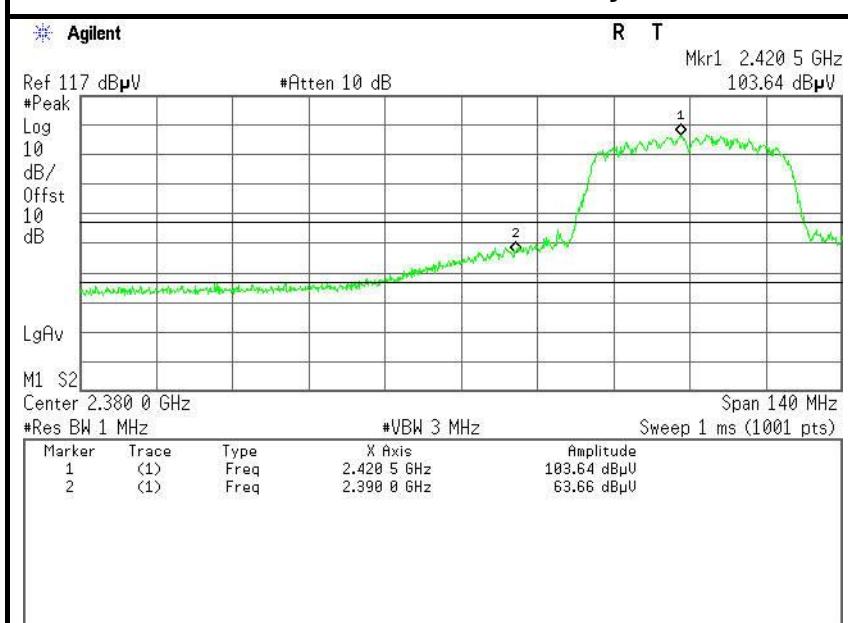




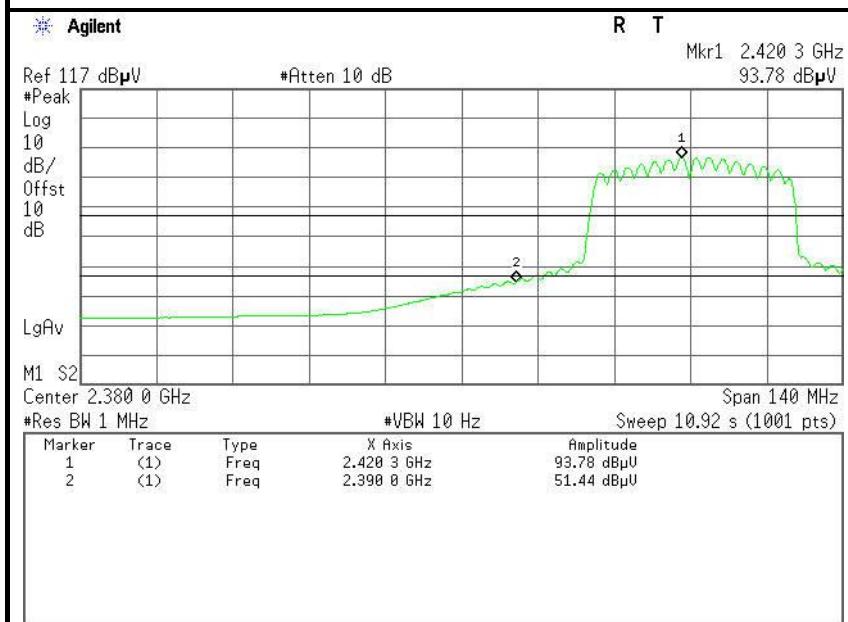
Detector mode: Peak

Polarity: Horizontal

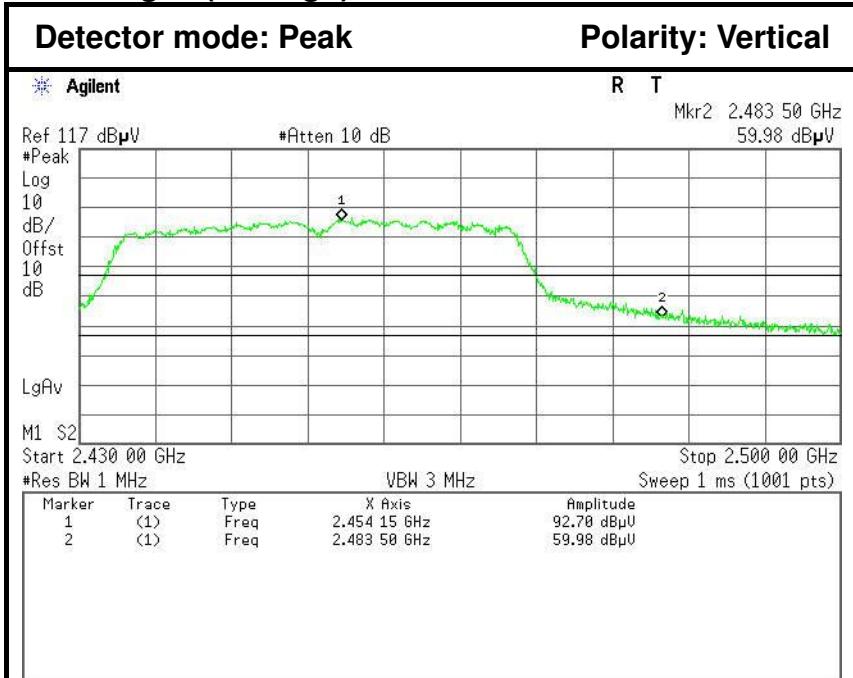
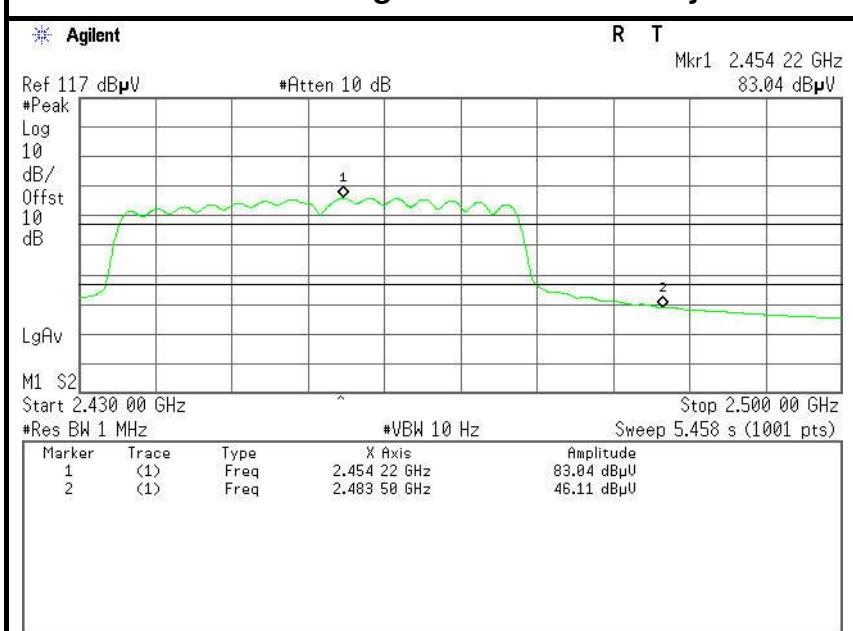


Detector mode: Average

Polarity: Horizontal



No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2390.0000	57.06	-6.60	63.66	74.00	-10.34	Peak	Horizontal
2	2390.0000	44.84	-6.60	51.44	54.00	-2.56	Average	Horizontal

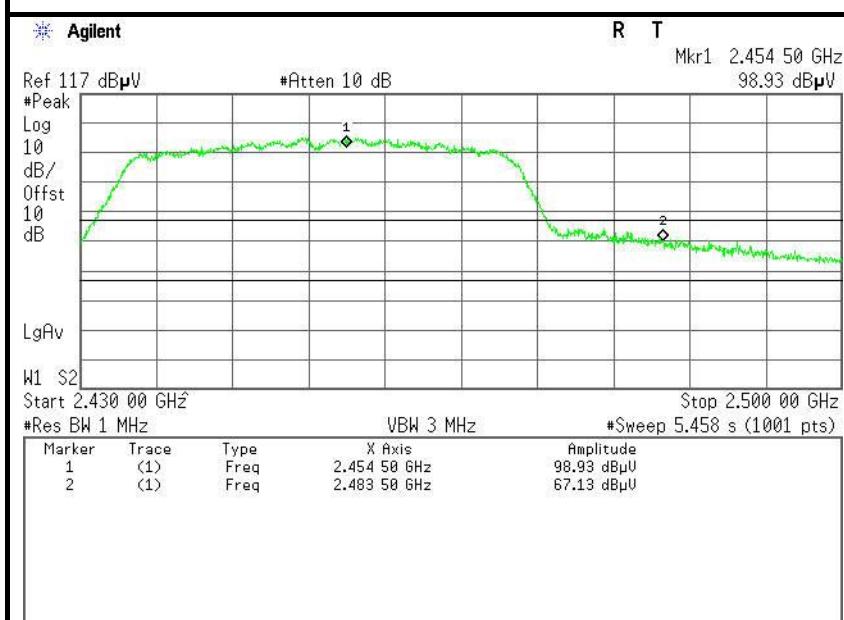
**Band Edges (CH High)****Detector mode: Average Polarity: Vertical**

No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	53.74	-6.24	59.98	74.00	-14.02	Peak	Vertical
2	2483.5000	39.87	-6.24	46.11	54.00	-7.89	Average	Vertical



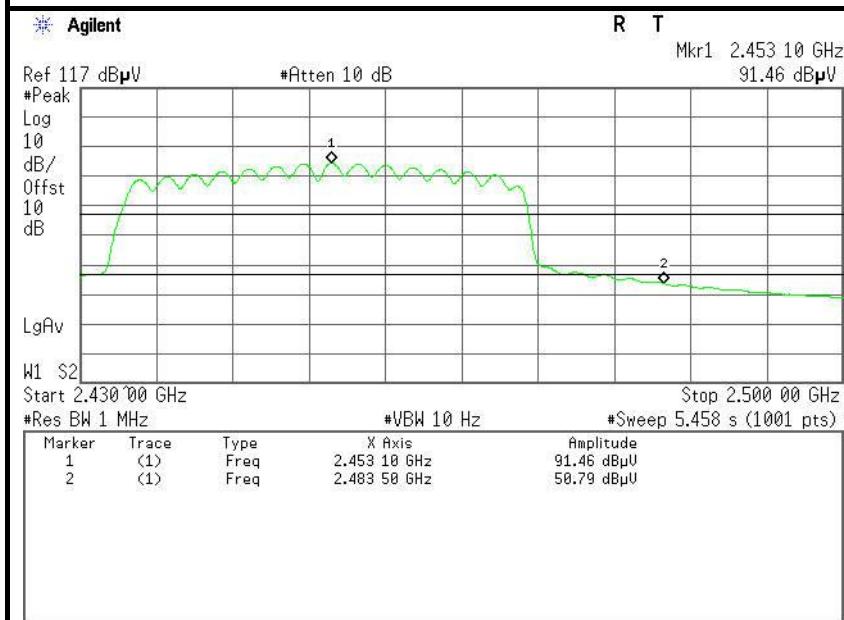
Detector mode: Peak

Polarity: Horizontal

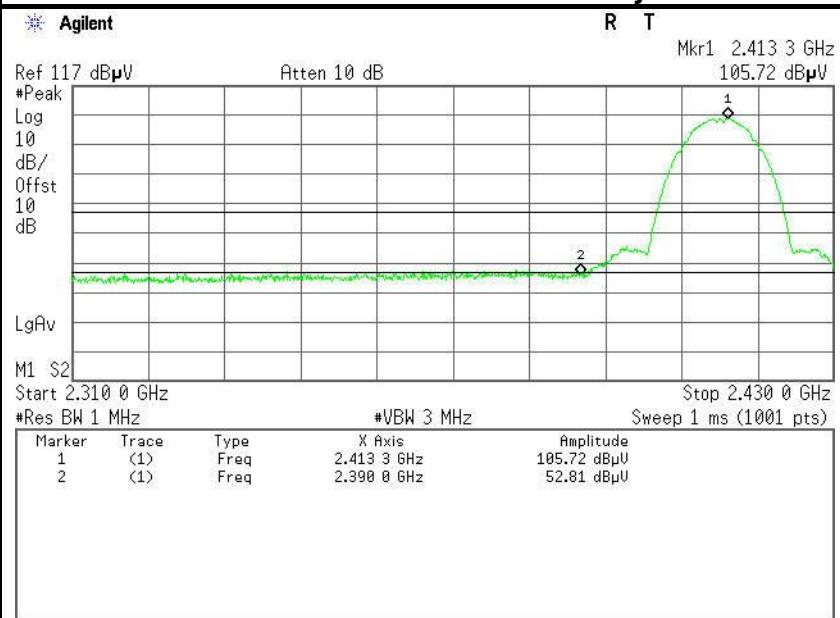
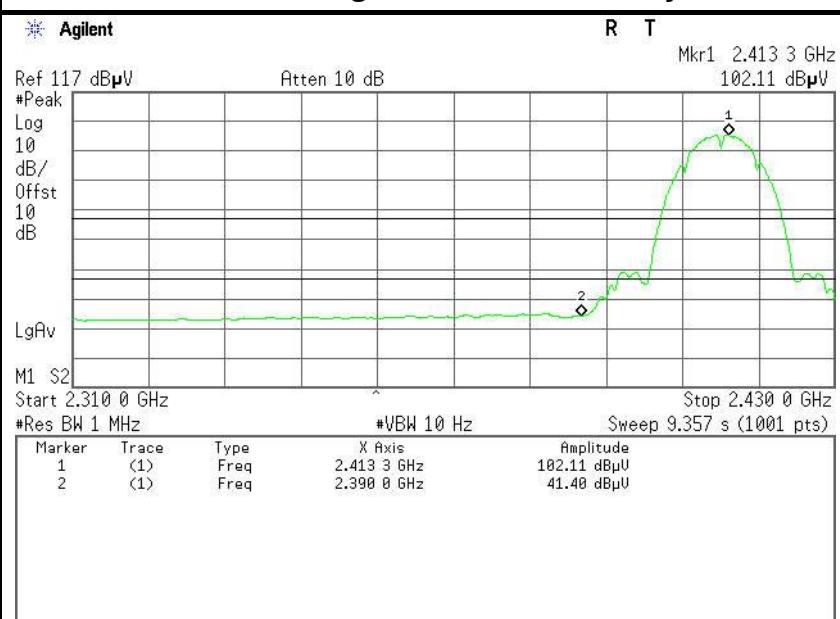


Detector mode: Average

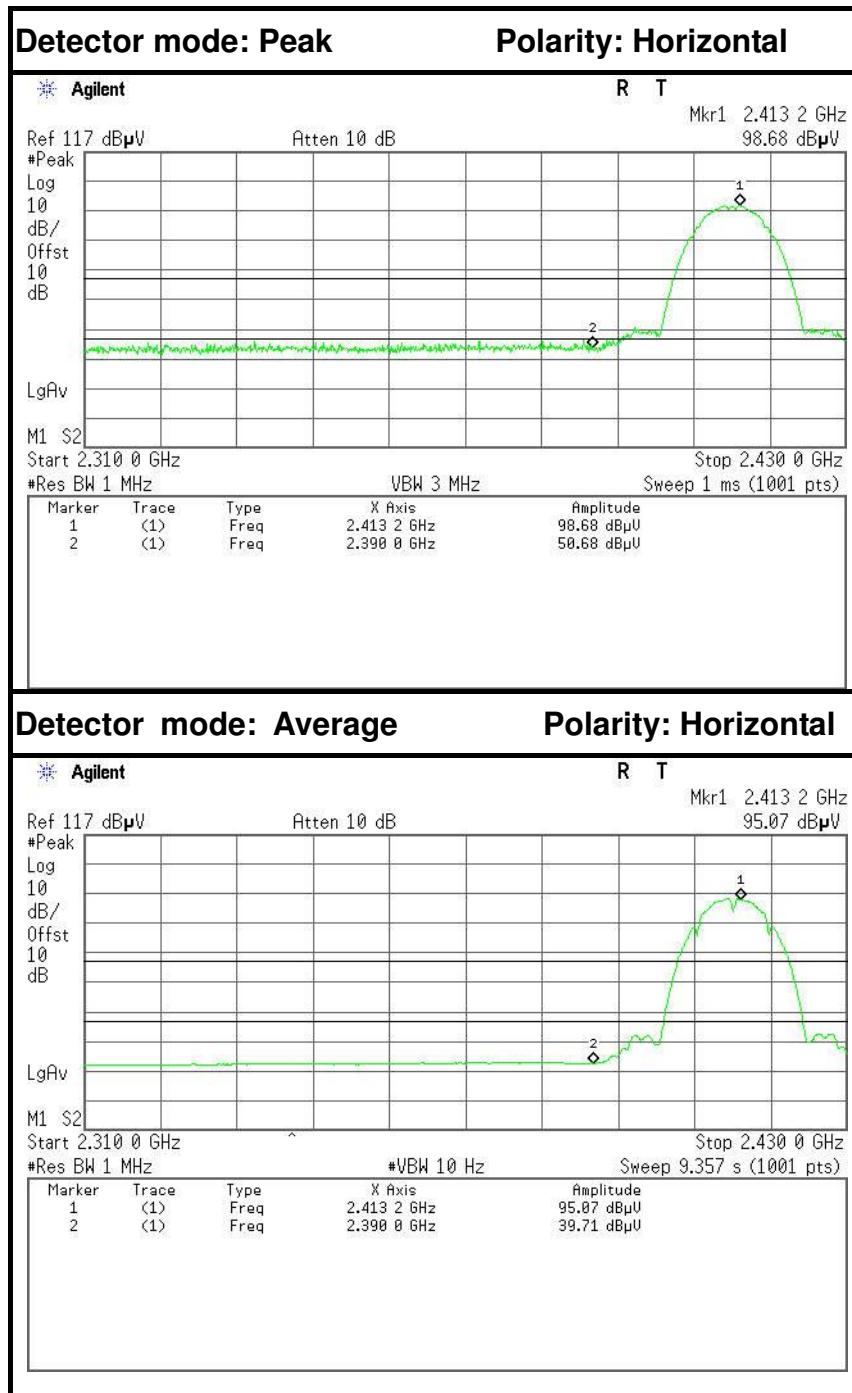
Polarity: Horizontal



No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	60.89	-6.24	67.13	74.00	-6.87	Peak	Horizontal
2	2483.5000	44.55	-6.24	50.79	54.00	-3.21	Average	Horizontal

