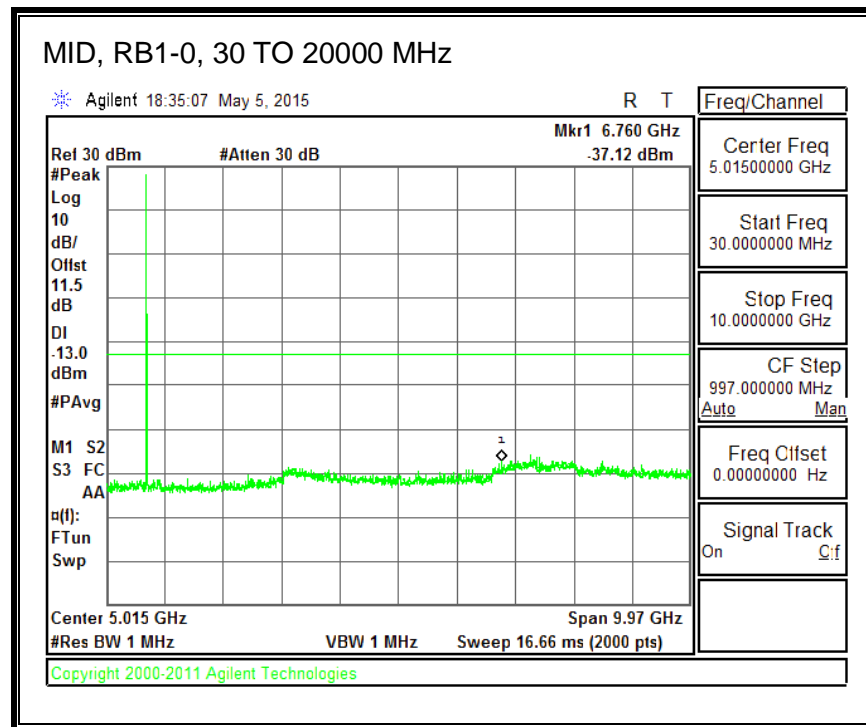
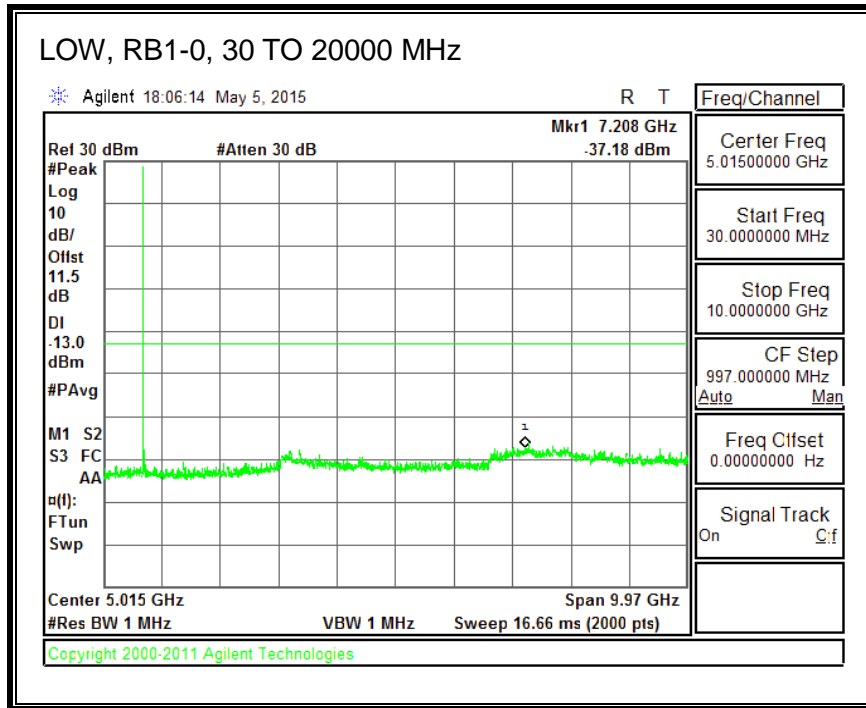
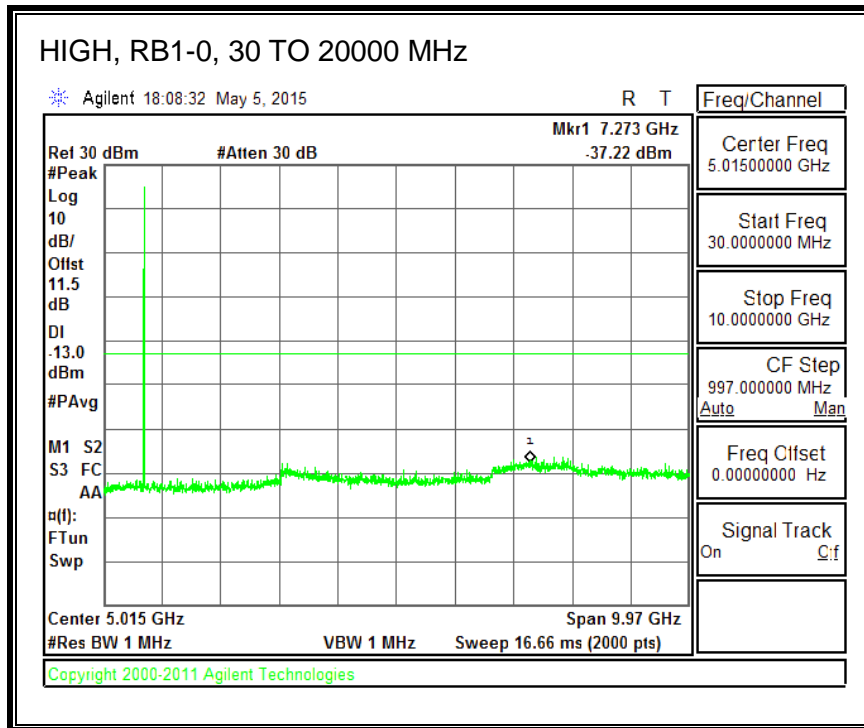
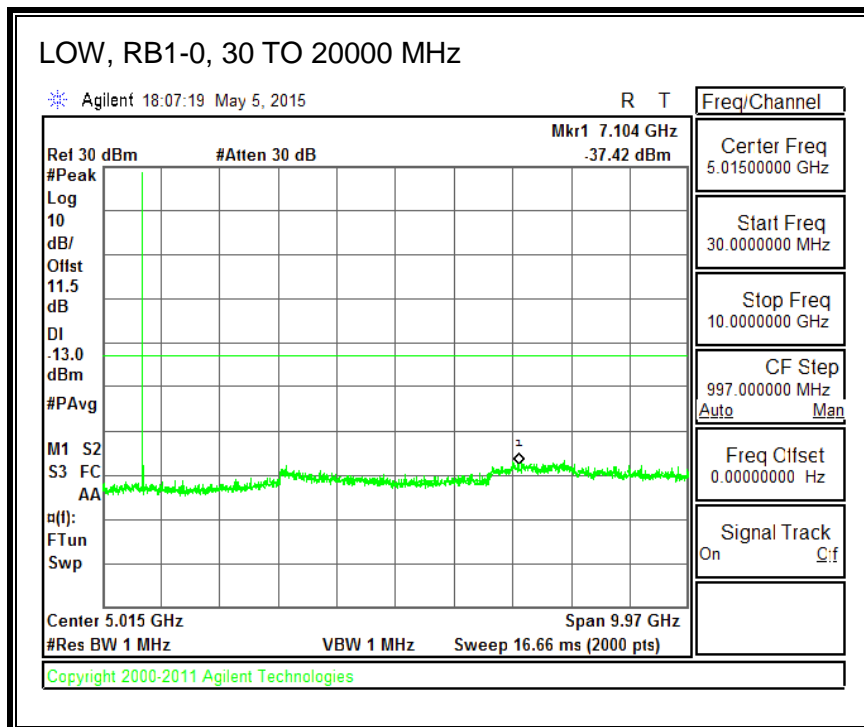


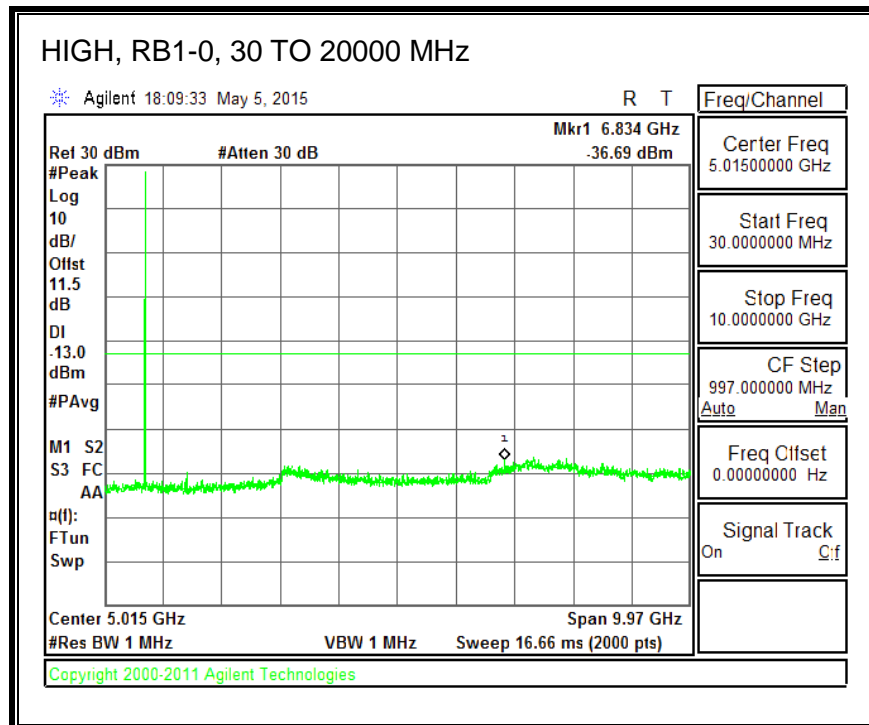
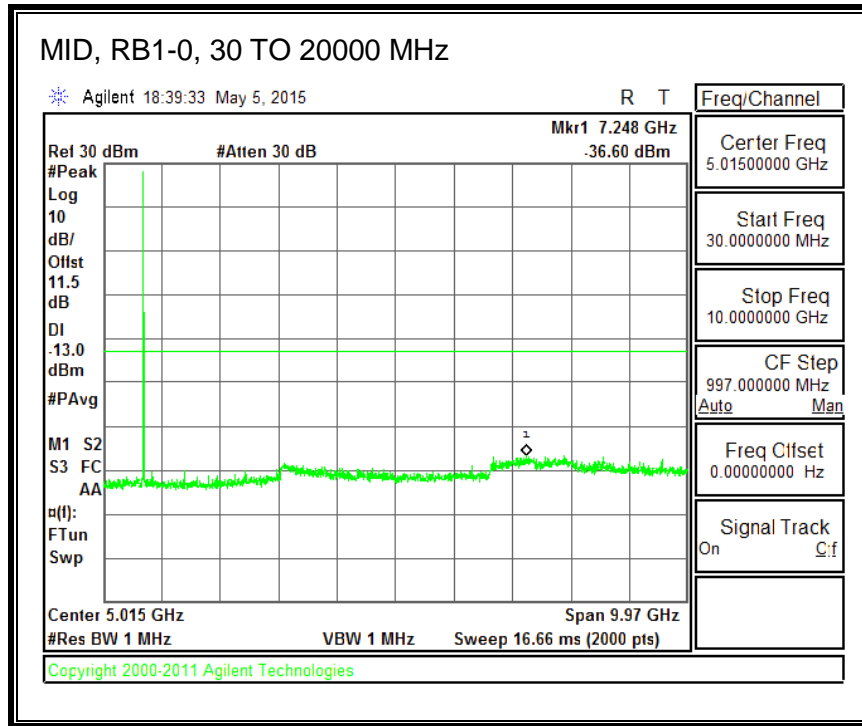
QPSK, (3.0 MHz BAND WIDTH)



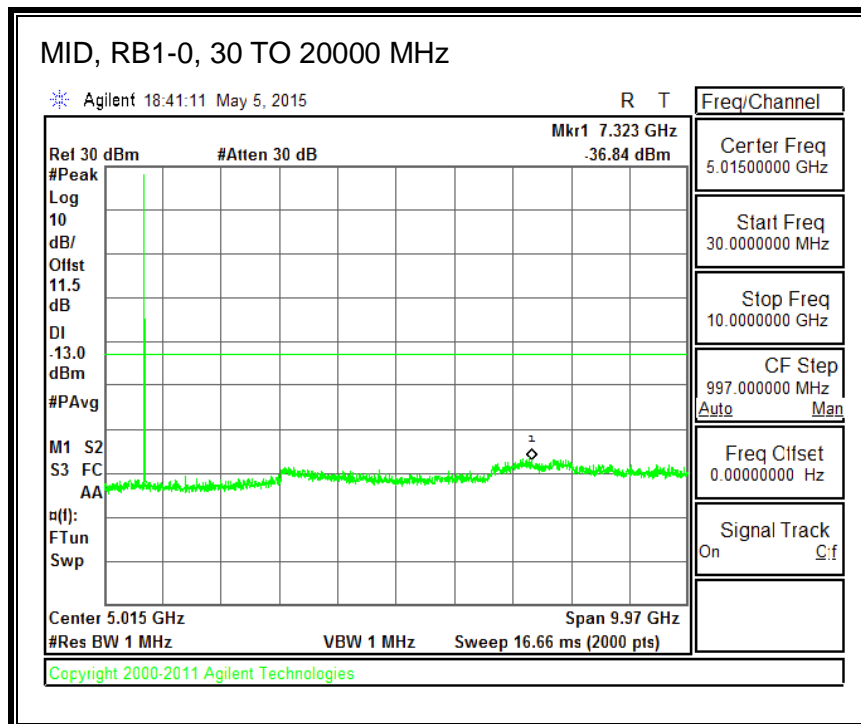
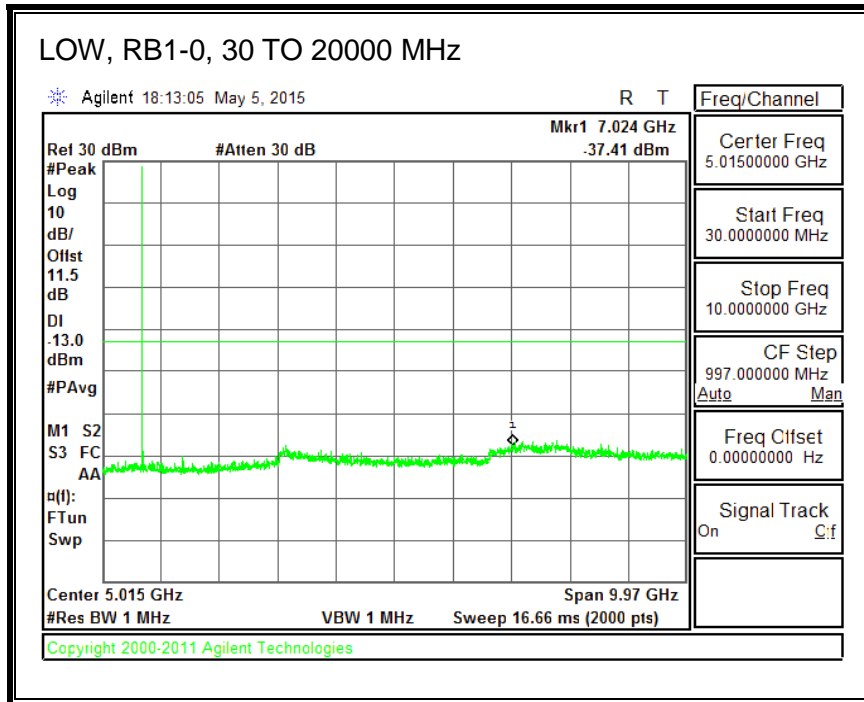


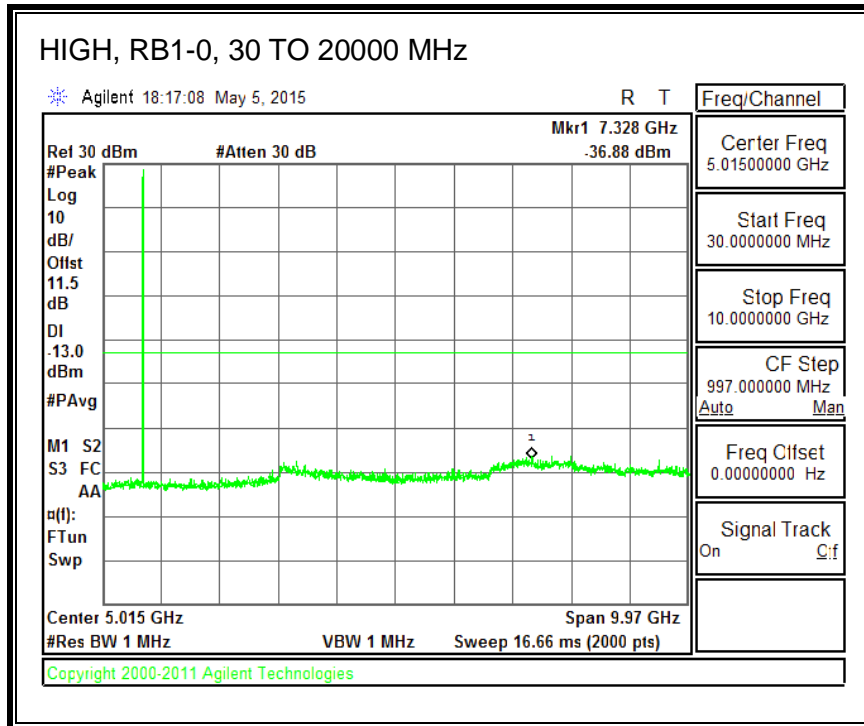
16QAM, (3.0 MHz BAND WIDTH)



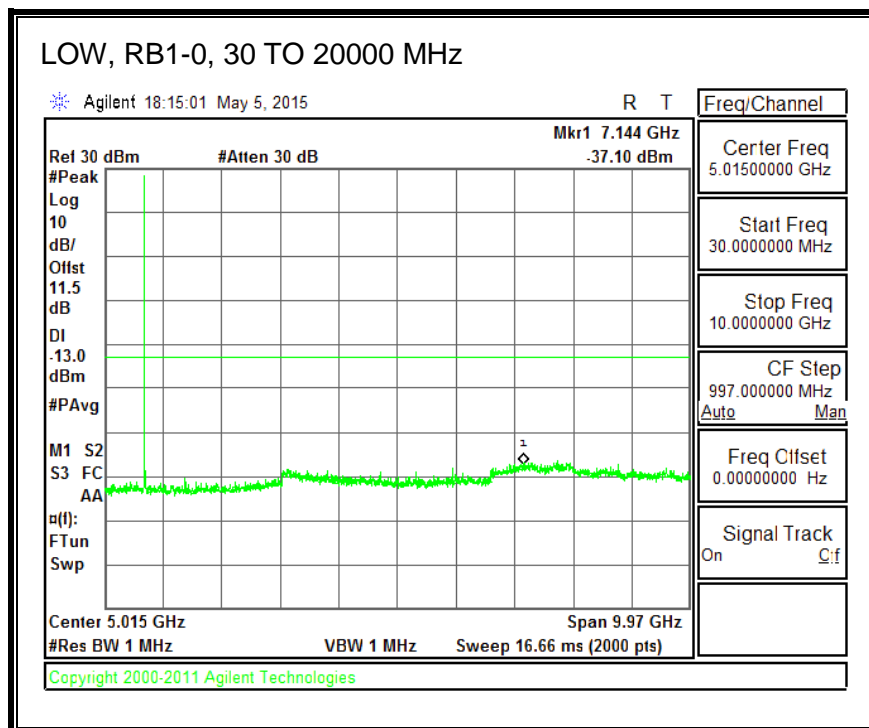


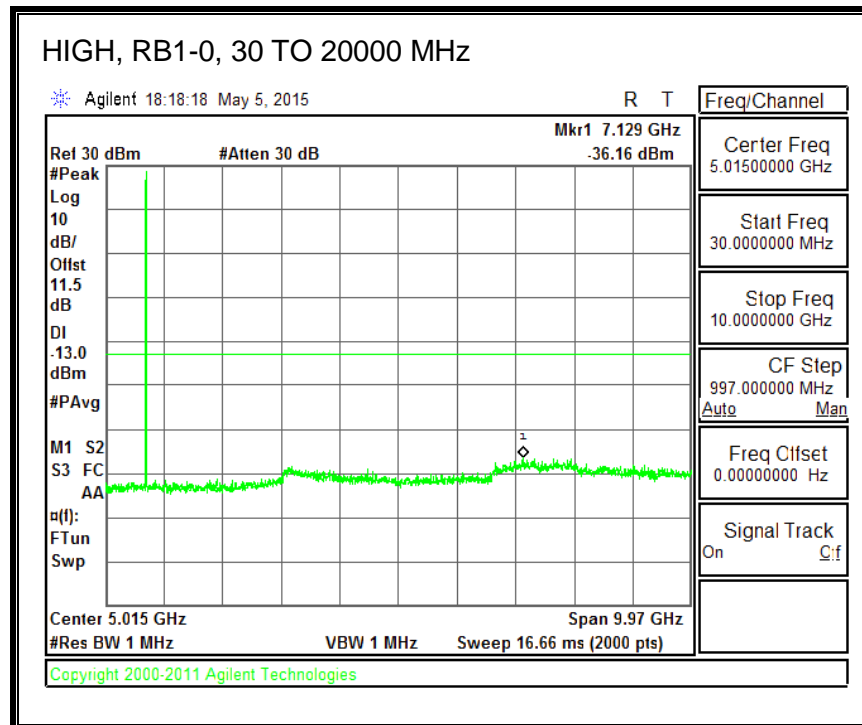
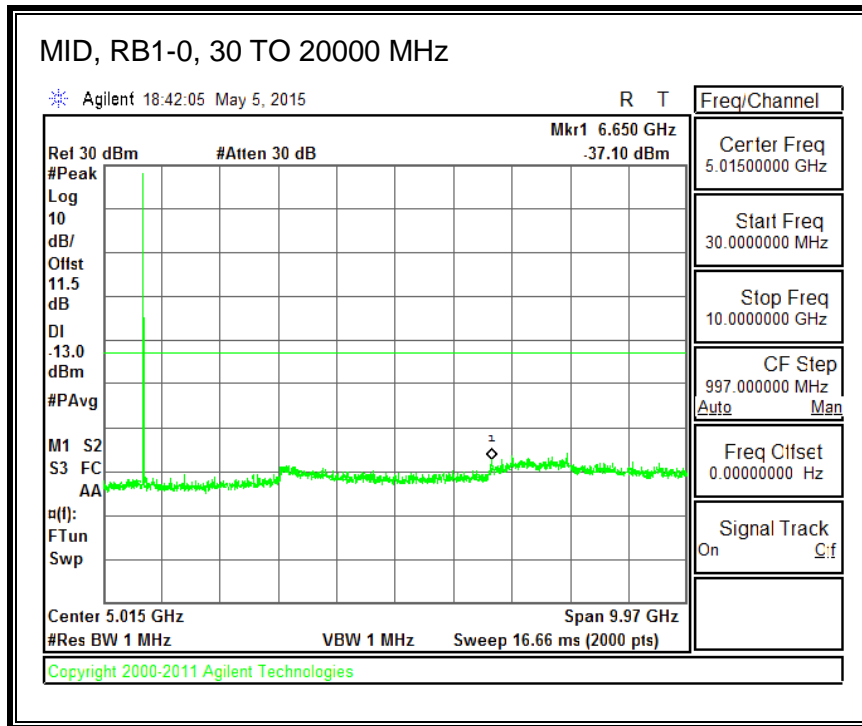
QPSK, (5.0 MHz BAND WIDTH)



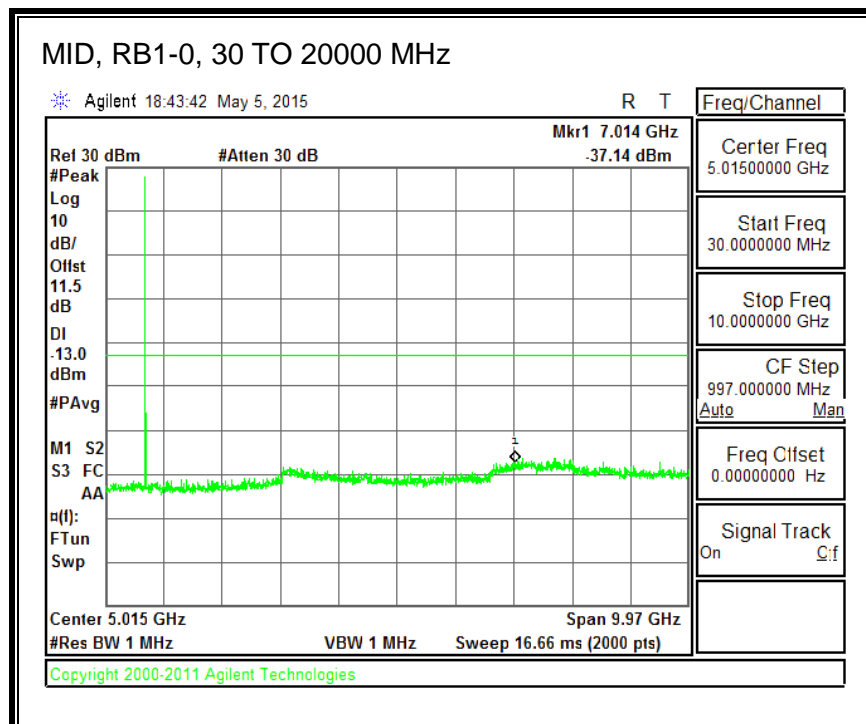
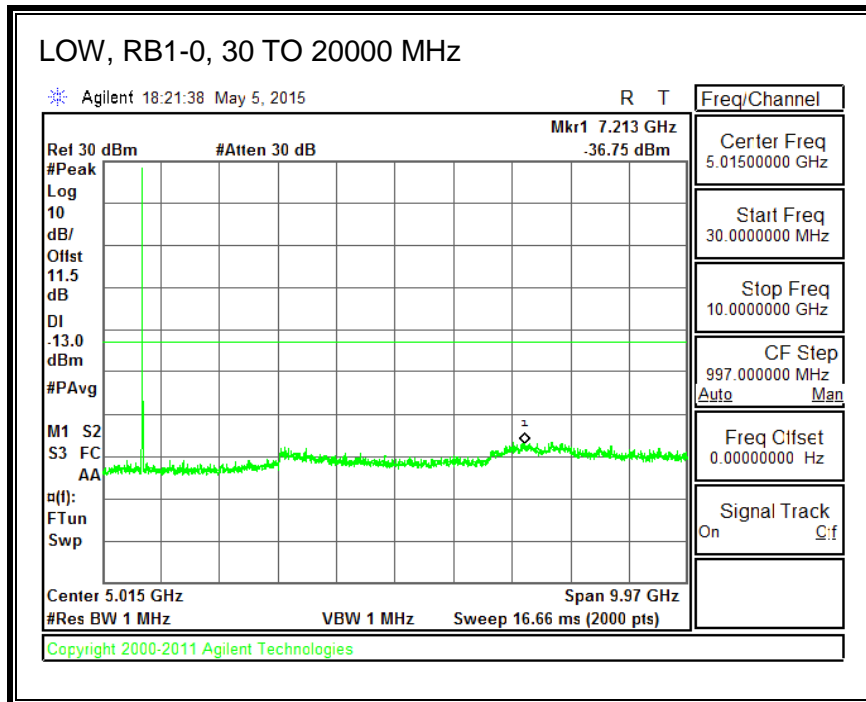


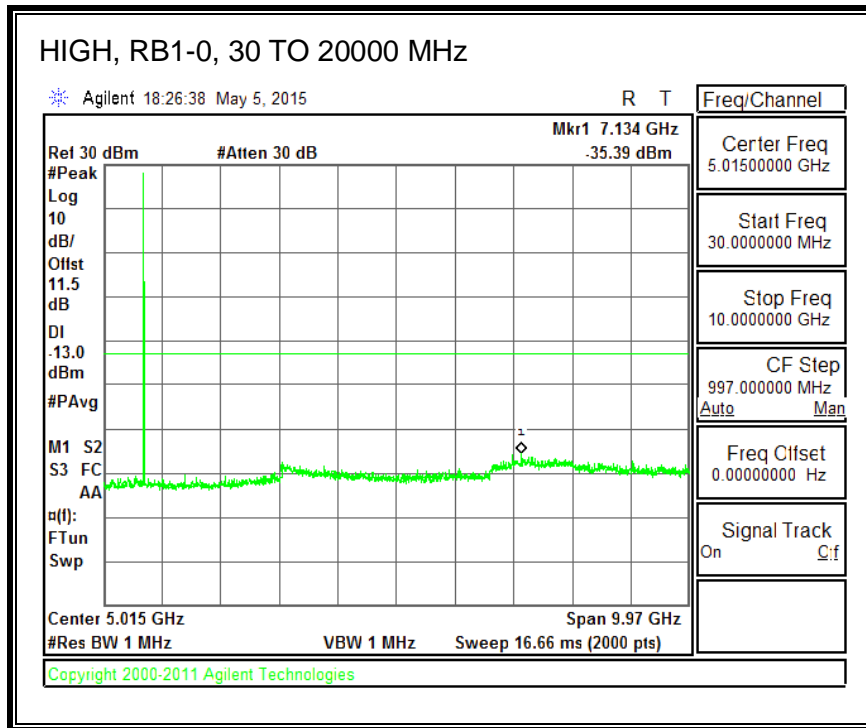
16QAM, (5.0 MHz BAND WIDTH)



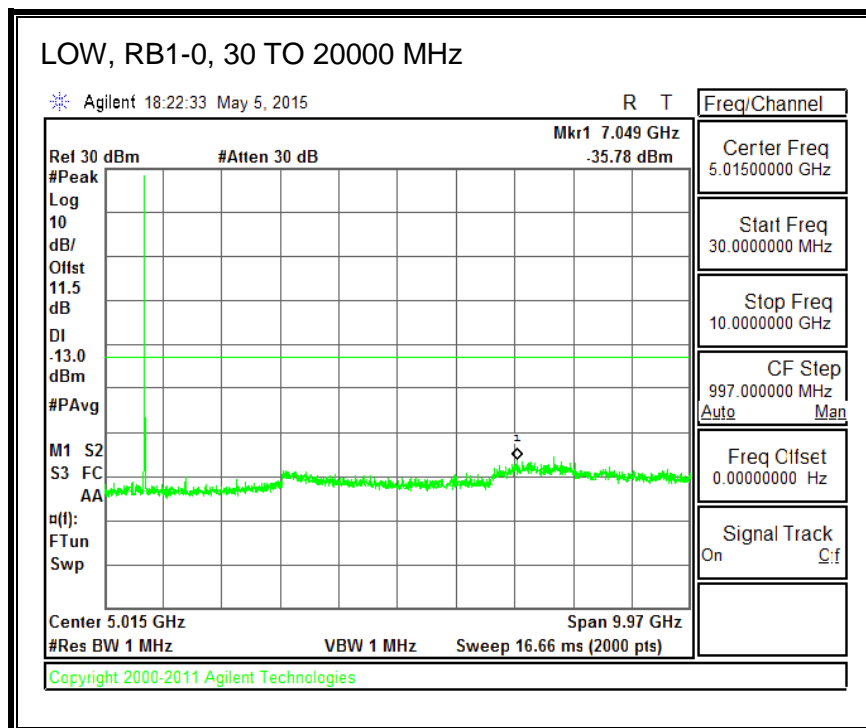


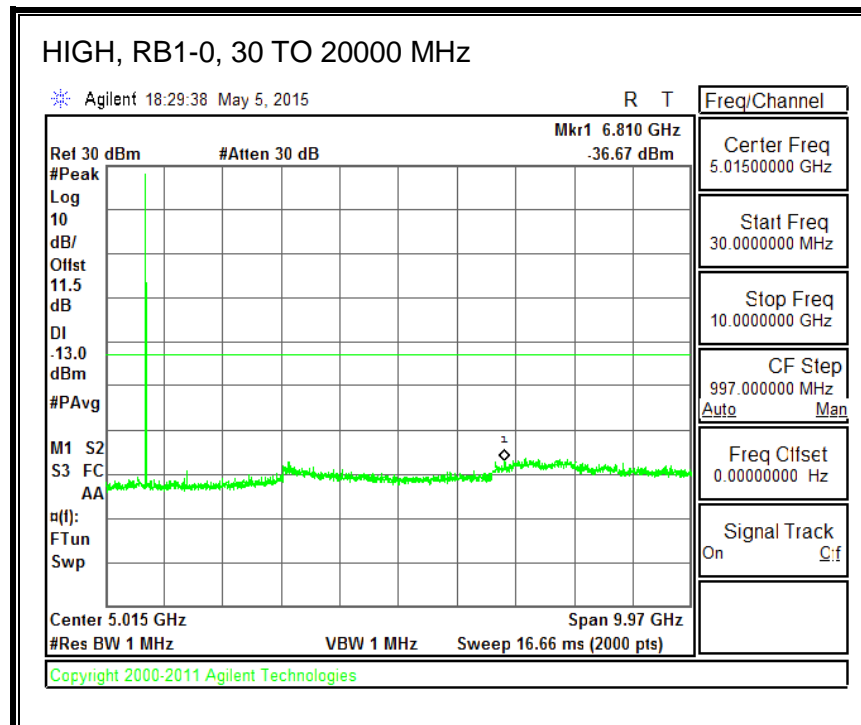
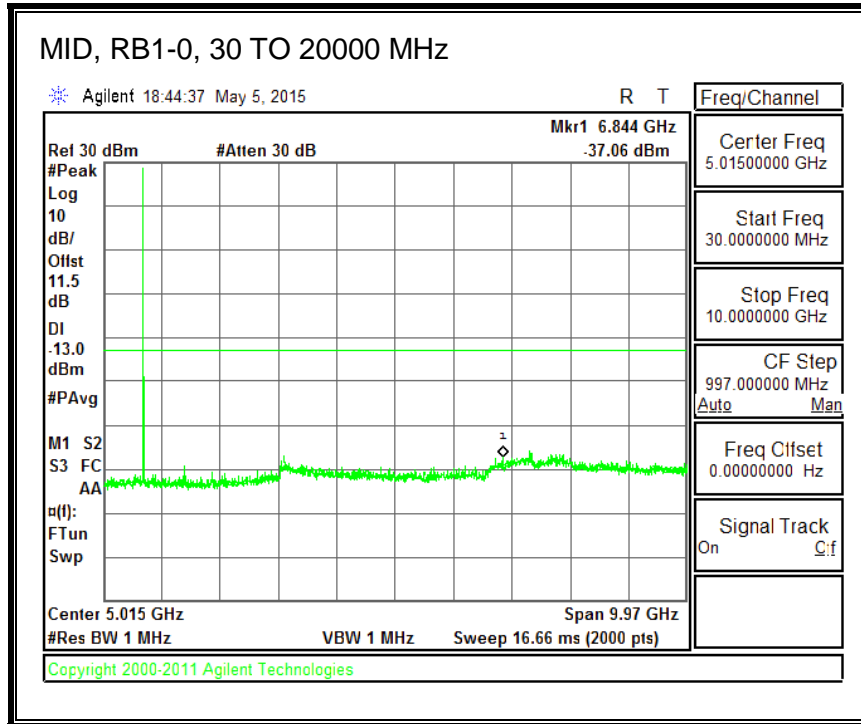
QPSK, (10.0 MHz BAND WIDTH)





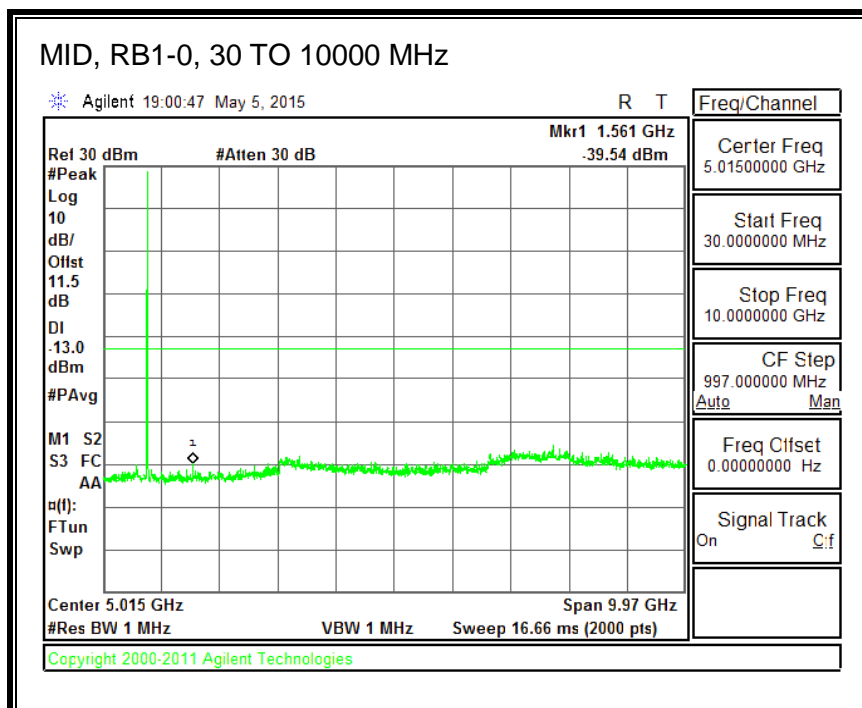
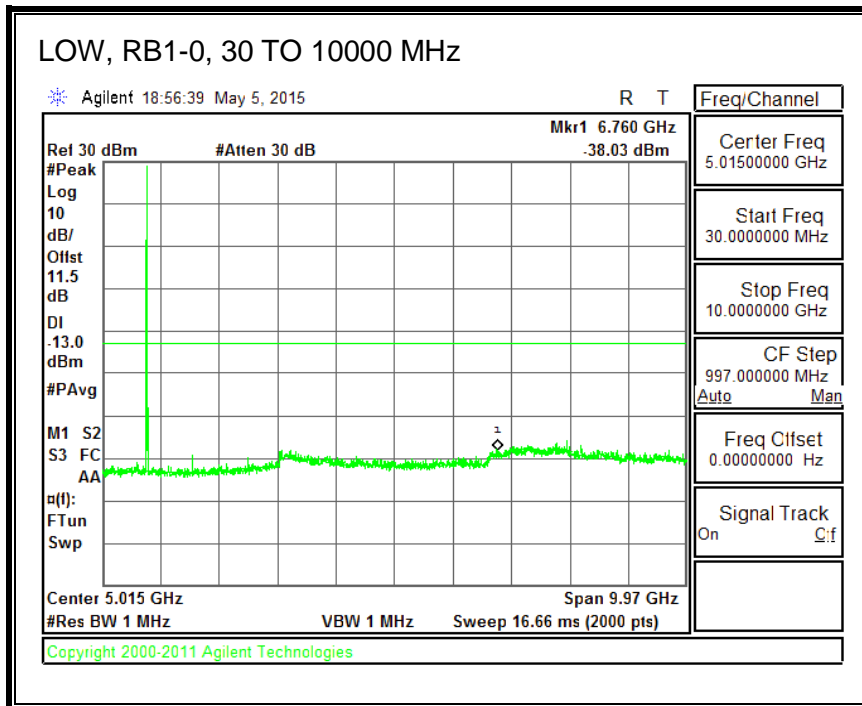
16QAM, (10.0 MHz BAND WIDTH)

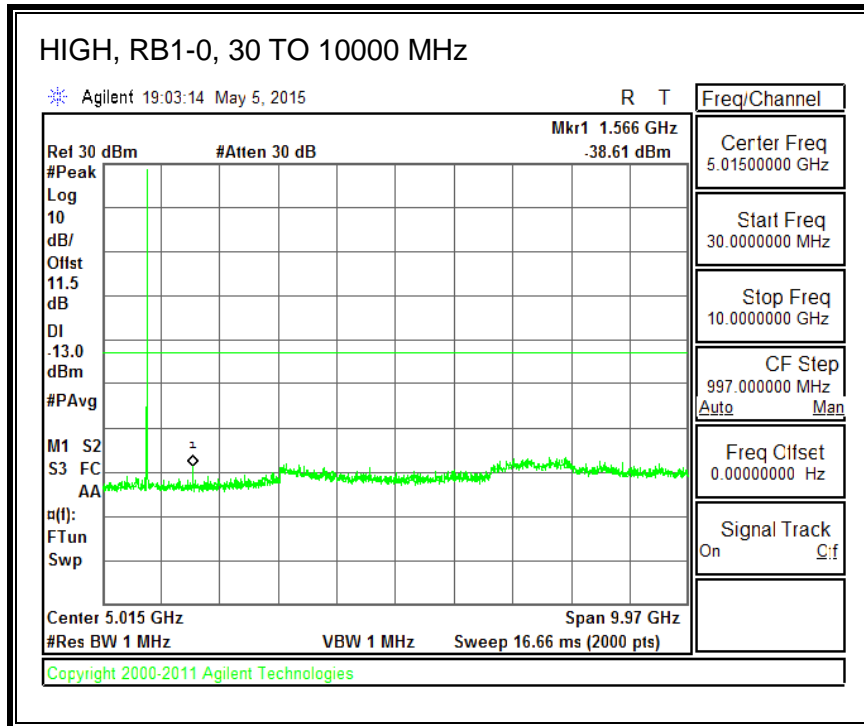




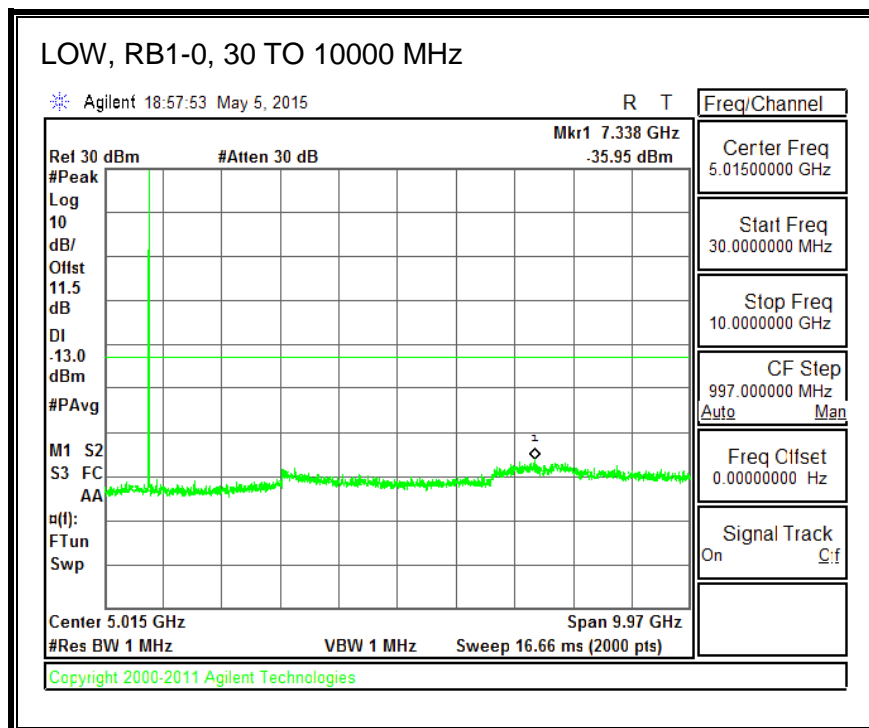
8.5.6. LTE BAND 13

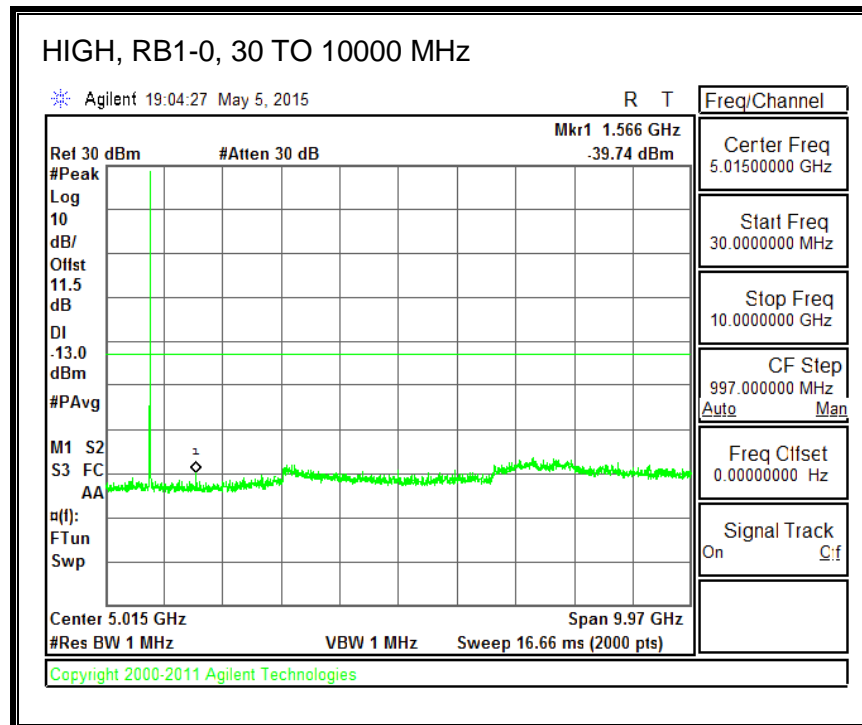
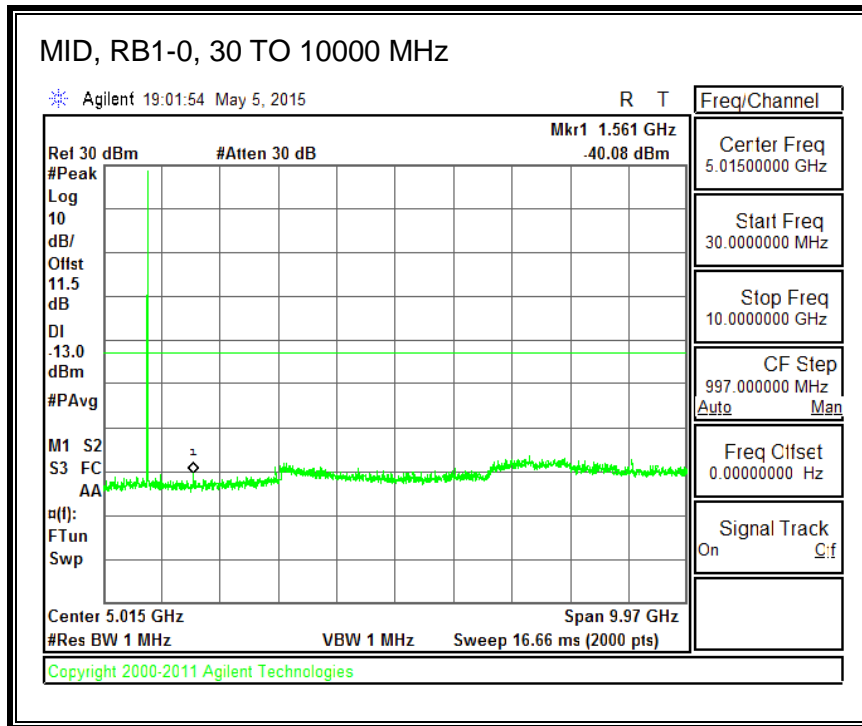
QPSK, (5.0 MHz BAND WIDTH)



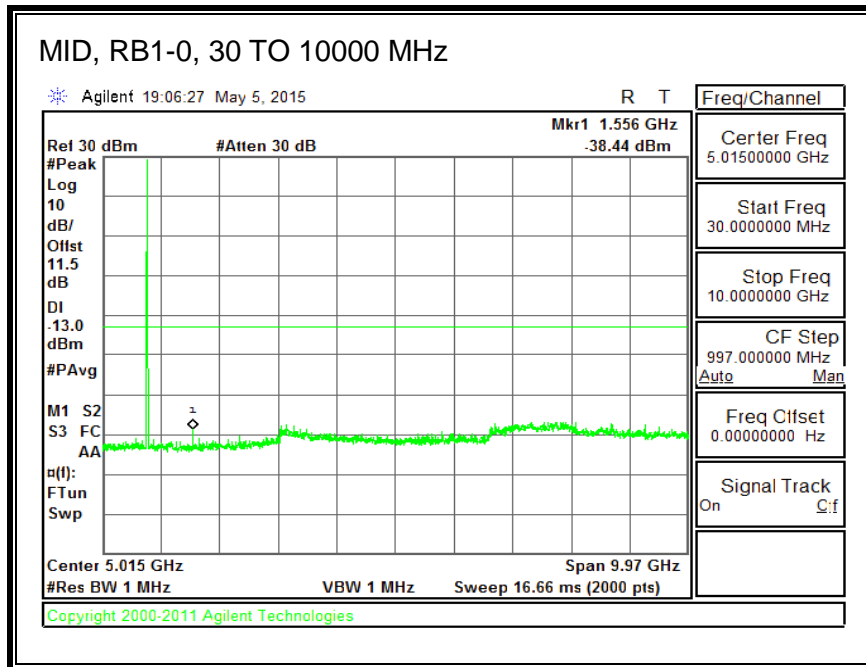


16QAM, (5.0 MHz BAND WIDTH)

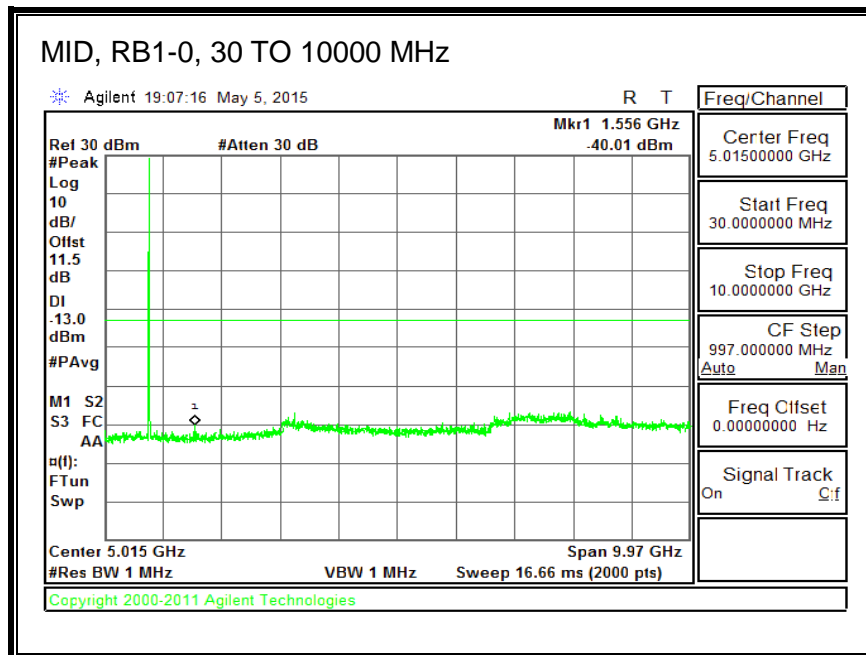




QPSK, (10.0 MHz BAND WIDTH)

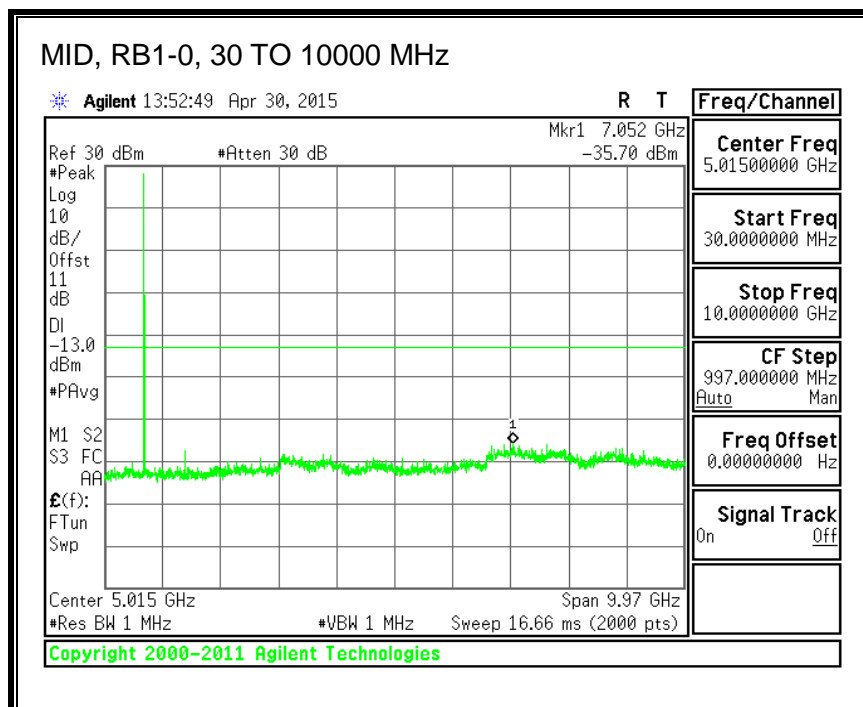
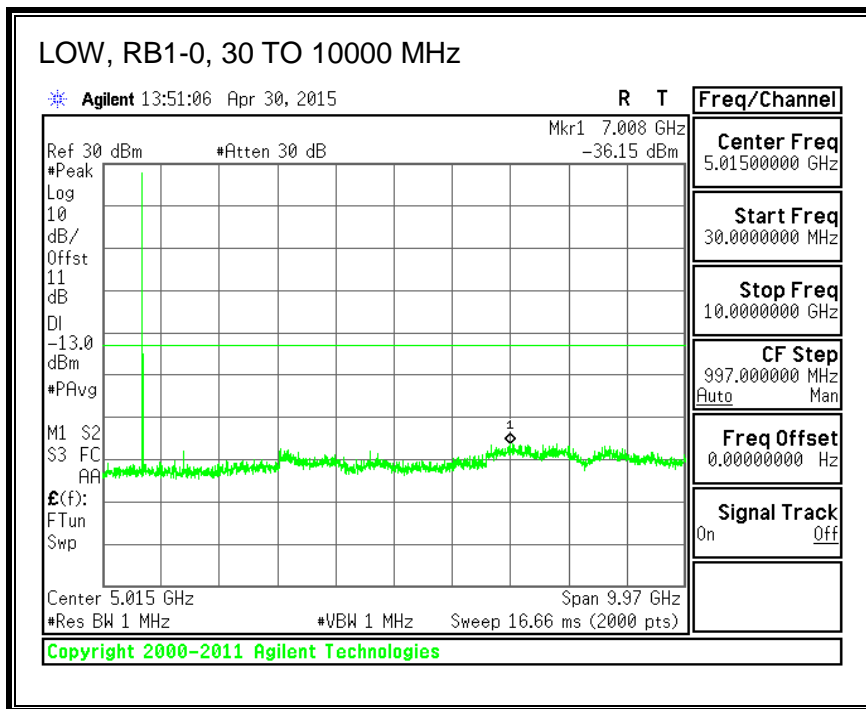


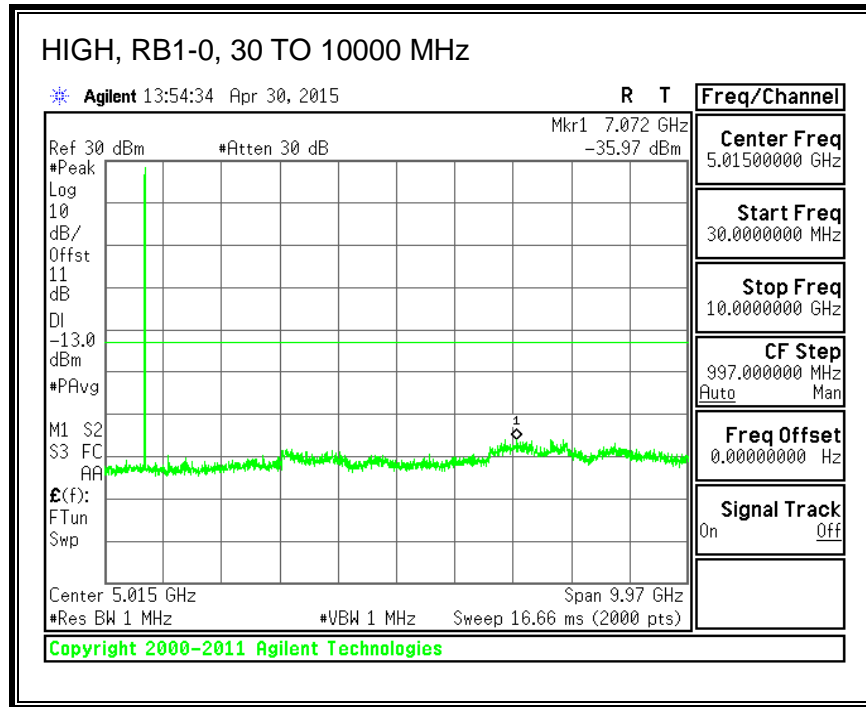
16QAM, (10.0 MHz BAND WIDTH)



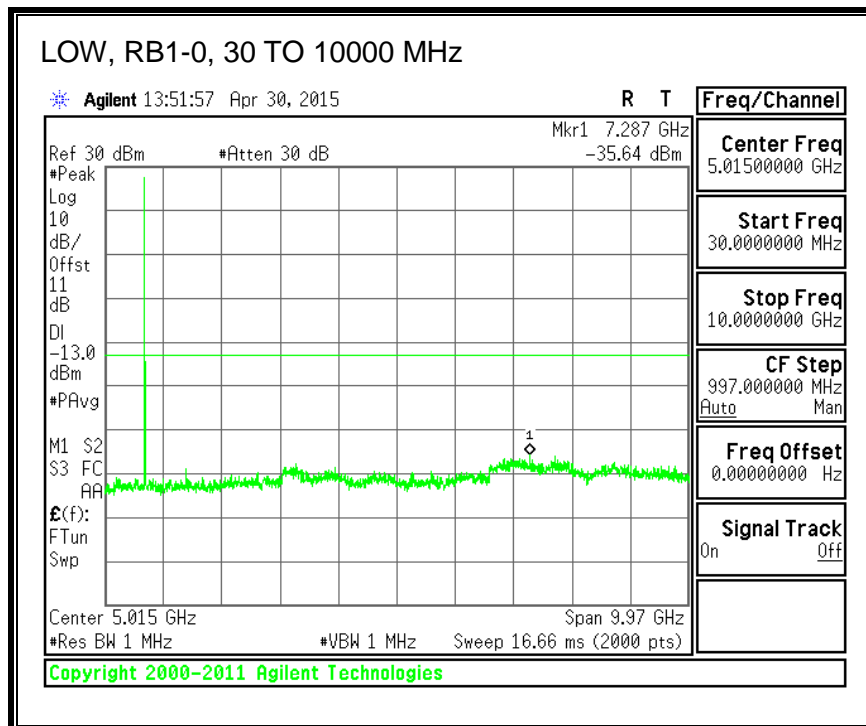
8.5.7. LTE BAND 17

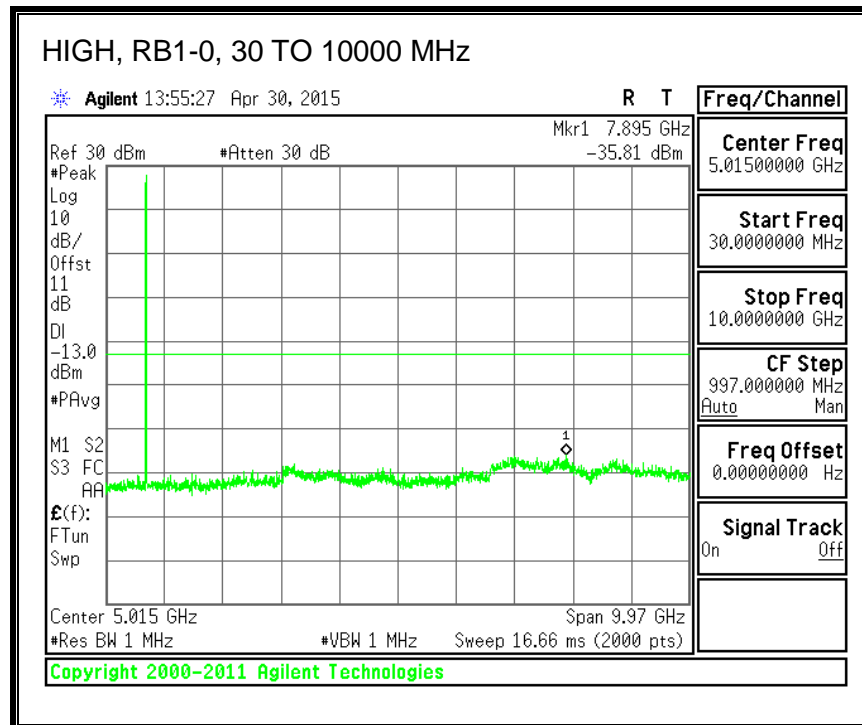
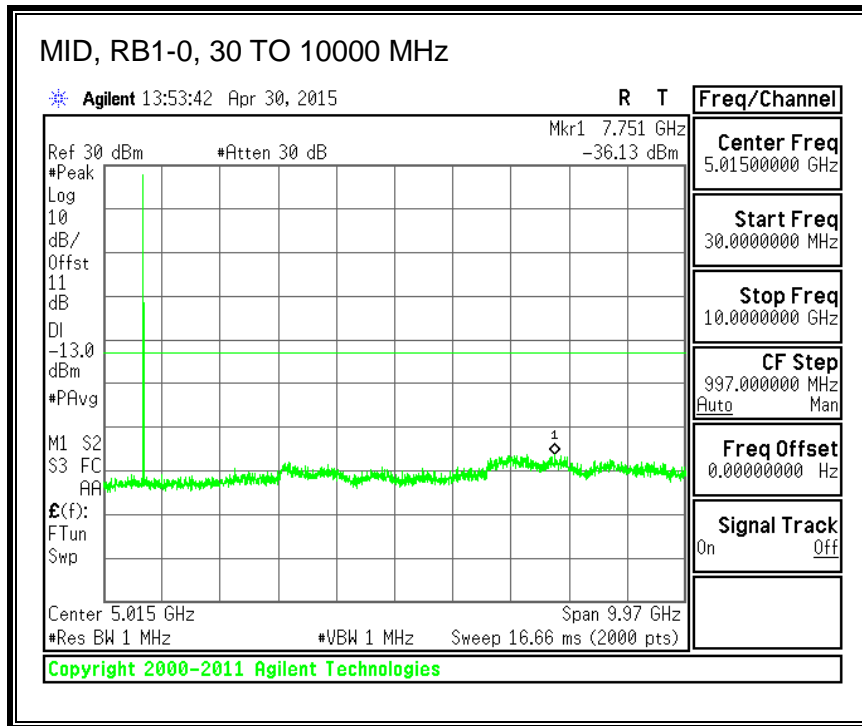
QPSK, (5.0 MHz BAND WIDTH)



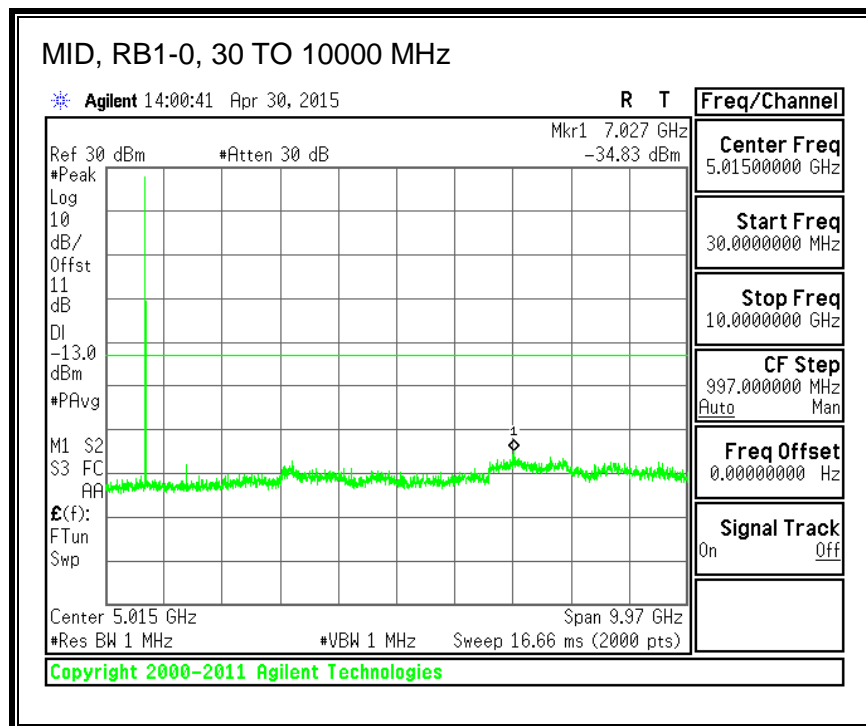
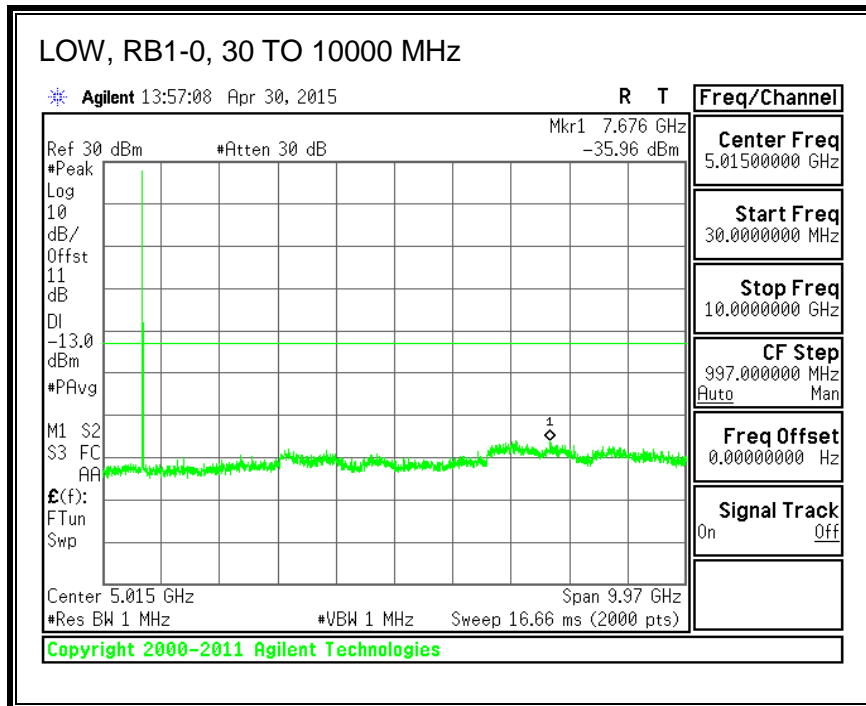


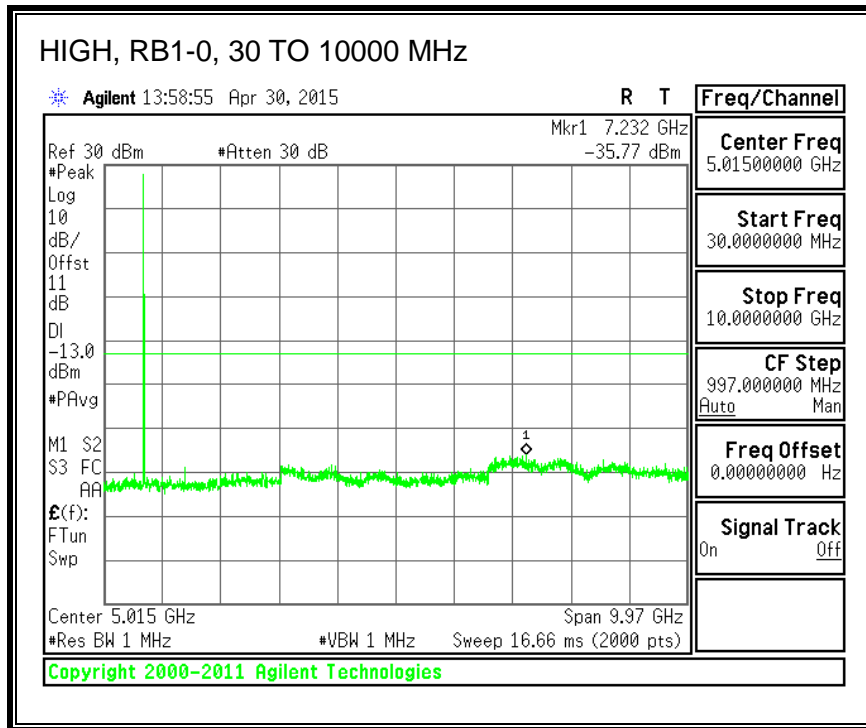
16QAM, (5.0 MHz BAND WIDTH)



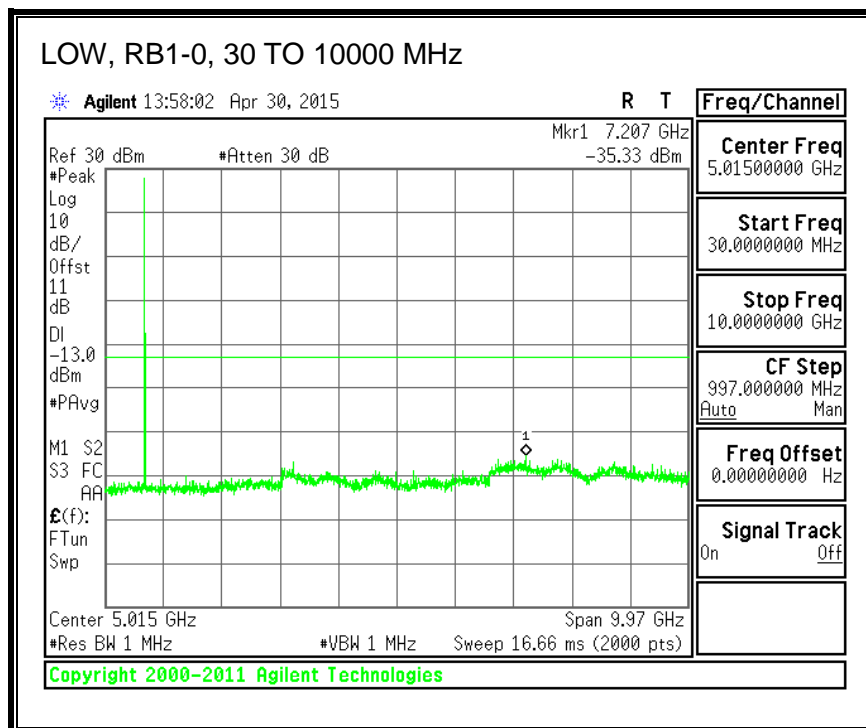


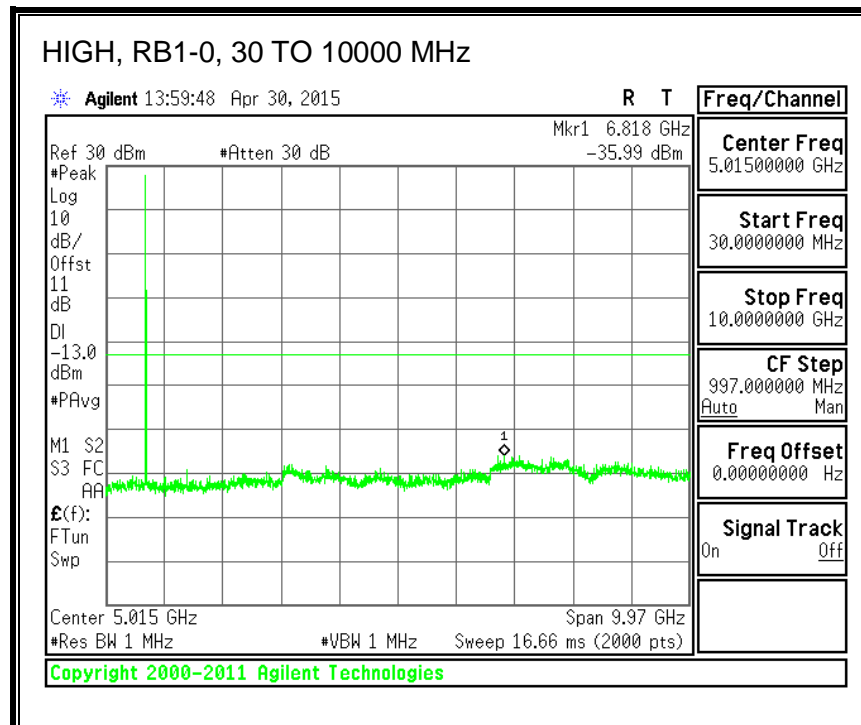
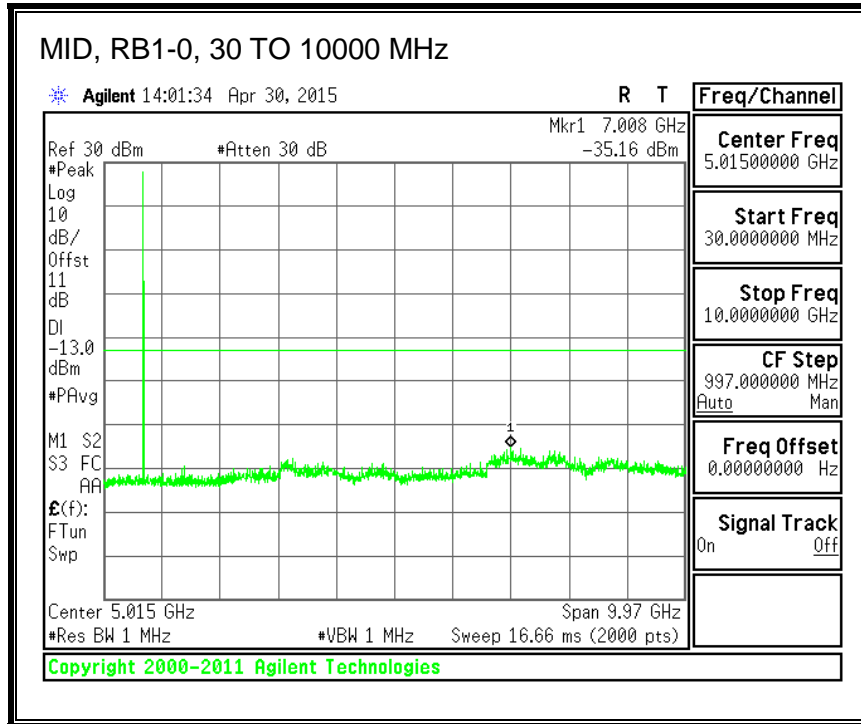
QPSK, (10.0 MHz BAND WIDTH)





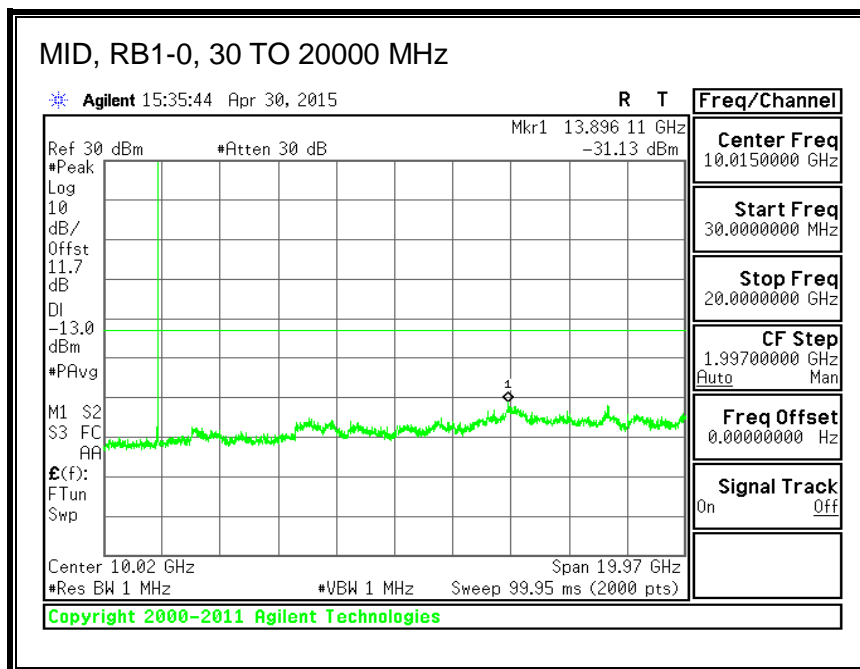
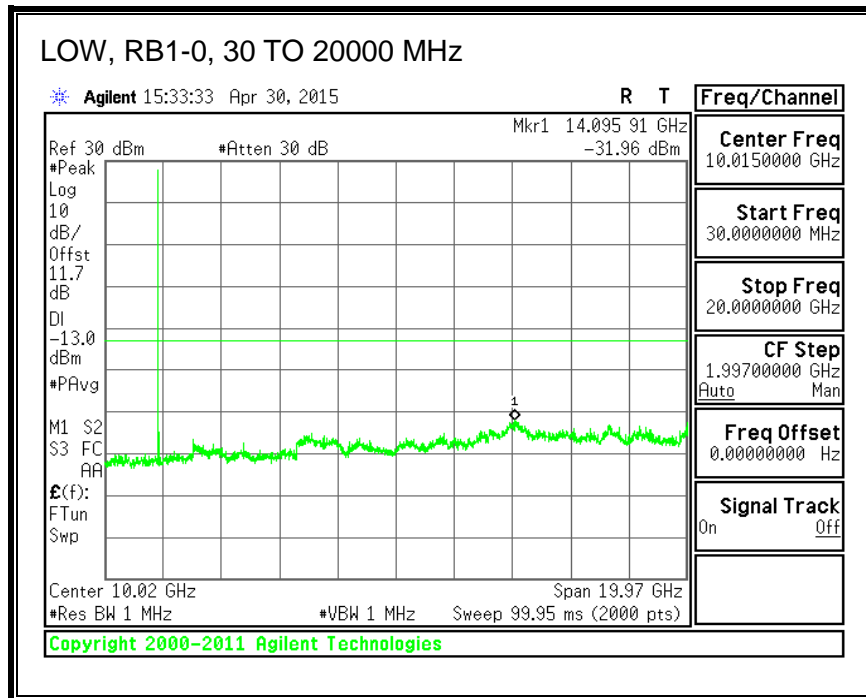
16QAM, (10.0 MHz BAND WIDTH)

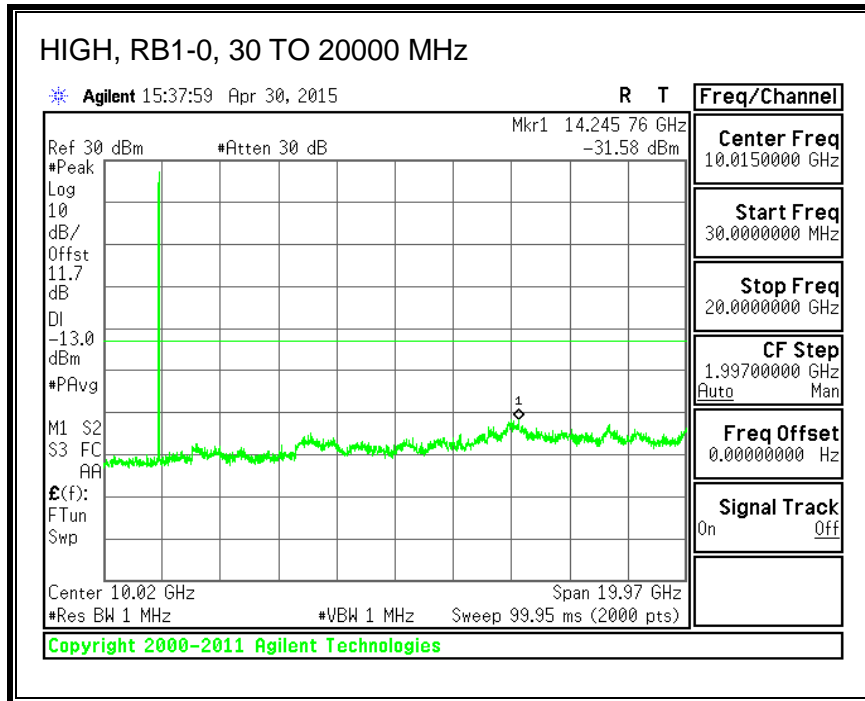




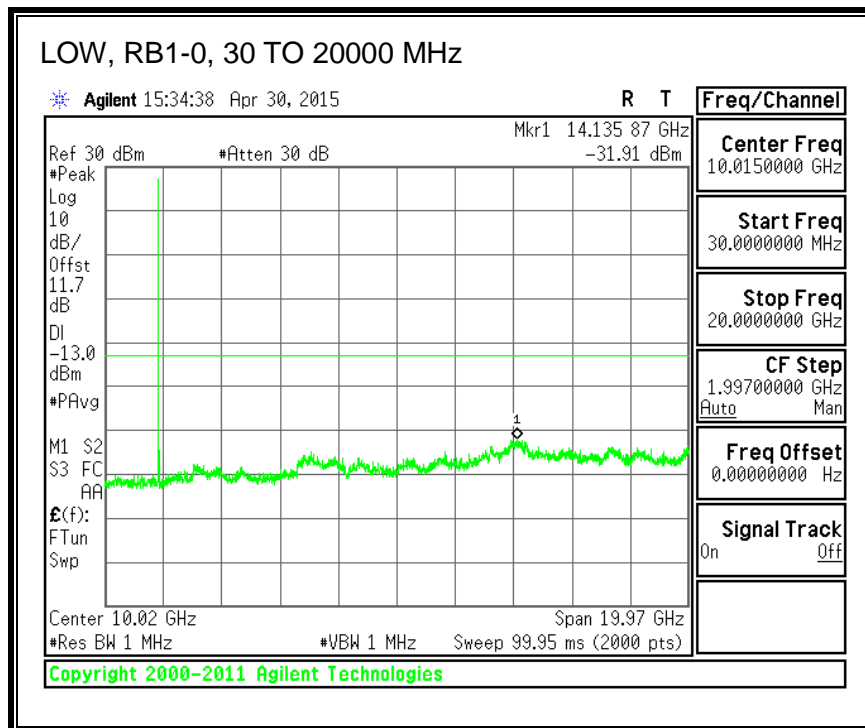
8.5.8. LTE BAND 25

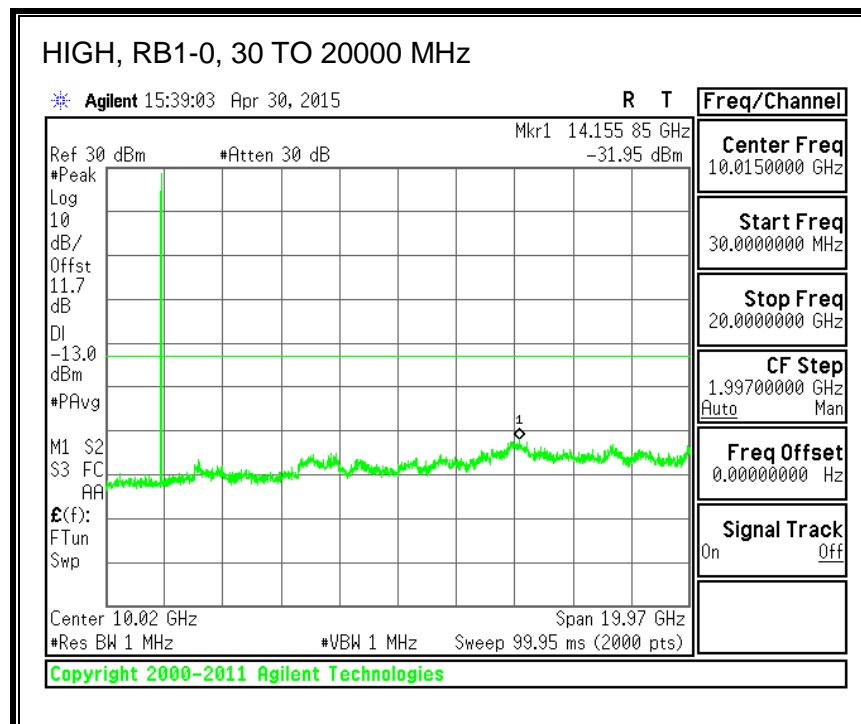
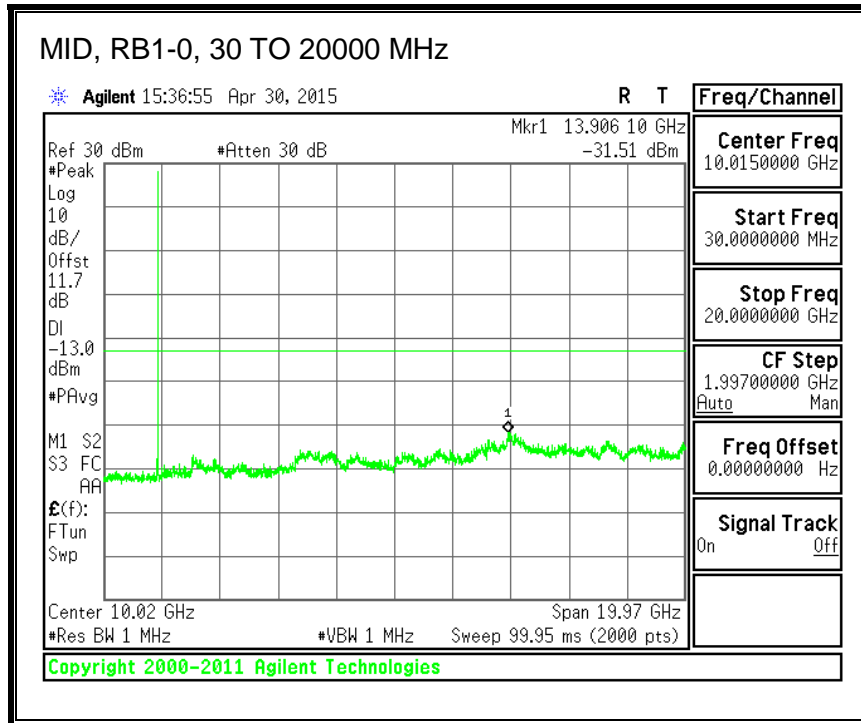
QPSK, (1.4 MHz BAND WIDTH)



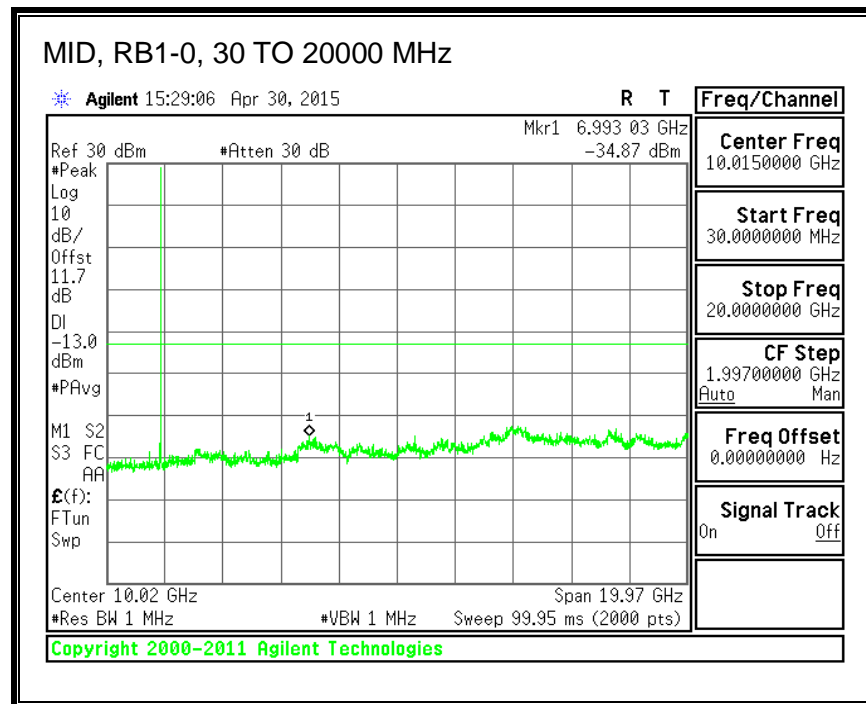
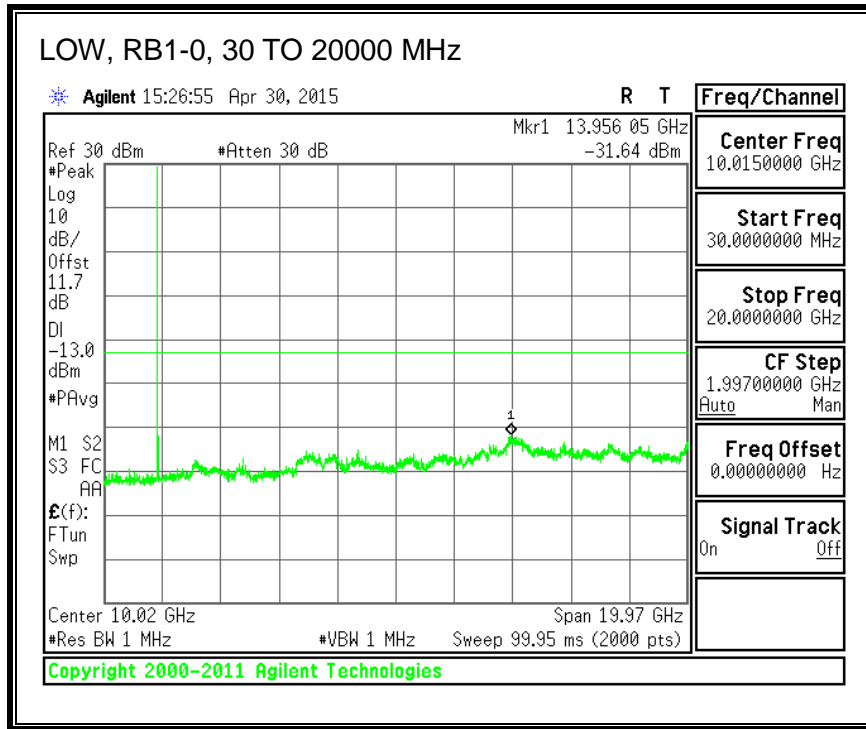


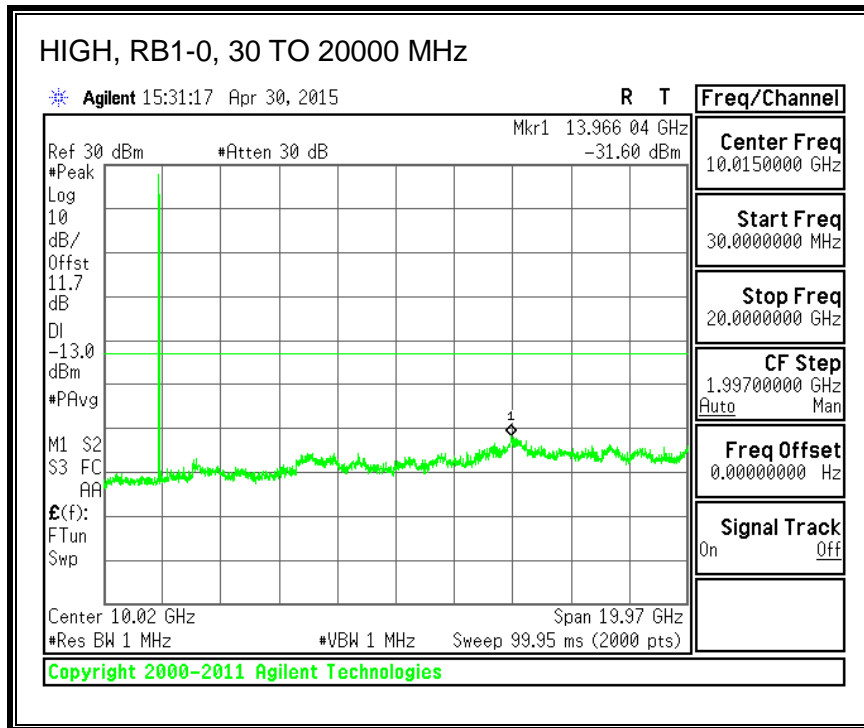
16QAM, (1.4 MHz BAND WIDTH)



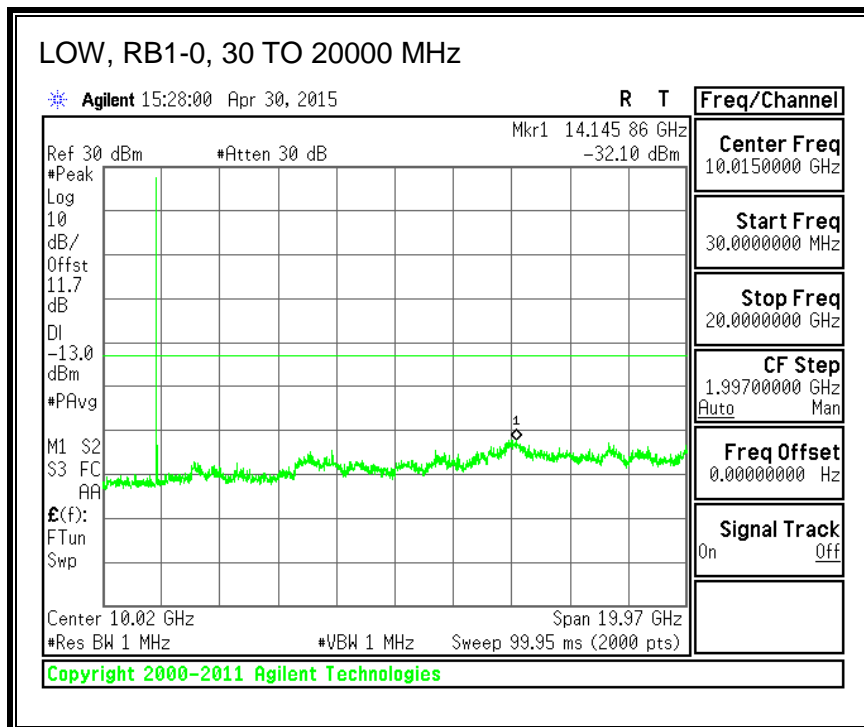


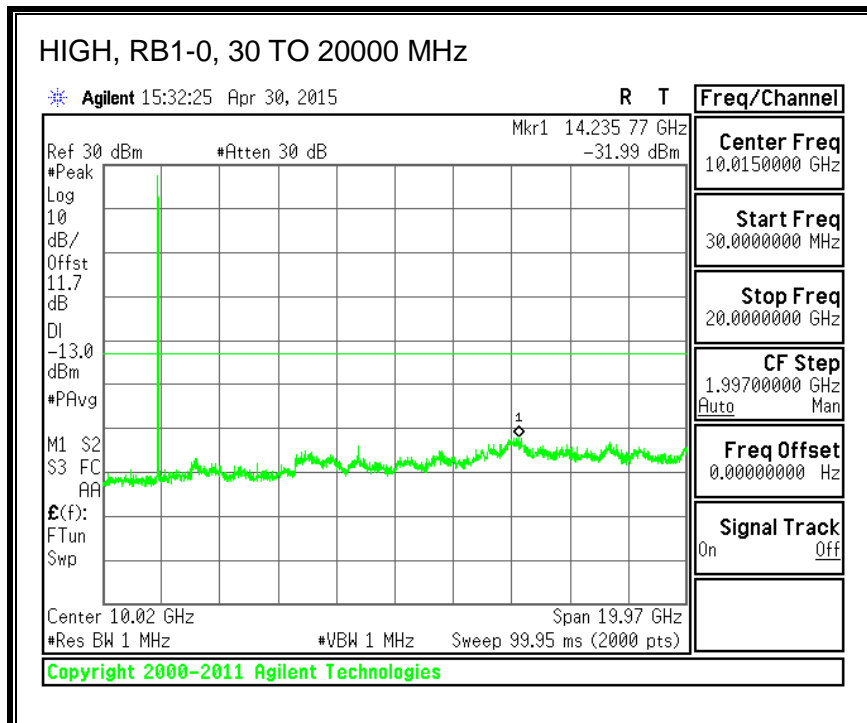
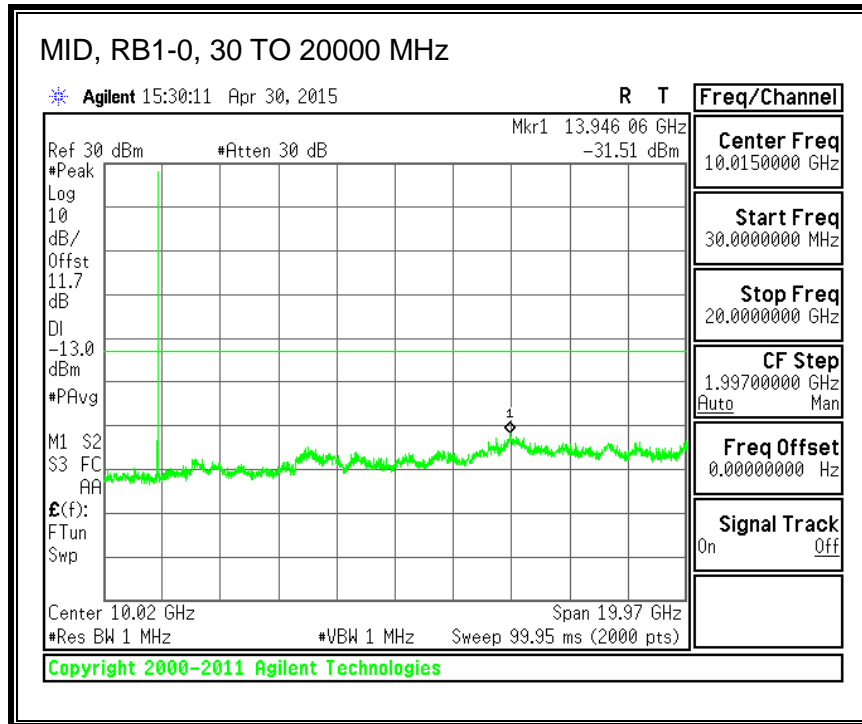
QPSK, (3.0 MHz BAND WIDTH)



