Appendix B

Test Data for SZEM150900579805

CONTENT

1 Effective (Isotropic) Radiated Power Output Data

Part I - Test Results

Part 1 – RF Conducted Power of Transmitter for GSM850

TEST CONDITIONS	RF Output Power(Conducted)					
	Channel128(L)		Channel190(M)		Channel251(H)	
	824.2MHz		836.6 MHz		848.8 MHz	
Tnom/ Vnom	Measured (dBm)	Limit (dBm)	Measured (dBm)	Limit (dBm)	Measured (dBm)	Limit (dBm)
GSM/TM1 (GSM ONLY)	32.53	38.5	32.62	32.63	32.61	38.5
GSM/TM1 (GPRS)	32.56	38.5	32.63	32.65	32.79	38.5

Part 2– Effective Radiated Power of Transmitter (ERP) for GSM850

Test Mode	Freq. (MHz)	Meas. Level (dBm)	Substitution Antenna Type	SGP (dBm)	Substitution Gain(dBd)	Cable Loss (dB)	Substitution Level(ERP) / dBm	Limit (dBm)	Result
GSM/TM1 (GSM ONLY)	824.2	31.47	Dipole Ant.	36.74	-4.90	0.6	31.24	38.5	Pass
GSM/TM1 (GSM ONLY)	836.6	31.38	Dipole Ant.	36.51	-5.02	0.6	30.89	38.5	Pass
GSM/TM1 (GSM ONLY)	848.8	31.16	Dipole Ant.	37.17	-5.00	0.6	31.57	38.5	Pass
GSM/TM1 (GPRS)	824.2	31.52	Dipole	36.52	-4.90	0.6	31.02	38.5	Pass
GSM/TM1 (GPRS)	836.6	31.46	Dipole	36.59	-5.02	0.6	30.97	38.5	Pass
GSM/TM1 (GPRS)	848.8	31.34	Dipole	36.90	-5.00	0.6	31.30	38.5	Pass

Note:

a: For getting the ERP (Efficient Radiated Power) in substitution method, the following formula should be taken to calculate it,

ERP [dBm] = SGP [dBm] – Cable Loss [dB] + Gain [dBd]

b: SGP=Signal Generator Level

c: RBW > emission bandwidth, VBW > 3 x RBW.
Detector: RMS

Part 3 – RF Conducted Power of Transmitter for GSM1900

TEST CONDITIONS	RF Output Power(Conducted)					
	Channel512(L)		Channel661(M)		Channel810(H)	
	1850.2MHz		1880 MHz		1909.8 MHz	
Tnom/ Vnom	Measured (dBm)	Limit (dBm)	Measured (dBm)	Limit (dBm)	Measured (dBm)	Limit (dBm)
GSM/TM1 (GSM ONLY)	28.2	38.5	28.13	38.5	28.38	38.5
GSM/TM1 (GPRS)	28.13	38.5	28.1	38.5	28.32	38.5

Part 4– Effective Isotropic Radiated Power of Transmitter (EIRP) for GSM1900

Test Mode	Freq. (MHz)	Meas. Level (dBm)	Substitution Antenna Type	SGP (dBm)	Substitution Gain(dBd)	Cable Loss (dB)	Substitution Level(EIRP) / dBm	Limit (dBm)	Result
GSM/TM1 (GSM ONLY)	1850.2	27.25	Dipole Ant.	32.70	-4.90	0.6	27.20	38.5	Pass
GSM/TM1 (GSM ONLY)	1880	27.13	Dipole Ant.	32.57	-5.02	0.6	26.95	38.5	Pass
GSM/TM1 (GSM ONLY)	1909.8	27.70	Dipole Ant.	32.72	-5.00	0.6	27.12	38.5	Pass
GSM/TM1 (GPRS)	1850.2	27.26	Dipole	33.36	-4.90	0.6	27.86	38.5	Pass
GSM/TM1 (GPRS)	1880	27.05	Dipole	33.61	-5.02	0.6	27.99	38.5	Pass
GSM/TM1 (GPRS)	1909.8	27.67	Dipole	33.33	-5.00	0.6	27.73	38.5	Pass

Note:

a: For getting the EIRP (Efficient Isotropic Radiated Power) in substitution method, the following formula should be taken to calculate it,

EIRP [dBm] = SGP [dBm] – Cable Loss [dB] + Gain [dBd]

b: SGP=Signal Generator Level

c: RBW > emission bandwidth, VBW > 3 x RBW.
Detector: RMS

Part 3 – RF Conducted Power of Transmitter for WCDMA BAND 5

TEST CONDITIONS	RF Output Power(Conducted)					
	Channel 4132(L)		Channel 4182 (M)		Channel 4233(H)	
	826.4MHz		836.4MHz		846.6MHz	
Tnom/ Vnom	Measured(dBm)	Limit (dBm)	Measured(dBm)	Limit (dBm)	Measured(dBm)	Limit (dBm)
WCDMA	23.33	38.5	23.16	38.5	23.24	38.5
HSDPA	22.35	38.5	22.17	38.5	22.26	38.5
HSUPA	22.39	38.5	22.19	38.5	22.32	38.5

Part 4– Effective Radiated Power of Transmitter (ERP) for WCDMA BAND 5

Test Mode	Freq. (MHz)	Meas. Level (dBm)	Substitution Antenna Type	SGP (dBm)	Substitution Gain(dBd)	Cable Loss (dB)	Substitution Level(ERP) / dBm	Limit (dBm)	Result
WCDMA	826.4	21.32	Dipole	27.09	-4.90	0.6	21.59	38.5	Pass
WCDMA	836.4	21.89	Dipole	27.05	-5.02	0.6	21.43	38.5	Pass
WCDMA	846.6	21.75	Dipole	26.73	-5.00	0.6	21.13	38.5	Pass
HSDPA	826.4	20.38	Dipole	26.26	-4.90	0.6	20.76	38.5	Pass
HSDPA	836.4	20.73	Dipole	26.62	-5.02	0.6	21.00	38.5	Pass
HSDPA	846.6	20.55	Dipole	25.65	-5.00	0.6	20.05	38.5	Pass
HSUPA	826.4	19.69	Dipole	25.37	-4.90	0.6	19.87	38.5	Pass
HSUPA	836.4	20.92	Dipole	26.26	-5.02	0.6	20.64	38.5	Pass
HSUPA	846.6	20.38	Dipole	25.99	-5.00	0.6	20.39	38.5	Pass

Note:

a: For getting the ERP (Efficient Radiated Power) in substitution method, the following formula should be taken to calculate it,

ERP [dBm] = SGP [dBm] – Cable Loss [dB] + Gain [dBd]

b: SGP=Signal Generator Level

c: RBW > emission bandwidth, VBW > 3 x RBW.
Detector: RMS

2 Peak-to-Average Ratio

Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
GSM850	GSM/TM1	LCH	0.28	13	PASS
		MCH	0.32	13	PASS
		HCH	0.21	13	PASS

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
GSM1900	GSM/TM1	LCH	0.29	13	PASS
		MCH	0.35	13	PASS
		HCH	0.27	13	PASS

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
WCDMA850	UMTS/TM1	LCH	3.09	13	PASS
		MCH	2.83	13	PASS
		HCH	3.25	13	PASS

