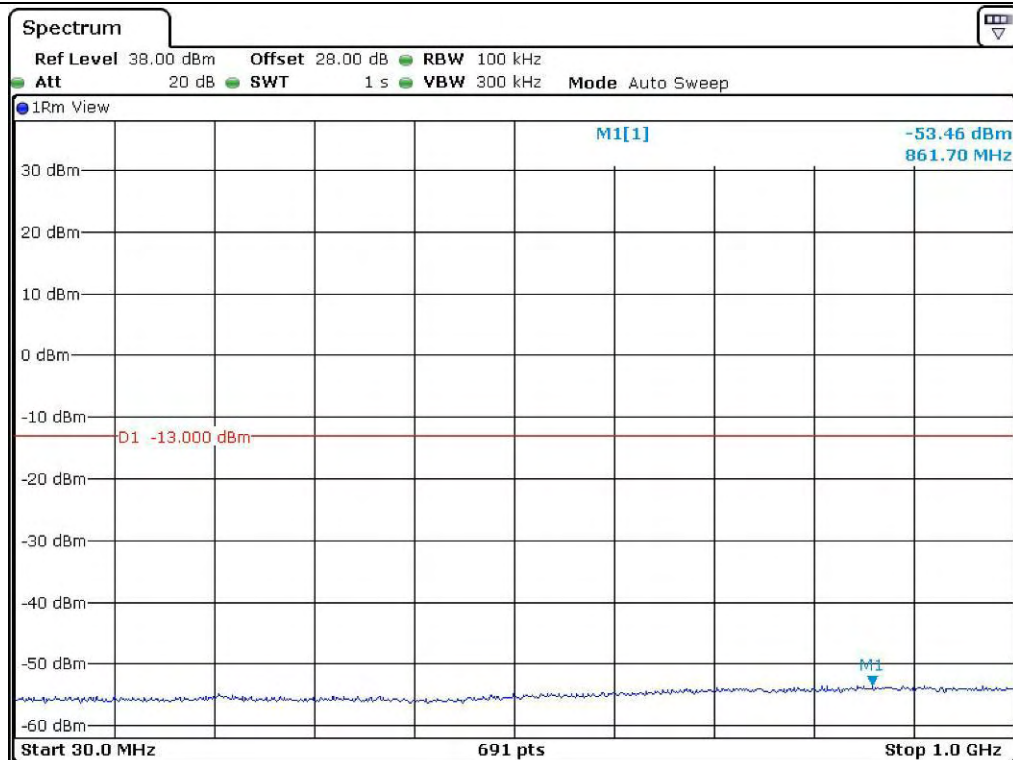
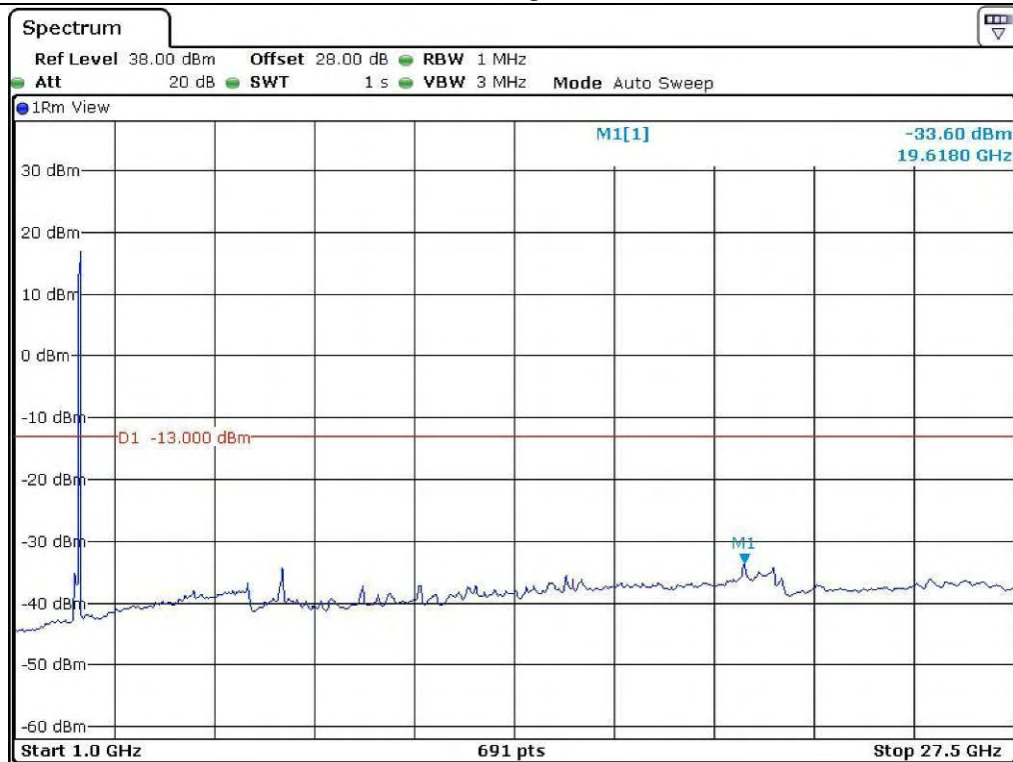
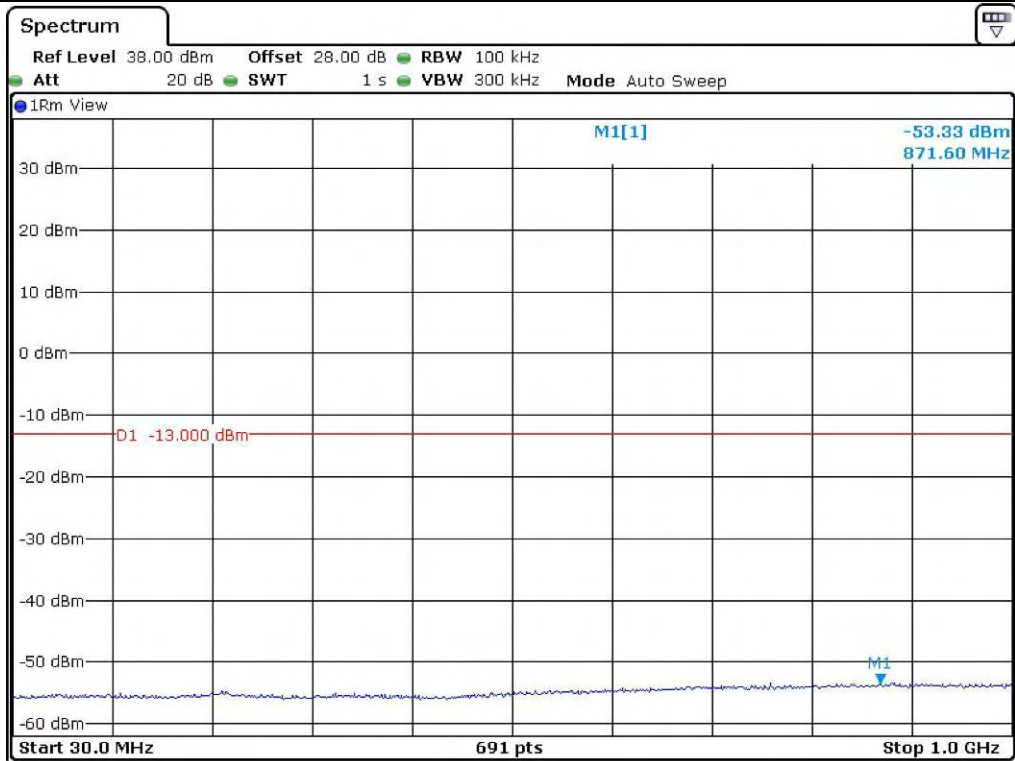




