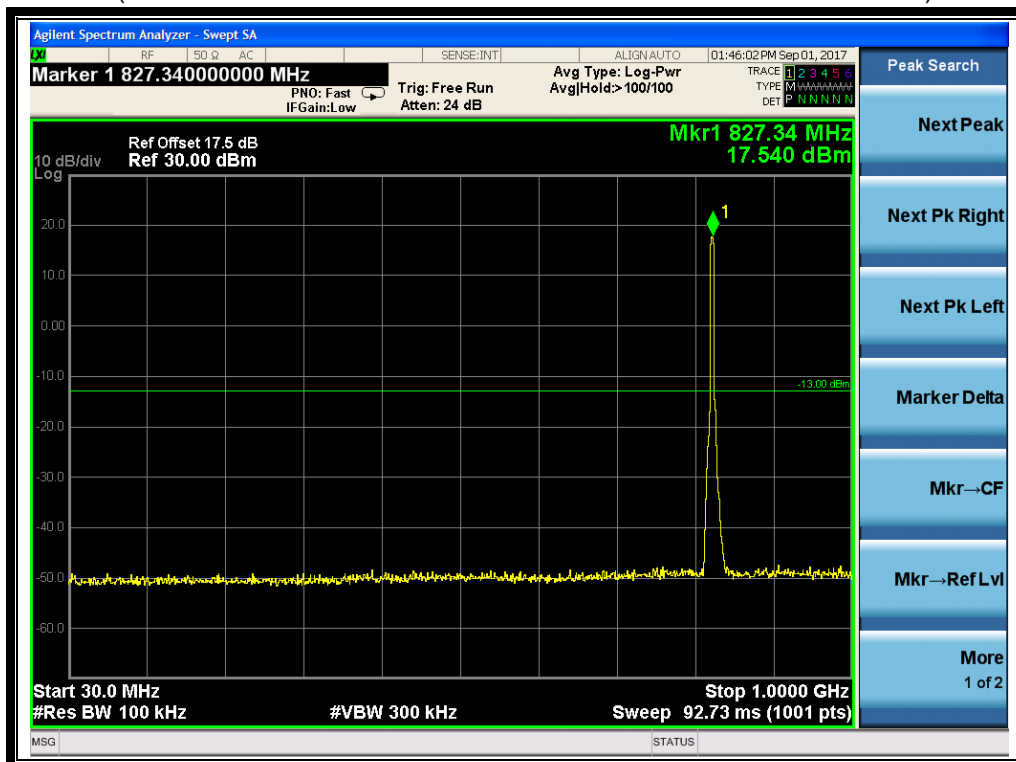
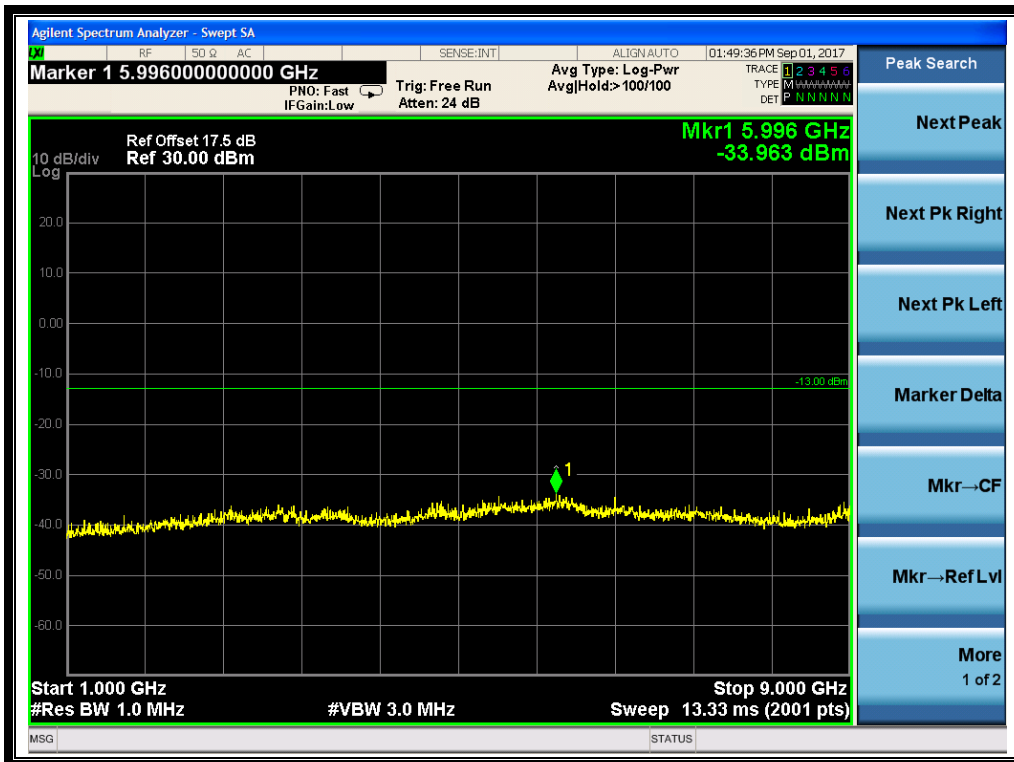


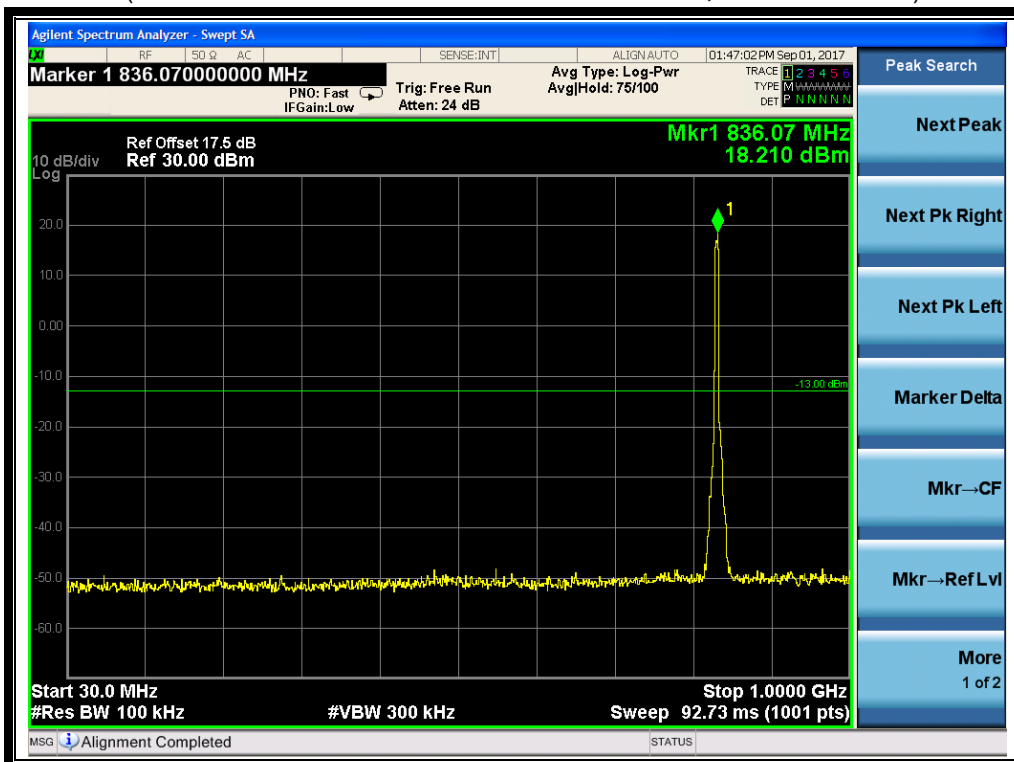
(Plot L3.1: HSUPA1900MHz Channel = 9538 1GHz to 20GHz)



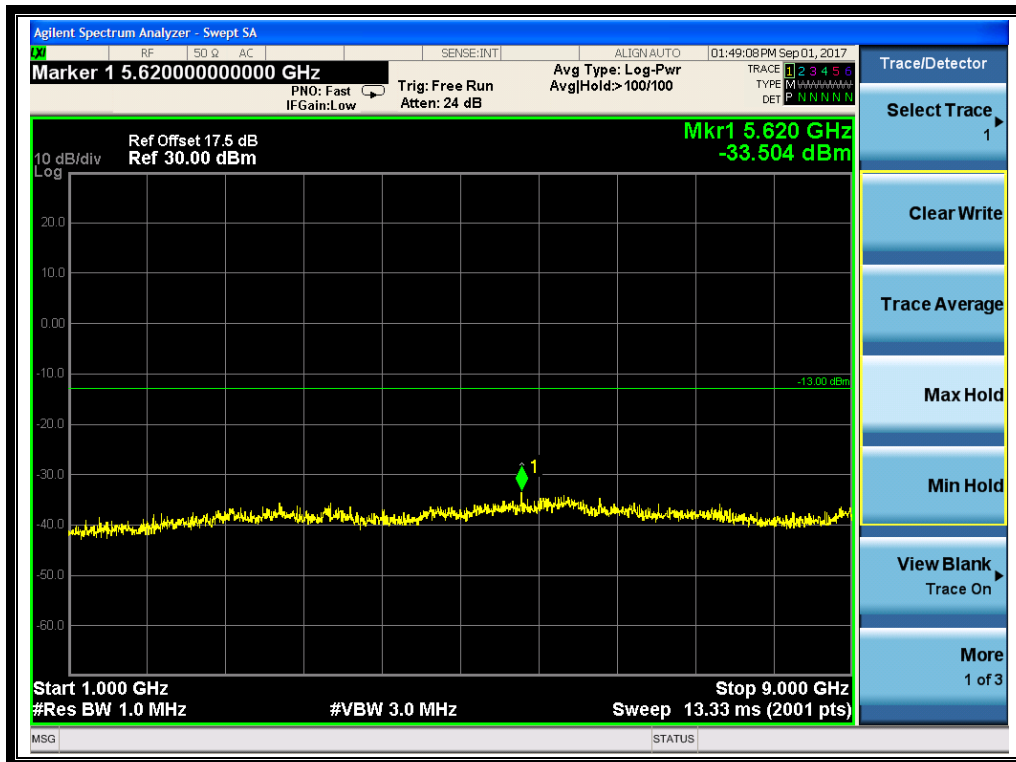
(Plot M1: HSPA+ 850MHz Channel = 4132, 30MHz to 1GHz)



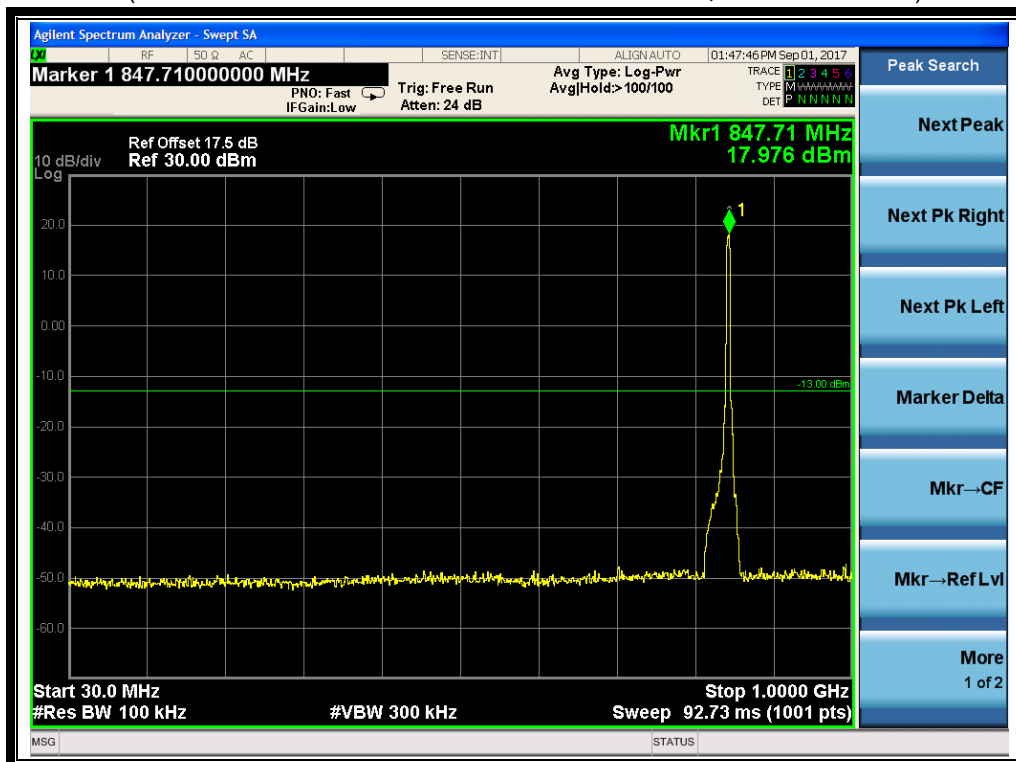
(Plot M1.1: HSPA+ 850MHz Channel = 4132, 1GHz to 9GHz)



(Plot M2: HSPA+ 850MHz Channel = 4175, 30MHz to 1GHz)



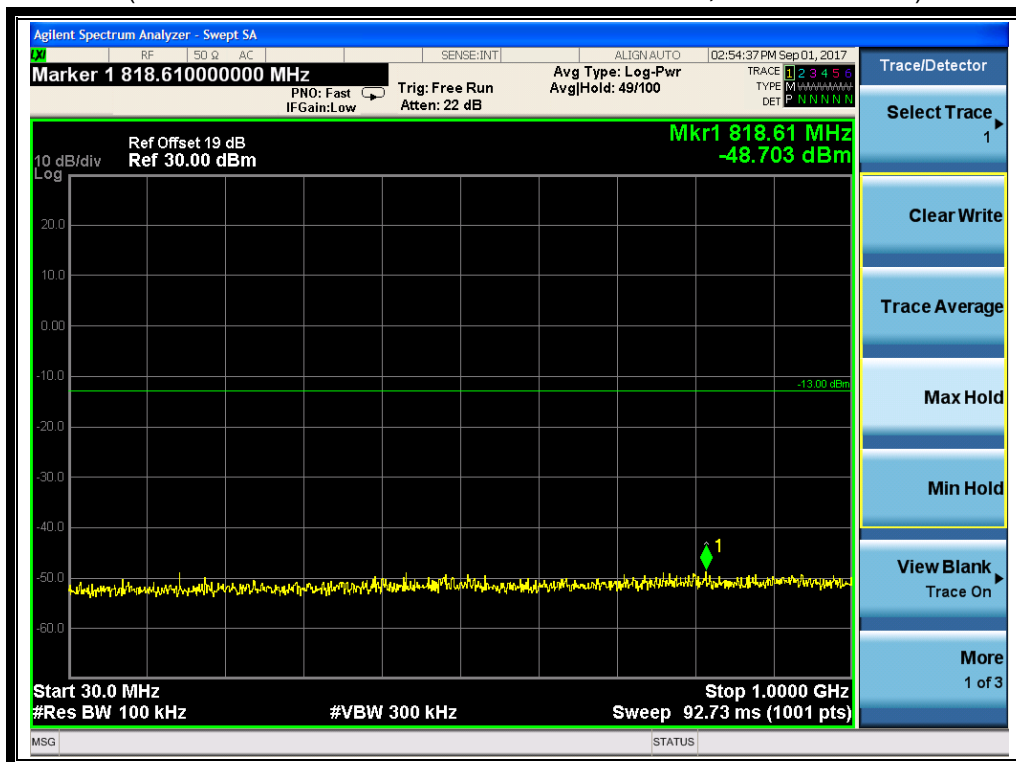
(Plot M2.1: HSPA+ 850MHz Channel = 4175, 1GHz to 9GHz)



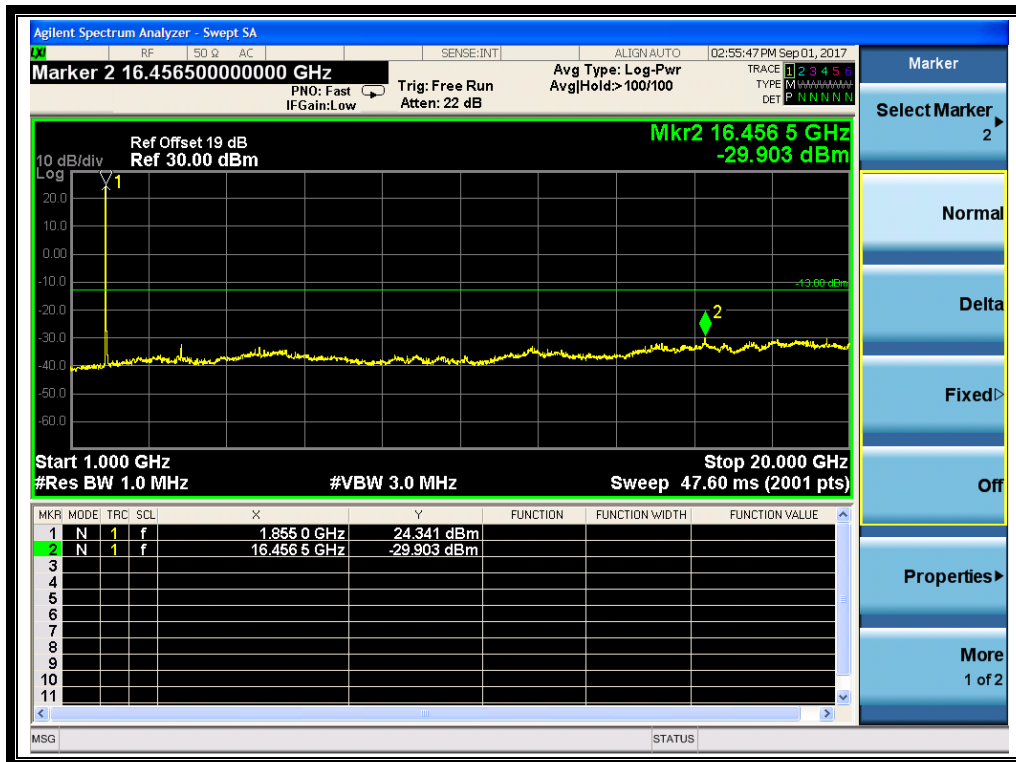
(Plot M3: HSPA+ 850MHz Channel = 4233, 30MHz to 1GHz)



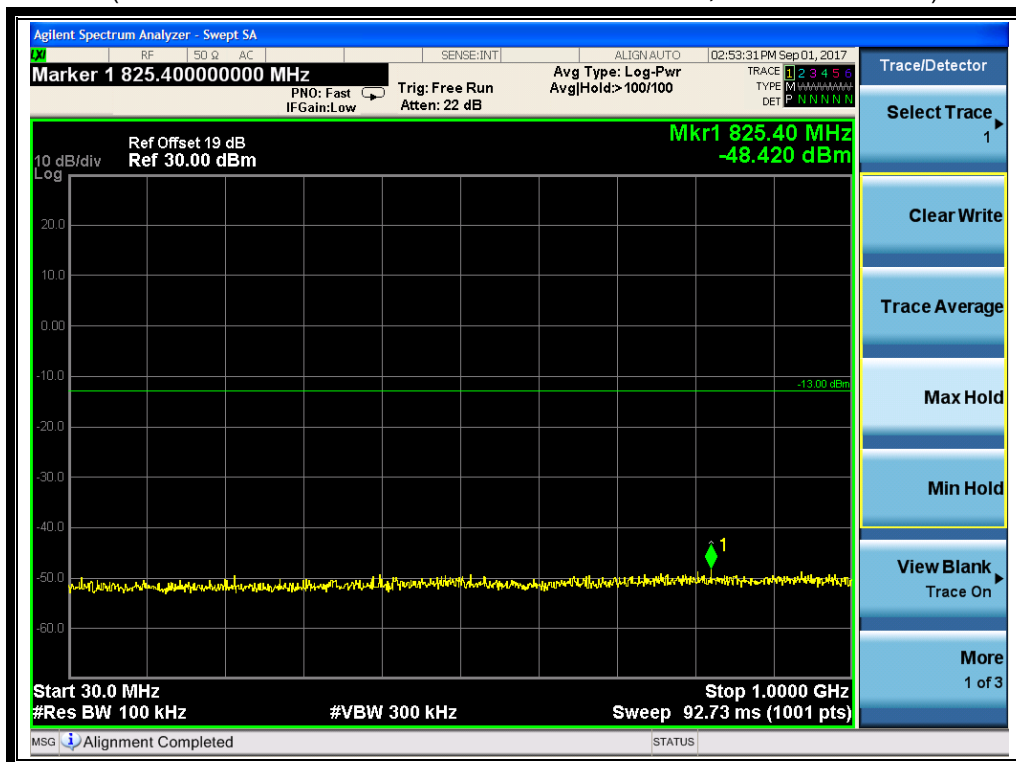
(Plot M3.1: HSPA+ 850MHz Channel = 4233, 1GHz to 9GHz)



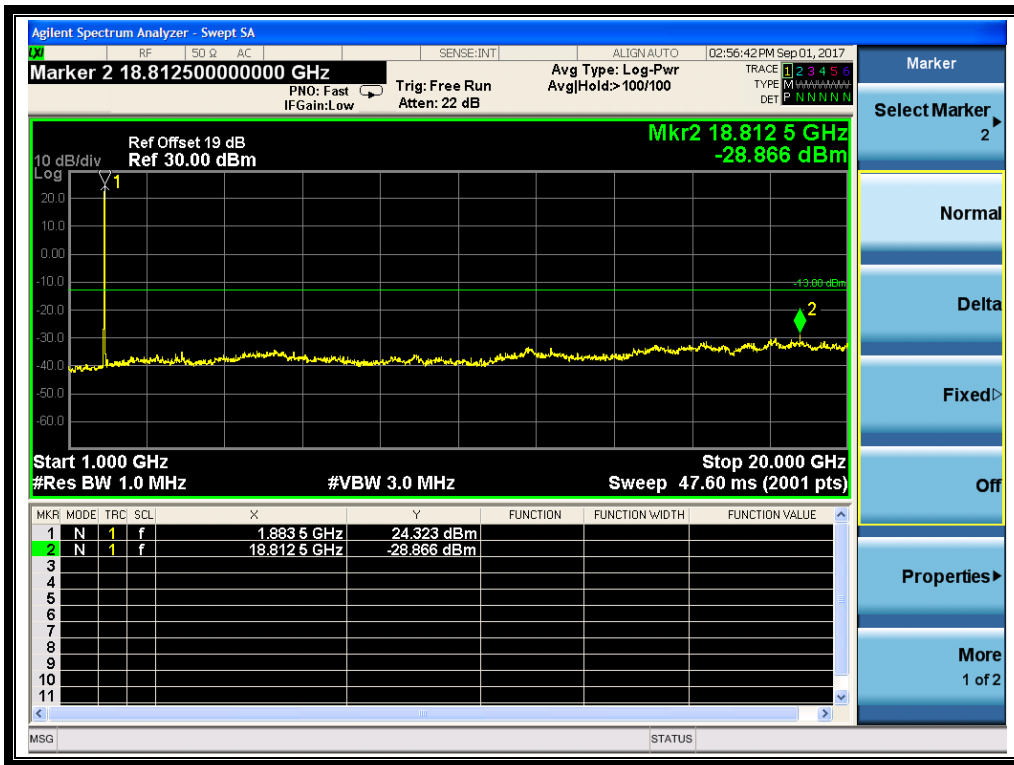
(Plot N1: HSPA+ 1900MHz Channel = 9262, 30MHz to 1GHz)



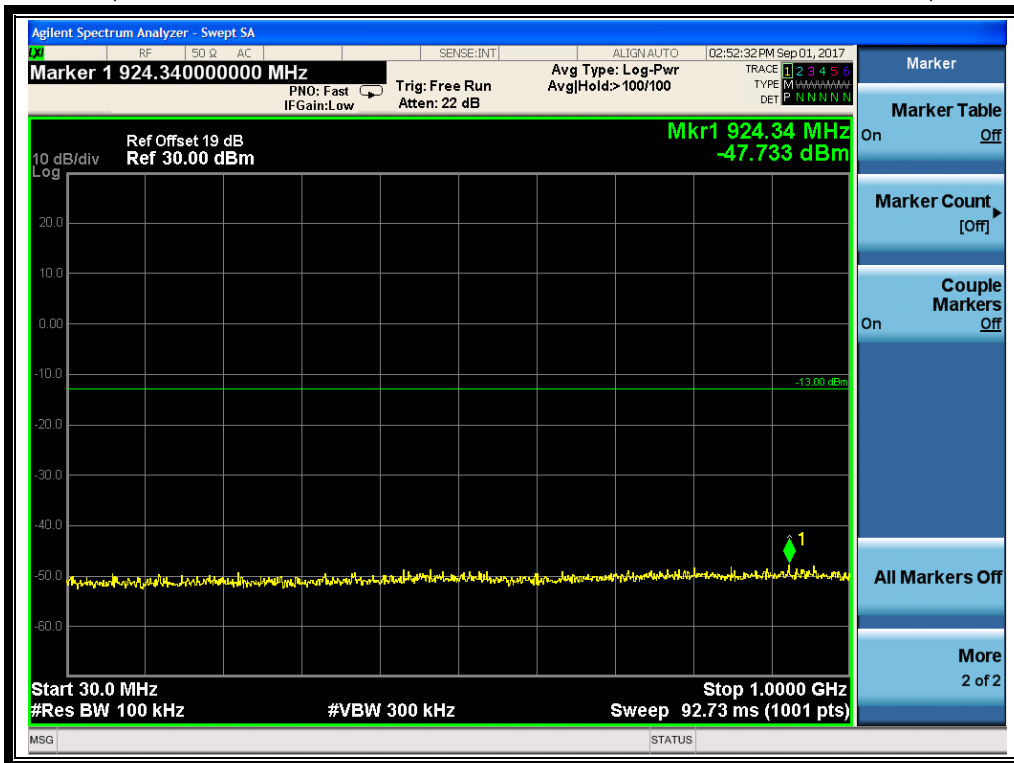
(Plot N1.1: HSPA+ 1900MHz Channel = 9262, 1GHz to 20GHz)



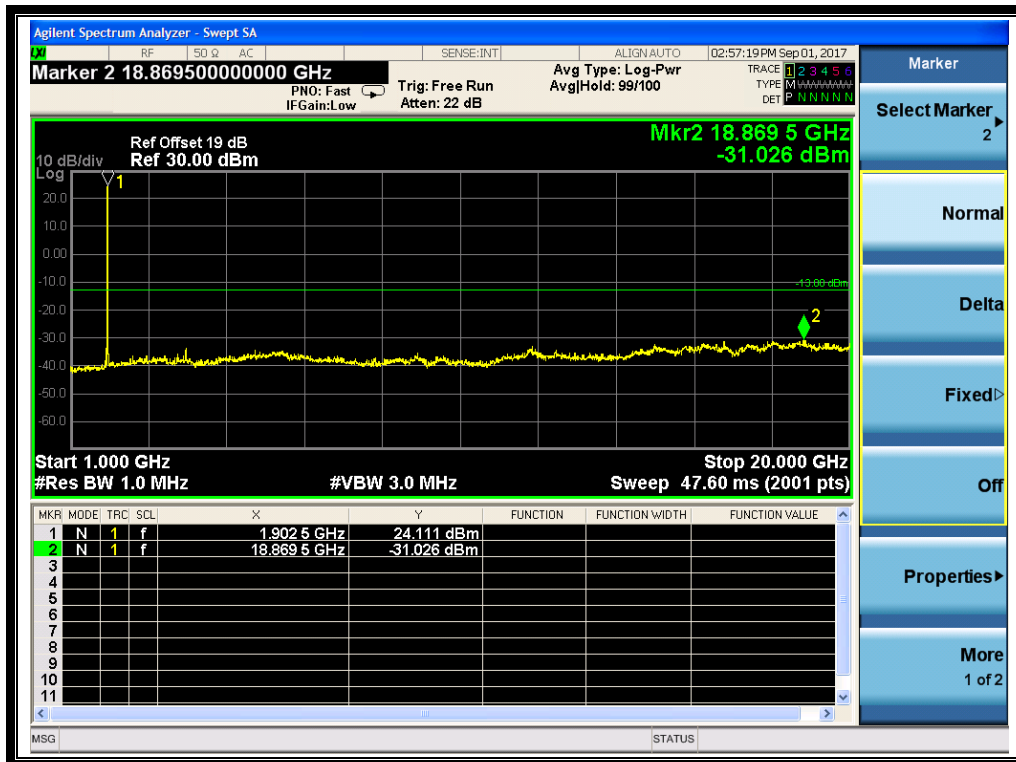
(Plot N2: HSPA+ 1900MHz Channel = 9400, 30MHz to 1GHz)



(Plot N2.1: HSPA+ 1900MHz Channel = 9400, 1GHz to 20GHz)



(Plot N3: HSPA+ 1900MHz Channel = 9538, 30MHz to 1GHz)



(Plot N3.1: HSPA+ 1900MHz Channel = 9538 1GHz to 20GHz)



## 2.6 Band Edge

### 2.6.1 Requirement

According to FCC section 22.917(b) and FCC section 24.238(b) 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.

