

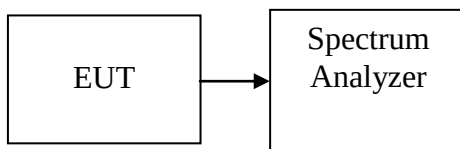


8.6 PEAK POWER SPECTRAL DENSITY

LIMIT

1. According to §15.247(e) & RSS-210 §A8.2, 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 transmission.
2. According to §15.247(f) & RSS-210 §A8.3, 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.

Test Configuration



TEST PROCEDURE

1. Place the EUT on the table and set it in transmitting mode.
Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
2. Set the spectrum analyzer as RBW=10kHz,VBW=100kHz,Span=1.5 times bandwidth,Sweep=auto
3. Record the max. reading.
4. Repeat the above procedure until the measurements for all frequencies are completed.

TEST RESULTS

No non-compliance noted

**Test Data****Test mode: IEEE 802.11b mode**

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Result
Low	2412	-3.12	8.00	PASS
Mid	2437	-2.85		PASS
High	2462	-2.91		PASS

Test mode: IEEE 802.11g mode

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Result
Low	2412	-4.67	8.00	PASS
Mid	2437	-4.39		PASS
High	2462	-4.92		PASS

Test mode: IEEE 802.11n HT 20 MHz mode

Channel	Frequency (MHz)	Chain 0 PSD (dBm)	Chain 1 PSD (dBm)	PPSD (dBm)	Limit (dBm)	Result
Low	2412	-7.86	-8.22	-5.03	3.7	PASS
Mid	2437	-7.63	-7.86	-4.73		PASS
High	2462	-8.90	-7.95	-5.39		PASS

Test mode: IEEE 802.11n HT 40 MHz mode

Channel	Frequency (MHz)	Chain 0 PSD (dBm)	Chain 1 PSD (dBm)	PPSD (dBm)	Limit (dBm)	Result
Low	2422	-9.32	-11.26	-7.17	3.7	PASS
Mid	2437	-10.80	-11.15	-7.96		PASS
High	2452	-10.97	-11.27	-8.11		PASS

Remark: 1. Total PSD (dBm) = $10 \cdot \log(10^{\text{Chain 0 PSD} / 10} + 10^{\text{Chain 1 PSD} / 10})$

2. The maximum antenna gain is 6.37dBi; therefore the reduction due to antenna gain is 4.3dBi, so the limit is 3.7dBm

**Test mode: IEEE 802.11a mode**

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Result
Low	5745	-7.88	8.00	PASS
Mid	5785	-7.87		PASS
High	5825	-7.57		PASS

Test mode: IEEE 802.11n HT 20 MHz mode

Channel	Frequency (MHz)	Chain 0 PPSP (dBm)	Chain 1 PPSP (dBm)	PPSD (dBm)	Limit (dBm)	Result
Low	5745	-8.93	-10.44	-6.61	3.9	PASS
Mid	5785	-9.05	-10.46	-6.69		PASS
High	5825	-9.96	-10.70	-7.30		PASS

Test mode: IEEE 802.11n HT 40 MHz mode

Channel	Frequency (MHz)	Chain 0 PPSP (dBm)	Chain 1 PPSP (dBm)	PPSD (dBm)	Limit (dBm)	Result
Low	5755	-12.03	-12.55	-9.27	3.9	PASS
High	5795	-11.32	-12.17	-8.71		PASS

Test mode: IEEE 802.11n HT 80 MHz mode

Channel	Frequency (MHz)	Chain 0 PPSP (dBm)	Chain 1 PPSP (dBm)	PPSD (dBm)	Limit (dBm)	Result
Mid	5755	-14.72	-13.54	-11.08	3.9	PASS

Remark: 1. Total PPSP (dBm) = $10 \cdot \log(10^{\text{Chain 0 PPSP} / 10} + 10^{\text{Chain 1 PPSP} / 10})$

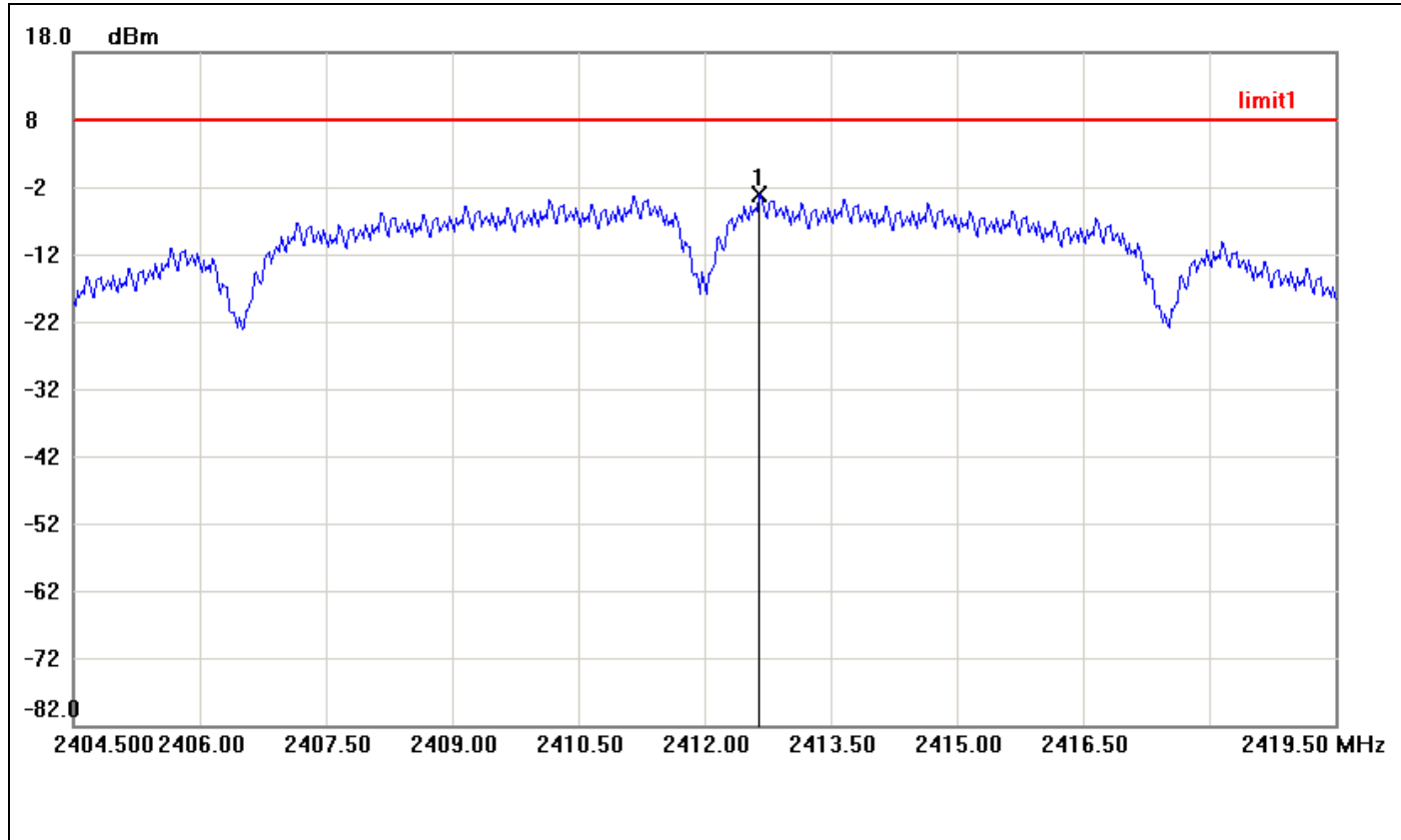
2. The maximum antenna gain is 6.37dBi; therefore the reduction due to antenna gain is 4.1dBi, so the limit is 3.9dBm



Test Plot

IEEE 802.11b mode

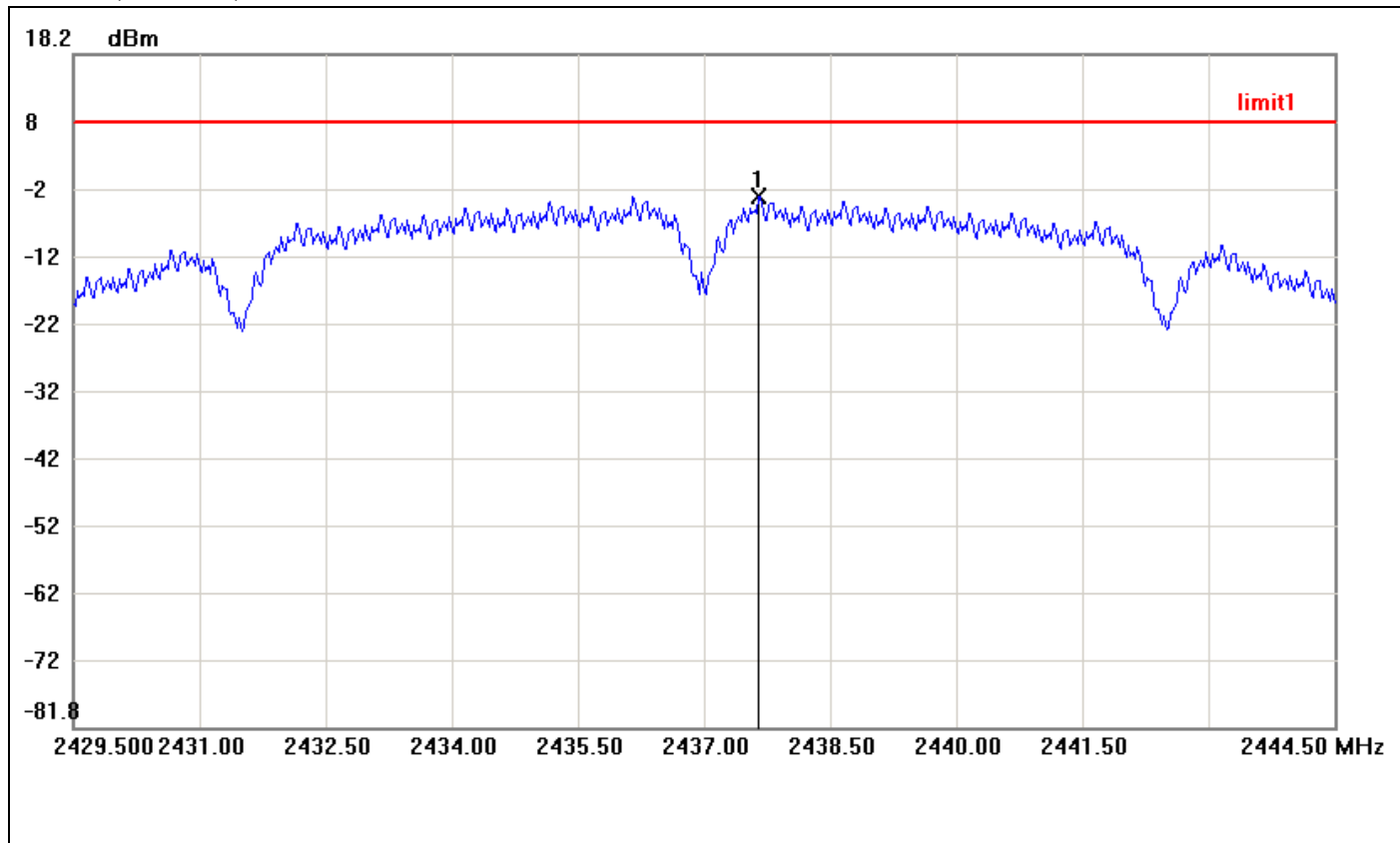
PPSD (CH Low)



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2412.6500	-3.12	8.00	-11.12



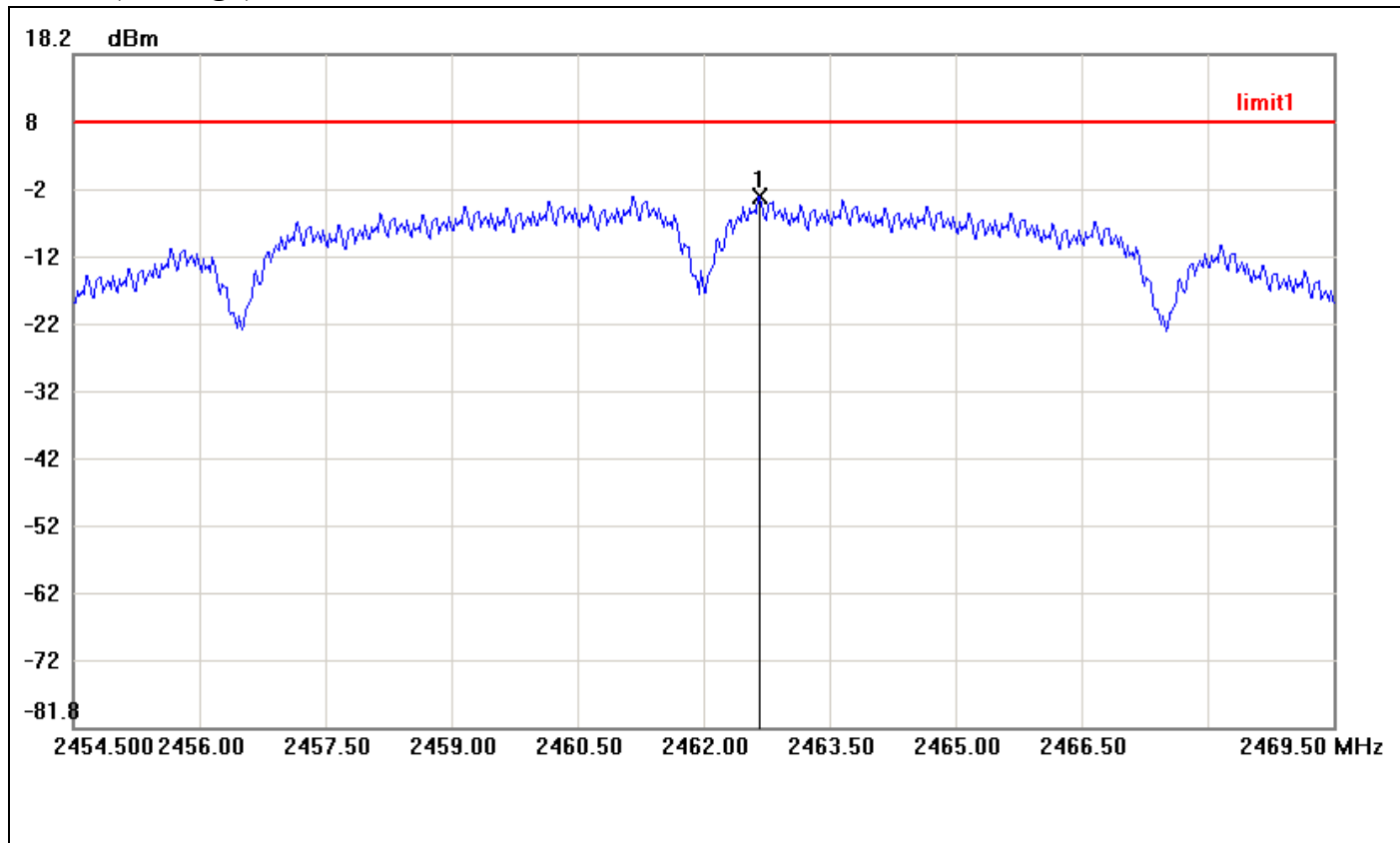
PPSD (CH Mid)



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2437.6500	-2.85	8.00	-10.85



PPSD (CH High)

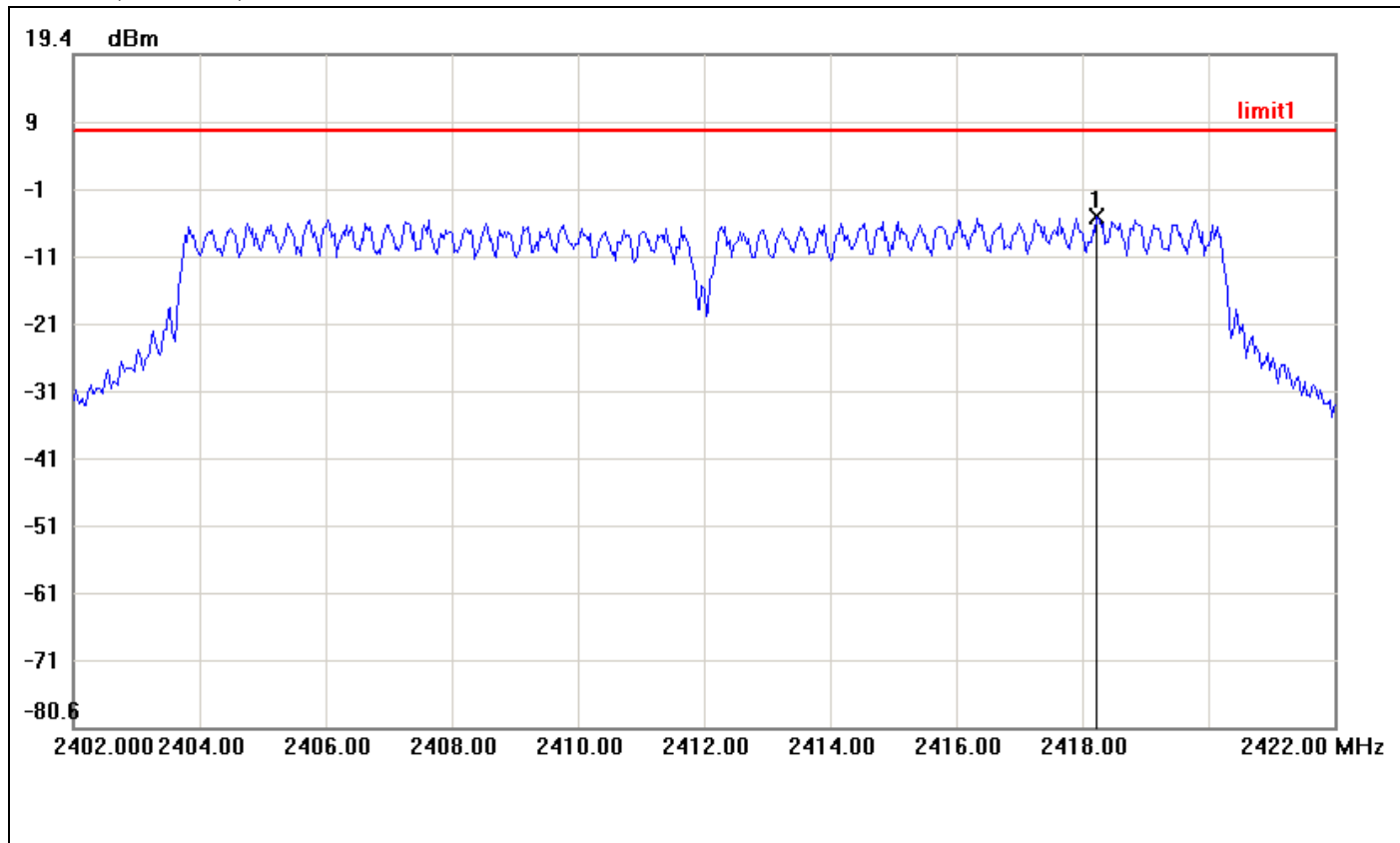


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2462.6750	-2.91	8.00	-10.91



IEEE 802.11g mode

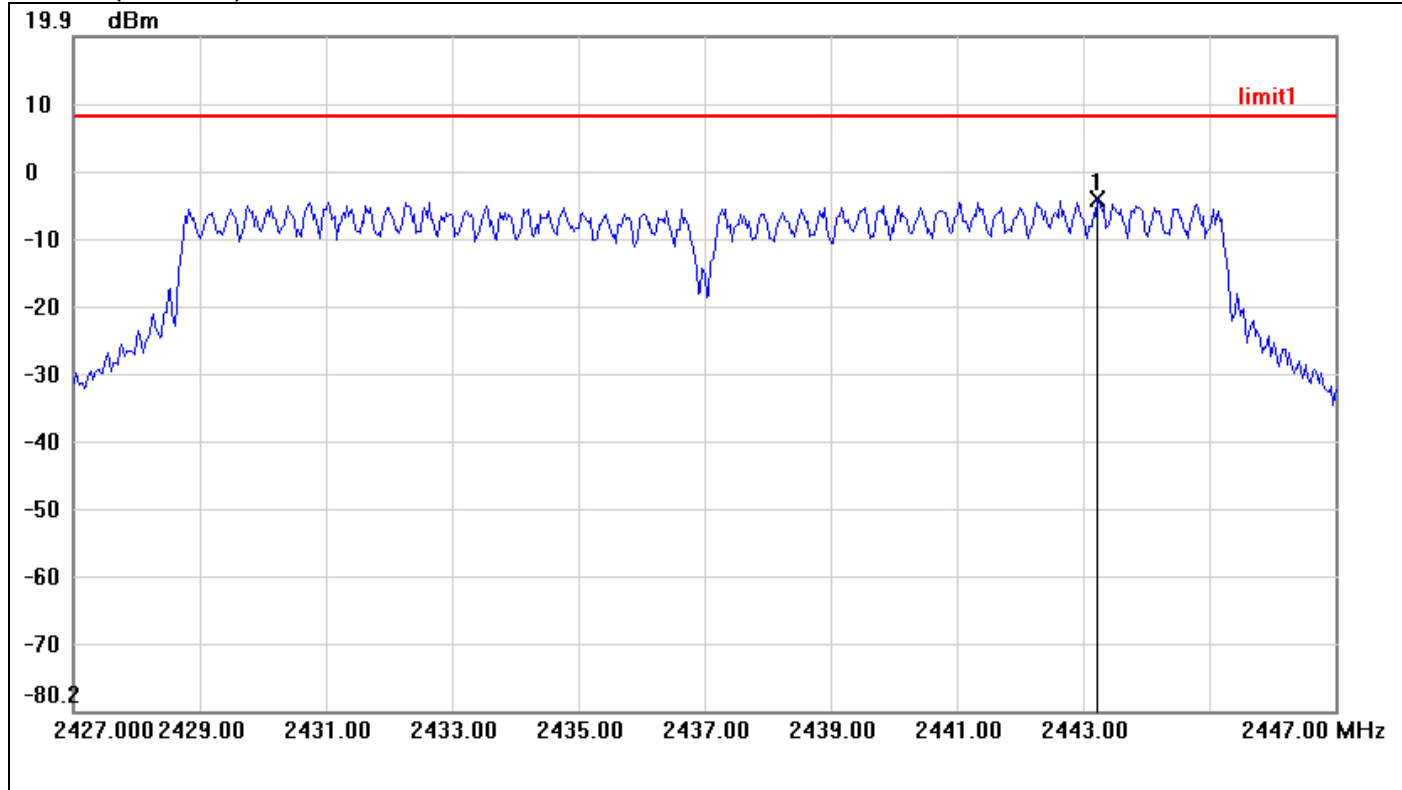
PPSD (CH Low)



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2418.2333	-4.67	8.00	-12.67



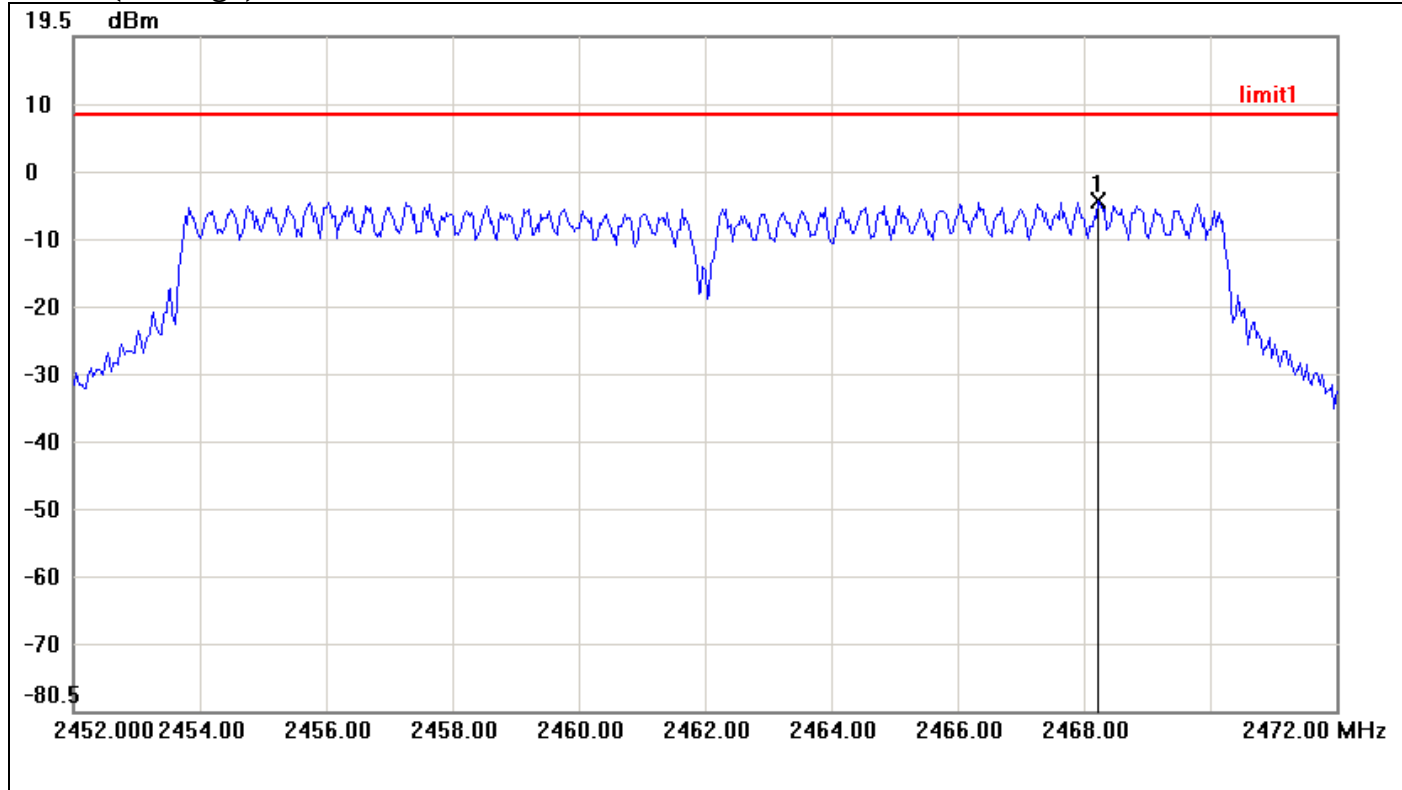
PPSD (CH Mid)



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2443.2333	-4.39	8.00	-12.39



PPSD (CH High)

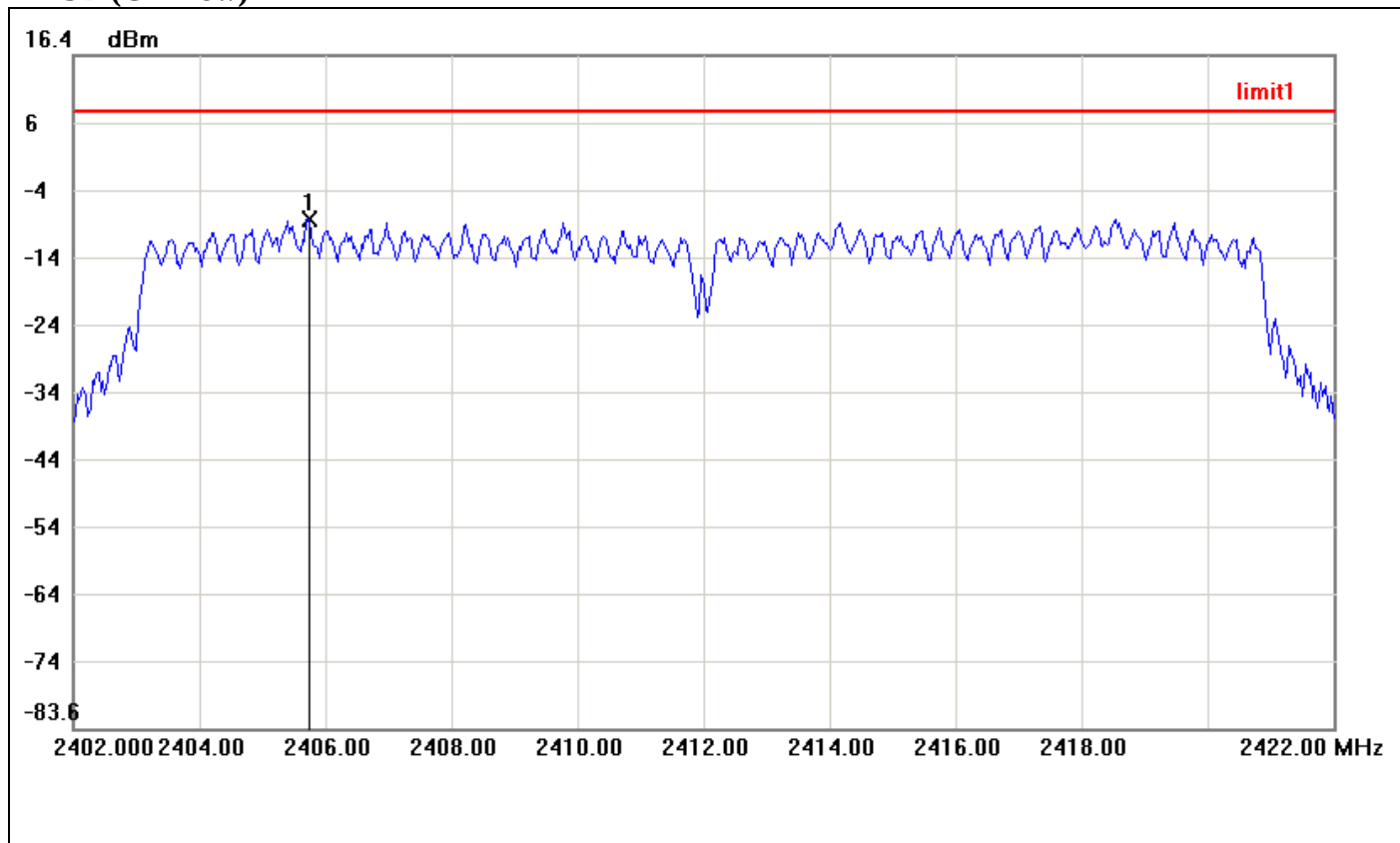


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2468.2333	-4.92	8.00	-12.92



IEEE 802.11n HT 20 MHz mode / Chain 0

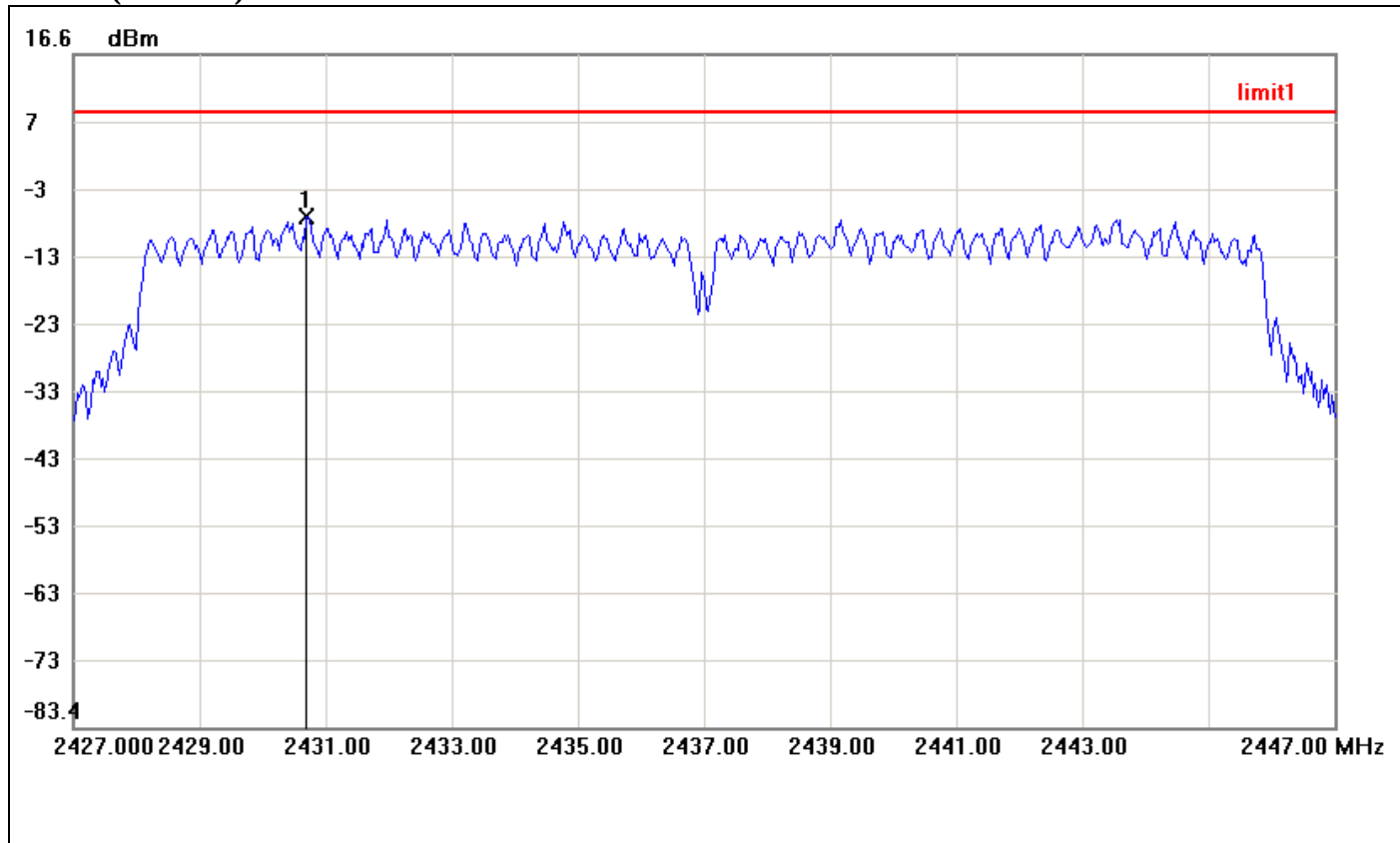
PPSD (CH Low)



