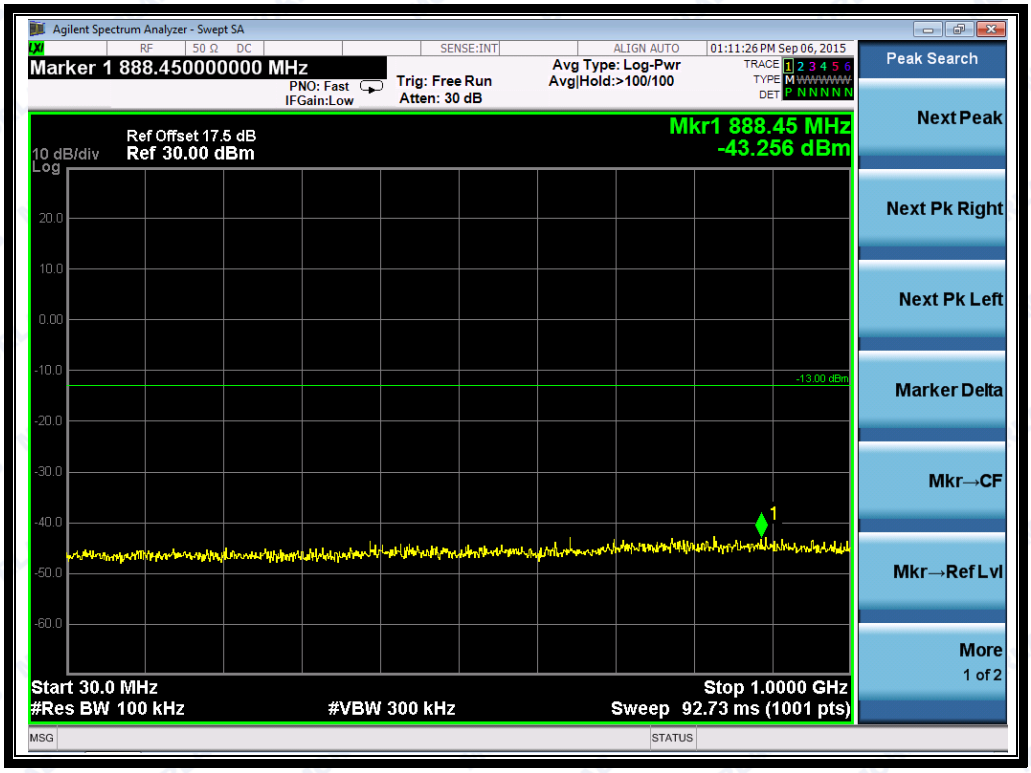
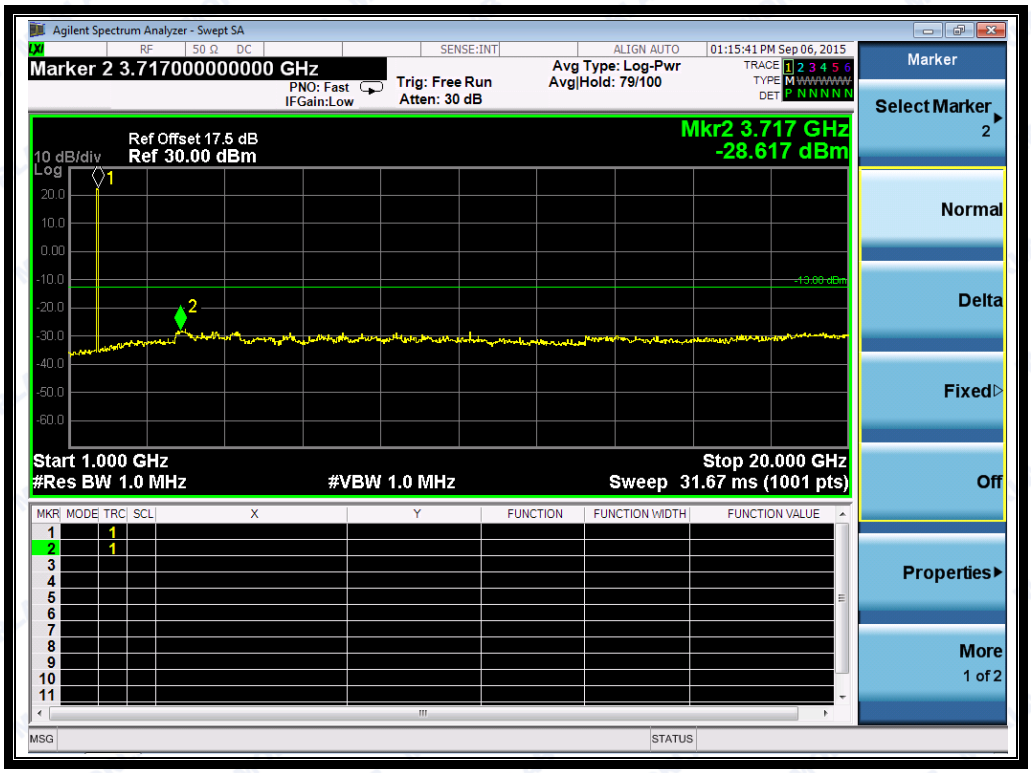
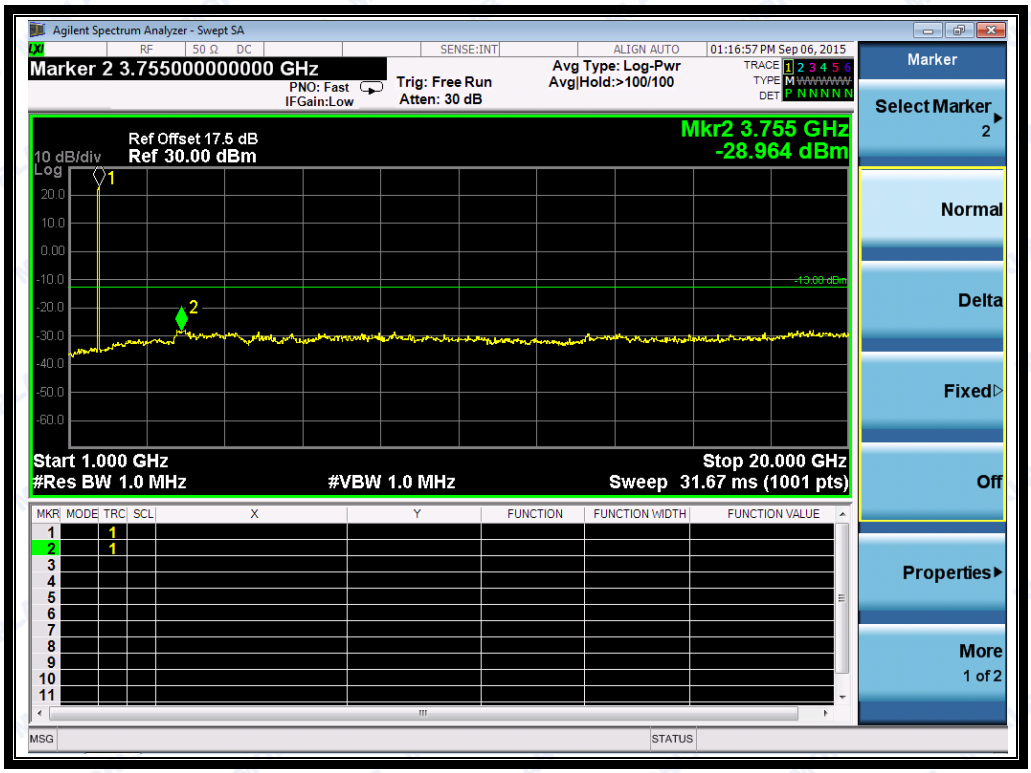


(Plot K1: HSDPA 1700MHz Channel = 1312, 30MHz to 1GHz)

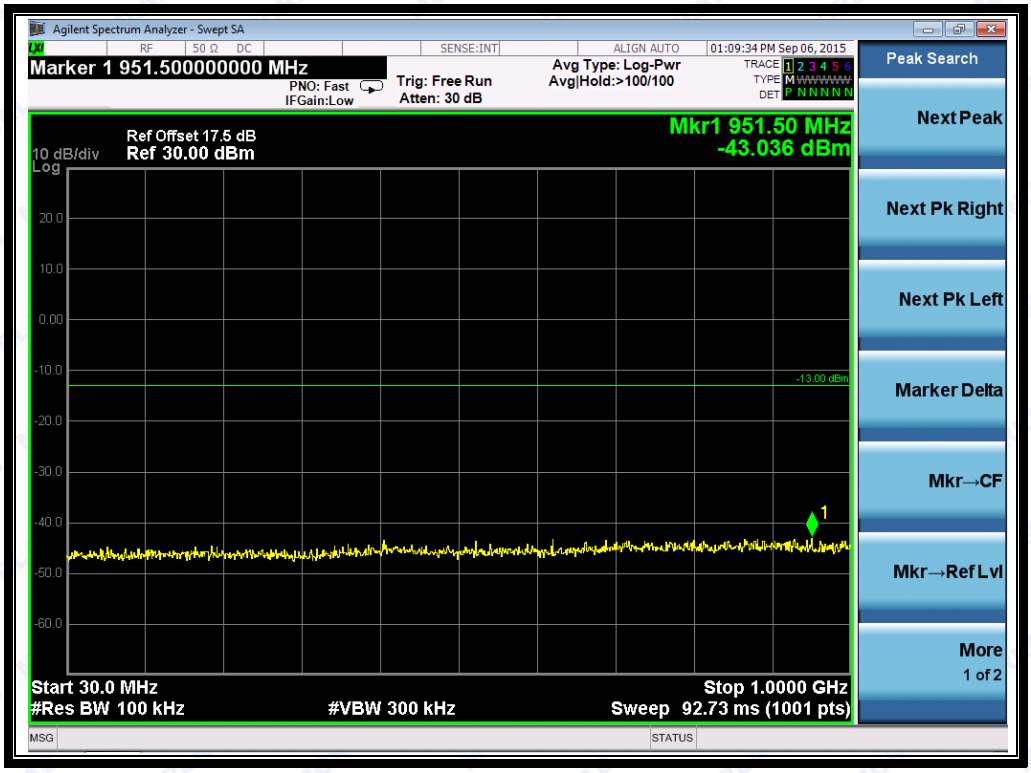


(Plot K1.1: HSDPA 1700MHz Channel = 1312, 1GHz to 20GHz)

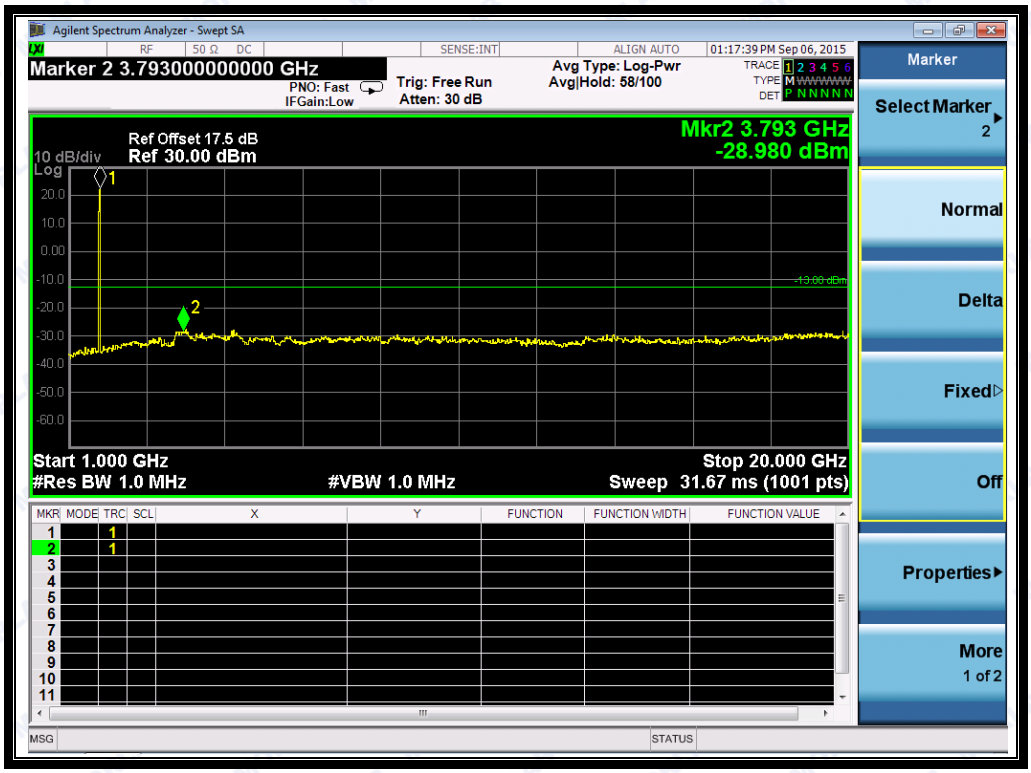
(Plot K2: HSDPA 1700MHz Channel = 1412, 30MHz to 1GHz)



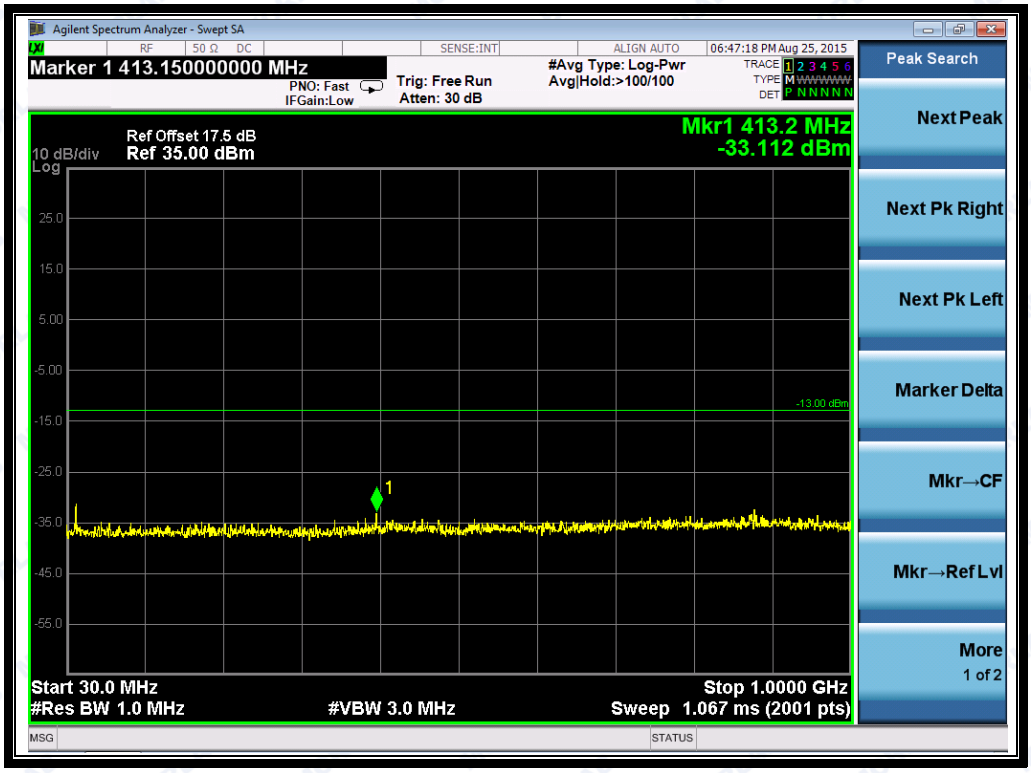
(Plot K2.1: HSDPA1700MHz Channel = 1412, 1GHz to 20GHz)



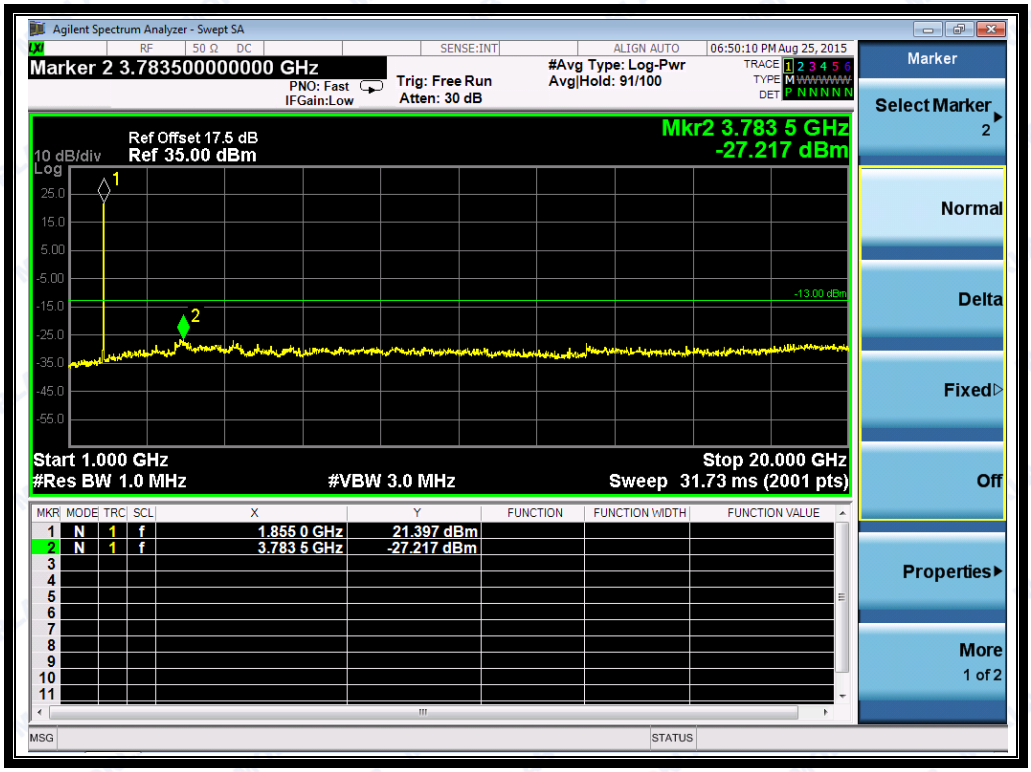
(Plot K3: HSDPA1700MHz Channel = 1513, 30MHz to 1GHz)



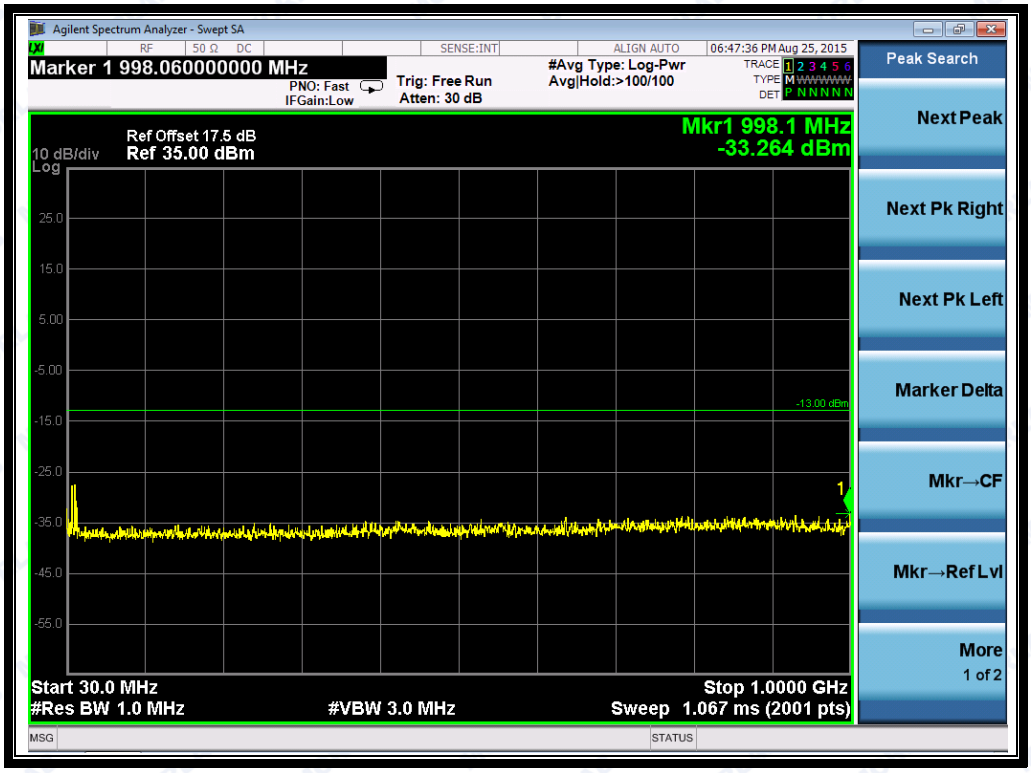
(Plot K3.1: HSDPA1700MHz Channel = 1513 1GHz to 20GHz)



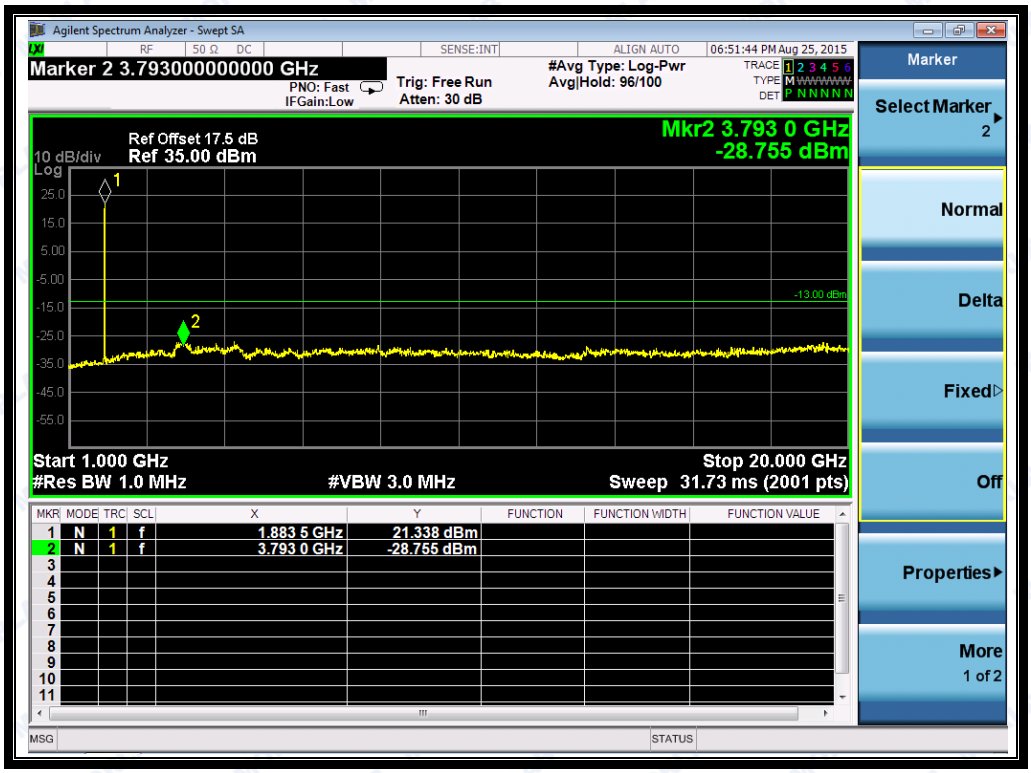
(Plot L1: HSDPA 1900MHz Channel = 9262, 30MHz to 1GHz)



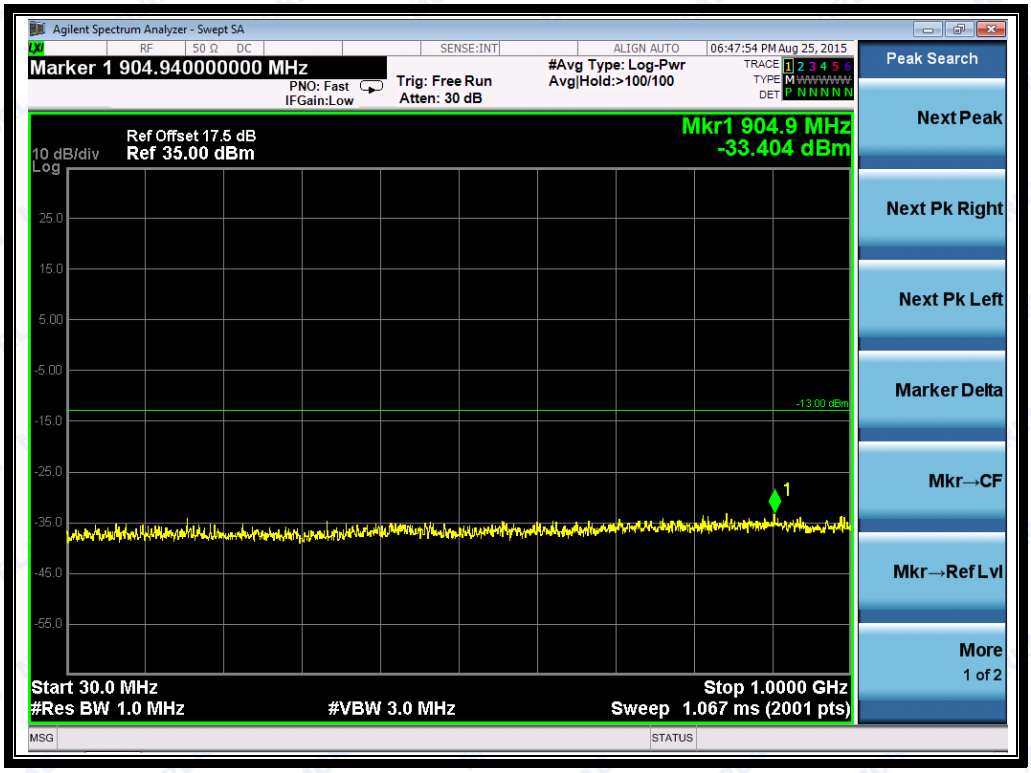
(Plot L1.1: HSDPA 1900MHz Channel = 9262, 1GHz to 20GHz)



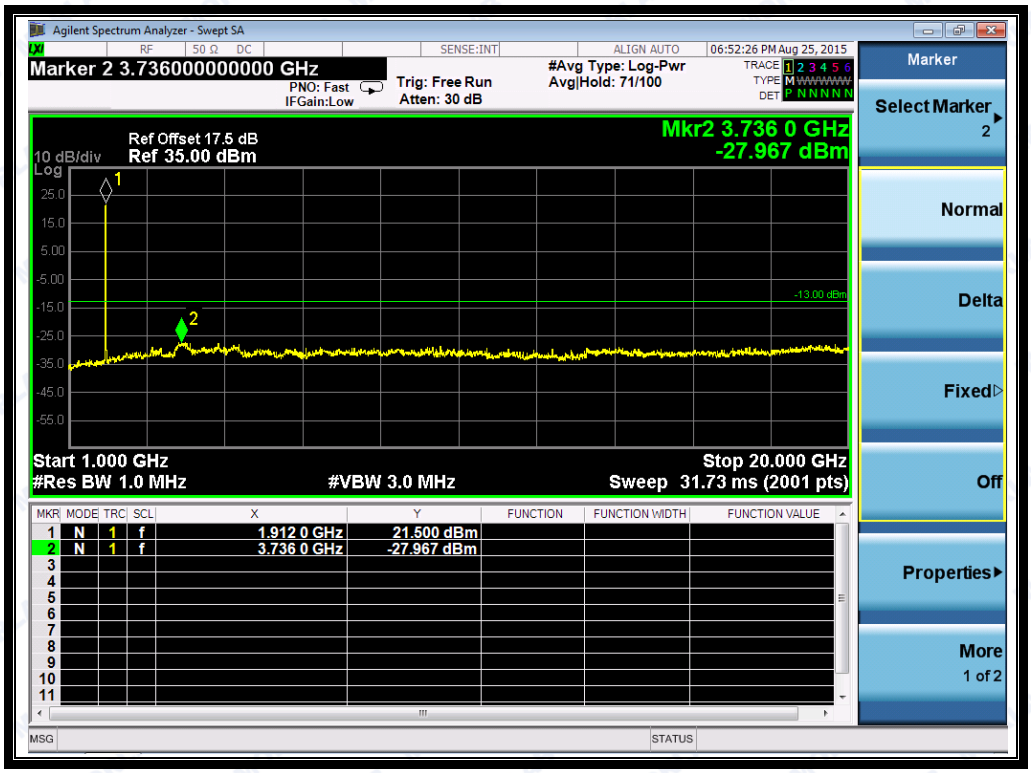
(Plot L2: HSDPA 1900MHz Channel = 9400, 30MHz to 1GHz)



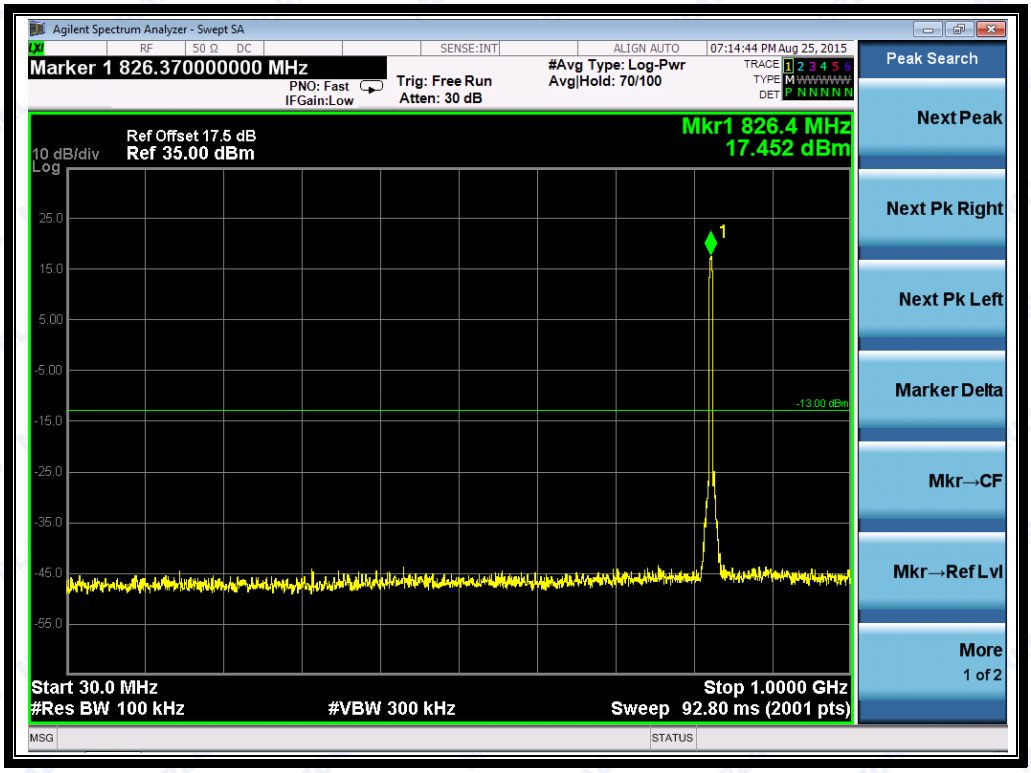
(Plot L2.1: HSDPA1900MHz Channel = 9400, 1GHz to 20GHz)



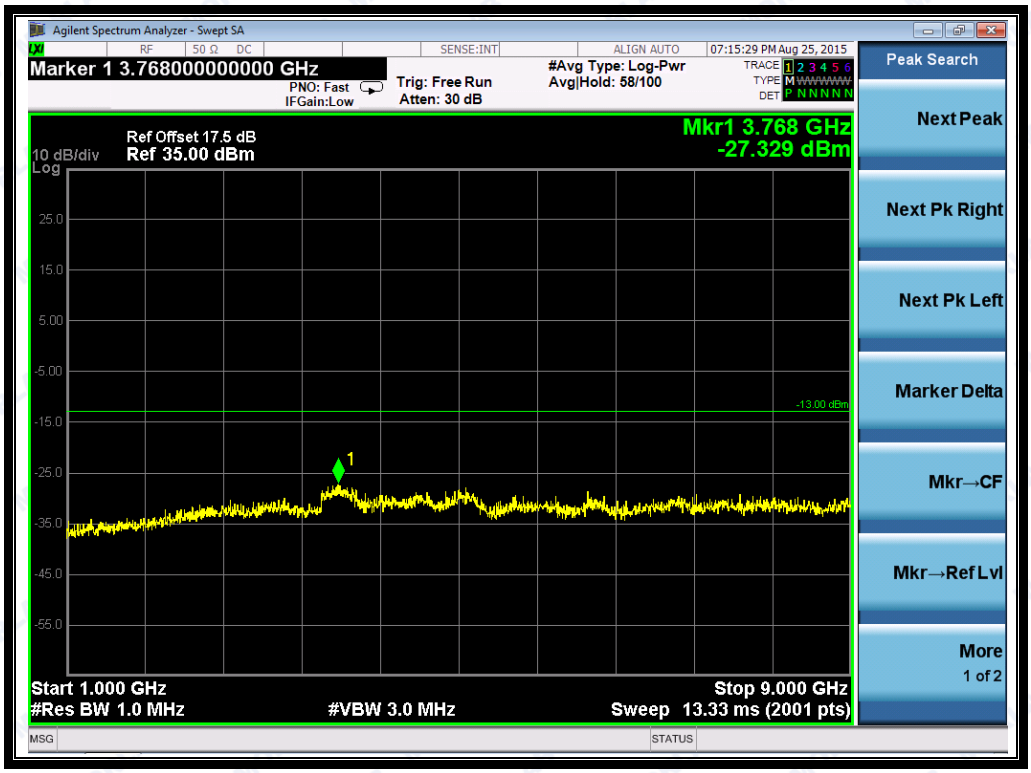
(Plot L3: HSDPA1900MHz Channel = 9538, 30MHz to 1GHz)



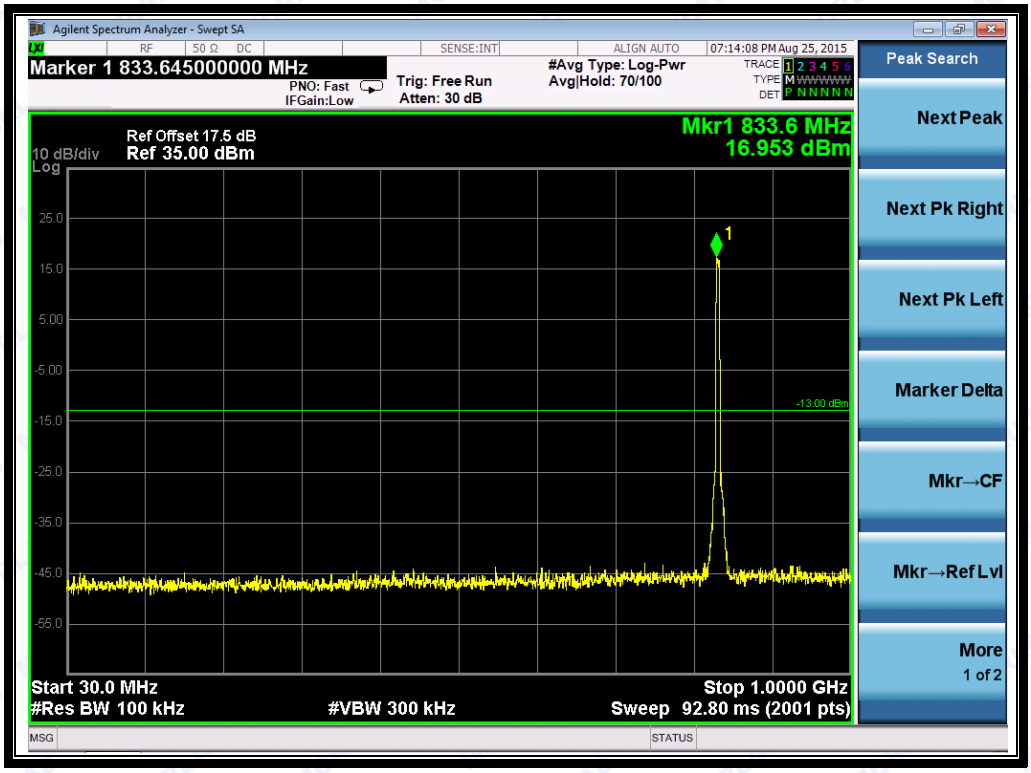
(Plot L3.1: HSDPA1900MHz Channel = 9538 1GHz to 20GHz)



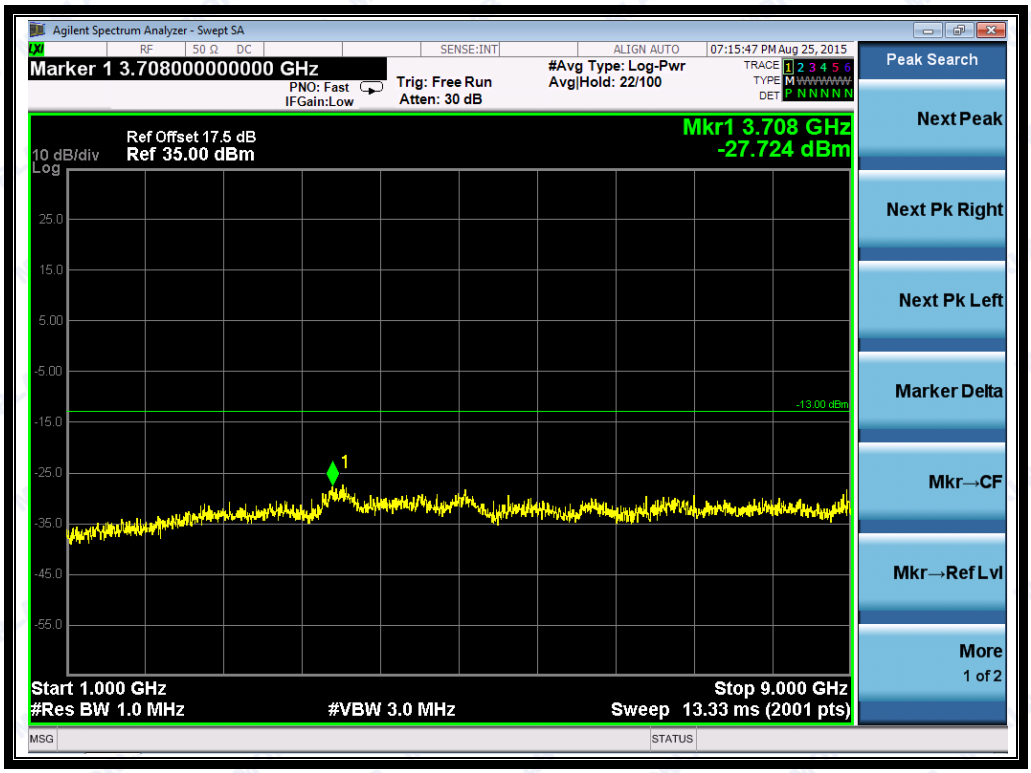
(Plot M1: HSUPA 850MHz Channel = 4132, 30MHz to 1GHz)



