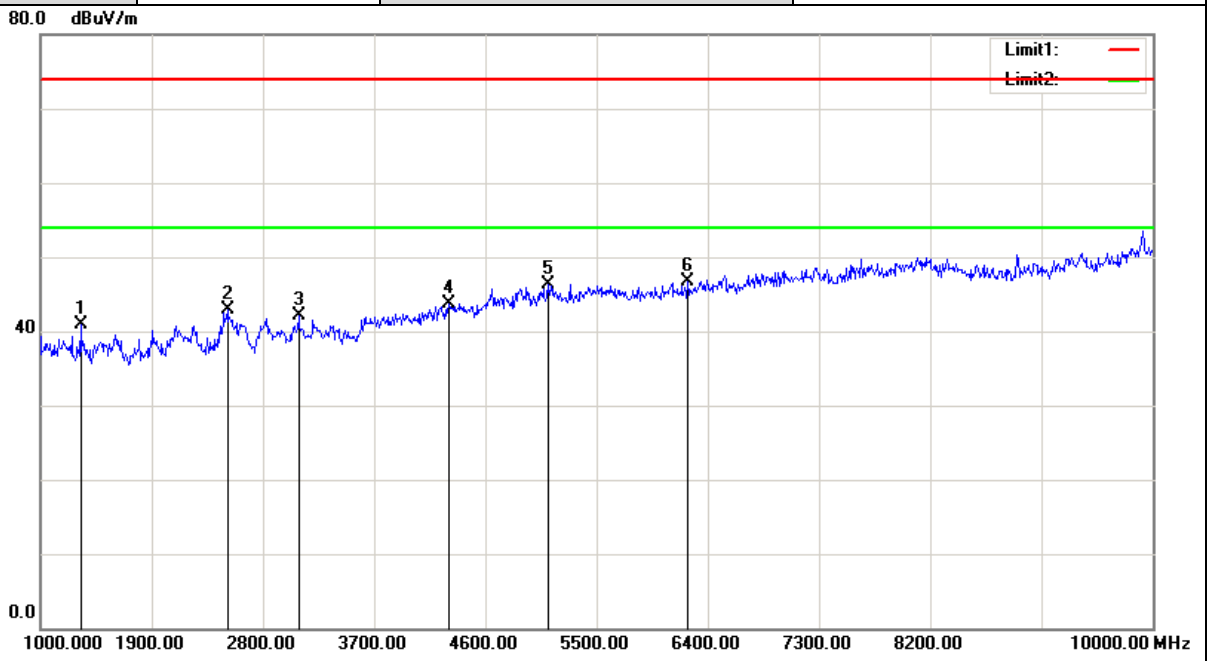
Mode	802.11n(HT20)	Ant. Polar.	Horizontal
Antenna	Chain 1+2	Channel	6



.No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1324.000	48.18	-7.34	40.84	74.00	33.16	peak
2	2512.000	45.12	-2.24	42.88	74.00	31.12	peak
3	3088.000	43.39	-1.21	42.18	74.00	31.82	peak
4	4303.000	41.02	2.66	43.68	74.00	30.32	peak
5	5104.000	41.12	5.17	46.29	74.00	27.71	peak
6*	6238.000	40.29	6.47	46.76	74.00	27.24	peak

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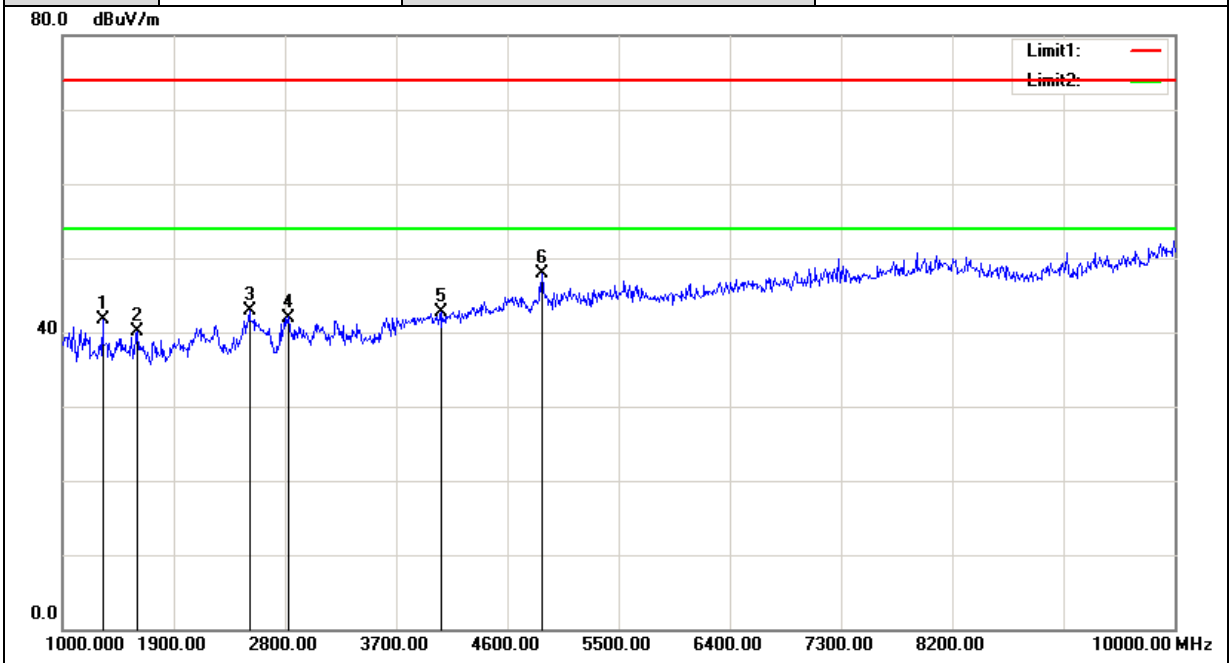
Mode	802.11n(HT20)	Ant. Polar.	Vertical
Antenna	Chain 1+2	Channel	6



.No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1324.000	49.09	-7.34	41.75	74.00	32.25	peak
2	1603.000	46.82	-6.69	40.13	74.00	33.87	peak
3	2512.000	45.18	-2.24	42.94	74.00	31.06	peak
4	2827.000	43.67	-1.67	42.00	74.00	32.00	peak
5	4069.000	40.87	1.83	42.70	74.00	31.30	peak
6*	4879.000	43.31	4.59	47.90	74.00	26.10	peak

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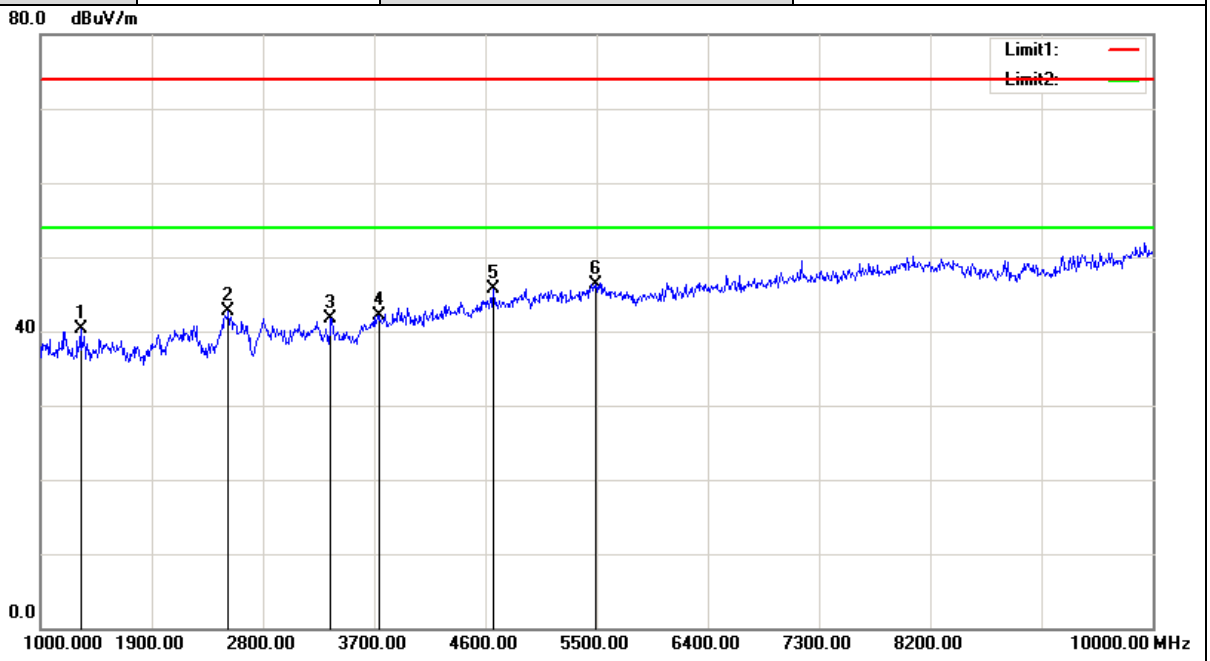
Mode	802.11n(HT20)	Ant. Polar.	Horizontal
Antenna	Chain 1+2	Channel	11



.No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1324.000	47.62	-7.34	40.28	74.00	33.72	peak
2	2521.000	44.93	-2.22	42.71	74.00	31.29	peak
3	3349.000	42.47	-0.77	41.70	74.00	32.30	peak
4	3736.000	41.69	0.48	42.17	74.00	31.83	peak
5	4663.000	41.81	3.88	45.69	74.00	28.31	peak
6*	5491.000	40.42	5.85	46.27	74.00	27.73	peak

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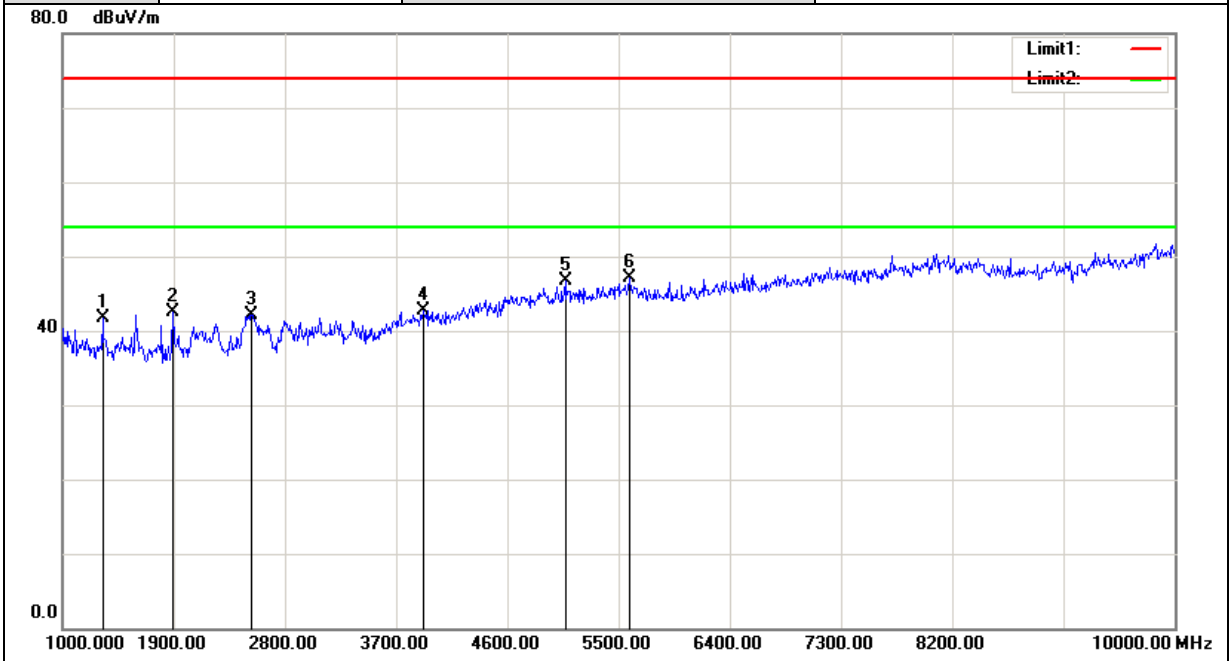
Mode	802.11n(HT20)	Ant. Polar.	Vertical
Antenna	Chain 1+2	Channel	11



.No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1324.000	48.99	-7.34	41.65	74.00	32.35	peak
2	1891.000	48.27	-5.69	42.58	74.00	31.42	peak
3	2530.000	44.30	-2.21	42.09	74.00	31.91	peak
4	3916.000	41.48	1.24	42.72	74.00	31.28	peak
5	5068.000	41.51	5.10	46.61	74.00	27.39	peak
6*	5590.000	41.12	5.91	47.03	74.00	26.97	peak

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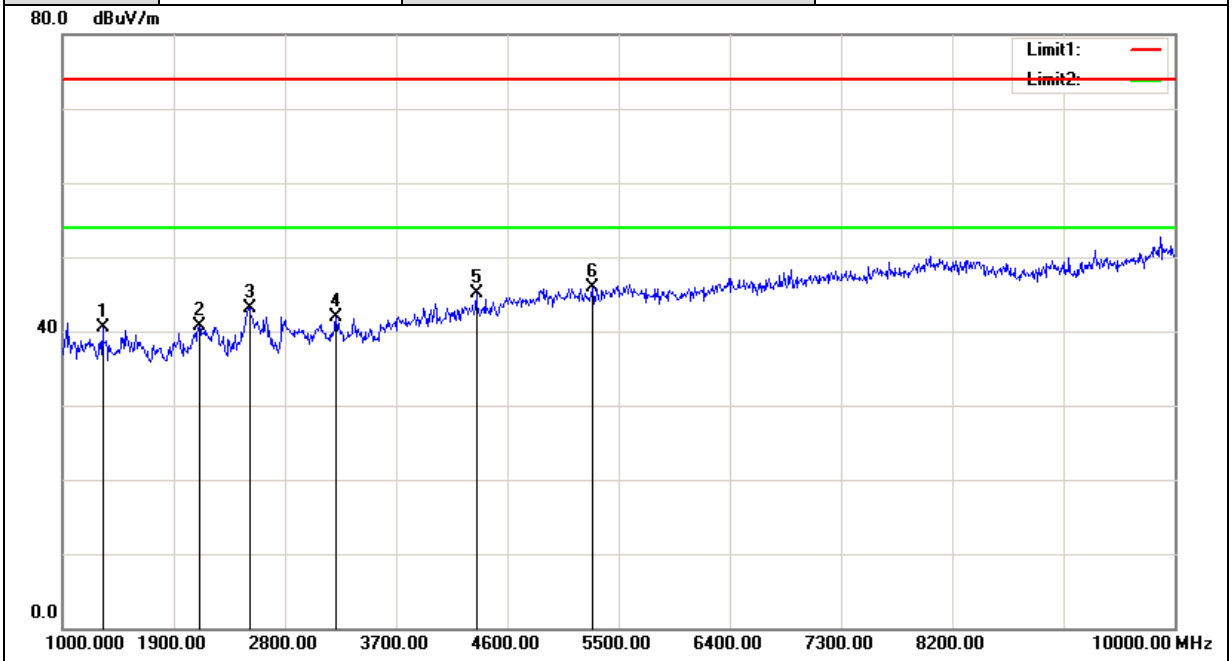
Mode	802.11n(HT40)	Ant. Polar.	Horizontal
Antenna	Chain 1+2	Channel	3



.No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1324.000	47.93	-7.34	40.59	74.00	33.41	peak
2	2107.000	45.04	-4.41	40.63	74.00	33.37	peak
3	2512.000	45.34	-2.24	43.10	74.00	30.90	peak
4	3214.000	42.83	-1.00	41.83	74.00	32.17	peak
5	4348.000	42.32	2.81	45.13	74.00	28.87	peak
6*	5293.000	40.43	5.50	45.93	74.00	28.07	peak

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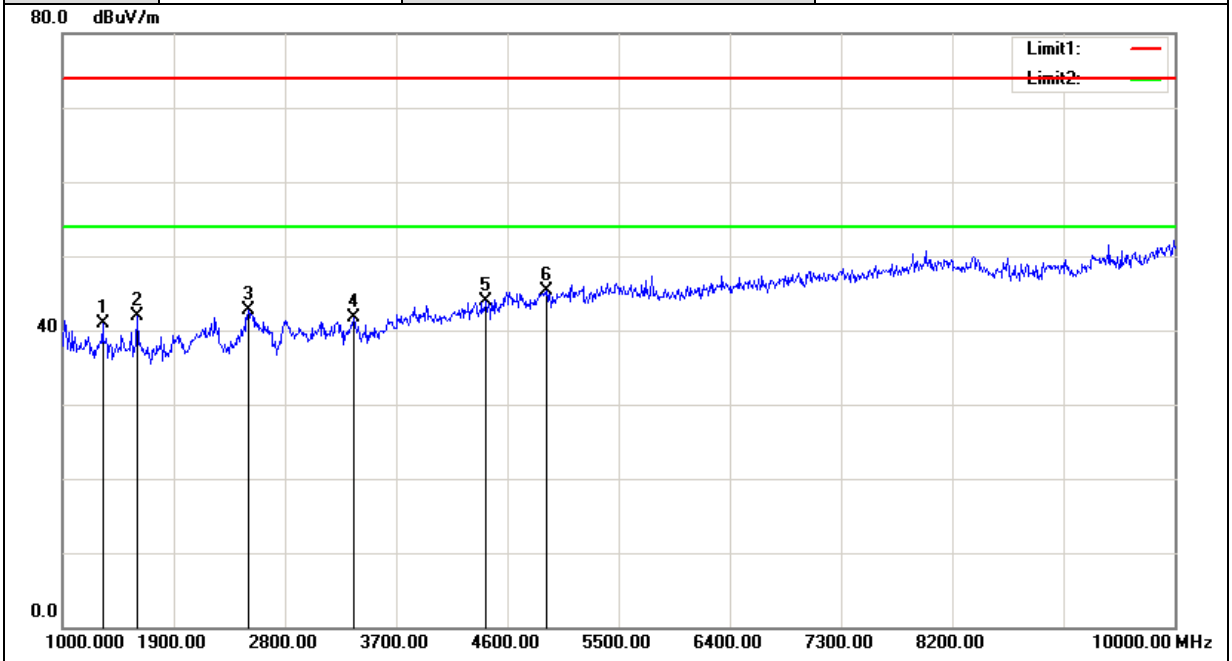
Mode	802.11n(HT40)	Ant. Polar.	Vertical
Antenna	Chain 1+2	Channel	3



