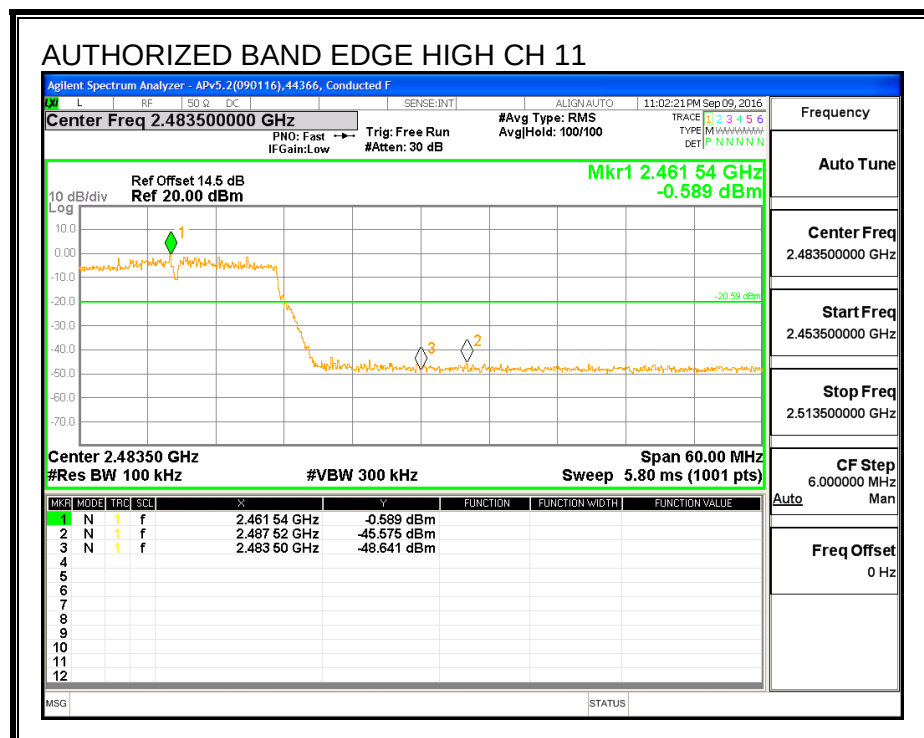
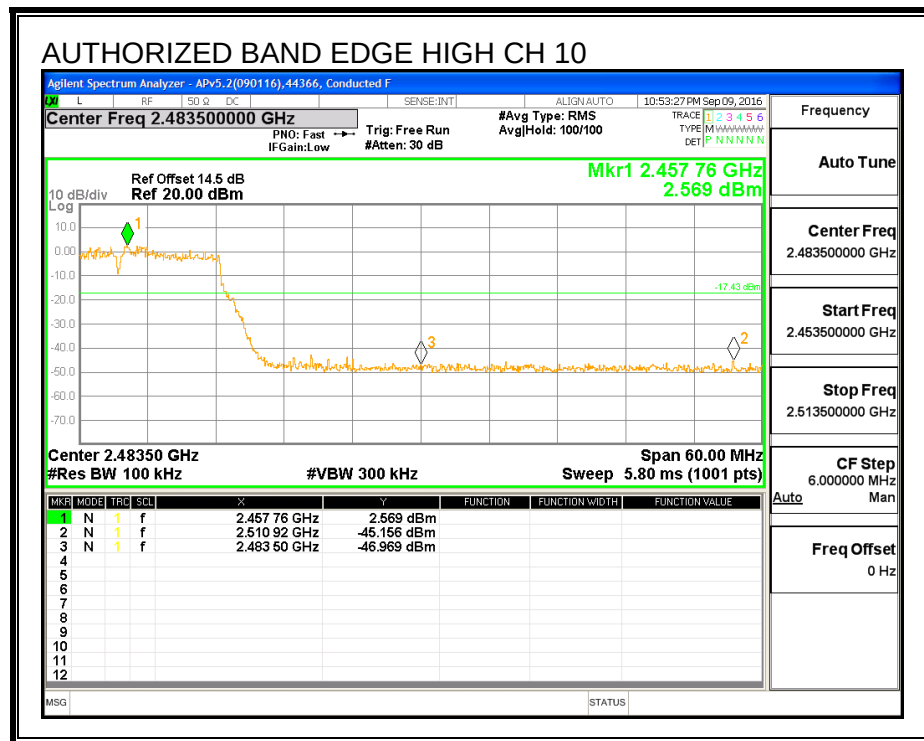
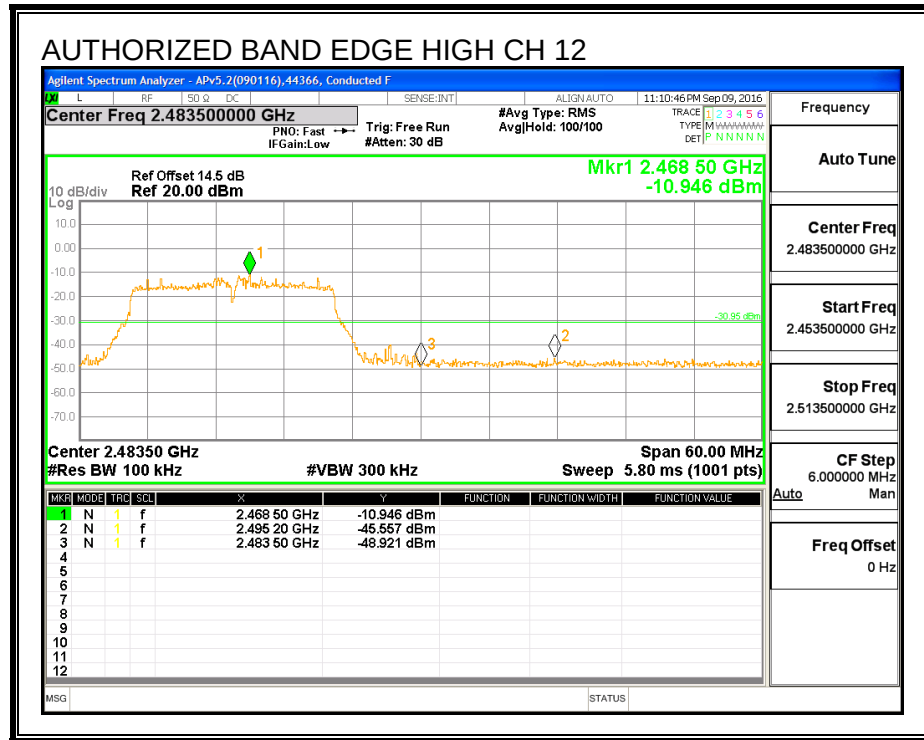
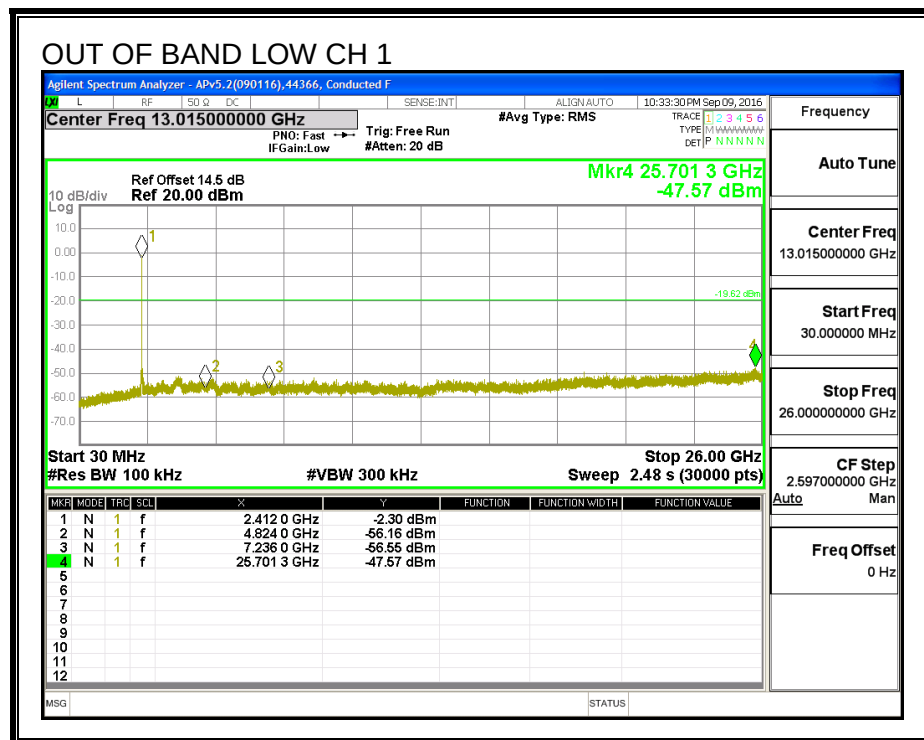
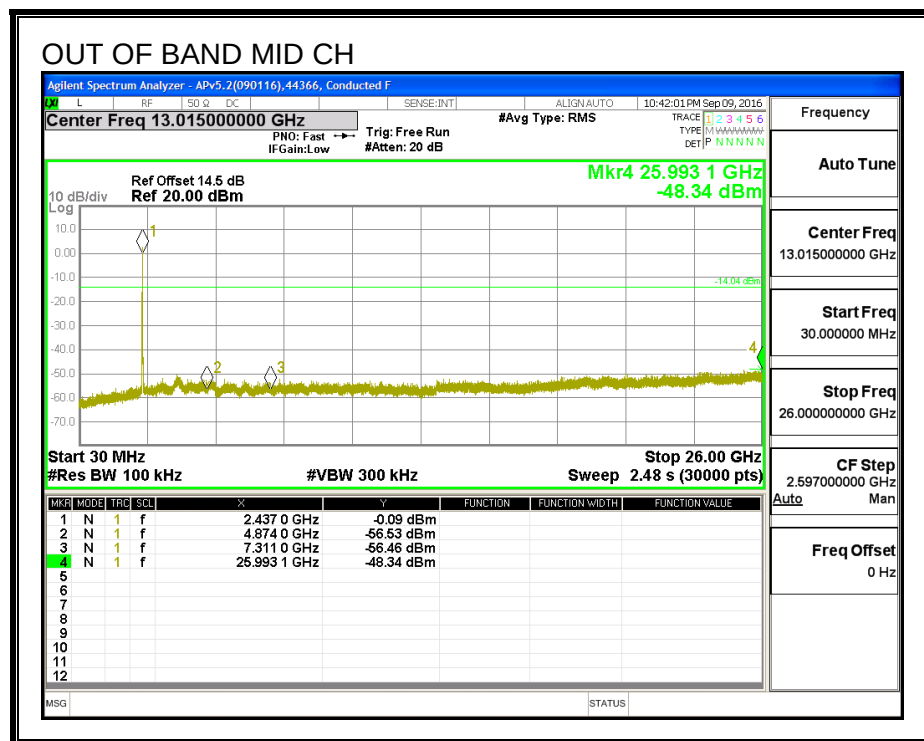
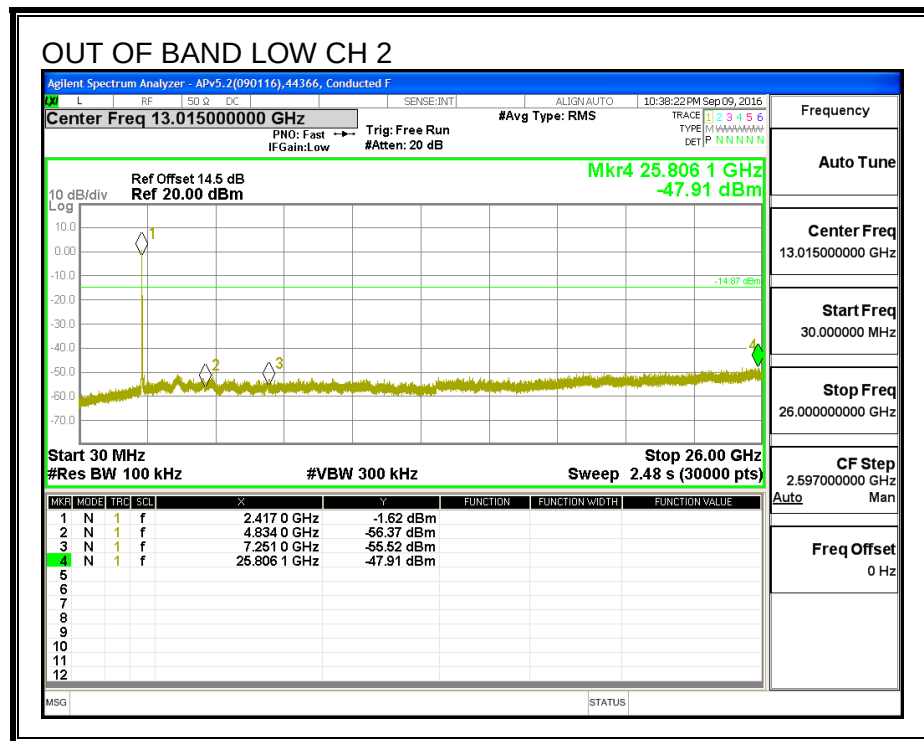


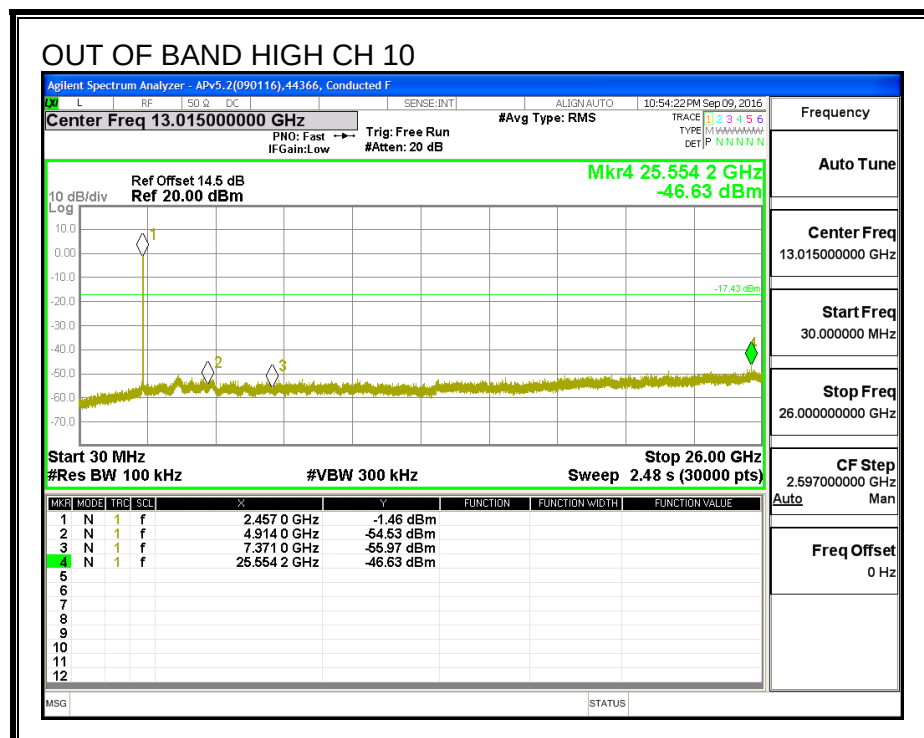
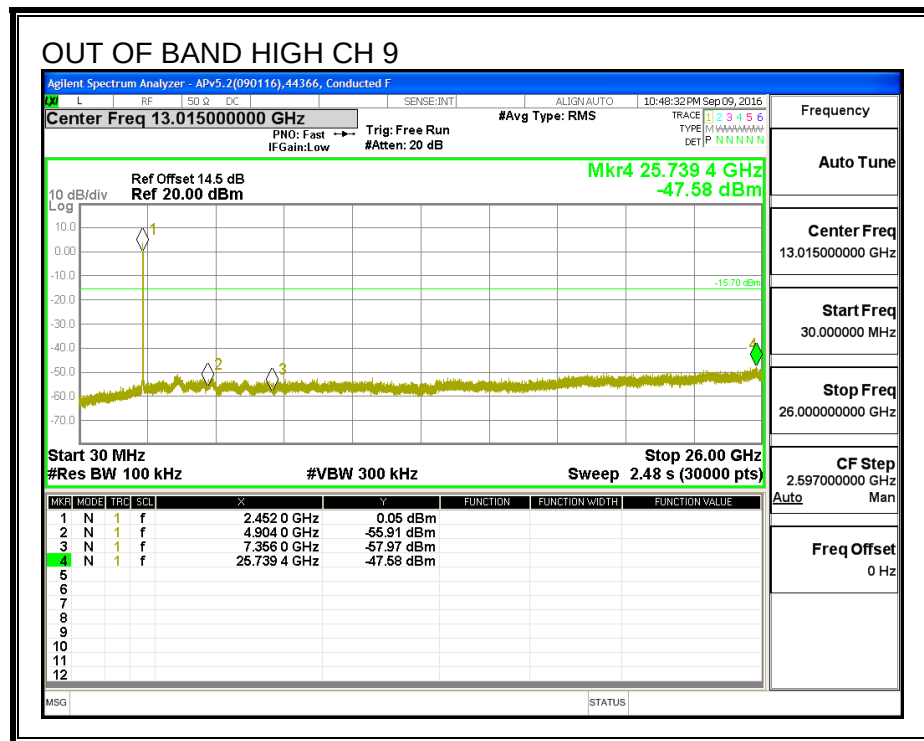


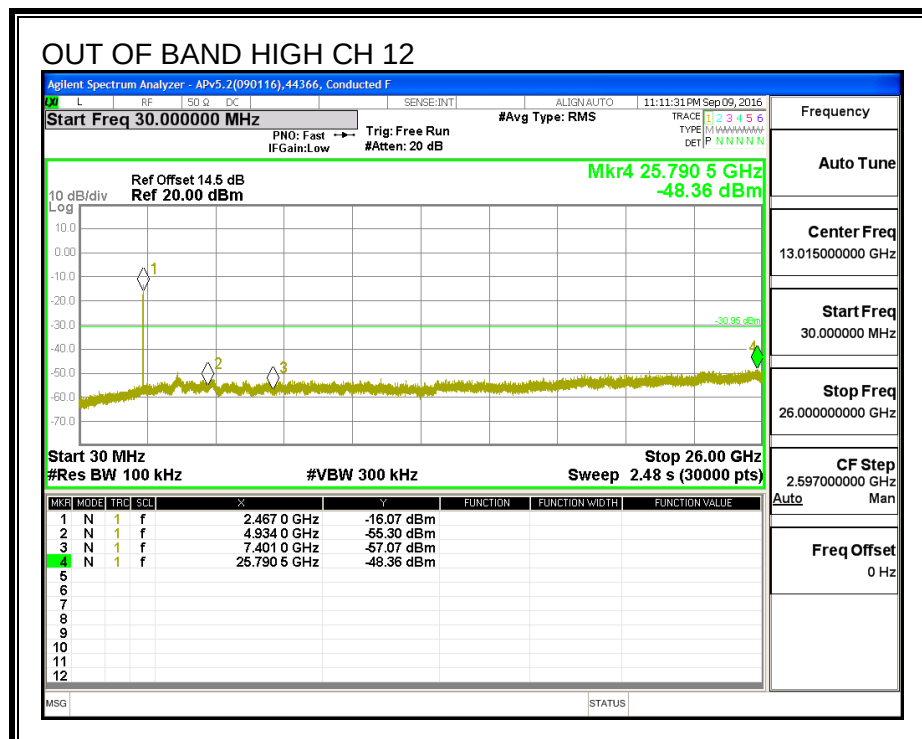
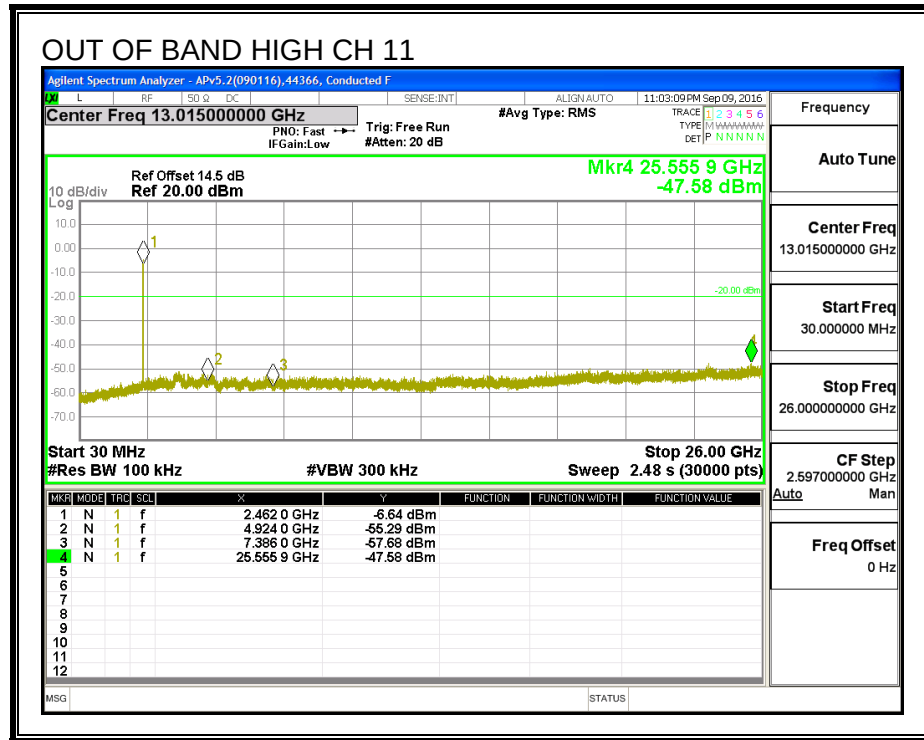


OUT-OF-BAND EMISSIONS, Chain 1

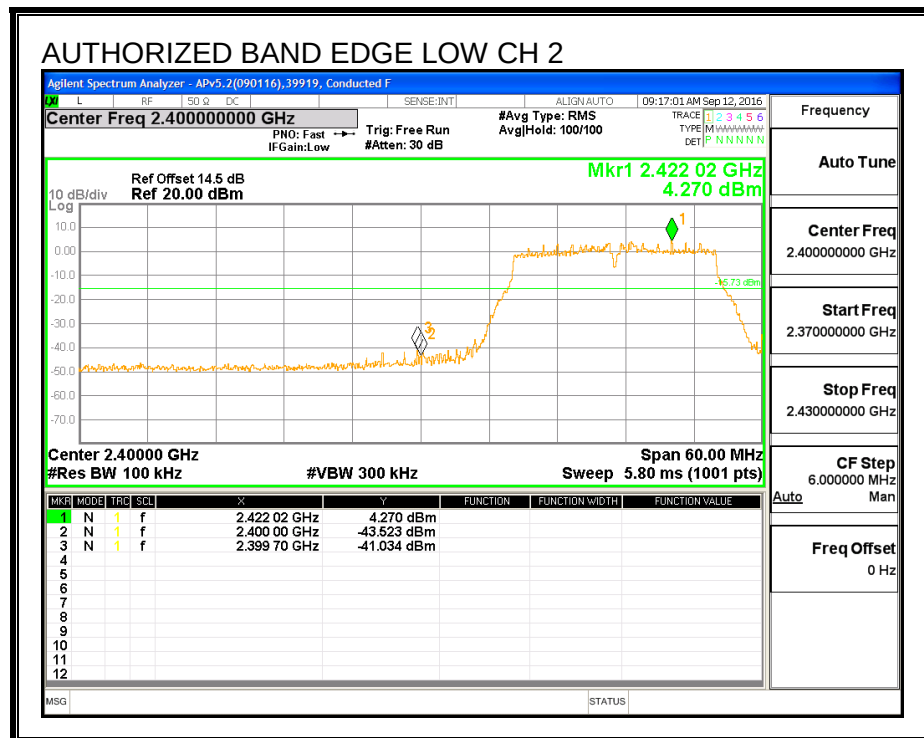
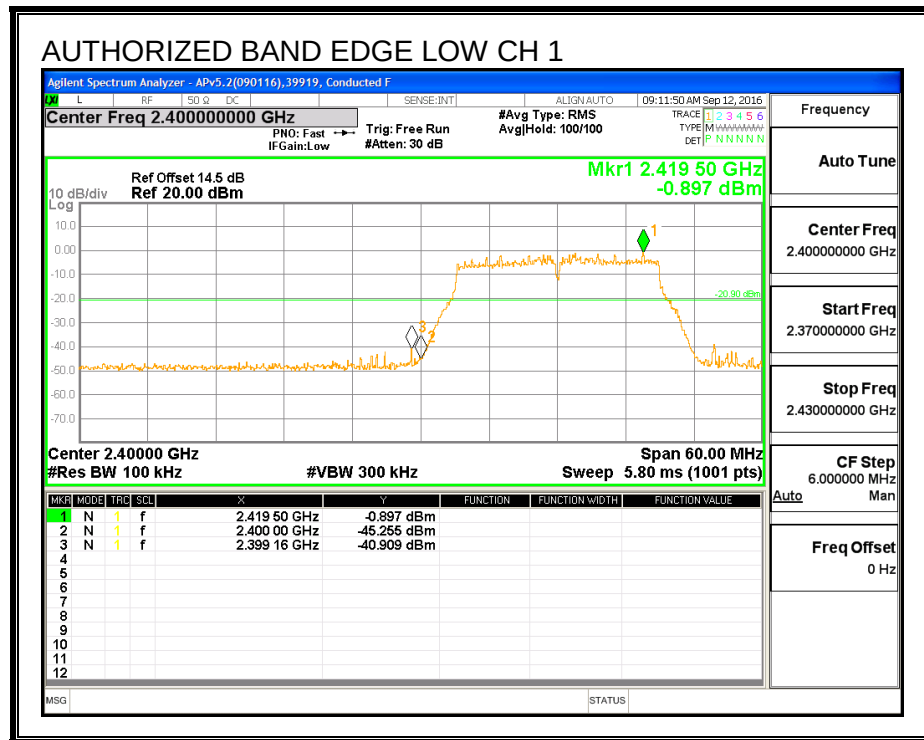




