

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

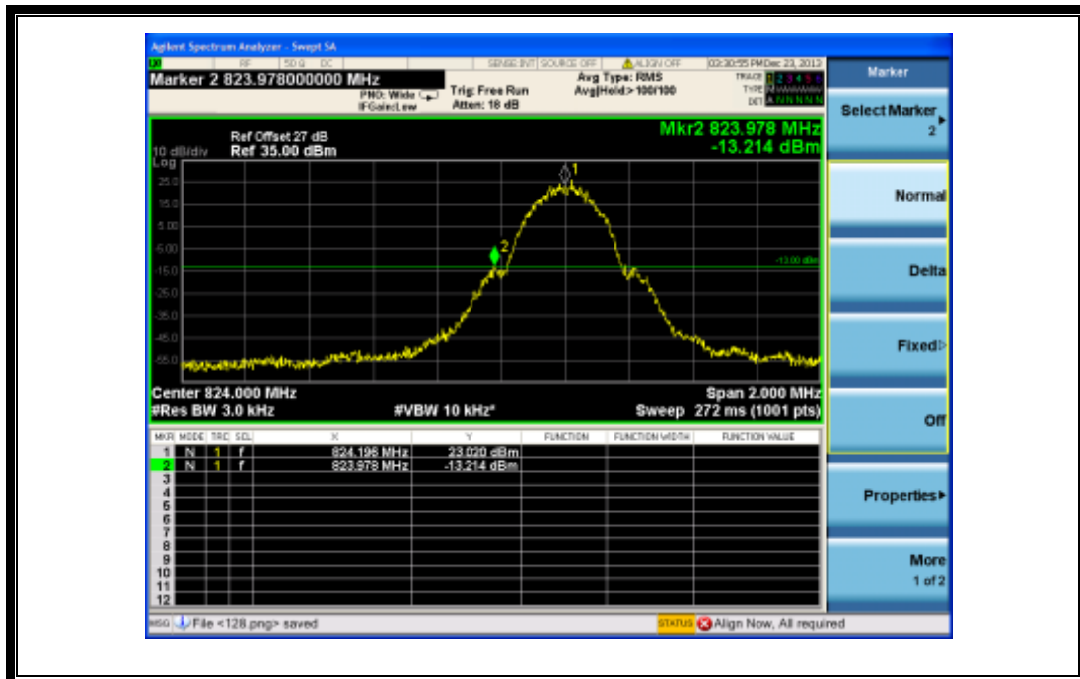
The lowest and highest channels are tested to verify the band edge emissions.

1. Test Verdict:

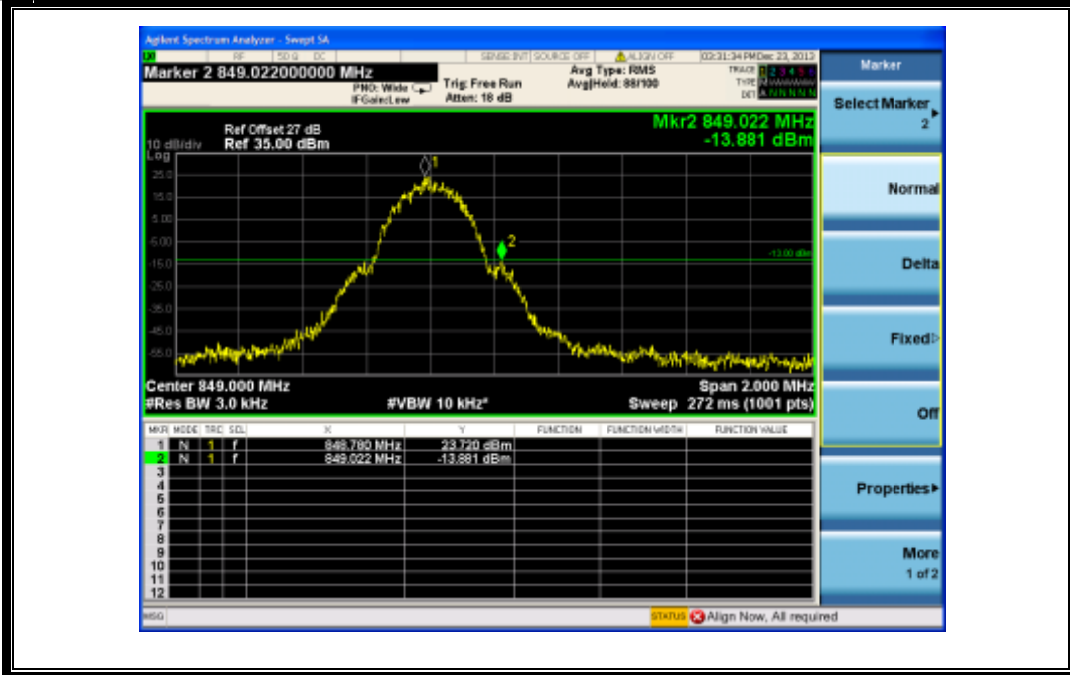
Band	Channel	Frequency (MHz)	Measured Max. Band Edge Emission (dBm)	Refer to Plot	Limit (dBm)	Verdict
GSM 850MHz	128	824.2	-13.21	Plat A	-13	<u>PASS</u>
	251	848.8	-13.88	Plot B		<u>PASS</u>
GSM 1900MHz	512	1850.2	-18.46	Plat C	-13	<u>PASS</u>
	810	1909.8	-17.11	Plot D		<u>PASS</u>
EDGE 850MHz	128	824.2	-21.03	Plat E	-13	<u>PASS</u>
	251	848.8	-22.24	Plot F		<u>PASS</u>
EDGE 1900MHz	512	1850.2	-22.56	Plat G	-13	<u>PASS</u>
	810	1909.8	-26.18	Plot H		<u>PASS</u>
WCDMA 850MHz	4132	826.4	-24.64	Plat I	-13	<u>PASS</u>
	4233	846.6	-26.80	Plot J		<u>PASS</u>
WCDMA 1900MHz	9262	1852.4	-27.82	Plat K	-13	<u>PASS</u>
	9538	1907.6	-28.71	Plot L		<u>PASS</u>
HSDPA 850MHz	4132	826.4	-26.05	Plat M	-13	<u>PASS</u>
	4233	846.6	-27.03	Plot N		<u>PASS</u>
HSDPA 1900MHz	9262	1852.4	-27.39	Plat O	-13	<u>PASS</u>
	9538	1907.6	-26.85	Plot P		<u>PASS</u>
HSUPA 850MHz	4132	826.4	-27.27	Plat Q	-13	<u>PASS</u>
	4233	846.6	-26.95	Plot R		<u>PASS</u>
HSUPA 1900MHz	9262	1852.4	-27.01	Plat S	-13	<u>PASS</u>
	9538	1907.6	-26.28	Plot T		<u>PASS</u>

HSPA+ 850MHz	4132	826.4	-26.23	Plat U	-13	<u>PASS</u>
	4233	846.6	-26.50	Plot V		<u>PASS</u>
HSPA+ 1900MHz	9262	1852.4	-26.26	Plat W	-13	<u>PASS</u>
	9538	1907.6	-26.78	Plot X		<u>PASS</u>
WCDMA 1700MHz	1312	1712.4	-25.13	Plat Y	-13	<u>PASS</u>
	1513	1752.6	-26.50	Plat Z		<u>PASS</u>
HSDPA 1700MHz	1312	1712.4	-25.82	Plot A1	-13	<u>PASS</u>
	1513	1752.6	-27.27	Plat B1		<u>PASS</u>
HSUPA 1700MHz	1312	1712.4	-25.52	Plot C1	-13	<u>PASS</u>
	1513	1752.6	-24.74	Plat D1		<u>PASS</u>
HSPA+ 1700MHz	1312	1712.4	-24.42	Plot E1	-13	<u>PASS</u>
	1513	1752.6	-25.62	Plat F1		<u>PASS</u>

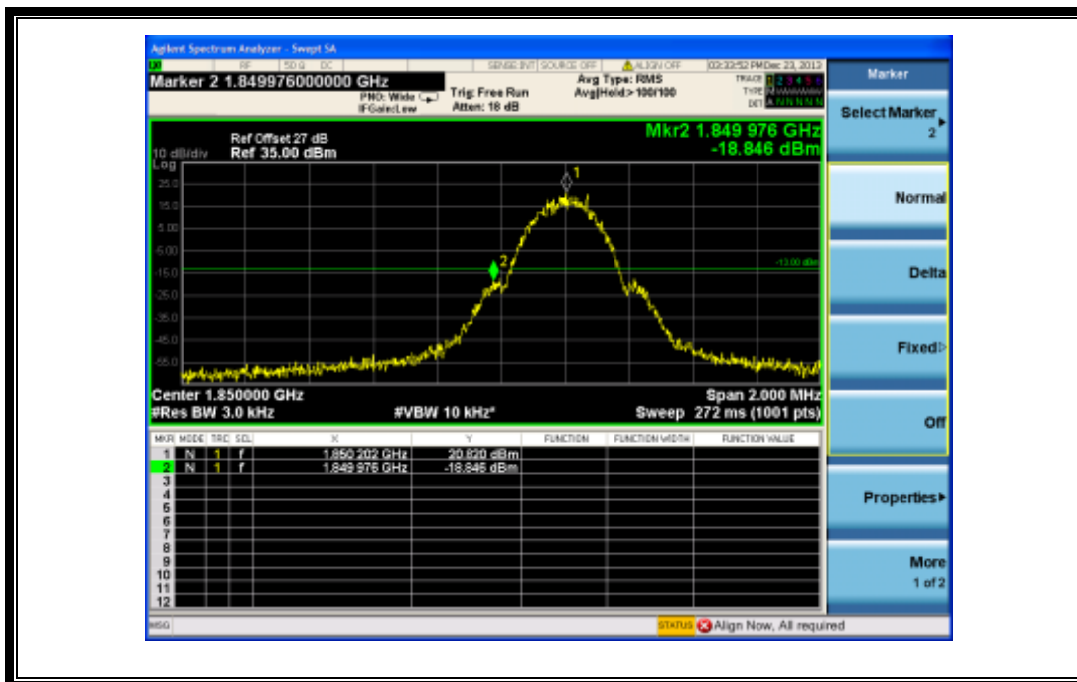
2. Test Plots:



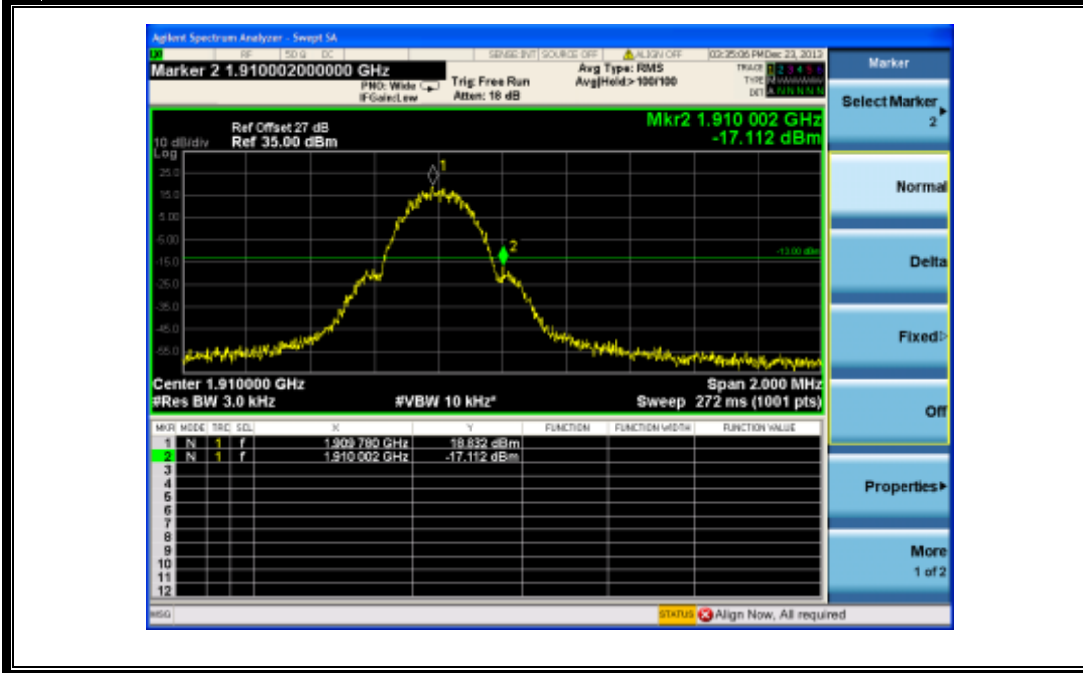
(Plot A: GSM 850 Channel = 128)



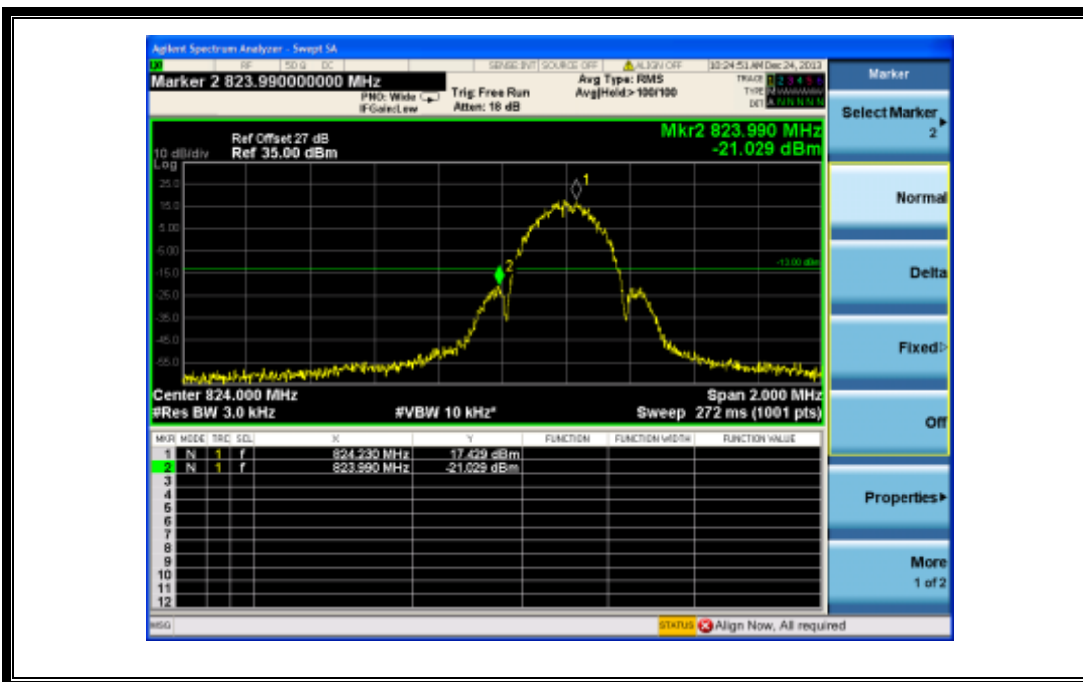
(Plot B: GSM 850 Channel = 251)



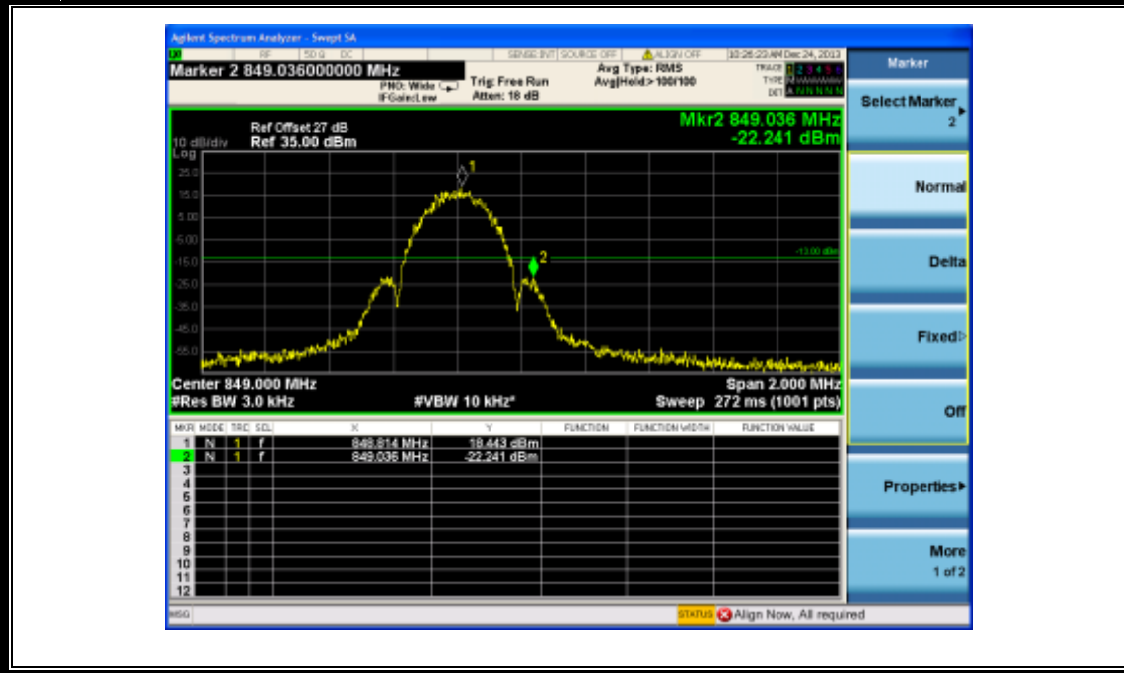
(Plot C: GSM 1900 Channel = 512)



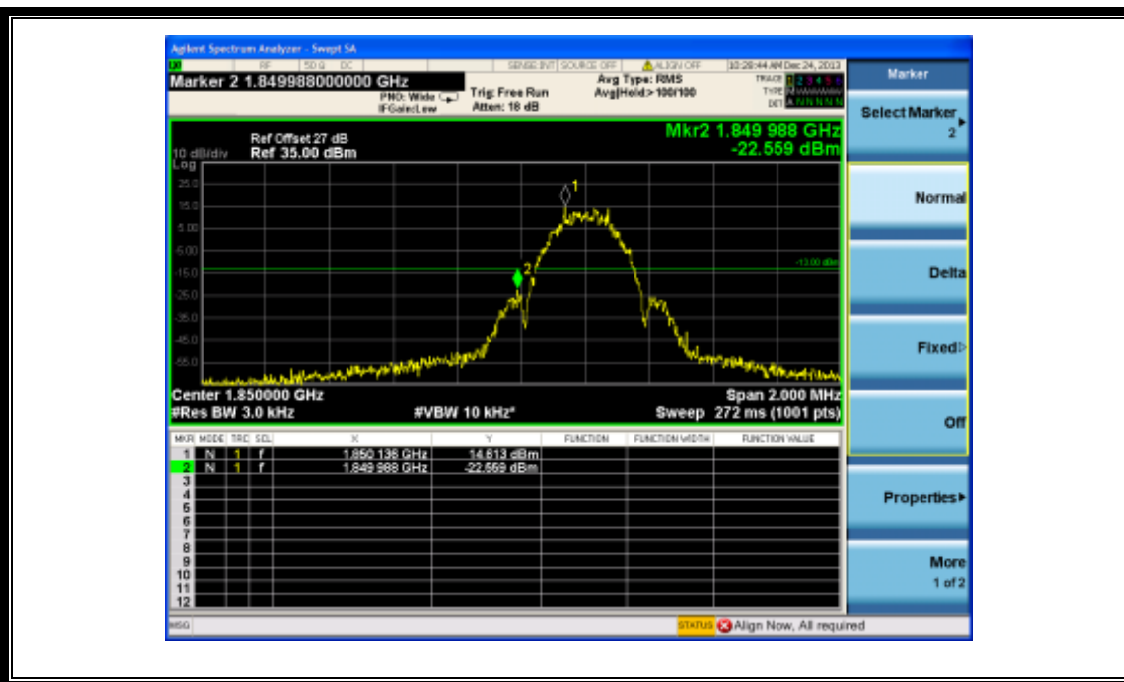
(Plot D: GSM 1900 Channel = 810)



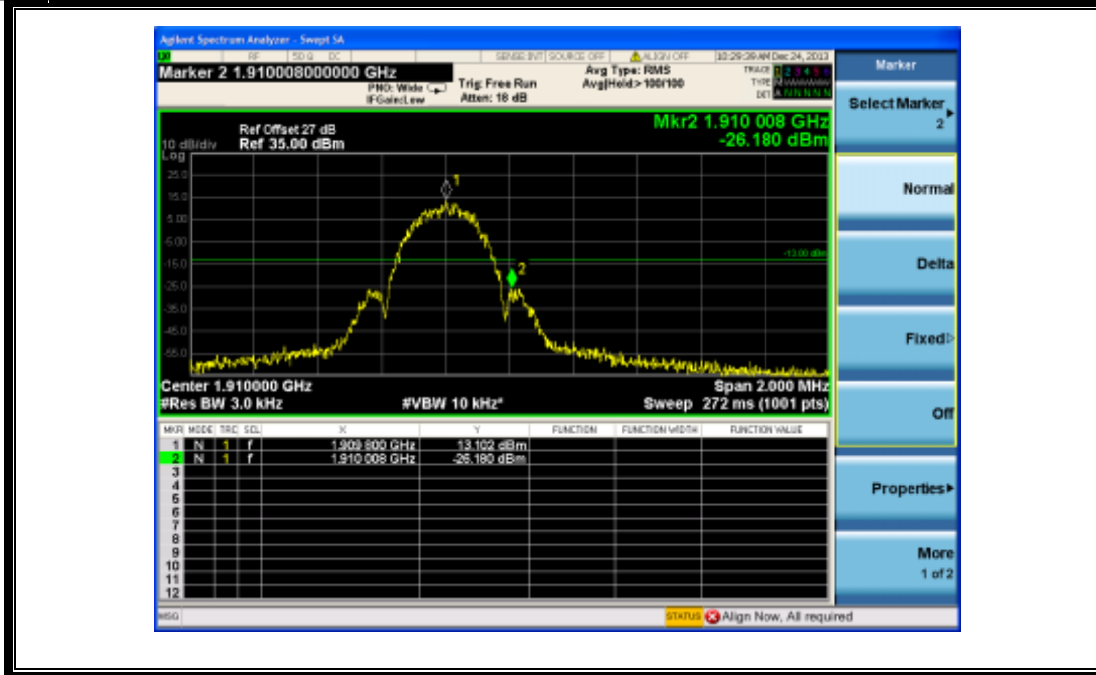
(Plot E: EGPRS 850 Channel = 128)



(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)



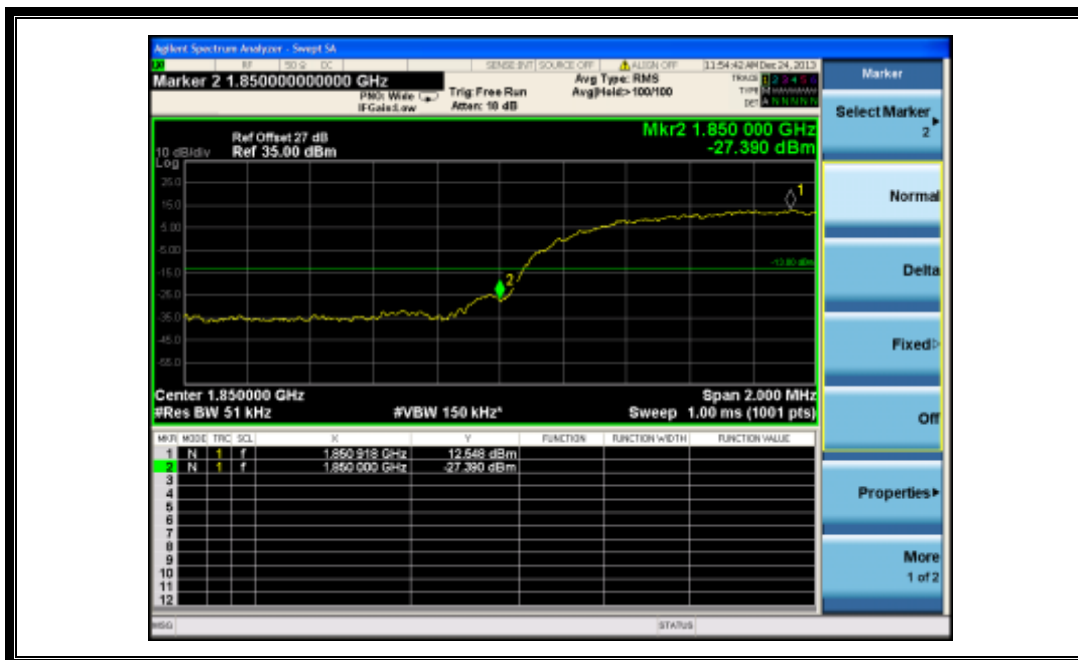
(Plot L: WCDMA 1900 Channel = 9538)



(Plot M: HSDPA 850 Channel = 4132)



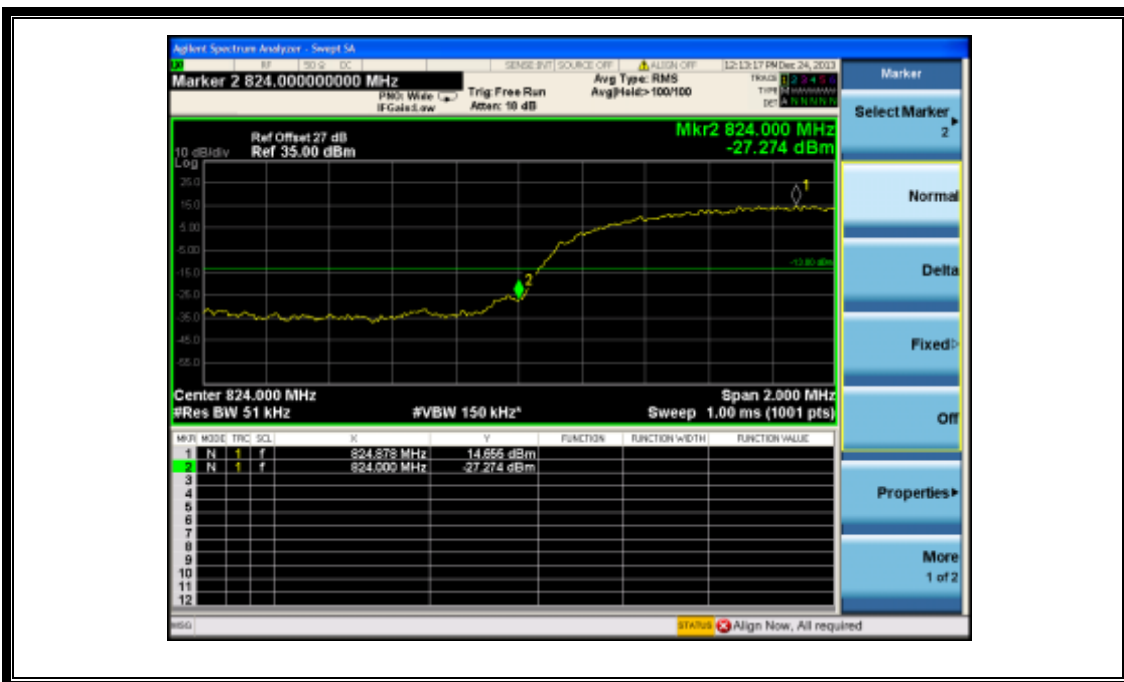
(Plot N: HSDPA850 Channel = 4233)



(Plot O: HSDPA 1900 Channel = 9262)



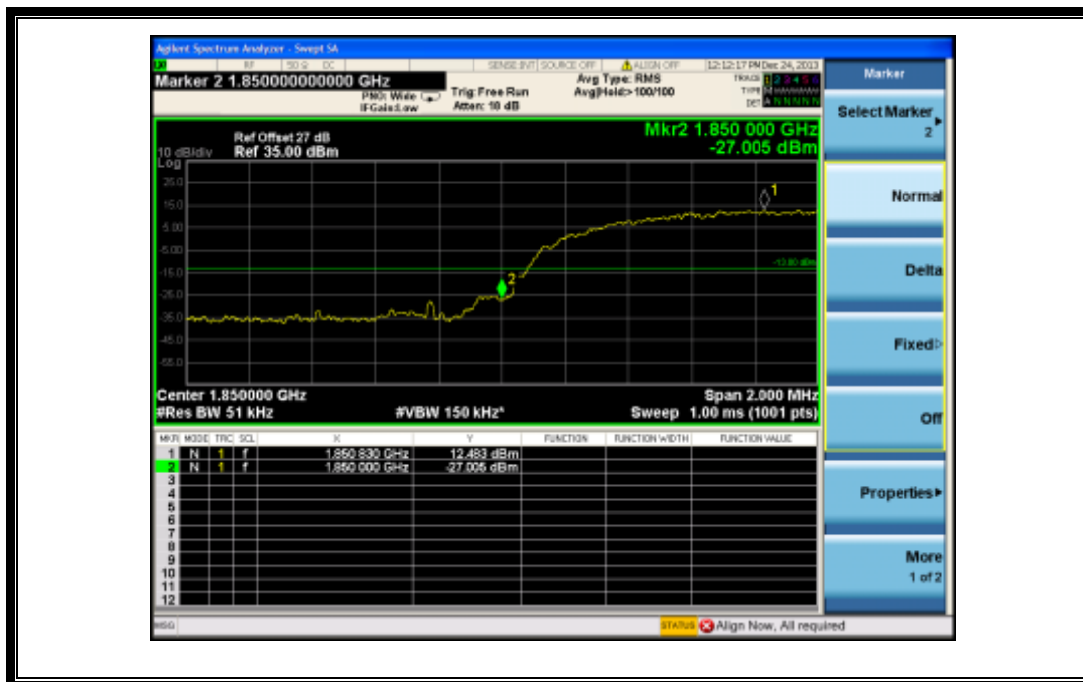
(Plot P: HSDPA 1900 Channel = 9538)



(Plot Q: HSUPA 850 Channel = 4132)



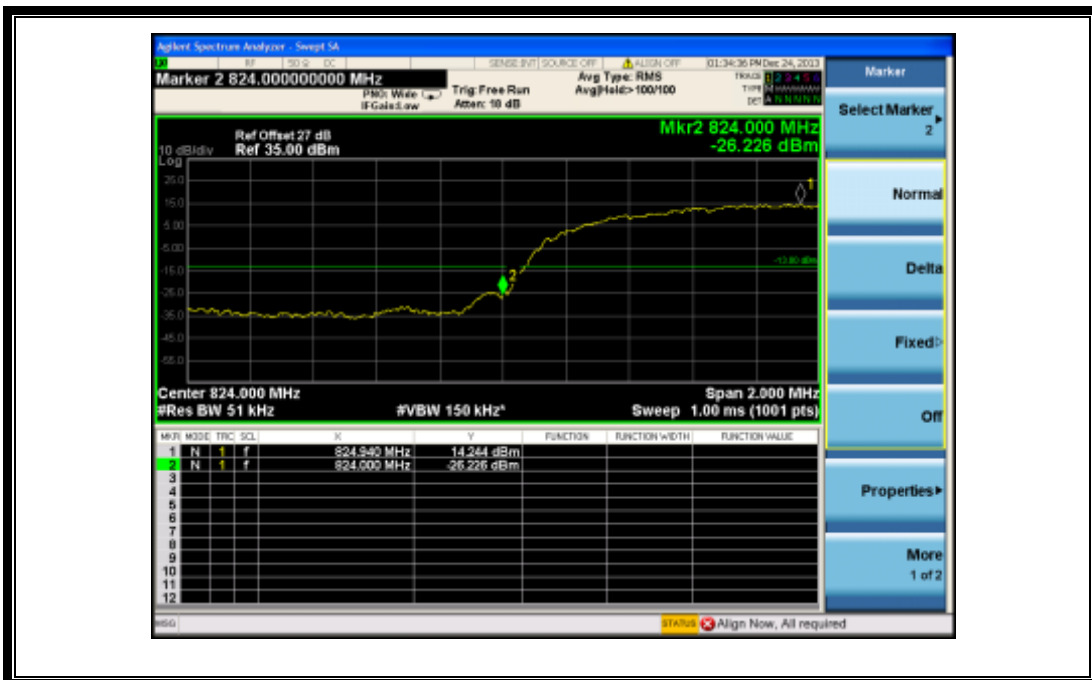
(Plot R: HSUPA850 Channel = 4233)



(Plot S: HSUPA 1900 Channel = 9262)



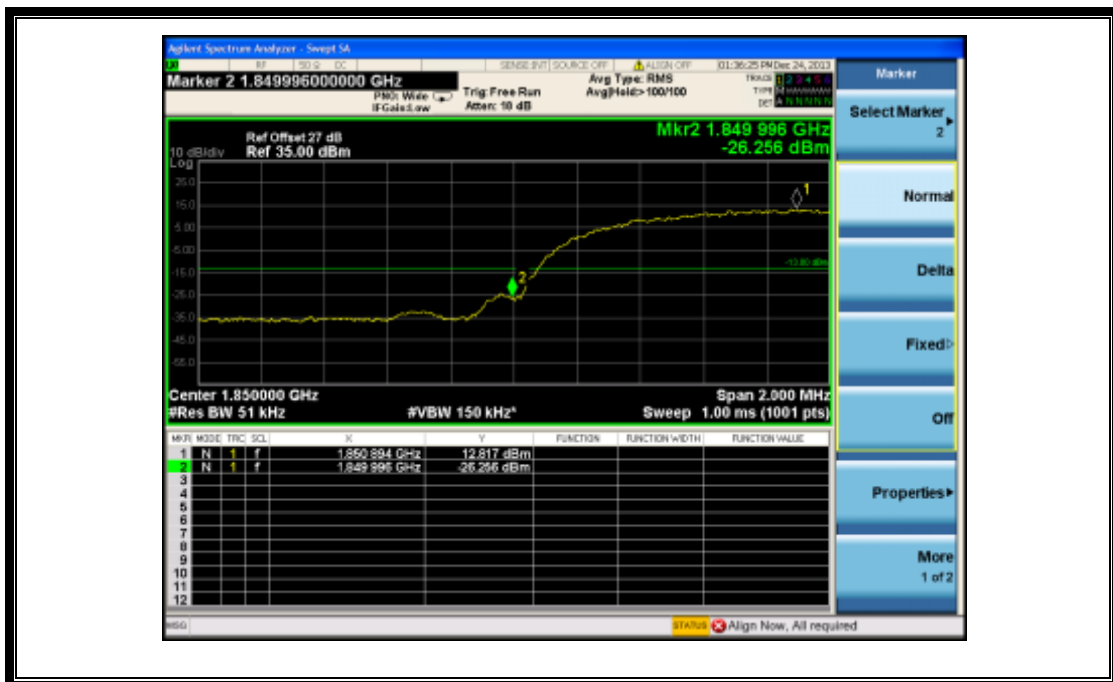
(Plot T: HSUPA 1900 Channel = 9538)



(Plot U: HSPA+ 850 Channel = 4132)



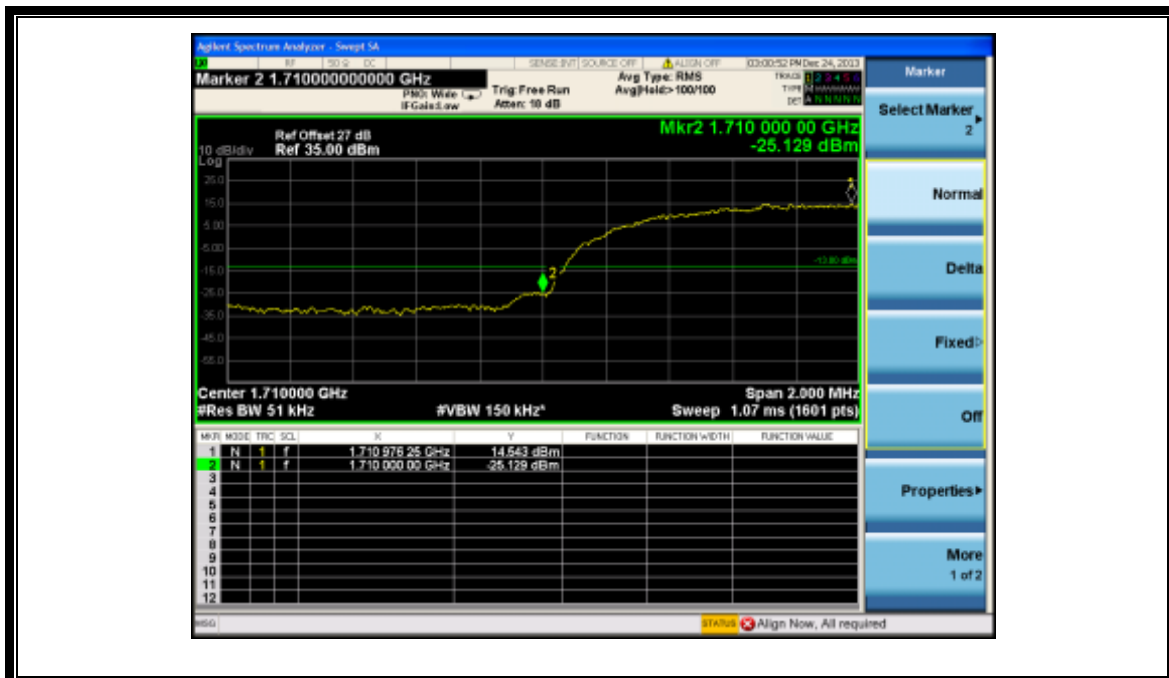
(Plot V: HSPA+ 850 Channel = 4233)



(Plot W: HSPA+ 1900 Channel = 9262)



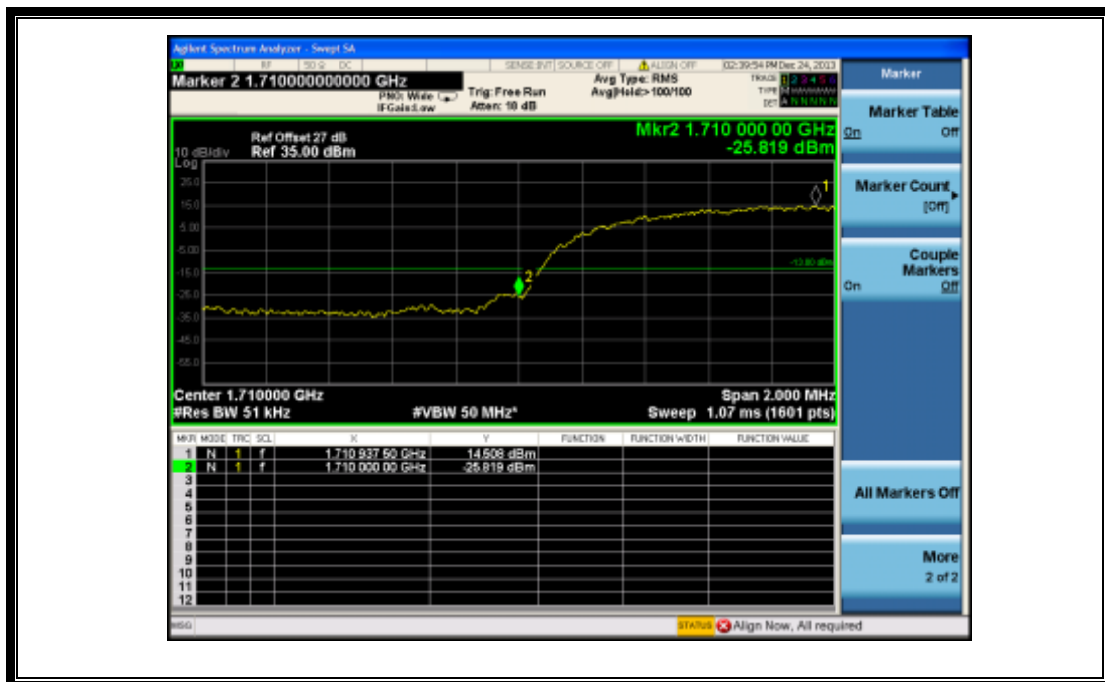
(Plot X: HSPA+ 1900 Channel = 9538)



(Plot Y: WCDMA 1700 Channel = 1312)



(Plot Z: WCDMA 1700 Channel = 1513)