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2405.7333	-7.86	8.00	-15.86



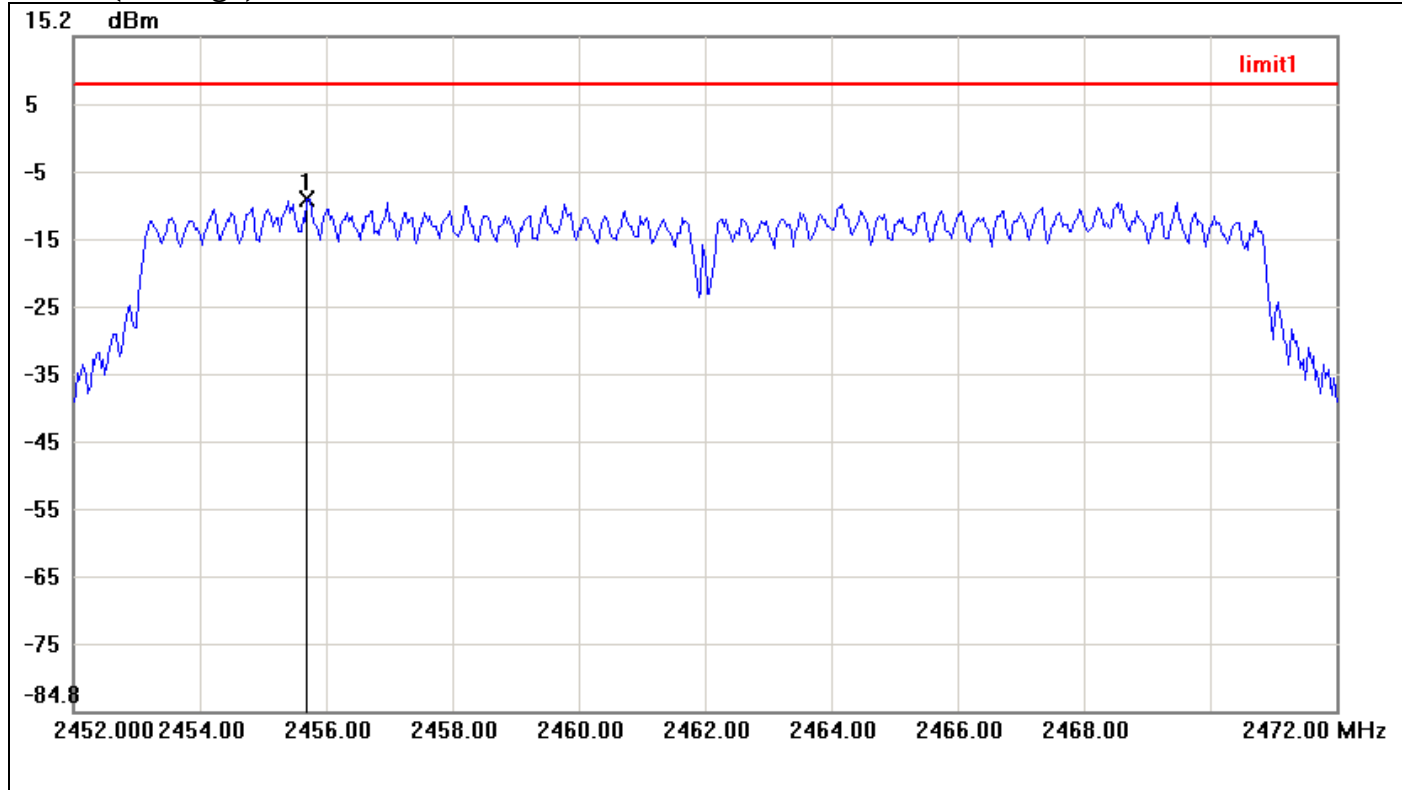
PPSD (CH Mid)



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2430.7000	-7.63	8.00	-15.63



PPSD (CH High)

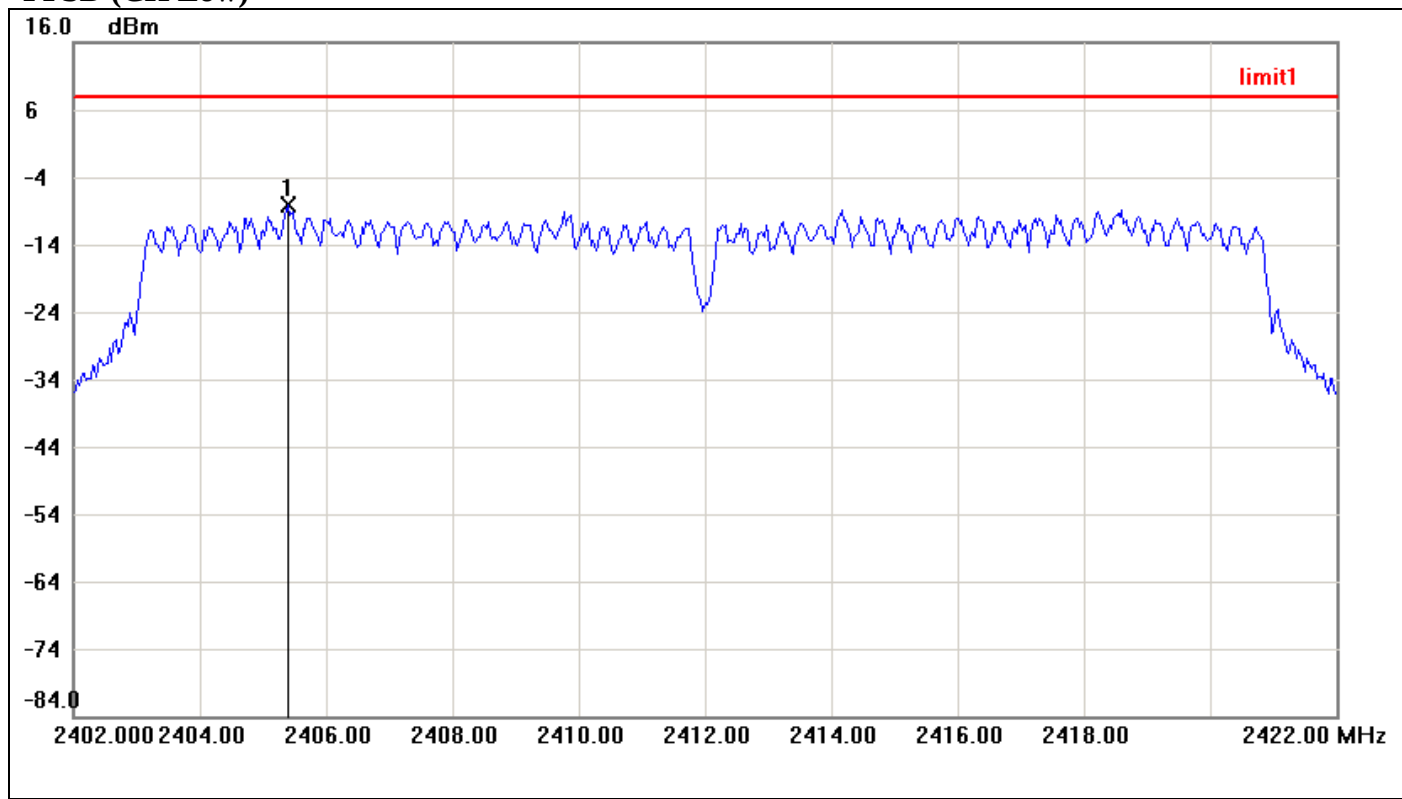


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2455.7000	-8.90	8.00	-16.90



IEEE 802.11n HT 20 MHz mode / Chain 1

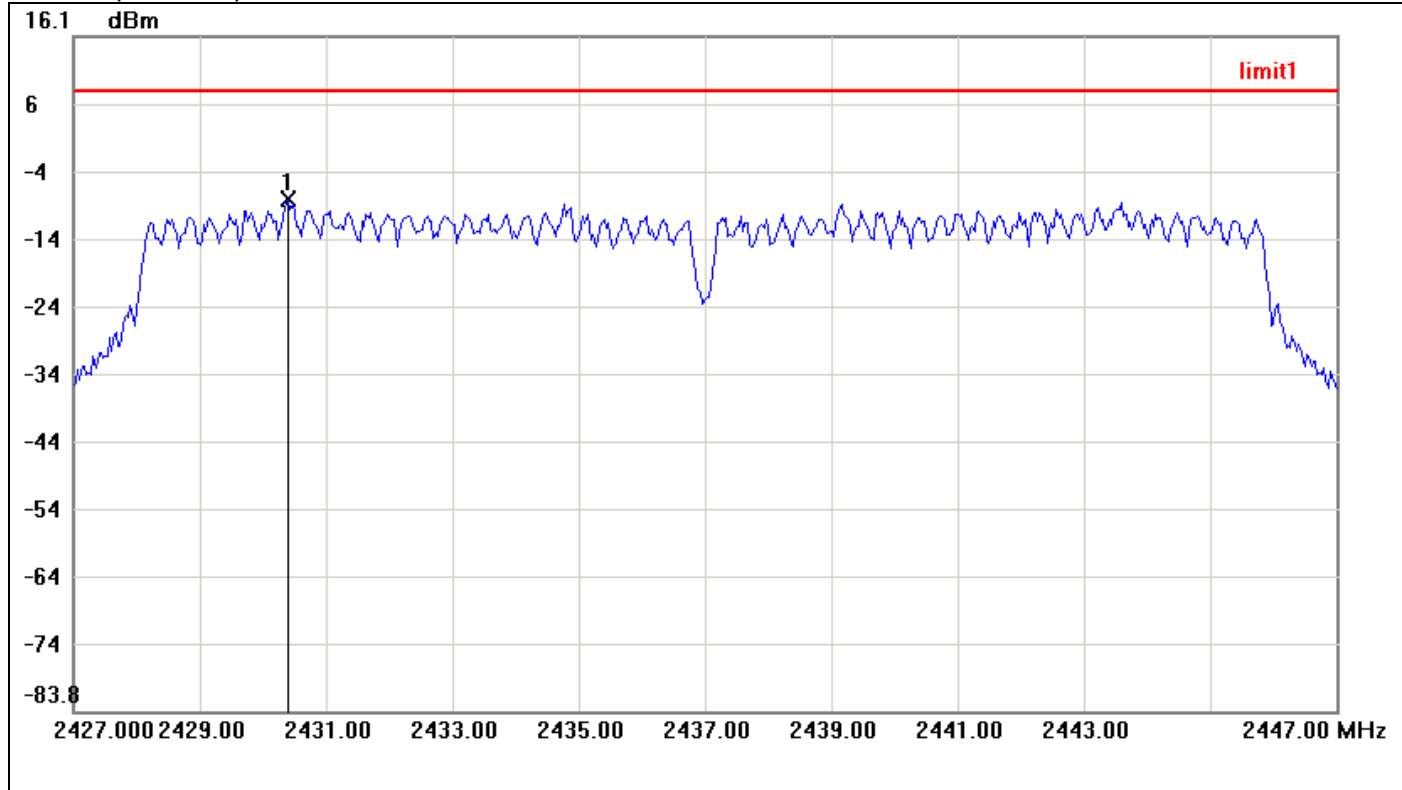
PPSD (CH Low)



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2405.4000	-8.22	8.00	-16.22



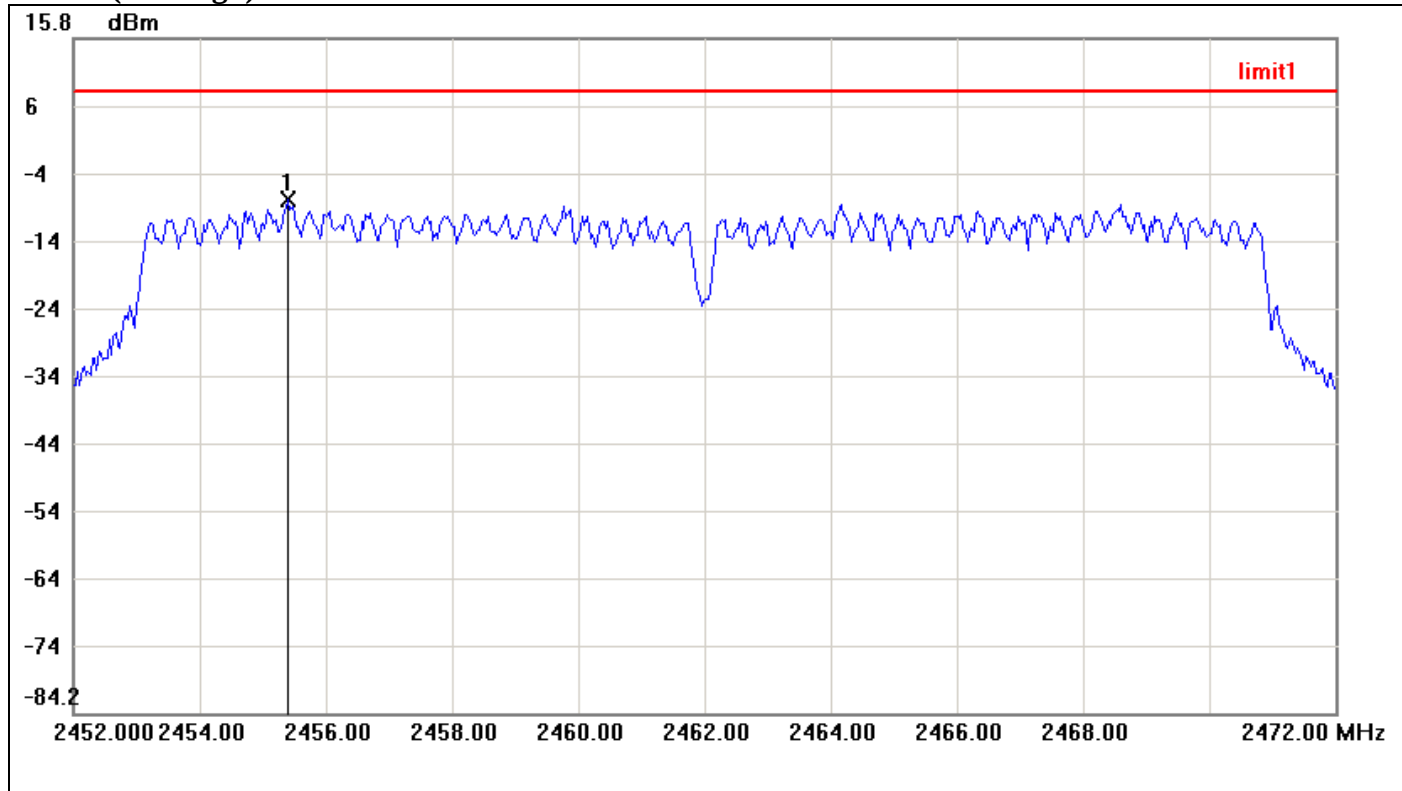
PPSD (CH Mid)



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2430.4000	-7.86	8.00	-15.86



PPSD (CH High)

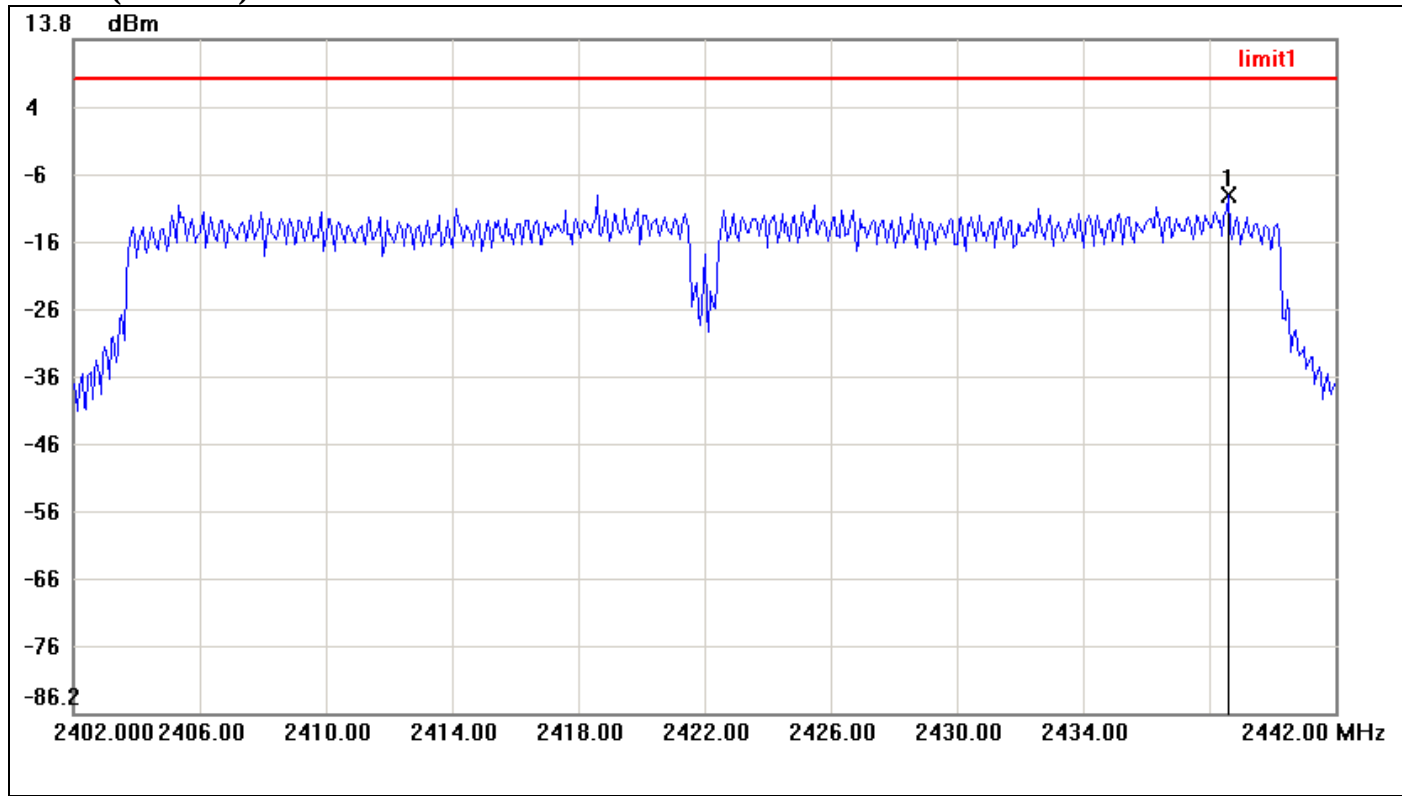


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2455.4000	-7.95	8.00	-15.95



IEEE 802.11n HT 40 MHz mode / Chain 0

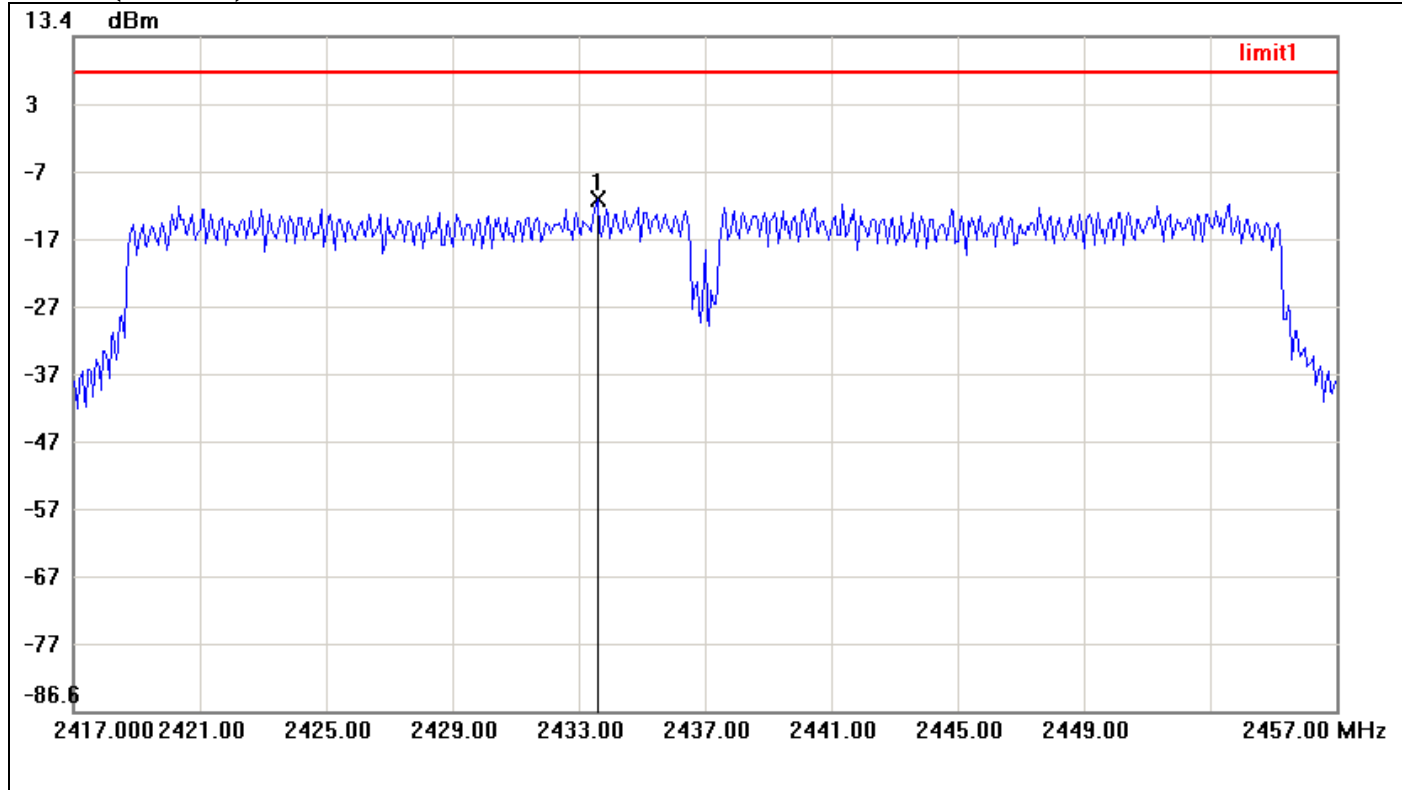
PPSD (CH Low)



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2438.6000	-9.32	8.00	-17.32



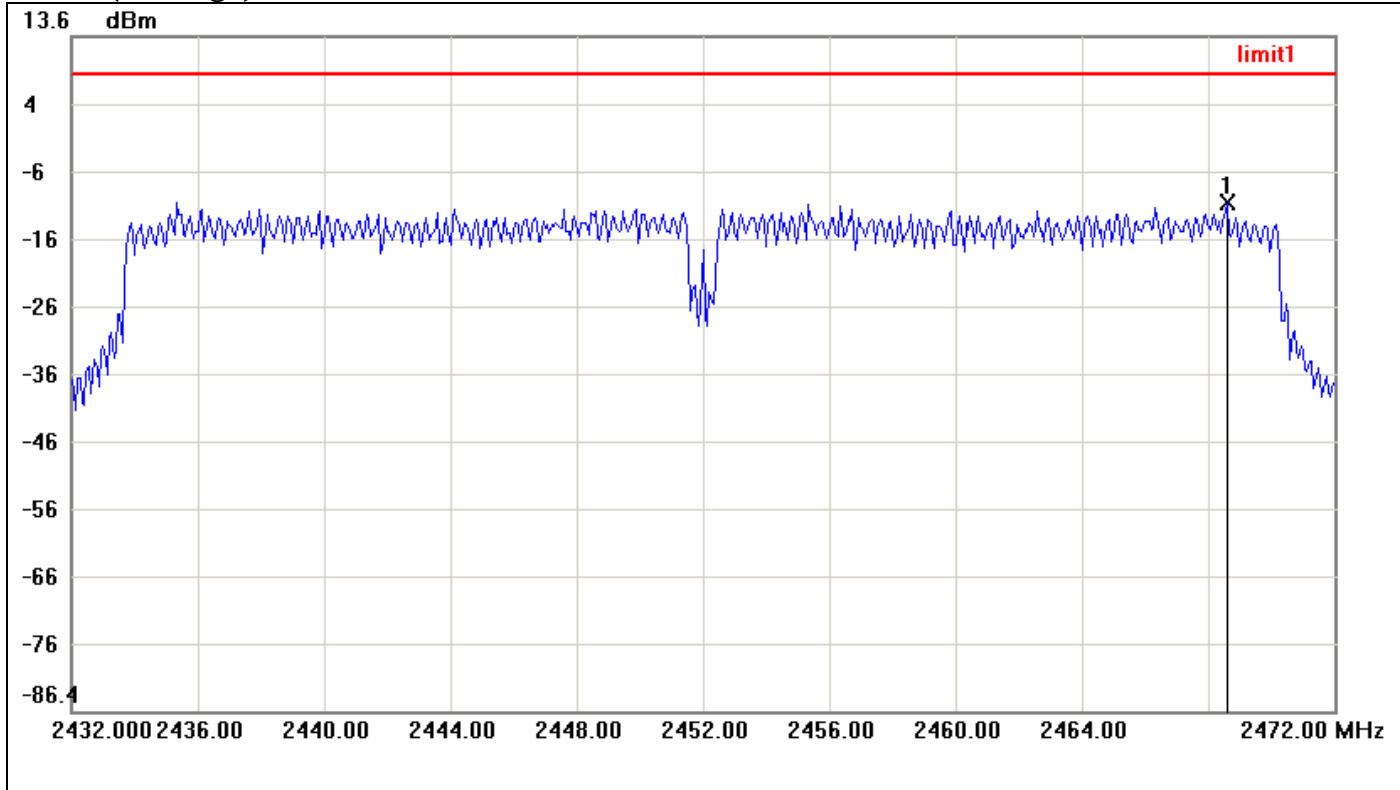
PPSD (CH Mid)



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2433.6000	-10.80	8.00	-18.80



PPSD (CH High)

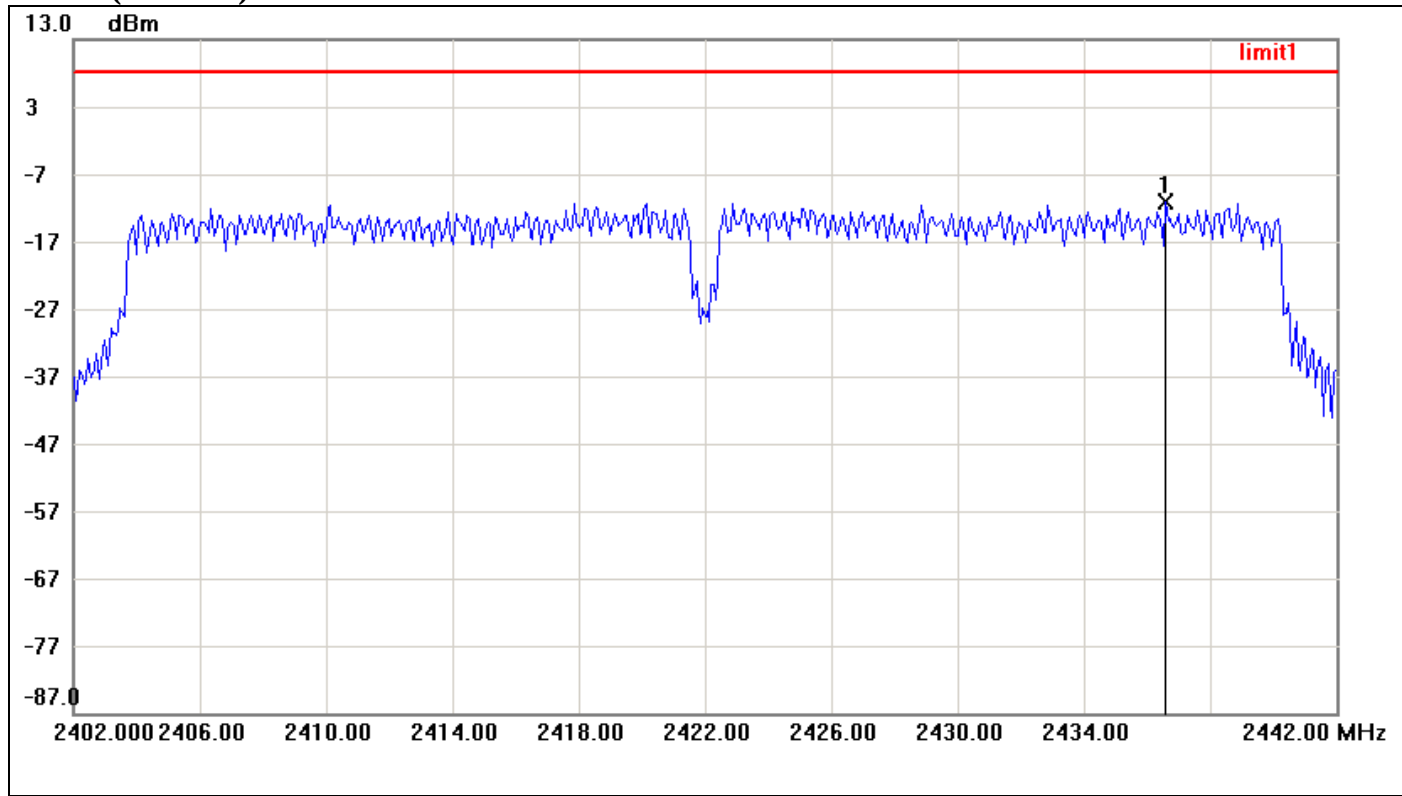


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2468.6000	-10.97	8.00	-18.97



IEEE 802.11n HT 40 MHz mode / Chain 1

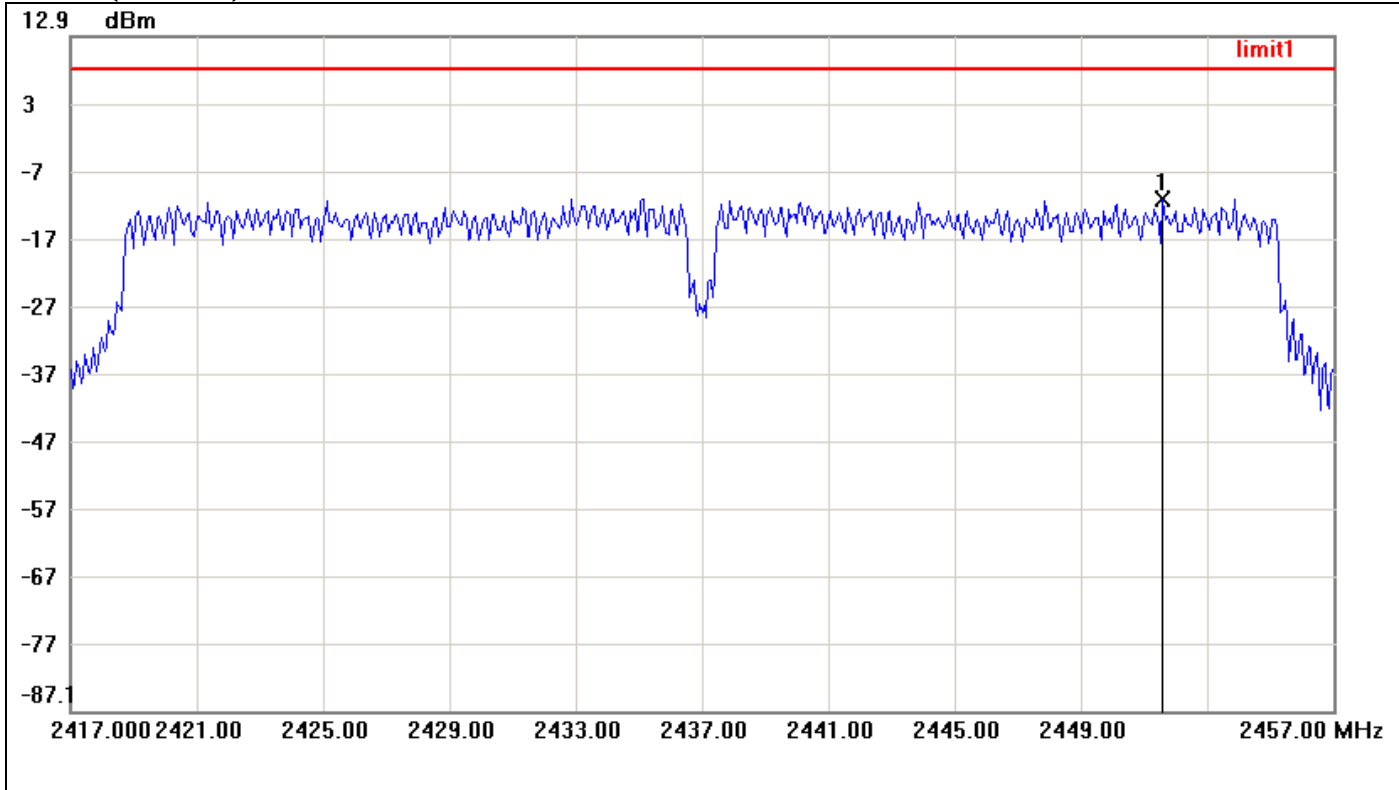
PPSD (CH Low)