.No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1324.000	48.22	-7.34	40.88	74.00	33.12	peak
2	1603.000	48.51	-6.69	41.82	74.00	32.18	peak
3	2503.000	45.05	-2.25	42.80	74.00	31.20	peak
4	3358.000	42.43	-0.76	41.67	74.00	32.33	peak
5	4429.000	40.90	3.10	44.00	74.00	30.00	peak
6*	4915.000	40.62	4.70	45.32	74.00	28.68	peak

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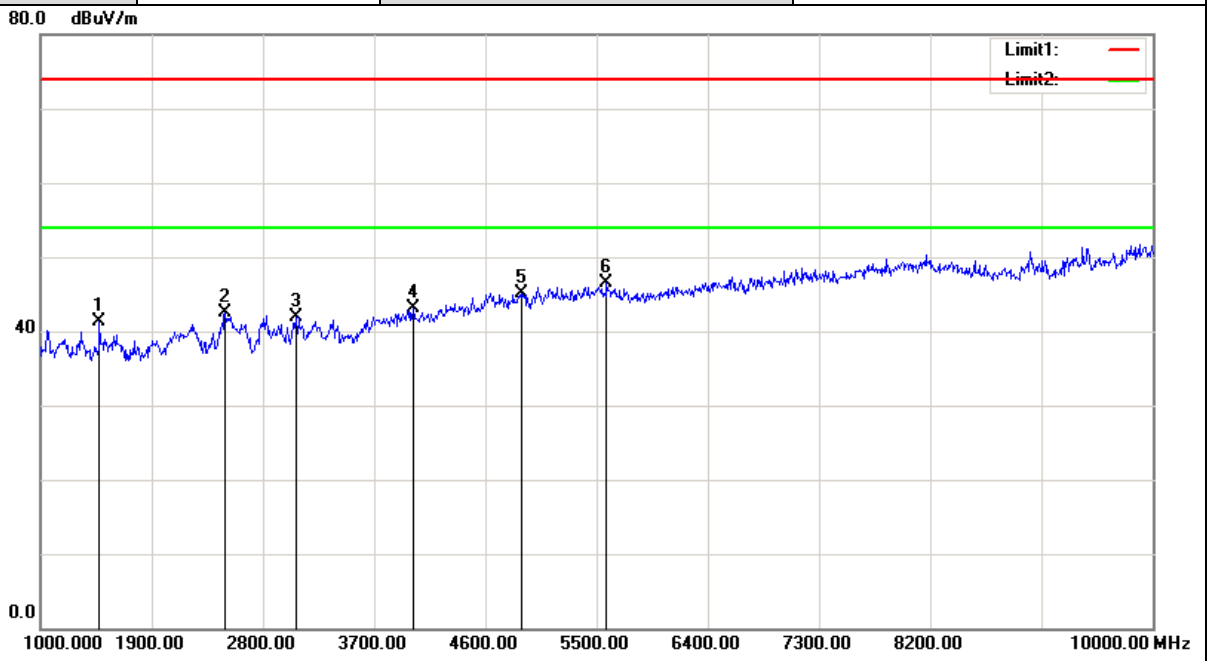
Mode	802.11n(HT40)	Ant. Polar.	Horizontal
Antenna	Chain 1+2	Channel	6



.No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1477.000	48.26	-6.92	41.34	74.00	32.66	peak
2	2494.000	44.76	-2.29	42.47	74.00	31.53	peak
3	3070.000	43.20	-1.24	41.96	74.00	32.04	peak
4	4015.000	41.54	1.64	43.18	74.00	30.82	peak
5	4888.000	40.55	4.61	45.16	74.00	28.84	peak
6*	5581.000	40.63	5.90	46.53	74.00	27.47	peak

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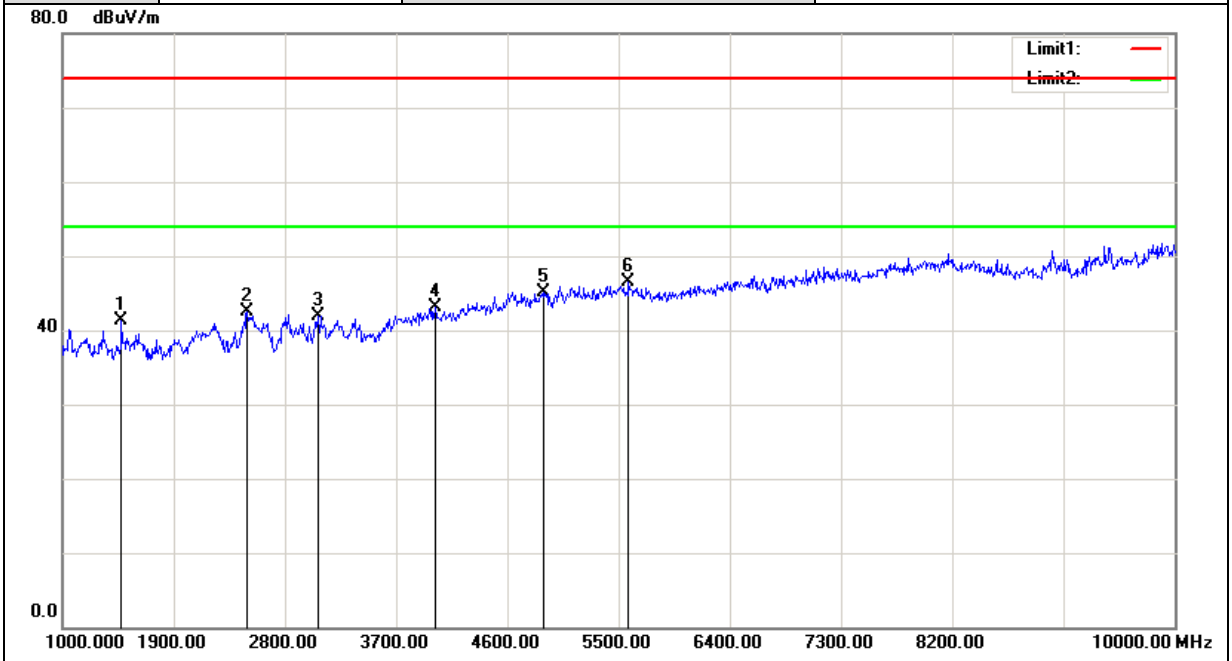
Mode	802.11n(HT40)	Ant. Polar.	Vertical
Antenna	Chain 1+2	Channel	6



.No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1477.000	48.26	-6.92	41.34	74.00	32.66	peak
2	2494.000	44.76	-2.29	42.47	74.00	31.53	peak
3	3070.000	43.20	-1.24	41.96	74.00	32.04	peak
4	4015.000	41.54	1.64	43.18	74.00	30.82	peak
5	4888.000	40.55	4.61	45.16	74.00	28.84	peak
6*	5581.000	40.63	5.90	46.53	74.00	27.47	peak

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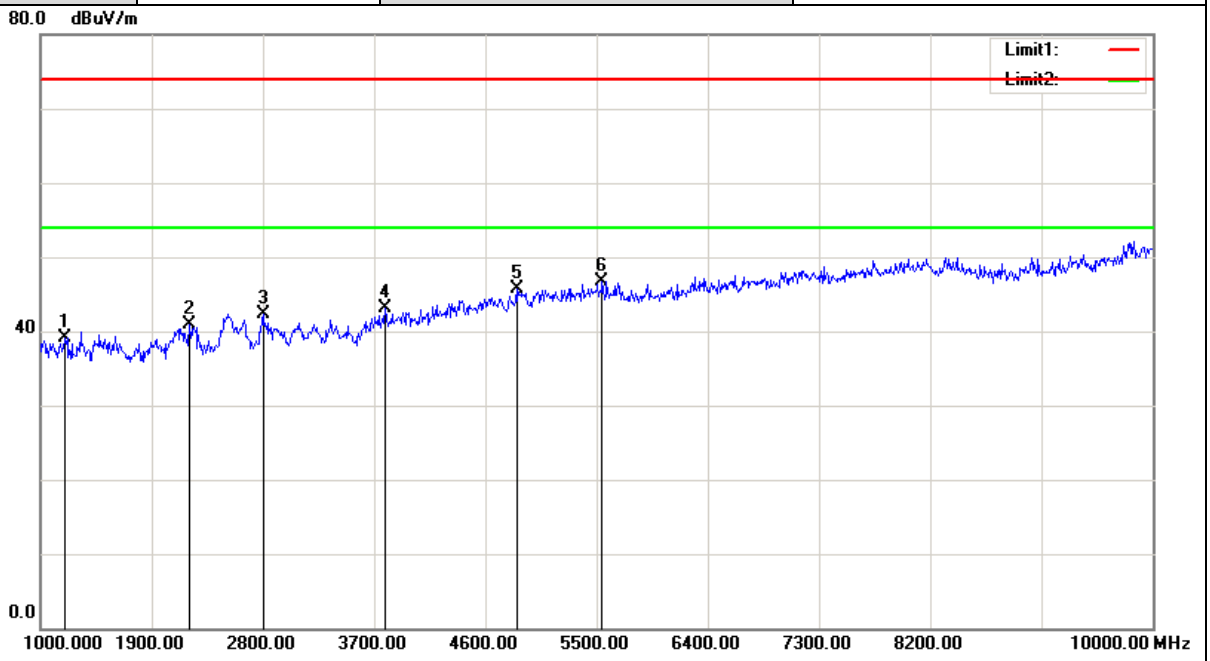
Mode	802.11n(HT40)	Ant. Polar.	Horizontal
Antenna	Chain 1+2	Channel	9



.No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1198.000	46.98	-7.80	39.18	74.00	34.82	peak
2	2206.000	44.68	-3.87	40.81	74.00	33.19	peak
3	2800.000	43.98	-1.72	42.26	74.00	31.74	peak
4	3790.000	42.36	0.70	43.06	74.00	30.94	peak
5	4852.000	41.14	4.50	45.64	74.00	28.36	peak
6*	5545.000	40.90	5.89	46.79	74.00	27.21	peak

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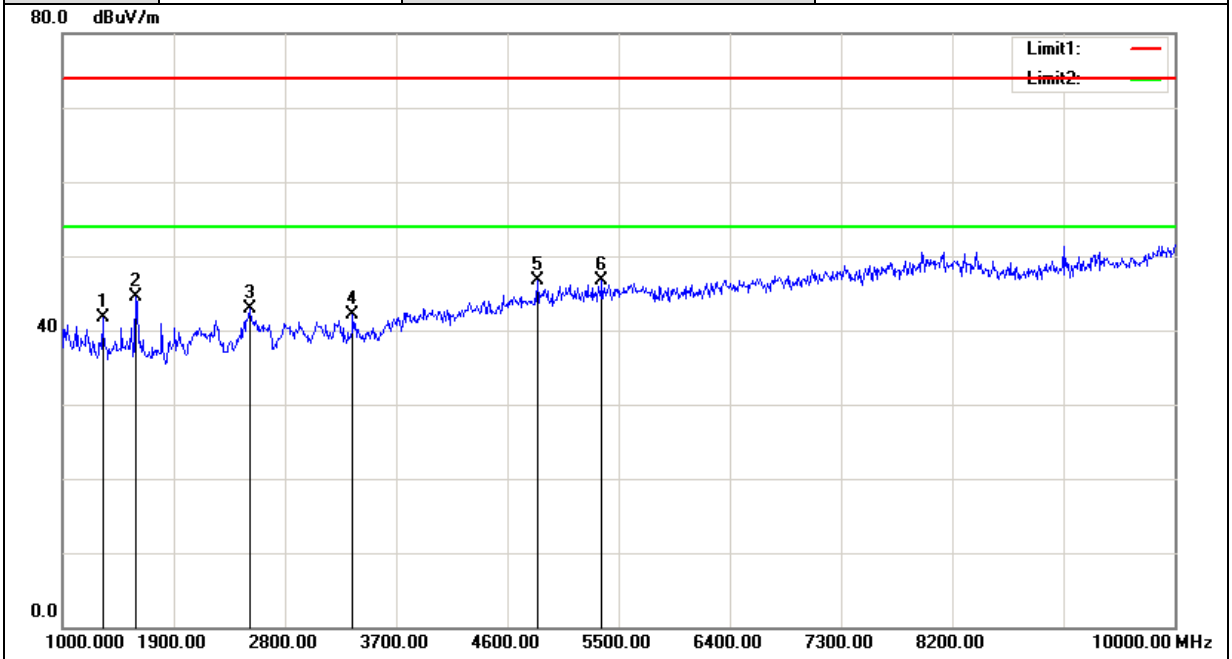
Mode	802.11n(HT40)	Ant. Polar.	Vertical
Antenna	Chain 1+2	Channel	9



.No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1324.000	49.11	-7.34	41.77	74.00	32.23	peak
2	1594.000	51.21	-6.71	44.50	74.00	29.50	peak
3	2512.000	45.20	-2.24	42.96	74.00	31.04	peak
4	3349.000	42.88	-0.77	42.11	74.00	31.89	peak
5*	4843.000	42.28	4.47	46.75	74.00	27.25	peak
6	5365.000	41.02	5.63	46.65	74.00	27.35	peak

Remark: As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak measurements were shown in the report.

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6.5 Conducted Out of Band Emission

6.5.1 Limits

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

6.5.2 Test Procedure(KDB 558074 D01 v03r05, Section 11)

Measurement Procedure REF

a) Set instrument center frequency to DTS channel center frequency.

b) Set the span to ≥ 1.5 times the DTS bandwidth.

c) Set the RBW = 100 kHz.

d) Set the VBW ≥ 3 x RBW.

e) Detector = peak.

f) Sweep time = auto couple.

g) Trace mode = max hold.

h) Allow trace to fully stabilize.

i) Use the peak marker function to determine the maximum PSD level.

Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

Measurement Procedure OOBE

a) Set RBW = 100 kHz.

b) Set VBW ≥ 300 kHz.

c) Detector = peak.

d) Sweep = auto couple.

e) Trace Mode = max hold.

f) Allow trace to fully stabilize.

Use the peak marker function to determine the maximum amplitude level.

6.5.3 Test Data

The EUT complied with the FCC Part 15.247 Conducted band edge emissions requirements.

Table 10 provides the test results for Conducted band edge emissions. (All the data attached was use the worst case data rate as in table 6)

6.5.4 Areas of Concern

None.

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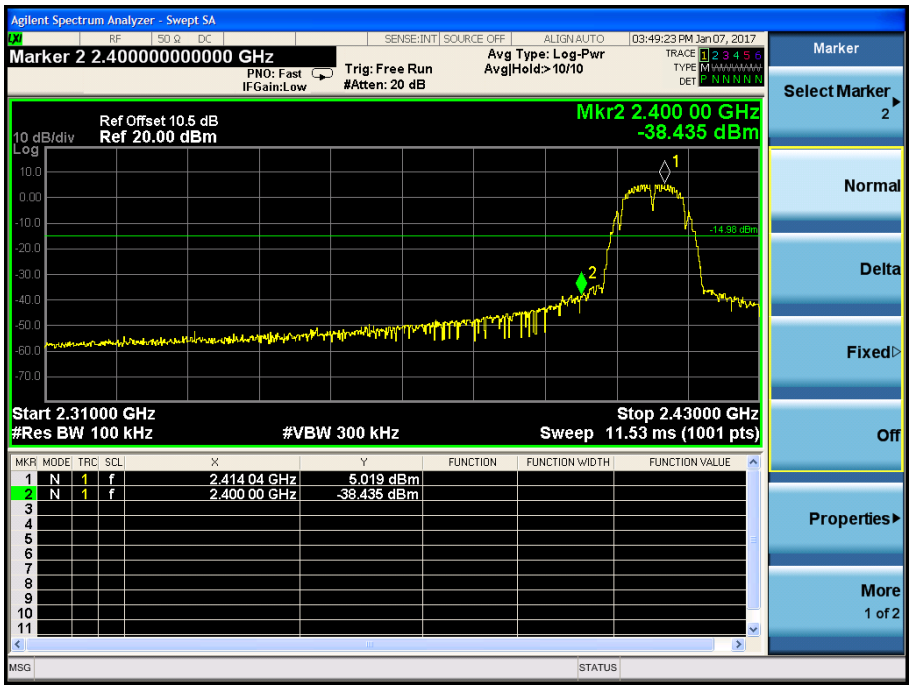
Table 10: Conducted Out of Band Emission