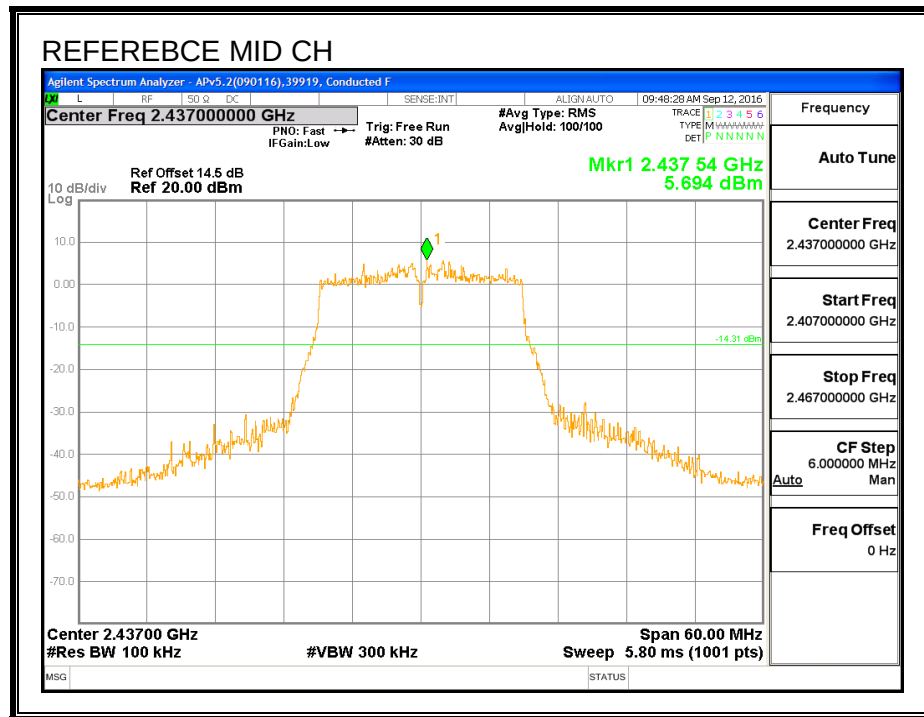




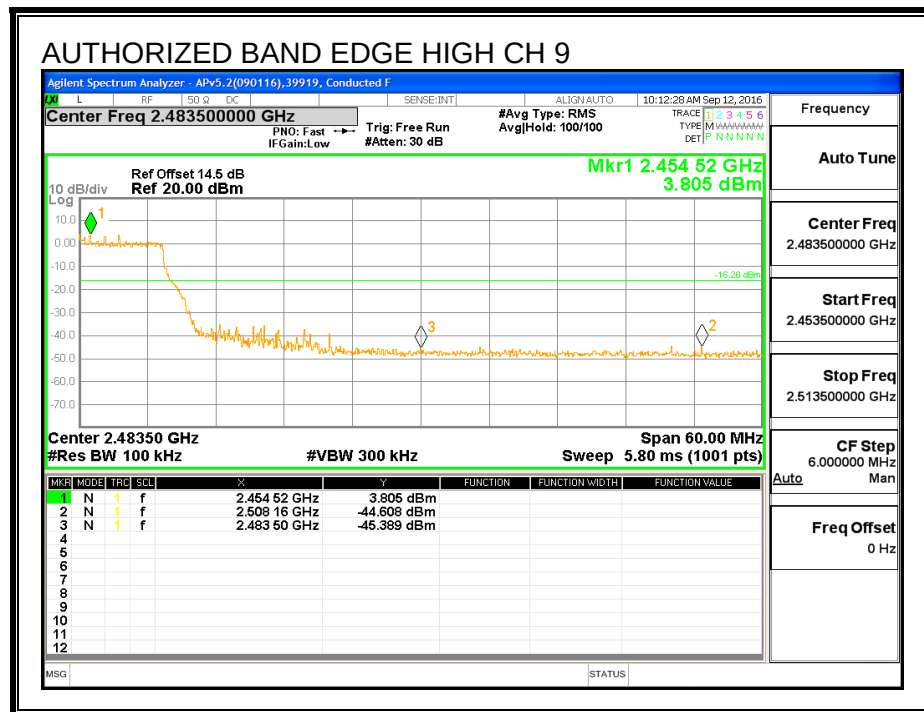
LOW CHANNEL BANDEDGE, Chain 2

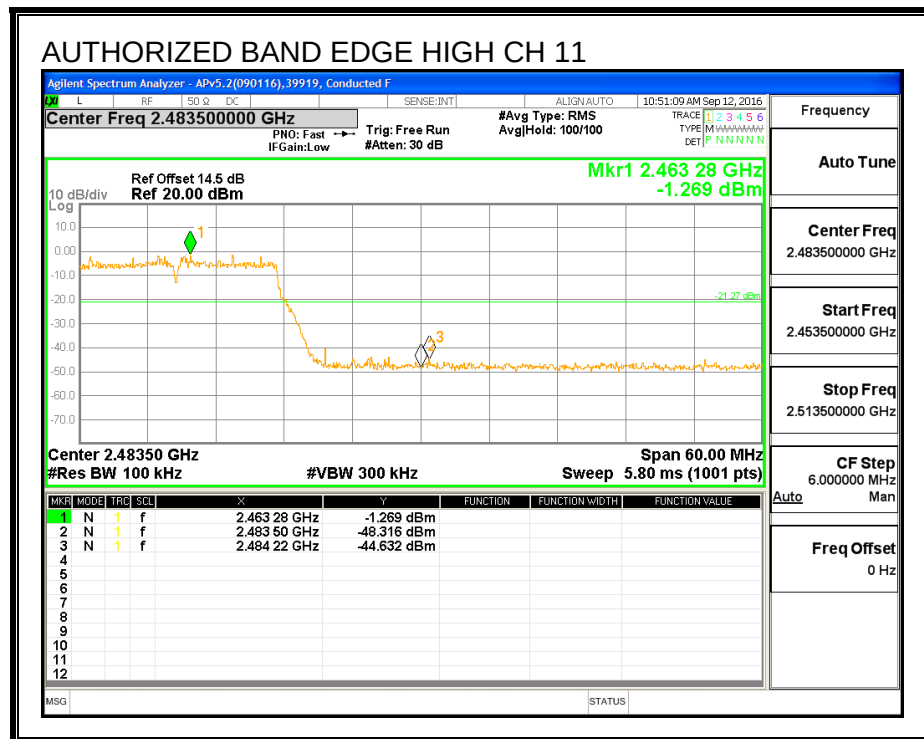
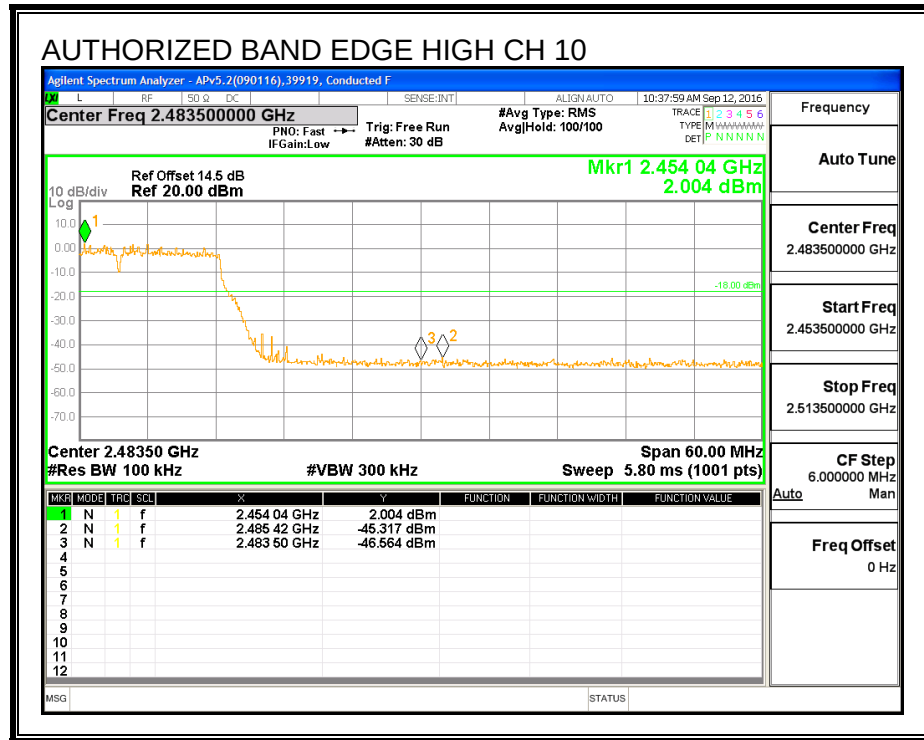


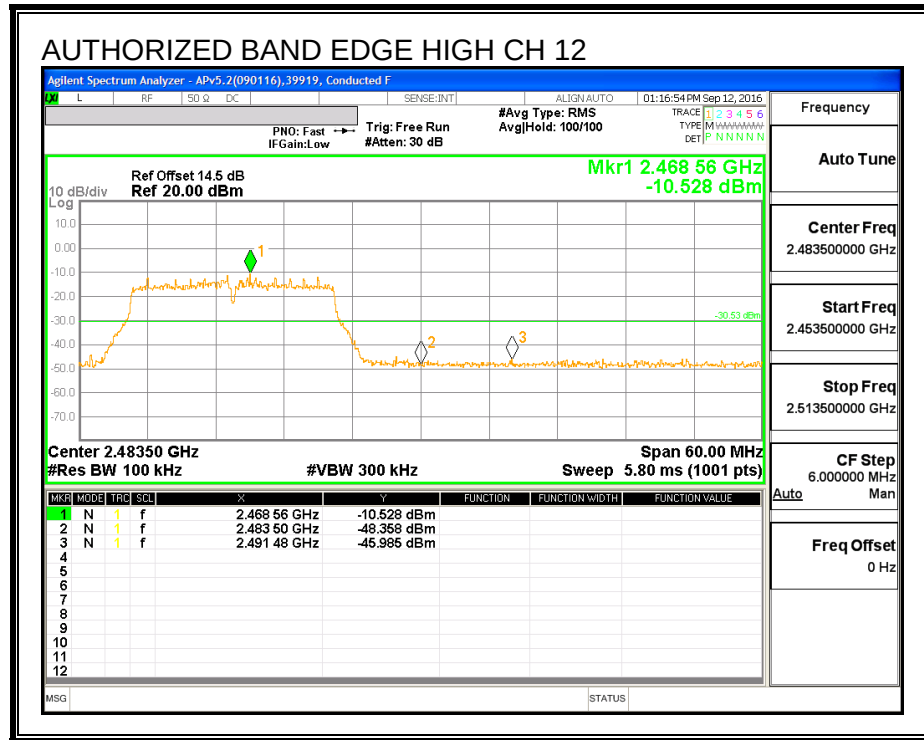
MID CHANNEL REFERENCE, Chain 2



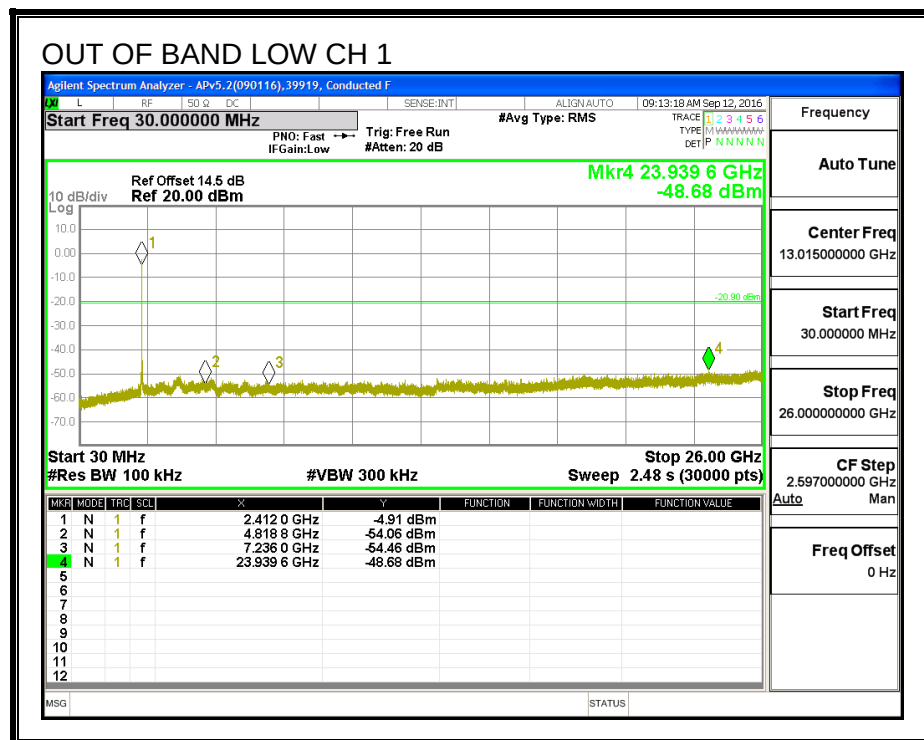
HIGH CHANNEL BANDEDGE, Chain 2

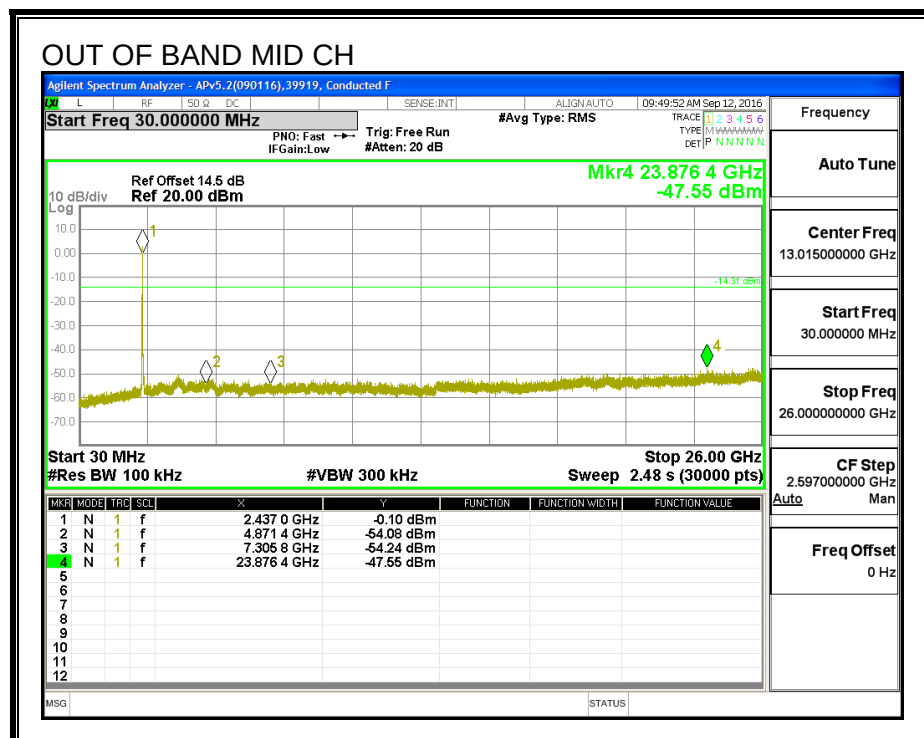
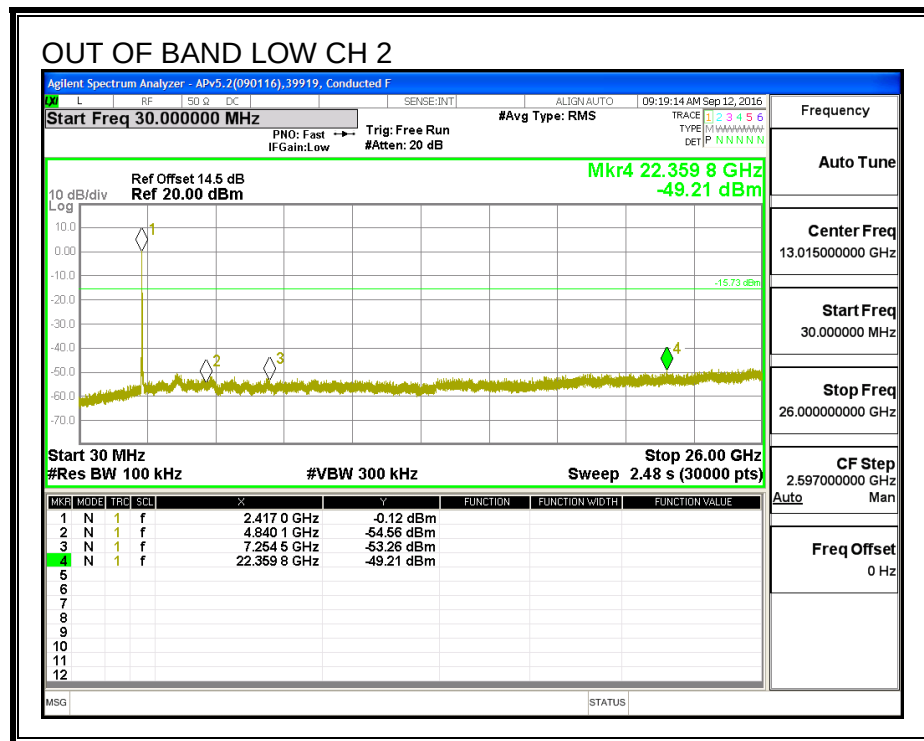


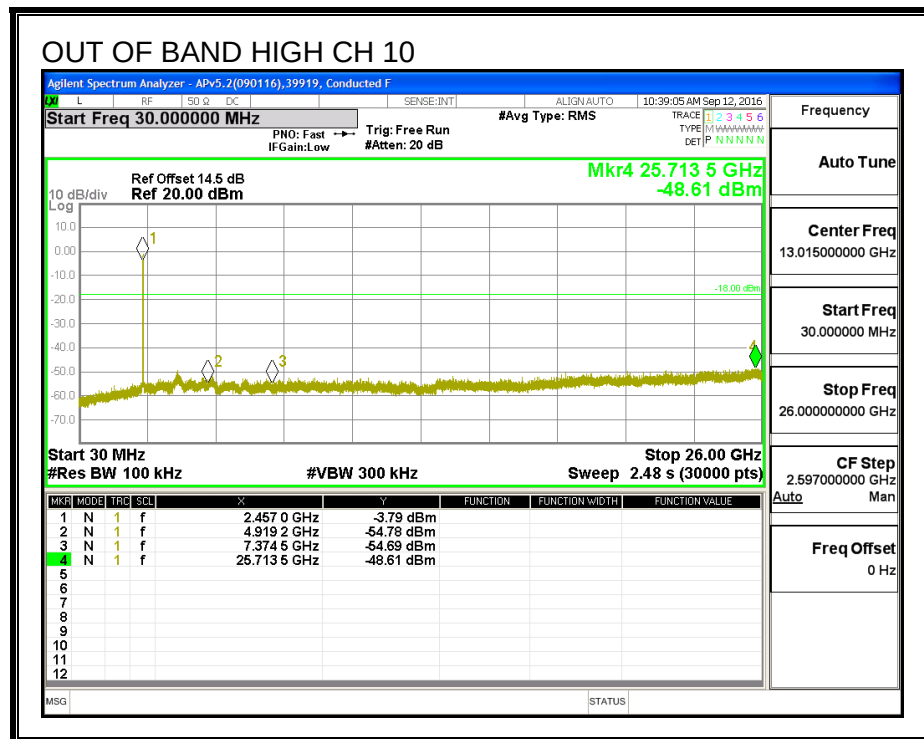
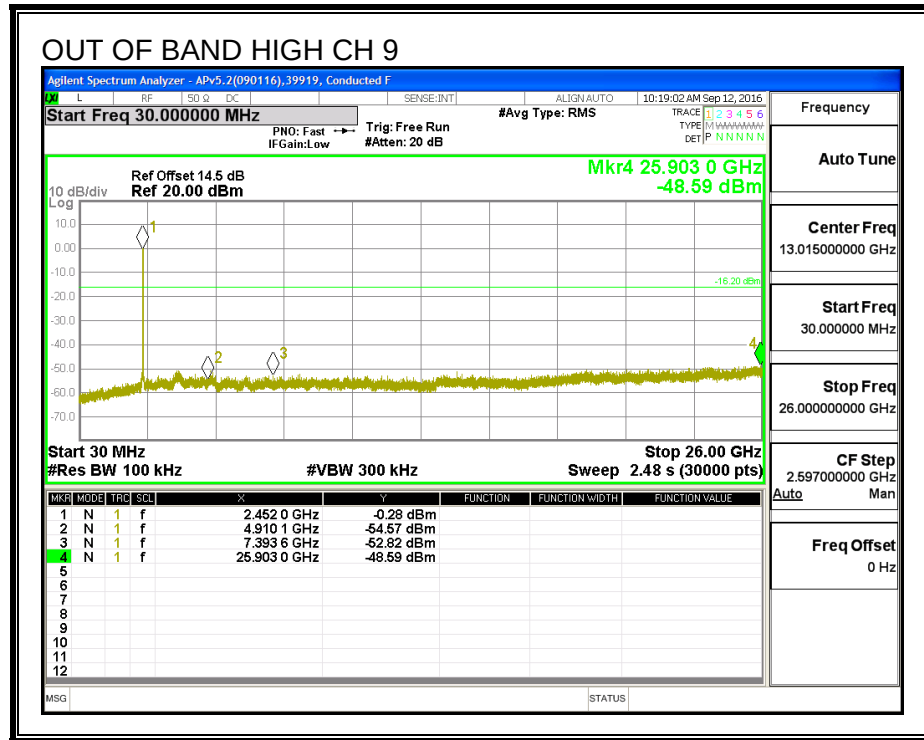


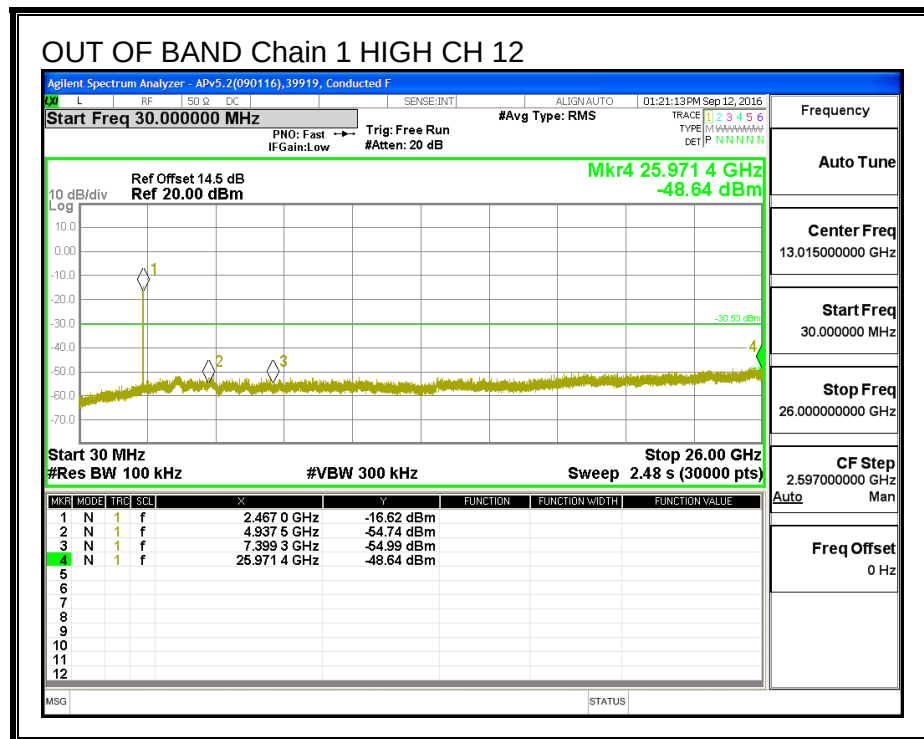
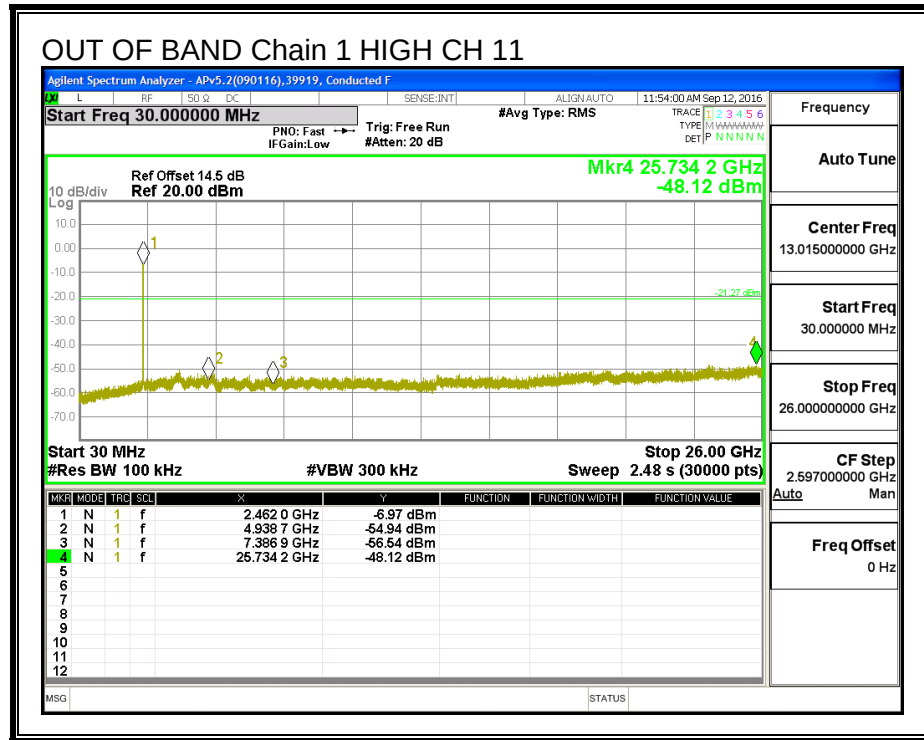


