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1. Radiated Power

1.1 Test Datas

GSM850

Frequency	Substitude SG	Height	Table	Polar	Cable loss	Antenna Gain	Result	FCC Part 22H Limit
MHz	dBm	Meter	Degree	H / V	dB	dB	dBm	dBm
Low Channel								
824.2	28.66	1.5	0	H	1.5	0	27.16	38.45
824.2	29.99	1.5	0	V	1.5	0	28.49	38.45
Middle Channel								
836.4	27.77	1.5	0	H	1.5	0	26.27	38.45
836.4	28.94	1.5	0	V	1.5	0	27.44	38.45
High Channel								
848.8	27.62	1.5	0	H	1.5	0	26.12	38.45
848.8	28.72	1.5	0	V	1.5	0	27.22	38.45

PCS1900

Frequency	Substitude SG	Height	Table	Polar	Cable loss	Antenna Gain	Result	FCC Part 24E Limit
MHz	dBm	Meter	Degree	H / V	dB	dB	dBm	dBm
Low Channel								
1850.2	18.82	1.5	0	H	1.9	7.7	24.62	33.00
1850.2	19.70	1.5	0	V	1.9	7.7	25.50	33.00
Middle Channel								
1880.0	19.81	1.5	0	H	1.9	7.7	25.61	33.00
1880.0	20.63	1.5	0	V	1.9	7.7	26.43	33.00
High Channel								
1909.8	19.63	1.5	0	H	1.9	7.7	25.43	33.00
1909.8	20.85	1.5	0	V	1.9	7.7	26.65	33.00

GPRS 850

Frequency	Substitude SG	Height	Table	Polar	Cable loss	Antenna Gain	Result	FCC Part 22H Limit
MHz	dBm	Meter	Degree	H / V	dB	dB	dBm	dBm
Low Channel								
824.2	28.87	1.5	0	H	1.5	0	27.37	38.45
824.2	28.83	1.5	0	V	1.5	0	27.33	38.45
Middle Channel								
836.6	26.80	1.5	0	H	1.5	0	25.30	38.45
836.6	27.84	1.5	0	V	1.5	0	26.34	38.45
High Channel								
848.8	26.82	1.5	0	H	1.5	0	25.32	38.45
848.8	27.79	1.5	0	V	1.5	0	26.29	38.45

GPRS 1900

Frequency	Substitude SG	Height	Table	Polar	Cable loss	Antenna Gain	Result	FCC Part 24E Limit
MHz	dBm	Meter	Degree	H / V	dB	dB	dBm	dBm
Low Channel								
1850.2	19.55	1.5	0	H	1.9	7.7	25.35	33.00

1850.2	20.87	1.5	0	V	1.9	7.7	26.67	33.00
Middle Channel								
1880.0	19.69	1.5	0	H	1.9	7.7	25.49	33.00
1880.0	20.57	1.5	0	V	1.9	7.7	26.37	33.00
High Channel								
1909.8	19.83	1.5	0	H	1.9	7.7	25.63	33.00
1909.8	20.50	1.5	0	V	1.9	7.7	26.30	33.00

EDGE850

Frequency	Substitude SG	Height	Table	Polar	Cable loss	Antenna Gain	Result	FCC Part 22H Limit
MHz	dBm	Meter	Degree	H / V	dB	dB	dBm	dBm
Low Channel								
824.2	28.36	1.5	0	H	1.5	0	26.86	38.45
824.2	30.35	1.5	0	V	1.5	0	28.85	38.45
Middle Channel								
836.6	28.20	1.5	0	H	1.5	0	26.70	38.45
836.6	30.18	1.5	0	V	1.5	0	28.68	38.45
High Channel								
848.8	28.23	1.5	0	H	1.5	0	26.73	38.45
848.8	30.24	1.5	0	V	1.5	0	28.74	38.45

EDGE1900

Frequency	Substitude SG	Height	Table	Polar	Cable loss	Antenna Gain	Result	FCC Part 24E Limit
MHz	dBm	Meter	Degree	H / V	dB	dB	dBm	dBm
Low Channel								
1850.2	16.06	1.5	0	H	1.9	7.7	21.86	33.00
1850.2	18.03	1.5	0	V	1.9	7.7	23.83	33.00
Middle Channel								
1880.0	16.46	1.5	0	H	1.9	7.7	22.26	33.00
1880.0	18.43	1.5	0	V	1.9	7.7	24.23	33.00
High Channel								
1909.8	16.63	1.5	0	H	1.9	7.7	22.43	33.00
1909.8	18.61	1.5	0	V	1.9	7.7	24.41	33.00

WCDMA Band 5

Frequency	Substitude SG	Height	Table	Polar	Cable loss	Antenna Gain	Result	FCC Part 22H Limit
MHz	dBm	Meter	Degree	H / V	dB	dBd	dBm	dBm
Low Channel								
826.4	20.99	1.5	0	H	1.5	0	19.49	38.45
826.4	21.79	1.5	0	V	1.5	0	20.29	38.45
Middle Channel								
836.6	20.99	1.5	0	H	1.5	0	19.49	38.45
836.6	21.64	1.5	0	V	1.5	0	20.14	38.45
High Channel								
846.6	21.14	1.5	0	H	1.5	0	19.64	38.45
846.6	21.85	1.5	0	V	1.5	0	20.35	38.45

HSDPA Band 5

Frequency	Substitude SG	Height	Table	Polar	Cable loss	Antenna Gain	Result	FCC Part 22H Limit
MHz	dBm	Meter	Degree	H / V	dB	dBd	dBm	dBm

Low Channel								
826.4	20.61	1.5	0	H	1.5	0	19.11	38.45
826.4	21.41	1.5	0	V	1.5	0	19.91	38.45
Middle Channel								
836.6	20.55	1.5	0	H	1.5	0	19.05	38.45
836.6	21.20	1.5	0	V	1.5	0	19.70	38.45
High Channel								
846.6	20.62	1.5	0	H	1.5	0	19.12	38.45
846.6	21.33	1.5	0	V	1.5	0	19.83	38.45

HSUPA Band 5

Frequency	Substitude SG	Height	Table	Polar	Cable loss	Antenna Gain	Result	FCC Part 22H Limit
MHz	dBm	Meter	Degree	H / V	dB	dBd	dBm	dBm
Low Channel								
826.4	20.63	1.5	0	H	1.5	0	19.13	38.45
826.4	21.43	1.5	0	V	1.5	0	19.93	38.45
Middle Channel								
836.6	20.59	1.5	0	H	1.5	0	19.09	38.45
836.6	21.24	1.5	0	V	1.5	0	19.74	38.45
High Channel								
846.6	20.66	1.5	0	H	1.5	0	19.16	38.45
846.6	21.37	1.5	0	V	1.5	0	19.87	38.45

WCDMA Band 2

Frequency	Substitude SG	Height	Table	Polar	Cable loss	Antenna Gain	Result	FCC Part 24E Limit
MHz	dBm	Meter	Degree	H / V	dB	dB	dBm	dBm
Low Channel								
1852.4	16.99	1.5	0	H	1.9	7.7	22.79	33
1852.4	17.88	1.5	0	V	1.9	7.7	23.68	33
Middle Channel								
1880.0	16.32	1.5	0	H	1.9	7.7	22.12	33
1880.0	17.70	1.5	0	V	1.9	7.7	23.50	33
High Channel								
1907.6	15.46	1.5	0	H	1.9	7.7	21.26	33
1907.6	16.01	1.5	0	V	1.9	7.7	21.81	33

HSDPA Band 2

Frequency	Substitude SG	Height	Table	Polar	Cable loss	Antenna Gain	Result	FCC Part 24E Limit
MHz	dBm	Meter	Degree	H / V	dB	dB	dBm	dBm
Low Channel								
1852.4	14.61	1.5	0	H	1.9	7.7	20.41	33
1852.4	14.03	1.5	0	V	1.9	7.7	19.83	33
Middle Channel								
1880.0	13.9	1.5	0	H	1.9	7.7	19.7	33
1880.0	13.8	1.5	0	V	1.9	7.7	19.6	33
High Channel								
1907.6	13.34	1.5	0	H	1.9	7.7	19.14	33
1907.6	13.28	1.5	0	V	1.9	7.7	19.08	33

HSUPA Band 2

Frequency	Substitude SG	Height	Table	Polar	Cable loss	Antenna Gain	Result	FCC Part 24E Limit
MHz	dBm	Meter	Degree	H / V	dB	dB	dBm	dBm
Low Channel								
1852.4	15.12	1.5	0	H	1.9	7.7	20.92	33
1852.4	15.24	1.5	0	V	1.9	7.7	21.04	33
Middle Channel								
1880.0	14.71	1.5	0	H	1.9	7.7	20.51	33
1880.0	14.65	1.5	0	V	1.9	7.7	20.45	33
High Channel								
1907.6	13.30	1.5	0	H	1.9	7.7	19.10	33
1907.6	13.73	1.5	0	V	1.9	7.7	19.53	33

Note: Result = Substitude - Cable loss + Antenna Gain

2. Occupied Bandwidth

2.1 Test Datas

GSM850

Test Mode	Channel	Frequency (MHz)	99% Emission Bandwidth (kHz)	26 dB Emission Bandwidth (kHz)
GSM	128	824.2	251.5	338.6
	190	836.6	250.91	334.8
	251	848.8	251.81	338.0
GPRS	128	824.2	249.85	335.7
	190	836.6	252.81	336.5
	251	848.8	251.45	336.5
EDGE	128	824.2	258.73	338.0
	190	836.6	256.76	338.5
	251	848.8	254.91	334.1

PCS1900

Test Mode	Channel	Frequency (MHz)	99% Emission Bandwidth (kHz)	26 dB Emission Bandwidth (kHz)
GSM	512	1850.2	248.99	334.0
	661	1880.0	250.36	336.0
	810	1909.8	251.49	334.6
GPRS	512	1850.2	252.36	336.5
	661	1880.0	248.43	338.3
	810	1909.8	250.28	335.2
EDGE	512	1850.2	257.66	336.3
	661	1880.0	262.51	335.5
	810	1909.8	261.52	326.8

WCDMA Band 5

Test Mode	Channel	Frequency (MHz)	99% Emission Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
WCDMA	4132	826.4	4.2381	4.820
	4183	836.6	4.2141	4.826
	4233	846.6	4.1999	4.778
HSDPA	4132	826.4	4.2841	5.296
	4183	836.6	4.2476	5.016
	4233	846.6	4.2557	4.930
HSUPA	4132	826.4	4.2675	4.863
	4183	836.6	4.2417	4.896
	4233	846.6	4.2544	4.970

WCDMA Band 2

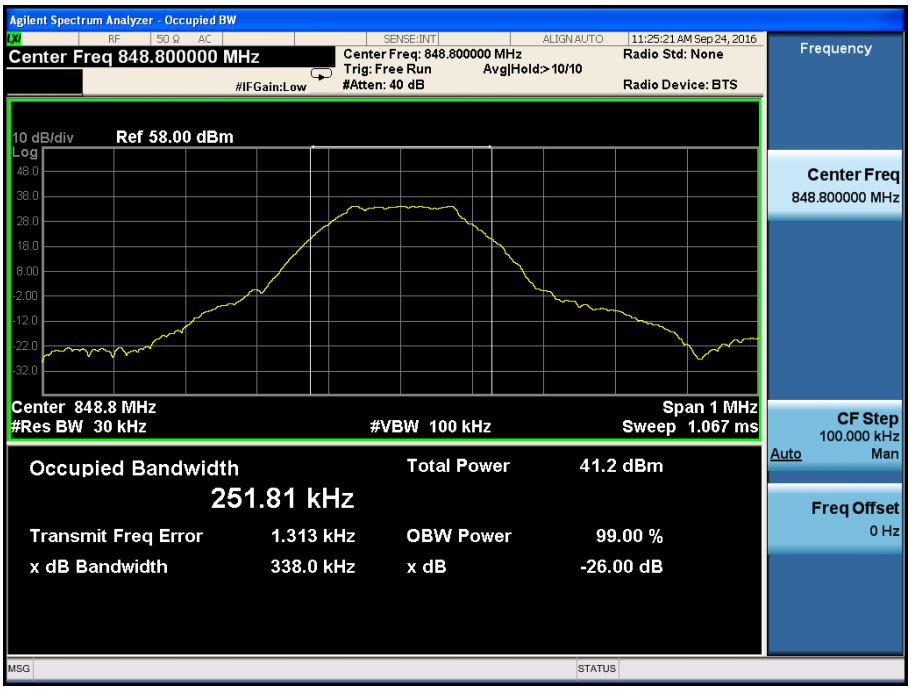
Test Mode	Channel	Frequency (MHz)	99% Emission Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
WCDMA	9262	1852.4	4.2130	4.839
	9400	1880.0	4.2151	4.859
	9538	1907.6	4.2200	4.891
HSDPA	9262	1852.4	4.2130	4.822
	9400	1880.0	4.2090	4.830
	9538	1907.6	4.2163	4.810
HSUPA	9262	1852.4	4.1994	4.802
	9400	1880.0	4.2464	4.877
	9538	1907.6	4.2488	4.893