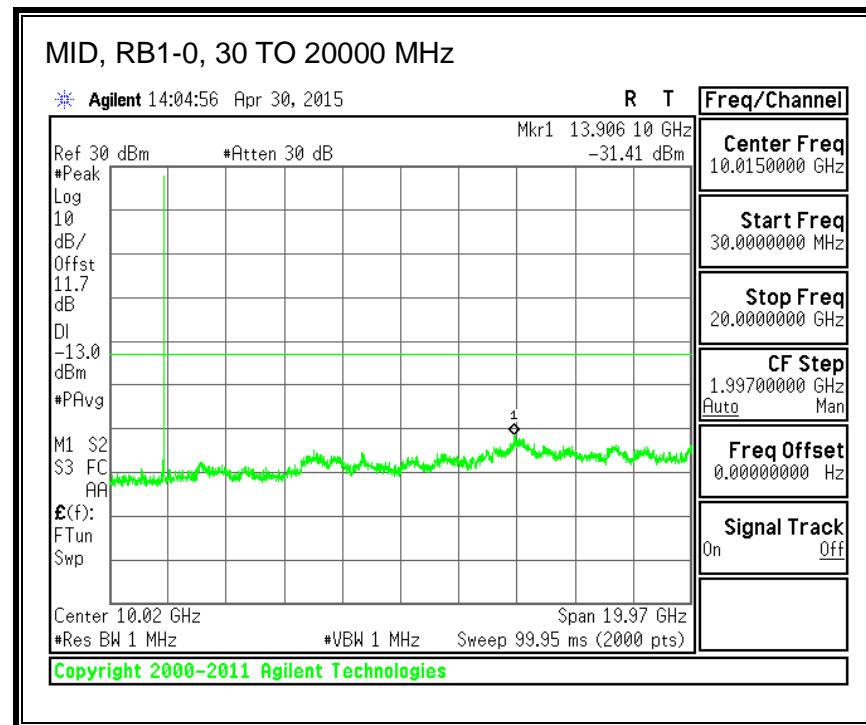
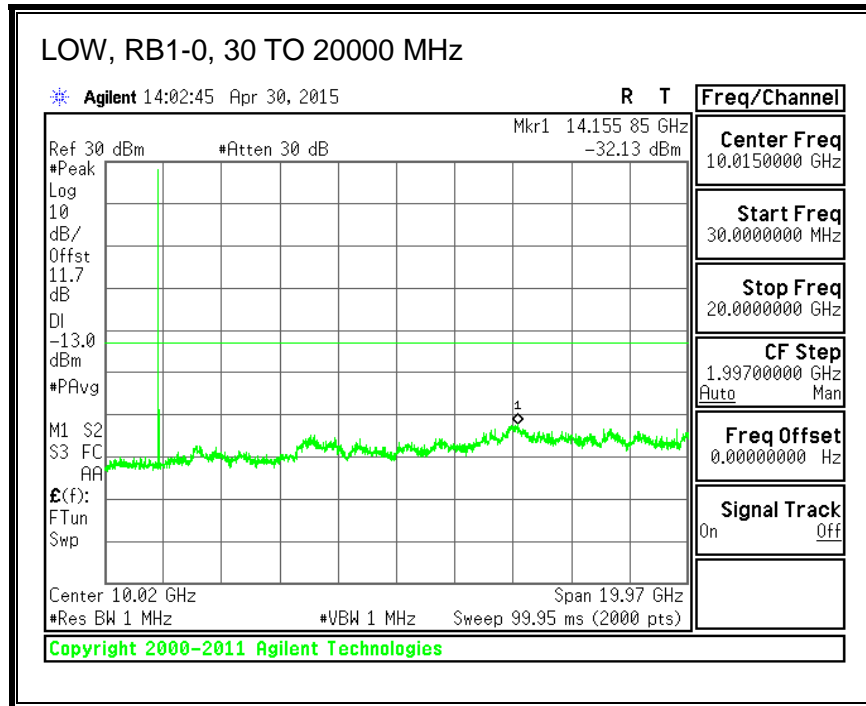


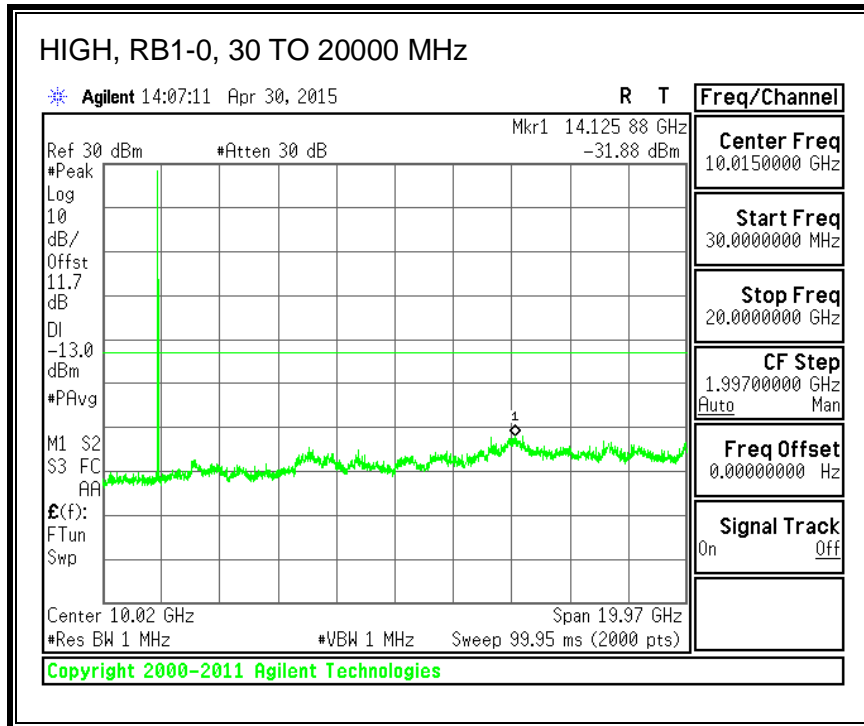
16QAM, (3.0 MHz BAND WIDTH)



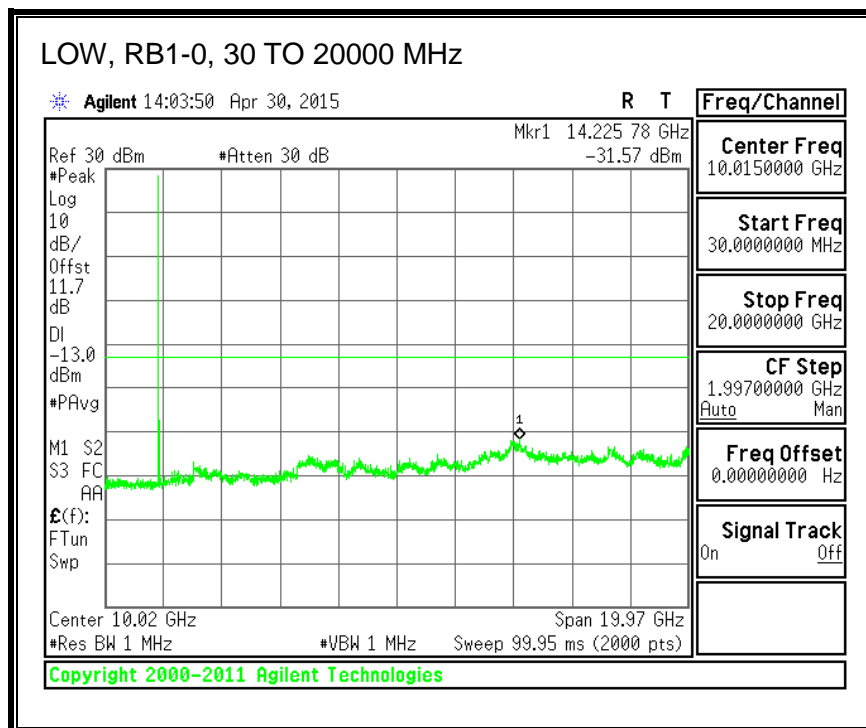


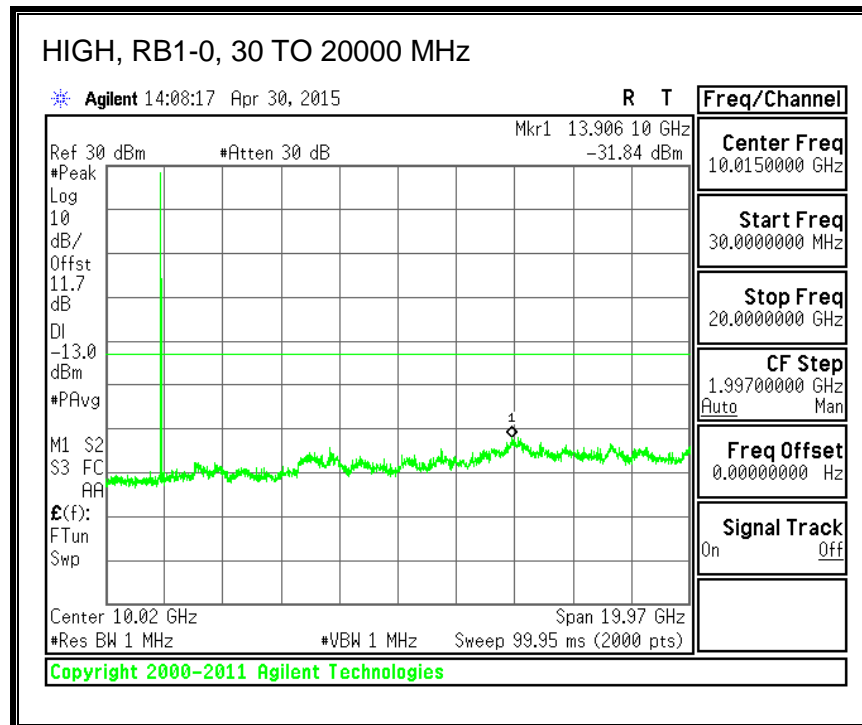
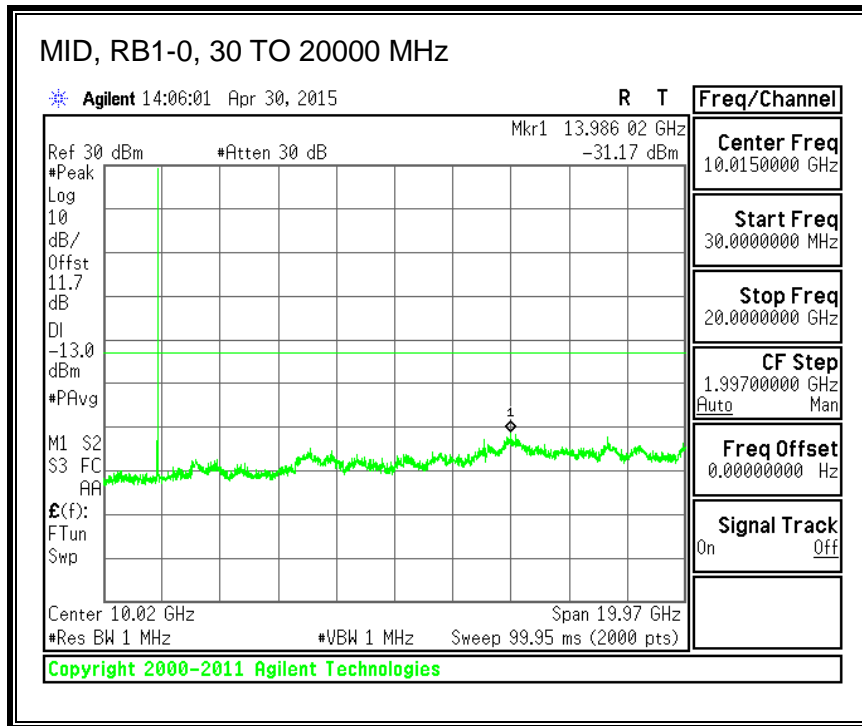
QPSK, (5.0 MHz BAND WIDTH)



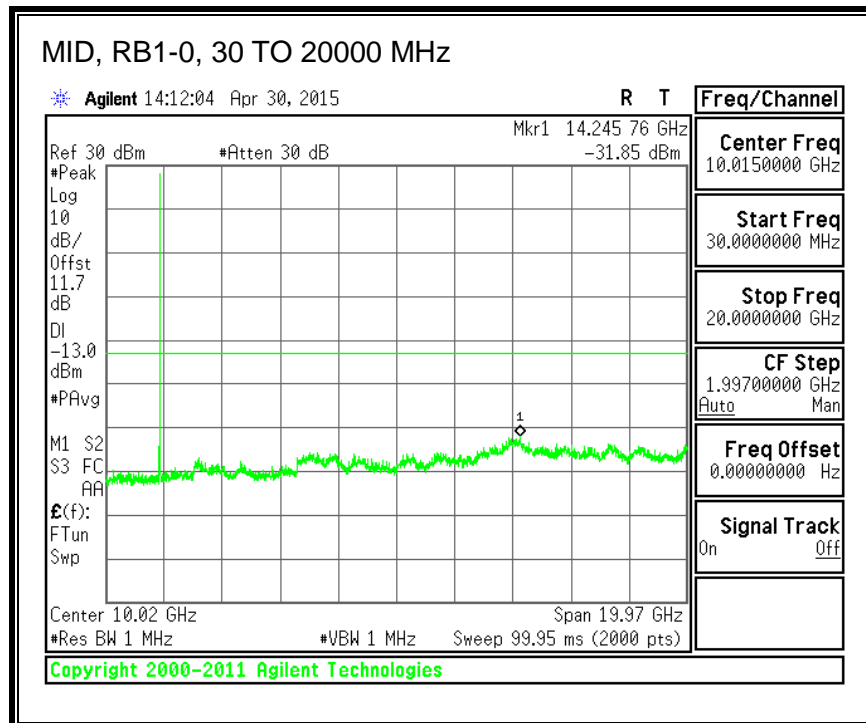
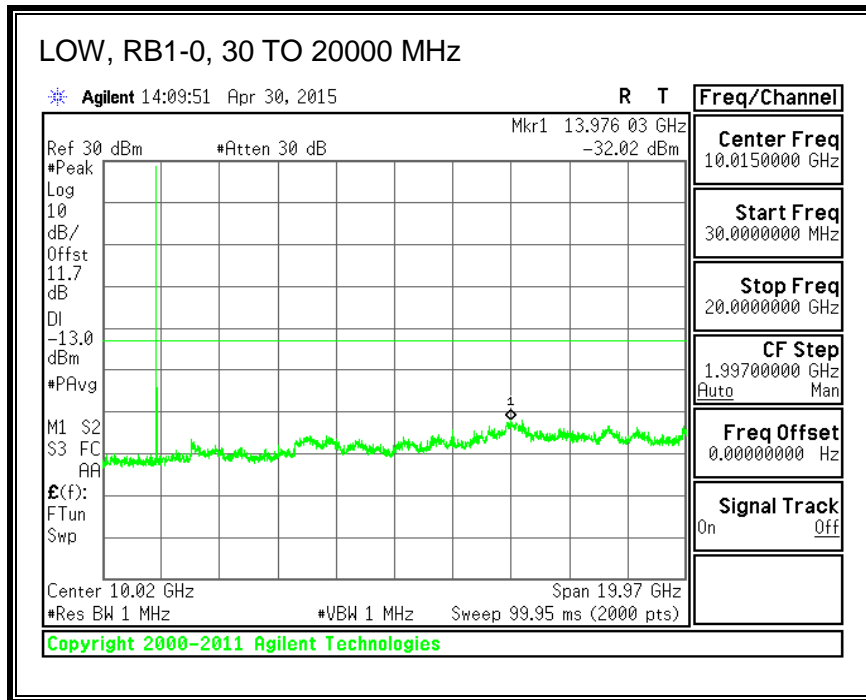


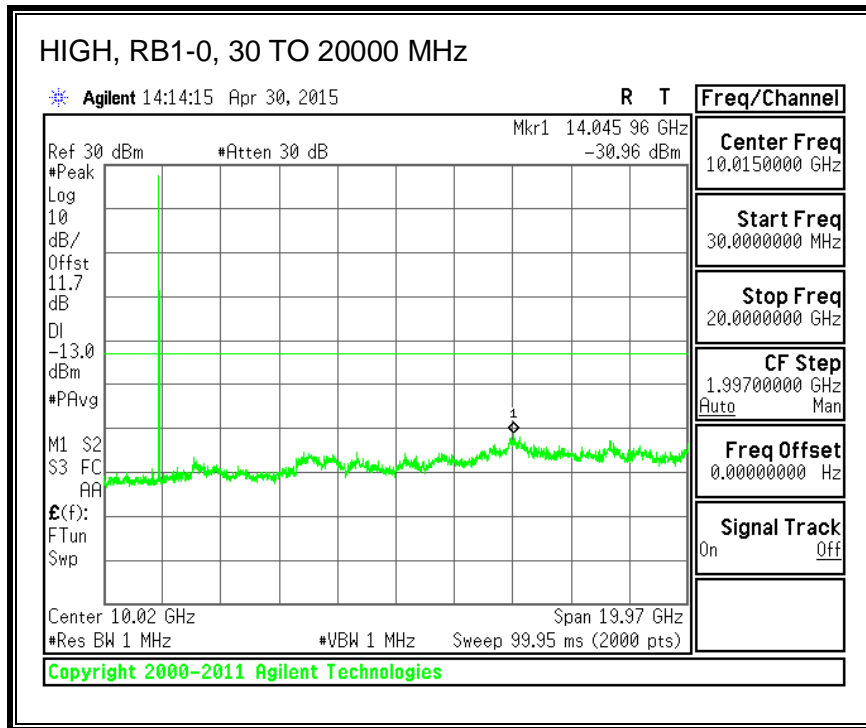
16QAM, (5.0 MHz BAND WIDTH)



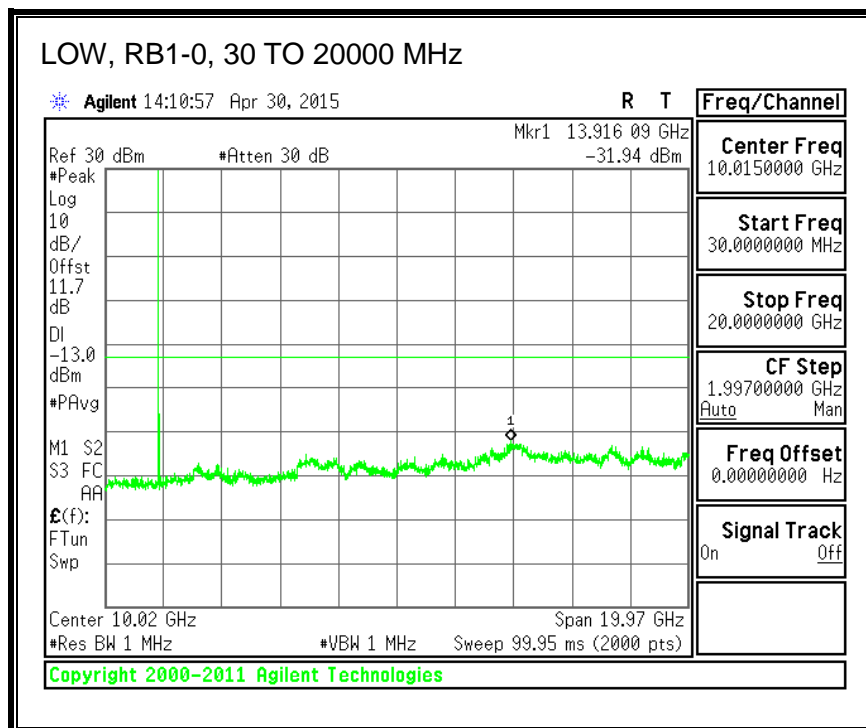


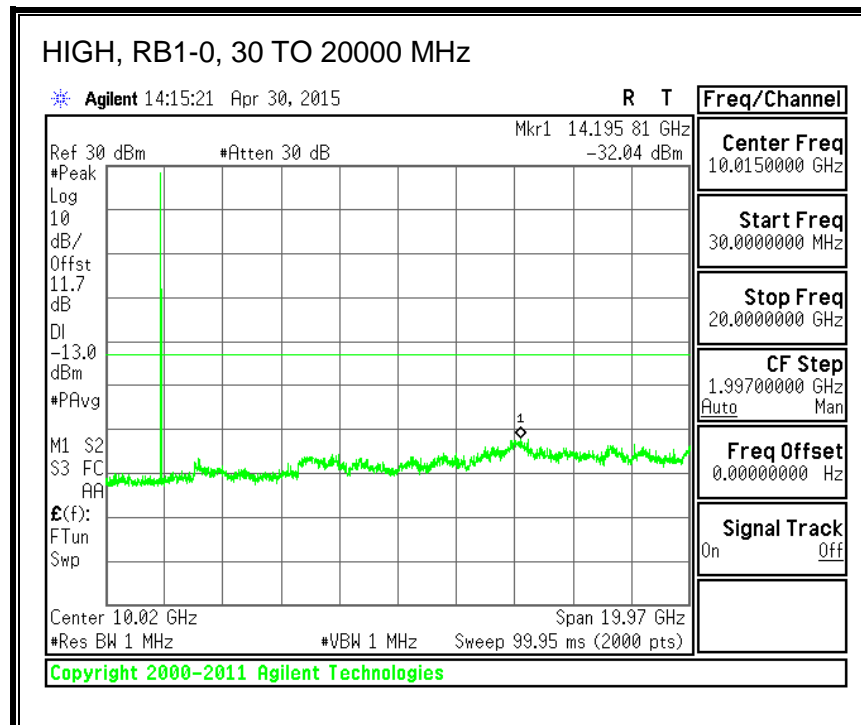
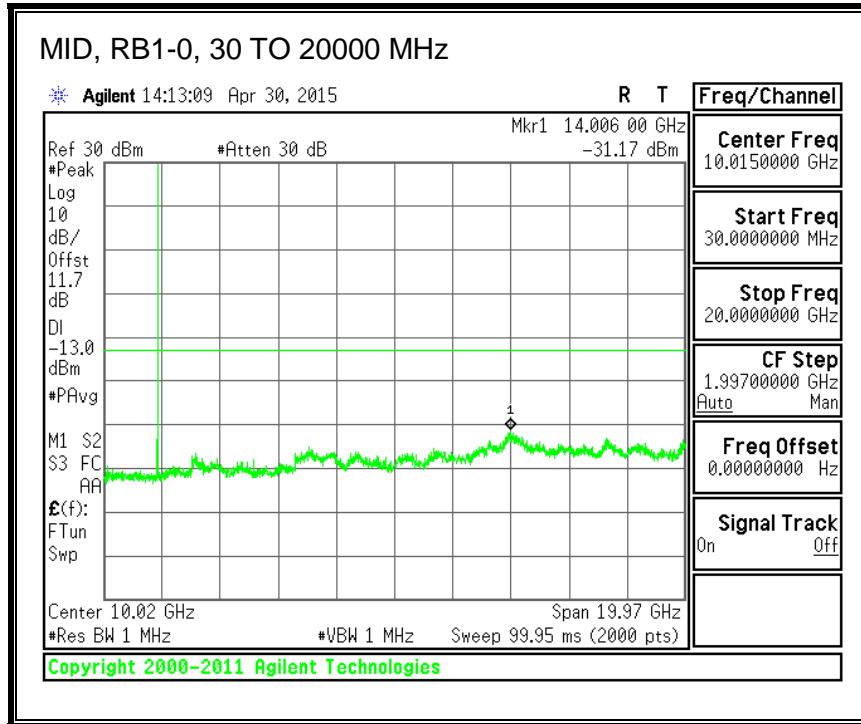
QPSK, (10.0 MHz BAND WIDTH)



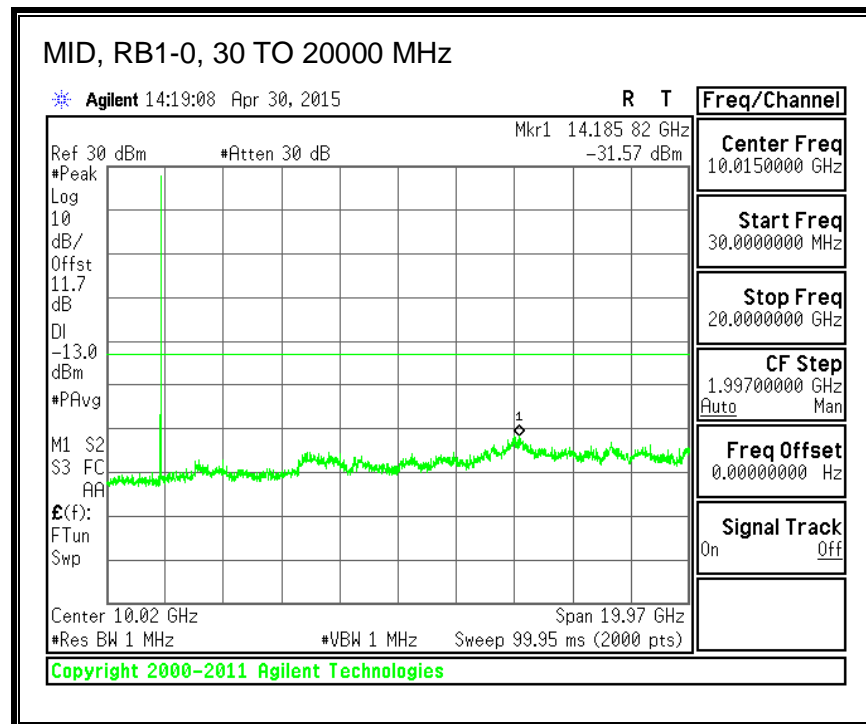
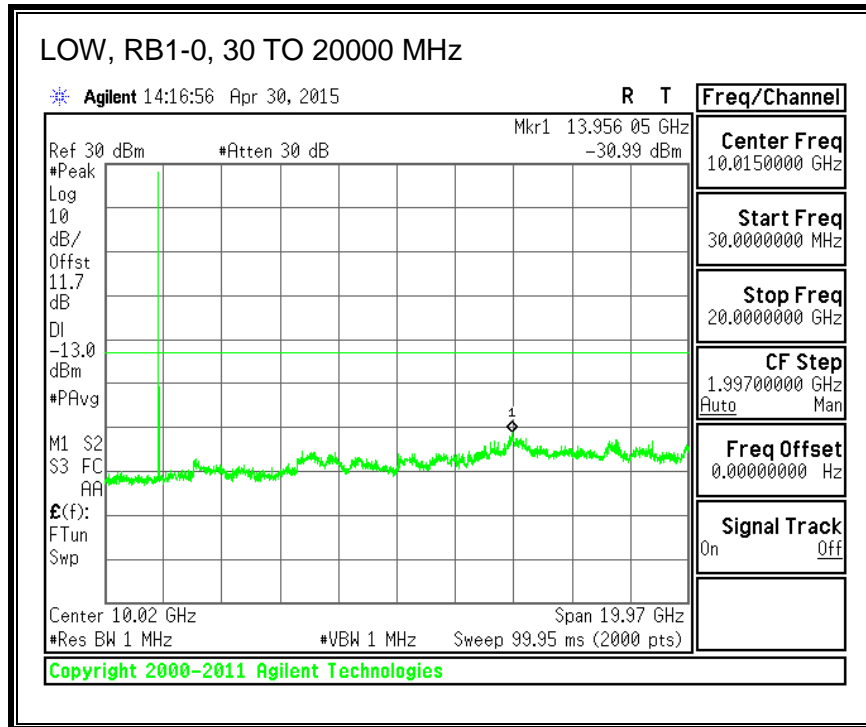


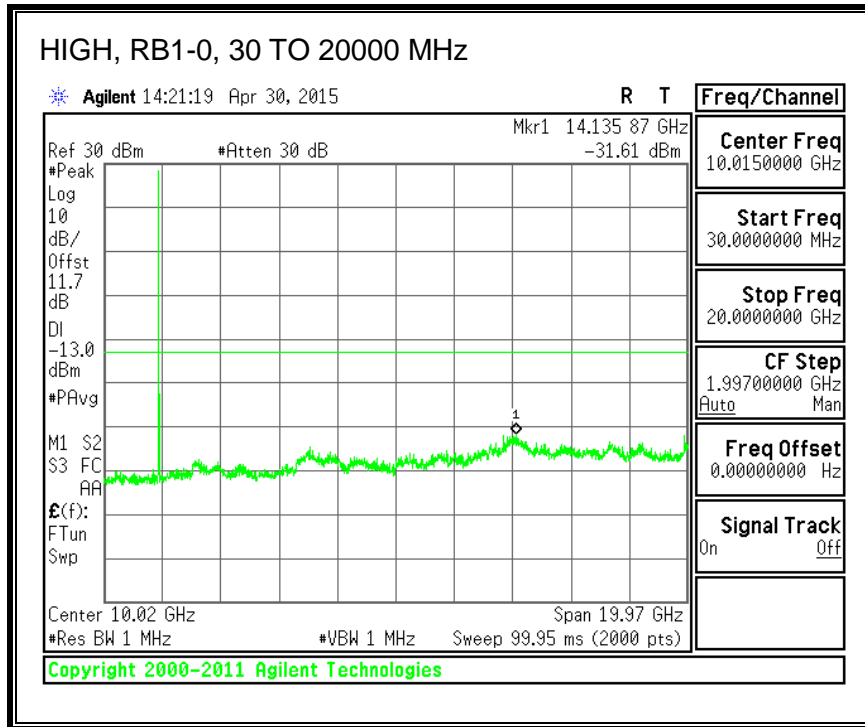
16QAM, (10.0 MHz BAND WIDTH)



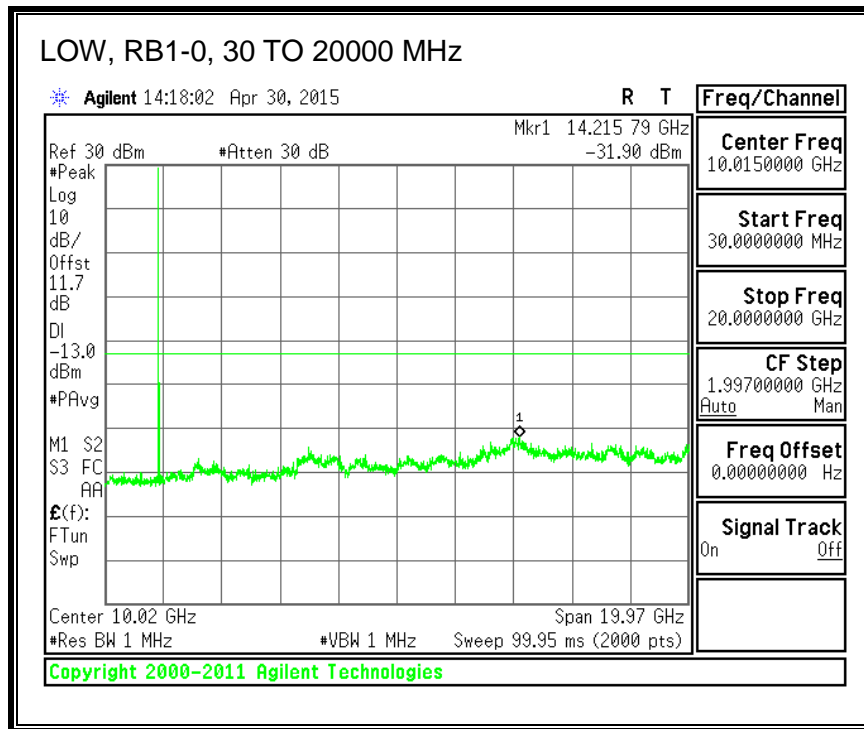


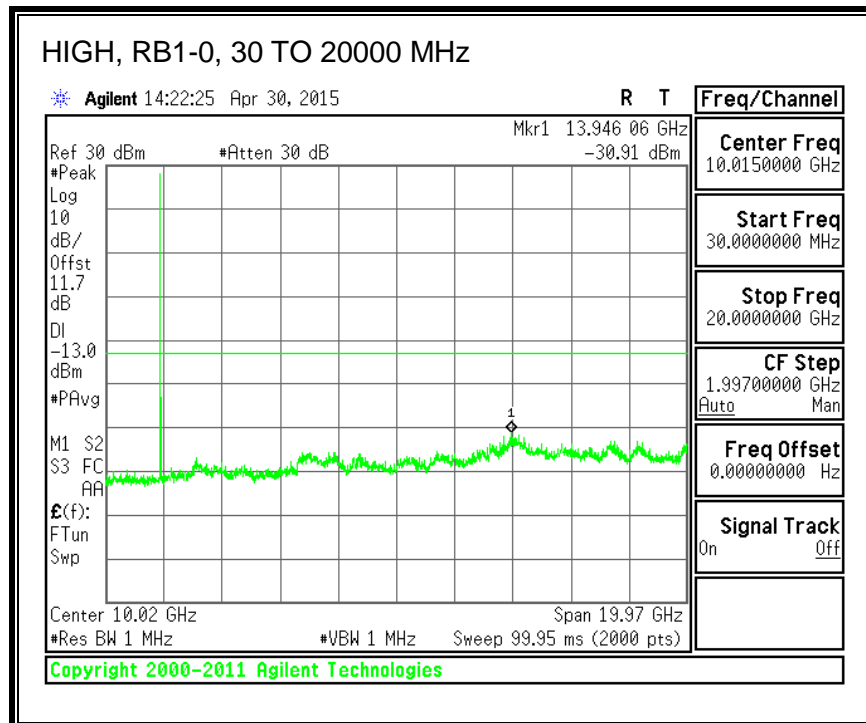
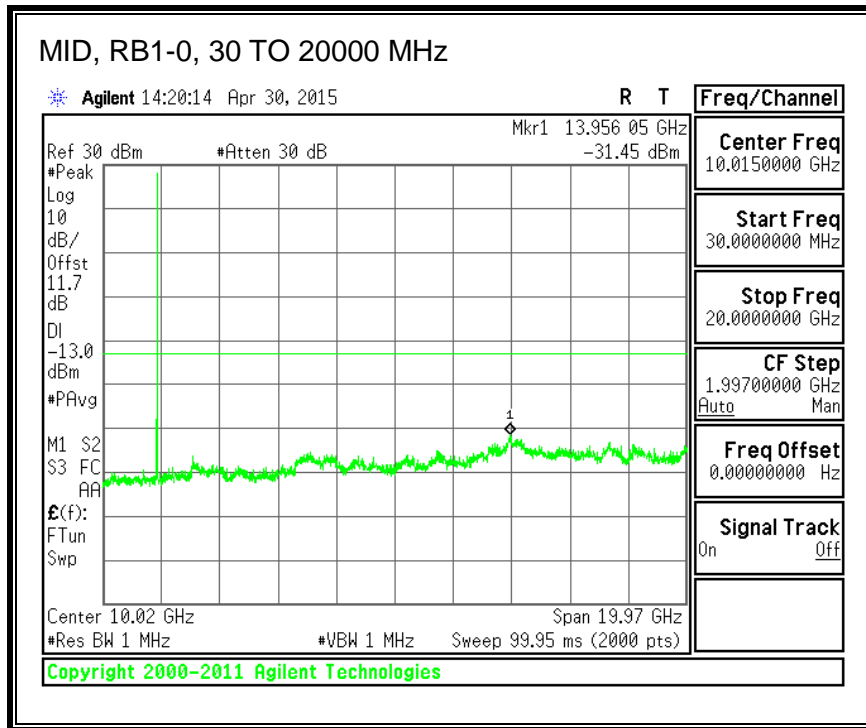
QPSK, (15.0 MHz BAND WIDTH)



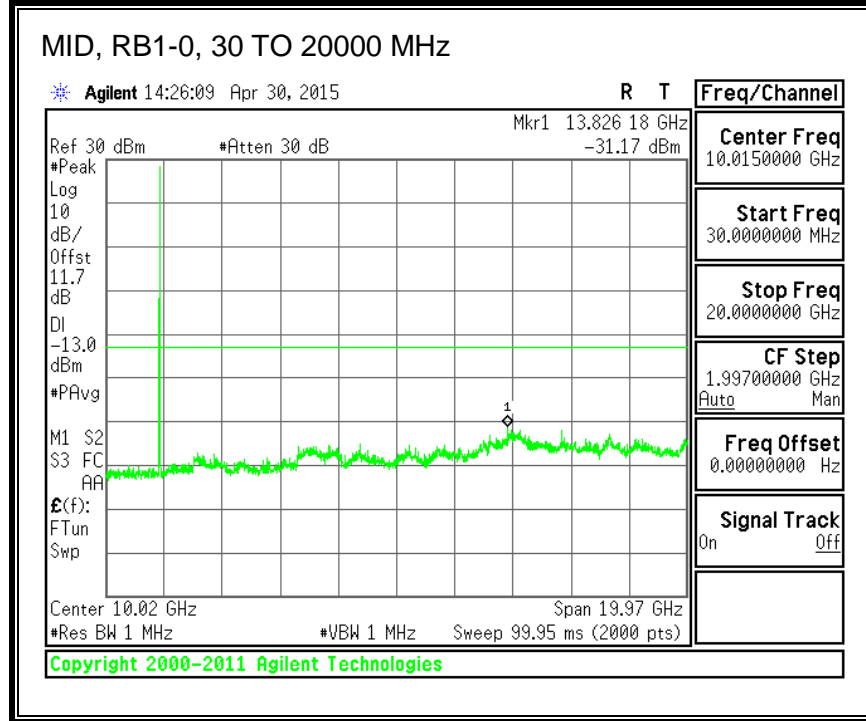
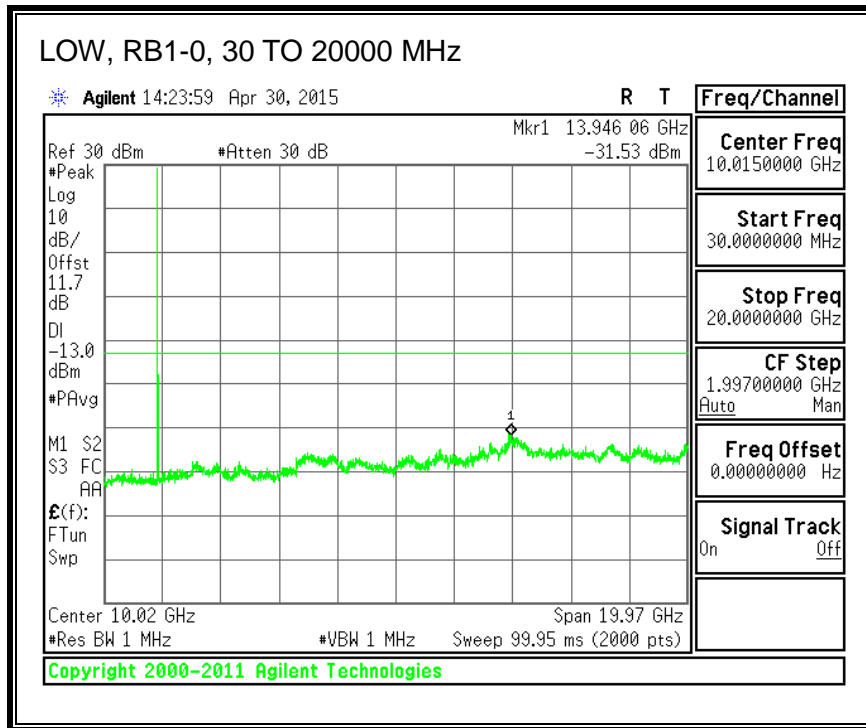


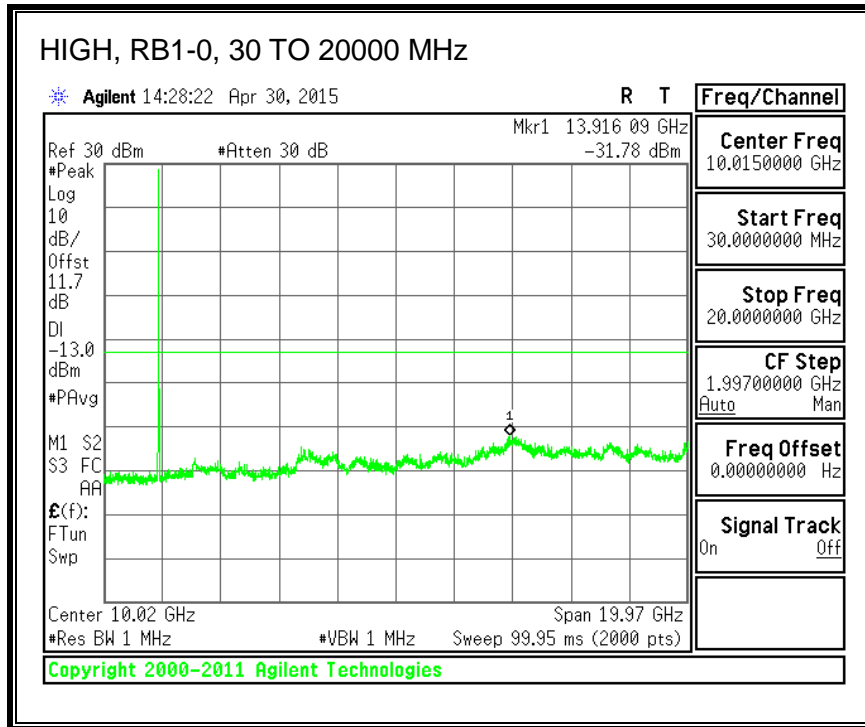
16QAM, (15.0 MHz BAND WIDTH)



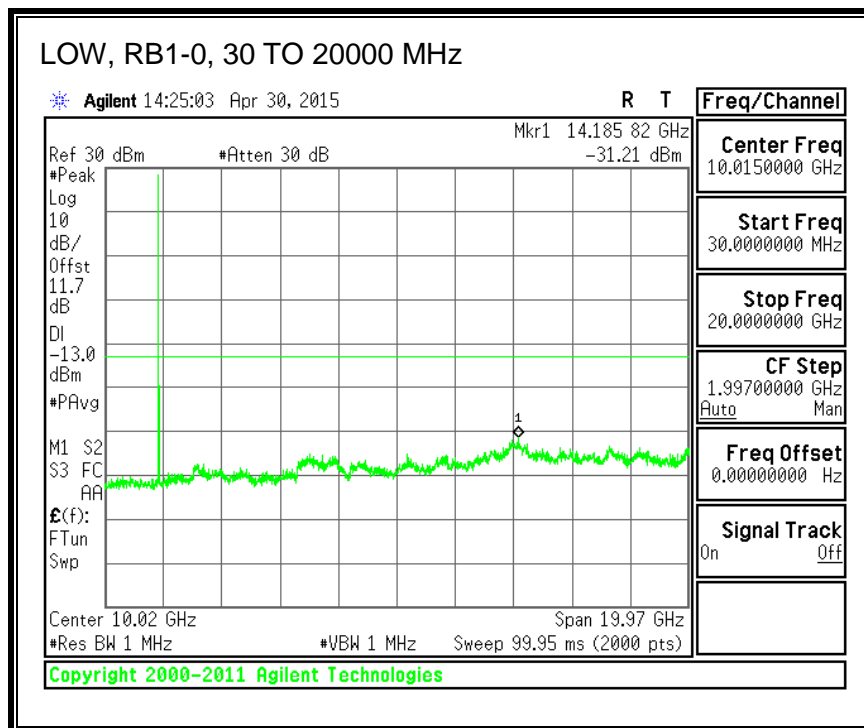


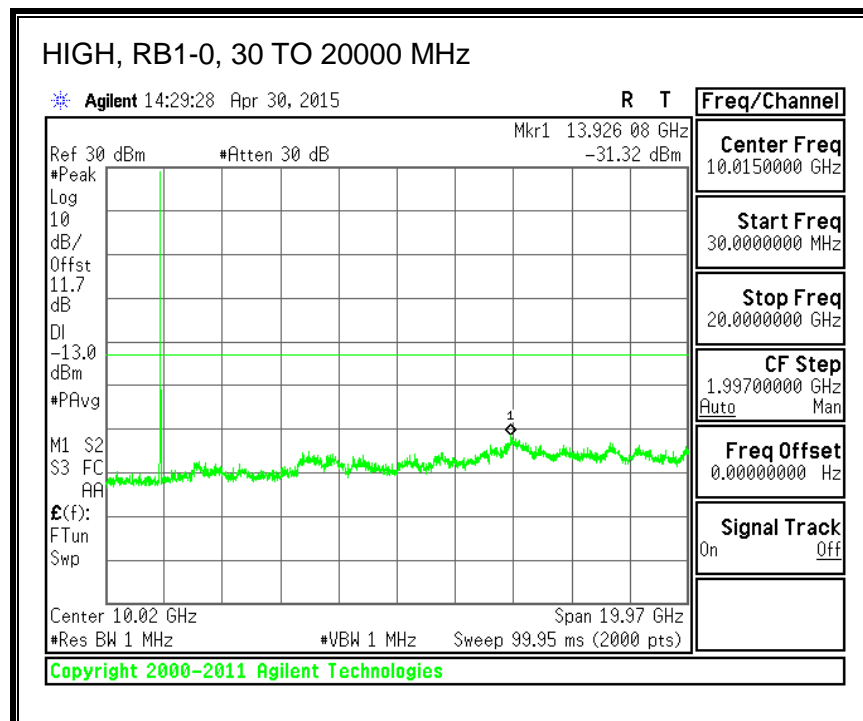
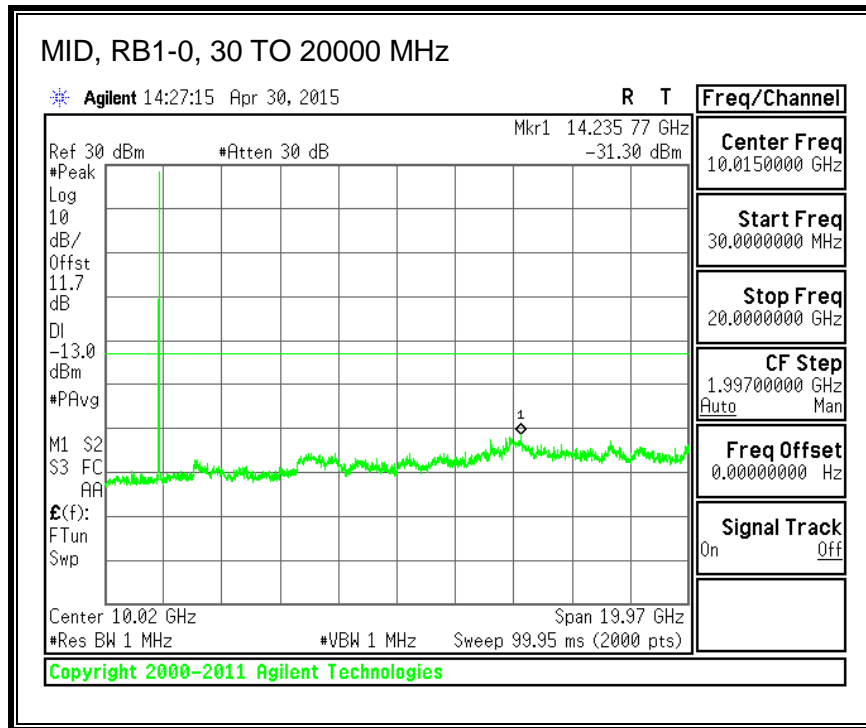
QPSK, (20.0 MHz BAND WIDTH)





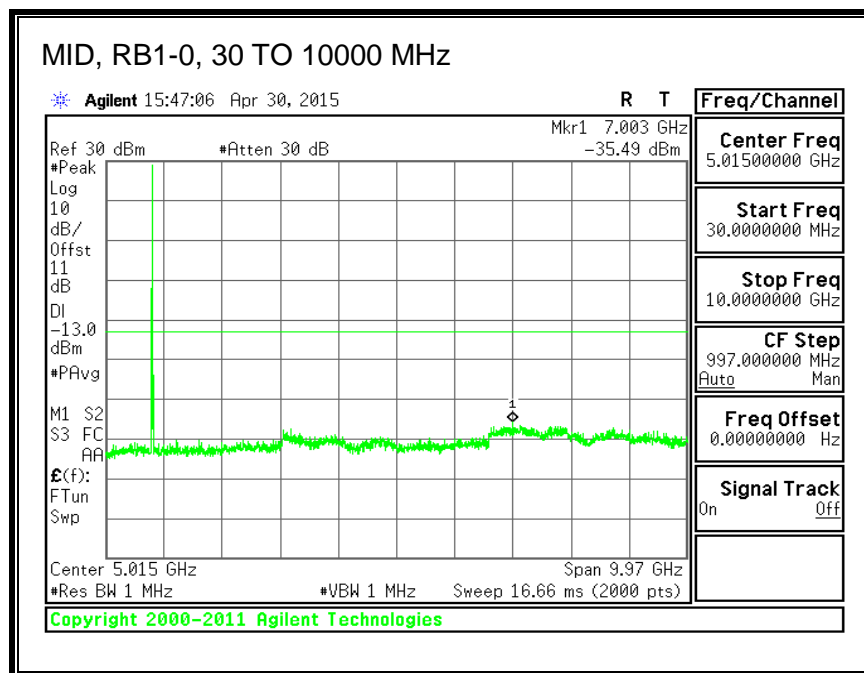
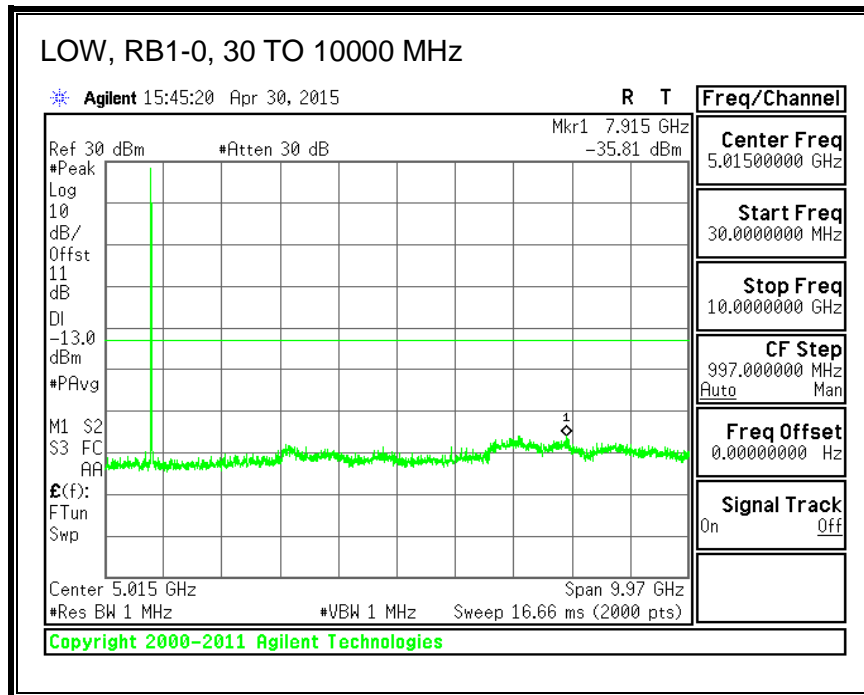
16QAM, (20.0 MHz BAND WIDTH)

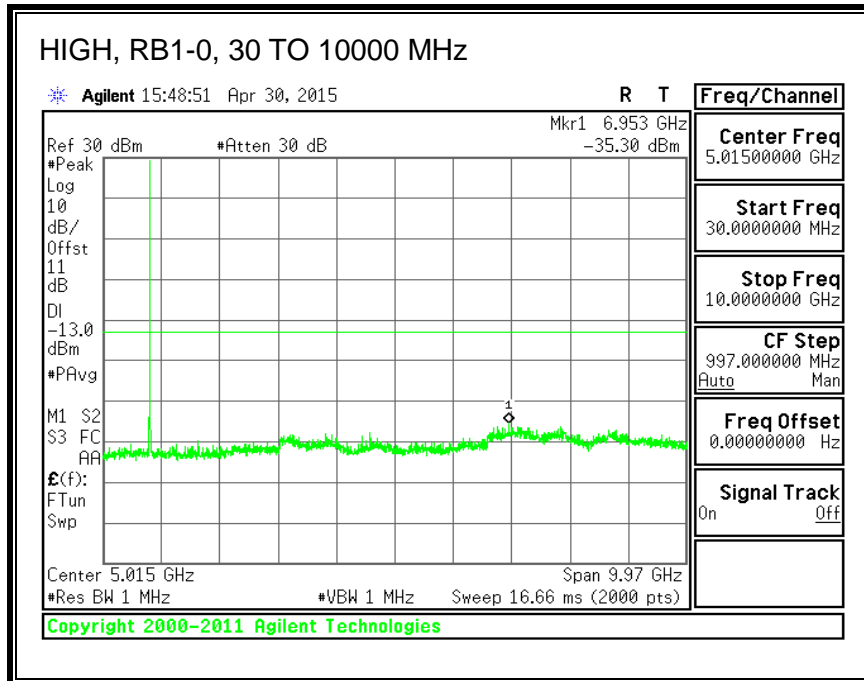




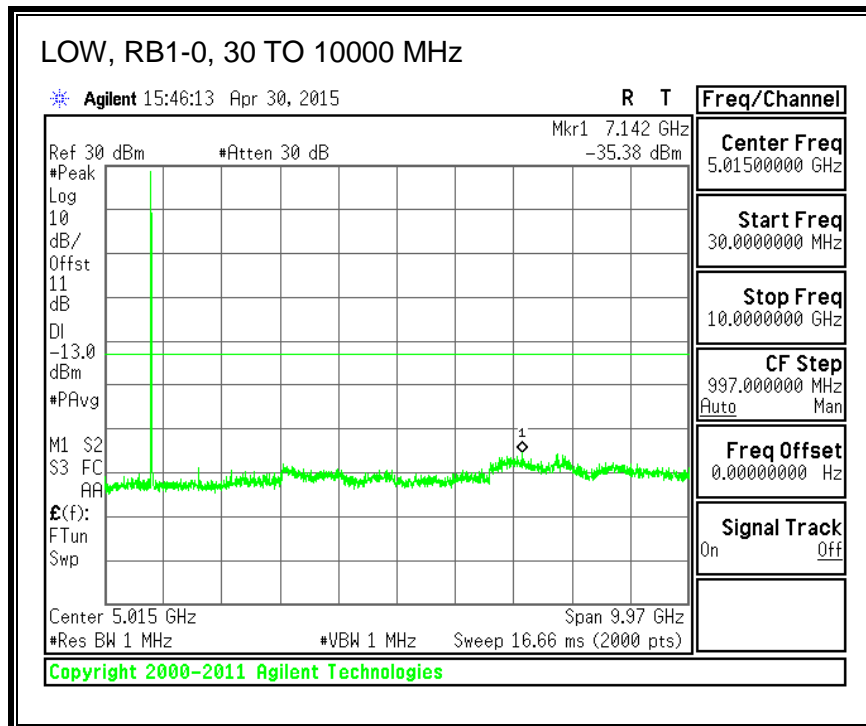
8.5.9. LTE BAND 26

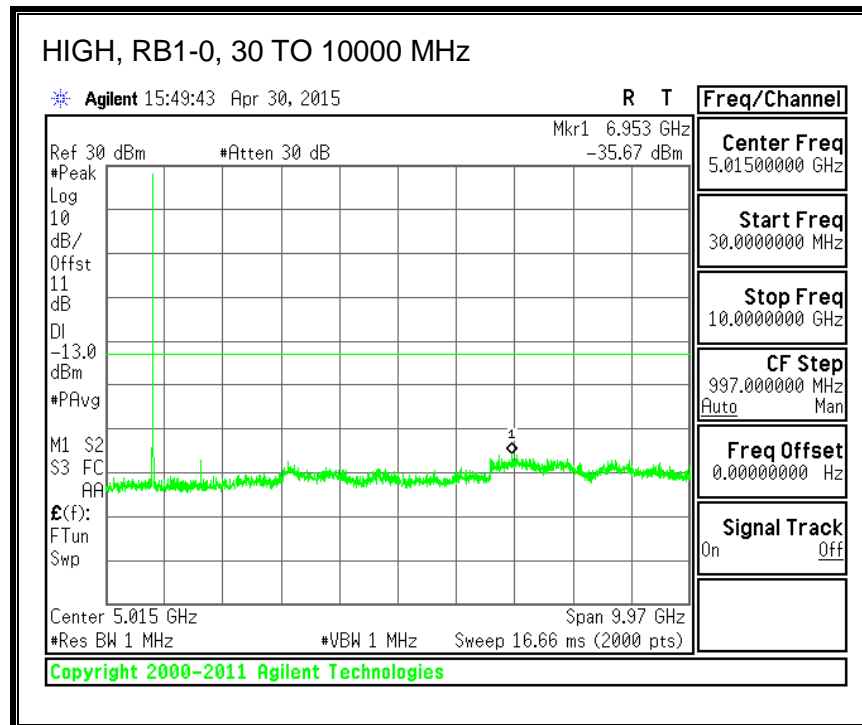
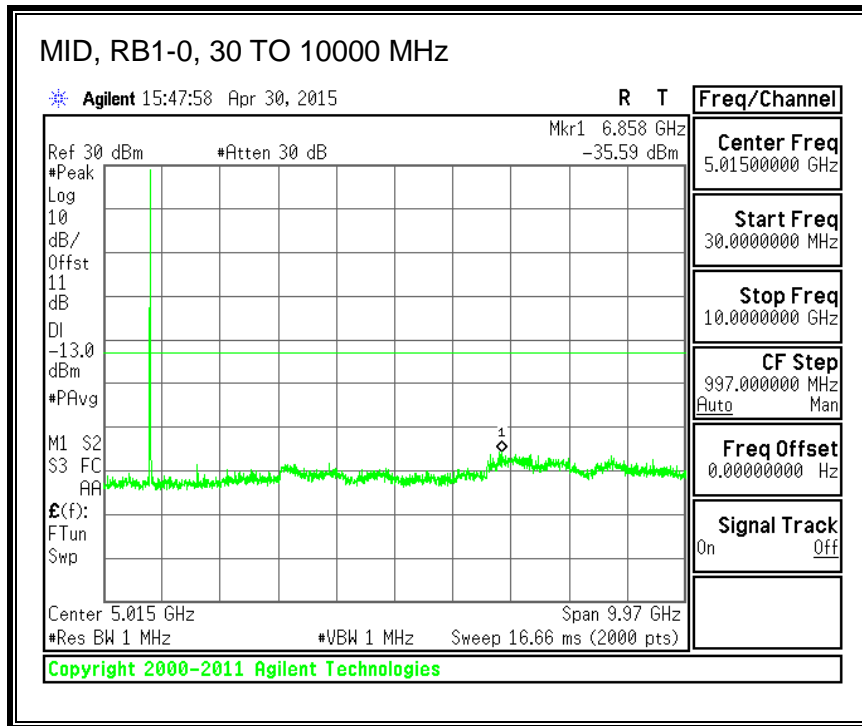
QPSK, (1.4 MHz BAND WIDTH)



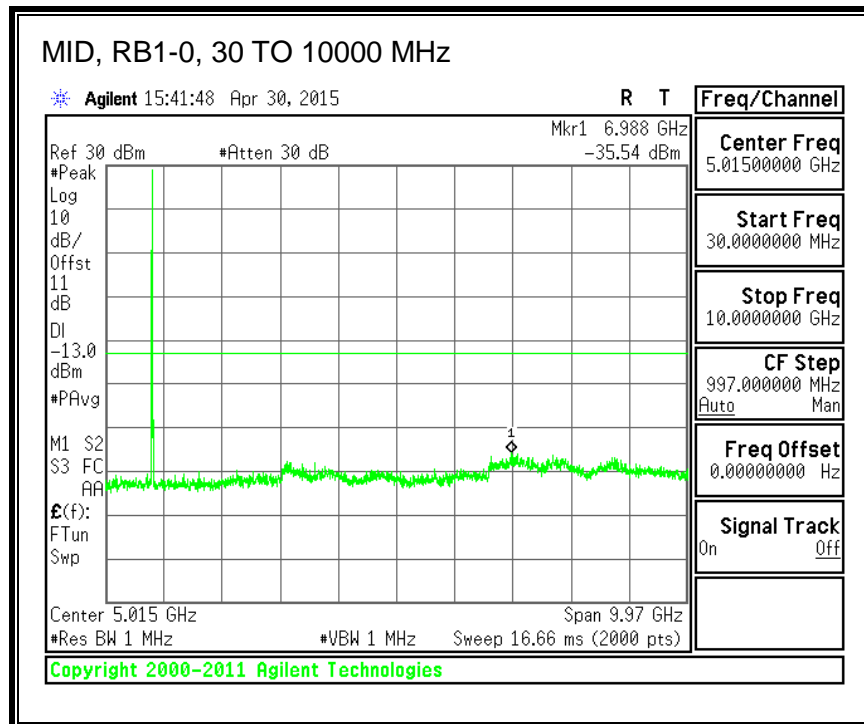
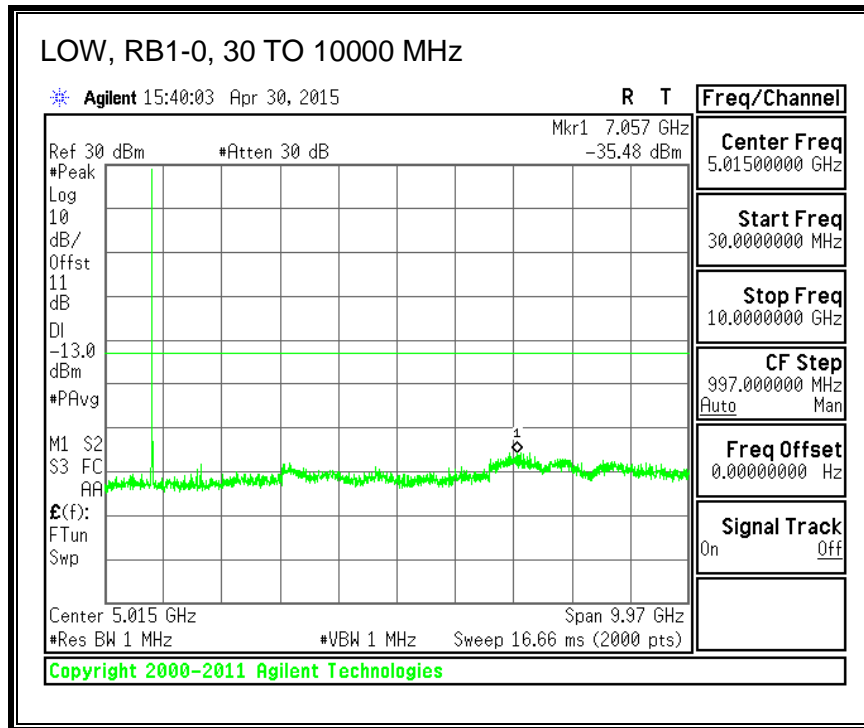


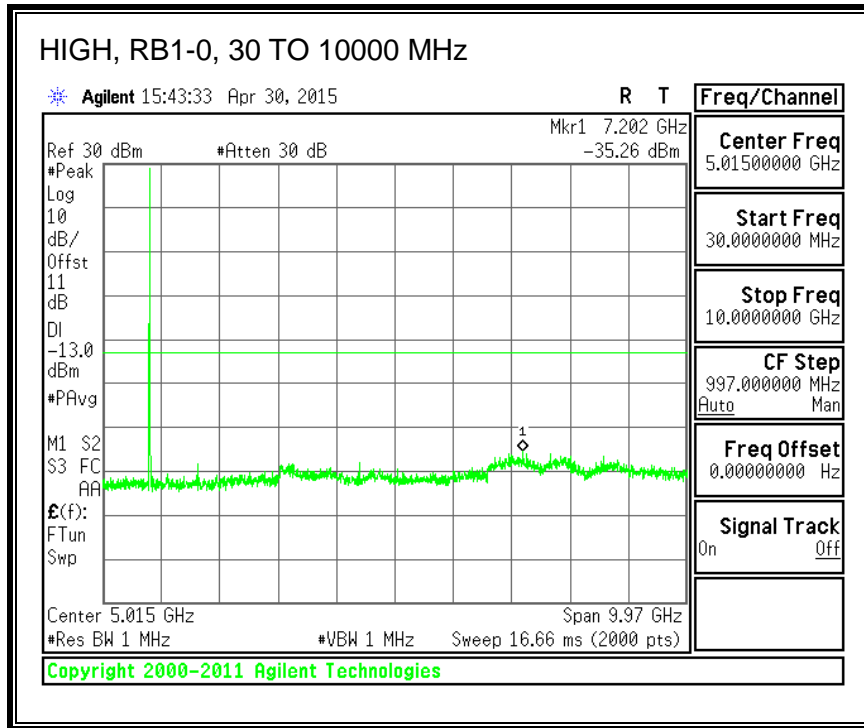
16QAM, (1.4 MHz BAND WIDTH)



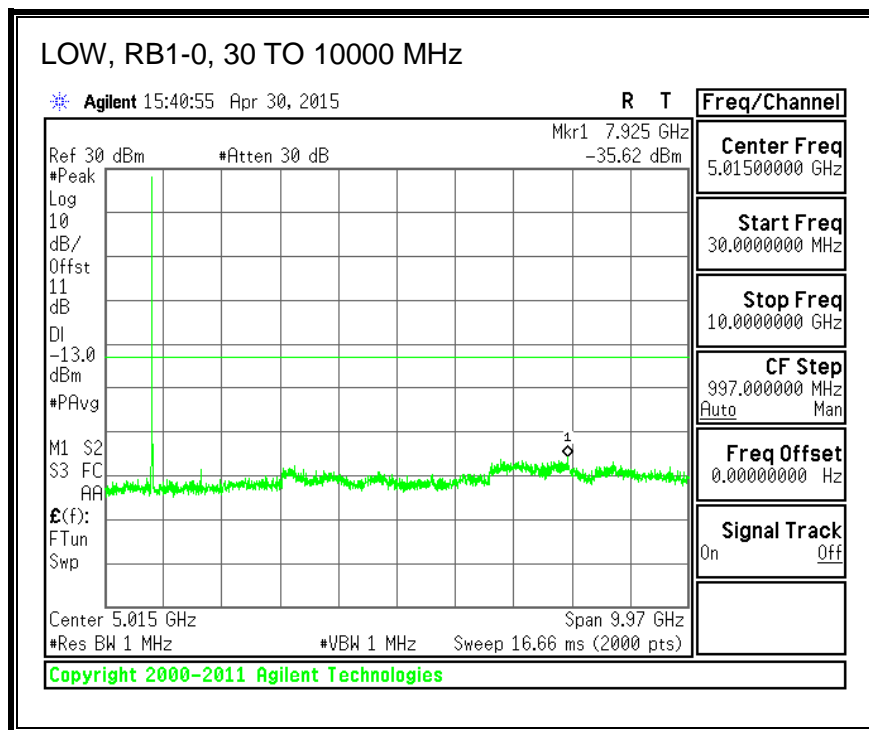


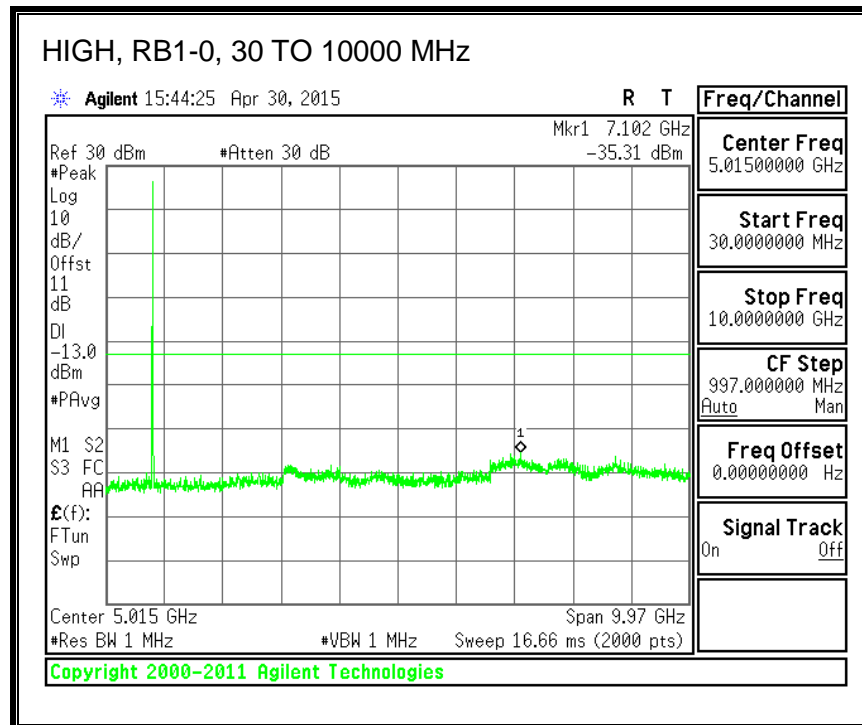
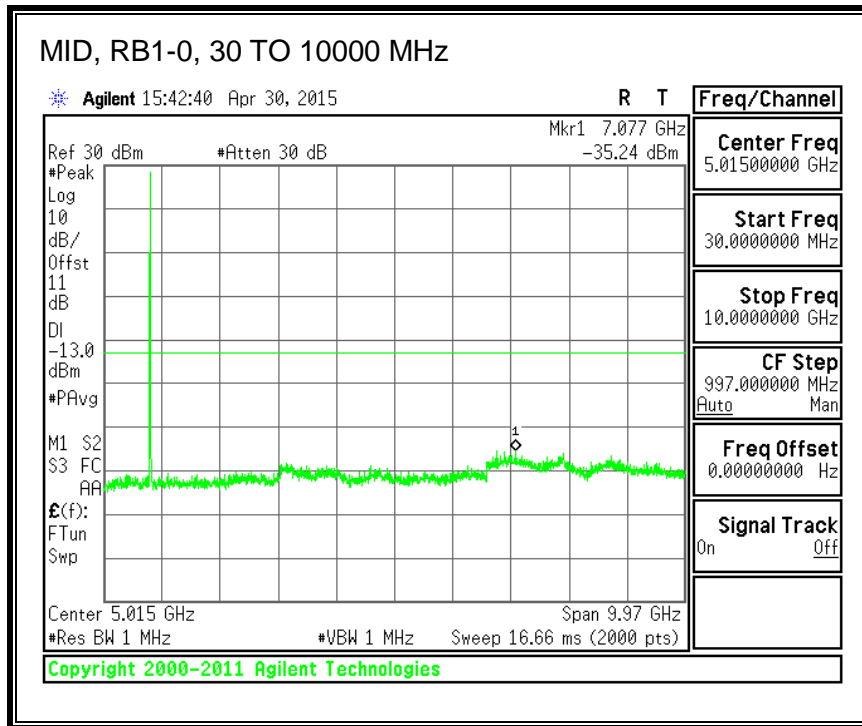
QPSK, (3.0 MHz BAND WIDTH)



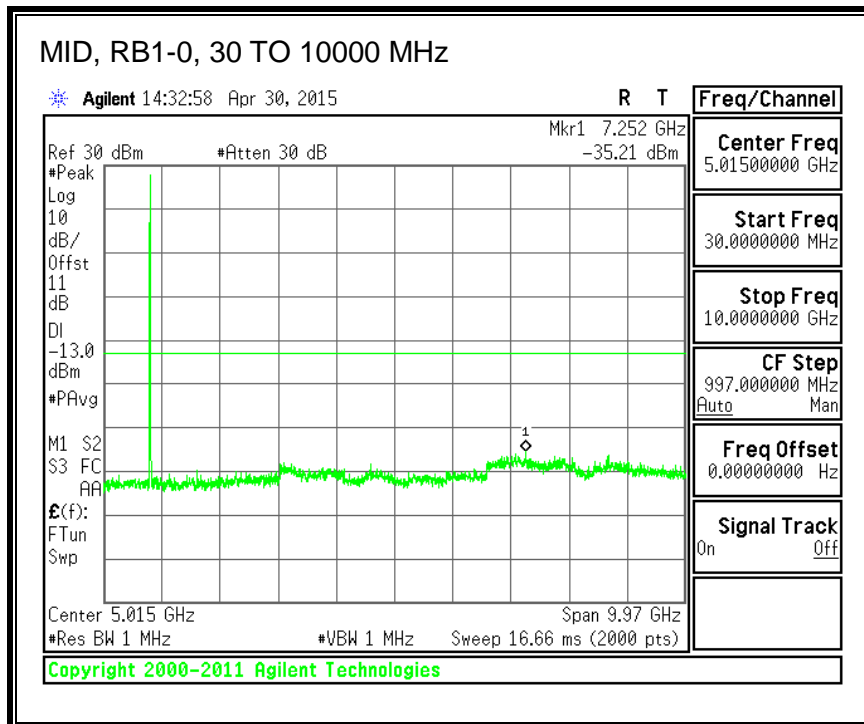
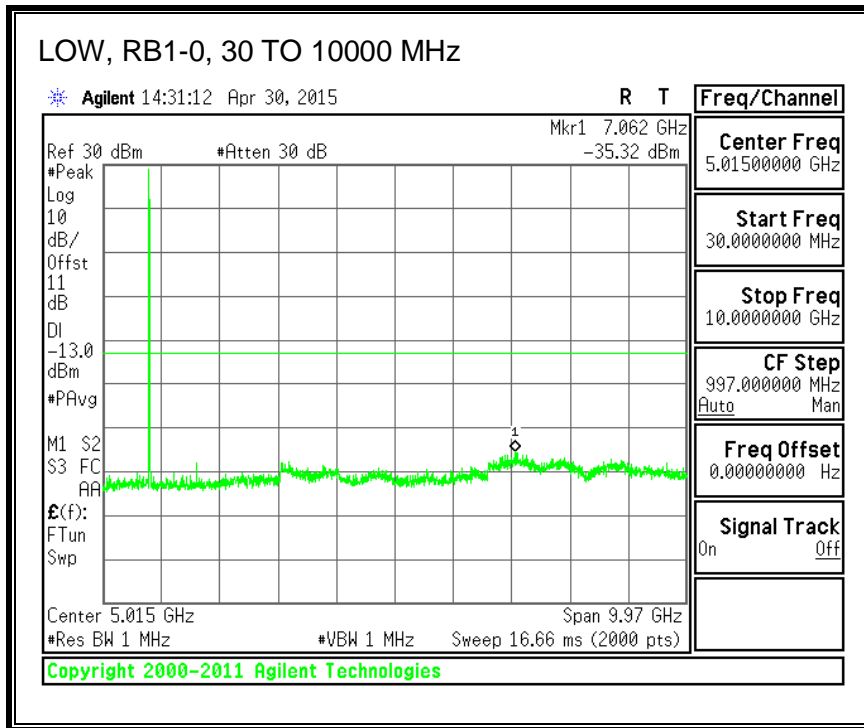


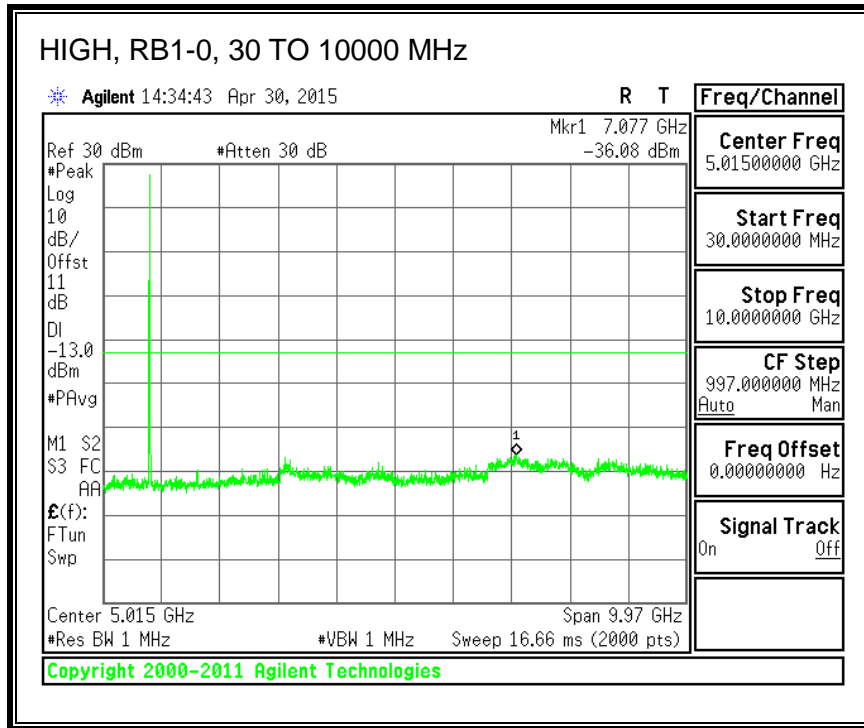
16QAM, (3.0 MHz BAND WIDTH)



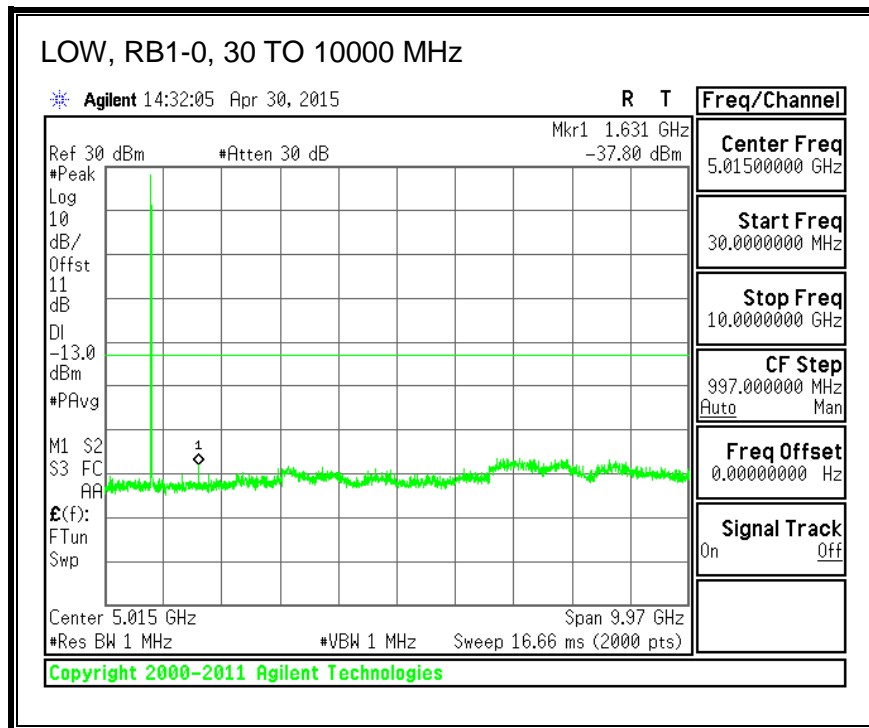


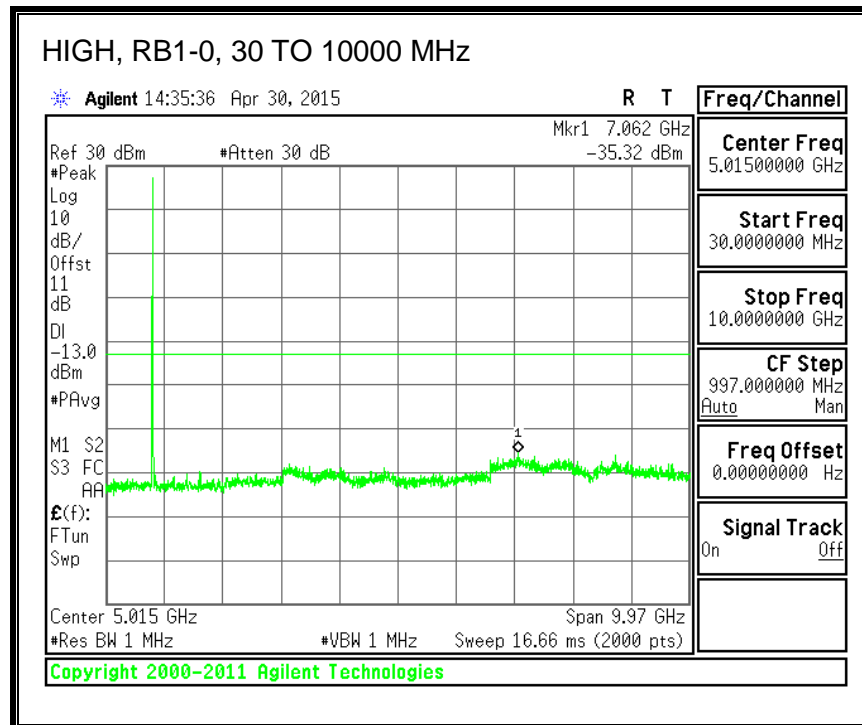
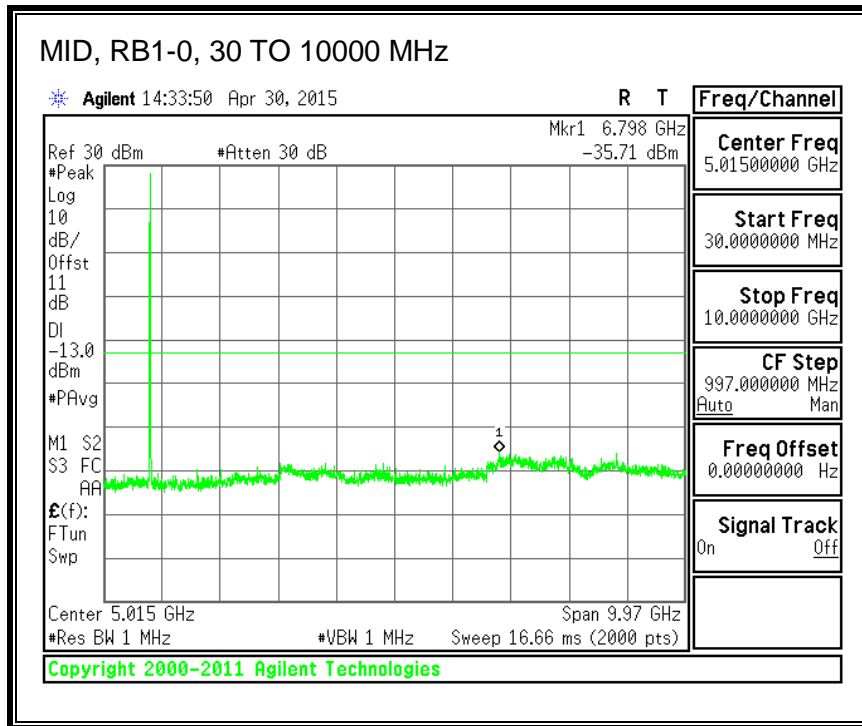
QPSK, (5.0 MHz BAND WIDTH)



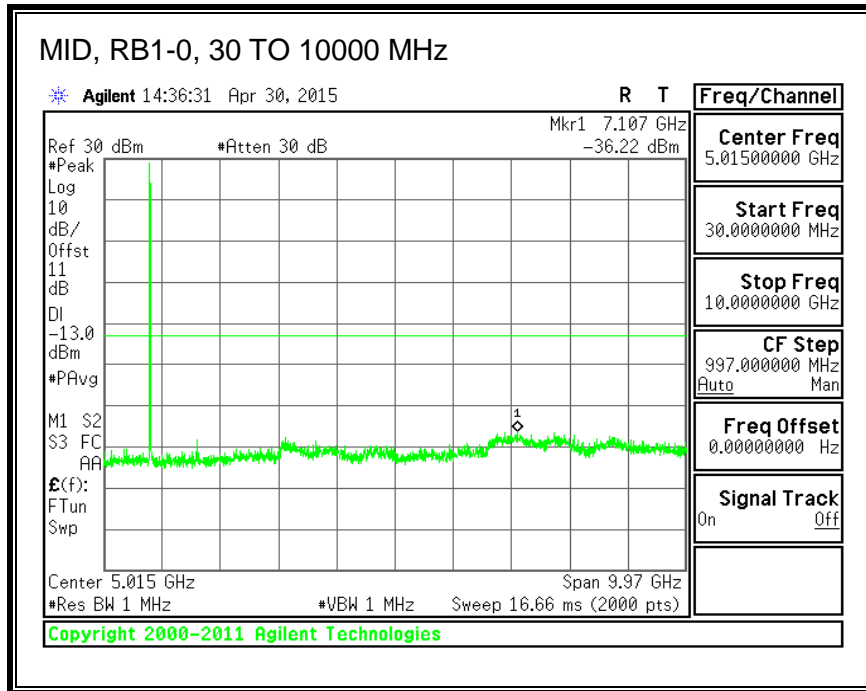


16QAM, (5.0 MHz BAND WIDTH)

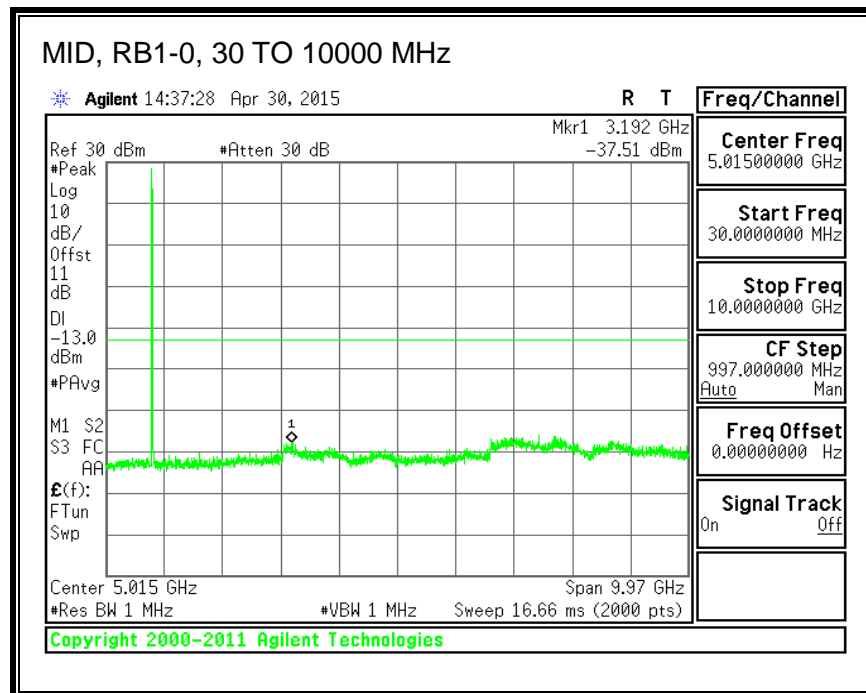




QPSK, (10.0 MHz BAND WIDTH)

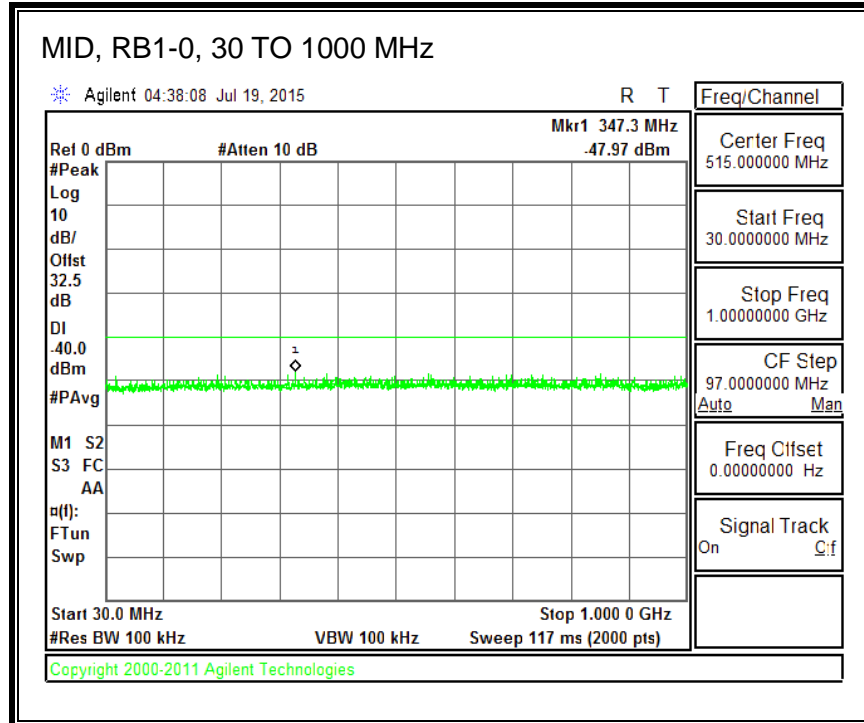
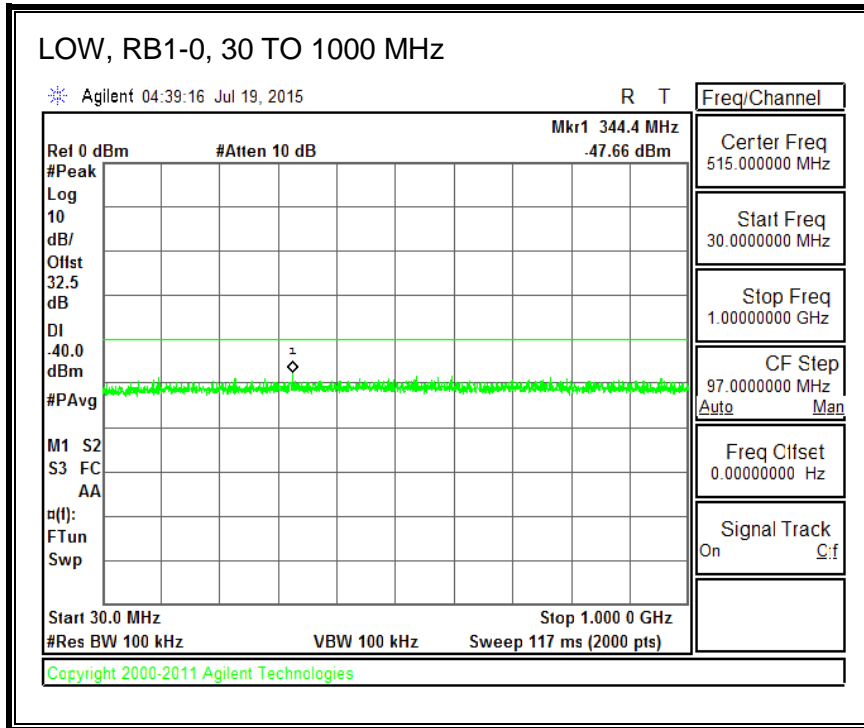


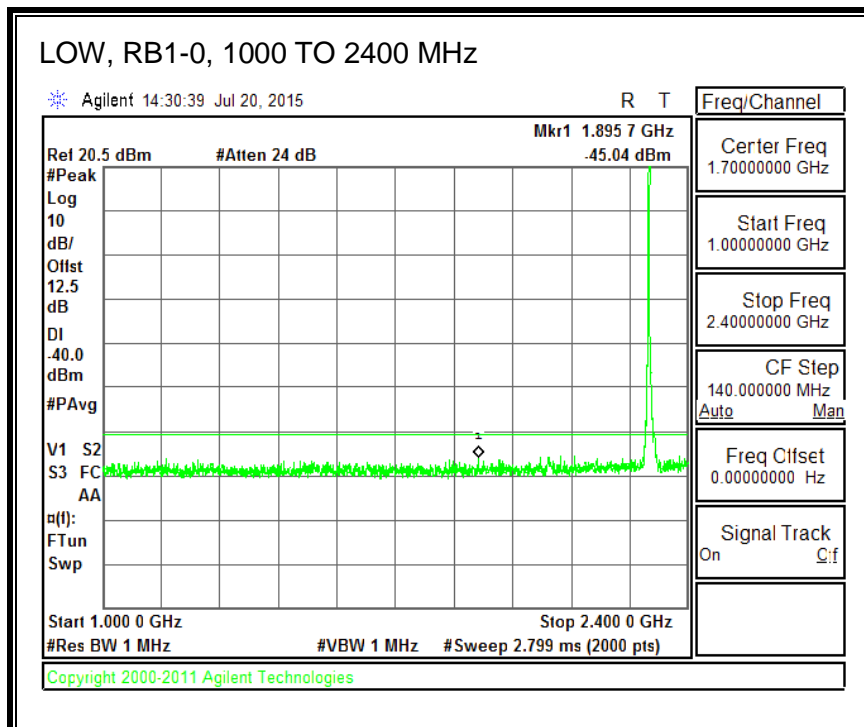
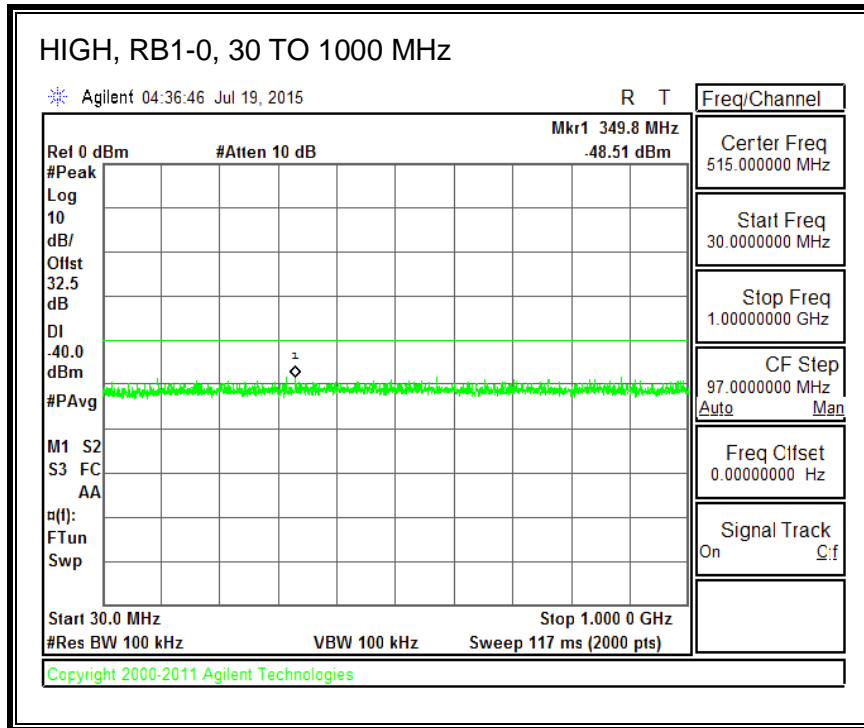
16QAM, (10.0 MHz BAND WIDTH)

