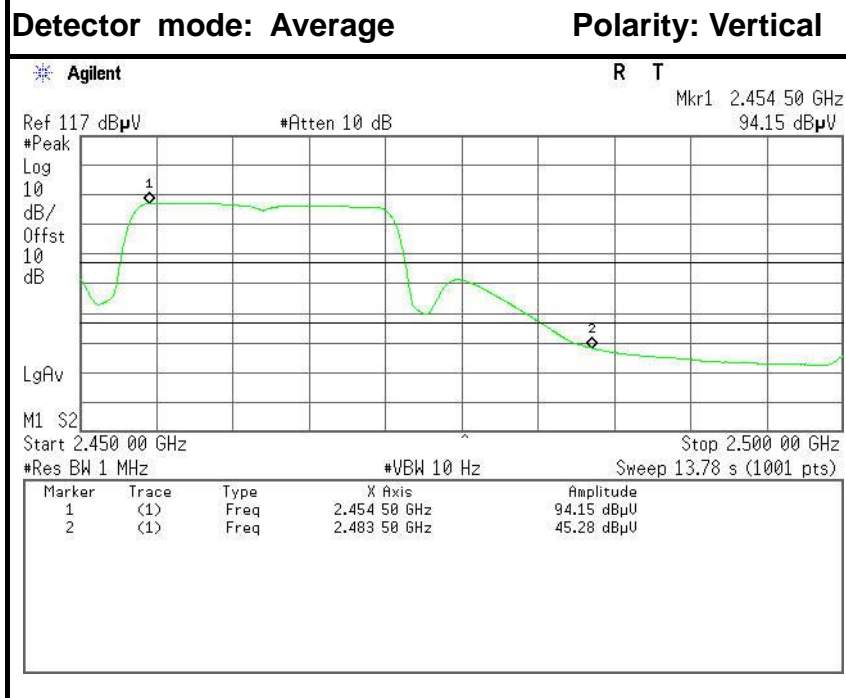
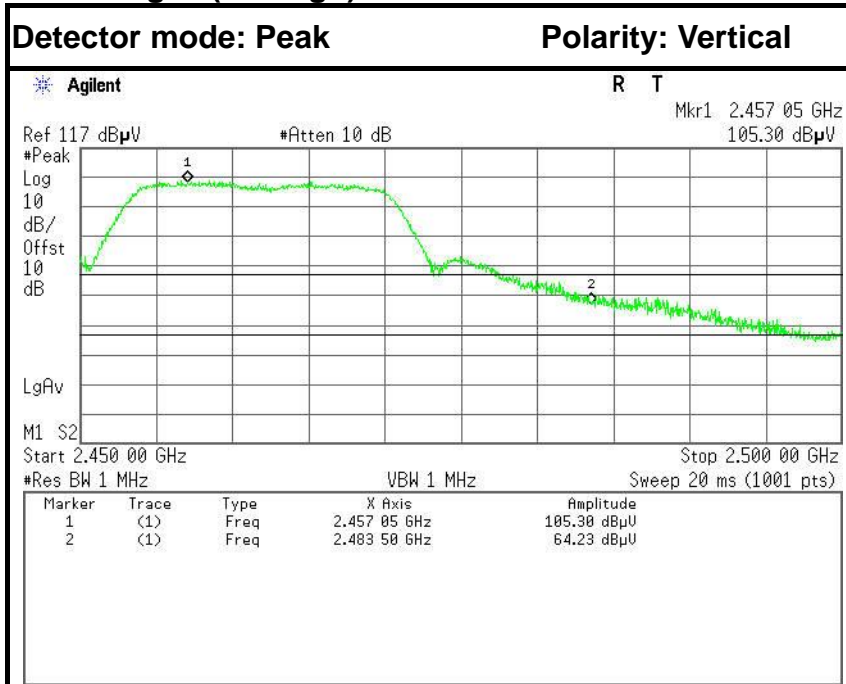


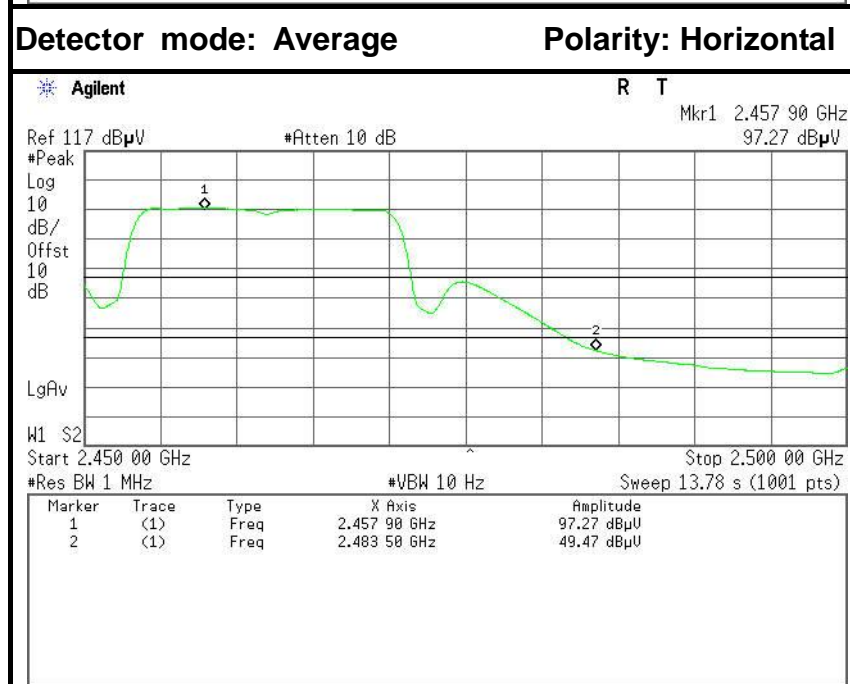
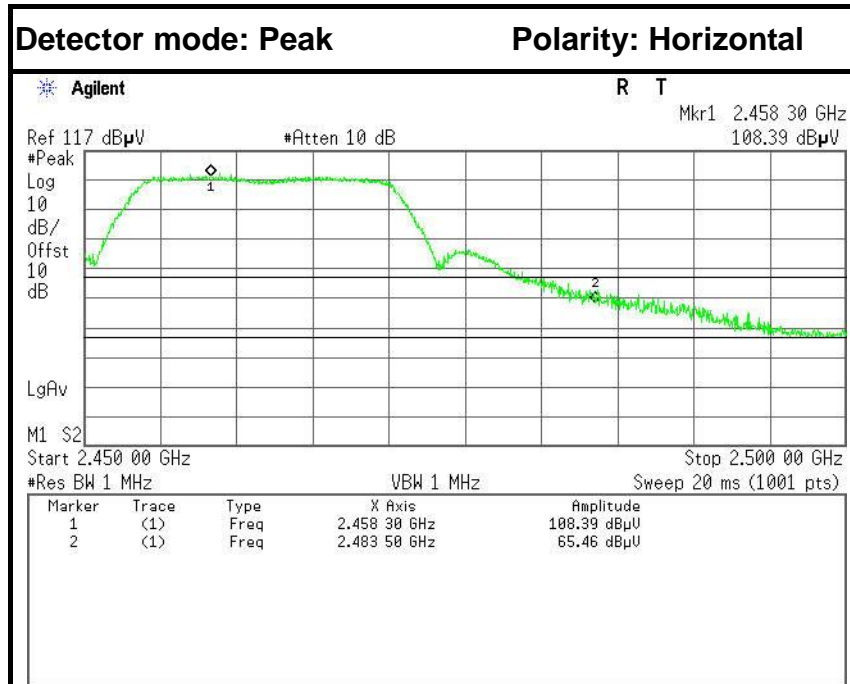
No.	Frequency (MHz)	Reading (dBuV)	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Antenna Pole
1	2390.0000	60.40	-6.60	67.00	74.00	-7.00	Peak	Horizontal
2	2390.0000	43.09	-6.60	49.69	54.00	-4.31	Average	Horizontal



Band Edges (CH High)



No.	Frequency (MHz)	Reading (dBuV)	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	57.99	-6.24	64.23	74.00	-9.77	Peak	Vertical
2	2483.5000	39.04	-6.24	45.28	54.00	-8.72	Average	Vertical

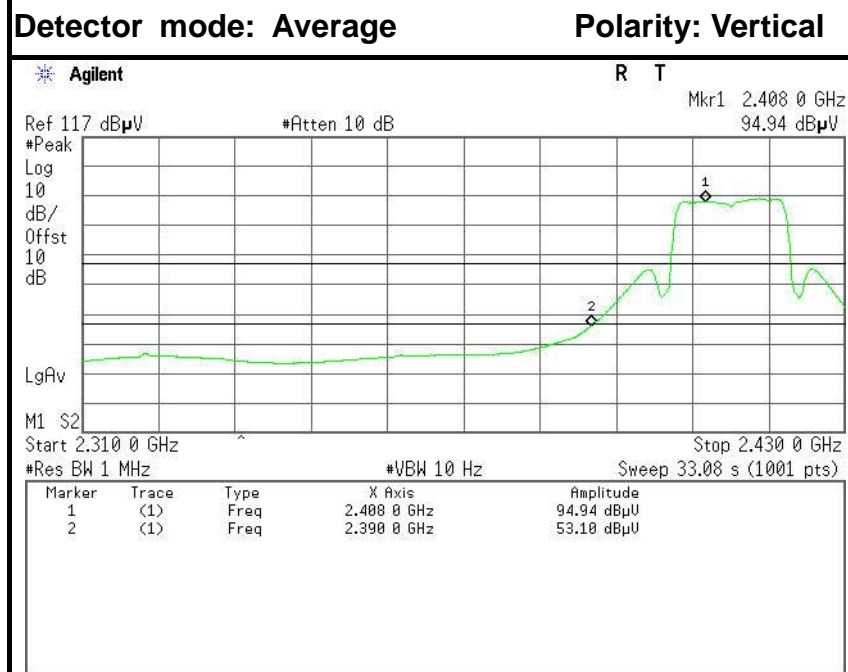
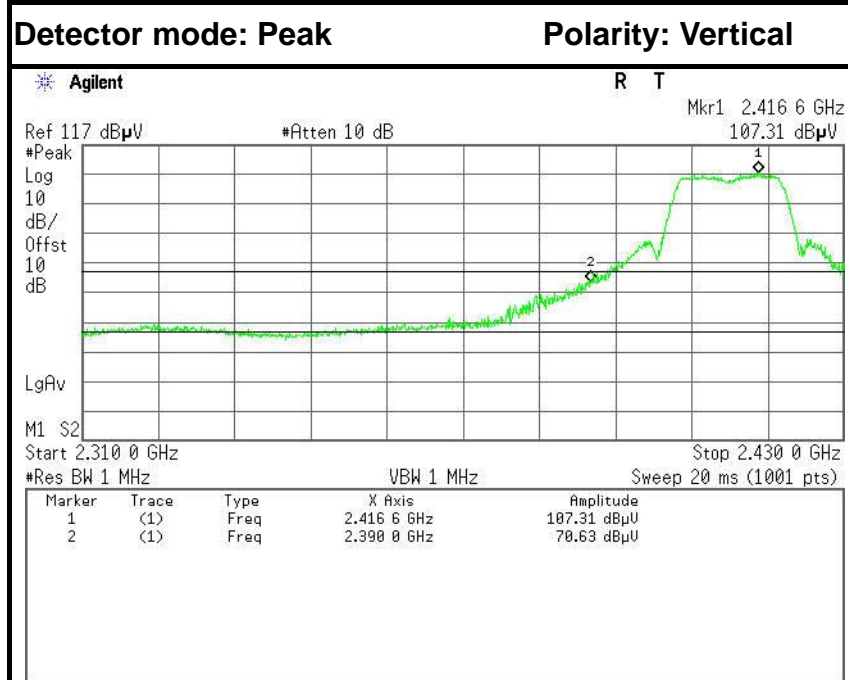


No.	Frequency (MHz)	Reading (dBuV)	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	59.22	-6.24	65.46	74.00	-8.54	Peak	Horizontal
2	2483.5000	43.23	-6.24	49.47	54.00	-4.53	Average	Horizontal

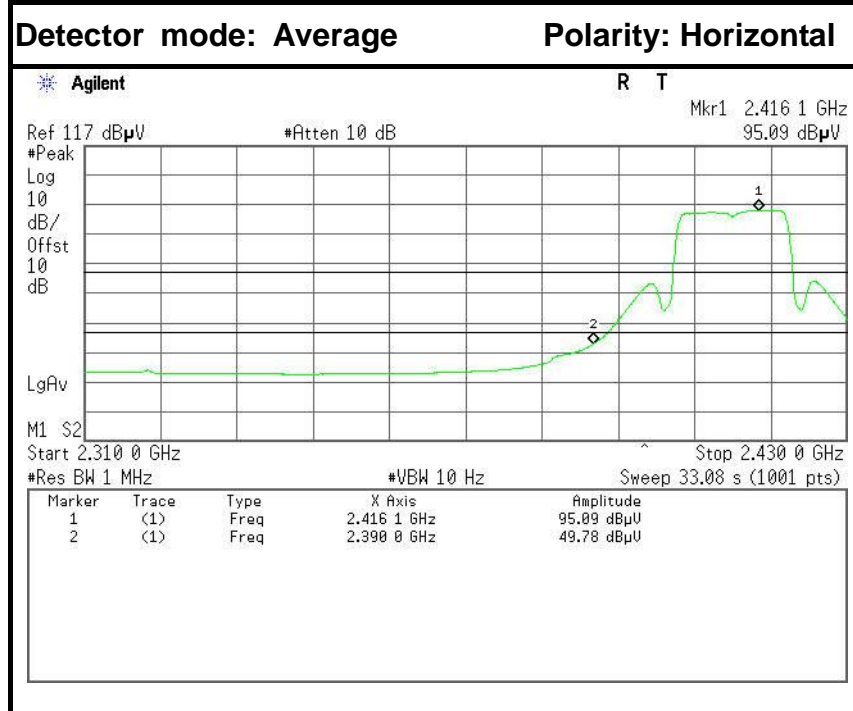
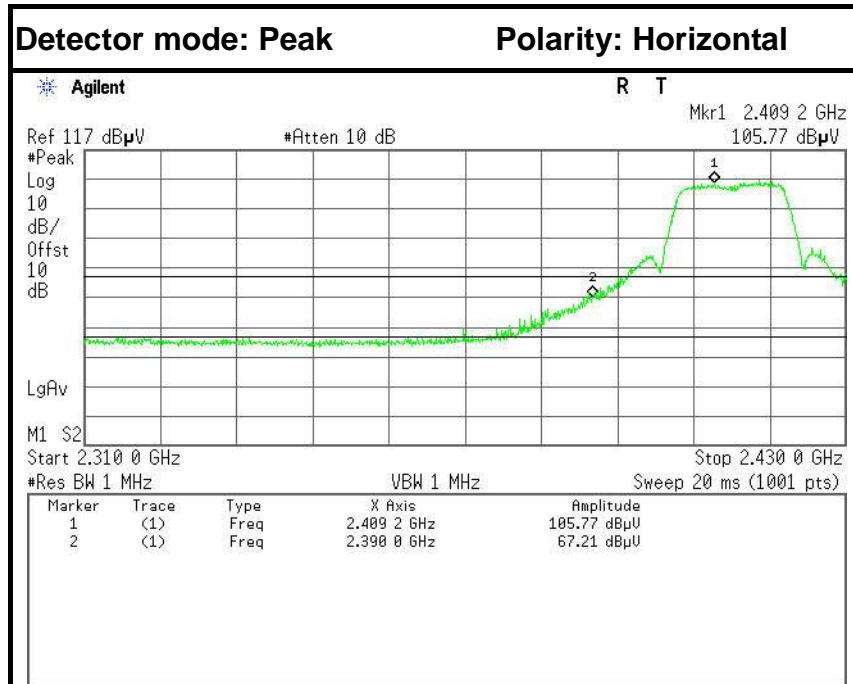


