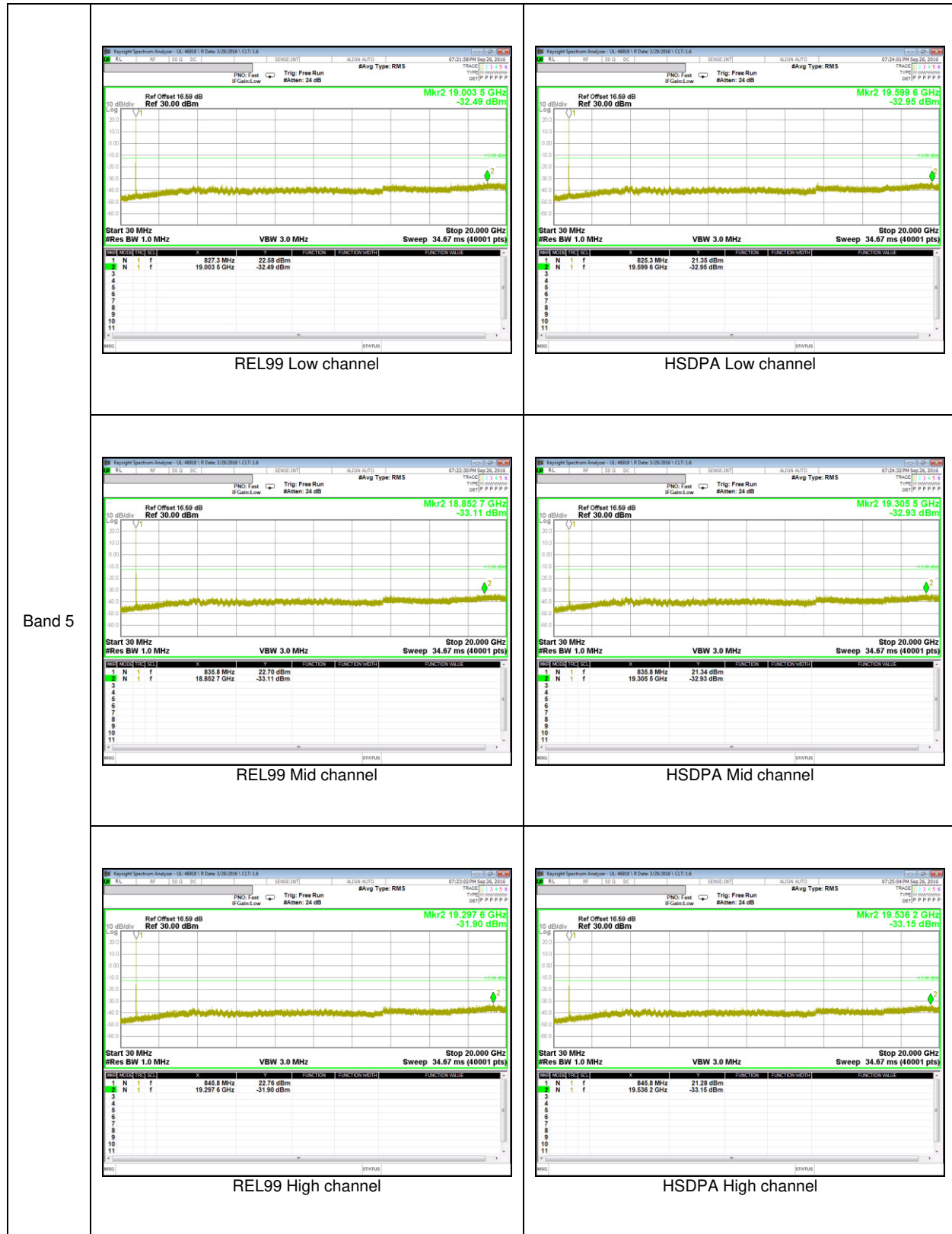
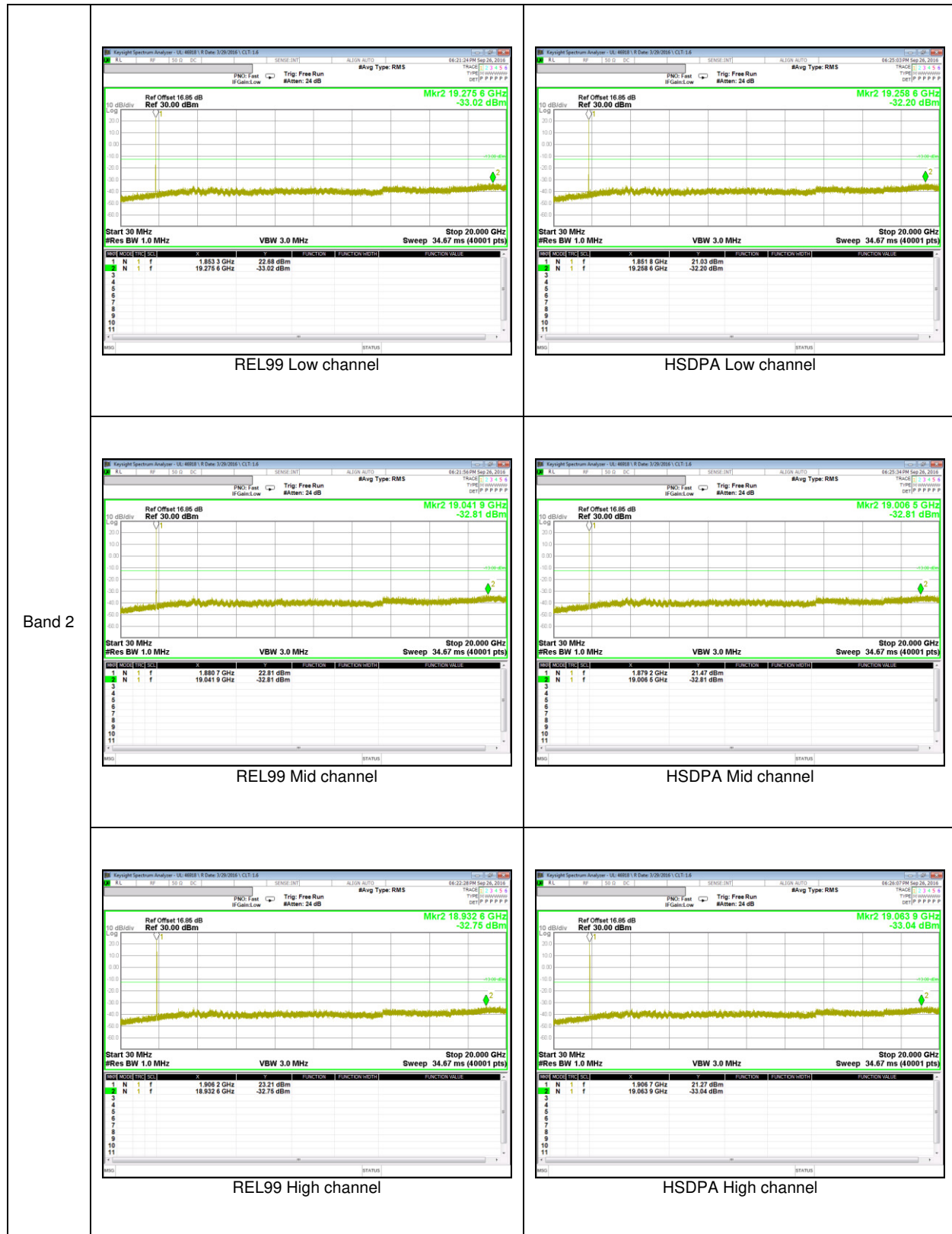