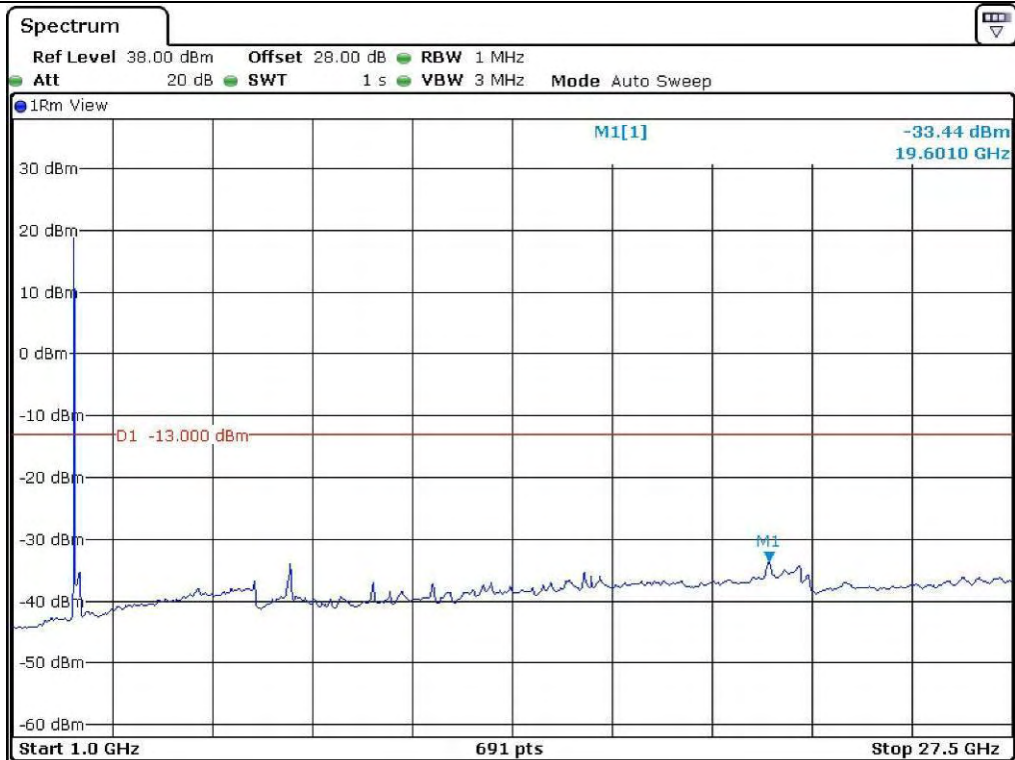
16 QAM – High Channel



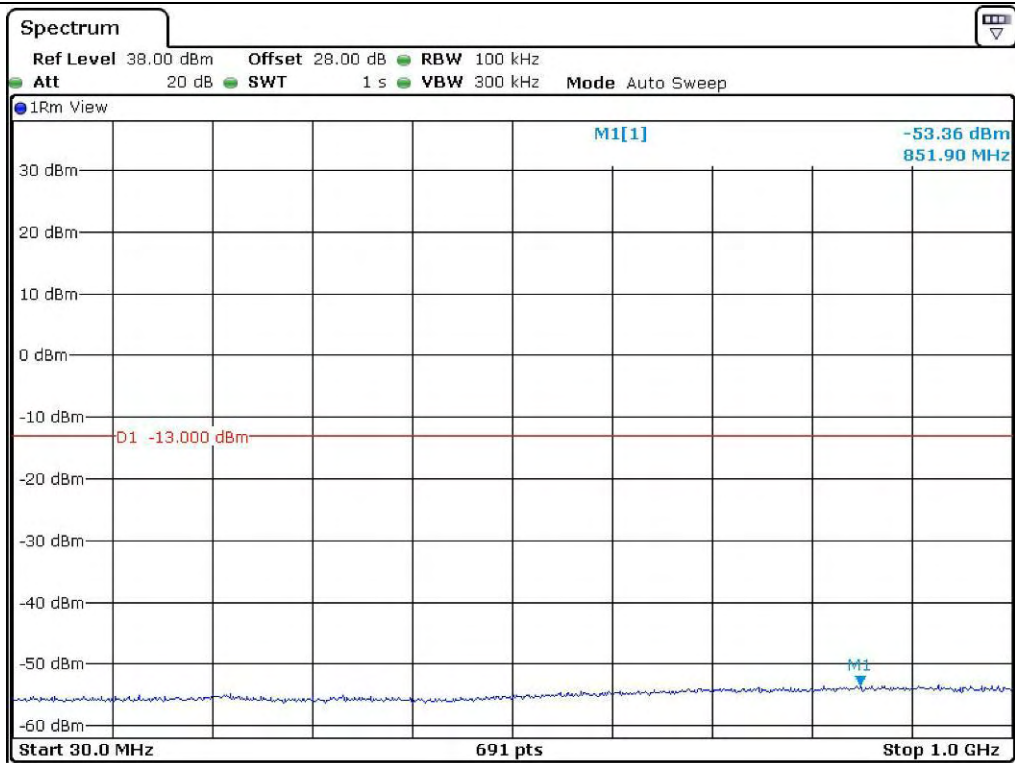
16 QAM – High Channel



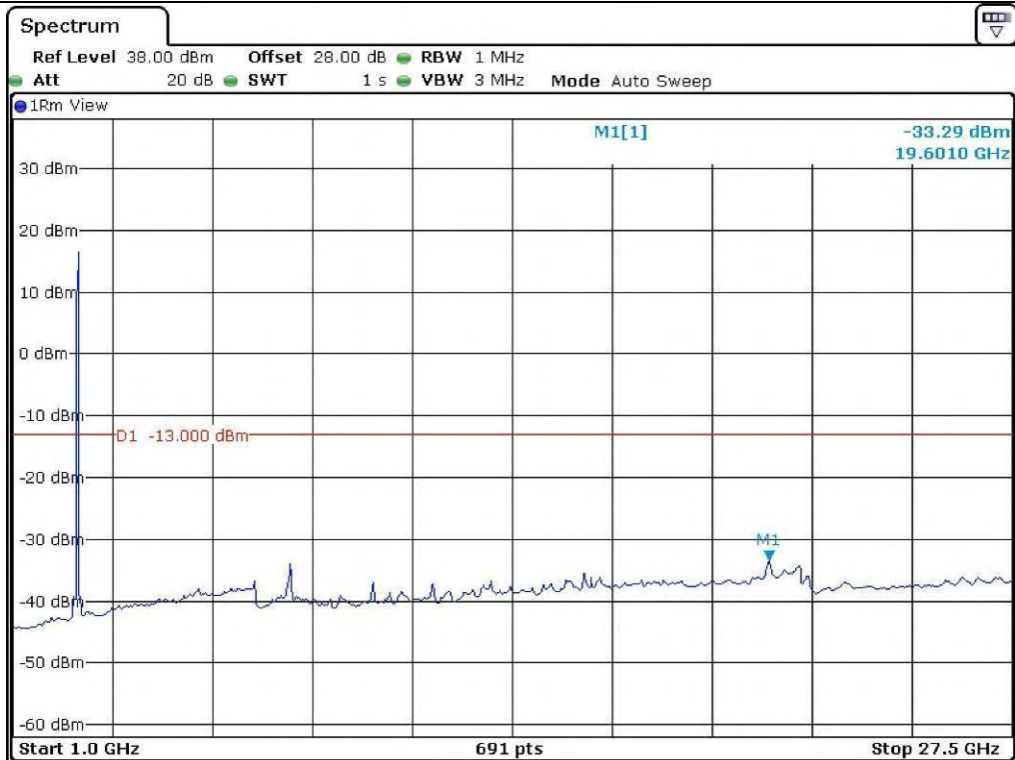
64 QAM – Low Channel



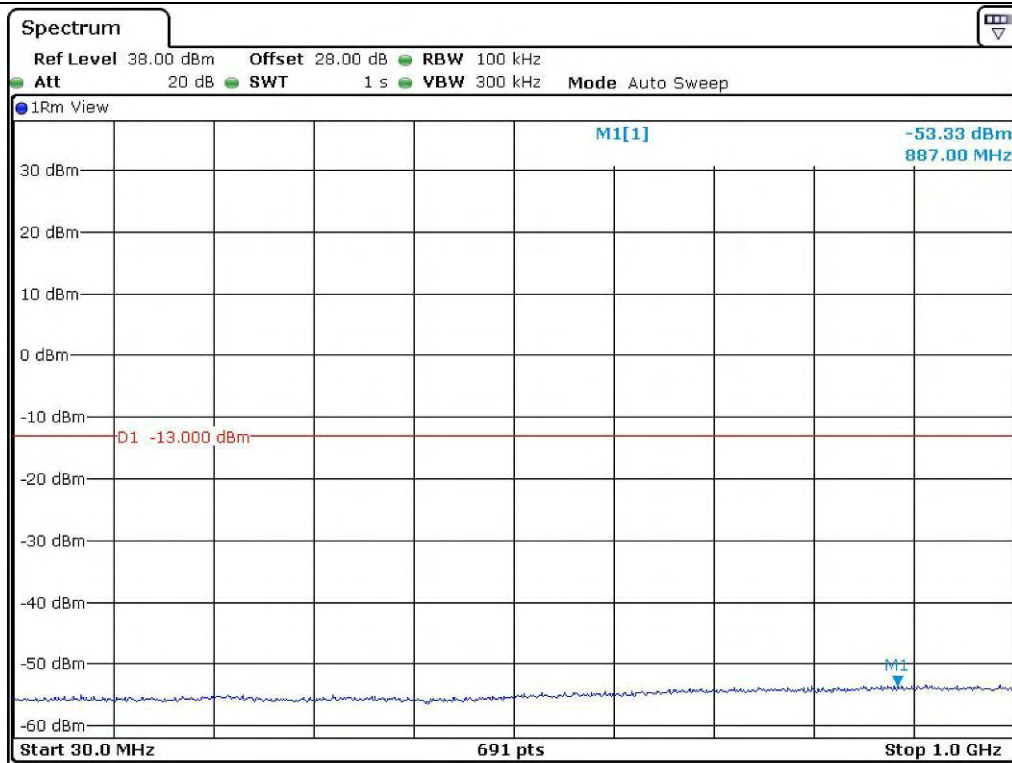
64 QAM – Low Channel



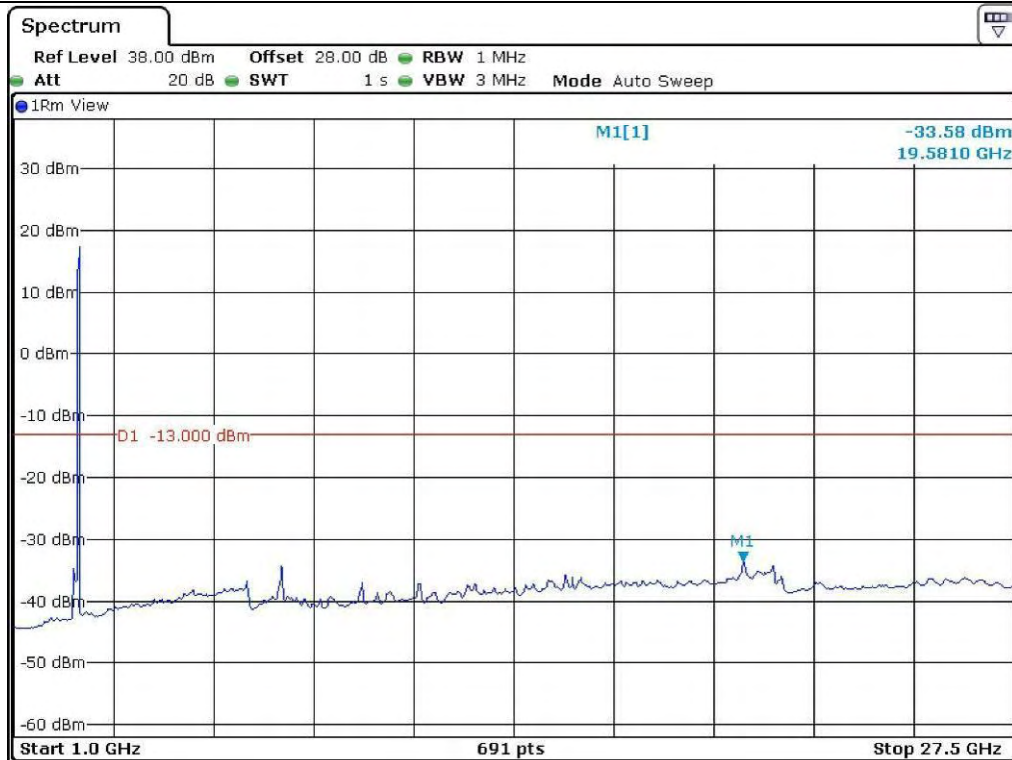
64 QAM – Middle Channel



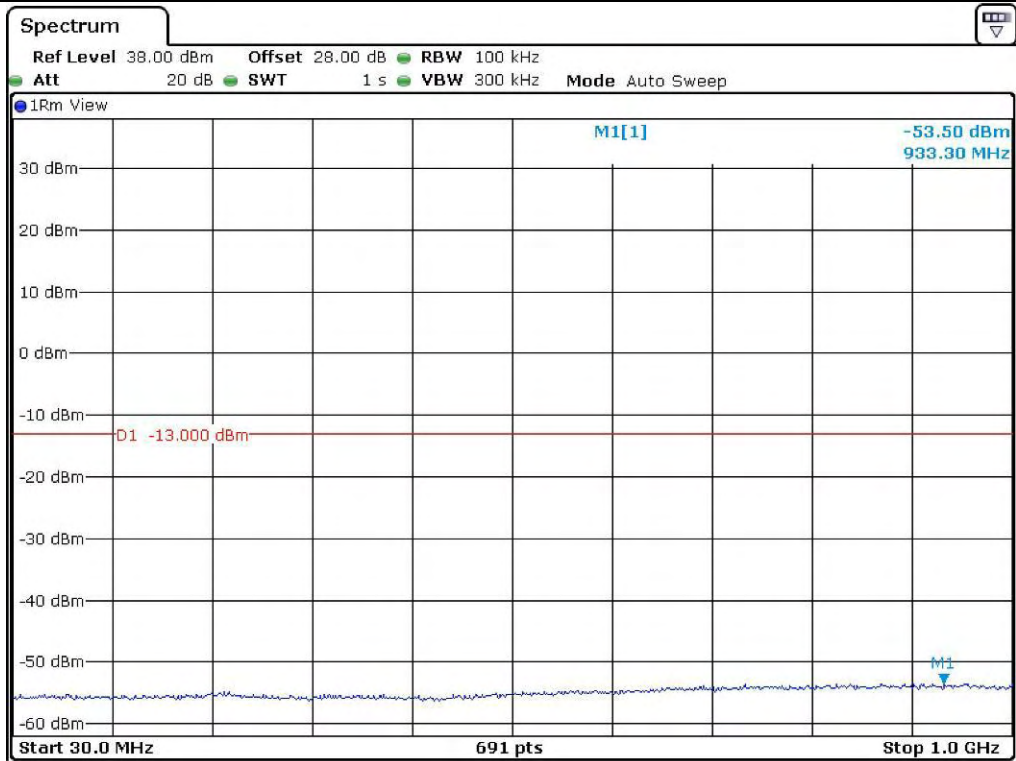
64 QAM – Middle Channel



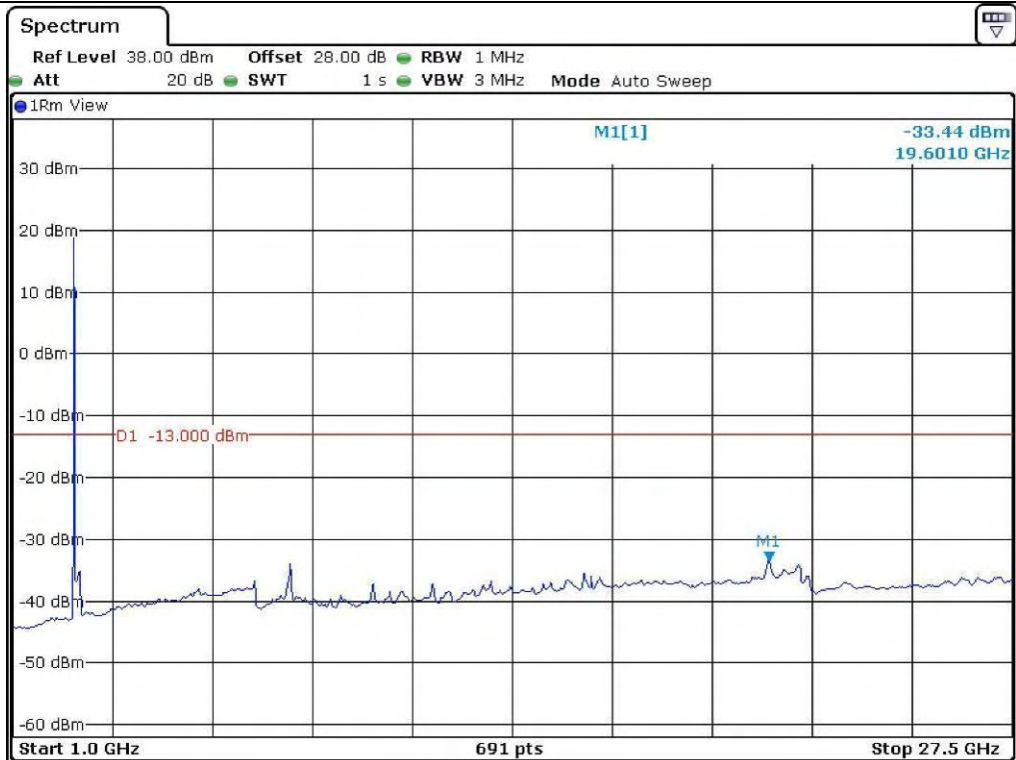
64 QAM – High Channel



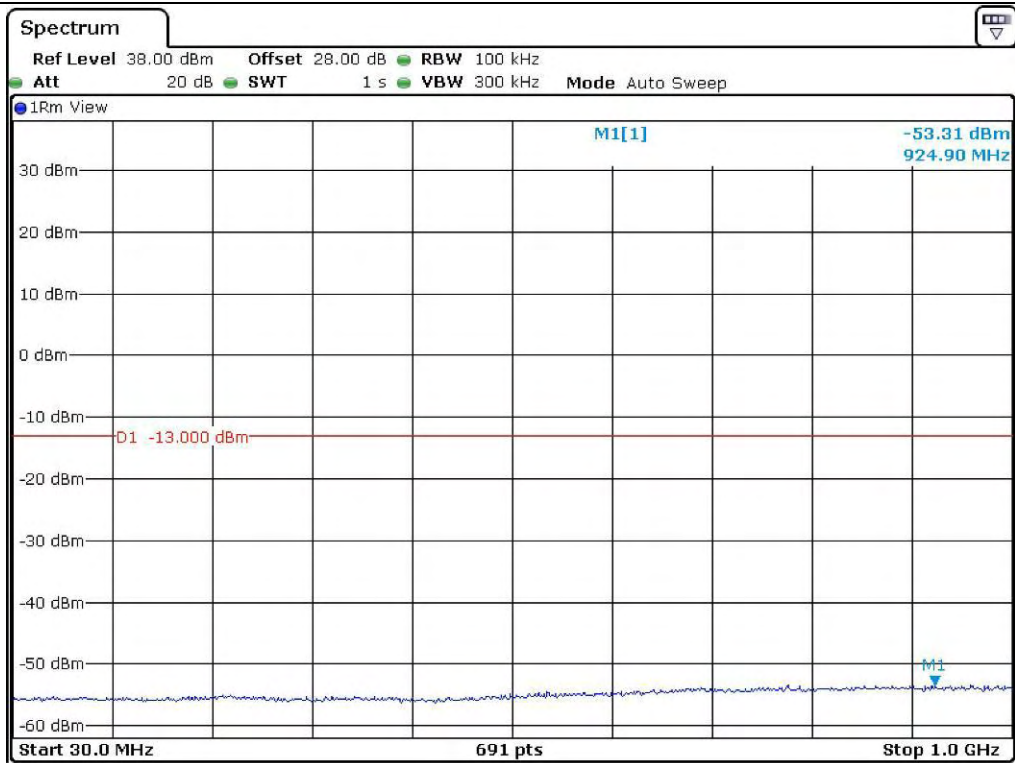
64 QAM – High Channel



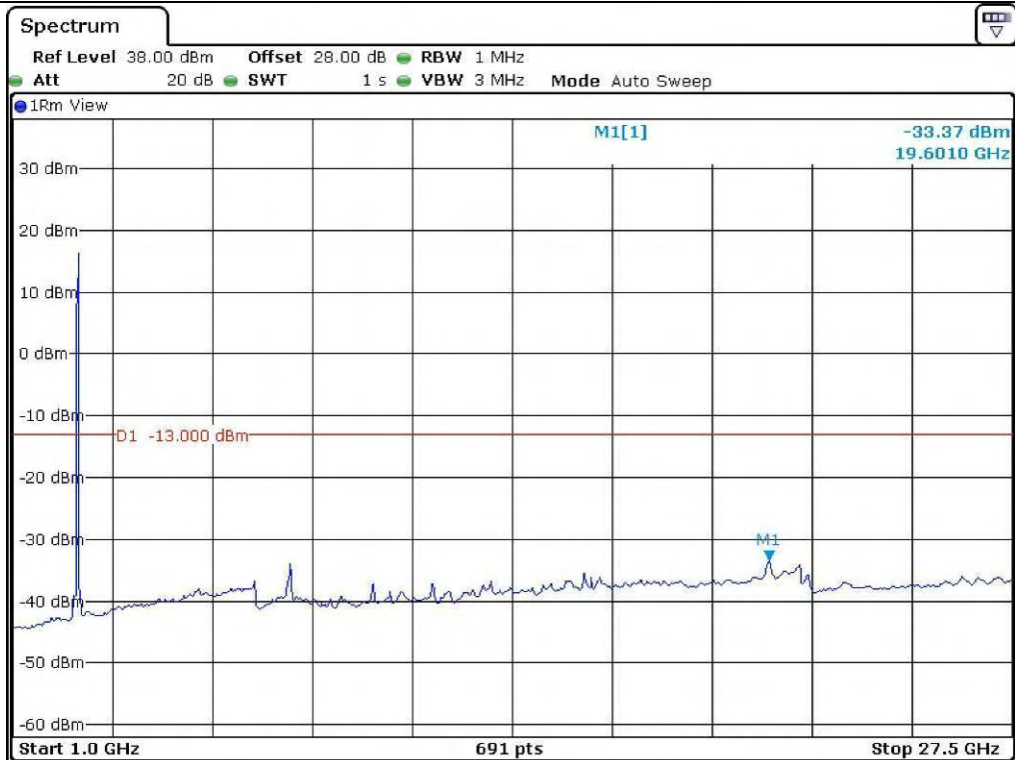
QPSK – Low Channel



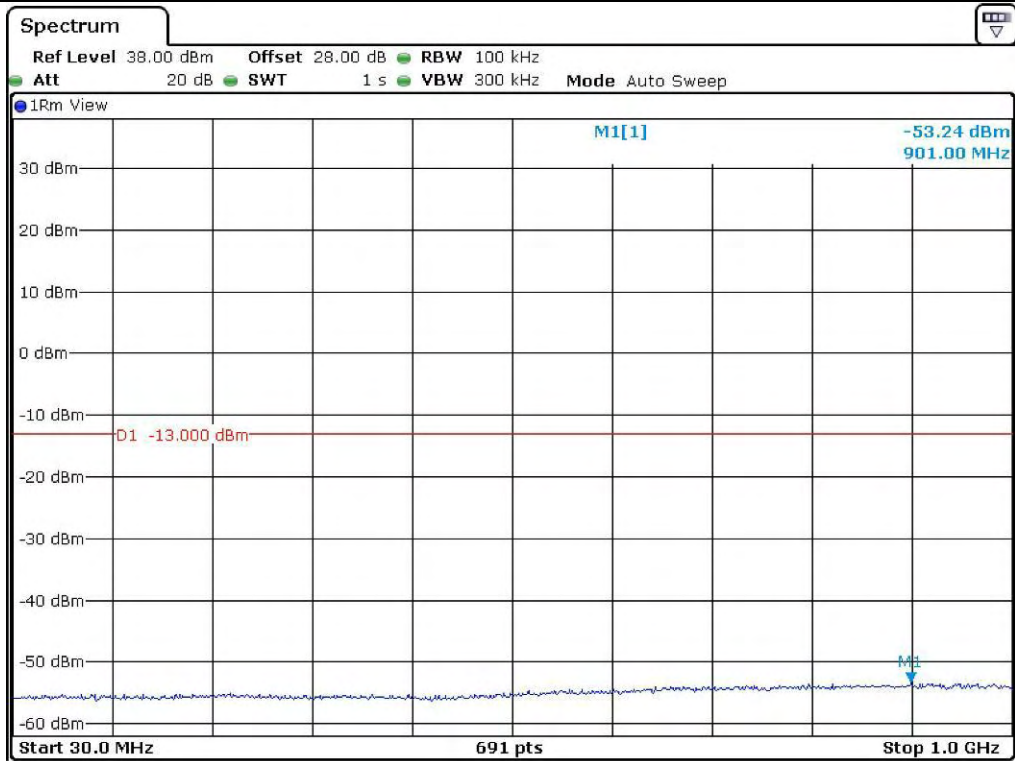
QPSK – Low Channel



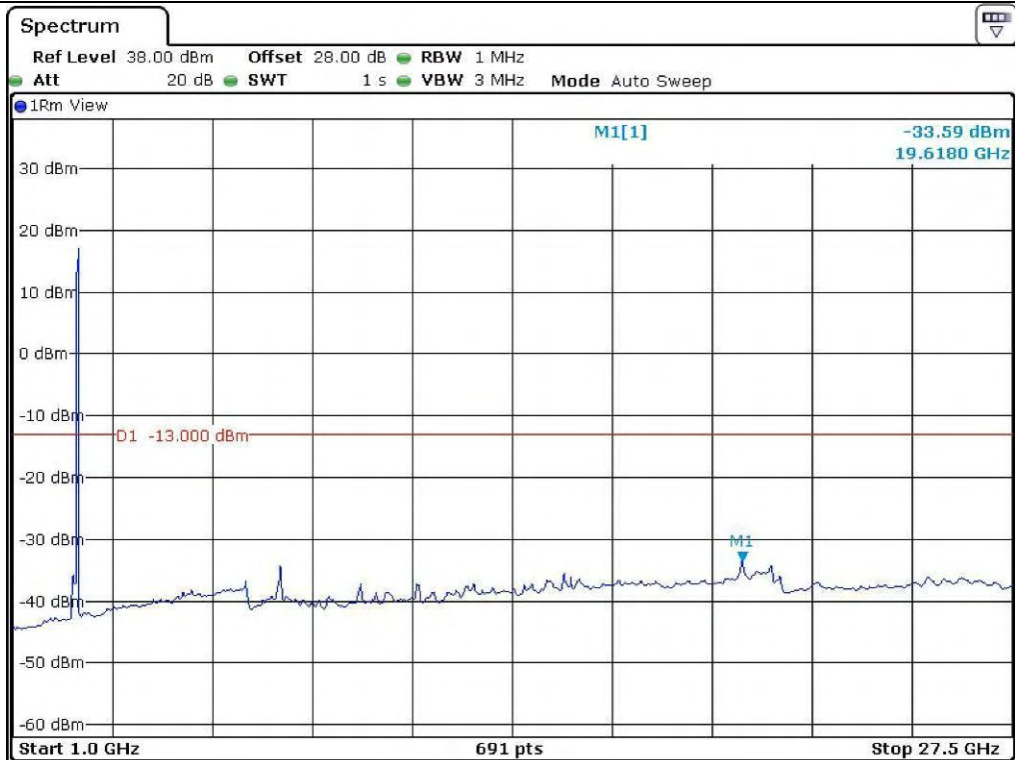
QPSK – Middle Channel



QPSK – Middle Channel



QPSK – High Channel



QPSK – High Channel

7.4.3 Test Result (20 MHz/3 Carrier)

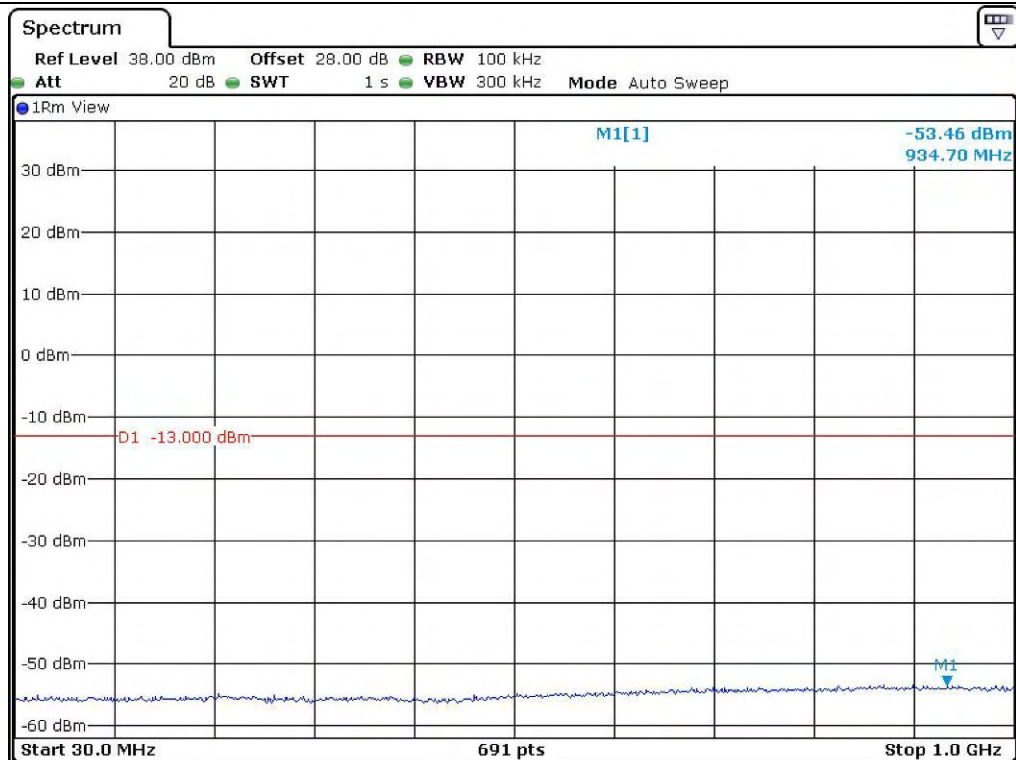
-. Test Date : July 31, 2014
-. Frequency range : 30 MHz ~ 27.5 GHz
-. Result : Pass

Modulation	Harmonic Frequency (MHz)		Measured Value (dBm)	Cable Loss (dB)	Total (dBm)	Limit (dBm)	Margin (dB)