IEEE 802.11g mode (Antenna 2)

Band Edges (CH Low)



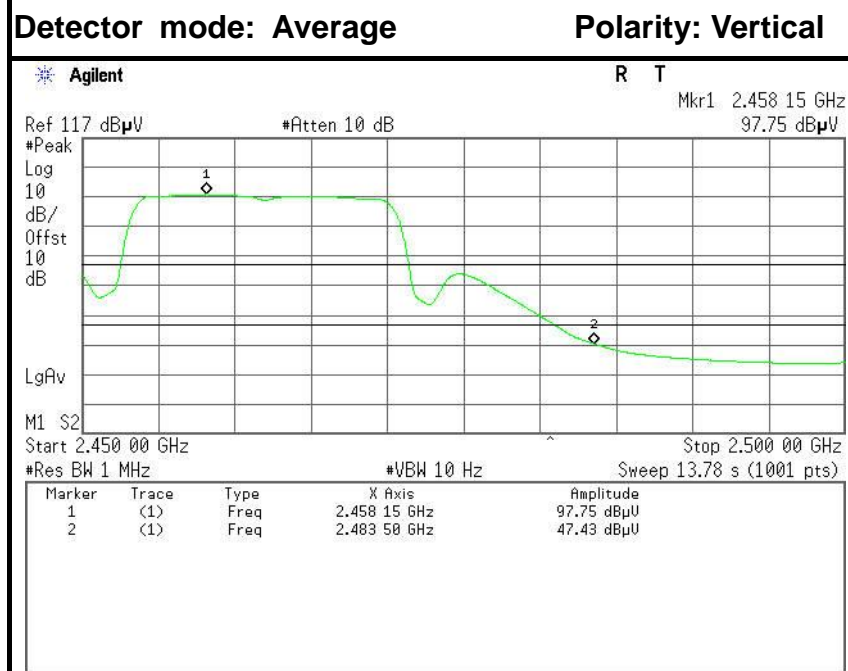
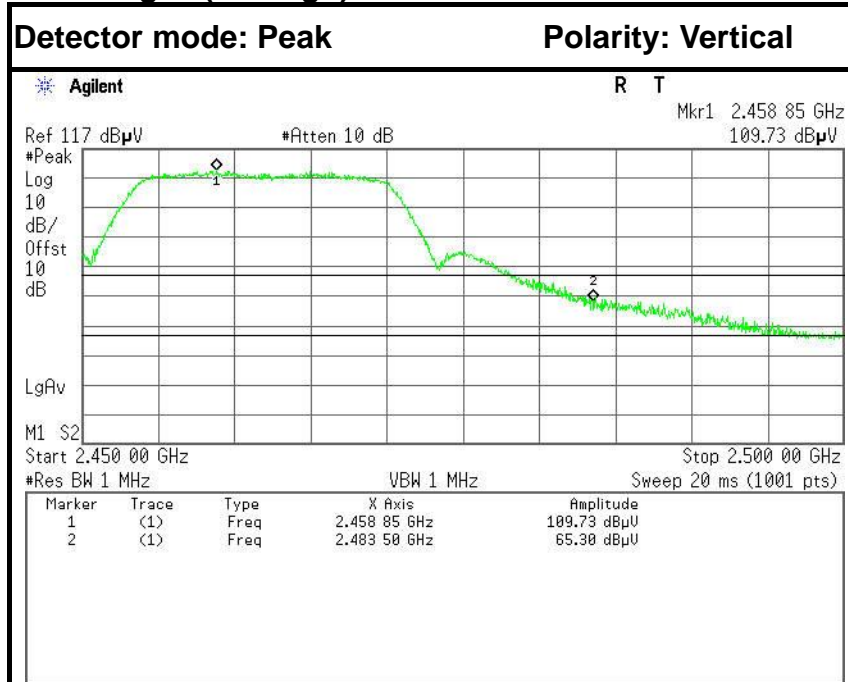
No.	Frequency (MHz)	Reading (dBuV)	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Antenna Pole
1	2390.0000	64.03	-6.60	70.63	74.00	-3.37	Peak	Vertical
2	2390.0000	46.50	-6.60	53.10	54.00	-0.90	Average	Vertical



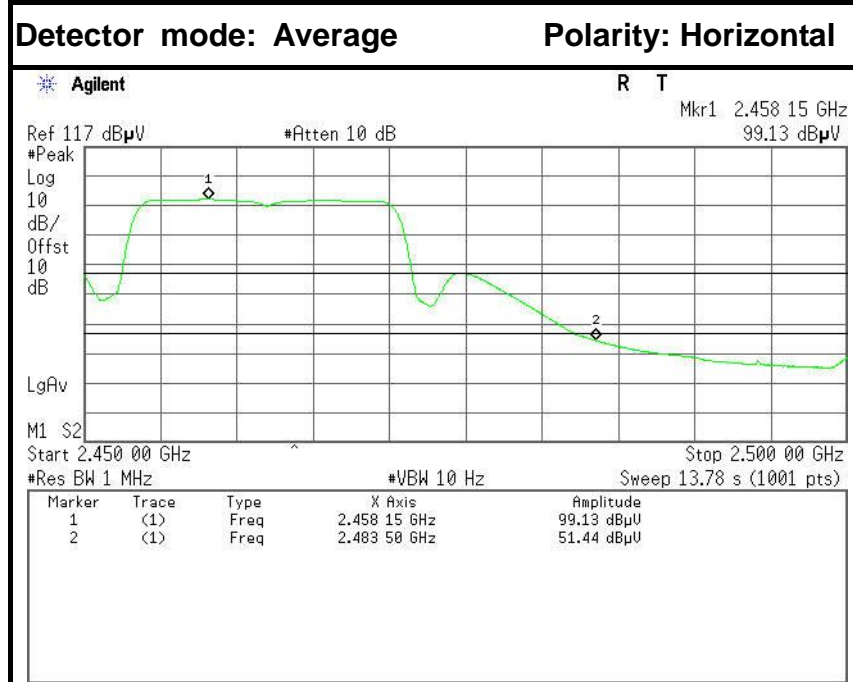
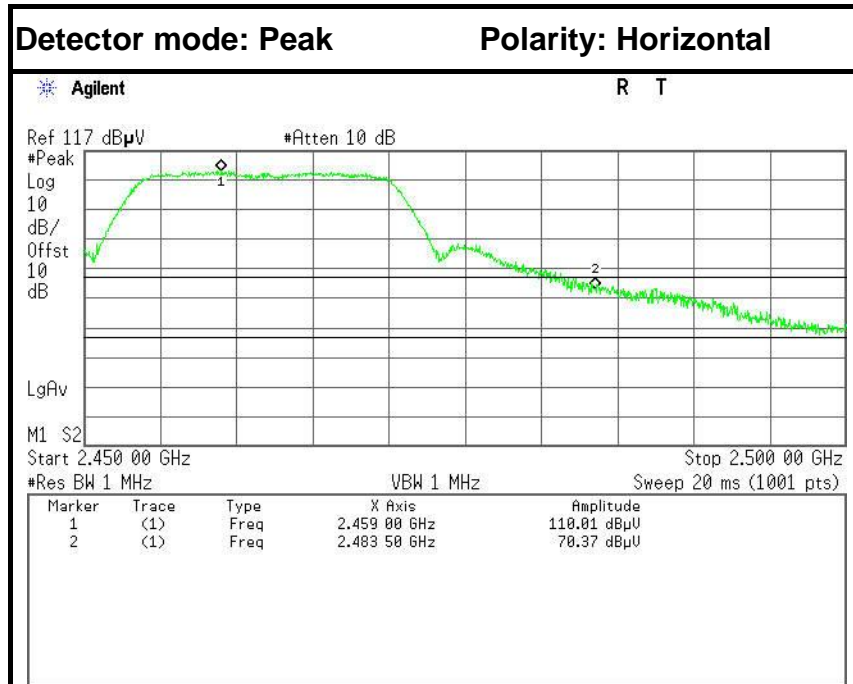
No.	Frequency (MHz)	Reading (dBuV)	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Antenna Pole
1	2390.0000	60.61	-6.60	67.21	74.00	-6.79	Peak	Horizontal
2	2390.0000	43.18	-6.60	49.78	54.00	-4.22	Average	Horizontal



Band Edges (CH High)



No.	Frequency (MHz)	Reading (dBuV)	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	59.06	-6.24	65.30	74.00	-8.70	Peak	Vertical
2	2483.5000	41.19	-6.24	47.43	54.00	-6.57	Average	Vertical

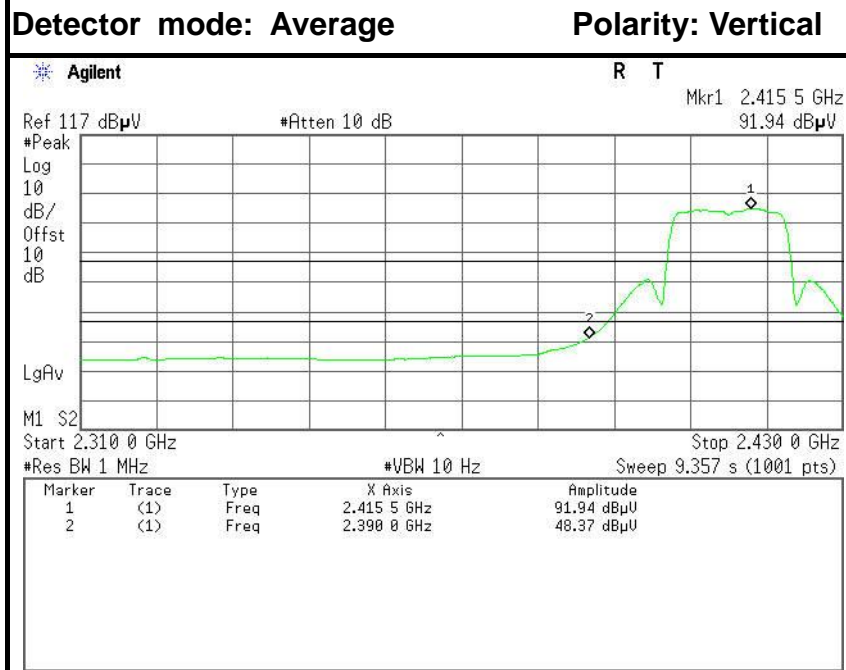
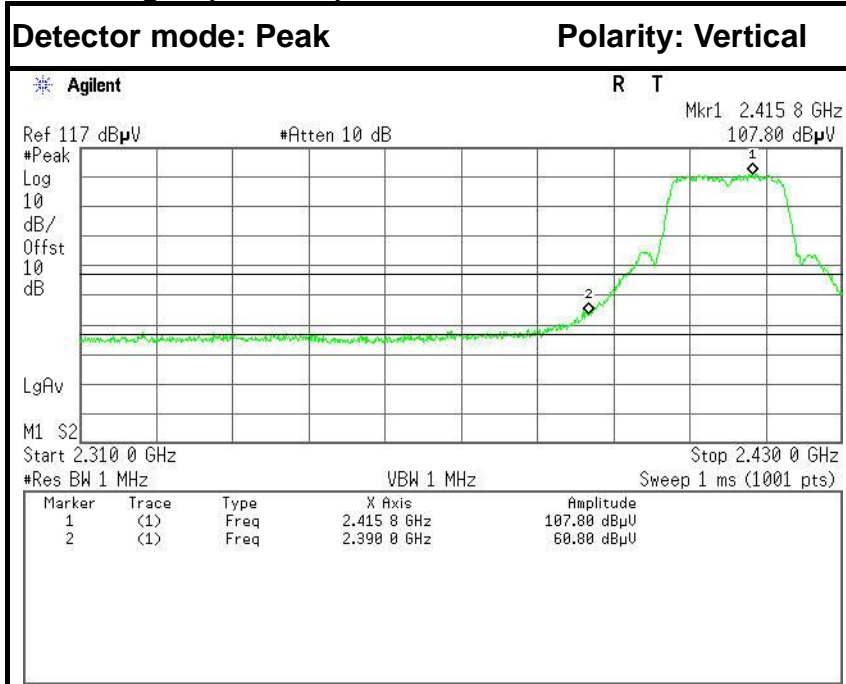


No.	Frequency (MHz)	Reading (dBuV)	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	64.13	-6.24	70.37	74.00	-3.63	Peak	Horizontal
2	2483.5000	45.20	-6.24	51.44	54.00	-2.56	Average	Horizontal

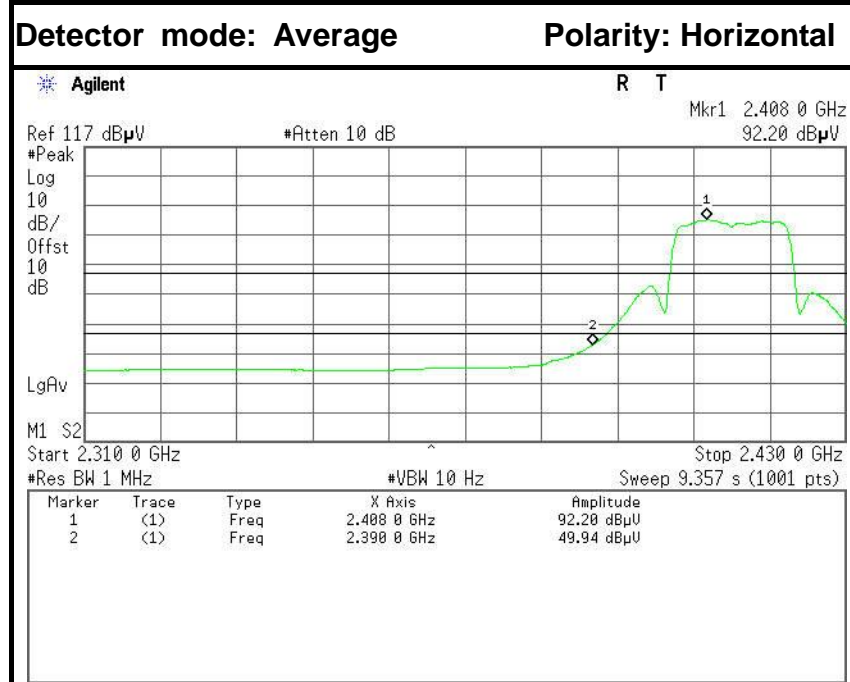
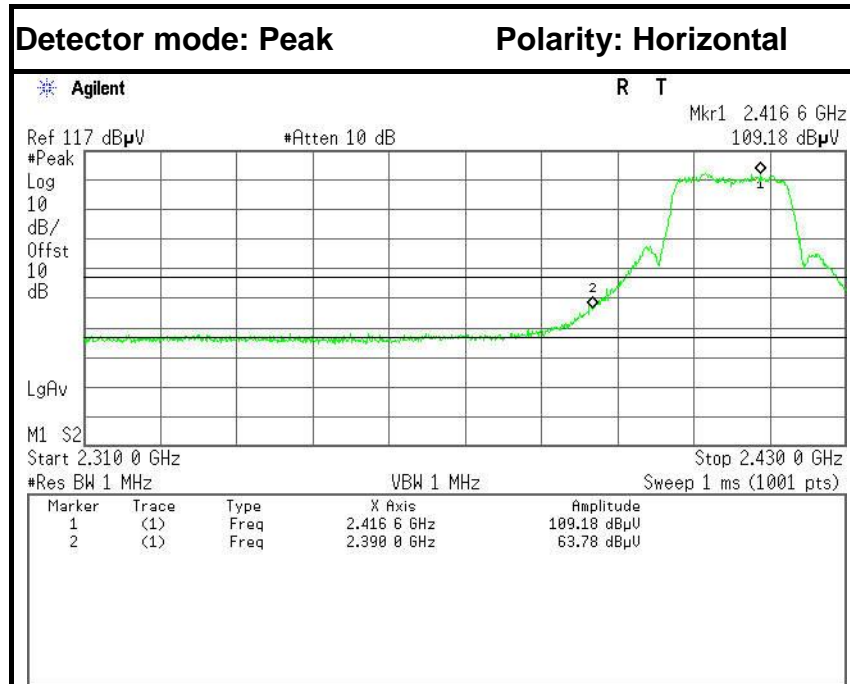


