2.6 Band Edge

2.6.1 Requirement

According to FCC section 22.917(b) and FCC section 24.238(b), 27.53(g)(h) in the 1MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth (26dB emission bandwidth) of the fundamental emission of the transmitter may be employed.

2.6.2 Test Description

See section 2.1.2 of this report.

2.6.3 Test Result

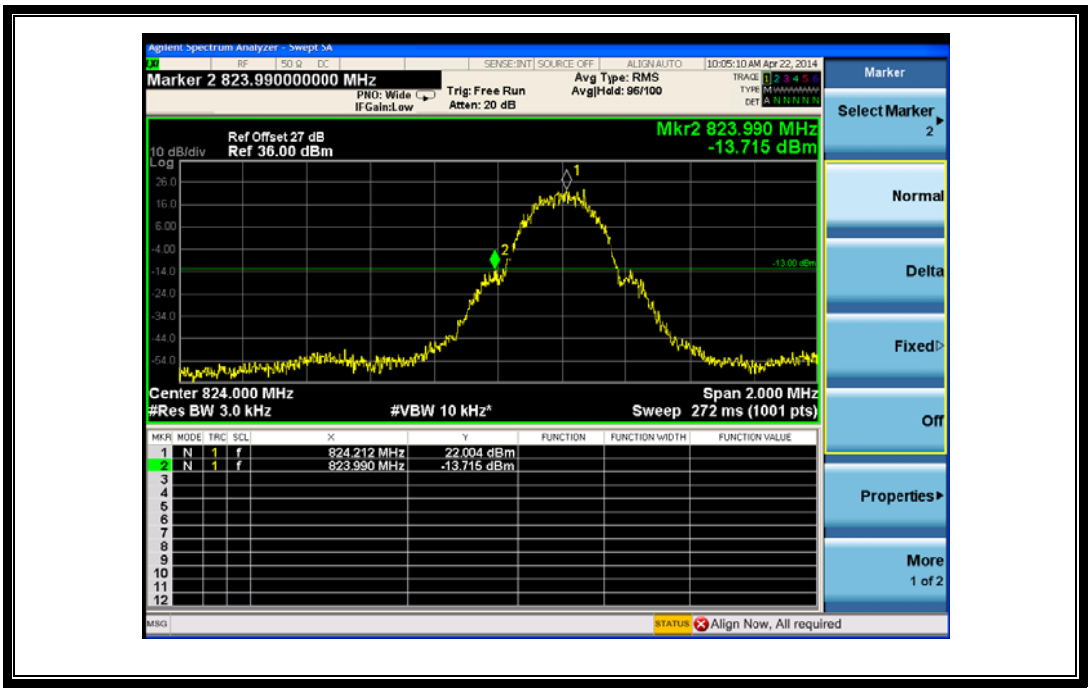
The lowest and highest channels are tested to verify the band edge emissions.

1. Test Verdict:

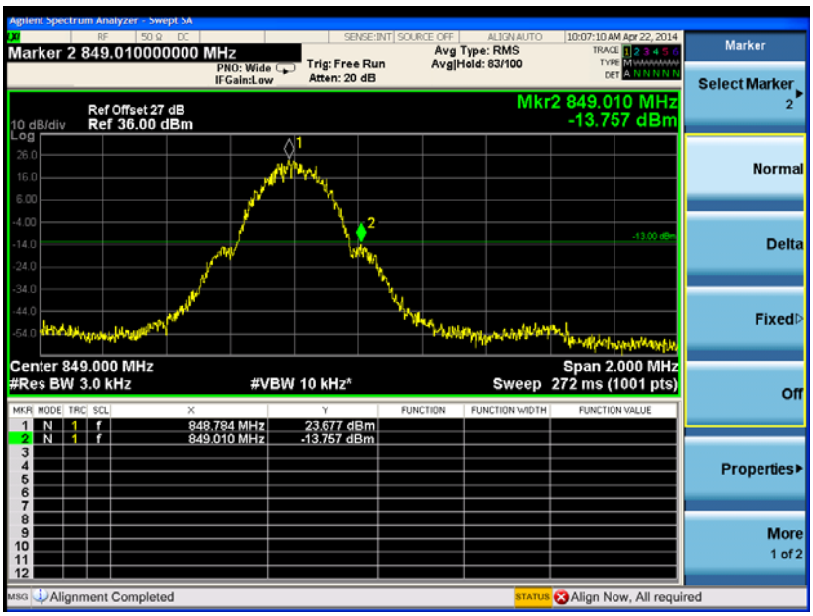
Band	Channel	Frequency (MHz)	Measured Max. Band Edge Emission (dBm)	Refer to Plot	Limit (dBm)	Verdict
GSM 850MHz	128	824.2	-13.715	Plat A	-13	PASS
	251	848.8	-13.757	Plot B		PASS
GSM 1900MHz	512	1850.2	-15.151	Plat C	-13	PASS
	810	1909.8	-15.459	Plot D		PASS
EDGE 850MHz	128	824.2	-21.657	Plat E	-13	PASS
	251	848.8	-22.333	Plot F		PASS
EDGE 1900MHz	512	1850.2	-22.779	Plat G	-13	PASS
	810	1909.8	-25.000	Plot H		PASS
WCDMA 850MHz	4132	826.4	-26.093	Plat I	-13	PASS
	4233	846.6	-16.068	Plot J		PASS
WCDMA 1900MHz	9262	1852.4	-26.765	Plat K	-13	PASS
	9538	1907.6	-25.630	Plot L		PASS
HSDPA 850MHz	4132	826.4	-25.231	Plat M	-13	PASS
	4233	846.6	-15.664	Plot N		PASS
HSDPA 1900MHz	9262	1852.4	-27.057	Plat O	-13	PASS
	9538	1907.6	-25.047	Plot P		PASS
HSUPA 850MHz	4132	826.4	-25.743	Plat Q	-13	PASS
	4233	846.6	-16.783	Plot R		PASS
HSUPA 1900MHz	9262	1852.4	-28.059	Plat S	-13	PASS
	9538	1907.6	-25.018	Plot T		PASS

HSPA+	4132	826.4	-24.849	Plat U	-13	PASS
850MHz	4233	846.6	-15.993	Plot V		PASS
HSPA+	9262	1852.4	-27.390	Plat W	-13	PASS
1900MHz	9538	1907.6	-26.389	Plot X		PASS
WCDMA	1312	1712.4	-23.406	Plat Y	-13	PASS
1700MHz	1513	1752.6	-23.361	Plat Z		PASS
HSDPA	1312	1712.4	-23.942	Plot A1	-13	PASS
1700MHz	1513	1752.6	-24.415	Plat B1		PASS
HSUPA	1312	1712.4	-24.602	Plot C1	-13	PASS
1700MHz	1513	1752.6	-23.728	Plat D1		PASS
HSPA+	1312	1712.4	-24.798	Plot E1	-13	PASS
1700MHz	1513	1752.6	-23.472	Plat F1		PASS

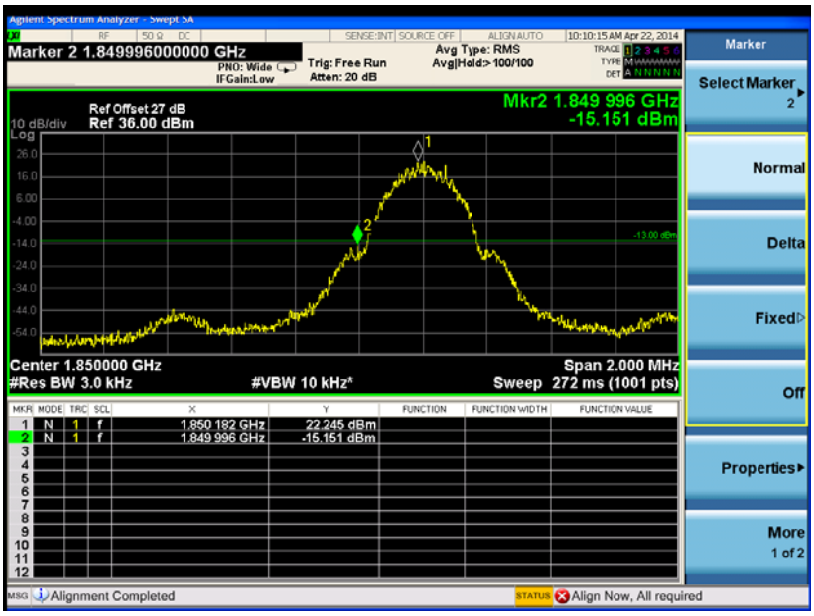
2. Test Plots:



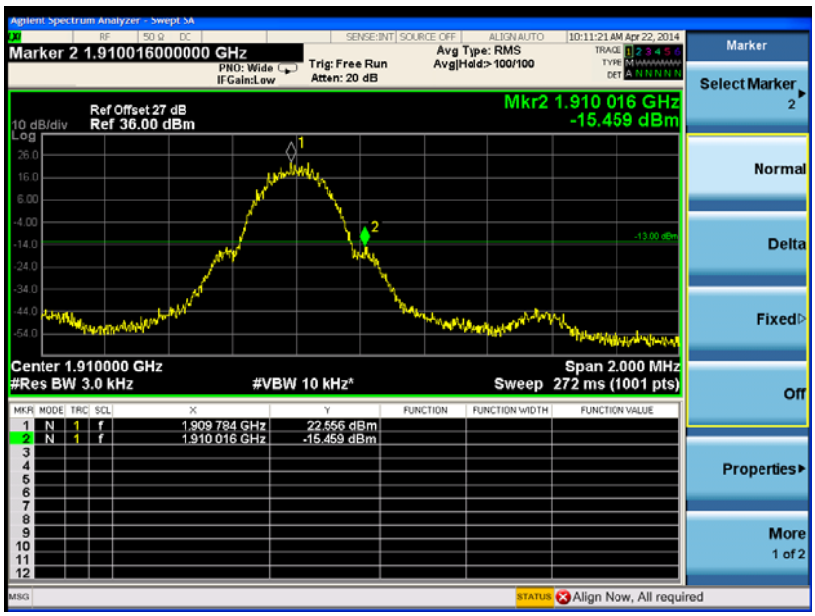
(Plot A: GSM 850 Channel = 128)



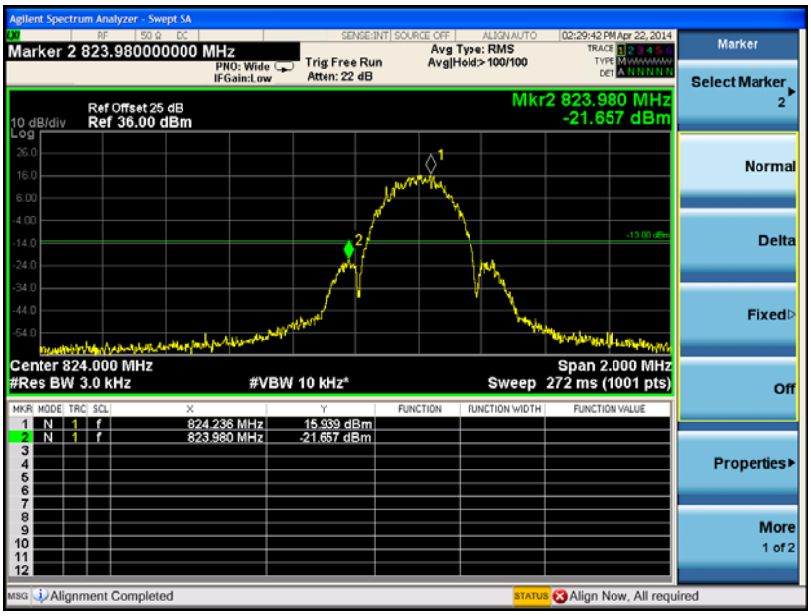
(Plot B: GSM 850 Channel = 251)



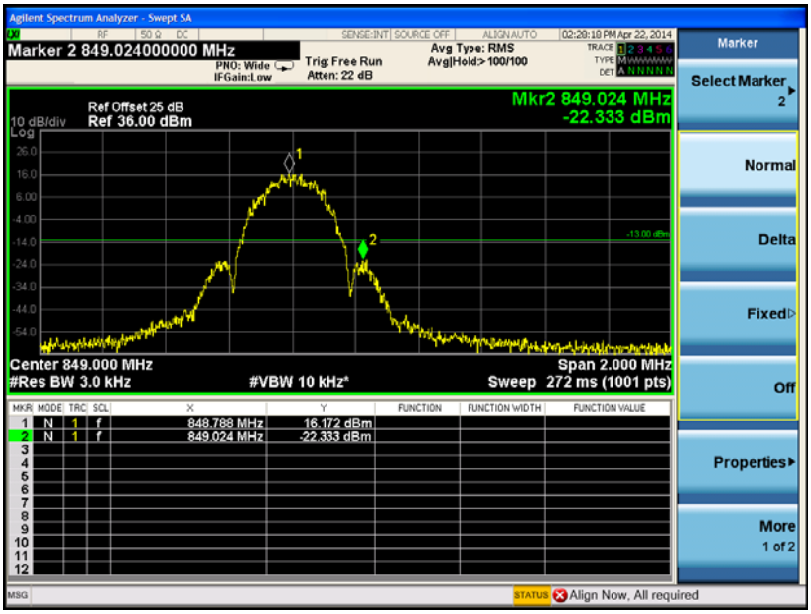
(Plot C: GSM 1900 Channel = 512)



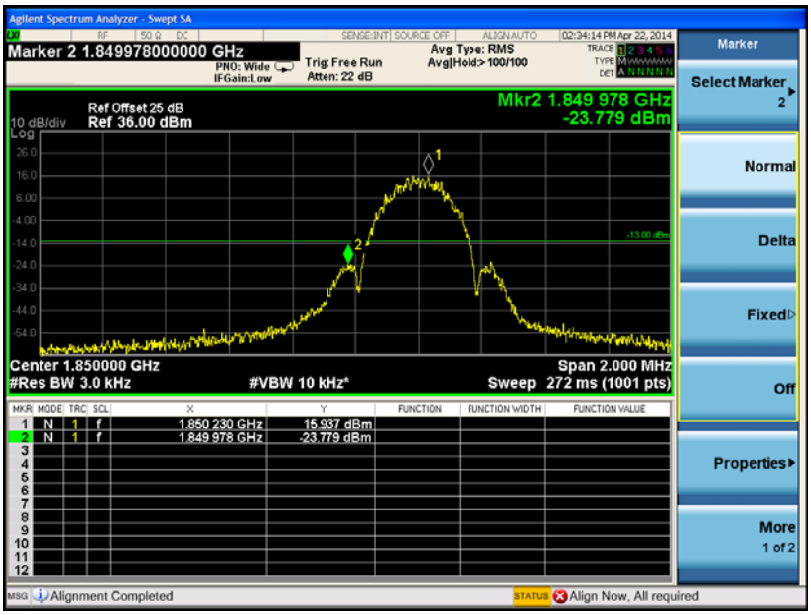
(Plot D: GSM 1900 Channel = 810)



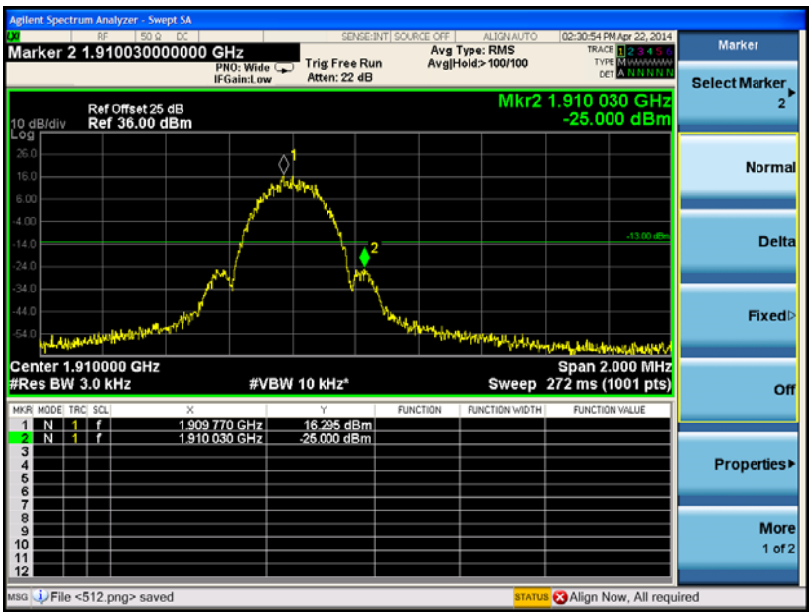
(Plot E: EGPRS 850 Channel = 128)



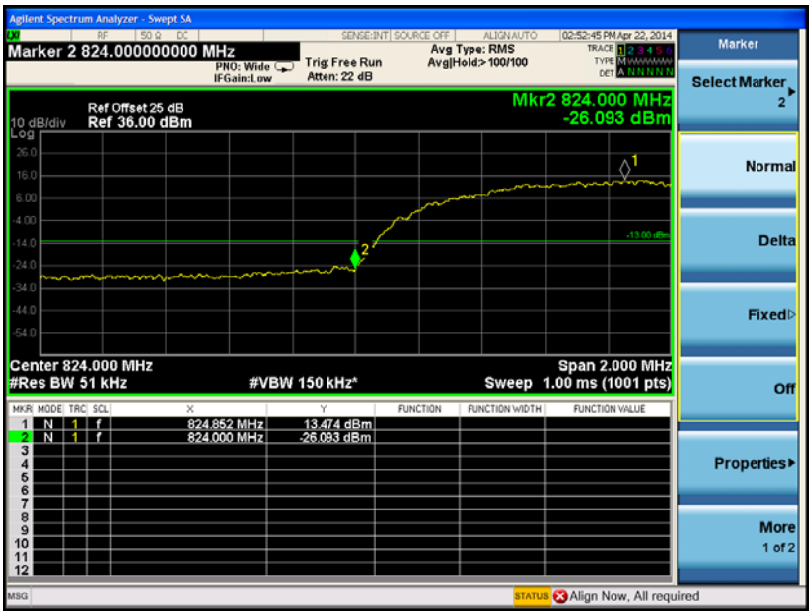
(Plot F: EGPRS 850 Channel = 251)



(Plot G: EGPRS 1900 Channel = 512)

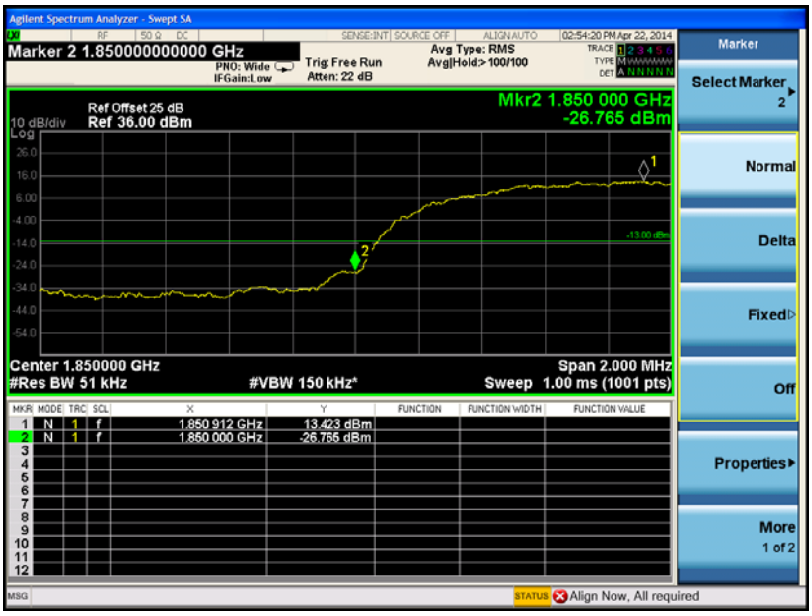


(Plot H: EGPRS 1900 Channel = 810)



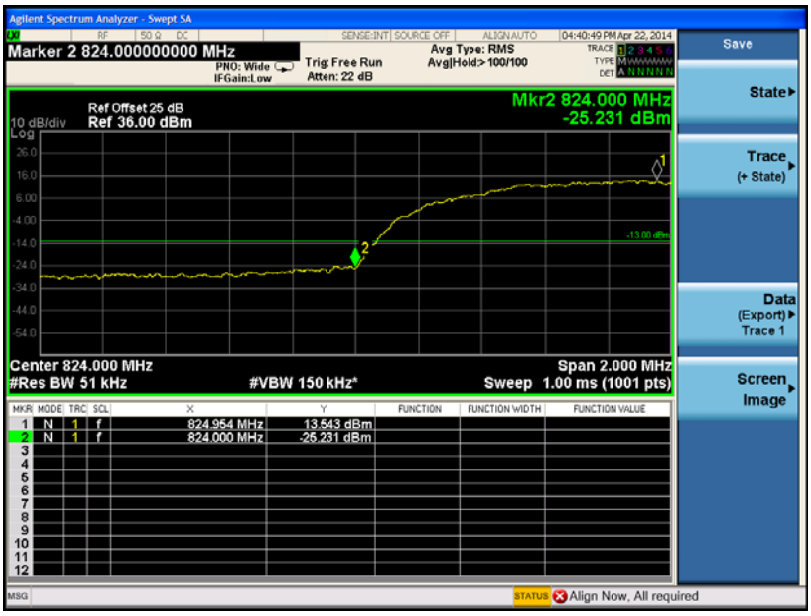
(Plot I: WCDMA 850 Channel = 4132)

(Plot J: WCDMA 850 Channel = 4233)

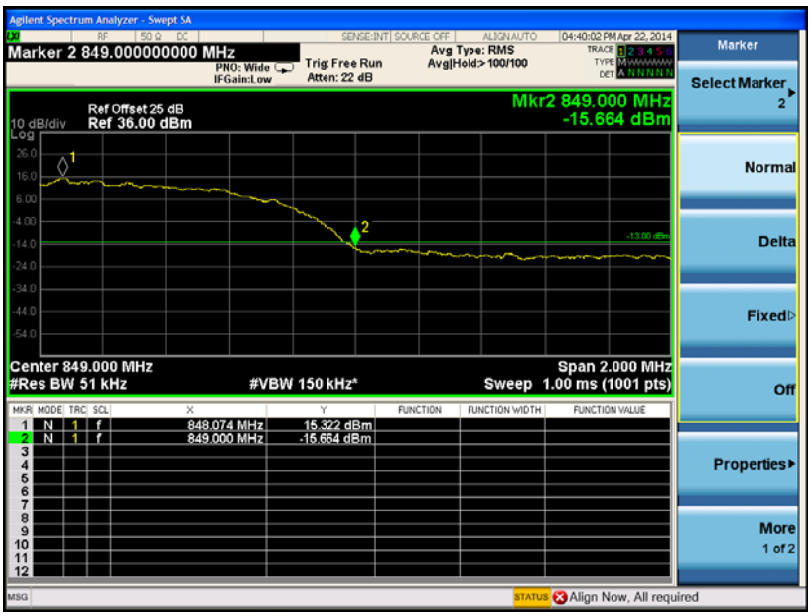


(Plot K: WCDMA 1900 Channel = 9262)

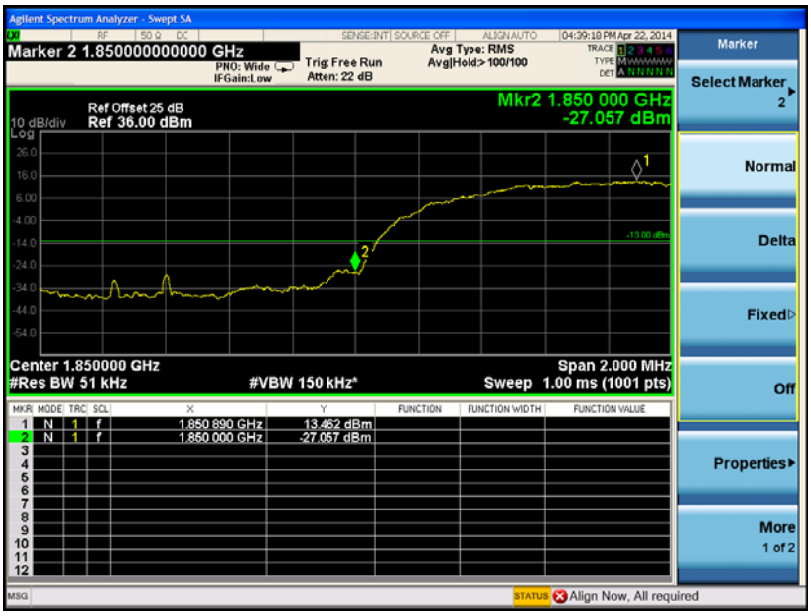
(Plot L: WCDMA 1900 Channel = 9538)



(Plot M: HSDPA 850 Channel = 4132)

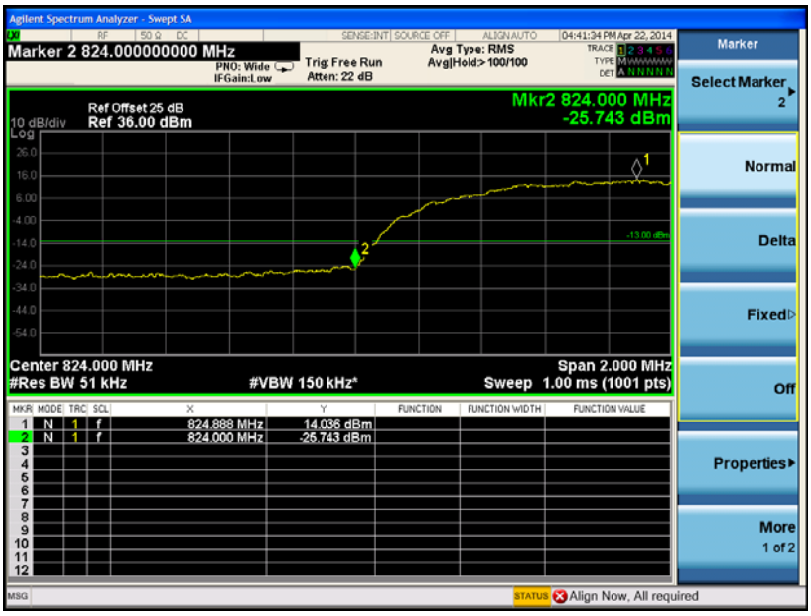


(Plot N: HSDPA850 Channel = 4233)

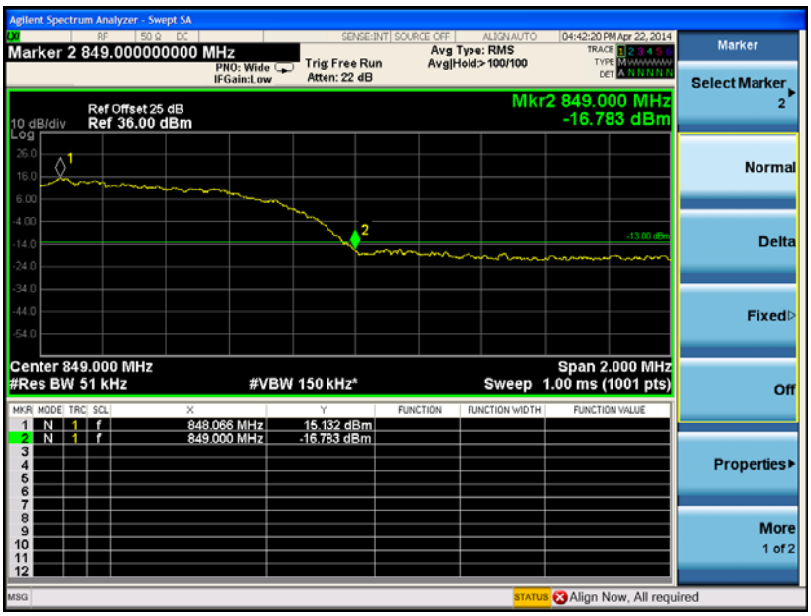


(Plot O: HSDPA 1900 Channel = 9262)

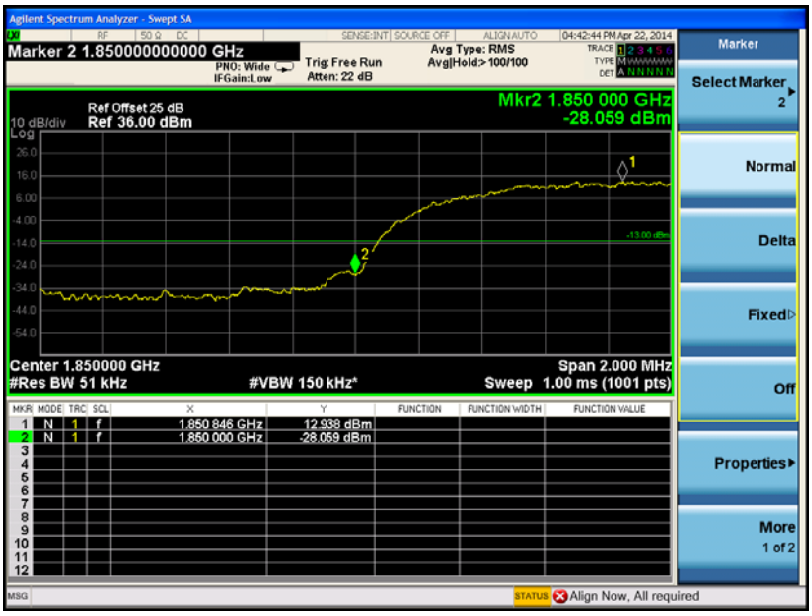
(Plot P: HSDPA 1900 Channel = 9538)



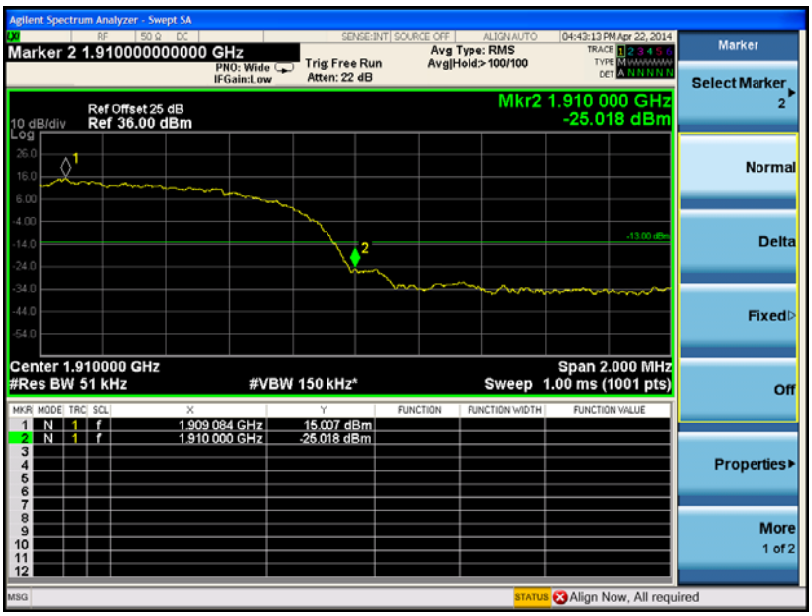
(Plot Q: HSUPA 850 Channel = 4132)



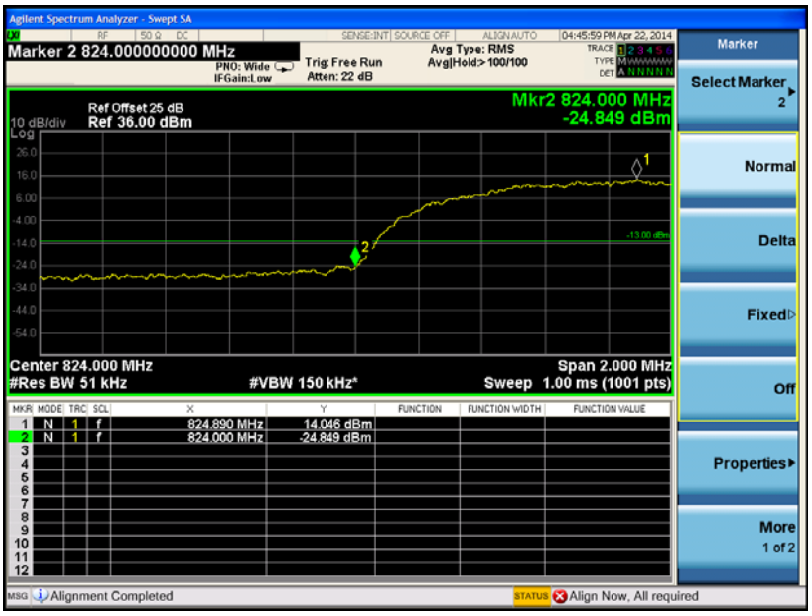
(Plot R: HSUPA850 Channel = 4233)



(Plot S: HSUPA 1900 Channel = 9262)

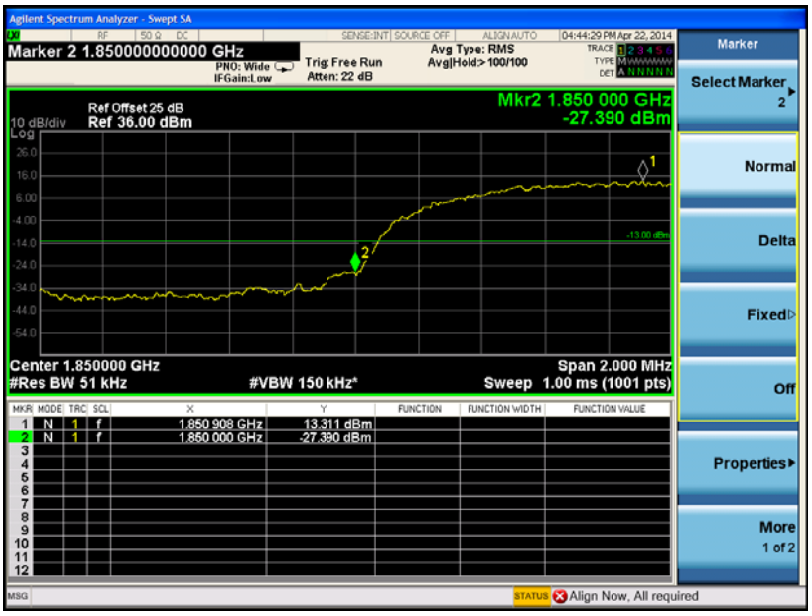


(Plot T: HSUPA 1900 Channel = 9538)



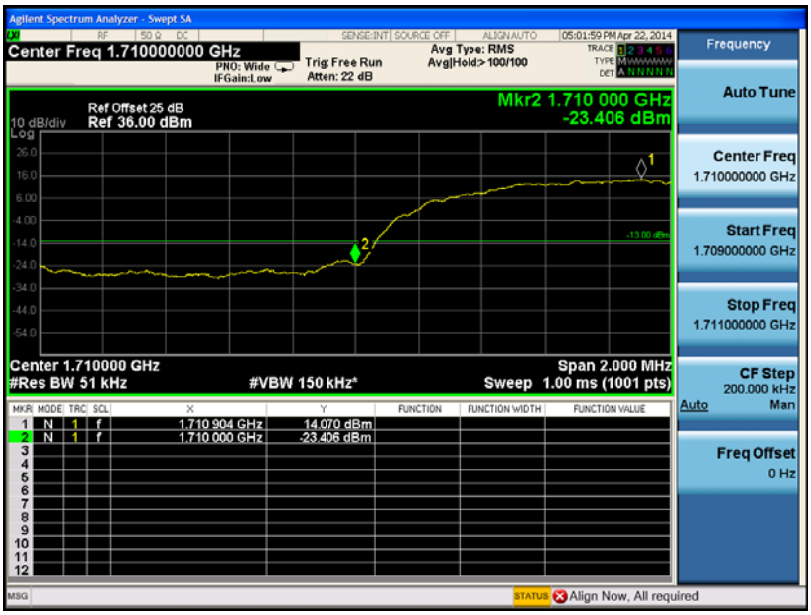
(Plot U: HSPA+ 850 Channel = 4132)

(Plot V: HSPA+ 850 Channel = 4233)