Chain 1-Test plot as follows

Test Mode: IEEE 802.11b TX

Test CH1: 2412MHz

In-Band Reference Level



Out of Band Emission

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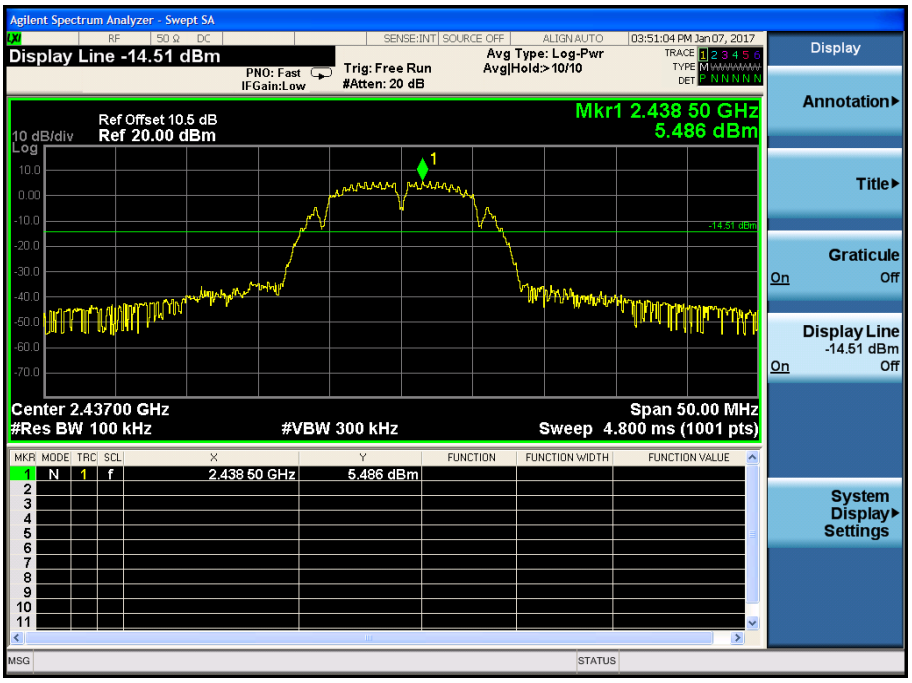
Test CH11: 2437MHz

In-Band Reference Level



Out of Band Emission

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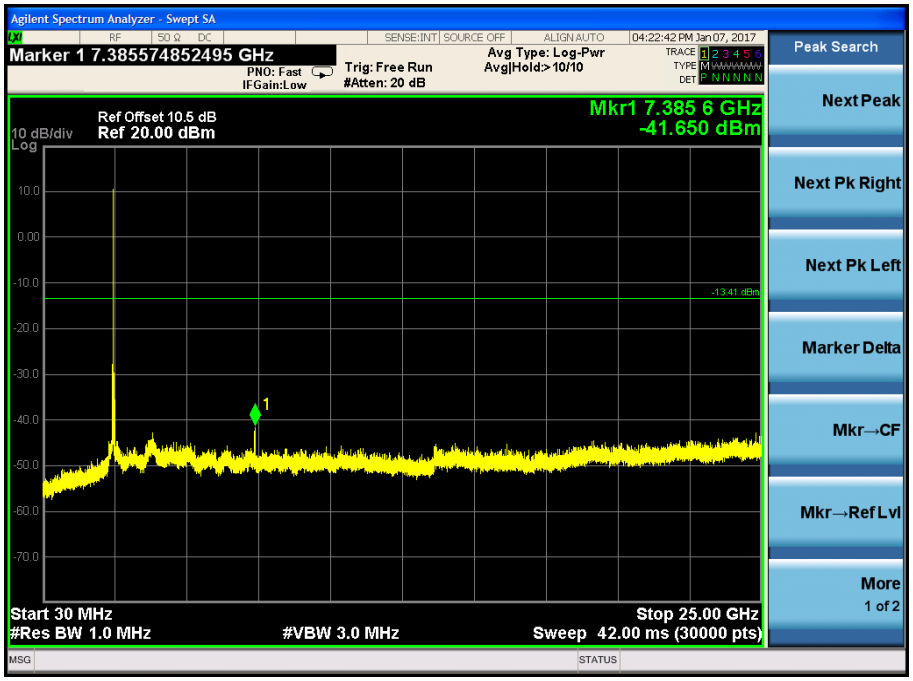
Test CH11: 2462MHz

In-Band Reference Level

Out of Band Emission



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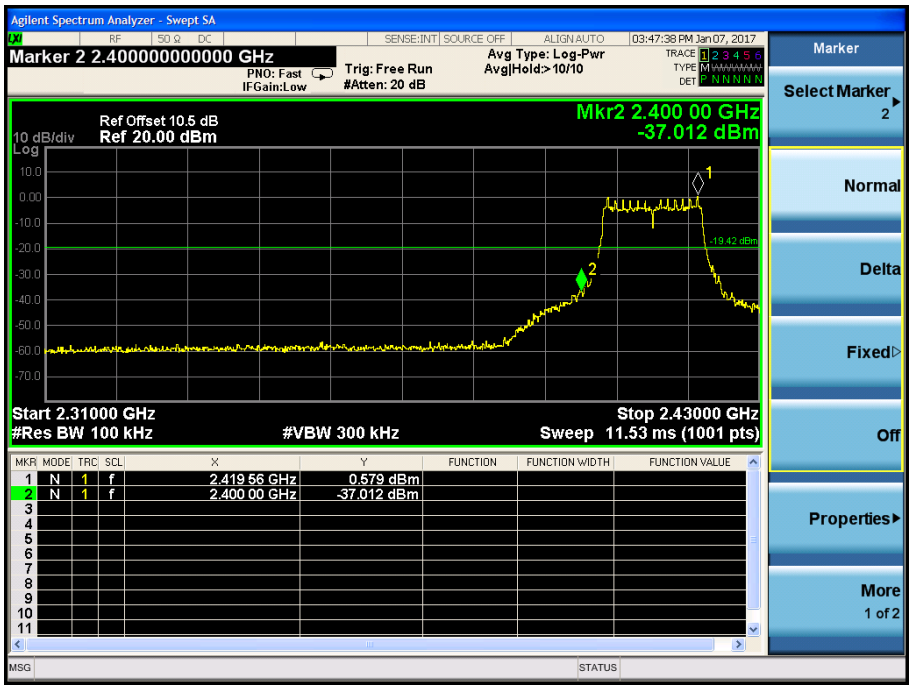
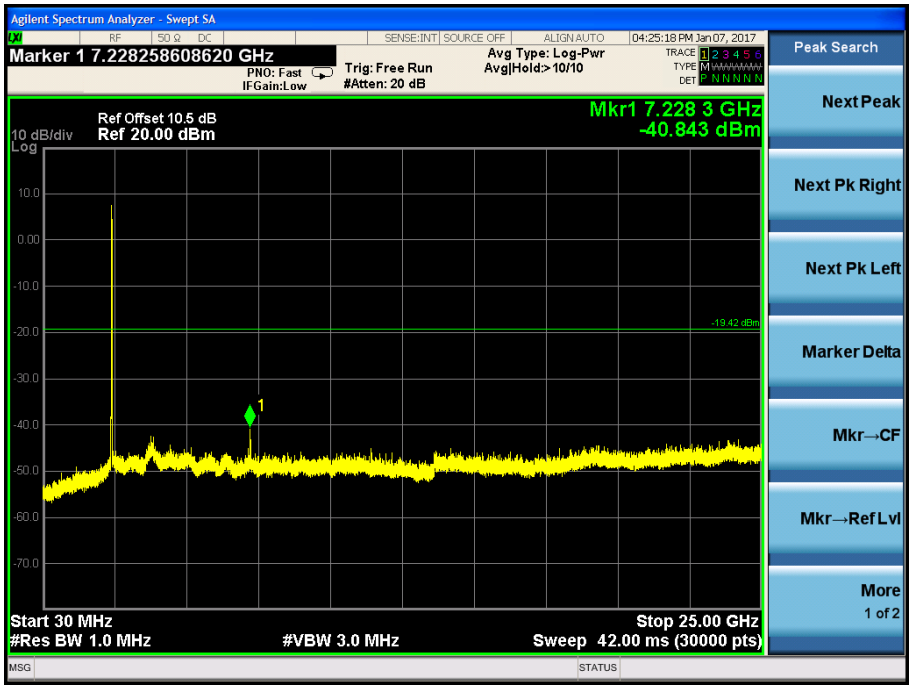
Test Mode: IEEE 802.11g TX

Test CH1: 2412MHz

In-Band Reference Level



Out of Band Emission



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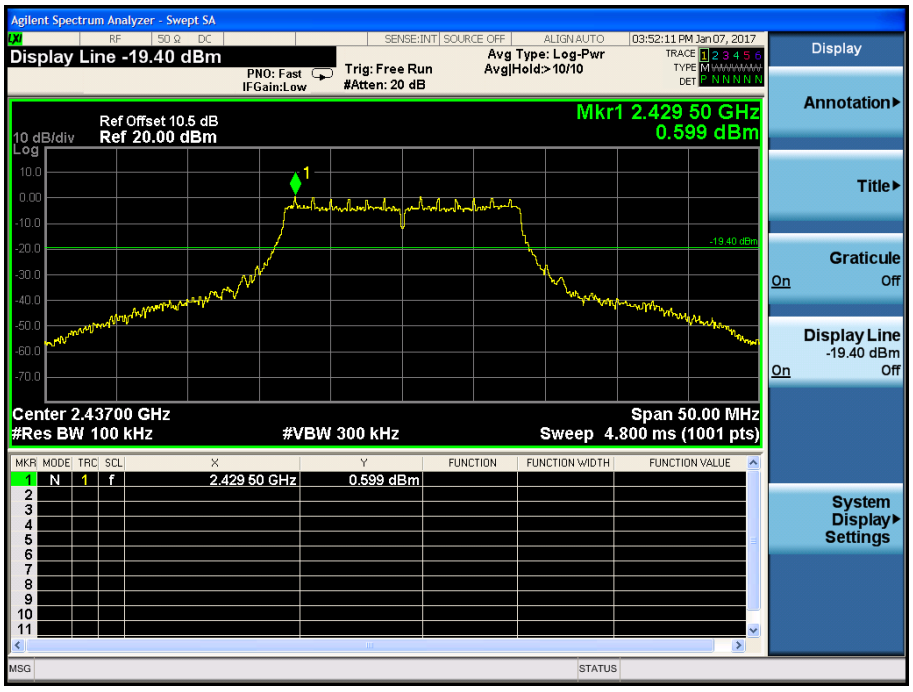
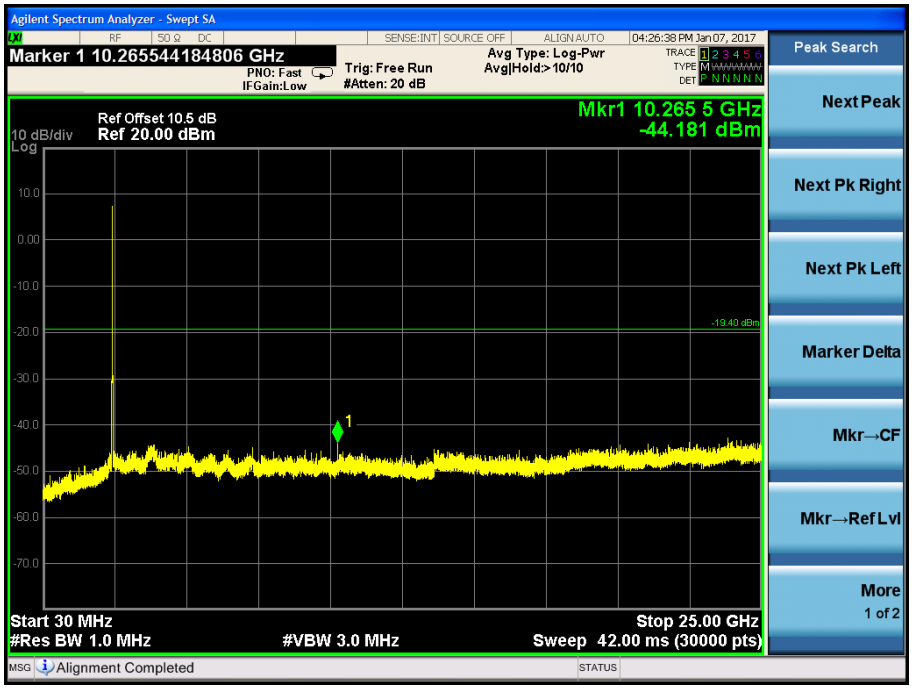
Test CH11: 2437MHz

In-Band Reference Level



Out of Band Emission



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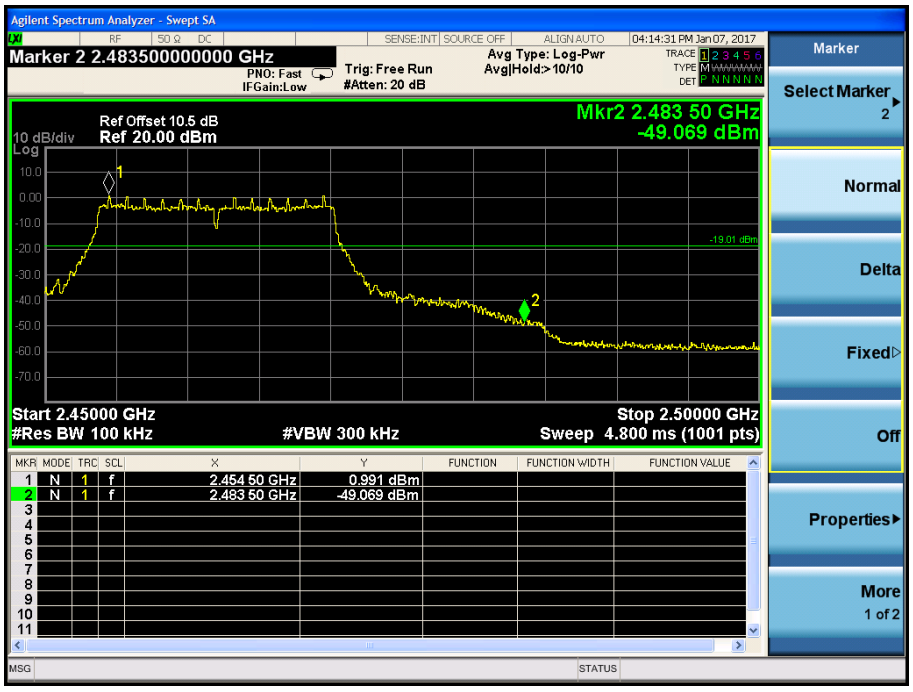
Test CH11: 2462MHz

In-Band Reference Level



Out of Band Emission

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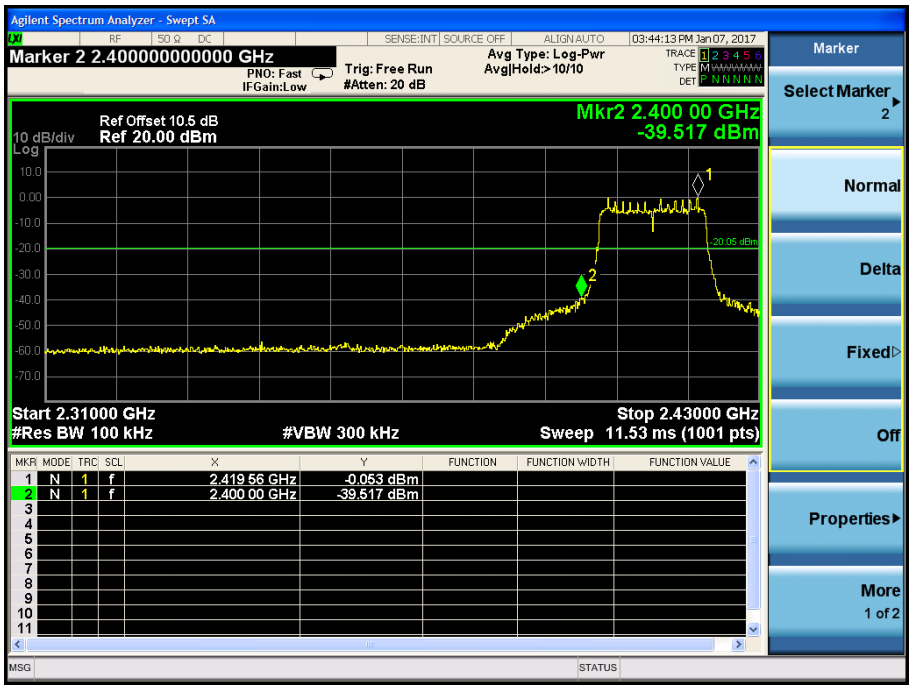
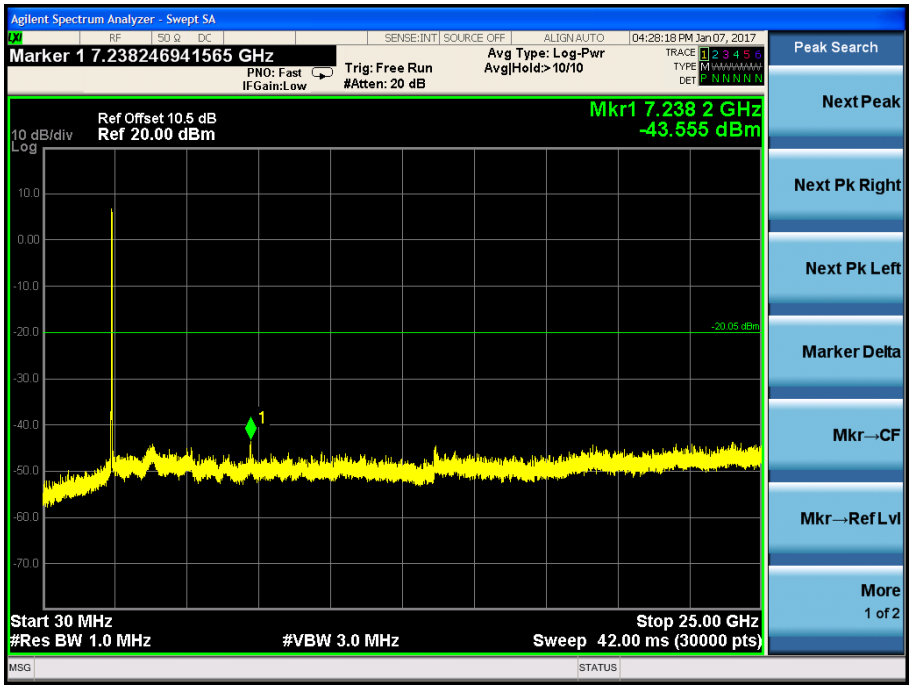
Test Mode: IEEE 802.11n (HT20) TX

