

### 7.3. 6dB Bandwidth Measurement

#### 7.3.1. Test Limit

The minimum 6dB bandwidth shall be at least 500 kHz.

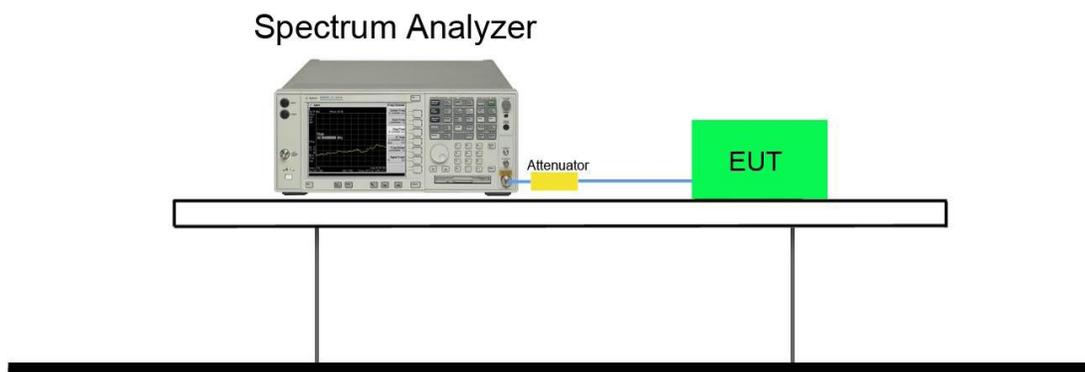
#### 7.3.2. Test Procedure used

KDB 789033 D02v01r01 - Section C.2

#### 7.3.3. Test Setting

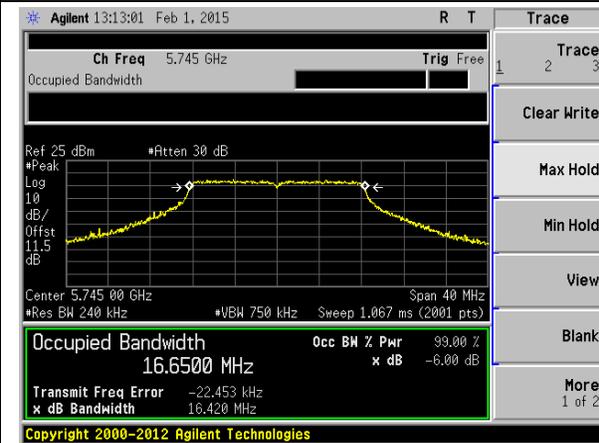
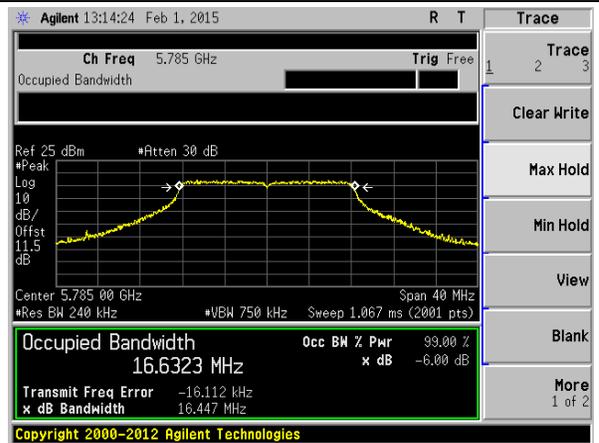
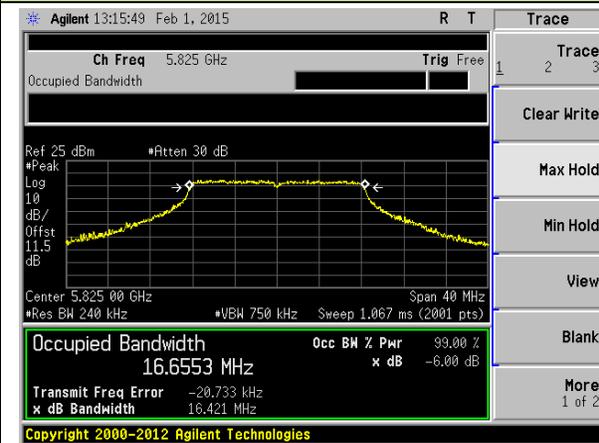
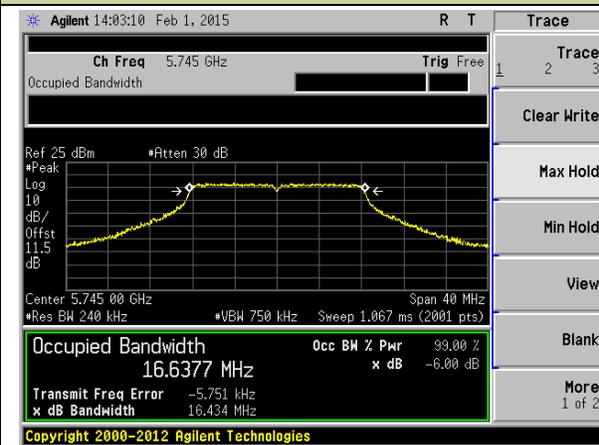
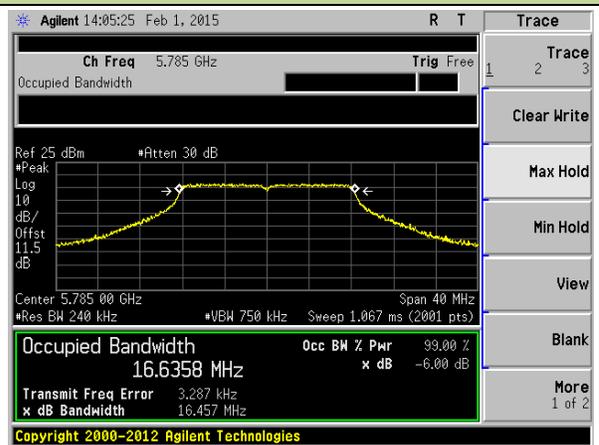
1. Set center frequency to the nominal EUT channel center frequency.
2. RBW = 100 kHz.
3. VBW  $\geq 3 \times$  RBW.
4. Detector = Peak.
5. Trace mode = max hold.
6. Sweep = auto couple.
7. Allow the trace to stabilize.
8. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