**RE3002****IEEE 802.11b mode (Antenna 0)****Band Edges (CH Low)****Detector mode: Peak Polarity: Vertical****Detector mode: Average Polarity: Vertical**

No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2390.0000	46.21	-6.60	52.81	74.00	-21.19	Peak	Vertical
2	2390.0000	34.80	-6.60	41.40	54.00	-12.60	Average	Vertical



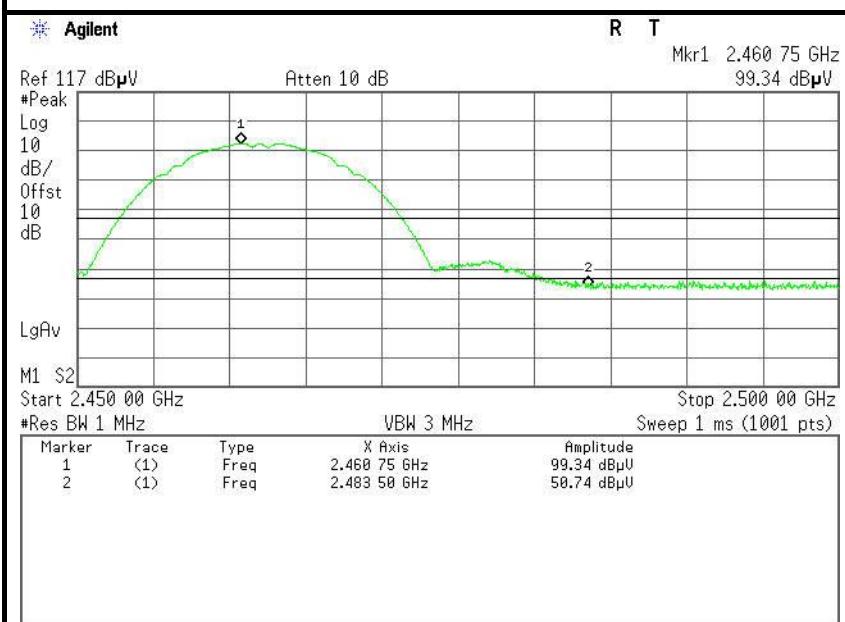
No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2390.0000	44.08	-6.60	50.68	74.00	-23.32	Peak	Horizontal
2	2390.0000	33.11	-6.60	39.71	54.00	-14.29	Average	Horizontal



Band Edges (CH High)

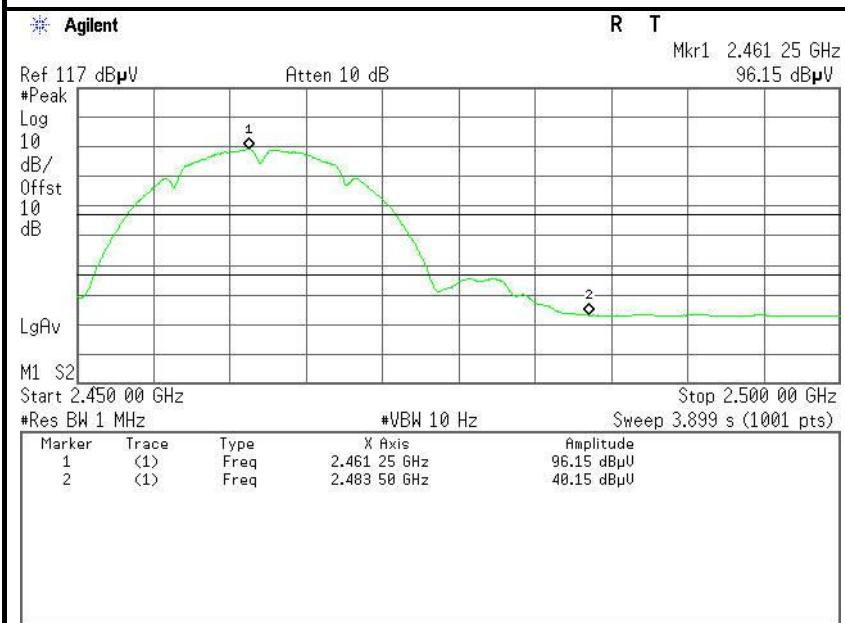
Detector mode: Peak

Polarity: Vertical



Detector mode: Average

Polarity: Vertical

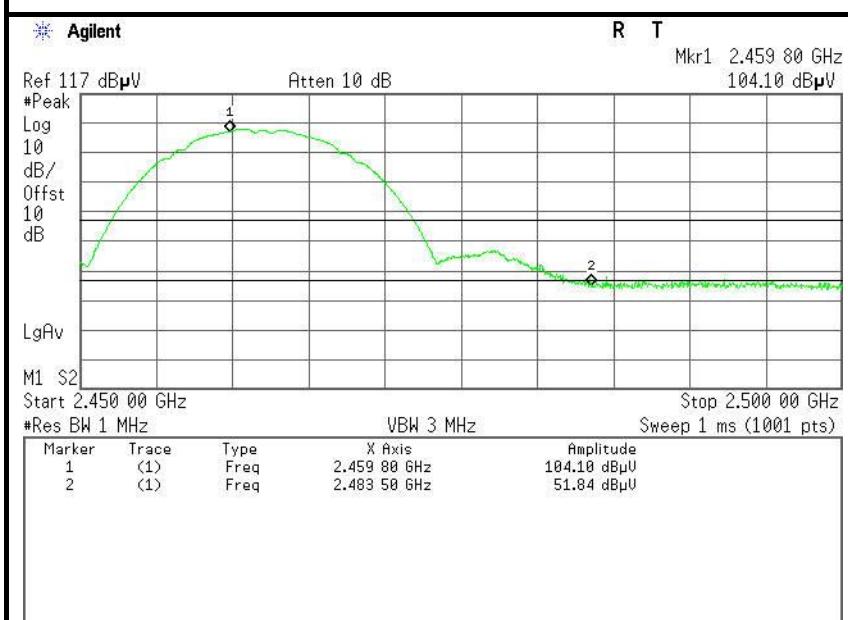


No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	44.50	-6.24	50.74	74.00	-23.26	Peak	Vertical
2	2483.5000	33.91	-6.24	40.15	54.00	-13.85	Average	Vertical



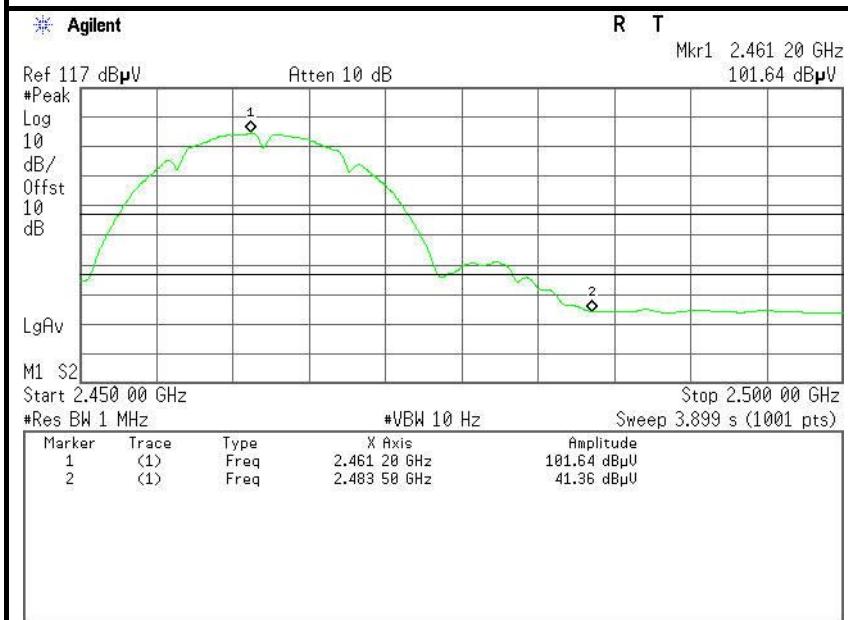
Detector mode: Peak

Polarity: Horizontal



Detector mode: Average

Polarity: Horizontal

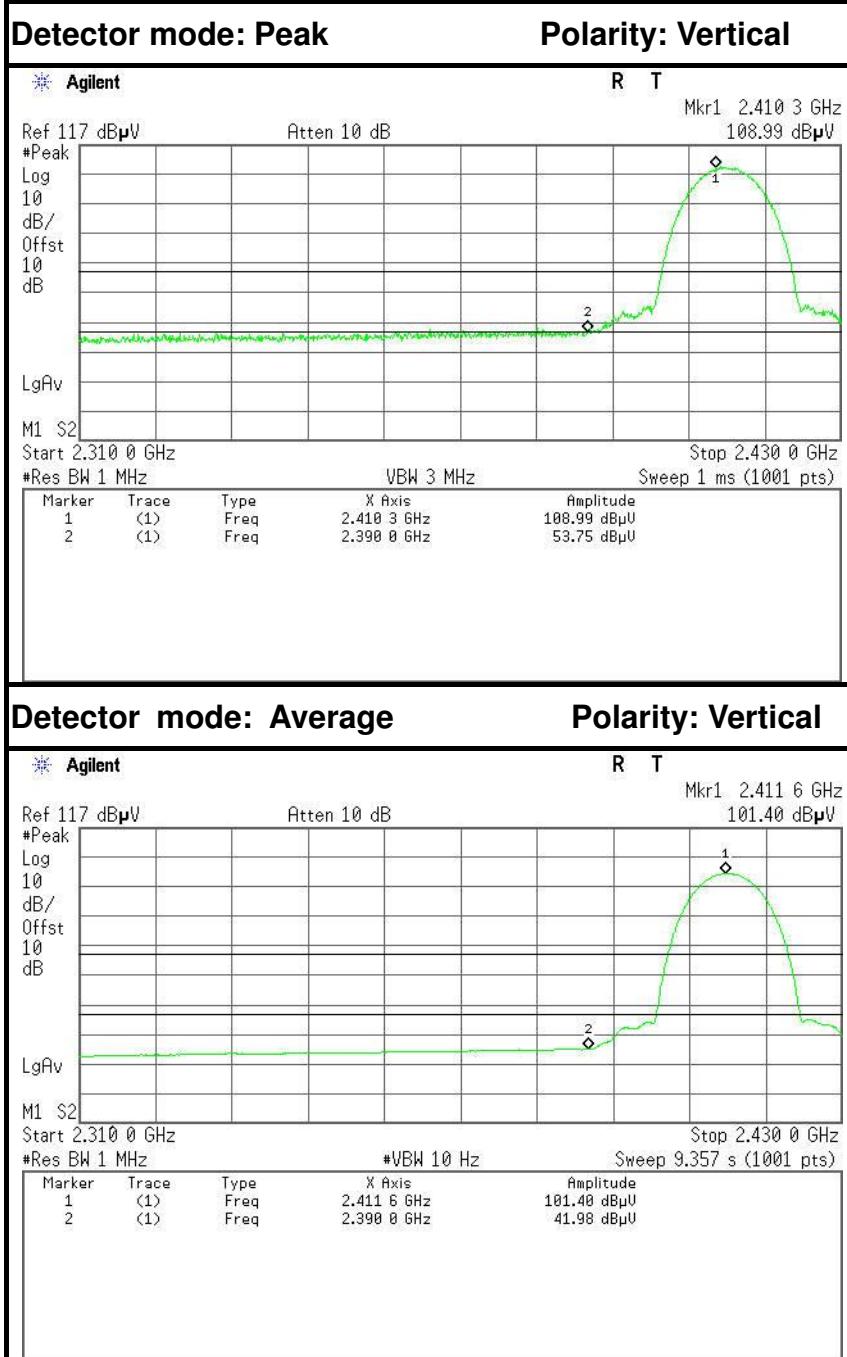


No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	45.60	-6.24	51.84	74.00	-22.16	Peak	Horizontal
2	2483.5000	35.12	-6.24	41.36	54.00	-12.64	Average	Horizontal

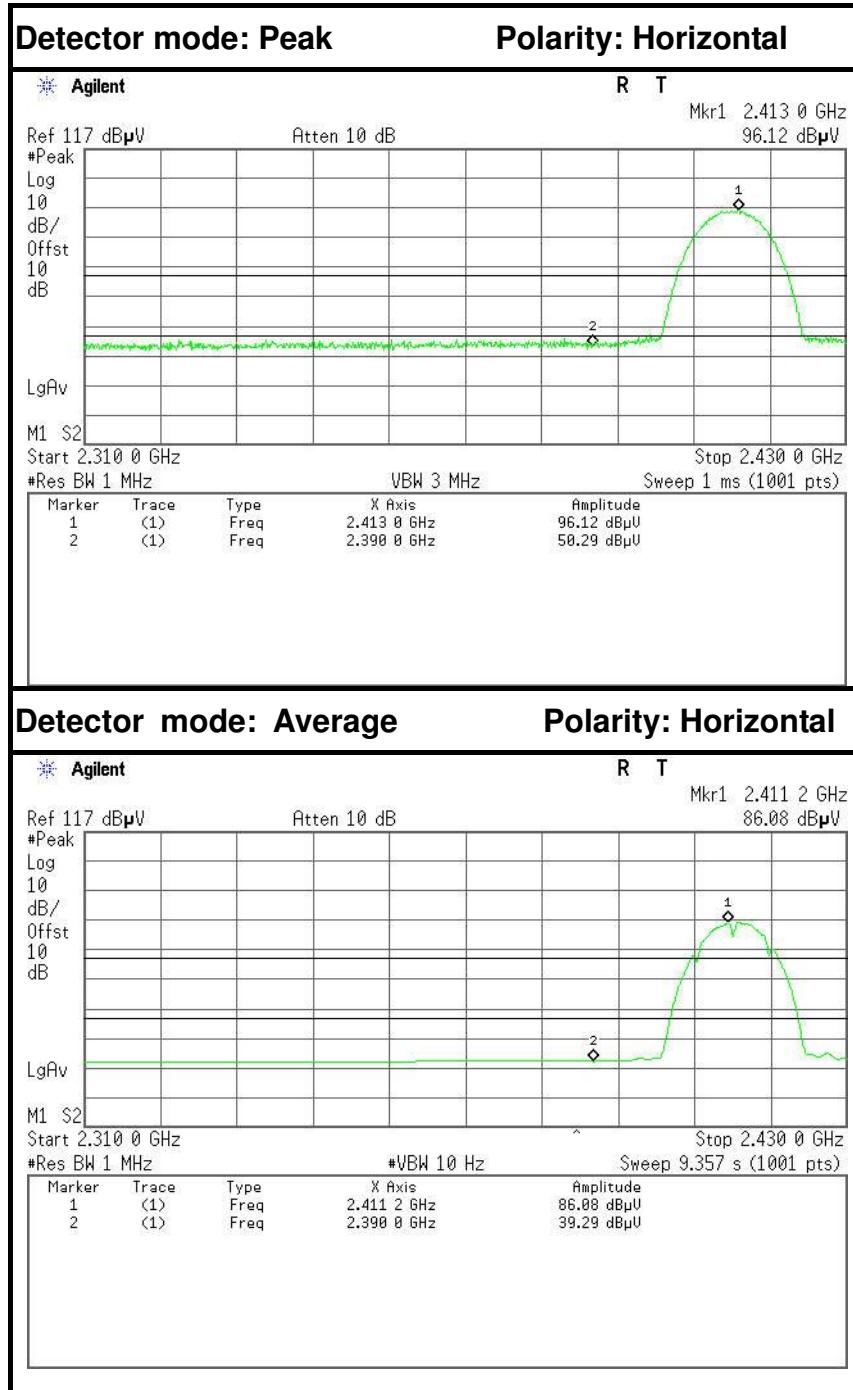


IEEE 802.11b mode (Antenna 1)

