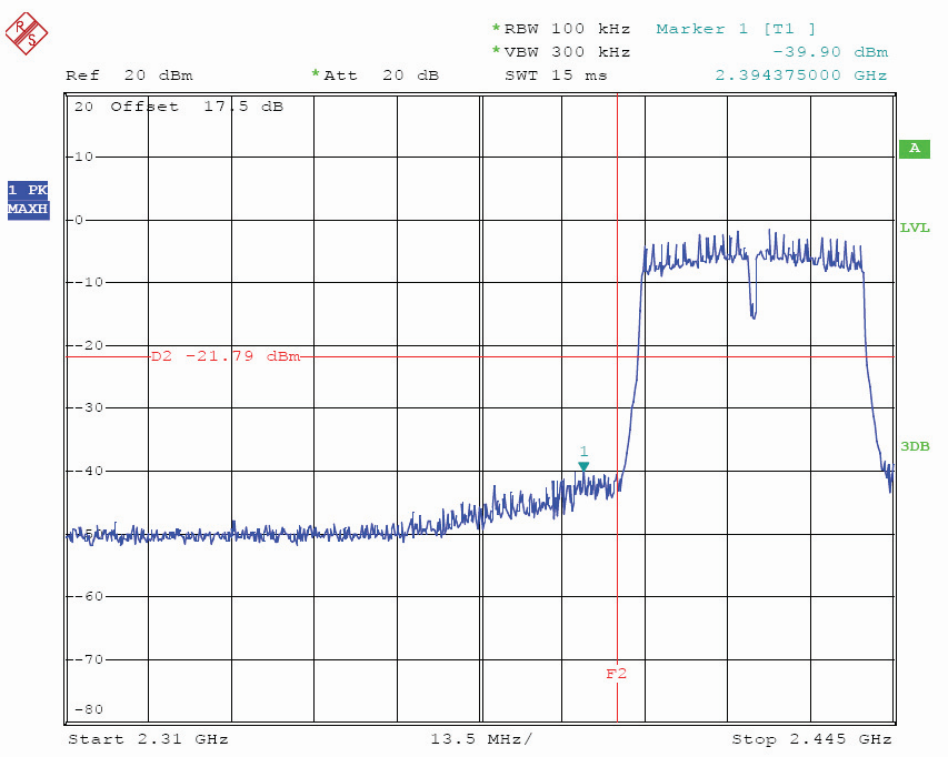
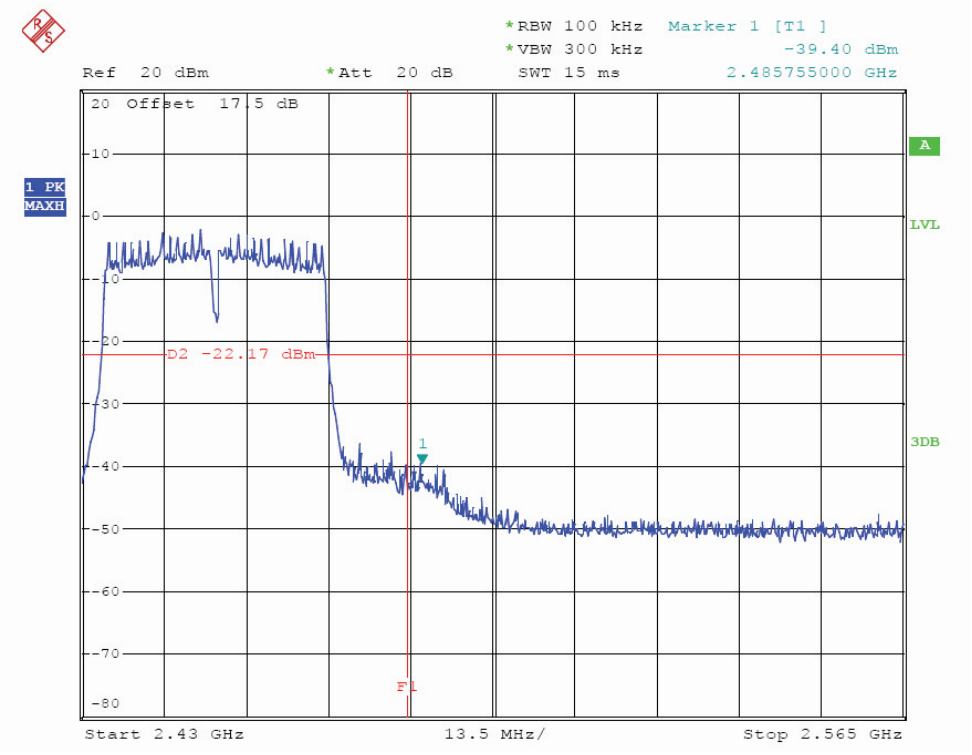
802.11n(HT40) 2422MHz