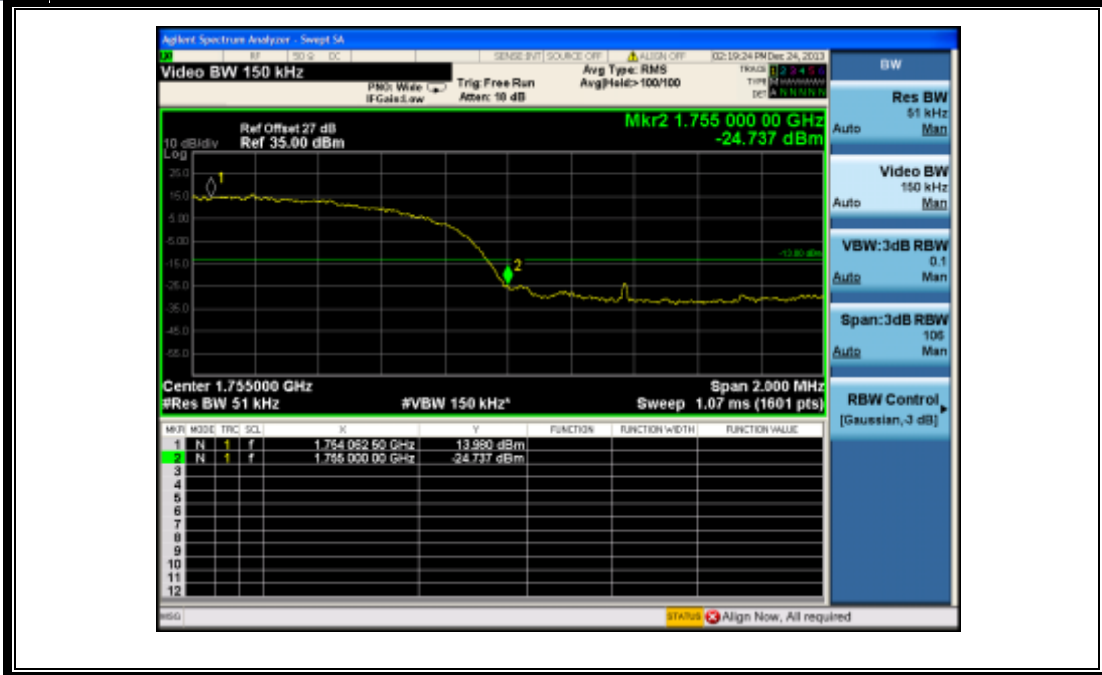
(Plot A1:HSDPA 1700 Channel = 1312)



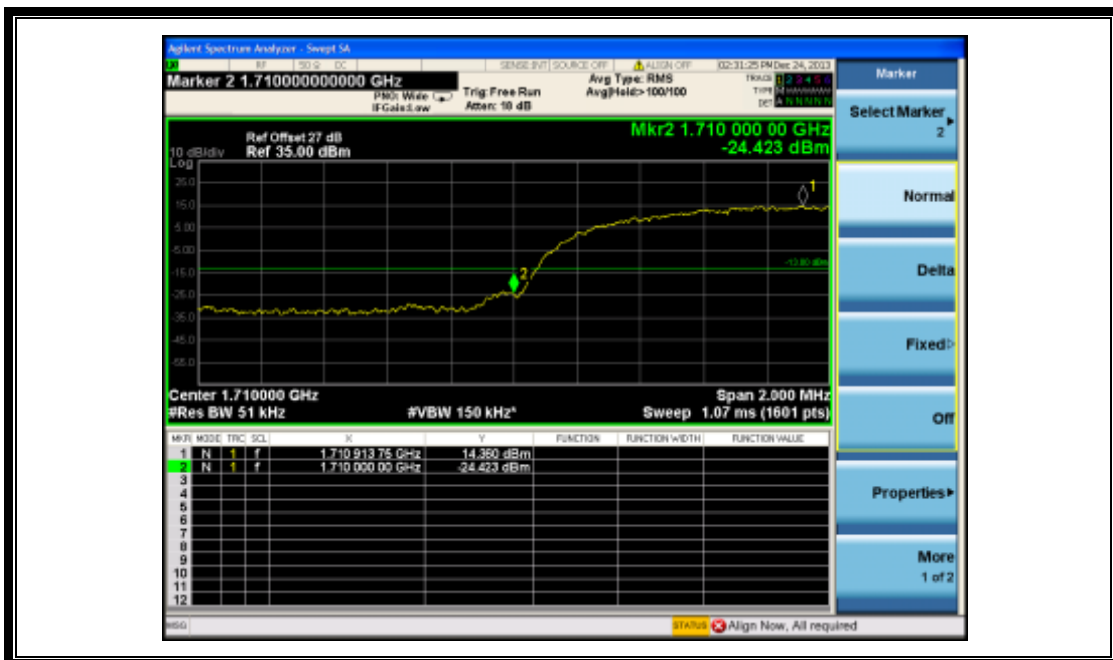
(Plot B1: HSDPA 1700 Channel = 1513)



(Plot C1: HSUPA 1700 Channel = 1312)



(Plot D1: HSUPA1700 Channel = 1513)



(Plot E1: HSPA+ 1700 Channel = 1312)



(Plot F1:HSPA+ 1700 Channel = 1513)

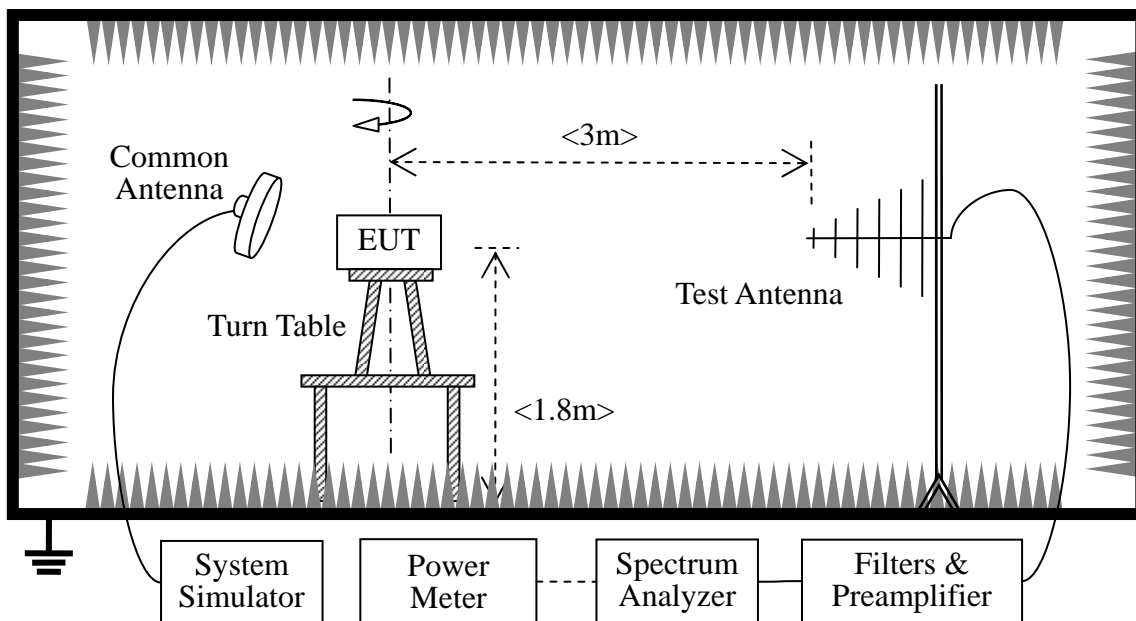
2.7 Transmitter Radiated Power (EIRP/ERP)

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 33.42dBm, GSM 1900 29.39dBm, EGPRS 850 30.64dBm, EGPRS 26.60.WCDMA 850 24.88dBm, WCDMA 1900 23.52 dBm, WCDMA1700 24.23 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:

$$A_{\text{SUBST}} = P_{\text{SUBST_TX}} - P_{\text{SUBST_RX}} - L_{\text{SUBST_CABLES}} + G_{\text{SUBST_TX_ANT}}$$

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

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

$P_{\text{SUBST_TX}}$ is signal generator level,

$P_{\text{SUBST_RX}}$ is receiver level,

$L_{\text{SUBST_CABLES}}$ is cable losses including TX cable,

$G_{\text{SUBST_TX_ANT}}$ 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	31.40	1.380	Plot A	38.5	7	PASS
	190	836.60	5	31.84	1.528				PASS
	251	848.80	5	31.86	1.535				PASS
GPRS 850MHz	128	824.20	5	29.52	0.895	Plot B ^{Note 1}	38.5	7	PASS
	190	836.60	5	29.75	0.944				PASS
	251	848.80	5	29.47	0.885				PASS
EGPRS 850MHz	128	824.20	5	31.10	1.288	Plot C ^{Note 1}	38.5	7	PASS
	190	836.60	5	31.04	1.271				PASS
	251	848.80	5	31.18	1.312				PASS
Band	Channel	Frequency (MHz)	PCL	Measured EIRP			Limit		Verdict
				dBm	W	Refer to Plot	dBm	W	
GSM 1900MHz	512	1850.2	0	29.15	0.822	Plot D	33	2	PASS
	661	1880.0	0	29.02	0.798				PASS
	810	1909.8	0	28.86	0.769				PASS
GPRS 1900MHz	512	1850.2	0	27.06	0.508	Plot E ^{Note 1}	33	2	PASS
	661	1880.0	0	27.18	0.522				PASS
	810	1909.8	0	27.11	0.514				PASS
EGPRS 1900MHz	512	1850.2	0	27.83	0.607	Plot F ^{Note 1}	33	2	PASS
	661	1880.0	0	27.77	0.598				PASS
	810	1909.8	0	27.82	0.605				PASS
Note 1:	For the GPRS and EGPRS model, all the slots were tested and just the worst data was record in this report.								

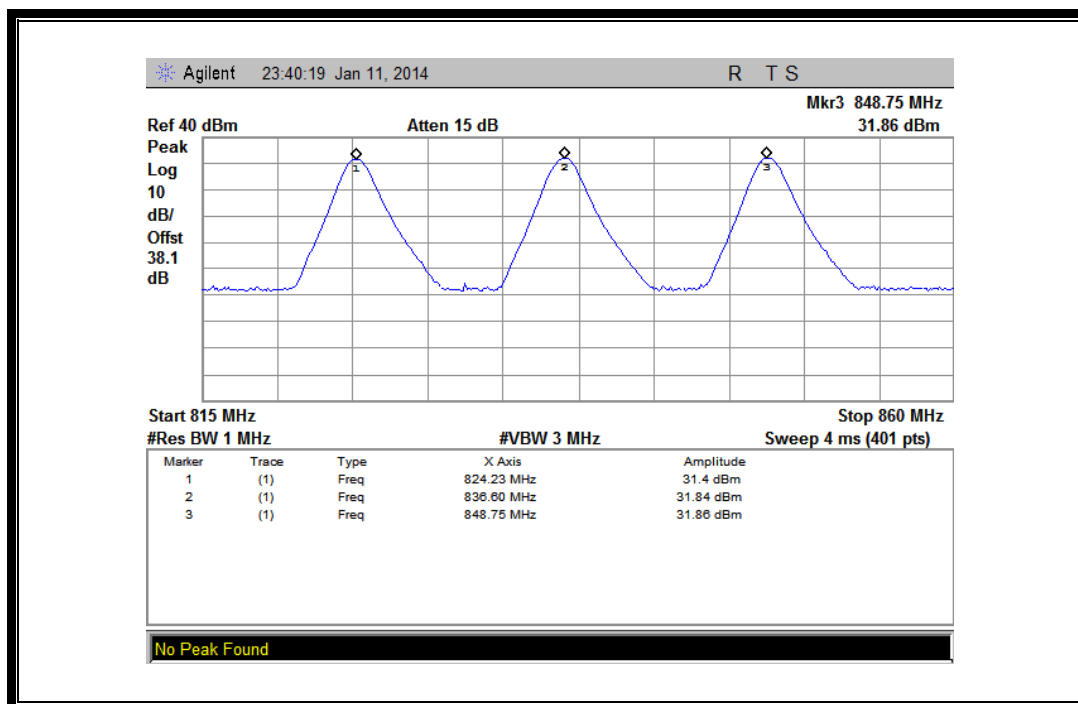
2. WCDMA Model Test Verdict:

Band	Channel	Frequency (MHz)	Measured ERP			Limit		Verdict
			dBm	W	Refer to Plot	dBm	W	
WCDMA 850MHz	4132	826.4	26.78	0.476	Plot G	38.5	7	PASS
	4175	835	26.58	0.455				PASS
	4233	846.6	26.82	0.481				PASS
HSDPA 850MHz	4132	826.4	26.67	0.465	Plot H	38.5	7	PASS
	4175	835	26.50	0.447				PASS
	4233	846.6	26.81	0.480				PASS
HSUPA 850MHz	4132	826.4	26.46	0.443	Plot I	38.5	7	PASS
	4175	835	26.42	0.439				PASS
	4233	846.6	26.54	0.451				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

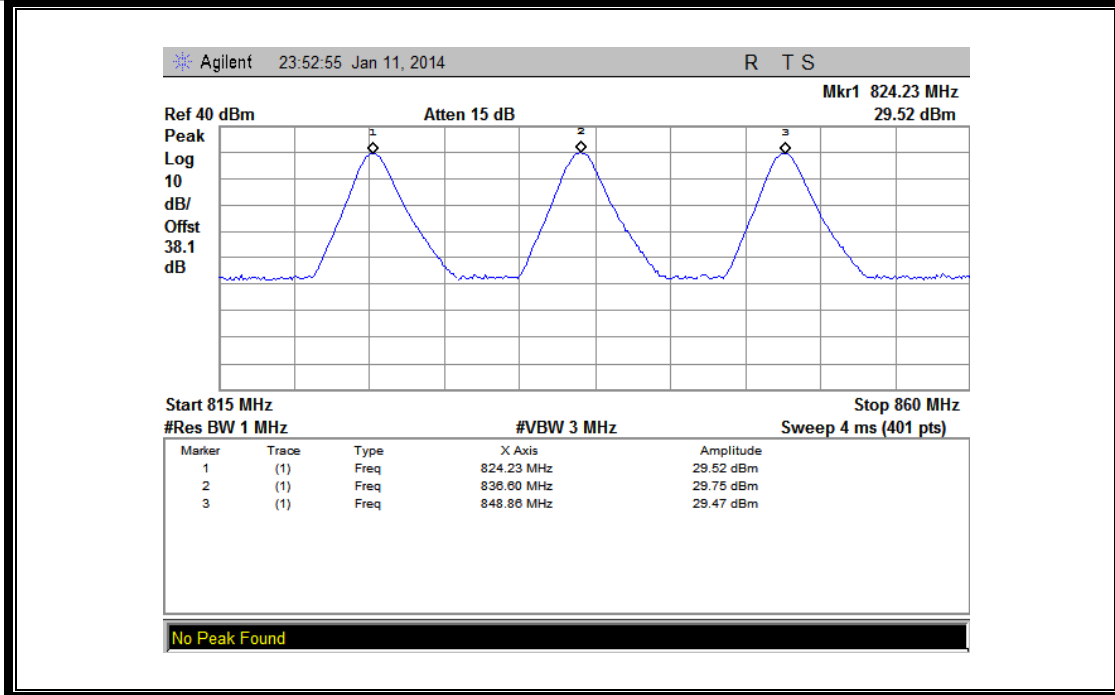
Band	Channel	Frequency (MHz)	Measured EIRP			Limit		Verdict
			dBm	W		dBm	W	
WCDMA 1900MHz	9262	1852.4	24.64	0.291	Plot K	33	2	PASS
	9400	1880	24.35	0.272				PASS
	9538	1907.6	24.38	0.274				PASS
HSDPA 1900MHz	9262	1852.4	24.09	0.256	Plot L	33	2	PASS
	9400	1880	24.05	0.254				PASS
	9538	1907.6	23.67	0.233				PASS
HSUPA 1900MHz	9262	1852.4	24.09	0.256	Plot M	33	2	PASS
	9400	1880	24.06	0.255				PASS
	9538	1907.6	23.69	0.234				PASS
HSPA+ 1900MHz	9262	1852.4	23.91	0.246	Plot N	33	2	PASS
	9400	1880	23.57	0.228				PASS
	9538	1907.6	23.52	0.225				PASS

Band	Channel	Frequency (MHz)	Measured EIRP		Limit		Verdict	
			dBm	W	dBm	W		
WCDMA 1700MHz	1312	1712.4	27.99	0.630	Plot O	30	1	PASS
	1412	1732.4	27.96	0.625				PASS
	1513	1752.6	27.89	0.615				PASS
HSDPA 1700MHz	1312	1712.4	27.75	0.596	Plot P	30	1	PASS
	1412	1732.4	27.95	0.624				PASS
	1513	1752.6	27.84	0.608				PASS
HSUPA 1700MHz	1312	1712.4	27.51	0.564	Plot Q	30	1	PASS
	1412	1732.4	27.93	0.621				PASS
	1513	1752.6	27.81	0.604				PASS
HSPA+ 1700MHz	1312	1712.4	27.20	0.525	Plot R	30	1	PASS
	1412	1732.4	27.89	0.615				PASS
	1513	1752.6	27.79	0.601				PASS

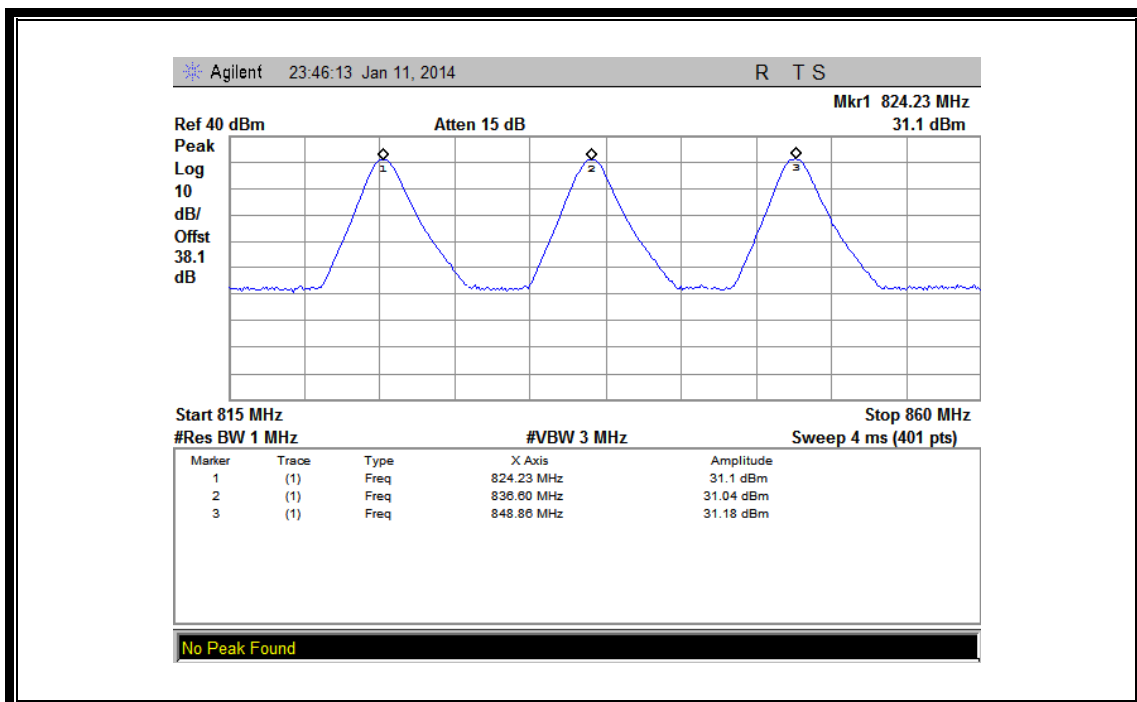
3. Test Plots:



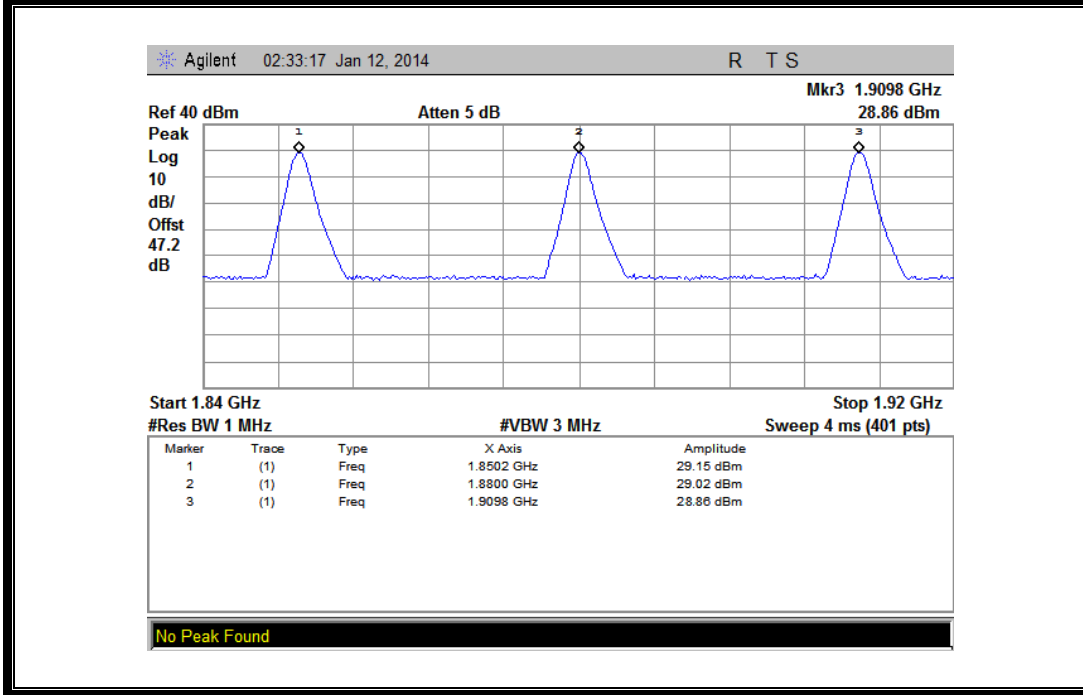
(Plot A: GSM 850MHz Channel = 128, 190, 251)



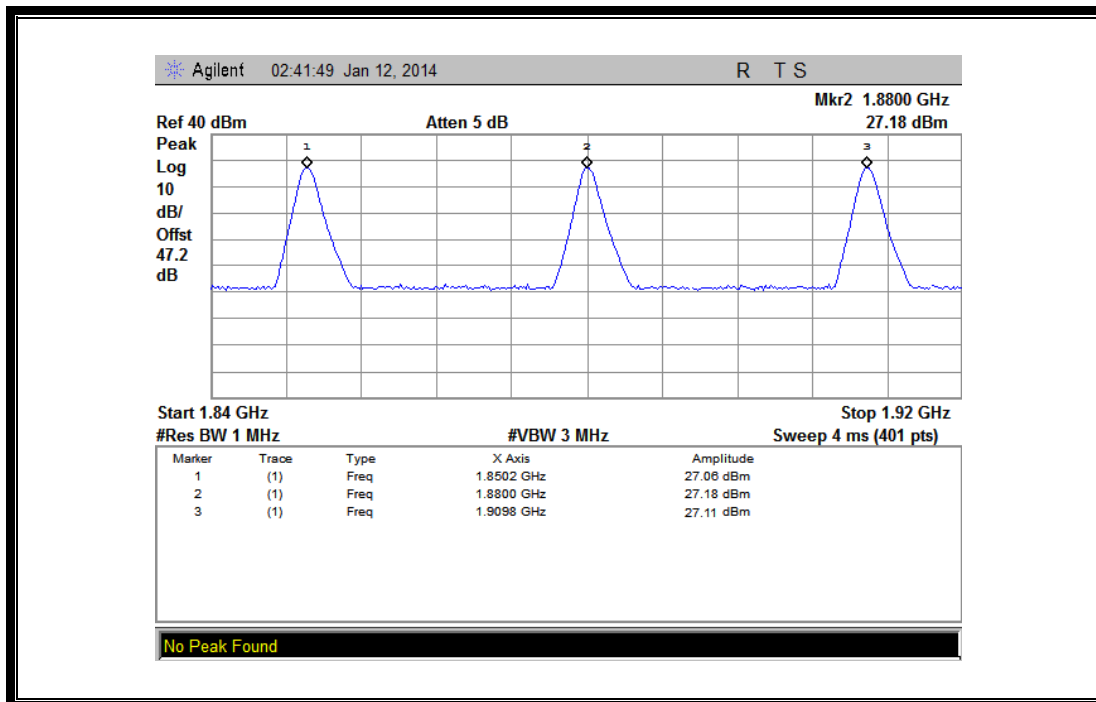
(Plot B: GPRS 850MHz Channel = 128, 190, 251)



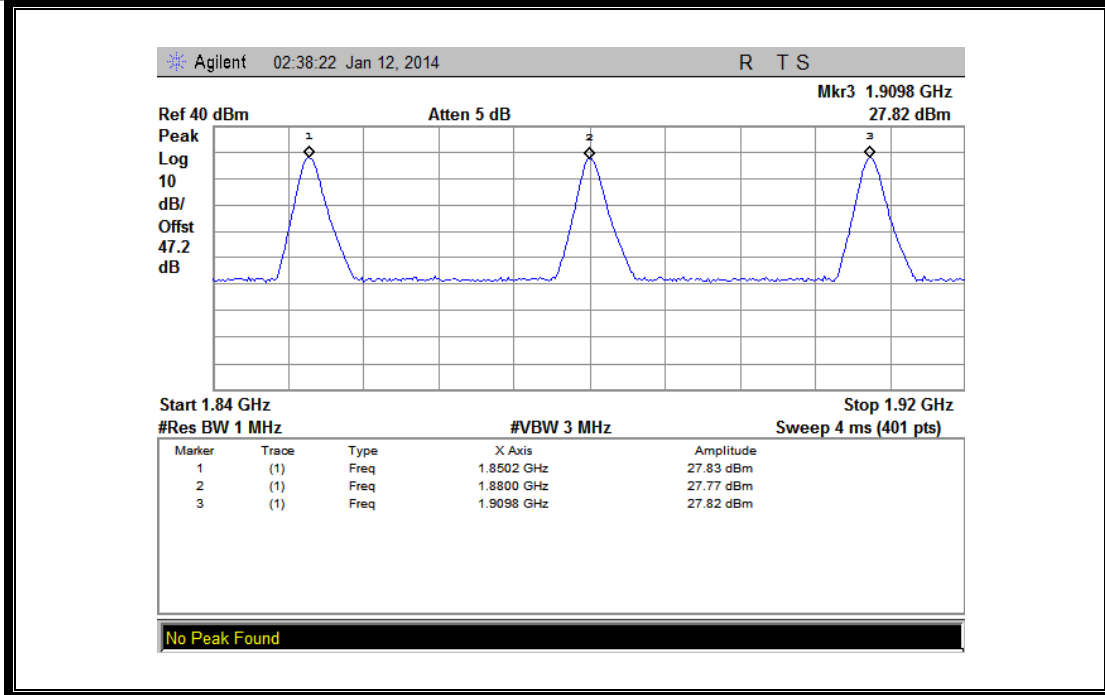
(Plot C: EGPRS 850MHz Channel = 128, 190, 251)



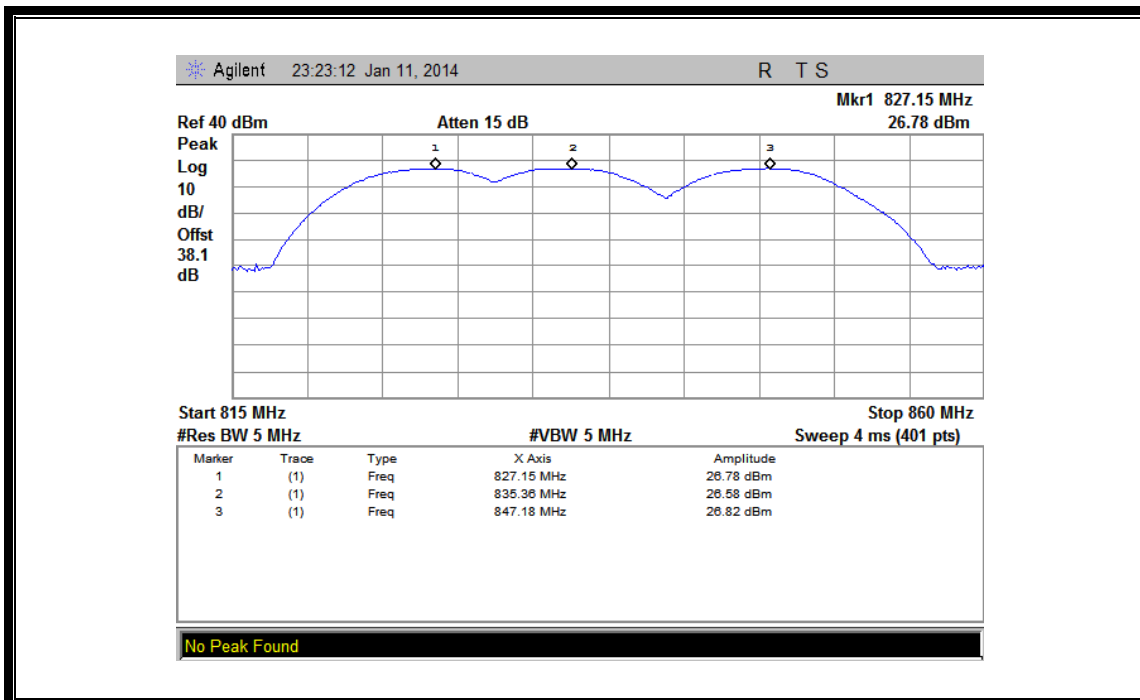
(Plot D: GSM 1900MHz Channel = 512, 661, 810)



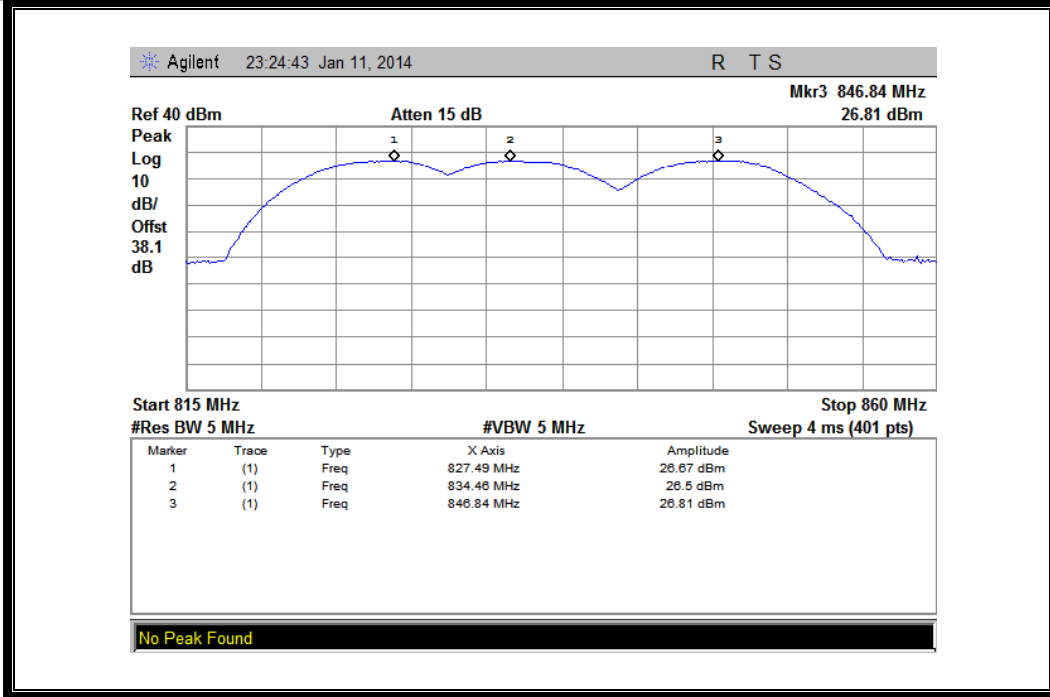
(Plot E: GPRS 1900MHz Channel = 512, 661, 810)



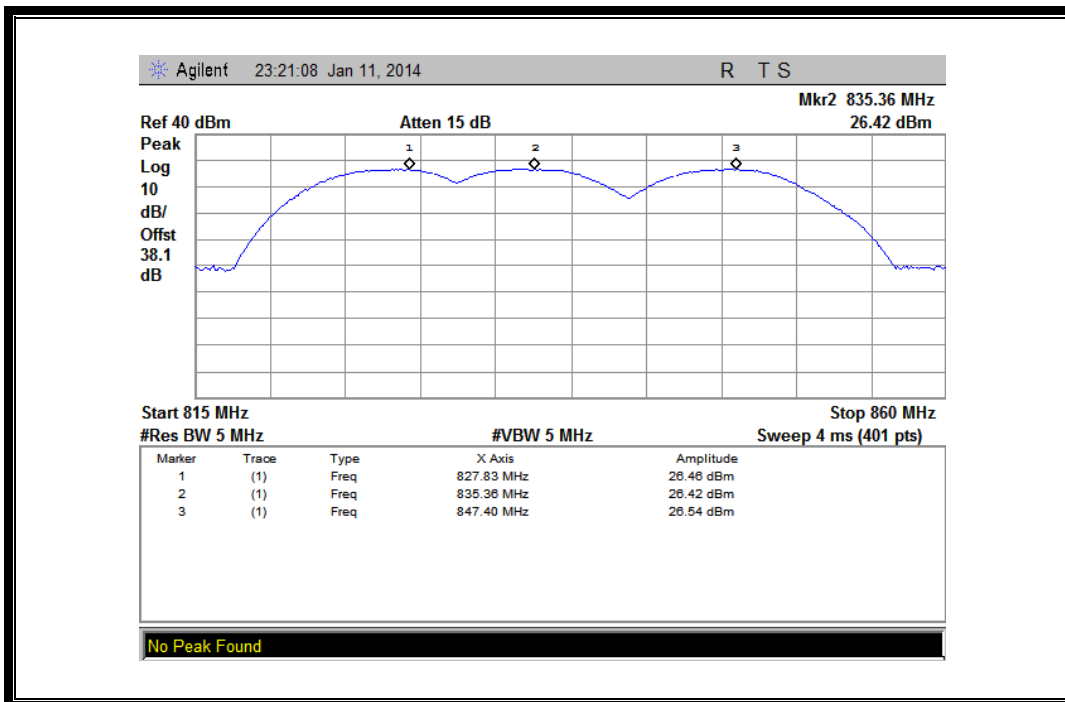
(Plot F: EGPRS 1900MHz Channel = 512, 661, 810)



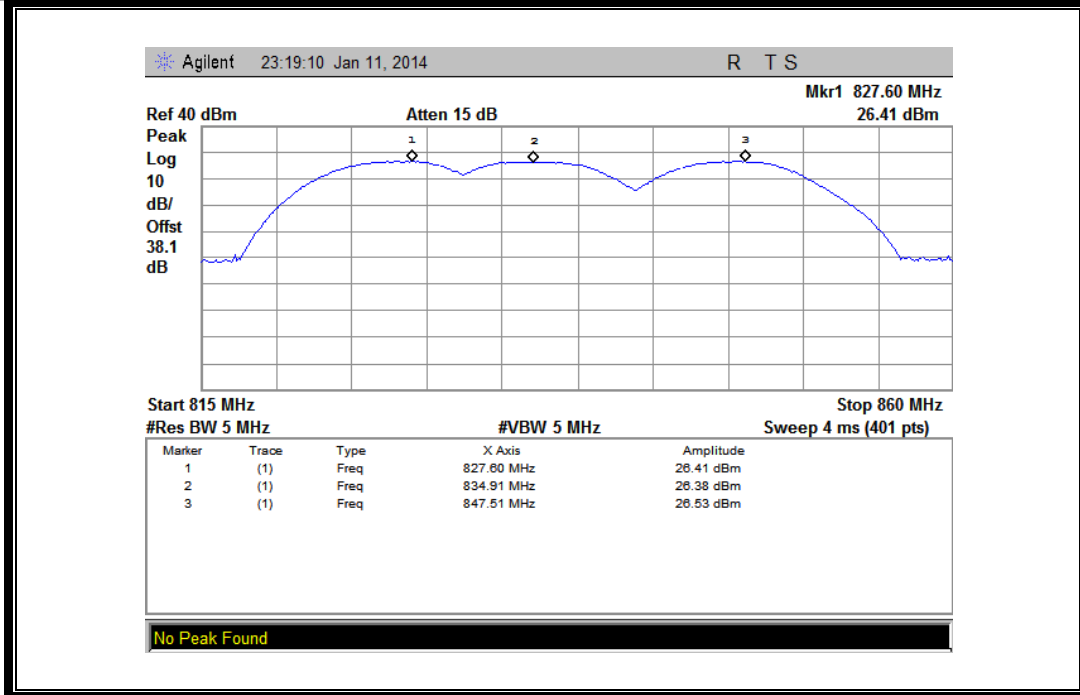
(Plot G: WCDMA 850 MHz Channel = 4132, 4175, 4233)



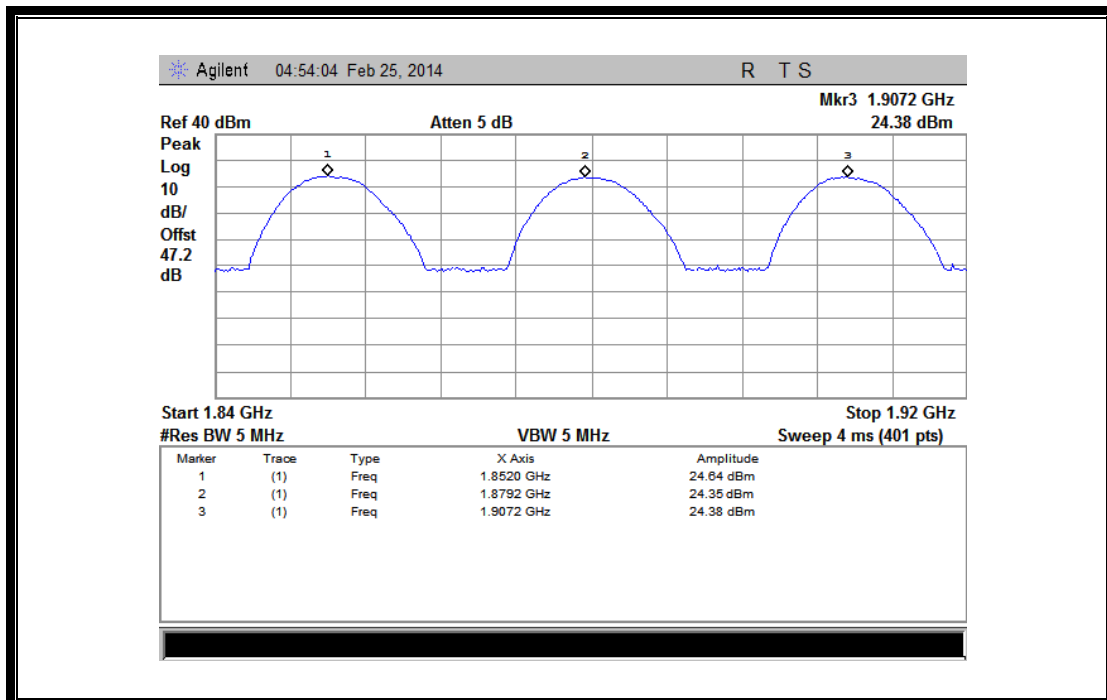
(Plot H: HSDPA 850 MHz Channel = 4132, 4175, 4233)