OUT-OF-BAND EMISSIONS, Chain 2









8.25. 802.11n HT20 3Tx BEAM FORMING MODE IN THE 2.4 GHz BAND

8.25.1. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

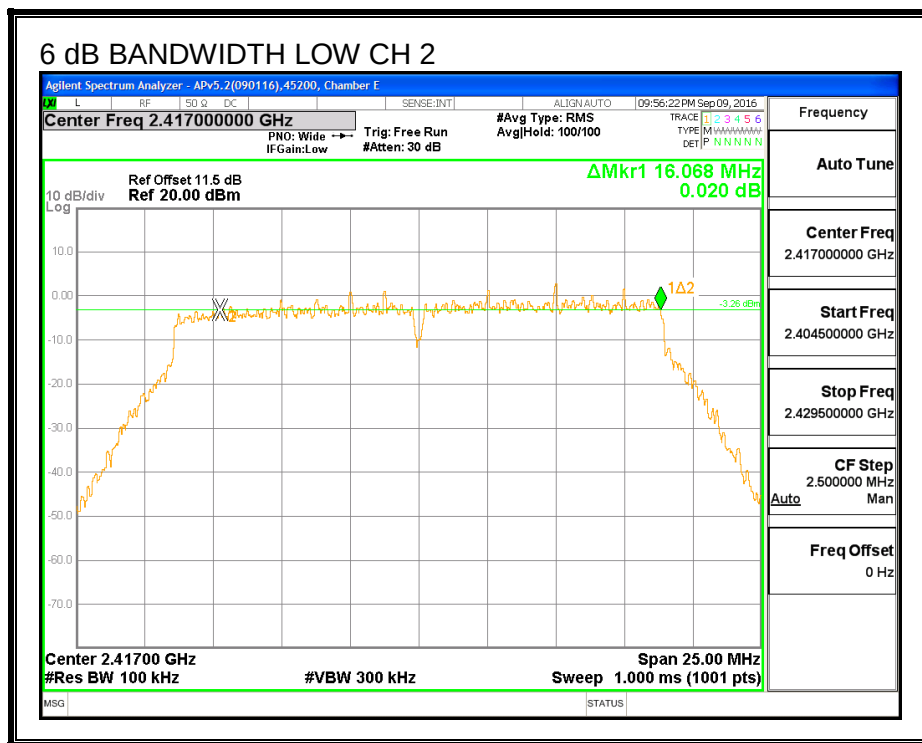
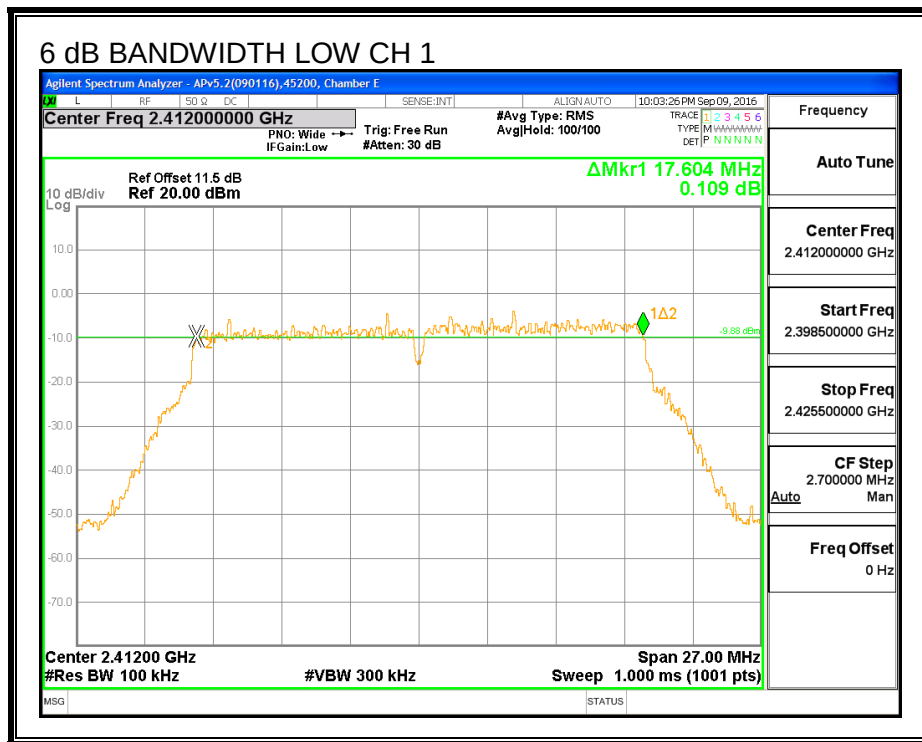
IC RSS-247 (5.2) (1)

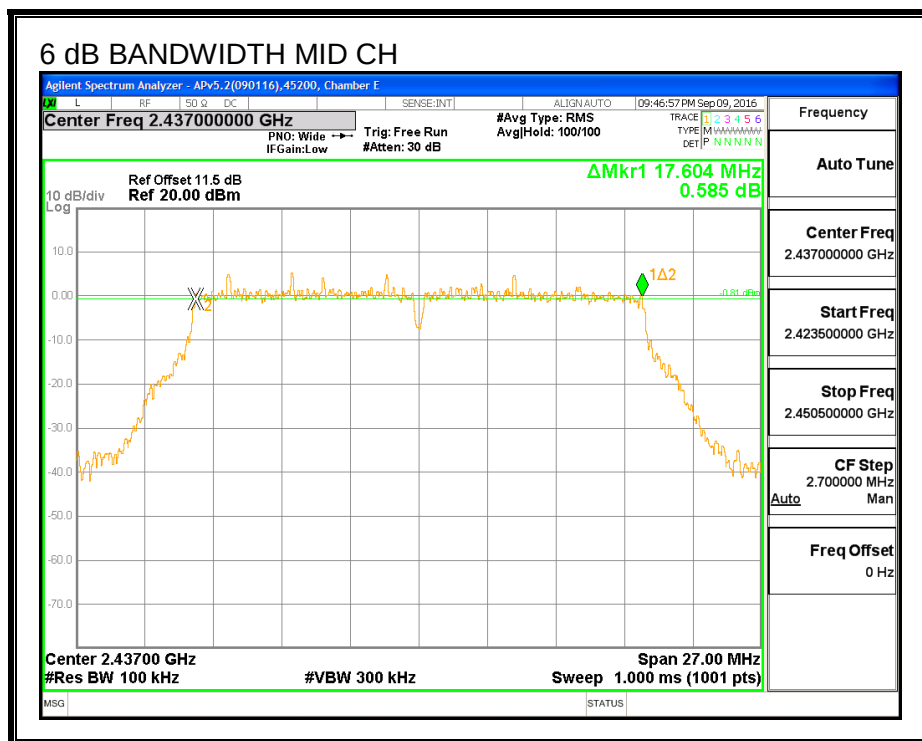
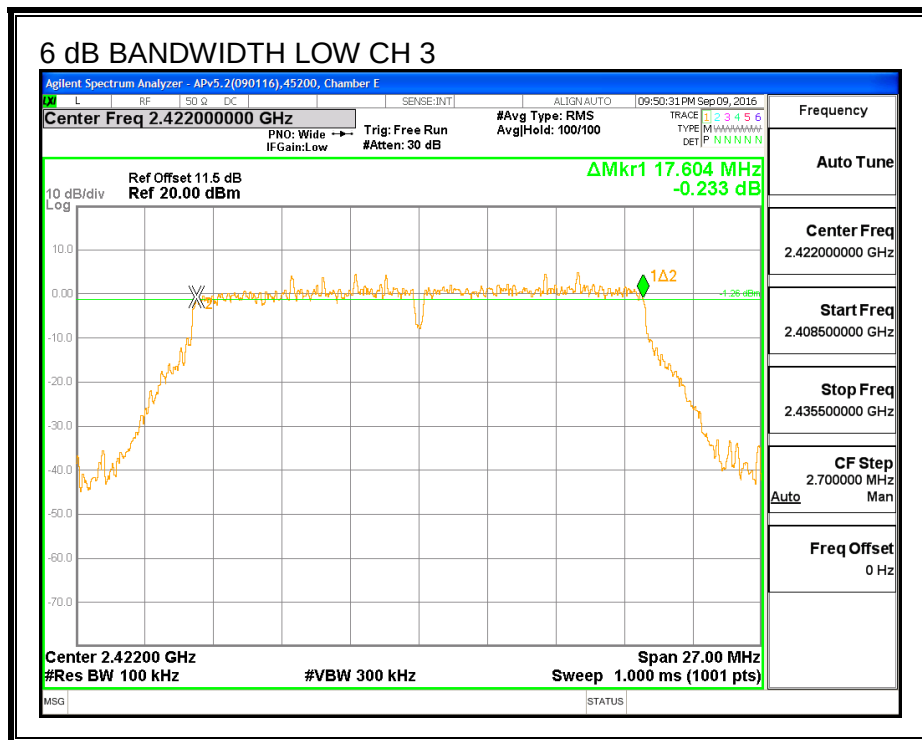
The minimum 6 dB bandwidth shall be at least 500 kHz.

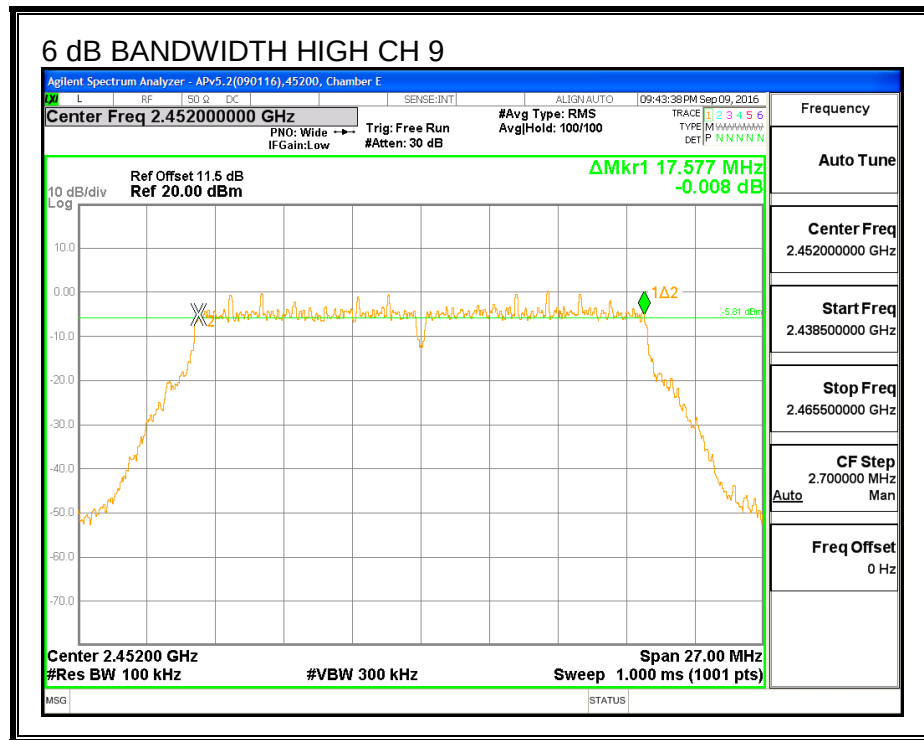
RESULTS

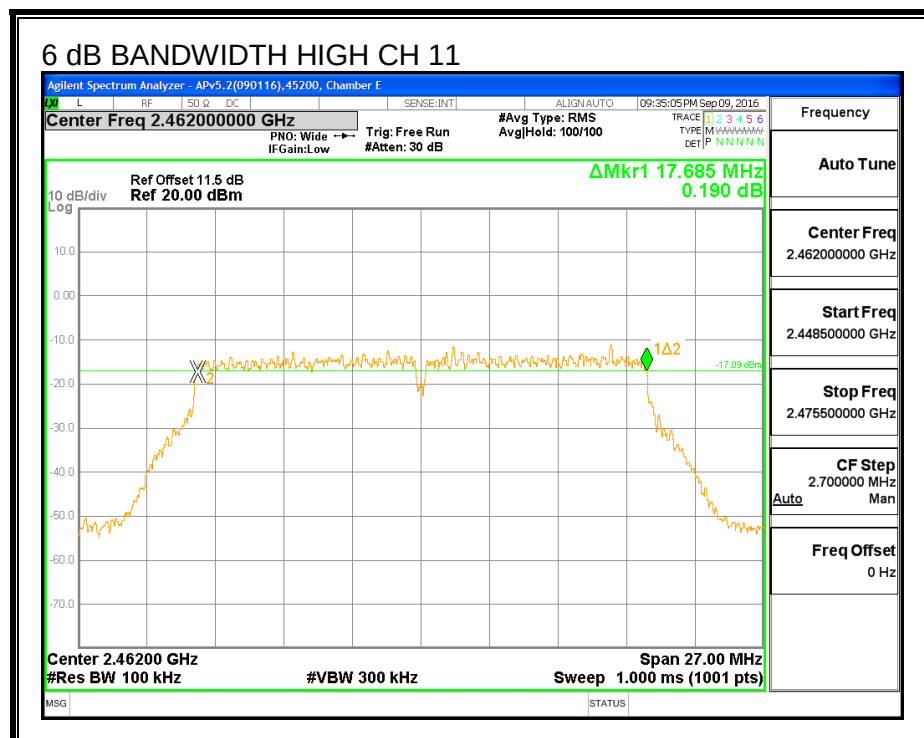
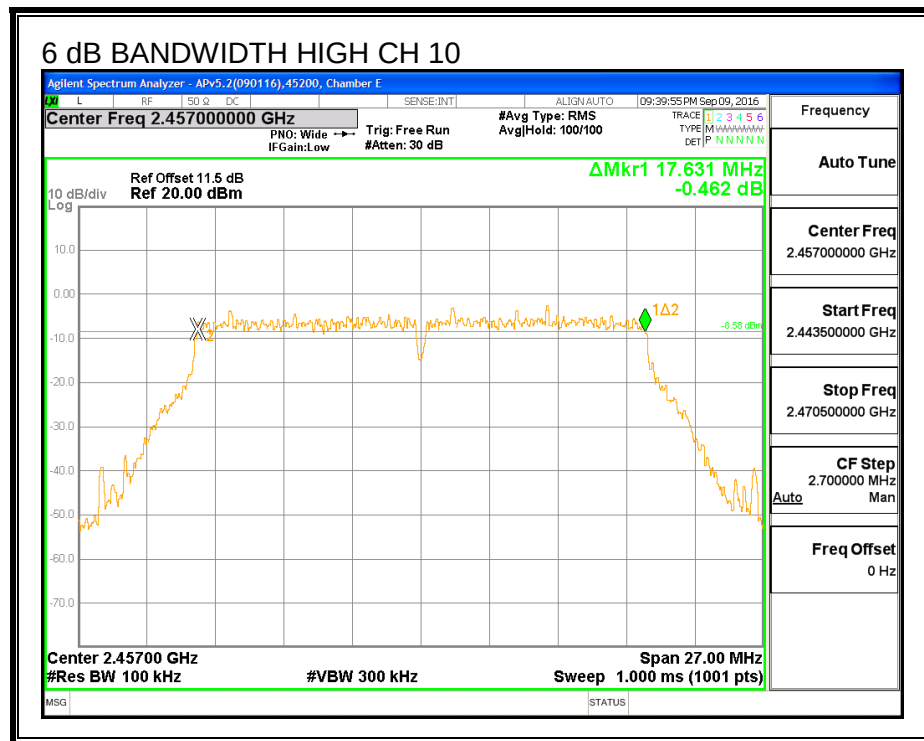
Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	6 dB BW Chain 2 (MHz)	Minimum Limit (MHz)
Low_1	2412	17.604	17.604	17.604	0.5
Low_2	2417	16.068	16.952	16.604	0.5
Low_3	2422	17.604	17.631	17.631	0.5
Mid_6	2437	17.604	17.631	17.631	0.5
High_8	2447	17.631	17.658	17.577	0.5
High_9	2452	17.577	17.631	17.577	0.5
High_10	2457	17.631	17.631	17.577	0.5
High_11	2462	17.685	17.631	17.604	0.5
High_12	2467	17.577	17.604	17.631	0.5

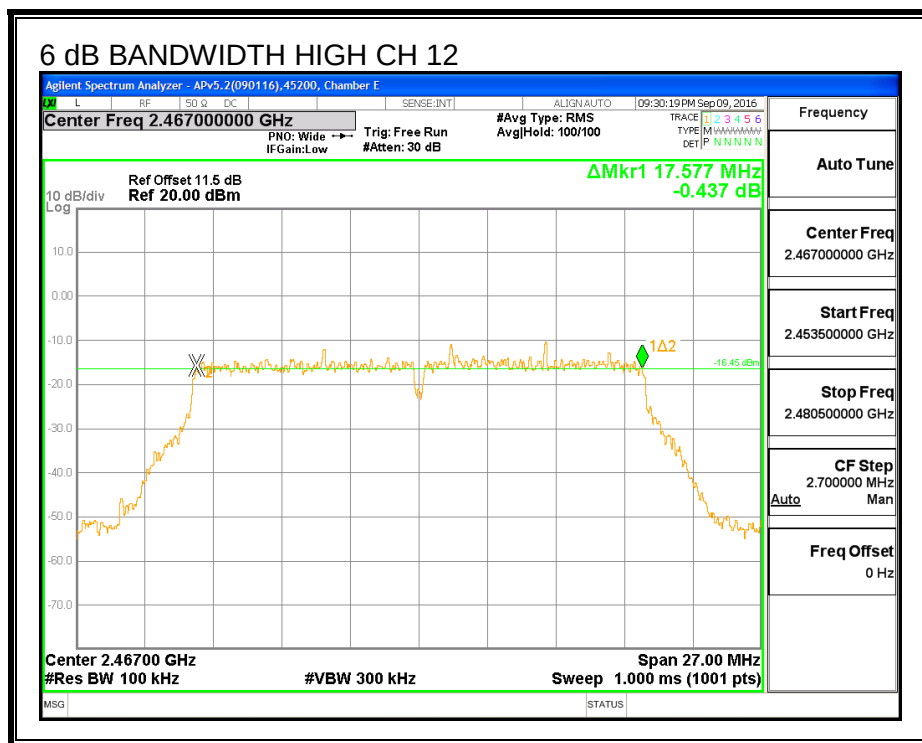
6 dB BANDWIDTH, Chain 0



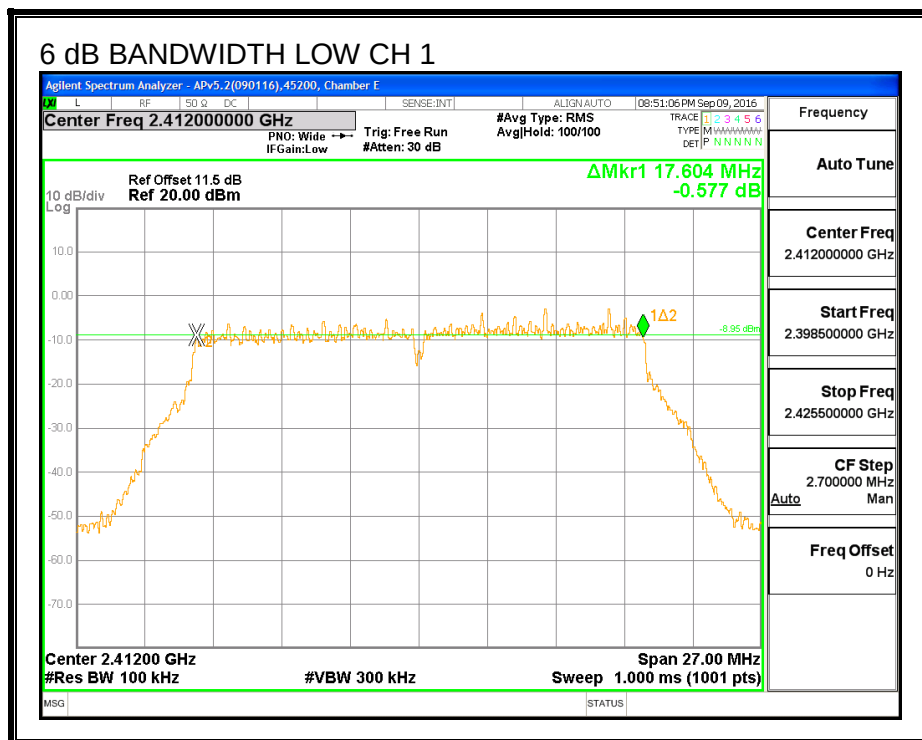


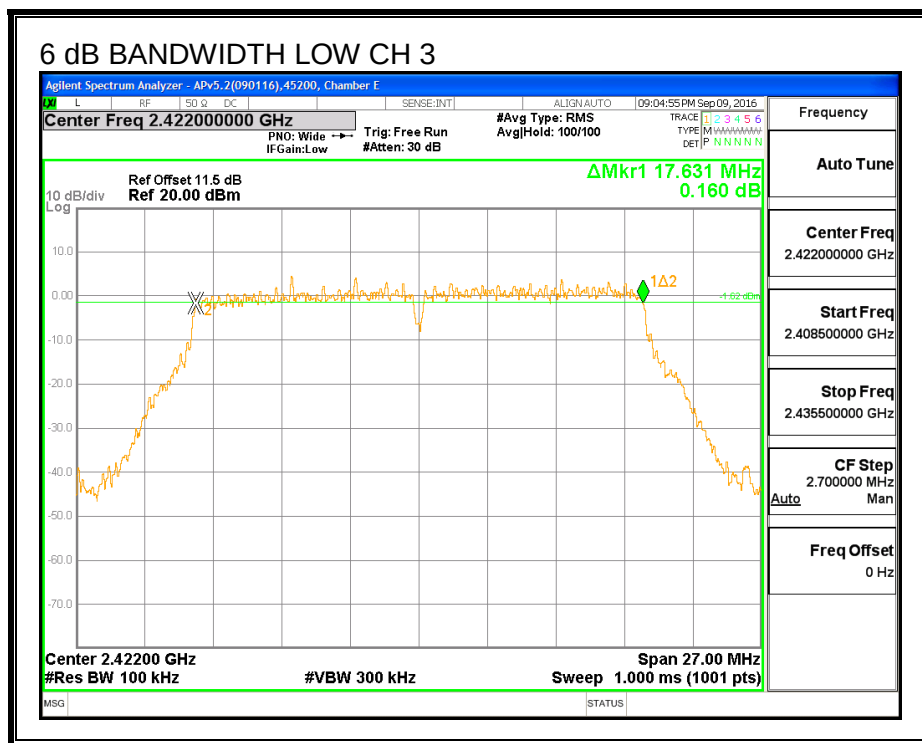
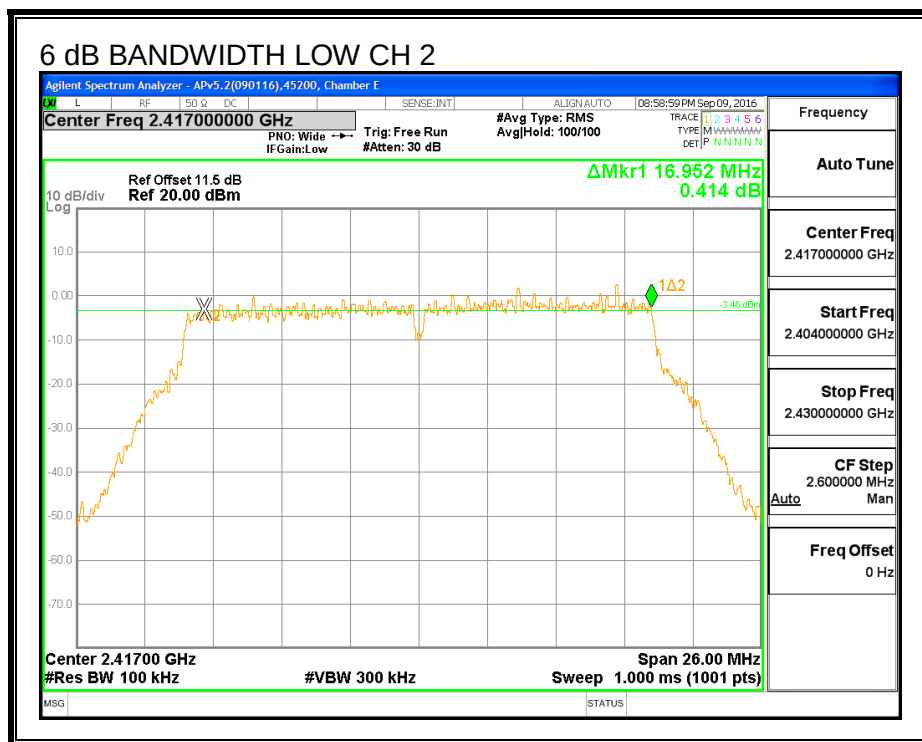


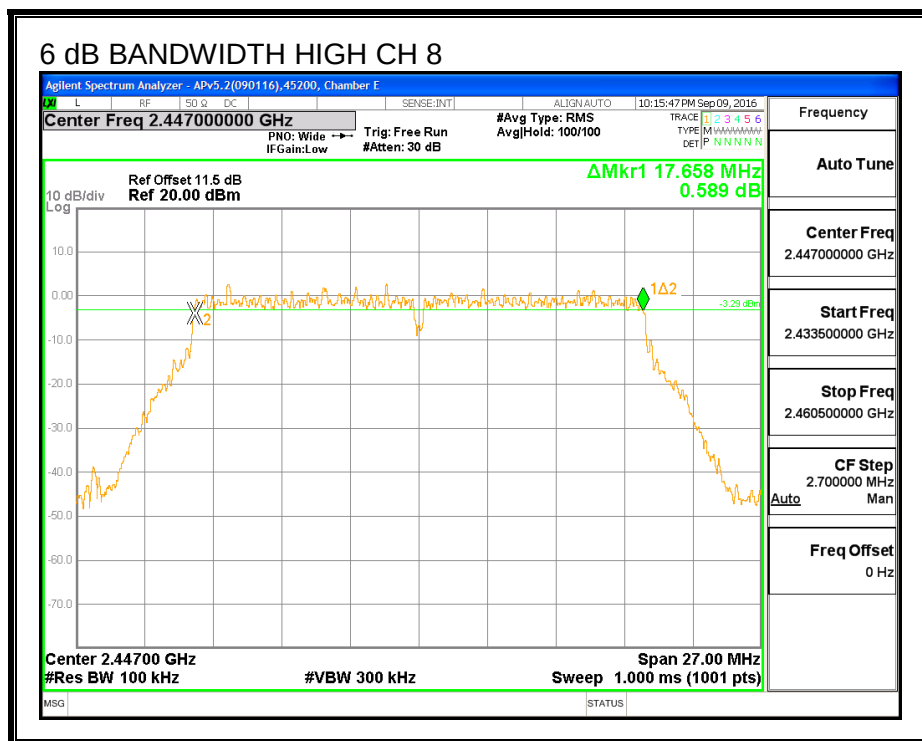
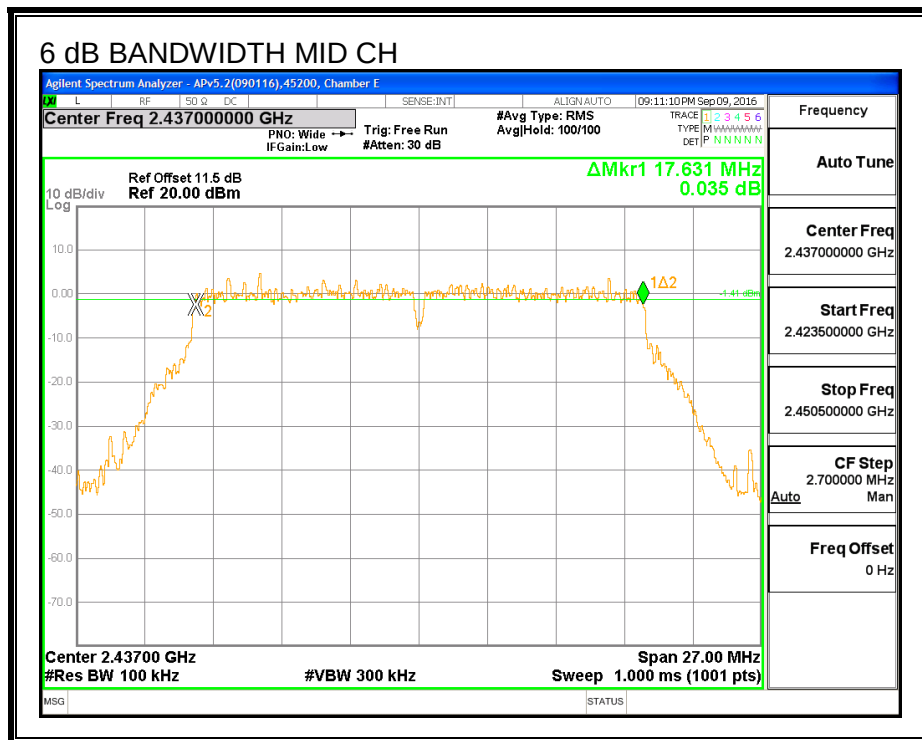