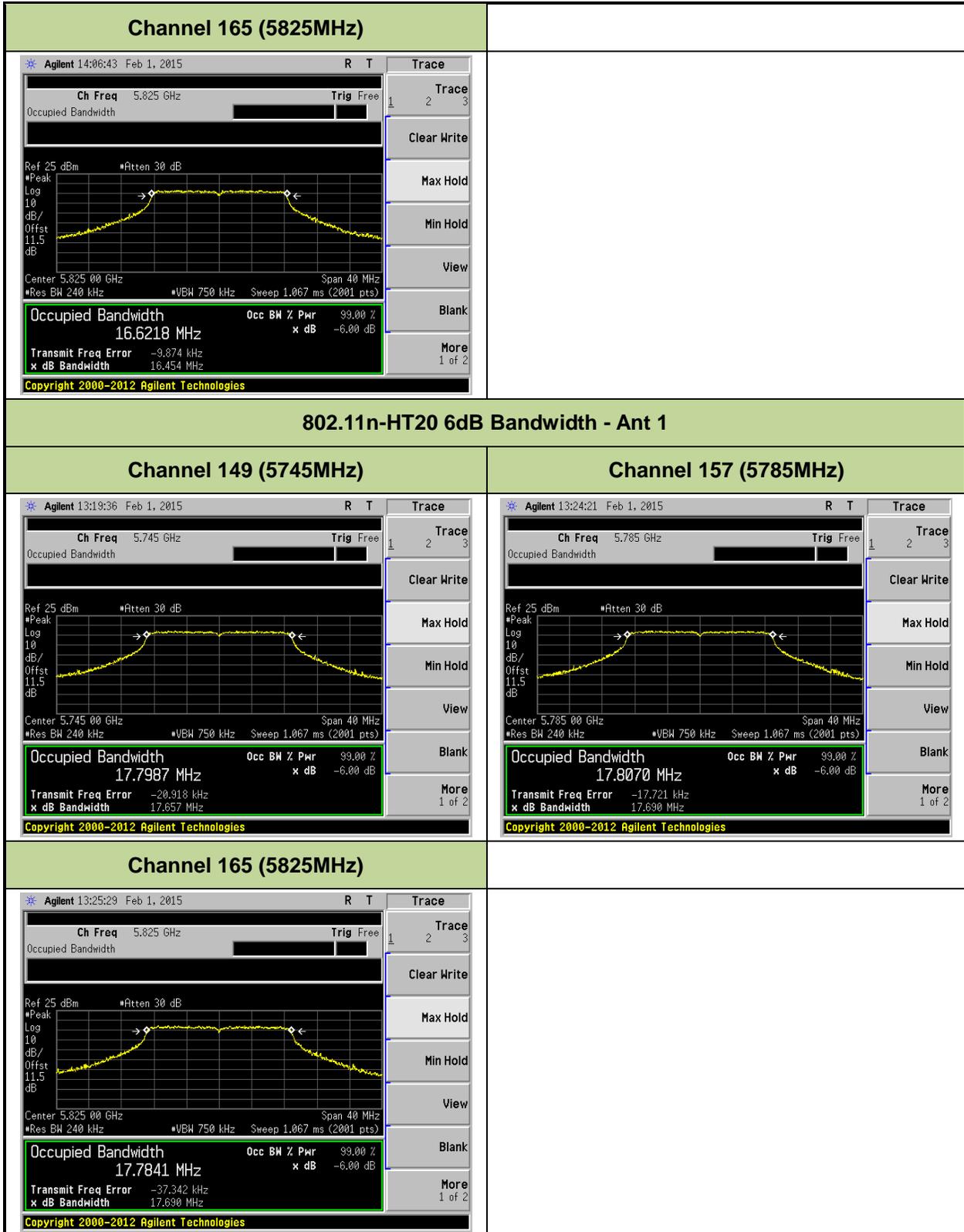
#### 7.3.4. Test Setup

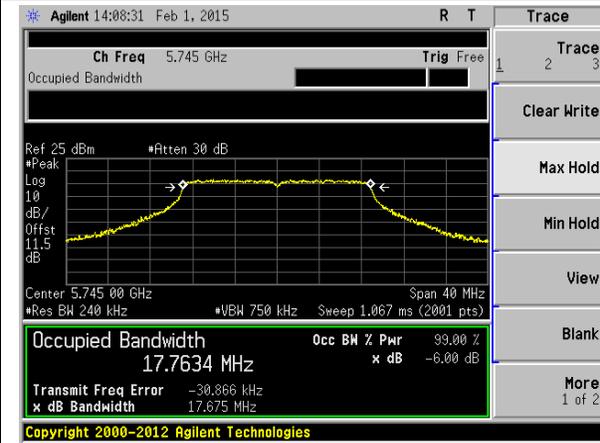
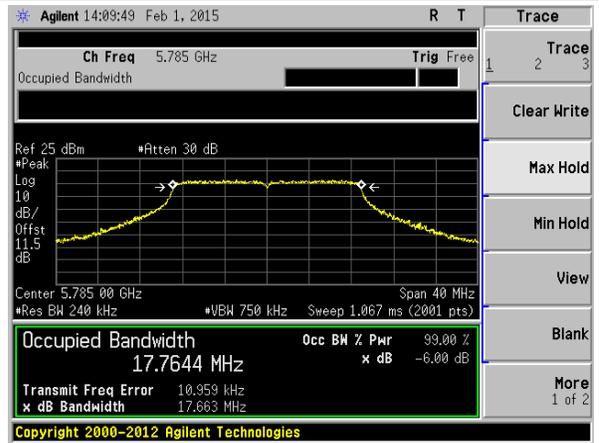
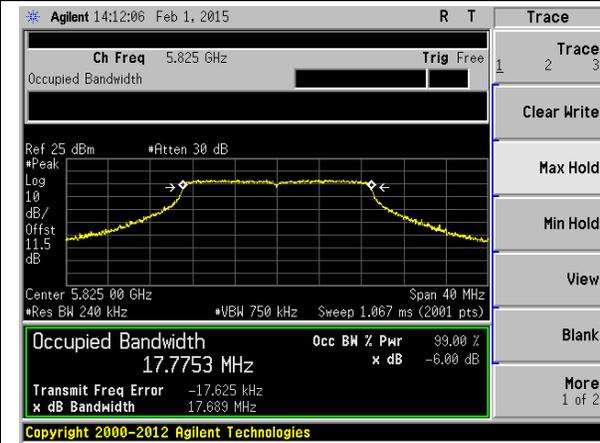
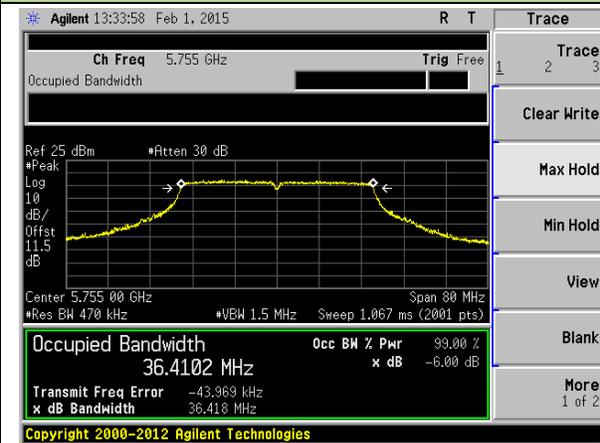
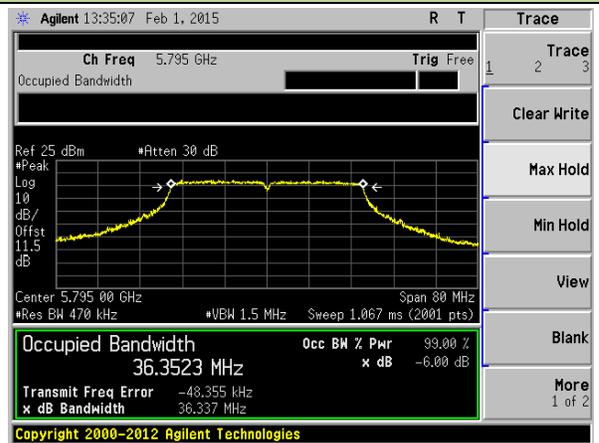


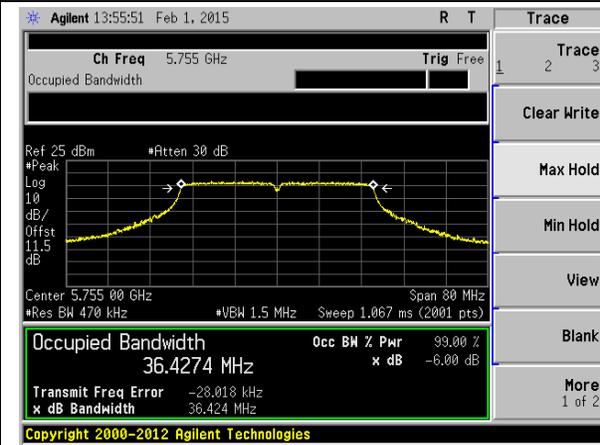
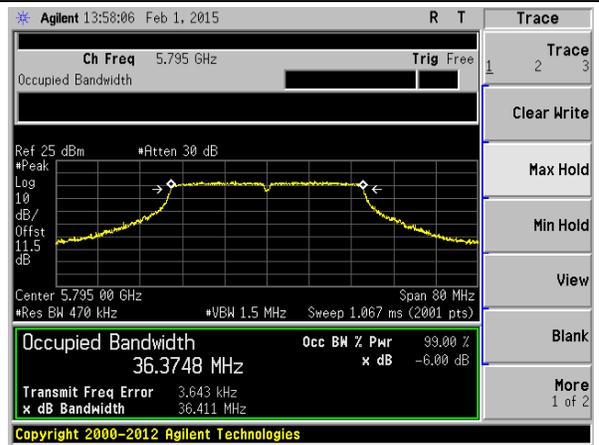
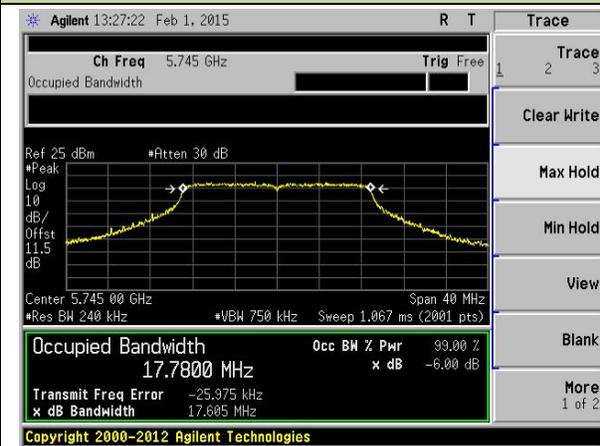
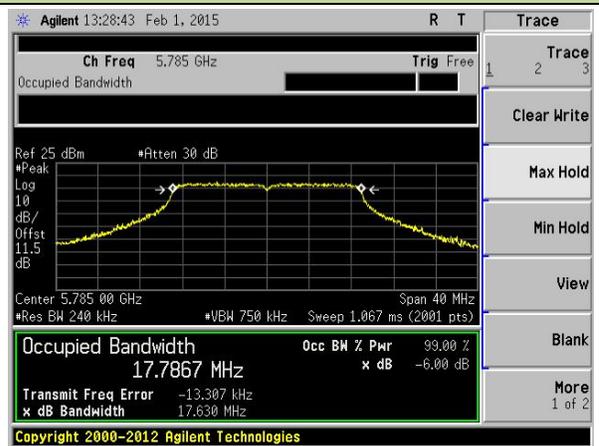
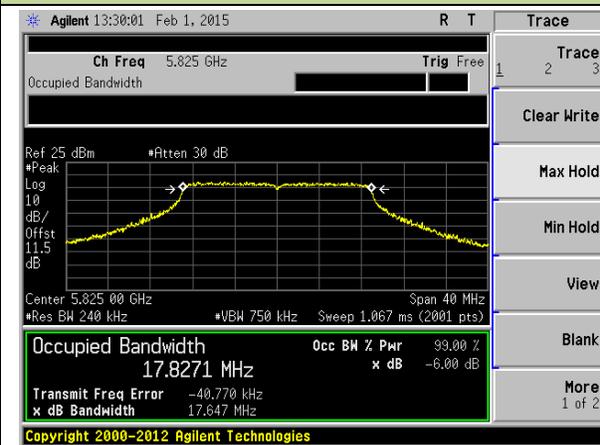
**7.3.5. Test Result**