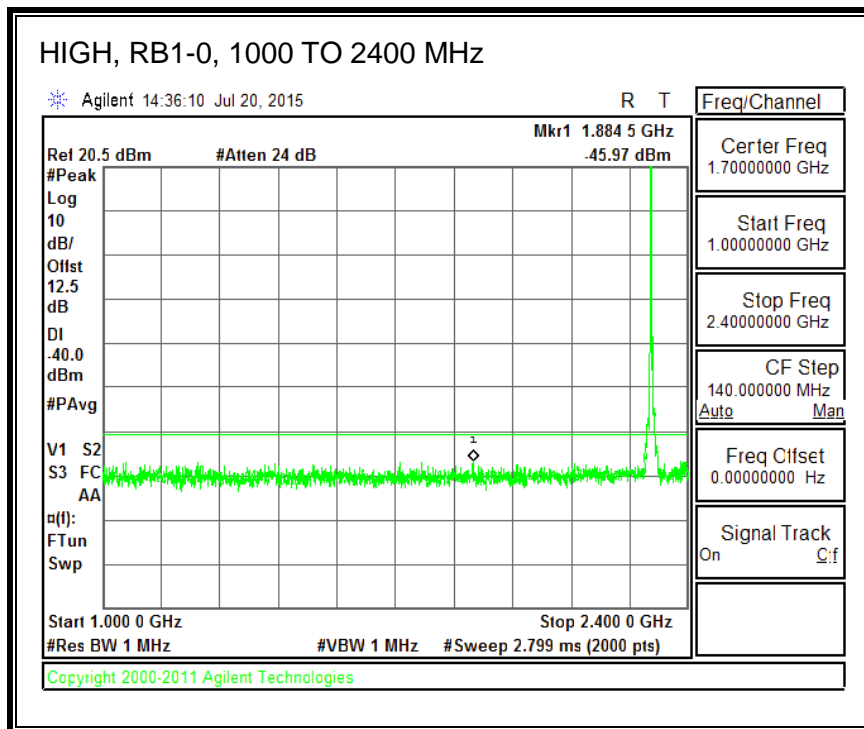
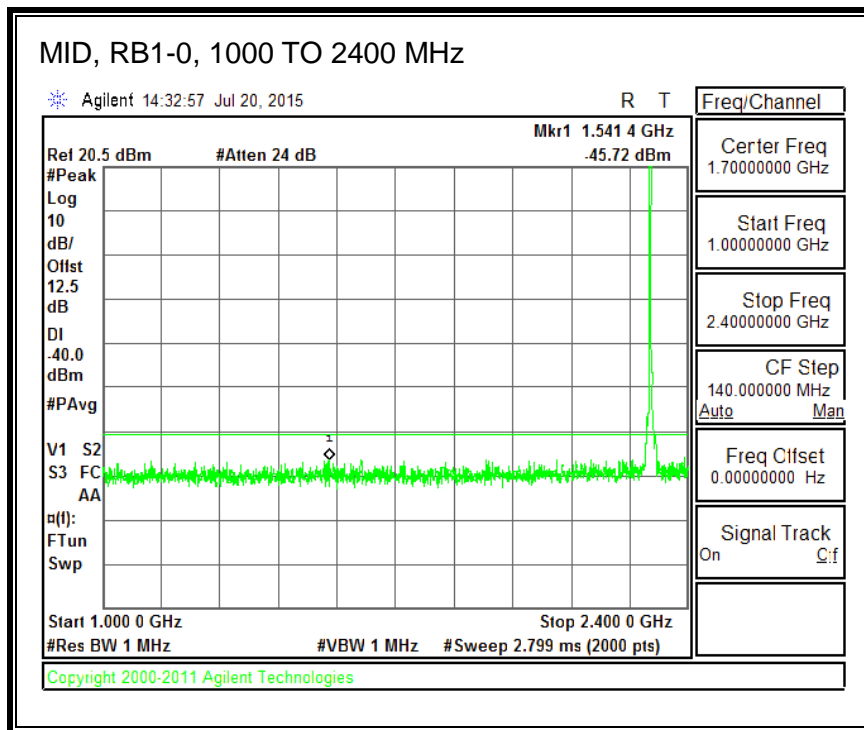


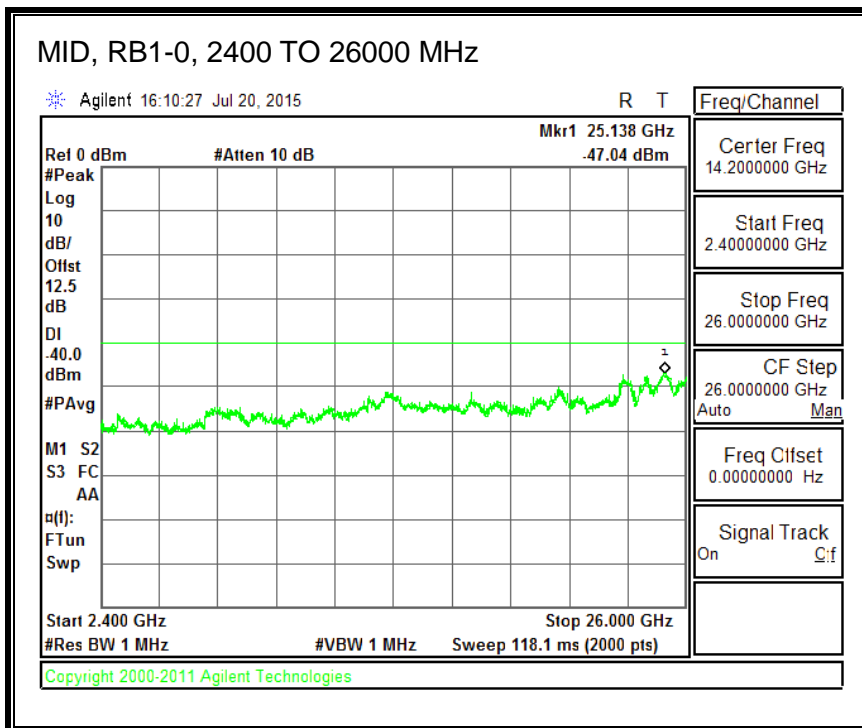
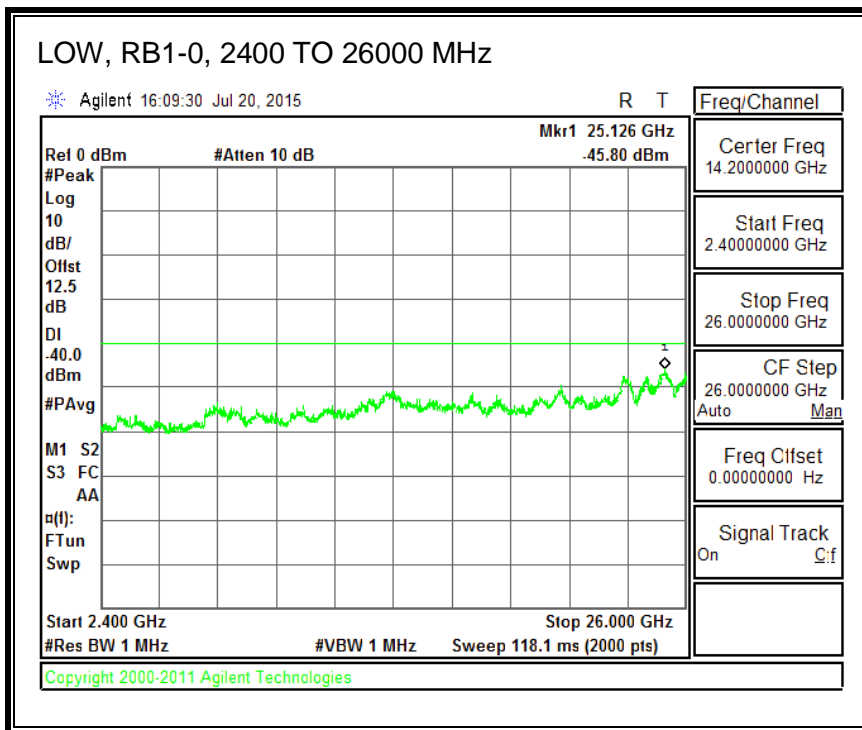
8.5.10. LTE BAND 30

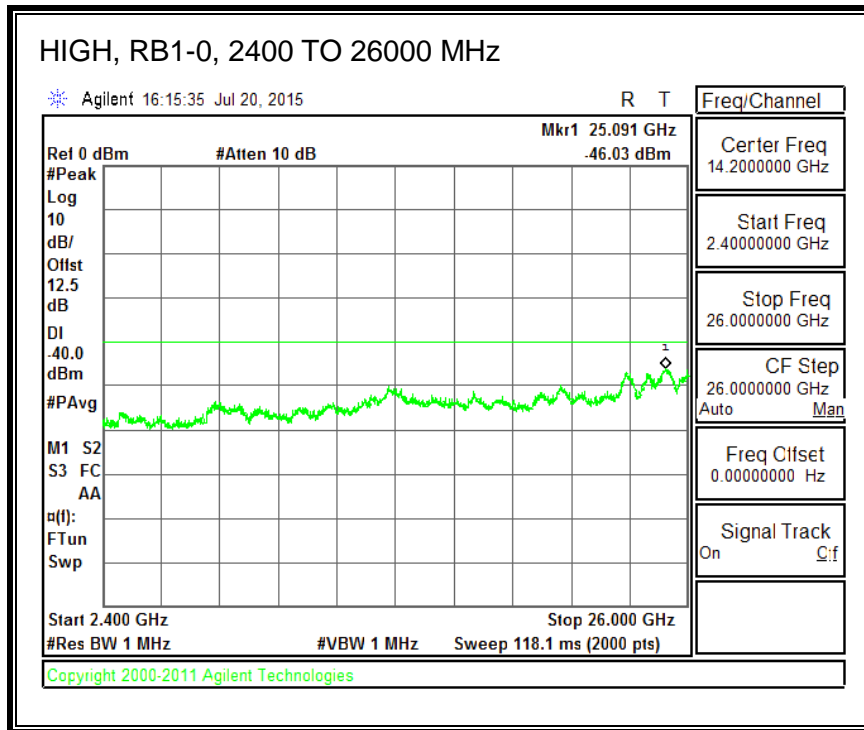
QPSK, (5.0 MHz BAND WIDTH)



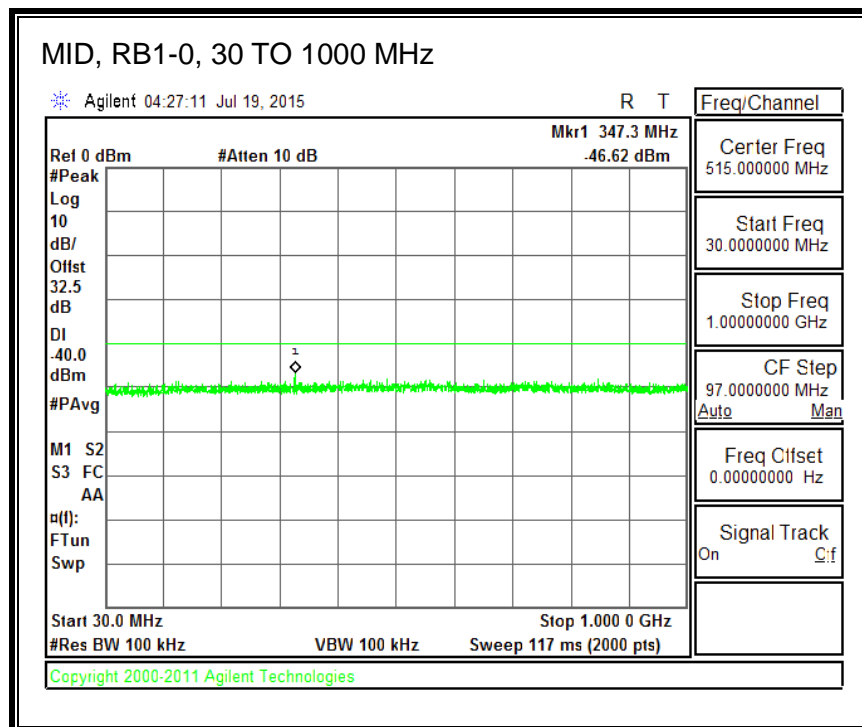
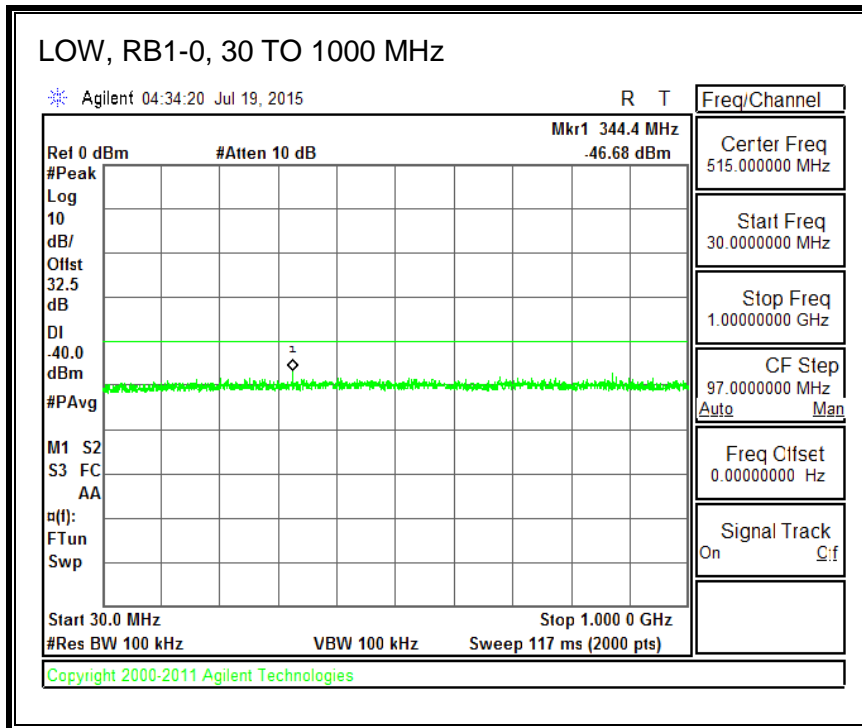


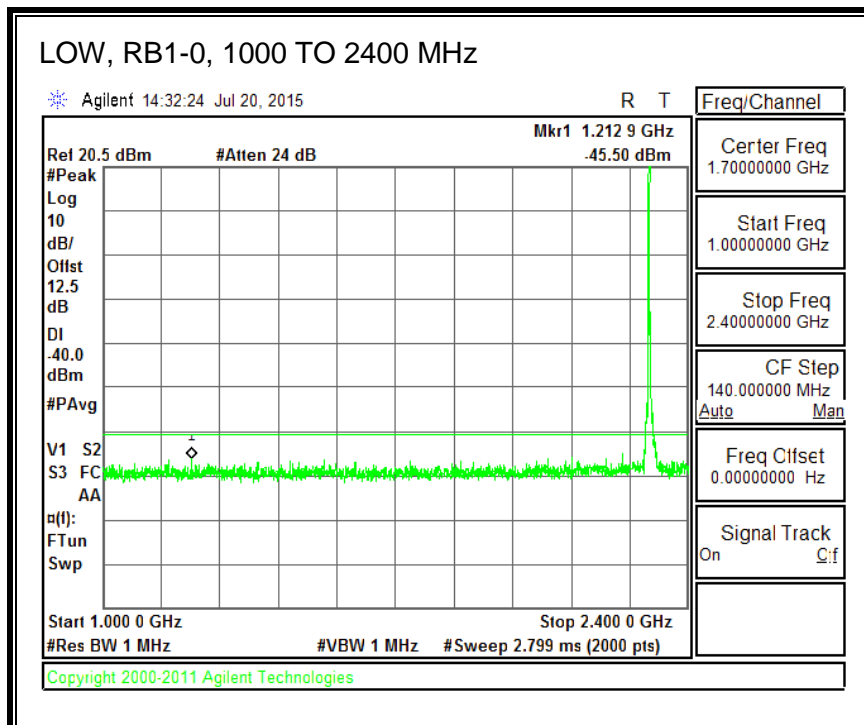
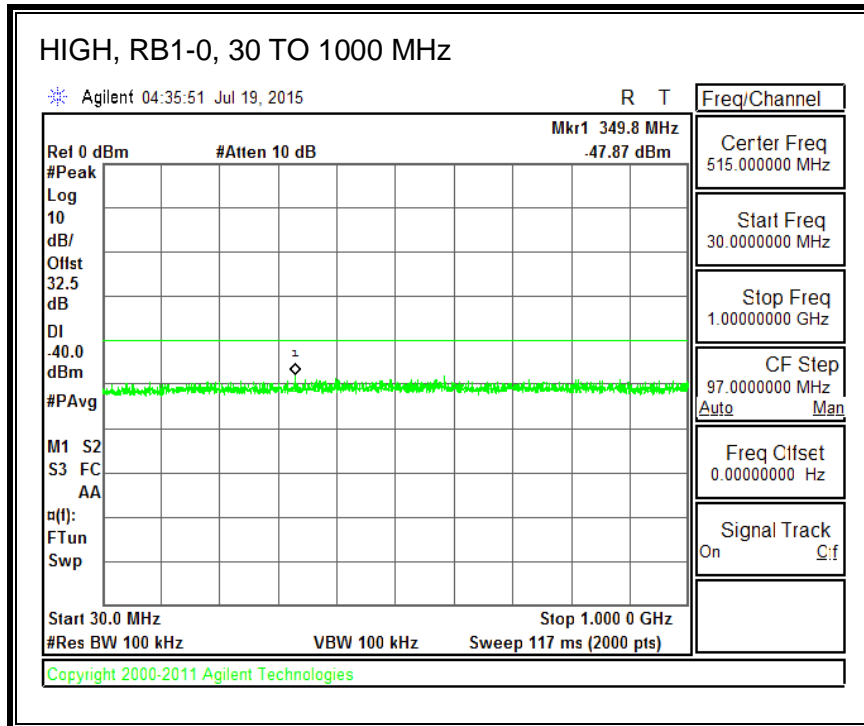


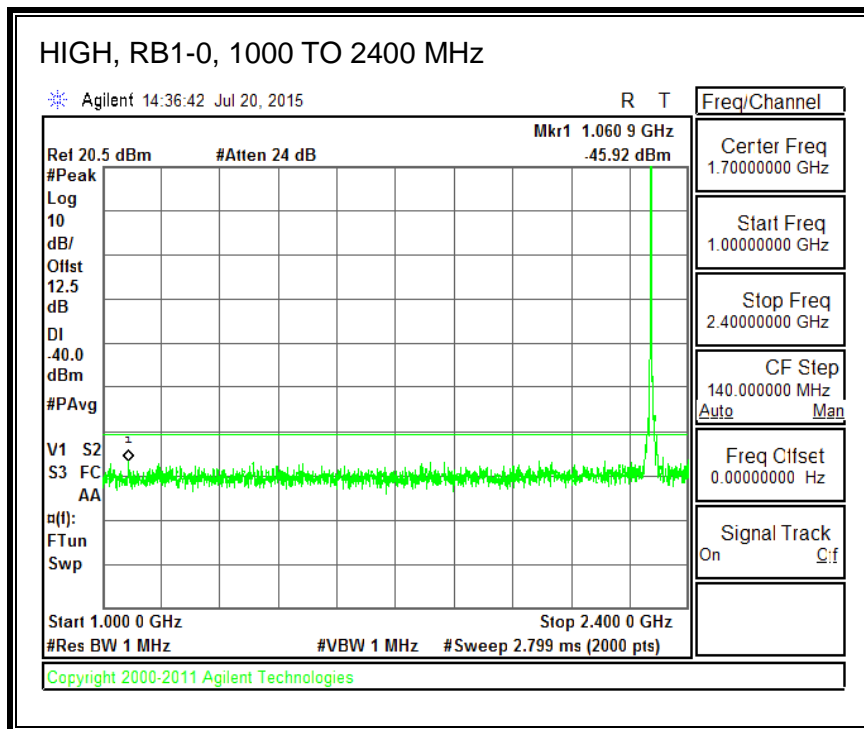
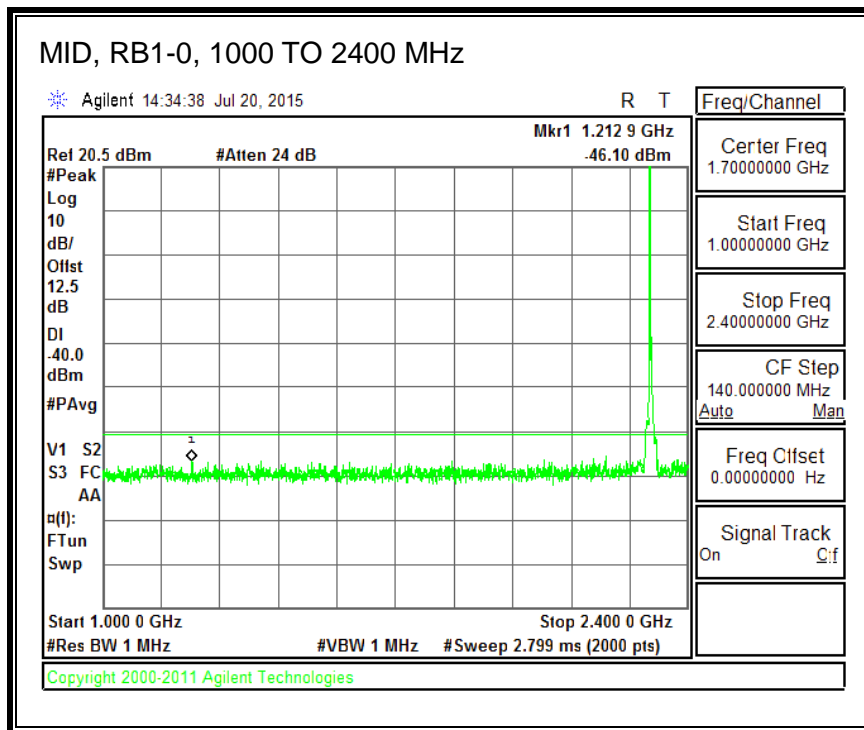


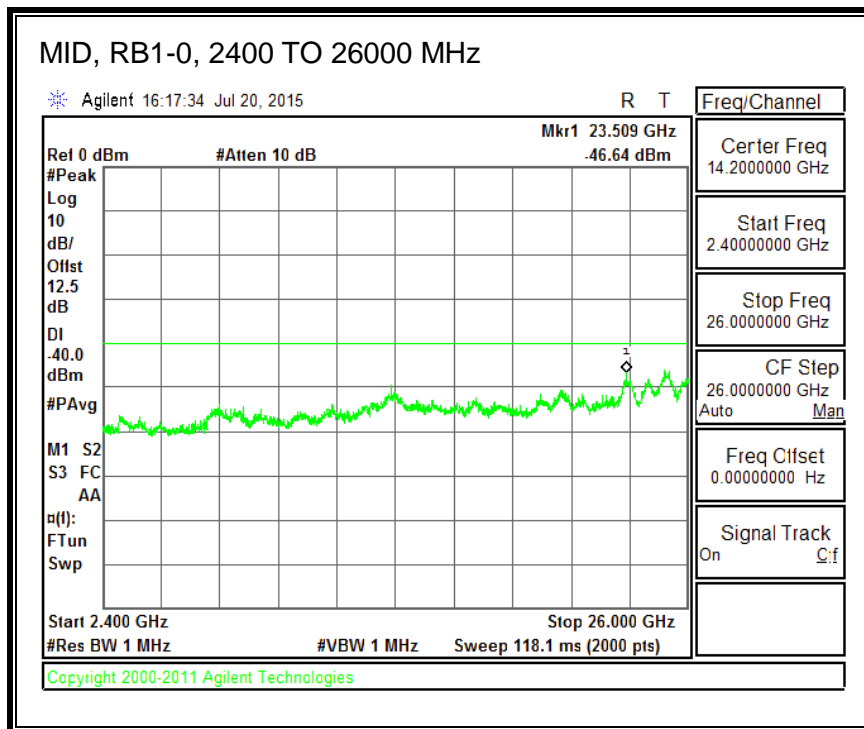
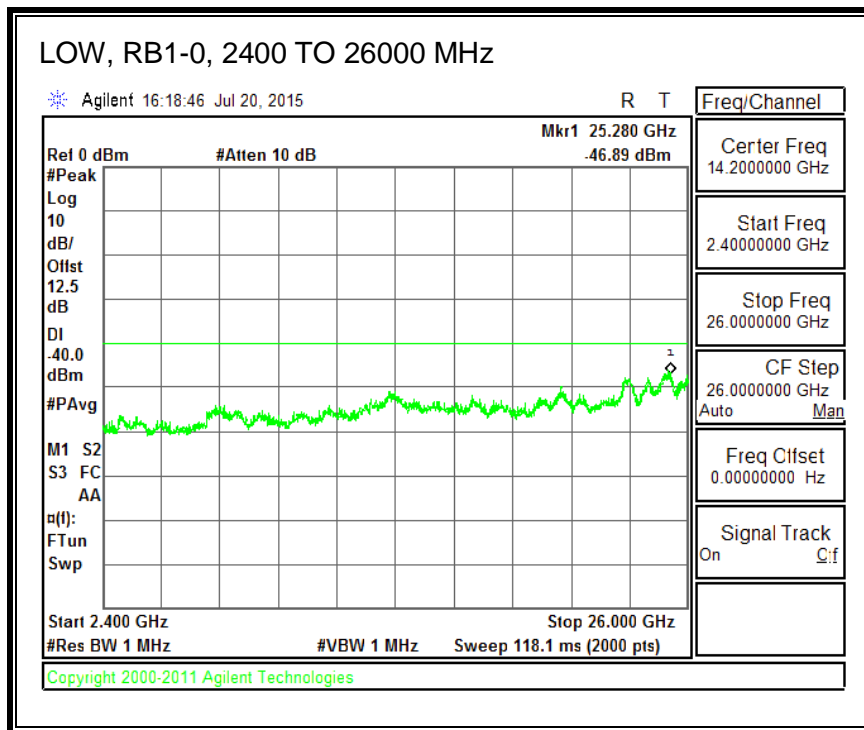


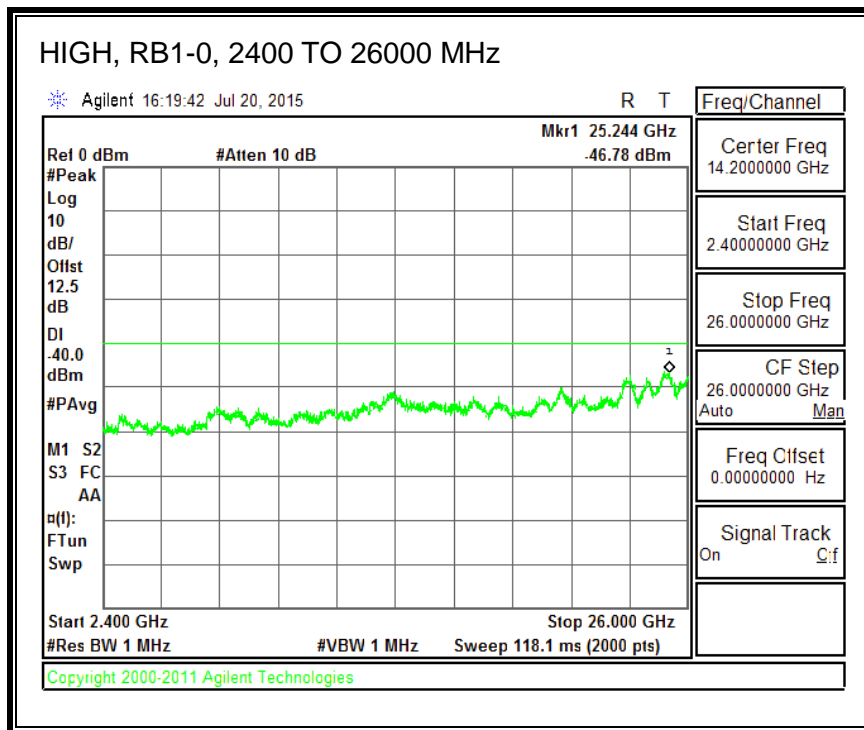
16QAM, (5.0 MHz BAND WIDTH)



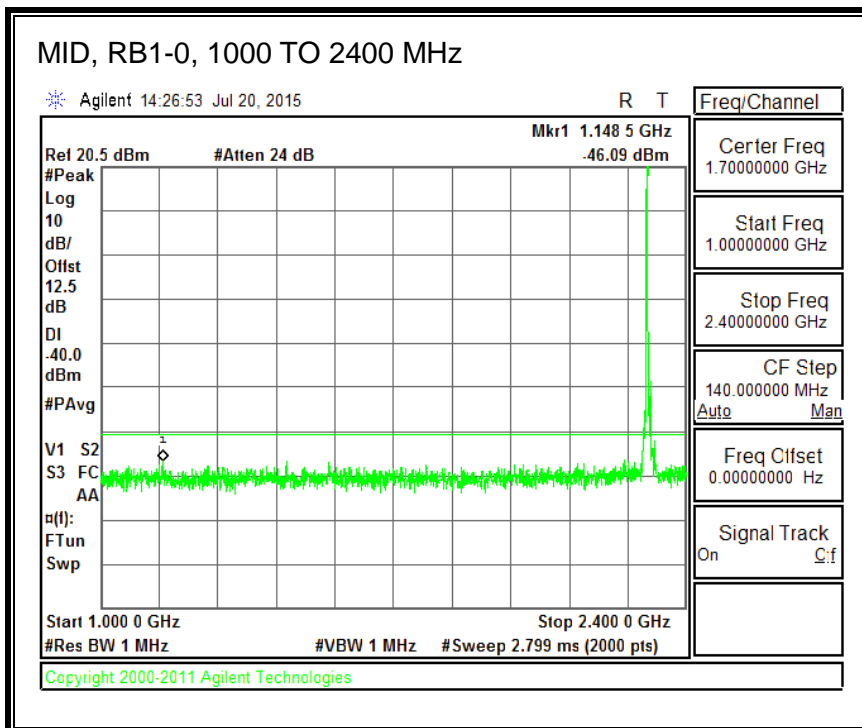
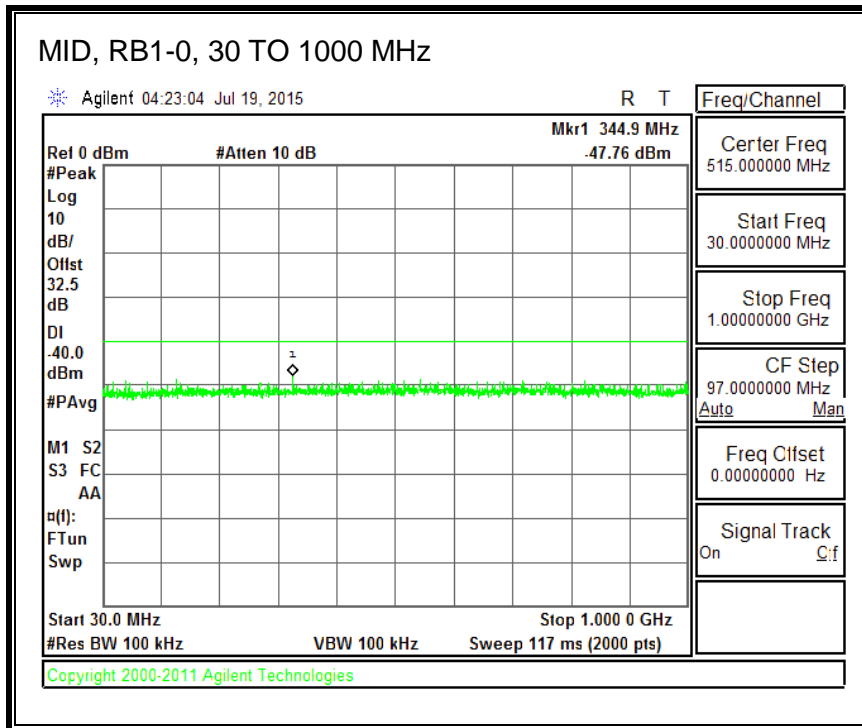


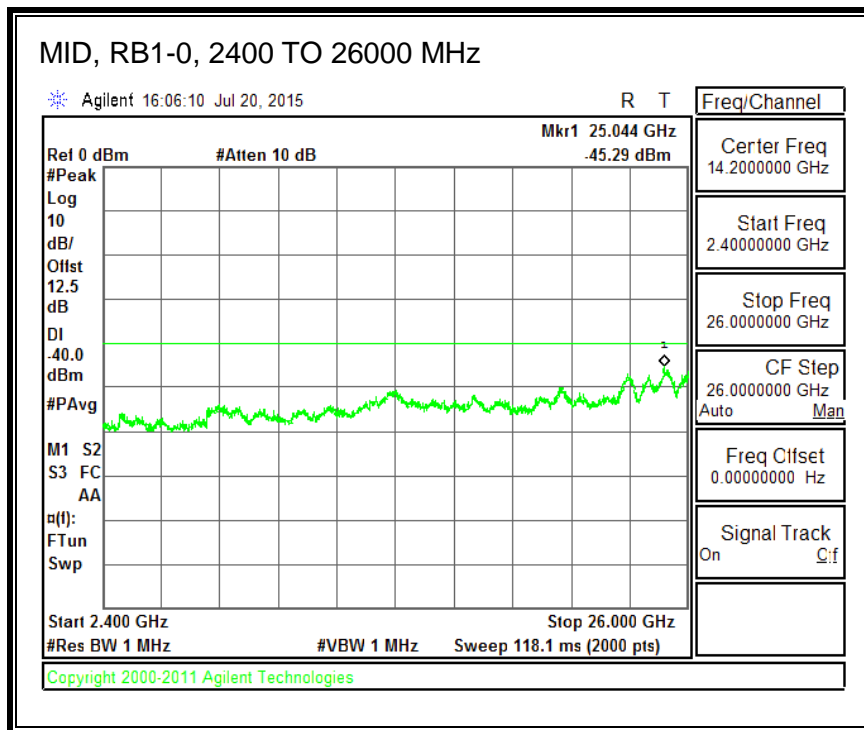




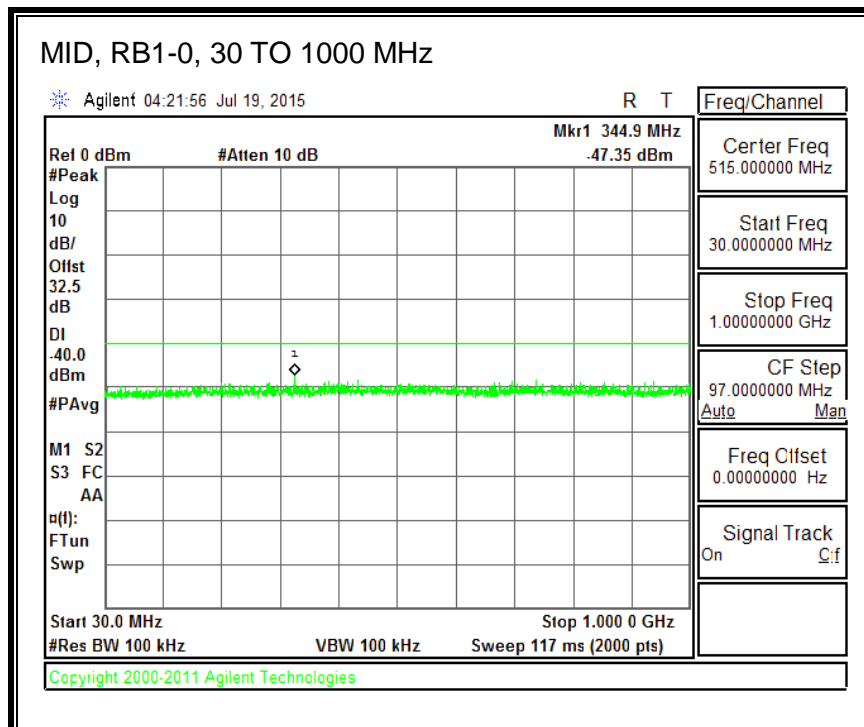


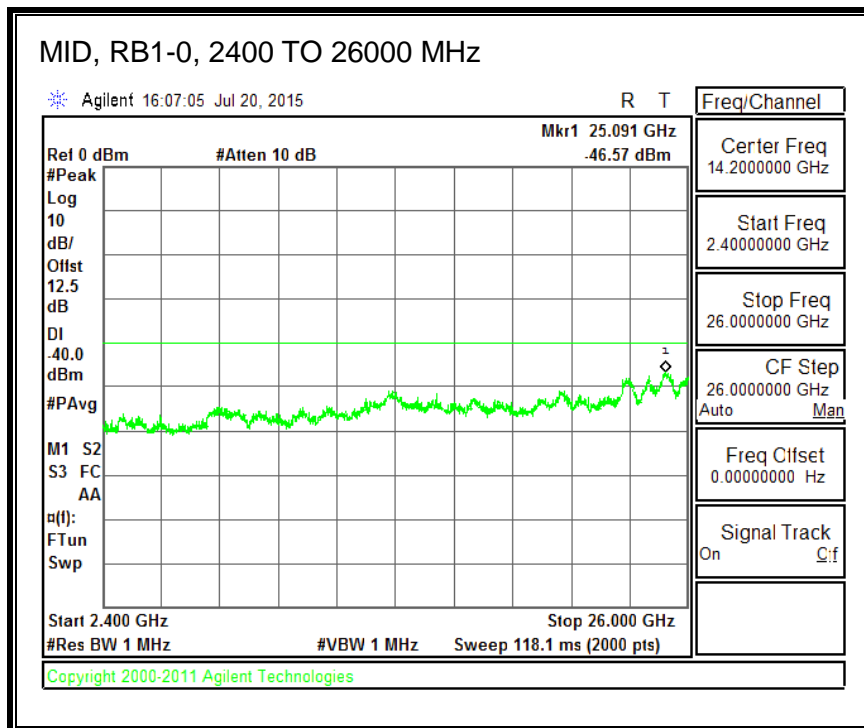
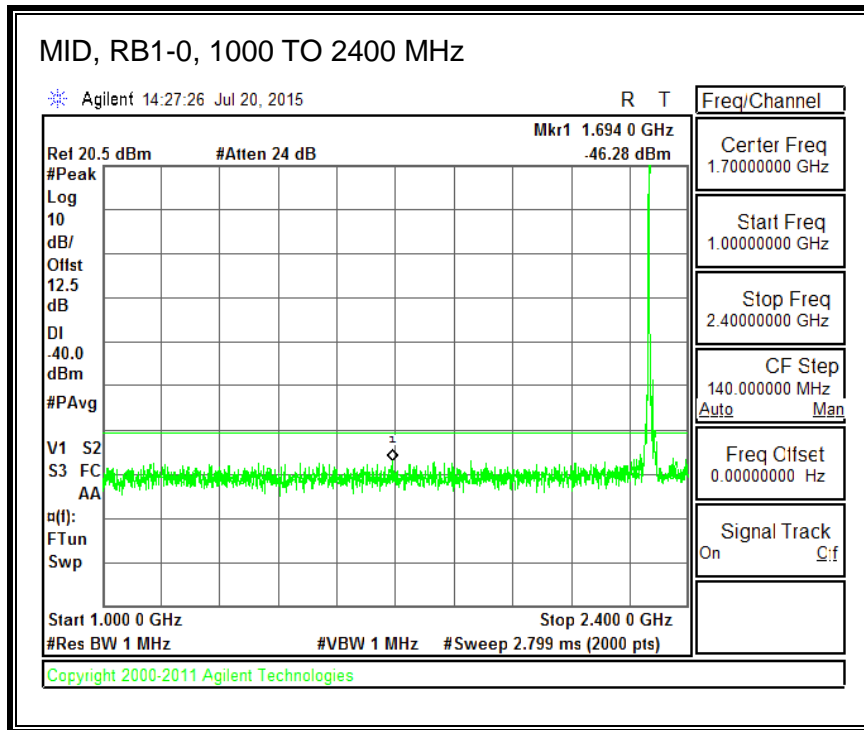
QPSK, (10.0 MHz BAND WIDTH)





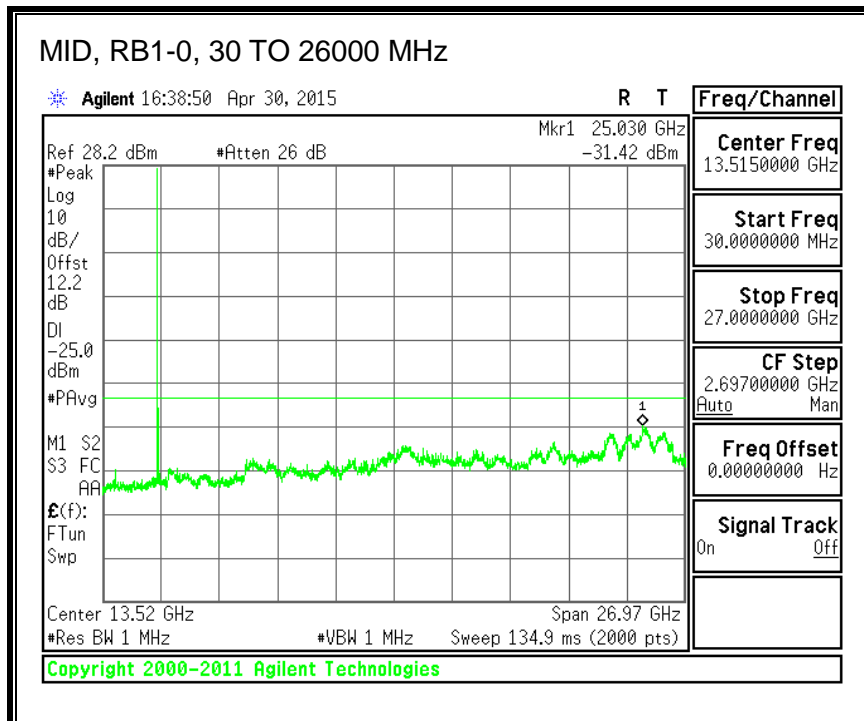
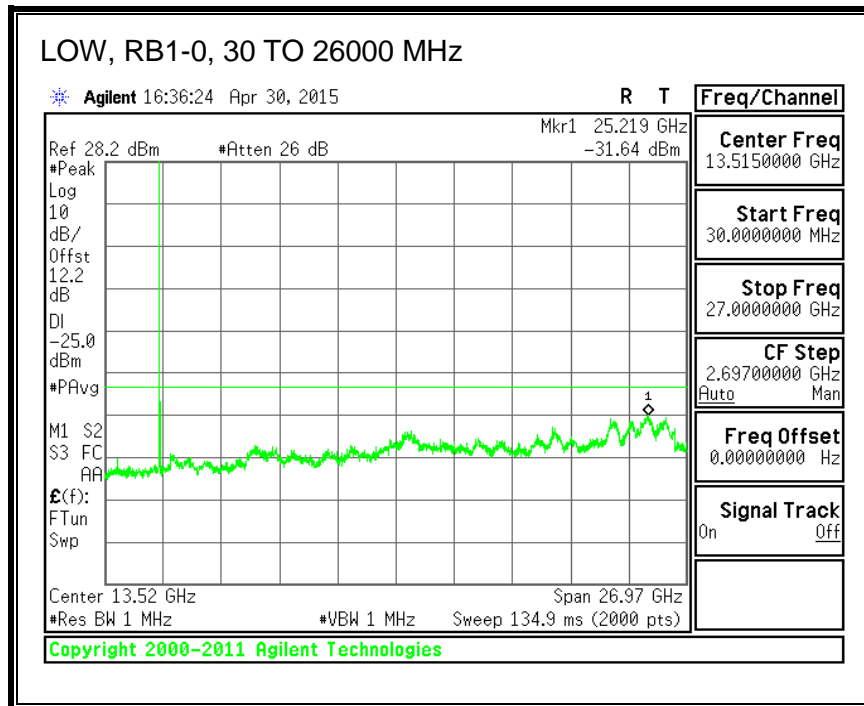
16QAM, (10.0 MHz BAND WIDTH)

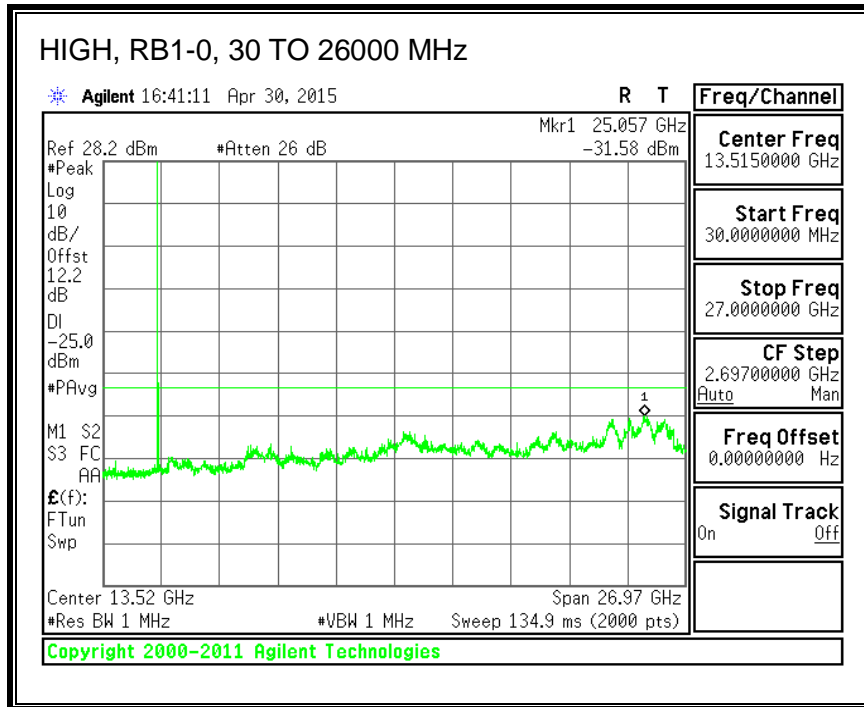




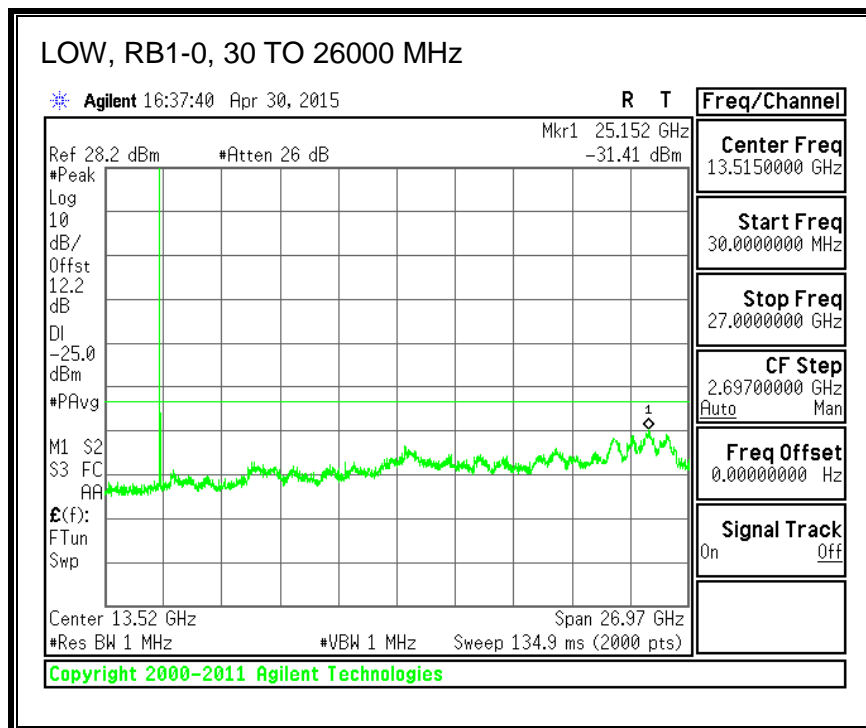
8.5.11. LTE BAND 41

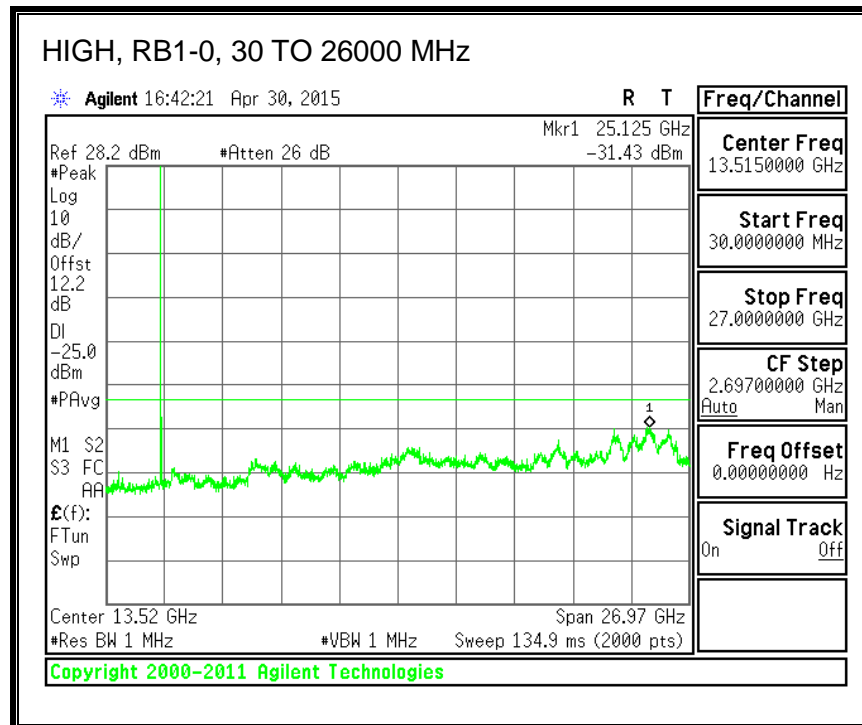
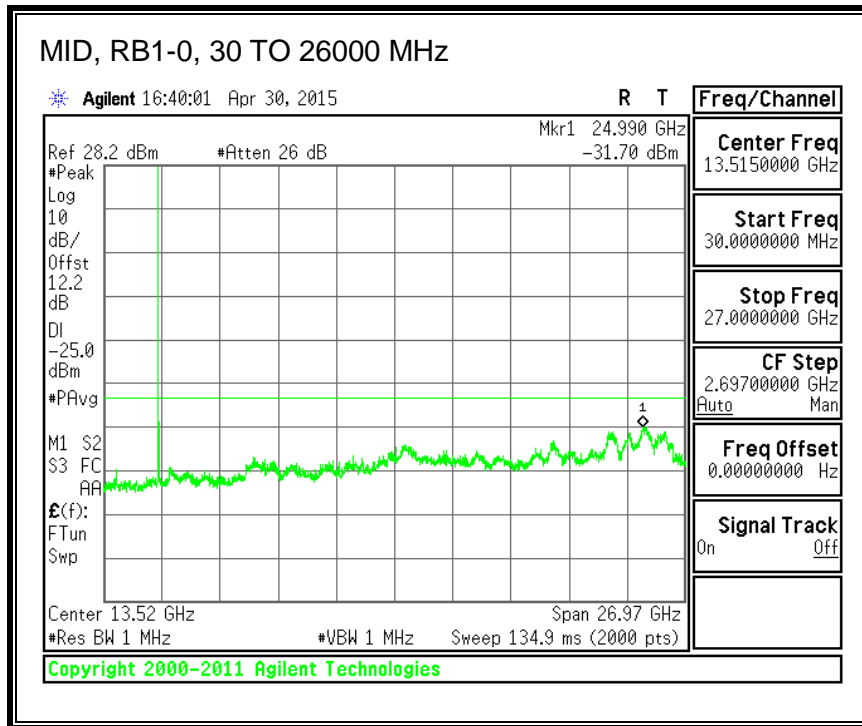
QPSK, (5.0 MHz BAND WIDTH)



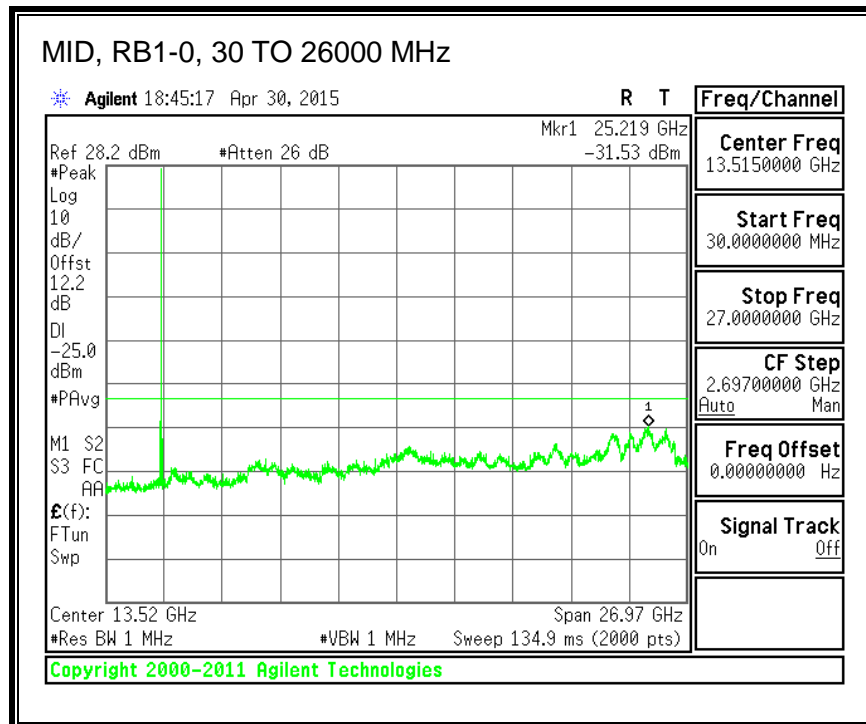
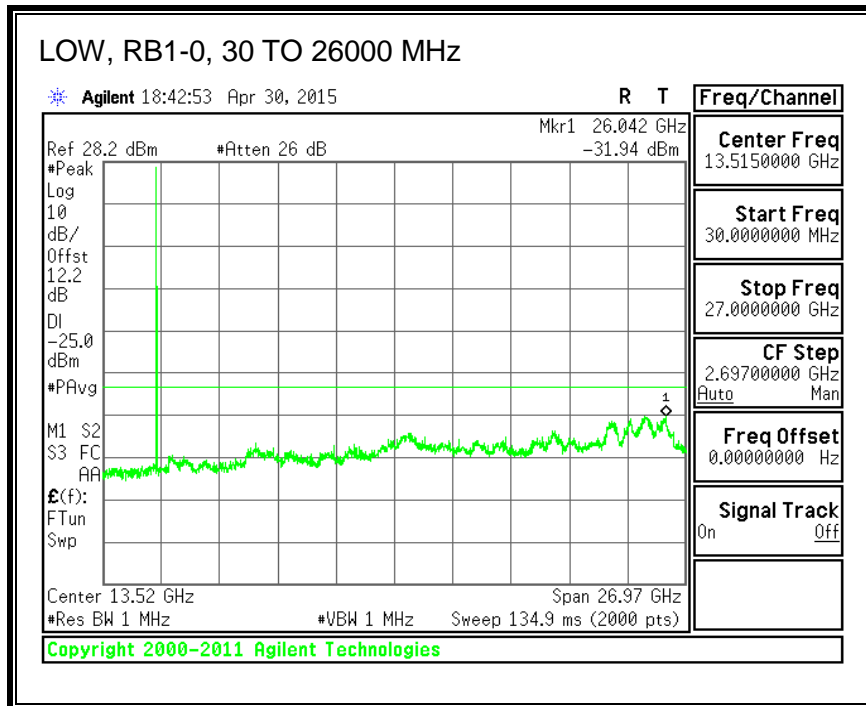


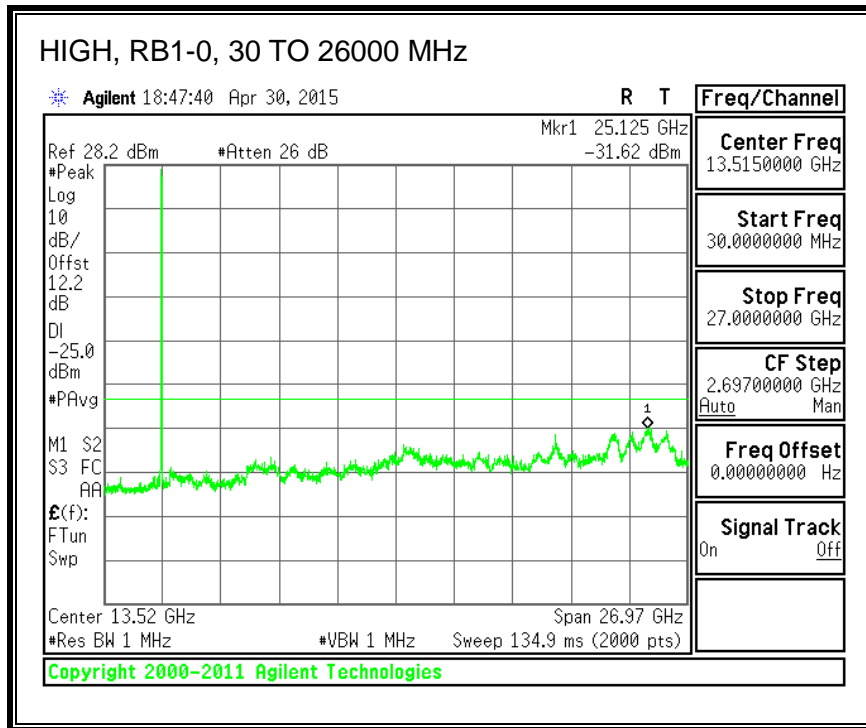
16QAM, (5.0 MHz BAND WIDTH)



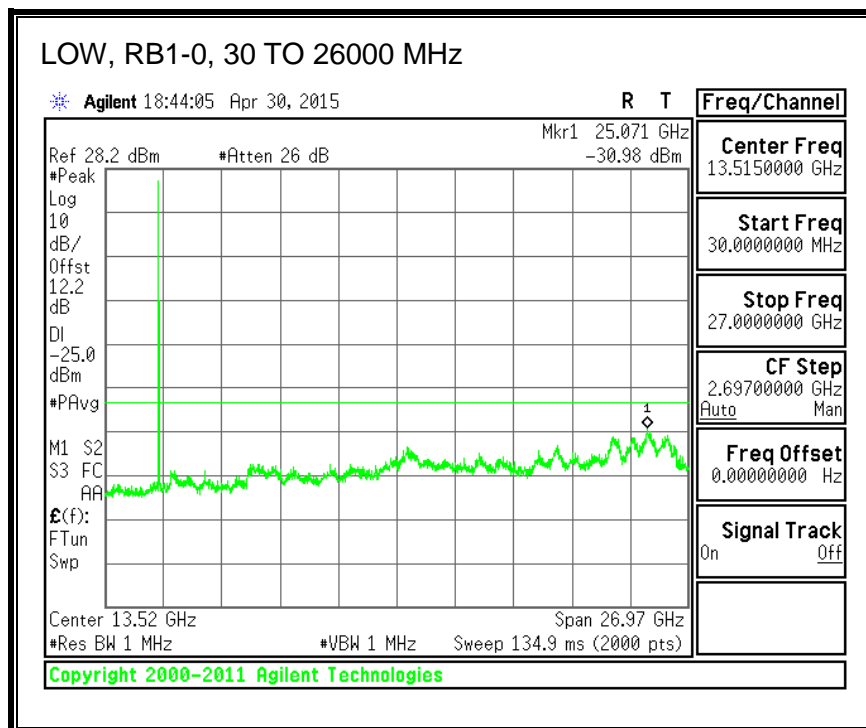


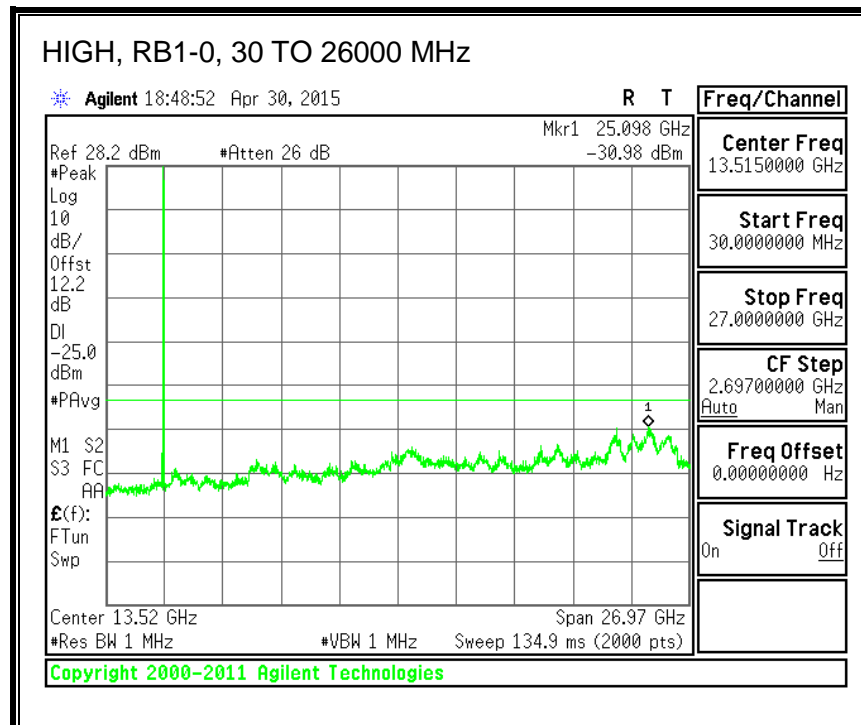
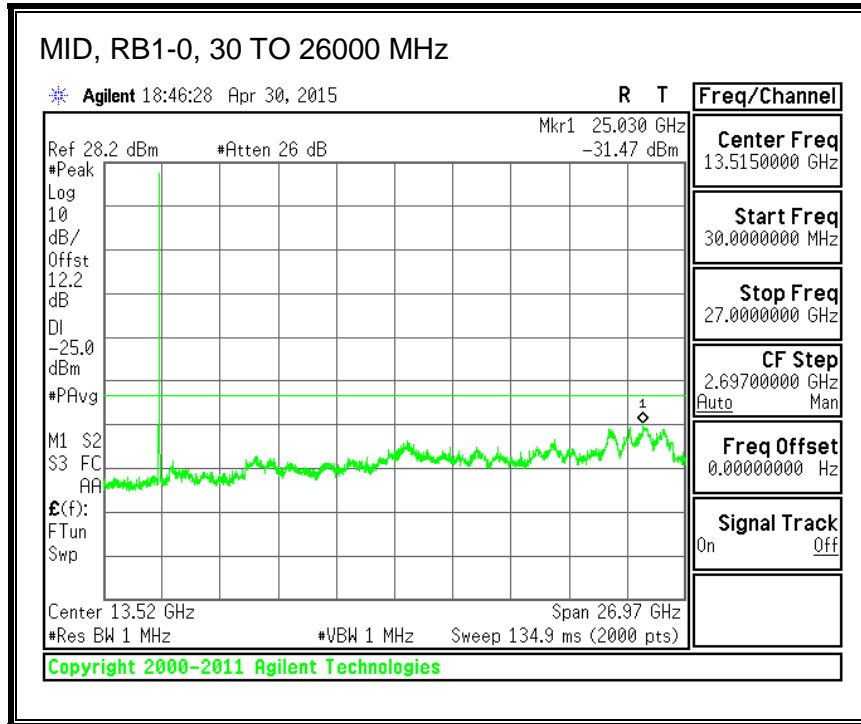
QPSK, (10.0 MHz BAND WIDTH)



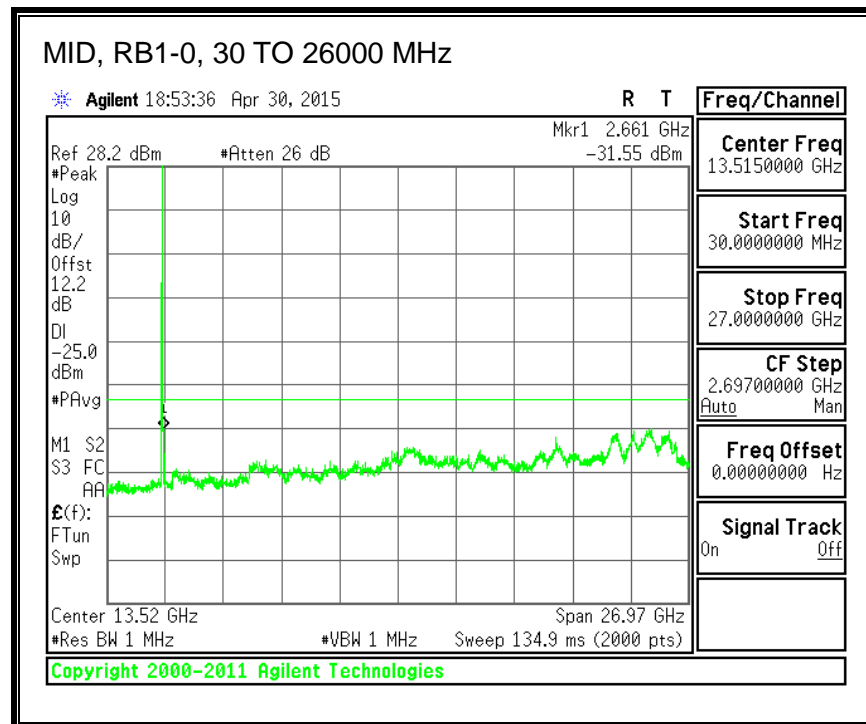
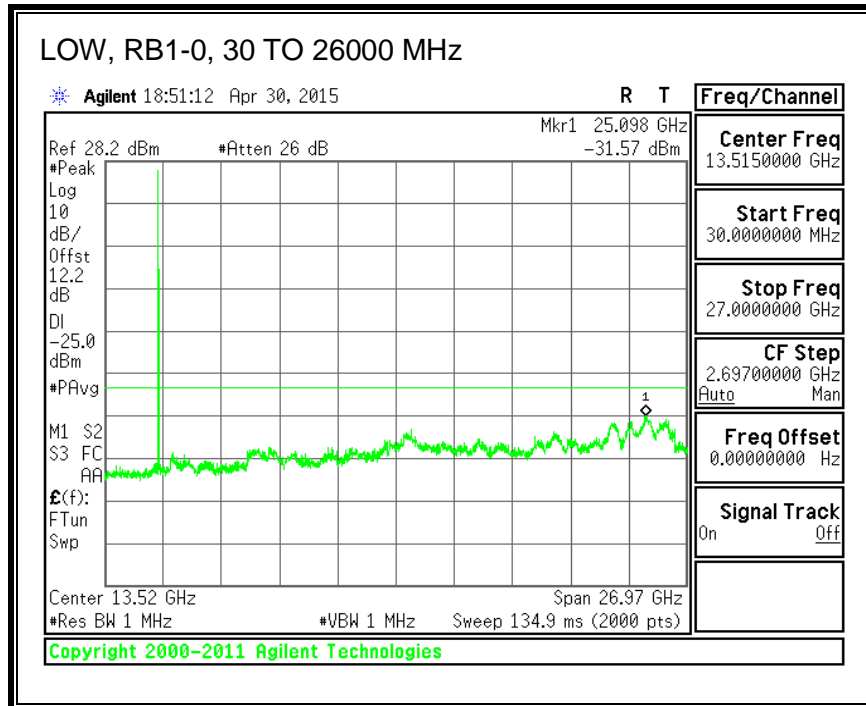


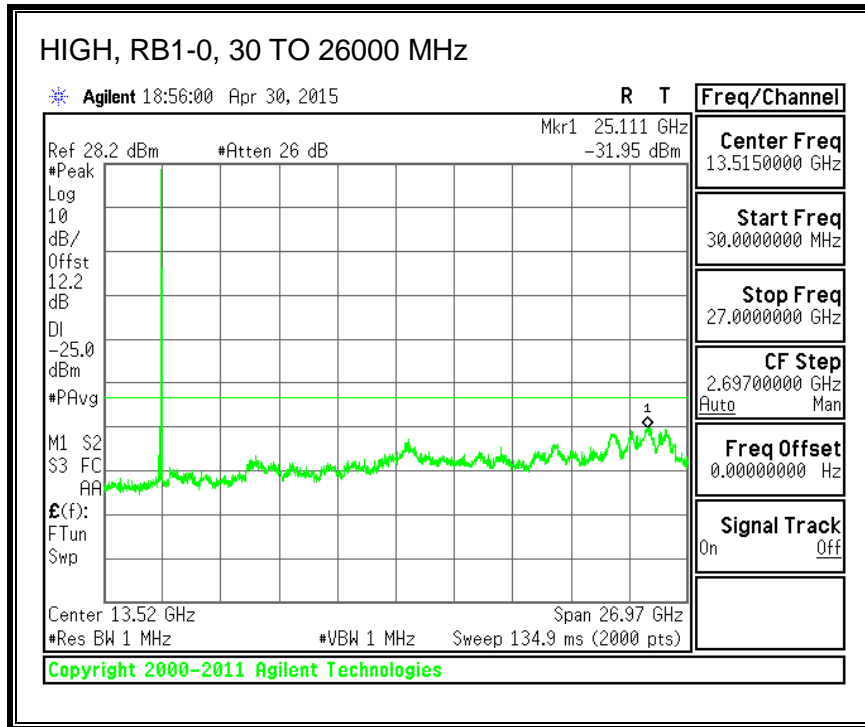
16QAM, (10.0 MHz BAND WIDTH)



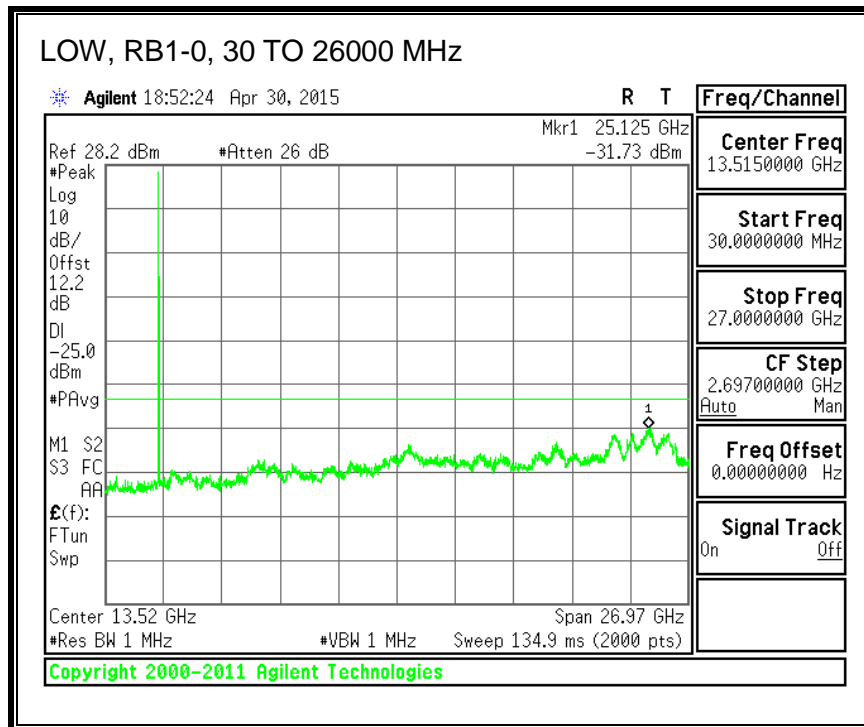


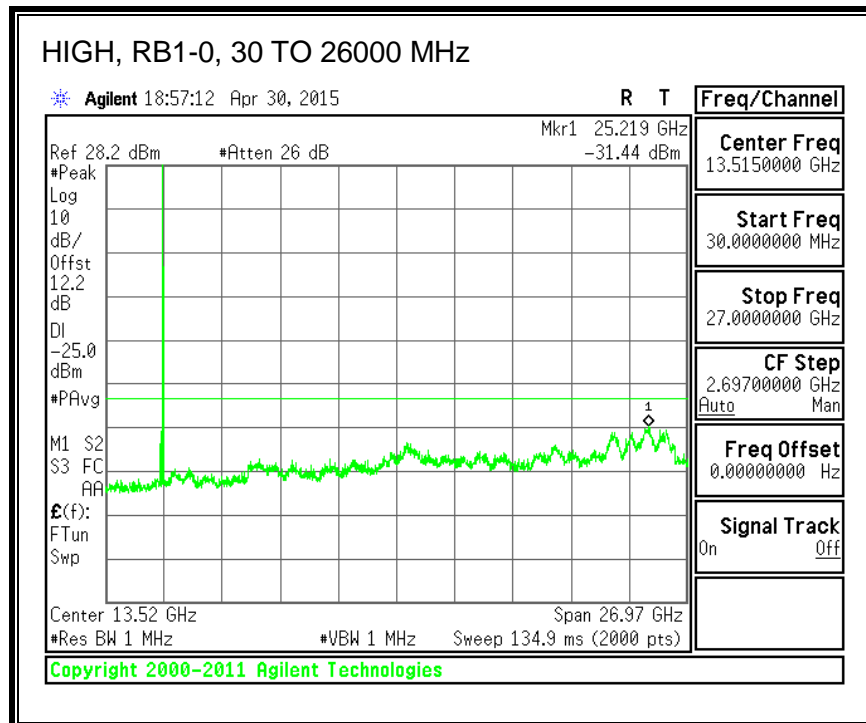
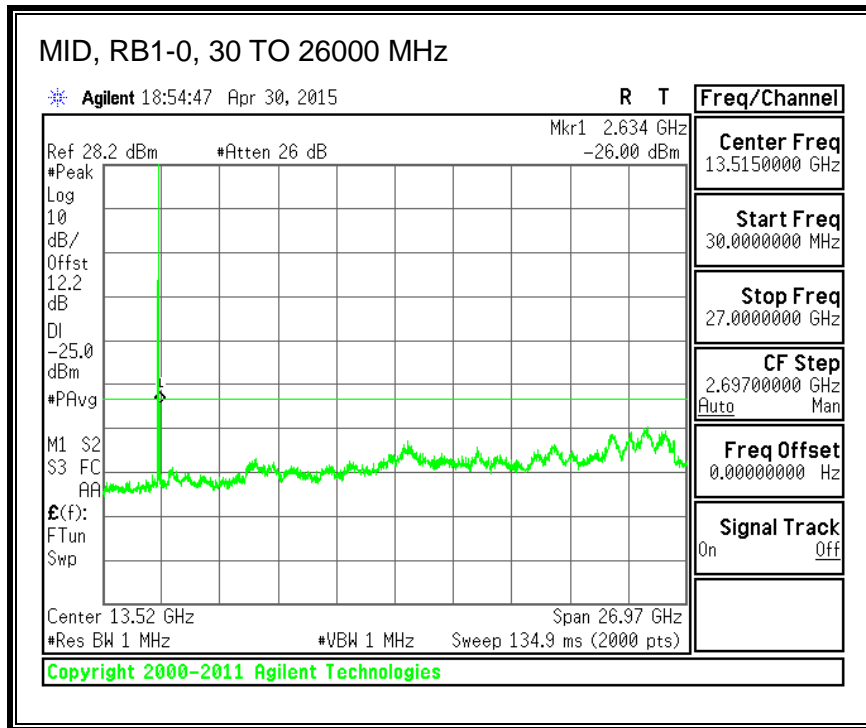
QPSK, (15.0 MHz BAND WIDTH)



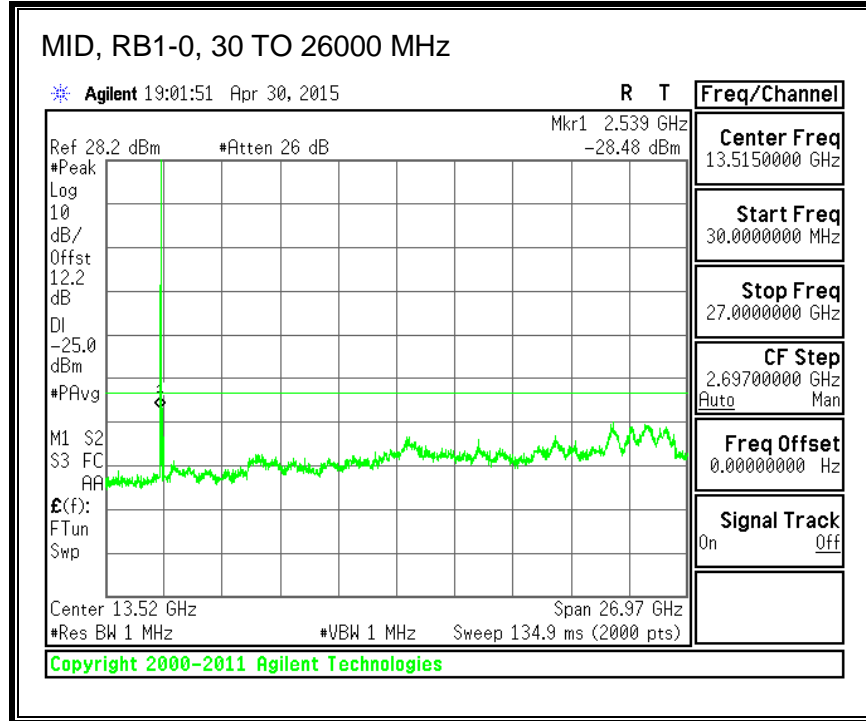
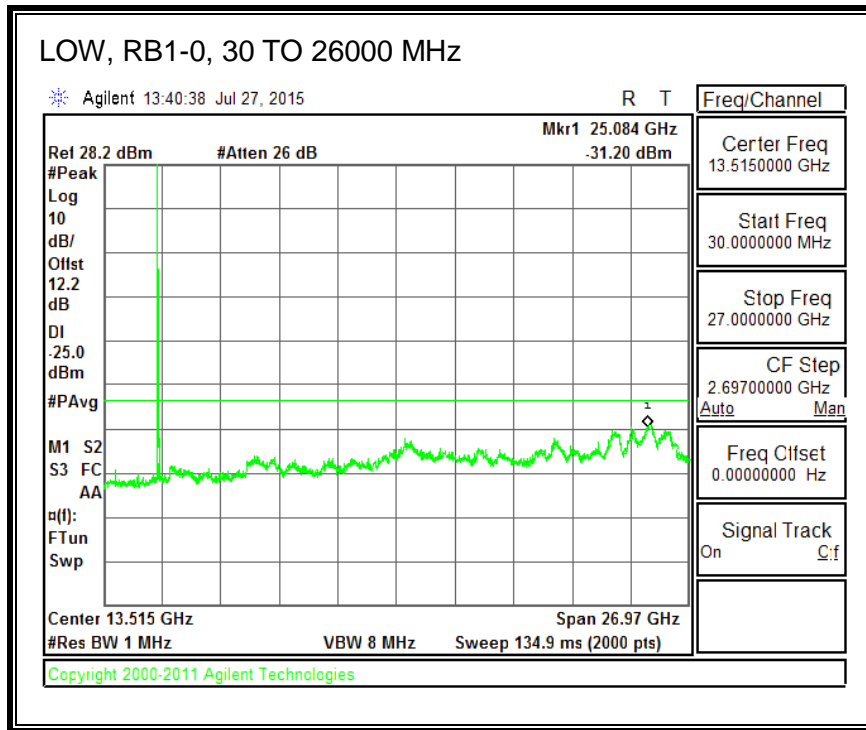


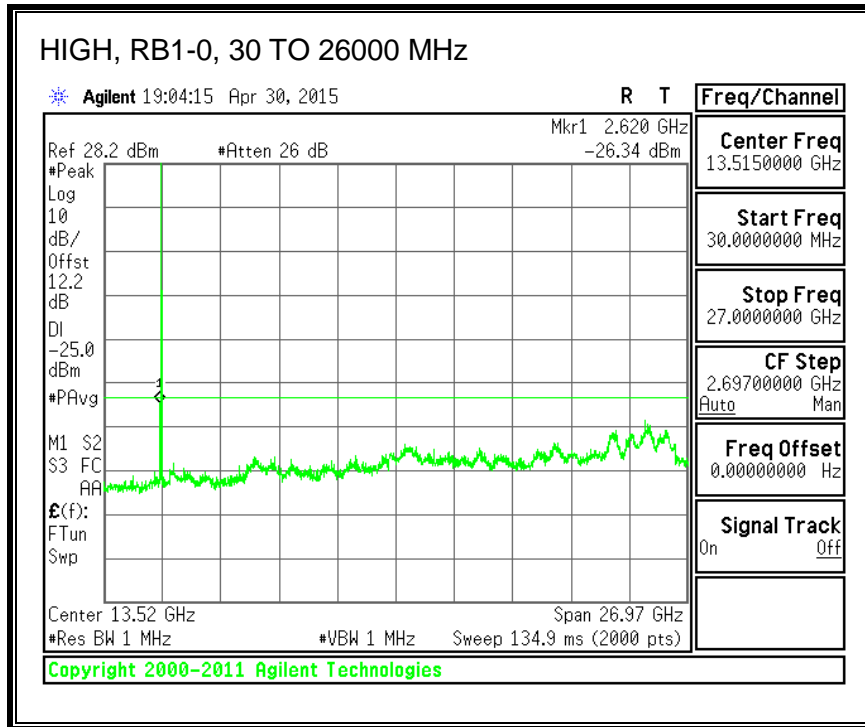
16QAM, (15.0 MHz BAND WIDTH)



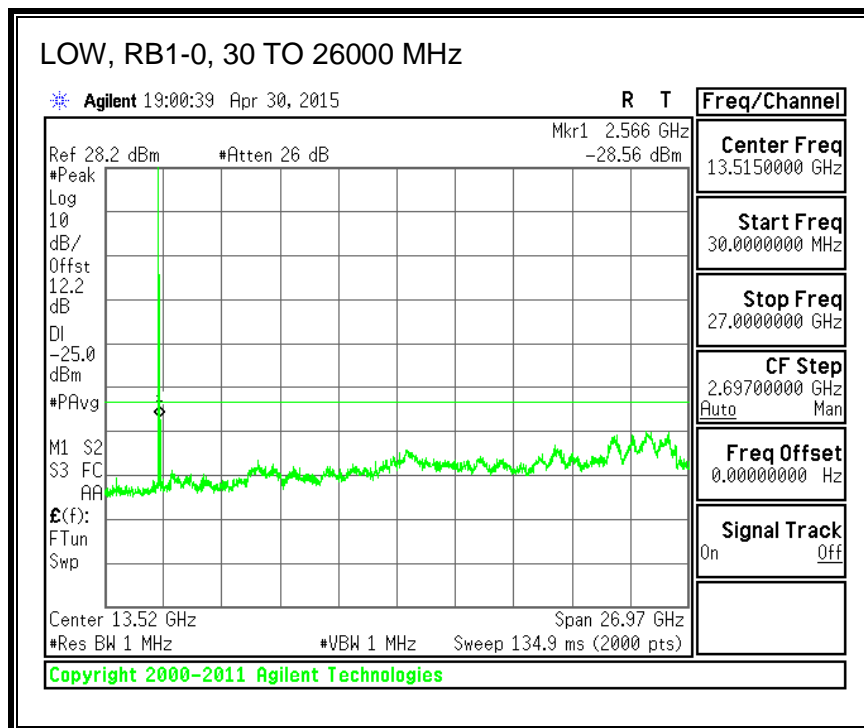


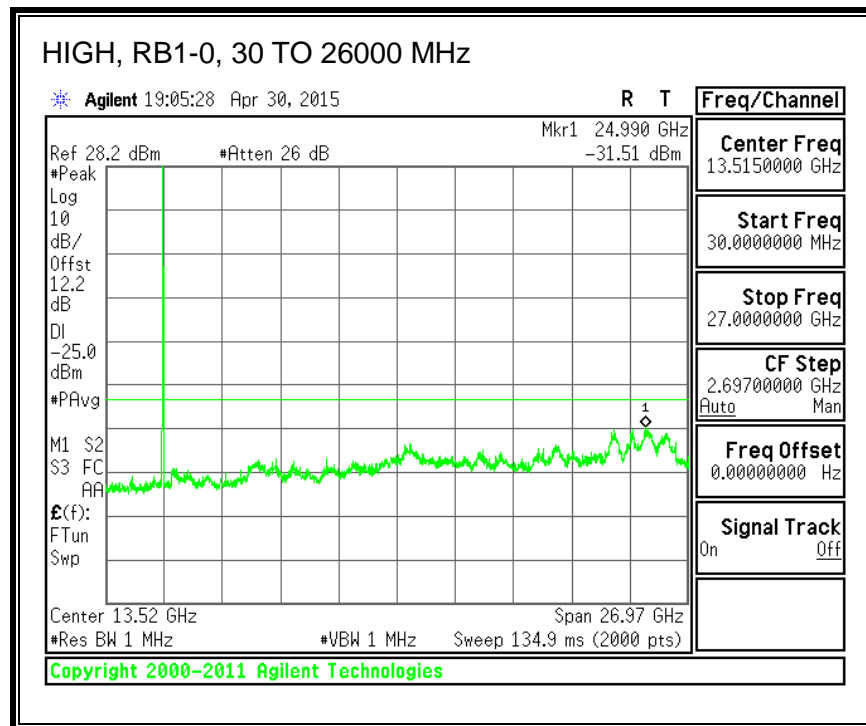
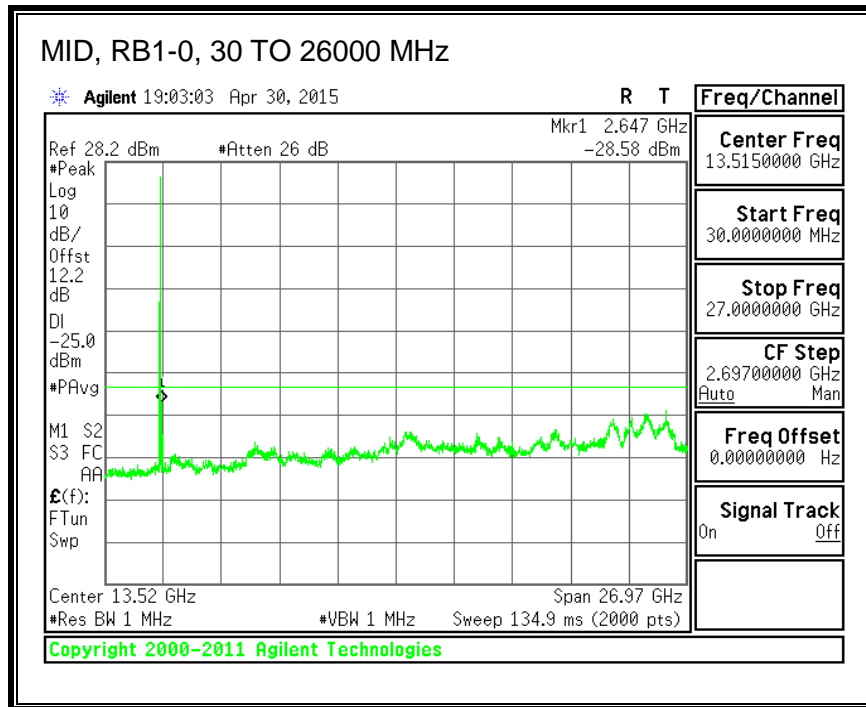
QPSK, (20.0 MHz BAND WIDTH)





16QAM, (20.0 MHz BAND WIDTH)





8.6.OUT OF BAND EMISSIONS (MODEL: A1687)

RULE PART(S)

FCC: §2.1051, §22.901, §22.917, §24.238 and §27.53

LIMITS

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.

TEST PROCEDURE

The RF output of the transmitter was connected to a spectrum analyzer through a calibrated coaxial cable. Sufficient scans were taken to show the out-of-band Emissions, if any, up to 10th harmonic. Multiple sweeps were recorded in maximum hold mode using a peak detector to ensure that the worst-case emissions were caught.

For each out of band emissions measurement:

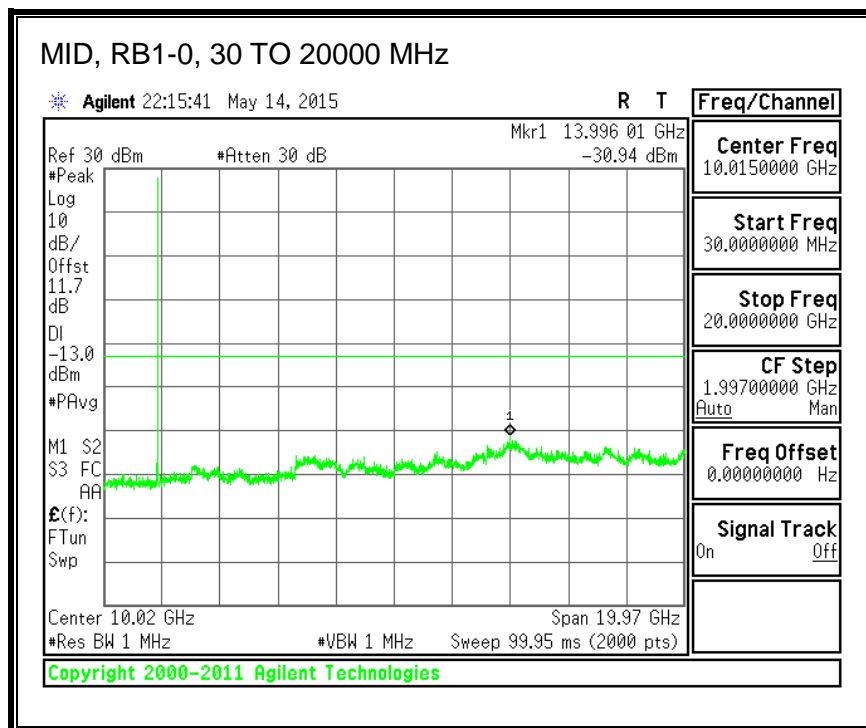
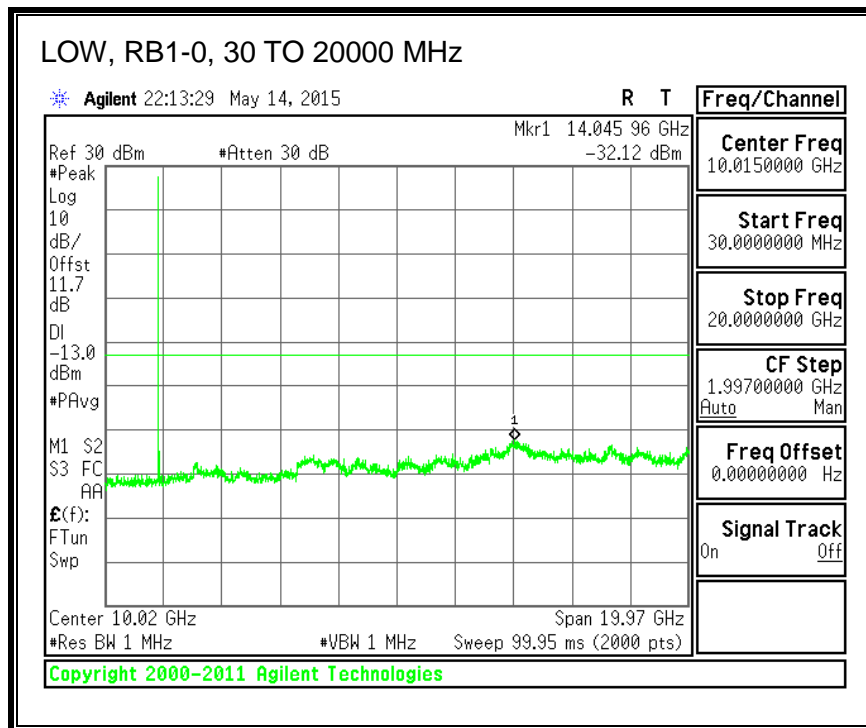
- Set display line at -13 dBm
- Set RBW & VBW to 100 kHz for the measurement below 1 GHz, and 1 MHz for the measurement above 1 GHz.