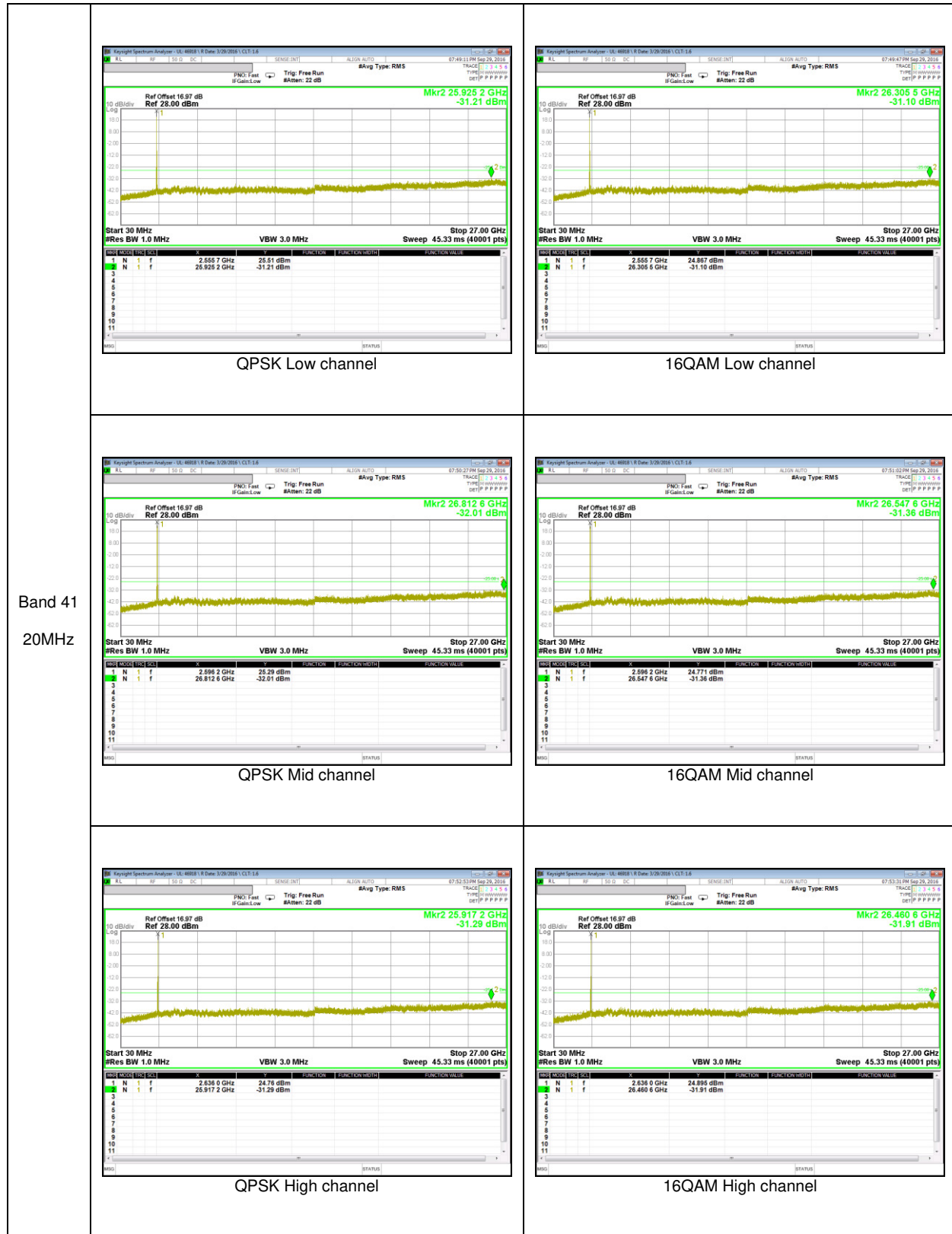
WCDMA Band 5

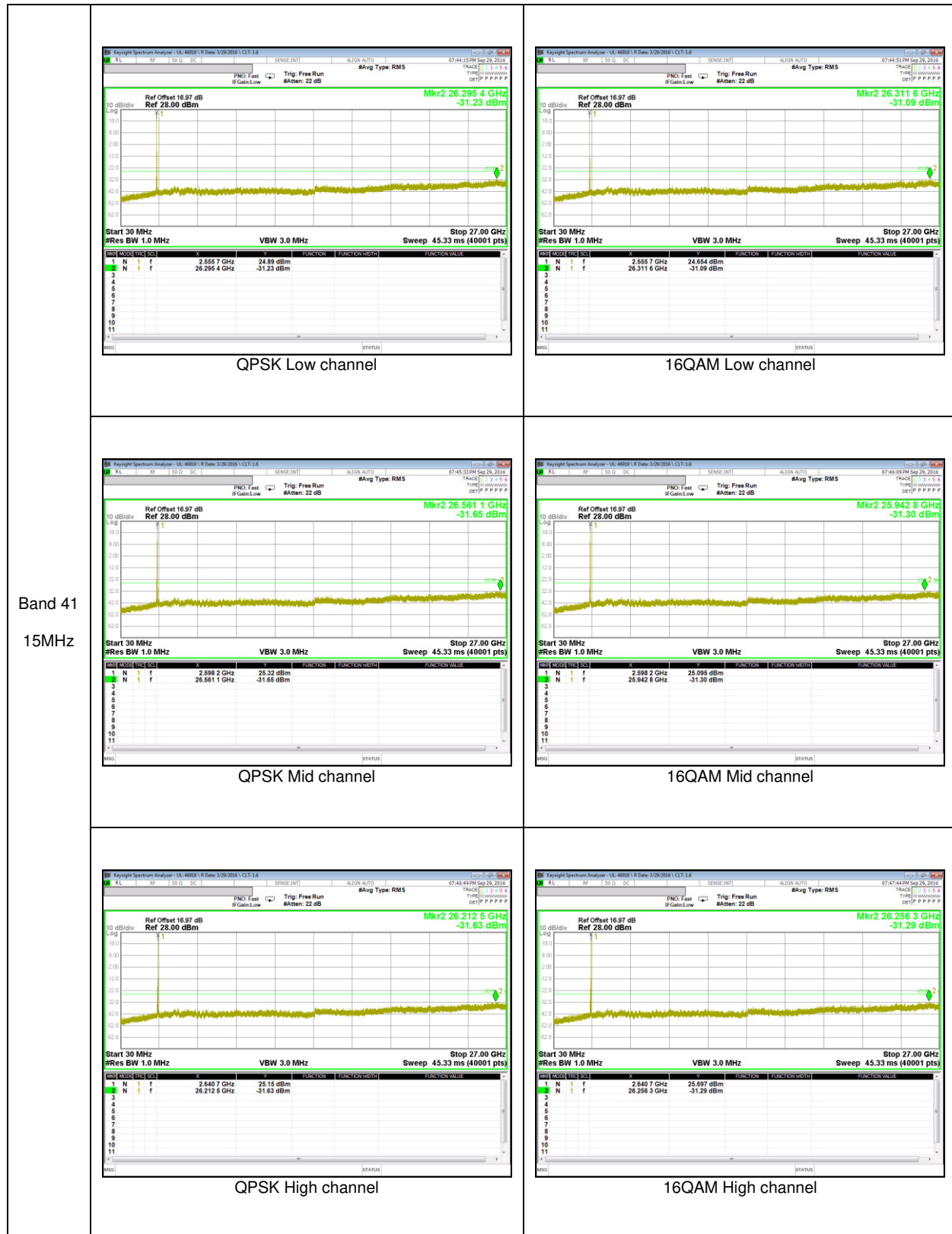


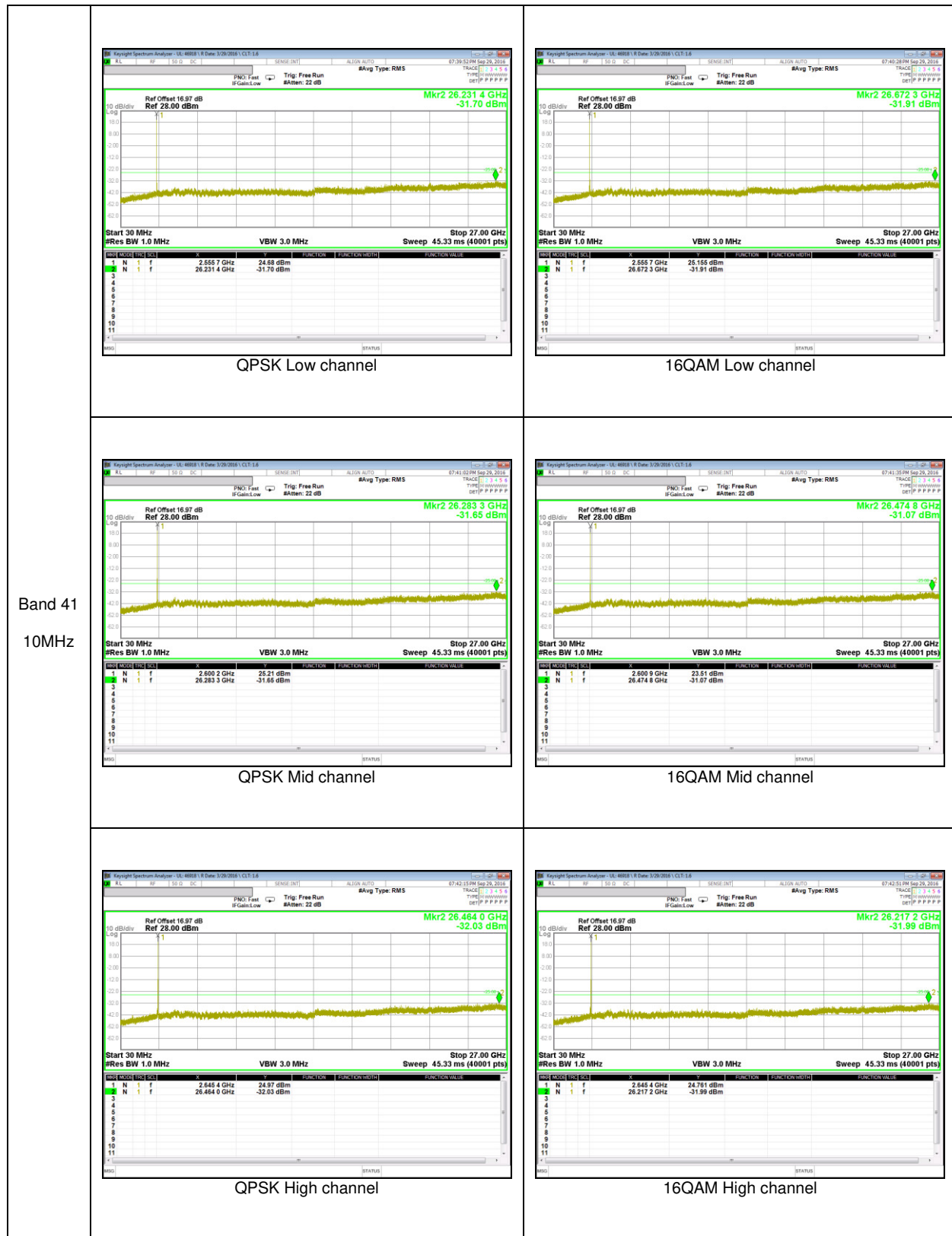
WCDMA Band 2

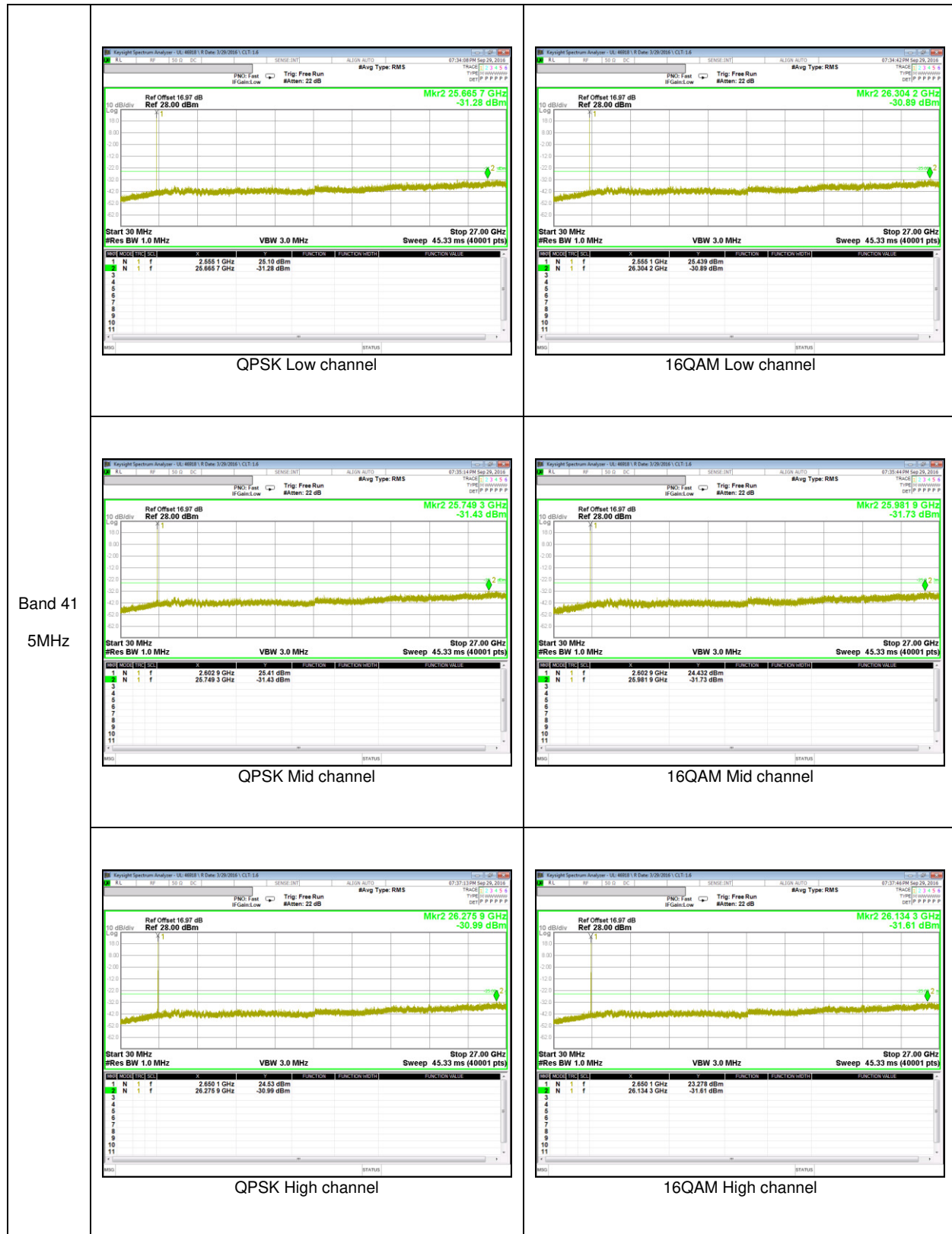


LTE Band 41

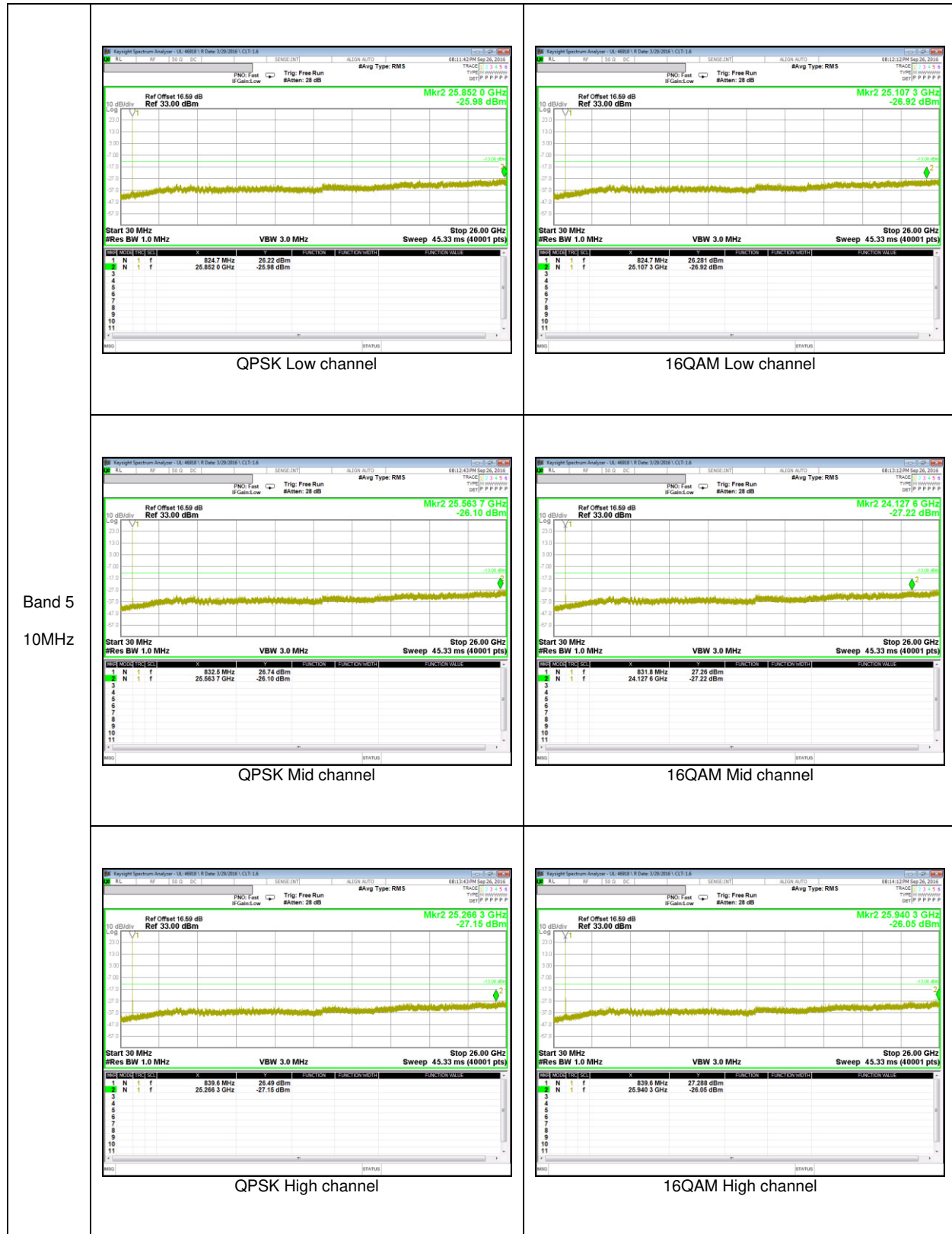


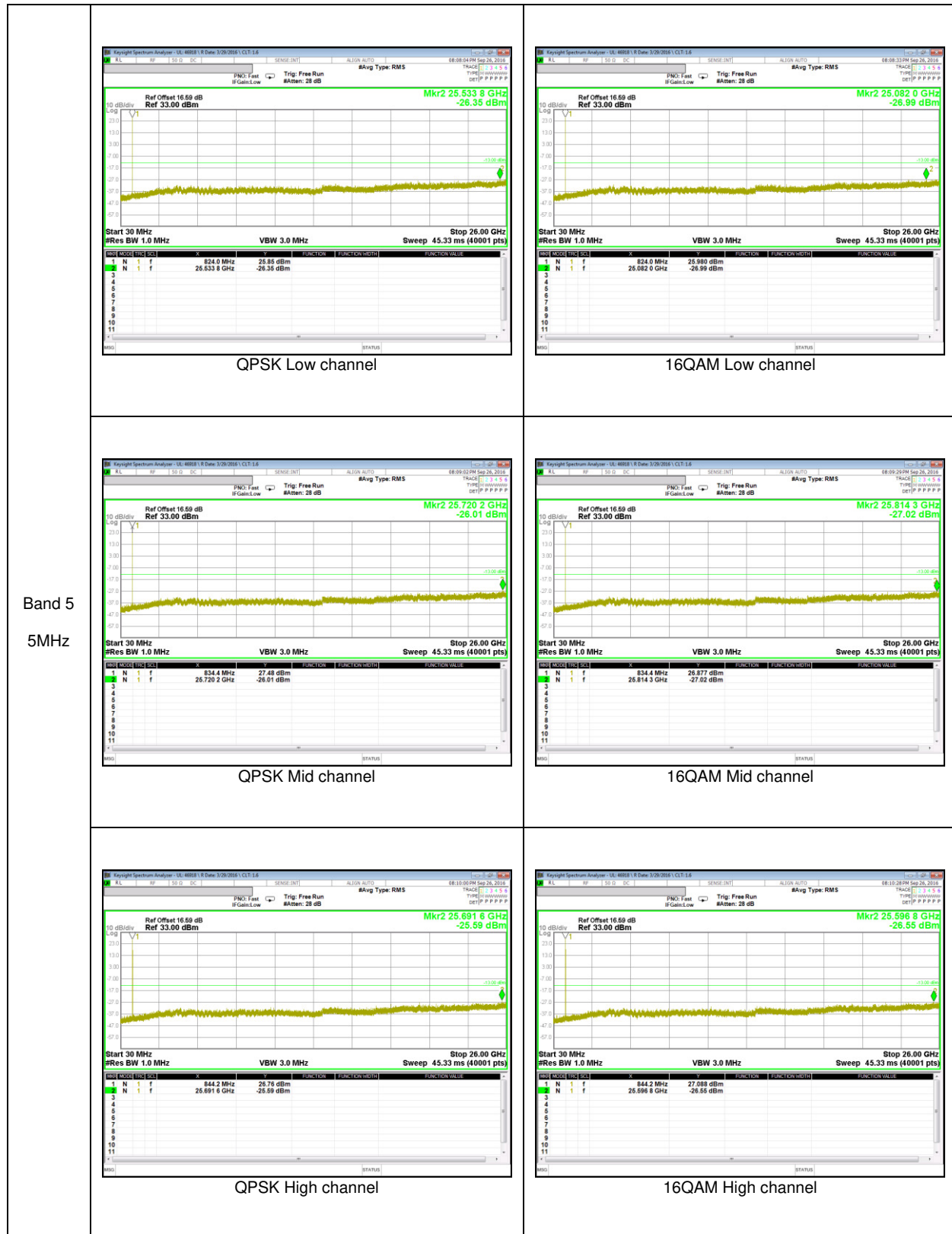


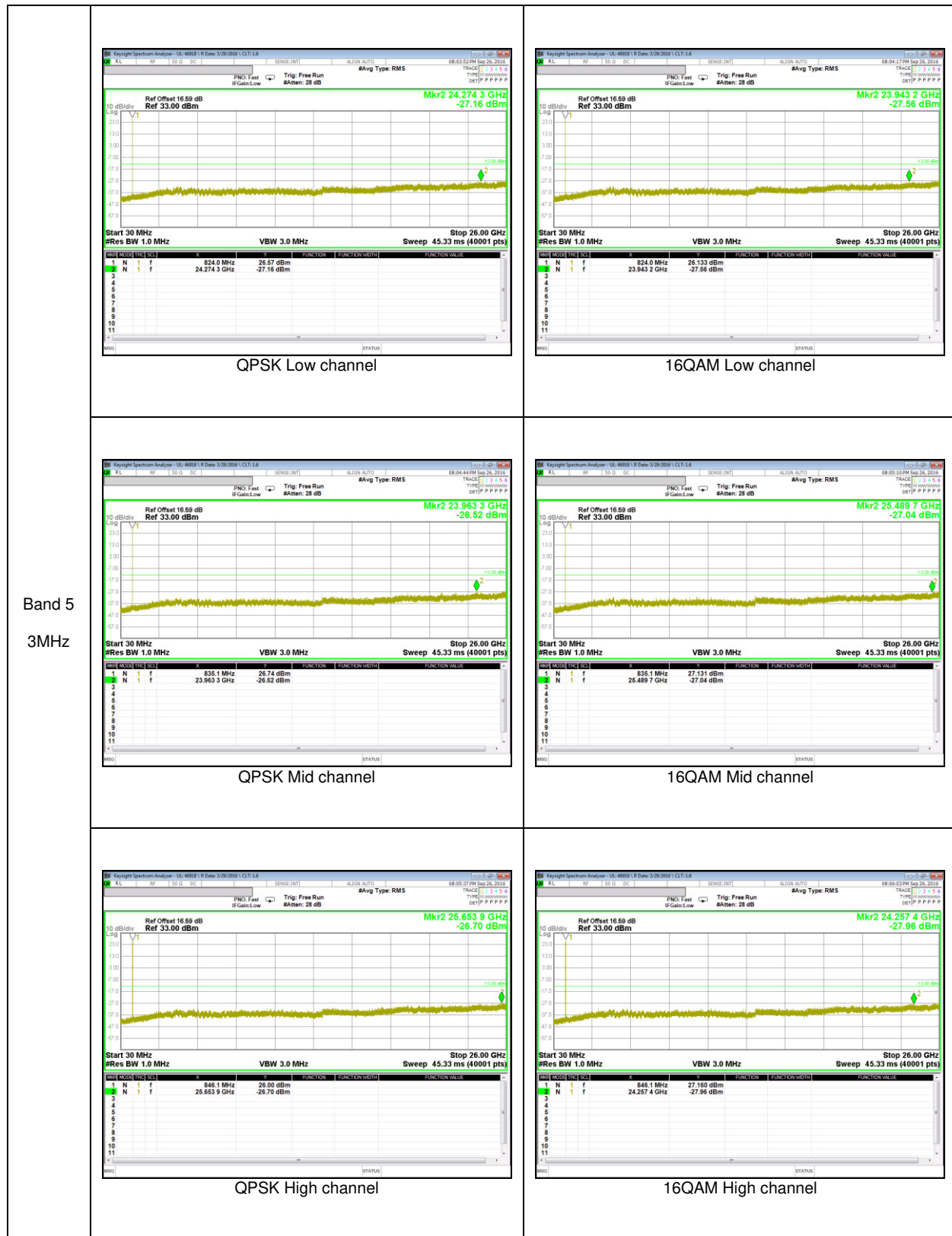


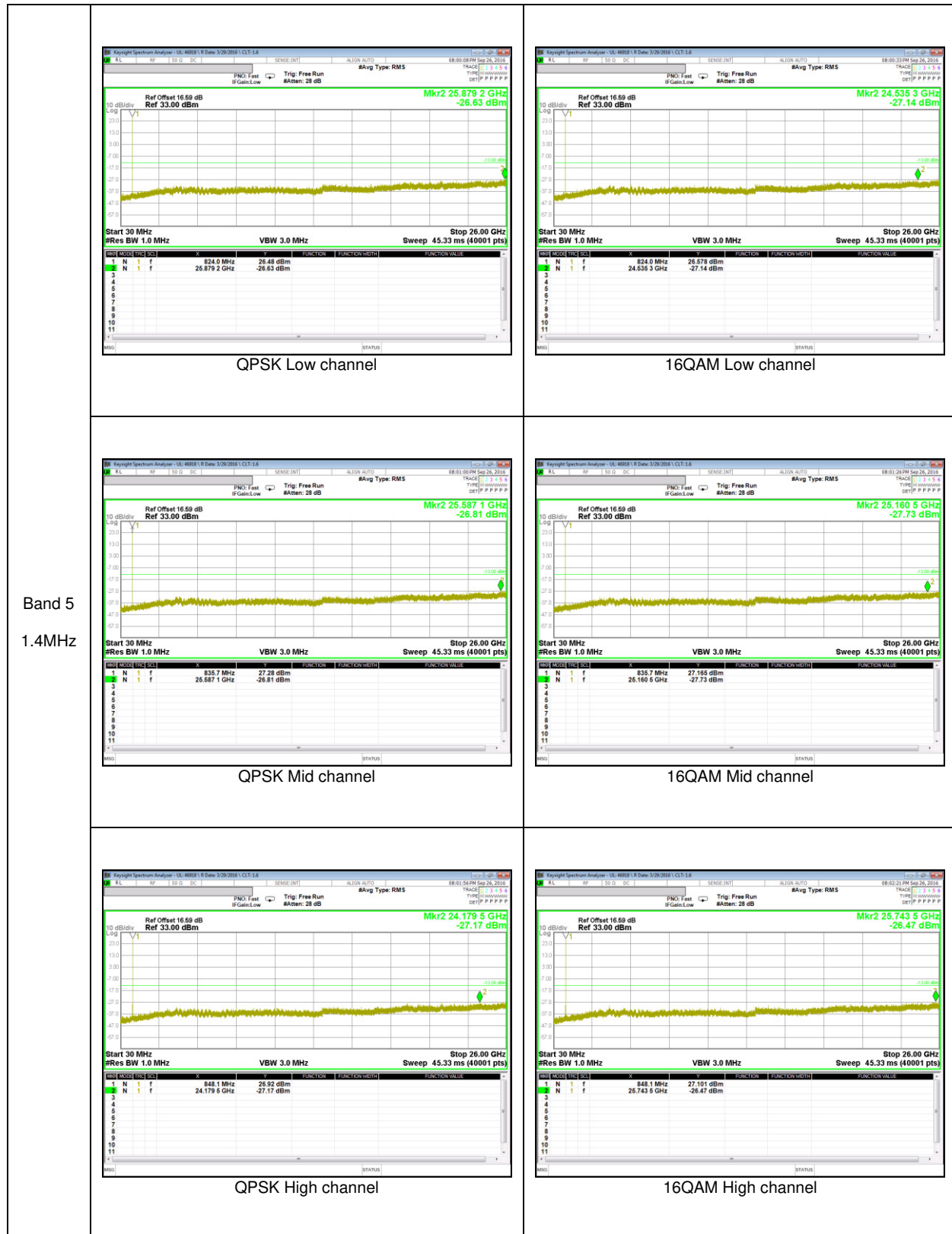


LTE Band 5









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

GSM 850, Channel 190, Frequency 836.6 MHz

Reference Frequency: GSM850 Mid Channel 836.6 MHz @ 20°C Limit: ± 2.5 ppm = 2091.500 Hz				
Power Supply (Vdc)	Environment Temperature (*C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.85	50	836.60001408	-0.001	2.5
3.85	40	836.60001939	-0.008	2.5
3.85	30	836.60001737	-0.005	2.5
3.85	20	836.60001301	0	2.5
3.85	10	836.60002146	-0.010	2.5
3.85	0	836.60001415	-0.001	2.5
3.85	-10	836.60001669	-0.004	2.5
3.85	-20	836.60001394	-0.001	2.5
3.85	-30	836.60001725	-0.005	2.5

Reference Frequency: GSM850 Mid Channel 836.6 MHz @ 20°C Limit: ± 2.5 ppm = 2091.500 Hz				
Power Supply [Vdc]	Environment Temperature (*C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.85	20	836.60001301	0	2.5
4.43	20	836.60001586	-0.003	2.5
3.60	20	836.60002248	-0.011	2.5