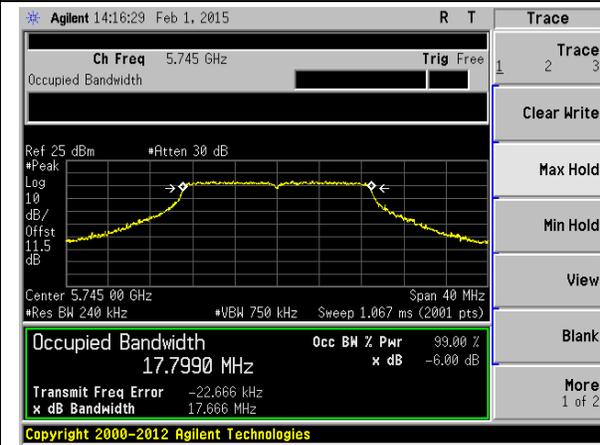
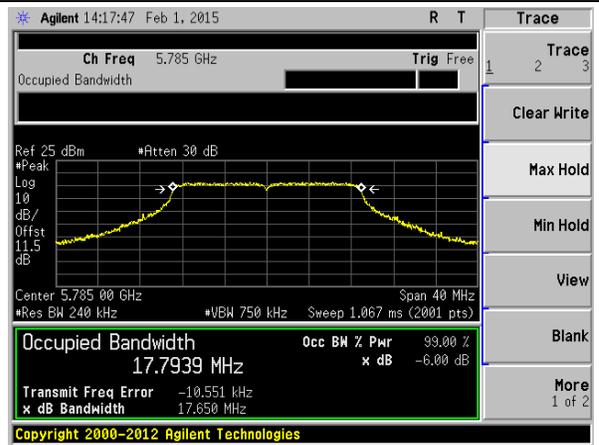
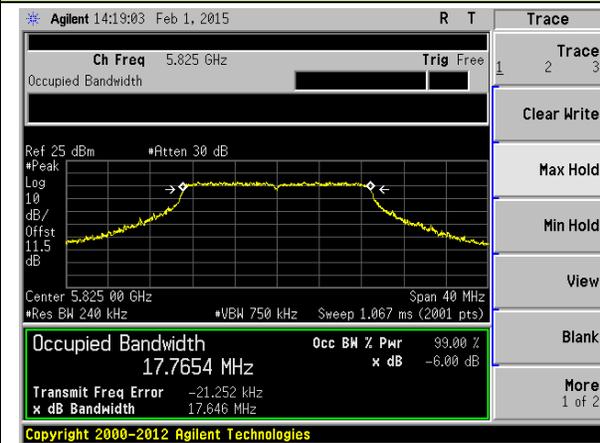
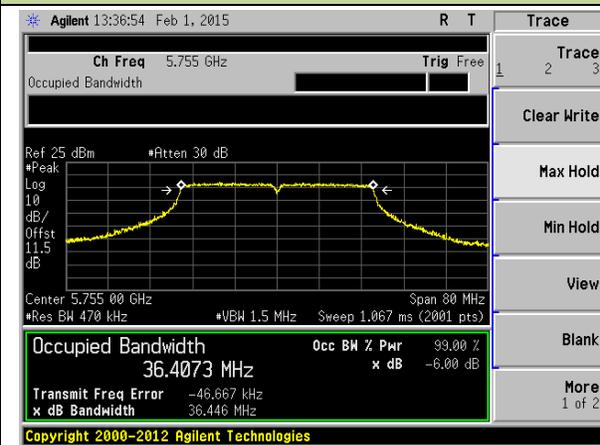
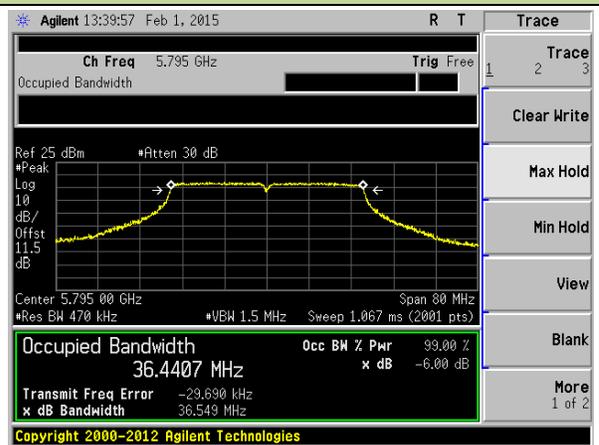
Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
<b>Ant 1</b>						
802.11a	6	149	5745	16.650	≥0.5	Pass
802.11a	6	157	5785	16.632	≥0.5	Pass
802.11a	6	165	5825	16.655	≥0.5	Pass
802.11n-HT20	13	149	5745	17.800	≥0.5	Pass
802.11n-HT20	13	157	5785	17.807	≥0.5	Pass
802.11n-HT20	13	165	5825	17.784	≥0.5	Pass
802.11n-HT40	27	151	5755	36.410	≥0.5	Pass
802.11n-HT40	27	159	5795	36.352	≥0.5	Pass
802.11ac-VHT20	13	149	5745	17.780	≥0.5	Pass
802.11ac-VHT20	13	157	5785	17.787	≥0.5	Pass
802.11ac-VHT20	13	165	5825	17.827	≥0.5	Pass
802.11ac-VHT40	27	151	5755	36.407	≥0.5	Pass
802.11ac-VHT40	27	159	5795	36.441	≥0.5	Pass
802.11ac-VHT80	58.6	155	5775	75.683	≥0.5	Pass
<b>Ant 2</b>						
802.11a	6	149	5745	16.638	≥0.5	Pass
802.11a	6	157	5785	16.636	≥0.5	Pass
802.11a	6	165	5825	16.622	≥0.5	Pass
802.11n-HT20	13	149	5745	17.763	≥0.5	Pass
802.11n-HT20	13	157	5785	17.764	≥0.5	Pass
802.11n-HT20	13	165	5825	17.775	≥0.5	Pass
802.11n-HT40	27	151	5755	36.427	≥0.5	Pass
802.11n-HT40	27	159	5795	36.375	≥0.5	Pass
802.11ac-VHT20	13	149	5745	17.799	≥0.5	Pass
802.11ac-VHT20	13	157	5785	17.794	≥0.5	Pass
802.11ac-VHT20	13	165	5825	17.765	≥0.5	Pass
802.11ac-VHT40	27	151	5755	36.424	≥0.5	Pass
802.11ac-VHT40	27	159	5795	36.371	≥0.5	Pass
802.11ac-VHT80	58.6	155	5775	75.733	≥0.5	Pass

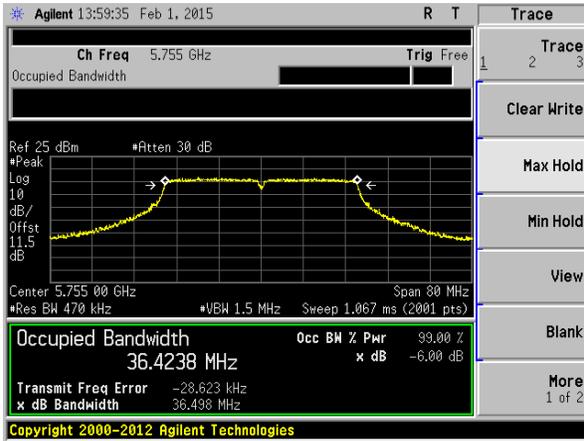
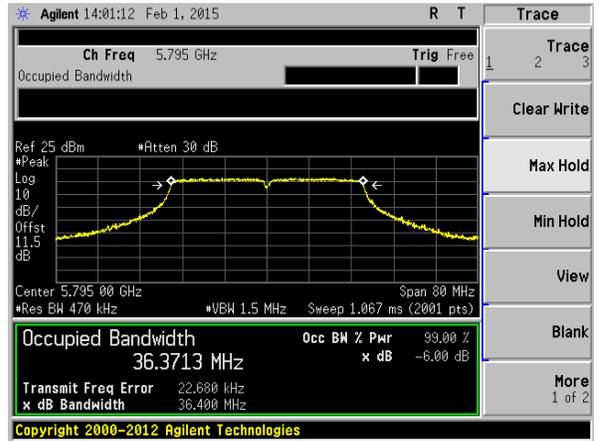
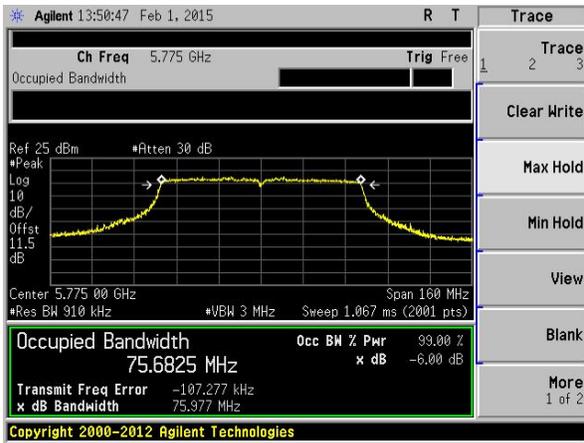
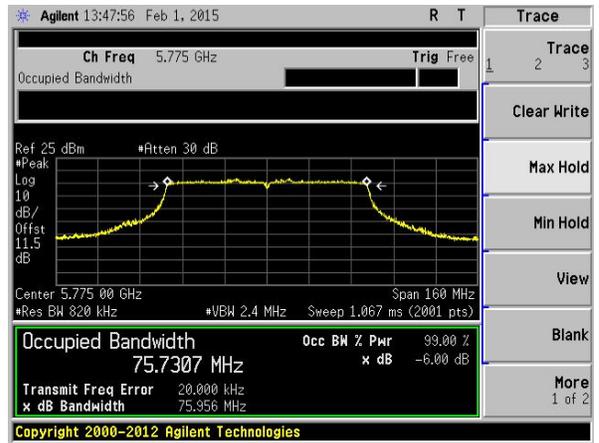
**802.11a 6dB Bandwidth - Ant 1**
**Channel 149 (5745MHz)**

**Channel 157 (5785MHz)**

**Channel 165 (5825MHz)**

**802.11a 6dB Bandwidth - Ant 2**
**Channel 149 (5745MHz)**

**Channel 157 (5785MHz)**




**802.11n-HT20 6dB Bandwidth - Ant 2**
**Channel 149 (5745MHz)**

**Channel 157 (5785MHz)**

**Channel 165 (5825MHz)**

**802.11n-HT40 6dB Bandwidth - Ant 1**
**Channel 151 (5755MHz)**

**Channel 159 (5795MHz)**


**802.11n-HT40 6dB Bandwidth - Ant 2**
**Channel 151 (5755MHz)**

**Channel 159 (5795MHz)**

**802.11ac-VHT20 6dB Bandwidth - Ant 1**
**Channel 149 (5745MHz)**

**Channel 157 (5785MHz)**

**Channel 165 (5825MHz)**


**802.11ac-VHT20 6dB Bandwidth - Ant 2**
**Channel 149 (5745MHz)**

**Channel 157 (5785MHz)**

**Channel 165 (5825MHz)**

**802.11ac-VHT40 6dB Bandwidth - Ant 1**
**Channel 151 (5755MHz)**

**Channel 159 (5795MHz)**


**802.11ac-VHT40 6dB Bandwidth - Ant 2**
**Channel 151 (5755MHz)**

**Channel 159 (5795MHz)**

**802.11ac-VHT80 6dB Bandwidth - Ant 1 & Ant 2**
**Channel 155 (5775MHz) - Ant 1**

**Channel 155 (5775MHz) - Ant 2**


## **7.4. Output Power Measurement**

### **7.4.1. Test Limit**

For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm).

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW (23.98dBm) or 11 dBm 10 log (26dB BW).

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm).

If transmitting antennas of directional gain greater than 6dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

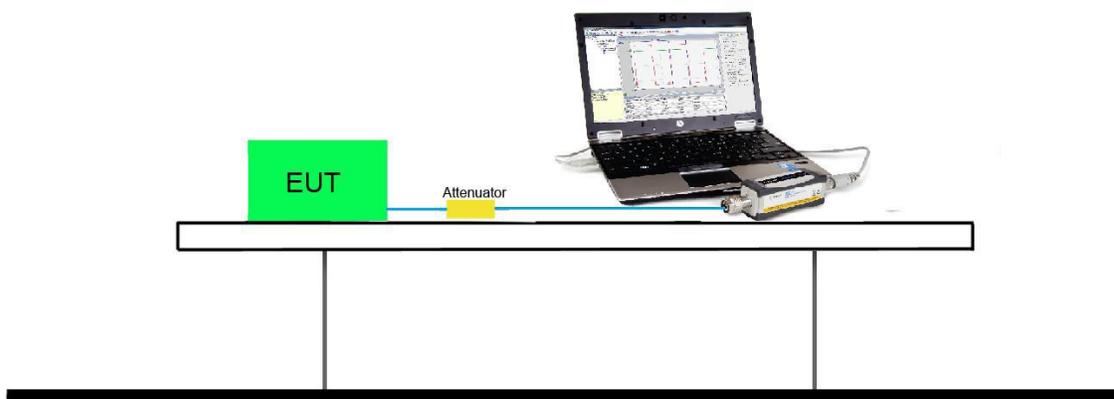
### **7.4.2. Test Procedure Used**

KDB 789033 D02v01r01 - Section E) 3) b) Method PM-G

### **7.4.3. Test Setting**

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

#### 7.4.4. Test Setup



### 7.4.5. Test Result

Power output test was verified over all data rates of each mode shown as below, and then choose the maximum power output (yellow marker) for final test of each channel.