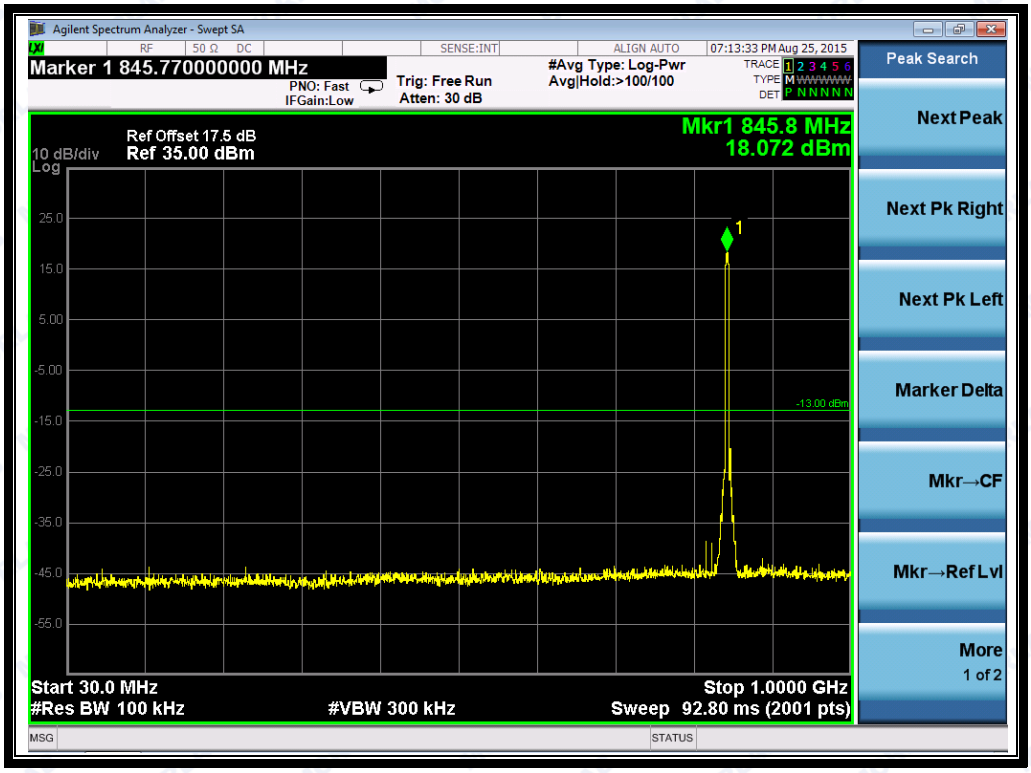
(Plot M1.1: HSUPA 850MHz Channel = 4132, 1GHz to 9GHz)



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

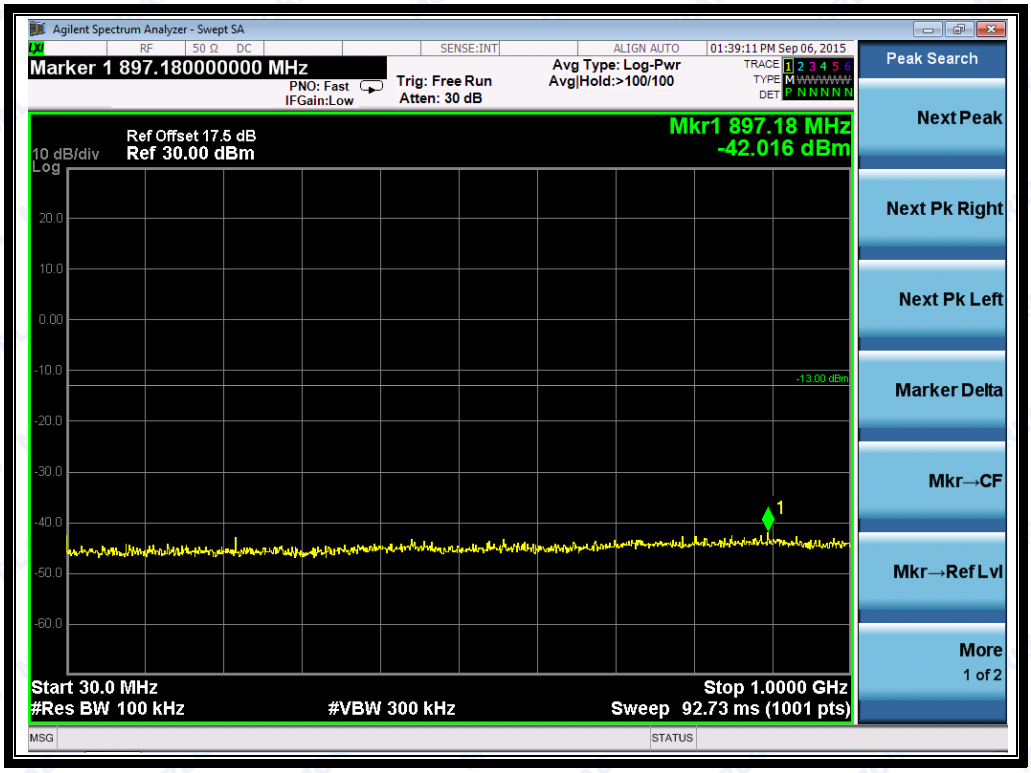


(Plot M2.1: HSUPA 850MHz Channel = 4175, 1GHz to 9GHz)

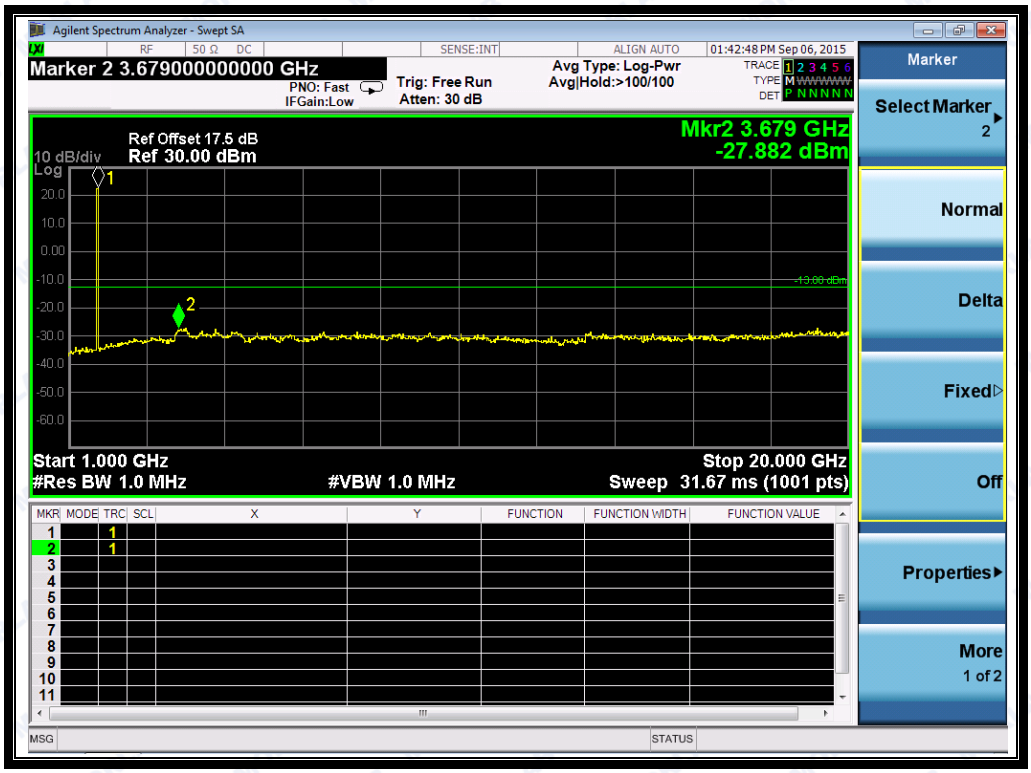


(Plot M3: HSUPA 850MHz Channel = 4233, 30MHz to 1GHz)

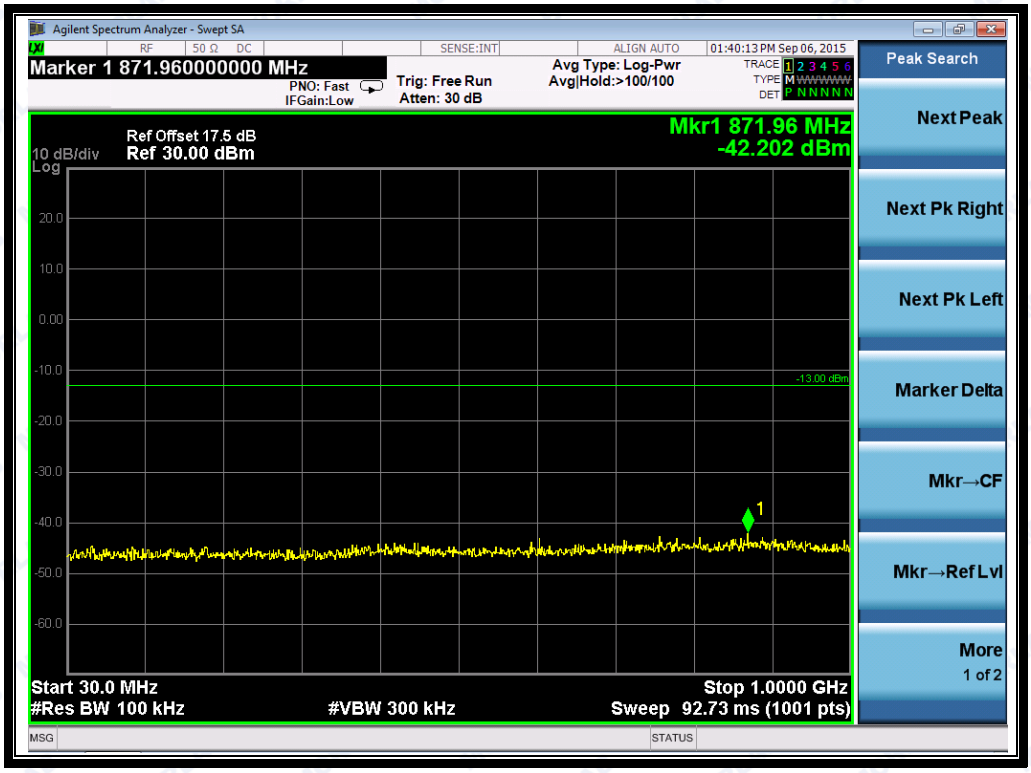
(Plot M3.1: HSUPA 850MHz Channel = 4233, 1GHz to 9GHz)



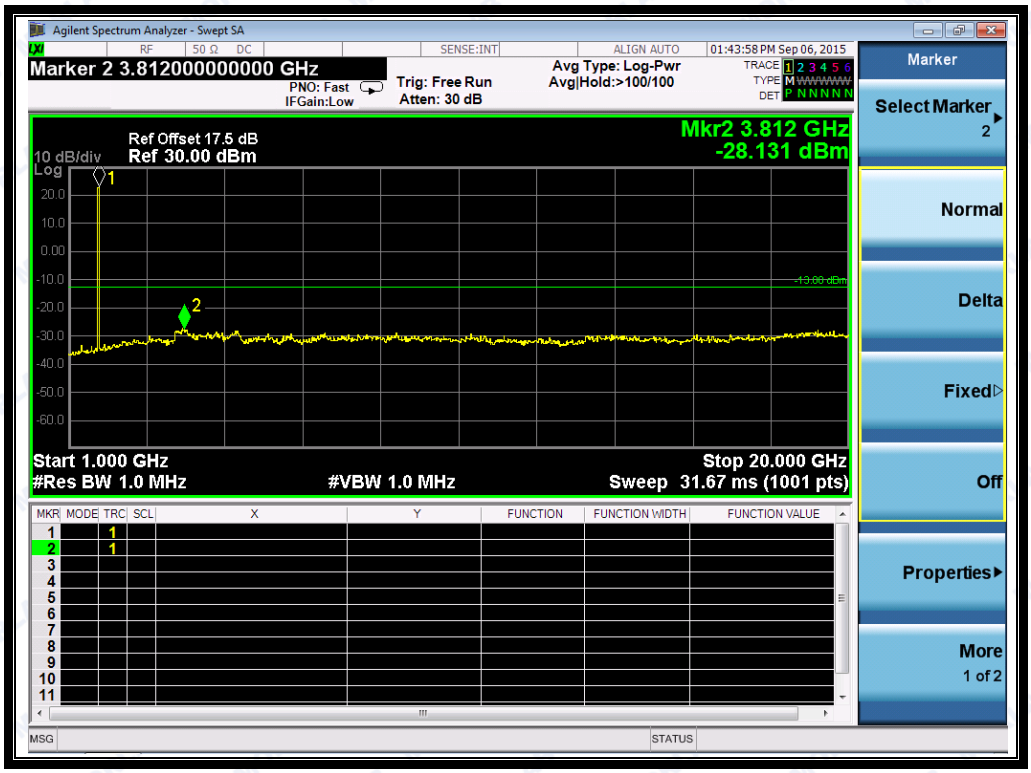
(Plot N1: HSUPA 1700MHz Channel = 1312, 30MHz to 1GHz)



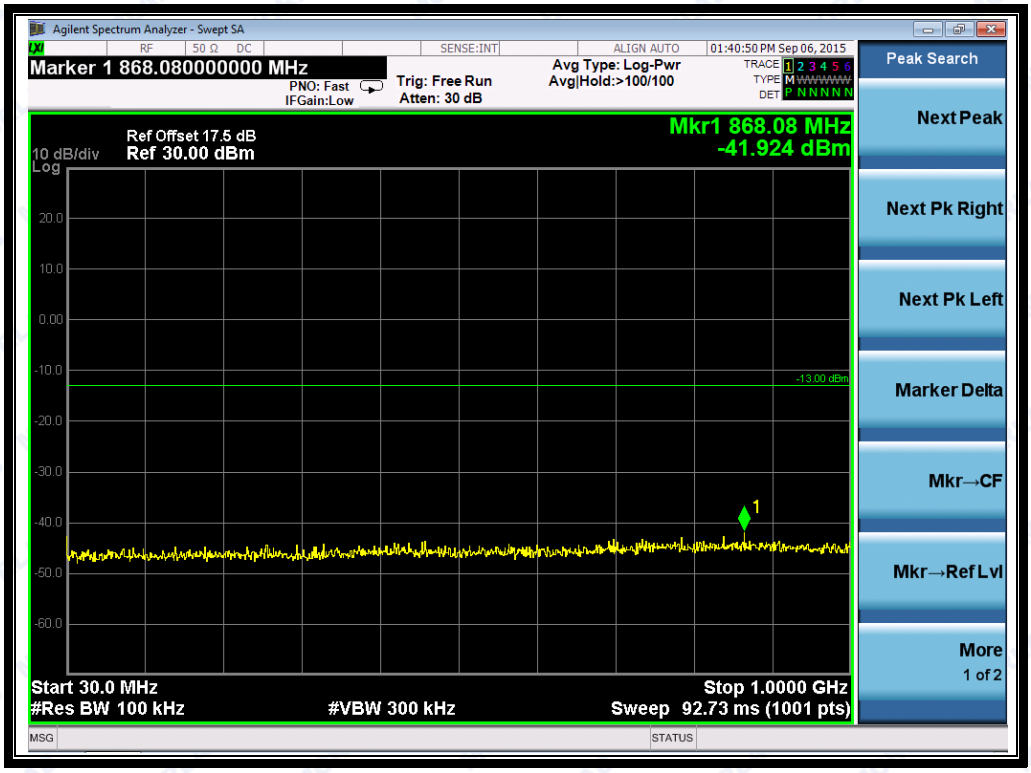
(Plot N1.1: HSUPA 1700MHz Channel = 1312, 1GHz to 20GHz)



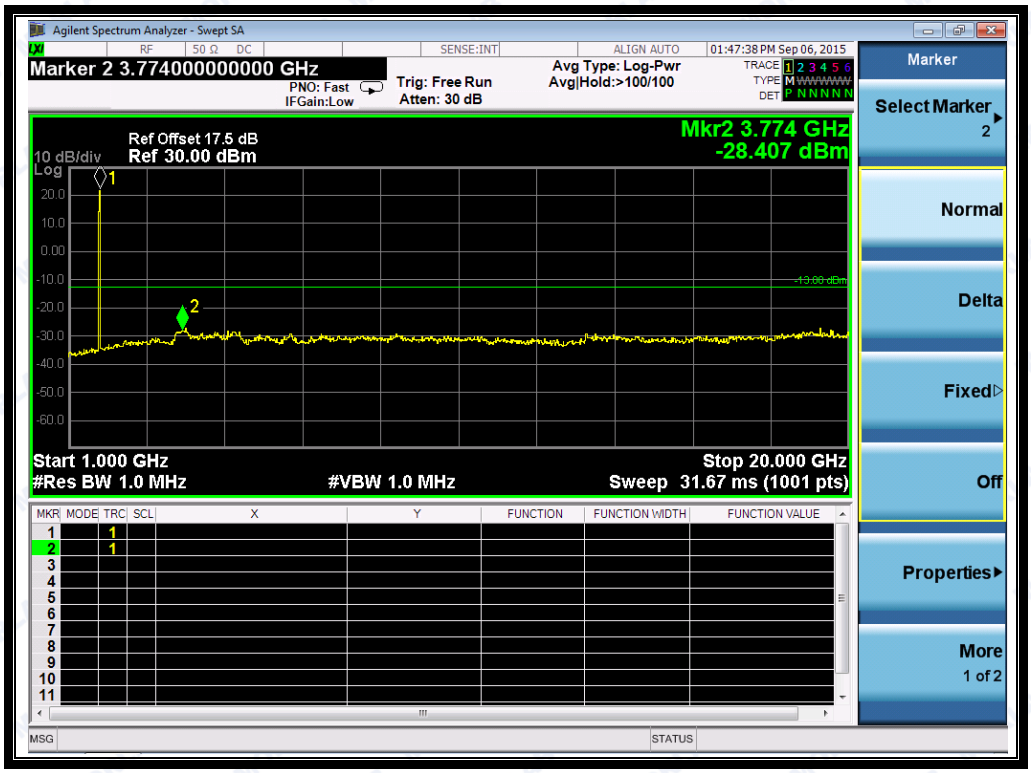
(Plot N2: HSUPA 1700MHz Channel = 1412, 30MHz to 1GHz)



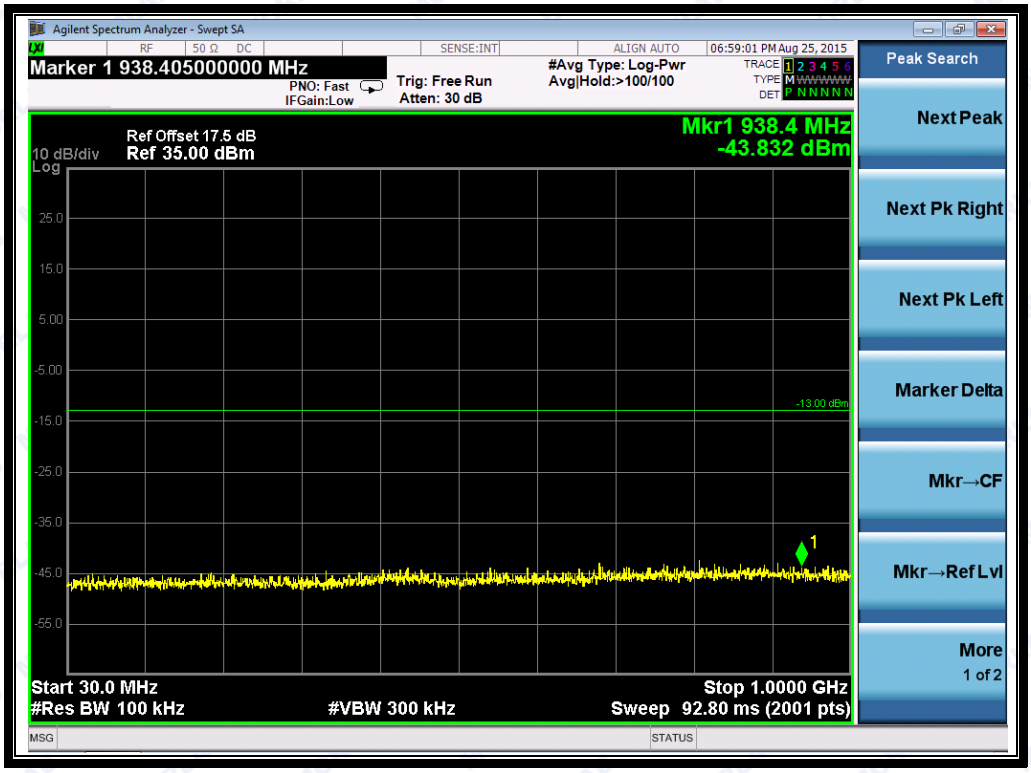
(Plot N2.1: HSUPA1700MHz Channel = 1412, 1GHz to 20GHz)



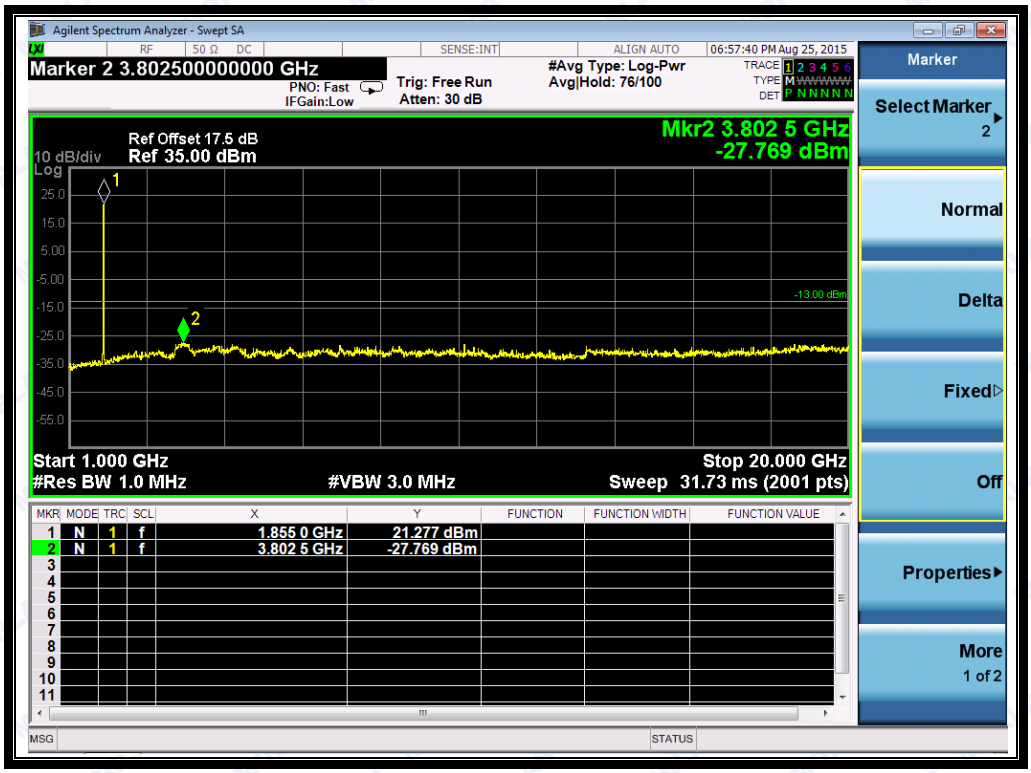
(Plot N3: HSUPA1700MHz Channel = 1513, 30MHz to 1GHz)



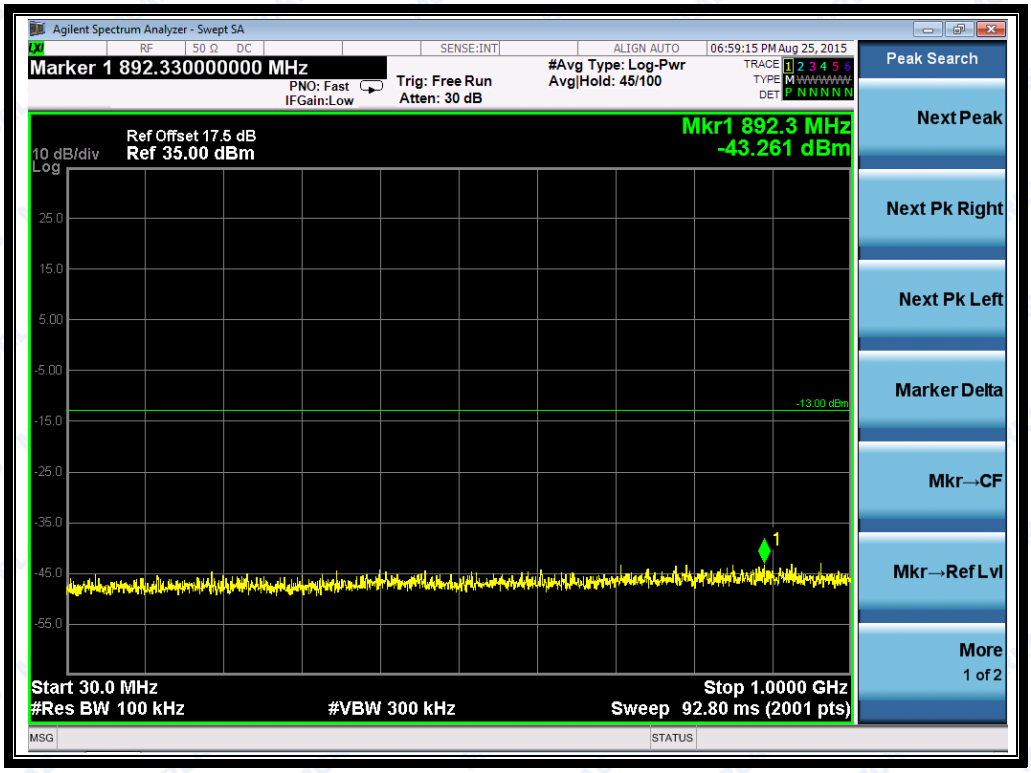
(Plot N3.1: HSUPA1700MHz Channel = 1513, 1GHz to 20GHz)



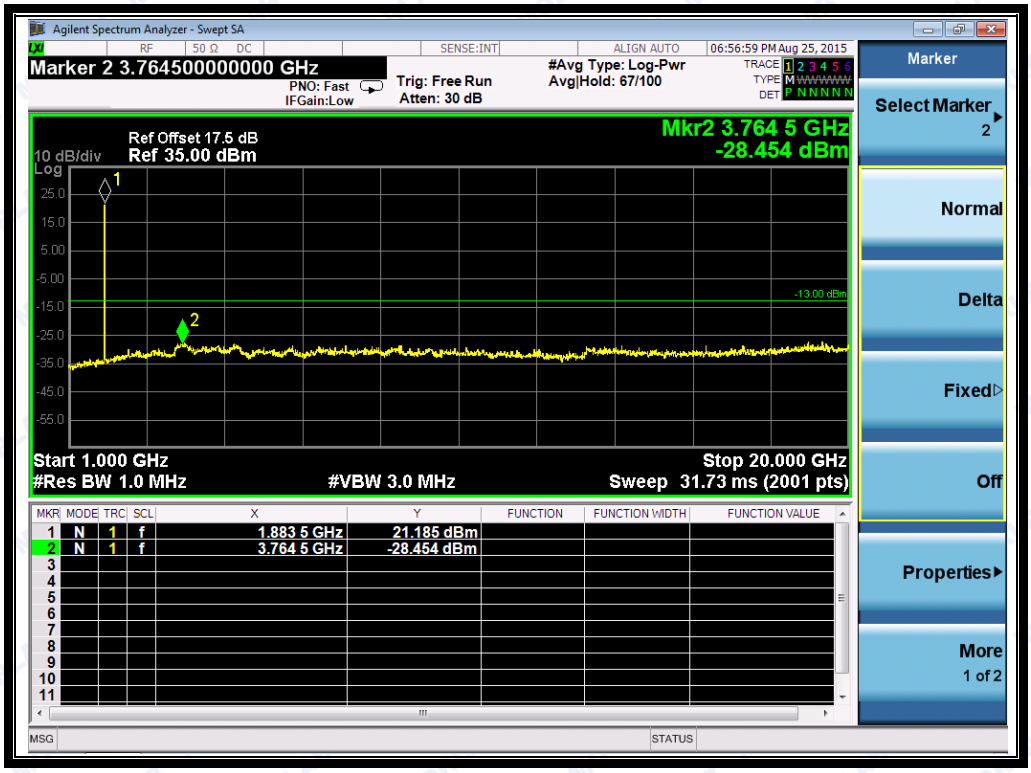
(Plot O1: HSUPA 1900MHz Channel = 9262, 30MHz to 1GHz)



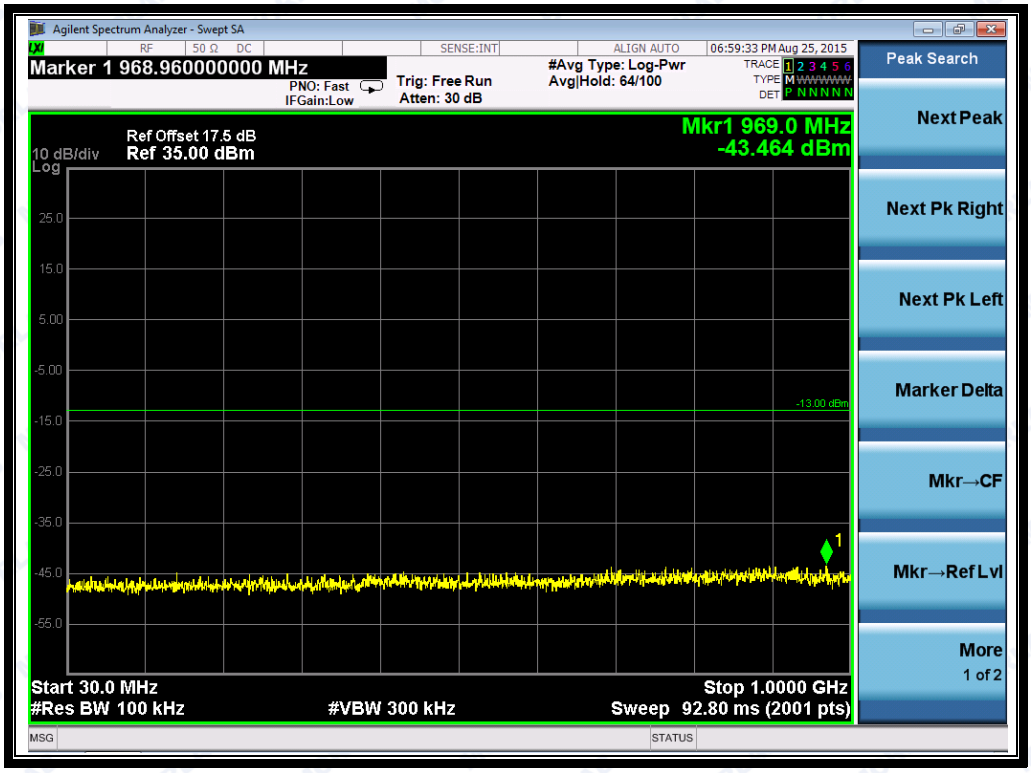
(Plot O1.1: HSUPA 1900MHz Channel = 9262, 1GHz to 20GHz)



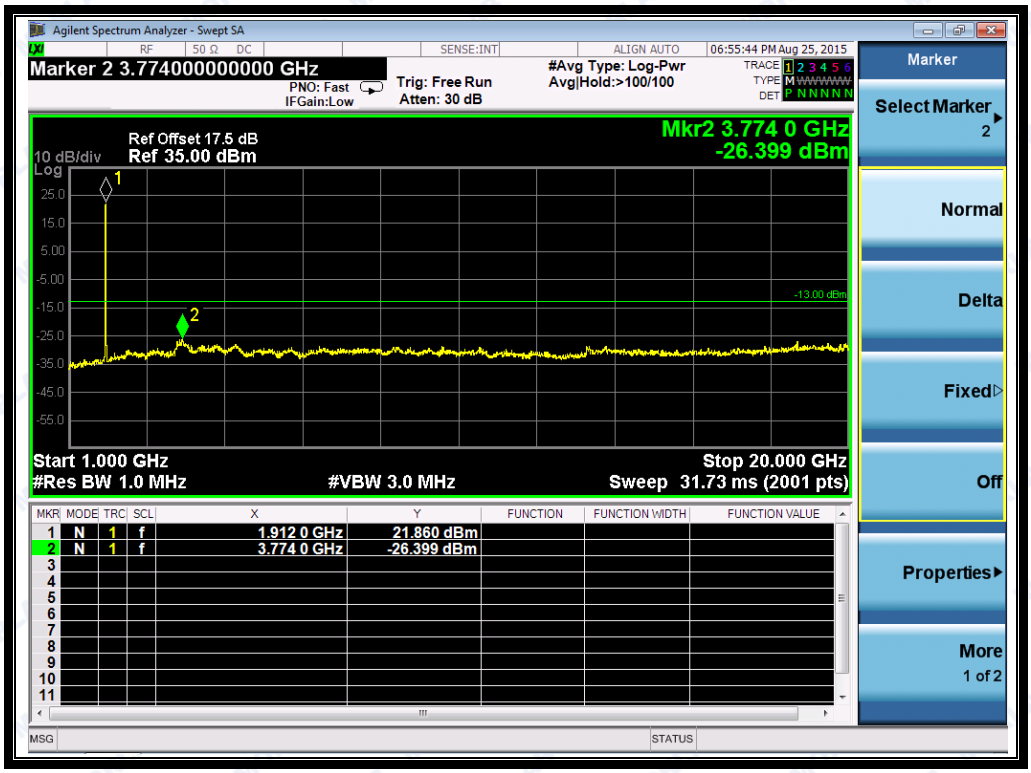
(Plot O2: HSUPA 1900MHz Channel = 9400, 30MHz to 1GHz)



(Plot O2.1: HSUPA1900MHz Channel = 9400, 1GHz to 20GHz)



(Plot O3: HSUPA1900MHz Channel = 9538, 30MHz to 1GHz)



(Plot O3.1: HSUPA1900MHz 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.