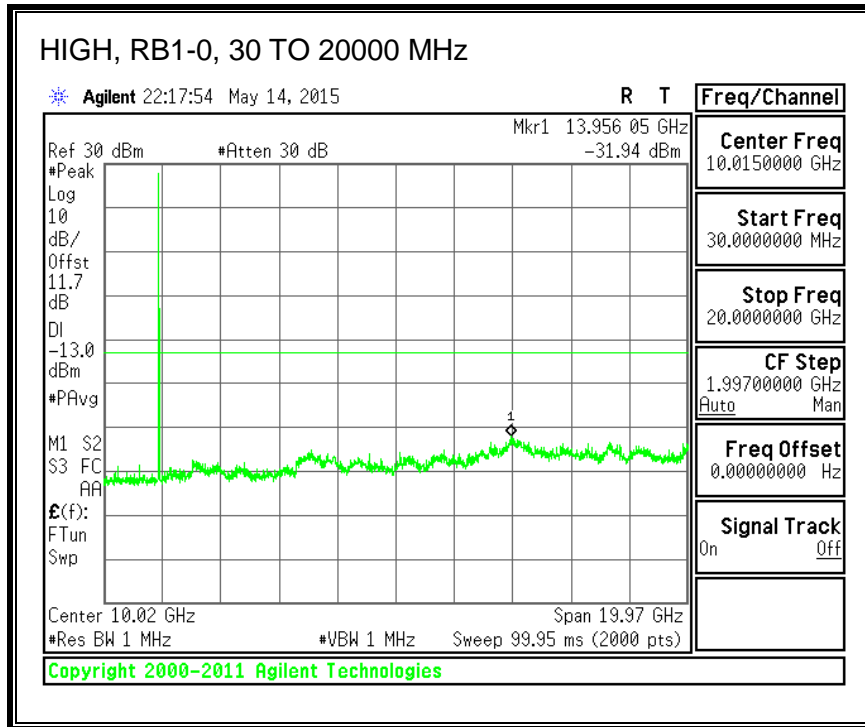
MODES TESTED

- LTE Band 2
- LTE Band 4
- LTE Band 5
- LTE Band 7
- LTE Band 12
- LTE Band 13
- LTE Band 17
- LTE Band 25
- LTE Band 26
- LTE Band 41

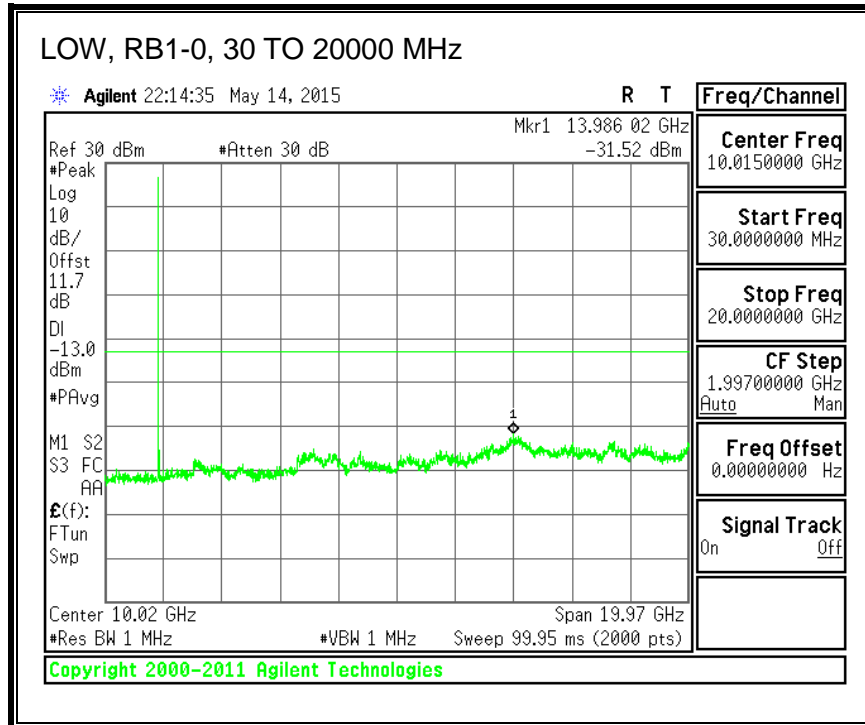
8.6.1. LTE BAND 2

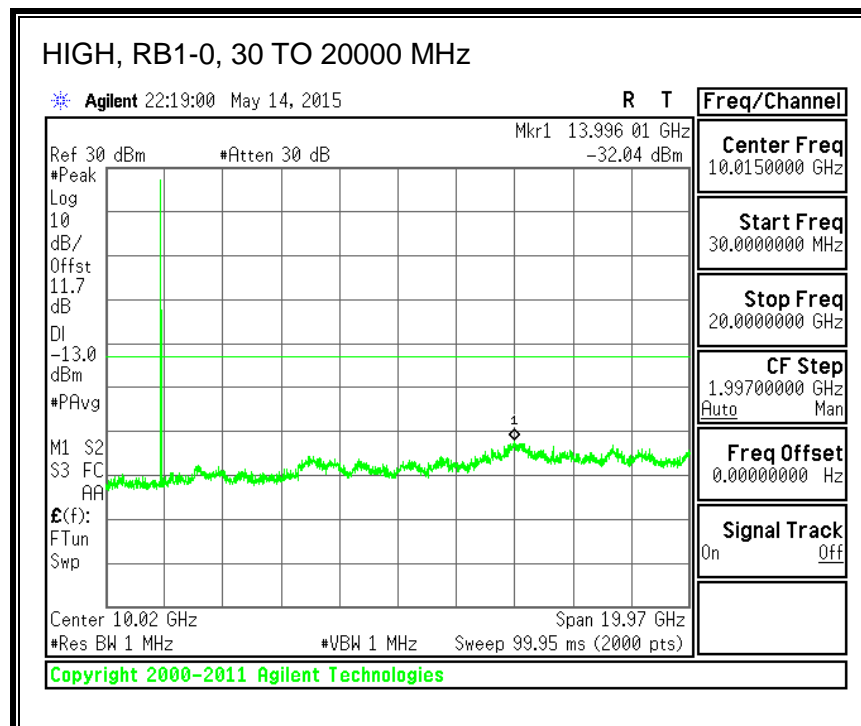
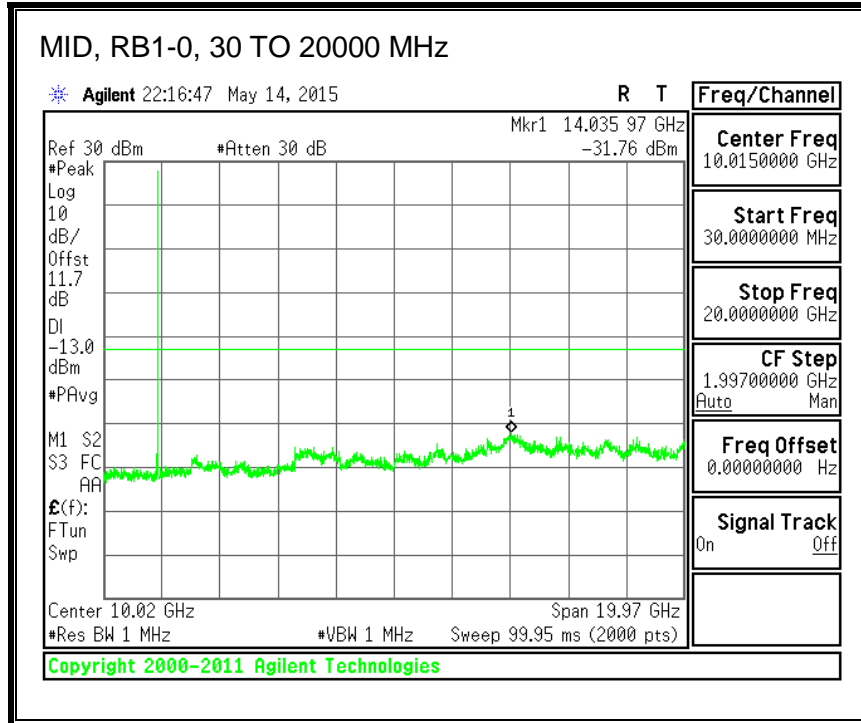
QPSK, (1.4 MHz BAND WIDTH)



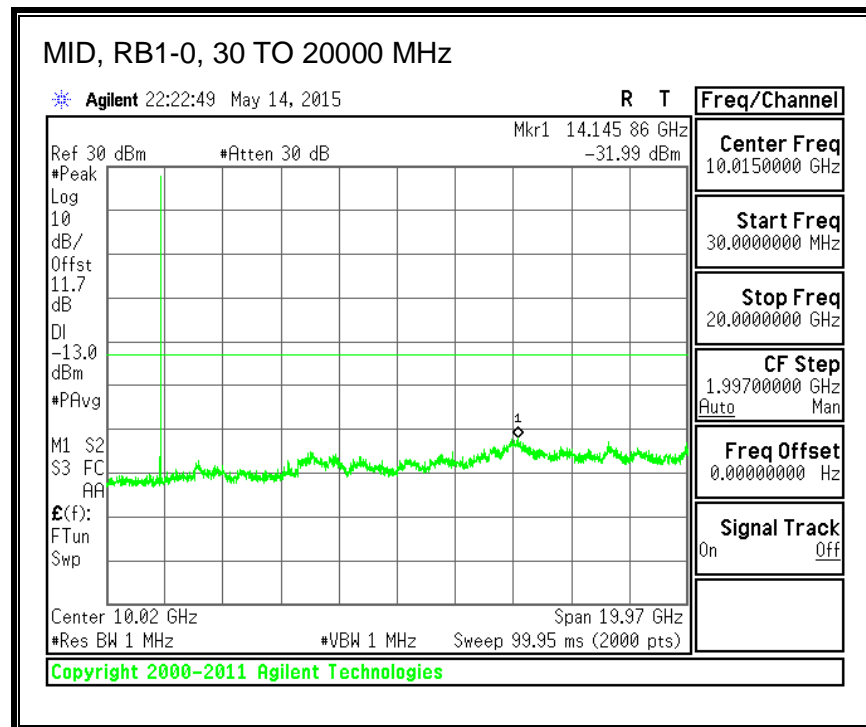
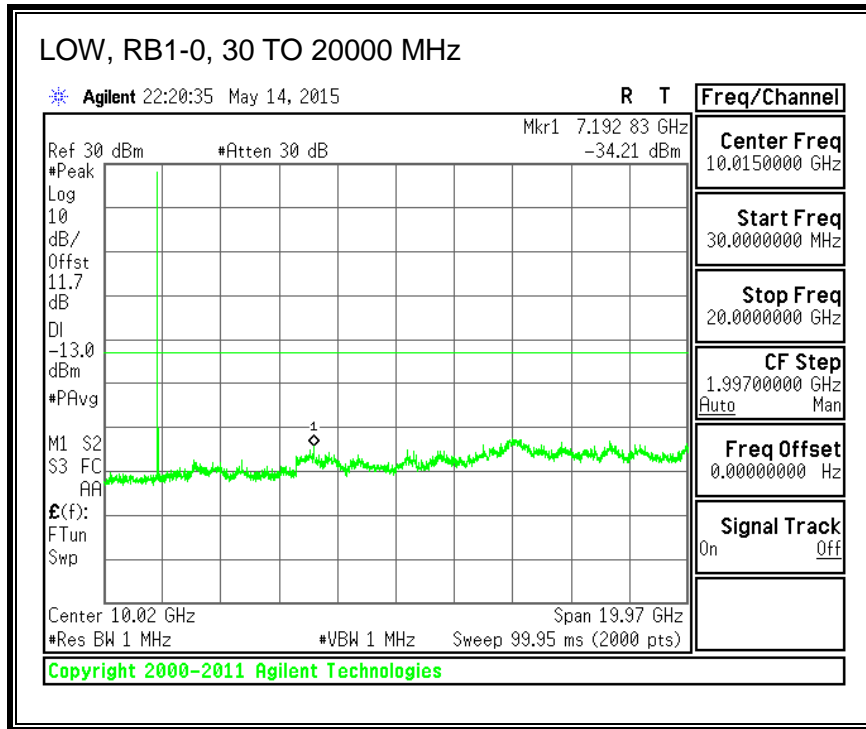


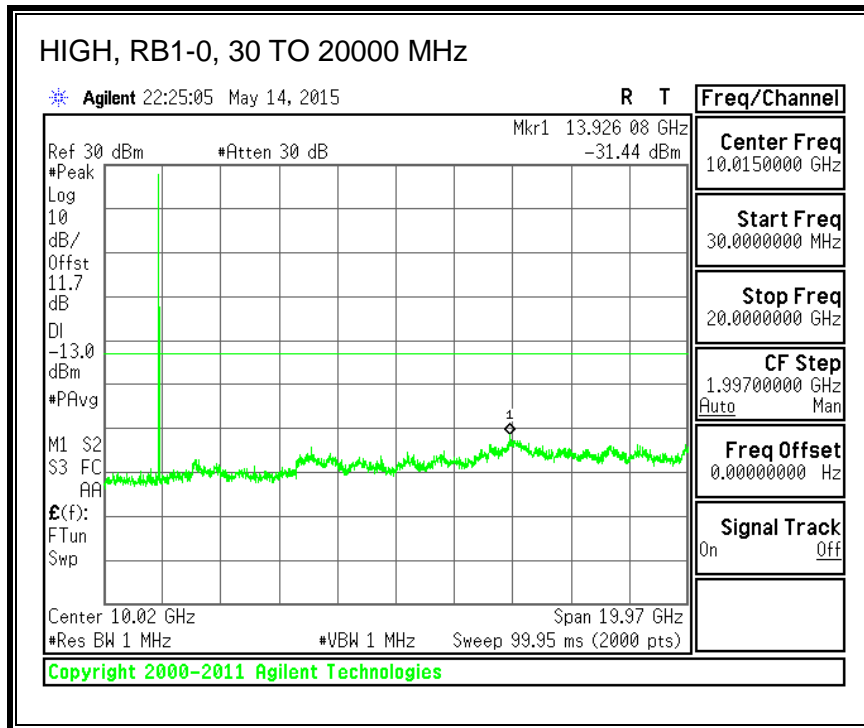
16QAM, (1.4 MHz BAND WIDTH)



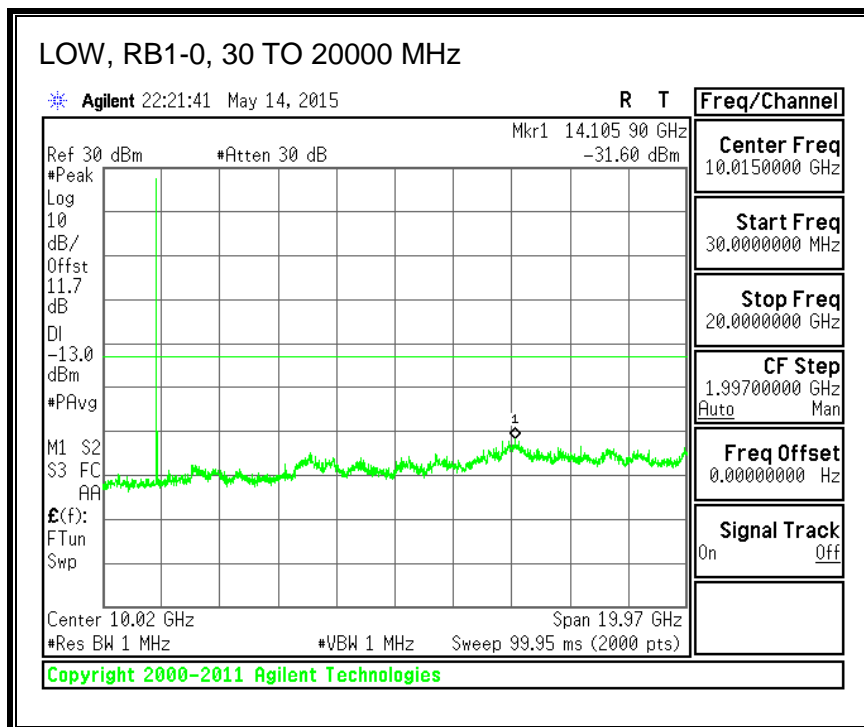


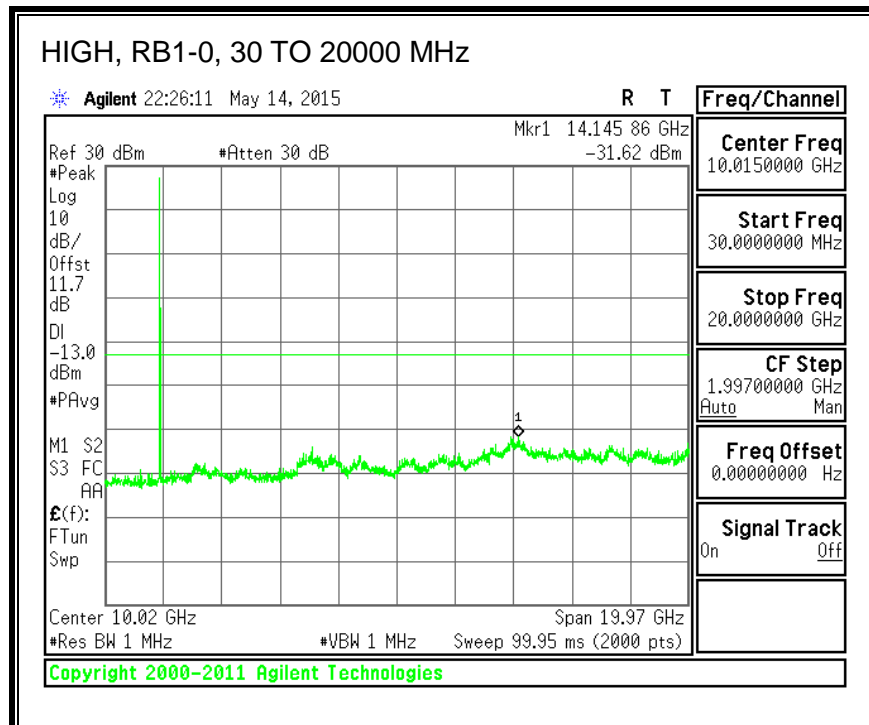
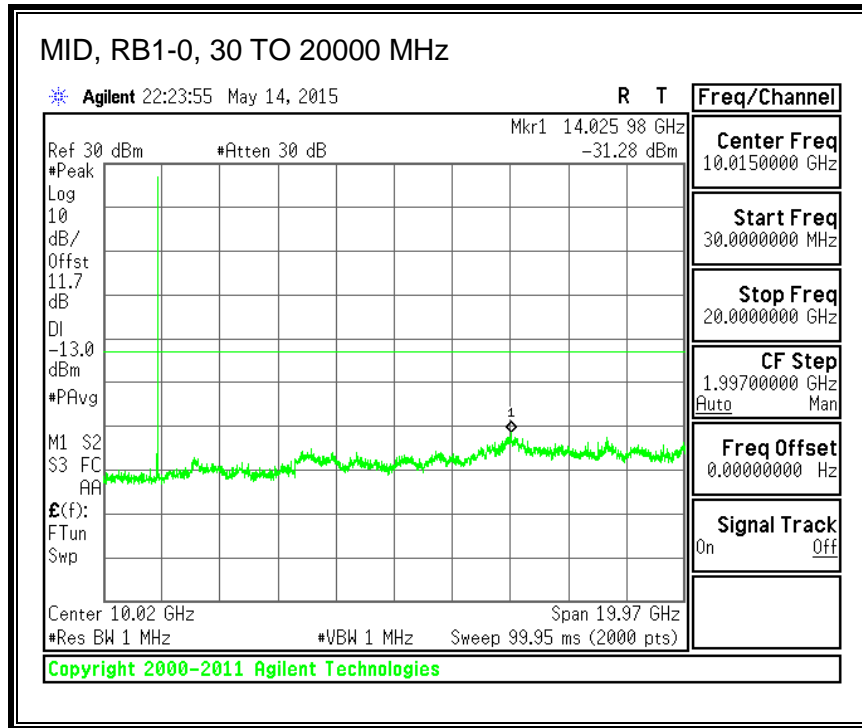
QPSK, (3.0 MHz BAND WIDTH)



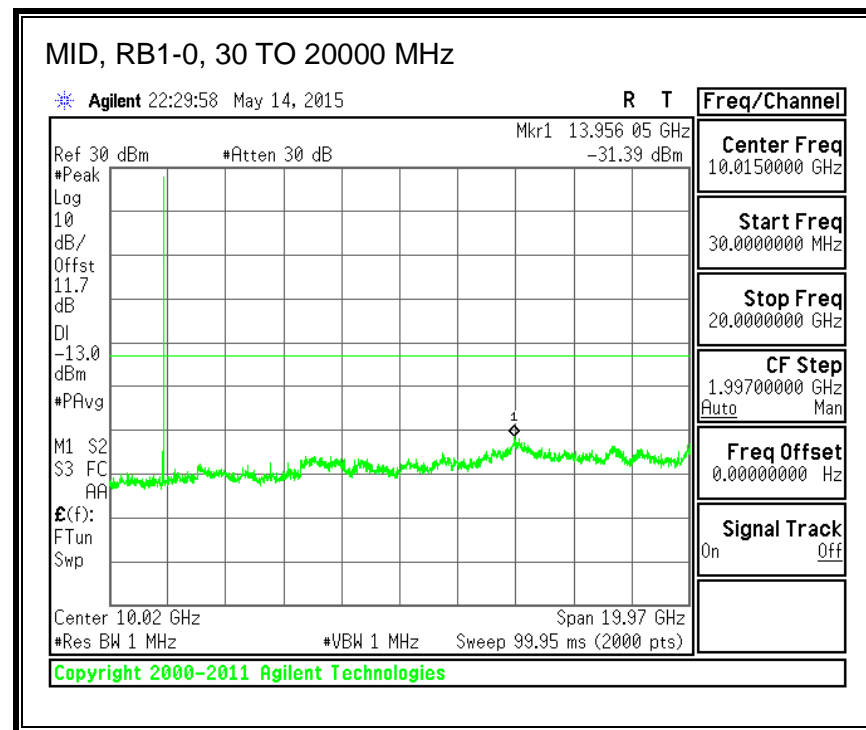
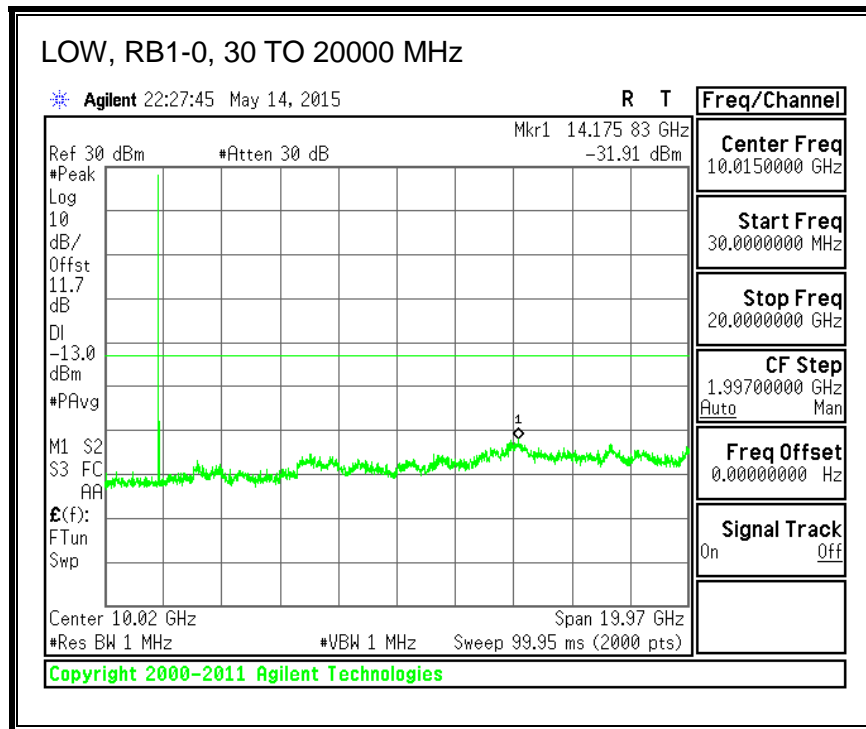


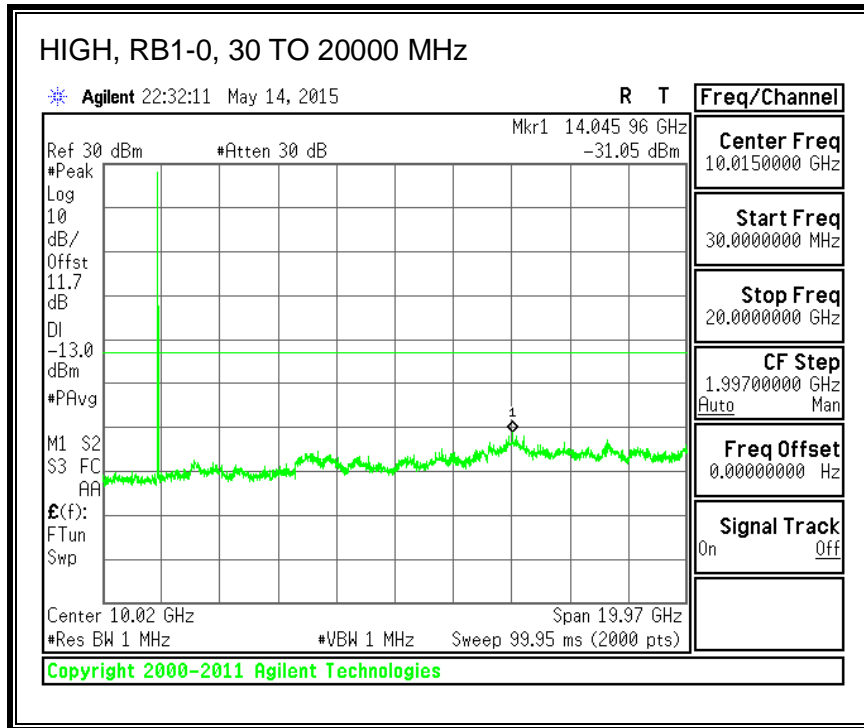
16QAM, (3.0 MHz BAND WIDTH)



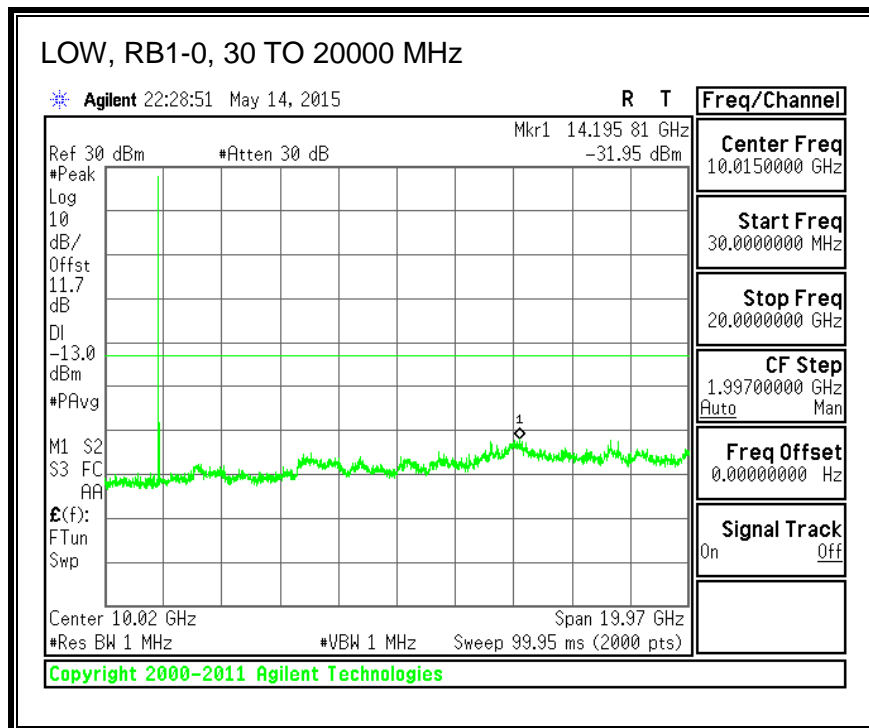


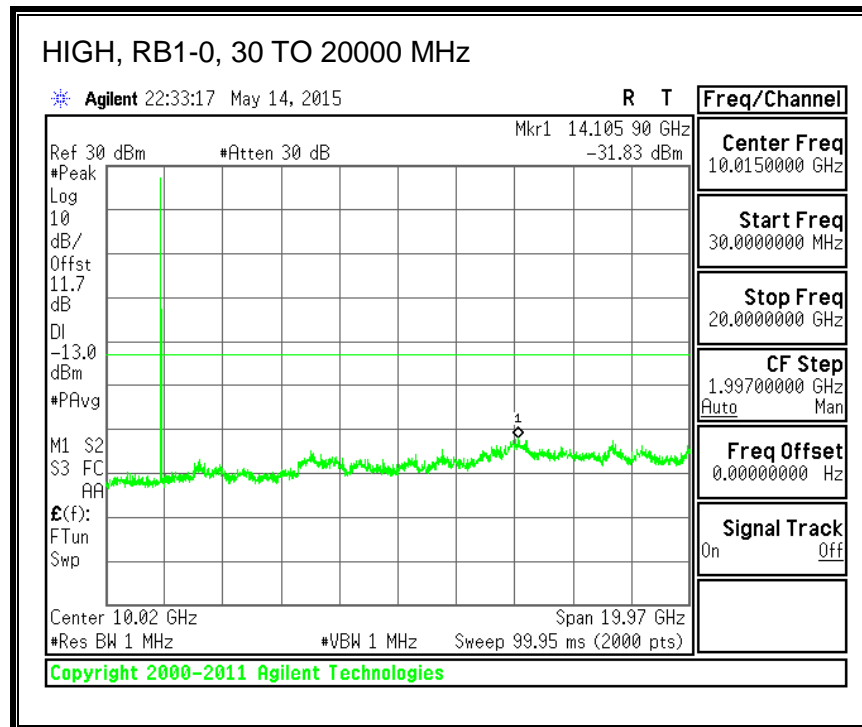
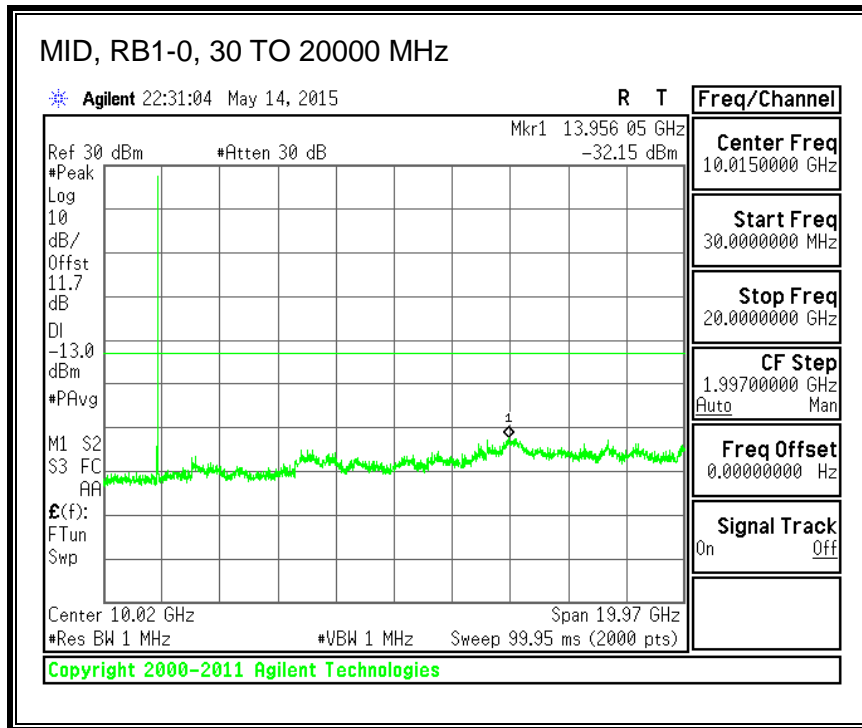
QPSK, (5.0 MHz BAND WIDTH)



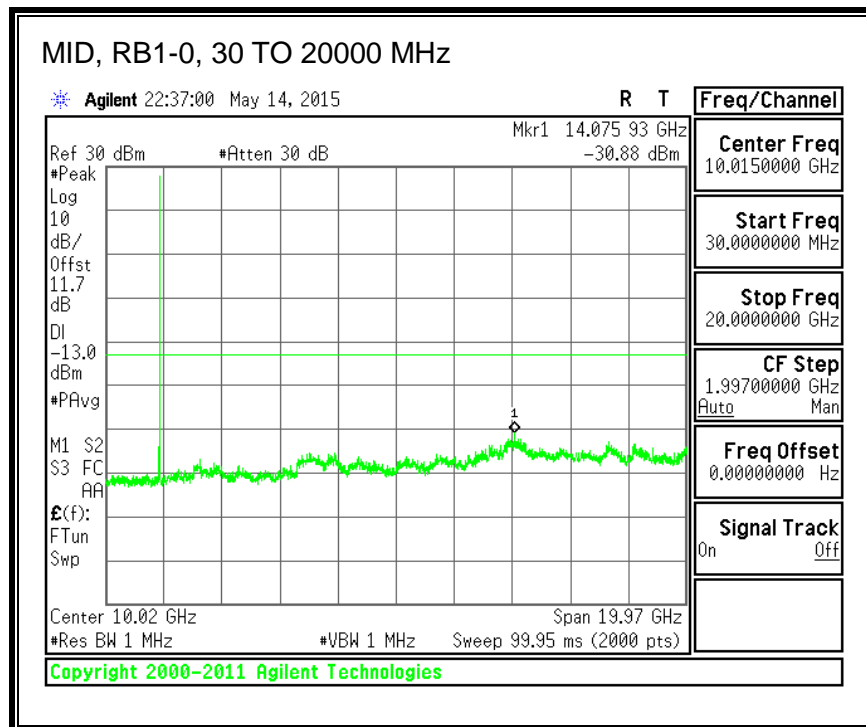
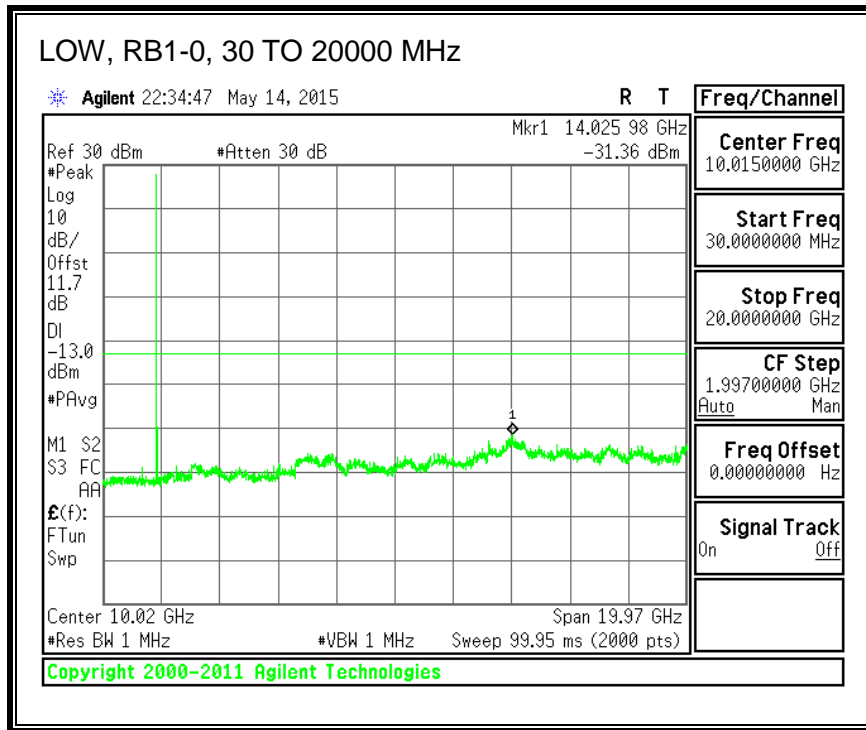


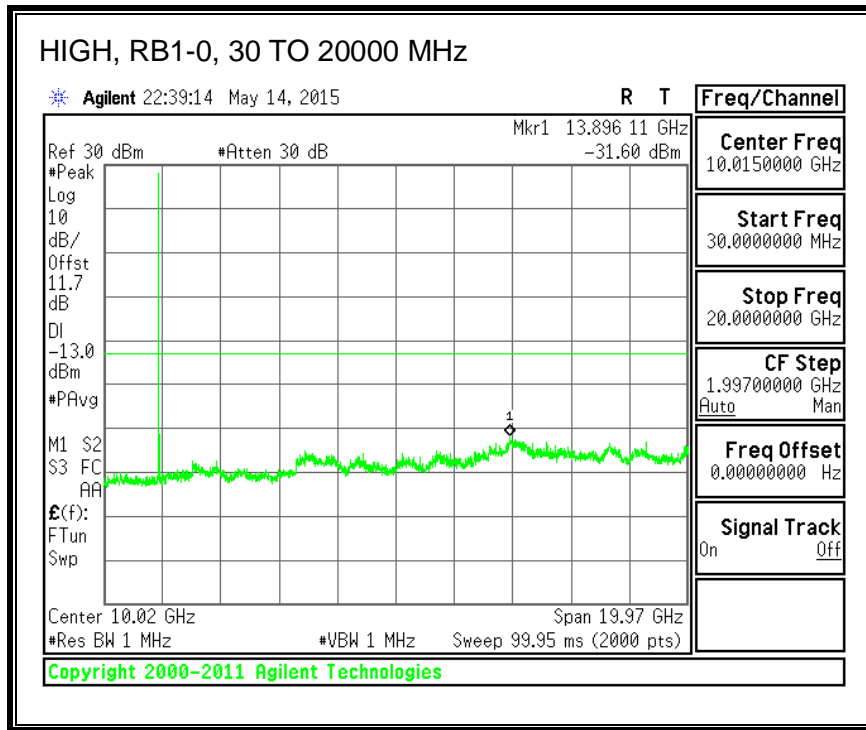
16QAM, (5.0 MHz BAND WIDTH)



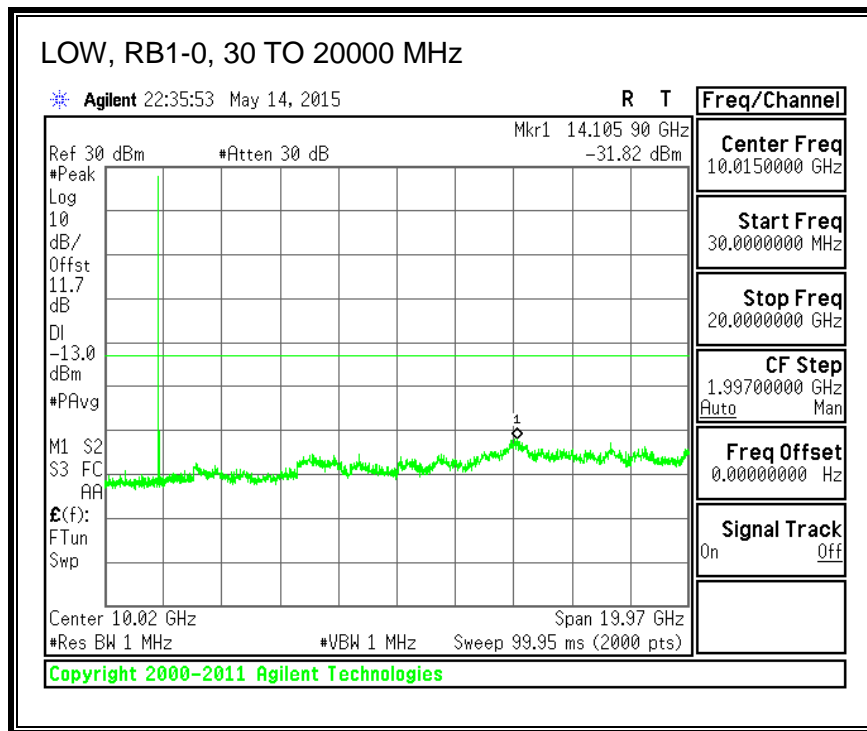


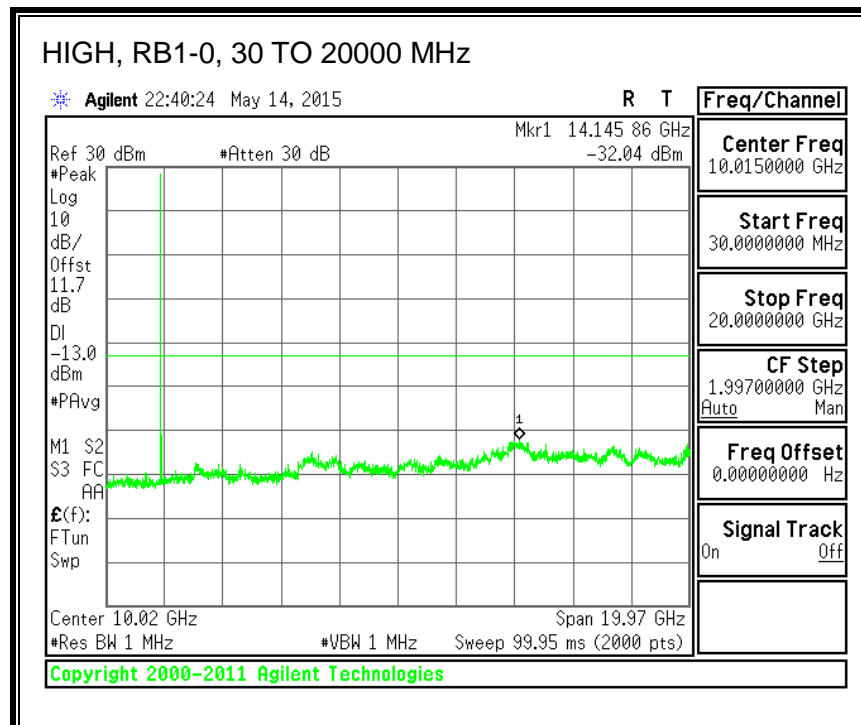
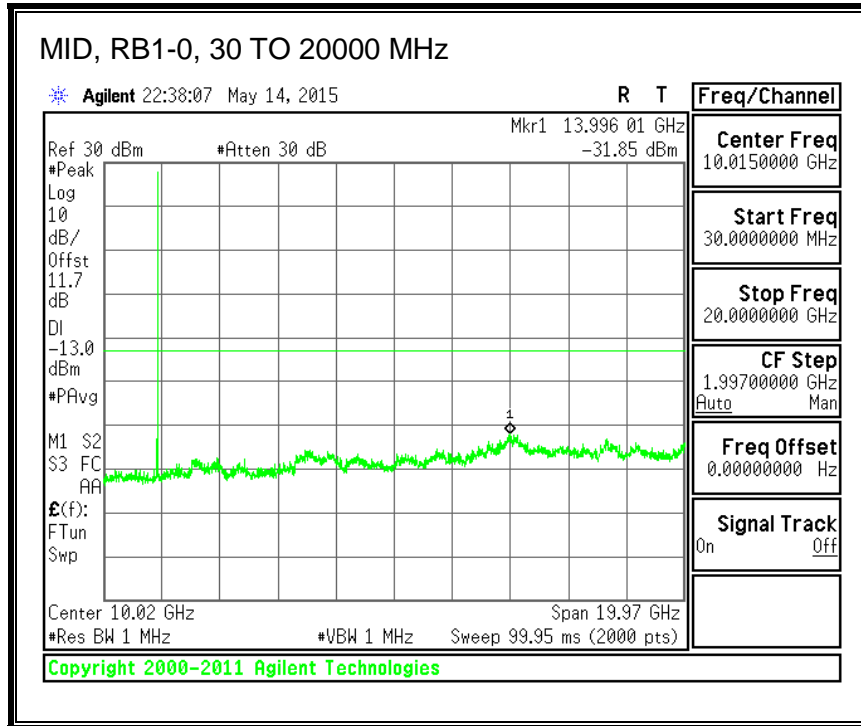
QPSK, (10.0 MHz BAND WIDTH)



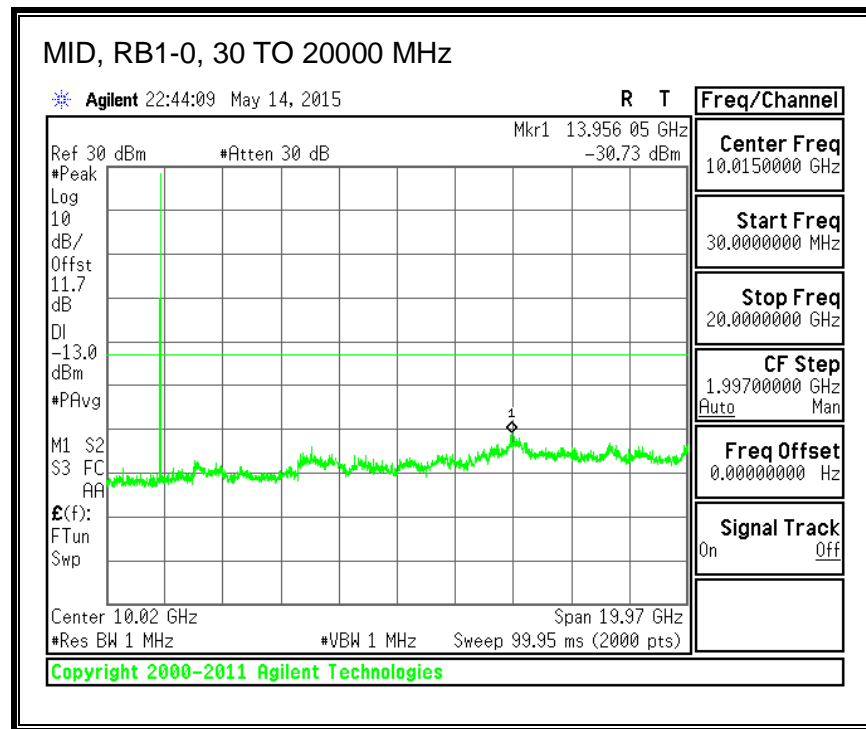
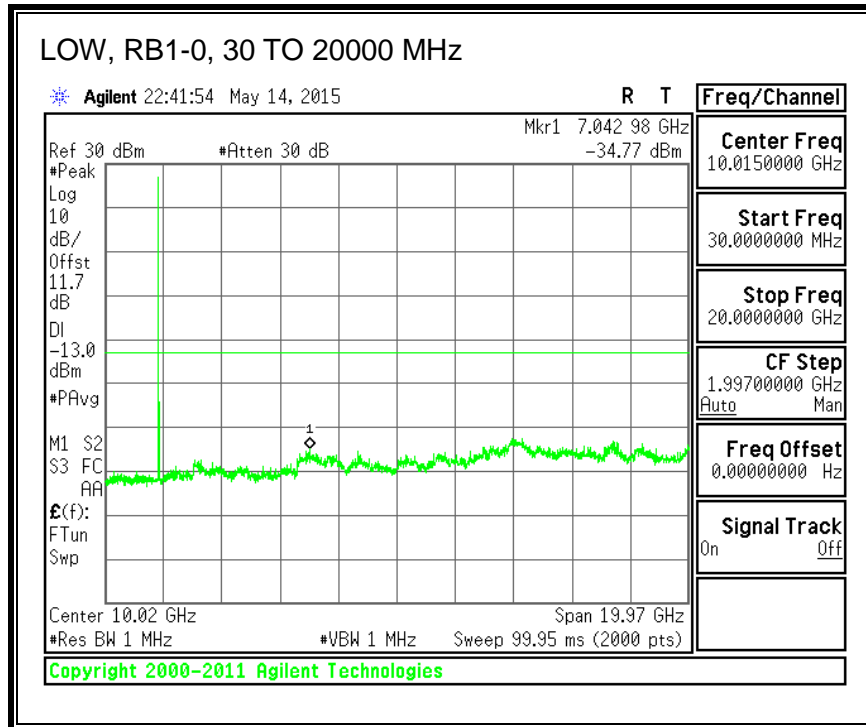


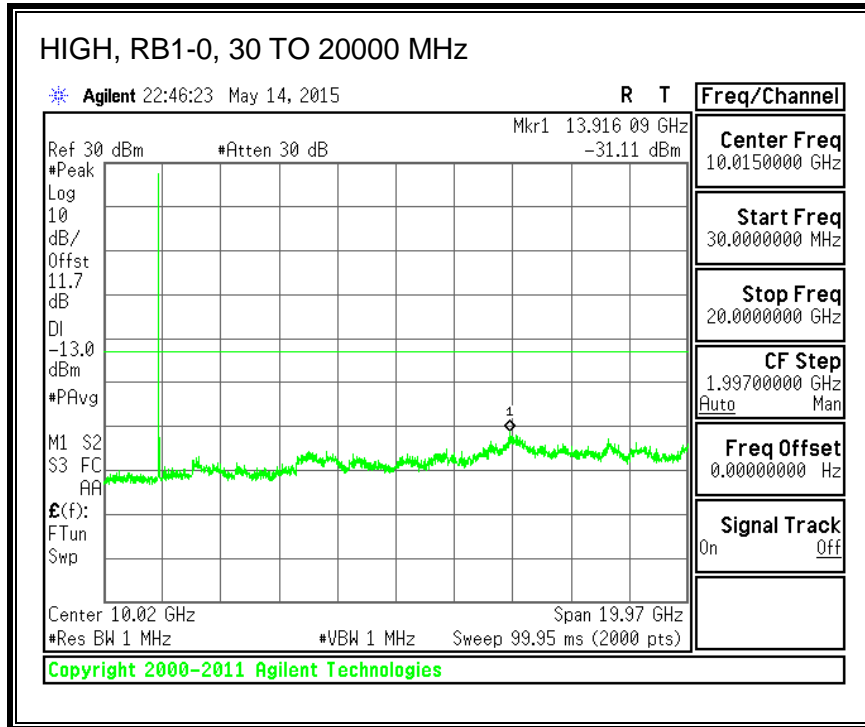
16QAM, (10.0 MHz BAND WIDTH)



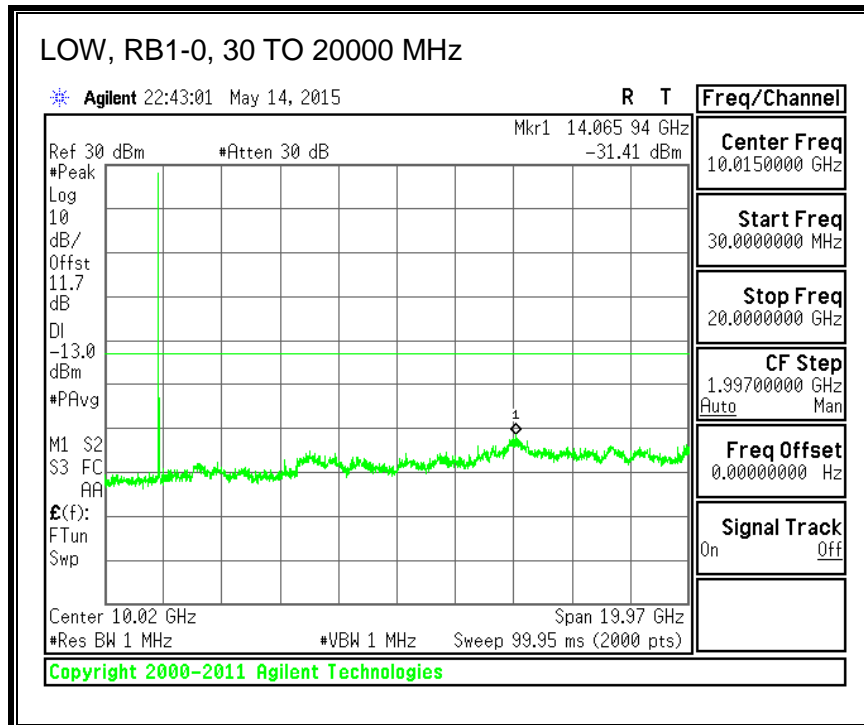


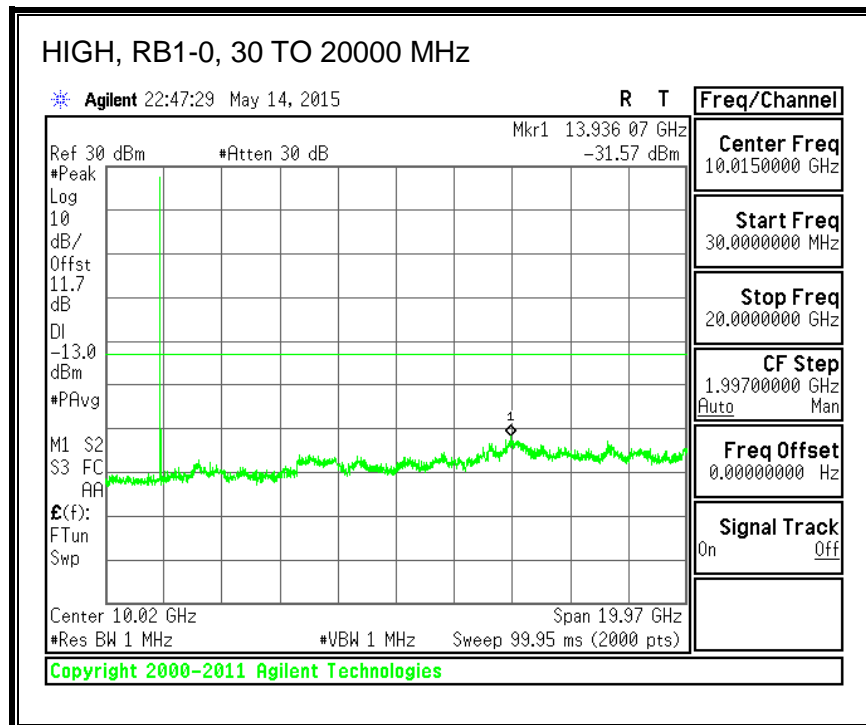
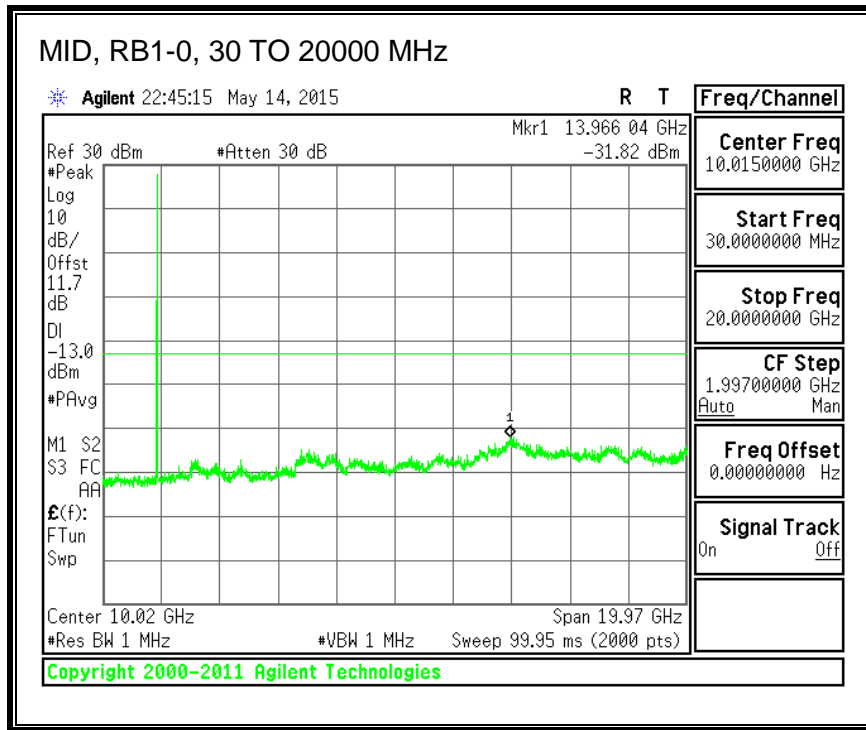
QPSK, (15.0 MHz BAND WIDTH)



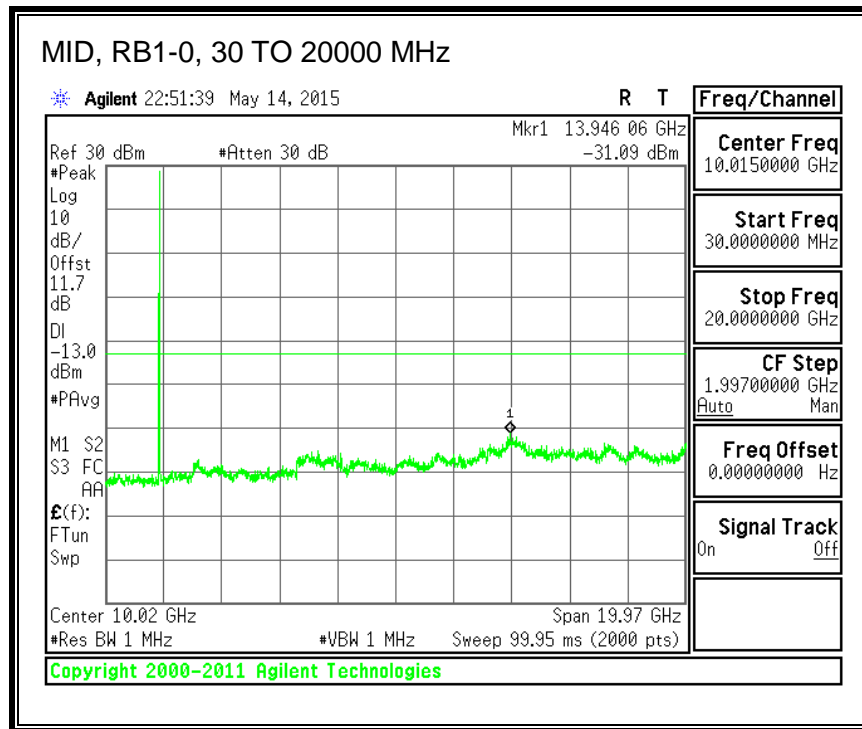
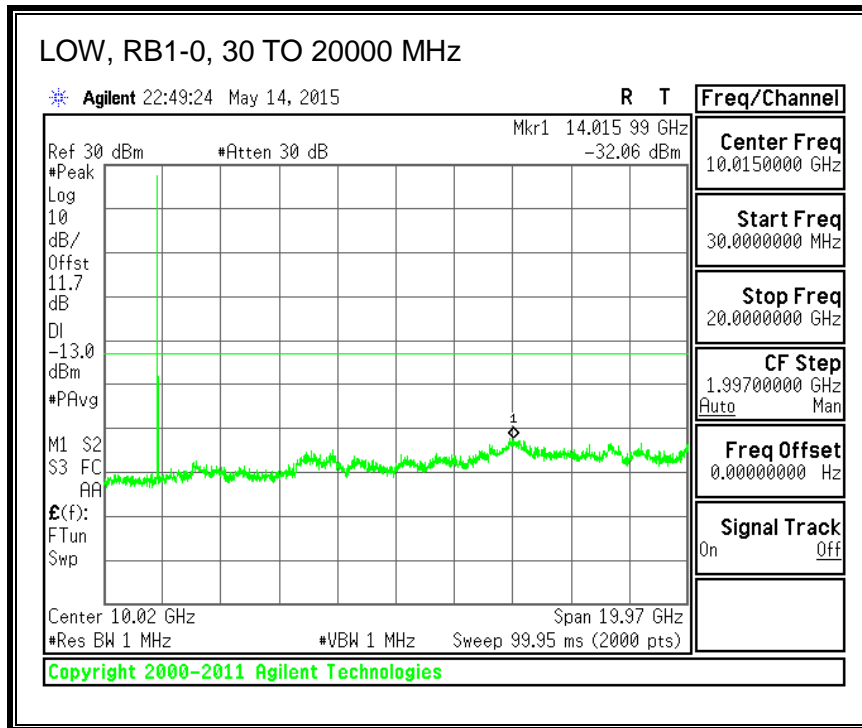


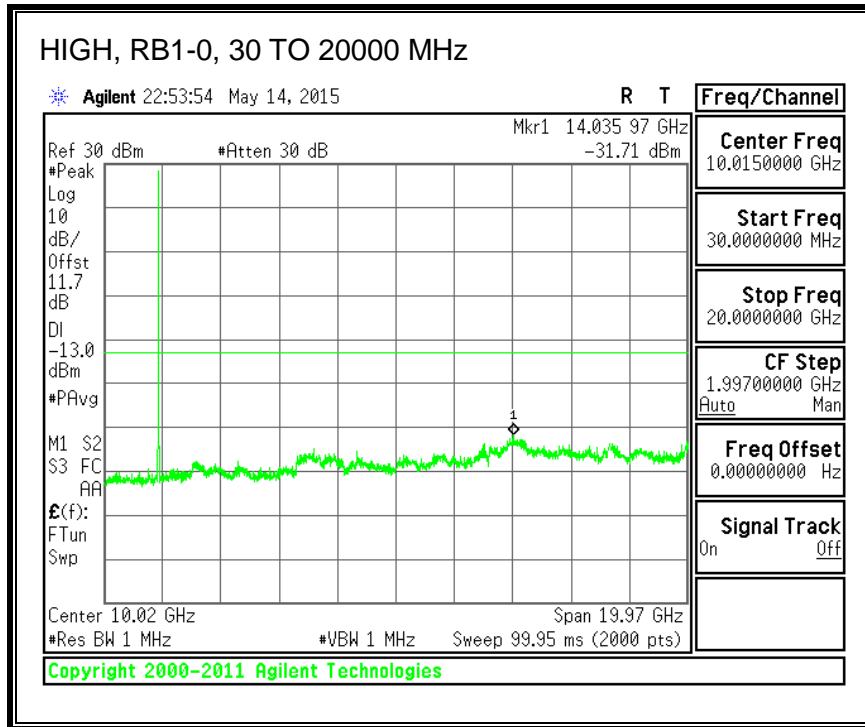
16QAM, (15.0 MHz BAND WIDTH)



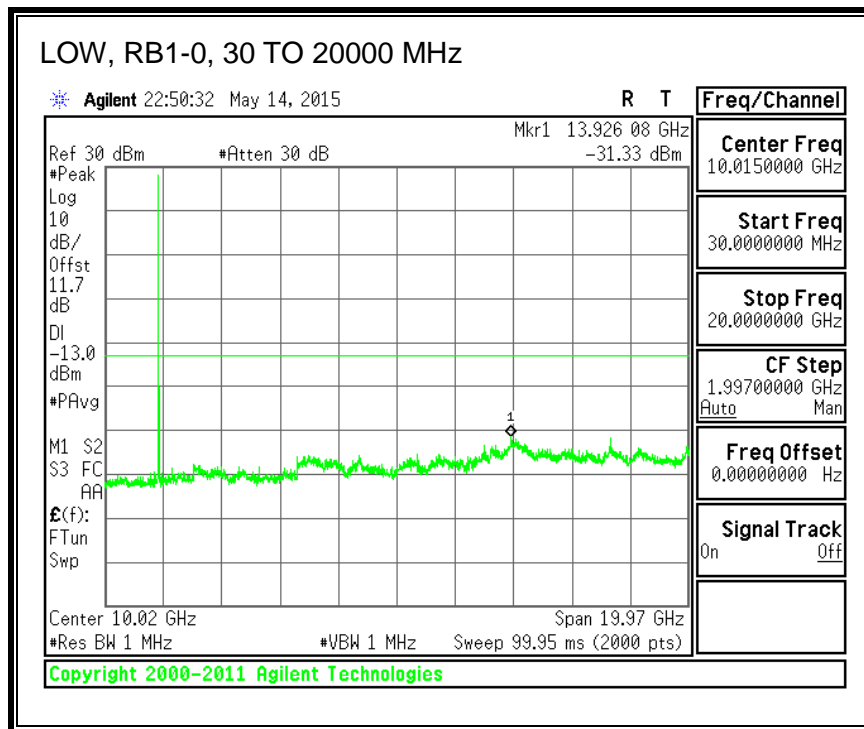


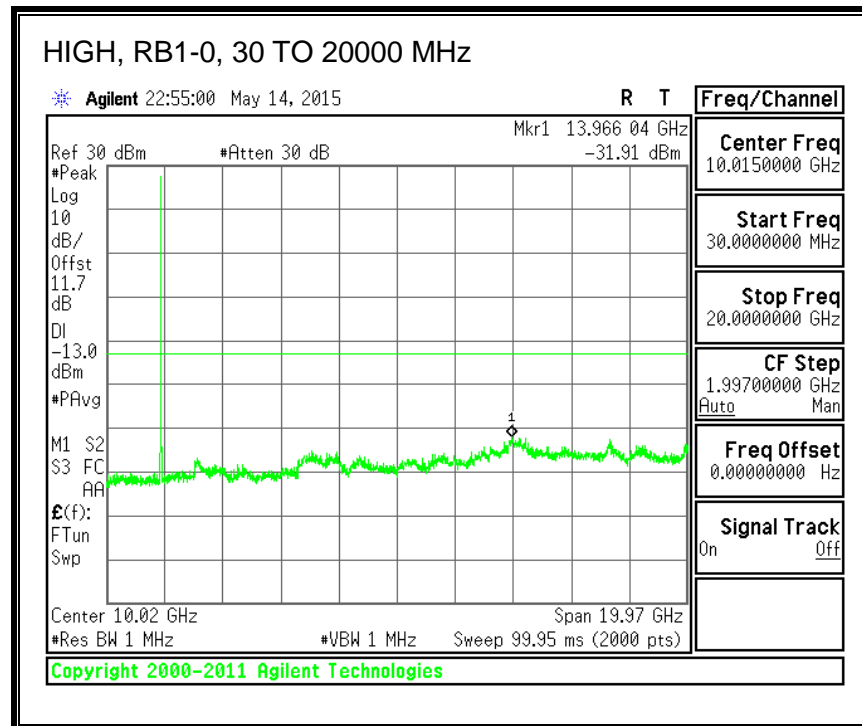
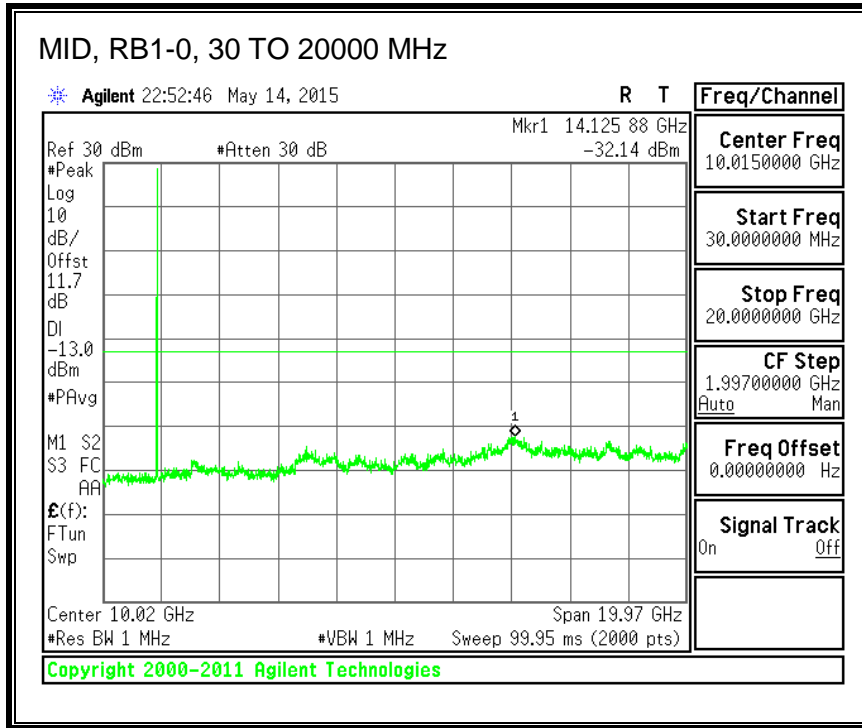
QPSK, (20.0 MHz BAND WIDTH)





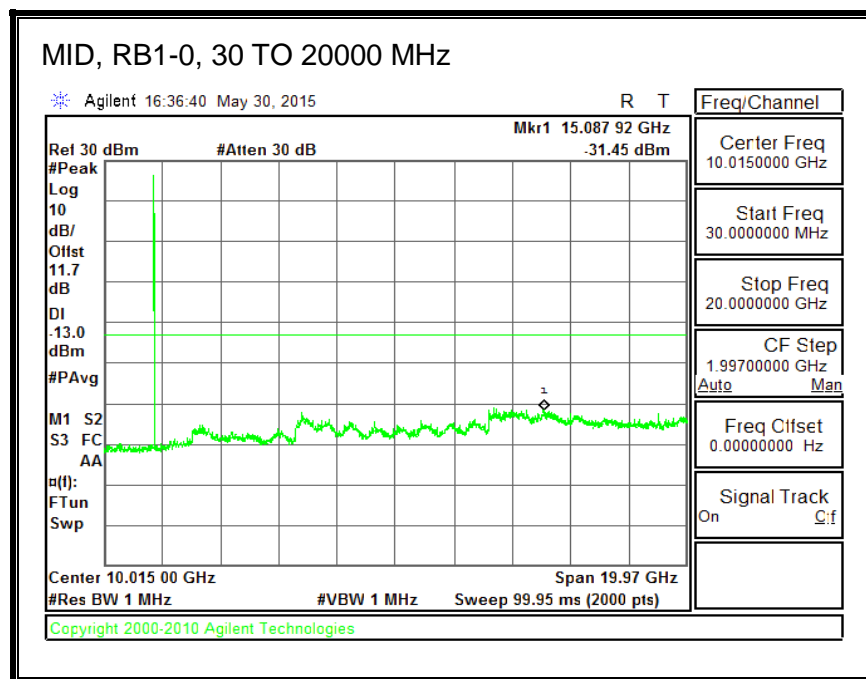
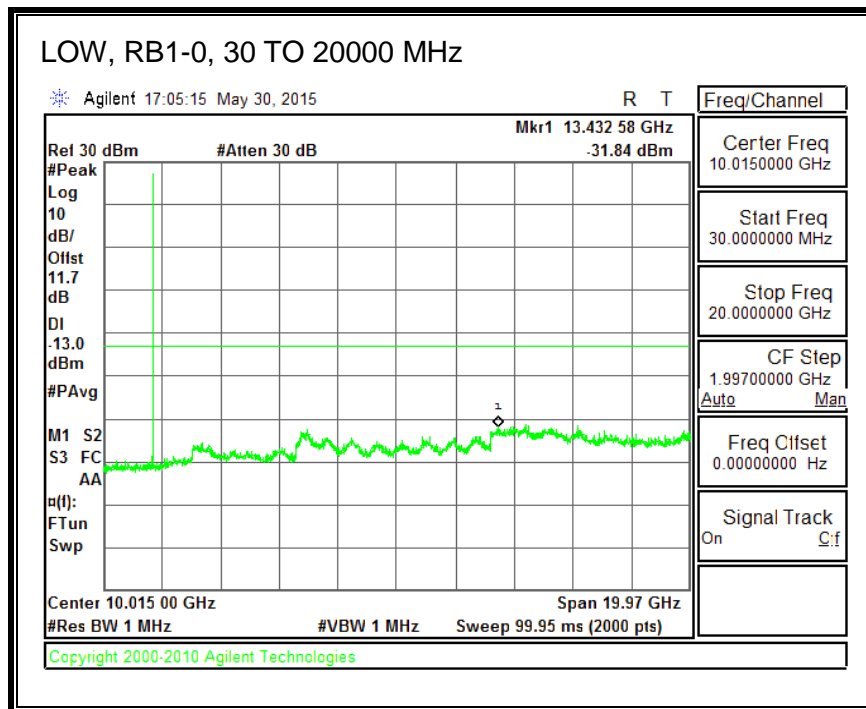
16QAM, (20.0 MHz BAND WIDTH)

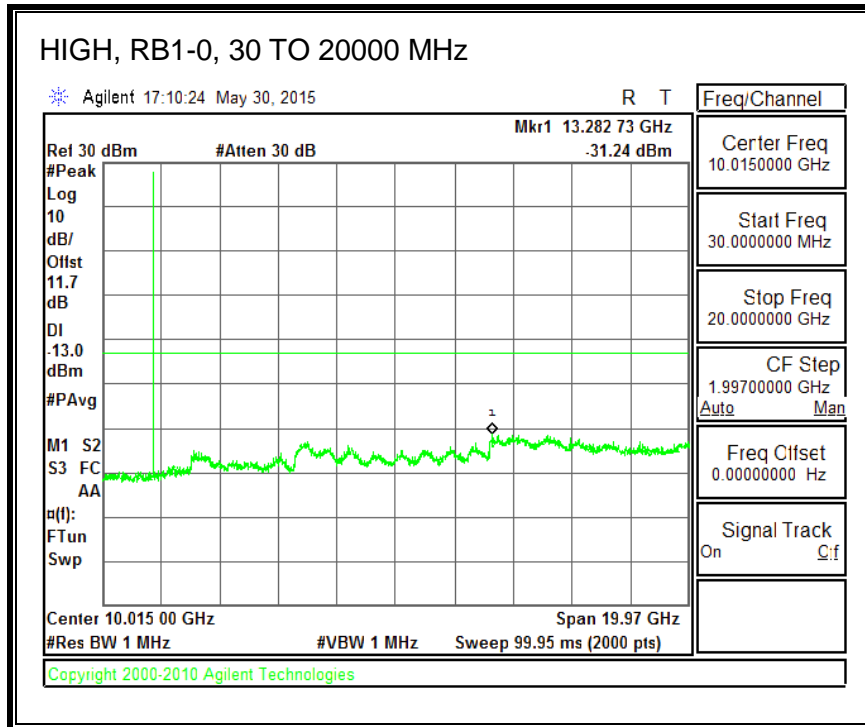




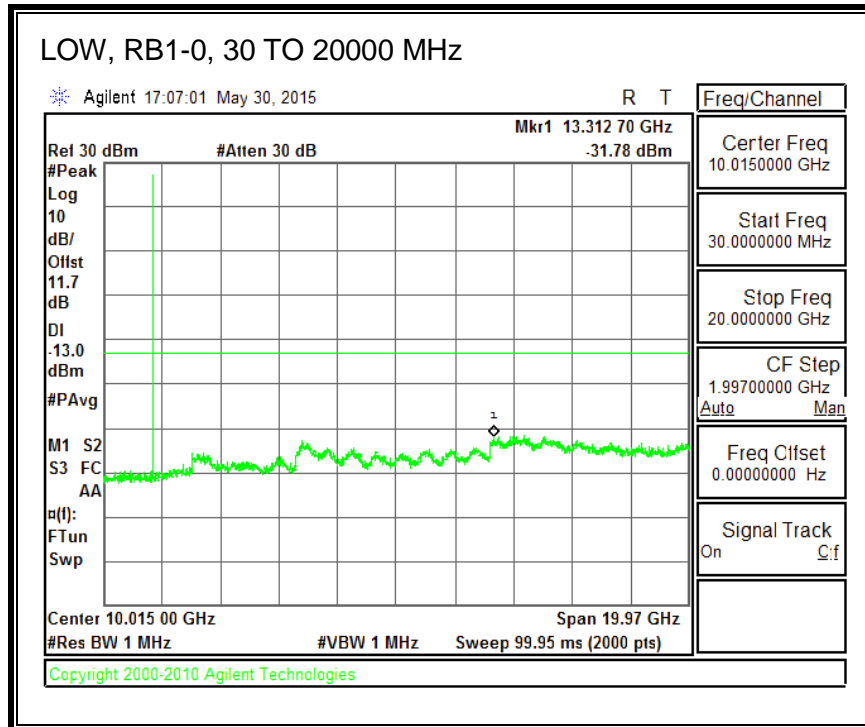
8.6.2. LTE BAND 4

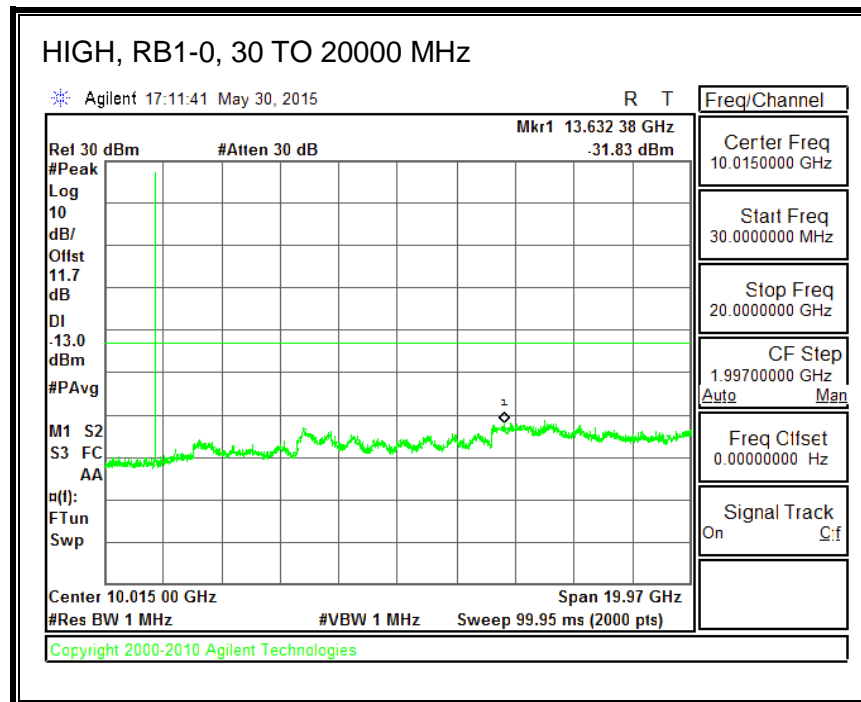
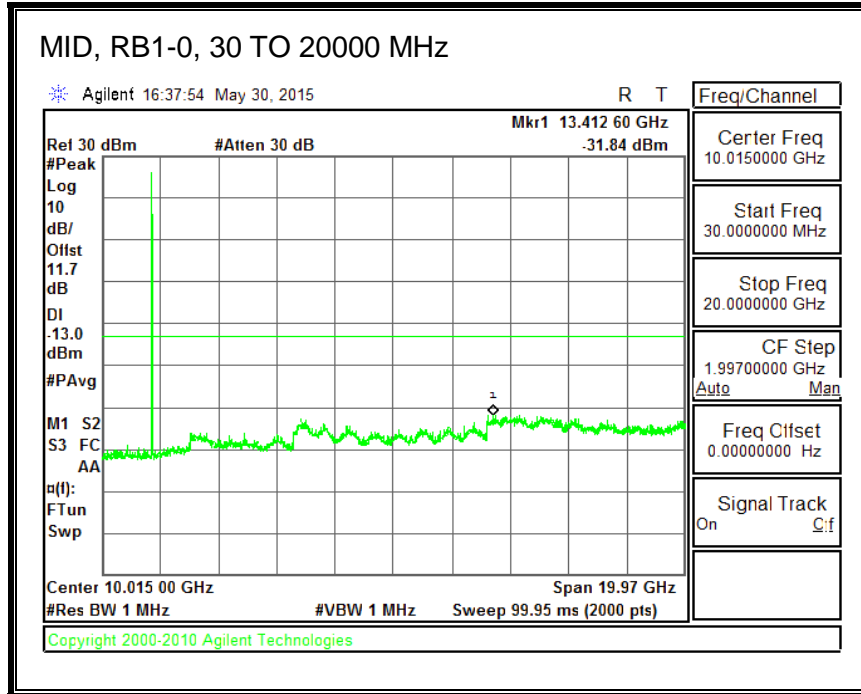
QPSK, (1.4 MHz BAND WIDTH)



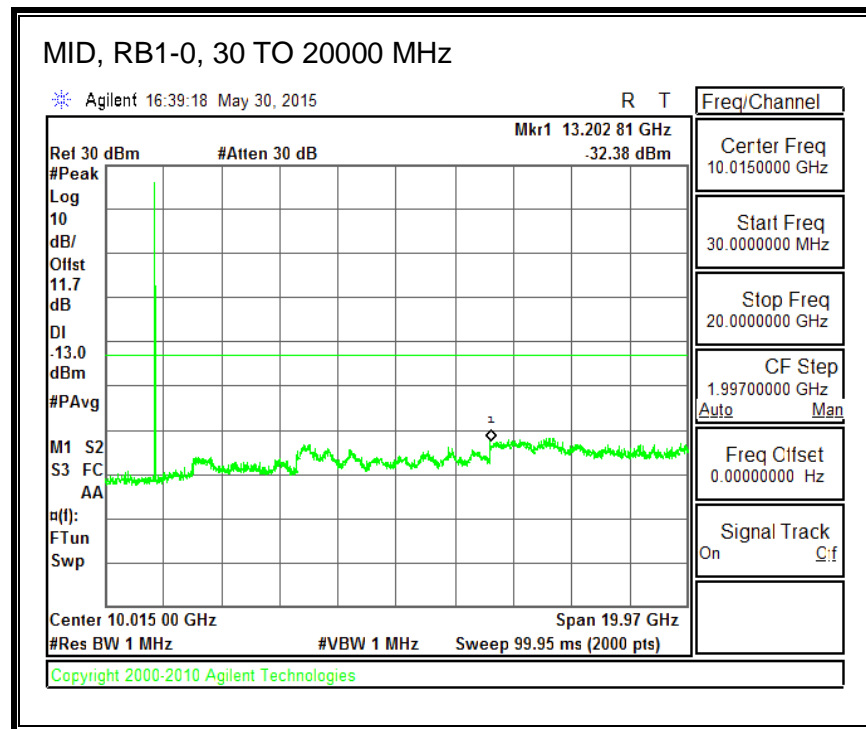
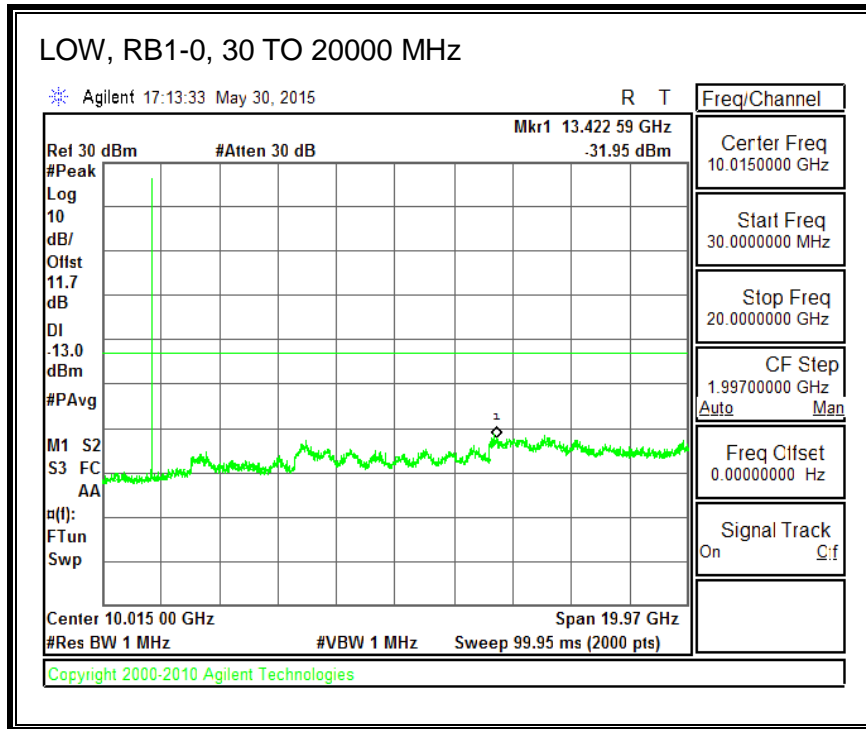


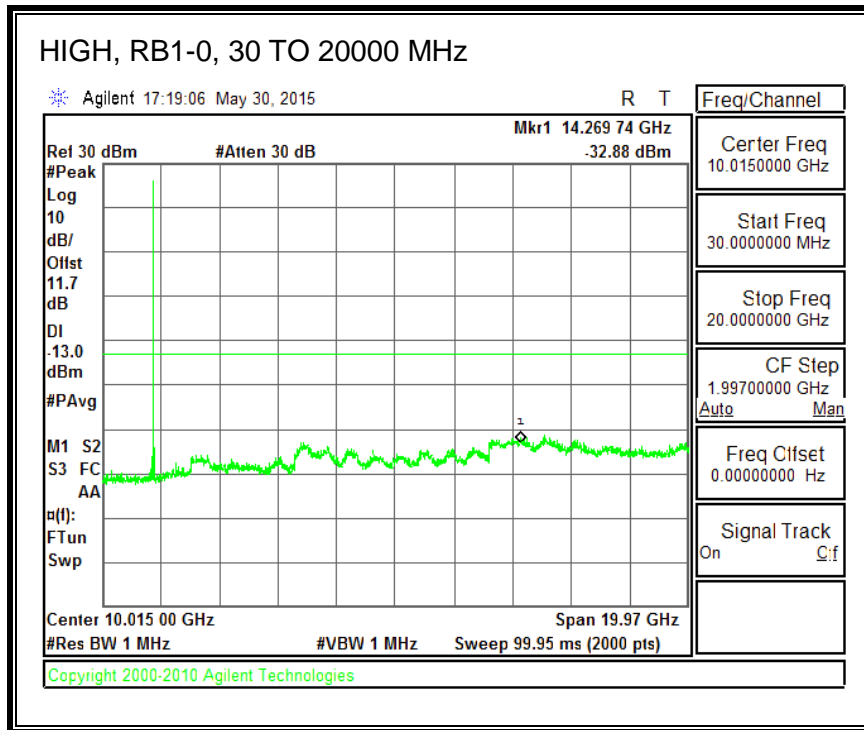
16QAM, (1.4 MHz BAND WIDTH)



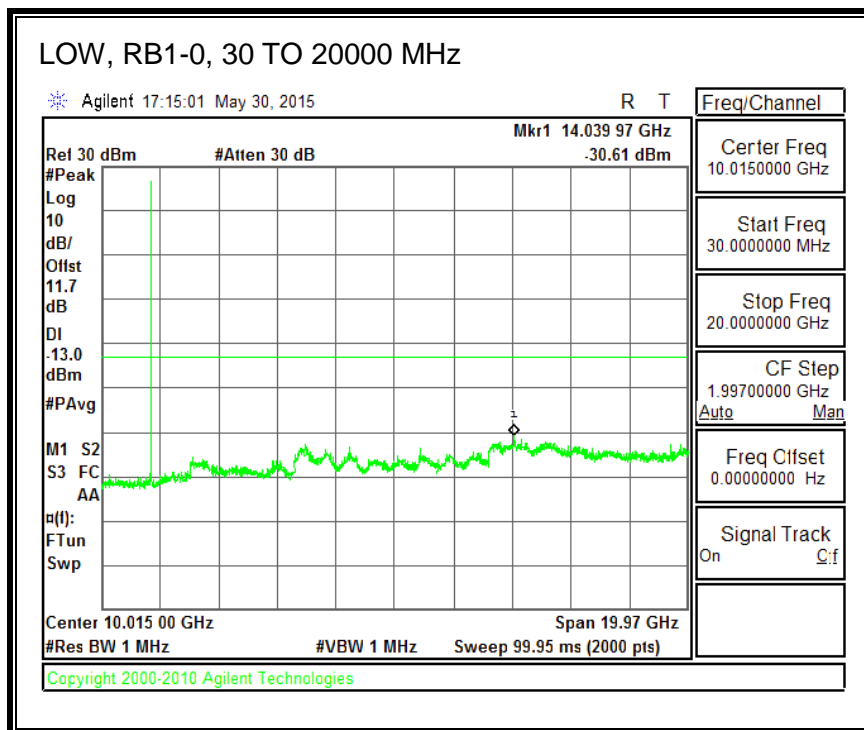


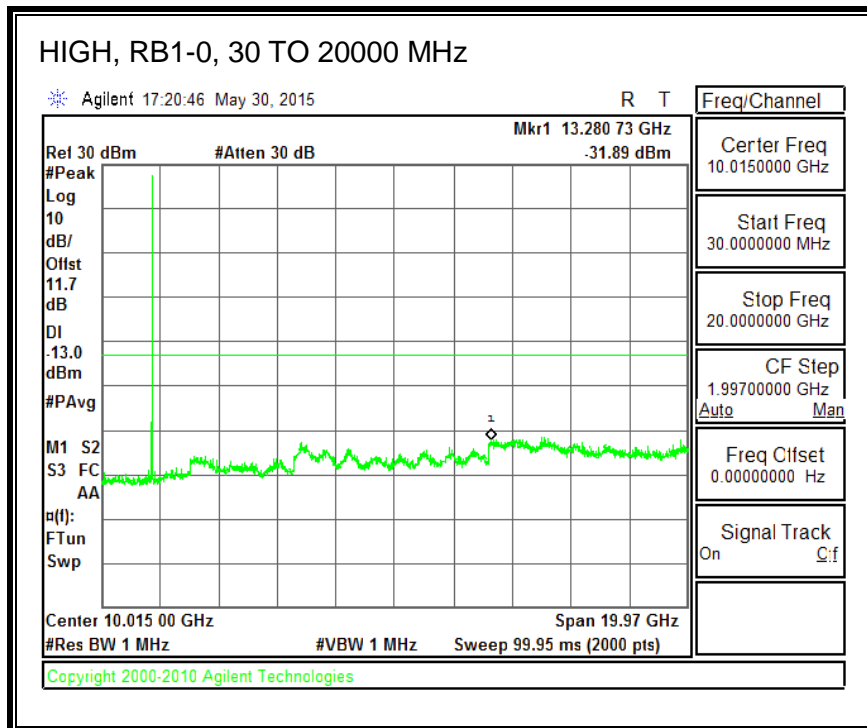
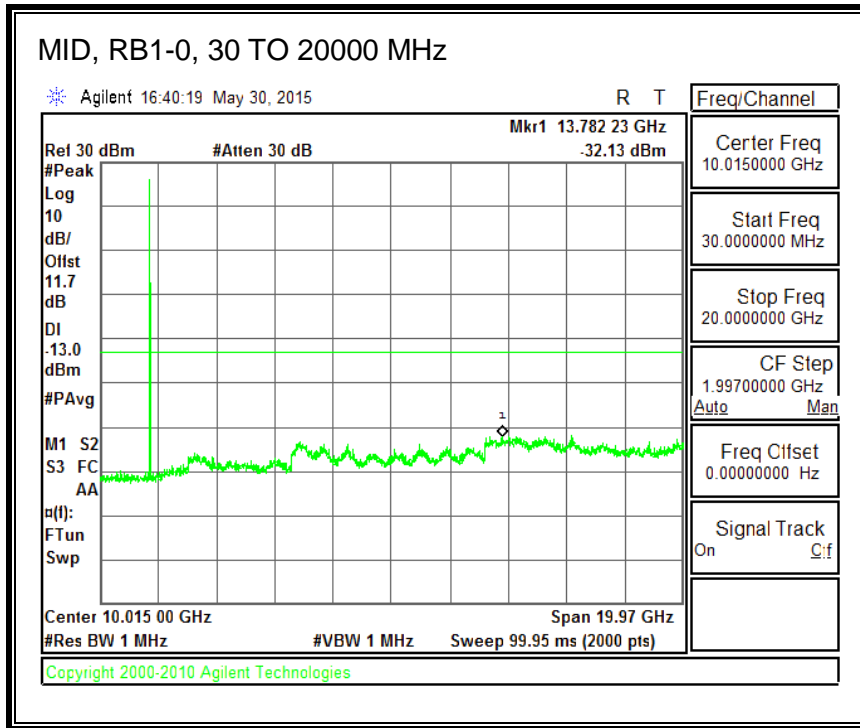
QPSK, (3.0 MHz BAND WIDTH)



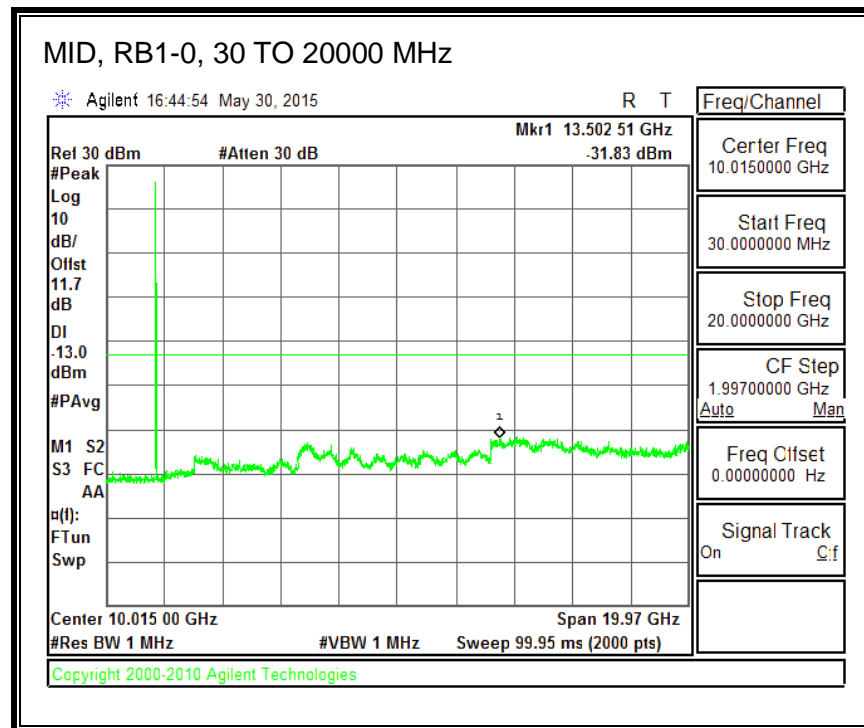
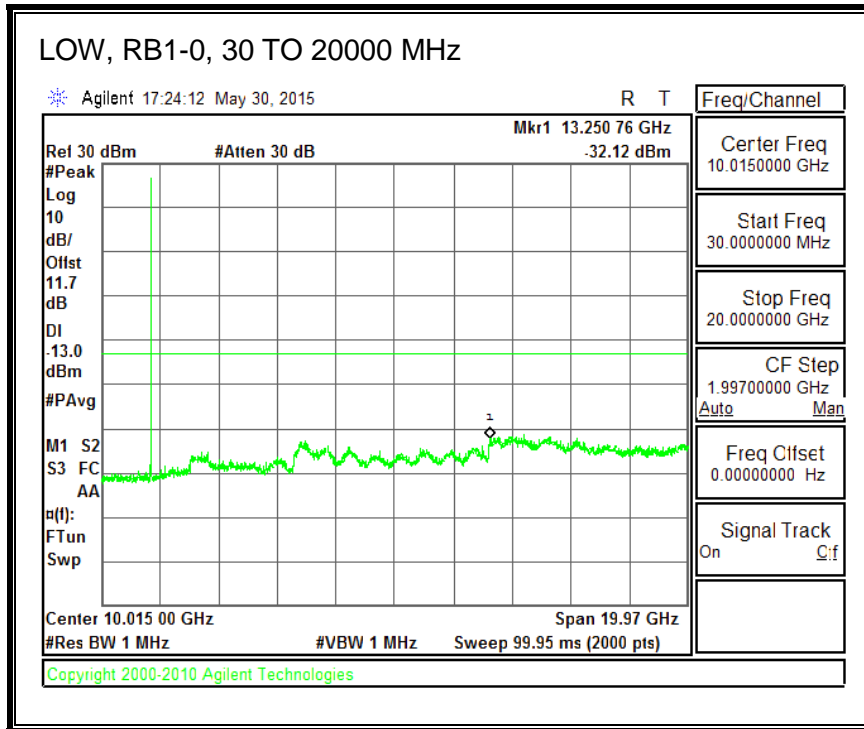


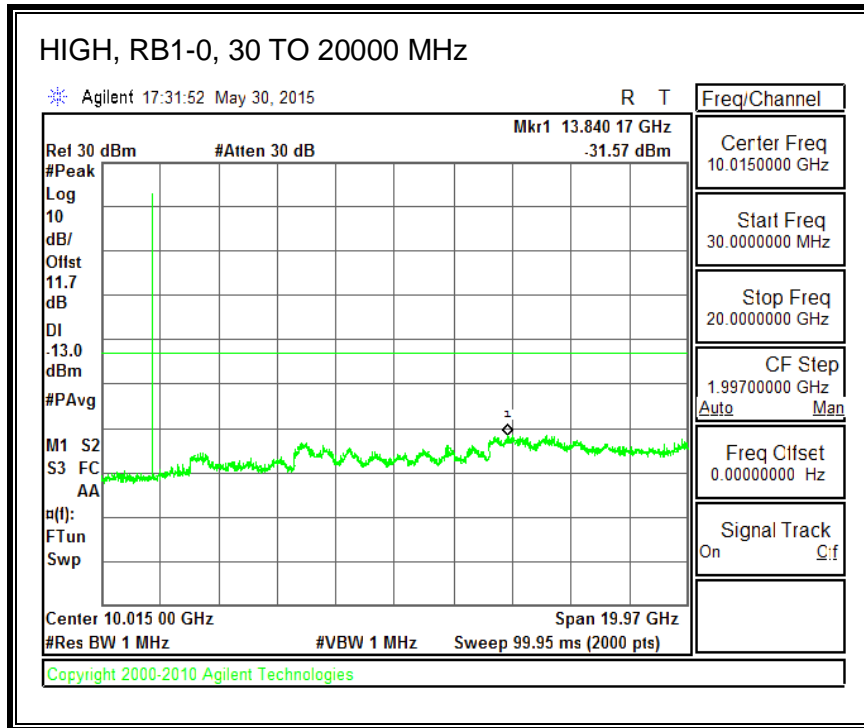
16QAM, (3.0 MHz BAND WIDTH)



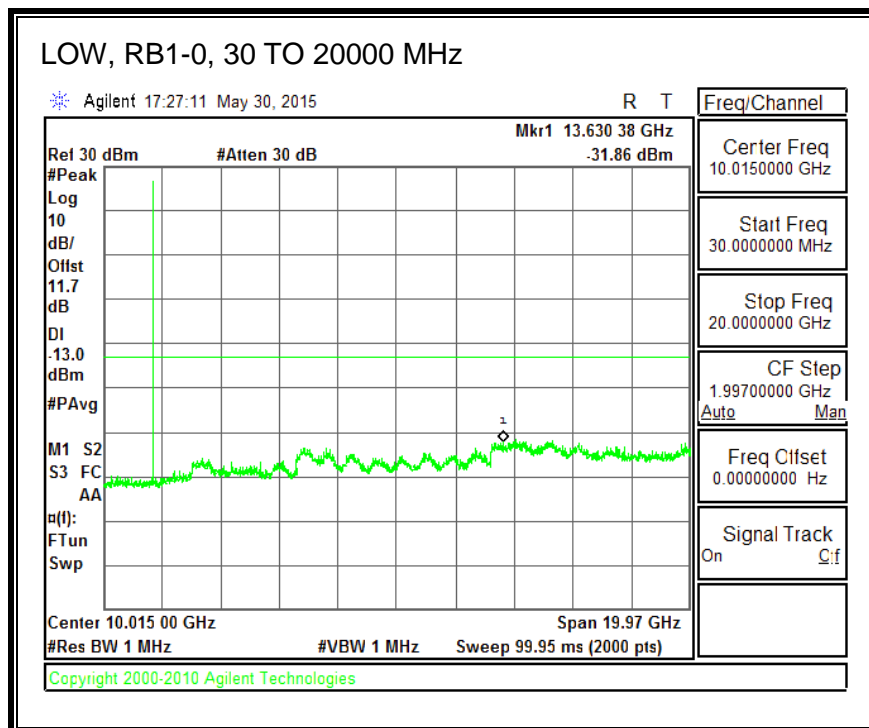


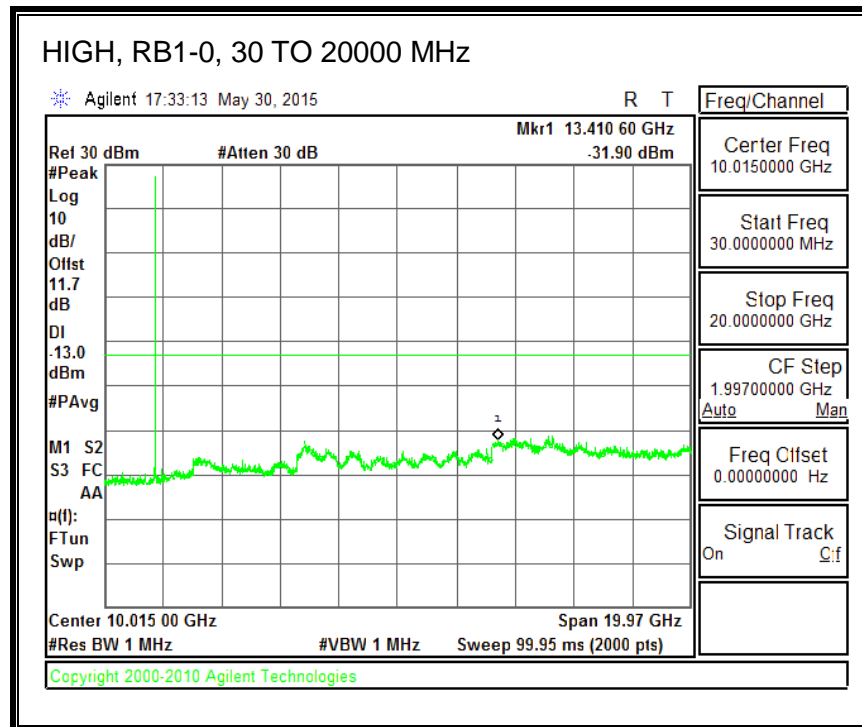
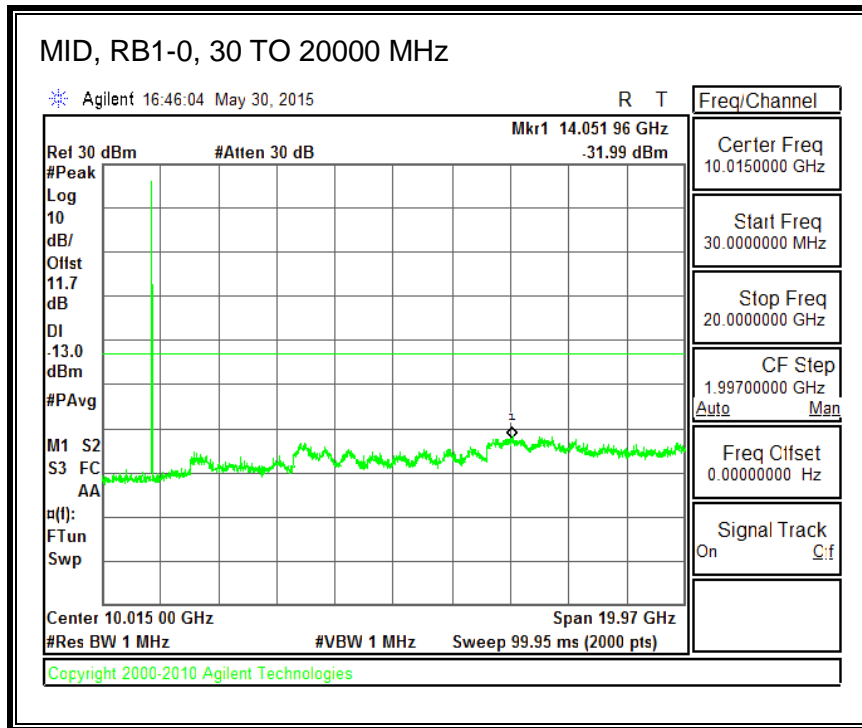
QPSK, (5.0 MHz BAND WIDTH)



