MHz)									
		3.4950	-16.4	V	3.0	40.3	1.0	-55.7	-13.0	-42.7	
		5.2425	-16.8	V	3.0	40.9	1.0	-56.7	-13.0	-43.7	
	6.9900	-8.4	V	3.0	41.0	1.0	-48.5	-13.0	-35.5		
	3.4950	-13.5	H	3.0	40.3	1.0	-52.7	-13.0	-39.7		
	5.2425	-11.8	H	3.0	40.9	1.0	-51.7	-13.0	-38.7		
	6.9900	0.6	H	3.0	41.0	1.0	-39.5	-13.0	-26.5		
	Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										
LTE Band 4 15MHz 16QAM	Company: Samsung Project #: 16K22867 Date: 03-04-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Ear Phone / Z-Position Mode: TX, LTE BAND 4, 15MHz BW, 16QAM										
	<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 FCC Part 27</div> </div>										
		f GHz	SG reading (dBm)	Ant. Pol. (HV)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
		Low Channel (1717.5MHz)									
		3.4350	-17.3	V	3.0	40.2	1.0	-56.5	-13.0	-43.5	
		5.1525	-17.1	V	3.0	40.9	1.0	-57.0	-13.0	-44.0	
		6.8700	-8.3	V	3.0	41.0	1.0	-48.3	-13.0	-35.3	
		3.4350	-16.0	H	3.0	40.2	1.0	-55.2	-13.0	-42.2	
		5.1525	-14.4	H	3.0	40.9	1.0	-54.3	-13.0	-41.3	
		6.8700	-0.4	H	3.0	41.0	1.0	-40.4	-13.0	-27.4	
		Mid Channel (1732.5MHz)									
		3.4650	-17.3	V	3.0	40.3	1.0	-56.5	-13.0	-43.5	
		5.1975	-16.8	V	3.0	40.9	1.0	-56.7	-13.0	-43.7	
		6.9300	-8.9	V	3.0	41.0	1.0	-48.9	-13.0	-35.9	
		3.4650	-18.1	H	3.0	40.3	1.0	-57.3	-13.0	-44.3	
		5.1975	-15.0	H	3.0	40.9	1.0	-54.9	-13.0	-41.9	
		6.9300	-1.3	H	3.0	41.0	1.0	-41.3	-13.0	-28.3	
		High Channel (1747.5MHz)									
		3.4950	-17.6	V	3.0	40.3	1.0	-56.9	-13.0	-43.9	
		5.2425	-17.8	V	3.0	40.9	1.0	-57.6	-13.0	-44.6	
	6.9900	-10.1	V	3.0	41.0	1.0	-50.1	-13.0	-37.1		
	3.4950	-15.1	H	3.0	40.3	1.0	-54.4	-13.0	-41.4		
	5.2425	-13.2	H	3.0	40.9	1.0	-53.1	-13.0	-40.1		
	6.9900	-1.4	H	3.0	41.0	1.0	-41.4	-13.0	-28.4		
	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 4 10MHz QPSK	Company: Samsung											
	Project #: 16K22867											
	Date: 03-04-16											
	Test Engineer: Steven.Kim											
	Configuration: EUT / AC Adapter / Ear Phone / Z-Position											
	Mode: TX, LTE BAND 4, 10MHz BW, QPSK											
			Chamber		Pre-amplifier		Filter		Limit			
			Chamber 2		AFS42		Filter 1		FCC Part 27			
			f GHz	SG reading (dBm)	Ant. Pol. (HV)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
			Low Channel (1715MHz)									
			3.4300	-16.2	V	3.0	40.2	1.0	-55.4	-13.0	-42.4	
			5.1450	-16.9	V	3.0	40.9	1.0	-56.8	-13.0	-43.8	
			6.8600	-6.4	V	3.0	41.0	1.0	-46.4	-13.0	-33.4	
			3.4300	-13.5	H	3.0	40.2	1.0	-52.8	-13.0	-39.8	
			5.1450	-14.6	H	3.0	40.9	1.0	-54.5	-13.0	-41.5	
			6.8600	2.3	H	3.0	41.0	1.0	-37.7	-13.0	-24.7	
			Mid Channel (1732.5MHz)									
			3.4650	-17.2	V	3.0	40.3	1.0	-56.5	-13.0	-43.5	
			5.1975	-17.0	V	3.0	40.9	1.0	-56.8	-13.0	-43.8	
			6.9300	-7.7	V	3.0	41.0	1.0	-47.7	-13.0	-34.7	
			3.4650	-17.8	H	3.0	40.3	1.0	-57.1	-13.0	-44.1	
			5.1975	-14.4	H	3.0	40.9	1.0	-54.2	-13.0	-41.2	
			6.9300	0.8	H	3.0	41.0	1.0	-39.2	-13.0	-26.2	
			High Channel (1750MHz)									
			3.5000	-16.6	V	3.0	40.3	1.0	-55.8	-13.0	-42.8	
		5.2500	-18.0	V	3.0	40.9	1.0	-57.8	-13.0	-44.8		
		7.0000	-7.7	V	3.0	41.0	1.0	-47.7	-13.0	-34.7		
		3.5000	-14.5	H	3.0	40.3	1.0	-53.8	-13.0	-40.8		
		5.2500	-11.0	H	3.0	40.9	1.0	-50.9	-13.0	-37.9		
		7.0000	1.2	H	3.0	41.0	1.0	-38.8	-13.0	-25.8		
		Rev. 03.03.09										
		Note: No other emissions were detected above the system noise floor.										