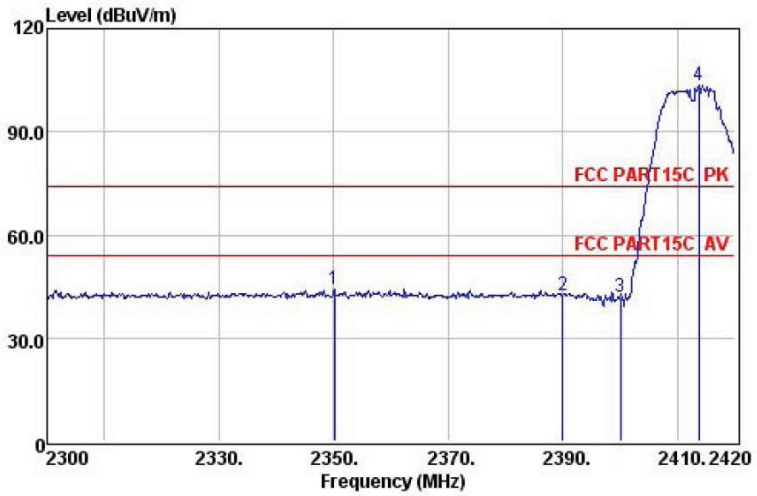
802.11n(HT40) 2452MHz



For radiated test as follows:

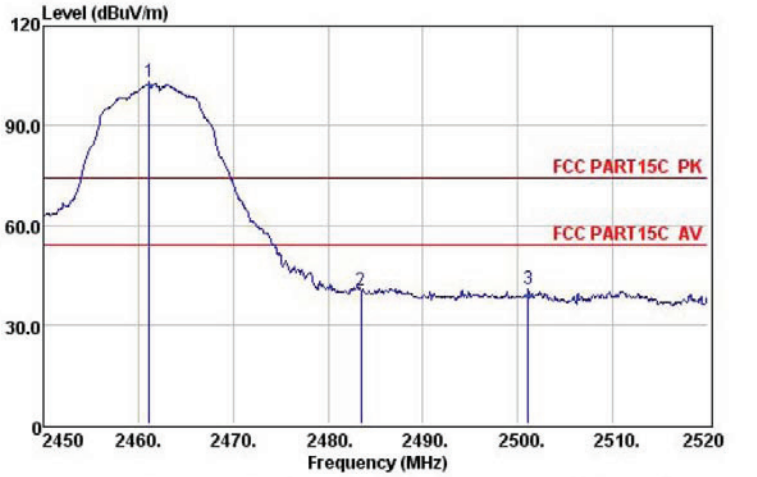
Note: we pretest horizontal and vertical polarizations, the worst was vertical polarizations and recorded in test report.

802.11b 2412MHz



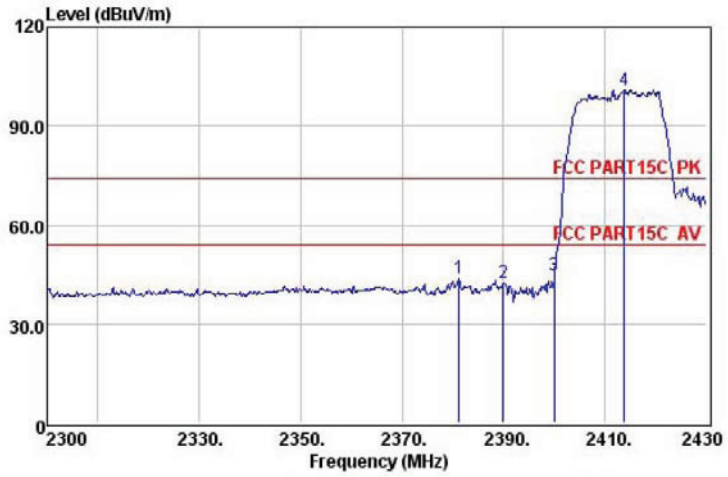
		Freq	Preamp Factor	Read Level	Cable Loss	Antenna Factor	Level	Limit Line	Over Limit	Remark
		MHz	dB	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1		2350.16	26.30	34.47	7.25	28.68	44.10	74.00	-29.90	Peak
2		2390.00	26.32	32.58	7.34	28.72	42.32	74.00	-31.68	Peak
3		2400.00	26.32	32.08	7.34	28.72	41.82	74.00	-32.18	Peak
4	*	2413.76	26.32	93.74	7.39	28.73	103.54	74.00	29.54	Peak