Band Edges (CH Low)



No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2390.0000	47.15	-6.60	53.75	74.00	-20.25	Peak	Vertical
2	2390.0000	35.38	-6.60	41.98	54.00	-12.02	Average	Vertical



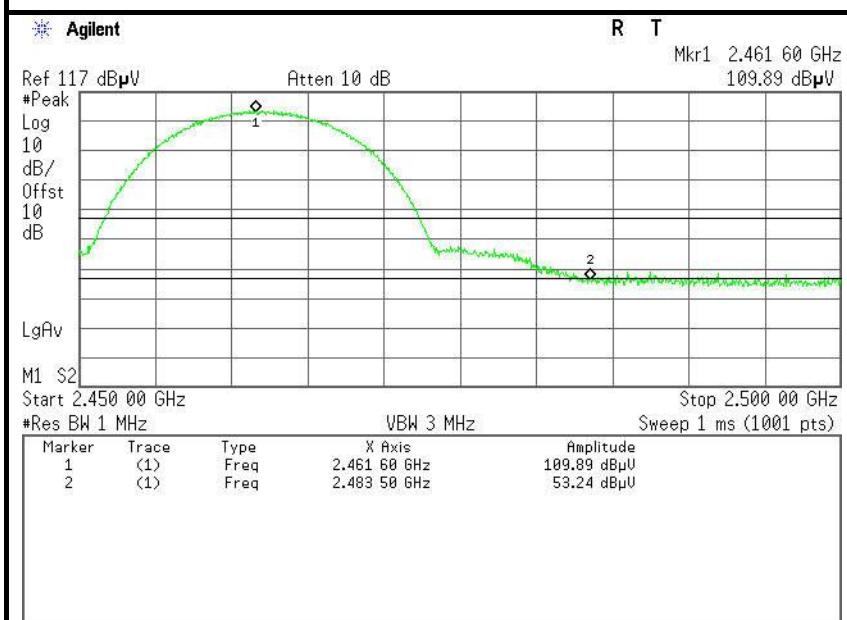
No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2390.0000	43.69	-6.60	50.29	74.00	-23.71	Peak	Horizontal
2	2390.0000	32.69	-6.60	39.29	54.00	-14.71	Average	Horizontal



Band Edges (CH High)

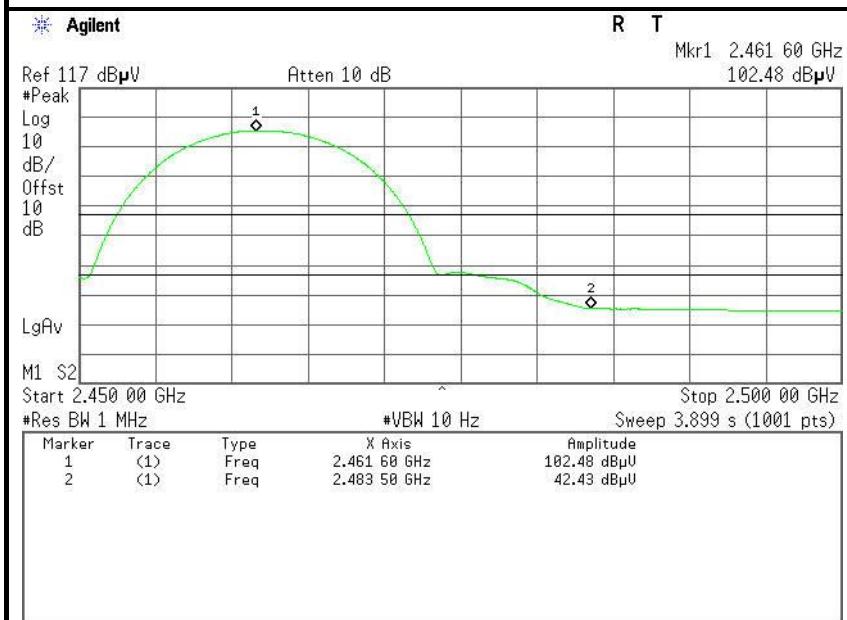
Detector mode: Peak

Polarity: Vertical



Detector mode: Average

Polarity: Vertical

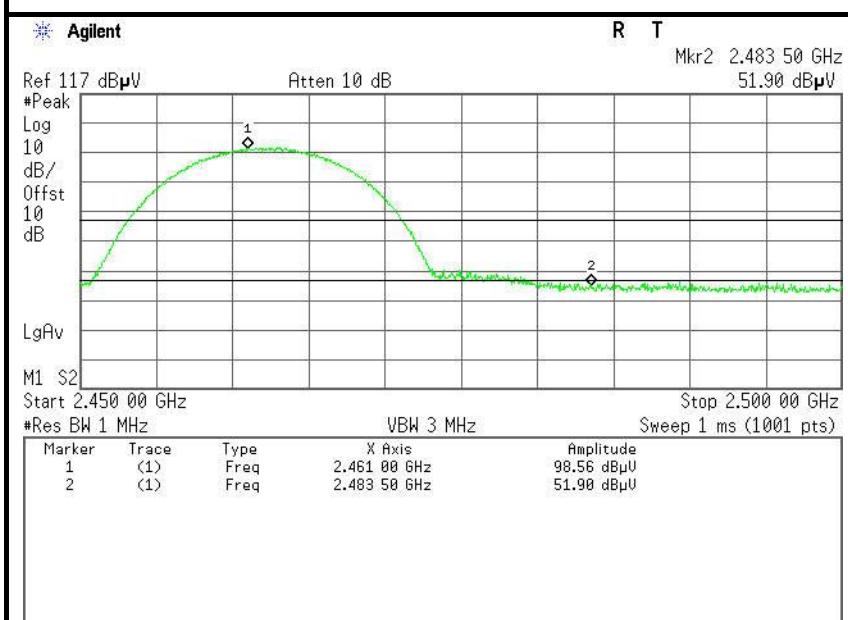


No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	47.00	-6.24	53.24	74.00	-20.76	Peak	Vertical
2	2483.5000	36.19	-6.24	42.43	54.00	-11.57	Average	Vertical



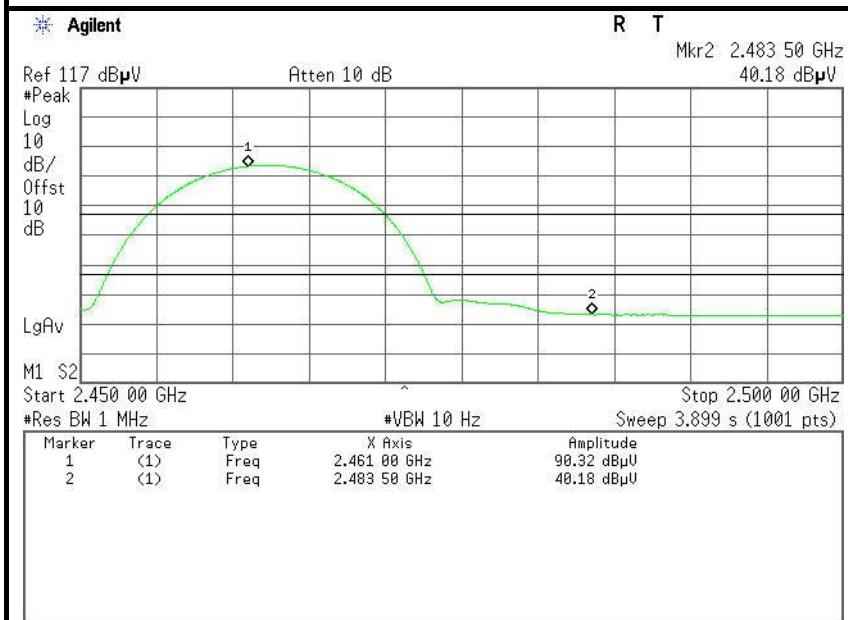
Detector mode: Peak

Polarity: Horizontal



Detector mode: Average

Polarity: Horizontal

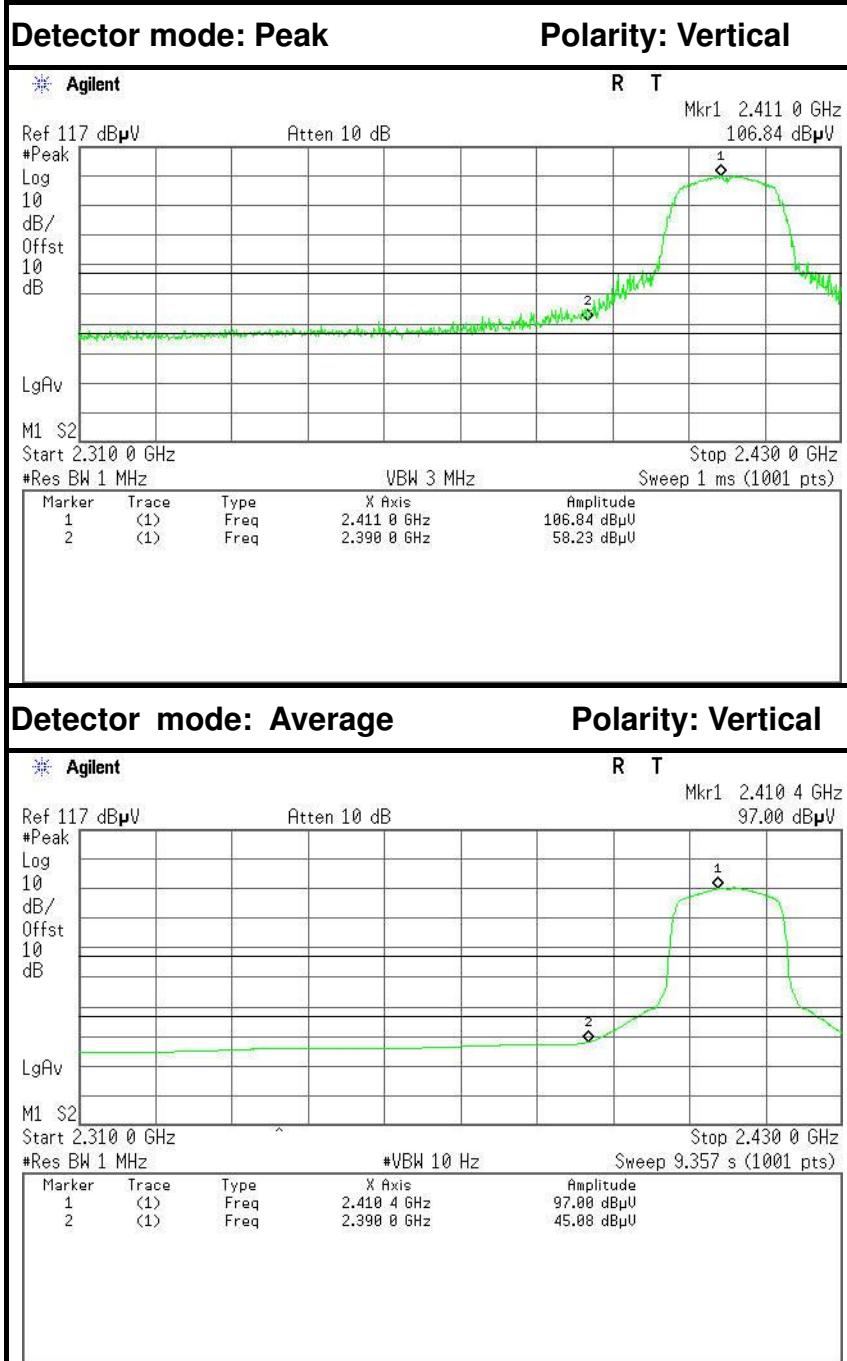


No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	45.66	-6.24	51.90	74.00	-22.10	Peak	Horizontal
2	2483.5000	33.94	-6.24	40.18	54.00	-13.82	Average	Horizontal



IEEE 802.11g mode (Antenna 0)

Band Edges (CH Low)

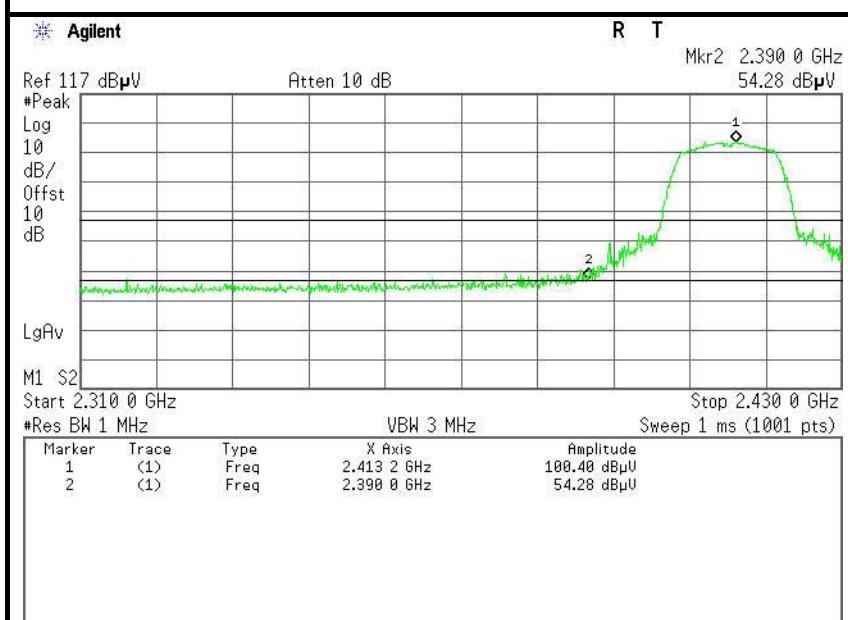


No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2390.0000	51.63	-6.60	58.23	74.00	-15.77	Peak	Vertical
2	2390.0000	38.48	-6.60	45.08	54.00	-8.92	Average	Vertical