16 QAM	Low	934.70	-53.46	0.30	-53.16	-13.00	40.16
		1 9601.00	-33.34	2.80	-30.54		17.54
	Middle	922.10	-53.43	0.30	-53.13		40.13
		1 9601.00	-33.51	2.80	-30.71		17.71
	High	912.30	-53.58	0.30	-53.28		40.28
		19581.00	-33.60	2.80	-30.80		17.80
64 QAM	Low	851.90	-53.49	0.20	-53.29	-13.00	40.29
		1 9601.00	-33.48	2.80	-30.68		17.68
	Middle	865.90	-53.50	0.20	-53.30		40.30
		1 9601.00	-33.44	2.80	-30.64		17.64
	High	919.30	-53.17	0.30	-52.87		39.87
		1 9581.00	-33.61	2.80	-30.81		17.81
QPSK	Low	947.40	-53.46	0.30	-53.16	-13.00	40.16
		1 9601.00	-33.41	2.80	-30.61		17.61
	Middle	947.40	-53.41	0.30	-53.11		40.11
		1 9601.00	-33.37	2.80	-30.57		17.57
	High	938.90	-53.45	0.30	-53.15		40.15
		1 9581.00	-33.56	2.80	-30.76		17.76
Other frequencies up to 27.5 GHz have margin more than 20 dB.							

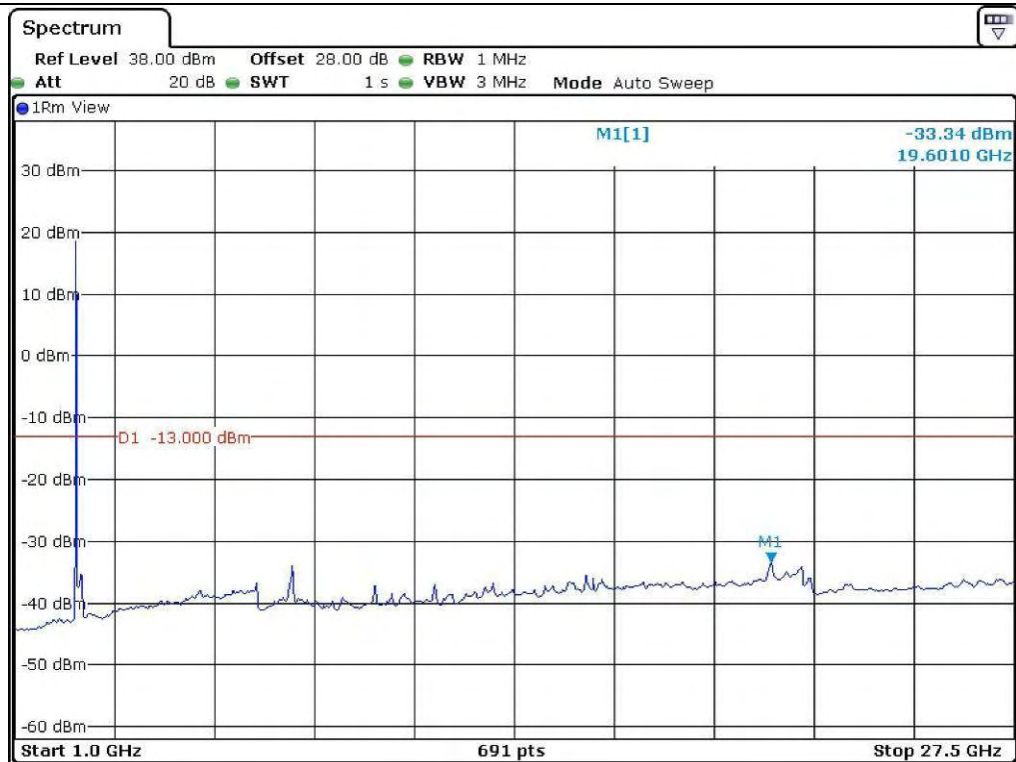
According to Part 27C, out of band emission shall be attenuated by $43 + 10 \log (P)$ dBc, equates to -13.0 dBm.



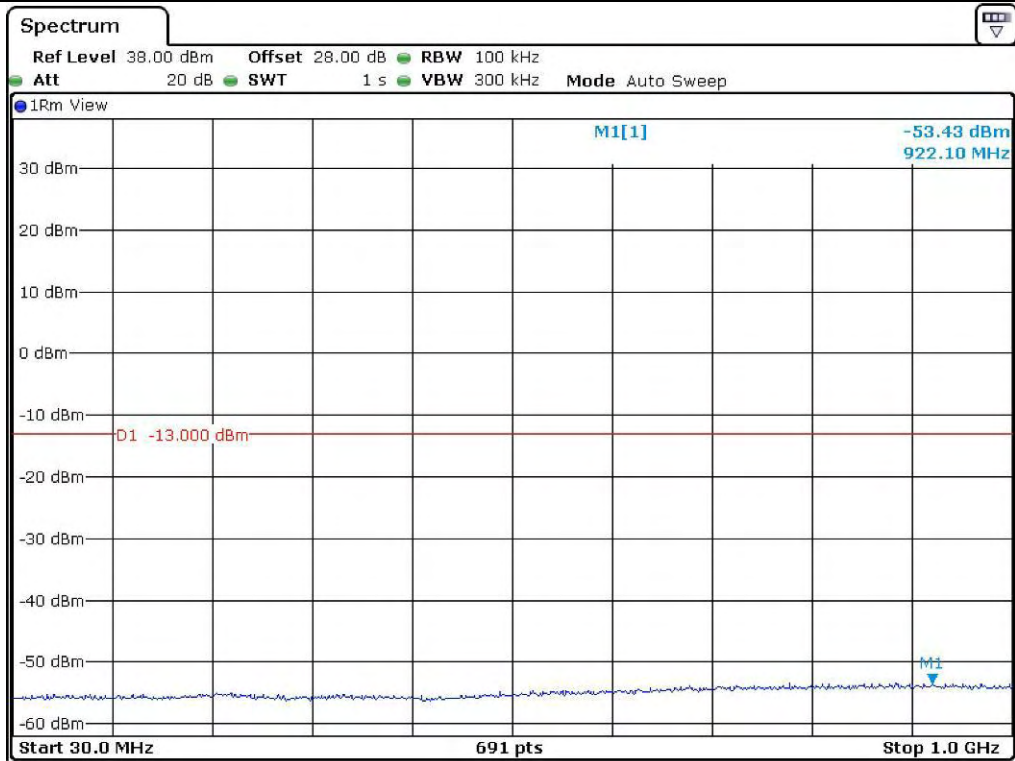
Tested by: Tae-Ho, Kim / Project Engineer