802.11b 2462MHz



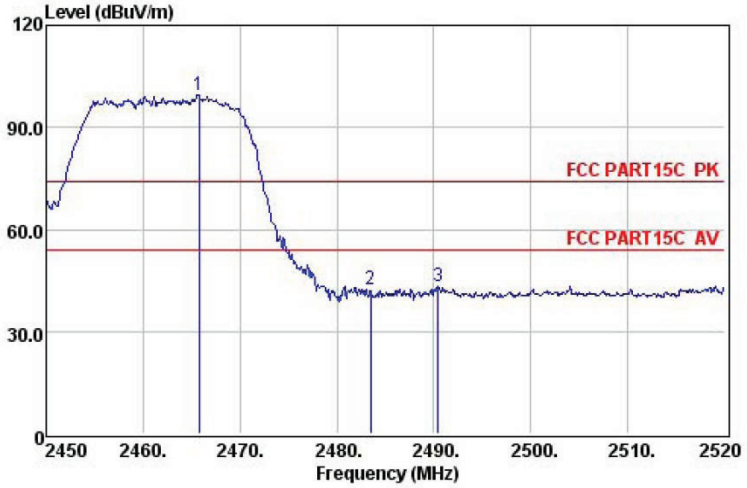
		Freq	Preamp Factor	Read Level	Cable Loss	Antenna Factor	Level	Limit Line	Over Limit	Remark
		MHz	dB	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	*	2461.13	26.34	92.94	7.52	28.77	102.89	74.00	28.89	Peak
2		2483.50	26.34	30.11	7.57	28.79	40.13	74.00	-33.87	Peak
3		2501.10	26.35	30.70	7.61	28.80	40.76	74.00	-33.24	Peak

802.11g 2412MHz



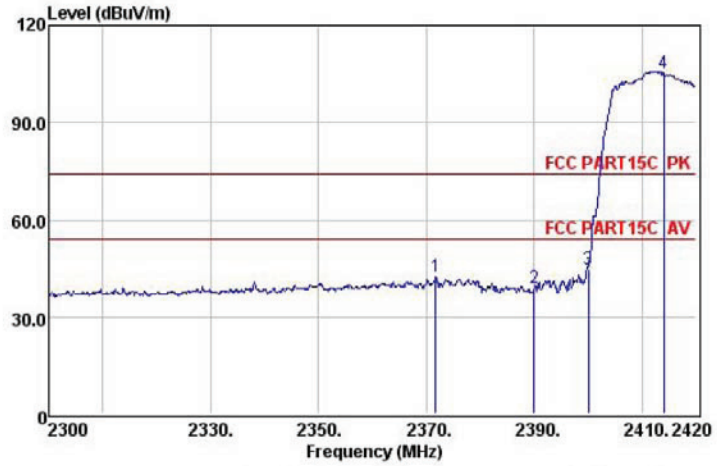
		Freq	Preamp Factor	Read Level	Cable Loss	Antenna Factor	Level	Limit Line	Over Limit	Remark
		MHz	dB	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1		2381.25	26.31	33.98	7.30	28.70	43.67	74.00	-30.33	Peak
2		2390.00	26.32	32.77	7.34	28.72	42.51	74.00	-31.49	Peak
3		2400.00	26.32	34.77	7.34	28.72	44.51	74.00	-29.49	Peak
4	*	2413.75	26.32	91.17	7.39	28.73	100.97	74.00	26.97	Peak