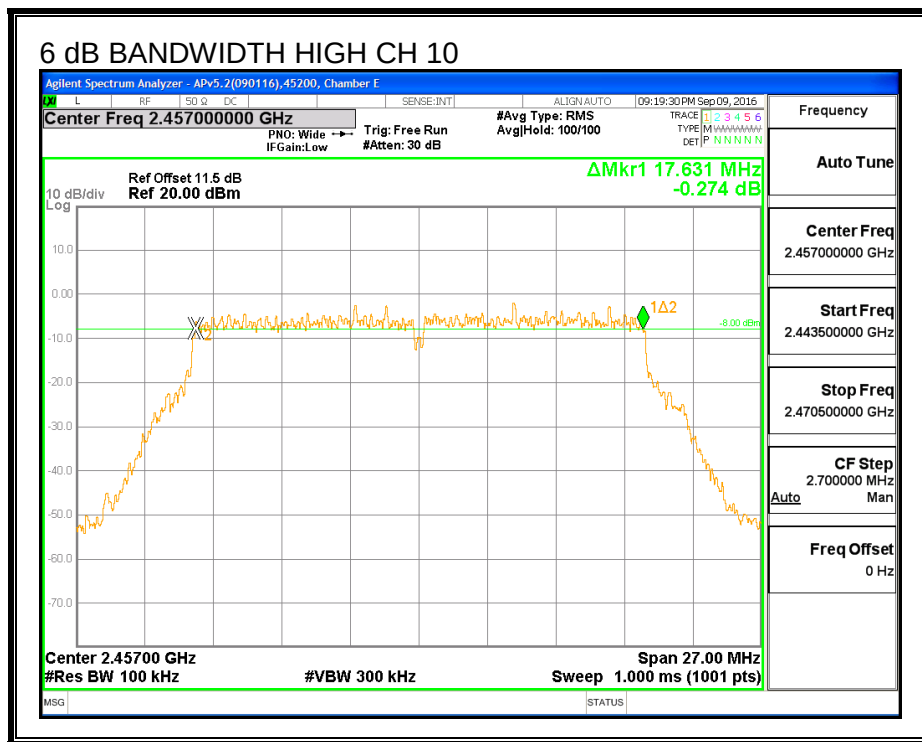
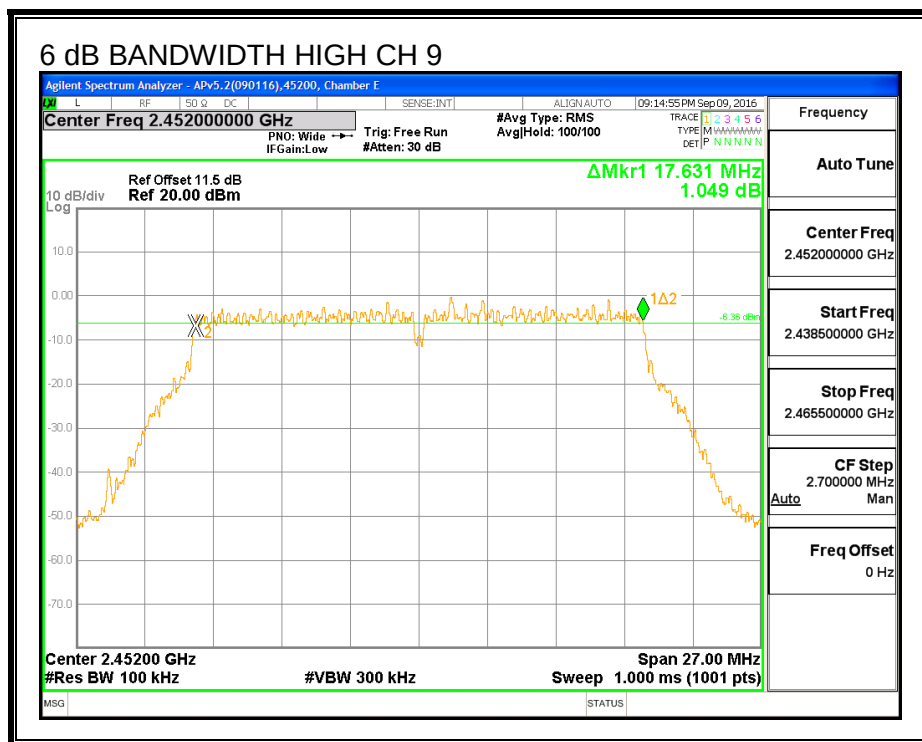


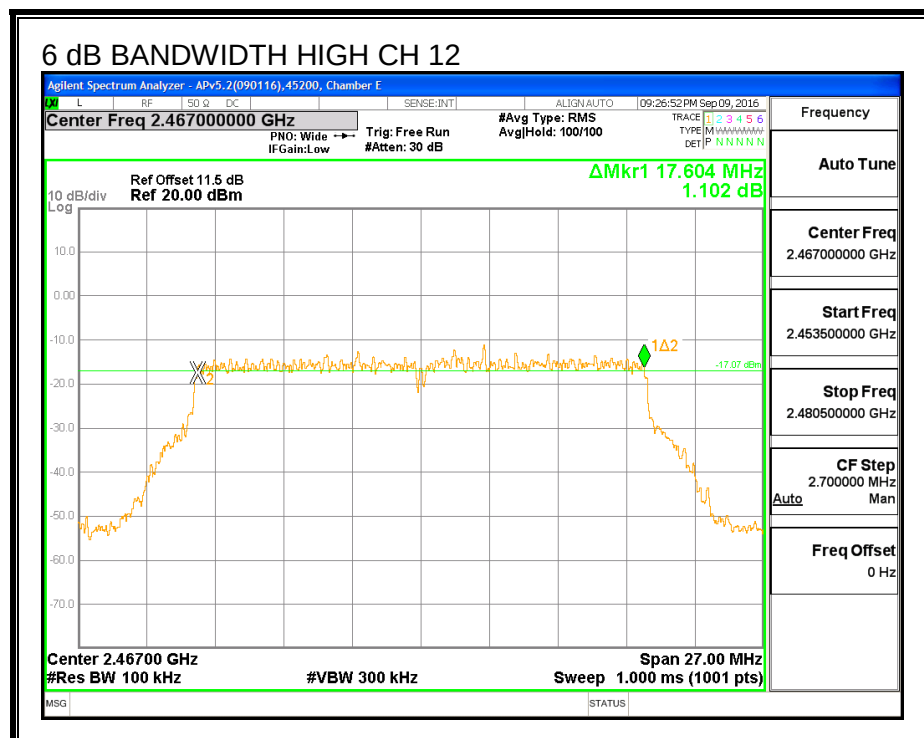
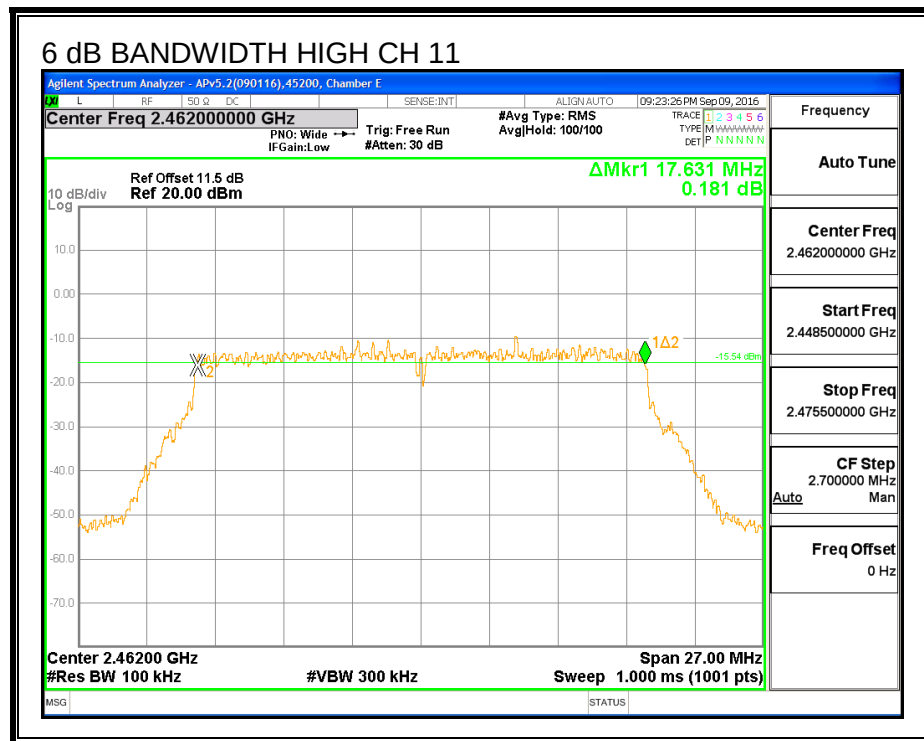
6 dB BANDWIDTH, Chain 1



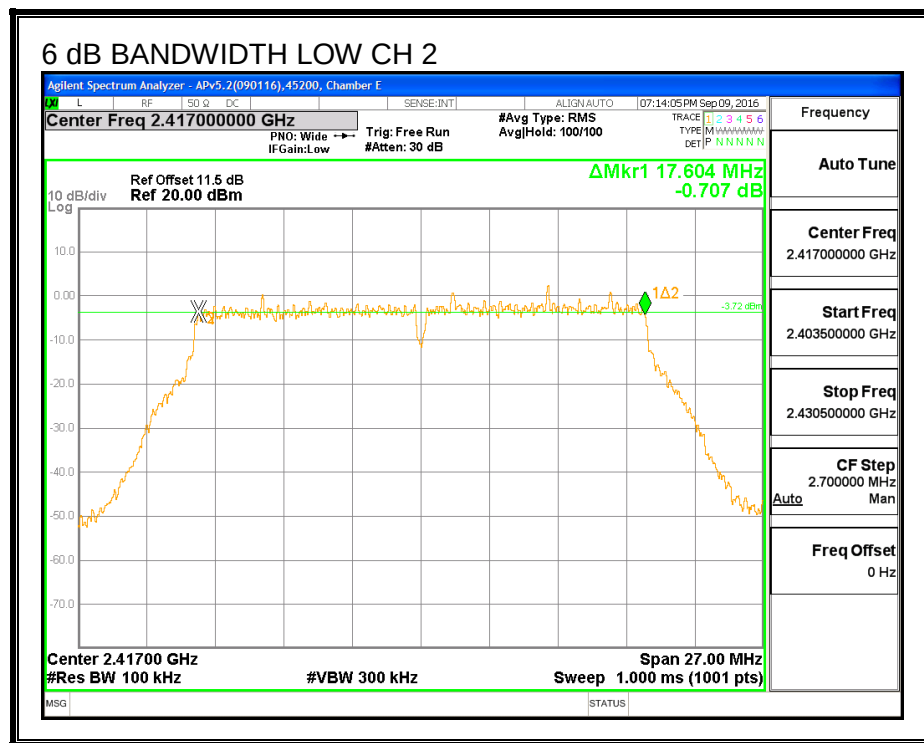
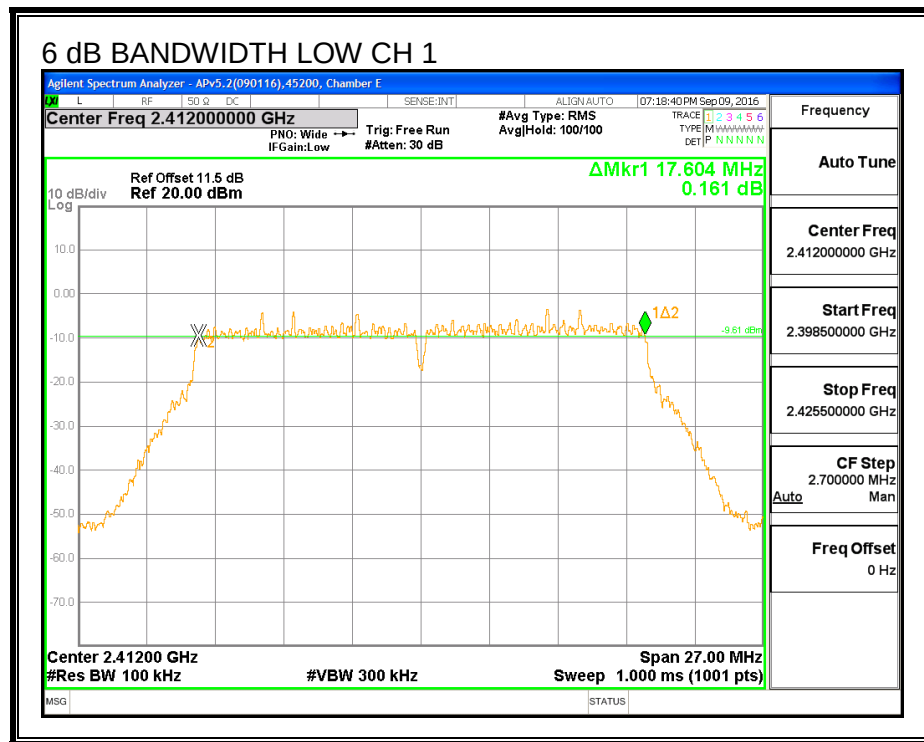


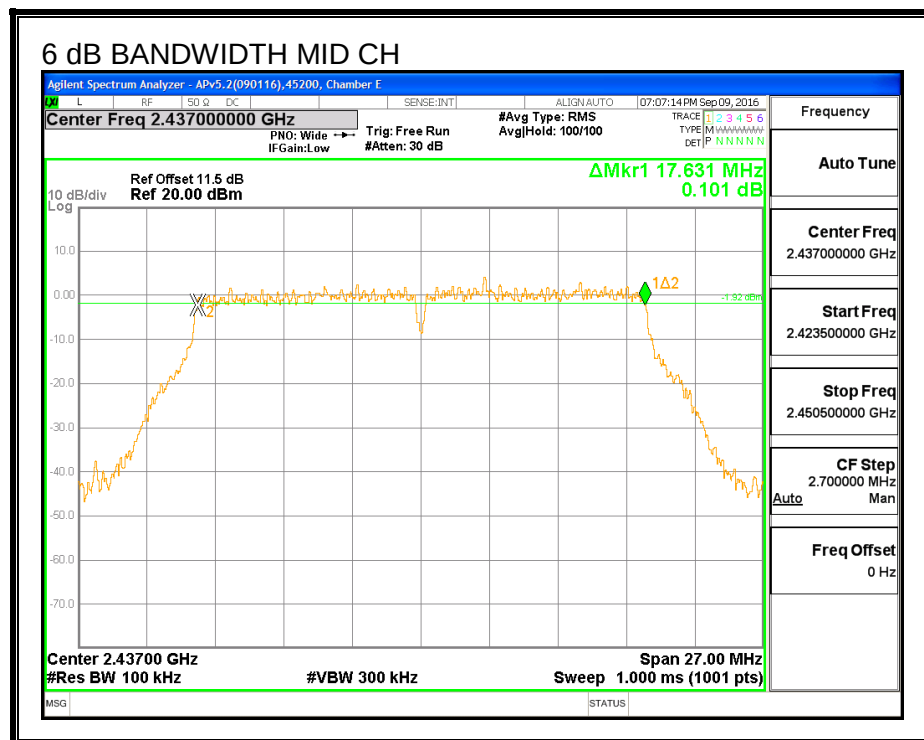
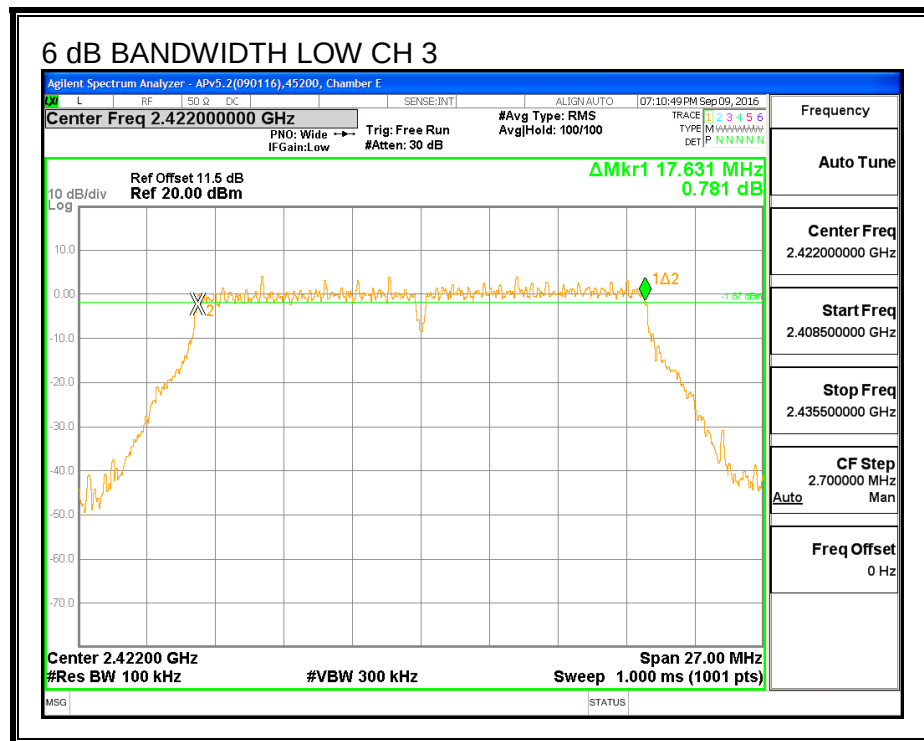


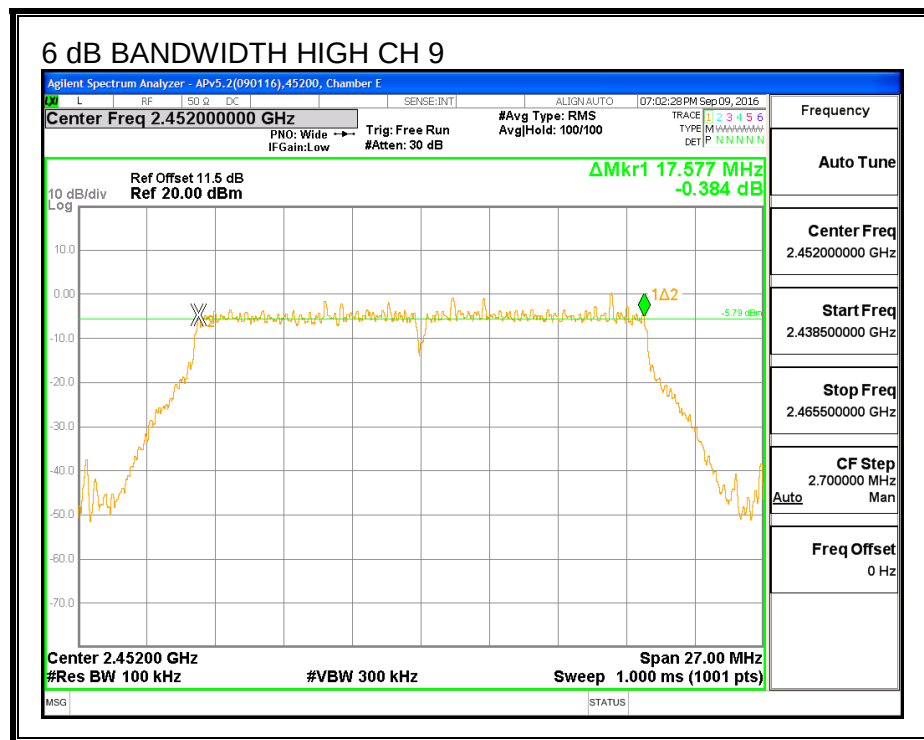
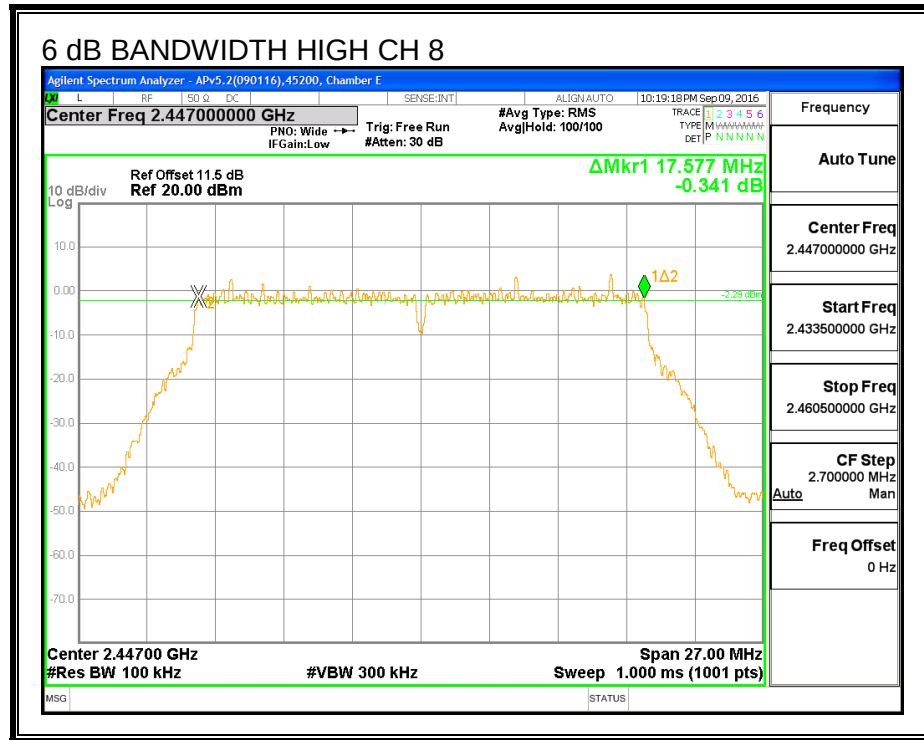


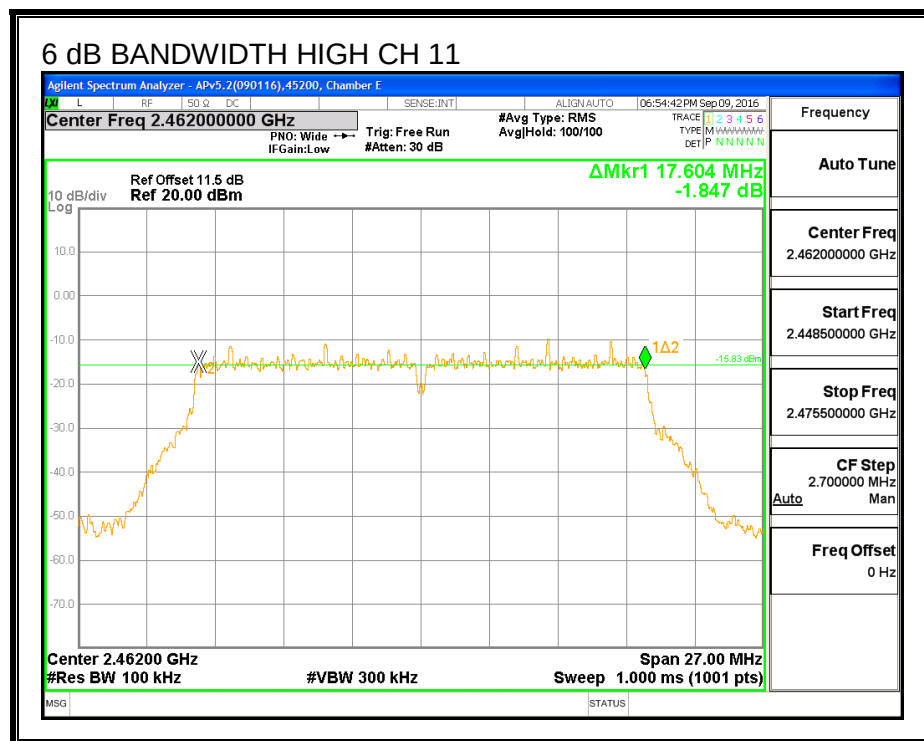
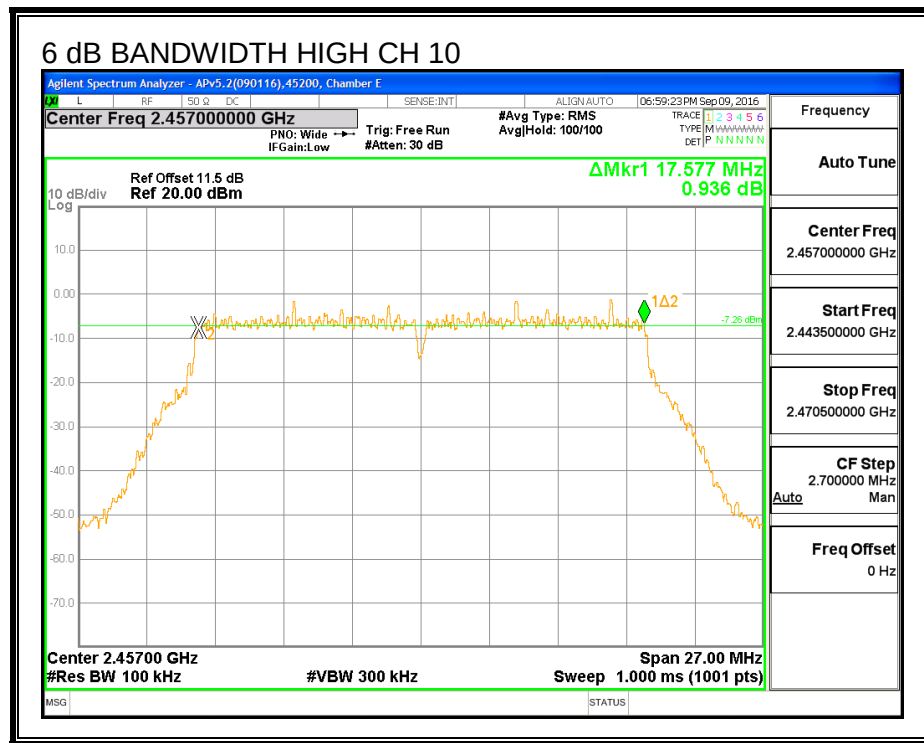