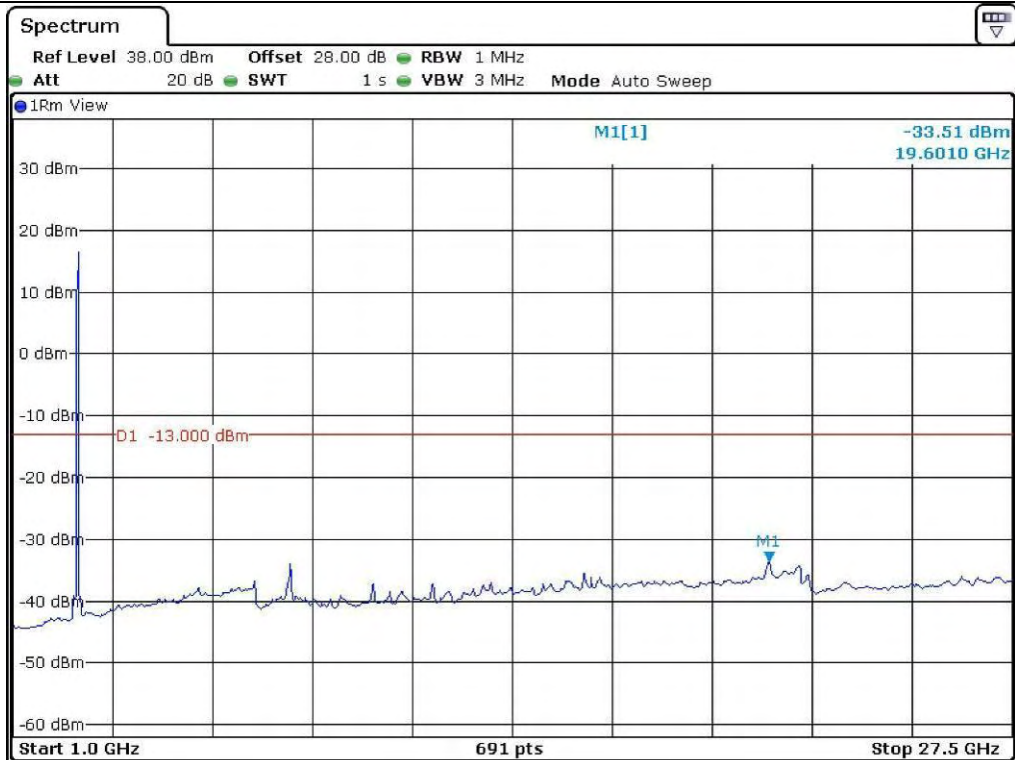
16 QAM – Low Channel



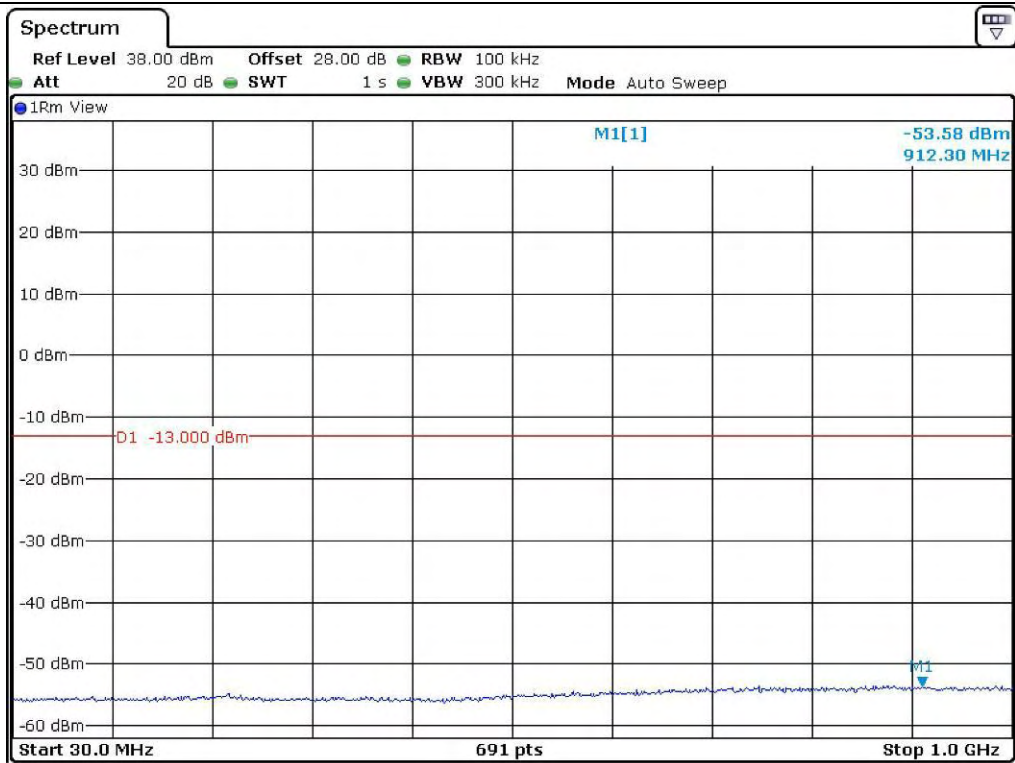
16 QAM – Low Channel



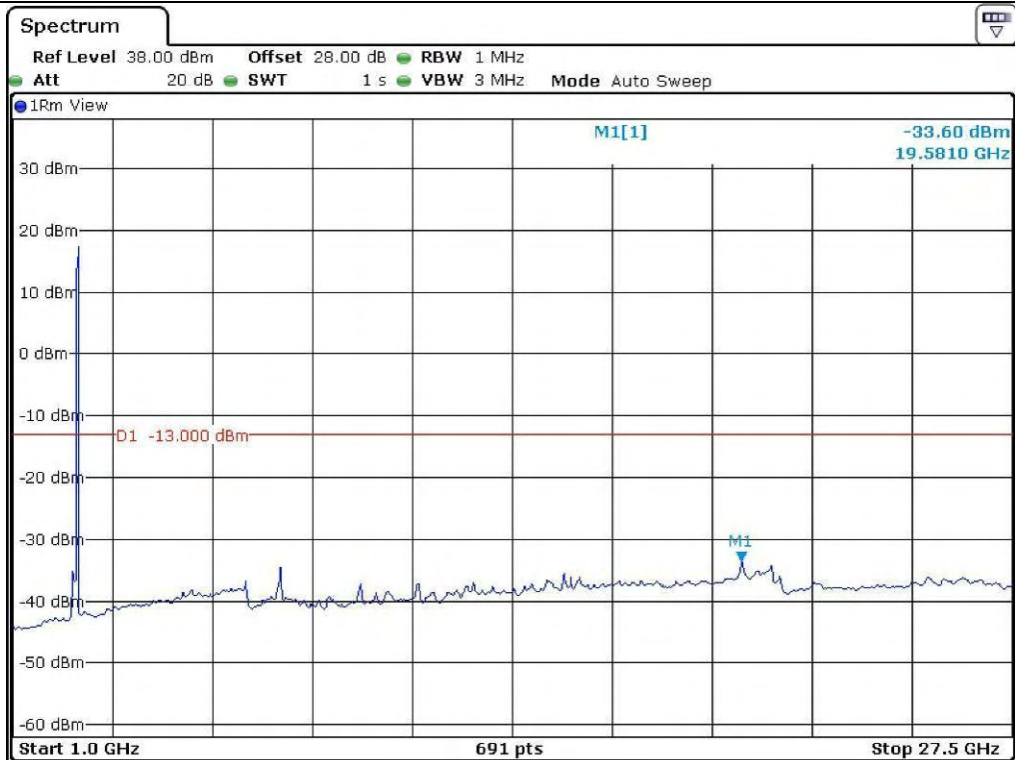
16 QAM – Middle Channel



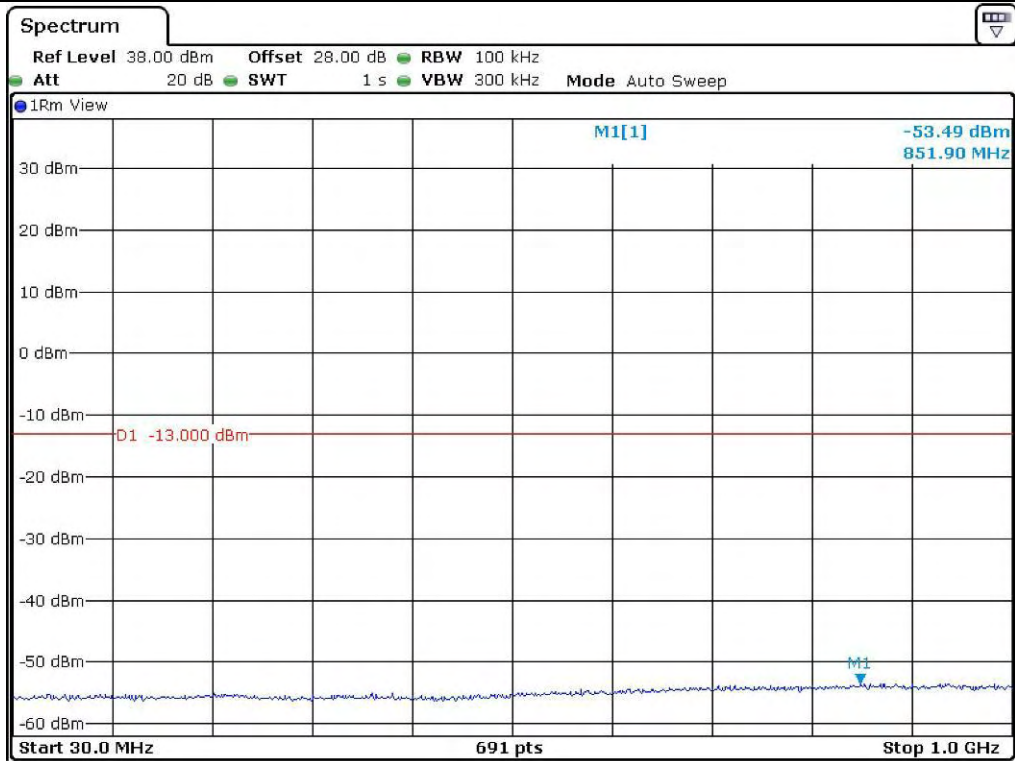
16 QAM – Middle Channel



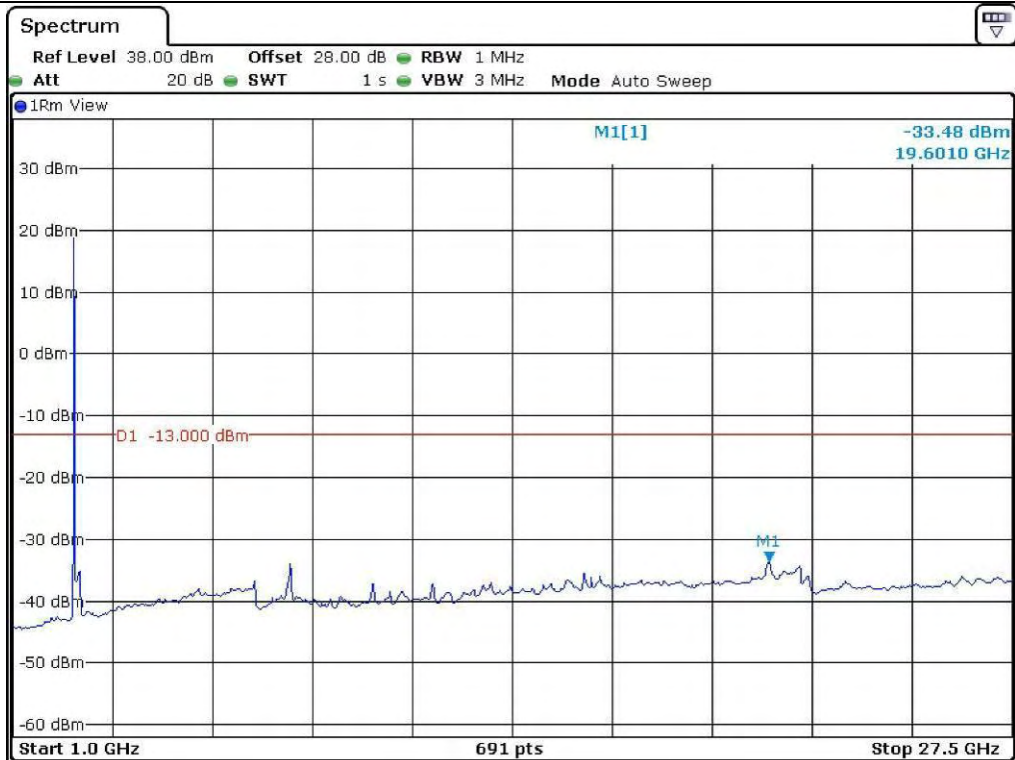
16 QAM – High Channel



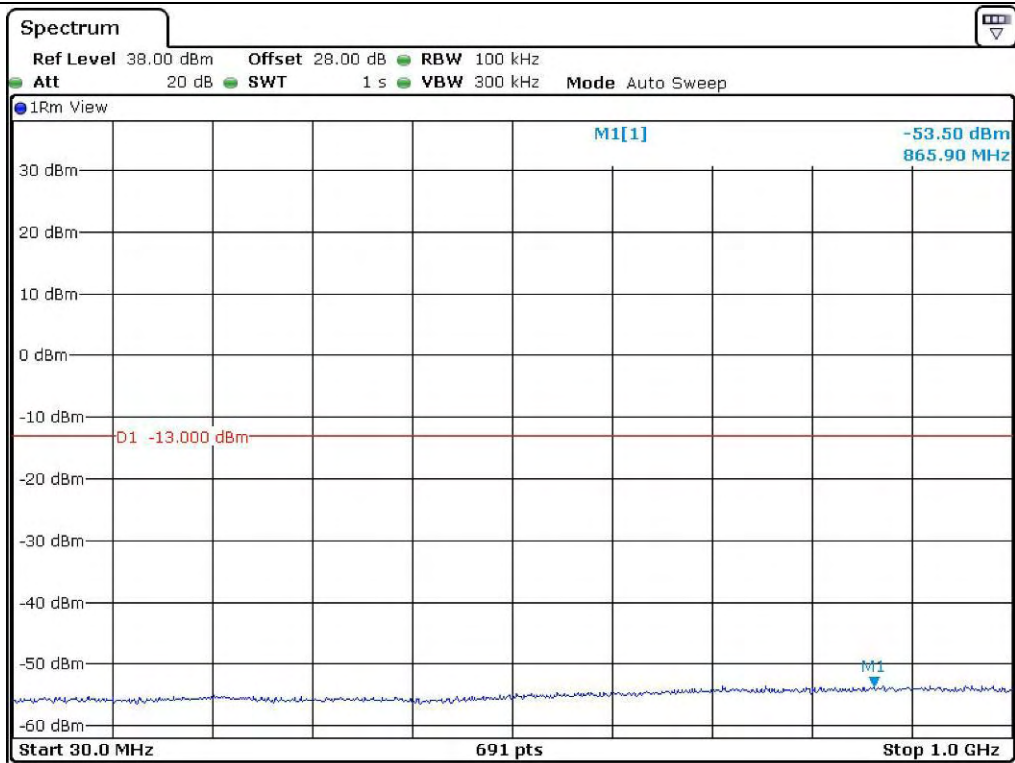
16 QAM – High Channel



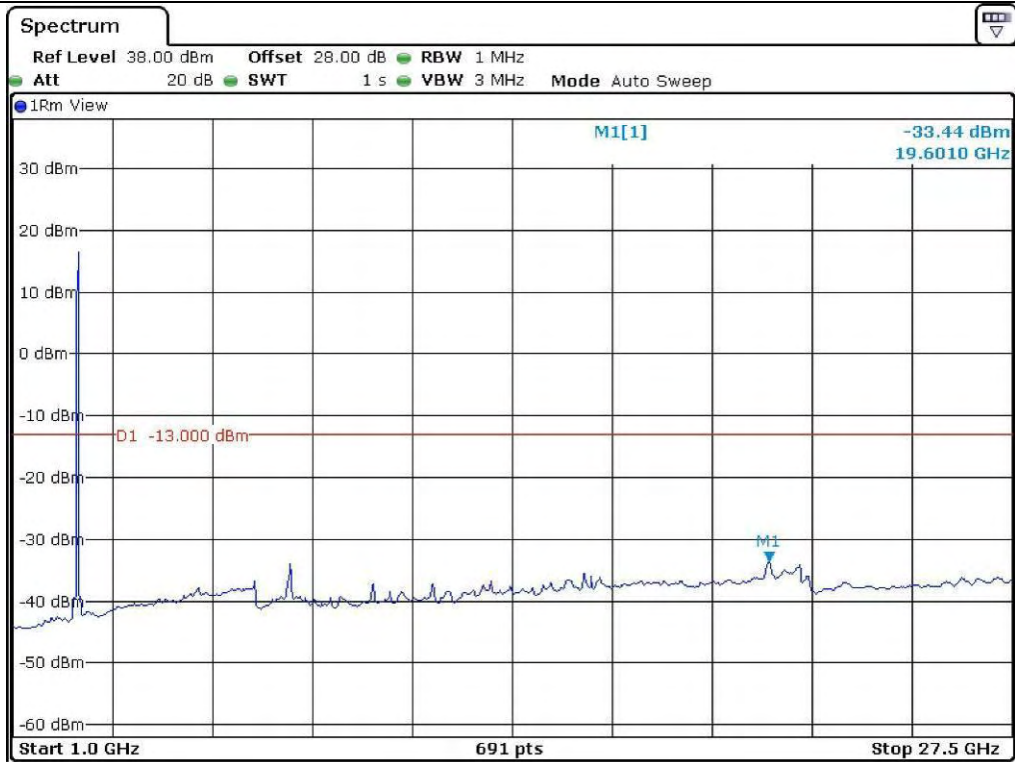
64 QAM – Low Channel



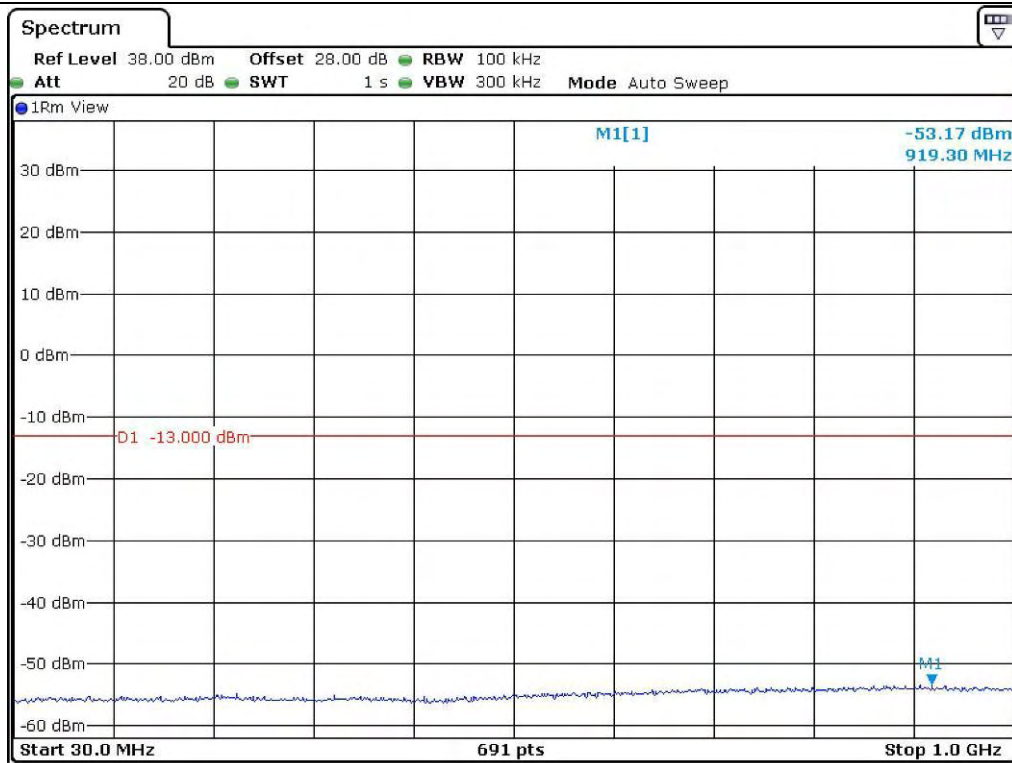
64 QAM – Low Channel



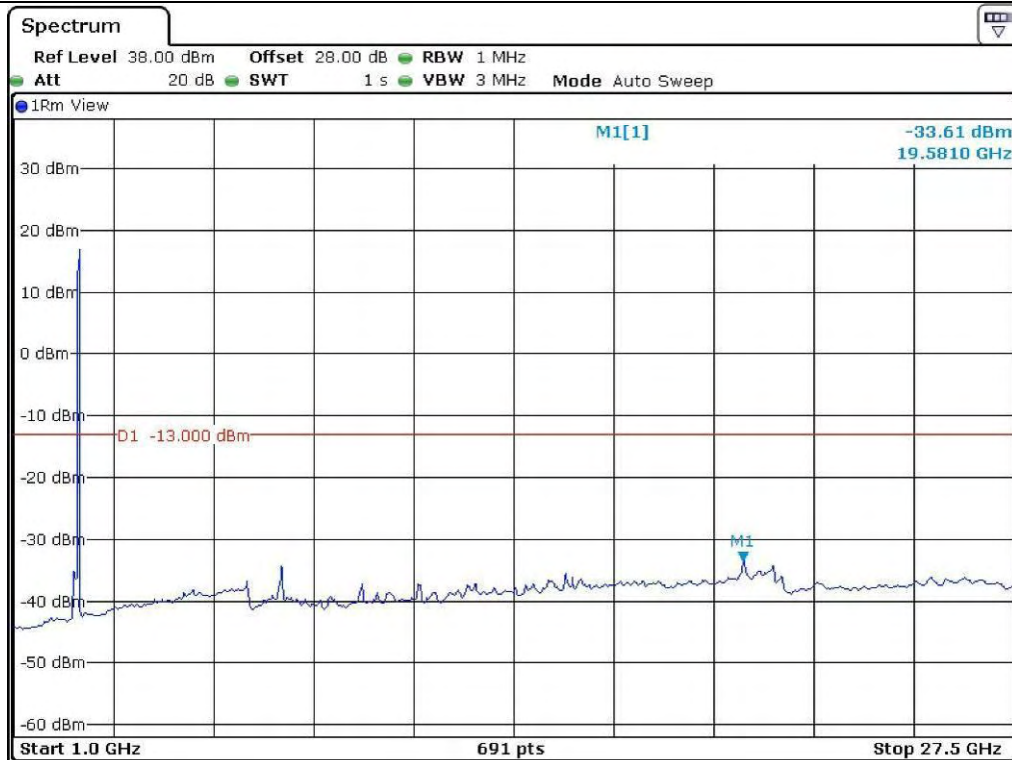
64 QAM – Middle Channel



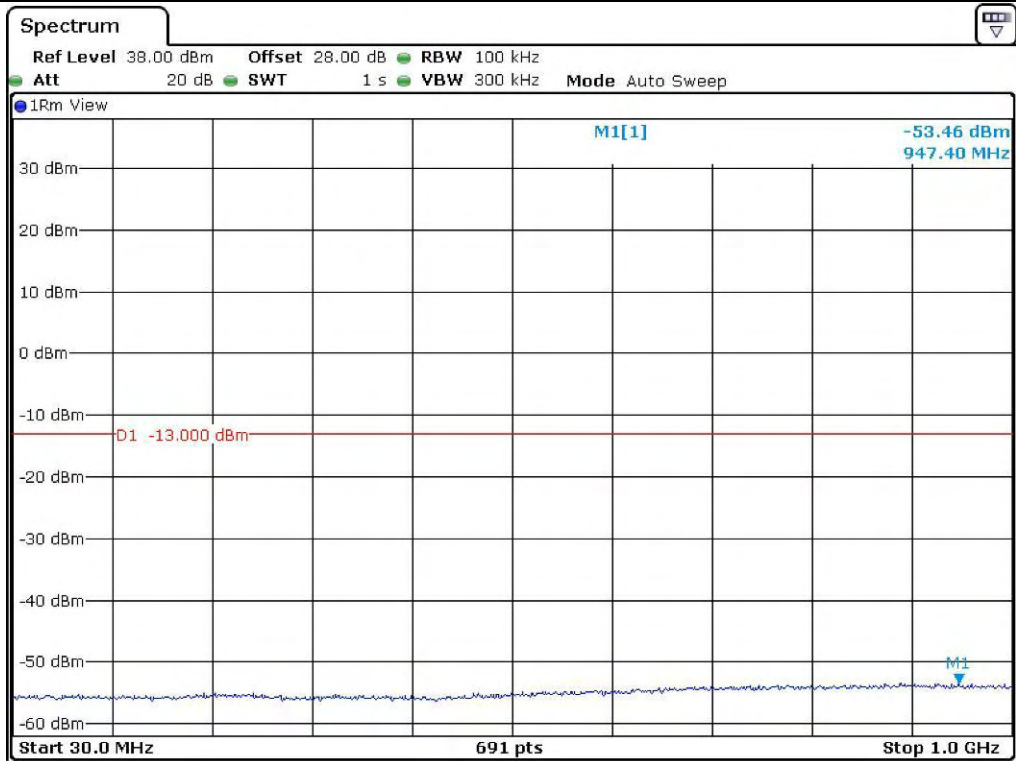
64 QAM – Middle Channel



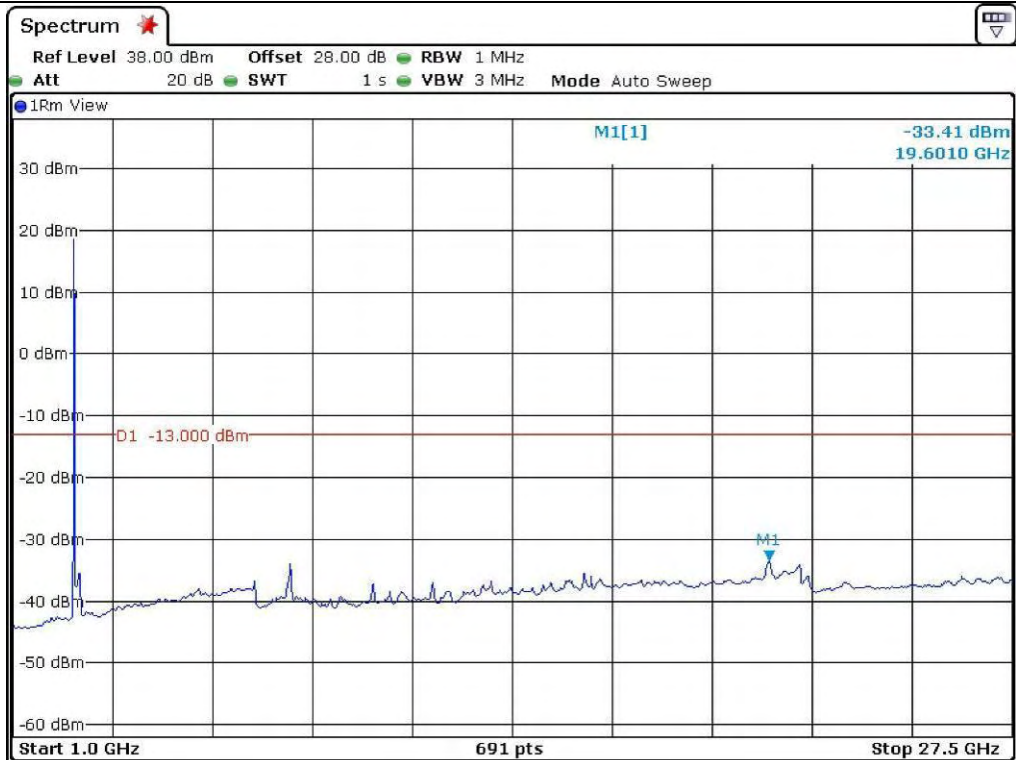
64 QAM – High Channel



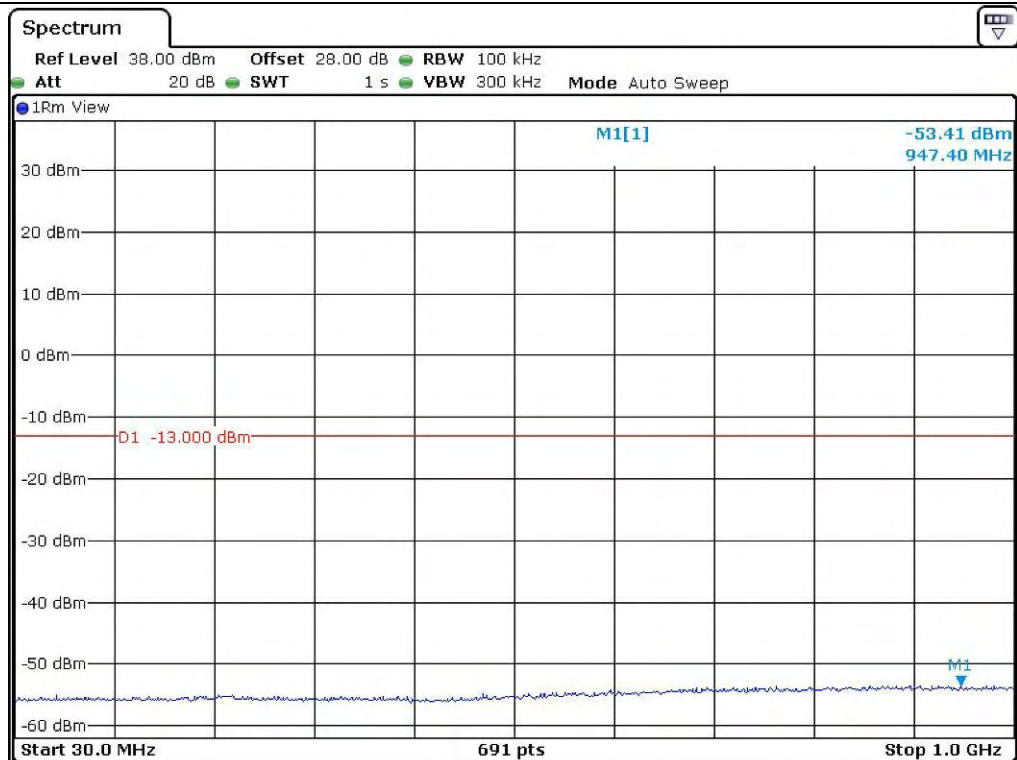