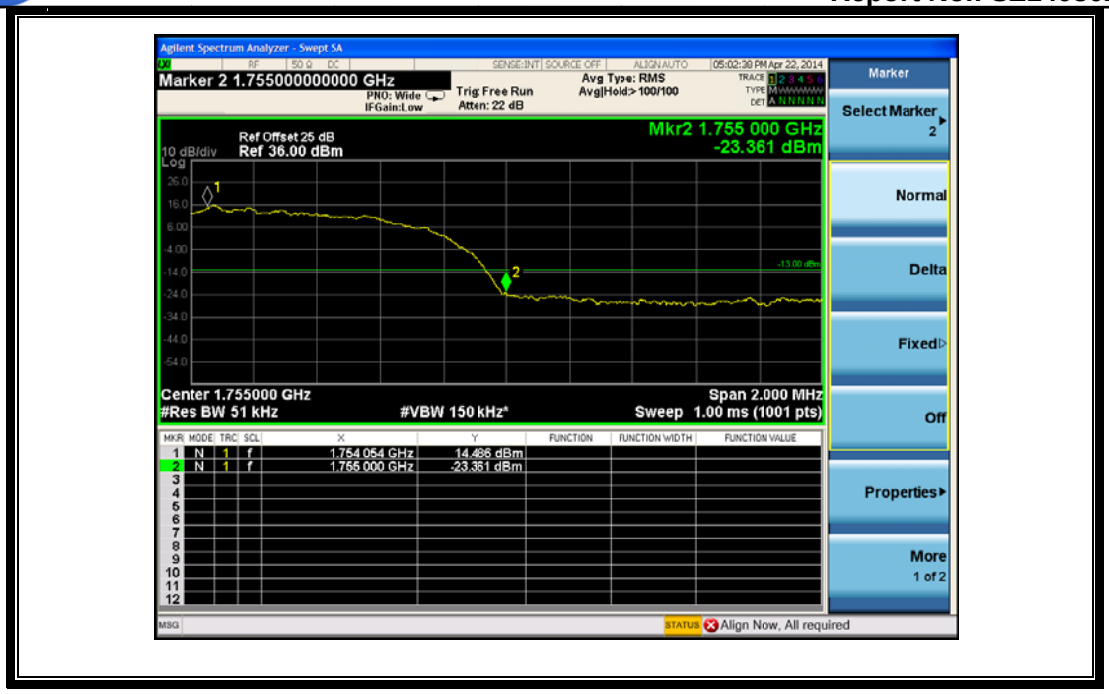


(Plot W: HSPA+ 1900 Channel = 9262)

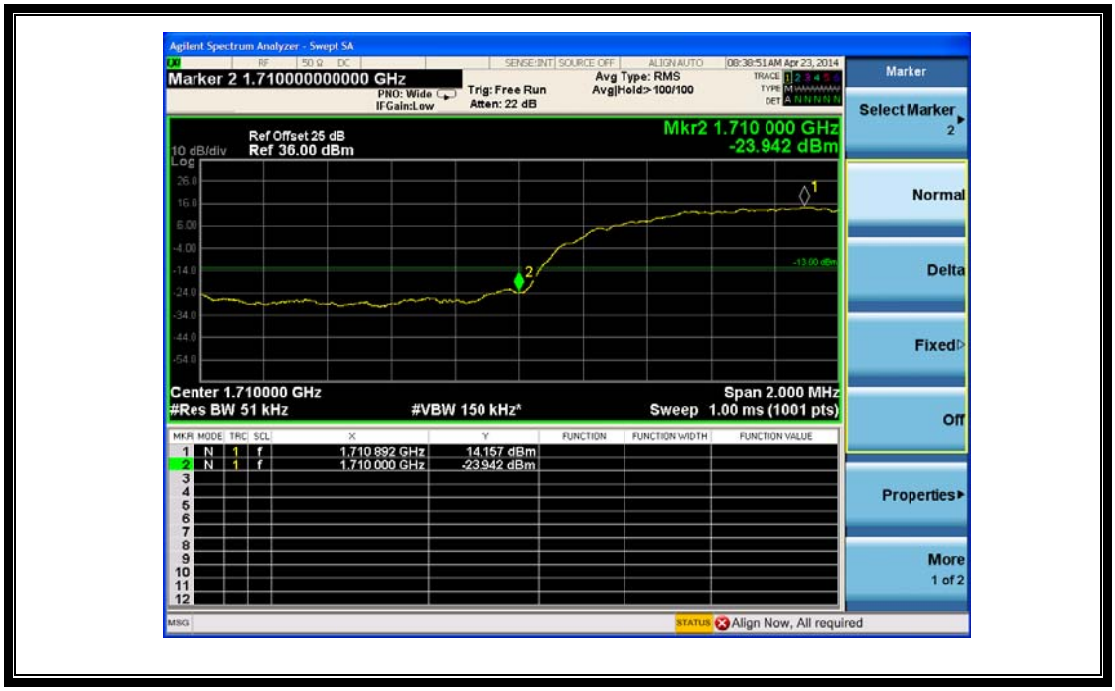
(Plot X: HSPA+ 1900 Channel = 9538)



(Plot Y: WCDMA 1700 Channel = 1312)



(Plot Z: WCDMA 1700 Channel = 1513)

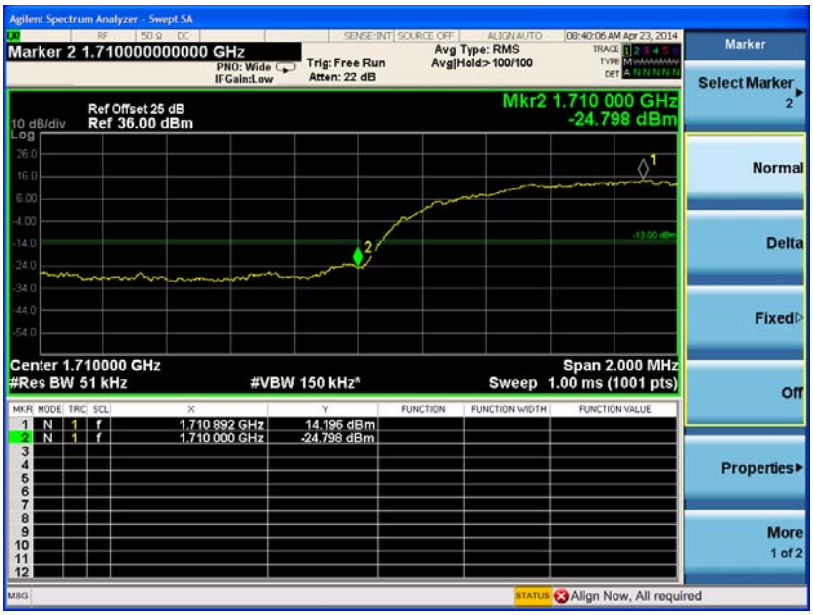


(Plot A1:HSDPA 1700 Channel = 1312)

(Plot B1: HSDPA 1700 Channel = 1513)

(Plot C1: HSUPA 1700 Channel = 1312)

(Plot D1: HSUPA1700 Channel = 1513)



(Plot E1: HSPA+ 1700 Channel = 1312)

(Plot F1:HSPA+ 1700 Channel = 1513)

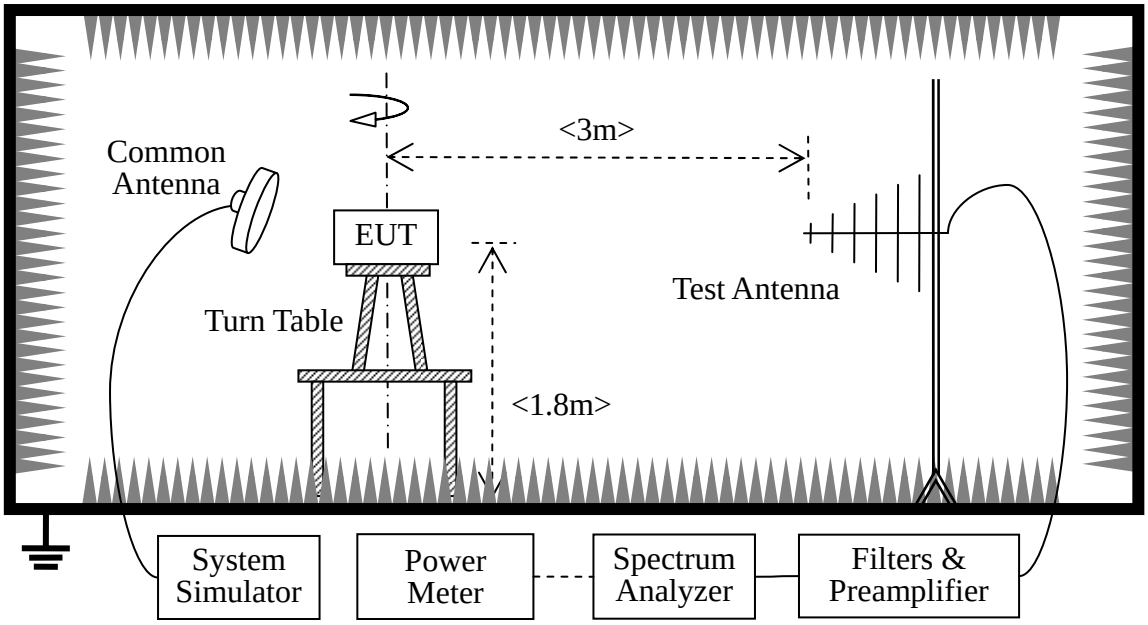
2.7 Transmitter Radiated Power (EIRP/ERP)

2.7.1 Requirement

According to FCC section 22.913, the Effective Radiated Power (ERP) of mobile transmitters and auxiliary test transmitters must not exceed 7Watts, and FCC section 24.232, the broadband PCS mobile station is limited to 2 Watts e.i.r.p. peak power. FCC section 27.50, AWS 1700 test transmitters must not exceed 1Watts

2.7.2 Test Description

1. Test Setup:



The EUT, which is powered by the Battery charged with the AC Adapter, is located in a 3m Full-Anechoic Chamber; the cable loss, air loss and so on of the site as factors are pre-calibrated using the "Substitution" method, and calculated to correct the reading.

A call is established between the EUT and the SS via a Common Antenna. The EUT is commanded by the SS to operate at the maximum and minimum output power (i.e. GSM850MHz band Power Control Level (PCL) = 5/19 and Power Class = 4, GSM1900MHz band Power Control Level (PCL) = 0/15 and Power Class = 1), and only the test result of the maximum output power was recorded.

- GSM Maximum RF output power: GSM 850 33.39dBm, GSM 1900 32.25dBm, EGPRS 850 30.34dBm，EGPRS 28.62.WCDMA 850 24.43dBm, WCDMA 1900 23.82 dBm, WCDMA1700 20.76 dBm Please refer to section 2.1.3 of this report.

- Step size (dB): 3dB

- Minimum RF power: GSM 850 3.1dBm, GSM 1900 0.3dBm，EGPRS 850 3.1dBm, EGPRS 1900

0.21dBm ,WCDMA 850 0.39dBm ,WCDMA 1900 0.5dBm WCDMA 1700 0.5dBm.

The Test Antenna is a Bi-Log one (used for 30MHz to 1GHz) or a Horn one (used for above 3GHz), and it's located at the same height as the EUT. The Filters consists of Notch Filters and High Pass Filter.

2. Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
System Simulator	Agilent	E5515C	GB43130131	2014.02.26	2015.02.25
Spectrum Analyzer	Agilent	E7405A	US44210471	2014.02.26	2015.02.25
Full-Anechoic Chamber	Albatross	9m*6m*6m	(n.a.)	2014.02.26	2015.02.25
Test Antenna - Bi-Log	Schwarzbeck	VULB 9163	9163-274	2014.02.26	2015.02.25
Test Antenna - Horn	Schwarzbeck	BBHA 9120C	9120C-384	2014.02.26	2015.02.25
Substitution Antenna	Schwarzbeck	BBHA 9120C	9120C-384	2014.02.26	2015.02.25
Pre-AMPs	lucix	S10M100L3802	S020180L3203	2014.02.26	2015.02.25
Notch Filter	COM-MW	ZBSF-C836.5-25-X	NA	2014.02.26	2015.02.25
Notch Filter	COM-MW	ZBSF-C1747.5-75-X2	NA	2014.02.26	2015.02.25
Notch Filter	COM-MW	ZBSF-C1880-60-X2	NA	2014.02.26	2015.02.25

2.7.3 Test Result

The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. The lowest, middle and highest channels are tested.

The substitution corrections are obtained as described below:

$A_{SUBST} = P_{SUBST\_TX} - P_{SUBST\_RX} - L_{SUBST\_CABLES} + G_{SUBST\_TX\_ANT}$

$A_{TOT} = L_{CABLES} + A_{SUBST}$

Where A_{SUBST} is the final substitution correction including receive antenna gain.

P_{SUBST_TX} is signal generator level,

P_{SUBST_RX} is receiver level,

L_{SUBST_CABLES} is cable losses including TX cable,

$G_{SUBST\_TX\_ANT}$ is substitution antenna gain.

A_{TOT} is total correction factor including cable loss and substitution correction

During the test, the data of A_{TOT} was added in the Test Spectrum Analyze, so Spectrum Analyze reading is the final values which contain the data of A_{TOT}.

1. GSM Model Test Verdict:

Band	Channel	Frequency (MHz)	PCL	Measured ERP			Limit		Verdict
				dBm	W	Refer to Plot	dBm	W	
GSM 850MHz	128	824.20	5	30.72	1.180	Plot A	38.5	7	PASS
	190	836.60	5	30.30	1.072				PASS
	251	848.80	5	31.18	1.312				PASS
GPRS 850MHz	128	824.20	5	29.86	0.968	Plot B Note 1	38.5	7	PASS
	190	836.60	5	29.83	0.962				PASS
	251	848.80	5	30.08	1.019				PASS
EGPRS 850MHz	128	824.20	5	29.03	0.800	Plot C Note 1	38.5	7	PASS
	190	836.60	5	29.08	0.809				PASS
	251	848.80	5	29.48	0.887				PASS

Band	Channel	Frequency (MHz)	PCL	Measured EIRP			Limit		Verdict
				dBm	W	Refer to Plot	dBm	W	
GSM 1900MHz	512	1850.2	0	29.52	0.895	Plot D	33	2	PASS
	661	1880.0	0	29.43	0.877				PASS
	810	1909.8	0	29.40	0.871				PASS
GPRS 1900MHz	512	1850.2	0	27.22	0.527	Plot E Note 1	33	2	PASS
	661	1880.0	0	27.34	0.542				PASS
	810	1909.8	0	27.41	0.551				PASS
EGPRS 1900MHz	512	1850.2	0	27.59	0.574	Plot F Note 1	33	2	PASS
	661	1880.0	0	27.48	0.560				PASS
	810	1909.8	0	27.83	0.607				PASS

Note 1:	For the GPRS and EGPRS model, all the slots were tested and just the worst data was record in this report.

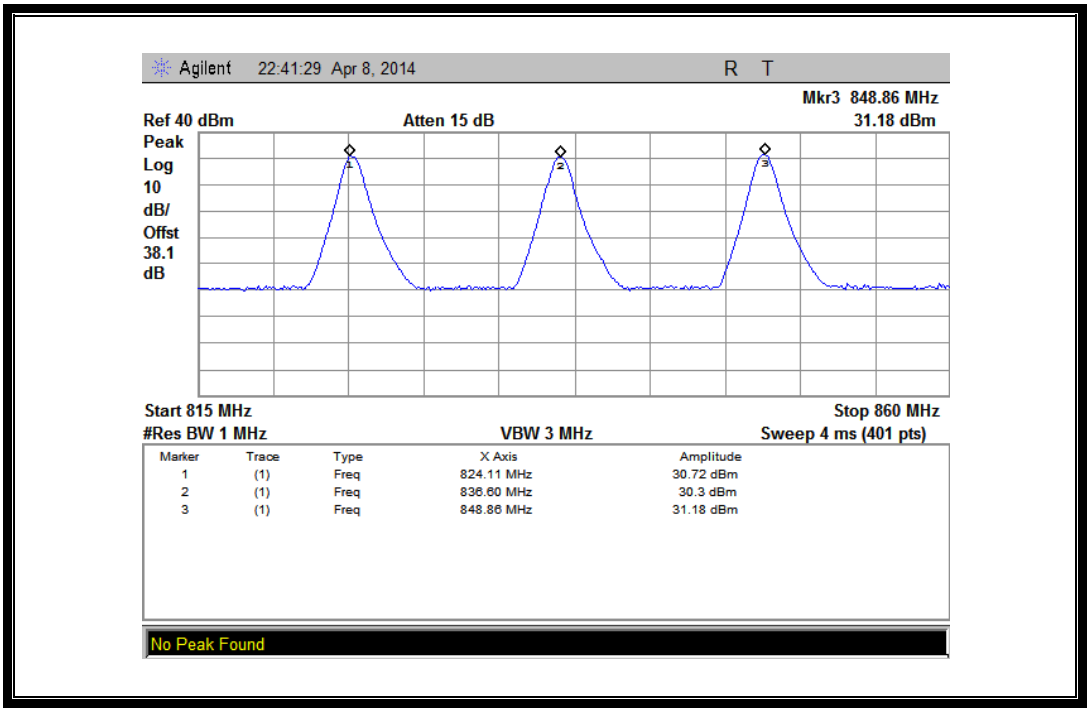
2. WCDMA Model Test Verdict:

Band	Channel	Frequency (MHz)	Measured ERP			Limit		Verdict
			dBm	W	Refer to Plot	dBm	W	
WCDMA 850MHz	4132	826.4	26.72	0.470	Plot G	38.5	7	PASS
	4175	835	26.58	0.455				PASS
	4233	846.6	26.86	0.485				PASS
HSDPA 850MHz	4132	826.4	26.67	0.465	Plot H	38.5	7	PASS
	4175	835	26.56	0.453				PASS
	4233	846.6	26.83	0.482				PASS
HSUPA 850MHz	4132	826.4	26.46	0.443	Plot I	38.5	7	PASS
	4175	835	26.45	0.442				PASS
	4233	846.6	26.55	0.452				PASS
HSPA+ 850MHz	4132	826.4	26.41	0.438	Plot J	38.5	7	PASS
	4175	835	26.38	0.435				PASS
	4233	846.6	26.53	0.450				PASS

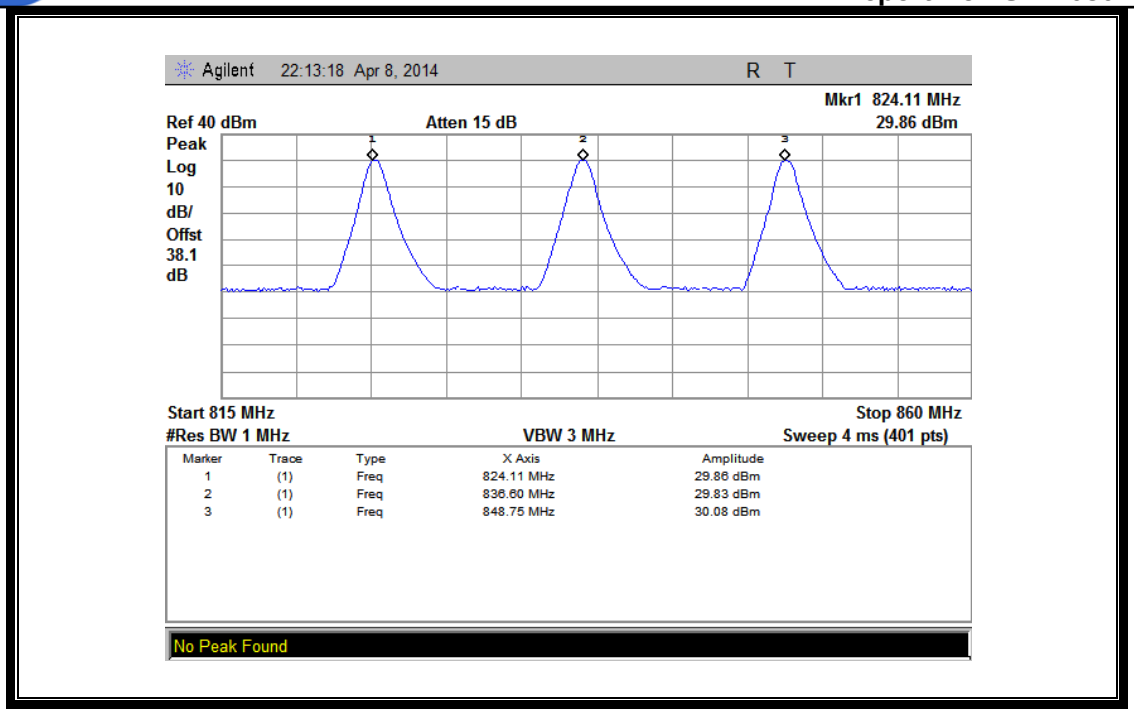
Band	Channel	Frequency (MHz)	Measured EIRP			Limit		Verdict
			dBm	W		dBm	W	
WCDMA 1900MHz	9262	1852.4	26.28	0.425	Plot K	33	2	PASS
	9400	1880	26.85	0.484				PASS
	9538	1907.6	26.19	0.416				PASS
HSDPA 1900MHz	9262	1852.4	26.43	0.440	Plot L	33	2	PASS
	9400	1880	26.56	0.453				PASS
	9538	1907.6	26.20	0.417				PASS
HSUPA 1900MHz	9262	1852.4	26.19	0.416	Plot M	33	2	PASS
	9400	1880	26.46	0.443				PASS
	9538	1907.6	26.12	0.410				PASS
HSPA+ 1900MHz	9262	1852.4	26.31	0.428	Plot N	33	2	PASS
	9400	1880	26.53	0.450				PASS
	9538	1907.6	26.18	0.415				PASS

Band	Channel	Frequency (MHz)	Measured EIRP			Limit		Verdict
			dBm	W		dBm	W	
WCDMA 1700MHz	1312	1712.4	24.67	0.293	Plot O	30	1	PASS
	1412	1732.4	24.26	0.267				PASS
	1513	1752.6	24.39	0.275				PASS
HSDPA 1700MHz	1312	1712.4	24.42	0.277	Plot P	30	1	PASS
	1412	1732.4	24.25	0.266				PASS
	1513	1752.6	24.22	0.264				PASS
HSUPA 1700MHz	1312	1712.4	24.25	0.266	Plot Q	30	1	PASS
	1412	1732.4	24.38	0.274				PASS
	1513	1752.6	24.49	0.281				PASS
HSPA+ 1700MHz	1312	1712.4	24.98	0.315	Plot R	30	1	PASS
	1412	1732.4	24.35	0.272				PASS
	1513	1752.6	24.53	0.284				PASS

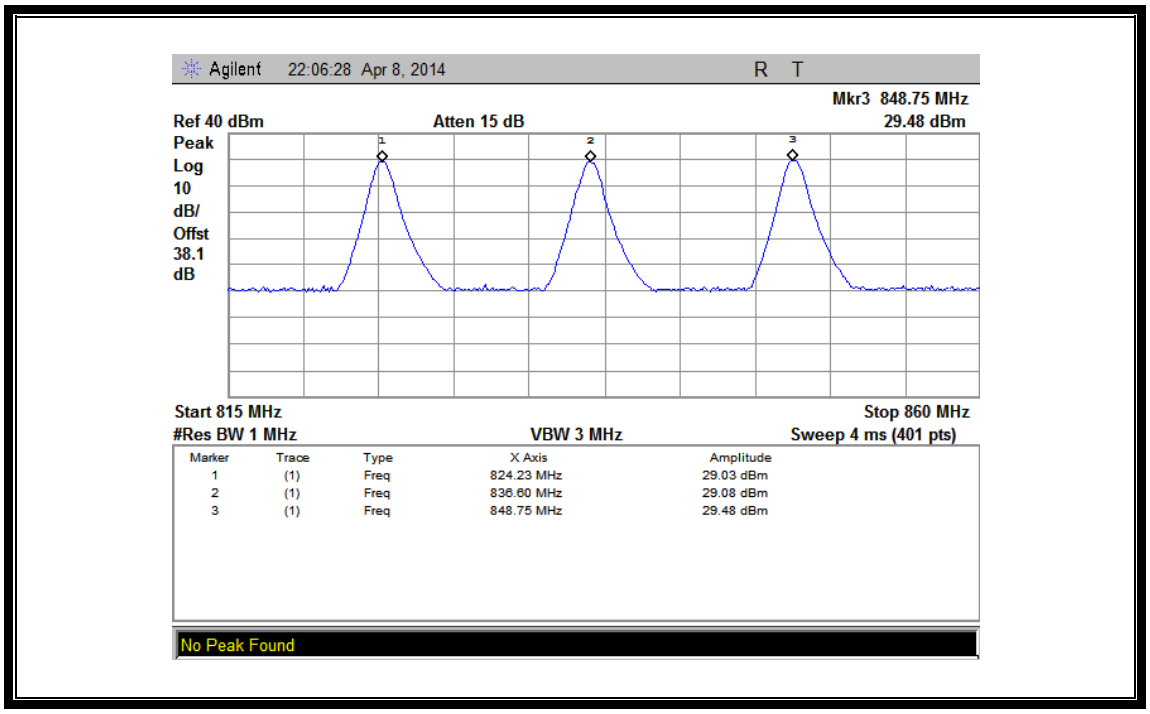
3. Test Plots:



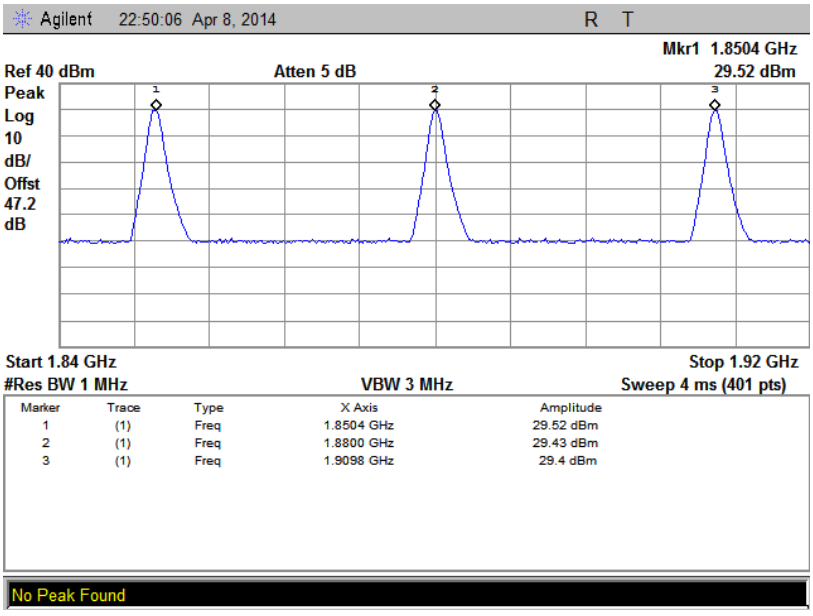
(Plot A: GSM 850MHz Channel = 128, 190, 251)



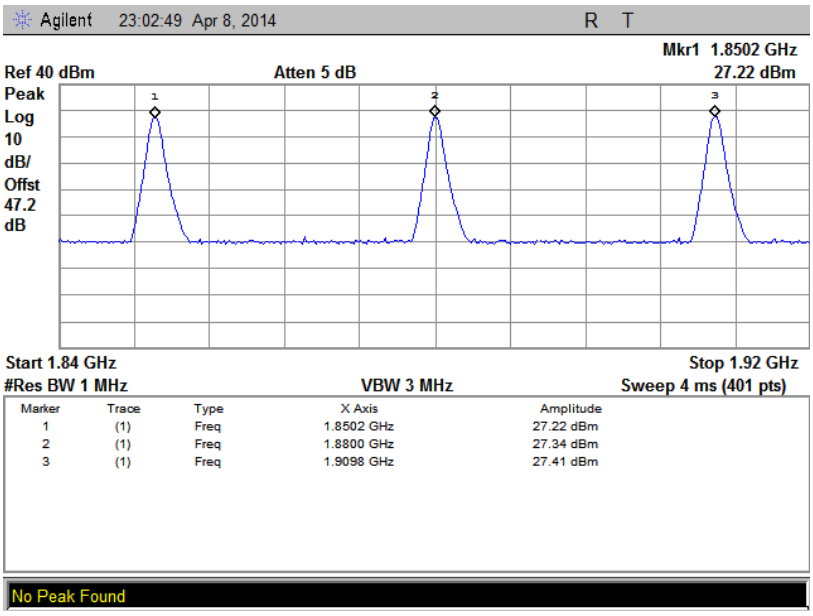
(Plot B: GPRS 850MHz Channel = 128, 190, 251)



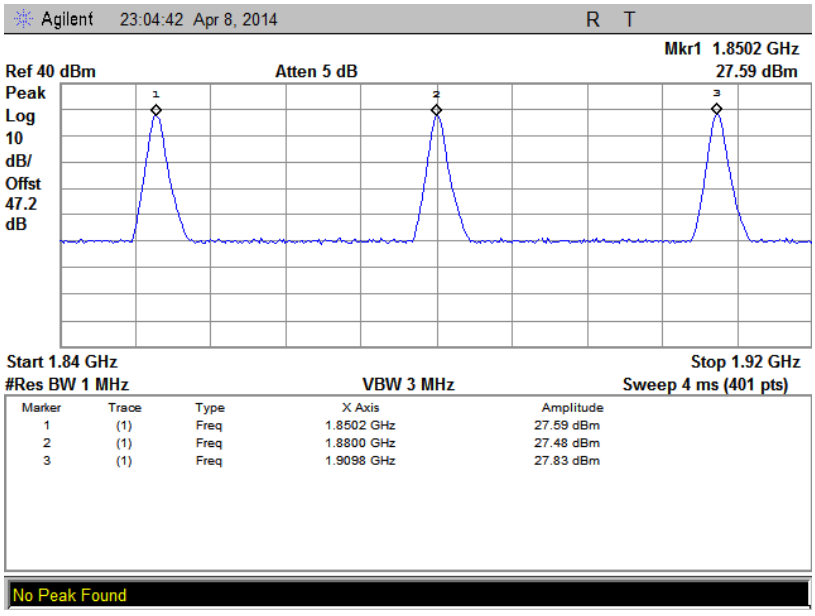
(Plot C: EGPRS 850MHz Channel = 128, 190, 251)



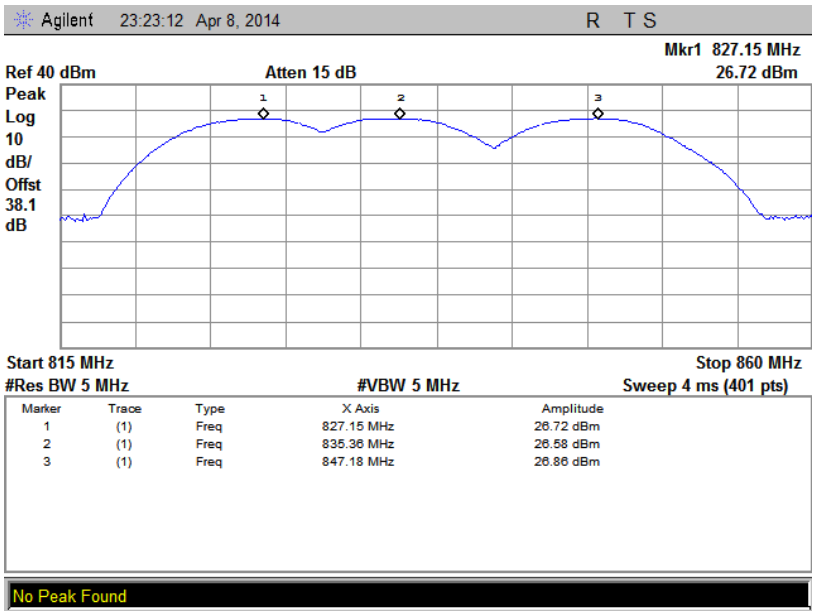
(Plot D: GSM 1900MHz Channel = 512, 661, 810)



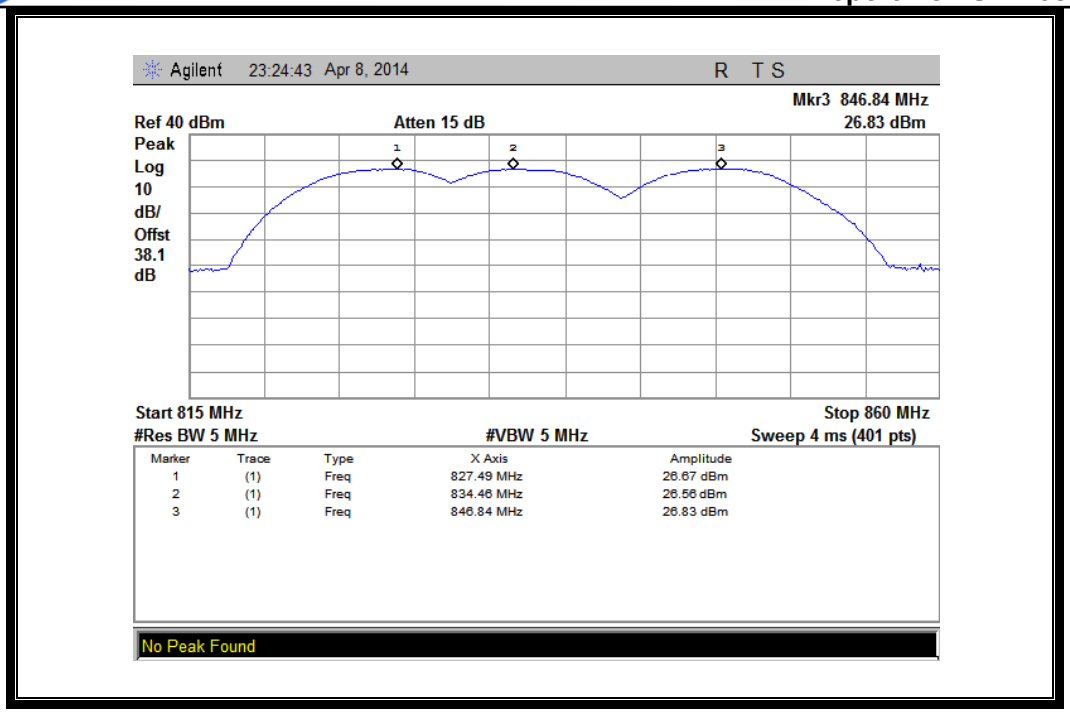
(Plot E: GPRS 1900MHz Channel = 512, 661, 810)



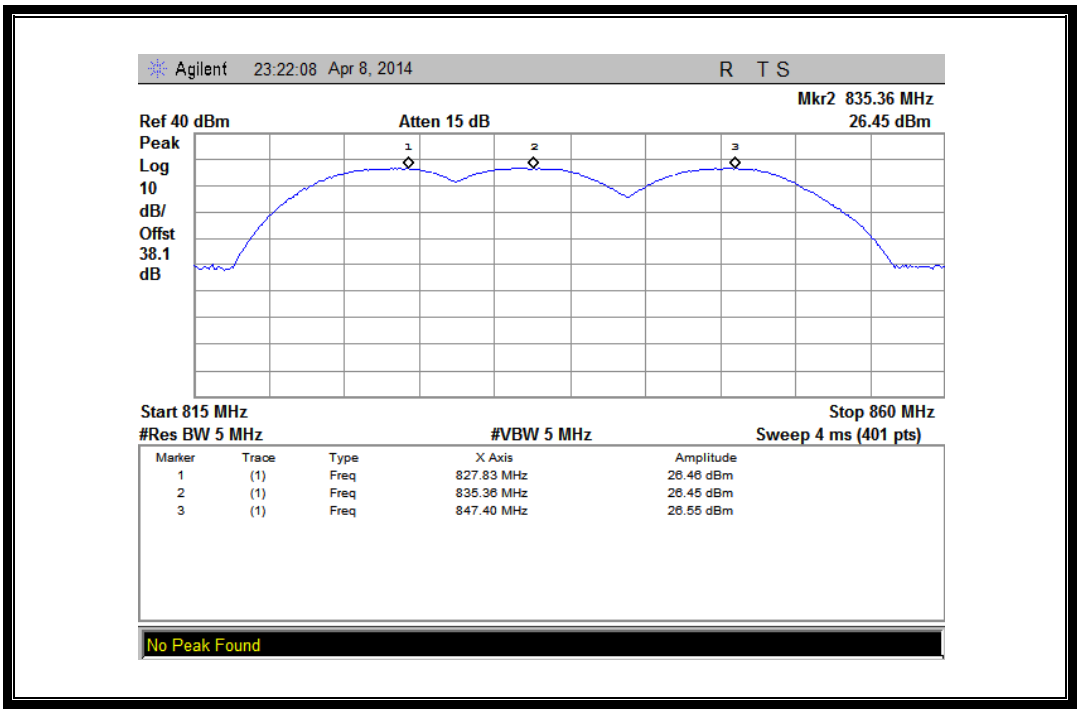
(Plot F: EGPRS 1900MHz Channel = 512, 661, 810)