IEEE 802.11n HT20 MHz mode (Combine with Antenna 0 and Antenna 1 and Antenna 2)

Band Edges (CH Low)



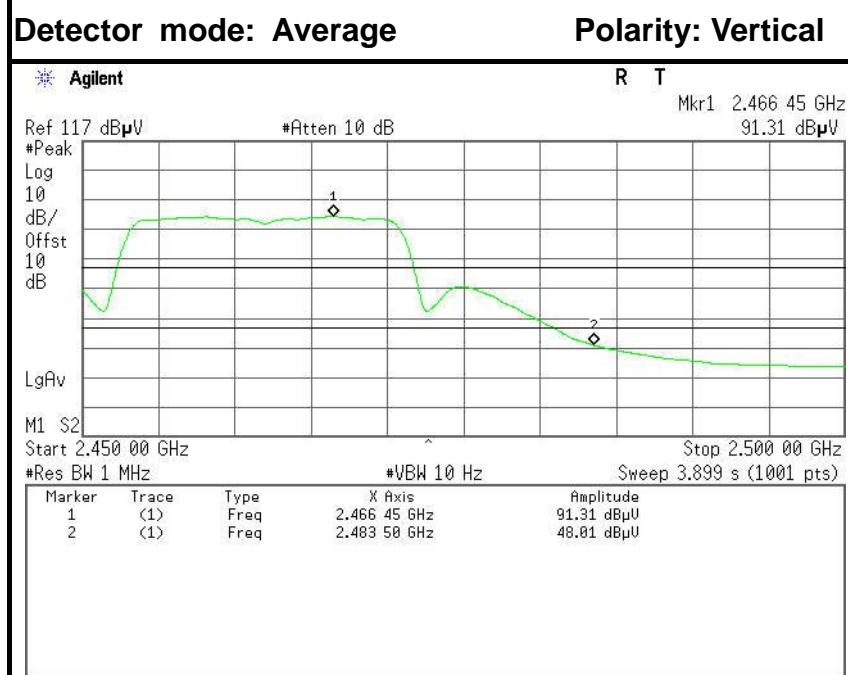
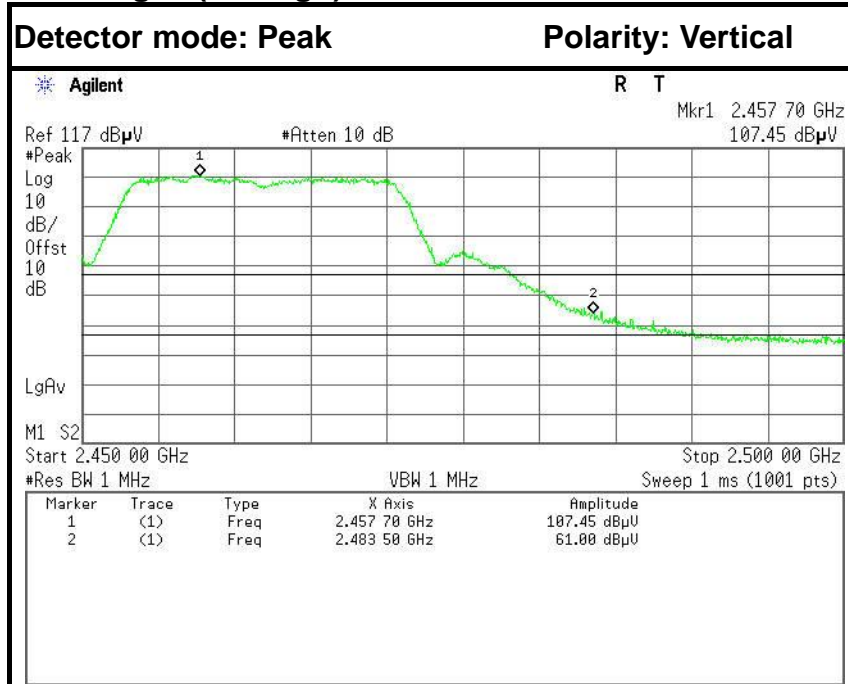
No.	Frequency (MHz)	Reading (dBuV)	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Antenna Pole
1	2390.0000	54.20	-6.60	60.80	74.00	-13.20	Peak	Vertical
2	2390.0000	41.77	-6.60	48.37	54.00	-5.63	Average	Vertical



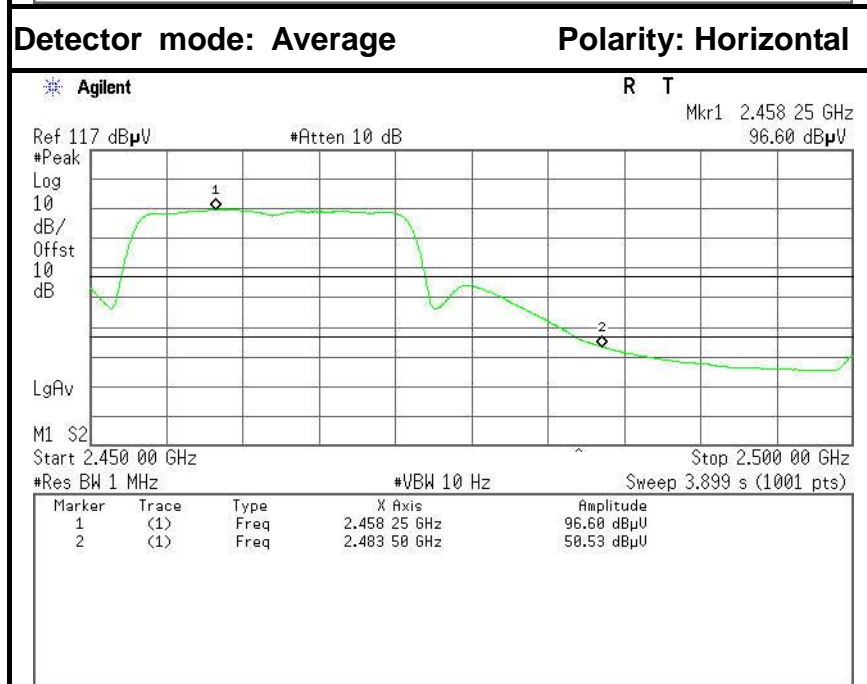
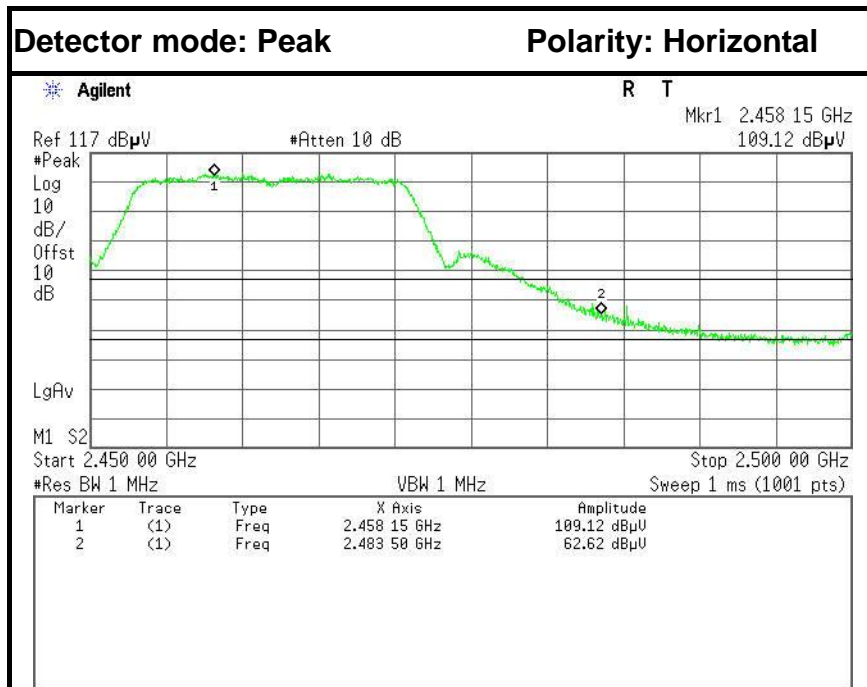
No.	Frequency (MHz)	Reading (dBuV)	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Antenna Pole
1	2390.0000	57.18	-6.60	63.78	74.00	-10.22	Peak	Horizontal
2	2390.0000	43.34	-6.60	49.94	54.00	-4.06	Average	Horizontal



Band Edges (CH High)



No.	Frequency (MHz)	Reading (dBuV)	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	54.76	-6.24	61.00	74.00	-13.00	Peak	Vertical
2	2483.5000	41.77	-6.24	48.01	54.00	-5.99	Average	Vertical

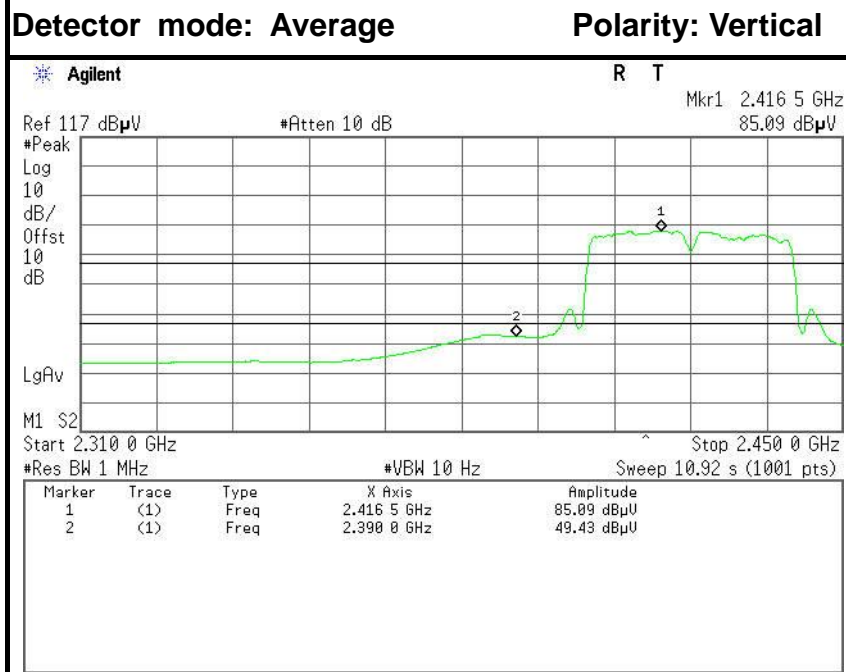
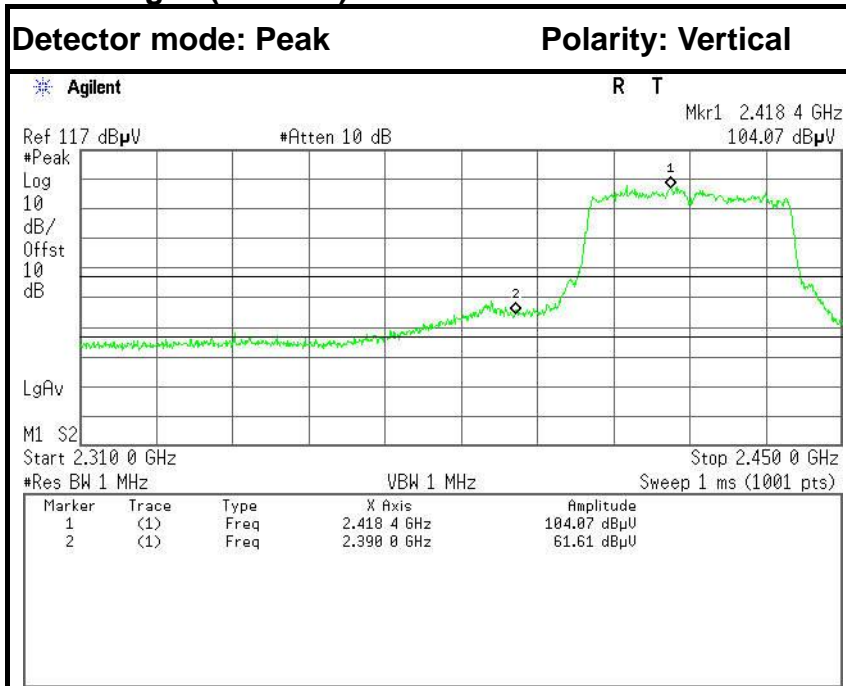


No.	Frequency (MHz)	Reading (dBuV)	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	56.38	-6.24	62.62	74.00	-11.38	Peak	Horizontal
2	2483.5000	44.29	-6.24	50.53	54.00	-3.47	Average	Horizontal

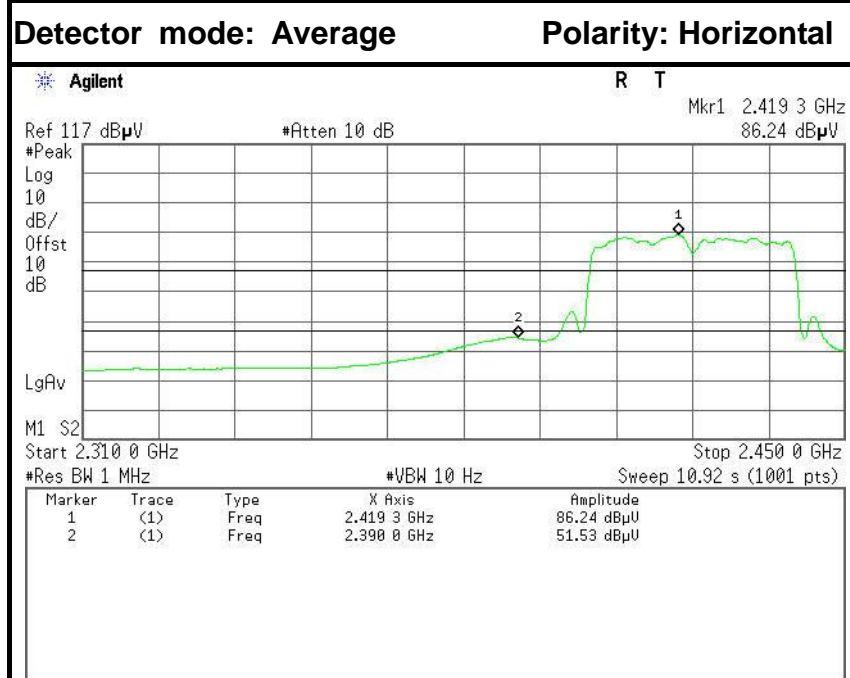
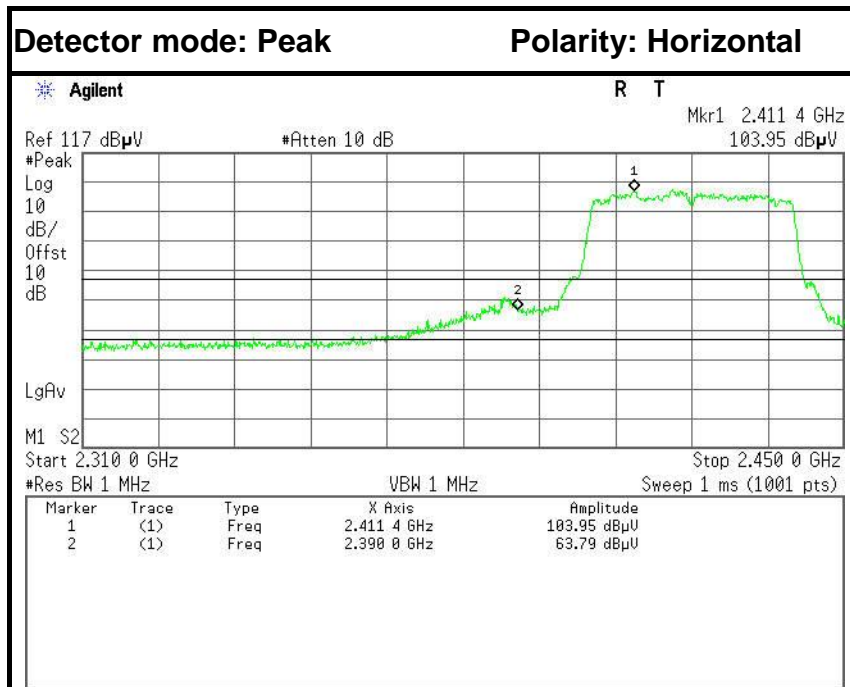