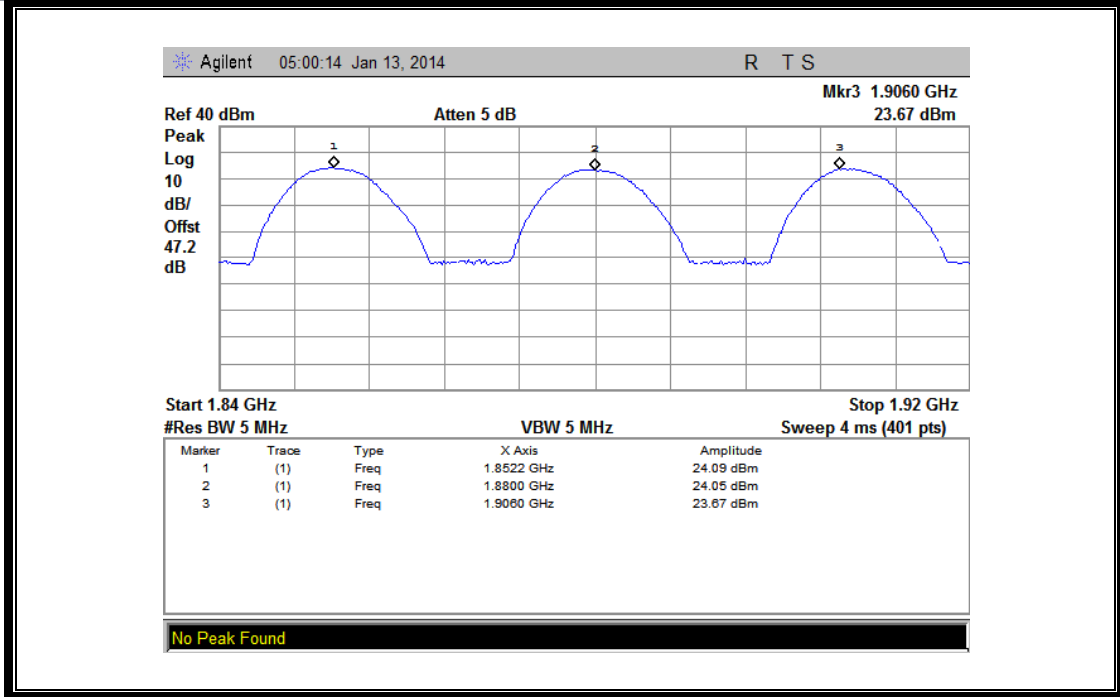
(Plot I: HSUPA 850 MHz Channel = 4132, 4175, 4233)



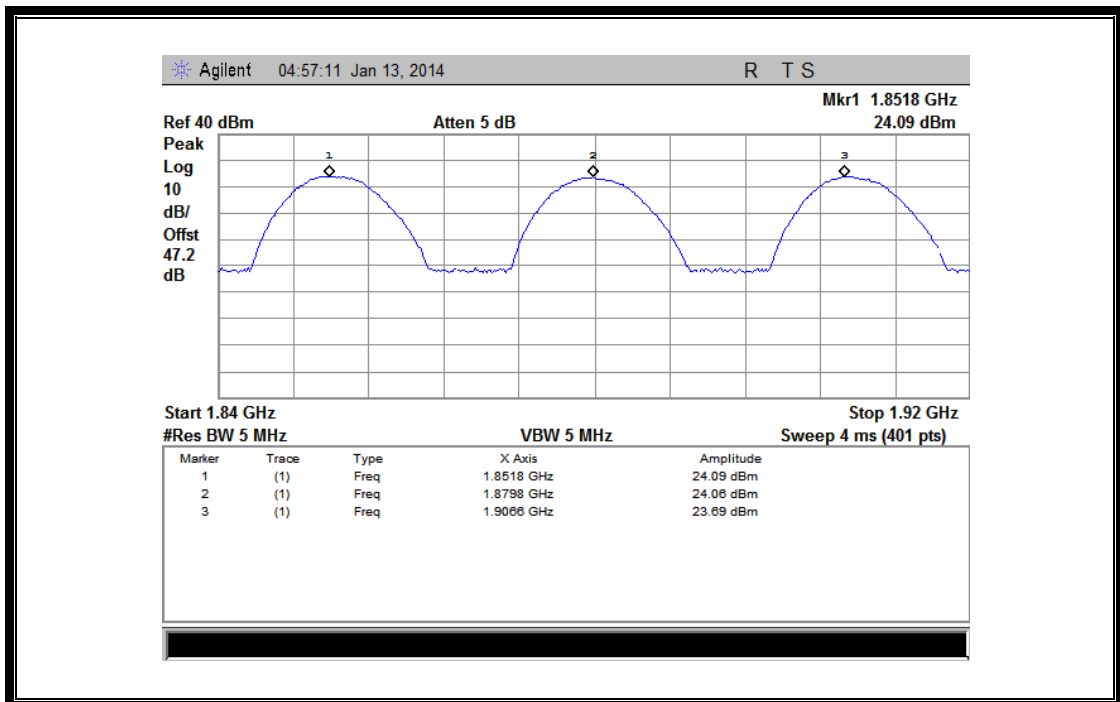
(Plot J: HSPA+ 850 MHz Channel = 4132, 4175, 4233)



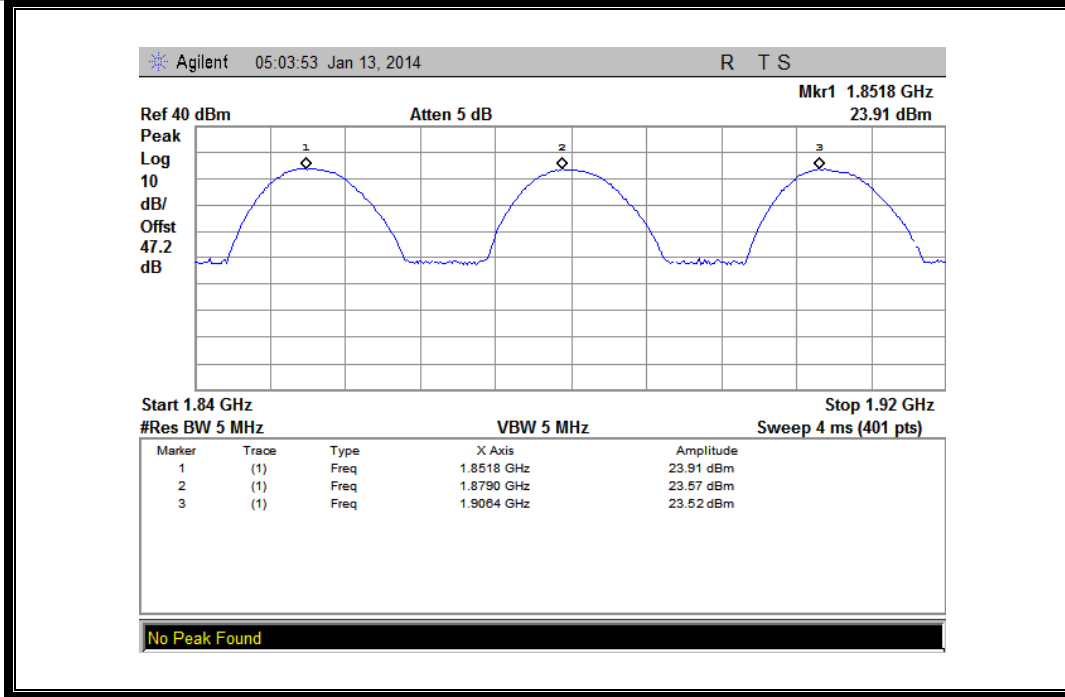
(Plot K: WCDMA 1900 MHz Channel = 9262, 9400, 9538)



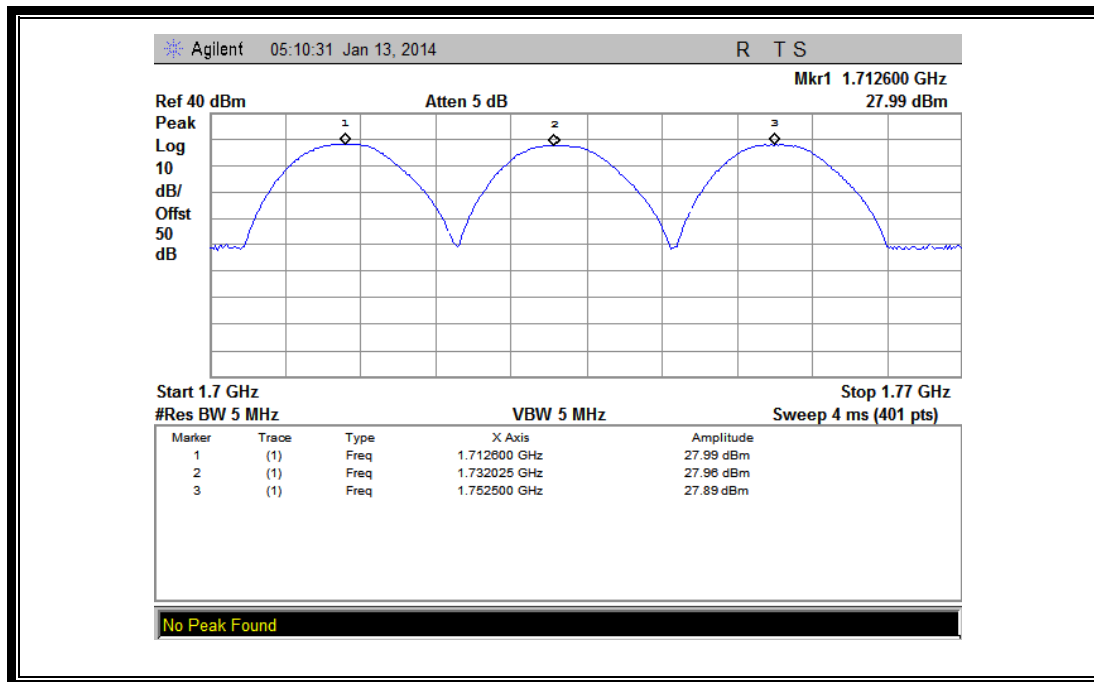
(Plot L: HSDPA1900 MHz Channel = 9262, 9400, 9538)



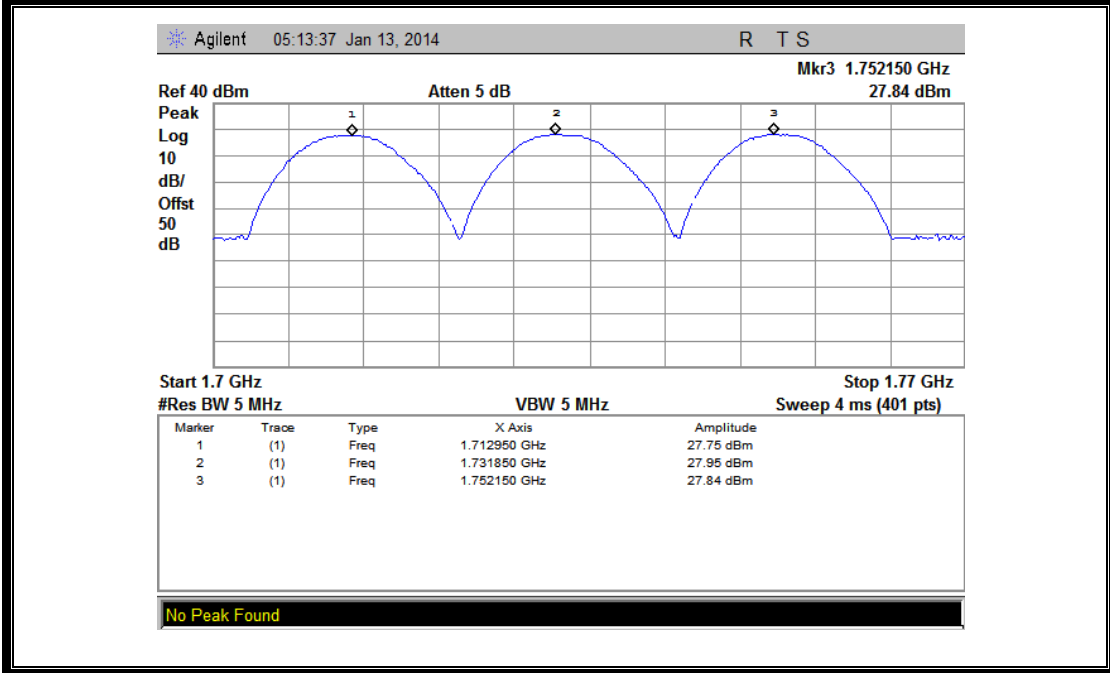
(Plot M: HSUPA1900 MHz Channel = 9262, 9400, 9538)



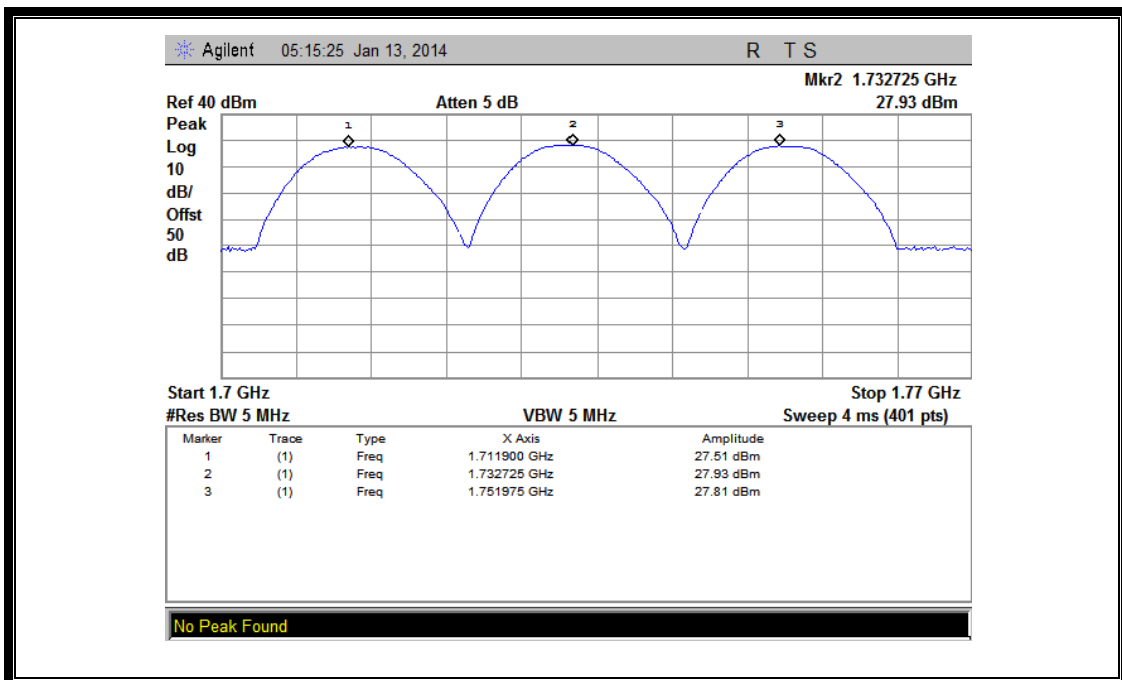
(Plot N: HSPA+1900 MHz Channel = 9262, 9400, 9538)



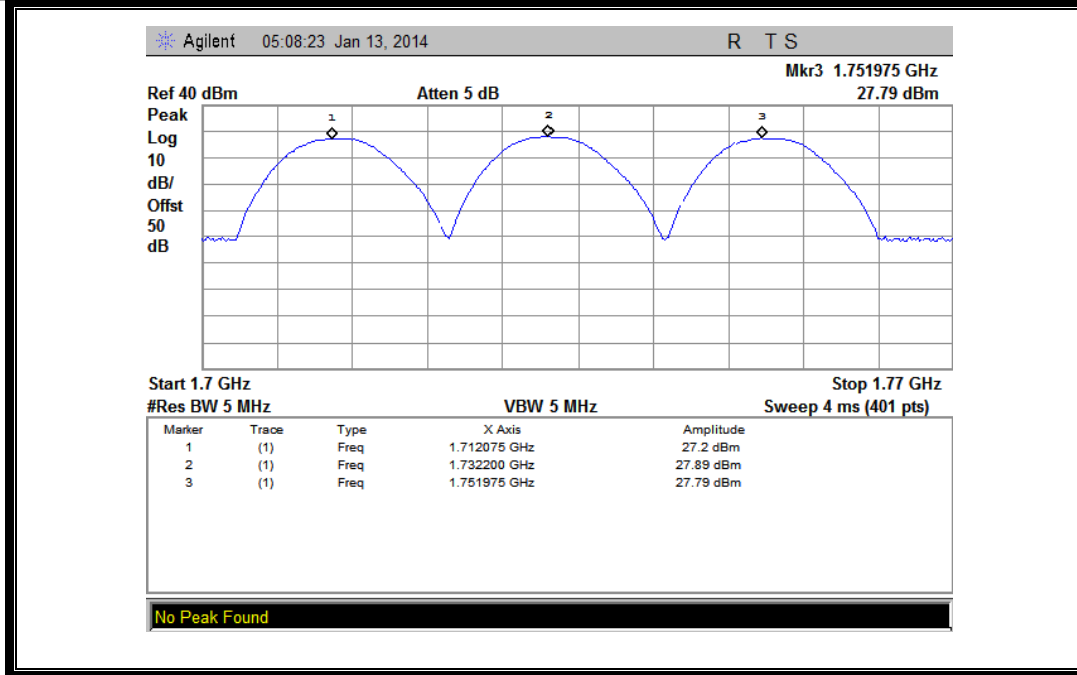
(Plot O: WCDMA 1700MHz Channel = 1312, 1412, 1513)



(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	<u>PASS</u>
	190	836.6	< -25	< -25	Plot A.3/A.4		<u>PASS</u>
	251	848.8	< -25	< -25	Plot A.5/A.6		<u>PASS</u>
GSM 1900MHz	512	1850.2	< -25	< -25	Plot B.1/B.2	-13	<u>PASS</u>
	661	1880.0	< -25	< -25	Plot B.3/B.4		<u>PASS</u>
	810	1909.8	< -25	< -25	Plot B.5/B.6		<u>PASS</u>
EDGE 850MHz	128	824.2	< -25	< -25	Plot C.1/C.2	-13	<u>PASS</u>
	190	836.6	< -25	< -25	Plot C.3/C.4		<u>PASS</u>
	251	848.8	< -25	< -25	Plot C.5/C.6		<u>PASS</u>
EDGE 1900MHz	512	1850.2	< -25	< -25	Plot D.1/D.2	-13	<u>PASS</u>
	661	1880.0	< -25	< -25	Plot D.3/D.4		<u>PASS</u>
	810	1909.8	< -25	< -25	Plot D.5/D.6		<u>PASS</u>
WCDMA 850MHz	4132	826.4	< -25	< -25	Plot E.1/E.2	-13	<u>PASS</u>
	4175	835	< -25	< -25	Plot E.3/E.4		<u>PASS</u>
	4233	846.6	< -25	< -25	Plot E.5/E.6		<u>PASS</u>
WCDMA 1900MHz	9262	1852.4	< -25	< -25	Plot F.1/F.2	-13	<u>PASS</u>
	9400	1880	< -25	< -25	Plot F.3/F.4		<u>PASS</u>
	9538	1907.6	< -25	< -25	Plot F.5/F.6		<u>PASS</u>
HSDPA 850MHz	4132	826.4	< -25	< -25	Plot G.1/G.2	-13	<u>PASS</u>
	4175	835	< -25	< -25	Plot G.3/G.4		<u>PASS</u>
	4233	846.6	< -25	< -25	Plot G.5/G.6		<u>PASS</u>
HSDPA 1900MHz	9262	1852.4	< -25	< -25	Plot H.1/H.2	-13	<u>PASS</u>
	9400	1880	< -25	< -25	Plot H.3/H.4		<u>PASS</u>
	9538	1907.6	< -25	< -25	Plot H.5/H.6		<u>PASS</u>
HSUPA 850MHz	4132	826.4	< -25	< -25	Plot I.1/I.2	-13	<u>PASS</u>
	4175	835	< -25	< -25	Plot I.3/I.4		<u>PASS</u>
	4233	846.6	< -25	< -25	Plot I.5/I.6		<u>PASS</u>
HSUPA 1900MHz	9262	1852.4	< -25	< -25	Plot J.1/J.2	-13	<u>PASS</u>
	9400	1880	< -25	< -25	Plot J.3/J.4		<u>PASS</u>
	9538	1907.6	< -25	< -25	Plot J.5/J.6		<u>PASS</u>
HSPA+ 850MHz	4132	826.4	< -25	< -25	Plot K.1/K.2	-13	<u>PASS</u>
	4175	835	< -25	< -25	Plot K.3/K.4		<u>PASS</u>
	4233	846.6	< -25	< -25	Plot K.5/K.6		<u>PASS</u>
HSPA+ 1900MHz	9662	1852.4	< -25	< -25	Plot L.1/L.2	-13	<u>PASS</u>
	9800	1880	< -25	< -25	Plot L.3/L.4		<u>PASS</u>
	9938	1907.6	< -25	< -25	Plot L.5/L.6		<u>PASS</u>

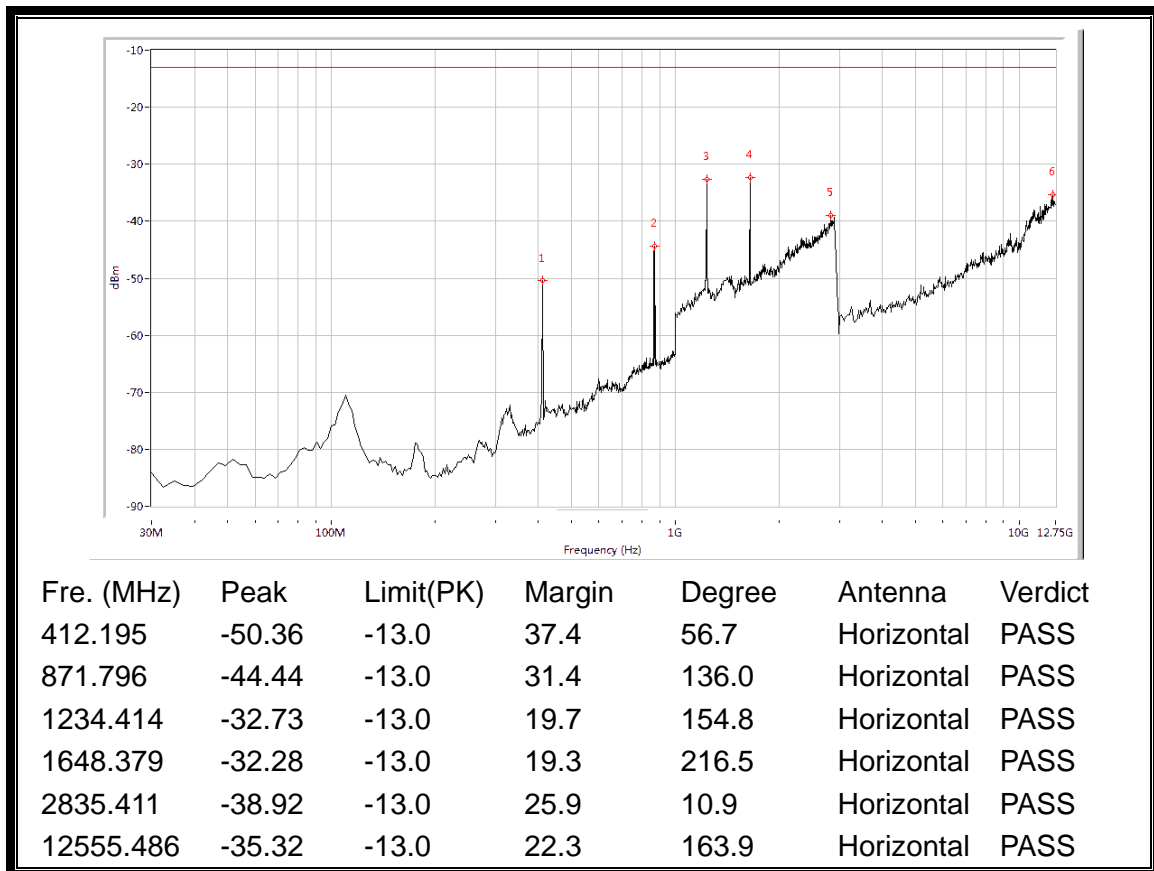


Band	Channel	Frequency (MHz)	Measured Max. Spurious Emission (dBm)		Refer to Plot	Limit (dBm)	Verdict
			Test Antenna Horizontal	Test Antenna Vertical			
WCDMA 1700MHz	1312	1712.4	< -25	< -25	Plot M.1/M.2	-13	<u>PASS</u>
	1412	1732.4	< -25	< -25	Plot M.3/M.4		<u>PASS</u>
	1513	1752.6	< -25	< -25	Plot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

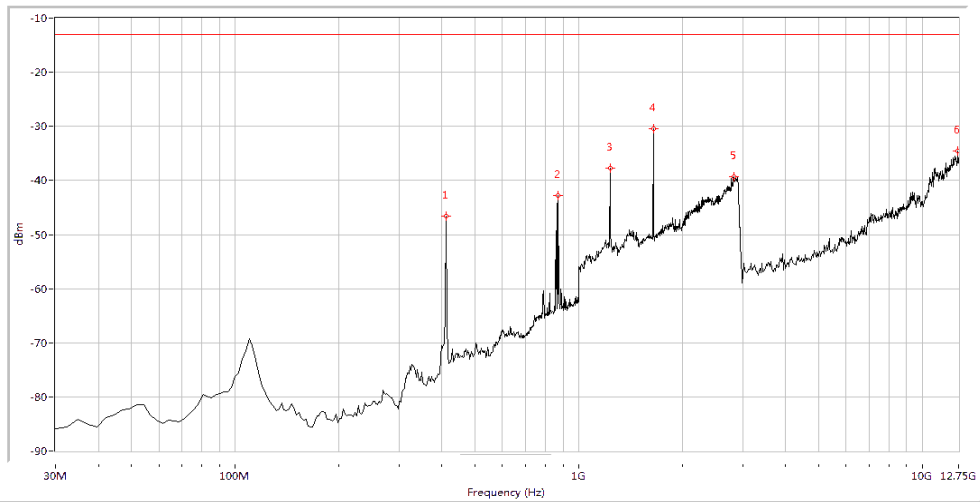
2. Test Plots for the Whole Measurement Frequency Range:

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.

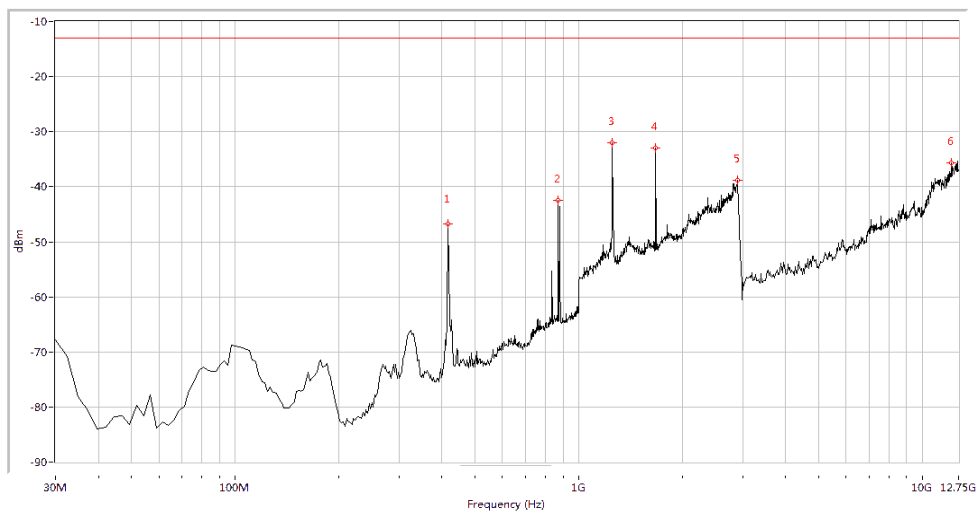


(Plot A.1: GSM 850MHz Channel = 128, Test Antenna Horizontal)



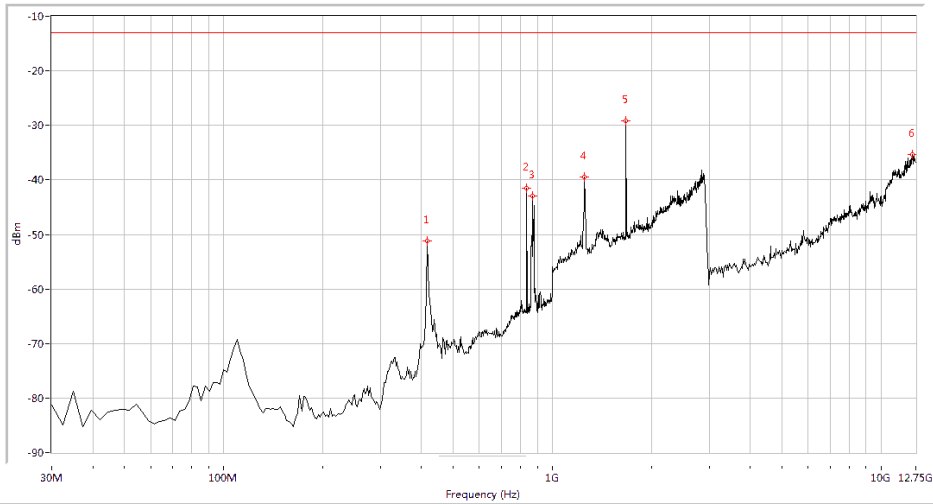
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
412.195	-46.56	-13.0	33.6	148.2	Vertical	PASS
871.796	-42.86	-13.0	29.9	239.0	Vertical	PASS
1234.414	-37.78	-13.0	24.8	323.0	Vertical	PASS
1648.379	-30.51	-13.0	17.5	360.0	Vertical	PASS
2825.436	-39.28	-13.0	26.3	19.8	Vertical	PASS
12701.372	-34.48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

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



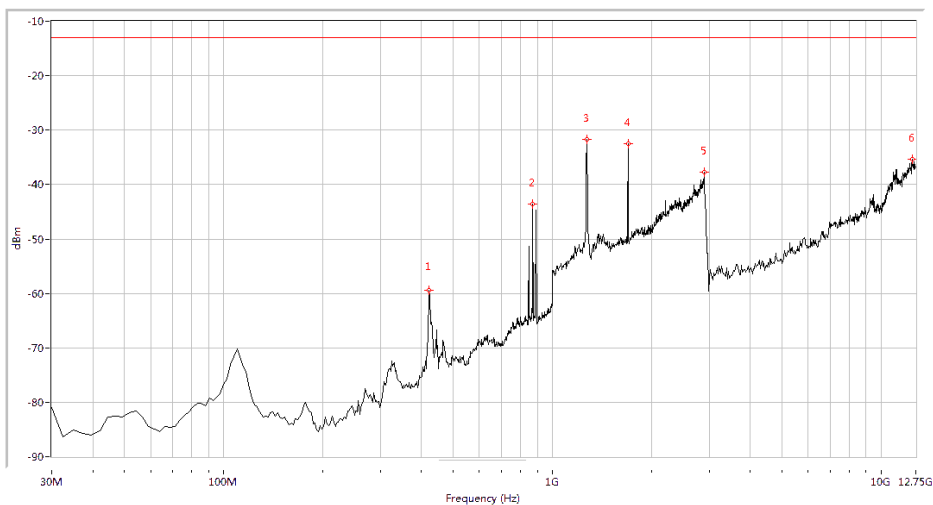
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
417.032	-46.71	-13.0	33.7	66.5	Horizontal	PASS
871.796	-42.48	-13.0	29.5	134.5	Horizontal	PASS
1254.364	-31.98	-13.0	19.0	137.4	Horizontal	PASS
1673.317	-33.00	-13.0	20.0	156.7	Horizontal	PASS
2900.249	-38.84	-13.0	25.8	166.4	Horizontal	PASS
12142.145	-35.59	-13.0	22.6	202.2	Horizontal	PASS

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



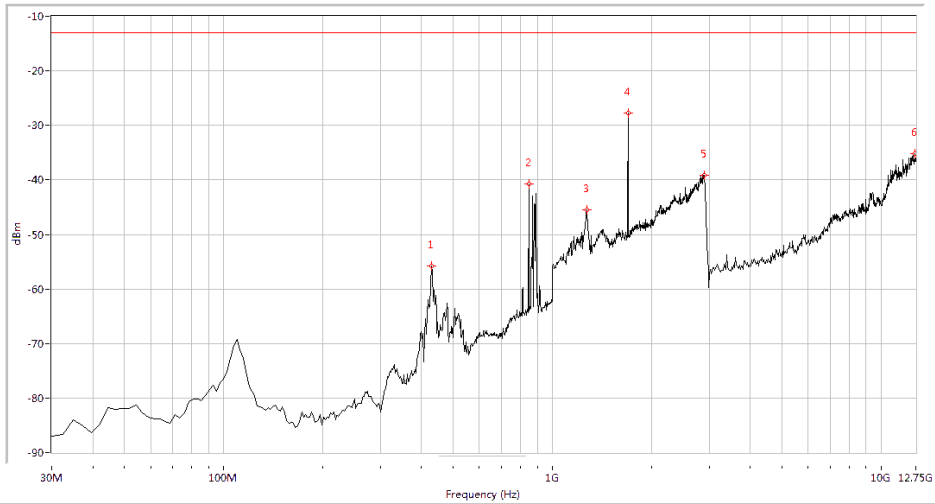
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
417.032	-51.13	-13.0	38.1	58.4	Vertical	PASS
835.511	-41.46	-13.0	28.5	170.7	Vertical	PASS
871.796	-42.93	-13.0	29.9	58.4	Vertical	PASS
1254.364	-39.54	-13.0	26.5	336.5	Vertical	PASS
1673.317	-29.17	-13.0	16.2	73.9	Vertical	PASS
12433.915	-35.35	-13.0	22.3	2.4	Vertical	PASS

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



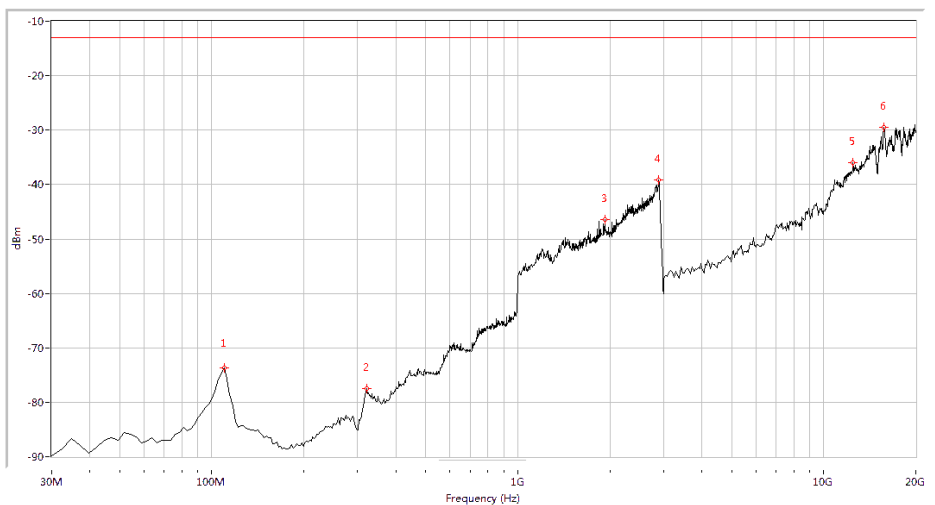
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
421.870	-59.35	-13.0	46.3	333.5	Horizontal	PASS
871.796	-43.61	-13.0	30.6	135.6	Horizontal	PASS
1274.314	-31.78	-13.0	18.8	134.7	Horizontal	PASS
1698.254	-32.45	-13.0	19.5	200.2	Horizontal	PASS
2895.262	-37.73	-13.0	24.7	90.8	Horizontal	PASS
12482.544	-35.40	-13.0	22.4	159.5	Horizontal	PASS

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



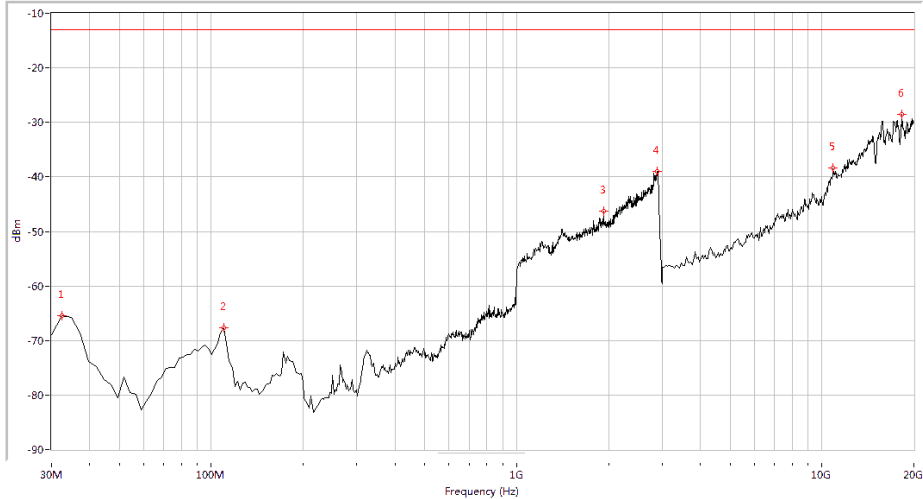
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
429.127	-55.84	-13.0	42.8	140.2	Vertical	PASS
847.606	-40.80	-13.0	27.8	359.6	Vertical	PASS
1274.314	-45.44	-13.0	32.4	360.0	Vertical	PASS
1698.254	-27.67	-13.0	14.7	297.8	Vertical	PASS
2890.274	-39.16	-13.0	26.2	181.0	Vertical	PASS
12701.372	-35.12	-13.0	22.1	262.6	Vertical	PASS

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



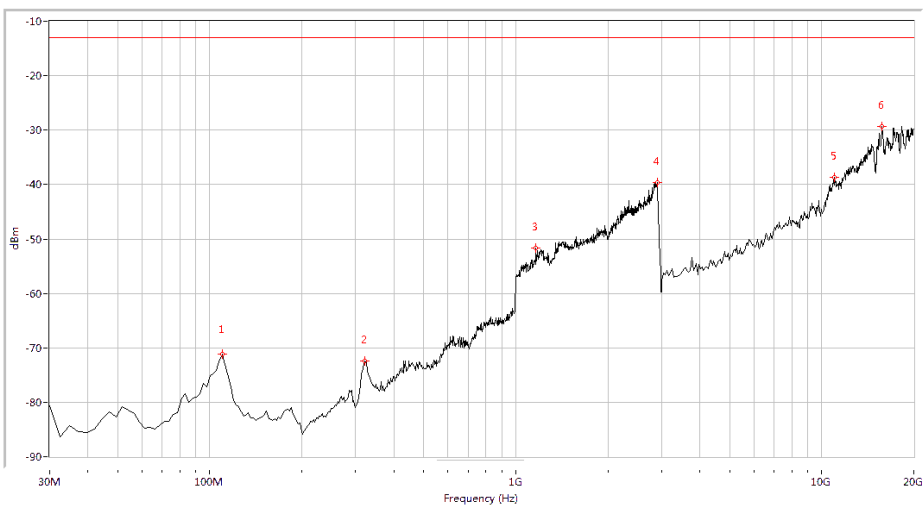
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-73.74	-13.0	60.7	0.1	Horizontal	PASS
320.274	-77.49	-13.0	64.5	182.1	Horizontal	PASS
1927.681	-46.46	-13.0	33.5	263.7	Horizontal	PASS
2890.274	-39.17	-13.0	26.2	346.9	Horizontal	PASS
12453.865	-35.97	-13.0	23.0	75.7	Horizontal	PASS
15718.204	-29.49	-13.0	16.5	8.8	Horizontal	PASS