3 Modulation Characteristics

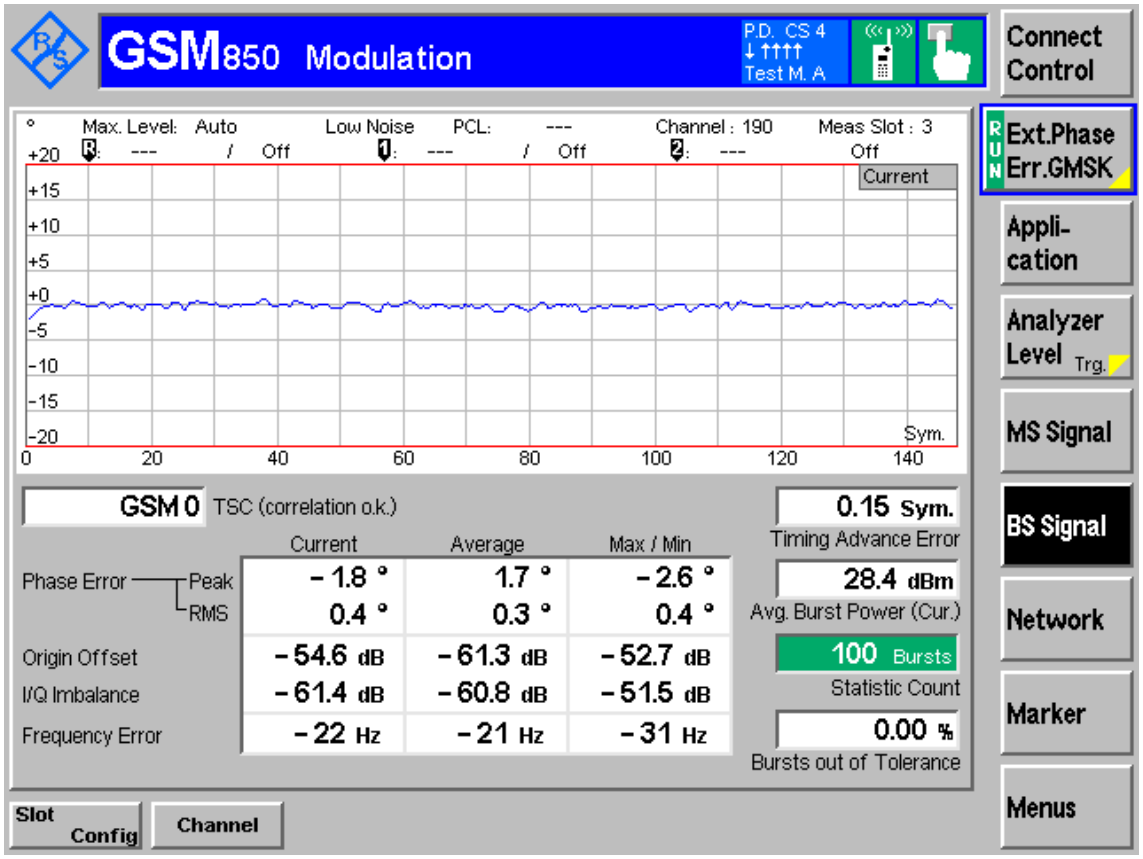
Part I - Test Plots

3.1 For GSM

3.1.1 Test Band = GSM850

3.1.1.1 Test Mode = GSM/TM1

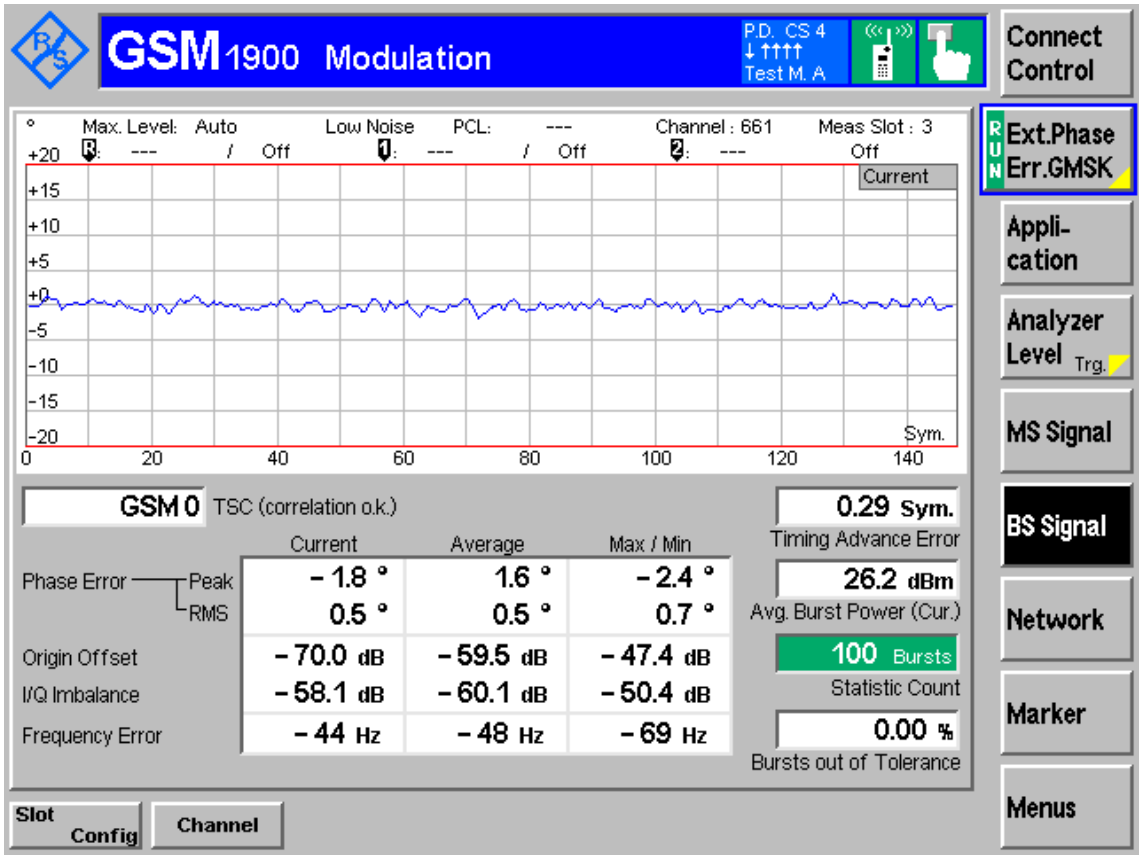
3.1.1.1.1 Test Channel = MCH



3.1.2 Test Band = GSM1900

3.1.2.1 Test Mode = GSM/TM1

3.1.2.1.1 Test Channel = MCH

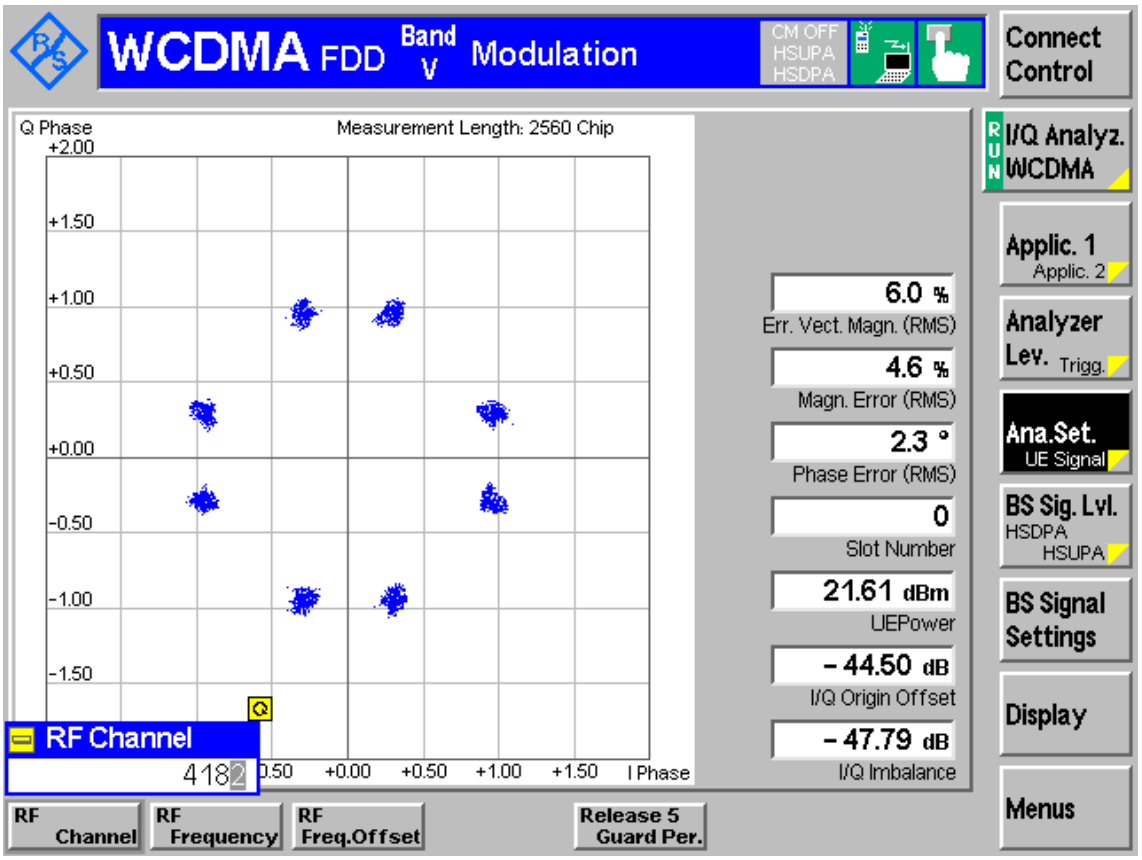


3.2 For WCDMA

3.2.1 Test Band = WCDMA 850

3.2.1.1 Test Mode = WCDMA BAND 5/TM1

3.2.1.1.1 Test Channel = MCH



4 Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [kHz]	Emission Bandwidth [kHz]	Verdict
GSM850	GSM/TM1	LCH	242.32	320.5	PASS
		MCH	248.32	318.7	PASS
		HCH	249.96	322.8	PASS
GSM1900	GSM/TM1	LCH	247.03	317.9	PASS
		MCH	239.78	319.1	PASS
		HCH	247.71	318.8	PASS

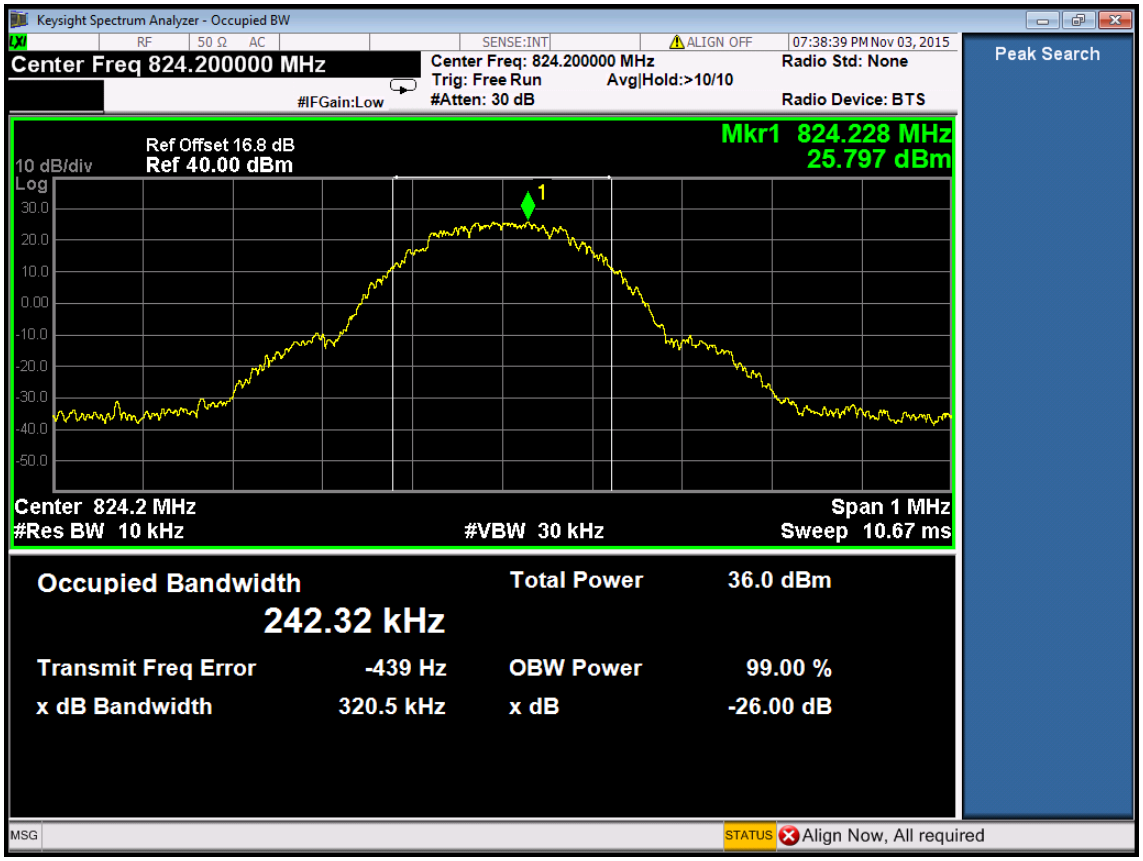
Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
WCDMA850	UMTS/TM1	LCH	4.1689	4.696	PASS
		MCH	4.1371	4.650	PASS
		HCH	4.1780	4.663	PASS