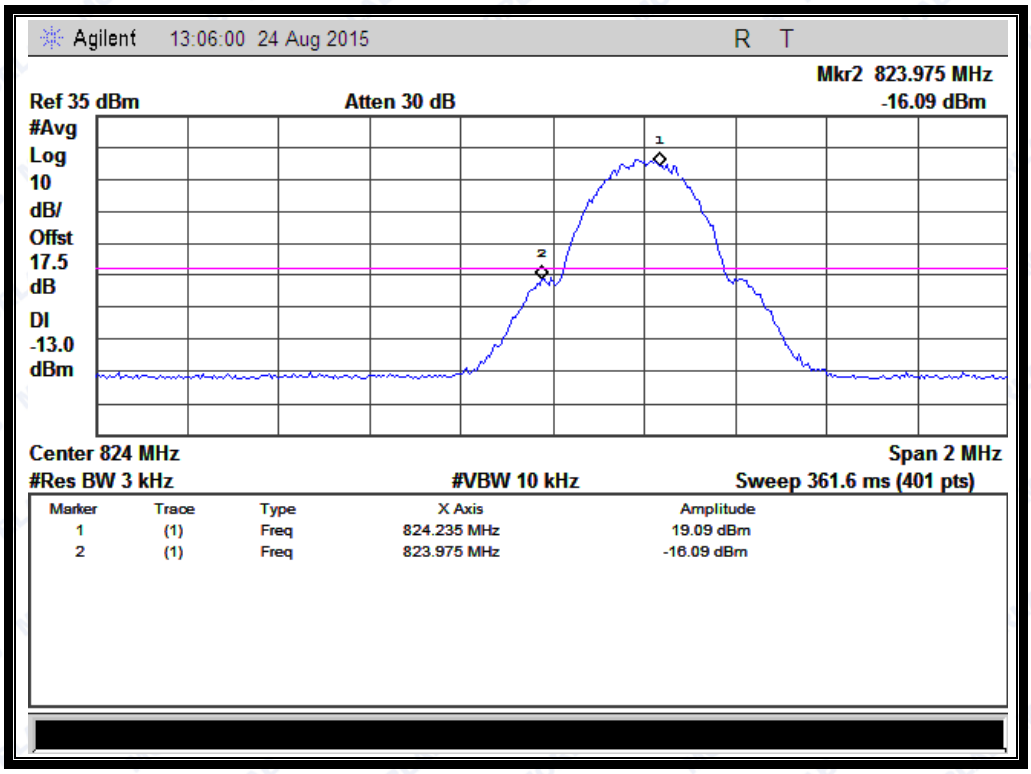
2.6.3 Test Result

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

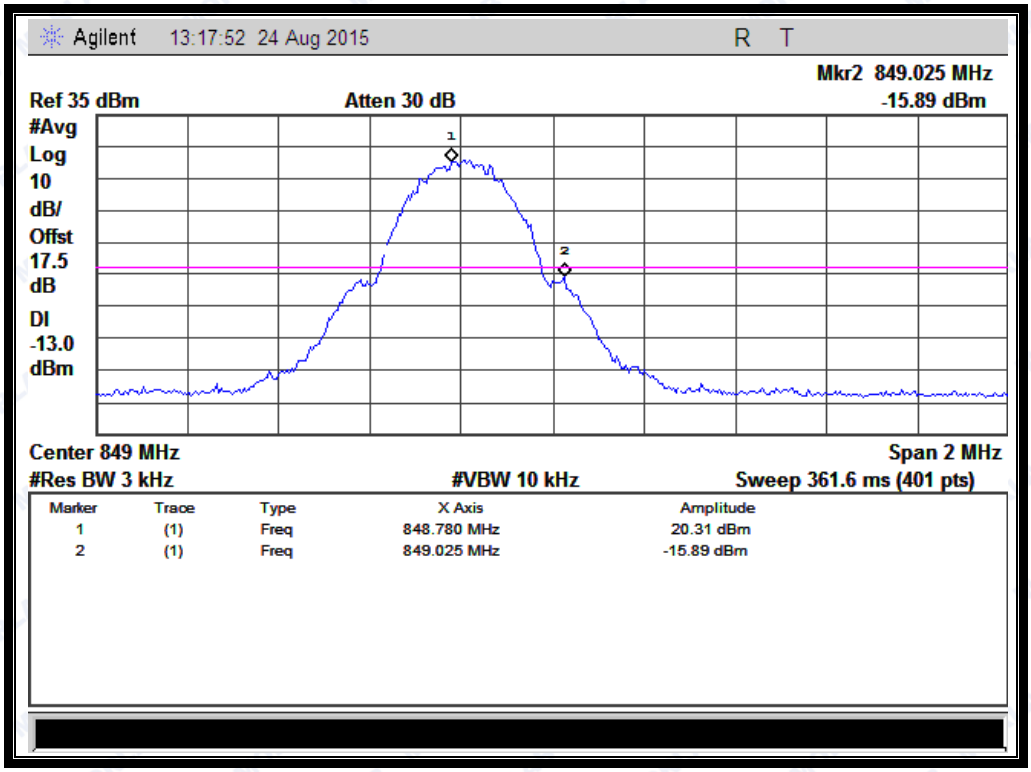
Test Verdict:

Band	Channel	Frequency (MHz)	Measured Max. Band Edge Emission (dBm)	Refer to Plot	Limit (dBm)	Verdict
GSM 850MHz	128	824.2	-16.09	Plat A1	-13	PASS
	251	848.8	-15.89	Plot A2		PASS
GSM 1900MHz	512	1850.2	-21.99	Plat B1	-13	PASS
	810	1909.8	-22.63	Plot B2		PASS
EGPRS 850MHz	128	824.2	-19.09	Plat C1	-13	PASS
	251	848.8	-28.36	Plot C2		PASS
EGPRS 1900MHz	512	1850.2	-28.11	Plat D1	-13	PASS
	810	1909.8	-30.91	Plot D2		PASS
WCDMA 850MHz	4132	826.4	-25.040	Plat E1	-13	PASS
	4233	846.6	-26.145	Plot E2		PASS
WCDMA 1700MHz	1312	1712.4	-16.345	Plat F1	-13	PASS
	1513	1752.6	-17.477	Plot F2		PASS
WCDMA 1900MHz	9262	1852.4	-24.654	Plat G1	-13	PASS
	9538	1907.6	-22.253	Plot G2		PASS
HSDPA 850MHz	4132	826.4	-24.409	Plat H1	-13	PASS
	4233	846.6	-27.014	Plot H2		PASS
HSDPA 1700MHz	1312	1712.4	-16.454	Plat I1	-13	PASS
	1513	1752.6	-17.712	Plot I2		PASS
HSDPA 1900MHz	9262	1852.4	-24.539	Plat J1	-13	PASS
	9538	1907.6	-23.399	Plot J2		PASS
HSUPA 850MHz	4132	826.4	-25.852	Plat K1	-13	PASS
	4233	846.6	-27.481	Plot K2		PASS
HSUPA 1700MHz	1312	1712.4	-18.049	Plat L1	-13	PASS
	1513	1752.6	-17.529	Plot L2		PASS
HSUPA 1900MHz	9262	1852.4	-29.010	Plat M1	-13	PASS
	9538	1907.6	-20.323	Plot M2		PASS

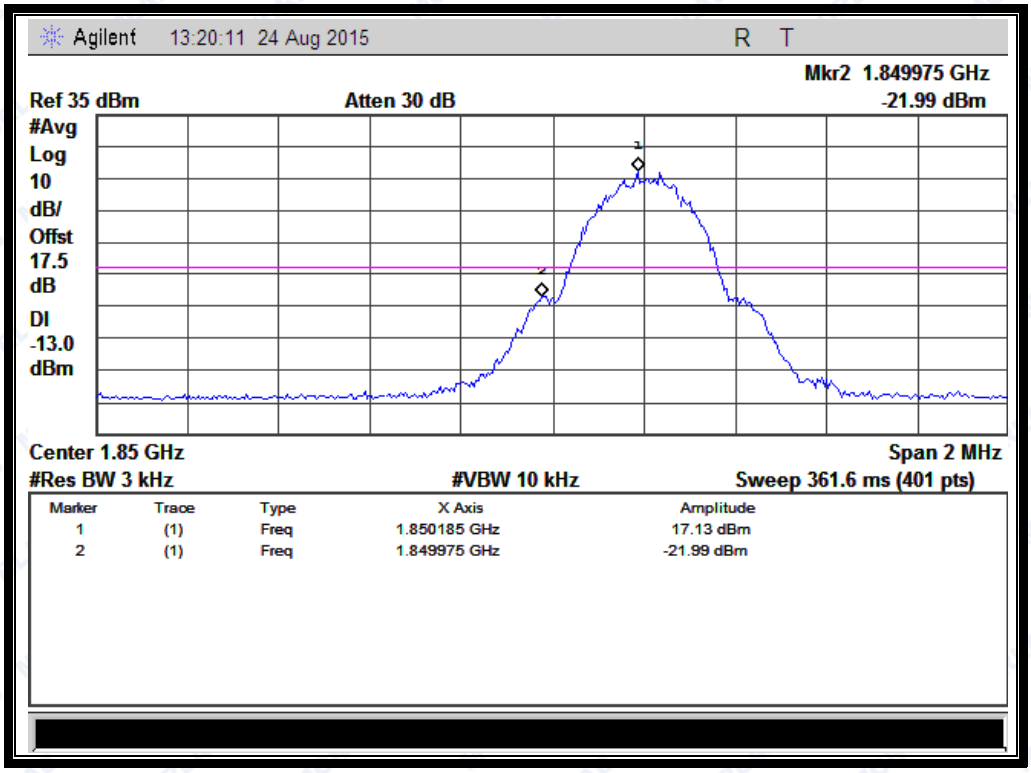
Test Plots:



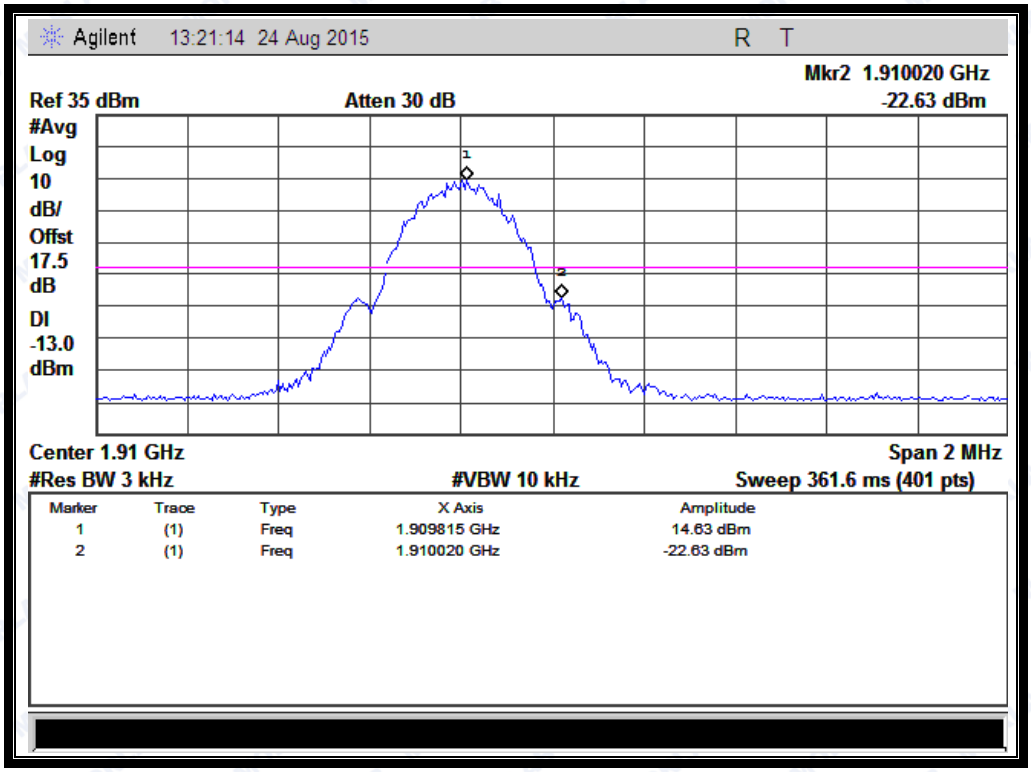
(Plot A1: GSM 850 Channel = 128)



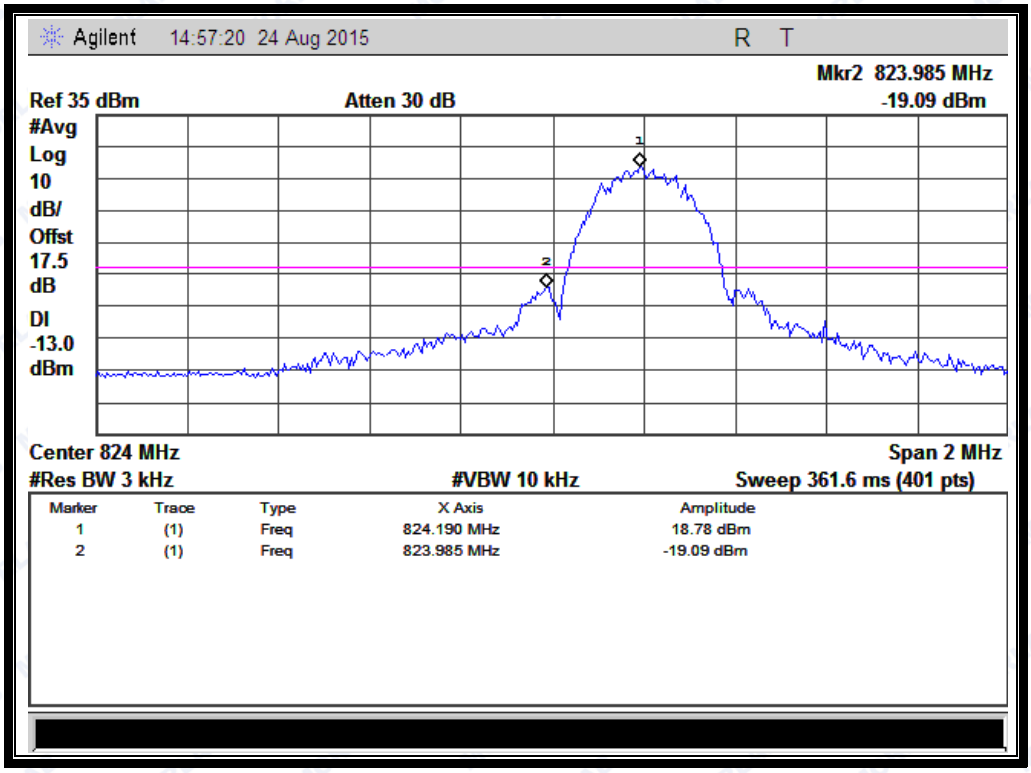
(Plot A2: GSM 850 Channel = 251)



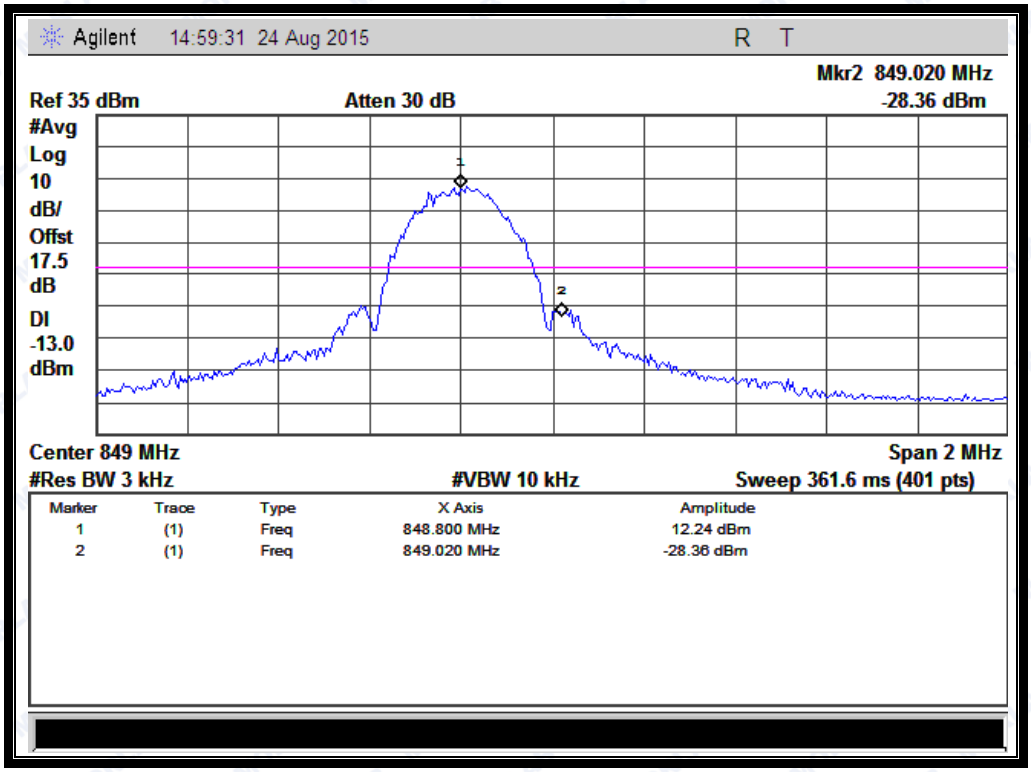
(Plot B1: GSM 1900 Channel = 512)



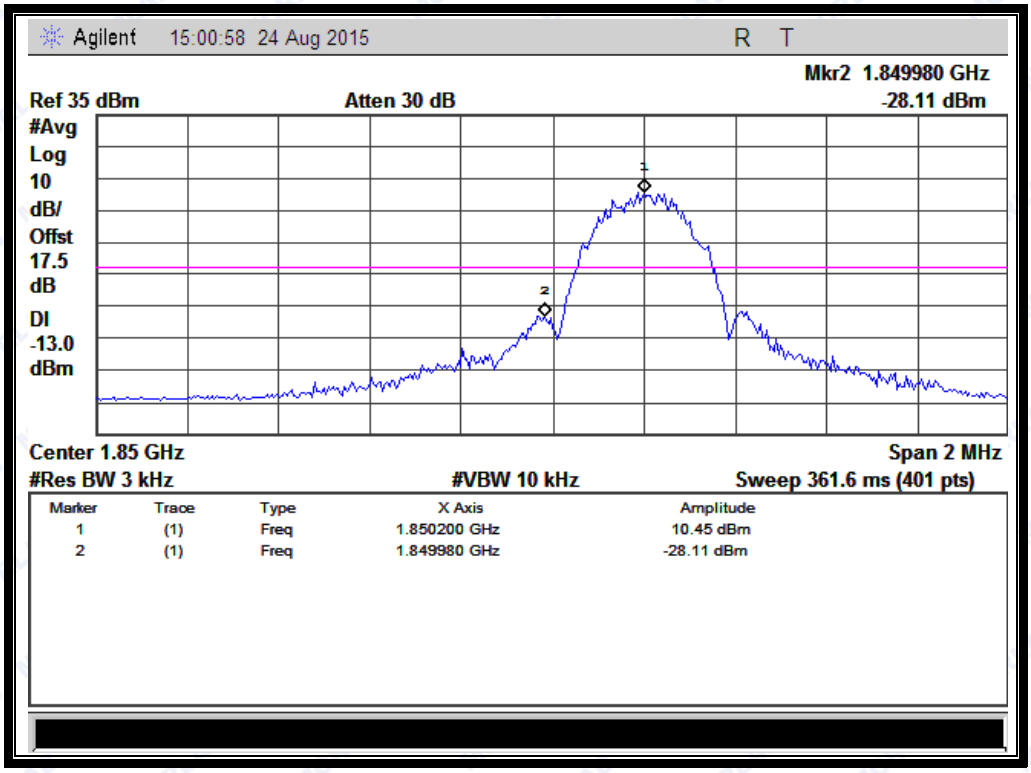
(Plot B2: GSM 1900 Channel = 810)



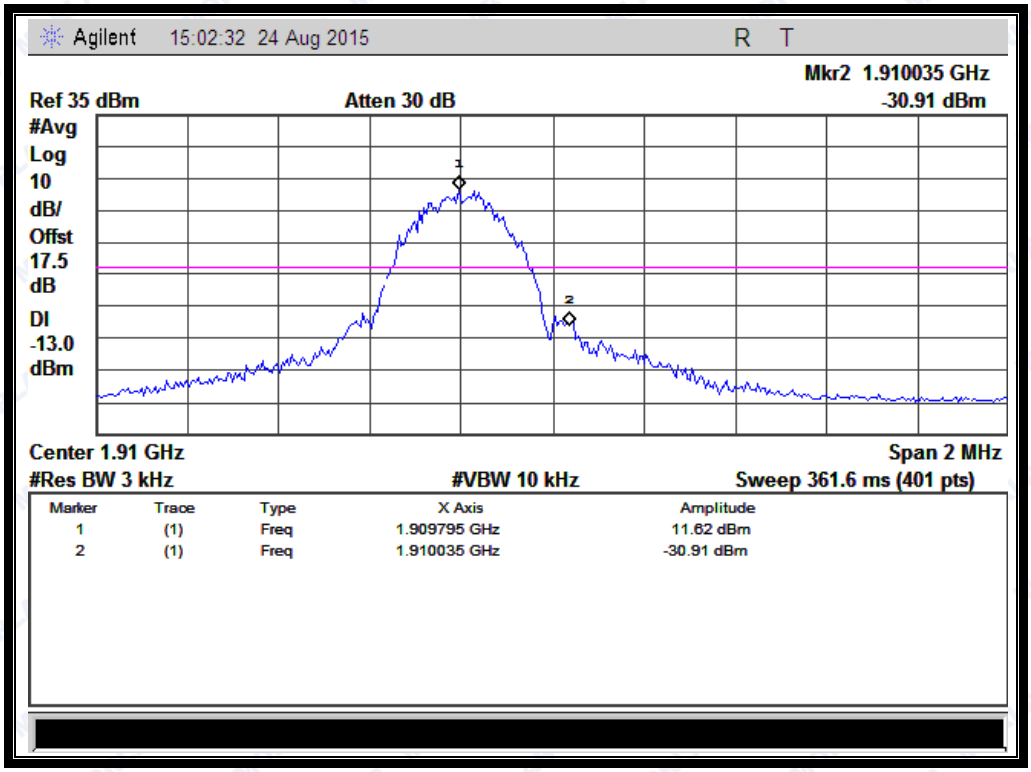
(Plot C1: EGPRS 850 Channel = 128)



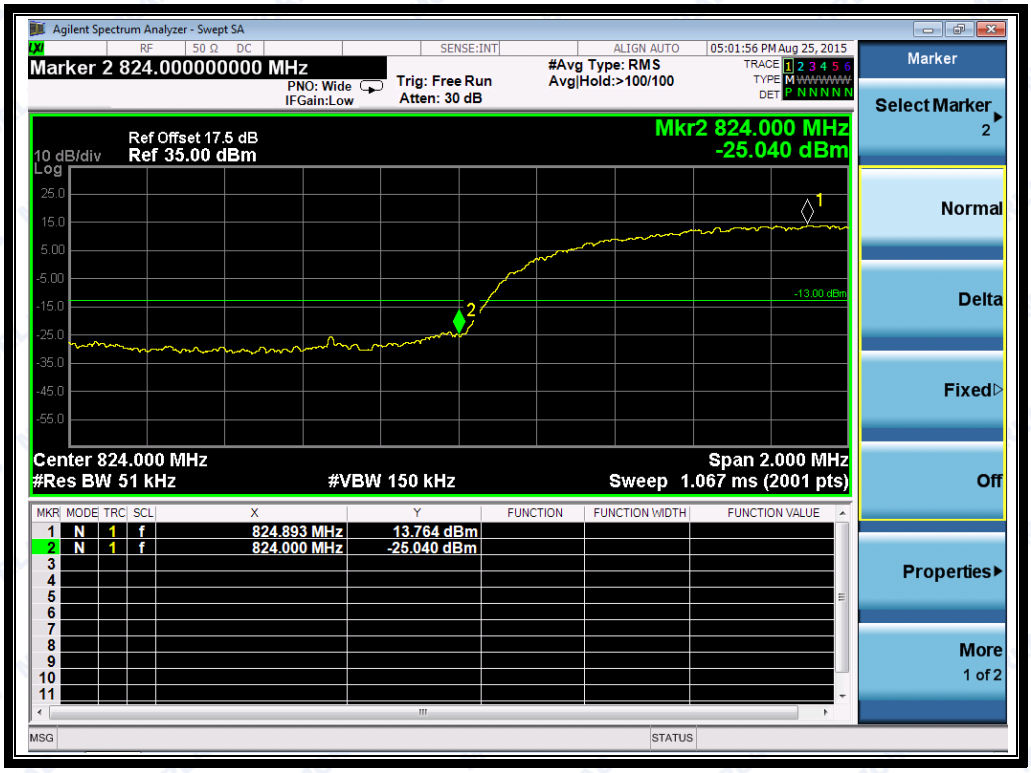
(Plot C2: EGPRS 850 Channel = 251)



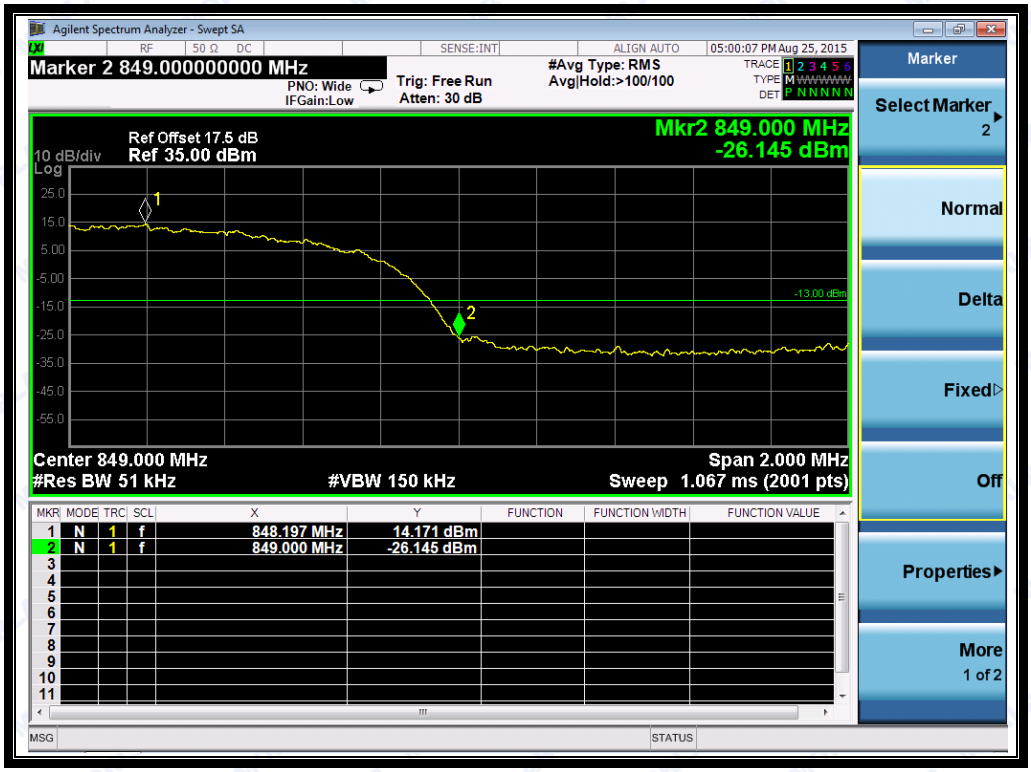
(Plot D1: EGPRS 1900 Channel = 512)



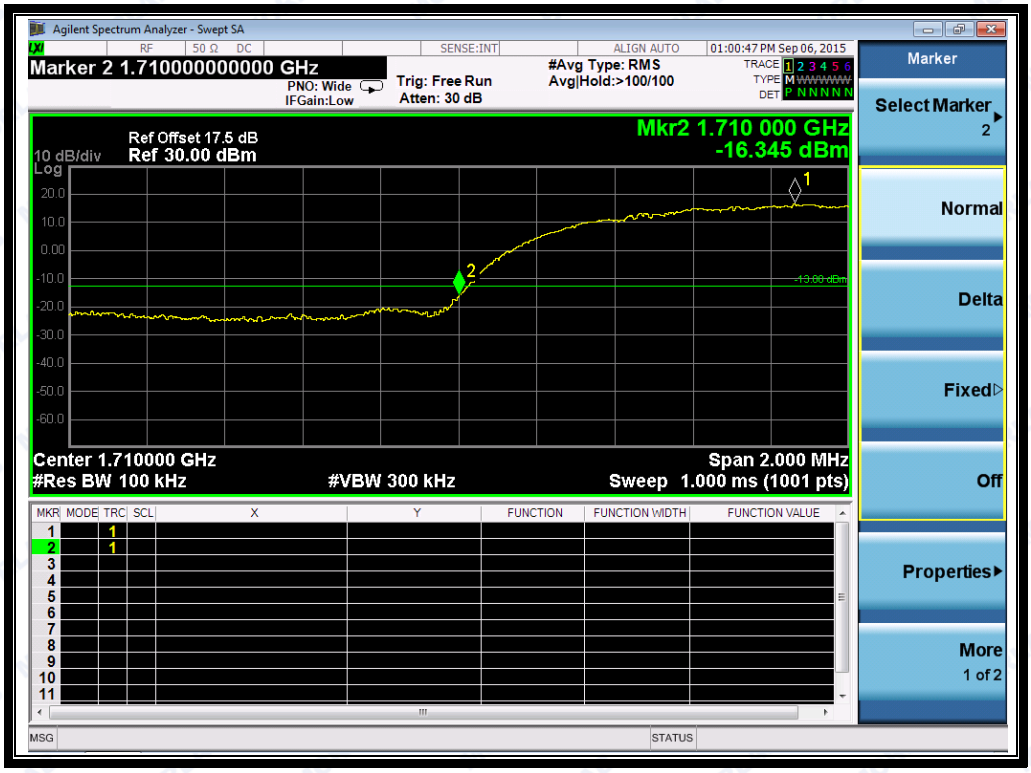
(Plot D2: EGPRS 1900 Channel = 810)



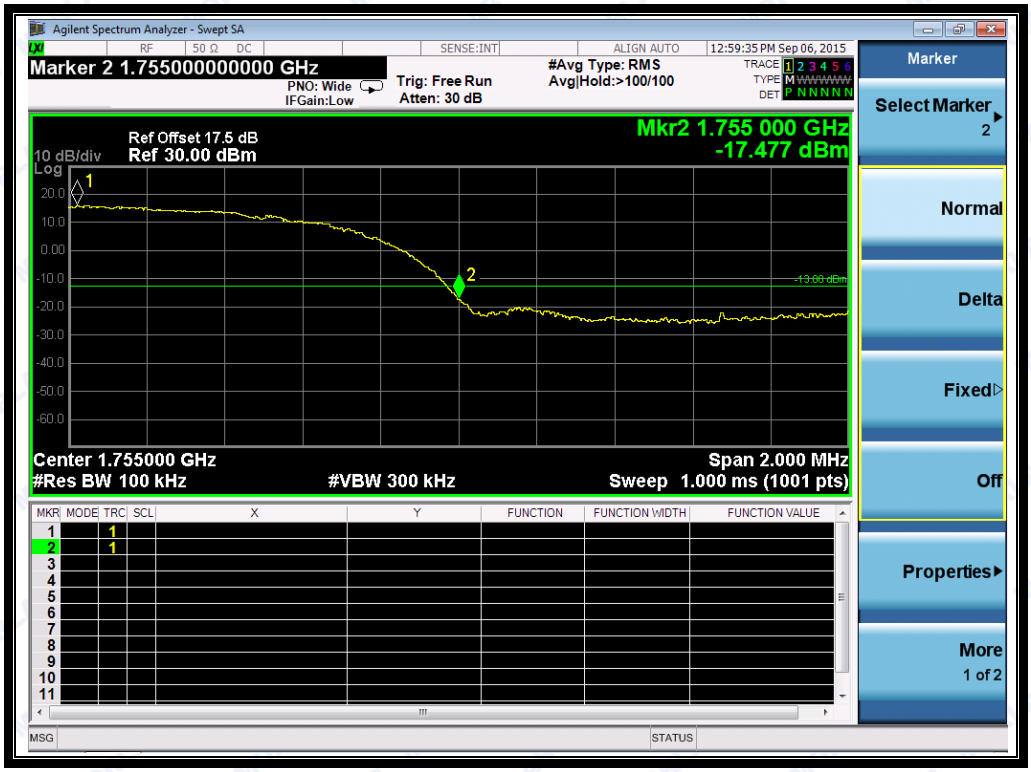
(Plot E1: WCDMA 850 Channel = 4132)



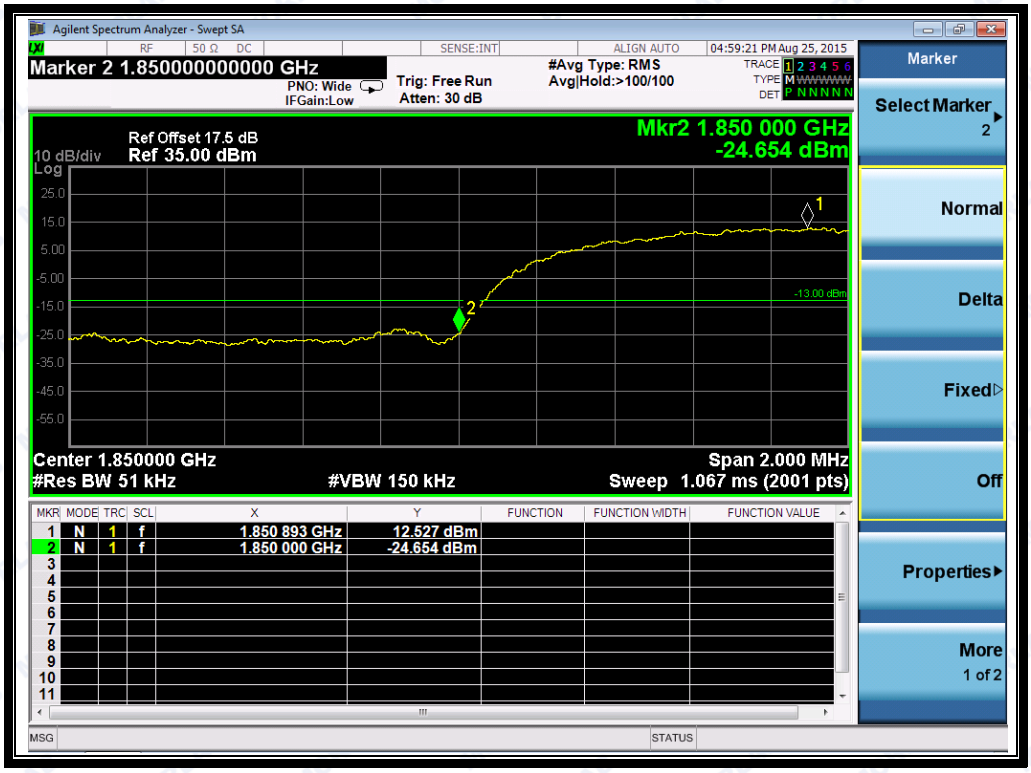
(Plot E2: WCDMA 850 Channel = 4233)



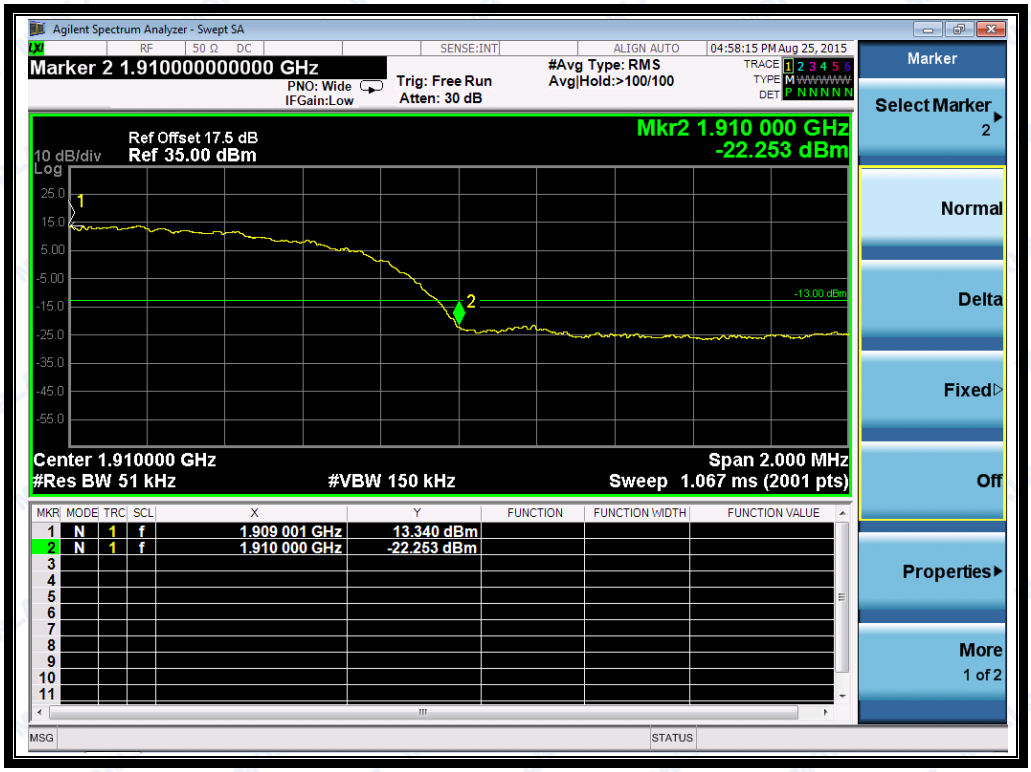
(Plot F1: WCDMA 1700 Channel = 1312)



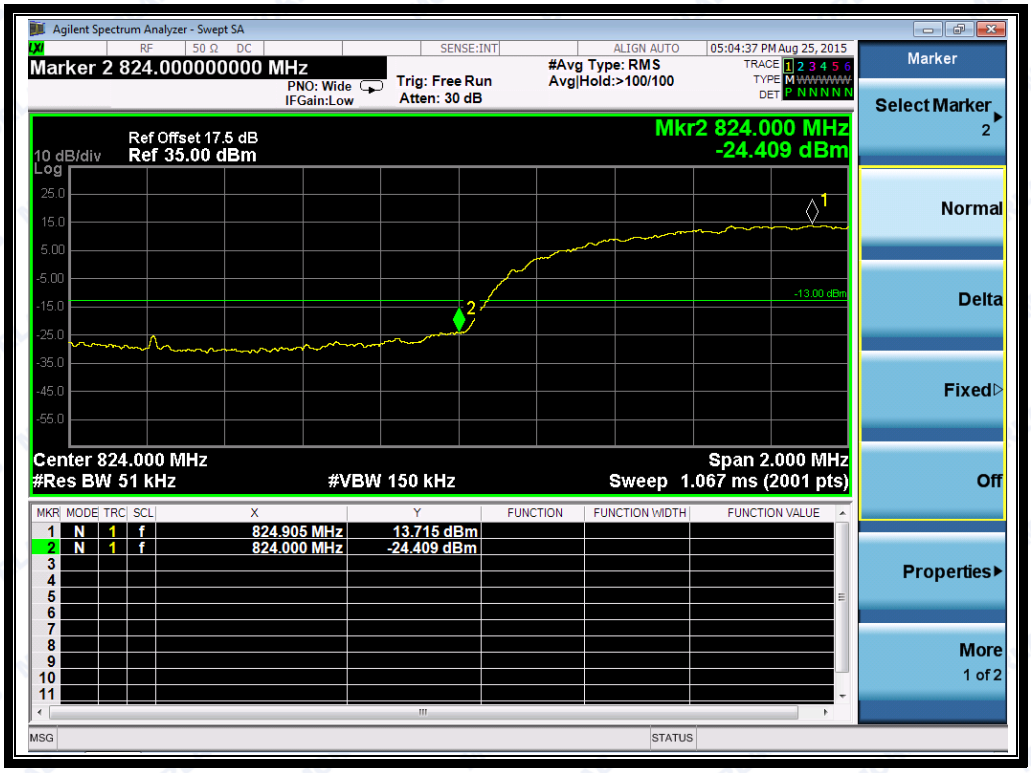
(Plot F2: WCDMA 1700 Channel = 1513)



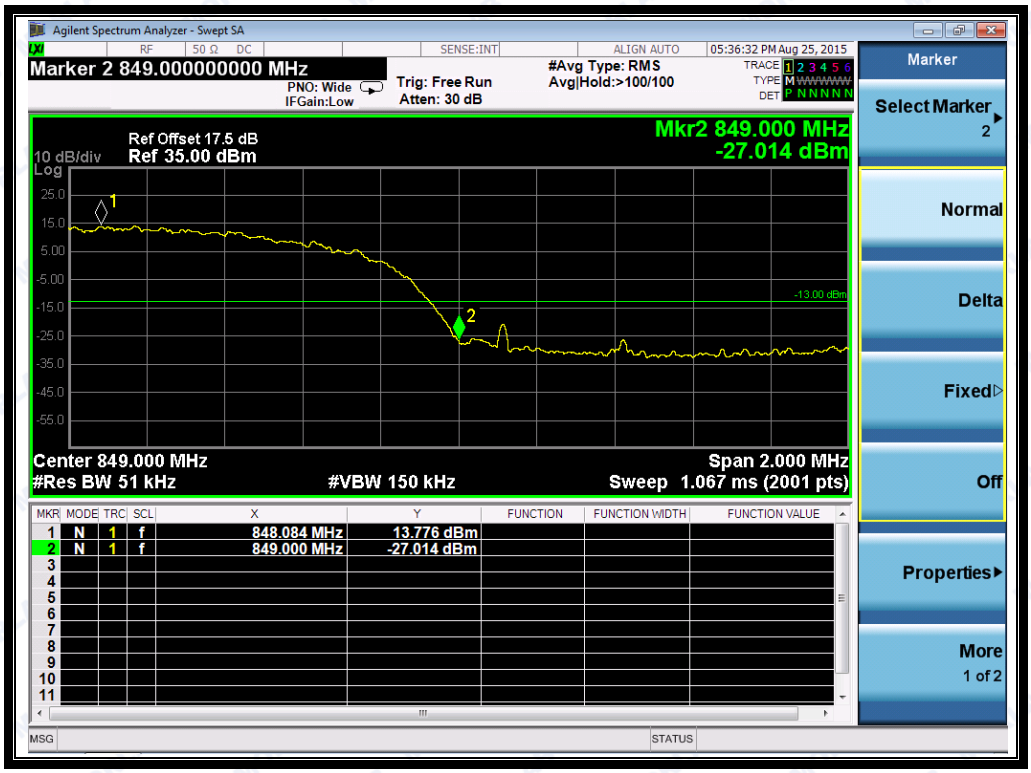
(Plot G1: WCDMA 1900 Channel = 9262)