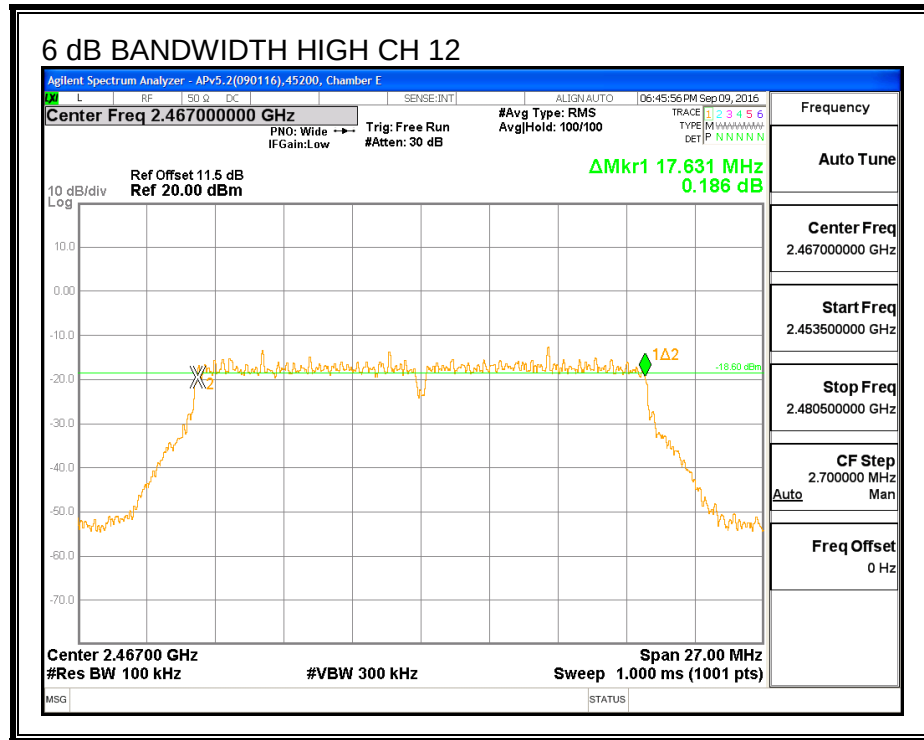
6 dB BANDWIDTH, Chain 2











8.25.2. 99% BANDWIDTH

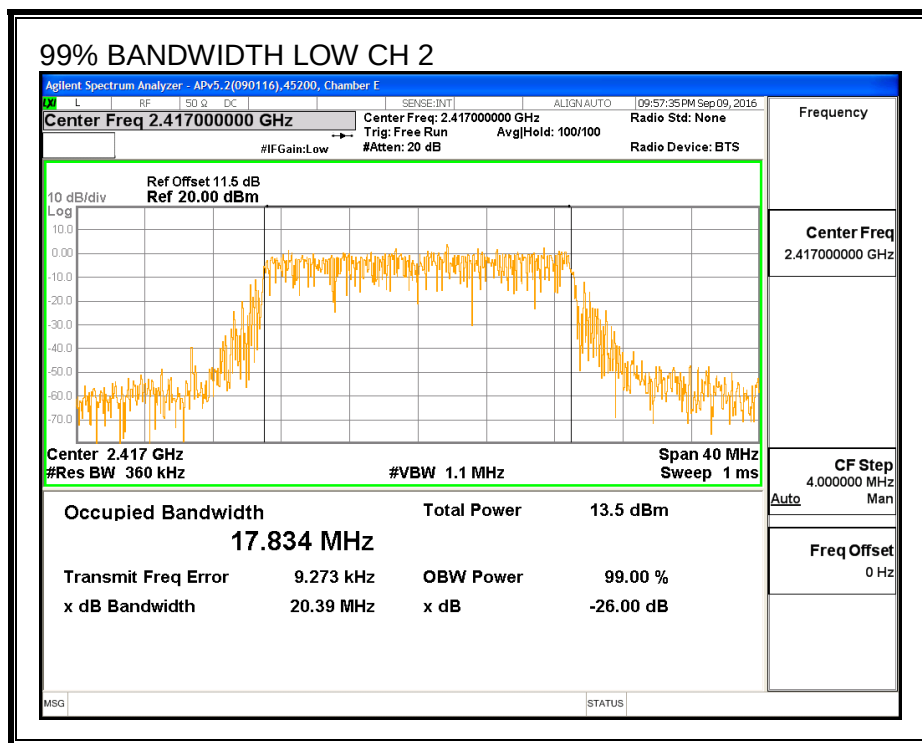
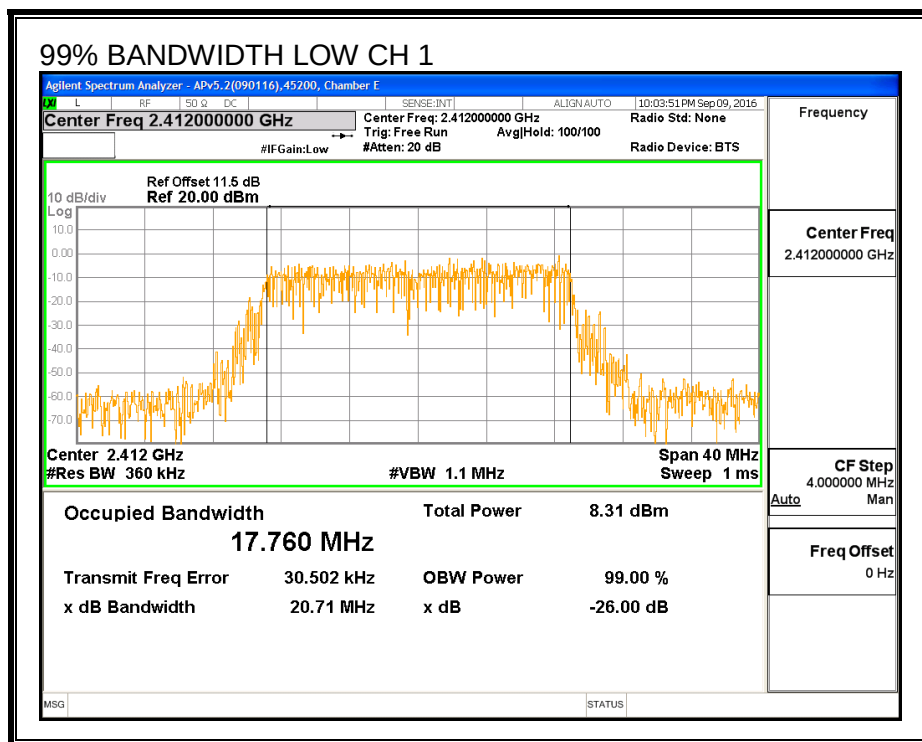
LIMITS

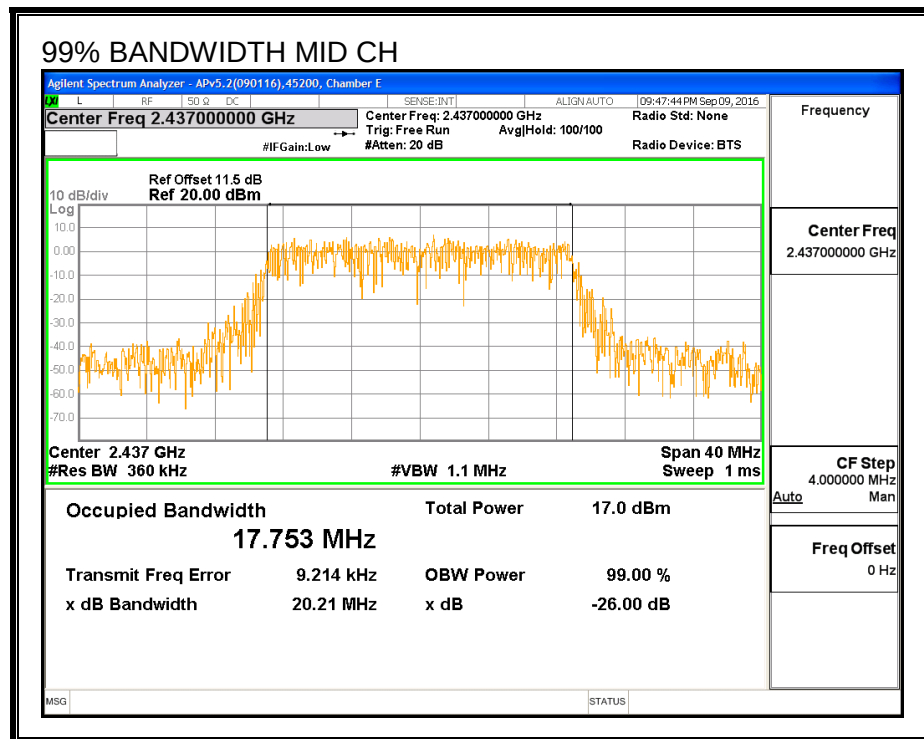
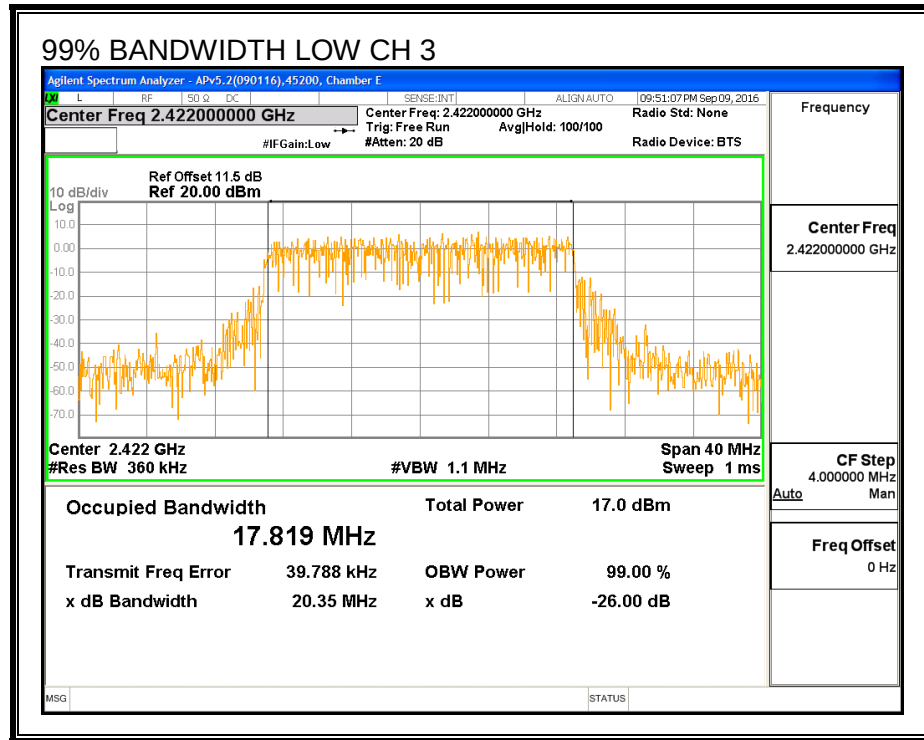
None; for reporting purposes only.

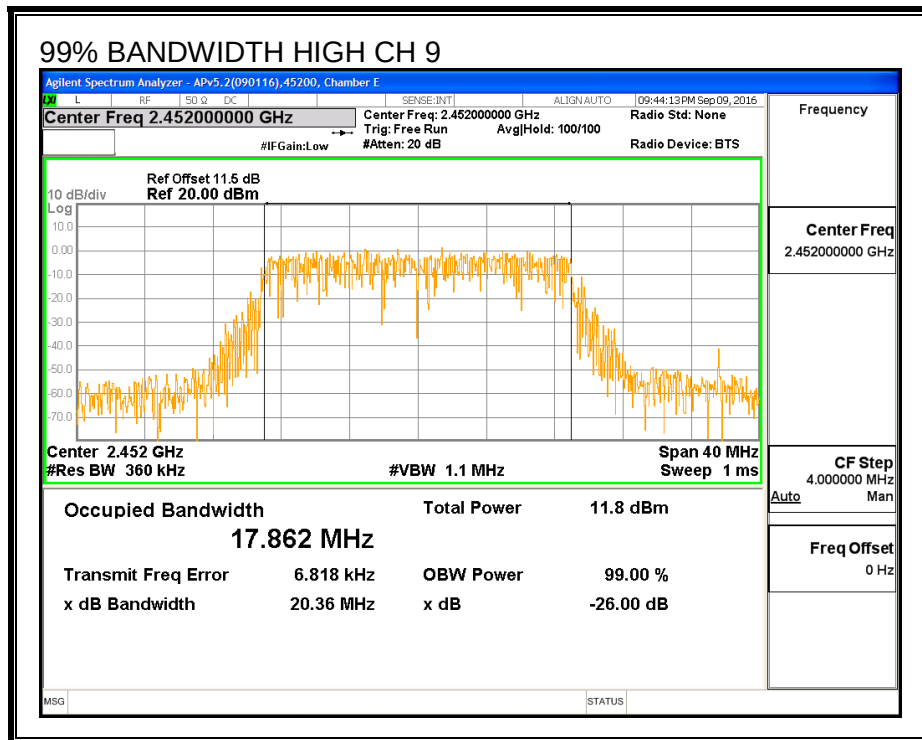
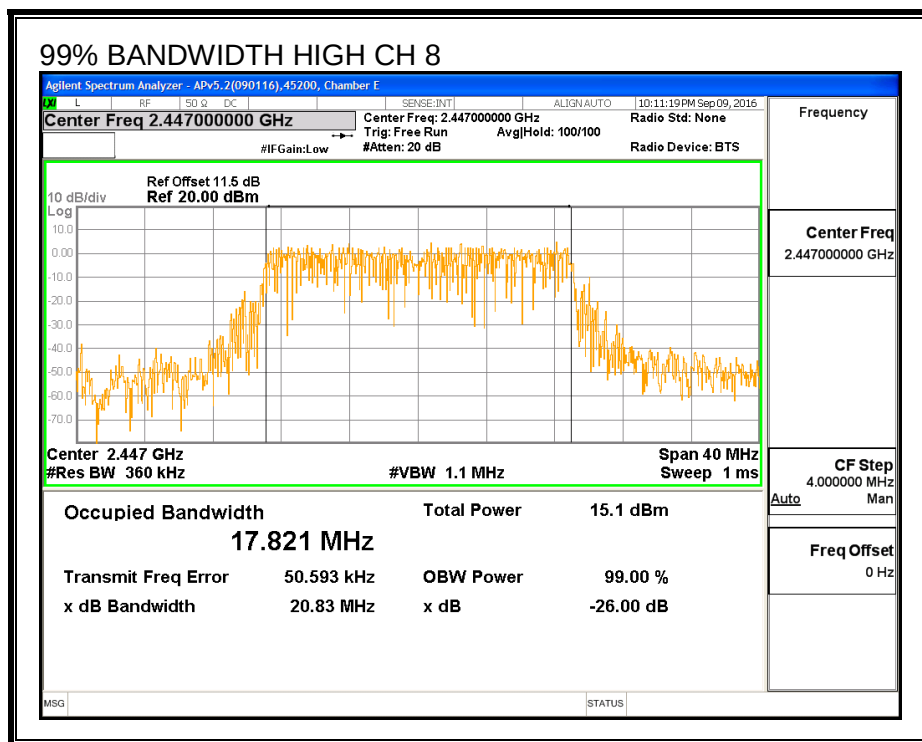
RESULTS

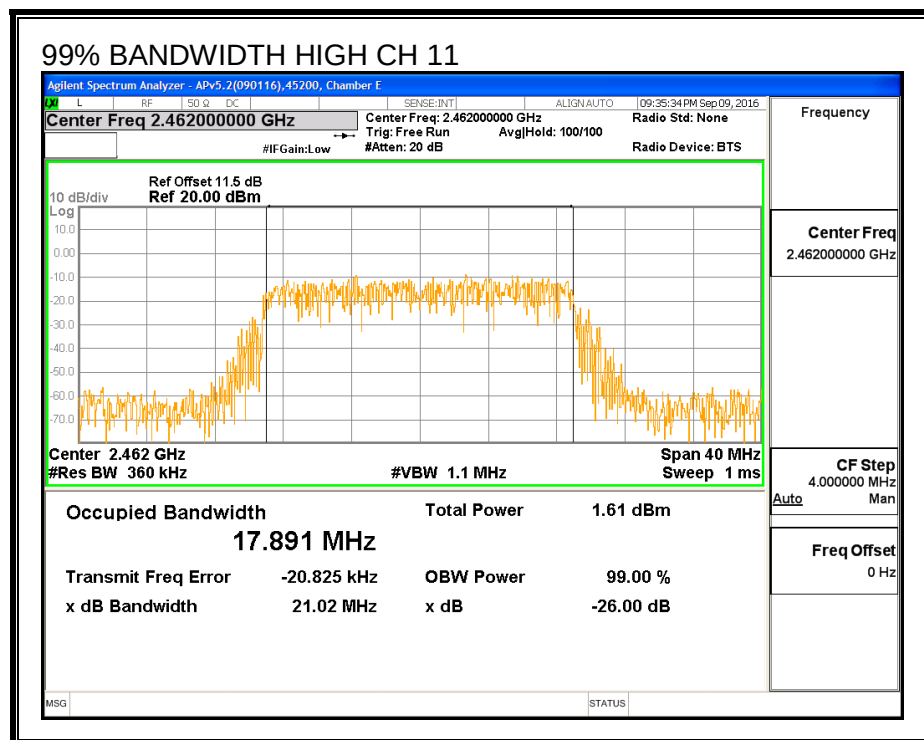
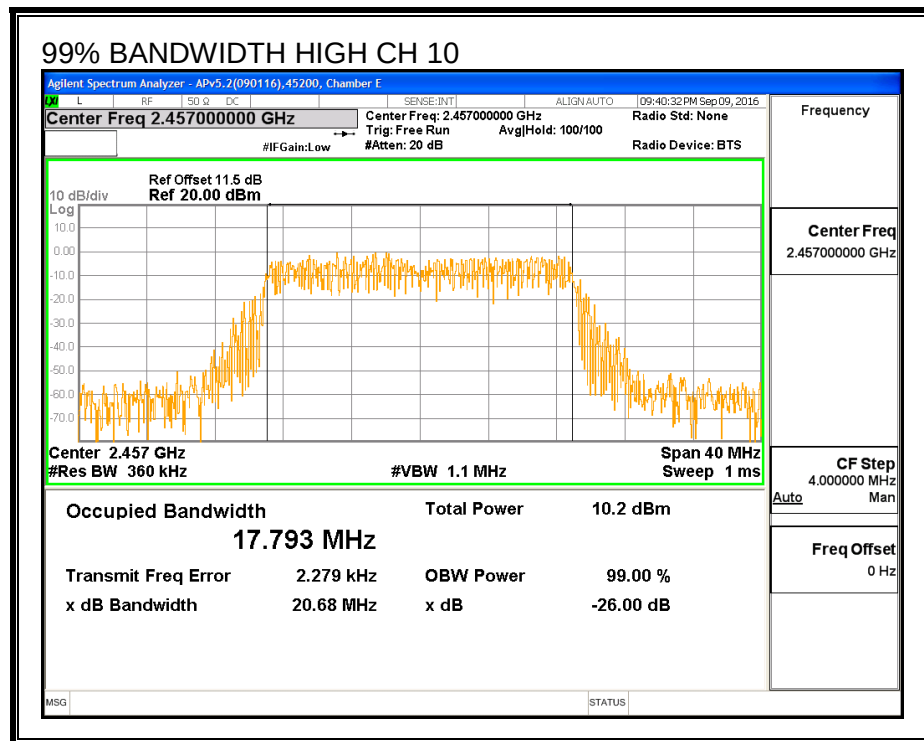
Channel	Frequency (MHz)	99% BW	99% BW	99% BW
		Chain 0 (MHz)	Chain 1 (MHz)	Chain 2 (MHz)
Low_1	2412	17.760	17.734	17.800
Low_2	2417	17.834	17.815	17.747
Low_3	2422	17.819	17.696	17.916
Mid_6	2437	17.753	17.809	17.758
High_8	2447	17.821	17.701	17.786
High_9	2452	17.862	17.788	17.867
High_10	2457	17.793	17.678	17.703
High_11	2462	17.891	17.797	17.871
High_12	2467	17.750	17.784	17.724