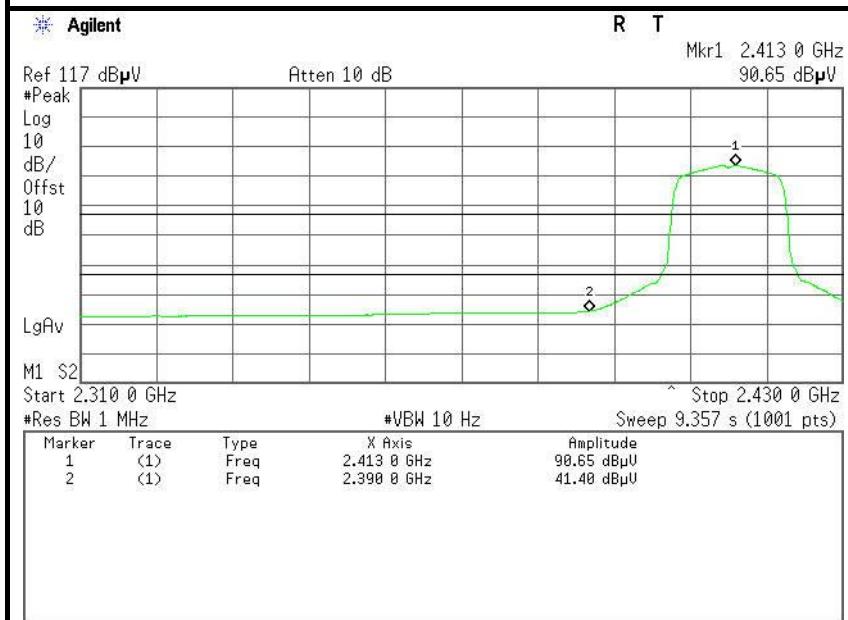
Detector mode: Peak

Polarity: Horizontal



Detector mode: Average

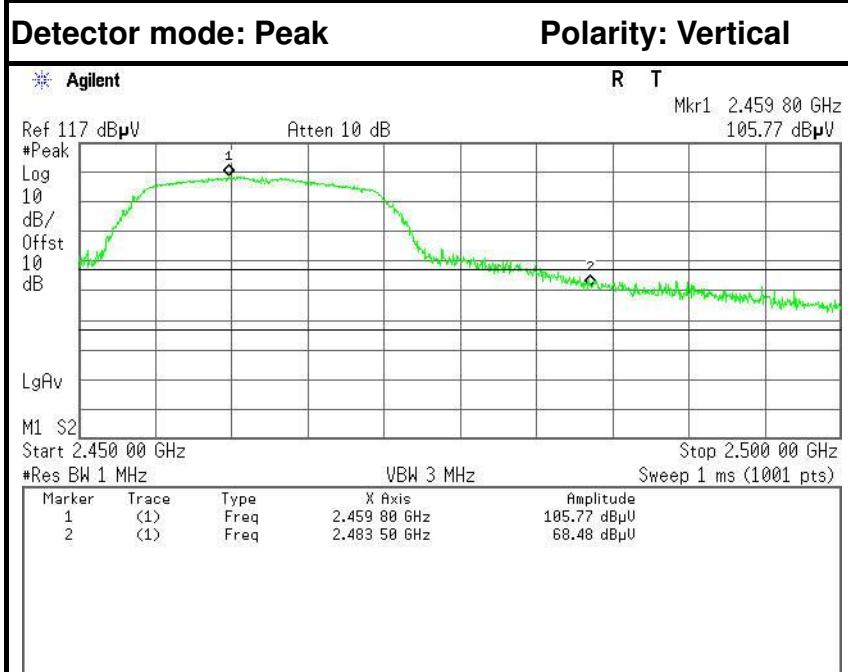
Polarity: Horizontal



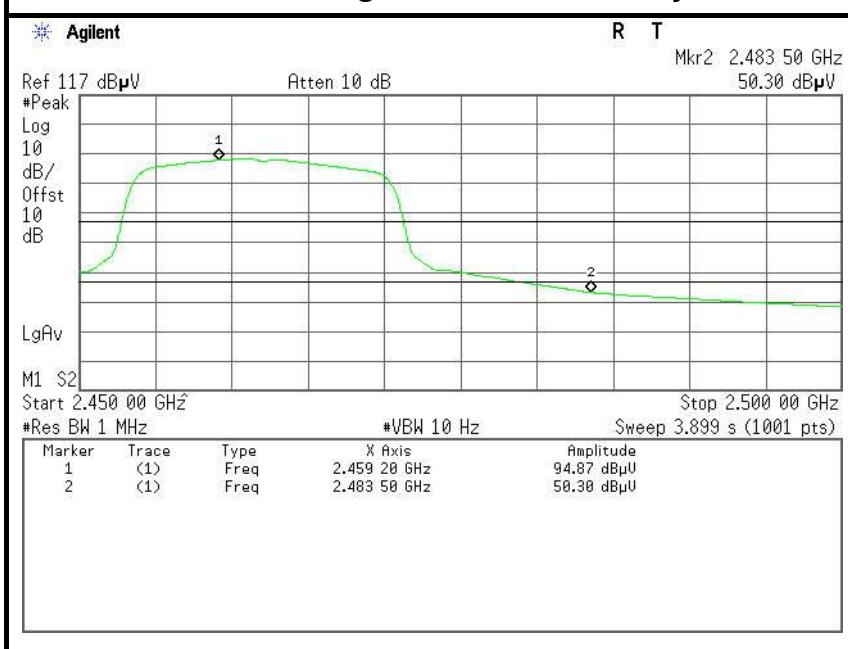
No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2390.0000	47.68	-6.60	54.28	74.00	-19.72	Peak	Horizontal
2	2390.0000	34.80	-6.60	41.40	54.00	-12.60	Average	Horizontal



Band Edges (CH High)



Detector mode: Average Polarity: Vertical

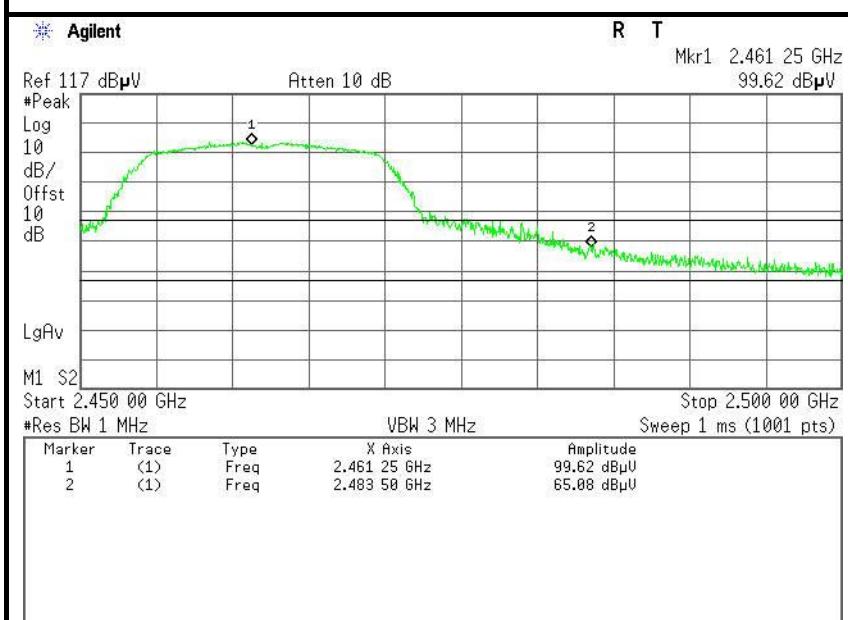


No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	62.24	-6.24	68.48	74.00	-5.52	Peak	Vertical
2	2483.5000	44.06	-6.24	50.30	54.00	-3.70	Average	Vertical



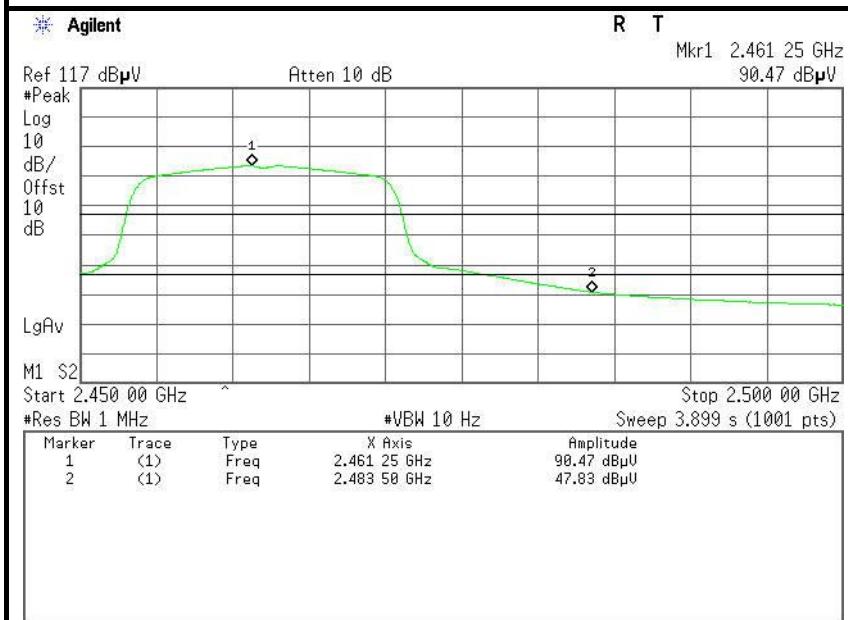
Detector mode: Peak

Polarity: Horizontal



Detector mode: Average

Polarity: Horizontal

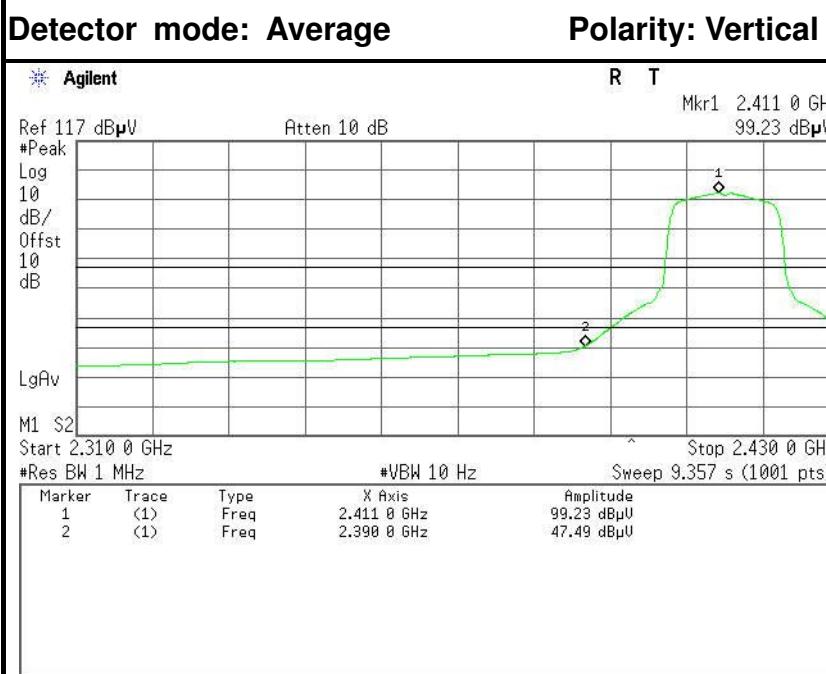
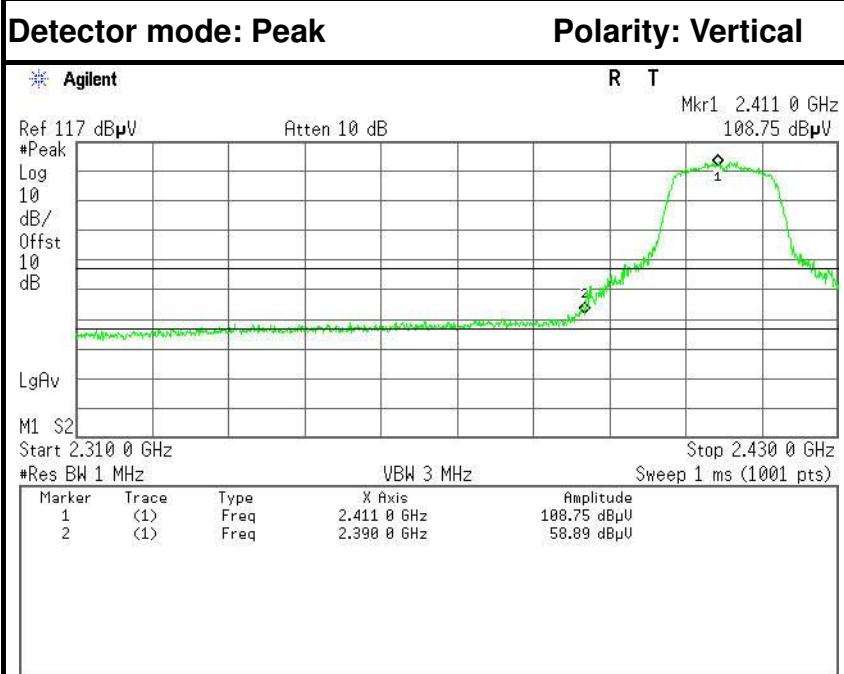


No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	58.84	-6.24	65.08	74.00	-8.92	Peak	Horizontal
2	2483.5000	41.59	-6.24	47.83	54.00	-6.17	Average	Horizontal

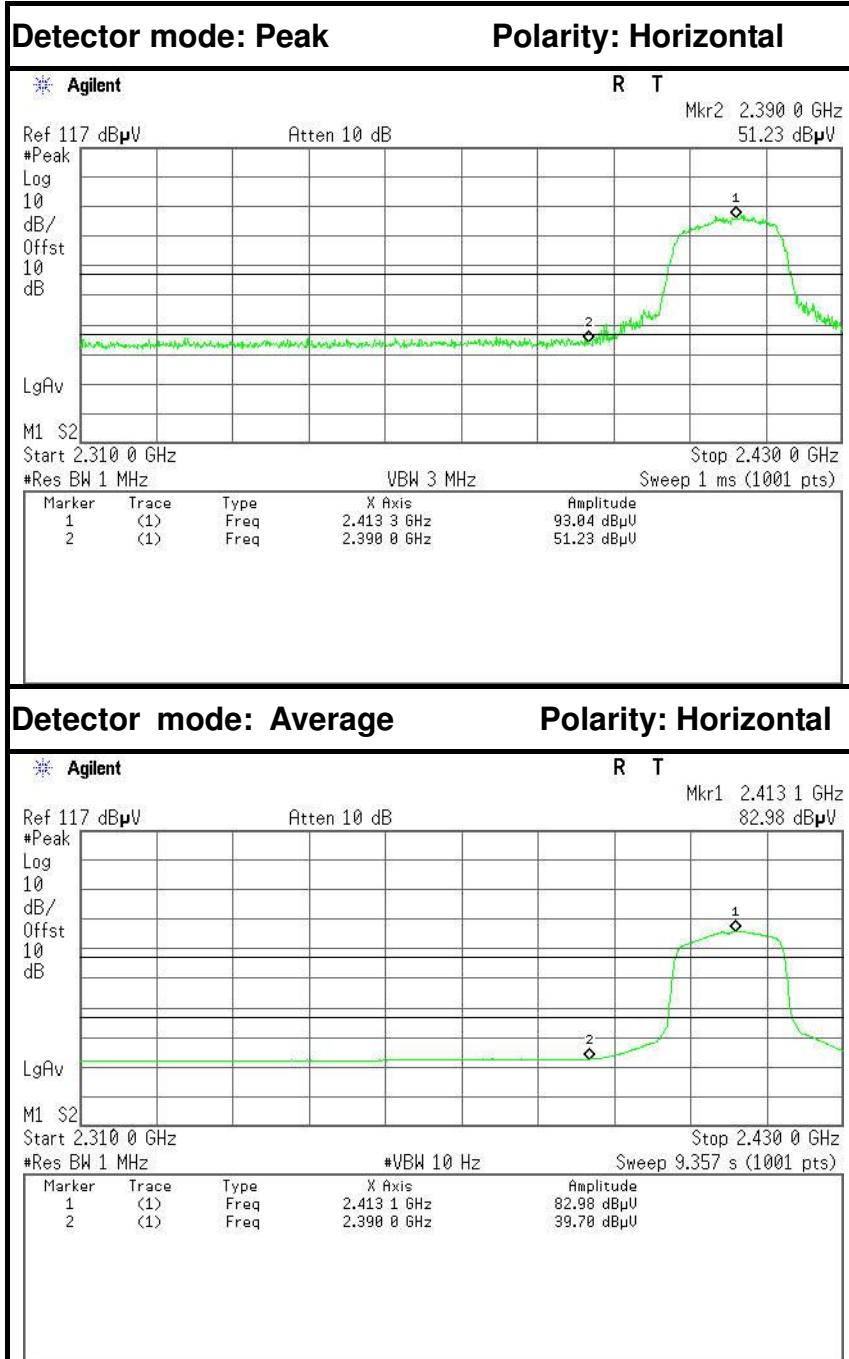


IEEE 802.11g mode (Antenna 1)

Band Edges (CH Low)



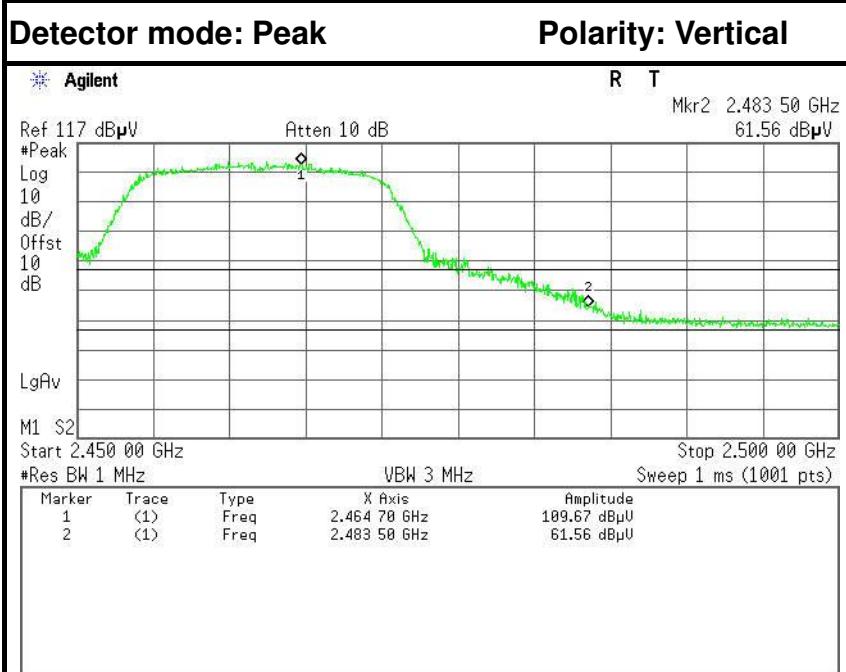
No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2390.0000	52.29	-6.60	58.89	74.00	-15.11	Peak	Vertical
2	2390.0000	40.89	-6.60	47.49	54.00	-6.51	Average	Vertical