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2436.6000	-11.26	8.00	-19.26



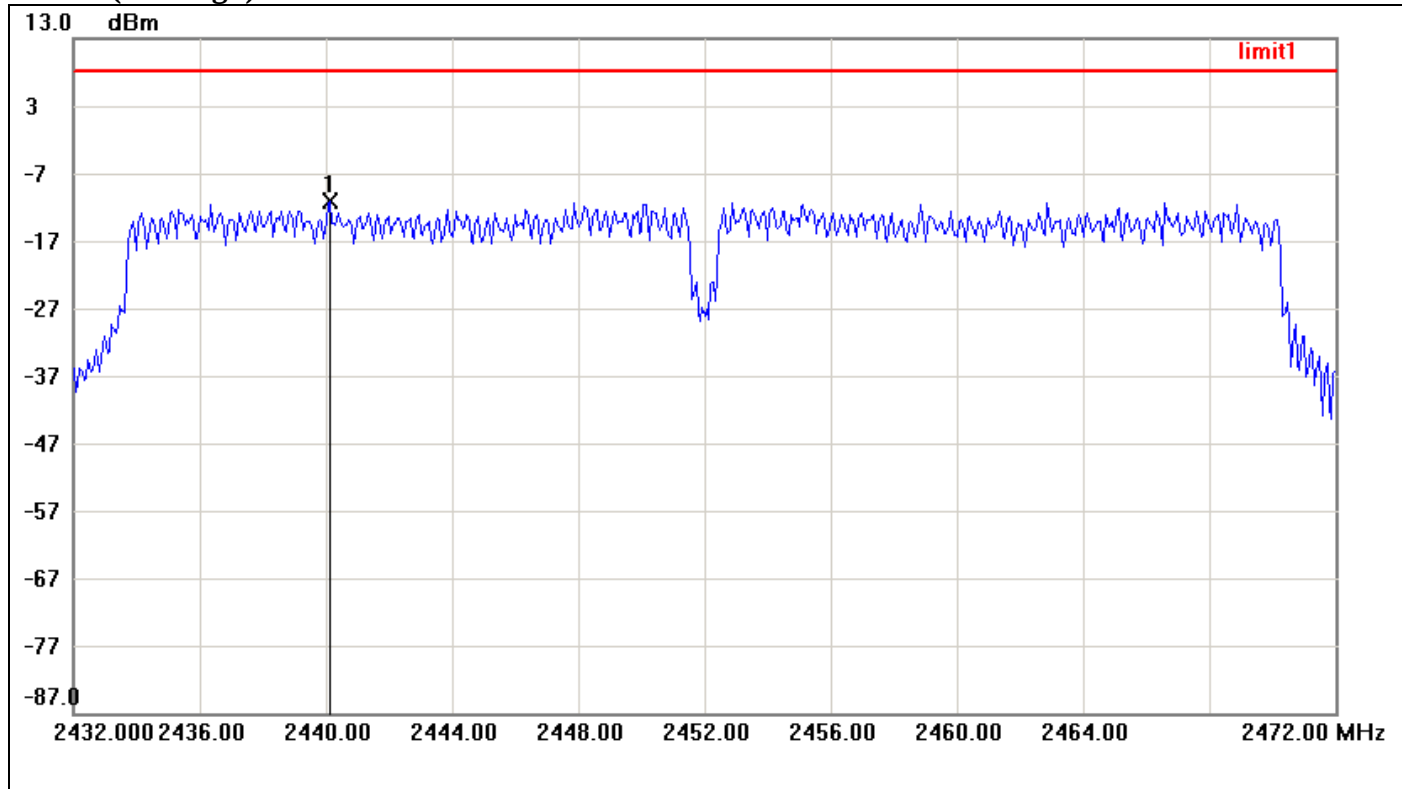
PPSD (CH Mid)



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2451.6000	-11.15	8.00	-19.15



PPSD (CH High)

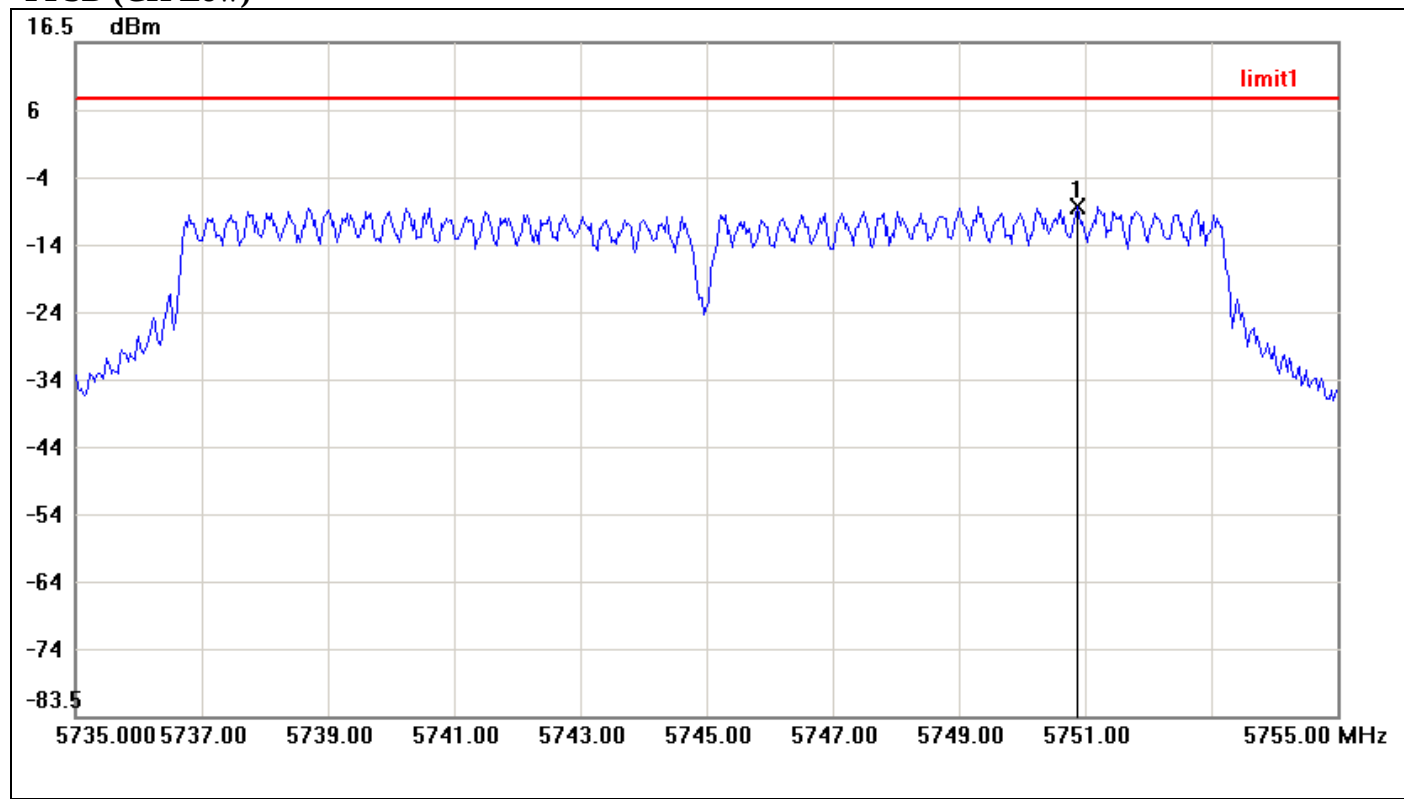


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2440.1333	-11.27	8.00	-19.27



IEEE 802.11a mode

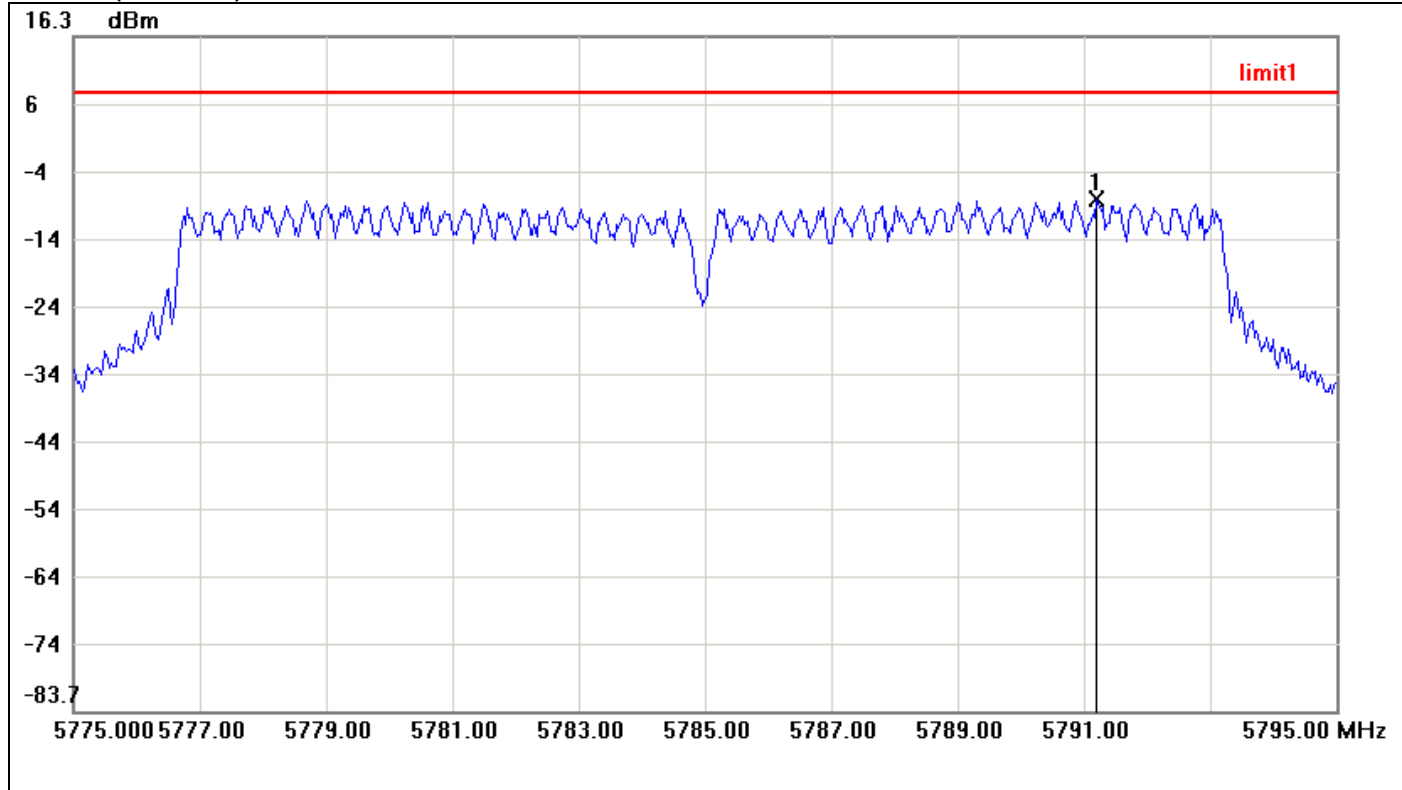
PPSD (CH Low)



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	5750.8667	-7.88	8.00	-15.88



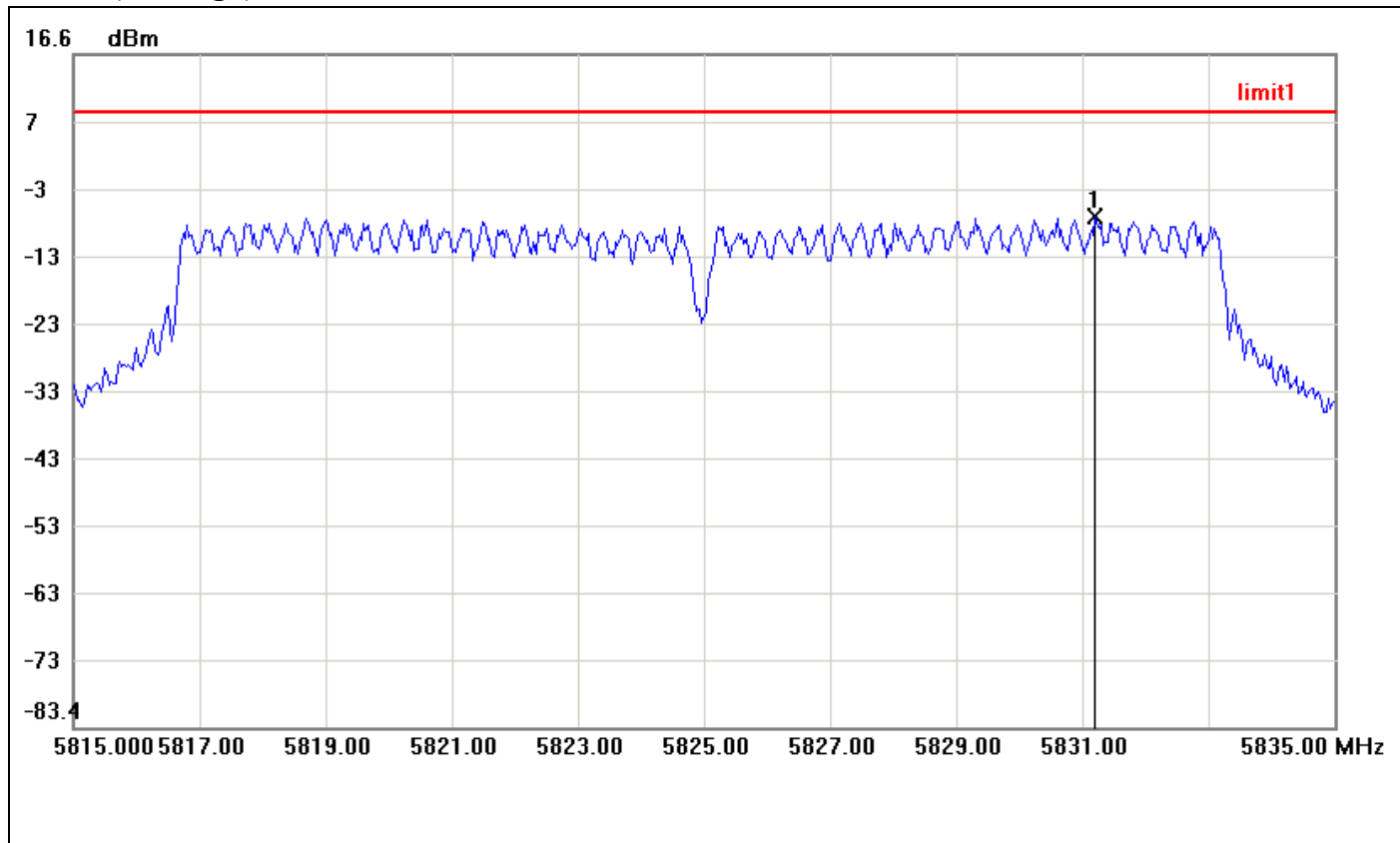
PPSD (CH Mid)



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	5791.2000	-7.87	8.00	-15.87



PPSD (CH High)

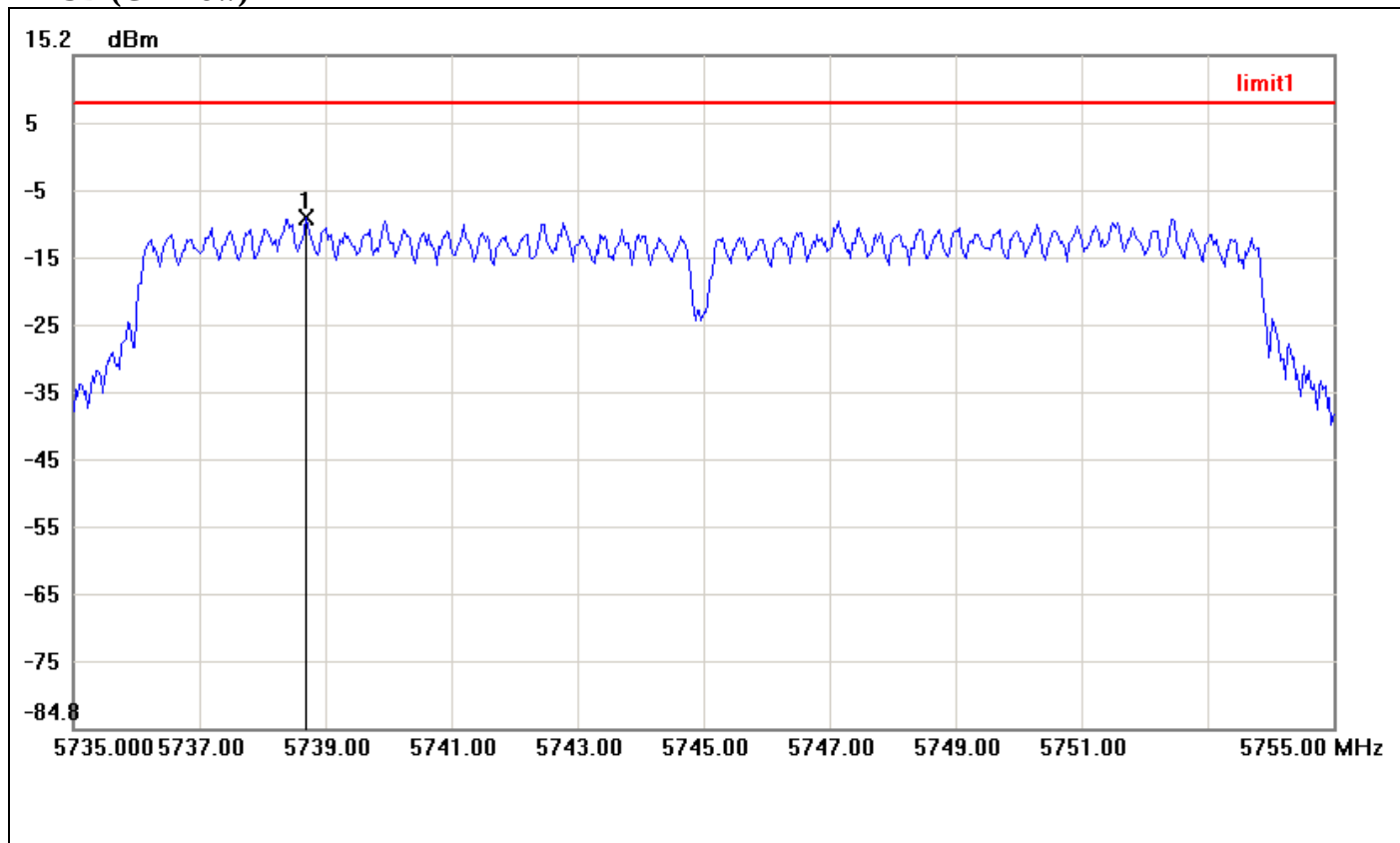


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	5831.2000	-7.57	8.00	-15.57



IEEE 802.11n HT 20 MHz mode / Chain 0

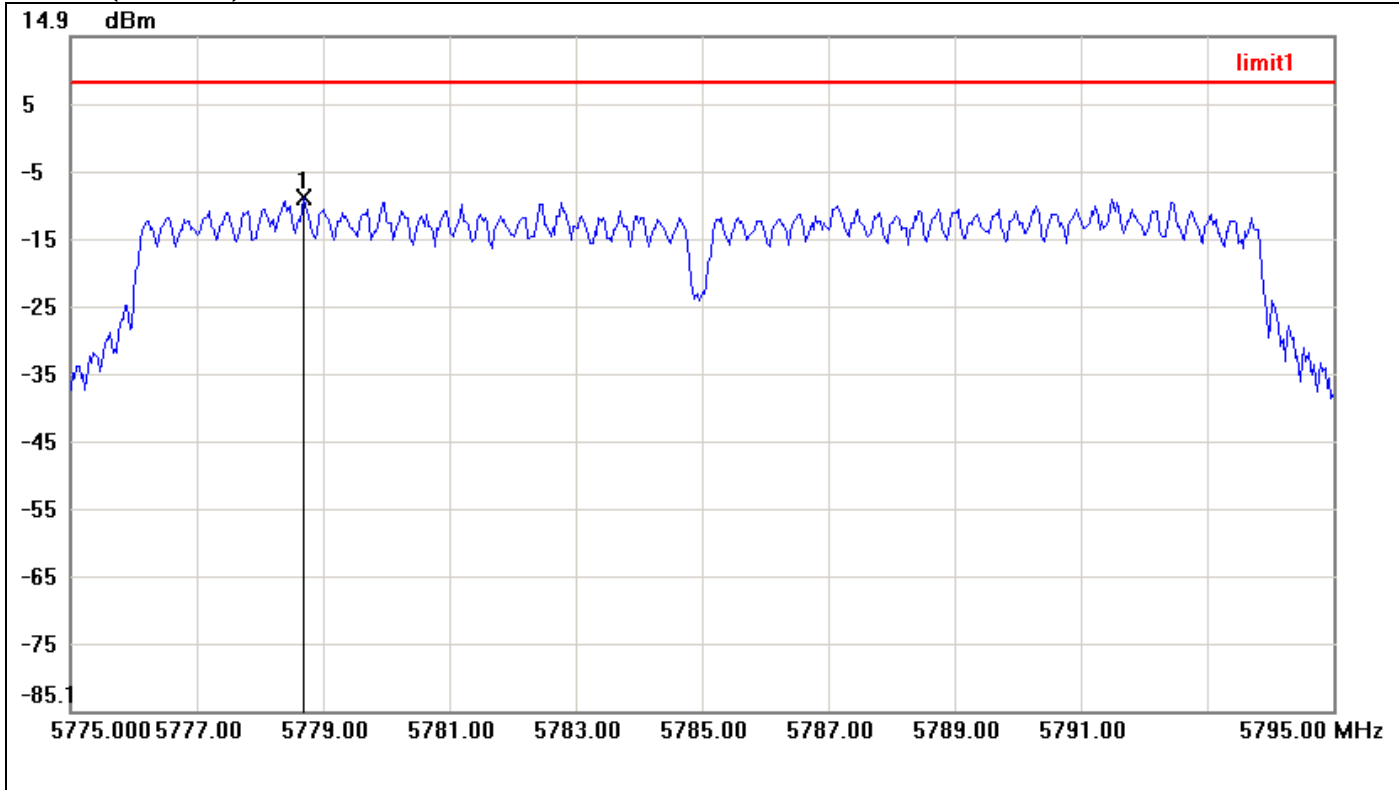
PPSD (CH Low)



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	5738.7000	-8.93	8.00	-16.93



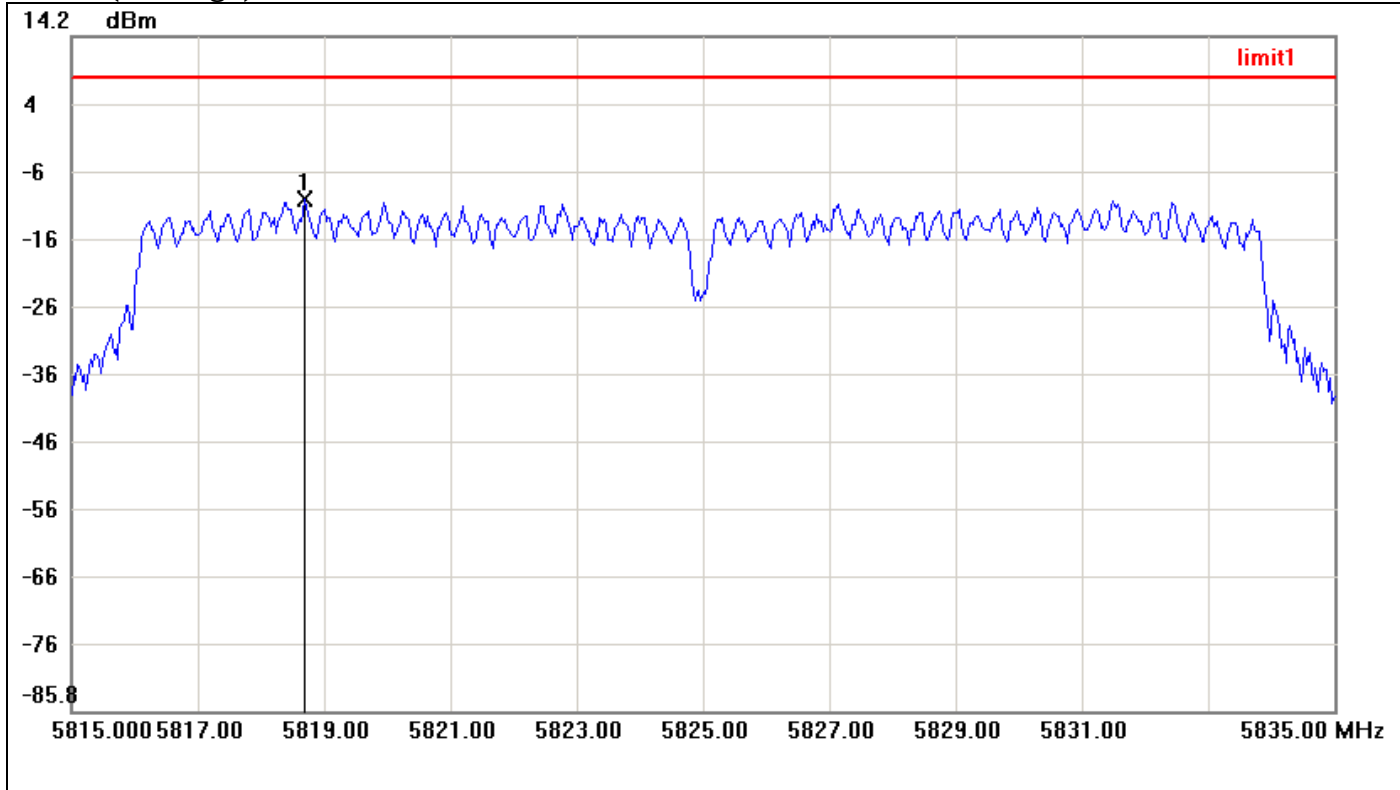
PPSD (CH Mid)



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	5778.7000	-9.05	8.00	-17.05



PPSD (CH High)

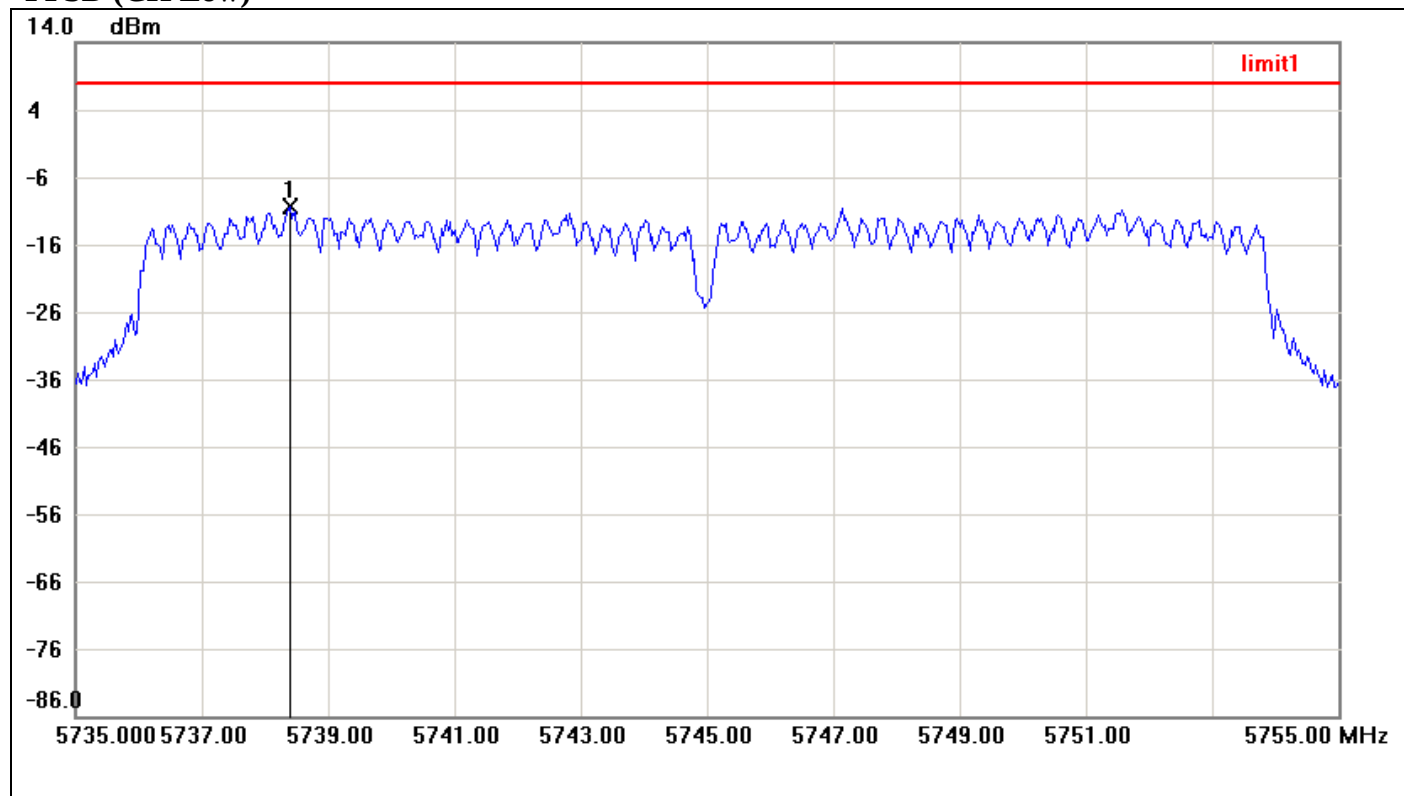


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	5818.7000	-9.96	8.00	-17.96



IEEE 802.11n HT 20 MHz mode / Chain 1

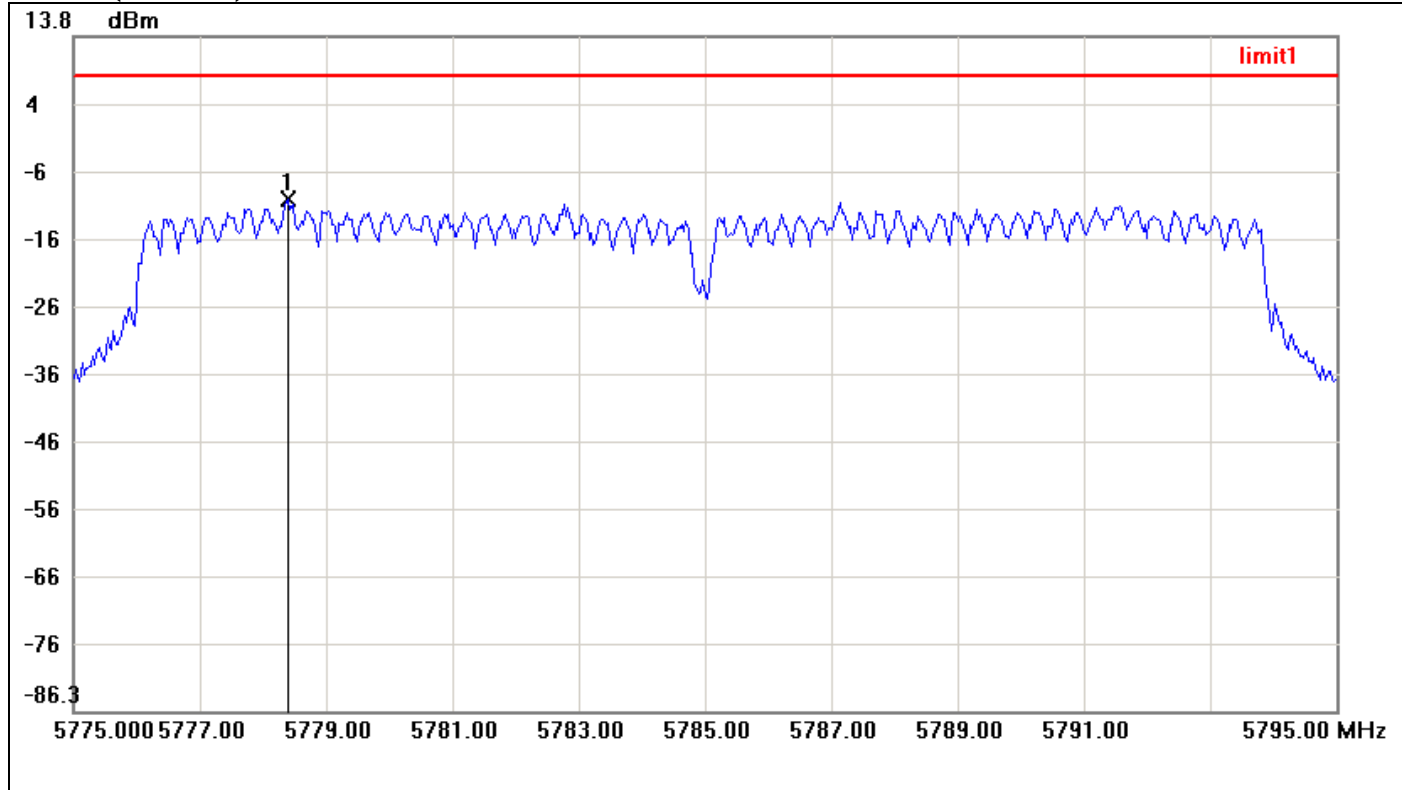
PPSD (CH Low)



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	5738.4000	-10.44	8.00	-18.44