4.1 For GSM

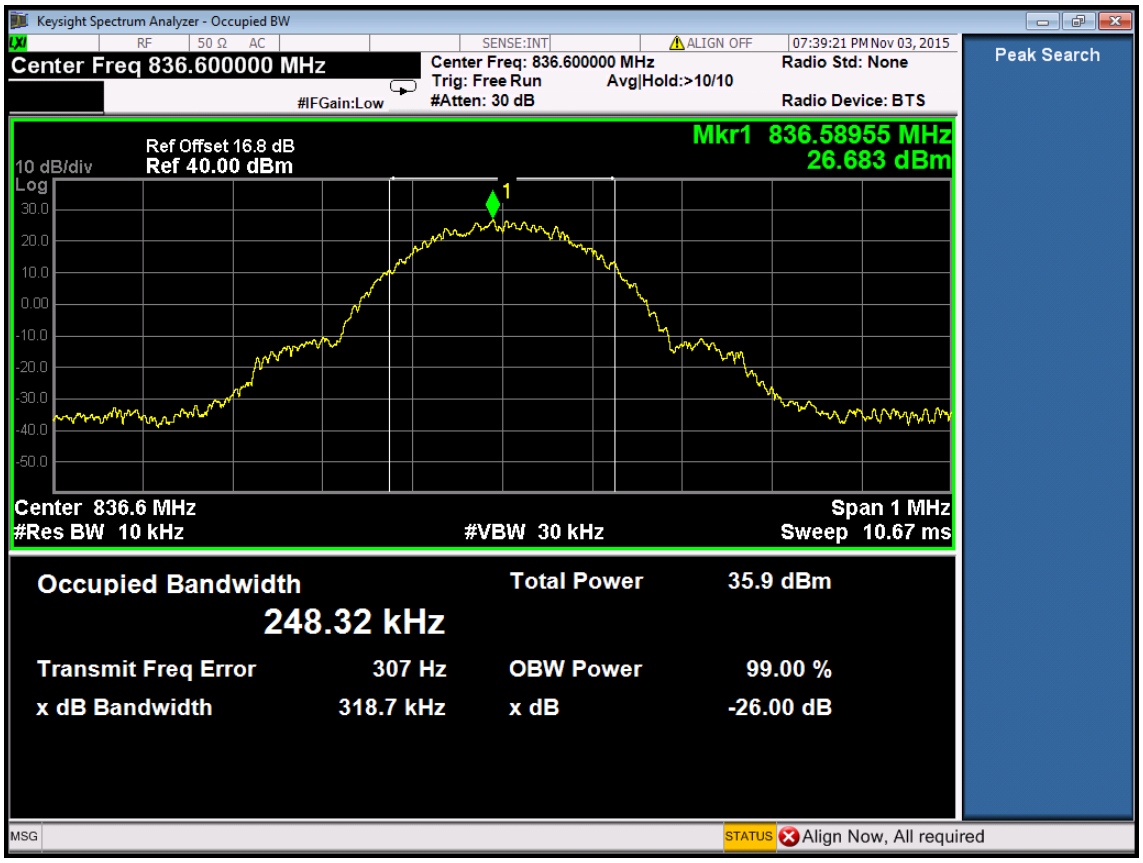
4.1.1 Test Band = GSM850

4.1.1.1 Test Mode = GSM/TM1

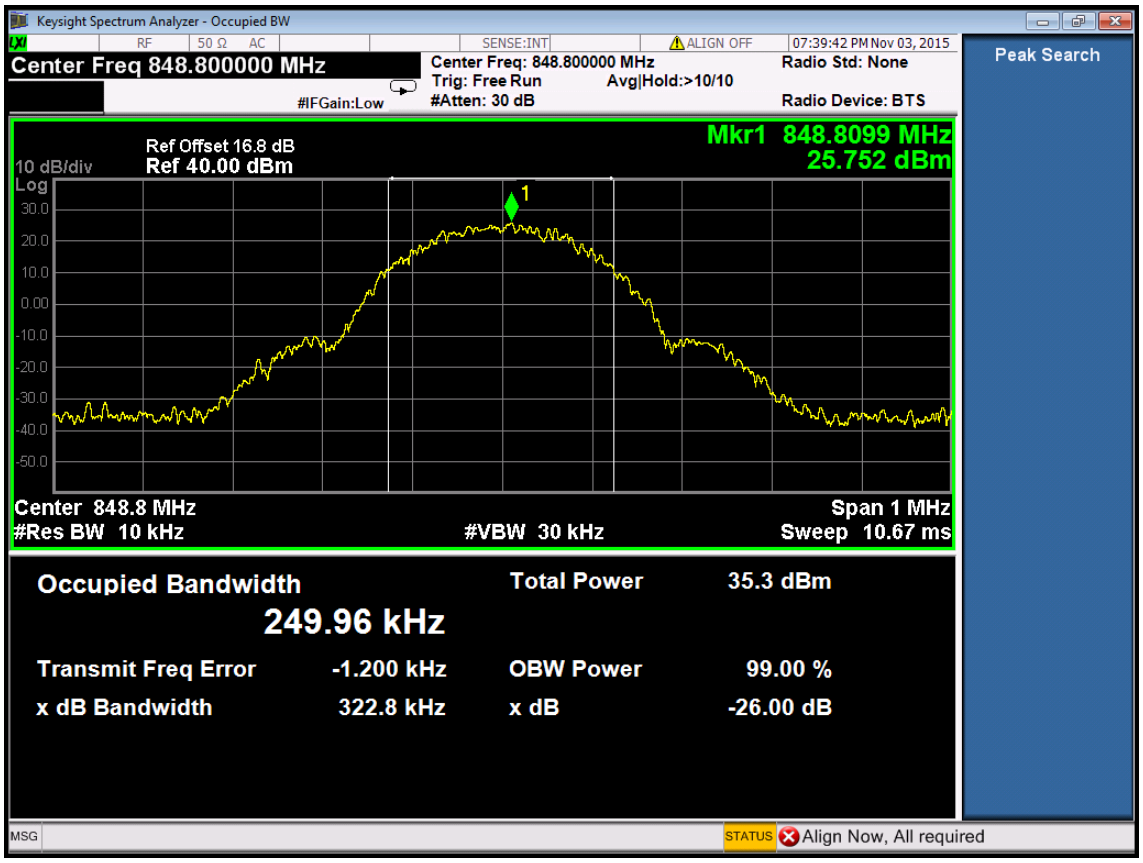
4.1.1.1.1 Test Channel = LCH



4.1.1.1.2 Test Channel = MCH



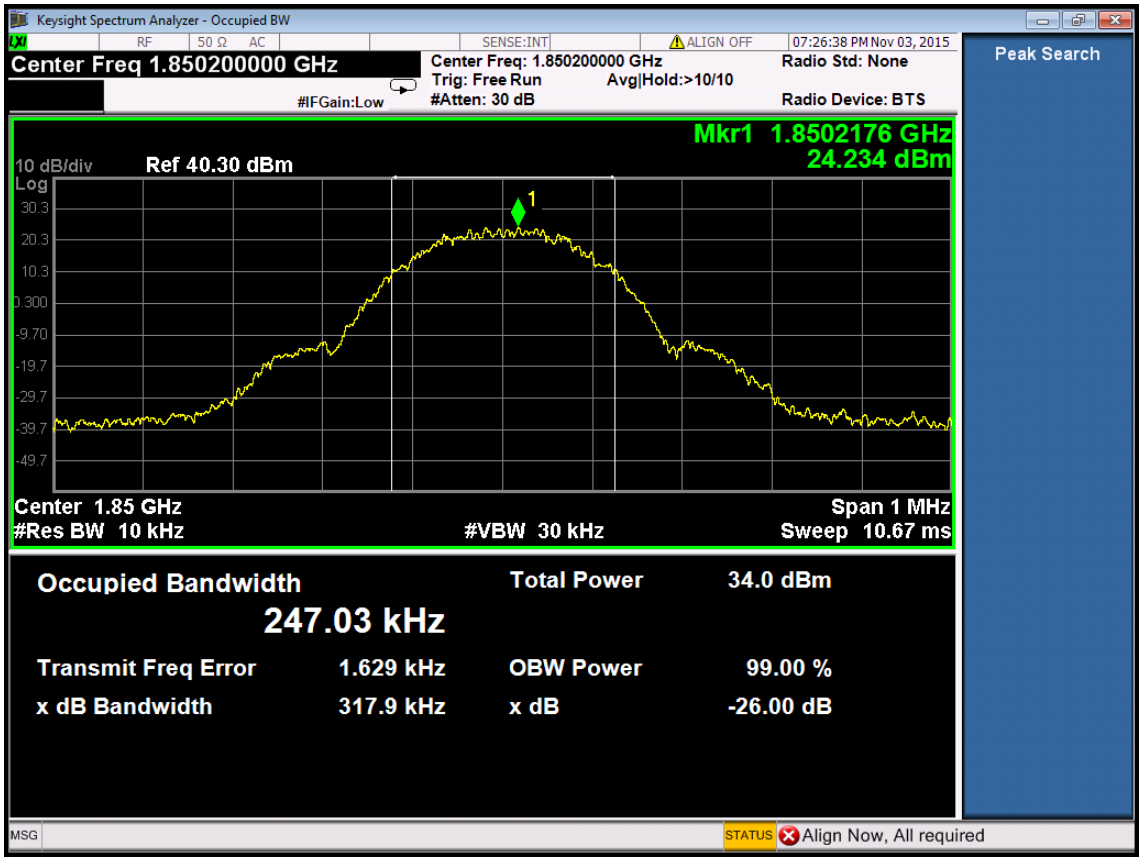
4.1.1.1.3 Test Channel = HCH



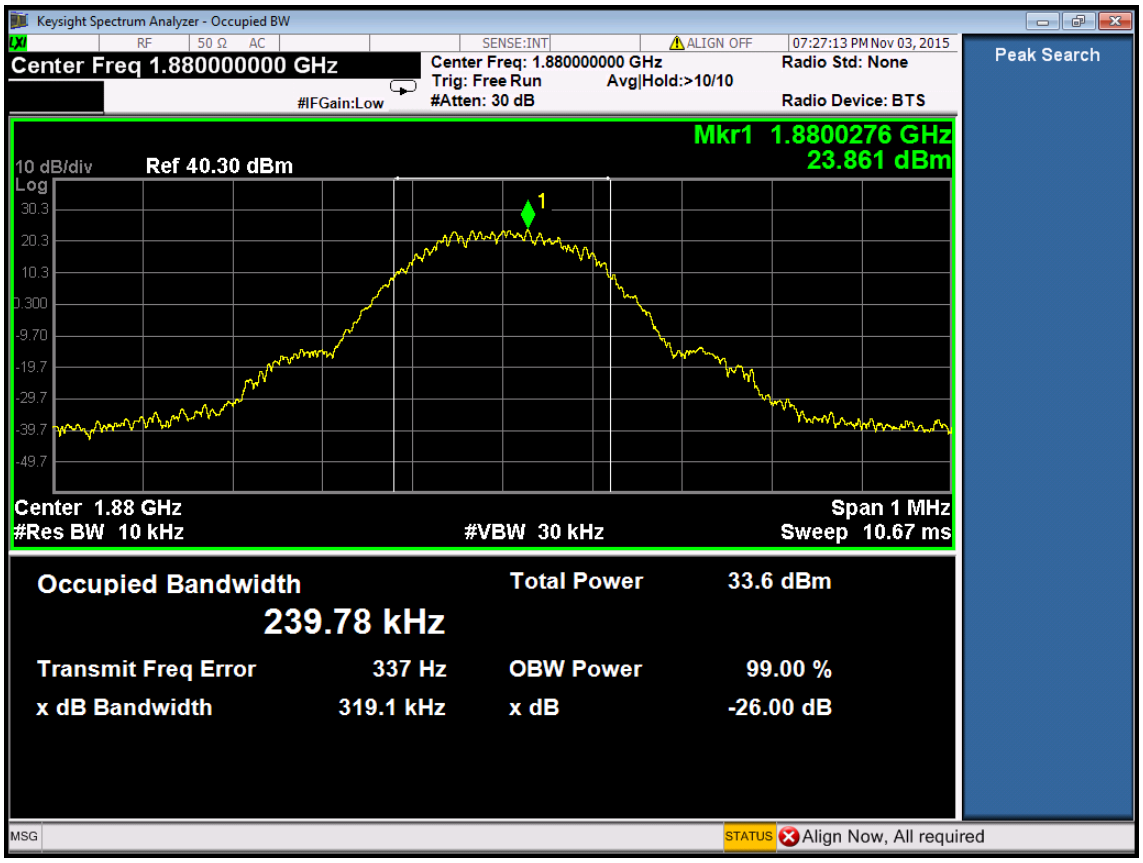
4.1.2 Test Band = GSM1900

4.1.2.1 Test Mode = GSM/TM1

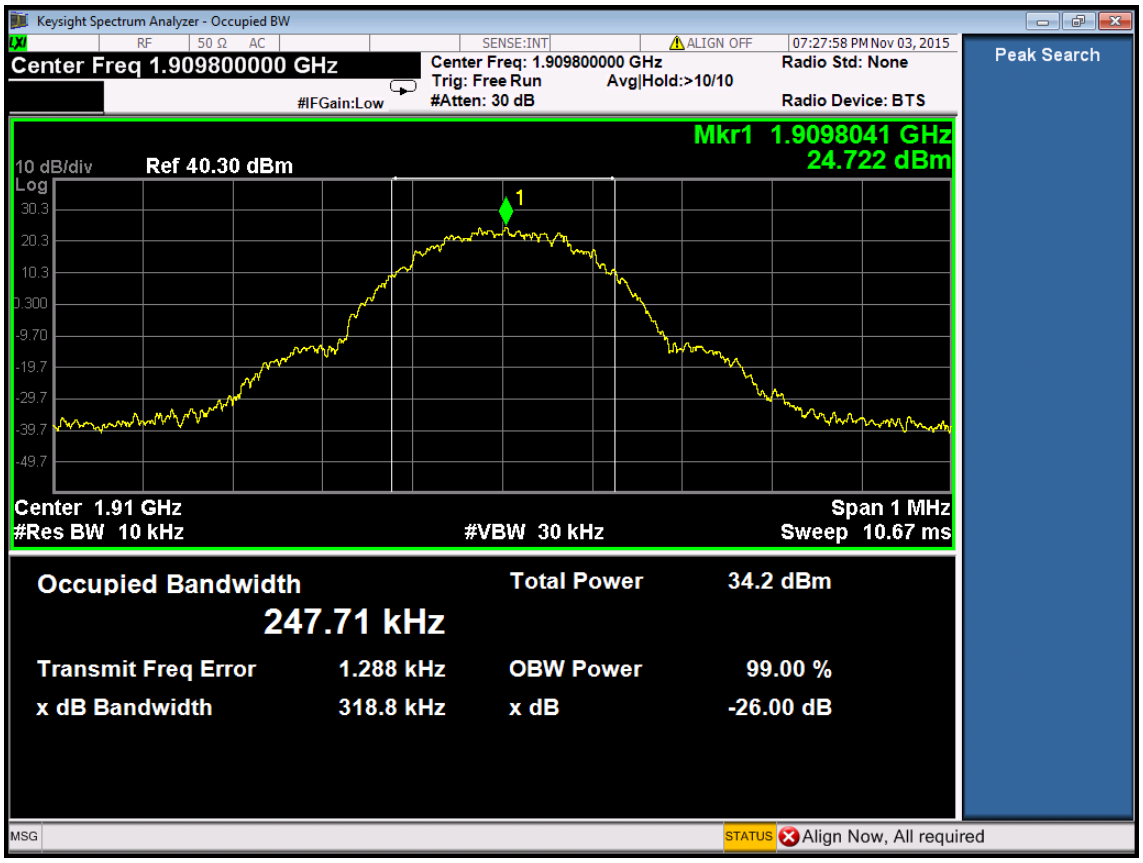
4.1.2.1.1 Test Channel = LCH



4.1.2.1.2 Test Channel = MCH



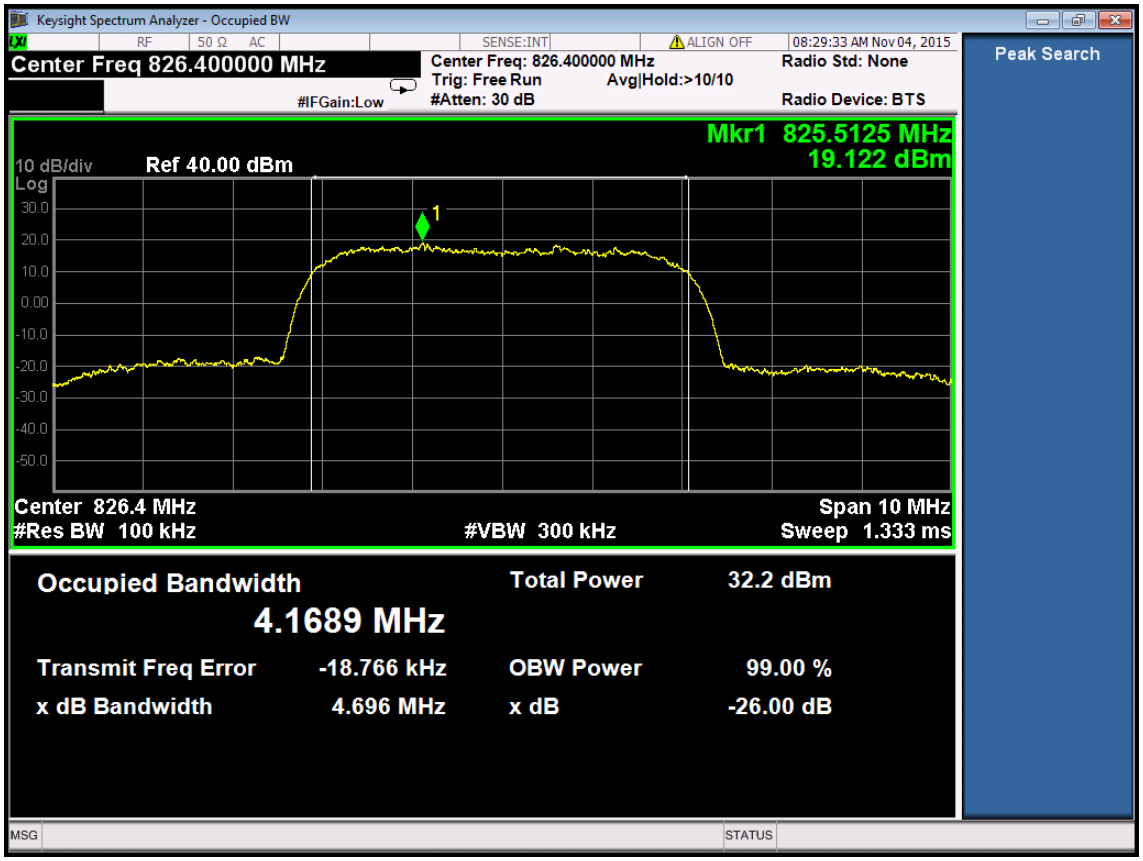