WCDMA Band 5, Channel 4183, Frequency 836.6 MHz

Reference Frequency: WCDMA Band 5 Mid Channel 836.6 MHz @ 20°C				
Limit: +- 2.5 ppm = 2091.500 Hz				
Power Supply [Vdc]	Environment Temperature [°C]	Frequency Deviation Measured with Time Elapse		
		[MHz]	Delta [ppm]	Limit [ppm]
3.85	50	836.59998569	0.001	2.5
3.85	40	836.59998624	0.000	2.5
3.85	30	836.59998696	0.000	2.5
3.85	20	836.59998661	0	2.5
3.85	10	836.59998795	-0.002	2.5
3.85	0	836.59998803	-0.002	2.5
3.85	-10	836.59998670	0.000	2.5
3.85	-20	836.59998755	-0.001	2.5
3.85	-30	836.59998604	0.001	2.5

Reference Frequency: WCDMA Band 5 Mid Channel 836.6 MHz @ 20°C				
Limit: +- 2.5 ppm = 2091.500 Hz				
Power Supply [Vdc]	Environment Temperature [°C]	Frequency Deviation Measured with Time Elapse		
		[MHz]	Delta [ppm]	Limit [ppm]
3.85	20	836.59998661	0	2.5
4.43	20	836.59998787	-0.002	2.5
3.60	20	836.59998511	0.002	2.5

LTE Band 5, Channel 20524, Frequency 836.5 MHz

Reference Frequency: LTE Band 41 Mid Channel 2605 MHz @ 20°C				
Limit: +- 2.5 ppm = 2091.250 Hz				
Power Supply [Vdc]	Environment Temperature [°C]	Frequency Deviation Measured with Time Elapse		
		[MHz]	Delta [ppm]	Limit [ppm]
3.85	50	836.50001526	-0.007	2.5
3.85	40	836.50001336	-0.004	2.5
3.85	30	836.50000973	0.000	2.5
3.85	20	836.50000981	0	2.5
3.85	10	836.50001420	-0.005	2.5
3.85	0	836.50000911	0.001	2.5
3.85	-10	836.50001120	-0.002	2.5
3.85	-20	836.50000947	0.000	2.5
3.85	-30	836.50001364	-0.005	2.5

Reference Frequency: LTE Band 41 Mid Channel 2605 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	836.50000981	0	2.5
4.43	20	836.50001058	-0.001	2.5
3.60	20	836.50001542	-0.007	2.5

GSM 1900, Channel 661, Frequency 1880.0 MHz

Reference Frequency: GSM1900 Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700.000 Hz				
Power Supply (Vdc)	Environment Temperature (*C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.85	50	1879.99995759	0.000	2.5
3.85	40	1879.99995305	0.002	2.5
3.85	30	1879.99995904	-0.001	2.5
3.85	20	1879.99995765	0	2.5
3.85	10	1879.99996333	-0.003	2.5
3.85	0	1879.99997071	-0.007	2.5
3.85	-10	1879.99995759	0.000	2.5
3.85	-20	1879.99996830	-0.006	2.5
3.85	-30	1879.99996362	-0.003	2.5

Reference Frequency: GSM1900 Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700.000 Hz				
Power Supply [Vdc]	Environment Temperature (*C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.85	20	1879.99995765	0	2.5
4.43	20	1879.99996300	-0.003	2.5
3.60	20	1879.99997512	-0.009	2.5

WCDMA Band 2, Channel 9400, Frequency 1880.0 MHz

Reference Frequency: WCDMA 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	50	1879.99998267	0.001	2.5
3.85	40	1879.99998356	0.001	2.5
3.85	30	1879.99998129	0.002	2.5
3.85	20	1879.99998469	0	2.5
3.85	10	1879.99998625	-0.001	2.5
3.85	0	1879.99998482	0.000	2.5
3.85	-10	1879.99998341	0.001	2.5
3.85	-20	1879.99998094	0.002	2.5
3.85	-30	1879.99998099	0.002	2.5

Reference Frequency: WCDMA 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	1879.99998469	0	2.5
4.43	20	1879.99998718	-0.001	2.5
3.60	20	1879.99997967	0.003	2.5

LTE Band 41, Channel 40740, Frequency 2605.0 MHz

Reference Frequency: LTE Band41 Mid Channel 2605 MHz @ 20°C				
Limit: ± 2.5 ppm = 6482.500 Hz				
Power Supply (Vdc)	Environment Temperature (*C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.85	50	2605.00003039	-0.002	2.5
3.85	40	2605.00003179	-0.002	2.5
3.85	30	2605.00003306	-0.003	2.5
3.85	20	2605.00002542	0	2.5
3.85	10	2605.00002437	0.000	2.5
3.85	0	2605.00002649	0.000	2.5
3.85	-10	2605.00003187	-0.002	2.5
3.85	-20	2605.00003751	-0.005	2.5
3.85	-30	2605.00003689	-0.004	2.5

Reference Frequency: LTE Band41 Mid Channel 2605 MHz @ 20°C				
Limit: ± 2.5 ppm = 6482.500 Hz				
Power Supply [Vdc]	Environment Temperature (*C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.85	20	2605.00002542	0	2.5
4.43	20	2605.00002932	-0.002	2.5
3.60	20	2605.00003127	-0.002	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(h) - (2) Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.(LTE B41)

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; ESU40 setting reference to 971168 D01 v02r02

For average power measurement with a ESU40:

- a) Set span to at least 1.5 times the OBW;
- b) Set RBW = 1 MHz;
- c) Set VBW $\geq 3 \times$ RBW;
- d) Set number of points in sweep $\geq 2 \times$ span / RBW;
- e) Sweep time = auto-couple;
- f) Detector = RMS (power averaging);
- g) Use free run trigger If burst duty cycle ≥ 98 ;
- h) Use trigger to capture bursts If burst duty cycle < 98 ;
- i) Trace average at least 100 traces in power averaging (*i.e.*, RMS) mode.
- j) Compute the power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function. (RBW/VBW are automatically set for LTE B41)

TEST RESULTS

11.1.1. ERP/EIRP Results

GSM

Band	Mode	Channel	f [MHz]	ERP / EIRP	
				[dBm]	[mW]
GSM850	GPRS	512	824.2	26.73	470.98
		661	836.6	26.73	470.98
		810	848.8	27.97	626.61
	EGPRS	512	824.2	22.87	193.64
		661	836.6	23.09	203.70
		810	848.8	24.71	295.80
GSM1900	GPRS	512	1850.2	29.15	822.24
		661	1880.0	29.70	933.25
		810	1909.8	29.83	961.61
	EGPRS	512	1850.2	23.89	244.91
		661	1880.0	23.74	236.59
		810	1909.8	24.25	266.07

WCDMA

Band	Mode	Channel	f [MHz]	ERP / EIRP	
				[dBm]	[mW]
Band 5	REL99	4132	826.4	16.09	40.64
		4183	836.6	16.20	41.69
		4233	846.6	17.23	52.84
	HSDPA	4132	826.4	14.07	25.53
		4183	836.6	14.23	26.49
		4233	846.6	15.32	34.04
Band 2	REL99	9262	1852.4	21.63	145.55
		9400	1880.0	21.46	139.96
		9538	1907.6	21.73	148.94
	HSDPA	9262	1852.4	20.16	103.75
		9400	1880.0	19.82	95.94
		9538	1907.6	20.29	106.91

LTE Band 41 (Antenna A)

Band	BW [MHz]	Mode	RB/RB Size	f [MHz]	ERP / EIRP	
			Full RB		[dBm]	[mW]
Band 41	20	QPSK	100/0	2565.0	16.94	49.43
			100/0	2605.0	18.40	69.18
			100/0	2645.0	18.60	72.44
		16QAM	100/0	2565.0	15.92	39.08
			100/0	2605.0	17.50	56.23
			100/0	2645.0	17.46	55.72
	15	QPSK	75/0	2562.5	16.75	47.32
			75/0	2605.0	19.03	79.98
			75/0	2647.5	20.01	100.23
		16QAM	75/0	2562.5	15.92	39.08
			75/0	2605.0	18.21	66.22
			75/0	2647.5	19.17	82.60
	10	QPSK	50/0	2560.0	16.68	46.56
			50/0	2605.0	18.24	66.68
			50/0	2650.0	19.04	80.17
		16QAM	50/0	2560.0	15.80	38.02
			50/0	2605.0	17.76	59.70
			50/0	2650.0	17.89	61.52
	5	QPSK	25/0	2557.5	17.63	57.94
			25/0	2605.0	19.08	80.91
			25/0	2652.5	19.92	98.17
		16QAM	25/0	2557.5	16.52	44.87
			25/0	2605.0	17.91	61.80
			25/0	2652.5	18.79	75.68

LTE Band 41 (Antenna B)

Band	BW [MHz]	Mode	RB/RB Size	f [MHz]	ERP / EIRP	
			Full RB		[dBm]	[mW]
Band 41	20	QPSK	100/0	2565.0	16.18	41.50
			100/0	2605.0	14.48	28.05
			100/0	2645.0	15.54	35.81
		16QAM	100/0	2565.0	15.01	31.70
			100/0	2605.0	13.74	23.66
			100/0	2645.0	14.45	27.86
	15	QPSK	75/0	2562.5	16.50	44.67
			75/0	2605.0	18.61	72.61
			75/0	2647.5	14.89	30.83
		16QAM	75/0	2562.5	15.43	34.91
			75/0	2605.0	16.35	43.15
			75/0	2647.5	14.25	26.61
	10	QPSK	50/0	2560.0	16.03	40.09
			50/0	2605.0	16.97	49.77
			50/0	2650.0	14.83	30.41
		16QAM	50/0	2560.0	15.17	32.89
			50/0	2605.0	16.20	41.69
			50/0	2650.0	13.81	24.04
	5	QPSK	25/0	2557.5	16.24	42.07
			25/0	2605.0	17.90	61.66
			25/0	2652.5	15.37	34.43
		16QAM	25/0	2557.5	15.31	33.96
			25/0	2605.0	17.32	53.95
			25/0	2652.5	14.58	28.71

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	16.19	41.59
			50/0	836.5	15.42	34.83
			50/0	844.0	15.19	33.04
		16QAM	50/0	829.0	15.16	32.81
			50/0	836.5	14.34	27.16
			50/0	844.0	14.06	25.47
	5	QPSK	25/0	826.5	15.90	38.90
			25/0	836.5	15.26	33.57
			25/0	846.5	14.37	27.35
		16QAM	25/0	826.5	14.84	30.48
			25/0	836.5	14.32	27.04
			25/0	846.5	13.76	23.77
	3	QPSK	15/0	825.5	15.92	39.08
			15/0	836.5	15.72	37.33
			15/0	847.5	14.81	30.27
		16QAM	15/0	825.5	15.18	32.96
			15/0	836.5	14.66	29.24
			15/0	847.5	14.29	26.85
	1.4	QPSK	6/0	824.7	12.66	18.45
			6/0	836.5	11.64	14.59
			6/0	848.3	12.08	16.14
		16QAM	6/0	824.7	11.80	15.14
			6/0	836.5	10.74	11.86
			6/0	848.3	11.21	13.21

11.1.2. ERP/EIRP DATA

GSM 850

GSM GSM850 GPRS	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company:		Samsung						
	Project #:		16K23811						
	Date:		09-12-16						
	Test Engineer:		YH Lim						
	Configuration:		EUT ONLY, Z 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.								
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
	Low Ch								
	824.20	29.35	V	1.1	-1.6	26.73	38.5	-11.7	
	824.20	18.23	H	1.1	-1.6	15.61	38.5	-22.8	
	Mid Ch								
	836.60	29.22	V	1.1	-1.4	26.73	38.5	-11.7	
	836.60	18.76	H	1.1	-1.4	16.27	38.5	-22.2	
	High Ch								
	848.80	30.33	V	1.1	-1.3	27.97	38.5	-10.5	
	848.80	19.68	H	1.1	-1.3	17.32	38.5	-21.1	
	Rev. 3.17.11								

GSM GSM850 EGPRS	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company:		Samsung						
	Project #:		16K23811						
	Date:		09-12-16						
	Test Engineer:		YH Lim						
	Configuration:		EUT ONLY, Z 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.								
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
	Low Ch								
	824.20	25.49	V	1.1	-1.6	22.87	38.5	-15.6	
	824.20	14.78	H	1.1	-1.6	12.16	38.5	-26.3	
	Mid Ch								
	836.60	25.58	V	1.1	-1.4	23.09	38.5	-15.4	
	836.60	15.73	H	1.1	-1.4	13.24	38.5	-25.2	
	High Ch								
	848.80	27.07	V	1.1	-1.3	24.71	38.5	-13.7	
	848.80	16.16	H	1.1	-1.3	13.80	38.5	-24.7	
	Rev. 3.17.11								

GSM 1900

GSM GSM1900 GPRS	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2																																																																																																	
	Company:		Samsung																																																																																															
	Project #:		16K23811																																																																																															
	Date:		09-12-16																																																																																															
	Test Engineer:		Chan Park																																																																																															
	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																																																																																																	
<table><tr><th>f GHz</th><th>SG reading (dBm)</th><th>Ant. Pol. (H/V)</th><th>Cable Loss (dB)</th><th>Antenna Gain (dBi)</th><th>EIRP (dBm)</th><th>Limit (dBm)</th><th>Delta (dB)</th><th>Notes</th></tr><tr><td>Low Ch</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>1850.20</td><td>20.0</td><td>V</td><td>1.60</td><td>8.80</td><td>27.20</td><td>33.0</td><td>-5.8</td><td></td></tr><tr><td>1850.20</td><td>22.0</td><td>H</td><td>1.60</td><td>8.80</td><td>29.15</td><td>33.0</td><td>-3.9</td><td></td></tr><tr><td>Mid Ch</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>1880.00</td><td>21.5</td><td>V</td><td>1.62</td><td>8.62</td><td>28.47</td><td>33.0</td><td>-4.5</td><td></td></tr><tr><td>1880.00</td><td>22.7</td><td>H</td><td>1.62</td><td>8.62</td><td>29.70</td><td>33.0</td><td>-3.3</td><td></td></tr><tr><td>High Ch</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>1909.80</td><td>22.8</td><td>V</td><td>1.63</td><td>8.44</td><td>29.58</td><td>33.0</td><td>-3.4</td><td></td></tr><tr><td>1909.80</td><td>23.0</td><td>H</td><td>1.63</td><td>8.44</td><td>29.83</td><td>33.0</td><td>-3.2</td><td></td></tr></table>									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	20.0	V	1.60	8.80	27.20	33.0	-5.8		1850.20	22.0	H	1.60	8.80	29.15	33.0	-3.9		Mid Ch									1880.00	21.5	V	1.62	8.62	28.47	33.0	-4.5		1880.00	22.7	H	1.62	8.62	29.70	33.0	-3.3		High Ch									1909.80	22.8	V	1.63	8.44	29.58	33.0	-3.4		1909.80	23.0	H	1.63	8.44	29.83	33.0	-3.2	
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	20.0	V	1.60	8.80	27.20	33.0	-5.8																																																																																											
1850.20	22.0	H	1.60	8.80	29.15	33.0	-3.9																																																																																											
Mid Ch																																																																																																		
1880.00	21.5	V	1.62	8.62	28.47	33.0	-4.5																																																																																											
1880.00	22.7	H	1.62	8.62	29.70	33.0	-3.3																																																																																											
High Ch																																																																																																		
1909.80	22.8	V	1.63	8.44	29.58	33.0	-3.4																																																																																											
1909.80	23.0	H	1.63	8.44	29.83	33.0	-3.2																																																																																											
Rev. 3.17.11																																																																																																		

GSM GSM1900 EGPRS	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2																																																																																																	
	Company:		Samsung																																																																																															
	Project #:																																																																																																	
	Date:		09-13-16																																																																																															
	Test Engineer:		JH Park																																																																																															
	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																																																																																																	
<table><tr><th>f GHz</th><th>SG reading (dBm)</th><th>Ant. Pol. (H/V)</th><th>Cable Loss (dB)</th><th>Antenna Gain (dBi)</th><th>EIRP (dBm)</th><th>Limit (dBm)</th><th>Delta (dB)</th><th>Notes</th></tr><tr><td>Low Ch</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>1850.20</td><td>14.2</td><td>V</td><td>1.60</td><td>8.80</td><td>21.39</td><td>33.0</td><td>-11.6</td><td></td></tr><tr><td>1850.20</td><td>16.7</td><td>H</td><td>1.60</td><td>8.80</td><td>23.89</td><td>33.0</td><td>-9.1</td><td></td></tr><tr><td>Mid Ch</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>1880.00</td><td>14.2</td><td>V</td><td>1.62</td><td>8.62</td><td>21.20</td><td>33.0</td><td>-11.8</td><td></td></tr><tr><td>1880.00</td><td>16.7</td><td>H</td><td>1.62</td><td>8.62</td><td>23.74</td><td>33.0</td><td>-9.3</td><td></td></tr><tr><td>High Ch</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>1909.80</td><td>14.0</td><td>V</td><td>1.63</td><td>8.44</td><td>20.79</td><td>33.0</td><td>-12.2</td><td></td></tr><tr><td>1909.80</td><td>17.4</td><td>H</td><td>1.63</td><td>8.44</td><td>24.25</td><td>33.0</td><td>-8.7</td><td></td></tr></table>									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	14.2	V	1.60	8.80	21.39	33.0	-11.6		1850.20	16.7	H	1.60	8.80	23.89	33.0	-9.1		Mid Ch									1880.00	14.2	V	1.62	8.62	21.20	33.0	-11.8		1880.00	16.7	H	1.62	8.62	23.74	33.0	-9.3		High Ch									1909.80	14.0	V	1.63	8.44	20.79	33.0	-12.2		1909.80	17.4	H	1.63	8.44	24.25	33.0	-8.7	
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	14.2	V	1.60	8.80	21.39	33.0	-11.6																																																																																											
1850.20	16.7	H	1.60	8.80	23.89	33.0	-9.1																																																																																											
Mid Ch																																																																																																		
1880.00	14.2	V	1.62	8.62	21.20	33.0	-11.8																																																																																											
1880.00	16.7	H	1.62	8.62	23.74	33.0	-9.3																																																																																											
High Ch																																																																																																		
1909.80	14.0	V	1.63	8.44	20.79	33.0	-12.2																																																																																											
1909.80	17.4	H	1.63	8.44	24.25	33.0	-8.7																																																																																											
Rev. 3.17.11																																																																																																		

WCDMA Band 5

WCDMA Band 5 REL99	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company:		Samsung						
	Project #:		16K23811						
	Date:		09-22-16						
	Test Engineer:		JH Park						
	Configuration:		EUT ONLY, Z 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	18.70	V	1.1	-1.5	16.09	38.5	-22.4	
	826.40	5.77	H	1.1	-1.5	3.16	38.5	-35.3	
Mid Ch									
836.60	18.69	V	1.1	-1.4	16.20	38.5	-22.3		
836.60	7.37	H	1.1	-1.4	4.88	38.5	-33.6		
High Ch									
846.60	19.61	V	1.1	-1.3	17.23	38.5	-21.2		
846.60	8.14	H	1.1	-1.3	5.76	38.5	-32.7		
Rev. 3.17.11									