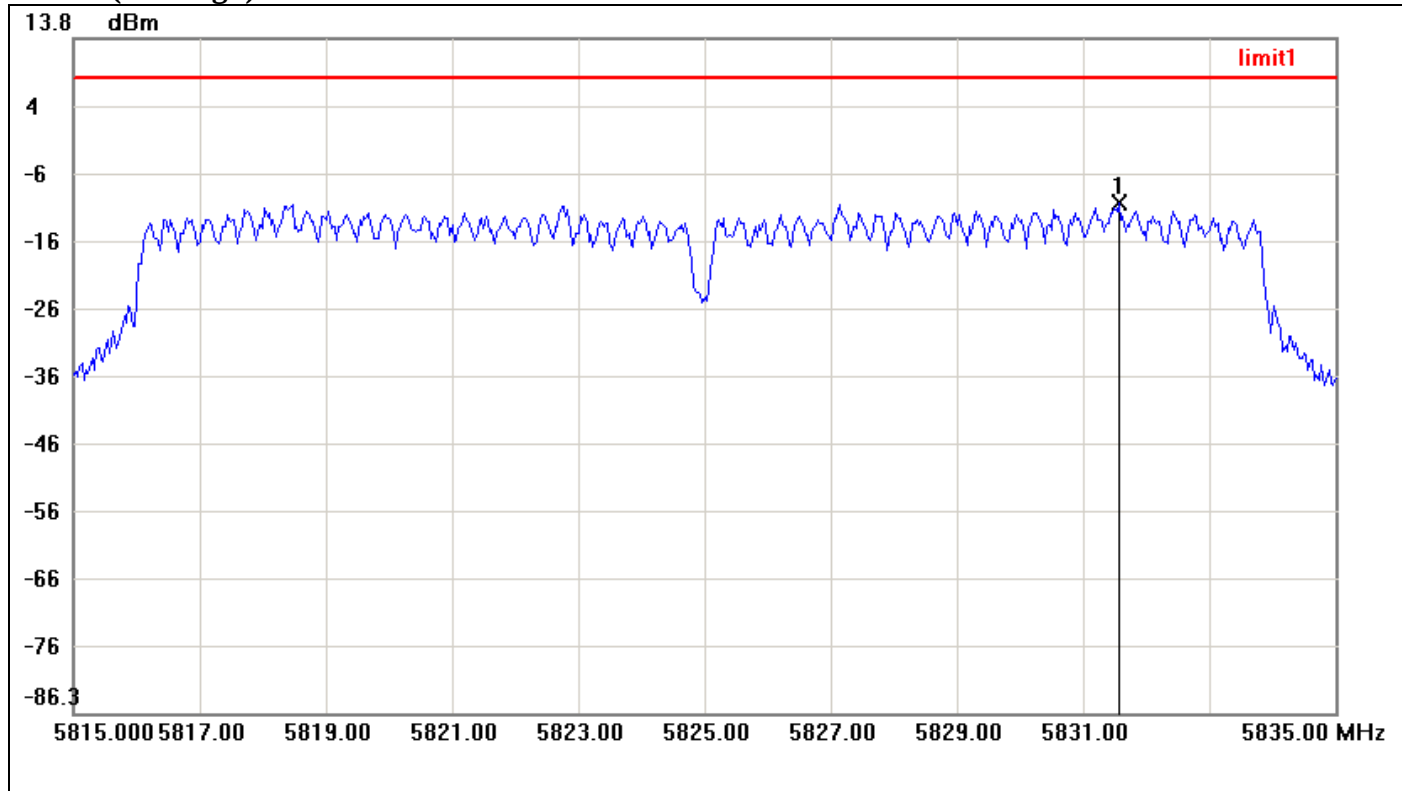
PPSD (CH Mid)



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	5778.4000	-10.46	8.00	-18.46



PPSD (CH High)

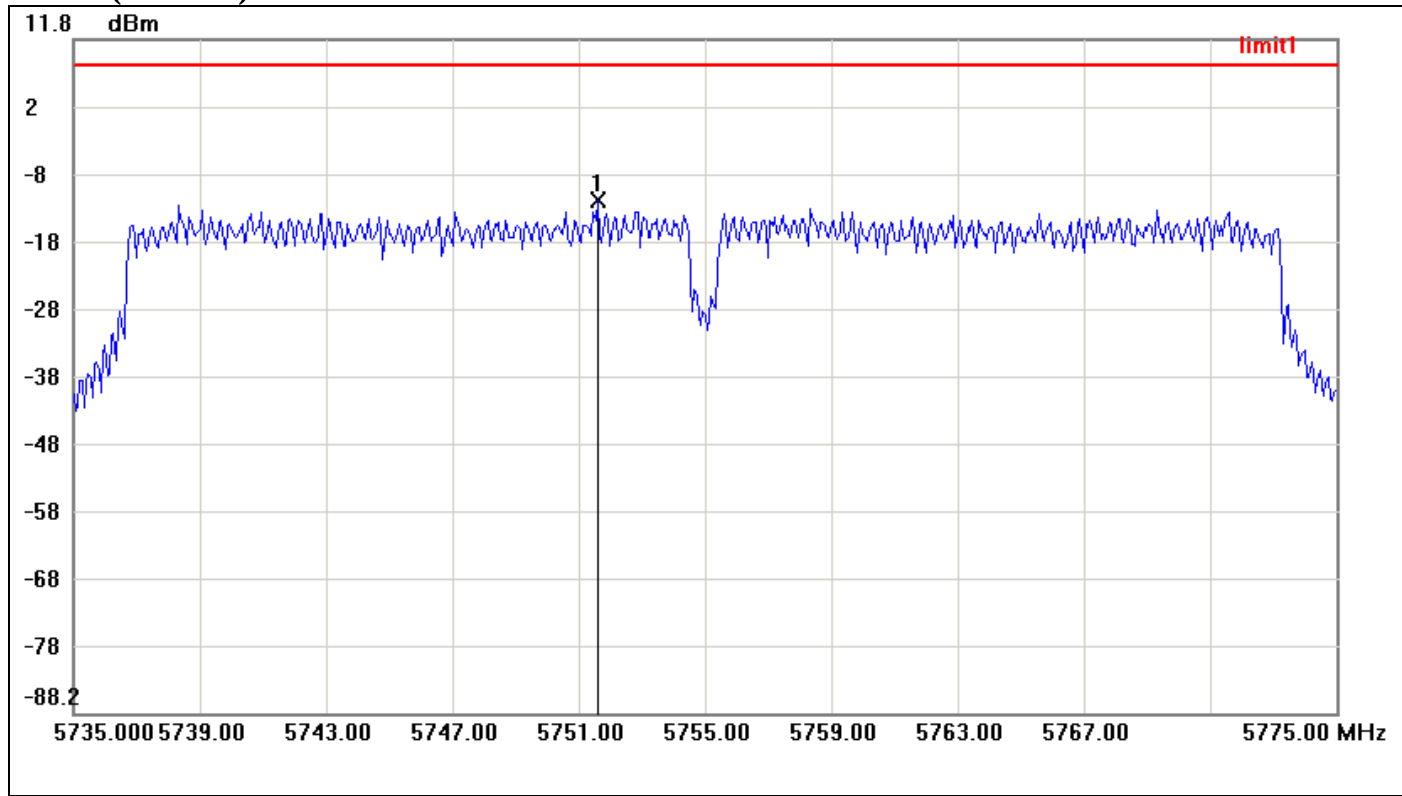


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	5831.5667	-10.70	8.00	-18.70



IEEE 802.11n HT 40 MHz mode / Chain 0

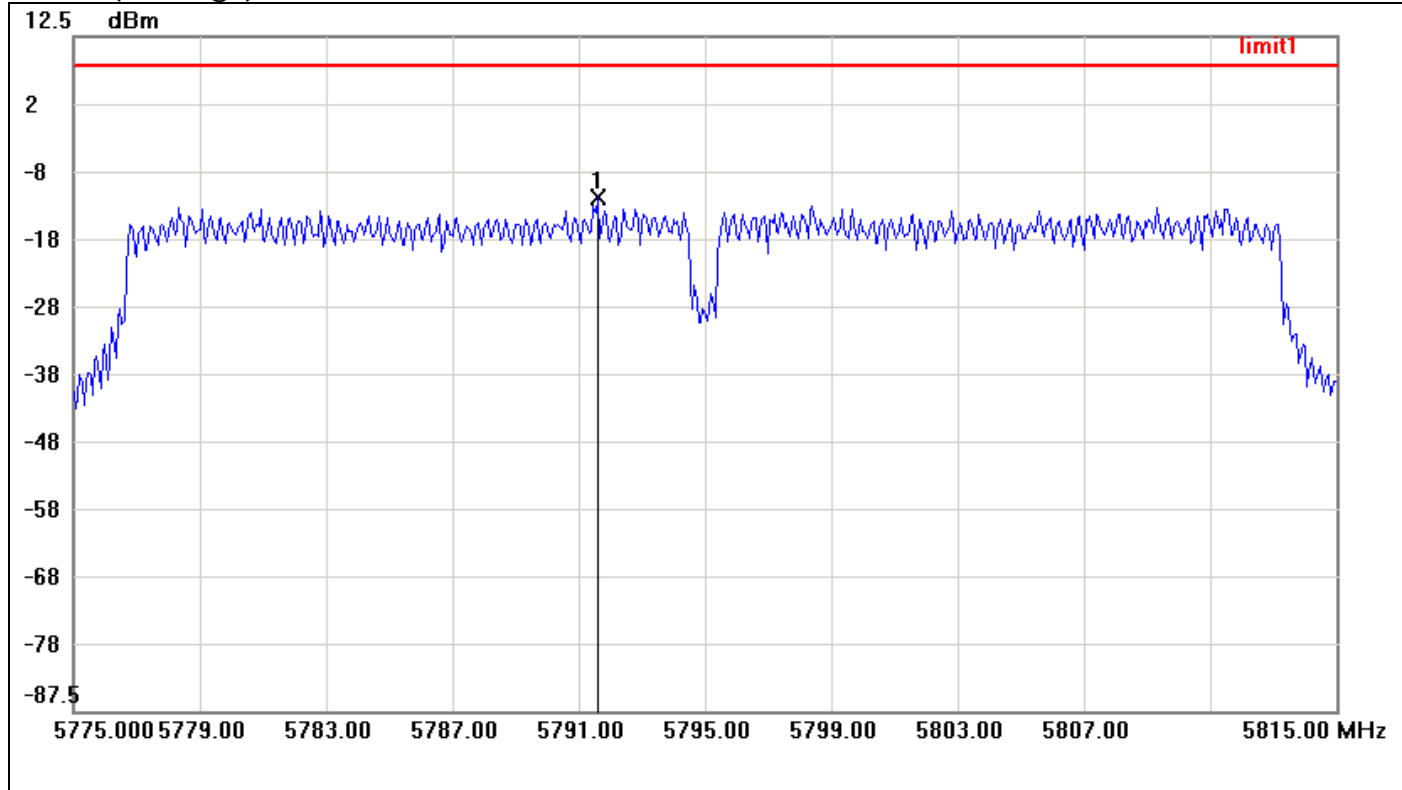
PPSD (CH Low)



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	5751.6000	-12.03	8.00	-20.03



PPSD (CH High)

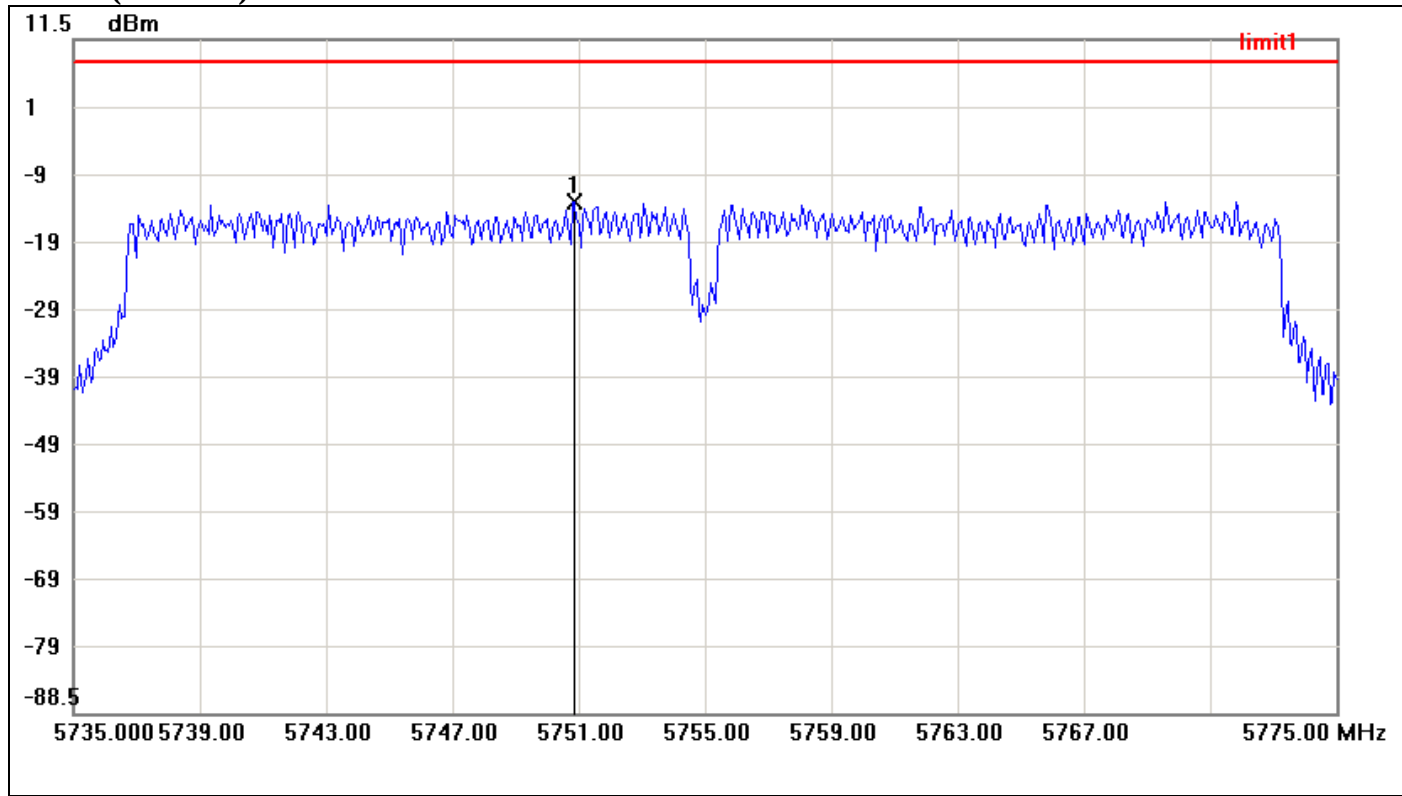


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	5791.6000	-11.32	8.00	-19.32



IEEE 802.11n HT 40 MHz mode / Chain 1

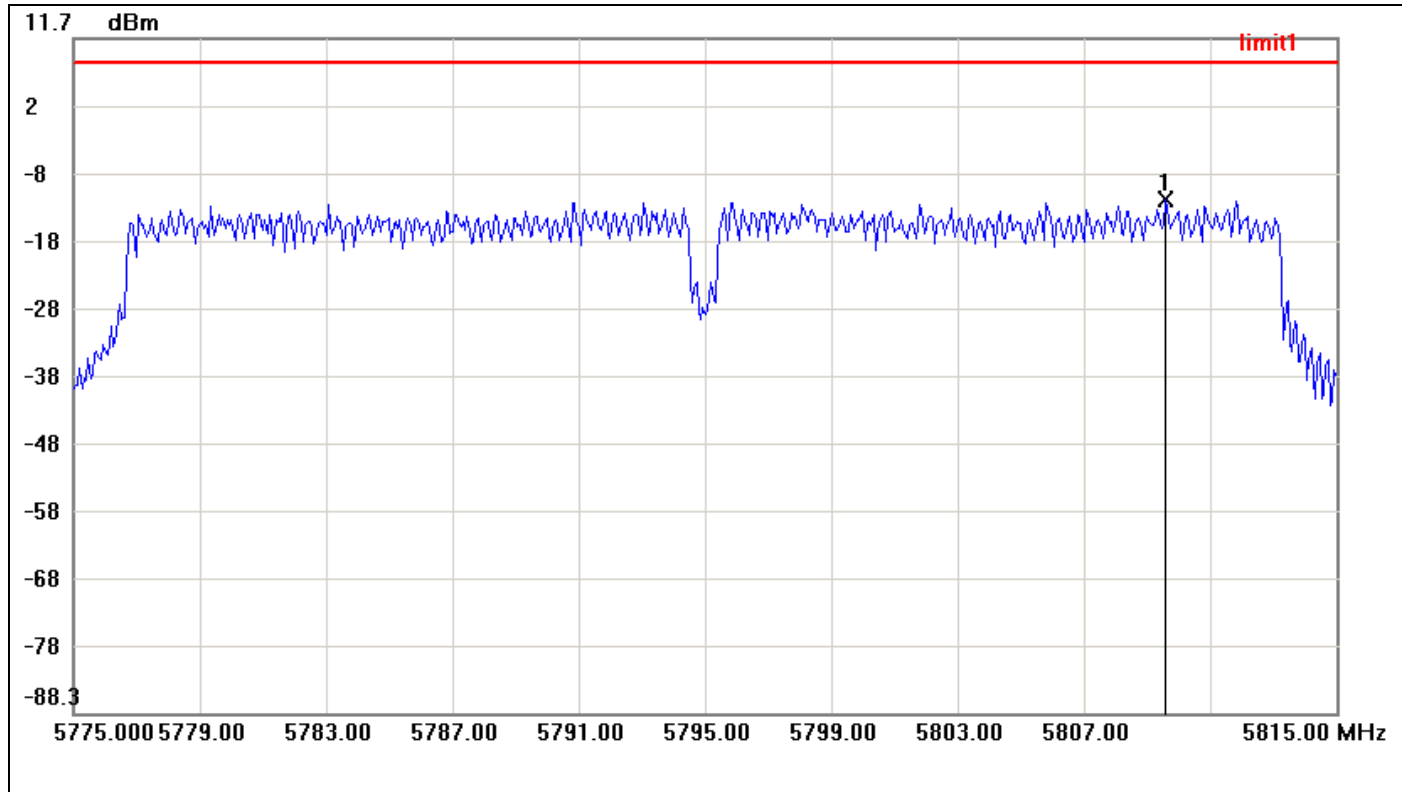
PPSD (CH Low)



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	5750.8667	-12.55	8.00	-20.55



PPSD (CH High)

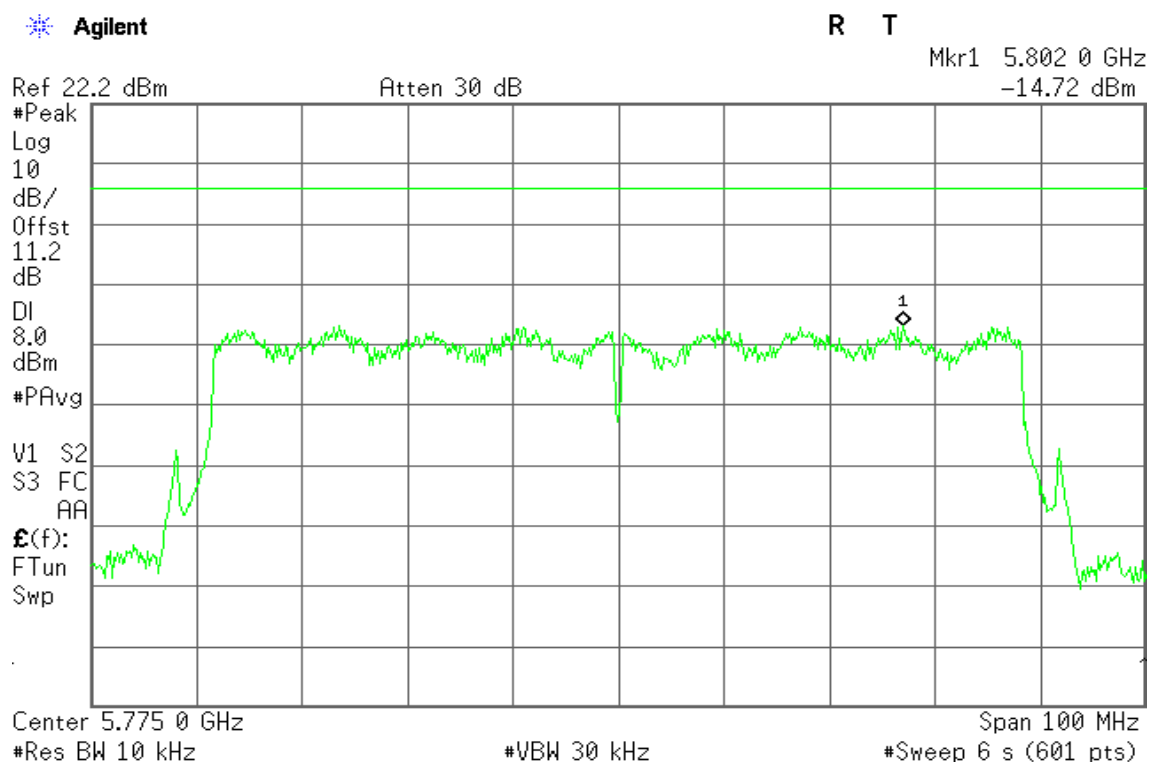


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	5809.6000	-12.17	8.00	-20.17



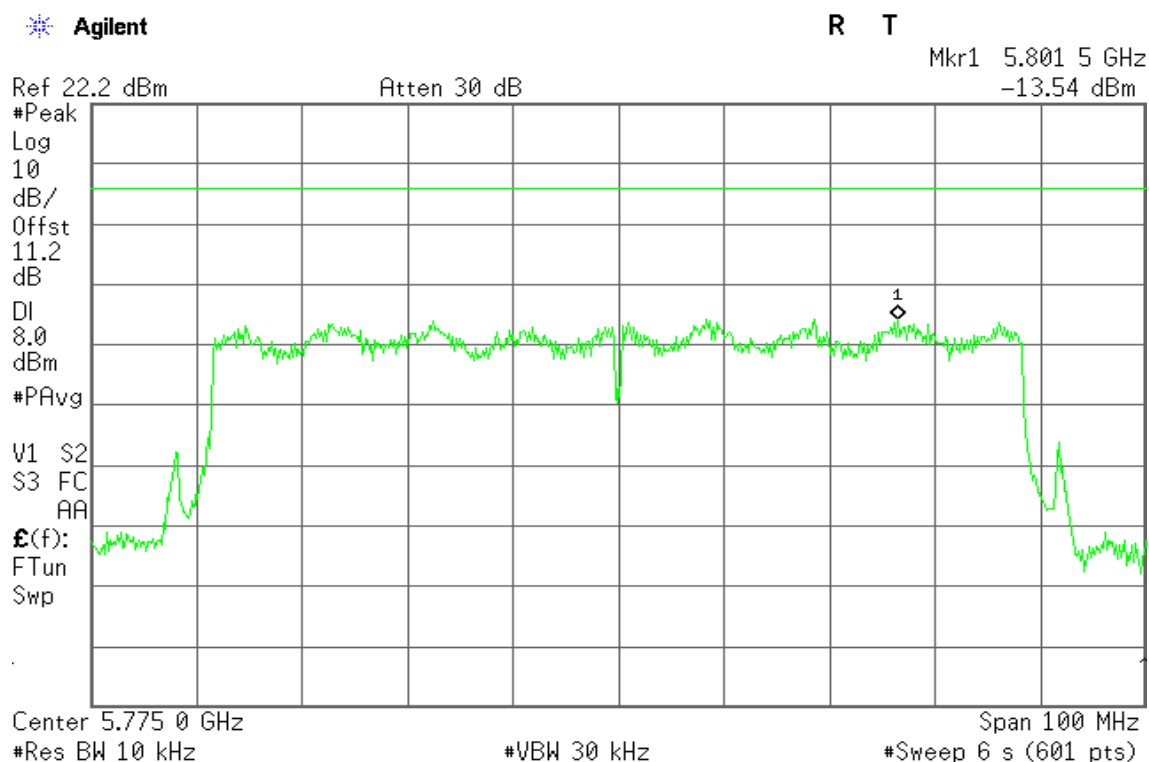
IEEE 802.11n HT 80 MHz mode / Chain 0

PPSD (CH Mid)



IEEE 802.11n HT 80 MHz mode / Chain 1

PPSD (CH Mid)





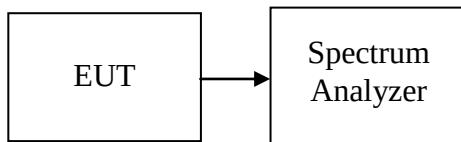
8.7 SPURIOUS EMISSIONS

8.7.1 Conducted Measurement

LIMIT

According to §15.247(d) & RSS-210 §A8.5, in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum 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. 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) (see Section 15.205(c)).

Test Configuration



TEST PROCEDURE

Conducted RF measurements of the transmitter output were made to confirm that the EUT antenna port conducted emissions meet the specified limit and to identify any spurious signals that require further investigation or measurements on the radiated emissions site.

The transmitter output is connected to the spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

Measurements are made over the 30MHz to 26GHz range for IEEE 802.11b/g, 30MHz to 40GHz range for IEEE 802.11a with the transmitter set to the lowest, middle, and highest channels.

TEST RESULTS

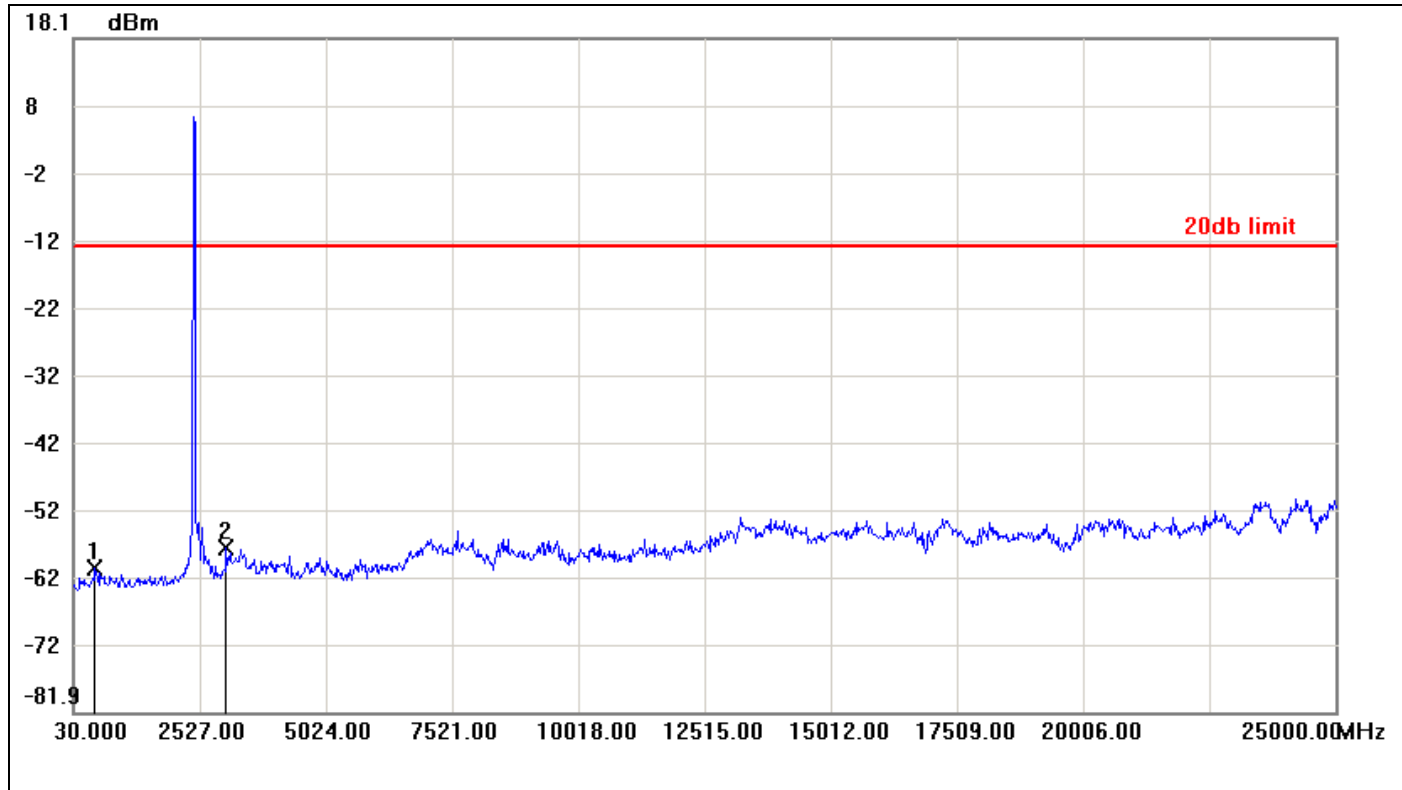
No non-compliance noted



Test Plot

IEEE 802.11b mode

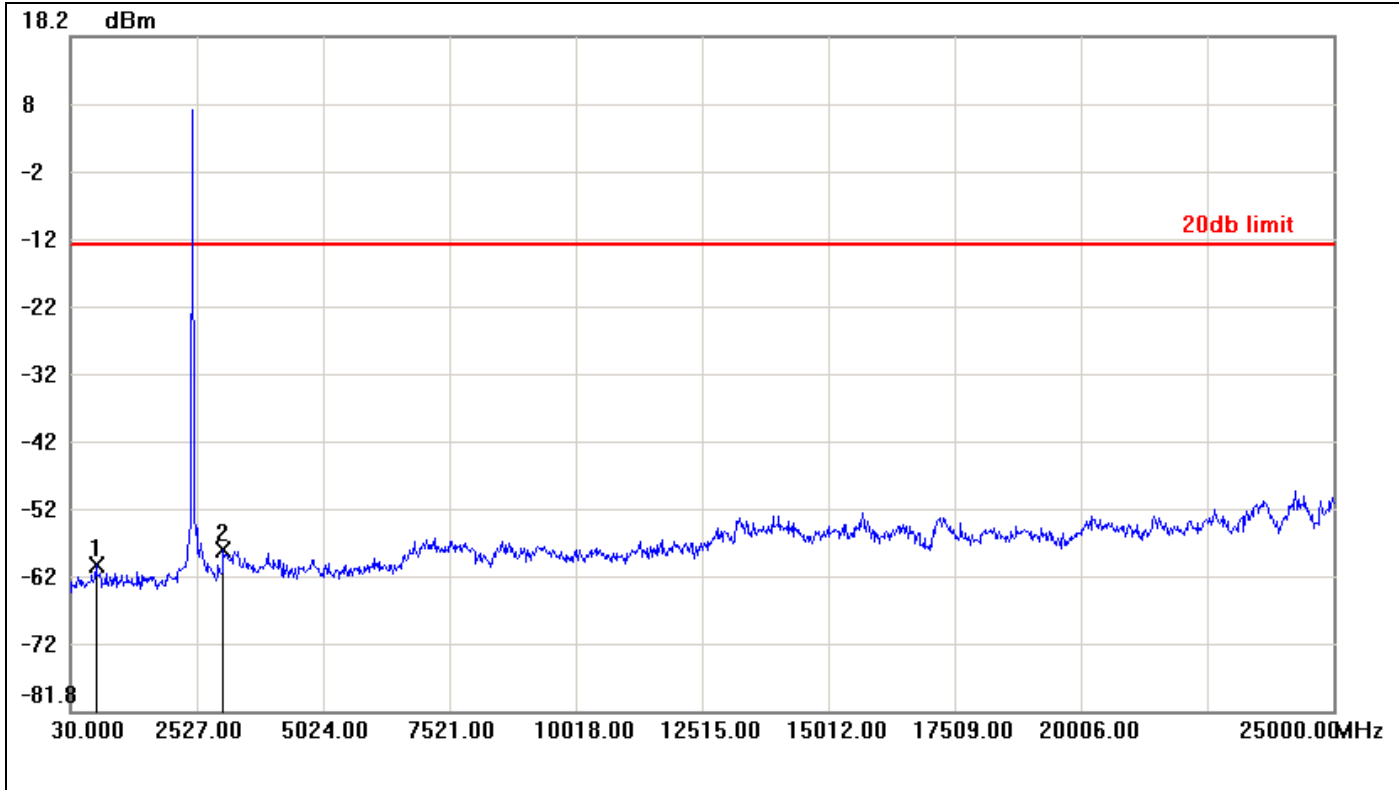
CH Low



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	454.4900	-60.61	-12.86	-47.75
2	3051.3700	-57.52	-12.86	-44.66