64 QAM – High Channel



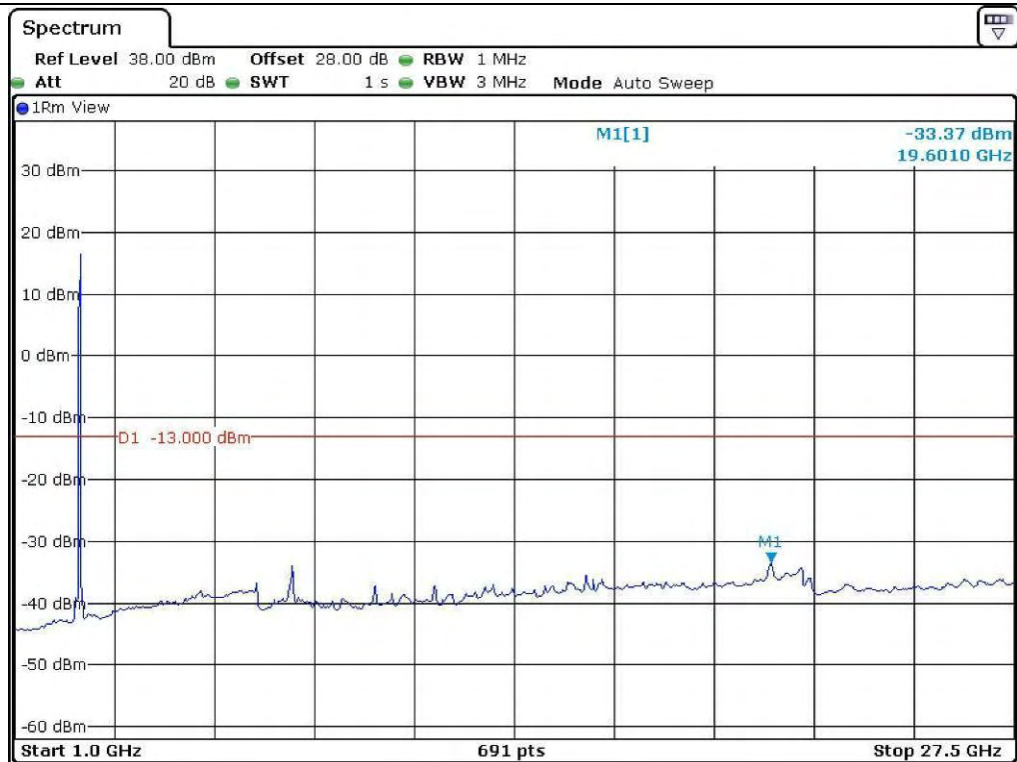
QPSK – Low Channel



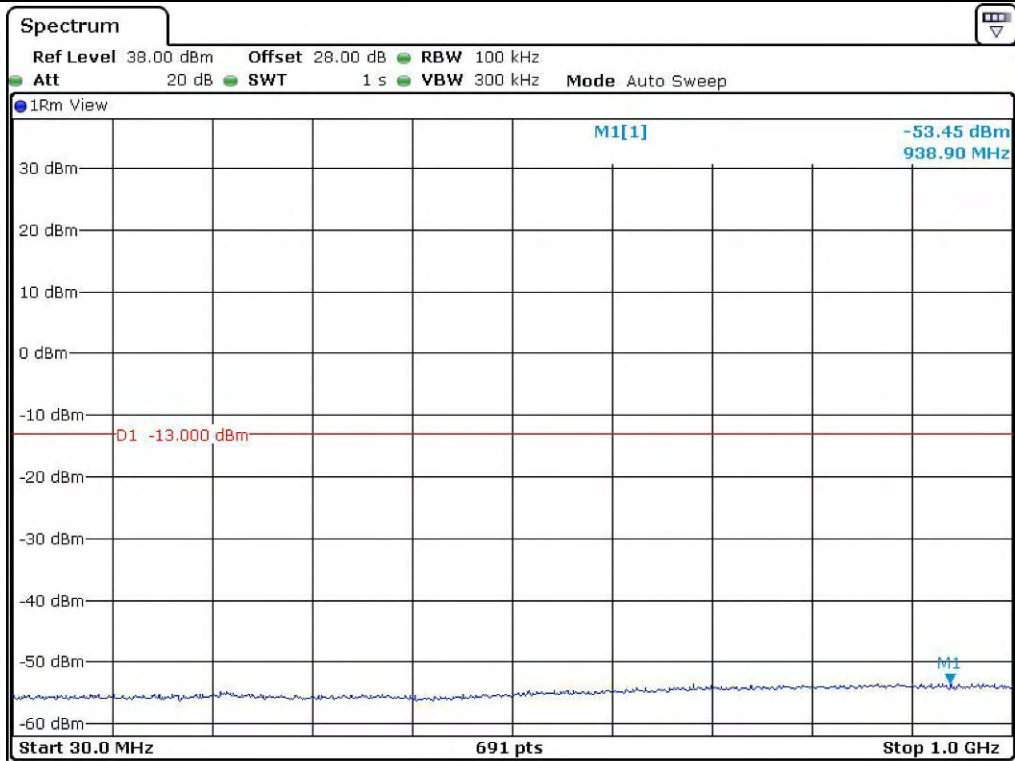
QPSK – Low Channel



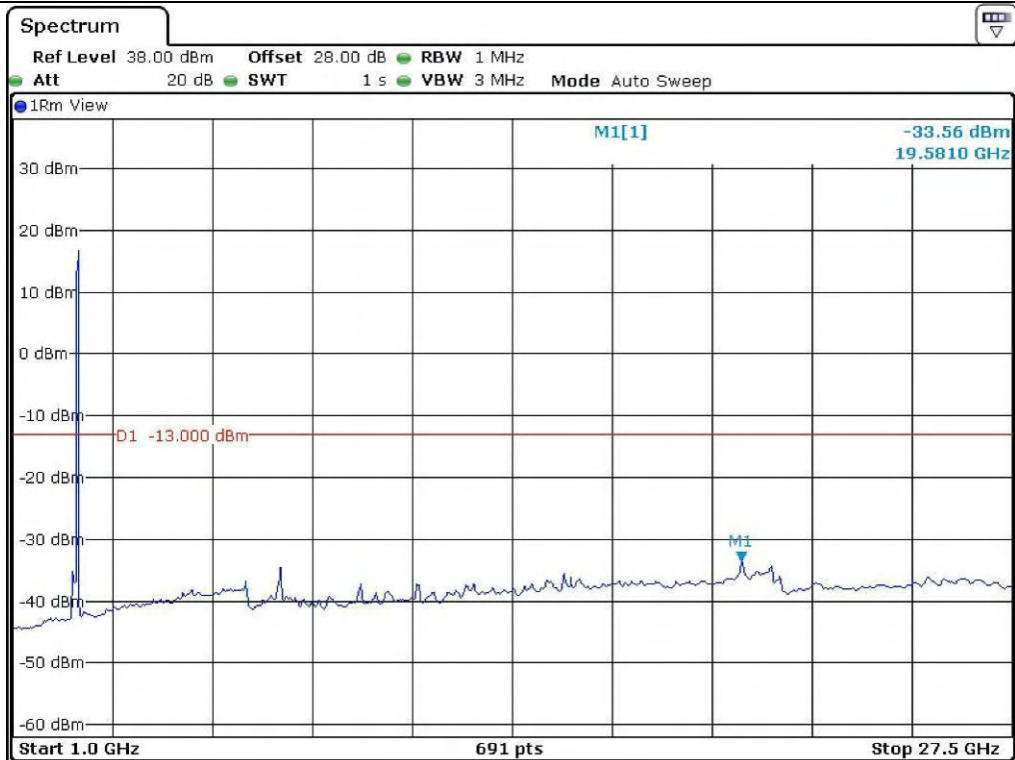
QPSK – Middle Channel



QPSK – Middle Channel



QPSK – High Channel



QPSK – High Channel

7.5 Test data for Port 1

7.5.1 Test Result (20 MHz/1 Carrier)

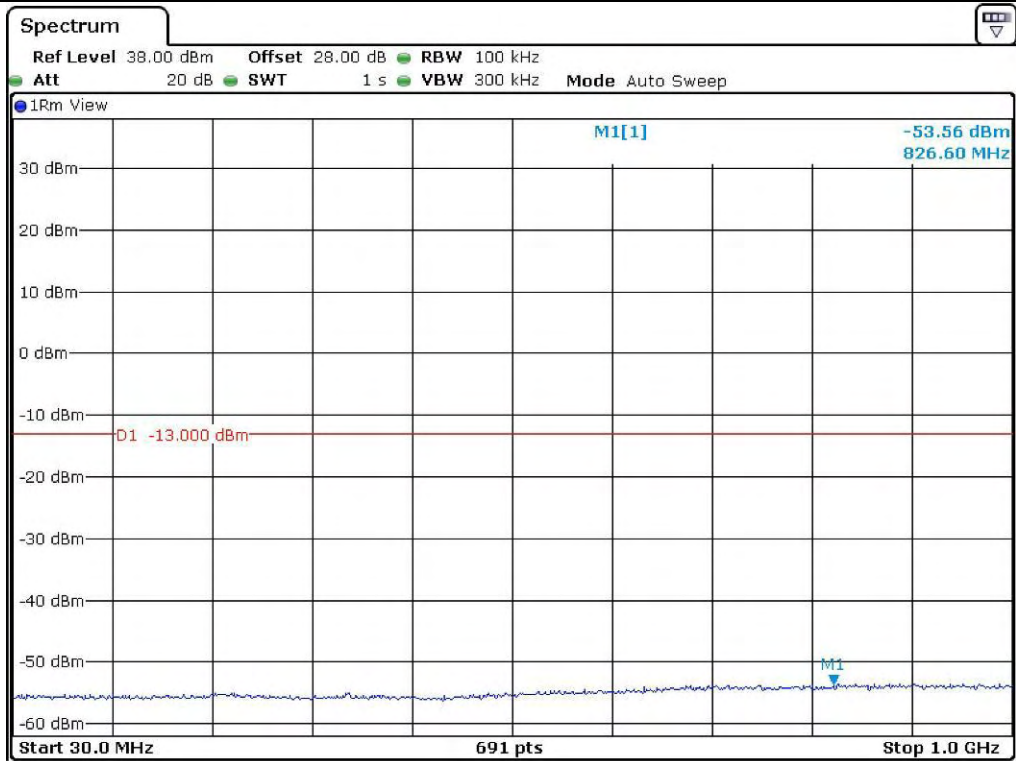
-. Test Date : July 31, 2014
 -. Frequency range : 30 MHz ~ 27.5 GHz
 -. Result : Pass

Modulation	Harmonic Frequency (MHz)		Measured Value (dBm)	Cable Loss (dB)	Total (dBm)	Limit (dBm)	Margin (dB)
16 QAM	Low	826.60	-53.56	0.20	-53.36	-13.00	40.36
		1 9618.00	-33.67	2.80	-30.87		17.87
	Middle	933.30	-53.20	0.30	-52.90		39.90
		1 9581.00	-33.55	2.80	-30.75		17.75