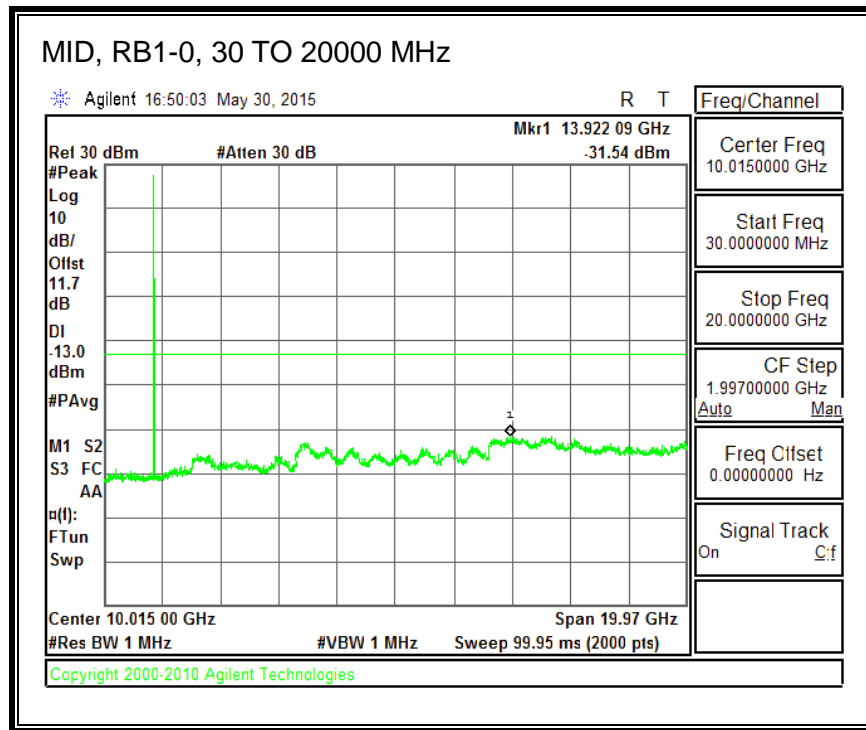
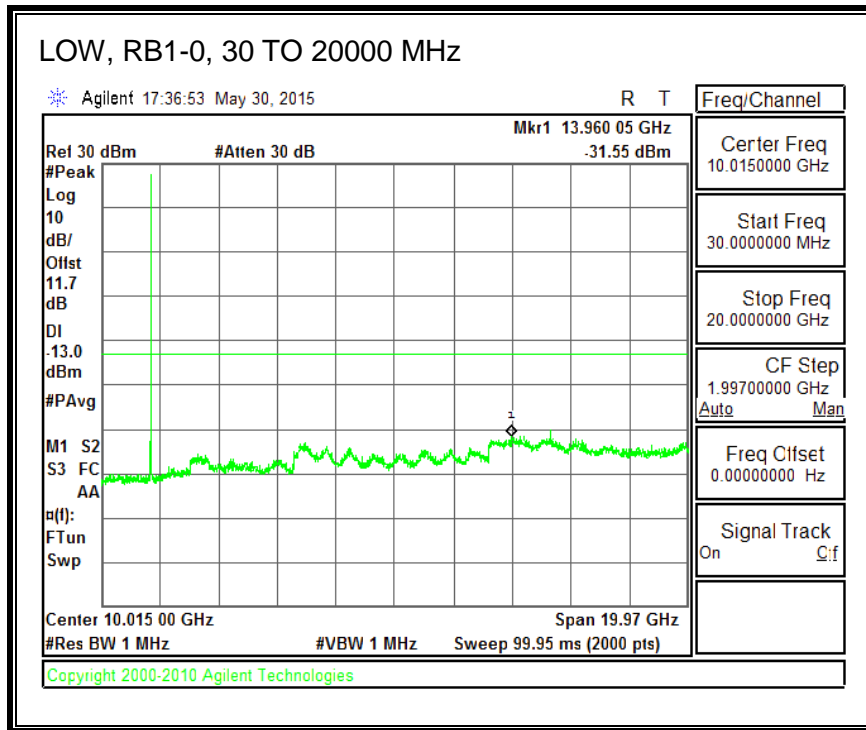


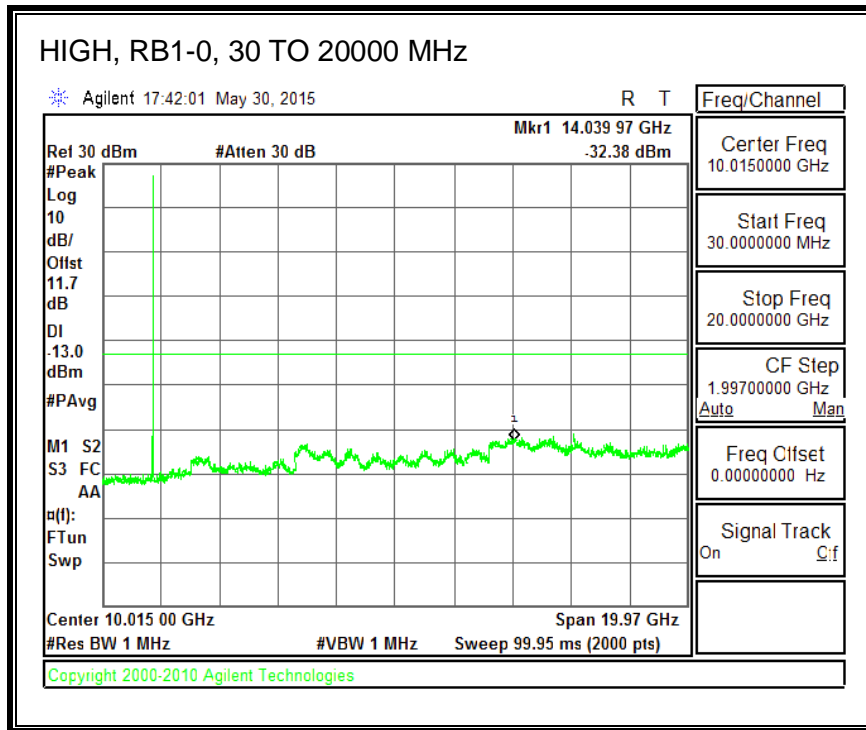
16QAM, (5.0 MHz BAND WIDTH)



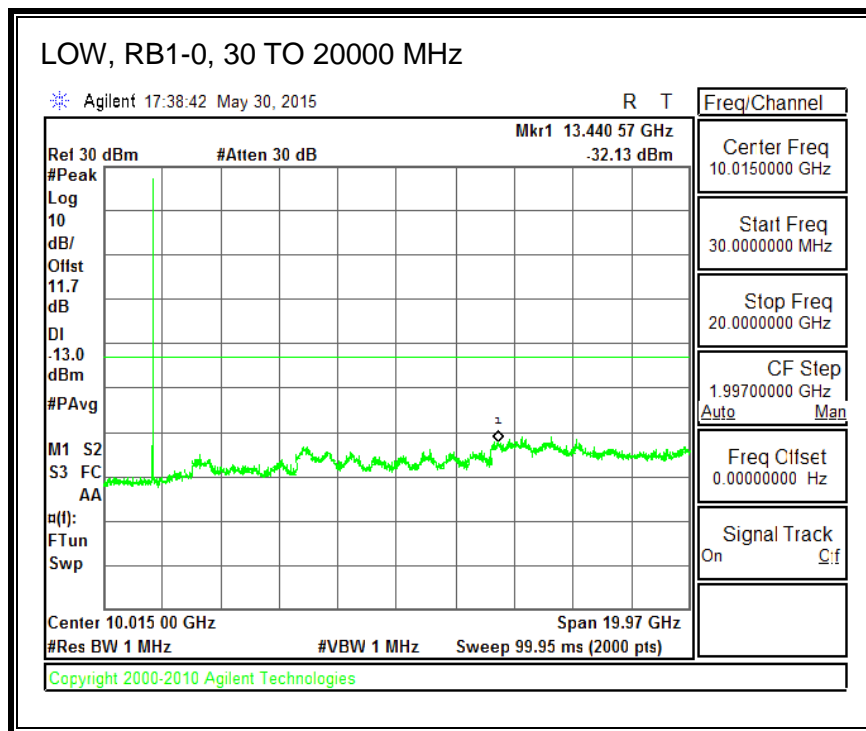


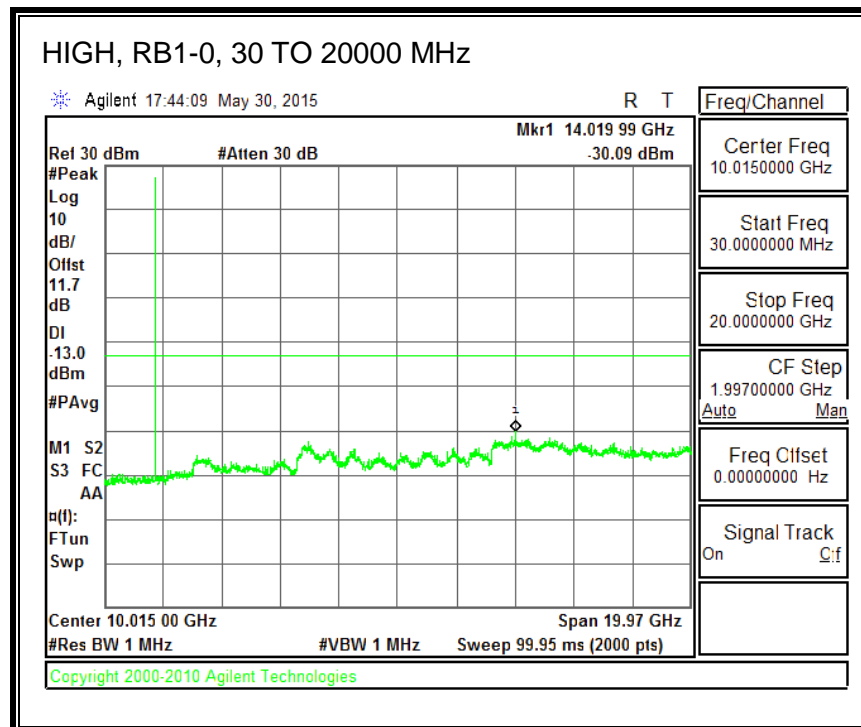
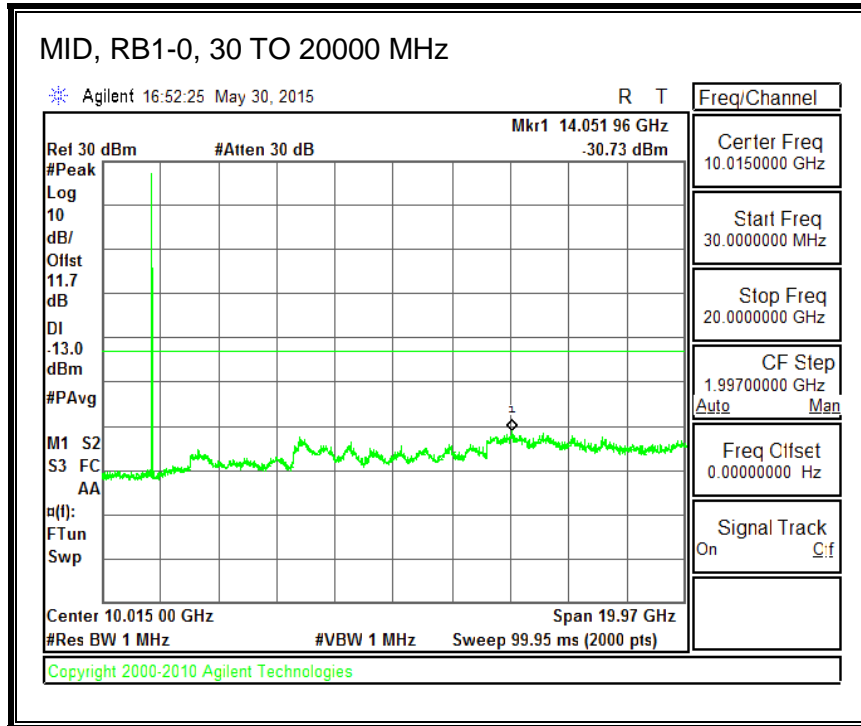
QPSK, (10.0 MHz BAND WIDTH)



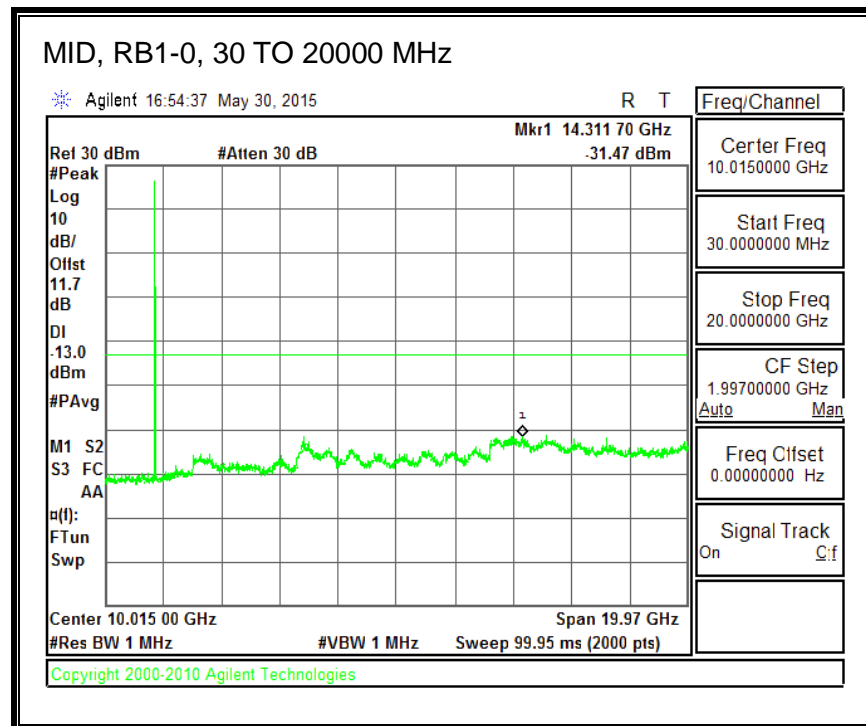
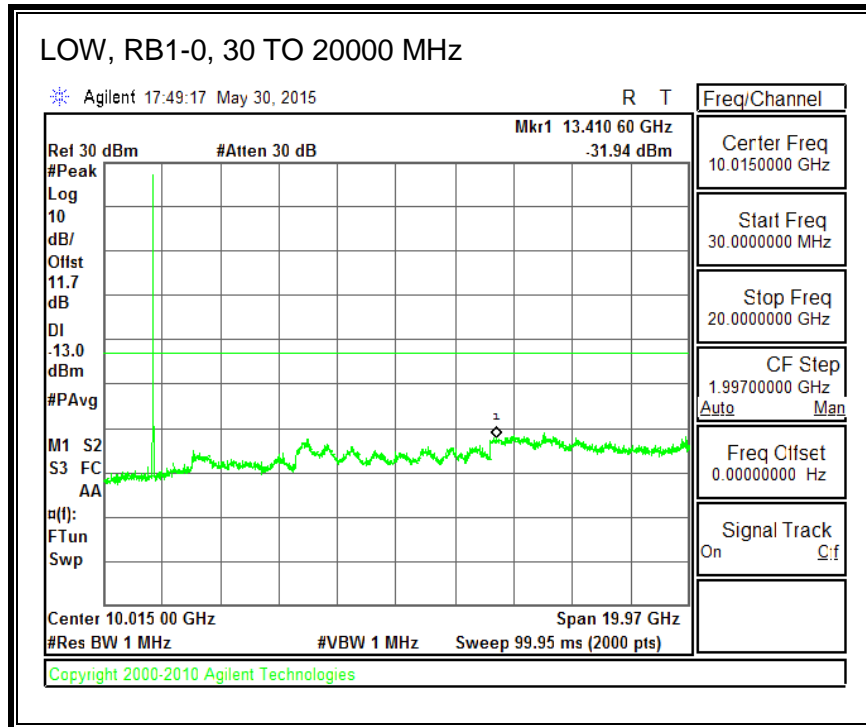


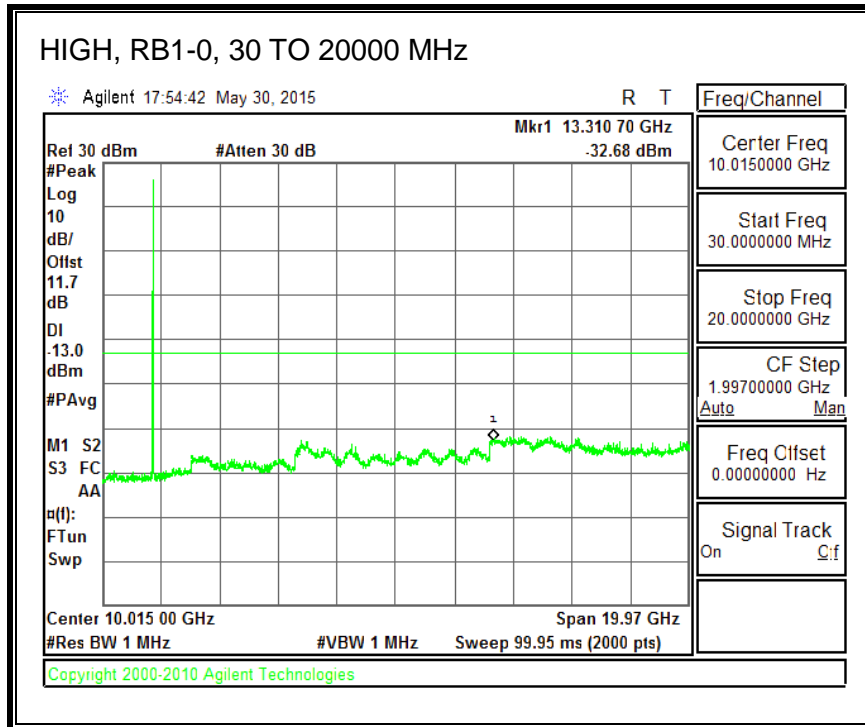
16QAM, (10.0 MHz BAND WIDTH)



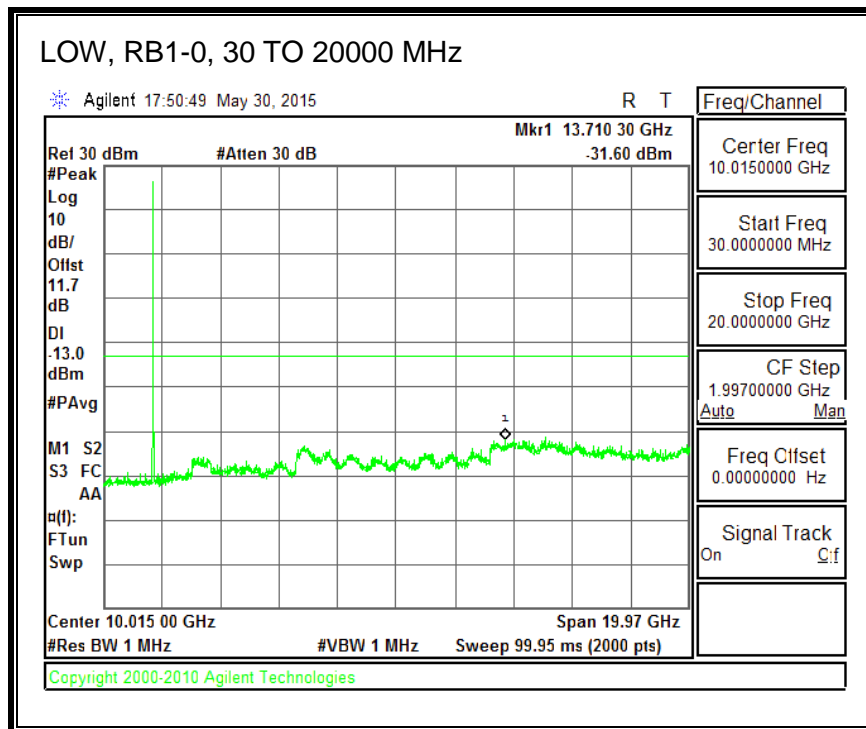


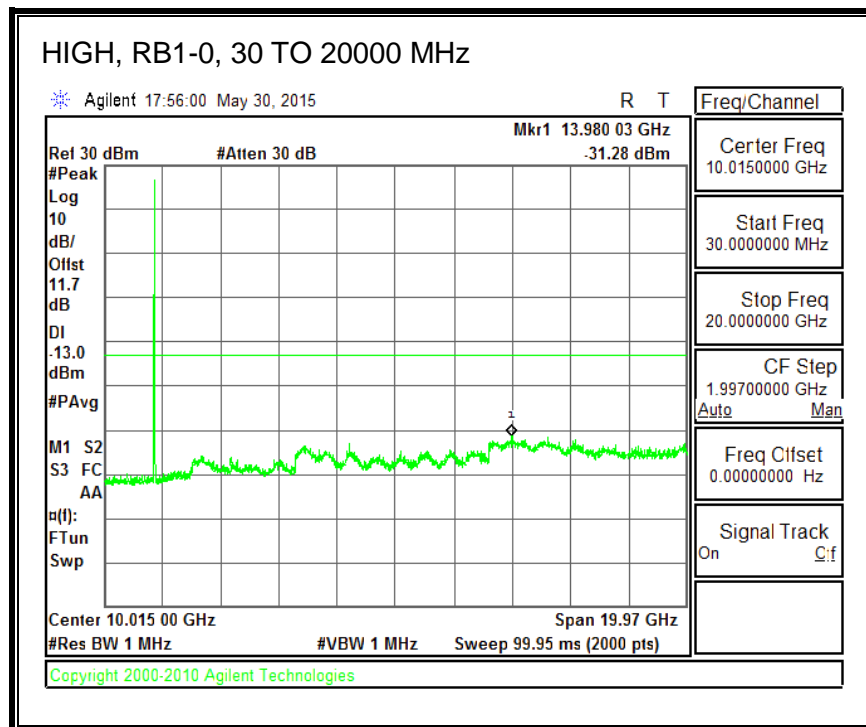
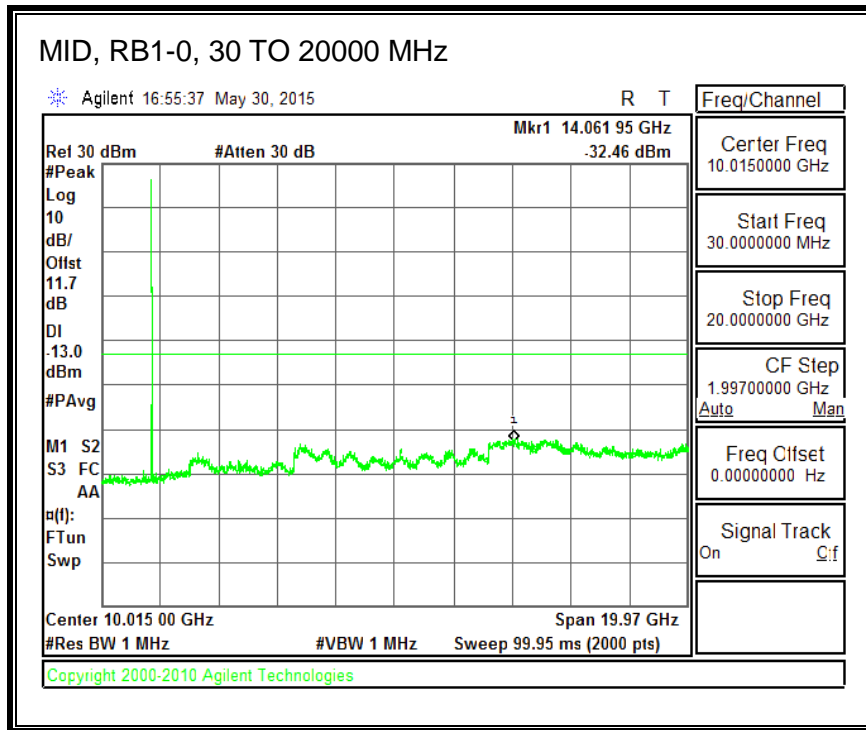
QPSK, (15.0 MHz BAND WIDTH)



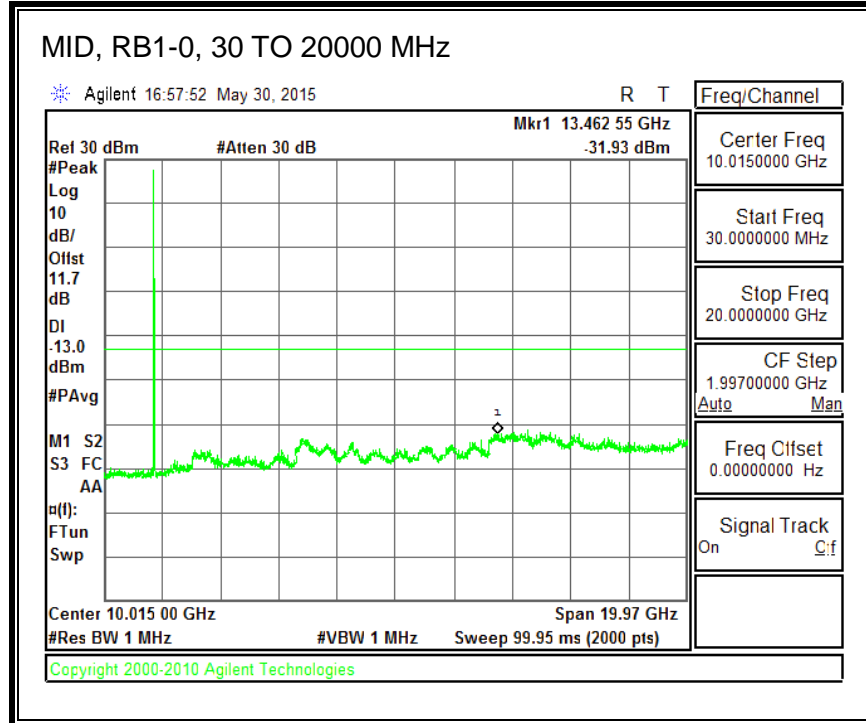
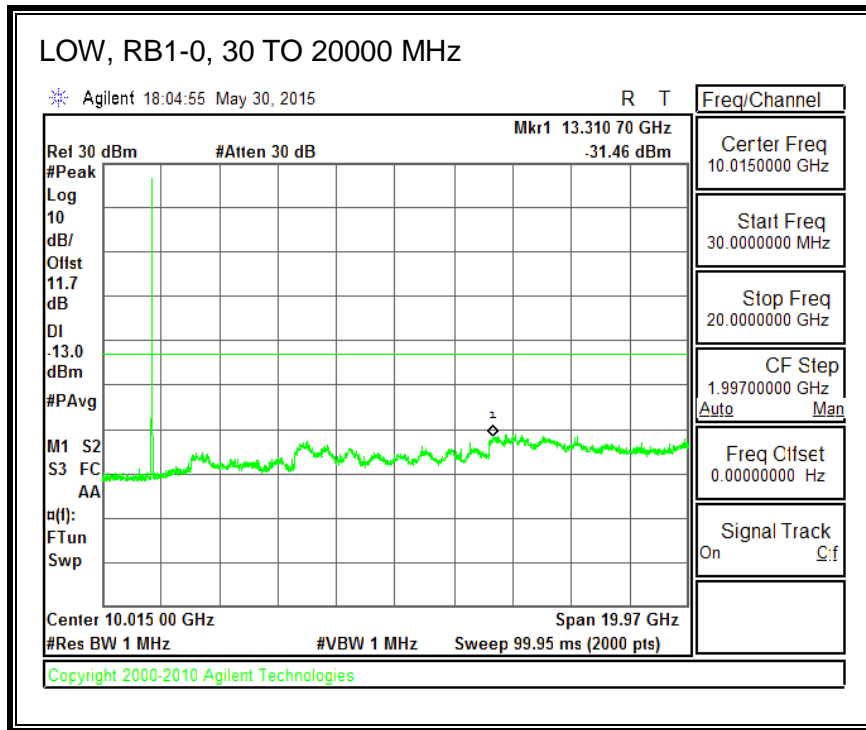


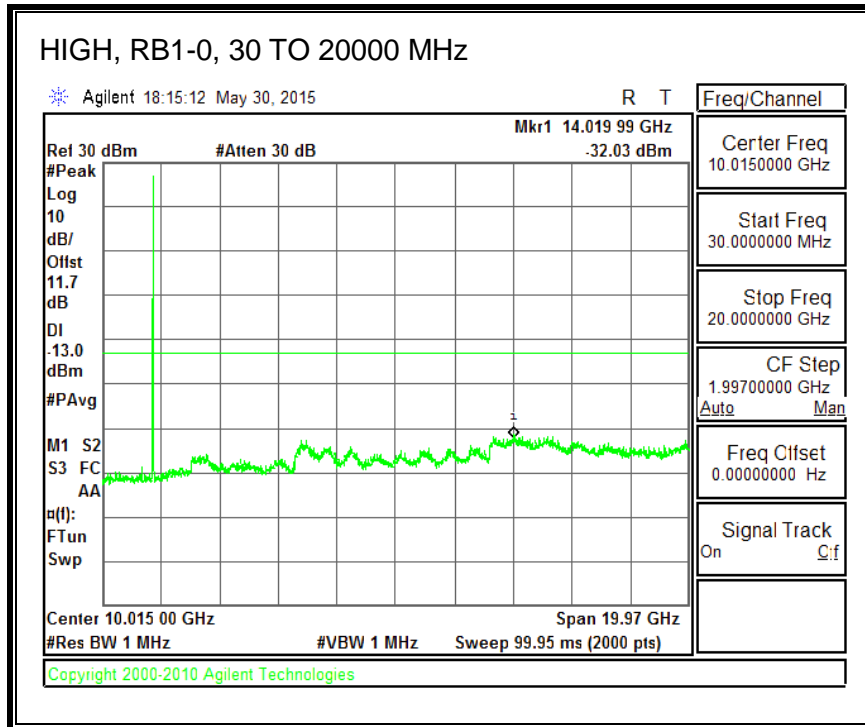
16QAM, (15.0 MHz BAND WIDTH)



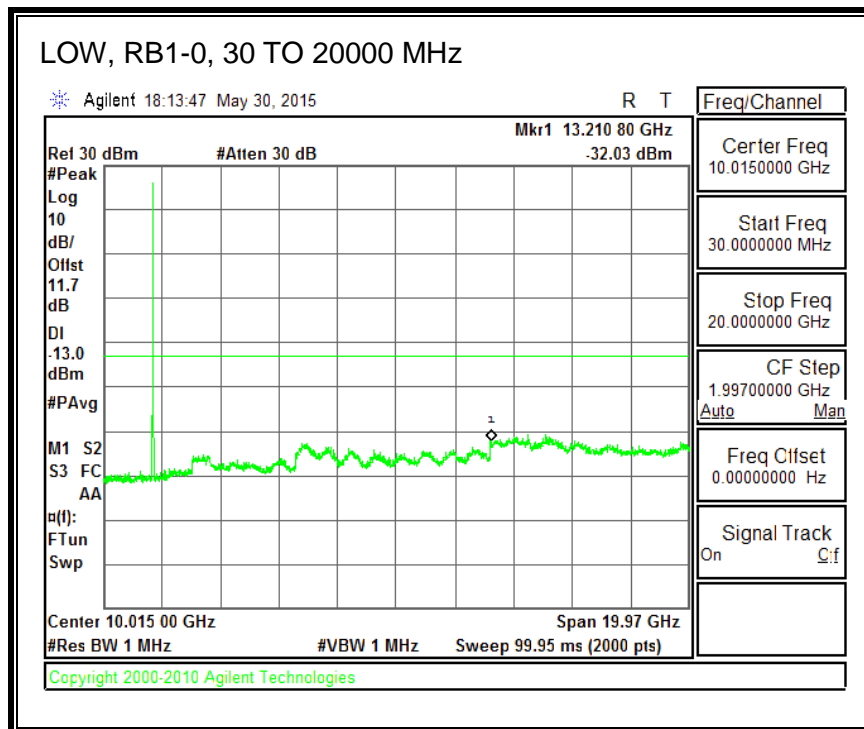


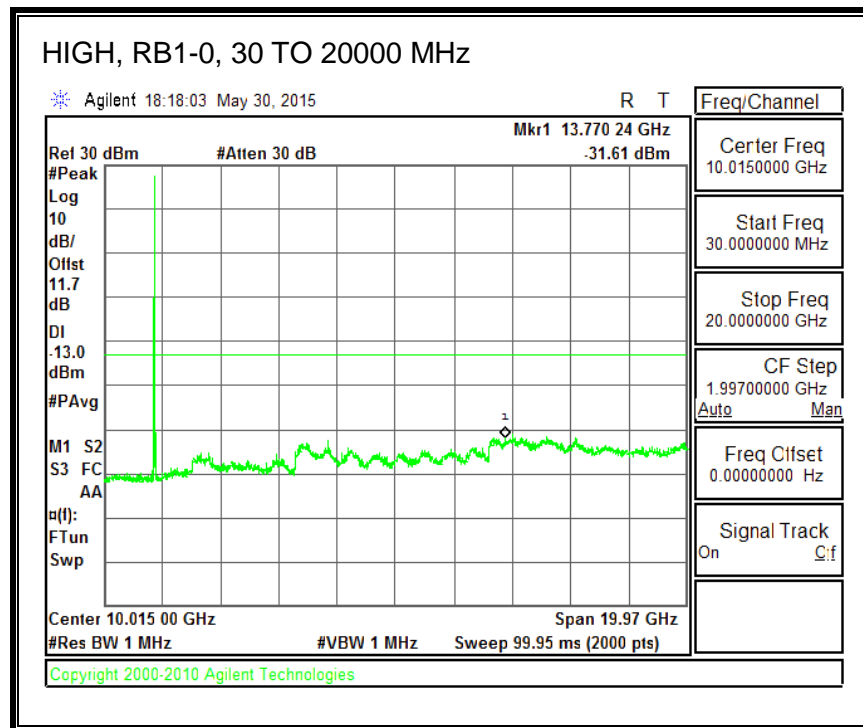
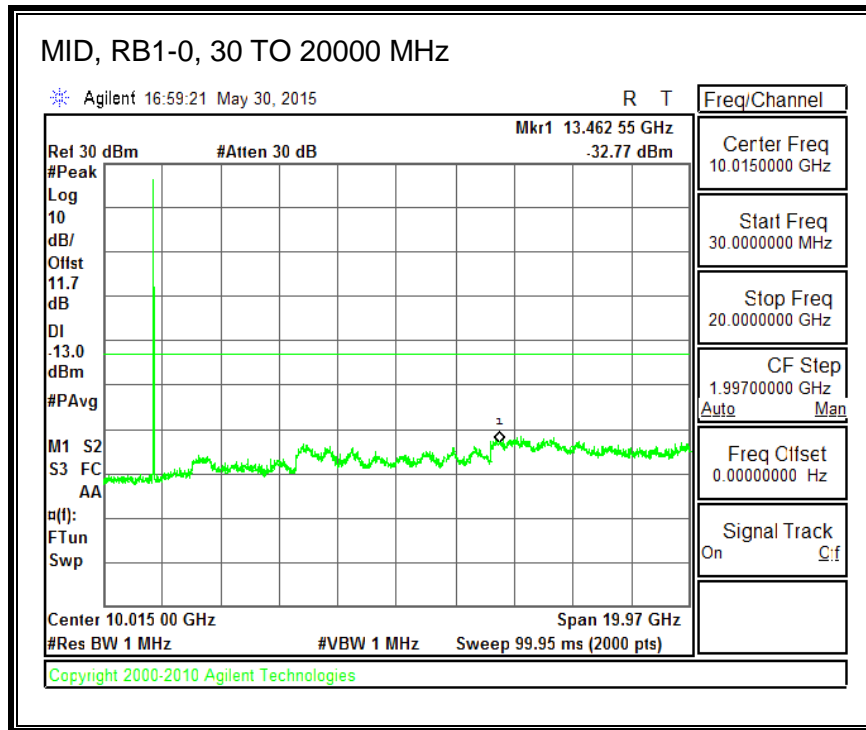
QPSK, (20.0 MHz BAND WIDTH)





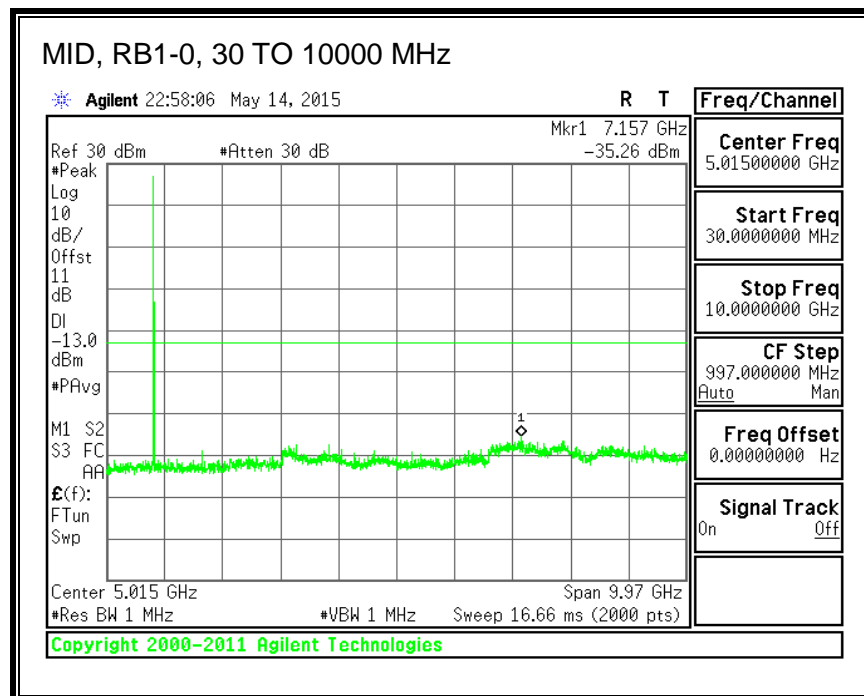
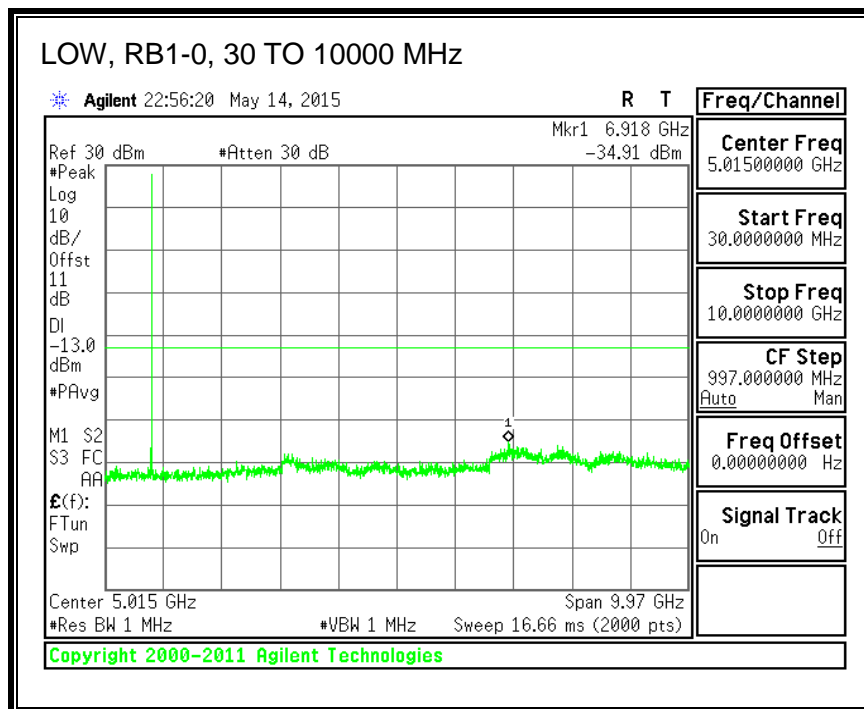
16QAM, (20.0 MHz BAND WIDTH)

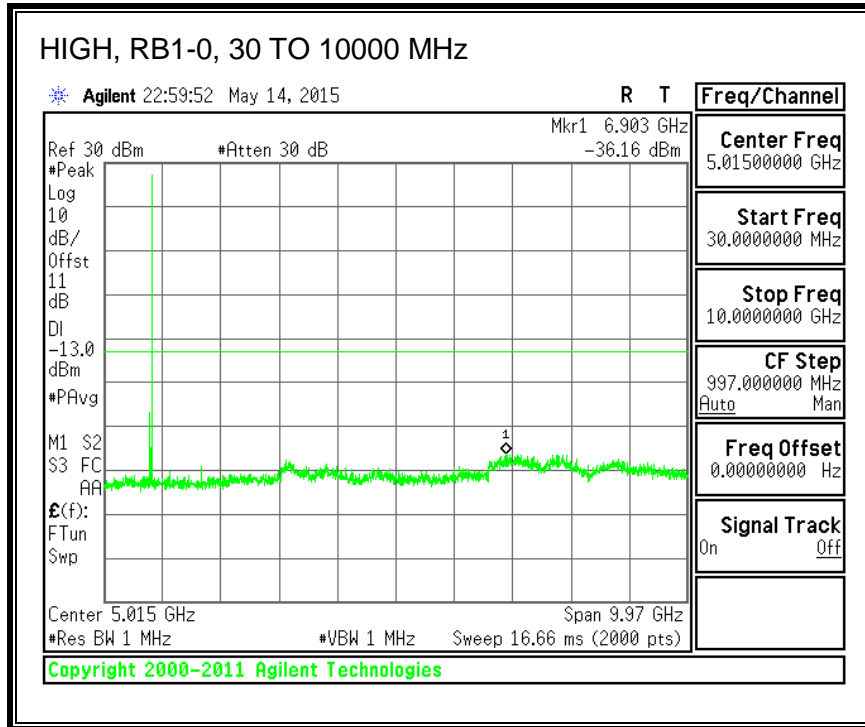




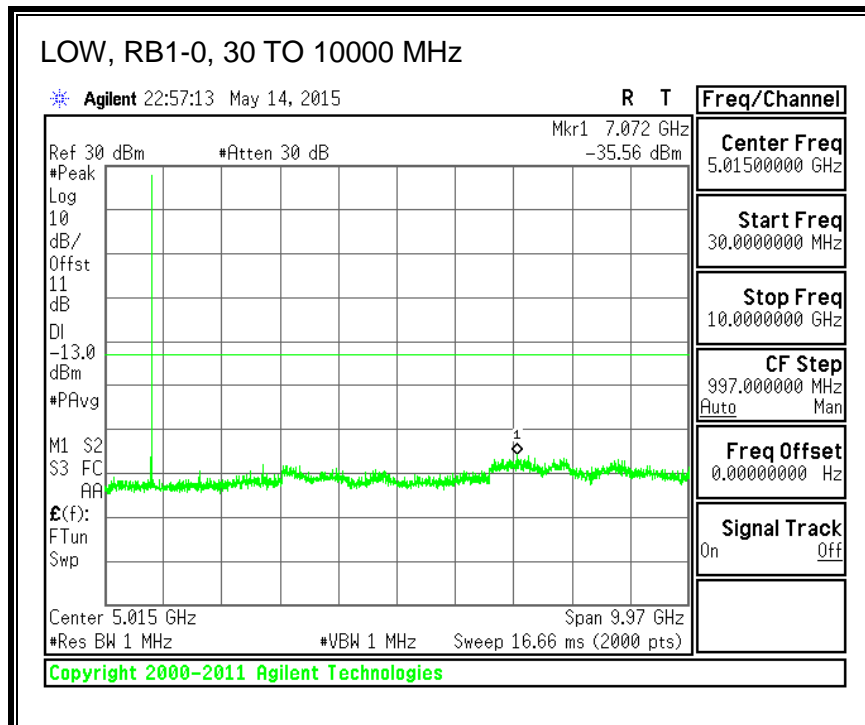
8.6.3. LTE BAND 5

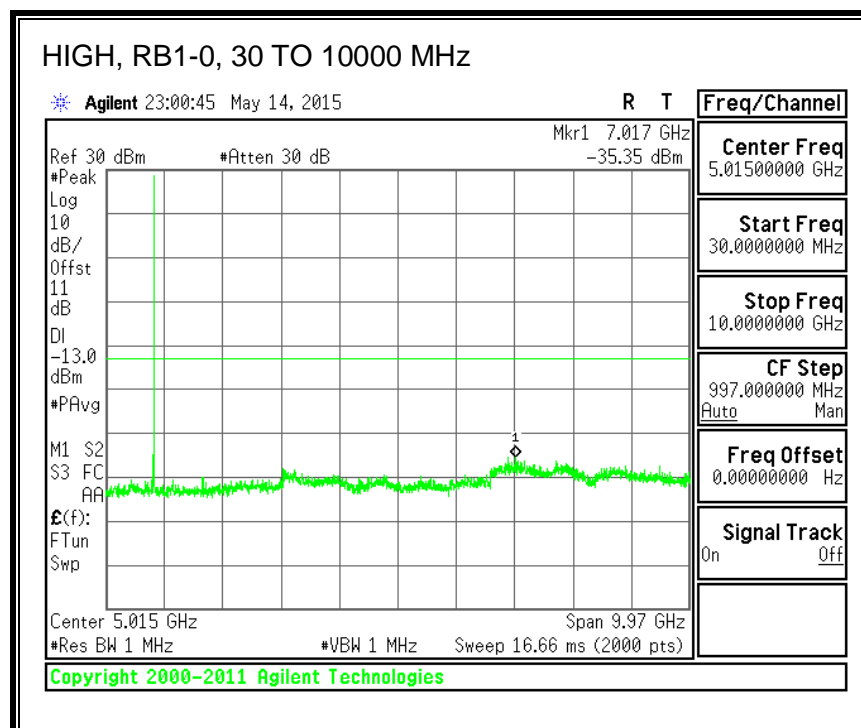
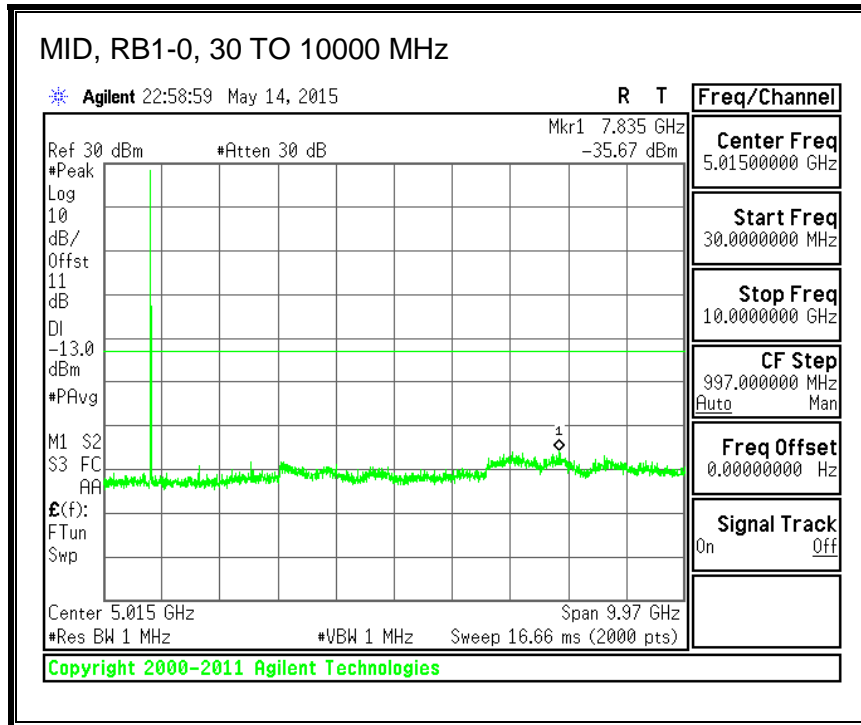
QPSK, (1.4 MHz BAND WIDTH)



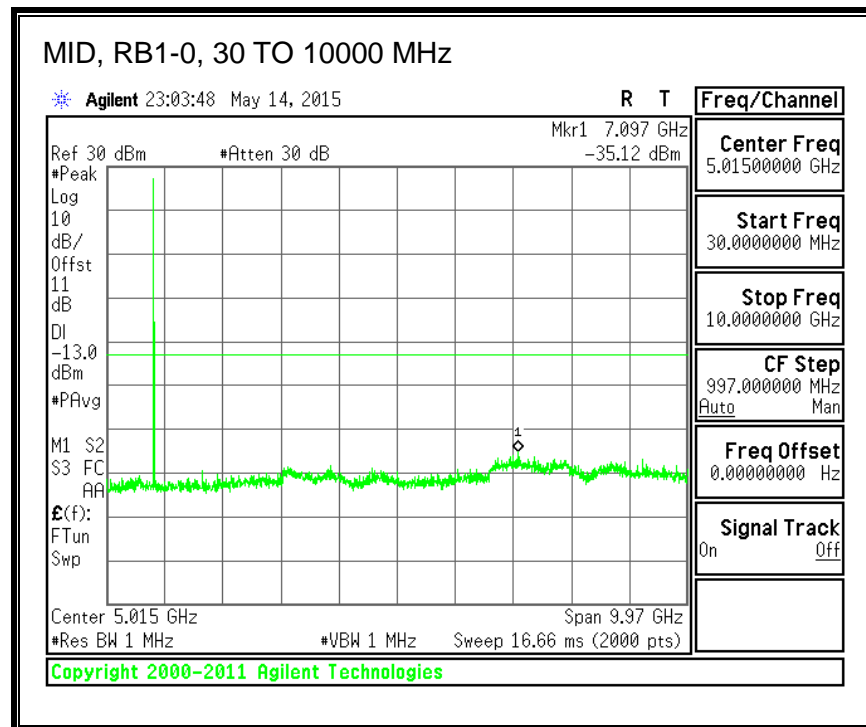
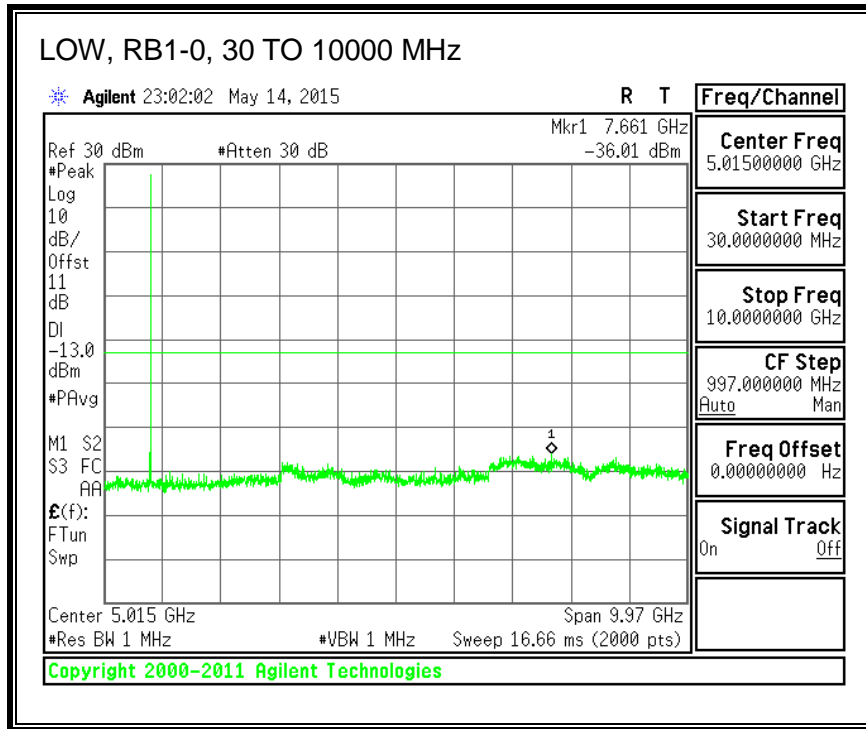


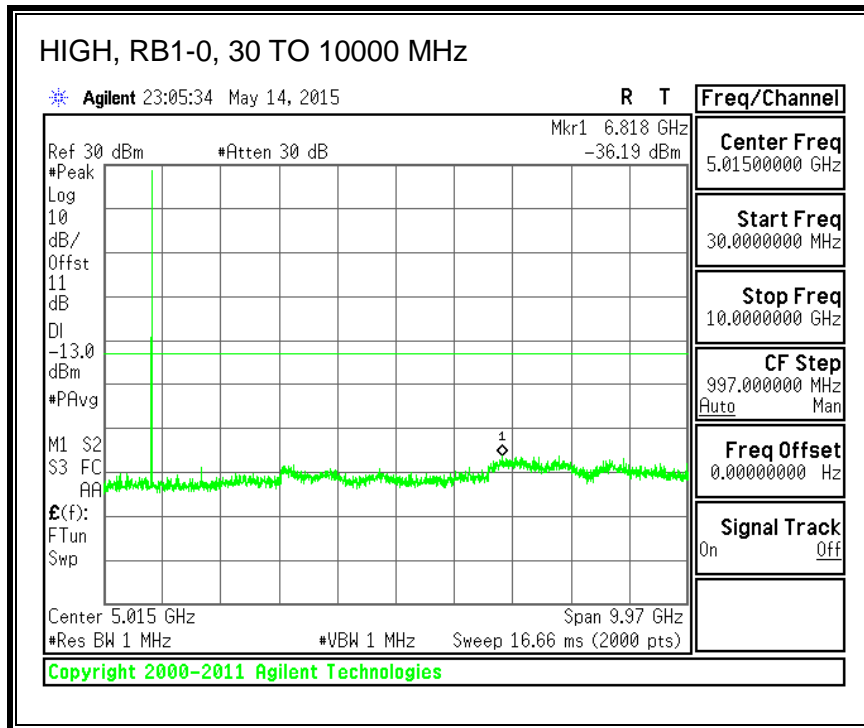
16QAM, (1.4 MHz BAND WIDTH)



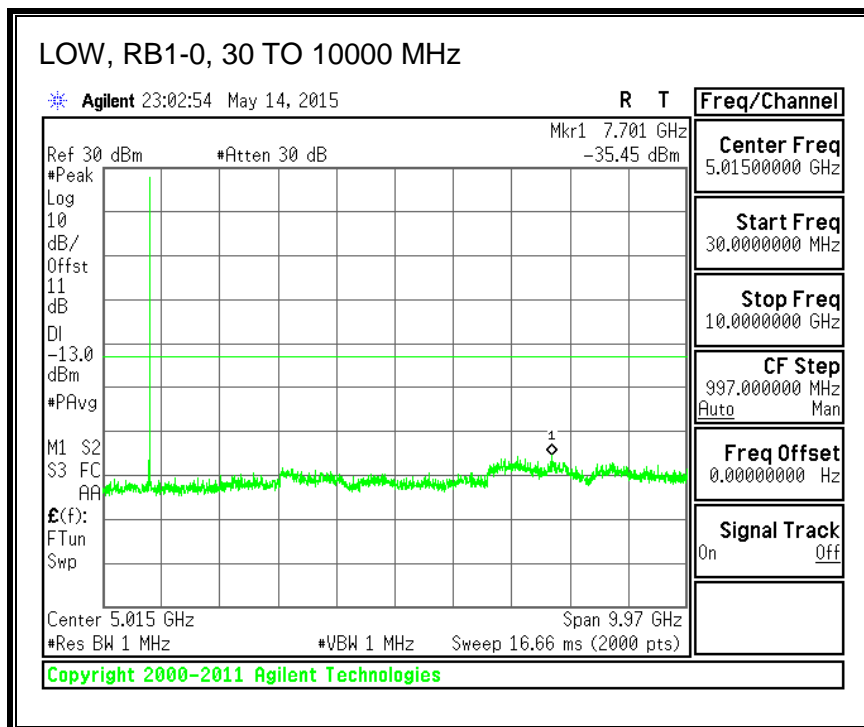


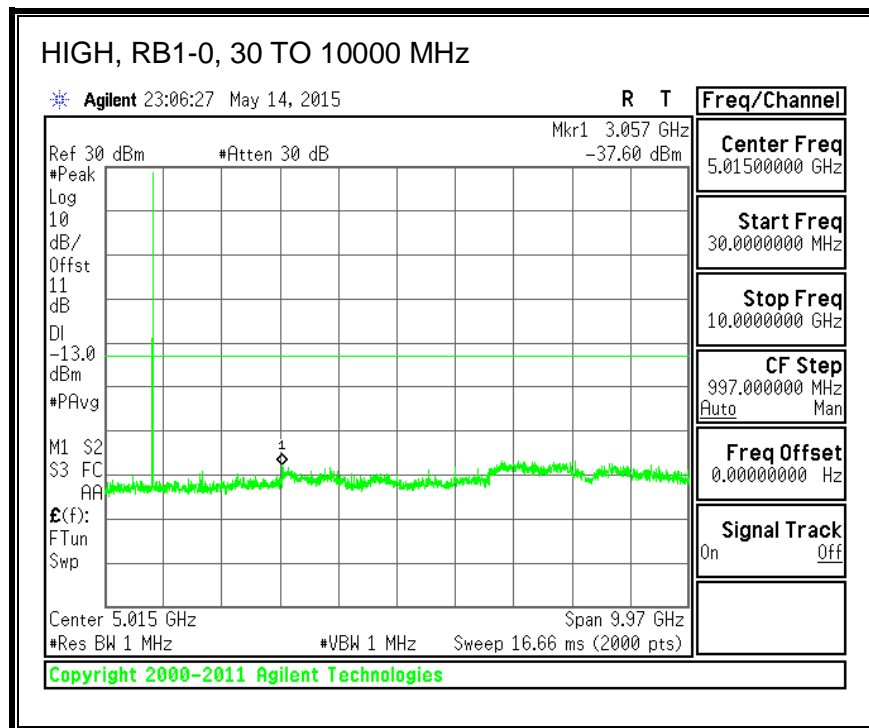
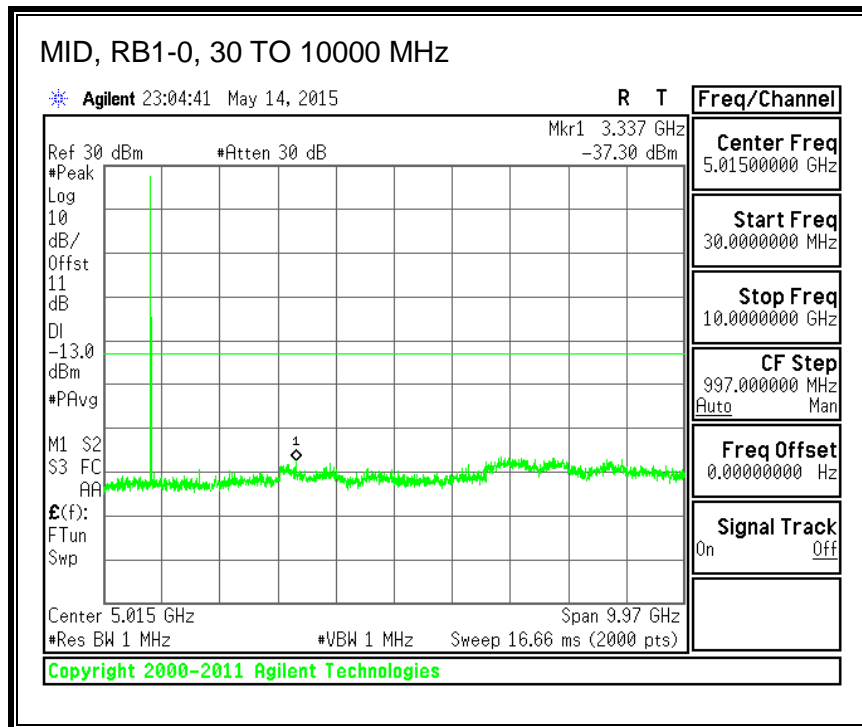
QPSK, (3.0 MHz BAND WIDTH)



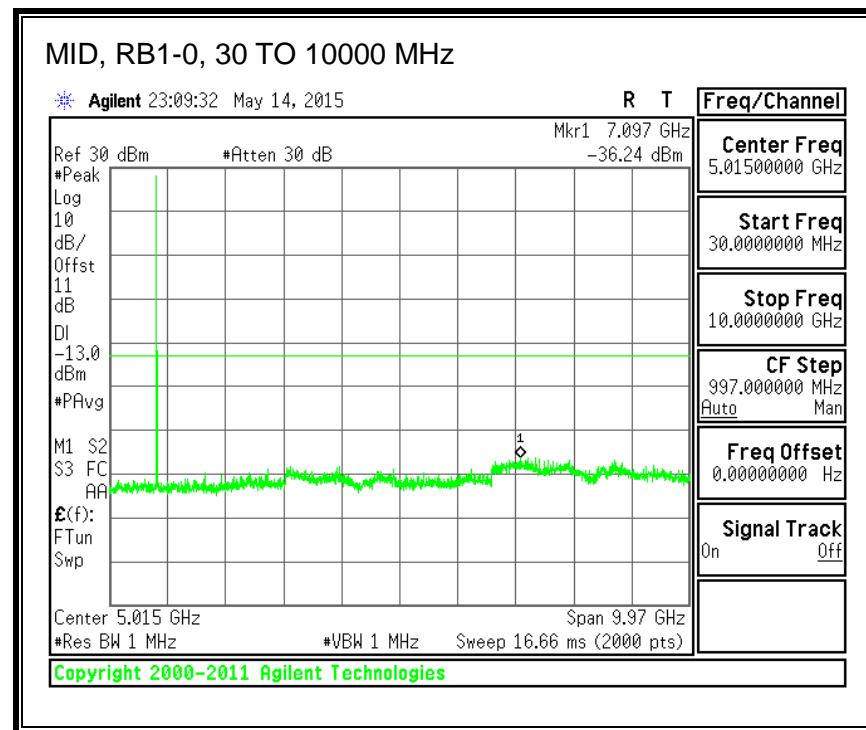
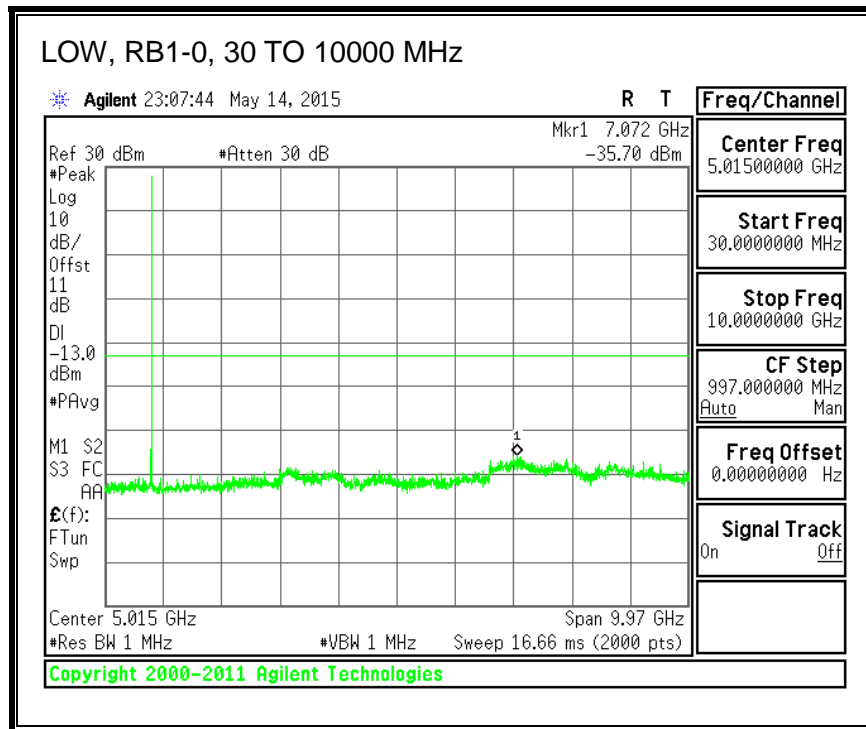


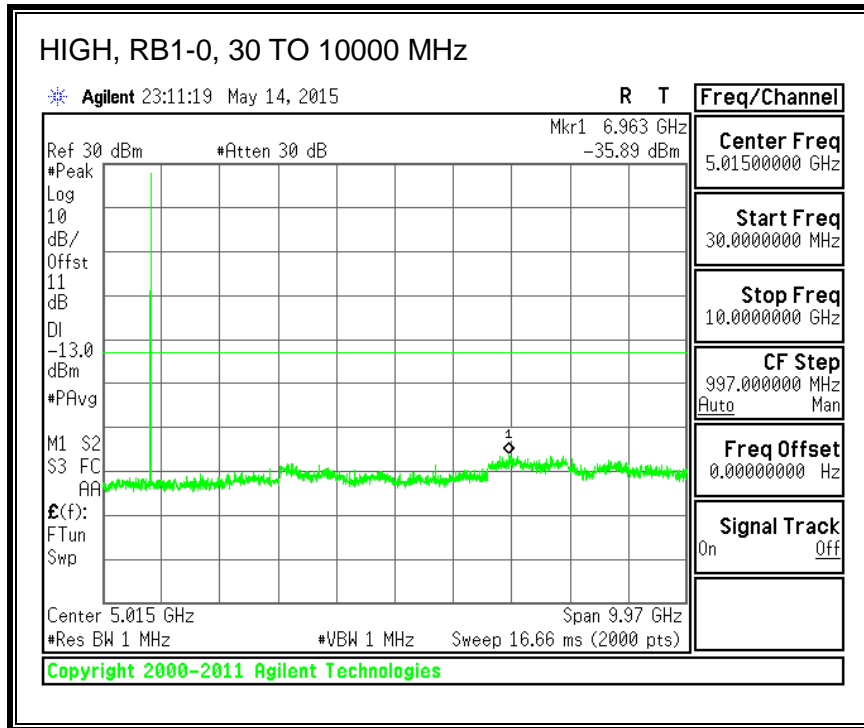
16QAM, (3.0 MHz BAND WIDTH)



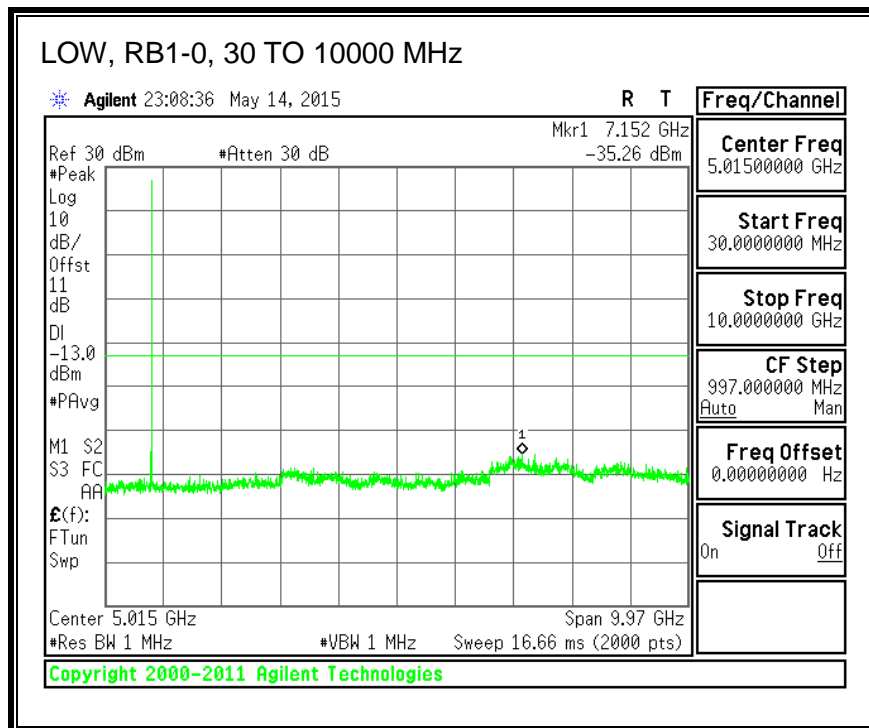


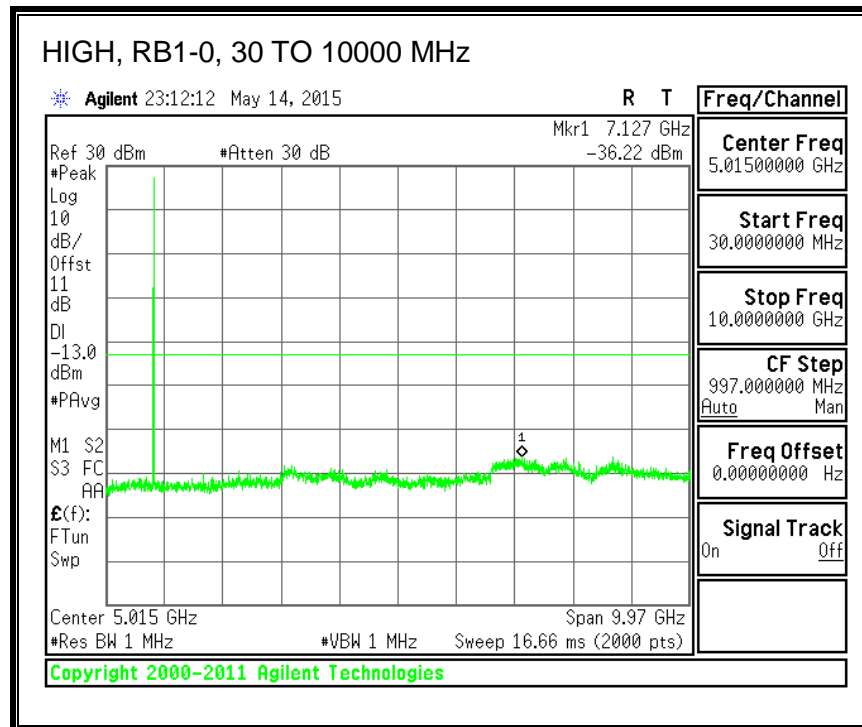
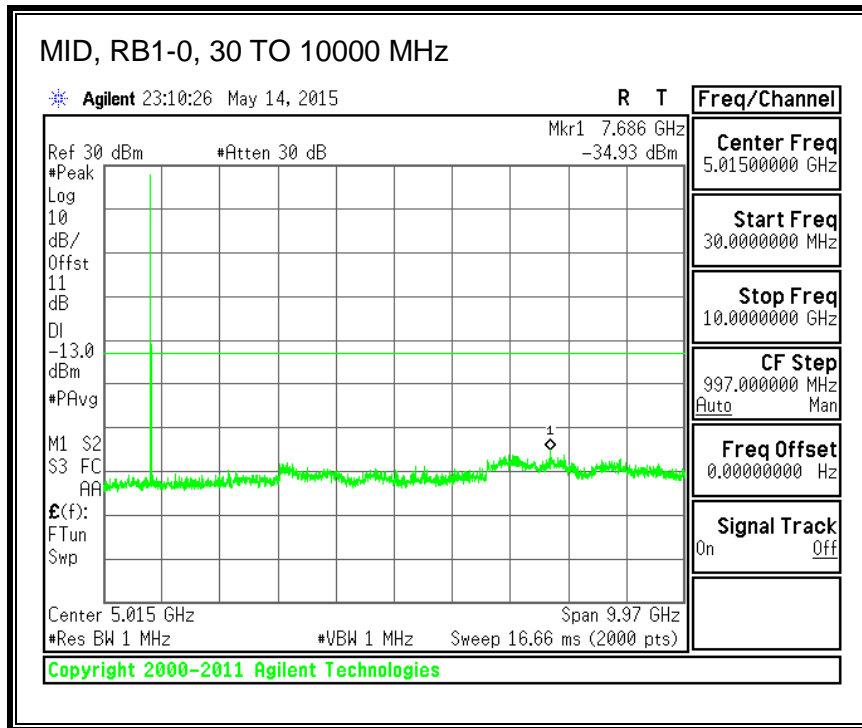
QPSK, (5.0 MHz BAND WIDTH)



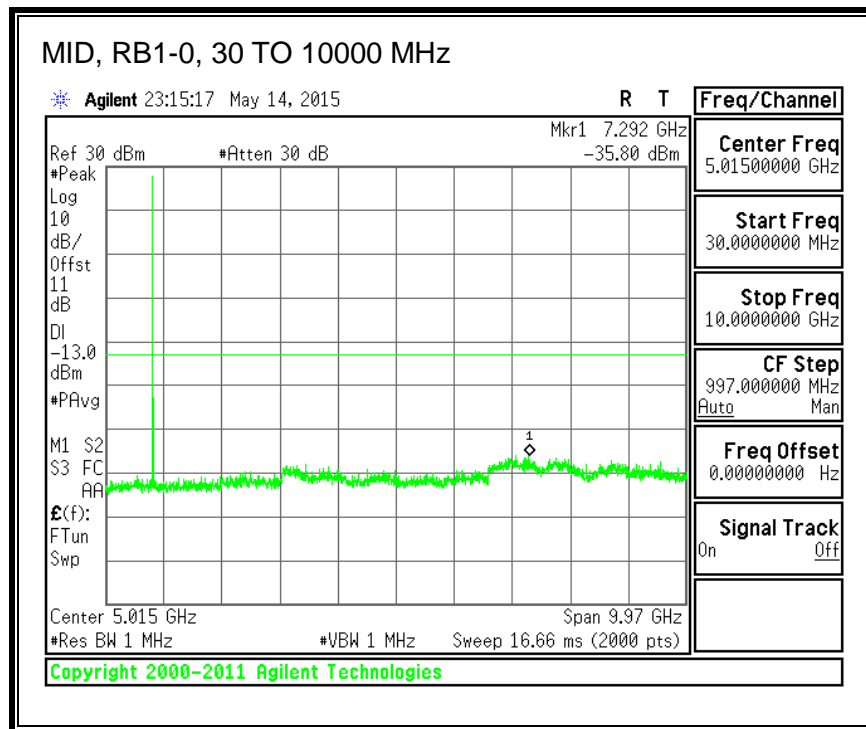
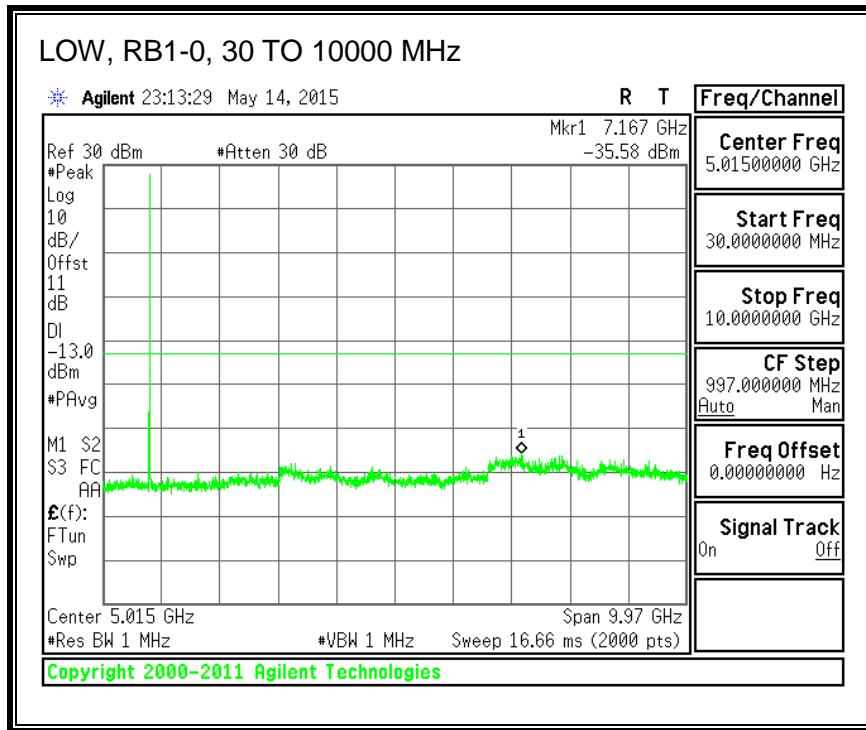


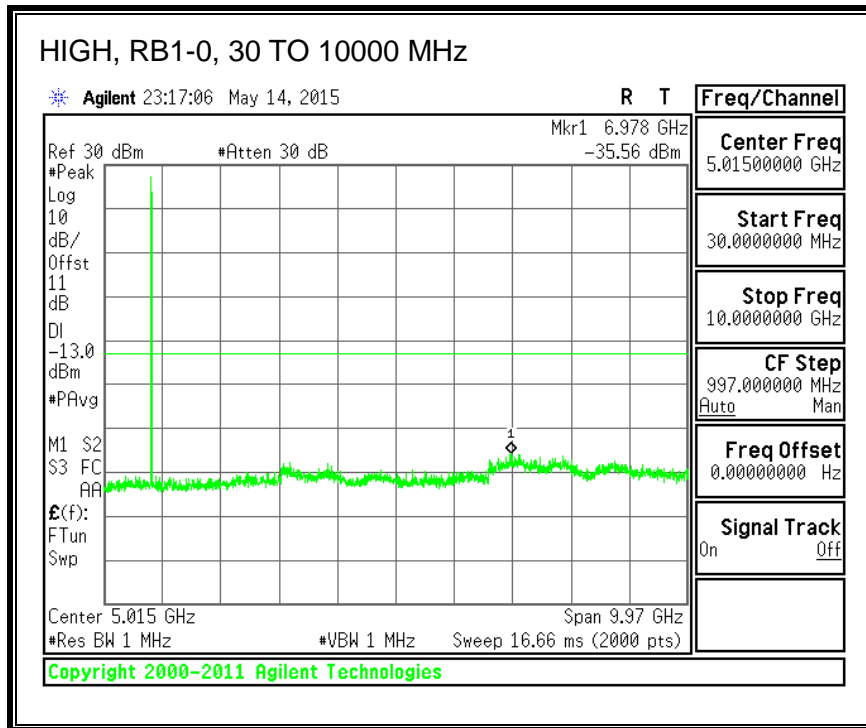
16QAM, (5.0 MHz BAND WIDTH)



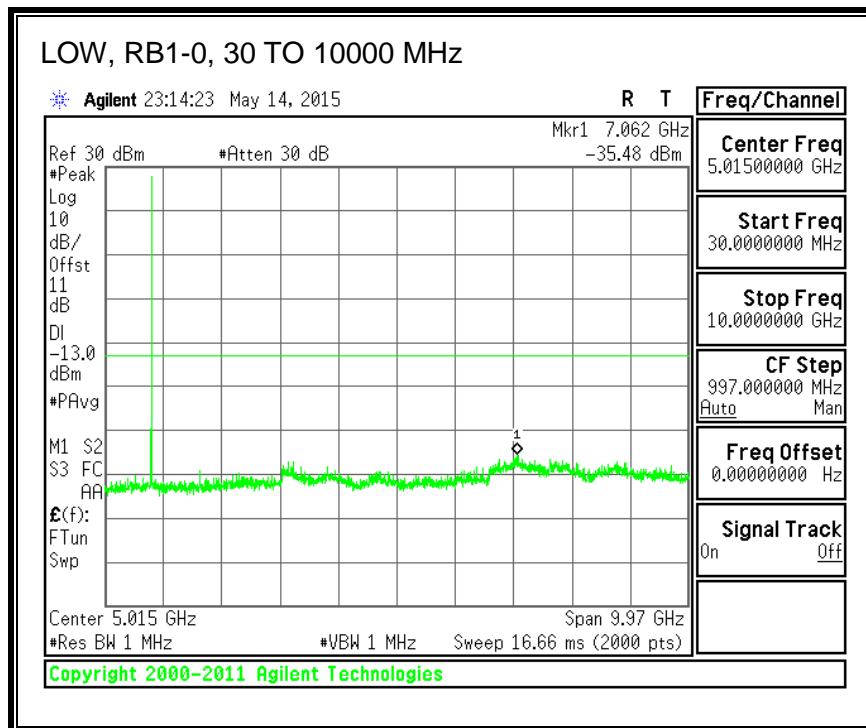


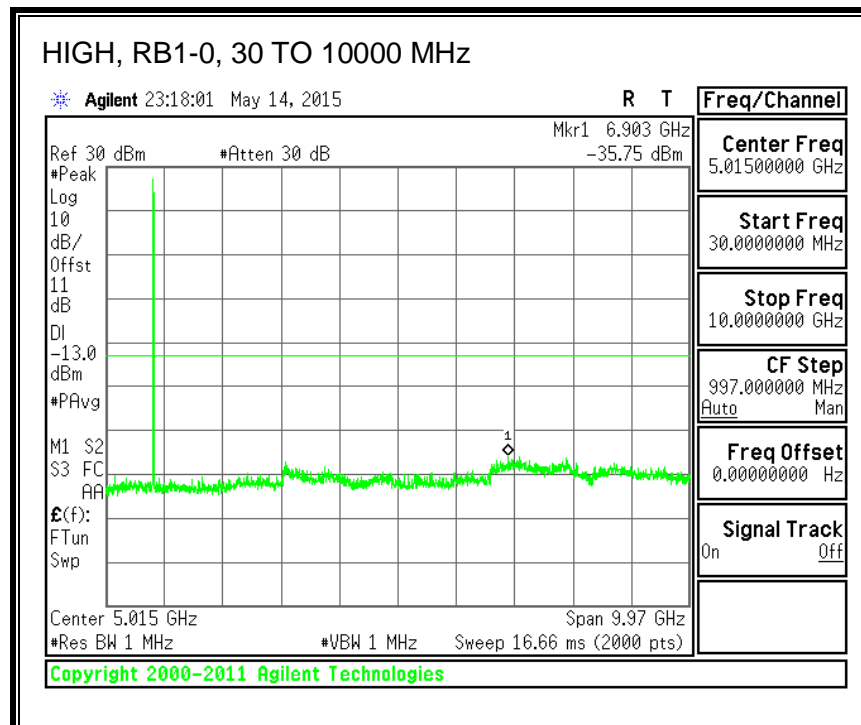
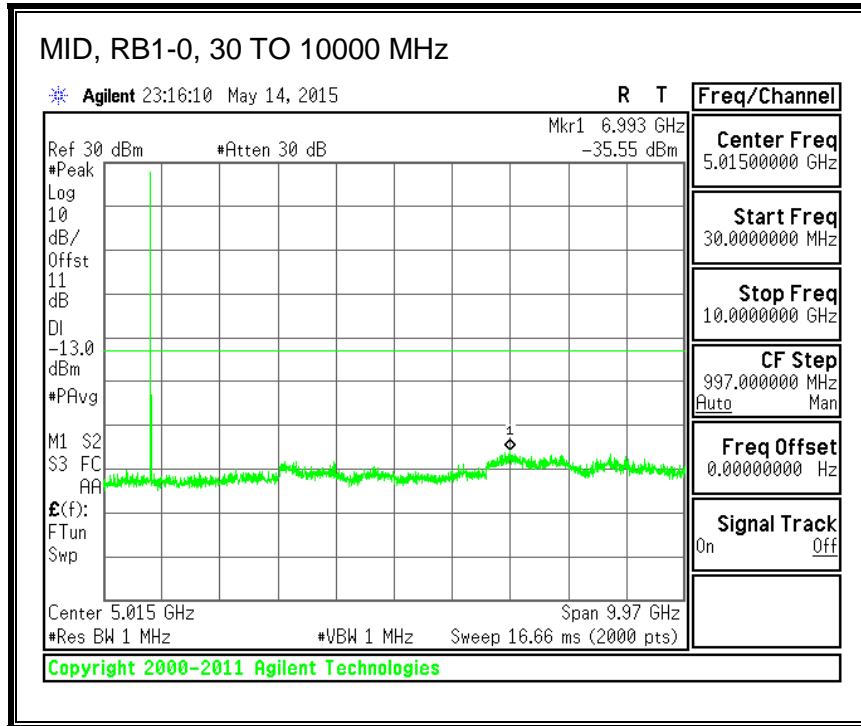
QPSK, (10.0 MHz BAND WIDTH)





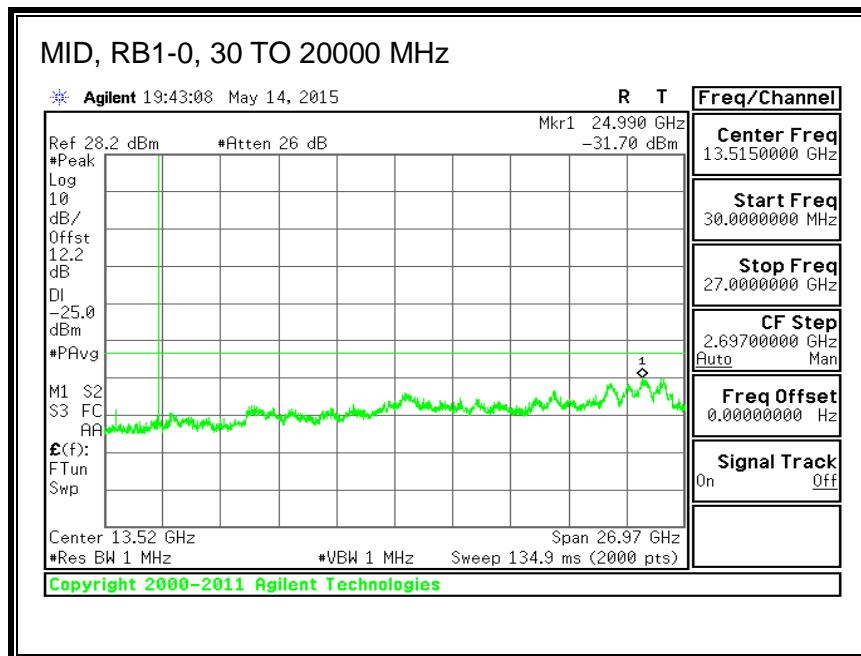
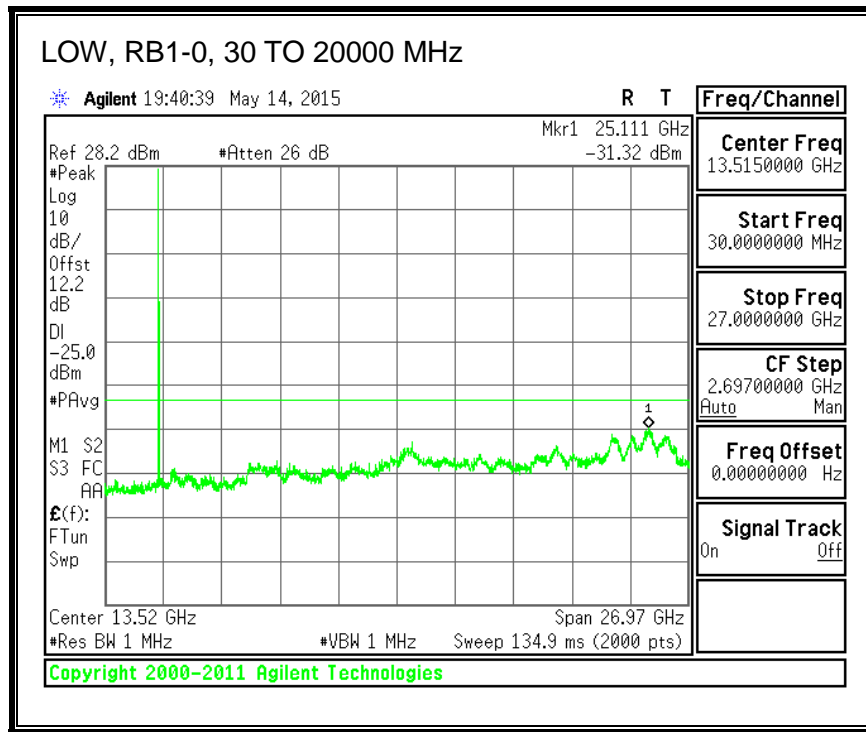
16QAM, (10.0 MHz BAND WIDTH)

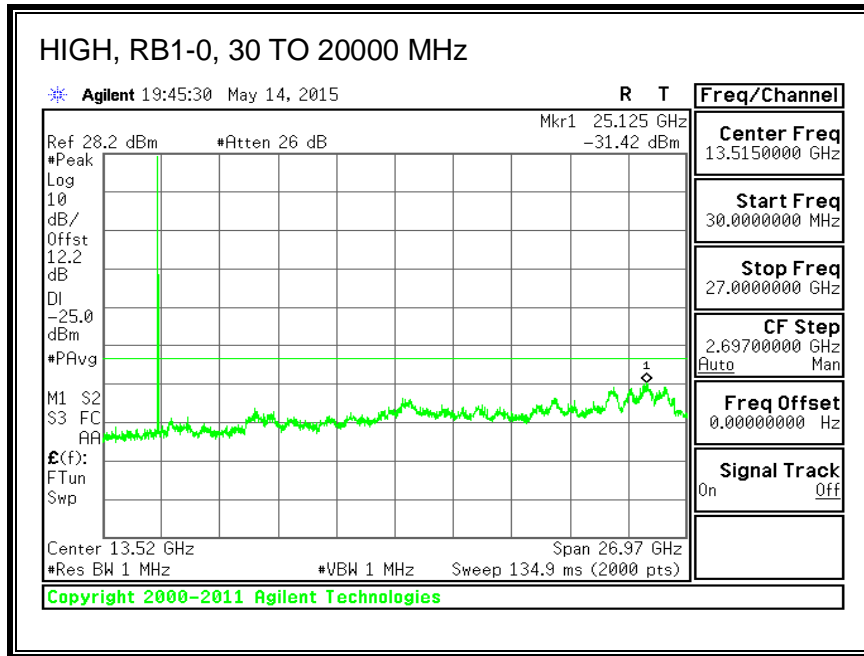




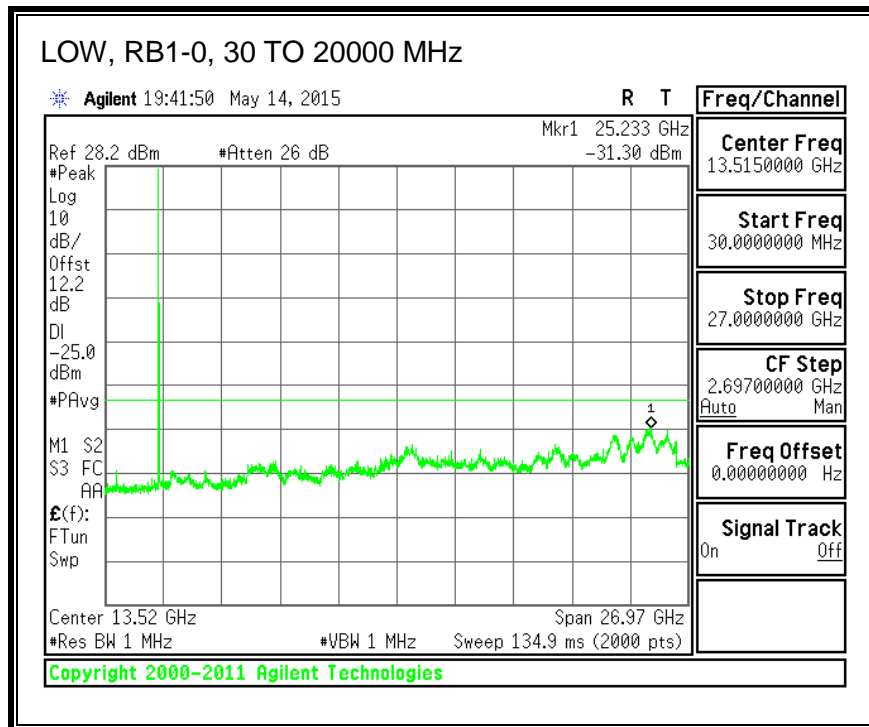
8.6.4. LTE BAND 7

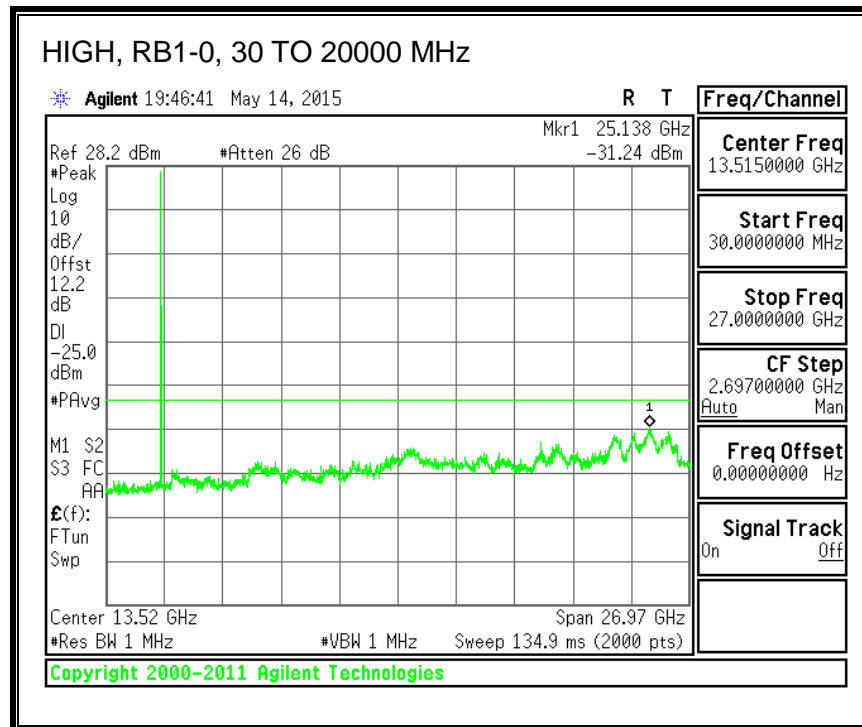
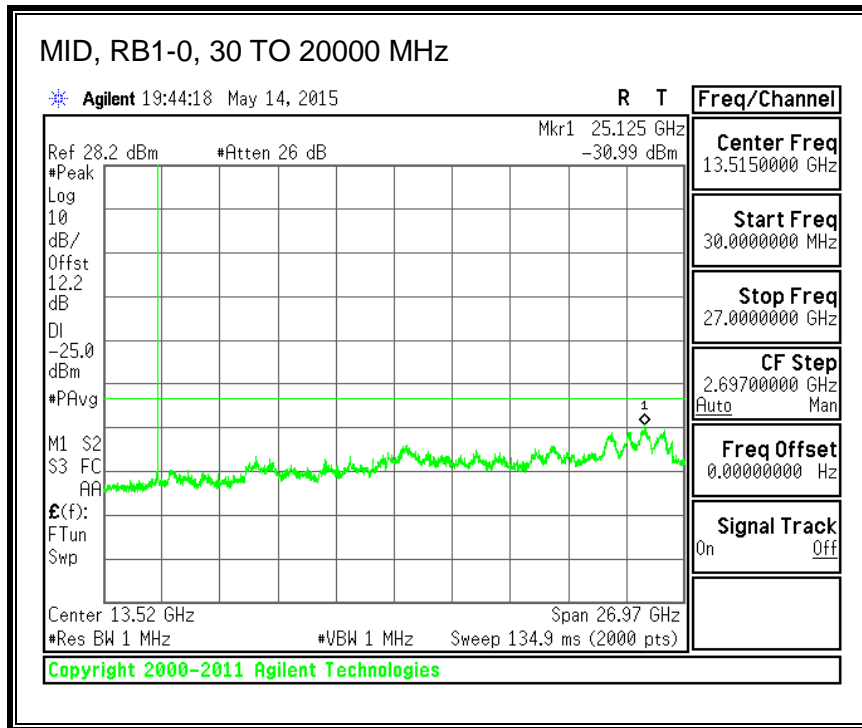
QPSK, (5.0 MHz BAND WIDTH)