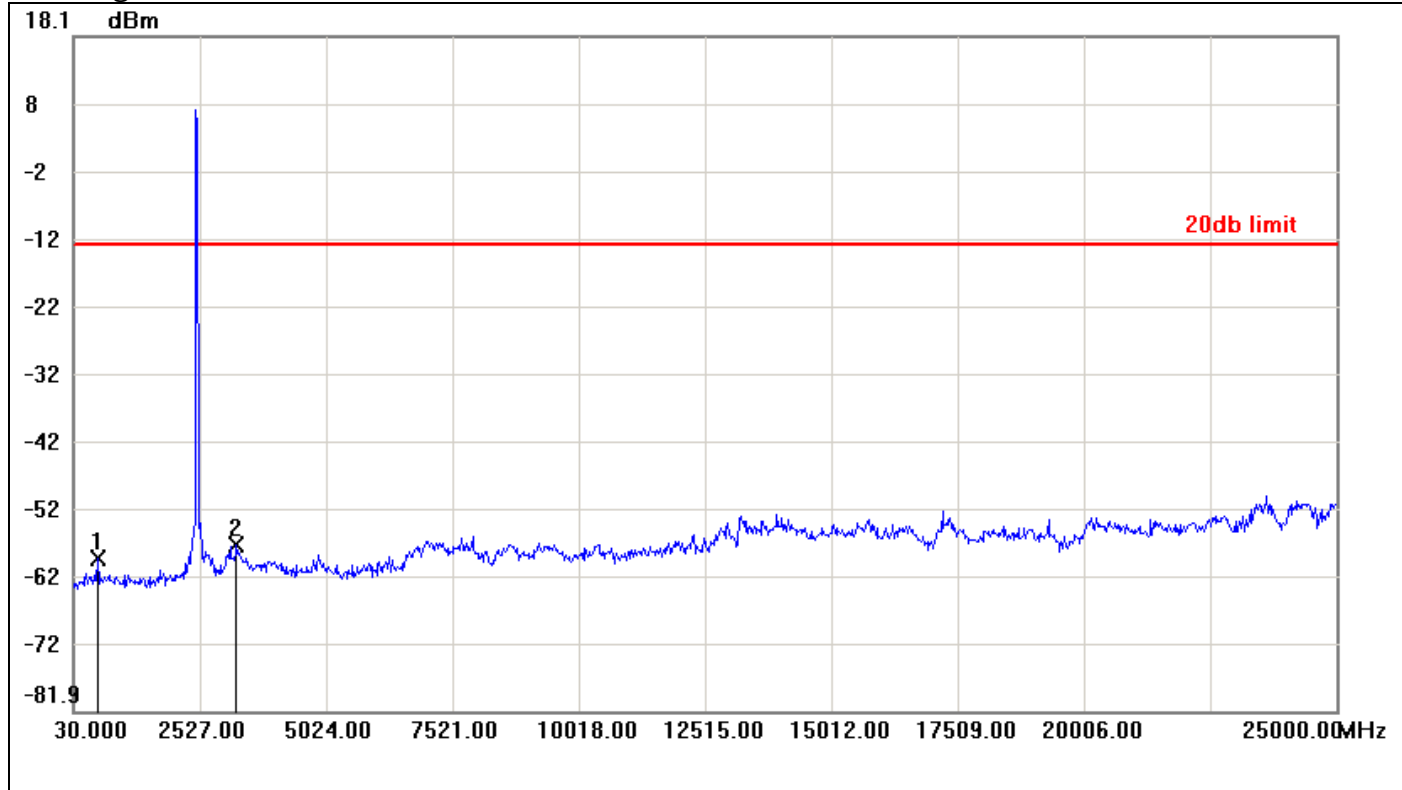
CH Mid



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	529.4000	-60.19	-12.69	-47.50
2	3051.3700	-57.86	-12.69	-45.17



CH High

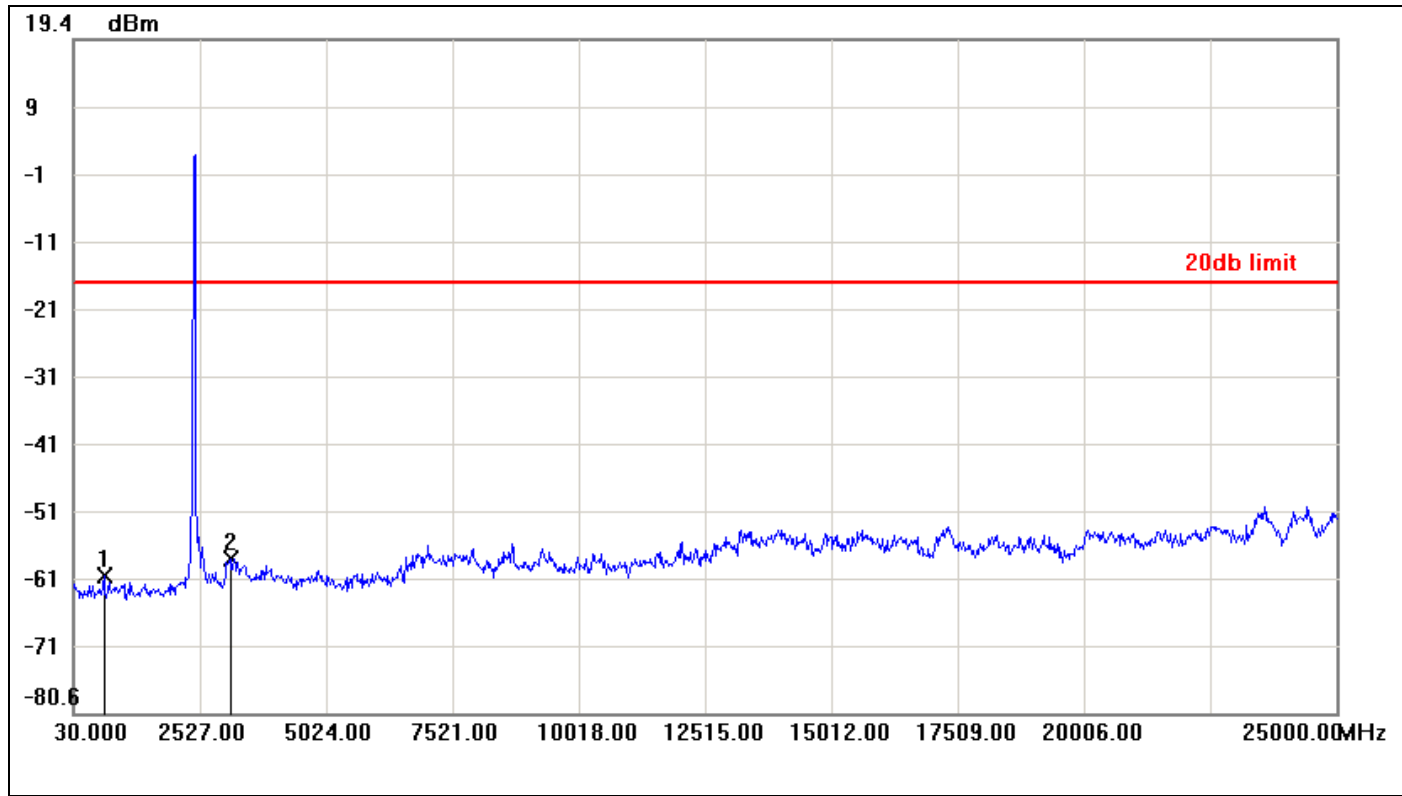


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	504.4300	-59.24	-12.73	-46.51
2	3251.1300	-57.29	-12.73	-44.56



IEEE 802.11g mode

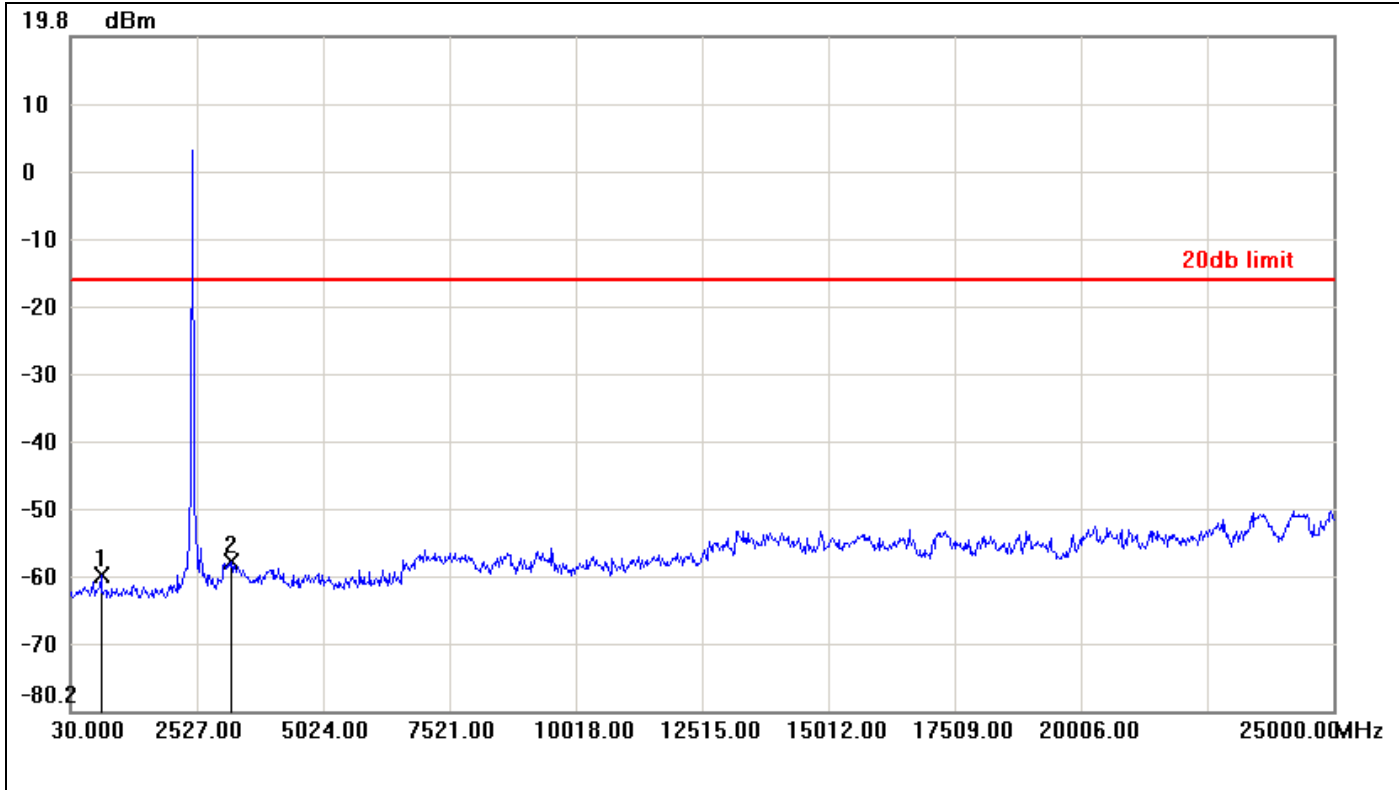
CH Low



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	629.2800	-60.29	-16.70	-43.59
2	3126.2800	-57.63	-16.70	-40.93



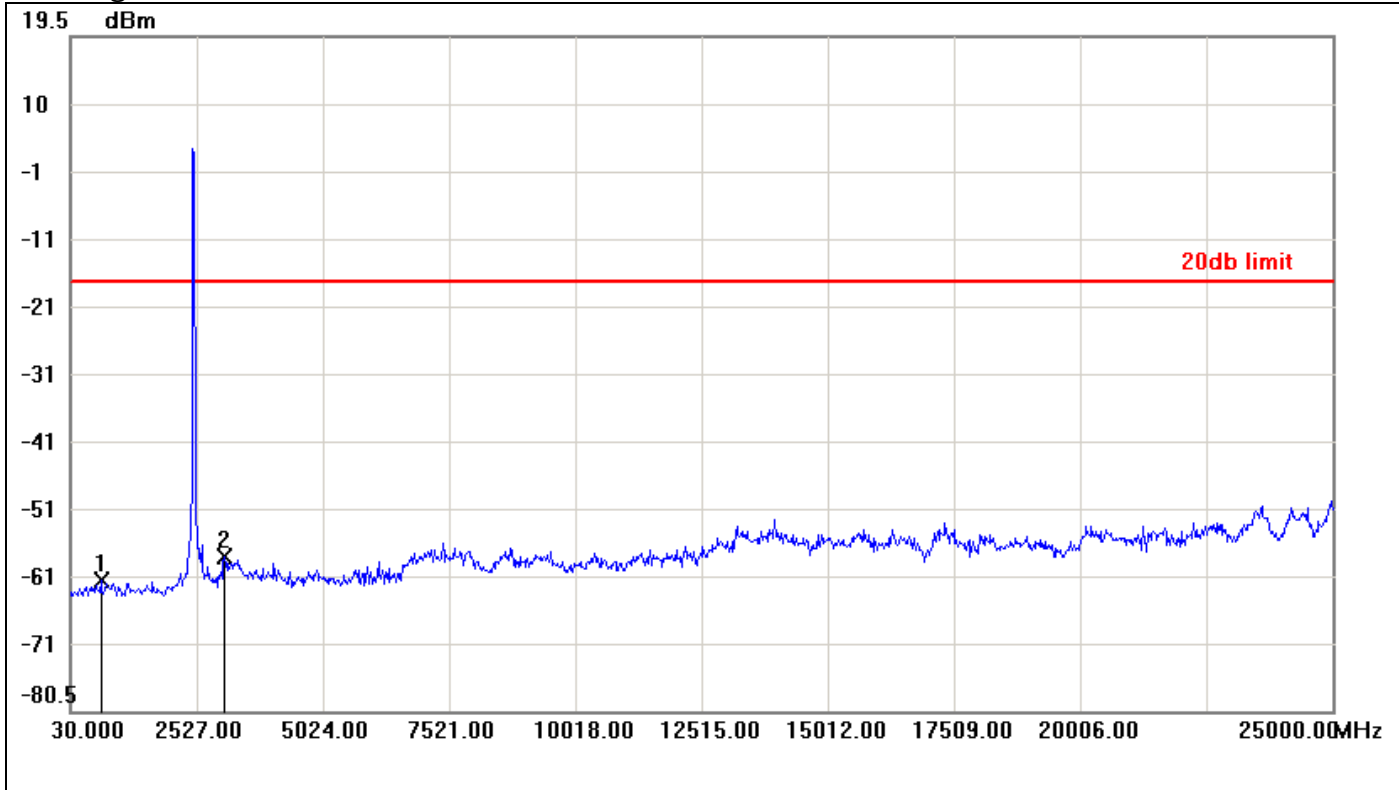
CH Mid



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	629.2800	-60.10	-16.41	-43.69
2	3201.1900	-57.98	-16.41	-41.57



CH High

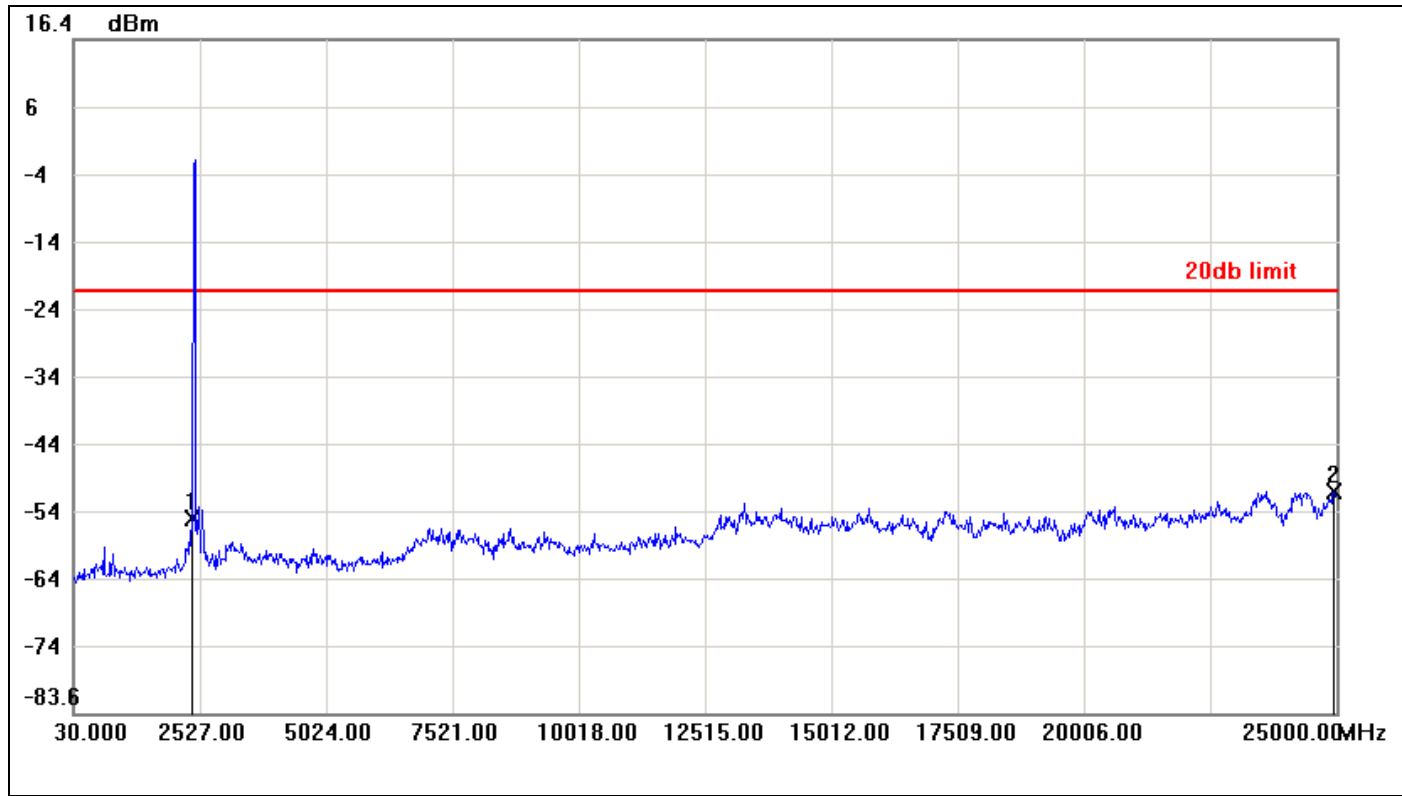


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	629.2800	-61.16	-16.92	-44.24
2	3076.3400	-57.62	-16.92	-40.70



IEEE 802.11n HT 20 MHz mode / Chain 0

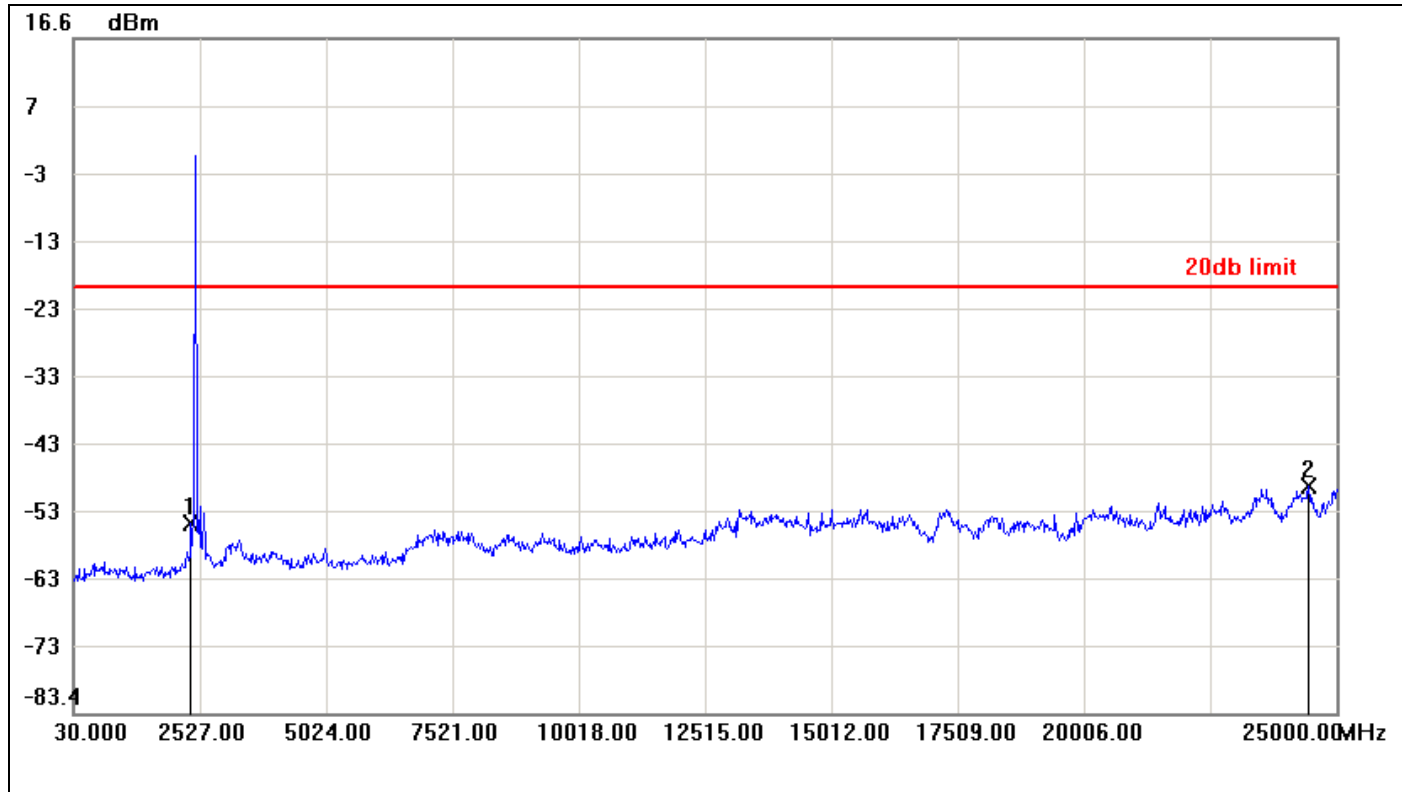
CH Low



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2377.1800	-54.73	-20.96	-33.77
2	24950.0600	-50.67	-20.96	-29.71



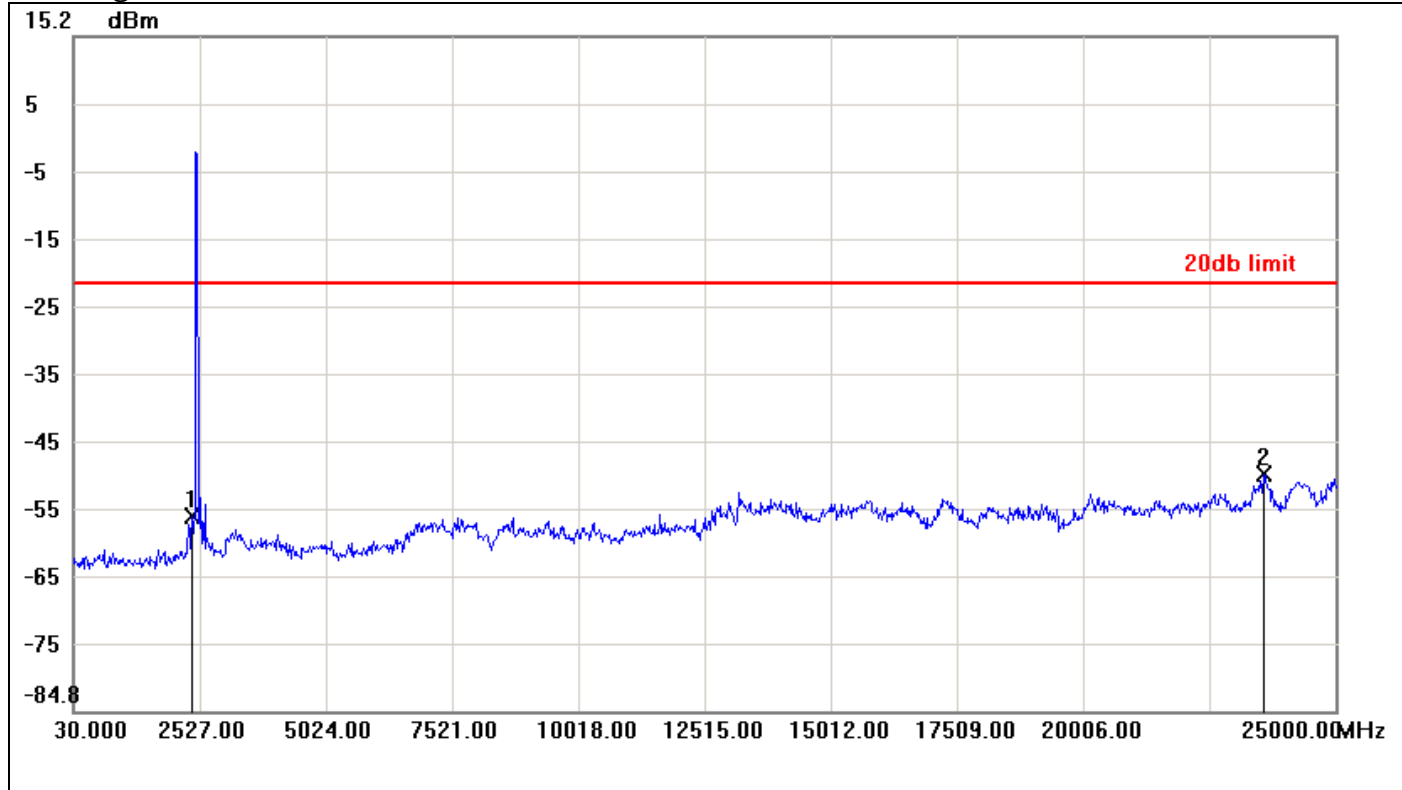
CH Mid



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2352.2100	-55.29	-20.20	-35.09
2	24450.6600	-49.70	-20.20	-29.50



CH High

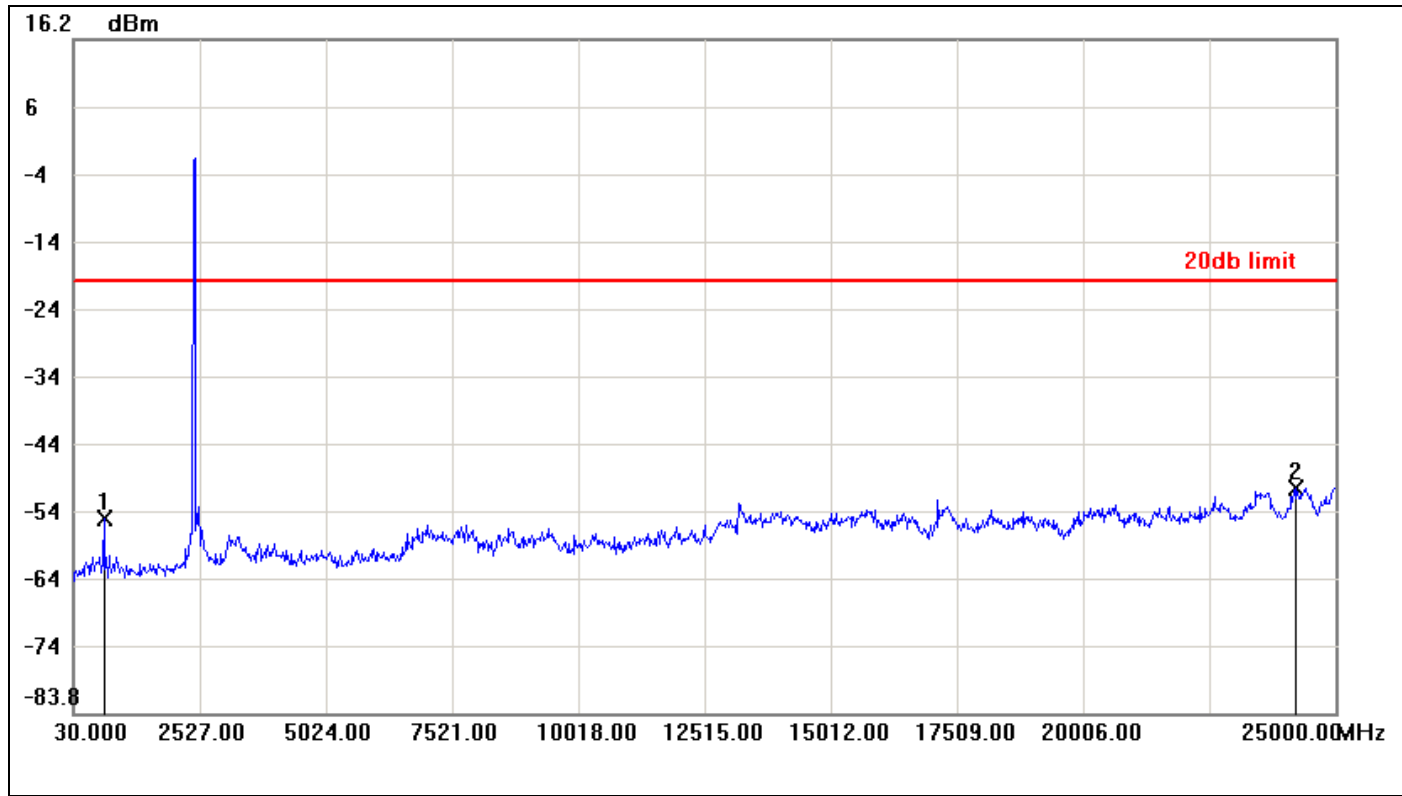


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2377.1800	-55.92	-21.47	-34.45
2	23576.7100	-49.66	-21.47	-28.19



IEEE 802.11n HT 20 MHz mode / Chain 1

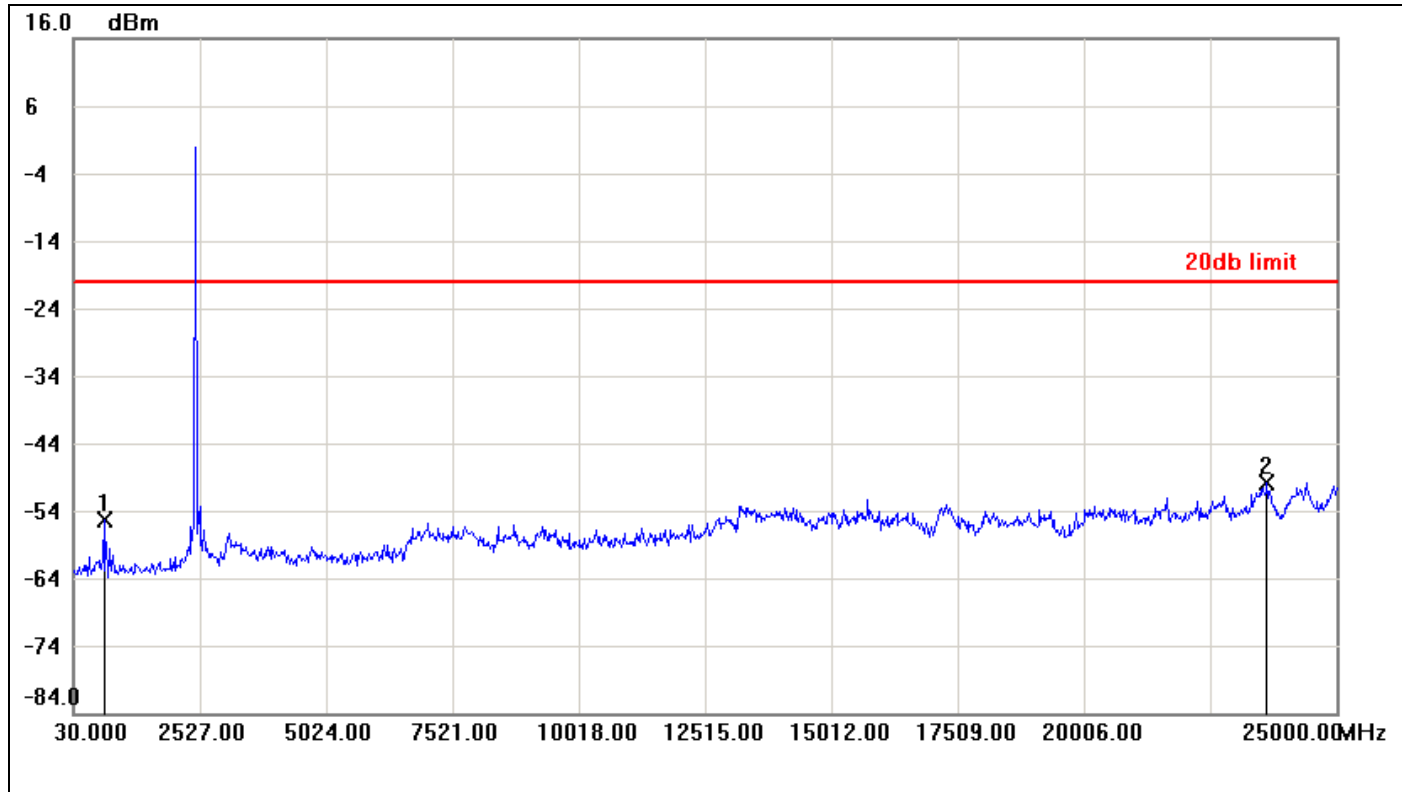
CH Low



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	629.2800	-55.05	-19.80	-35.25
2	24200.9600	-50.48	-19.80	-30.68