2.2 Test Plots

GSM 850
Low Channel

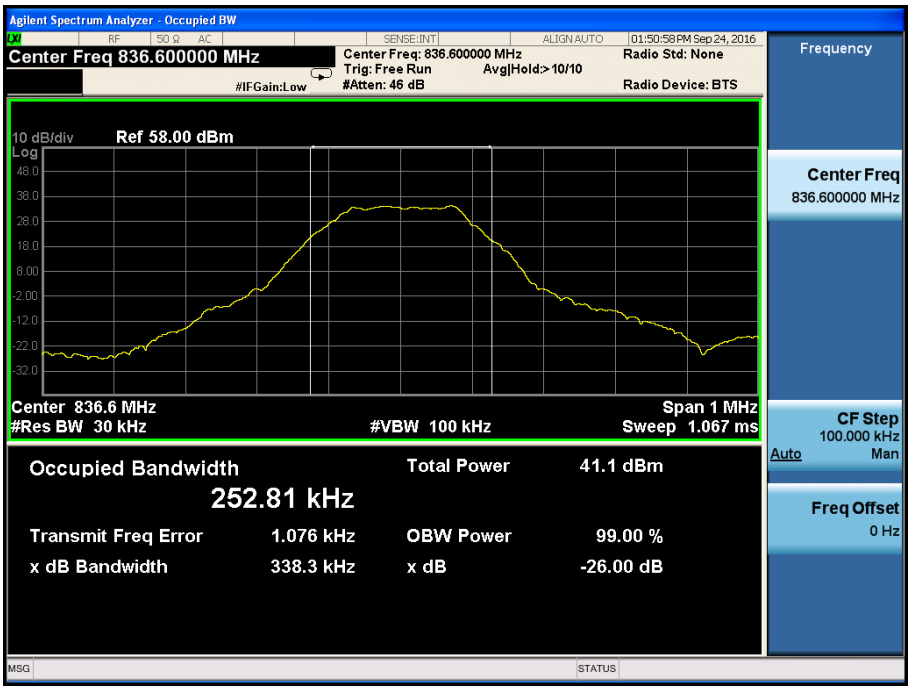
Middle Channel

High channel

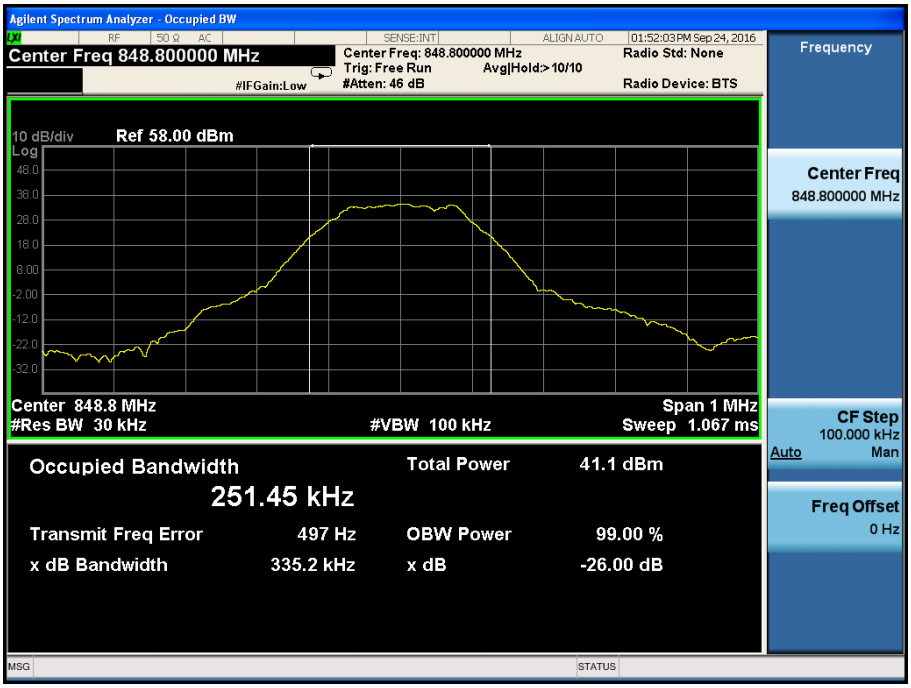


GPRS850
Low Channel

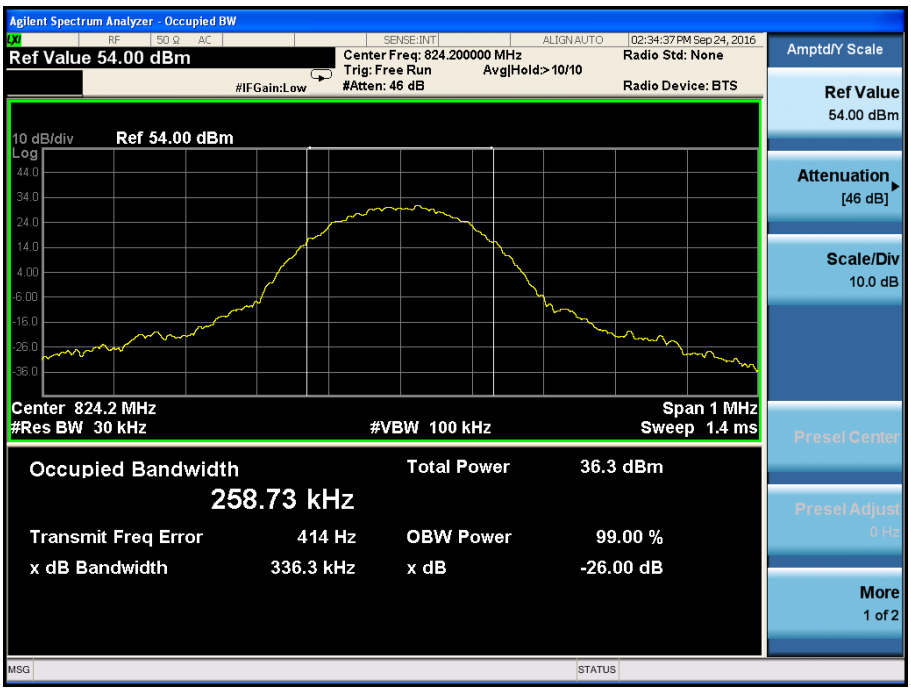
Middle Channel



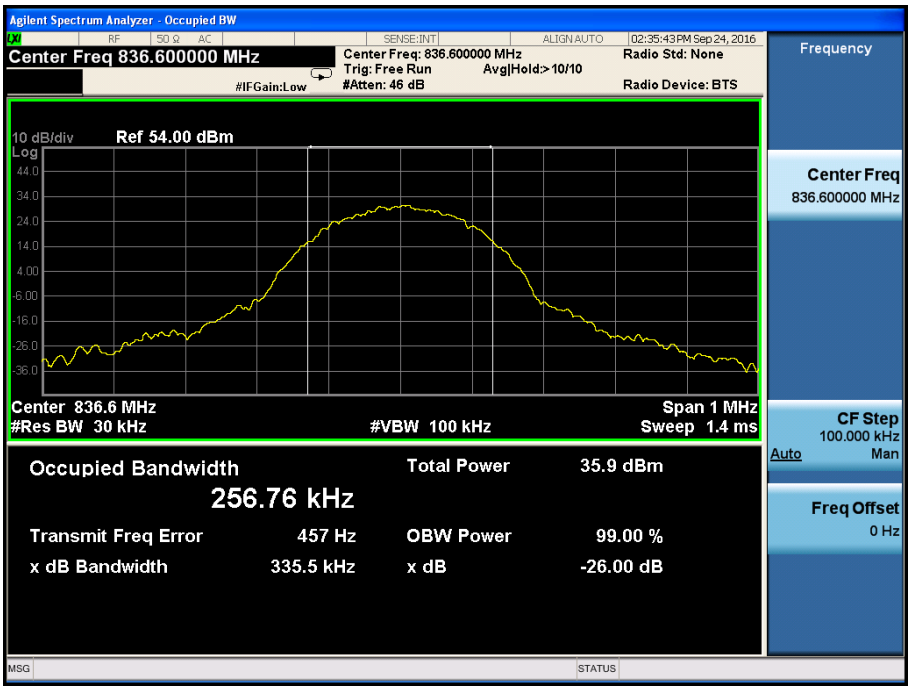
High Channel



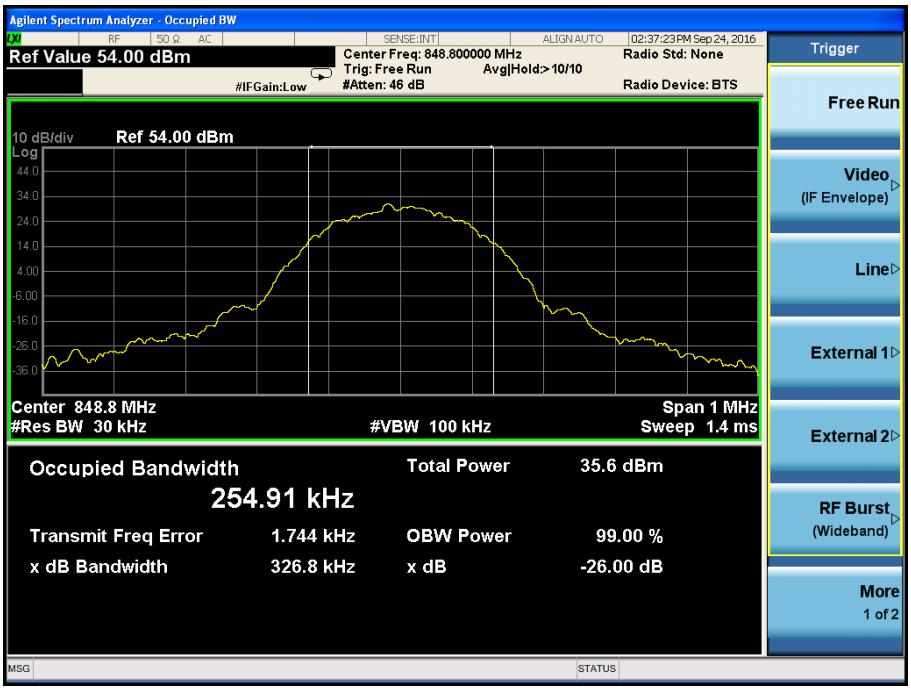
EDGE850
Low Channel



Middle Channel



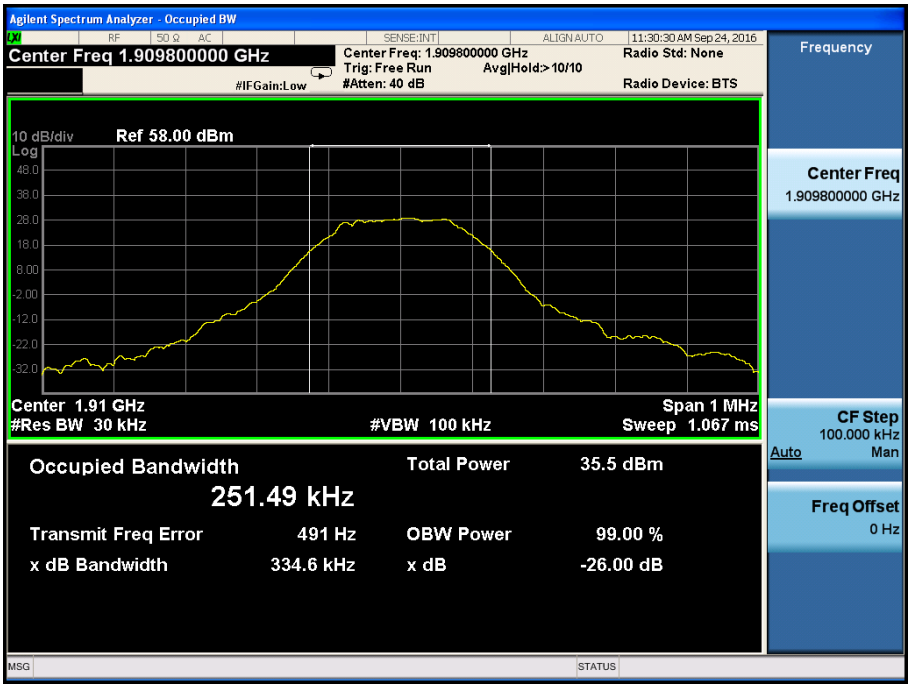
High Channel



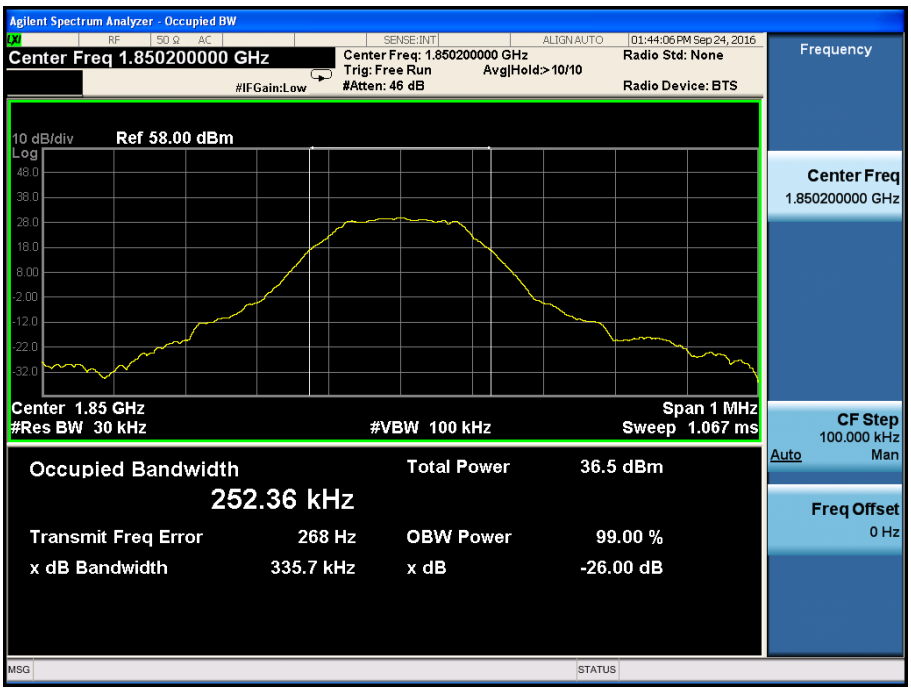
PCS1900
Low Channel

Middle Channel

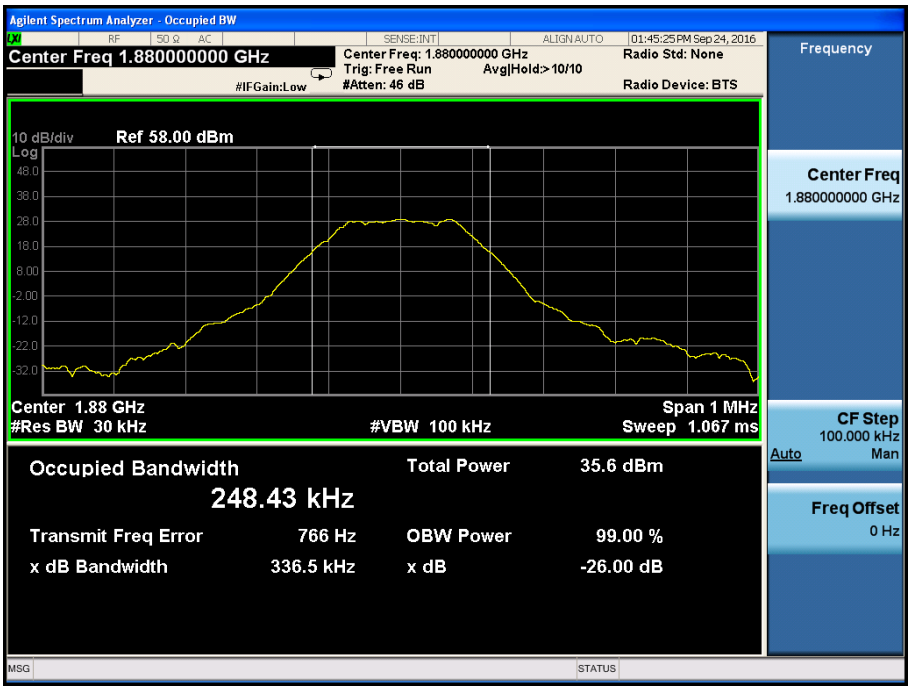
High channel



GPRS1900
Low Channel



Middle Channel



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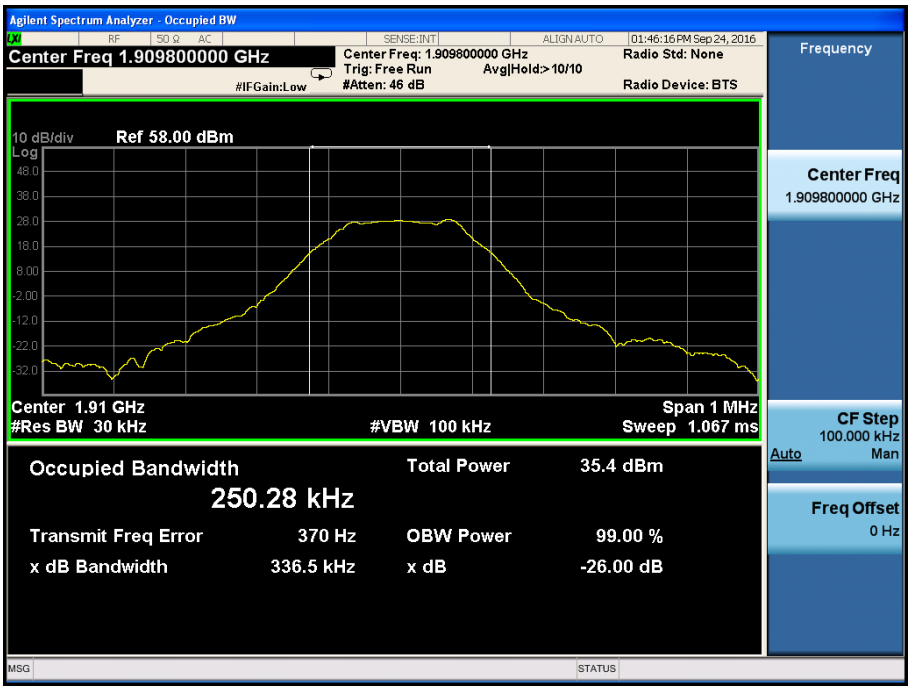
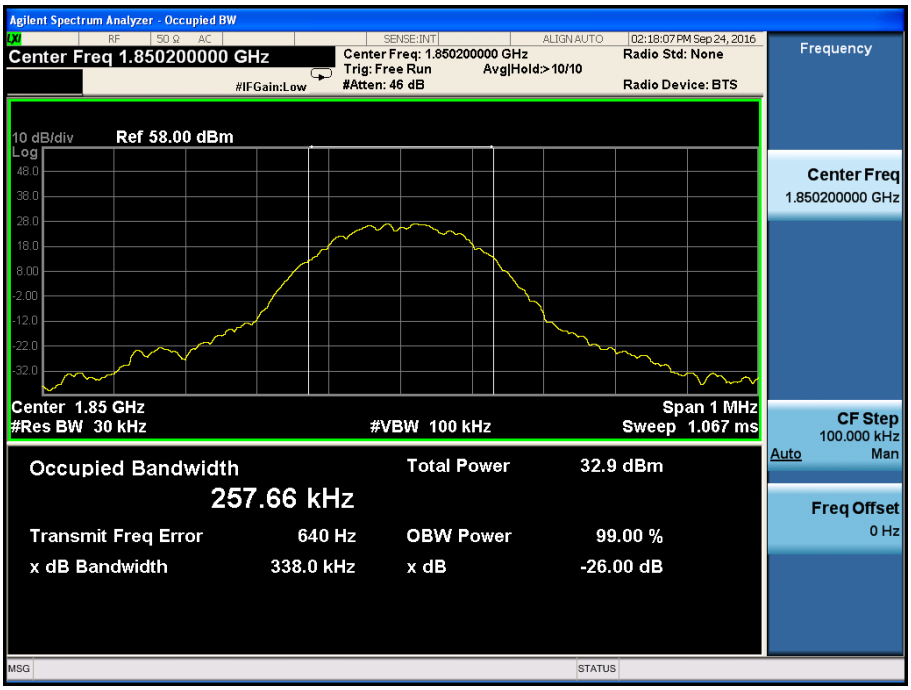
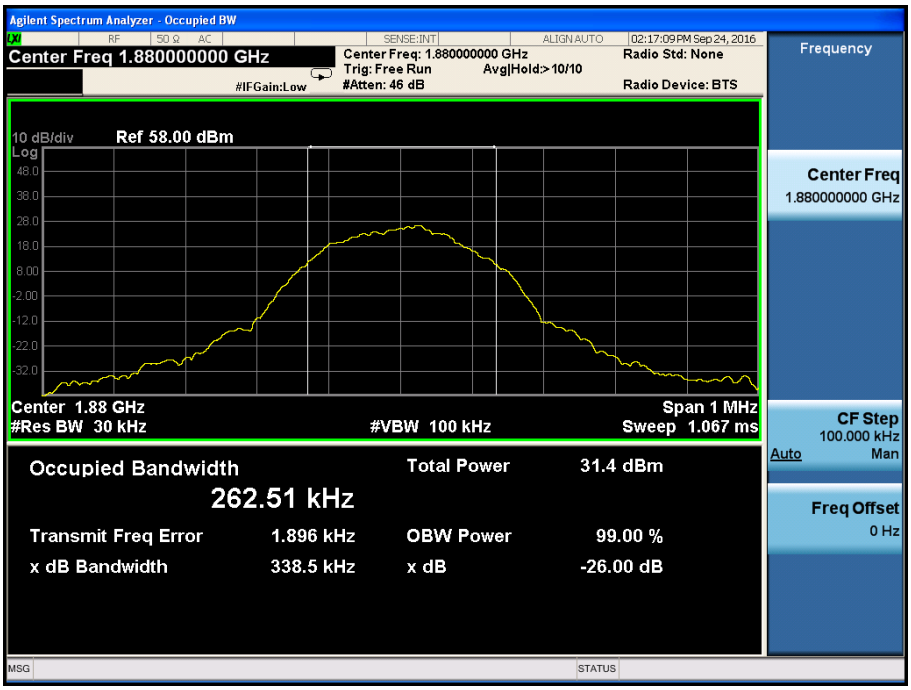


EDGE1900
Low Channel



Middle Channel



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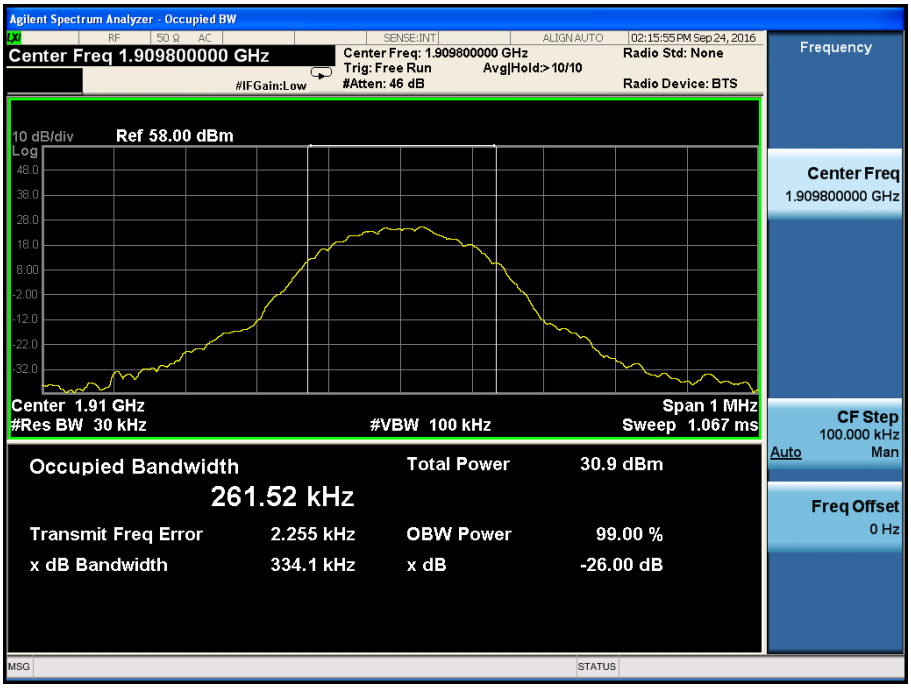
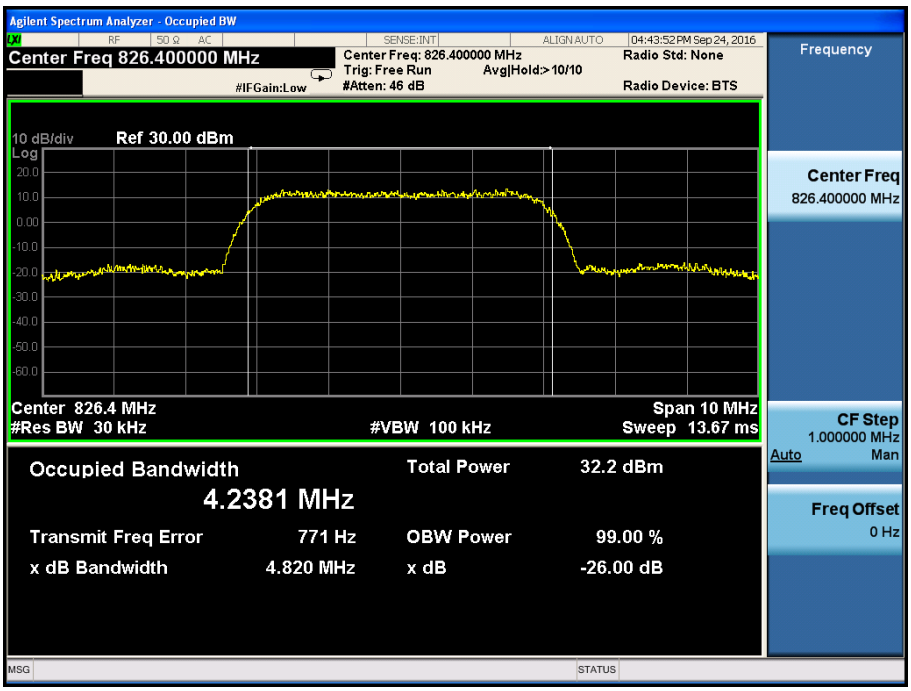