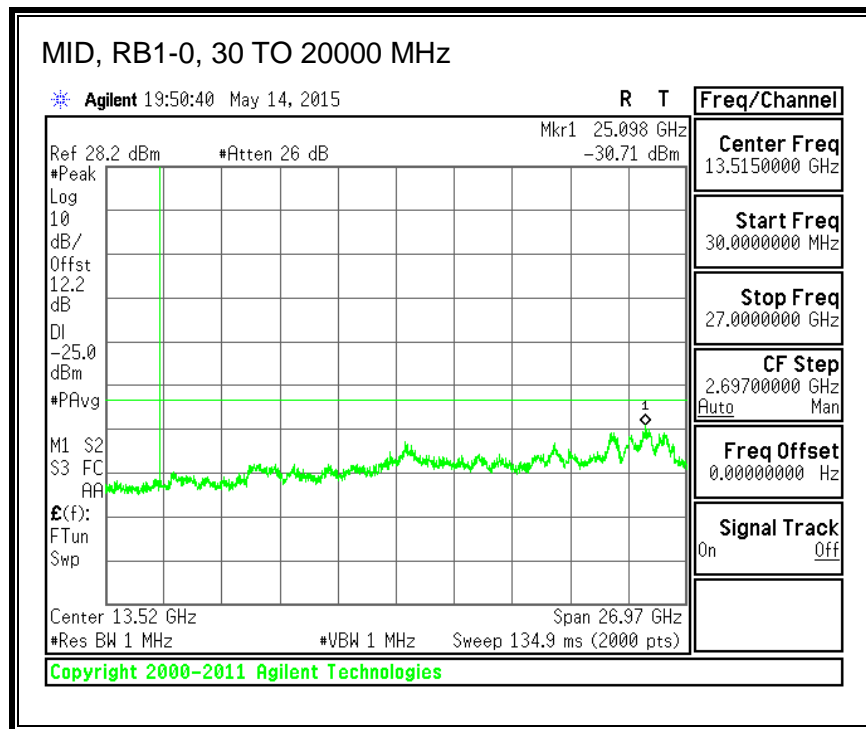
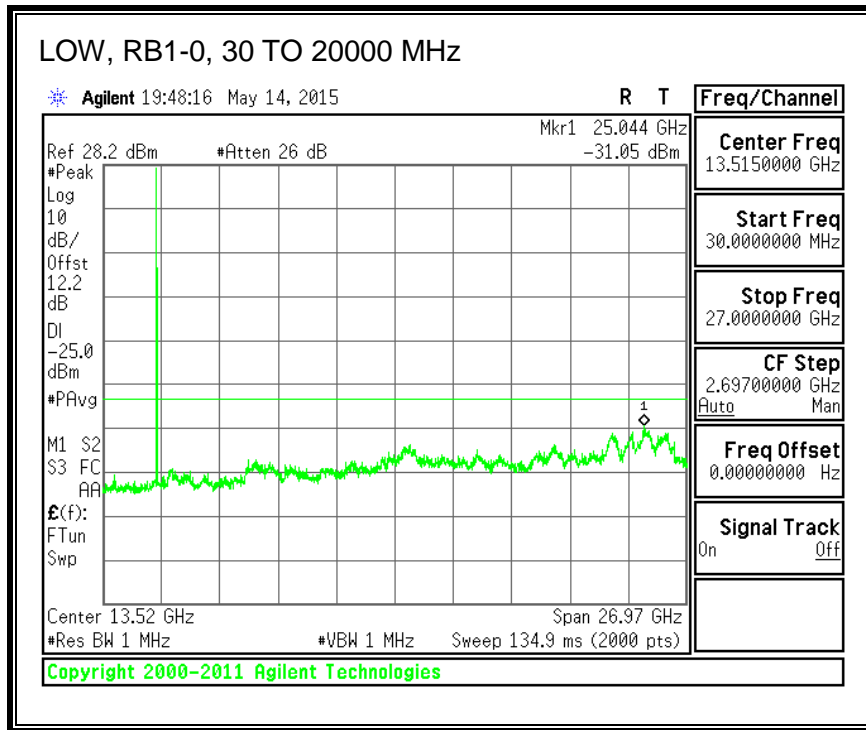


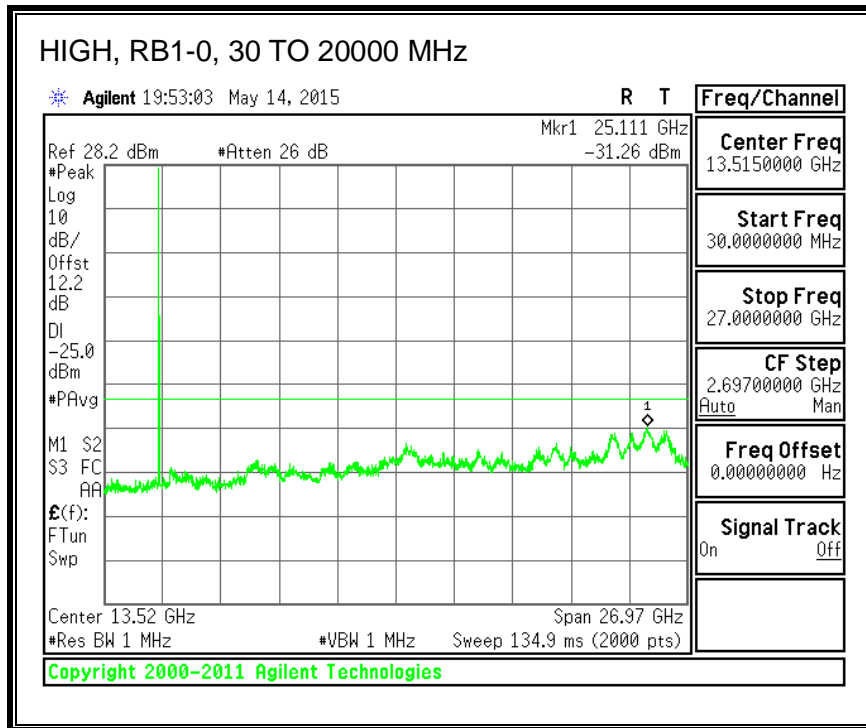
16QAM, (5.0 MHz BAND WIDTH)



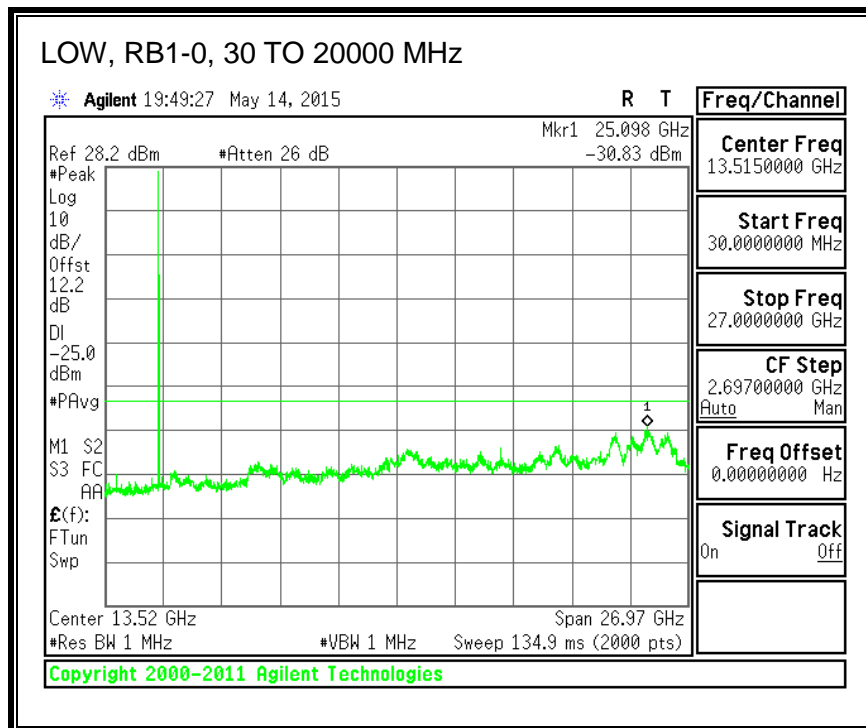


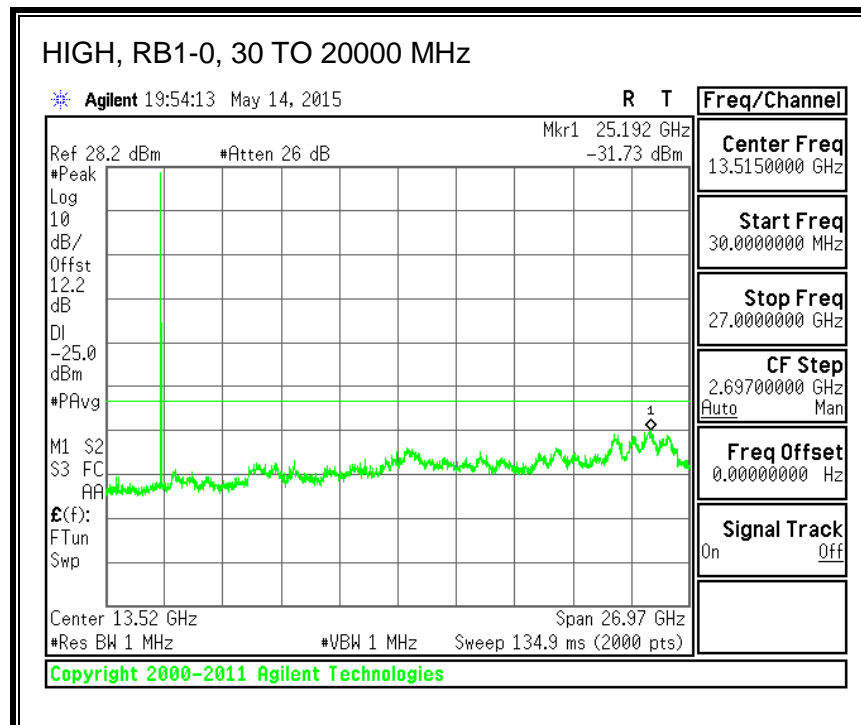
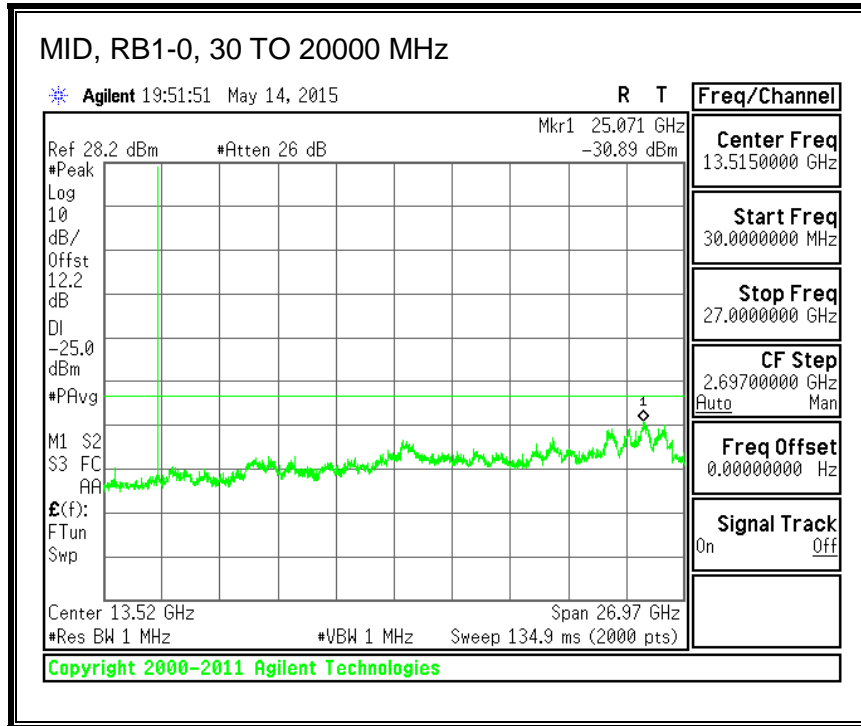
QPSK, (10.0 MHz BAND WIDTH)



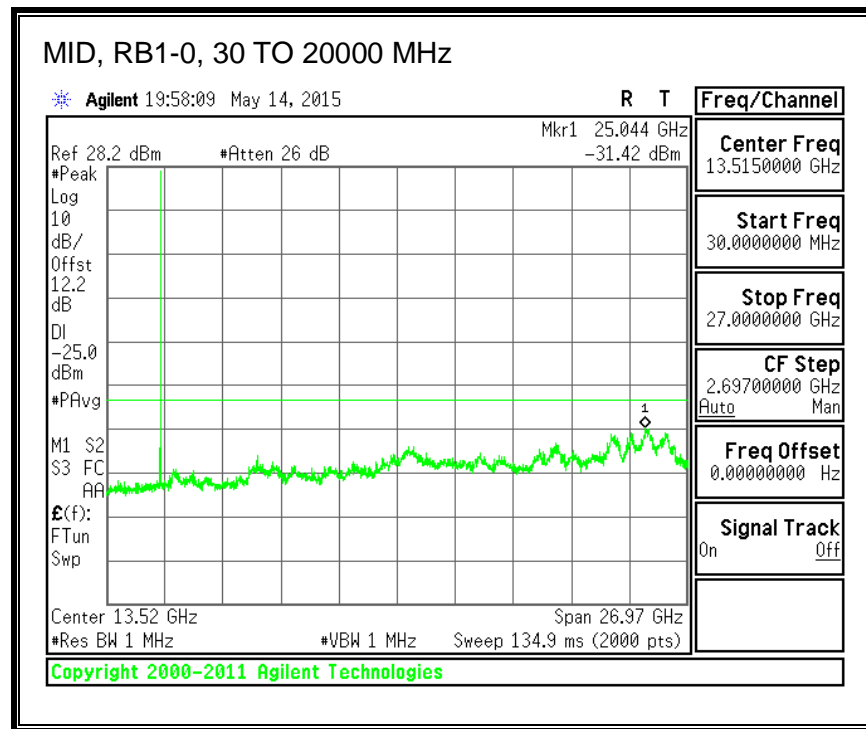
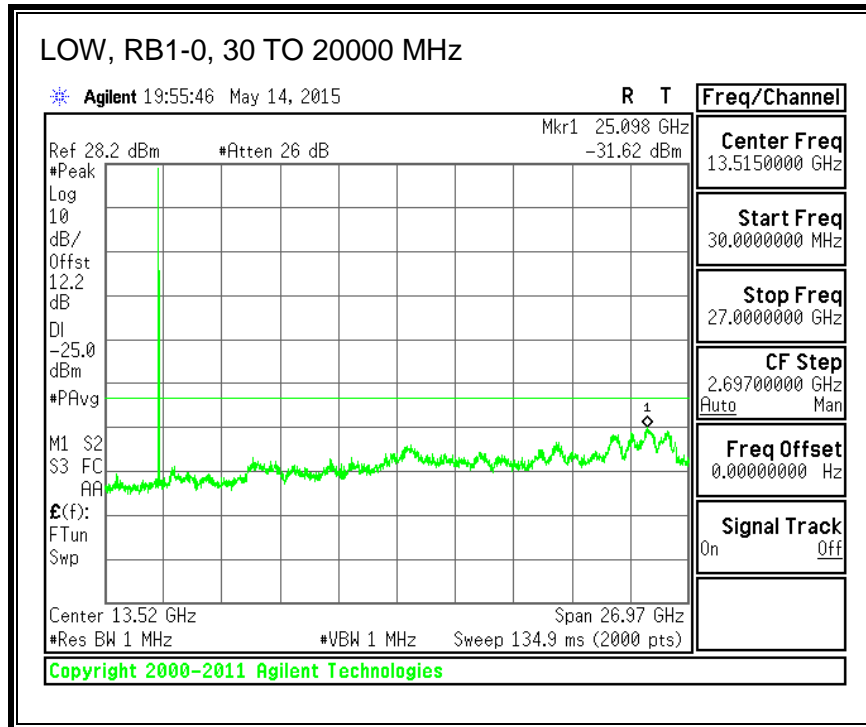


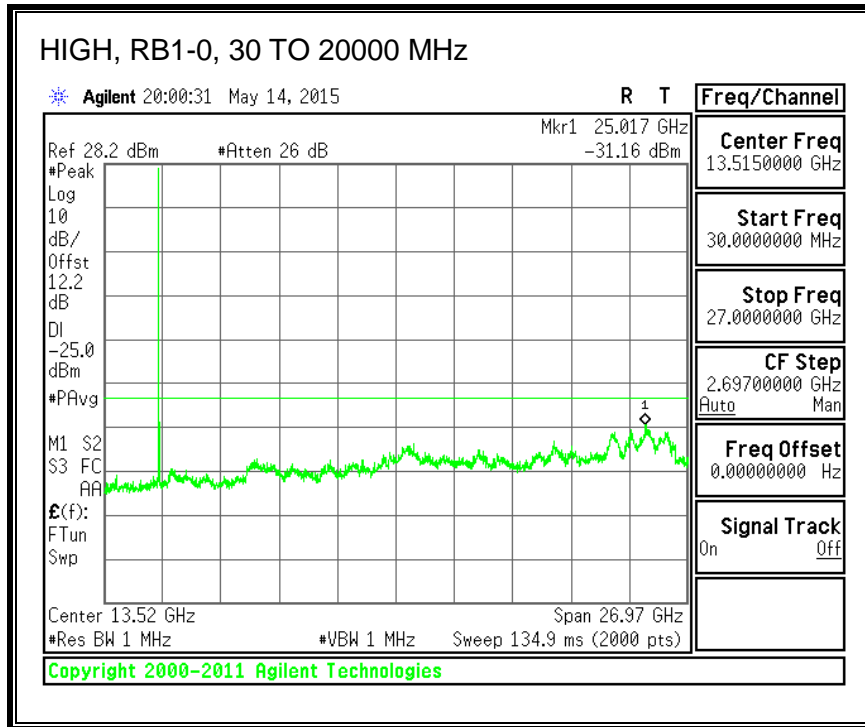
16QAM, (10.0 MHz BAND WIDTH)



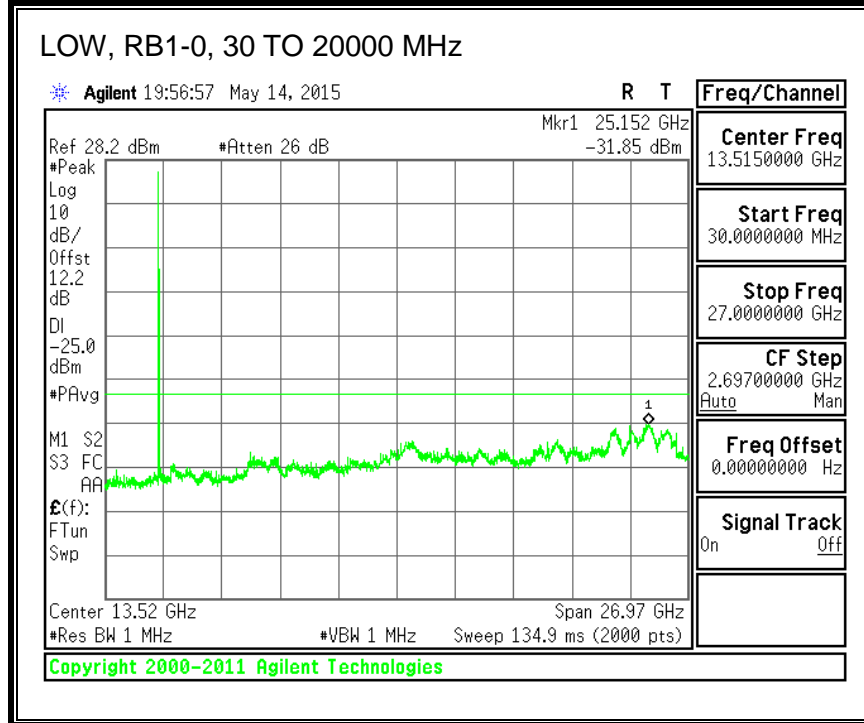


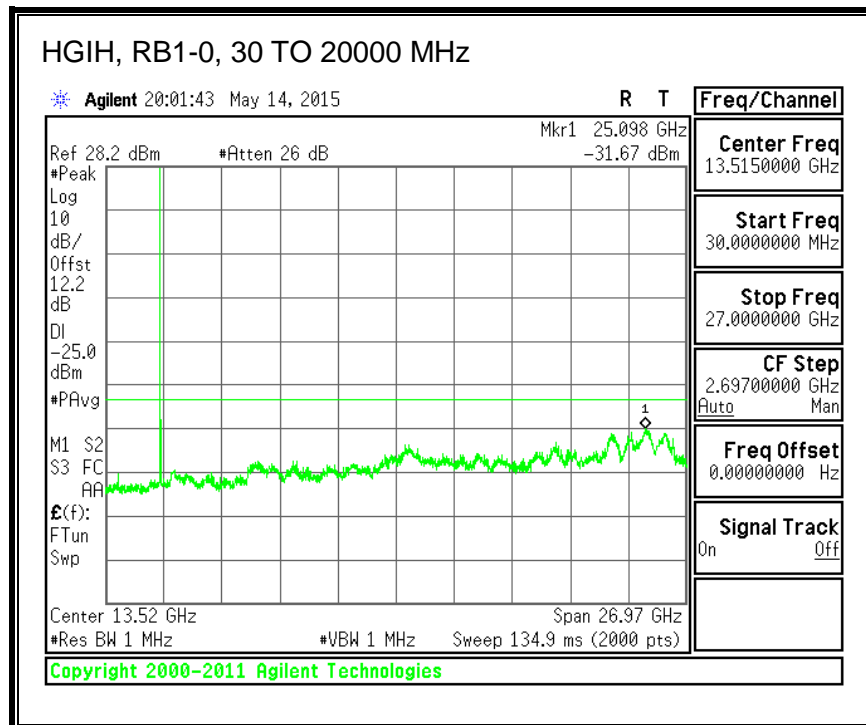
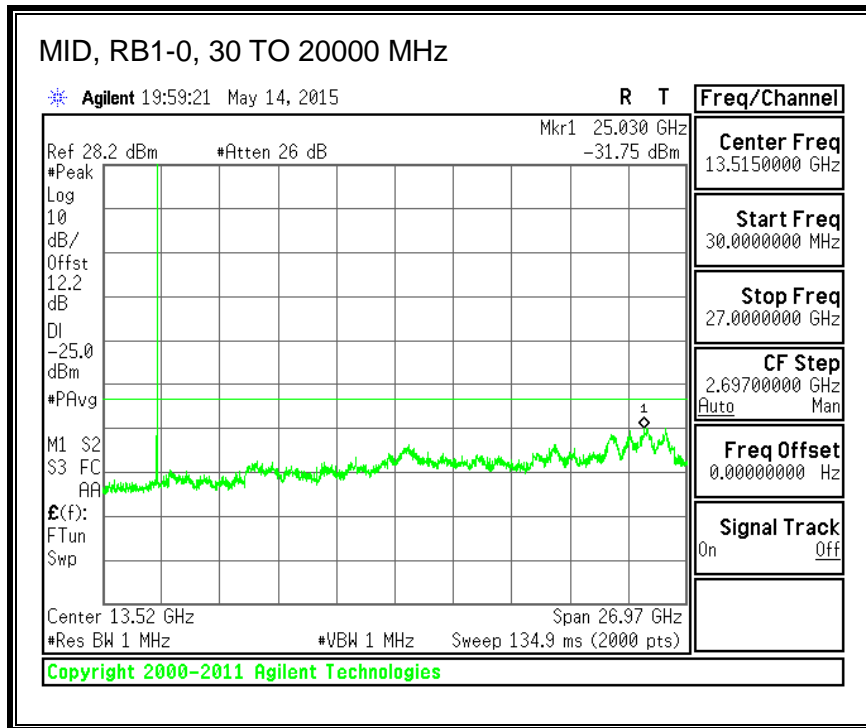
QPSK, (15.0 MHz BAND WIDTH)



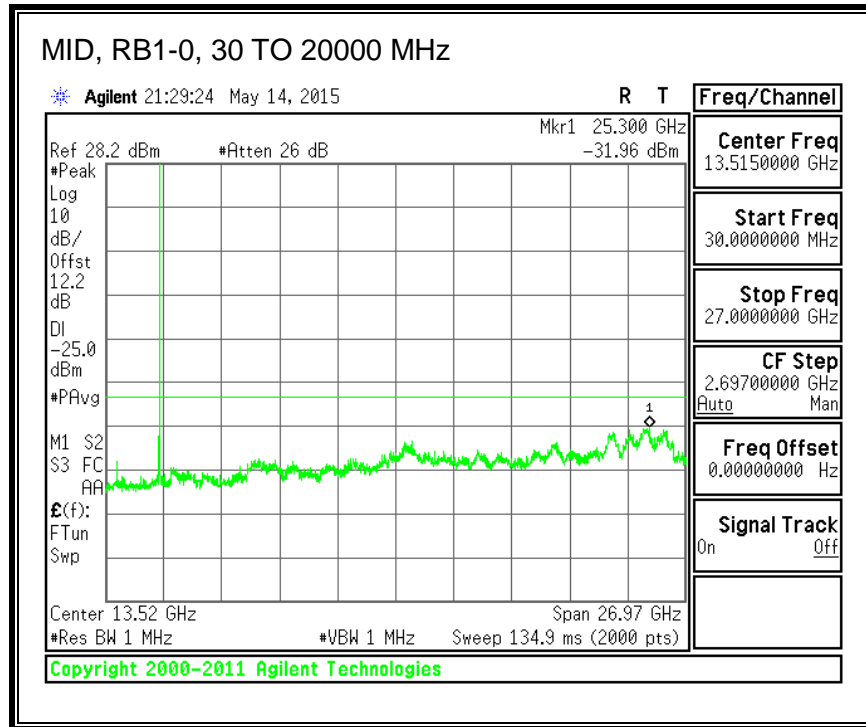
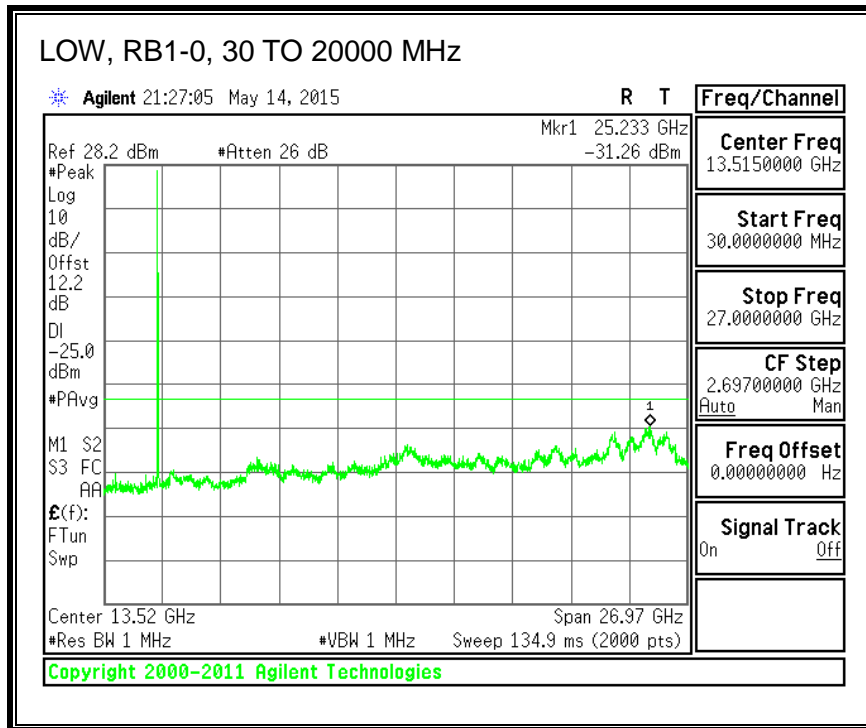


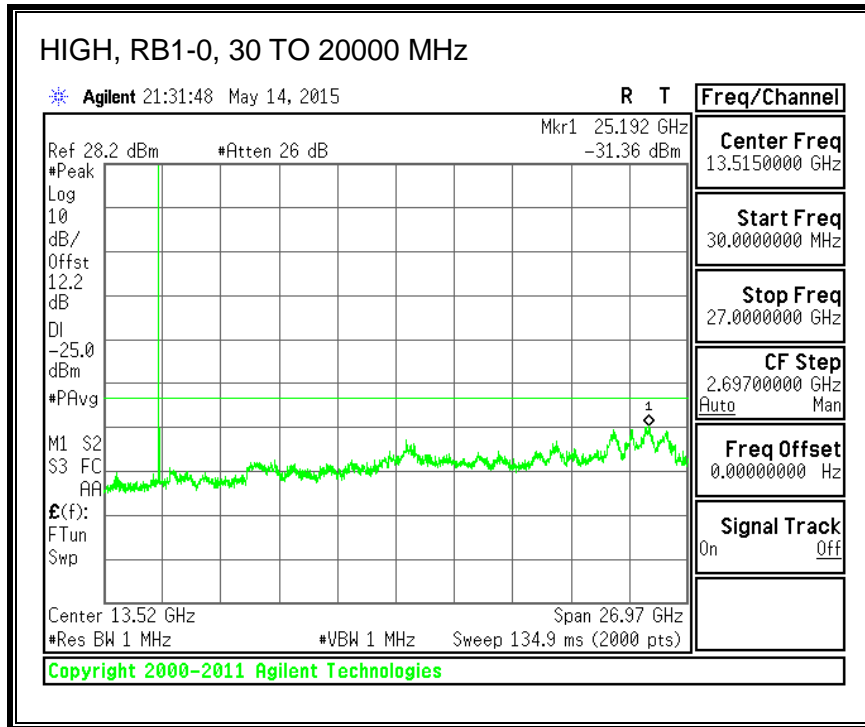
16QAM, (15.0 MHz BAND WIDTH)



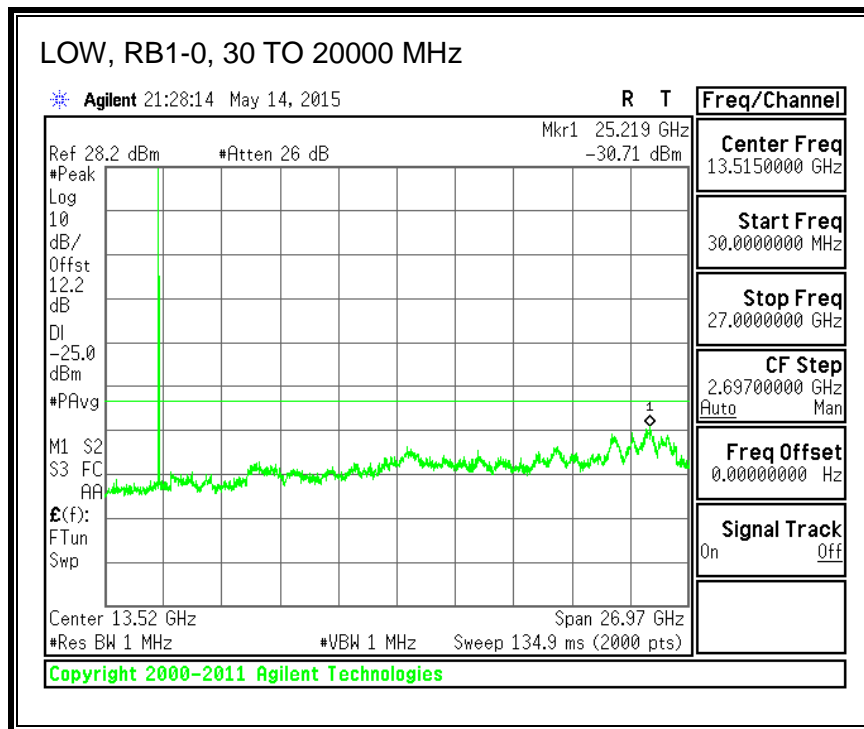


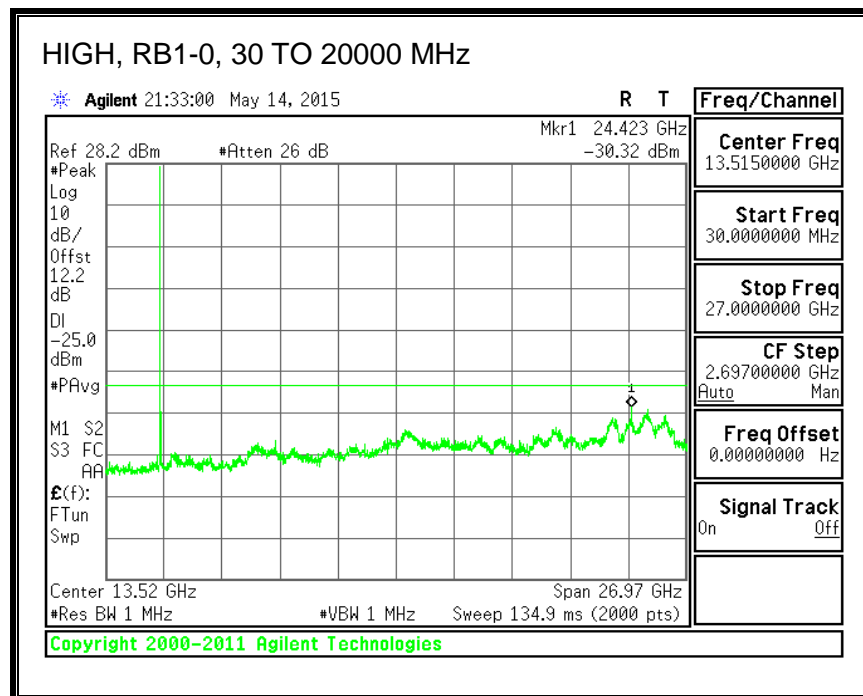
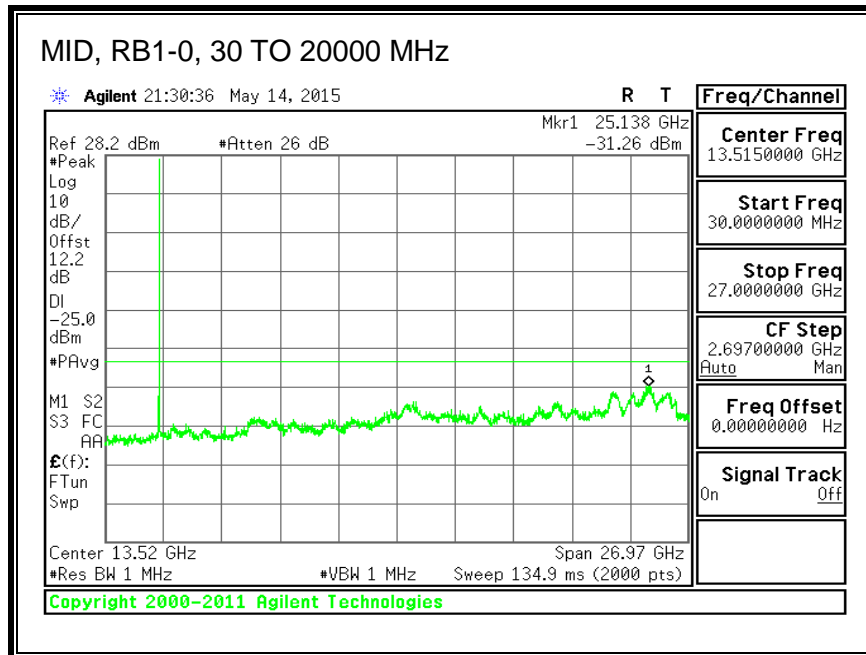
QPSK, (20.0 MHz BAND WIDTH)





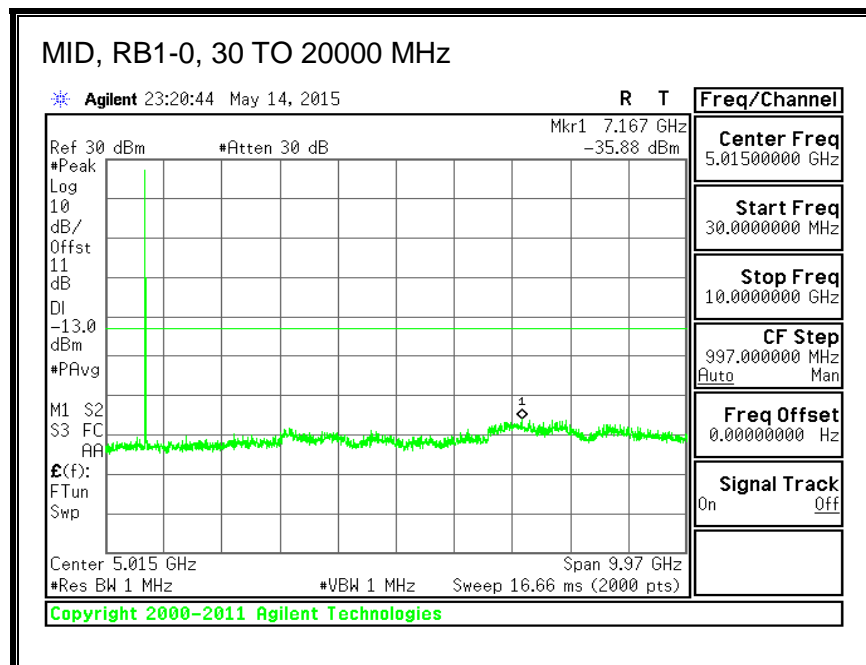
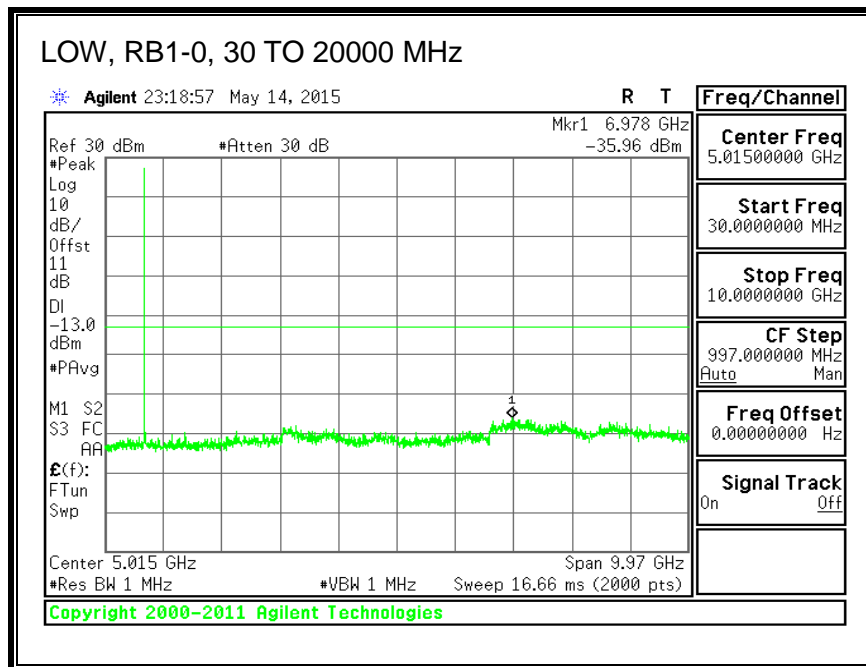
16QAM, (20.0 MHz BAND WIDTH)

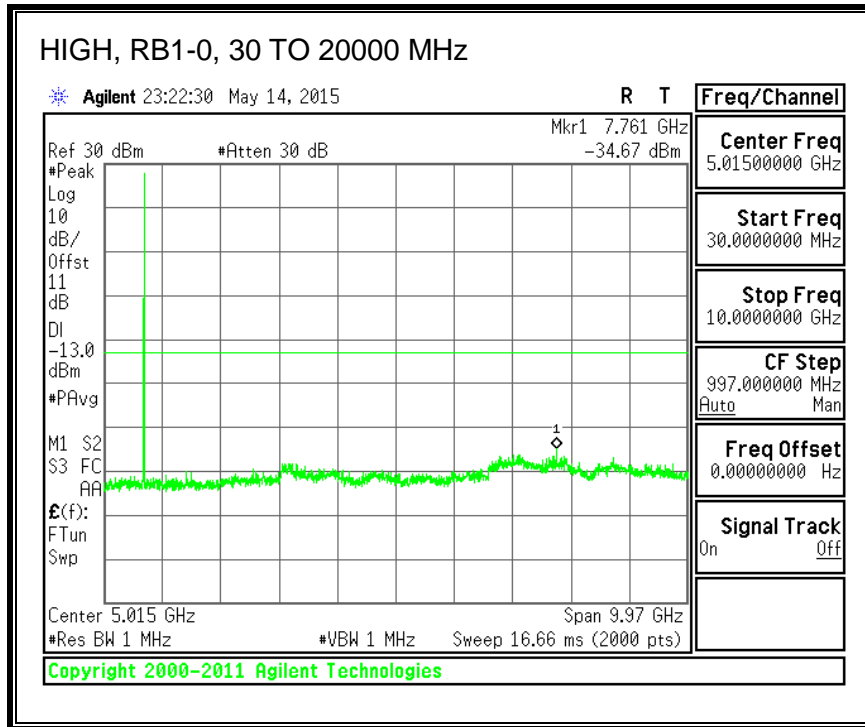




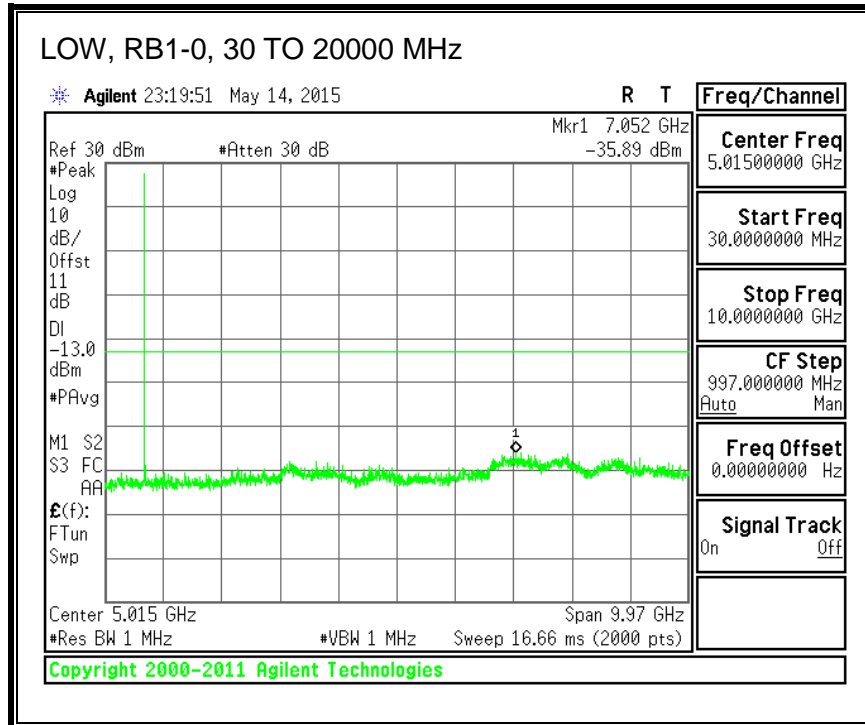
8.6.5. LTE BAND 12

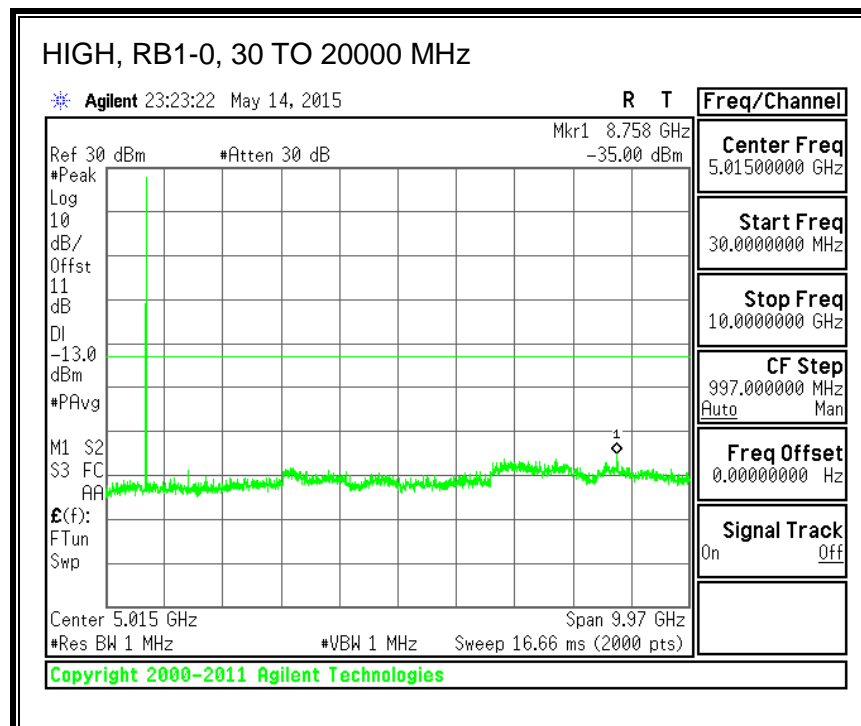
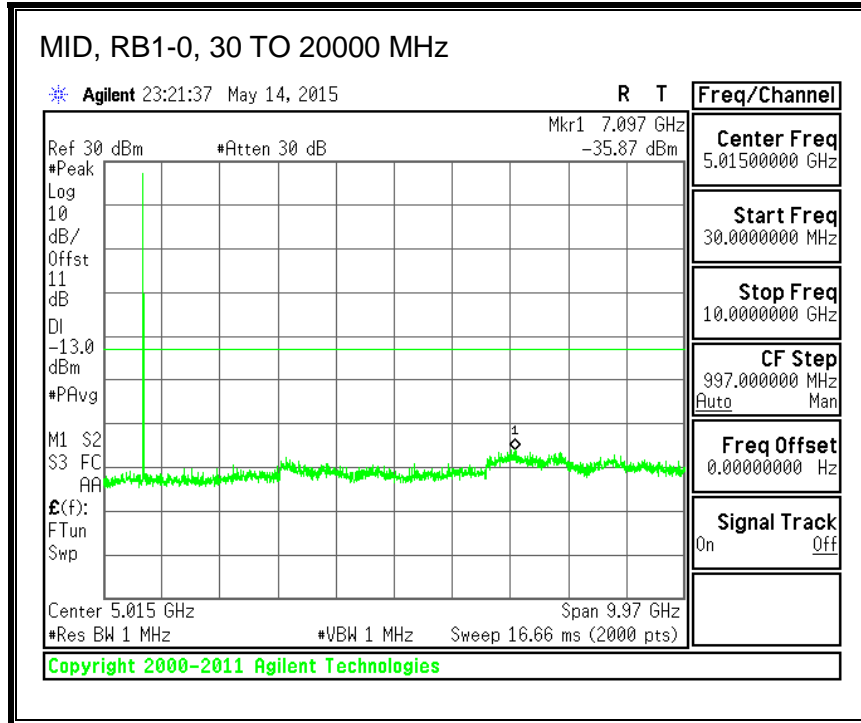
QPSK, (1.4 MHz BAND WIDTH)



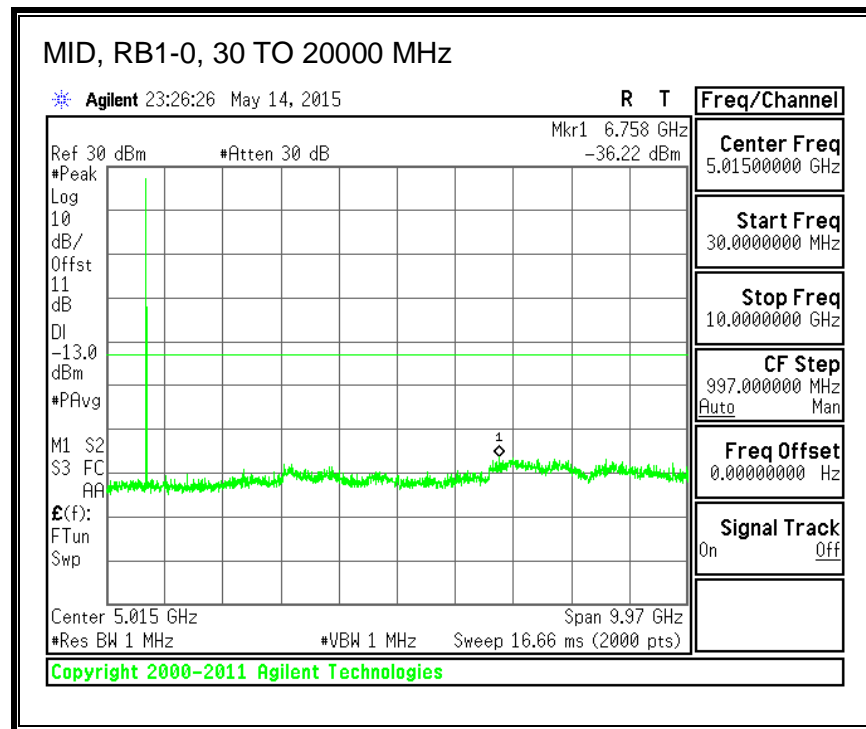
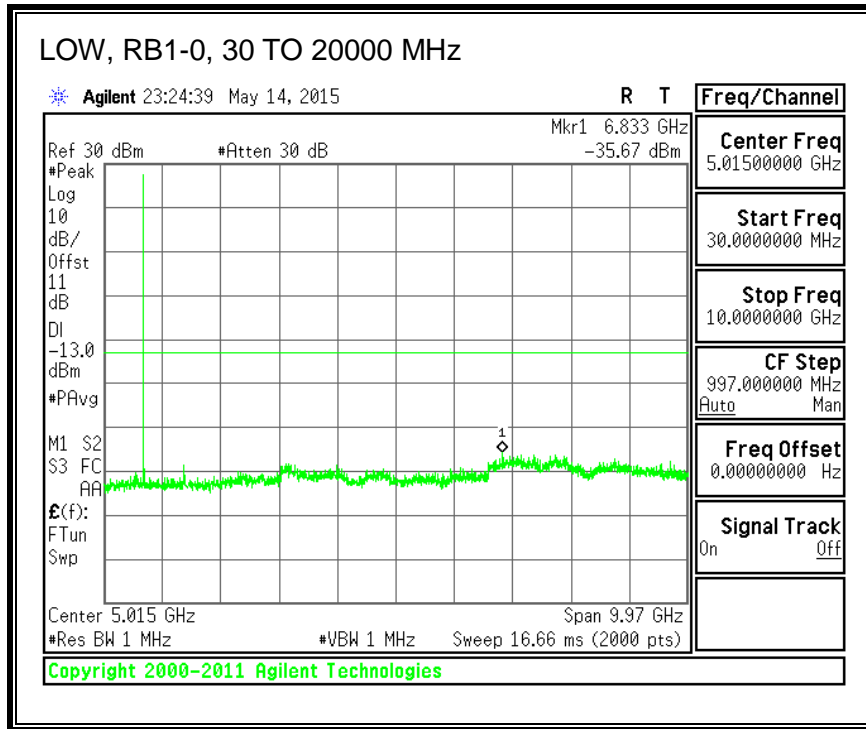


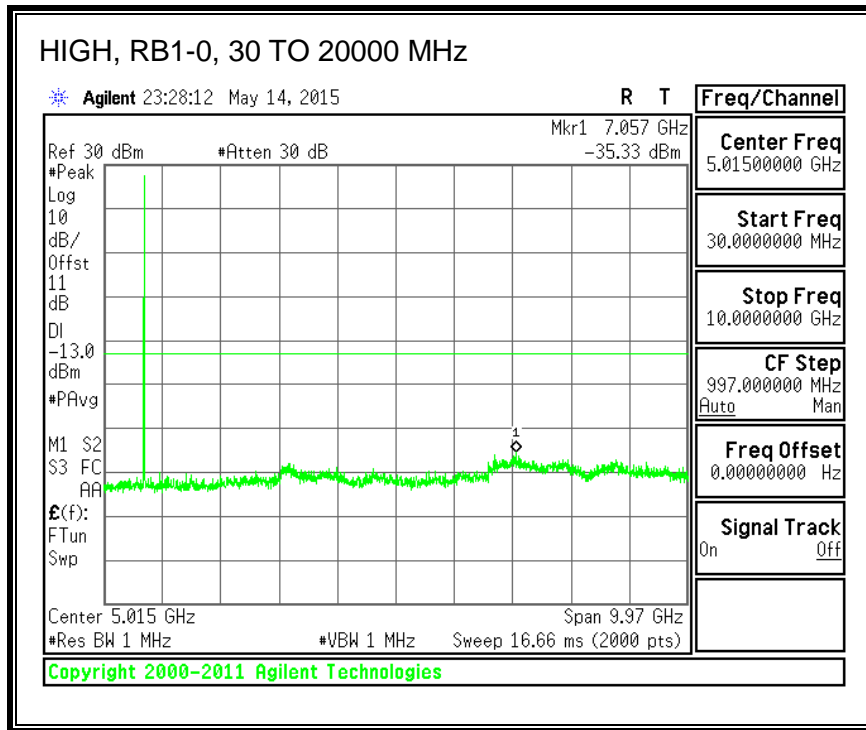
16QAM, (1.4 MHz BAND WIDTH)



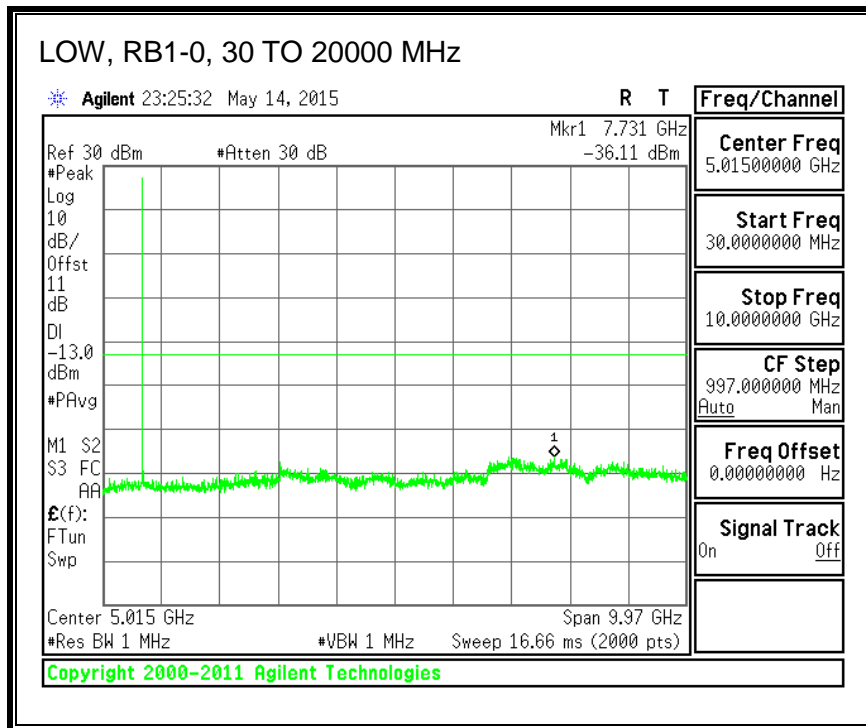


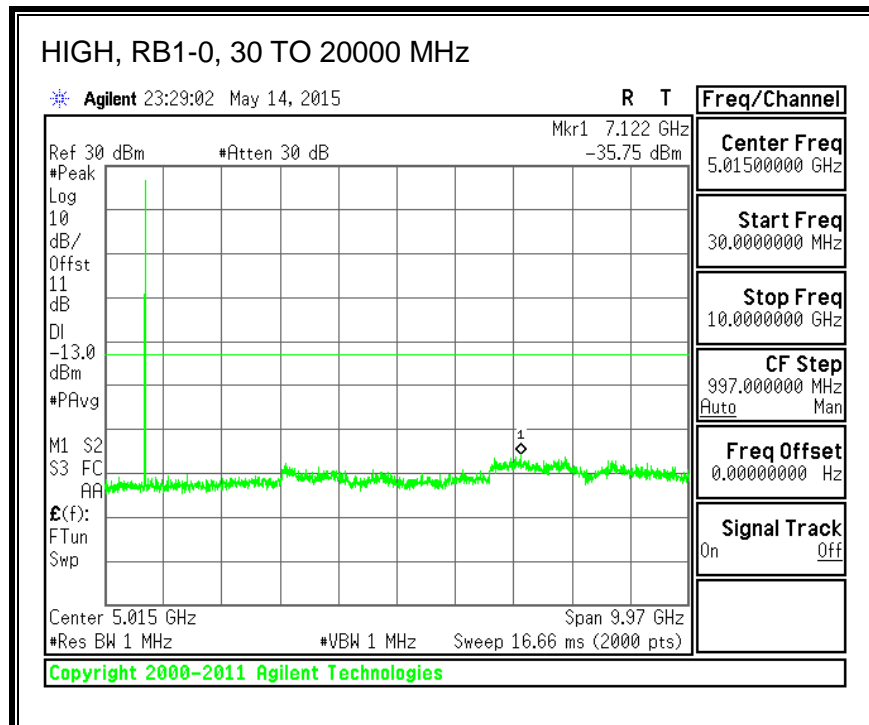
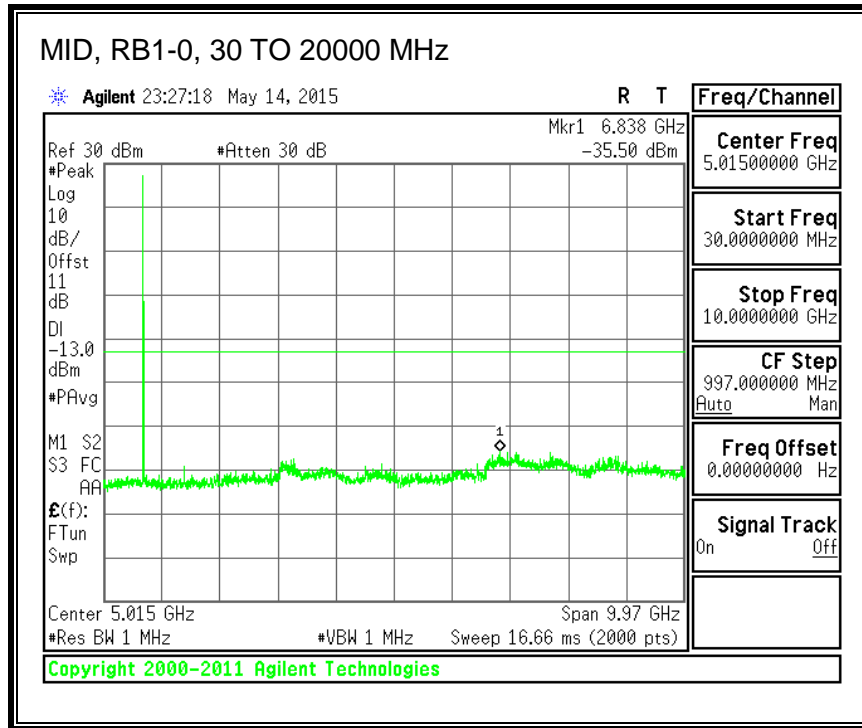
QPSK, (3.0 MHz BAND WIDTH)



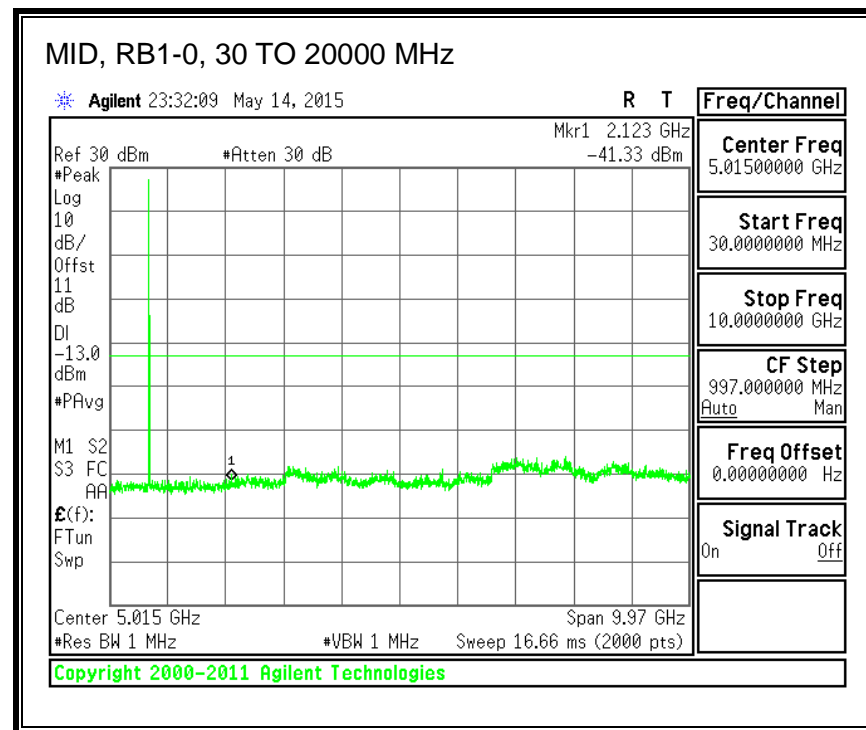
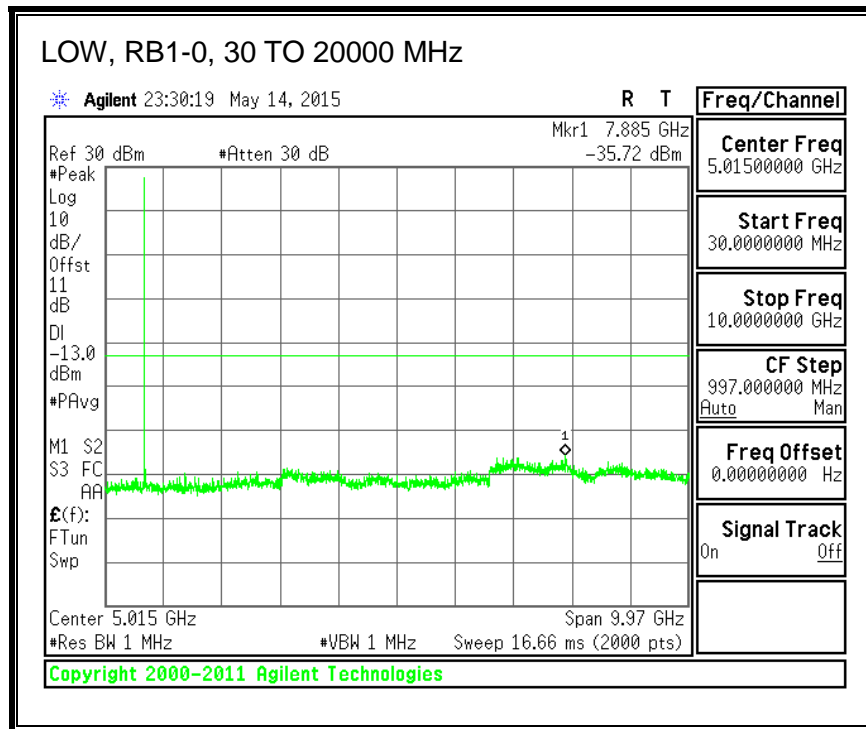


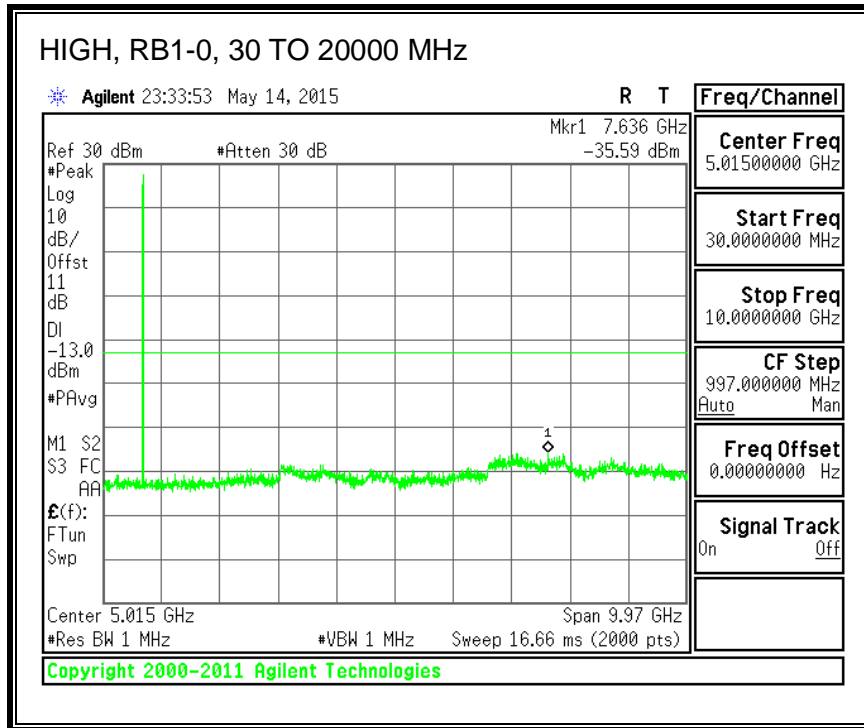
16QAM, (3.0 MHz BAND WIDTH)



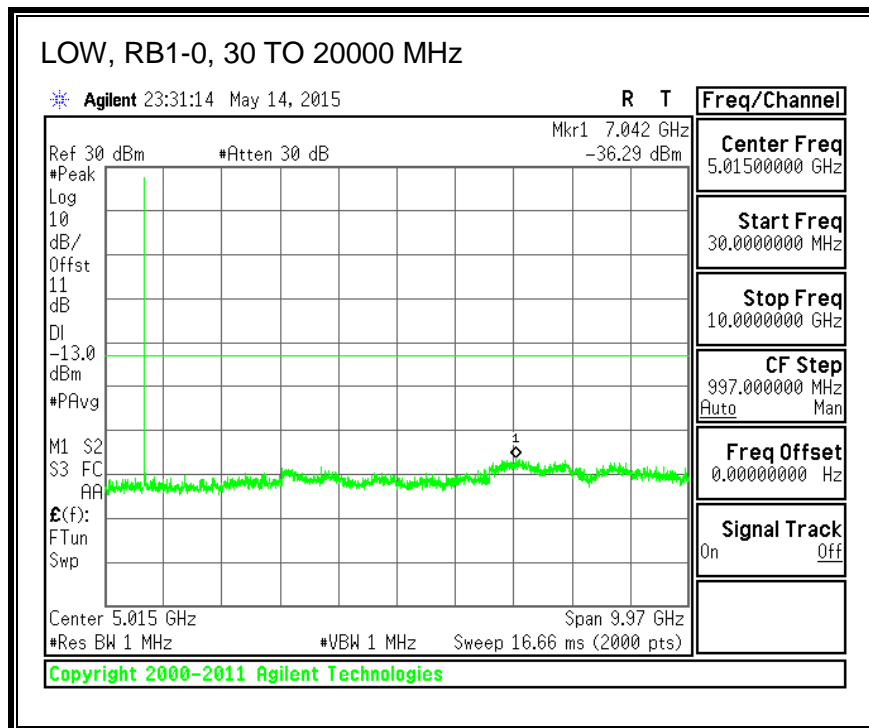


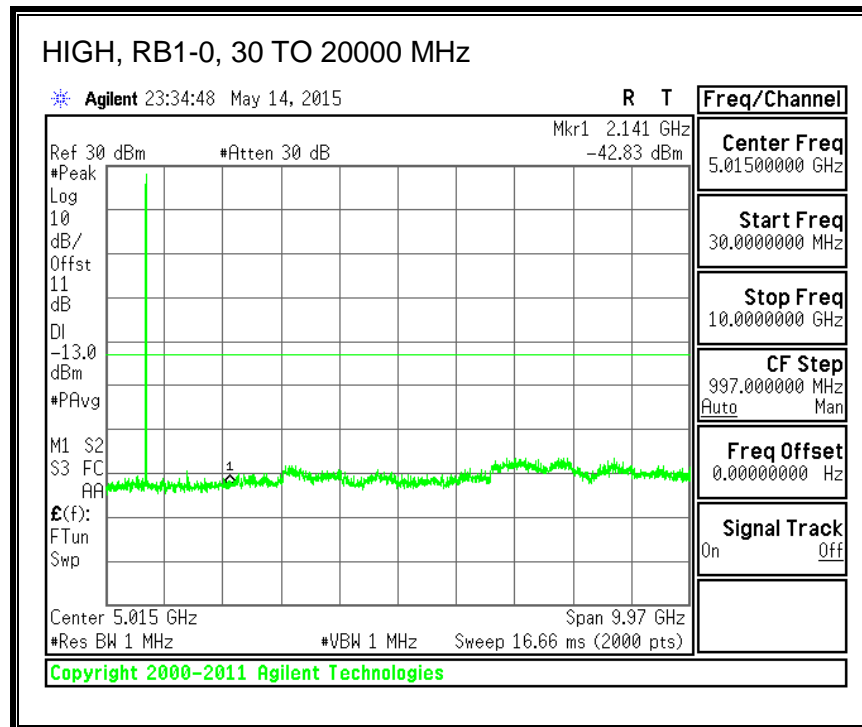
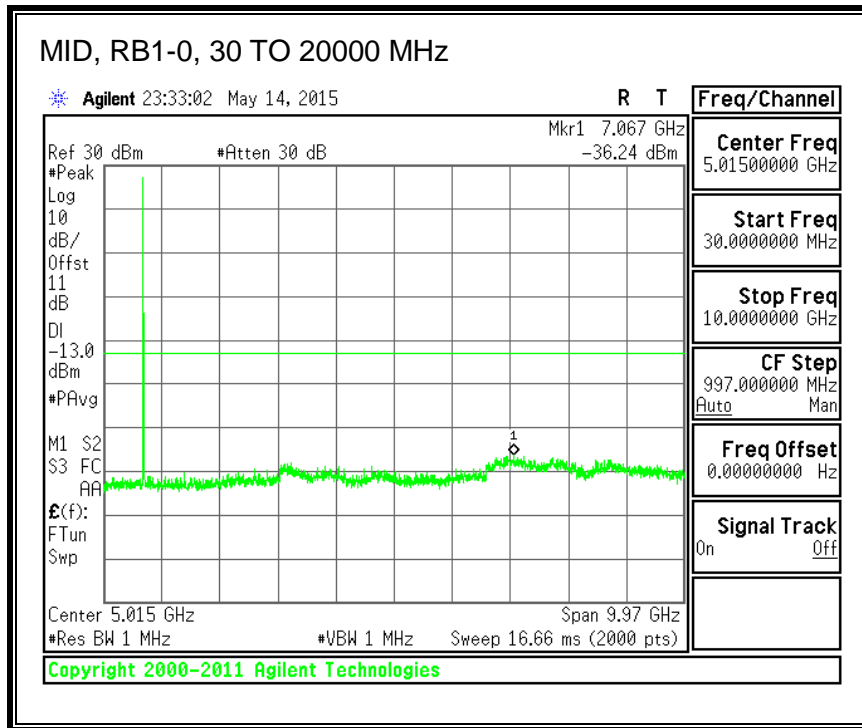
QPSK, (5.0 MHz BAND WIDTH)



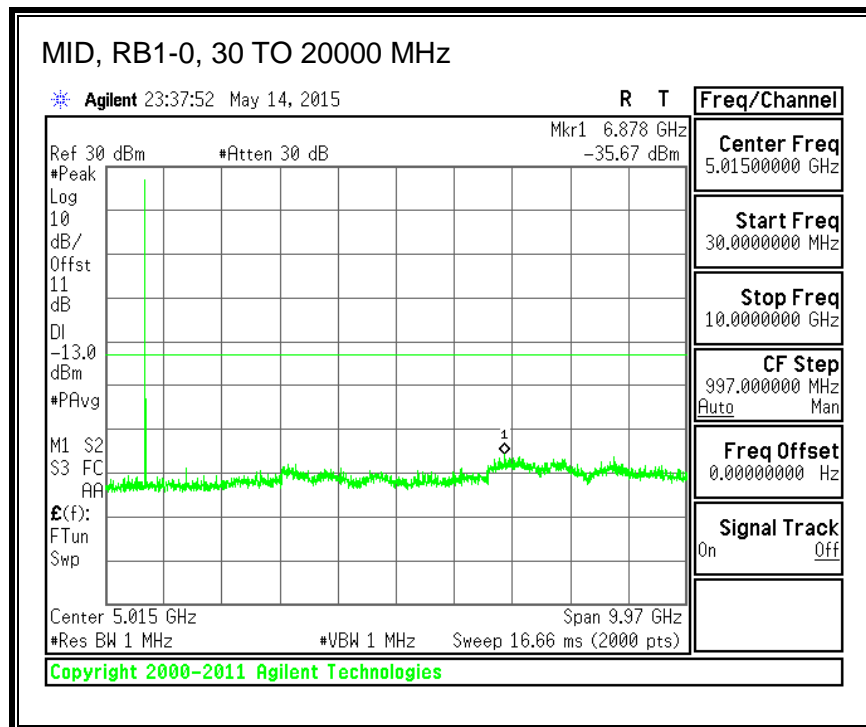
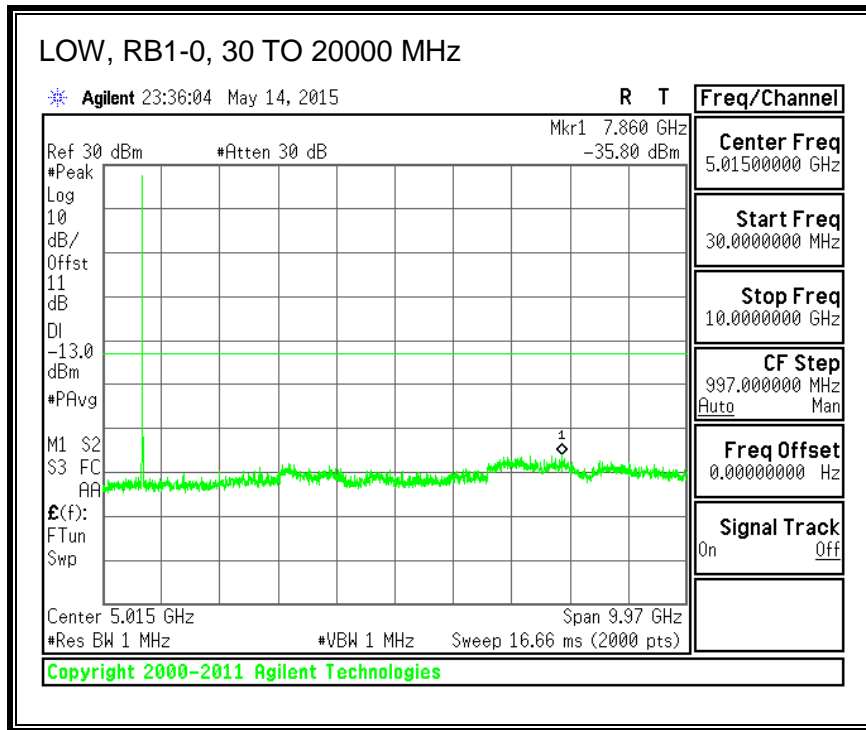


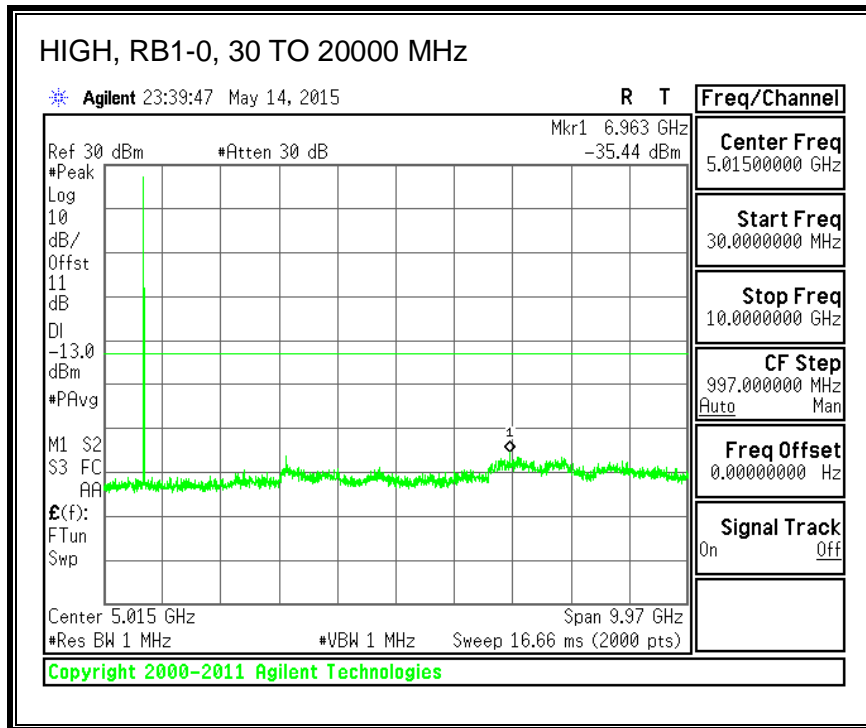
16QAM, (5.0 MHz BAND WIDTH)



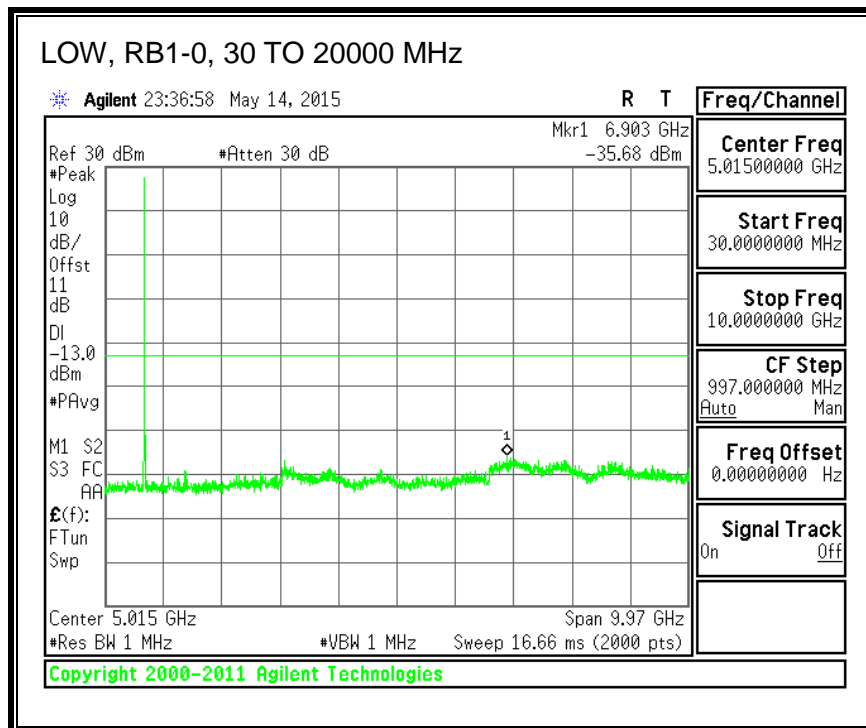


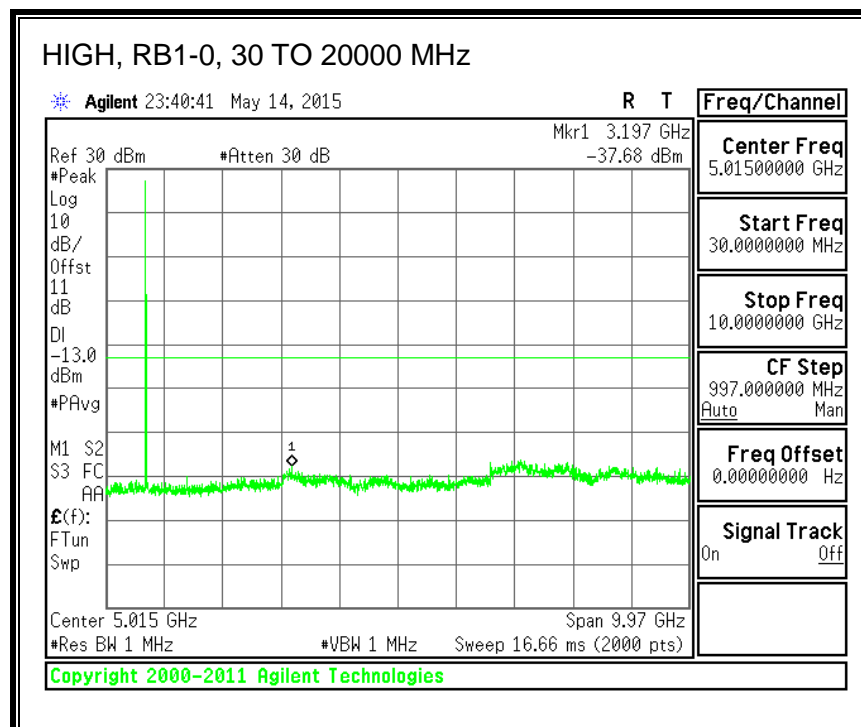
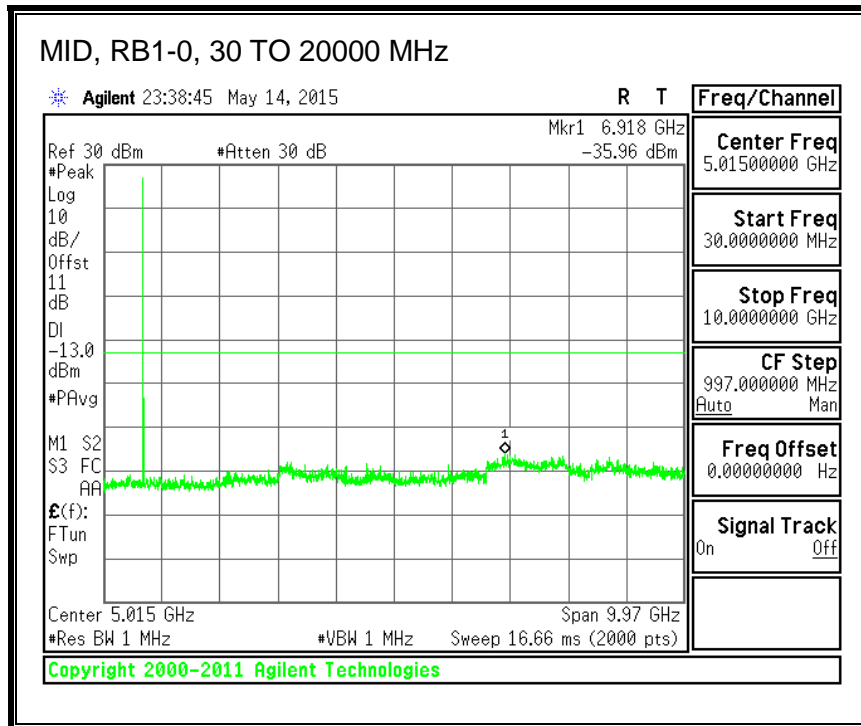
QPSK, (10.0 MHz BAND WIDTH)





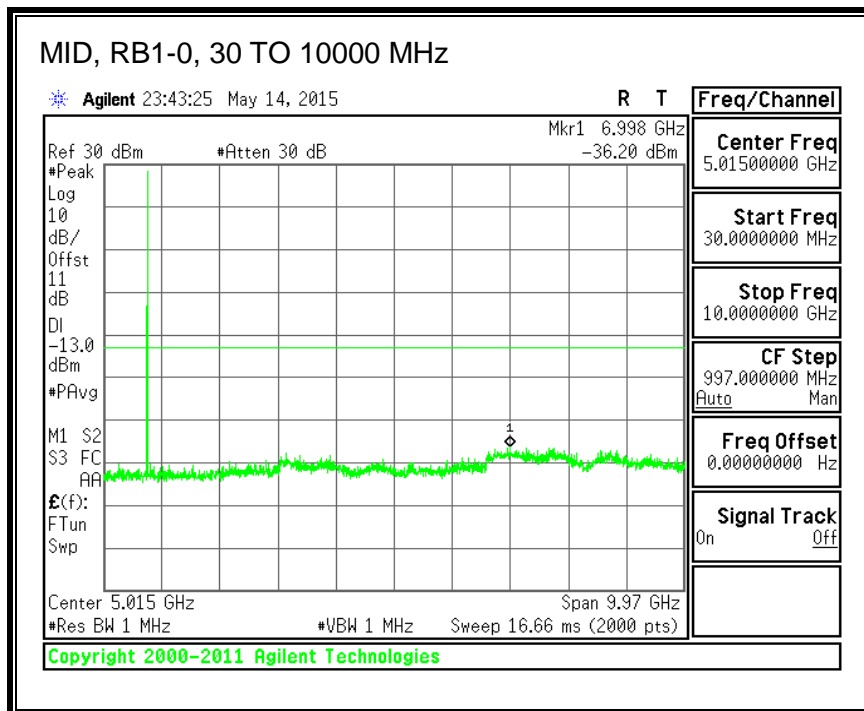
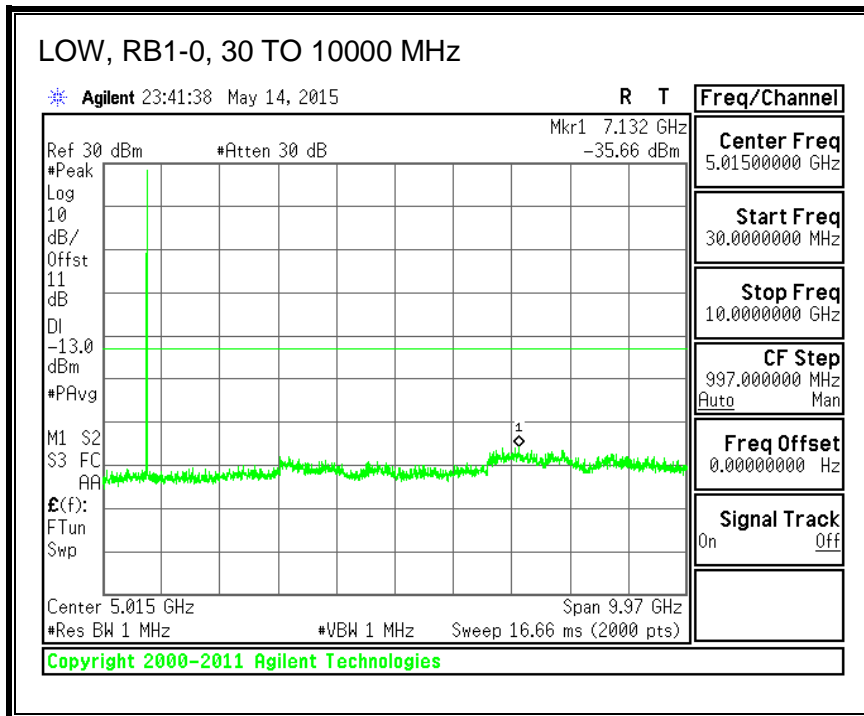
16QAM, (10.0 MHz BAND WIDTH)

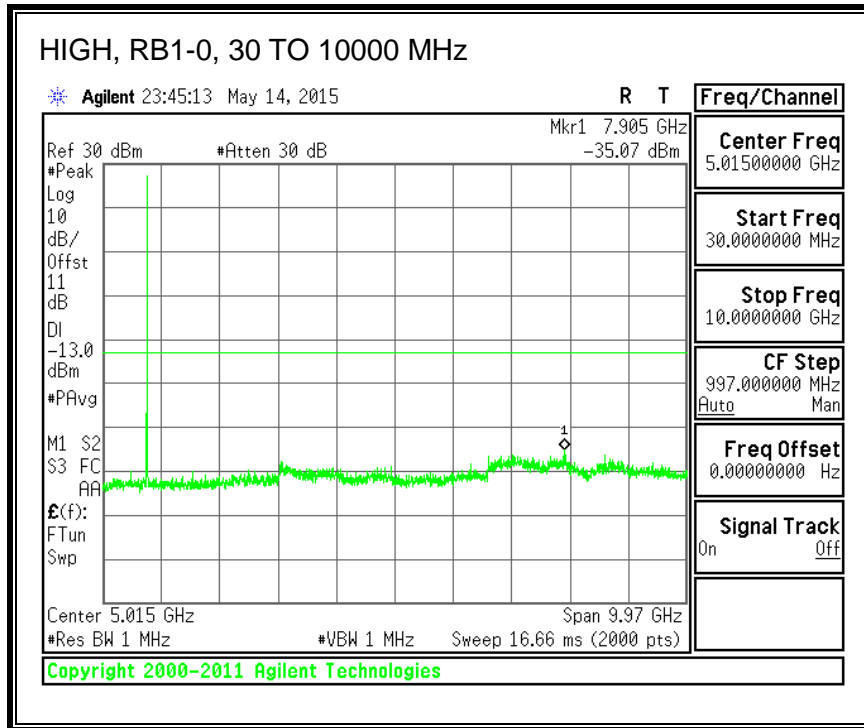




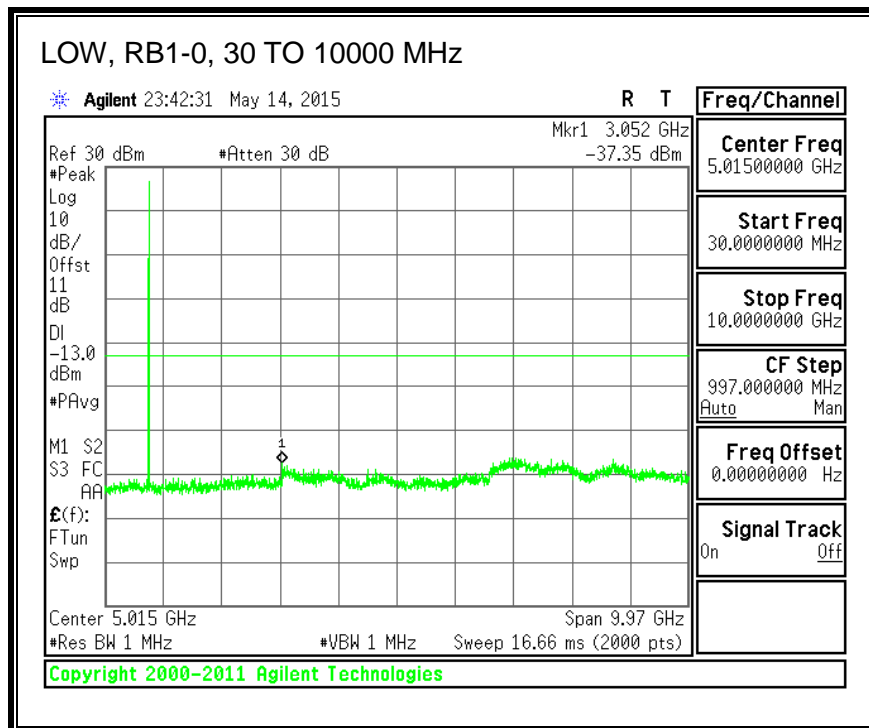
8.6.6. LTE BAND 13

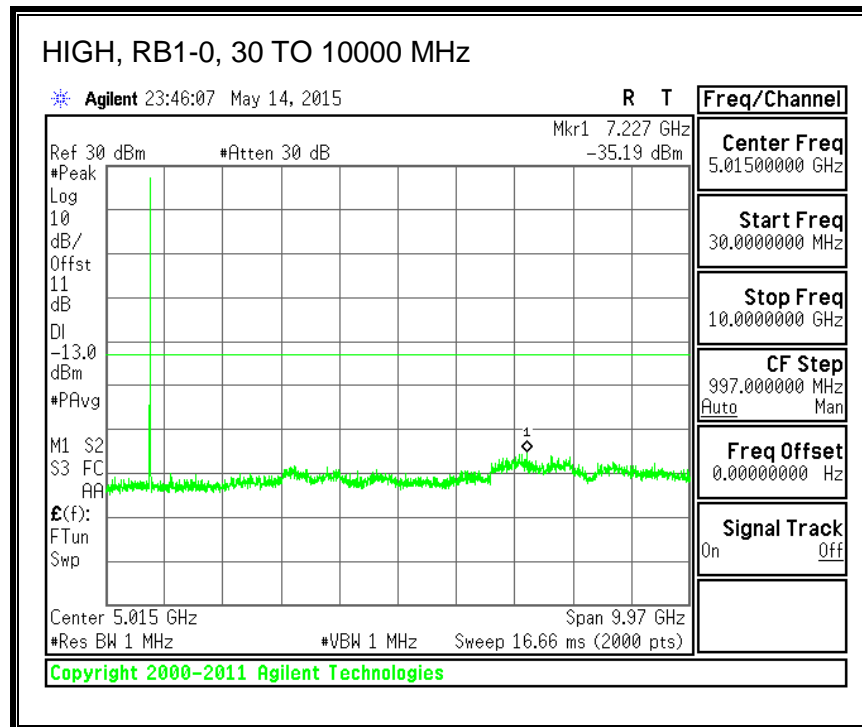
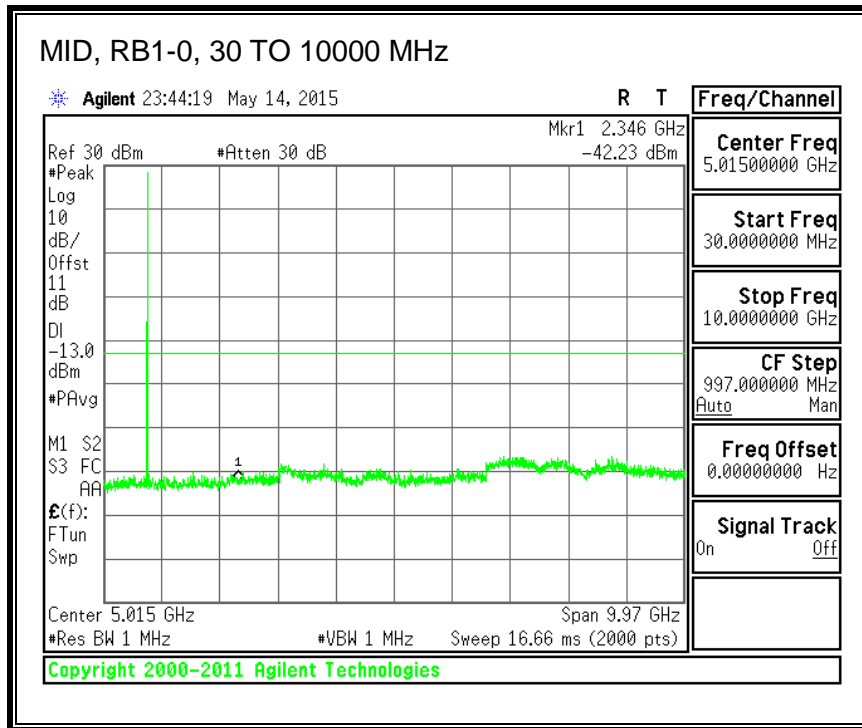
QPSK, (5.0 MHz BAND WIDTH)



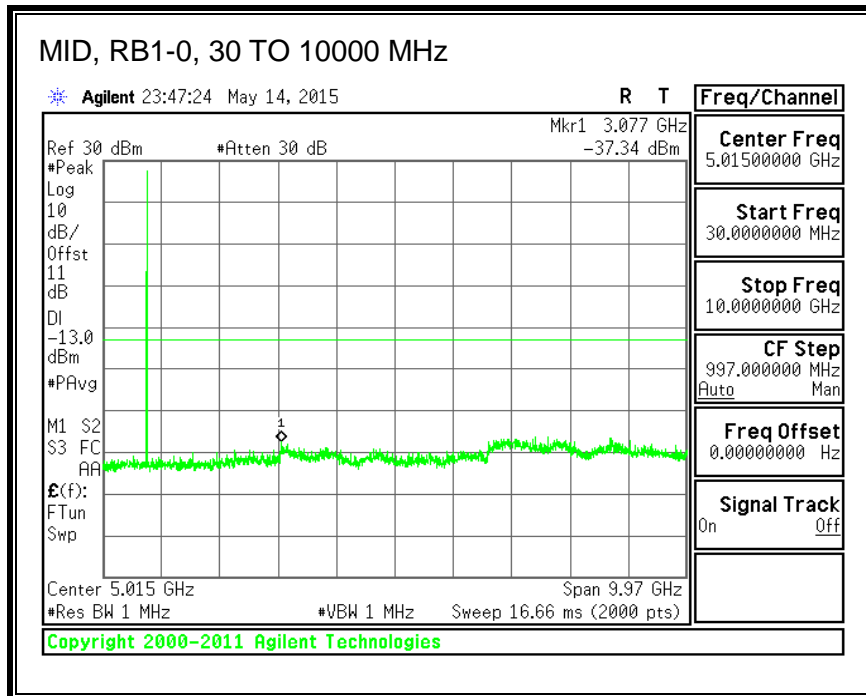


16QAM, (5.0 MHz BAND WIDTH)