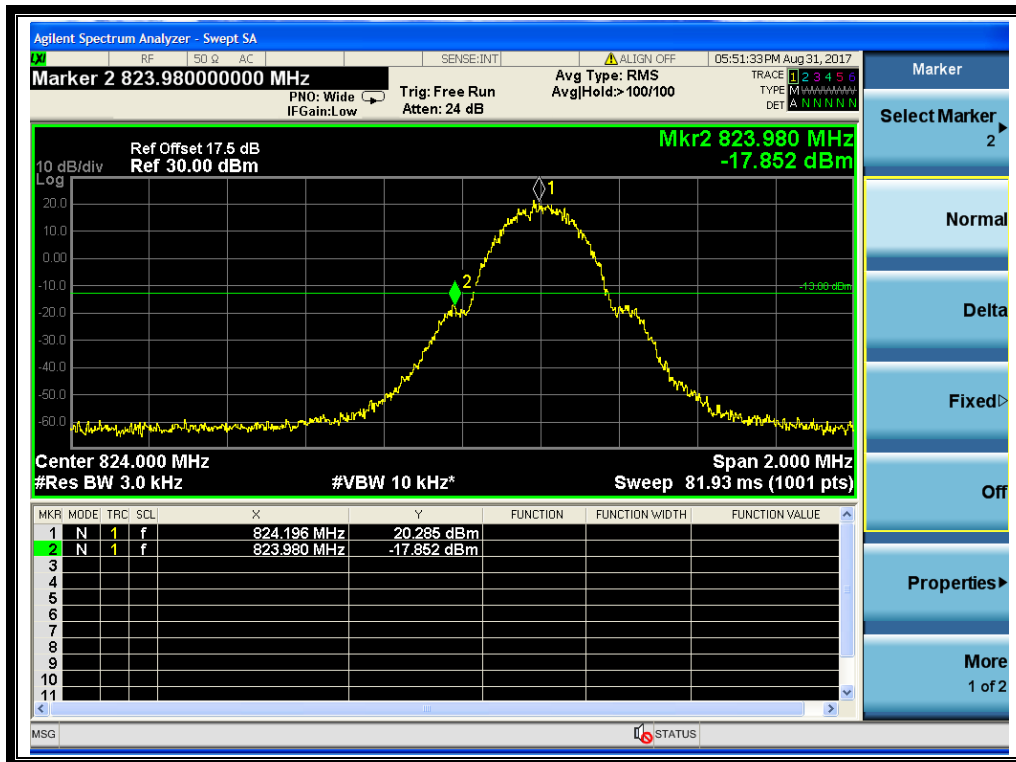
Test Verdict:

Band	Channel	Frequency (MHz)	Measured Max. Band Edge Emission (dBm)	Refer to Plot	Limit (dBm)	Verdict
GPRS 850MHz	128	824.2	-17.85	Plat A1	-13	PASS
	251	848.8	-17.86	Plot A2		PASS
GPRS 1900MHz	512	1850.2	-18.88	Plat B1	-13	PASS
	810	1909.8	-19.81	Plot B2		PASS
EGPRS 850MHz	128	824.2	-22.78	Plat C1	-13	PASS
	251	848.8	-21.50	Plot C2		PASS
EGPRS 1900MHz	512	1850.2	-21.59	Plat D1	-13	PASS
	810	1909.8	-23.28	Plot D2		PASS
HSDPA 850MHz	4132	826.4	-32.78	Plat G1	-13	PASS
	4233	846.6	-34.95	Plot G2		PASS
HSDPA 1900MHz	9262	1852.4	-35.43	Plat H1	-13	PASS
	9538	1907.6	-36.03	Plot H2		PASS
HSUPA 850MHz	4132	826.4	-32.50	Plat I1	-13	PASS
	4233	846.6	-34.56	Plot I2		PASS
HSUPA 1900MHz	9262	1852.4	-33.99	Plat J1	-13	PASS
	9538	1907.6	-35.27	Plot J2		PASS
HSPA+ 850MHz	4132	826.4	-32.60	Plat K1	-13	PASS
	4233	846.6	-33.03	Plot K2		PASS
HSPA + 1900MHz	9262	1852.4	-32.63	Plat L1	-13	PASS
	9538	1907.6	-33.15	Plot L2		PASS

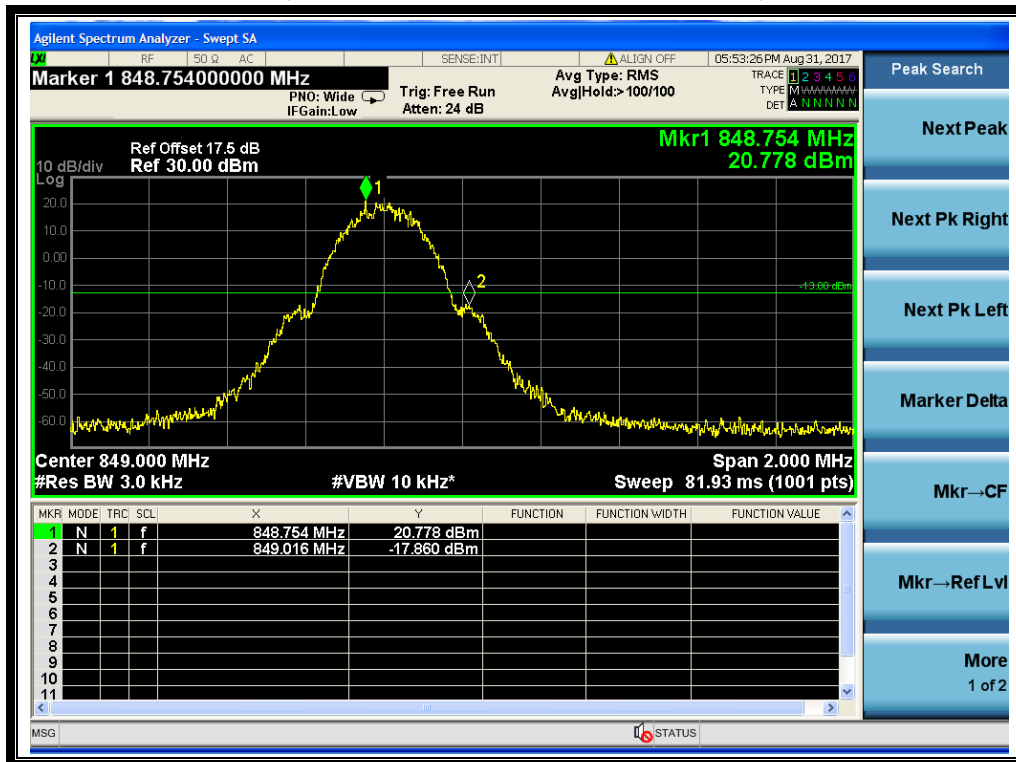




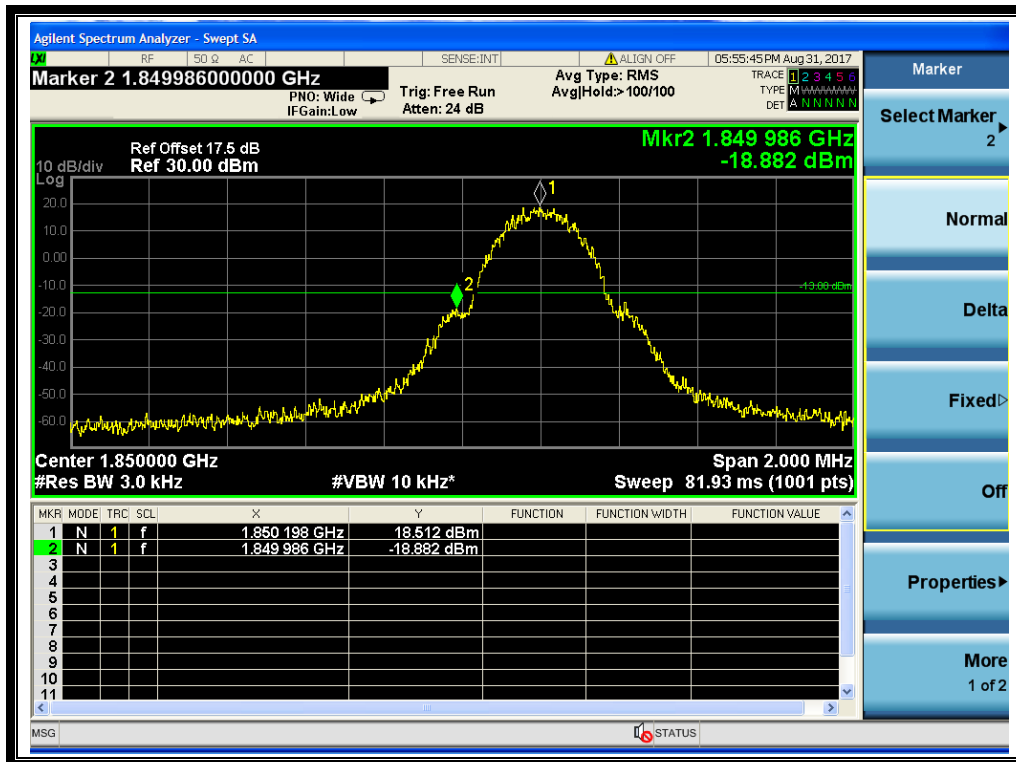
Test Plots:



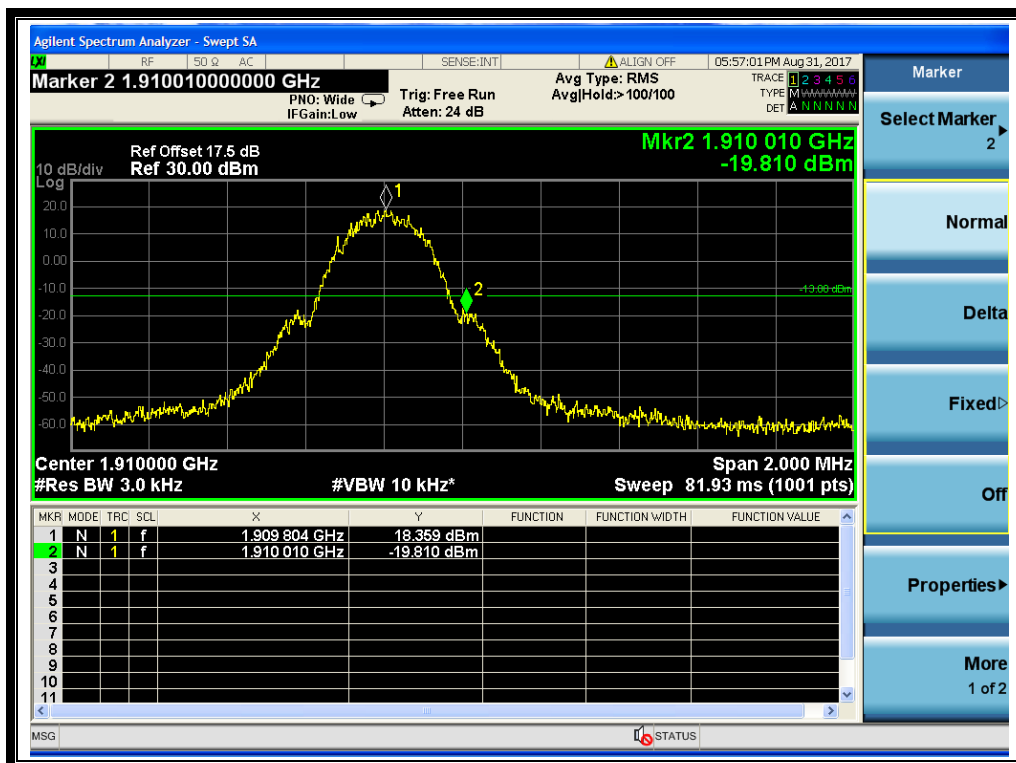
(Plot A1: GSM 850 Channel = 128)



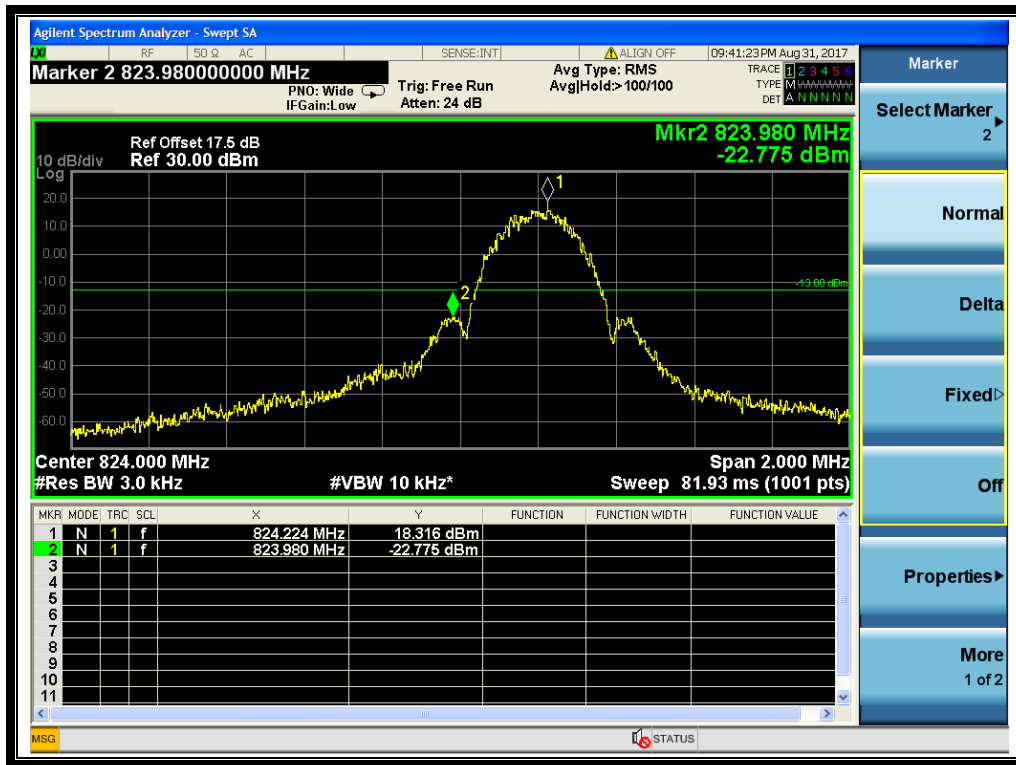
(Plot A2: GSM 850 Channel = 251)



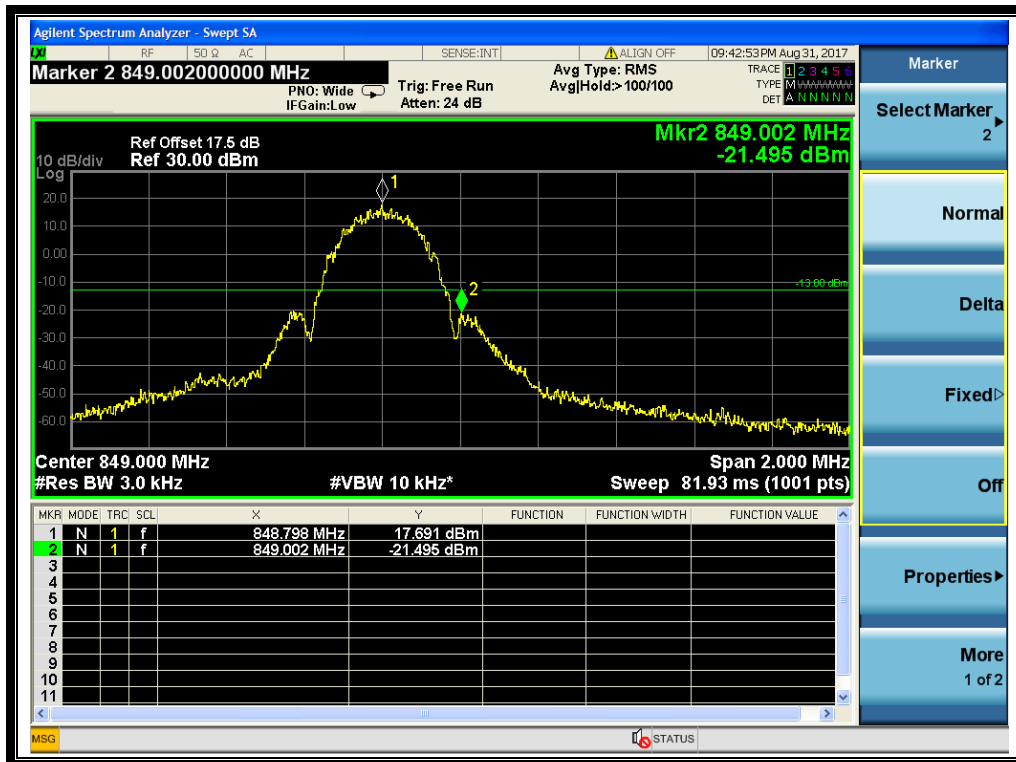
(Plot B1: GSM 1900 Channel = 512)



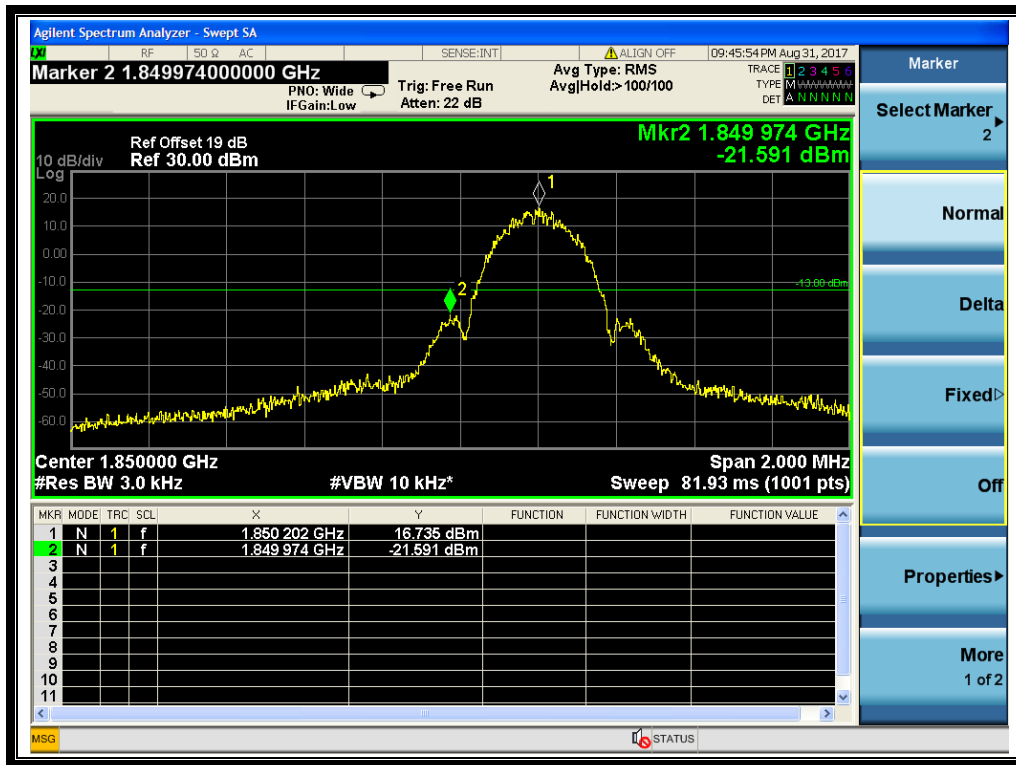
(Plot B2: GSM 1900 Channel = 810)



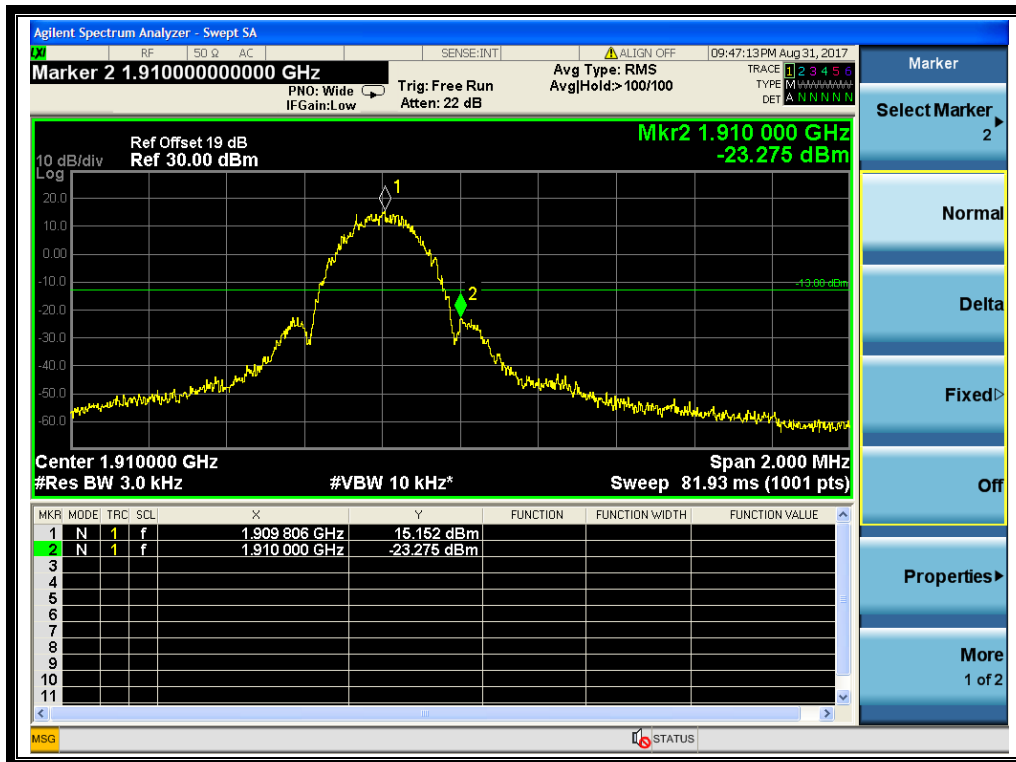
(Plot C1: EGPRS 850 Channel = 128)



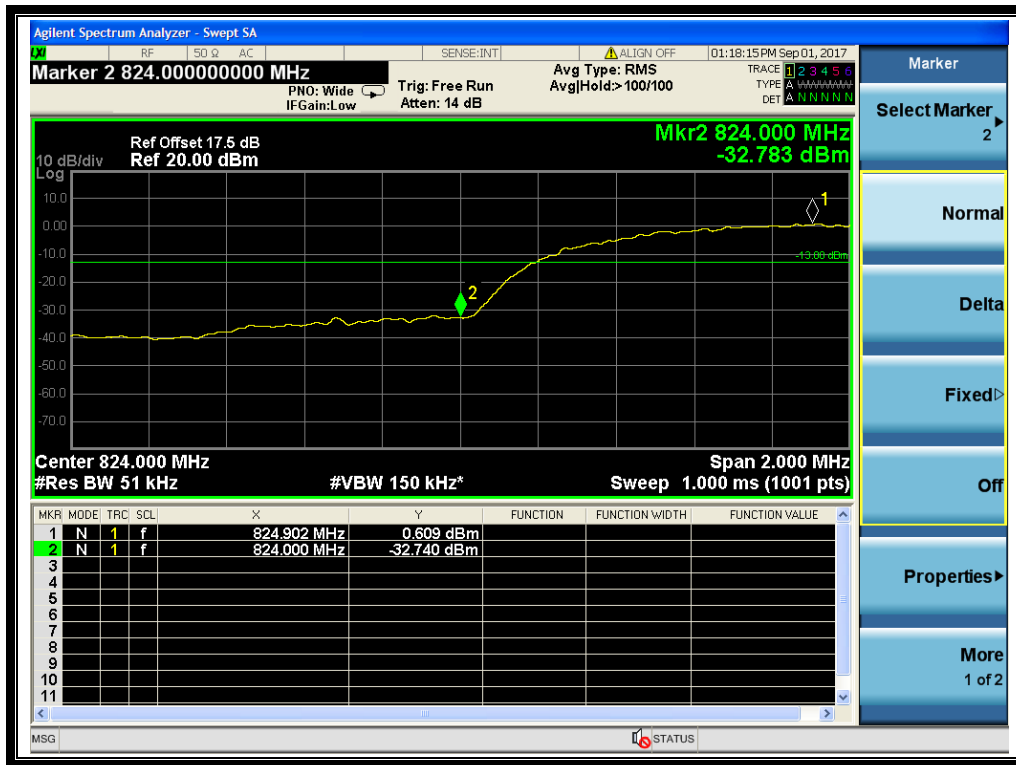
(Plot C2: EGPRS 850 Channel = 251)



(Plot D1: EGPRS 1900 Channel = 512)