4.1.2.1.3 Test Channel = HCH



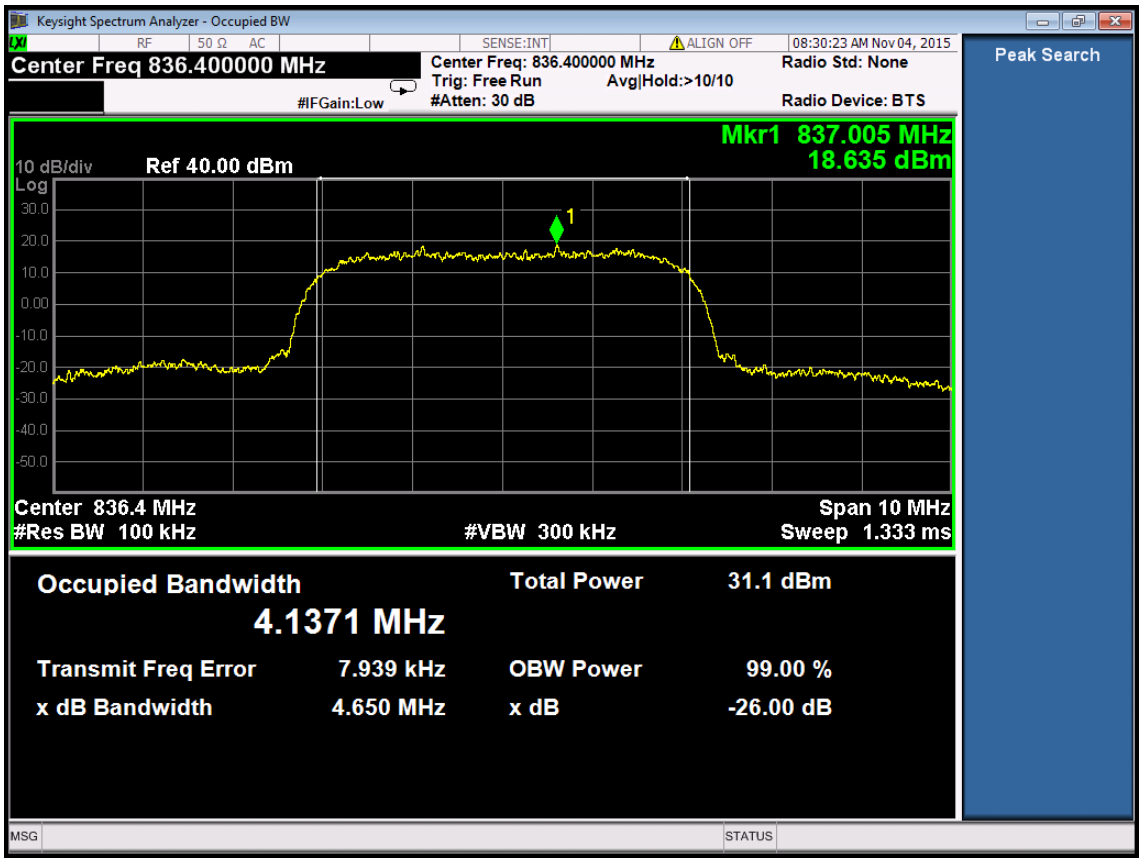
4.1.3 Test Band = WCDMA850

4.1.3.1 Test Mode = UMTS/TM1

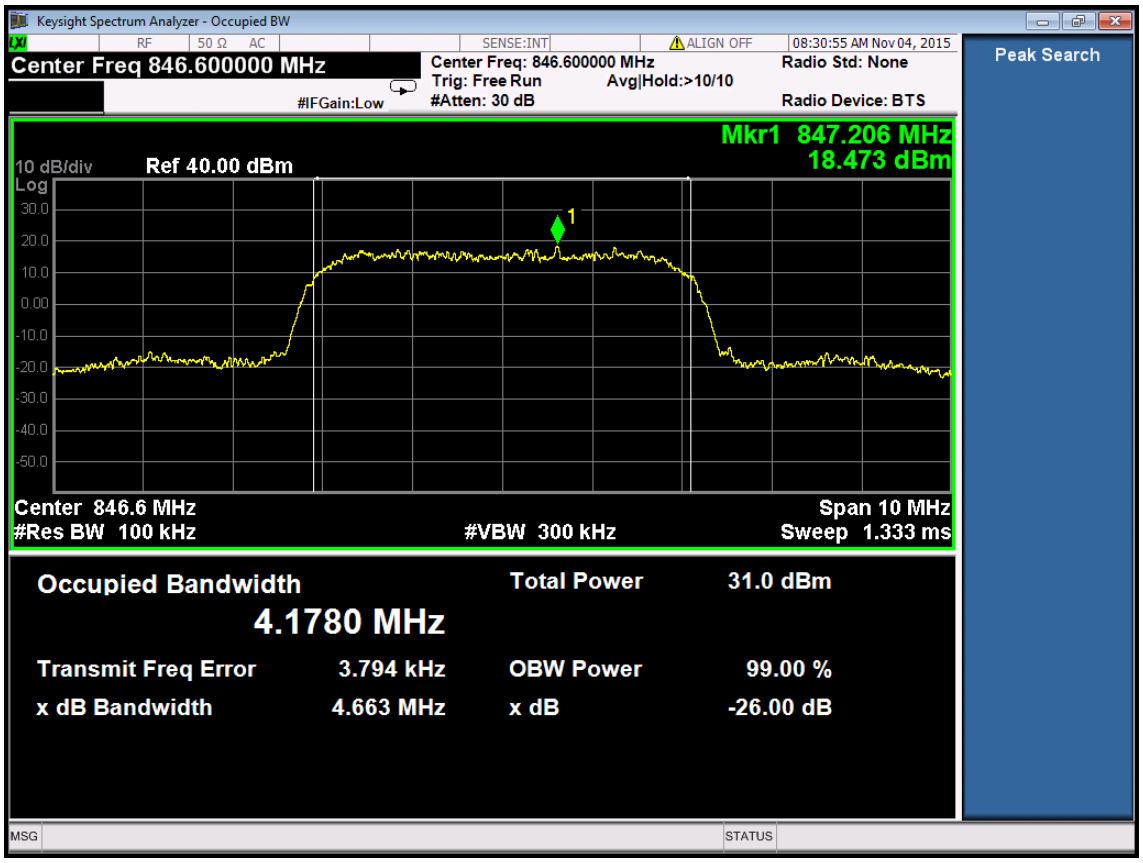
4.1.3.1.1 Test Channel = LCH



4.1.3.1.2 Test Channel = MCH



4.1.3.1.3 Test Channel = HCH



5 Band Edges Compliance

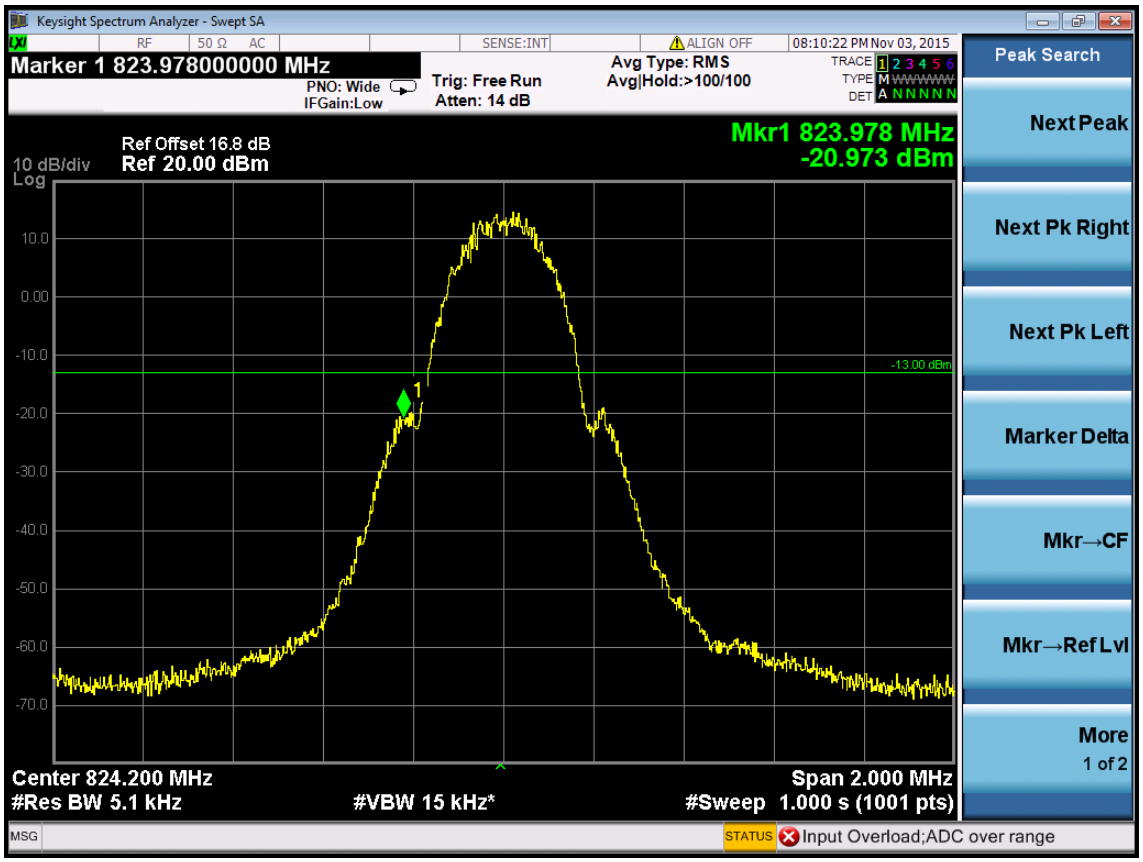
Part I - Test Plots

5.1 For GSM

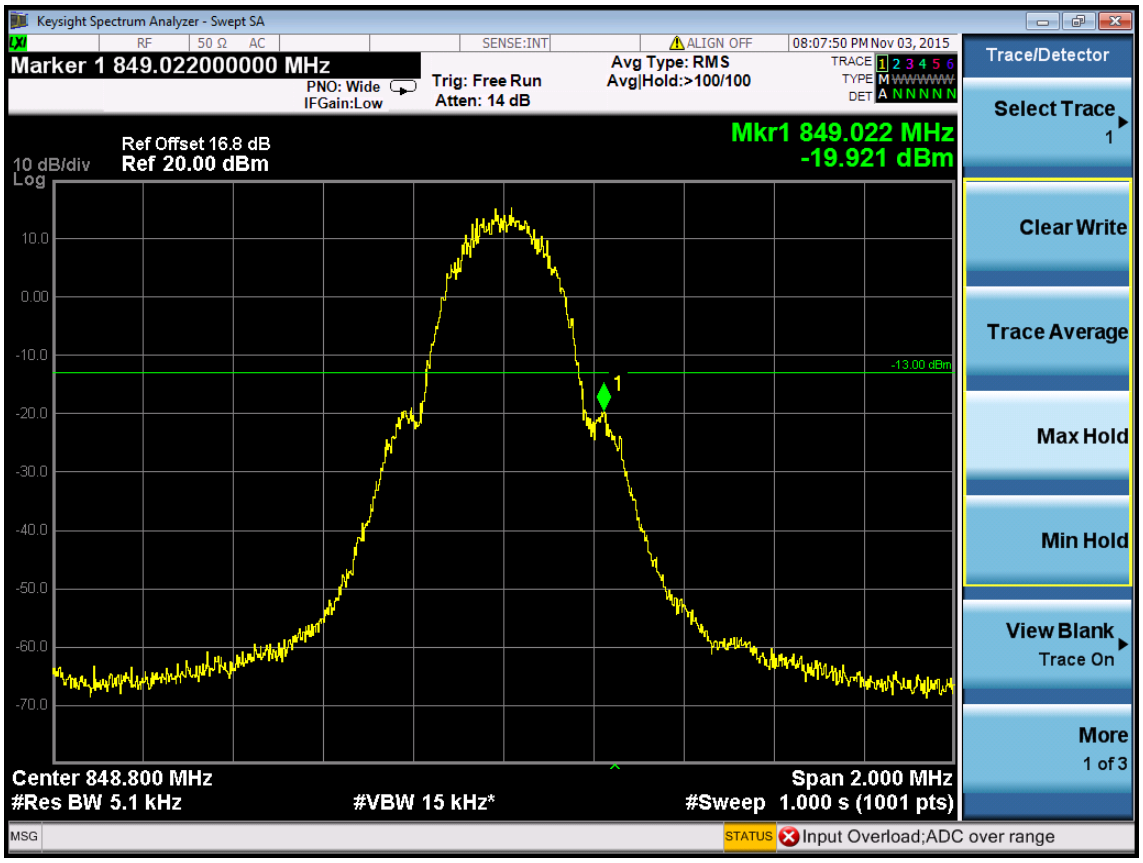
5.1.1 Test Band = GSM850

5.1.1.1 Test Mode = GSM/TM1

5.1.1.1.1 Test Channel = LCH



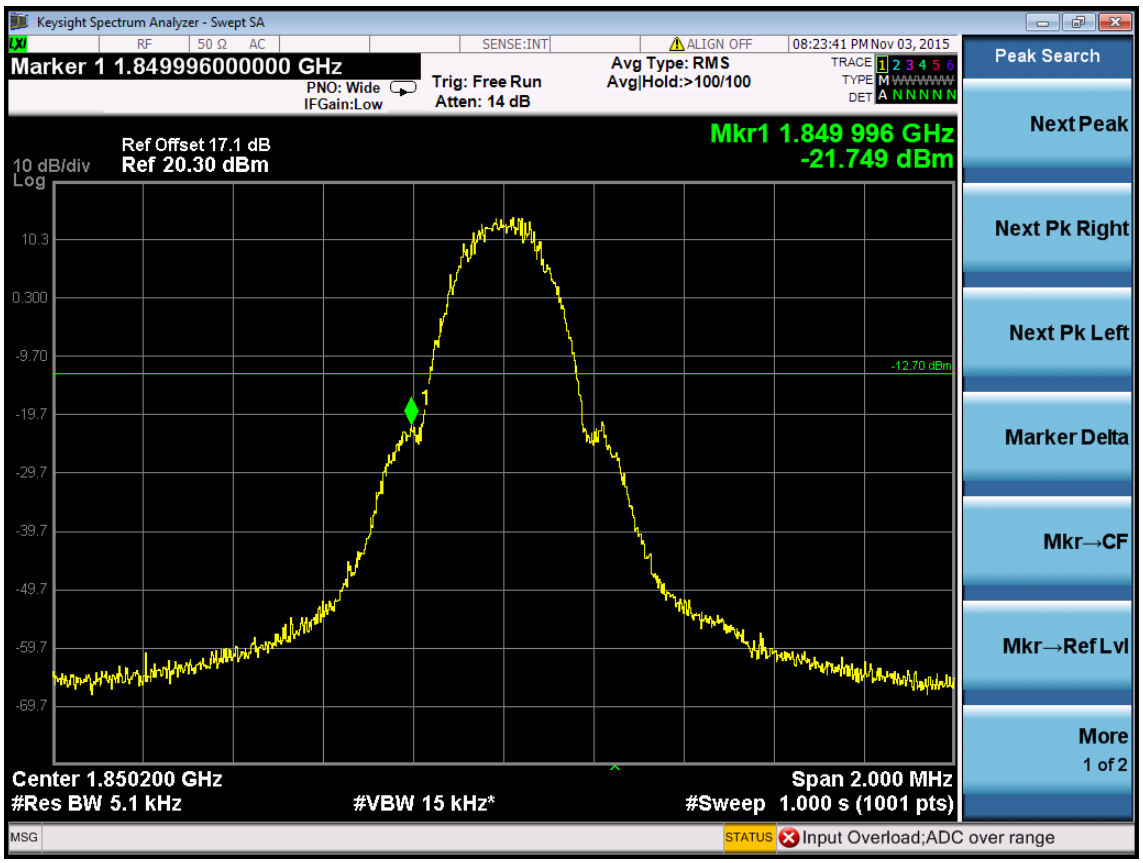