LTE Band 4 10MHz 16QAM	Company: Samsung											
	Project #: 16K22867											
	Date: 03-04-16											
	Test Engineer: Steven.Kim											
	Configuration: EUT / AC Adapter / Ear Phone / Z-Position											
	Mode: TX, LTE BAND 4, 10MHz BW, 16QAM											
			Chamber		Pre-amplifier		Filter		Limit			
			Chamber 2		AFS42		Filter 1		FCC Part 27			
			f GHz	SG reading (dBm)	Ant. Pol. (HV)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
			Low Channel (1715MHz)									
			3.4300	-17.4	V	3.0	40.2	1.0	-56.6	-13.0	-43.6	
			5.1450	-17.2	V	3.0	40.9	1.0	-57.1	-13.0	-44.1	
			6.8600	-7.7	V	3.0	41.0	1.0	-47.6	-13.0	-34.6	
			3.4300	-14.9	H	3.0	40.2	1.0	-54.2	-13.0	-41.2	
			5.1450	-15.3	H	3.0	40.9	1.0	-55.2	-13.0	-42.2	
			6.8600	0.7	H	3.0	41.0	1.0	-39.2	-13.0	-26.2	
			Mid Channel (1732.5MHz)									
			3.4650	-18.5	V	3.0	40.3	1.0	-57.8	-13.0	-44.8	
			5.1975	-17.5	V	3.0	40.9	1.0	-57.4	-13.0	-44.4	
			6.9300	-9.4	V	3.0	41.0	1.0	-49.4	-13.0	-36.4	
			3.4650	-18.4	H	3.0	40.3	1.0	-57.7	-13.0	-44.7	
			5.1975	-15.1	H	3.0	40.9	1.0	-55.0	-13.0	-42.0	
			6.9300	-0.6	H	3.0	41.0	1.0	-40.6	-13.0	-27.6	
			High Channel (1750MHz)									
			3.5000	-17.9	V	3.0	40.3	1.0	-57.2	-13.0	-44.2	
		5.2500	-17.4	V	3.0	40.9	1.0	-57.3	-13.0	-44.3		
		7.0000	-9.1	V	3.0	41.0	1.0	-49.1	-13.0	-36.1		
		3.5000	-15.3	H	3.0	40.3	1.0	-54.6	-13.0	-41.6		
		5.2500	-12.5	H	3.0	40.9	1.0	-52.4	-13.0	-39.4		
		7.0000	-0.1	H	3.0	41.0	1.0	-40.1	-13.0	-27.1		
		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 5MHz QPSK	Company: Samsung											
	Project #: 16K22867											
	Date: 03-04-16											
	Test Engineer: Steven.Kim											
	Configuration: EUT / AC Adapter / Ear Phone / Z-Position											
	Mode: TX, LTE BAND 4, 5MHz BW, QPSK											
			Chamber Chamber 2		Pre-amplifier AFS42		Filter Filter 1		Limit FCC Part 27			
			f GHz	SGreading (dBm)	Ant. Pol. (HV)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
			Low Channel (1712.5MHz)									
			3.4250	-17.0	V	3.0	40.2	1.0	-56.2	-13.0	-43.2	
			5.1375	-17.7	V	3.0	40.9	1.0	-57.6	-13.0	-44.6	
			6.8500	-6.8	V	3.0	41.0	1.0	-46.8	-13.0	-33.8	
			3.4250	-14.8	H	3.0	40.2	1.0	-54.0	-13.0	-41.0	
			5.1375	-13.0	H	3.0	40.9	1.0	-52.9	-13.0	-39.9	
			6.8500	1.2	H	3.0	41.0	1.0	-38.7	-13.0	-25.7	
			Mid Channel (1732.5MHz)									
			3.4650	-18.7	V	3.0	40.3	1.0	-58.0	-13.0	-45.0	
			5.1975	-17.8	V	3.0	40.9	1.0	-57.7	-13.0	-44.7	
			6.9300	-9.3	V	3.0	41.0	1.0	-49.3	-13.0	-36.3	
			3.4650	-16.4	H	3.0	40.3	1.0	-55.7	-13.0	-42.7	
		5.1975	-13.9	H	3.0	40.9	1.0	-53.8	-13.0	-40.8		
		6.9300	1.3	H	3.0	41.0	1.0	-38.7	-13.0	-25.7		
		High Channel (1752.5MHz)										
		3.5050	-15.6	V	3.0	40.3	1.0	-54.8	-13.0	-41.8		
		5.2575	-16.5	V	3.0	40.9	1.0	-56.4	-13.0	-43.4		
		7.0100	-8.4	V	3.0	41.0	1.0	-48.4	-13.0	-35.4		
		3.5050	-14.5	H	3.0	40.3	1.0	-53.8	-13.0	-40.8		
		5.2575	-10.7	H	3.0	40.9	1.0	-50.6	-13.0	-37.6		
		7.0100	0.6	H	3.0	41.0	1.0	-39.5	-13.0	-26.5		
		Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										
LTE Band 4 5MHz 16QAM	Company: Samsung											
	Project #: 16K22867											
	Date: 03-04-16											
	Test Engineer: Steven.Kim											
	Configuration: EUT / AC Adapter / Ear Phone / Z-Position											
	Mode: TX, LTE BAND 7, 5MHz BW, 16QAM											
			Chamber Chamber 2		Pre-amplifier AFS42		Filter Filter 1		Limit FCC Part 27			
			f GHz	SGreading (dBm)	Ant. Pol. (HV)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
			Low Channel (1712.5MHz)									
			3.4250	-18.1	V	3.0	40.2	1.0	-57.4	-13.0	-44.4	
			5.1375	-18.0	V	3.0	40.9	1.0	-57.9	-13.0	-44.9	
			6.8500	-8.3	V	3.0	41.0	1.0	-48.2	-13.0	-35.2	
			3.4250	-16.4	H	3.0	40.2	1.0	-55.6	-13.0	-42.6	
			5.1375	-14.1	H	3.0	40.9	1.0	-54.0	-13.0	-41.0	
			6.8500	-0.2	H	3.0	41.0	1.0	-40.2	-13.0	-27.2	
			Mid Channel (1732.5MHz)									
			3.4650	-19.6	V	3.0	40.3	1.0	-58.9	-13.0	-45.9	
			5.1975	-18.4	V	3.0	40.9	1.0	-58.3	-13.0	-45.3	
			6.9300	-10.7	V	3.0	41.0	1.0	-50.7	-13.0	-37.7	
			3.4650	-17.9	H	3.0	40.3	1.0	-57.2	-13.0	-44.2	
		5.1975	-14.7	H	3.0	40.9	1.0	-54.6	-13.0	-41.6		