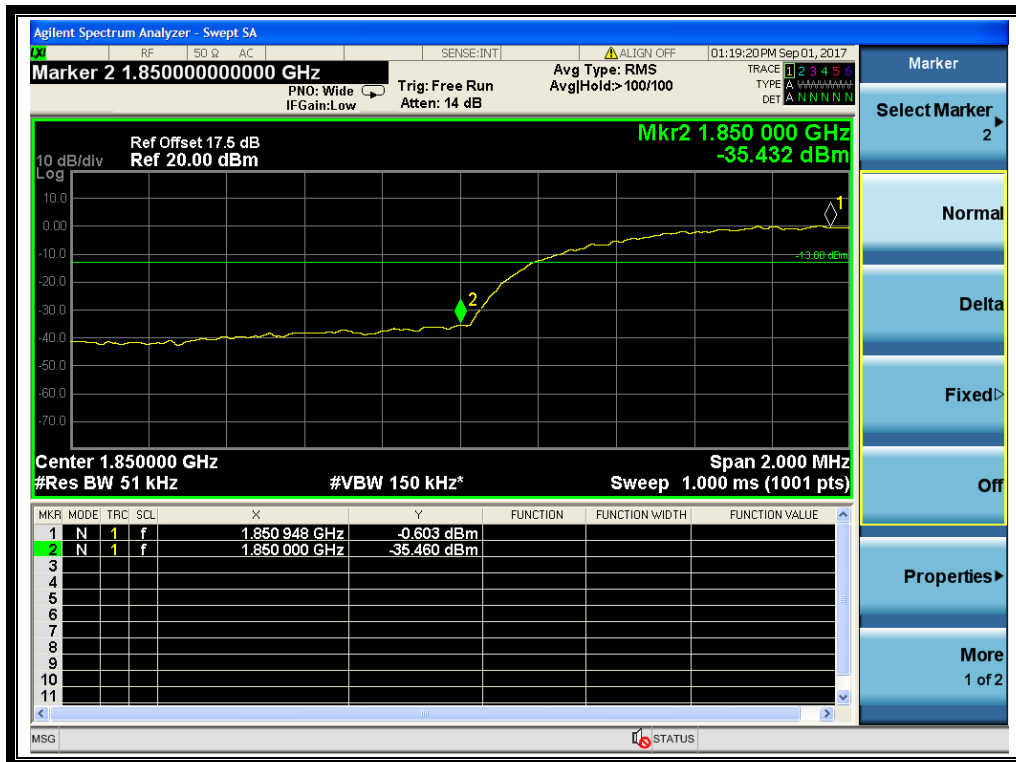
(Plot D2: EGPRS 1900 Channel = 810)



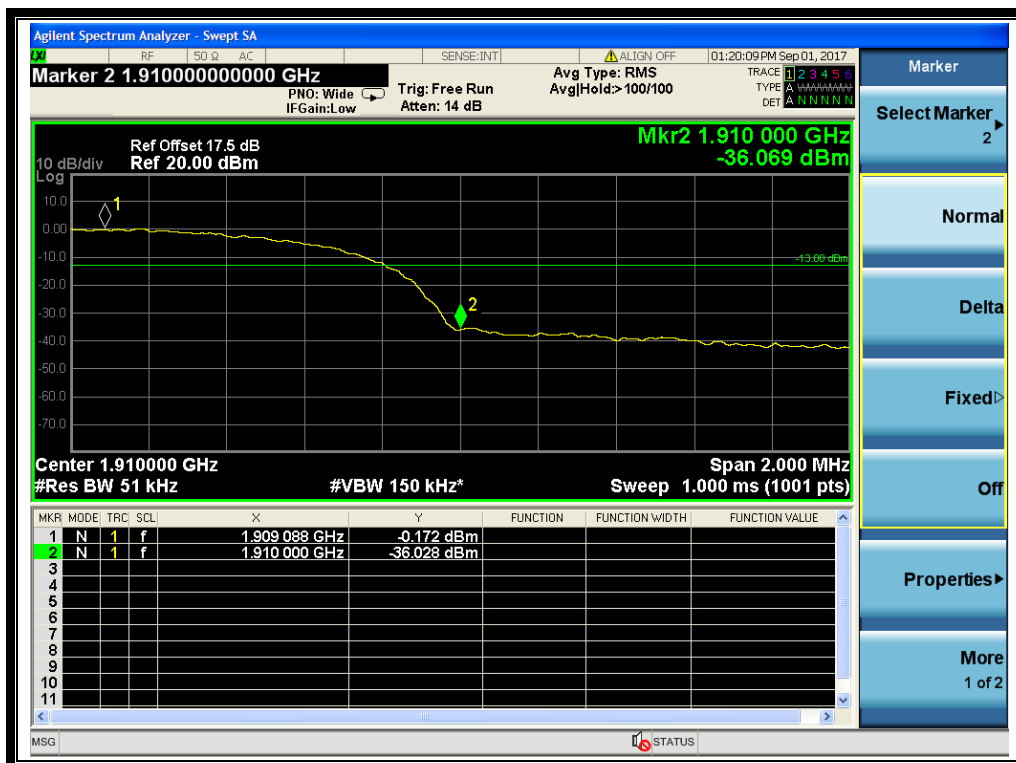
(Plot G1: HSDPA 850 Channel = 4132)



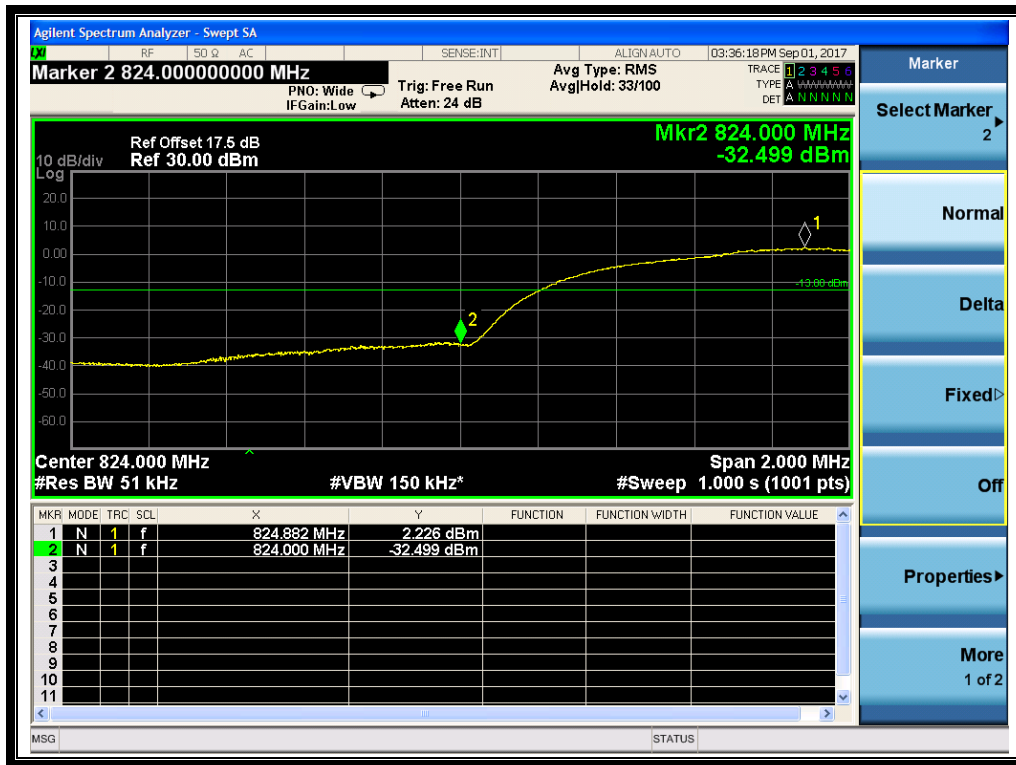
(Plot G2: HSDPA 850 Channel = 4233)



(Plot H1: HSDPA 1900 Channel = 9262)



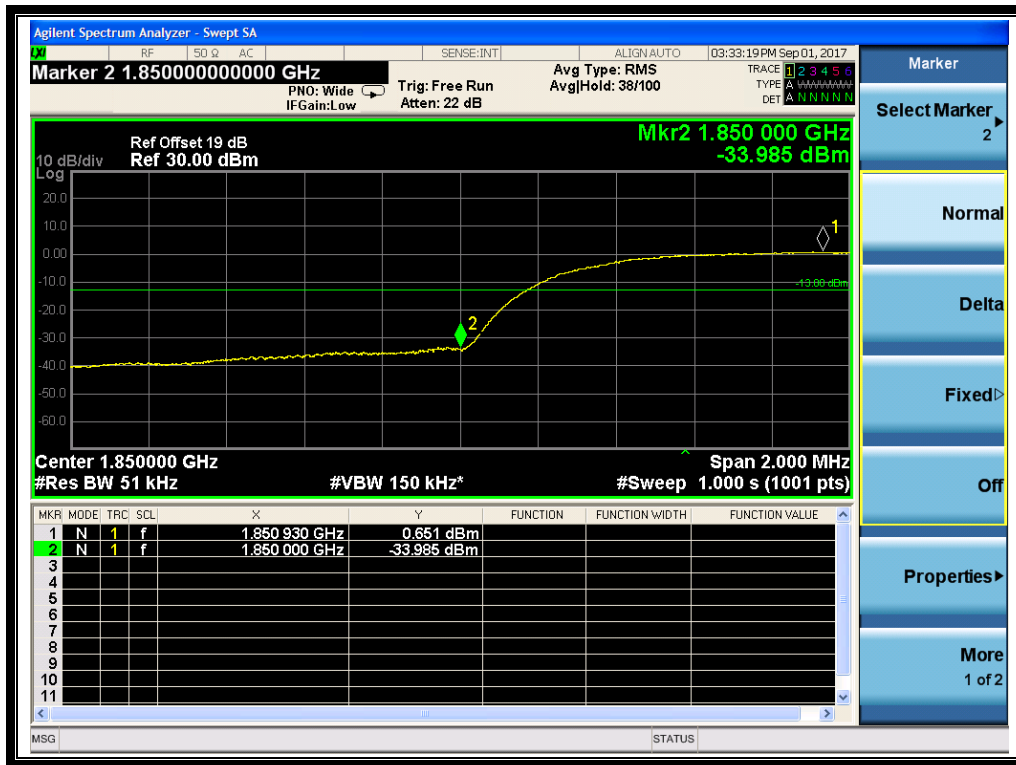
(Plot H2: HSDPA 1900 Channel = 9538)



(Plot I1: HSUPA 850 Channel = 4132)



(Plot I2: HSUPA 850 Channel = 4233)

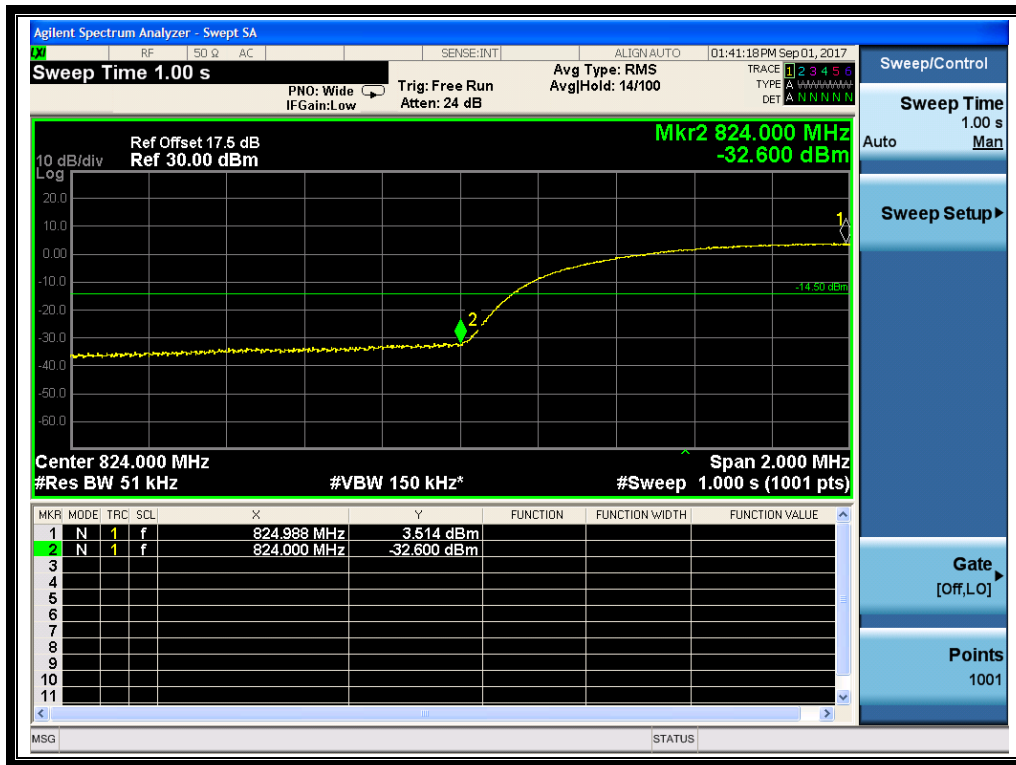


(Plot J1: HSUPA 1900 Channel = 9262)

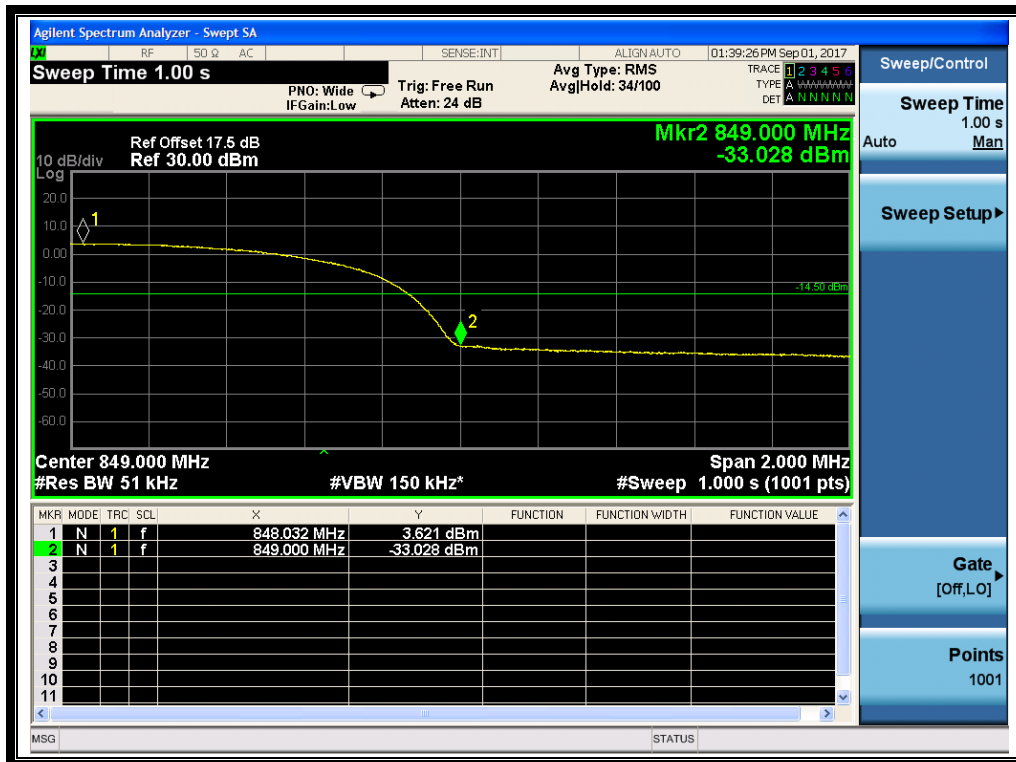


(Plot J2: HSUPA 1900 Channel = 9538)

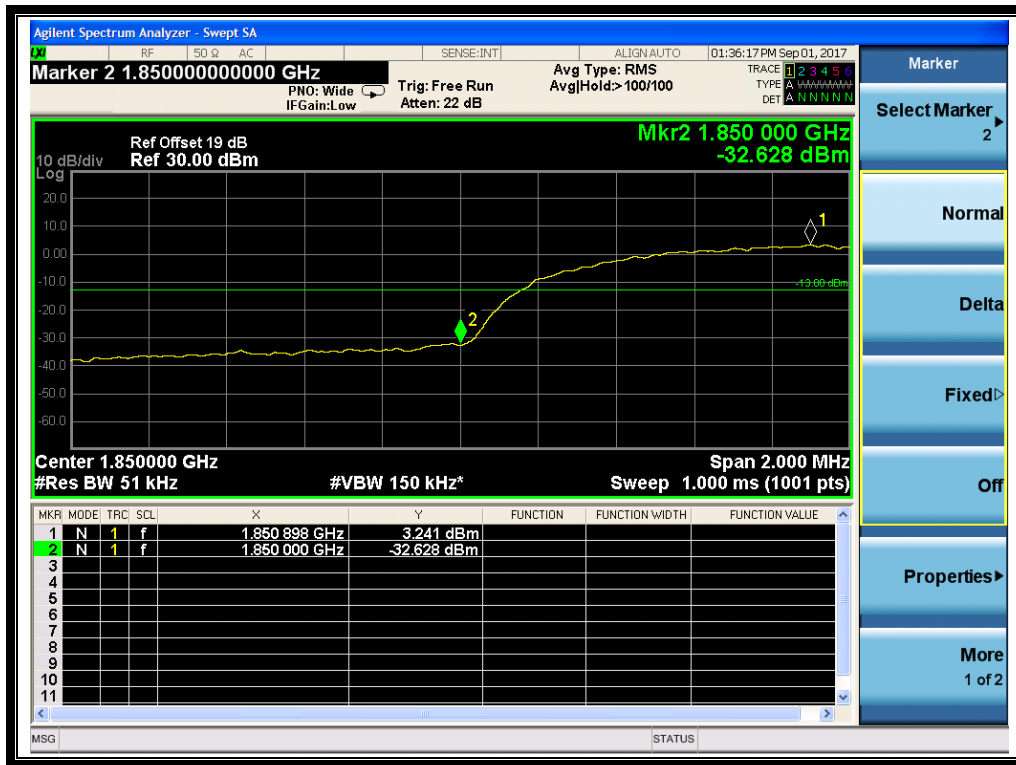




(Plot K1: HSPA+ 850 Channel = 4132)



(Plot K2: HSPA+ 850 Channel = 4233)



(Plot L1: HSPA+ 1900 Channel = 9262)



(Plot L2: HSPA+ 1900 Channel = 9538)

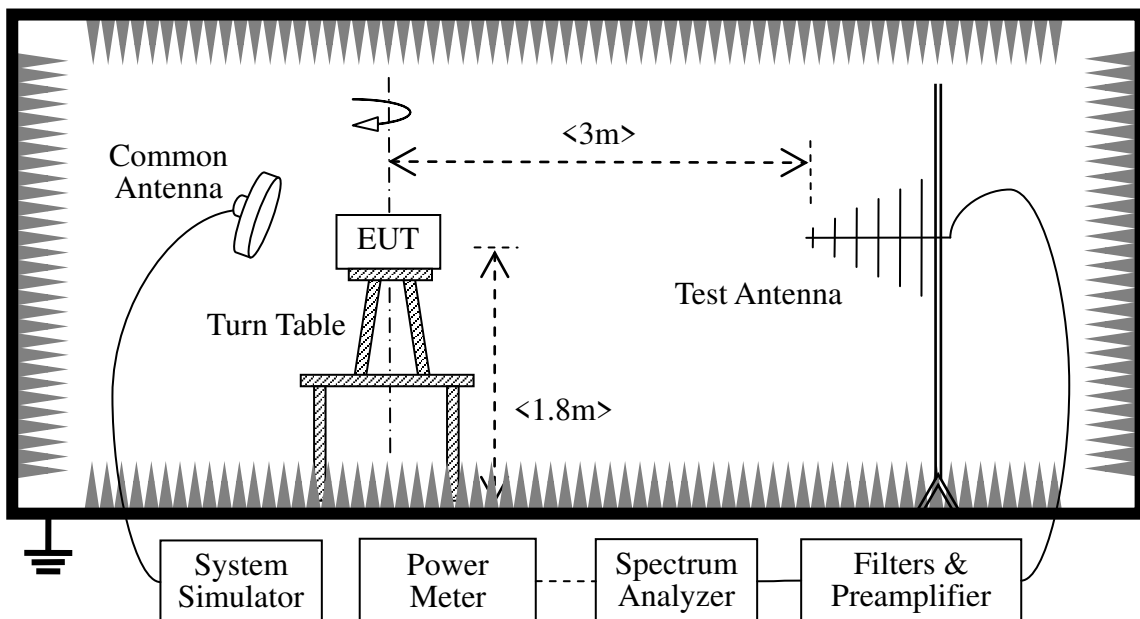
## 2.7 Transmitter Radiated Power (EIRP/ERP)

### 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.

### 2.7.2 Test Description

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 33.03dBm, GSM 1900 29.35dBm. WCDMA 850 24.77 dBm, WCDMA 1900 24.44 dBm .Please refer to section 2.1.3 of this report.

- Step size (dB): 3dB

- Minimum RF power: GSM 850 2.6dBm, GSM 1900 1.1dBm, WCDMA 850 0.50dBm, WCDMA 1900 0.61dBm.



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.

### 2.7.3 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  $A_{\text{SUBST}}$  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.

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

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



GSM Model Test Verdict:

Band	Channel	Frequency (MHz)	PCL	Measured ERP			Limit		Verdict
				dBm	W	Refer to Plot	dBm	W	
GPRS 850MHz	128	824.20	5	33.28	2.13	Plot B <sup>Note 1</sup>	38.5	7	PASS
	190	836.60	5	33.78	2.39				PASS
	251	848.80	5	33.30	2.14				PASS
EGPRS 850MHz	128	824.20	5	33.16	2.07	Plot C <sup>Note 1</sup>	38.5	7	PASS
	190	836.60	5	33.66	2.32				PASS
	251	848.80	5	33.18	2.08				PASS

Band	Channel	Frequency (MHz)	PCL	Measured EIRP			Limit		Verdict
				dBm	W	Refer to Plot	dBm	W	
GPRS 1900MHz	512	1850.2	0	30.44	1.11	Plot E <sup>Note 1</sup>	33	2	PASS
	661	1880.0	0	30.34	1.08				PASS
	810	1909.8	0	30.73	1.18				PASS
EGPRS 1900MHz	512	1850.2	0	30.31	1.07	Plot F <sup>Note 1</sup>	33	2	PASS
	661	1880.0	0	30.67	1.17				PASS
	810	1909.8	0	30.87	1.22				PASS

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



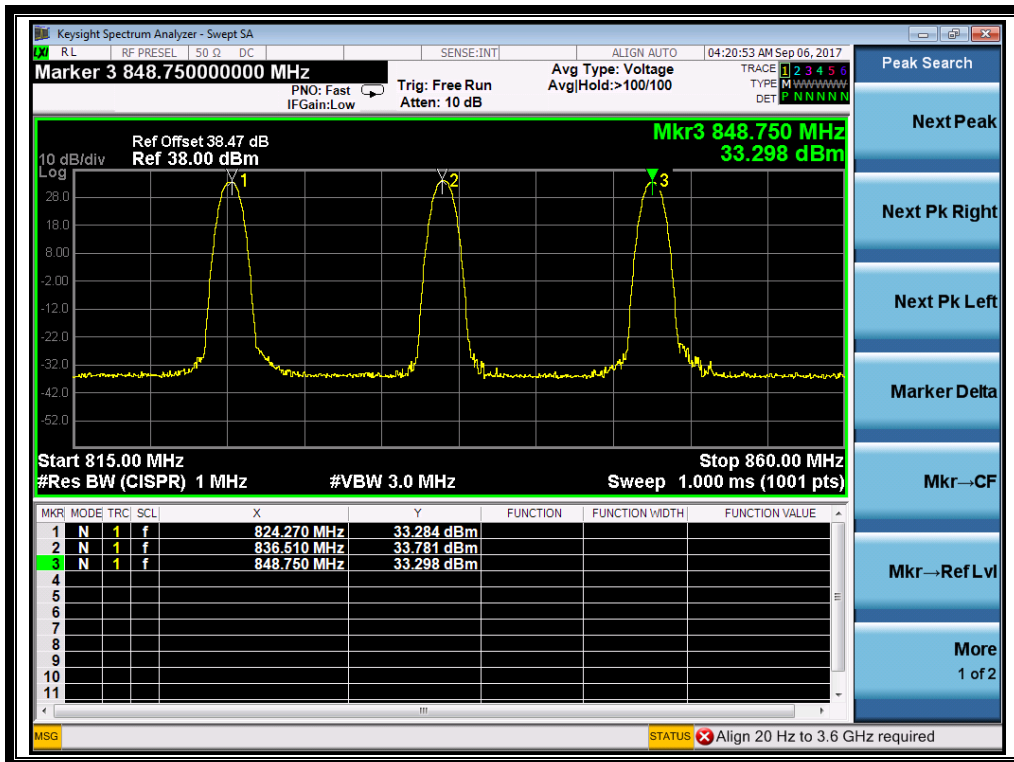
WCDMA Model Test Verdict:

Band	Channel	Frequency (MHz)	Measured ERP			Limit		Verdict
			dBm	W	Refer to Plot	dBm	W	
HSDPA 850MHz	4132	826.4	28.43	0.70	Plot H	38.5	7	PASS
	4175	835.0	28.45	0.70				PASS
	4233	846.6	28.32	0.68				PASS
HSUPA 850MHz	4132	826.4	28.04	0.64	Plot I	38.5	7	PASS
	4175	835.0	28.28	0.67				PASS
	4233	846.6	28.25	0.67				PASS
HSPA+ 850MHz	4132	826.4	28.33	0.68	Plot J	38.5	7	PASS
	4175	835.0	28.30	0.68				PASS
	4233	846.6	28.36	0.69				PASS

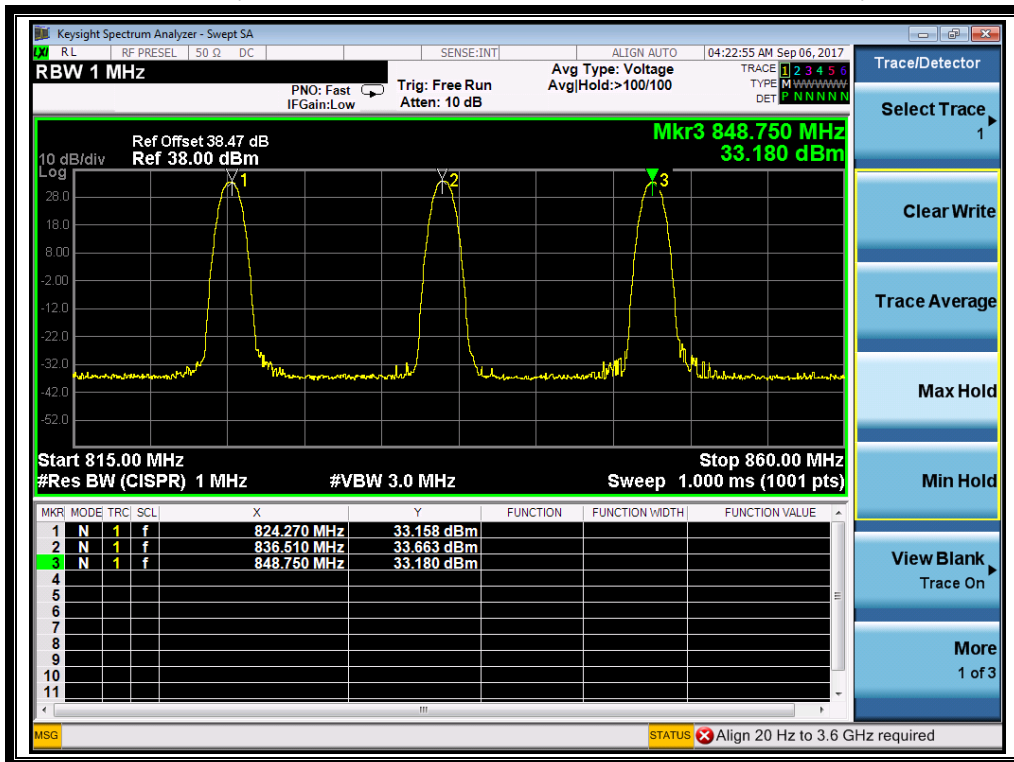
Band	Channel	Frequency (MHz)	Measured EIRP			Limit		Verdict
			dBm	W	Refer to Plot	dBm	W	
HSDPA 1900MHz	9262	1852.4	27.55	0.57	Plot L	33	2	PASS
	9400	1880.0	27.15	0.52				PASS
	9538	1907.6	27.31	0.54				PASS
HSUPA 1900MHz	9262	1852.4	27.26	0.53	Plot M	33	2	PASS
	9400	1880.0	27.25	0.53				PASS
	9538	1907.6	27.17	0.52				PASS
HSPA+ 1900MHz	9262	1852.4	27.31	0.54	Plot N	33	2	PASS
	9400	1880.0	27.43	0.55				PASS
	9538	1907.6	27.51	0.56				PASS