N <sub>Tx</sub>	a	MCS Index for 802.11n	Data Rate (Mbps)			
			20MHz Bandwidth		40MHz Bandwidth	
			800ns GI	400ns GI	800ns GI	400ns GI
1	6	0	6.5	7.2	13.5	15.0
1	9	1	13.0	14.4	27	30.0
1	12	2	19.5	21.7	40.5	45.0
1	18	3	26.0	28.9	54	60.0
1	24	4	39.0	43.3	81	90.0
1	36	5	52.0	57.8	108	120.0
1	48	6	58.5	65.0	121.5	135.0
1	54	7	65.0	72.2	135	150.0
2	---	8	13.0	14.4	27	30.0
2	---	9	26.0	28.9	54	60.0
2	---	10	39.0	43.3	81	90.0
2	---	11	52.0	57.8	108	120.0
2	---	12	78.0	86.7	162	180.0
2	---	13	104.0	115.6	216	240.0
2	---	14	117.0	130.0	243	270.0
2	---	15	130.0	144.4	270	300.0

MCS Index for 802.11ac	N <sub>Tx</sub>	Data Rate (Mbps)					
		20MHz Bandwidth		40MHz Bandwidth		80MHz Bandwidth	
		800ns GI	400ns GI	800ns GI	400ns GI	800ns GI	400ns GI
0	1	6.5	7.2	13.5	15.0	29.3	32.5
1	1	13.0	14.4	27.0	30.0	58.5	65.0
2	1	19.5	21.7	40.5	45.0	87.8	97.5
3	1	26.0	28.9	54.0	60.0	117.0	130.0
4	1	39.0	43.3	81.0	90.0	175.5	195
5	1	52.0	57.8	108.0	120.0	234.0	260.0
6	1	58.5	65.0	121.5	135.0	263.3	292.5
7	1	65.0	72.2	135.0	150.0	292.5	325
8	1	78.0	86.7	162.0	180.0	351.0	390.0
9	1	--	--	180.0	200.0	390.0	433.3
10	2	13.0	14.4	27.0	30.0	58.6	65.0
11	2	26.0	28.8	54.0	60.0	117.0	130.0
12	2	39.0	43.4	81.0	90.0	175.6	195.0
13	2	52.0	57.8	108.0	120.0	234.0	260.0
14	2	78.0	86.6	162.0	180.0	351.0	390.0
15	2	104.0	115.6	216.0	240.0	468.0	520.0
16	2	117.0	130.0	243.0	270.0	526.6	585.0
17	2	130.0	144.4	270.0	300.0	585.0	650.0
18	2	156.0	173.4	324.0	360.0	702.0	780.0
19	2	--	--	360.0	400.0	780.0	866.6

**Output power at various data rates for Ant 1:**

Test Mode	Bandwidth (MHz)	Channel	Frequency (MHz)	Data Rate (Mbps)	Average Power (dBm)
802.11a	20	60	5300	6	20.51
				24	20.03
				54	19.69
802.11n	20	60	5300	6.5	20.45
				156	19.91
				260	19.58
802.11n	40	62	5310	13.5	19.10
				324	18.64
				540	18.33
802.11ac	20	60	5300	6.5	20.55
				156	20.07
				312	19.85
802.11ac	40	62	5310	13.5	17.19
				324	16.77
				720	16.29
802.11ac	80	58	5290	29.3	16.51
				702	16.07
				1560	15.61



Test Mode	N <sub>Tx</sub>	Data Rate (Mbps)	Channel No.	Freq. (MHz)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Total Average Power (dBm)	Limit (dBm)	Result
11a	1	6	36	5180	20.56	20.67	---	30	Pass
11a	1	6	44	5220	20.77	20.59	---	30	Pass
11a	1	6	48	5240	20.71	20.93	---	30	Pass
11a	1	6	52	5260	20.50	20.77	---	24	Pass
11a	1	6	60	5300	20.51	20.73	---	24	Pass
11a	1	6	64	5320	20.65	20.85	---	24	Pass
11a	1	6	100	5500	20.74	19.54	---	24	Pass
11a	1	6	120	5600	20.06	20.41	---	24	Pass
11a	1	6	140	5700	20.26	19.18	---	24	Pass
11a	1	6	149	5745	20.05	18.77	---	30	Pass
11a	1	6	157	5785	19.37	17.87	---	30	Pass
11a	1	6	165	5825	18.37	17.43	---	30	Pass
11n-HT20	1	6.5	36	5180	20.72	20.58	---	30	Pass
11n-HT20	1	6.5	44	5220	20.71	20.52	---	30	Pass
11n-HT20	1	6.5	48	5240	20.72	20.80	---	30	Pass
11n-HT20	1	6.5	52	5260	20.40	20.59	---	24	Pass
11n-HT20	1	6.5	60	5300	20.45	20.65	---	24	Pass
11n-HT20	1	6.5	64	5320	20.52	20.71	---	24	Pass
11n-HT20	1	6.5	100	5500	20.68	19.44	---	24	Pass
11n-HT20	1	6.5	120	5600	19.98	20.25	---	24	Pass
11n-HT20	1	6.5	140	5700	20.14	19.13	---	24	Pass
11n-HT20	1	6.5	149	5745	20.02	18.73	---	30	Pass
11n-HT20	1	6.5	157	5785	19.40	17.84	---	30	Pass
11n-HT20	1	6.5	165	5825	18.45	17.28	---	30	Pass
11n-HT40	1	13.5	38	5190	17.07	18.98	---	30	Pass
11n-HT40	1	13.5	46	5230	18.10	20.10	---	30	Pass
11n-HT40	1	13.5	54	5270	18.91	20.14	---	24	Pass
11n-HT40	1	13.5	62	5310	19.10	20.35	---	24	Pass
11n-HT40	1	13.5	102	5510	20.69	19.48	---	24	Pass
11n-HT40	1	13.5	118	5590	20.51	20.23	---	24	Pass
11n-HT40	1	13.5	134	5670	20.51	19.24	---	24	Pass
11n-HT40	1	13.5	151	5755	19.53	18.57	---	30	Pass
11n-HT40	1	13.5	159	5795	18.89	17.67	---	30	Pass



11ac-VHT20	1	6.5	36	5180	20.74	20.66	---	30	Pass
11ac-VHT20	1	6.5	44	5220	20.86	20.55	---	30	Pass
11ac-VHT20	1	6.5	48	5240	20.74	20.72	---	30	Pass
11ac-VHT20	1	6.5	52	5260	20.57	20.62	---	24	Pass
11ac-VHT20	1	6.5	60	5300	20.55	20.58	---	24	Pass
11ac-VHT20	1	6.5	64	5320	20.66	20.68	---	24	Pass
11ac-VHT20	1	6.5	100	5500	20.63	19.44	---	24	Pass
11ac-VHT20	1	6.5	120	5600	20.02	20.23	---	24	Pass
11ac-VHT20	1	6.5	140	5700	20.82	19.11	---	24	Pass
11ac-VHT20	1	6.5	144	5720	20.58	18.89	---	24	Pass
11ac-VHT20	1	6.5	149	5745	20.03	18.71	---	30	Pass
11ac-VHT20	1	6.5	157	5785	19.32	17.78	---	30	Pass
11ac-VHT20	1	6.5	165	5825	18.43	17.25	---	30	Pass
11ac-VHT40	1	13.5	38	5190	17.09	19.95	---	30	Pass
11ac-VHT40	1	13.5	46	5230	18.15	20.02	---	30	Pass
11ac-VHT40	1	13.5	54	5270	17.95	20.09	---	24	Pass
11ac-VHT40	1	13.5	62	5310	17.19	20.22	---	24	Pass
11ac-VHT40	1	13.5	102	5510	20.74	19.42	---	24	Pass
11ac-VHT40	1	13.5	118	5590	20.58	20.24	---	24	Pass
11ac-VHT40	1	13.5	134	5670	20.50	19.22	---	24	Pass
11ac-VHT40	1	13.5	142	5710	20.51	19.07	---	24	Pass
11ac-VHT40	1	13.5	151	5755	19.61	18.55	---	30	Pass
11ac-VHT40	1	13.5	159	5795	18.88	17.77	---	30	Pass
11ac-VHT80	1	29.3	42	5210	15.66	17.65	---	30	Pass
11ac-VHT80	1	29.3	58	5290	16.51	19.74	---	30	Pass
11ac-VHT80	1	29.3	106	5530	17.97	18.39	---	30	Pass
11ac-VHT80	1	29.3	122	5610	19.14	19.63	---	30	Pass
11ac-VHT80	1	29.3	138	5690	20.24	18.80	---	30	Pass
11ac-VHT80	1	29.3	155	5775	18.86	17.53	---	24	Pass



Test Mode	N <sub>Tx</sub>	Data Rate (Mbps)	Channel No.	Freq. (MHz)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Total Average Power (dBm)	Limit (dBm)	Result
11a	2	6	36	5180	20.40	20.56	23.49	30	Pass
11a	2	6	44	5220	20.44	20.67	23.57	30	Pass
11a	2	6	48	5240	20.65	20.95	23.81	30	Pass
11a	2	6	52	5260	15.64	15.98	18.82	24	Pass
11a	2	6	60	5300	15.24	15.65	18.46	24	Pass
11a	2	6	64	5320	15.35	15.80	18.59	24	Pass
11a	2	6	100	5500	15.18	14.52	17.87	24	Pass
11a	2	6	120	5600	13.77	14.03	16.91	24	Pass
11a	2	6	140	5700	14.22	12.60	16.50	24	Pass
11a	2	6	149	5745	19.65	19.30	22.49	30	Pass
11a	2	6	157	5785	18.62	18.20	21.43	30	Pass
11a	2	6	165	5825	17.60	17.91	20.77	30	Pass
11n-HT20	2	13	36	5180	20.18	20.68	23.45	27.49	Pass
11n-HT20	2	13	44	5220	20.46	20.66	23.57	27.49	Pass
11n-HT20	2	13	48	5240	20.43	20.93	23.70	27.49	Pass
11n-HT20	2	13	52	5260	16.05	16.56	19.32	21.47	Pass
11n-HT20	2	13	60	5300	15.59	16.17	18.90	21.47	Pass
11n-HT20	2	13	64	5320	15.83	16.25	19.06	21.47	Pass
11n-HT20	2	13	100	5500	15.48	15.04	18.28	21.47	Pass
11n-HT20	2	13	120	5600	14.51	14.92	17.73	21.47	Pass
11n-HT20	2	13	140	5700	15.16	13.73	17.51	21.47	Pass
11n-HT20	2	13	149	5745	19.40	19.33	22.38	27.49	Pass
11n-HT20	2	13	157	5785	18.41	18.22	21.33	27.49	Pass
11n-HT20	2	13	165	5825	17.52	17.62	20.58	27.49	Pass
11n-HT40	2	27	38	5190	17.11	17.37	20.25	27.49	Pass
11n-HT40	2	27	46	5230	17.83	18.24	21.05	27.49	Pass
11n-HT40	2	27	54	5270	16.53	17.11	19.84	21.47	Pass
11n-HT40	2	27	62	5310	16.13	16.73	19.45	21.47	Pass
11n-HT40	2	27	102	5510	16.94	16.30	19.64	21.47	Pass
11n-HT40	2	27	118	5590	16.61	16.52	19.58	21.47	Pass
11n-HT40	2	27	134	5670	17.13	16.17	19.69	21.47	Pass
11n-HT40	2	27	151	5755	16.09	16.19	19.15	27.49	Pass
11n-HT40	2	27	159	5795	15.04	15.20	18.13	27.49	Pass