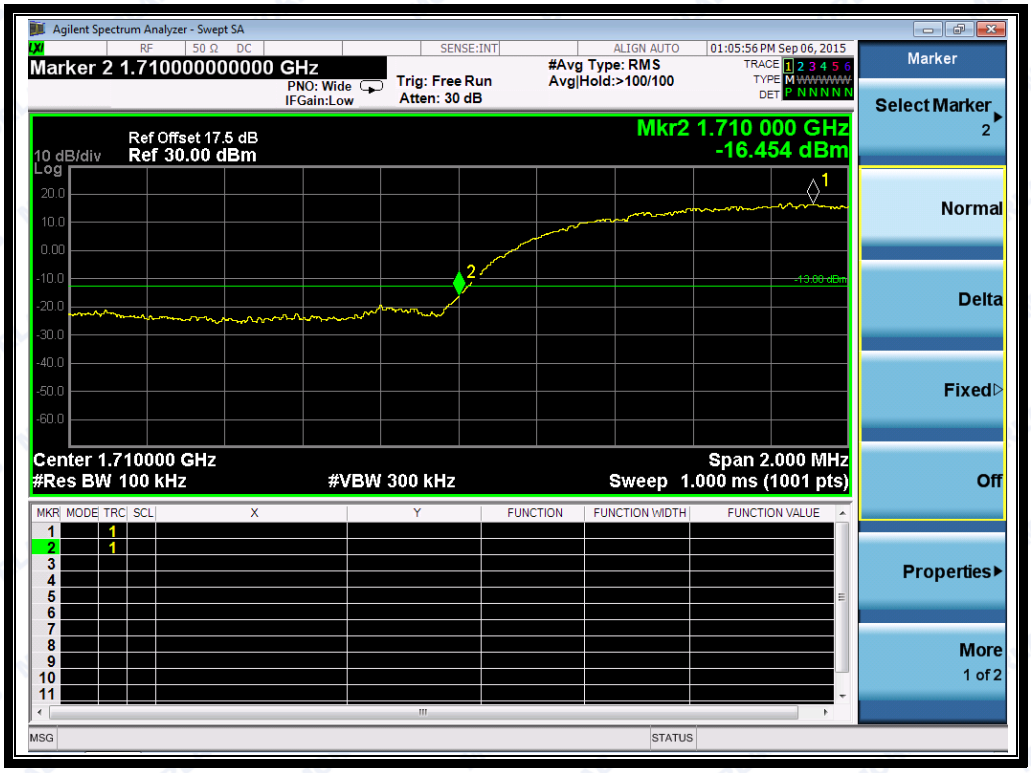
(Plot G2: WCDMA 1900 Channel = 9538)



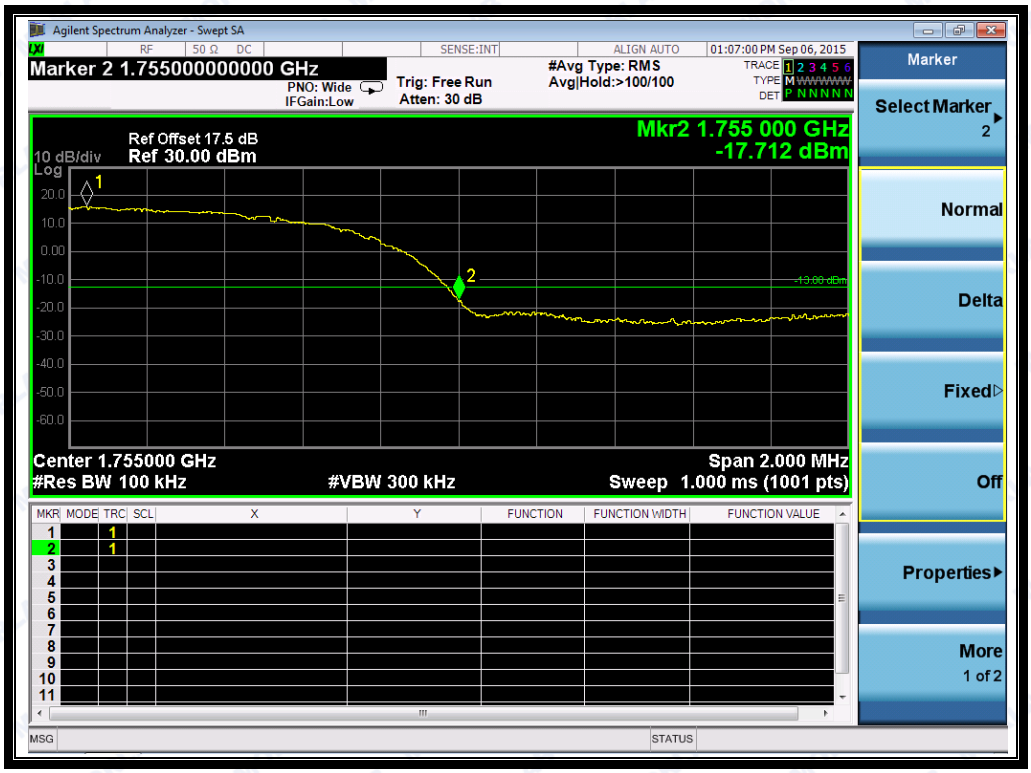
(Plot H1: HSDPA 850 Channel = 4132)



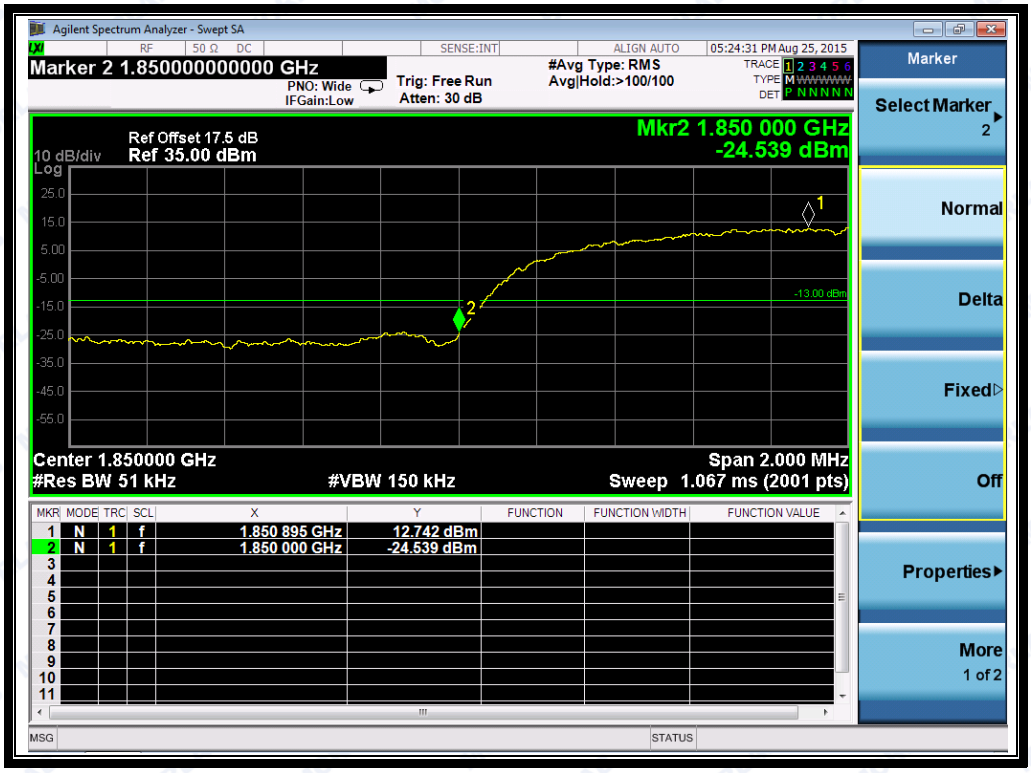
(Plot H2: HSDPA 850 Channel = 4233)



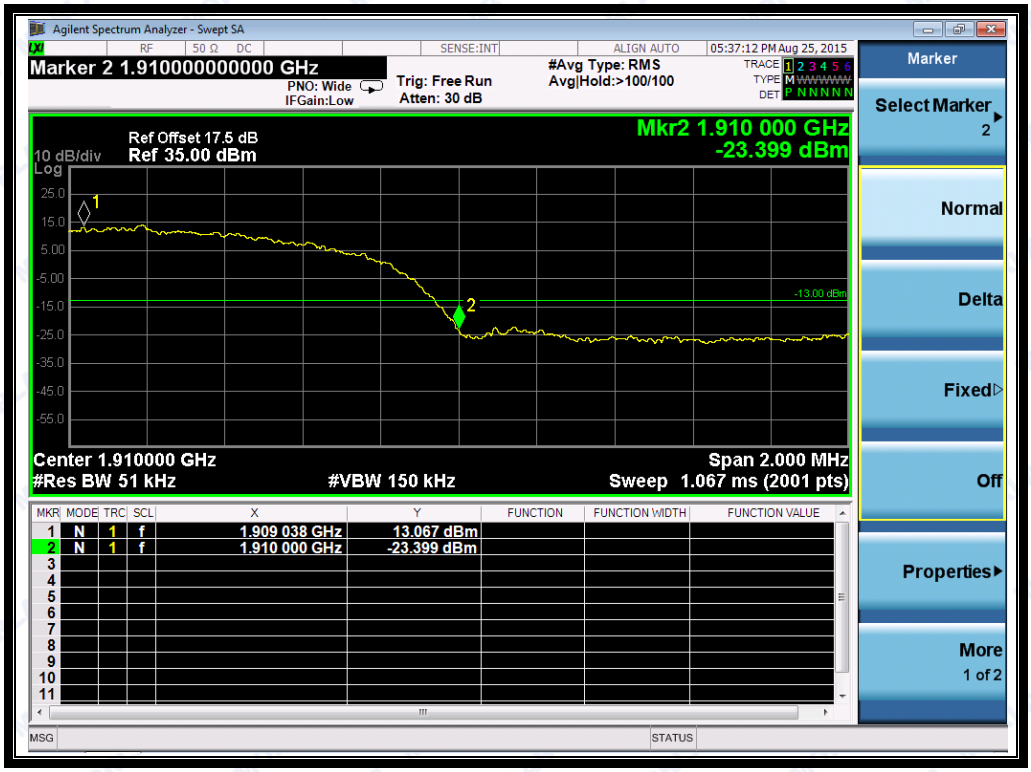
(Plot I1: HSDPA 1700 Channel = 1312)



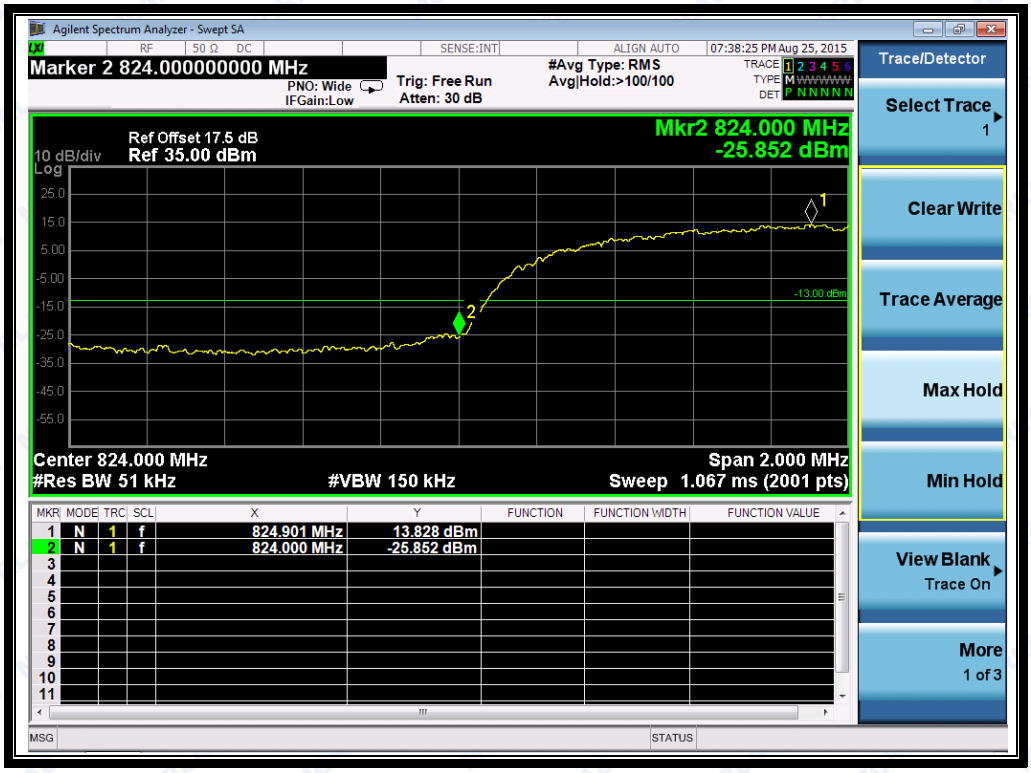
(Plot I2: HSDPA 1700 Channel = 1513)



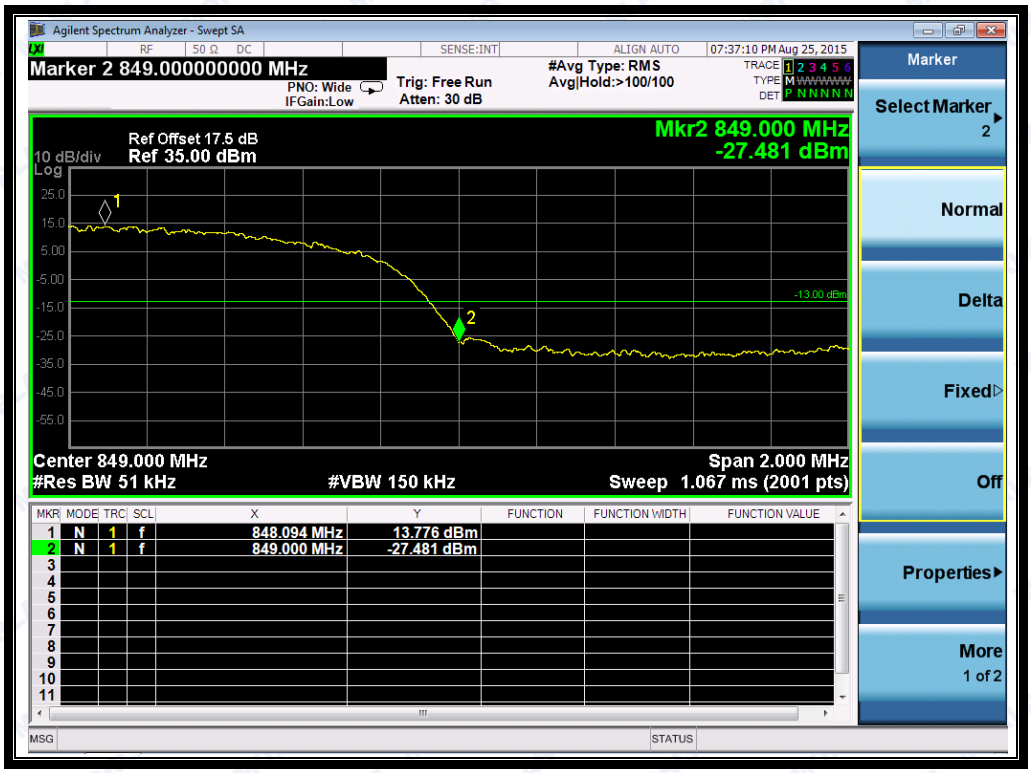
(Plot J1: HSDPA 1900 Channel = 9262)



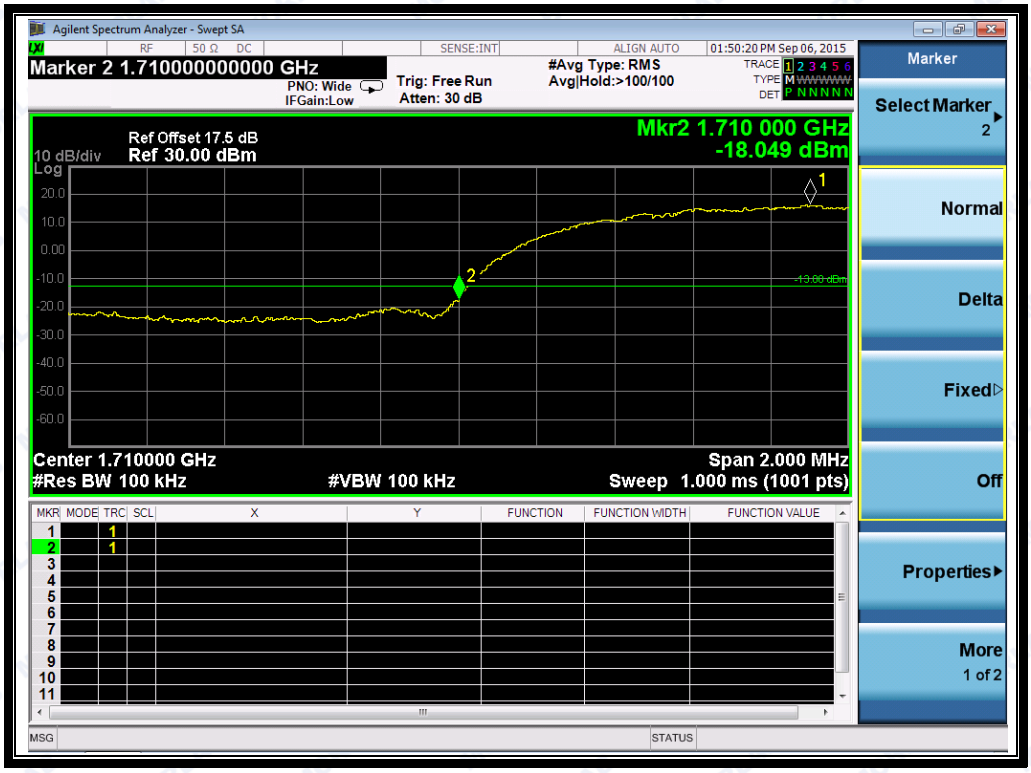
(Plot J2: HSDPA 1900 Channel = 9538)



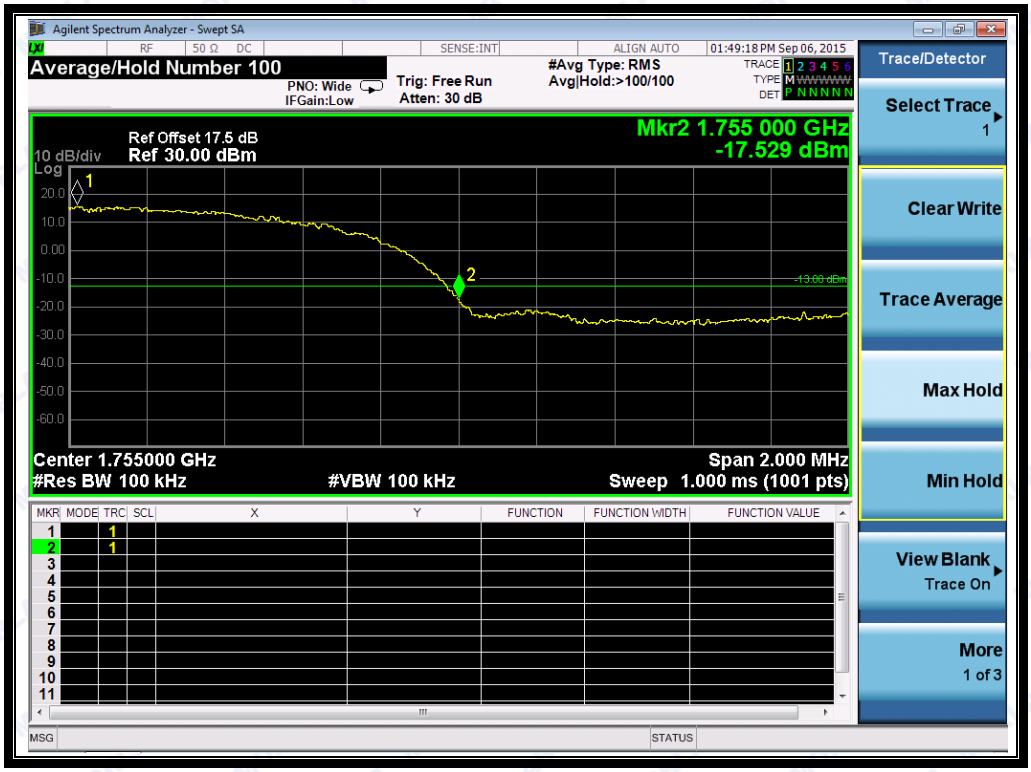
(Plot K1: HSUPA 850 Channel = 4132)



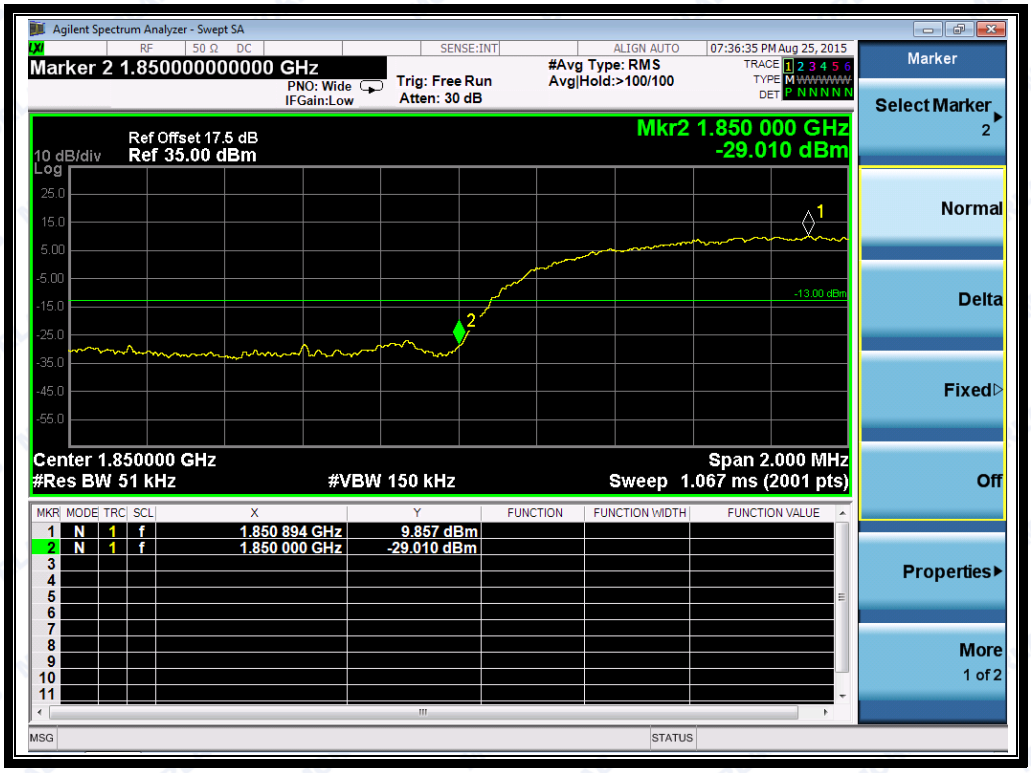
(Plot K2: HSUPA 850 Channel = 4233)



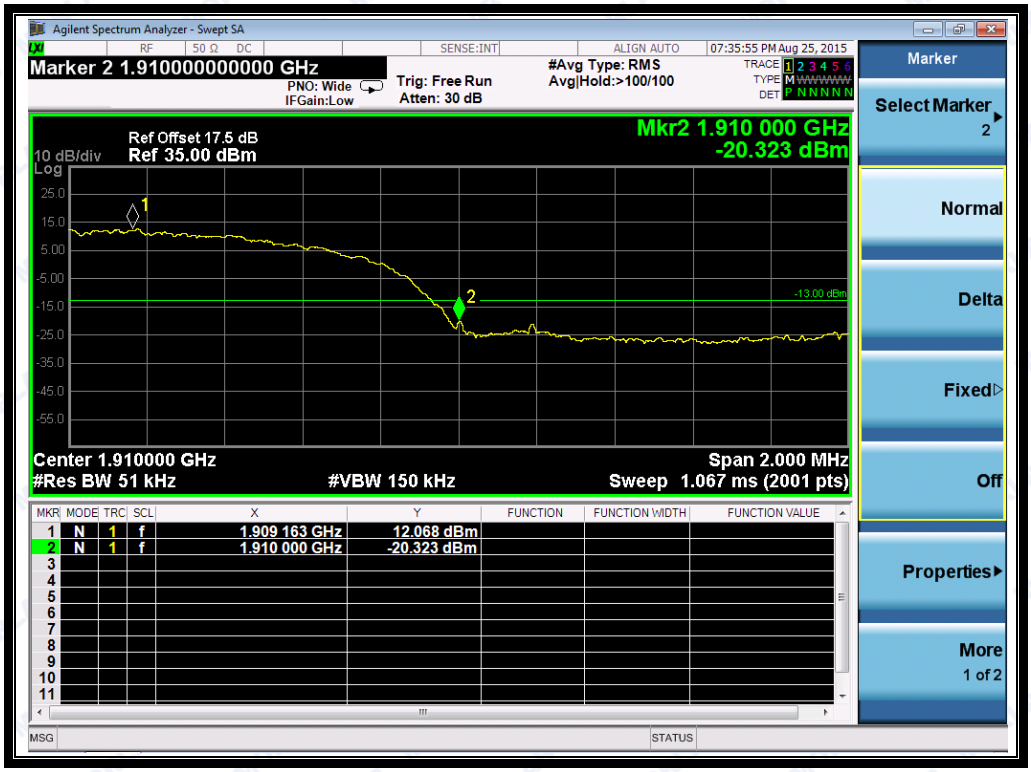
(Plot L1: HSUPA 1700 Channel = 1312)



(Plot L2: HSUPA 1700 Channel = 1513)



(Plot M1: HSUPA 1900 Channel = 9262)



(Plot M2: HSUPA 1900 Channel = 9538)

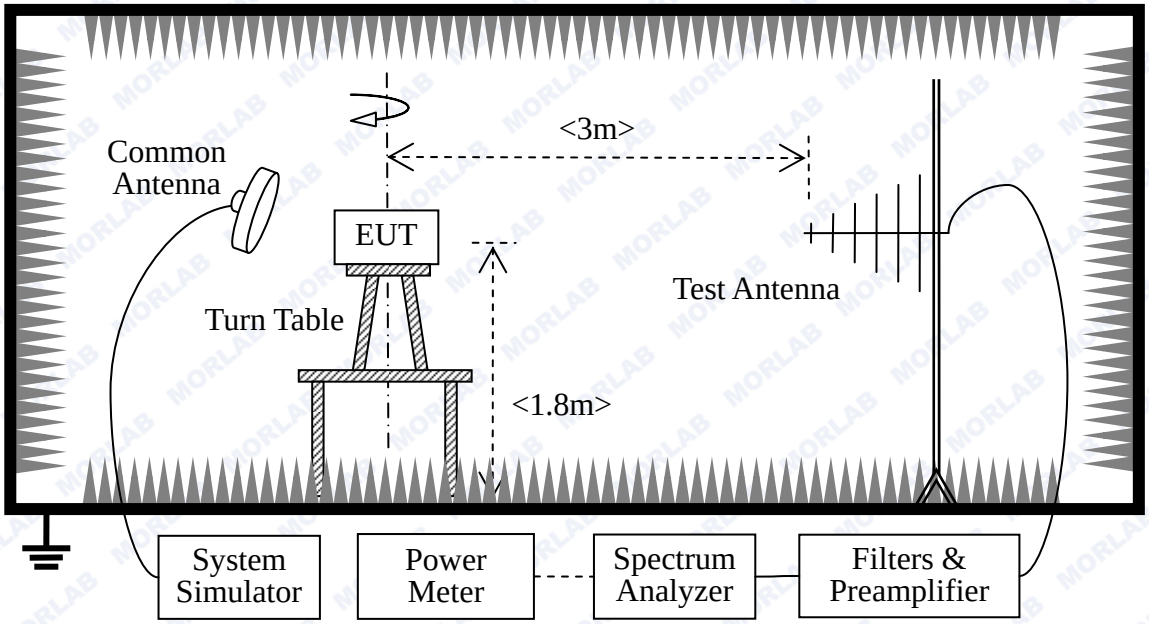
2.7 Transmitter Radiated Power (EIRP/ERP)

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. FCC section 27.50, AWS 1700 test transmitters must not exceed 1Watts.

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 33.01dBm, GSM 1900 28.64dBm. WCDMA 850 24.54dBm, WCDMA 1700 23.45dBm, WCDMA 1900 22.34dBm . Please refer to section 2.1.3 of this report.

- Step size (dB): 3dB

- Minimum RF power: GSM 850 2.1dBm, GSM 1900 0.3dBm, WCDMA 850 0.17dBm, WCDMA 1700 0.8dBm, WCDMA 1900 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.

Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
System Simulator	Agilent	E5515C	GB43130131	2015.02.26	2016.02.25
Spectrum Analyzer	Agilent	E7405A	US44210471	2015.02.26	2016.02.25
Full-Anechoic Chamber	Albatross	9m*6m*6m	(n.a.)	2015.02.26	2016.02.25
Test Antenna - Bi-Log	Schwarzbeck	VULB 9163	9163-274	2015.02.26	2016.02.25
Test Antenna - Horn	Schwarzbeck	BBHA 9120C	9120C-384	2015.02.26	2016.02.25
Substitution Antenna	Schwarzbeck	BBHA 9120C	9120C-384	2015.02.26	2016.02.25
Pre-AMPs	lucix	S10M100L3802	S020180L3203	2015.02.26	2016.02.25
Notch Filter	COM-MW	ZBSF-C836.5-25-X	NA	2015.02.26	2016.02.25
Notch Filter	COM-MW	ZBSF-C1747.5-75-X2	NA	2015.02.26	2016.02.25
Notch Filter	COM-MW	ZBSF-C1880-60-X2	NA	2015.02.26	2016.02.25

2.7.3 Test Result

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

The substitution corrections are obtained as described below:

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

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

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

P_{SUBST_TX} is signal generator level,

P_{SUBST_RX} is receiver level,

L_{SUBST_CABLES} is cable losses including TX cable,

$G_{SUBST_TX_ANT}$ is substitution antenna gain.

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

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

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	33.28	2.13	Plot A	38.5	7	PASS
	190	836.60	5	33.78	2.39				PASS
	251	848.80	5	33.30	2.14				PASS
GPRS 850MHz	128	824.20	5	31.33	1.36	Plot B Note 1	38.5	7	PASS
	190	836.60	5	31.26	1.34				PASS
	251	848.80	5	31.57	1.44				PASS
EGPRS 850MHz	128	824.20	5	31.53	1.42	Plot C Note 1	38.5	7	PASS
	190	836.60	5	31.67	1.47				PASS
	251	848.80	5	31.97	1.57				PASS

Band	Channel	Frequency (MHz)	PCL	Measured EIRP			Limit		Verdict
				DBm	W	Refer to Plot	dBm	W	
GSM 1900MHz	512	1850.2	0	28.71	0.74	Plot D	33	2	PASS
	661	1880.0	0	28.05	0.64				PASS
	810	1909.8	0	27.86	0.61				PASS
GPRS 1900MHz	512	1850.2	0	28.24	0.67	Plot E Note 1	33	2	PASS
	661	1880.0	0	27.26	0.53				PASS
	810	1909.8	0	27.77	0.60				PASS
EGPRS 1900MHz	512	1850.2	0	28.24	0.67	Plot F Note 1	33	2	PASS
	661	1880.0	0	27.48	0.56				PASS
	810	1909.8	0	27.81	0.60				PASS

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

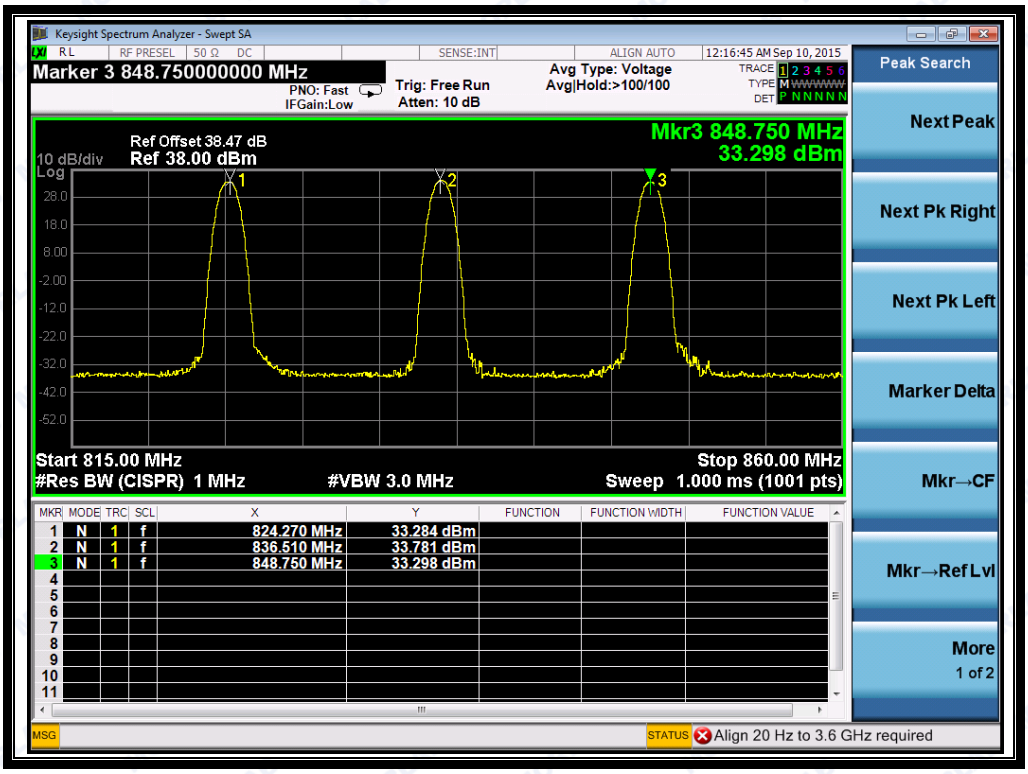
WCDMA Model Test Verdict:

Band	Channel	Frequency (MHz)	Measured ERP			Limit		Verdict
			dBm	W	Refer to Plot	dBm	W	
WCDMA 850MHz	4132	826.4	28.42	0.70	Plot G	38.5	7	PASS
	4175	835.0	28.37	0.69				PASS
	4233	846.6	28.57	0.72				PASS
HSDPA 850MHz	4132	826.4	28.04	0.64	Plot H	38.5	7	PASS
	4175	835.0	28.28	0.67				PASS
	4233	846.6	28.25	0.67				PASS
HSUPA 850MHz	4132	826.4	28.33	0.68	Plot I	38.5	7	PASS
	4175	835.0	28.30	0.67				PASS
	4233	846.6	28.36	0.69				PASS

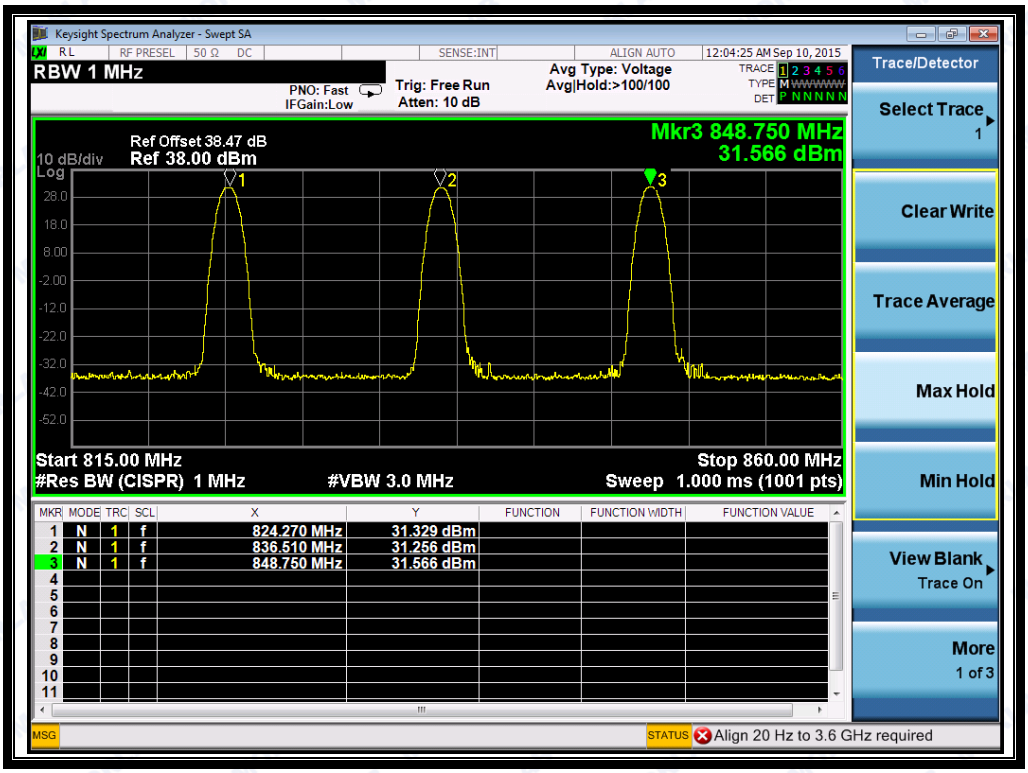
Band	Channel	Frequency (MHz)	Measured EIRP			Limit		Verdict
			dBm	W	Refer to Plot	dBm	W	
WCDMA 1900MHz	9262	1852.4	25.62	0.36	Plot K	33	2	PASS
	9400	1880.0	25.74	0.37				PASS
	9538	1907.6	24.84	0.30				PASS
HSDPA 1900MHz	9262	1852.4	25.45	0.35	Plot L	33	2	PASS
	9400	1880.0	25.26	0.34				PASS
	9538	1907.6	25.39	0.35				PASS
HSUPA 1900MHz	9262	1852.4	25.91	0.39	Plot M	33	2	PASS
	9400	1880.0	25.18	0.33				PASS
	9538	1907.6	25.49	0.35				PASS