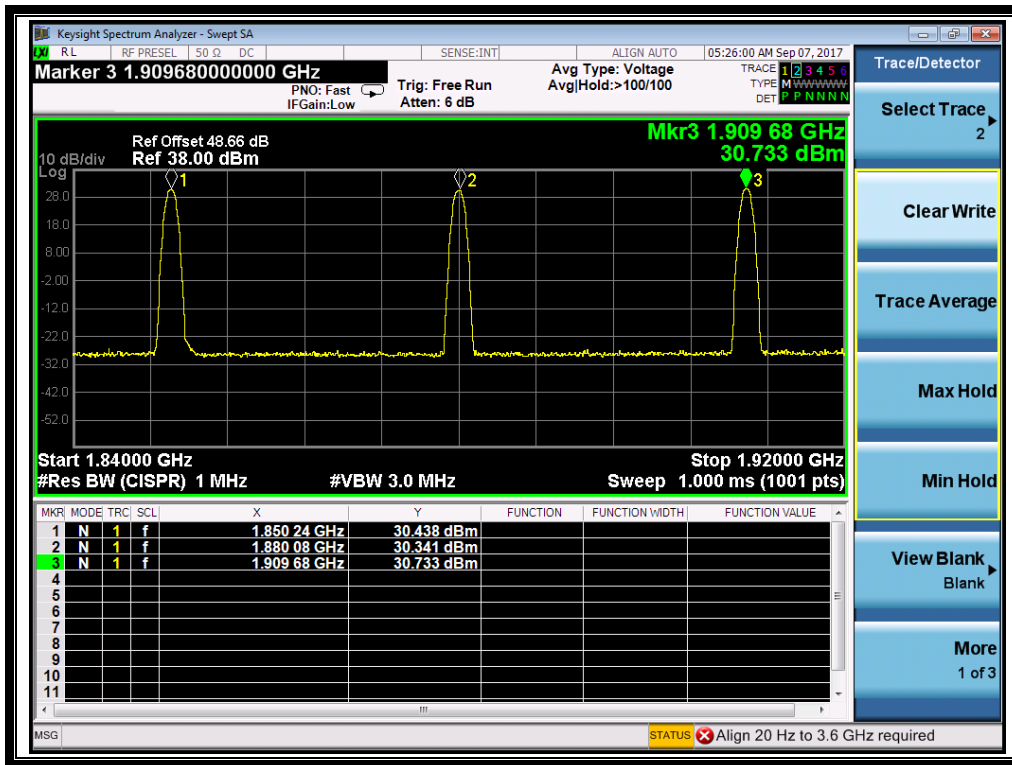
Test Plots:



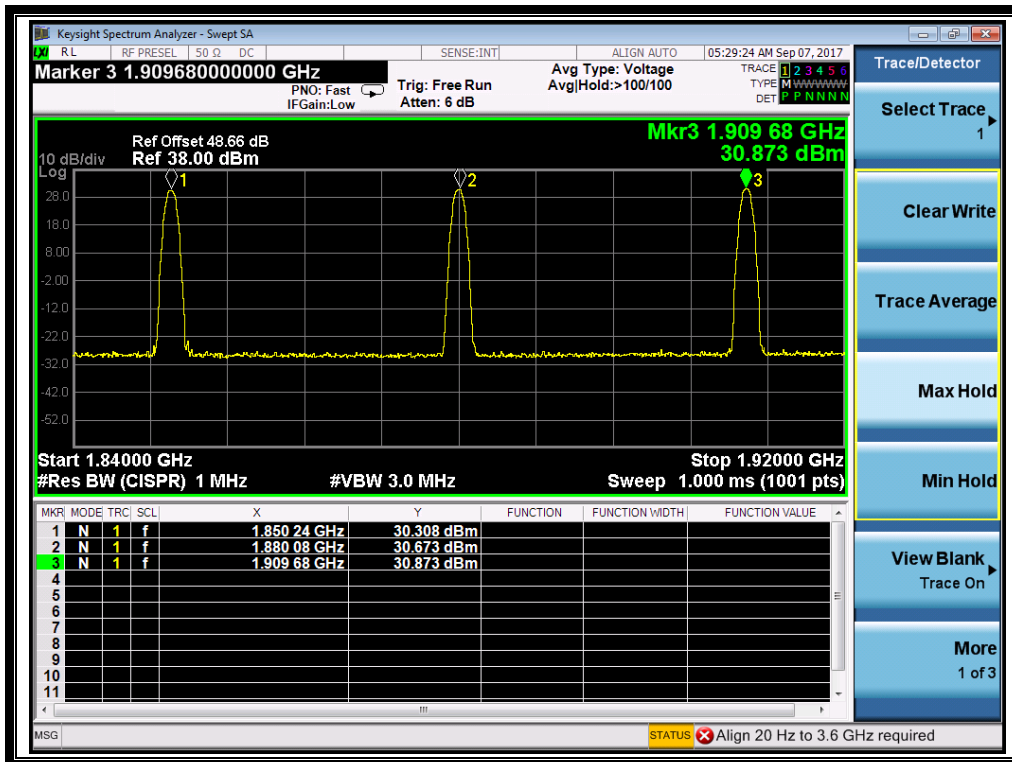
(Plot B:GPRS 850MHz Channel = 128, 190, 251)



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

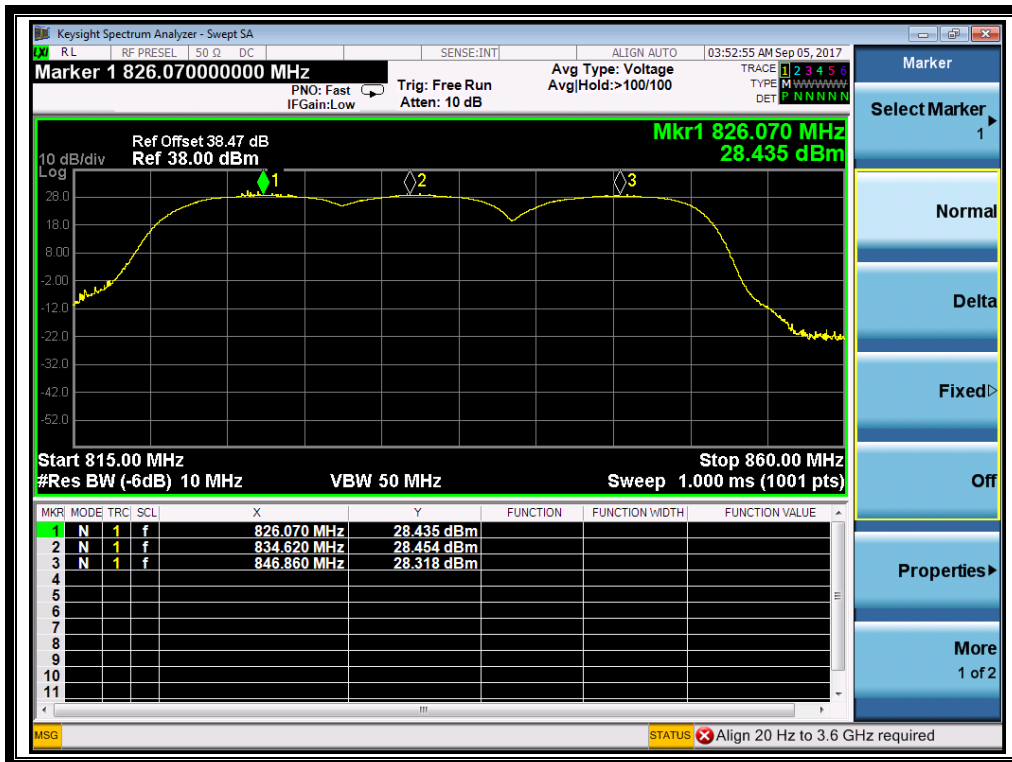


(Plot E: GPRS 1900MHz Channel = 512, 661, 810)

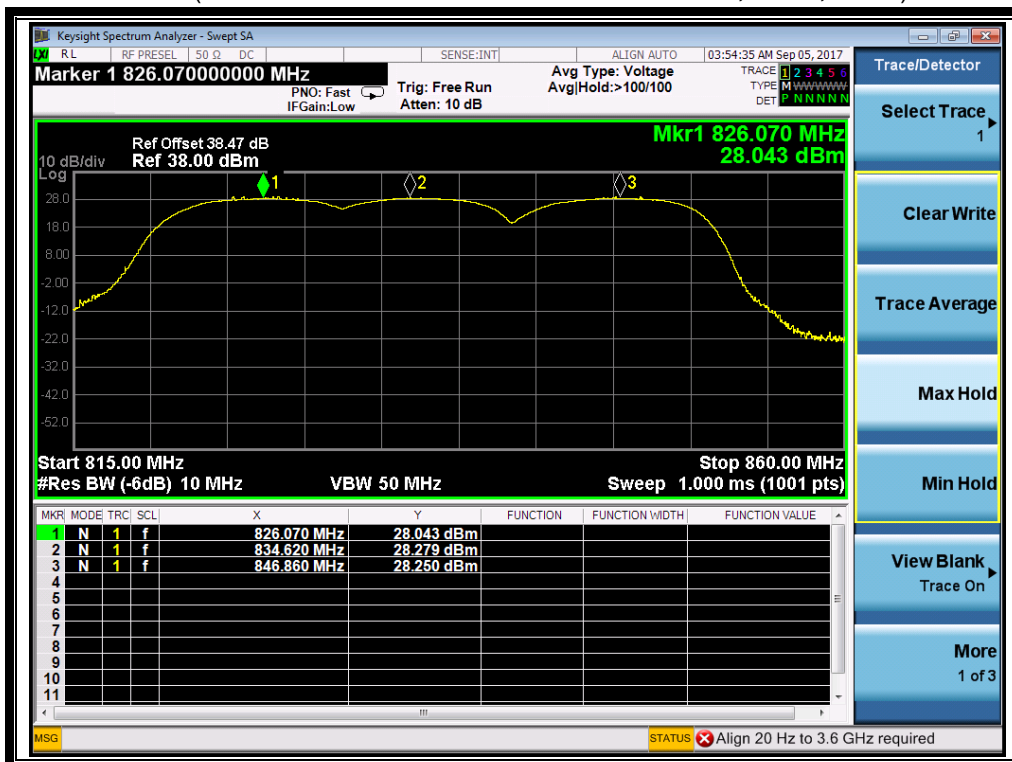


(Plot F: EGPRS 1900MHz Channel = 512, 661, 810)

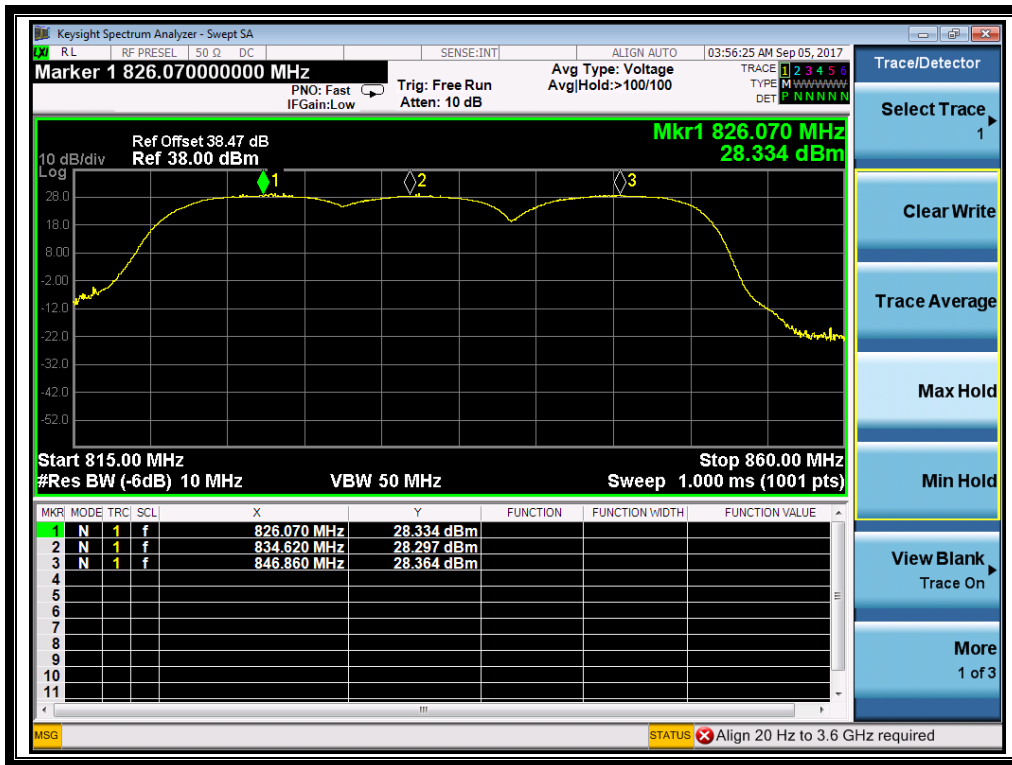




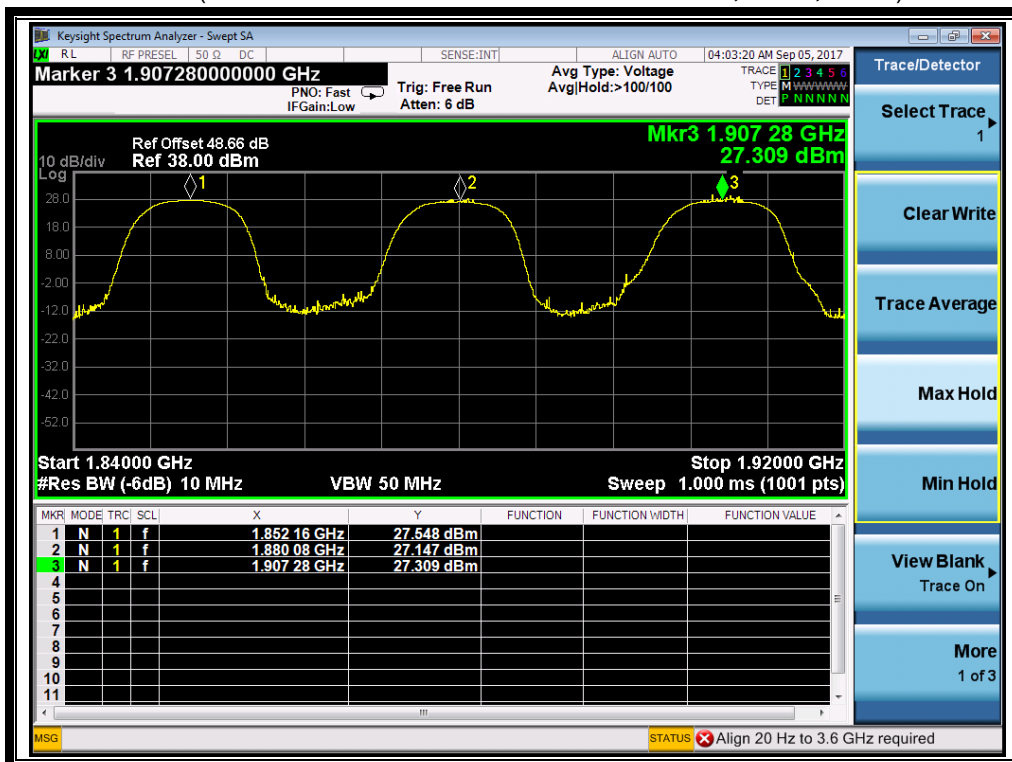
(Plot H: HSDPA 850 MHz Channel = 4132, 4175, 4233)



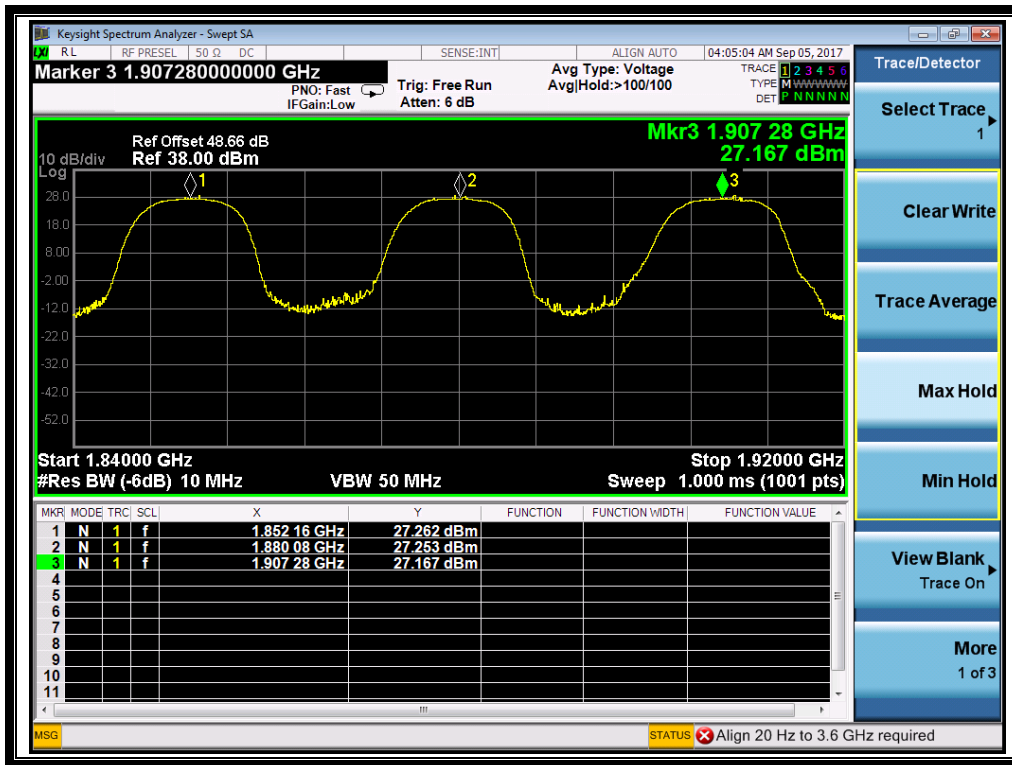
(Plot I: HSPA 850 MHz Channel = 4132, 4175, 4233)



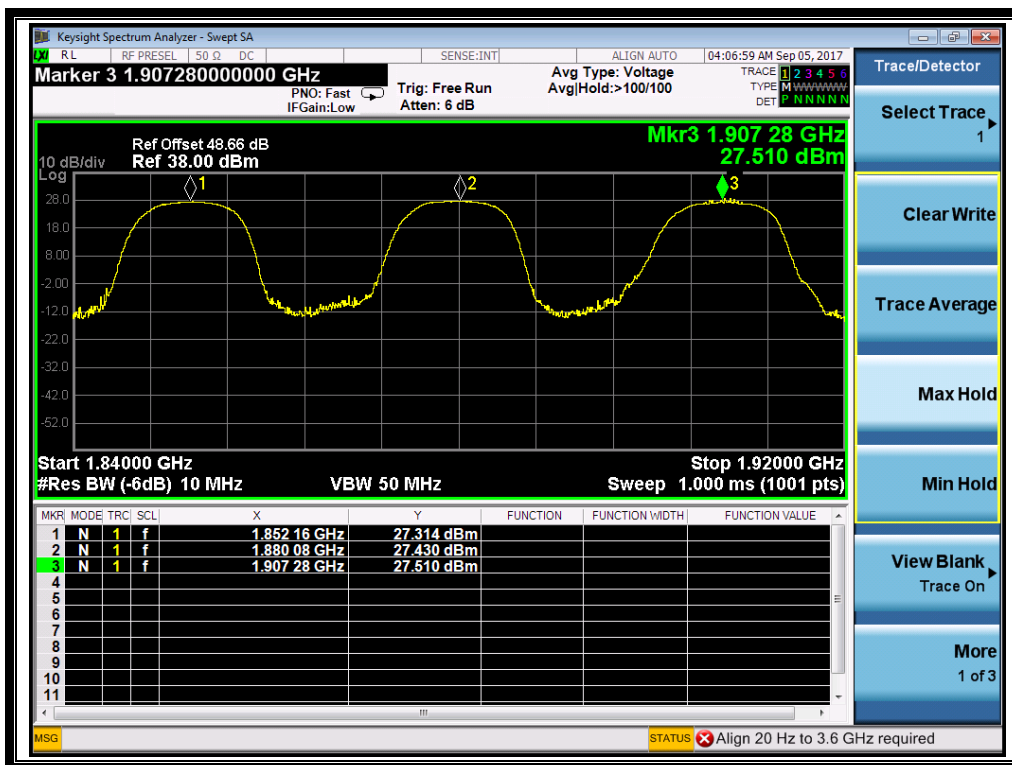
(Plot J: HSPA+ 850 MHz Channel = 4132, 4175, 4233)



(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)



## 2.8 Radiated Out of Band Emissions

### 2.8.1 Requirement

According to FCC section 22.917(a) and section 24.238(a) the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43+10*\log(P)$ dB. 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.

### 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			
GPRS 850MHz	128	824.2	< -25	< -25	Plot A1/A2	-13	PASS
	190	836.6	< -25	< -25	Plot A3/A4		PASS
	251	848.8	< -25	< -25	Plot A5/A6		PASS
GPRS 1900MHz	512	1850.2	< -25	< -25	Plot B1/B2	-13	PASS
	661	1880.0	< -25	< -25	Plot B3/B4		PASS
	810	1909.8	< -25	< -25	Plot B5/B6		PASS
EGPRS 850MHz	128	824.2	< -25	< -25	Plot C1/C2	-13	PASS
	190	836.6	< -25	< -25	Plot C3/C4		PASS
	251	848.8	< -25	< -25	Plot C5/C6		PASS
EGPRS 1900MHz	512	1850.2	< -25	< -25	Plot D1/D2	-13	PASS
	661	1880.0	< -25	< -25	Plot D3/D4		PASS
	810	1909.8	< -25	< -25	Plot D5/D6		PASS
HSDPA 850MHz	4132	826.4	< -25	< -25	Plot G1/G2	-13	PASS
	4175	835.0	< -25	< -25	Plot G3/G4		PASS
	4233	846.6	< -25	< -25	Plot G5/G6		PASS
HSDPA 1900MHz	9262	1852.4	< -25	< -25	Plot H1/H2	-13	PASS
	9400	1880.0	< -25	< -25	Plot H3/H4		PASS

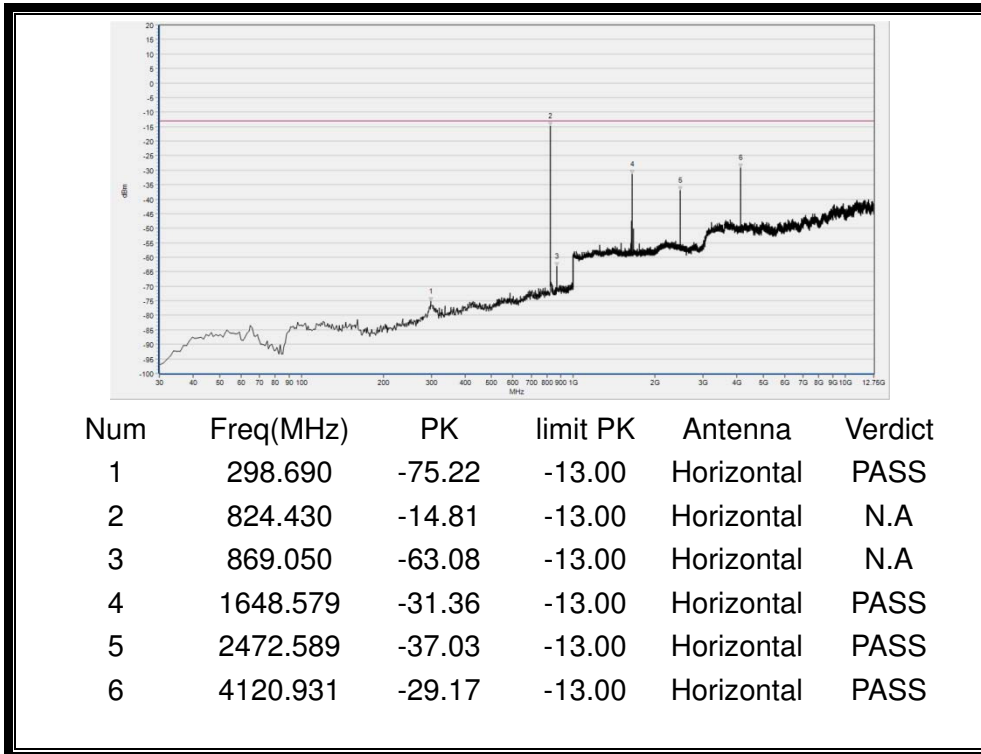


Band	Channel	Frequency (MHz)	Measured Max. Spurious Emission (dBm)		Refer to Plot	Limit (dBm)	Verdict
			Test Antenna Horizontal	Test Antenna Vertical			
	9538	1907.6	< -25	< -25	Plot H5/H6		PASS
HSUPA 850MHz	4132	826.4	< -25	< -25	Plot I1/I2	-13	PASS
	4175	835.0	< -25	< -25	Plot I3/I4		PASS
	4233	846.6	< -25	< -25	Plot I5/I6		PASS
HSUPA 1900MHz	9262	1852.4	< -25	< -25	Plot J1/J2	-13	PASS
	9400	1880.0	< -25	< -25	Plot H3/J4		PASS
	9538	1907.6	< -25	< -25	Plot J5/J6		PASS
HSPA+ 850MHz	4132	826.4	< -25	< -25	Plot K1/K2	-13	PASS
	4175	835.0	< -25	< -25	Plot K3/K4		PASS
	4233	846.6	< -25	< -25	Plot K5/K6		PASS
HSPA+ 1900MHz	9262	1852.4	< -25	< -25	Plot L1/L2	-13	PASS
	9400	1880.0	< -25	< -25	Plot L3/L4		PASS
	9538	1907.6	< -25	< -25	Plot L5/L6		PASS