IEEE 802.11n HT40 MHz mode (Combine with Antenna 0 and Antenna 1 and Antenna 2)

Band Edges (CH Low)



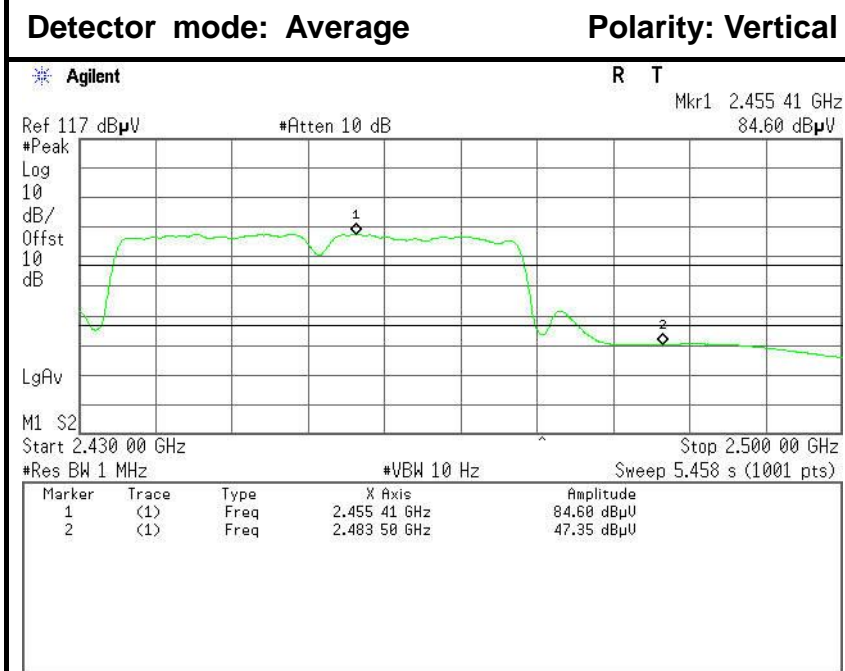
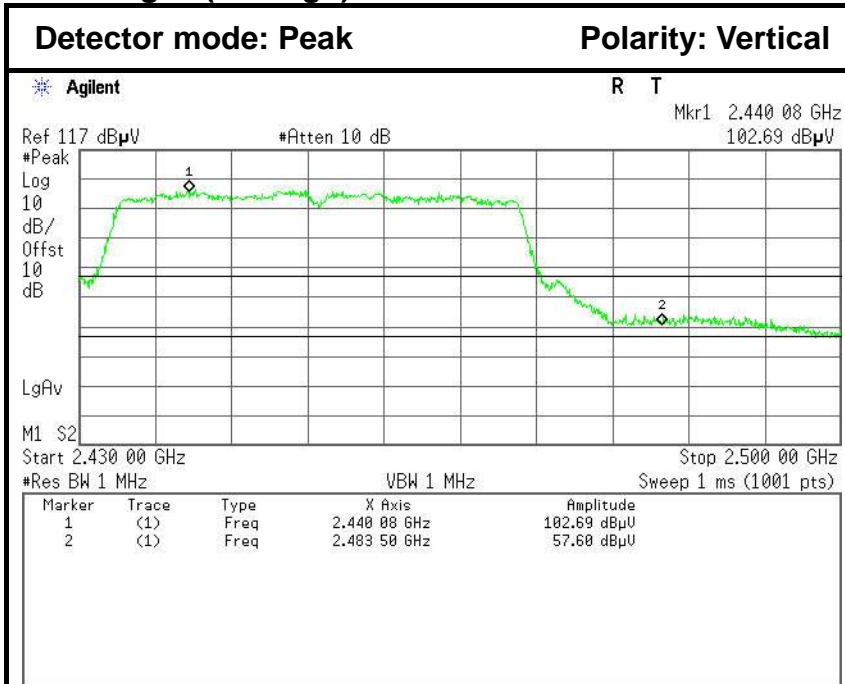
No.	Frequency (MHz)	Reading (dBuV)	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Antenna Pole
1	2390.0000	55.01	-6.60	61.61	74.00	-12.39	Peak	Vertical
2	2390.0000	42.83	-6.60	49.43	54.00	-4.57	Average	Vertical



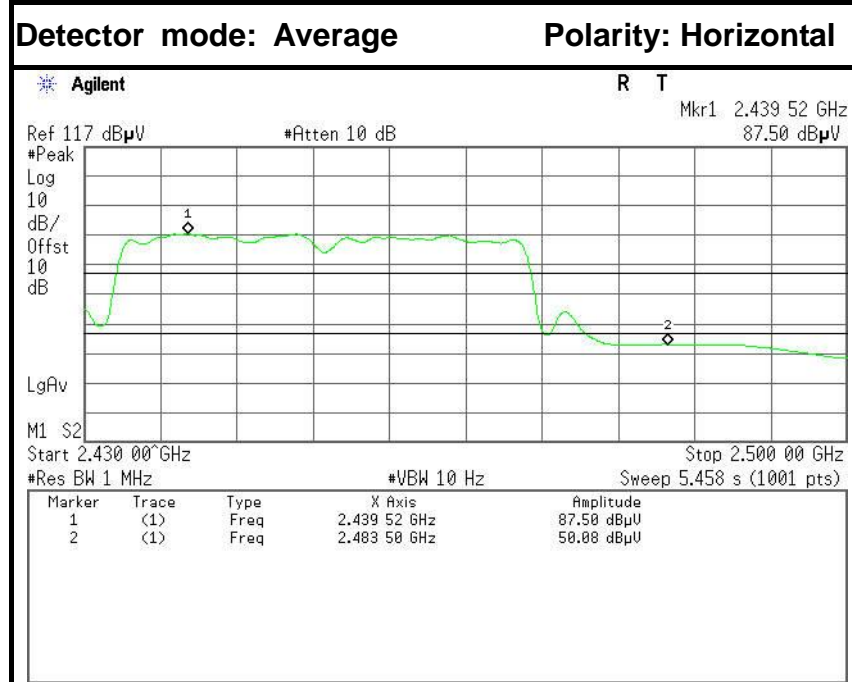
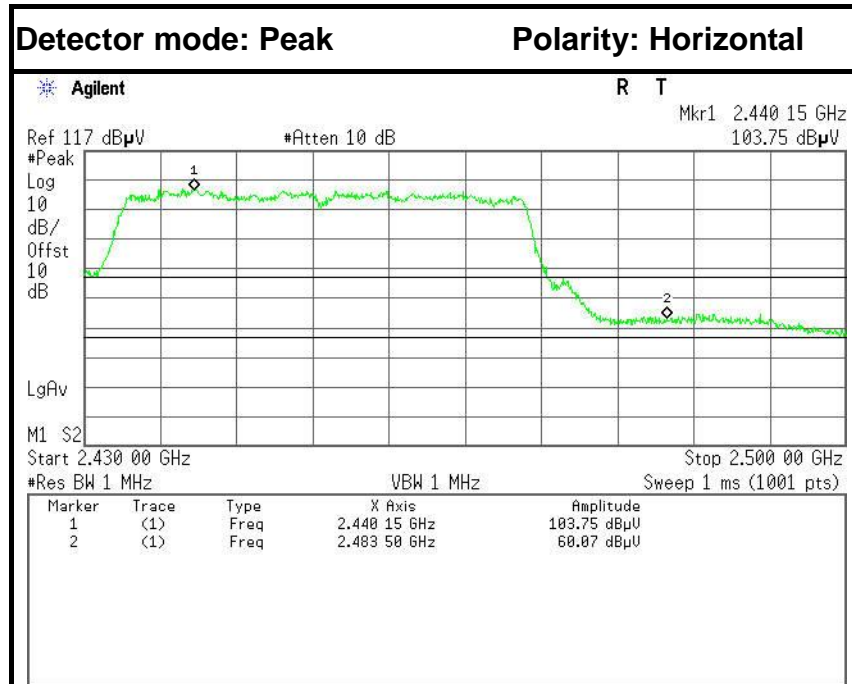
No.	Frequency (MHz)	Reading (dBuV)	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Antenna Pole
1	2390.0000	57.19	-6.60	63.79	74.00	-10.21	Peak	Horizontal
2	2390.0000	44.93	-6.60	51.53	54.00	-2.47	Average	Horizontal



Band Edges (CH High)



No.	Frequency (MHz)	Reading (dBuV)	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	51.36	-6.24	57.60	74.00	-16.40	Peak	Vertical
2	2483.5000	41.11	-6.24	47.35	54.00	-6.65	Average	Vertical



No.	Frequency (MHz)	Reading (dBuV)	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	53.83	-6.24	60.07	74.00	-13.93	Peak	Horizontal
2	2483.5000	43.84	-6.24	50.08	54.00	-3.92	Average	Horizontal



7.7. PEAK POWER SPECTRAL DENSITY MEASUREMENT

7.7.1. LIMITS

According to §15.247(e), 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 transmission.

According to §15.247(f), the digital modulation operation of the hybrid system, with the frequency hopping turned off, shall comply with the power density requirements of paragraph (d) of this section.

7.7.2. TEST INSTRUMENTS

Name of Equipment	Manufacturer	Model	Serial Number	Last Calibration	Calibration Due
Spectrum Analyzer	Agilent	N9010A	MY52221469	02/21/2016	02/20/2017

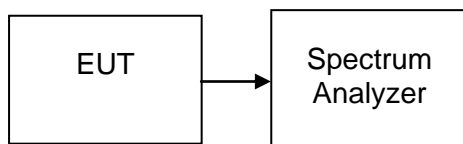
7.7.3. TEST PROCEDURES (please refer to measurement standard)

§15.247(e) specifies a conducted power spectral density (PSD) limit of 8 dBm in any 3 kHz band segment within the fundamental EBW during any time interval of continuous transmission. The same method as used to determine the conducted output power shall be used to determine the power spectral density (i.e., if peak-detected fundamental power was measured then use the peak PSD procedure and if average fundamental power was measured then use the average PSD procedure).

10.2 Method PKPSD (peak PSD)

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
4. Set the VBW $\geq 3 \times \text{RBW}$.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level within the RBW.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

7.7.4. TEST SETUP





7.7.5. TEST RESULTS

No non-compliance noted

Test Data

Test mode: IEEE 802.11b (Antenna 0)

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Test Result
Low	2412	-4.080	8	PASS
Mid	2437	-3.601		PASS
High	2462	-4.309		PASS

Test mode: IEEE 802.11b (Antenna 1)

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Test Result
Low	2412	-4.258	8	PASS
Mid	2437	-4.200		PASS
High	2462	-3.790		PASS

Test mode: IEEE 802.11b (Antenna 2)

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Test Result
Low	2412	-2.877	8	PASS
Mid	2437	-2.386		PASS
High	2462	-3.015		PASS

Test mode: IEEE 802.11g (Antenna 0)

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Test Result
Low	2412	-6.068	8	PASS
Mid	2437	-6.753		PASS
High	2462	-5.785		PASS

Test mode: IEEE 802.11g (Antenna 1)

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Test Result
Low	2412	-7.505	8	PASS
Mid	2437	-7.622		PASS
High	2462	-7.045		PASS



Test mode: IEEE 802.11g (Antenna 2)

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Test Result
Low	2412	-8.955	8	PASS
Mid	2437	-7.092		PASS
High	2462	-7.680		PASS

Test mode: IEEE 802.11n HT20 MHz (Combine with Antenna 0 and Antenna 1 and Antenna 2)

Channel	Frequency (MHz)	PPSD (dBm)				Limit (dBm)	Test Result
		Antenna 0	Antenna 1	Antenna 2	Total		
Low	2412	-8.429	-9.961	-10.432	-6.306	8	PASS
Mid	2437	-8.437	-10.330	-8.505	-5.461		PASS
High	2462	-8.123	-7.935	-8.466	-5.281		PASS

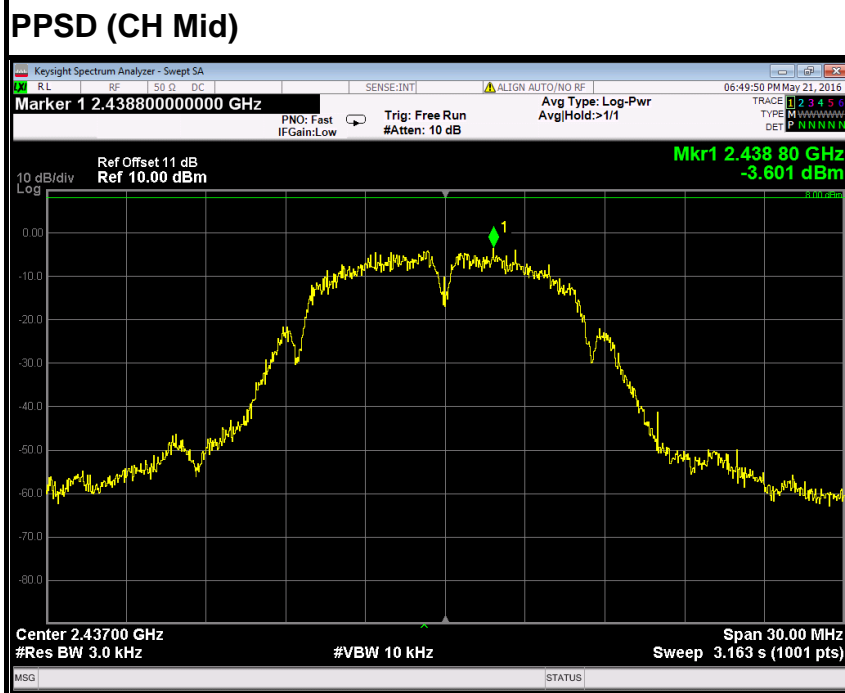
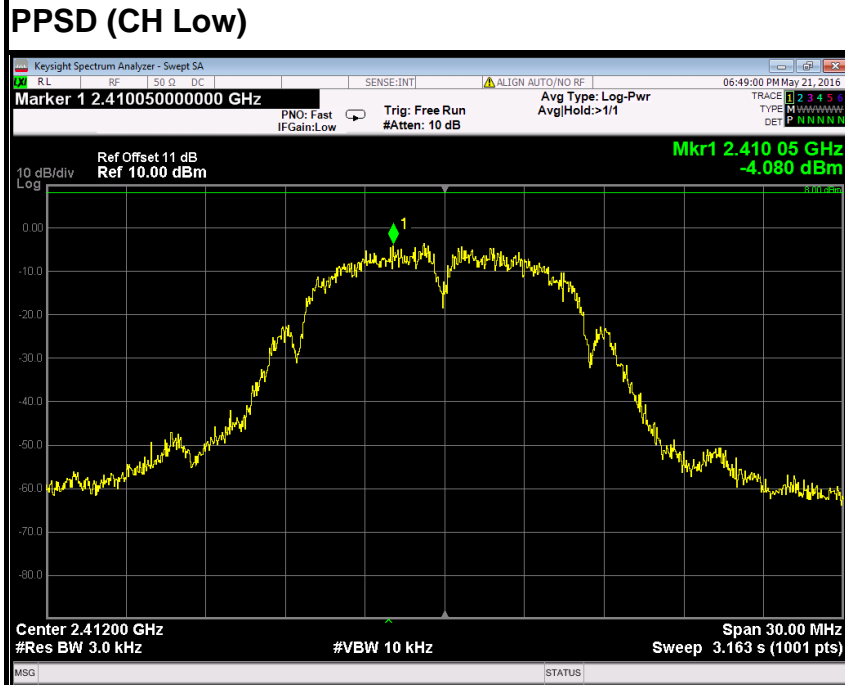
Test mode: IEEE 802.11n HT40 MHz (Combine with Antenna 0 and Antenna 1 and Antenna 2)