802.11g 2462MHz



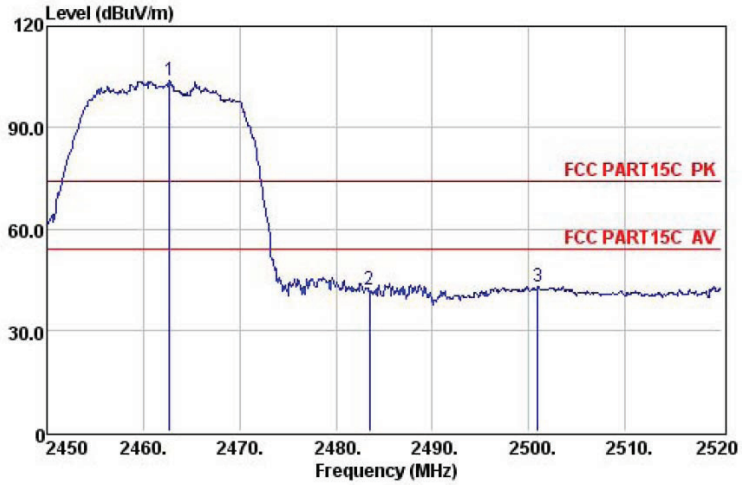
		Freq	Preamp Factor	Read Level	Cable Loss	Antenna Factor	Level	Limit Line	Over Limit	Remark
		MHz	dB	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	*	2465.75	26.34	89.46	7.52	28.77	99.41	74.00	25.41	Peak
2		2483.50	26.34	32.27	7.57	28.79	42.29	74.00	-31.71	Peak
3		2490.46	26.35	33.13	7.57	28.80	43.15	74.00	-30.85	Peak

802.11n(HT20) 2412MHz



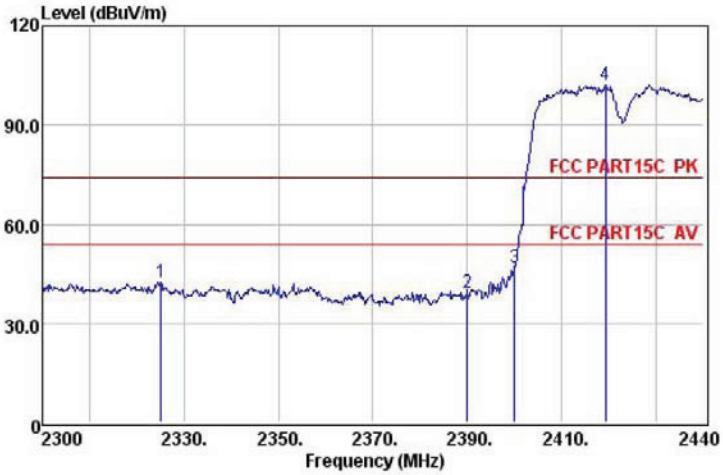
	Freq	Preamp Factor	Read Level	Cable Loss	Antenna Factor	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	2371.76	26.31	32.63	7.30	28.70	42.32	74.00	-31.68	Peak
2	2390.00	26.32	29.00	7.34	28.72	38.74	74.00	-35.26	Peak
3	2400.00	26.32	34.96	7.34	28.72	44.70	74.00	-29.30	Peak
4 *	2414.00	26.32	95.30	7.39	28.73	105.10	74.00	31.10	Peak

802.11n(HT20) 2462MHz



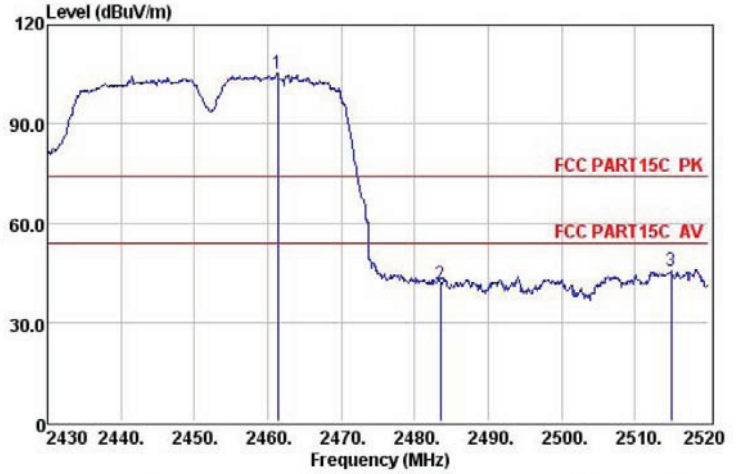
	Freq	Preamp Factor	Read Level	Cable Loss	Antenna Factor	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1 *	2462.74	26.34	93.78	7.52	28.77	103.73	74.00	29.73	Peak
2	2483.50	26.34	32.01	7.57	28.79	42.03	74.00	-31.97	Peak
3	2500.96	26.35	32.96	7.61	28.80	43.02	74.00	-30.98	Peak