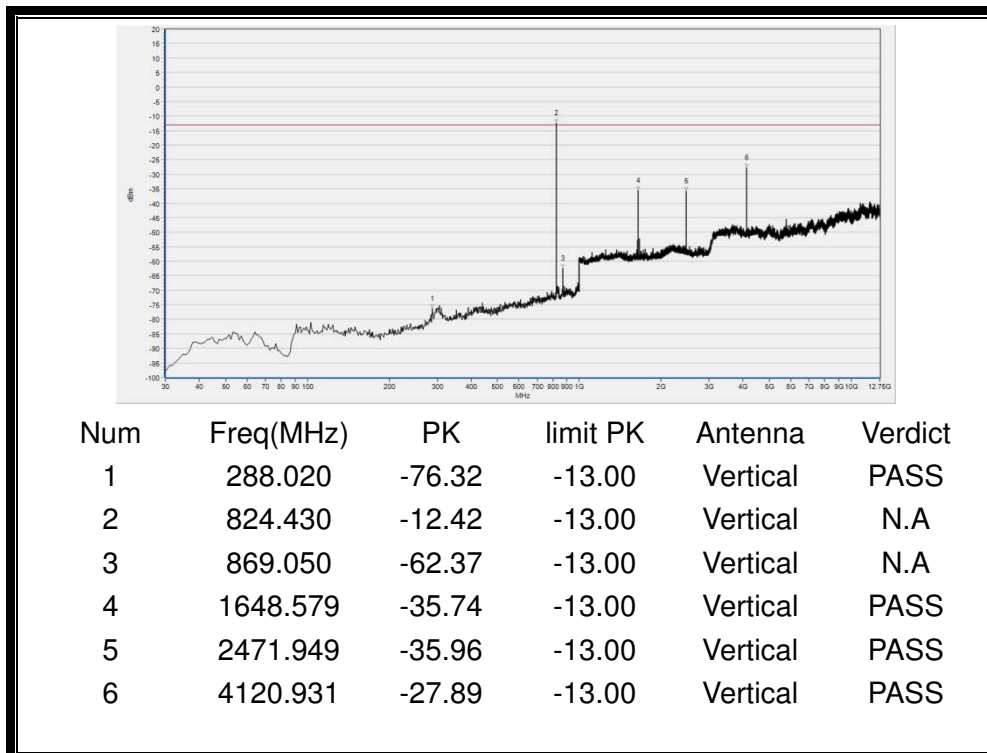
2. Test Plots for the Whole Measurement Frequency Range:

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

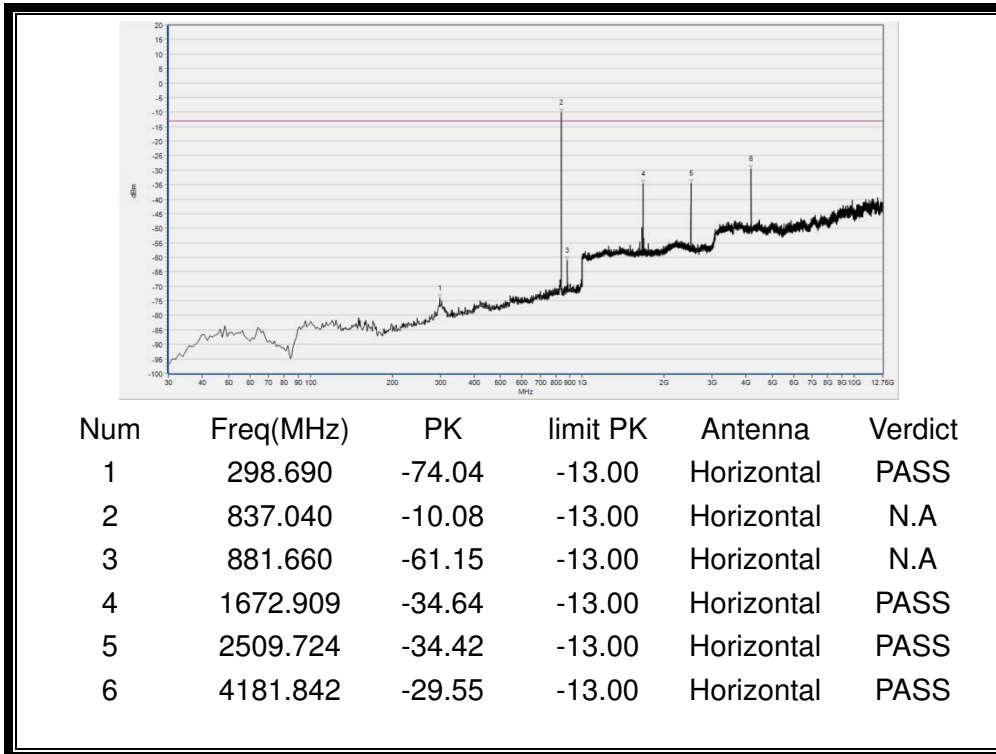
Note2: All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.



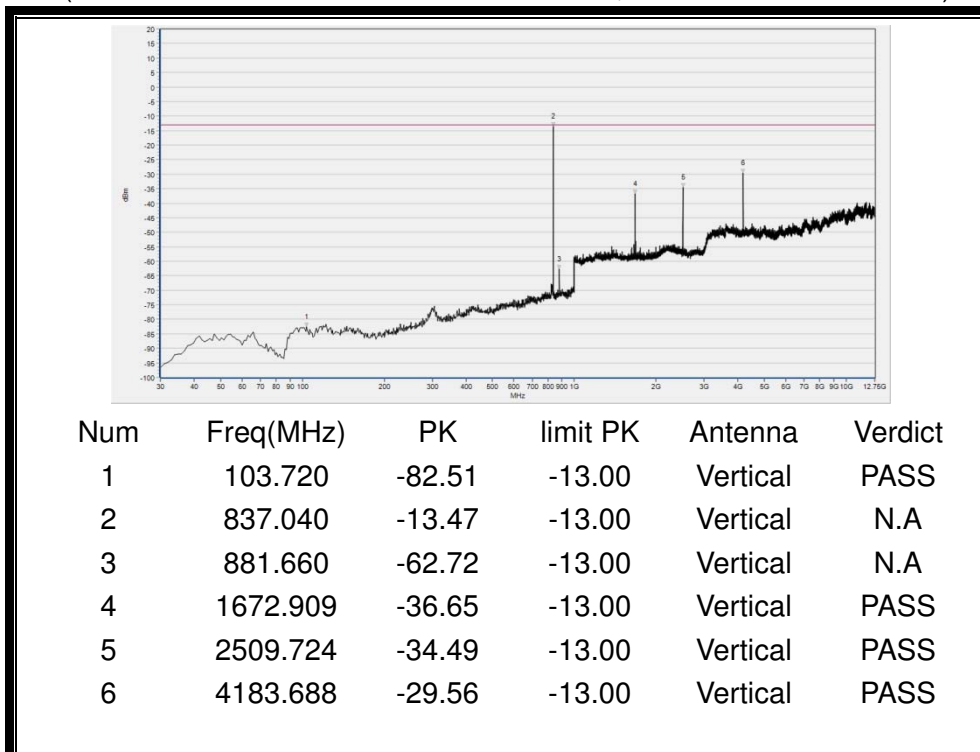
(Plot A1: GPRS 850MHz Channel = 128, Test Antenna Horizontal)



(Plot A2: GPRS 850MHz Channel = 128, Test Antenna Vertical)

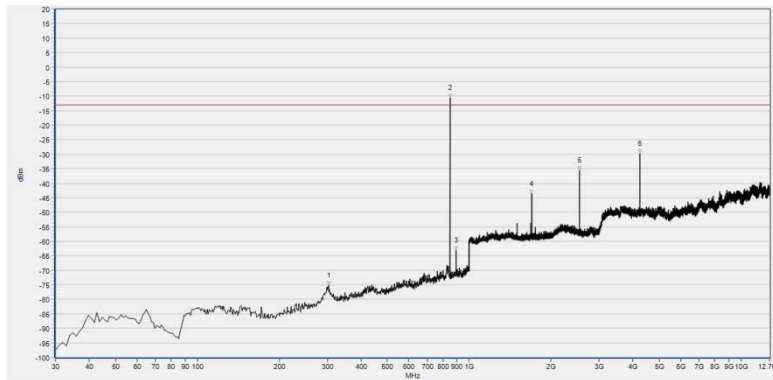


(Plot A3: GPRS 850MHz Channel = 190, Test Antenna Horizontal)



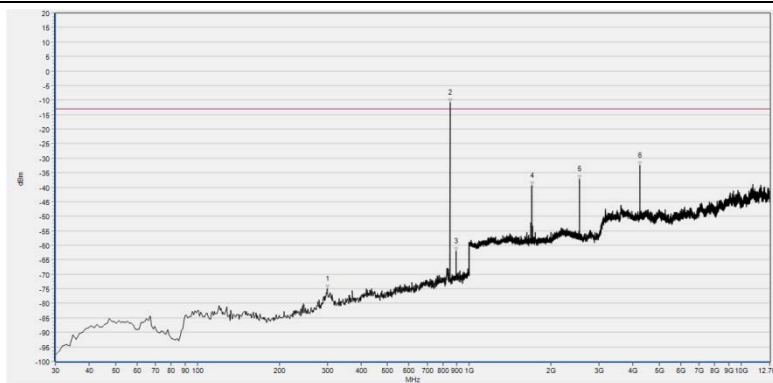
(Plot A4: GPRS 850MHz Channel = 190, Test Antenna Vertical)





Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	303.540	-75.25	-13.00	Horizontal	PASS
2	848.680	-10.58	-13.00	Horizontal	N.A
3	893.300	-63.06	-13.00	Horizontal	N.A
4	1697.239	-43.64	-13.00	Horizontal	PASS
5	2546.218	-35.55	-13.00	Horizontal	PASS
6	4244.599	-29.88	-13.00	Horizontal	PASS

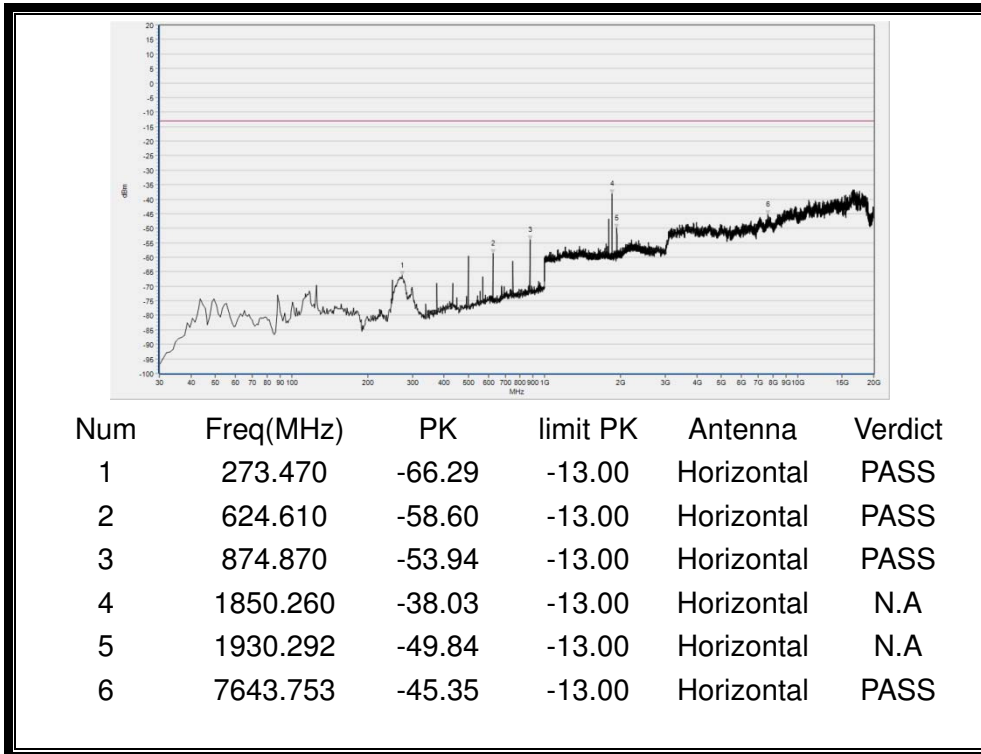
(Plot A5: GPRS 850MHz Channel = 251, Test Antenna Horizontal)



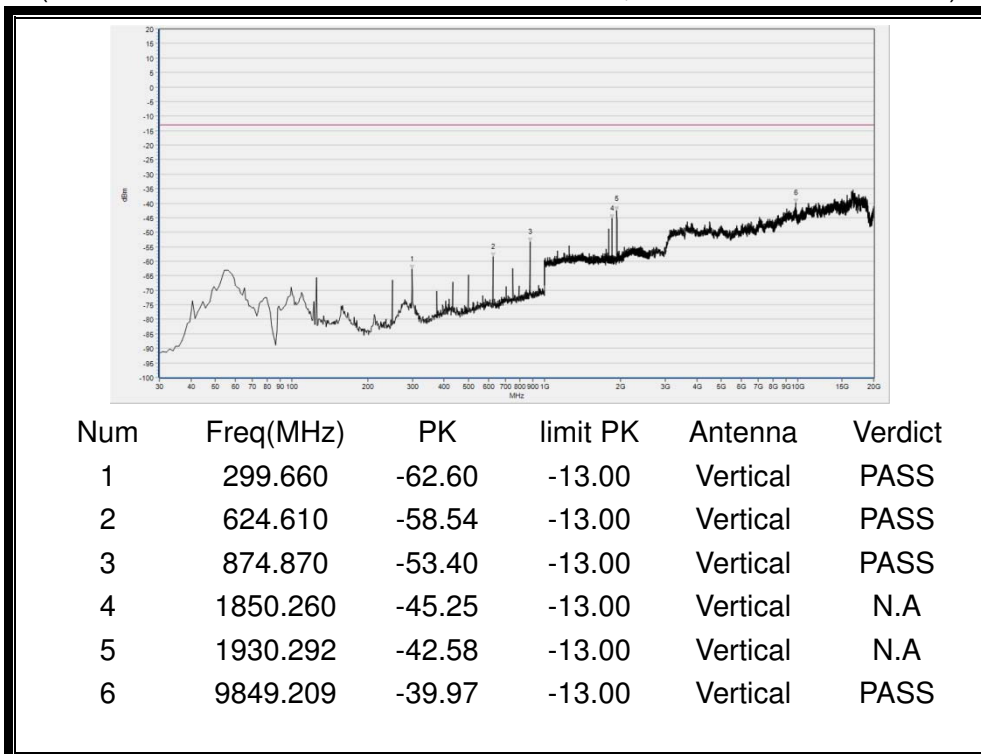
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	300.630	-75.07	-13.00	Vertical	PASS
2	848.680	-10.78	-13.00	Vertical	N.A
3	894.270	-62.10	-13.00	Vertical	N.A
4	1697.879	-39.48	-13.00	Vertical	PASS
5	2546.218	-37.14	-13.00	Vertical	PASS
6	4242.753	-32.50	-13.00	Vertical	PASS

(Plot A6: GPRS 850MHz Channel = 251, Test Antenna Vertical)

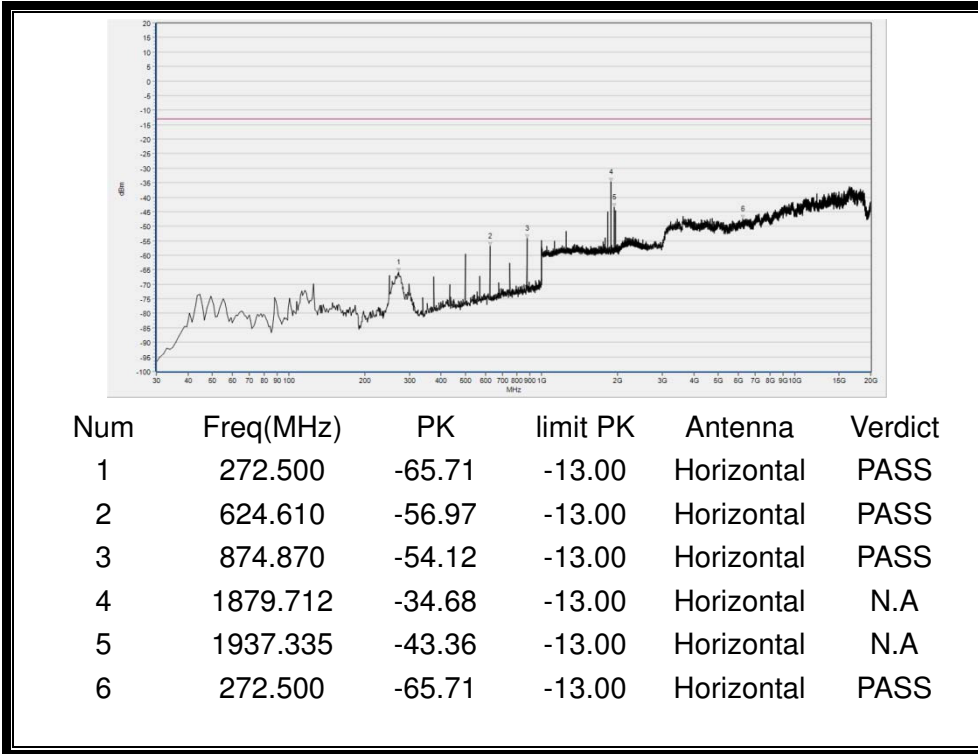




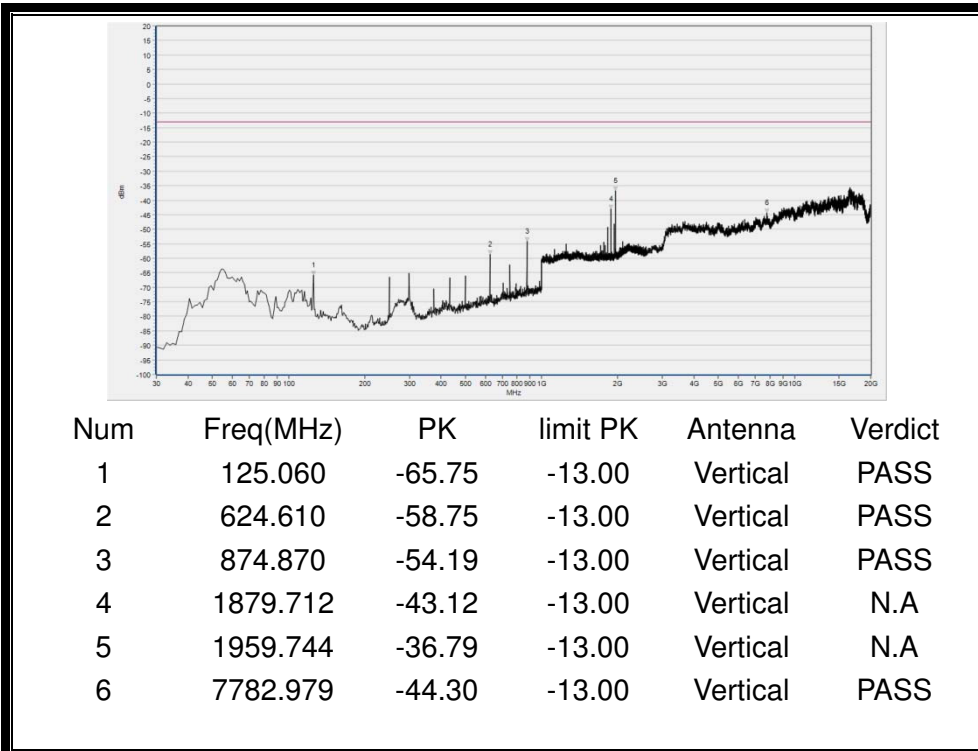
(Plot B1: GPRS 1900MHz Channel = 512, Test Antenna Horizontal)



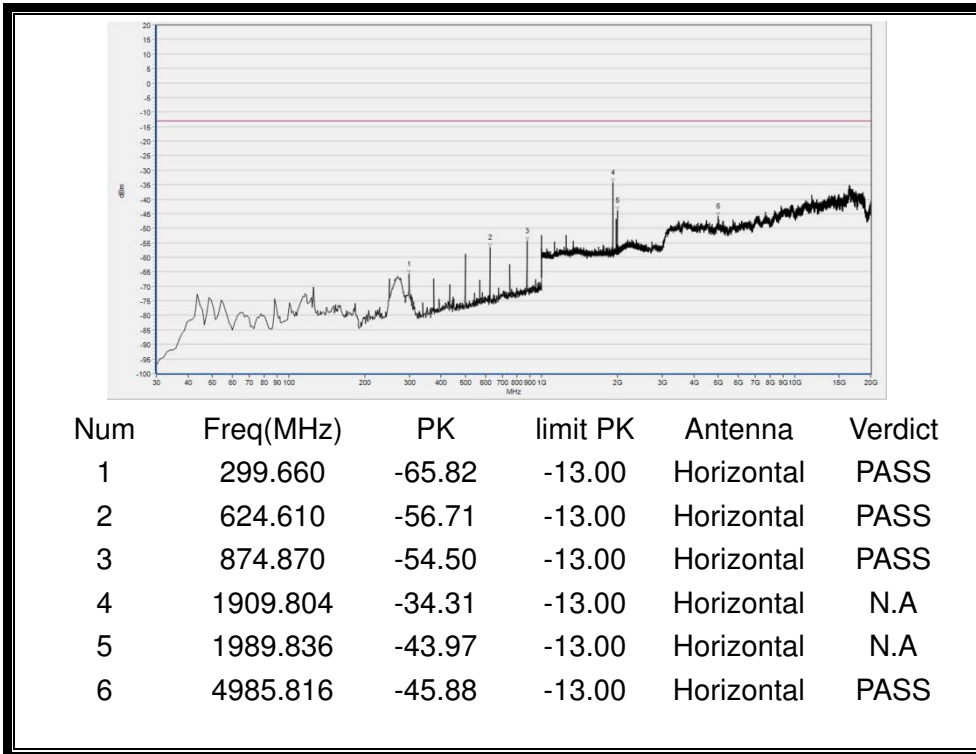
(Plot B2: GPRS 1900MHz Channel = 512, Test Antenna Vertical)



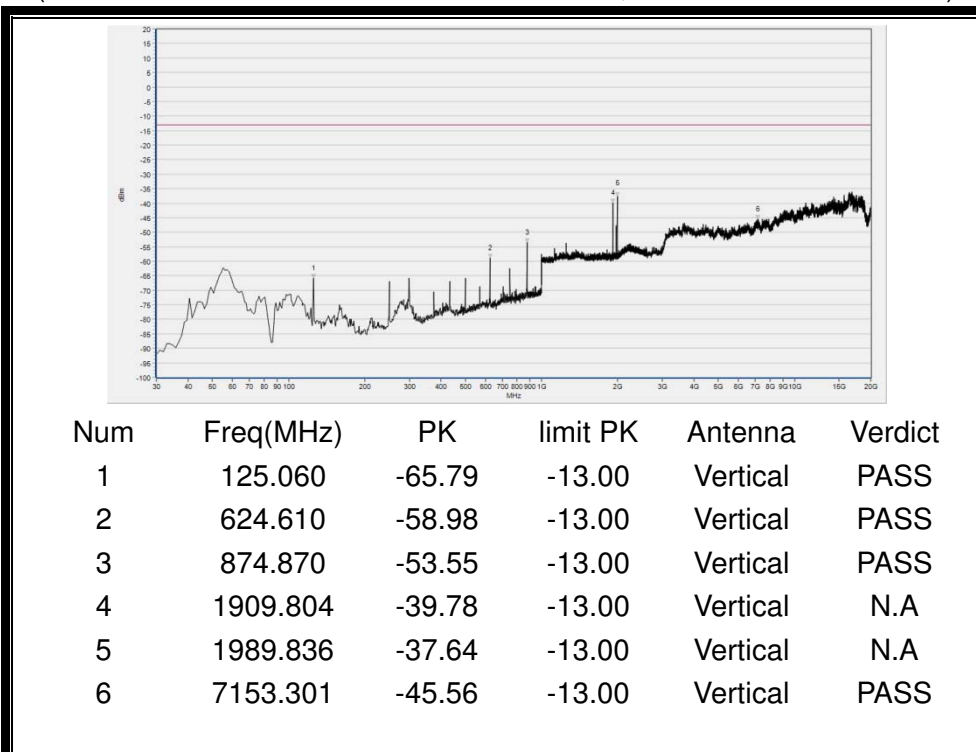
(Plot B3: GPRS 1900MHz Channel = 661, Test Antenna Horizontal)



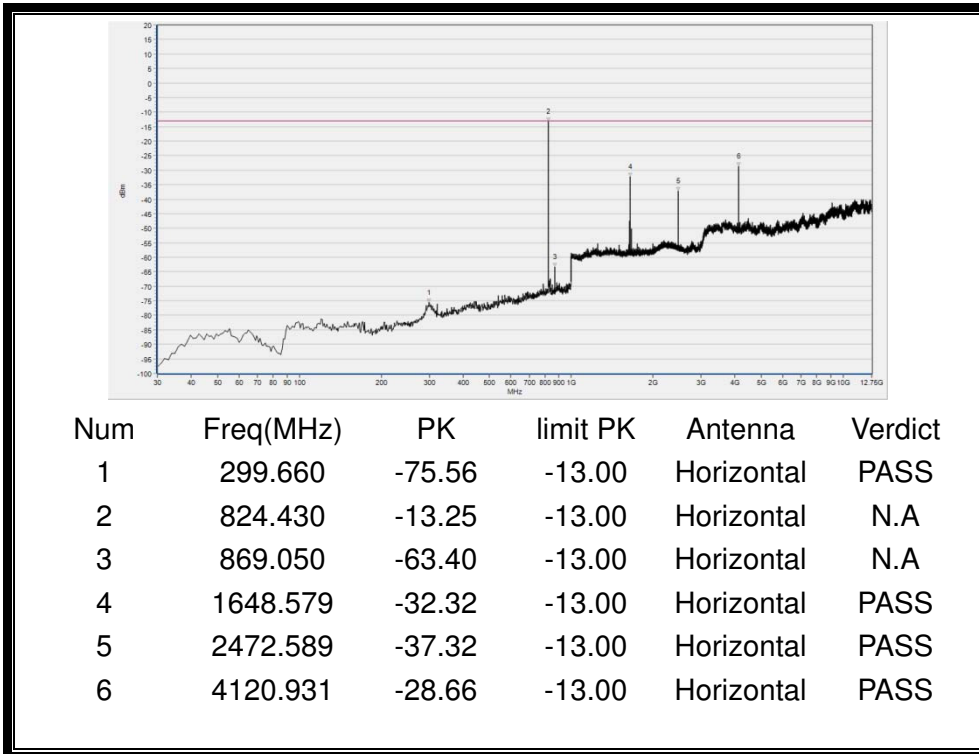
(Plot B4: GPRS 1900MHz Channel = 661, Test Antenna Vertical)