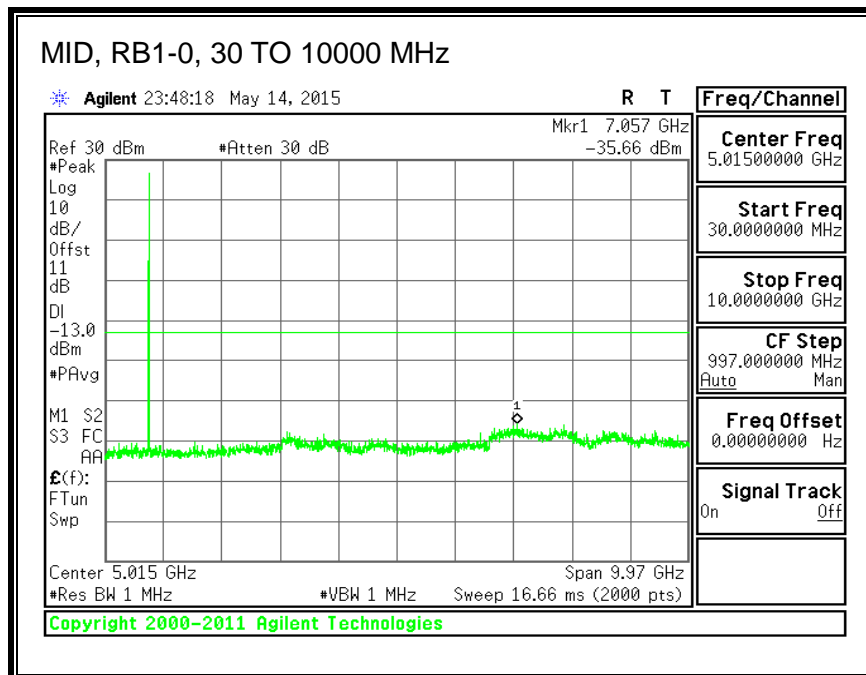




QPSK, (10.0 MHz BAND WIDTH)

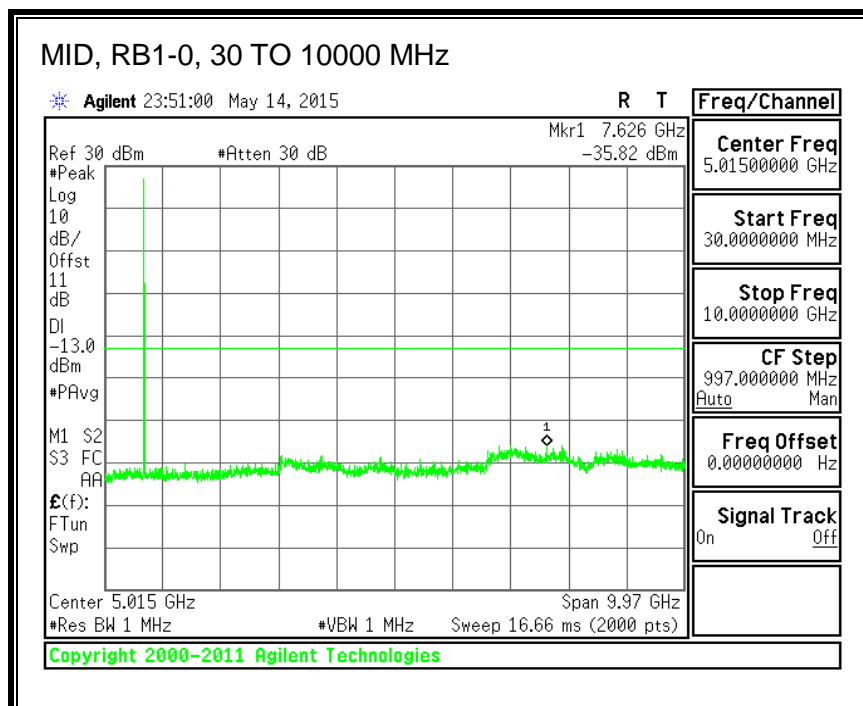
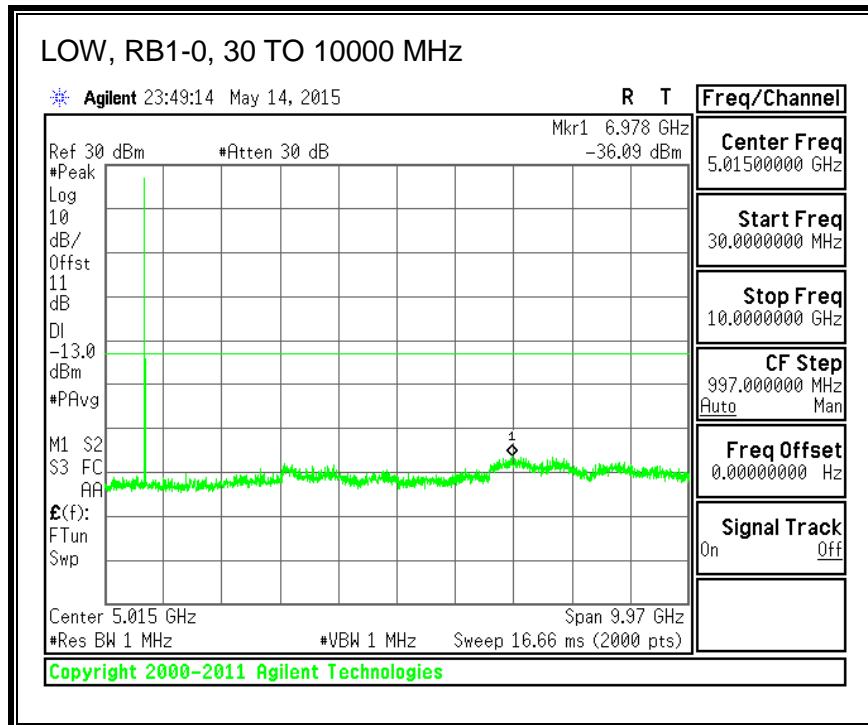


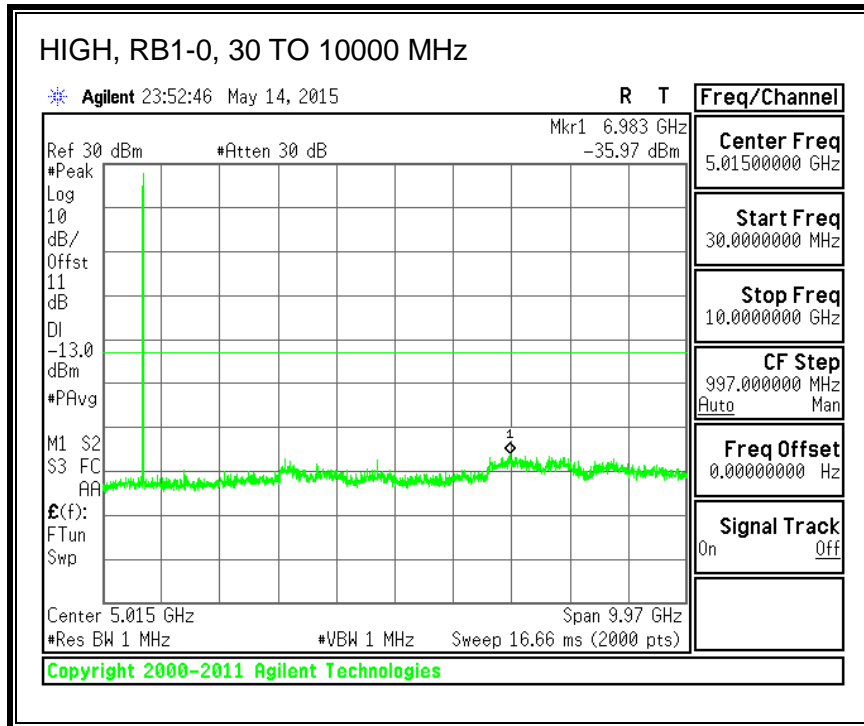
16QAM, (10.0 MHz BAND WIDTH)



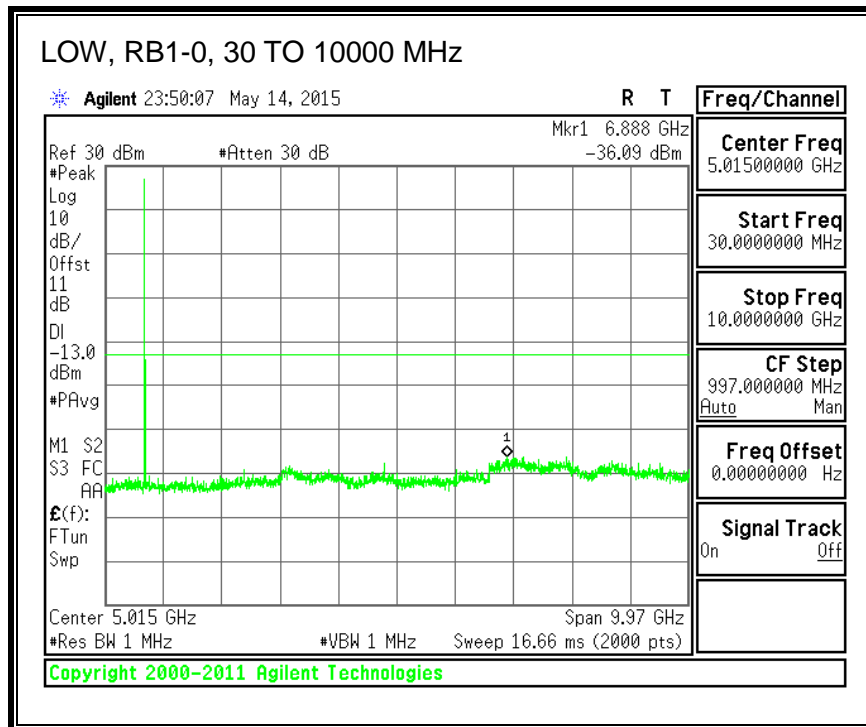
8.6.7. LTE BAND 17

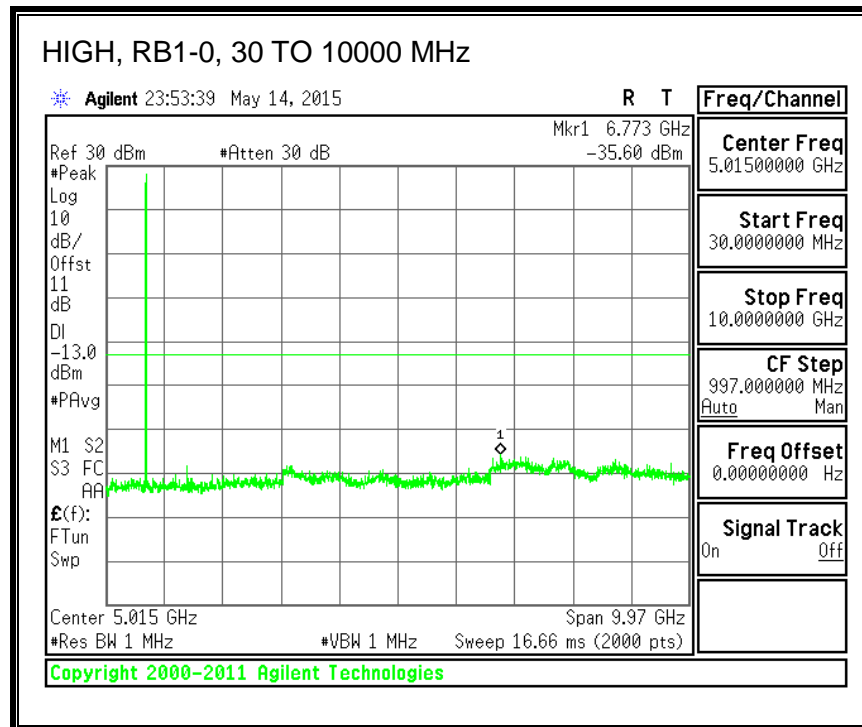
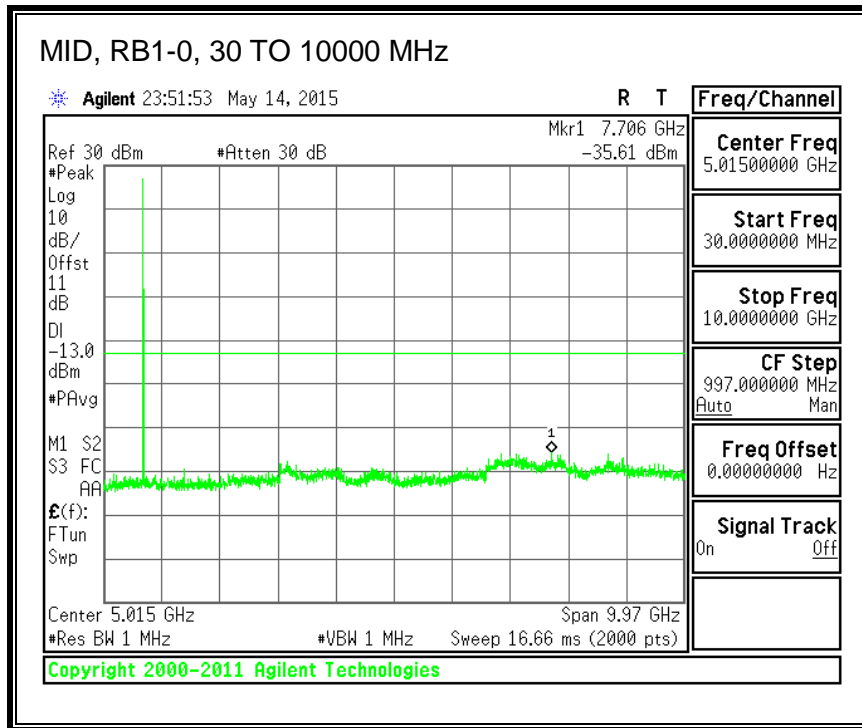
QPSK, (5.0 MHz BAND WIDTH)



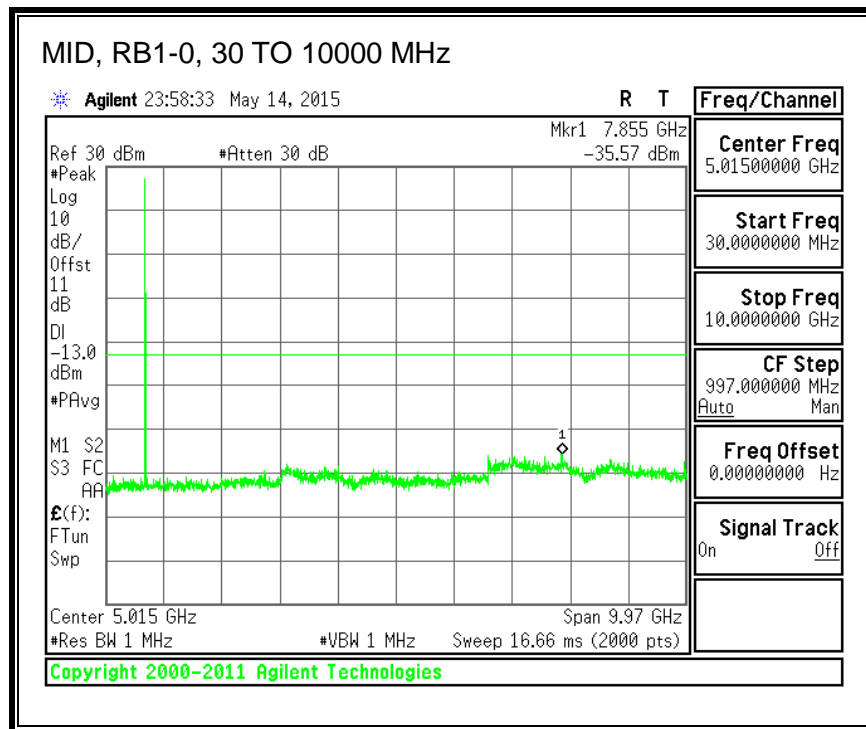
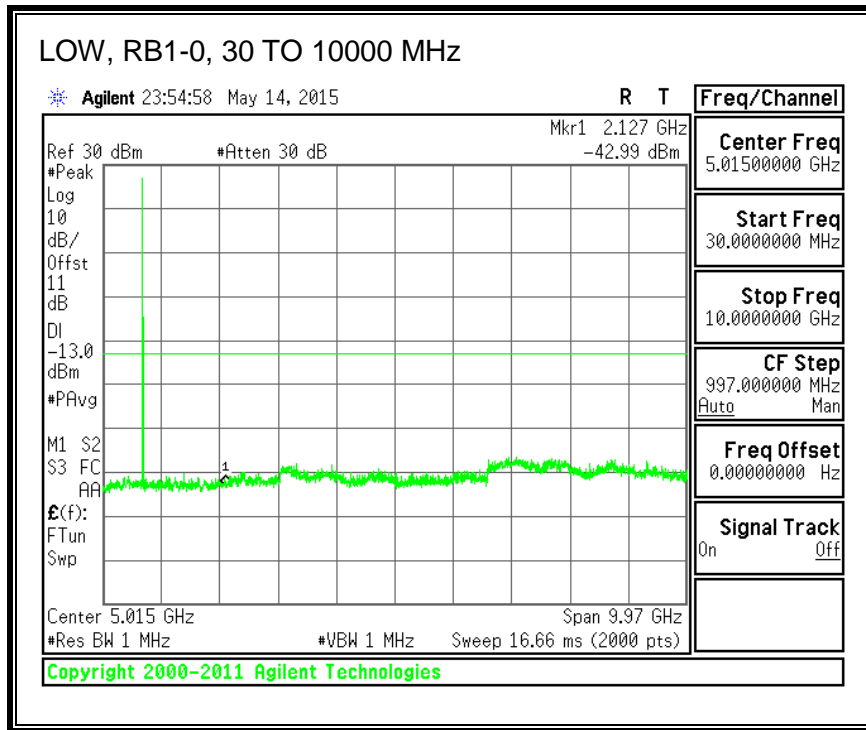


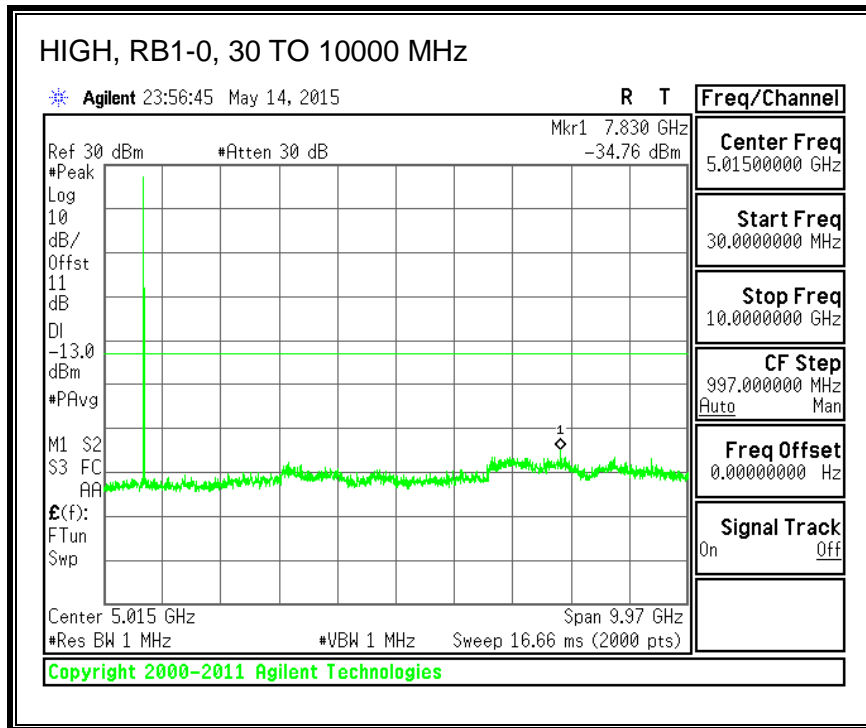
16QAM, (5.0 MHz BAND WIDTH)



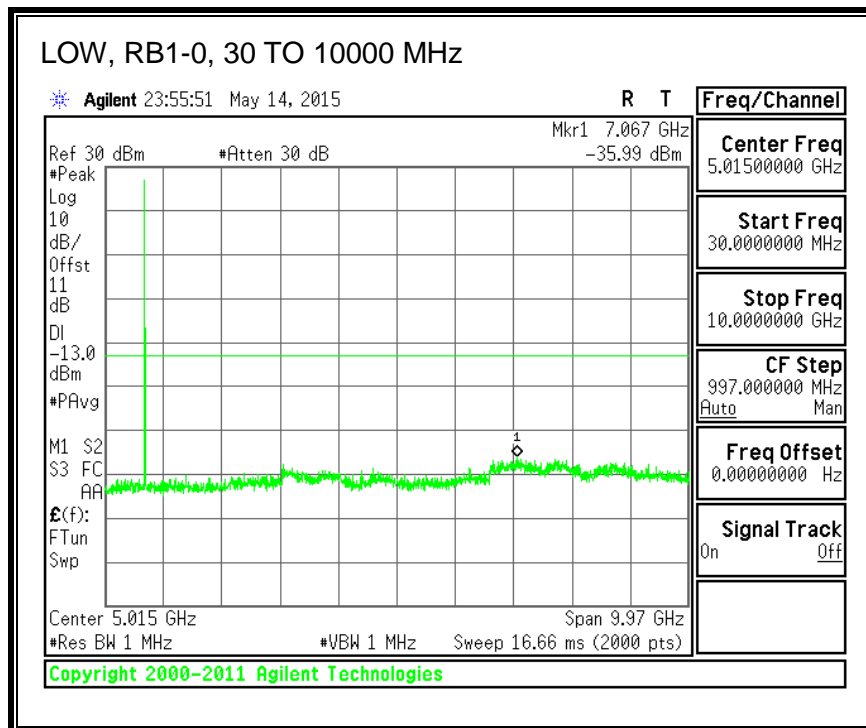


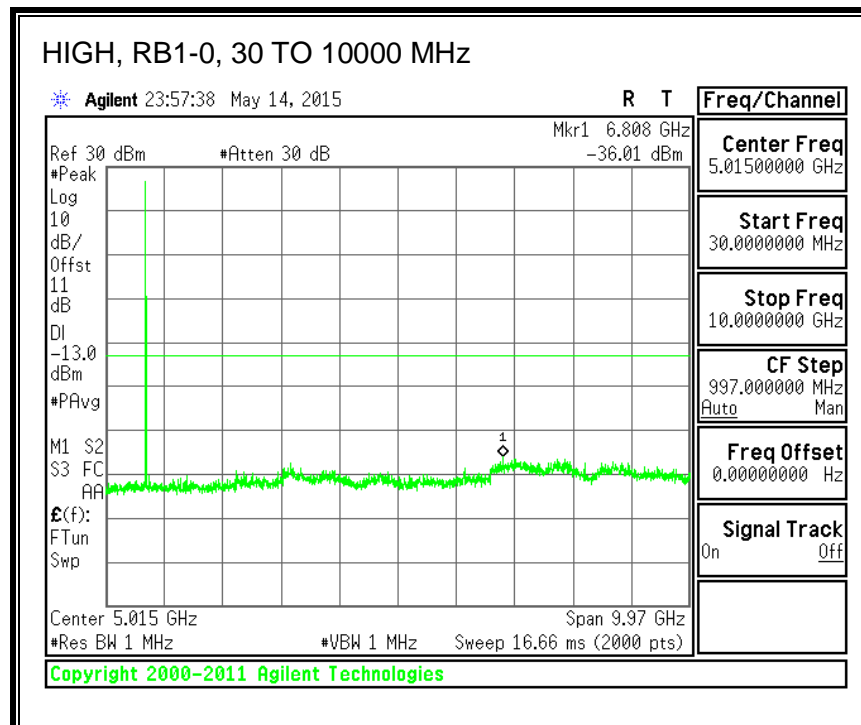
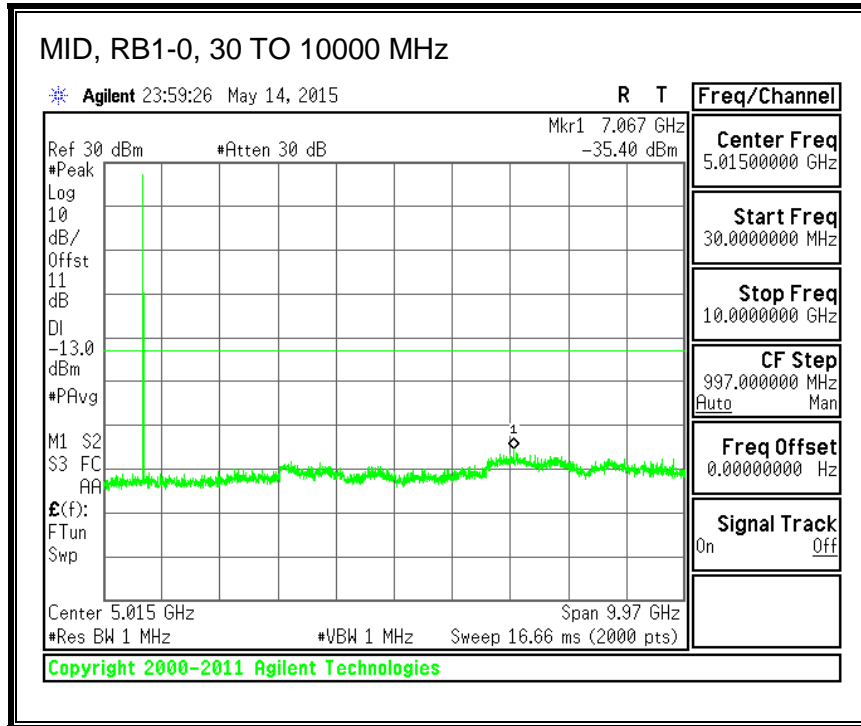
QPSK, (10.0 MHz BAND WIDTH)





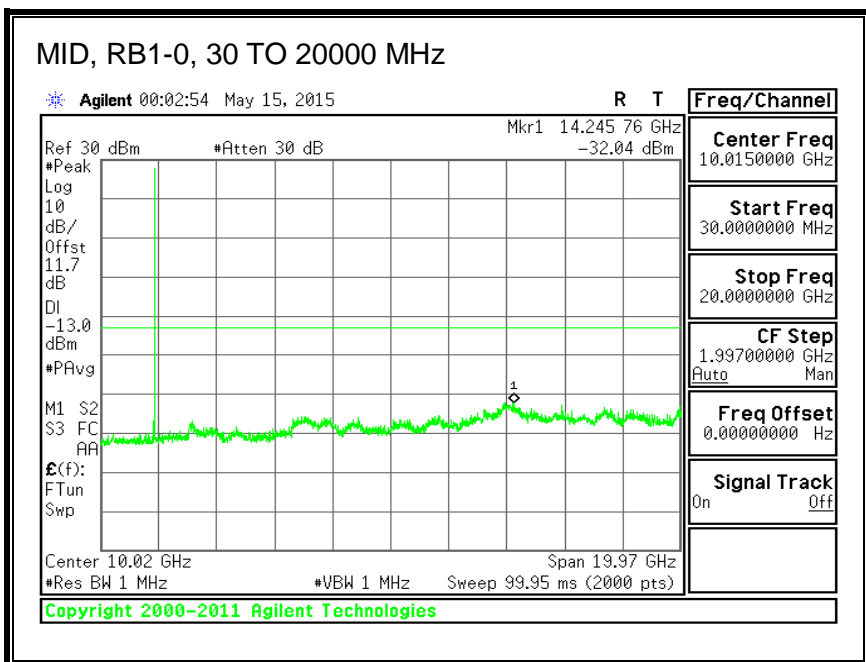
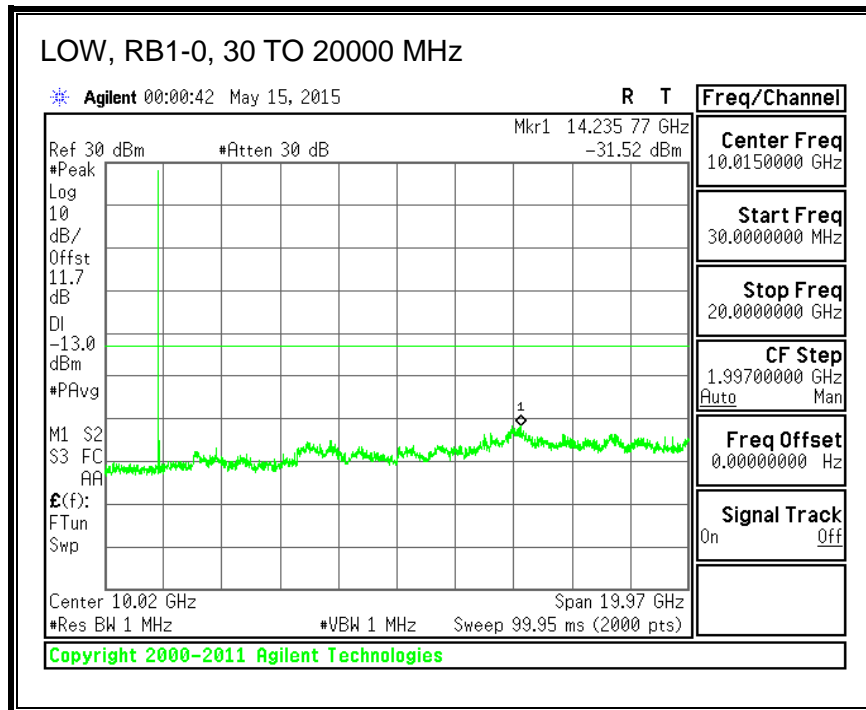
16QAM, (10.0 MHz BAND WIDTH)

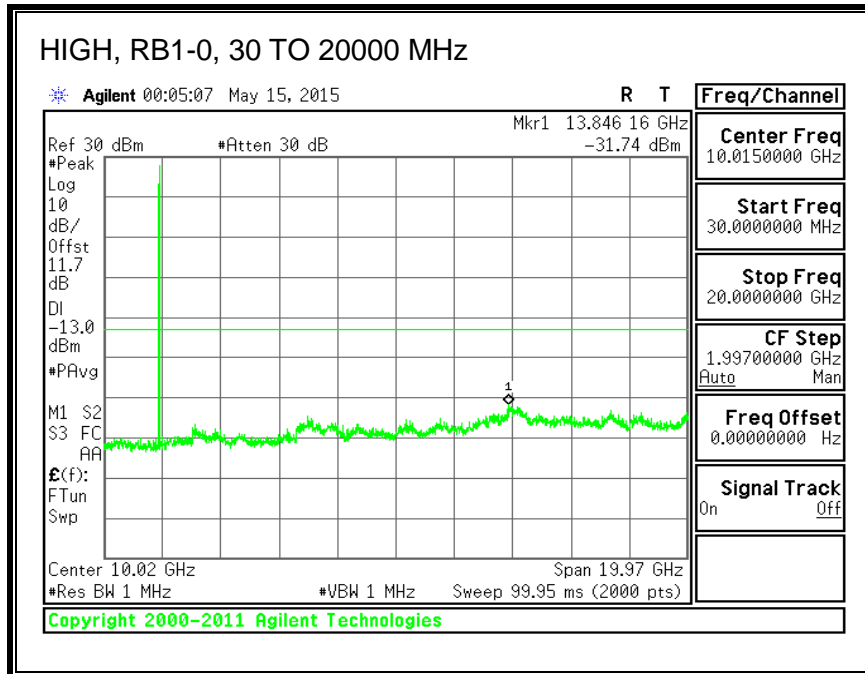




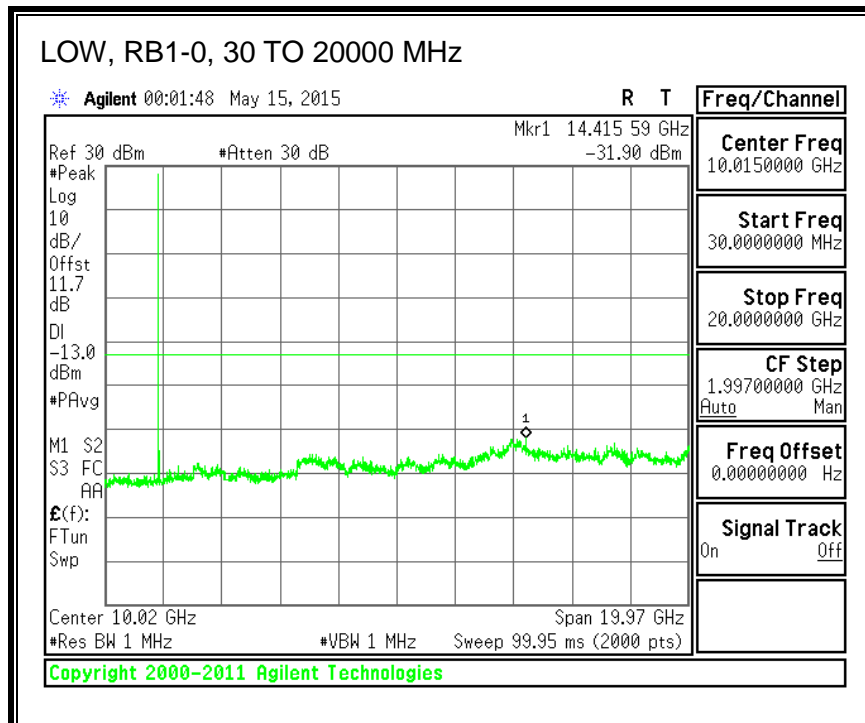
8.6.8. LTE BAND 25

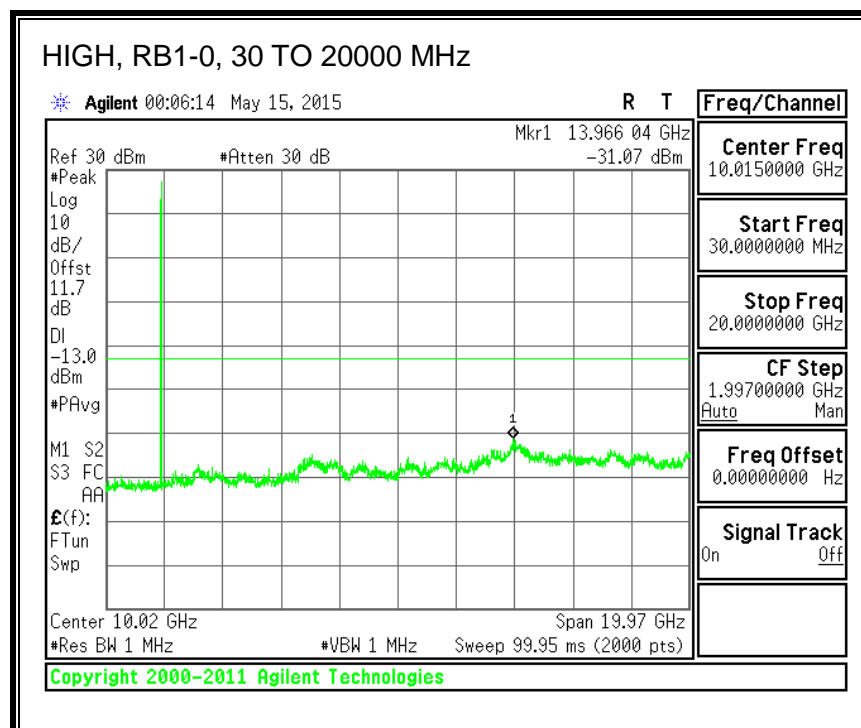
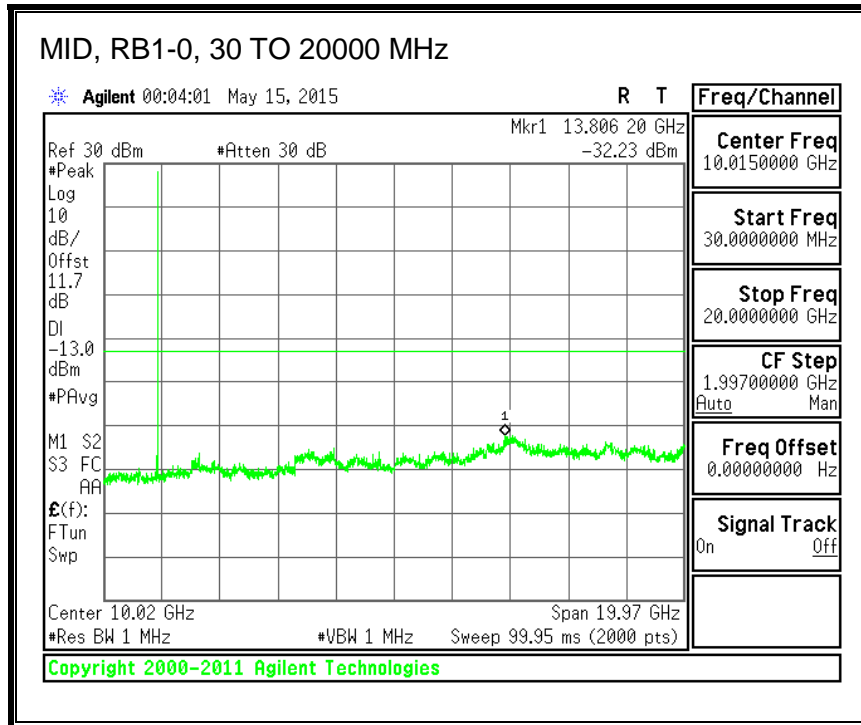
QPSK, (1.4 MHz BAND WIDTH)



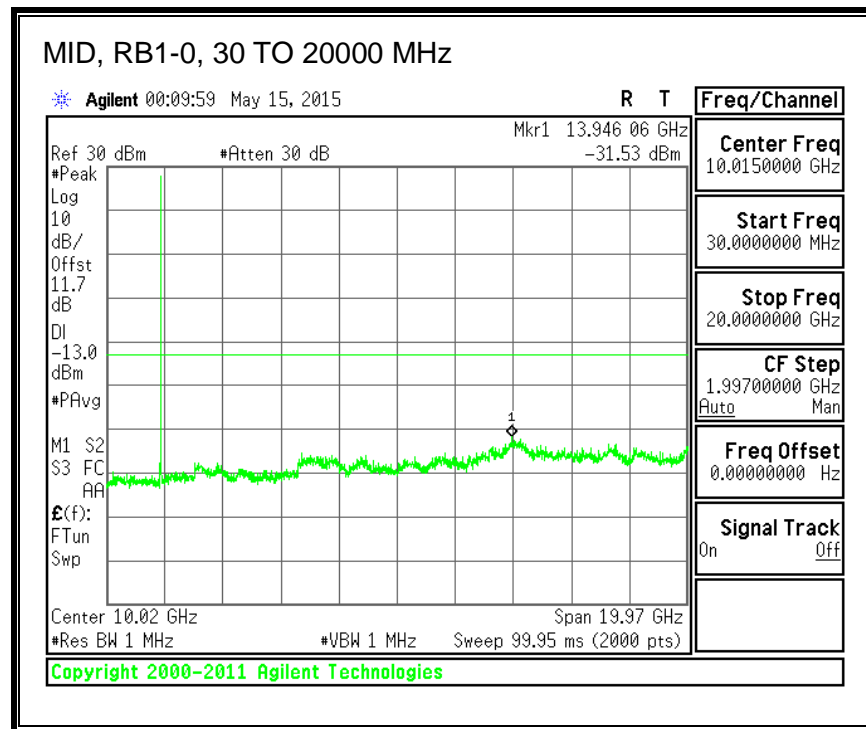
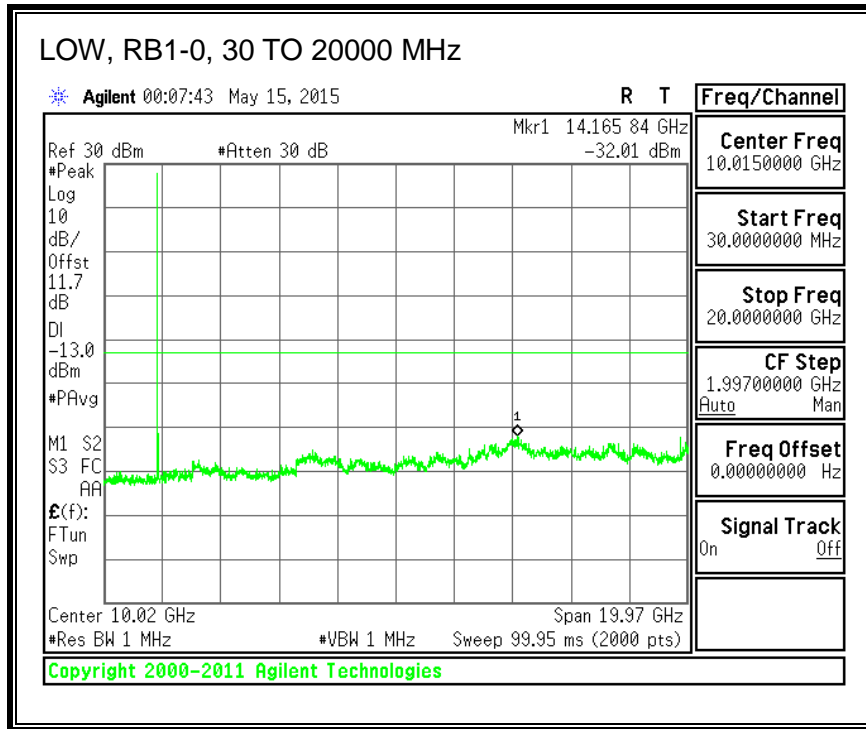


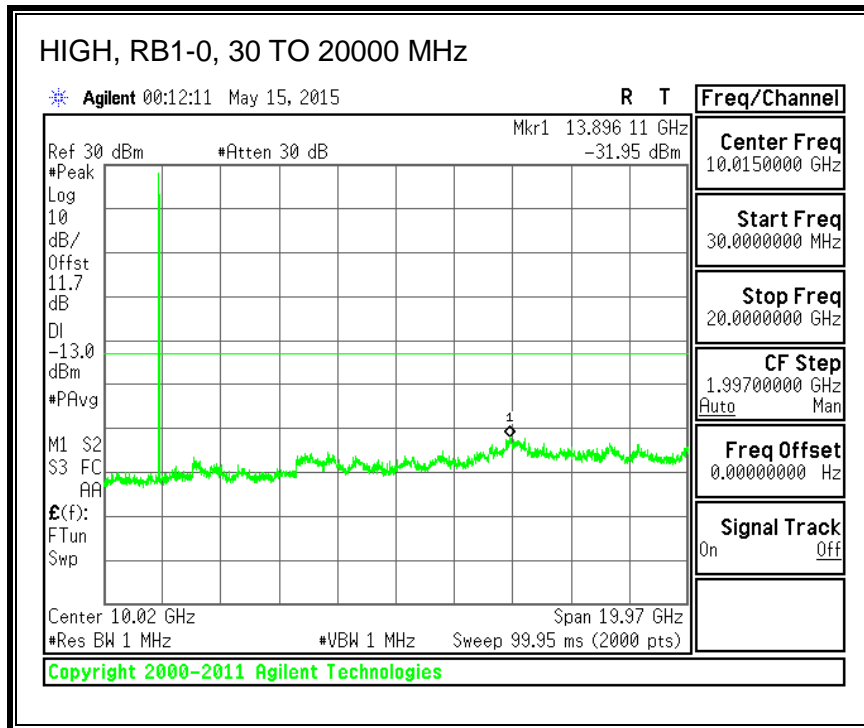
16QAM, (1.4 MHz BAND WIDTH)



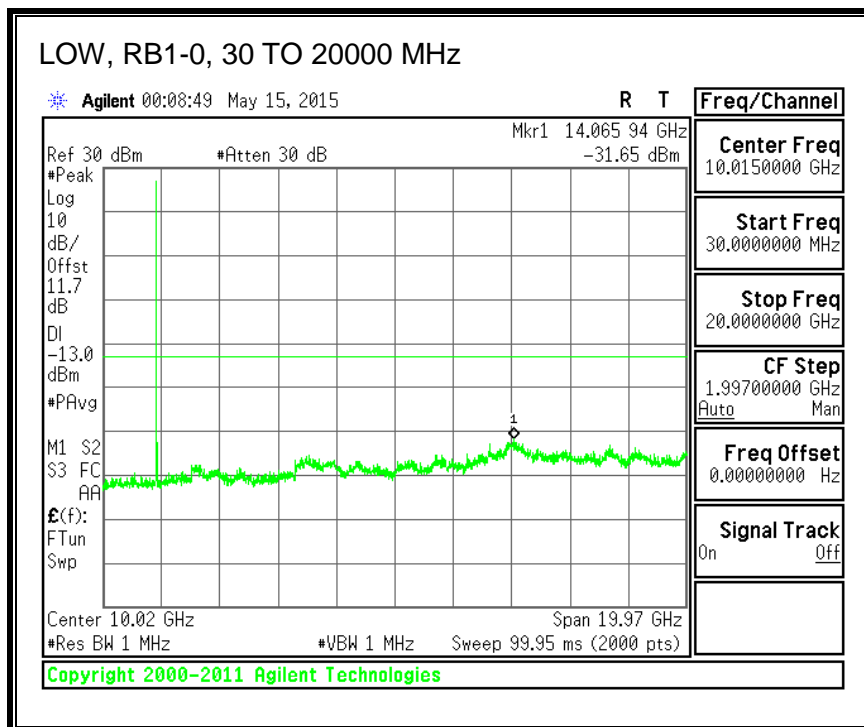


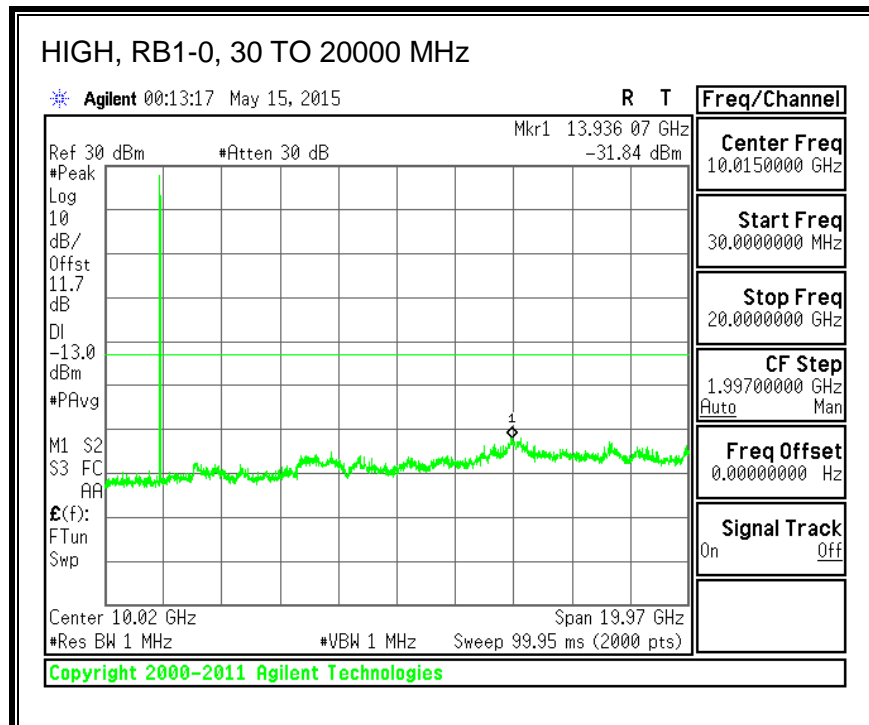
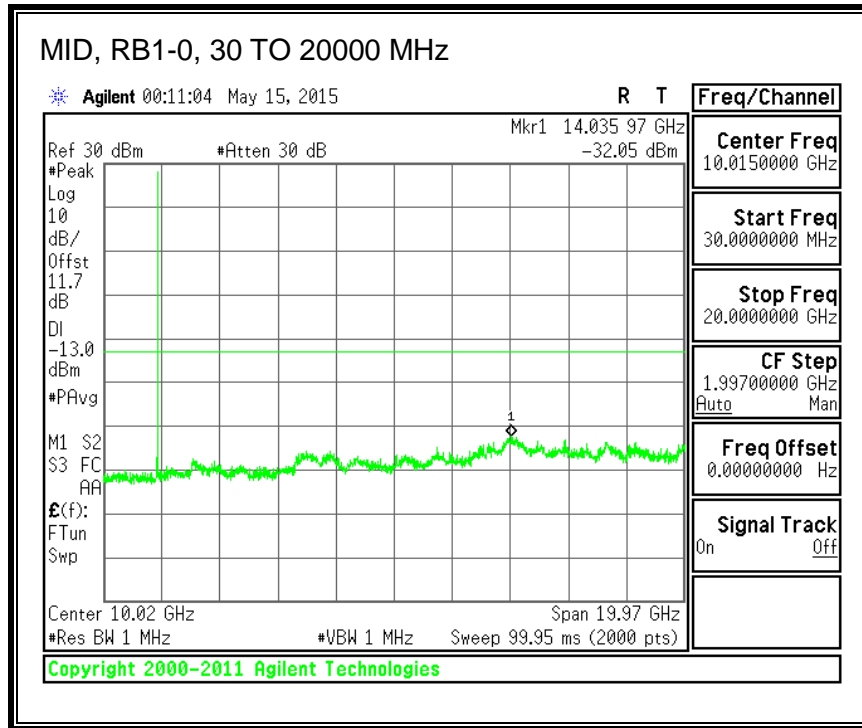
QPSK, (3.0 MHz BAND WIDTH)



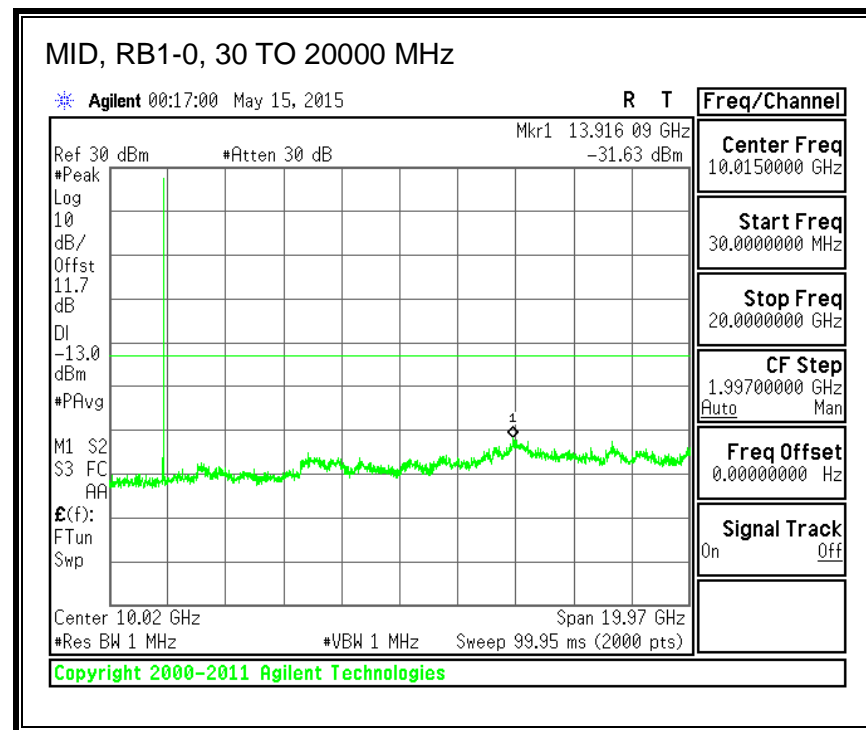
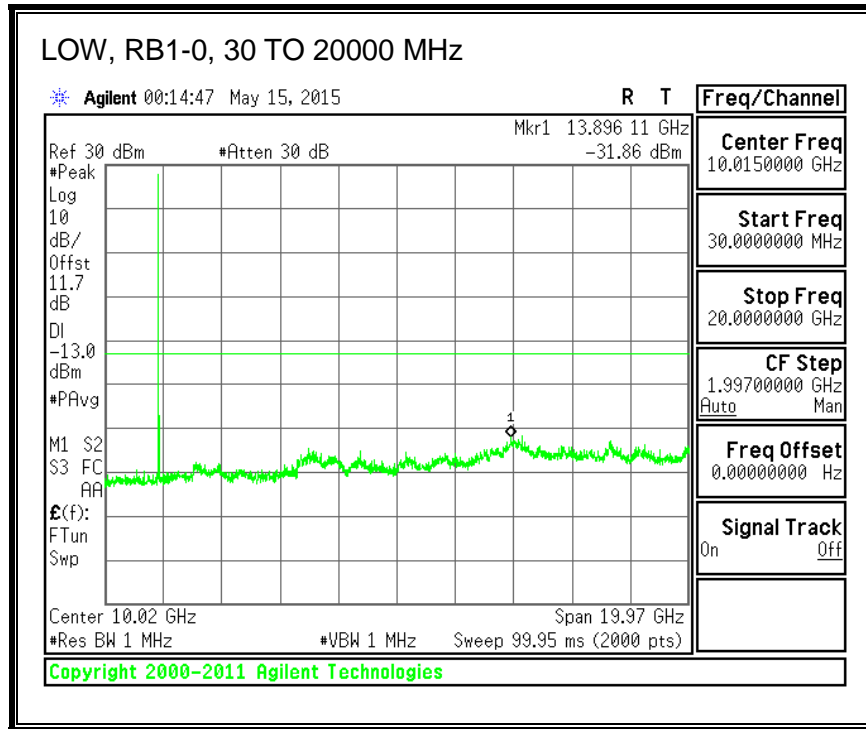


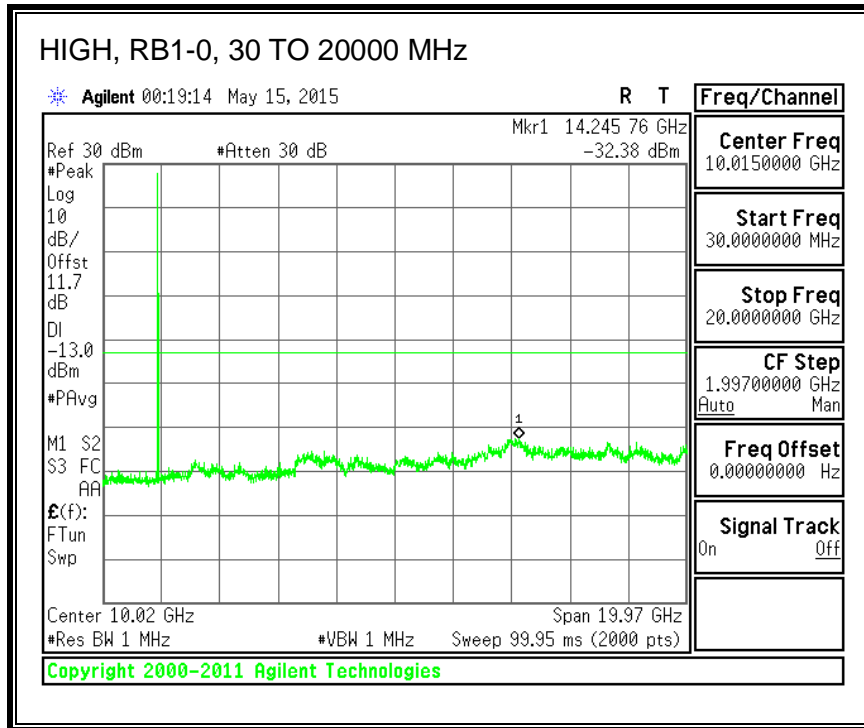
16QAM, (3.0 MHz BAND WIDTH)



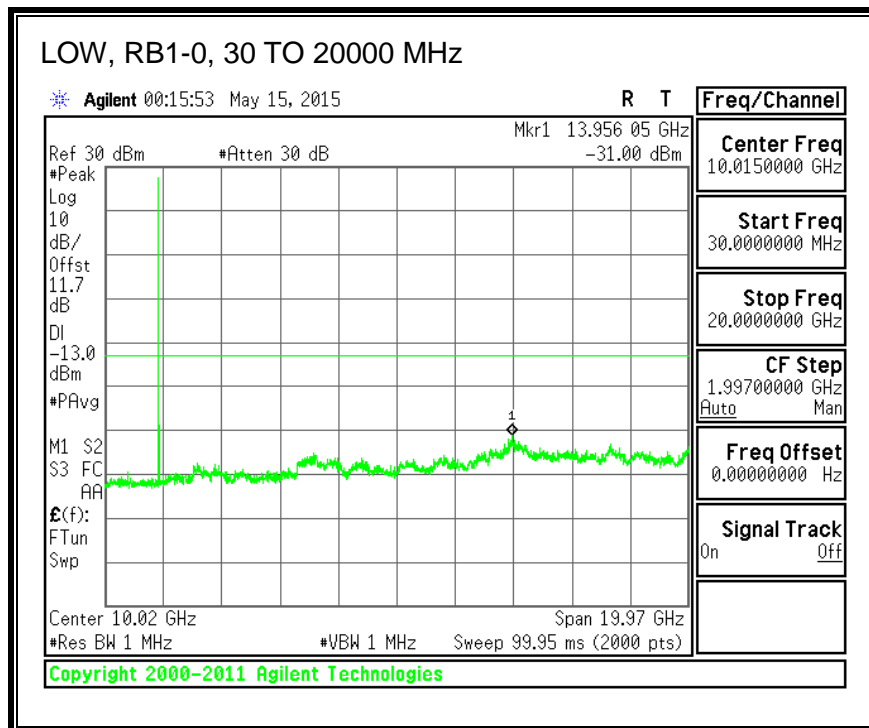


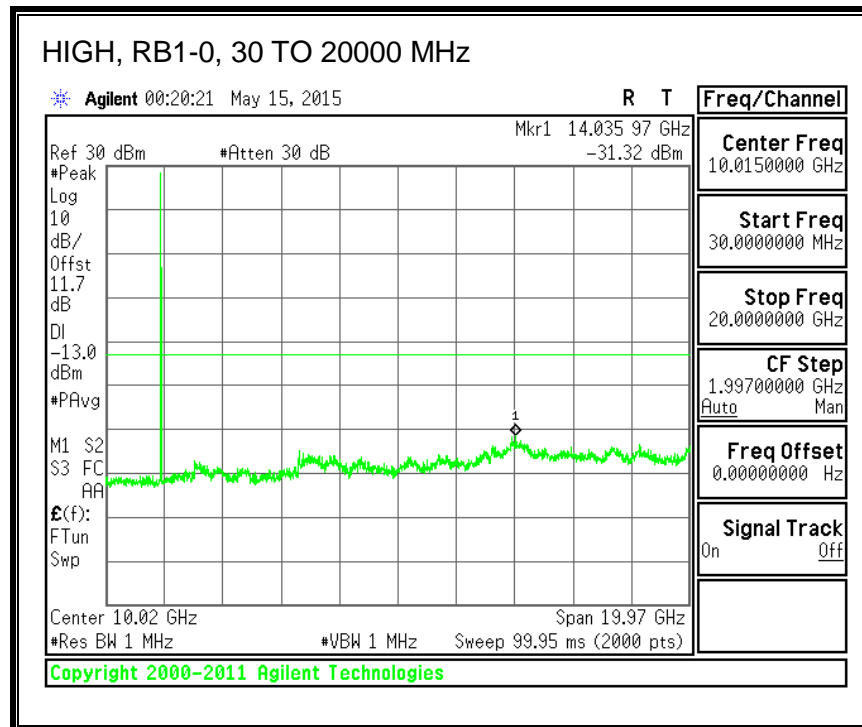
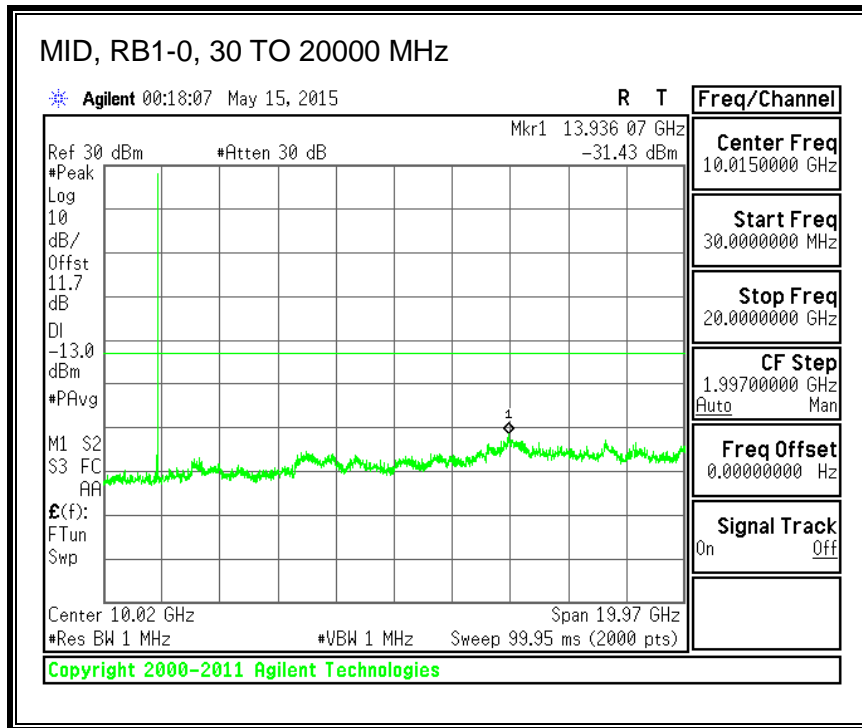
QPSK, (5.0 MHz BAND WIDTH)



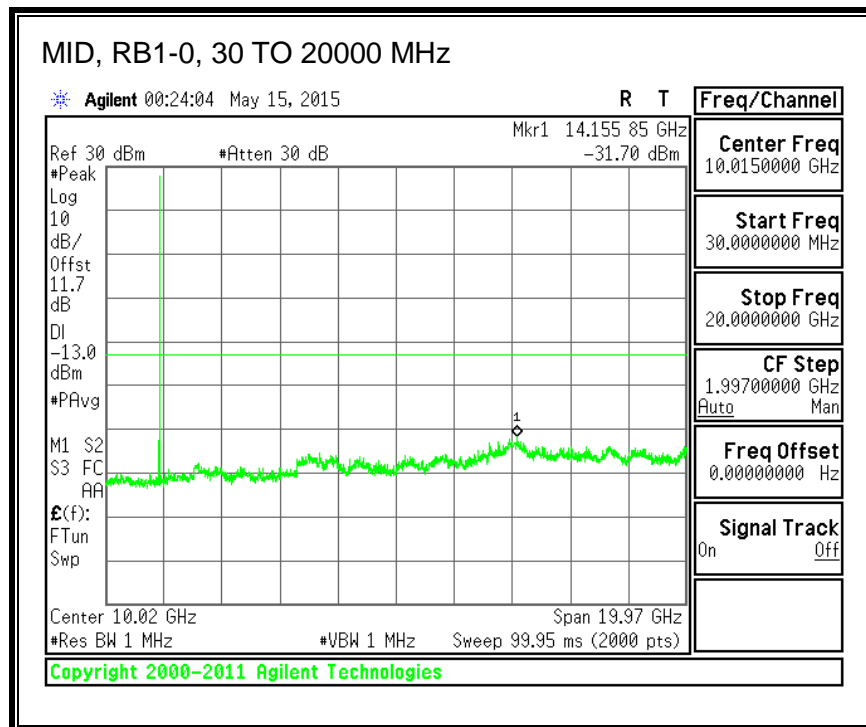
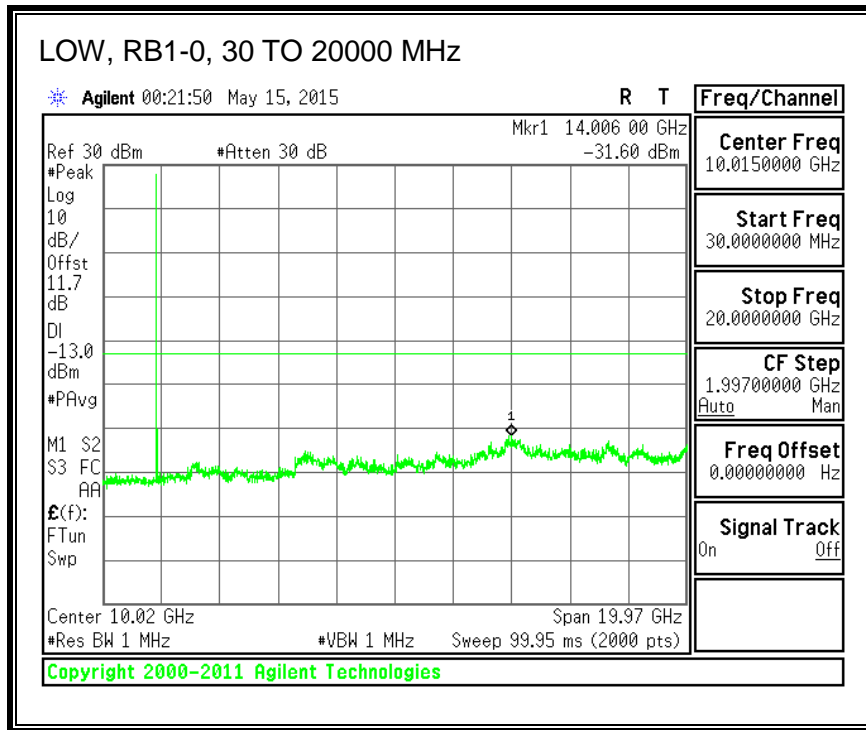


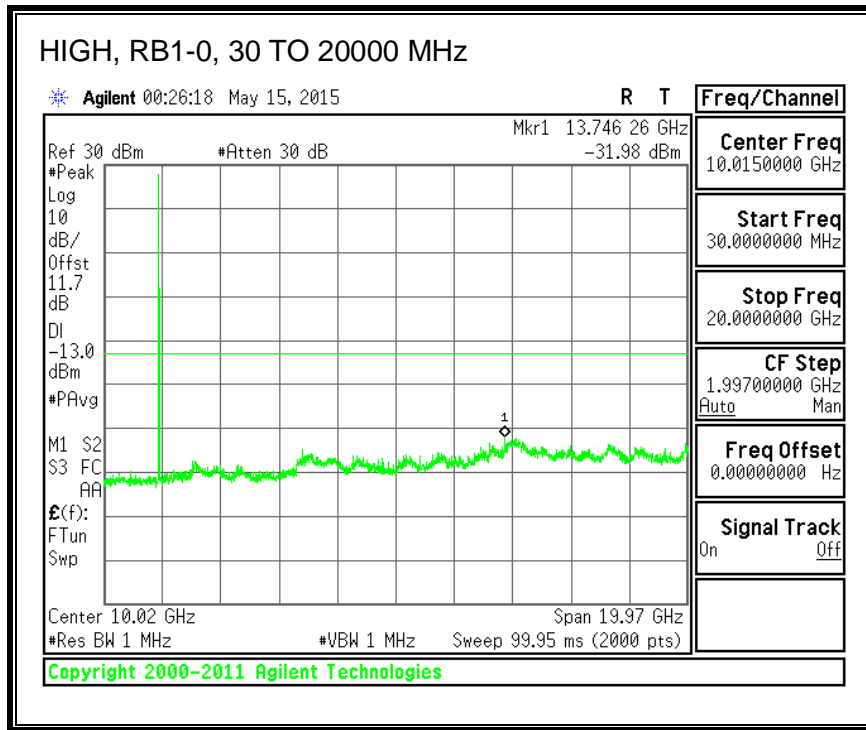
16QAM, (5.0 MHz BAND WIDTH)



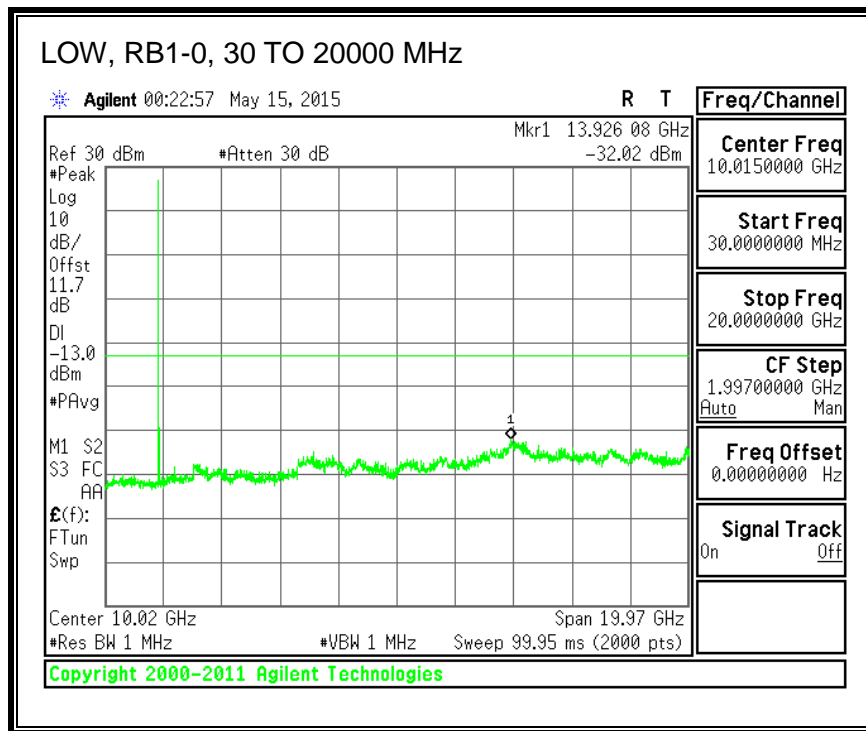


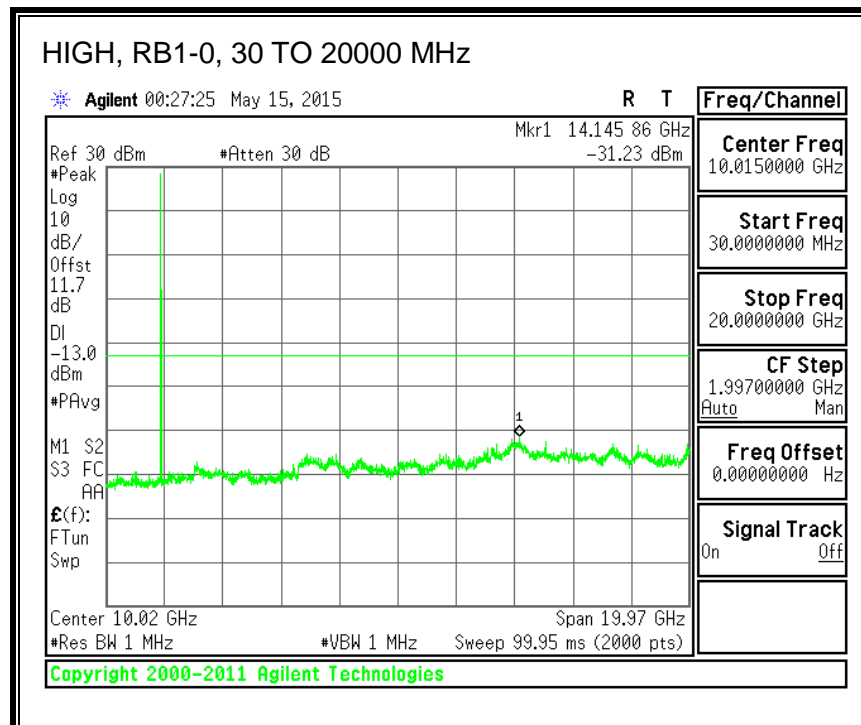
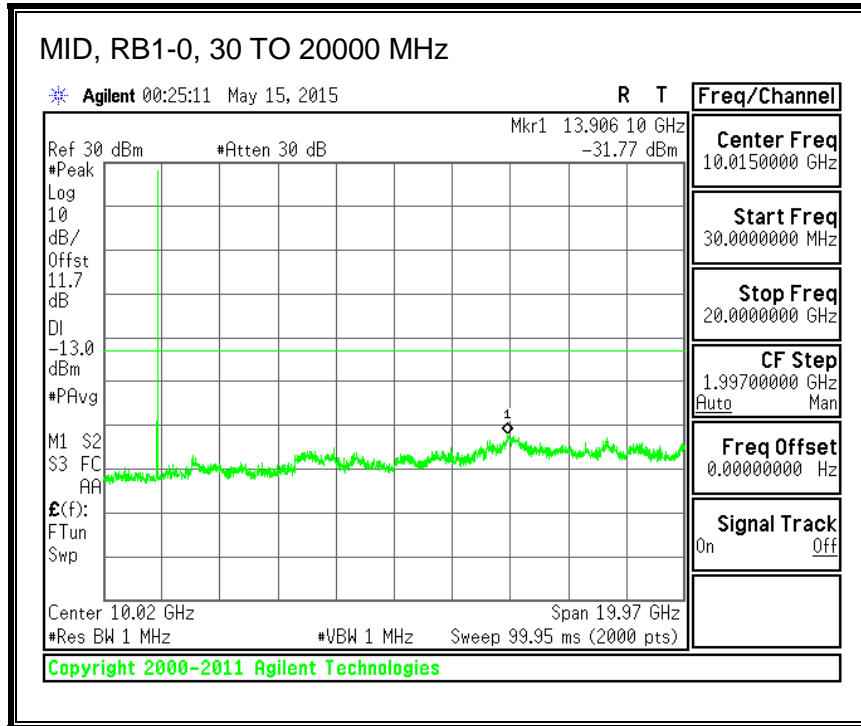
QPSK, (10.0 MHz BAND WIDTH)



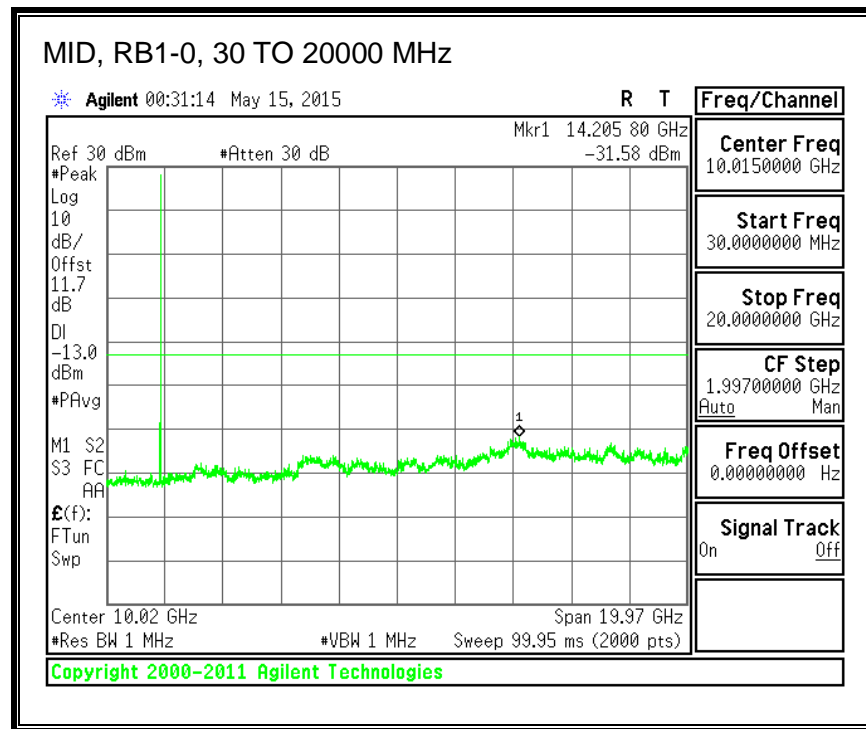
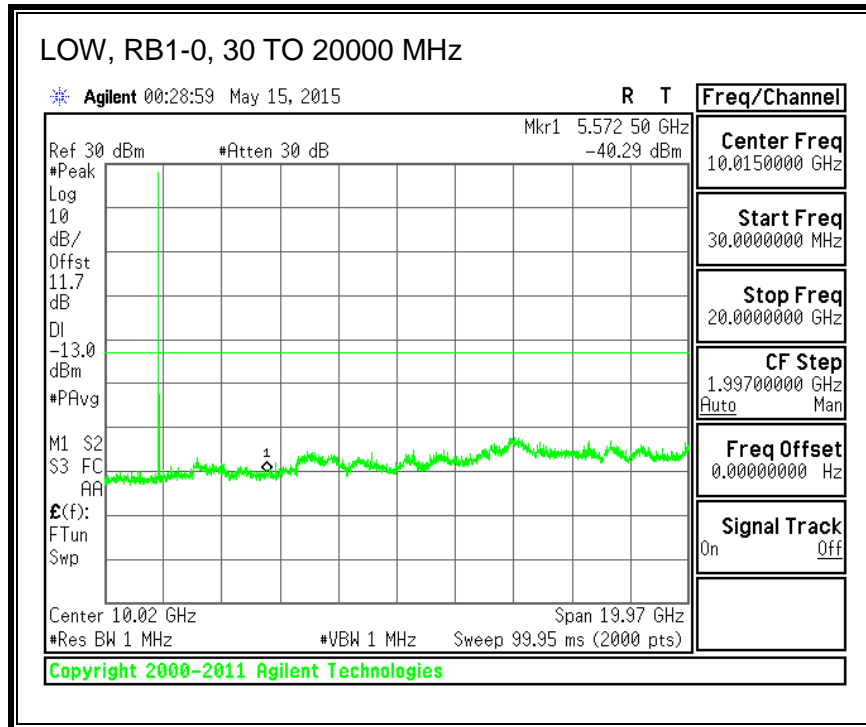


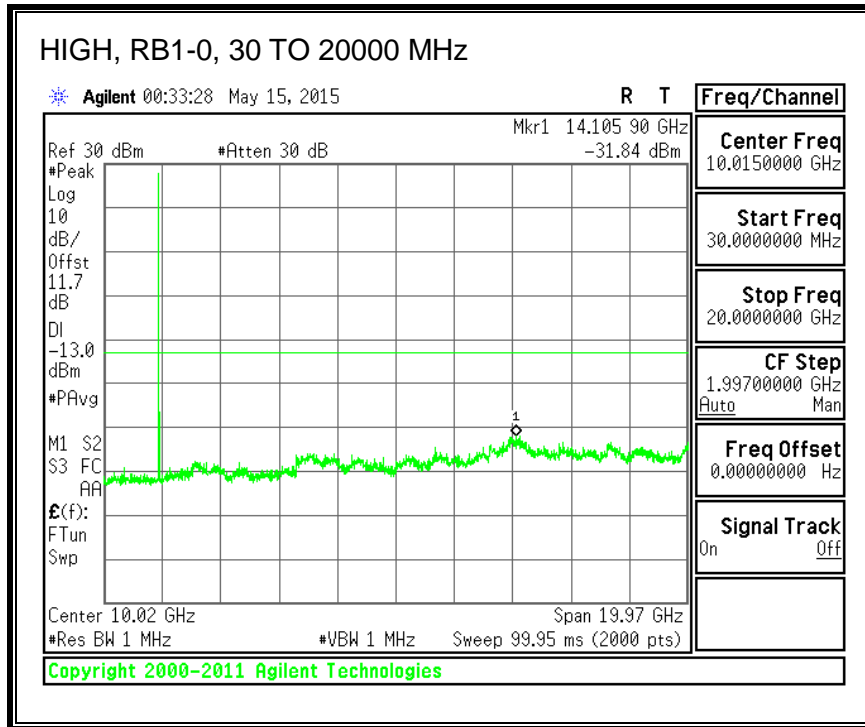
16QAM, (10.0 MHz BAND WIDTH)



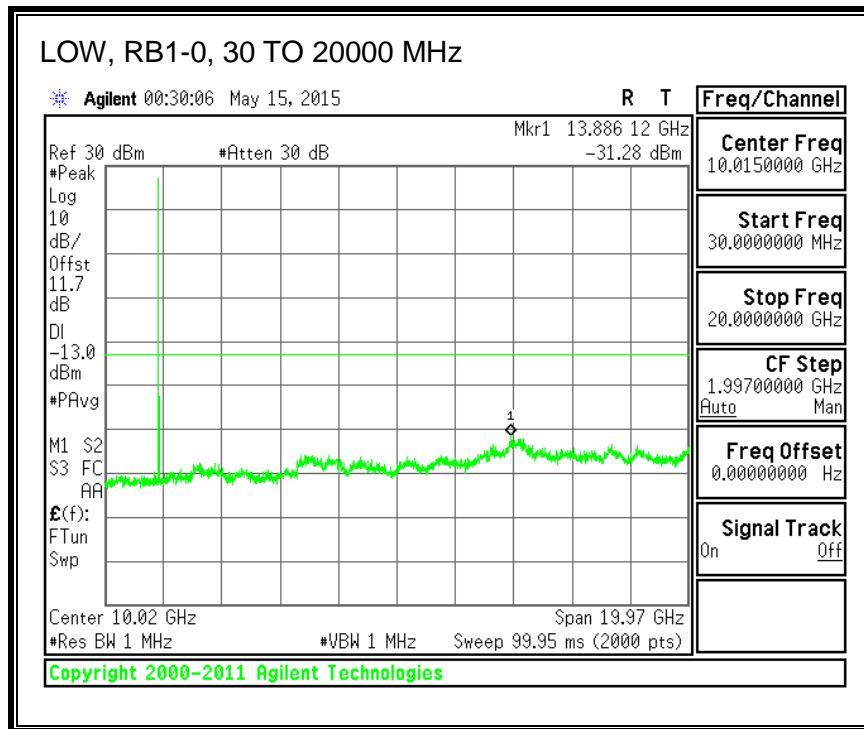


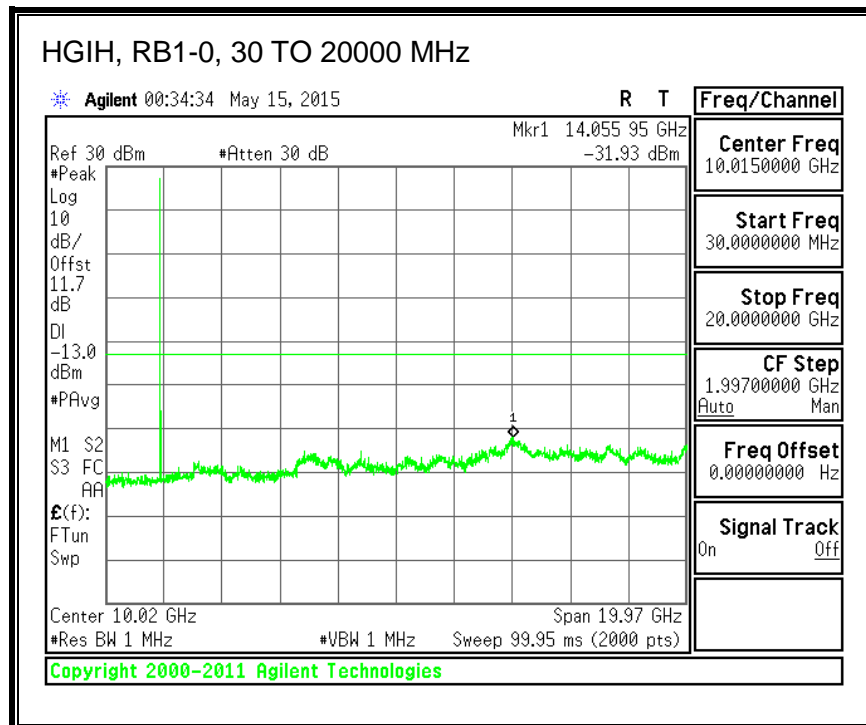
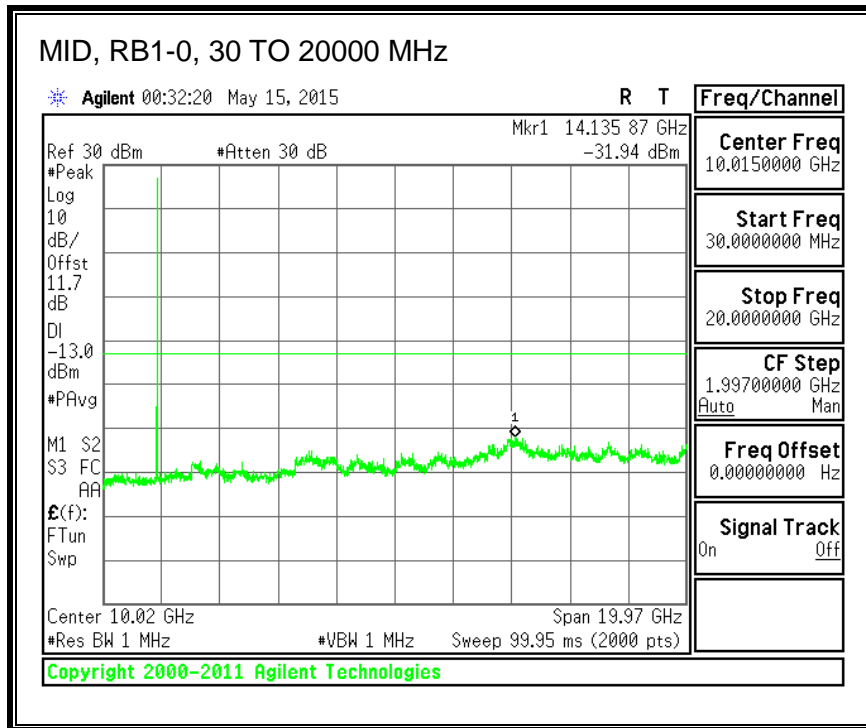
QPSK, (15.0 MHz BAND WIDTH)



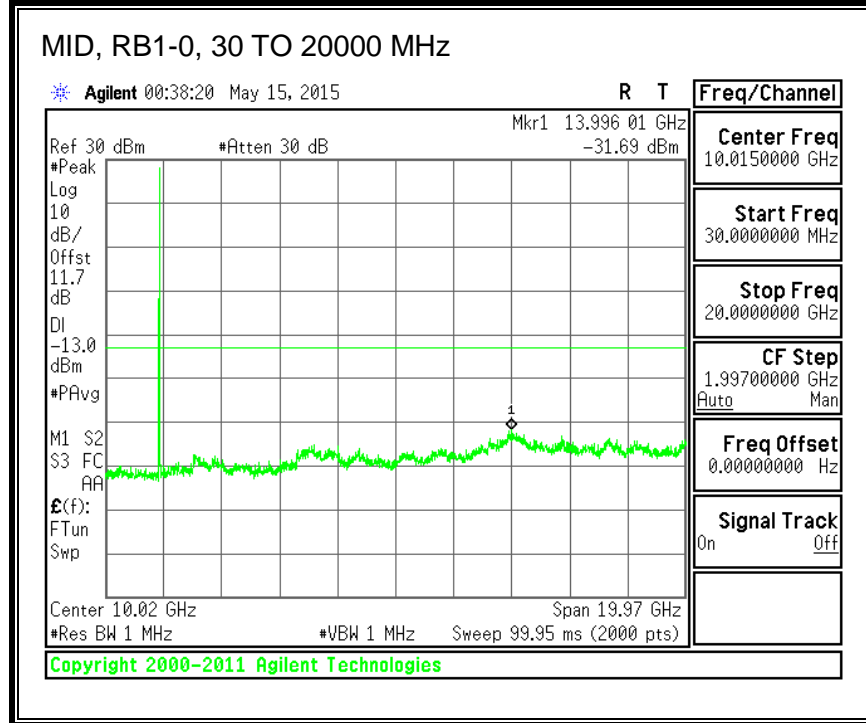
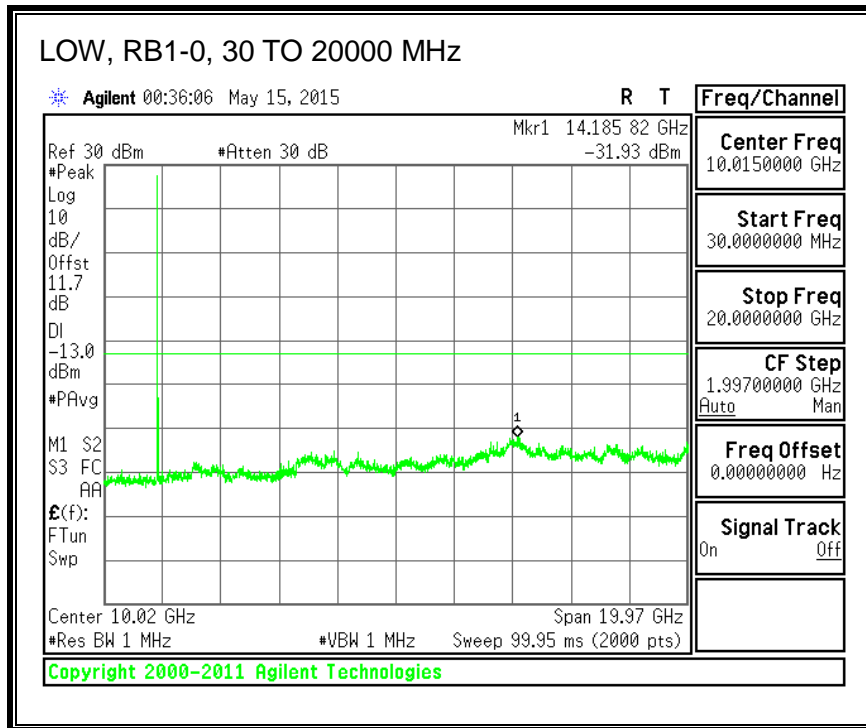


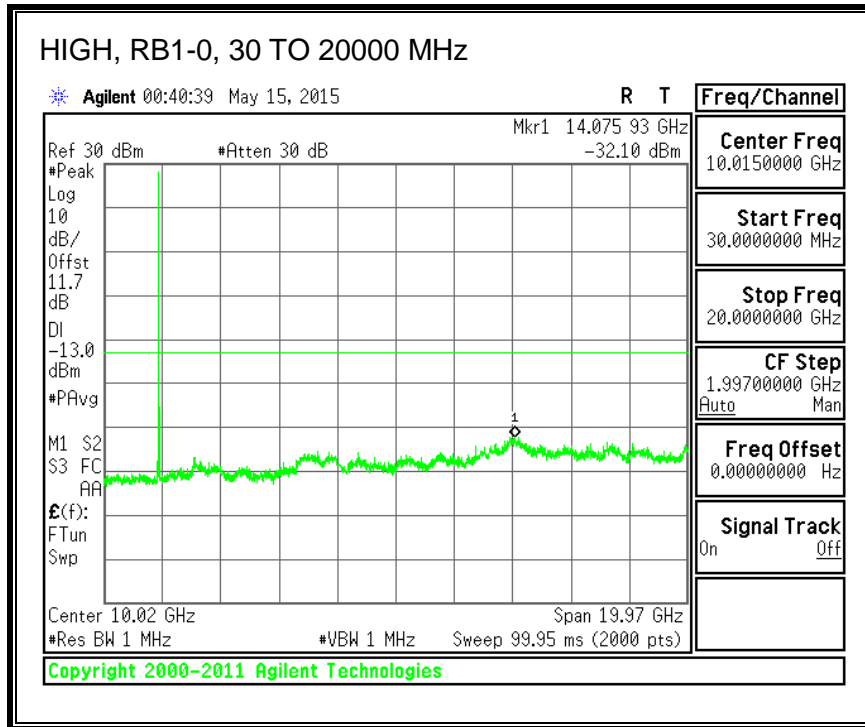
16QAM, (15.0 MHz BAND WIDTH)



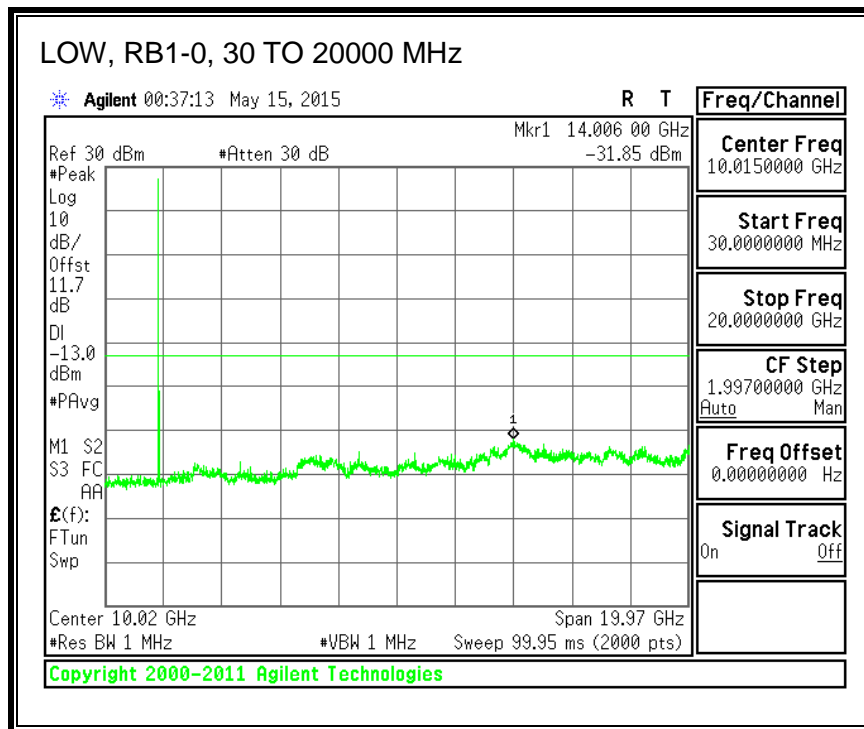


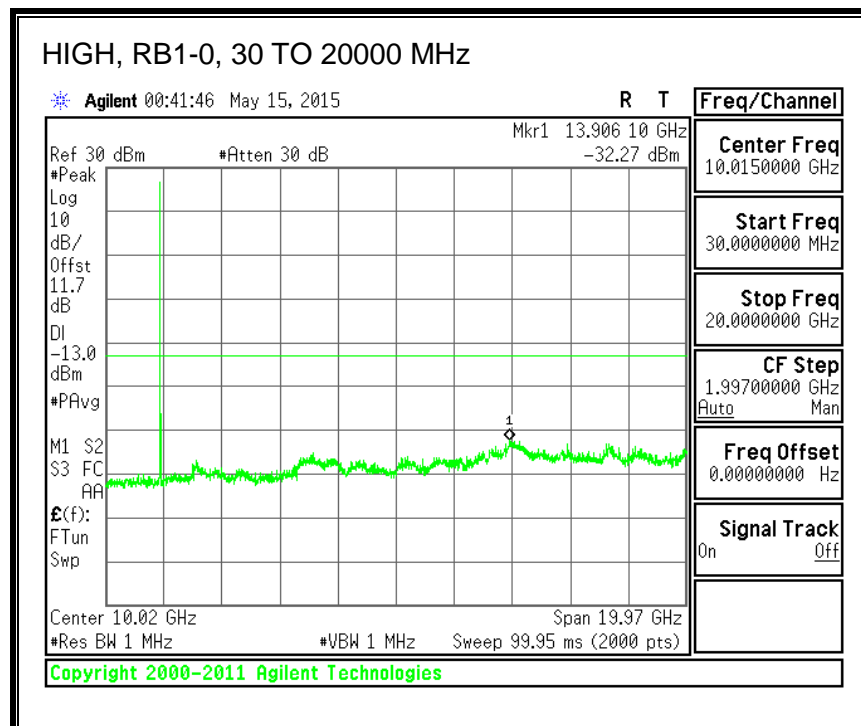
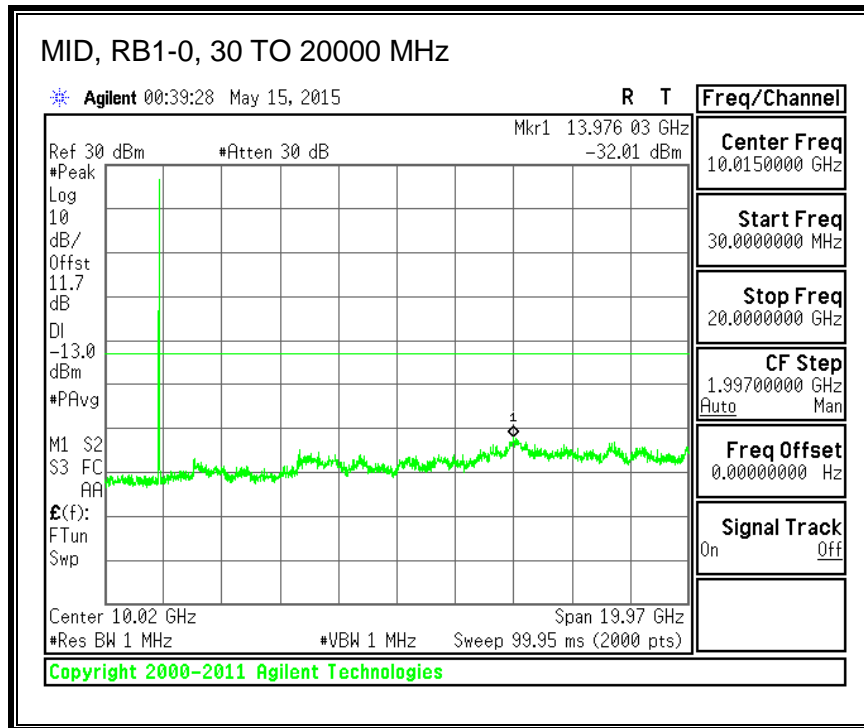
QPSK, (20.0 MHz BAND WIDTH)