802.11n(HT40) 2422MHz



	Freq	Preamp Factor	Read Level	Cable Loss	Antenna Factor	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	2325.20	26.30	32.94	7.16	28.66	42.46	74.00	-31.54	Peak
2	2390.00	26.32	29.61	7.34	28.72	39.35	74.00	-34.65	Peak
3	2400.00	26.32	36.94	7.34	28.72	46.68	74.00	-27.32	Peak
4 *	2419.28	26.32	92.20	7.39	28.73	102.00	74.00	28.00	Peak

802.11n(HT40) 2452MHz



	Freq	Preamp Factor	Read Level	Cable Loss	Antenna Factor	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1 *	2461.32	26.34	95.28	7.52	28.77	105.23	74.00	31.23	Peak
2	2483.50	26.34	31.61	7.57	28.79	41.63	74.00	-32.37	Peak
3	2514.96	26.35	35.34	7.66	28.84	45.49	74.00	-28.51	Peak

7. 6DB OCCUPY BANDWIDTH

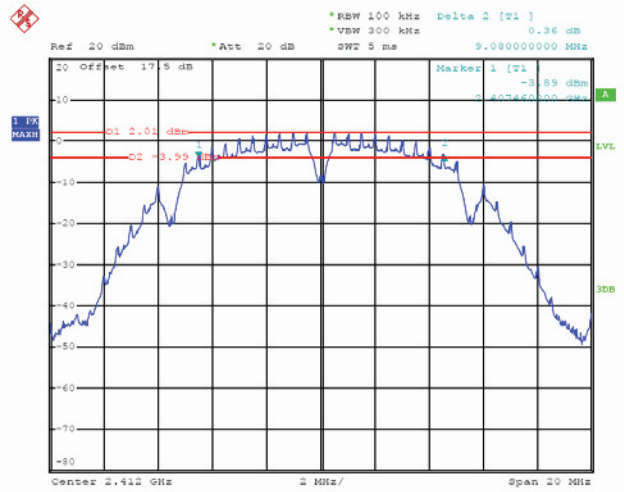
7.1. Limits

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz
Test data:

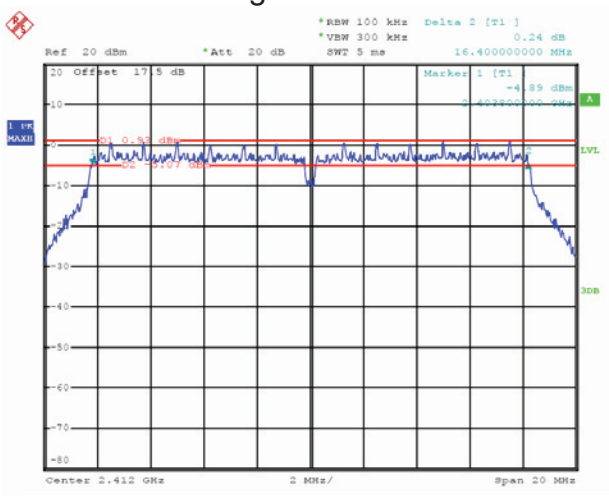
	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11b	2412	9.08	>0.5	Pass
	2437	9.04	>0.5	Pass
	2462	9.06	>0.5	Pass
802.11g	2412	16.40	>0.5	Pass
	2437	16.44	>0.5	Pass
	2462	16.42	>0.5	Pass
802.11n(HT20)	2412	17.64	>0.5	Pass
	2437	17.64	>0.5	Pass
	2462	17.64	>0.5	Pass
802.11n(HT40)	2422	35.44	>0.5	Pass
	2437	35.44	>0.5	Pass
	2452	35.56	>0.5	Pass