5.1.1.1.2 Test Channel = HCH



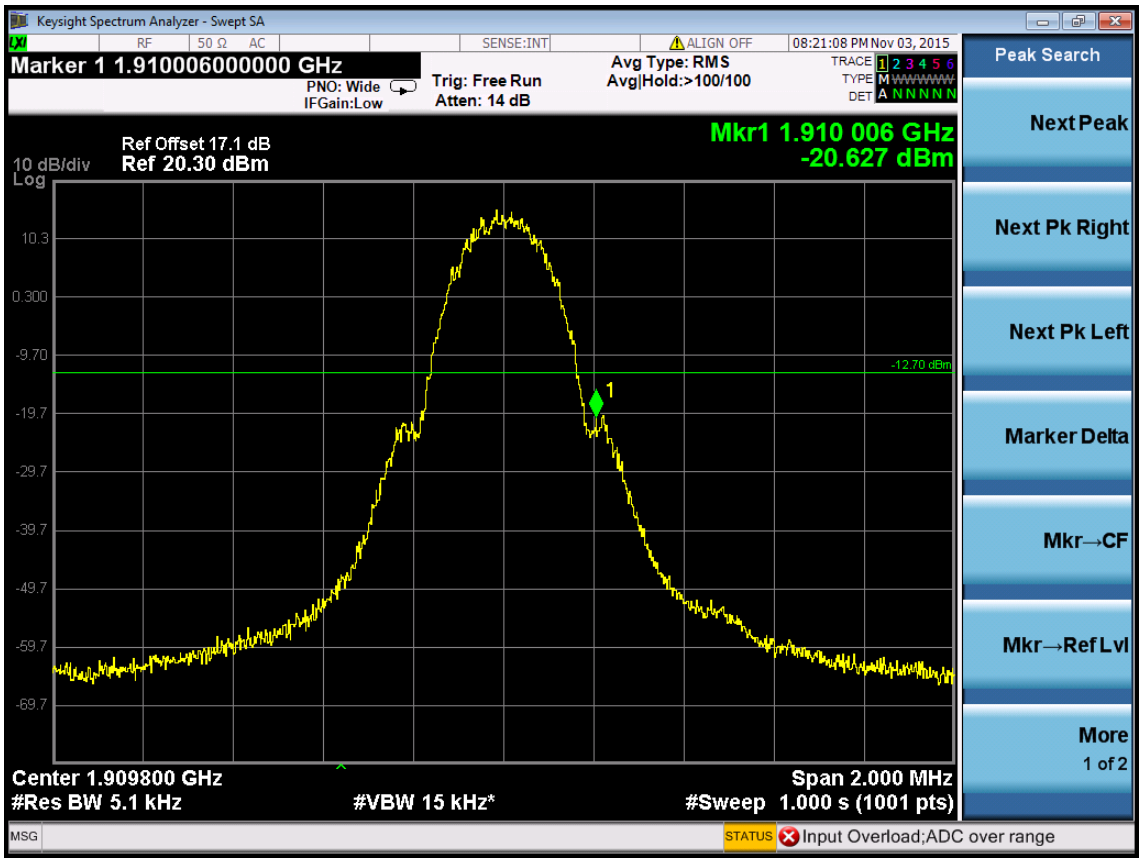
5.1.2 Test Band = GSM1900

5.1.2.1 Test Mode = GSM/TM1

5.1.2.1.1 Test Channel = LCH



5.1.2.1.2 Test Channel = HCH



5.2 For WCDMA 850 Band 5

5.2.1.1 Test Mode = UMTS/TM1

5.2.1.1.1 Test Channel = LCH

5.2.1.1.2 Test Channel = HCH

6 Spurious Emission at Antenna Terminal

NOTE: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of < RBW/2 so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = k * (Span / RBW)" with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