Band	Channel	Frequency (MHz)	Measured EIRP			Limit		Verdict
			dBm	W	Refer to Plot	dBm	W	
WCDMA 1700MHz	1312	1712.4	27.20	0.54	Plot O	30	1	PASS
	1412	1732.4	26.83	0.48				PASS
	1513	1752.6	27.07	0.51				PASS
HSDPA 1700MHz	1312	1712.4	27.77	0.60	Plot P	30	1	PASS
	1412	1732.4	27.09	0.51				PASS
	1513	1752.6	27.12	0.52				PASS
HSUPA 1700MHz	1312	1712.4	28.18	0.66	Plot Q	30	1	PASS
	1412	1732.4	27.65	0.58				PASS
	1513	1752.6	26.43	0.44				PASS

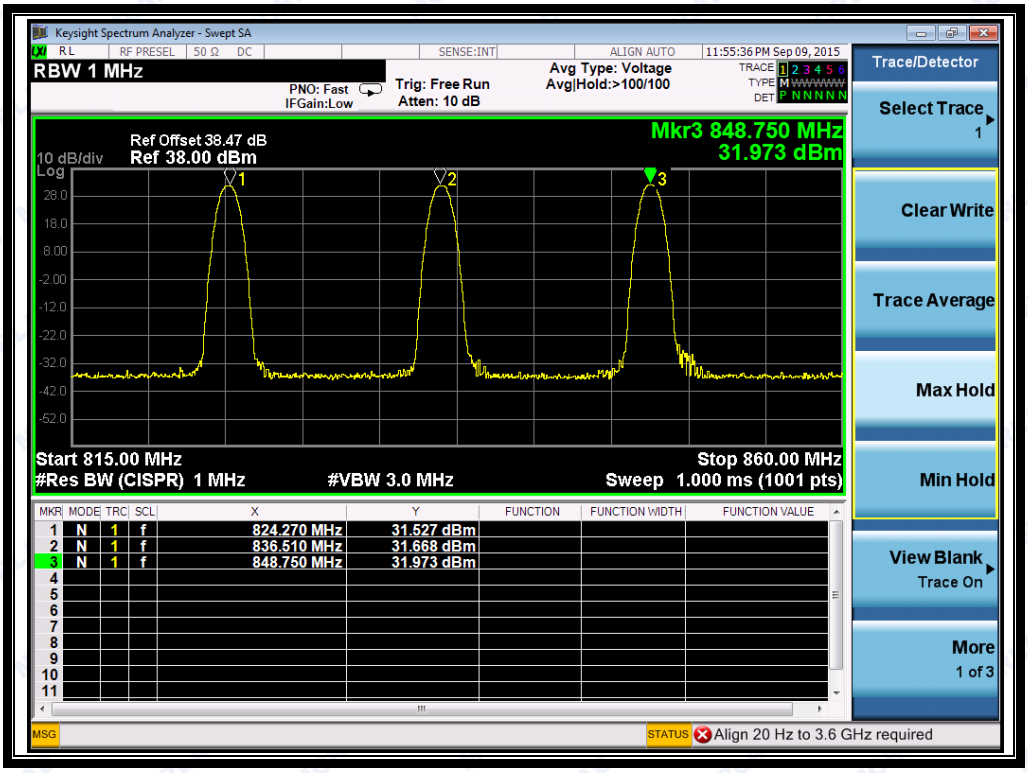
Test Plots:



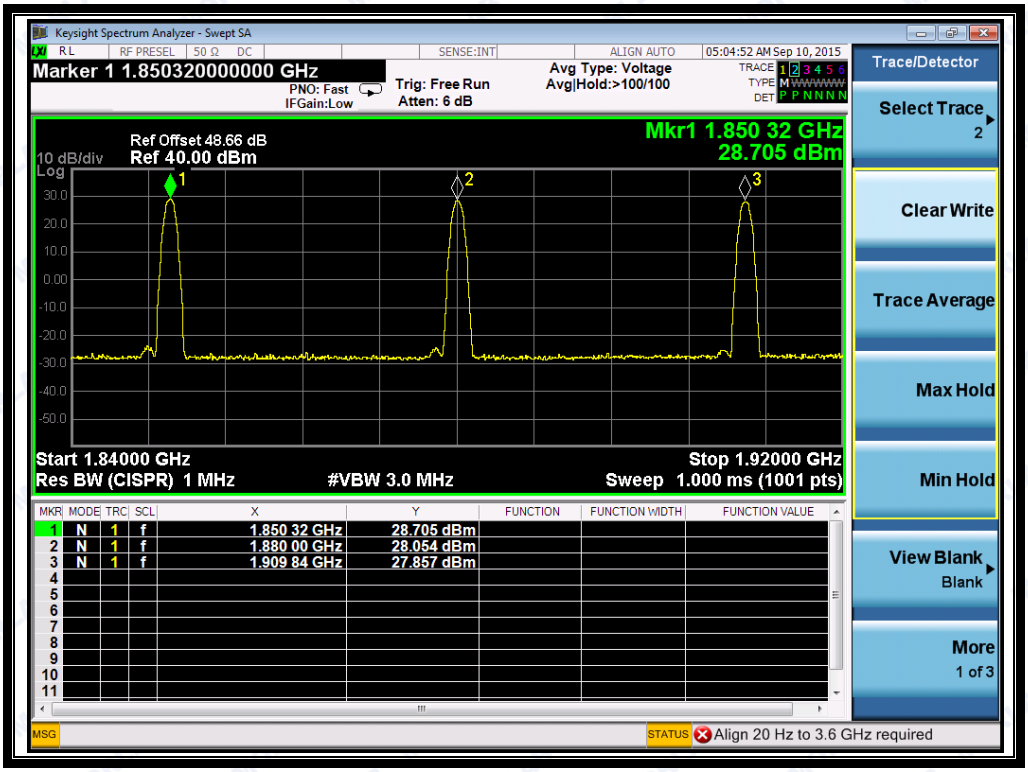
(Plot A:GSM 850MHz Channel = 128, 190, 251)



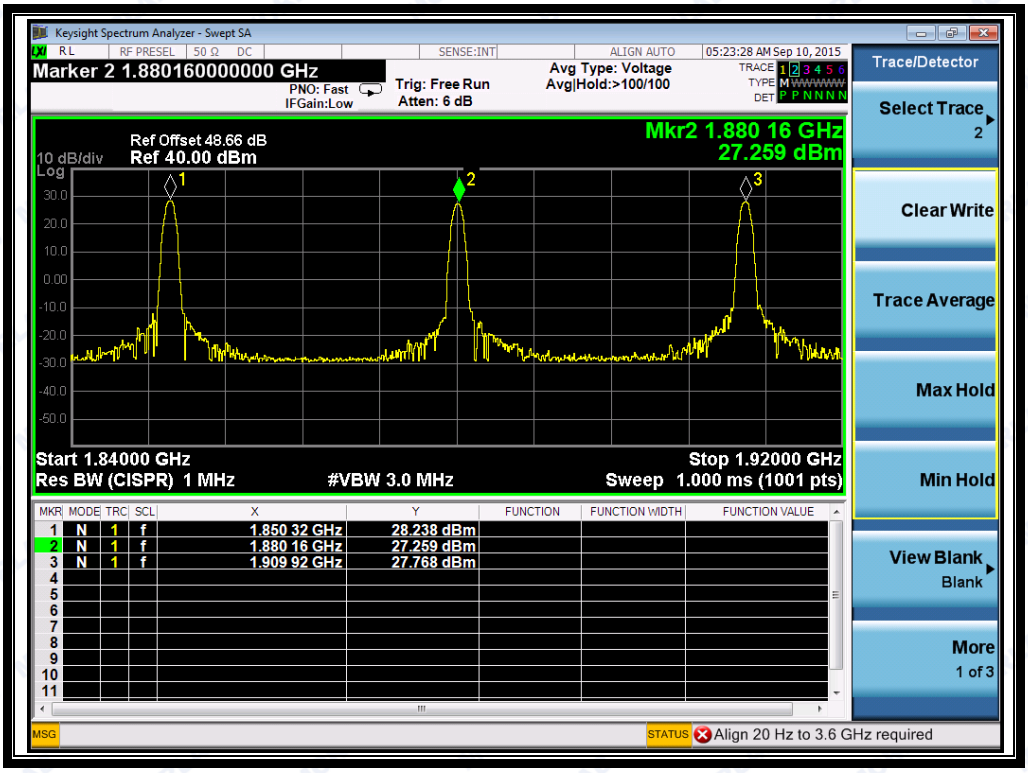
(Plot B:GPRS 850MHz Channel = 128, 190, 251)



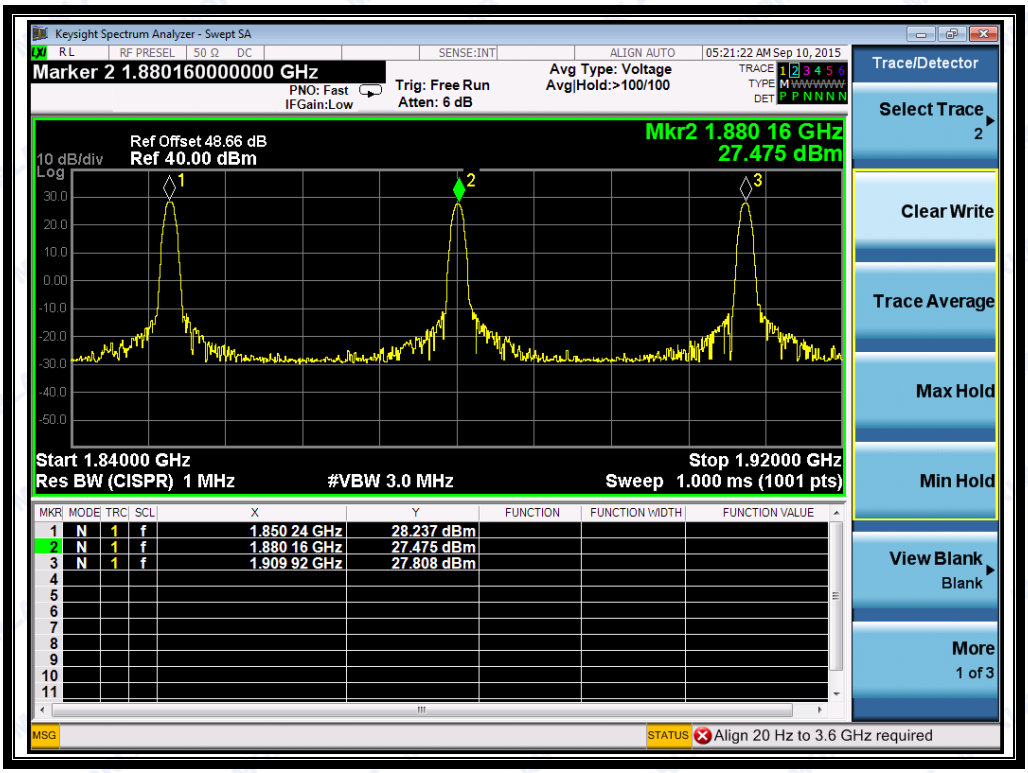
(Plot C: EGPRS 850MHz Channel = 128, 190, 251)



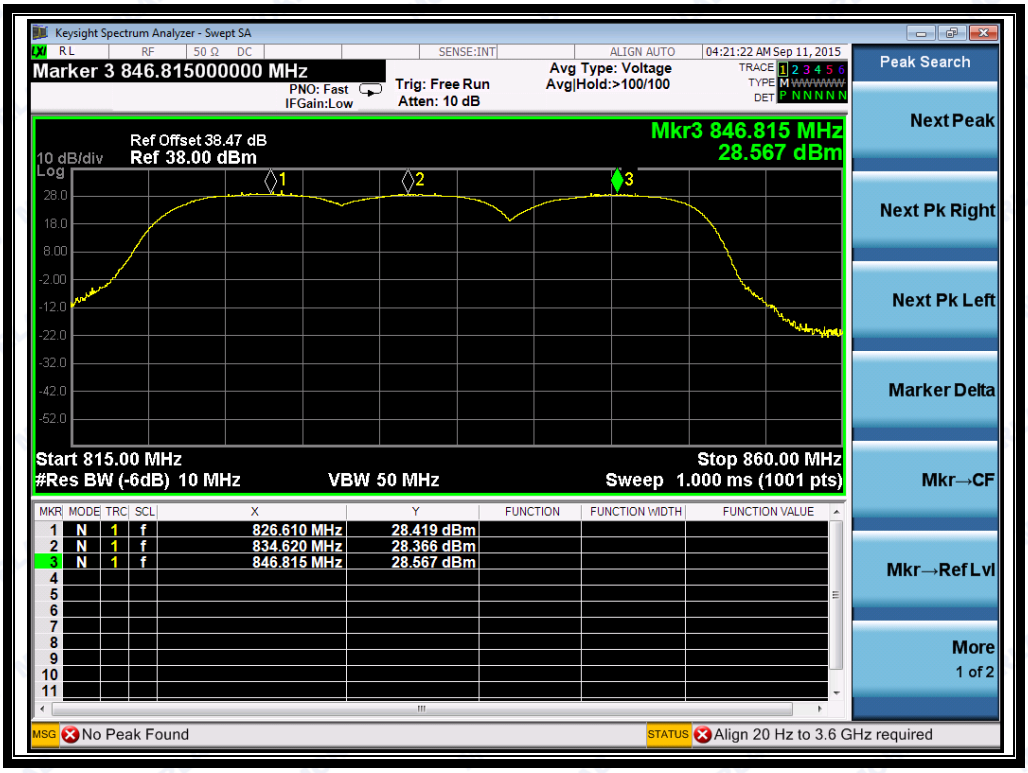
(Plot D: GSM 1900MHz Channel = 512, 661, 810)



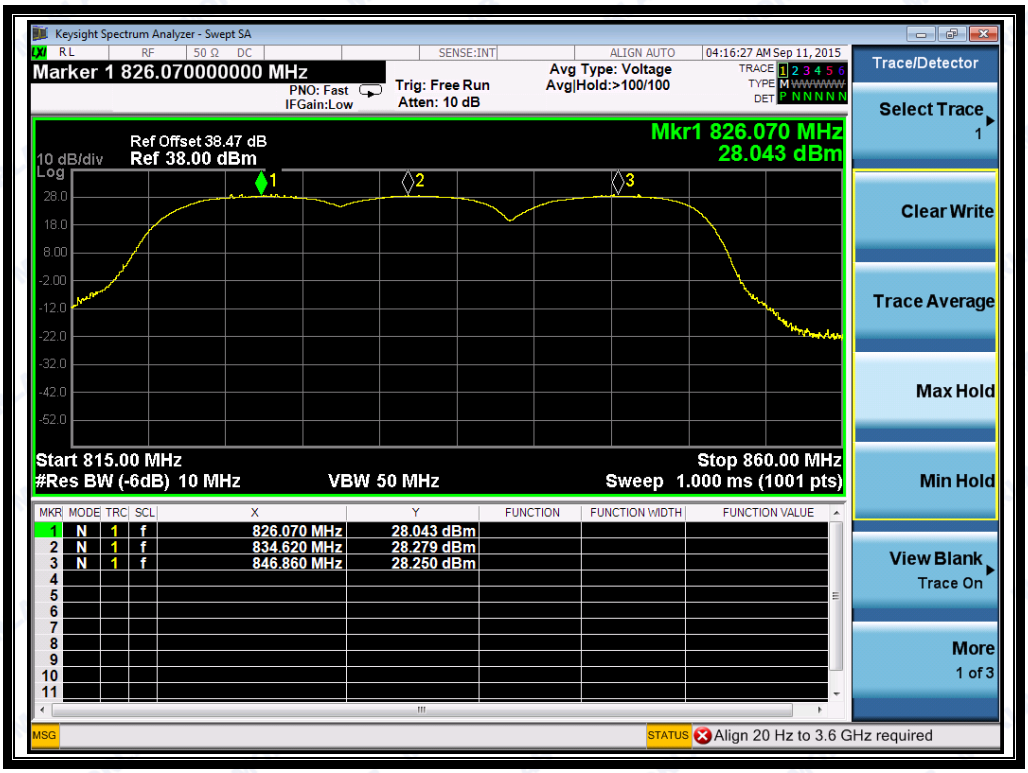
(Plot E: GPRS 1900MHz Channel = 512, 661, 810)



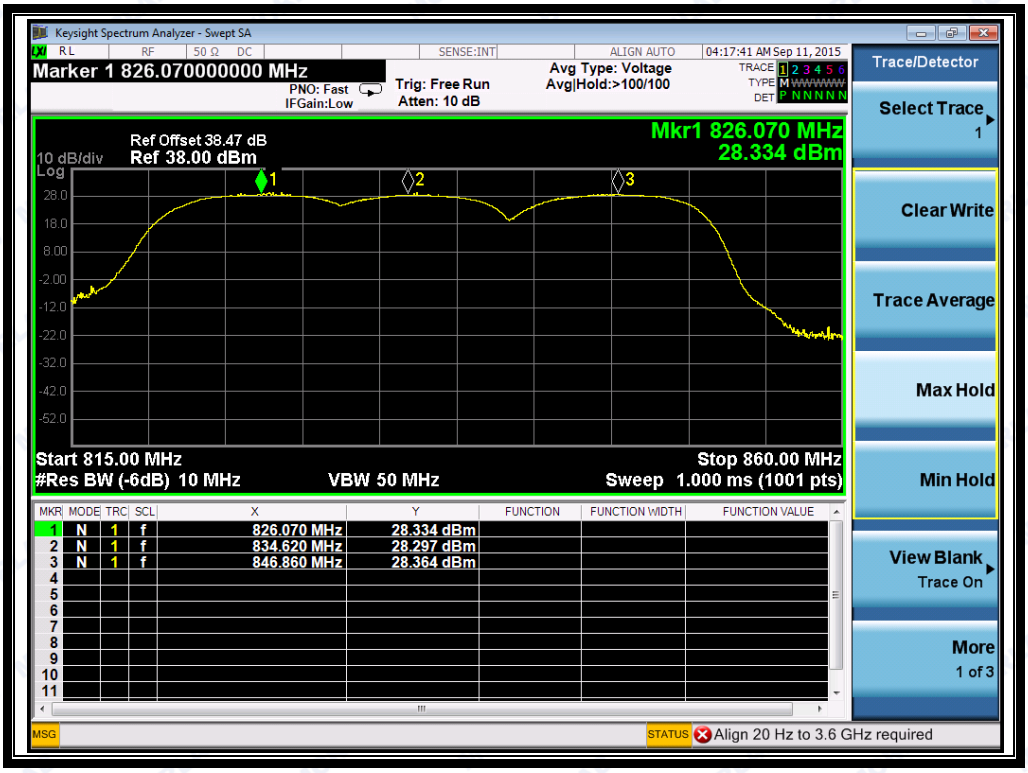
(Plot F: EGPRS 1900MHz Channel = 512, 661, 810)



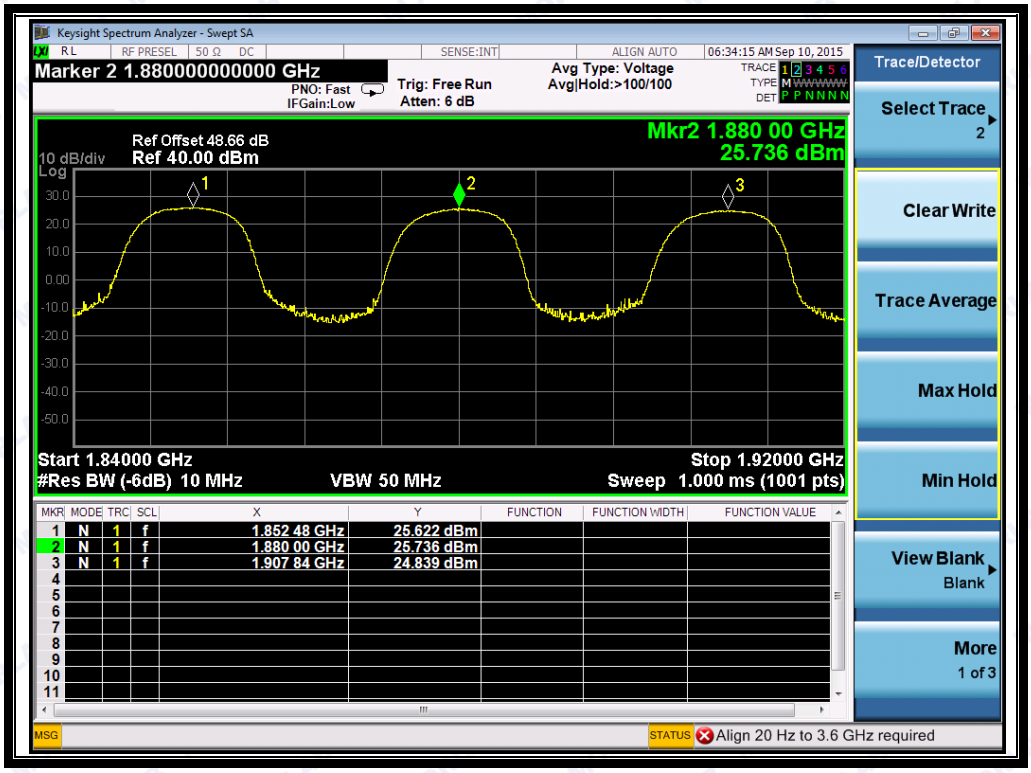
(Plot G: WCDMA 850 MHz Channel = 4132, 4175, 4233)



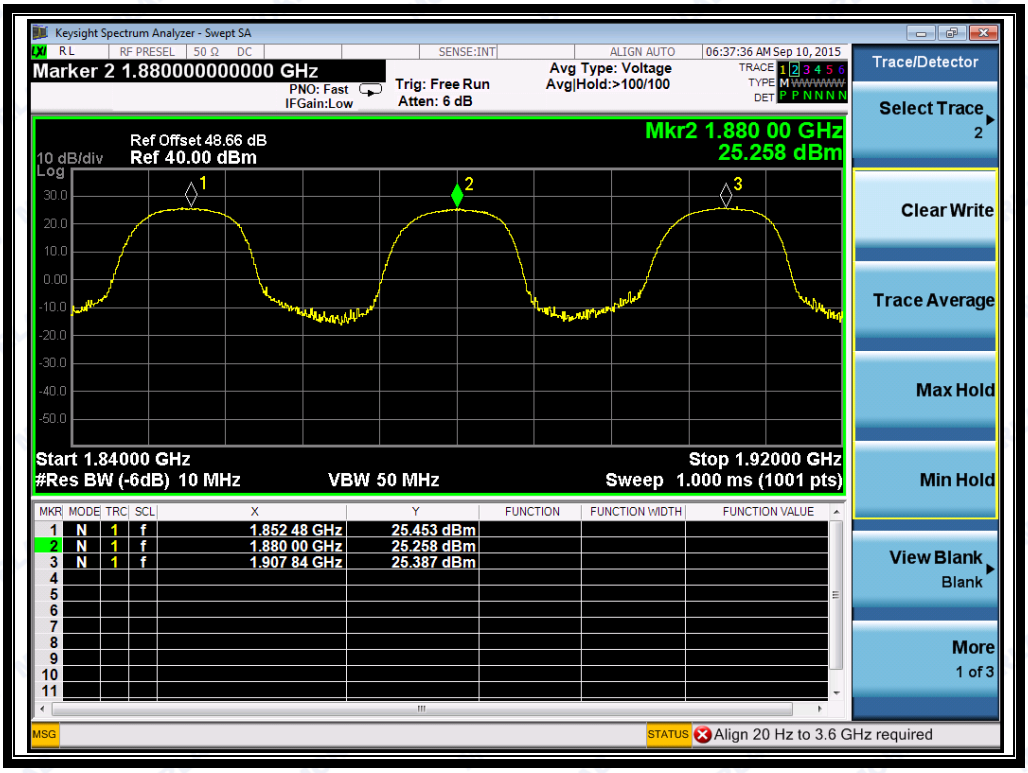
(Plot H: HSDPA 850 MHz Channel = 4132, 4175, 4233)



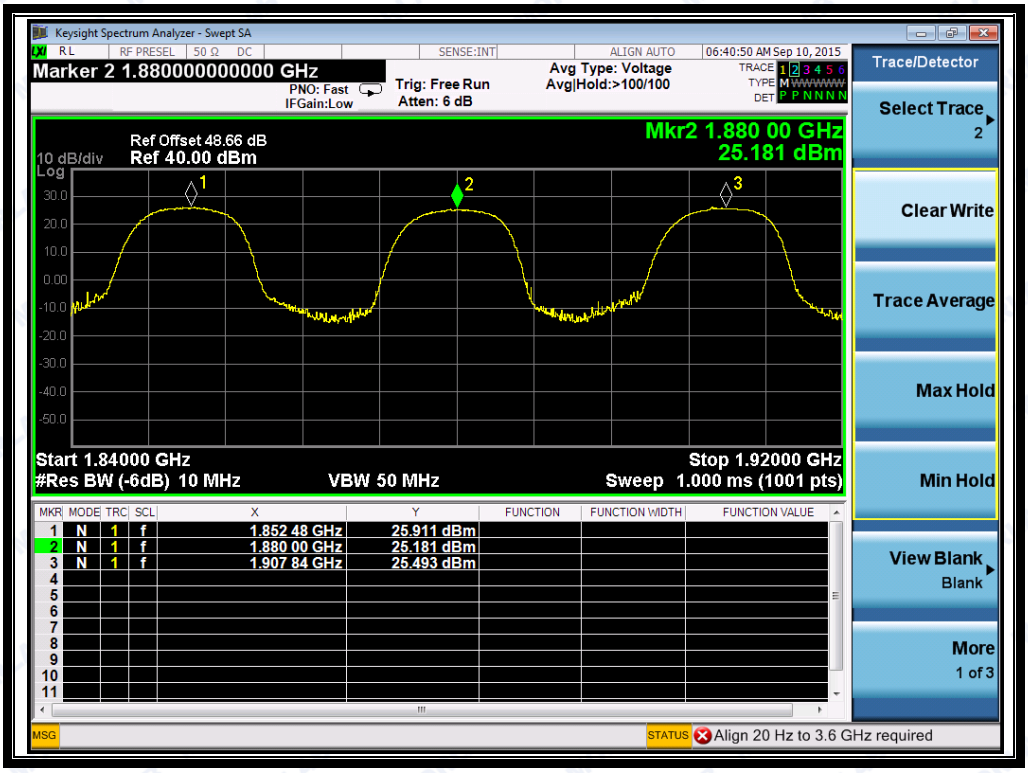
(Plot I: HSUPA 850 MHz Channel = 4132, 4175, 4233)



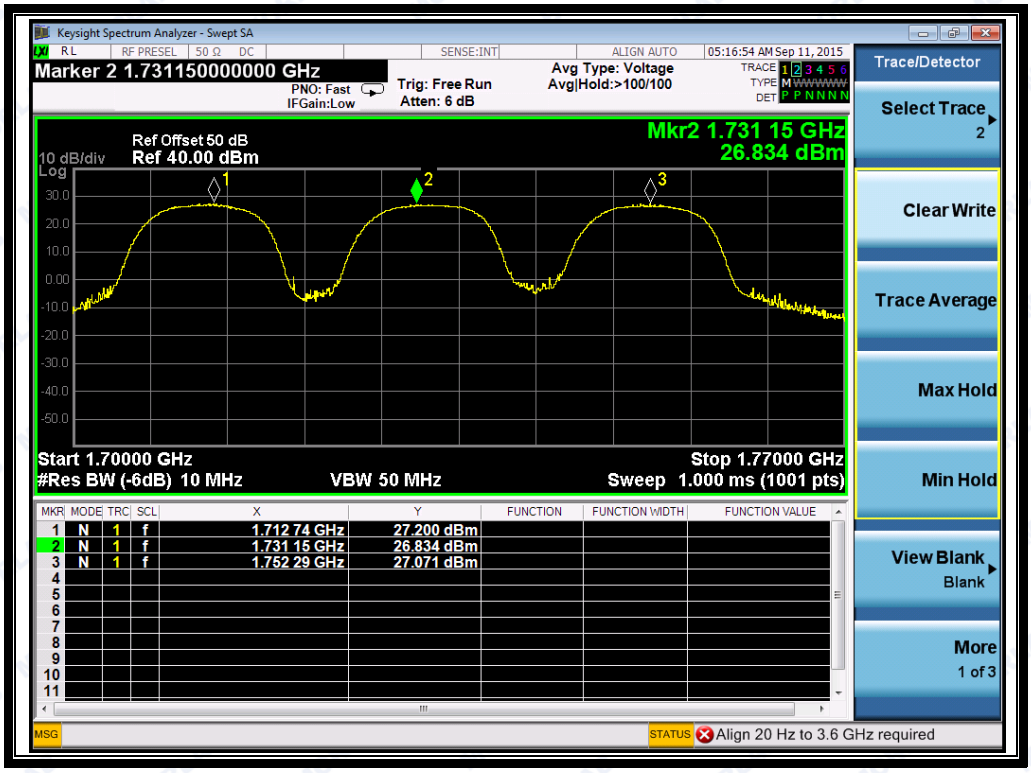
(Plot K: WCDMA 1900 MHz Channel = 9262, 9400, 9538)



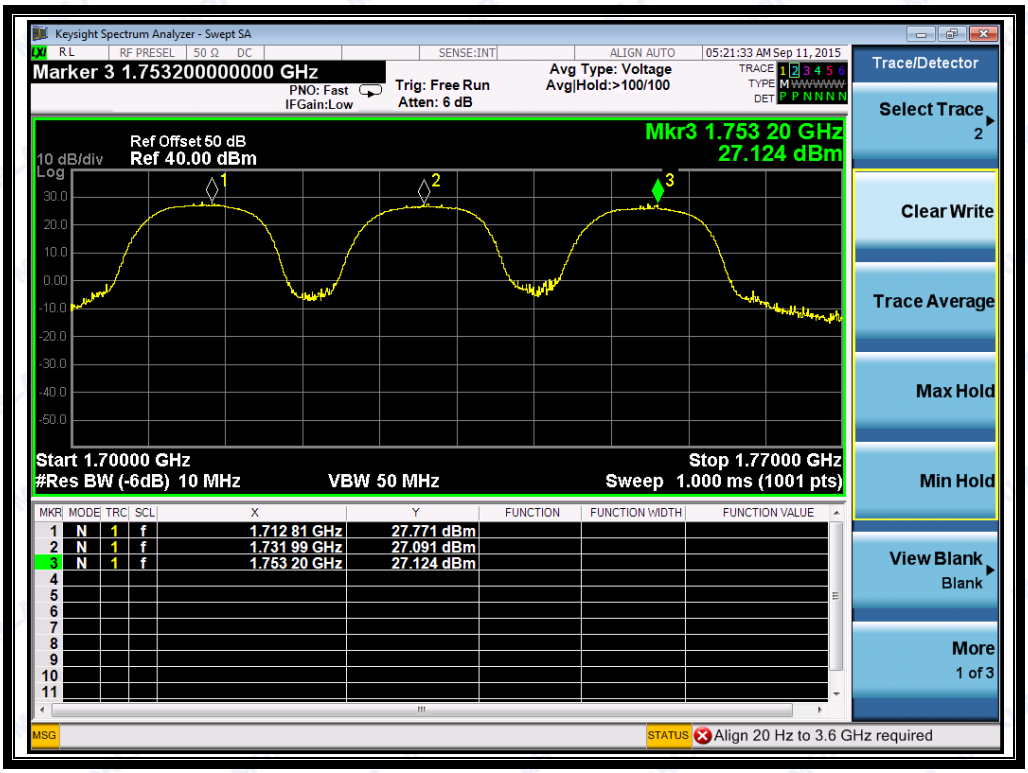
(Plot L: HSDPA1900 MHz Channel = 9262, 9400, 9538)



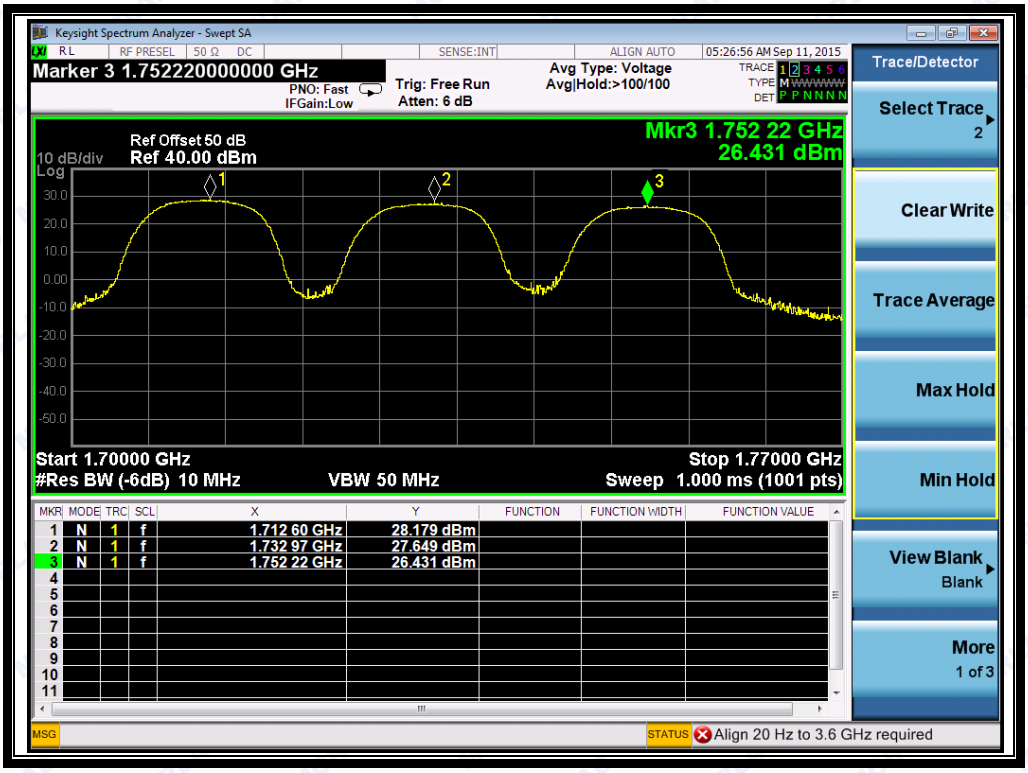
(Plot M: HSUPA1900 MHz Channel = 9262, 9400, 9538)



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



(Plot P:HSDPA1700 MHz Channel = 1312, 1412, 1513)



(Plot Q: HSUPA1700 MHz 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) 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	2015.02.26	2016.02.25
Spectrum Analyzer	Agilent	E7405A	US44210471	2015.02.26	2016.02.25
Full-Anechoic Chamber	Albatross	9m*6m*6m	(n.a.)	2015.02.26	2016.02.25
Test Antenna - Bi-Log	Schwarzbeck	VULB 9163	9163-274	2015.02.26	2016.02.25
Test Antenna - Horn	Schwarzbeck	BBHA 9120C	9120C-384	2015.02.26	2016.02.25
Substitution Antenna	Schwarzbeck	BBHA 9120C	9120C-384	2015.02.26	2016.02.25
Pre-AMPs	lucix	S10M100L3802	S020180L3203	2015.02.26	2016.02.25
Notch Filter	COM-MW	ZBSF-C836.5-25-X	NA	2015.02.26	2016.02.25
Notch Filter	COM-MW	ZBSF-C1747.5-75-X2	NA	2015.02.26	2016.02.25
Notch Filter	COM-MW	ZBSF-C1880-60-X2	NA	2015.02.26	2016.02.25

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:

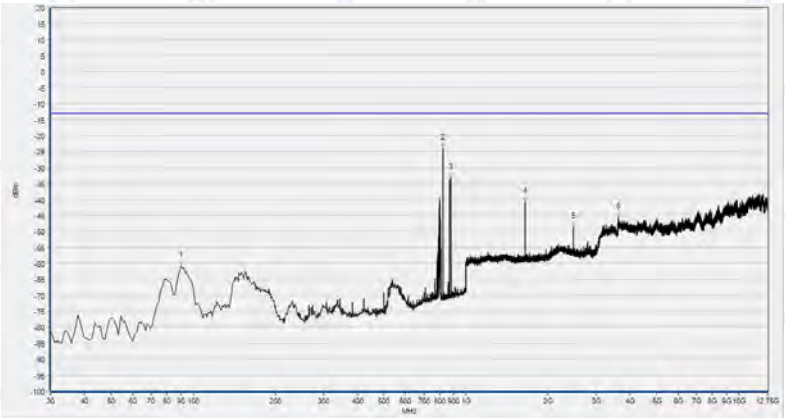
Band	Channel	Frequency (MHz)	Measured Max. Spurious Emission (dBm)		Refer to Plot	Limit (dBm)	Verdict
			Test Antenna Horizontal	Test Antenna Vertical			
GSM 850MHz	128	824.2	< -25	< -25	Plot A1/A2	-13	PASS
	190	836.6	< -25	< -25	Plot A3/A4		PASS
	251	848.8	< -25	< -25	Plot A5/A6		PASS
GSM 1900MHz	512	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
WCDMA 850MHz	4132	826.4	< -25	< -25	Plot E1/E2	-13	PASS
	4175	835.0	< -25	< -25	Plot E3/E4		PASS
	4233	846.6	< -25	< -25	Plot E5/E6		PASS
WCDMA 1700MHz	1312	1712.4	< -25	< -25	Plot F1/F2	-13	PASS
	1412	1732.4	< -25	< -25	Plot F3/F4		PASS
	1513	1752.6	< -25	< -25	Plot F5/F6		PASS
WCDMA 1900MHz	9262	1852.4	< -25	< -25	Plot G1/G2	-13	PASS
	9400	1880.0	< -25	< -25	Plot G3/G4		PASS
	9538	1907.6	< -25	< -25	Plot G5/G6		PASS
HSDPA 850MHz	4132	826.4	< -25	< -25	Plot H1/H2	-13	PASS
	4175	835.0	< -25	< -25	Plot H3/H4		PASS
	4233	846.6	< -25	< -25	Plot H5/H6		PASS
HSDPA 1700MHz	1312	1712.4	< -25	< -25	Plot I1/I2	-13	PASS
	1412	1732.4	< -25	< -25	Plot I3/I4		PASS
	1513	1752.6	< -25	< -25	Plot I5/I6		PASS
HSDPA 1900MHz	9262	1852.4	< -25	< -25	Plot J1/J2	-13	PASS
	9400	1880.0	< -25	< -25	Plot J3/J4		PASS
	9538	1907.6	< -25	< -25	Plot J5/J6		PASS
HSUPA 850MHz	4132	826.4	< -25	< -25	Plot K1/K2	-13	PASS
	4175	835.0	< -25	< -25	Plot K3/K4		PASS

Band	Channel	Frequency (MHz)	Measured Max. Spurious Emission (dBm)		Refer to Plot	Limit (dBm)	Verdict
			Test Antenna Horizontal	Test Antenna Vertical			
	4233	846.6	< -25	< -25	Plot K5/K6		PASS
HSUPA 1700MHz	1312	1712.4	< -25	< -25	Plot L1/L2	-13	PASS
	1412	1732.4	< -25	< -25	Plot L3/L4		PASS
	1513	1752.6	< -25	< -25	Plot L5/L6		PASS
HSUPA 1900MHz	9262	1852.4	< -25	< -25	Plot M1/M2	-13	PASS
	9400	1880.0	< -25	< -25	Plot M3/M4		PASS
	9538	1907.6	< -25	< -25	Plot M5/M6		PASS

2. Test Plots for the Whole Measurement Frequency Range:

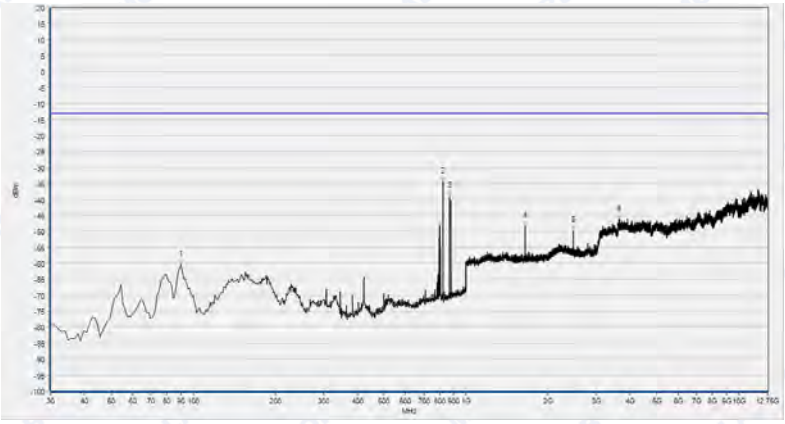
Note1: the power of the EUT transmitting frequency should be ignored.