Test plot as follows:

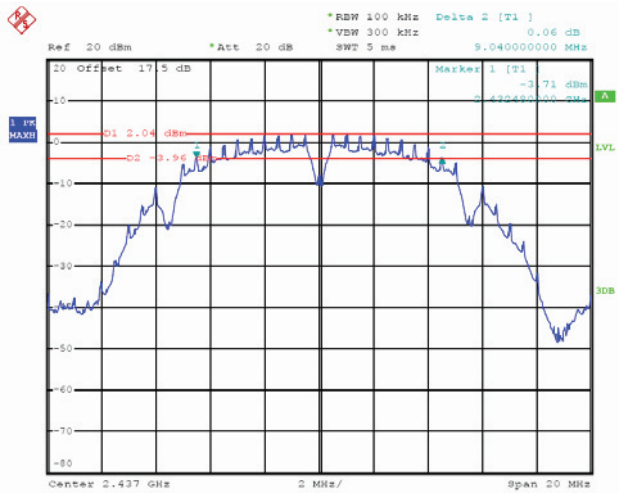
802.11b 2412MHz



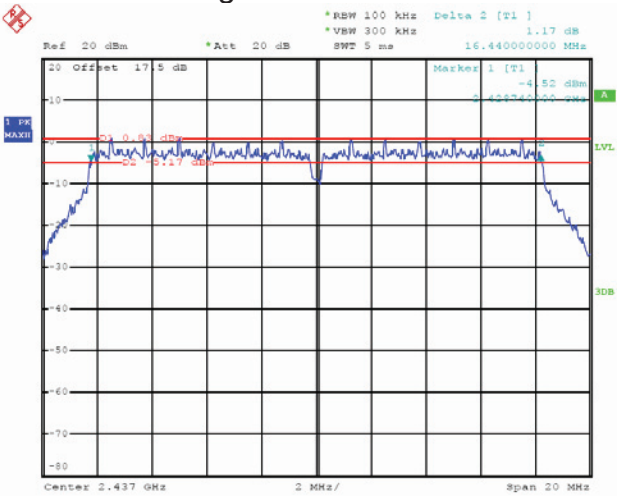
802.11g 2412MHz



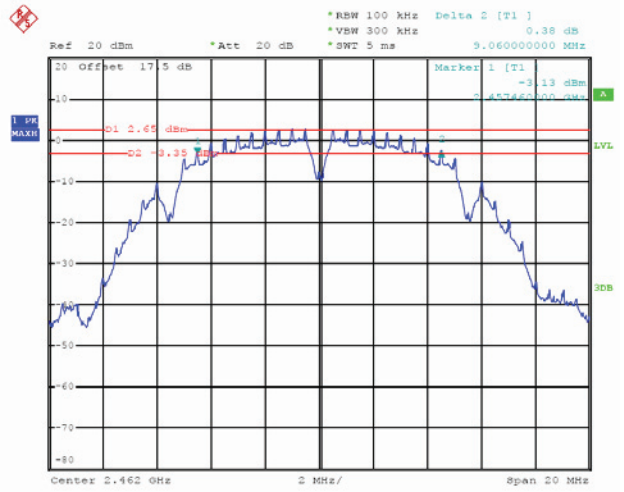
802.11b 2437MHz



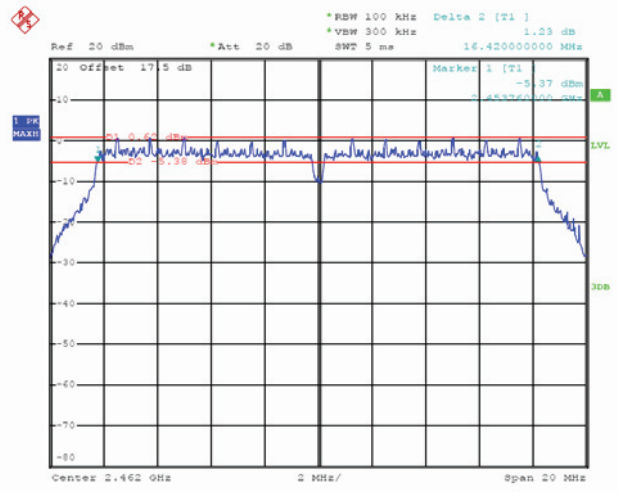
802.11g 2437MHz



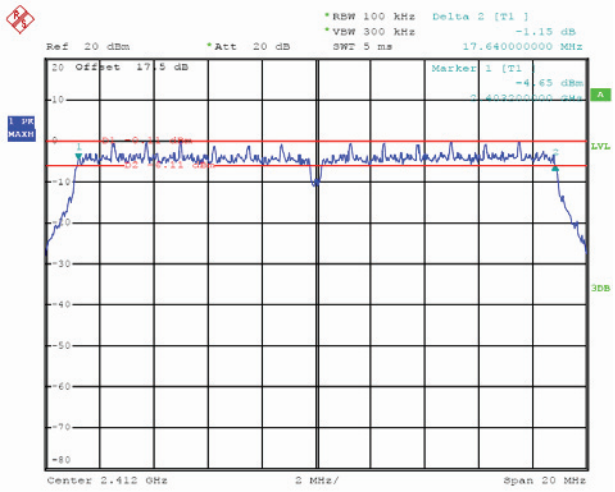
802.11b 2462MHz



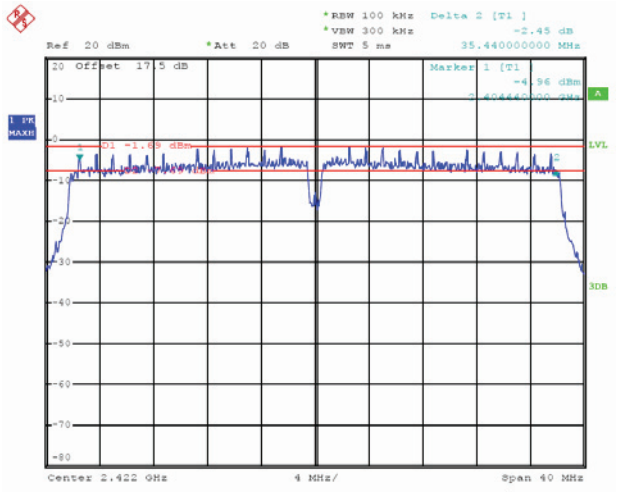
802.11g 2462MHz



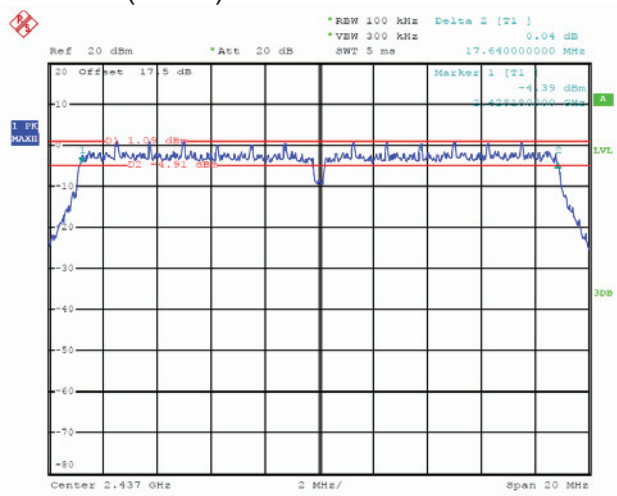
802.11n (HT20) 2412MHz



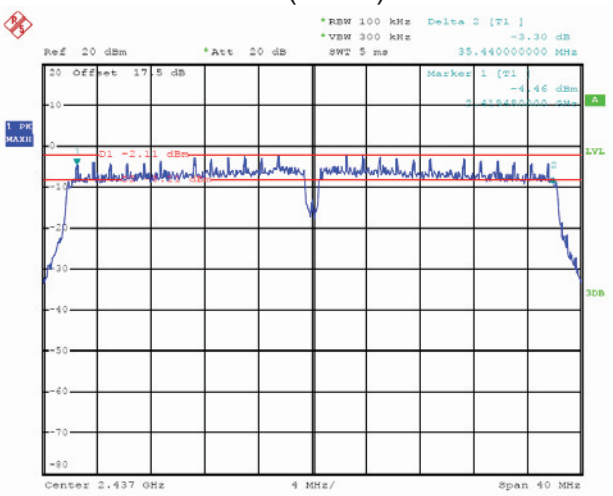
802.11n (HT40) 2422MHz



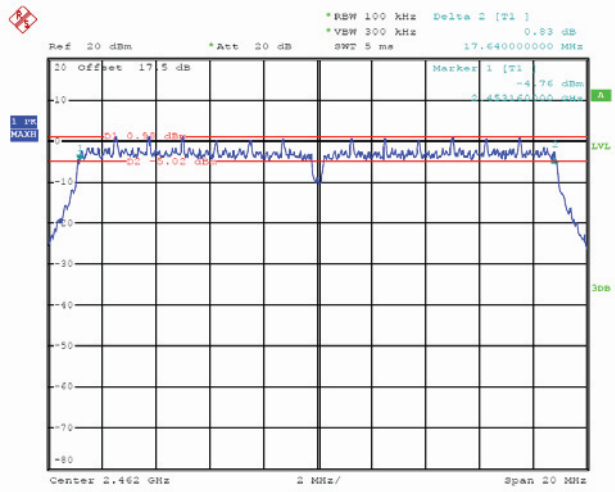
802.11n (HT20) 2437MHz



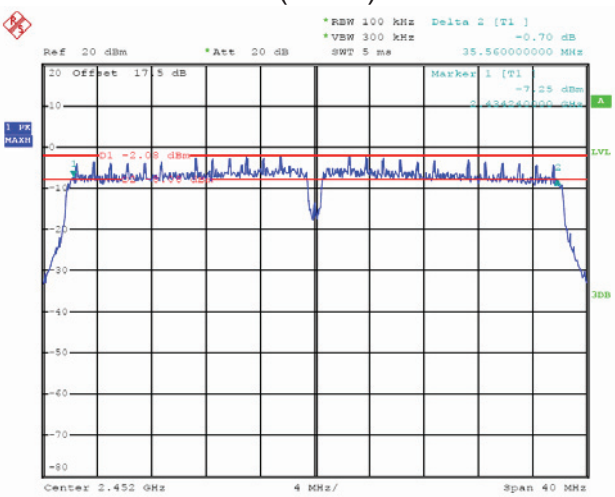
802.11n (HT40) 2437MHz



802.11n(HT20) 2462MHz



802.11n (HT40)2452MHz



8. OUTPUT POWER TEST