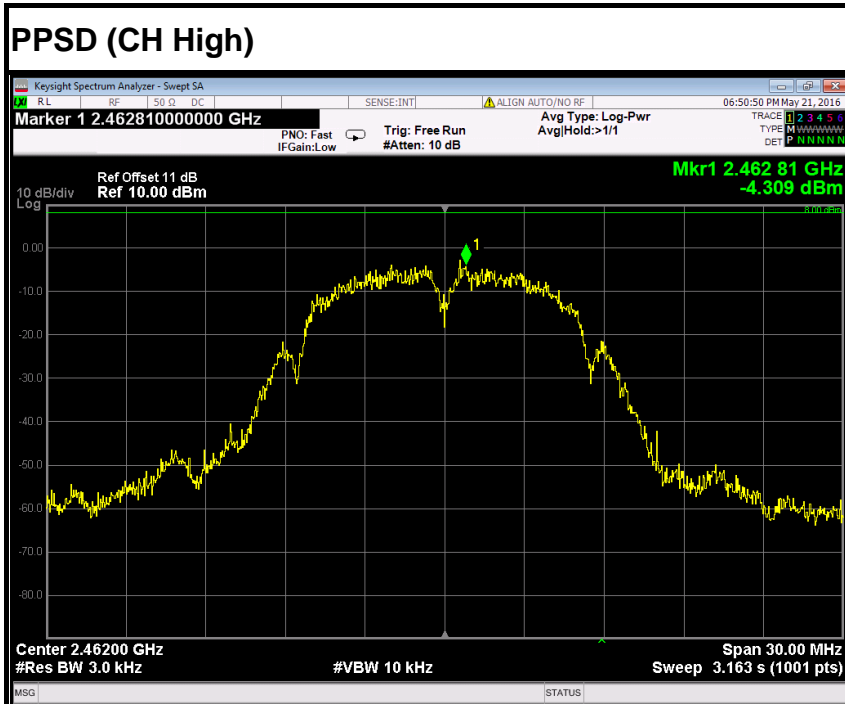
Channel	Frequency (MHz)	PPSD (dBm)				Limit (dBm)	Test Result
		Antenna 0	Antenna 1	Antenna 2	Total		
Low	2412	-14.772	-16.468	-13.600	-11.136	8	PASS
Mid	2437	-8.858	-8.459	-9.684	-6.241		PASS
High	2462	-11.688	-11.624	-11.569	-8.618		PASS



Test Plot

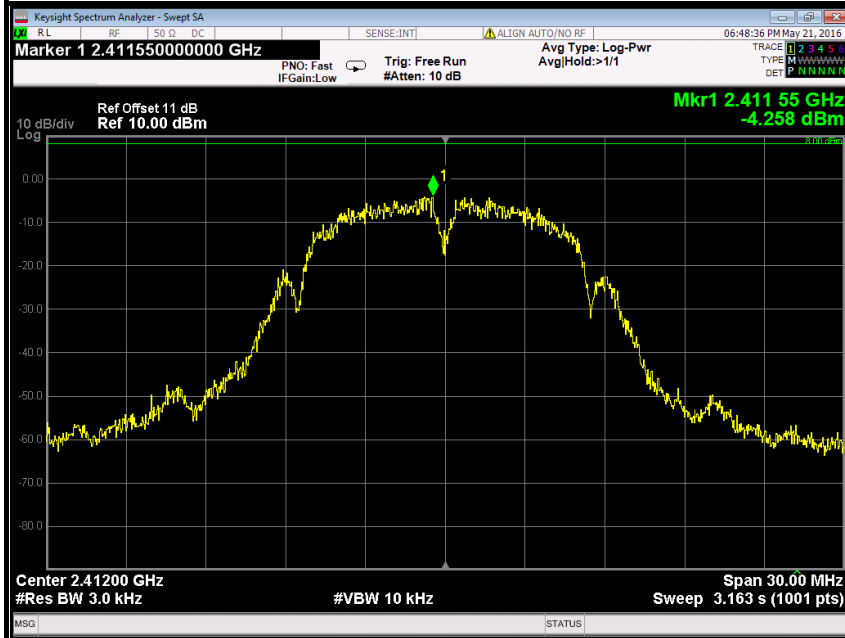
IEEE 802.11b mode (Antenna 0)

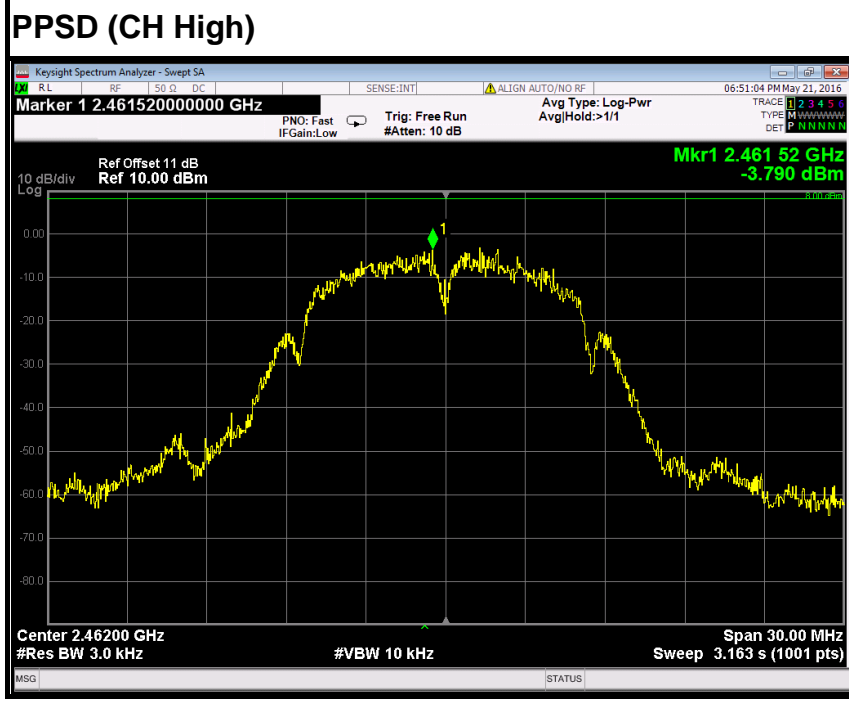
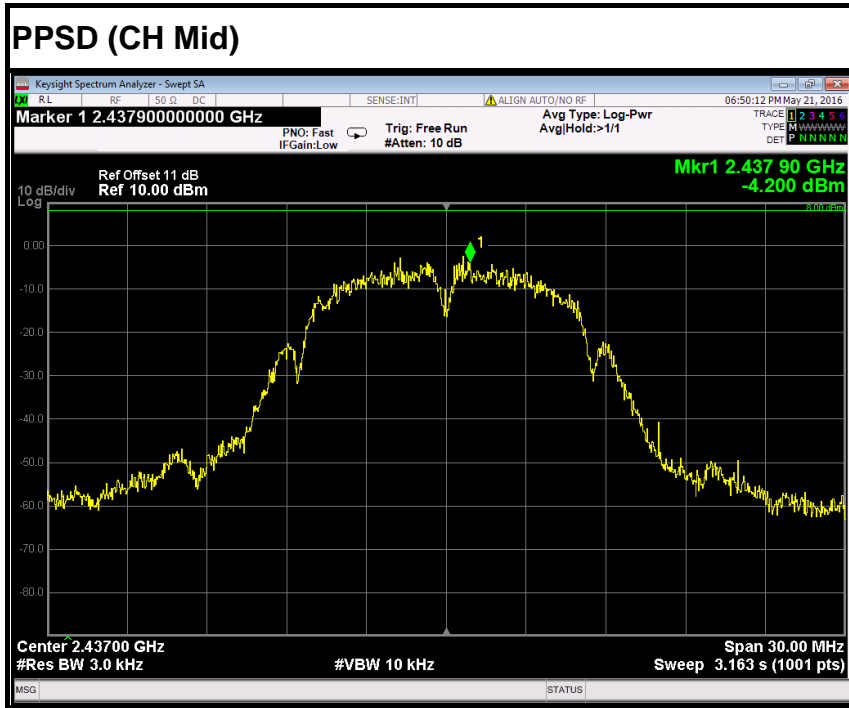




IEEE 802.11b mode (Antenna 1)

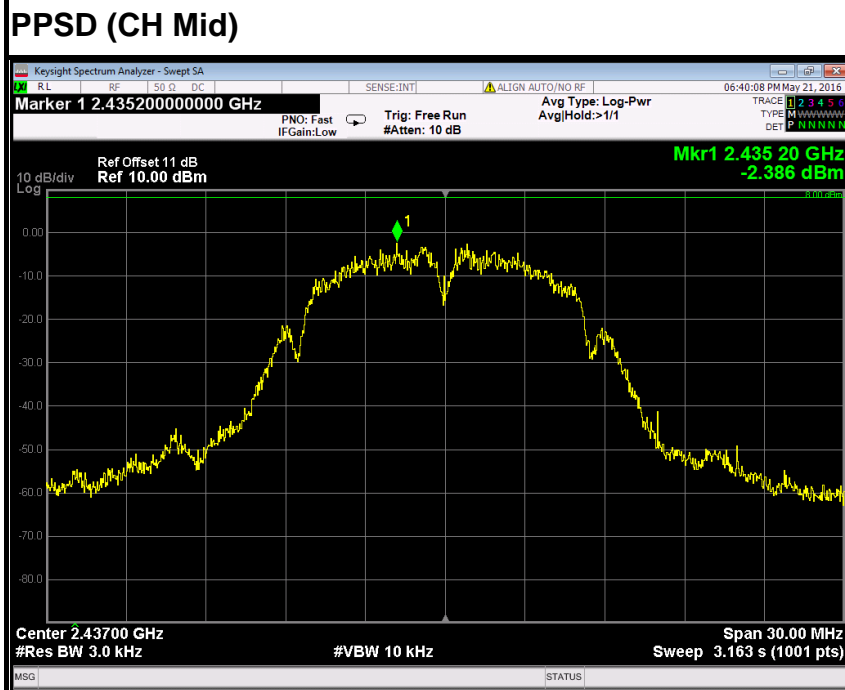
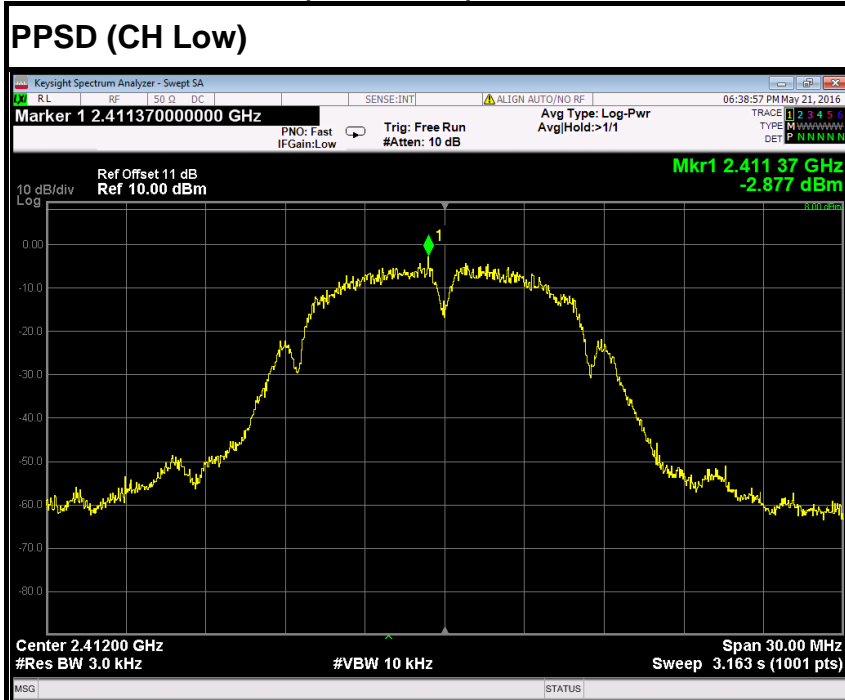
PPSD (CH Low)