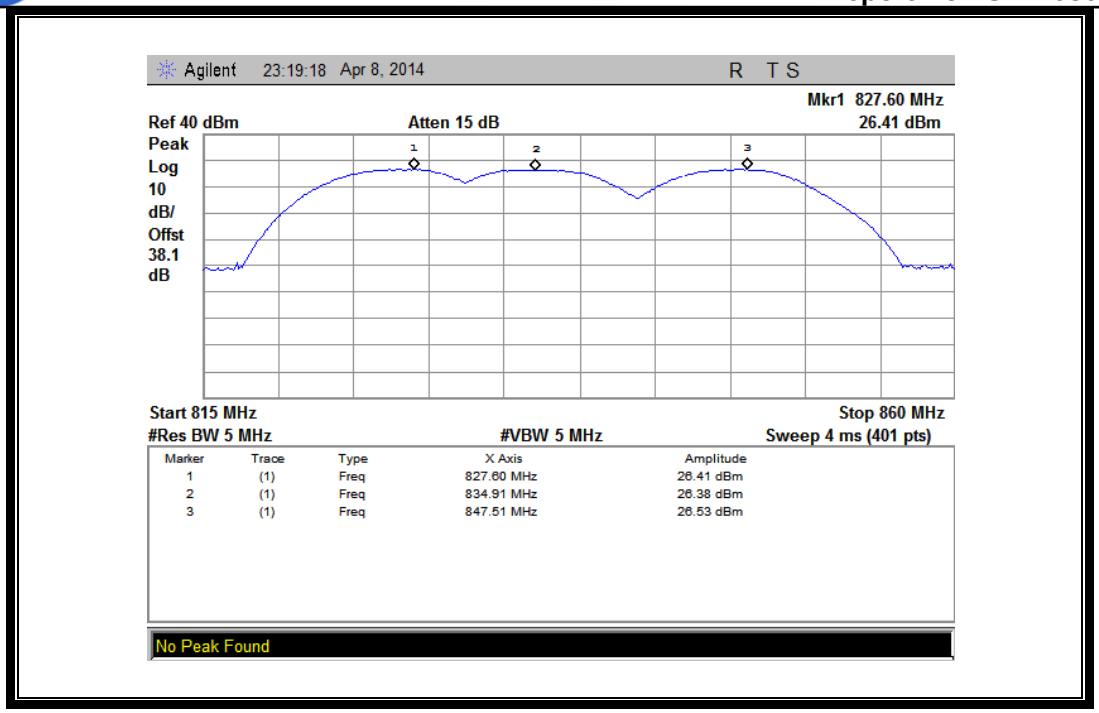
(Plot G: WCDMA 850 MHz Channel = 4132, 4175, 4233)



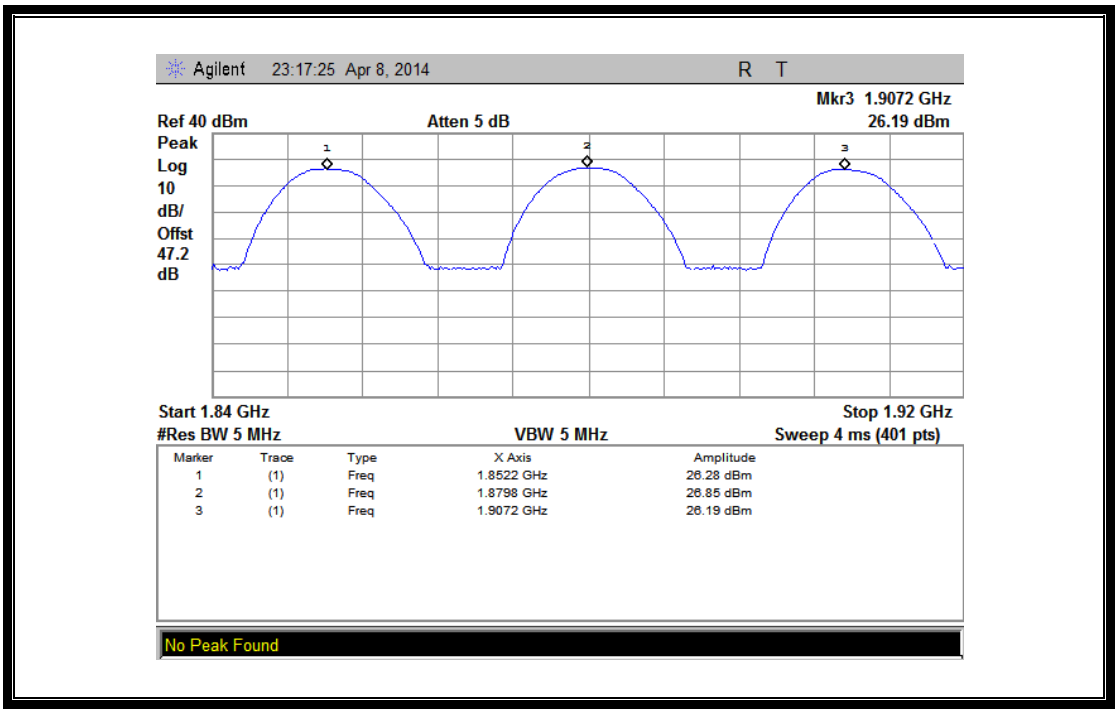
(Plot H: HSDPA 850 MHz Channel = 4132, 4175, 4233)



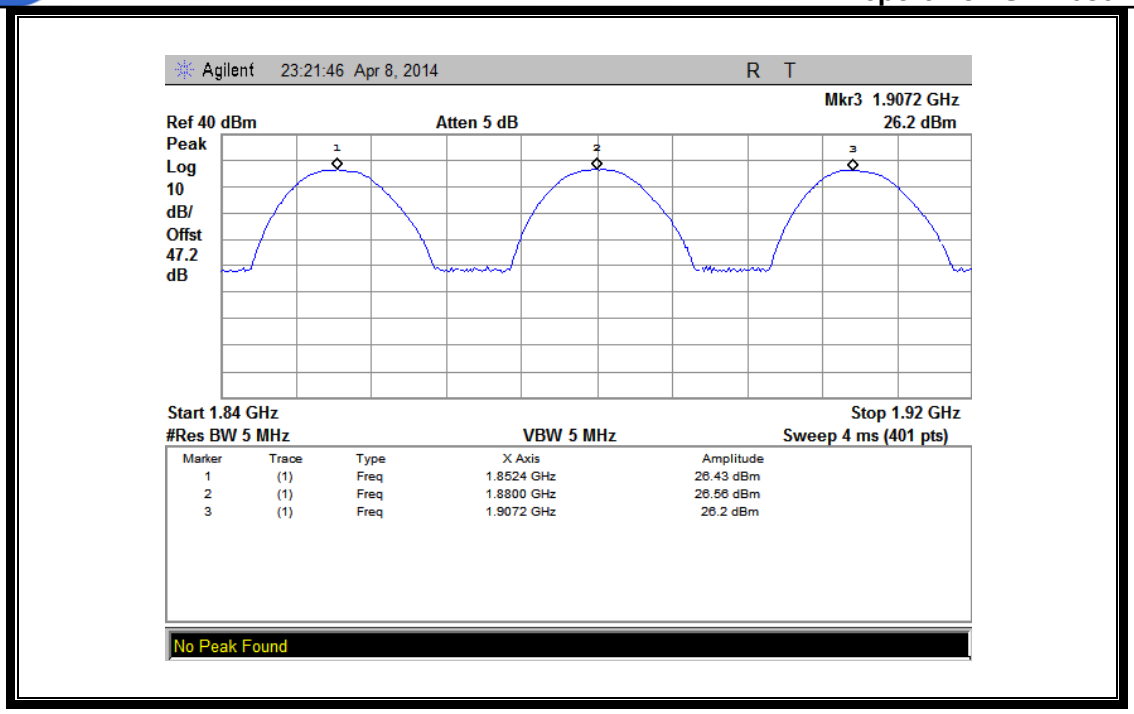
(Plot I: HSUPA 850 MHz Channel = 4132, 4175, 4233)



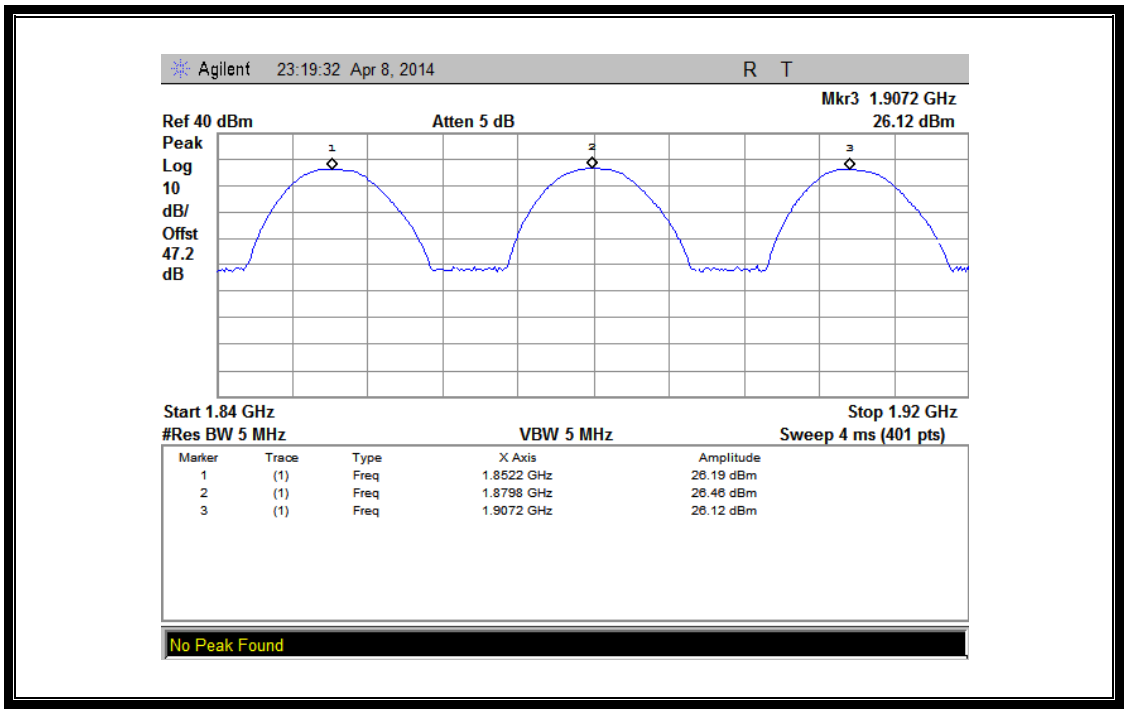
(Plot J: HSPA+ 850 MHz Channel = 4132, 4175, 4233)



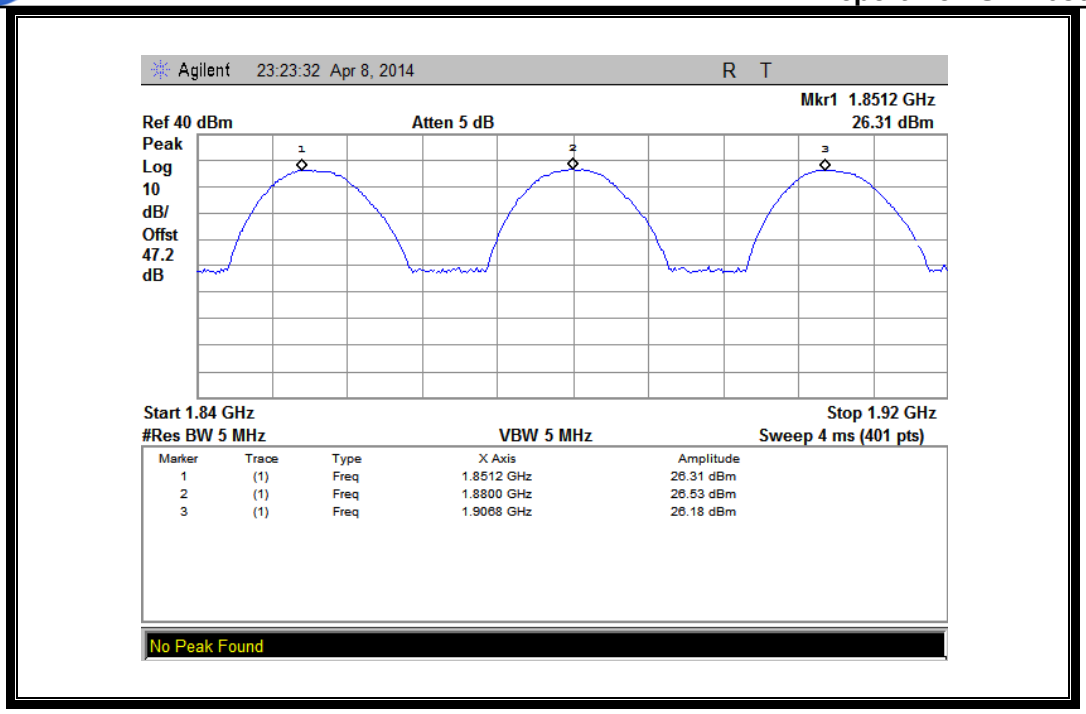
(Plot K: WCDMA 1900 MHz Channel = 9262, 9400, 9538)



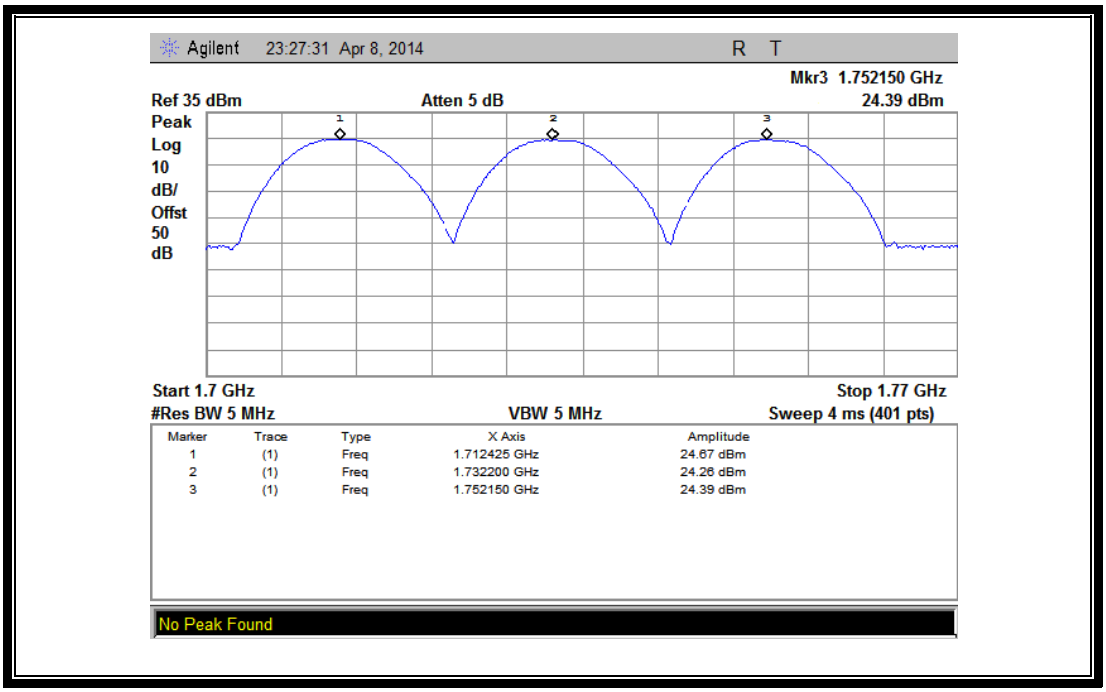
(Plot L: HSDPA1900 MHz Channel = 9262, 9400, 9538)



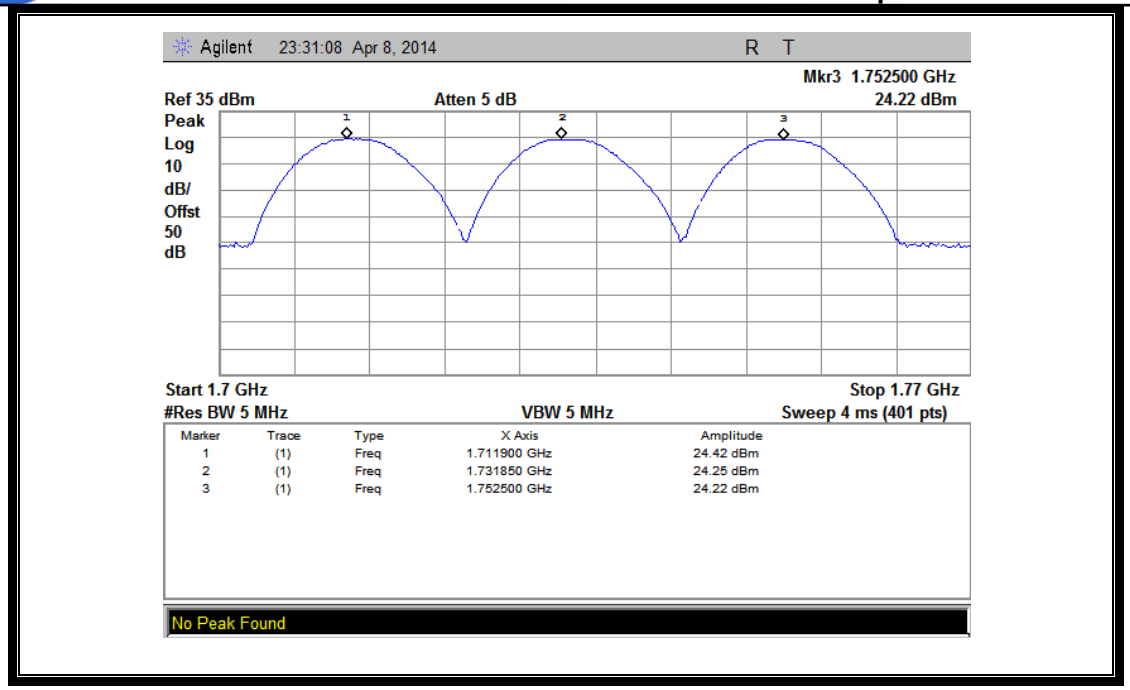
(Plot M: HSUPA1900 MHz Channel = 9262, 9400, 9538)



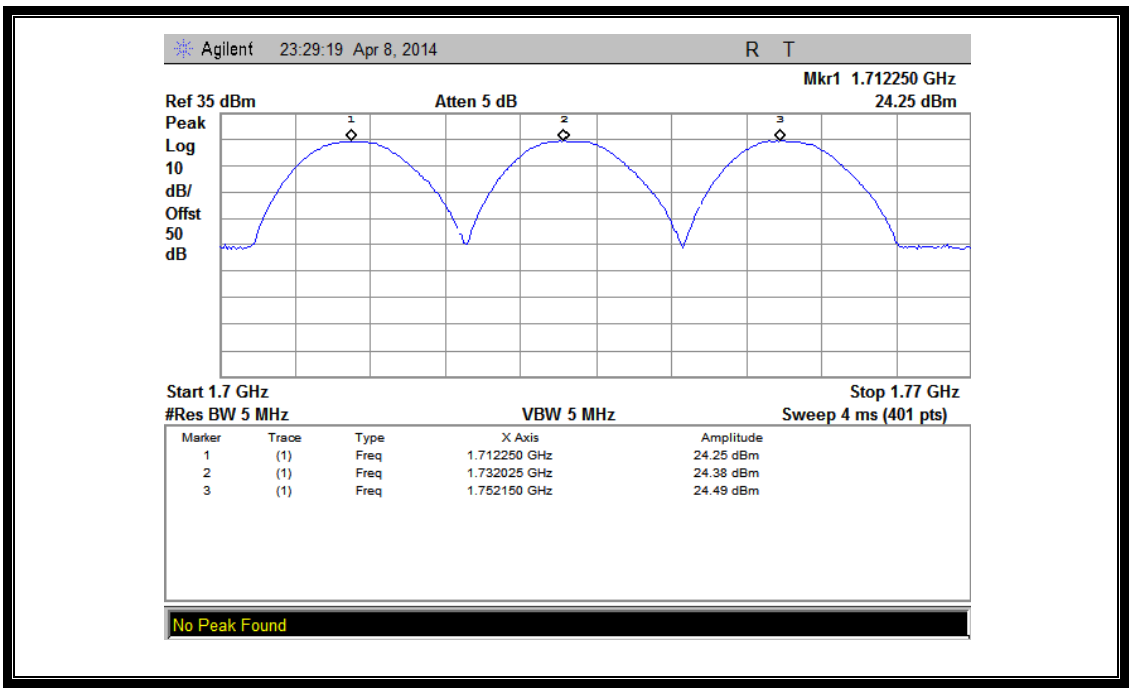
(Plot N: HSPA+1900 MHz Channel = 9262, 9400, 9538)



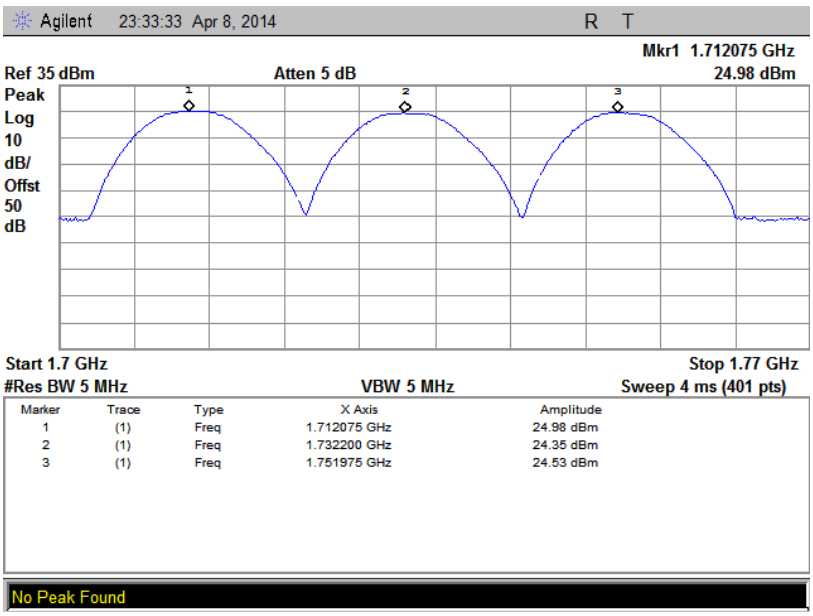
(Plot O: WCDMA 1700MHz Channel = 1312, 1412, 1513)



(Plot P: HSDPA 1700MHz Channel = 1312, 1412, 1513)



(Plot Q: HSUPA 1700MHz Channel = 1312, 1412, 1513)



(Plot R: HSPA+ 1700MHz Channel = 1312, 1412, 1513)

2.8 Radiated Out of Band Emissions

2.8.1 Requirement

According to FCC section 22.917(a) and section 24.238(a), 27.53(g) 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. This calculated to be -13dBm.

The spurious emission with frequency band 1900 according to FCC section 2.1057.

2.8.2 Test Description

See section 2.7.2 of this report.

Equipment List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
System Simulator	Agilent	E5515C	GB43130131	2014.02.26	2015.02.25
Spectrum Analyzer	Agilent	E7405A	US44210471	2014.02.26	2015.02.25
Full-Anechoic Chamber	Albatross	9m*6m*6m	(n.a.)	2014.02.26	2015.02.25
Test Antenna - Bi-Log	Schwarzbeck	VULB 9163	9163-274	2014.02.26	2015.02.25
Test Antenna - Horn	Schwarzbeck	BBHA 9120C	9120C-384	2014.02.26	2015.02.25
Substitution Antenna	Schwarzbeck	BBHA 9120C	9120C-384	2014.02.26	2015.02.25
Pre-AMPs	lucix	S10M100L3802	S020180L3203	2014.02.26	2015.02.25
Notch Filter	COM-MW	ZBSF-C836.5-25-X	NA	2014.02.26	2015.02.25
Notch Filter	COM-MW	ZBSF-C1747.5-75-X2	NA	2014.02.26	2015.02.25
Notch Filter	COM-MW	ZBSF-C1880-60-X2	NA	2014.02.26	2015.02.25

Note: when doing measurements above 1GHz, the EUT has been within the 3dB cone width of the horn antenna during horizontal antenna.

2.8.3 Test Result

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. The lowest, middle and highest channels are tested to verify the out of band emissions.

1. Test Verdict:

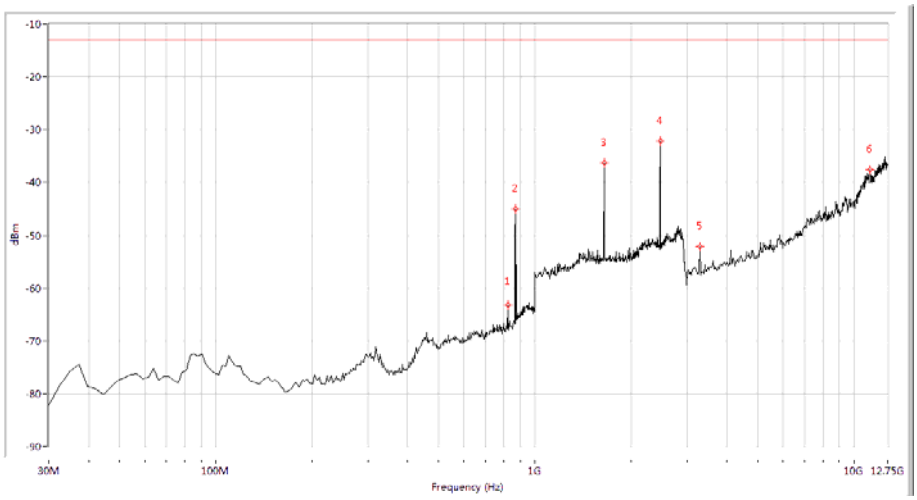
Band	Channel	Frequency (MHz)	Measured Max. Spurious Emission (dBm)		Refer to Plot	Limit (dBm)	Verdict
			Test Antenna Horizontal	Test Antenna Vertical			
GSM 850MHz	128	824.2	< -25	< -25	Plot A.1/A.2	-13	PASS
	190	836.6	< -25	< -25	Plot A.3/A.4		PASS
	251	848.8	< -25	< -25	Plot A.5/A.6		PASS
GSM 1900MHz	512	1850.2	< -25	< -25	Plot B.1/B.2	-13	PASS
	661	1880.0	< -25	< -25	Plot B.3/B.4		PASS
	810	1909.8	< -25	< -25	Plot B.5/B.6		PASS
EDGE 850MHz	128	824.2	< -25	< -25	Plot C.1/C.2	-13	PASS
	190	836.6	< -25	< -25	Plot C.3/C.4		PASS
	251	848.8	< -25	< -25	Plot C.5/C.6		PASS
EDGE 1900MHz	512	1850.2	< -25	< -25	Plot D.1/D.2	-13	PASS
	661	1880.0	< -25	< -25	Plot D.3/D.4		PASS
	810	1909.8	< -25	< -25	Plot D.5/D.6		PASS
WCDMA 850MHz	4132	826.4	< -25	< -25	Plot E.1/E.2	-13	PASS
	4175	835	< -25	< -25	Plot E.3/E.4		PASS
	4233	846.6	< -25	< -25	Plot E.5/E.6		PASS
WCDMA 1900MHz	9262	1852.4	< -25	< -25	Plot F.1/F.2	-13	PASS
	9400	1880	< -25	< -25	Plot F.3/F.4		PASS
	9538	1907.6	< -25	< -25	Plot F.5/F.6		PASS
HSDPA 850MHz	4132	826.4	< -25	< -25	Plot G.1/G.2	-13	PASS
	4175	835	< -25	< -25	Plot G.3/G.4		PASS
	4233	846.6	< -25	< -25	Plot G.5/G.6		PASS
HSDPA 1900MHz	9262	1852.4	< -25	< -25	Plot H.1/H.2	-13	PASS
	9400	1880	< -25	< -25	Plot H.3/H.4		PASS
	9538	1907.6	< -25	< -25	Plot H.5/H.6		PASS
HSUPA 850MHz	4132	826.4	< -25	< -25	Plot I.1/I.2	-13	PASS
	4175	835	< -25	< -25	Plot I.3/I.4		PASS
	4233	846.6	< -25	< -25	Plot I.5/I.6		PASS
HSUPA 1900MHz	9262	1852.4	< -25	< -25	Plot J.1/J.2	-13	PASS
	9400	1880	< -25	< -25	Plot J.3/J.4		PASS
	9538	1907.6	< -25	< -25	Plot J.5/J.6		PASS
HSPA+ 850MHz	4132	826.4	< -25	< -25	Plot K.1/K.2	-13	PASS
	4175	835	< -25	< -25	Plot K.3/K.4		PASS
	4233	846.6	< -25	< -25	Plot K.5/K.6		PASS
HSPA+ 1900MHz	9662	1852.4	< -25	< -25	Plot L.1/L.2	-13	PASS
	9800	1880	< -25	< -25	Plot L.3/L.4		PASS
	9938	1907.6	< -25	< -25	Plot L.5/L.6		PASS

Band	Channel	Frequency (MHz)	Measured Max. Spurious Emission (dBm)		Refer to Plot	Limit (dBm)	Verdict
			Test Antenna Horizontal	Test Antenna Vertical			
WCDMA 1700MHz	1312	1712.4	< -25	< -25	Plot M.1/M.2	-13	PASS
	1412	1732.4	< -25	< -25	Plot M.3/M.4		PASS
	1513	1752.6	< -25	< -25	Plot M.5/M.6		PASS
HSDPA 1700MHz	1312	1712.4	< -25	< -25	Plot N.1/N.2	-13	PASS
	1412	1732.4	< -25	< -25	Plot N.3/N.4		PASS
	1513	1752.6	< -25	< -25	Plot N.5/N.6		PASS
HSUPA 1700MHz	1312	1712.4	< -25	< -25	Plot O.1/O.2	-13	PASS
	1412	1732.4	< -25	< -25	Plot O.3/O.4		PASS
	1513	1752.6	< -25	< -25	Plot O.5/O.6		PASS
HSPA+ 1700MHz	1312	1712.4	< -25	< -25	Plot P.1/P.2	-13	PASS
	1412	1732.4	< -25	< -25	Plot P.3/P.4		PASS
	1513	1752.6	< -25	< -25	Plot P.5/P.6		PASS

2. Test Plots for the Whole Measurement Frequency Range:

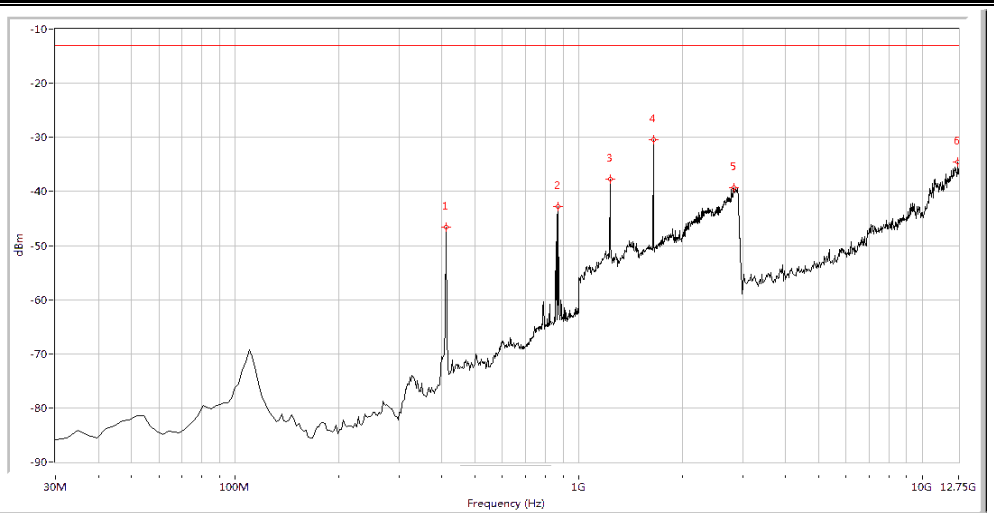
Note1: the power of the EUT transmitting frequency should be ignored.

Note2: All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.