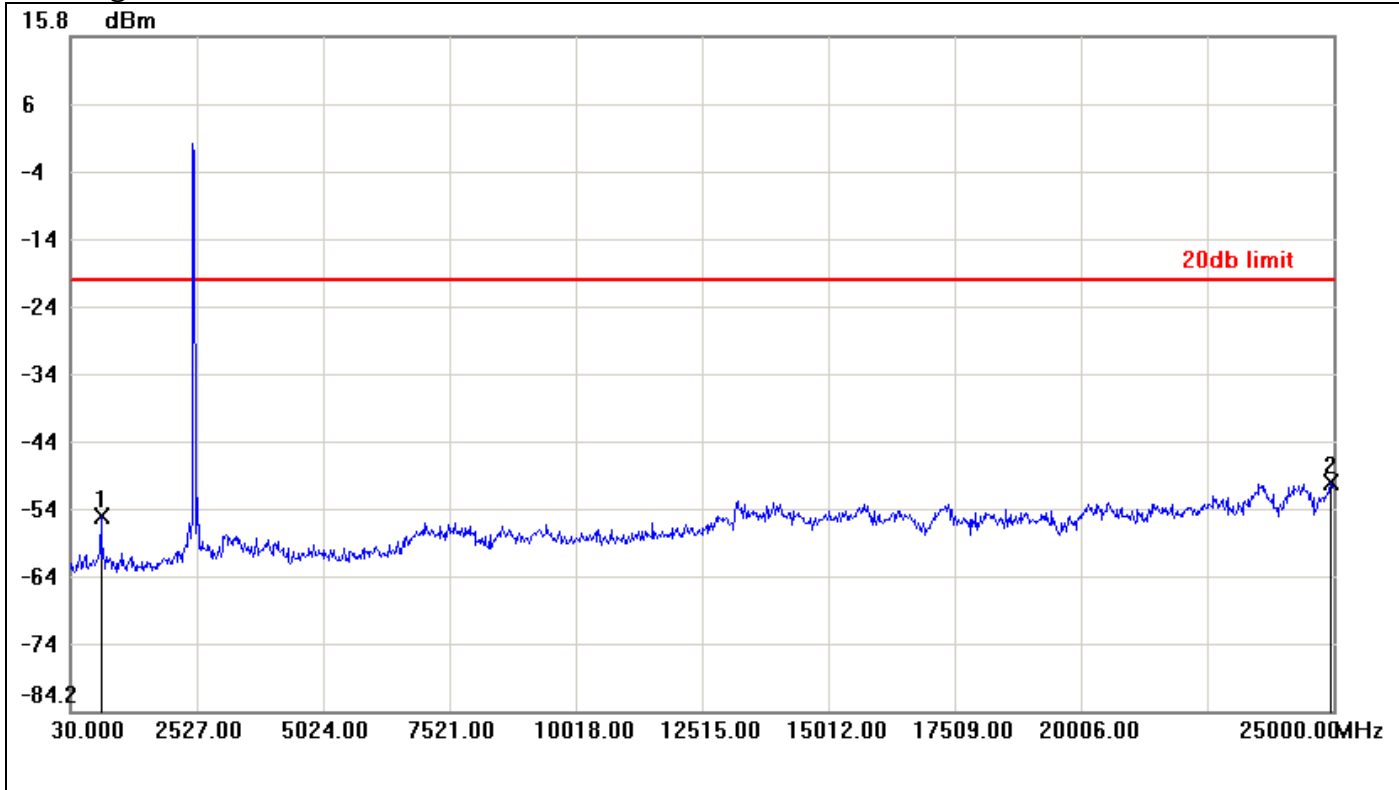
CH Mid



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	629.2800	-55.51	-20.18	-35.33
2	23626.6500	-49.87	-20.18	-29.69



CH High

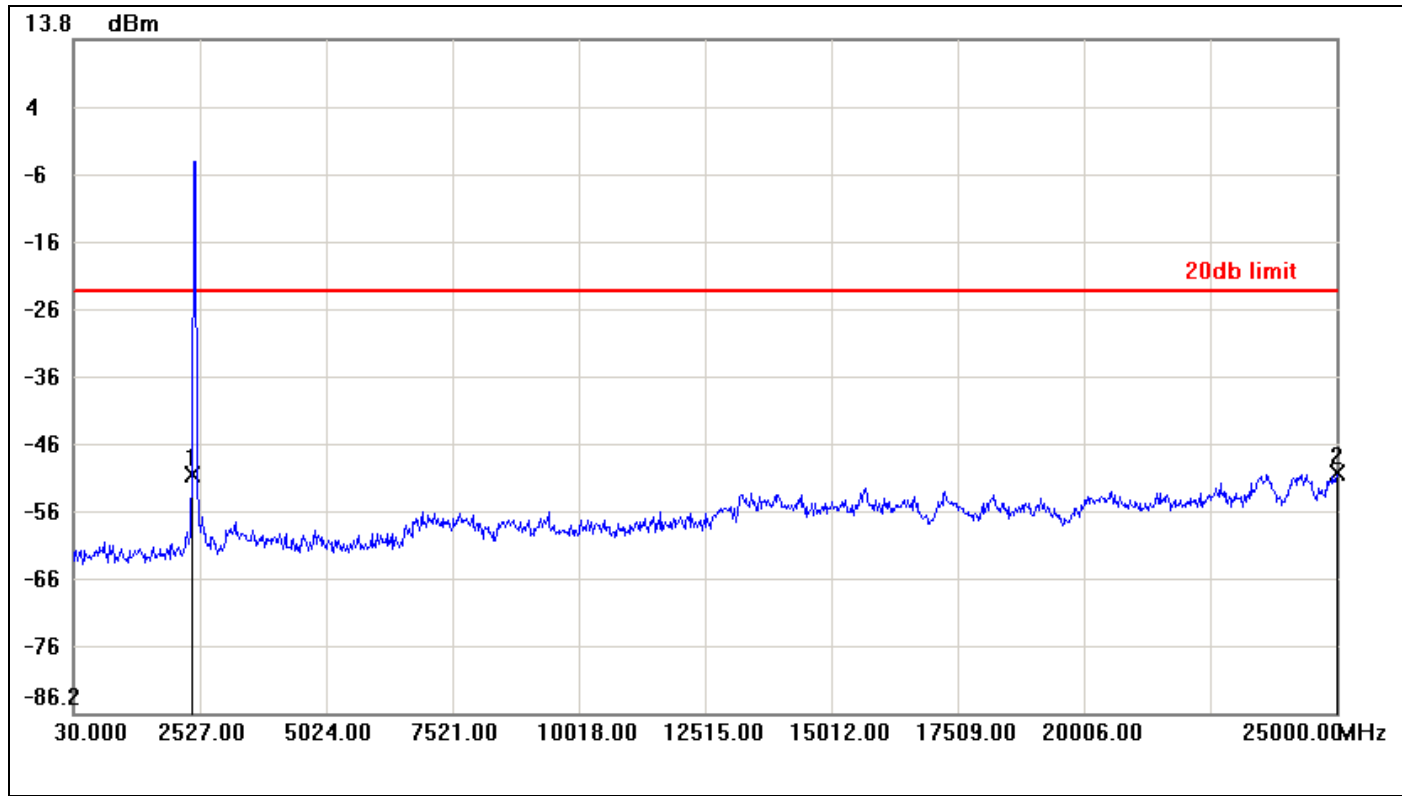


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	629.2800	-55.34	-20.22	-35.12
2	24950.0600	-50.45	-20.22	-30.23



IEEE 802.11n HT 40 MHz mode / Chain 0

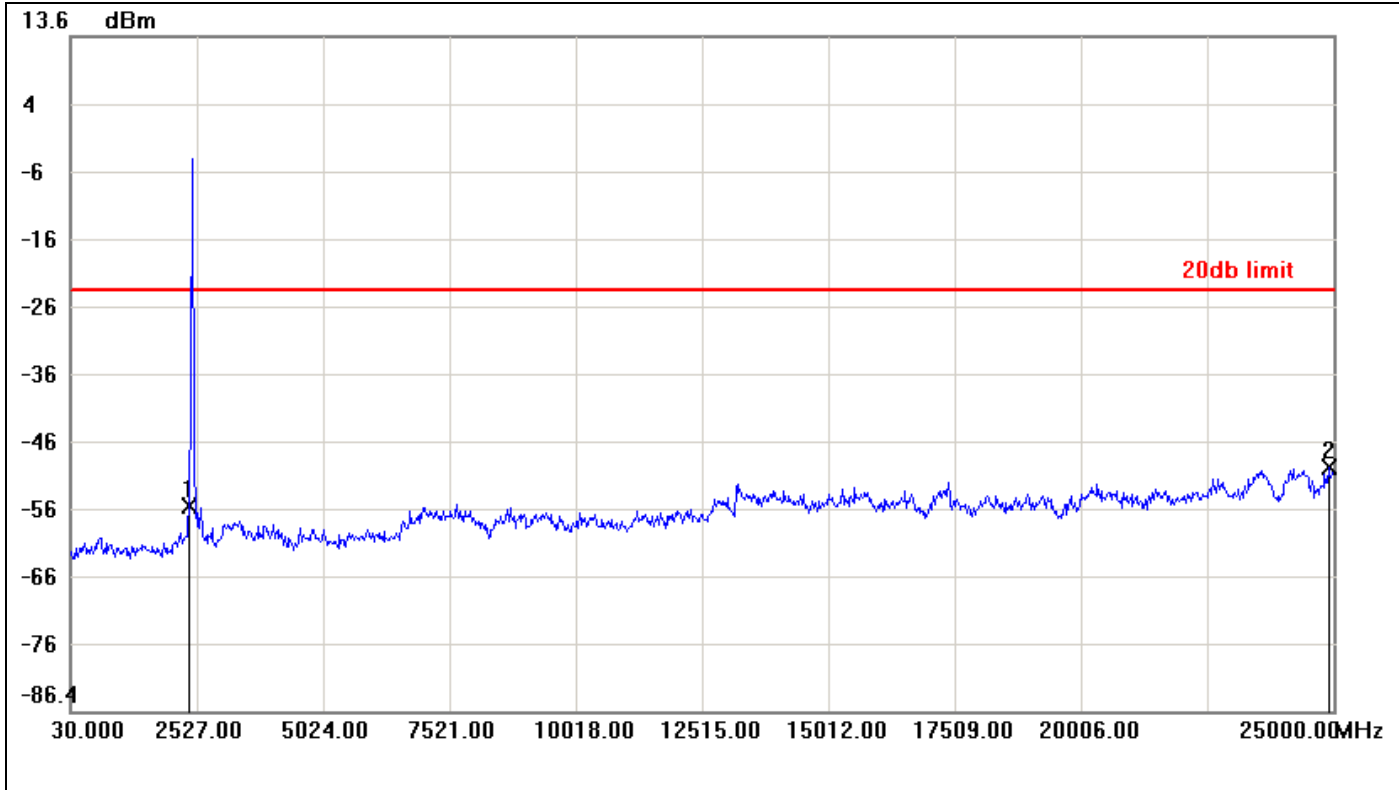
CH Low



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2377.1800	-50.81	-23.65	-27.16
2	25000.0000	-50.66	-23.65	-27.01



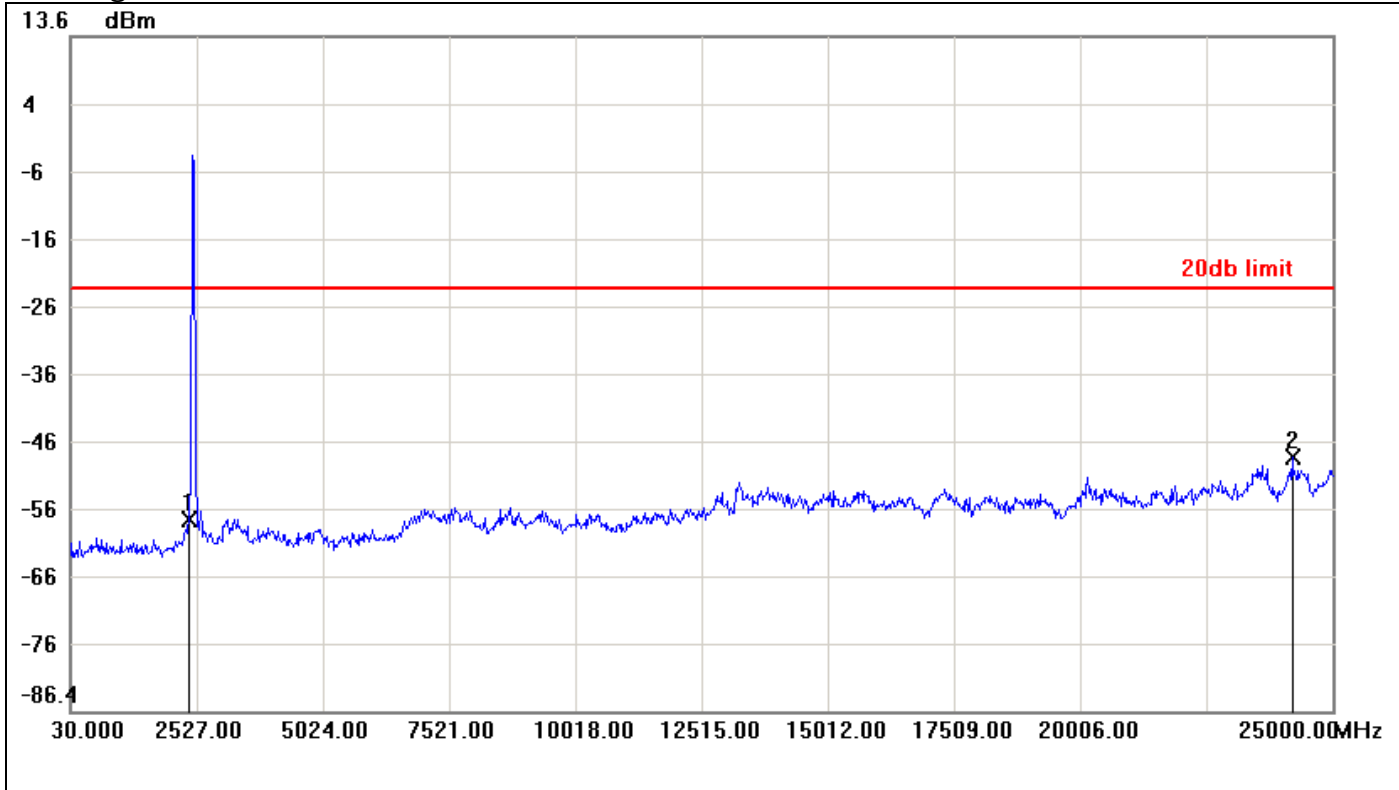
CH Mid



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2377.1800	-56.12	-24.00	-32.12
2	24900.1200	-50.32	-24.00	-26.32



CH High

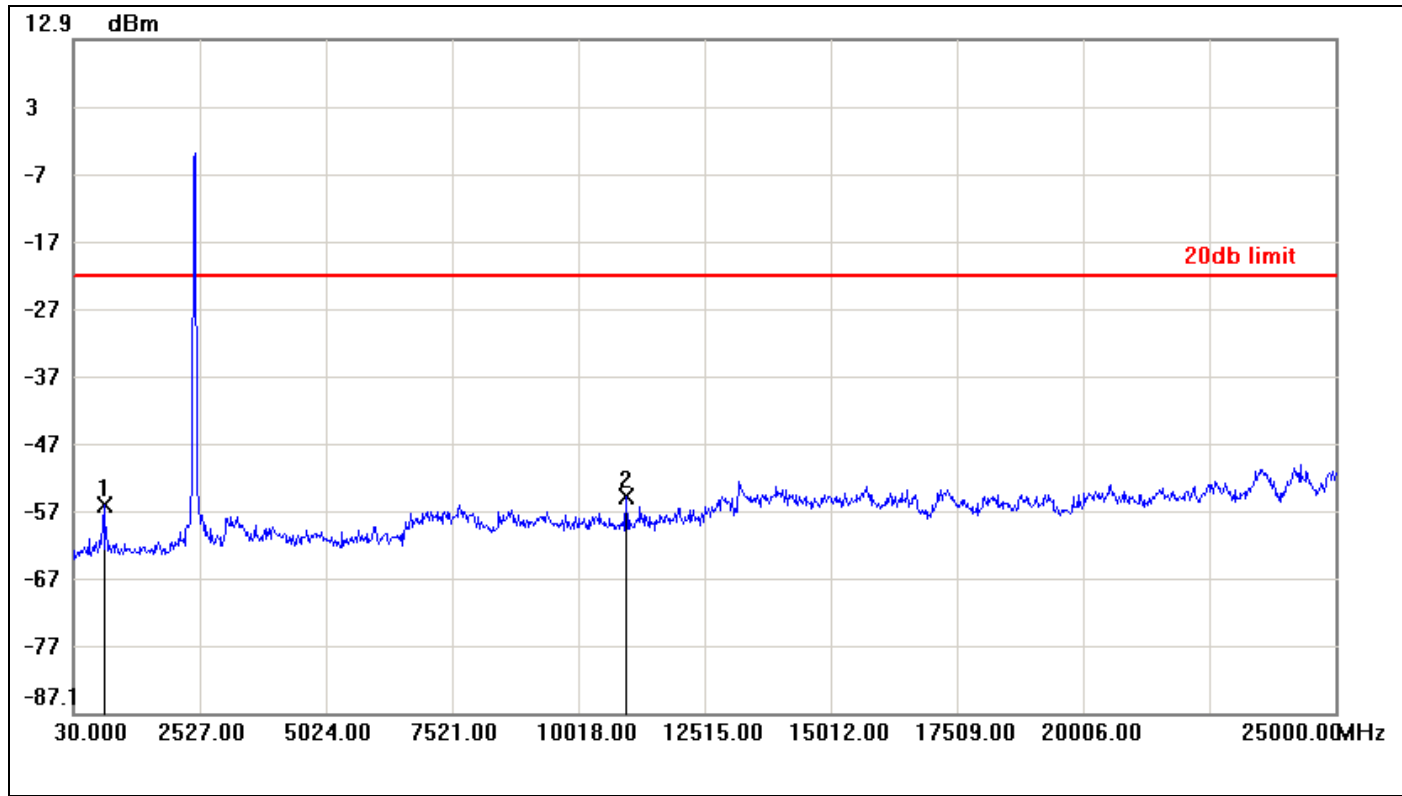


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	2377.1800	-57.98	-23.85	-34.13
2	24200.9600	-48.82	-23.85	-24.97



IEEE 802.11n HT 40 MHz mode / Chain 1

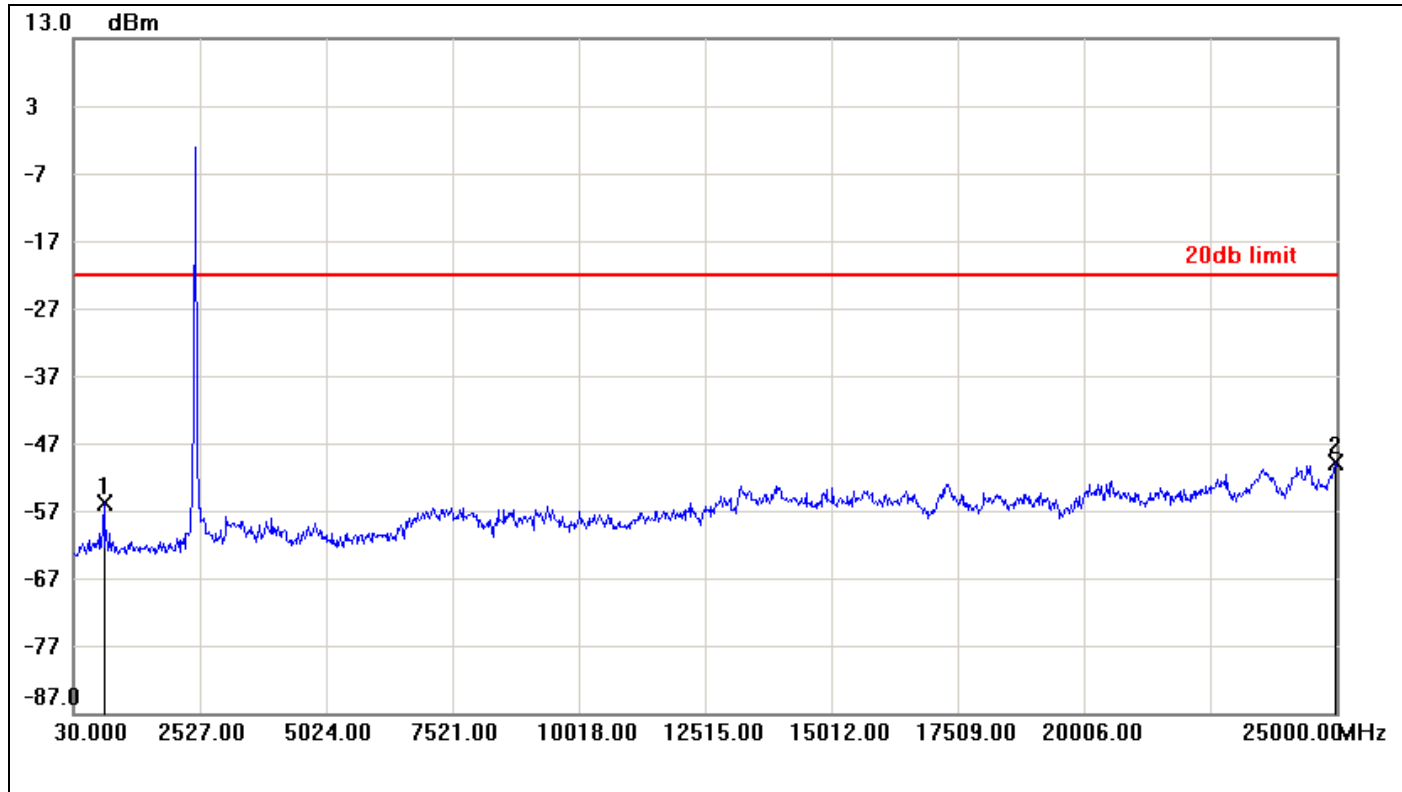
CH Low



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	629.2800	-56.12	-22.29	-33.83
2	10966.8600	-54.98	-22.29	-32.69



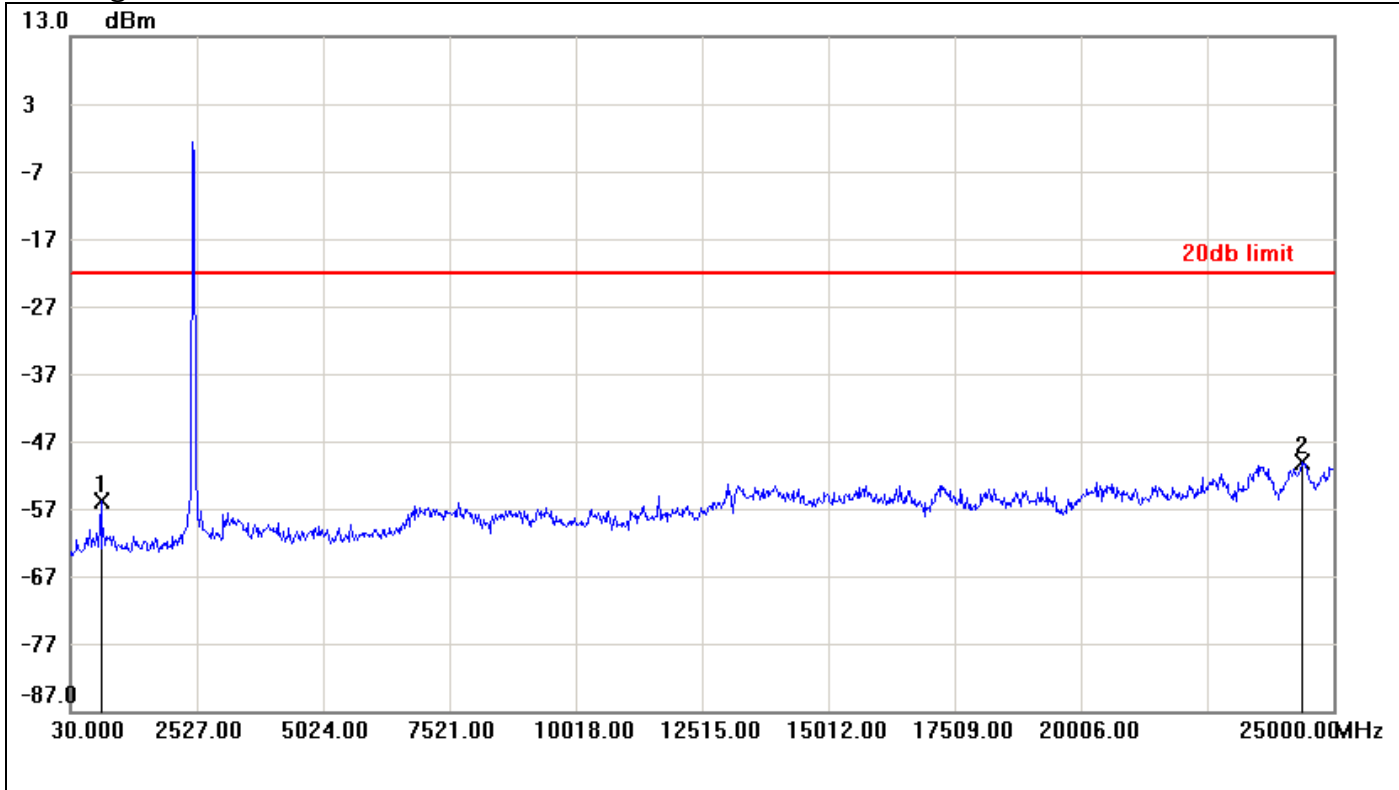
CH Mid



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	629.2800	-55.87	-22.17	-33.70
2	24975.0300	-49.87	-22.17	-27.70



CH High

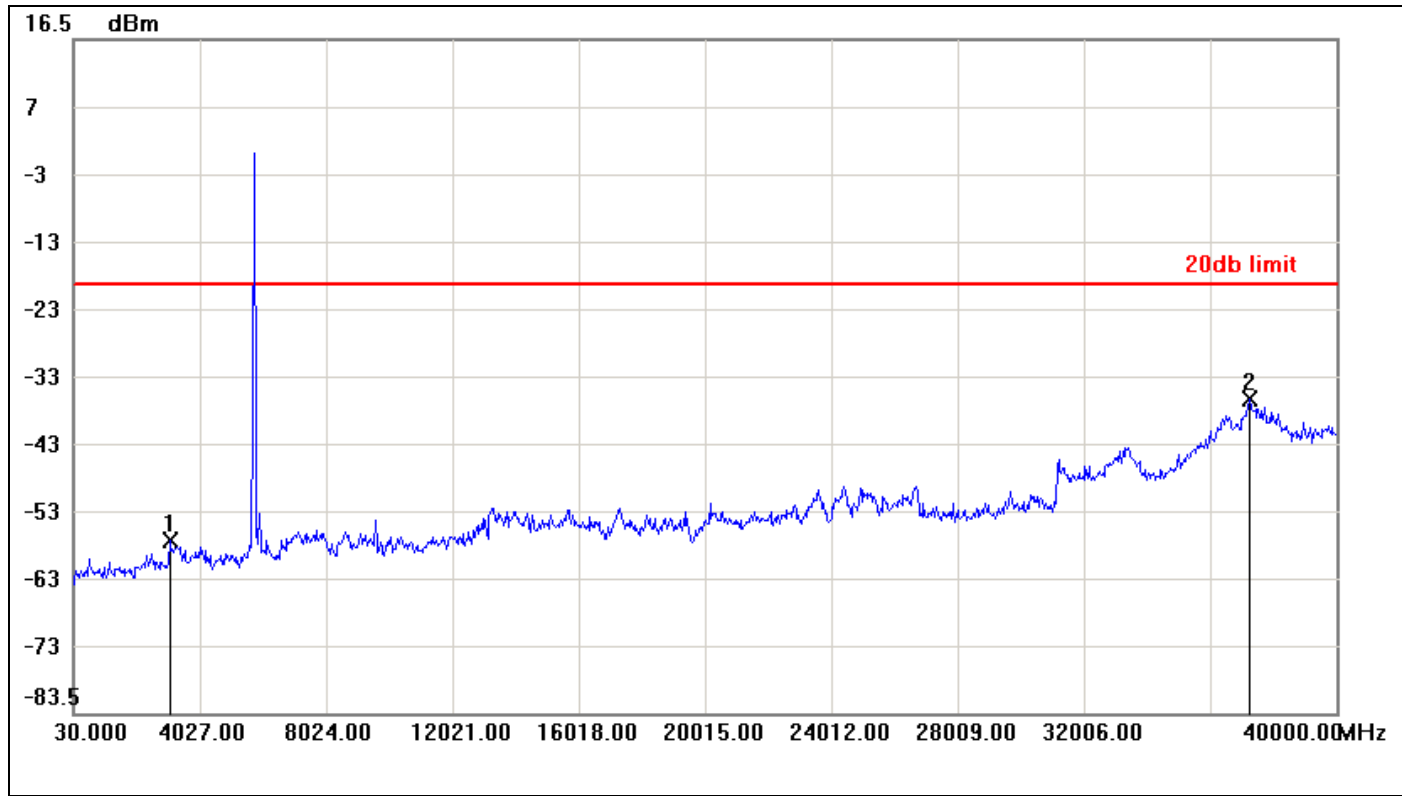


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	629.2800	-55.80	-22.20	-33.60
2	24375.7500	-50.10	-22.20	-27.90



IEEE 802.11a mode

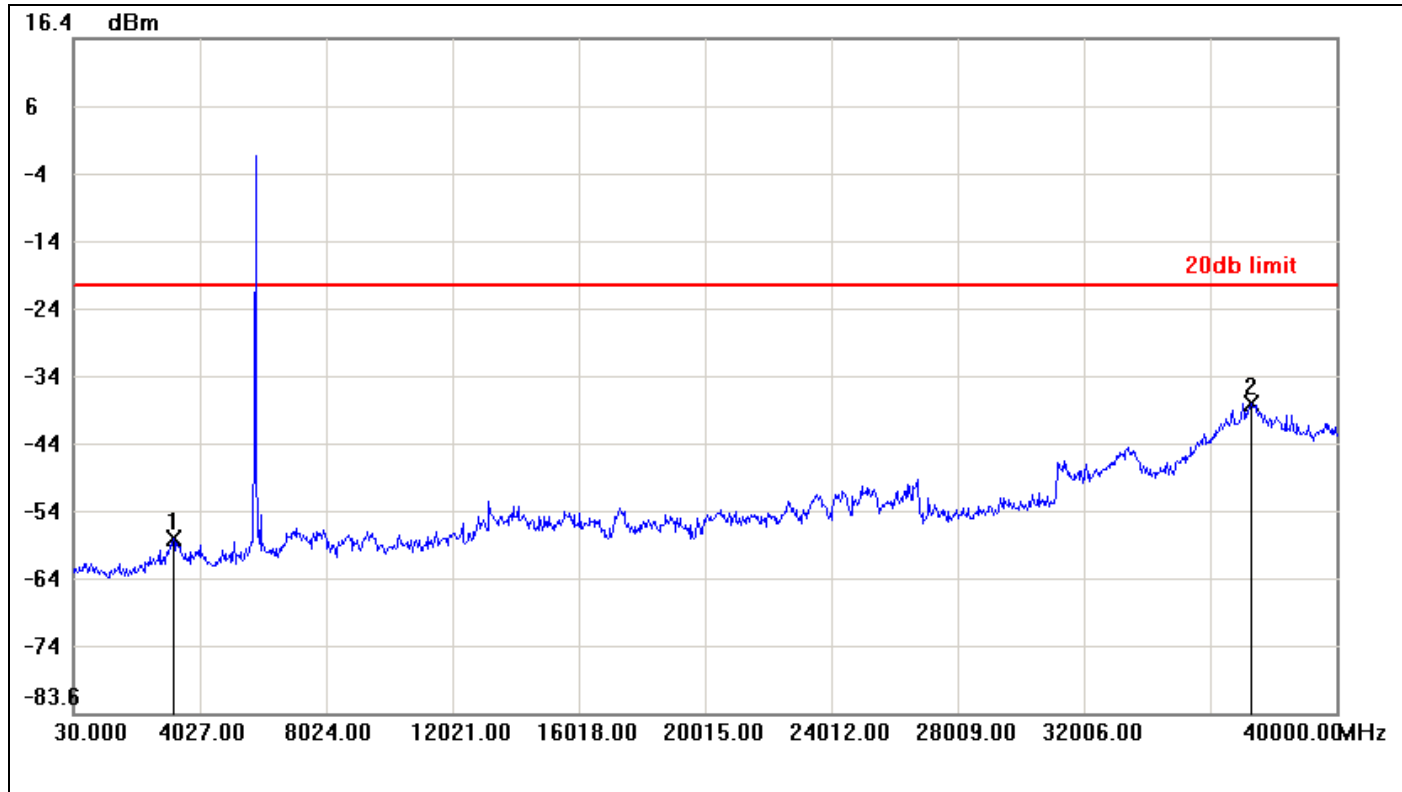
CH Low



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	3067.7200	-57.77	-19.85	-37.92
2	37242.0700	-36.77	-19.85	-16.92