Test CH1: 2412MHz

In-Band Reference Level



Out of Band Emission



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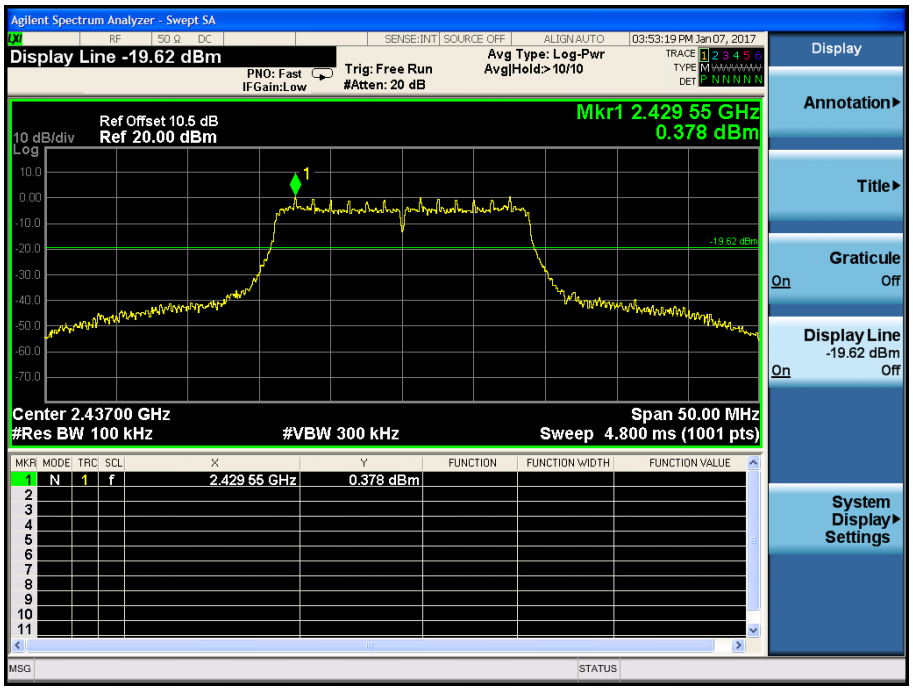
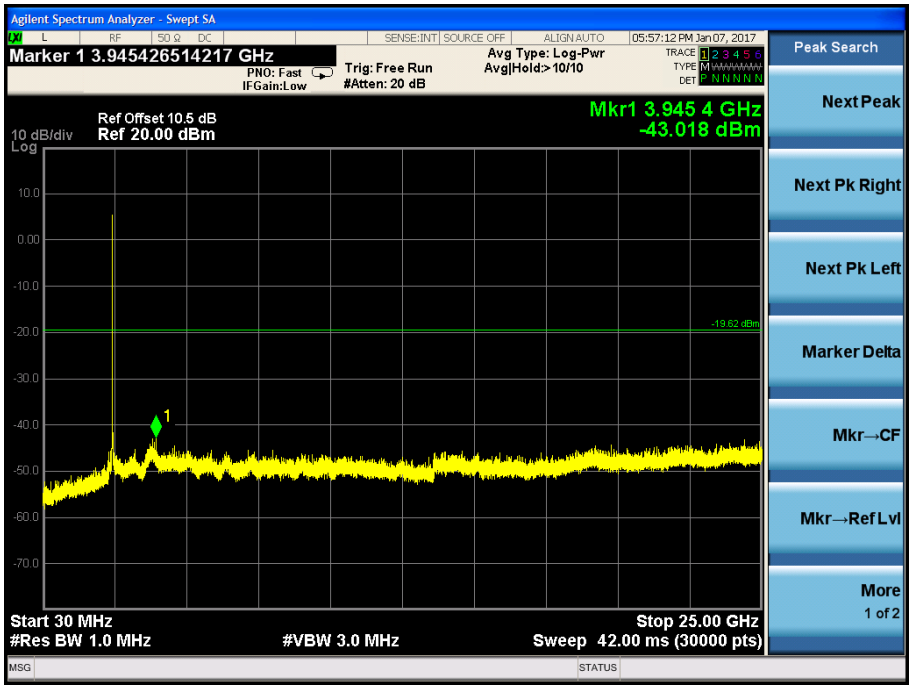
Test CH11: 2437MHz

In-Band Reference Level



Out of Band Emission



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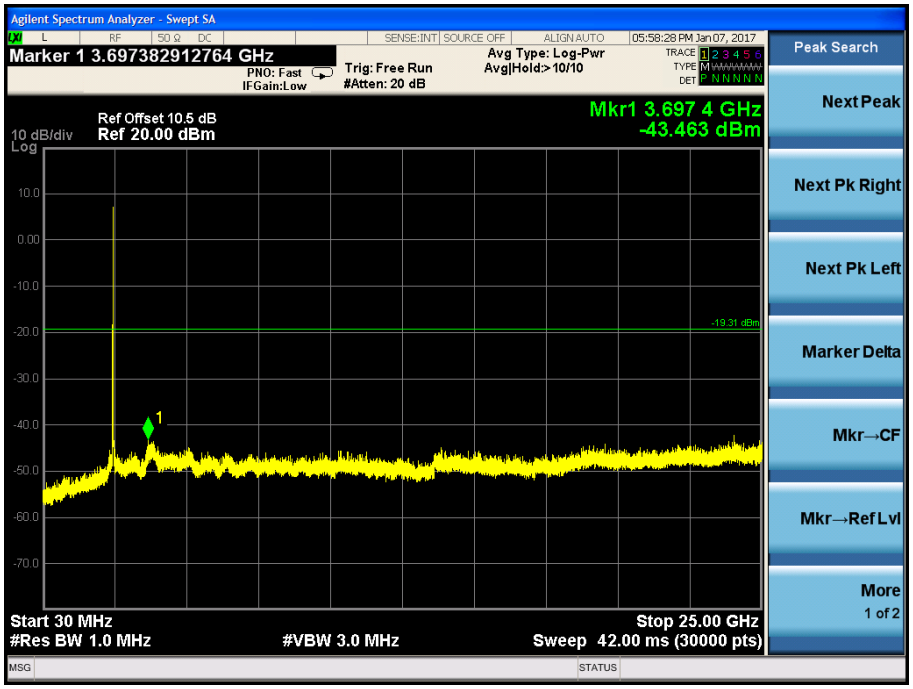
Test CH11: 2462MHz

In-Band Reference Level

Out of Band Emission



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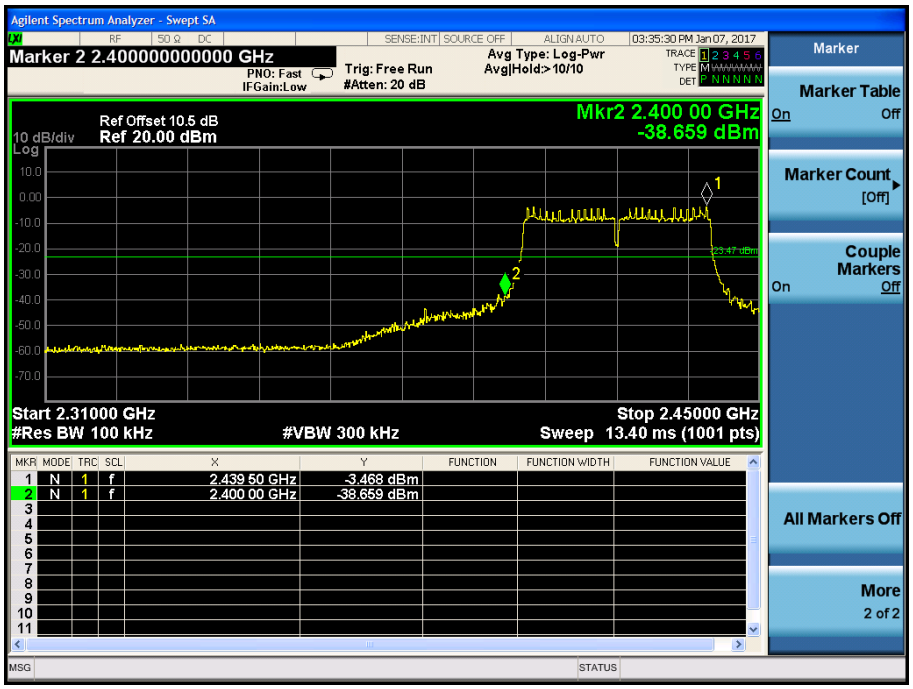
Test Mode: IEEE 802.11n (HT40) TX

Test CH3: 2422MHz

In-Band Reference Level



Out of Band Emission

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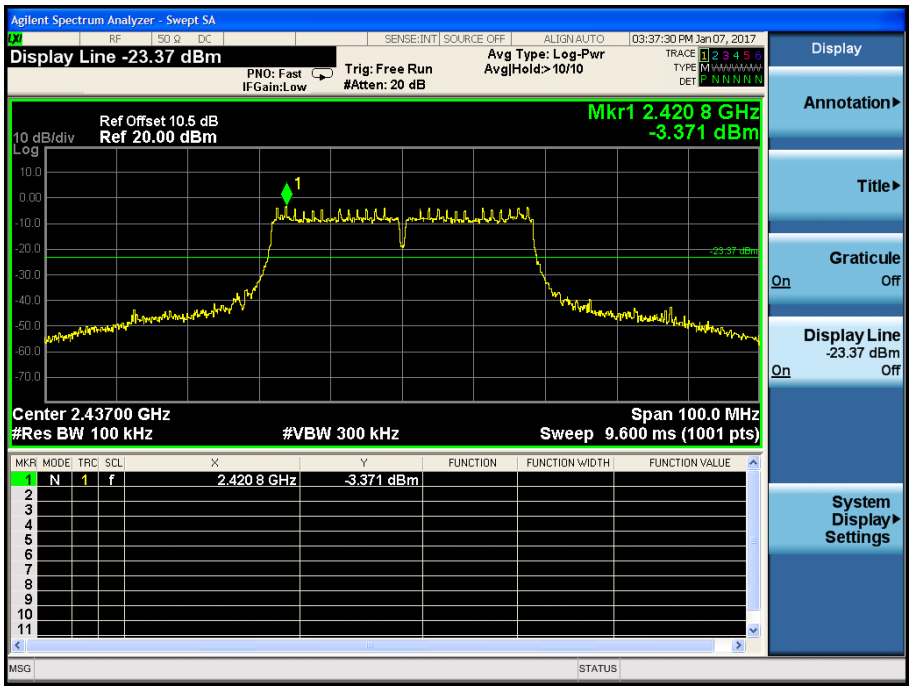
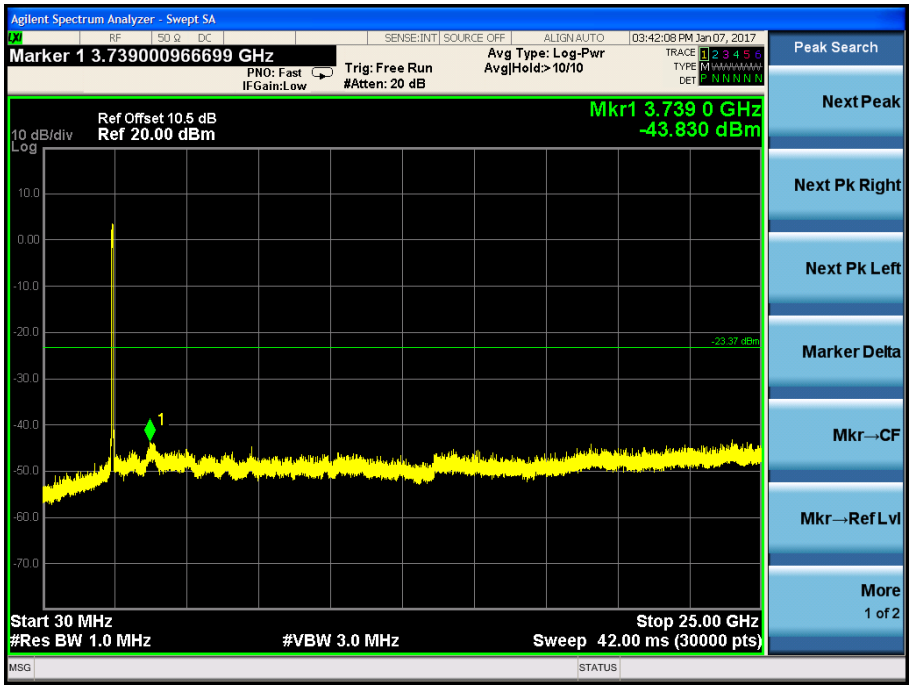
Test CH11: 2437MHz

In-Band Reference Level



Out of Band Emission



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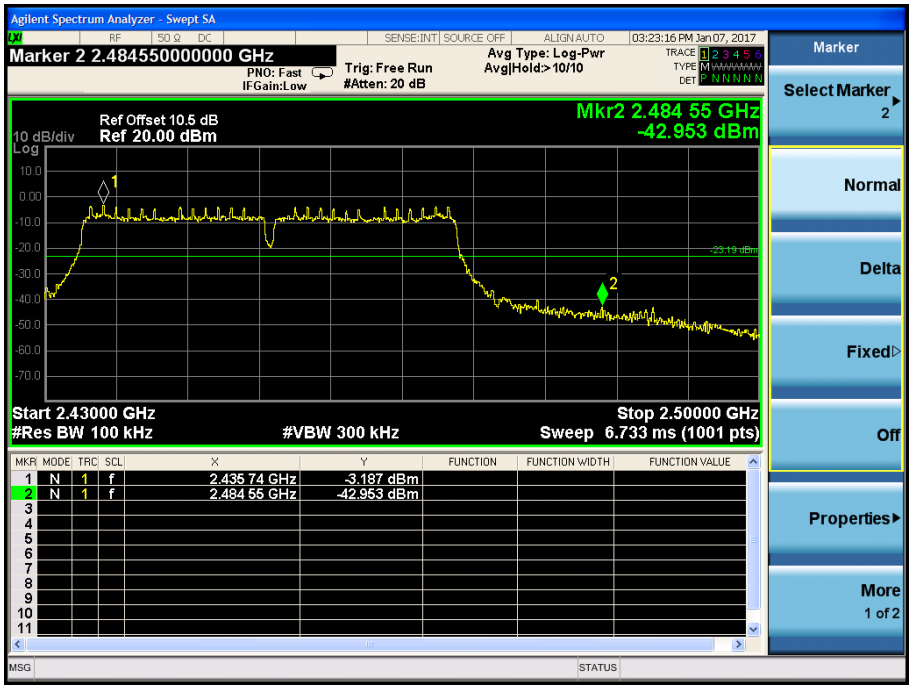
Test CH9: 2452MHz

In-Band Reference Level



Out of Band Emission

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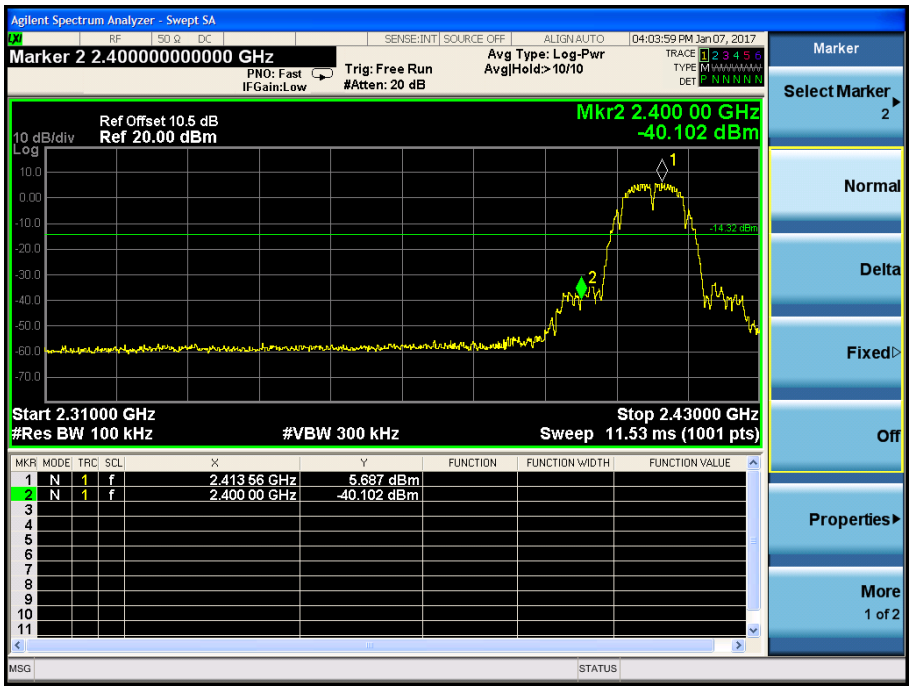
Chain 2-Test plot as follows