WCDMA Band 5
Low Channel



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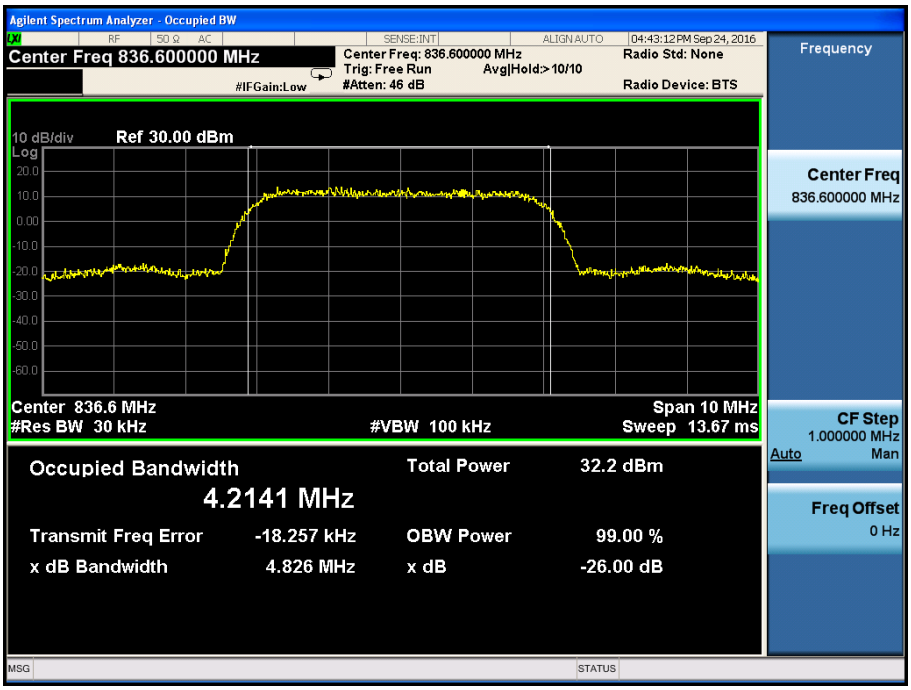

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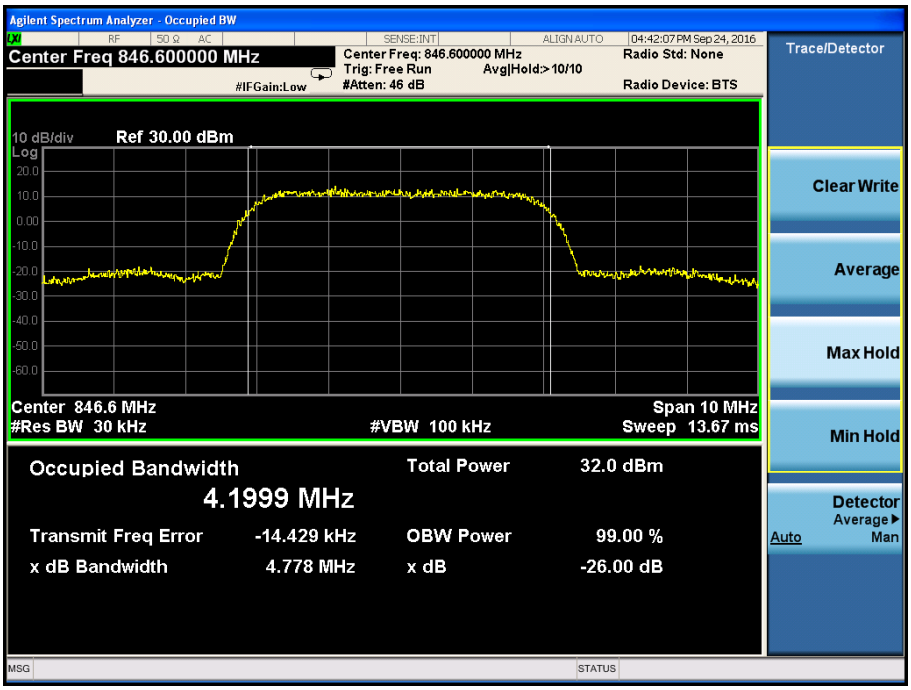
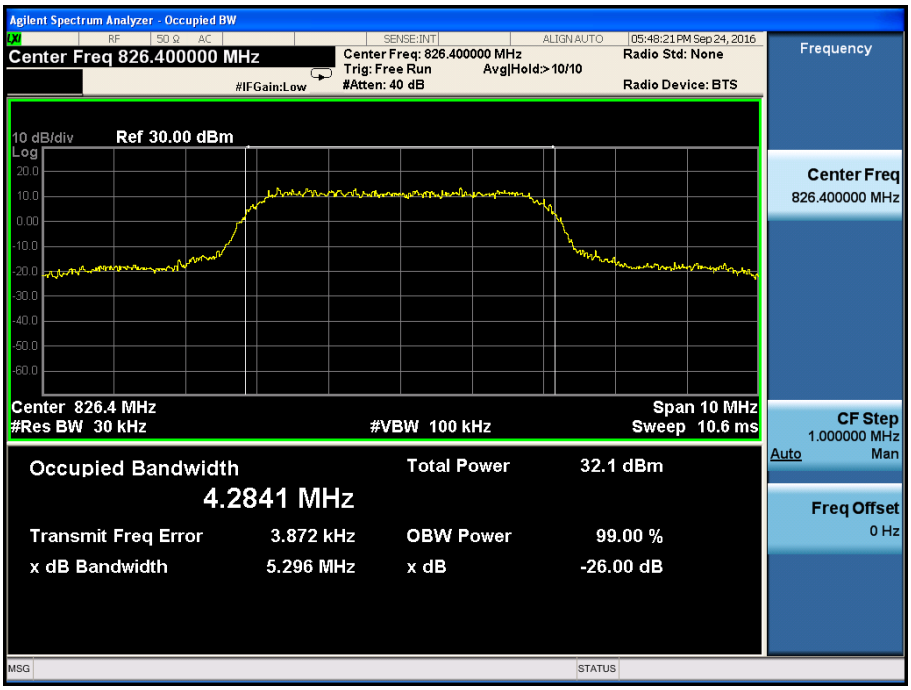
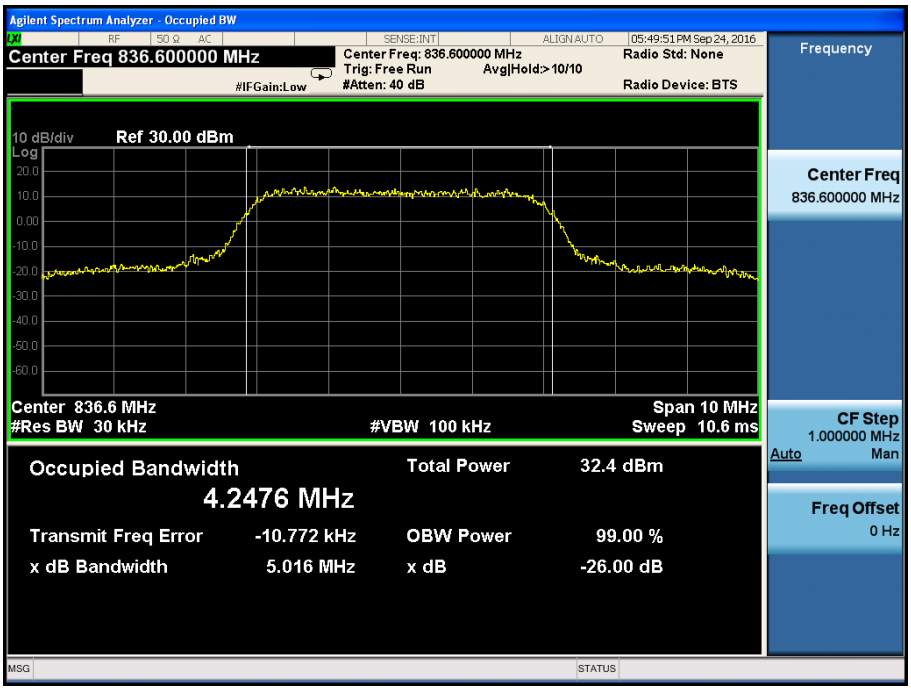