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



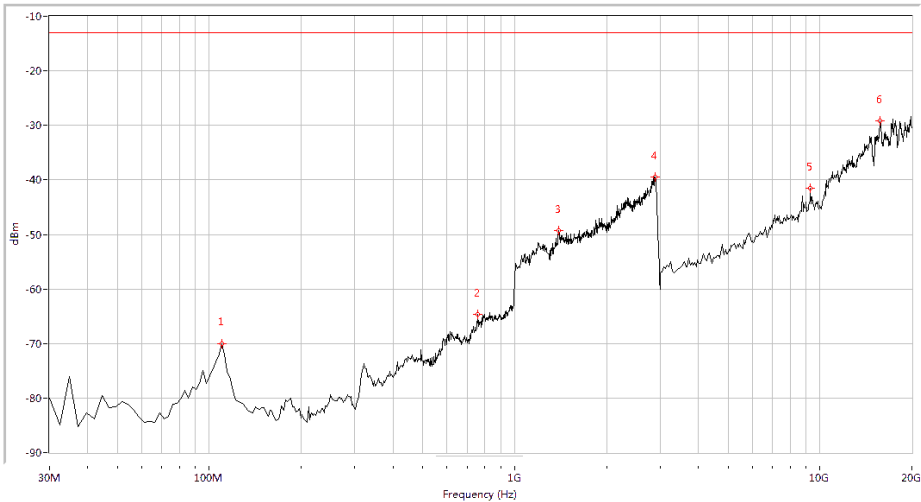
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
32.419	-65.40	-13.0	52.4	206.2	Vertical	PASS
109.825	-67.74	-13.0	54.7	174.2	Vertical	PASS
1927.681	-46.20	-13.0	33.2	226.7	Vertical	PASS
2895.262	-38.95	-13.0	25.9	281.8	Vertical	PASS
10885.287	-38.37	-13.0	25.4	226.5	Vertical	PASS
18304.239	-28.55	-13.0	15.6	276.4	Vertical	PASS

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



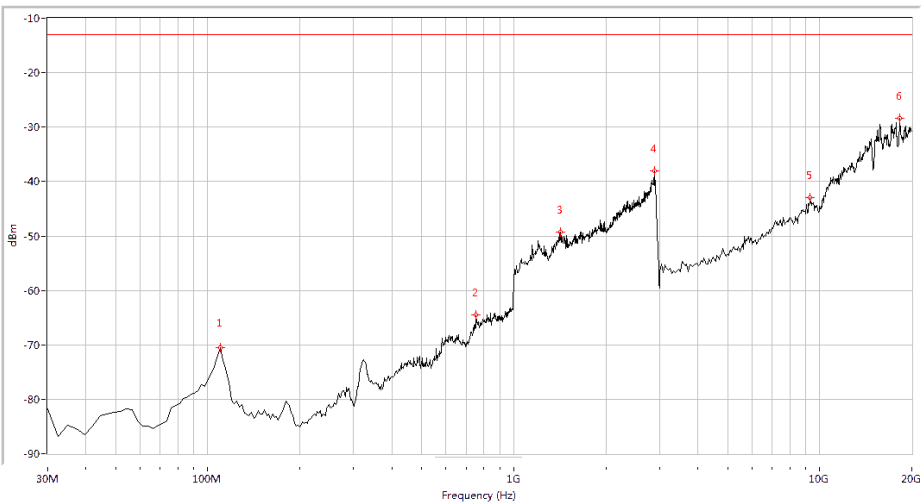
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-71.16	-13.0	58.2	180.3	Horizontal	PASS
320.274	-72.40	-13.0	59.4	235.0	Horizontal	PASS
1164.589	-51.67	-13.0	38.7	220.6	Horizontal	PASS
2900.249	-39.64	-13.0	26.6	299.4	Horizontal	PASS
10970.075	-38.63	-13.0	25.6	108.1	Horizontal	PASS
15760.599	-29.27	-13.0	16.3	99.9	Horizontal	PASS

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



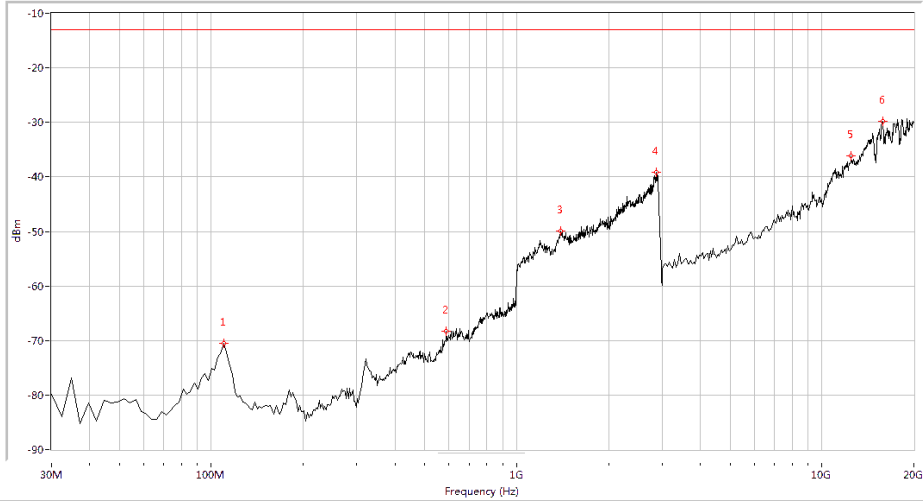
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.11	-13.0	57.1	30.9	Vertical	PASS
755.686	-64.69	-13.0	51.7	230.6	Vertical	PASS
1394.015	-49.28	-13.0	36.3	128.9	Vertical	PASS
2890.274	-39.51	-13.0	26.5	72.4	Vertical	PASS
9316.708	-41.47	-13.0	28.5	229.5	Vertical	PASS
15760.599	-29.19	-13.0	16.2	99.4	Vertical	PASS

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



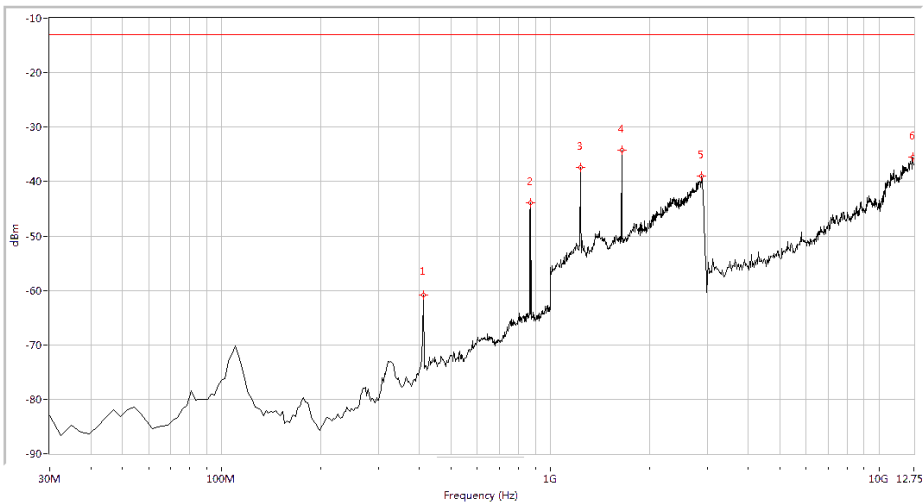
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.50	-13.0	57.5	349.9	Horizontal	PASS
753.267	-64.56	-13.0	51.6	227.9	Horizontal	PASS
1423.940	-49.29	-13.0	36.3	356.1	Horizontal	PASS
2880.299	-38.00	-13.0	25.0	272.6	Horizontal	PASS
9316.708	-42.98	-13.0	30.0	93.2	Horizontal	PASS
18304.239	-28.39	-13.0	15.4	-0.0	Horizontal	PASS

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



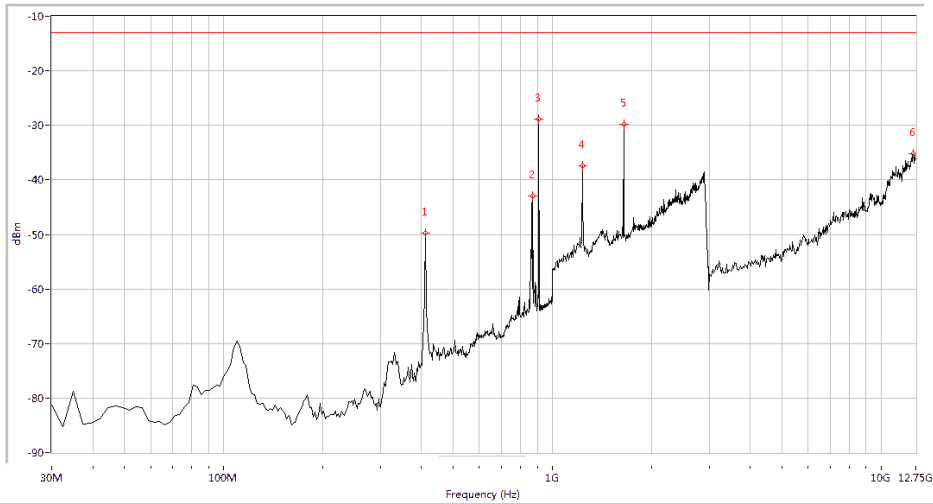
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.48	-13.0	57.5	196.5	Vertical	PASS
588.778	-68.25	-13.0	55.3	356.5	Vertical	PASS
1394.015	-49.89	-13.0	36.9	115.5	Vertical	PASS
2865.337	-39.22	-13.0	26.2	109.2	Vertical	PASS
12453.865	-36.22	-13.0	23.2	164.8	Vertical	PASS
15802.993	-29.84	-13.0	16.8	108.3	Vertical	PASS

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



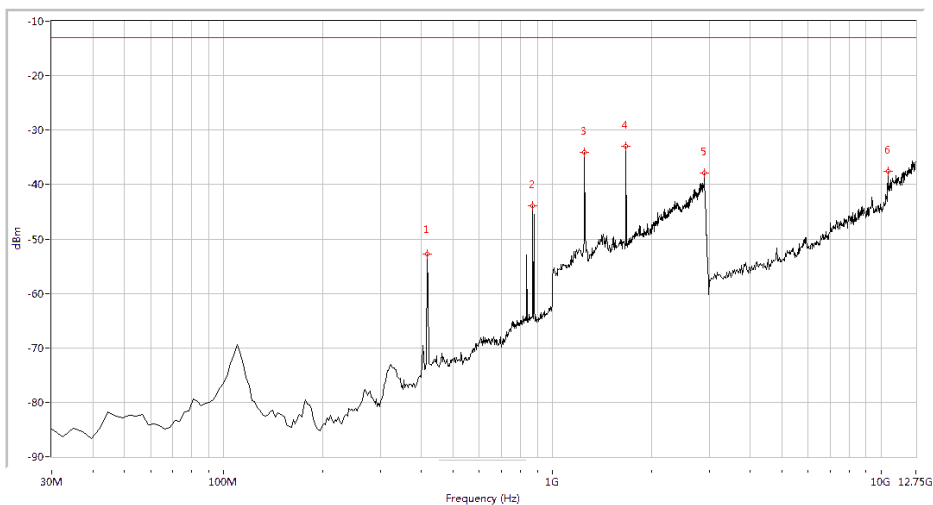
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
412.195	-60.91	-13.0	47.9	341.8	Horizontal	PASS
871.796	-43.88	-13.0	30.9	128.4	Horizontal	PASS
1234.414	-37.48	-13.0	24.5	19.1	Horizontal	PASS
1648.379	-34.31	-13.0	21.3	211.1	Horizontal	PASS
2880.299	-38.96	-13.0	26.0	280.7	Horizontal	PASS
12652.743	-35.54	-13.0	22.5	73.3	Horizontal	PASS

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



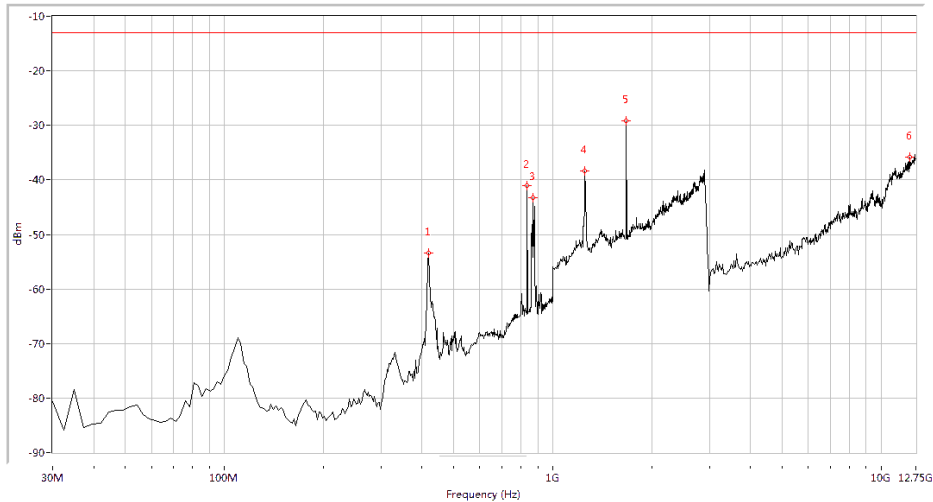
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
412.195	-49.71	-13.0	36.7	247.1	Vertical	PASS
871.796	-42.89	-13.0	29.9	236.6	Vertical	PASS
910.499	-28.90	-13.0	15.9	129.5	Vertical	PASS
1234.414	-37.41	-13.0	24.4	1.2	Vertical	PASS
1648.379	-29.80	-13.0	16.8	350.6	Vertical	PASS
12555.486	-35.14	-13.0	22.1	286.9	Vertical	PASS

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



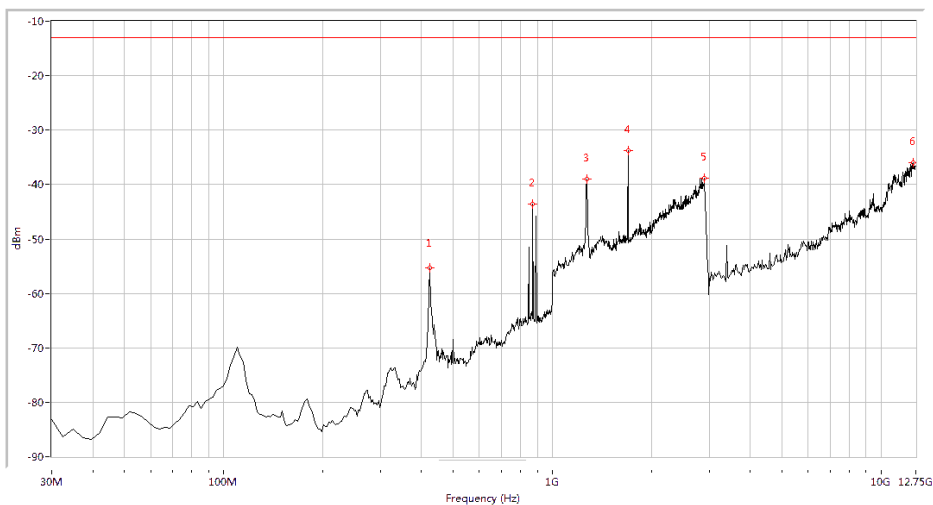
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
417.032	-52.81	-13.0	39.8	84.5	Horizontal	PASS
871.796	-43.83	-13.0	30.8	130.2	Horizontal	PASS
1254.364	-34.03	-13.0	21.0	-0.0	Horizontal	PASS
1673.317	-32.95	-13.0	20.0	166.9	Horizontal	PASS
2900.249	-37.87	-13.0	24.9	7.0	Horizontal	PASS
10488.778	-37.57	-13.0	24.6	254.3	Horizontal	PASS

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



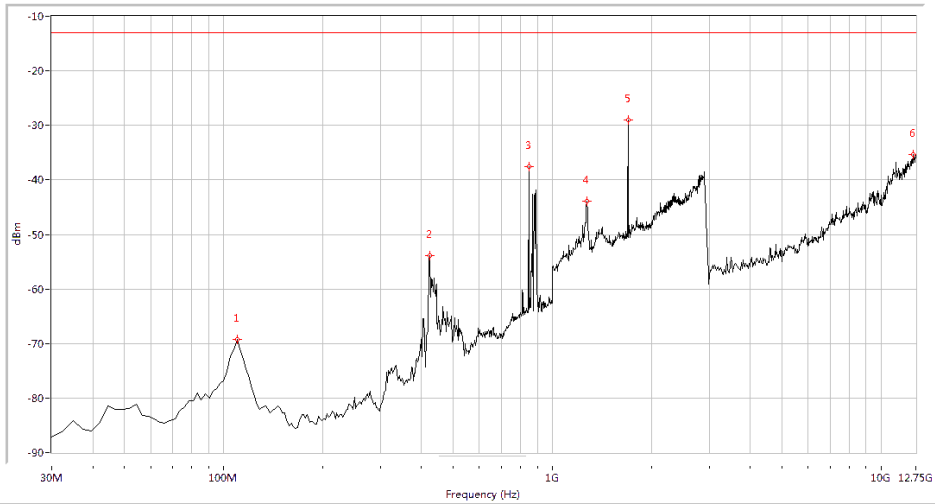
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
419.451	-53.44	-13.0	40.4	120.3	Vertical	PASS
835.511	-40.98	-13.0	28.0	153.4	Vertical	PASS
871.796	-43.22	-13.0	30.2	241.2	Vertical	PASS
1254.364	-38.28	-13.0	25.3	360.0	Vertical	PASS
1673.317	-29.13	-13.0	16.1	313.2	Vertical	PASS
12215.087	-35.85	-13.0	22.9	177.3	Vertical	PASS

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



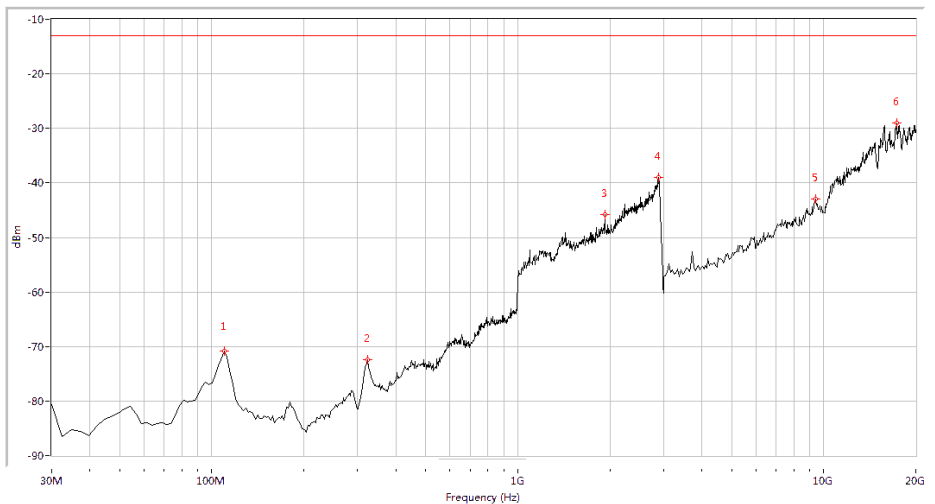
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
424.289	-55.34	-13.0	42.3	355.9	Horizontal	PASS
871.796	-43.51	-13.0	30.5	139.5	Horizontal	PASS
1274.314	-38.92	-13.0	25.9	212.9	Horizontal	PASS
1698.254	-33.81	-13.0	20.8	231.9	Horizontal	PASS
2895.262	-38.88	-13.0	25.9	359.5	Horizontal	PASS
12555.486	-35.97	-13.0	23.0	0.9	Horizontal	PASS

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



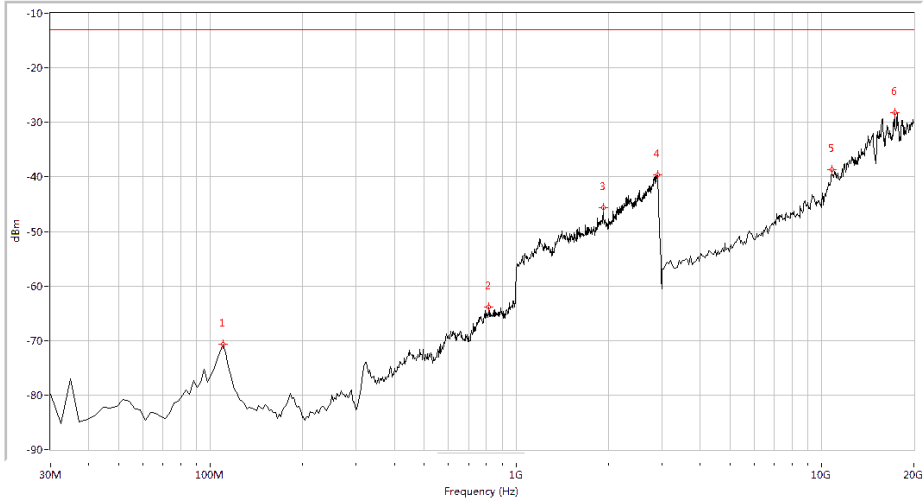
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-69.20	-13.0	56.2	1.5	Vertical	PASS
424.289	-53.91	-13.0	40.9	137.5	Vertical	PASS
847.606	-37.61	-13.0	24.6	170.2	Vertical	PASS
1274.314	-43.85	-13.0	30.9	360.0	Vertical	PASS
1698.254	-28.99	-13.0	16.0	306.1	Vertical	PASS
12555.486	-35.30	-13.0	22.3	161.4	Vertical	PASS

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



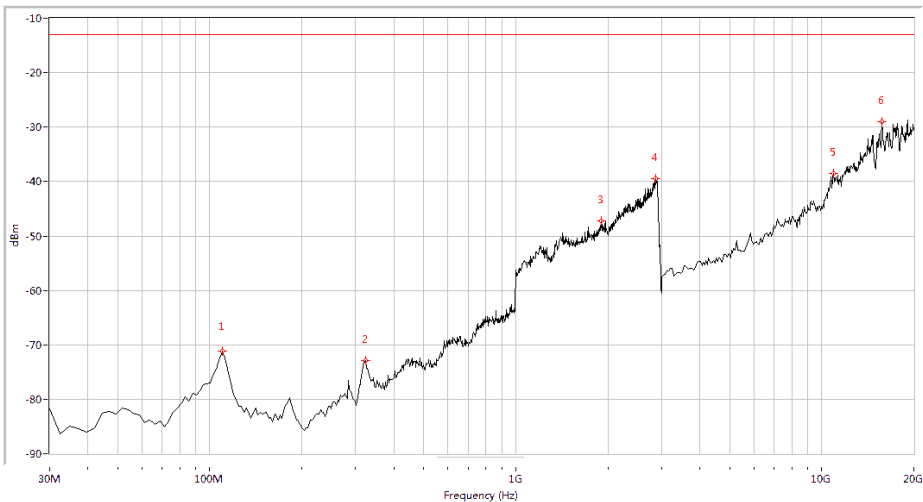
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.89	-13.0	57.9	357.9	Horizontal	PASS
322.693	-72.48	-13.0	59.5	144.0	Horizontal	PASS
1927.681	-45.77	-13.0	32.8	339.4	Horizontal	PASS
2880.299	-39.00	-13.0	26.0	281.8	Horizontal	PASS
9401.496	-43.03	-13.0	30.0	50.7	Horizontal	PASS
17286.783	-28.98	-13.0	16.0	360.0	Horizontal	PASS

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



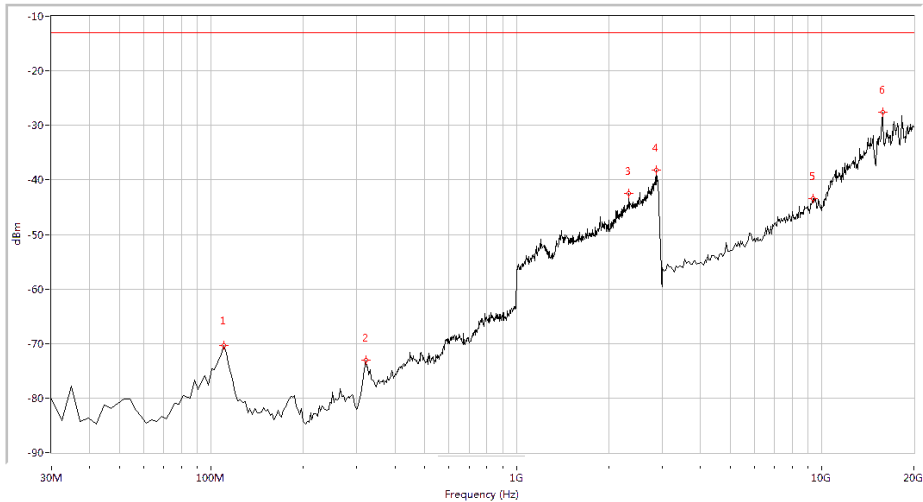
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.66	-13.0	57.7	303.0	Vertical	PASS
813.741	-63.91	-13.0	50.9	345.8	Vertical	PASS
1927.681	-45.68	-13.0	32.7	69.6	Vertical	PASS
2905.237	-39.69	-13.0	26.7	84.5	Vertical	PASS
10758.105	-38.73	-13.0	25.7	-0.0	Vertical	PASS
17286.783	-28.24	-13.0	15.2	-0.0	Vertical	PASS

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



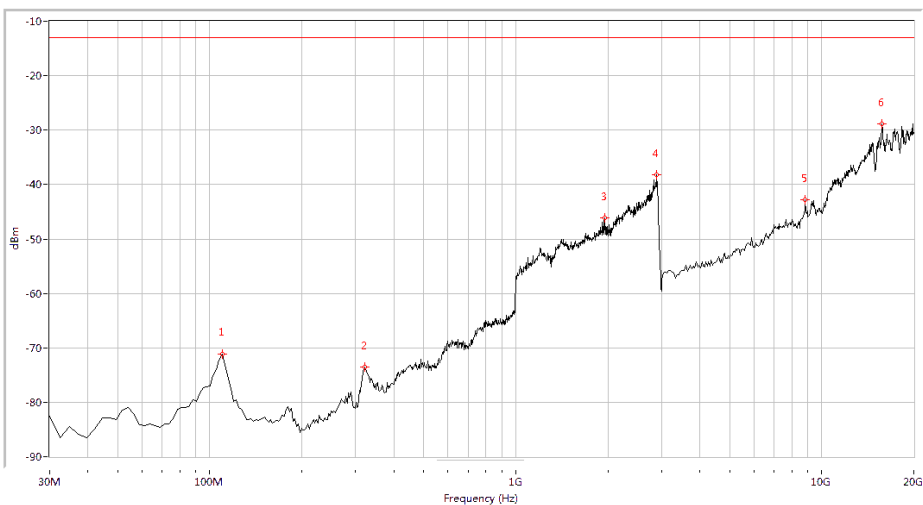
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-71.10	-13.0	58.1	0.1	Horizontal	PASS
322.693	-72.93	-13.0	59.9	236.0	Horizontal	PASS
1907.731	-47.17	-13.0	34.2	211.3	Horizontal	PASS
2875.312	-39.44	-13.0	26.4	291.9	Horizontal	PASS
10927.681	-38.56	-13.0	25.6	0.8	Horizontal	PASS
15760.599	-29.06	-13.0	16.1	51.5	Horizontal	PASS

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



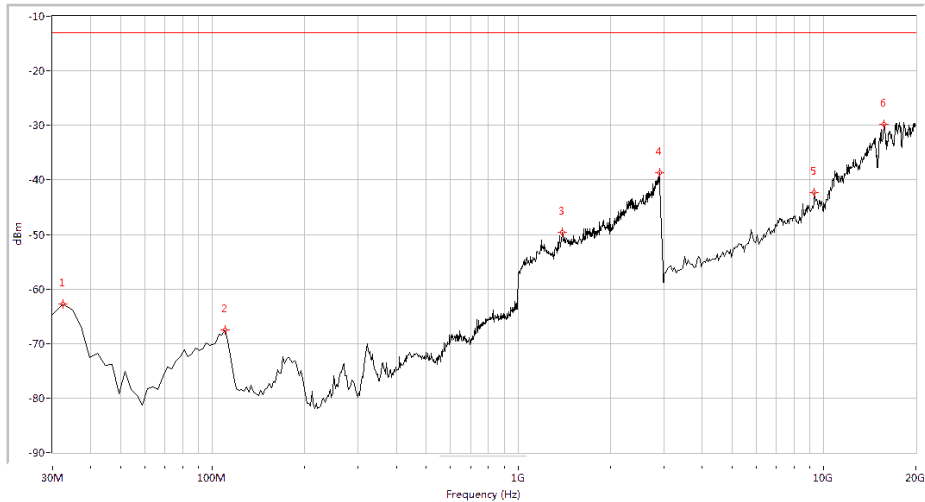
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.35	-13.0	57.4	75.7	Vertical	PASS
320.274	-73.09	-13.0	60.1	70.9	Vertical	PASS
2331.671	-42.41	-13.0	29.4	142.2	Vertical	PASS
2865.337	-38.27	-13.0	25.3	272.7	Vertical	PASS
9359.102	-43.47	-13.0	30.5	63.9	Vertical	PASS
15802.993	-27.61	-13.0	14.6	80.6	Vertical	PASS

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



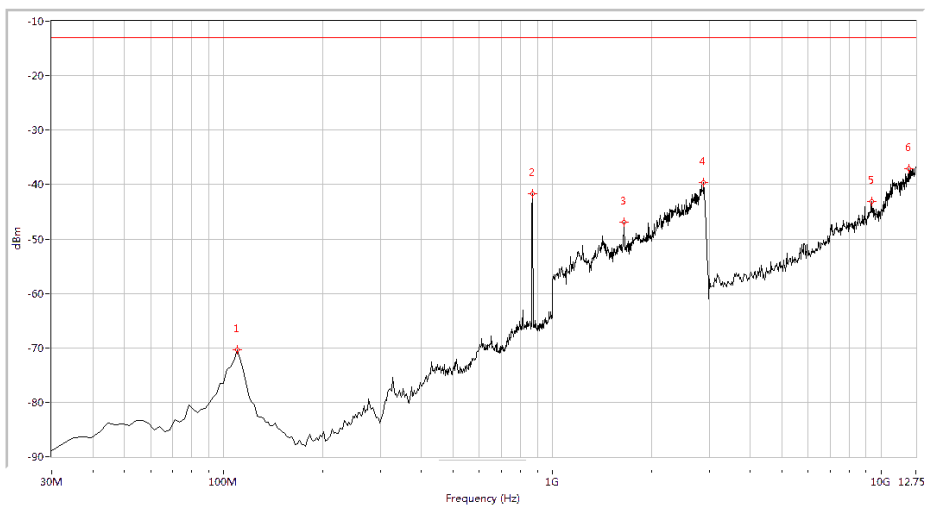
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-71.07	-13.0	58.1	243.4	Horizontal	PASS
320.274	-73.47	-13.0	60.5	127.7	Horizontal	PASS
1957.606	-46.09	-13.0	33.1	101.1	Horizontal	PASS
2890.274	-38.17	-13.0	25.2	26.7	Horizontal	PASS
8850.374	-42.83	-13.0	29.8	272.6	Horizontal	PASS
15760.599	-28.88	-13.0	15.9	167.8	Horizontal	PASS

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



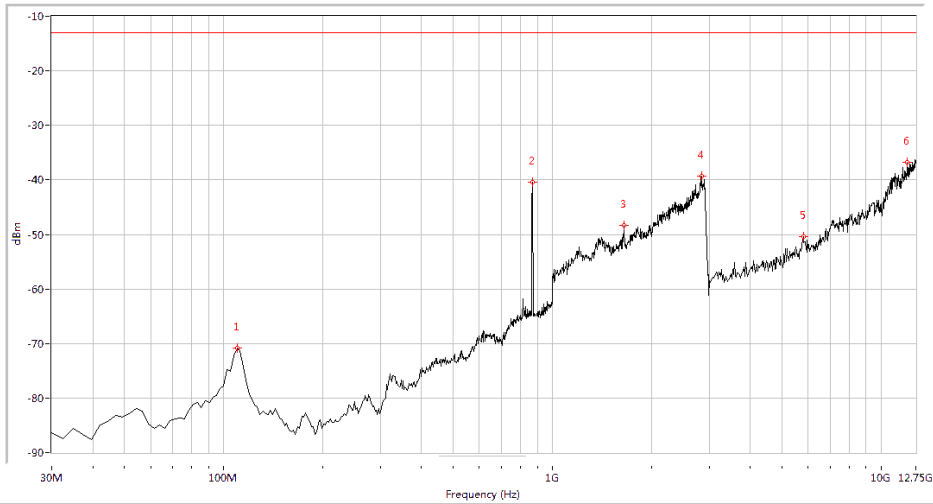
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
32.419	-62.73	-13.0	49.7	0.3	Vertical	PASS
109.825	-67.44	-13.0	54.4	340.6	Vertical	PASS
1394.015	-49.67	-13.0	36.7	153.3	Vertical	PASS
2900.249	-38.74	-13.0	25.7	119.4	Vertical	PASS
9316.708	-42.39	-13.0	29.4	62.0	Vertical	PASS
15760.599	-29.72	-13.0	16.7	317.9	Vertical	PASS

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



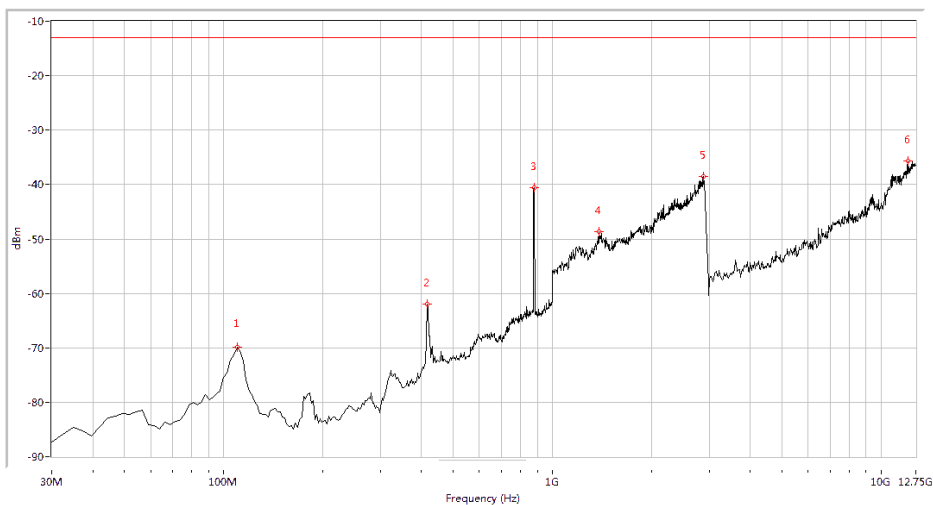
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.39	-13.0	57.4	56.4	Horizontal	PASS
869.377	-41.71	-13.0	28.7	165.7	Horizontal	PASS
1653.367	-46.94	-13.0	33.9	325.4	Horizontal	PASS
2885.287	-39.70	-13.0	26.7	196.4	Horizontal	PASS
9346.010	-43.10	-13.0	30.1	0.0	Horizontal	PASS
12142.145	-37.01	-13.0	24.0	10.2	Horizontal	PASS

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



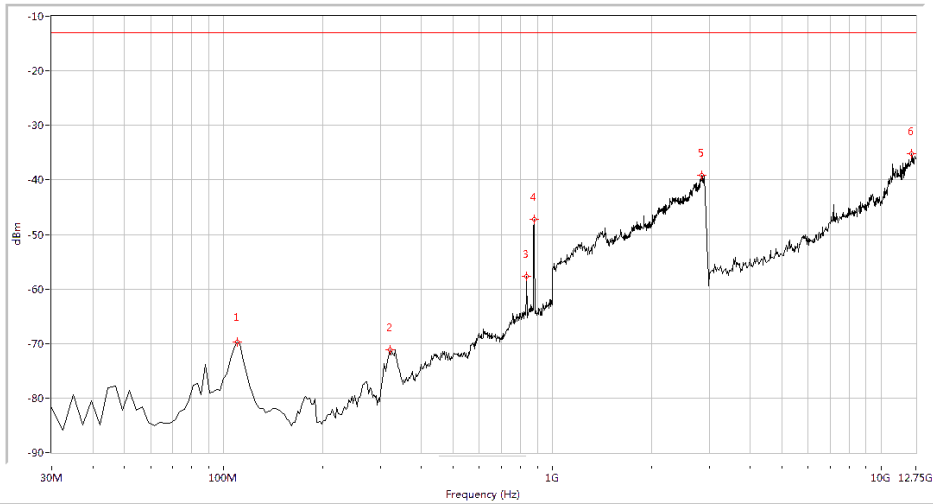
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.88	-13.0	57.9	352.8	Vertical	PASS
869.377	-40.37	-13.0	27.4	201.0	Vertical	PASS
1648.379	-48.29	-13.0	35.3	194.5	Vertical	PASS
2845.387	-39.24	-13.0	26.2	16.5	Vertical	PASS
5796.135	-50.42	-13.0	37.4	24.3	Vertical	PASS
12020.574	-36.85	-13.0	23.8	3.5	Vertical	PASS

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



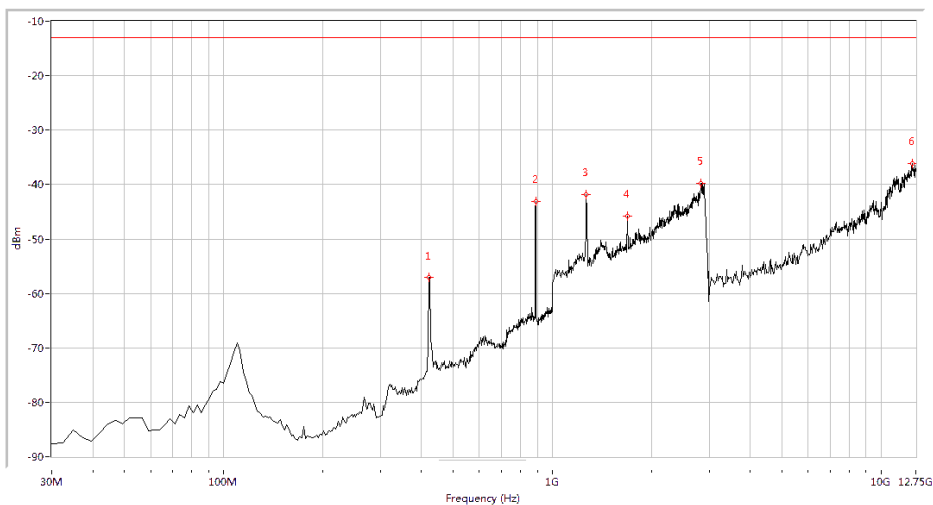
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-69.82	-13.0	56.8	216.7	Horizontal	PASS
417.032	-61.99	-13.0	49.0	163.1	Horizontal	PASS
879.052	-40.64	-13.0	27.6	95.0	Horizontal	PASS
1384.040	-48.61	-13.0	35.6	-0.0	Horizontal	PASS
2880.299	-38.56	-13.0	25.6	60.0	Horizontal	PASS
12044.888	-35.68	-13.0	22.7	117.0	Horizontal	PASS

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



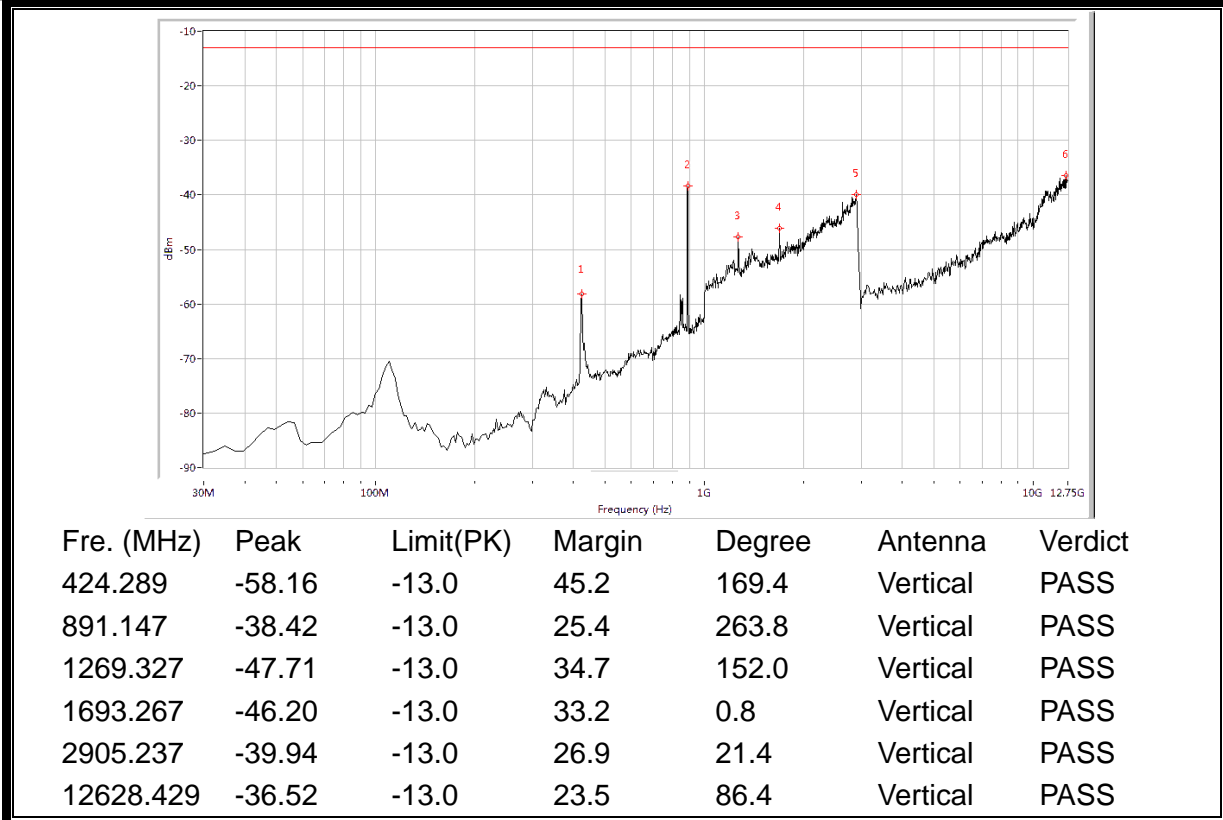
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-69.68	-13.0	56.7	207.8	Vertical	PASS
320.274	-71.15	-13.0	58.2	360.0	Vertical	PASS
835.511	-57.64	-13.0	44.6	160.9	Vertical	PASS
879.052	-47.27	-13.0	34.3	151.2	Vertical	PASS
2845.387	-39.13	-13.0	26.1	167.5	Vertical	PASS
12360.973	-35.12	-13.0	22.1	270.6	Vertical	PASS