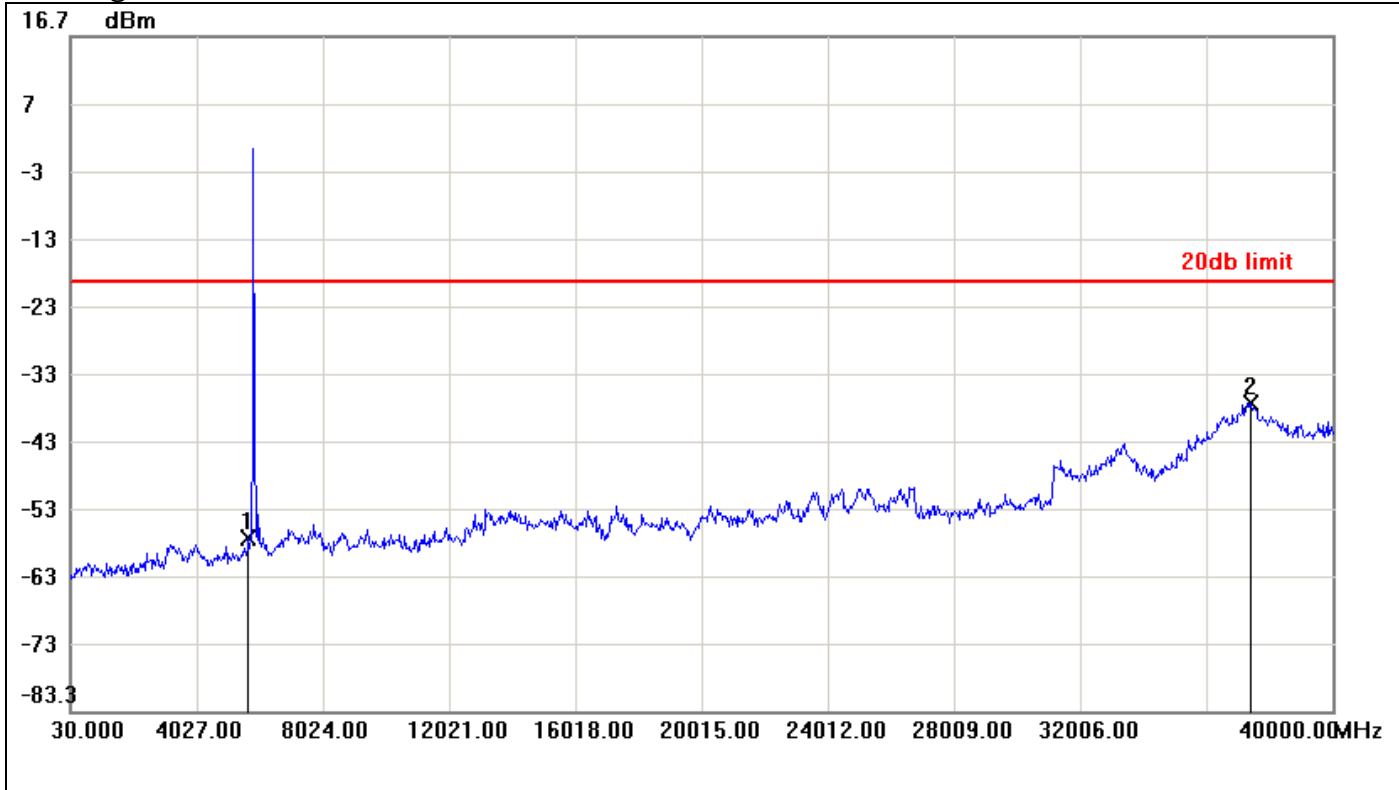
CH Mid



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	3187.6300	-57.79	-20.27	-37.52
2	37322.0100	-37.69	-20.27	-17.42



CH High

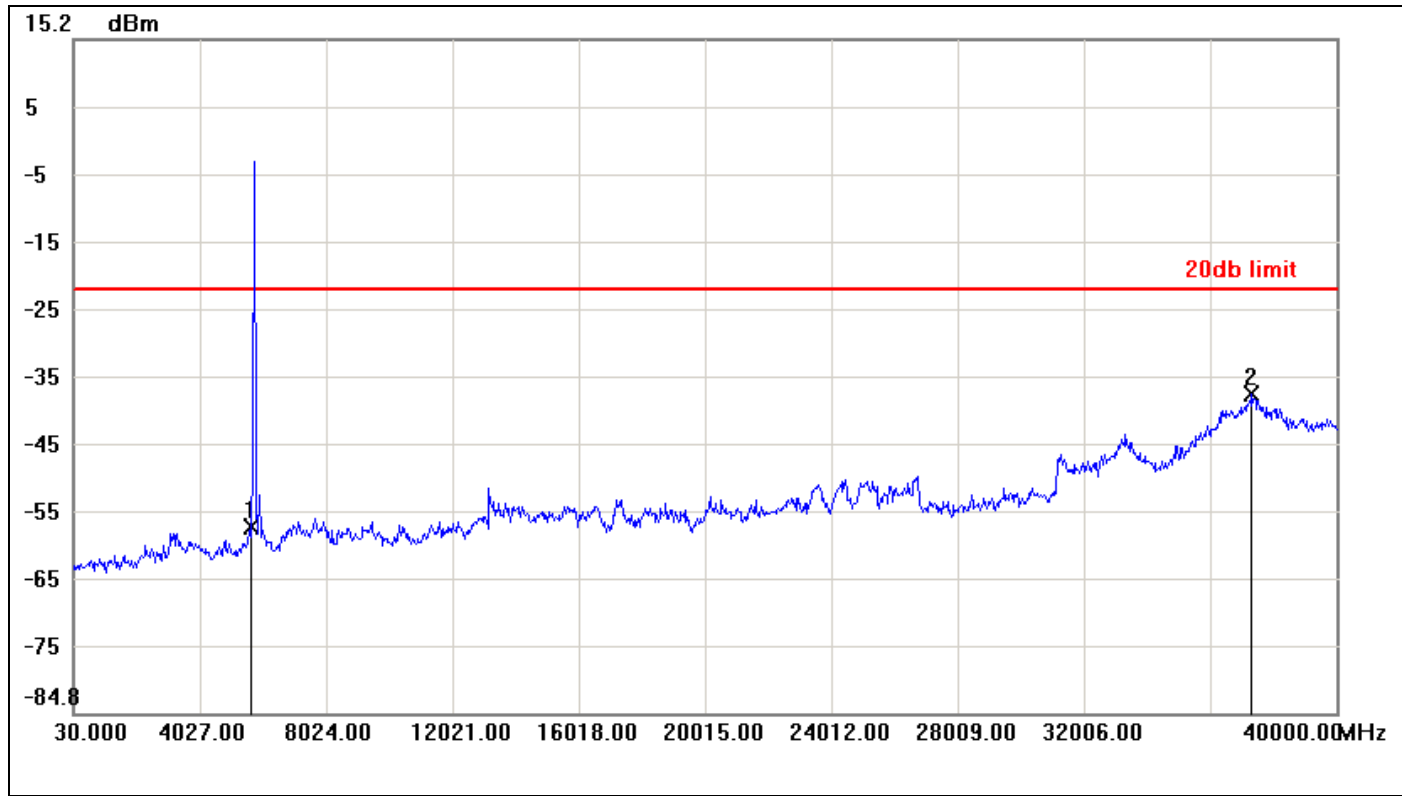


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	5665.7700	-57.63	-19.70	-37.93
2	37401.9500	-37.68	-19.70	-17.98



IEEE 802.11n HT 20 MHz mode / Chain 0

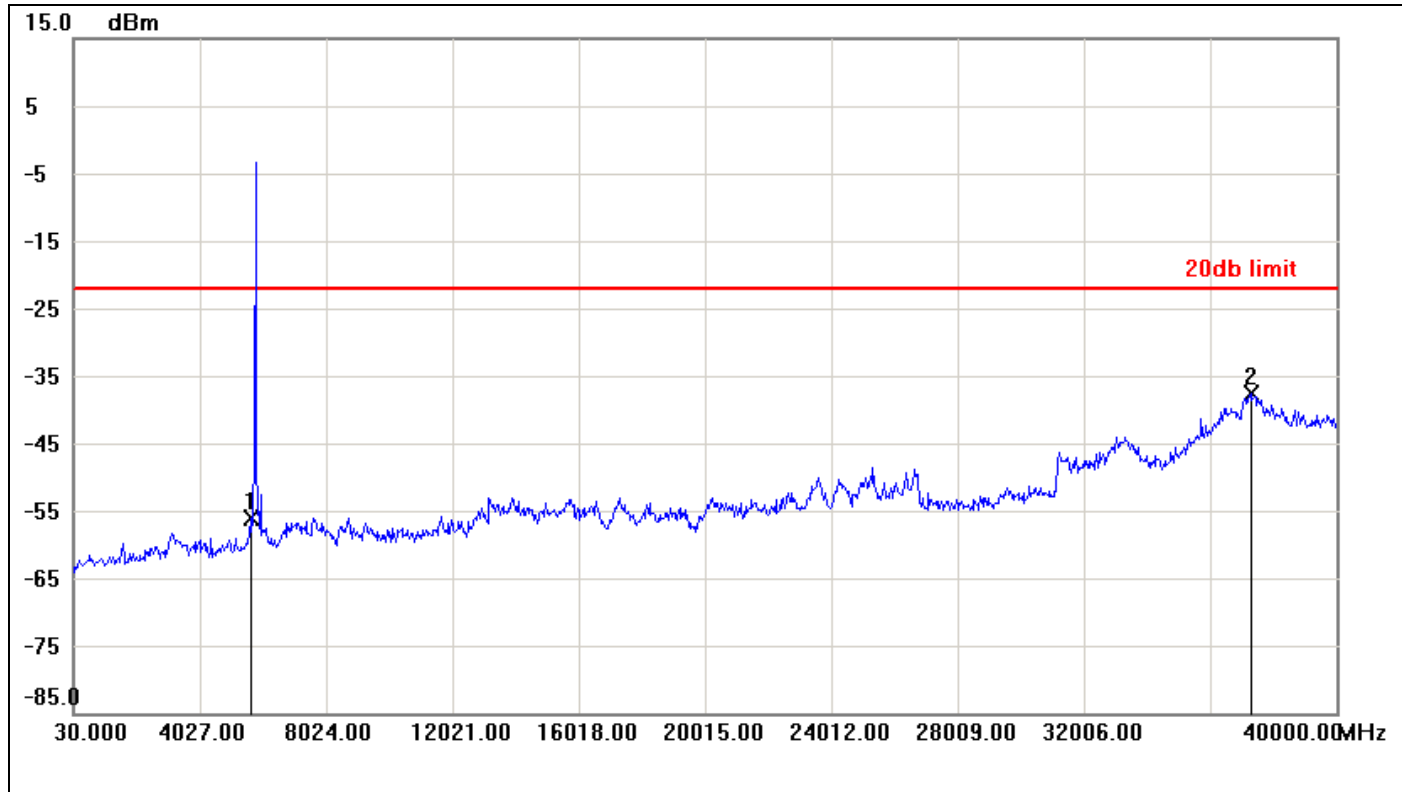
CH Low



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	5665.7700	-57.03	-21.92	-35.11
2	37322.0100	-37.36	-21.92	-15.44



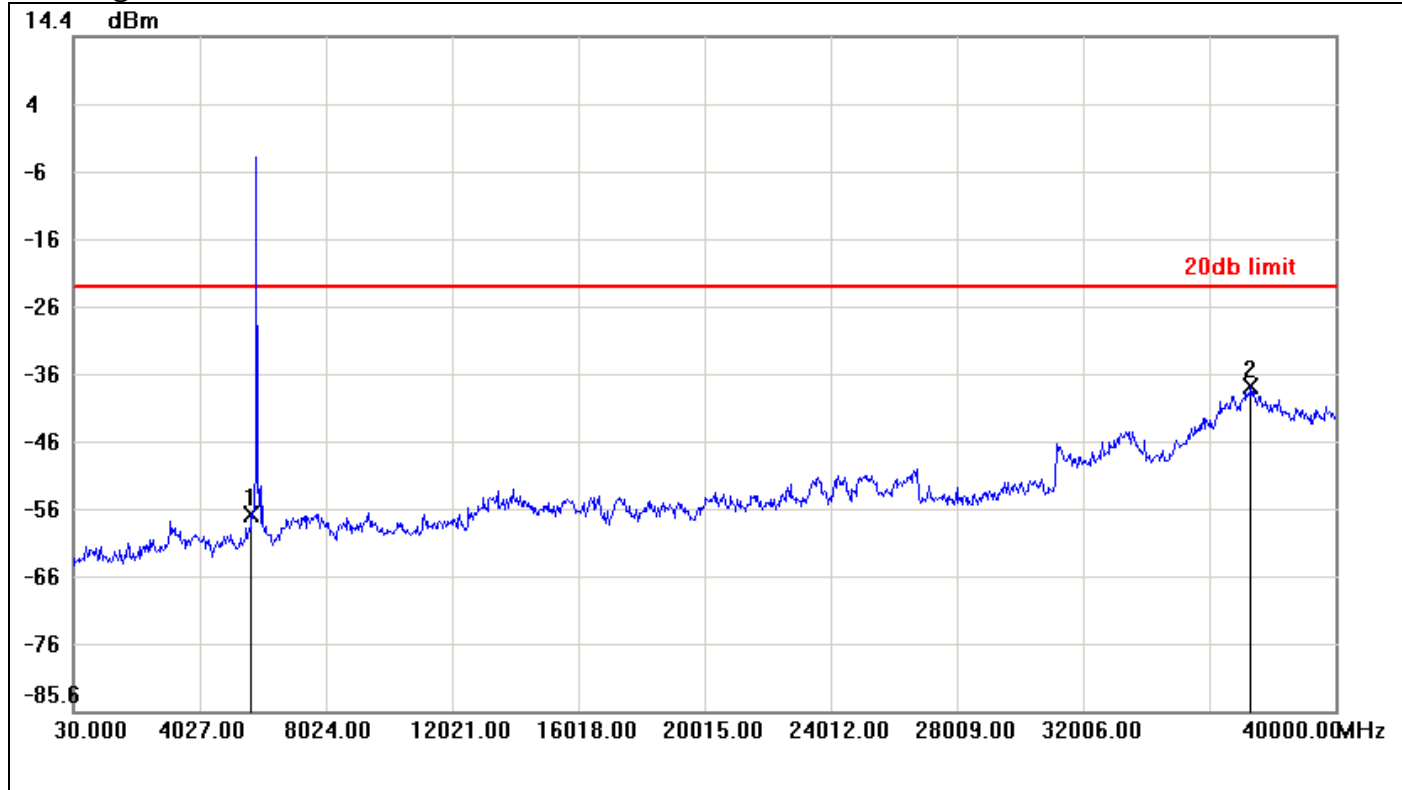
CH Mid



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	5625.8000	-56.05	-22.26	-33.79
2	37282.0400	-37.58	-22.26	-15.32



CH High

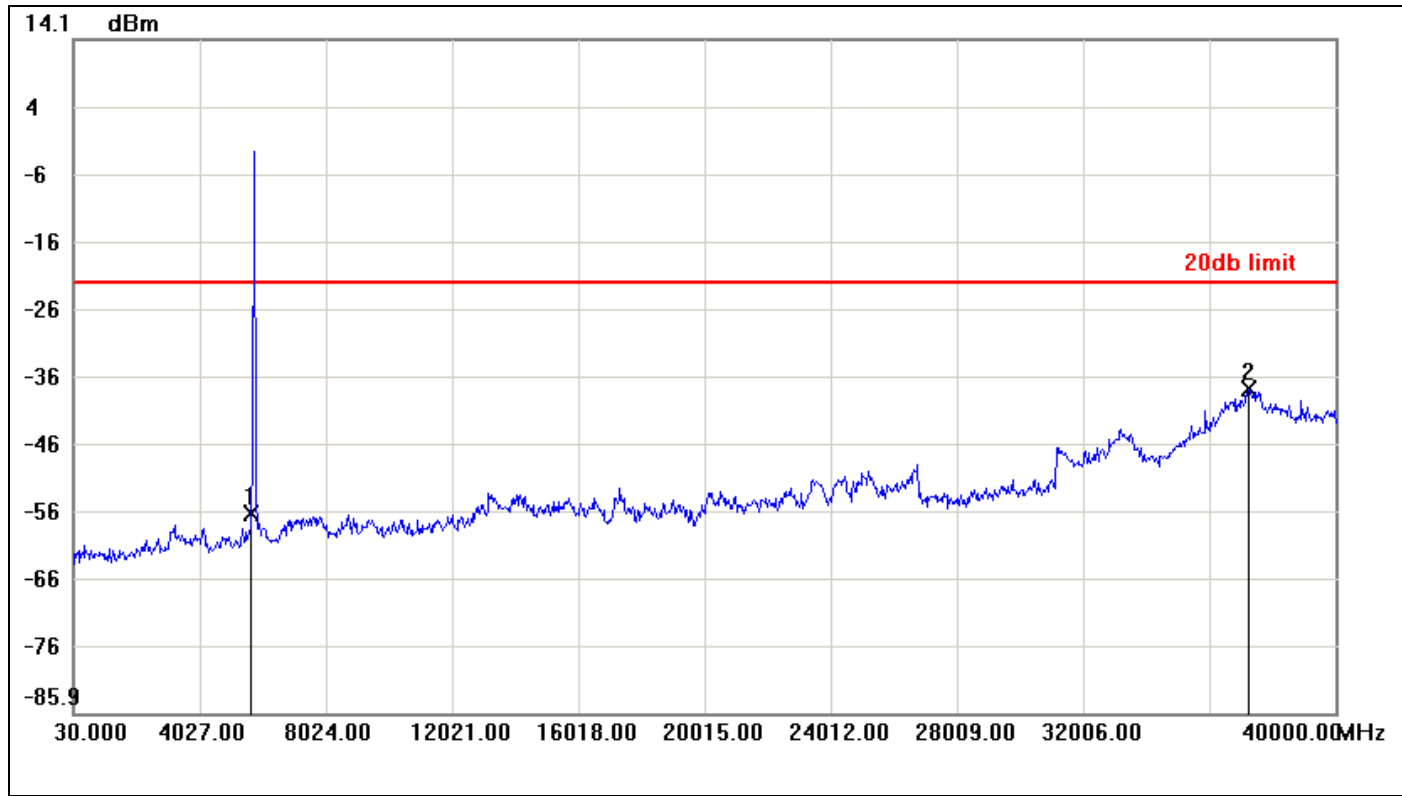


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	5665.7700	-56.40	-22.77	-33.63
2	37322.0100	-37.59	-22.77	-14.82



IEEE 802.11n HT 20 MHz mode / Chain 1

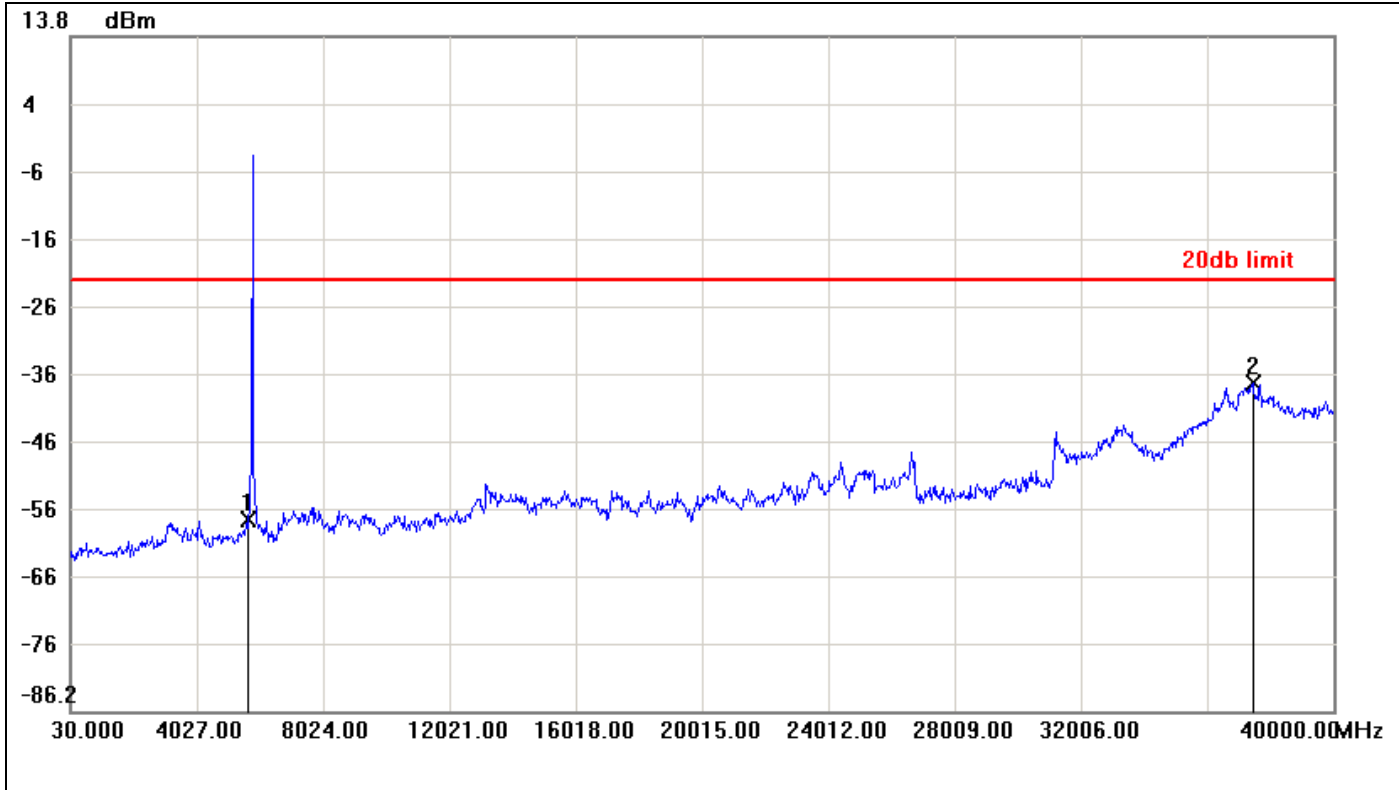
CH Low



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	5665.7700	-56.18	-22.09	-34.09
2	37242.0700	-37.84	-22.09	-15.75



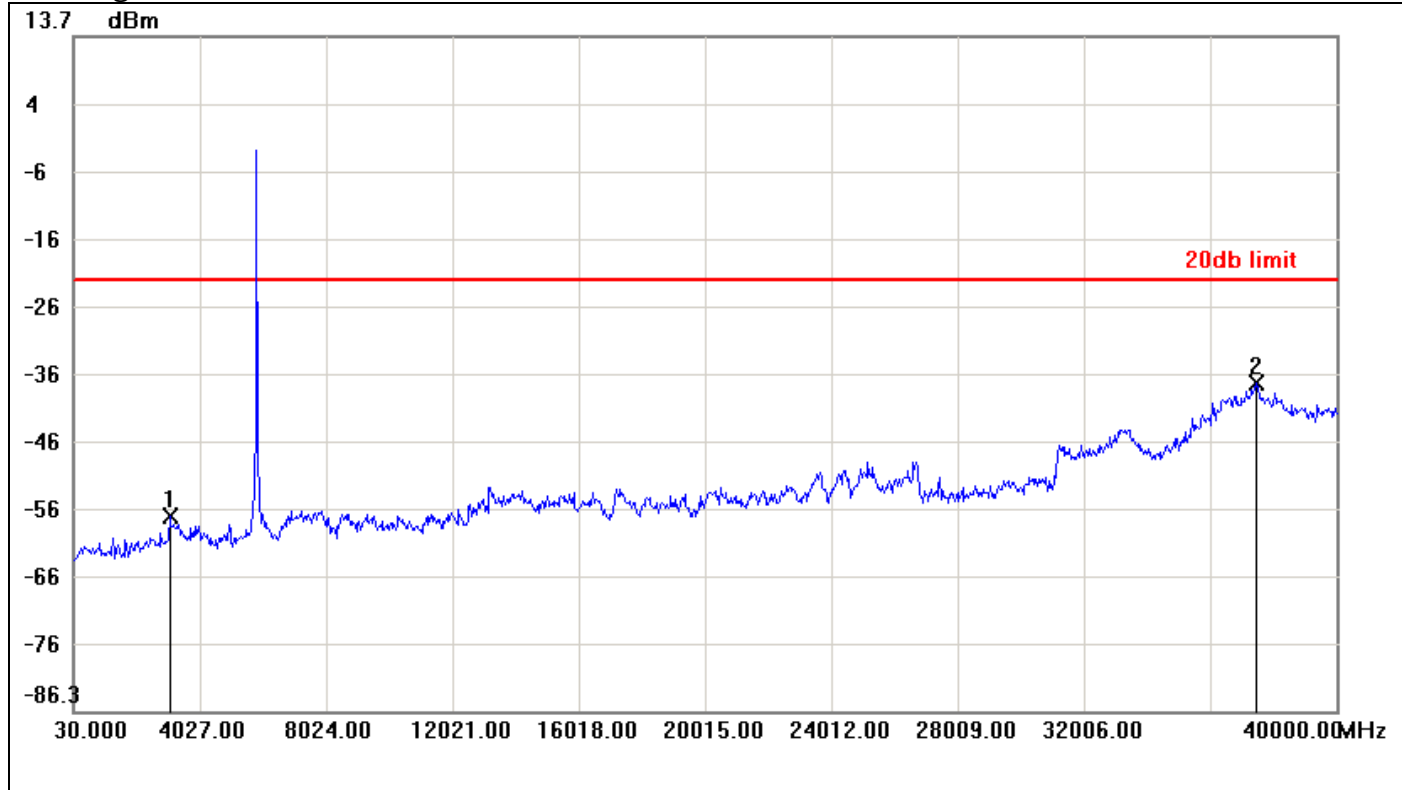
CH Mid



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	5665.7700	-57.76	-22.46	-35.30
2	37441.9200	-37.65	-22.46	-15.19



CH High

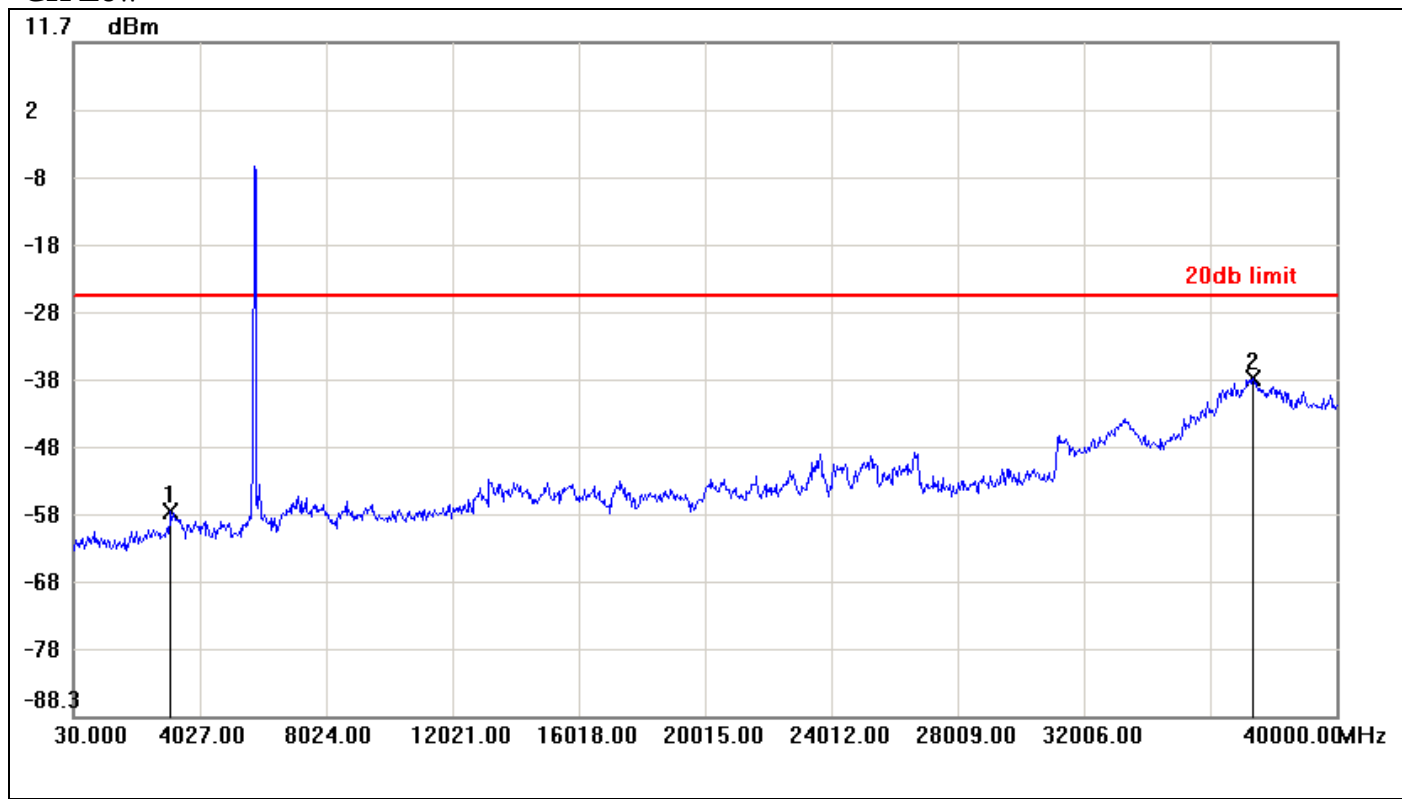


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	3067.7200	-57.37	-22.44	-34.93
2	37441.9200	-37.73	-22.44	-15.29



IEEE 802.11n HT 40 MHz mode / Chain 0

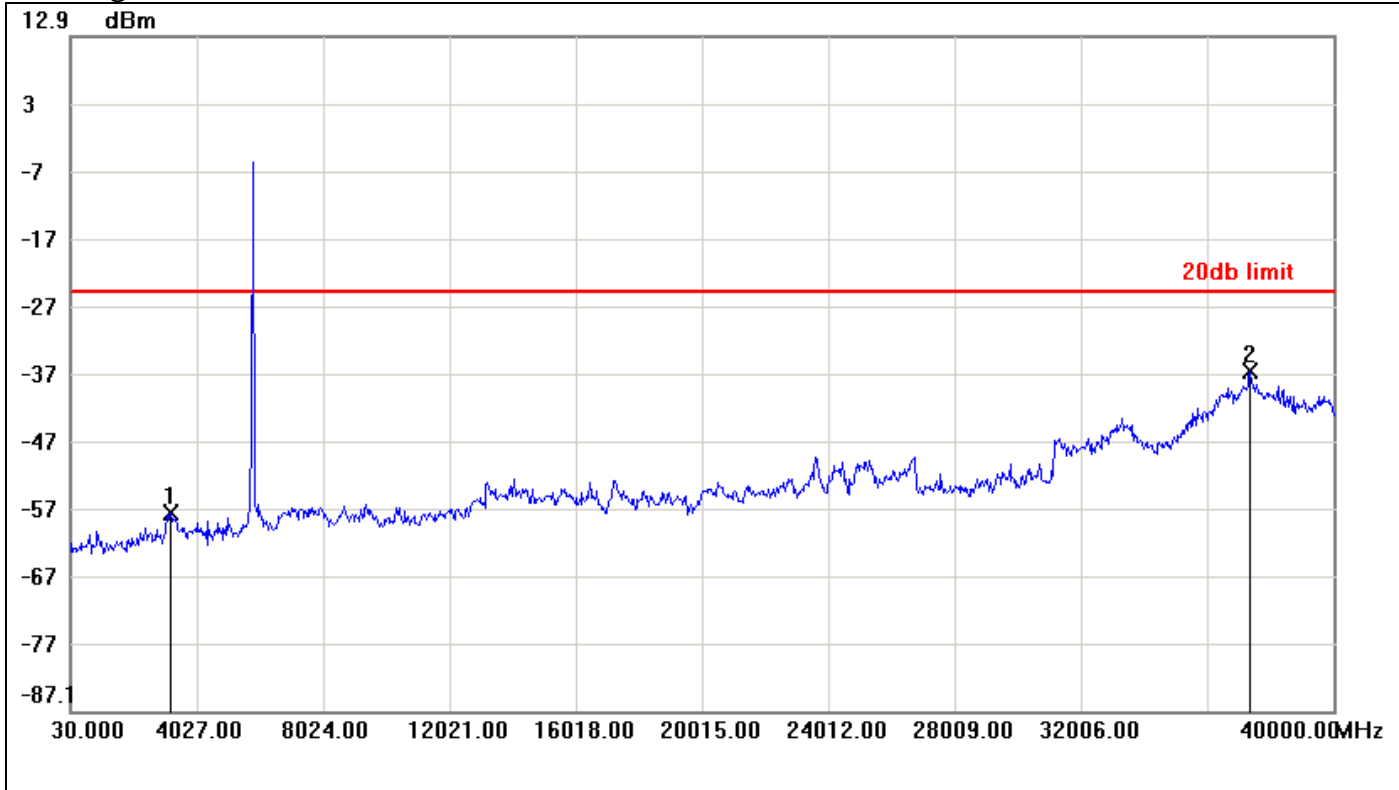
CH Low



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	3107.6900	-57.99	-25.96	-32.03
2	37361.9800	-38.06	-25.96	-12.10



CH High

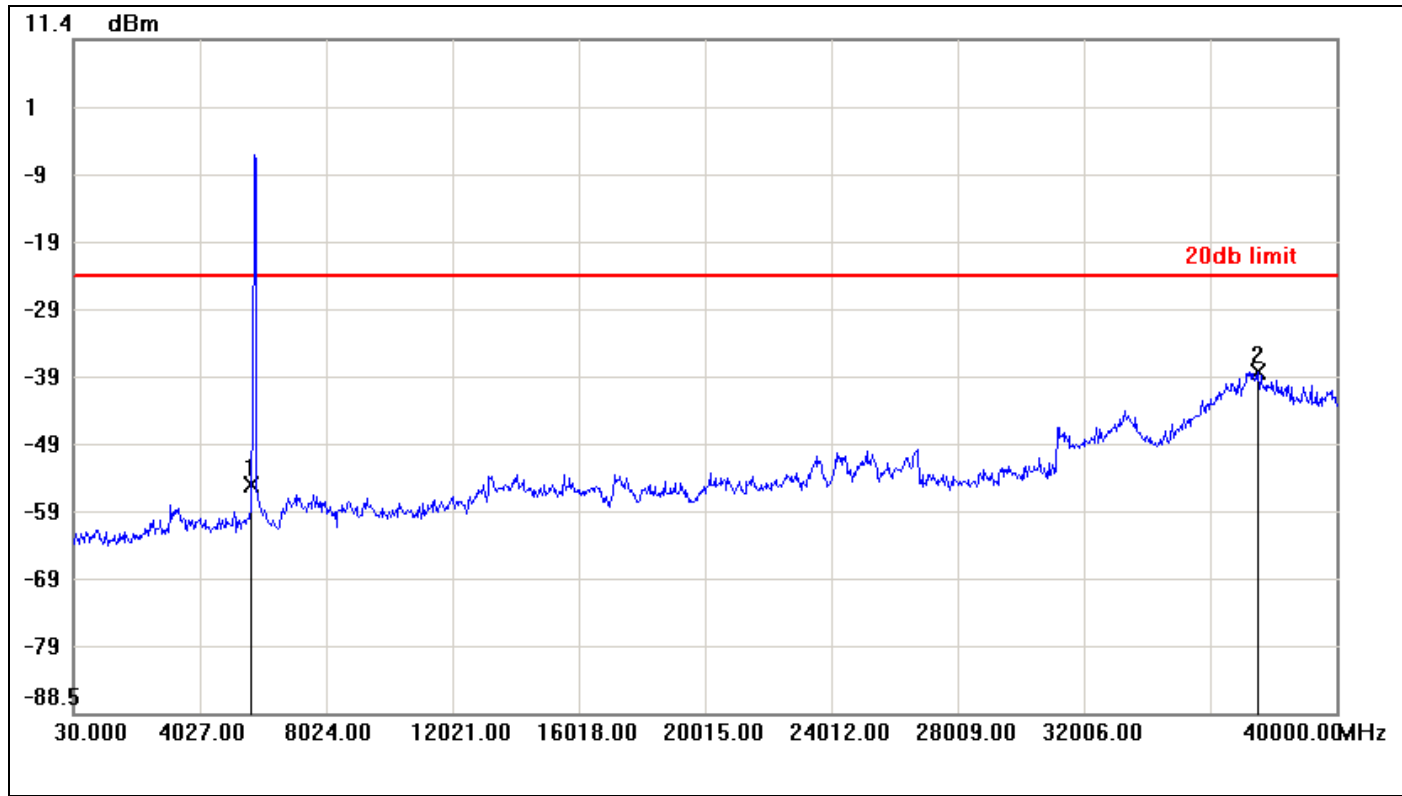


No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	3187.6300	-57.61	-24.94	-32.67
2	37361.9800	-36.85	-24.94	-11.91