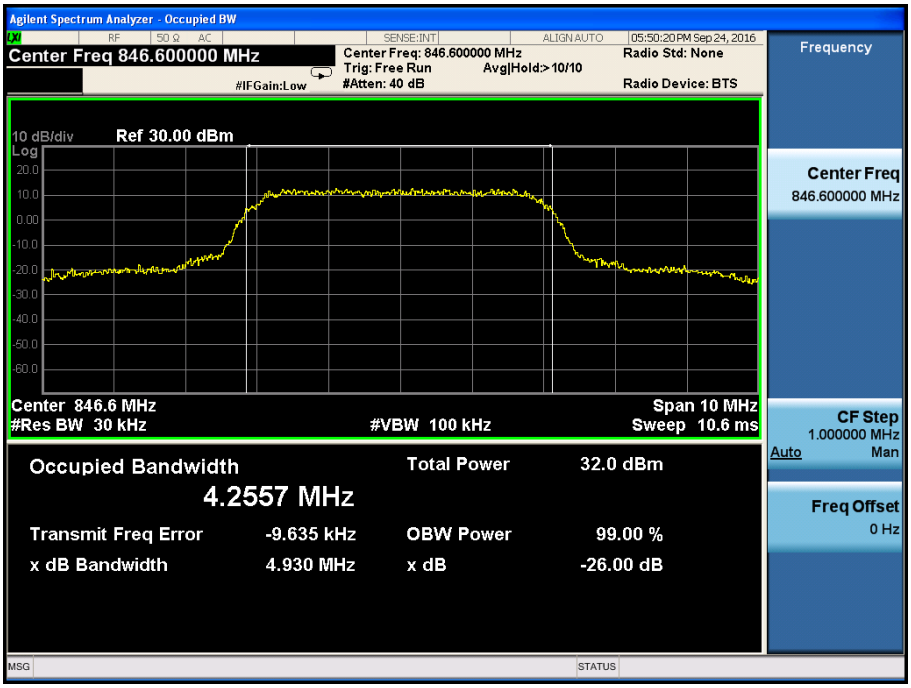
HSDPA Band 5
Low Channel



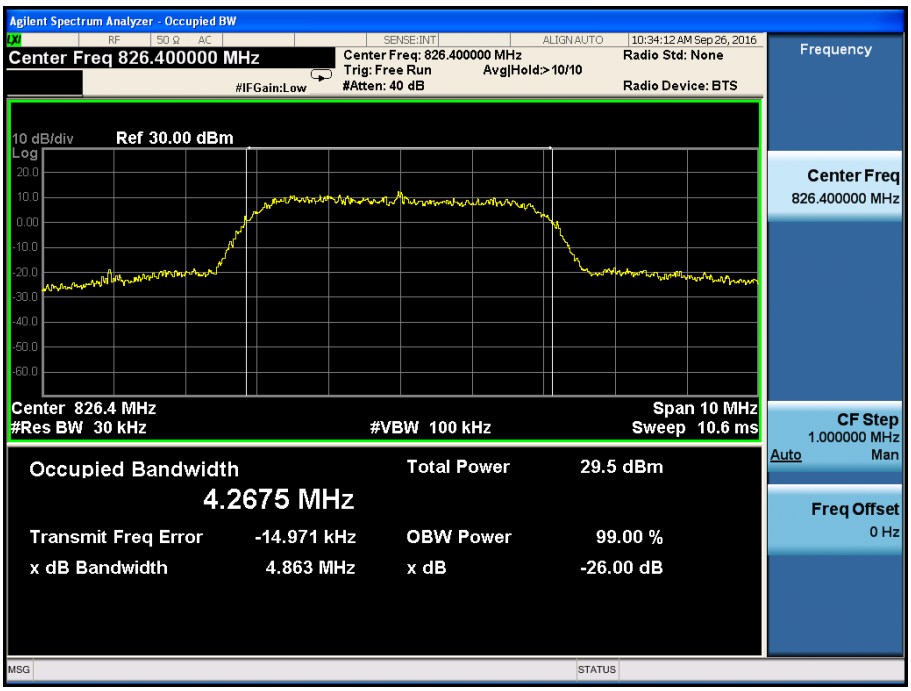
Middle Channel



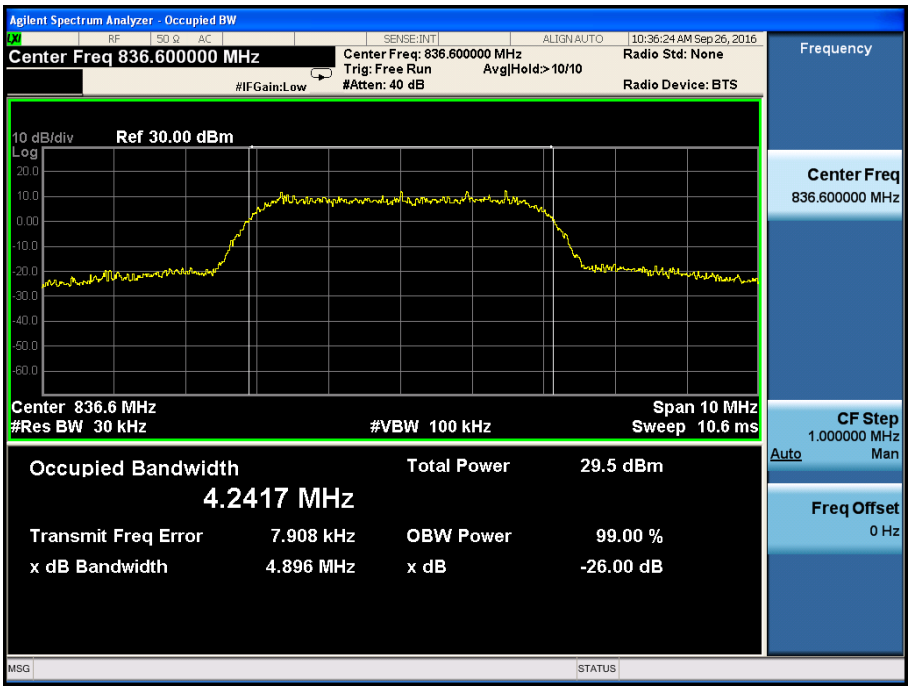
High Channel



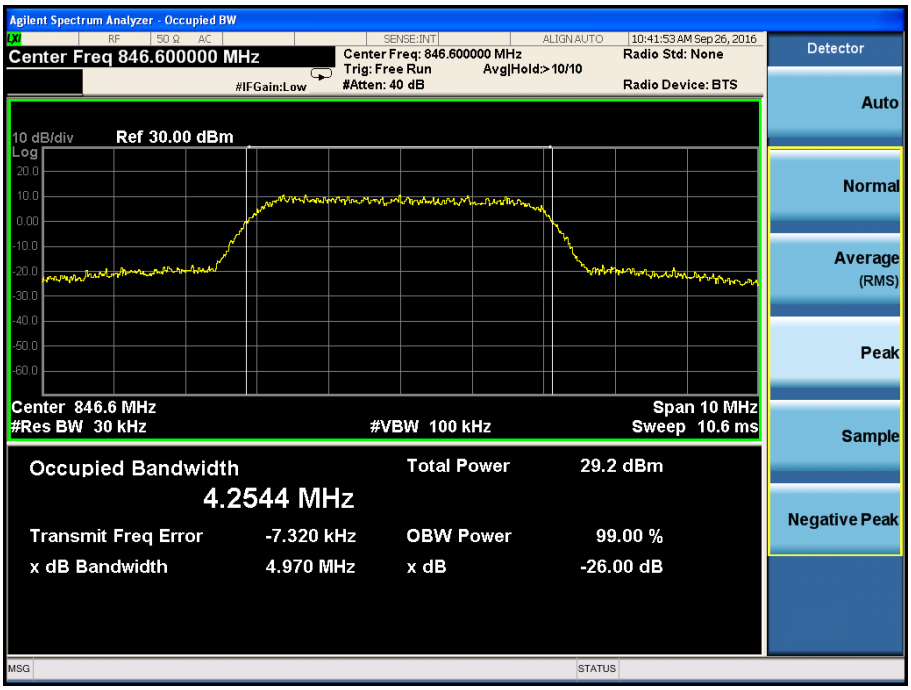
HSUPA Band 5
Low Channel



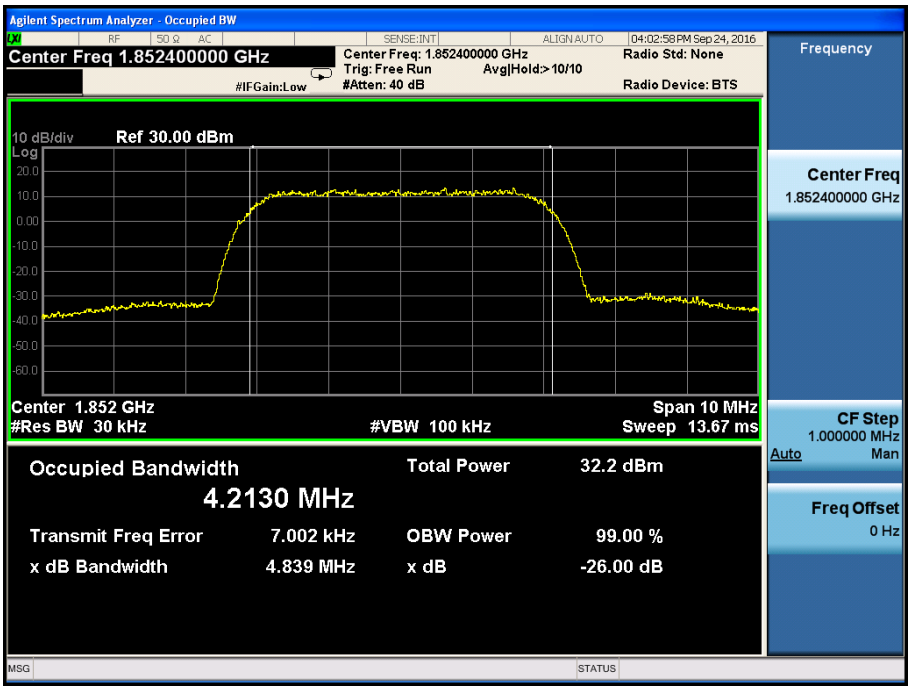
Middle Channel



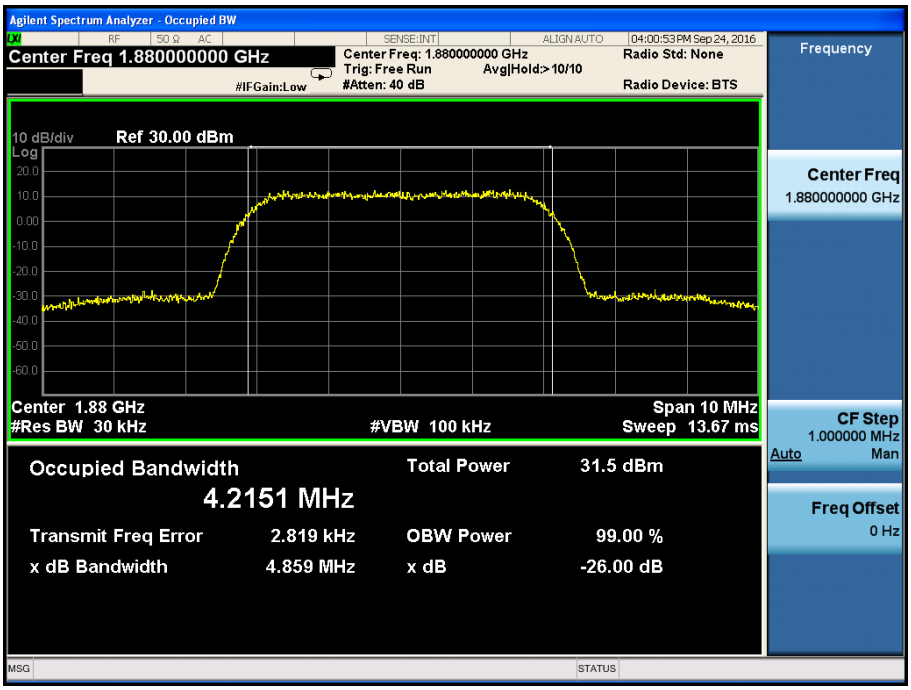
High Channel



WCDMA Band 2
Low Channel

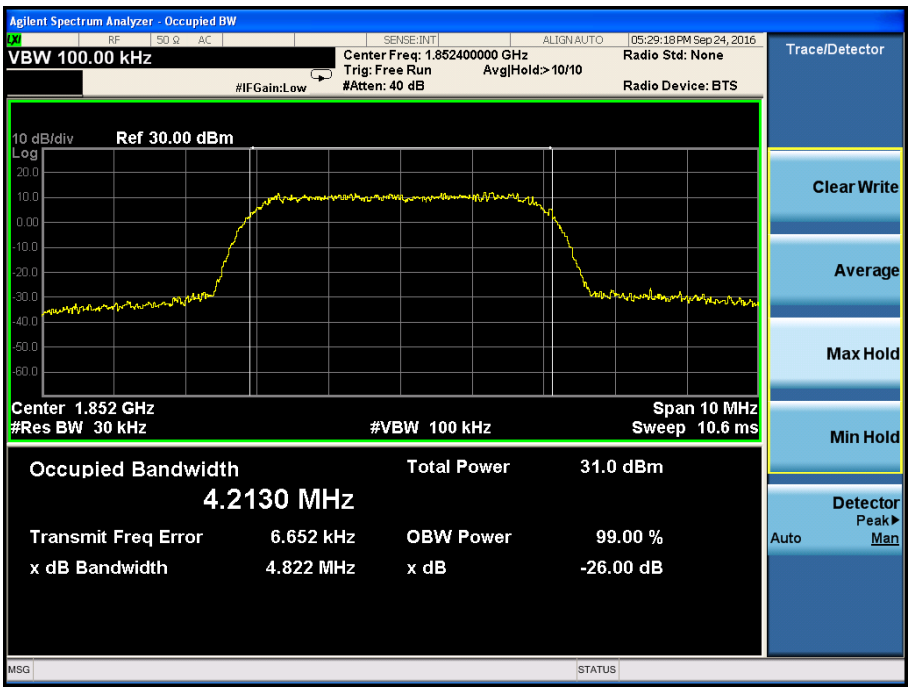


Middle Channel

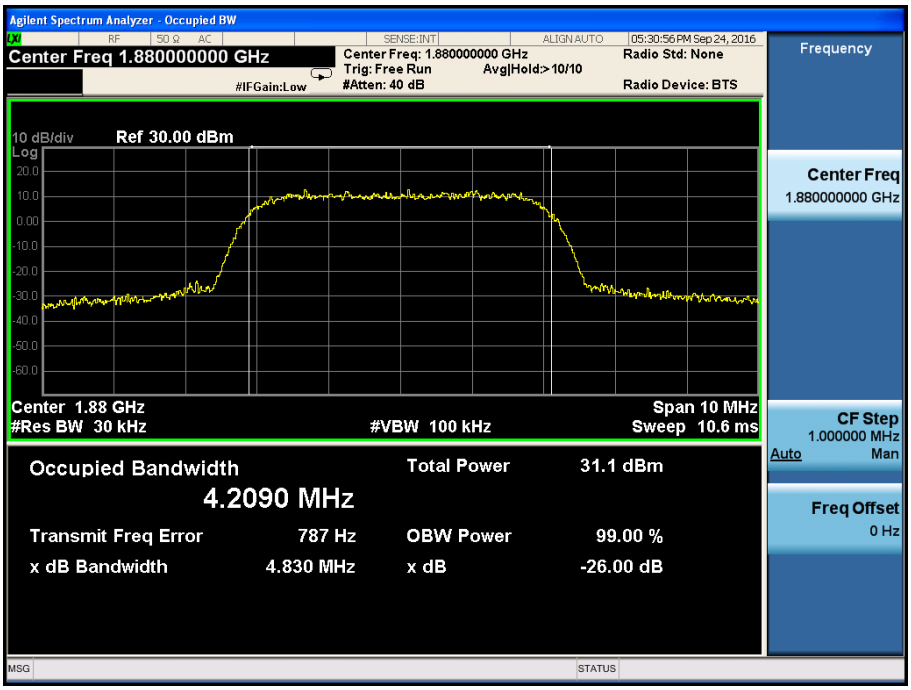


High Channel

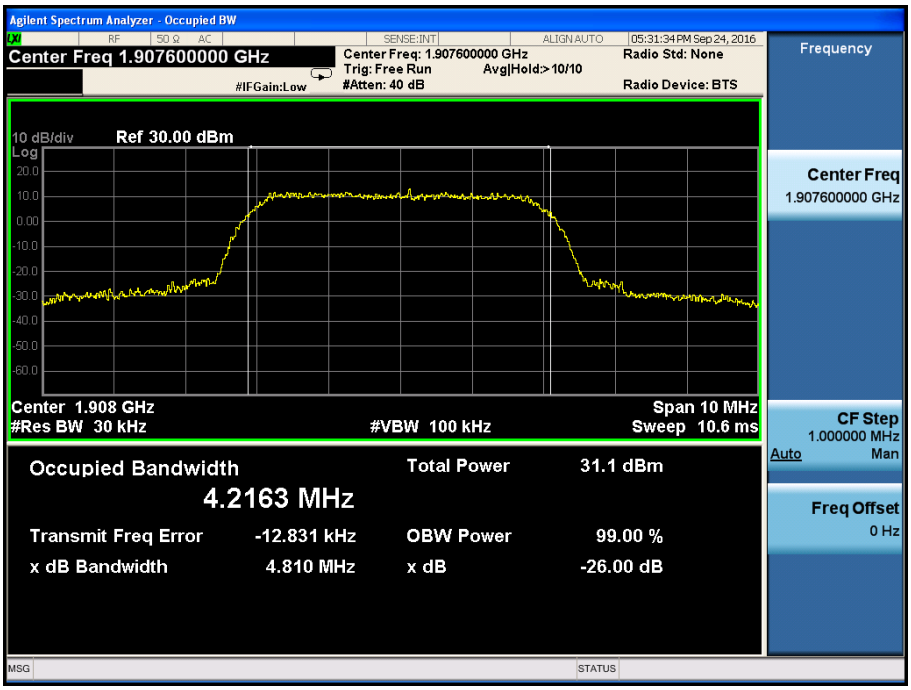
HSDPA Band 2
Low Channel



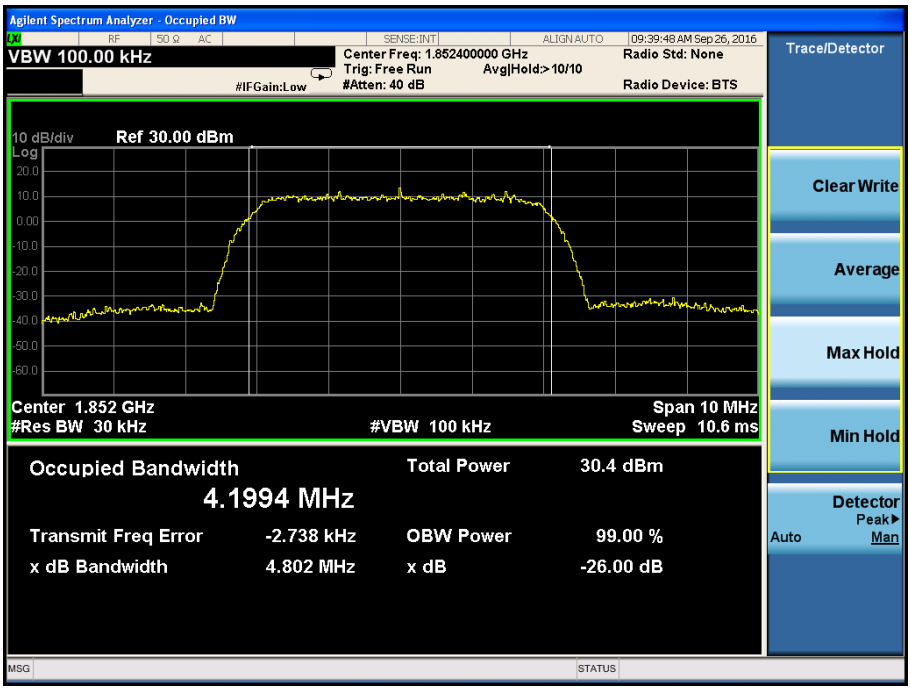
Middle Channel