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.



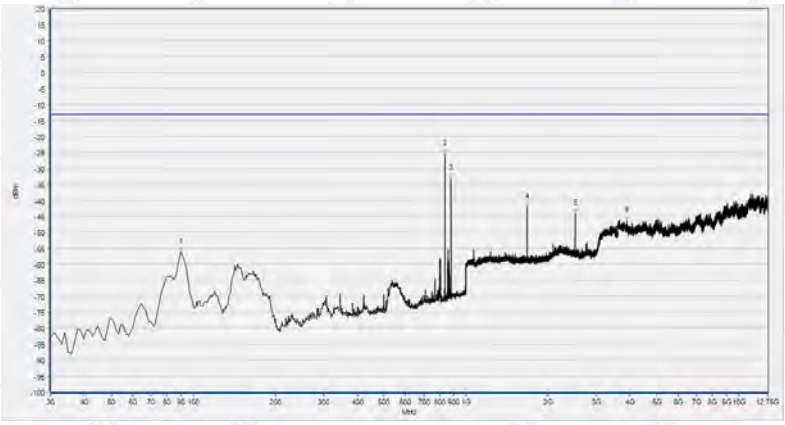
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	90.140	-60.65	-13.00	302.5	Horizontal	PASS
2	824.430	-24.12	-13.00	204.6	Horizontal	N.A
3	881.660	-33.21	-13.00	235.2	Horizontal	N.A
4	1647.939	-40.85	-13.00	58.4	Horizontal	PASS
5	2471.949	-48.69	-13.00	58.4	Horizontal	PASS
6	3617.030	-45.45	-13.00	360.0	Horizontal	PASS

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



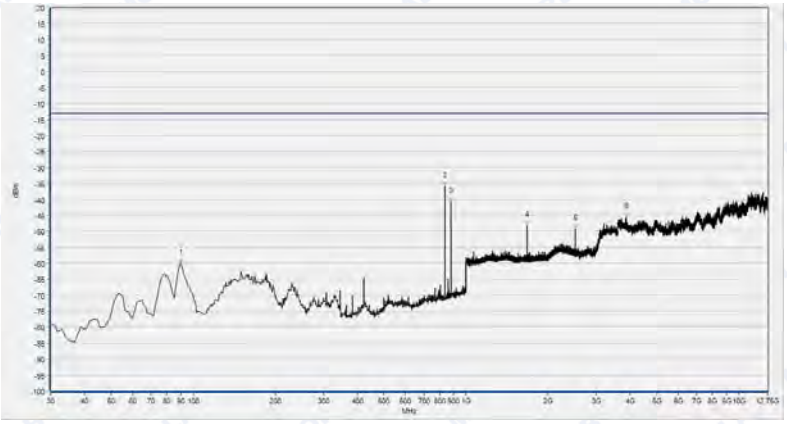
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	90.140	-60.46	-13.00	100.1	Vertical	PASS
2	824.430	-34.55	-13.00	124.7	Vertical	N.A
3	869.050	-38.99	-13.00	69.6	Vertical	N.A
4	1647.939	-48.34	-13.00	69.3	Vertical	PASS
5	2471.949	-49.67	-13.00	216.2	Vertical	PASS
6	3635.488	-46.45	-13.00	79.3	Vertical	PASS

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



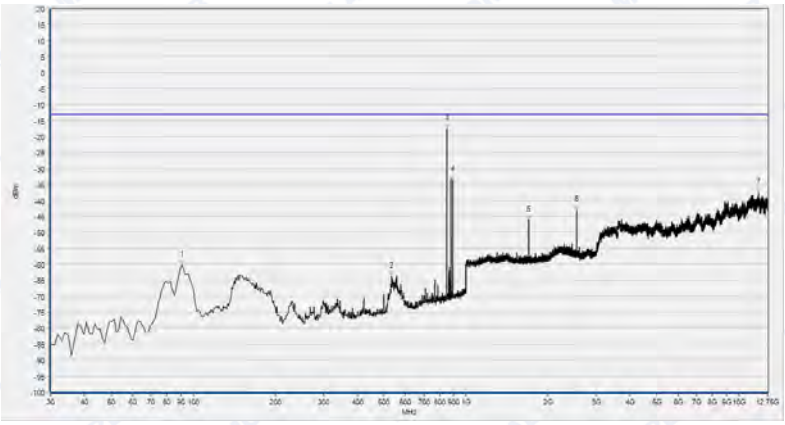
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	90.140	-56.22	-13.00	308.5	Horizontal	PASS
2	836.070	-25.62	-13.00	1.0	Horizontal	N.A
3	881.660	-33.23	-13.00	204.3	Horizontal	N.A
4	1672.909	-42.15	-13.00	53.2	Horizontal	PASS
5	2509.724	-44.18	-13.00	66.2	Horizontal	PASS
6	3892.053	-46.47	-13.00	238.9	Horizontal	PASS

(Plot A3: GSM850MHz Channel = 190, Test Antenna Horizontal)



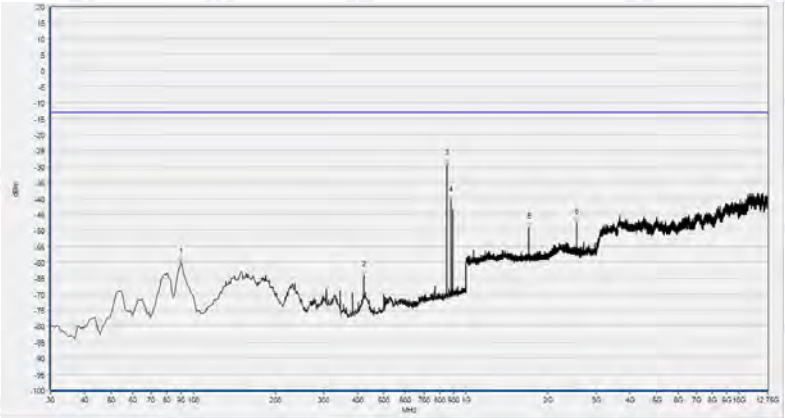
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	90.140	-60.02	-13.00	137.3	Vertical	PASS
2	837.040	-35.82	-13.00	149.6	Vertical	N.A
3	881.660	-40.89	-13.00	351.3	Vertical	N.A
4	1672.909	-48.10	-13.00	42.4	Vertical	PASS
5	2509.724	-49.29	-13.00	288.4	Vertical	PASS
6	3868.058	-45.39	-13.00	21.2	Vertical	PASS

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



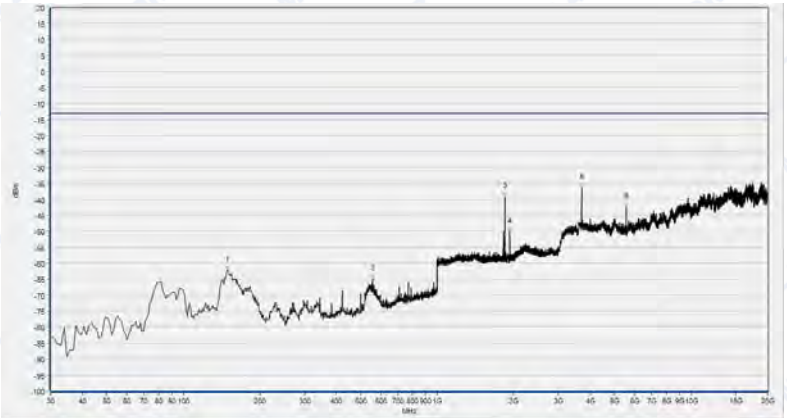
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	91.110	-60.25	-13.00	289.5	Horizontal	PASS
2	534.400	-63.89	-13.00	313.7	Horizontal	PASS
3	848.680	-17.45	-13.00	20.5	Horizontal	N.A
4	894.270	-33.70	-13.00	204.0	Horizontal	N.A
5	1697.239	-46.04	-13.00	56.2	Horizontal	PASS
6	2546.218	-42.94	-13.00	65.5	Horizontal	PASS
7	11788.343	-37.51	-13.00	186.5	Horizontal	PASS

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



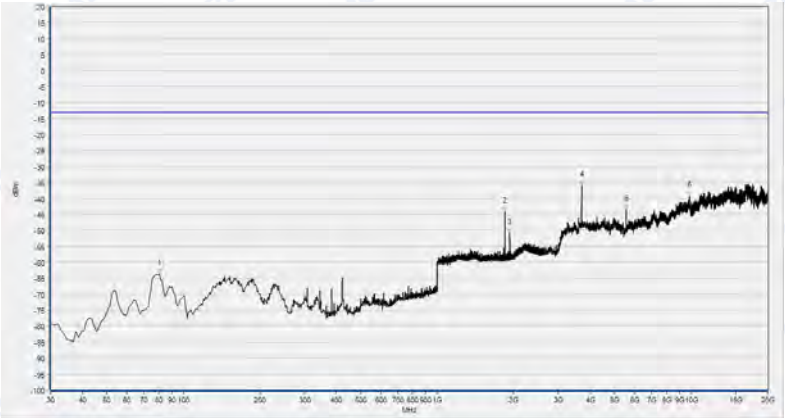
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	90.140	-60.08	-13.00	130.7	Vertical	PASS
2	422.850	-64.12	-13.00	357.4	Vertical	PASS
3	848.680	-29.10	-13.00	354.7	Vertical	N.A
4	881.660	-40.59	-13.00	344.7	Vertical	N.A
5	1697.879	-49.13	-13.00	51.1	Vertical	PASS
6	2546.218	-47.51	-13.00	306.4	Vertical	PASS

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



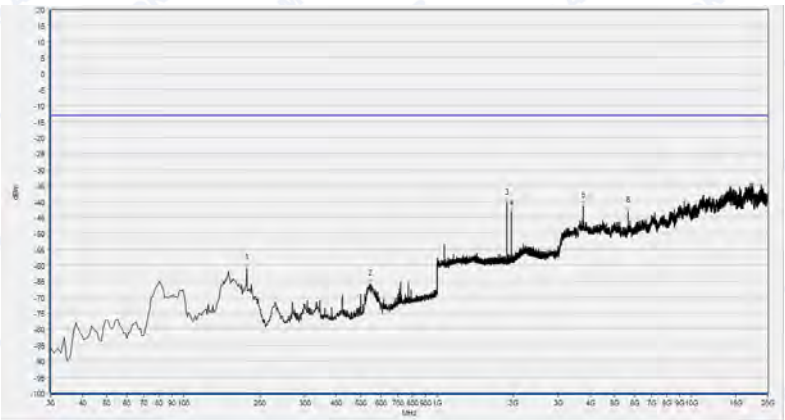
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	149.310	-62.15	-13.00	88.6	Horizontal	PASS
2	556.710	-64.97	-13.00	320.8	Horizontal	PASS
3	1850.260	-39.19	-13.00	116.5	Horizontal	N.A
4	1929.652	-50.23	-13.00	334.2	Horizontal	N.A
5	3701.146	-36.20	-13.00	185.3	Horizontal	PASS
6	5552.209	-42.38	-13.00	185.3	Horizontal	PASS

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



Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	80.440	-63.48	-13.00	1.0	Vertical	PASS
2	1850.260	-44.05	-13.00	55.8	Vertical	N.A
3	1930.292	-50.83	-13.00	319.7	Vertical	N.A
4	3701.146	-35.95	-13.00	80.4	Vertical	PASS
5	5549.045	-43.37	-13.00	37.6	Vertical	PASS
6	9858.702	-39.28	-13.00	149.3	Vertical	PASS

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

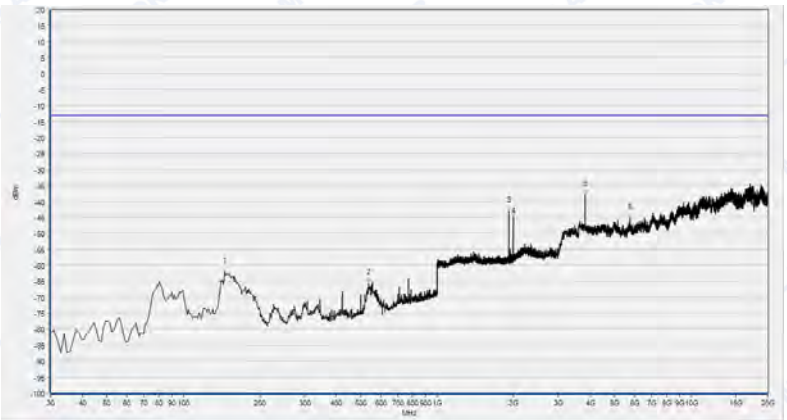


Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	177.440	-60.80	-13.00	81.9	Horizontal	PASS
2	542.160	-65.74	-13.00	301.8	Horizontal	PASS
3	1879.712	-40.58	-13.00	131.8	Horizontal	N.A
4	1959.744	-43.07	-13.00	91.3	Horizontal	N.A
5	3761.266	-41.50	-13.00	262.4	Horizontal	PASS
6	5640.807	-43.10	-13.00	46.5	Horizontal	PASS

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

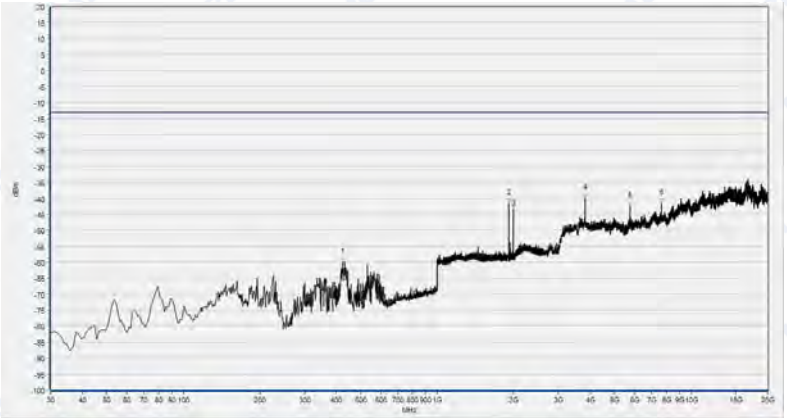
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	438.370	-58.75	-13.00	94.2	Vertical	PASS
2	1879.712	-39.77	-13.00	121.0	Vertical	N.A
3	1959.744	-42.11	-13.00	63.7	Vertical	N.A
4	3761.266	-37.19	-13.00	98.3	Vertical	PASS
5	5640.807	-38.83	-13.00	0.0	Vertical	PASS
6	11216.148	-37.51	-13.00	162.3	Vertical	PASS

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



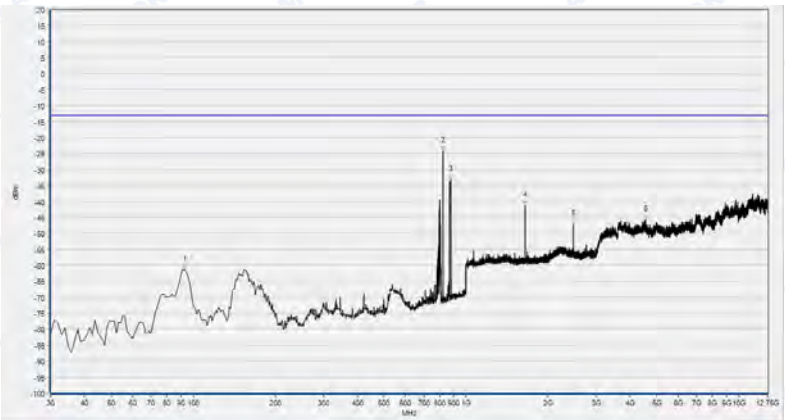
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	145.430	-61.94	-13.00	89.0	Horizontal	PASS
2	538.280	-65.55	-13.00	339.3	Horizontal	PASS
3	1909.804	-42.92	-13.00	115.0	Horizontal	N.A
4	1989.836	-44.88	-13.00	46.2	Horizontal	N.A
5	3818.221	-37.86	-13.00	347.6	Horizontal	PASS
6	5729.405	-45.26	-13.00	58.1	Horizontal	PASS

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



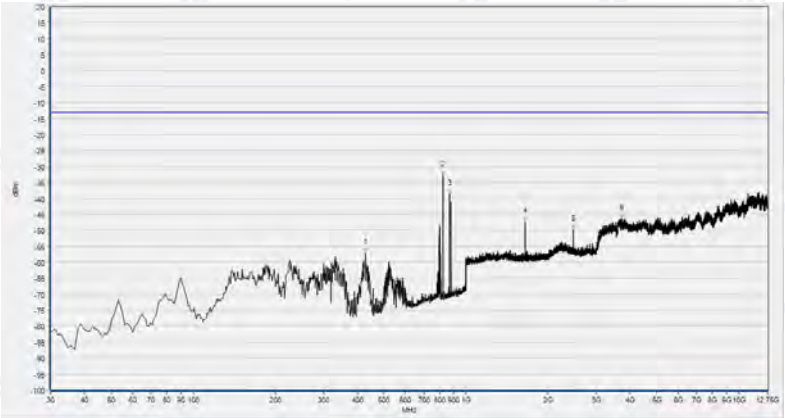
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	424.790	-60.00	-13.00	2.7	Vertical	PASS
2	1909.804	-41.43	-13.00	105.4	Vertical	N.A
3	1989.196	-43.41	-13.00	45.8	Vertical	N.A
4	3818.221	-39.81	-13.00	179.8	Vertical	PASS
5	5729.405	-42.33	-13.00	129.2	Vertical	PASS
6	7637.425	-41.49	-13.00	218.5	Vertical	PASS

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



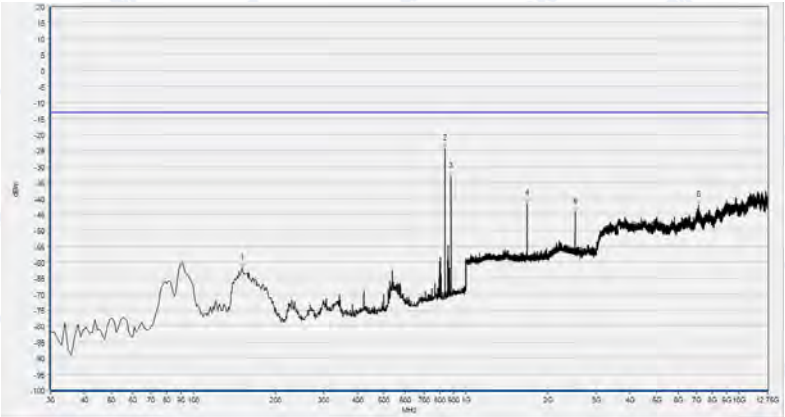
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	93.050	-61.29	-13.00	283.6	Horizontal	PASS
2	824.430	-24.33	-13.00	8.6	Horizontal	N.A
3	881.660	-33.07	-13.00	198.0	Horizontal	N.A
4	1647.939	-41.12	-13.00	73.7	Horizontal	PASS
5	2472.589	-47.22	-13.00	99.8	Horizontal	PASS
6	4558.383	-45.62	-13.00	99.7	Horizontal	PASS

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



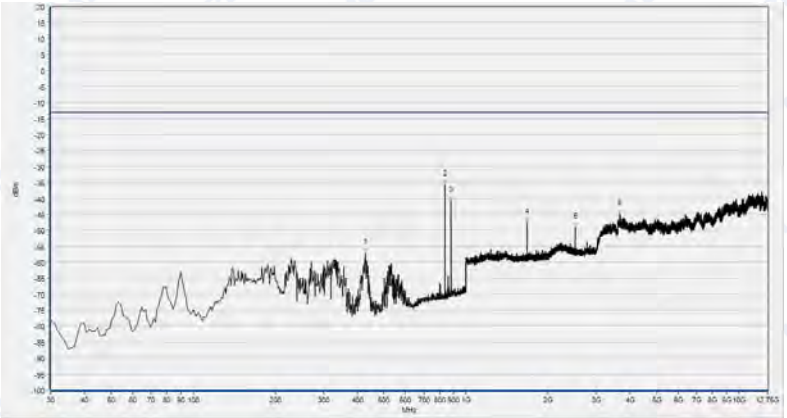
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	428.670	-57.19	-13.00	357.9	Vertical	PASS
2	824.430	-32.84	-13.00	131.4	Vertical	N.A
3	869.050	-38.59	-13.00	320.7	Vertical	N.A
4	1647.939	-47.25	-13.00	321.2	Vertical	PASS
5	2471.949	-49.72	-13.00	46.9	Vertical	PASS
6	3711.166	-46.41	-13.00	357.1	Vertical	PASS

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



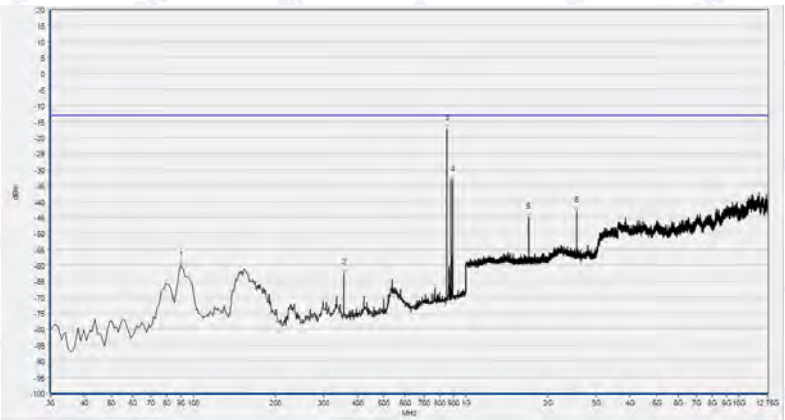
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	151.250	-61.88	-13.00	88.6	Horizontal	PASS
2	836.070	-24.55	-13.00	355.6	Horizontal	N.A
3	881.660	-33.08	-13.00	204.7	Horizontal	N.A
4	1672.909	-41.67	-13.00	46.1	Horizontal	PASS
5	2509.724	-44.31	-13.00	58.4	Horizontal	PASS
6	7122.186	-42.04	-13.00	172.4	Horizontal	PASS

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



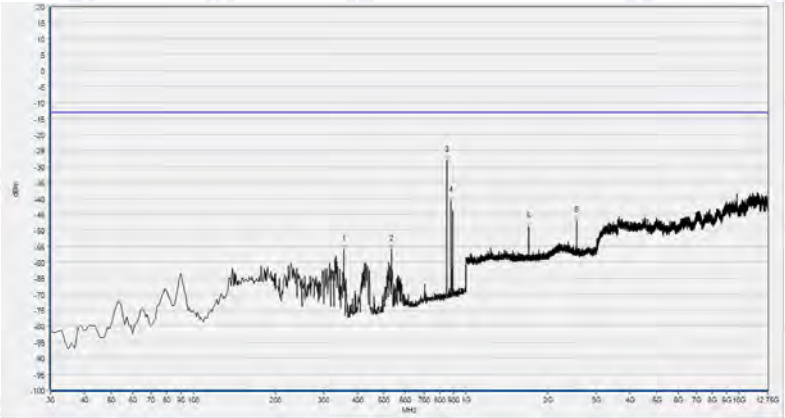
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	428.670	-57.17	-13.00	338.7	Vertical	PASS
2	837.040	-35.60	-13.00	149.3	Vertical	N.A
3	881.660	-40.77	-13.00	314.2	Vertical	N.A
4	1672.909	-47.45	-13.00	51.4	Vertical	PASS
5	2509.724	-48.98	-13.00	304.7	Vertical	PASS
6	3666.867	-44.85	-13.00	188.7	Vertical	PASS

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



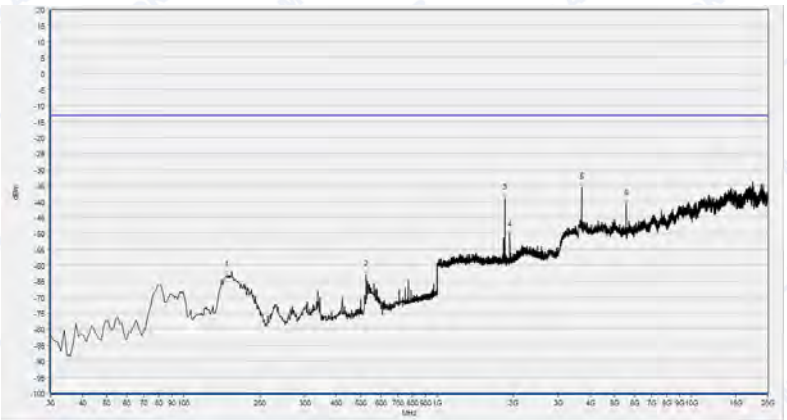
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	90.140	-60.09	-13.00	290.0	Horizontal	PASS
2	355.920	-62.49	-13.00	247.5	Horizontal	PASS
3	848.680	-17.26	-13.00	9.1	Horizontal	N.A
4	893.300	-33.48	-13.00	241.2	Horizontal	N.A
5	1697.239	-45.04	-13.00	38.4	Horizontal	PASS
6	2546.218	-43.10	-13.00	57.3	Horizontal	PASS

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



Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	355.920	-56.09	-13.00	58.1	Vertical	PASS
2	533.430	-55.89	-13.00	58.1	Vertical	PASS
3	848.680	-28.08	-13.00	339.1	Vertical	N.A
4	881.660	-40.71	-13.00	351.4	Vertical	N.A
5	1697.239	-48.93	-13.00	35.0	Vertical	PASS
6	2546.218	-47.12	-13.00	282.5	Vertical	PASS

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

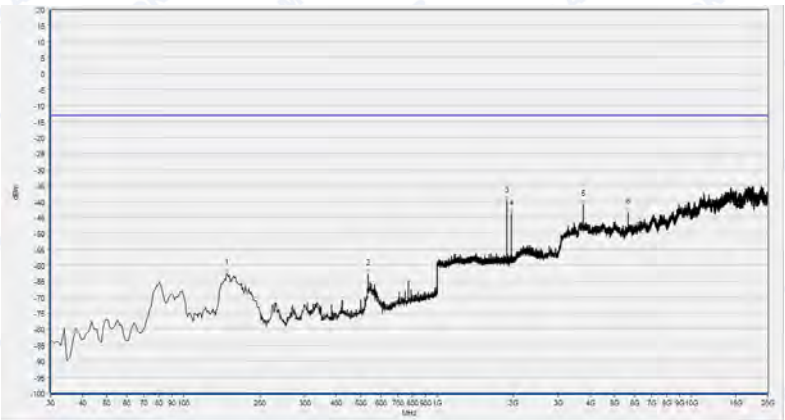


Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	148.340	-63.13	-13.00	81.9	Horizontal	PASS
2	524.700	-62.90	-13.00	289.9	Horizontal	PASS
3	1849.620	-39.10	-13.00	69.6	Horizontal	N.A
4	1929.652	-50.50	-13.00	173.4	Horizontal	N.A
5	3701.146	-35.68	-13.00	164.5	Horizontal	PASS
6	5549.045	-40.86	-13.00	314.8	Horizontal	PASS

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

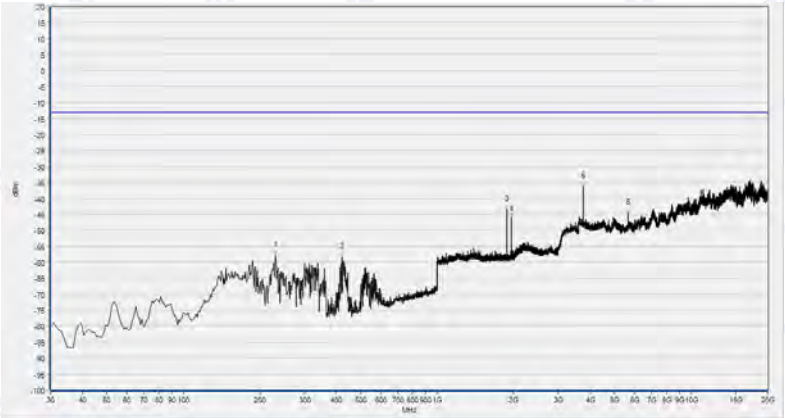
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	227.880	-57.82	-13.00	57.3	Vertical	PASS
2	425.760	-59.62	-13.00	0.0	Vertical	PASS
3	1850.260	-42.91	-13.00	44.7	Vertical	N.A
4	1929.652	-51.18	-13.00	298.4	Vertical	N.A
5	3701.146	-36.48	-13.00	48.0	Vertical	PASS
6	5549.045	-43.82	-13.00	313.4	Vertical	PASS

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



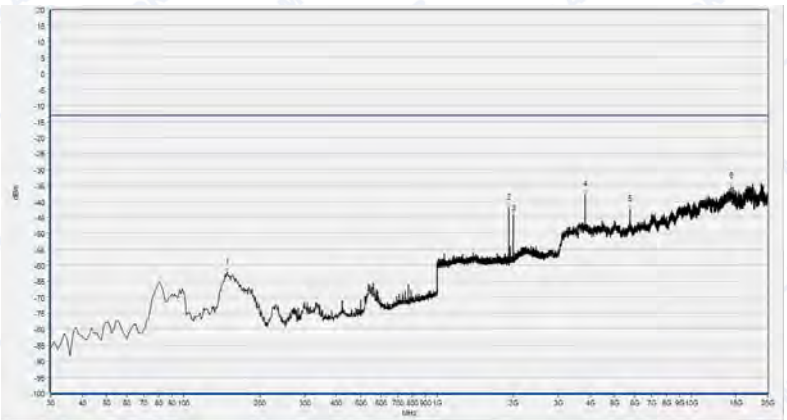
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	148.340	-62.43	-13.00	89.0	Horizontal	PASS
2	533.430	-62.71	-13.00	89.0	Horizontal	PASS
3	1879.712	-39.93	-13.00	118.4	Horizontal	N.A
4	1959.744	-43.81	-13.00	149.7	Horizontal	N.A
5	3761.266	-41.08	-13.00	185.0	Horizontal	PASS
6	5640.807	-43.46	-13.00	348.0	Horizontal	PASS

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



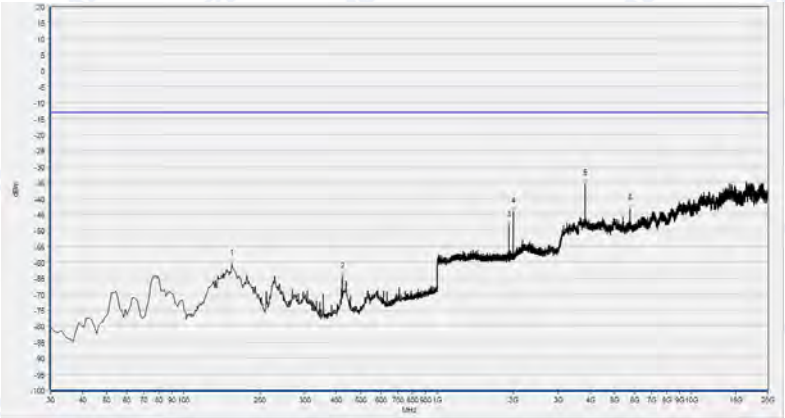
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	230.790	-57.84	-13.00	21.3	Vertical	PASS
2	420.910	-58.43	-13.00	339.1	Vertical	PASS
3	1879.712	-43.52	-13.00	33.9	Vertical	N.A
4	1959.744	-45.88	-13.00	210.3	Vertical	N.A
5	3761.266	-36.26	-13.00	173.0	Vertical	PASS
6	5640.807	-44.59	-13.00	350.1	Vertical	PASS

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



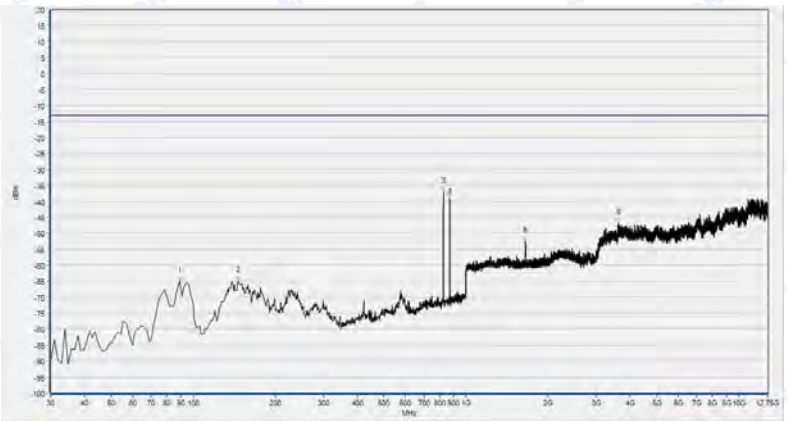
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	149.310	-62.31	-13.00	88.1	Horizontal	PASS
2	1909.804	-42.10	-13.00	128.4	Horizontal	N.A
3	1989.836	-44.40	-13.00	228.5	Horizontal	N.A
4	3818.221	-37.93	-13.00	103.8	Horizontal	PASS
5	5729.405	-42.58	-13.00	327.5	Horizontal	PASS
6	14389.853	-35.43	-13.00	0.7	Horizontal	PASS

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



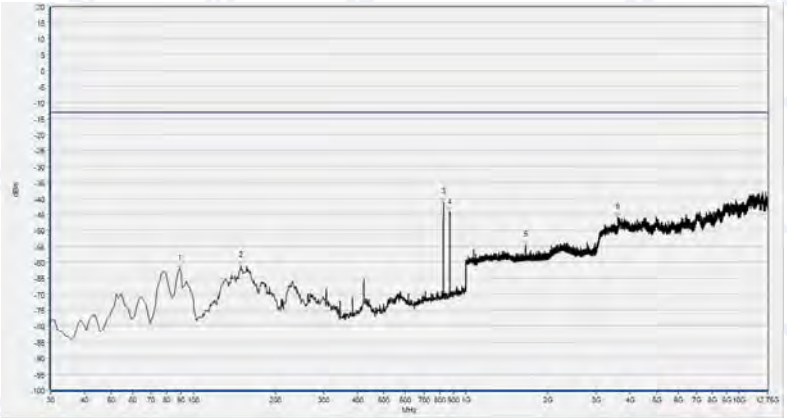
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	155.130	-60.54	-13.00	234.8	Vertical	PASS
2	422.850	-64.45	-13.00	332.4	Vertical	PASS
3	1909.804	-48.41	-13.00	77.1	Vertical	N.A
4	1989.836	-44.10	-13.00	64.1	Vertical	N.A
5	3818.221	-35.47	-13.00	263.1	Vertical	PASS
6	5729.405	-43.23	-13.00	72.9	Vertical	PASS

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



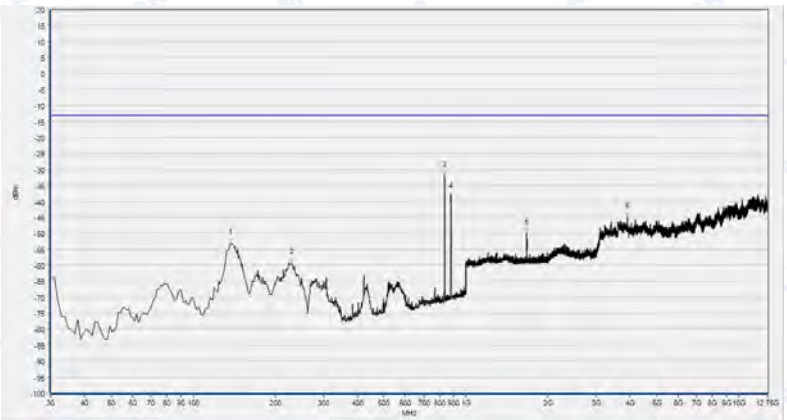
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	89.170	-64.85	-13.00	321.9	Horizontal	PASS
2	146.400	-64.91	-13.00	309.6	Horizontal	PASS
3	827.340	-37.03	-13.00	279.1	Horizontal	N.A
4	870.990	-38.93	-13.00	291.0	Horizontal	N.A
5	1651.140	-52.32	-13.00	234.5	Horizontal	PASS
6	3611.493	-46.74	-13.00	66.4	Horizontal	PASS