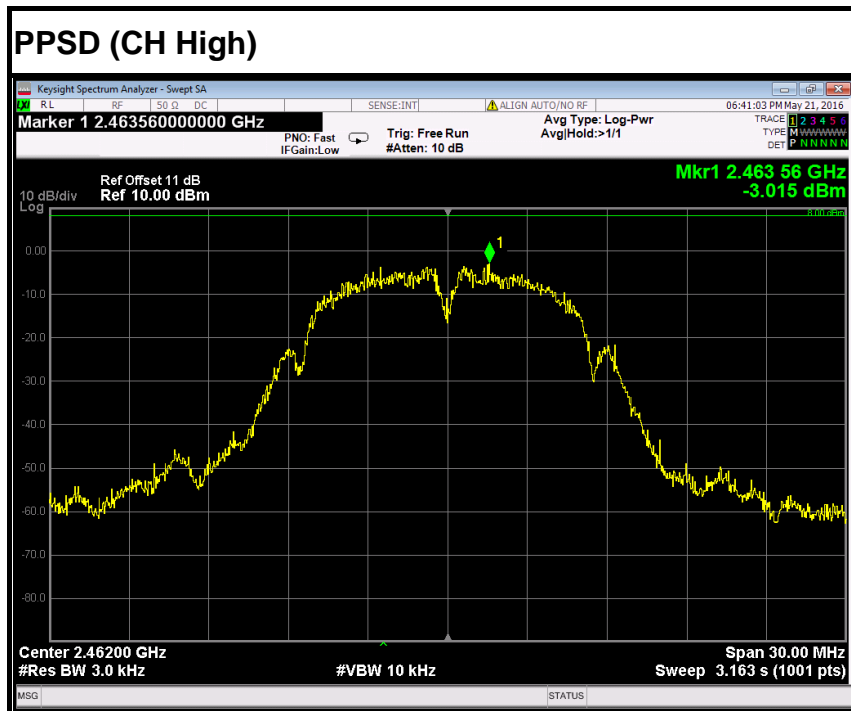






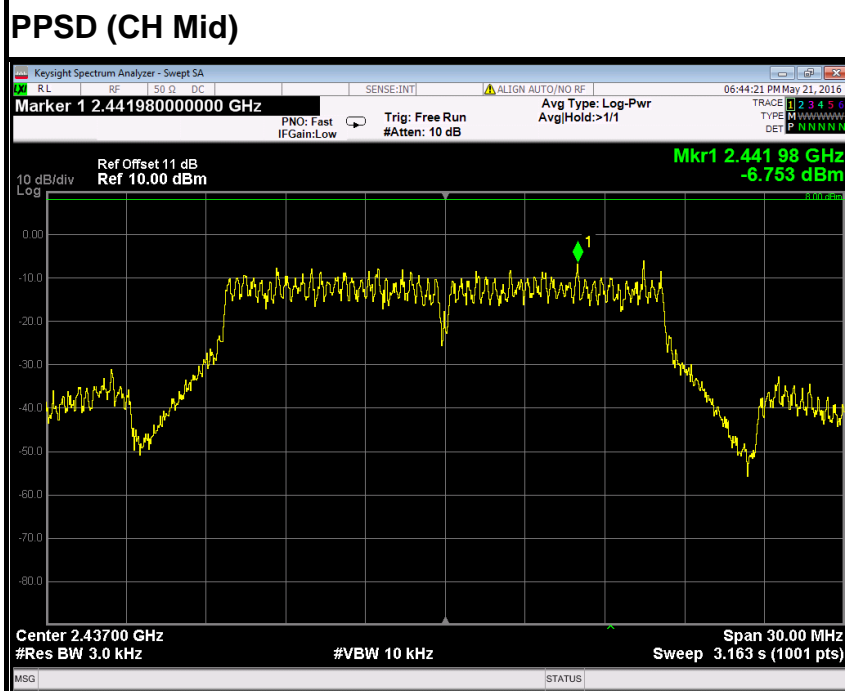
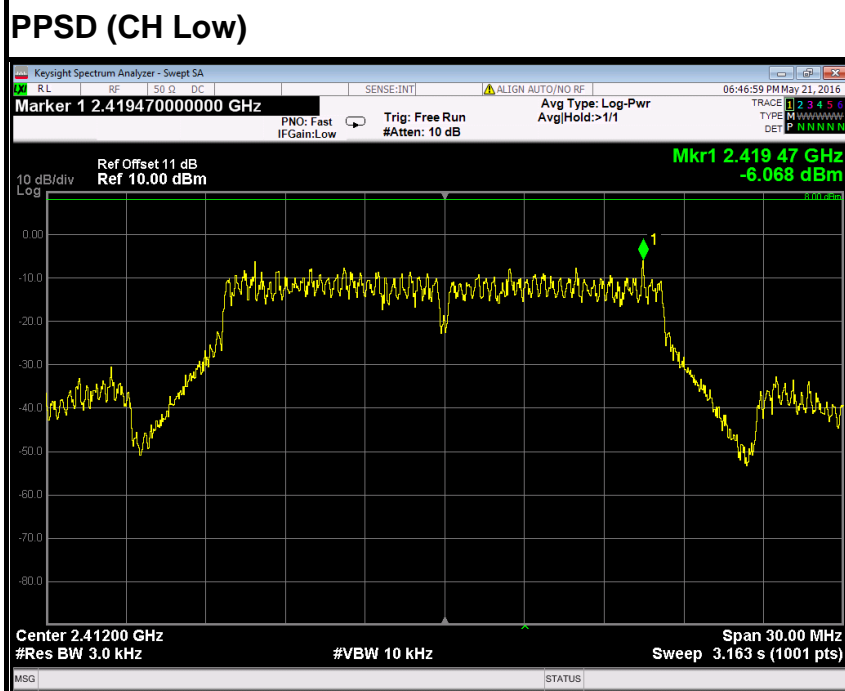
IEEE 802.11b mode (Antenna 2)

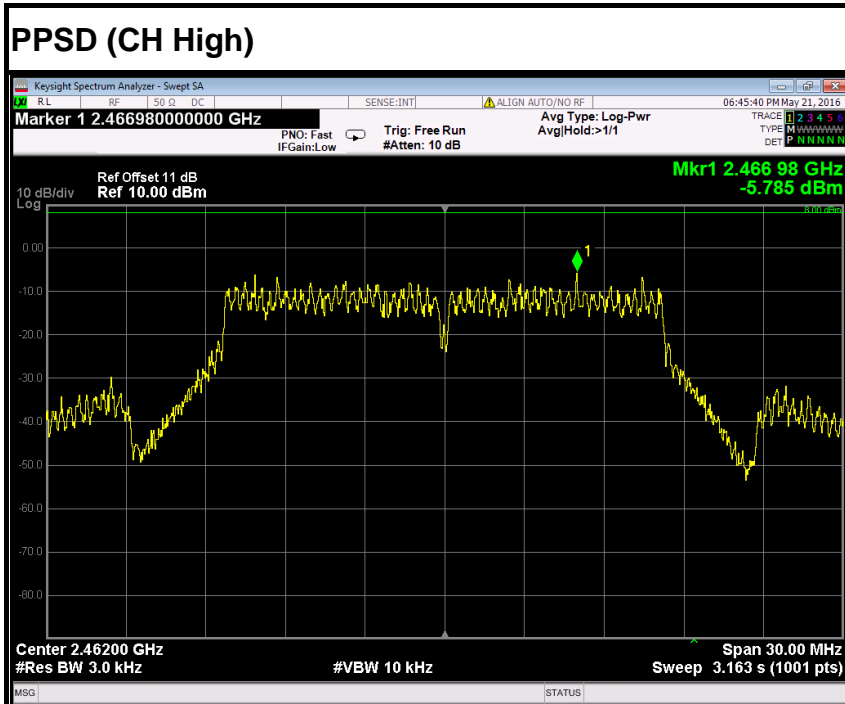




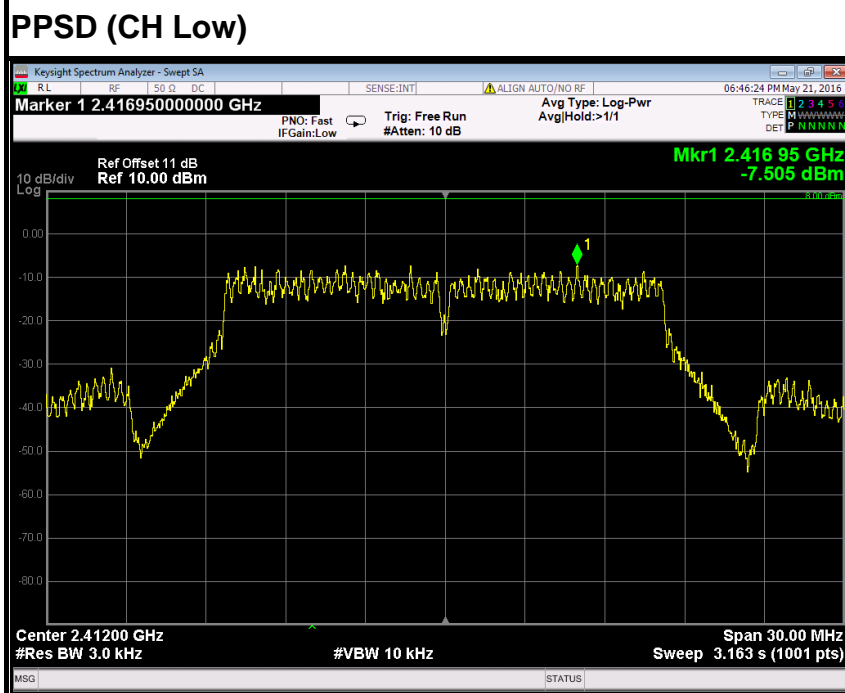


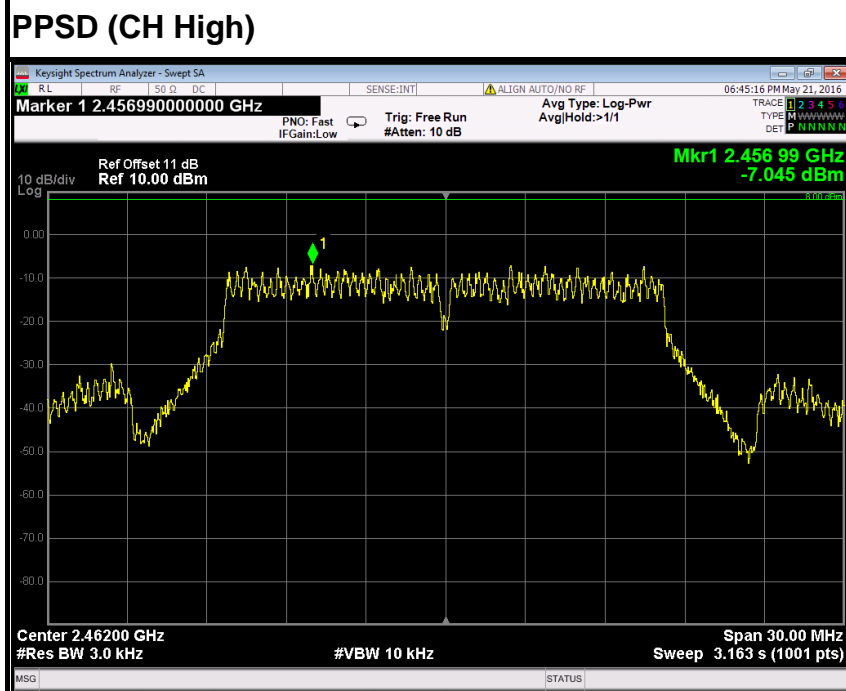
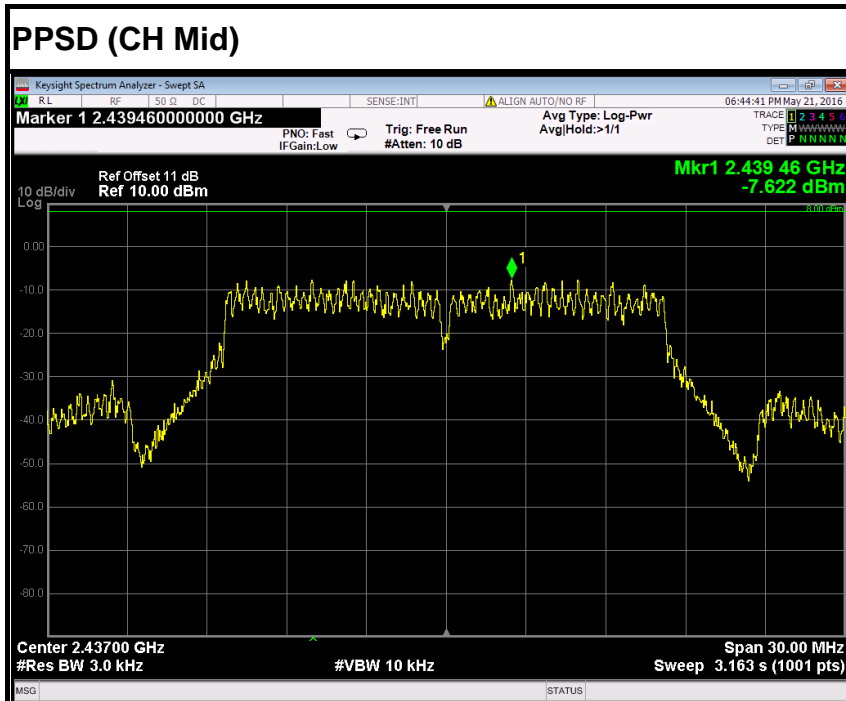
IEEE 802.11g mode (Antenna 0)





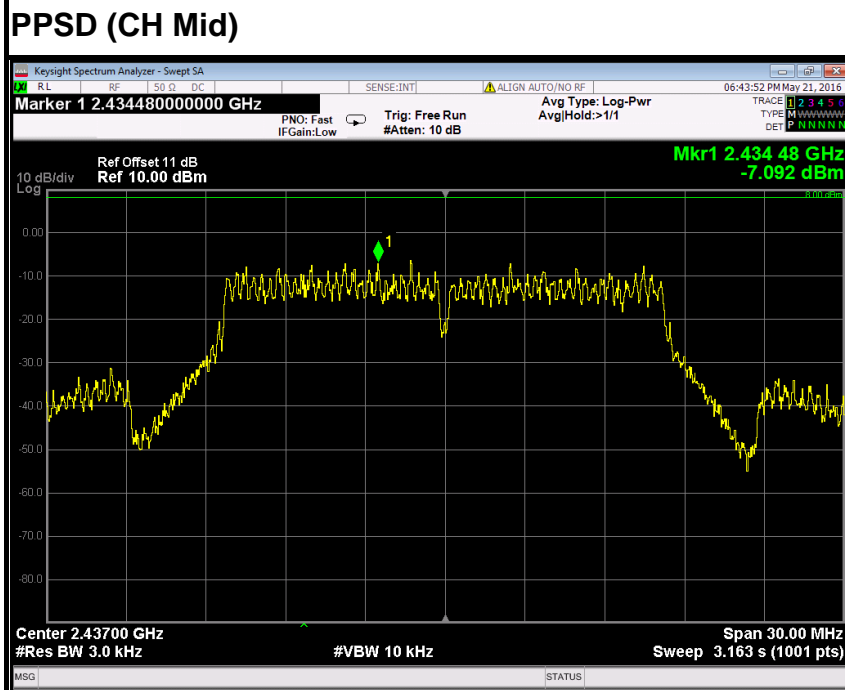
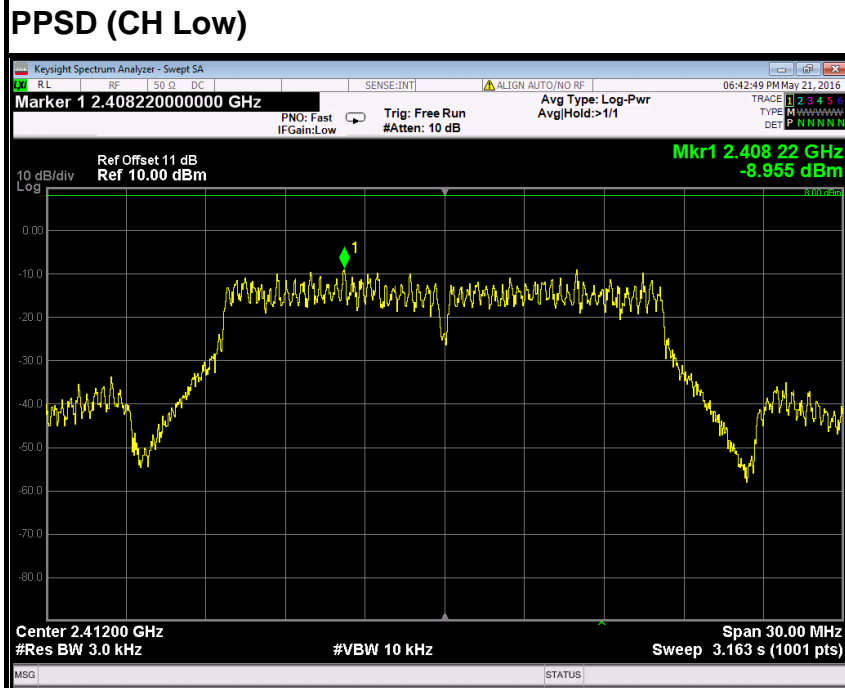
IEEE 802.11g mode (Antenna 1)