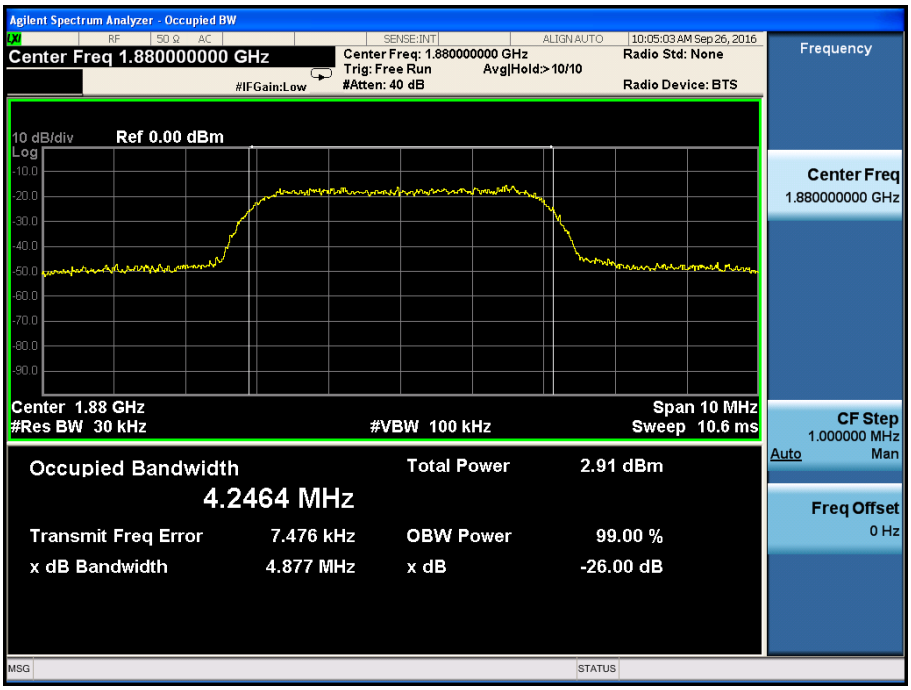
High Channel



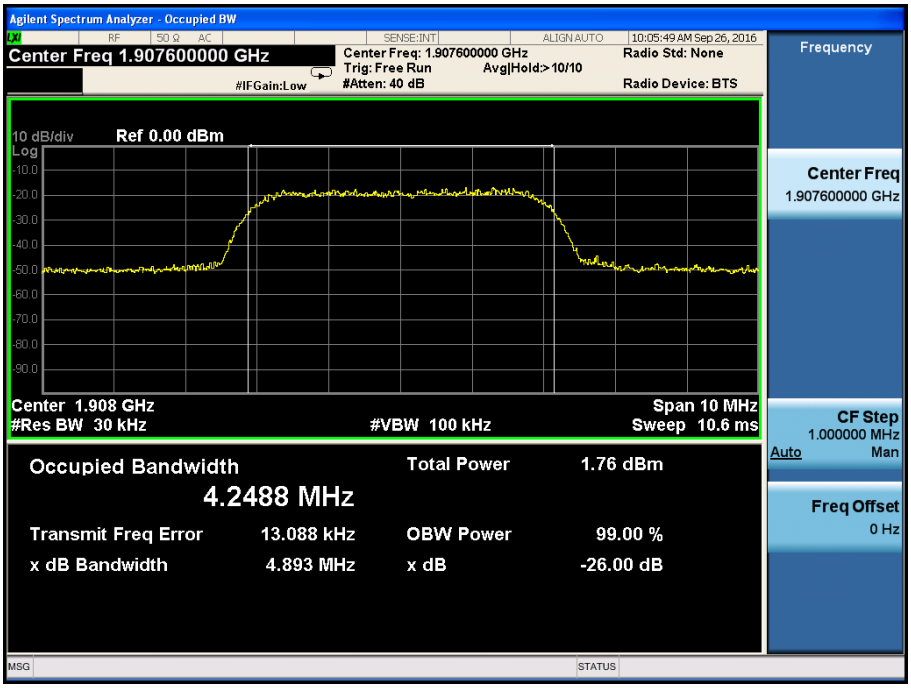
HSUPA Band 2
Low Channel



Middle Channel



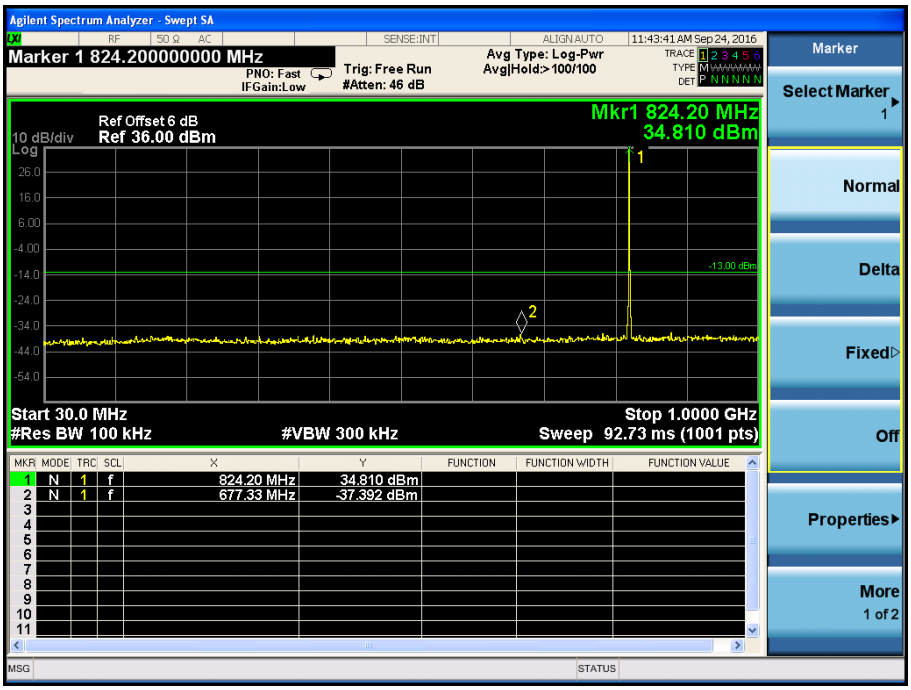
High Channel

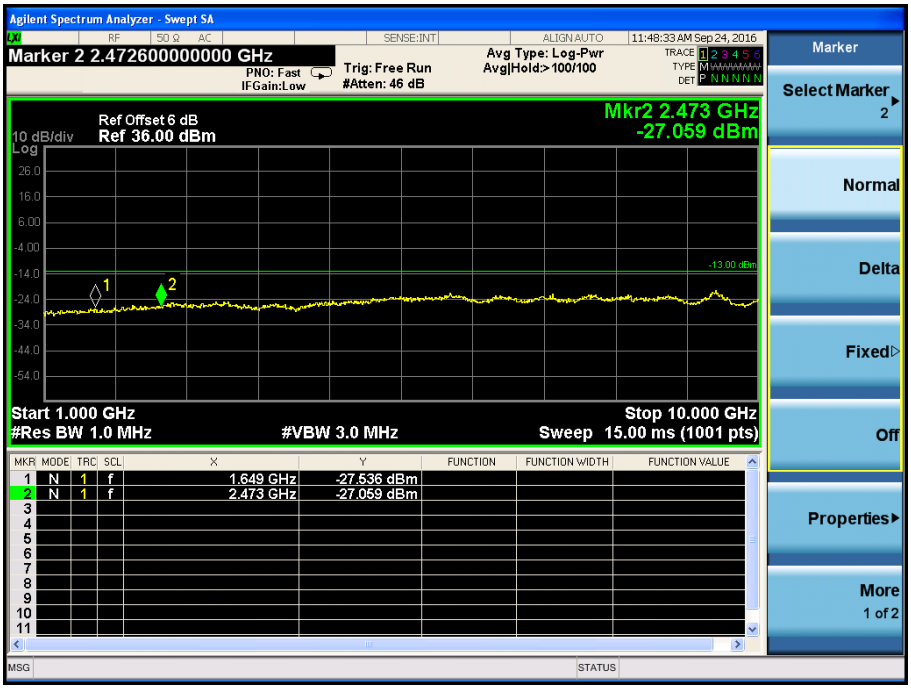


3. Spurious Emissions at Antenna Terminal

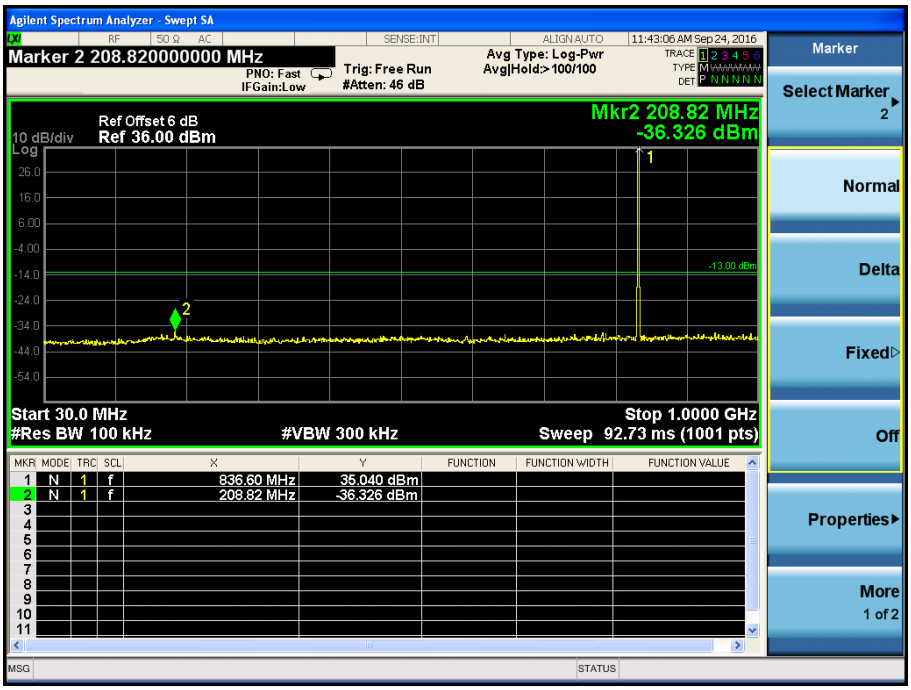
3.1 Test Datas

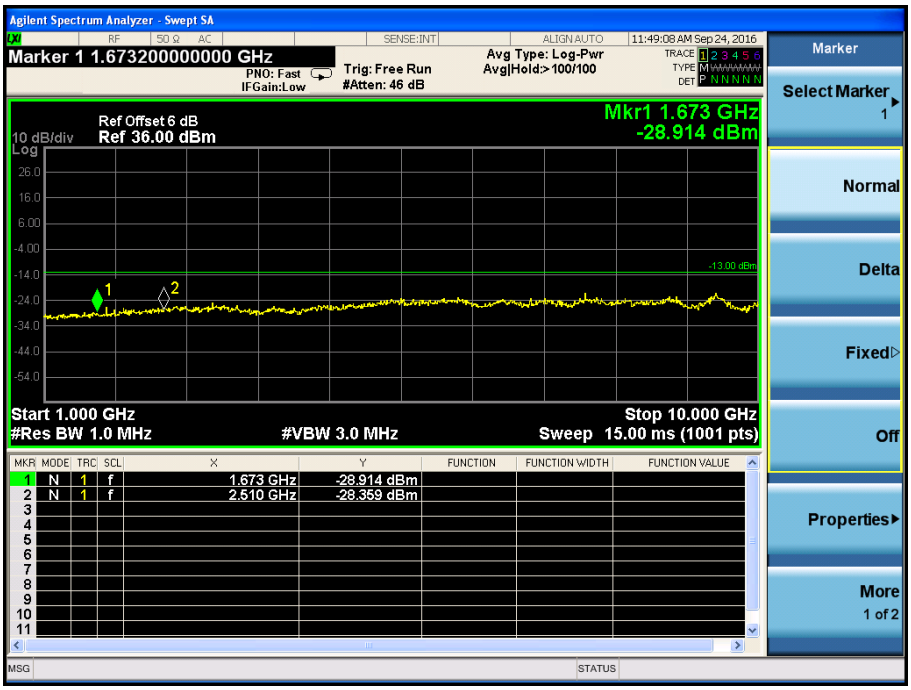
GSM850
Low Channel



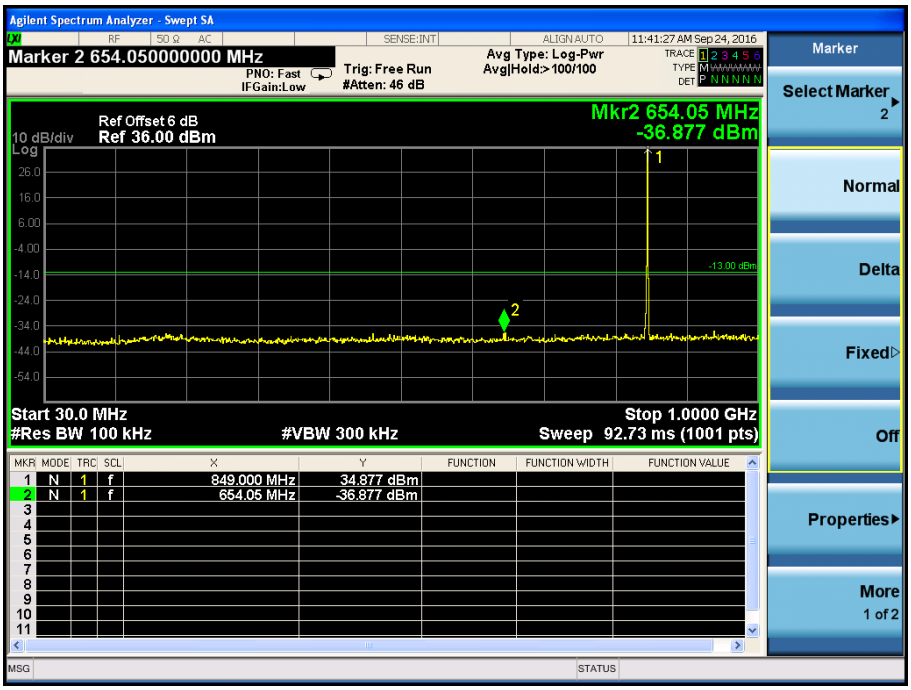


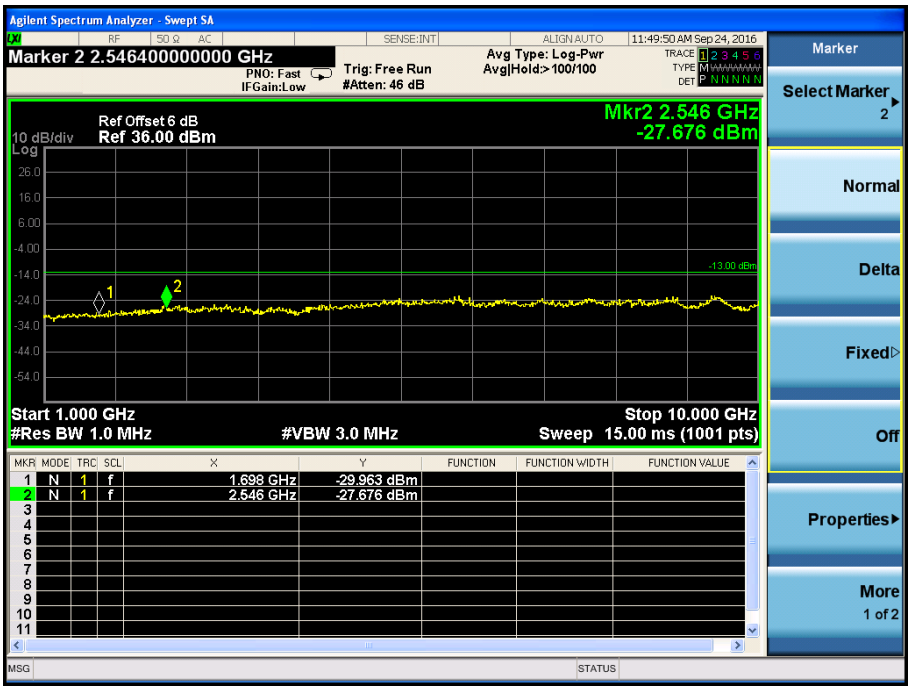
Middle Channel





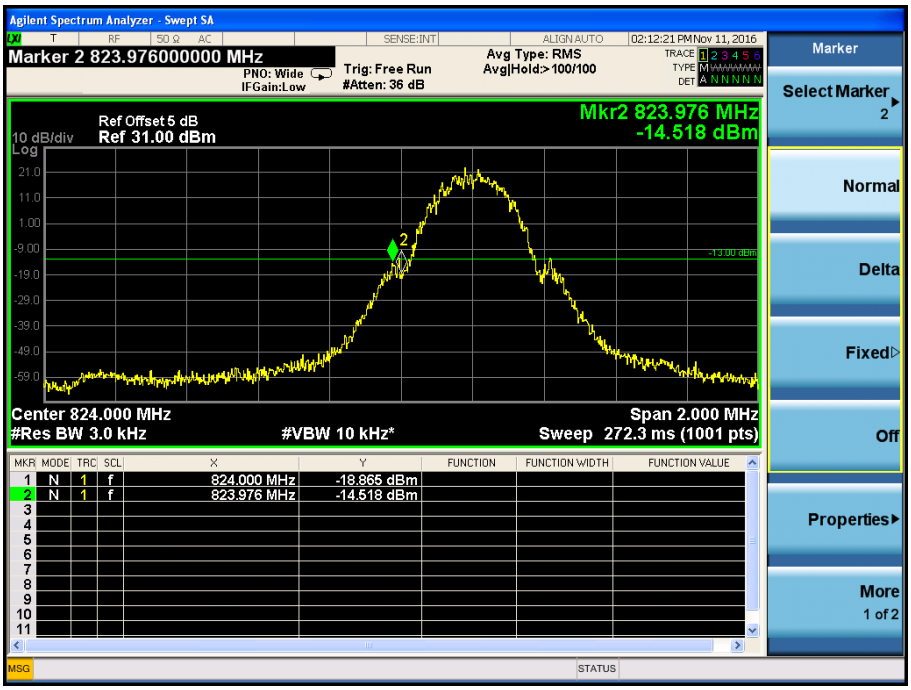
High Channel



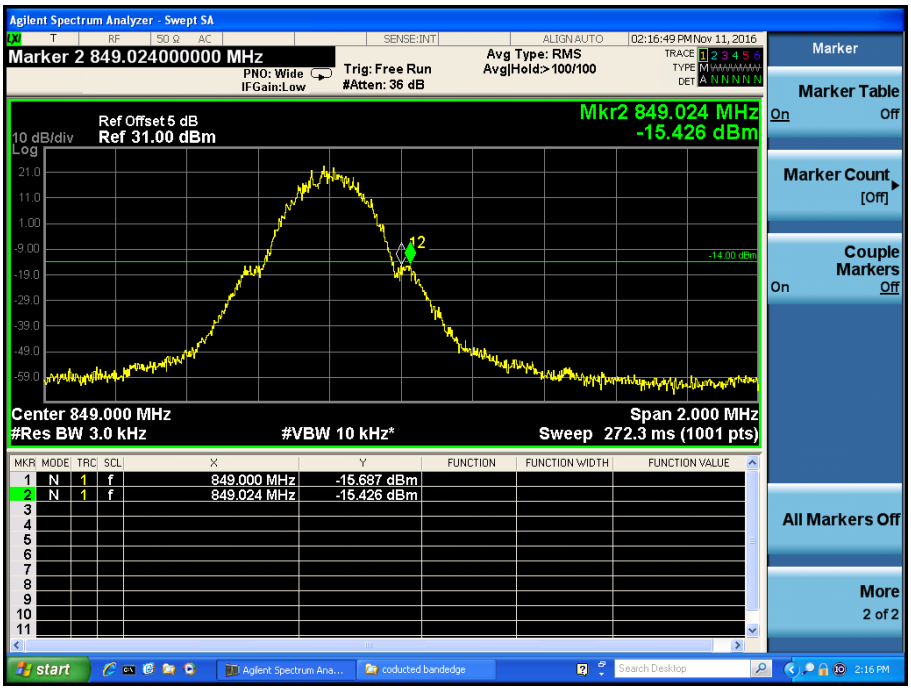


GSM850 Bandedge Spurious Emissions at Antenna Terminals