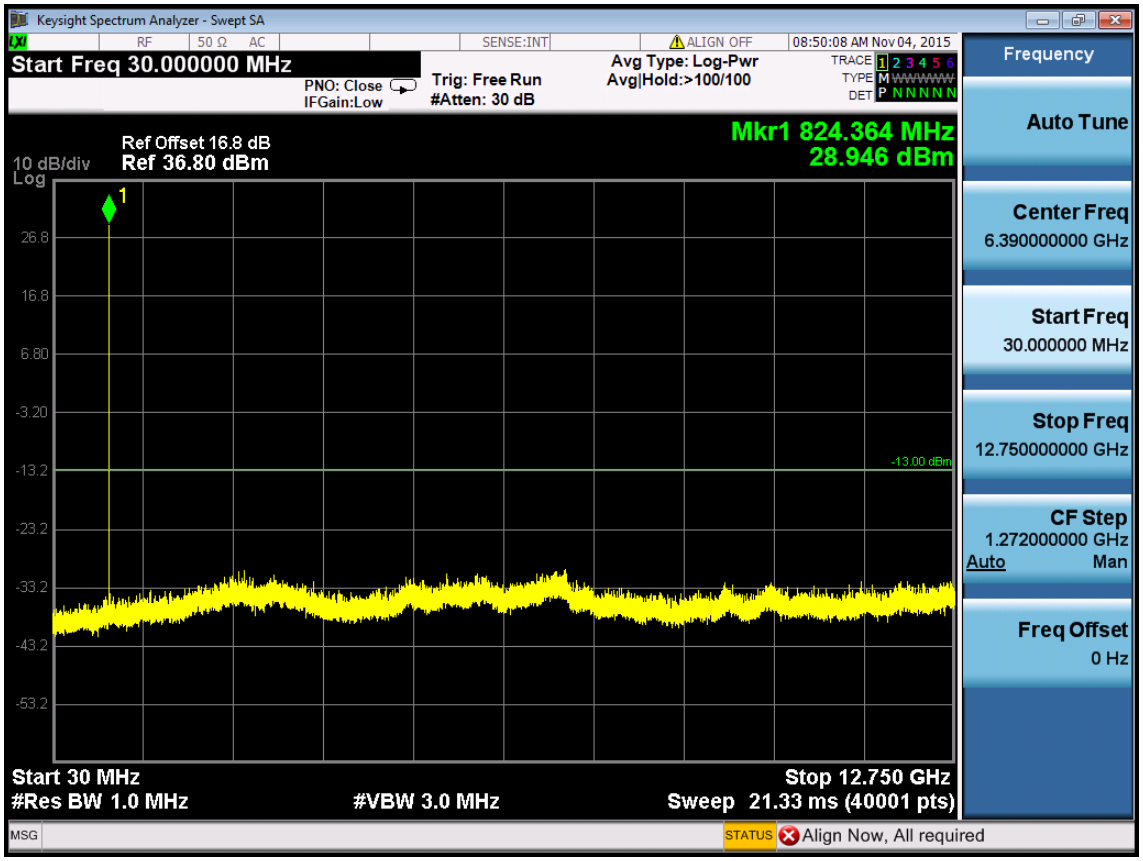
Part I - Test Plots

6.1 For GSM

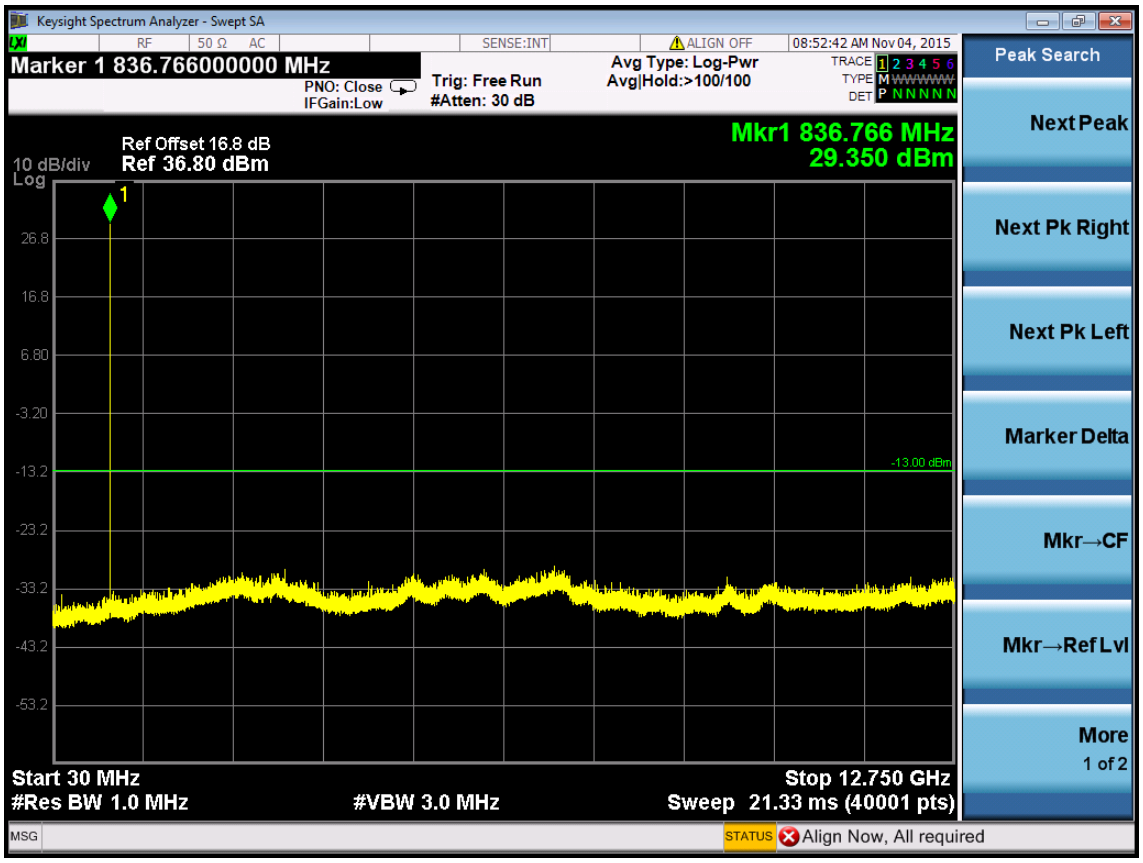
6.1.1 Test Band = GSM850

6.1.1.1 Test Mode = GSM/TM1

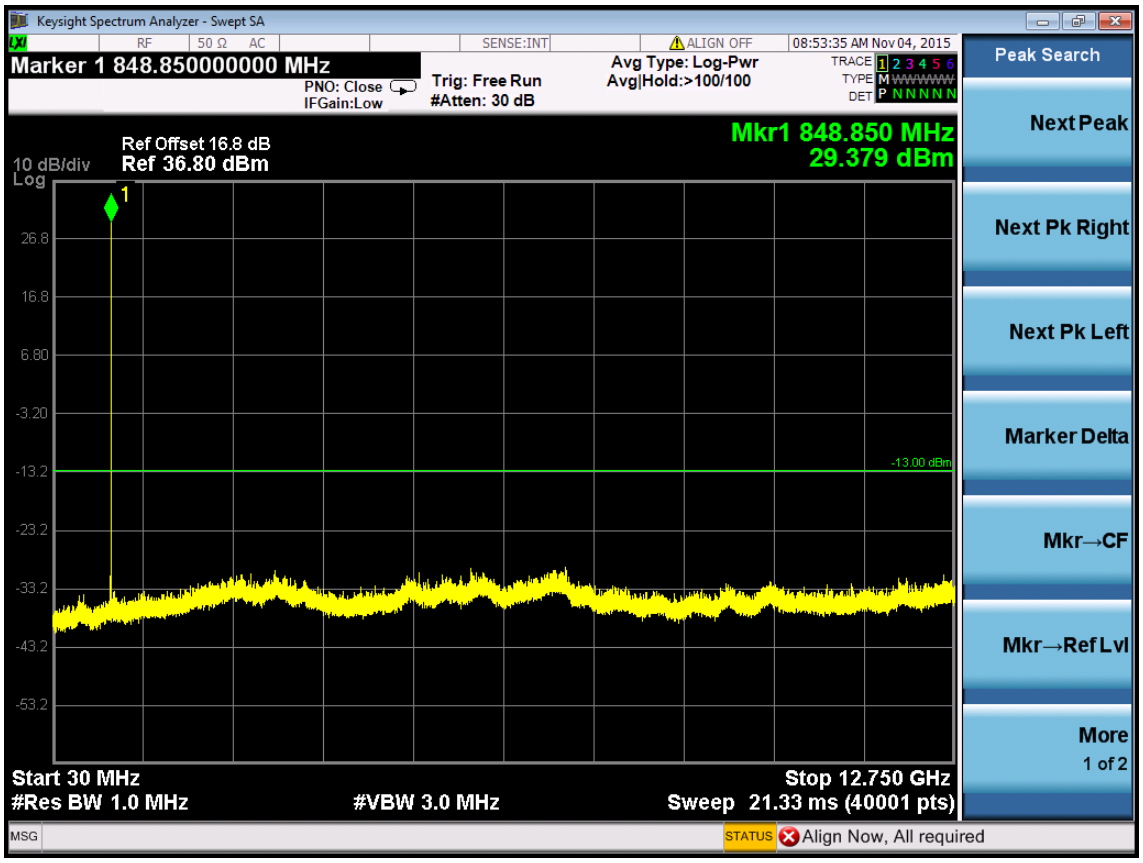
6.1.1.1.1 Test Channel = LCH



6.1.1.1.2 Test Channel = MCH



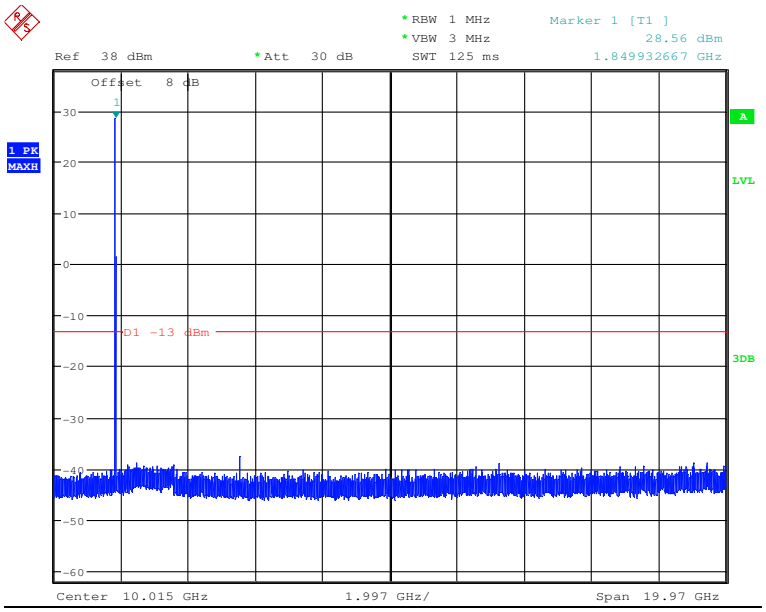
6.1.1.1.3 Test Channel = HCH



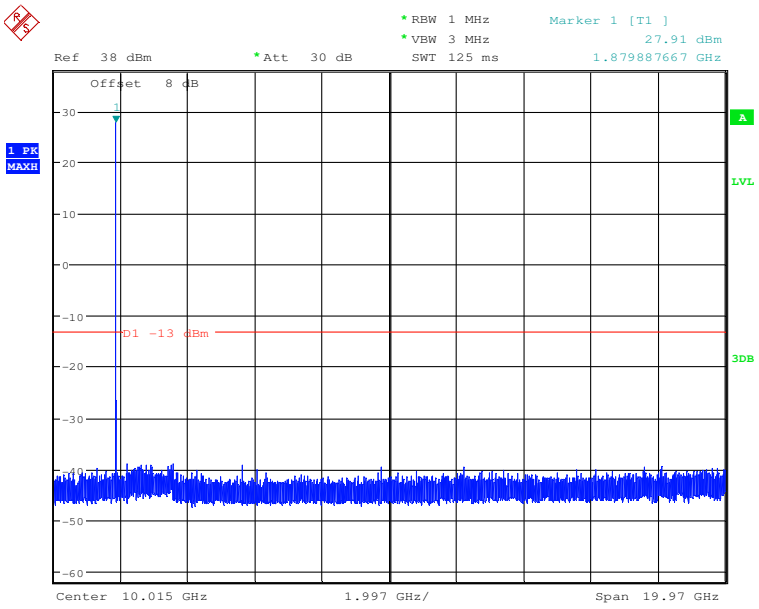
6.1.2 Test Band = GSM1900

6.1.2.1 Test Mode = GSM/TM1

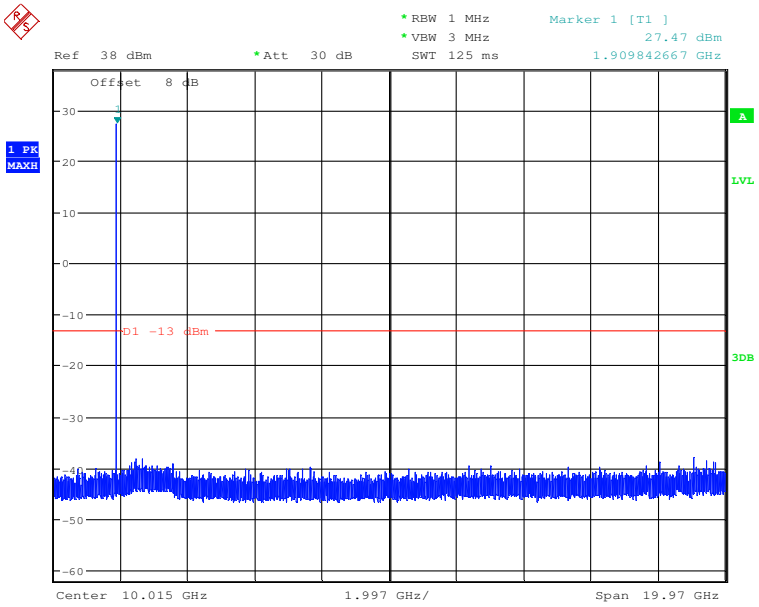
6.1.2.1.1 Test Channel = LCH



6.1.2.1.2 Test Channel = MCH



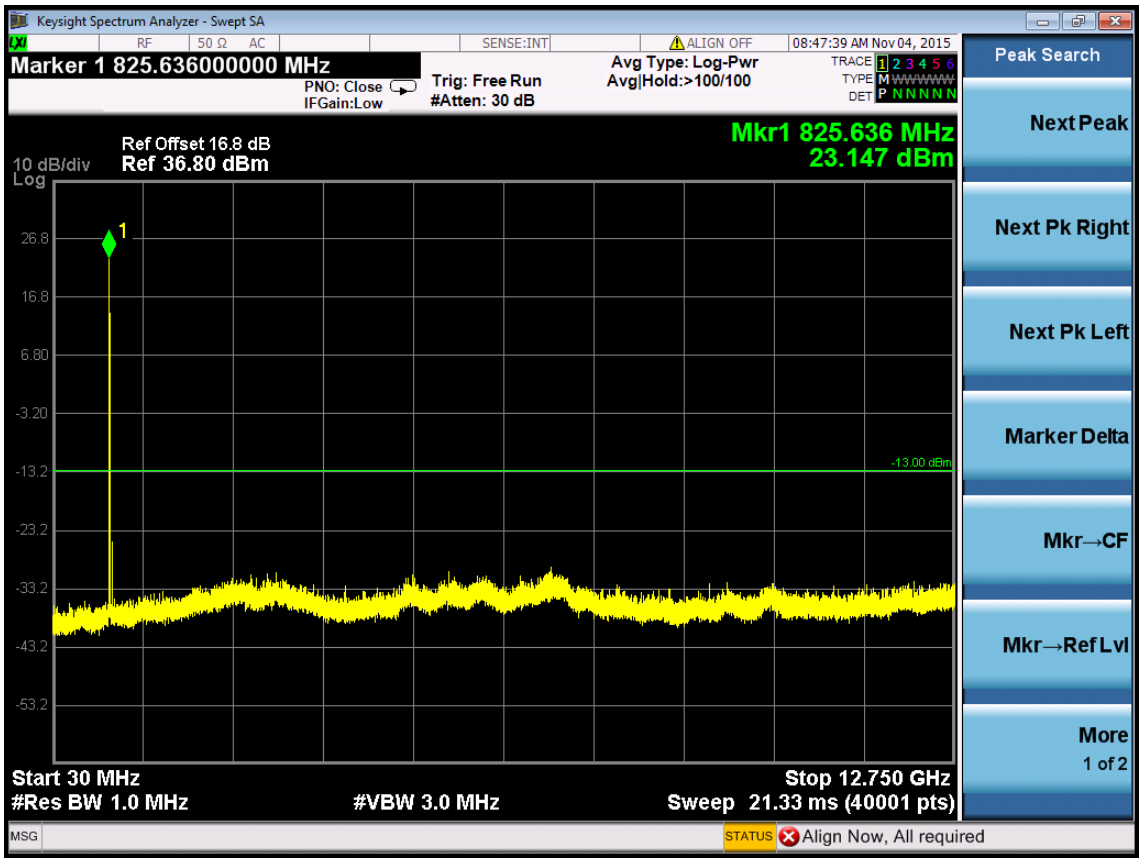
6.1.2.1.3 Test Channel = HCH



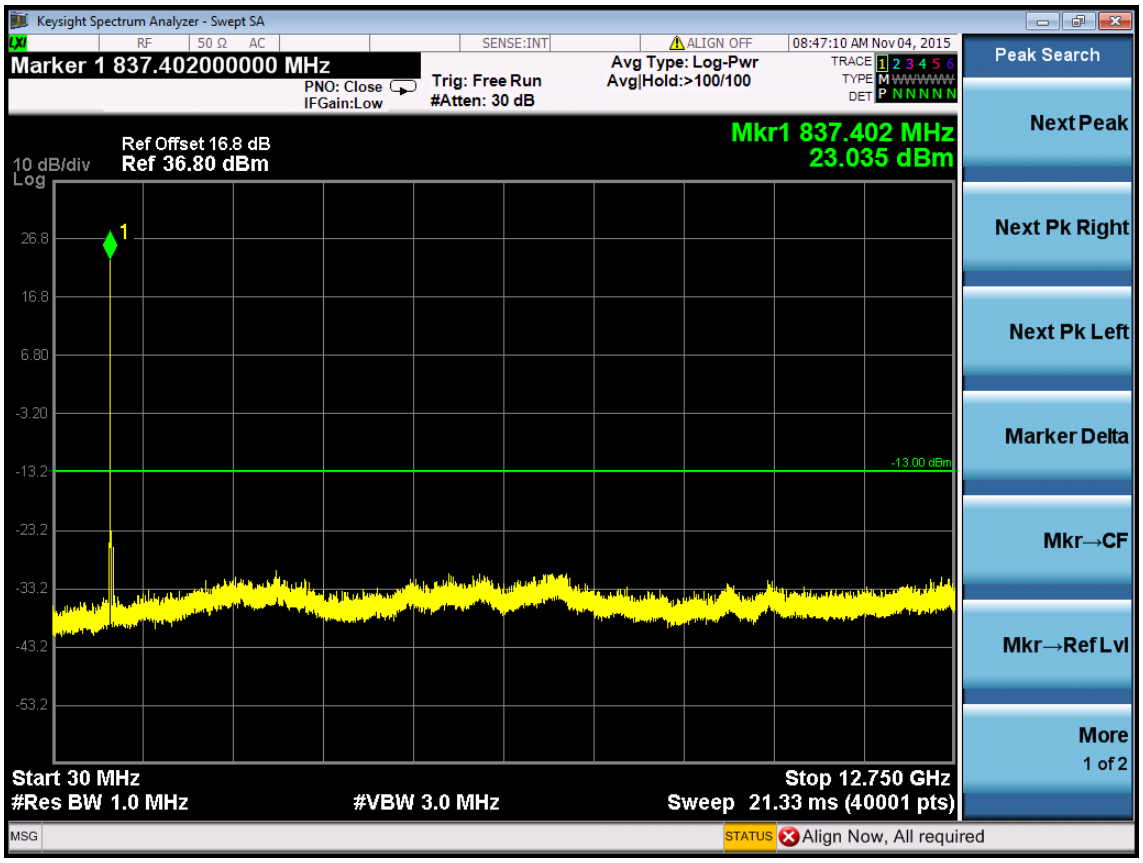
6.2 For WCDMA850 BAND 5

8.1.1.2 Test Mode = UMTS/TM1

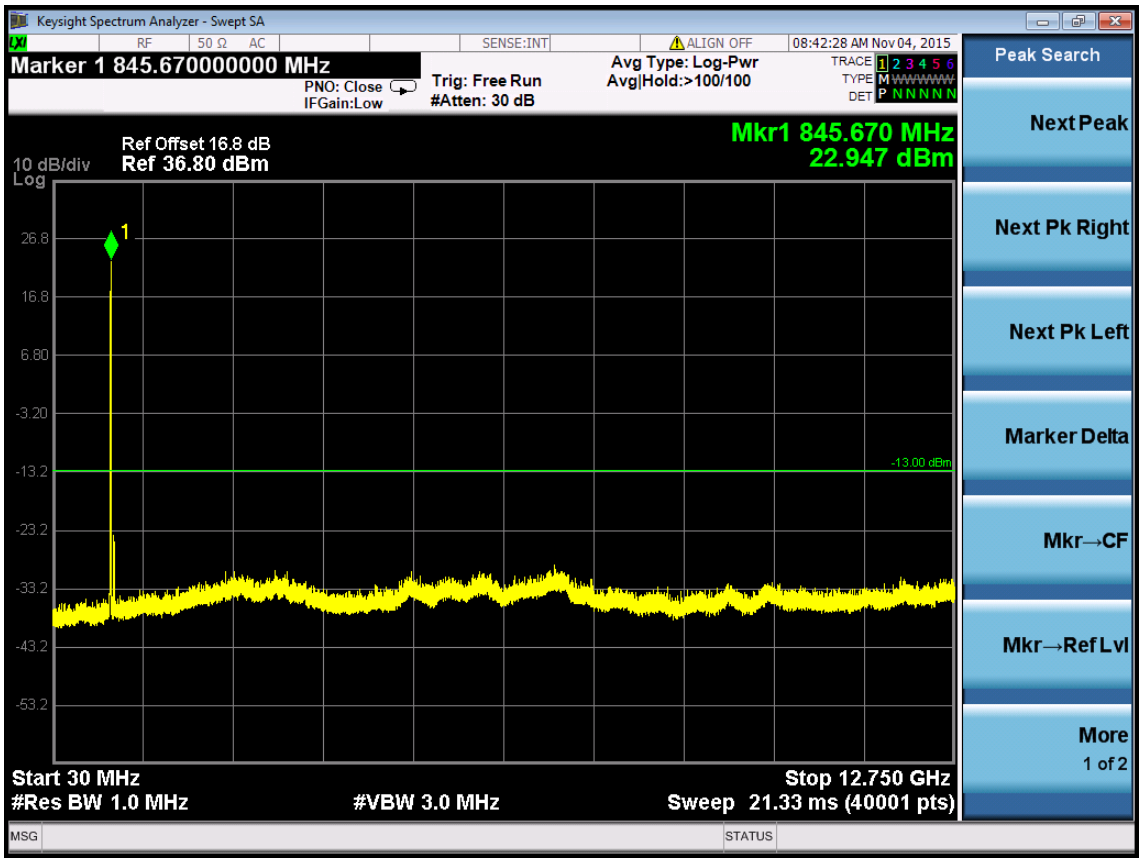
6.2.1.1.1 Test Channel = LCH



6.2.1.1.2 Test Channel = MCH



6.2.1.1.3 Test Channel = HCH



7 Field Strength of Spurious Radiation

Part I - Test Plots

7.1 For GSM

7.1.1 Test Band = GSM850

7.1.1.1 Test Mode = GSM/TM1

7.1.1.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
49.579	-67.5	-13.0	-54.5	Vertical
102.768	-65.3	-13.0	-52.3	Vertical
139.011	-62.5	-13.0	-49.5	Vertical
300.712	-64.5	-13.0	-51.5	Vertical
453.312	-61.7	-13.0	-48.7	Vertical
656.949	-57.2	-13.0	-44.2	Vertical
1368.586	-53.5	-13.0	-40.5	Vertical
2000.316	-50.4	-13.0	-37.4	Vertical
3202.730	-45.0	-13.0	-32.0	Vertical
4956.887	-42.8	-13.0	-29.8	Vertical
6784.068	-39.1	-13.0	-26.1	Vertical
8749.604	-36.5	-13.0	-23.5	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
43.334	-66.6	-13.0	-53.6	Horizontal
99.123	-65.2	-13.0	-52.2	Horizontal
130.176	-59.8	-13.0	-46.8	Horizontal
232.769	-66.3	-13.0	-53.3	Horizontal
487.269	-60.6	-13.0	-47.6	Horizontal
648.378	-58.4	-13.0	-45.4	Horizontal
1357.028	-52.5	-13.0	-39.5	Horizontal
1987.633	-50.1	-13.0	-37.1	Horizontal
3122.270	-45.6	-13.0	-32.6	Horizontal
4515.366	-44.0	-13.0	-31.0	Horizontal
6232.430	-39.2	-13.0	-26.2	Horizontal
7526.798	-37.9	-13.0	-24.9	Horizontal

7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
53.292	-66.8	-13.0	-53.8	Vertical
98.474	-65.2	-13.0	-52.2	Vertical
172.082	-59.6	-13.0	-46.6	Vertical
284.387	-65.4	-13.0	-52.4	Vertical
479.335	-61.0	-13.0	-48.0	Vertical
667.824	-58.4	-13.0	-45.4	Vertical
1331.378	-53.7	-13.0	-40.7	Vertical
2191.259	-49.6	-13.0	-36.6	Vertical
3691.605	-45.3	-13.0	-32.3	Vertical
4956.887	-42.3	-13.0	-29.3	Vertical
6011.786	-39.5	-13.0	-26.5	Vertical
8245.282	-37.0	-13.0	-24.0	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