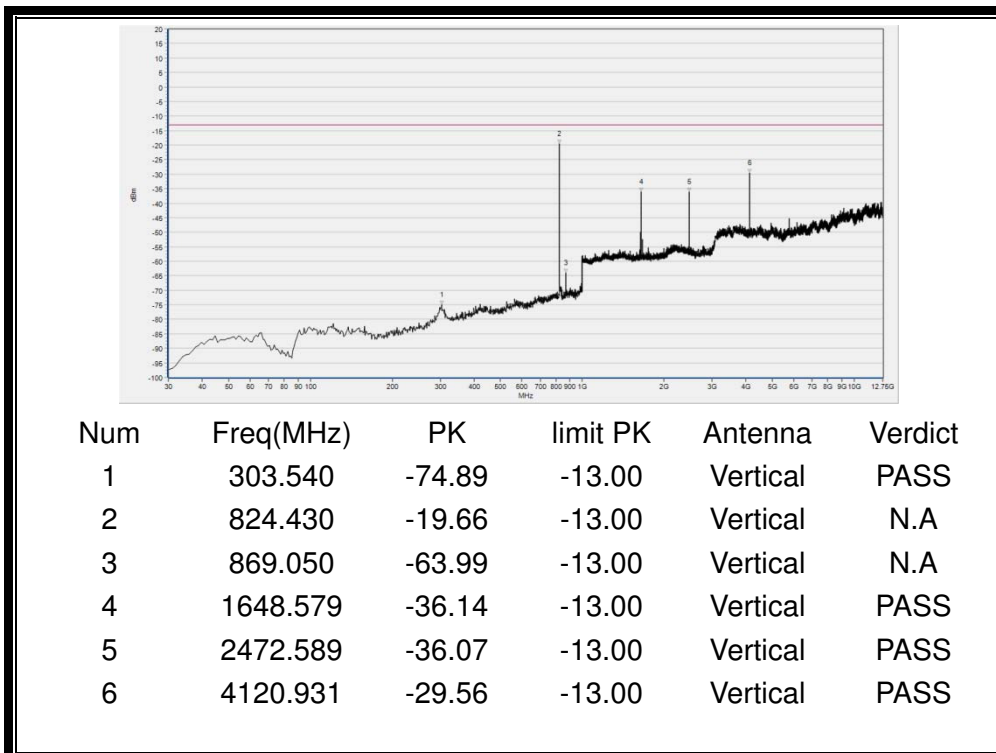
(Plot B5: GPRS 1900MHz Channel = 810, Test Antenna Horizontal)



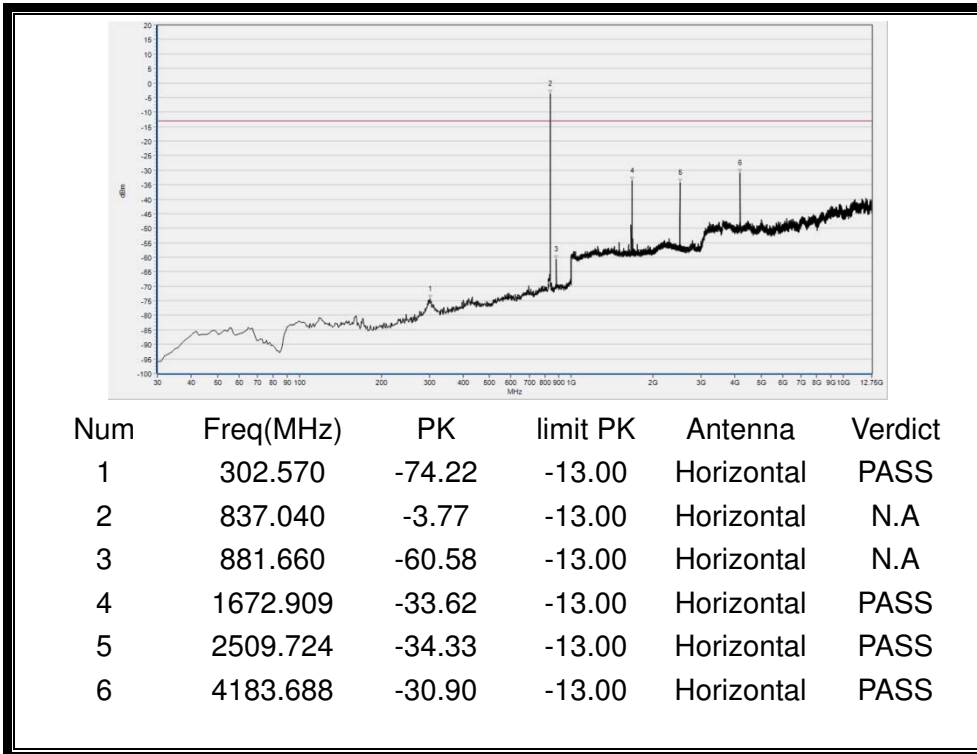
(Plot B6: GPRS 1900MHz Channel = 810, Test Antenna Vertical)



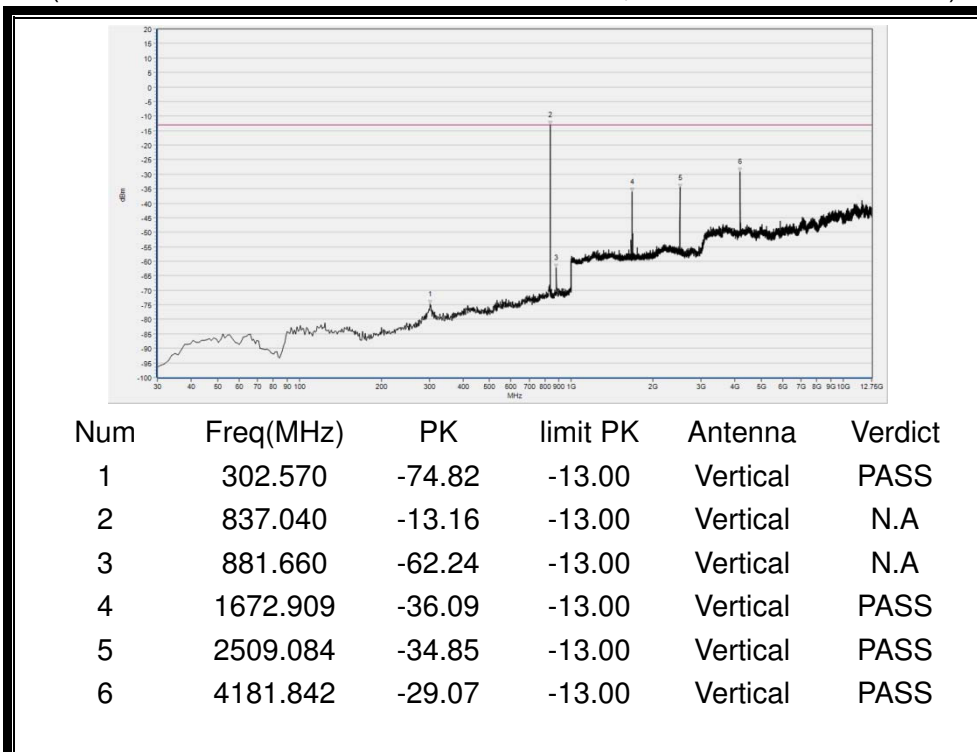
(Plot C1: EGPRS 850MHz Channel = 128, Test Antenna Horizontal)



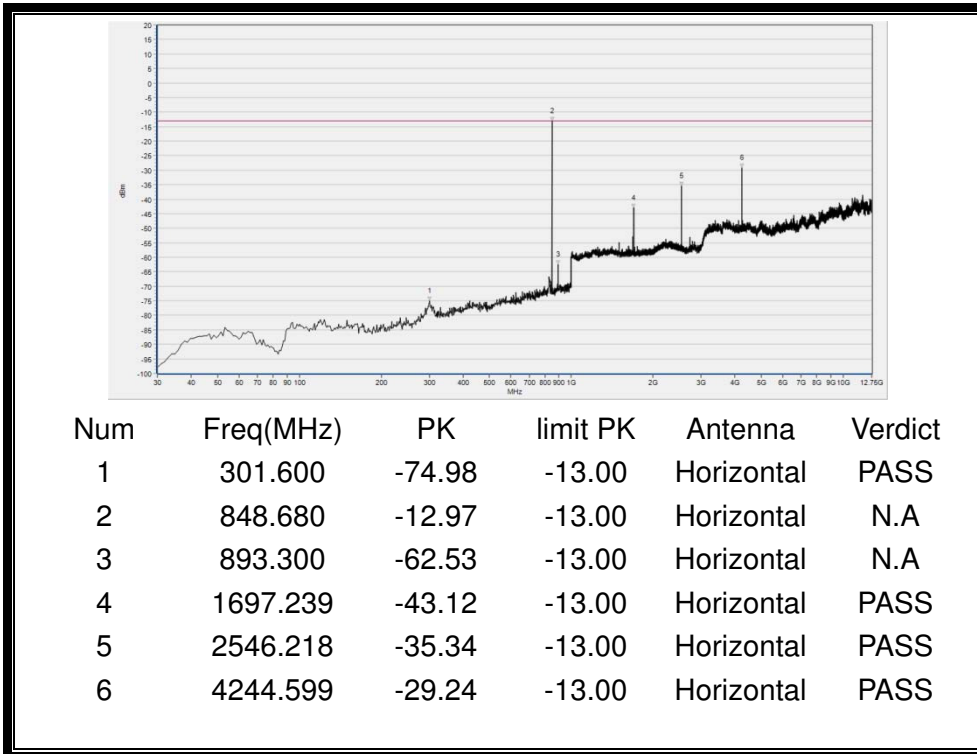
(Plot C2: EGPRS 850MHz Channel = 128, Test Antenna Vertical)



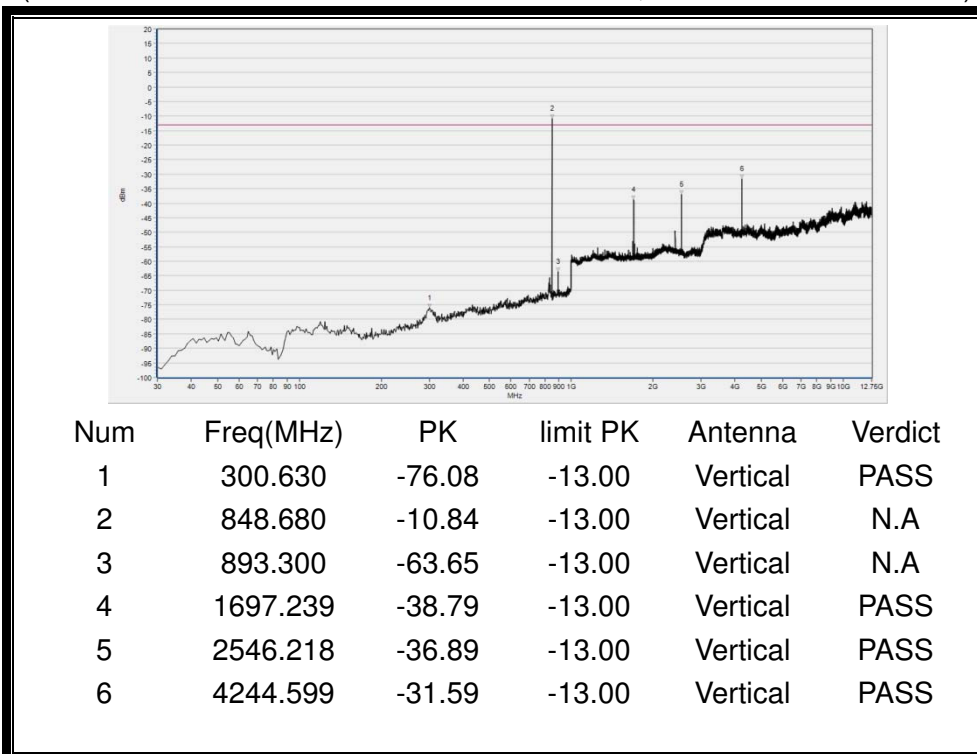
(Plot C3: EGPRS 850MHz Channel = 190, Test Antenna Horizontal)



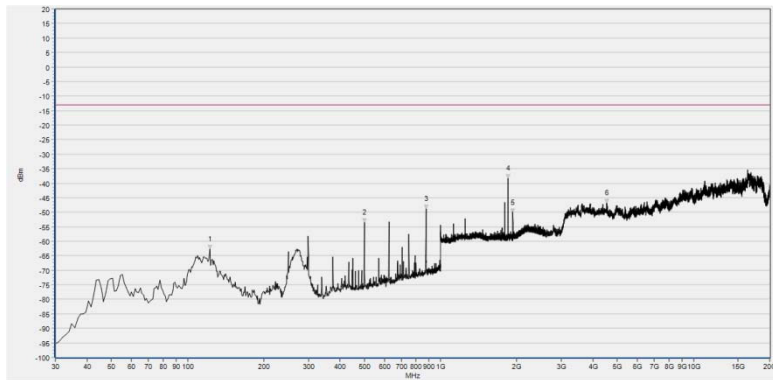
(Plot C4: EGPRS 850MHz Channel = 190, Test Antenna Vertical)



(Plot C5: EGPRS 850MHz Channel = 251, Test Antenna Horizontal)

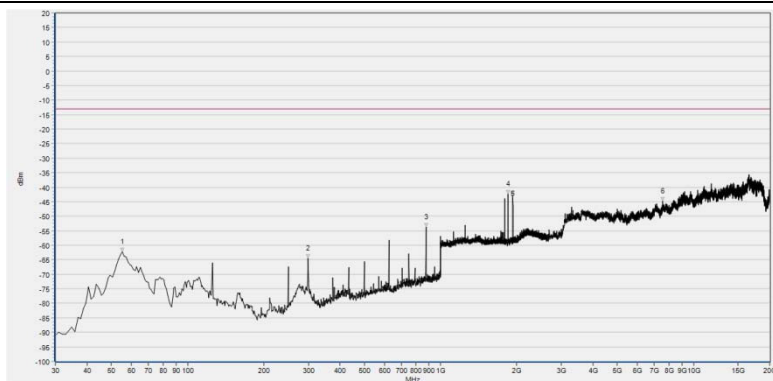


(Plot C6: EGPRS 850MHz Channel = 251, Test Antenna Vertical)



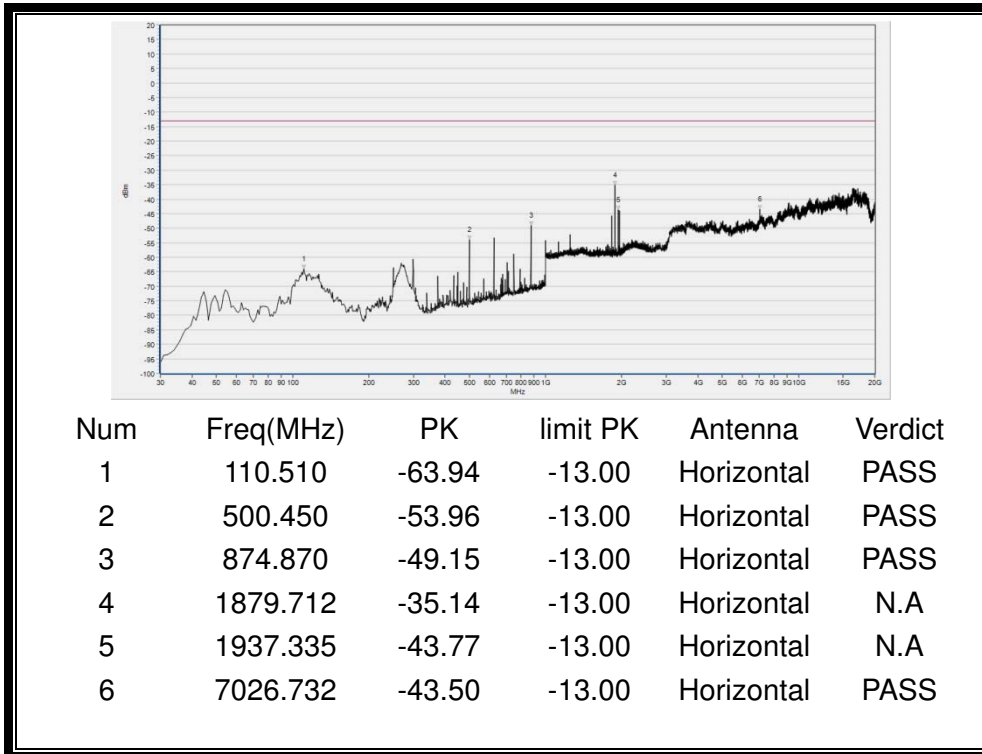
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	122.150	-62.57	-13.00	Horizontal	PASS
2	500.450	-53.55	-13.00	Horizontal	PASS
3	874.870	-48.80	-13.00	Horizontal	PASS
4	1850.260	-38.33	-13.00	Horizontal	N.A
5	1929.652	-50.20	-13.00	Horizontal	PASS
6	4530.169	-46.78	-13.00	Horizontal	PASS

(Plot D1: EGPRS 1900MHz Channel = 512, Test Antenna Horizontal)

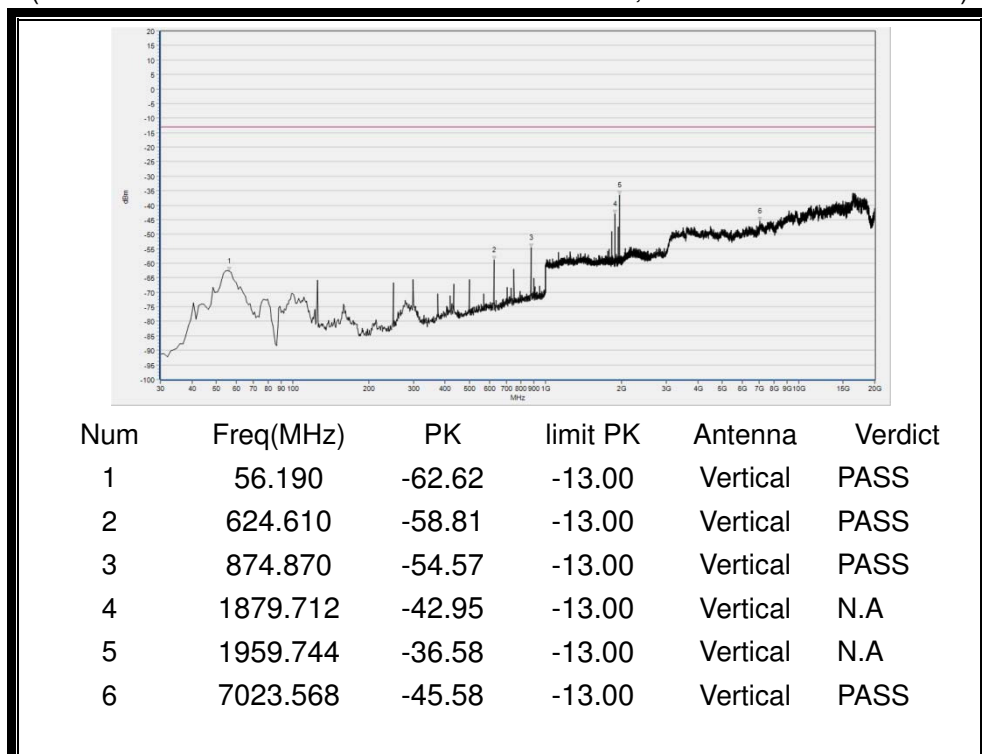


Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	55.220	-62.27	-13.00	Vertical	PASS
2	299.660	-64.48	-13.00	Vertical	PASS
3	874.870	-53.77	-13.00	Vertical	PASS
4	1850.260	-42.24	-13.00	Vertical	N.A
5	1930.292	-42.78	-13.00	Vertical	N.A
6	7533.006	-44.77	-13.00	Vertical	PASS

(Plot D2: EGPRS 1900MHz Channel = 512, Test Antenna Vertical)

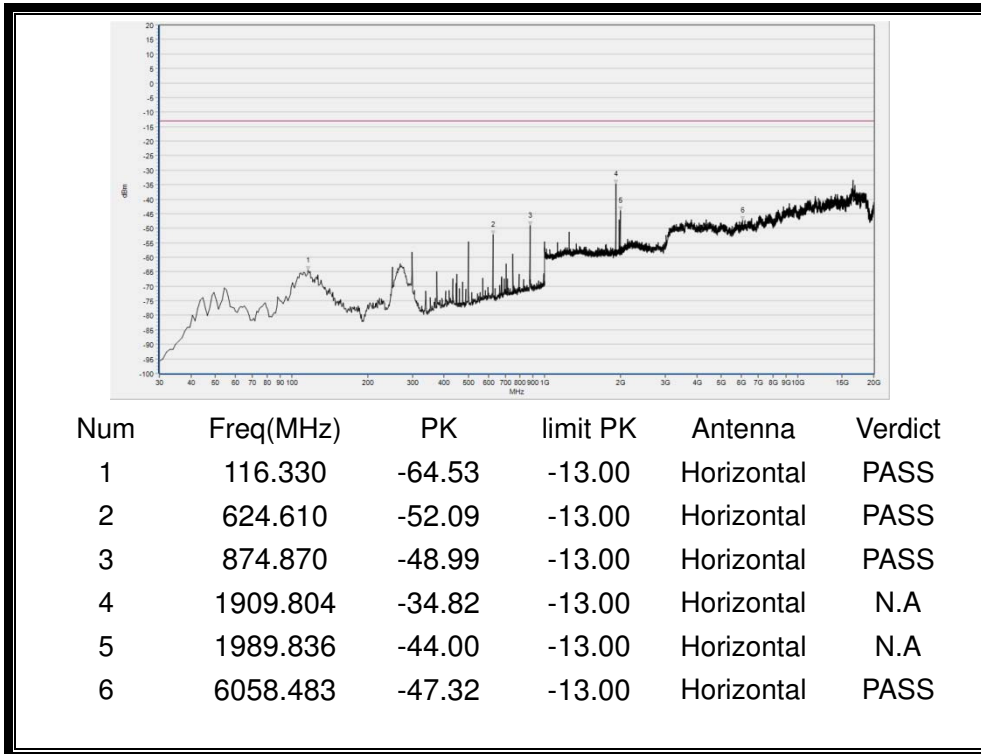


(Plot D3: EGPRS 1900MHz Channel = 661, Test Antenna Horizontal)

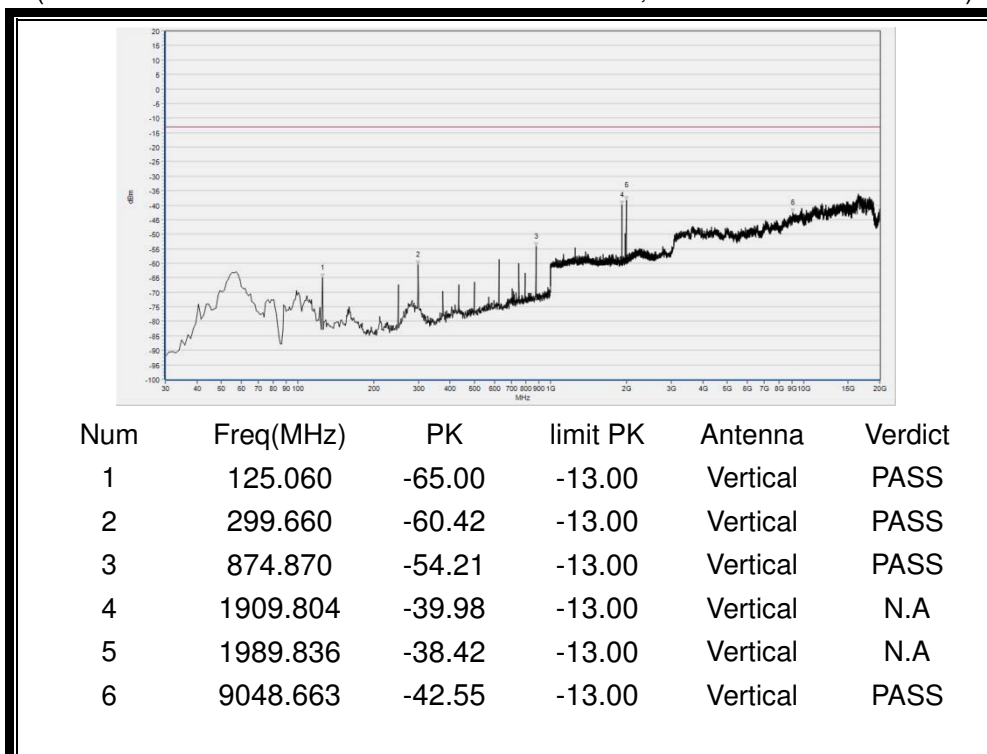


(Plot D4: EGPRS 1900MHz Channel = 661, Test Antenna Vertical)

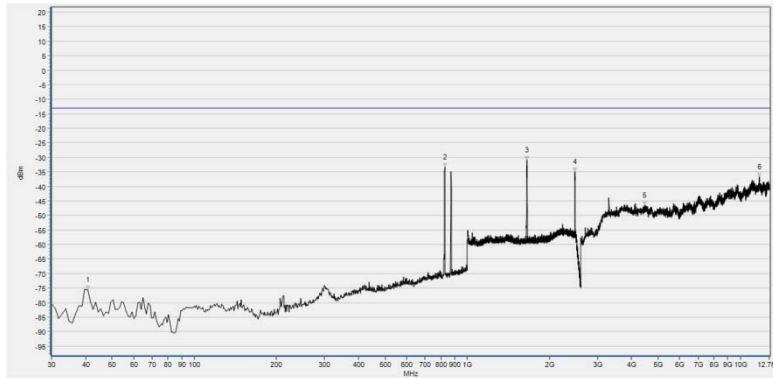




(Plot D5: EGPRS 1900MHz Channel = 810, Test Antenna Horizontal)

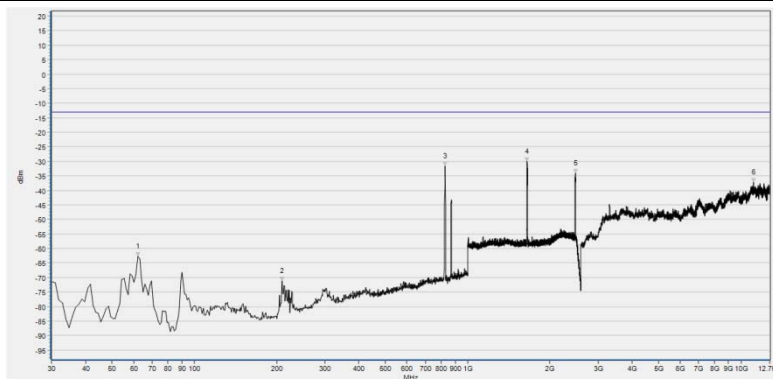


(Plot D6: EGPRS 1900MHz Channel = 810, Test Antenna Vertical)