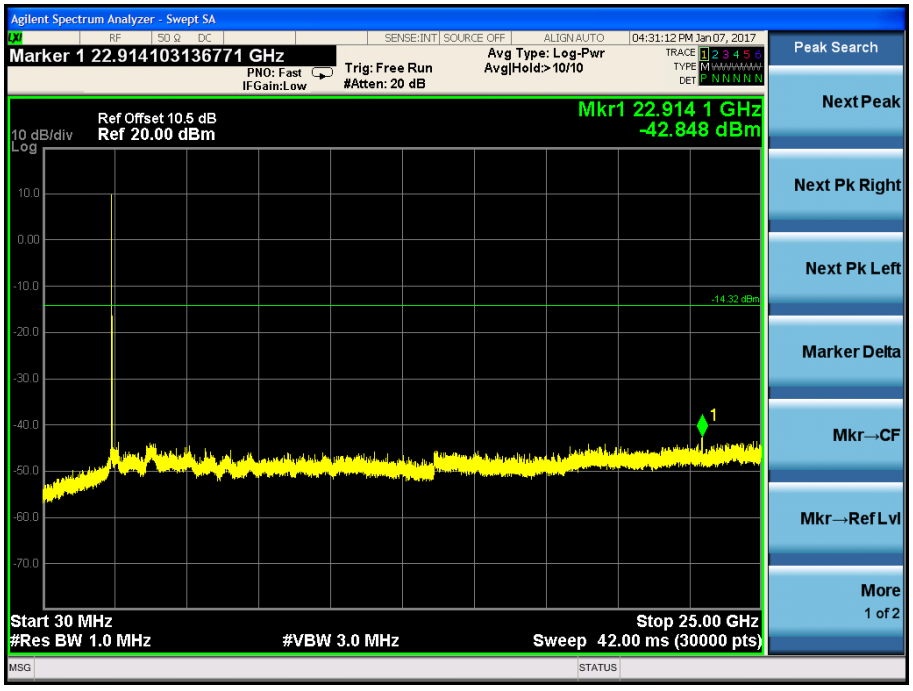
Test Mode: IEEE 802.11b TX

Test CH1: 2412MHz

In-Band Reference Level



Out of Band Emission



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Test CH11: 2437MHz

In-Band Reference Level

Out of Band Emission

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Test CH11: 2462MHz

In-Band Reference Level

Out of Band Emission

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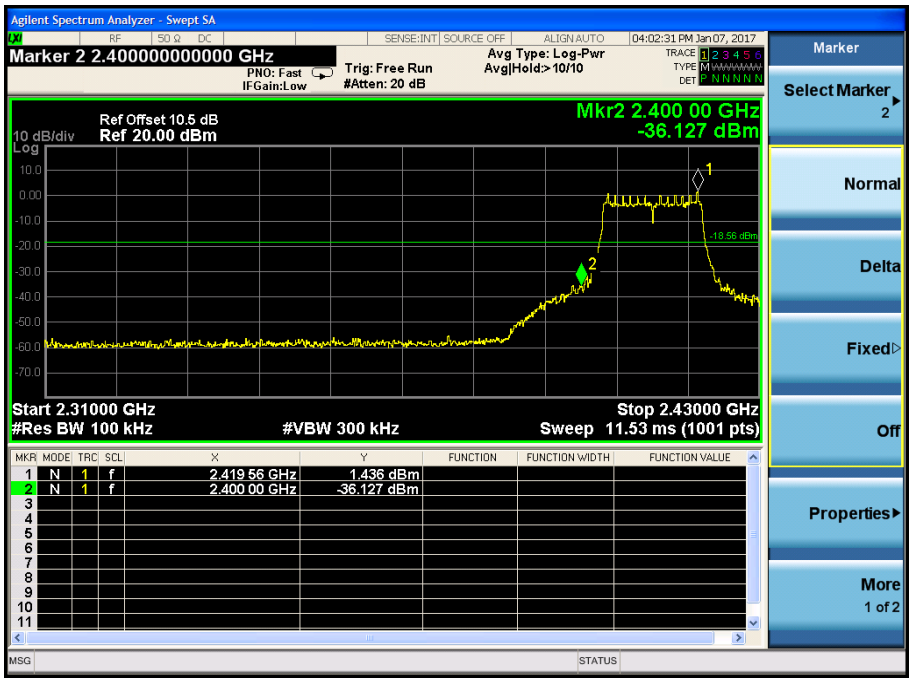
Test Mode: IEEE 802.11g TX

Test CH1: 2412MHz

In-Band Reference Level



Out of Band Emission

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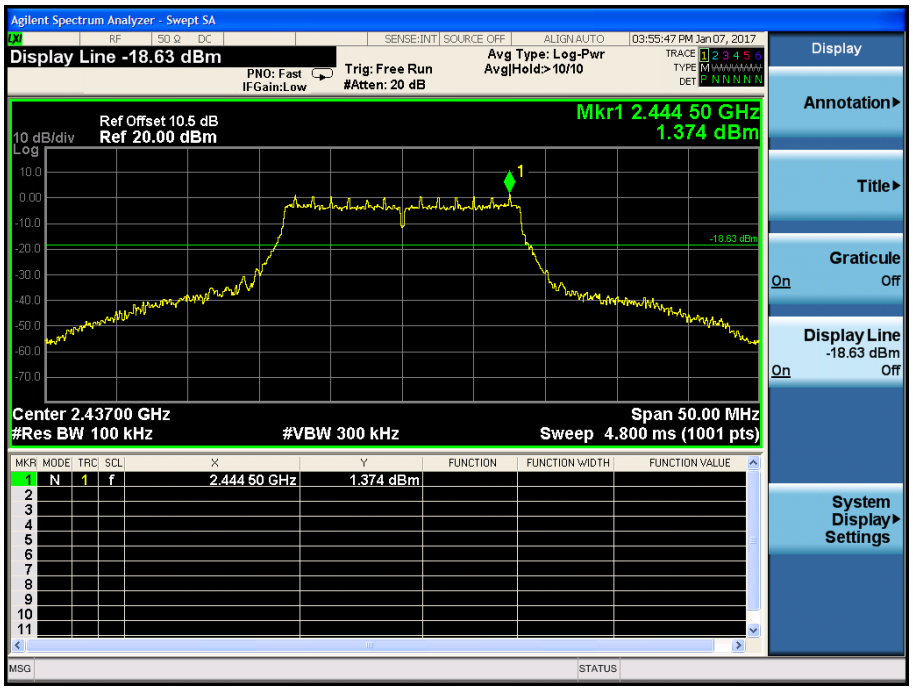
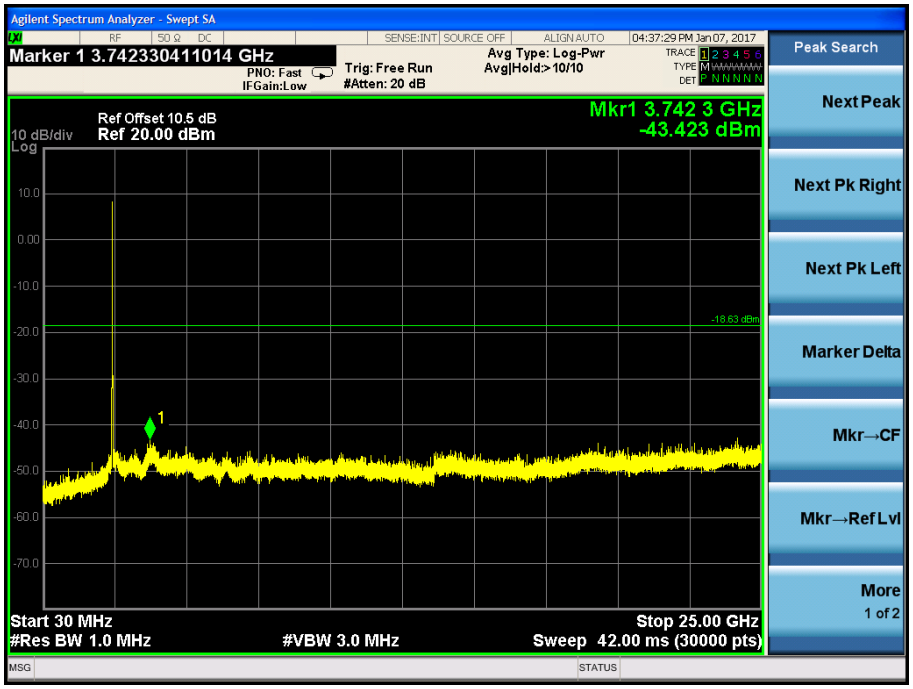
Test CH11: 2437MHz

In-Band Reference Level



Out of Band Emission



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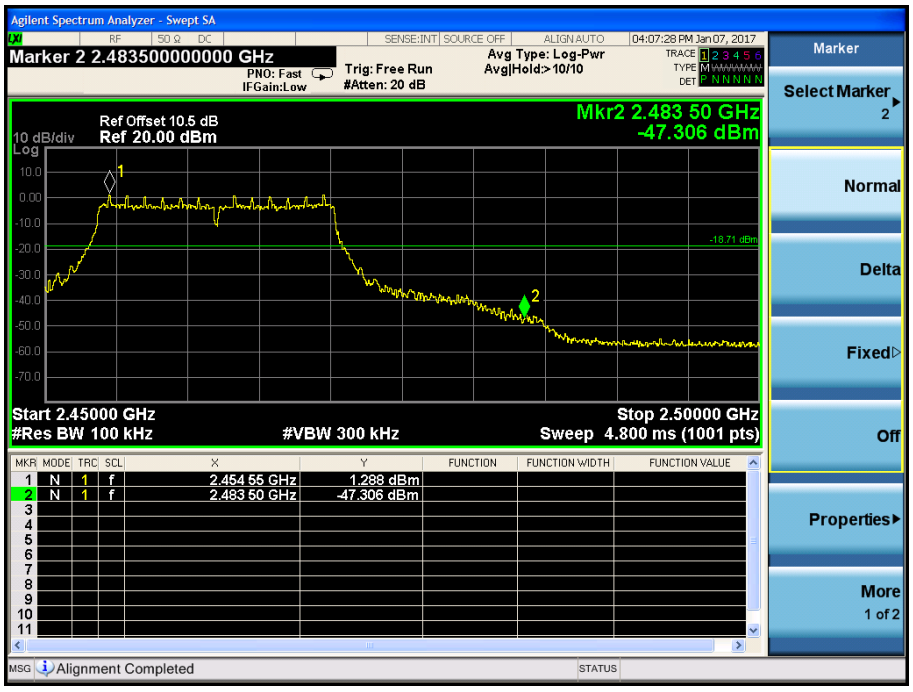
Test CH11: 2462MHz

In-Band Reference Level



Out of Band Emission

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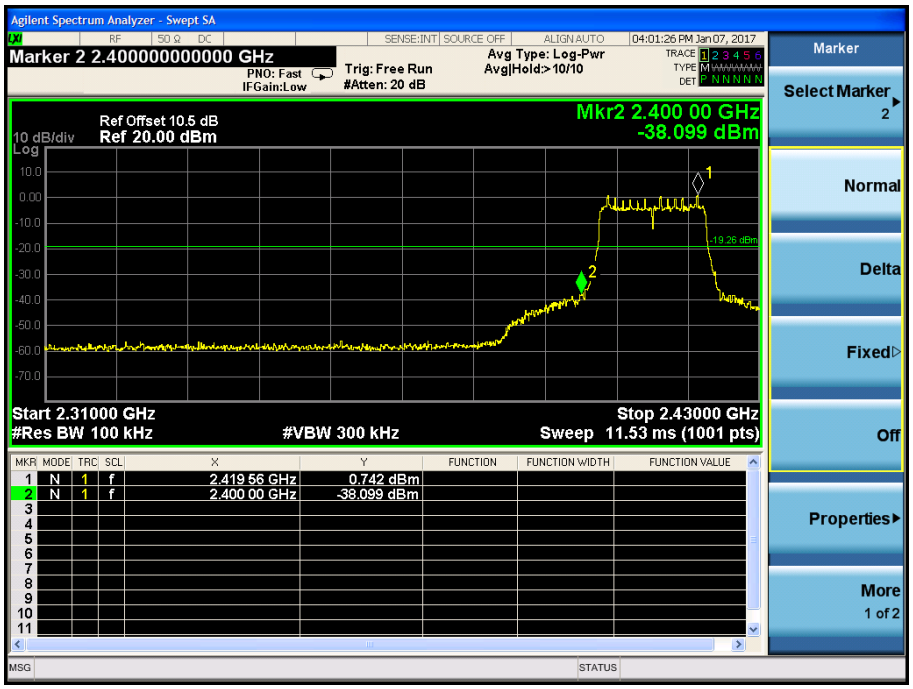
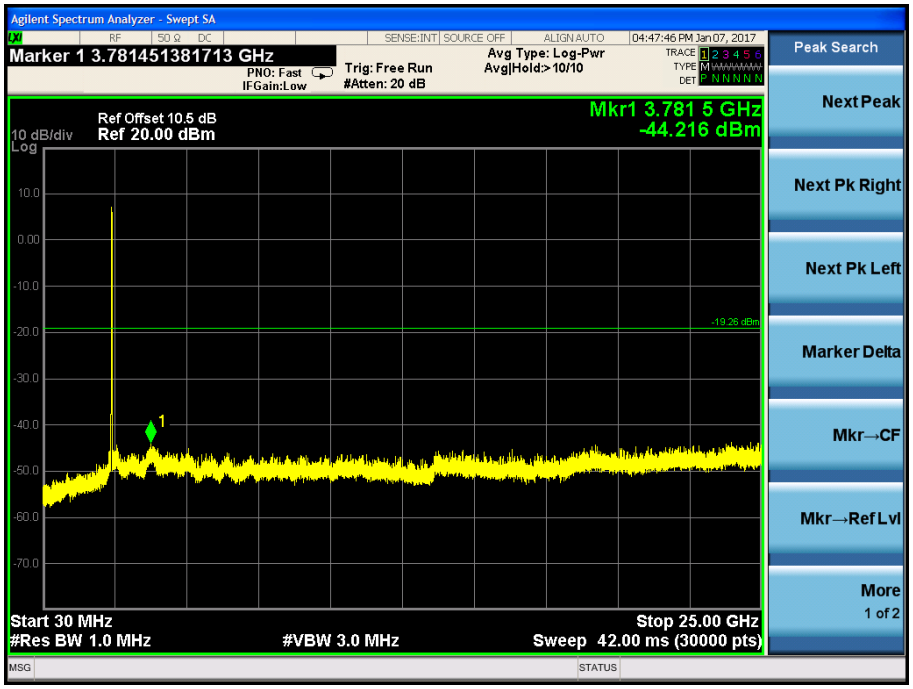
Test Mode: IEEE 802.11n (HT20) TX

Test CH1: 2412MHz

In-Band Reference Level



Out of Band Emission



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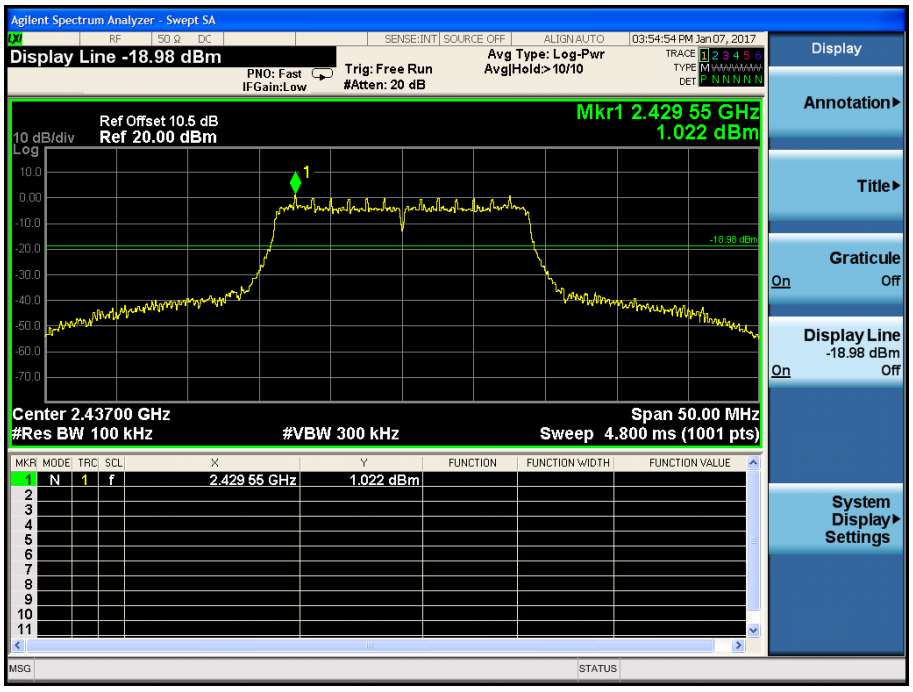
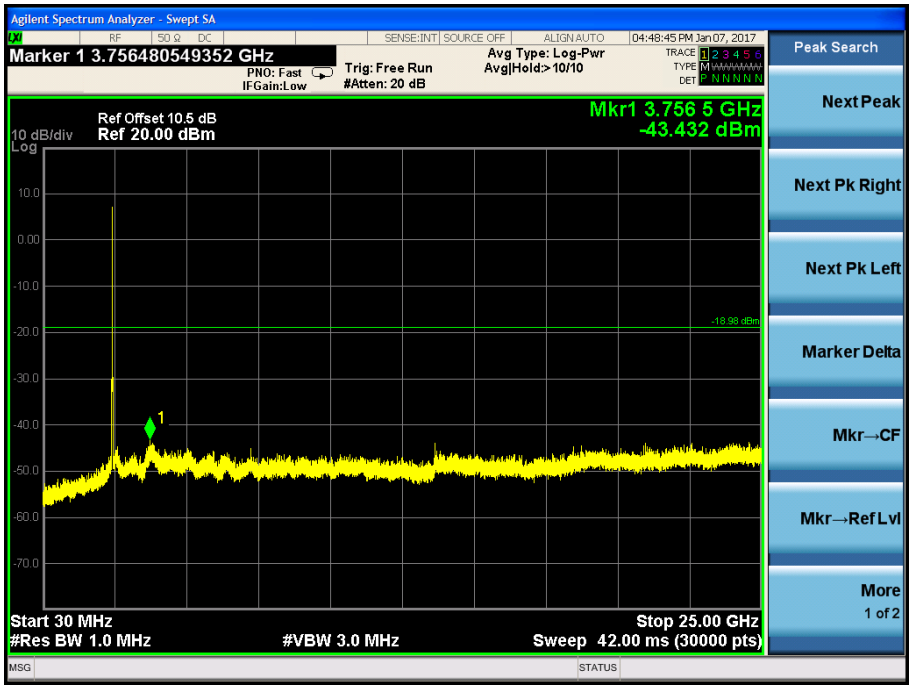
Test CH11: 2437MHz