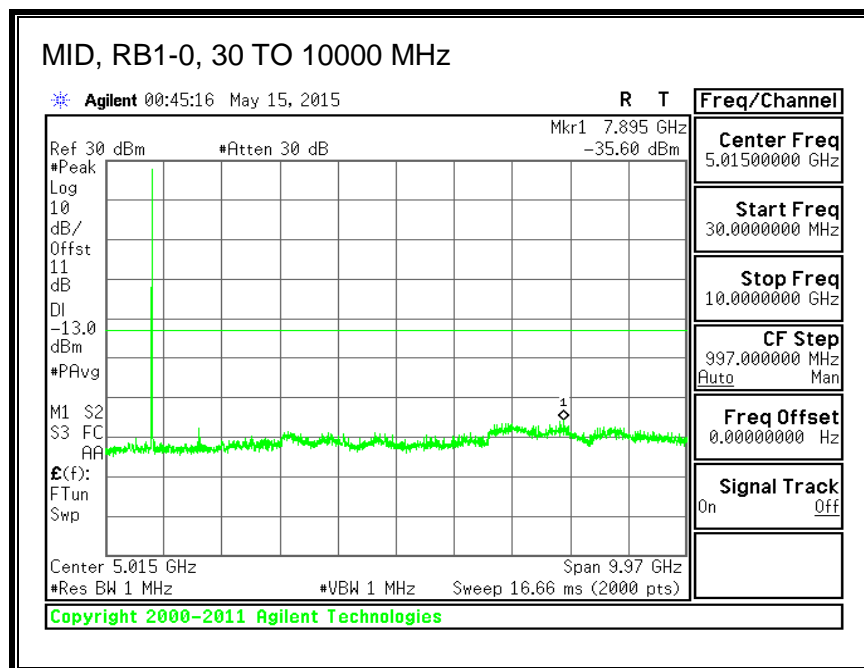
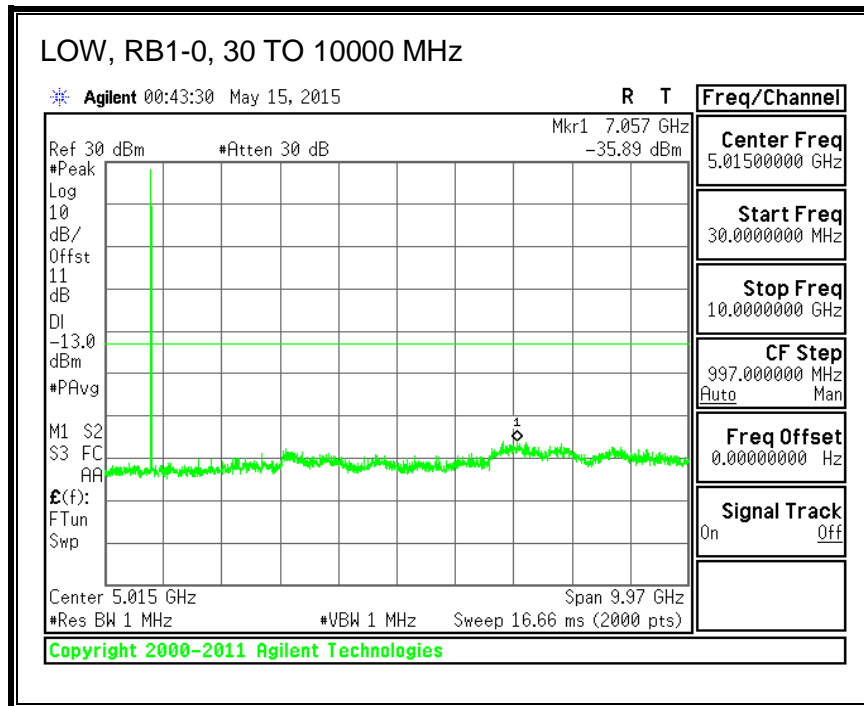
16QAM, (20.0 MHz BAND WIDTH)

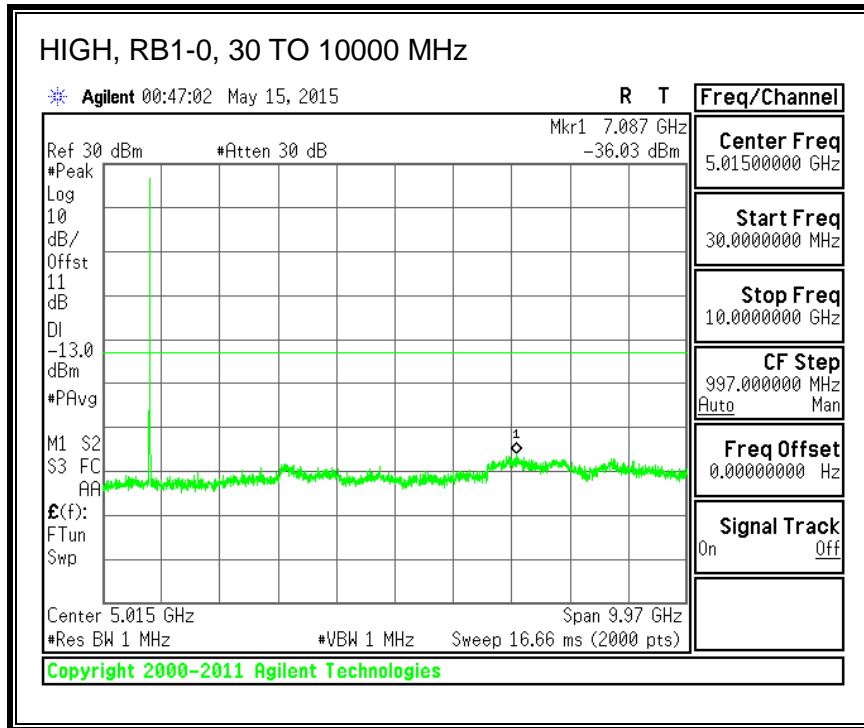




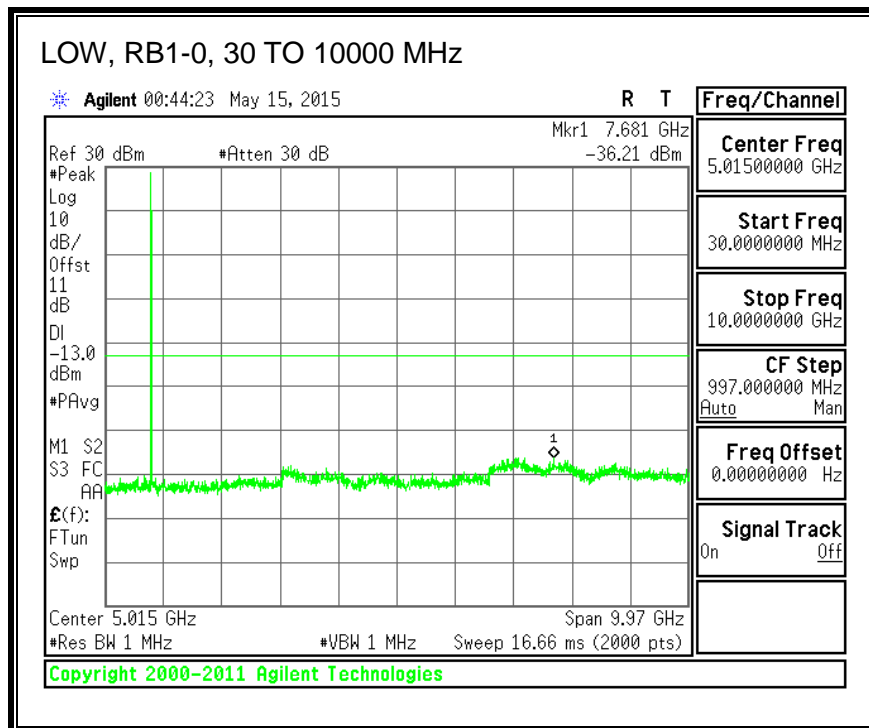
8.6.9. LTE BAND 26

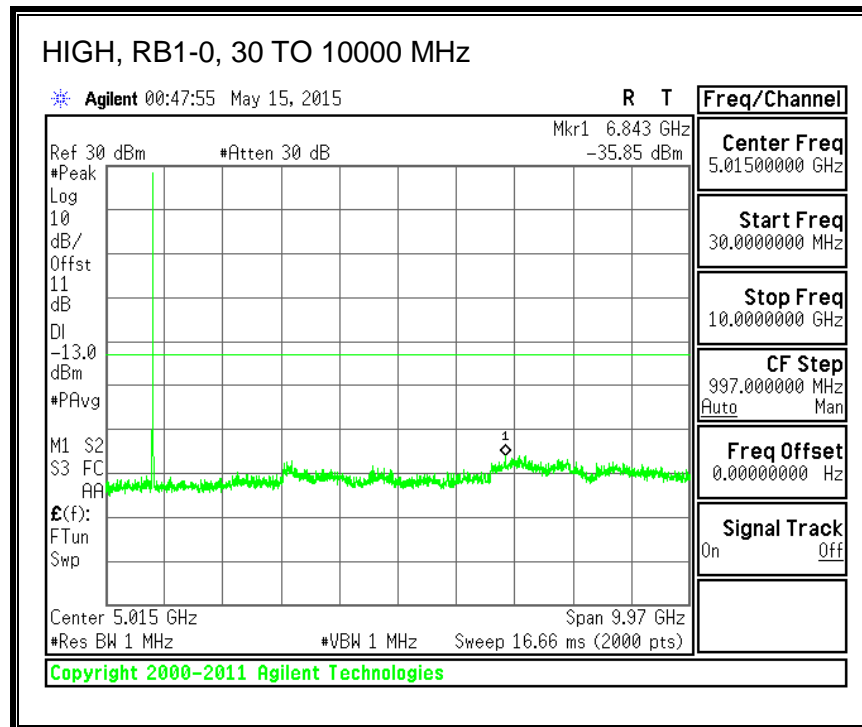
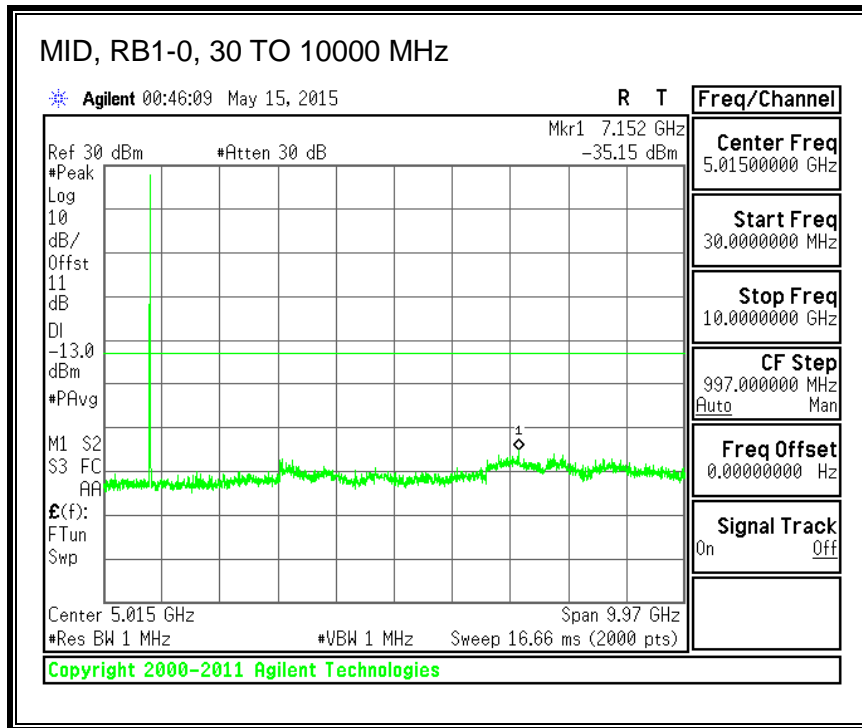
QPSK, (1.4 MHz BAND WIDTH)



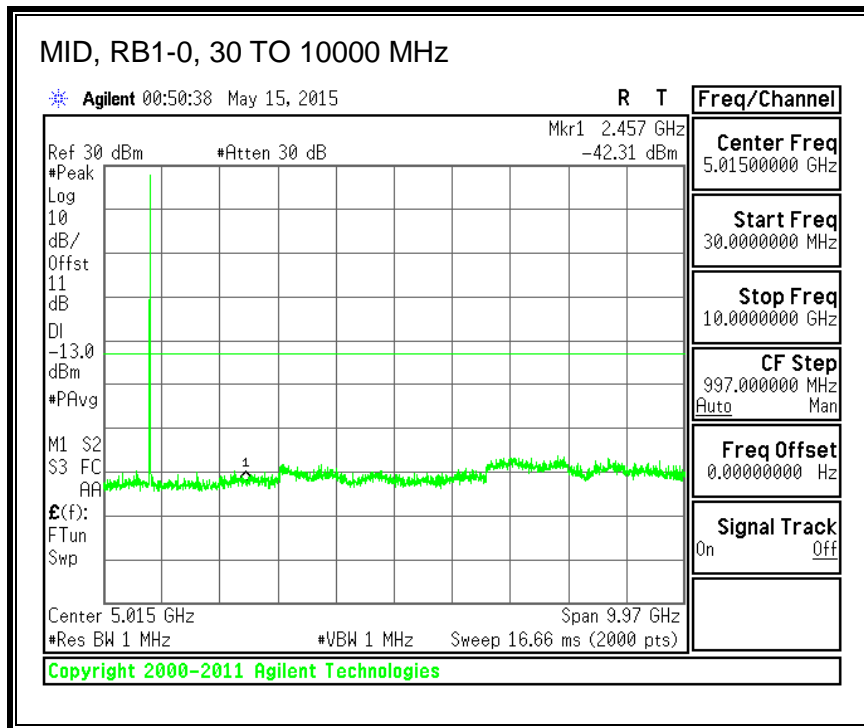
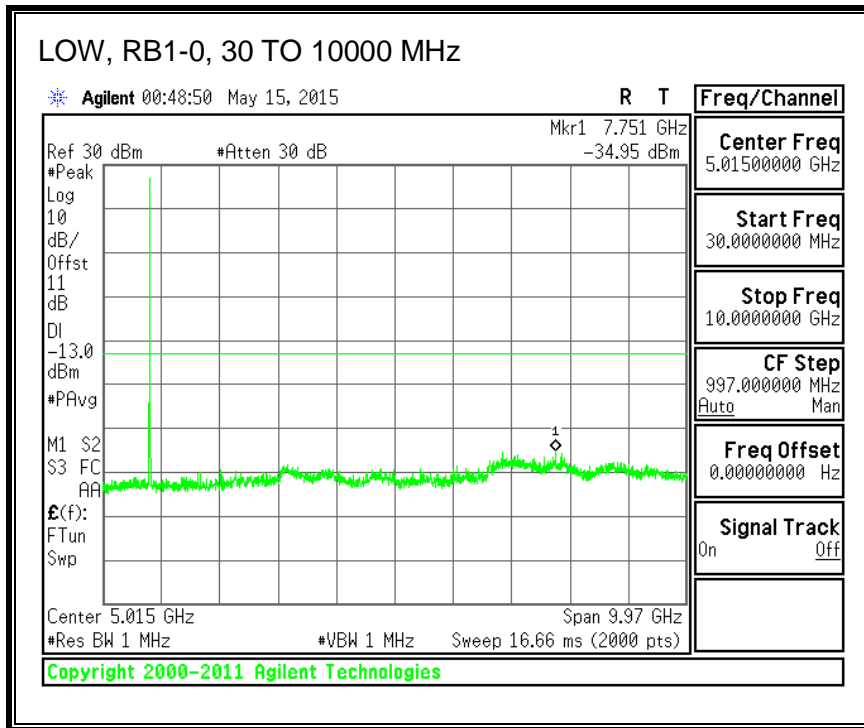


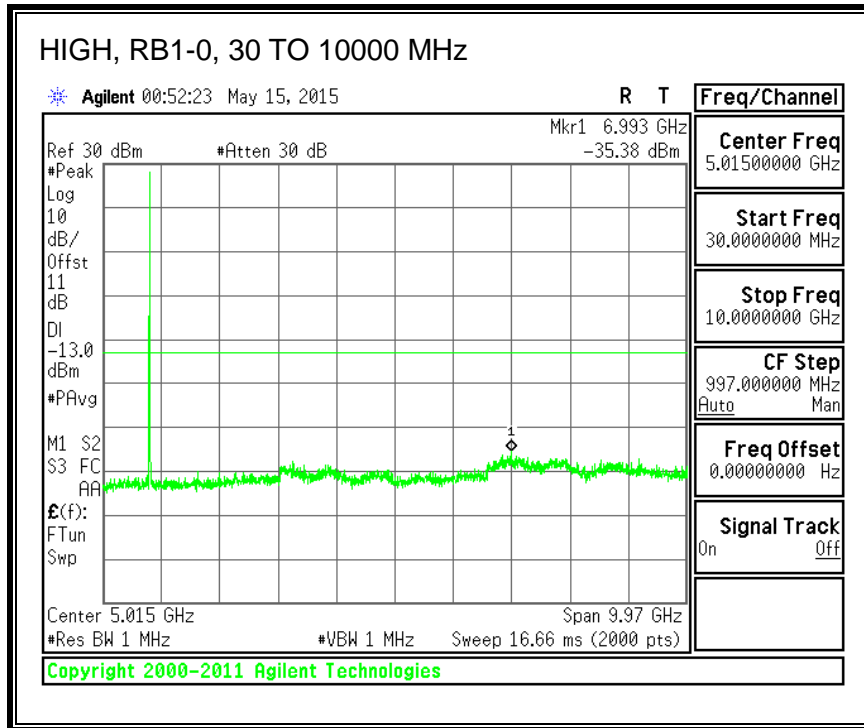
16QAM, (1.4 MHz BAND WIDTH)



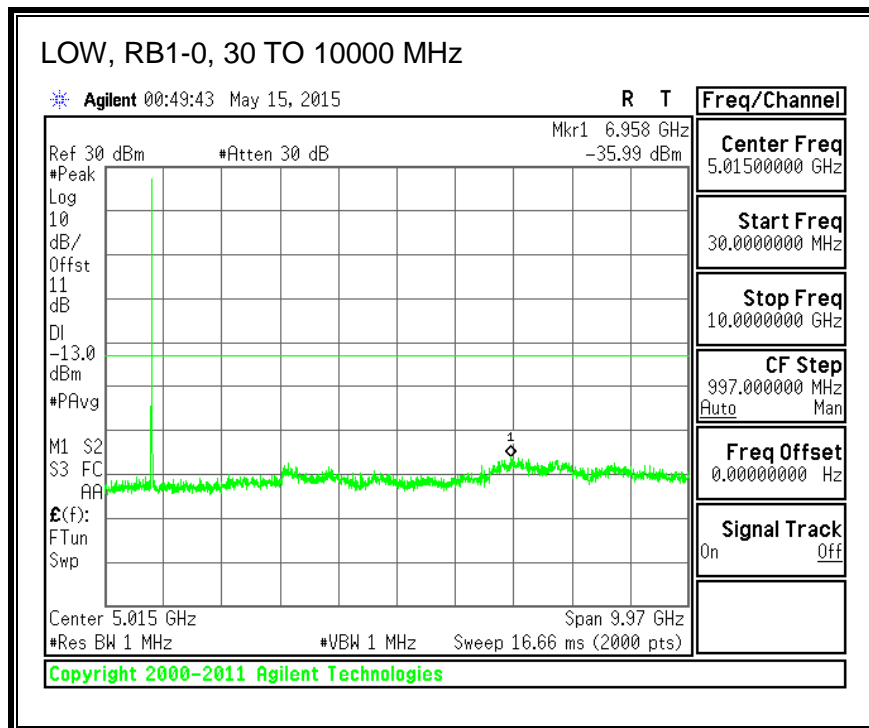


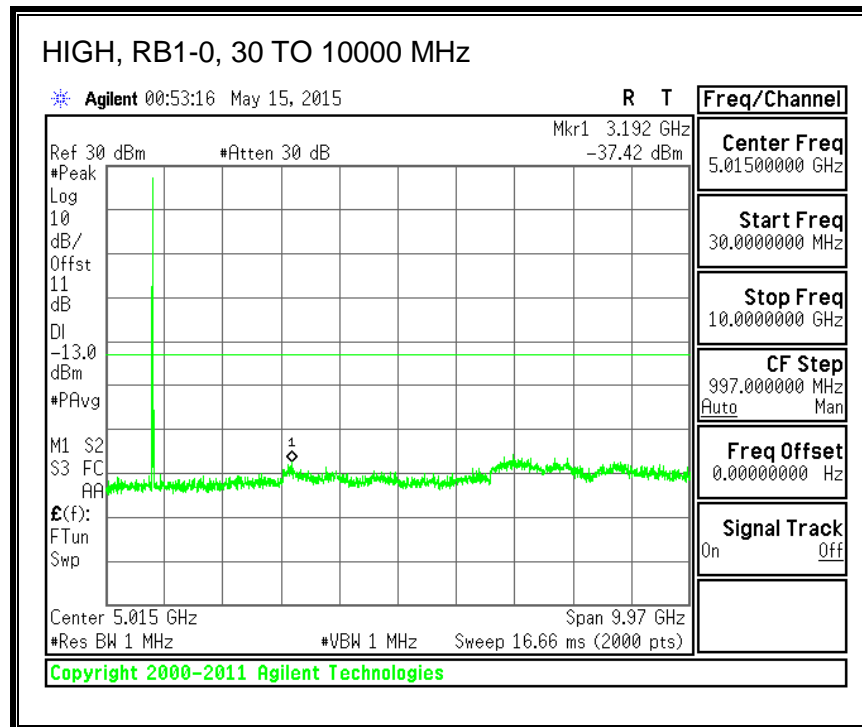
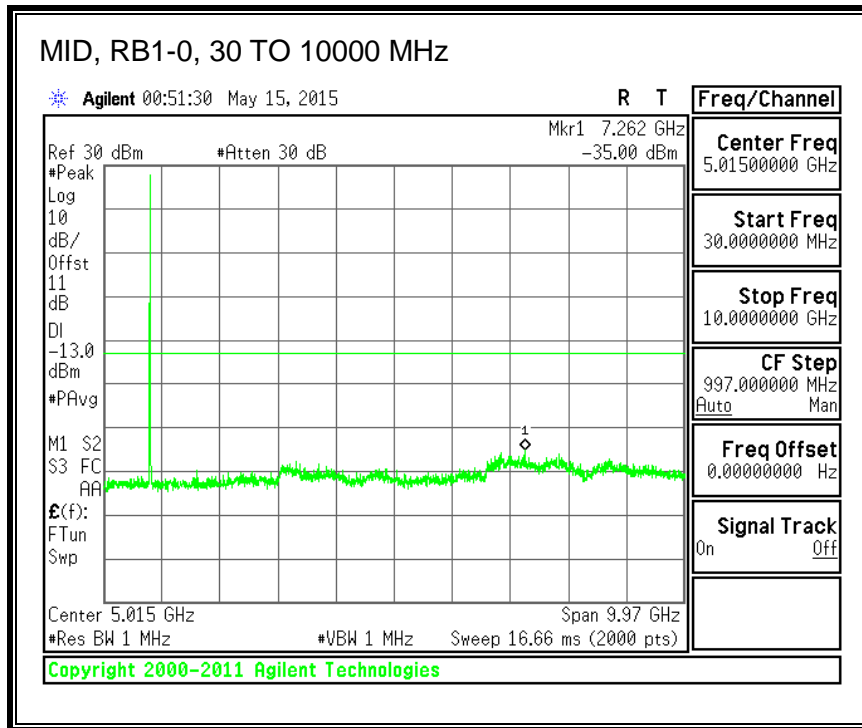
QPSK, (3.0 MHz BAND WIDTH)



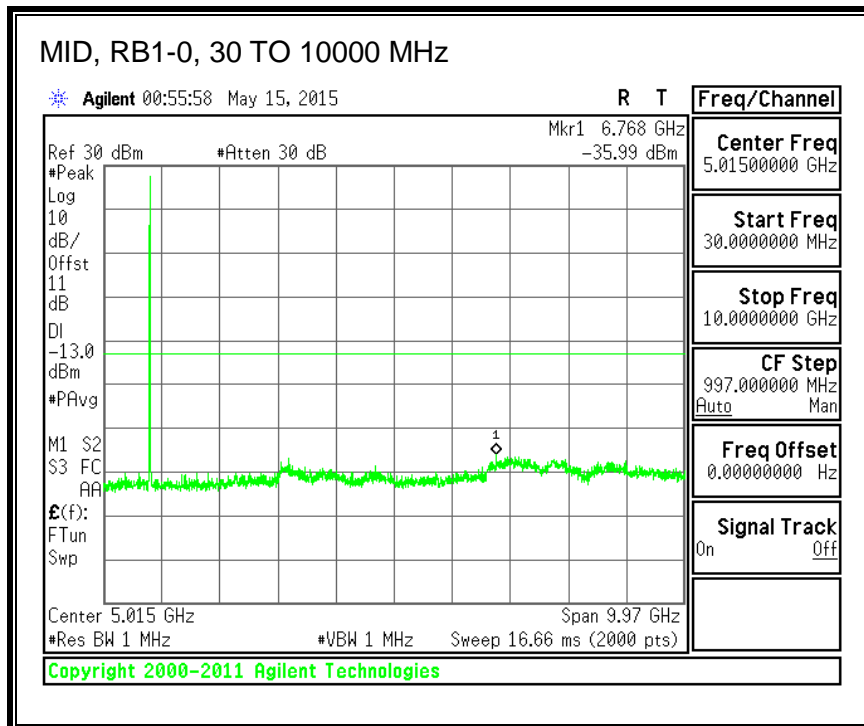
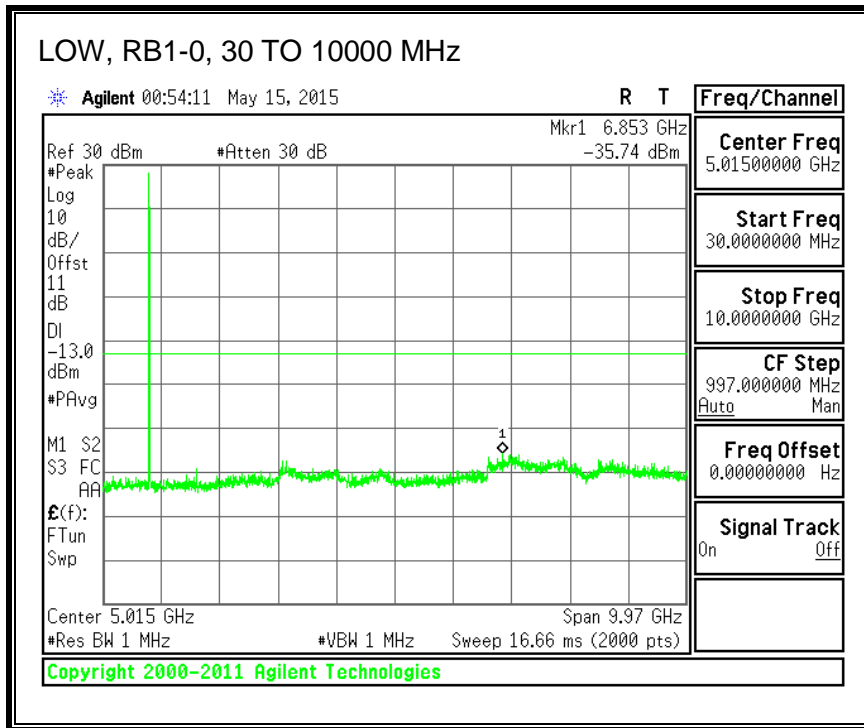


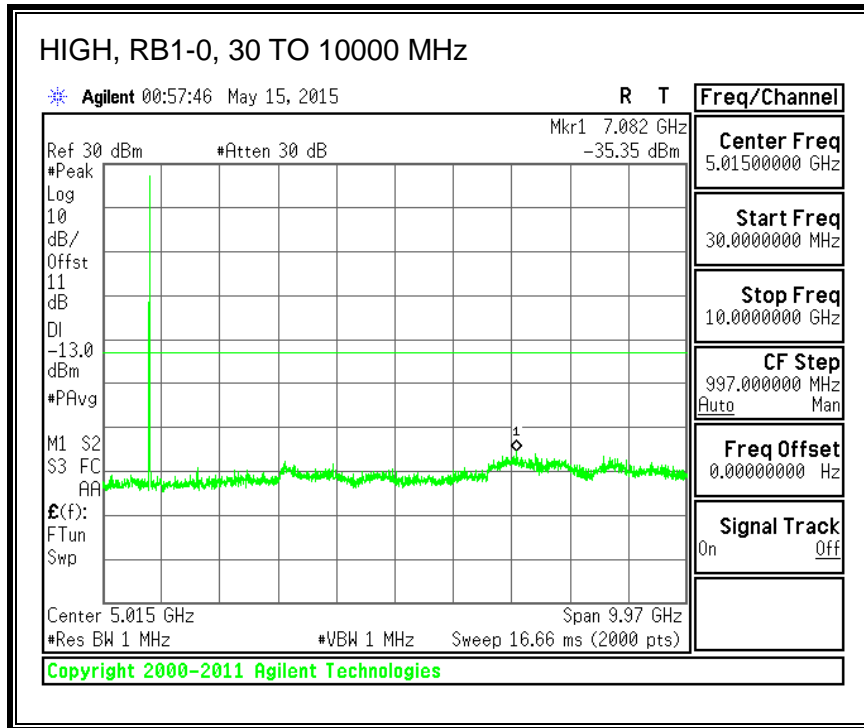
16QAM, (3.0 MHz BAND WIDTH)



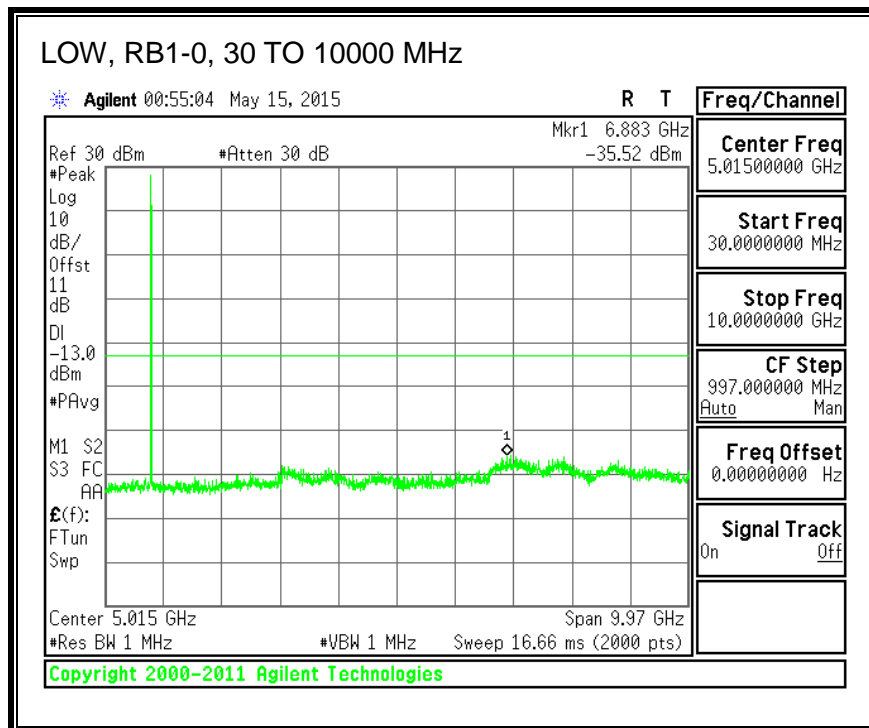


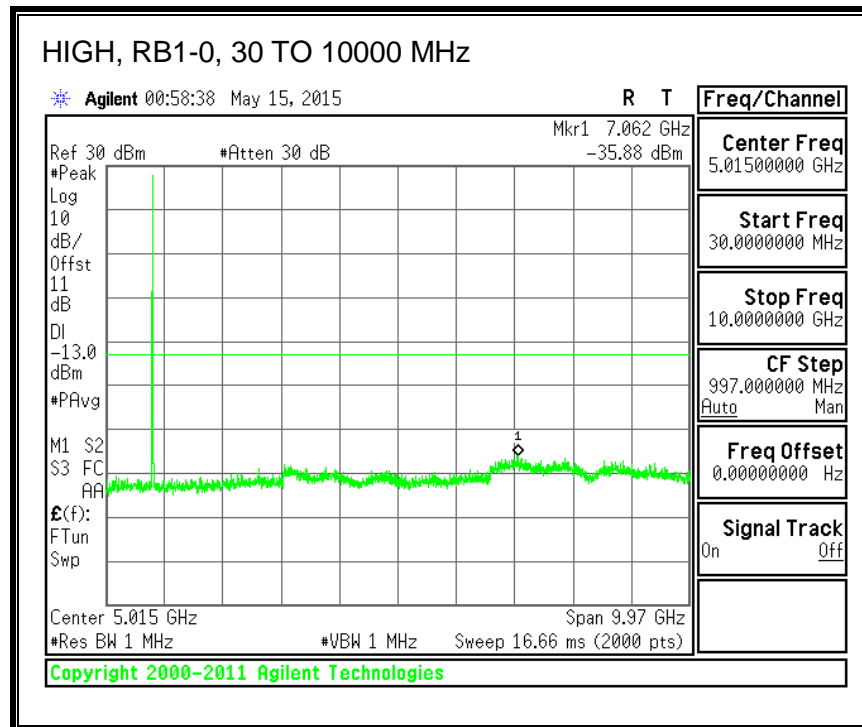
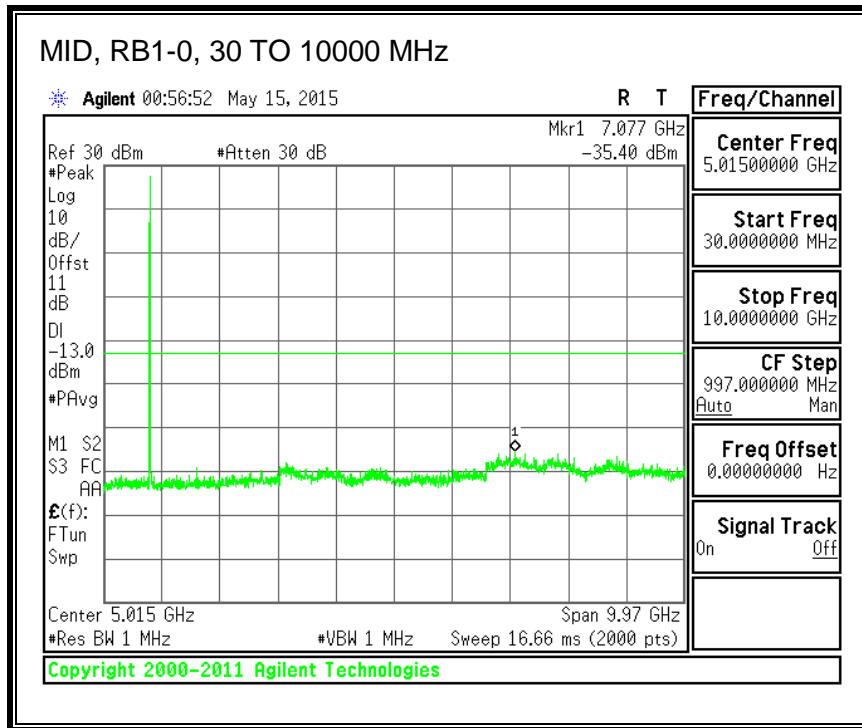
QPSK, (5.0 MHz BAND WIDTH)



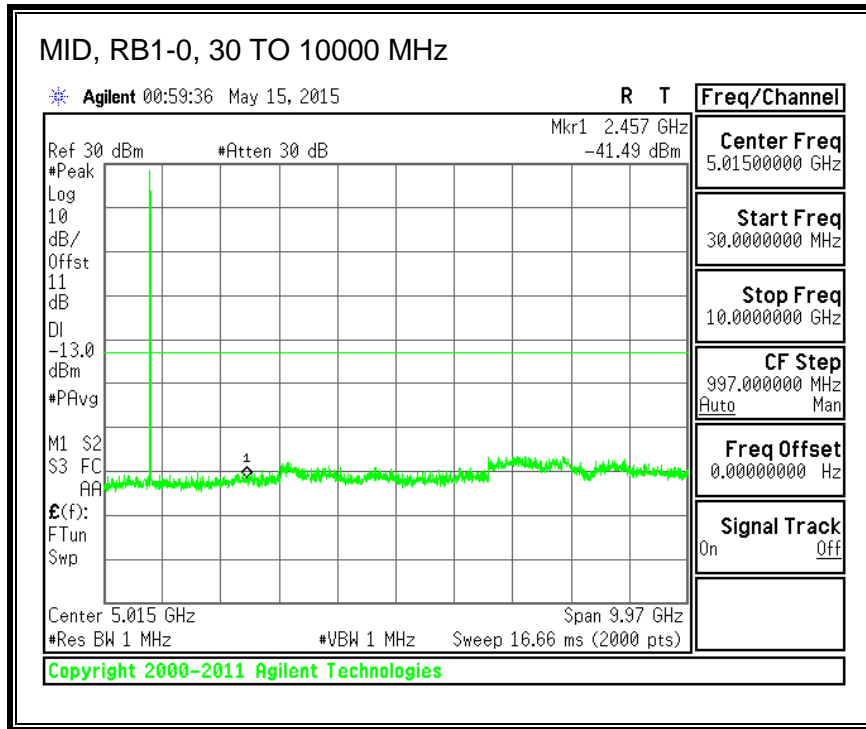


16QAM, (5.0 MHz BAND WIDTH)

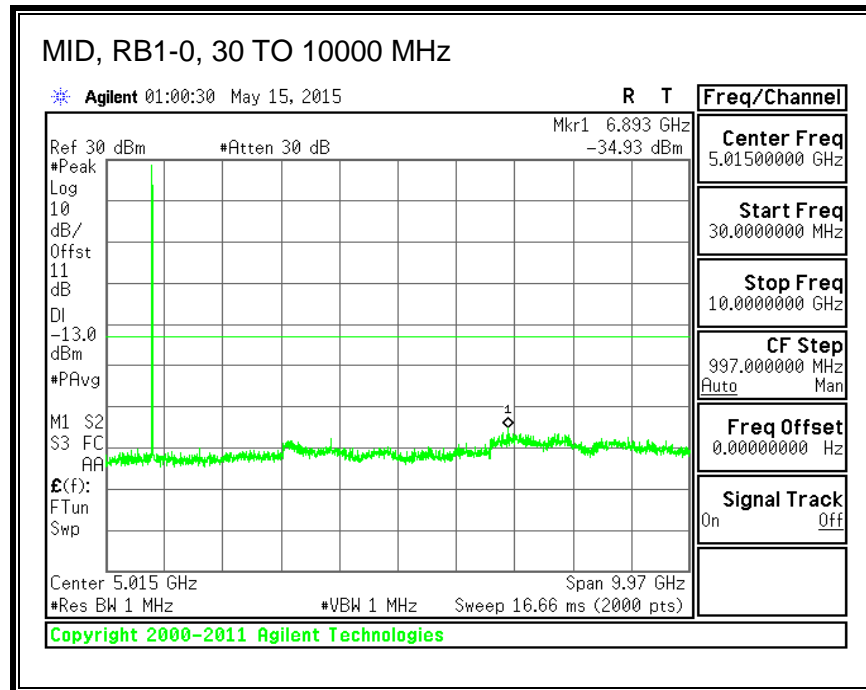




QPSK, (10.0 MHz BAND WIDTH)

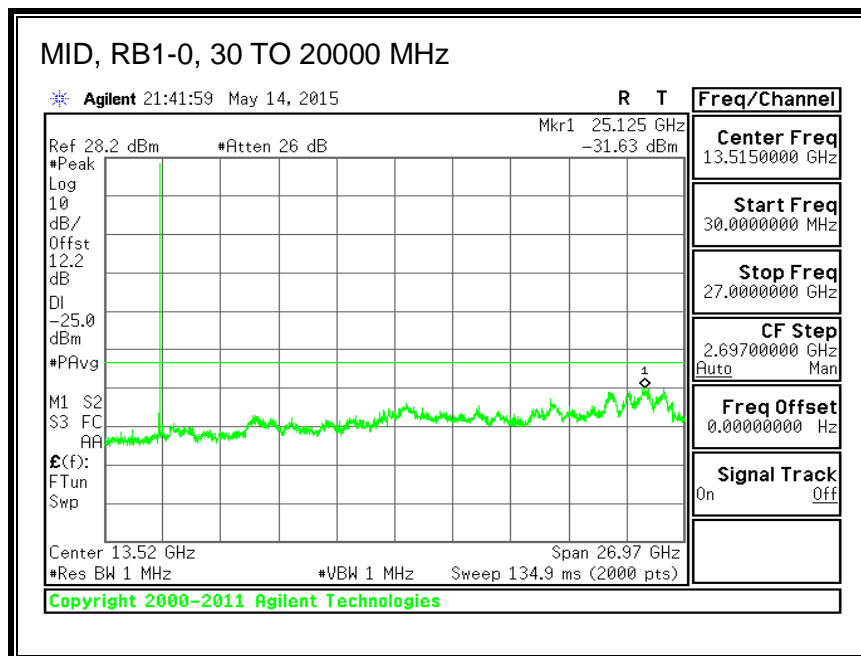
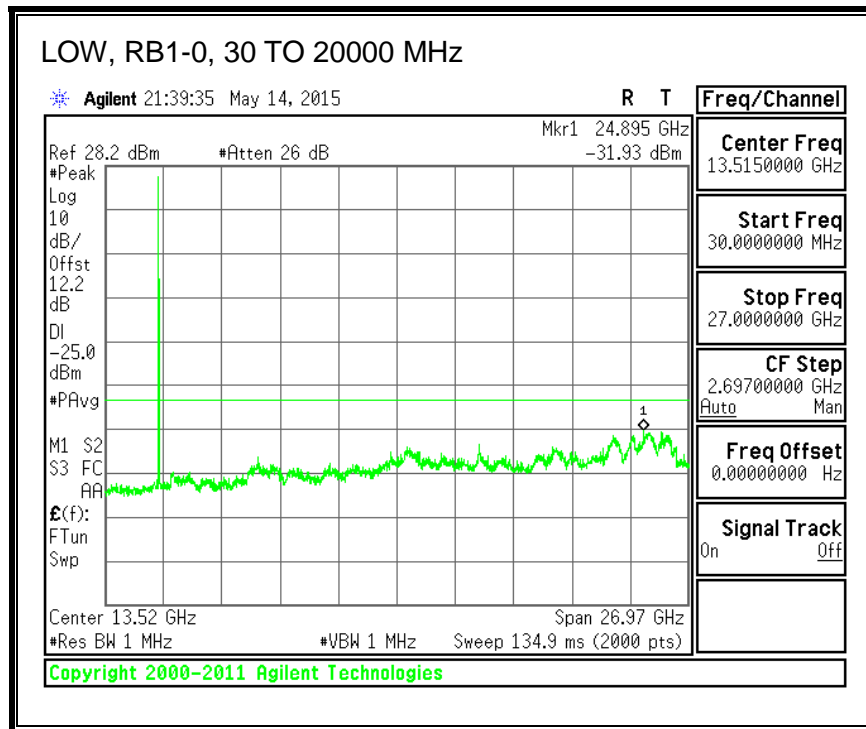


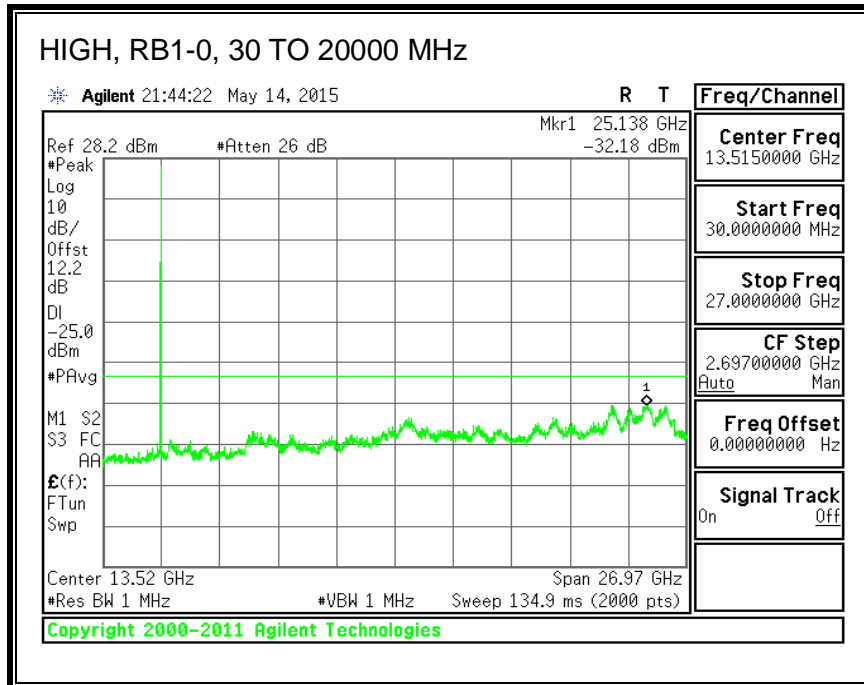
16QAM, (10.0 MHz BAND WIDTH)



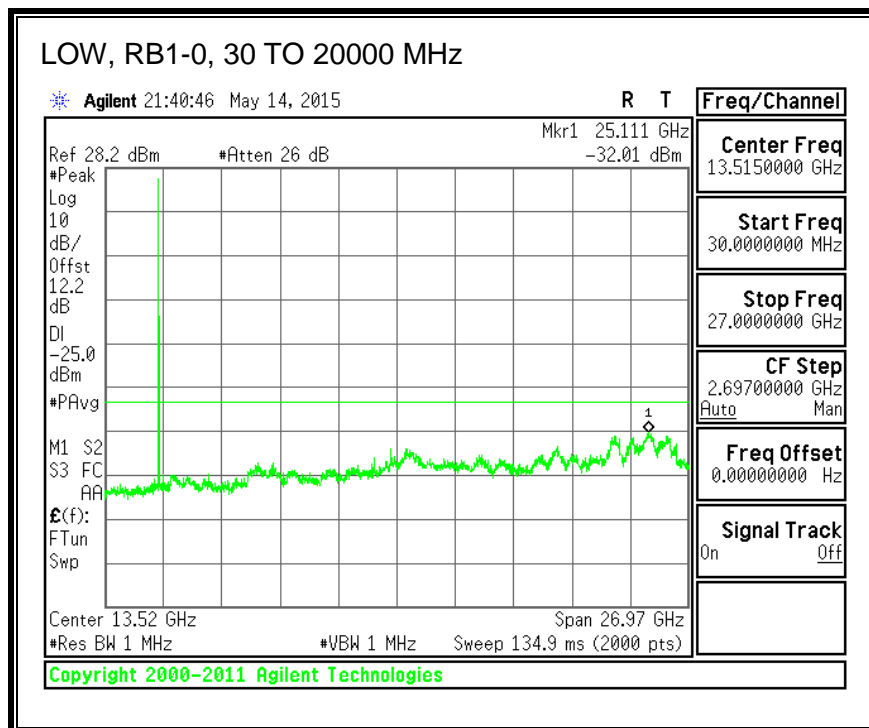
8.6.10. LTE BAND 41

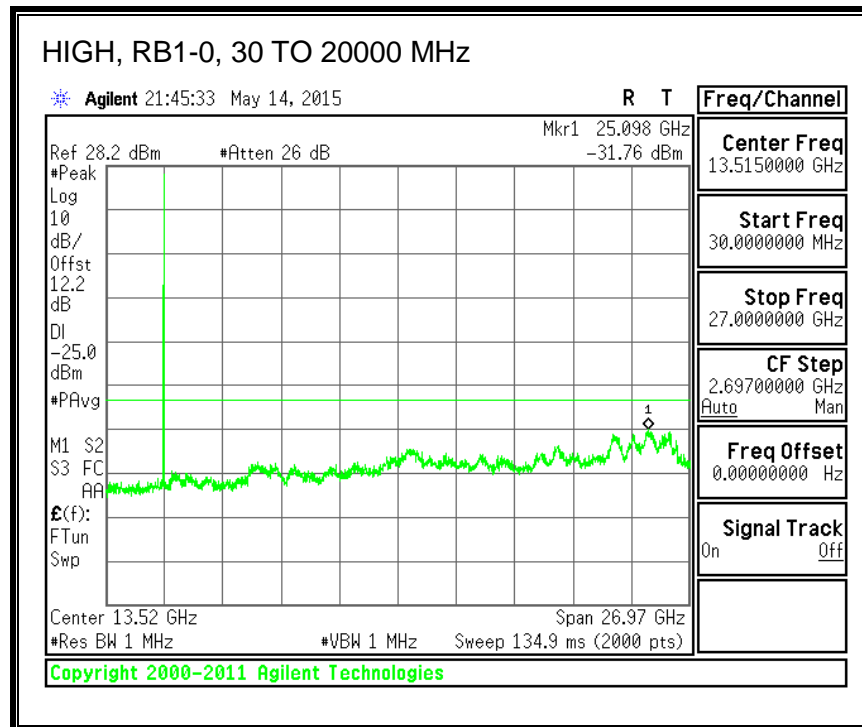
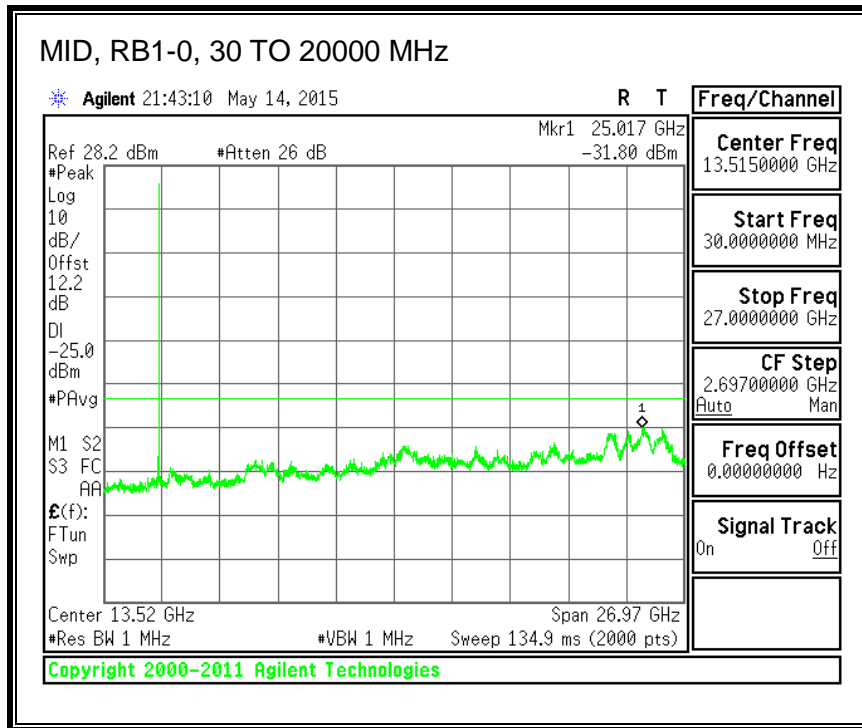
QPSK, (5.0 MHz BAND WIDTH)



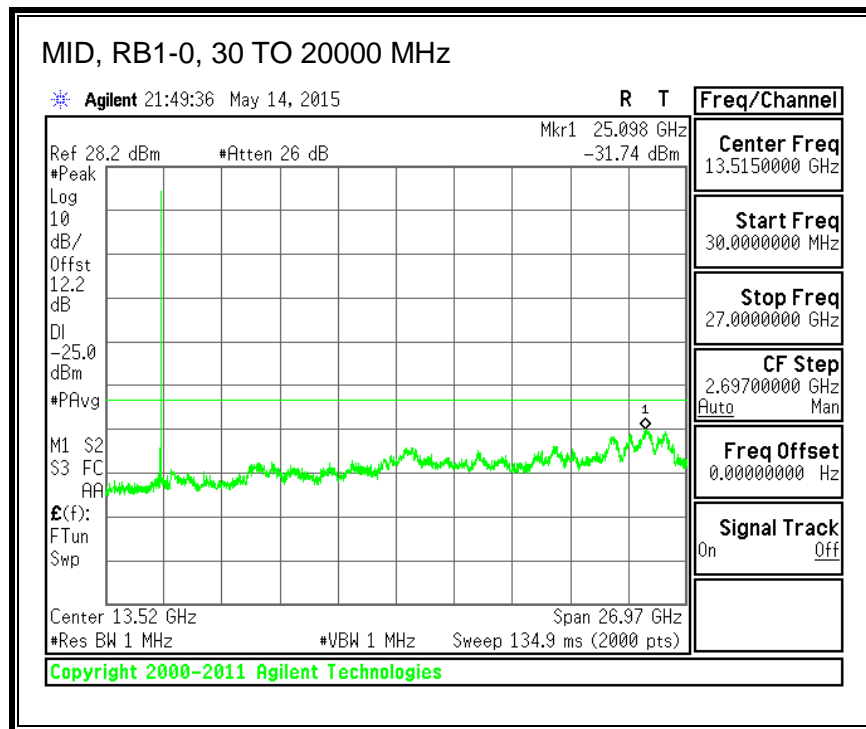
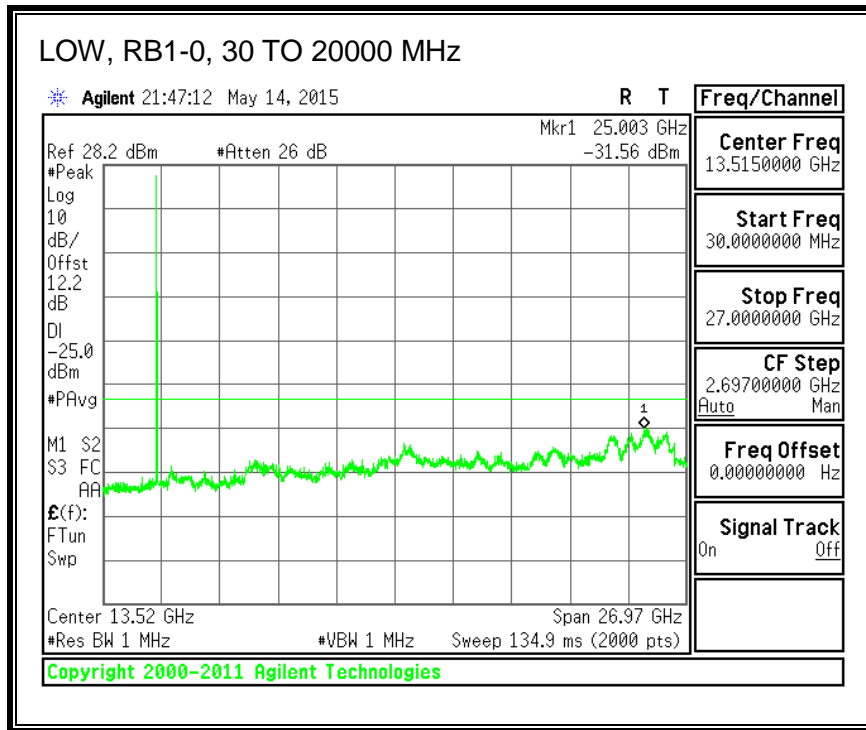


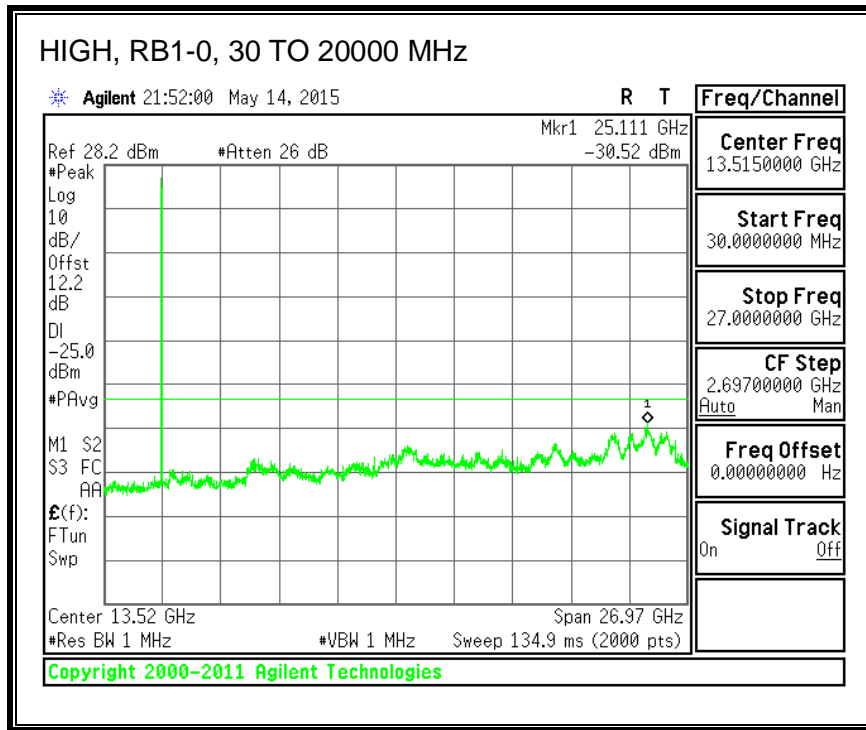
16QAM, (5.0 MHz BAND WIDTH)



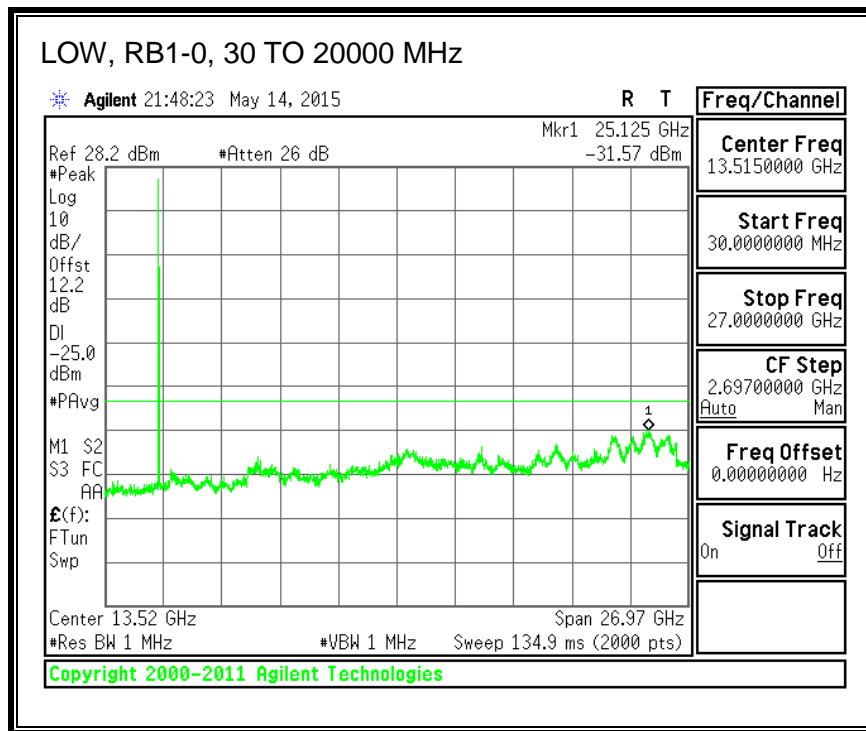


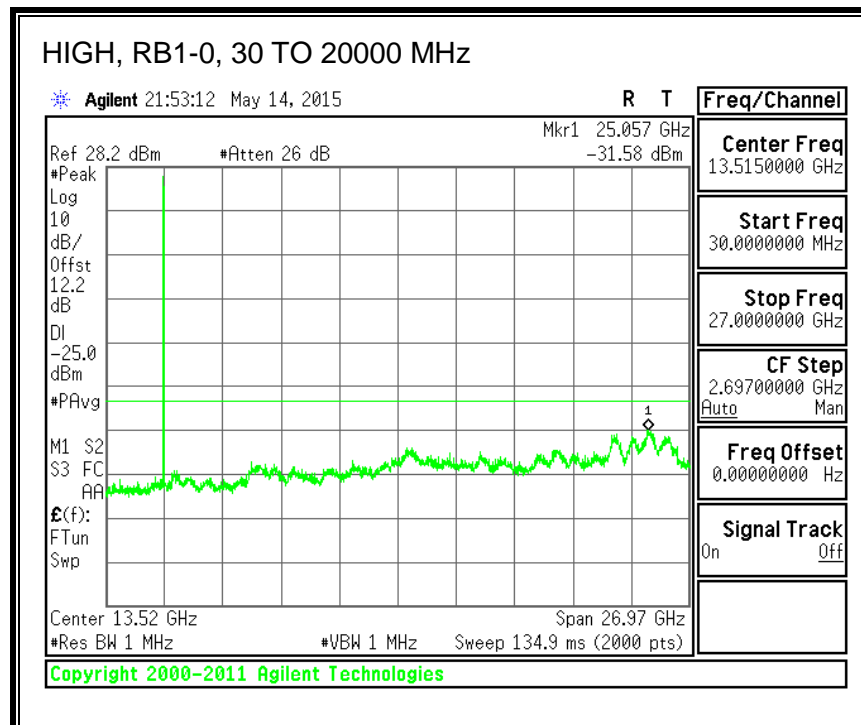
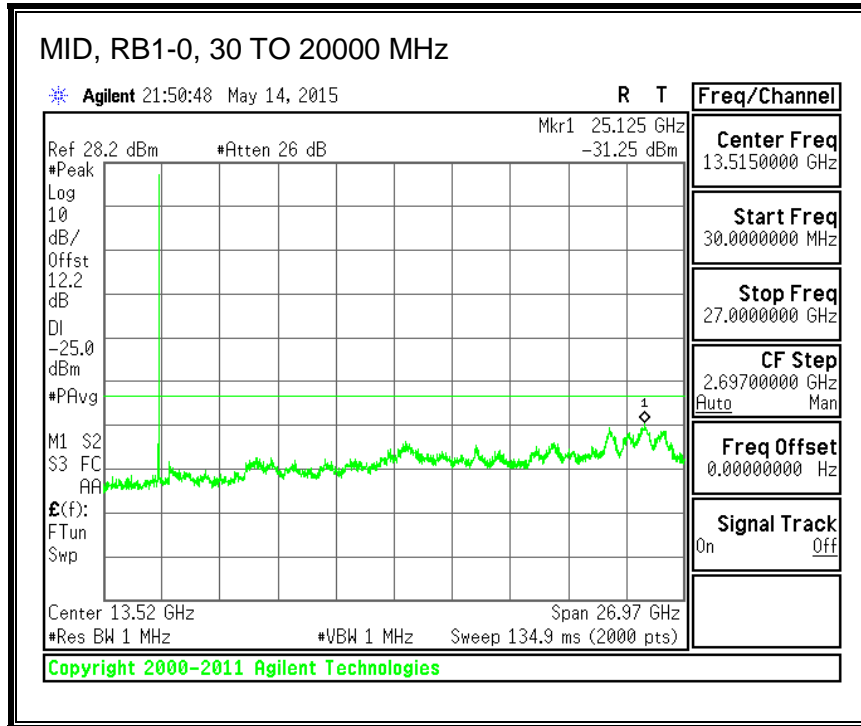
QPSK, (10.0 MHz BAND WIDTH)



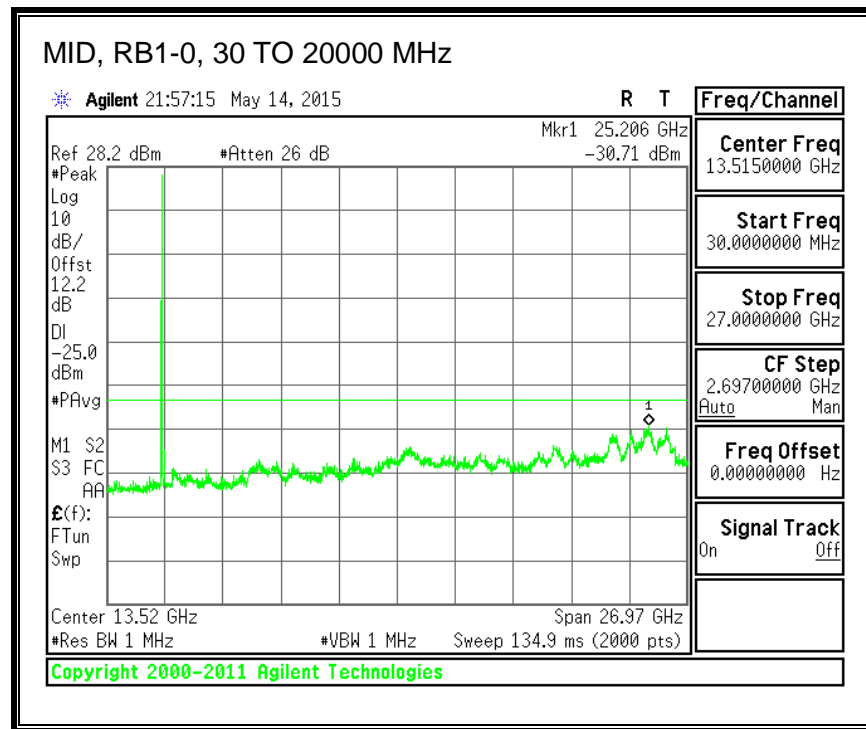
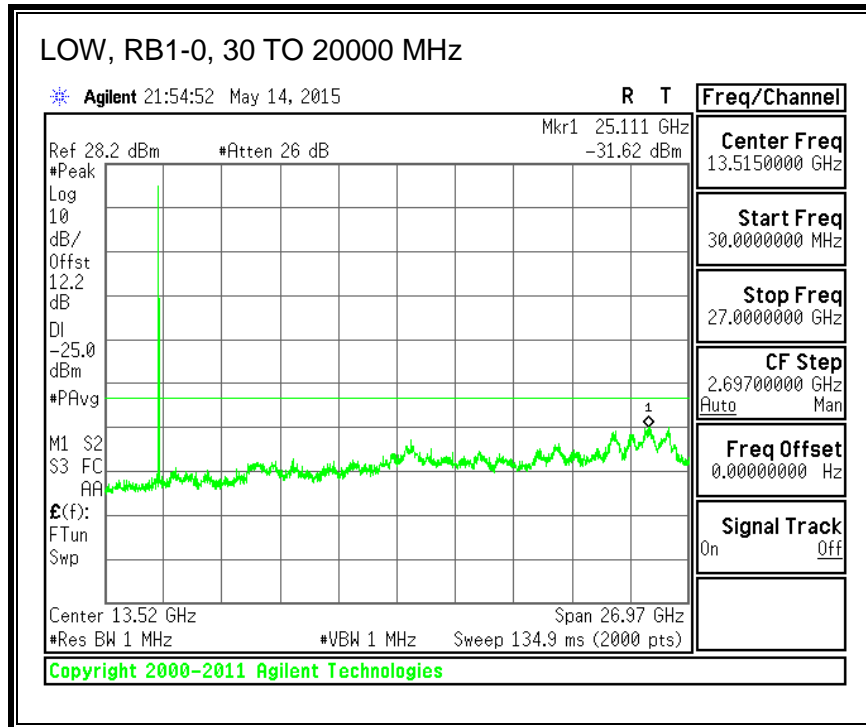


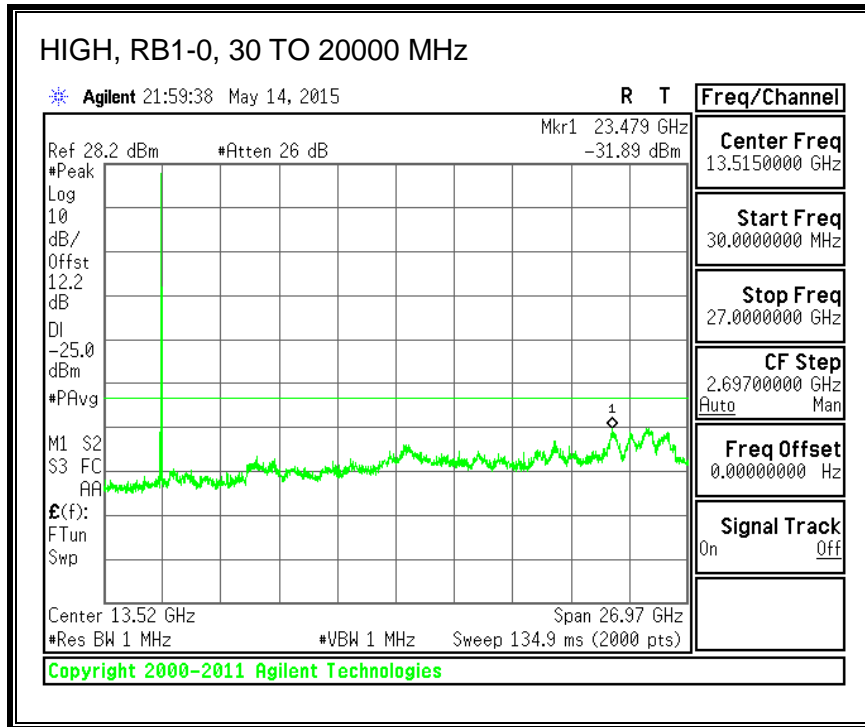
16QAM, (10.0 MHz BAND WIDTH)



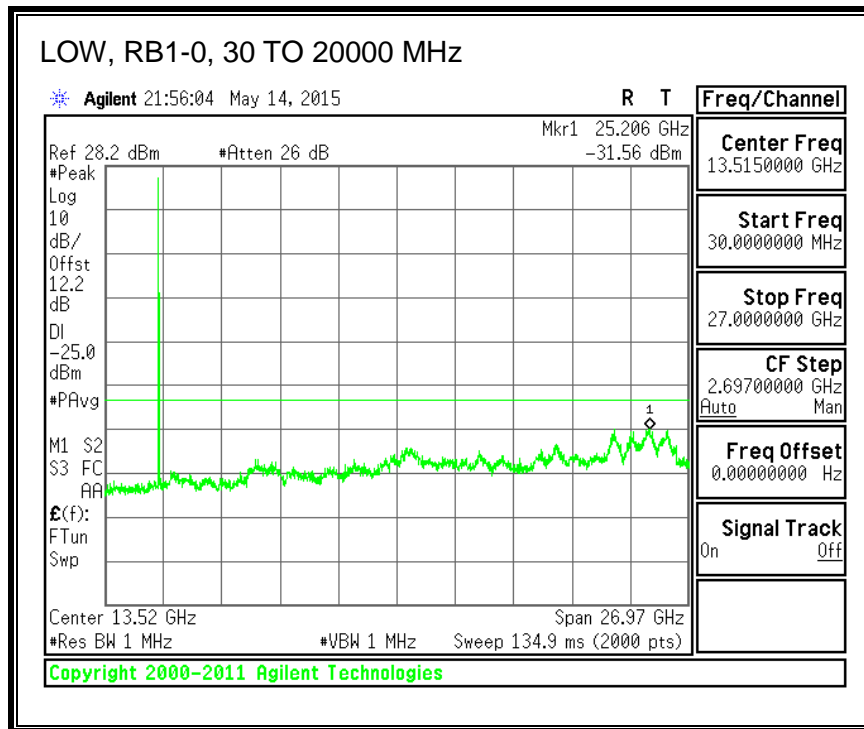


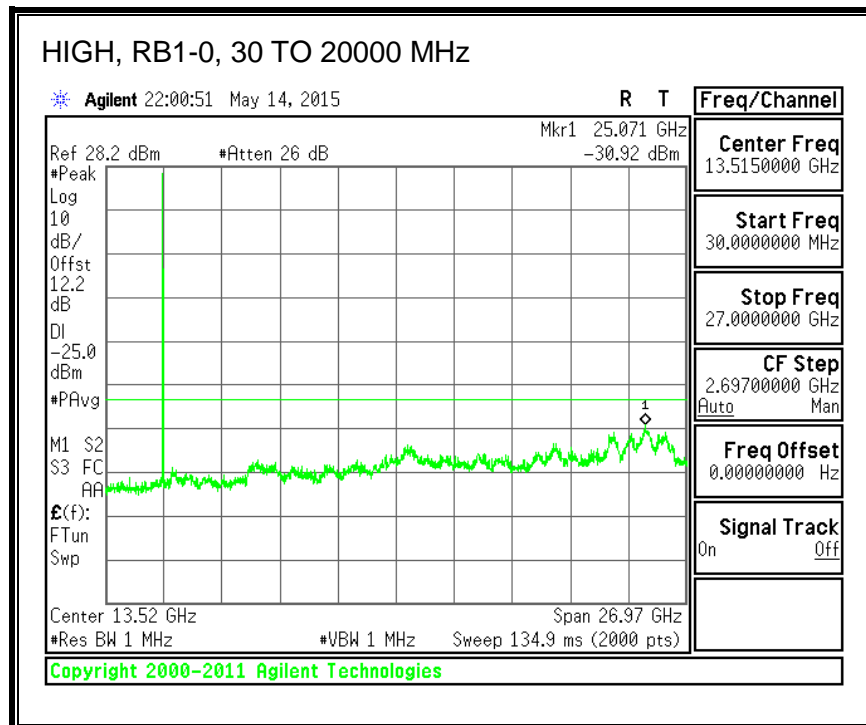
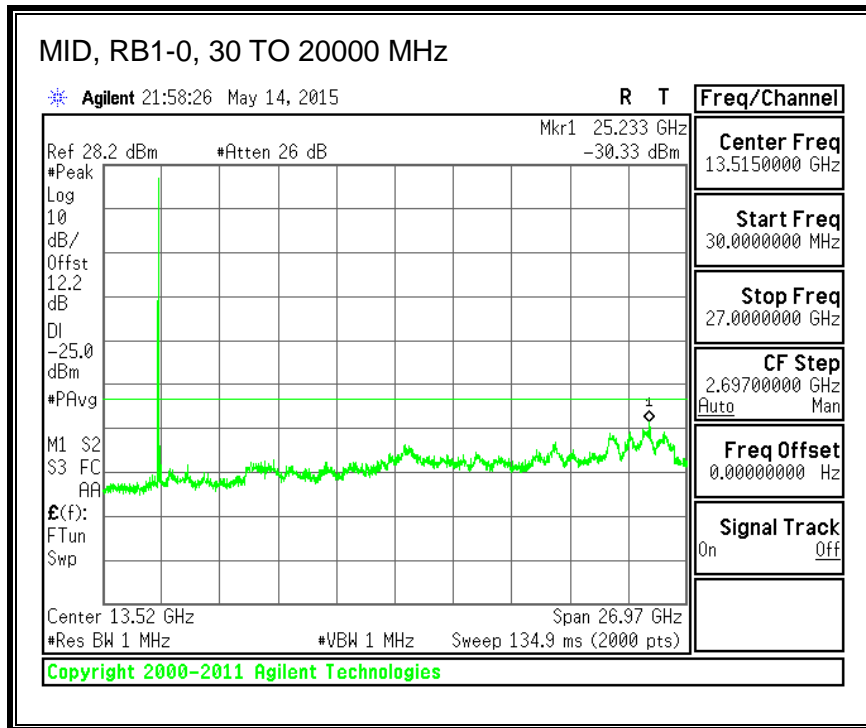
QPSK, (15.0 MHz BAND WIDTH)



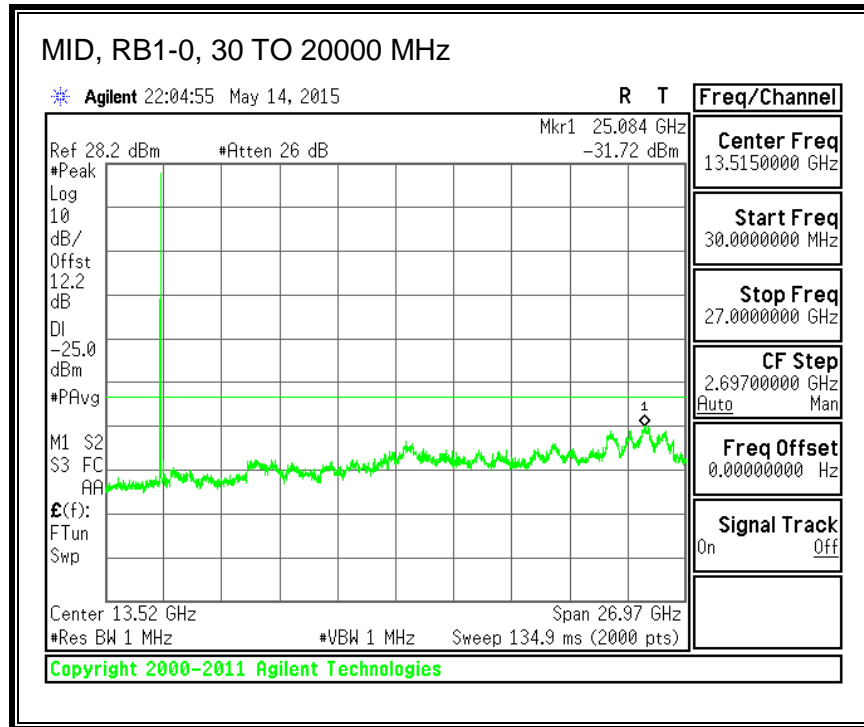
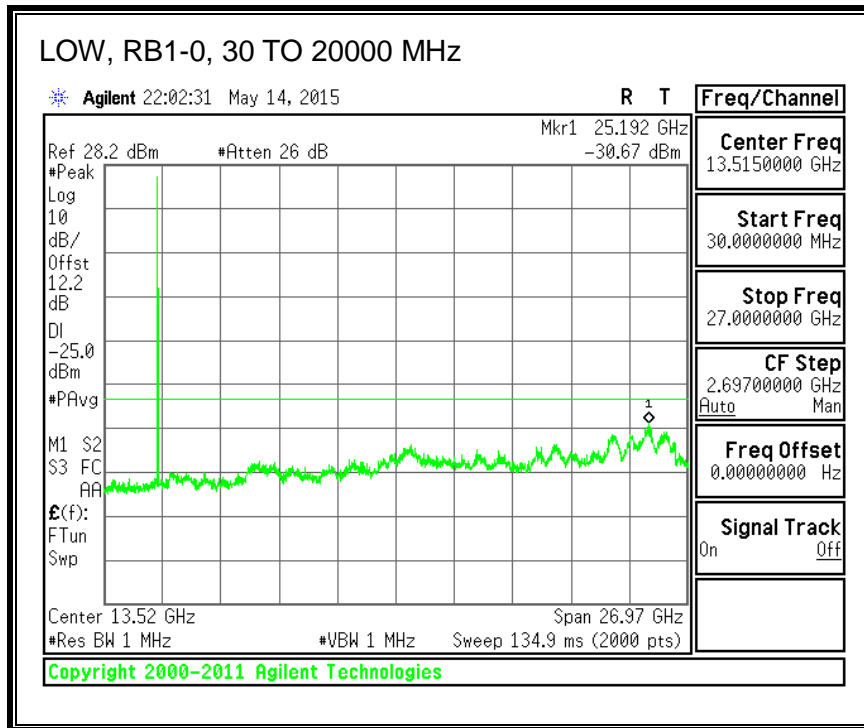


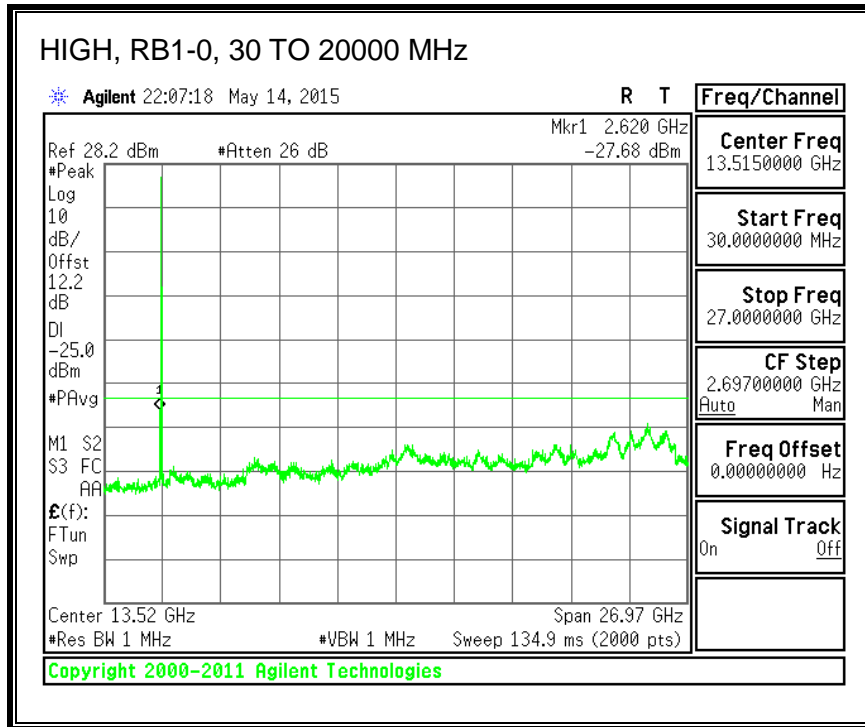
16QAM, (15.0 MHz BAND WIDTH)



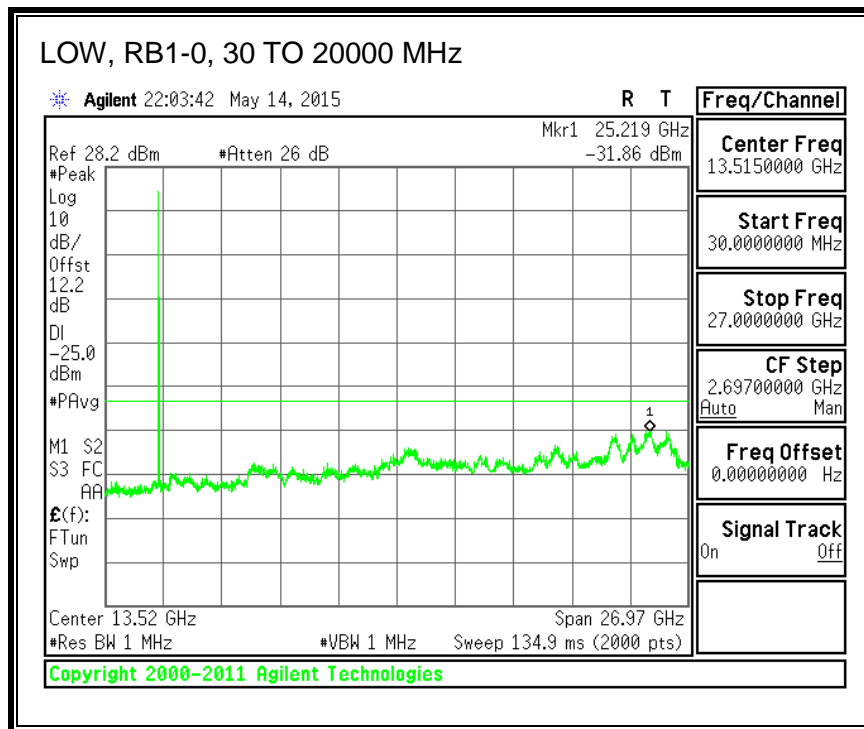


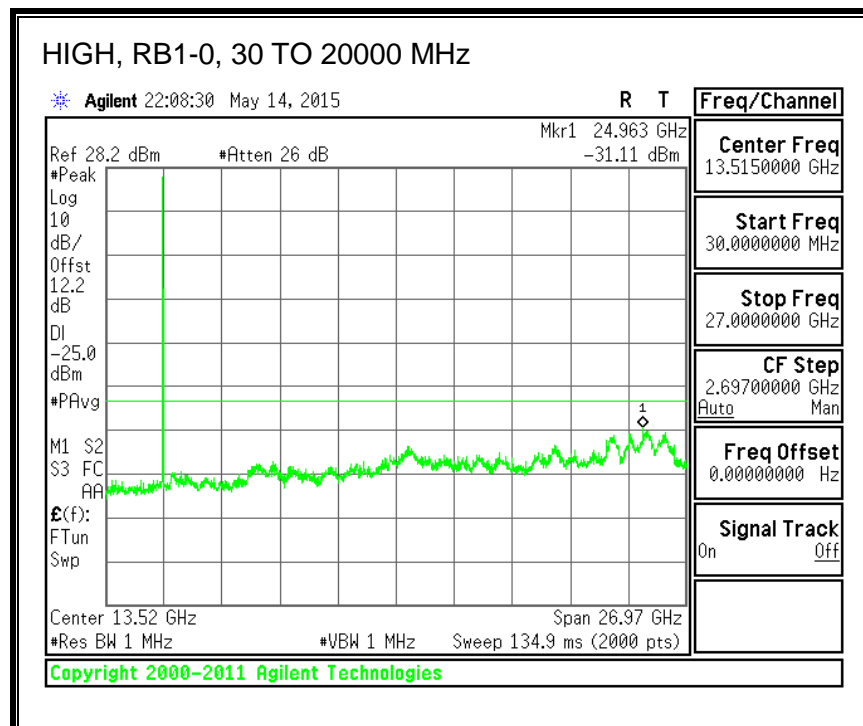
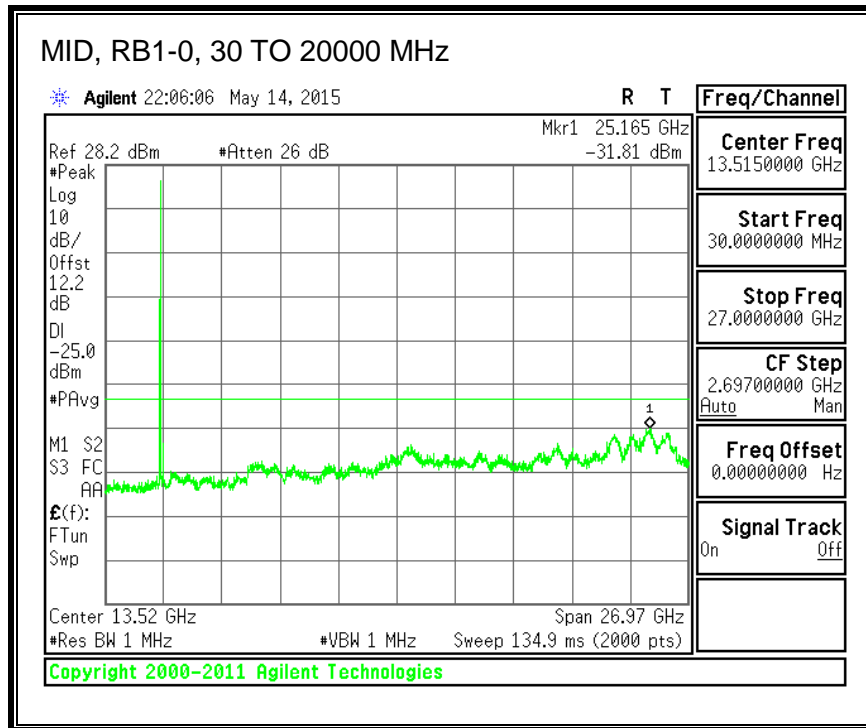
QPSK, (20.0 MHz BAND WIDTH)





16QAM, (20.0 MHz BAND WIDTH)





9. FREQUENCY STABILITY

9.1. MODEL: A1634

FCC: §2.1055, §22.355, §24.235, §27.54

LIMITS

§22.355 & RSS-132 5.3

The carrier frequency shall not depart from the reference frequency in excess of ± 2.5 ppm for mobile stations.

§24.235 & §27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

TEST PROCEDURE

Use CMW 500 with Frequency Error measurement capability.

- Temp. = -30° to $+50^{\circ}\text{C}$
- Voltage = low voltage, 3.4VDC, Normal, 3.8VDC and High voltage, 4.3VDC.

Frequency Stability vs Temperature:

The EUT is placed inside a temperature chamber. The temperature is set to 20°C and allowed to stabilize. After sufficient soak time, the transmitting frequency error is measured. The temperature is increased by 10 degrees, allowed to stabilize and soak, and then the measurement is repeated. This is repeated until $+50^{\circ}\text{C}$ is reached.

Frequency Stability vs Voltage:

The peak frequency error is recorded (worst-case).

MODES TESTED

- LTE Band 2
- LTE Band 4
- LTE Band 5
- LTE Band 7
- LTE Band 12
- LTE Band 13
- LTE Band 17
- LTE Band 25
- LTE Band 26
- LTE Band 30
- LTE Band 41

RESULTS

9.1.1. LTE BAND 2

QPSK, (20MHz BANDWIDTH)

Limit		1850	1910	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)		
Temperature	Voltage				
Normal (25C)	Normal	1851.0144	1908.9875		
Extreme (50C)		1851.0144	1908.9875	-3.4	-0.002
Extreme (40C)		1851.0144	1908.9875	-3.5	-0.002
Extreme (30C)		1851.0144	1908.9875	-3.0	-0.002
Extreme (10C)		1851.0144	1908.9875	-4.1	-0.002
Extreme (0C)		1851.0144	1908.9875	-4.5	-0.002
Extreme (-10C)		1851.0144	1908.9875	-3.6	-0.002
Extreme (-20C)		1851.0144	1908.9875	-3.2	-0.002
Extreme (-30C)		1851.0144	1908.9875	-3.3	-0.002
25C	10%	1851.0144	1908.9875	-3.8	-0.002
	-10%	1851.0144	1908.9875	-4.0	-0.002
	End Point	1851.0144	1908.9875	-4.4	-0.002

16QAM, (20MHz BANDWIDTH)

Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)	Delta (Hz)	Frequency Stability (ppm)
Temperature	Voltage				
Normal (25C)	Normal	1851.0209	1908.9795		
Extreme (50C)		1851.0209	1908.9795	-4.0	-0.002
Extreme (40C)		1851.0209	1908.9795	-3.6	-0.002
Extreme (30C)		1851.0209	1908.9795	-2.8	-0.001
Extreme (10C)		1851.0209	1908.9795	-3.8	-0.002
Extreme (0C)		1851.0209	1908.9795	-2.7	-0.001
Extreme (-10C)		1851.0209	1908.9795	-2.4	-0.001
Extreme (-20C)		1851.0209	1908.9795	-2.1	-0.001
Extreme (-30C)		1851.0209	1908.9795	-3.6	-0.002
25C	10%	1851.0209	1908.9795	-3.7	-0.002
	-10%	1851.0209	1908.9795	-4.1	-0.002
	End Point	1851.0209	1908.9795	-2.9	-0.002

9.1.2. LTE BAND 4

QPSK, (20MHz BANDWIDTH)

Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)	Delta (Hz)	Frequency Stability (ppm)
Temperature	Voltage				
Normal (25C)	Normal	1711.0129	1753.9848		
Extreme (50C)		1711.0129	1753.9848	-0.5	0.000
Extreme (40C)		1711.0129	1753.9848	0.6	0.000
Extreme (30C)		1711.0129	1753.9848	-0.4	0.000
Extreme (10C)		1711.0129	1753.9848	0.8	0.000
Extreme (0C)		1711.0129	1753.9848	0.5	0.000
Extreme (-10C)		1711.0129	1753.9848	0.7	0.000
Extreme (-20C)		1711.0129	1753.9848	-2.0	-0.001
Extreme (-30C)		1711.0129	1753.9848	0.8	0.000
25C	10%	1711.0129	1753.9848	-0.3	0.000
	-10%	1711.0129	1753.9848	-0.4	0.000
	End Point	1711.0129	1753.9848	0.5	0.000

16QAM, (20MHz BANDWIDTH)

Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)	Delta (Hz)	Frequency Stability (ppm)
Temperature	Voltage				
Normal (25C)	Normal	1711.0155	1753.9820		
Extreme (50C)		1711.0155	1753.9820	0.4	0.000
Extreme (40C)		1711.0155	1753.9820	-0.3	0.000
Extreme (30C)		1711.0155	1753.9820	-0.1	0.000
Extreme (10C)		1711.0155	1753.9820	0.7	0.000
Extreme (0C)		1711.0155	1753.9820	2.2	0.001
Extreme (-10C)		1711.0155	1753.9820	2.6	0.001
Extreme (-20C)		1711.0155	1753.9820	-3.8	-0.002
Extreme (-30C)		1711.0155	1753.9820	1.1	0.001
25C	10%	1711.0155	1753.9820	0.7	0.000
	-10%	1711.0155	1753.9820	-0.5	0.000
	End Point	1711.0155	1753.9820	0.7	0.000

9.1.3. LTE BAND 5

QPSK, (10MHz BANDWIDTH)

Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)	Delta (Hz)	Frequency Stability (ppm)
Temperature	Voltage				
Normal (25C)	Normal	824.3071	848.4924		
Extreme (50C)		824.3071	848.4924	-1.8	-0.002
Extreme (40C)		824.3071	848.4924	-0.9	-0.001
Extreme (30C)		824.3071	848.4924	-1.0	-0.001
Extreme (10C)		824.3071	848.4924	-1.2	-0.001
Extreme (0C)		824.3071	848.4924	0.4	0.000
Extreme (-10C)		824.3071	848.4924	-1.1	-0.001
Extreme (-20C)		824.3071	848.4924	-0.4	0.000
Extreme (-30C)		824.3071	848.4924	0.7	0.001
25C	10%	824.3071	848.4924	-1.2	-0.001
	-10%	824.3071	848.4924	-0.9	-0.001
	End Point	824.3071	848.4924	-1.3	-0.002

16QAM, (10MHz BANDWIDTH)

Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)	Delta (Hz)	Frequency Stability (ppm)
Temperature	Voltage				
Normal (25C)	Normal	824.5063	848.4917		
Extreme (50C)		824.5063	848.4917	-1.4	-0.002
Extreme (40C)		824.5063	848.4917	-0.7	-0.001
Extreme (30C)		824.5063	848.4917	-1.4	-0.002
Extreme (10C)		824.5063	848.4917	-1.1	-0.001
Extreme (0C)		824.5063	848.4917	0.8	0.001
Extreme (-10C)		824.5063	848.4917	1.2	0.001
Extreme (-20C)		824.5063	848.4917	0.6	0.001
Extreme (-30C)		824.5063	848.4917	1.3	0.002
25C	10%	824.5063	848.4917	-1.2	-0.001
	-10%	824.5063	848.4917	-0.8	-0.001
	End Point	824.5063	848.4917	0.6	0.001

9.1.4. LTE BAND 7

QPSK, (20MHz BANDWIDTH)

Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)	Delta (Hz)	Frequency Stability (ppm)
Temperature	Voltage				
Normal (25C)	Normal	2501.0210	2568.9822		
Extreme (50C)		2501.0210	2568.9822	-3.6	-0.001
Extreme (40C)		2501.0210	2568.9822	-3.2	-0.001
Extreme (30C)		2501.0210	2568.9822	-3.6	-0.001
Extreme (10C)		2501.0210	2568.9822	-3.3	-0.001
Extreme (0C)		2501.0210	2568.9822	-3.0	-0.001
Extreme (-10C)		2501.0210	2568.9822	-2.7	-0.001
Extreme (-20C)		2501.0210	2568.9822	-3.0	-0.001
Extreme (-30C)		2501.0210	2568.9822	-3.4	-0.001
25C	10%	2501.0210	2568.9822	-3.2	-0.001
	-10%	2501.0210	2568.9822	-3.5	-0.001
	End Point	2501.0210	2568.9822	-4.1	-0.002

16QAM, (20MHz BANDWIDTH)

Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)	Delta (Hz)	Frequency Stability (ppm)
Temperature	Voltage				
Normal (25C)	Normal	2501.0225	2568.9819		
Extreme (50C)		2501.0225	2568.9819	-3.6	-0.001
Extreme (40C)		2501.0225	2568.9819	-3.0	-0.001
Extreme (30C)		2501.0225	2568.9819	-2.5	-0.001
Extreme (10C)		2501.0225	2568.9819	-3.2	-0.001
Extreme (0C)		2501.0225	2568.9819	-2.8	-0.001
Extreme (-10C)		2501.0225	2568.9819	-1.8	-0.001
Extreme (-20C)		2501.0225	2568.9819	-2.2	-0.001
Extreme (-30C)		2501.0225	2568.9819	-2.5	-0.001
25C	10%	2501.0225	2568.9819	-3.3	-0.001
	-10%	2501.0225	2568.9819	-3.3	-0.001
	End Point	2501.0225	2568.9819	-3.7	-0.001