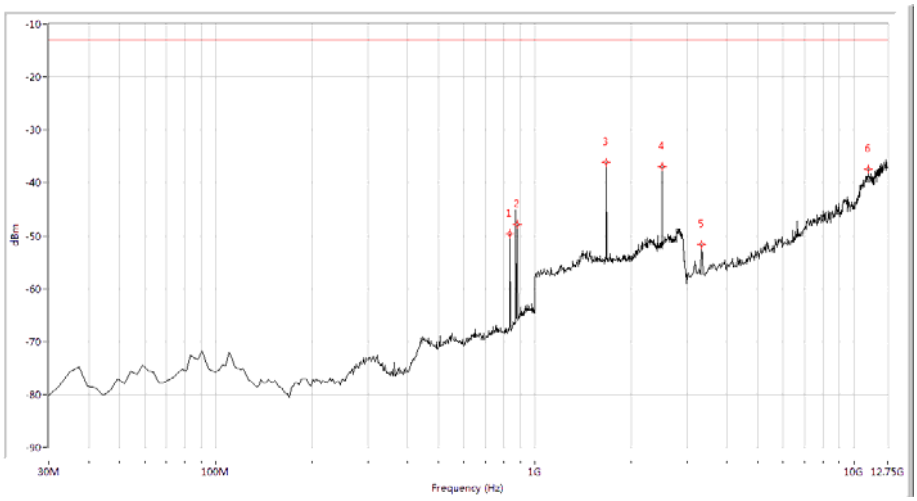
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
823.416	-63.20	-13.0	50.2	81.1	Horizontal	PASS
871.796	-45.01	-13.0	32.0	206.9	Horizontal	PASS
1648.379	-36.31	-13.0	23.3	217.0	Horizontal	PASS
2471.322	-32.10	-13.0	19.1	62.2	Horizontal	PASS
3291.771	-52.18	-13.0	39.2	70.3	Horizontal	PASS
11242.519	-37.61	-13.0	24.6	58.4	Horizontal	PASS

(Plot A.1: GSM 850MHz Channel = 128, Test Antenna Horizontal)



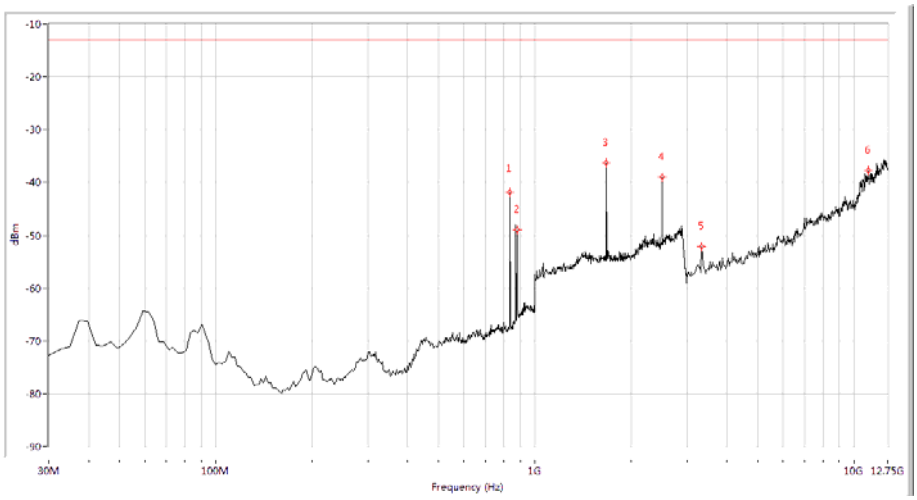
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
412.195	-46.56	-13.0	33.6	148.2	Vertical	PASS
871.796	-42.86	-13.0	29.9	239.0	Vertical	PASS
1234.414	-37.78	-13.0	24.8	323.0	Vertical	PASS
1648.379	-30.51	-13.0	17.5	360.0	Vertical	PASS
2825.436	-39.28	-13.0	26.3	19.8	Vertical	PASS
12701.372	-34.48	-13.0	21.5	360.0	Vertical	PASS

(Plot A.2: GSM 850MHz Channel = 128, Test Antenna Vertical)



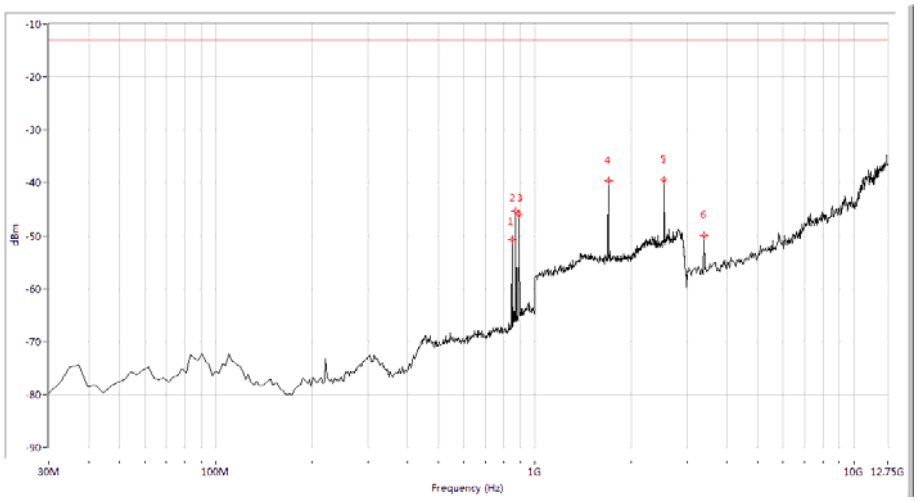
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
835.511	-49.68	-13.0	36.7	66.3	Horizontal	PASS
879.052	-47.88	-13.0	34.9	282.8	Horizontal	PASS
1673.317	-36.08	-13.0	23.1	276.2	Horizontal	PASS
2506.234	-36.87	-13.0	23.9	179.0	Horizontal	PASS
3340.399	-51.71	-13.0	38.7	55.9	Horizontal	PASS
11120.948	-37.33	-13.0	24.3	360.0	Horizontal	PASS

(Plot A.3: GSM 850MHz Channel = 190, Test Antenna Horizontal)



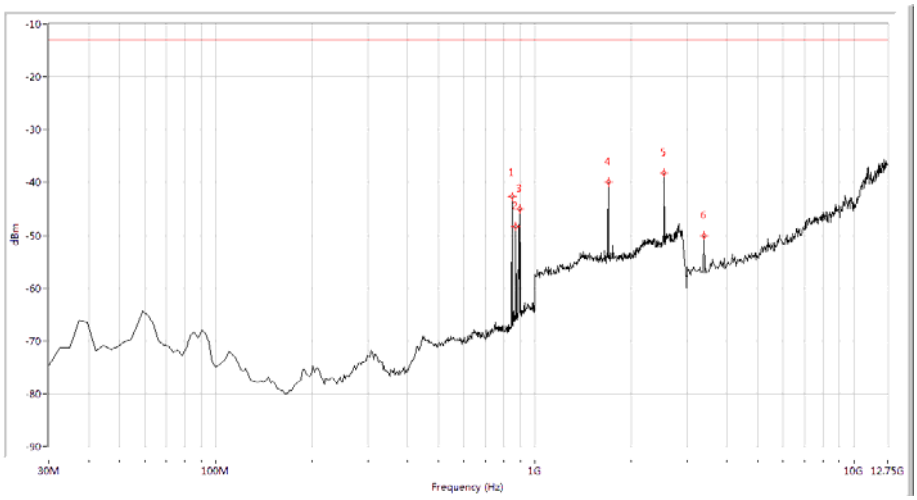
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
835.511	-41.86	-13.0	28.9	271.7	Vertical	PASS
879.052	-48.98	-13.0	36.0	261.6	Vertical	PASS
1673.317	-36.37	-13.0	23.4	280.9	Vertical	PASS
2506.234	-38.97	-13.0	26.0	305.9	Vertical	PASS
3340.399	-52.08	-13.0	39.1	98.3	Vertical	PASS
11096.633	-37.80	-13.0	24.8	23.5	Vertical	PASS

(Plot A.4: GSM 850MHz Channel = 190, Test Antenna Vertical)



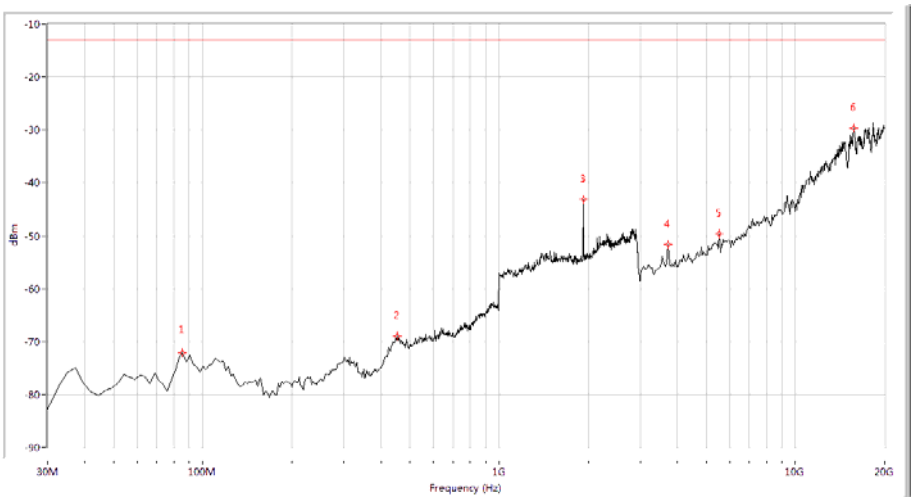
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
847.606	-50.73	-13.0	37.7	171.6	Horizontal	PASS
871.796	-45.39	-13.0	32.4	203.6	Horizontal	PASS
891.147	-45.96	-13.0	33.0	198.4	Horizontal	PASS
1698.254	-39.57	-13.0	26.6	11.1	Horizontal	PASS
2541.147	-39.46	-13.0	26.5	164.1	Horizontal	PASS
3389.027	-49.93	-13.0	36.9	45.5	Horizontal	PASS

(Plot A.5: GSM 850MHz Channel = 251, Test Antenna Horizontal)



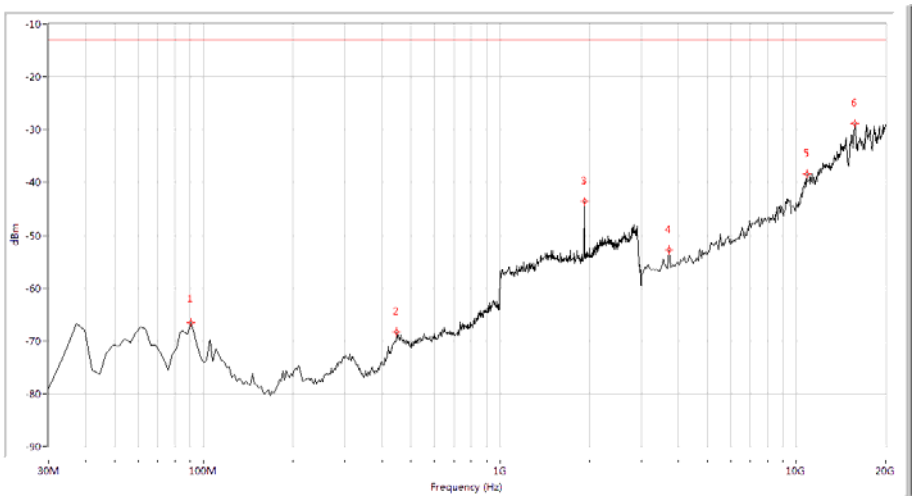
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
847.606	-42.68	-13.0	29.7	154.5	Vertical	PASS
871.796	-48.31	-13.0	35.3	24.2	Vertical	PASS
898.404	-44.97	-13.0	32.0	358.0	Vertical	PASS
1698.254	-39.88	-13.0	26.9	179.4	Vertical	PASS
2541.147	-38.19	-13.0	25.2	166.8	Vertical	PASS
3389.027	-50.09	-13.0	37.1	45.4	Vertical	PASS

(Plot A.6: GSM 850MHz Channel = 251, Test Antenna Vertical)



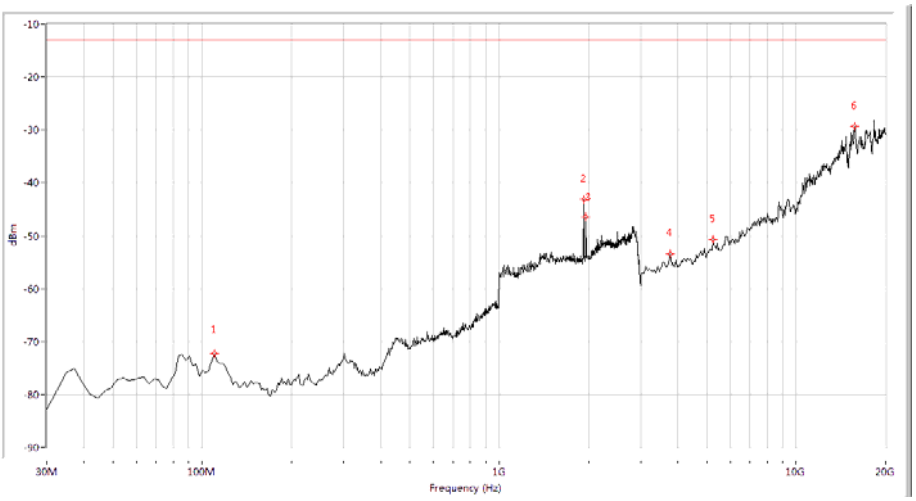
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
85.636	-72.12	-13.0	59.1	89.6	Horizontal	PASS
453.317	-68.95	-13.0	56.0	131.3	Horizontal	PASS
1927.681	-43.08	-13.0	30.1	228.5	Horizontal	PASS
3720.698	-51.70	-13.0	38.7	57.0	Horizontal	PASS
5543.641	-49.68	-13.0	36.7	57.0	Horizontal	PASS
15760.599	-29.64	-13.0	16.6	302.2	Horizontal	PASS

(Plot B.1: GSM 1900MHz Channel = 512, Test Antenna Horizontal)



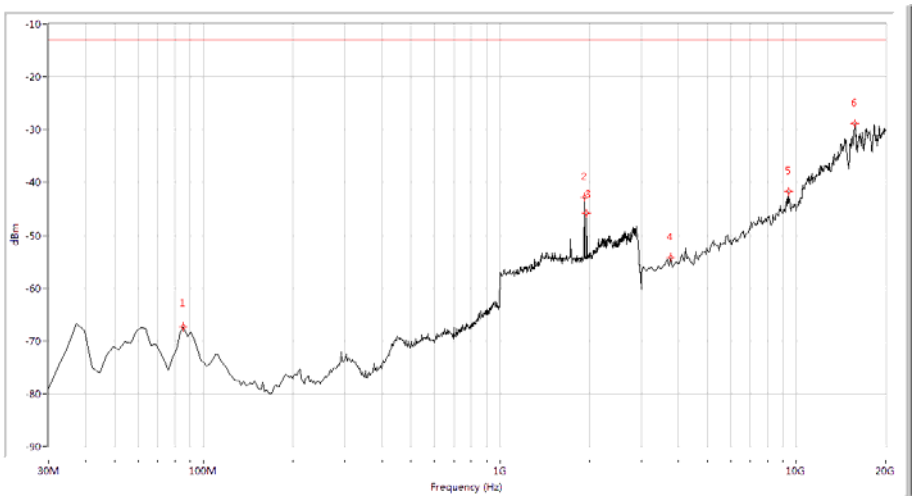
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
90.474	-66.57	-13.0	53.6	177.1	Vertical	PASS
448.479	-68.37	-13.0	55.4	87.1	Vertical	PASS
1927.681	-43.64	-13.0	30.6	212.5	Vertical	PASS
3720.698	-52.72	-13.0	39.7	66.3	Vertical	PASS
10842.893	-38.42	-13.0	25.4	50.7	Vertical	PASS
15760.599	-28.85	-13.0	15.8	230.7	Vertical	PASS

(Plot B.2: GSM 1900MHz Channel = 512, Test Antenna Vertical)



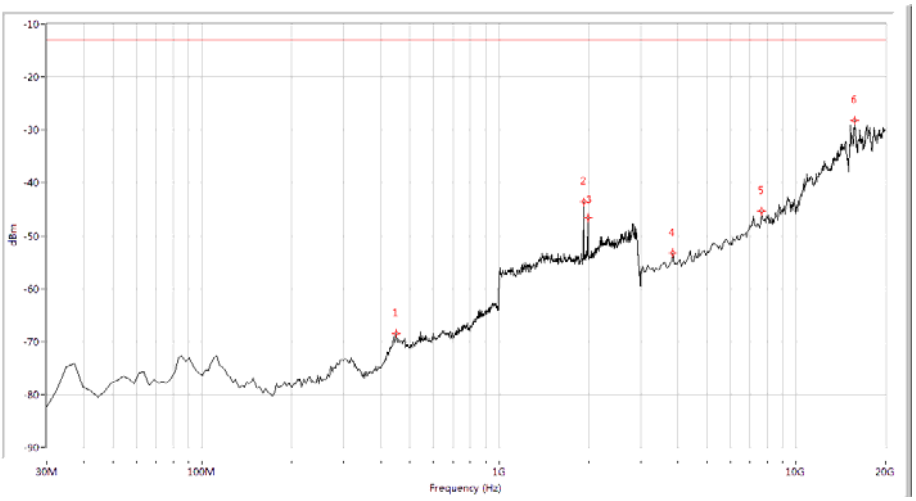
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-72.29	-13.0	59.3	137.7	Horizontal	PASS
1927.681	-43.17	-13.0	30.2	215.9	Horizontal	PASS
1957.606	-46.45	-13.0	33.5	69.6	Horizontal	PASS
3763.092	-53.34	-13.0	40.3	236.8	Horizontal	PASS
5246.883	-50.67	-13.0	37.7	81.2	Horizontal	PASS
15760.599	-29.27	-13.0	16.3	276.6	Horizontal	PASS

(Plot B.3: GSM 1900MHz Channel = 661, Test Antenna Horizontal)



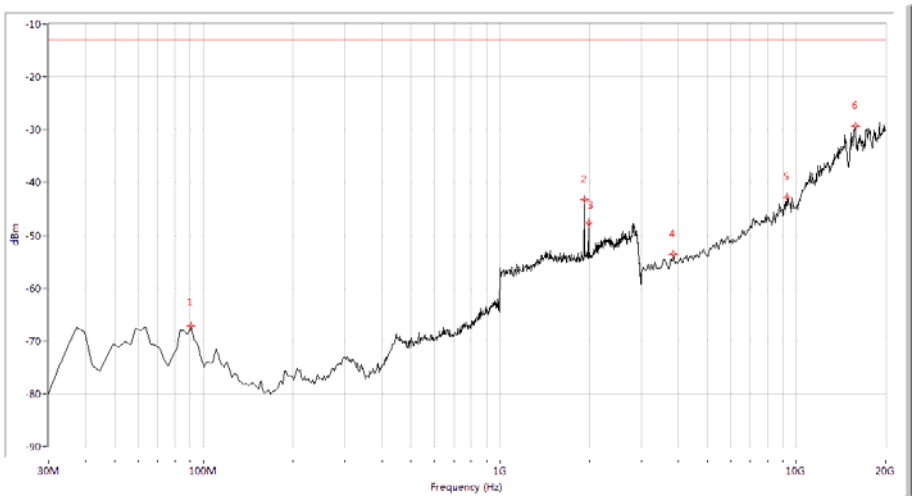
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
85.636	-67.40	-13.0	54.4	190.9	Vertical	PASS
1927.681	-42.85	-13.0	29.9	229.2	Vertical	PASS
1957.606	-45.73	-13.0	32.7	40.6	Vertical	PASS
3763.092	-54.21	-13.0	41.2	129.1	Vertical	PASS
9401.496	-41.68	-13.0	28.7	-0.0	Vertical	PASS
15760.599	-28.83	-13.0	15.8	308.9	Vertical	PASS

(Plot B.4: GSM 1900MHz Channel = 661, Test Antenna Vertical)



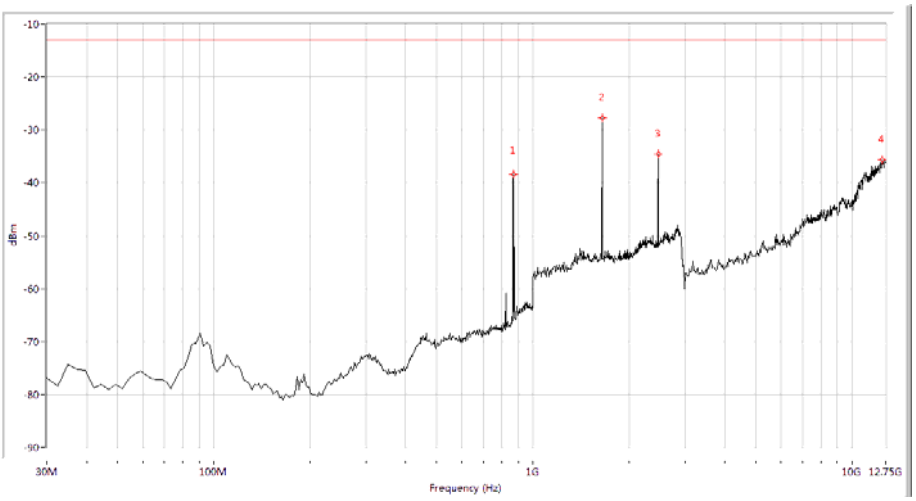
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
450.898	-68.45	-13.0	55.4	125.8	Horizontal	PASS
1927.681	-43.56	-13.0	30.6	214.0	Horizontal	PASS
1987.531	-46.62	-13.0	33.6	224.4	Horizontal	PASS
3847.880	-53.30	-13.0	40.3	76.3	Horizontal	PASS
7663.342	-45.31	-13.0	32.3	178.3	Horizontal	PASS
15718.204	-28.28	-13.0	15.3	101.6	Horizontal	PASS

(Plot B.5: GSM 1900MHz Channel = 810, Test Antenna Horizontal)



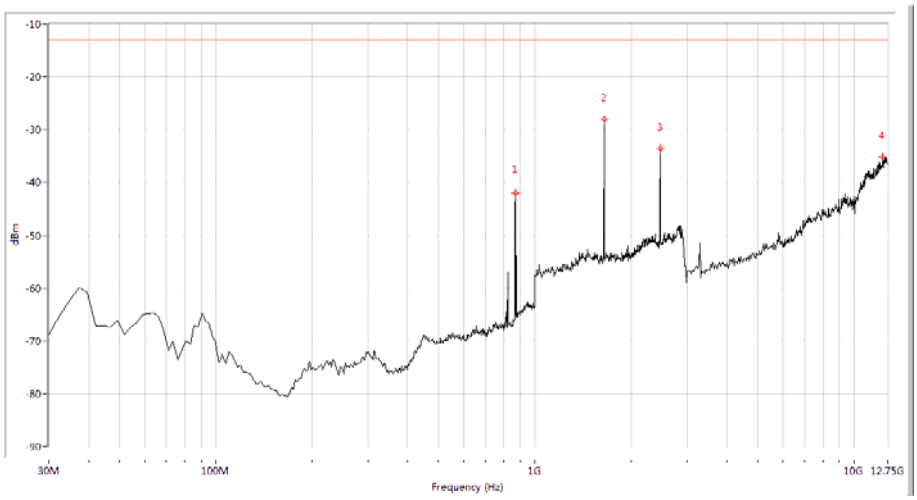
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
90.474	-67.24	-13.0	54.2	185.3	Vertical	PASS
1927.681	-43.32	-13.0	30.3	317.5	Vertical	PASS
1987.531	-47.72	-13.0	34.7	191.3	Vertical	PASS
3847.880	-53.64	-13.0	40.6	-0.0	Vertical	PASS
9274.314	-42.82	-13.0	29.8	12.4	Vertical	PASS
15802.993	-29.29	-13.0	16.3	5.8	Vertical	PASS

(PlotB.6: GSM 1900MHz Channel = 810, Test Antenna Vertical)



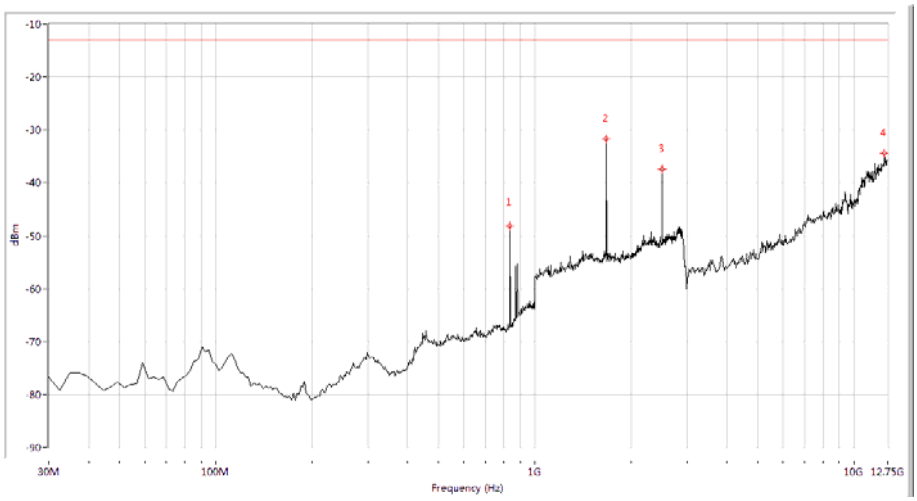
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
871.796	-38.37	-13.0	25.4	142.6	Horizontal	PASS
1648.379	-27.70	-13.0	14.7	191.3	Horizontal	PASS
2471.322	-34.48	-13.0	21.5	122.8	Horizontal	PASS
12458.229	-35.71	-13.0	22.7	348.0	Horizontal	PASS

(Plot C.1: EGPRS 850MHz Channel = 128, Test Antenna Horizontal)



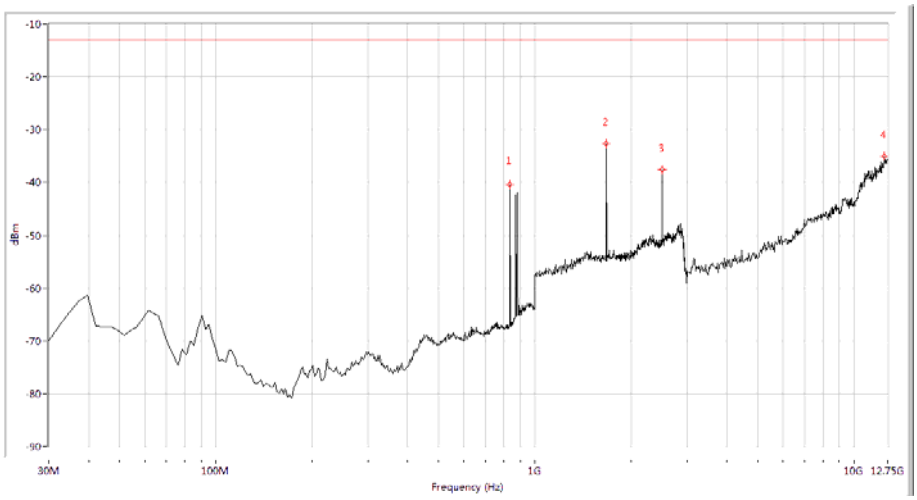
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
871.796	-41.97	-13.0	29.0	73.3	Vertical	PASS
1648.379	-28.08	-13.0	15.1	191.3	Vertical	PASS
2471.322	-33.58	-13.0	20.6	142.9	Vertical	PASS
12288.030	-35.19	-13.0	22.2	27.9	Vertical	PASS

(Plot C.2: EGPRS 850MHz Channel = 128, Test Antenna Vertical)



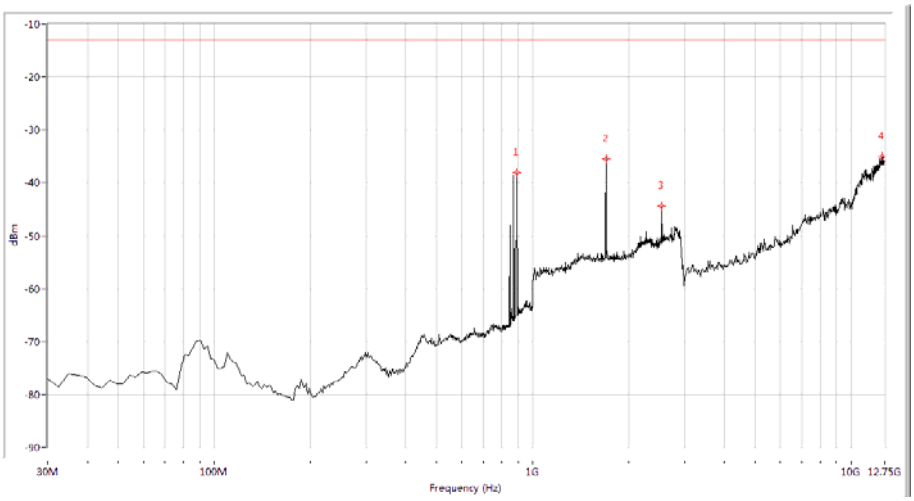
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
835.511	-48.25	-13.0	35.2	49.9	Horizontal	PASS
1673.317	-31.72	-13.0	18.7	189.5	Horizontal	PASS
2506.234	-37.37	-13.0	24.4	60.3	Horizontal	PASS
12482.544	-34.41	-13.0	21.4	89.4	Horizontal	PASS

(Plot C.3: EGPRS 850MHz Channel = 190, Test Antenna Horizontal)



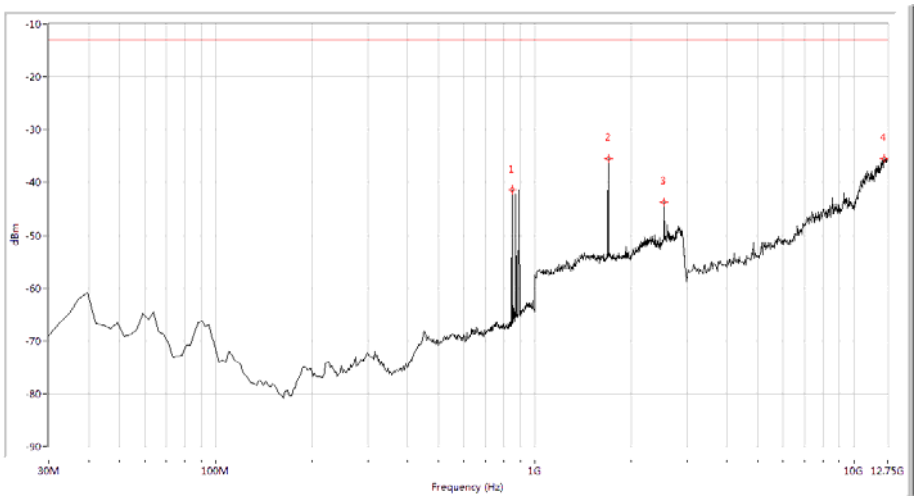
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
835.511	-40.46	-13.0	27.5	360.0	Vertical	PASS
1673.317	-32.59	-13.0	19.6	189.8	Vertical	PASS
2506.234	-37.53	-13.0	24.5	62.1	Vertical	PASS
12458.229	-35.01	-13.0	22.0	360.0	Vertical	PASS

(Plot C.4: EGPRS 850MHz Channel = 190, Test Antenna Vertical)



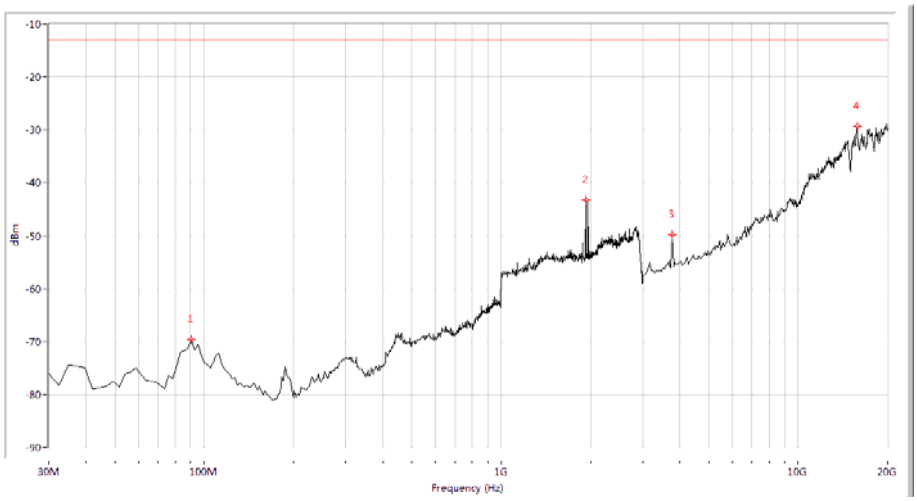
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
891.147	-38.07	-13.0	25.1	238.9	Horizontal	PASS
1698.254	-35.52	-13.0	22.5	185.8	Horizontal	PASS
2541.147	-44.42	-13.0	31.4	72.2	Horizontal	PASS
12506.858	-34.96	-13.0	22.0	142.2	Horizontal	PASS

(Plot C.5: EGPRS 850MHz Channel = 251, Test Antenna Horizontal)



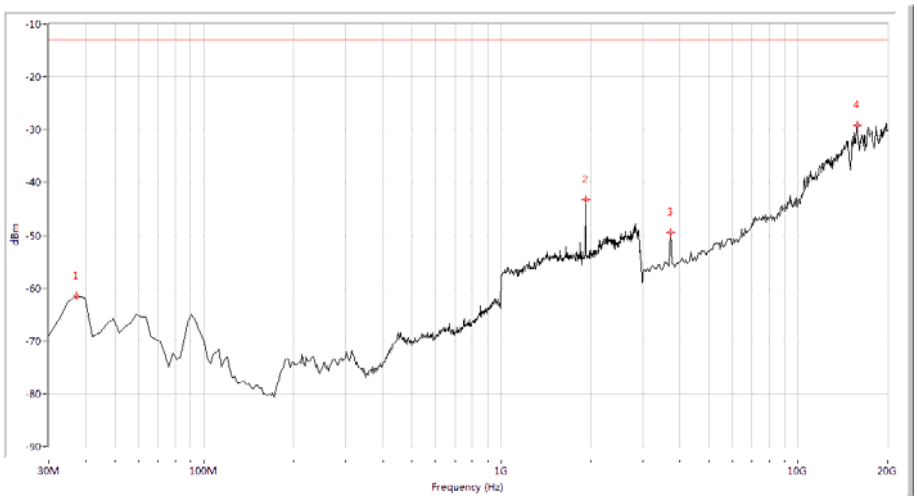
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
847.606	-41.38	-13.0	28.4	184.3	Vertical	PASS
1698.254	-35.44	-13.0	22.4	183.1	Vertical	PASS
2541.147	-43.74	-13.0	30.7	120.6	Vertical	PASS
12482.544	-35.53	-13.0	22.5	203.2	Vertical	PASS

(Plot C.6: EGPRS 850MHz Channel = 251, Test Antenna Vertical)



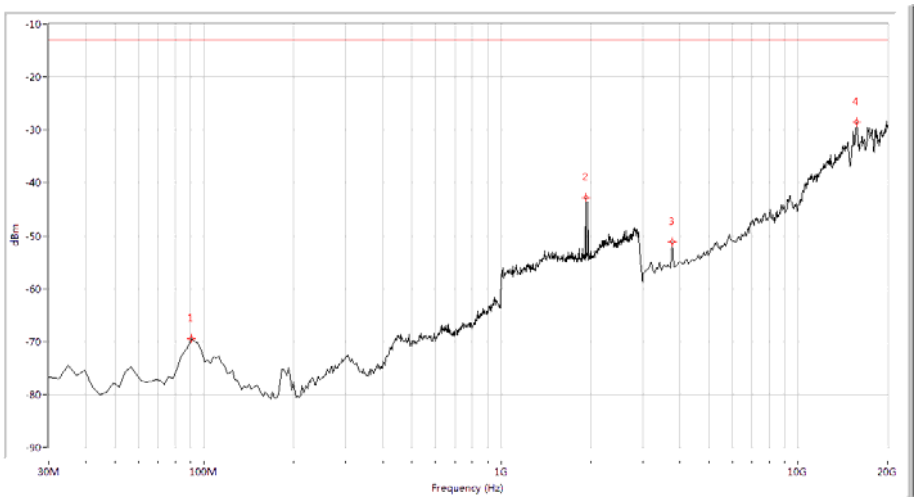
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
90.474	-69.53	-13.0	56.5	21.6	Horizontal	PASS
1927.681	-43.33	-13.0	30.3	58.5	Horizontal	PASS
3763.092	-49.80	-13.0	36.8	260.5	Horizontal	PASS
15802.993	-29.33	-13.0	16.3	155.1	Horizontal	PASS

(Plot D.1: EGPRS 1900MHz Channel = 512, Test Antenna Horizontal)



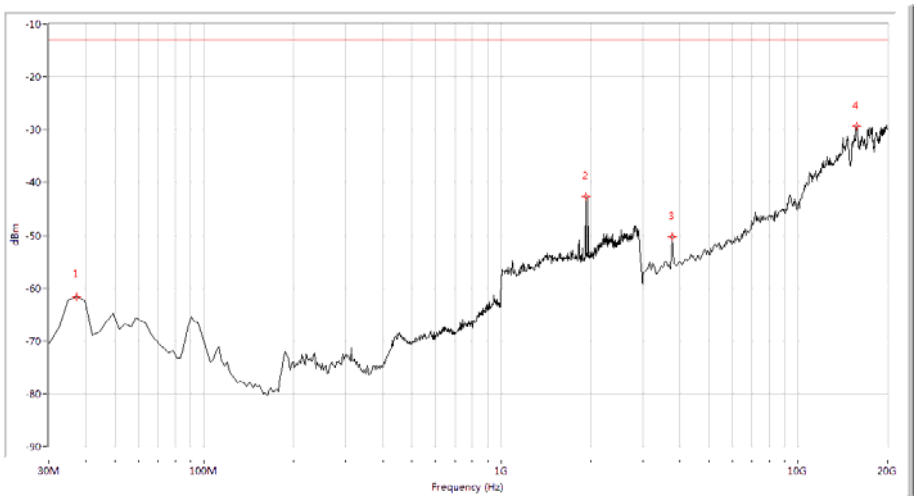
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
37.257	-61.52	-13.0	48.5	198.0	Vertical	PASS
1927.681	-43.29	-13.0	30.3	58.1	Vertical	PASS
3720.698	-49.48	-13.0	36.5	0.0	Vertical	PASS
15802.993	-29.22	-13.0	16.2	136.6	Vertical	PASS

(Plot D.2: EGPRS 1900MHz Channel = 512, Test Antenna Vertical)



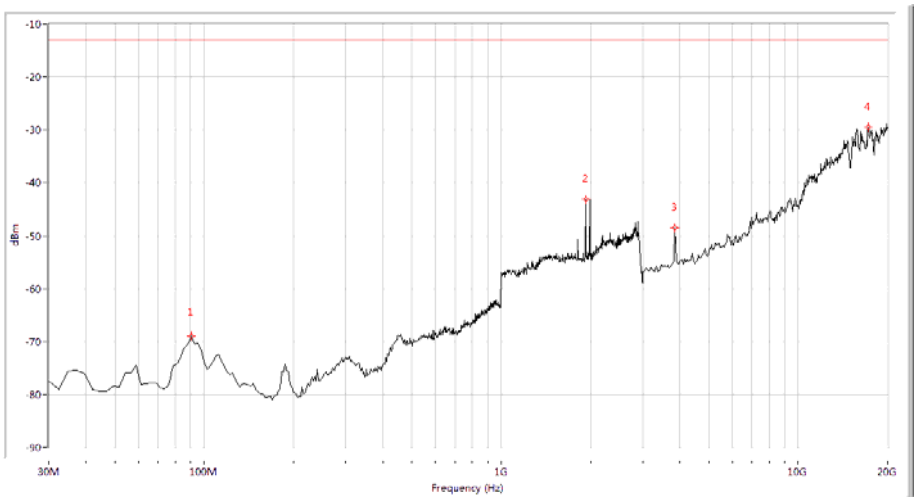
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
90.474	-69.35	-13.0	56.4	41.4	Horizontal	PASS
1927.681	-42.82	-13.0	29.8	56.9	Horizontal	PASS
3763.092	-51.21	-13.0	38.2	167.1	Horizontal	PASS
15760.599	-28.50	-13.0	15.5	116.5	Horizontal	PASS

(Plot D.3: EGPRS 1900MHz Channel = 661, Test Antenna Horizontal)