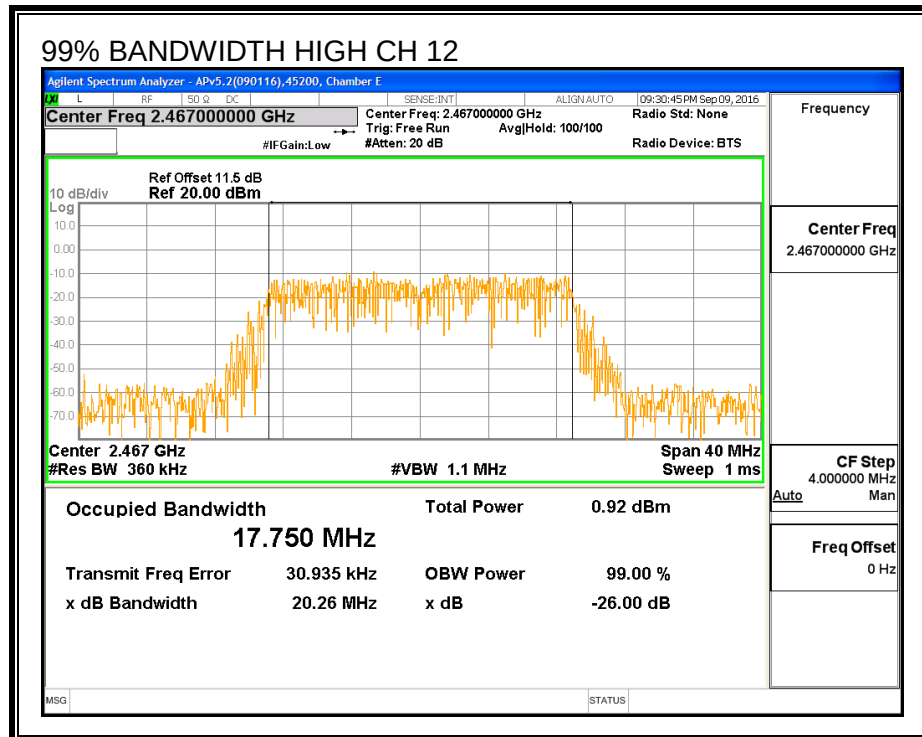
99% BANDWIDTH, Chain 0



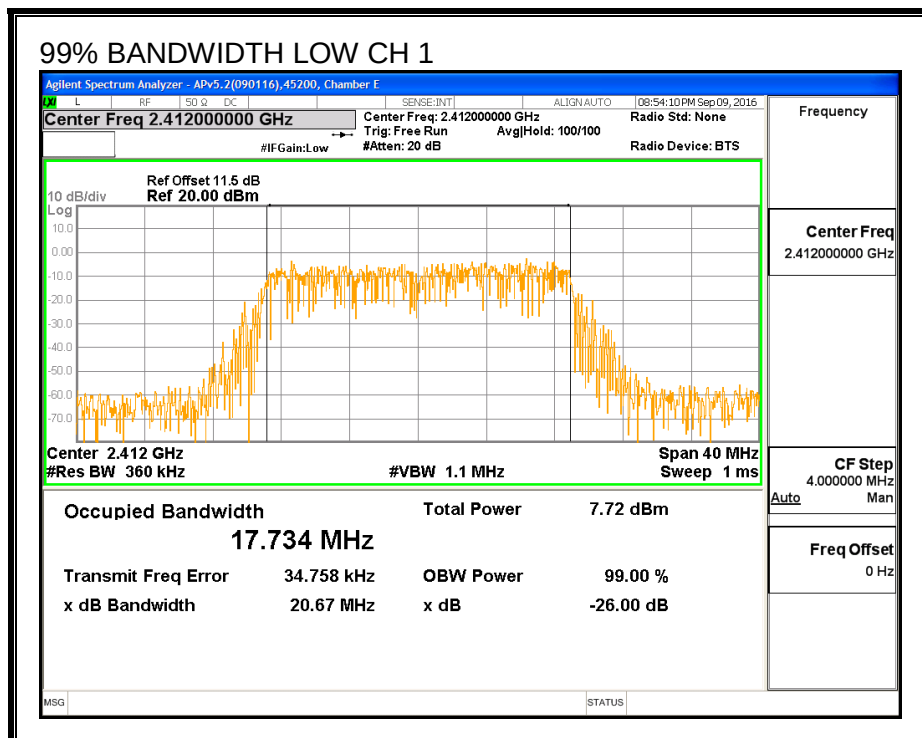


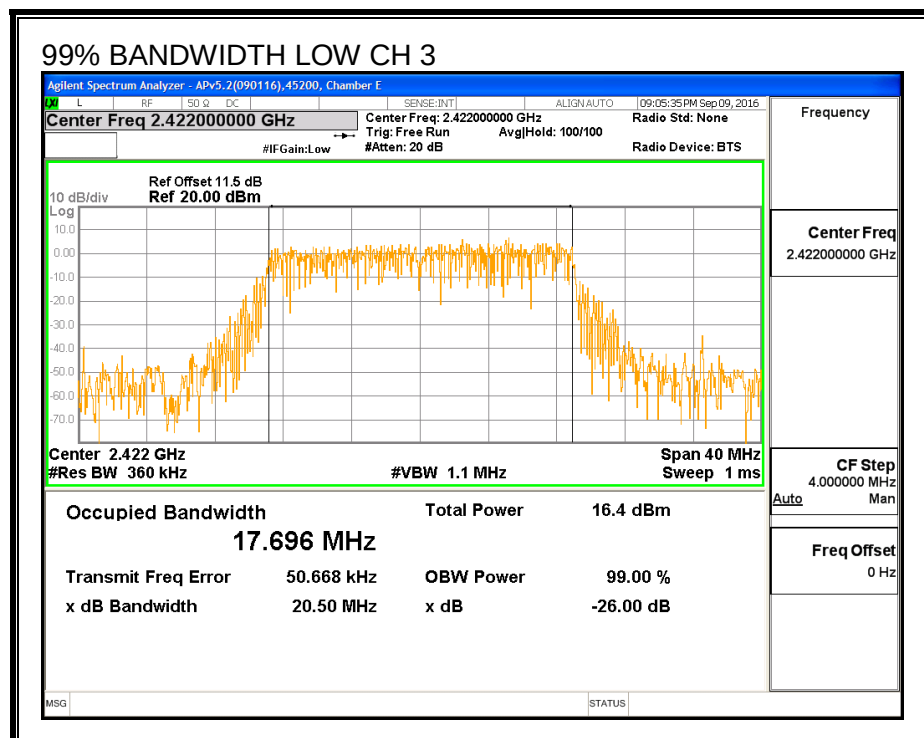
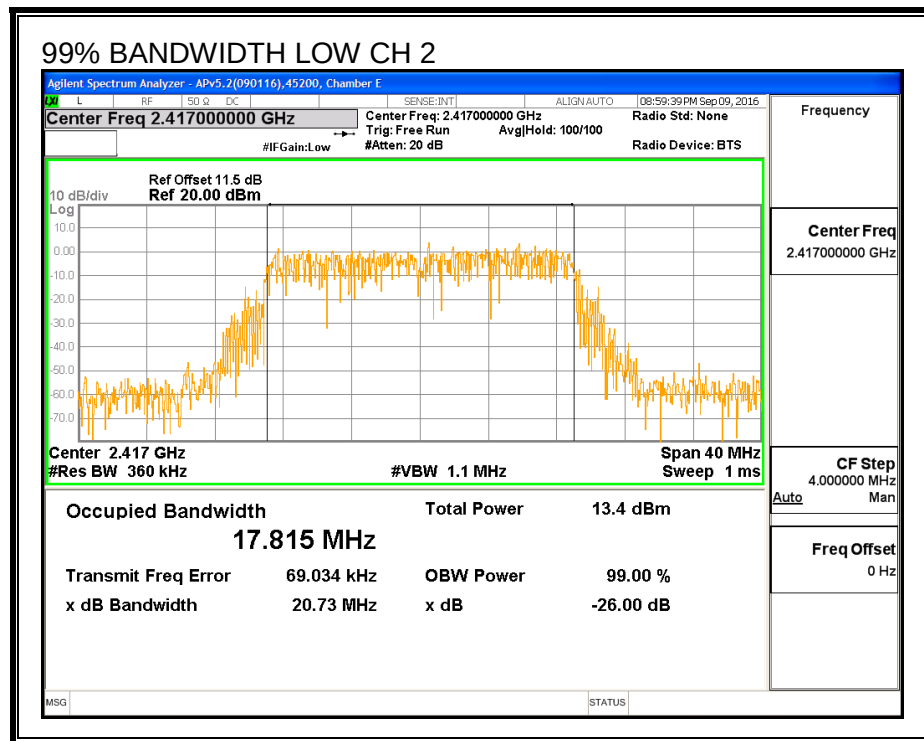


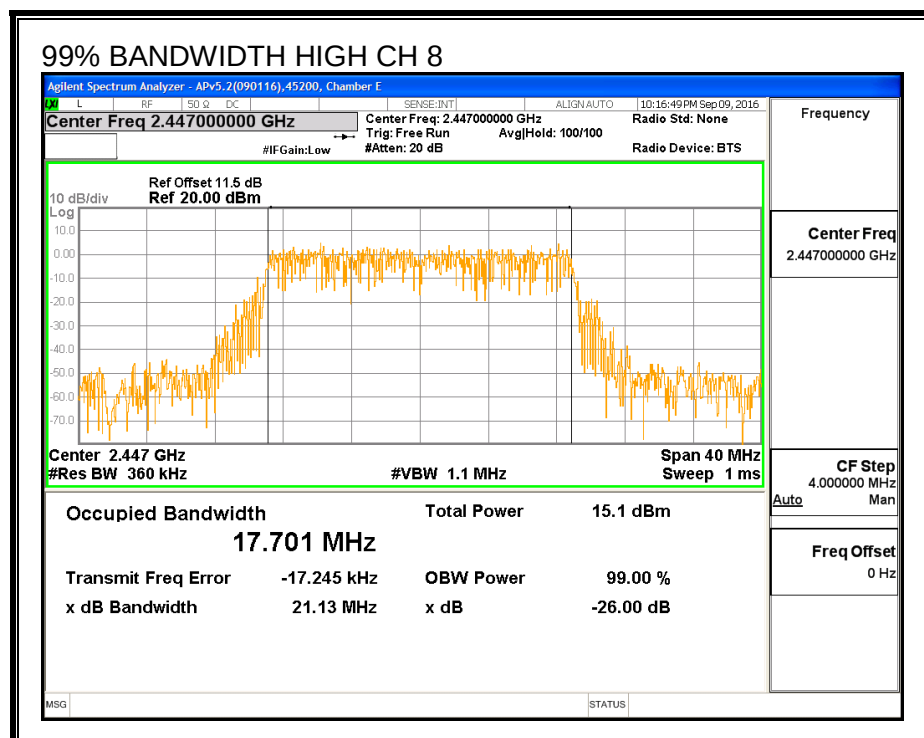
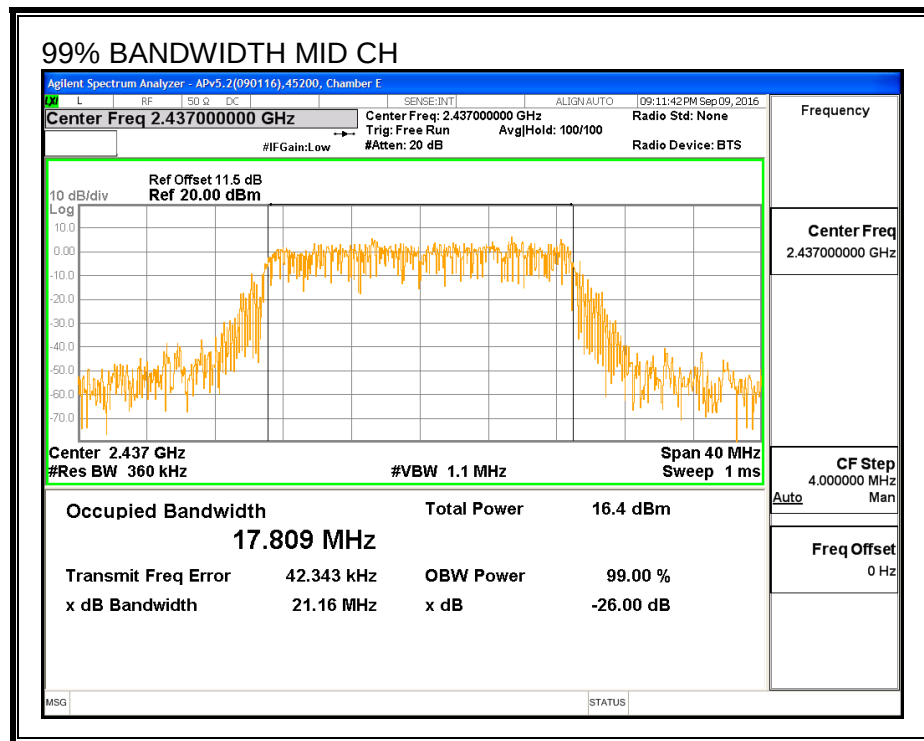


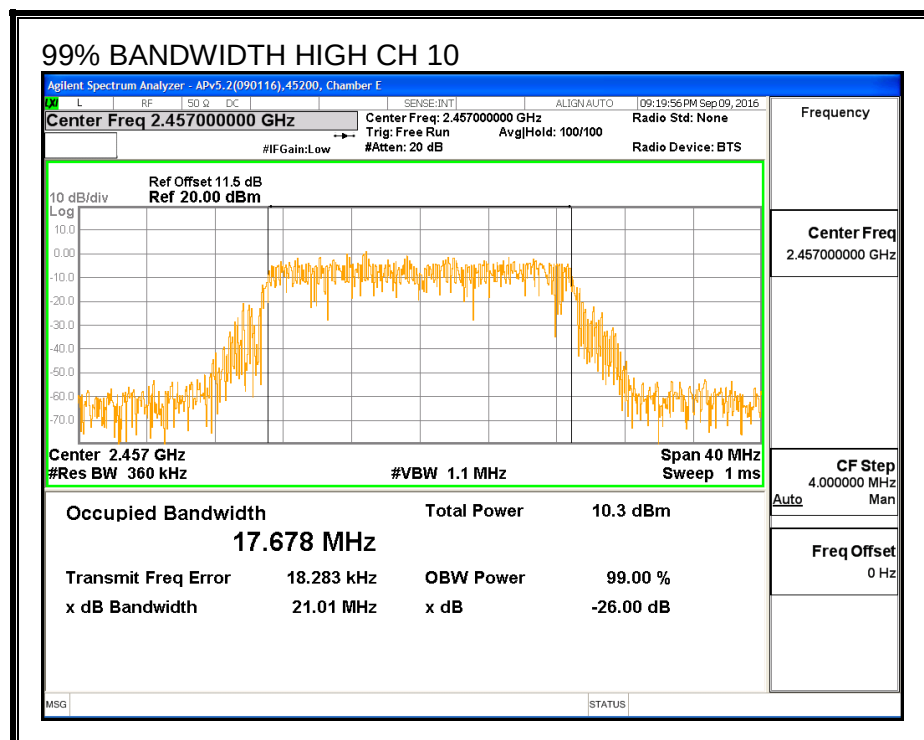
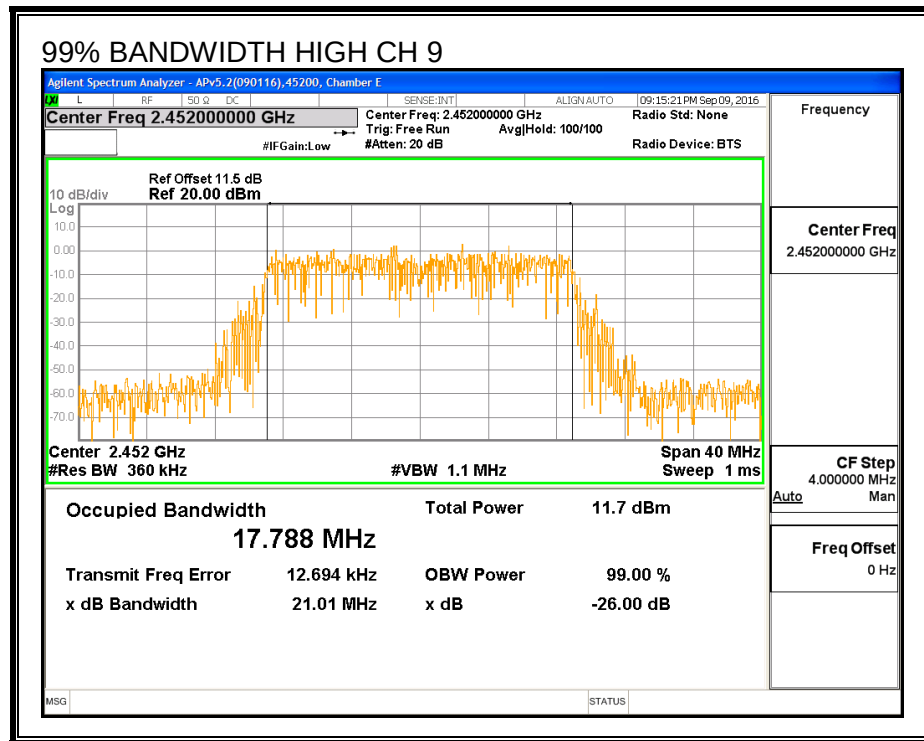


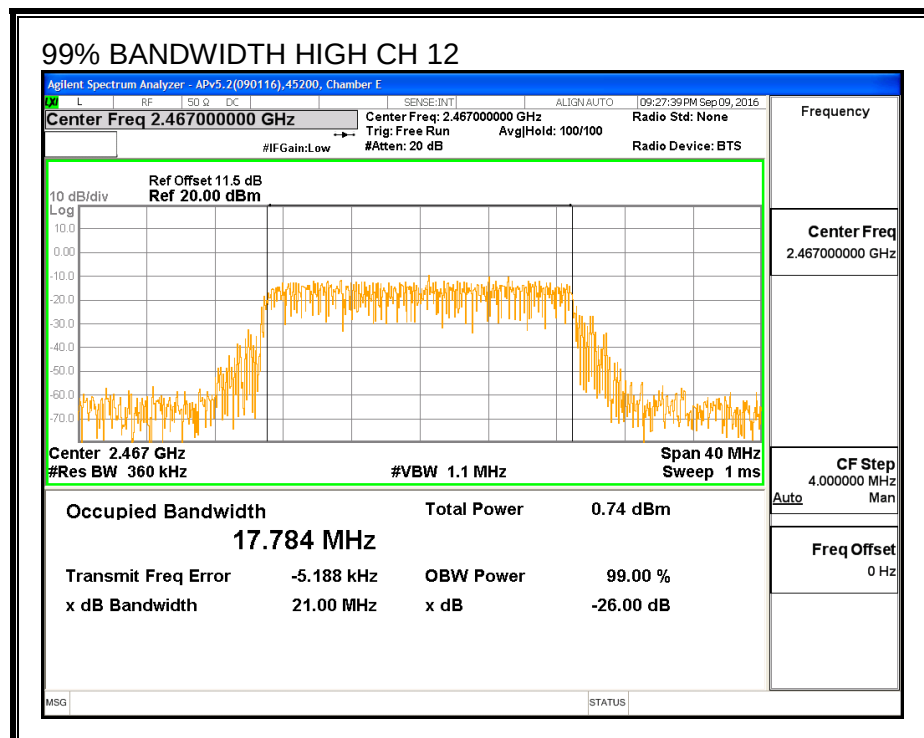
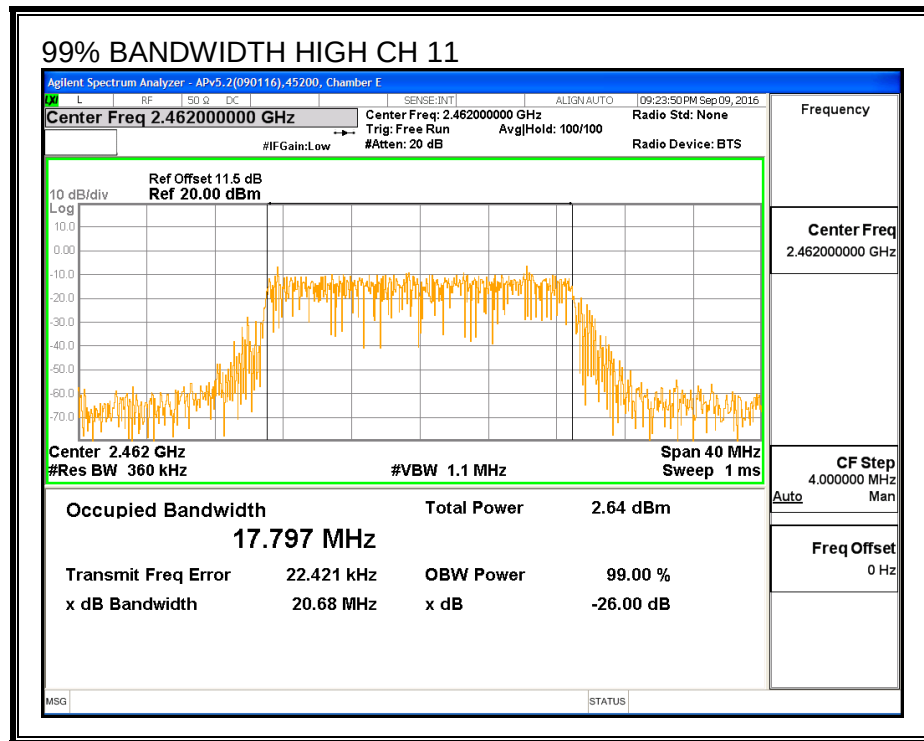
99% BANDWIDTH, Chain 1



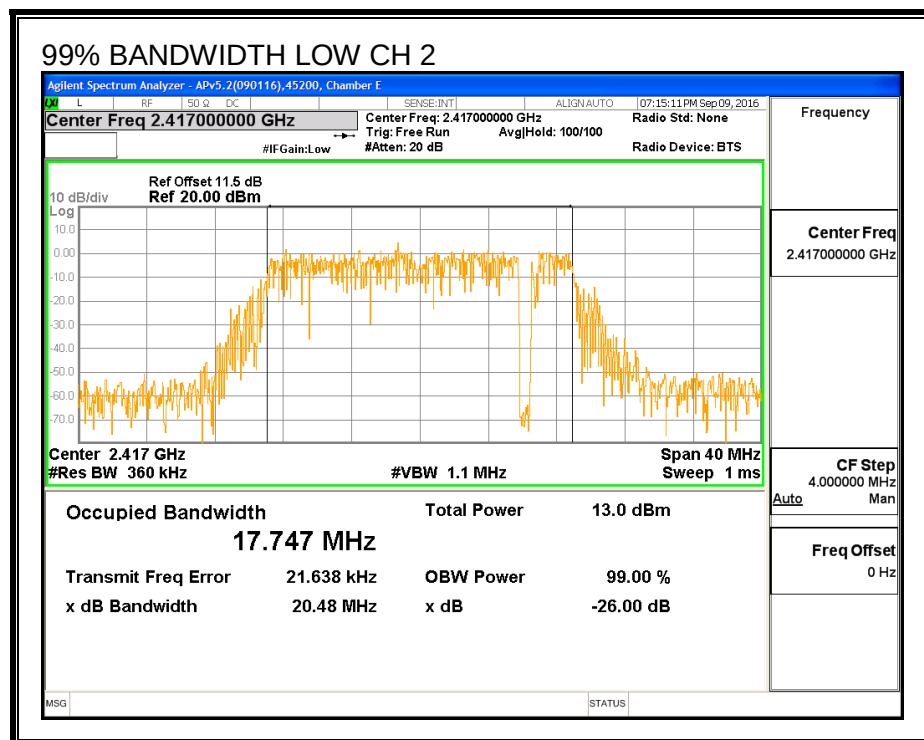
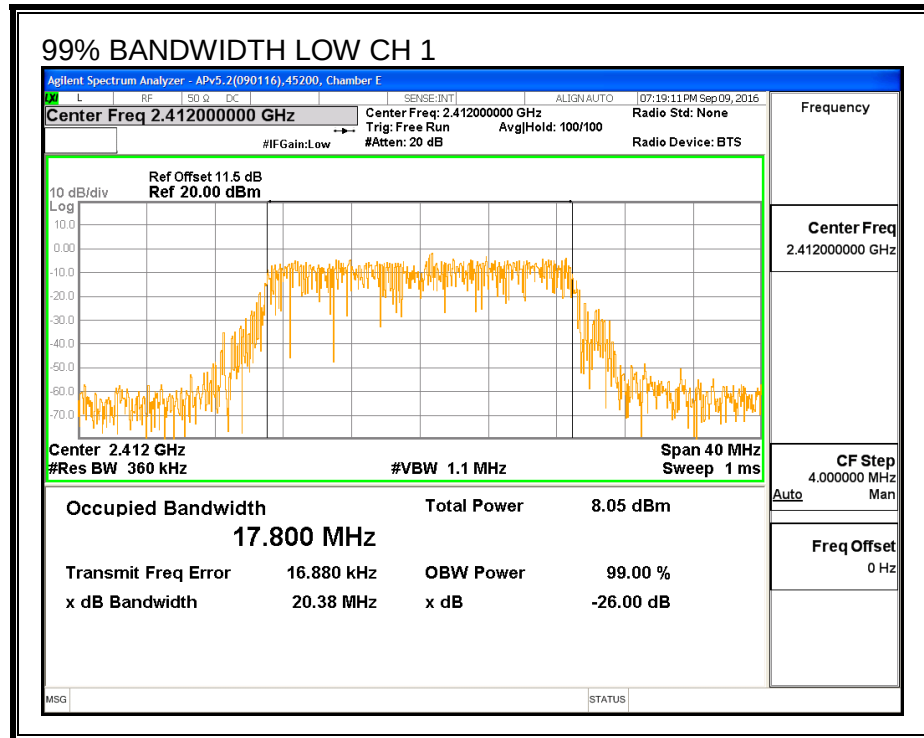


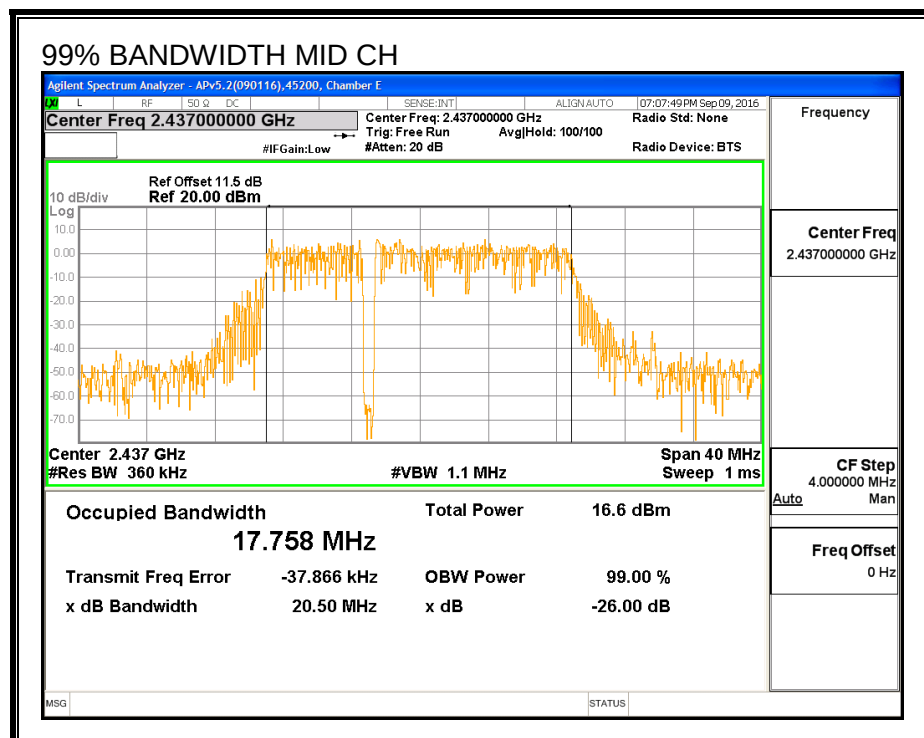
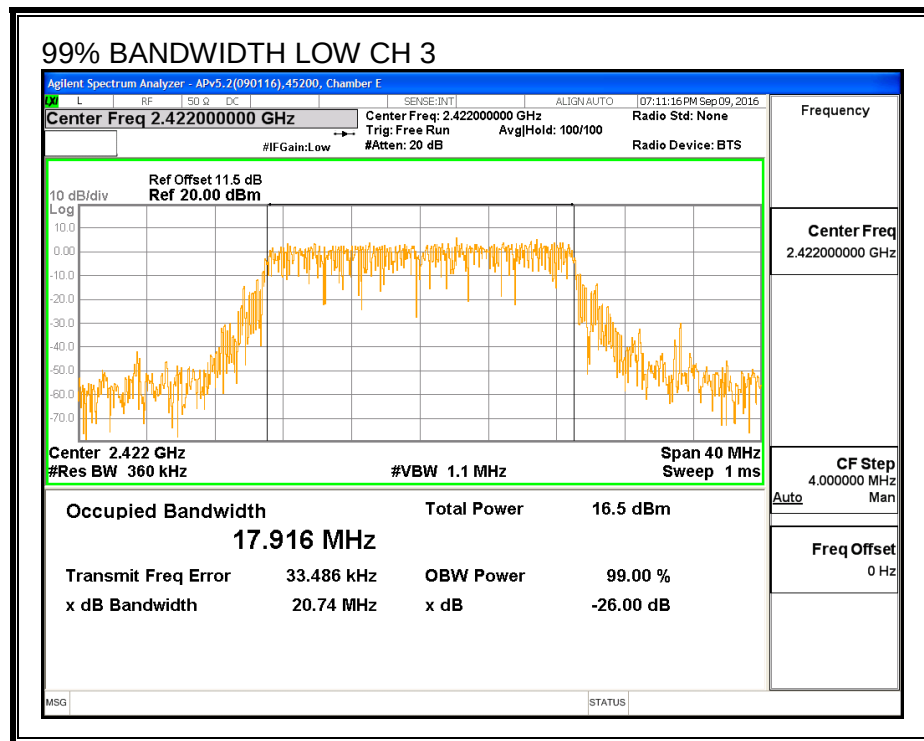