WCDMA Band 5 HSDPA	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company:		Samsung						
	Project #:		16K23811						
	Date:		09-22-16						
	Test Engineer:		JH Park						
	Configuration:		EUT ONLY, Z 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	16.68	V	1.1	-1.5	14.07	38.5	-24.4	
	826.40	4.50	H	1.1	-1.5	1.89	38.5	-36.6	
Mid Ch									
836.60	16.72	V	1.1	-1.4	14.23	38.5	-24.2		
836.60	4.75	H	1.1	-1.4	2.26	38.5	-36.2		
High Ch									
846.60	17.70	V	1.1	-1.3	15.32	38.5	-23.1		
846.60	5.83	H	1.1	-1.3	3.45	38.5	-35.0		
Rev. 3.17.11									

WCDMA Band 2

WCDMA Band 2 REL99	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-12-16 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	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1852.40	12.11	V	1.60	8.79	19.30	33.0	-13.7	
	1852.40	14.44	H	1.60	8.79	21.63	33.0	-11.4	
	Mid Ch								
	1880.00	13.57	V	1.62	8.62	20.57	33.0	-12.4	
	1880.00	14.46	H	1.62	8.62	21.46	33.0	-11.5	
	High Ch								
	1907.60	14.59	V	1.63	8.45	21.41	33.0	-11.6	
	1907.60	14.91	H	1.63	8.45	21.73	33.0	-11.3	
Rev. 3.17.11									
WCDMA Band 2 HSDPA	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-12-16 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	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	1852.40	10.28	V	1.60	8.79	17.47	33.0	-15.5	
	1852.40	12.97	H	1.60	8.79	20.16	33.0	-12.8	
	Mid Ch								
	1880.00	12.00	V	1.62	8.62	19.00	33.0	-14.0	
	1880.00	12.82	H	1.62	8.62	19.82	33.0	-13.2	
	High Ch								
	1907.60	12.98	V	1.63	8.45	19.80	33.0	-13.2	
	1907.60	13.47	H	1.63	8.45	20.29	33.0	-12.7	
Rev. 3.17.11									
Note: For Band 4 EIRP limit is 30dBm									

LTE Band 41(Antenna A)

LTE Band 41 20MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: Date: Test Engineer: Configuration: EUT / X-Position Mode: LTE Band 41, QPSK, 20MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	2565.00	9.68	V	1.9	9.1	16.94	33.0	-16.1	
	2565.00	8.72	H	1.9	9.1	15.98	33.0	-17.0	
	Mid Ch								
	2605.00	9.91	V	1.9	10.4	18.40	33.0	-14.6	
	2605.00	9.50	H	1.9	10.4	17.99	33.0	-15.0	
	High Ch								
	2645.00	9.82	V	1.9	10.3	18.26	33.0	-14.7	
	2645.00	10.16	H	1.9	10.3	18.60	33.0	-14.4	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
LTE Band 41 20MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-22-16 Test Engineer: YH Lim Configuration: EUT / X-Position Mode: LTE Band 41, 16QAM, 20MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	2565.00	8.66	V	1.9	9.1	15.92	33.0	-17.1	
	2565.00	7.76	H	1.9	9.1	15.02	33.0	-18.0	
	Mid Ch								
	2605.00	9.01	V	1.9	10.4	17.50	33.0	-15.5	
	2605.00	8.60	H	1.9	10.4	17.09	33.0	-15.9	
	High Ch								
	2645.00	8.88	V	1.9	10.3	17.32	33.0	-15.7	
	2645.00	9.02	H	1.9	10.3	17.46	33.0	-15.5	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

LTE Band 41 15MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-22-16 Test Engineer: YH Lim Configuration: EUT / X-Position Mode: LTE Band 41, QPSK, 15MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	2562.50	9.49	V	1.9	9.1	16.75	33.0	-16.3	
	2562.50	8.86	H	1.9	9.1	16.12	33.0	-16.9	
	Mid Ch								
	2605.00	10.54	V	1.9	10.4	19.03	33.0	-14.0	
LTE Band 41 15MHz 16QAM	2605.00	10.02	H	1.9	10.4	18.51	33.0	-14.5	
	High Ch								
	2647.50	11.57	V	1.9	10.3	20.01	33.0	-13.0	
	2647.50	10.15	H	1.9	10.3	18.59	33.0	-14.4	
	Rev. 3.17.11								
	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-22-16 Test Engineer: YH Lim Configuration: EUT / X-Position Mode: LTE Band 41, 16QAM, 15MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	2562.50	8.66	V	1.9	9.1	15.92	33.0	-17.1	
	2562.50	7.86	H	1.9	9.1	15.12	33.0	-17.9	
	Mid Ch								
	2605.00	9.72	V	1.9	10.4	18.21	33.0	-14.8	
	2605.00	8.93	H	1.9	10.4	17.42	33.0	-15.6	
	High Ch								
	2647.50	10.73	V	1.9	10.3	19.17	33.0	-13.8	
	2647.50	9.28	H	1.9	10.3	17.72	33.0	-15.3	
	Rev. 3.17.11								

LTE Band 41 10MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-22-16 Test Engineer: YH Lim Configuration: EUT / X-Position Mode: LTE Band 41, QPSK, 10MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	2560.00	9.42	V	1.9	9.1	16.68	33.0	-16.3	
	2560.00	7.84	H	1.9	9.1	15.10	33.0	-17.9	
	Mid Ch								
	2605.00	9.75	V	1.9	10.4	18.24	33.0	-14.8	
	2650.00	8.93	H	1.9	10.4	17.42	33.0	-15.6	
	High Ch								
	2650.00	10.60	V	1.9	10.3	19.04	33.0	-14.0	
	2650.00	9.71	H	1.9	10.3	18.15	33.0	-14.8	
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									
LTE Band 41 10MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-22-16 Test Engineer: YH Lim Configuration: EUT / X-Position Mode: LTE Band 41 16QAM, 10MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	2560.00	8.54	V	1.9	9.1	15.80	33.0	-17.2	
	2560.00	6.98	H	1.9	9.1	14.24	33.0	-18.8	
	Mid Ch								
	2605.00	9.27	V	1.9	10.4	17.76	33.0	-15.2	
	2650.00	8.14	H	1.9	10.4	16.63	33.0	-16.4	
	High Ch								
	2650.00	9.45	V	1.9	10.3	17.89	33.0	-15.1	
	2650.00	8.58	H	1.9	10.3	17.02	33.0	-16.0	
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									

LTE Band 41 5MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-22-16 Test Engineer: YH Lim Configuration: EUT / X-Position Mode: LTE Band 41, QPSK , 5MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	2557.50	10.37	V	1.9	9.1	17.63	33.0	-15.4	
	2557.50	8.89	H	1.9	9.1	16.15	33.0	-16.9	
	Mid Ch								
	2605.00	10.50	V	1.9	10.4	18.99	33.0	-14.0	
	2605.00	10.59	H	1.9	10.4	19.08	33.0	-13.9	
	High Ch								
	2652.50	11.48	V	1.9	10.3	19.92	33.0	-13.1	
	2652.50	10.89	H	1.9	10.3	19.33	33.0	-13.7	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
LTE Band 41 5MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-22-16 Test Engineer: YH Lim Configuration: EUT / X-Position Mode: LTE Band 41 16QAM, 5MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	2557.50	9.26	V	1.9	9.1	16.52	33.0	-16.5	
	2557.50	7.38	H	1.9	9.1	14.64	33.0	-18.4	
	Mid Ch								
	2605.00	9.42	V	1.9	10.4	17.91	33.0	-15.1	
	2605.00	9.10	H	1.9	10.4	17.59	33.0	-15.4	
	High Ch								
	2652.50	10.35	V	1.9	10.3	18.79	33.0	-14.2	
	2652.50	9.69	H	1.9	10.3	18.13	33.0	-14.9	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

LTE Band 41(Antenna B)

LTE Band 41 20MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-26-16 Test Engineer: JH Park Configuration: EUT / X-Position Mode: LTE Band 41, QPSK, 20MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	2565.00	8.92	V	1.9	9.1	16.18	33.0	-16.8	
	2565.00	7.52	H	1.9	9.1	14.78	33.0	-18.2	
	Mid Ch								
	2605.00	5.06	V	1.9	10.4	13.55	33.0	-19.5	
	2605.00	5.99	H	1.9	10.4	14.48	33.0	-18.5	
	High Ch								
	2645.00	7.10	V	1.9	10.3	15.54	33.0	-17.5	
	2645.00	5.62	H	1.9	10.3	14.06	33.0	-18.9	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
LTE Band 41 20MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-26-16 Test Engineer: JH Park Configuration: EUT / X-Position Mode: LTE Band 41, 16QAM, 20MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	2565.00	7.75	V	1.9	9.1	15.01	33.0	-18.0	
	2565.00	6.62	H	1.9	9.1	13.88	33.0	-19.1	
	Mid Ch								
	2605.00	4.20	V	1.9	10.4	12.69	33.0	-20.3	
	2605.00	5.25	H	1.9	10.4	13.74	33.0	-19.3	
	High Ch								
	2645.00	6.01	V	1.9	10.3	14.45	33.0	-18.5	
	2645.00	4.62	H	1.9	10.3	13.06	33.0	-19.9	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

LTE Band 41 15MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-26-16 Test Engineer: JH Park Configuration: EUT / X-Position Mode: LTE Band 41, QPSK, 15MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	2562.50	9.24	V	1.9	9.1	16.50	33.0	-16.5	
	2562.50	6.65	H	1.9	9.1	13.91	33.0	-19.1	
	Mid Ch								
	2605.00	10.12	V	1.9	10.4	18.61	33.0	-14.4	
	2605.00	6.03	H	1.9	10.4	14.52	33.0	-18.5	
	High Ch								
	2647.50	6.45	V	1.9	10.3	14.89	33.0	-18.1	
	2647.50	5.65	H	1.9	10.3	14.09	33.0	-18.9	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
LTE Band 41 15MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-26-16 Test Engineer: JH Park Configuration: EUT / X-Position Mode: LTE Band 41, 16QAM, 15MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	2562.50	8.17	V	1.9	9.1	15.43	33.0	-17.6	
	2562.50	5.61	H	1.9	9.1	12.87	33.0	-20.1	
	Mid Ch								
	2605.00	7.86	V	1.9	10.4	16.35	33.0	-16.7	
	2605.00	5.27	H	1.9	10.4	13.76	33.0	-19.2	
	High Ch								
	2647.50	5.81	V	1.9	10.3	14.25	33.0	-18.7	
	2647.50	4.76	H	1.9	10.3	13.20	33.0	-19.8	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

LTE Band 41 10MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-26-16 Test Engineer: JH Park Configuration: EUT / X-Position Mode: LTE Band 41, QPSK, 10MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	2560.00	8.77	V	1.9	9.1	16.03	33.0	-17.0	
	2560.00	7.18	H	1.9	9.1	14.44	33.0	-18.6	
	Mid Ch								
	2605.00	8.48	V	1.9	10.4	16.97	33.0	-16.0	
	2650.00	7.19	H	1.9	10.4	15.68	33.0	-17.3	
	High Ch								
	2650.00	6.39	V	1.9	10.3	14.83	33.0	-18.2	
	2650.00	5.74	H	1.9	10.3	14.18	33.0	-18.8	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
LTE Band 41 10MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-26-16 Test Engineer: JH Park Configuration: EUT / X-Position Mode: LTE Band 41 16QAM, 10MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	2560.00	7.91	V	1.9	9.1	15.17	33.0	-17.8	
	2560.00	6.33	H	1.9	9.1	13.59	33.0	-19.4	
	Mid Ch								
	2605.00	7.71	V	1.9	10.4	16.20	33.0	-16.8	
	2650.00	6.52	H	1.9	10.4	15.01	33.0	-18.0	
	High Ch								
	2650.00	5.37	V	1.9	10.3	13.81	33.0	-19.2	
	2650.00	4.64	H	1.9	10.3	13.08	33.0	-19.9	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

LTE Band 41 5MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-26-16 Test Engineer: JH Park Configuration: EUT / X-Position Mode: LTE Band 41, QPSK , 5MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	2557.50	8.42	V	1.9	9.1	15.68	33.0	-17.3	
	2557.50	8.98	H	1.9	9.1	16.24	33.0	-16.8	
	Mid Ch								
	2605.00	9.41	V	1.9	10.4	17.90	33.0	-15.1	
	2605.00	9.39	H	1.9	10.4	17.88	33.0	-15.1	
	High Ch								
	2652.50	6.93	V	1.9	10.3	15.37	33.0	-17.6	
	2652.50	5.23	H	1.9	10.3	13.67	33.0	-19.3	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								
LTE Band 41 5MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-26-16 Test Engineer: JH Park Configuration: EUT / X-Position Mode: LTE Band 41 16QAM, 5MHz								
	Test Equipment: Receiving: 3117[00168724] and Chamber 1 SMA Cables Substitution: 3115[00161451] Substitution, 3m SMA Cable Warehouse								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBi)	(dBm)	(dBm)	(dB)	
	Low Ch								
	2557.50	7.51	V	1.9	9.1	14.77	33.0	-18.2	
	2557.50	8.05	H	1.9	9.1	15.31	33.0	-17.7	
	Mid Ch								
	2605.00	8.83	V	1.9	10.4	17.32	33.0	-15.7	
	2605.00	5.89	H	1.9	10.4	14.38	33.0	-18.6	
	High Ch								
	2652.50	6.14	V	1.9	10.3	14.58	33.0	-18.4	
	2652.50	4.54	H	1.9	10.3	12.98	33.0	-20.0	
	Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm								

LTE Band 5

LTE Band 5 10MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2																																																																																																	
	Company:		Samsung																																																																																															
	Project #:		16K23811																																																																																															
	Date:		09-23-16																																																																																															
	Test Engineer:		JH Park																																																																																															
	Configuration:		EUT / Z-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.																																																																																																	
<table><tr><th>f MHz</th><th>SG reading (dBm)</th><th>Ant. Pol. (H/V)</th><th>Cable Loss (dB)</th><th>Antenna Gain (dBd)</th><th>ERP (dBm)</th><th>Limit (dBm)</th><th>Margin (dB)</th><th>Notes</th></tr><tr><td colspan="9">Low Ch</td></tr><tr><td>829.00</td><td>18.77</td><td>V</td><td>1.1</td><td>-1.5</td><td>16.19</td><td>38.5</td><td>-22.3</td><td></td></tr><tr><td>829.00</td><td>5.66</td><td>H</td><td>1.1</td><td>-1.5</td><td>3.08</td><td>38.5</td><td>-35.4</td><td></td></tr><tr><td colspan="9">Mid Ch</td></tr><tr><td>836.50</td><td>17.91</td><td>V</td><td>1.1</td><td>-1.4</td><td>15.42</td><td>38.5</td><td>-23.0</td><td></td></tr><tr><td>836.50</td><td>6.12</td><td>H</td><td>1.1</td><td>-1.4</td><td>3.63</td><td>38.5</td><td>-34.8</td><td></td></tr><tr><td colspan="9">High Ch</td></tr><tr><td>844.00</td><td>17.58</td><td>V</td><td>1.1</td><td>-1.3</td><td>15.19</td><td>38.5</td><td>-23.3</td><td></td></tr><tr><td>844.00</td><td>6.93</td><td>H</td><td>1.1</td><td>-1.3</td><td>4.51</td><td>38.5</td><td>-33.9</td><td></td></tr></table>									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	18.77	V	1.1	-1.5	16.19	38.5	-22.3		829.00	5.66	H	1.1	-1.5	3.08	38.5	-35.4		Mid Ch									836.50	17.91	V	1.1	-1.4	15.42	38.5	-23.0		836.50	6.12	H	1.1	-1.4	3.63	38.5	-34.8		High Ch									844.00	17.58	V	1.1	-1.3	15.19	38.5	-23.3		844.00	6.93	H	1.1	-1.3	4.51	38.5	-33.9	
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes																																																																																										
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829.00	18.77	V	1.1	-1.5	16.19	38.5	-22.3																																																																																											
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836.50	17.91	V	1.1	-1.4	15.42	38.5	-23.0																																																																																											
836.50	6.12	H	1.1	-1.4	3.63	38.5	-34.8																																																																																											
High Ch																																																																																																		
844.00	17.58	V	1.1	-1.3	15.19	38.5	-23.3																																																																																											
844.00	6.93	H	1.1	-1.3	4.51	38.5	-33.9																																																																																											
Rev. 3.17.11																																																																																																		
Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm																																																																																																		

LTE Band 5 10MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2																																																																																																	
	Company:		Samsung																																																																																															
	Project #:		16K23811																																																																																															
	Date:		09-23-16																																																																																															
	Test Engineer:		JH Park																																																																																															
	Configuration:		EUT / Z-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.																																																																																																	
<table><tr><th>f MHz</th><th>SG reading (dBm)</th><th>Ant. Pol. (H/V)</th><th>Cable Loss (dB)</th><th>Antenna Gain (dBd)</th><th>ERP (dBm)</th><th>Limit (dBm)</th><th>Margin (dB)</th><th>Notes</th></tr><tr><td colspan="9">Low Ch</td></tr><tr><td>829.00</td><td>17.74</td><td>V</td><td>1.1</td><td>-1.5</td><td>15.16</td><td>38.5</td><td>-23.3</td><td></td></tr><tr><td>829.00</td><td>4.59</td><td>H</td><td>1.1</td><td>-1.5</td><td>2.01</td><td>38.5</td><td>-36.4</td><td></td></tr><tr><td colspan="9">Mid Ch</td></tr><tr><td>836.50</td><td>16.85</td><td>V</td><td>1.1</td><td>-1.4</td><td>14.34</td><td>38.5</td><td>-24.1</td><td></td></tr><tr><td>836.50</td><td>5.16</td><td>H</td><td>1.1</td><td>-1.4</td><td>2.65</td><td>38.5</td><td>-35.8</td><td></td></tr><tr><td colspan="9">High Ch</td></tr><tr><td>844.00</td><td>16.48</td><td>V</td><td>1.1</td><td>-1.3</td><td>14.06</td><td>38.5</td><td>-24.4</td><td></td></tr><tr><td>844.00</td><td>5.80</td><td>H</td><td>1.1</td><td>-1.3</td><td>3.38</td><td>38.5</td><td>-35.1</td><td></td></tr></table>									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	17.74	V	1.1	-1.5	15.16	38.5	-23.3		829.00	4.59	H	1.1	-1.5	2.01	38.5	-36.4		Mid Ch									836.50	16.85	V	1.1	-1.4	14.34	38.5	-24.1		836.50	5.16	H	1.1	-1.4	2.65	38.5	-35.8		High Ch									844.00	16.48	V	1.1	-1.3	14.06	38.5	-24.4		844.00	5.80	H	1.1	-1.3	3.38	38.5	-35.1	
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	17.74	V	1.1	-1.5	15.16	38.5	-23.3																																																																																											
829.00	4.59	H	1.1	-1.5	2.01	38.5	-36.4																																																																																											
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836.50	16.85	V	1.1	-1.4	14.34	38.5	-24.1																																																																																											
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844.00	16.48	V	1.1	-1.3	14.06	38.5	-24.4																																																																																											
844.00	5.80	H	1.1	-1.3	3.38	38.5	-35.1																																																																																											
Rev. 3.17.11																																																																																																		
Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm																																																																																																		