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

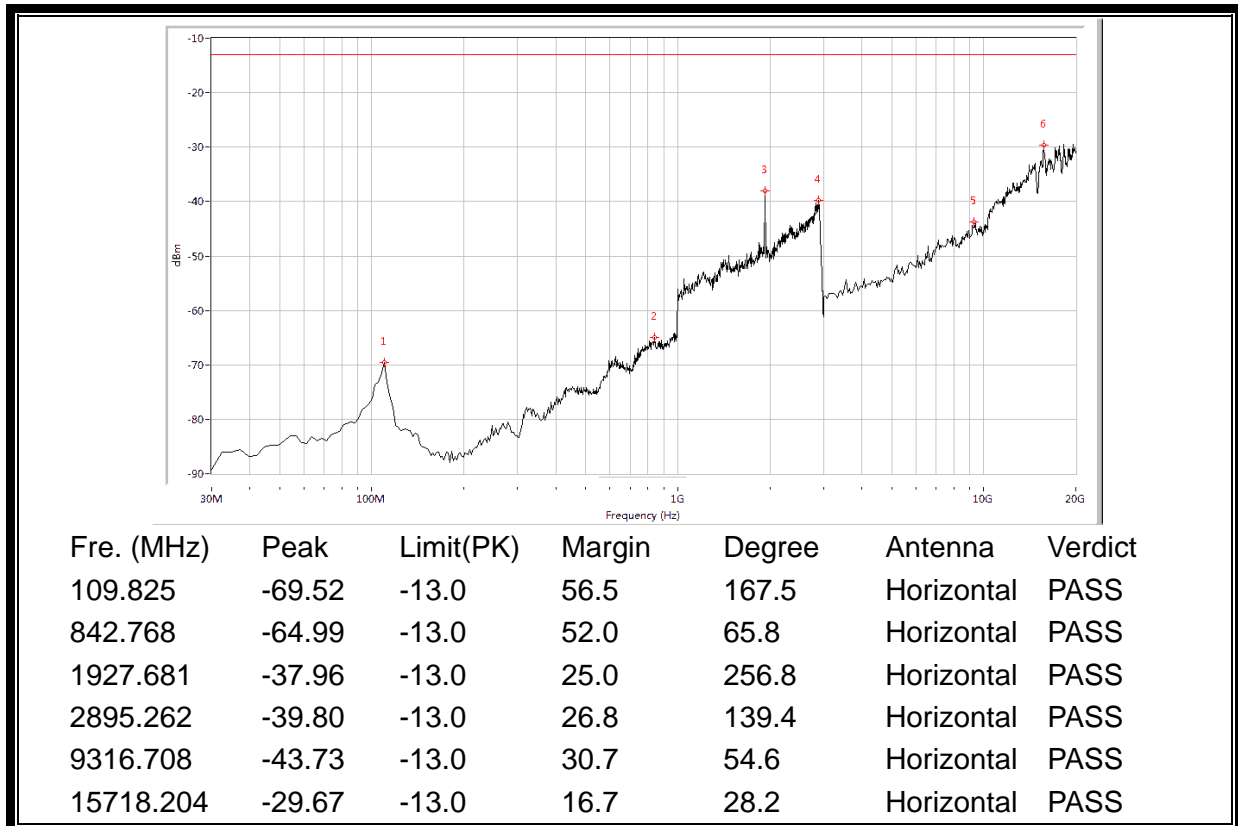


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
421.870	-57.10	-13.0	44.1	360.0	Horizontal	PASS
891.147	-43.09	-13.0	30.1	258.4	Horizontal	PASS
1269.327	-41.88	-13.0	28.9	16.4	Horizontal	PASS
1688.279	-45.77	-13.0	32.8	249.4	Horizontal	PASS
2830.424	-39.85	-13.0	26.9	251.0	Horizontal	PASS
12458.229	-36.07	-13.0	23.1	0.2	Horizontal	PASS

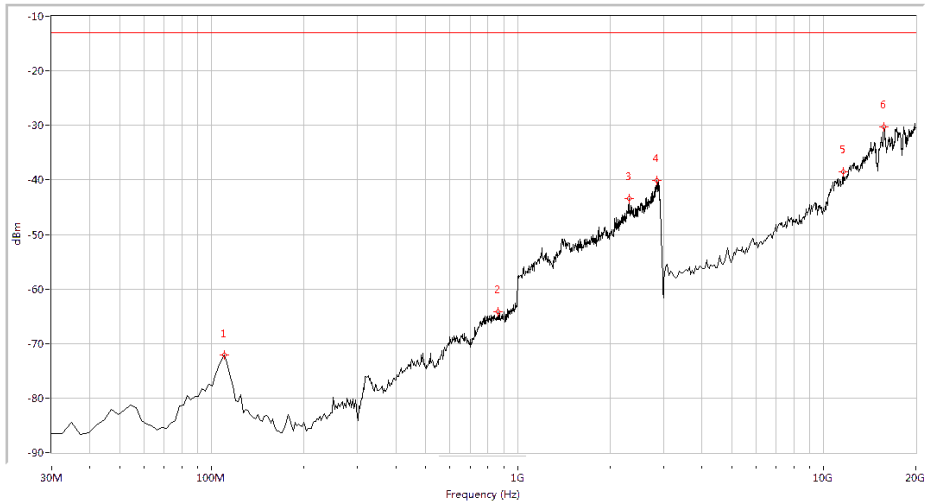
(Plot E.5: WCDMA 850MHz Channel = 4233, Test Antenna Horizontal)



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

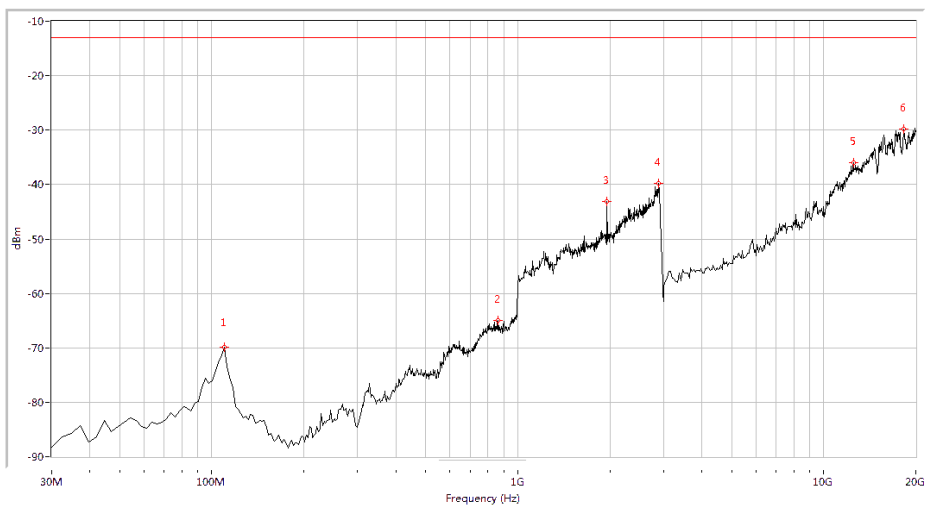


(Plot F.1: WCDMA 1900MHz Channel = 9262, Test Antenna Horizontal)



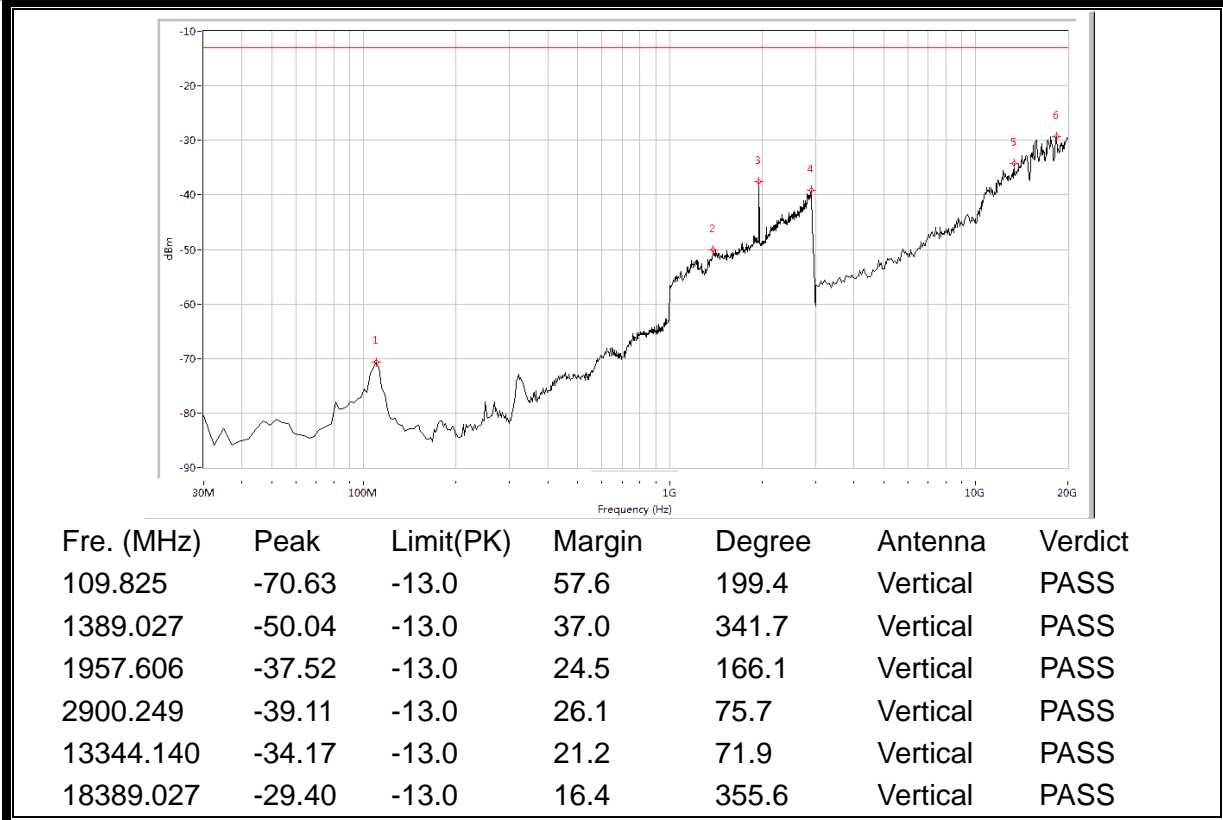
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-72.13	-13.0	59.1	63.8	Vertical	PASS
864.539	-64.11	-13.0	51.1	48.5	Vertical	PASS
2311.721	-43.42	-13.0	30.4	195.4	Vertical	PASS
2855.362	-40.13	-13.0	27.1	246.7	Vertical	PASS
11605.985	-38.49	-13.0	25.5	0.0	Vertical	PASS
15718.204	-30.24	-13.0	17.2	10.9	Vertical	PASS

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

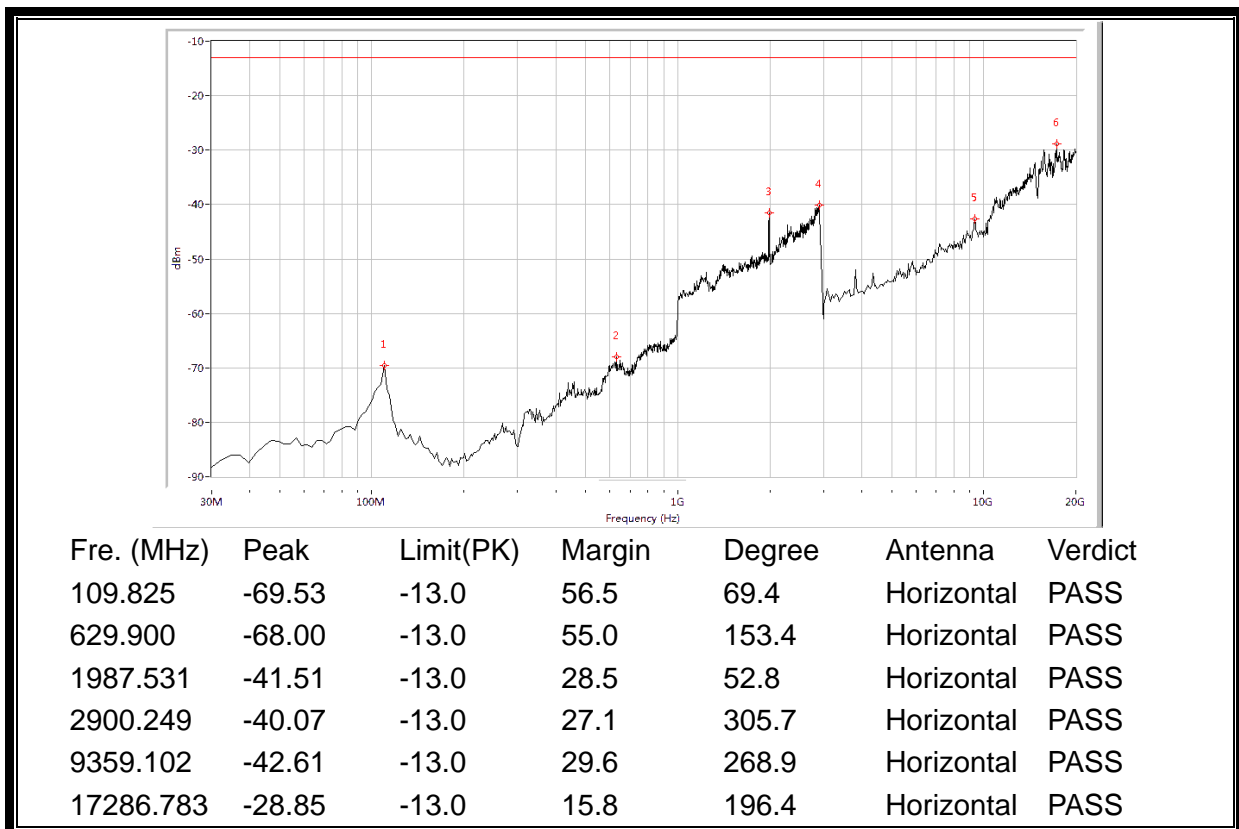


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-69.85	-13.0	56.8	348.5	Horizontal	PASS
864.539	-64.98	-13.0	52.0	96.7	Horizontal	PASS
1957.606	-43.12	-13.0	30.1	267.3	Horizontal	PASS
2895.262	-39.71	-13.0	26.7	10.0	Horizontal	PASS
12496.259	-35.91	-13.0	22.9	0.4	Horizontal	PASS
18304.239	-29.85	-13.0	16.8	251.4	Horizontal	PASS

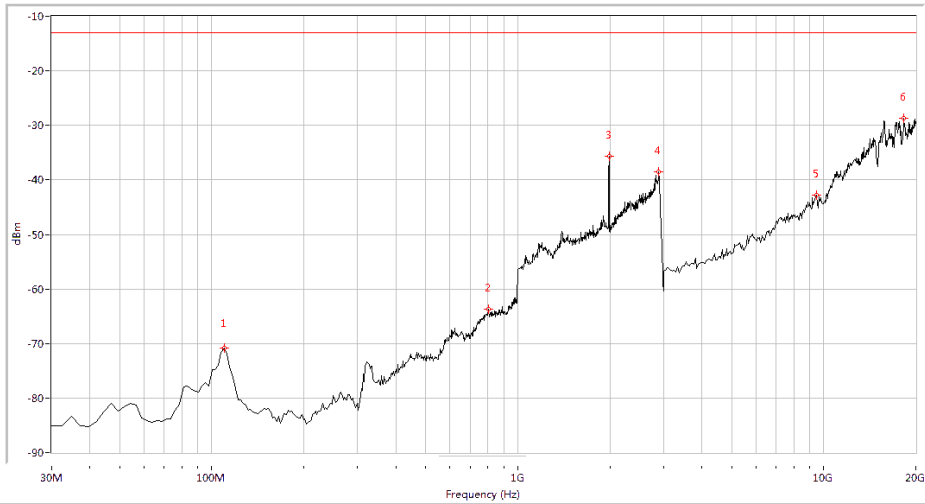
(Plot F.3: WCDMA 1900MHz Channel = 9400, Test Antenna Horizontal)



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

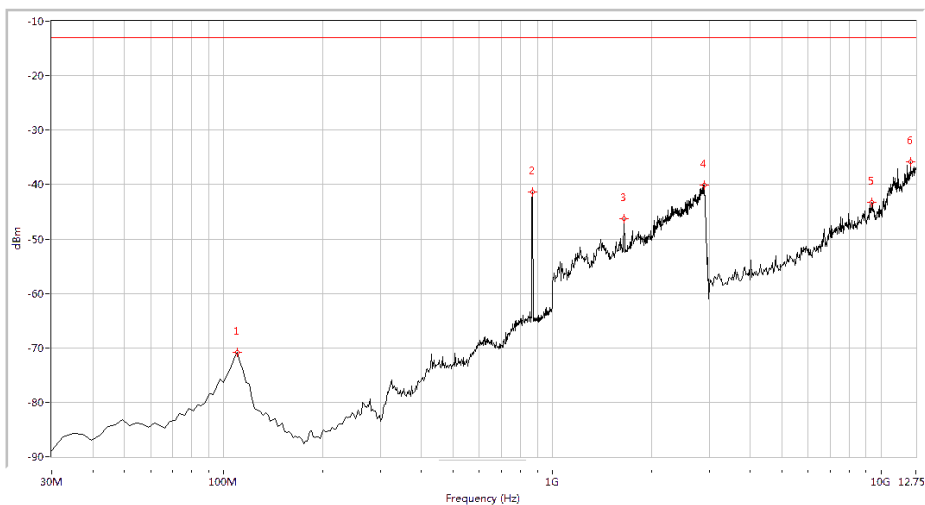


(Plot F.5: WCDMA 1900MHz Channel = 9538, Test Antenna Horizontal)



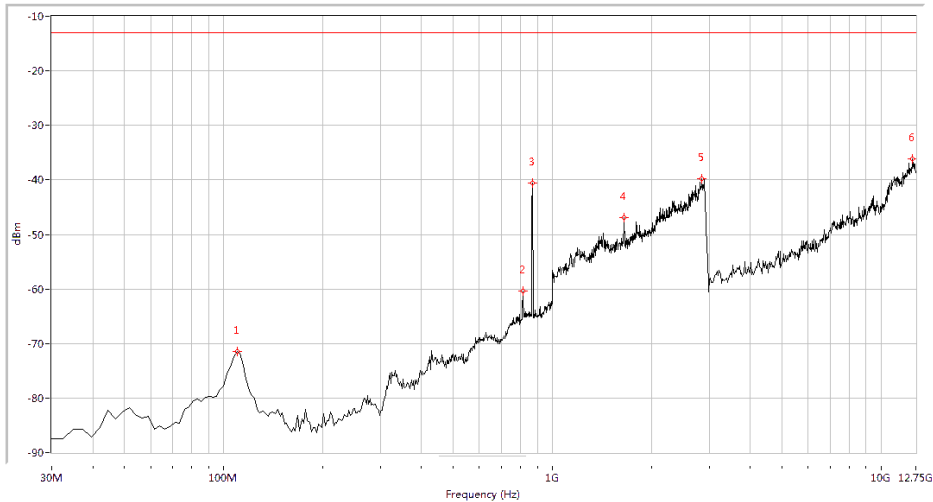
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.78	-13.0	57.8	132.4	Vertical	PASS
801.646	-63.65	-13.0	50.7	70.0	Vertical	PASS
1987.531	-35.69	-13.0	22.7	123.7	Vertical	PASS
2890.274	-38.45	-13.0	25.5	0.5	Vertical	PASS
9486.284	-42.78	-13.0	29.8	146.5	Vertical	PASS
18304.239	-28.63	-13.0	15.6	16.1	Vertical	PASS

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



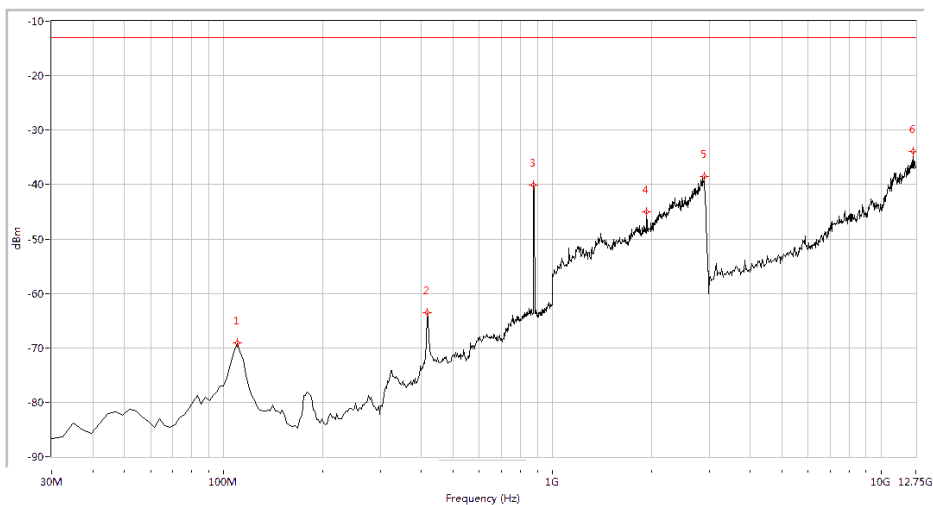
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.86	-13.0	57.9	126.4	Horizontal	PASS
869.377	-41.37	-13.0	28.4	346.5	Horizontal	PASS
1653.367	-46.35	-13.0	33.4	98.1	Horizontal	PASS
2890.274	-40.14	-13.0	27.1	165.8	Horizontal	PASS
9394.638	-43.27	-13.0	30.3	20.1	Horizontal	PASS
12288.030	-35.78	-13.0	22.8	0.8	Horizontal	PASS

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



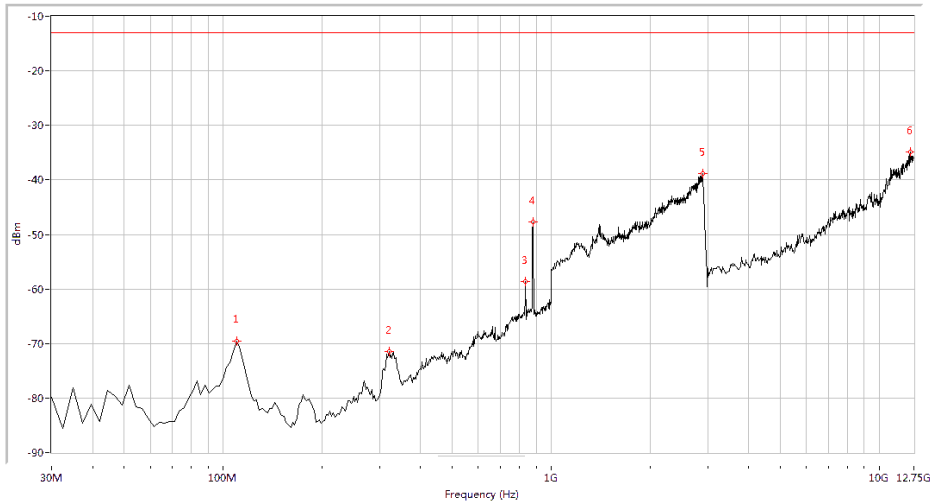
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-71.51	-13.0	58.5	36.4	Vertical	PASS
813.741	-60.33	-13.0	47.3	52.8	Vertical	PASS
869.377	-40.51	-13.0	27.5	164.2	Vertical	PASS
1653.367	-46.95	-13.0	34.0	269.9	Vertical	PASS
2845.387	-39.75	-13.0	26.8	0.2	Vertical	PASS
12458.229	-36.09	-13.0	23.1	248.6	Vertical	PASS

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



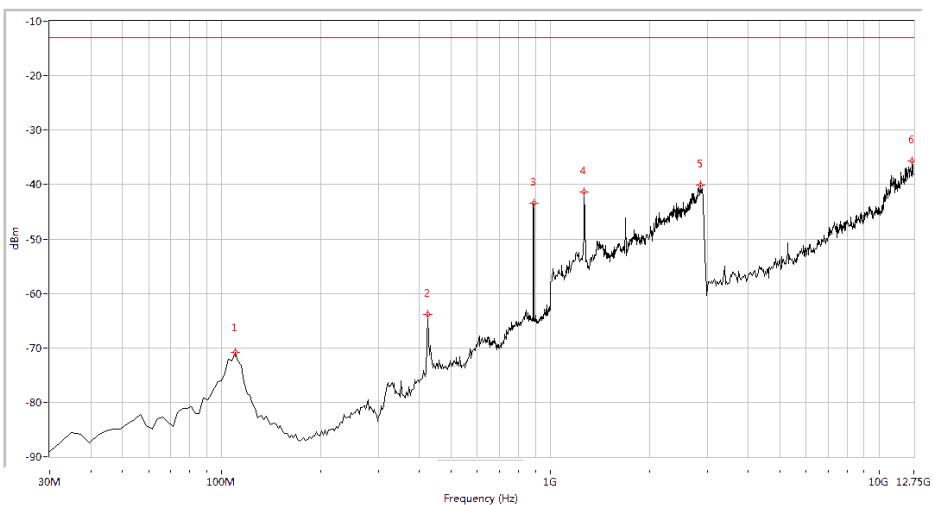
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-69.11	-13.0	56.1	-0.0	Horizontal	PASS
417.032	-63.54	-13.0	50.5	186.2	Horizontal	PASS
876.633	-40.05	-13.0	27.1	84.3	Horizontal	PASS
1937.656	-44.94	-13.0	31.9	85.2	Horizontal	PASS
2895.262	-38.48	-13.0	25.5	-0.0	Horizontal	PASS
12555.486	-33.99	-13.0	21.0	120.7	Horizontal	PASS

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



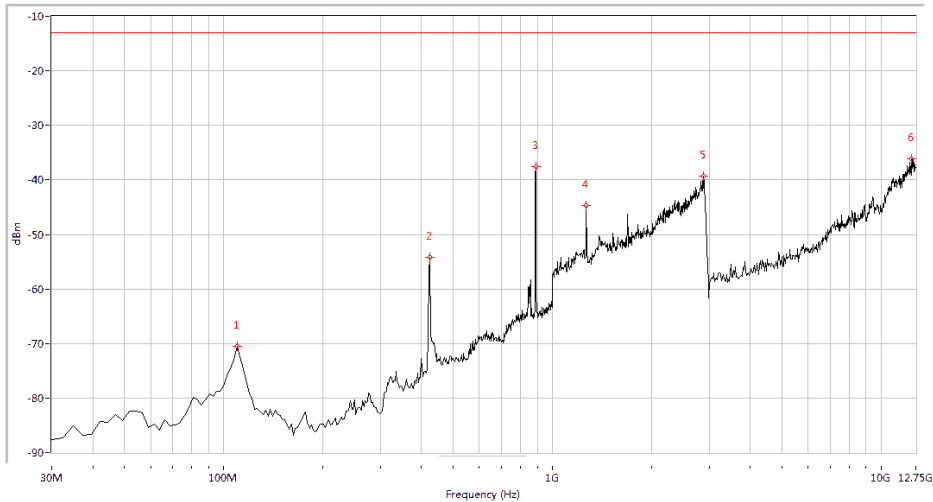
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-69.49	-13.0	56.5	107.2	Vertical	PASS
320.274	-71.39	-13.0	58.4	46.9	Vertical	PASS
835.511	-58.65	-13.0	45.7	194.9	Vertical	PASS
879.052	-47.65	-13.0	34.6	102.0	Vertical	PASS
2890.274	-38.83	-13.0	25.8	138.6	Vertical	PASS
12482.544	-34.90	-13.0	21.9	334.8	Vertical	PASS

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



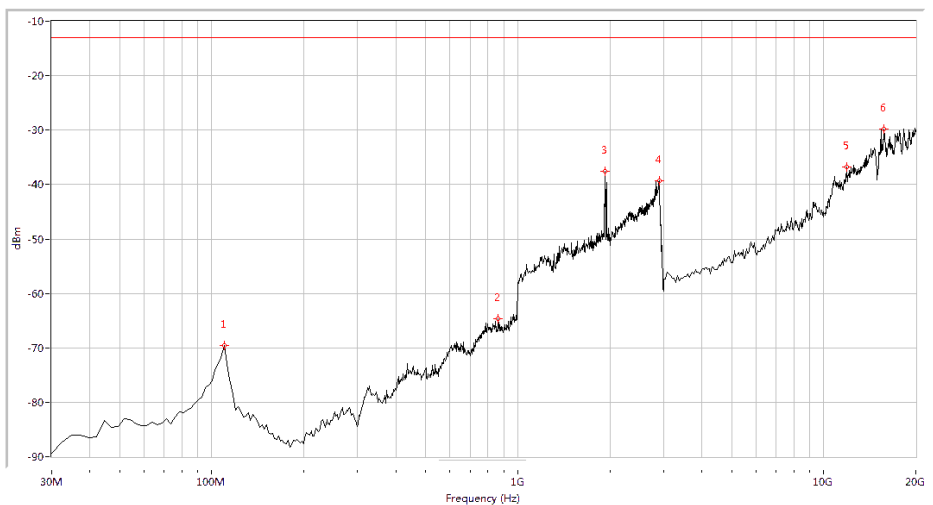
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.88	-13.0	57.9	35.9	Horizontal	PASS
424.289	-63.79	-13.0	50.8	165.4	Horizontal	PASS
891.147	-43.39	-13.0	30.4	251.9	Horizontal	PASS
1269.327	-41.31	-13.0	28.3	0.2	Horizontal	PASS
2855.362	-40.14	-13.0	27.1	21.5	Horizontal	PASS
12628.429	-35.67	-13.0	22.7	63.7	Horizontal	PASS

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



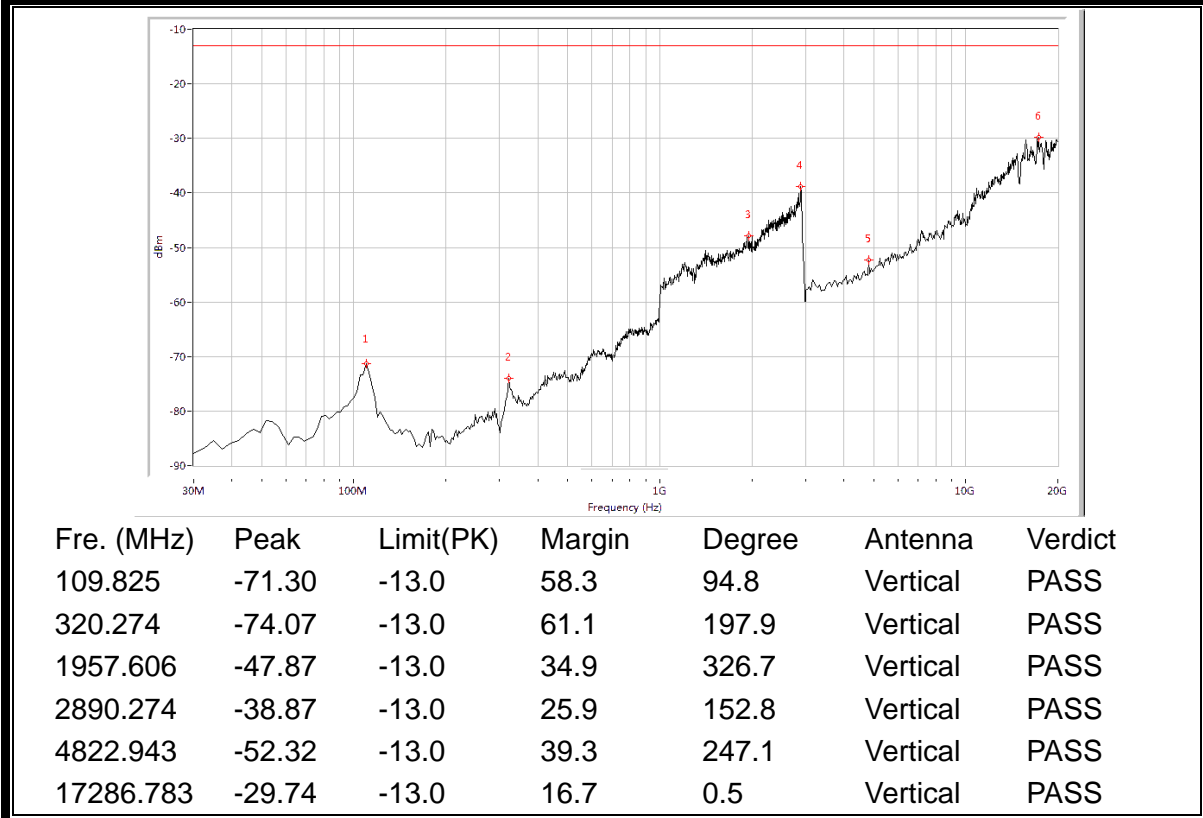
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.52	-13.0	57.5	169.4	Vertical	PASS
424.289	-54.23	-13.0	41.2	65.4	Vertical	PASS
891.147	-37.60	-13.0	24.6	89.2	Vertical	PASS
1269.327	-44.74	-13.0	31.7	136.8	Vertical	PASS
2885.287	-39.35	-13.0	26.3	91.1	Vertical	PASS
12385.287	-36.19	-13.0	23.2	0.0	Vertical	PASS

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

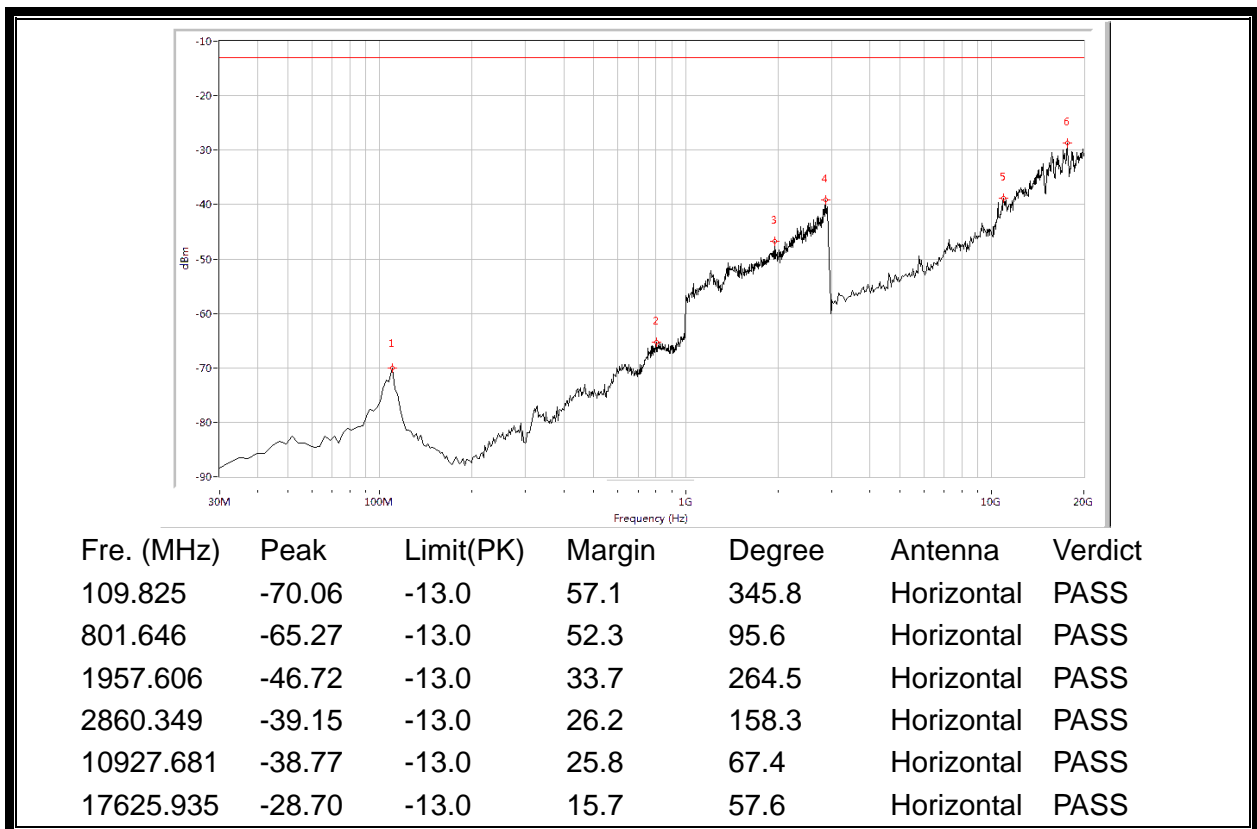


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-69.64	-13.0	56.6	63.4	Horizontal	PASS
864.539	-64.63	-13.0	51.6	195.8	Horizontal	PASS
1927.681	-37.52	-13.0	24.5	264.7	Horizontal	PASS
2900.249	-39.38	-13.0	26.4	23.5	Horizontal	PASS
11860.349	-36.77	-13.0	23.8	269.5	Horizontal	PASS
15760.599	-29.86	-13.0	16.9	86.4	Horizontal	PASS

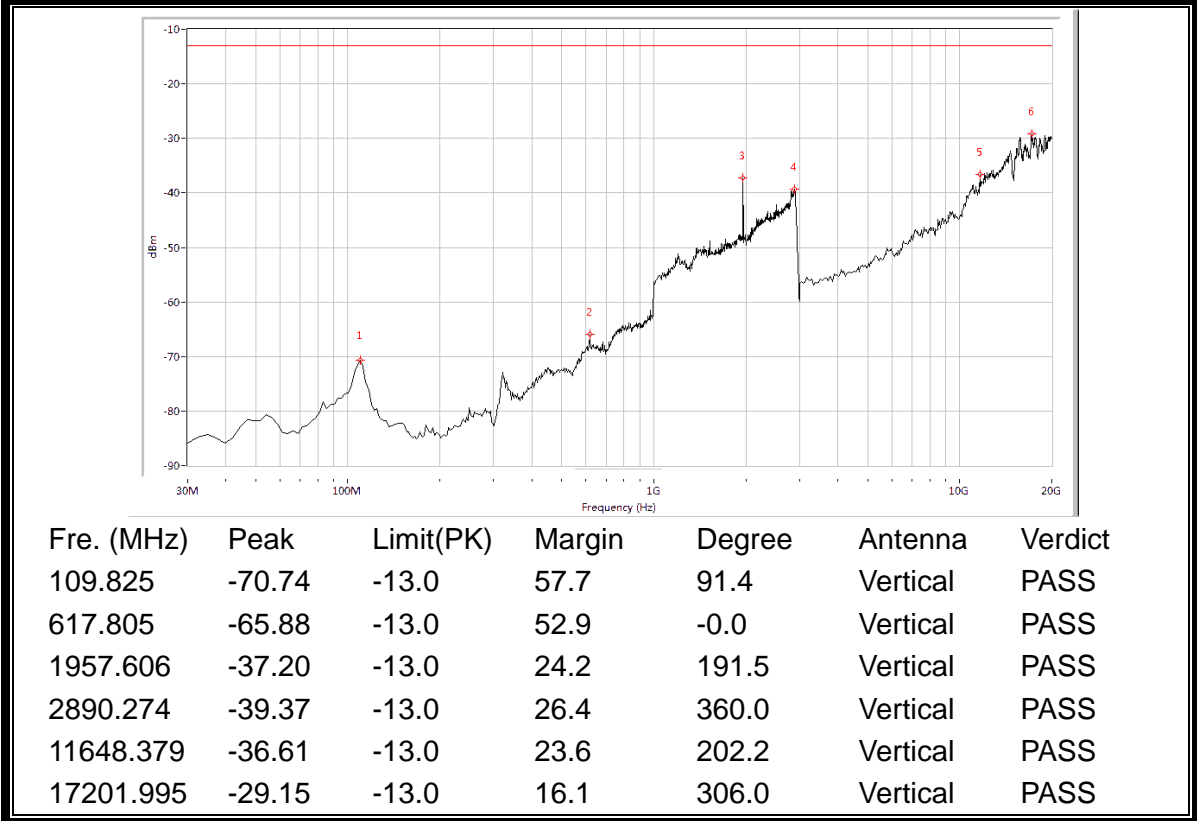
(Plot H.1: HSDPA 1900 MHz Channel = 9262, Test Antenna Horizontal)