In-Band Reference Level



Out of Band Emission



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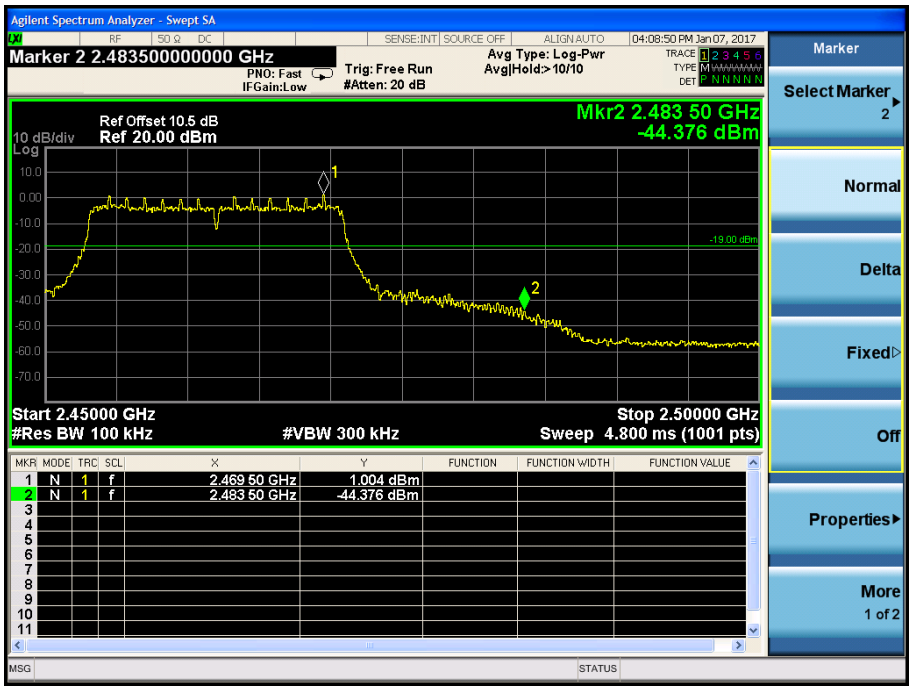
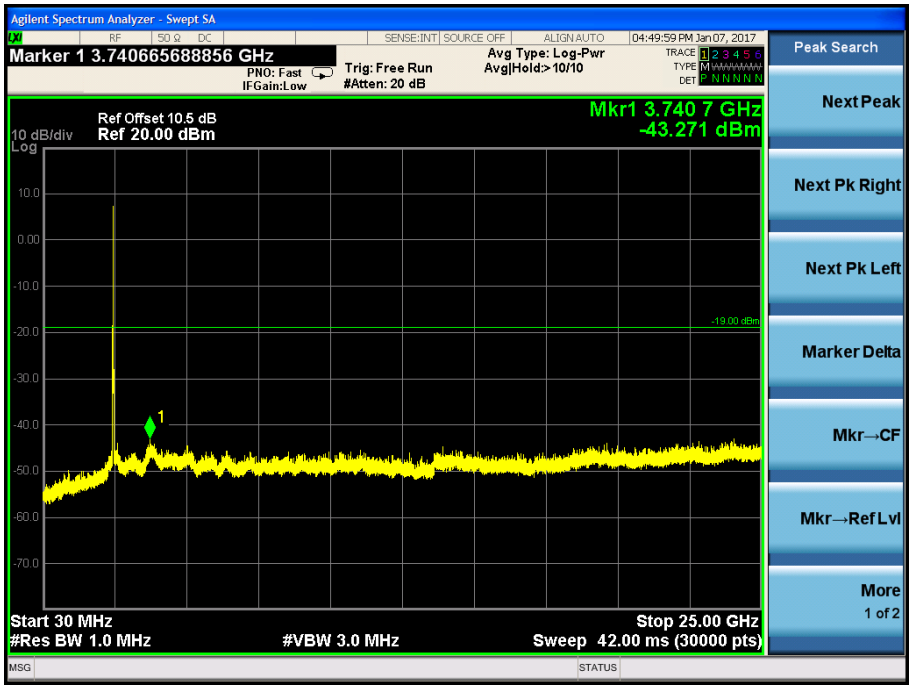
Test CH11: 2462MHz

In-Band Reference Level



Out of Band Emission



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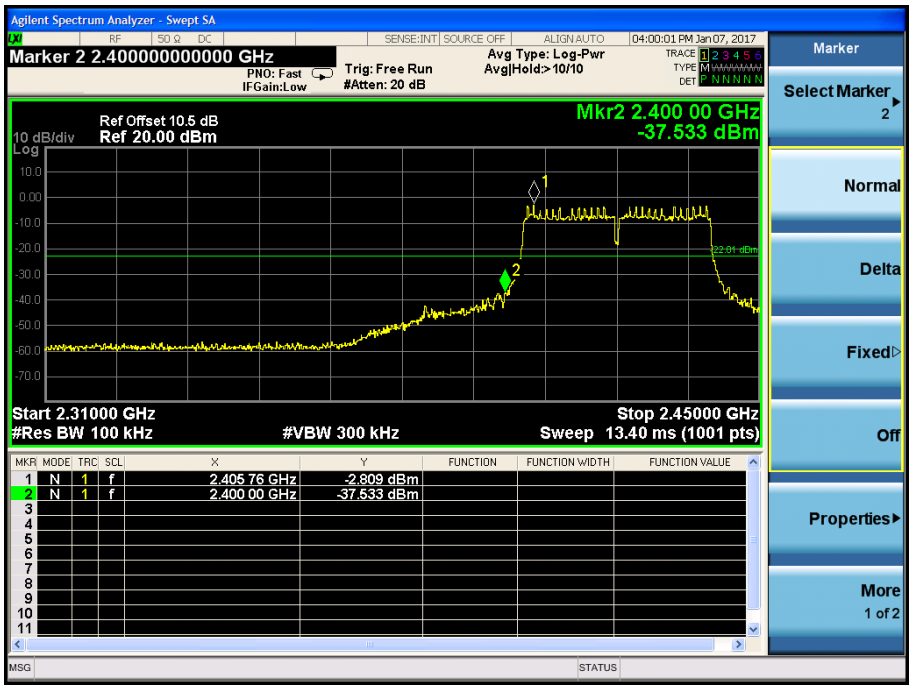
Test Mode: IEEE 802.11n (HT40) TX

Test CH3: 2422MHz

In-Band Reference Level



Out of Band Emission

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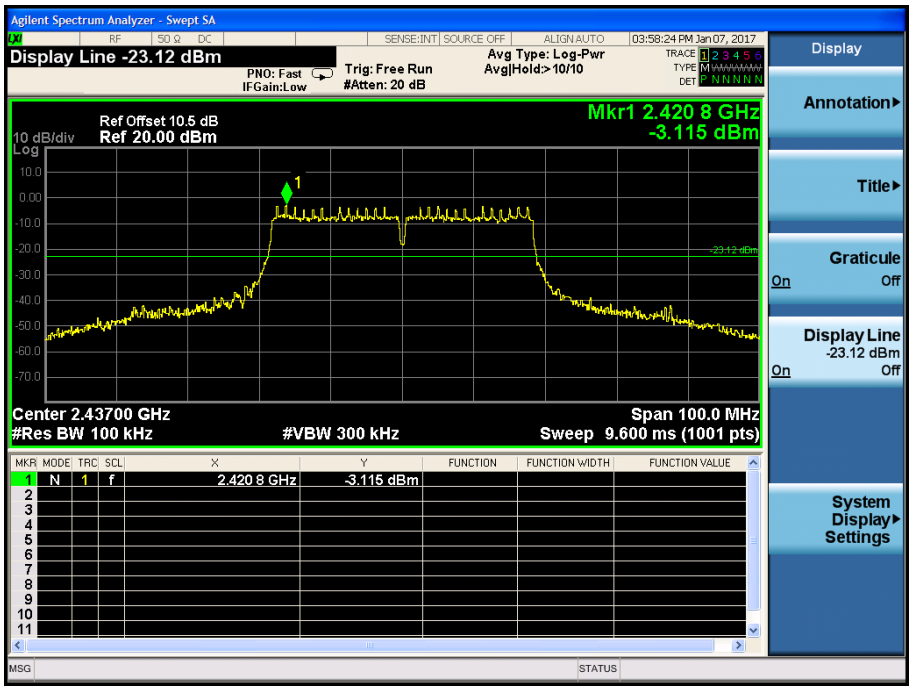
Test CH11: 2437MHz

In-Band Reference Level



Out of Band Emission

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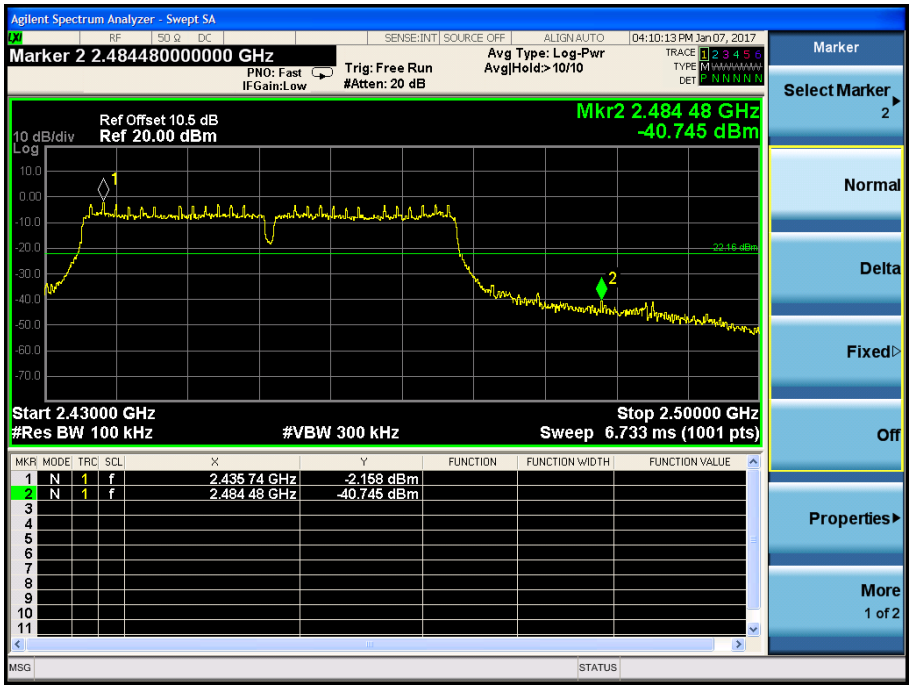
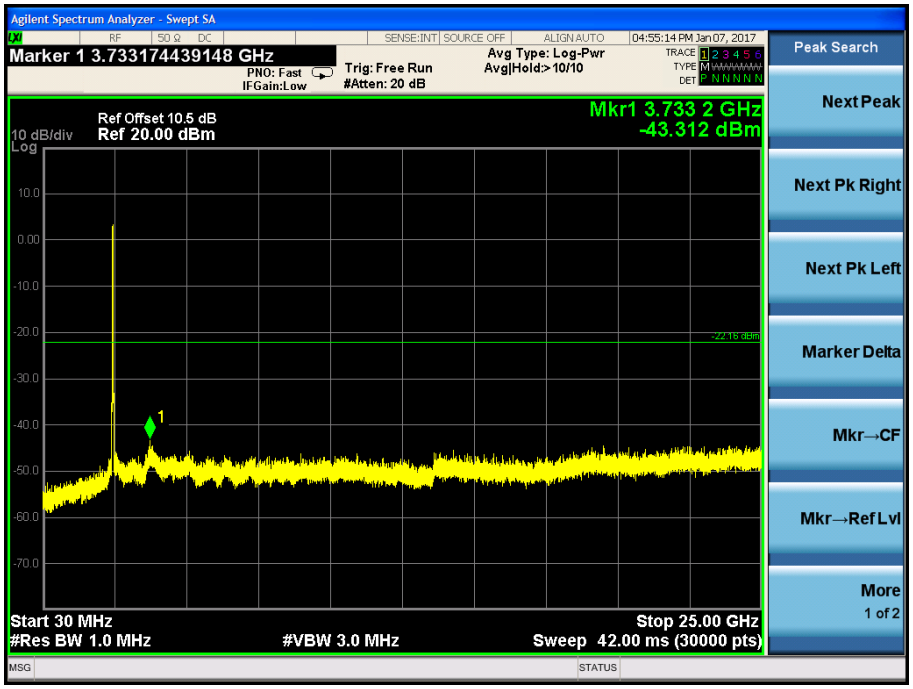
Test CH9: 2452MHz

In-Band Reference Level



Out of Band Emission



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6.6 Band Edge Measurements (Radiated)

Radiated band edge measurements at 2390MHz and 2483MHz were made with the unit transmitting in the low end of the channel range and the high end closest to the restricted bands respectively. The emissions were made on the 966 Semi-Chamber. Use (resolution bandwidth (RBW) = 1 MHz, video bandwidth (VBW) = 1 MHz for peak levels and RBW = 1 MHz and VBW = 10 Hz or 1/T for average levels).

6.6.1 Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

6.6.2 Test Procedure(KDB 558074 D01 v03r05, Section 12.1)

1. Use radiated spurious emission test procedure described in 4.5.2 clause. The transmitter output (antenna port) was connected to the test receiver.

2. Set the PK and AV limit line.

3. Record the fundamental emission and emissions out of the band edge.

4. Determine band-edge compliance as required.

6.6.3 Test Data

The EUT complied with the FCC Part 15.247 Radiated band edge emissions requirements.

Table 11 provides the test results for Radiated band edge emissions. (All the data attached was use the worst case data rate as in table 6)

6.6.4 Areas of Concern

None.

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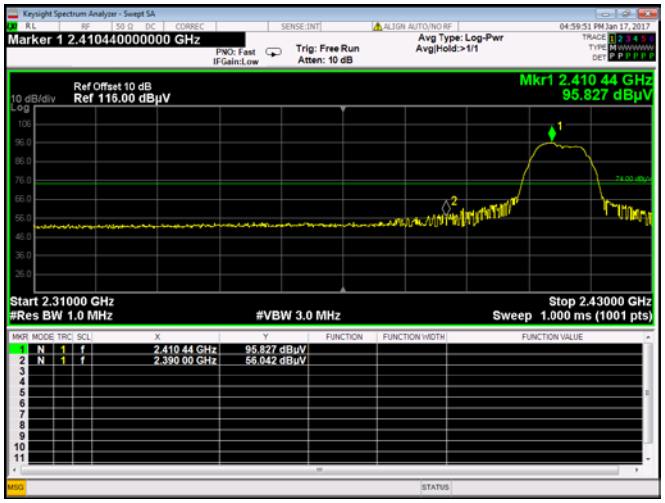
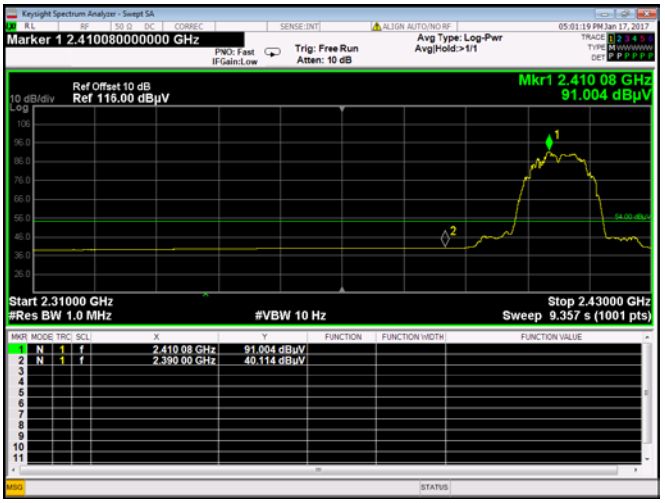
Table 11: Band Edge Measurements (Radiated)

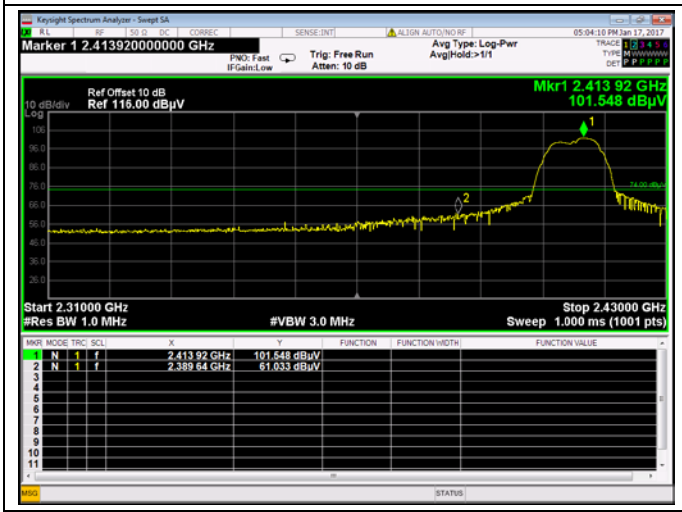
Mode	802.11b	Ant. Polar.	Horizontal
Antenna	Chain 1+2	Channel	1
Detector: Peak		Detector: AV	

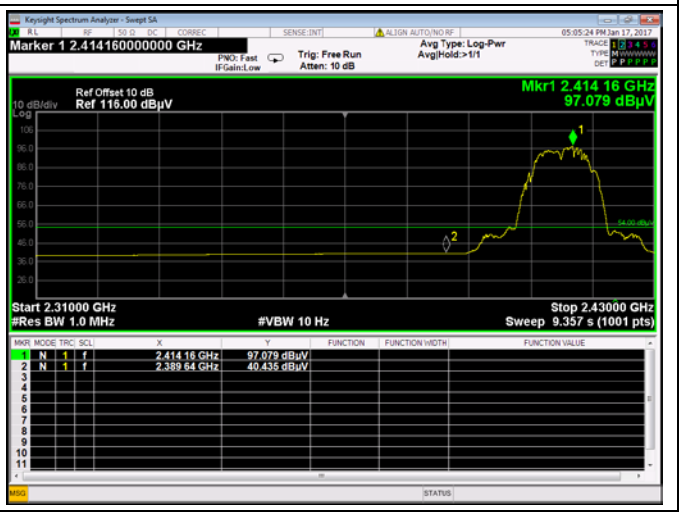




Frequency (MHz)	Peak level (dBuv/m)	Peak Limit (dBuv/m)	AV level (dBuv/m)	AV Limit (dBuv/m)	Conclusion
2390	56.042	74	40.114	54	Pass