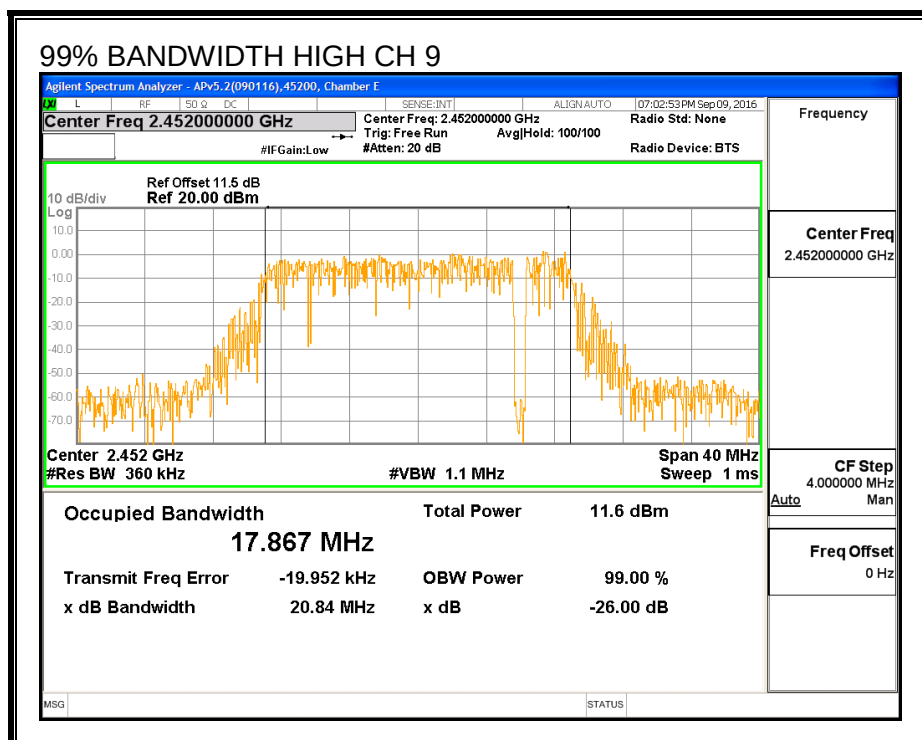
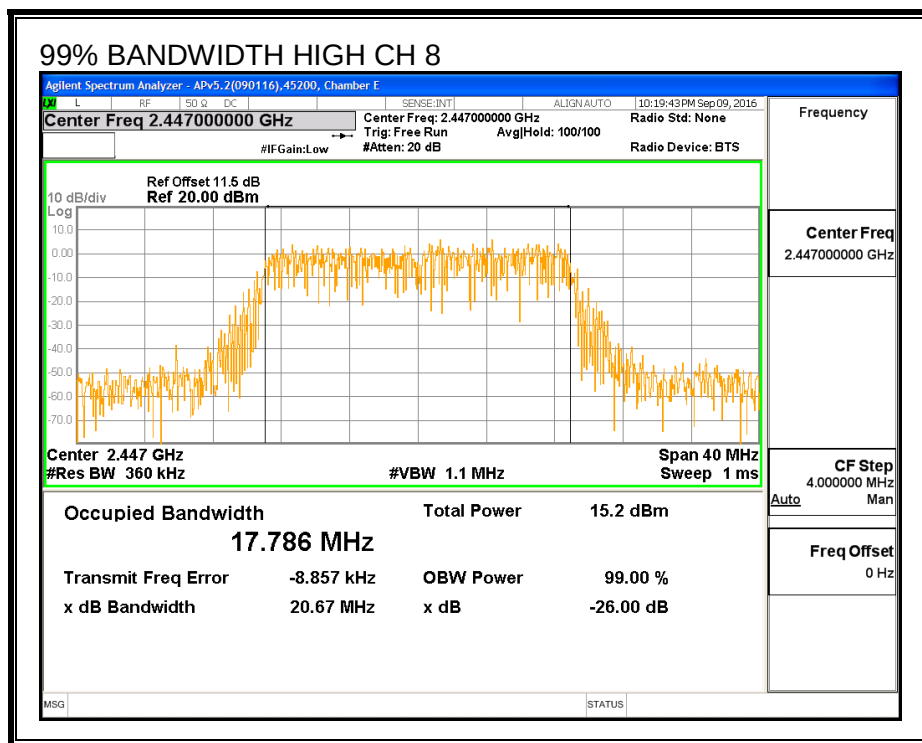


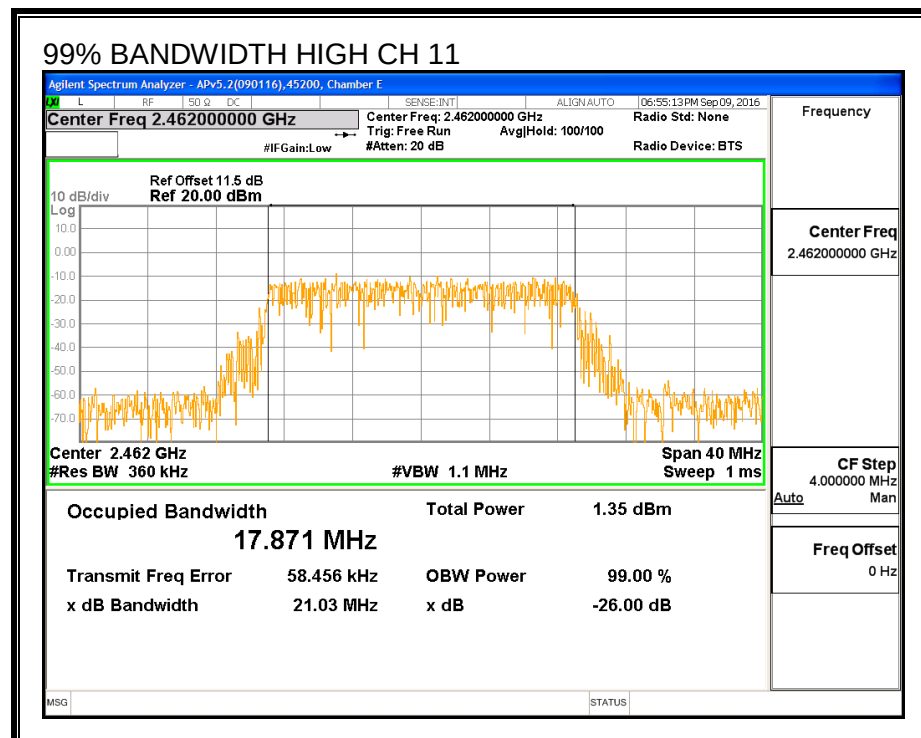
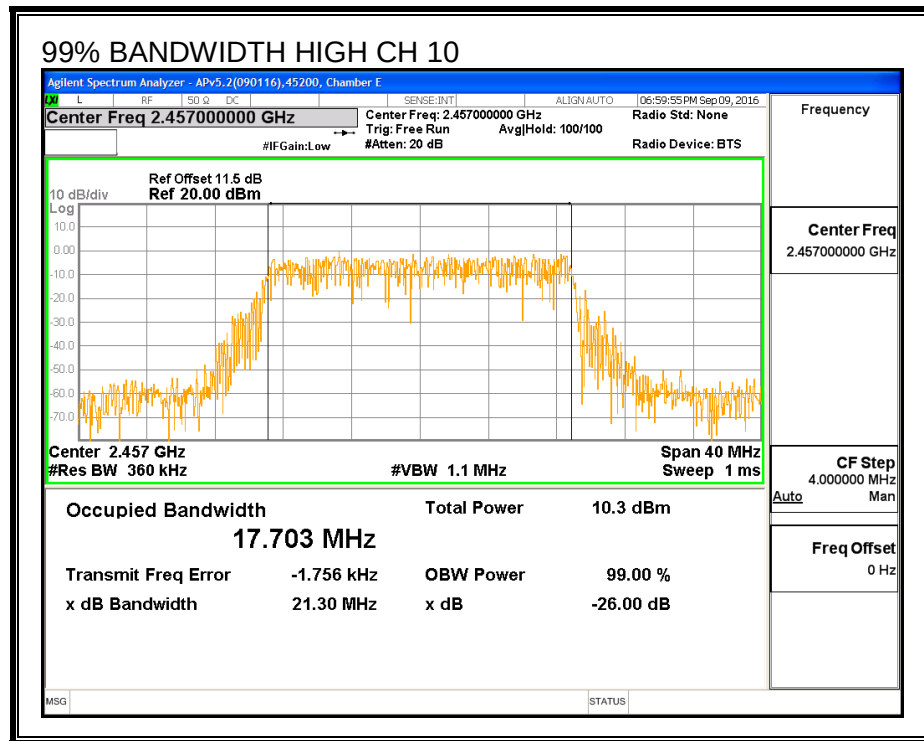


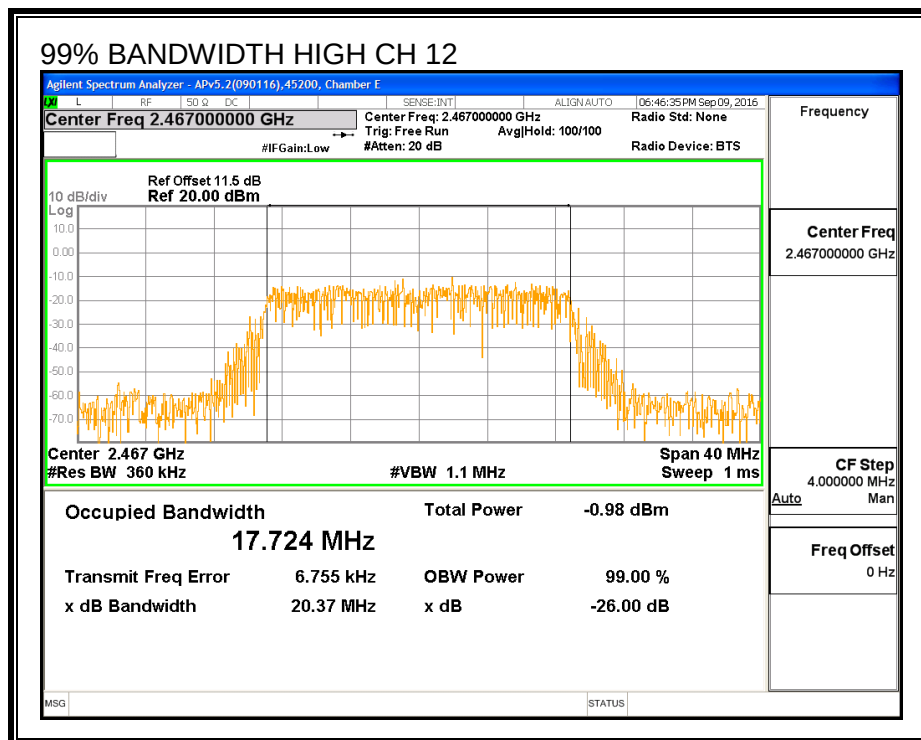
99% BANDWIDTH, Chain 2











8.25.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Chain 2 Power (dBm)	Total Power (dBm)
Low_1	2412	7.99	7.77	7.87	12.65
Low_2	2417	13.49	13.40	13.42	18.21
Low_3	2422	16.45	16.27	16.45	21.16
Mid_6	2437	16.49	16.38	16.46	21.21
High_8	2447	14.98	14.87	14.90	19.69
High_9	2452	11.49	11.44	11.38	16.21
High_10	2457	10.00	10.00	9.79	14.70
High_11	2462	1.45	1.48	1.40	6.21
High_12	2467	-1.01	-1.01	-1.23	3.69

8.25.4. OUTPUT POWER

LIMITS

FCC §15.247

IC RSS-247 (5.4) (4)

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

The TX chains are correlated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
2.1	3.3	2.1	7.3

RESULTS

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low_1	2412	7.29	28.71	30	36	28.71
Low_2	2417	7.29	28.71	30	36	28.71
Low_3	2422	7.29	28.71	30	36	28.71
Mid_6	2437	7.29	28.71	30	36	28.71
High_8	2447	7.29	28.71	30	36	28.71
High_9	2452	7.29	28.71	30	36	28.71
High_10	2457	7.29	28.71	30	36	28.71
High_11	2462	7.29	28.71	30	36	28.71
High_12	2467	7.29	28.71	30	36	28.71

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power
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Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low_1	2412	11.09	11.10	10.99	15.83	28.71	-12.88
Low_2	2417	16.18	16.83	16.45	21.27	28.71	-7.44
Low_3	2422	19.12	19.81	19.57	24.28	28.71	-4.43
Mid_6	2437	19.47	19.93	19.62	24.45	28.71	-4.26
High_8	2447	18.72	18.43	18.12	23.20	28.71	-5.51
High_9	2452	15.29	15.29	14.84	19.92	28.71	-8.79
High_10	2457	13.74	13.24	13.53	18.28	28.71	-10.43
High_11	2462	4.66	4.81	4.61	9.47	28.71	-19.24
High_12	2467	2.46	2.30	2.21	7.10	28.71	-21.61

8.25.5. POWER SPECTRAL DENSITY

LIMITS

FCC §15.247

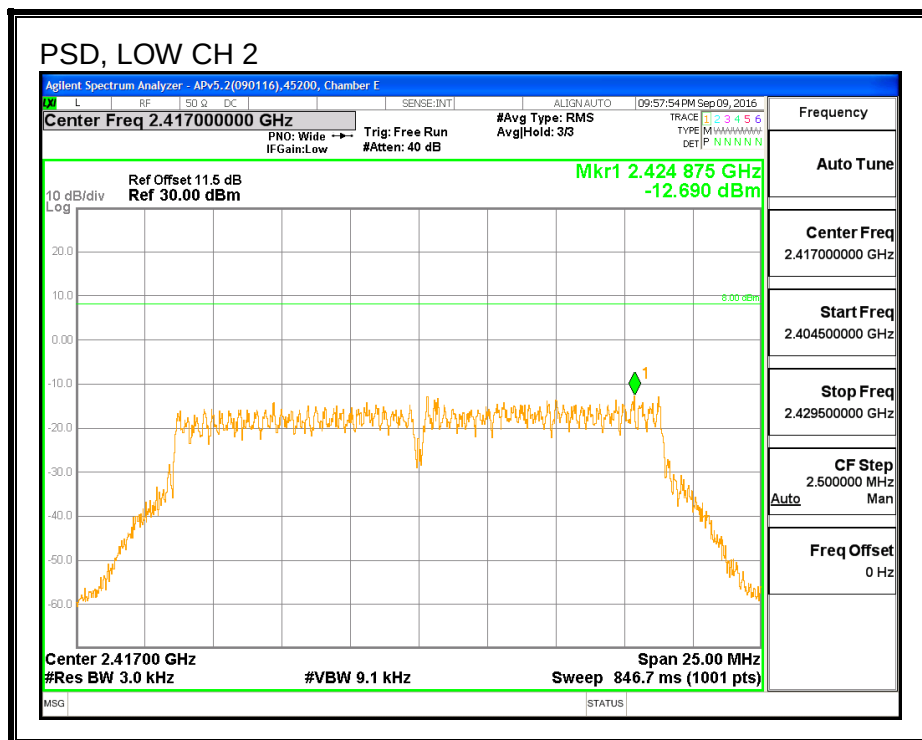
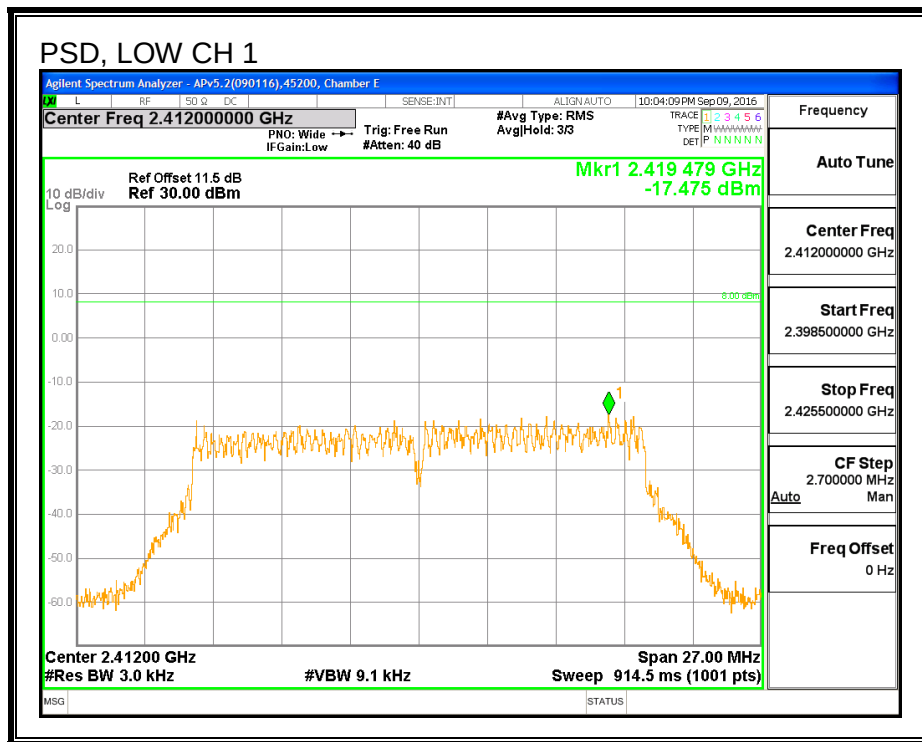
IC RSS-247 (5.2) (2)

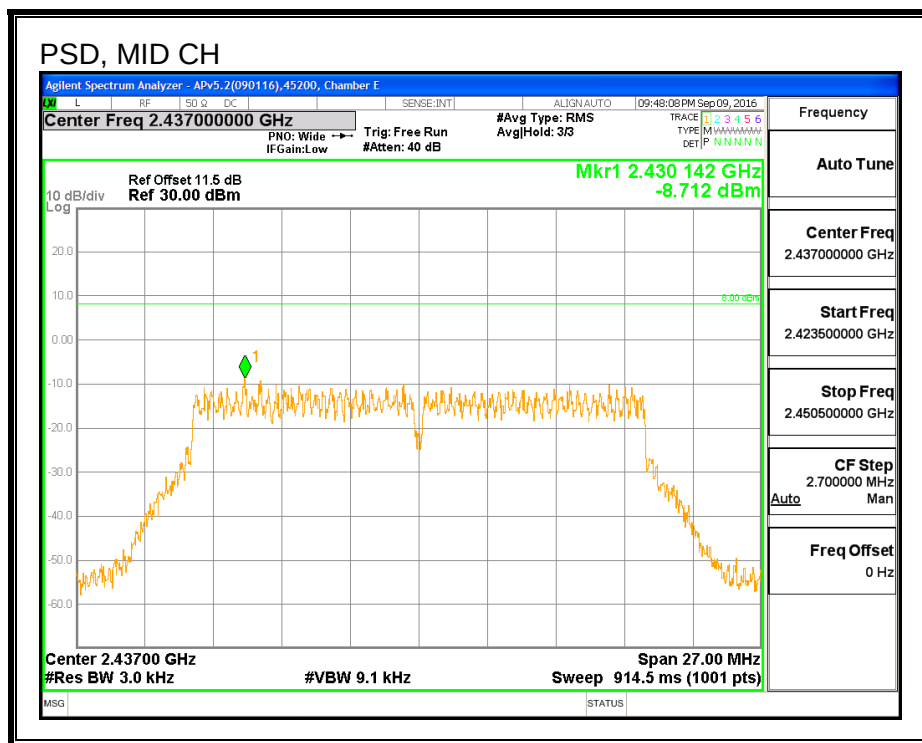
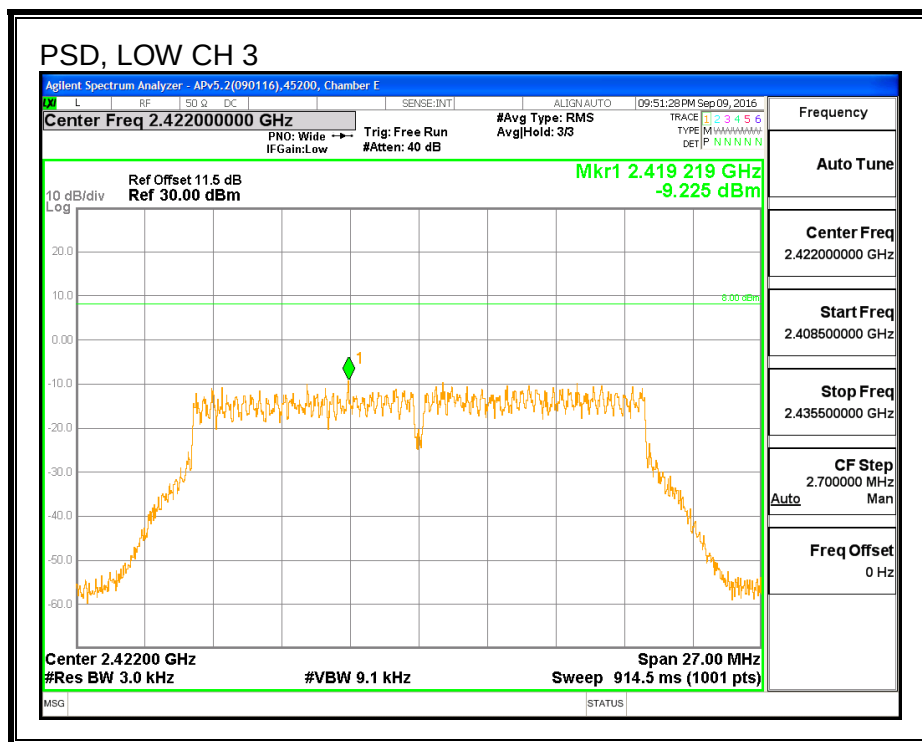
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 KHz band during any time interval of continuous transmissions.

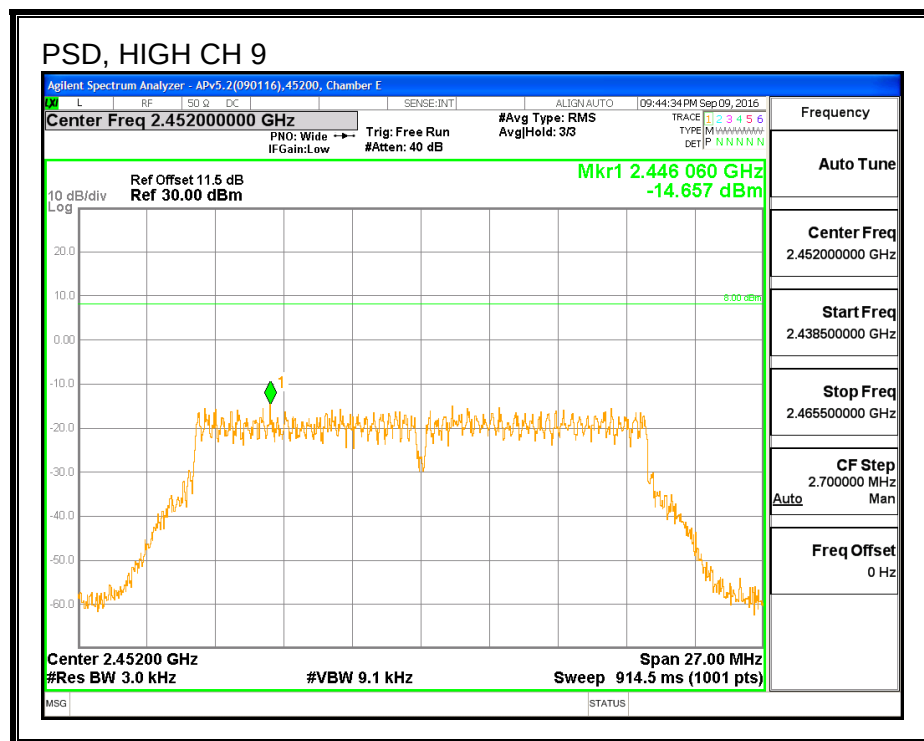
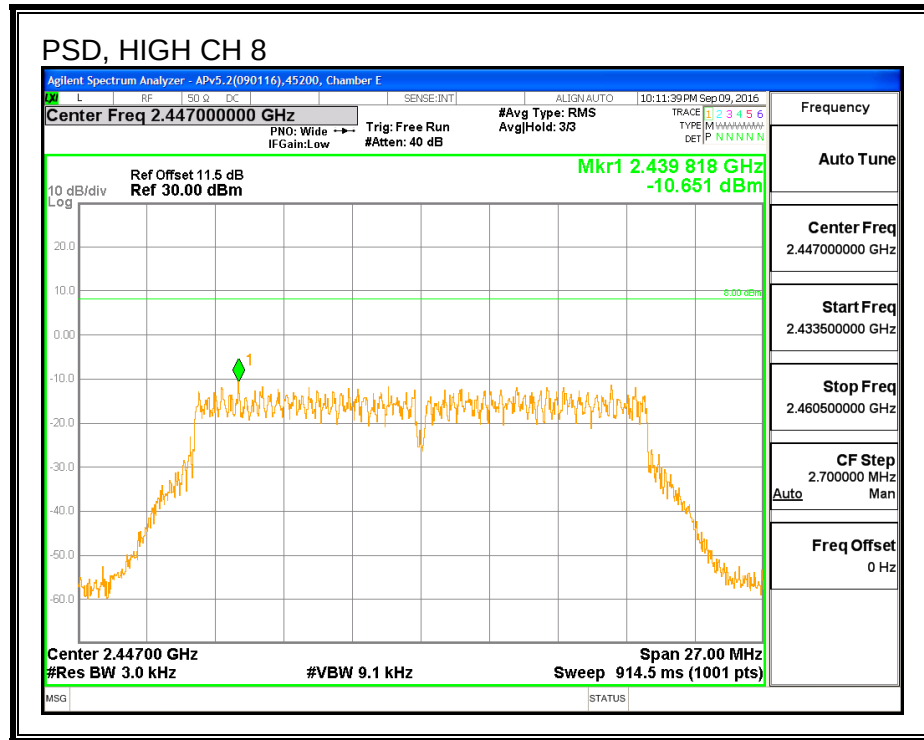
RESULTS