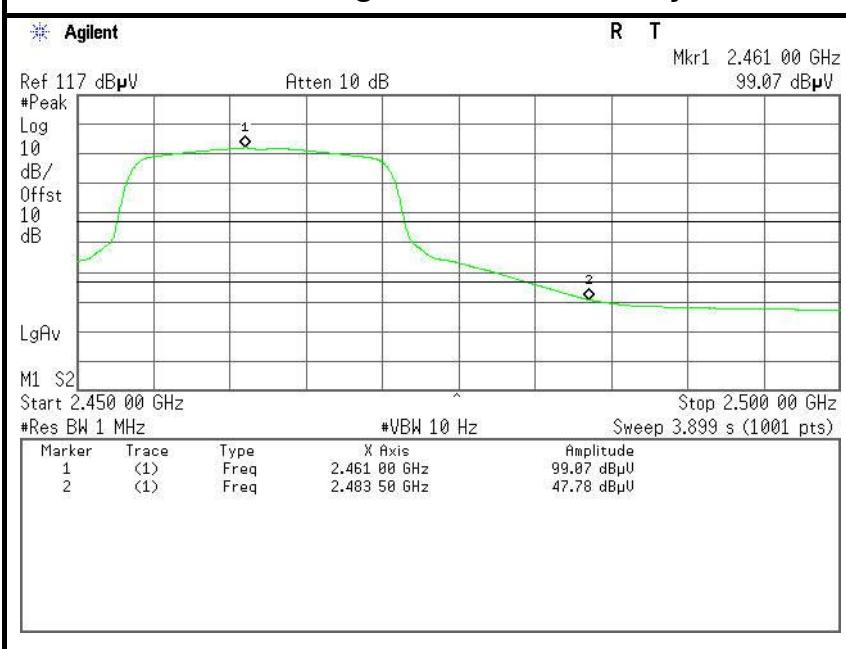
No.	Frequency (MHz)	Reading (dBuV)	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Antenna Pole
1	2390.0000	44.63	-6.60	51.23	74.00	-22.77	Peak	Horizontal
2	2390.0000	33.10	-6.60	39.70	54.00	-14.30	Average	Horizontal



Band Edges (CH High)



Detector mode: Average Polarity: Vertical

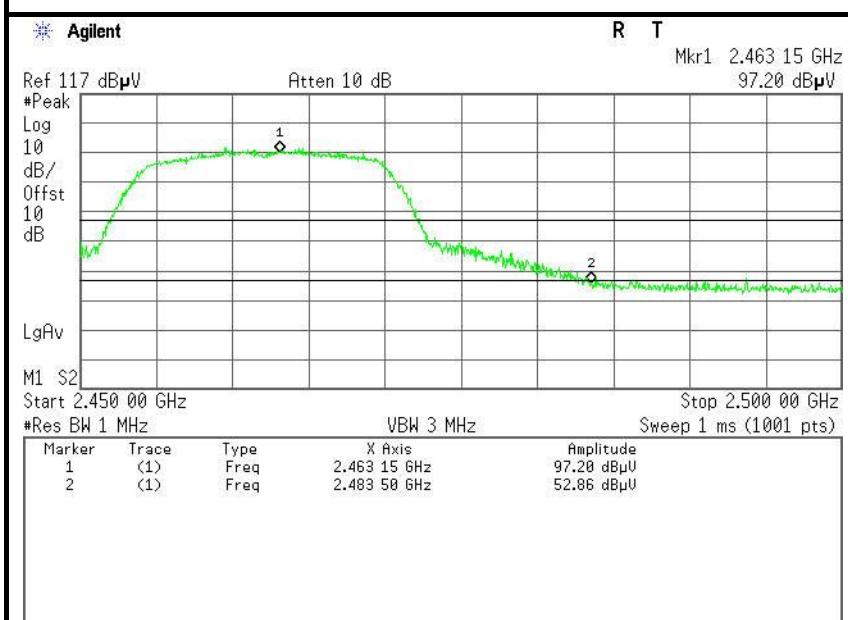


No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	55.32	-6.24	61.56	74.00	-12.44	Peak	Vertical
2	2483.5000	41.54	-6.24	47.78	54.00	-6.22	Average	Vertical



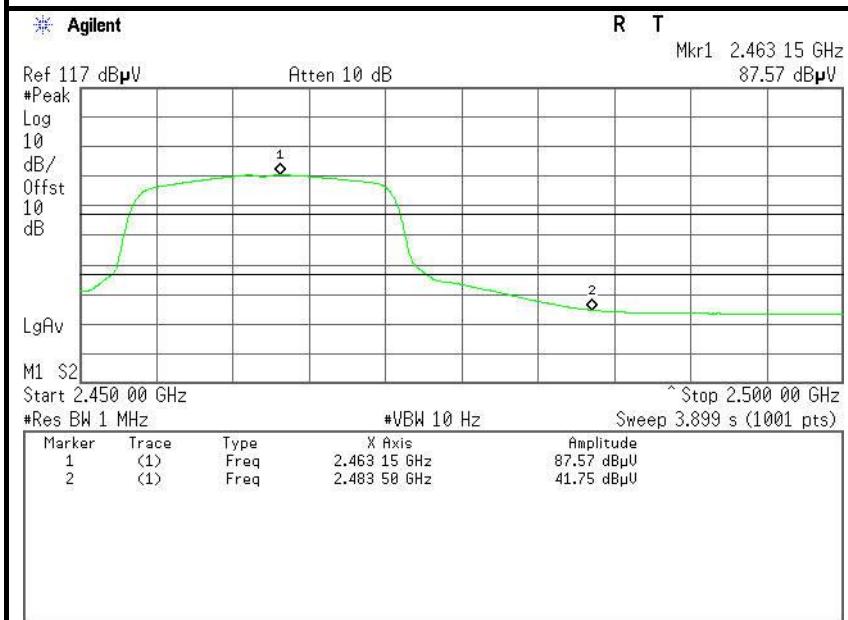
Detector mode: Peak

Polarity: Horizontal



Detector mode: Average

Polarity: Horizontal

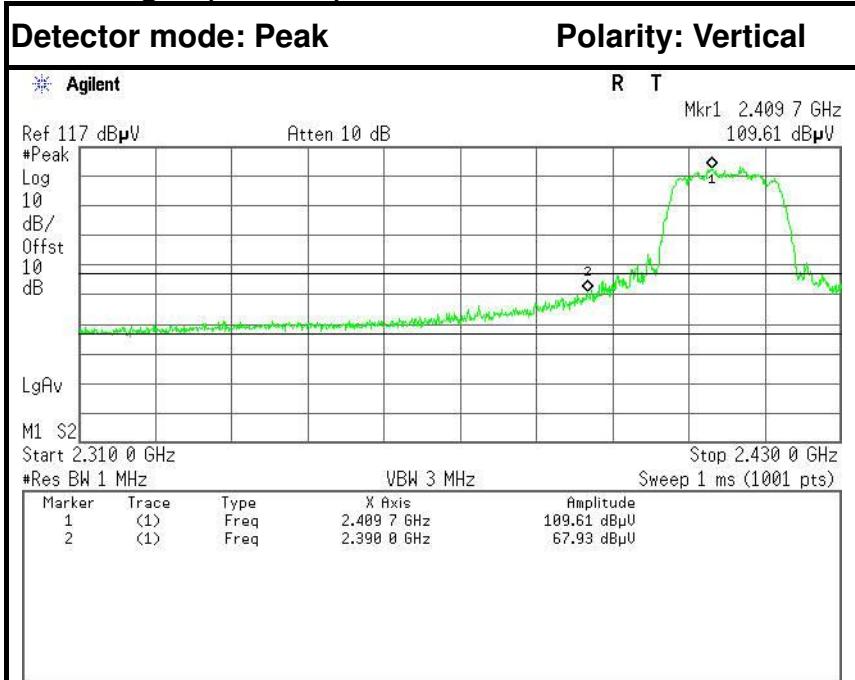


No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	46.62	-6.24	52.86	74.00	-21.14	Peak	Horizontal
2	2483.5000	35.51	-6.24	41.75	54.00	-12.25	Average	Horizontal

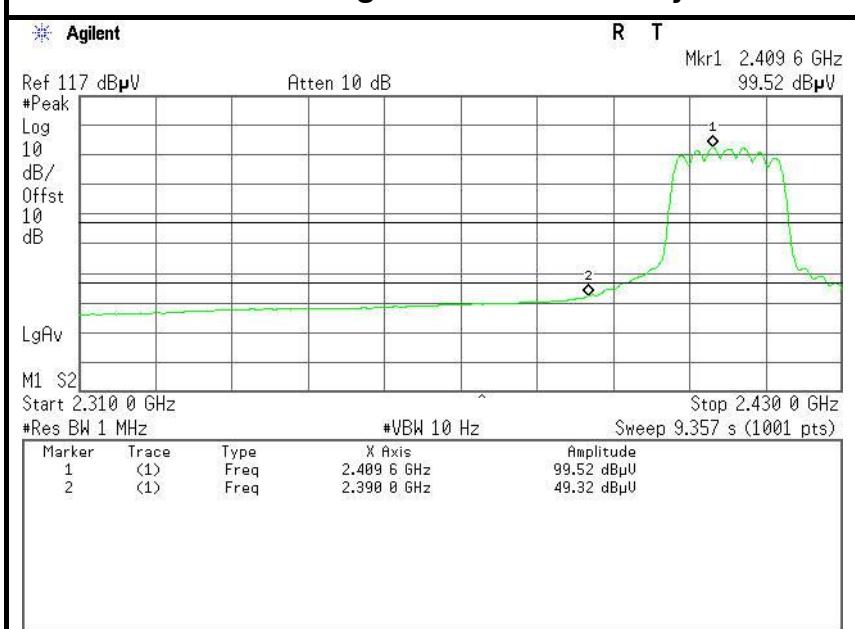


IEEE 802.11n HT20 MHz mode (Combine with Antenna 0 and Antenna 1)

Band Edges (CH Low)



Detector mode: Average Polarity: Vertical

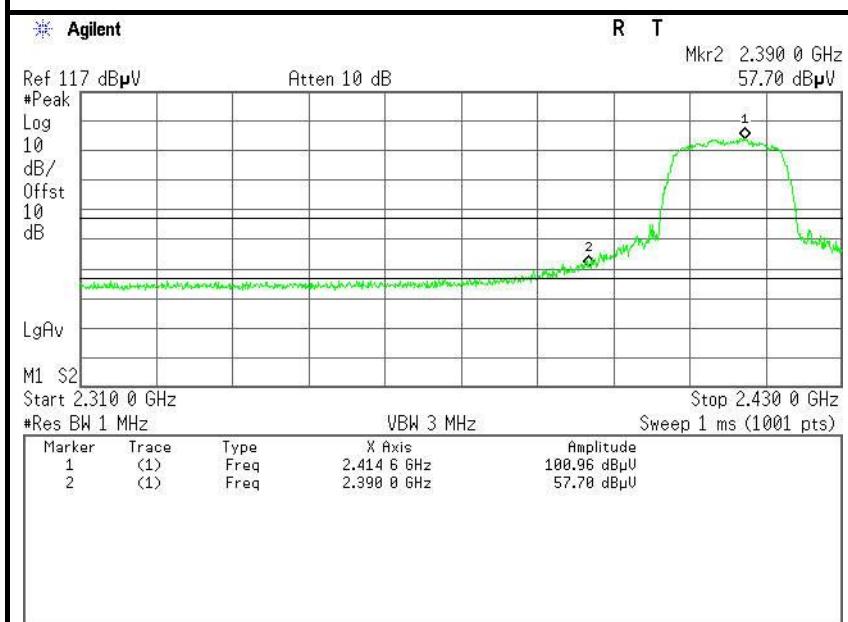


No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2390.0000	61.33	-6.60	67.93	74.00	-6.07	Peak	Vertical
2	2390.0000	42.72	-6.60	49.32	54.00	-4.68	Average	Vertical



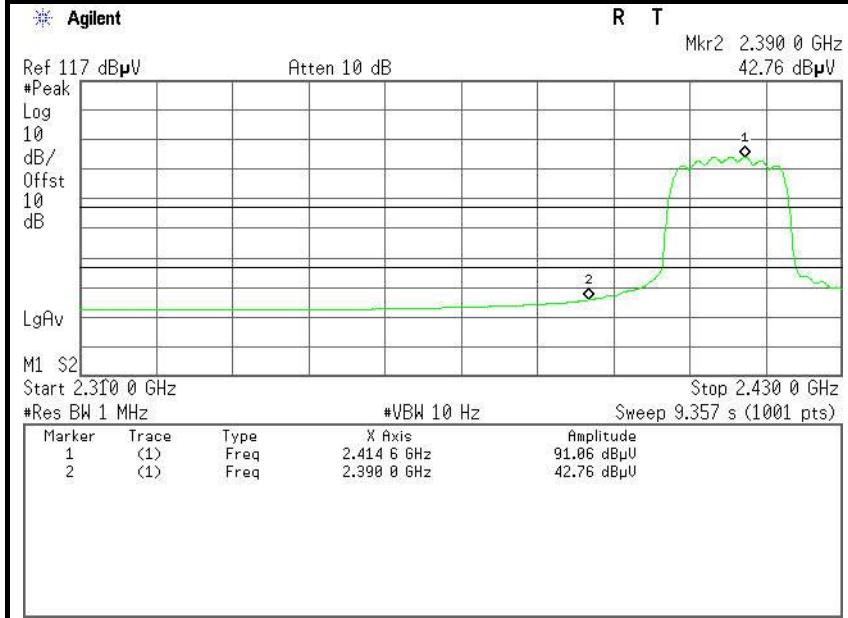
Detector mode: Peak

Polarity: Horizontal

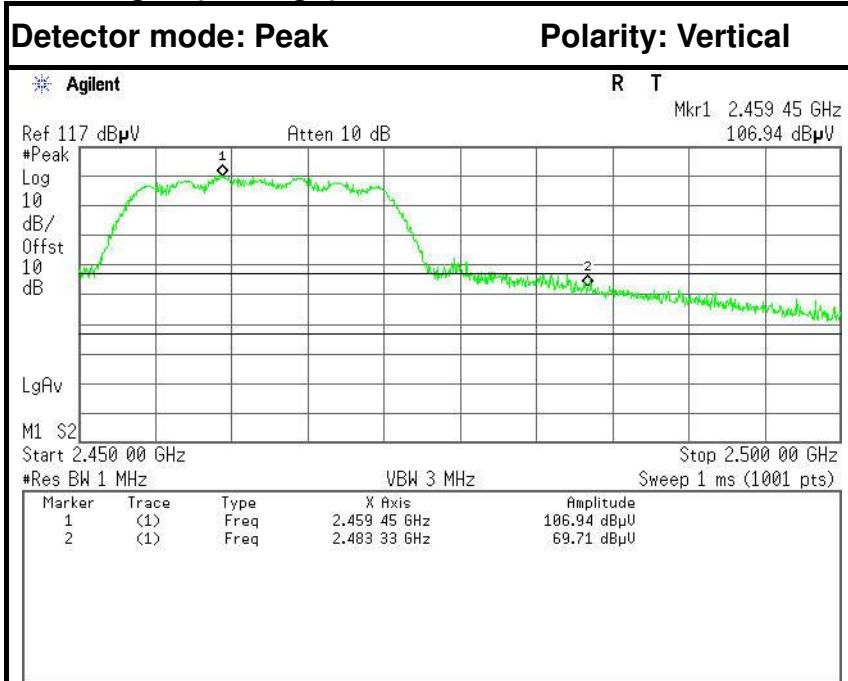
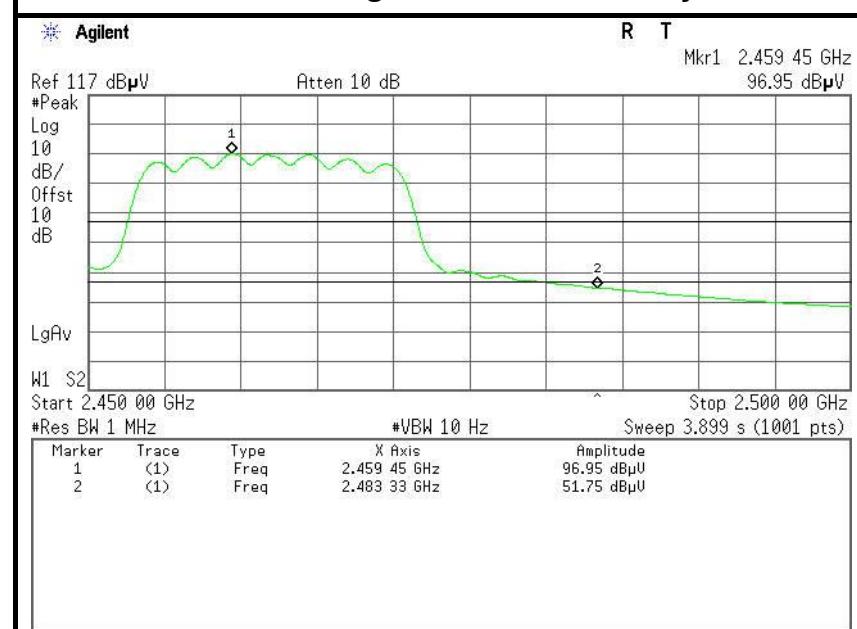