		6.9300	-0.7	H	3.0	41.0	1.0	-40.7	-13.0	-27.7		
		High Channel (1752.5MHz)										
		3.5050	-16.8	V	3.0	40.3	1.0	-56.1	-13.0	-43.1		
		5.2575	-17.2	V	3.0	40.9	1.0	-57.1	-13.0	-44.1		
		7.0100	-9.7	V	3.0	41.0	1.0	-49.7	-13.0	-36.7		
		3.5050	-15.9	H	3.0	40.3	1.0	-55.2	-13.0	-42.2		
		5.2575	-11.9	H	3.0	40.9	1.0	-51.8	-13.0	-38.8		
		7.0100	-1.1	H	3.0	41.0	1.0	-41.1	-13.0	-28.1		
		Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										

		Above 1GHz High Frequency Substitution Measurement											
LTE Band 4 3MHz QPSK	Company: Samsung												
	Project #: 16K22867												
	Date: 03-04-16												
	Test Engineer: Steven.Kim												
	Configuration: EUT / AC Adapter / Ear Phone / Z-Position												
	Mode: TX, LTE BAND 4, 3MHz BW, QPSK												
			Chamber Chamber 2		Pre-amplifier AFS42		Filter Filter 1		Limit FCC Part 27				
			f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes	
			Low Channel (1711.5MHz)										
			3.4230	-16.3	V	3.0	40.2	1.0	-55.5	-13.0	-42.5		
		5.1345	-17.1	V	3.0	40.9	1.0	-57.0	-13.0	-44.0			
		6.8460	-7.3	V	3.0	41.0	1.0	-47.3	-13.0	-34.3			
		3.4230	-13.5	H	3.0	40.2	1.0	-52.7	-13.0	-39.7			
		5.1345	-13.6	H	3.0	40.9	1.0	-53.5	-13.0	-40.5			
		6.8460	2.8	H	3.0	41.0	1.0	-37.2	-13.0	-24.2			
		Mid Channel (1732.5MHz)											
		3.4650	-17.7	V	3.0	40.3	1.0	-57.0	-13.0	-44.0			
		5.1975	-18.1	V	3.0	40.9	1.0	-58.0	-13.0	-45.0			
		6.9300	-7.4	V	3.0	41.0	1.0	-47.4	-13.0	-34.4			
		3.4650	-17.0	H	3.0	40.3	1.0	-56.3	-13.0	-43.3			
		5.1975	-12.8	H	3.0	40.9	1.0	-52.7	-13.0	-39.7			
		6.9300	1.1	H	3.0	41.0	1.0	-38.9	-13.0	-25.9			
		High Channel (1753.5MHz)											
		3.5070	-16.3	V	3.0	40.3	1.0	-55.6	-13.0	-42.6			
		5.2605	-17.7	V	3.0	40.9	1.0	-57.5	-13.0	-44.5			
		7.0140	-8.5	V	3.0	41.0	1.0	-48.5	-13.0	-35.5			
		3.5070	-15.0	H	3.0	40.3	1.0	-54.3	-13.0	-41.3			
		5.2605	-10.0	H	3.0	40.9	1.0	-49.9	-13.0	-36.9			
		7.0140	-0.2	H	3.0	41.0	1.0	-40.2	-13.0	-27.2			
		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											
		Company: Samsung											
		Project #: 16K22867											
		Date: 03-04-16											
		Test Engineer: Steven.Kim											
		Configuration: EUT / AC Adapter / Ear Phone / Z-Position											
		Mode: TX, LTE BAND 4, 3MHz BW, 16QAM											
				Chamber Chamber 2		Pre-amplifier AFS42		Filter Filter 1		Limit FCC Part 27			
		f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes		
		Low Channel (1711.5MHz)											
		3.4230	-17.4	V	3.0	40.2	1.0	-56.6	-13.0	-43.6			
		5.1345	-18.0	V	3.0	40.9	1.0	-57.9	-13.0	-44.9			
		6.8460	-8.3	V	3.0	41.0	1.0	-48.3	-13.0	-35.3			
		3.4230	-15.5	H	3.0	40.2	1.0	-54.7	-13.0	-41.7			
		5.1345	-14.5	H	3.0	40.9	1.0	-54.4	-13.0	-41.4			
		6.8460	0.8	H	3.0	41.0	1.0	-39.2	-13.0	-26.2			
		Mid Channel (1732.5MHz)											
		3.4650	-19.1	V	3.0	40.3	1.0	-58.4	-13.0	-45.4			
		5.1975	-18.4	V	3.0	40.9	1.0	-58.3	-13.0	-45.3			
		6.9300	-9.1	V	3.0	41.0	1.0	-49.1	-13.0	-36.1			
		3.4650	-18.1	H	3.0	40.3	1.0	-57.4	-13.0	-44.4			
		5.1975	-14.0	H	3.0	40.9	1.0	-53.9	-13.0	-40.9			
		6.9300	-0.5	H	3.0	41.0	1.0	-40.5	-13.0	-27.5			
		High Channel (1753.5MHz)											
		3.5070	-17.7	V	3.0	40.3	1.0	-57.0	-13.0	-44.0			
		5.2605	-18.2	V	3.0	40.9	1.0	-58.1	-13.0	-45.1			
		7.0140	-9.5	V	3.0	41.0	1.0	-49.5	-13.0	-36.5			
		3.5070	-16.2	H	3.0	40.3	1.0	-55.5	-13.0	-42.5			
		5.2605	-11.5	H	3.0	40.9	1.0	-51.4	-13.0	-38.4			
		7.0140	-1.9	H	3.0	41.0	1.0	-41.9	-13.0	-28.9			
		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 1.4MHz QPSK	Company:	Samsung										
	Project #:	16K22867										
	Date:	03-04-16										
	Test Engineer:	Steven.Kim										
	Configuration:	EUT / AC Adapter / Ear Phone / Z-Position										
	Mode:	TX, LTE BAND 4, 1.4MHz 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 (1710.7MHz)									
			3.4214	-14.8	V	3.0	40.2	1.0	-54.1	-13.0	-41.1	
			5.1321	-13.9	V	3.0	40.9	1.0	-53.8	-13.0	-40.8	
			6.8428	-3.8	V	3.0	41.0	1.0	-43.7	-13.0	-30.7	
			3.4214	-11.5	H	3.0	40.2	1.0	-50.8	-13.0	-37.8	
			5.1321	-11.6	H	3.0	40.9	1.0	-51.5	-13.0	-38.5	
		6.8428	4.2	H	3.0	41.0	1.0	-35.8	-13.0	-22.8		