LTE Band 5 5MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-23-16 Test Engineer: JH Park Configuration: EUT / Z-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	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBd)	(dBm)	(dBm)	(dB)	
	Low Ch								
	826.50	18.50	V	1.1	-1.5	15.90	38.5	-22.6	
	826.50	5.51	H	1.1	-1.5	2.91	38.5	-35.5	
	Mid Ch								
	836.50	17.75	V	1.1	-1.4	15.26	38.5	-23.2	
	836.50	5.32	H	1.1	-1.4	2.83	38.5	-35.6	
	High Ch								
	846.50	17.25	V	1.6	-1.3	14.37	38.5	-24.1	
	846.50	7.25	H	1.6	-1.3	4.37	38.5	-34.1	
	Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm								
LTE Band 5 5MHz 16QAM	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-23-16 Test Engineer: JH Park Configuration: EUT / Z-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	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBd)	(dBm)	(dBm)	(dB)	
	Low Ch								
	826.50	17.44	V	1.1	-1.5	14.84	38.5	-23.6	
	826.50	4.49	H	1.1	-1.5	1.89	38.5	-36.6	
	Mid Ch								
	836.50	16.81	V	1.1	-1.4	14.32	38.5	-24.1	
	836.50	4.28	H	1.1	-1.4	1.79	38.5	-36.7	
	High Ch								
	846.50	16.14	V	1.1	-1.3	13.76	38.5	-24.7	
	846.50	6.15	H	1.1	-1.3	3.77	38.5	-34.7	
	Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm								

LTE Band 5 3MHz QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-23-16 Test Engineer: JH Park Configuration: EUT / Z-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	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBd)	(dBm)	(dBm)	(dB)	
	Low Ch								
	825.50	18.52	V	1.1	-1.5	15.92	38.5	-22.5	
	825.50	4.73	H	1.1	-1.5	2.13	38.5	-36.3	
	Mid Ch								
	836.50	18.21	V	1.1	-1.4	15.72	38.5	-22.7	
	836.50	6.17	H	1.1	-1.4	3.68	38.5	-34.8	
	High Ch								
	847.50	17.69	V	1.6	-1.3	14.81	38.5	-23.6	
	847.50	7.14	H	1.6	-1.3	4.26	38.5	-34.2	
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	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2								
	Company: Samsung Project #: 16K23811 Date: 09-23-16 Test Engineer: JH Park Configuration: EUT / Z-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	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBd)	(dBm)	(dBm)	(dB)	
	Low Ch								
	825.50	17.78	V	1.1	-1.5	15.18	38.5	-23.3	
	825.50	3.95	H	1.1	-1.5	1.35	38.5	-37.1	
	Mid Ch								
	836.50	17.15	V	1.1	-1.4	14.66	38.5	-23.8	
	836.50	5.04	H	1.1	-1.4	2.55	38.5	-35.9	
	High Ch								
	847.50	16.67	V	1.1	-1.3	14.29	38.5	-24.2	
	847.50	6.07	H	1.1	-1.3	3.69	38.5	-34.8	
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 QPSK	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2 Company: Samsung Project #: 16K23811 Date: 09-22-16 Test Engineer: YH Lim Configuration: EUT / Z-Position Mode: LTE5 1.4MHz FUND QPSK Test Equipment: Receiving: VULB9163-749, and 3m Chamber N-type Cable (Setup this one for testing EUT) Substitution: Dipole S/N: 00164753, 3m SMA Cable Warehouse.								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBd)	(dBm)	(dBm)	(dB)	
	Low Ch								
	824.70	15.26	V	1.1	-1.5	12.66	38.5	-25.8	
	824.70	2.20	H	1.1	-1.5	-0.40	38.5	-38.9	
	Mid Ch								
	836.50	14.13	V	1.1	-1.4	11.64	38.5	-26.8	
	836.50	1.61	H	1.1	-1.4	-0.89	38.5	-39.3	
	High Ch								
	848.30	14.96	V	1.6	-1.3	12.08	38.5	-26.4	
	848.30	3.66	H	1.6	-1.3	0.78	38.5	-37.7	
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	High Frequency Substitution Measurement UL Korea, Ltd. Suwon Laboratory Chamber 2 Company: Samsung Project #: 16K23811 Date: 09-22-16 Test Engineer: YH Lim Configuration: EUT / Z-Position Mode: LTE5 1.4MHz FUND 16QAM Test Equipment: Receiving: VULB9163-749, and 3m Chamber N-type Cable (Setup this one for testing EUT) Substitution: Dipole S/N: 00164753, 3m SMA Cable Warehouse.								
	f	SG reading	Ant. Pol.	Cable Loss	Antenna Gain	ERP	Limit	Margin	Notes
	MHz	(dBm)	(H/V)	(dB)	(dBd)	(dBm)	(dBm)	(dB)	
	Low Ch								
	824.70	14.40	V	1.1	-1.5	11.80	38.5	-26.7	
	824.70	1.24	H	1.1	-1.5	-1.36	38.5	-39.8	
	Mid Ch								
	836.50	13.23	V	1.1	-1.4	10.74	38.5	-27.7	
	836.50	0.61	H	1.1	-1.4	-1.89	38.5	-40.3	
	High Ch								
	848.30	13.59	V	1.1	-1.3	11.21	38.5	-27.2	
	848.30	2.77	H	1.1	-1.3	0.39	38.5	-38.1	
Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm									

11.2. FIELD STRENGTH OF SPURIOUS RADIATION

RULE PART(S)

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

LIMIT

Part 22.917(a) & Part 24.238(a) 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.

Part 27: (m)(4) For mobile station, the attenuation factor shall be not less than $43 + 10 \log (P)$ dB at the channel edge and $(55 + 10 \log (P))$ dB at the 5.5 MHz from the channel edges.

TEST PROCEDURE

ANSI / TIA / EIA 603D Clause 2.2.12; ESU40 setting reference to 971168 D01 v02r02

For peak power measurement with a ESU40:

- a) Set the RBW = 100KHz for emission below 1GHz and 1MHz for emissions above 1GHz
- b) Set VBW $\geq 3 \times$ RBW;
- c) Set span ≥ 1.5 times the OBW;
- d) Sweep time = auto couple;
- e) Detector = peak;
- f) Ensure that the number of measurement points $\geq$ span/RBW;
- g) Trace mode = max hold;

RESULTS

11.2.1. SPURIOUS RADIATION PLOTS

GSM 850

GSM GSM850 GPRS	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement Company: Samsung Project #: 16K23811 Date: 09-28-16 Test Engineer: Chan Park Configuration: EUT / AC Adapter / Earphone, Z Position Mode: GPRS 850 MHz									
	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 Ch, 824.2MHz									
	1.6484	-9.5	V	3.0	39.1	1.0	-47.6	-13.0	-34.6	
	2.4726	1.9	V	3.0	39.5	1.0	-36.6	-13.0	-23.6	
	3.2968	-22.0	V	3.0	40.1	1.0	-61.1	-13.0	-48.1	
	1.6484	-10.4	H	3.0	39.1	1.0	-48.5	-13.0	-35.5	
	2.4726	-3.9	H	3.0	39.5	1.0	-42.4	-13.0	-29.4	
	3.2968	-22.5	H	3.0	40.1	1.0	-61.5	-13.0	-48.5	
	Mid Ch, 836.6MHz									
	1.6730	-15.0	V	3.0	39.1	1.0	-53.1	-13.0	-40.1	
	2.5098	-2.6	V	3.0	39.5	1.0	-41.1	-13.0	-28.1	
	3.3464	-22.0	V	3.0	40.1	1.0	-61.2	-13.0	-48.2	
	1.6730	-16.3	H	3.0	39.1	1.0	-54.4	-13.0	-41.4	
	2.5098	-5.6	H	3.0	39.5	1.0	-44.1	-13.0	-31.1	
	3.3464	-22.5	H	3.0	40.1	1.0	-61.6	-13.0	-48.6	
	High Ch, 848.8MHz									
	1.6976	-13.9	V	3.0	39.1	1.0	-52.0	-13.0	-39.0	
	2.5466	-1.3	V	3.0	39.6	1.0	-39.8	-13.0	-26.8	
	3.3952	-21.7	V	3.0	40.2	1.0	-60.9	-13.0	-47.9	
	1.6976	-15.0	H	3.0	39.1	1.0	-53.1	-13.0	-40.1	
	2.5466	-3.3	H	3.0	39.6	1.0	-41.8	-13.0	-28.8	
	3.3952	-22.1	H	3.0	40.2	1.0	-61.3	-13.0	-48.3	

GSM GSM850 EGPRS	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement Company: Samsung Project #: 16K23811 Date: 09-13-16 Test Engineer: JH Park Configuration: EUT / AC Adapter / Earphone, Z Position Mode: EGPRS 850 MHz									
	Chamber Chamber 1 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 Ch, 824.2MHz									
	1.6484	-17.3	V	3.0	39.1	1.0	-55.4	-13.0	-42.4	
	2.4726	-12.9	V	3.0	39.5	1.0	-51.4	-13.0	-38.4	
	3.2968	-22.9	V	3.0	40.1	1.0	-62.0	-13.0	-49.0	
	1.6484	-24.5	H	3.0	39.1	1.0	-62.6	-13.0	-49.6	
	2.4726	-18.9	H	3.0	39.5	1.0	-57.4	-13.0	-44.4	
	3.2968	-23.5	H	3.0	40.1	1.0	-62.6	-13.0	-49.6	
	Mid Ch, 836.6MHz									
	1.6730	-22.7	V	3.0	39.1	1.0	-60.8	-13.0	-47.8	
	2.5098	-12.1	V	3.0	39.5	1.0	-50.6	-13.0	-37.6	
	3.3464	-22.7	V	3.0	40.1	1.0	-61.8	-13.0	-48.8	
	1.6730	-21.5	H	3.0	39.1	1.0	-59.6	-13.0	-46.6	
	2.5098	-13.6	H	3.0	39.5	1.0	-52.2	-13.0	-39.2	
	3.3464	-23.1	H	3.0	40.1	1.0	-62.3	-13.0	-49.3	
	High Ch, 848.8MHz									
	1.6976	-19.7	V	3.0	39.1	1.0	-57.8	-13.0	-44.8	
	2.5466	-15.8	V	3.0	39.6	1.0	-54.3	-13.0	-41.3	
	3.3952	-22.3	V	3.0	40.2	1.0	-61.5	-13.0	-48.5	
	1.6976	-19.0	H	3.0	39.1	1.0	-57.1	-13.0	-44.1	
	2.5466	-21.8	H	3.0	39.6	1.0	-60.3	-13.0	-47.3	
	3.3952	-22.9	H	3.0	40.2	1.0	-62.1	-13.0	-49.1	

GSM 1900

GSM GSM1900 GPRS	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement Company: Samsung Project #: 16K23811 Date: 09-28-16 Test Engineer: Chan Park Configuration: EUT / AC Adapter / Earphone, X Position Mode: GPRS 1900 Chamber Chamber 2 Pre-amplifier AFS42 Filter Filter 1 Limit Part 24 <table><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><tr><td colspan="10">Low Ch, 1850.2MHz</td></tr><tr><td>3.7004</td><td>-14.7</td><td>V</td><td>3.0</td><td>40.5</td><td>1.0</td><td>-54.2</td><td>-13.0</td><td>-41.2</td><td></td></tr><tr><td>5.5506</td><td>0.4</td><td>V</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-39.4</td><td>-13.0</td><td>-26.4</td><td></td></tr><tr><td>7.4008</td><td>-18.2</td><td>V</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-58.0</td><td>-13.0</td><td>-45.0</td><td></td></tr><tr><td>3.7000</td><td>-13.5</td><td>H</td><td>3.0</td><td>40.5</td><td>1.0</td><td>-53.0</td><td>-13.0</td><td>-40.0</td><td></td></tr><tr><td>5.5506</td><td>-2.4</td><td>H</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-42.2</td><td>-13.0</td><td>-29.2</td><td></td></tr><tr><td>7.4008</td><td>-18.2</td><td>H</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-58.0</td><td>-13.0</td><td>-45.0</td><td></td></tr><tr><td colspan="10">Mid Ch, 1880.0MHz</td></tr><tr><td>3.7600</td><td>-9.5</td><td>V</td><td>3.0</td><td>40.5</td><td>1.0</td><td>-49.0</td><td>-13.0</td><td>-36.0</td><td></td></tr><tr><td>5.6400</td><td>11.8</td><td>V</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-28.0</td><td>-13.0</td><td>-15.0</td><td></td></tr><tr><td>7.5200</td><td>-17.7</td><td>V</td><td>3.0</td><td>40.7</td><td>1.0</td><td>-57.4</td><td>-13.0</td><td>-44.4</td><td></td></tr><tr><td>3.7600</td><td>-11.0</td><td>H</td><td>3.0</td><td>40.5</td><td>1.0</td><td>-50.6</td><td>-13.0</td><td>-37.6</td><td></td></tr><tr><td>5.6400</td><td>2.0</td><td>H</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-37.8</td><td>-13.0</td><td>-24.8</td><td></td></tr><tr><td>7.5200</td><td>-17.7</td><td>H</td><td>3.0</td><td>40.7</td><td>1.0</td><td>-57.4</td><td>-13.0</td><td>-44.4</td><td></td></tr><tr><td colspan="10">High Ch, 1909.8 MHz</td></tr><tr><td>3.8196</td><td>-15.0</td><td>V</td><td>3.0</td><td>40.6</td><td>1.0</td><td>-54.6</td><td>-13.0</td><td>-41.6</td><td></td></tr><tr><td>5.7294</td><td>-1.0</td><td>V</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-40.8</td><td>-13.0</td><td>-27.8</td><td></td></tr><tr><td>7.6392</td><td>-17.9</td><td>V</td><td>3.0</td><td>40.7</td><td>1.0</td><td>-57.5</td><td>-13.0</td><td>-44.5</td><td></td></tr><tr><td>3.8196</td><td>-12.5</td><td>H</td><td>3.0</td><td>40.6</td><td>1.0</td><td>-52.1</td><td>-13.0</td><td>-39.1</td><td></td></tr><tr><td>5.7294</td><td>122.8</td><td>H</td><td>3.0</td><td>40.8</td><td>1.0</td><td>83.1</td><td>-13.0</td><td>96.1</td><td></td></tr><tr><td>7.6392</td><td>-17.8</td><td>H</td><td>3.0</td><td>40.7</td><td>1.0</td><td>-57.5</td><td>-13.0</td><td>-44.5</td><td></td></tr></table>										f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	Low Ch, 1850.2MHz										3.7004	-14.7	V	3.0	40.5	1.0	-54.2	-13.0	-41.2		5.5506	0.4	V	3.0	40.8	1.0	-39.4	-13.0	-26.4		7.4008	-18.2	V	3.0	40.8	1.0	-58.0	-13.0	-45.0		3.7000	-13.5	H	3.0	40.5	1.0	-53.0	-13.0	-40.0		5.5506	-2.4	H	3.0	40.8	1.0	-42.2	-13.0	-29.2		7.4008	-18.2	H	3.0	40.8	1.0	-58.0	-13.0	-45.0		Mid Ch, 1880.0MHz										3.7600	-9.5	V	3.0	40.5	1.0	-49.0	-13.0	-36.0		5.6400	11.8	V	3.0	40.8	1.0	-28.0	-13.0	-15.0		7.5200	-17.7	V	3.0	40.7	1.0	-57.4	-13.0	-44.4		3.7600	-11.0	H	3.0	40.5	1.0	-50.6	-13.0	-37.6		5.6400	2.0	H	3.0	40.8	1.0	-37.8	-13.0	-24.8		7.5200	-17.7	H	3.0	40.7	1.0	-57.4	-13.0	-44.4		High Ch, 1909.8 MHz										3.8196	-15.0	V	3.0	40.6	1.0	-54.6	-13.0	-41.6		5.7294	-1.0	V	3.0	40.8	1.0	-40.8	-13.0	-27.8		7.6392	-17.9	V	3.0	40.7	1.0	-57.5	-13.0	-44.5		3.8196	-12.5	H	3.0	40.6	1.0	-52.1	-13.0	-39.1		5.7294	122.8	H	3.0	40.8	1.0	83.1	-13.0	96.1		7.6392	-17.8	H	3.0	40.7	1.0	-57.5	-13.0	-44.5	
	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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7.6392	-17.9	V	3.0	40.7	1.0	-57.5	-13.0	-44.5																																																																																																																																																																																																																														
3.8196	-12.5	H	3.0	40.6	1.0	-52.1	-13.0	-39.1																																																																																																																																																																																																																														
5.7294	122.8	H	3.0	40.8	1.0	83.1	-13.0	96.1																																																																																																																																																																																																																														
7.6392	-17.8	H	3.0	40.7	1.0	-57.5	-13.0	-44.5																																																																																																																																																																																																																														
GSM GSM1900 EGPRS	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement Company: Samsung Project #: 16K23811 Date: 09-13-16 Test Engineer: JH Park Configuration: EUT / AC Adapter / Earphone, X Position Mode: EGPRS 1900 MHz Chamber Chamber 2 Pre-amplifier AFS42 Filter Filter 1 Limit Part 24 <table><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><tr><td colspan="10">Low Ch, 1850.2MHz</td></tr><tr><td>3.7004</td><td>-21.7</td><td>V</td><td>3.0</td><td>40.5</td><td>1.0</td><td>-61.1</td><td>-13.0</td><td>-48.1</td><td></td></tr><tr><td>5.5506</td><td>-16.7</td><td>V</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-56.5</td><td>-13.0</td><td>-43.5</td><td></td></tr><tr><td>7.4008</td><td>-18.9</td><td>V</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-58.7</td><td>-13.0</td><td>-45.7</td><td></td></tr><tr><td>3.7000</td><td>-20.2</td><td>H</td><td>3.0</td><td>40.5</td><td>1.0</td><td>-59.7</td><td>-13.0</td><td>-46.7</td><td></td></tr><tr><td>5.5500</td><td>-19.5</td><td>H</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-59.4</td><td>-13.0</td><td>-46.4</td><td></td></tr><tr><td>7.4000</td><td>-18.8</td><td>H</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-58.6</td><td>-13.0</td><td>-45.6</td><td></td></tr><tr><td colspan="10">Mid Ch, 1880.0MHz</td></tr><tr><td>3.7600</td><td>-9.2</td><td>V</td><td>3.0</td><td>40.5</td><td>1.0</td><td>-48.8</td><td>-13.0</td><td>-35.8</td><td></td></tr><tr><td>5.6400</td><td>-6.7</td><td>V</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-46.5</td><td>-13.0</td><td>-33.5</td><td></td></tr><tr><td>7.5200</td><td>-18.4</td><td>V</td><td>3.0</td><td>40.7</td><td>1.0</td><td>-58.1</td><td>-13.0</td><td>-45.1</td><td></td></tr><tr><td>3.7600</td><td>-4.1</td><td>H</td><td>3.0</td><td>40.5</td><td>1.0</td><td>-43.6</td><td>-13.0</td><td>-30.6</td><td></td></tr><tr><td>5.6400</td><td>-12.6</td><td>H</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-52.4</td><td>-13.0</td><td>-39.4</td><td></td></tr><tr><td>7.5200</td><td>-18.5</td><td>H</td><td>3.0</td><td>40.7</td><td>1.0</td><td>-58.2</td><td>-13.0</td><td>-45.2</td><td></td></tr><tr><td colspan="10">High Ch, 1909.8 MHz</td></tr><tr><td>3.8196</td><td>-20.3</td><td>V</td><td>3.0</td><td>40.6</td><td>1.0</td><td>-59.9</td><td>-13.0</td><td>-46.9</td><td></td></tr><tr><td>5.7294</td><td>-16.1</td><td>V</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-55.9</td><td>-13.0</td><td>-42.9</td><td></td></tr><tr><td>7.6392</td><td>-18.4</td><td>V</td><td>3.0</td><td>40.7</td><td>1.0</td><td>-58.1</td><td>-13.0</td><td>-45.1</td><td></td></tr><tr><td>3.8196</td><td>-21.8</td><td>H</td><td>3.0</td><td>40.6</td><td>1.0</td><td>-61.4</td><td>-13.0</td><td>-48.4</td><td></td></tr><tr><td>5.7294</td><td>-19.2</td><td>H</td><td>3.0</td><td>40.8</td><td>1.0</td><td>-58.9</td><td>-13.0</td><td>-45.9</td><td></td></tr><tr><td>7.6392</td><td>-18.4</td><td>H</td><td>3.0</td><td>40.7</td><td>1.0</td><td>-58.1</td><td>-13.0</td><td>-45.1</td><td></td></tr></table>										f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	Low Ch, 1850.2MHz										3.7004	-21.7	V	3.0	40.5	1.0	-61.1	-13.0	-48.1		5.5506	-16.7	V	3.0	40.8	1.0	-56.5	-13.0	-43.5		7.4008	-18.9	V	3.0	40.8	1.0	-58.7	-13.0	-45.7		3.7000	-20.2	H	3.0	40.5	1.0	-59.7	-13.0	-46.7		5.5500	-19.5	H	3.0	40.8	1.0	-59.4	-13.0	-46.4		7.4000	-18.8	H	3.0	40.8	1.0	-58.6	-13.0	-45.6		Mid Ch, 1880.0MHz										3.7600	-9.2	V	3.0	40.5	1.0	-48.8	-13.0	-35.8		5.6400	-6.7	V	3.0	40.8	1.0	-46.5	-13.0	-33.5		7.5200	-18.4	V	3.0	40.7	1.0	-58.1	-13.0	-45.1		3.7600	-4.1	H	3.0	40.5	1.0	-43.6	-13.0	-30.6		5.6400	-12.6	H	3.0	40.8	1.0	-52.4	-13.0	-39.4		7.5200	-18.5	H	3.0	40.7	1.0	-58.2	-13.0	-45.2		High Ch, 1909.8 MHz										3.8196	-20.3	V	3.0	40.6	1.0	-59.9	-13.0	-46.9		5.7294	-16.1	V	3.0	40.8	1.0	-55.9	-13.0	-42.9		7.6392	-18.4	V	3.0	40.7	1.0	-58.1	-13.0	-45.1		3.8196	-21.8	H	3.0	40.6	1.0	-61.4	-13.0	-48.4		5.7294	-19.2	H	3.0	40.8	1.0	-58.9	-13.0	-45.9		7.6392	-18.4	H	3.0	40.7	1.0	-58.1	-13.0	-45.1	
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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5.5506	-16.7	V	3.0	40.8	1.0	-56.5	-13.0	-43.5																																																																																																																																																																																																																														
7.4008	-18.9	V	3.0	40.8	1.0	-58.7	-13.0	-45.7																																																																																																																																																																																																																														
3.7000	-20.2	H	3.0	40.5	1.0	-59.7	-13.0	-46.7																																																																																																																																																																																																																														
5.5500	-19.5	H	3.0	40.8	1.0	-59.4	-13.0	-46.4																																																																																																																																																																																																																														
7.4000	-18.8	H	3.0	40.8	1.0	-58.6	-13.0	-45.6																																																																																																																																																																																																																														
Mid Ch, 1880.0MHz																																																																																																																																																																																																																																						
3.7600	-9.2	V	3.0	40.5	1.0	-48.8	-13.0	-35.8																																																																																																																																																																																																																														
5.6400	-6.7	V	3.0	40.8	1.0	-46.5	-13.0	-33.5																																																																																																																																																																																																																														
7.5200	-18.4	V	3.0	40.7	1.0	-58.1	-13.0	-45.1																																																																																																																																																																																																																														
3.7600	-4.1	H	3.0	40.5	1.0	-43.6	-13.0	-30.6																																																																																																																																																																																																																														
5.6400	-12.6	H	3.0	40.8	1.0	-52.4	-13.0	-39.4																																																																																																																																																																																																																														
7.5200	-18.5	H	3.0	40.7	1.0	-58.2	-13.0	-45.2																																																																																																																																																																																																																														
High Ch, 1909.8 MHz																																																																																																																																																																																																																																						
3.8196	-20.3	V	3.0	40.6	1.0	-59.9	-13.0	-46.9																																																																																																																																																																																																																														
5.7294	-16.1	V	3.0	40.8	1.0	-55.9	-13.0	-42.9																																																																																																																																																																																																																														
7.6392	-18.4	V	3.0	40.7	1.0	-58.1	-13.0	-45.1																																																																																																																																																																																																																														
3.8196	-21.8	H	3.0	40.6	1.0	-61.4	-13.0	-48.4																																																																																																																																																																																																																														
5.7294	-19.2	H	3.0	40.8	1.0	-58.9	-13.0	-45.9																																																																																																																																																																																																																														
7.6392	-18.4	H	3.0	40.7	1.0	-58.1	-13.0	-45.1																																																																																																																																																																																																																														