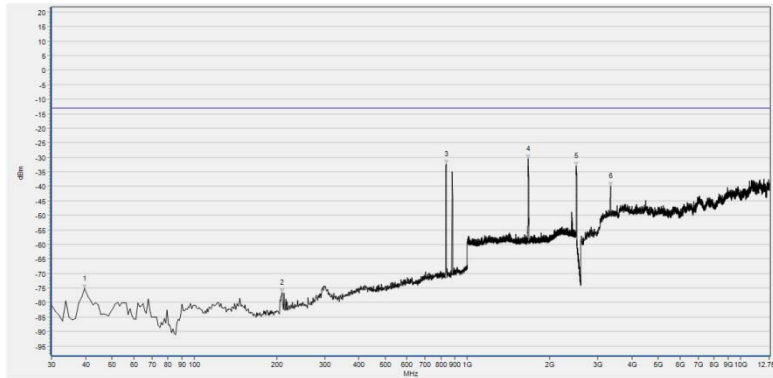
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	40.681	-75.62	-13.00	Horizontal	PASS
2	827.167	-33.47	-13.00	Horizontal	PASS
3	1650.350	-30.86	-13.00	Horizontal	PASS
4	2476.759	-35.08	-13.00	Horizontal	PASS
5	4464.838	-46.64	-13.00	Horizontal	PASS
6	11748.199	-36.74	-13.00	Horizontal	PASS

(Plot G1: HSDPA 850MHz Channel = 4132, Test Antenna Horizontal)



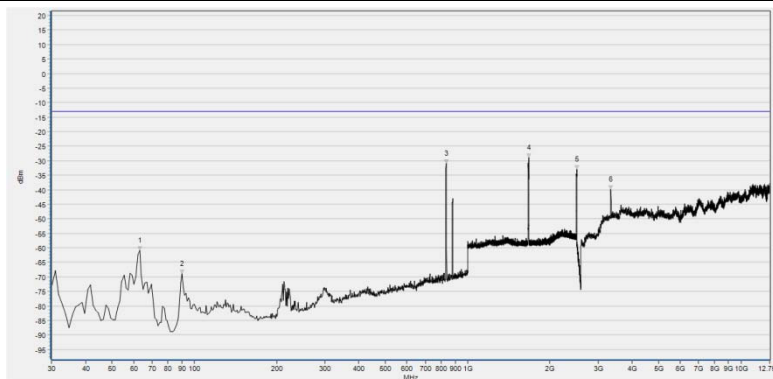
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	62.042	-62.57	-13.00	Vertical	PASS
2	209.630	-71.25	-13.00	Vertical	PASS
3	827.167	-31.67	-13.00	Vertical	PASS
4	1651.417	-30.15	-13.00	Vertical	PASS
5	2476.225	-34.04	-13.00	Vertical	PASS
6	11138.996	-37.27	-13.00	Vertical	PASS

(Plot G2: HSDPA 850MHz Channel = 4132, Test Antenna Vertical)



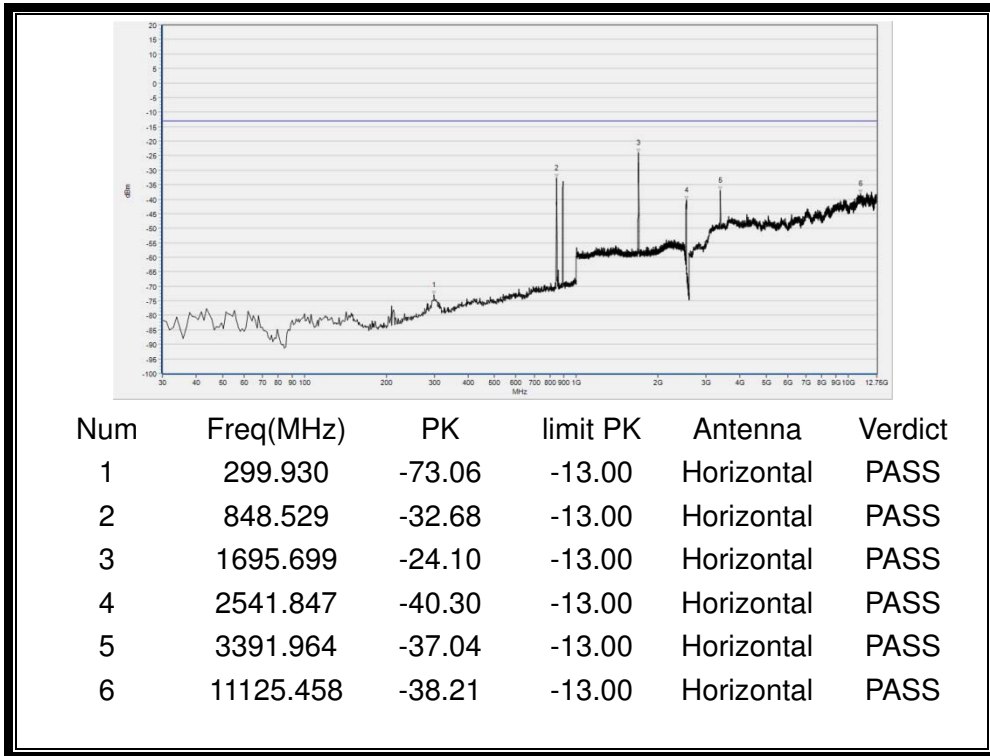
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	39.710	-75.28	-13.00	Horizontal	PASS
2	209.630	-76.49	-13.00	Horizontal	PASS
3	834.935	-32.18	-13.00	Horizontal	PASS
4	1672.224	-30.56	-13.00	Horizontal	PASS
5	2506.636	-33.06	-13.00	Horizontal	PASS
6	3344.582	-39.95	-13.00	Horizontal	PASS

(Plot G3: HSDPA 850MHz Channel = 4175, Test Antenna Horizontal)

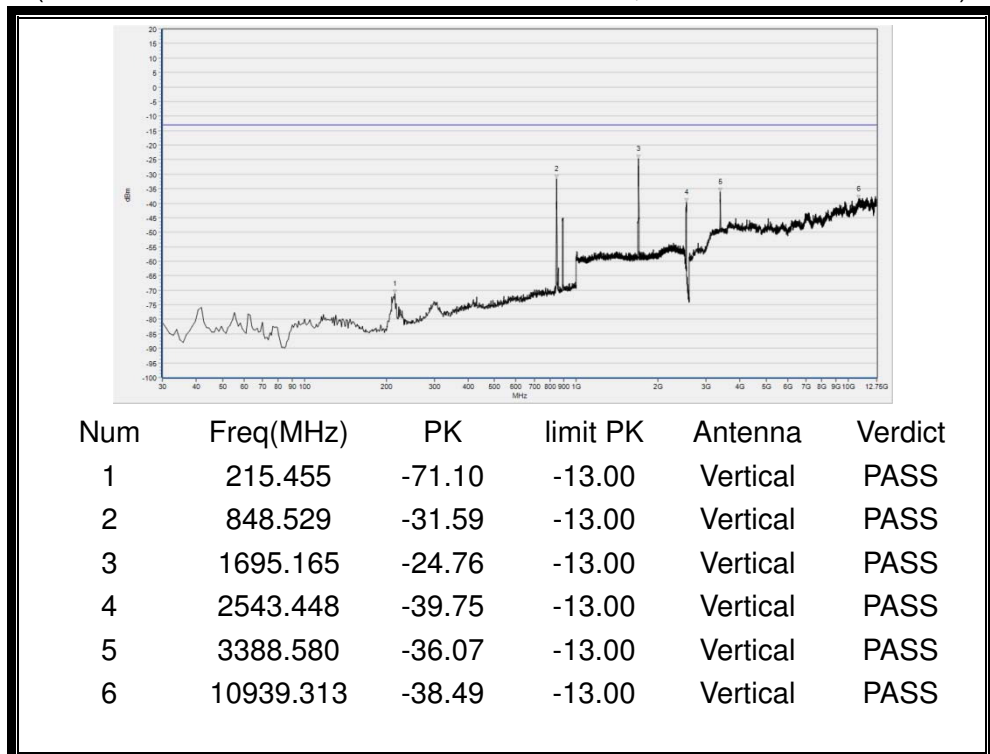


Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	63.013	-60.95	-13.00	Vertical	PASS
2	90.200	-68.91	-13.00	Vertical	PASS
3	833.964	-30.92	-13.00	Vertical	PASS
4	1672.758	-28.96	-13.00	Vertical	PASS
5	2508.770	-33.06	-13.00	Vertical	PASS
6	3344.582	-39.92	-13.00	Vertical	PASS

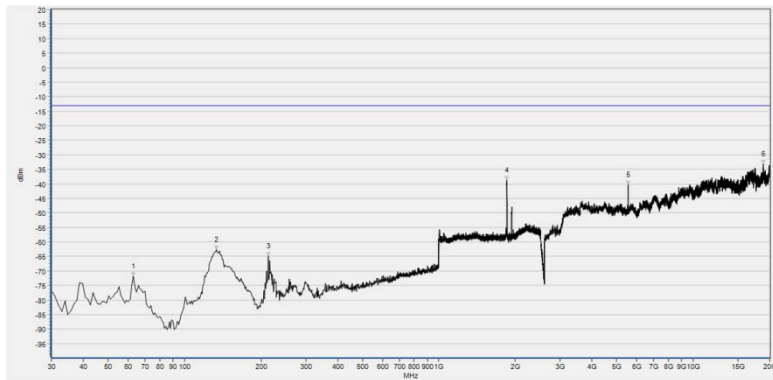
(Plot G4: HSDPA 850MHz Channel = 4175, Test Antenna Vertical)



(Plot G5: HSDPA 850MHz Channel = 4233, Test Antenna Horizontal)



(Plot G6: HSDPA 850MHz Channel = 4233, Test Antenna Vertical)



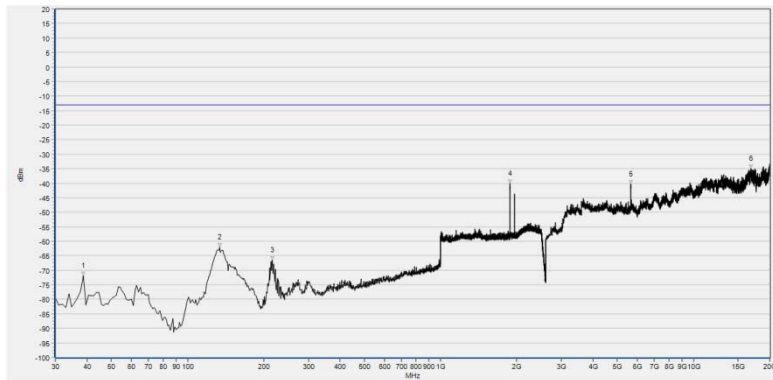
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	62.980	-71.89	-13.00	Horizontal	PASS
2	133.790	-62.74	-13.00	Horizontal	PASS
3	213.330	-64.95	-13.00	Horizontal	PASS
4	1851.541	-38.79	-13.00	Horizontal	PASS
5	5555.374	-40.34	-13.00	Horizontal	PASS
6	18848.227	-33.25	-13.00	Horizontal	PASS

(Plot H1: HSDPA 1900MHz Channel = 9262, Test Antenna Horizontal)



Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	62.010	-63.76	-13.00	Vertical	PASS
2	214.300	-70.76	-13.00	Vertical	PASS
3	414.120	-72.43	-13.00	Vertical	PASS
4	1852.181	-39.67	-13.00	Vertical	PASS
5	5555.374	-39.18	-13.00	Vertical	PASS
6	17443.317	-34.39	-13.00	Vertical	PASS

(Plot H2: HSDPA 1900MHz Channel = 9262, Test Antenna Vertical)



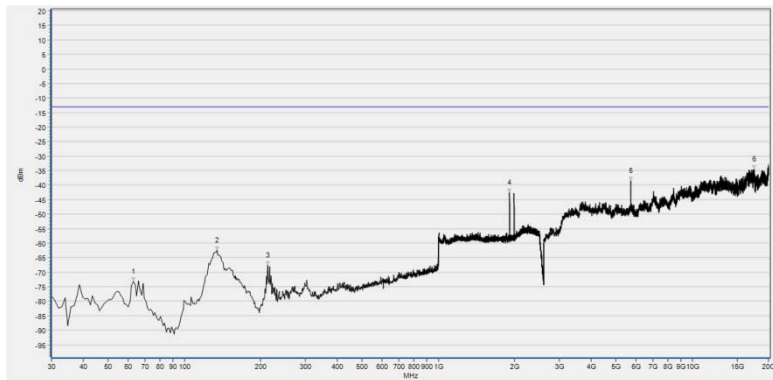
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	38.730	-71.78	-13.00	Horizontal	PASS
2	133.790	-62.06	-13.00	Horizontal	PASS
3	216.240	-66.59	-13.00	Horizontal	PASS
4	1878.431	-40.10	-13.00	Horizontal	PASS
5	5637.643	-40.29	-13.00	Horizontal	PASS
6	16851.609	-35.06	-13.00	Horizontal	PASS

(Plot H3: HSDPA 1900MHz Channel = 9400, Test Antenna Horizontal)



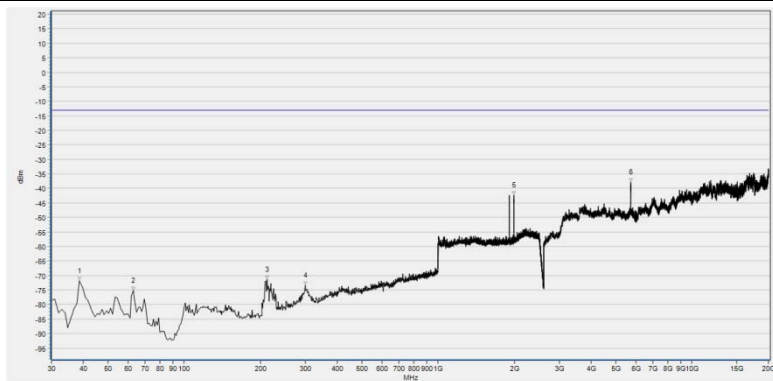
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	62.980	-63.52	-13.00	Vertical	PASS
2	215.270	-70.12	-13.00	Vertical	PASS
3	299.660	-71.20	-13.00	Vertical	PASS
4	1879.072	-40.23	-13.00	Vertical	PASS
5	5643.972	-41.11	-13.00	Vertical	PASS
6	17161.702	-34.33	-13.00	Vertical	PASS

(Plot H4: HSDPA 1900MHz Channel = 9400, Test Antenna Vertical)



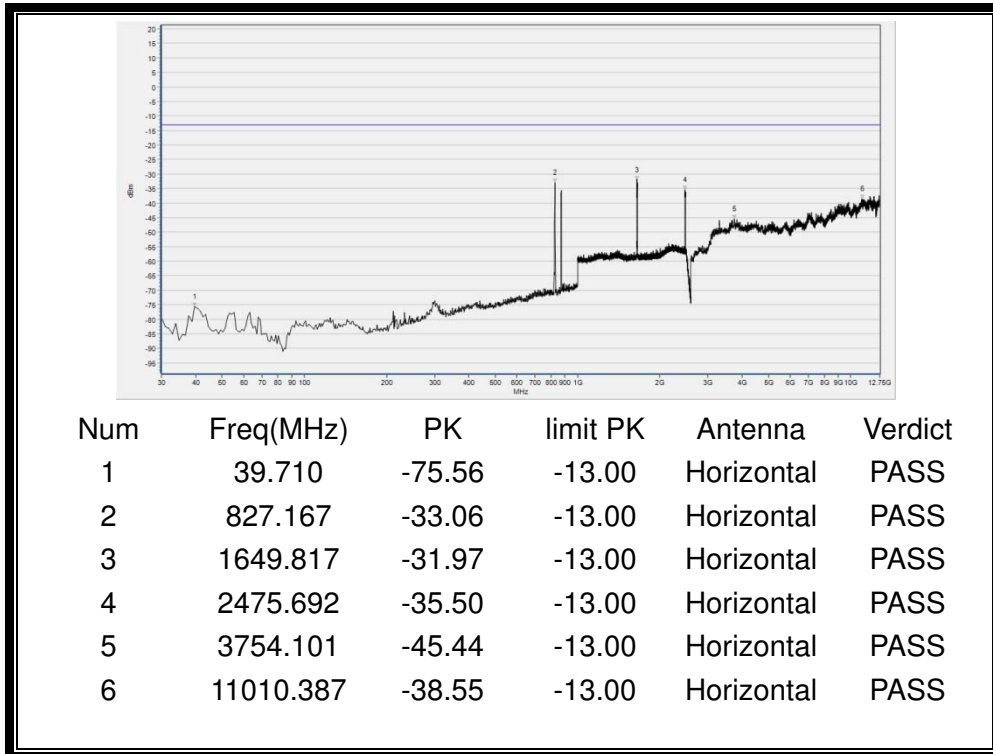
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	62.980	-73.15	-13.00	Horizontal	PASS
2	134.760	-62.50	-13.00	Horizontal	PASS
3	213.330	-67.51	-13.00	Horizontal	PASS
4	1907.883	-42.62	-13.00	Horizontal	PASS
5	5726.241	-38.49	-13.00	Horizontal	PASS
6	17541.408	-34.46	-13.00	Horizontal	PASS

(Plot H5: HSDPA 1900MHz Channel = 9538, Test Antenna Horizontal)

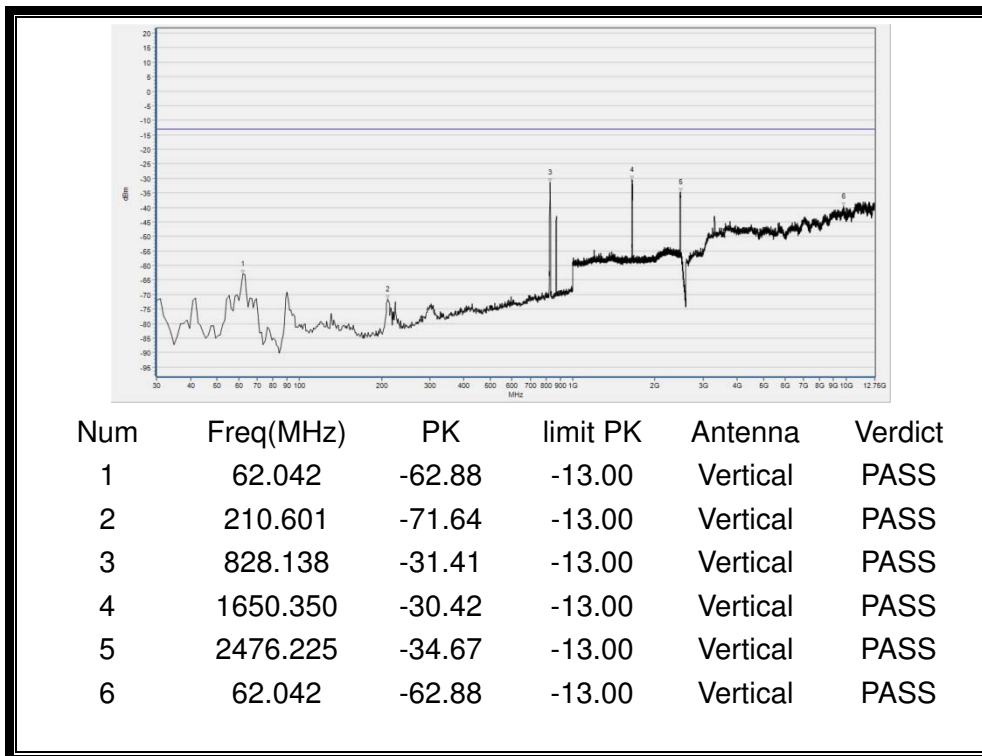


Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	38.730	-71.90	-13.00	Vertical	PASS
2	62.980	-75.30	-13.00	Vertical	PASS
3	212.360	-71.43	-13.00	Vertical	PASS
4	299.660	-73.43	-13.00	Vertical	PASS
5	1988.555	-42.40	-13.00	Vertical	PASS
6	5726.241	-37.84	-13.00	Vertical	PASS

(Plot H6: HSDPA 1900MHz Channel = 9538, Test Antenna Vertical)

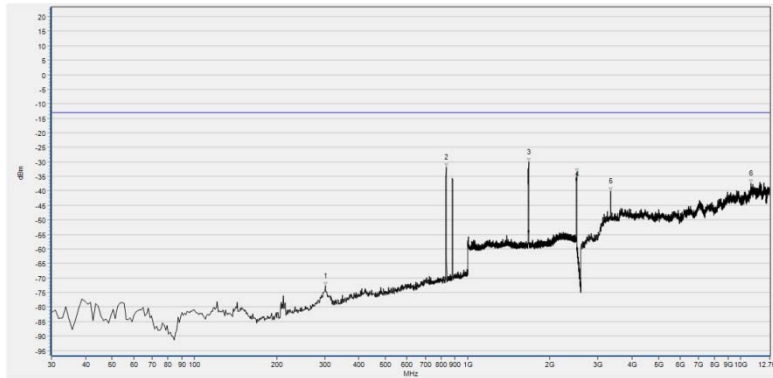


(Plot I1: HSUPA 850MHz Channel = 4132, Test Antenna Horizontal)



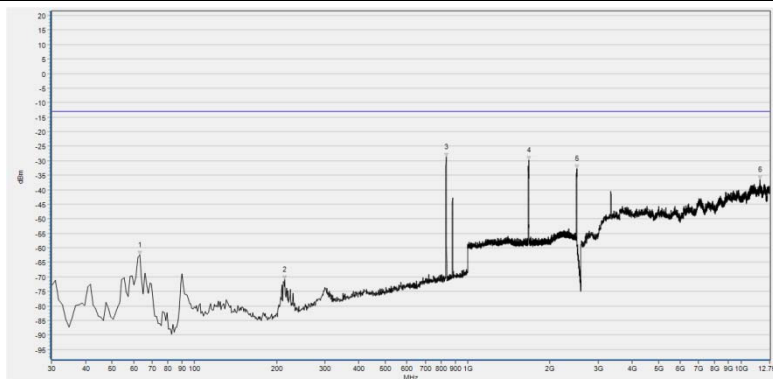
(Plot I2: HSUPA 850MHz Channel = 4132, Test Antenna Vertical)





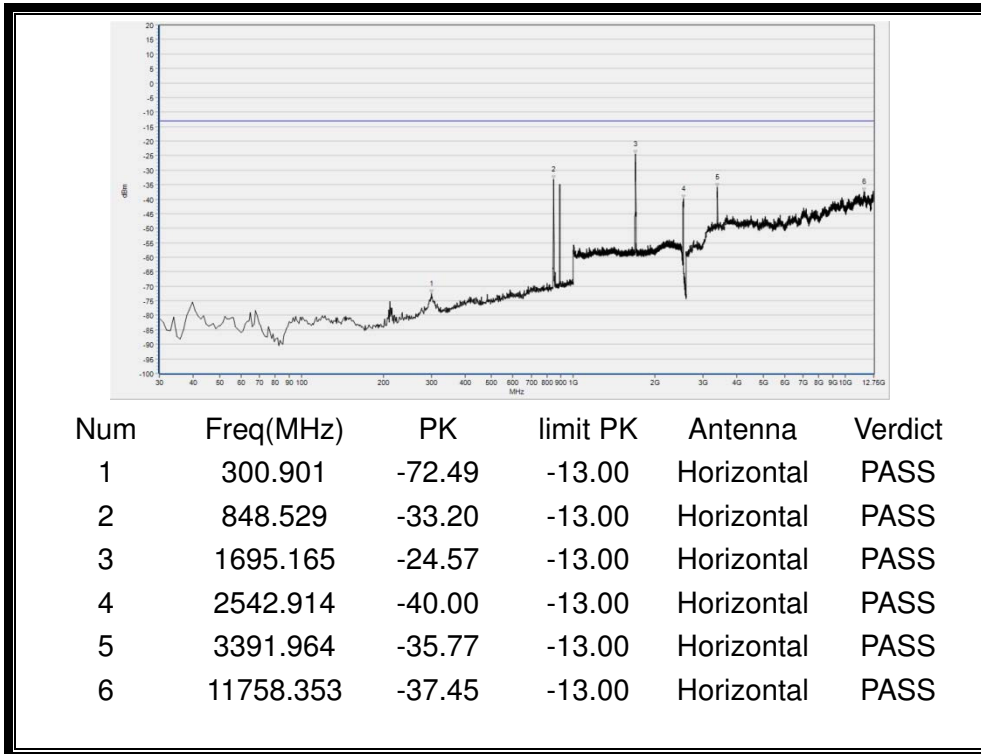
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	301.872	-72.65	-13.00	Horizontal	PASS
2	833.964	-31.91	-13.00	Horizontal	PASS
3	1672.224	-30.10	-13.00	Horizontal	PASS
4	2508.236	-33.63	-13.00	Horizontal	PASS
5	3344.582	-40.15	-13.00	Horizontal	PASS
6	10875.008	-37.47	-13.00	Horizontal	PASS

(Plot I3: HSUPA 850MHz Channel = 4175, Test Antenna Horizontal)

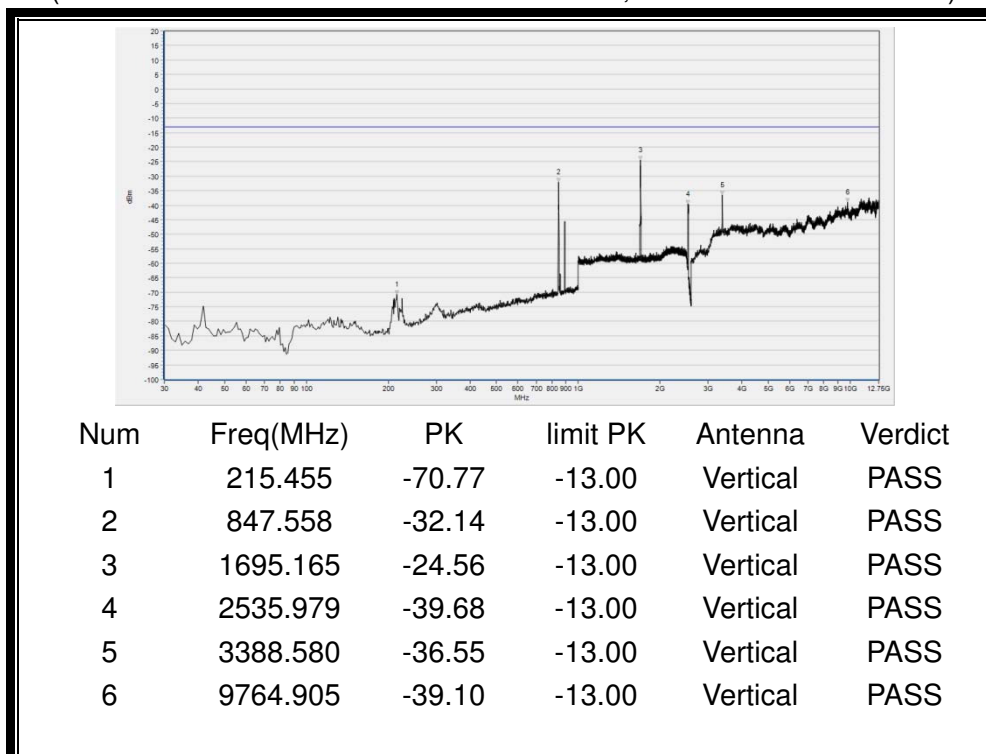


Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	67.830	-72.56	-13.00	Vertical	PASS
2	303.540	-74.19	-13.00	Vertical	PASS
3	835.100	-46.43	-13.00	Vertical	PASS
4	2189.596	-53.71	-13.00	Vertical	PASS
5	3707.474	-45.73	-13.00	Vertical	PASS
6	6965.294	-43.69	-13.00	Vertical	PASS