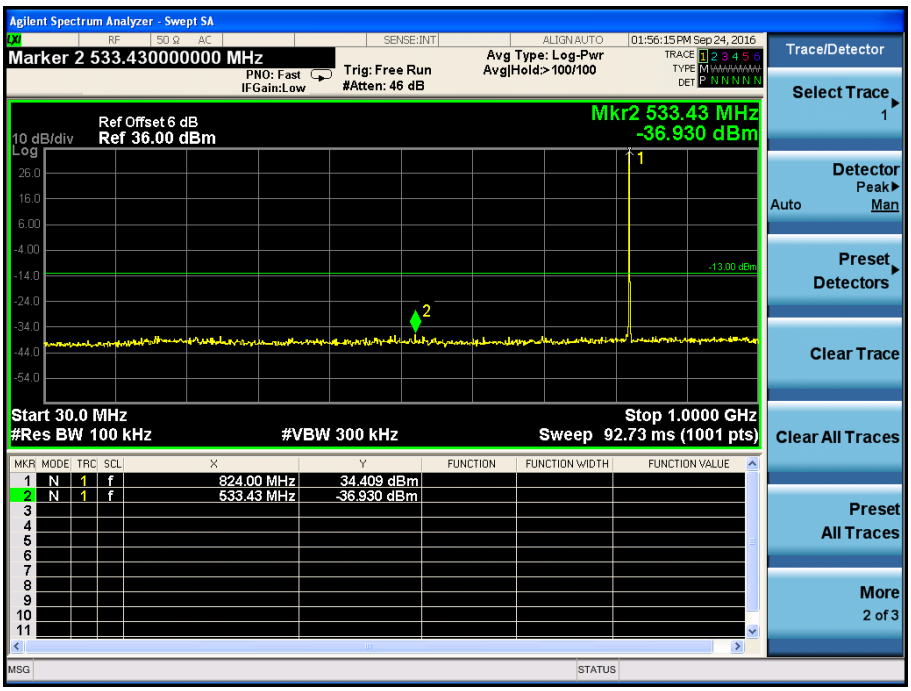
Low Band Emission

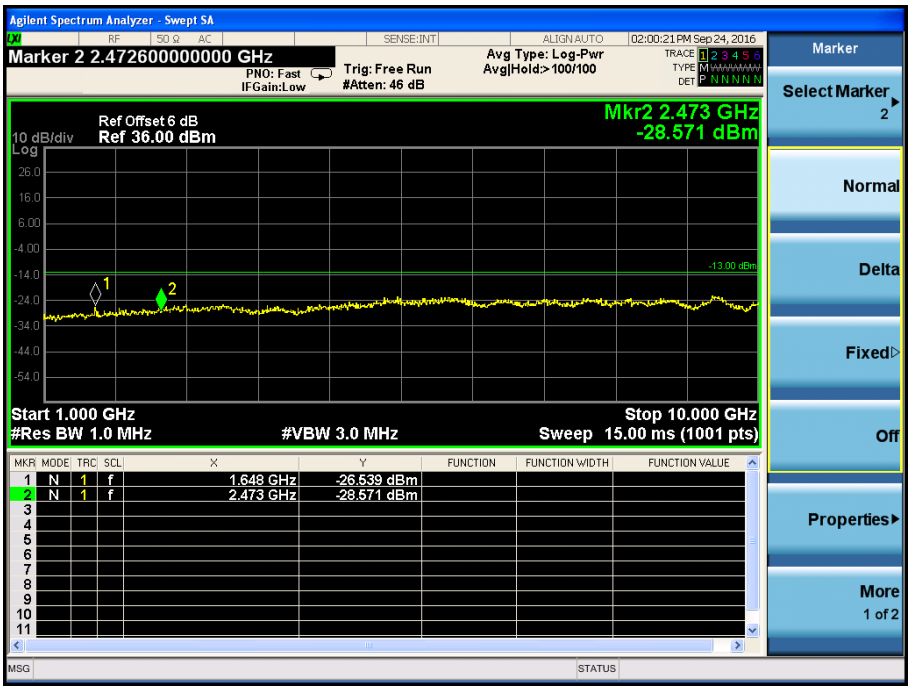


High Band Emission

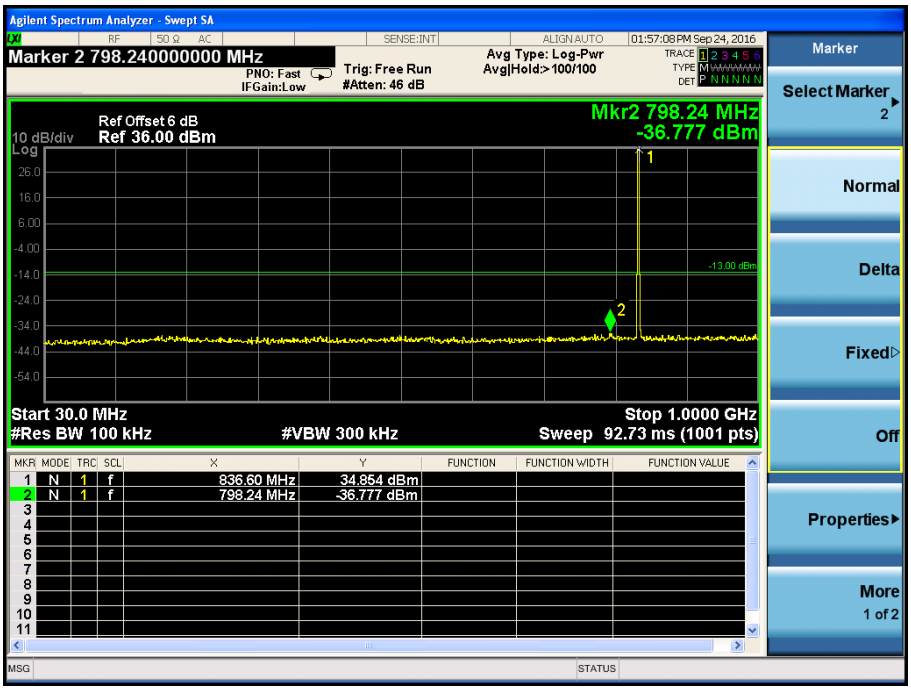


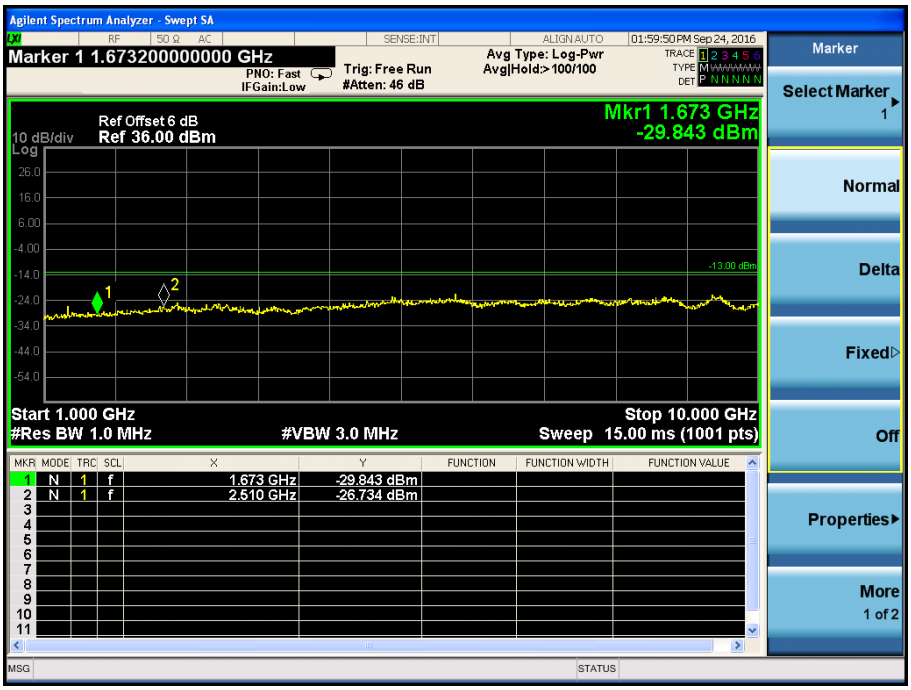
GPRS850
Low Channel



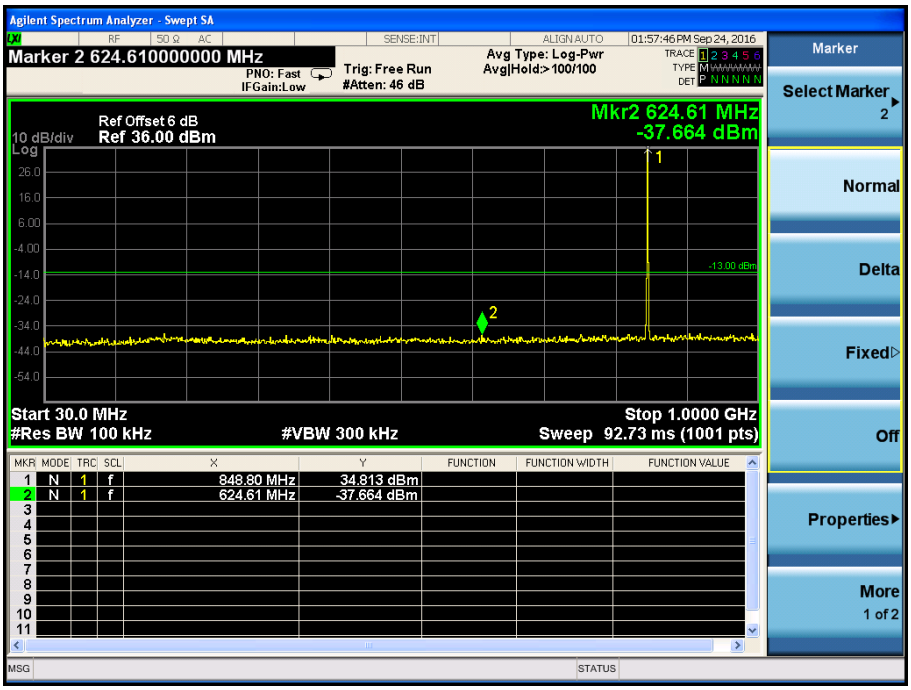


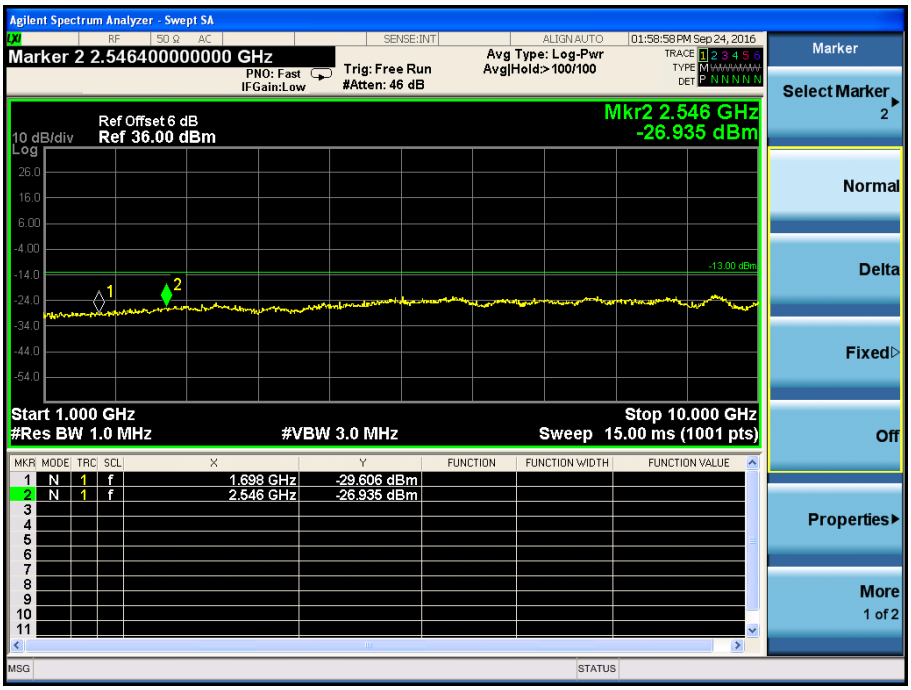
Middle Channel





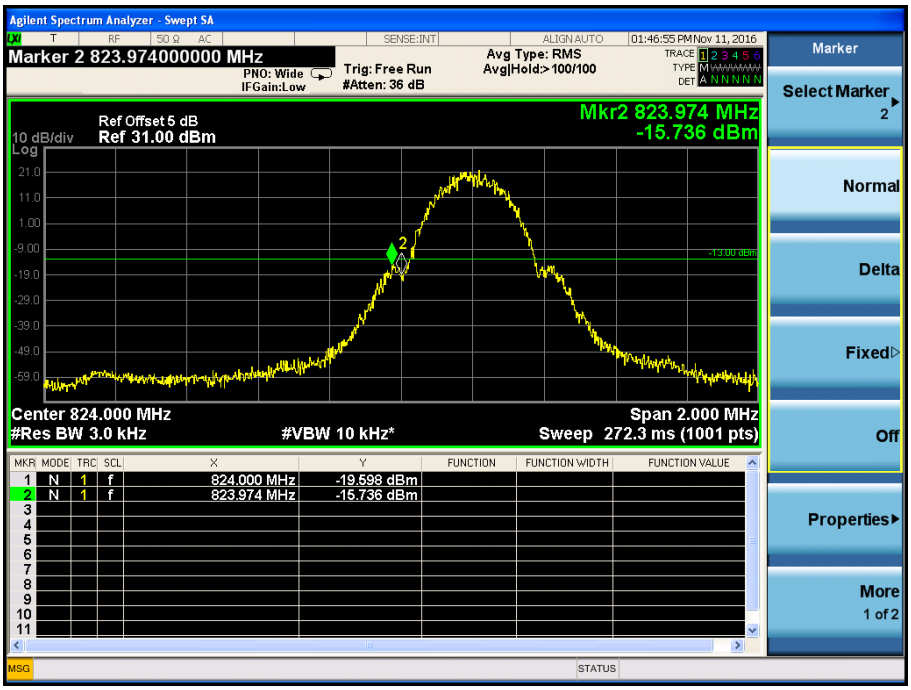
High Channel



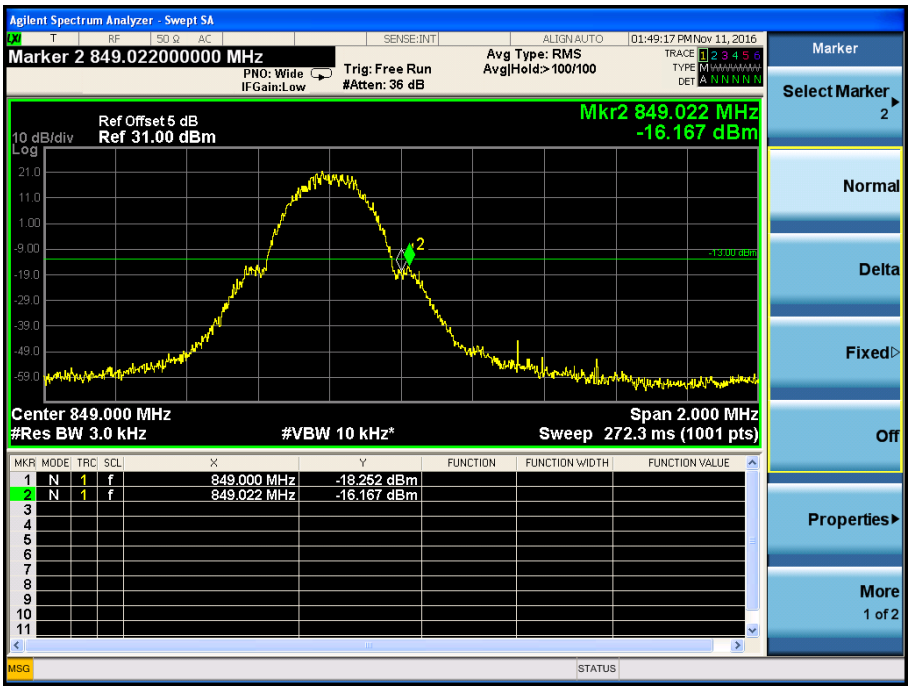


GPRS850 Bandedge Spurious Emissions at Antenna Terminals

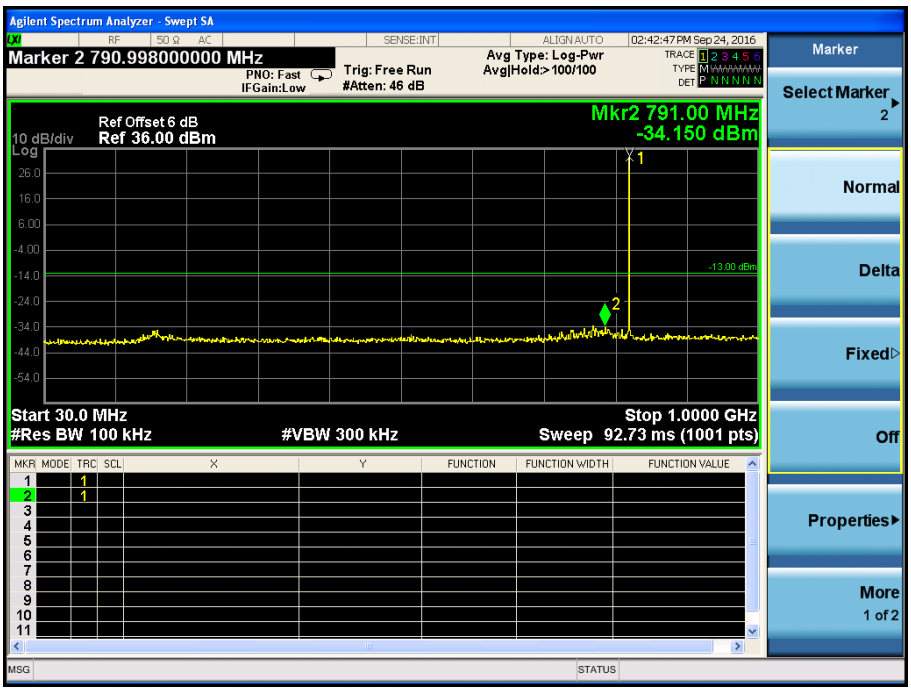
Low Band Emission

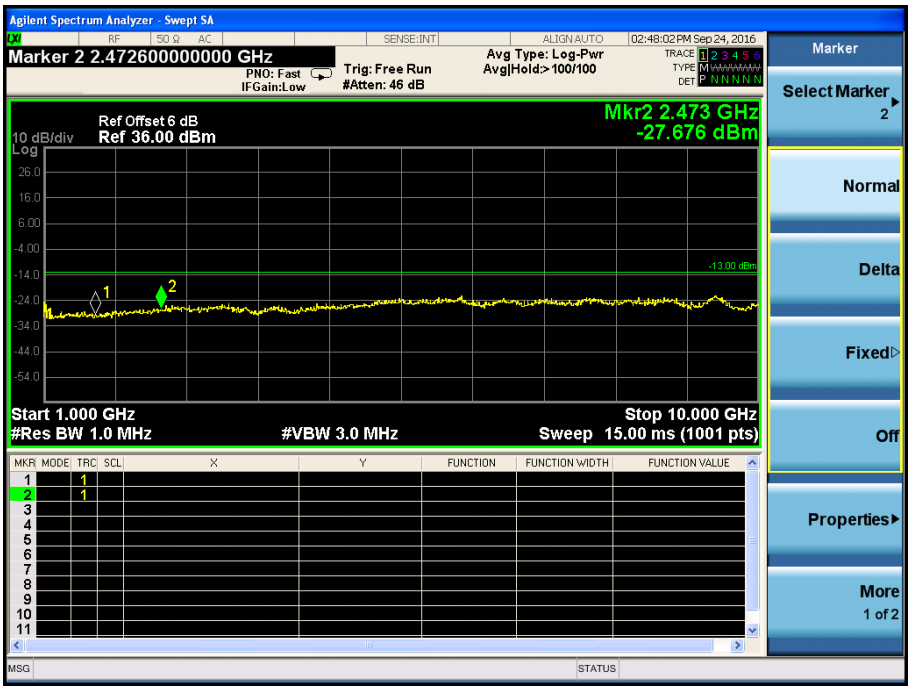


High Band Emission

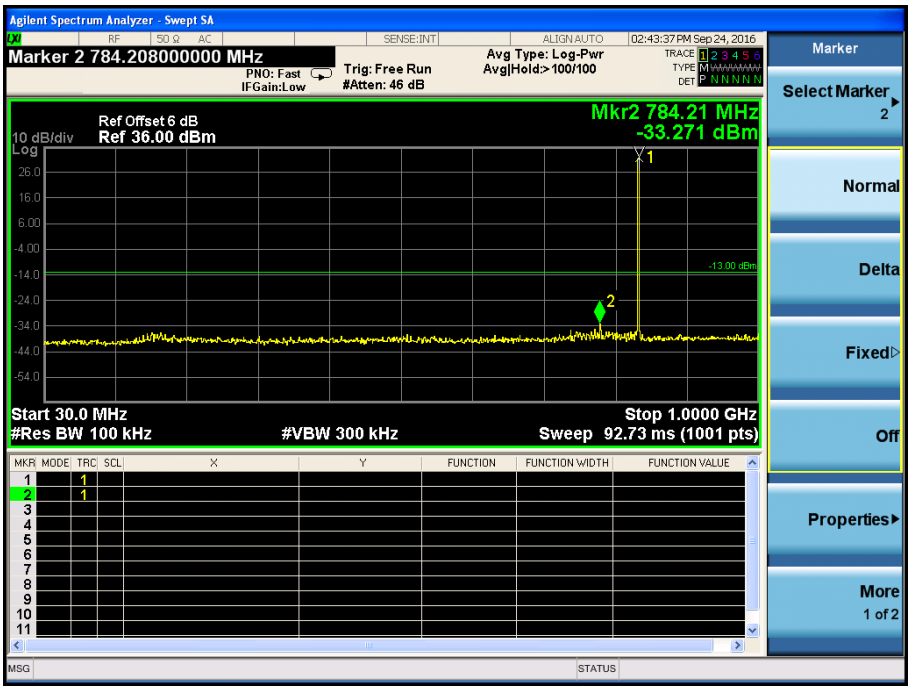