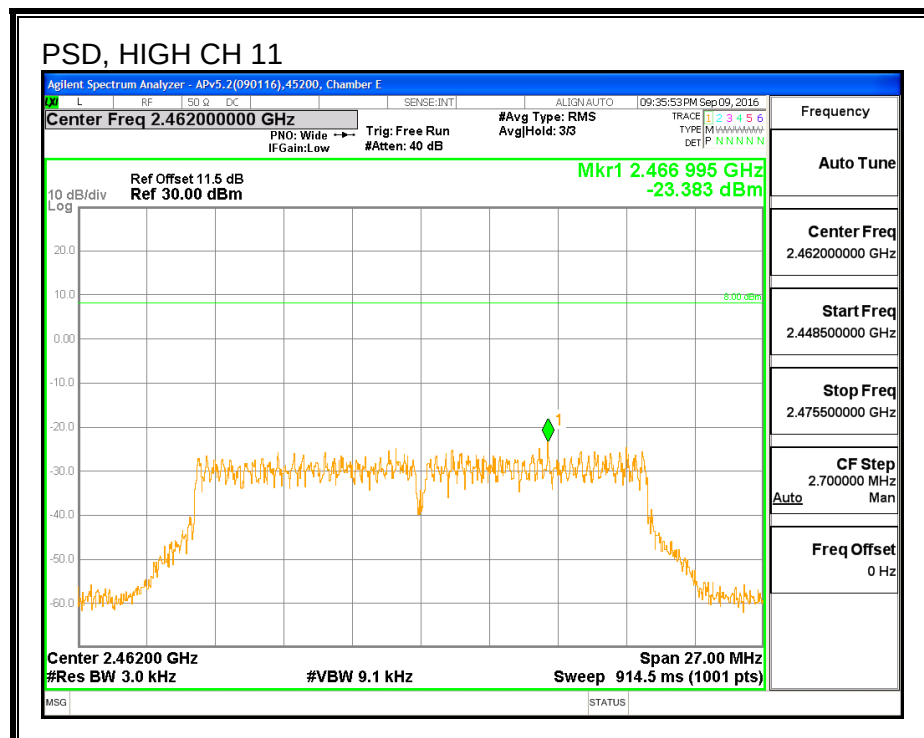
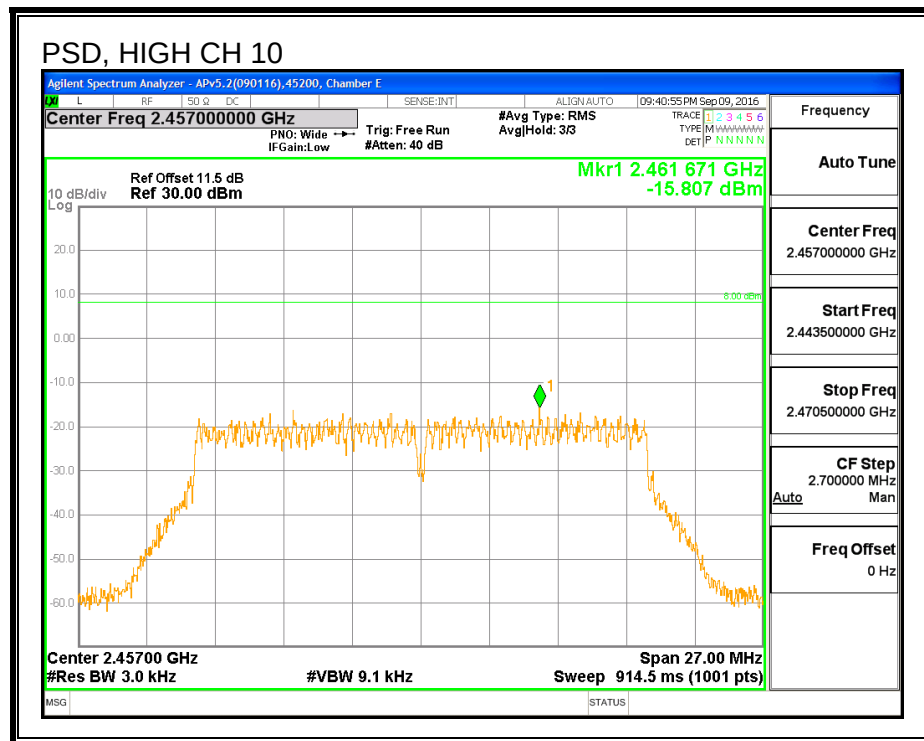
PSD Results							
Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Chain 1 Meas (dBm)	Chain 2 Meas (dBm)	Total Corr'd PSD (dBm)	Limit (dBm)	Margin (dB)
Low_1	2412	-17.75	-17.50	-18.03	-12.98	8.0	-21.0
Low_2	2417	-12.69	-12.68	-13.03	-8.03	8.0	-16.0
Low_3	2422	-9.23	-9.92	-9.85	-4.88	8.0	-12.9
Mid_6	2437	-8.71	-9.57	-9.33	-4.42	8.0	-12.4
High_8	2447	-10.65	-11.60	-10.82	-6.23	8.0	-14.2
High_9	2452	-14.66	-14.56	-14.46	-9.79	8.0	-17.8
High_10	2457	-15.81	-16.43	-16.23	-11.38	8.0	-19.4
High_11	2462	-23.38	-23.42	-24.79	-19.05	8.0	-27.0
High_12	2467	-24.74	-27.18	-26.40	-21.21	8.0	-29.2

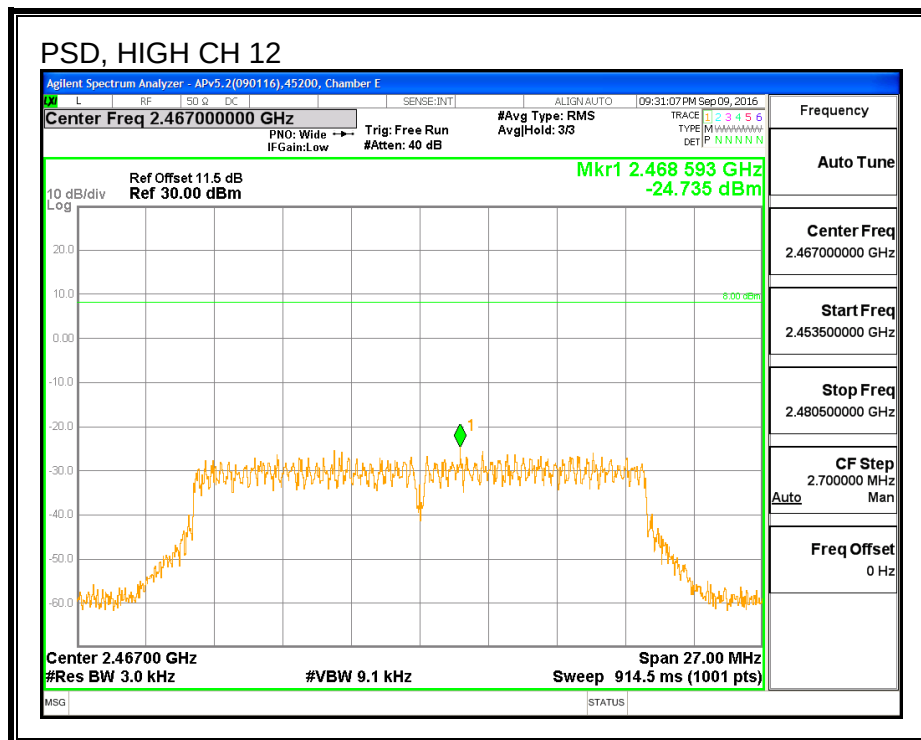
PSD, Chain 0



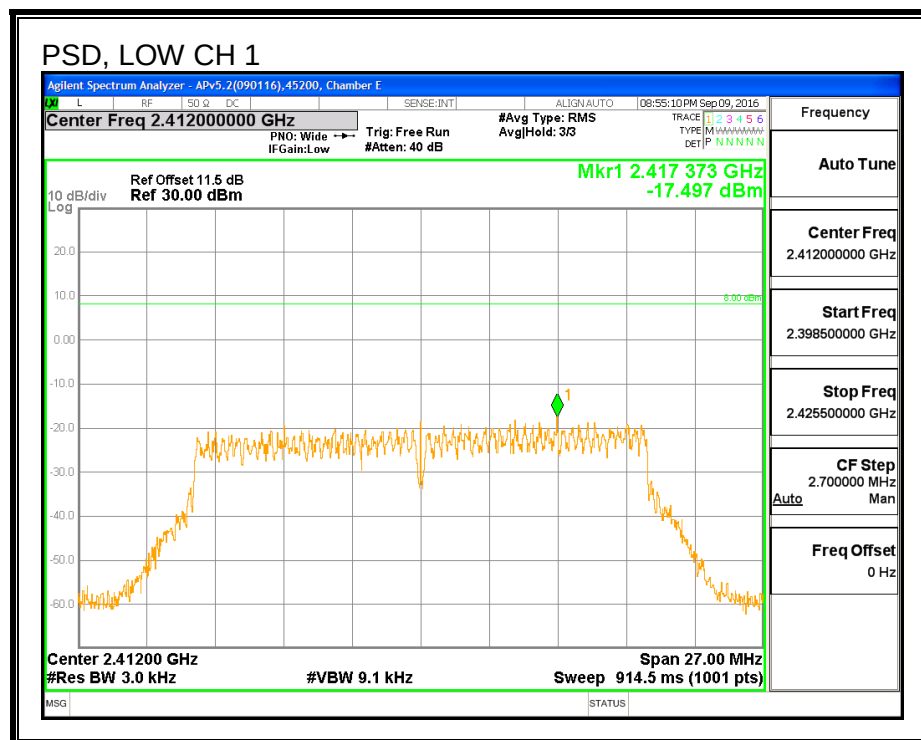


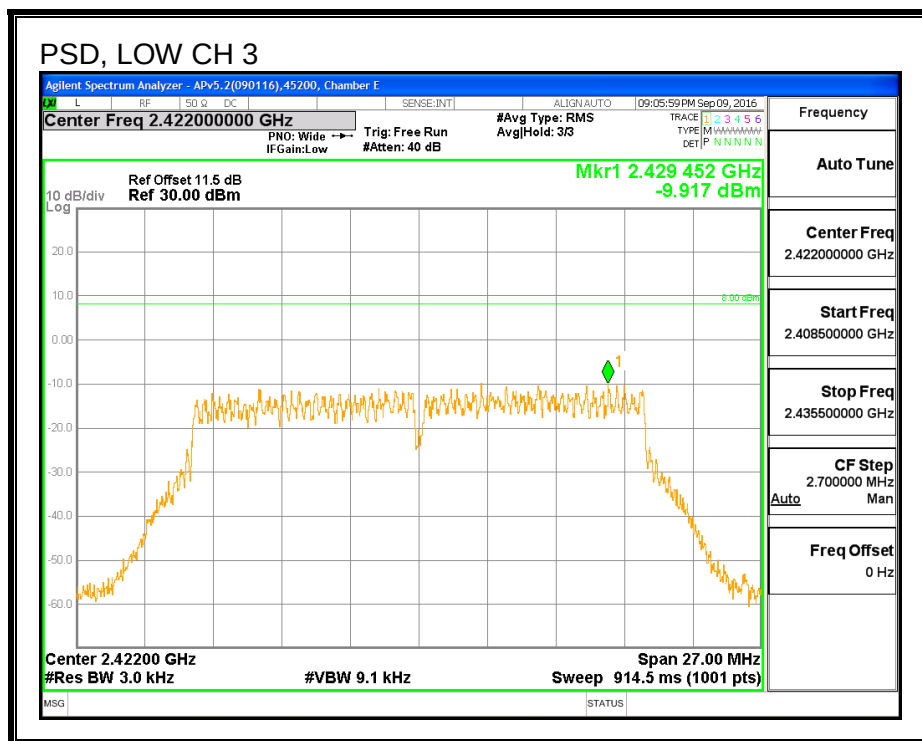
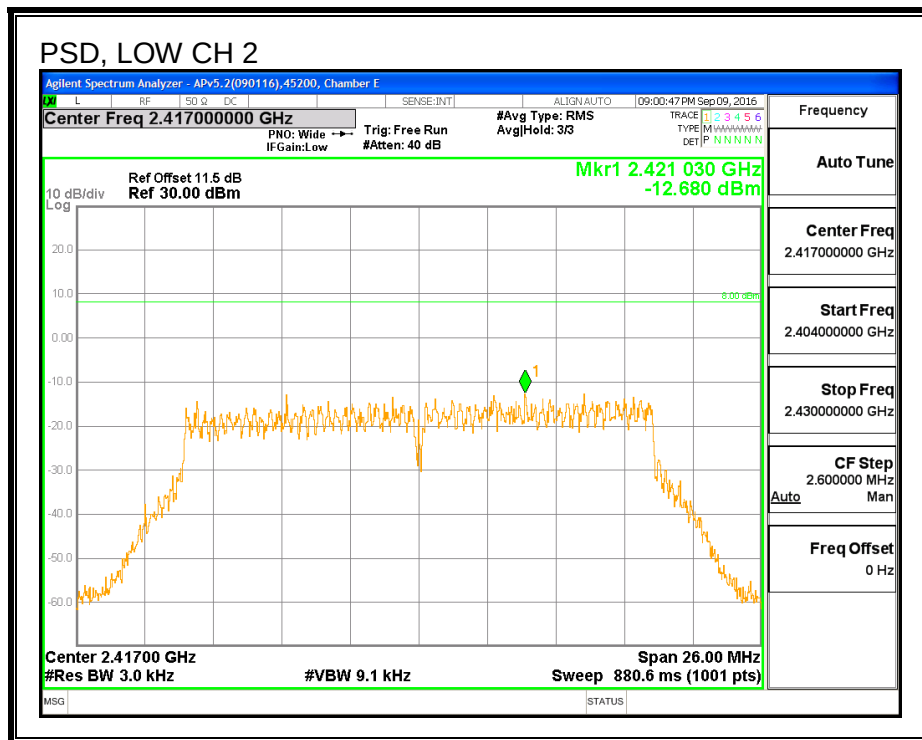


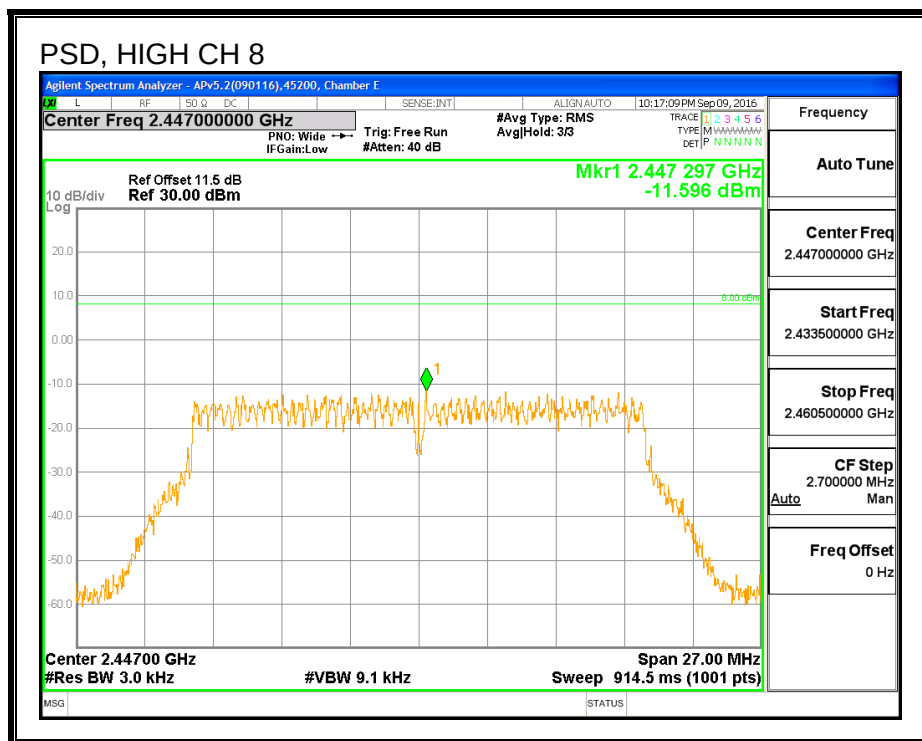
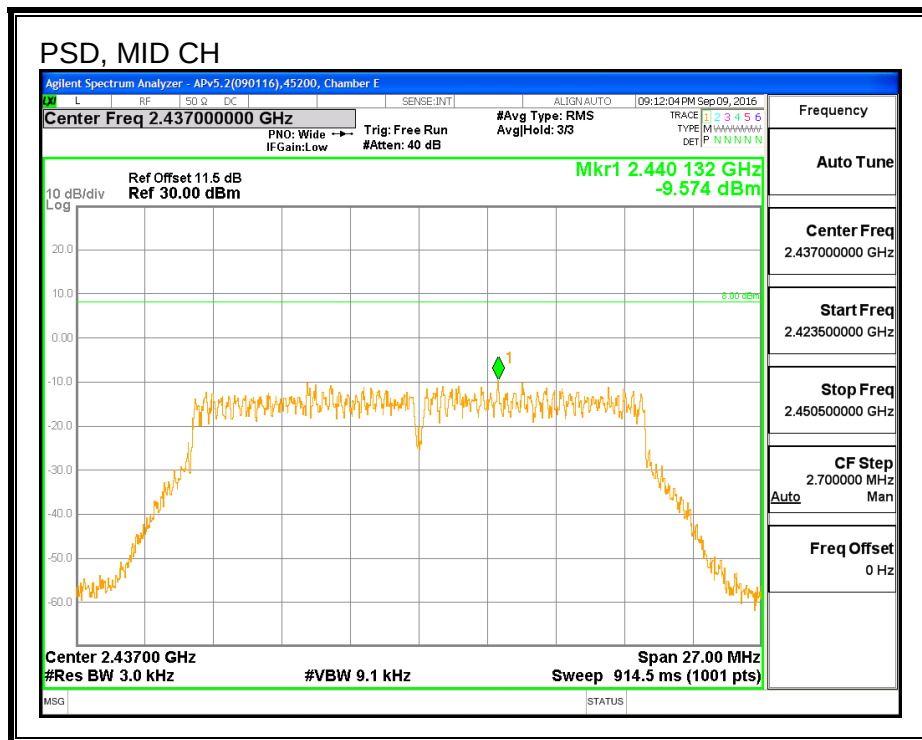


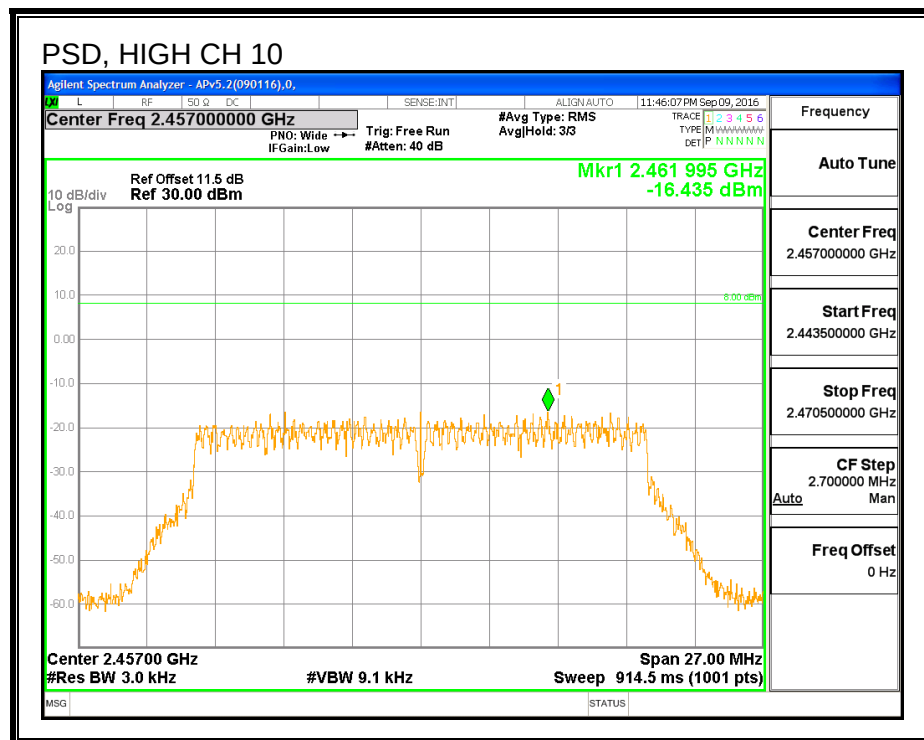
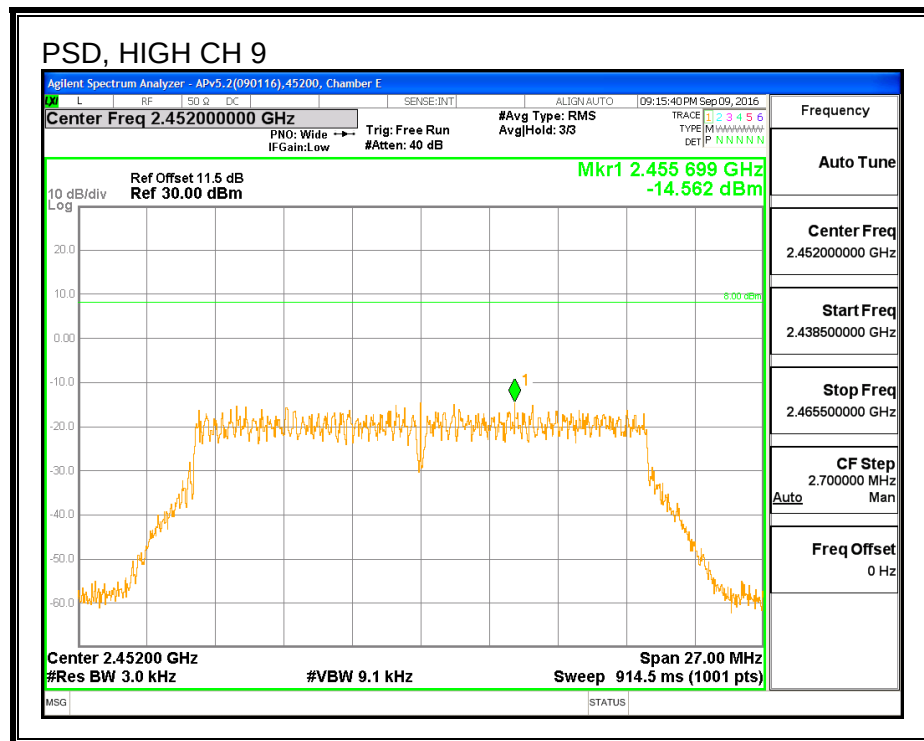


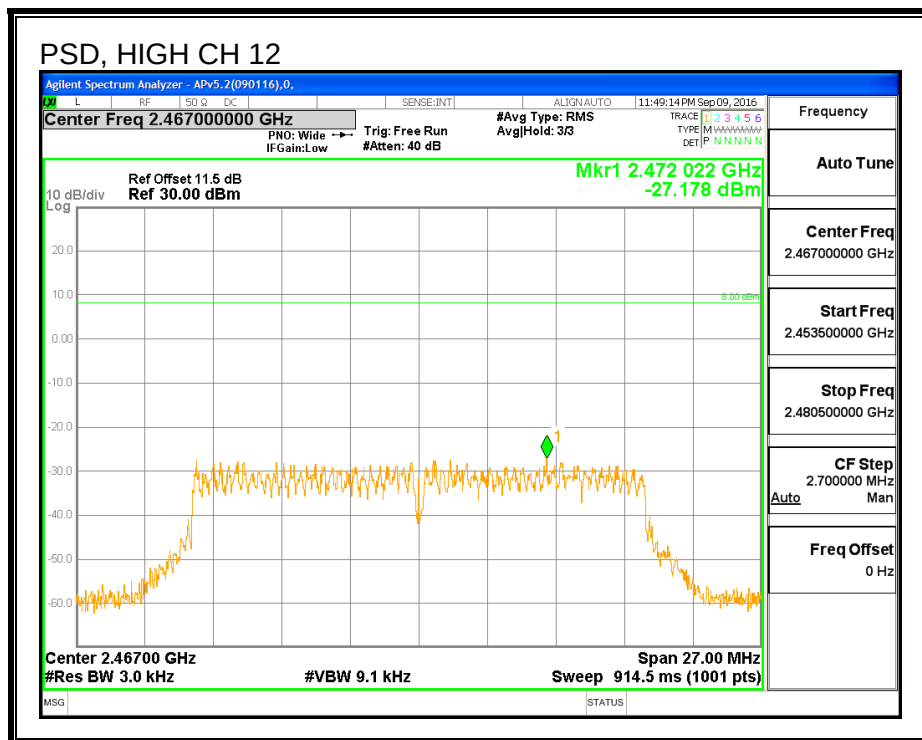
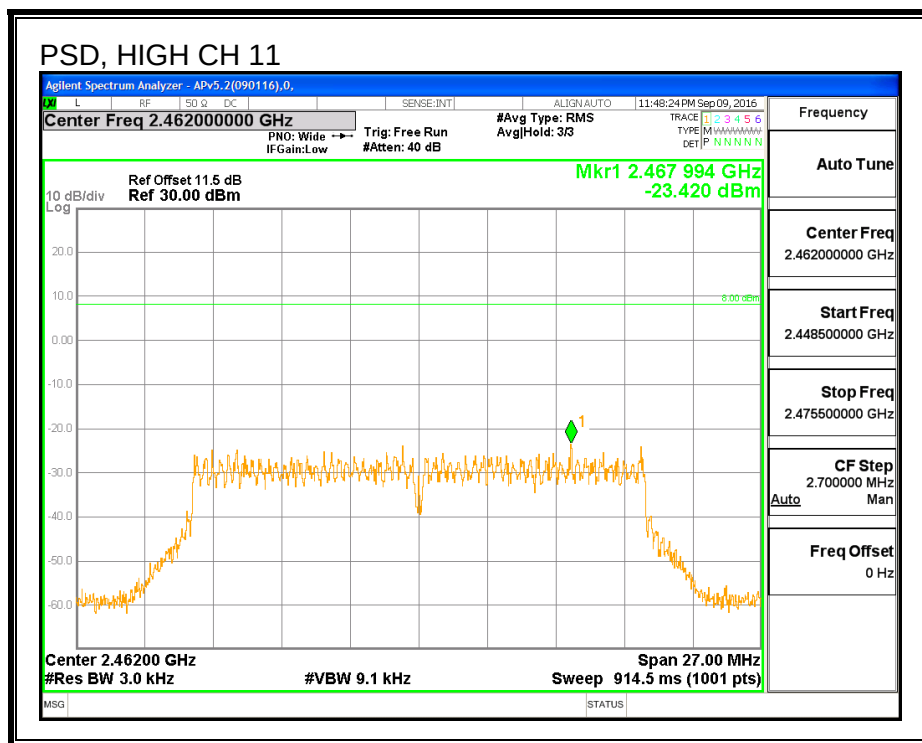
PSD, Chain 1











PSD, Chain 2