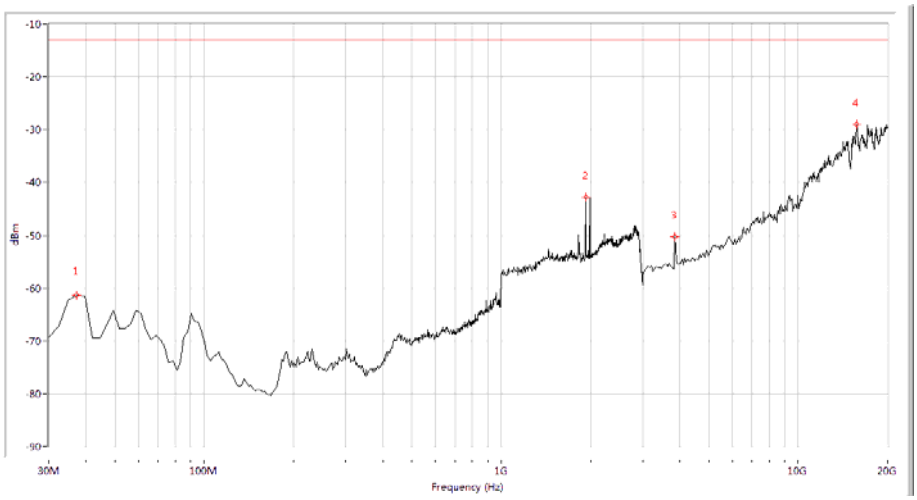
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
37.257	-61.71	-13.0	48.7	212.1	Vertical	PASS
1927.681	-42.65	-13.0	29.7	56.6	Vertical	PASS
3763.092	-50.17	-13.0	37.2	246.7	Vertical	PASS
15760.599	-29.36	-13.0	16.4	358.1	Vertical	PASS

(Plot D.4: EGPRS 1900MHz Channel = 661, Test Antenna Vertical)



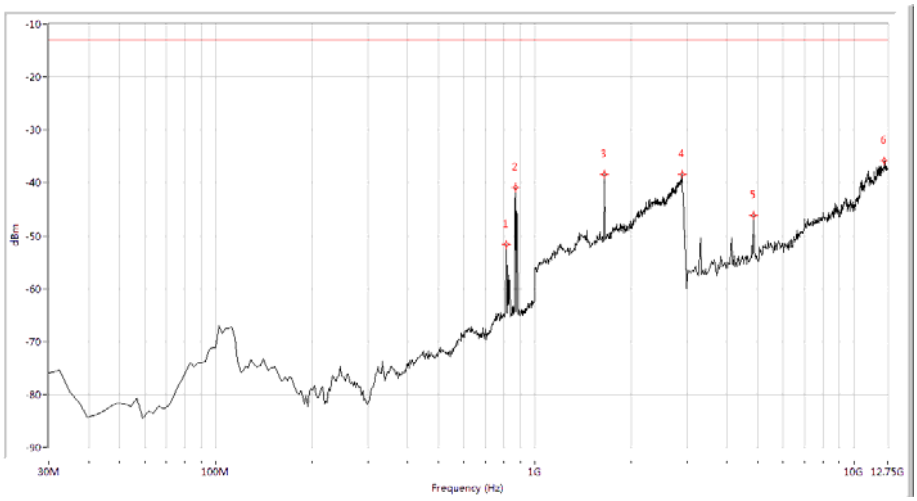
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
90.474	-68.93	-13.0	55.9	51.4	Horizontal	PASS
1927.681	-43.14	-13.0	30.1	59.3	Horizontal	PASS
3847.880	-48.56	-13.0	35.6	208.8	Horizontal	PASS
17201.995	-29.48	-13.0	16.5	37.6	Horizontal	PASS

(Plot D.5: EGPRS 1900MHz Channel = 810, Test Antenna Horizontal)



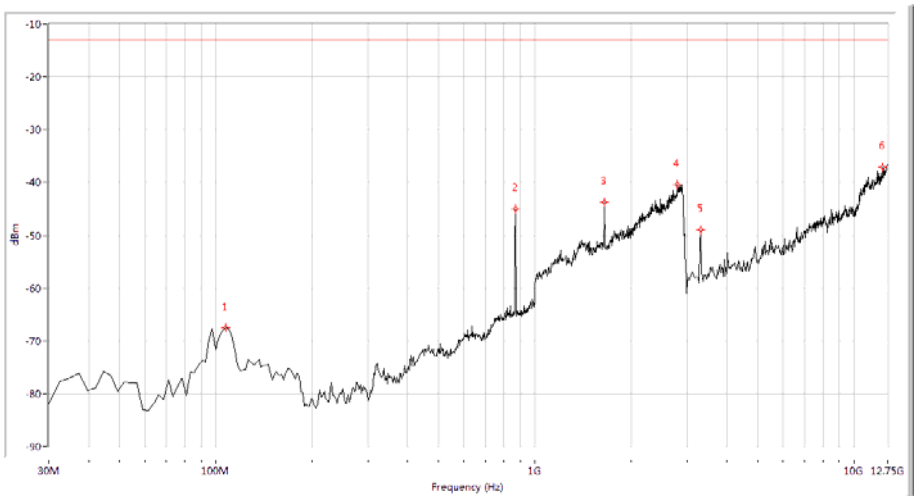
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
37.257	-61.25	-13.0	48.3	16.1	Vertical	PASS
1927.681	-42.78	-13.0	29.8	58.0	Vertical	PASS
3847.880	-50.30	-13.0	37.3	360.0	Vertical	PASS
15760.599	-29.08	-13.0	16.1	177.8	Vertical	PASS

(Plot D.6: EGPRS 1900MHz Channel = 810, Test Antenna Vertical)



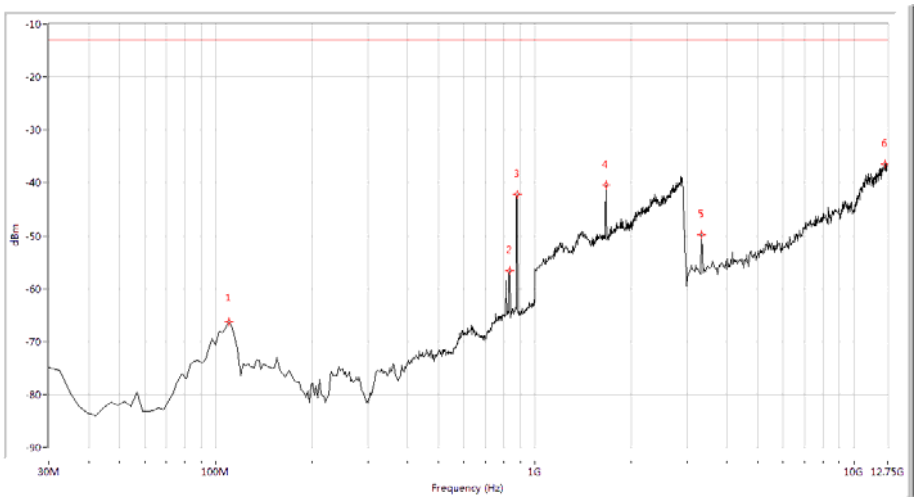
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
816.160	-51.69	-13.0	38.7	207.1	Horizontal	PASS
869.377	-40.95	-13.0	27.9	126.0	Horizontal	PASS
1653.367	-38.33	-13.0	25.3	263.3	Horizontal	PASS
2900.249	-38.38	-13.0	25.4	213.9	Horizontal	PASS
4847.880	-46.10	-13.0	33.1	157.5	Horizontal	PASS
12482.544	-35.84	-13.0	22.8	209.6	Horizontal	PASS

(Plot E.1: WCDMA 850MHz Channel = 4132, Test Antenna Horizontal)



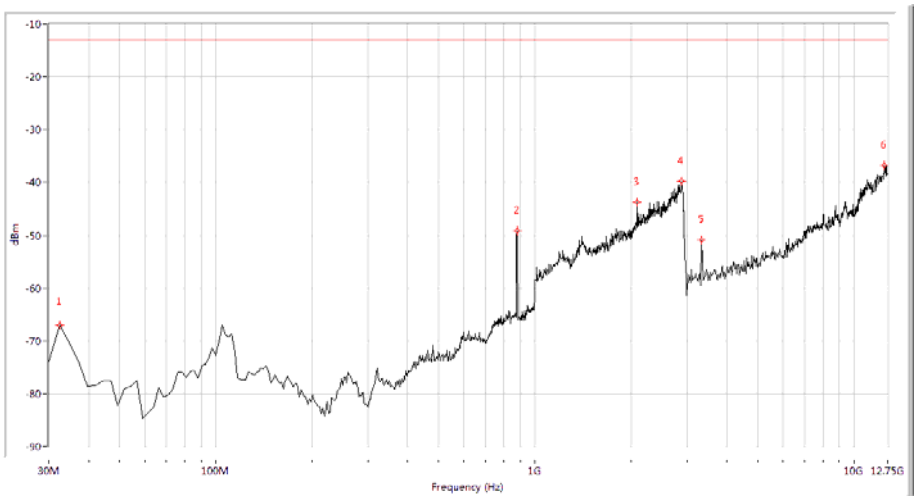
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
107.406	-67.56	-13.0	54.6	352.8	Vertical	PASS
869.377	-44.94	-13.0	31.9	201.0	Vertical	PASS
1653.367	-43.68	-13.0	30.7	194.5	Vertical	PASS
2800.499	-40.38	-13.0	27.4	16.5	Vertical	PASS
3316.085	-49.01	-13.0	36.0	24.3	Vertical	PASS
12312.344	-37.12	-13.0	24.1	3.5	Vertical	PASS

(Plot E.2: WCDMA 850MHz Channel = 4132, Test Antenna Vertical)



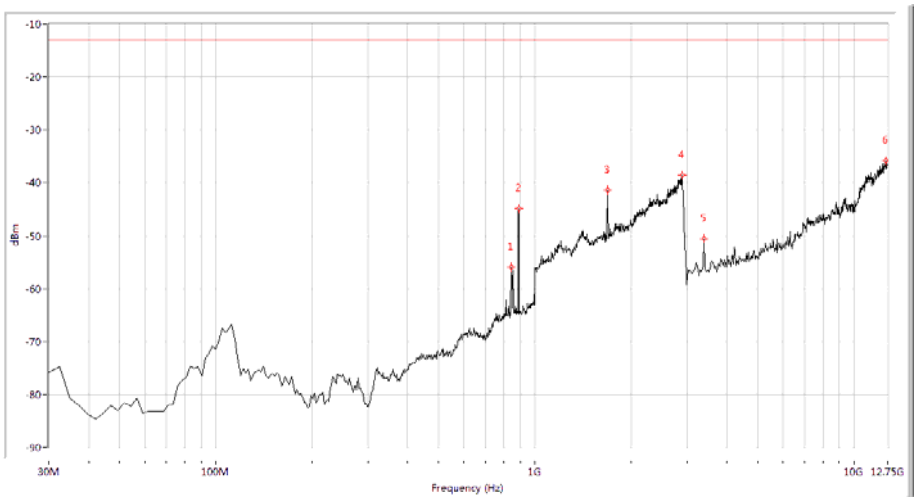
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-66.24	-13.0	53.2	118.1	Horizontal	PASS
835.511	-56.57	-13.0	43.6	8.8	Horizontal	PASS
879.052	-42.12	-13.0	29.1	13.1	Horizontal	PASS
1668.329	-40.46	-13.0	27.5	268.7	Horizontal	PASS
3340.399	-49.84	-13.0	36.8	199.0	Horizontal	PASS
12555.486	-36.52	-13.0	23.5	357.8	Horizontal	PASS

(Plot E.3: WCDMA 850MHz Channel = 4175, Test Antenna Horizontal)



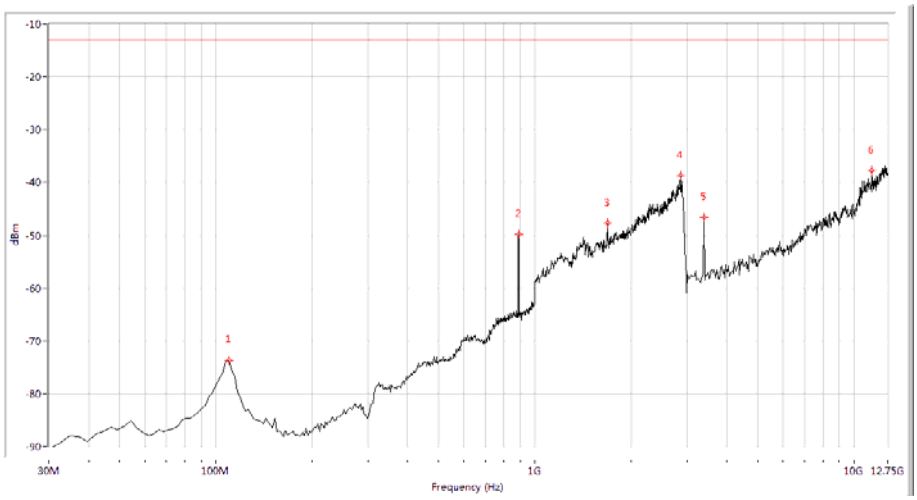
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
32.419	-67.05	-13.0	54.1	207.8	Vertical	PASS
879.052	-49.17	-13.0	36.2	360.0	Vertical	PASS
2097.257	-43.68	-13.0	30.7	160.9	Vertical	PASS
2885.287	-39.70	-13.0	26.7	151.2	Vertical	PASS
3340.399	-50.92	-13.0	37.9	167.5	Vertical	PASS
12433.915	-36.72	-13.0	23.7	270.6	Vertical	PASS

(Plot E.4: WCDMA 850MHz Channel = 4175, Test Antenna Vertical)



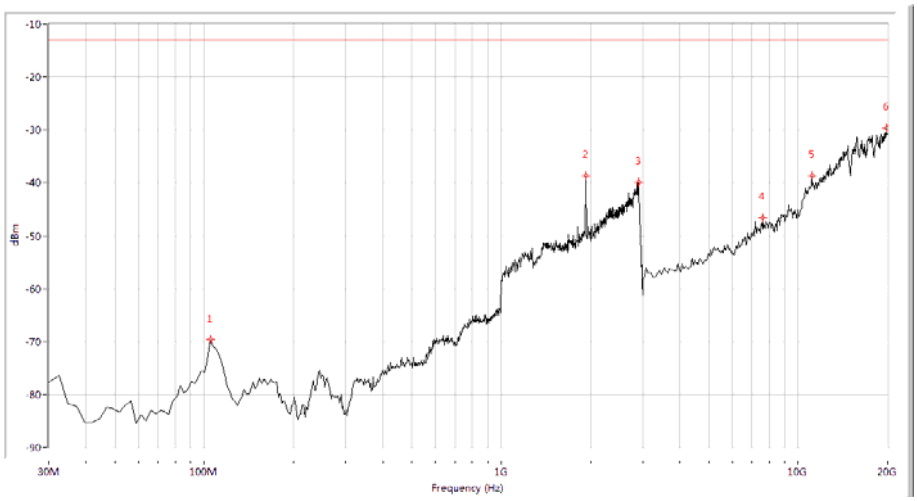
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
842.768	-55.93	-13.0	42.9	189.1	Horizontal	PASS
891.147	-44.78	-13.0	31.8	16.8	Horizontal	PASS
1688.279	-41.44	-13.0	28.4	284.8	Horizontal	PASS
2895.262	-38.44	-13.0	25.4	157.2	Horizontal	PASS
3389.027	-50.63	-13.0	37.6	178.6	Horizontal	PASS
12604.115	-35.76	-13.0	22.8	3.4	Horizontal	PASS

(Plot E.5: WCDMA 850MHz Channel = 4233, Test Antenna Horizontal)



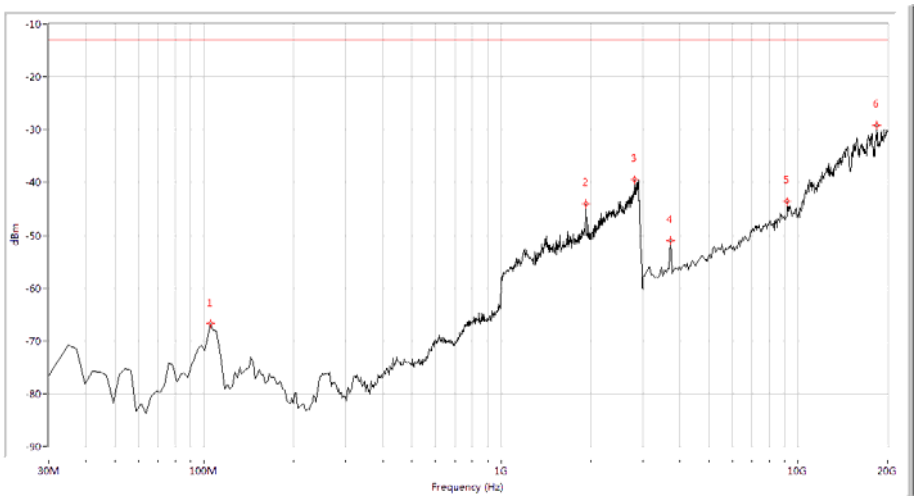
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-73.61	-13.0	60.6	169.4	Vertical	PASS
891.147	-49.77	-13.0	36.8	263.8	Vertical	PASS
1688.279	-47.66	-13.0	34.7	152.0	Vertical	PASS
2865.337	-38.74	-13.0	25.7	0.8	Vertical	PASS
3389.027	-46.59	-13.0	33.6	21.4	Vertical	PASS
11388.404	-37.73	-13.0	24.7	86.4	Vertical	PASS

(Plot E.6: WCDMA 850MHz Channel = 4233, Test Antenna Vertical)



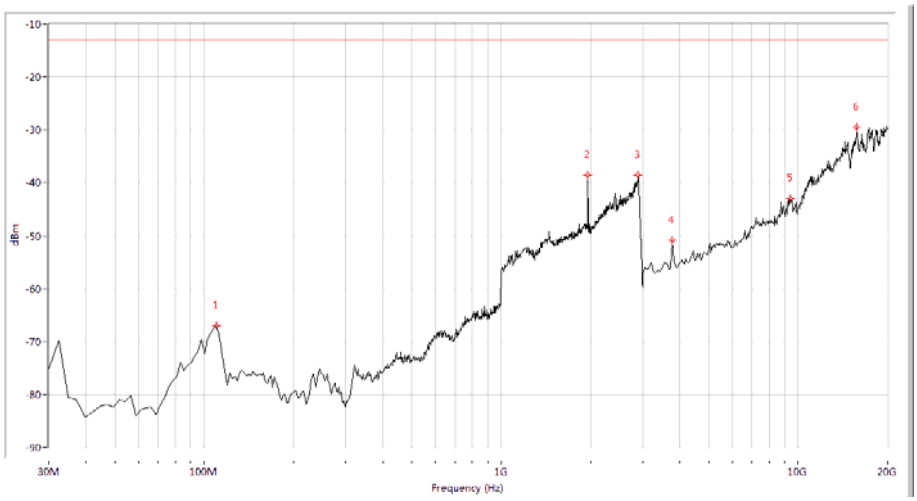
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
104.988	-69.54	-13.0	56.5	167.5	Horizontal	PASS
1927.681	-38.60	-13.0	25.6	65.8	Horizontal	PASS
2900.249	-40.01	-13.0	27.0	256.8	Horizontal	PASS
7620.948	-46.63	-13.0	33.6	139.4	Horizontal	PASS
11139.651	-38.61	-13.0	25.6	54.6	Horizontal	PASS
19830.424	-29.65	-13.0	16.6	28.2	Horizontal	PASS

(Plot F.1: WCDMA 1900MHz Channel = 9262, Test Antenna Horizontal)



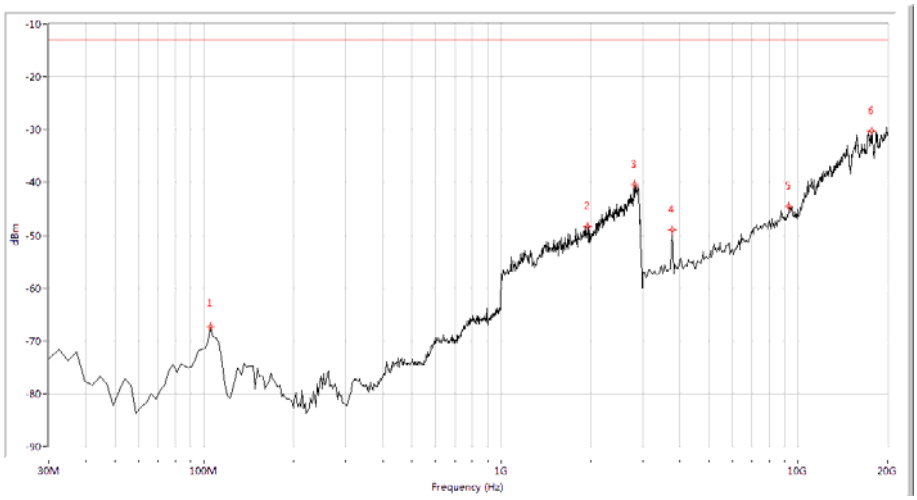
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
104.988	-66.64	-13.0	53.6	63.8	Vertical	PASS
1932.668	-44.11	-13.0	31.1	48.5	Vertical	PASS
2820.449	-39.45	-13.0	26.5	195.4	Vertical	PASS
3720.698	-51.11	-13.0	38.1	246.7	Vertical	PASS
9189.526	-43.66	-13.0	30.7	0.0	Vertical	PASS
18431.421	-29.23	-13.0	16.2	10.9	Vertical	PASS

(Plot F.2: WCDMA 1900MHz Channel = 9262, Test Antenna Vertical)



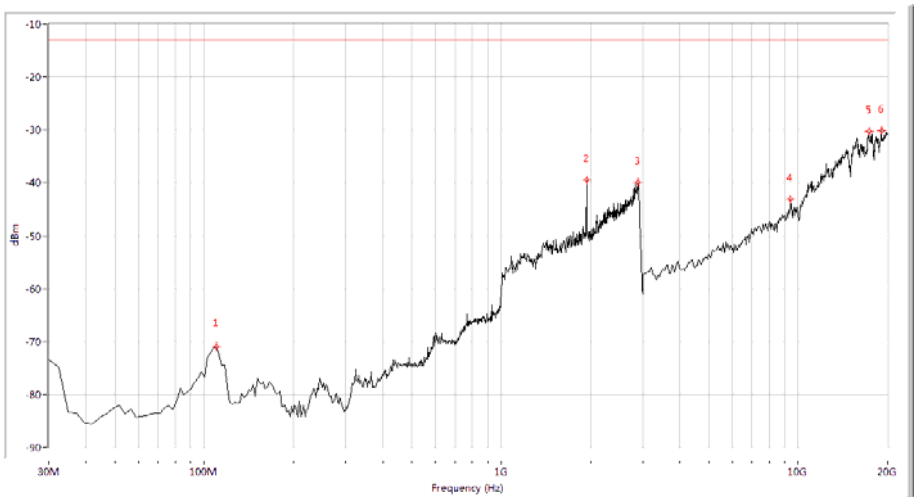
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-66.97	-13.0	54.0	266.2	Horizontal	PASS
1957.606	-38.48	-13.0	25.5	15.7	Horizontal	PASS
2895.262	-38.54	-13.0	25.5	190.1	Horizontal	PASS
3763.092	-50.93	-13.0	37.9	288.9	Horizontal	PASS
9401.496	-43.00	-13.0	30.0	256.9	Horizontal	PASS
15760.599	-29.53	-13.0	16.5	288.9	Horizontal	PASS

(Plot F.3: WCDMA 1900MHz Channel = 9400, Test Antenna Horizontal)



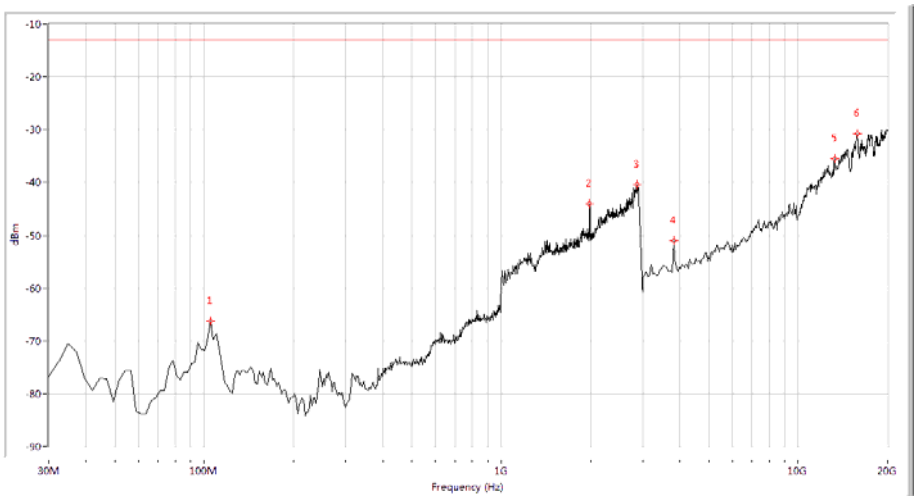
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
104.988	-67.38	-13.0	54.4	199.4	Vertical	PASS
1957.606	-48.34	-13.0	35.3	341.7	Vertical	PASS
2805.486	-40.46	-13.0	27.5	166.1	Vertical	PASS
3763.092	-48.97	-13.0	36.0	75.7	Vertical	PASS
9316.708	-44.55	-13.0	31.5	71.9	Vertical	PASS
17625.935	-30.26	-13.0	17.3	355.6	Vertical	PASS

(Plot F.4: WCDMA 1900MHz Channel = 9400, Test Antenna Vertical)



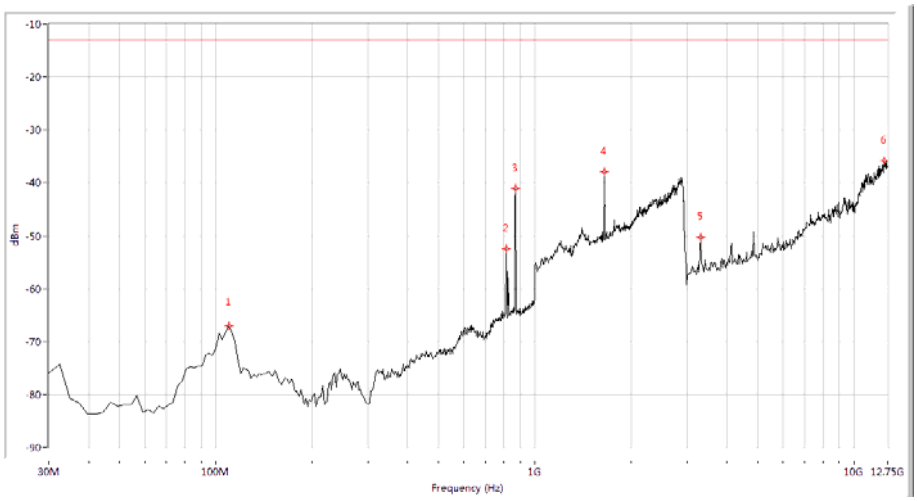
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-71.00	-13.0	58.0	69.4	Horizontal	PASS
1937.656	-39.46	-13.0	26.5	153.4	Horizontal	PASS
2890.274	-40.01	-13.0	27.0	52.8	Horizontal	PASS
9443.890	-43.07	-13.0	30.1	305.7	Horizontal	PASS
17329.177	-30.22	-13.0	17.2	268.9	Horizontal	PASS
19067.332	-30.06	-13.0	17.1	196.4	Horizontal	PASS

(Plot F.5: WCDMA 1900MHz Channel = 9538, Test Antenna Horizontal)



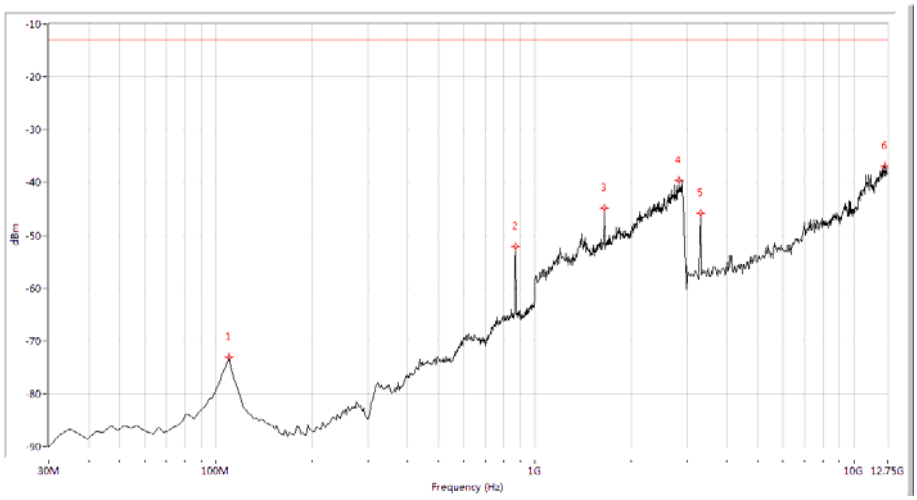
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
104.988	-66.18	-13.0	53.2	132.4	Vertical	PASS
1982.544	-44.13	-13.0	31.1	70.0	Vertical	PASS
2875.312	-40.39	-13.0	27.4	123.7	Vertical	PASS
3805.486	-50.97	-13.0	38.0	0.5	Vertical	PASS
13259.352	-35.52	-13.0	22.5	146.5	Vertical	PASS
15802.993	-30.81	-13.0	17.8	16.1	Vertical	PASS

(Plot F.6: WCDMA 1900MHz Channel = 9538, Test Antenna Vertical)



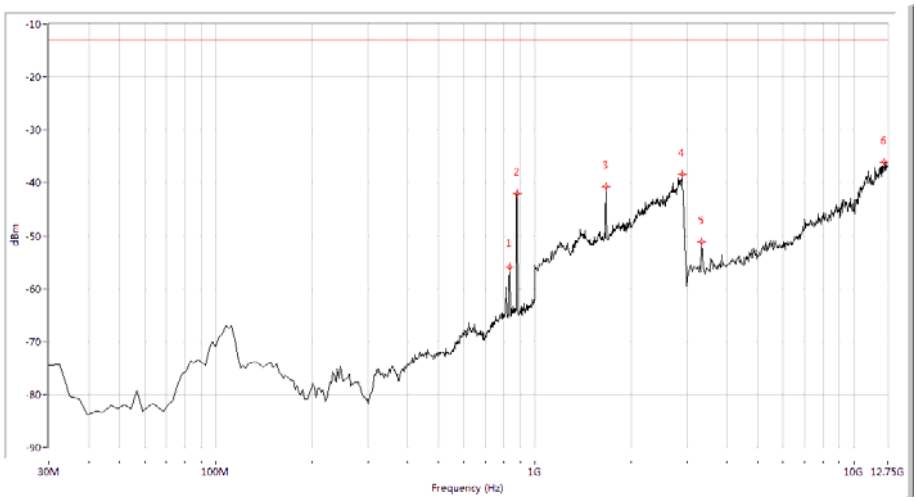
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-67.04	-13.0	54.0	72.3	Horizontal	PASS
816.160	-52.41	-13.0	39.4	-0.0	Horizontal	PASS
869.377	-41.01	-13.0	28.0	354.3	Horizontal	PASS
1653.367	-37.95	-13.0	25.0	257.6	Horizontal	PASS
3316.085	-50.20	-13.0	37.2	195.3	Horizontal	PASS
12433.915	-35.83	-13.0	22.8	274.5	Horizontal	PASS

(Plot G.1: HSDPA 850MHz Channel = 4132, Test Antenna Horizontal)



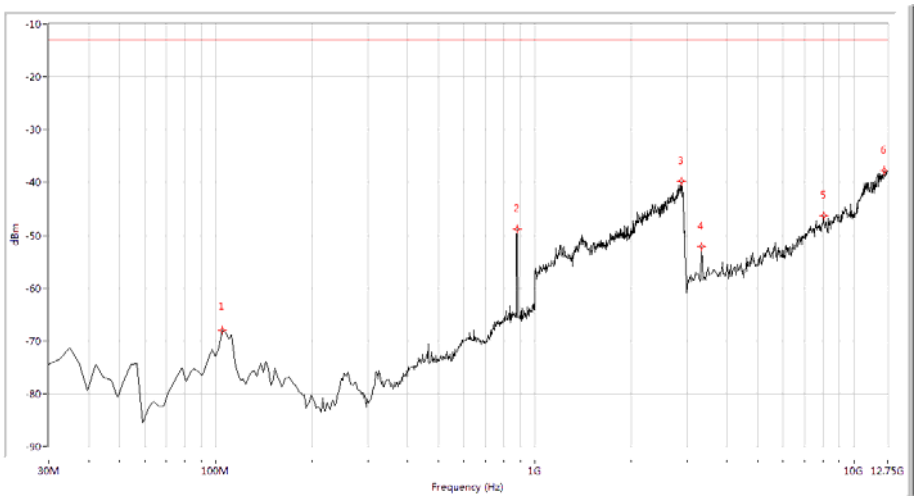
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-73.06	-13.0	60.1	36.4	Vertical	PASS
871.796	-52.19	-13.0	39.2	52.8	Vertical	PASS
1653.367	-44.90	-13.0	31.9	164.2	Vertical	PASS
2830.424	-39.60	-13.0	26.6	269.9	Vertical	PASS
3316.085	-45.74	-13.0	32.7	0.2	Vertical	PASS
12531.172	-36.97	-13.0	24.0	248.6	Vertical	PASS

(Plot G.2: HSDPA 850MHz Channel = 4132, Test Antenna Vertical)



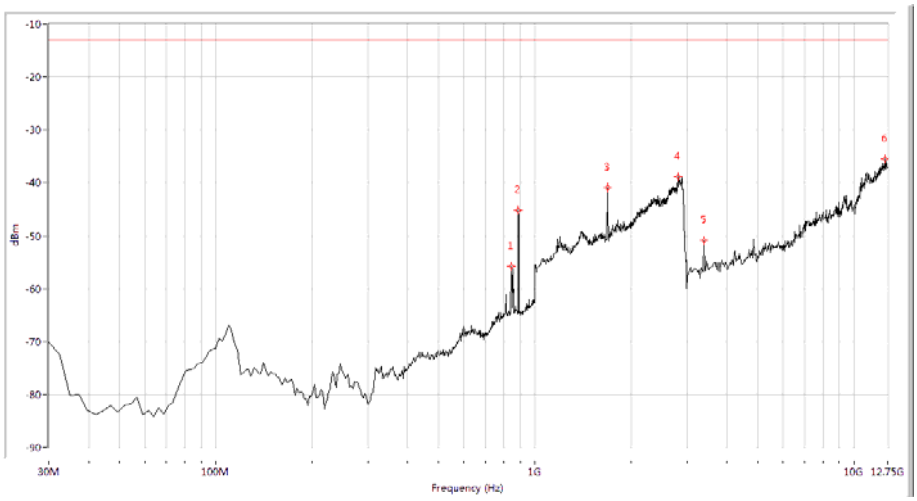
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
835.511	-55.91	-13.0	42.9	187.5	Horizontal	PASS
879.052	-41.95	-13.0	29.0	21.1	Horizontal	PASS
1668.329	-40.77	-13.0	27.8	263.1	Horizontal	PASS
2900.249	-38.33	-13.0	25.3	86.9	Horizontal	PASS
3340.399	-51.12	-13.0	38.1	195.6	Horizontal	PASS
12482.544	-36.15	-13.0	23.1	195.6	Horizontal	PASS

(Plot G.3: HSDPA 850MHz Channel = 4175, Test Antenna Horizontal)



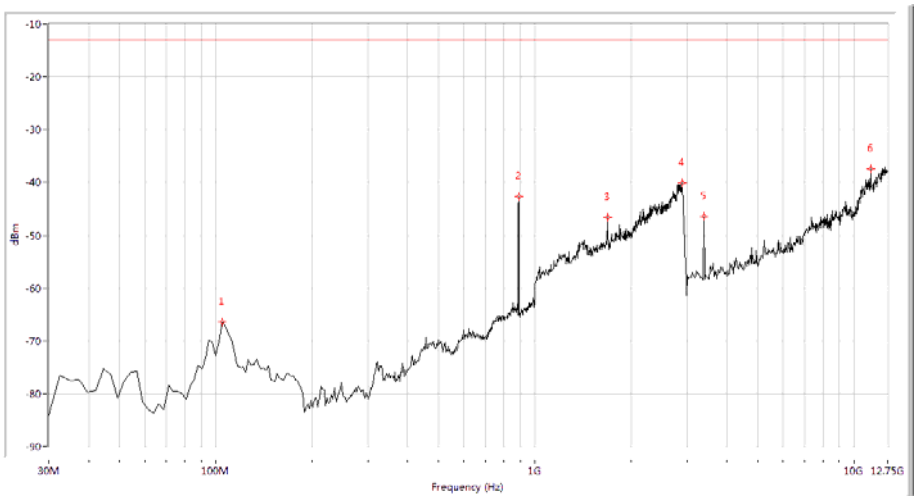
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
104.988	-67.94	-13.0	54.9	107.2	Vertical	PASS
879.052	-48.74	-13.0	35.7	46.9	Vertical	PASS
2885.287	-39.82	-13.0	26.8	194.9	Vertical	PASS
3340.399	-52.07	-13.0	39.1	102.0	Vertical	PASS
8033.042	-46.29	-13.0	33.3	138.6	Vertical	PASS
12409.601	-37.72	-13.0	24.7	334.8	Vertical	PASS