Detector mode: Average

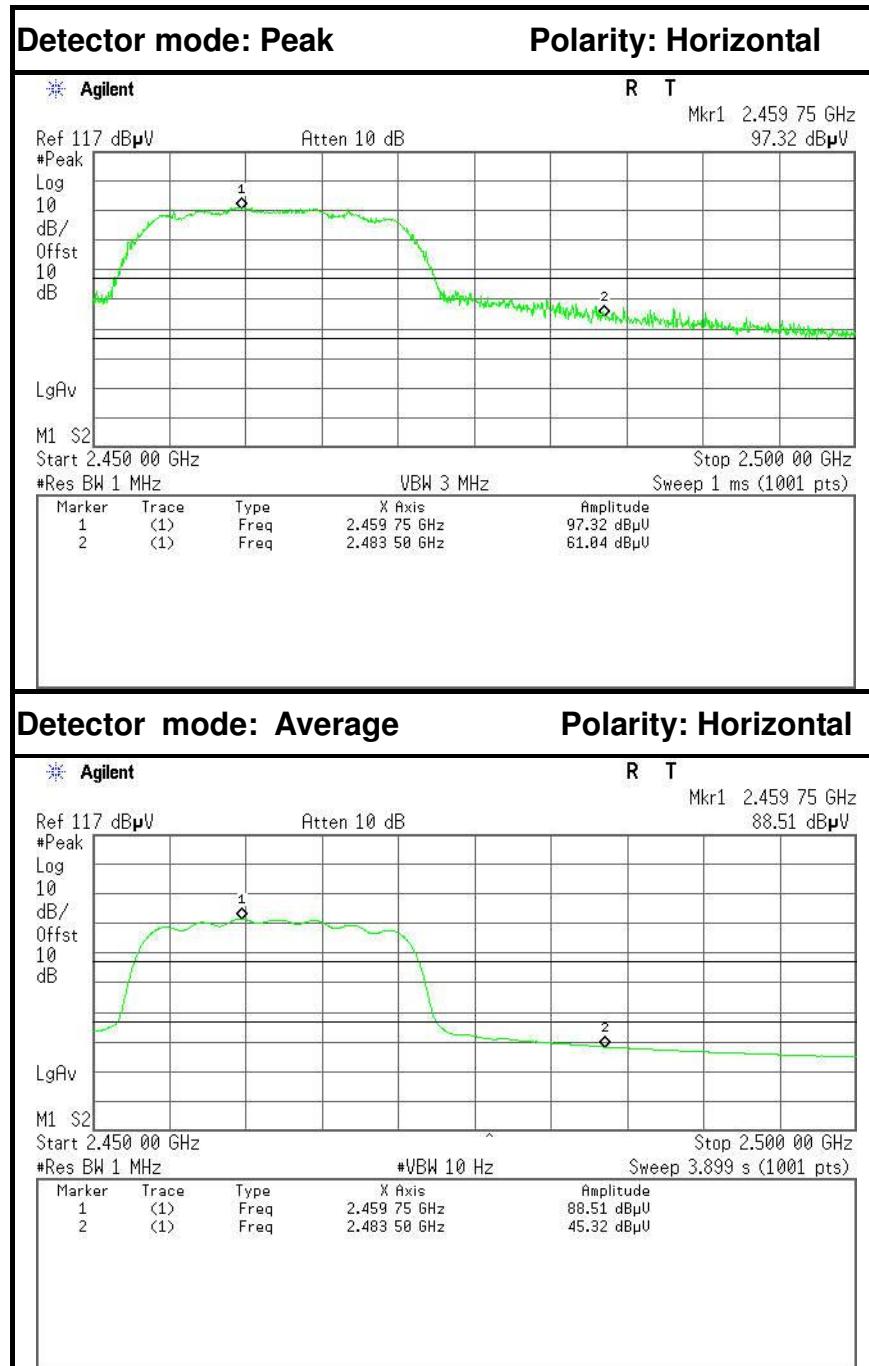
Polarity: Horizontal



No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2390.0000	51.10	-6.60	57.70	74.00	-16.30	Peak	Horizontal
2	2390.0000	36.16	-6.60	42.76	54.00	-11.24	Average	Horizontal

**Band Edges (CH High)****Detector mode: Average** **Polarity: Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	63.47	-6.24	69.71	74.00	-4.29	Peak	Vertical
2	2483.5000	45.51	-6.24	51.75	54.00	-2.25	Average	Vertical

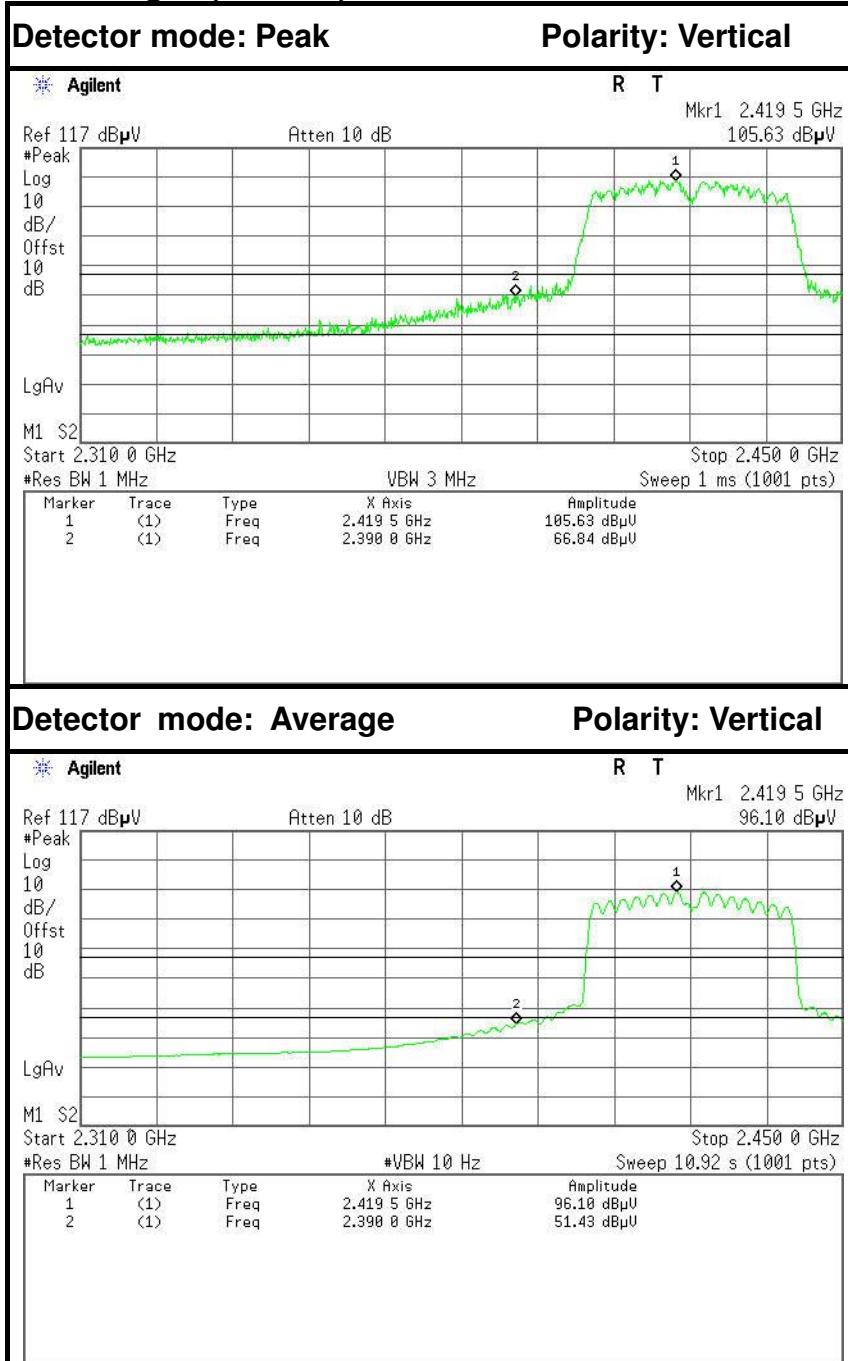


No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	54.80	-6.24	61.04	74.00	-12.96	Peak	Horizontal
2	2483.5000	39.08	-6.24	45.32	54.00	-8.68	Average	Horizontal



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

Band Edges (CH Low)

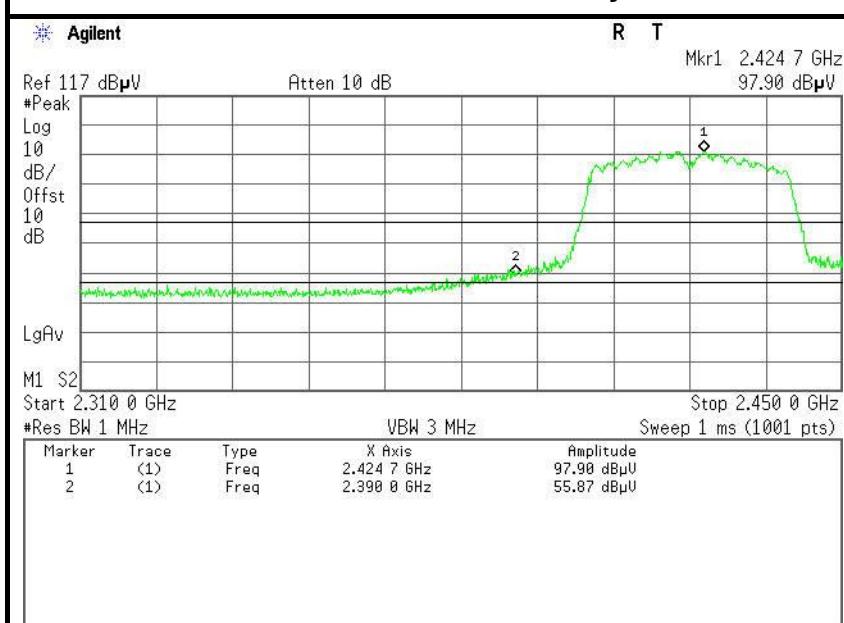


No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2390.0000	60.24	-6.60	66.84	74.00	-7.16	Peak	Vertical
2	2390.0000	44.83	-6.60	51.43	54.00	-2.57	Average	Vertical



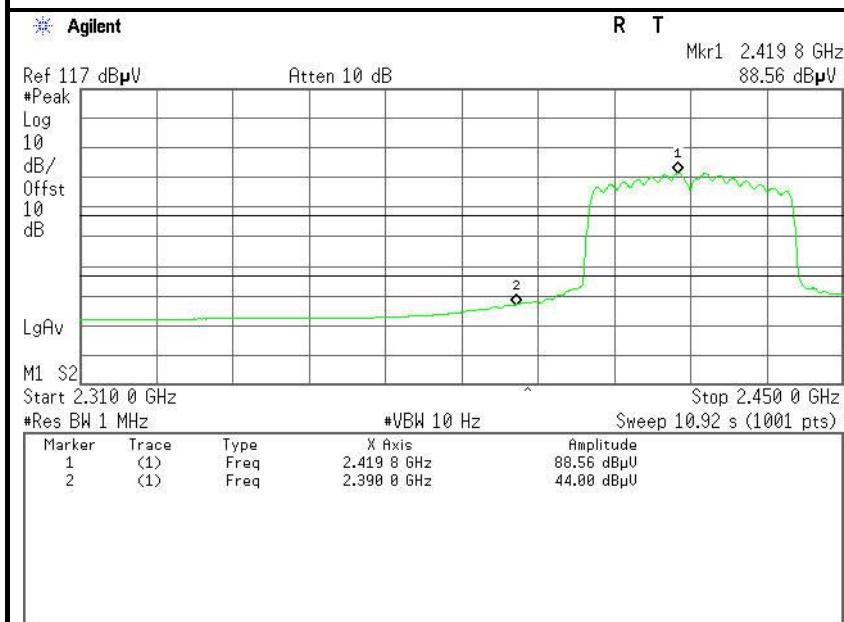
Detector mode: Peak

Polarity: Horizontal

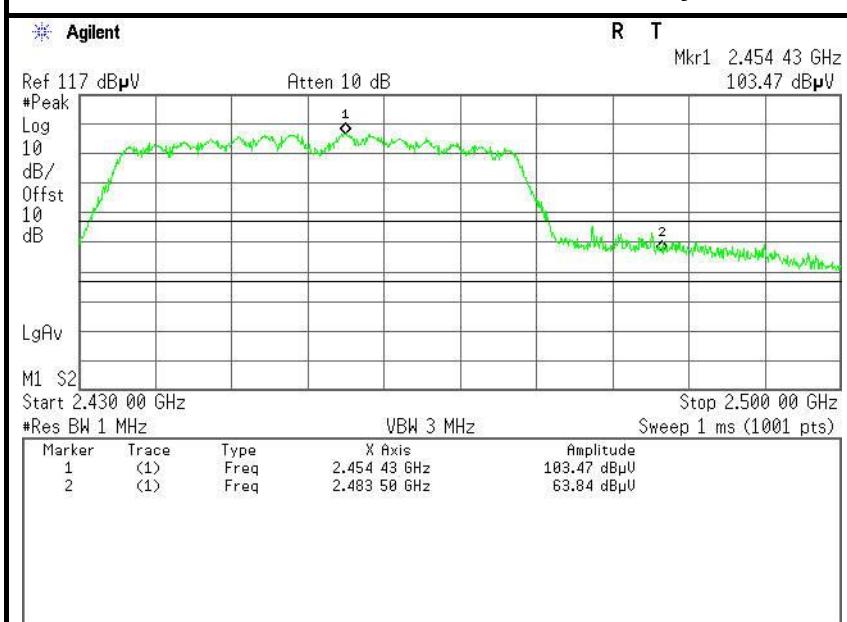
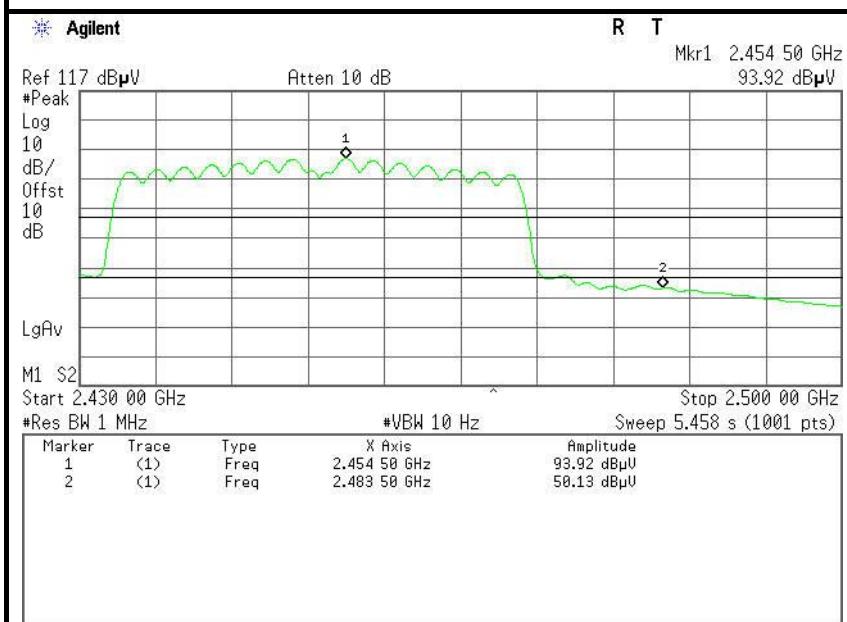


Detector mode: Average

Polarity: Horizontal



No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2390.0000	49.27	-6.60	55.87	74.00	-18.13	Peak	Horizontal
2	2390.0000	37.40	-6.60	44.00	54.00	-10.00	Average	Horizontal

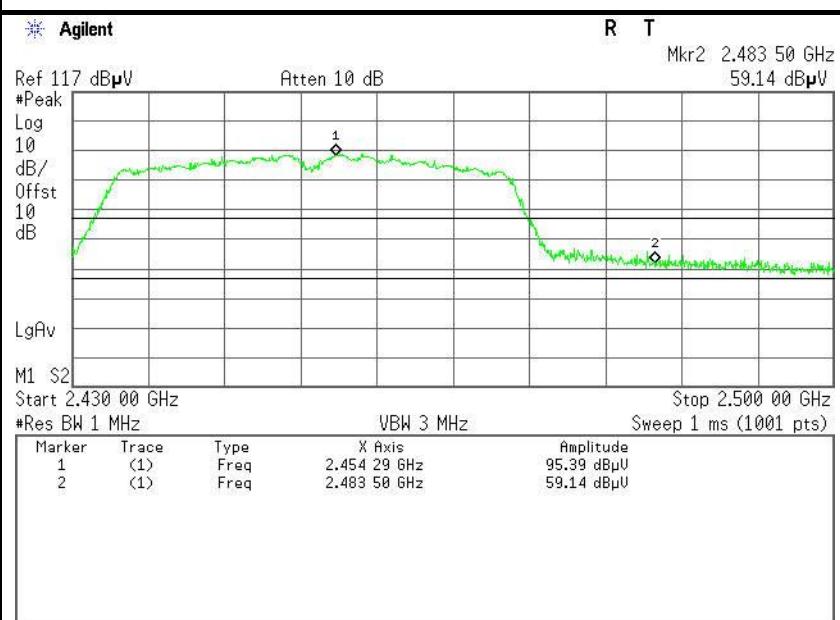
**Band Edges (CH High)****Detector mode: Peak****Polarity: Vertical****Detector mode: Average****Polarity: Vertical**