IEEE 802.11n HT 40 MHz mode / Chain 1

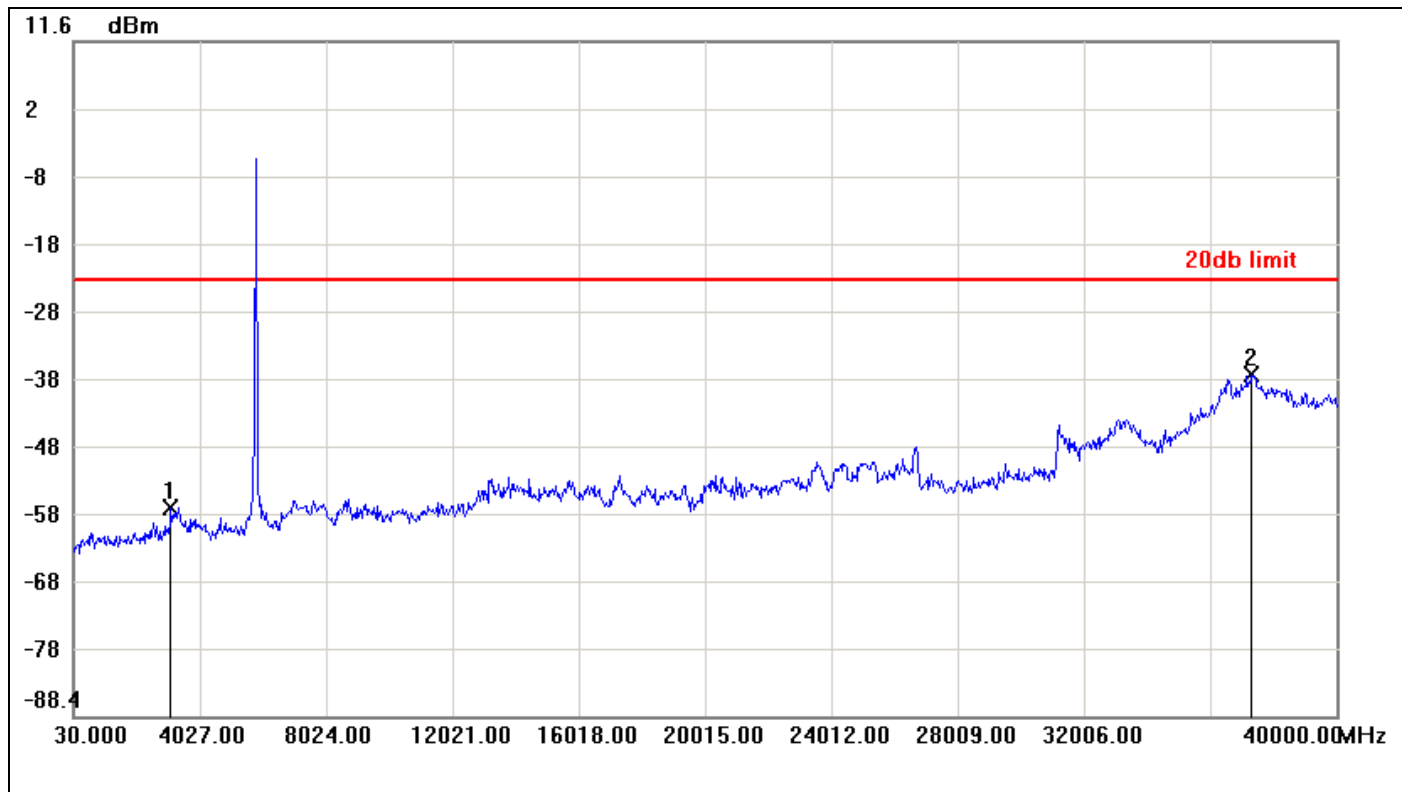
CH Low



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	5665.7700	-54.73	-23.72	-31.01
2	37521.8600	-37.94	-23.72	-14.22



CH High



No.	Frequency(MHz)	Result(dBm)	Limit(dBm)	Margin(dBm)
1	3107.6900	-57.54	-23.66	-33.88
2	37322.0100	-37.73	-23.66	-14.07

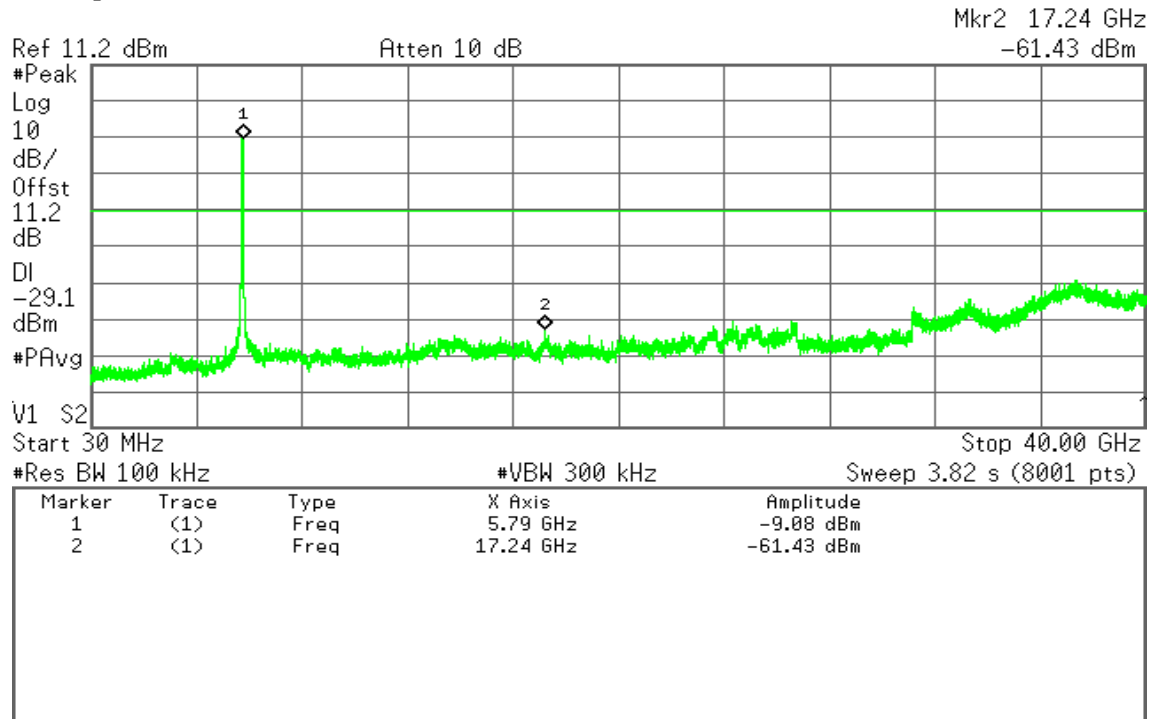


IEEE 802.11n HT 80 MHz mode / Chain 0

CH Mid

Agilent

R T

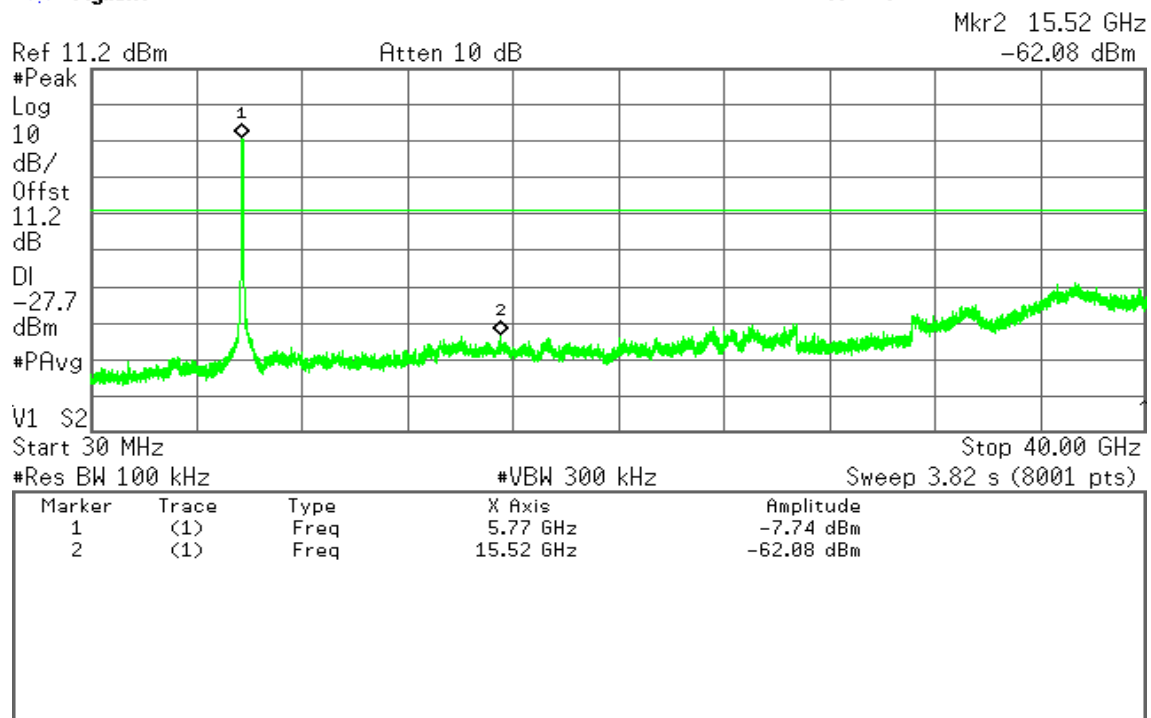


IEEE 802.11n HT 80 MHz mode / Chain 1

CH Mid

Agilent

R T





8.7.2 Radiated Emissions

LIMIT

All spurious emissions shall comply with the limits of §15.209(a) and RSS-Gen Table 2 & Table 5.

RSS-Gen Table 2 & Table 5: General Field Strength Limits for Transmitters and Receivers at Frequencies Above 30 MHz ^(Note)

Frequency (MHz)	Field Strength microvolts/m at 3 metres (watts, e.i.r.p.)	
	Transmitters	Receivers
30-88	100 (3 nW)	100 (3 nW)
88-216	150 (6.8 nW)	150 (6.8 nW)
216-960	200 (12 nW)	200 (12 nW)
Above 960	500 (75 nW)	500 (75 nW)

Note: *Measurements for compliance with limits in the above table may be performed at distances other than 3 metres, in accordance with Section 7.2.7.

Transmitting devices are not permitted in Table 1 bands or, unless stated otherwise, in TV bands (54-72 MHz, 76-88 MHz, 174-216 MHz, 470-608 MHz and 614-806 MHz).

RSS-Gen Table 6: General Field Strength Limits for Transmitters at Frequencies Below 30 MHz (Transmit)

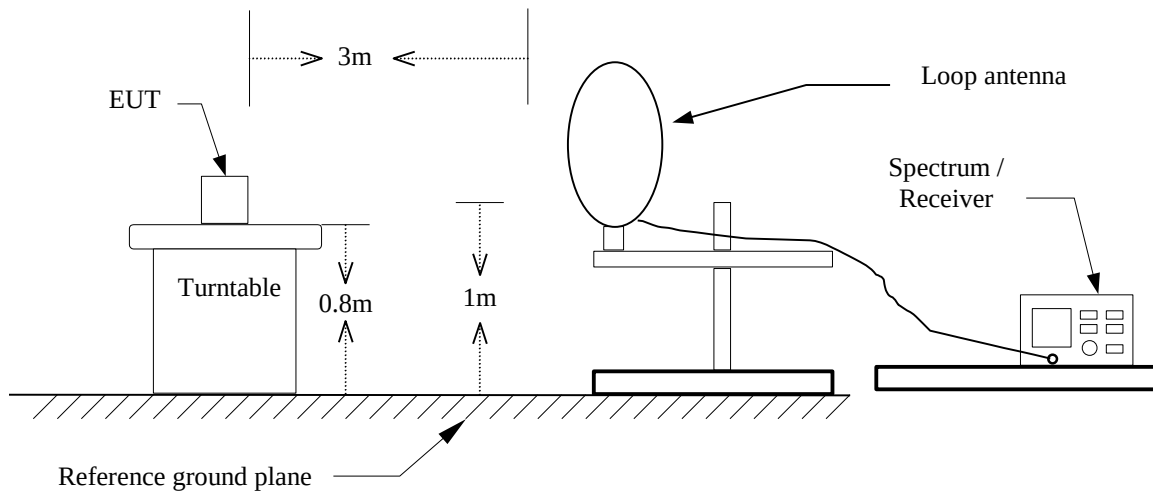
Frequency	Field Strength (microvolts/m)	Magnetic H-Field (microamperes/m)	Measurement Distance (metres)
9-490 kHz	2,400/F (F in kHz)	2,400/377F (F in kHz)	3000
490-1,705 kHz	24,000/F (F in kHz)	24,000/377F (F in kHz)	30
1.705-30 MHz	30	N/A	30

Note: The emission limits for the bands 9-90 kHz and 110-490 kHz are based on measurements employing an average detector.

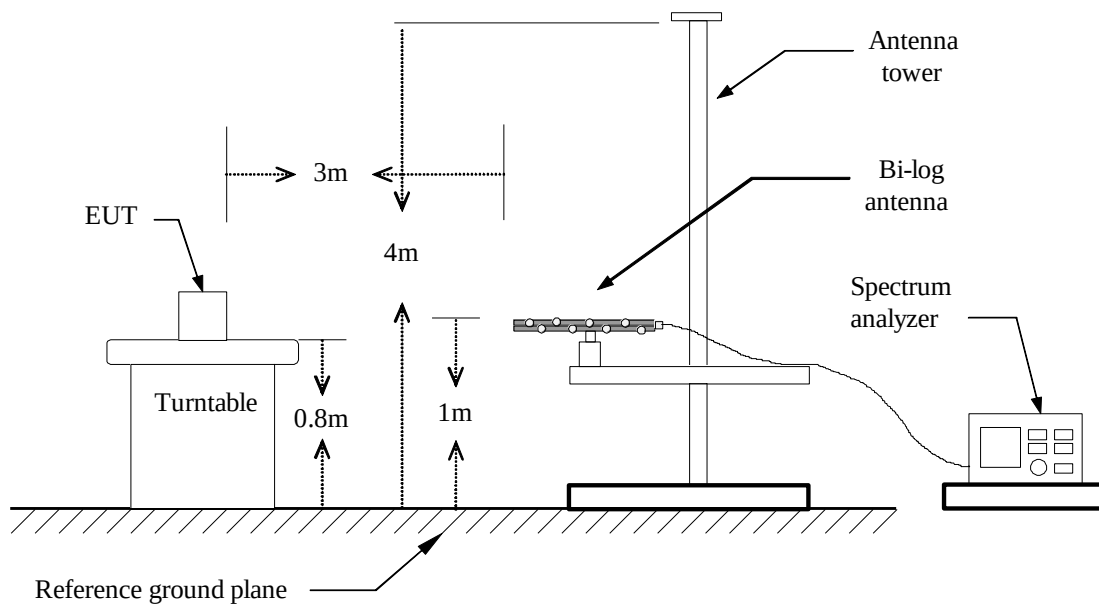


Test Configuration

9kHz ~ 30MHz

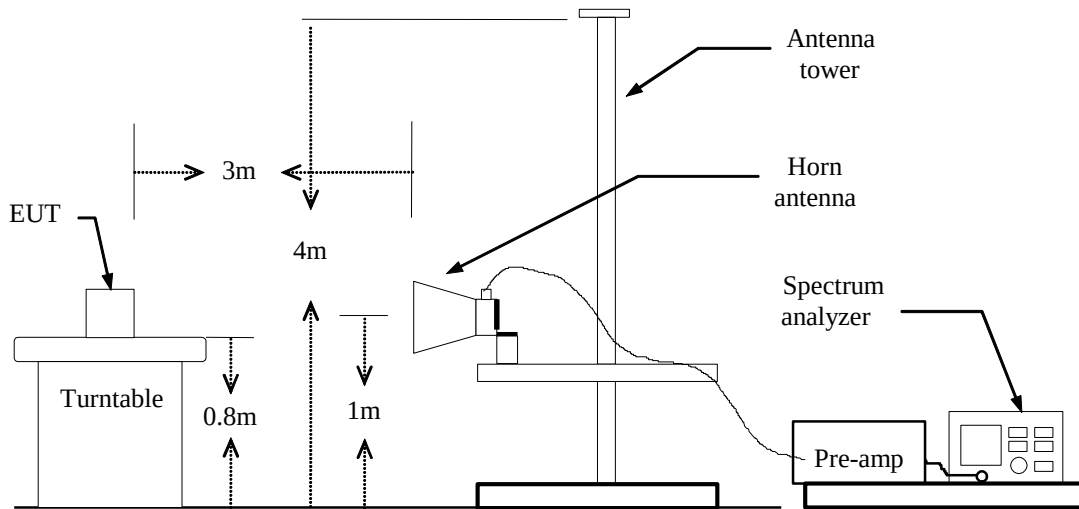


30MHz ~ 1GHz





Above 1 GHz





TEST PROCEDURE

1. The EUT is placed on a turntable, which is 0.8m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Set the spectrum analyzer in the following setting as:
Below 1GHz:
RBW=100kHz / VBW=300kHz / Sweep=AUTO
Above 1GHz:
(a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
(b) AVERAGE: RBW=1MHz / VBW=300Hz / Sweep=AUTO
7. Repeat above procedures until the measurements for all frequencies are complete.

**Below 1 GHz****Operation Mode:** Normal link**Test Date:** April 22, 2014**Temperature:** 27°C**Tested by:** David Shu**Humidity:** 53% RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant. Pol. (H/V)
30.9700	45.54	-10.58	34.96	40.00	-5.04	Peak	V
103.7200	51.76	-20.26	31.50	43.50	-12.00	Peak	V
216.2400	54.58	-18.72	35.86	46.00	-10.14	Peak	V
366.5900	43.62	-14.80	28.82	46.00	-17.18	Peak	V
499.4800	47.93	-11.84	36.09	46.00	-9.91	Peak	V
747.8000	42.88	-7.92	34.96	46.00	-11.04	Peak	V
57.1600	56.82	-23.64	33.18	40.00	-6.82	Peak	H
335.5500	51.36	-15.54	35.82	46.00	-10.18	Peak	H
531.4900	45.36	-11.31	34.05	46.00	-11.95	Peak	H
739.0700	47.10	-8.08	39.02	46.00	-6.98	Peak	H
804.0600	46.23	-7.33	38.90	46.00	-7.10	Peak	H
891.3600	44.61	-6.27	38.34	46.00	-7.66	Peak	H

Remark:

1. No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz).
2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using peak/quasi-peak detector mode.
3. Quasi-peak test would be performed if the peak result were greater than the quasi-peak limit or as required by the applicant.
4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
5. Margin (dB) = Remark result (dBuV/m) – Quasi-peak limit (dBuV/m).

**Above 1 GHz****Operation Mode:** TX / IEEE 802.11b mode / CH Low**Test Date:** April 22, 2014**Temperature:** 27°C**Tested by:** David Shu**Humidity:** 53 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
1802.000	51.46	-6.49	44.97	74.00	-29.03	peak	V
N/A							
1812.000	52.02	-6.14	45.88	74.00	-28.12	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit.
4. Data of measurement within this frequency range shown “ --- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11b mode / CH Mid**Test Date:** April 22, 2014**Temperature:** 27°C**Tested by:** David Shu**Humidity:** 53 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
1736.000	51.76	-6.88	44.88	74.00	-29.12	peak	V
1720.000	51.88	-6.98	44.90	74.00	-29.10	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. $\text{Margin (dB)} = \text{Remark result (dBuV/m)} - \text{Average limit (dBuV/m)}$.

**Operation Mode:** TX / IEEE 802.11b mode / CH High**Test Date:** April 22, 2014**Temperature:** 27°C**Tested by:** David Shu**Humidity:** 53 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
1436.000	53.58	-8.72	44.86	74.00	-29.14	peak	V
N/A							
1720.000	55.10	-6.98	48.12	74.00	-25.88	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11g mode / CH Low**Test Date:** April 22, 2014**Temperature:** 27°C**Tested by:** David Shu**Humidity:** 53 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
1940.000	51.70	-5.36	46.34	74.00	-27.66	peak	V
N/A							
2012.000	52.16	-4.96	47.20	74.00	-26.80	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11g mode / CH Mid**Test Date:** April 22, 2014**Temperature:** 27°C**Tested by:** David Shu**Humidity:** 53 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
1508.000	51.31	-8.01	43.30	74.00	-30.70	peak	V
N/A							
1442.000	51.78	-8.43	43.35	74.00	-30.65	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11g mode / CH High**Test Date:** April 22, 2014**Temperature:** 27°C**Tested by:** David Shu**Humidity:** 53 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
1662.000	51.99	-7.07	44.92	74.00	-29.08	peak	V
N/A							
1896.000	51.82	-5.63	46.19	74.00	-27.81	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11n HT 20 MHz mode / CH Low **Test Date:** April 22, 2014**Temperature:** 27°C**Tested by:** David Shu**Humidity:** 53 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
1710.000	53.90	-6.77	47.13	74.00	-26.87	peak	V
N/A							
2140.000	51.62	-4.70	46.92	74.00	-27.08	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / IEEE 802.11n HT 20 MHz mode / CH Mid **Test Date:** April 22, 2014

Temperature: 27°C

Tested by: David Shu

Humidity: 53 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
1474.000	52.07	-8.22	43.85	74.00	-30.15	peak	V
N/A							
1470.000	51.44	-8.25	43.19	74.00	-30.81	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11n HT 20 MHz mode / CH High **Test Date:** April 22, 2014**Temperature:** 27°C**Tested by:** David Shu**Humidity:** 53 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
1814.000	51.77	-6.13	45.64	74.00	-28.36	peak	V
N/A							
1754.000	52.10	-6.50	45.60	74.00	-28.40	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / IEEE 802.11n HT 40 MHz mode
/ CH Low

Temperature: 27°C

Humidity: 53 % RH

Test Date: April 22, 2014

Tested by: David Shu

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
1708.000	52.54	-6.78	45.76	74.00	-28.24	peak	V
N/A							
2096.000	52.98	-4.79	48.19	74.00	-25.81	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown “ --- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / IEEE 802.11n HT 40 MHz mode
/ CH Mid

Test Date: April 22, 2014

Temperature: 27°C

Tested by: David Shu

Humidity: 53 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
1496.000	51.58	-8.09	43.49	74.00	-30.51	peak	V
N/A							
1484.000	51.35	-8.16	43.19	74.00	-30.81	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown “ --- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11n HT 40 MHz mode
/ CH High**Test Date:** April 22, 2014**Temperature:** 27°C**Tested by:** David Shu**Humidity:** 53 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
1432.000	52.80	-8.49	44.31	74.00	-29.69	peak	V
N/A							
1532.000	52.92	-7.86	45.06	74.00	-28.94	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown “ --- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11a mode / CH Low**Test Date:** April 23, 2014**Temperature:** 27°C**Tested by:** David Shu**Humidity:** 53 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
2533.000	51.00	-3.18	47.82	74.00	-26.18	peak	V
N/A							
2442.000	50.52	-3.57	46.95	74.00	-27.05	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11a mode / CH Mid**Test Date:** April 23, 2014**Temperature:** 27°C**Tested by:** David Shu**Humidity:** 53 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
2575.000	50.31	-3.09	47.22	74.00	-26.78	peak	V
N/A							
2540.000	50.87	-3.17	47.70	74.00	-26.30	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11a mode / CH High**Test Date:** April 23, 2014**Temperature:** 27°C**Tested by:** David Shu**Humidity:** 53 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
2435.000	50.68	-3.60	47.08	74.00	-26.92	peak	V
N/A							
2547.000	50.66	-3.15	47.51	74.00	-26.49	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11n HT 20 MHz mode / CH Low **Test Date:** April 23, 2014**Temperature:** 27°C**Tested by:** David Shu**Humidity:** 53 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
2820.000	50.50	-2.58	47.92	74.00	-26.08	peak	V
N/A							
2274.000	50.71	-4.48	46.23	74.00	-27.77	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown “ --- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11n HT 20 MHz mode / CH Mid **Test Date:** April 23, 2014**Temperature:** 27°C**Tested by:** David Shu**Humidity:** 53 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
2428.000	50.89	-3.64	47.25	74.00	-26.75	peak	V
N/A							
2659.000	50.87	-2.92	47.95	74.00	-26.05	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11n HT 20 MHz mode / CH High **Test Date:** April 23, 2014**Temperature:** 27°C**Tested by:** David Shu**Humidity:** 53 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
2645.000	50.61	-2.95	47.66	74.00	-26.34	peak	V
N/A							
2449.000	50.69	-3.53	47.16	74.00	-26.84	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / IEEE 802.11n HT 40 MHz mode
/ CH Low

Test Date: April 23, 2014

Temperature: 27°C

Tested by: David Shu

Humidity: 53 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
2435.000	50.59	-3.60	46.99	74.00	-27.01	peak	V
N/A							
2526.000	50.77	-3.20	47.57	74.00	-26.43	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown “ --- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11n HT 40 MHz mode
/ CH High**Test Date:** April 23, 2014**Temperature:** 27°C**Tested by:** David Shu**Humidity:** 53 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
2407.000	50.69	-3.73	46.96	74.00	-27.04	peak	V
N/A							
2379.000	50.06	-3.95	46.11	74.00	-27.89	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown “ --- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / IEEE 802.11n HT 80 MHz mode
/ CH Mid

Temperature: 27°C

Humidity: 53 % RH

Test Date: April 23, 2014

Tested by: David Shu

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
2267.000	50.47	-4.49	45.98	74.00	-28.02	peak	V
N/A							
2449.000	50.80	-3.53	47.27	74.00	-26.73	peak	H
N/A							

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown “ --- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



8.8 POWERLINE CONDUCTED EMISSIONS

LIMIT

According to §15.207(a) & RSS-Gen §7.2.4, except when the requirements applicable to a given device state otherwise, for any licence-exempt radiocommunication device equipped to operate from the public utility AC power supply, either directly or indirectly, the radio frequency voltage that is conducted back onto the AC power lines in the frequency range of 0.15 MHz to 30 MHz shall not exceed the limits shown in Table 2. The tighter limit applies at the frequency range boundaries.

The conducted emissions shall be measured with a 50 ohm/50 microhenry line impedance stabilization network.

RSS-Gen Table 2 – AC Power Lines Conducted Emission Limits

Frequency Range (MHz)	Conducted limit (dBµV)	
	Quasi-peak	Average
0.15 to 0.5	66 to 56*	56 to 46*
0.5 to 5	56	46
5 to 30	60	50

**Decreases with the logarithm of the frequency*

Test Configuration

See test photographs attached in Appendix 1 for the actual connections between EUT and support equipment.

TEST PROCEDURE

1. The EUT was placed on a table, which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured were complete.



TEST RESULTS

The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range. Significant peaks are then marked as shown on the following data page, and these signals are then quasi-peaked.

Test Data

Operation Mode: Normal Link **Test Date:** May 9, 2014
Temperature: 26°C **Tested by:** Sehni Hu
Humidity: 60% RH

Freq. (MHz)	QP Reading (dBuV)	AV Reading (dBuV)	Corr. factor (dB/m)	QP Result (dBuV)	AV Result (dBuV)	QP Limit (dBuV)	AV Limit (dBuV)	QP Margin (dB)	AV Margin (dB)	Note
0.1700	44.71	21.12	0.19	44.90	21.31	64.96	54.96	-20.06	-33.65	L1
0.3060	39.17	30.91	0.20	39.37	31.11	60.08	50.08	-20.71	-18.97	L1
0.5940	29.67	20.62	0.20	29.87	20.82	56.00	46.00	-26.13	-25.18	L1
2.6540	22.87	12.44	0.16	23.03	12.60	56.00	46.00	-32.97	-33.40	L1
3.7660	18.75	10.06	0.19	18.94	10.25	56.00	46.00	-37.06	-35.75	L1
13.7780	19.99	13.35	0.68	20.67	14.03	60.00	50.00	-39.33	-35.97	L1
0.1580	44.13	38.40	0.19	44.32	38.59	65.57	55.57	-21.25	-16.98	L2
0.1980	42.19	35.85	0.19	42.38	36.04	63.69	53.69	-21.31	-17.65	L2
0.2860	43.67	33.09	0.19	43.86	33.28	60.64	50.64	-16.78	-17.36	L2
0.3780	37.96	27.12	0.19	38.15	27.31	58.32	48.32	-20.17	-21.01	L2
0.4940	34.21	23.06	0.19	34.40	23.25	56.10	46.10	-21.70	-22.85	L2
13.9060	23.00	15.79	0.53	23.53	16.32	60.00	50.00	-36.47	-33.68	L2

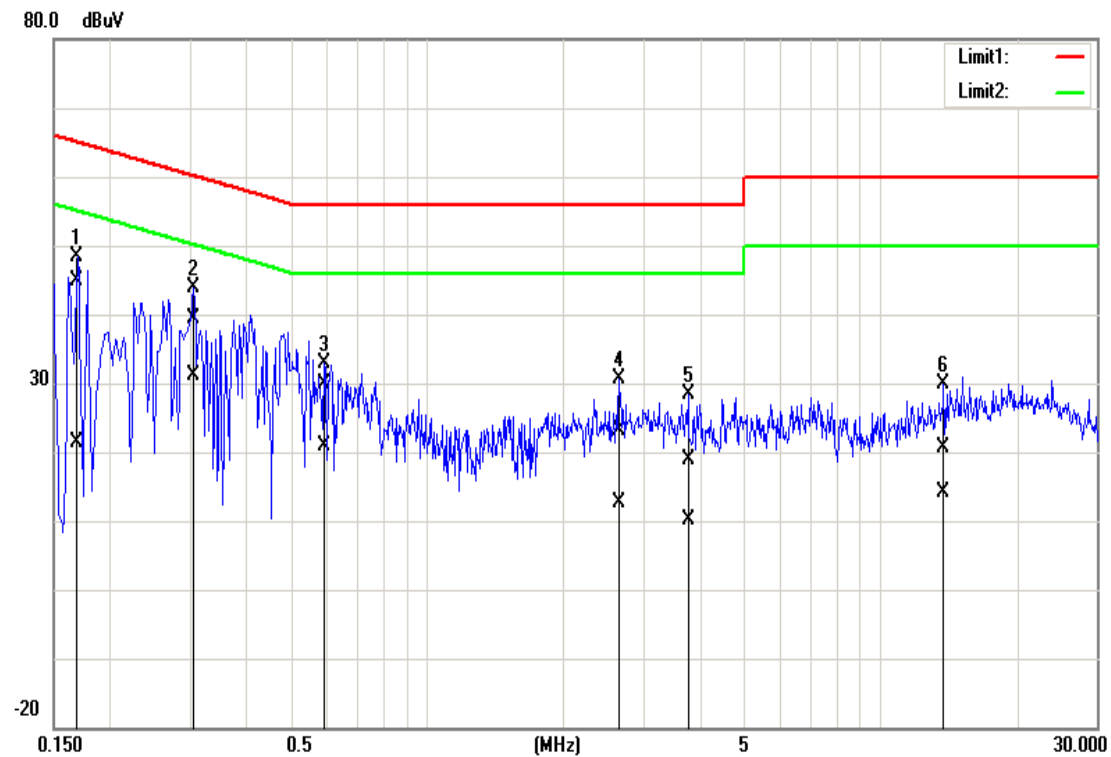
Remark:

1. Measuring frequencies from 0.15 MHz to 30MHz.
2. The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Quasi-peak detector and average detector.
3. The IF bandwidth of SPA between 0.15MHz to 30MHz was 10kHz; the IF bandwidth of Test Receiver between 0.15MHz to 30MHz was 9kHz;
4. L1 = Line One (Live Line) / L2 = Line Two (Neutral Line)



Test Plots

Conducted emissions (Line 1)



Conducted emissions (Line 2)