(Plot G.4: HSDPA 850MHz Channel = 4175, Test Antenna Vertical)



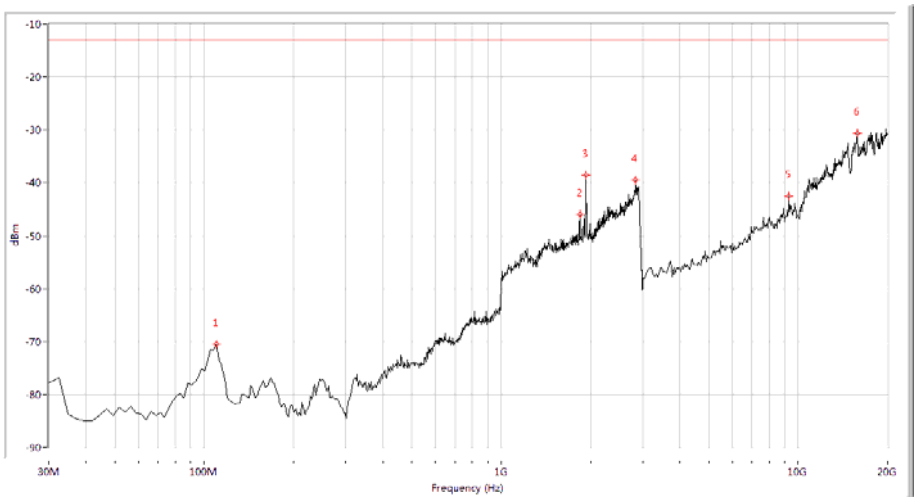
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
845.187	-55.84	-13.0	42.8	210.7	Horizontal	PASS
888.728	-45.12	-13.0	32.1	263.2	Horizontal	PASS
1688.279	-40.90	-13.0	27.9	256.9	Horizontal	PASS
2820.449	-38.76	-13.0	25.8	263.6	Horizontal	PASS
3389.027	-50.95	-13.0	38.0	219.3	Horizontal	PASS
12555.486	-35.51	-13.0	22.5	17.7	Horizontal	PASS

(Plot G.5: HSDPA 850MHz Channel = 4233, Test Antenna Horizontal)



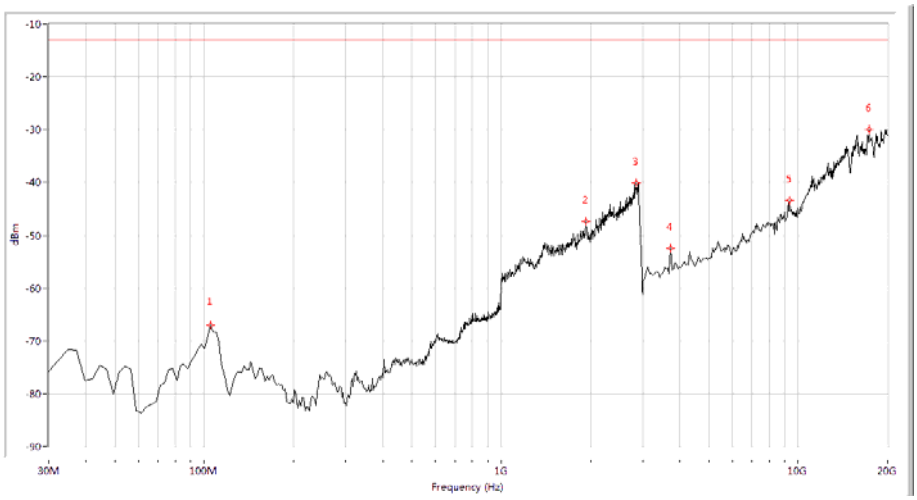
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
104.988	-66.38	-13.0	53.4	169.4	Vertical	PASS
891.147	-42.61	-13.0	29.6	65.4	Vertical	PASS
1688.279	-46.60	-13.0	33.6	89.2	Vertical	PASS
2900.249	-40.10	-13.0	27.1	136.8	Vertical	PASS
3389.027	-46.50	-13.0	33.5	91.1	Vertical	PASS
11266.833	-37.48	-13.0	24.5	0.0	Vertical	PASS

(Plot G.6: HSDPA 850MHz Channel = 4233, Test Antenna Vertical)



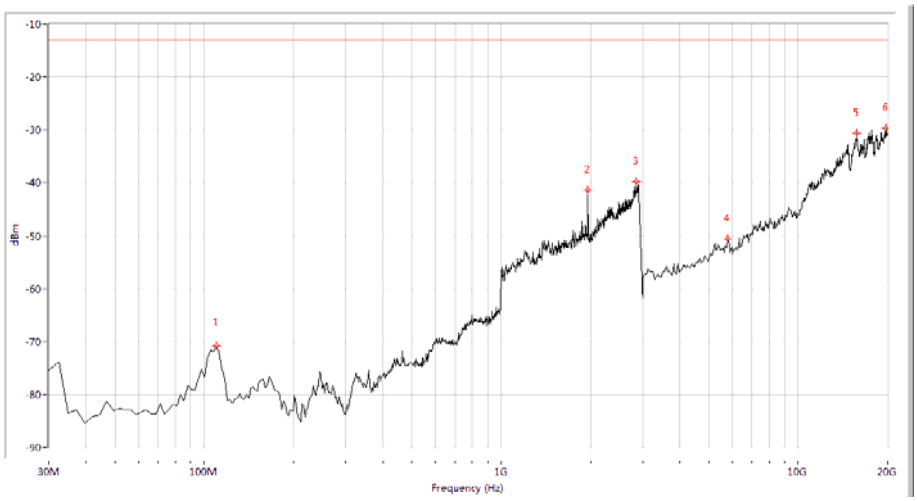
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.52	-13.0	57.5	63.4	Horizontal	PASS
1837.905	-45.96	-13.0	33.0	195.8	Horizontal	PASS
1932.668	-38.52	-13.0	25.5	264.7	Horizontal	PASS
2835.411	-39.40	-13.0	26.4	23.5	Horizontal	PASS
9316.708	-42.48	-13.0	29.5	269.5	Horizontal	PASS
15802.993	-30.53	-13.0	17.5	86.4	Horizontal	PASS

(Plot H.1: HSDPA 1900 MHz Channel = 9262, Test Antenna Horizontal)



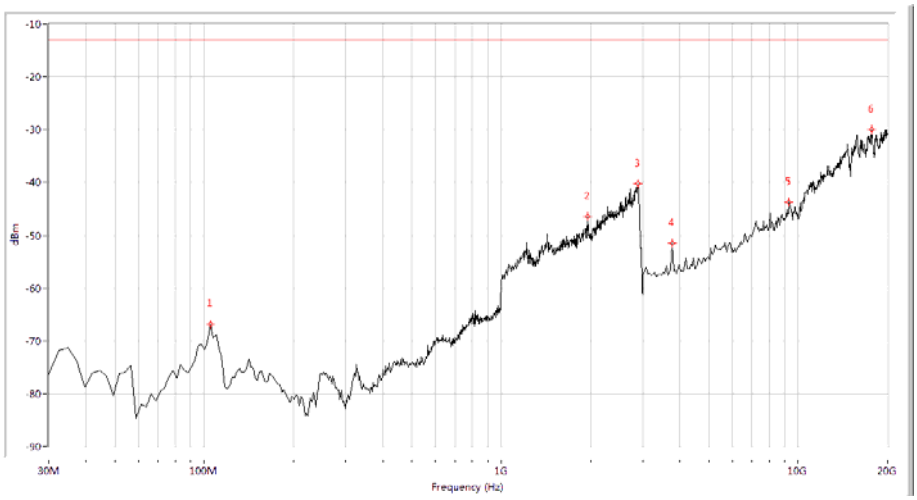
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
104.988	-66.98	-13.0	54.0	94.8	Vertical	PASS
1932.668	-47.46	-13.0	34.5	197.9	Vertical	PASS
2850.374	-40.14	-13.0	27.1	326.7	Vertical	PASS
3720.698	-52.53	-13.0	39.5	152.8	Vertical	PASS
9359.102	-43.38	-13.0	30.4	247.1	Vertical	PASS
17286.783	-29.92	-13.0	16.9	0.5	Vertical	PASS

(Plot H.2: HSDPA 1900 MHz Channel = 9262, Test Antenna Vertical)



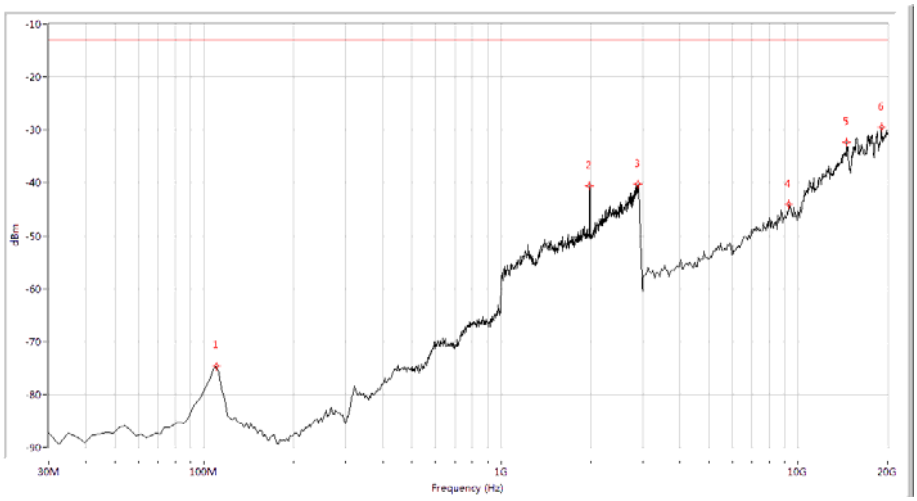
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.81	-13.0	57.8	345.8	Horizontal	PASS
1957.606	-41.33	-13.0	28.3	95.6	Horizontal	PASS
2850.374	-39.83	-13.0	26.8	264.5	Horizontal	PASS
5798.005	-50.59	-13.0	37.6	158.3	Horizontal	PASS
15760.599	-30.61	-13.0	17.6	67.4	Horizontal	PASS
19788.030	-29.70	-13.0	16.7	57.6	Horizontal	PASS

(PlotH.3:HSDPA 1900 MHz Channel = 9400, Test Antenna Horizontal)



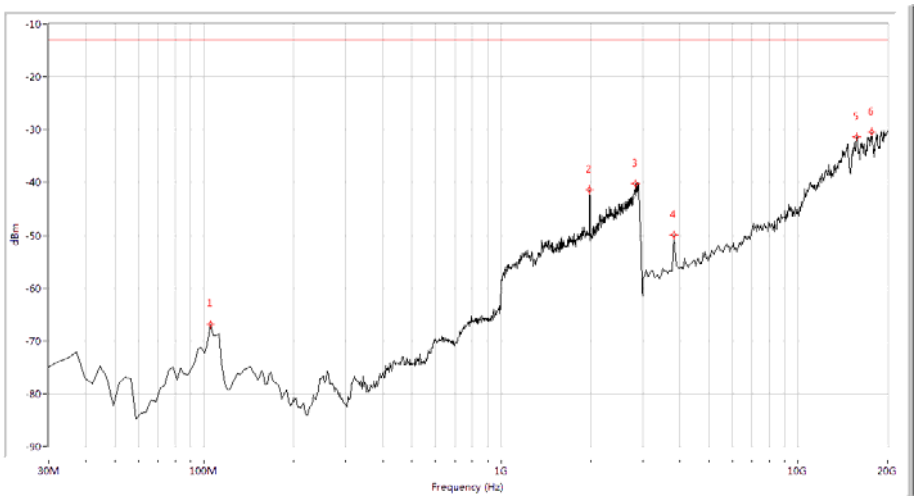
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
104.988	-66.83	-13.0	53.8	91.4	Vertical	PASS
1957.606	-46.40	-13.0	33.4	-0.0	Vertical	PASS
2880.299	-40.19	-13.0	27.2	191.5	Vertical	PASS
3763.092	-51.49	-13.0	38.5	360.0	Vertical	PASS
9316.708	-43.76	-13.0	30.8	202.2	Vertical	PASS
17710.723	-30.01	-13.0	17.0	306.0	Vertical	PASS

(Plot H.4: HSDPA 1900 MHz Channel = 9400, Test Antenna Vertical)



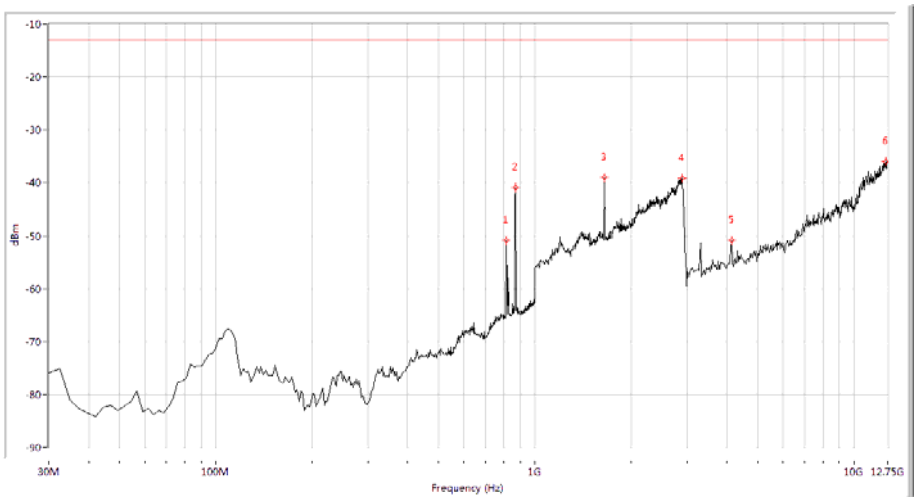
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-74.65	-13.0	61.7	342.1	Horizontal	PASS
1982.544	-40.62	-13.0	27.6	268.4	Horizontal	PASS
2895.262	-40.21	-13.0	27.2	173.4	Horizontal	PASS
9316.708	-44.06	-13.0	31.1	52.8	Horizontal	PASS
14573.566	-32.37	-13.0	19.4	95.6	Horizontal	PASS
19067.332	-29.42	-13.0	16.4	111.0	Horizontal	PASS

(Plot H.5: HSDPA 1900 MHz Channel = 9538, Test Antenna Horizontal)



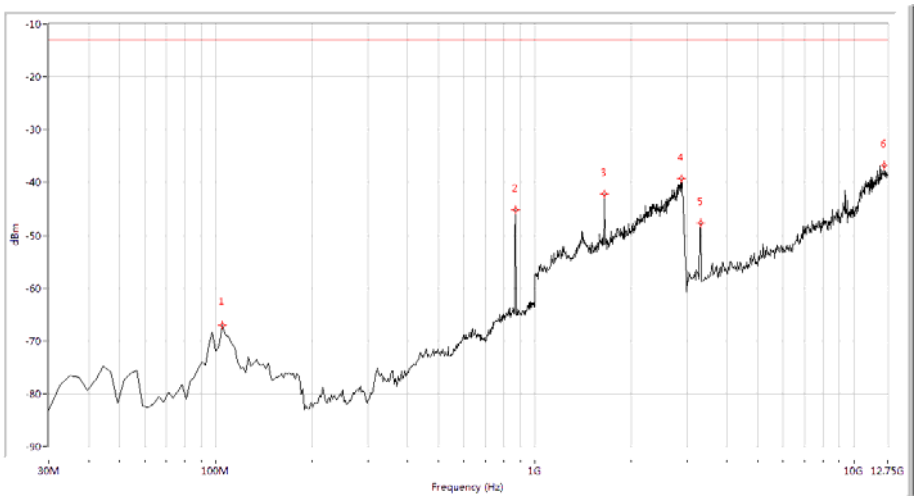
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
104.988	-66.92	-13.0	53.9	4.2	Vertical	PASS
1982.544	-41.42	-13.0	28.4	38.6	Vertical	PASS
2830.424	-40.23	-13.0	27.2	258.5	Vertical	PASS
3805.486	-49.87	-13.0	36.9	359.8	Vertical	PASS
15760.599	-31.44	-13.0	18.4	235.3	Vertical	PASS
17710.723	-30.43	-13.0	17.4	250.5	Vertical	PASS

(Plot H.6: HSDPA 1900 MHz Channel = 9538, Test Antenna Vertical)



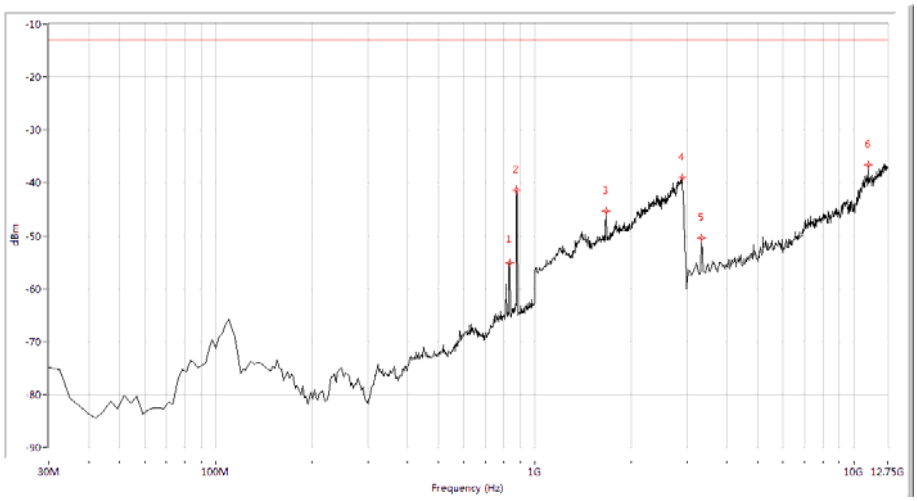
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
816.160	-50.81	-13.0	37.8	196.8	Horizontal	PASS
869.377	-40.86	-13.0	27.9	29.5	Horizontal	PASS
1648.379	-39.05	-13.0	26.1	269.2	Horizontal	PASS
2895.262	-39.20	-13.0	26.2	73.1	Horizontal	PASS
4142.768	-50.83	-13.0	37.8	36.5	Horizontal	PASS
12579.800	-35.92	-13.0	22.9	48.4	Horizontal	PASS

(Plot I.1: HSUPA 850MHz Channel = 4132, Test Antenna Horizontal)



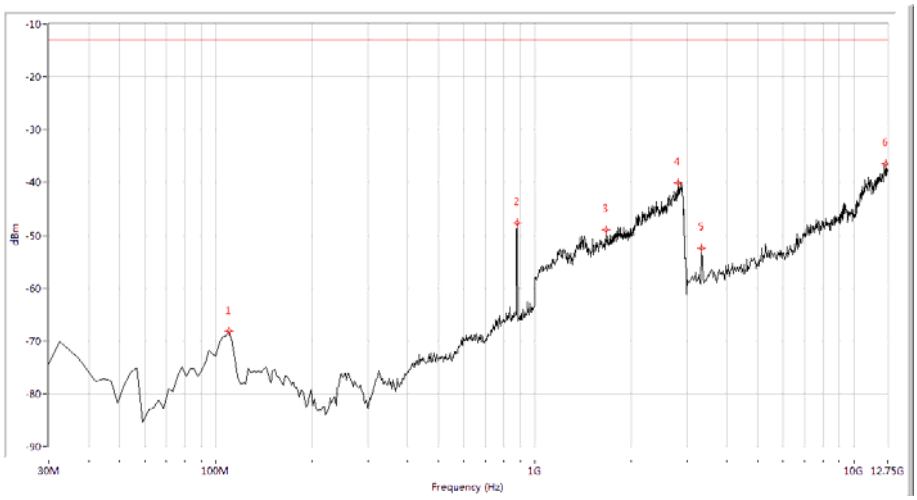
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
104.988	-66.96	-13.0	54.0	321.5	Vertical	PASS
869.377	-45.18	-13.0	32.2	164.7	Vertical	PASS
1653.367	-42.20	-13.0	29.2	30.4	Vertical	PASS
2875.312	-39.35	-13.0	26.3	125.4	Vertical	PASS
3316.085	-47.70	-13.0	34.7	97.6	Vertical	PASS
12433.915	-36.75	-13.0	23.7	20.0	Vertical	PASS

(Plot I.2: HSUPA 850 MHz Channel = 4132, Test Antenna Vertical)



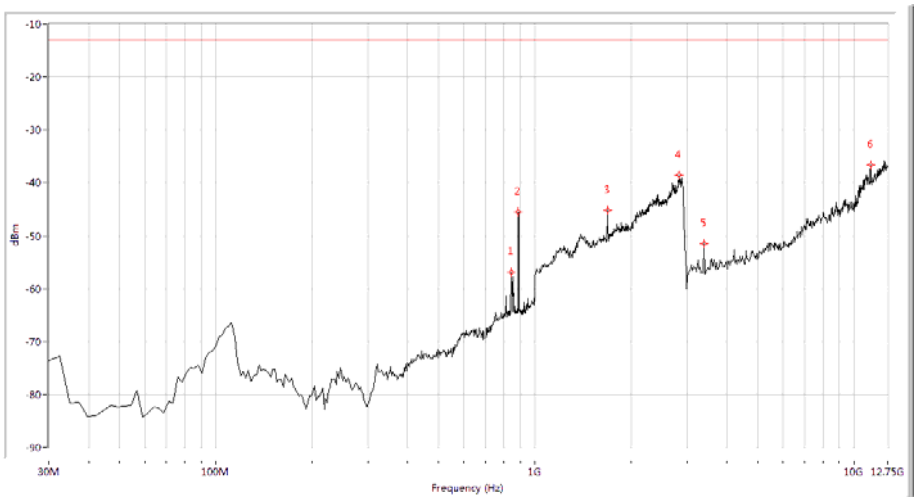
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
833.092	-55.07	-13.0	42.1	197.7	Horizontal	PASS
876.633	-41.31	-13.0	28.3	269.0	Horizontal	PASS
1668.329	-45.37	-13.0	32.4	253.9	Horizontal	PASS
2890.274	-38.96	-13.0	26.0	3.0	Horizontal	PASS
3340.399	-50.35	-13.0	37.4	222.1	Horizontal	PASS
11096.633	-36.59	-13.0	23.6	216.8	Horizontal	PASS

(Plot I.3: HSUPA 850MHz Channel = 4175, Test Antenna Horizontal)



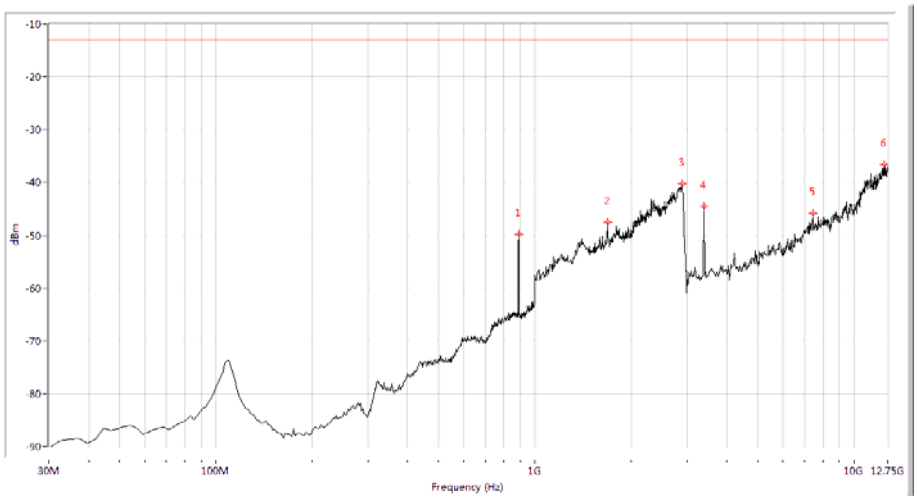
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-68.19	-13.0	55.2	318.4	Vertical	PASS
879.052	-47.75	-13.0	34.8	96.7	Vertical	PASS
1668.329	-49.02	-13.0	36.0	182.0	Vertical	PASS
2815.461	-40.08	-13.0	27.1	24.7	Vertical	PASS
3340.399	-52.48	-13.0	39.5	95.6	Vertical	PASS
12579.800	-36.39	-13.0	23.4	121.0	Vertical	PASS

(Plot I.4: HSUPA 850MHz Channel = 4175, Test Antenna Vertical)



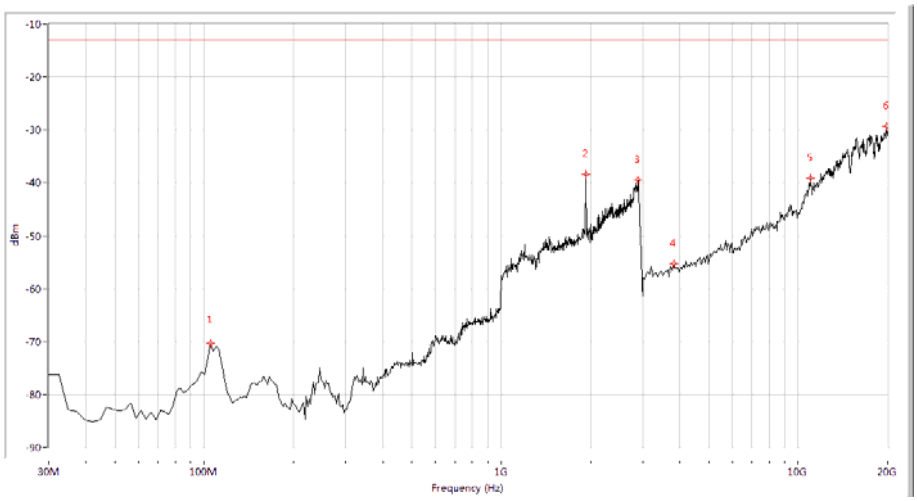
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
845.187	-56.85	-13.0	43.8	2.7	Horizontal	PASS
888.728	-45.46	-13.0	32.5	105.1	Horizontal	PASS
1688.279	-45.21	-13.0	32.2	278.5	Horizontal	PASS
2835.411	-38.48	-13.0	25.5	164.4	Horizontal	PASS
3389.027	-51.56	-13.0	38.6	198.5	Horizontal	PASS
11266.833	-36.67	-13.0	23.7	266.6	Horizontal	PASS

(Plot I.5: HSUPA 850MHz Channel = 4233, Test Antenna Horizontal)



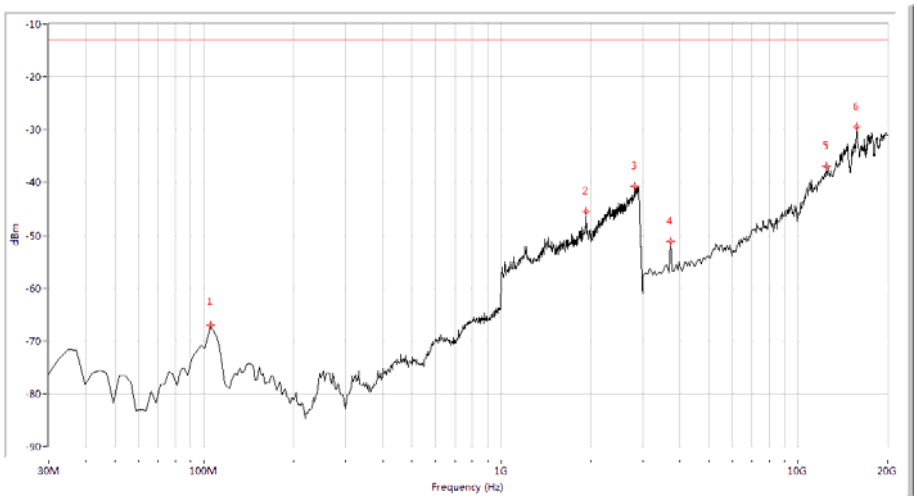
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
891.147	-49.71	-13.0	36.7	69.5	Vertical	PASS
1688.279	-47.57	-13.0	34.6	168.5	Vertical	PASS
2890.274	-40.28	-13.0	27.3	52.3	Vertical	PASS
3389.027	-44.52	-13.0	31.5	169.9	Vertical	PASS
7425.187	-45.82	-13.0	32.8	0.0	Vertical	PASS
12409.601	-36.59	-13.0	23.6	360.0	Vertical	PASS

(Plot I.6: HSUPA 850MHz Channel = 4233, Test Antenna Vertical)



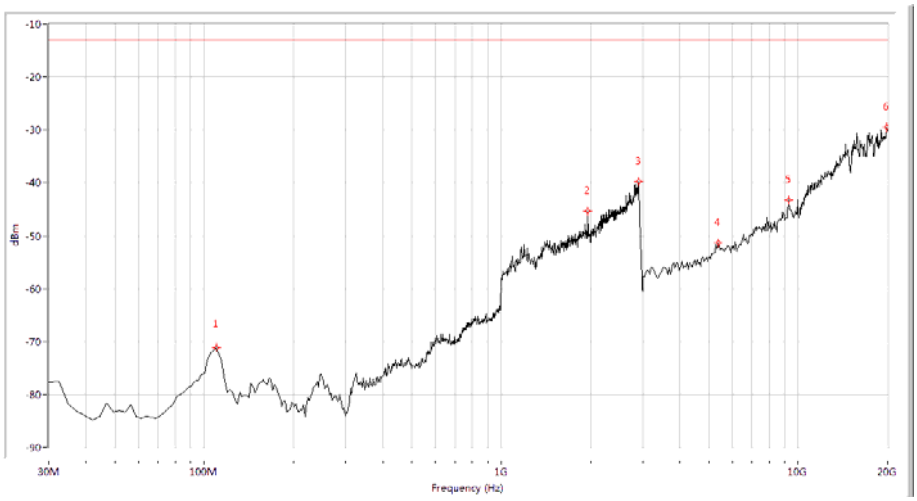
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
104.988	-70.33	-13.0	57.3	95.7	Horizontal	PASS
1927.681	-38.31	-13.0	25.3	48.3	Horizontal	PASS
2890.274	-39.45	-13.0	26.5	164.8	Horizontal	PASS
3805.486	-55.24	-13.0	42.2	105.6	Horizontal	PASS
10970.075	-39.10	-13.0	26.1	42.9	Horizontal	PASS
19915.212	-29.40	-13.0	16.4	254.3	Horizontal	PASS

(Plot J.1: HSUPA 1900 MHz Channel = 9262, Test Antenna Horizontal)



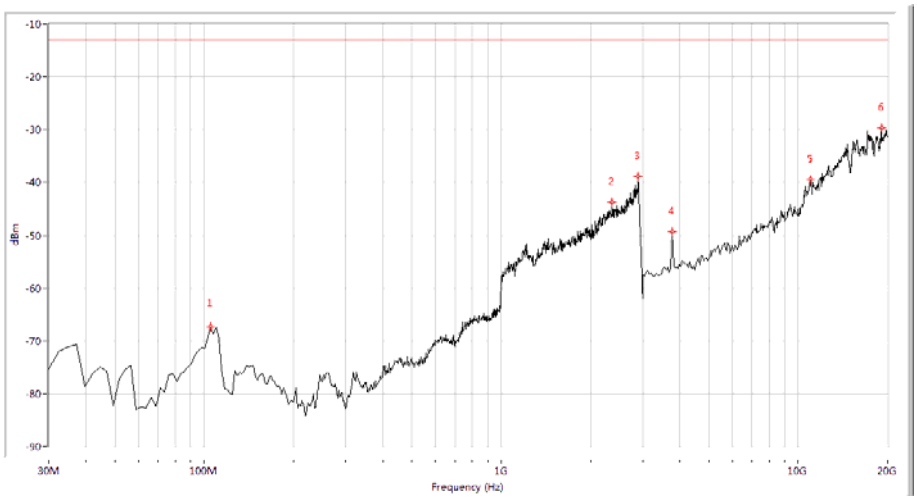
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
104.988	-66.97	-13.0	54.0	349.7	Vertical	PASS
1932.668	-45.55	-13.0	32.5	152.8	Vertical	PASS
2810.474	-40.74	-13.0	27.7	84.2	Vertical	PASS
3720.698	-51.14	-13.0	38.1	63.9	Vertical	PASS
12411.471	-36.85	-13.0	23.9	94.2	Vertical	PASS
15760.599	-29.56	-13.0	16.6	147.5	Vertical	PASS

(Plot J.2: HSUPA 1900 MHz Channel = 9262, Test Antenna Vertical)



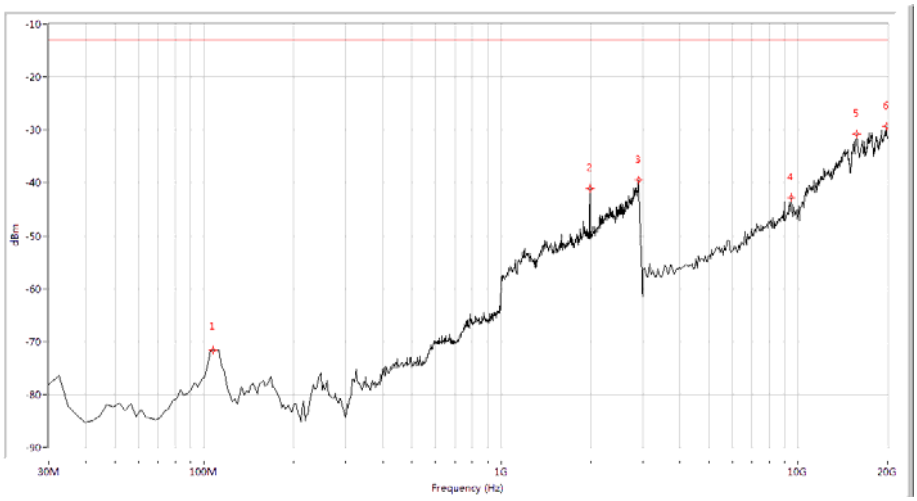
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-71.08	-13.0	58.1	346.5	Horizontal	PASS
1957.606	-45.30	-13.0	32.3	258.7	Horizontal	PASS
2900.249	-39.83	-13.0	26.8	95.8	Horizontal	PASS
5374.065	-51.30	-13.0	38.3	156.4	Horizontal	PASS
9316.708	-43.32	-13.0	30.3	263.5	Horizontal	PASS
19872.818	-29.54	-13.0	16.5	185.3	Horizontal	PASS

(Plot J.3: HSUPA 1900 MHz Channel = 9400, Test Antenna Horizontal)



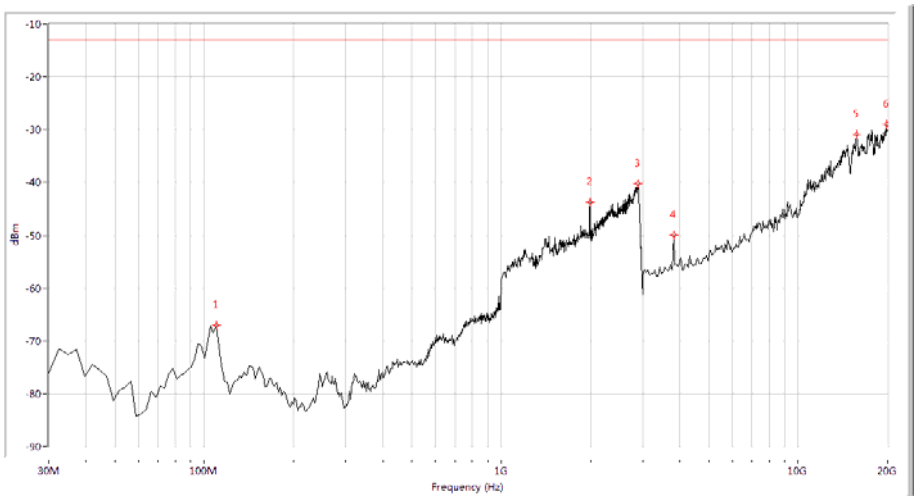
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
104.988	-67.38	-13.0	54.4	269.5	Vertical	PASS
2366.584	-43.77	-13.0	30.8	33.8	Vertical	PASS
2890.274	-38.87	-13.0	25.9	215.7	Vertical	PASS
3763.092	-49.34	-13.0	36.3	3.9	Vertical	PASS
10970.075	-39.48	-13.0	26.5	-0.0	Vertical	PASS
19067.332	-29.58	-13.0	16.6	326.8	Vertical	PASS

(Plot J.4: HSUPA 1900 MHz Channel = 9400, Test Antenna Vertical)