		Mid Channel (1732.5MHz)										
		3.4650	-16.1	V	3.0	40.3	1.0	-55.4	-13.0	-42.4		
		5.1975	-16.8	V	3.0	40.9	1.0	-56.7	-13.0	-43.7		
		6.9300	-6.8	V	3.0	41.0	1.0	-46.8	-13.0	-33.8		
		3.4650	-14.1	H	3.0	40.3	1.0	-53.4	-13.0	-40.4		
		5.1975	-11.5	H	3.0	40.9	1.0	-51.4	-13.0	-38.4		
		6.9300	1.3	H	3.0	41.0	1.0	-38.7	-13.0	-25.7		
		High Channel (1754.3MHz)										
		3.5086	-14.7	V	3.0	40.3	1.0	-54.0	-13.0	-41.0		
		5.2629	-16.3	V	3.0	40.9	1.0	-56.2	-13.0	-43.2		
		7.0172	-7.4	V	3.0	41.0	1.0	-47.4	-13.0	-34.4		
		3.5086	-13.7	H	3.0	40.3	1.0	-53.0	-13.0	-40.0		
		5.2629	-8.8	H	3.0	40.9	1.0	-48.7	-13.0	-35.7		
		7.0172	1.2	H	3.0	41.0	1.0	-38.8	-13.0	-25.8		
		Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										
LTE Band 4 1.4MHz 16QAM	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement											
	Company:	Samsung										
	Project #:	16K22867										
	Date:	03-04-16										
	Test Engineer:	Steven.Kim										
	Configuration:	EUT / AC Adapter / Ear Phone / Z-Position										
	Mode:	TX, LTE BAND 4, 1.4MHz 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 (1710.7MHz)									
			3.4214	-15.8	V	3.0	40.2	1.0	-55.0	-13.0	-42.0	
			5.1321	-14.9	V	3.0	40.9	1.0	-54.8	-13.0	-41.8	
			6.8428	-4.7	V	3.0	41.0	1.0	-44.7	-13.0	-31.7	
			3.4214	-12.5	H	3.0	40.2	1.0	-51.7	-13.0	-38.7	
		5.1321	-12.6	H	3.0	40.9	1.0	-52.5	-13.0	-39.5		
		6.8428	3.1	H	3.0	41.0	1.0	-36.9	-13.0	-23.9		
		Mid Channel (1732.5MHz)										
		3.4650	-17.2	V	3.0	40.3	1.0	-56.5	-13.0	-43.5		
		5.1975	-15.7	V	3.0	40.9	1.0	-55.6	-13.0	-42.6		
		6.9300	-8.0	V	3.0	41.0	1.0	-48.0	-13.0	-35.0		
		3.4650	-14.9	H	3.0	40.3	1.0	-54.1	-13.0	-41.1		
		5.1975	-12.4	H	3.0	40.9	1.0	-52.3	-13.0	-39.3		
		6.9300	2.0	H	3.0	41.0	1.0	-38.0	-13.0	-25.0		
		High Channel (1754.3MHz)										
		3.5086	-15.8	V	3.0	40.3	1.0	-55.1	-13.0	-42.1		
		5.2629	-17.4	V	3.0	40.9	1.0	-57.3	-13.0	-44.3		
		7.0172	-8.5	V	3.0	41.0	1.0	-48.5	-13.0	-35.5		
		3.5086	-14.5	H	3.0	40.3	1.0	-53.8	-13.0	-40.8		
		5.2629	-9.9	H	3.0	40.9	1.0	-49.7	-13.0	-36.7		
		7.0172	-0.1	H	3.0	41.0	1.0	-40.2	-13.0	-27.2		
		Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										

LTE Band 2

		UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement									
LTE Band 2 20MHz QPSK	Company: Samsung Project #: 16K22867 Date: 03-04-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Ear Phone / X-Position Mode: TX, LTE BAND 2, 20MHz BW, QPSK										
	<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 FCC Part 24</div> </div>										
		f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
		Low Channel (1860MHz)									
		3.7200	-5.8	V	3.0	40.5	1.0	-45.3	-13.0	-32.3	
		5.5800	-5.5	V	3.0	40.8	1.0	-45.3	-13.0	-32.3	
		7.4400	-2.9	V	3.0	40.8	1.0	-42.7	-13.0	-29.7	
		3.7200	-11.2	H	3.0	40.5	1.0	-50.7	-13.0	-37.7	
		5.5800	-9.6	H	3.0	40.8	1.0	-49.4	-13.0	-36.4	
		7.4400	-5.9	H	3.0	40.8	1.0	-45.7	-13.0	-32.7	
		Mid Channel (1880MHz)									
		3.7600	-5.2	V	3.0	40.5	1.0	-44.8	-13.0	-31.8	
		5.6400	-6.5	V	3.0	40.8	1.0	-46.3	-13.0	-33.3	
		7.5200	-4.1	V	3.0	40.7	1.0	-43.8	-13.0	-30.8	
		3.7600	-9.9	H	3.0	40.5	1.0	-49.4	-13.0	-36.4	
	5.6400	-8.4	H	3.0	40.8	1.0	-48.2	-13.0	-35.2		
	7.5200	-5.6	H	3.0	40.7	1.0	-45.3	-13.0	-32.3		
	High Channel (1900MHz)										
	3.8000	-2.3	V	3.0	40.6	1.0	-41.9	-13.0	-28.9		
	5.7000	-1.4	V	3.0	40.8	1.0	-41.2	-13.0	-28.2		
	7.6000	-2.7	V	3.0	40.7	1.0	-42.4	-13.0	-29.4		
	3.8000	-5.1	H	3.0	40.6	1.0	-44.7	-13.0	-31.7		
	5.7000	-7.2	H	3.0	40.8	1.0	-47.0	-13.0	-34.0		
	7.6000	-4.6	H	3.0	40.7	1.0	-44.3	-13.0	-31.3		
	Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										
LTE Band 2 20MHz 16QAM	Company: Samsung Project #: 16K22867 Date: 03-04-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Ear Phone / X-Position Mode: TX, LTE BAND 2, 20MHz BW, 16QAM										
	<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 FCC Part 24</div> </div>										
		f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
		Low Channel (1860MHz)									
		3.7200	-7.1	V	3.0	40.5	1.0	-46.6	-13.0	-33.6	
		5.5800	-6.9	V	3.0	40.8	1.0	-46.7	-13.0	-33.7	