8.1. Limits

For systems using digital modulation in the 2400~2483.5MHz, The out put Power shall not exceed 1W (30dBm)

8.2. Test setup

1. The Transmitter output (antenna port) was connected to the power meter.
2. Turn on the EUT and power meter and then record the power value.
3. Repeat above procedures on all channels needed to be tested.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

8.3. Test result

	Channel Frequency (MHz)	Output Power(dBm)	Limit (dBm)	Result
802.11b	2412	17.24	30	Pass
	2437	17.37	30	Pass
	2462	17.32	30	Pass
802.11g	2412	14.18	30	Pass
	2437	14.06	30	Pass
	2462	14.11	30	Pass
802.11n(HT20)	2412	12.13	30	Pass
	2437	12.08	30	Pass
	2462	12.12	30	Pass
802.11n(HT40)	2422	12.05	30	Pass
	2437	11.97	30	Pass
	2452	12.01	30	Pass

9. POWER SPECTRAL DENSITY TEST

9.1. Limits

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

9.2. Test setup

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS channel bandwidth.
3. Set the RBW =3kHz.
4. Set the VBW ⩾3 times RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level.

9.3. Test result

	Channel Frequency (MHz)	Power density (dBm/3kHz)	Limit (dBm/3kHz)	Result
802.11b	2412	-11.66	8	Pass
	2437	-5.66	8	Pass
	2462	-11.65	8	Pass
802.11g	2412	-13.58	8	Pass
	2437	-13.01	8	Pass
	2462	-13.03	8	Pass
802.11n (HT20)	2412	-13.32	8	Pass
	2437	-13.43	8	Pass
	2462	-12.18	8	Pass
802.11n (HT40)	2422	-15.96	8	Pass
	2437	-17.21	8	Pass
	2452	-16.57	8	Pass