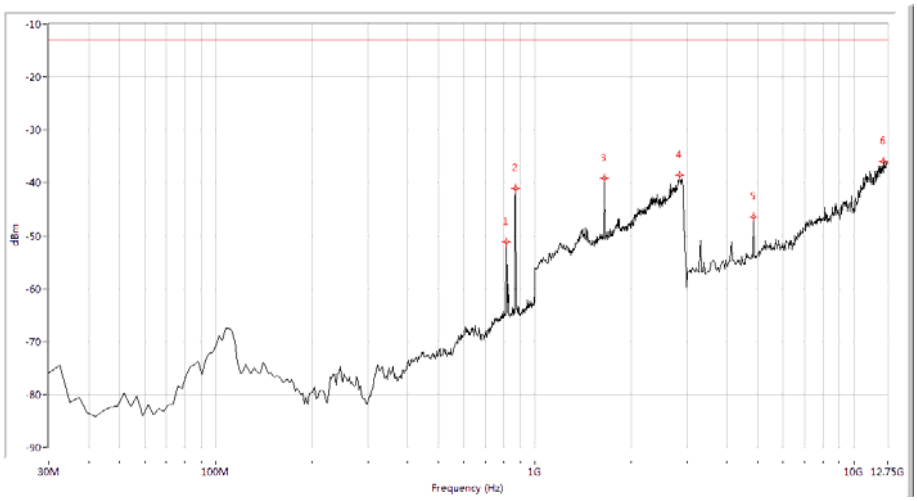
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
107.406	-71.65	-13.0	58.7	325.9	Horizontal	PASS
1987.531	-41.09	-13.0	28.1	45.5	Horizontal	PASS
2900.249	-39.45	-13.0	26.5	264.7	Horizontal	PASS
9486.284	-42.72	-13.0	29.7	152.5	Horizontal	PASS
15760.599	-30.74	-13.0	17.7	35.9	Horizontal	PASS
19872.818	-29.27	-13.0	16.3	68.7	Horizontal	PASS

(Plot J.5: HSUPA 1900 MHz Channel = 9538, Test Antenna Horizontal)



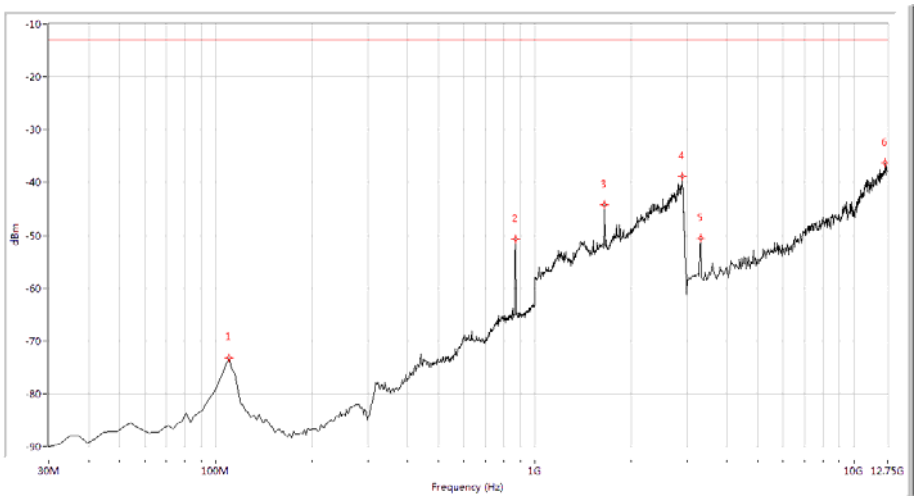
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-67.01	-13.0	54.0	233.4	Vertical	PASS
1987.531	-43.72	-13.0	30.7	32.9	Vertical	PASS
2880.299	-40.33	-13.0	27.3	212.8	Vertical	PASS
3805.486	-49.98	-13.0	37.0	82.6	Vertical	PASS
15718.204	-30.89	-13.0	17.9	220.8	Vertical	PASS
19830.424	-28.98	-13.0	16.0	350.9	Vertical	PASS

(Plot J.6: HSUPA 1900 MHz Channel = 9538, Test Antenna Vertical)



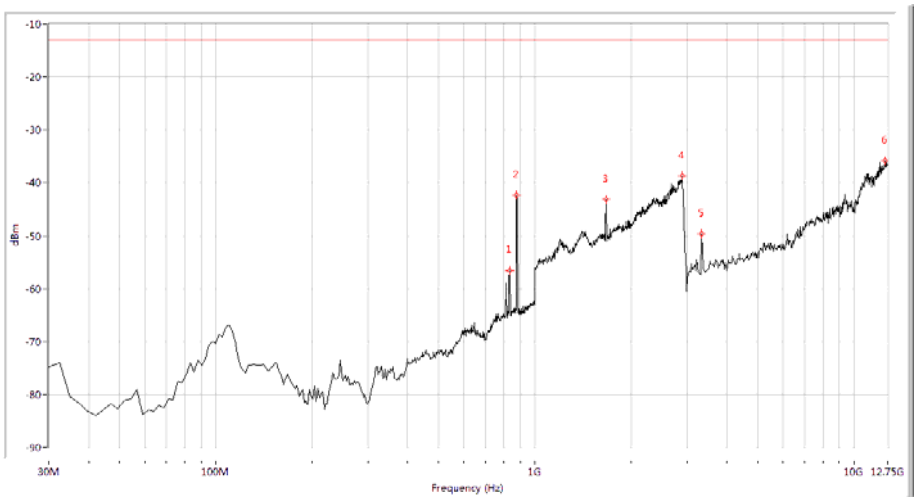
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
816.160	-51.22	-13.0	38.2	-0.0	Horizontal	PASS
869.377	-41.11	-13.0	28.1	301.9	Horizontal	PASS
1653.367	-39.18	-13.0	26.2	259.9	Horizontal	PASS
2850.374	-38.59	-13.0	25.6	60.0	Horizontal	PASS
4847.880	-46.48	-13.0	33.5	164.7	Horizontal	PASS
12385.287	-36.03	-13.0	23.0	320.9	Horizontal	PASS

(Plot K.1: HSPA+ 850MHz Channel = 4132, Test Antenna Horizontal)



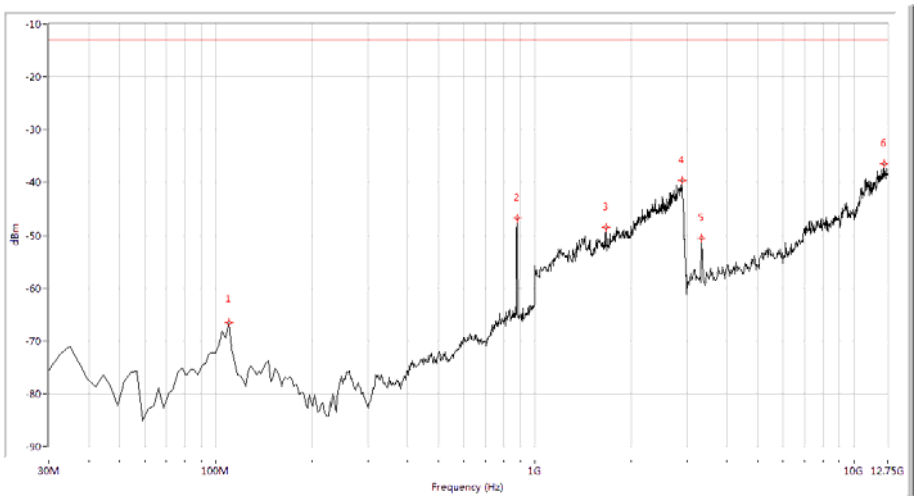
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-73.27	-13.0	60.3	321.5	Vertical	PASS
869.377	-50.71	-13.0	37.7	15.2	Vertical	PASS
1653.367	-44.19	-13.0	31.2	69.7	Vertical	PASS
2905.237	-38.90	-13.0	25.9	184.3	Vertical	PASS
3316.085	-50.50	-13.0	37.5	33.2	Vertical	PASS
12555.486	-36.31	-13.0	23.3	121.4	Vertical	PASS

(Plot K.2: HSPA+ 850 MHz Channel = 4132, Test Antenna Vertical)



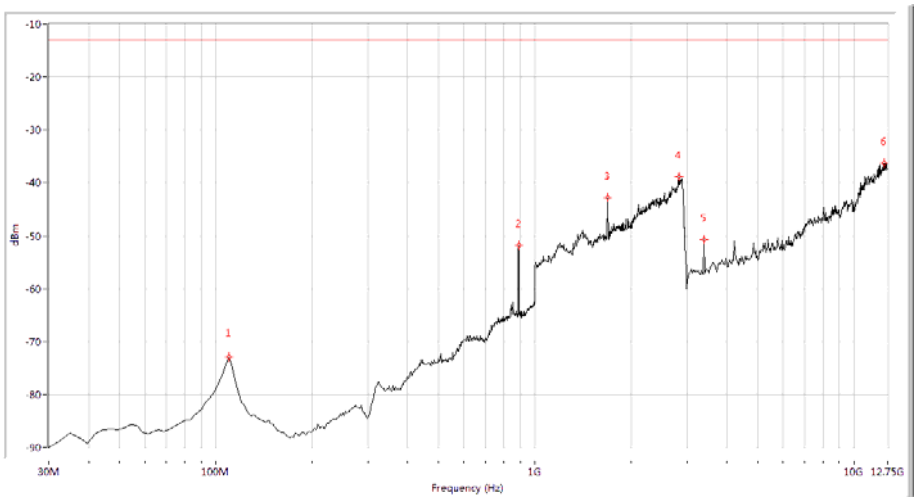
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
833.092	-56.54	-13.0	43.5	180.8	Horizontal	PASS
876.633	-42.31	-13.0	29.3	141.2	Horizontal	PASS
1668.329	-43.03	-13.0	30.0	270.9	Horizontal	PASS
2900.249	-38.65	-13.0	25.7	127.0	Horizontal	PASS
3340.399	-49.62	-13.0	36.6	194.3	Horizontal	PASS
12555.486	-35.74	-13.0	22.7	336.7	Horizontal	PASS

(Plot K.3: HSPA+ 850MHz Channel = 4175, Test Antenna Horizontal)



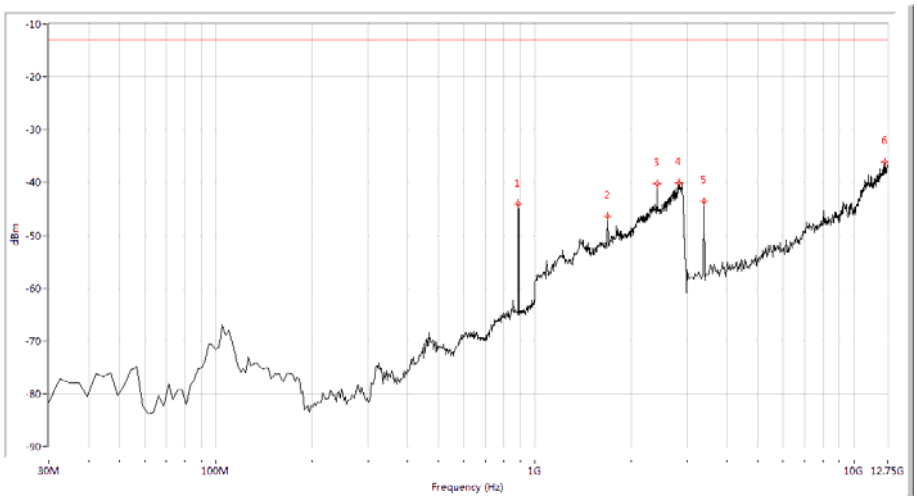
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-66.55	-13.0	53.6	32.6	Vertical	PASS
879.052	-46.81	-13.0	33.8	164.8	Vertical	PASS
1668.329	-48.49	-13.0	35.5	251.8	Vertical	PASS
2900.249	-39.63	-13.0	26.6	360.0	Vertical	PASS
3340.399	-50.62	-13.0	37.6	318.7	Vertical	PASS
12433.915	-36.47	-13.0	23.5	261.8	Vertical	PASS

(Plot K.4: HSPA+ 850MHz Channel = 4175, Test Antenna Vertical)



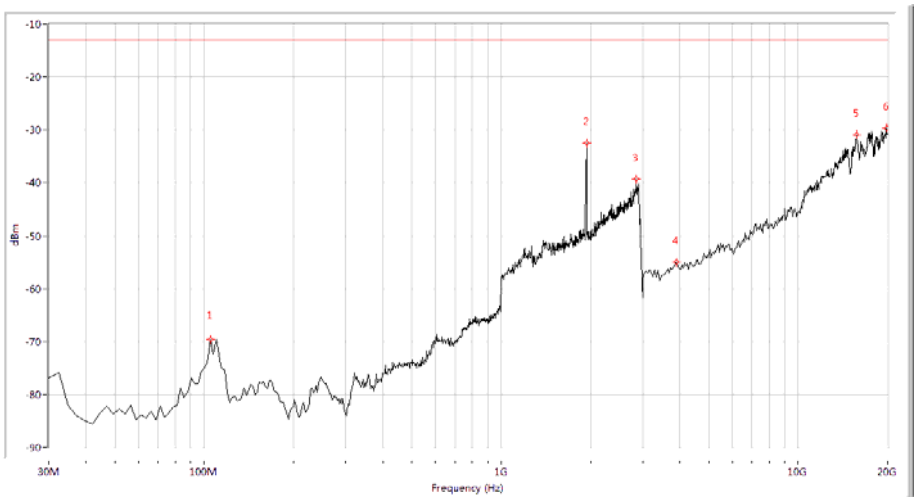
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-72.86	-13.0	59.9	317.2	Horizontal	PASS
891.147	-51.82	-13.0	38.8	25.4	Horizontal	PASS
1688.279	-42.85	-13.0	29.8	264.4	Horizontal	PASS
2835.411	-38.89	-13.0	25.9	16.2	Horizontal	PASS
3389.027	-50.73	-13.0	37.7	181.9	Horizontal	PASS
12458.229	-36.34	-13.0	23.3	249.9	Horizontal	PASS

(Plot K.5: HSPA+ 850MHz Channel = 4233, Test Antenna Horizontal)



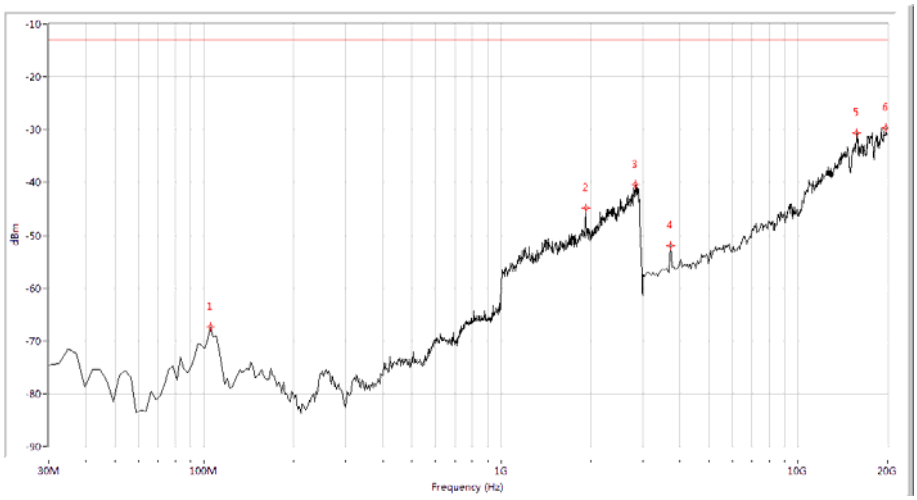
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
888.728	-44.12	-13.0	31.1	69.4	Vertical	PASS
1693.267	-46.38	-13.0	33.4	165.7	Vertical	PASS
2416.459	-40.18	-13.0	27.2	84.5	Vertical	PASS
2830.424	-40.07	-13.0	27.1	264.3	Vertical	PASS
3389.027	-43.61	-13.0	30.6	63.9	Vertical	PASS
12506.858	-36.18	-13.0	23.2	19.0	Vertical	PASS

(Plot K.6: HSPA+ 850MHz Channel = 4233, Test Antenna Vertical)



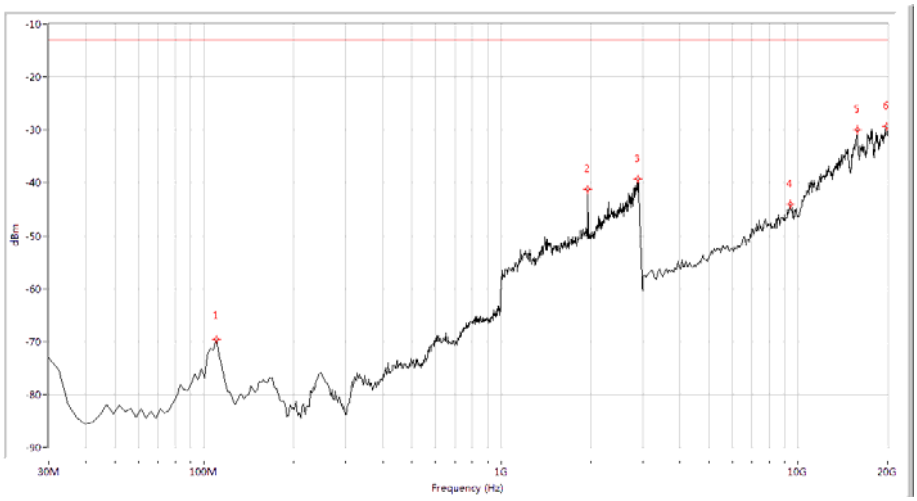
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
104.988	-69.56	-13.0	56.6	64.5	Horizontal	PASS
1942.643	-32.46	-13.0	19.5	256.8	Horizontal	PASS
2845.387	-39.32	-13.0	26.3	175.3	Horizontal	PASS
3890.274	-54.98	-13.0	42.0	94.1	Horizontal	PASS
15718.204	-30.98	-13.0	18.0	0.0	Horizontal	PASS
19830.424	-29.66	-13.0	16.7	71.2	Horizontal	PASS

(Plot L.1: HSPA+ 1900 MHz Channel = 9262, Test Antenna Horizontal)



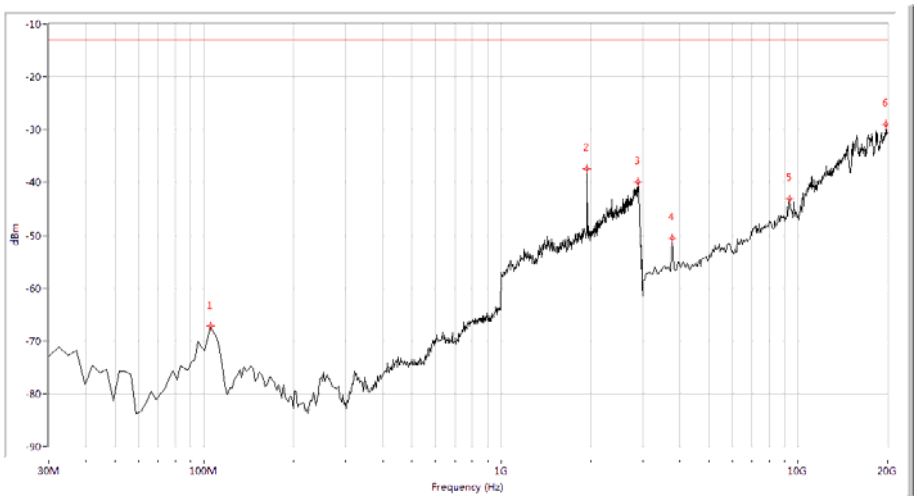
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
104.988	-67.32	-13.0	54.3	345.2	Vertical	PASS
1927.681	-44.82	-13.0	31.8	0.8	Vertical	PASS
2830.424	-40.42	-13.0	27.4	123.4	Vertical	PASS
3720.698	-52.06	-13.0	39.1	24.5	Vertical	PASS
15760.599	-30.53	-13.0	17.5	47.6	Vertical	PASS
19745.636	-29.57	-13.0	16.6	247.3	Vertical	PASS

(Plot L.2: HSPA+ 1900 MHz Channel = 9262, Test Antenna Vertical)



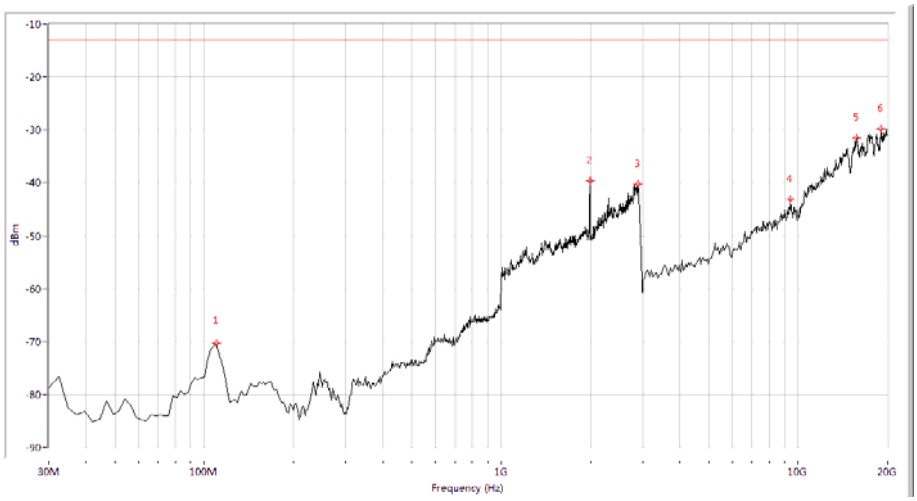
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-69.58	-13.0	56.6	234.9	Horizontal	PASS
1957.606	-41.14	-13.0	28.1	-0.0	Horizontal	PASS
2895.262	-39.24	-13.0	26.2	293.0	Horizontal	PASS
9401.496	-44.06	-13.0	31.1	306.8	Horizontal	PASS
15802.993	-29.95	-13.0	17.0	4.9	Horizontal	PASS
19915.212	-29.38	-13.0	16.4	164.6	Horizontal	PASS

(Plot L.3: HSPA+ 1900 MHz Channel = 9400, Test Antenna Horizontal)



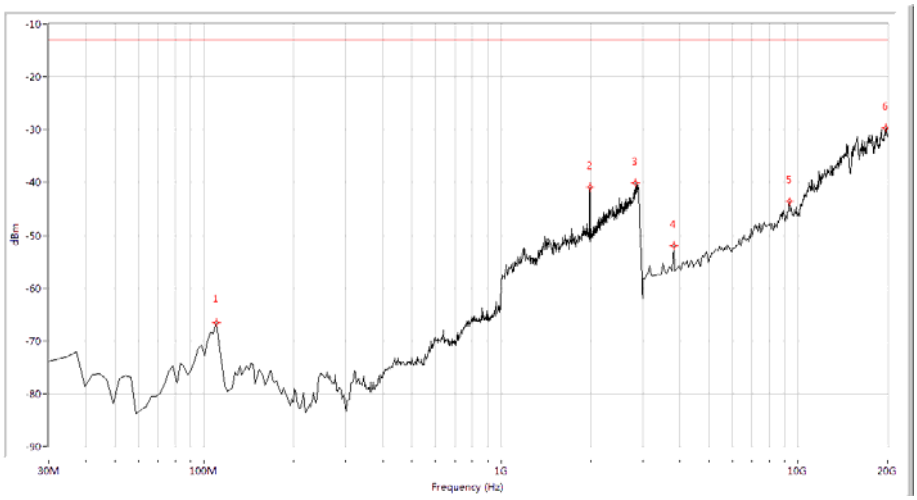
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
104.988	-67.24	-13.0	54.2	271.8	Vertical	PASS
1947.631	-37.38	-13.0	24.4	41.0	Vertical	PASS
2895.262	-39.92	-13.0	26.9	213.0	Vertical	PASS
3763.092	-50.48	-13.0	37.5	116.6	Vertical	PASS
9359.102	-43.08	-13.0	30.1	255.6	Vertical	PASS
19788.030	-29.06	-13.0	16.1	271.6	Vertical	PASS

(Plot L.4: HSPA+ 1900 MHz Channel = 9400, Test Antenna Vertical)



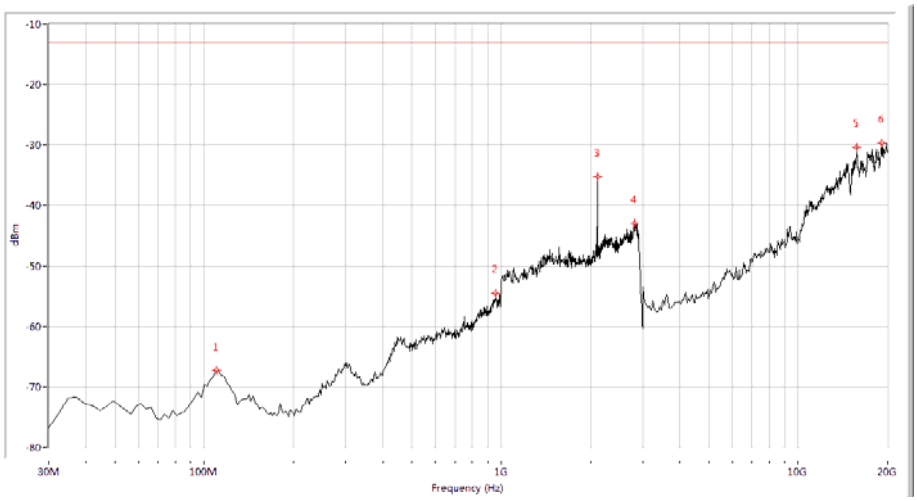
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.30	-13.0	57.3	64.7	Horizontal	PASS
1987.531	-39.65	-13.0	26.6	51.6	Horizontal	PASS
2880.299	-40.19	-13.0	27.2	169.5	Horizontal	PASS
9443.890	-43.15	-13.0	30.1	354.8	Horizontal	PASS
15718.204	-31.50	-13.0	18.5	208.7	Horizontal	PASS
19024.938	-29.84	-13.0	16.8	69.4	Horizontal	PASS

(Plot L.5: HSPA+ 1900 MHz Channel = 9538, Test Antenna Horizontal)



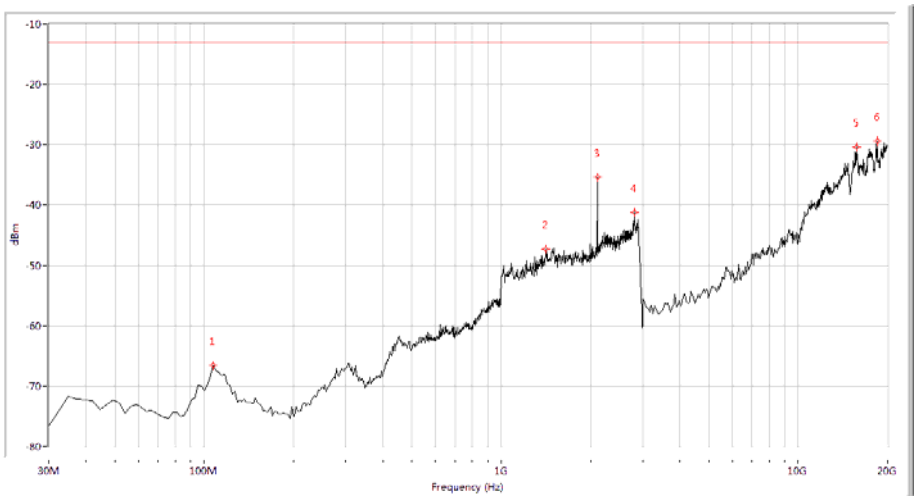
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-66.59	-13.0	53.6	269.8	Vertical	PASS
1987.531	-40.93	-13.0	27.9	35.4	Vertical	PASS
2835.411	-40.05	-13.0	27.1	326.1	Vertical	PASS
3805.486	-52.06	-13.0	39.1	266.9	Vertical	PASS
9359.102	-43.54	-13.0	30.5	359.5	Vertical	PASS
19788.030	-29.70	-13.0	16.7	153.3	Vertical	PASS

(Plot L.6: HSPA+ 1900 MHz Channel = 9538, Test Antenna Vertical)



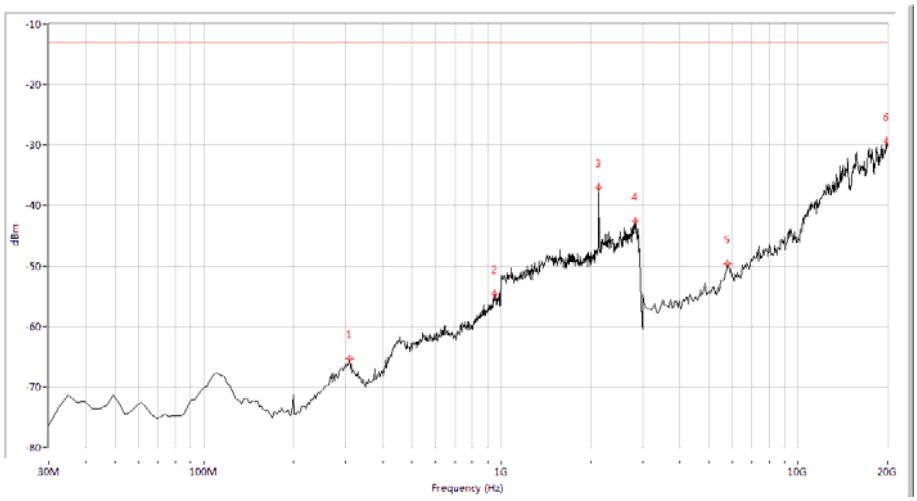
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-67.31	-13.0	54.3	325.9	Horizontal	PASS
958.878	-54.51	-13.0	41.5	157.4	Horizontal	PASS
2112.219	-35.18	-13.0	22.2	111.0	Horizontal	PASS
2805.486	-42.97	-13.0	30.0	86.5	Horizontal	PASS
15760.599	-30.43	-13.0	17.4	175.4	Horizontal	PASS
19067.332	-29.68	-13.0	16.7	239.1	Horizontal	PASS

(Plot M.1: WCDMA 1700MHz Channel = 1312, Test Antenna Horizontal)



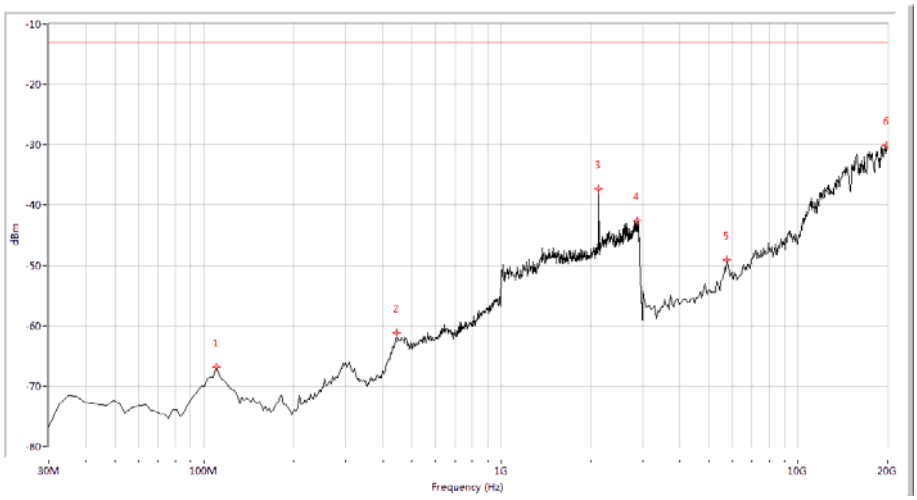
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
107.406	-66.56	-13.0	53.6	328.4	Vertical	PASS
1408.978	-47.27	-13.0	34.3	11.0	Vertical	PASS
2112.219	-35.39	-13.0	22.4	28.4	Vertical	PASS
2805.486	-41.25	-13.0	28.2	305.6	Vertical	PASS
15760.599	-30.42	-13.0	17.4	97.5	Vertical	PASS
18473.815	-29.41	-13.0	16.4	145.7	Vertical	PASS

(Plot M.2: WCDMA 1700MHz Channel = 1312, Test Antenna Vertical)



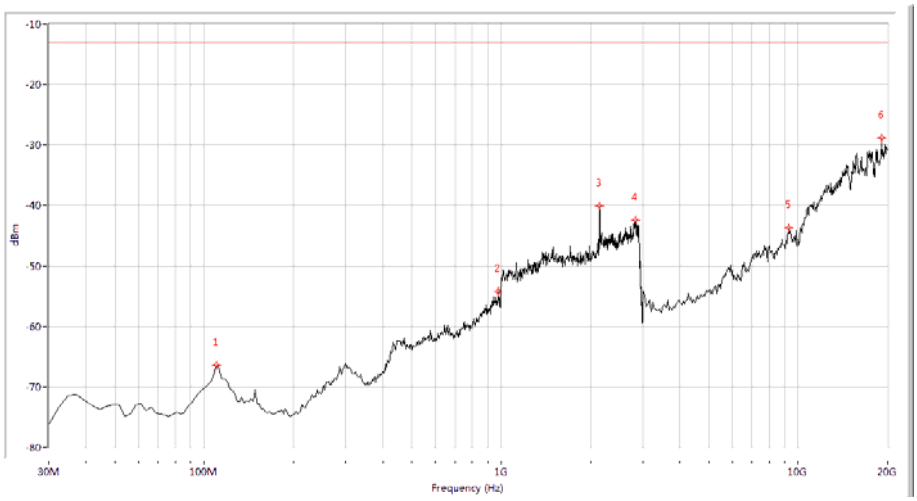
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
308.180	-65.37	-13.0	52.4	64.8	Horizontal	PASS
949.202	-54.68	-13.0	41.7	196.4	Horizontal	PASS
2127.182	-37.00	-13.0	24.0	265.4	Horizontal	PASS
2830.424	-42.59	-13.0	29.6	10.7	Horizontal	PASS
5798.005	-49.66	-13.0	36.7	251.2	Horizontal	PASS
19830.424	-29.38	-13.0	16.4	13.2	Horizontal	PASS

(Plot M.3: WCDMA 1700MHz Channel = 1412, Test Antenna Horizontal)



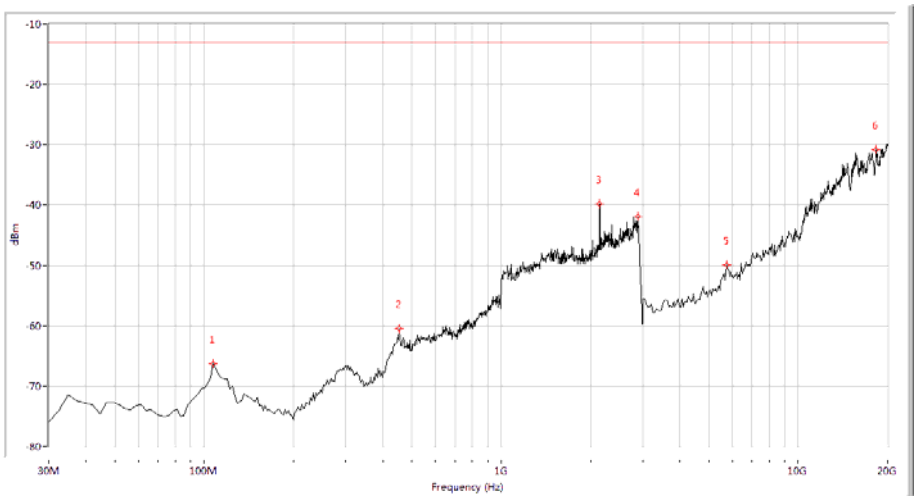
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-66.79	-13.0	53.8	349.5	Vertical	PASS
443.641	-61.19	-13.0	48.2	156.4	Vertical	PASS
2127.182	-37.28	-13.0	24.3	0.2	Vertical	PASS
2860.349	-42.53	-13.0	29.5	85.1	Vertical	PASS
5755.611	-49.15	-13.0	36.2	169.9	Vertical	PASS
19872.818	-30.04	-13.0	17.0	84.7	Vertical	PASS

(Plot M.4: WCDMA 1700MHz Channel = 1412, Test Antenna Vertical)