Mode	802.11b	Ant. Polar.	Vertical
Antenna	Chain 1+2	Channel	1
Detector: Peak		Detector: AV	





Frequency (MHz)	Peak level (dBuv/m)	Peak Limit (dBuv/m)	AV level (dBuv/m)	AV Limit (dBuv/m)	Conclusion
2390	61.033	74	40.435	54	Pass

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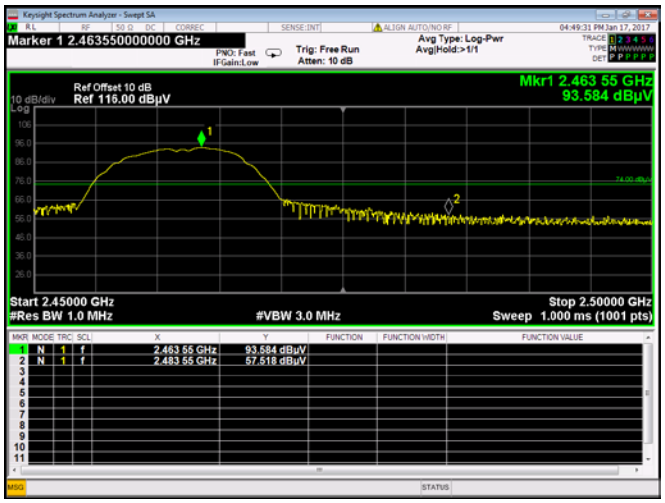
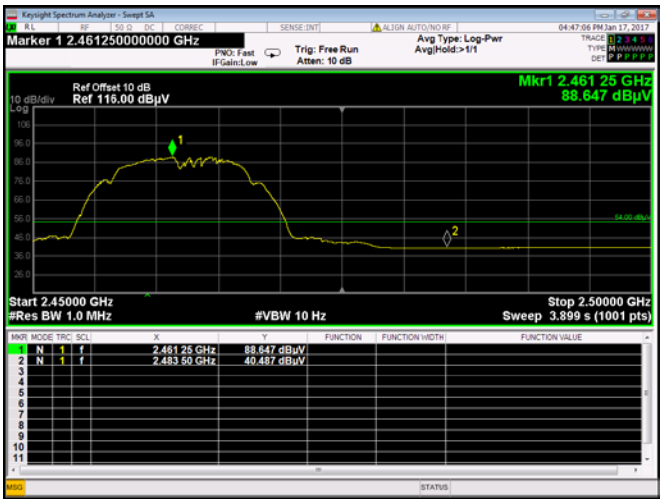
Mode	802.11b	Ant. Polar.	Horizontal
Antenna	Chain 1+2	Channel	11

Detector: Peak



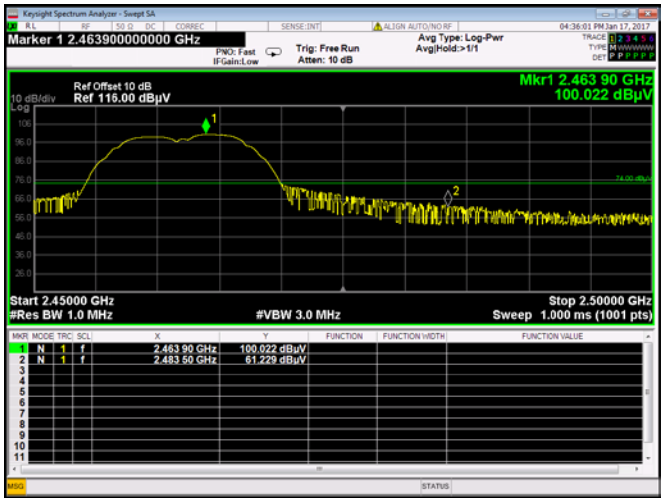
Detector: AV



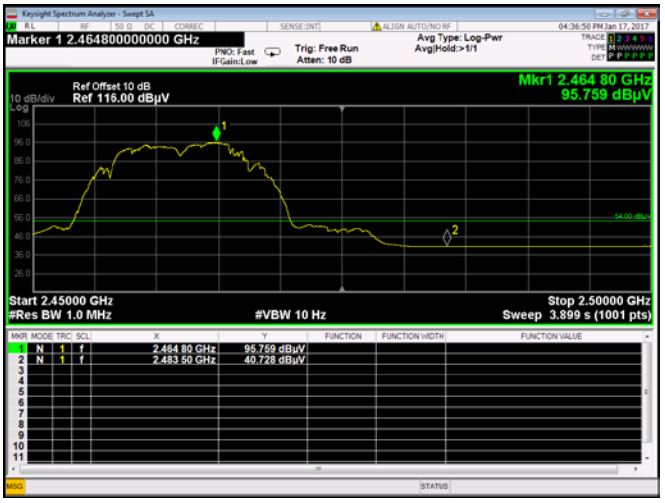
Frequency (MHz)	Peak level (dBuv/m)	Peak Limit (dBuv/m)	AV level (dBuv/m)	AV Limit (dBuv/m)	Conclusion
2483.5	57.518	74	40.487	54	Pass

Mode	802.11b	Ant. Polar.	Vertical
Antenna	Chain 1+2	Channel	11

Detector: Peak



Detector: AV



Frequency (MHz)	Peak level (dBuv/m)	Peak Limit (dBuv/m)	AV level (dBuv/m)	AV Limit (dBuv/m)	Conclusion
2483.5	61.229	74	40.728	54	Pass

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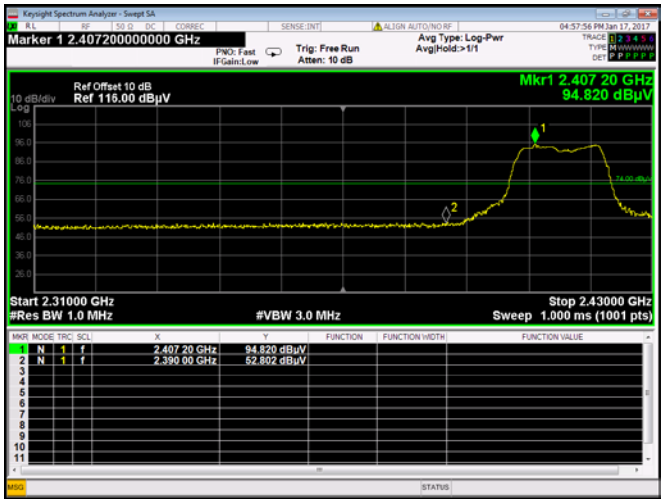
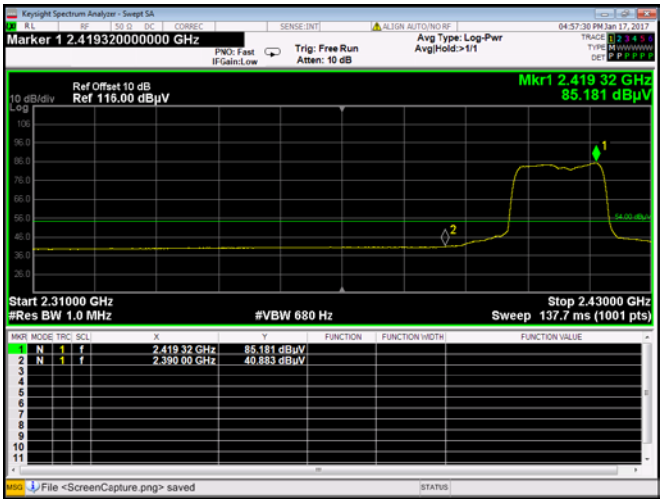
Mode	802.11g	Ant. Polar.	Horizontal
Antenna	Chain 1+2	Channel	1

Detector: Peak



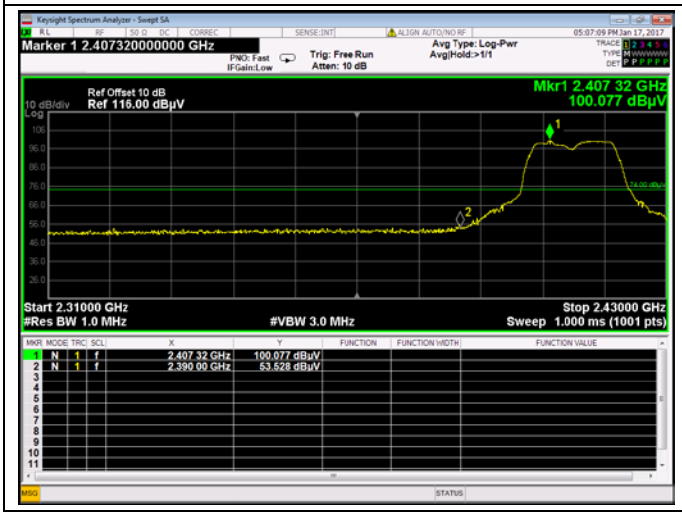
Detector: AV



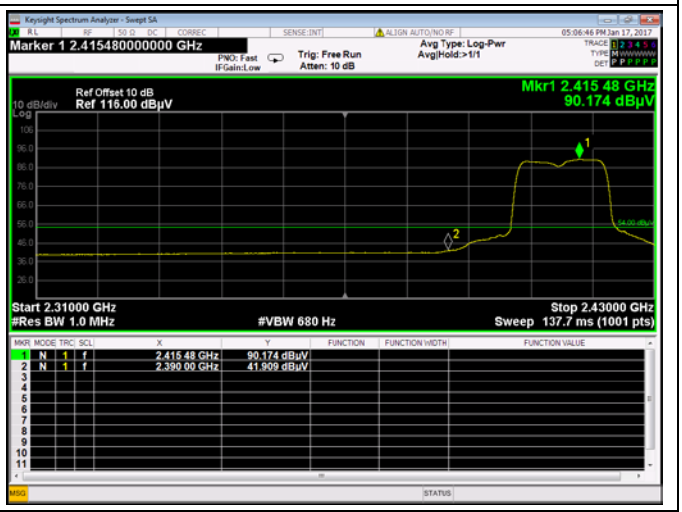
Frequency (MHz)	Peak level (dBuv/m)	Peak Limit (dBuv/m)	AV level (dBuv/m)	AV Limit (dBuv/m)	Conclusion
2390	52.802	74	40.883	54	Pass

Mode	802.11g	Ant. Polar.	Vertical
Antenna	Chain 1+2	Channel	1

Detector: Peak



Detector: AV



Frequency (MHz)	Peak level (dBuv/m)	Peak Limit (dBuv/m)	AV level (dBuv/m)	AV Limit (dBuv/m)	Conclusion
2390	53.528	74	41.909	54	Pass

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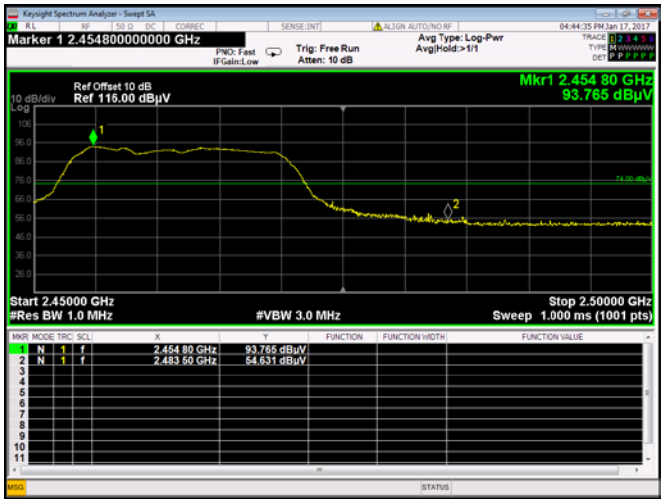
Mode	802.11g	Ant. Polar.	Horizontal
Antenna	Chain 1+2	Channel	11

Detector: Peak

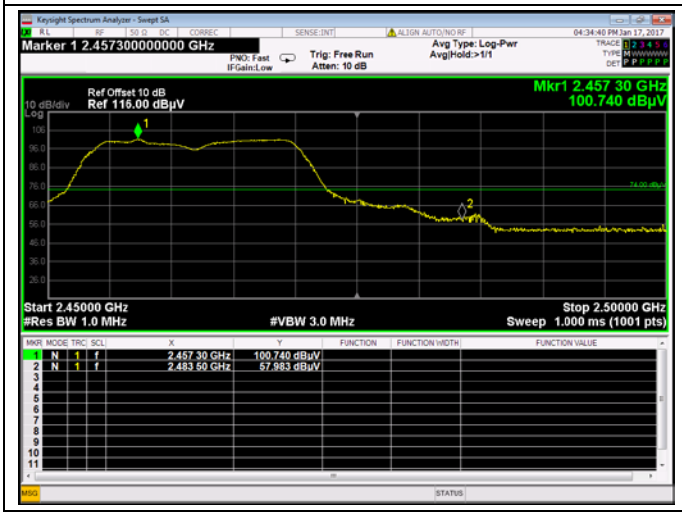


Detector: AV

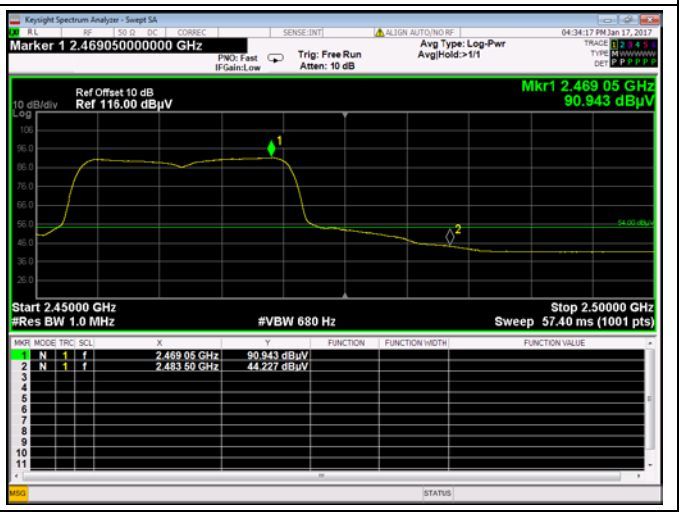
Frequency (MHz)	Peak level (dBuv/m)	Peak Limit (dBuv/m)	AV level (dBuv/m)	AV Limit (dBuv/m)	Conclusion
2483.5	54.631	74	41.967	54	Pass

Mode	802.11g	Ant. Polar.	Vertical
Antenna	Chain 1+2	Channel	11

Detector: Peak



Detector: AV



Frequency (MHz)	Peak level (dBuv/m)	Peak Limit (dBuv/m)	AV level (dBuv/m)	AV Limit (dBuv/m)	Conclusion
2483.5	57.983	74	44.227	54	Pass

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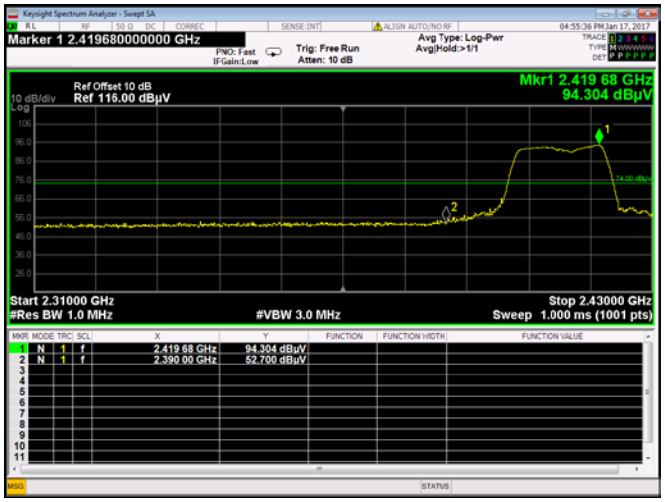
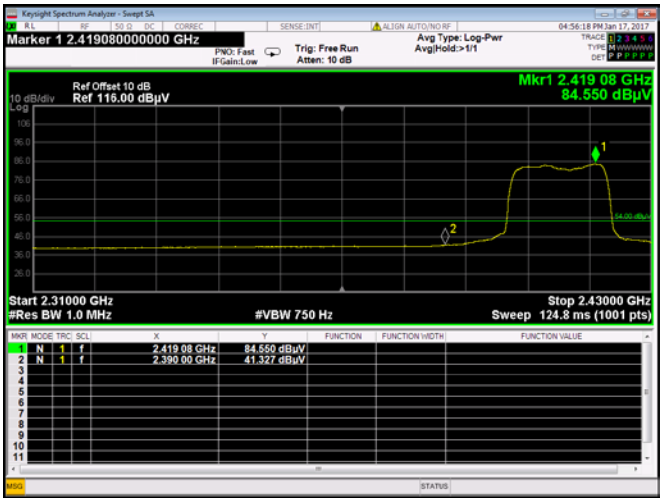
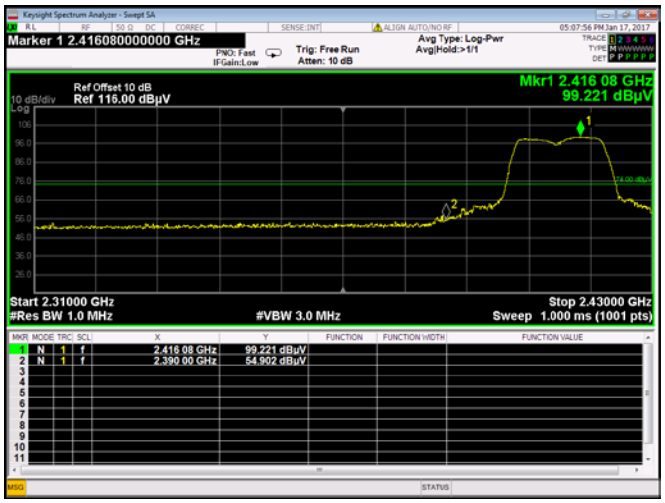
Mode	802.11n(HT20)	Ant. Polar.	Horizontal
Antenna	Chain 1+2	Channel	1
Detector: Peak		Detector: AV	