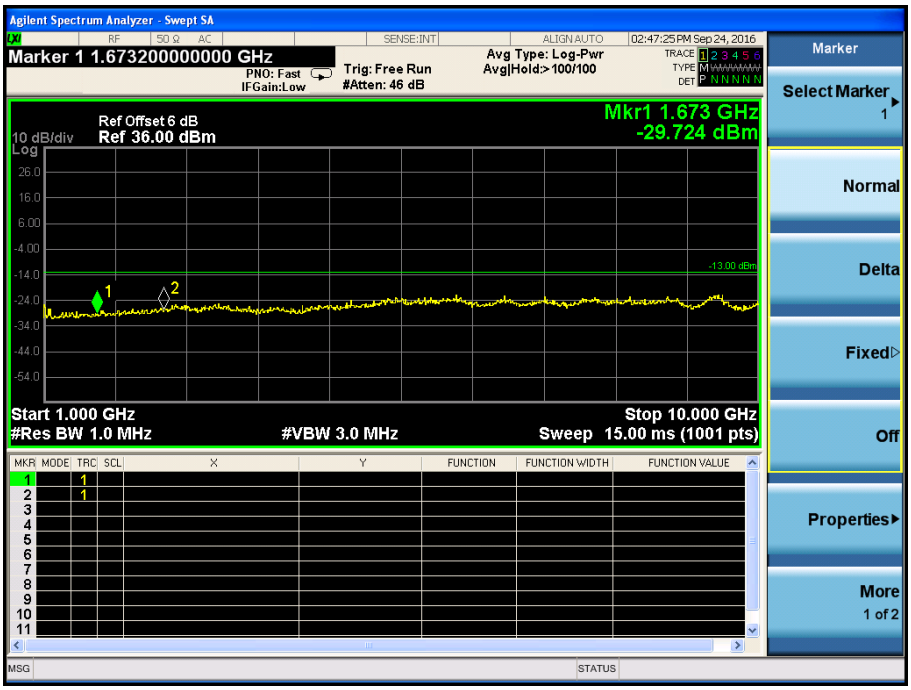
EDGE850
Low Channel



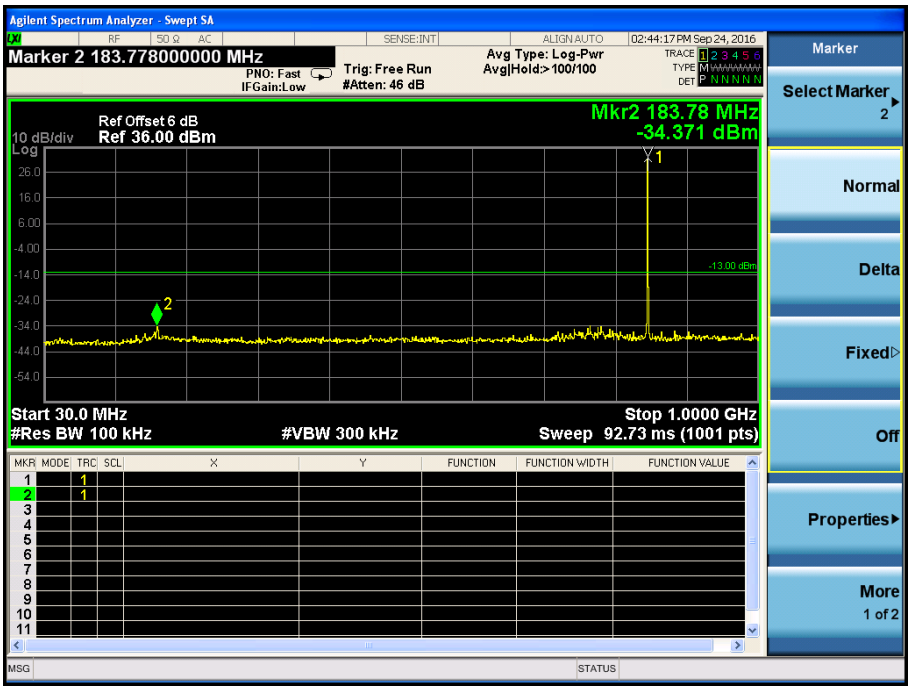


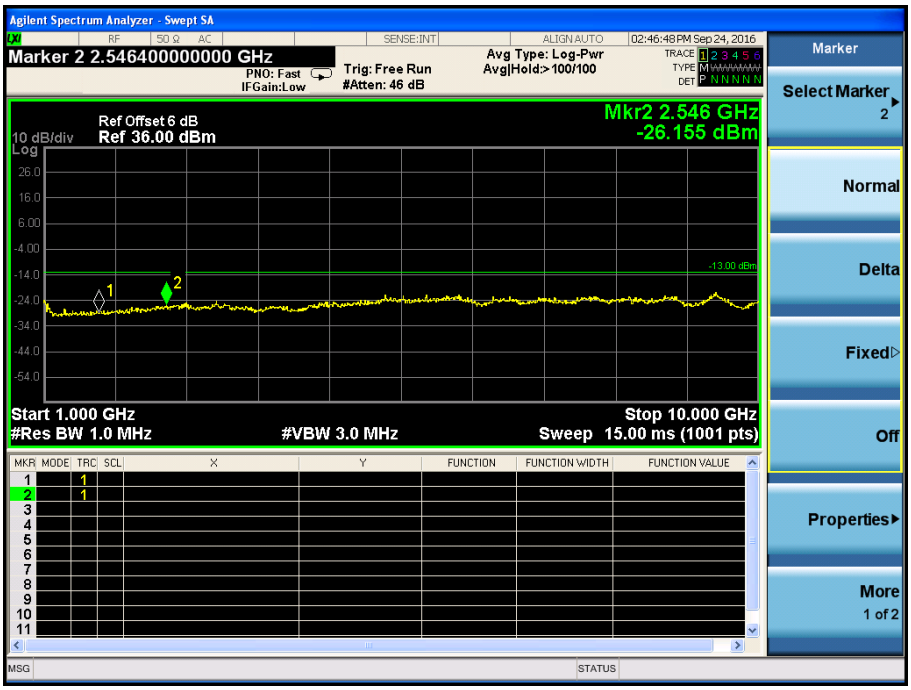
Middle Channel





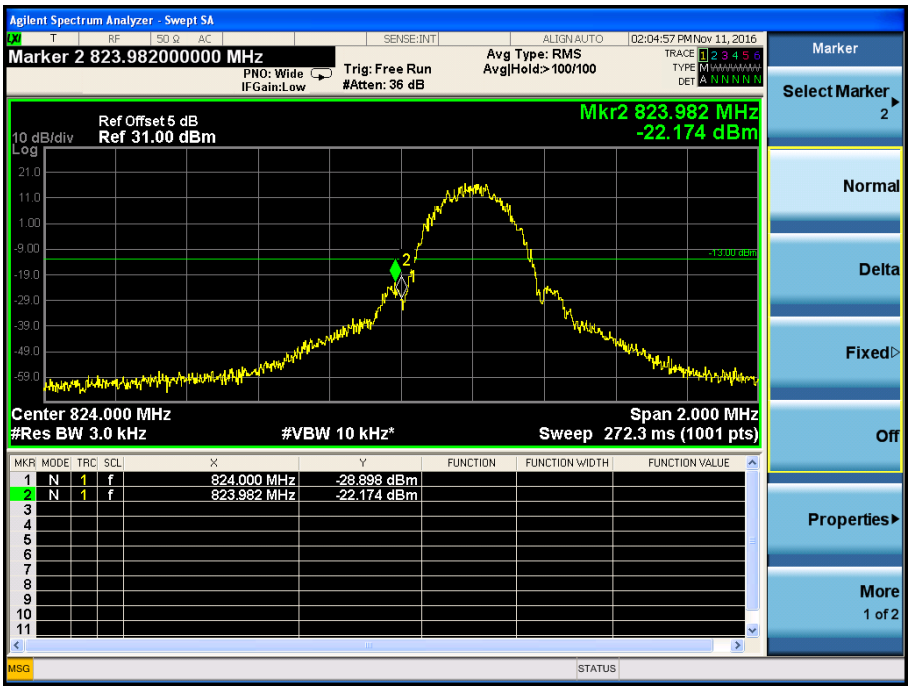
High Channel



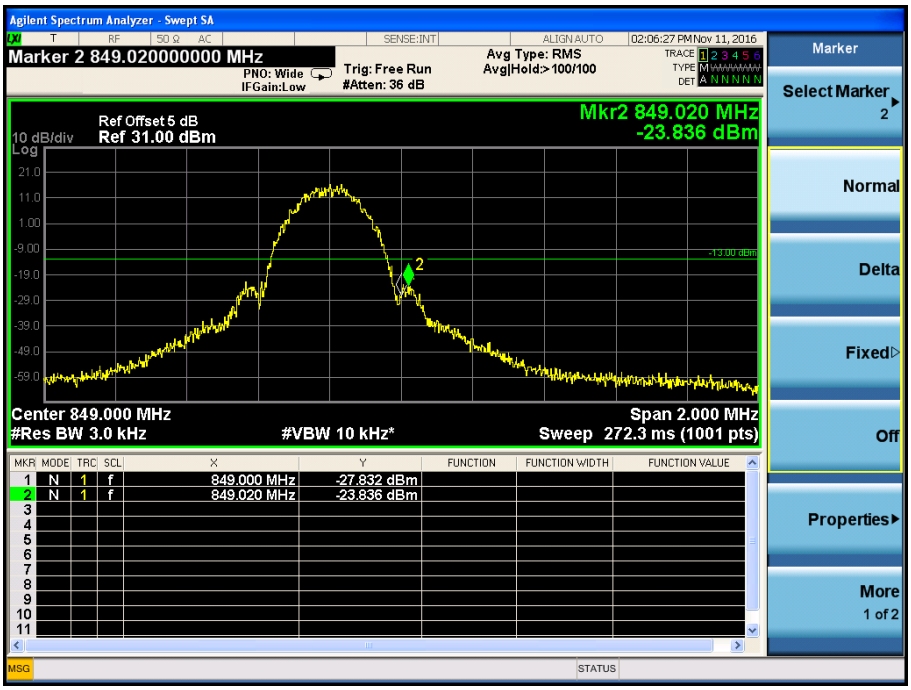


EDGE850 Bandedge Spurious Emissions at Antenna Terminals

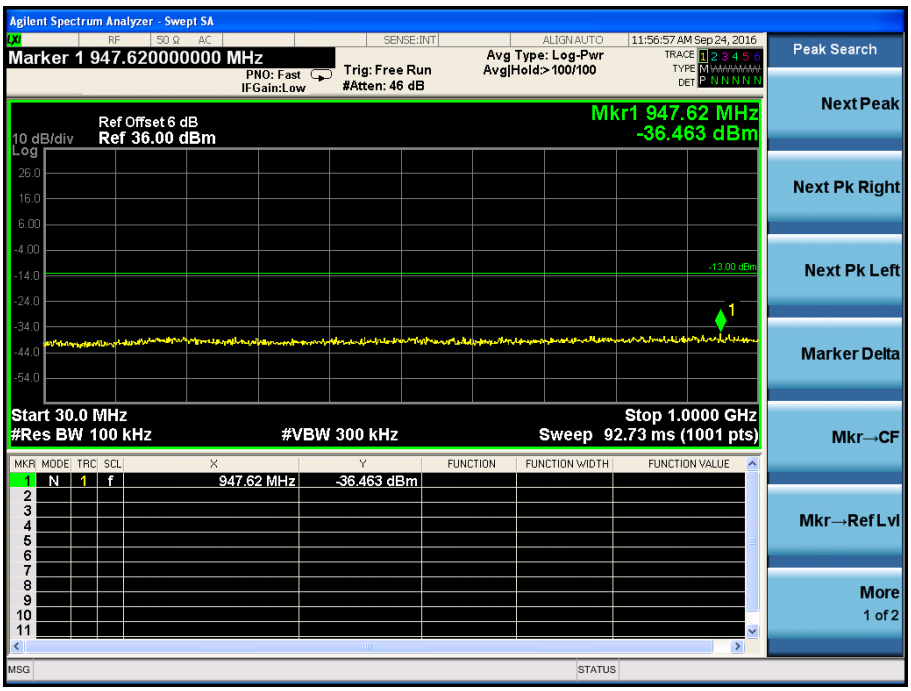
Low Band Emission

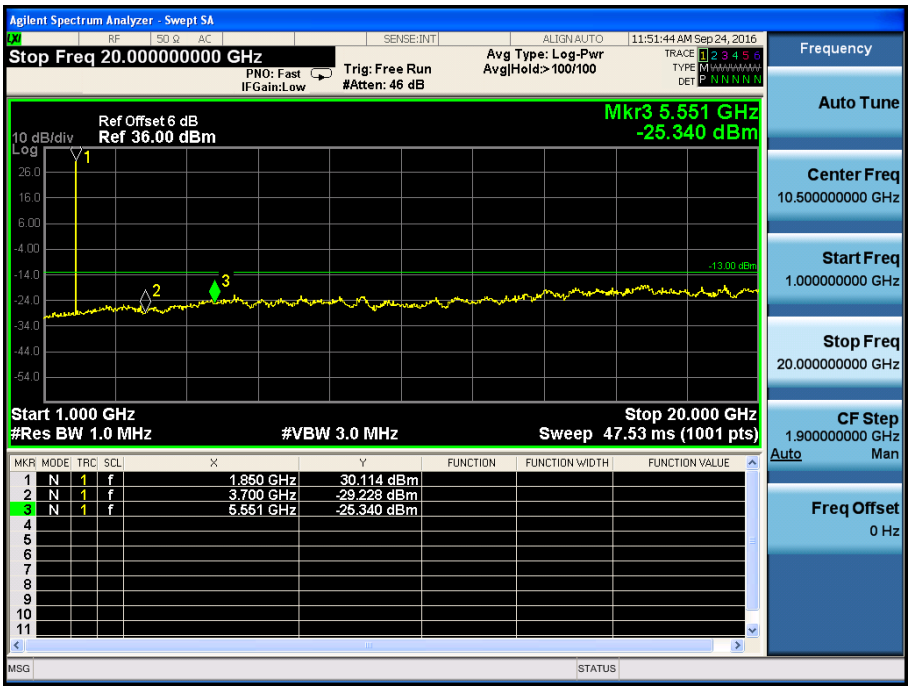


High Band Emission

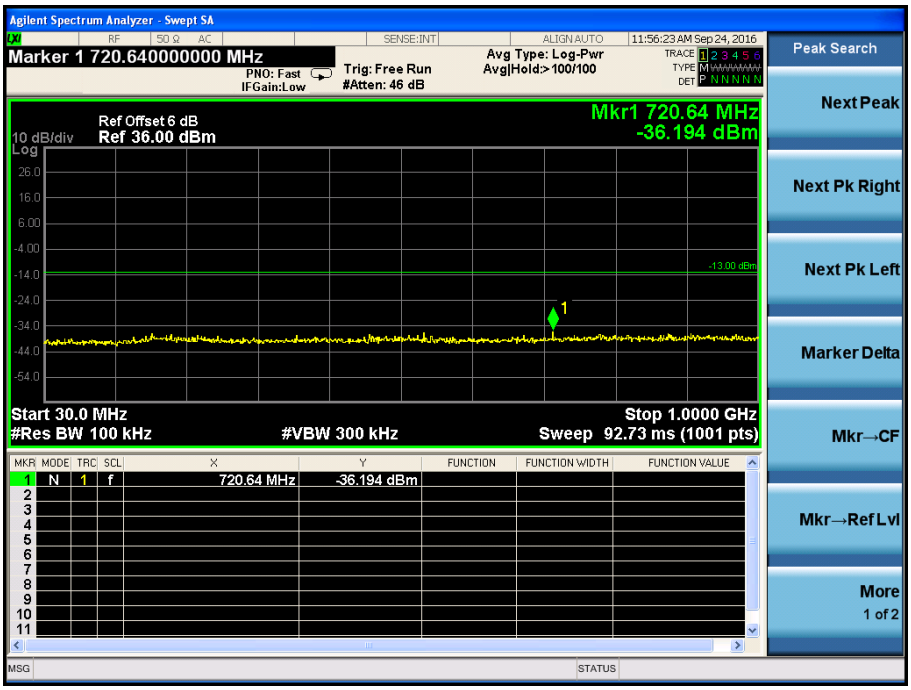


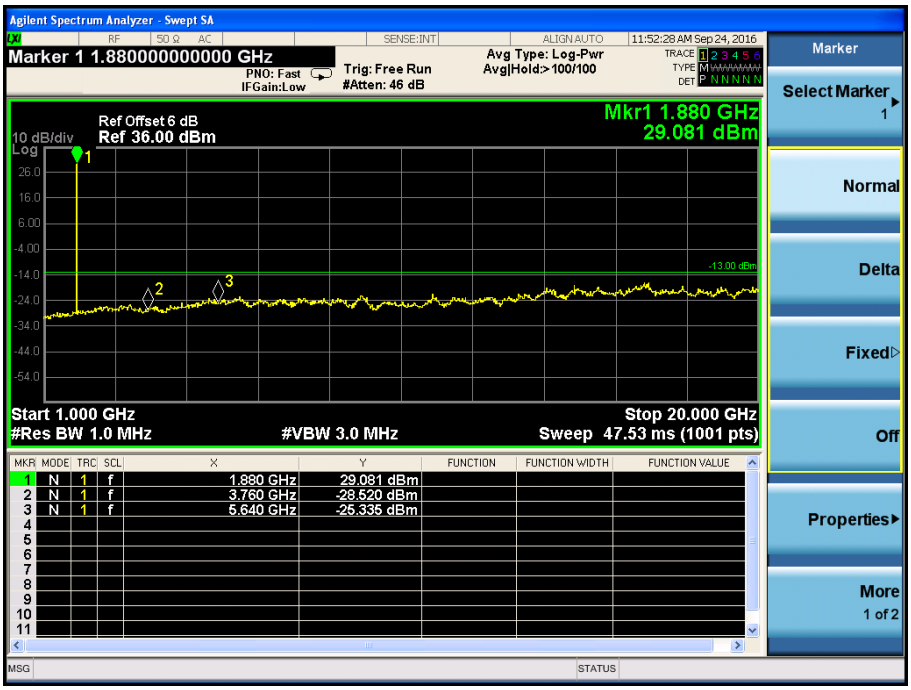
PCS1900
Low Channel



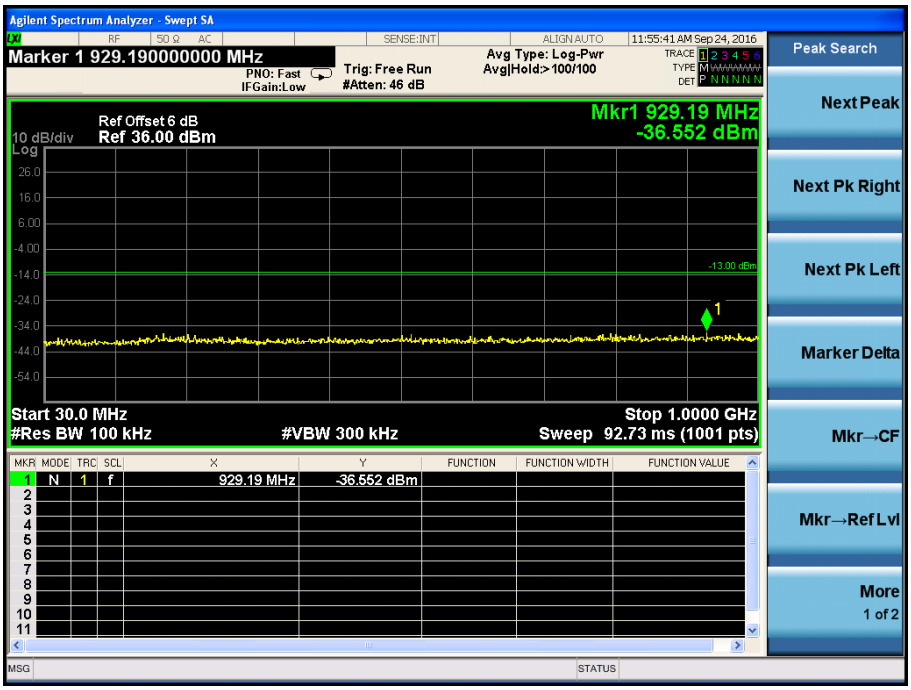


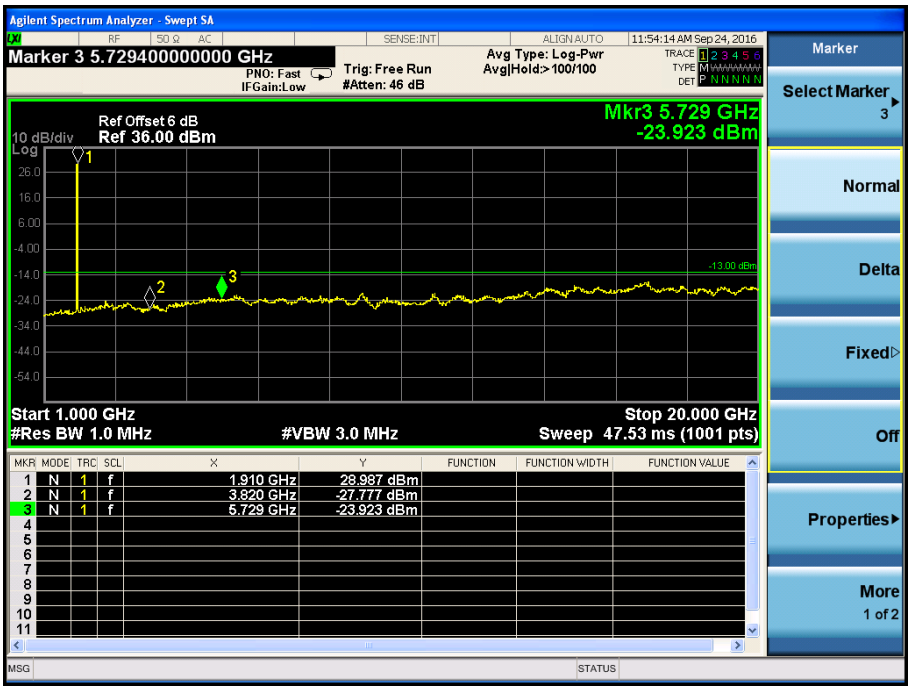
Middle Channel