44.634	-66.0	-13.0	-53.0	Horizontal
98.474	-66.1	-13.0	-53.1	Horizontal
176.662	-58.6	-13.0	-45.6	Horizontal
282.526	-64.8	-13.0	-51.8	Horizontal
471.530	-61.0	-13.0	-48.0	Horizontal
654.796	-57.9	-13.0	-44.9	Horizontal
1342.717	-52.7	-13.0	-39.7	Horizontal
2200.571	-50.3	-13.0	-37.3	Horizontal
3236.864	-45.5	-13.0	-32.5	Horizontal
4374.019	-44.0	-13.0	-31.0	Horizontal
6140.612	-39.2	-13.0	-26.2	Horizontal
8439.846	-36.4	-13.0	-23.4	Horizontal

7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
41.523	-68.9	-13.0	-55.9	Vertical
58.233	-67.6	-13.0	-54.6	Vertical
103.106	-65.5	-13.0	-52.5	Vertical
173.786	-62.0	-13.0	-49.0	Vertical
293.880	-64.9	-13.0	-51.9	Vertical
550.211	-59.7	-13.0	-46.7	Vertical
1331.378	-53.2	-13.0	-40.2	Vertical
2172.754	-49.8	-13.0	-36.8	Vertical
3730.949	-46.0	-13.0	-33.0	Vertical
5041.683	-42.0	-13.0	-29.0	Vertical
7062.943	-38.5	-13.0	-25.5	Vertical
8956.069	-36.3	-13.0	-23.3	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
53.292	-67.2	-13.0	-54.2	Horizontal
94.670	-64.9	-13.0	-51.9	Horizontal
131.896	-59.7	-13.0	-46.7	Horizontal
287.202	-65.2	-13.0	-52.2	Horizontal
485.672	-60.4	-13.0	-47.4	Horizontal
674.434	-57.6	-13.0	-44.6	Horizontal
1254.638	-53.5	-13.0	-40.5	Horizontal
2385.209	-49.8	-13.0	-36.8	Horizontal
4300.452	-44.0	-13.0	-31.0	Horizontal
5641.297	-42.0	-13.0	-29.0	Horizontal
7542.774	-37.6	-13.0	-24.6	Horizontal
9483.738	-34.0	-13.0	-21.0	Horizontal

7.1.2 Test Band = GSM1900

7.1.2.1 Test Mode = GSM/TM1

7.1.2.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
47.977	-67.5	-13.0	-54.5	Vertical
79.028	-65.7	-13.0	-52.7	Vertical
138.555	-63.8	-13.0	-50.8	Vertical
296.789	-66.2	-13.0	-53.2	Vertical
674.434	-61.2	-13.0	-48.2	Vertical
1013.542	-54.6	-13.0	-41.6	Vertical
2956.698	-47.0	-13.0	-34.0	Vertical
4179.066	-44.6	-13.0	-31.6	Vertical
6044.751	-40.0	-13.0	-27.0	Vertical
8375.330	-37.5	-13.0	-24.5	Vertical
10515.432	-31.6	-13.0	-18.6	Vertical
12399.868	-29.3	-13.0	-16.3	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
38.001	-67.0	-13.0	-54.0	Horizontal
87.496	-61.7	-13.0	-48.7	Horizontal
176.662	-58.4	-13.0	-45.4	Horizontal
447.397	-64.4	-13.0	-51.4	Horizontal
646.252	-61.3	-13.0	-48.3	Horizontal
1211.535	-53.2	-13.0	-40.2	Horizontal
2324.520	-48.5	-13.0	-35.5	Horizontal
3234.474	-44.5	-13.0	-31.5	Horizontal
4901.564	-42.2	-13.0	-29.2	Horizontal
6926.565	-38.3	-13.0	-25.3	Horizontal
8965.441	-35.4	-13.0	-22.4	Horizontal
11276.518	-30.9	-13.0	-17.9	Horizontal