		7.4400	-4.1	V	3.0	40.8	1.0	-43.8	-13.0	-30.8	
		3.7200	-12.1	H	3.0	40.5	1.0	-51.6	-13.0	-38.6	
		5.5800	-11.0	H	3.0	40.8	1.0	-50.8	-13.0	-37.8	
		7.4400	-7.0	H	3.0	40.8	1.0	-46.8	-13.0	-33.8	
		Mid Channel (1880MHz)									
		3.7600	-6.5	V	3.0	40.5	1.0	-46.0	-13.0	-33.0	
		5.6400	-7.8	V	3.0	40.8	1.0	-47.6	-13.0	-34.6	
		7.5200	-5.4	V	3.0	40.7	1.0	-45.1	-13.0	-32.1	
		3.7600	-11.2	H	3.0	40.5	1.0	-50.7	-13.0	-37.7	
	5.6400	-9.5	H	3.0	40.8	1.0	-49.3	-13.0	-36.3		
	7.5200	-6.9	H	3.0	40.7	1.0	-46.6	-13.0	-33.6		
	High Channel (1900MHz)										
	3.8000	-3.8	V	3.0	40.6	1.0	-43.4	-13.0	-30.4		
	5.7000	-2.5	V	3.0	40.8	1.0	-42.3	-13.0	-29.3		
	7.6000	-3.8	V	3.0	40.7	1.0	-43.4	-13.0	-30.4		
	3.8000	-6.4	H	3.0	40.6	1.0	-46.0	-13.0	-33.0		
	5.7000	-8.7	H	3.0	40.8	1.0	-48.5	-13.0	-35.5		
	7.6000	-6.0	H	3.0	40.7	1.0	-45.7	-13.0	-32.7		
	Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										

		UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement									
LTE Band 2 15MHz QPSK	Company: Samsung Project #: 16K22867 Date: 03-04-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Ear Phone / X-Position Mode: TX, LTE BAND 2, 15MHz BW, QPSK										
	<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 FCC Part 24</div> </div>										
		f	SG reading	Ant. Pol.	Distance	Preamp	Filter	ERP	Limit	Delta	Notes
		GHz	(dBm)	(HV)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
		Low Channel (1857.5MHz)									
		3.7150	-5.1	V	3.0	40.5	1.0	-44.6	-13.0	-31.6	
		5.5725	-4.4	V	3.0	40.8	1.0	-44.3	-13.0	-31.3	
		7.4300	-1.7	V	3.0	40.8	1.0	-41.5	-13.0	-28.5	
		3.7150	-11.6	H	3.0	40.5	1.0	-51.1	-13.0	-38.1	
		5.5725	-8.3	H	3.0	40.8	1.0	-48.1	-13.0	-35.1	
		7.4300	-4.8	H	3.0	40.8	1.0	-44.6	-13.0	-31.6	
		Mid Channel (1880MHz)									
		3.7600	-3.6	V	3.0	40.5	1.0	-43.2	-13.0	-30.2	
		5.6400	-4.9	V	3.0	40.8	1.0	-44.7	-13.0	-31.7	
		7.5200	-2.1	V	3.0	40.7	1.0	-41.8	-13.0	-28.8	
	3.7600	-10.3	H	3.0	40.5	1.0	-49.8	-13.0	-36.8		
	5.6400	-8.3	H	3.0	40.8	1.0	-48.1	-13.0	-35.1		
	7.5200	-6.1	H	3.0	40.7	1.0	-45.8	-13.0	-32.8		
	High Channel (1902.5MHz)										
	3.8050	-1.9	V	3.0	40.6	1.0	-41.5	-13.0	-28.5		
	5.7075	-1.0	V	3.0	40.8	1.0	-40.8	-13.0	-27.8		
	7.6100	-2.0	V	3.0	40.7	1.0	-41.7	-13.0	-28.7		
	3.8050	-4.4	H	3.0	40.6	1.0	-44.0	-13.0	-31.0		
	5.7075	-7.0	H	3.0	40.8	1.0	-46.8	-13.0	-33.8		
	7.6100	-5.3	H	3.0	40.7	1.0	-44.9	-13.0	-31.9		
	Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										
LTE Band 2 15MHz 16QAM	Company: Samsung Project #: 16K22867 Date: 03-04-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Ear Phone / X-Position Mode: TX, LTE BAND 2, 15MHz BW, 16QAM										
	<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 FCC Part 24</div> </div>										
		f	SG reading	Ant. Pol.	Distance	Preamp	Filter	ERP	Limit	Delta	Notes
		GHz	(dBm)	(HV)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
		Low Channel (1857.5MHz)									
		3.7150	-5.9	V	3.0	40.5	1.0	-45.4	-13.0	-32.4	
		5.5725	-5.3	V	3.0	40.8	1.0	-45.1	-13.0	-32.1	
		7.4300	-2.6	V	3.0	40.8	1.0	-42.4	-13.0	-29.4	
		3.7150	-12.9	H	3.0	40.5	1.0	-52.4	-13.0	-39.4	
		5.5725	-8.7	H	3.0	40.8	1.0	-48.5	-13.0	-35.5	
		7.4300	-5.7	H	3.0	40.8	1.0	-45.5	-13.0	-32.5	
		Mid Channel (1880MHz)									
		3.7600	-4.9	V	3.0	40.5	1.0	-44.4	-13.0	-31.4	
		5.6400	-6.6	V	3.0	40.8	1.0	-46.4	-13.0	-33.4	
		7.5200	-4.4	V	3.0	40.7	1.0	-44.1	-13.0	-31.1	
	3.7600	-11.3	H	3.0	40.5	1.0	-50.9	-13.0	-37.9		
	5.6400	-10.0	H	3.0	40.8	1.0	-49.8	-13.0	-36.8		
	7.5200	-7.7	H	3.0	40.7	1.0	-47.4	-13.0	-34.4		
	High Channel (1902.5MHz)										
	3.8050	-0.4	V	3.0	40.6	1.0	-40.0	-13.0	-27.0		
	5.7075	-3.1	V	3.0	40.8	1.0	-42.9	-13.0	-29.9		
	7.6100	-3.8	V	3.0	40.7	1.0	-43.4	-13.0	-30.4		
	3.8050	-5.9	H	3.0	40.6	1.0	-45.4	-13.0	-32.4		
	5.7075	-8.1	H	3.0	40.8	1.0	-47.9	-13.0	-34.9		
	7.6100	-6.5	H	3.0	40.7	1.0	-46.2	-13.0	-33.2		
	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 2 10MHz QPSK	Company: Samsung Project #: 16K22867 Date: 03-03-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Ear Phone / X-Position Mode: TX, LTE BAND 2, 10MHz BW, QPSK		Chamber Chamber 2		Pre-amplifier AFS42		Filter Filter 1		Limit FCC Part 24		