(Plot E1: WCDMA 850MHz Channel = 4132, Test Antenna Horizontal)



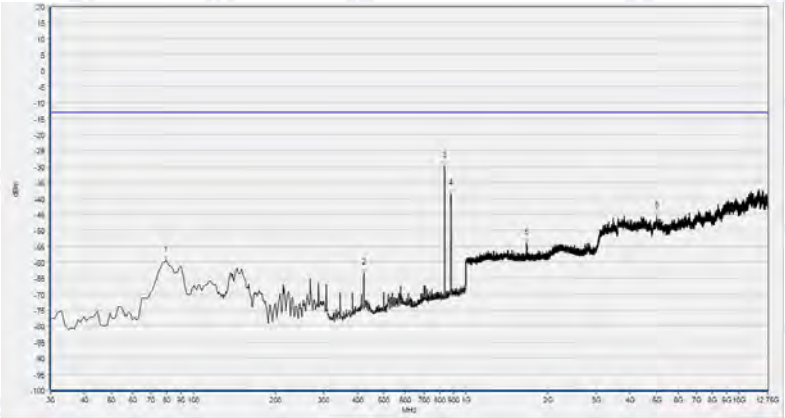
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	89.170	-62.09	-13.00	161.9	Vertical	PASS
2	149.310	-61.21	-13.00	241.5	Vertical	PASS
3	827.340	-41.29	-13.00	82.7	Vertical	N.A
4	870.020	-44.04	-13.00	125.4	Vertical	N.A
5	1654.982	-54.72	-13.00	74.8	Vertical	PASS
6	3605.956	-45.82	-13.00	8.2	Vertical	PASS

(Plot E2: WCDMA 850MHz Channel = 4132, Test Antenna Vertical)



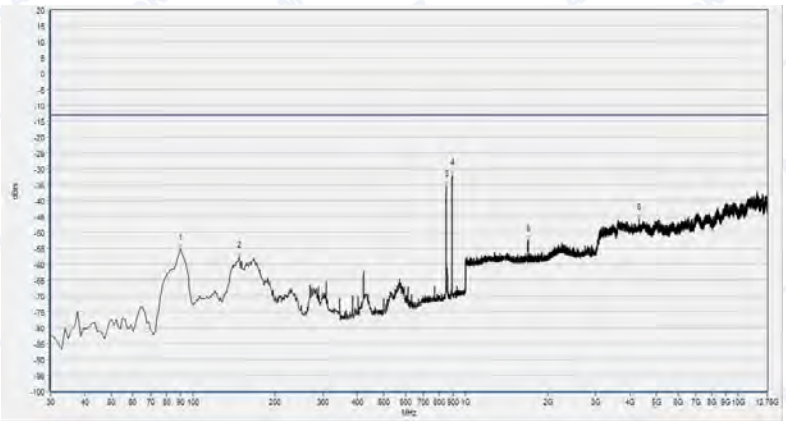
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	136.700	-53.06	-13.00	87.8	Horizontal	PASS
2	229.820	-59.35	-13.00	161.2	Horizontal	PASS
3	834.130	-31.84	-13.00	197.6	Horizontal	PASS
4	881.660	-38.53	-13.00	191.7	Horizontal	PASS
5	1668.427	-49.98	-13.00	129.5	Horizontal	PASS
6	3895.745	-44.70	-13.00	313.8	Horizontal	PASS

(Plot E3: WCDMA 850MHz Channel = 4175, Test Antenna Horizontal)



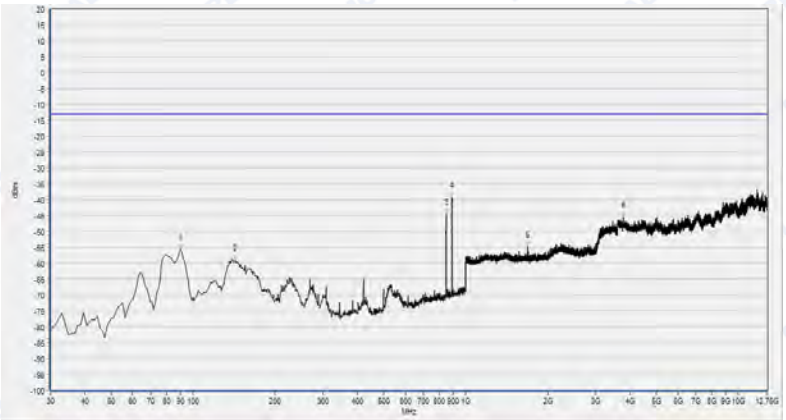
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	79.470	-59.37	-13.00	360.0	Vertical	PASS
2	422.850	-63.32	-13.00	186.5	Vertical	PASS
3	834.130	-29.87	-13.00	88.6	Vertical	N.A
4	881.660	-38.48	-13.00	15.3	Vertical	N.A
5	1667.787	-53.93	-13.00	100.8	Vertical	PASS
6	4992.144	-45.41	-13.00	235.2	Vertical	PASS

(Plot E4: WCDMA 850MHz Channel = 4175, Test Antenna Vertical)



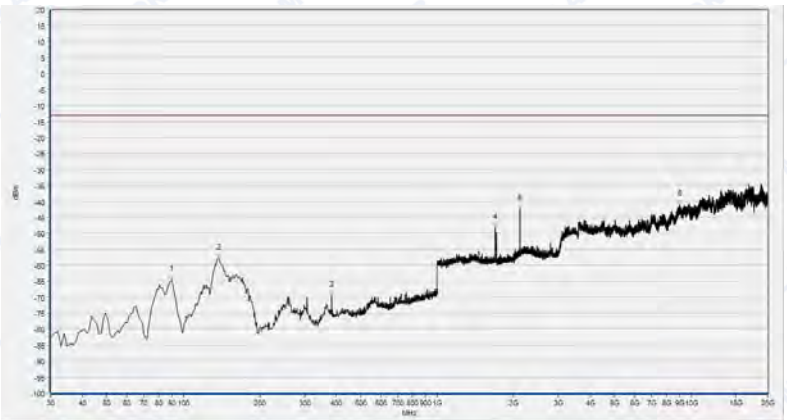
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	90.140	-55.25	-13.00	70.4	Horizontal	PASS
2	147.370	-57.73	-13.00	241.5	Horizontal	PASS
3	847.710	-35.25	-13.00	266.1	Horizontal	PASS
4	892.330	-32.05	-13.00	205.1	Horizontal	PASS
5	1691.477	-52.29	-13.00	224.8	Horizontal	PASS
6	4327.660	-45.69	-13.00	184.3	Horizontal	PASS

(Plot E5: WCDMA 850MHz Channel = 4233, Test Antenna Horizontal)



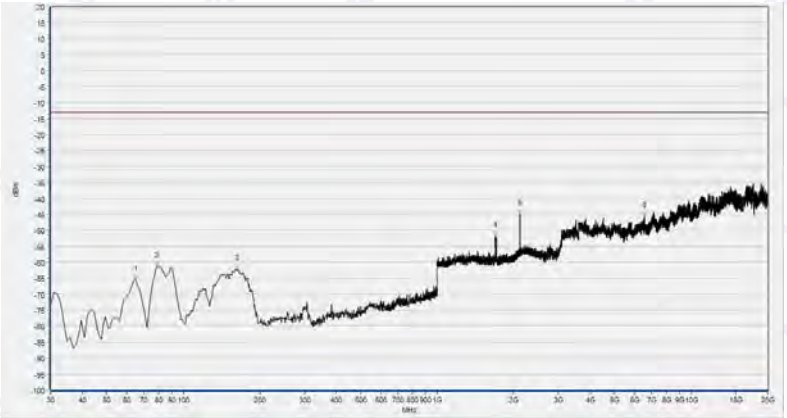
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	90.140	-55.65	-13.00	1.0	Vertical	PASS
2	142.520	-59.13	-13.00	355.6	Vertical	PASS
3	847.710	-44.56	-13.00	137.7	Vertical	PASS
4	890.390	-39.26	-13.00	15.3	Vertical	PASS
5	1690.196	-54.81	-13.00	99.3	Vertical	PASS
6	3781.306	-45.55	-13.00	250.8	Vertical	PASS

(Plot E6: WCDMA 850MHz Channel = 4233, Test Antenna Vertical)



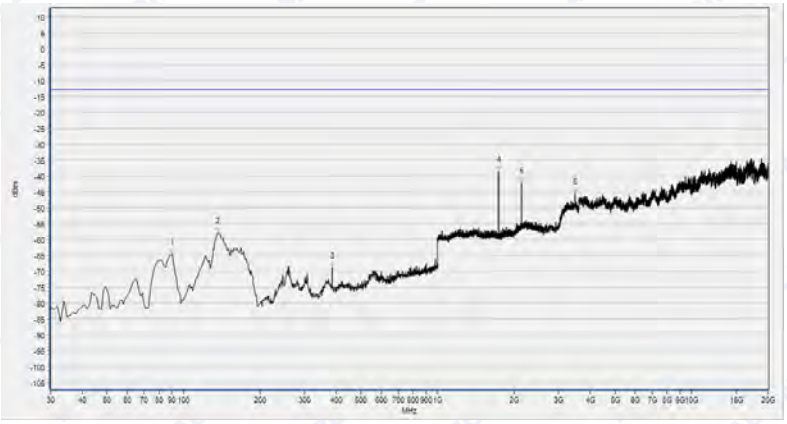
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	90.200	-64.53	-13.00	295.9	Horizontal	PASS
2	137.778	-57.77	-13.00	106.5	Horizontal	PASS
3	384.404	-69.35	-13.00	359.0	Horizontal	PASS
4	1689.945	-48.17	-13.00	346.1	Horizontal	PASS
5	2111.756	-42.30	-13.00	59.2	Horizontal	PASS
6	9021.670	-41.08	-13.00	340.9	Horizontal	PASS

(Plot F1: WCDMA 1700MHz Channel = 1312, Test Antenna Horizontal)



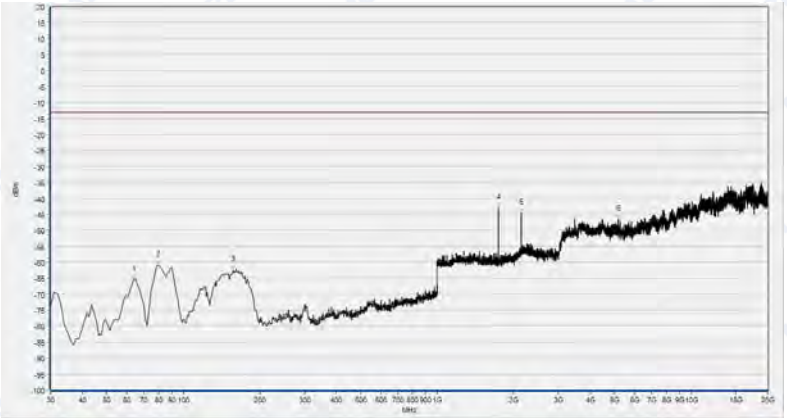
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	64.955	-65.28	-13.00	0.0	Vertical	PASS
2	78.549	-61.45	-13.00	0.0	Vertical	PASS
3	163.023	-62.06	-13.00	0.0	Vertical	PASS
4	1689.945	-51.83	-13.00	0.0	Vertical	PASS
5	2112.556	-44.81	-13.00	0.0	Vertical	PASS
6	6538.856	-45.57	-13.00	0.0	Vertical	PASS

(Plot F2: WCDMA 1700MHz Channel = 1312, Test Antenna Vertical)



Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	90.200	-64.62	-13.00	301.9	Horizontal	PASS
2	136.807	-58.00	-13.00	69.7	Horizontal	PASS
3	384.404	-68.76	-13.00	20.9	Horizontal	PASS
4	1739.570	-38.54	-13.00	315.6	Horizontal	PASS
5	2139.770	-42.28	-13.00	236.3	Horizontal	PASS
6	3478.846	-45.49	-13.00	53.9	Horizontal	PASS

(Plot F3: WCDMA 1700MHz Channel = 1412, Test Antenna Horizontal)

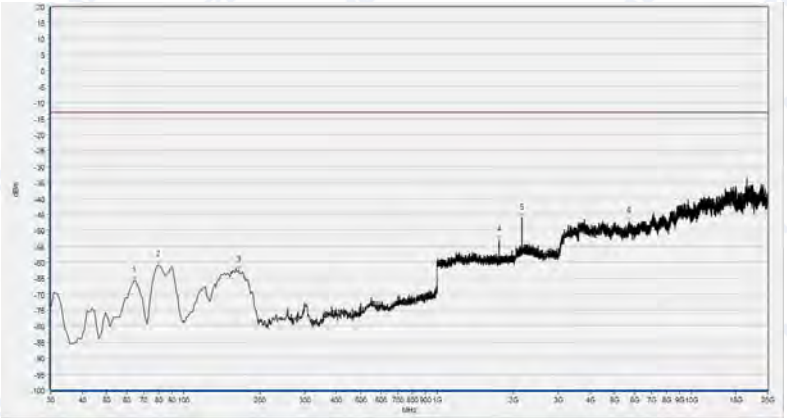


Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	63.984	-65.42	-13.00	0.0	Vertical	PASS
2	79.520	-60.93	-13.00	0.0	Vertical	PASS
3	157.197	-62.38	-13.00	0.0	Vertical	PASS
4	1738.769	-42.98	-13.00	0.0	Vertical	PASS
5	2141.371	-44.56	-13.00	0.0	Vertical	PASS
6	5152.425	-46.62	-13.00	0.0	Vertical	PASS

(Plot F4: WCDMA 1700MHz Channel = 1412, Test Antenna Vertical)

Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	89.229	-64.95	-13.00	82.2	Horizontal	PASS
2	136.807	-57.79	-13.00	82.2	Horizontal	PASS
3	384.404	-69.39	-13.00	350.9	Horizontal	PASS
4	1751.576	-50.11	-13.00	328.1	Horizontal	PASS
5	2152.576	-42.70	-13.00	236.6	Horizontal	PASS
6	7153.759	-44.43	-13.00	309.3	Horizontal	PASS

(Plot F5: WCDMA 1700MHz Channel = 1513, Test Antenna Horizontal)

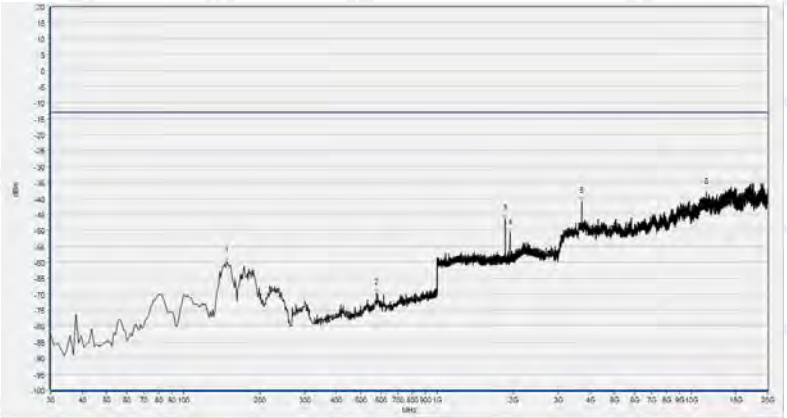


Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	63.984	-65.92	-13.00	0.0	Vertical	PASS
2	79.520	-60.91	-13.00	0.0	Vertical	PASS
3	165.936	-62.52	-13.00	0.0	Vertical	PASS
4	1751.576	-53.04	-13.00	0.0	Vertical	PASS
5	2152.576	-46.16	-13.00	0.0	Vertical	PASS
6	5680.313	-47.28	-13.00	0.0	Vertical	PASS

(Plot F6: WCDMA 1700MHz Channel = 1513, Test Antenna Vertical)

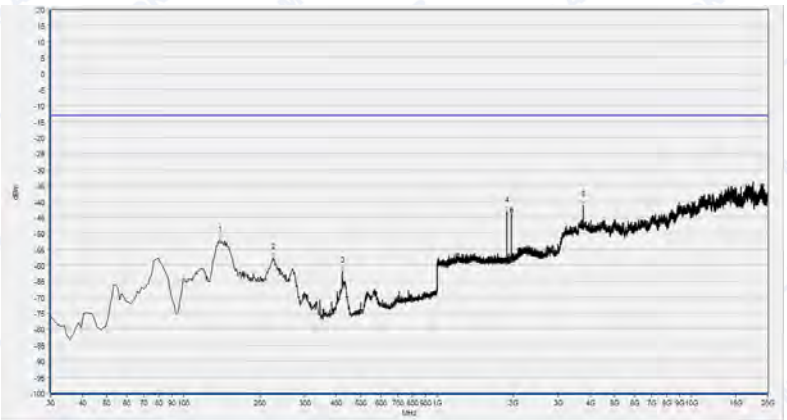
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	139.610	-53.78	-13.00	45.4	Horizontal	PASS
2	422.850	-61.87	-13.00	198.4	Horizontal	PASS
3	1851.541	-38.86	-13.00	70.0	Horizontal	N.A
4	1933.493	-45.20	-13.00	57.0	Horizontal	N.A
5	3701.146	-38.00	-13.00	114.6	Horizontal	PASS
6	13972.177	-35.46	-13.00	301.9	Horizontal	PASS

(Plot G1: WCDMA 1900MHz Channel = 9262, Test Antenna Horizontal)



Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	148.340	-59.81	-13.00	267.5	Vertical	PASS
2	576.110	-69.50	-13.00	291.7	Vertical	PASS
3	1851.541	-46.35	-13.00	0.0	Vertical	N.A
4	1933.493	-50.75	-13.00	1.4	Vertical	N.A
5	3704.310	-40.90	-13.00	0.0	Vertical	PASS
Num	Freq(MHz)	PK	limit PK	Degree	Vertical	PASS

(Plot G2: WCDMA 1900MHz Channel = 9262, Test Antenna Vertical)

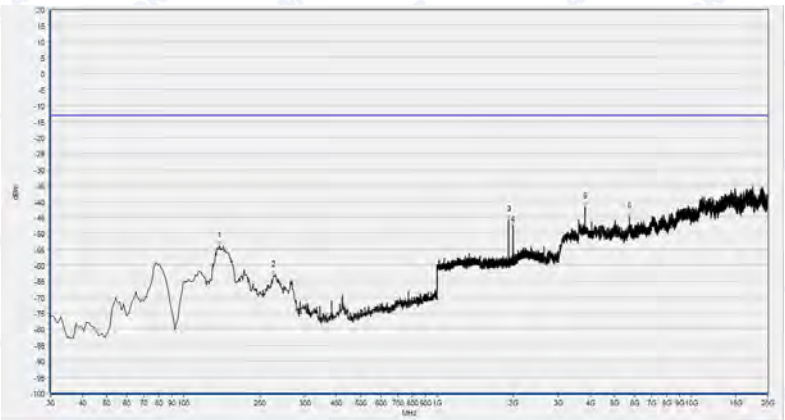


Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	139.610	-52.21	-13.00	4.4	Horizontal	PASS
2	225.940	-57.52	-13.00	326.4	Horizontal	PASS
3	422.850	-61.74	-13.00	142.9	Horizontal	PASS
4	1879.072	-43.02	-13.00	81.2	Horizontal	N.A
5	1959.744	-43.66	-13.00	55.9	Horizontal	N.A
6	3761.266	-41.33	-13.00	0.5	Horizontal	PASS

(Plot G3: WCDMA 1900MHz Channel = 9400, Test Antenna Horizontal)

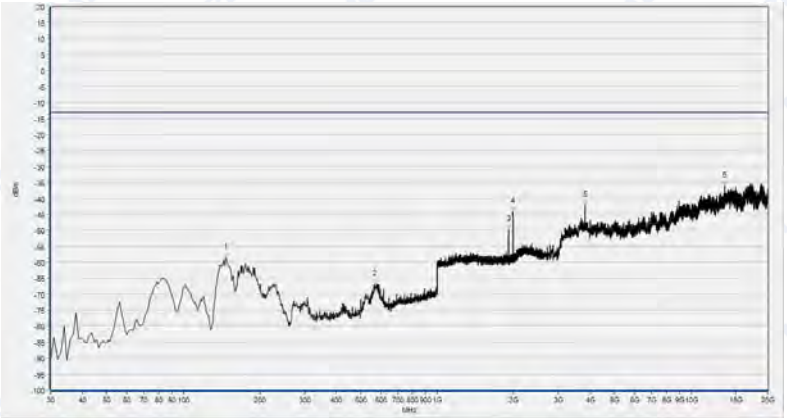
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	147.370	-59.40	-13.00	94.2	Vertical	PASS
2	613.940	-69.27	-13.00	290.0	Vertical	PASS
3	1878.431	-46.61	-13.00	93.8	Vertical	N.A
4	1960.384	-40.22	-13.00	226.6	Vertical	N.A
5	3761.266	-40.29	-13.00	141.4	Vertical	PASS
6	11257.283	-37.72	-13.00	90.8	Vertical	PASS

(Plot G4: WCDMA 1900MHz Channel = 9400, Test Antenna Vertical)



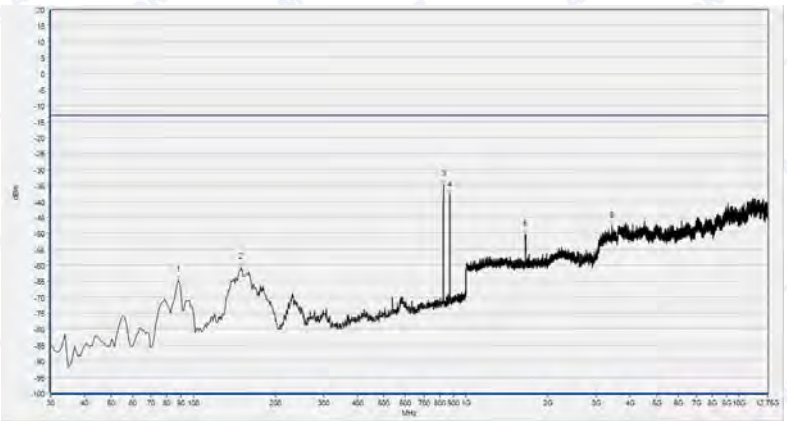
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	138.640	-53.94	-13.00	79.1	Horizontal	PASS
2	226.910	-63.07	-13.00	42.2	Horizontal	PASS
3	1908.523	-45.63	-13.00	150.1	Horizontal	N.A
4	1987.275	-47.35	-13.00	175.4	Horizontal	N.A
5	3818.221	-41.58	-13.00	350.8	Horizontal	PASS
6	5719.913	-44.84	-13.00	360.0	Horizontal	PASS

(Plot G5: WCDMA 1900MHz Channel = 9538, Test Antenna Horizontal)



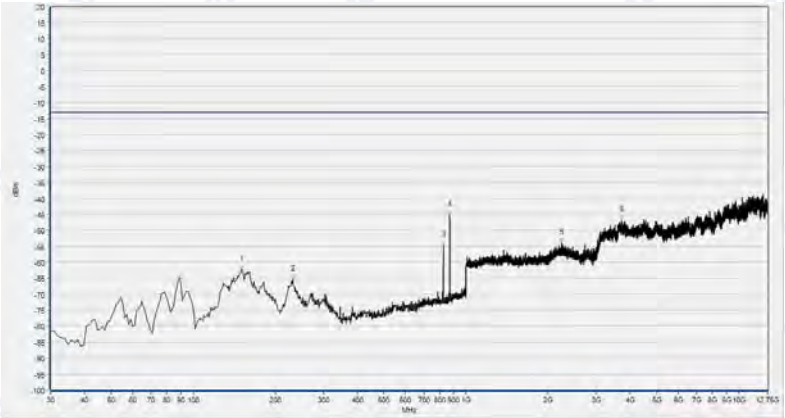
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	147.370	-58.67	-13.00	83.8	Vertical	PASS
2	566.410	-66.94	-13.00	65.6	Vertical	PASS
3	1908.523	-49.76	-13.00	135.4	Vertical	N.A
4	1986.635	-44.13	-13.00	172.9	Vertical	N.A
5	3815.057	-42.07	-13.00	281.3	Vertical	PASS
6	13573.486	-36.13	-13.00	293.5	Vertical	PASS

(Plot G6: WCDMA 1900MHz Channel = 9538, Test Antenna Vertical)



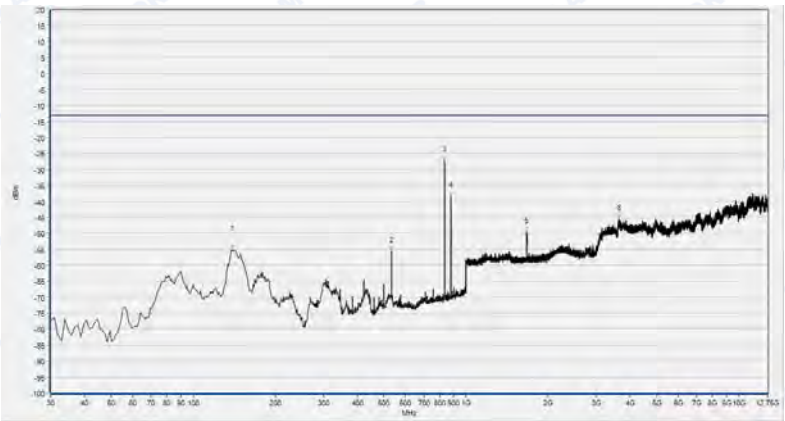
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	88.200	-64.64	-13.00	47.8	Horizontal	PASS
2	149.310	-60.73	-13.00	47.8	Horizontal	PASS
3	827.340	-34.79	-13.00	78.3	Horizontal	N.A
4	870.990	-37.58	-13.00	47.8	Horizontal	N.A
5	1649.860	-50.46	-13.00	172.4	Horizontal	PASS
6	3432.451	-47.77	-13.00	256.8	Horizontal	PASS

(Plot H1: HSDPA 850MHz Channel = 4132, Test Antenna Horizontal)



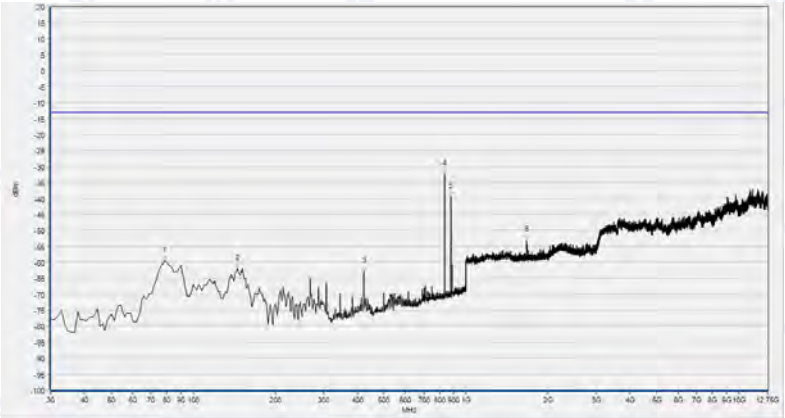
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	150.280	-62.30	-13.00	250.7	Vertical	PASS
2	231.760	-65.29	-13.00	238.5	Vertical	PASS
3	827.340	-54.81	-13.00	250.7	Vertical	N.A
4	870.020	-45.35	-13.00	263.0	Vertical	N.A
5	2239.536	-54.07	-13.00	168.5	Vertical	PASS
6	3714.857	-46.71	-13.00	40.8	Vertical	PASS

(Plot H2: HSDPA 850MHz Channel = 4132, Test Antenna Vertical)



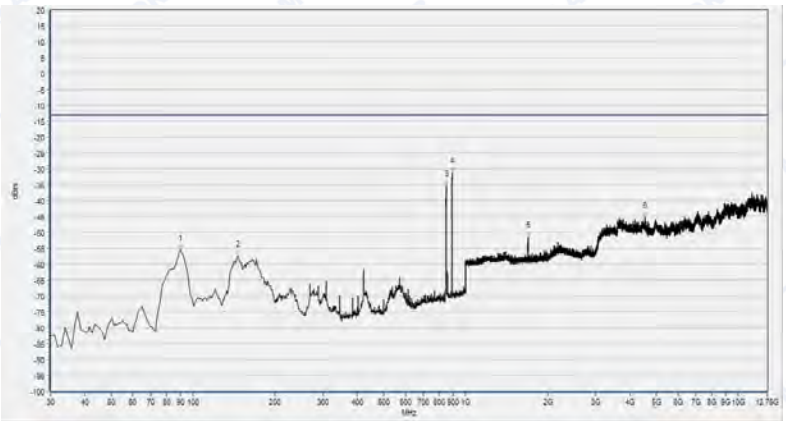
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	139.610	-55.18	-13.00	76.7	Horizontal	PASS
2	533.430	-55.55	-13.00	357.9	Horizontal	PASS
3	834.130	-27.16	-13.00	308.9	Horizontal	PASS
4	880.690	-38.23	-13.00	64.1	Horizontal	PASS
5	1668.427	-49.49	-13.00	308.9	Horizontal	PASS
6	3646.563	-45.54	-13.00	292.1	Horizontal	PASS

(Plot H3: HSDPA 850MHz Channel = 4175, Test Antenna Horizontal)



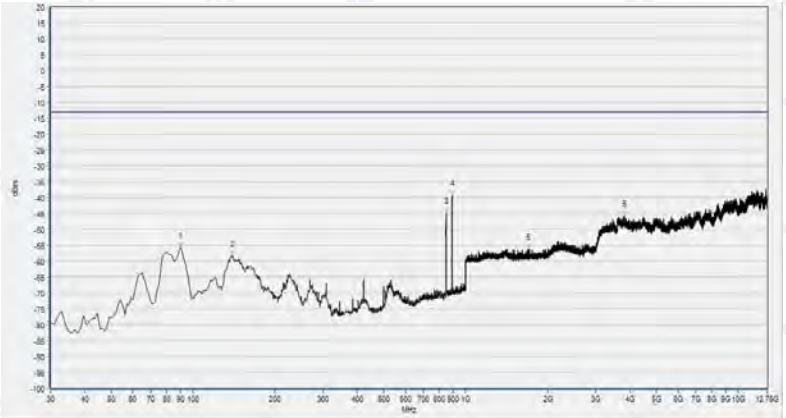
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	78.500	-59.49	-13.00	8.6	Vertical	PASS
2	145.430	-62.04	-13.00	2.0	Vertical	PASS
3	422.850	-62.88	-13.00	234.8	Vertical	N.A
4	834.130	-32.60	-13.00	81.8	Vertical	N.A
5	879.720	-39.38	-13.00	27.1	Vertical	PASS
6	1668.427	-52.99	-13.00	116.5	Vertical	PASS

(Plot H4: HSDPA 850MHz Channel = 4175, Test Antenna Vertical)



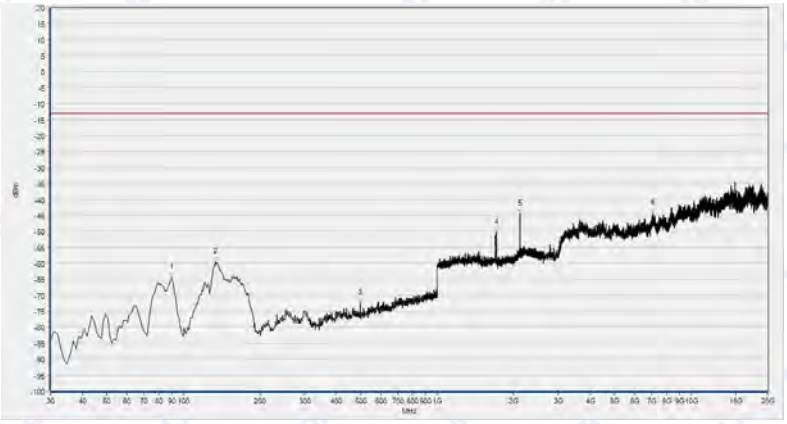
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	90.140	-55.41	-13.00	45.8	Horizontal	PASS
2	146.400	-57.28	-13.00	204.3	Horizontal	PASS
3	847.710	-35.32	-13.00	253.4	Horizontal	PASS
4	893.300	-31.23	-13.00	271.7	Horizontal	PASS
5	1695.318	-51.42	-13.00	245.9	Horizontal	PASS
6	4541.771	-45.20	-13.00	314.1	Horizontal	PASS

(Plot H5: HSDPA 850MHz Channel = 4233, Test Antenna Horizontal)



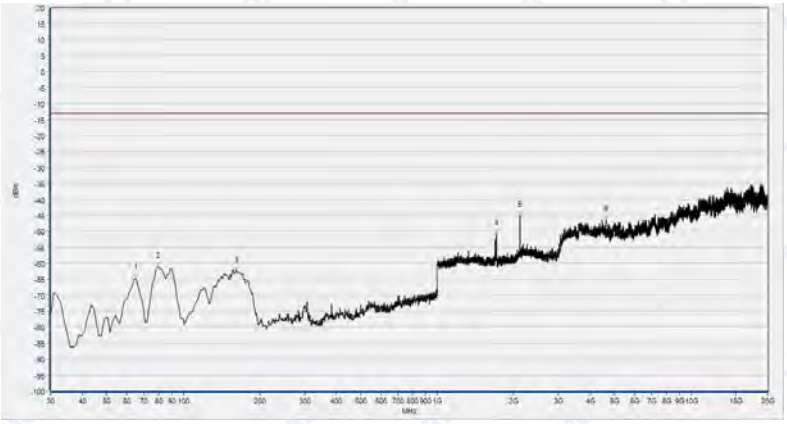
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	90.140	-55.71	-13.00	359.0	Vertical	PASS
2	139.610	-58.36	-13.00	332.4	Vertical	PASS
3	847.710	-44.85	-13.00	125.0	Vertical	PASS
4	892.330	-39.34	-13.00	20.8	Vertical	PASS
5	1691.477	-56.17	-13.00	138.1	Vertical	PASS
6	3831.142	-45.81	-13.00	351.8	Vertical	PASS

(Plot H6: HSDPA 850MHz Channel = 4233, Test Antenna Vertical)



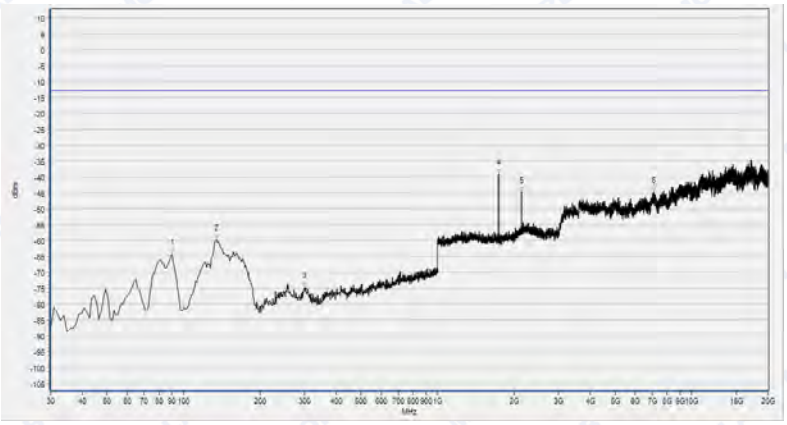
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	90.200	-64.57	-13.00	300.0	Horizontal	PASS
2	133.894	-59.62	-13.00	300.0	Horizontal	PASS
3	498.008	-72.57	-13.00	300.0	Horizontal	PASS
4	1711.556	-50.29	-13.00	300.0	Horizontal	PASS
5	2111.756	-44.65	-13.00	300.0	Horizontal	PASS
6	7084.147	-44.45	-13.00	300.0	Horizontal	PASS

(Plot I1: HSDPA 1700MHz Channel = 1312, Test Antenna Horizontal)



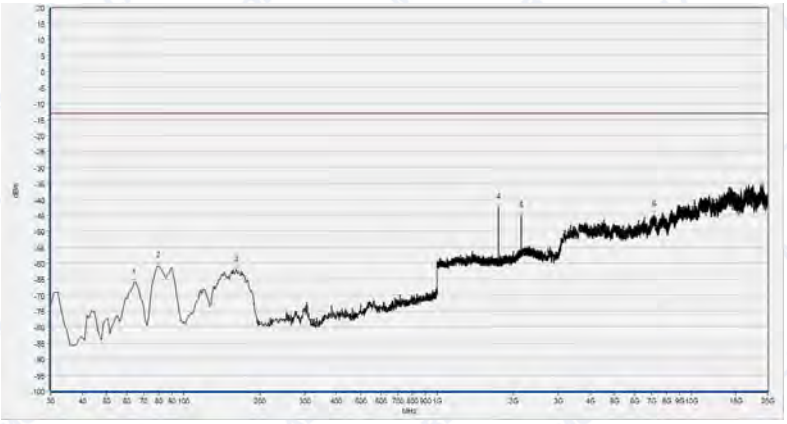
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	64.955	-64.76	-13.00	0.0	Vertical	PASS
2	79.520	-61.20	-13.00	0.0	Vertical	PASS
3	162.052	-62.45	-13.00	0.0	Vertical	PASS
4	1711.556	-50.92	-13.00	0.0	Vertical	PASS
5	2114.157	-45.03	-13.00	0.0	Vertical	PASS
6	4618.736	-46.46	-13.00	0.0	Vertical	PASS

(Plot I2: HSDPA 1700MHz Channel = 1312, Test Antenna Vertical)



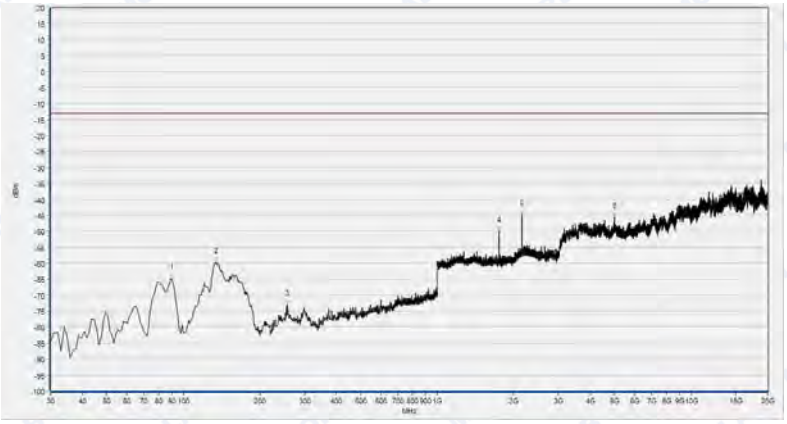
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	90.200	-64.41	-13.00	300.0	Horizontal	PASS
2	134.865	-59.91	-13.00	300.0	Horizontal	PASS
3	298.959	-74.87	-13.00	300.0	Horizontal	PASS
4	1739.570	-39.06	-13.00	300.0	Horizontal	PASS
5	2139.770	-44.78	-13.00	300.0	Horizontal	PASS
6	7072.545	-44.89	-13.00	300.0	Horizontal	PASS