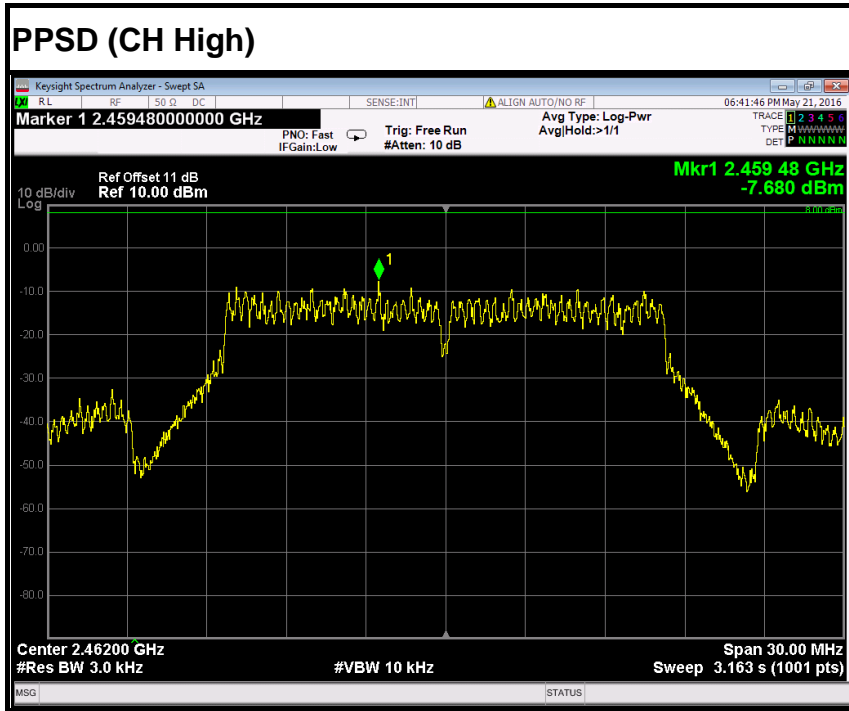






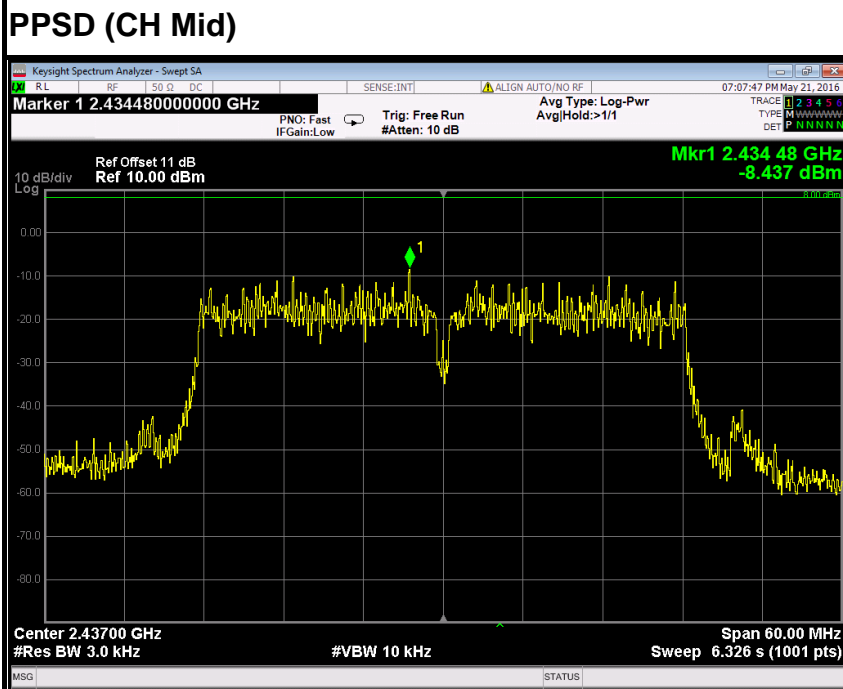
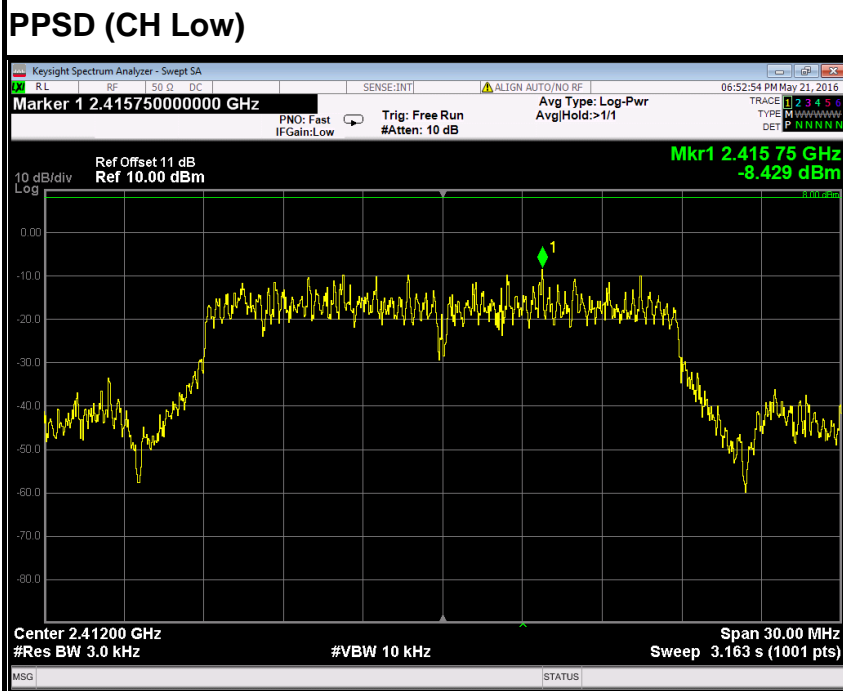
IEEE 802.11g mode (Antenna 2)

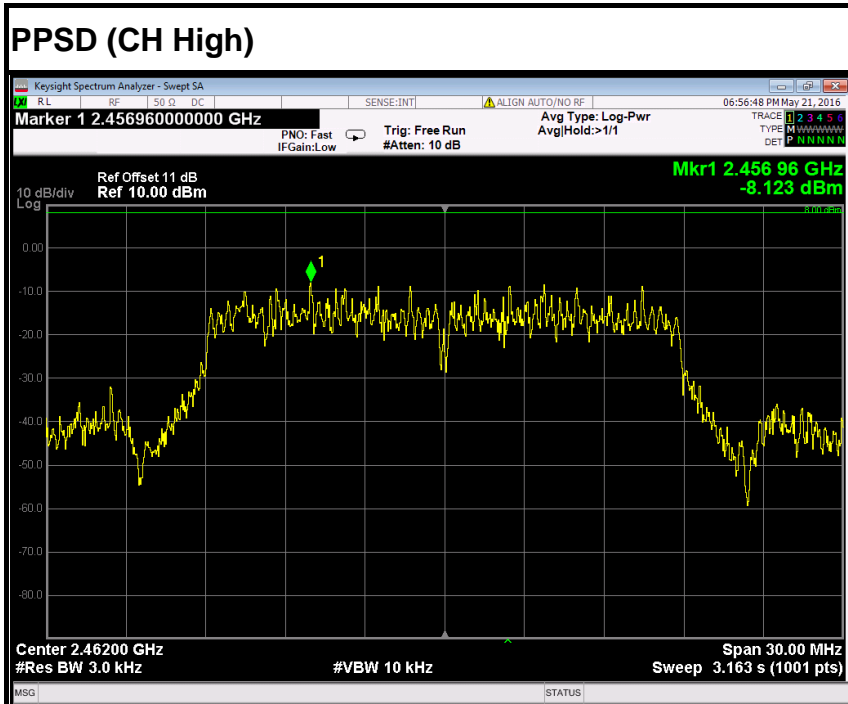




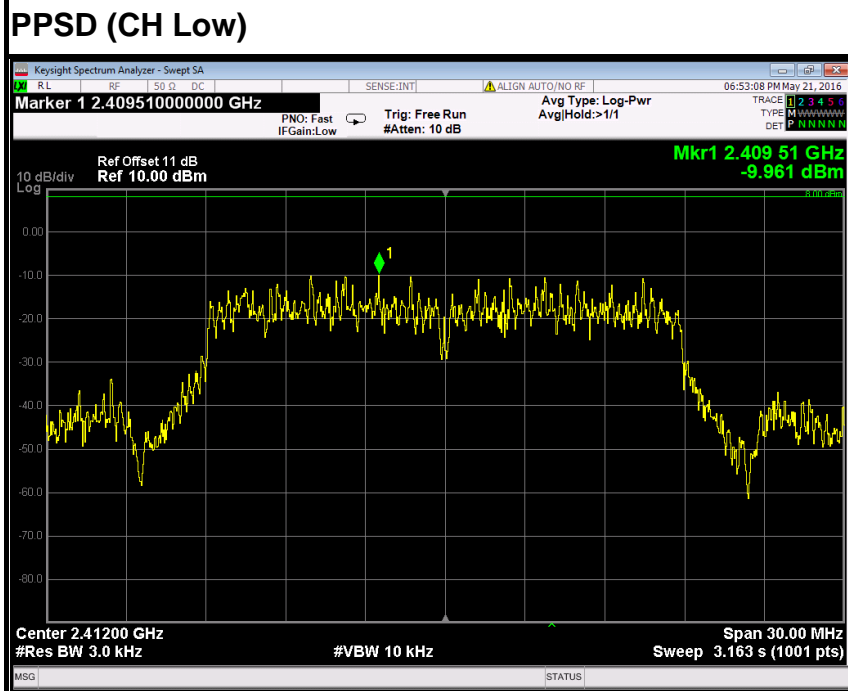


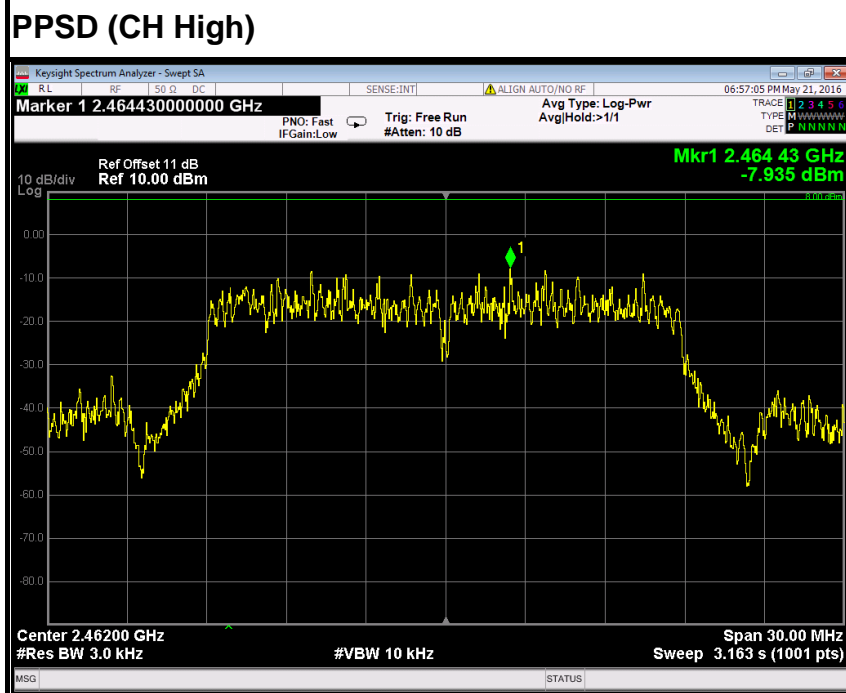
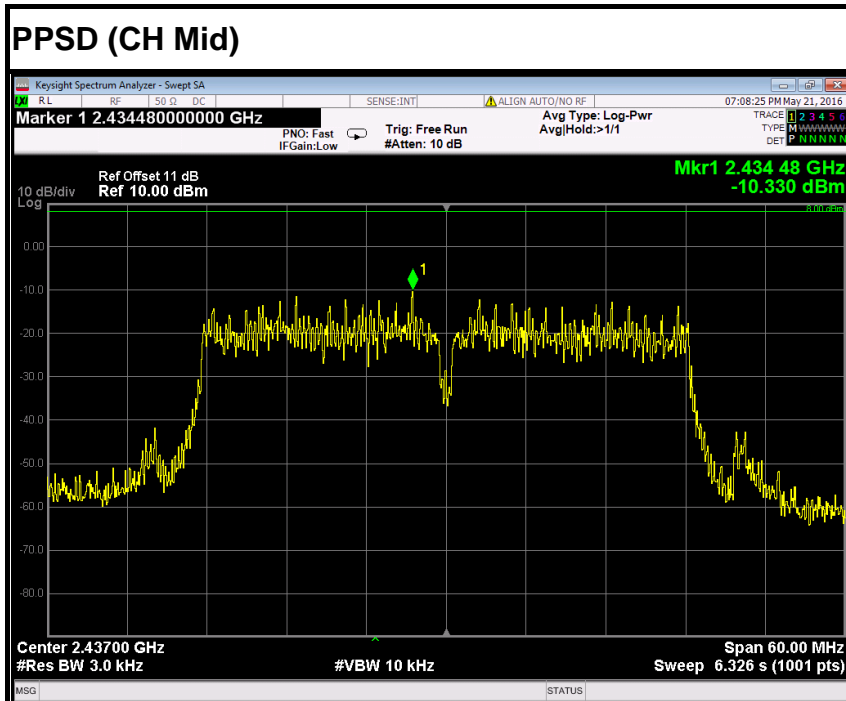
IEEE 802.11n HT20 MHz mode (Antenna 0)





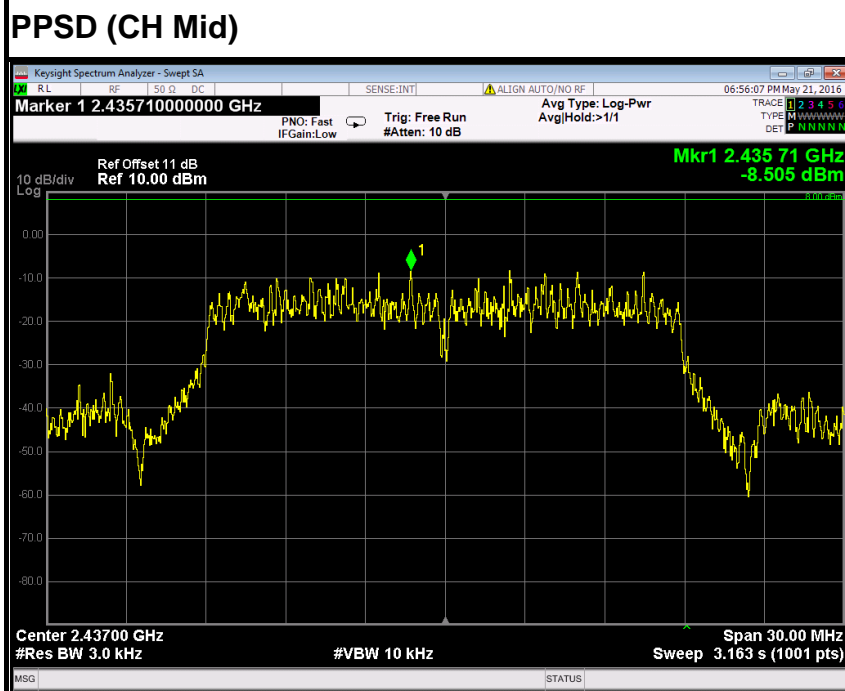
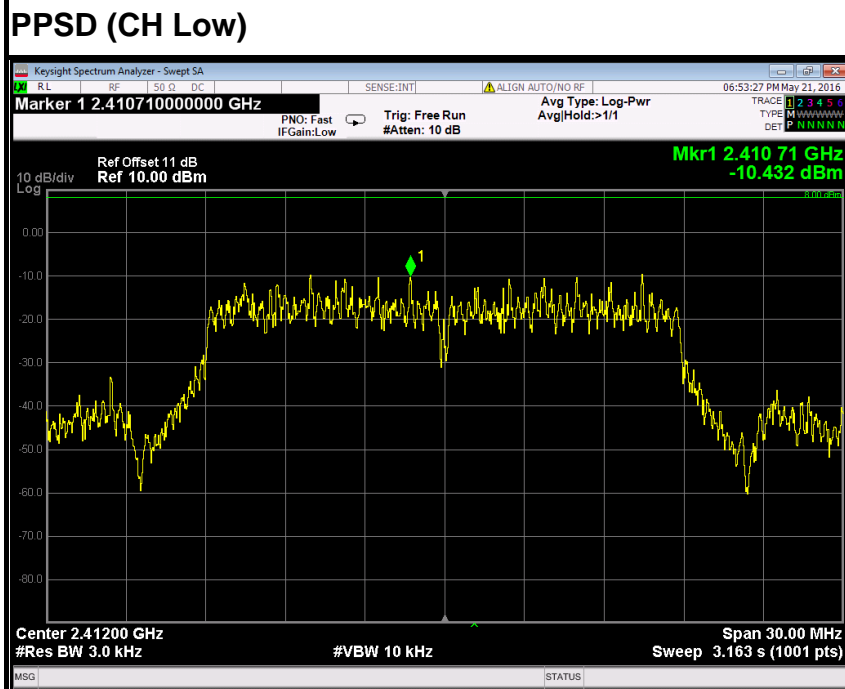
IEEE 802.11n HT20 MHz mode (Antenna 1)