No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	57.60	-6.24	63.84	74.00	-10.16	Peak	Vertical
2	2483.5000	43.89	-6.24	50.13	54.00	-3.87	Average	Vertical



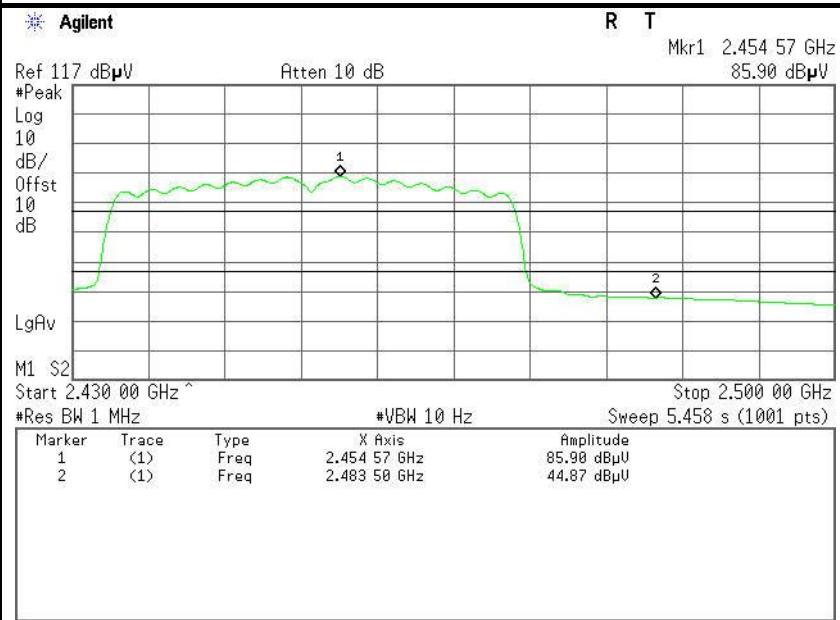
Detector mode: Peak

Polarity: Horizontal



Detector mode: Average

Polarity: Horizontal



No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	2483.5000	52.90	-6.24	59.14	74.00	-14.86	Peak	Horizontal
2	2483.5000	38.63	-6.24	44.87	54.00	-9.13	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

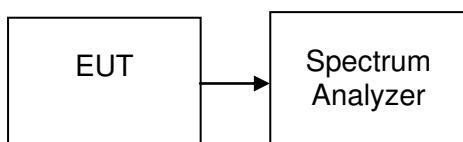
7.7.3. TEST PROCEDURES (please refer to measurement standard)

§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	-7.858	8	PASS
Mid	2437	-8.336		PASS
High	2462	-6.861		PASS

Test mode: IEEE 802.11b (Antenna 1)

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Test Result
Low	2412	-7.460	8	PASS
Mid	2437	-8.541		PASS
High	2462	-6.432		PASS

Test mode: IEEE 802.11g (Antenna 0)

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Test Result
Low	2412	-10.340	8	PASS
Mid	2437	-8.349		PASS
High	2462	-12.009		PASS

Test mode: IEEE 802.11g (Antenna 1)

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Test Result
Low	2412	-10.076	8	PASS
Mid	2437	-8.804		PASS
High	2462	-9.375		PASS

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

Channel	Frequency (MHz)	PPSD (dBm)			Limit (dBm)	Test Result
		Antenna 0	Antenna 1	Total		
Low	2412	-11.238	-10.581	-7.887	8	PASS
Mid	2437	-8.198	-8.282	-5.229		PASS
High	2462	-13.287	-12.491	-9.860		PASS

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

Channel	Frequency (MHz)	PPSD (dBm)			Limit (dBm)	Test Result
		Antenna 0	Antenna 1	Total		
Low	2422	-14.415	-14.315	-11.354	8	PASS
Mid	2437	-8.055	-8.675	-5.344		PASS
High	2452	-16.079	-17.386	-13.673		PASS



Test Plot

IEEE 802.11b mode (Antenna 0)

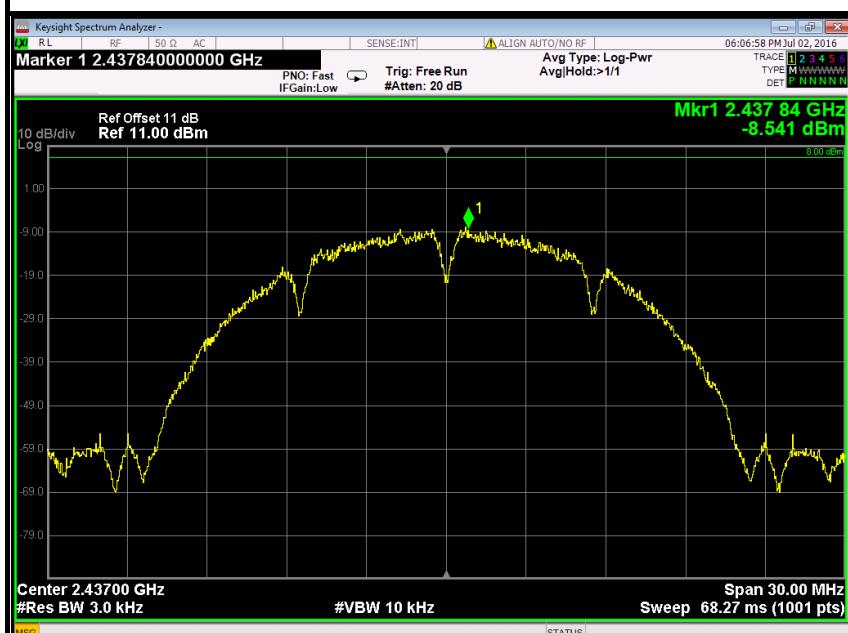
PPSD (CH Low)



PPSD (CH Mid)



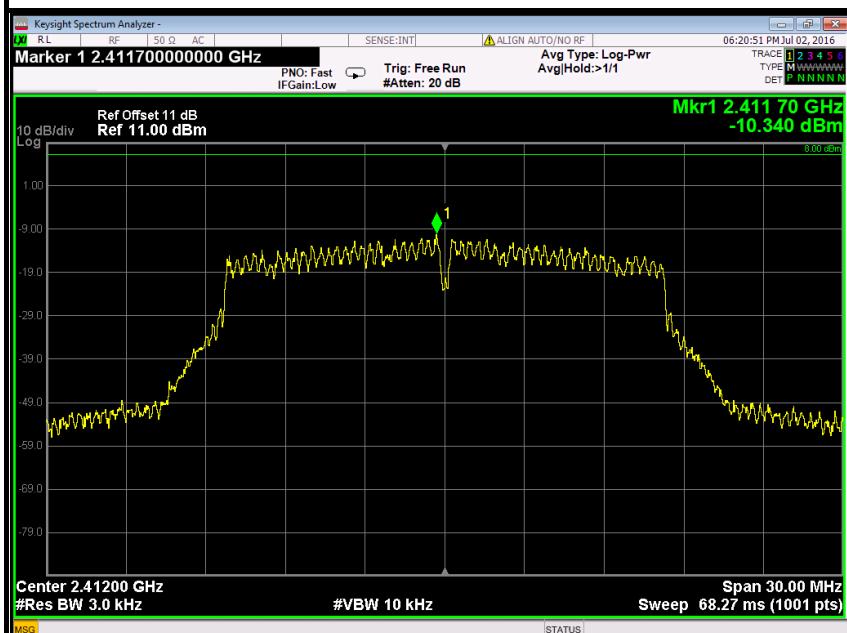
**PPSD (CH High)****IEEE 802.11b mode (Antenna 1)****PPSD (CH Low)**

**PPSD (CH Mid)****PPSD (CH High)**

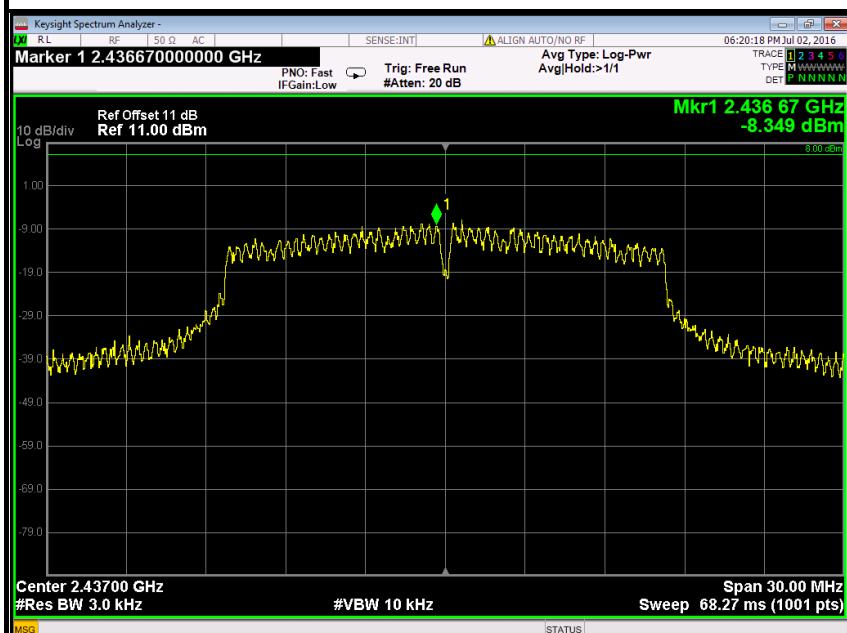


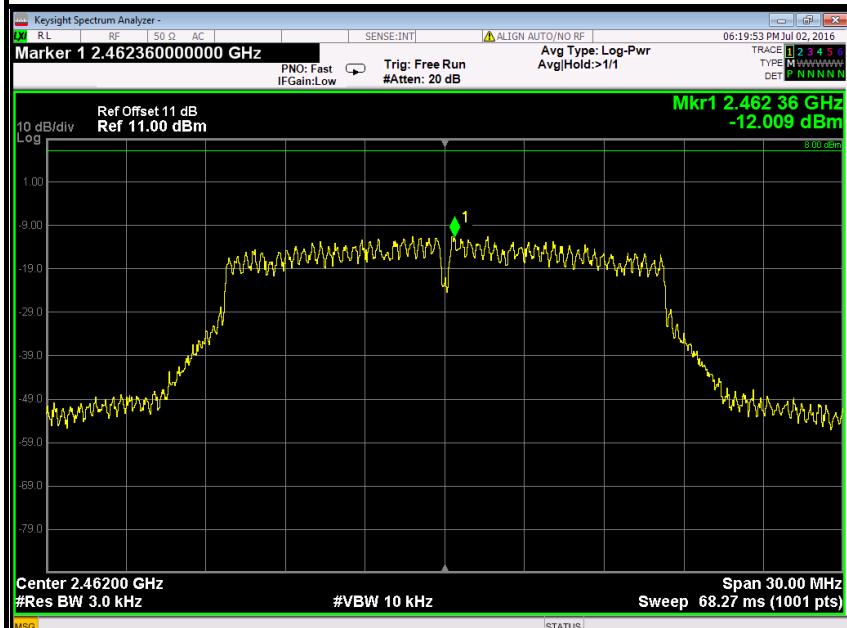
IEEE 802.11g mode (Antenna 0)

PPSD (CH Low)



PPSD (CH Mid)



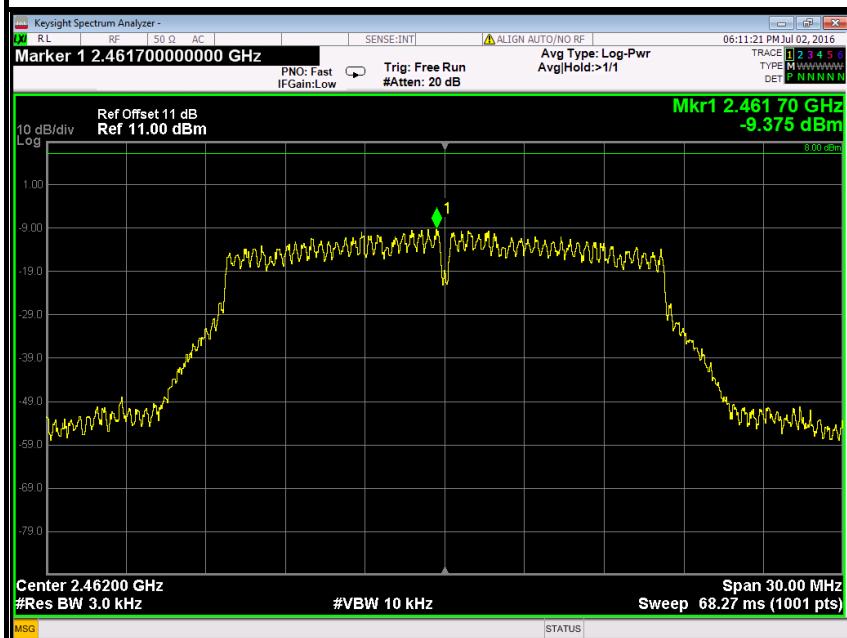
**PPSD (CH High)****IEEE 802.11g mode (Antenna 1)****PPSD (CH Low)**



PPSD (CH Mid)



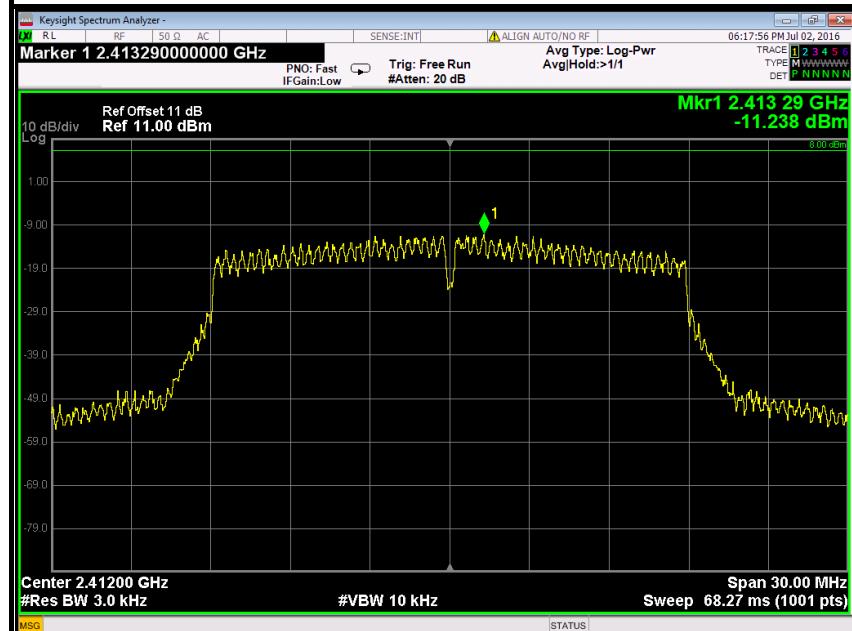
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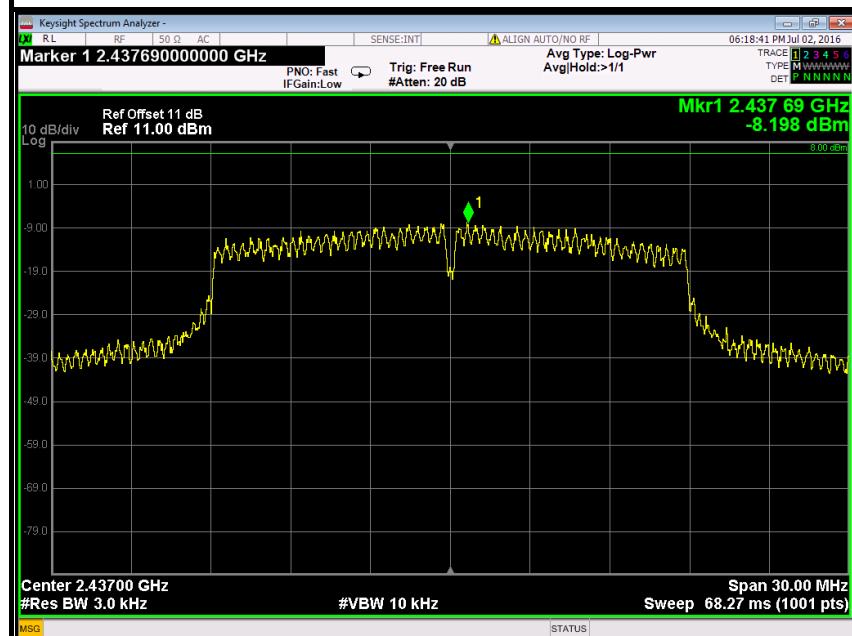