WCDMA Band 5

WCDMA

Band 5

REL99

UL Korea, Ltd Suwon Laboratory

Above 1GHz High Frequency Substitution Measurement

Company:

Samsung

Project #:

16K23811

Date:

09-23-16

Test Engineer:

YH Lim

Configuration:

EUT / AC Adapter / Earphone, Z Position

Mode:

Tx, REL99,850MHz

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 Ch, 826.40MHz									
1.6520	-19.9	V	3.0	39.1	1.0	-58.0	-13.0	-45.0	
2.4790	-22.4	V	3.0	39.5	1.0	-61.0	-13.0	-48.0	
3.3056	-20.6	V	3.0	40.1	1.0	-59.7	-13.0	-46.7	
1.6520	-24.3	H	3.0	39.1	1.0	-62.4	-13.0	-49.4	
2.4790	-23.4	H	3.0	39.5	1.0	-61.9	-13.0	-48.9	
3.3056	-21.3	H	3.0	40.1	1.0	-60.4	-13.0	-47.4	
Mid Ch, 836.6MHz									
1.6732	-23.1	V	3.0	39.1	1.0	-61.3	-13.0	-48.3	
2.5098	-22.4	V	3.0	39.5	1.0	-61.0	-13.0	-48.0	
3.3464	-20.7	V	3.0	40.1	1.0	-59.8	-13.0	-46.8	
1.6732	-23.7	H	3.0	39.1	1.0	-61.8	-13.0	-48.8	
2.5098	-23.2	H	3.0	39.5	1.0	-61.7	-13.0	-48.7	
3.3464	-21.4	H	3.0	40.1	1.0	-60.5	-13.0	-47.5	
High Ch, 846.6MHz									
1.6932	-23.1	V	3.0	39.1	1.0	-61.2	-13.0	-48.2	
2.5390	-22.0	V	3.0	39.6	1.0	-60.6	-13.0	-47.6	
3.3860	-20.6	V	3.0	40.2	1.0	-59.8	-13.0	-46.8	
1.6932	-24.0	H	3.0	39.1	1.0	-62.2	-13.0	-49.2	
2.5390	-23.1	H	3.0	39.6	1.0	-61.7	-13.0	-48.7	
3.3860	-21.0	H	3.0	40.2	1.0	-60.2	-13.0	-47.2	

WCDMA

Band 5

HSDPA

UL Korea, Ltd Suwon Laboratory

Above 1GHz High Frequency Substitution Measurement

Company:

Samsung

Project #:

16K23811

Date:

09-23-16

Test Engineer:

YH Lim

Configuration:

EUT / AC Adapter / Earphone, Z Position

Mode:

Tx, HSDPA,850MHz

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 Ch, 826.40MHz									
1.6520	-20.9	V	3.0	39.1	1.0	-59.0	-13.0	-46.0	
2.4790	-22.4	V	3.0	39.5	1.0	-60.9	-13.0	-47.9	
3.3056	-20.6	V	3.0	40.1	1.0	-59.7	-13.0	-46.7	
1.6520	-24.7	H	3.0	39.1	1.0	-62.8	-13.0	-49.8	
2.4790	-23.4	H	3.0	39.5	1.0	-61.9	-13.0	-48.9	
3.3056	-21.4	H	3.0	40.1	1.0	-60.5	-13.0	-47.5	
Mid Ch, 836.6MHz									
1.6732	-24.3	V	3.0	39.1	1.0	-62.4	-13.0	-49.4	
2.5098	-22.4	V	3.0	39.5	1.0	-61.0	-13.0	-48.0	
3.3464	-20.8	V	3.0	40.1	1.0	-59.9	-13.0	-46.9	
1.6732	-24.2	H	3.0	39.1	1.0	-62.3	-13.0	-49.3	
2.5098	-23.3	H	3.0	39.5	1.0	-61.8	-13.0	-48.8	
3.3464	-21.1	H	3.0	40.1	1.0	-60.2	-13.0	-47.2	
High Ch, 846.6MHz									
1.6932	-24.0	V	3.0	39.1	1.0	-62.1	-13.0	-49.1	
2.5390	-22.3	V	3.0	39.6	1.0	-60.9	-13.0	-47.9	
3.3860	-20.7	V	3.0	40.2	1.0	-59.9	-13.0	-46.9	
1.6932	-24.7	H	3.0	39.1	1.0	-62.8	-13.0	-49.8	
2.5390	-23.2	H	3.0	39.6	1.0	-61.7	-13.0	-48.7	
3.3860	-21.1	H	3.0	40.2	1.0	-60.3	-13.0	-47.3	

WCDMA Band 2

WCDMA Band 2 REL99	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement Company: Samsung Project #: 16K23811 Date: 09-19-16 Test Engineer: JH Park Configuration: EUT / AC Adapter / Earphone / X Position Mode: Tx, REL99,1900MHz									
	Chamber: Chamber 2 Pre-amplifier: AFS42 Filter: Filter 1 Limit: Part 24									
	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
	Low Ch, 1852.4MHz									
	3.7048	-17.6	V	3.0	40.5	1.0	-57.1	-13.0	-44.1	
	5.5572	-8.4	V	3.0	40.8	1.0	-48.2	-13.0	-35.2	
	7.4096	-17.2	V	3.0	40.8	1.0	-57.0	-13.0	-44.0	
	3.7048	-18.2	H	3.0	40.5	1.0	-57.7	-13.0	-44.7	
	5.5572	-17.1	H	3.0	40.8	1.0	-56.9	-13.0	-43.9	
	7.4096	-17.2	H	3.0	40.8	1.0	-57.0	-13.0	-44.0	
	Mid Ch, 1880MHz									
	3.7600	-17.7	V	3.0	40.5	1.0	-57.3	-13.0	-44.3	
	5.6400	-11.4	V	3.0	40.8	1.0	-51.2	-13.0	-38.2	
	7.5200	-16.9	V	3.0	40.7	1.0	-56.7	-13.0	-43.7	
	3.7600	-15.6	H	3.0	40.5	1.0	-55.2	-13.0	-42.2	
	5.6400	-17.6	H	3.0	40.8	1.0	-57.4	-13.0	-44.4	
	7.5200	-17.1	H	3.0	40.7	1.0	-56.8	-13.0	-43.8	
	High Ch, 1907.6MHz									
	3.8152	-18.9	V	3.0	40.6	1.0	-58.5	-13.0	-45.5	
	5.7228	-17.8	V	3.0	40.8	1.0	-57.6	-13.0	-44.6	
	7.6304	-16.8	V	3.0	40.7	1.0	-56.5	-13.0	-43.5	
	3.8152	-12.5	H	3.0	40.6	1.0	-52.1	-13.0	-39.1	
	5.7228	-17.0	H	3.0	40.8	1.0	-56.8	-13.0	-43.8	
	7.6304	-16.8	H	3.0	40.7	1.0	-56.4	-13.0	-43.4	
WCDMA Band 2 HSDPA	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement Company: Samsung Project #: 16K23811 Date: 09-19-16 Test Engineer: JH Park Configuration: EUT / AC Adapter / Earphone / X Position Mode: Tx, HSDPA,1900MHz									
	Chamber: Chamber 2 Pre-amplifier: AFS42 Filter: Filter 1 Limit: Part 24									
	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
	Low Ch, 1852.4MHz									
	3.7048	-19.7	V	3.0	40.5	1.0	-59.2	-13.0	-46.2	
	5.5572	-18.4	V	3.0	40.8	1.0	-58.2	-13.0	-45.2	
	7.4096	-17.4	V	3.0	40.8	1.0	-57.2	-13.0	-44.2	
	3.7048	-20.3	H	3.0	40.5	1.0	-59.8	-13.0	-46.8	
	5.5572	-19.0	H	3.0	40.8	1.0	-58.8	-13.0	-45.8	
	7.4096	-17.4	H	3.0	40.8	1.0	-57.2	-13.0	-44.2	
	Mid Ch, 1880MHz									
	3.7600	-16.9	V	3.0	40.5	1.0	-56.5	-13.0	-43.5	
	5.6400	-18.5	V	3.0	40.8	1.0	-58.3	-13.0	-45.3	
	7.5200	-17.4	V	3.0	40.7	1.0	-57.1	-13.0	-44.1	
	3.7600	-17.5	H	3.0	40.5	1.0	-57.1	-13.0	-44.1	
	5.6400	-18.9	H	3.0	40.8	1.0	-58.7	-13.0	-45.7	
	7.5200	-17.4	H	3.0	40.7	1.0	-57.1	-13.0	-44.1	
	High Ch, 1907.6MHz									
	3.8152	-19.5	V	3.0	40.6	1.0	-59.1	-13.0	-46.1	
	5.7228	-18.2	V	3.0	40.8	1.0	-58.0	-13.0	-45.0	
	7.6304	-17.0	V	3.0	40.7	1.0	-56.7	-13.0	-43.7	
	3.8152	-15.6	H	3.0	40.6	1.0	-55.2	-13.0	-42.2	
	5.7228	-18.2	H	3.0	40.8	1.0	-58.0	-13.0	-45.0	
	7.6304	-17.0	H	3.0	40.7	1.0	-56.6	-13.0	-43.6	

LTE Band 41 (Antenna A)

LTE Band 41 20MHz QPSK	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement																																																																																																																																																																																																																																				
	Company: Samsung																																																																																																																																																																																																																																				
	Project #: 16K23811																																																																																																																																																																																																																																				
	Date: 09-26-16																																																																																																																																																																																																																																				
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5.2900	-12.4	H	3.0	40.9	1.0	-52.3	-25.0	-27.3																																																																																																																																																																																																																													
7.9350	-14.8	H	3.0	40.5	1.0	-54.3	-25.0	-29.3																																																																																																																																																																																																																													
10.5800	-12.8	H	3.0	39.3	1.0	-51.0	-25.0	-26.0																																																																																																																																																																																																																													

LTE Band 41 15MHz QPSK	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement									
	Company: Samsung									
	Project #: 16K23811									
	Date: 09-26-16									
	Test Engineer: YH Lim									
	Configuration: EUT / AC Adapter / Ear Phone / X-Position									
	Mode: TX, LTE BAND 41, 15MHz BW,QPSK									
	Chamber		Pre-amplifier		Filter		Limit			
	Chamber 2		AFS42		Filter 1		FCC Part 27			
	f GHz		SGreading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)
Low Ch, (2562.5 MHz)										
5.1250		-14.8	V	3.0	40.9	1.0	-54.7	-25.0	-29.7	
7.6875		-12.6	V	3.0	40.6	1.0	-52.2	-25.0	-27.2	
10.2500		-4.1	V	3.0	39.5	1.0	-42.6	-25.0	-17.6	
5.1250		-19.8	H	3.0	40.9	1.0	-59.7	-25.0	-34.7	
7.6875		-15.5	H	3.0	40.6	1.0	-55.2	-25.0	-30.2	
10.2500		-13.4	H	3.0	39.5	1.0	-51.9	-25.0	-26.9	
Mid Ch, (2605 MHz)										
5.2100		-5.5	V	3.0	40.9	1.0	-45.4	-25.0	-20.4	
7.8150		-16.1	V	3.0	40.6	1.0	-55.7	-25.0	-30.7	
10.4200		-13.0	V	3.0	39.4	1.0	-51.4	-25.0	-26.4	
5.2100		-14.0	H	3.0	40.9	1.0	-53.8	-25.0	-28.8	
7.8150		-18.3	H	3.0	40.6	1.0	-57.9	-25.0	-32.9	
10.4200		-16.6	H	3.0	39.4	1.0	-55.0	-25.0	-30.0	
High Ch, (2647.5 MHz)										
5.2950		-2.6	V	3.0	40.9	1.0	-42.4	-25.0	-17.4	
7.9425		-11.6	V	3.0	40.5	1.0	-51.1	-25.0	-26.1	
10.5900		-10.9	V	3.0	39.3	1.0	-49.2	-25.0	-24.2	
5.2950		-11.6	H	3.0	40.9	1.0	-51.4	-25.0	-26.4	
7.9425		-16.1	H	3.0	40.5	1.0	-55.5	-25.0	-30.5	
10.5900		-12.7	H	3.0	39.3	1.0	-51.0	-25.0	-26.0	
LTE Band 41 15MHz 16QAM	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement									
	Company: Samsung									
	Project #: 16K23811									
	Date: 09-26-16									
	Test Engineer: YH Lim									
	Configuration: EUT / AC Adapter / Ear Phone / X-Position									
	Mode: TX, LTE BAND 41, 15MHz BW,16QAM									
	Chamber		Pre-amplifier		Filter		Limit			
	Chamber 2		AFS42		Filter 1		FCC Part 27			
	f GHz		SGreading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)
Low Ch, (2562.5 MHz)										
5.1250		-15.9	V	3.0	40.9	1.0	-55.8	-25.0	-30.8	
7.6875		-13.2	V	3.0	40.6	1.0	-52.8	-25.0	-27.8	
10.2500		-5.3	V	3.0	39.5	1.0	-43.8	-25.0	-18.8	
5.1250		-20.6	H	3.0	40.9	1.0	-60.5	-25.0	-35.5	
7.6875		-15.4	H	3.0	40.6	1.0	-55.0	-25.0	-30.0	
10.2500		-13.3	H	3.0	39.5	1.0	-51.8	-25.0	-26.8	
Mid Ch, (2605 MHz)										
5.2100		-8.0	V	3.0	40.9	1.0	-47.8	-25.0	-22.8	
7.8150		-16.1	V	3.0	40.6	1.0	-55.7	-25.0	-30.7	
10.4200		-12.0	V	3.0	39.4	1.0	-50.4	-25.0	-25.4	
5.2100		-16.2	H	3.0	40.9	1.0	-56.0	-25.0	-31.0	
7.8150		-19.1	H	3.0	40.6	1.0	-58.6	-25.0	-33.6	
10.4200		-17.0	H	3.0	39.4	1.0	-55.4	-25.0	-30.4	
High Ch, (2647.5 MHz)										
5.2950		-3.4	V	3.0	40.9	1.0	-43.2	-25.0	-18.2	
7.9425		-11.9	V	3.0	40.5	1.0	-51.4	-25.0	-26.4	
10.5900		-11.0	V	3.0	39.3	1.0	-49.3	-25.0	-24.3	
5.2950		-11.9	H	3.0	40.9	1.0	-51.8	-25.0	-26.8	
7.9425		-16.3	H	3.0	40.5	1.0	-55.8	-25.0	-30.8	
10.5900		-13.3	H	3.0	39.3	1.0	-51.6	-25.0	-26.6	