11ac-VHT20	2	13	36	5180	19.09	19.53	22.33	30	Pass
11ac-VHT20	2	13	44	5220	20.41	20.63	23.53	30	Pass
11ac-VHT20	2	13	48	5240	20.33	20.86	23.61	30	Pass
11ac-VHT20	2	13	52	5260	15.92	16.52	19.24	24	Pass
11ac-VHT20	2	13	60	5300	15.61	16.13	18.89	24	Pass
11ac-VHT20	2	13	64	5320	15.85	16.27	19.08	24	Pass
11ac-VHT20	2	13	100	5500	15.02	14.62	17.83	24	Pass
11ac-VHT20	2	13	120	5600	14.84	15.02	17.94	24	Pass
11ac-VHT20	2	13	140	5700	15.06	13.71	17.45	24	Pass
11ac-VHT20	2	13	144	5720	14.71	13.71	17.25	24	Pass
11ac-VHT20	2	13	149	5745	18.71	18.57	21.65	30	Pass
11ac-VHT20	2	13	157	5785	17.59	17.55	20.58	30	Pass
11ac-VHT20	2	13	165	5825	16.76	16.82	19.80	30	Pass
11ac-VHT40	2	27	38	5190	15.69	15.85	18.78	30	Pass
11ac-VHT40	2	27	46	5230	16.74	17.03	19.90	30	Pass
11ac-VHT40	2	27	54	5270	16.07	16.74	19.43	24	Pass
11ac-VHT40	2	27	62	5310	16.24	16.94	19.61	24	Pass
11ac-VHT40	2	27	102	5510	16.96	16.29	19.65	24	Pass
11ac-VHT40	2	27	118	5590	16.61	16.55	19.59	24	Pass
11ac-VHT40	2	27	134	5670	17.15	16.04	19.64	24	Pass
11ac-VHT40	2	27	142	5710	17.48	16.22	19.91	24	Pass
11ac-VHT40	2	27	151	5755	16.18	16.20	19.20	30	Pass
11ac-VHT40	2	27	159	5795	15.02	15.21	18.13	30	Pass
11ac-VHT80	2	58.6	42	5210	15.29	15.63	18.47	30	Pass
11ac-VHT80	2	58.6	58	5290	15.31	15.56	18.45	24	Pass
11ac-VHT80	2	58.6	106	5530	16.76	16.24	19.52	24	Pass
11ac-VHT80	2	58.6	122	5610	16.42	16.54	19.49	24	Pass
11ac-VHT80	2	58.6	138	5690	17.13	16.07	19.64	24	Pass
11ac-VHT80	2	58.6	155	5775	14.44	14.31	17.39	30	Pass

Note: The Total Average Power (dBm) = 10\*log{10<sup>(Ant 1 Average Power /10)</sup>+10<sup>(Ant 2 Average Power /10)</sup>}.

## 7.5. Transmit Power Control

### 7.5.1. Test Limit

The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm.

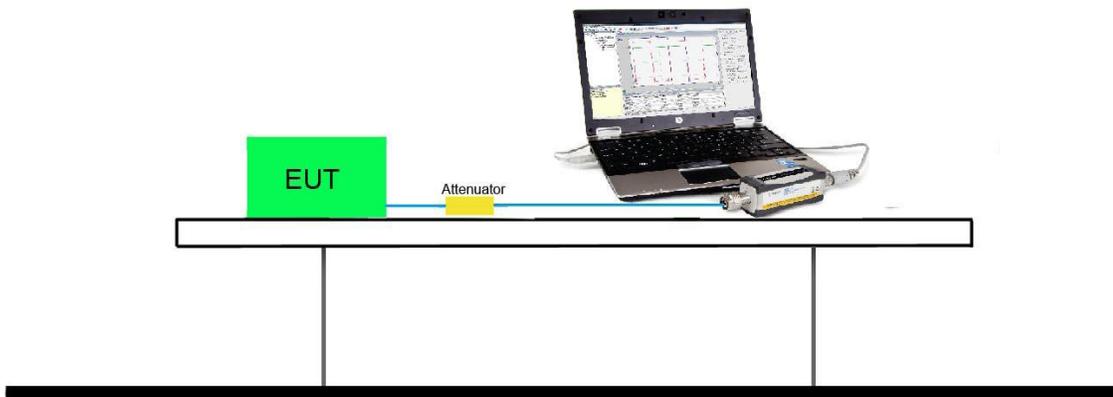
### 7.5.2. Test Procedure Used

KDB 789033 D02v01r01 - Section E) 3) b) Method PM-G

### 7.5.3. Test Setting

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

### 7.5.4. Test Setup



**7.5.5. Test Result**

Test Mode	N <sub>Tx</sub>	Data Rate (Mbps)	Channel No.	Freq. (MHz)	Ant 1 TPC Power (dBm)	Ant 2 TPC Power (dBm)	Total TPC Power (dBm)	Limit (dBm)	Result
11a	1	6	52	5260	16.44	16.73	23.13	24	Pass
11a	1	6	60	5300	16.45	16.67	23.07	24	Pass
11a	1	6	64	5320	16.61	16.77	23.17	24	Pass
11a	1	6	100	5500	16.67	16.45	23.07	24	Pass
11a	1	6	120	5600	16.55	16.37	22.95	24	Pass
11a	1	6	140	5700	16.69	16.68	23.09	24	Pass
11n-HT20	1	6.5	52	5260	16.84	16.57	23.24	24	Pass
11n-HT20	1	6.5	60	5300	16.41	16.58	22.98	24	Pass
11n-HT20	1	6.5	64	5320	16.48	16.71	23.11	24	Pass
11n-HT20	1	6.5	100	5500	16.61	16.41	23.01	24	Pass
11n-HT20	1	6.5	120	5600	16.42	16.72	23.12	24	Pass
11n-HT20	1	6.5	140	5700	16.55	16.60	23.00	24	Pass
11n-HT40	1	13.5	54	5270	16.39	16.62	23.02	24	Pass
11n-HT40	1	13.5	62	5310	16.53	16.79	23.19	24	Pass
11n-HT40	1	13.5	102	5510	16.64	16.44	23.04	24	Pass
11n-HT40	1	13.5	118	5590	16.47	16.69	23.09	24	Pass
11n-HT40	1	13.5	134	5670	16.46	16.69	23.09	24	Pass
11ac-VHT20	1	6.5	52	5260	16.53	16.53	22.93	24	Pass
11ac-VHT20	1	6.5	60	5300	16.47	16.53	22.93	24	Pass
11ac-VHT20	1	6.5	64	5320	16.61	16.62	23.02	24	Pass
11ac-VHT20	1	6.5	100	5500	16.57	16.37	22.97	24	Pass
11ac-VHT20	1	6.5	120	5600	16.48	16.67	23.07	24	Pass
11ac-VHT20	1	6.5	140	5700	16.80	16.60	23.20	24	Pass
11ac-VHT20	1	6.5	144	5720	16.52	16.87	23.27	24	Pass
11ac-VHT40	1	13.5	54	5270	16.36	16.56	22.96	24	Pass
11ac-VHT40	1	13.5	62	5310	16.64	16.64	23.04	24	Pass
11ac-VHT40	1	13.5	102	5510	16.74	16.42	23.14	24	Pass
11ac-VHT40	1	13.5	118	5590	16.55	16.68	23.08	24	Pass
11ac-VHT40	1	13.5	134	5670	16.50	16.65	23.05	24	Pass
11ac-VHT40	1	13.5	142	5710	16.46	16.57	22.97	24	Pass
11ac-VHT80	1	29.3	58	5290	15.96	16.66	23.06	24	Pass
11ac-VHT80	1	29.3	106	5530	16.43	16.87	23.27	24	Pass



11ac-VHT80	1	29.3	122	5610	16.63	16.60	23.03	24	Pass
11ac-VHT80	1	29.3	138	5690	16.70	16.27	23.10	24	Pass
11a	2	6	52	5260	10.63	10.91	23.14	24	Pass
11a	2	6	60	5300	10.21	10.51	22.73	24	Pass
11a	2	6	64	5320	10.22	10.67	22.82	24	Pass
11a	2	6	100	5500	11.15	10.51	23.21	24	Pass
11a	2	6	120	5600	10.72	10.95	23.21	24	Pass
11a	2	6	140	5700	11.20	9.58	22.84	24	Pass
11n-HT20	2	13	52	5260	10.49	11.00	23.12	24	Pass
11n-HT20	2	13	60	5300	10.55	11.12	23.21	24	Pass
11n-HT20	2	13	64	5320	10.27	10.72	22.87	24	Pass
11n-HT20	2	13	100	5500	10.90	10.52	23.08	24	Pass
11n-HT20	2	13	120	5600	10.43	10.91	23.05	24	Pass
11n-HT20	2	13	140	5700	11.06	9.60	22.76	24	Pass
11n-HT40	2	27	54	5270	10.43	11.02	23.11	24	Pass
11n-HT40	2	27	62	5310	10.01	10.66	22.72	24	Pass
11n-HT40	2	27	102	5510	10.89	10.25	22.95	24	Pass
11n-HT40	2	27	118	5590	10.59	10.43	22.88	24	Pass
11n-HT40	2	27	134	5670	11.09	10.05	22.97	24	Pass
11ac-VHT20	2	13	52	5260	10.38	11.00	23.07	24	Pass
11ac-VHT20	2	13	60	5300	10.53	11.07	23.18	24	Pass
11ac-VHT20	2	13	64	5320	10.33	10.68	22.88	24	Pass
11ac-VHT20	2	13	100	5500	10.99	10.51	23.13	24	Pass
11ac-VHT20	2	13	120	5600	10.22	10.45	22.71	24	Pass
11ac-VHT20	2	13	140	5700	10.94	9.62	22.70	24	Pass
11ac-VHT20	2	13	144	5720	11.10	10.08	22.99	24	Pass
11ac-VHT40	2	27	54	5270	10.55	11.23	23.27	24	Pass
11ac-VHT40	2	27	62	5310	10.19	10.92	22.94	24	Pass
11ac-VHT40	2	27	102	5510	10.90	10.18	22.93	24	Pass
11ac-VHT40	2	27	118	5590	10.59	10.46	22.90	24	Pass
11ac-VHT40	2	27	134	5670	11.05	10.04	22.94	24	Pass
11ac-VHT40	2	27	142	5710	11.46	10.21	23.25	24	Pass
11ac-VHT80	2	58.6	58	5290	10.21	10.53	22.74	24	Pass
11ac-VHT80	2	58.6	106	5530	10.71	10.21	22.84	24	Pass
11ac-VHT80	2	58.6	122	5610	10.32	10.45	22.76	24	Pass
11ac-VHT80	2	58.6	138	5690	11.02	10.07	22.94	24	Pass

Note: Total TPC Power (dBm) =  $10 \cdot \log\{10^{(\text{Ant 1 TPC Power}/10)} + 10^{(\text{Ant 2 TPC Power}/10)}\}$ .