	f GHz	SG reading (dBm)	Ant. Pol. (HV)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes	
	Low Channel (1855MHz)										
	3.7100	-8.6	V	3.0	40.5	1.0	-48.1	-13.0	-35.1		
	5.5650	-4.1	V	3.0	40.8	1.0	-44.0	-13.0	-31.0		
	7.4200	-0.7	V	3.0	40.8	1.0	-40.4	-13.0	-27.4		
	3.7100	-8.8	H	3.0	40.5	1.0	-48.3	-13.0	-35.3		
	5.5650	-9.9	H	3.0	40.8	1.0	-49.7	-13.0	-36.7		
	7.4200	-5.2	H	3.0	40.8	1.0	-45.0	-13.0	-32.0		
	Mid Channel (1880MHz)										
	3.7600	-6.7	V	3.0	40.5	1.0	-46.2	-13.0	-33.2		
	5.6400	-5.5	V	3.0	40.8	1.0	-45.3	-13.0	-32.3		
	7.5200	-3.8	V	3.0	40.7	1.0	-43.6	-13.0	-30.6		
	3.7600	-12.3	H	3.0	40.5	1.0	-51.9	-13.0	-38.9		
	5.6400	-12.9	H	3.0	40.8	1.0	-52.7	-13.0	-39.7		
	7.5200	-7.5	H	3.0	40.7	1.0	-47.2	-13.0	-34.2		
	High Channel (1905MHz)										
	3.8100	0.2	V	3.0	40.6	1.0	-39.4	-13.0	-26.4		
	5.7150	-0.2	V	3.0	40.8	1.0	-40.0	-13.0	-27.0		
	7.6200	-1.2	V	3.0	40.7	1.0	-40.9	-13.0	-27.9		
	3.8100	-3.8	H	3.0	40.6	1.0	-43.4	-13.0	-30.4		
	5.7150	-1.6	H	3.0	40.8	1.0	-41.4	-13.0	-28.4		
	7.6200	-4.6	H	3.0	40.7	1.0	-44.3	-13.0	-31.3		
	Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										
LTE Band 2 10MHz 16QAM	Company: Samsung Project #: 16K22867 Date: 03-03-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Ear Phone / X-Position Mode: TX, LTE BAND 2, 10MHz BW, 16QAM		Chamber Chamber 2		Pre-amplifier AFS42		Filter Filter 1		Limit FCC Part 24		
	f GHz	SG reading (dBm)	Ant. Pol. (HV)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes	
	Low Channel (1855MHz)										
	3.7100	-9.7	V	3.0	40.5	1.0	-49.2	-13.0	-36.2		
	5.5650	-5.1	V	3.0	40.8	1.0	-44.9	-13.0	-31.9		
	7.4200	-1.2	V	3.0	40.8	1.0	-41.0	-13.0	-28.0		
	3.7100	-9.9	H	3.0	40.5	1.0	-49.4	-13.0	-36.4		
	5.5650	-10.5	H	3.0	40.8	1.0	-50.4	-13.0	-37.4		
	7.4200	-6.0	H	3.0	40.8	1.0	-45.7	-13.0	-32.7		
	Mid Channel (1880MHz)										
	3.7600	-7.8	V	3.0	40.5	1.0	-47.3	-13.0	-34.3		
	5.6400	-6.6	V	3.0	40.8	1.0	-46.4	-13.0	-33.4		
	7.5200	-4.9	V	3.0	40.7	1.0	-44.7	-13.0	-31.7		
	3.7600	-14.2	H	3.0	40.5	1.0	-53.7	-13.0	-40.7		
	5.6400	-14.2	H	3.0	40.8	1.0	-54.0	-13.0	-41.0		
	7.5200	-8.3	H	3.0	40.7	1.0	-48.0	-13.0	-35.0		
	High Channel (1905MHz)										
	3.8100	-1.2	V	3.0	40.6	1.0	-40.8	-13.0	-27.8		
	5.7150	-2.1	V	3.0	40.8	1.0	-41.9	-13.0	-28.9		
	7.6200	-2.9	V	3.0	40.7	1.0	-42.6	-13.0	-29.6		
	3.8100	-5.2	H	3.0	40.6	1.0	-44.7	-13.0	-31.7		
	5.7150	-3.6	H	3.0	40.8	1.0	-43.3	-13.0	-30.3		
	7.6200	-6.1	H	3.0	40.7	1.0	-45.7	-13.0	-32.7		
	Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										

		UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement										
LTE Band 2 5MHz QPSK	Company: Samsung Project #: 16K22867 Date: 03-03-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Ear Phone / X-Position Mode: TX, LTE BAND 2, 5MHz BW, QPSK		Chamber Chamber 2		Pre-amplifier AFS42		Filter Filter 1		Limit FCC Part 24			
	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes		
	Low Channel (1852.5MHz)											
	3.7050	-5.4	V	3.0	40.5	1.0	-44.9	-13.0	-31.9			
	5.5575	-5.6	V	3.0	40.8	1.0	-45.4	-13.0	-32.4			
	7.4100	-1.8	V	3.0	40.8	1.0	-41.6	-13.0	-28.6			
	3.7050	-11.3	H	3.0	40.5	1.0	-50.8	-13.0	-37.8			
	5.5575	-9.9	H	3.0	40.8	1.0	-49.7	-13.0	-36.7			
	7.4100	-7.7	H	3.0	40.8	1.0	-47.5	-13.0	-34.5			
	Mid Channel (1880MHz)											
	3.7600	-2.2	V	3.0	40.5	1.0	-41.7	-13.0	-28.7			
	5.6400	-3.3	V	3.0	40.8	1.0	-43.1	-13.0	-30.1			
	7.5200	-2.1	V	3.0	40.7	1.0	-41.8	-13.0	-28.8			
	3.7600	-9.2	H	3.0	40.5	1.0	-48.8	-13.0	-35.8			
	5.6400	-10.6	H	3.0	40.8	1.0	-50.4	-13.0	-37.4			
7.5200	-7.3	H	3.0	40.7	1.0	-47.0	-13.0	-34.0				
High Channel (1907.5MHz)												
3.8150	1.7	V	3.0	40.6	1.0	-37.9	-13.0	-24.9				
5.7225	0.0	V	3.0	40.8	1.0	-39.8	-13.0	-26.8				
7.6300	-1.1	V	3.0	40.7	1.0	-40.7	-13.0	-27.7				
3.8150	-6.8	H	3.0	40.6	1.0	-46.4	-13.0	-33.4				
5.7225	-9.2	H	3.0	40.8	1.0	-49.0	-13.0	-36.0				
7.6300	-5.8	H	3.0	40.7	1.0	-45.5	-13.0	-32.5				
Rev.03.03.09 Note: No other emissions were detected above the system noise floor.												