(Plot I3: HSDPA 1700MHz Channel = 1412, Test Antenna Horizontal)



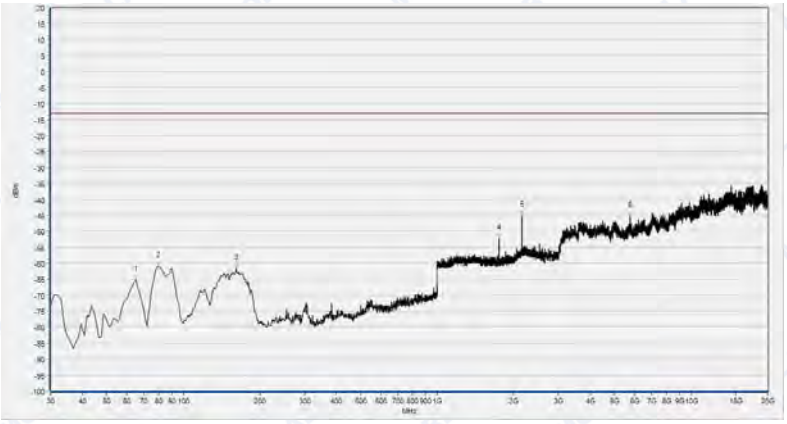
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	63.984	-66.25	-13.00	0.0	Vertical	PASS
2	79.520	-60.87	-13.00	0.0	Vertical	PASS
3	162.052	-62.11	-13.00	0.0	Vertical	PASS
4	1738.769	-42.51	-13.00	0.0	Vertical	PASS
5	2139.770	-45.24	-13.00	0.0	Vertical	PASS
6	7150.858	-44.80	-13.00	0.0	Vertical	PASS

(Plot I4: HSDPA 1700MHz Channel = 1412, Test Antenna Vertical)



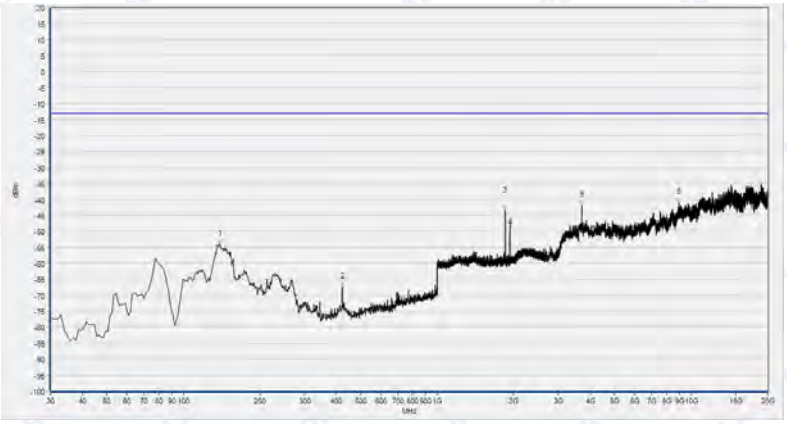
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	90.200	-64.78	-13.00	300.0	Horizontal	PASS
2	134.865	-59.59	-13.00	300.0	Horizontal	PASS
3	257.207	-73.07	-13.00	300.0	Horizontal	PASS
4	1751.576	-49.97	-13.00	300.0	Horizontal	PASS
5	2152.576	-44.87	-13.00	300.0	Horizontal	PASS
6	4989.998	-45.45	-13.00	300.0	Horizontal	PASS

(Plot I5: HSDPA 1700MHz Channel = 1513, Test Antenna Horizontal)



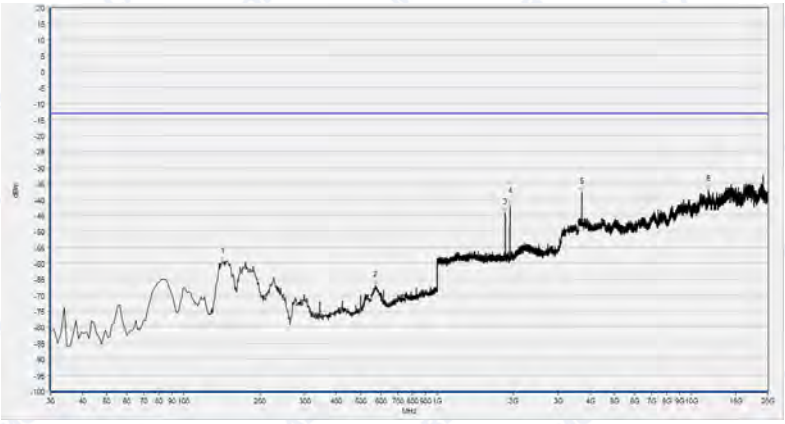
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	64.955	-65.20	-13.00	0.0	Vertical	PASS
2	79.520	-60.88	-13.00	0.0	Vertical	PASS
3	162.052	-61.66	-13.00	0.0	Vertical	PASS
4	1751.576	-52.09	-13.00	0.0	Vertical	PASS
5	2153.377	-45.13	-13.00	0.0	Vertical	PASS
6	5749.925	-45.15	-13.00	0.0	Vertical	PASS

(Plot I6: HSDPA 1700MHz Channel = 1513, Test Antenna Vertical)



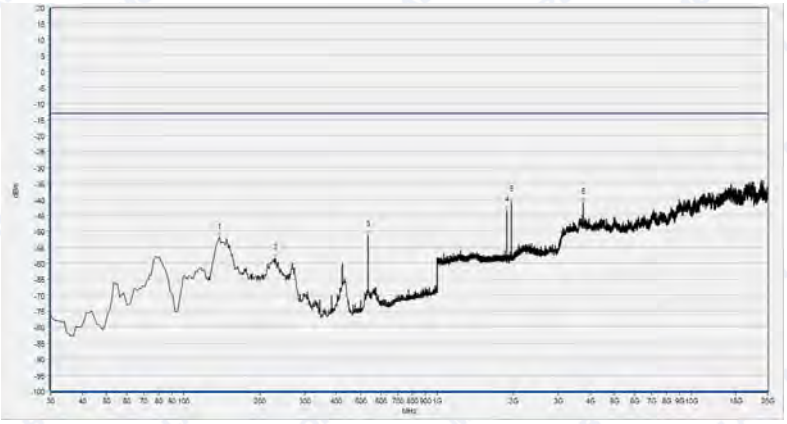
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	139.610	-53.86	-13.00	84.9	Horizontal	PASS
2	422.850	-67.33	-13.00	66.6	Horizontal	PASS
3	1851.541	-43.34	-13.00	149.3	Horizontal	N.A
4	1933.493	-47.69	-13.00	155.6	Horizontal	N.A
5	3704.310	-42.01	-13.00	253.4	Horizontal	PASS
6	8944.244	-40.99	-13.00	240.8	Horizontal	PASS

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



Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	142.520	-59.52	-13.00	88.2	Vertical	PASS
2	569.320	-66.97	-13.00	39.1	Vertical	PASS
3	1851.541	-44.14	-13.00	148.2	Vertical	N.A
4	1933.493	-42.21	-13.00	128.8	Vertical	N.A
5	3704.310	-37.57	-13.00	126.2	Vertical	PASS
6	11662.302	-36.95	-13.00	239.0	Vertical	PASS

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

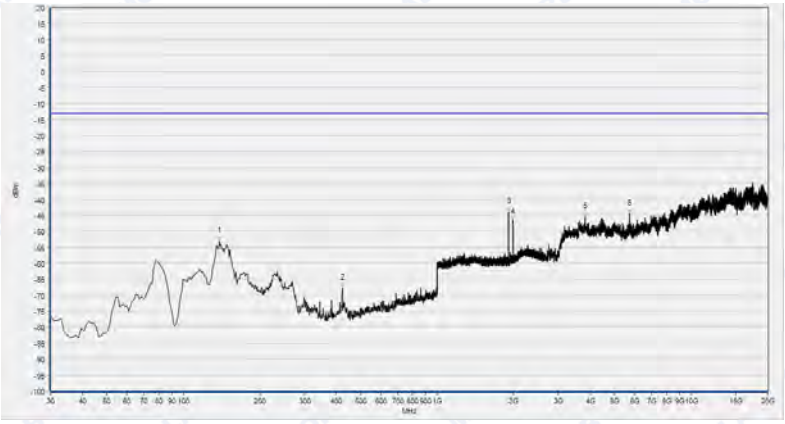


Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	138.640	-51.89	-13.00	0.5	Horizontal	PASS
2	230.790	-58.43	-13.00	301.5	Horizontal	PASS
3	533.430	-51.22	-13.00	228.1	Horizontal	PASS
4	1878.431	-43.39	-13.00	89.0	Horizontal	N.A
5	1959.744	-40.88	-13.00	56.6	Horizontal	N.A
6	3758.101	-40.99	-13.00	0.0	Horizontal	PASS

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

Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	143.490	-60.98	-13.00	235.6	Vertical	PASS
2	567.380	-69.07	-13.00	211.4	Vertical	PASS
3	1878.431	-50.84	-13.00	8.3	Vertical	N.A
4	1959.744	-43.62	-13.00	39.2	Vertical	N.A
5	3761.266	-43.46	-13.00	0.0	Vertical	PASS
6	14848.663	-34.81	-13.00	0.0	Vertical	PASS

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

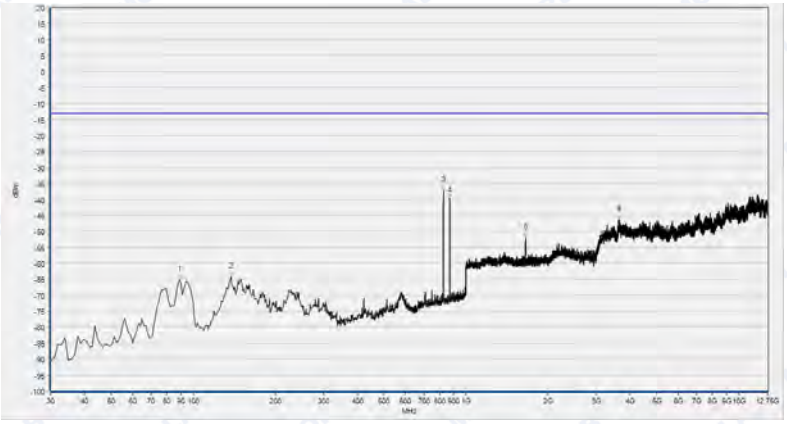


Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	138.640	-53.04	-13.00	65.4	Horizontal	PASS
2	422.850	-67.93	-13.00	89.9	Horizontal	PASS
3	1908.523	-43.86	-13.00	141.6	Horizontal	N.A
4	1985.994	-46.48	-13.00	166.9	Horizontal	N.A
5	3818.221	-45.52	-13.00	296.0	Horizontal	PASS
6	5726.241	-44.64	-13.00	258.5	Horizontal	PASS

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

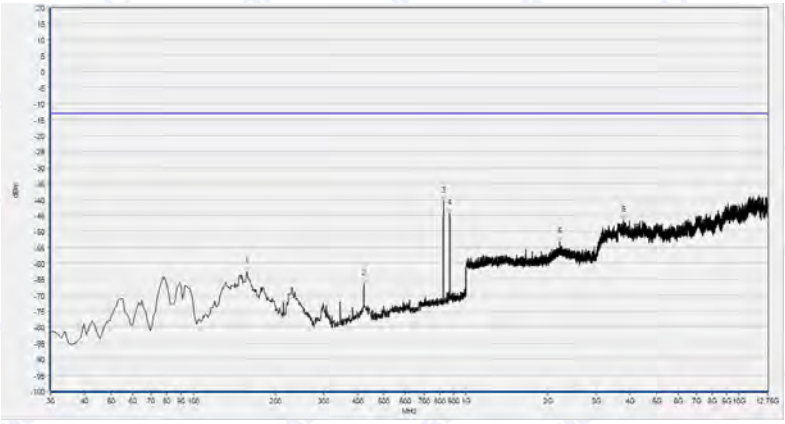
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	146.400	-60.67	-13.00	275.1	Vertical	PASS
2	173.560	-60.92	-13.00	275.1	Vertical	PASS
3	1907.883	-50.33	-13.00	228.4	Vertical	N.A
4	1986.635	-40.48	-13.00	215.8	Vertical	N.A
5	3818.221	-40.02	-13.00	127.2	Vertical	PASS
6	16481.397	-34.15	-13.00	77.3	Vertical	PASS

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



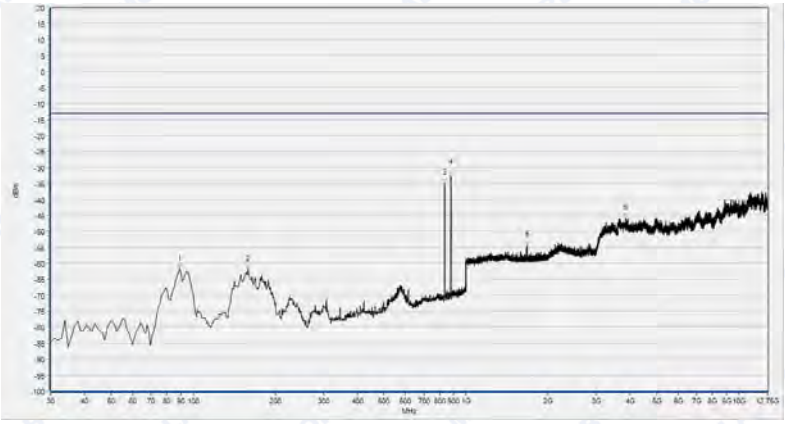
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	89.170	-65.07	-13.00	295.5	Horizontal	PASS
2	137.670	-64.29	-13.00	283.2	Horizontal	PASS
3	828.310	-37.29	-13.00	277.2	Horizontal	N.A
4	870.020	-39.72	-13.00	301.8	Horizontal	N.A
5	1654.342	-51.99	-13.00	177.1	Horizontal	PASS
6	3646.563	-46.46	-13.00	62.1	Horizontal	PASS

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



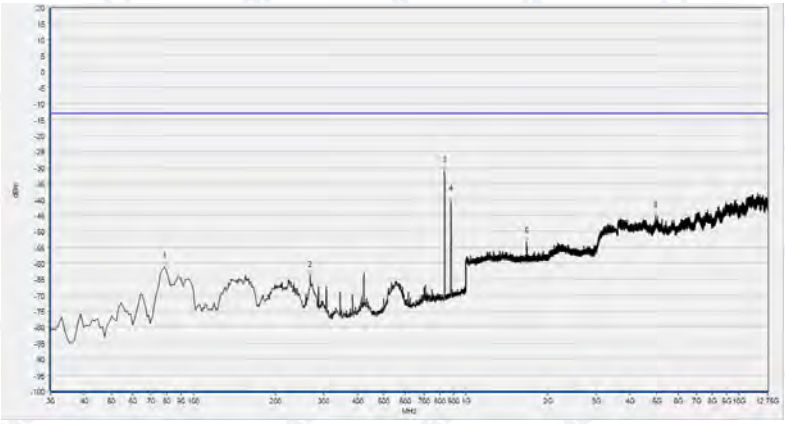
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	157.070	-62.63	-13.00	54.1	Vertical	PASS
2	422.850	-66.58	-13.00	41.8	Vertical	PASS
3	827.340	-40.52	-13.00	66.4	Vertical	N.A
4	870.990	-44.33	-13.00	60.4	Vertical	N.A
5	2207.523	-53.40	-13.00	142.3	Vertical	PASS
6	3781.306	-46.67	-13.00	249.5	Vertical	PASS

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



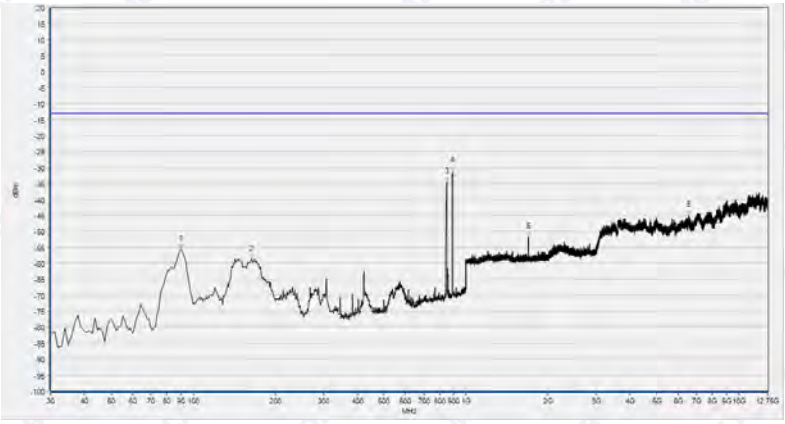
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	89.170	-61.78	-13.00	63.6	Horizontal	PASS
2	159.010	-62.00	-13.00	246.8	Horizontal	PASS
3	834.130	-34.99	-13.00	191.6	Horizontal	PASS
4	878.750	-32.77	-13.00	20.8	Horizontal	PASS
5	1671.629	-54.52	-13.00	51.1	Horizontal	PASS
6	3845.908	-45.88	-13.00	326.8	Horizontal	PASS

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



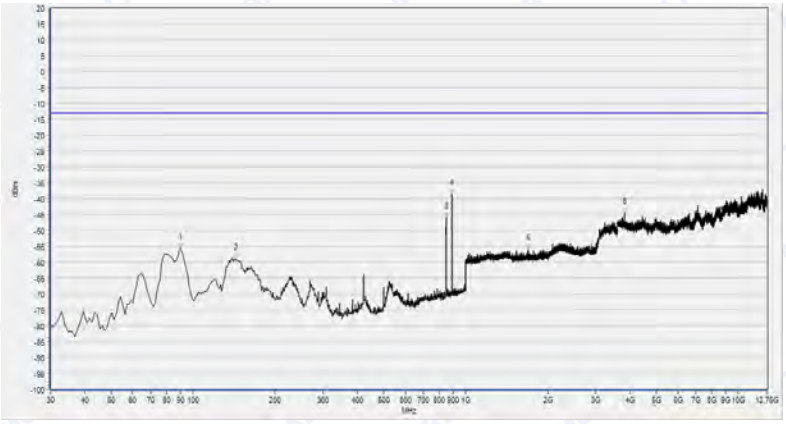
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	78.500	-61.19	-13.00	1.0	Vertical	PASS
2	268.620	-63.91	-13.00	308.5	Vertical	PASS
3	834.130	-31.07	-13.00	88.6	Vertical	PASS
4	878.750	-40.82	-13.00	27.6	Vertical	PASS
5	1667.787	-53.19	-13.00	94.5	Vertical	PASS
6	4960.766	-45.19	-13.00	46.6	Vertical	PASS

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



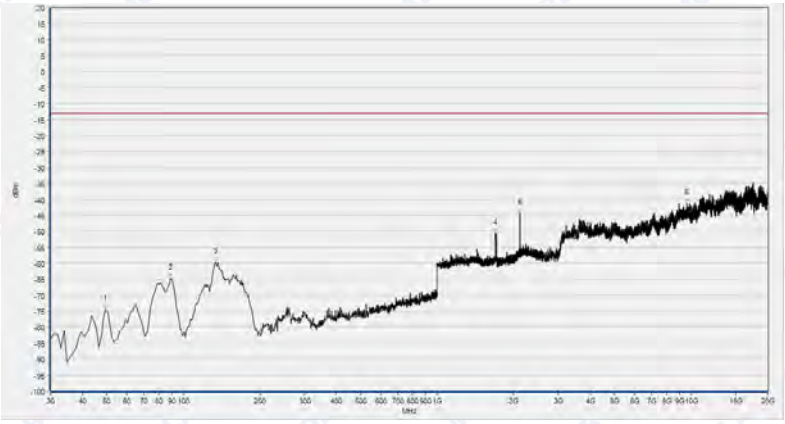
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	90.140	-55.47	-13.00	64.5	Horizontal	PASS
2	162.890	-58.80	-13.00	223.0	Horizontal	PASS
3	848.680	-34.58	-13.00	235.2	Horizontal	PASS
4	892.330	-31.73	-13.00	21.3	Horizontal	PASS
5	1690.836	-51.71	-13.00	231.5	Horizontal	PASS
6	6561.066	-44.97	-13.00	309.6	Horizontal	PASS

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



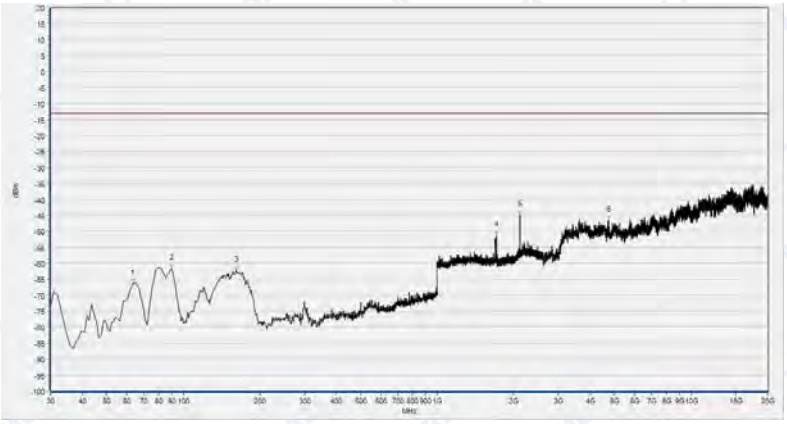
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	90.140	-55.60	-13.00	359.0	Vertical	PASS
2	143.490	-58.97	-13.00	308.2	Vertical	PASS
3	847.710	-45.85	-13.00	118.4	Vertical	PASS
4	890.390	-38.53	-13.00	4.4	Vertical	PASS
5	1695.958	-56.03	-13.00	117.0	Vertical	PASS
6	3827.450	-44.46	-13.00	37.9	Vertical	PASS

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



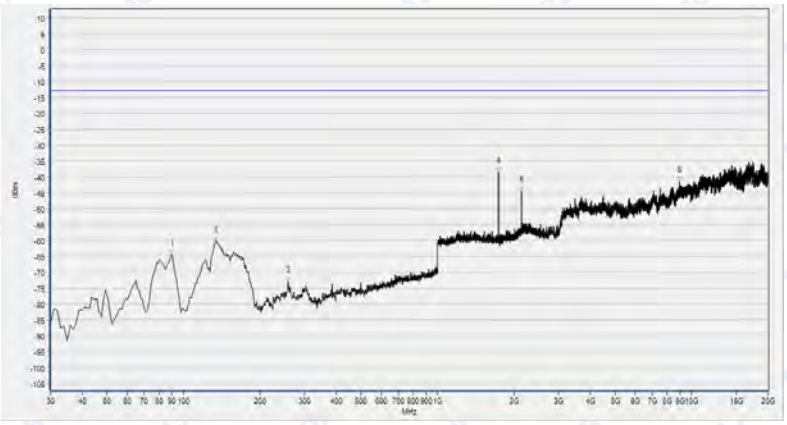
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	49.419	-74.54	-13.00	300.0	Horizontal	PASS
2	89.229	-64.76	-13.00	300.0	Horizontal	PASS
3	133.894	-59.57	-13.00	300.0	Horizontal	PASS
4	1689.145	-50.56	-13.00	300.0	Horizontal	PASS
5	2114.157	-44.43	-13.00	300.0	Horizontal	PASS
6	9627.871	-41.20	-13.00	300.0	Horizontal	PASS

(Plot L1: HSUPA 1700MHz Channel = 1312, Test Antenna Horizontal)



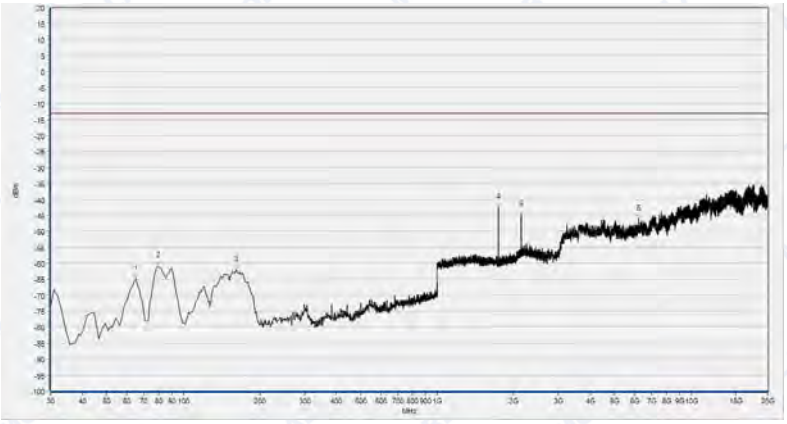
Num	Freq(MHz)	PK	limit PK	Num	Antenna	Verdict
1	63.013	-66.42	-13.00	1	Vertical	PASS
2	90.200	-61.49	-13.00	2	Vertical	PASS
3	162.052	-62.27	-13.00	3	Vertical	PASS
4	1711.556	-51.24	-13.00	4	Vertical	PASS
5	2114.157	-44.86	-13.00	5	Vertical	PASS
6	4720.253	-46.59	-13.00	6	Vertical	PASS

(Plot L2: HSUPA 1700MHz Channel = 1312, Test Antenna Vertical)



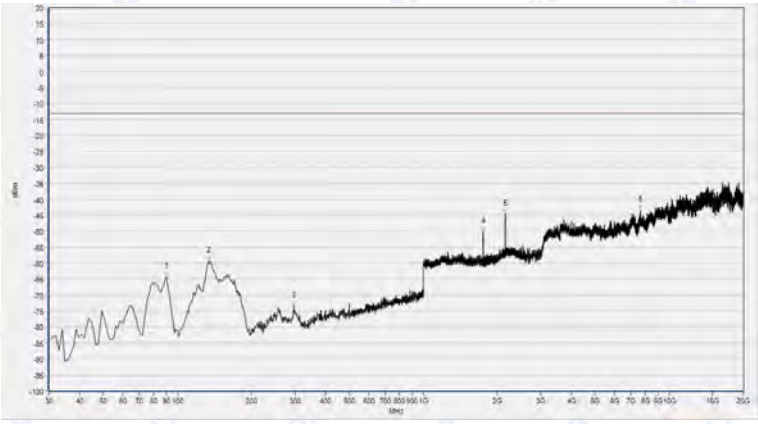
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	90.200	-64.68	-13.00	300.0	Horizontal	PASS
2	133.894	-60.34	-13.00	300.0	Horizontal	PASS
3	258.178	-73.01	-13.00	300.0	Horizontal	PASS
4	1738.769	-38.66	-13.00	300.0	Horizontal	PASS
5	2140.570	-44.63	-13.00	300.0	Horizontal	PASS
6	8952.059	-41.42	-13.00	300.0	Horizontal	PASS

(Plot L3: HSUPA 1700MHz Channel = 1412, Test Antenna Horizontal)



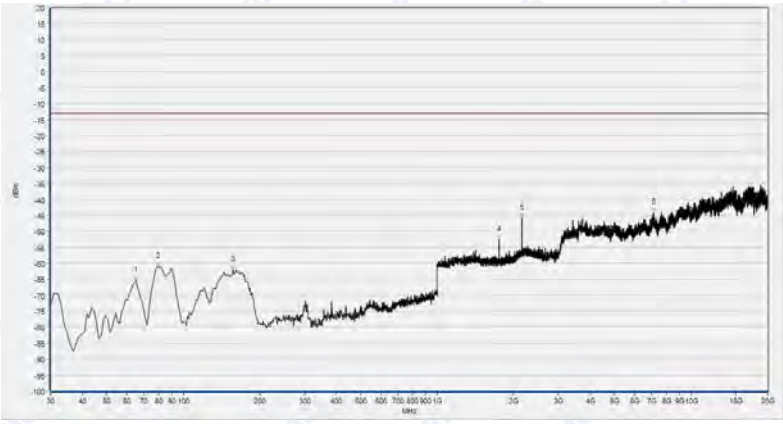
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	64.955	-64.85	-13.00	0.0	Vertical	PASS
2	79.520	-60.84	-13.00	0.0	Vertical	PASS
3	162.052	-62.08	-13.00	0.0	Vertical	PASS
4	1739.570	-42.60	-13.00	0.0	Vertical	PASS
5	2141.371	-44.92	-13.00	0.0	Vertical	PASS
6	6193.699	-46.12	-13.00	0.0	Vertical	PASS

(Plot L4: HSUPA 1700MHz Channel = 1412, Test Antenna Vertical)



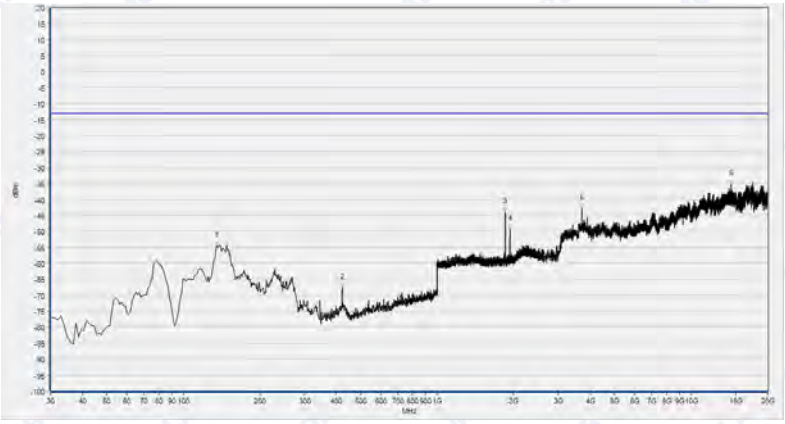
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	90.200	-64.22	-13.00	300.0	Horizontal	PASS
2	133.894	-59.41	-13.00	300.0	Horizontal	PASS
3	297.988	-73.42	-13.00	300.0	Horizontal	PASS
4	1751.576	-50.13	-13.00	300.0	Horizontal	PASS
5	2153.377	-44.64	-13.00	300.0	Horizontal	PASS
6	7612.035	-43.41	-13.00	300.0	Horizontal	PASS

(Plot L5: HSUPA 1700MHz Channel = 1513, Test Antenna Horizontal)



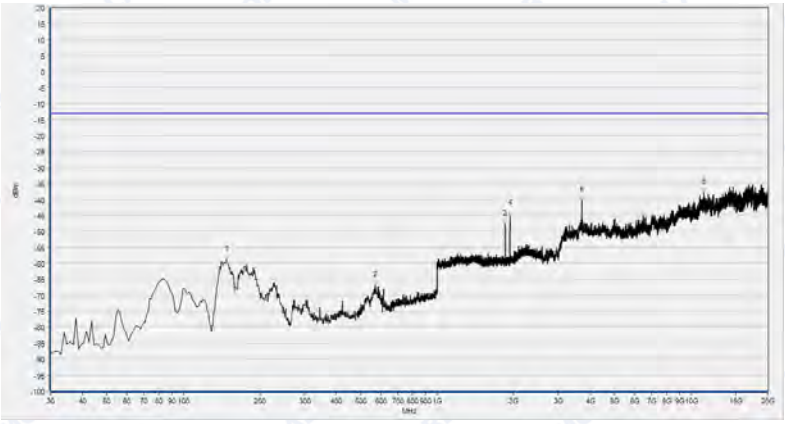
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	64.955	-65.29	-13.00	0.0	Vertical	PASS
2	79.520	-61.13	-13.00	0.0	Vertical	PASS
3	157.197	-62.01	-13.00	0.0	Vertical	PASS
4	1751.576	-52.63	-13.00	0.0	Vertical	PASS
5	2154.177	-46.01	-13.00	0.0	Vertical	PASS
6	7110.252	-44.12	-13.00	0.0	Vertical	PASS

(Plot L6: HSUPA 1700MHz Channel = 1513, Test Antenna Vertical)



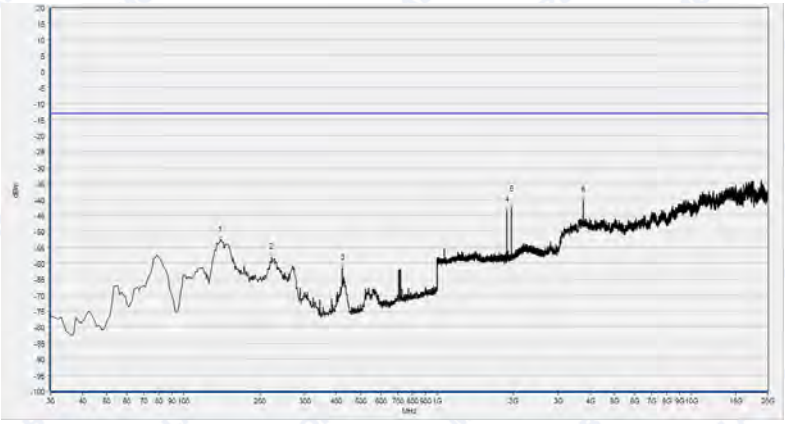
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	135.730	-54.67	-13.00	69.6	Horizontal	PASS
2	422.850	-67.58	-13.00	75.6	Horizontal	PASS
3	1850.900	-43.84	-13.00	145.0	Horizontal	N.A
4	1933.493	-49.36	-13.00	157.6	Horizontal	N.A
5	3707.474	-42.86	-13.00	243.5	Horizontal	PASS
6	14370.867	-35.20	-13.00	243.5	Horizontal	PASS

(Plot M1: HSUPA 1900MHz Channel = 9262, Test Antenna Horizontal)



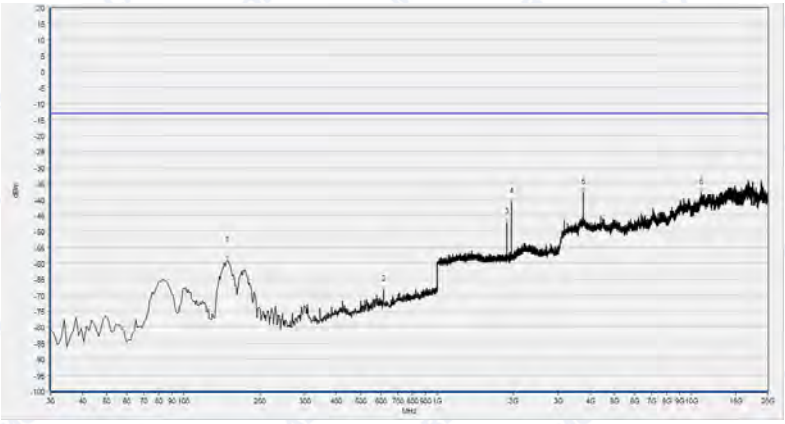
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	148.340	-58.98	-13.00	88.7	Vertical	PASS
2	571.260	-66.93	-13.00	57.8	Vertical	PASS
3	1851.541	-47.62	-13.00	331.7	Vertical	N.A
4	1933.493	-45.36	-13.00	344.3	Vertical	N.A
5	3704.310	-40.37	-13.00	360.0	Vertical	PASS
6	11216.148	-37.81	-13.00	360.0	Vertical	PASS

(Plot M2: HSUPA 1900MHz Channel = 9262, Test Antenna Vertical)



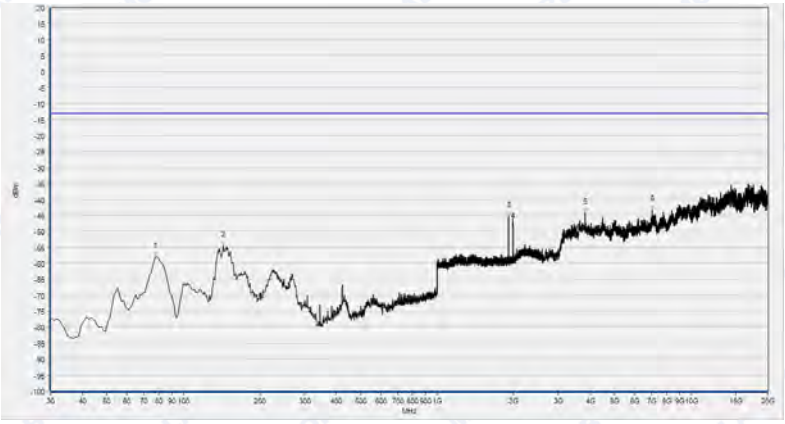
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	139.610	-52.81	-13.00	168.2	Horizontal	PASS
2	223.030	-58.10	-13.00	333.1	Horizontal	PASS
3	422.850	-61.64	-13.00	199.1	Horizontal	PASS
4	1878.431	-43.53	-13.00	74.0	Horizontal	N.A
5	1959.744	-42.68	-13.00	41.7	Horizontal	N.A
6	3758.101	-40.42	-13.00	8.8	Horizontal	PASS

(Plot M3: HSUPA 1900MHz Channel = 9400, Test Antenna Horizontal)



Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	149.310	-59.07	-13.00	81.9	Vertical	PASS
2	613.940	-68.24	-13.00	39.1	Vertical	PASS
3	1878.431	-47.16	-13.00	92.0	Vertical	N.A
4	1959.744	-40.89	-13.00	320.0	Vertical	N.A
5	3761.266	-37.78	-13.00	127.3	Vertical	PASS
6	10953.519	-37.95	-13.00	45.4	Vertical	PASS

(Plot M4: HSUPA 1900MHz Channel = 9400, Test Antenna Vertical)



Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	77.530	-58.05	-13.00	309.7	Horizontal	PASS
2	143.490	-54.51	-13.00	309.7	Horizontal	PASS
3	1908.523	-45.30	-13.00	145.2	Horizontal	N.A
4	1987.915	-45.88	-13.00	183.1	Horizontal	N.A
5	3818.221	-44.13	-13.00	81.2	Horizontal	PASS
6	7017.239	-43.26	-13.00	68.5	Horizontal	PASS

(Plot M5: HSUPA 1900MHz Channel = 9538, Test Antenna Horizontal)

Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	141.550	-59.36	-13.00	63.6	Vertical	PASS
2	571.260	-67.46	-13.00	20.8	Vertical	PASS
3	1908.523	-46.20	-13.00	82.3	Vertical	N.A
4	1986.635	-42.55	-13.00	230.7	Vertical	N.A
5	3818.221	-38.22	-13.00	76.7	Vertical	PASS
6	9719.476	-39.32	-13.00	326.8	Vertical	PASS

(Plot M6: HSUPA 1900MHz Channel = 9538, Test Antenna Vertical)

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