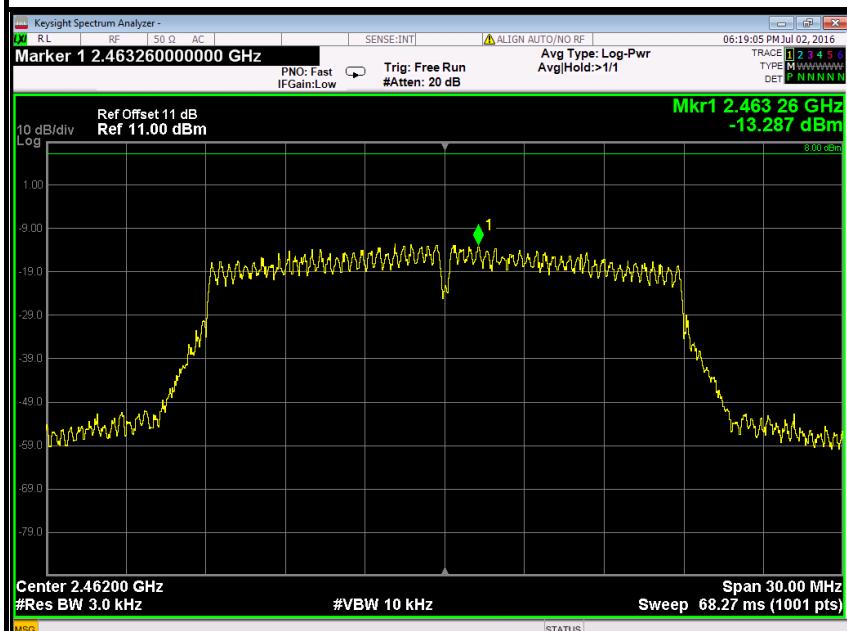
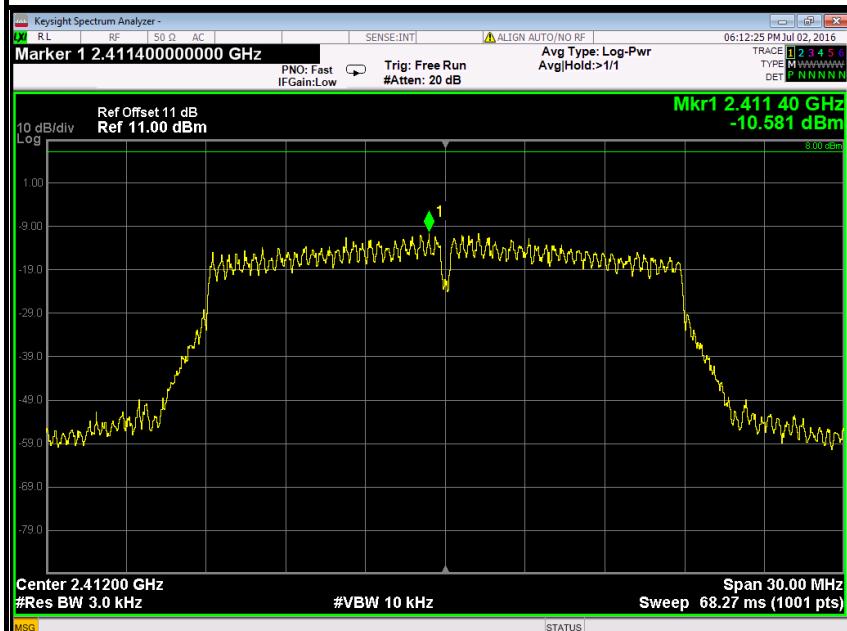
IEEE 802.11n HT20 MHz mode (Antenna 0)

PPSD (CH Low)



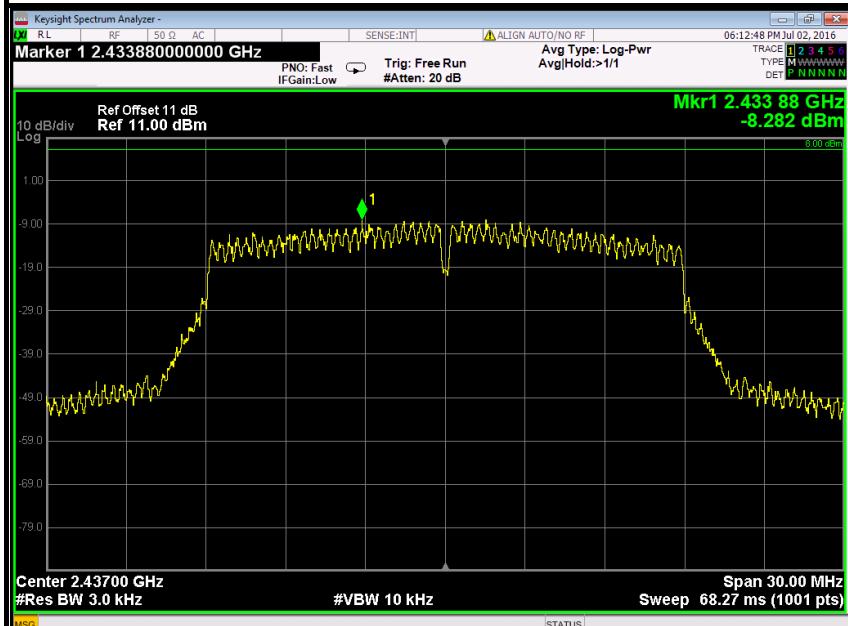
PPSD (CH Mid)



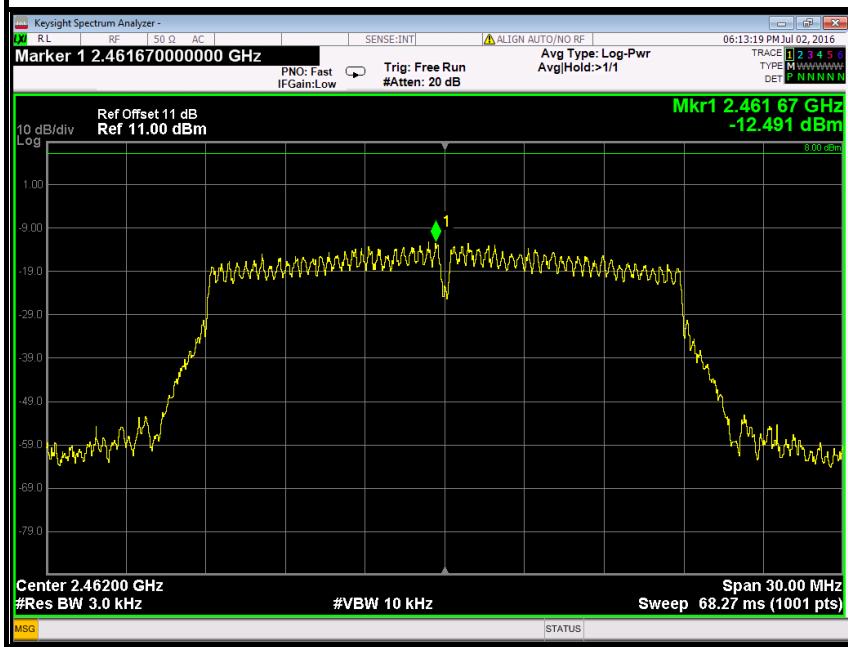
**PPSD (CH High)****IEEE 802.11n HT20 MHz mode (Antenna 1)****PPSD (CH Low)**



PPSD (CH Mid)



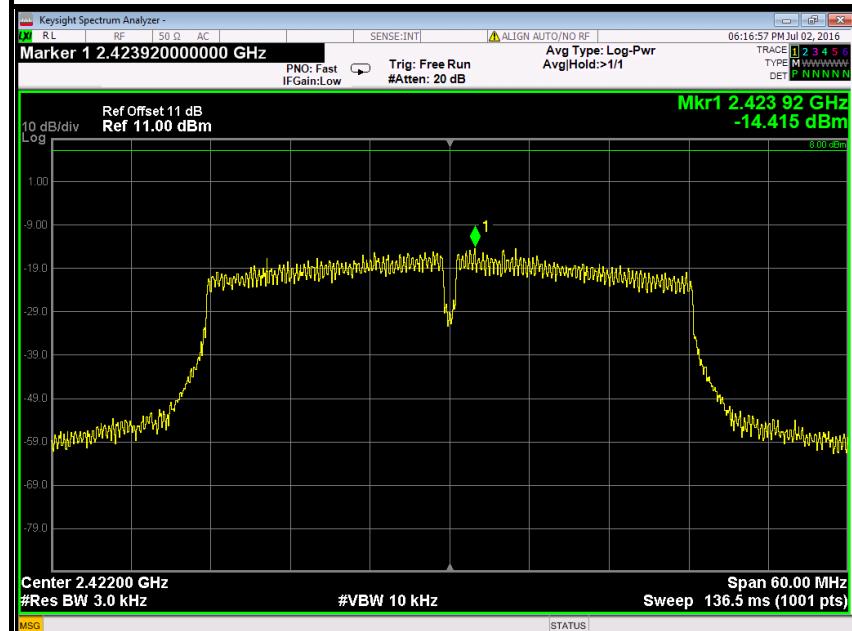
PPSD (CH High)



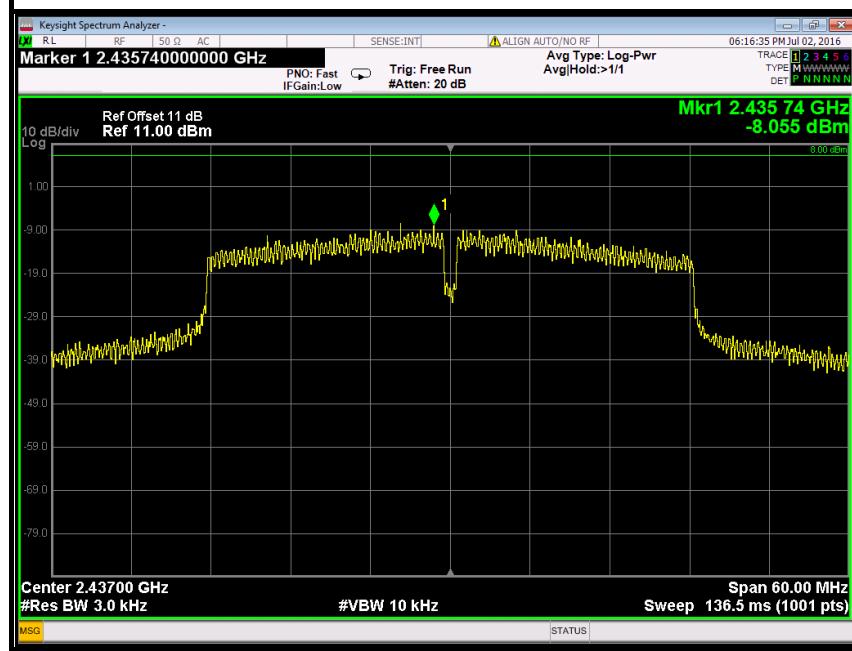


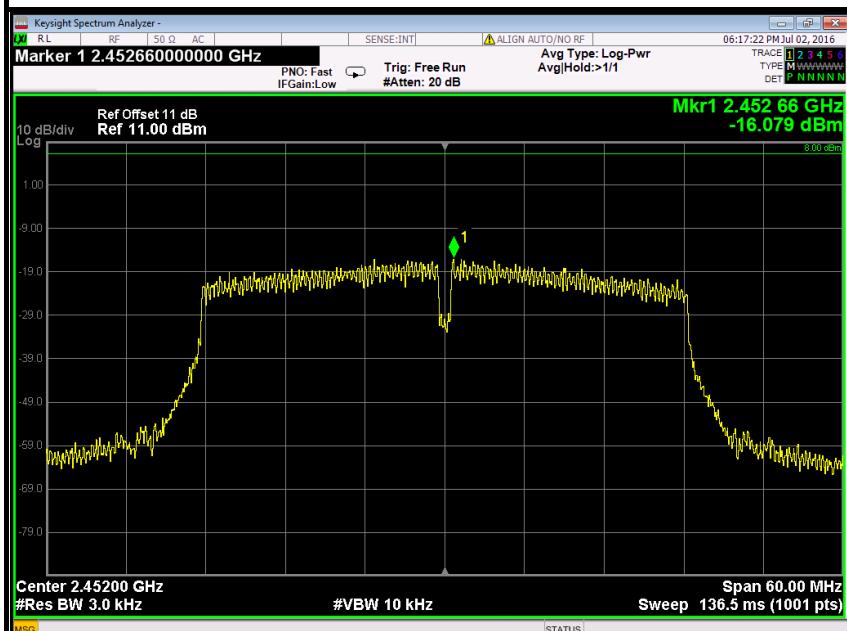
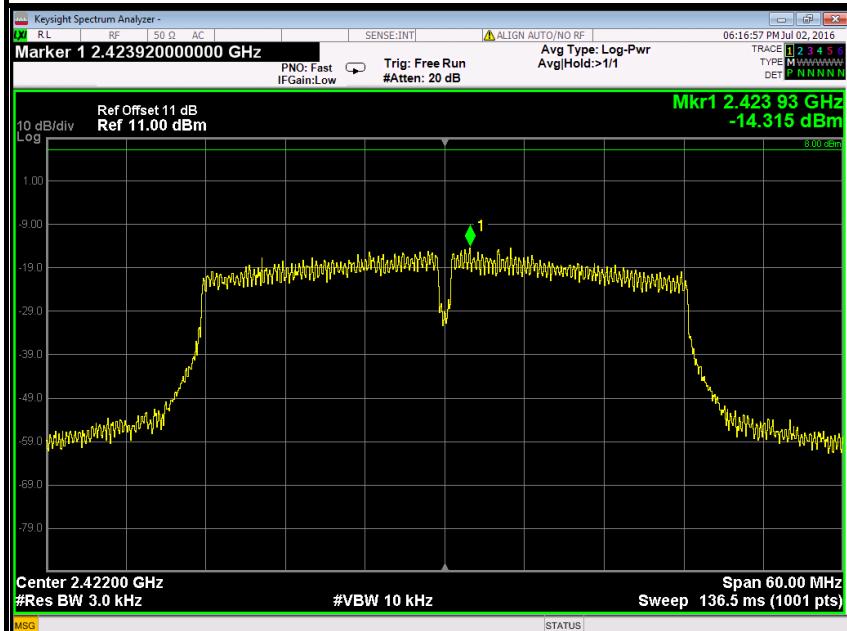
IEEE 802.11n HT40 MHz mode (Antenna 0)

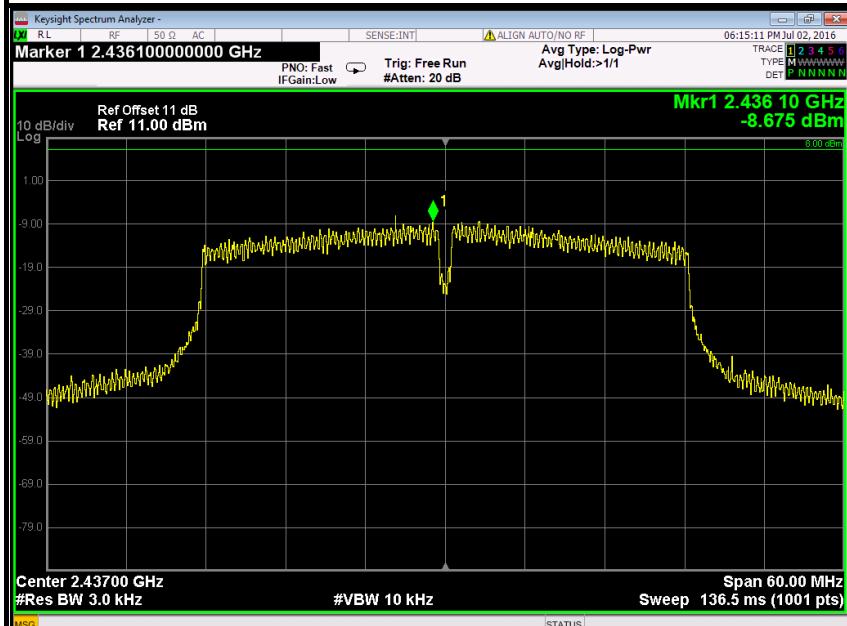
PPSD (CH Low)



PPSD (CH Mid)



**PPSD (CH High)****IEEE 802.11n HT40 MHz mode (Antenna 1)****PPSD (CH Low)**

**PPSD (CH Mid)****PPSD (CH High)**