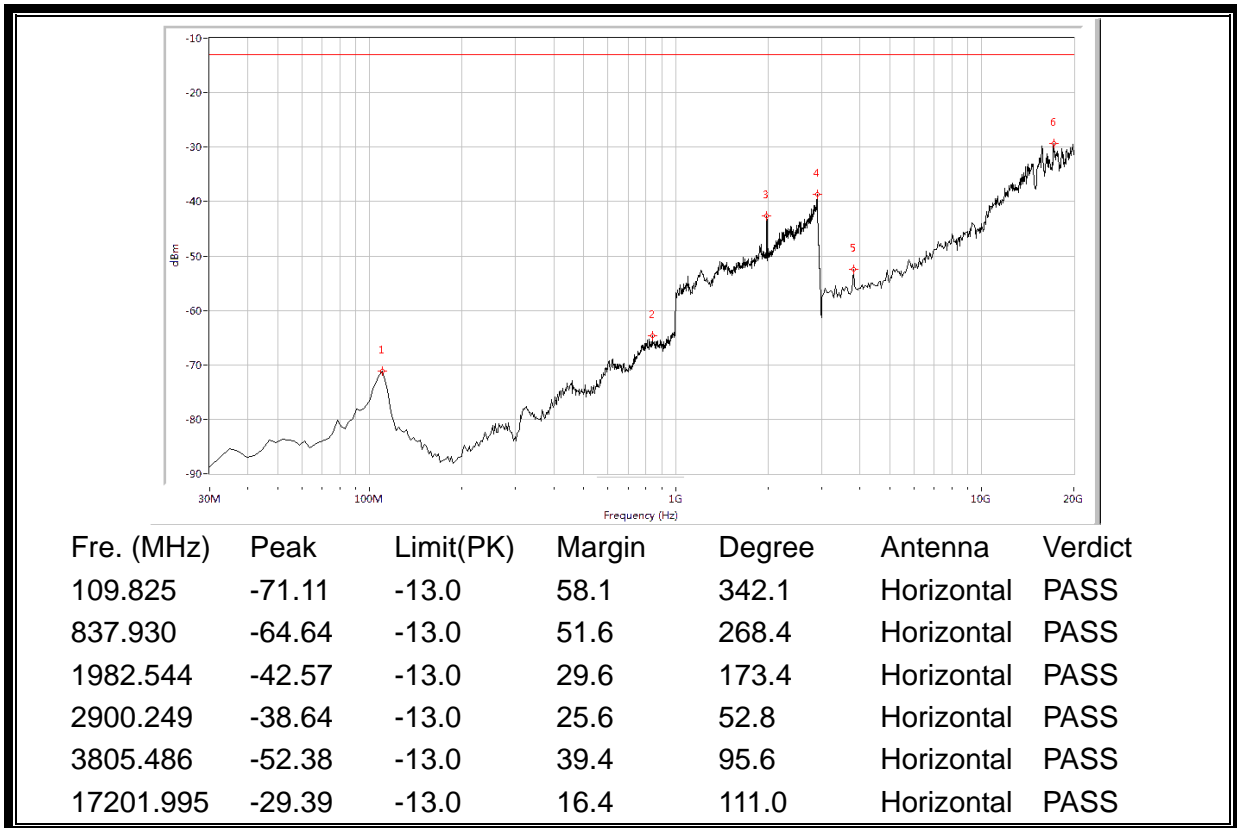
(Plot H.2: HSDPA 1900 MHz Channel = 9262, Test Antenna Vertical)



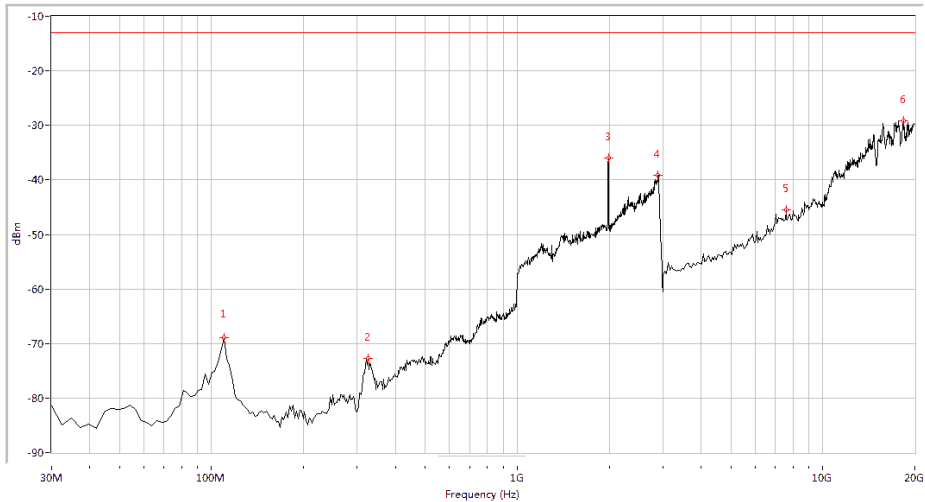
(Plot H.3: HSDPA 1900 MHz Channel = 9400, Test Antenna Horizontal)



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

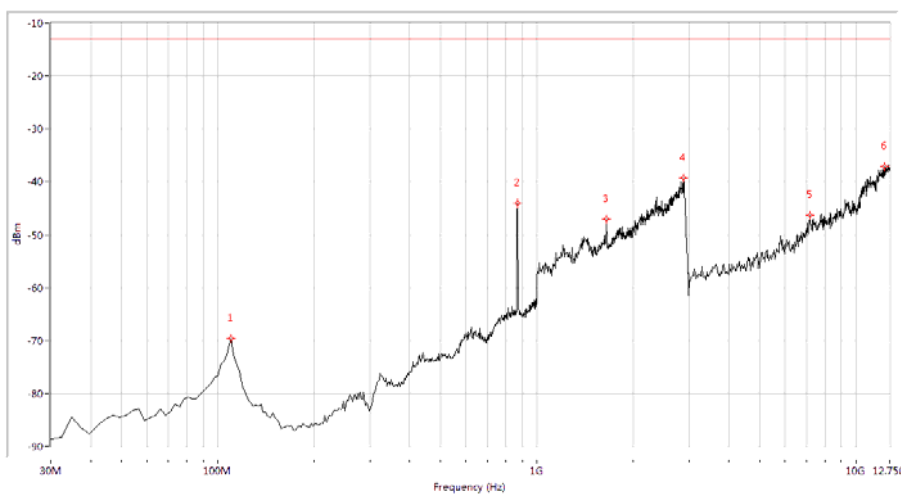


(Plot H.5: HSDPA 1900 MHz Channel = 9538, Test Antenna Horizontal)



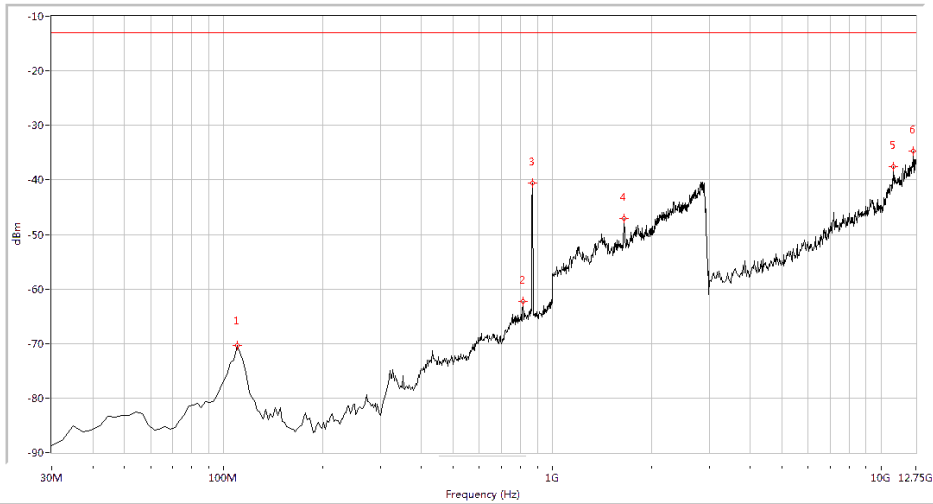
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-68.87	-13.0	55.9	4.2	Vertical	PASS
325.112	-72.74	-13.0	59.7	38.6	Vertical	PASS
1987.531	-36.02	-13.0	23.0	258.5	Vertical	PASS
2890.274	-39.22	-13.0	26.2	359.8	Vertical	PASS
7578.554	-45.41	-13.0	32.4	235.3	Vertical	PASS
18389.027	-29.17	-13.0	16.2	250.5	Vertical	PASS

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



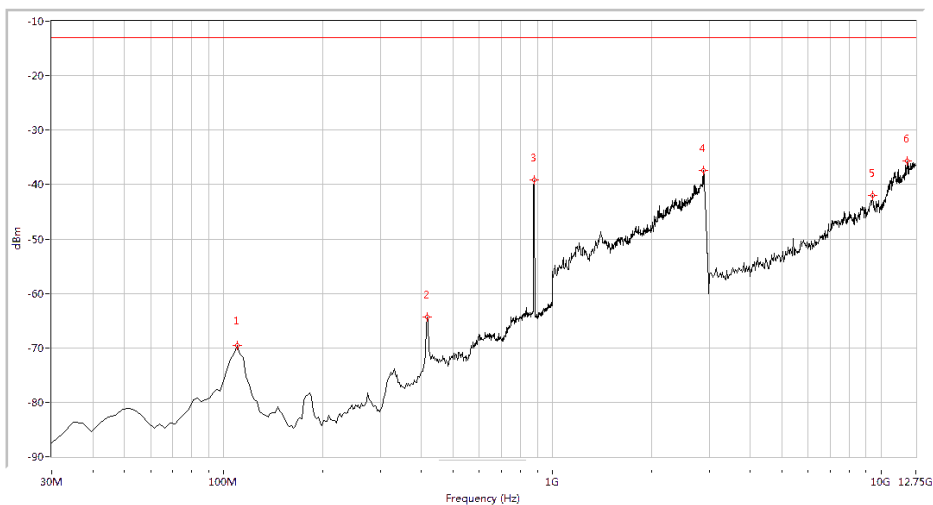
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-69.53	-13.0	56.5	12.5	Horizontal	PASS
869.377	-44.12	-13.0	31.1	254.8	Horizontal	PASS
1653.367	-47.09	-13.0	34.1	0.0	Horizontal	PASS
2885.287	-39.27	-13.0	26.3	25.3	Horizontal	PASS
7157.731	-46.27	-13.0	33.3	269.7	Horizontal	PASS
12288.030	-37.12	-13.0	24.1	194.2	Horizontal	PASS

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



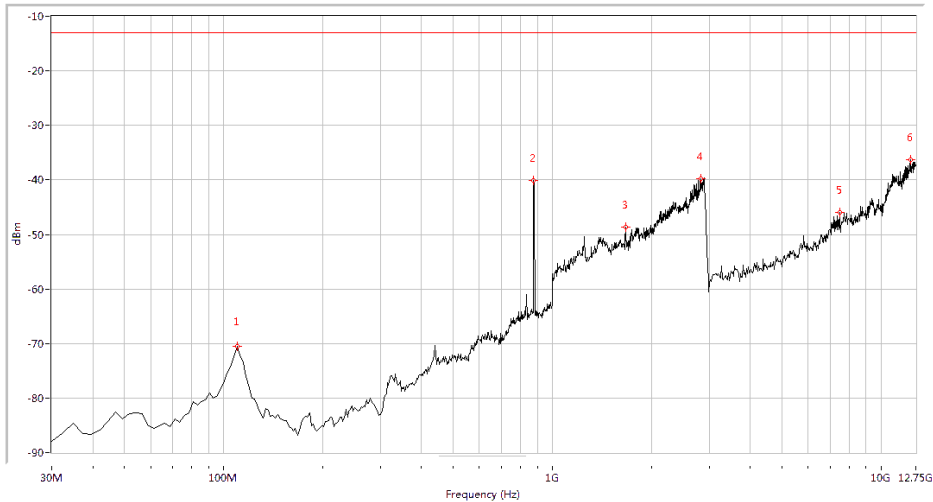
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.32	-13.0	57.3	321.5	Vertical	PASS
813.741	-62.32	-13.0	49.3	164.7	Vertical	PASS
871.796	-40.56	-13.0	27.6	30.4	Vertical	PASS
1653.367	-47.07	-13.0	34.1	125.4	Vertical	PASS
10926.434	-37.63	-13.0	24.6	97.6	Vertical	PASS
12555.486	-34.68	-13.0	21.7	20.0	Vertical	PASS

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



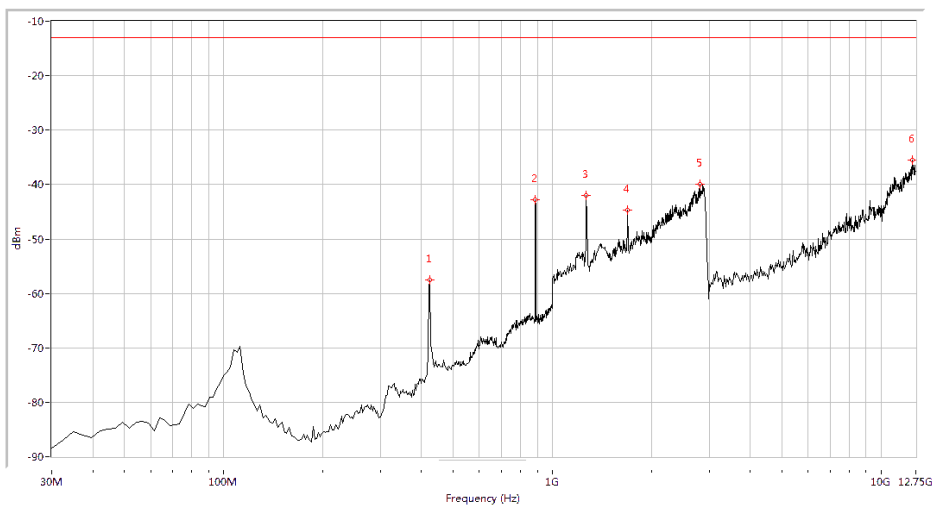
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-69.50	-13.0	56.5	260.5	Horizontal	PASS
417.032	-64.38	-13.0	51.4	185.7	Horizontal	PASS
879.052	-39.23	-13.0	26.2	93.1	Horizontal	PASS
2875.312	-37.48	-13.0	24.5	3.8	Horizontal	PASS
9418.953	-41.99	-13.0	29.0	157.3	Horizontal	PASS
12020.574	-35.70	-13.0	22.7	78.5	Horizontal	PASS

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



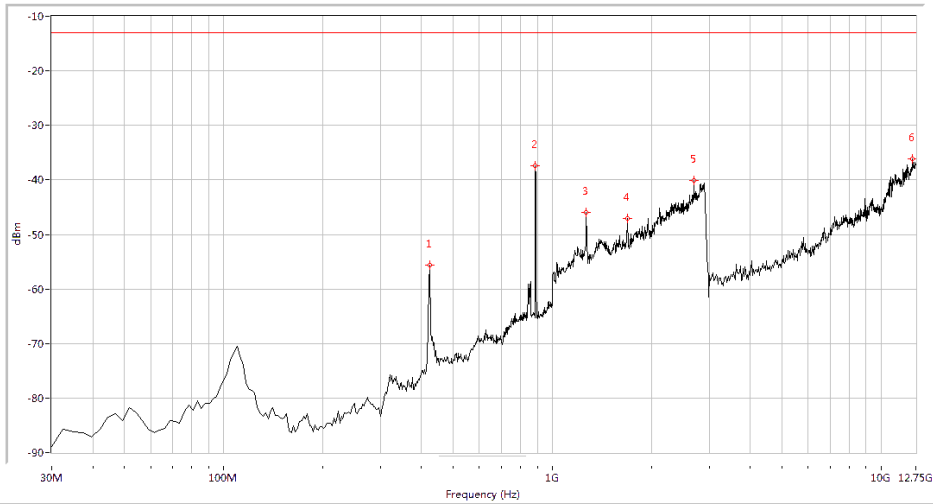
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.44	-13.0	57.4	318.4	Vertical	PASS
876.633	-40.13	-13.0	27.1	96.7	Vertical	PASS
1668.329	-48.72	-13.0	35.7	182.0	Vertical	PASS
2825.436	-39.85	-13.0	26.8	24.7	Vertical	PASS
7473.815	-45.98	-13.0	33.0	95.6	Vertical	PASS
12312.344	-36.35	-13.0	23.3	121.0	Vertical	PASS

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



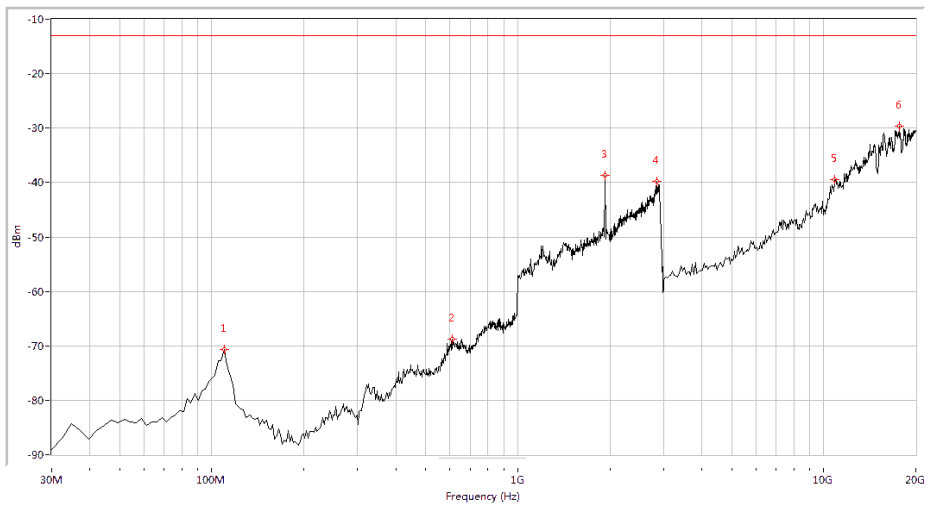
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
424.289	-57.55	-13.0	44.6	319.7	Horizontal	PASS
888.728	-42.72	-13.0	29.7	26.4	Horizontal	PASS
1269.327	-41.96	-13.0	29.0	168.4	Horizontal	PASS
1693.267	-44.63	-13.0	31.6	254.9	Horizontal	PASS
2805.486	-39.88	-13.0	26.9	31.5	Horizontal	PASS
12409.601	-35.43	-13.0	22.4	267.8	Horizontal	PASS

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



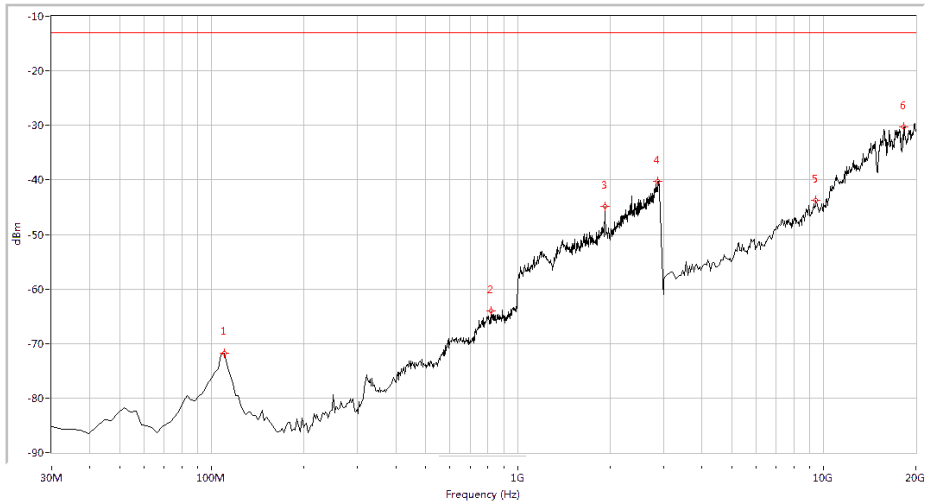
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
424.289	-55.69	-13.0	42.7	69.5	Vertical	PASS
888.728	-37.38	-13.0	24.4	168.5	Vertical	PASS
1269.327	-45.99	-13.0	33.0	52.3	Vertical	PASS
1688.279	-47.08	-13.0	34.1	169.9	Vertical	PASS
2695.761	-40.17	-13.0	27.2	0.0	Vertical	PASS
12433.915	-36.14	-13.0	23.1	360.0	Vertical	PASS

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



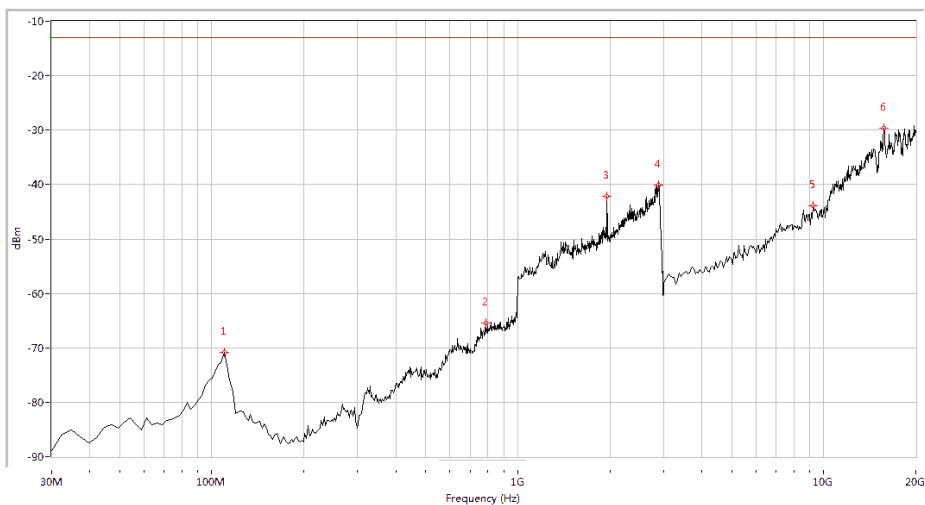
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.61	-13.0	57.6	95.7	Horizontal	PASS
612.968	-68.78	-13.0	55.8	48.3	Horizontal	PASS
1932.668	-38.68	-13.0	25.7	164.8	Horizontal	PASS
2855.362	-39.76	-13.0	26.8	105.6	Horizontal	PASS
10885.287	-39.49	-13.0	26.5	42.9	Horizontal	PASS
17710.723	-29.67	-13.0	16.7	254.3	Horizontal	PASS

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



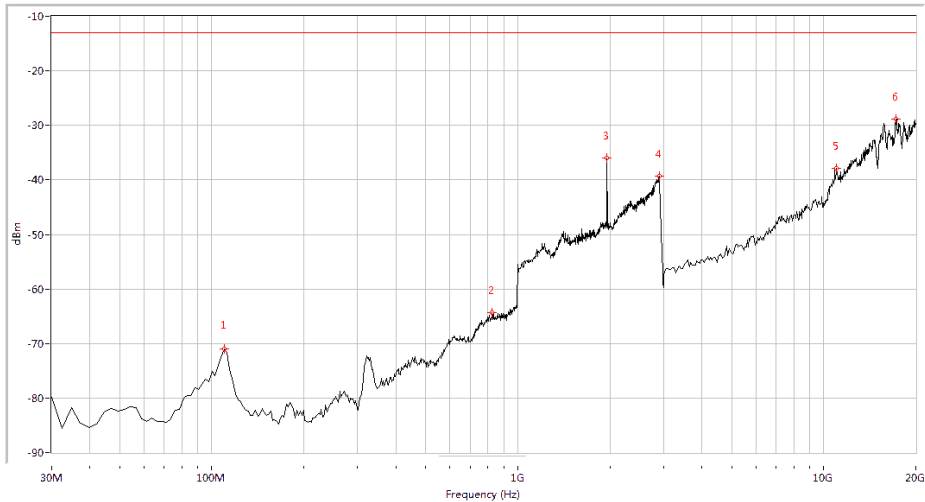
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-71.80	-13.0	58.8	349.7	Vertical	PASS
816.160	-64.10	-13.0	51.1	152.8	Vertical	PASS
1927.681	-44.92	-13.0	31.9	84.2	Vertical	PASS
2875.312	-40.31	-13.0	27.3	63.9	Vertical	PASS
9443.890	-43.76	-13.0	30.8	94.2	Vertical	PASS
18304.239	-30.31	-13.0	17.3	147.5	Vertical	PASS

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



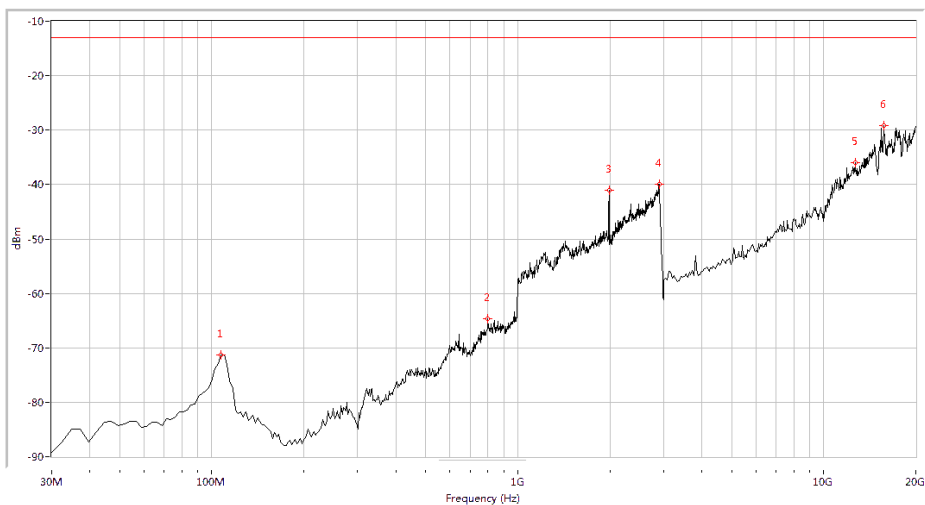
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.85	-13.0	57.8	346.5	Horizontal	PASS
787.132	-65.46	-13.0	52.5	258.7	Horizontal	PASS
1957.606	-42.13	-13.0	29.1	95.8	Horizontal	PASS
2885.287	-40.13	-13.0	27.1	156.4	Horizontal	PASS
9231.920	-43.93	-13.0	30.9	263.5	Horizontal	PASS
15718.204	-29.69	-13.0	16.7	185.3	Horizontal	PASS

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



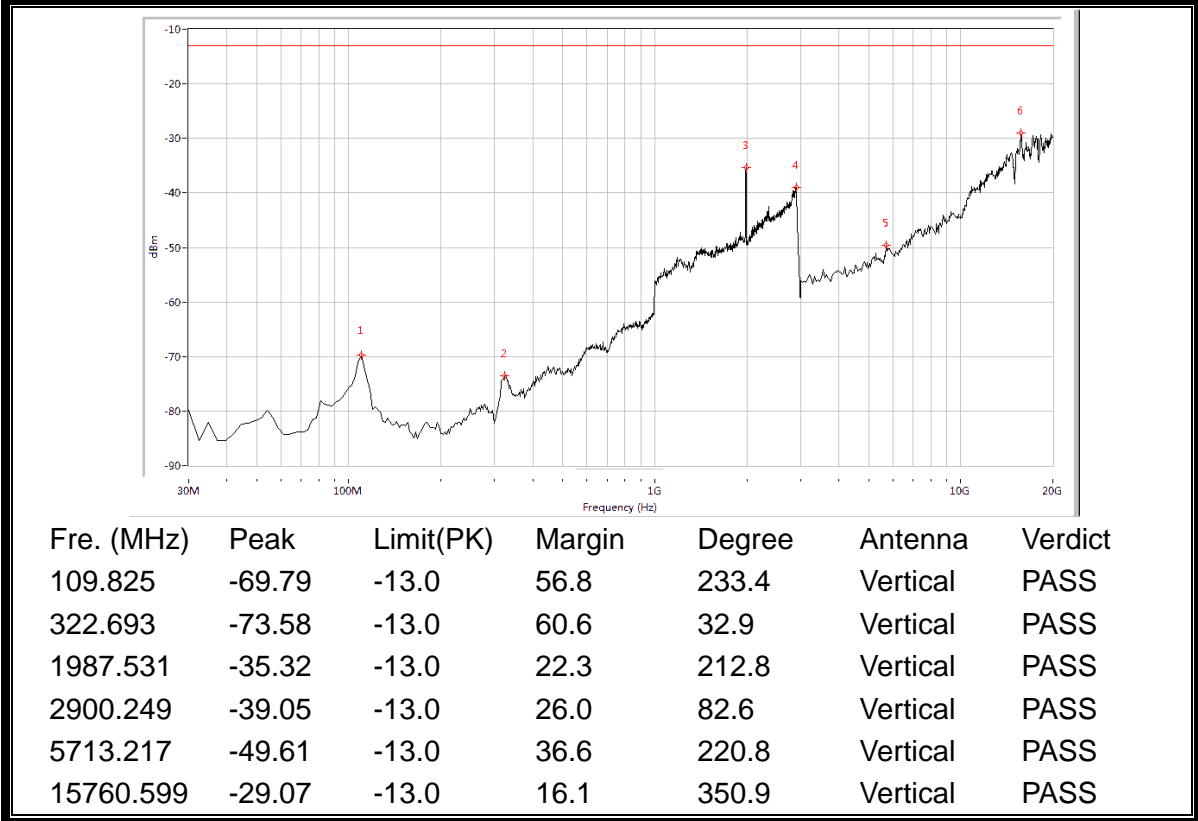
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-71.03	-13.0	58.0	269.5	Vertical	PASS
825.835	-64.41	-13.0	51.4	33.8	Vertical	PASS
1957.606	-35.92	-13.0	22.9	215.7	Vertical	PASS
2900.249	-39.36	-13.0	26.4	3.9	Vertical	PASS
11012.469	-37.84	-13.0	24.8	-0.0	Vertical	PASS
17201.995	-28.81	-13.0	15.8	326.8	Vertical	PASS

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

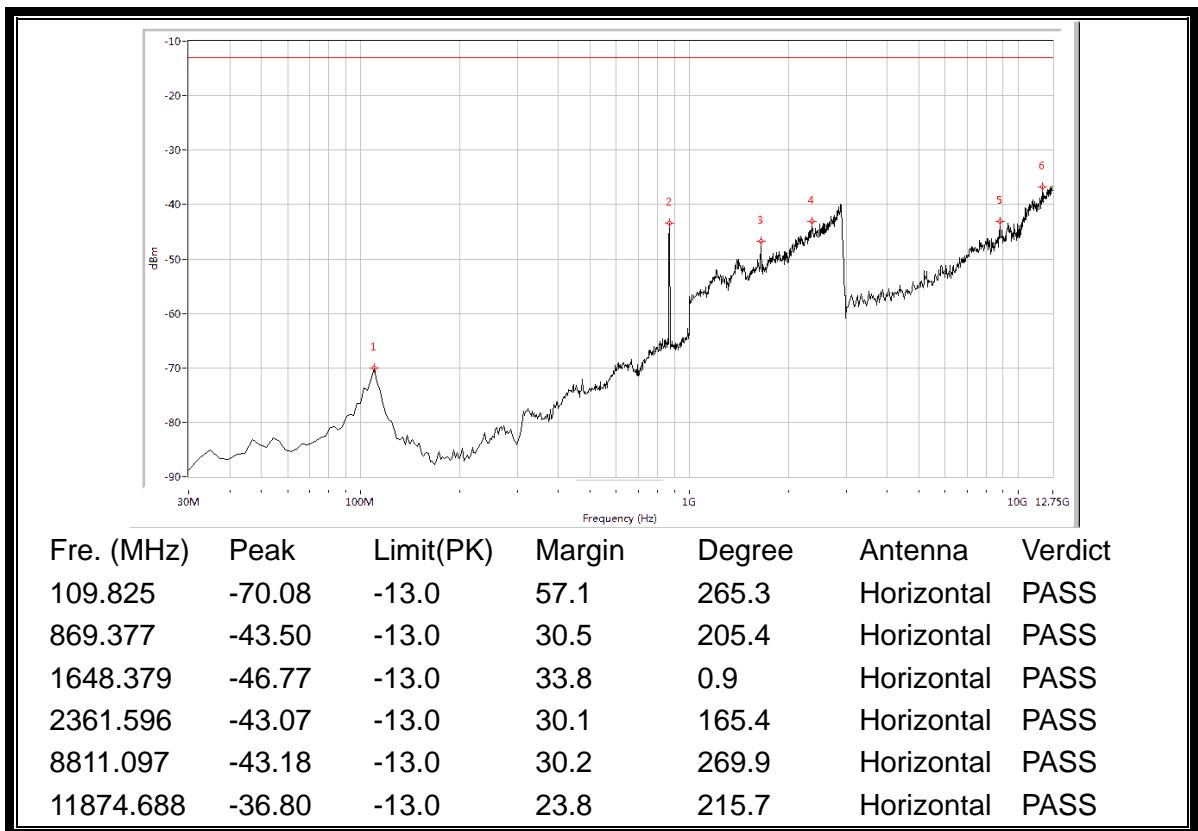


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
107.406	-71.38	-13.0	58.4	325.9	Horizontal	PASS
799.227	-64.66	-13.0	51.7	45.5	Horizontal	PASS
1987.531	-41.01	-13.0	28.0	264.7	Horizontal	PASS
2905.237	-39.93	-13.0	26.9	152.5	Horizontal	PASS
12665.835	-36.05	-13.0	23.1	35.9	Horizontal	PASS
15760.599	-29.14	-13.0	16.1	68.7	Horizontal	PASS

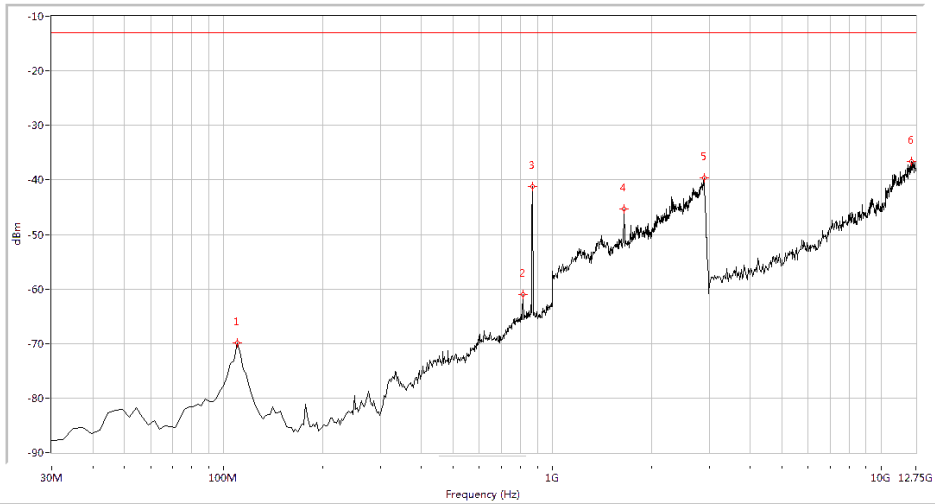
(Plot J.5: HSUPA 1900 MHz Channel = 9538, Test Antenna Horizontal)



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

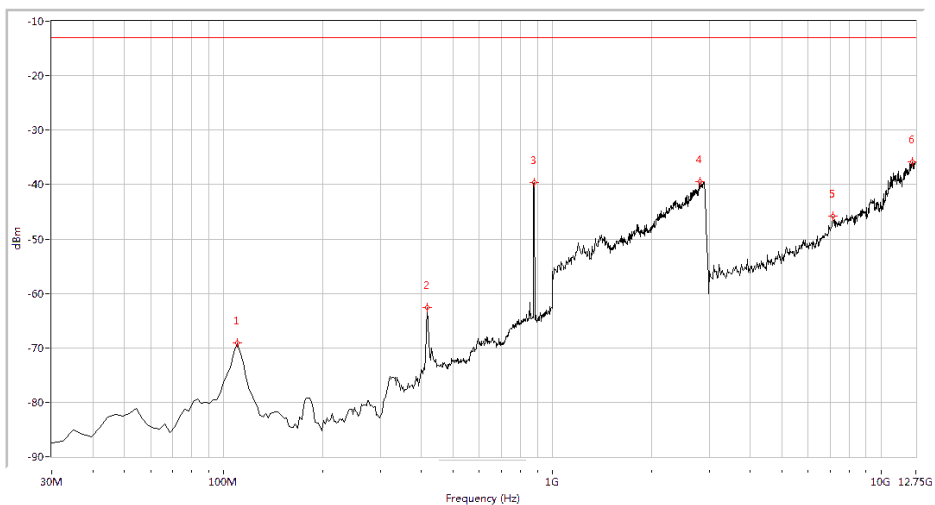


(Plot K.1: HSPA+ 850MHz Channel = 4132, Test Antenna Horizontal)



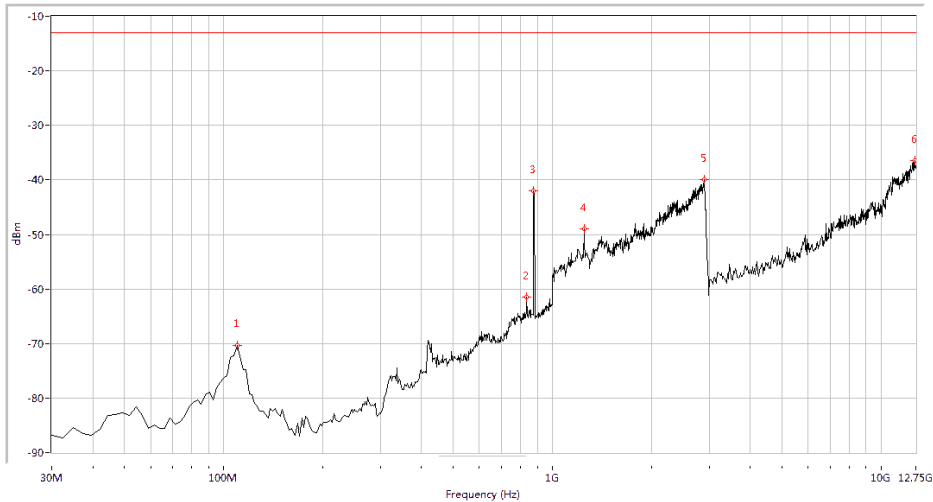
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-69.93	-13.0	56.9	321.5	Vertical	PASS
813.741	-61.08	-13.0	48.1	15.2	Vertical	PASS
869.377	-41.28	-13.0	28.3	69.7	Vertical	PASS
1653.367	-45.31	-13.0	32.3	184.3	Vertical	PASS
2895.262	-39.57	-13.0	26.6	33.2	Vertical	PASS
12385.287	-36.62	-13.0	23.6	121.4	Vertical	PASS