LTE Band 41 10MHz QPSK	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement																																																																																																																																																																																																																																				
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	Mode: TX, LTE BAND 41, 10MHz BW, QPSK																																																																																																																																																																																																																																				
	Chamber		Pre-amplifier		Filter		Limit																																																																																																																																																																																																																														
	Chamber 2		AFS42		Filter 1		FCC Part 27																																																																																																																																																																																																																														
<table><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><tr><td colspan="10">Low Ch, (2560 MHz)</td></tr><tr><td>5.1200</td><td>-13.4</td><td>V</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-53.3</td><td>-25.0</td><td>-28.3</td><td></td></tr><tr><td>7.6800</td><td>-15.9</td><td>V</td><td>3.0</td><td>40.6</td><td>1.0</td><td>-55.5</td><td>-25.0</td><td>-30.5</td><td></td></tr><tr><td>10.2400</td><td>-8.2</td><td>V</td><td>3.0</td><td>39.5</td><td>1.0</td><td>-46.7</td><td>-25.0</td><td>-21.7</td><td></td></tr><tr><td>5.1200</td><td>-16.2</td><td>H</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-56.1</td><td>-25.0</td><td>-31.1</td><td></td></tr><tr><td>7.6800</td><td>-17.4</td><td>H</td><td>3.0</td><td>40.6</td><td>1.0</td><td>-57.0</td><td>-25.0</td><td>-32.0</td><td></td></tr><tr><td>10.2400</td><td>-10.9</td><td>H</td><td>3.0</td><td>39.5</td><td>1.0</td><td>-49.4</td><td>-25.0</td><td>-24.4</td><td></td></tr><tr><td colspan="10">Mid Ch, (2605 MHz)</td></tr><tr><td>5.2100</td><td>-11.9</td><td>V</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-51.8</td><td>-25.0</td><td>-26.8</td><td></td></tr><tr><td>7.8150</td><td>-18.6</td><td>V</td><td>3.0</td><td>40.6</td><td>1.0</td><td>-58.2</td><td>-25.0</td><td>-33.2</td><td></td></tr><tr><td>10.4200</td><td>-15.3</td><td>V</td><td>3.0</td><td>39.4</td><td>1.0</td><td>-53.6</td><td>-25.0</td><td>-28.6</td><td></td></tr><tr><td>5.2100</td><td>-16.0</td><td>H</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-55.9</td><td>-25.0</td><td>-30.9</td><td></td></tr><tr><td>7.8150</td><td>-19.7</td><td>H</td><td>3.0</td><td>40.6</td><td>1.0</td><td>-59.2</td><td>-25.0</td><td>-34.2</td><td></td></tr><tr><td>10.4200</td><td>-17.8</td><td>H</td><td>3.0</td><td>39.4</td><td>1.0</td><td>-56.2</td><td>-25.0</td><td>-31.2</td><td></td></tr><tr><td colspan="10">High Ch, (2650 MHz)</td></tr><tr><td>5.3000</td><td>-7.6</td><td>V</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-47.5</td><td>-25.0</td><td>-22.5</td><td></td></tr><tr><td>7.9500</td><td>-12.0</td><td>V</td><td>3.0</td><td>40.5</td><td>1.0</td><td>-51.5</td><td>-25.0</td><td>-26.5</td><td></td></tr><tr><td>10.6000</td><td>-11.1</td><td>V</td><td>3.0</td><td>39.2</td><td>1.0</td><td>-49.4</td><td>-25.0</td><td>-24.4</td><td></td></tr><tr><td>5.3000</td><td>-14.1</td><td>H</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-54.0</td><td>-25.0</td><td>-29.0</td><td></td></tr><tr><td>7.9500</td><td>-15.8</td><td>H</td><td>3.0</td><td>40.5</td><td>1.0</td><td>-55.3</td><td>-25.0</td><td>-30.3</td><td></td></tr><tr><td>10.6000</td><td>-17.5</td><td>H</td><td>3.0</td><td>39.2</td><td>1.0</td><td>-55.7</td><td>-25.0</td><td>-30.7</td><td></td></tr></table>										f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes	Low Ch, (2560 MHz)										5.1200	-13.4	V	3.0	40.9	1.0	-53.3	-25.0	-28.3		7.6800	-15.9	V	3.0	40.6	1.0	-55.5	-25.0	-30.5		10.2400	-8.2	V	3.0	39.5	1.0	-46.7	-25.0	-21.7		5.1200	-16.2	H	3.0	40.9	1.0	-56.1	-25.0	-31.1		7.6800	-17.4	H	3.0	40.6	1.0	-57.0	-25.0	-32.0		10.2400	-10.9	H	3.0	39.5	1.0	-49.4	-25.0	-24.4		Mid Ch, (2605 MHz)										5.2100	-11.9	V	3.0	40.9	1.0	-51.8	-25.0	-26.8		7.8150	-18.6	V	3.0	40.6	1.0	-58.2	-25.0	-33.2		10.4200	-15.3	V	3.0	39.4	1.0	-53.6	-25.0	-28.6		5.2100	-16.0	H	3.0	40.9	1.0	-55.9	-25.0	-30.9		7.8150	-19.7	H	3.0	40.6	1.0	-59.2	-25.0	-34.2		10.4200	-17.8	H	3.0	39.4	1.0	-56.2	-25.0	-31.2		High Ch, (2650 MHz)										5.3000	-7.6	V	3.0	40.9	1.0	-47.5	-25.0	-22.5		7.9500	-12.0	V	3.0	40.5	1.0	-51.5	-25.0	-26.5		10.6000	-11.1	V	3.0	39.2	1.0	-49.4	-25.0	-24.4		5.3000	-14.1	H	3.0	40.9	1.0	-54.0	-25.0	-29.0		7.9500	-15.8	H	3.0	40.5	1.0	-55.3	-25.0	-30.3		10.6000	-17.5	H	3.0	39.2	1.0	-55.7	-25.0	-30.7	
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LTE Band 41 10MHz 16QAM	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement																																																																																																																																																																																																																																				
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<table><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><tr><td colspan="10">Low Ch, (2560 MHz)</td></tr><tr><td>5.1200</td><td>-15.1</td><td>V</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-55.0</td><td>-25.0</td><td>-30.0</td><td></td></tr><tr><td>7.6800</td><td>-18.1</td><td>V</td><td>3.0</td><td>40.6</td><td>1.0</td><td>-57.8</td><td>-25.0</td><td>-32.8</td><td></td></tr><tr><td>10.2400</td><td>-9.7</td><td>V</td><td>3.0</td><td>39.5</td><td>1.0</td><td>-48.2</td><td>-25.0</td><td>-23.2</td><td></td></tr><tr><td>5.1200</td><td>-17.5</td><td>H</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-57.4</td><td>-25.0</td><td>-32.4</td><td></td></tr><tr><td>7.6800</td><td>-17.5</td><td>H</td><td>3.0</td><td>40.6</td><td>1.0</td><td>-57.1</td><td>-25.0</td><td>-32.1</td><td></td></tr><tr><td>10.2400</td><td>-11.8</td><td>H</td><td>3.0</td><td>39.5</td><td>1.0</td><td>-50.3</td><td>-25.0</td><td>-25.3</td><td></td></tr><tr><td colspan="10">Mid Ch, (2605 MHz)</td></tr><tr><td>5.2100</td><td>-12.0</td><td>V</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-51.9</td><td>-25.0</td><td>-26.9</td><td></td></tr><tr><td>7.8150</td><td>-19.0</td><td>V</td><td>3.0</td><td>40.6</td><td>1.0</td><td>-58.6</td><td>-25.0</td><td>-33.6</td><td></td></tr><tr><td>10.4200</td><td>-16.2</td><td>V</td><td>3.0</td><td>39.4</td><td>1.0</td><td>-54.6</td><td>-25.0</td><td>-29.6</td><td></td></tr><tr><td>5.2100</td><td>-16.1</td><td>H</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-56.0</td><td>-25.0</td><td>-31.0</td><td></td></tr><tr><td>7.8150</td><td>-19.7</td><td>H</td><td>3.0</td><td>40.6</td><td>1.0</td><td>-59.3</td><td>-25.0</td><td>-34.3</td><td></td></tr><tr><td>10.4200</td><td>-18.5</td><td>H</td><td>3.0</td><td>39.4</td><td>1.0</td><td>-56.9</td><td>-25.0</td><td>-31.9</td><td></td></tr><tr><td colspan="10">High Ch, (2650 MHz)</td></tr><tr><td>5.3000</td><td>-8.2</td><td>V</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-48.0</td><td>-25.0</td><td>-23.0</td><td></td></tr><tr><td>7.9500</td><td>-12.6</td><td>V</td><td>3.0</td><td>40.5</td><td>1.0</td><td>-52.1</td><td>-25.0</td><td>-27.1</td><td></td></tr><tr><td>10.6000</td><td>-11.4</td><td>V</td><td>3.0</td><td>39.2</td><td>1.0</td><td>-49.6</td><td>-25.0</td><td>-24.6</td><td></td></tr><tr><td>5.3000</td><td>-14.8</td><td>H</td><td>3.0</td><td>40.9</td><td>1.0</td><td>-54.7</td><td>-25.0</td><td>-29.7</td><td></td></tr><tr><td>7.9500</td><td>-16.0</td><td>H</td><td>3.0</td><td>40.5</td><td>1.0</td><td>-55.5</td><td>-25.0</td><td>-30.5</td><td></td></tr><tr><td>10.6000</td><td>-17.6</td><td>H</td><td>3.0</td><td>39.2</td><td>1.0</td><td>-55.9</td><td>-25.0</td><td>-30.9</td><td></td></tr></table>										f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes	Low Ch, (2560 MHz)										5.1200	-15.1	V	3.0	40.9	1.0	-55.0	-25.0	-30.0		7.6800	-18.1	V	3.0	40.6	1.0	-57.8	-25.0	-32.8		10.2400	-9.7	V	3.0	39.5	1.0	-48.2	-25.0	-23.2		5.1200	-17.5	H	3.0	40.9	1.0	-57.4	-25.0	-32.4		7.6800	-17.5	H	3.0	40.6	1.0	-57.1	-25.0	-32.1		10.2400	-11.8	H	3.0	39.5	1.0	-50.3	-25.0	-25.3		Mid Ch, (2605 MHz)										5.2100	-12.0	V	3.0	40.9	1.0	-51.9	-25.0	-26.9		7.8150	-19.0	V	3.0	40.6	1.0	-58.6	-25.0	-33.6		10.4200	-16.2	V	3.0	39.4	1.0	-54.6	-25.0	-29.6		5.2100	-16.1	H	3.0	40.9	1.0	-56.0	-25.0	-31.0		7.8150	-19.7	H	3.0	40.6	1.0	-59.3	-25.0	-34.3		10.4200	-18.5	H	3.0	39.4	1.0	-56.9	-25.0	-31.9		High Ch, (2650 MHz)										5.3000	-8.2	V	3.0	40.9	1.0	-48.0	-25.0	-23.0		7.9500	-12.6	V	3.0	40.5	1.0	-52.1	-25.0	-27.1		10.6000	-11.4	V	3.0	39.2	1.0	-49.6	-25.0	-24.6		5.3000	-14.8	H	3.0	40.9	1.0	-54.7	-25.0	-29.7		7.9500	-16.0	H	3.0	40.5	1.0	-55.5	-25.0	-30.5		10.6000	-17.6	H	3.0	39.2	1.0	-55.9	-25.0	-30.9	
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LTE Band 41 5MHz QPSK	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement									
	Company: Samsung									
	Project #: 16K23811									
	Date: 09-23-16									
	Test Engineer: YH Lim									
	Configuration: EUT / AC Adapter / Ear Phone / X-Position									
	Mode: TX, LTE BAND 41, 5MHz 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)
Low Ch, (2557.5 MHz)										
5.1150		-10.4	V	3.0	40.9	1.0	-50.3	-25.0	-25.3	
7.6725		-15.9	V	3.0	40.6	1.0	-55.5	-25.0	-30.5	
10.2300		-8.4	V	3.0	39.5	1.0	-47.0	-25.0	-22.0	
5.1150		-11.6	H	3.0	40.9	1.0	-51.4	-25.0	-26.4	
7.6725		-17.3	H	3.0	40.6	1.0	-57.0	-25.0	-32.0	
10.2300		-12.3	H	3.0	39.5	1.0	-50.8	-25.0	-25.8	
Mid Ch, (2605 MHz)										
5.2100		-7.8	V	3.0	40.9	1.0	-47.7	-25.0	-22.7	
7.8150		-14.0	V	3.0	40.6	1.0	-53.6	-25.0	-28.6	
10.4200		-9.7	V	3.0	39.4	1.0	-48.1	-25.0	-23.1	
5.2100		-15.5	H	3.0	40.9	1.0	-55.4	-25.0	-30.4	
7.8150		-16.8	H	3.0	40.6	1.0	-56.4	-25.0	-31.4	
10.4200		-18.0	H	3.0	39.4	1.0	-56.4	-25.0	-31.4	
High Ch, (2652.5 MHz)										
5.3050		-3.1	V	3.0	40.9	1.0	-42.9	-25.0	-17.9	
7.9575		-11.0	V	3.0	40.5	1.0	-50.5	-25.0	-25.5	
10.6100		-9.6	V	3.0	39.2	1.0	-47.9	-25.0	-22.9	
5.3050		-11.5	H	3.0	40.9	1.0	-51.3	-25.0	-26.3	
7.9575		-14.6	H	3.0	40.5	1.0	-54.1	-25.0	-29.1	
10.6100		-11.5	H	3.0	39.2	1.0	-49.7	-25.0	-24.7	
LTE Band 41 5MHz 16QAM	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement									
	Company: Samsung									
	Project #: 16K23811									
	Date: 09-23-16									
	Test Engineer: YH Lim									
	Configuration: EUT / AC Adapter / Ear Phone / X-Position									
	Mode: TX, LTE BAND 41, 5MHz 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)
Low Ch, (2557.5 MHz)										
5.1150		-11.3	V	3.0	40.9	1.0	-51.2	-25.0	-26.2	
7.6725		-16.2	V	3.0	40.6	1.0	-55.8	-25.0	-30.8	
10.2300		-8.8	V	3.0	39.5	1.0	-47.3	-25.0	-22.3	
5.1150		-11.7	H	3.0	40.9	1.0	-51.6	-25.0	-26.6	
7.6725		-18.1	H	3.0	40.6	1.0	-57.7	-25.0	-32.7	
10.2300		-12.8	H	3.0	39.5	1.0	-51.3	-25.0	-26.3	
Mid Ch, (2605 MHz)										
5.2100		-8.5	V	3.0	40.9	1.0	-48.4	-25.0	-23.4	
7.8150		-14.9	V	3.0	40.6	1.0	-54.5	-25.0	-29.5	
10.4200		-10.1	V	3.0	39.4	1.0	-48.4	-25.0	-23.4	
5.2100		-16.1	H	3.0	40.9	1.0	-55.9	-25.0	-30.9	
7.8150		-17.1	H	3.0	40.6	1.0	-56.6	-25.0	-31.6	
10.4200		-17.3	H	3.0	39.4	1.0	-55.7	-25.0	-30.7	
High Ch, (2652.5 MHz)										
5.3050		-4.0	V	3.0	40.9	1.0	-43.9	-25.0	-18.9	
7.9575		-10.9	V	3.0	40.5	1.0	-50.4	-25.0	-25.4	
10.6100		-9.7	V	3.0	39.2	1.0	-47.9	-25.0	-22.9	
5.3050		-11.8	H	3.0	40.9	1.0	-51.7	-25.0	-26.7	
7.9575		-13.5	H	3.0	40.5	1.0	-53.0	-25.0	-28.0	
10.6100		-12.1	H	3.0	39.2	1.0	-50.3	-25.0	-25.3	

LTE Band 41 (Antenna B)

LTE Band 41 20MHz QPSK	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement																																																																																																																																																																																																																																				
	Company: Samsung																																																																																																																																																																																																																																				
	Project #: 16K23811																																																																																																																																																																																																																																				
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	Mode: TX, LTE BAND 41, 20MHz BW, QPSK																																																																																																																																																																																																																																				
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LTE Band 41 15MHz QPSK	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement																																																																																																																																																																																																																																				
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7.9425	-4.9	V	3.0	40.5	1.0	-44.4	-25.0	-19.4																																																																																																																																																																																																																													
10.5900	-7.2	V	3.0	39.3	1.0	-45.4	-25.0	-20.4																																																																																																																																																																																																																													
5.2950	-15.0	H	3.0	40.9	1.0	-54.9	-25.0	-29.9																																																																																																																																																																																																																													
7.9425	-9.3	H	3.0	40.5	1.0	-48.8	-25.0	-23.8																																																																																																																																																																																																																													
10.5900	-12.3	H	3.0	39.3	1.0	-50.5	-25.0	-25.5																																																																																																																																																																																																																													

LTE Band 41 10MHz QPSK	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement																																																																																																																																																																																																																																				
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10.4200	-10.2	V	3.0	39.4	1.0	-48.6	-25.0	-23.6																																																																																																																																																																																																																													
5.2100	-17.1	H	3.0	40.9	1.0	-57.0	-25.0	-32.0																																																																																																																																																																																																																													
7.8150	-15.6	H	3.0	40.6	1.0	-55.2	-25.0	-30.2																																																																																																																																																																																																																													
10.4200	-16.0	H	3.0	39.4	1.0	-54.4	-25.0	-29.4																																																																																																																																																																																																																													
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5.3000	-6.5	V	3.0	40.9	1.0	-46.4	-25.0	-21.4																																																																																																																																																																																																																													
7.9500	-3.9	V	3.0	40.5	1.0	-43.4	-25.0	-18.4																																																																																																																																																																																																																													
10.6000	-7.8	V	3.0	39.2	1.0	-46.0	-25.0	-21.0																																																																																																																																																																																																																													
5.3000	-12.3	H	3.0	40.9	1.0	-52.2	-25.0	-27.2																																																																																																																																																																																																																													
7.9500	-8.5	H	3.0	40.5	1.0	-48.0	-25.0	-23.0																																																																																																																																																																																																																													
10.6000	-12.7	H	3.0	39.2	1.0	-51.0	-25.0	-26.0																																																																																																																																																																																																																													