7.1.2.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
44.196	-67.3	-13.0	-54.3	Vertical
99.776	-65.7	-13.0	-52.7	Vertical
174.357	-61.3	-13.0	-48.3	Vertical
304.688	-65.2	-13.0	-52.2	Vertical
654.796	-61.2	-13.0	-48.2	Vertical
1053.146	-54.8	-13.0	-41.8	Vertical
2539.764	-48.4	-13.0	-35.4	Vertical
4954.543	-42.5	-13.0	-29.5	Vertical
6276.529	-40.1	-13.0	-27.1	Vertical
7521.645	-37.6	-13.0	-24.6	Vertical
10496.608	-32.1	-13.0	-19.1	Vertical
12399.868	-29.4	-13.0	-16.4	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
42.628	-67.3	-13.0	-54.3	Horizontal
82.746	-67.0	-13.0	-54.0	Horizontal
131.896	-64.1	-13.0	-51.1	Horizontal
352.045	-65.2	-13.0	-52.2	Horizontal
561.158	-62.6	-13.0	-49.6	Horizontal
938.745	-55.3	-13.0	-42.3	Horizontal
2639.005	-47.7	-13.0	-34.7	Horizontal
4441.569	-43.5	-13.0	-30.5	Horizontal
6154.034	-40.0	-13.0	-27.0	Horizontal
7880.337	-37.7	-13.0	-24.7	Horizontal
9460.546	-34.7	-13.0	-21.7	Horizontal
11500.976	-31.1	-13.0	-18.1	Horizontal

7.1.2.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
53.292	-67.8	-13.0	-54.8	Vertical
96.871	-65.4	-13.0	-52.4	Vertical
171.518	-61.1	-13.0	-48.1	Vertical
284.387	-65.7	-13.0	-52.7	Vertical
482.493	-63.1	-13.0	-50.1	Vertical
803.179	-58.4	-13.0	-45.4	Vertical
2642.495	-47.2	-13.0	-34.2	Vertical
4300.606	-44.0	-13.0	-31.0	Vertical
6066.451	-40.5	-13.0	-27.5	Vertical
7441.216	-38.4	-13.0	-25.4	Vertical
10163.476	-32.6	-13.0	-19.6	Vertical
12511.455	-29.6	-13.0	-16.6	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
53.118	-67.8	-13.0	-54.8	Horizontal
115.284	-69.0	-13.0	-56.0	Horizontal
226.735	-64.1	-13.0	-51.1	Horizontal
409.442	-63.8	-13.0	-50.8	Horizontal
613.178	-61.3	-13.0	-48.3	Horizontal
1150.664	-53.1	-13.0	-40.1	Horizontal
3109.455	-44.4	-13.0	-31.4	Horizontal
4729.026	-43.7	-13.0	-30.7	Horizontal
6493.883	-39.3	-13.0	-26.3	Horizontal
8345.370	-37.4	-13.0	-24.4	Horizontal
10534.290	-31.6	-13.0	-18.6	Horizontal
12466.700	-29.3	-13.0	-16.3	Horizontal

NOTE:

1) The disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

7.2 For WCDMA

7.2.1 Test Band = WCDMA850

7.2.1.1 Test Mode = UMTS/TM1

7.2.1.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
95.520	-57.0	-13.0	-44.0	Vertical
121.260	-68.3	-13.0	-55.3	Vertical
180.930	-67.4	-13.0	-54.4	Vertical
268.680	-63.5	-13.0	-50.5	Vertical
421.950	-63.6	-13.0	-50.6	Vertical
652.440	-66.1	-13.0	-53.1	Vertical
1673.400	-38.4	-13.0	-25.4	Vertical
2434.800	-37.2	-13.0	-24.2	Vertical
3812.000	-50.4	-13.0	-37.4	Vertical
5093.000	-50.0	-13.0	-37.0	Vertical
6976.000	-47.2	-13.0	-34.2	Vertical
8908.000	-42.6	-13.0	-29.6	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
81.480	-68.4	-13.0	-55.4	Horizontal
111.900	-67.1	-13.0	-54.1	Horizontal
178.862	-68.6	-13.0	-55.6	Horizontal
233.580	-70.3	-13.0	-57.3	Horizontal
370.470	-69.0	-13.0	-56.0	Horizontal
599.790	-65.9	-13.0	-52.9	Horizontal
1673.400	-36.5	-13.0	-23.5	Horizontal
2438.400	-37.8	-13.0	-24.8	Horizontal
3574.000	-53.1	-13.0	-40.1	Horizontal
4589.000	-49.1	-13.0	-36.1	Horizontal
6493.000	-43.9	-13.0	-30.9	Horizontal
8831.000	-45.1	-13.0	-32.1	Horizontal

7.2.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
88.500	-62.7	-13.0	-49.7	Vertical
128.280	-63.4	-13.0	-50.4	Vertical
178.590	-67.9	-13.0	-54.9	Vertical
307.290	-60.4	-13.0	-47.4	Vertical
421.950	-62.9	-13.0	-49.9	Vertical
613.830	-64.5	-13.0	-51.5	Vertical
1675.200	-37.4	-13.0	-24.4	Vertical
2429.400	-37.8	-13.0	-24.8	Vertical
3238.000	-50.6	-13.0	-37.6	Vertical
4967.000	-50.7	-13.0	-37.7	Vertical
6696.000	-48.0	-13.0	-35.0	Vertical
8894.000	-42.6	-13.0	-29.6	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
103.710	-64.4	-13.0	-51.4	Horizontal
162.504	-68.4	-13.0	-55.4	Horizontal
249.960	-71.1	-13.0	-58.1	Horizontal
395.040	-69.2	-13.0	-56.2	Horizontal
517.890	-68.7	-13.0	-55.7	Horizontal
689.880	-65.9	-13.0	-52.9	Horizontal
1673.400	-35.6	-13.0	-22.6	Horizontal
2434.800	-31.4	-13.0	-18.4	Horizontal
3756.000	-52.1	-13.0	-39.1	Horizontal
5261.000	-48.6	-13.0	-35.6	Horizontal
6990.000	-42.9	-13.0	-29.9	Horizontal
9265.000	-43.7	-13.0	-30.7	Horizontal

7.2.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
95.520	-56.3	-13.0	-43.3	Vertical
127.110	-69.3	-13.0	-56.3	Vertical
182.100	-67.4	-13.0	-54.4	Vertical
307.290	-60.1	-13.0	-47.1	Vertical
421.950	-63.4	-13.0	-50.4	Vertical
633.720	-64.8	-13.0	-51.8	Vertical
1675.200	-38.3	-13.0	-25.3	Vertical
2443.800	-34.9	-13.0	-21.9	Vertical
3714.000	-50.0	-13.0	-37.0	Vertical
5114.000	-49.6	-13.0	-36.6	Vertical
6948.000	-47.1	-13.0	-34.1	Vertical
8943.000	-43.6	-13.0	-30.6	Vertical

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
95.520	-60.8	-13.0	-47.8	Horizontal
159.870	-66.8	-13.0	-53.8	Horizontal
234.750	-68.5	-13.0	-55.5	Horizontal
344.730	-67.5	-13.0	-54.5	Horizontal
481.620	-68.4	-13.0	-55.4	Horizontal
654.780	-66.2	-13.0	-53.2	Horizontal
1675.200	-36.9	-13.0	-23.9	Horizontal
2438.400	-32.2	-13.0	-19.2	Horizontal
3665.000	-52.6	-13.0	-39.6	Horizontal
5051.000	-49.1	-13.0	-36.1	Horizontal
6598.000	-43.2	-13.0	-30.2	Horizontal
8922.000	-43.8	-13.0	-30.8	Horizontal

NOTE:

1) The disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

8 Frequency Stability

8.1 For GSM

8.1.1 Frequency Error VS. Voltage

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
GSM850	GSM/TM1	LCH	TN	VL	-3.17	-0.00385	PASS
				VN	-8.07	-0.00979	PASS
				VH	0.45	0.00055	PASS
		MCH	TN	VL	-7.81	-0.00934	PASS
				VN	-6.59	-0.00788	PASS
				VH	-5.23	-0.00625	PASS
		HCH	TN	VL	-0.87	-0.00102	PASS
				VN	-5.59	-0.00659	PASS
				VH	-9.12	-0.01074	PASS

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
GSM1900	GSM/TM1	LCH	TN	VL	3.57	0.00193	PASS
				VN	-5.73	-0.00310	PASS
				VH	-7.99	-0.00432	PASS
		MCH	TN	VL	-18.97	-0.01009	PASS
				VN	-1.77	-0.00094	PASS
				VH	-14.30	-0.00761	PASS
		HCH	TN	VL	-6.81	-0.00357	PASS
				VN	-10.62	-0.00556	PASS
				VH	-9.36	-0.00490	PASS

8.1.2 Frequency Error VS. Temperature

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
GSM850	GSM/TM1	LCH	VN	-30	-2.16	-0.00262	PASS
				-20	-1.45	-0.00176	PASS
				-10	-1.77	-0.00215	PASS
				0	-3.71	-0.00450	PASS
				10	1.07	0.00130	PASS
				20	2.30	0.00279	PASS
				30	2.39	0.00290	PASS
				40	1.34	0.00163	PASS
				50	6.44	0.00781	PASS
		MCH	VN	-30	0.50	0.00060	PASS
				-20	3.21	0.00384	PASS
				-10	-0.36	-0.00043	PASS
				0	-1.71	-0.00204	PASS
				10	0.68	0.00081	PASS
				20	-0.87	-0.00104	PASS
				30	1.19	0.00142	PASS
				40	1.77	0.00212	PASS
				50	2.61	0.00312	PASS
		HCH	VN	-30	0.57	0.00067	PASS
				-20	5.22	0.00615	PASS
				-10	-0.43	-0.00051	PASS
				0	-0.88	-0.00104	PASS
				10	-0.62	-0.00073	PASS
				20	-0.88	-0.00104	PASS
				30	-1.08	-0.00127	PASS
				40	-1.98	-0.00233	PASS
				50	0.09	0.00011	PASS

8.1.3 Frequency Error VS. Temperature

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
GSM1900	GSM/TM1	LCH	VN	-30	-14.91	-0.00806	PASS
				-20	-8.84	-0.00478	PASS
				-10	-14.01	-0.00757	PASS
				0	-2.19	-0.00118	PASS
				10	1.68	0.00091	PASS
				20	-5.03	-0.00272	PASS
				30	-13.81	-0.00746	PASS
				40	-10.39	-0.00562	PASS
				50	1.36	0.00074	PASS
		MCH	VN	-30	-5.74	-0.00305	PASS
				-20	-7.36	-0.00391	PASS
				-10	-13.10	-0.00697	PASS
				0	-0.42	-0.00022	PASS
				10	-15.08	-0.00802	PASS
				20	-7.39	-0.00393	PASS
				30	2.68	0.00143	PASS
				40	-8.62	-0.00459	PASS
				50	-11.66	-0.00620	PASS
		HCH	VN	-30	-14.43	-0.00756	PASS
				-20	-5.21	-0.00273	PASS
				-10	-6.76	-0.00354	PASS
				0	-11.73	-0.00614	PASS
				10	1.05	0.00055	PASS
				20	2.60	0.00136	PASS
				30	-6.31	-0.00330	PASS
				40	-13.61	-0.00713	PASS
				50	-2.18	-0.00114	PASS

8.2 For WCDMA

8.2.1 Frequency Error VS. Voltage

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
WCDMA	UMTS/TM 1	LCH	TN	VL	0.40	0.00048	PASS
				VN	-0.06	-0.00007	PASS
				VH	0.14	0.00017	PASS
		MCH	TN	VL	0.96	0.00115	PASS
				VN	0.87	0.00104	PASS
				VH	-1.23	-0.00147	PASS
		HCH	TN	VL	1.86	0.00220	PASS
				VN	-2.52	-0.00298	PASS
				VH	2.62	0.00309	PASS

8.2.2 Frequency Error VS. Temperature

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
WCDMA	UMTS/TM1	LCH	VN	-30	2.70	0.00327	PASS
				-20	1.47	0.00178	PASS
				-10	0.61	0.00074	PASS
				0	-2.70	-0.00327	PASS
				10	0.55	0.00067	PASS
				20	-1.86	-0.00225	PASS
				30	1.62	0.00196	PASS
				40	-0.07	-0.00008	PASS
				50	-1.20	-0.00145	PASS
		MCH	VN	-30	-1.95	-0.00233	PASS
				-20	-1.22	-0.00146	PASS
				-10	-0.48	-0.00057	PASS
				0	-1.49	-0.00178	PASS
				10	2.19	0.00262	PASS
				20	1.61	0.00192	PASS
				30	1.50	0.00179	PASS
				40	-0.04	-0.00005	PASS
				50	-0.50	-0.00060	PASS
		HCH	VN	-30	-0.30	-0.00035	PASS
				-20	0.52	0.00061	PASS
				-10	0.72	0.00085	PASS
				0	-1.38	-0.00163	PASS
				10	1.71	0.00202	PASS
				20	-2.67	-0.00315	PASS
				30	2.81	0.00332	PASS
				40	-0.42	-0.00050	PASS
				50	-2.45	-0.00289	PASS

The End