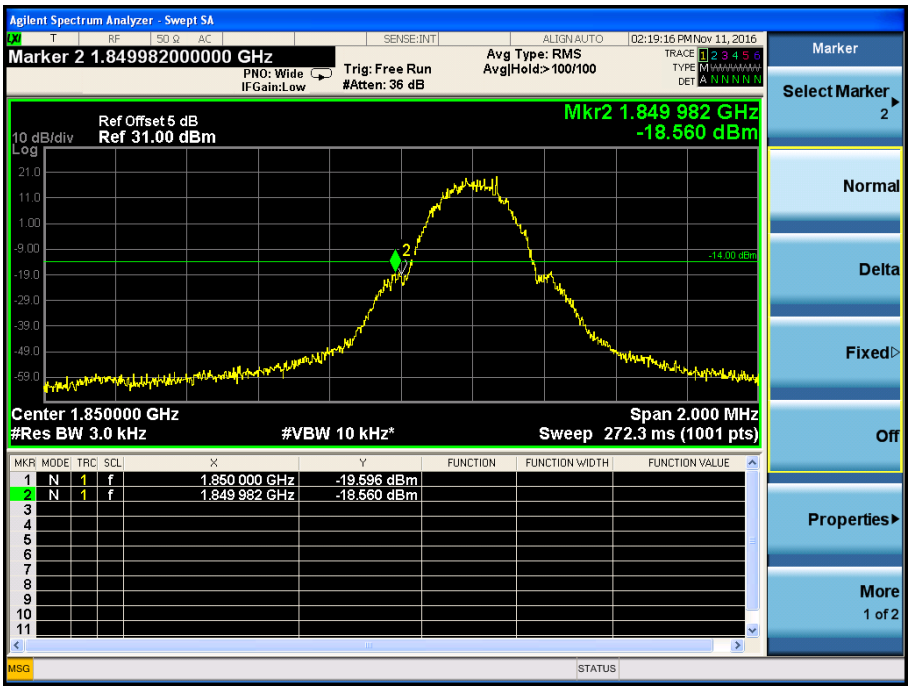
High Channel



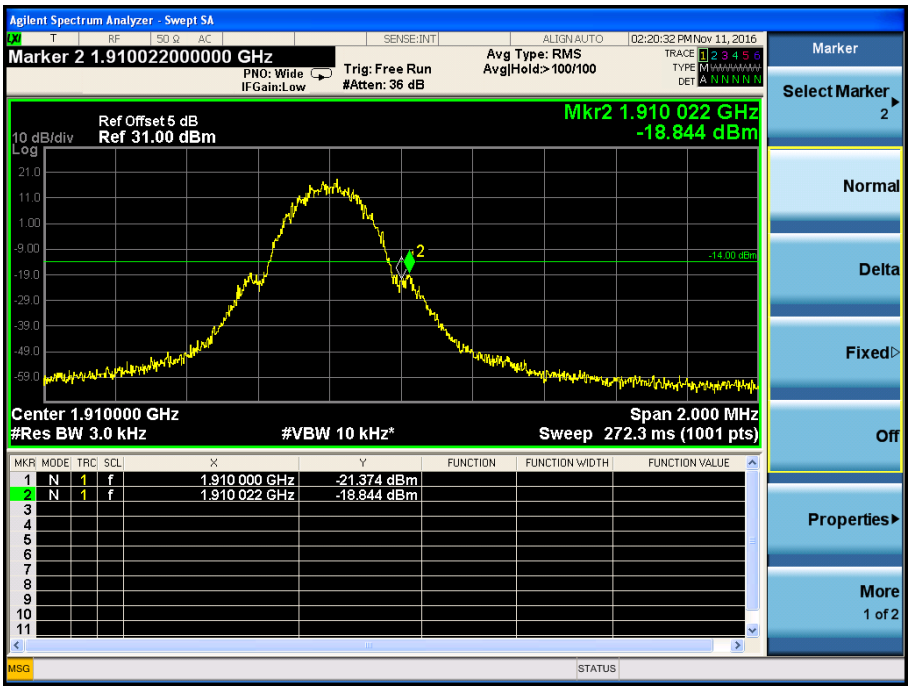


PCS1900 Bandedge Spurious Emissions at Antenna Terminals

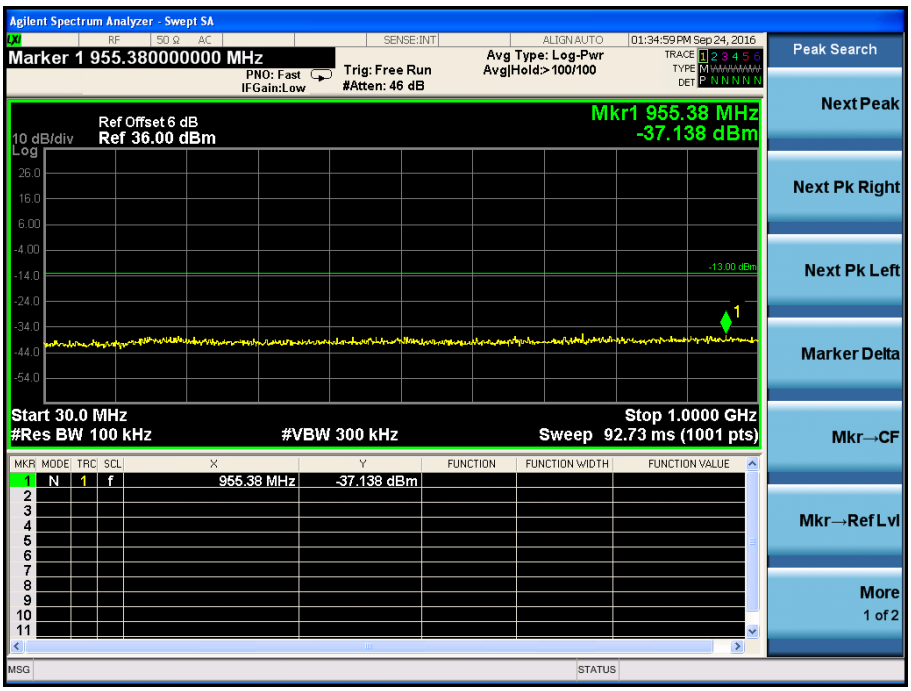
Low Band Emission

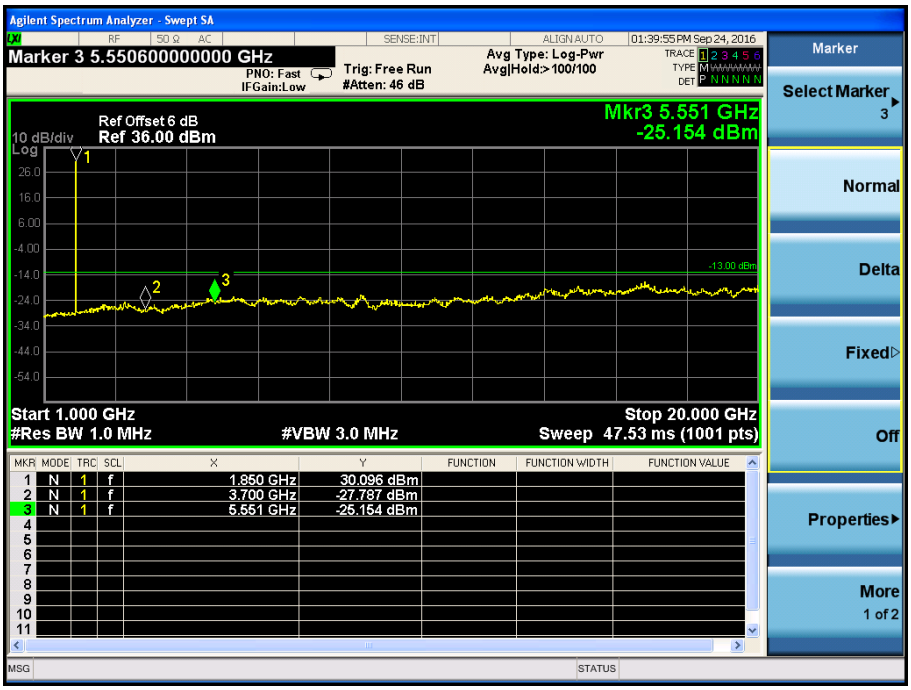


High Band Emission

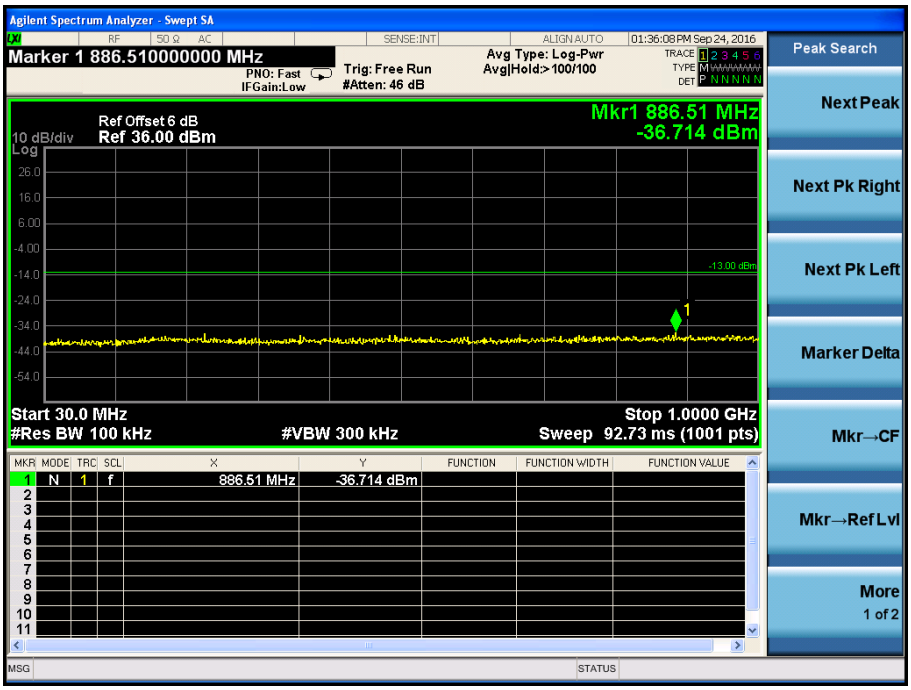


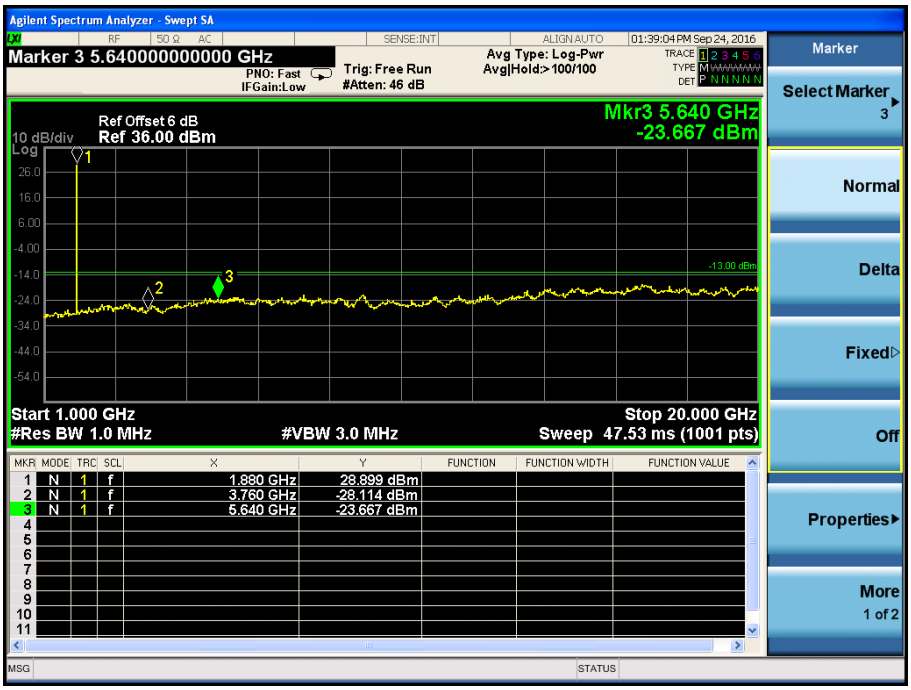
GPRS1900
Low Channel



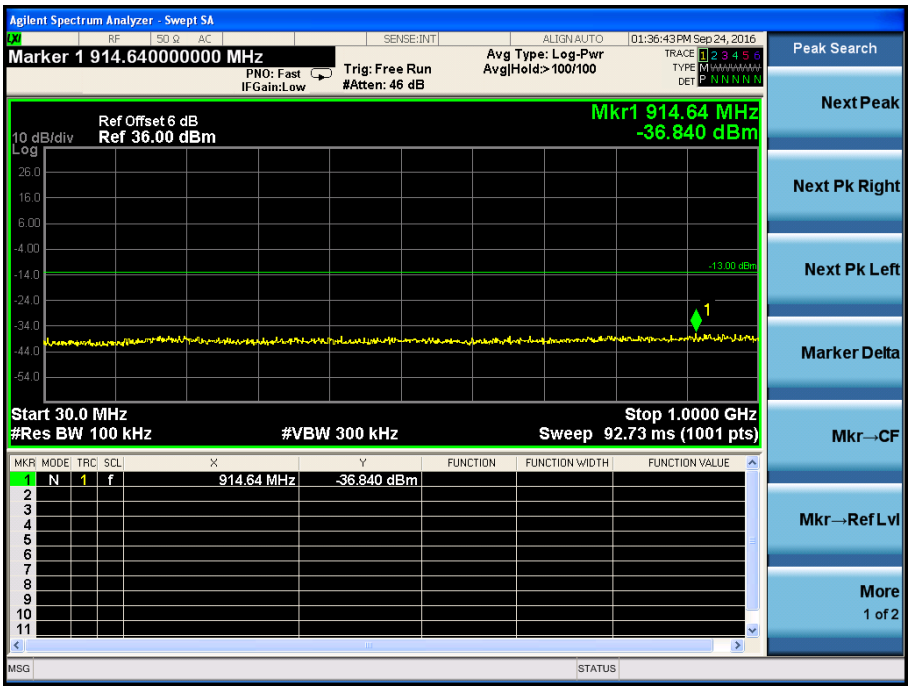


Middle Channel



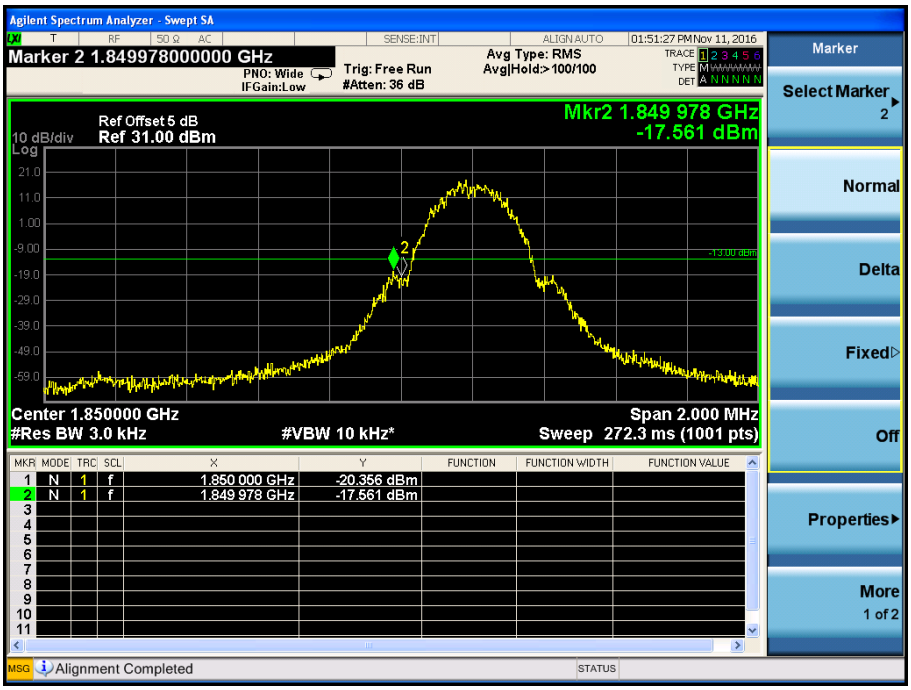
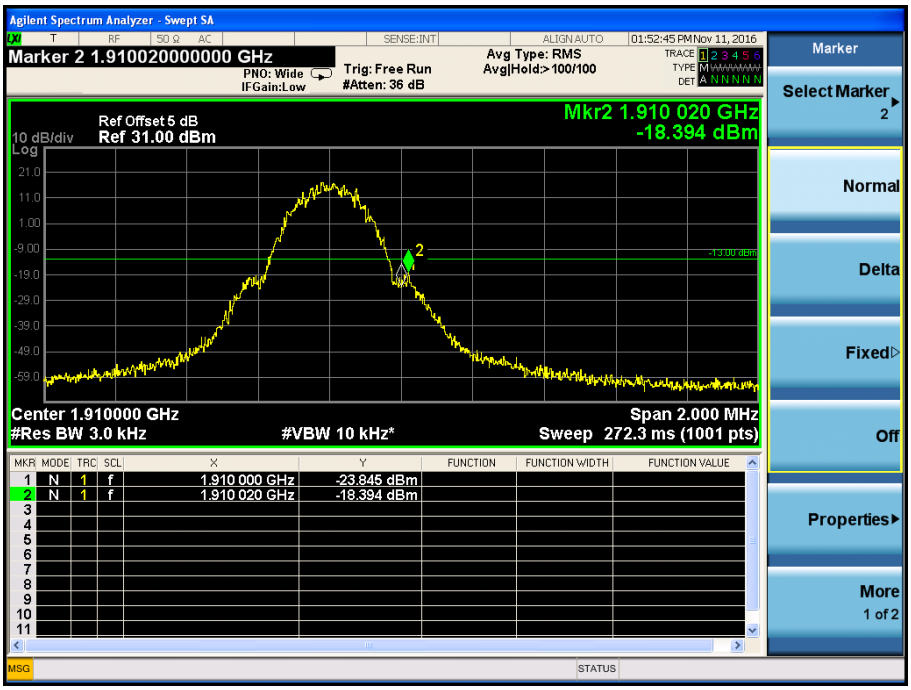


High Channel



GPRS1900 Bandedge Spurious Emissions at Antenna Terminals

Low Band Emission



High Band Emission