LTE Band 41 5MHz QPSK	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement																																																																																																																																																																																																																																														
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Low Ch, (2557.5 MHz)																																																																																																																																																																																																																																															
5.1150	-8.2	V	3.0	40.9	1.0	-48.1	-25.0	-23.1																																																																																																																																																																																																																																							
7.6725	-14.9	V	3.0	40.6	1.0	-54.6	-25.0	-29.6																																																																																																																																																																																																																																							
10.2300	-7.7	V	3.0	39.5	1.0	-46.3	-25.0	-21.3																																																																																																																																																																																																																																							
5.1150	-11.4	H	3.0	40.9	1.0	-51.3	-25.0	-26.3																																																																																																																																																																																																																																							
7.6725	-17.4	H	3.0	40.6	1.0	-57.0	-25.0	-32.0																																																																																																																																																																																																																																							
10.2300	-14.3	H	3.0	39.5	1.0	-52.8	-25.0	-27.8																																																																																																																																																																																																																																							
Mid Ch, (2605 MHz)																																																																																																																																																																																																																																															
5.2100	-11.4	V	3.0	40.9	1.0	-51.3	-25.0	-26.3																																																																																																																																																																																																																																							
7.8150	-13.9	V	3.0	40.6	1.0	-53.5	-25.0	-28.5																																																																																																																																																																																																																																							
10.4200	-9.9	V	3.0	39.4	1.0	-48.3	-25.0	-23.3																																																																																																																																																																																																																																							
5.2100	-16.0	H	3.0	40.9	1.0	-55.8	-25.0	-30.8																																																																																																																																																																																																																																							
7.8150	-16.8	H	3.0	40.6	1.0	-56.3	-25.0	-31.3																																																																																																																																																																																																																																							
10.4200	-16.1	H	3.0	39.4	1.0	-54.5	-25.0	-29.5																																																																																																																																																																																																																																							
High Ch, (2652.5 MHz)																																																																																																																																																																																																																																															
5.3050	-5.8	V	3.0	40.9	1.0	-45.6	-25.0	-20.6																																																																																																																																																																																																																																							
7.9575	-12.2	V	3.0	40.5	1.0	-51.7	-25.0	-26.7																																																																																																																																																																																																																																							
10.6100	-8.2	V	3.0	39.2	1.0	-46.4	-25.0	-21.4																																																																																																																																																																																																																																							
5.3050	-12.9	H	3.0	40.9	1.0	-52.7	-25.0	-27.7																																																																																																																																																																																																																																							
7.9575	-11.7	H	3.0	40.5	1.0	-51.2	-25.0	-26.2																																																																																																																																																																																																																																							
10.6100	-14.5	H	3.0	39.2	1.0	-52.7	-25.0	-27.7																																																																																																																																																																																																																																							

LTE Band 5

LTE Band 5 10MHz QPSK	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement Company: Samsung Project #: 16K23811 Date: 09-23-16 Test Engineer: JH Park Configuration: EUT / AC Adapter / Earphone, Z Position Mode: TX, LTE BAND 5, 10MHz BW,QPSK									
	Chamber: Chamber 2 Pre-amplifier: AFS42 Filter: Filter 1 Limit: Part 22									
	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
	Low Channel (829MHz)									
	1.6580	-16.8	V	3.0	39.1	1.0	-54.9	-13.0	-41.9	
	2.4870	-9.6	V	3.0	39.5	1.0	-48.1	-13.0	-35.1	
	3.3160	-20.8	V	3.0	40.1	1.0	-59.9	-13.0	-46.9	
	1.6580	-18.2	H	3.0	39.1	1.0	-56.3	-13.0	-43.3	
	2.4870	-11.7	H	3.0	39.5	1.0	-50.2	-13.0	-37.2	
	3.3160	-20.2	H	3.0	40.1	1.0	-59.3	-13.0	-46.3	
	Mid Channel (836.5MHz)									
	1.6730	-13.3	V	3.0	39.1	1.0	-51.4	-13.0	-38.4	
	2.5090	-10.4	V	3.0	39.5	1.0	-48.9	-13.0	-35.9	
	3.3460	-20.2	V	3.0	40.1	1.0	-59.3	-13.0	-46.3	
	1.6730	-13.3	H	3.0	39.1	1.0	-51.5	-13.0	-38.5	
	2.5090	-9.5	H	3.0	39.5	1.0	-48.0	-13.0	-35.0	
	3.3460	-20.6	H	3.0	40.1	1.0	-59.7	-13.0	-46.7	
	High Channel (844MHz)									
	1.6880	-9.8	V	3.0	39.1	1.0	-47.9	-13.0	-34.9	
	2.5320	-14.2	V	3.0	39.5	1.0	-52.7	-13.0	-39.7	
	3.3760	-20.3	V	3.0	40.2	1.0	-59.5	-13.0	-46.5	
	1.6880	-17.5	H	3.0	39.1	1.0	-55.6	-13.0	-42.6	
	2.5320	-10.6	H	3.0	39.5	1.0	-49.1	-13.0	-36.1	
	3.3760	-19.8	H	3.0	40.2	1.0	-59.0	-13.0	-46.0	

LTE Band 5 10MHz 16QAM	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement Company: Samsung Project #: 16K23811 Date: 09-23-16 Test Engineer: JH Park Configuration: EUT / AC Adapter / Earphone, Z Position Mode: TX, LTE BAND 5, 10MHz BW,16QAM									
	Chamber: Chamber 2 Pre-amplifier: AFS42 Filter: Filter 1 Limit: Part 22									
	f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
	Low Channel (829MHz)									
	1.6580	-16.9	V	3.0	39.1	1.0	-55.0	-13.0	-42.0	
	2.4870	-9.2	V	3.0	39.5	1.0	-47.7	-13.0	-34.7	
	3.3160	-20.0	V	3.0	40.1	1.0	-59.1	-13.0	-46.1	
	1.6580	-18.1	H	3.0	39.1	1.0	-56.2	-13.0	-43.2	
	2.4870	-12.2	H	3.0	39.5	1.0	-50.7	-13.0	-37.7	
	3.3160	-21.1	H	3.0	40.1	1.0	-60.2	-13.0	-47.2	
	Mid Channel (836.5MHz)									
	1.6730	-13.3	V	3.0	39.1	1.0	-51.4	-13.0	-38.4	
	2.5090	-10.0	V	3.0	39.5	1.0	-48.5	-13.0	-35.5	
	3.3460	-20.6	V	3.0	40.1	1.0	-59.7	-13.0	-46.7	
	1.6730	-13.5	H	3.0	39.1	1.0	-51.7	-13.0	-38.7	
	2.5090	-9.7	H	3.0	39.5	1.0	-48.3	-13.0	-35.3	
	3.3460	-21.1	H	3.0	40.1	1.0	-60.2	-13.0	-47.2	
	High Channel (844MHz)									
	1.6880	-10.1	V	3.0	39.1	1.0	-48.2	-13.0	-35.2	
	2.5320	-13.5	V	3.0	39.5	1.0	-52.0	-13.0	-39.0	
	3.3760	-19.5	V	3.0	40.2	1.0	-58.6	-13.0	-45.6	
	1.6880	-18.8	H	3.0	39.1	1.0	-56.9	-13.0	-43.9	
	2.5320	-10.9	H	3.0	39.5	1.0	-49.5	-13.0	-36.5	
	3.3760	-20.5	H	3.0	40.2	1.0	-59.7	-13.0	-46.7	

LTE Band 5 5MHz QPSK	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement																																																																																																																																																																																																																																				
	Company:		Samsung																																																																																																																																																																																																																																		
	Project #:		16K23811																																																																																																																																																																																																																																		
	Date:		09-23-16																																																																																																																																																																																																																																		
	Test Engineer:		JH Park																																																																																																																																																																																																																																		
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	Chamber		Pre-amplifier		Filter		Limit																																																																																																																																																																																																																														
	Chamber 2		AFS42		Filter 1		Part 22																																																																																																																																																																																																																														
<table><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><tr><td colspan="10">Low Channel (826.5MHz)</td></tr><tr><td>1.6530</td><td>-19.2</td><td>V</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-57.3</td><td>-13.0</td><td>-44.3</td><td></td></tr><tr><td>2.4790</td><td>-12.6</td><td>V</td><td>3.0</td><td>39.5</td><td>1.0</td><td>-51.2</td><td>-13.0</td><td>-38.2</td><td></td></tr><tr><td>3.3060</td><td>-21.1</td><td>V</td><td>3.0</td><td>40.1</td><td>1.0</td><td>-60.2</td><td>-13.0</td><td>-47.2</td><td></td></tr><tr><td>1.6530</td><td>-21.6</td><td>H</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-59.7</td><td>-13.0</td><td>-46.7</td><td></td></tr><tr><td>2.4790</td><td>-17.2</td><td>H</td><td>3.0</td><td>39.5</td><td>1.0</td><td>-55.7</td><td>-13.0</td><td>-42.7</td><td></td></tr><tr><td>3.3060</td><td>-20.4</td><td>H</td><td>3.0</td><td>40.1</td><td>1.0</td><td>-59.5</td><td>-13.0</td><td>-46.5</td><td></td></tr><tr><td colspan="10">Mid Channel (836.5MHz)</td></tr><tr><td>1.6730</td><td>-15.1</td><td>V</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-53.2</td><td>-13.0</td><td>-40.2</td><td></td></tr><tr><td>2.5090</td><td>-13.7</td><td>V</td><td>3.0</td><td>39.5</td><td>1.0</td><td>-52.3</td><td>-13.0</td><td>-39.3</td><td></td></tr><tr><td>3.3460</td><td>-20.0</td><td>V</td><td>3.0</td><td>40.1</td><td>1.0</td><td>-59.1</td><td>-13.0</td><td>-46.1</td><td></td></tr><tr><td>1.6730</td><td>-18.1</td><td>H</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-56.2</td><td>-13.0</td><td>-43.2</td><td></td></tr><tr><td>2.5090</td><td>-15.6</td><td>H</td><td>3.0</td><td>39.5</td><td>1.0</td><td>-54.1</td><td>-13.0</td><td>-41.1</td><td></td></tr><tr><td>3.3460</td><td>-21.5</td><td>H</td><td>3.0</td><td>40.1</td><td>1.0</td><td>-60.6</td><td>-13.0</td><td>-47.6</td><td></td></tr><tr><td colspan="10">High Channel (846.5MHz)</td></tr><tr><td>1.6930</td><td>-18.3</td><td>V</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-56.5</td><td>-13.0</td><td>-43.5</td><td></td></tr><tr><td>2.5390</td><td>-10.4</td><td>V</td><td>3.0</td><td>39.6</td><td>1.0</td><td>-49.0</td><td>-13.0</td><td>-36.0</td><td></td></tr><tr><td>3.3860</td><td>-21.1</td><td>V</td><td>3.0</td><td>40.2</td><td>1.0</td><td>-60.3</td><td>-13.0</td><td>-47.3</td><td></td></tr><tr><td>1.6930</td><td>-15.2</td><td>H</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-53.3</td><td>-13.0</td><td>-40.3</td><td></td></tr><tr><td>2.5390</td><td>-8.8</td><td>H</td><td>3.0</td><td>39.6</td><td>1.0</td><td>-47.3</td><td>-13.0</td><td>-34.3</td><td></td></tr><tr><td>3.3860</td><td>-21.1</td><td>H</td><td>3.0</td><td>40.2</td><td>1.0</td><td>-60.3</td><td>-13.0</td><td>-47.3</td><td></td></tr></table>										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	-19.2	V	3.0	39.1	1.0	-57.3	-13.0	-44.3		2.4790	-12.6	V	3.0	39.5	1.0	-51.2	-13.0	-38.2		3.3060	-21.1	V	3.0	40.1	1.0	-60.2	-13.0	-47.2		1.6530	-21.6	H	3.0	39.1	1.0	-59.7	-13.0	-46.7		2.4790	-17.2	H	3.0	39.5	1.0	-55.7	-13.0	-42.7		3.3060	-20.4	H	3.0	40.1	1.0	-59.5	-13.0	-46.5		Mid Channel (836.5MHz)										1.6730	-15.1	V	3.0	39.1	1.0	-53.2	-13.0	-40.2		2.5090	-13.7	V	3.0	39.5	1.0	-52.3	-13.0	-39.3		3.3460	-20.0	V	3.0	40.1	1.0	-59.1	-13.0	-46.1		1.6730	-18.1	H	3.0	39.1	1.0	-56.2	-13.0	-43.2		2.5090	-15.6	H	3.0	39.5	1.0	-54.1	-13.0	-41.1		3.3460	-21.5	H	3.0	40.1	1.0	-60.6	-13.0	-47.6		High Channel (846.5MHz)										1.6930	-18.3	V	3.0	39.1	1.0	-56.5	-13.0	-43.5		2.5390	-10.4	V	3.0	39.6	1.0	-49.0	-13.0	-36.0		3.3860	-21.1	V	3.0	40.2	1.0	-60.3	-13.0	-47.3		1.6930	-15.2	H	3.0	39.1	1.0	-53.3	-13.0	-40.3		2.5390	-8.8	H	3.0	39.6	1.0	-47.3	-13.0	-34.3		3.3860	-21.1	H	3.0	40.2	1.0	-60.3	-13.0	-47.3	
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3.3060	-20.4	H	3.0	40.1	1.0	-59.5	-13.0	-46.5																																																																																																																																																																																																																													
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LTE Band 5 5MHz 16QAM	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement																																																																																																																																																																																																																																				
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3.3460	-22.0	H	3.0	40.1	1.0	-61.1	-13.0	-48.1																																																																																																																																																																																																																													
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1.6966	-18.5	V	3.0	39.1	1.0	-56.7	-13.0	-43.7																																																																																																																																																																																																																													
2.5449	-9.6	V	3.0	39.6	1.0	-48.2	-13.0	-35.2																																																																																																																																																																																																																													
3.3932	-20.7	V	3.0	40.2	1.0	-59.9	-13.0	-46.9																																																																																																																																																																																																																													
1.6966	-20.8	H	3.0	39.1	1.0	-58.9	-13.0	-45.9																																																																																																																																																																																																																													
2.5449	-9.5	H	3.0	39.6	1.0	-48.0	-13.0	-35.0																																																																																																																																																																																																																													
3.3932	-21.2	H	3.0	40.2	1.0	-60.4	-13.0	-47.4																																																																																																																																																																																																																													
LTE Band 5 1.4MHz 16QAM	UL Korea, Ltd Suwon Laboratory Above 1GHz High Frequency Substitution Measurement																																																																																																																																																																																																																																				
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	Test Engineer: JH Park																																																																																																																																																																																																																																				
	Configuration: EUT / AC Adapter / Earphone, Z Position																																																																																																																																																																																																																																				
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<table><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><tr><td colspan="10">Low Channel (824.7MHz)</td></tr><tr><td>1.6494</td><td>-18.1</td><td>V</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-56.2</td><td>-13.0</td><td>-43.2</td><td></td></tr><tr><td>2.4741</td><td>-15.7</td><td>V</td><td>3.0</td><td>39.5</td><td>1.0</td><td>-54.2</td><td>-13.0</td><td>-41.2</td><td></td></tr><tr><td>3.2988</td><td>-21.2</td><td>V</td><td>3.0</td><td>40.1</td><td>1.0</td><td>-60.3</td><td>-13.0</td><td>-47.3</td><td></td></tr><tr><td>1.6494</td><td>-18.0</td><td>H</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-56.1</td><td>-13.0</td><td>-43.1</td><td></td></tr><tr><td>2.4741</td><td>-18.2</td><td>H</td><td>3.0</td><td>39.5</td><td>1.0</td><td>-56.7</td><td>-13.0</td><td>-43.7</td><td></td></tr><tr><td>3.2988</td><td>-21.9</td><td>H</td><td>3.0</td><td>40.1</td><td>1.0</td><td>-61.0</td><td>-13.0</td><td>-48.0</td><td></td></tr><tr><td colspan="10">Mid Channel (836.5MHz)</td></tr><tr><td>1.6730</td><td>-15.3</td><td>V</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-53.4</td><td>-13.0</td><td>-40.4</td><td></td></tr><tr><td>2.5090</td><td>-7.1</td><td>V</td><td>3.0</td><td>39.5</td><td>1.0</td><td>-45.6</td><td>-13.0</td><td>-32.6</td><td></td></tr><tr><td>3.3460</td><td>-20.9</td><td>V</td><td>3.0</td><td>40.1</td><td>1.0</td><td>-60.1</td><td>-13.0</td><td>-47.1</td><td></td></tr><tr><td>1.6730</td><td>-18.4</td><td>H</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-56.5</td><td>-13.0</td><td>-43.5</td><td></td></tr><tr><td>2.5090</td><td>-8.5</td><td>H</td><td>3.0</td><td>39.5</td><td>1.0</td><td>-47.1</td><td>-13.0</td><td>-34.1</td><td></td></tr><tr><td>3.3460</td><td>-21.8</td><td>H</td><td>3.0</td><td>40.1</td><td>1.0</td><td>-60.9</td><td>-13.0</td><td>-47.9</td><td></td></tr><tr><td colspan="10">High Channel (848.3MHz)</td></tr><tr><td>1.6966</td><td>-19.1</td><td>V</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-57.2</td><td>-13.0</td><td>-44.2</td><td></td></tr><tr><td>2.5449</td><td>-9.3</td><td>V</td><td>3.0</td><td>39.6</td><td>1.0</td><td>-47.8</td><td>-13.0</td><td>-34.8</td><td></td></tr><tr><td>3.3932</td><td>-20.8</td><td>V</td><td>3.0</td><td>40.2</td><td>1.0</td><td>-60.0</td><td>-13.0</td><td>-47.0</td><td></td></tr><tr><td>1.6966</td><td>-20.9</td><td>H</td><td>3.0</td><td>39.1</td><td>1.0</td><td>-59.0</td><td>-13.0</td><td>-46.0</td><td></td></tr><tr><td>2.5449</td><td>-10.1</td><td>H</td><td>3.0</td><td>39.6</td><td>1.0</td><td>-48.6</td><td>-13.0</td><td>-35.6</td><td></td></tr><tr><td>3.3932</td><td>-20.7</td><td>H</td><td>3.0</td><td>40.2</td><td>1.0</td><td>-59.9</td><td>-13.0</td><td>-46.9</td><td></td></tr></table>										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	-18.1	V	3.0	39.1	1.0	-56.2	-13.0	-43.2		2.4741	-15.7	V	3.0	39.5	1.0	-54.2	-13.0	-41.2		3.2988	-21.2	V	3.0	40.1	1.0	-60.3	-13.0	-47.3		1.6494	-18.0	H	3.0	39.1	1.0	-56.1	-13.0	-43.1		2.4741	-18.2	H	3.0	39.5	1.0	-56.7	-13.0	-43.7		3.2988	-21.9	H	3.0	40.1	1.0	-61.0	-13.0	-48.0		Mid Channel (836.5MHz)										1.6730	-15.3	V	3.0	39.1	1.0	-53.4	-13.0	-40.4		2.5090	-7.1	V	3.0	39.5	1.0	-45.6	-13.0	-32.6		3.3460	-20.9	V	3.0	40.1	1.0	-60.1	-13.0	-47.1		1.6730	-18.4	H	3.0	39.1	1.0	-56.5	-13.0	-43.5		2.5090	-8.5	H	3.0	39.5	1.0	-47.1	-13.0	-34.1		3.3460	-21.8	H	3.0	40.1	1.0	-60.9	-13.0	-47.9		High Channel (848.3MHz)										1.6966	-19.1	V	3.0	39.1	1.0	-57.2	-13.0	-44.2		2.5449	-9.3	V	3.0	39.6	1.0	-47.8	-13.0	-34.8		3.3932	-20.8	V	3.0	40.2	1.0	-60.0	-13.0	-47.0		1.6966	-20.9	H	3.0	39.1	1.0	-59.0	-13.0	-46.0		2.5449	-10.1	H	3.0	39.6	1.0	-48.6	-13.0	-35.6		3.3932	-20.7	H	3.0	40.2	1.0	-59.9	-13.0	-46.9	
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