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



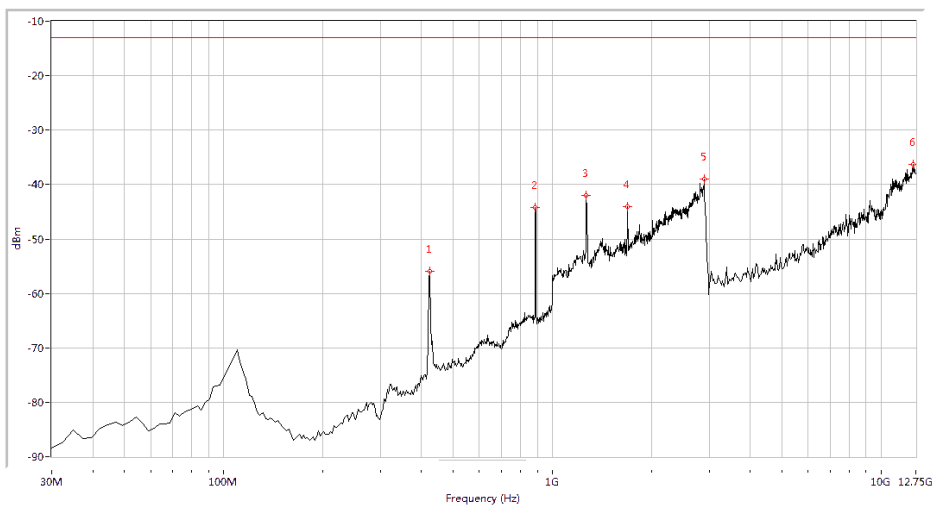
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-69.13	-13.0	56.1	1.7	Horizontal	PASS
417.032	-62.64	-13.0	49.6	179.0	Horizontal	PASS
879.052	-39.59	-13.0	26.6	78.5	Horizontal	PASS
2810.474	-39.49	-13.0	26.5	253.5	Horizontal	PASS
7133.416	-45.80	-13.0	32.8	360.0	Horizontal	PASS
12409.601	-35.75	-13.0	22.8	306.2	Horizontal	PASS

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



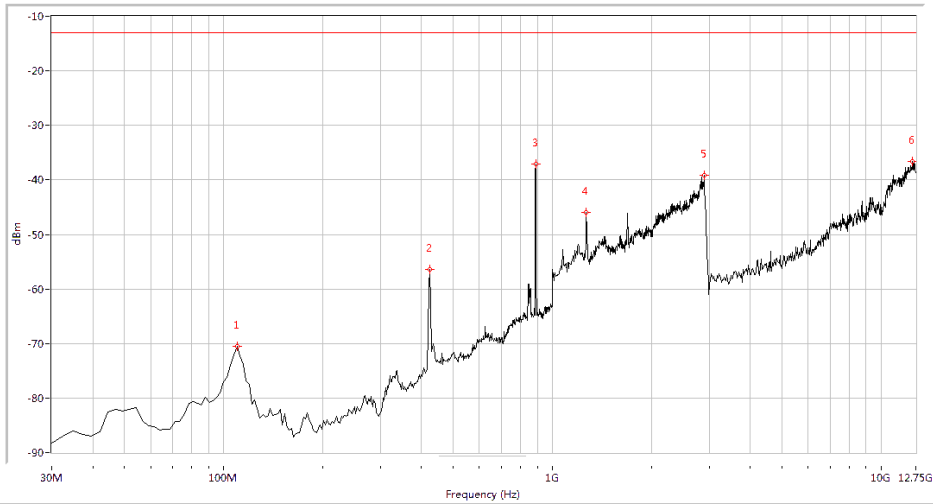
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.29	-13.0	57.3	32.6	Vertical	PASS
835.511	-61.53	-13.0	48.5	164.8	Vertical	PASS
876.633	-42.03	-13.0	29.0	251.8	Vertical	PASS
1249.377	-48.99	-13.0	36.0	360.0	Vertical	PASS
2890.274	-39.98	-13.0	27.0	318.7	Vertical	PASS
12652.743	-36.43	-13.0	23.4	261.8	Vertical	PASS

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



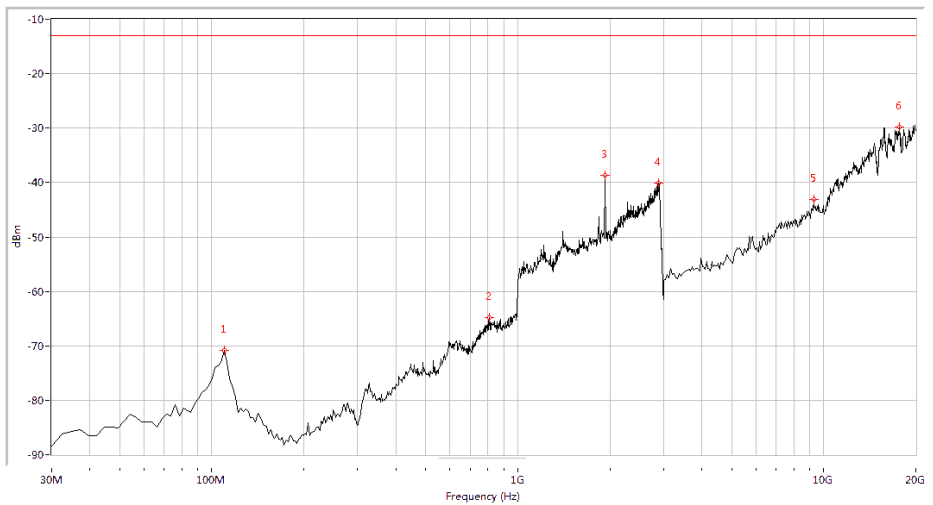
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
424.289	-55.94	-13.0	42.9	305.4	Horizontal	PASS
888.728	-44.18	-13.0	31.2	135.4	Horizontal	PASS
1269.327	-41.95	-13.0	29.0	0.5	Horizontal	PASS
1693.267	-44.11	-13.0	31.1	22.3	Horizontal	PASS
2900.249	-39.01	-13.0	26.0	121.6	Horizontal	PASS
12531.172	-36.29	-13.0	23.3	108.6	Horizontal	PASS

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



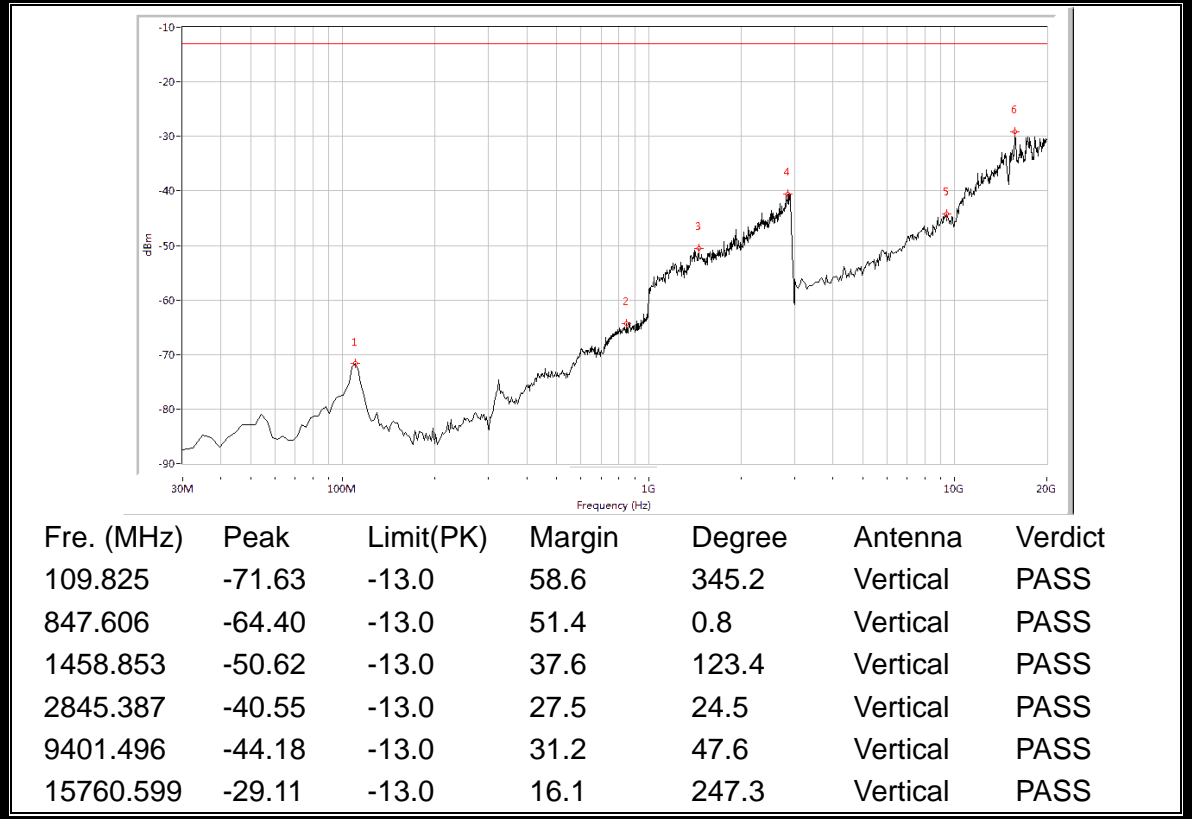
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.50	-13.0	57.5	69.4	Vertical	PASS
424.289	-56.45	-13.0	43.4	165.7	Vertical	PASS
891.147	-37.08	-13.0	24.1	84.5	Vertical	PASS
1269.327	-45.99	-13.0	33.0	264.3	Vertical	PASS
2900.249	-39.18	-13.0	26.2	63.9	Vertical	PASS
12458.229	-36.65	-13.0	23.7	19.0	Vertical	PASS

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

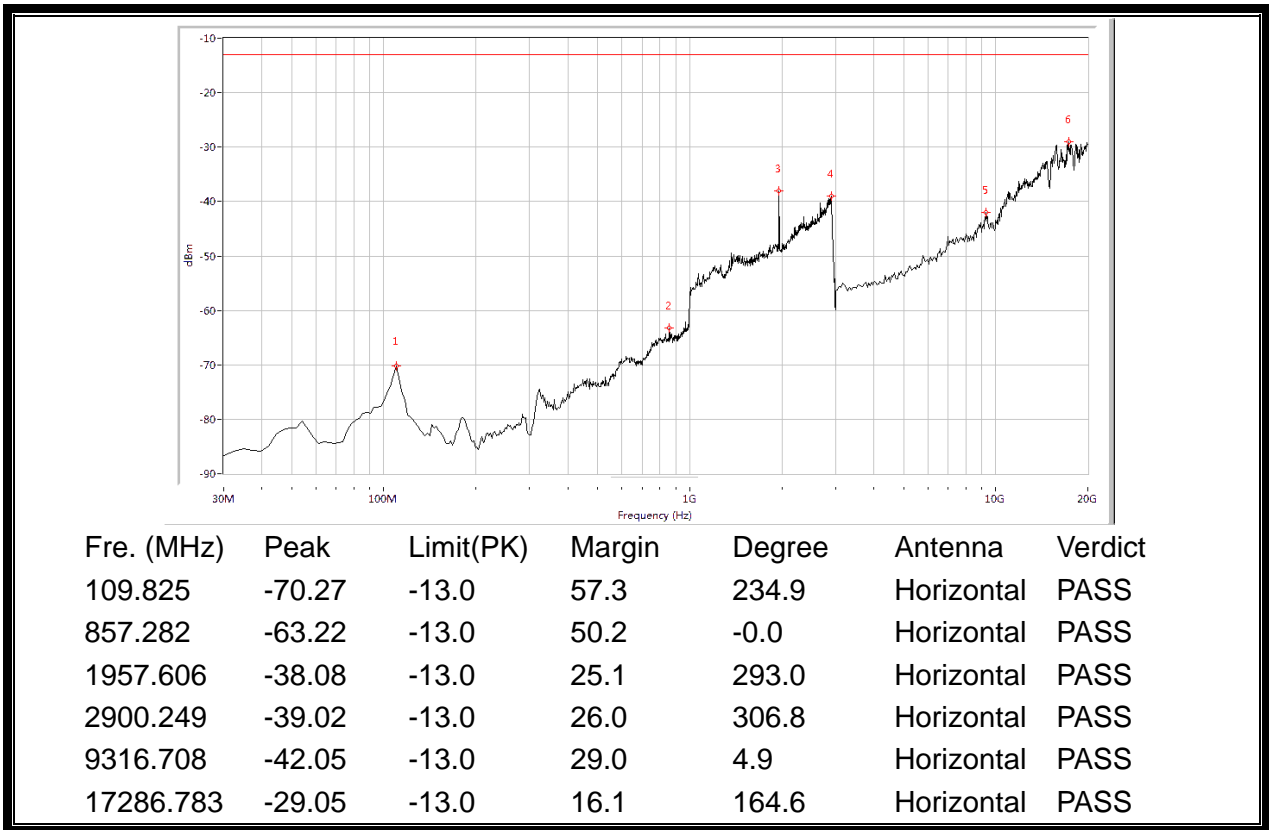


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.87	-13.0	57.9	64.5	Horizontal	PASS
808.903	-64.85	-13.0	51.9	256.8	Horizontal	PASS
1932.668	-38.71	-13.0	25.7	175.3	Horizontal	PASS
2895.262	-40.15	-13.0	27.2	94.1	Horizontal	PASS
9274.314	-43.07	-13.0	30.1	0.0	Horizontal	PASS
17625.935	-29.72	-13.0	16.7	71.2	Horizontal	PASS

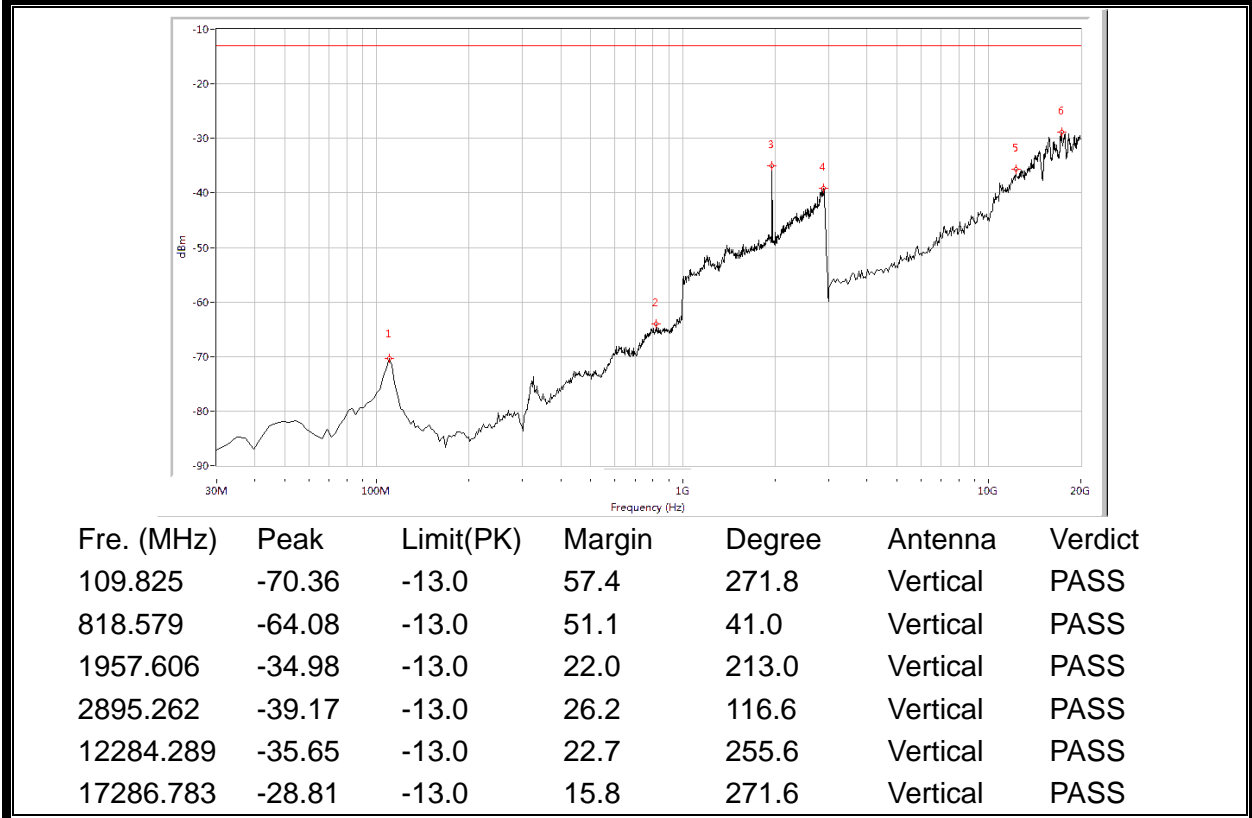
(Plot L.1: HSPA+ 1900 MHz Channel = 9262, Test Antenna Horizontal)



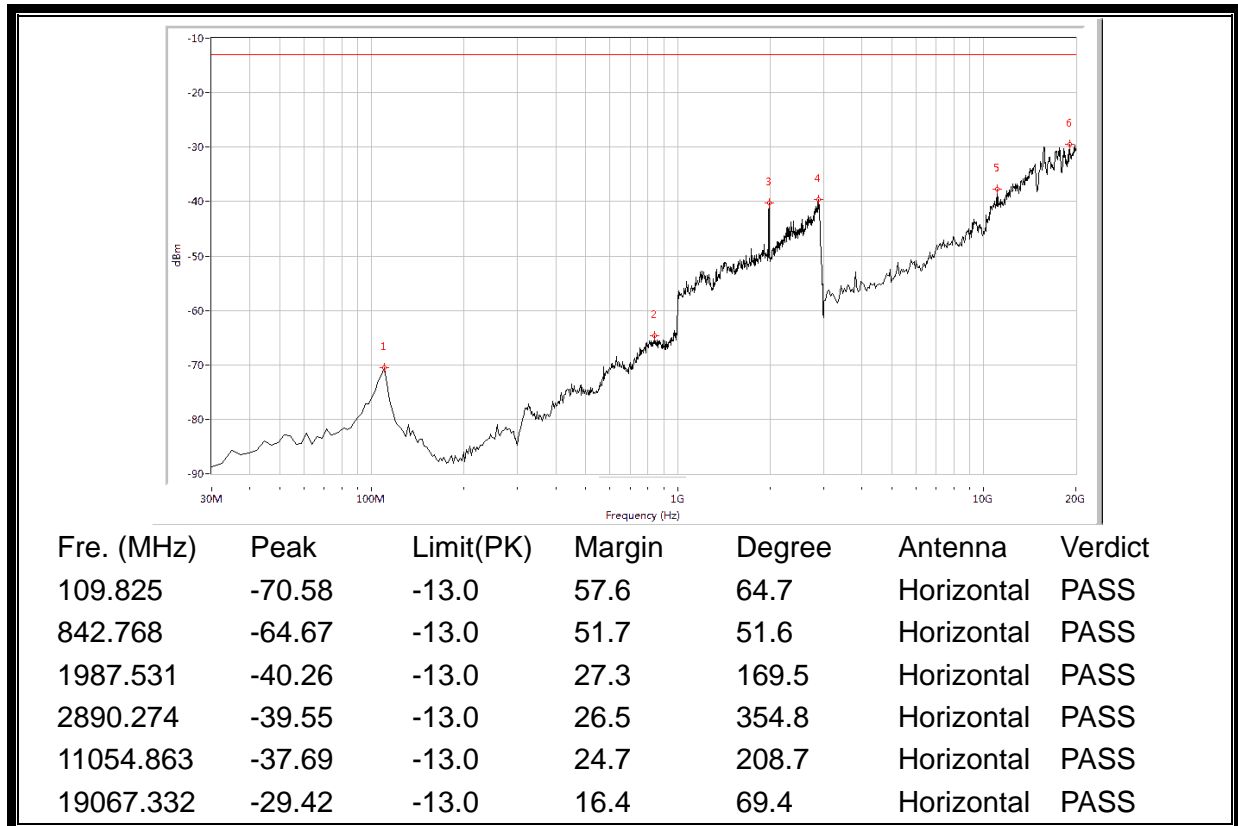
(Plot L.2: HSPA+ 1900 MHz Channel = 9262, Test Antenna Vertical)



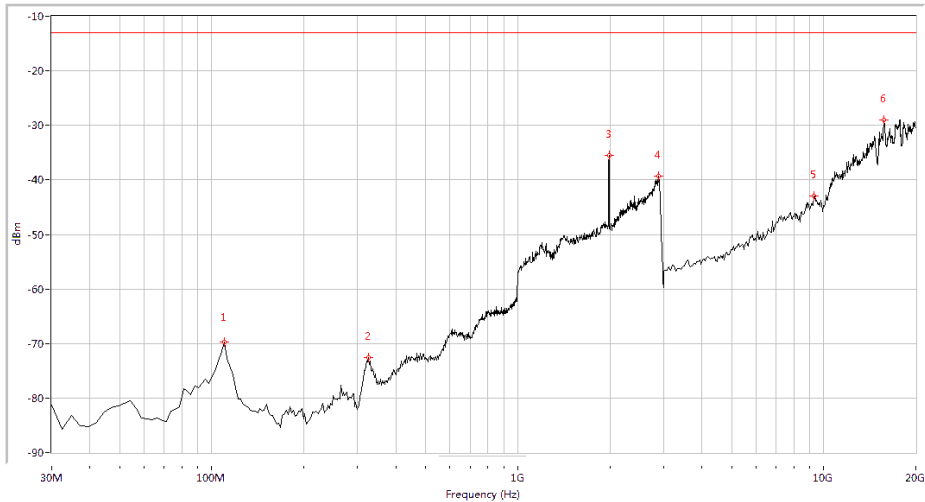
(Plot L.3: HSPA+ 1900 MHz Channel = 9400, Test Antenna Horizontal)



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

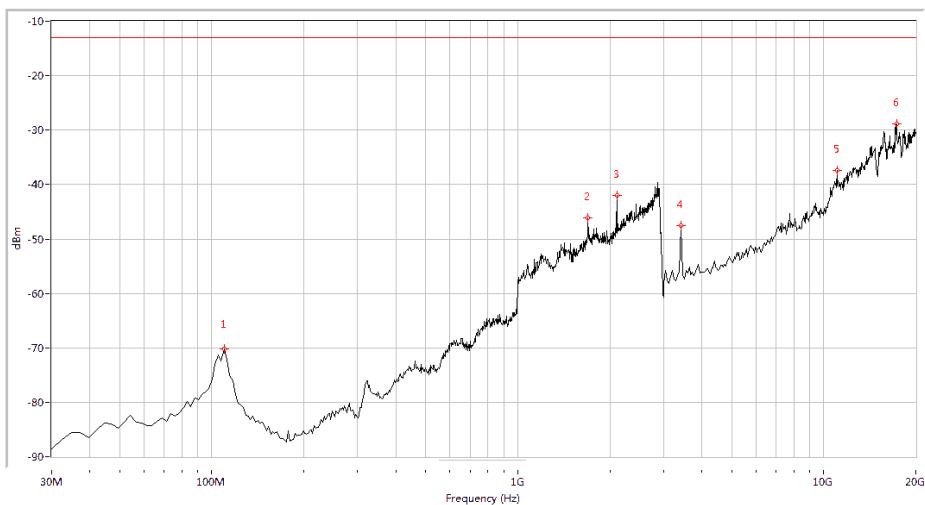


(Plot L.5: HSPA+ 1900 MHz Channel = 9538, Test Antenna Horizontal)



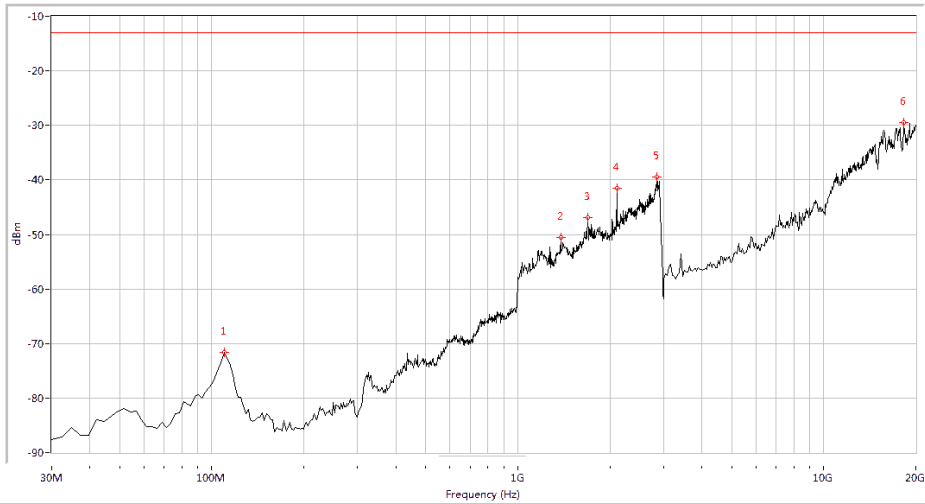
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-69.70	-13.0	56.7	269.8	Vertical	PASS
325.112	-72.50	-13.0	59.5	35.4	Vertical	PASS
1987.531	-35.46	-13.0	22.5	326.1	Vertical	PASS
2885.287	-39.32	-13.0	26.3	266.9	Vertical	PASS
9316.708	-42.94	-13.0	29.9	359.5	Vertical	PASS
15760.599	-28.96	-13.0	16.0	153.3	Vertical	PASS

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



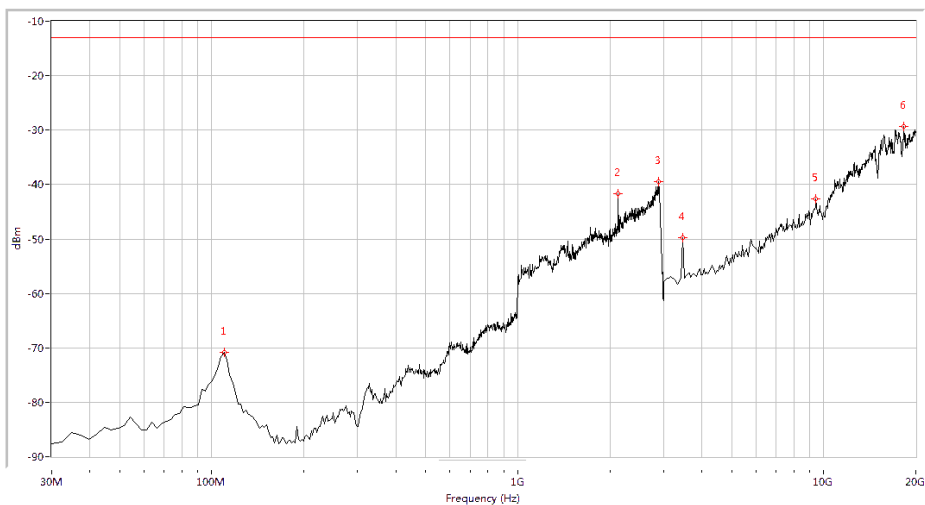
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.27	-13.0	57.3	325.9	Horizontal	PASS
1698.254	-46.05	-13.0	33.1	157.4	Horizontal	PASS
2107.232	-41.94	-13.0	28.9	111.0	Horizontal	PASS
3423.940	-47.54	-13.0	34.5	86.5	Horizontal	PASS
11054.863	-37.38	-13.0	24.4	175.4	Horizontal	PASS
17286.783	-28.90	-13.0	15.9	239.1	Horizontal	PASS

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



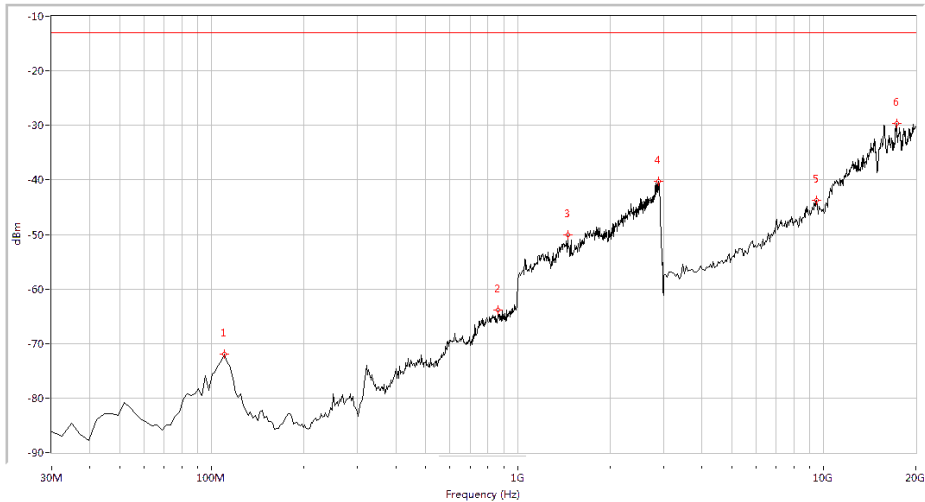
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-71.65	-13.0	58.7	328.4	Vertical	PASS
1384.040	-50.60	-13.0	37.6	11.0	Vertical	PASS
1698.254	-46.87	-13.0	33.9	28.4	Vertical	PASS
2107.232	-41.46	-13.0	28.5	305.6	Vertical	PASS
2850.374	-39.54	-13.0	26.5	97.5	Vertical	PASS
18261.845	-29.54	-13.0	16.5	145.7	Vertical	PASS

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



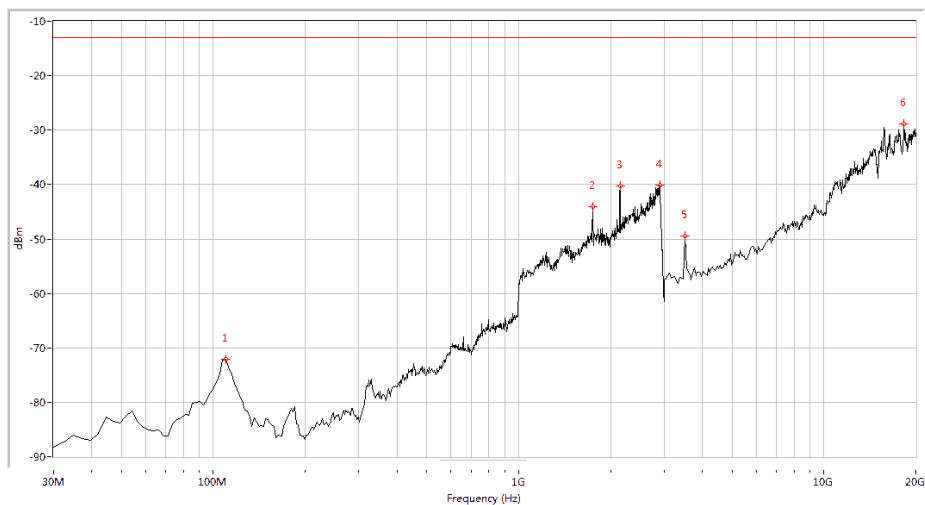
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.90	-13.0	57.9	64.8	Horizontal	PASS
2127.182	-41.69	-13.0	28.7	196.4	Horizontal	PASS
2880.299	-39.51	-13.0	26.5	265.4	Horizontal	PASS
3466.334	-49.84	-13.0	36.8	10.7	Horizontal	PASS
9443.890	-42.62	-13.0	29.6	251.2	Horizontal	PASS
18304.239	-29.33	-13.0	16.3	13.2	Horizontal	PASS

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



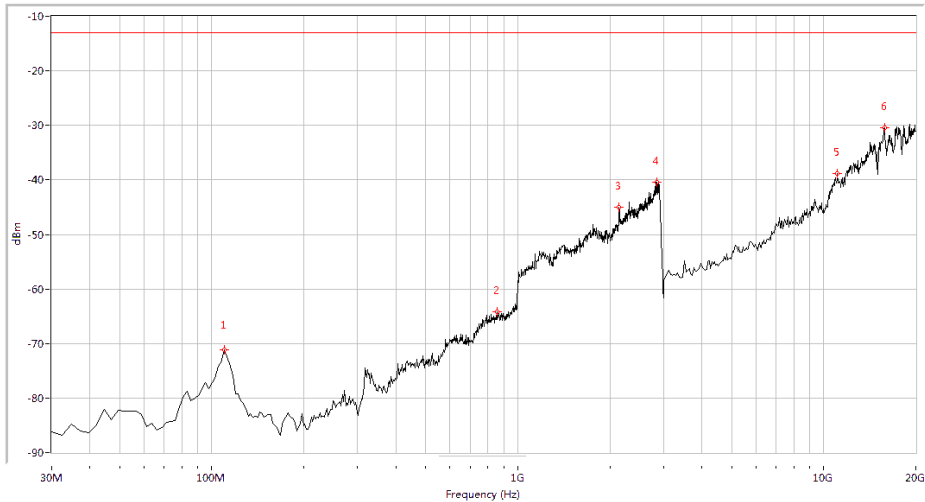
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-71.87	-13.0	58.9	349.5	Vertical	PASS
864.539	-63.79	-13.0	50.8	156.4	Vertical	PASS
1458.853	-50.02	-13.0	37.0	0.2	Vertical	PASS
2880.299	-40.24	-13.0	27.2	85.1	Vertical	PASS
9486.284	-43.77	-13.0	30.8	169.9	Vertical	PASS
17286.783	-29.70	-13.0	16.7	84.7	Vertical	PASS

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



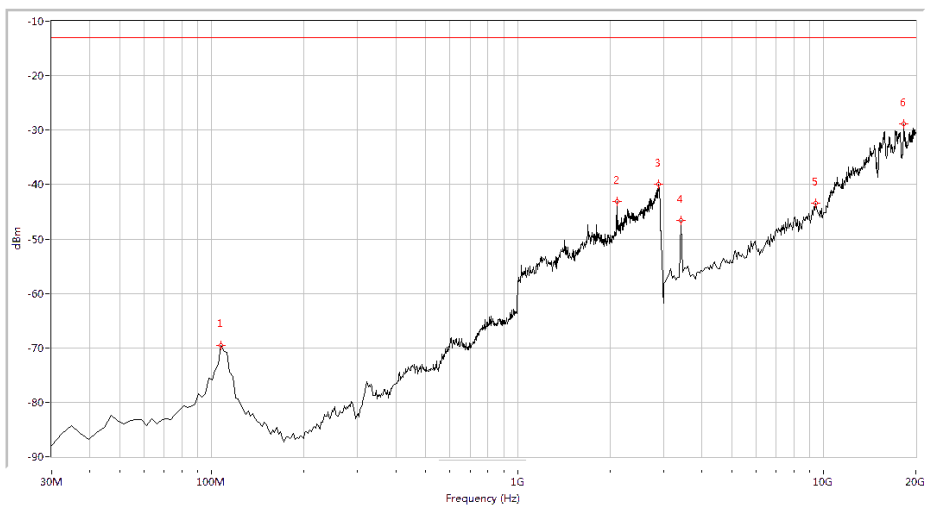
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-72.02	-13.0	59.0	64.5	Horizontal	PASS
1748.130	-44.10	-13.0	31.1	159.7	Horizontal	PASS
2152.120	-40.28	-13.0	27.3	84.3	Horizontal	PASS
2900.249	-40.17	-13.0	27.2	318.6	Horizontal	PASS
3508.728	-49.47	-13.0	36.5	17.4	Horizontal	PASS
18304.239	-28.85	-13.0	15.8	0.5	Horizontal	PASS

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



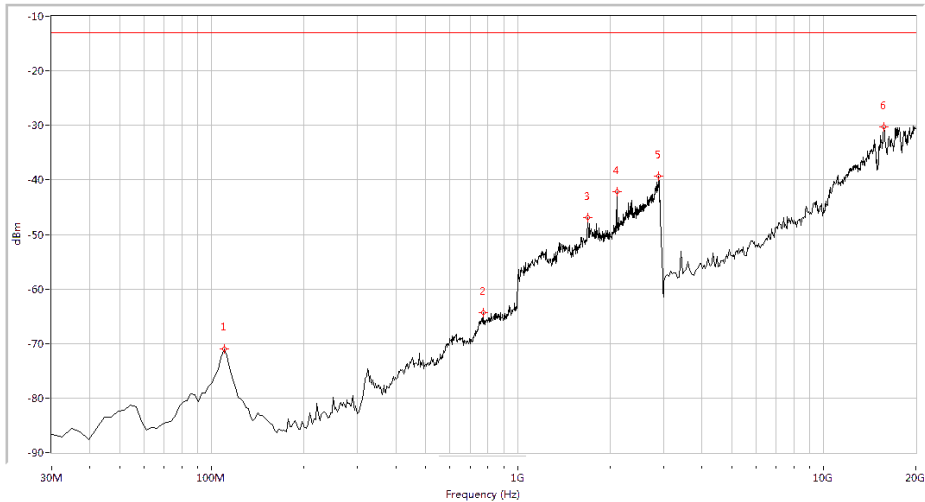
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-71.16	-13.0	58.2	46.5	Vertical	PASS
857.282	-64.21	-13.0	51.2	163.9	Vertical	PASS
2147.132	-44.98	-13.0	32.0	84.6	Vertical	PASS
2845.387	-40.40	-13.0	27.4	68.1	Vertical	PASS
11097.257	-38.87	-13.0	25.9	159.7	Vertical	PASS
15802.993	-30.49	-13.0	17.5	52.6	Vertical	PASS

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



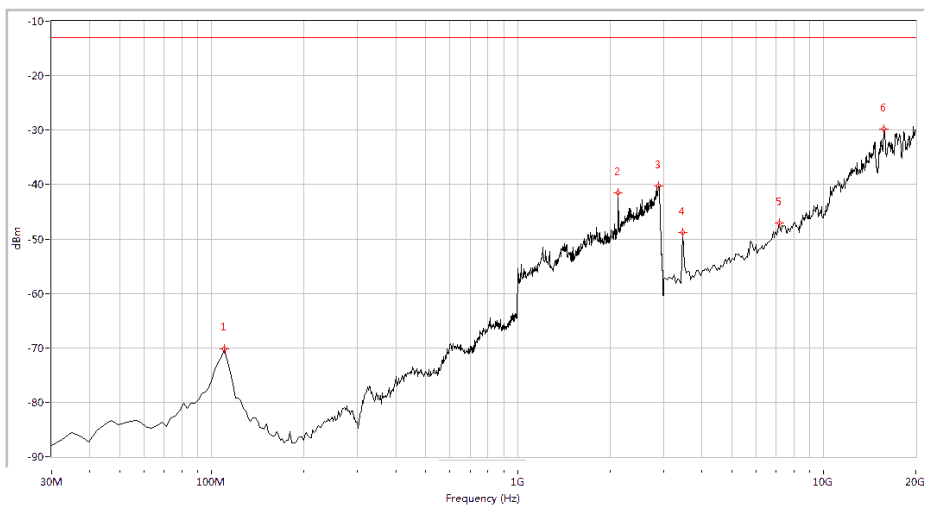
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
107.406	-69.61	-13.0	56.6	69.4	Horizontal	PASS
2107.232	-43.08	-13.0	30.1	212.7	Horizontal	PASS
2880.299	-39.93	-13.0	26.9	20.8	Horizontal	PASS
3423.940	-46.59	-13.0	33.6	197.6	Horizontal	PASS
9401.496	-43.48	-13.0	30.5	63.5	Horizontal	PASS
18304.239	-28.84	-13.0	15.8	71.6	Horizontal	PASS