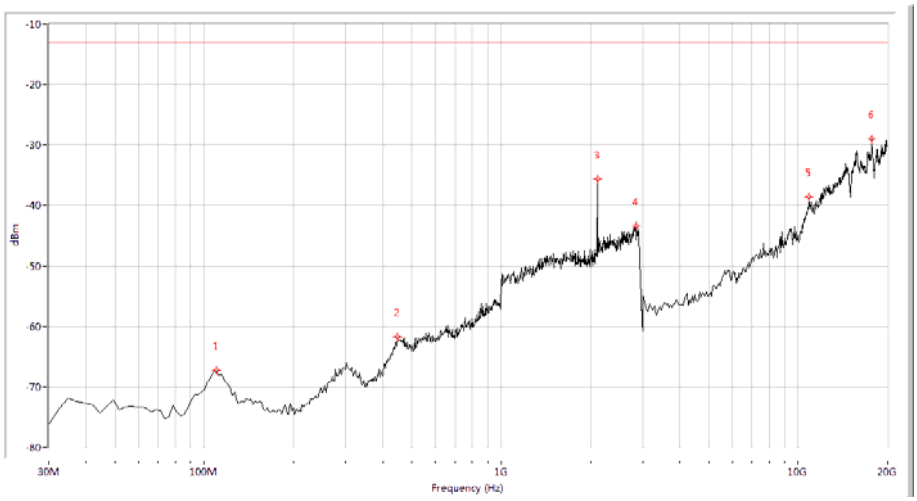
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-66.41	-13.0	53.4	64.5	Horizontal	PASS
978.229	-54.21	-13.0	41.2	159.7	Horizontal	PASS
2147.132	-40.07	-13.0	27.1	84.3	Horizontal	PASS
2835.411	-42.48	-13.0	29.5	318.6	Horizontal	PASS
9316.708	-43.70	-13.0	30.7	17.4	Horizontal	PASS
19109.726	-28.84	-13.0	15.8	0.5	Horizontal	PASS

(Plot M.5: WCDMA 1700MHz Channel = 1513, Test Antenna Horizontal)



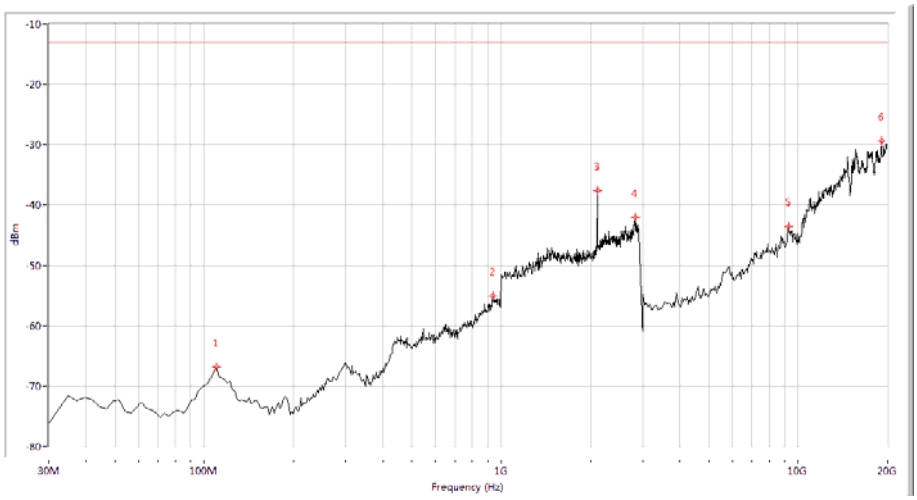
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
107.406	-66.34	-13.0	53.3	46.5	Vertical	PASS
453.317	-60.42	-13.0	47.4	163.9	Vertical	PASS
2147.132	-39.82	-13.0	26.8	84.6	Vertical	PASS
2890.274	-41.89	-13.0	28.9	68.1	Vertical	PASS
5755.611	-49.88	-13.0	36.9	159.7	Vertical	PASS
18304.239	-30.78	-13.0	17.8	52.6	Vertical	PASS

(Plot M.6: WCDMA 1700MHz Channel = 1513, Test Antenna Vertical)



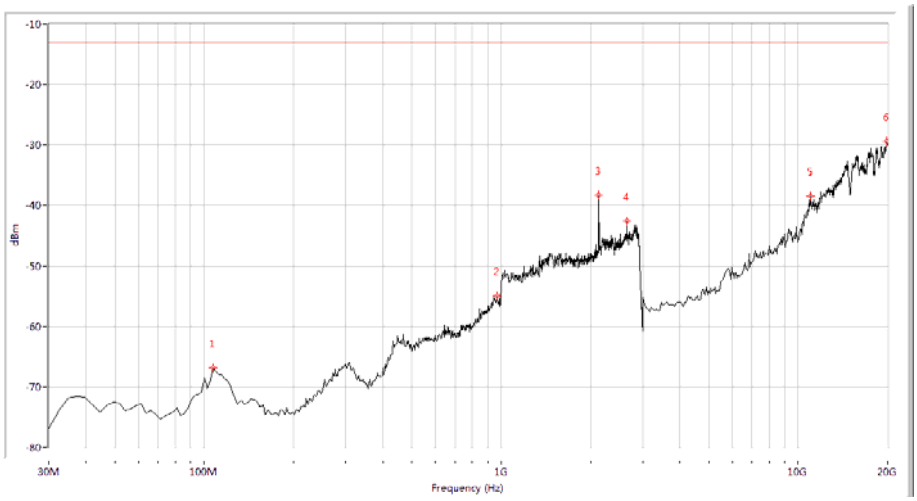
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-67.23	-13.0	54.2	69.4	Horizontal	PASS
446.060	-61.64	-13.0	48.6	212.7	Horizontal	PASS
2112.219	-35.64	-13.0	22.6	20.8	Horizontal	PASS
2840.399	-43.41	-13.0	30.4	197.6	Horizontal	PASS
10885.287	-38.51	-13.0	25.5	63.5	Horizontal	PASS
17710.723	-29.01	-13.0	16.0	71.6	Horizontal	PASS

(Plot N.1: HSDPA 1700MHz Channel = 1312, Test Antenna Horizontal)



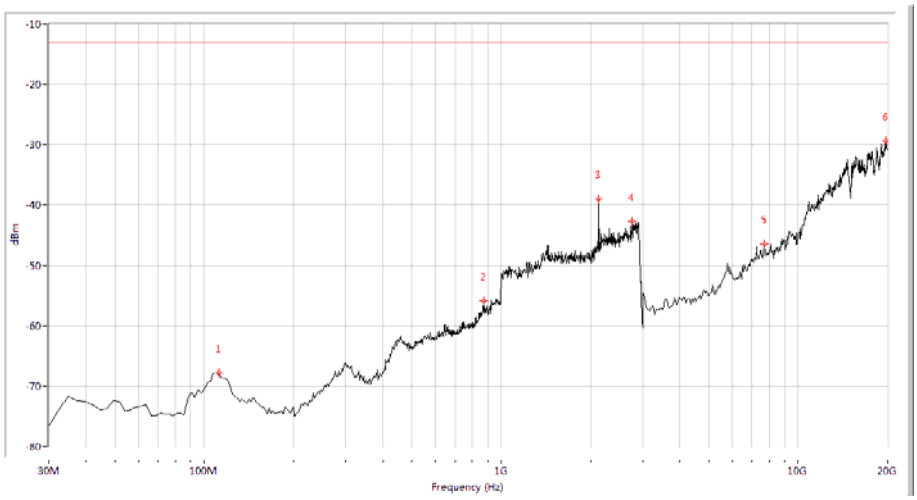
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-66.77	-13.0	53.8	349.5	Vertical	PASS
937.107	-55.03	-13.0	42.0	0.8	Vertical	PASS
2107.232	-37.62	-13.0	24.6	263.8	Vertical	PASS
2825.436	-41.99	-13.0	29.0	22.4	Vertical	PASS
9274.314	-43.56	-13.0	30.6	0.0	Vertical	PASS
19067.332	-29.35	-13.0	16.3	84.1	Vertical	PASS

(Plot N.2: HSDPA 1700MHz Channel = 1312, Test Antenna Vertical)



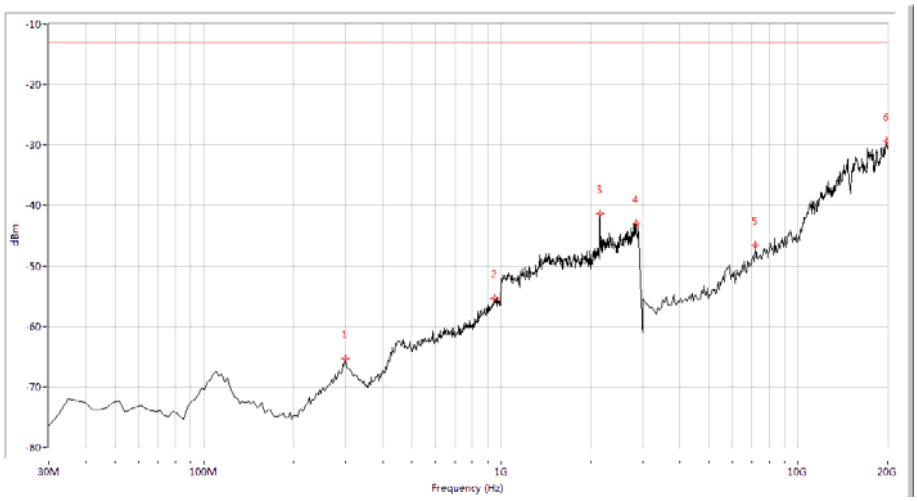
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
107.406	-66.79	-13.0	53.8	64.9	Horizontal	PASS
970.973	-54.88	-13.0	41.9	156.3	Horizontal	PASS
2132.170	-38.25	-13.0	25.3	35.7	Horizontal	PASS
2655.860	-42.56	-13.0	29.6	222.5	Horizontal	PASS
10970.075	-38.44	-13.0	25.4	95.1	Horizontal	PASS
19915.212	-29.41	-13.0	16.4	102.2	Horizontal	PASS

(Plot N.3: HSDPA 1700MHz Channel = 1412, Test Antenna Horizontal)



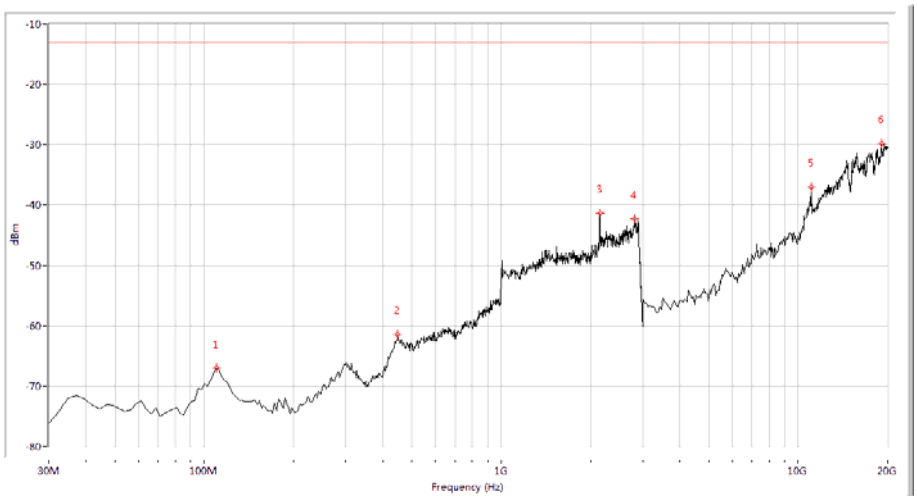
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
112.244	-67.82	-13.0	54.8	94.7	Vertical	PASS
871.796	-55.82	-13.0	42.8	65.1	Vertical	PASS
2127.182	-38.99	-13.0	26.0	254.9	Vertical	PASS
2760.599	-42.69	-13.0	29.7	131.3	Vertical	PASS
7705.736	-46.51	-13.0	33.5	47.5	Vertical	PASS
19788.030	-29.37	-13.0	16.4	68.5	Vertical	PASS

(Plot N.4: HSDAP 1700MHz Channel = 1412, Test Antenna Vertical)



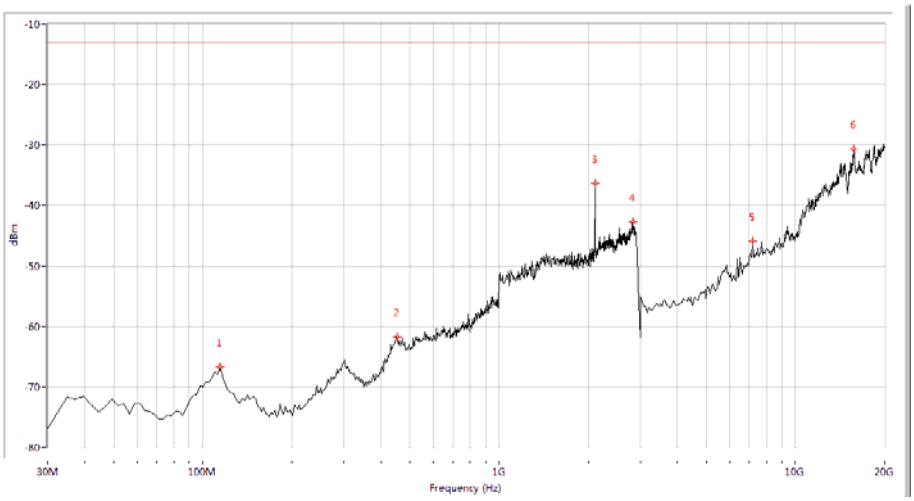
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
298.504	-65.29	-13.0	52.3	321.5	Horizontal	PASS
949.202	-55.35	-13.0	42.4	167.4	Horizontal	PASS
2152.120	-41.31	-13.0	28.3	52.8	Horizontal	PASS
2845.387	-43.05	-13.0	30.0	64.7	Horizontal	PASS
7154.613	-46.62	-13.0	33.6	95.6	Horizontal	PASS
19915.212	-29.46	-13.0	16.5	258.4	Horizontal	PASS

(Plot N.5: HSDPA 1700MHz Channel = 1513, Test Antenna Horizontal)



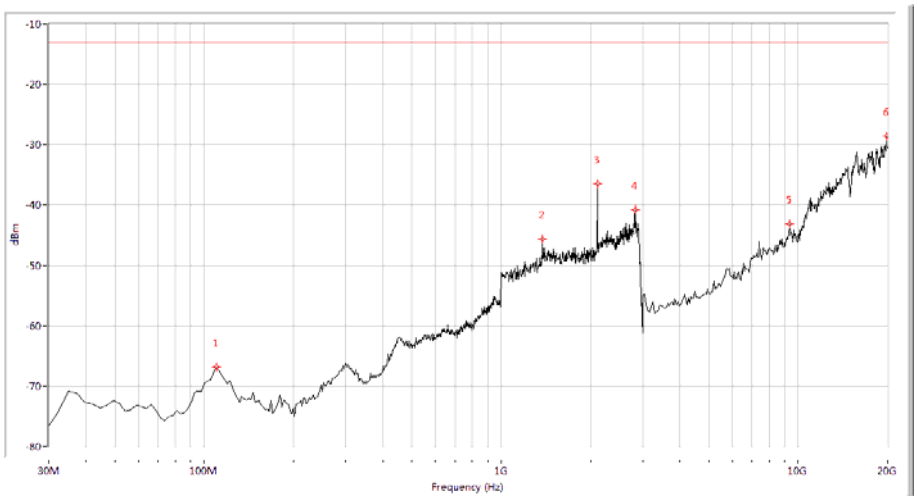
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-67.03	-13.0	54.0	349.7	Vertical	PASS
448.479	-61.36	-13.0	48.4	65.6	Vertical	PASS
2152.120	-41.31	-13.0	28.3	284.7	Vertical	PASS
2820.449	-42.24	-13.0	29.2	305.4	Vertical	PASS
11054.863	-37.06	-13.0	24.1	0.1	Vertical	PASS
19109.726	-29.87	-13.0	16.9	18.2	Vertical	PASS

(Plot N.6: HSDPA 1700MHz Channel = 1513, Test Antenna Vertical)



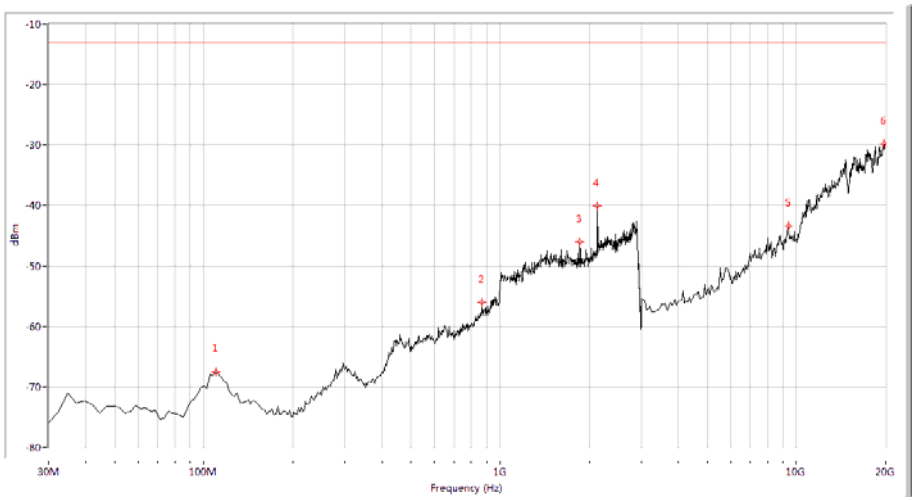
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
114.663	-66.64	-13.0	53.6	269.4	Horizontal	PASS
453.317	-61.76	-13.0	48.8	0.2	Horizontal	PASS
2107.232	-36.37	-13.0	23.4	360.0	Horizontal	PASS
2830.424	-42.68	-13.0	29.7	251.7	Horizontal	PASS
7154.613	-45.93	-13.0	32.9	46.8	Horizontal	PASS
15760.599	-30.62	-13.0	17.6	39.4	Horizontal	PASS

(Plot O.1: HSUPA 1700MHz Channel = 1312, Test Antenna Horizontal)



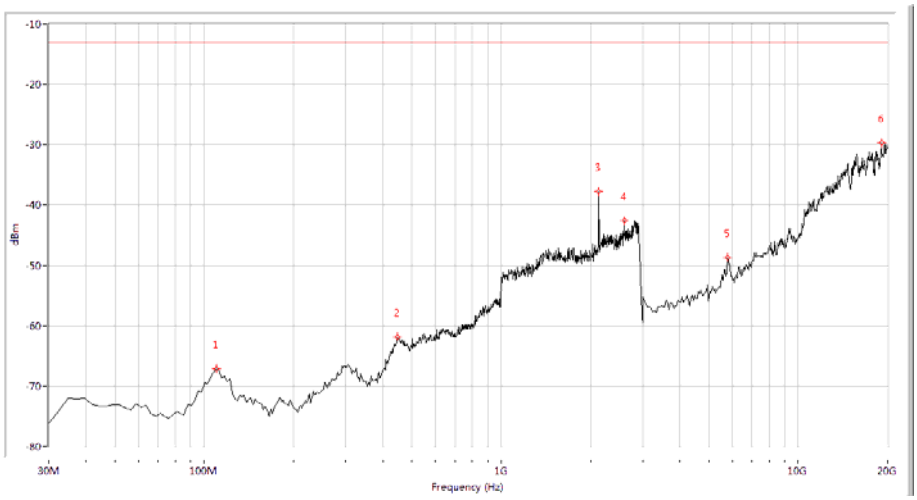
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-66.90	-13.0	53.9	69.4	Vertical	PASS
1379.052	-45.60	-13.0	32.6	96.1	Vertical	PASS
2112.219	-36.51	-13.0	23.5	123.5	Vertical	PASS
2825.436	-40.72	-13.0	27.7	0.7	Vertical	PASS
9359.102	-43.14	-13.0	30.1	94.8	Vertical	PASS
19872.818	-28.55	-13.0	15.6	56.7	Vertical	PASS

(Plot O.2: HSUPA 1700MHz Channel = 1312, Test Antenna Vertical)



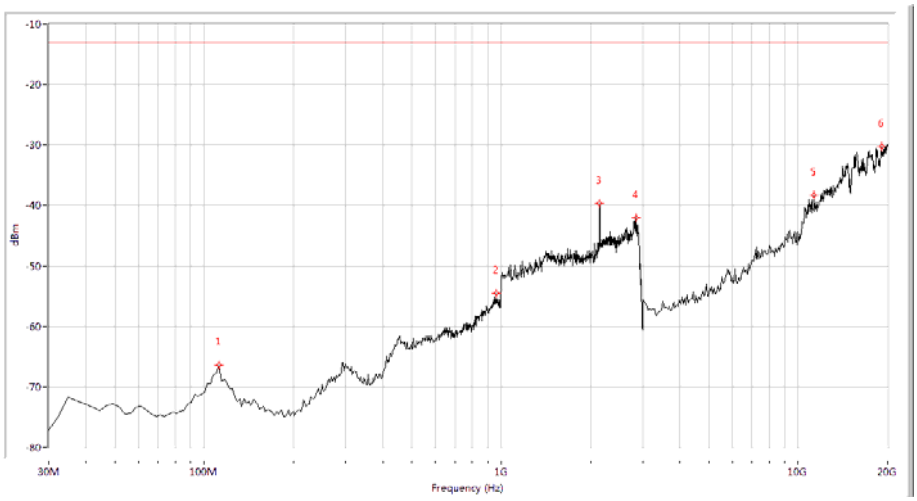
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-67.50	-13.0	54.5	168.4	Horizontal	PASS
869.377	-56.04	-13.0	43.0	95.4	Horizontal	PASS
1857.855	-46.04	-13.0	33.0	65.8	Horizontal	PASS
2132.170	-40.03	-13.0	27.0	132.5	Horizontal	PASS
9401.496	-43.44	-13.0	30.4	0.0	Horizontal	PASS
19788.030	-29.78	-13.0	16.8	347.0	Horizontal	PASS

(Plot O.3: HSUPA 1700MHz Channel = 1412, Test Antenna Horizontal)



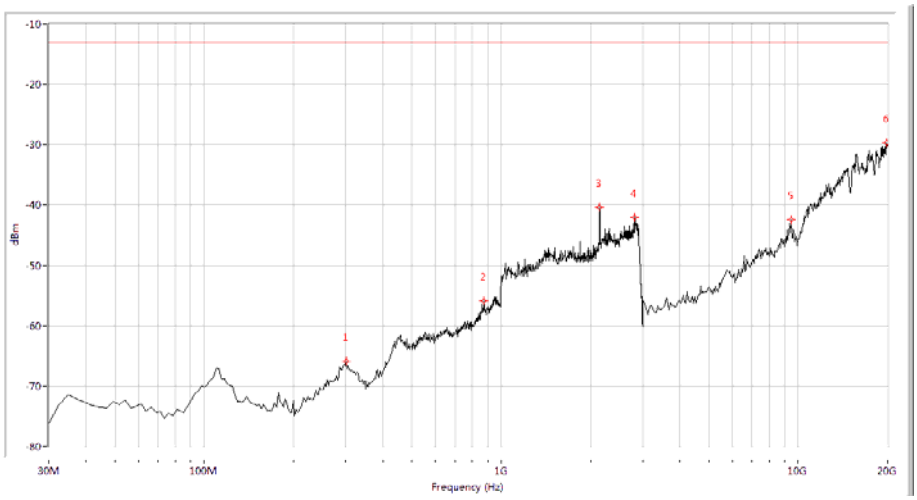
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-67.08	-13.0	54.1	360.0	Vertical	PASS
446.060	-61.83	-13.0	48.8	0.7	Vertical	PASS
2132.170	-37.66	-13.0	24.7	58.6	Vertical	PASS
2600.998	-42.51	-13.0	29.5	97.4	Vertical	PASS
5798.005	-48.70	-13.0	35.7	65.2	Vertical	PASS
19109.726	-29.75	-13.0	16.7	125.7	Vertical	PASS

(Plot O.4: HSUPA 1700MHz Channel =1412, Test Antenna Vertical)



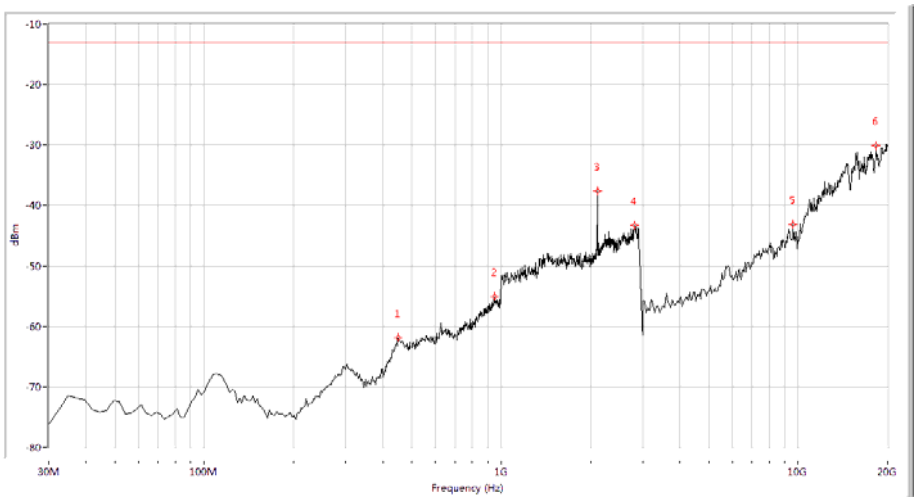
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
112.244	-66.47	-13.0	53.5	349.7	Horizontal	PASS
961.297	-54.52	-13.0	41.5	106.8	Horizontal	PASS
2147.132	-39.69	-13.0	26.7	219.7	Horizontal	PASS
2850.374	-42.00	-13.0	29.0	0.0	Horizontal	PASS
11309.227	-38.21	-13.0	25.2	247.9	Horizontal	PASS
19067.332	-30.28	-13.0	17.3	95.3	Horizontal	PASS

(Plot O.5: HSUPA 1700MHz Channel = 1513, Test Antenna Horizontal)



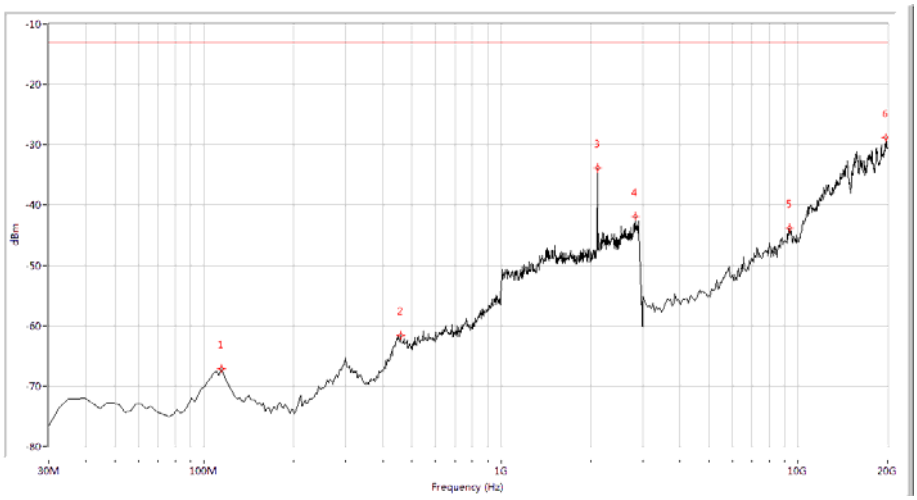
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
300.923	-65.90	-13.0	52.9	94.3	Vertical	PASS
874.214	-55.92	-13.0	42.9	162.8	Vertical	PASS
2147.132	-40.37	-13.0	27.4	252.4	Vertical	PASS
2820.449	-42.09	-13.0	29.1	87.6	Vertical	PASS
9486.284	-42.41	-13.0	29.4	51.9	Vertical	PASS
19872.818	-29.65	-13.0	16.7	156.2	Vertical	PASS

(Plot O.6: HSUPA 1700MHz Channel = 1513, Test Antenna Vertical)



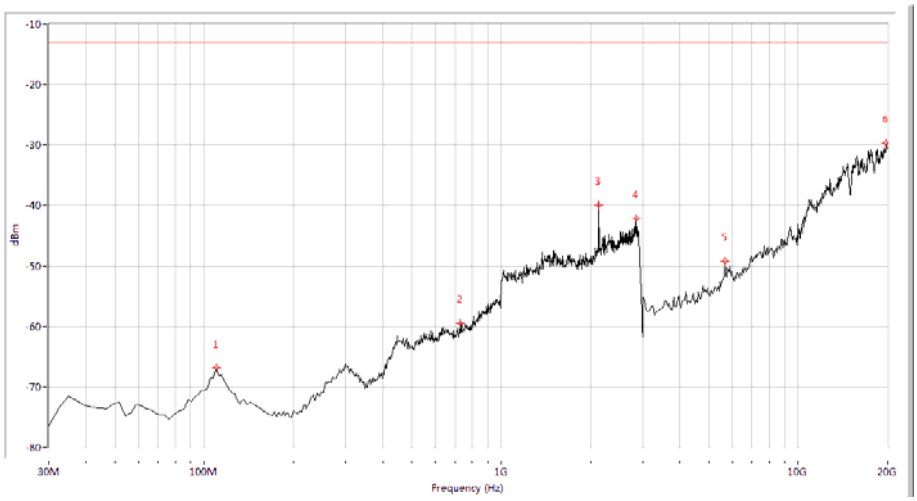
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
450.898	-61.81	-13.0	48.8	349.5	Horizontal	PASS
949.202	-55.06	-13.0	42.1	25.1	Horizontal	PASS
2112.219	-37.54	-13.0	24.5	97.6	Horizontal	PASS
2805.486	-43.22	-13.0	30.2	22.2	Horizontal	PASS
9613.466	-43.16	-13.0	30.2	201.4	Horizontal	PASS
18261.845	-30.08	-13.0	17.1	73.3	Horizontal	PASS

(Plot P.1: HSPA+ 1700 MHz Channel = 1312, Test Antenna Horizontal)



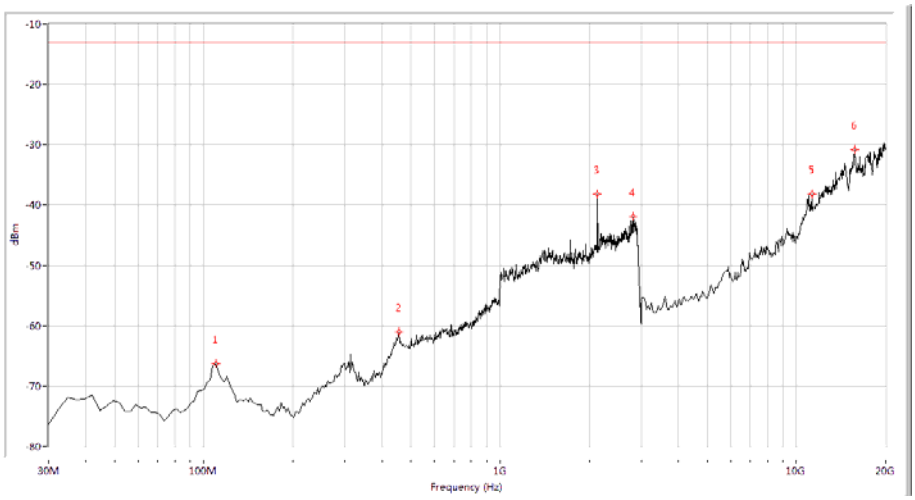
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
114.663	-67.15	-13.0	54.1	319.5	Vertical	PASS
458.155	-61.60	-13.0	48.6	75.4	Vertical	PASS
2107.232	-33.86	-13.0	20.9	269.8	Vertical	PASS
2830.424	-41.89	-13.0	28.9	333.5	Vertical	PASS
9359.102	-43.76	-13.0	30.8	20.1	Vertical	PASS
19745.636	-28.91	-13.0	15.9	18.7	Vertical	PASS

(Plot P.2: HSPA+ 1700 MHz Channel = 1312, Test Antenna Vertical)



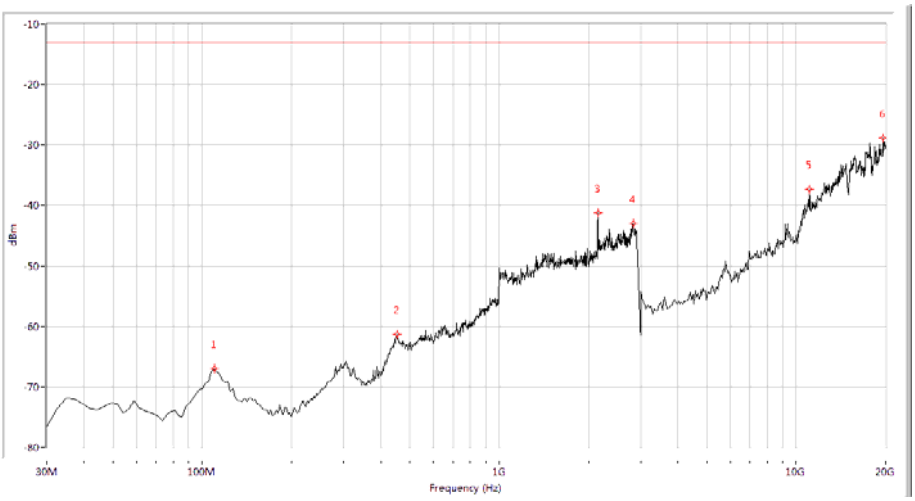
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-66.81	-13.0	53.8	63.5	Horizontal	PASS
729.077	-59.46	-13.0	46.5	95.4	Horizontal	PASS
2132.170	-39.89	-13.0	26.9	159.9	Horizontal	PASS
2840.399	-42.20	-13.0	29.2	65.7	Horizontal	PASS
5670.823	-49.26	-13.0	36.3	158.1	Horizontal	PASS
19788.030	-29.74	-13.0	16.7	356.9	Horizontal	PASS

(Plot P.3: HSPA+ 1700 MHz Channel = 1412, Test Antenna Horizontal)



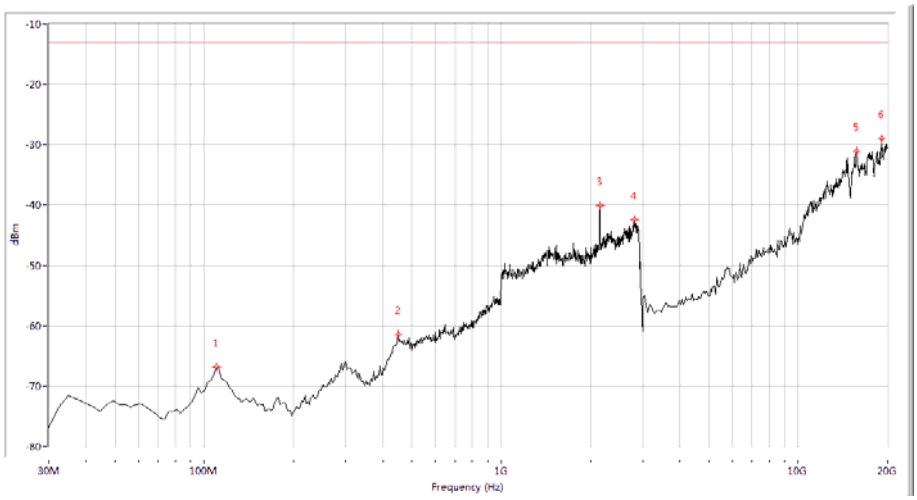
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-66.29	-13.0	53.3	345.5	Vertical	PASS
455.736	-61.06	-13.0	48.1	55.7	Vertical	PASS
2127.182	-38.14	-13.0	25.1	163.9	Vertical	PASS
2820.449	-41.84	-13.0	28.8	65.1	Vertical	PASS
11266.833	-38.16	-13.0	25.2	275.8	Vertical	PASS
15760.599	-30.83	-13.0	17.8	0.0	Vertical	PASS

(Plot P.4: HSPA+ 1700 MHz Channel = 1412, Test Antenna Vertical)



Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-66.92	-13.0	53.9	64.7	Horizontal	PASS
453.317	-61.35	-13.0	48.3	198.4	Horizontal	PASS
2152.120	-41.12	-13.0	28.1	137.2	Horizontal	PASS
2825.436	-42.98	-13.0	30.0	299.8	Horizontal	PASS
11097.257	-37.37	-13.0	24.4	301.7	Horizontal	PASS
19660.848	-28.85	-13.0	15.8	0.2	Horizontal	PASS

(Plot P.5: HSPA+ 1700 MHz Channel = 1513, Test Antenna Horizontal)



Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-66.79	-13.0	53.8	249.6	Vertical	PASS
450.898	-61.41	-13.0	48.4	354.8	Vertical	PASS
2152.120	-40.11	-13.0	27.1	10.1	Vertical	PASS
2815.461	-42.41	-13.0	29.4	208.5	Vertical	PASS
15760.599	-31.01	-13.0	18.0	169.7	Vertical	PASS
19152.120	-29.02	-13.0	16.0	52.3	Vertical	PASS

(Plot P.6: HSPA+ 1700 MHz Channel = 1513, Test Antenna Vertical)

** END OF REPORT **