LTE Band 2 5MHz 16QAM	Company: Samsung Project #: 16K22867 Date: 03-03-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Ear Phone / X-Position Mode: TX, LTE BAND 2, 5MHz BW, 16QAM		Chamber Chamber 2		Pre-amplifier AFS42		Filter Filter 1		Limit FCC Part 24			
	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes		
	Low Channel (1852.5MHz)											
	3.7050	-5.9	V	3.0	40.5	1.0	-45.4	-13.0	-32.4			
	5.5575	-6.7	V	3.0	40.8	1.0	-46.5	-13.0	-33.5			
	7.4100	-2.5	V	3.0	40.8	1.0	-42.3	-13.0	-29.3			
	3.7050	-12.1	H	3.0	40.5	1.0	-51.6	-13.0	-38.6			
	5.5575	-11.0	H	3.0	40.8	1.0	-50.8	-13.0	-37.8			
	7.4100	-8.2	H	3.0	40.8	1.0	-48.0	-13.0	-35.0			
	Mid Channel (1880MHz)											
	3.7600	-3.8	V	3.0	40.5	1.0	-43.4	-13.0	-30.4			
	5.6400	-5.2	V	3.0	40.8	1.0	-45.0	-13.0	-32.0			
	7.5200	-3.4	V	3.0	40.7	1.0	-43.1	-13.0	-30.1			
	3.7600	-10.8	H	3.0	40.5	1.0	-50.4	-13.0	-37.4			
	5.6400	-11.9	H	3.0	40.8	1.0	-51.7	-13.0	-38.7			
7.5200	-8.5	H	3.0	40.7	1.0	-48.3	-13.0	-35.3				
High Channel (1907.5MHz)												
3.8150	0.5	V	3.0	40.6	1.0	-39.1	-13.0	-26.1				
5.7225	-1.9	V	3.0	40.8	1.0	-41.7	-13.0	-28.7				
7.6300	-2.3	V	3.0	40.7	1.0	-41.9	-13.0	-28.9				
3.8150	-8.0	H	3.0	40.6	1.0	-47.6	-13.0	-34.6				
5.7225	-10.6	H	3.0	40.8	1.0	-50.4	-13.0	-37.4				
7.6300	-6.6	H	3.0	40.7	1.0	-46.2	-13.0	-33.2				
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 2 3MHz QPSK	Company:	Samsung										
	Project #:	16K22867										
	Date:	03-03-16										
	Test Engineer:	Steven.Kim										
	Configuration:	EUT / AC Adapter / Ear Phone / X-Position										
	Mode:	TX, LTE BAND 2, 3MHz BW, QPSK										
			Chamber	Pre-amplifier	Filter	Limit						
			Chamber 2	AFS42	Filter 1	FCC Part 24						
			f GHz	SG reading (dBm)	Ant. Pol. (HV)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
			Low Channel (1851.5MHz)									
			3.7030	-5.4	V	3.0	40.5	1.0	-44.9	-13.0	-31.9	
			5.5545	-5.6	V	3.0	40.8	1.0	-45.4	-13.0	-32.4	
			7.4060	-2.0	V	3.0	40.8	1.0	-41.8	-13.0	-28.8	
			3.7030	-10.8	H	3.0	40.5	1.0	-50.3	-13.0	-37.3	
			5.5545	-3.5	H	3.0	40.8	1.0	-43.3	-13.0	-30.3	
		7.4060	-5.7	H	3.0	40.8	1.0	-45.5	-13.0	-32.5		
		Mid Channel (1880MHz)										
		3.7600	-2.1	V	3.0	40.5	1.0	-41.6	-13.0	-28.6		
		5.6400	-2.8	V	3.0	40.8	1.0	-42.6	-13.0	-29.6		
		7.5200	-2.9	V	3.0	40.7	1.0	-42.7	-13.0	-29.7		
		3.7600	-8.0	H	3.0	40.5	1.0	-47.5	-13.0	-34.5		
		5.6400	-2.1	H	3.0	40.8	1.0	-41.9	-13.0	-28.9		
		7.5200	-5.5	H	3.0	40.7	1.0	-45.2	-13.0	-32.2		
		High Channel (1908.5MHz)										
		3.8170	1.8	V	3.0	40.6	1.0	-37.8	-13.0	-24.8		
		5.7255	0.3	V	3.0	40.8	1.0	-39.5	-13.0	-26.5		
		7.6340	-1.0	V	3.0	40.7	1.0	-40.7	-13.0	-27.7		
		3.8170	-5.3	H	3.0	40.6	1.0	-44.9	-13.0	-31.9		
		5.7255	-4.9	H	3.0	40.8	1.0	-44.7	-13.0	-31.7		
		7.6340	-4.5	H	3.0	40.7	1.0	-44.1	-13.0	-31.1		
		Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										
LTE Band 2 3MHz 16QAM	Company:	Samsung										
	Project #:	16K22867										
	Date:	03-03-16										
	Test Engineer:	Steven.Kim										
	Configuration:	EUT / AC Adapter / Ear Phone / X-Position										
	Mode:	TX, LTE BAND 2, 3MHz BW, 16QAM										
			Chamber	Pre-amplifier	Filter	Limit						
			Chamber 2	AFS42	Filter 1	FCC Part 24						
			f GHz	SG reading (dBm)	Ant. Pol. (HV)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
			Low Channel (1851.5MHz)									
			3.703	-6.8	V	3.0	40.5	1.0	-46.3	-13.0	-33.3	
			5.555	-6.8	V	3.0	40.8	1.0	-46.6	-13.0	-33.6	
			7.406	-3.6	V	3.0	40.8	1.0	-43.4	-13.0	-30.4	
			3.703	-12.0	H	3.0	40.5	1.0	-51.5	-13.0	-38.5	
			5.555	-4.7	H	3.0	40.8	1.0	-44.5	-13.0	-31.5	
		7.406	-6.8	H	3.0	40.8	1.0	-46.6	-13.0	-33.6		
		Mid Channel (1880MHz)										
		3.760	-3.6	V	3.0	40.5	1.0	-43.2	-13.0	-30.2		
		5.640	-4.4	V	3.0	40.8	1.0	-44.2	-13.0	-31.2		
		7.520	-4.0	V	3.0	40.7	1.0	-43.7	-13.0	-30.7		
		3.760	-9.3	H	3.0	40.5	1.0	-48.9	-13.0	-35.9		
		5.640	-4.0	H	3.0	40.8	1.0	-43.8	-13.0	-30.8		
		7.520	-6.7	H	3.0	40.7	1.0	-46.4	-13.0	-33.4		
		High Channel (1908.5MHz)										
		3.817	0.1	V	3.0	40.6	1.0	-39.5	-13.0	-26.5		
		5.726	-1.2	V	3.0	40.8	1.0	-41.0	-13.0	-28.0		
		7.634	-2.4	V	3.0	40.7	1.0	-42.0	-13.0	-29.0		
		3.817	-7.1	H	3.0	40.6	1.0	-46.7	-13.0	-33.7		
		5.726	-6.0	H	3.0	40.8	1.0	-45.8	-13.0	-32.8		
		7.634	-5.5	H	3.0	40.7	1.0	-45.2	-13.0	-32.2		
		Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										