	High	885.60	-53.26	0.20	-53.06		40.06
		1 9581.00	-33.50	2.80	-30.70		17.70
64 QAM	Low	903.80	-53.39	0.30	-53.09	-13.00	40.09
		1 9581.00	-33.58	2.80	-30.78		17.78
	Middle	919.30	-53.29	0.30	-52.99		39.99
		1 9581.00	-33.45	2.80	-30.65		17.65
	High	868.70	-53.51	0.20	-53.31		40.31
		1 9581.00	-33.53	2.80	-30.73		17.73
QPSK	Low	960.00	-53.51	0.30	-53.21	-13.00	40.21
		1 9618.00	-33.66	2.80	-30.86		17.86
	Middle	891.20	-53.35	0.20	-53.15		40.15
		1 9581.00	-33.52	2.80	-30.72		17.72
	High	867.30	-53.45	0.20	-53.25		40.25
		1 9618.00	-33.55	2.80	-30.75		17.75
Other frequencies up to 27.5 GHz have margin more than 20 dB.							

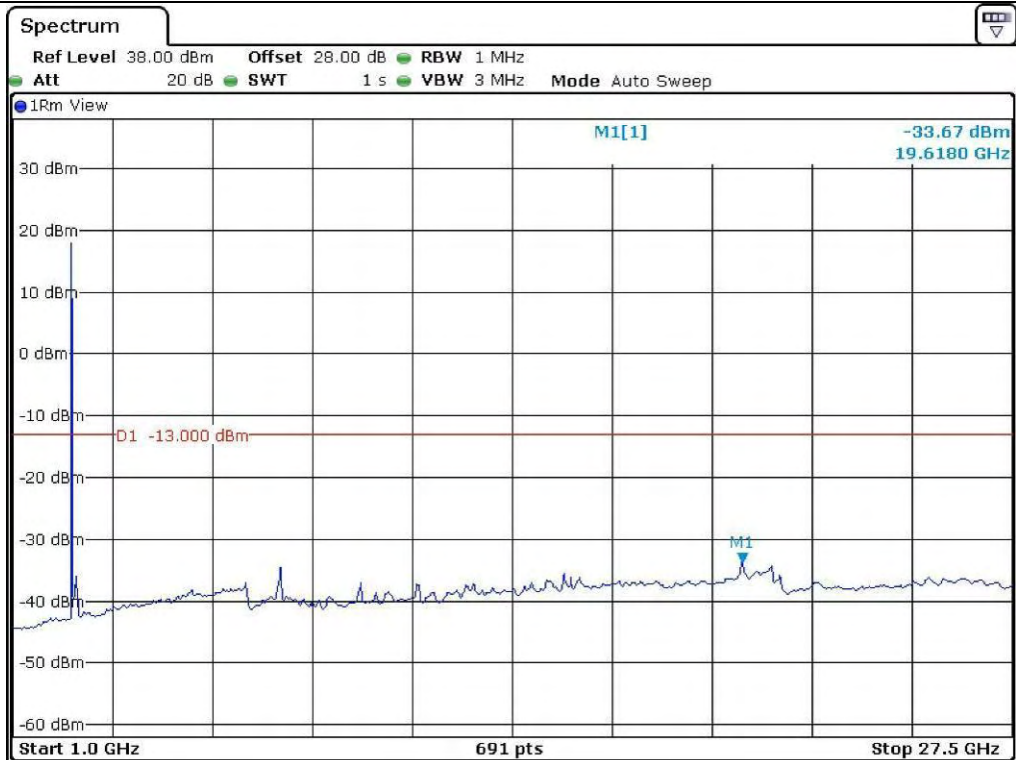
According to Part 27C, out of band emission shall be attenuated by $43 + 10 \log (P)$ dBc, equates to -13.0 dBm.