## 7.6. Power Spectral Density Measurement

### 7.6.1. Test Limit

For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

If transmitting antennas of directional gain greater than 6dBi are used, the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

2Tx

**5.15-5.25GHz: Limit (dBm/MHz) = 17dBm/MHz - (8.51dBi - 6dBi) = 14.49dBm/MHz**

**5.25-5.35GHz: Limit (dBm/MHz) = 11dBm/MHz - (8.51dBi - 6dBi) = 8.49dBm/MHz**

**5.47-5.725GHz: Limit (dBm/MHz) = 11dBm/MHz - (8.51dBi - 6dBi) = 8.49dBm/MHz**

**5.725-5.85GHz: Limit (dBm/500kHz) = 30dBm/500kHz - (8.51dBi - 6dBi) = 27.49dBm/500kHz**

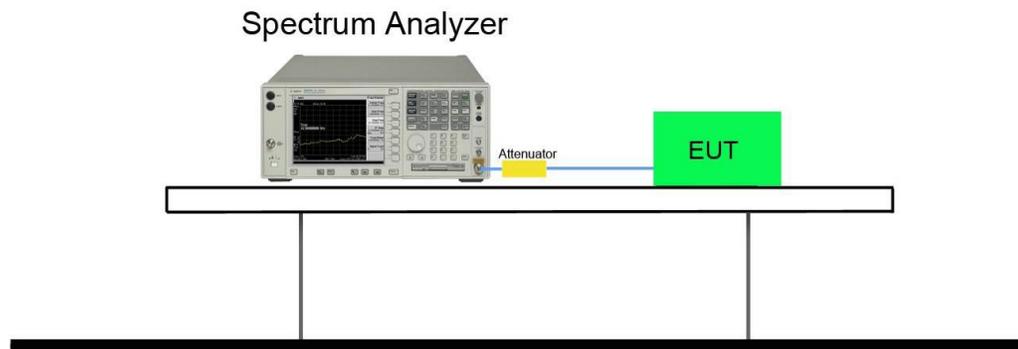
### 7.6.2. Test Procedure Used

KDB 789033 D02v01r01 - Section F

### 7.6.3. Test Setting

1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire 26dB EBW of the signal.
3. RBW = 1MHz, if measurement bandwidth of Maximum PSD is specified in 500 kHz,  
RBW = 100 kHz
4. VBW = 3MHz
5. Number of sweep points  $\geq 2 \times (\text{span} / \text{RBW})$
6. Detector = power averaging (RMS)
7. Sweep time = auto
8. Trigger = free run
9. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
10. Add  $10 \cdot \log(1/x)$ , where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add  $10 \cdot \log(1/0.25) = 6$  dB if the duty cycle is 25 percent.
11. When the measurement bandwidth of Maximum PSD is specified in 500 kHz, add a constant factor  $10 \cdot \log(500\text{kHz}/100\text{kHz}) = 7$  dB to the measured result

### 7.6.4. Test Setup



**7.6.5. Test Result**

Test Mode	N <sub>Tx</sub>	Data Rate (Mbps)	Channel No.	Freq. (MHz)	Ant 1 PSD (dBm)	Ant 2 PSD (dBm)	Duty Cycle (%)	Max PSD (dBm)	Limit (dBm /MHz)	Result
11a	1	6	36	5180	8.040	7.957	95.0	8.263	17	Pass
11a	1	6	44	5220	8.736	7.263	95.0	8.959	17	Pass
11a	1	6	48	5240	8.263	7.830	95.0	8.486	17	Pass
11a	1	6	52	5260	8.305	8.731	95.0	8.954	11	Pass
11a	1	6	60	5300	8.209	8.369	95.0	8.592	11	Pass
11a	1	6	64	5320	8.841	8.800	95.0	9.064	11	Pass
11a	1	6	100	5500	9.345	8.562	95.0	9.568	11	Pass
11a	1	6	120	5600	8.747	9.405	95.0	9.628	11	Pass
11a	1	6	140	5700	9.572	8.244	95.0	9.795	11	Pass
11n-HT20	1	6.5	36	5180	7.927	7.358	94.7	8.164	17	Pass
11n-HT20	1	6.5	44	5220	8.334	7.570	94.7	8.571	17	Pass
11n-HT20	1	6.5	48	5240	8.033	8.466	94.7	8.703	17	Pass
11n-HT20	1	6.5	52	5260	7.893	8.137	94.7	8.374	11	Pass
11n-HT20	1	6.5	60	5300	8.132	8.693	94.7	8.930	11	Pass
11n-HT20	1	6.5	64	5320	8.537	8.469	94.7	8.774	11	Pass
11n-HT20	1	6.5	100	5500	9.141	8.349	94.7	9.378	11	Pass
11n-HT20	1	6.5	120	5600	8.924	9.739	94.7	9.976	11	Pass
11n-HT20	1	6.5	140	5700	9.244	8.208	94.7	9.481	11	Pass
11n-HT40	1	13.5	38	5190	0.479	2.400	89.4	2.887	17	Pass
11n-HT40	1	13.5	46	5230	1.800	4.226	89.4	4.713	17	Pass
11n-HT40	1	13.5	54	5270	3.056	4.888	89.4	5.375	11	Pass
11n-HT40	1	13.5	62	5310	3.376	4.794	89.4	5.281	11	Pass
11n-HT40	1	13.5	102	5510	5.736	5.398	89.4	6.223	11	Pass
11n-HT40	1	13.5	118	5590	5.588	6.374	89.4	6.861	11	Pass
11n-HT40	1	13.5	134	5670	6.601	5.007	89.4	7.088	11	Pass
11ac-VHT20	1	6.5	36	5180	7.955	8.045	94.6	8.286	17	Pass
11ac-VHT20	1	6.5	44	5220	8.022	7.612	94.6	8.263	17	Pass
11ac-VHT20	1	6.5	48	5240	8.559	7.940	94.6	8.800	17	Pass
11ac-VHT20	1	6.5	52	5260	8.196	7.408	94.6	8.437	11	Pass
11ac-VHT20	1	6.5	60	5300	7.550	8.121	94.6	8.362	11	Pass
11ac-VHT20	1	6.5	64	5320	8.330	8.321	94.6	8.571	11	Pass
11ac-VHT20	1	6.5	100	5500	8.717	8.311	94.6	8.958	11	Pass



11ac-VHT20	1	6.5	120	5600	9.192	9.437	94.6	9.678	11	Pass
11ac-VHT20	1	6.5	140	5700	9.428	8.790	94.6	9.669	11	Pass
11ac-VHT20	1	6.5	144	5720	9.034	7.975	94.6	9.275	11	Pass
11ac-VHT40	1	13.5	38	5190	0.330	3.026	89.9	3.488	17	Pass
11ac-VHT40	1	13.5	46	5230	2.286	4.145	89.9	4.607	17	Pass
11ac-VHT40	1	13.5	54	5270	1.955	4.523	89.9	4.985	11	Pass
11ac-VHT40	1	13.5	62	5310	2.478	4.884	89.9	5.346	11	Pass
11ac-VHT40	1	13.5	102	5510	5.569	4.831	89.9	6.031	11	Pass
11ac-VHT40	1	13.5	118	5590	5.993	6.521	89.9	6.983	11	Pass
11ac-VHT40	1	13.5	134	5670	6.474	5.025	89.9	6.936	11	Pass
11ac-VHT40	1	13.5	142	5710	6.402	4.828	89.9	6.864	11	Pass
11ac-VHT80	1	29.3	42	5210	-4.244	-1.222	82.1	-0.365	17	Pass
11ac-VHT80	1	29.3	58	5290	-2.007	1.083	82.1	1.940	11	Pass
11ac-VHT80	1	29.3	106	5530	0.924	1.775	82.1	2.632	11	Pass
11ac-VHT80	1	29.3	122	5610	2.351	2.197	82.1	3.208	11	Pass
11ac-VHT80	1	29.3	138	5690	1.914	1.405	82.1	2.771	11	Pass
11a	2	6	36	5180	7.491	7.862	95.0	10.914	14.49	Pass
11a	2	6	44	5220	8.079	8.467	95.0	11.510	14.49	Pass
11a	2	6	48	5240	8.066	8.695	95.0	11.625	14.49	Pass
11a	2	6	52	5260	4.010	3.825	95.0	7.152	8.49	Pass
11a	2	6	60	5300	3.389	3.859	95.0	6.863	8.49	Pass
11a	2	6	64	5320	4.107	3.514	95.0	7.054	8.49	Pass
11a	2	6	100	5500	4.337	3.407	95.0	7.130	8.49	Pass
11a	2	6	120	5600	3.850	4.900	95.0	7.640	8.49	Pass
11a	2	6	140	5700	4.379	3.119	95.0	7.028	8.49	Pass
11n-HT20	2	13	36	5180	7.340	7.240	94.7	10.537	14.49	Pass
11n-HT20	2	13	44	5220	7.880	8.283	94.7	11.333	14.49	Pass
11n-HT20	2	13	48	5240	7.454	8.559	94.7	11.288	14.49	Pass
11n-HT20	2	13	52	5260	3.366	4.082	94.7	6.986	8.49	Pass
11n-HT20	2	13	60	5300	3.112	4.053	94.7	6.855	8.49	Pass
11n-HT20	2	13	64	5320	3.430	4.193	94.7	7.075	8.49	Pass
11n-HT20	2	13	100	5500	3.930	3.247	94.7	6.849	8.49	Pass
11n-HT20	2	13	120	5600	3.857	4.000	94.7	7.176	8.49	Pass
11n-HT20	2	13	140	5700	4.163	2.991	94.7	6.863	8.49	Pass
11n-HT40	2	27	38	5190	0.278	1.477	89.4	4.416	14.49	Pass
11n-HT40	2	27	46	5230	1.786	2.068	89.4	5.426	14.49	Pass
11n-HT40	2	27	54	5270	0.636	1.312	89.4	4.484	8.49	Pass