LTE Band 2 1.4MHz QPSK	<p style="text-align: center;">UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement</p> <p>Company: Samsung Project #: 16K22867 Date: 03-03-16 Test Engineer: Steven.Kim Configuration: EUT / AC Adapter / Ear Phone / X-Position Mode: TX, LTE BAND 2, 1.4MHz BW,QPSK</p> <p style="text-align: center;"> Chamber Pre-amplifier Filter Limit </p> <p style="text-align: center;"> Chamber 2 AFS42 Filter 1 FCC Part 24 </p> <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>ERP (dBm)</th> <th>Limit (dBm)</th> <th>Delta (dB)</th> <th>Notes</th> </tr> </thead> <tbody> <tr><td colspan="10">Low Channel (1850.7MHz)</td></tr> <tr><td>3.7014</td><td>-5.6</td><td>V</td><td>3.0</td><td>40.5</td><td>1.0</td><td>-45.1</td><td>-13.0</td><td>-32.1</td><td></td></tr> <tr><td>5.5521</td><td>-5.9</td><td>V</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-45.7</td><td>-13.0</td><td>-32.7</td><td></td></tr> <tr><td>7.4028</td><td>-1.6</td><td>V</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-41.4</td><td>-13.0</td><td>-28.4</td><td></td></tr> <tr><td>3.7014</td><td>-10.9</td><td>H</td><td>3.0</td><td>40.5</td><td>1.0</td><td>-50.4</td><td>-13.0</td><td>-37.4</td><td></td></tr> <tr><td>5.5521</td><td>-10.0</td><td>H</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-49.9</td><td>-13.0</td><td>-36.9</td><td></td></tr> <tr><td>7.4028</td><td>-7.0</td><td>H</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-46.8</td><td>-13.0</td><td>-33.8</td><td></td></tr> <tr><td colspan="10">Mid Channel (1880MHz)</td></tr> <tr><td>3.7600</td><td>-1.8</td><td>V</td><td>3.0</td><td>40.5</td><td>1.0</td><td>-41.3</td><td>-13.0</td><td>-28.3</td><td></td></tr> <tr><td>5.6400</td><td>-3.2</td><td>V</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-43.0</td><td>-13.0</td><td>-30.0</td><td></td></tr> <tr><td>7.5200</td><td>-1.8</td><td>V</td><td>3.0</td><td>40.7</td><td>1.0</td><td>-41.6</td><td>-13.0</td><td>-28.6</td><td></td></tr> <tr><td>3.7600</td><td>-8.2</td><td>H</td><td>3.0</td><td>40.5</td><td>1.0</td><td>-47.7</td><td>-13.0</td><td>-34.7</td><td></td></tr> <tr><td>5.6400</td><td>-9.4</td><td>H</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-49.2</td><td>-13.0</td><td>-36.2</td><td></td></tr> <tr><td>7.5200</td><td>-5.9</td><td>H</td><td>3.0</td><td>40.7</td><td>1.0</td><td>-45.7</td><td>-13.0</td><td>-32.7</td><td></td></tr> <tr><td colspan="10">High Channel (1909.3MHz)</td></tr> <tr><td>3.8186</td><td>2.9</td><td>V</td><td>3.0</td><td>40.6</td><td>1.0</td><td>-36.7</td><td>-13.0</td><td>-23.7</td><td></td></tr> <tr><td>5.7279</td><td>1.2</td><td>V</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-38.6</td><td>-13.0</td><td>-25.6</td><td></td></tr> <tr><td>7.6372</td><td>-1.4</td><td>V</td><td>3.0</td><td>40.7</td><td>1.0</td><td>-41.0</td><td>-13.0</td><td>-28.0</td><td></td></tr> <tr><td>3.8186</td><td>-5.6</td><td>H</td><td>3.0</td><td>40.6</td><td>1.0</td><td>-45.2</td><td>-13.0</td><td>-32.2</td><td></td></tr> <tr><td>5.7279</td><td>-9.1</td><td>H</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-48.9</td><td>-13.0</td><td>-35.9</td><td></td></tr> <tr><td>7.6372</td><td>-6.4</td><td>H</td><td>3.0</td><td>40.7</td><td>1.0</td><td>-46.1</td><td>-13.0</td><td>-33.1</td><td></td></tr> </tbody> </table> <p>Rev.03.03.09 Note: No other emissions were detected above the system noise floor.</p>	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes	Low Channel (1850.7MHz)										3.7014	-5.6	V	3.0	40.5	1.0	-45.1	-13.0	-32.1		5.5521	-5.9	V	3.0	40.8	1.0	-45.7	-13.0	-32.7		7.4028	-1.6	V	3.0	40.8	1.0	-41.4	-13.0	-28.4		3.7014	-10.9	H	3.0	40.5	1.0	-50.4	-13.0	-37.4		5.5521	-10.0	H	3.0	40.8	1.0	-49.9	-13.0	-36.9		7.4028	-7.0	H	3.0	40.8	1.0	-46.8	-13.0	-33.8		Mid Channel (1880MHz)										3.7600	-1.8	V	3.0	40.5	1.0	-41.3	-13.0	-28.3		5.6400	-3.2	V	3.0	40.8	1.0	-43.0	-13.0	-30.0		7.5200	-1.8	V	3.0	40.7	1.0	-41.6	-13.0	-28.6		3.7600	-8.2	H	3.0	40.5	1.0	-47.7	-13.0	-34.7		5.6400	-9.4	H	3.0	40.8	1.0	-49.2	-13.0	-36.2		7.5200	-5.9	H	3.0	40.7	1.0	-45.7	-13.0	-32.7		High Channel (1909.3MHz)										3.8186	2.9	V	3.0	40.6	1.0	-36.7	-13.0	-23.7		5.7279	1.2	V	3.0	40.8	1.0	-38.6	-13.0	-25.6		7.6372	-1.4	V	3.0	40.7	1.0	-41.0	-13.0	-28.0		3.8186	-5.6	H	3.0	40.6	1.0	-45.2	-13.0	-32.2		5.7279	-9.1	H	3.0	40.8	1.0	-48.9	-13.0	-35.9		7.6372	-6.4	H	3.0	40.7	1.0	-46.1	-13.0	-33.1	
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3.8186	-7.0	H	3.0	40.6	1.0	-46.6	-13.0	-33.6																																																																																																																																																																																																																					
5.7279	-10.6	H	3.0	40.8	1.0	-50.4	-13.0	-37.4																																																																																																																																																																																																																					
7.6372	-7.5	H	3.0	40.7	1.0	-47.2	-13.0	-34.2																																																																																																																																																																																																																					