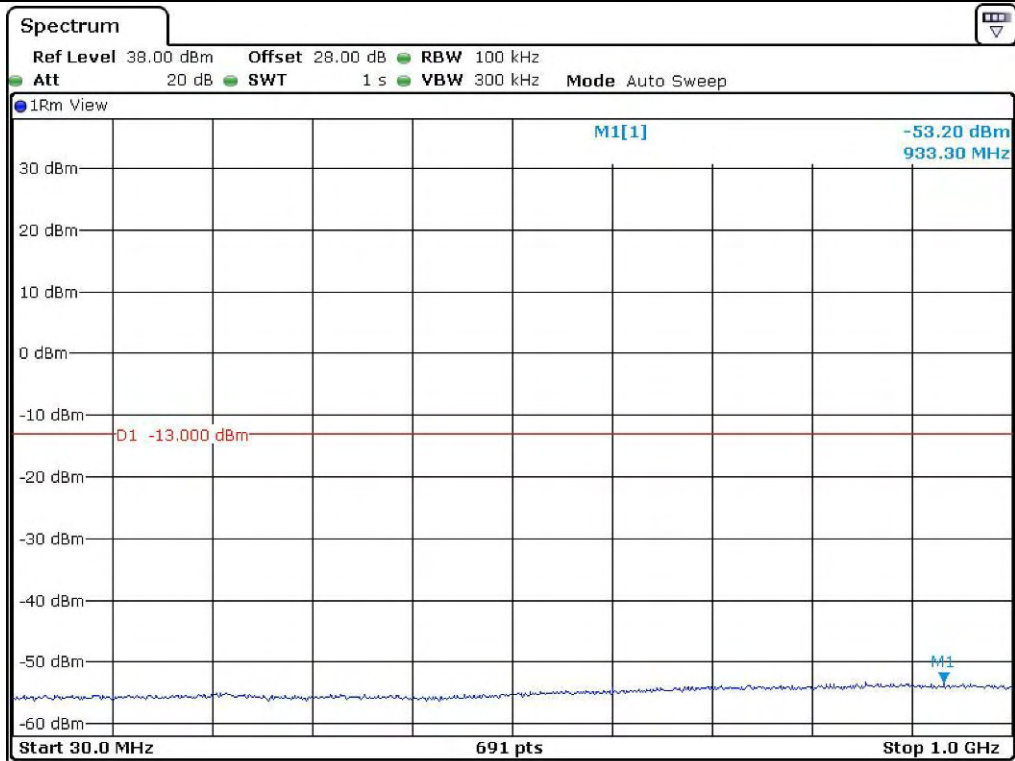
Tested by: Tae-Ho, Kim / Project Engineer