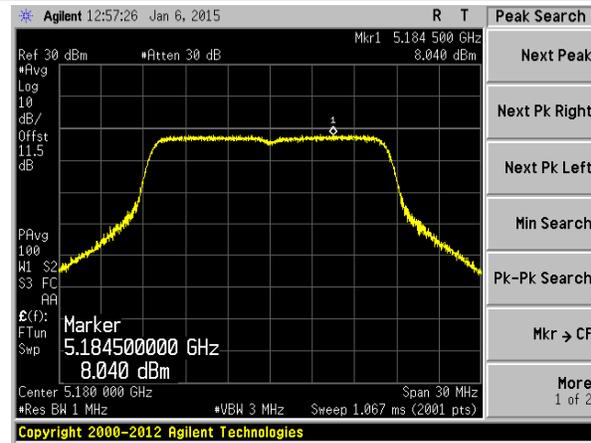
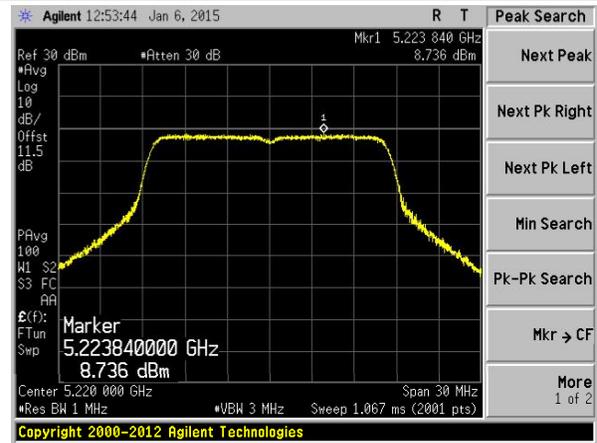
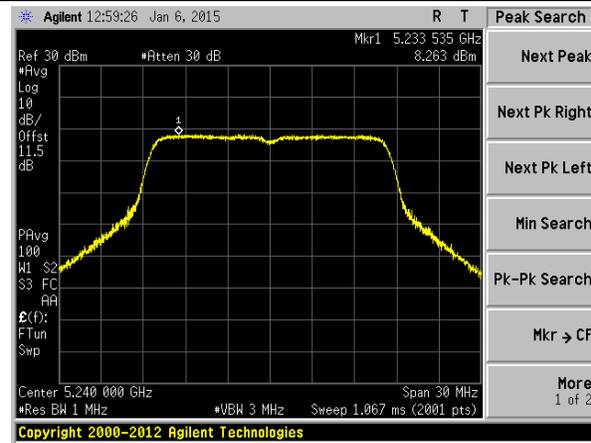
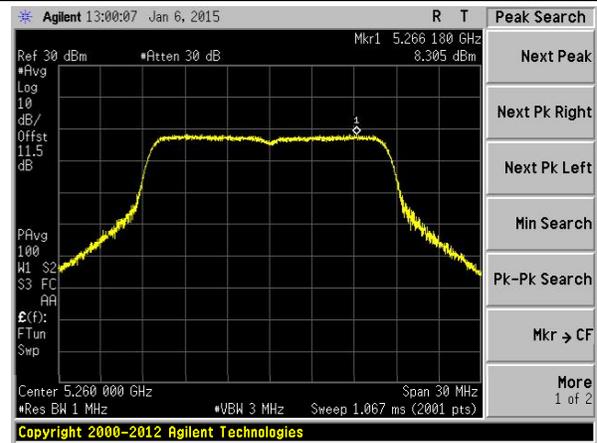
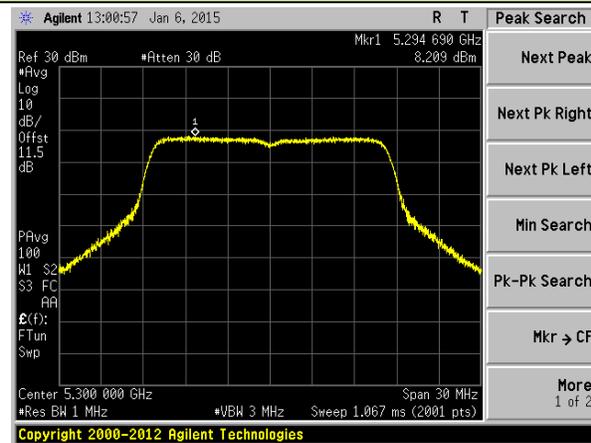
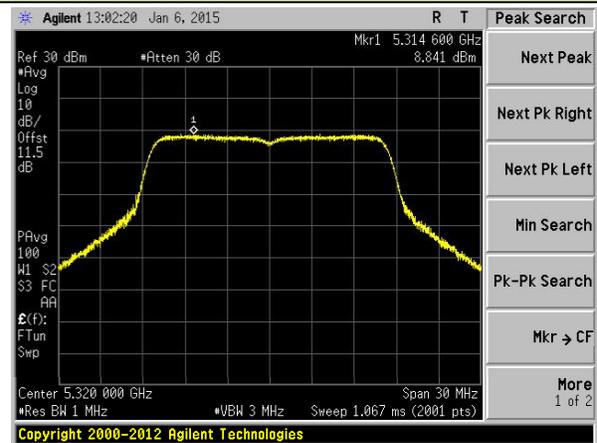


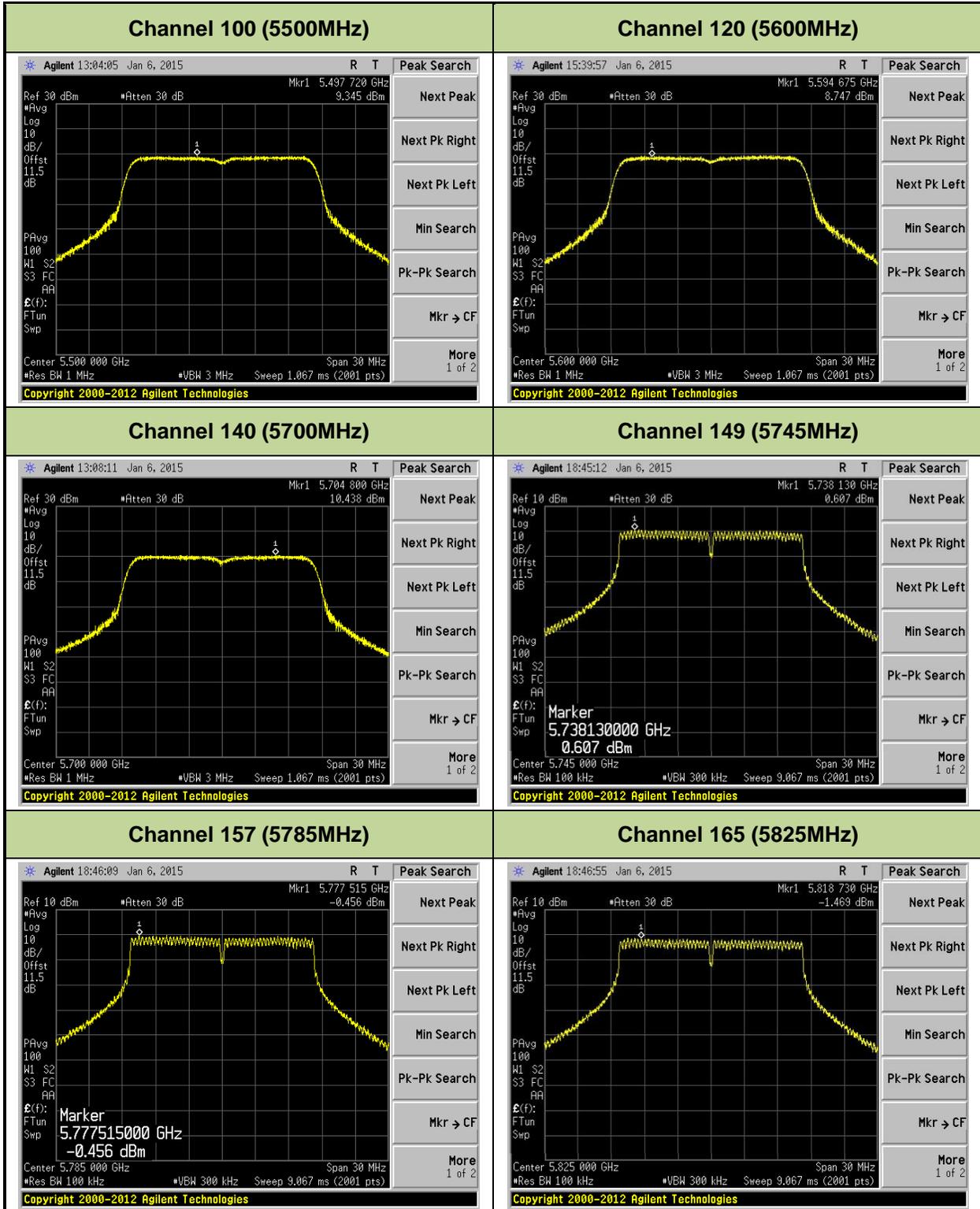
11n-HT40	2	27	62	5310	0.589	1.461	89.4	4.544	8.49	Pass
11n-HT40	2	27	102	5510	1.973	1.448	89.4	5.215	8.49	Pass
11n-HT40	2	27	118	5590	2.437	2.539	89.4	5.985	8.49	Pass
11n-HT40	2	27	134	5670	2.836	1.812	89.4	5.851	8.49	Pass
11ac-VHT20	2	13	36	5180	6.148	6.734	94.6	9.702	14.49	Pass
11ac-VHT20	2	13	44	5220	6.702	7.802	94.6	10.538	14.49	Pass
11ac-VHT20	2	13	48	5240	7.354	8.480	94.6	11.205	14.49	Pass
11ac-VHT20	2	13	52	5260	3.835	3.978	94.6	7.158	8.49	Pass
11ac-VHT20	2	13	60	5300	3.047	3.896	94.6	6.744	8.49	Pass
11ac-VHT20	2	13	64	5320	3.385	4.022	94.6	6.967	8.49	Pass
11ac-VHT20	2	13	100	5500	3.813	3.186	94.6	6.762	8.49	Pass
11ac-VHT20	2	13	120	5600	3.490	4.063	94.6	7.037	8.49	Pass
11ac-VHT20	2	13	140	5700	4.494	3.012	94.6	7.067	8.49	Pass
11ac-VHT20	2	13	144	5720	3.915	3.165	94.6	6.808	8.49	Pass
11ac-VHT40	2	27	38	5190	-1.237	-0.517	89.9	2.611	14.49	Pass
11ac-VHT40	2	27	46	5230	0.582	1.323	89.9	4.441	14.49	Pass
11ac-VHT40	2	27	54	5270	-0.833	0.777	89.9	3.519	8.49	Pass
11ac-VHT40	2	27	62	5310	0.503	1.638	89.9	4.580	8.49	Pass
11ac-VHT40	2	27	102	5510	2.188	1.304	89.9	5.241	8.49	Pass
11ac-VHT40	2	27	118	5590	2.526	2.217	89.9	5.847	8.49	Pass
11ac-VHT40	2	27	134	5670	3.063	2.412	89.9	6.222	8.49	Pass
11ac-VHT40	2	27	142	5710	3.431	2.038	89.9	6.263	8.49	Pass
11ac-VHT80	2	58.6	42	5210	-3.740	-3.743	82.1	0.125	14.49	Pass
11ac-VHT80	2	58.6	58	5290	-3.230	-2.199	82.1	1.183	8.49	Pass
11ac-VHT80	2	58.6	106	5530	-1.077	-1.614	82.1	2.530	8.49	Pass
11ac-VHT80	2	58.6	122	5610	-0.496	-0.686	82.1	3.277	8.49	Pass
11ac-VHT80	2	58.6	138	5690	0.128	-1.274	82.1	3.350	8.49	Pass