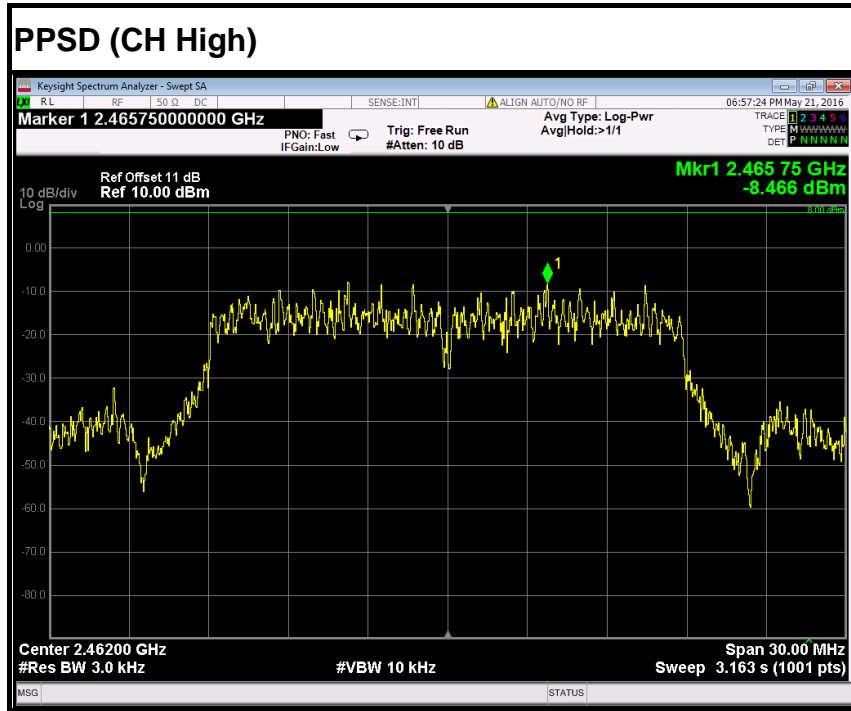






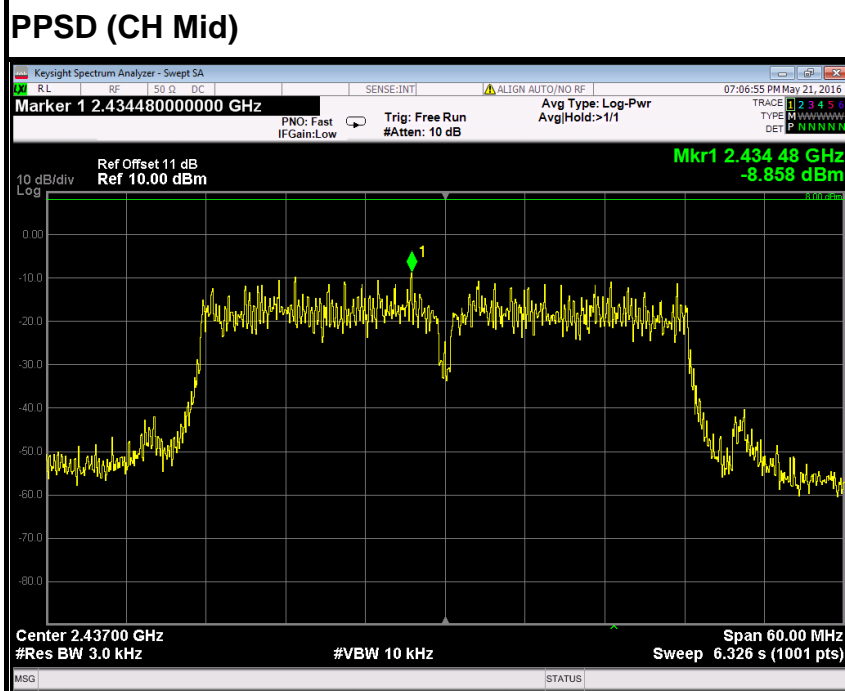
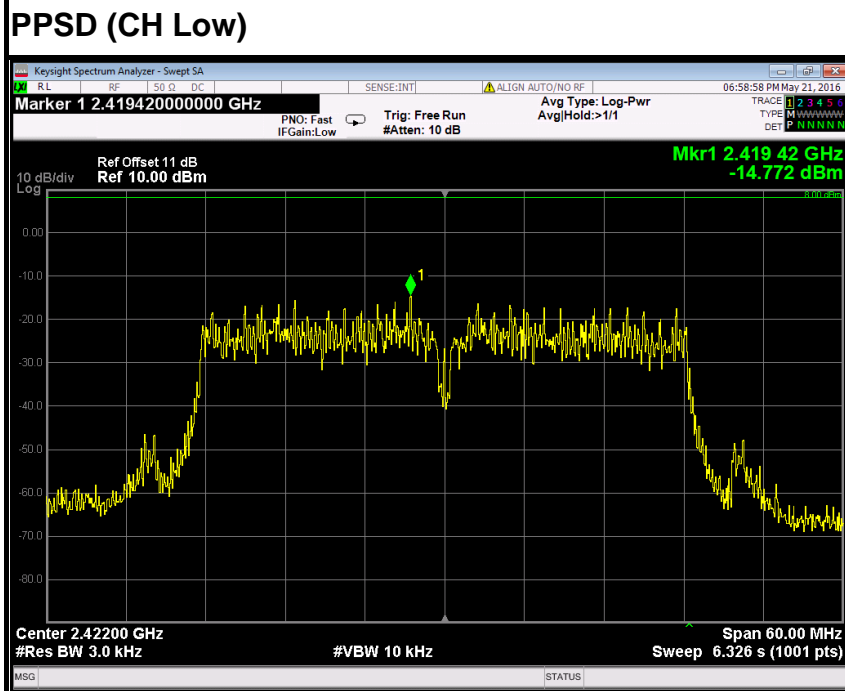
IEEE 802.11n HT20 MHz mode (Antenna 2)

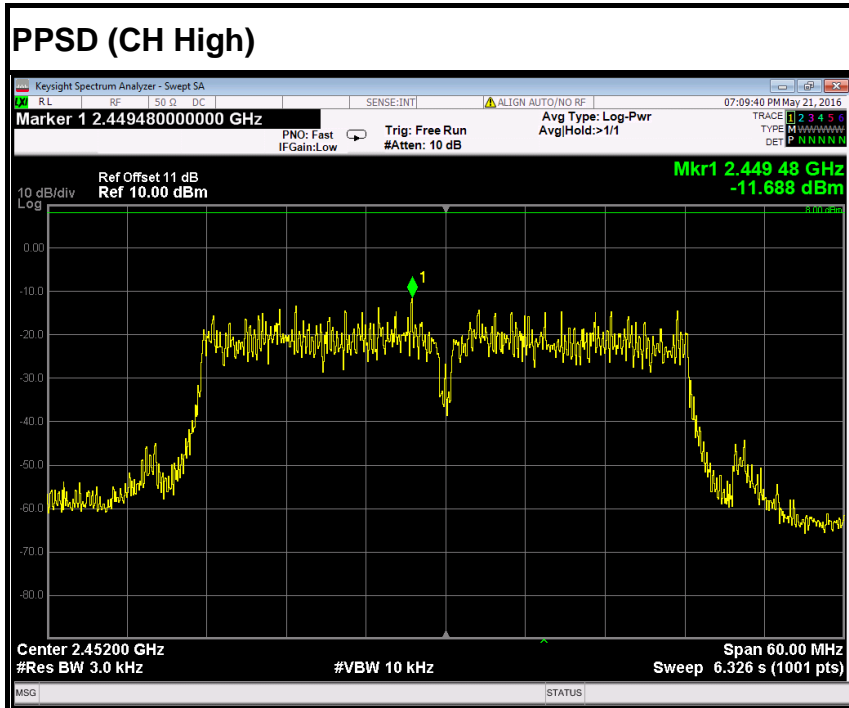




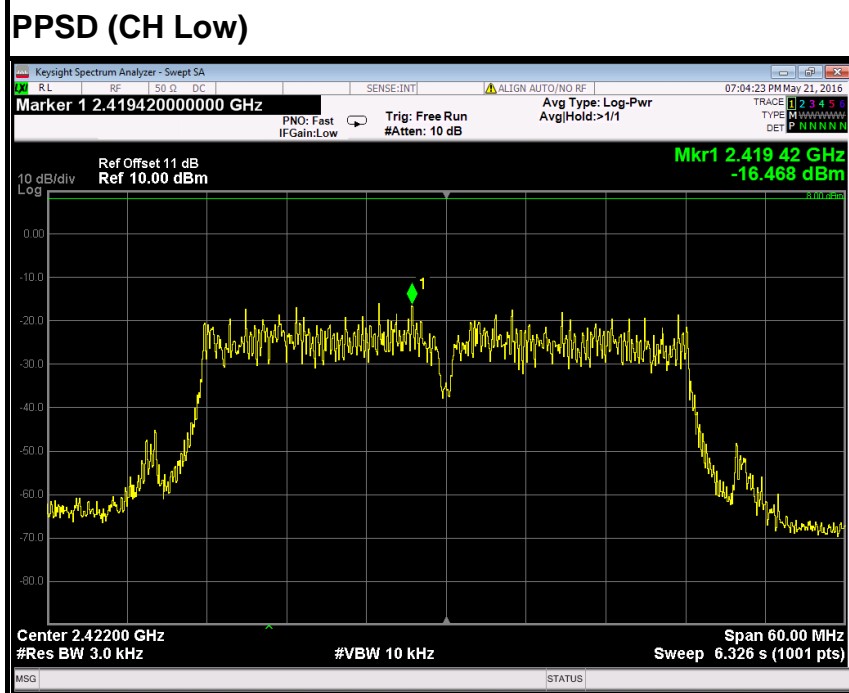


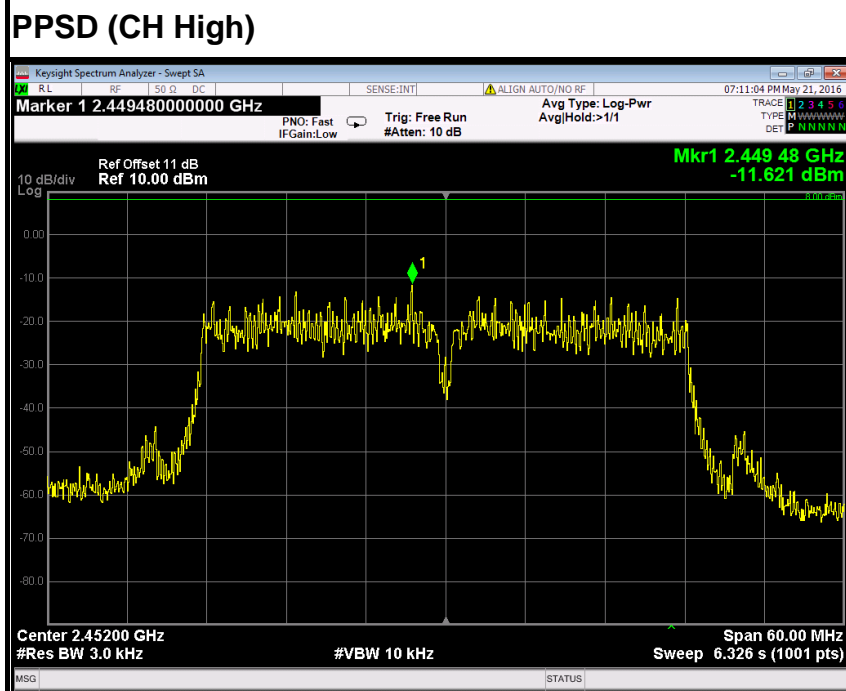
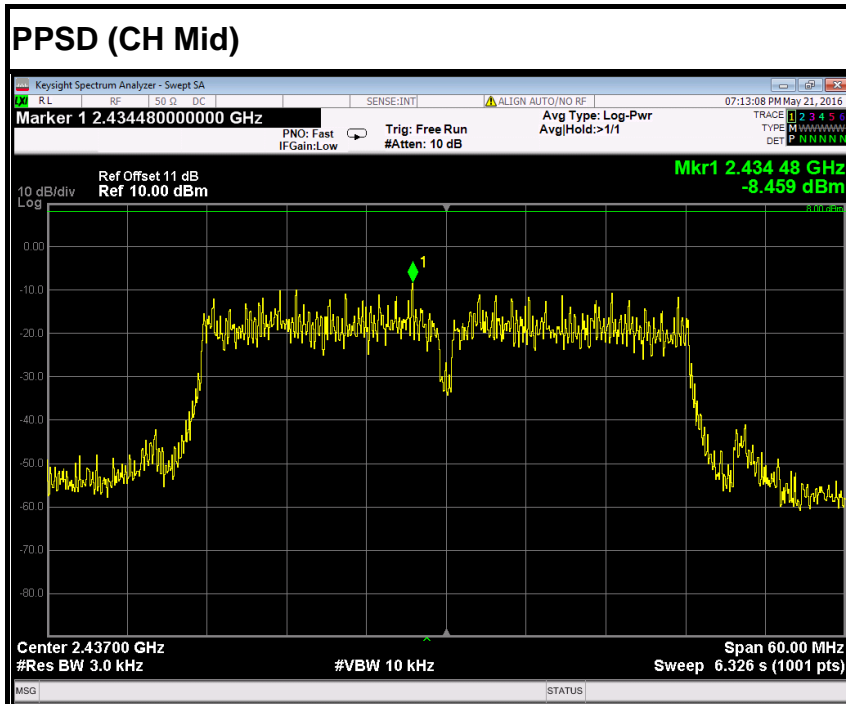
IEEE 802.11n HT40 MHz mode (Antenna 0)





IEEE 802.11n HT40 MHz mode (Antenna 1)







IEEE 802.11n HT40 MHz mode (Antenna 2)