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



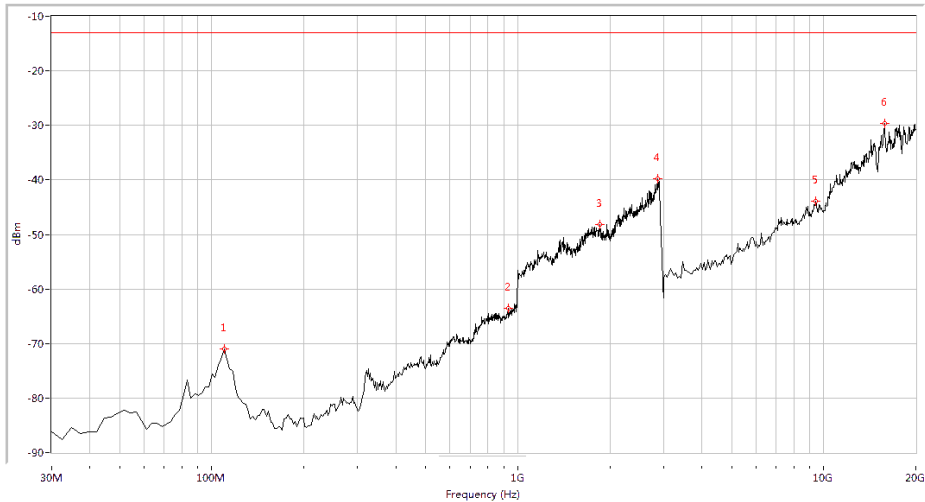
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-71.02	-13.0	58.0	349.5	Vertical	PASS
770.200	-64.37	-13.0	51.4	0.8	Vertical	PASS
1698.254	-46.91	-13.0	33.9	263.8	Vertical	PASS
2107.232	-42.22	-13.0	29.2	22.4	Vertical	PASS
2895.262	-39.32	-13.0	26.3	0.0	Vertical	PASS
15718.204	-30.32	-13.0	17.3	84.1	Vertical	PASS

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



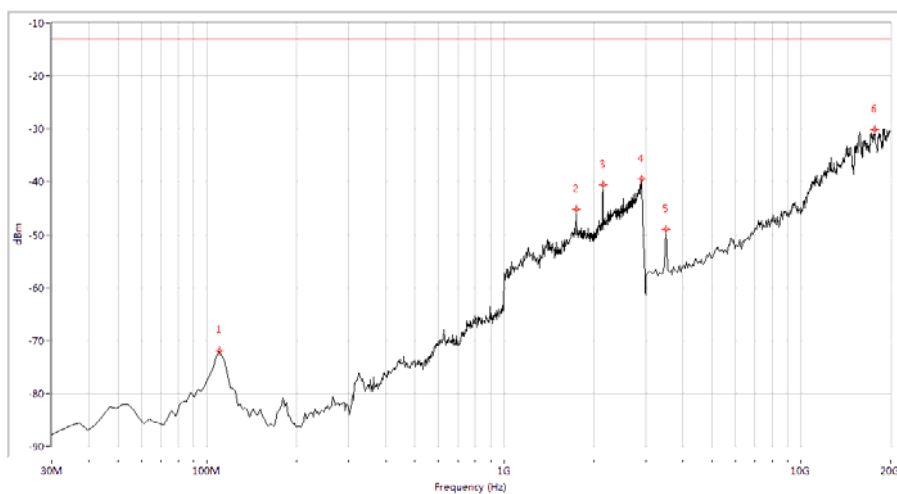
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.26	-13.0	57.3	64.9	Horizontal	PASS
2132.170	-41.48	-13.0	28.5	156.3	Horizontal	PASS
2895.262	-40.23	-13.0	27.2	35.7	Horizontal	PASS
3466.334	-48.82	-13.0	35.8	222.5	Horizontal	PASS
7154.613	-47.06	-13.0	34.1	95.1	Horizontal	PASS
15760.599	-29.75	-13.0	16.8	102.2	Horizontal	PASS

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



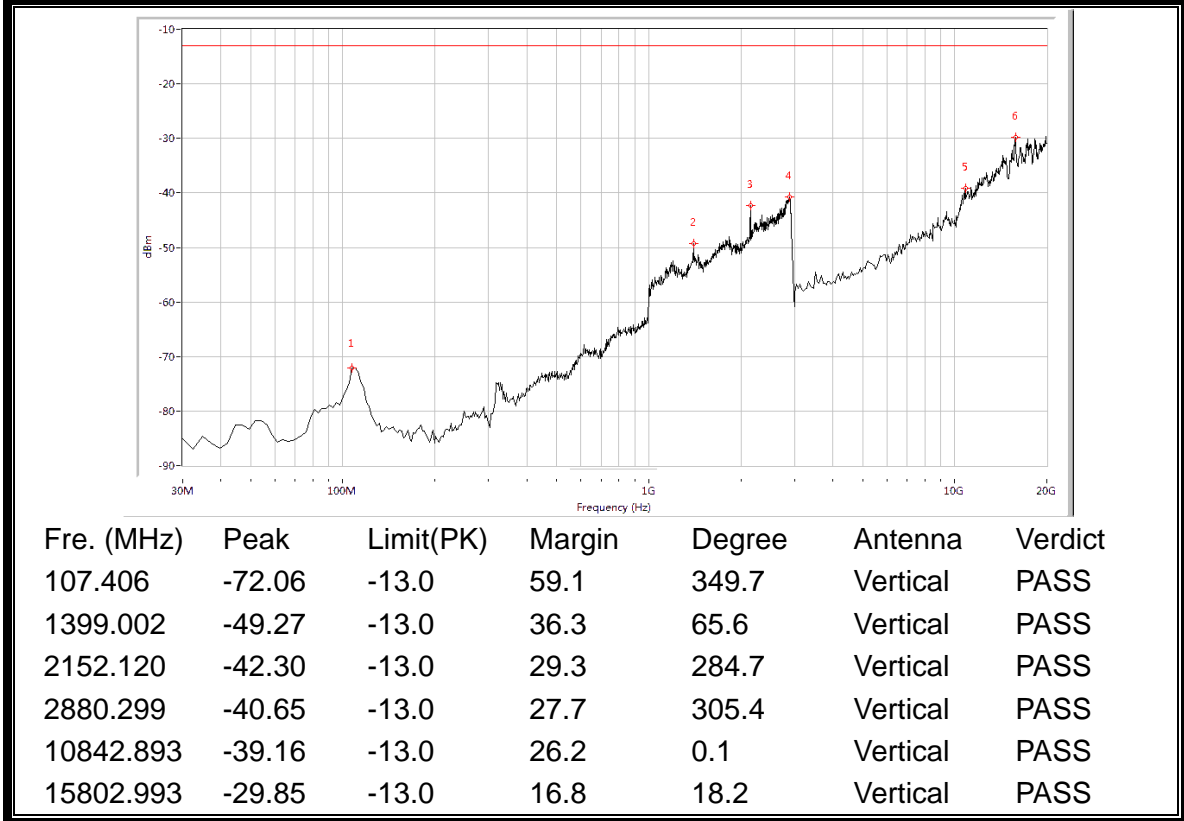
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-70.95	-13.0	57.9	94.7	Vertical	PASS
934.688	-63.54	-13.0	50.5	65.1	Vertical	PASS
1857.855	-48.20	-13.0	35.2	254.9	Vertical	PASS
2875.312	-39.80	-13.0	26.8	131.3	Vertical	PASS
9443.890	-43.96	-13.0	31.0	47.5	Vertical	PASS
15802.993	-29.68	-13.0	16.7	68.5	Vertical	PASS

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

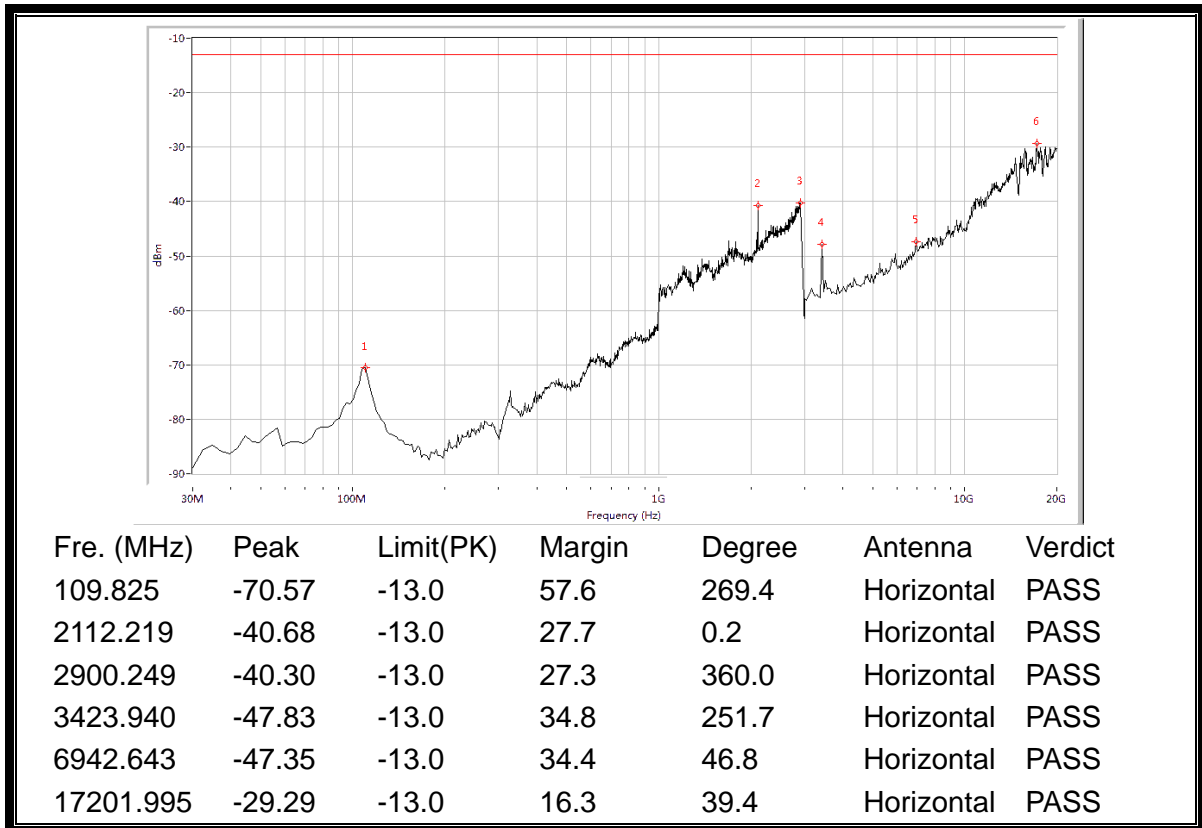


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-71.93	-13.0	58.9	321.5	Horizontal	PASS
1748.130	-45.20	-13.0	32.2	167.4	Horizontal	PASS
2152.120	-40.63	-13.0	27.6	52.8	Horizontal	PASS
2900.249	-39.52	-13.0	26.5	64.7	Horizontal	PASS
3508.728	-48.93	-13.0	35.9	95.6	Horizontal	PASS
17625.935	-30.15	-13.0	17.1	258.4	Horizontal	PASS

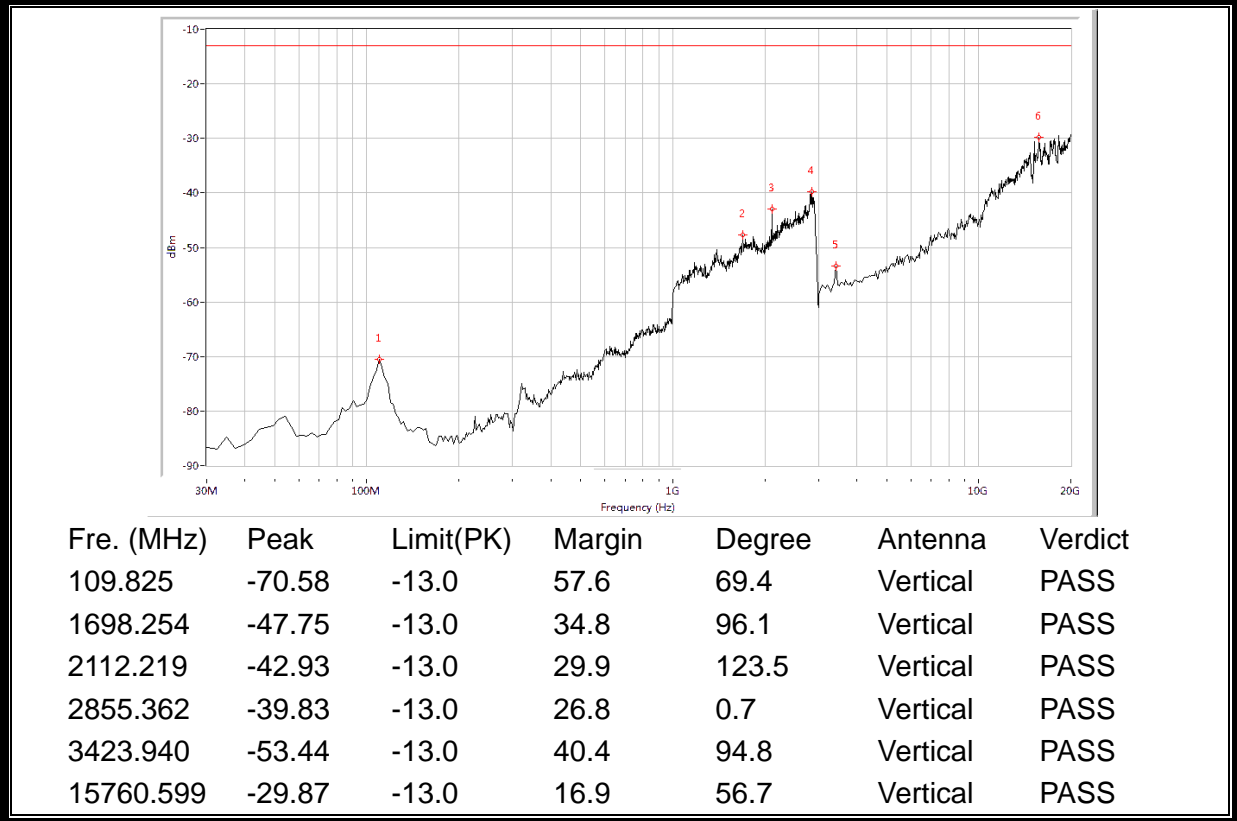
(Plot N.5: HSDPA 1700MHz Channel = 1513, Test Antenna Horizontal)



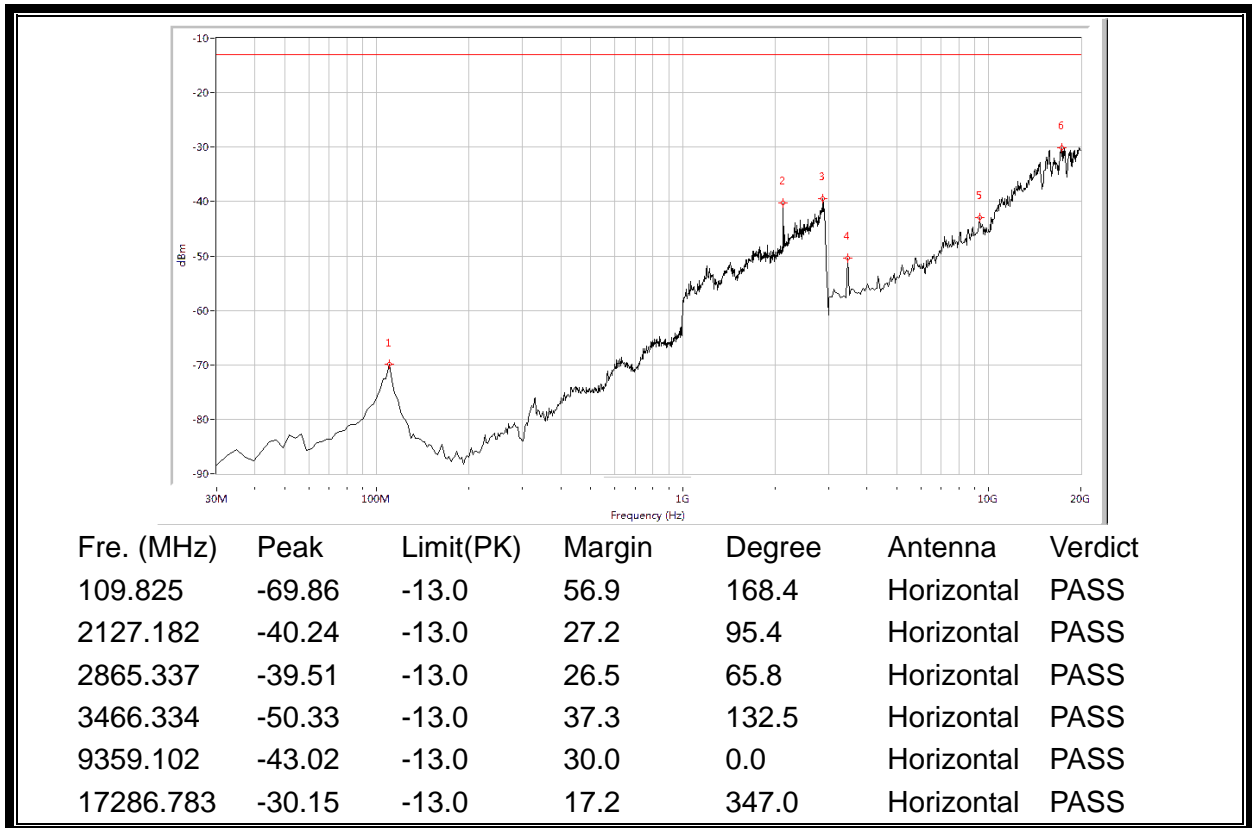
(Plot N.6: HSDPA 1700MHz Channel = 1513, Test Antenna Vertical)



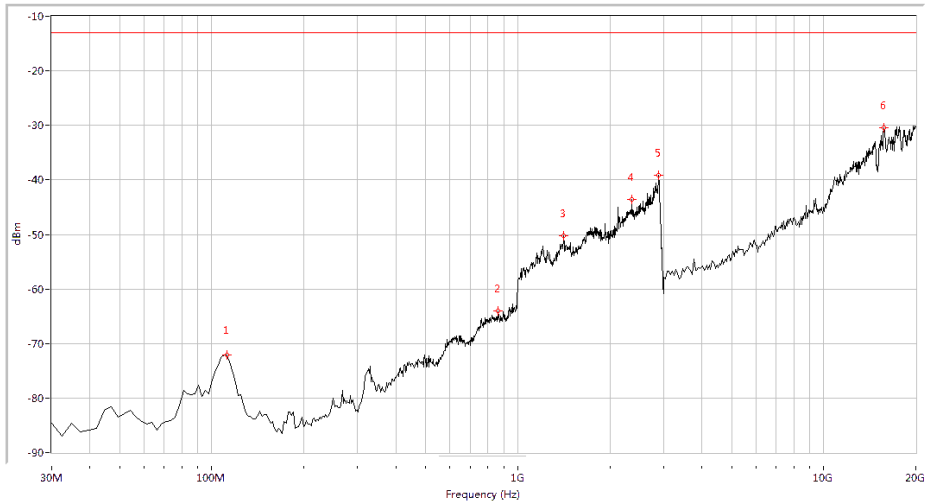
(Plot O.1: HSUPA 1700MHz Channel = 1312, Test Antenna Horizontal)



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

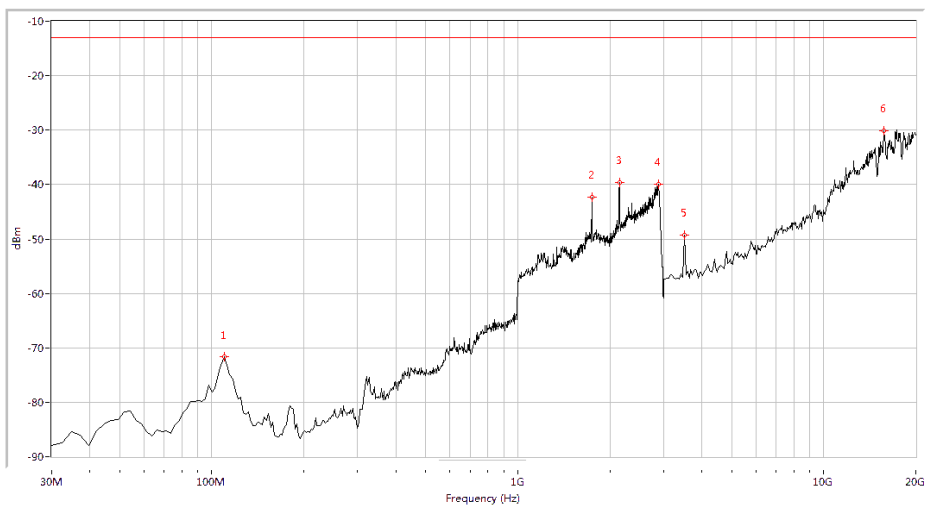


(Plot O.3: HSUPA 1700MHz Channel = 1412, Test Antenna Horizontal)



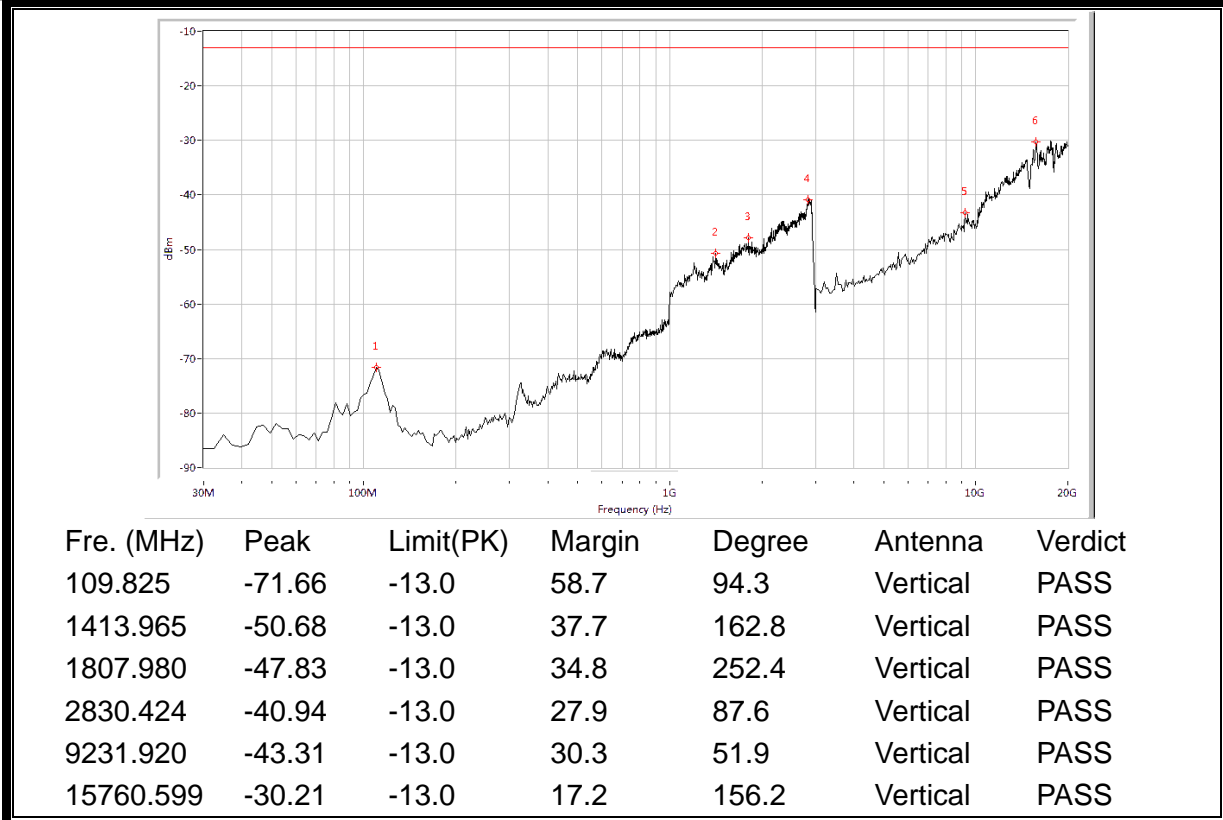
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
112.244	-72.14	-13.0	59.1	360.0	Vertical	PASS
864.539	-64.08	-13.0	51.1	0.7	Vertical	PASS
1413.965	-50.21	-13.0	37.2	58.6	Vertical	PASS
2361.596	-43.63	-13.0	30.6	97.4	Vertical	PASS
2890.274	-39.11	-13.0	26.1	65.2	Vertical	PASS
15760.599	-30.39	-13.0	17.4	125.7	Vertical	PASS

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

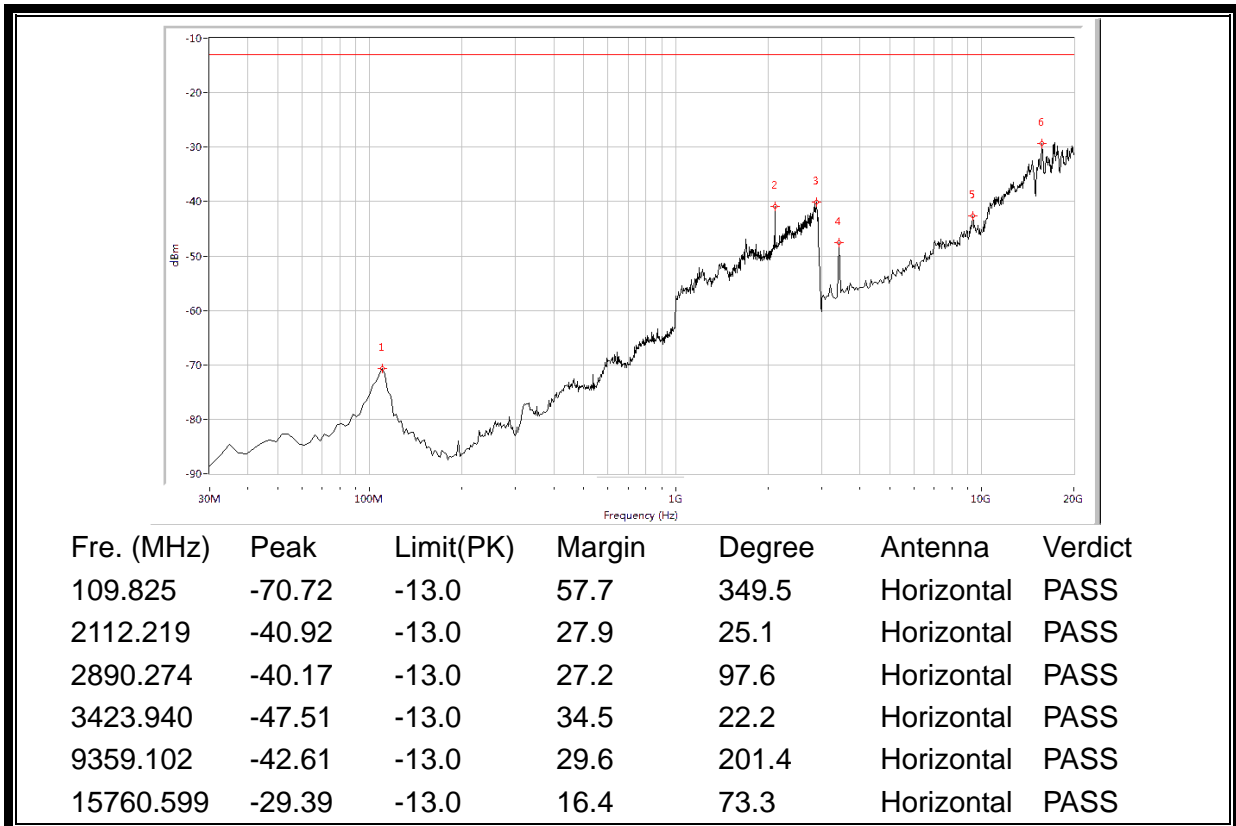


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-71.69	-13.0	58.7	349.7	Horizontal	PASS
1748.130	-42.33	-13.0	29.3	106.8	Horizontal	PASS
2152.120	-39.55	-13.0	26.5	219.7	Horizontal	PASS
2880.299	-39.92	-13.0	26.9	0.0	Horizontal	PASS
3508.728	-49.26	-13.0	36.3	247.9	Horizontal	PASS
15760.599	-30.08	-13.0	17.1	95.3	Horizontal	PASS

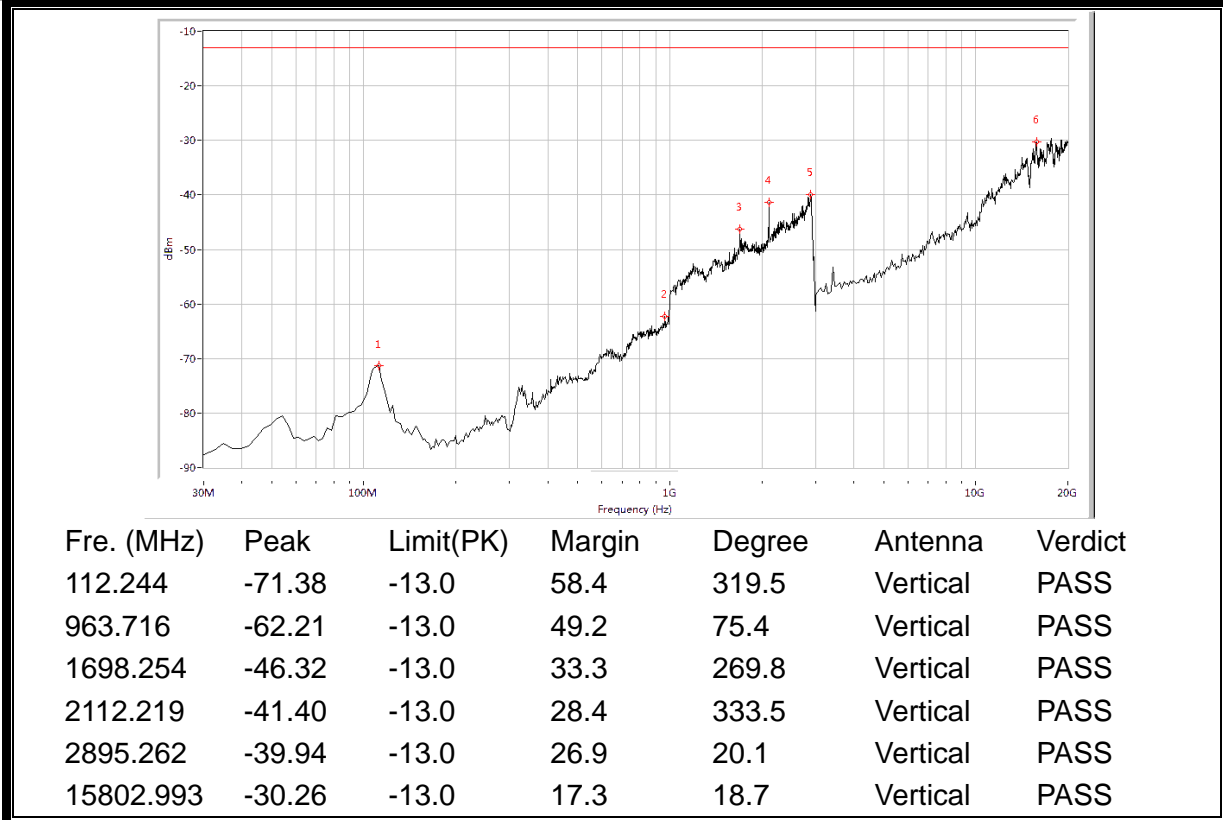
(Plot O.5: HSUPA 1700MHz Channel = 1513, Test Antenna Horizontal)



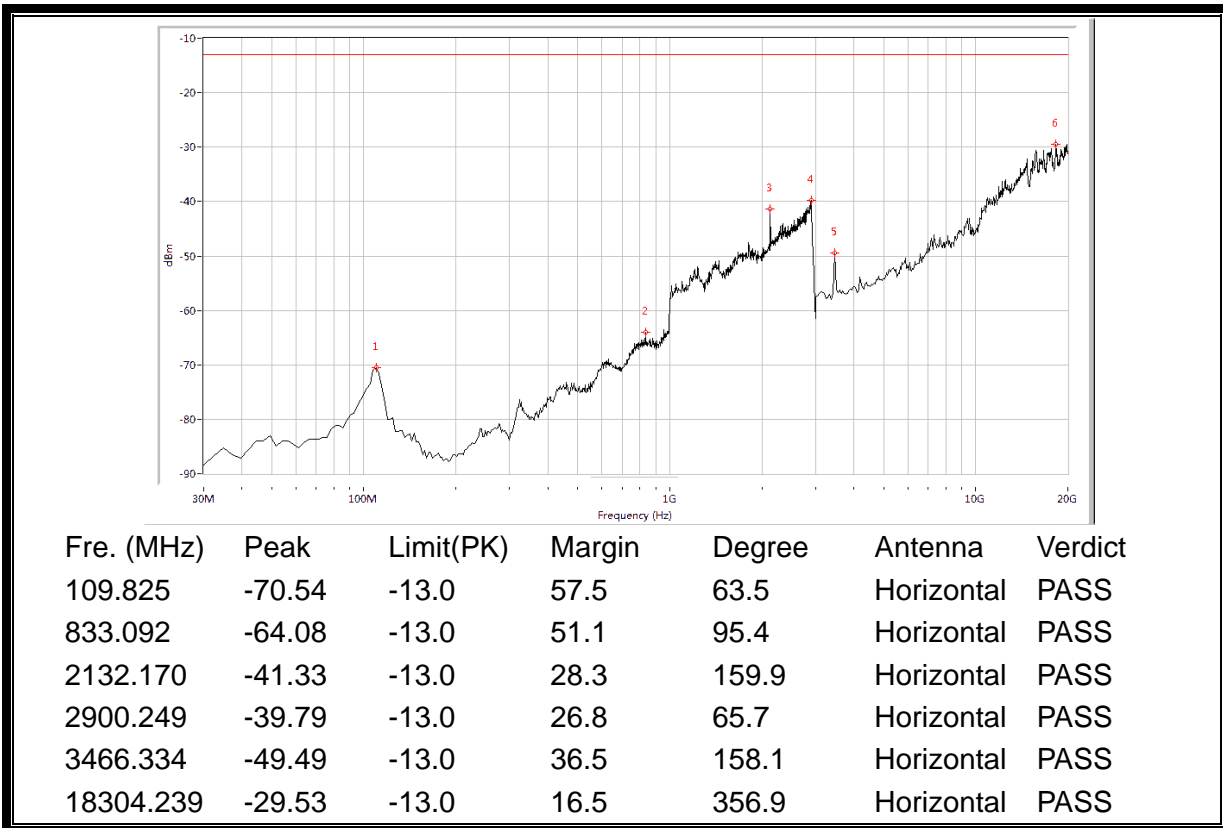
(Plot O.6: HSUPA 1700MHz Channel = 1513, Test Antenna Vertical)



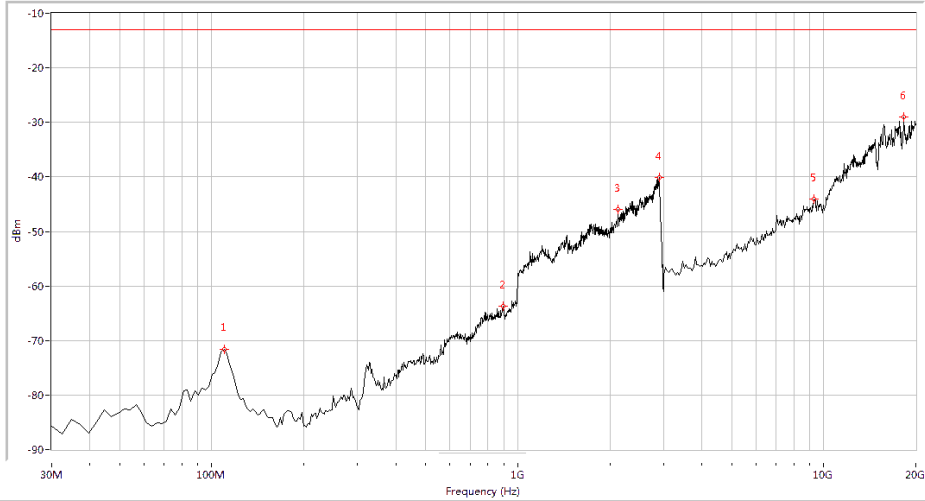
(Plot P.1: HSPA+ 1700 MHz Channel = 1312, Test Antenna Horizontal)



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

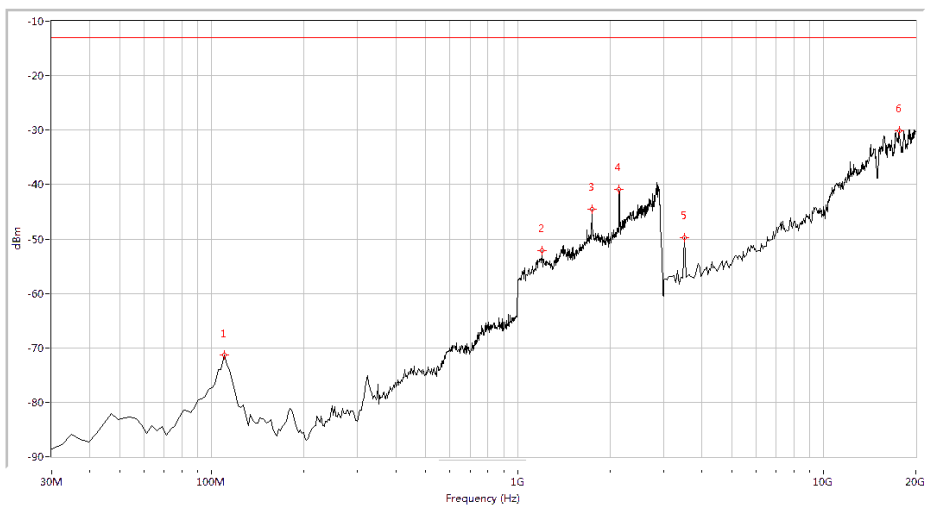


(Plot P.3: HSPA+ 1700 MHz Channel = 1412, Test Antenna Horizontal)



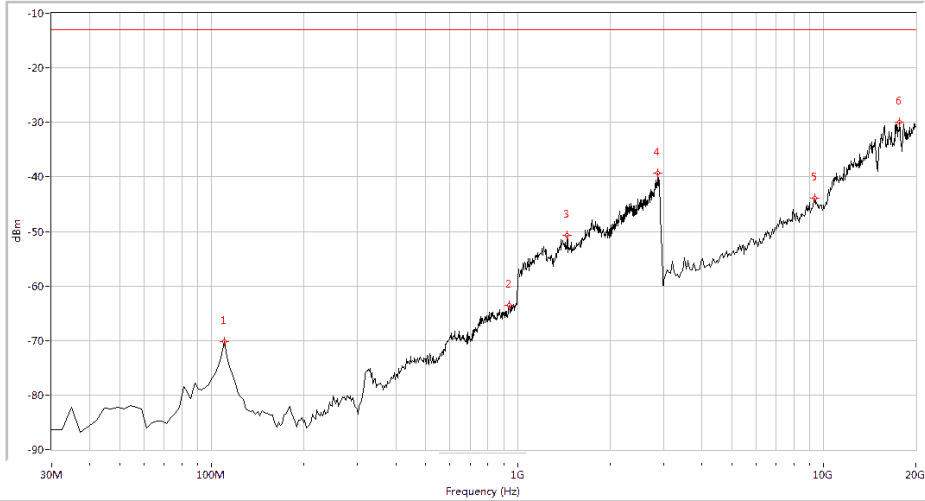
Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-71.59	-13.0	58.6	345.5	Vertical	PASS
895.985	-63.69	-13.0	50.7	55.7	Vertical	PASS
2132.170	-46.03	-13.0	33.0	163.9	Vertical	PASS
2900.249	-40.16	-13.0	27.2	65.1	Vertical	PASS
9274.314	-44.11	-13.0	31.1	275.8	Vertical	PASS
18304.239	-28.94	-13.0	15.9	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	-71.35	-13.0	58.3	64.7	Horizontal	PASS
1204.489	-52.17	-13.0	39.2	198.4	Horizontal	PASS
1748.130	-44.53	-13.0	31.5	137.2	Horizontal	PASS
2147.132	-40.88	-13.0	27.9	299.8	Horizontal	PASS
3508.728	-49.81	-13.0	36.8	301.7	Horizontal	PASS
17625.935	-30.17	-13.0	17.2	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	-70.27	-13.0	57.3	249.6	Vertical	PASS
937.107	-63.60	-13.0	50.6	354.8	Vertical	PASS
1453.865	-50.79	-13.0	37.8	10.1	Vertical	PASS
2875.312	-39.31	-13.0	26.3	208.5	Vertical	PASS
9359.102	-43.90	-13.0	30.9	169.7	Vertical	PASS
17710.723	-29.99	-13.0	17.0	52.3	Vertical	PASS

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

** END OF REPORT **