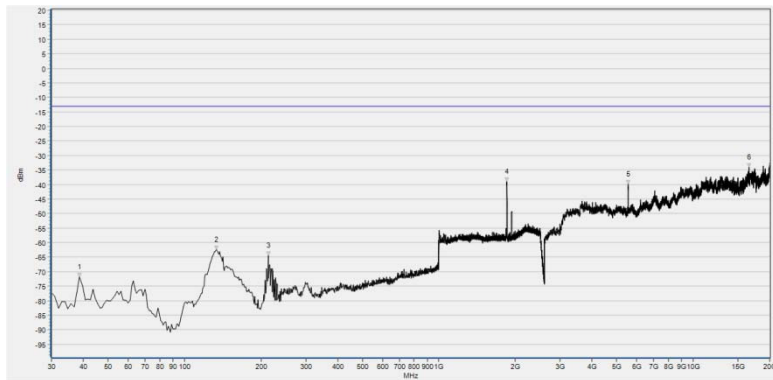
(Plot I4: HSUPA 850MHz Channel = 4175, Test Antenna Vertical)



(Plot I5: HSUPA 850MHz Channel = 4233, Test Antenna Horizontal)



(Plot I6: HSUPA 850MHz Channel = 4233, Test Antenna Vertical)



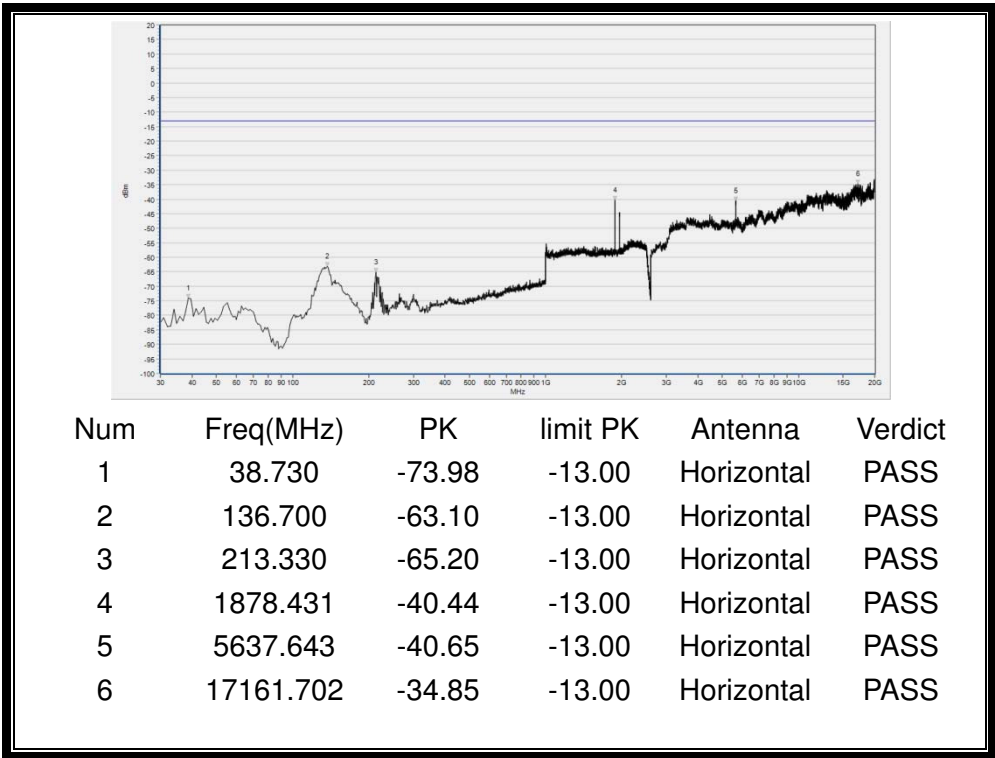
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	38.730	-71.74	-13.00	Horizontal	PASS
2	133.790	-62.35	-13.00	Horizontal	PASS
3	213.330	-64.44	-13.00	Horizontal	PASS
4	1852.821	-38.98	-13.00	Horizontal	PASS
5	5552.209	-39.81	-13.00	Horizontal	PASS
6	38.730	-71.74	-13.00	Horizontal	PASS

(Plot J1: HSUPA 1900MHz Channel = 9262, Test Antenna Horizontal)

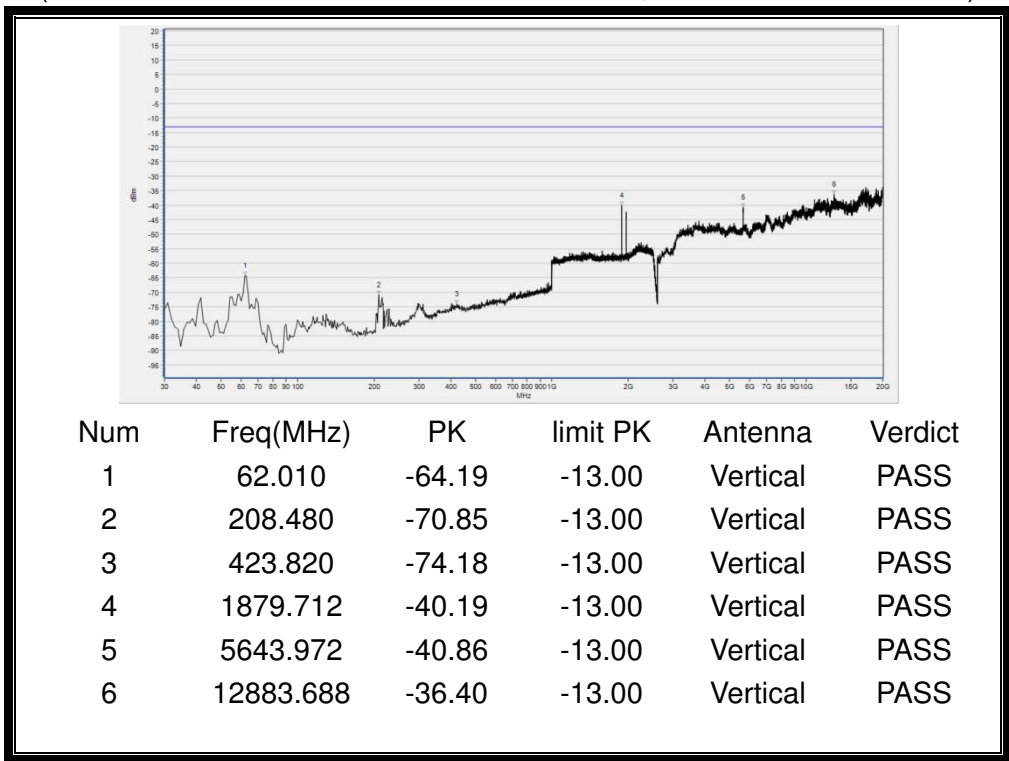


Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	62.010	-64.10	-13.00	Vertical	PASS
2	214.300	-71.78	-13.00	Vertical	PASS
3	709.970	-69.85	-13.00	Vertical	PASS
4	1852.181	-39.84	-13.00	Vertical	PASS
5	3701.146	-42.70	-13.00	Vertical	PASS
6	5558.538	-38.47	-13.00	Vertical	PASS

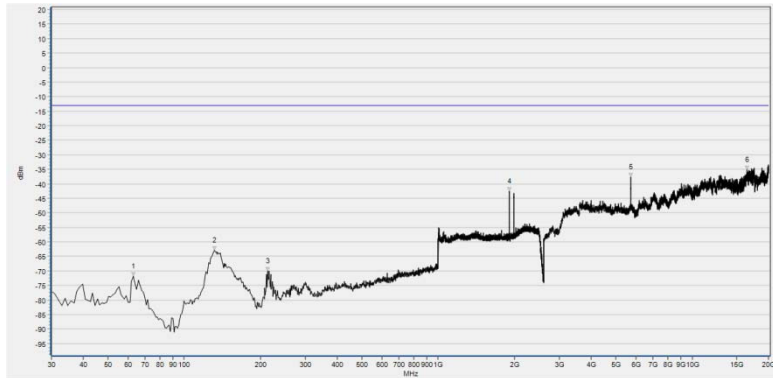
(Plot J2: HSUPA 1900MHz Channel = 9262, Test Antenna Vertical)



(Plot J3: HSUPA 1900MHz Channel = 9400, Test Antenna Horizontal)



(Plot J4: HSUPA 1900MHz Channel = 9400, Test Antenna Vertical)



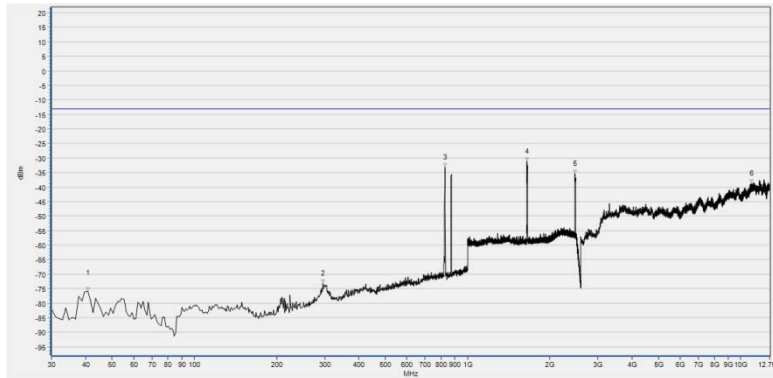
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	62.980	-71.74	-13.00	Horizontal	PASS
2	131.850	-62.86	-13.00	Horizontal	PASS
3	213.330	-70.08	-13.00	Horizontal	PASS
4	1908.523	-42.54	-13.00	Horizontal	PASS
5	5726.241	-37.70	-13.00	Horizontal	PASS
6	16468.740	-35.15	-13.00	Horizontal	PASS

(Plot J5: HSUPA 1900MHz Channel = 9538, Test Antenna Horizontal)



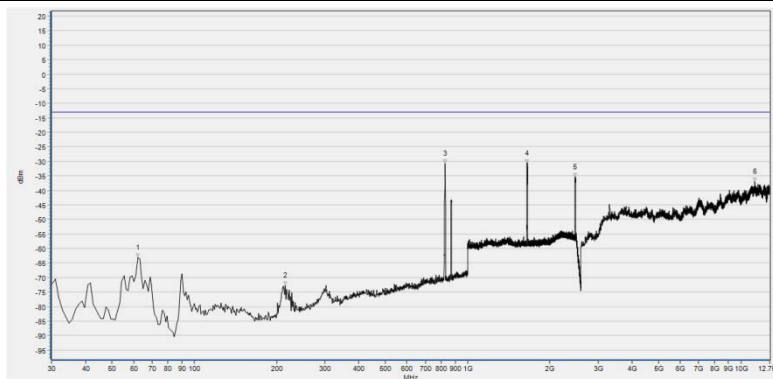
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	62.980	-67.69	-13.00	Vertical	PASS
2	132.820	-79.28	-13.00	Vertical	PASS
3	213.330	-71.35	-13.00	Vertical	PASS
4	418.970	-73.25	-13.00	Vertical	PASS
5	1908.523	-42.44	-13.00	Vertical	PASS
6	5726.241	-38.17	-13.00	Vertical	PASS

(Plot J6: HSUPA 1900MHz Channel = 9538, Test Antenna Vertical)



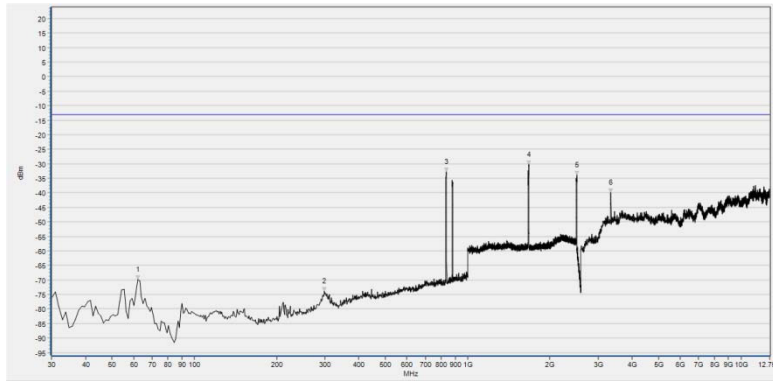
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	40.681	-75.81	-13.00	Horizontal	PASS
2	295.075	-73.14	-13.00	Horizontal	PASS
3	827.167	-33.25	-13.00	Horizontal	PASS
4	1649.817	-31.24	-13.00	Horizontal	PASS
5	2475.692	-35.45	-13.00	Horizontal	PASS
6	10959.620	-38.81	-13.00	Horizontal	PASS

(Plot K1: HSPA+ 850MHz Channel = 4132, Test Antenna Horizontal)



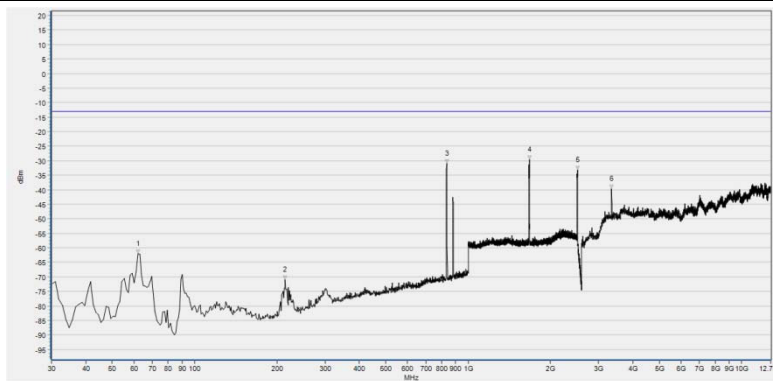
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	62.042	-63.11	-13.00	Vertical	PASS
2	215.455	-72.66	-13.00	Vertical	PASS
3	827.167	-30.79	-13.00	Vertical	PASS
4	1650.884	-30.62	-13.00	Vertical	PASS
5	2475.692	-35.43	-13.00	Vertical	PASS
6	11216.839	-37.08	-13.00	Vertical	PASS

(Plot K2: HSPA+ 850MHz Channel = 4132, Test Antenna Vertical)



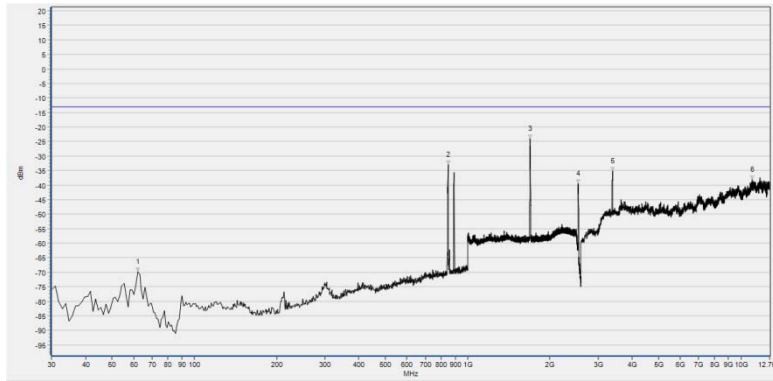
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	62.042	-69.91	-13.00	Horizontal	PASS
2	298.959	-73.85	-13.00	Horizontal	PASS
3	834.935	-32.72	-13.00	Horizontal	PASS
4	1671.157	-30.38	-13.00	Horizontal	PASS
5	2507.169	-33.89	-13.00	Horizontal	PASS
6	3344.582	-39.85	-13.00	Horizontal	PASS

(Plot K3: HSPA+ 850MHz Channel = 4175, Test Antenna Horizontal)



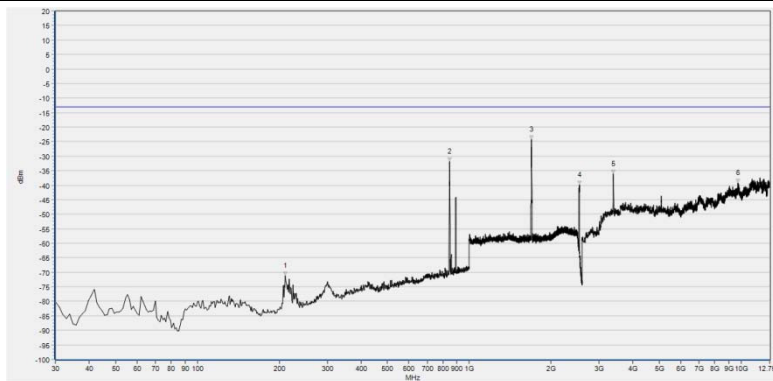
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	62.042	-62.00	-13.00	Vertical	PASS
2	214.484	-70.95	-13.00	Vertical	PASS
3	833.964	-30.93	-13.00	Vertical	PASS
4	1671.691	-29.71	-13.00	Vertical	PASS
5	2507.703	-33.25	-13.00	Vertical	PASS
6	3344.582	-39.61	-13.00	Vertical	PASS

(Plot K4: HSPA+ 850MHz Channel = 4175, Test Antenna Vertical)



Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	62.042	-69.74	-13.00	Horizontal	PASS
2	848.529	-32.88	-13.00	Horizontal	PASS
3	1695.699	-24.05	-13.00	Horizontal	PASS
4	2543.448	-39.50	-13.00	Horizontal	PASS
5	3391.964	-35.27	-13.00	Horizontal	PASS
6	11003.618	-38.00	-13.00	Horizontal	PASS

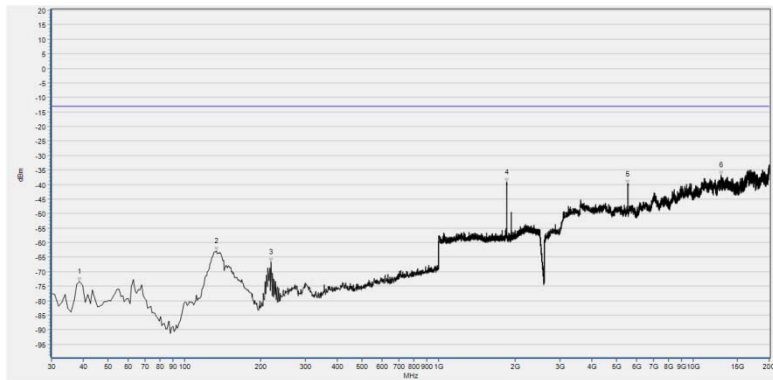
(Plot K5: HSPA+ 850MHz Channel = 4233, Test Antenna Horizontal)



Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	210.601	-71.08	-13.00	Vertical	PASS
2	848.529	-31.89	-13.00	Vertical	PASS
3	1695.165	-24.24	-13.00	Vertical	PASS
4	2542.914	-39.83	-13.00	Vertical	PASS
5	3391.964	-36.02	-13.00	Vertical	PASS
6	9751.367	-39.23	-13.00	Vertical	PASS

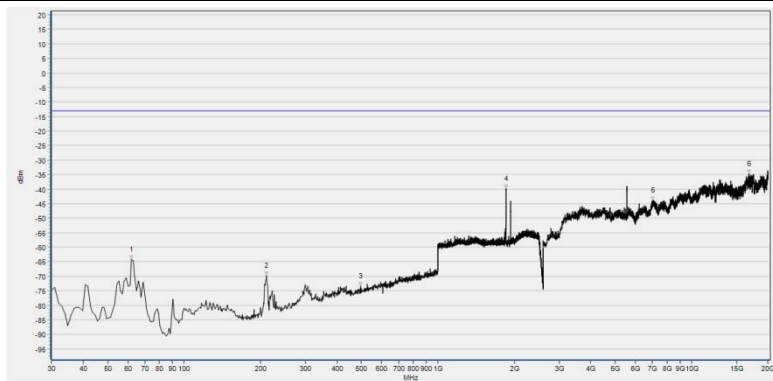
(Plot K6: HSPA+ 850MHz Channel = 4233, Test Antenna Vertical)





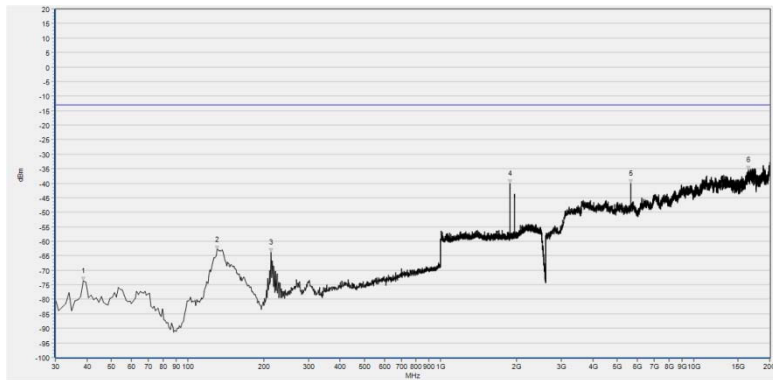
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	38.730	-73.45	-13.00	Horizontal	PASS
2	133.790	-62.96	-13.00	Horizontal	PASS
3	219.150	-66.79	-13.00	Horizontal	PASS
4	1851.541	-39.26	-13.00	Horizontal	PASS
5	5552.209	-39.92	-13.00	Horizontal	PASS
6	12918.494	-36.66	-13.00	Horizontal	PASS

(Plot L1: HSPA+ 1900MHz Channel = 9262, Test Antenna Horizontal)



Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	62.010	-64.24	-13.00	Vertical	PASS
2	211.390	-69.88	-13.00	Vertical	PASS
3	495.600	-73.49	-13.00	Vertical	PASS
4	1852.181	-39.79	-13.00	Vertical	PASS
5	7039.389	-43.80	-13.00	Vertical	PASS
6	16807.310	-34.81	-13.00	Vertical	PASS

(Plot L2: HSPA+ 1900MHz Channel = 9262, Test Antenna Vertical)



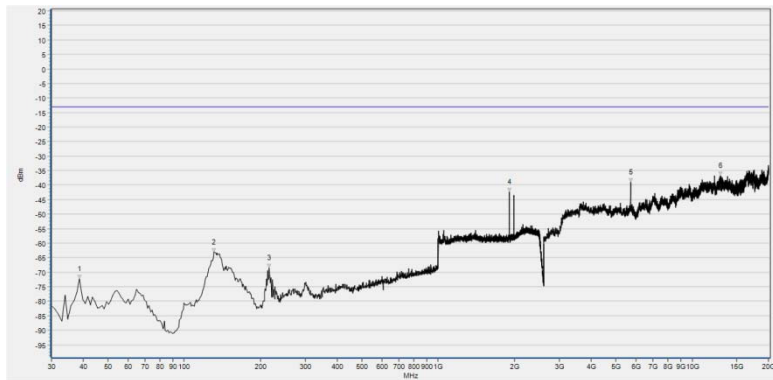
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	38.730	-73.70	-13.00	Horizontal	PASS
2	130.880	-62.86	-13.00	Horizontal	PASS
3	213.330	-63.73	-13.00	Horizontal	PASS
4	1879.072	-40.21	-13.00	Horizontal	PASS
5	5637.643	-40.07	-13.00	Horizontal	PASS
6	16465.576	-35.51	-13.00	Horizontal	PASS

(Plot L3: HSPA+ 1900MHz Channel = 9400, Test Antenna Horizontal)



Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	62.980	-63.44	-13.00	Vertical	PASS
2	219.150	-72.04	-13.00	Vertical	PASS
3	562.530	-72.47	-13.00	Vertical	PASS
4	1879.072	-39.94	-13.00	Vertical	PASS
5	5643.972	-40.41	-13.00	Vertical	PASS
6	12893.181	-36.86	-13.00	Vertical	PASS

(Plot L4: HSPA+ 1900MHz Channel = 9400, Test Antenna Vertical)



Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	38.730	-72.32	-13.00	Horizontal	PASS
2	130.880	-63.19	-13.00	Horizontal	PASS
3	216.240	-68.46	-13.00	Horizontal	PASS
4	1908.523	-42.39	-13.00	Horizontal	PASS
5	5723.077	-39.09	-13.00	Horizontal	PASS
6	12902.673	-36.79	-13.00	Horizontal	PASS

(Plot L5: HSPA+ 1900MHz Channel = 9538, Test Antenna Horizontal)



Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	119.240	-79.12	-13.00	Vertical	PASS
2	208.480	-72.71	-13.00	Vertical	PASS
3	298.690	-74.07	-13.00	Vertical	PASS
4	1908.523	-42.39	-13.00	Vertical	PASS
5	5726.241	-40.09	-13.00	Vertical	PASS
6	16899.073	-34.23	-13.00	Vertical	PASS

(Plot L6: HSPA+ 1900MHz Channel = 9538, Test Antenna Vertical)



## ANNEX A GENERAL INFORMATION

### 1.1 Identification of the Responsible Testing Laboratory

Company Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Department:	Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Responsible Test Lab Manager:	Mr. Su Feng
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

### 1.2 Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

### 1.3 Facilities and Accreditations

Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L3572.

All measurement facilities used to collect the measurement data are located at FL.3, Building A, FeiYang Science Park, Block 67, BaoAn District, Shenzhen, 518101 P. R. China. The test site is constructed in conformance with the requirements of ANSI C63.10-2013 and CISPR Publication 22; the FCC designation number is CN1192.



## 1.4 Test Equipments Utilized

### 1.4.1 Conducted Test Equipments

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
System Simulator	Agilent	E5515C	GB43130131	2017.05.17	2018.05.16
Spectrum Analyzer	Agilent	E7405A	US44210471	2017.05.17	2018.05.16
Power Meter	Agilent	E4418B	GB43318055	2017.05.24	2018.05.23
Power Sensor	Agilent	U2021XA	MY54210011	2017.05.24	2018.05.23
Power Splitter	Weinschel	1506A	NW521	2017.05.24	2018.05.23
Attenuator 1	Resnet	20dB	(n.a.)	2017.05.23	2018.05.22
Attenuator 2	Resnet	3dB	(n.a.)	2017.05.23	2018.05.22
DC Power Supply	Good Will	GPS -3030DD	EF920938	2017.05.24	2018.05.23
Temperature Chamber	CHONGQING HANBA EXPERIMENTAL EQUIPMENT CO.,LTD	HUT705P	(N/A.)	2017.05.24	2018.05.23

### 1.4.2 Auxiliary Test Equipment

Equipment Name	Model No.	Brand Name	Manufacturer	Cal.Date	Cal.Due Date
Computer	T430i	Think Pad	Lenovo	N/A	N/A

**1.4.3 Radiated Test Equipments**

Description	Manufacturer	Model	Serial No.	Cal.Date	Cal.Due
System Simulator	Agilent	E5515C	GB43130131	2017.05.17	2018.05.16
Spectrum Analyzer	Agilent	E7405A	US44210471	2017.05.17	2018.05.16
Anechoic Chamber	Albatross	9m*6m*6m	(n.a.)	2017.01.11	2018.01.10
Test Antenna - Bi-Log	Schwarzbeck	VULB 9163	9163-274	2016.12.09	2017.12.08
Test Antenna - Horn	Schwarzbeck	BBHA 9120C	9120C-384	2017.03.30	2018.03.29
Pre-amplifier	Mini Circuits	46732	S10M100L380 2	2017.07.13	2018.07.12

\*\*\*\*\* END OF REPORT \*\*\*\*\*