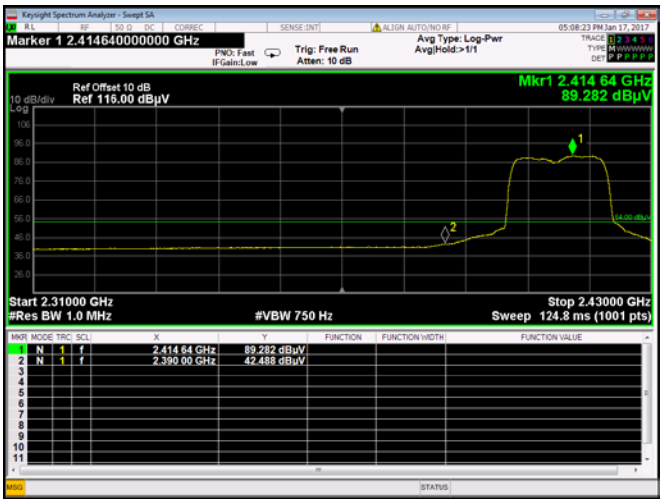




Frequency (MHz)	Peak level (dBuv/m)	Peak Limit (dBuv/m)	AV level (dBuv/m)	AV Limit (dBuv/m)	Conclusion
2390	52.700	74	41.327	54	Pass

Mode	802.11n(HT20)	Ant. Polar.	Vertical
Antenna	Chain 1+2	Channel	1
Detector: Peak		Detector: AV	





Frequency (MHz)	Peak level (dBuv/m)	Peak Limit (dBuv/m)	AV level (dBuv/m)	AV Limit (dBuv/m)	Conclusion
2390	54.902	74	42.488	54	Pass

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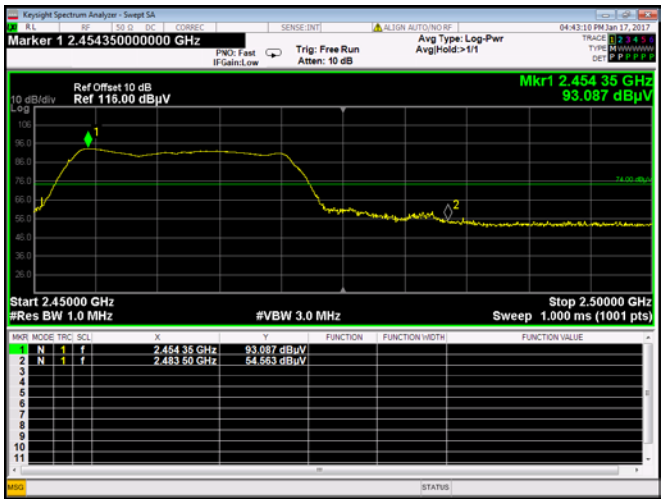
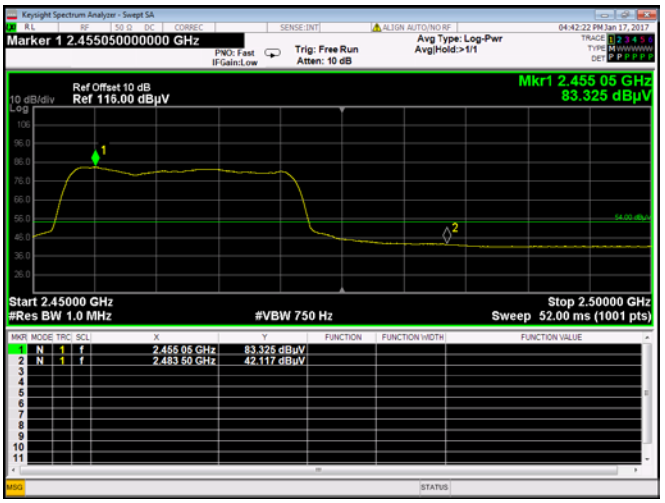
Mode	802.11n(HT20)	Ant. Polar.	Horizontal
Antenna	Chain 1+2	Channel	11

Detector: Peak



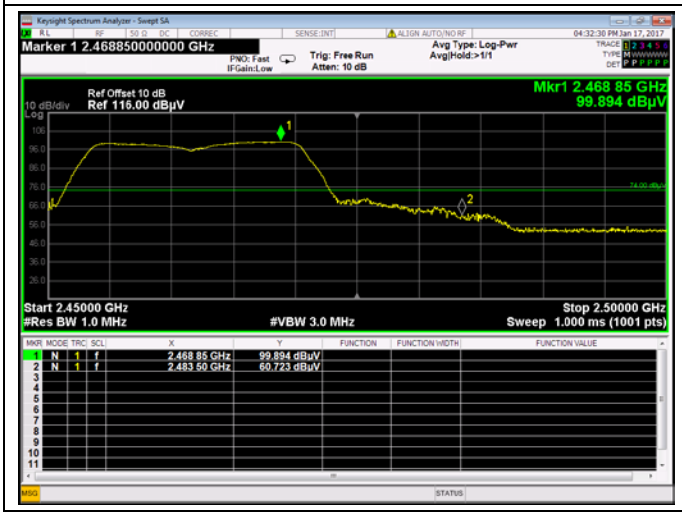
Detector: AV



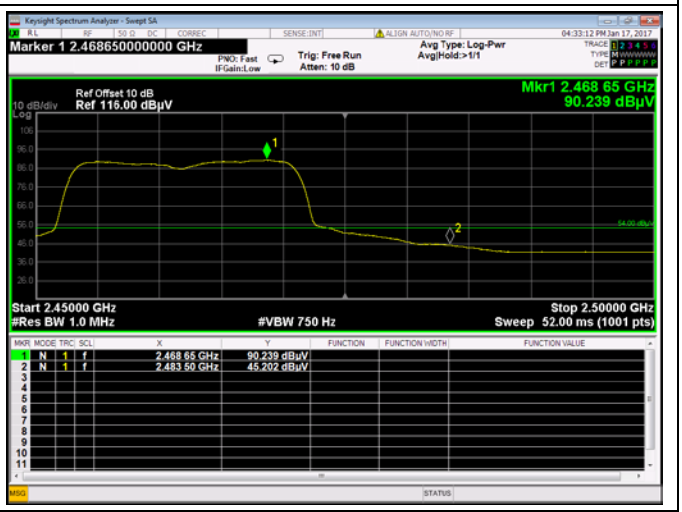
Frequency (MHz)	Peak level (dBuv/m)	Peak Limit (dBuv/m)	AV level (dBuv/m)	AV Limit (dBuv/m)	Conclusion
2483.5	54.563	74	42.117	54	Pass

Mode	802.11n(HT20)	Ant. Polar.	Vertical
Antenna	Chain 1+2	Channel	11

Detector: Peak



Detector: AV



Frequency (MHz)	Peak level (dBuv/m)	Peak Limit (dBuv/m)	AV level (dBuv/m)	AV Limit (dBuv/m)	Conclusion
2483.5	60.723	74	45.202	54	Pass

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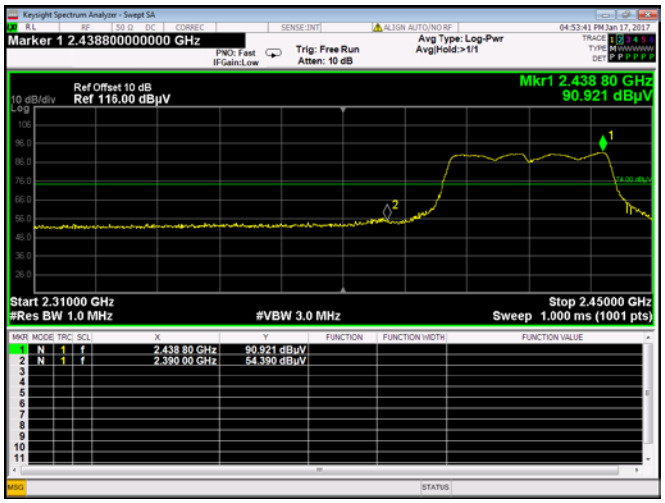
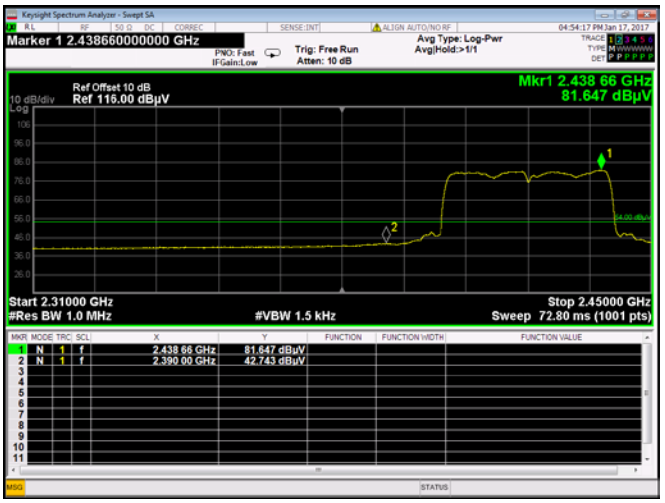
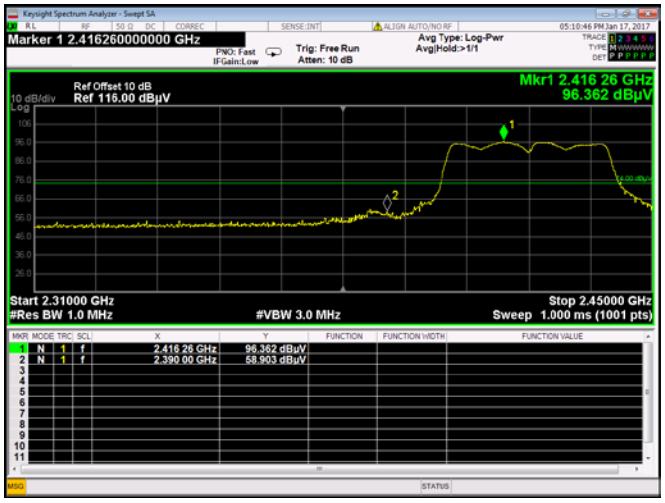
Mode	802.11n(HT40)	Ant. Polar.	Horizontal
Antenna	Chain 1+2	Channel	3
Detector: Peak		Detector: AV	

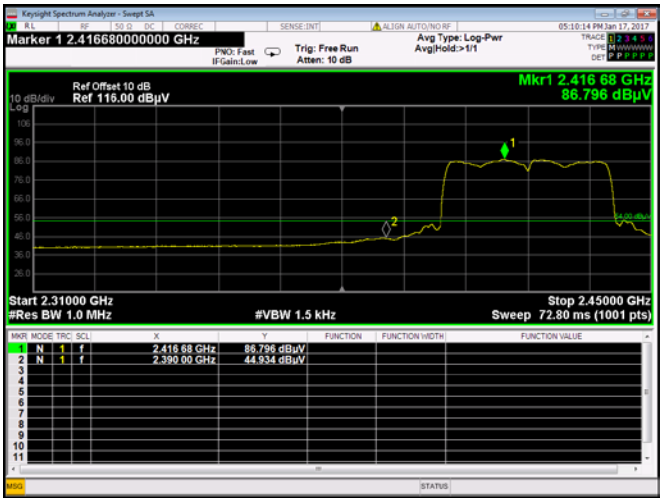




Frequency (MHz)	Peak level (dBuv/m)	Peak Limit (dBuv/m)	AV level (dBuv/m)	AV Limit (dBuv/m)	Conclusion
2390	54.390	74	42.743	54	Pass

Mode	802.11n(HT40)	Ant. Polar.	Vertical
Antenna	Chain 1+2	Channel	3
Detector: Peak		Detector: AV	





Frequency (MHz)	Peak level (dBuv/m)	Peak Limit (dBuv/m)	AV level (dBuv/m)	AV Limit (dBuv/m)	Conclusion
2390	58.903	74	44.934	54	Pass

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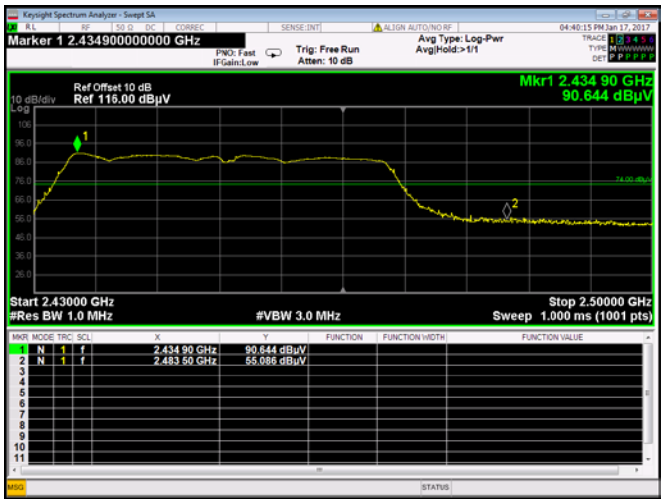
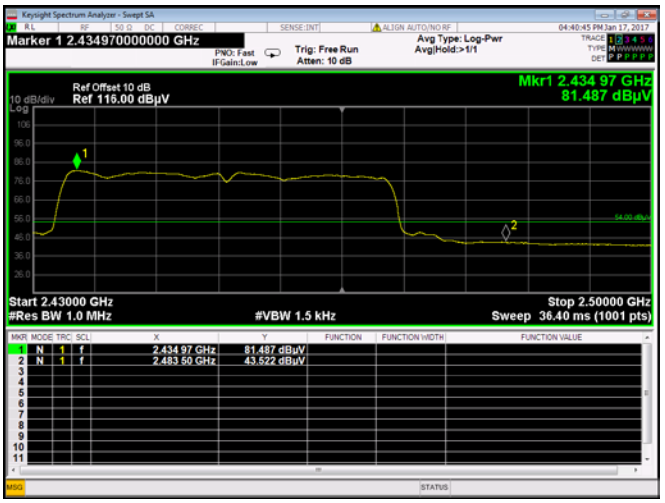
Mode	802.11n(HT40)	Ant. Polar.	Horizontal
Antenna	Chain 1+2	Channel	9

Detector: Peak



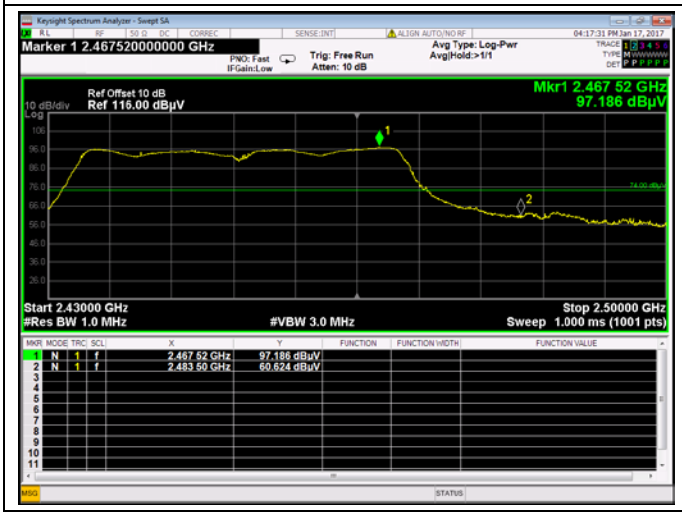
Detector: AV



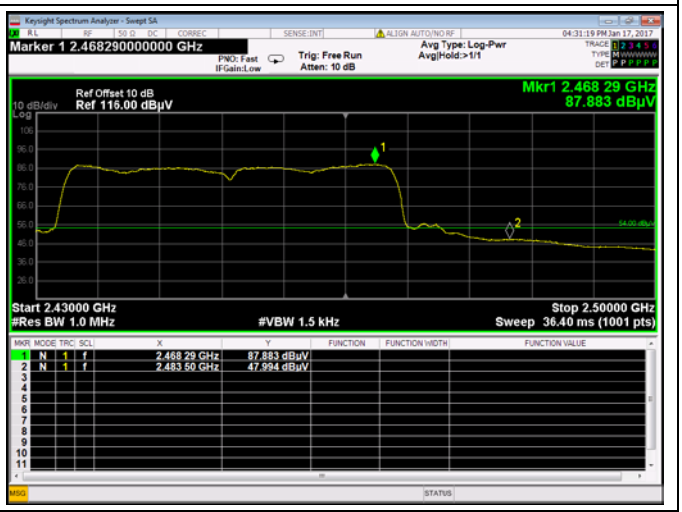
Frequency (MHz)	Peak level (dBuv/m)	Peak Limit (dBuv/m)	AV level (dBuv/m)	AV Limit (dBuv/m)	Conclusion
2483.5	55.086	74	43.522	54	Pass

Mode	802.11n(HT40)	Ant. Polar.	Vertical
Antenna	Chain 1+2	Channel	9

Detector: Peak



Detector: AV



Frequency (MHz)	Peak level (dBuv/m)	Peak Limit (dBuv/m)	AV level (dBuv/m)	AV Limit (dBuv/m)	Conclusion
2483.5	60.624	74	47.994	54	Pass

END of TEST REPORT

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