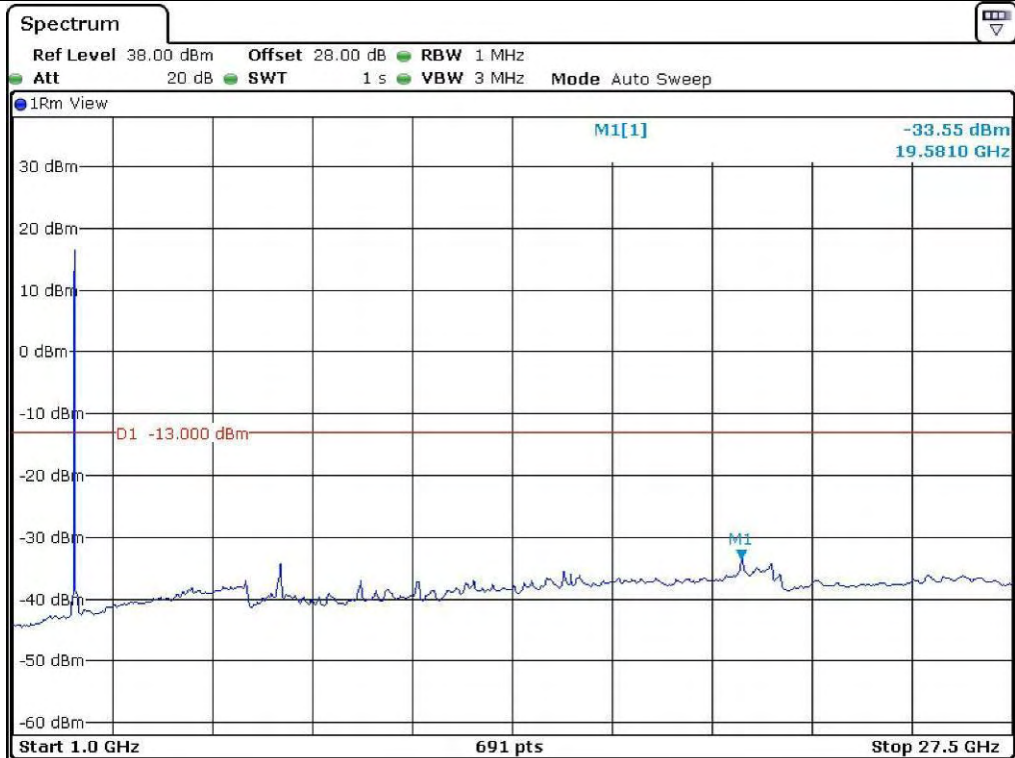
16 QAM – Low Channel



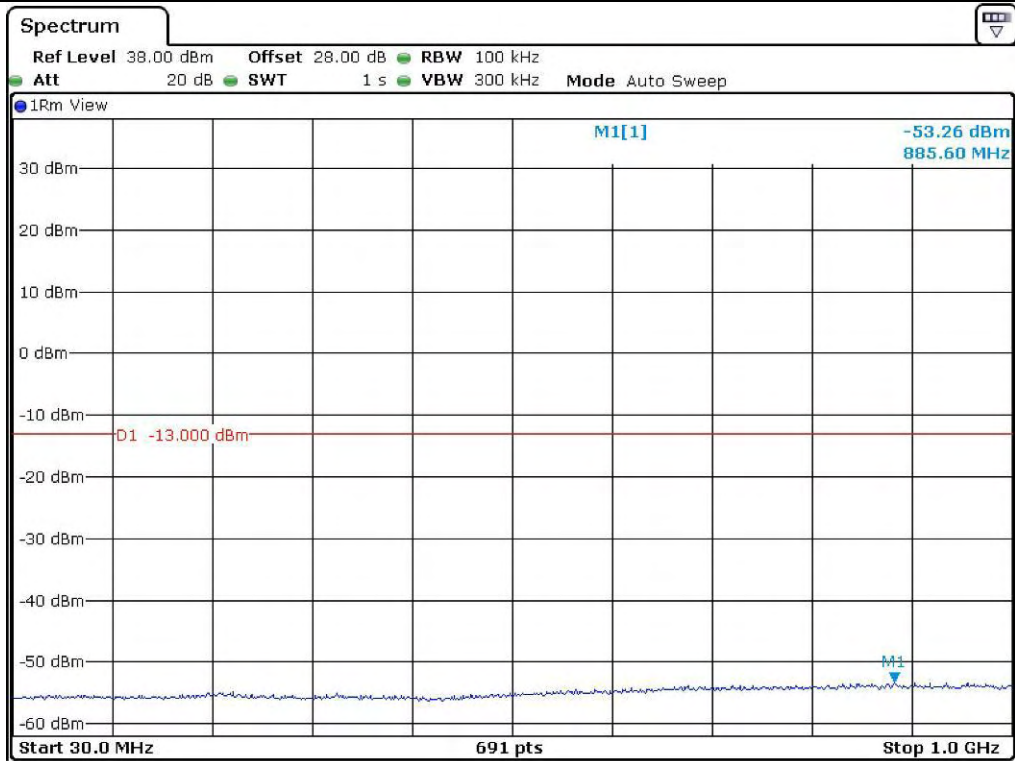
16 QAM – Low Channel



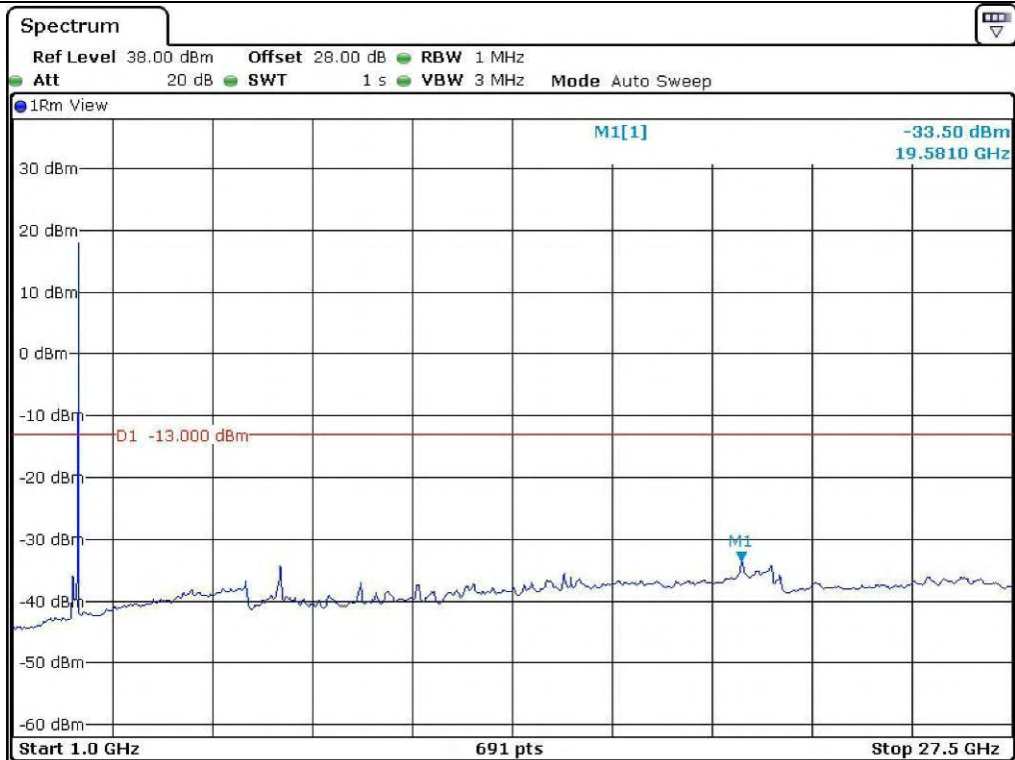
16 QAM – Middle Channel



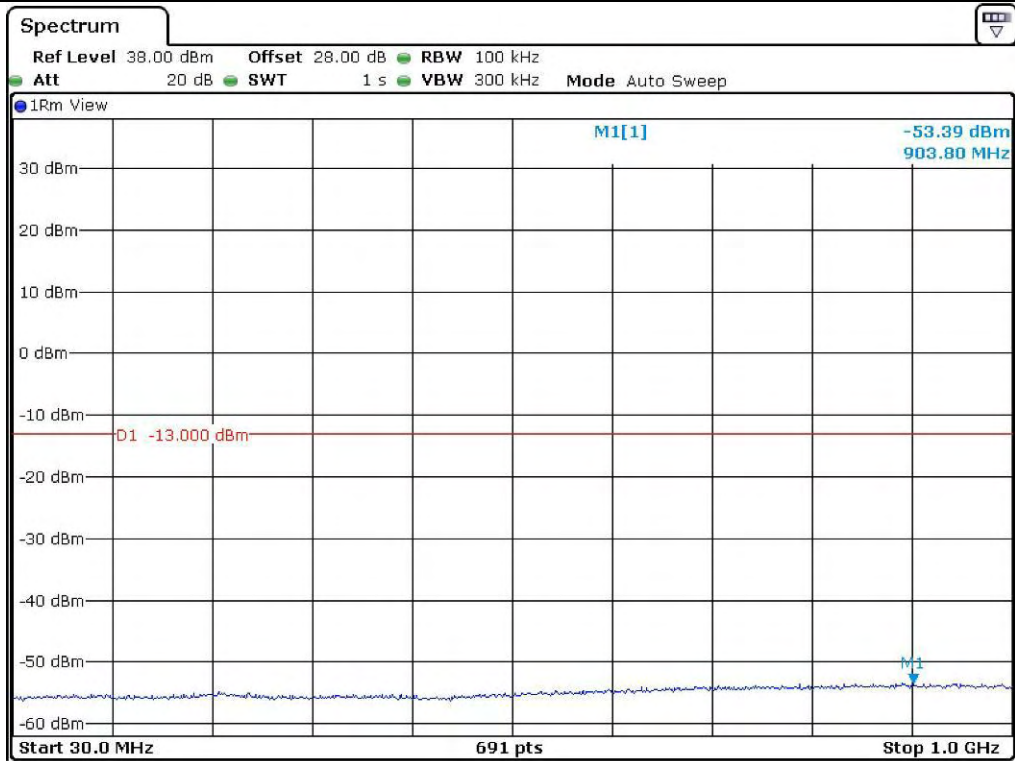
16 QAM – Middle Channel



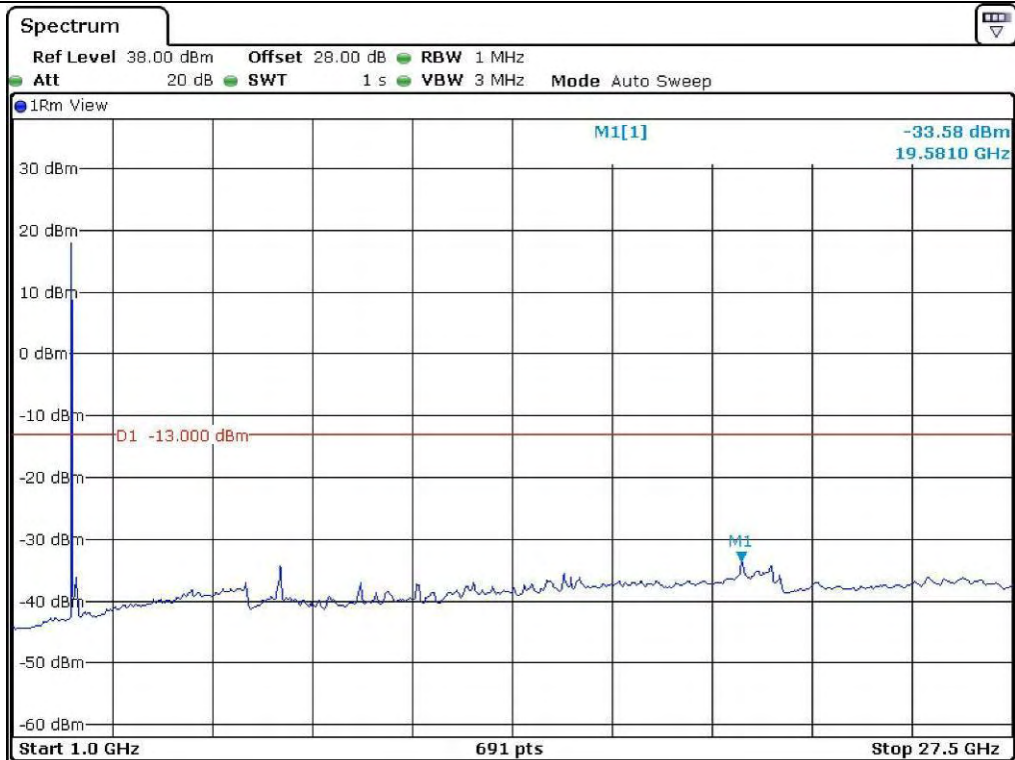
16 QAM – High Channel



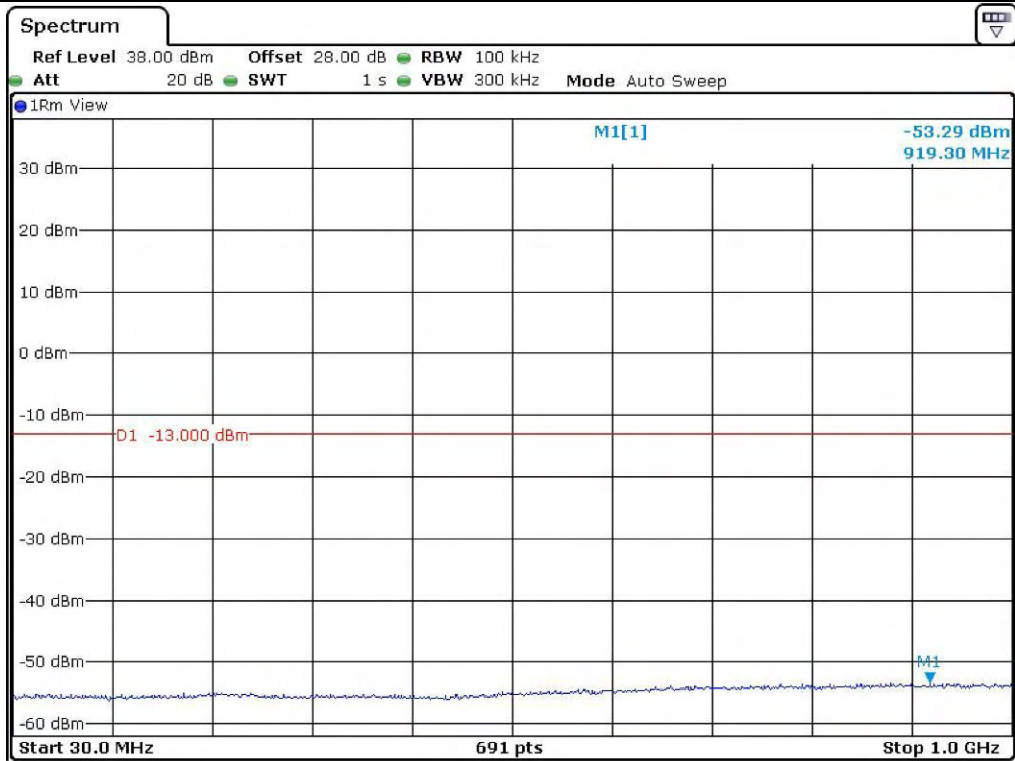
16 QAM – High Channel



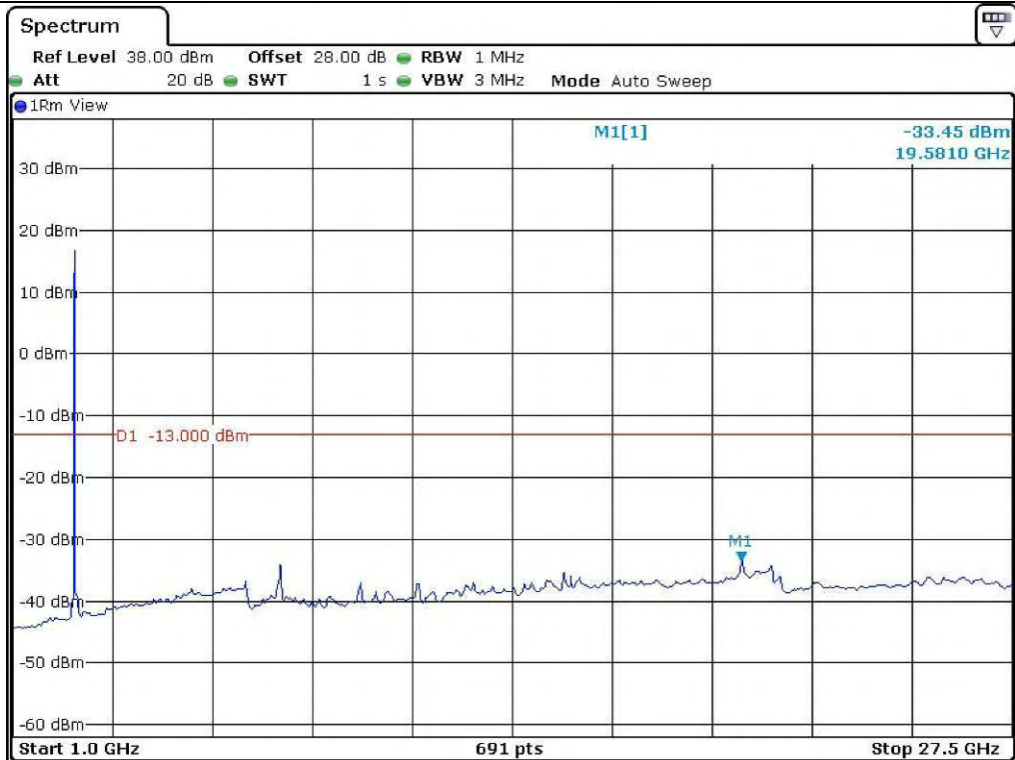
64 QAM – Low Channel



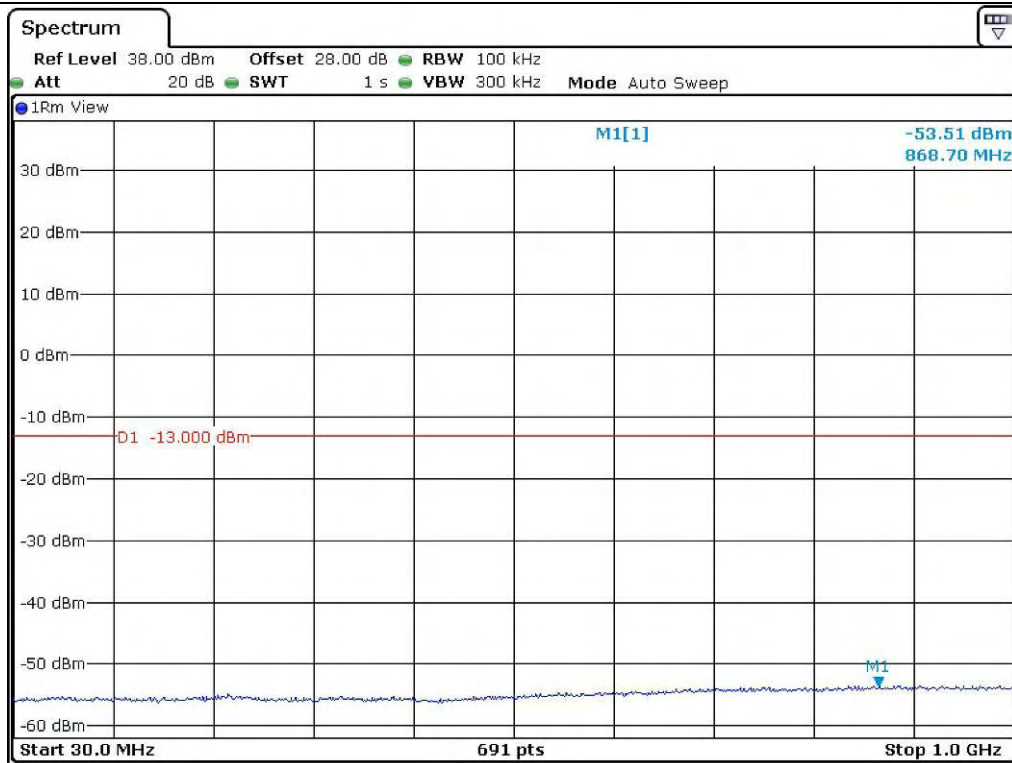
64 QAM – Low Channel



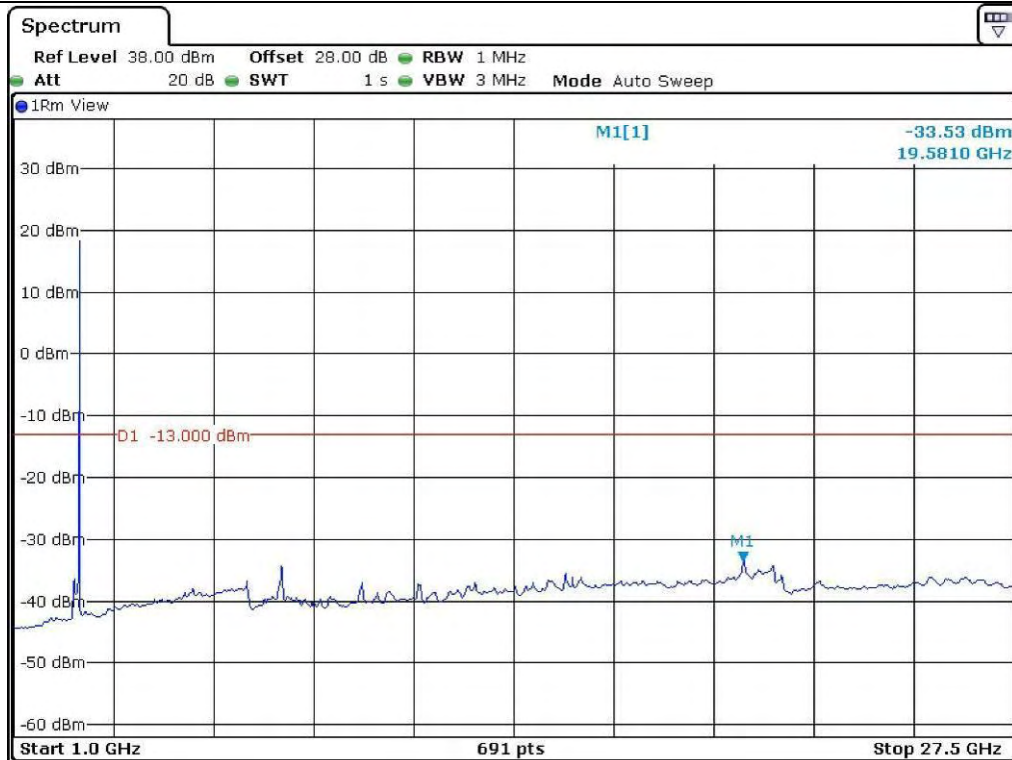
64 QAM – Middle Channel



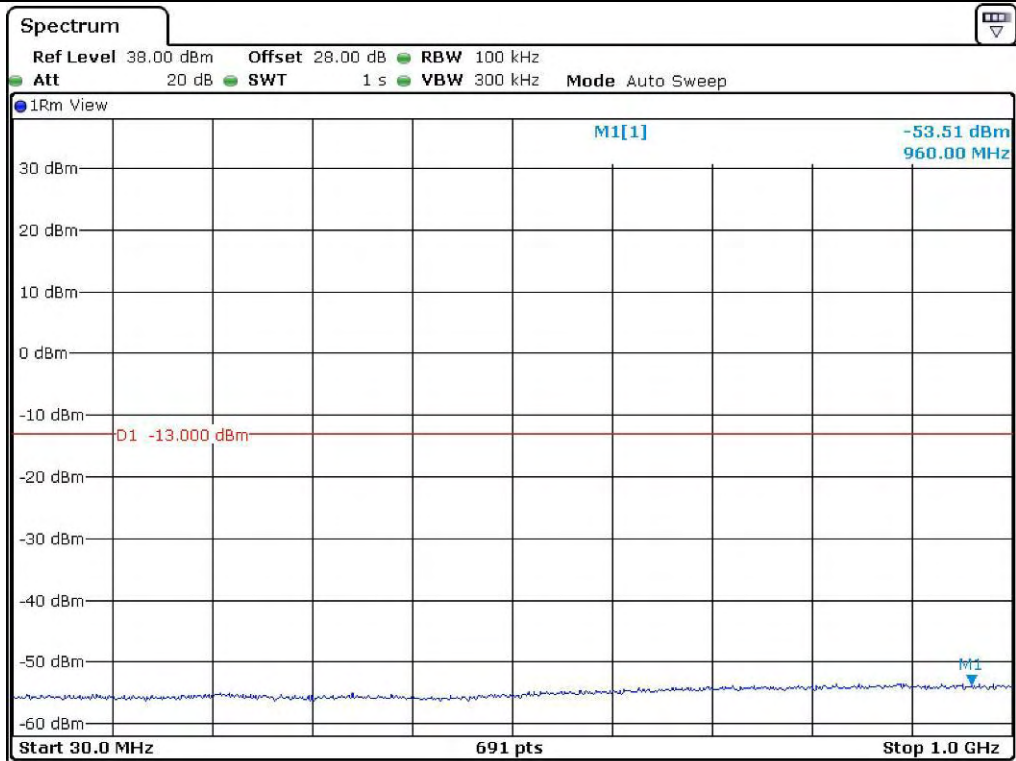
64 QAM – Middle Channel



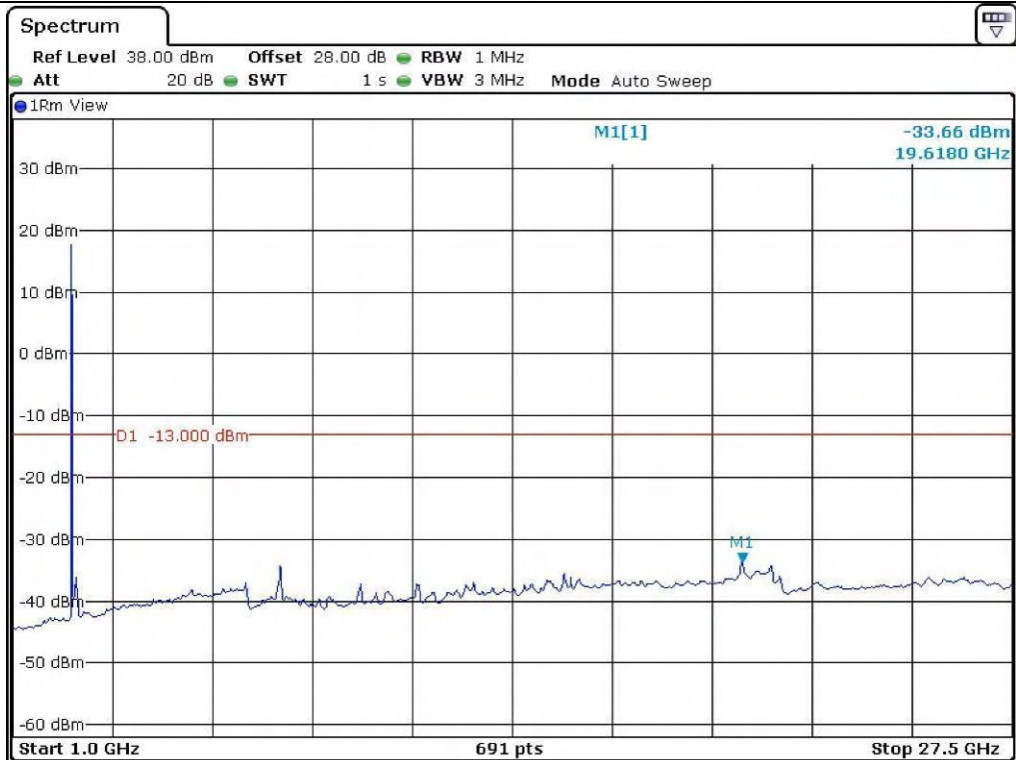
64 QAM – High Channel



64 QAM – High Channel



QPSK – Low Channel



QPSK – Low Channel