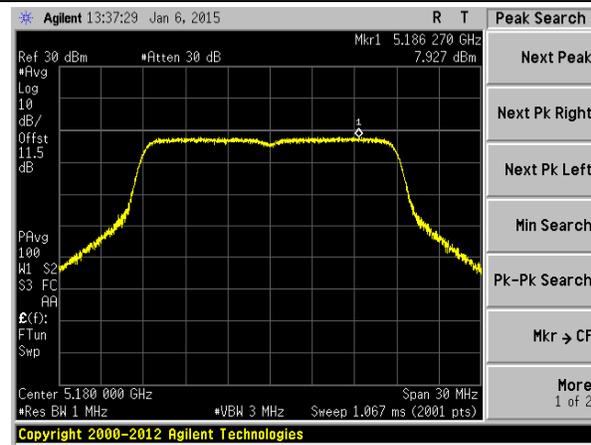
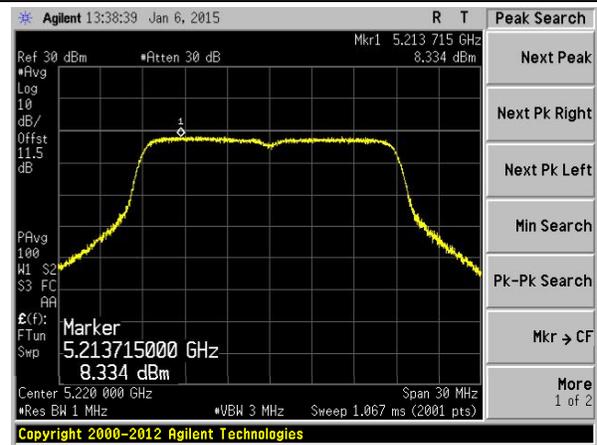
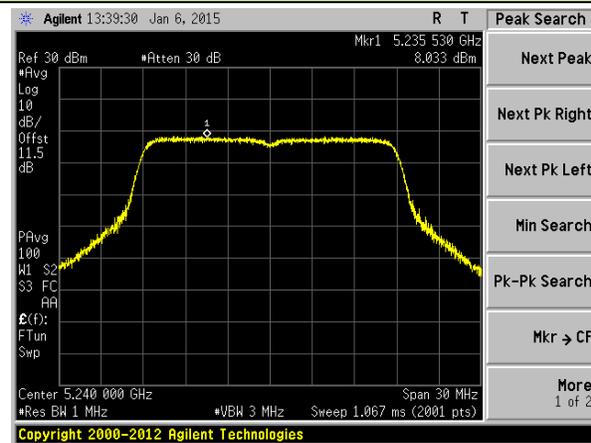
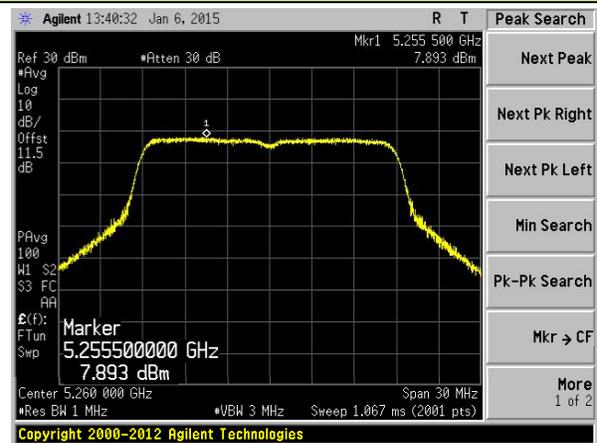
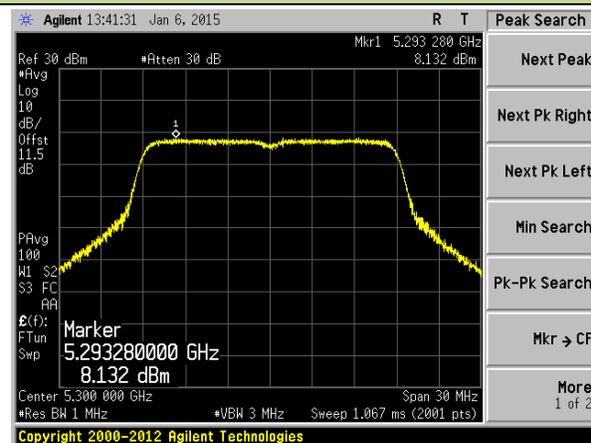
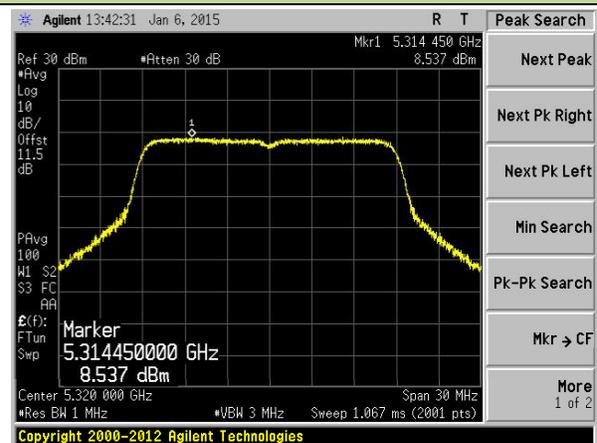
Note: When EUT duty cycle < 98%, the total PSD =  $10 \cdot \log\{10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)}\} + 10 \cdot \log(1/\text{duty cycle})$

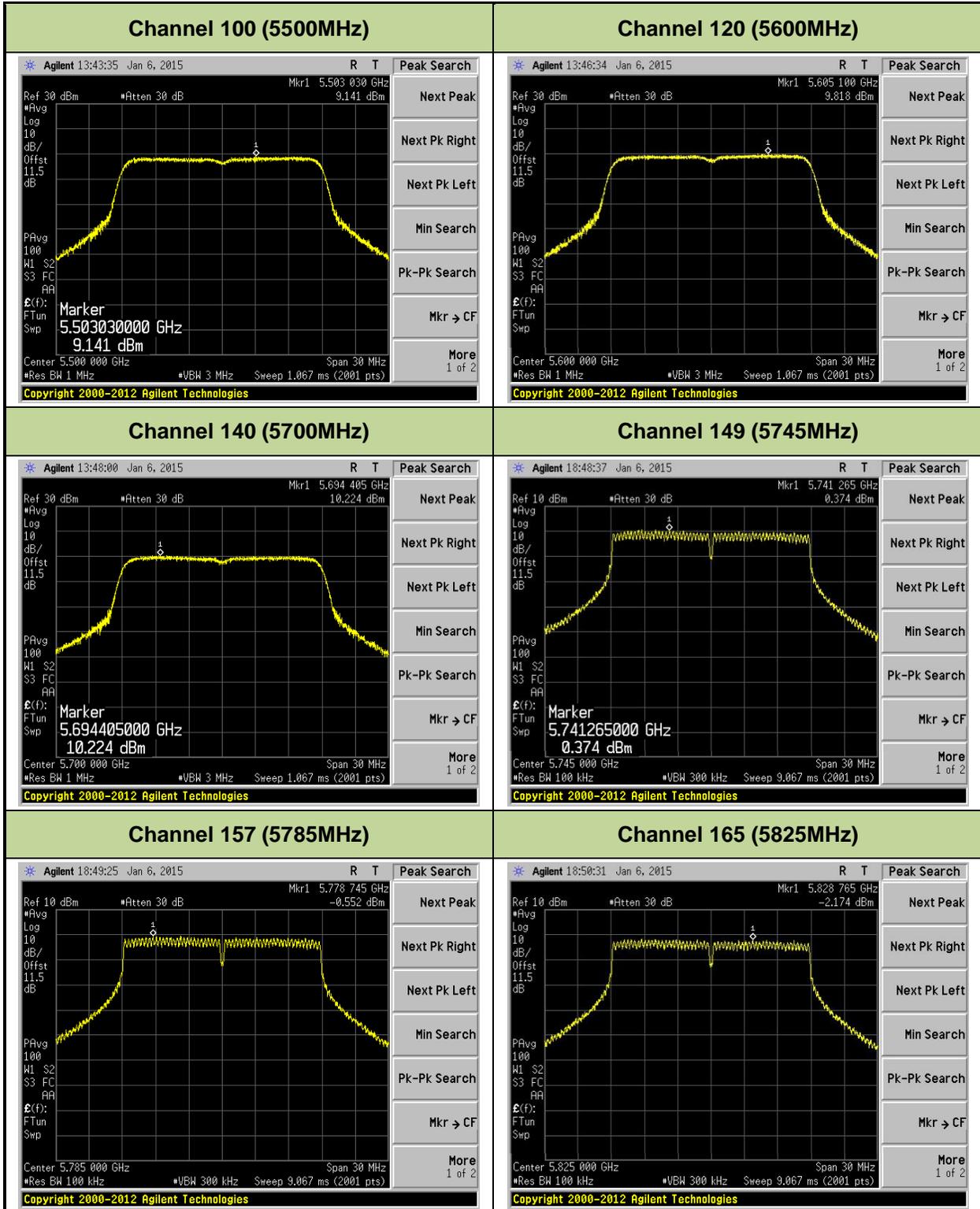
Test Mode	N <sub>Tx</sub>	Data Rate (Mbps)	Channel No.	Freq. (MHz)	Ant 1 PSD (dBm)	Ant 2 PSD (dBm)	Duty Cycle (%)	Constant Factor	Total PSD (dBm)	Limit (dBm/500kHz)	Result
11a	1	6	149	5745	0.607	-1.072	95.0	7	7.830	30	Pass
11a	1	6	157	5785	-0.456	-2.236	95.0	7	6.767	30	Pass
11a	1	6	165	5825	-1.469	-2.167	95.0	7	5.754	30	Pass
11n-HT20	1	6.5	149	5745	0.374	-1.262	94.7	7	7.611	30	Pass
11n-HT20	1	6.5	157	5785	-0.552	-1.787	94.7	7	6.685	30	Pass
11n-HT20	1	6.5	165	5825	-2.174	-2.199	94.7	7	5.063	30	Pass
11n-HT40	1	13.5	151	5755	-3.483	-4.496	89.4	7	4.004	30	Pass
11n-HT40	1	13.5	159	5795	-4.065	-5.087	89.4	7	3.422	30	Pass
11ac-VHT20	1	6.5	149	5745	0.503	-1.351	94.6	7	7.744	30	Pass
11ac-VHT20	1	6.5	157	5785	-0.284	-1.853	94.6	7	6.957	30	Pass
11ac-VHT20	1	6.5	165	5825	-1.680	-2.175	94.6	7	5.561	30	Pass
11ac-VHT40	1	13.5	151	5755	-2.939	-3.941	89.9	7	4.523	30	Pass
11ac-VHT40	1	13.5	159	5795	-3.974	-5.397	89.9	7	3.488	30	Pass
11ac-VHT80	1	29.3	155	5775	-6.876	-8.045	82.1	7	0.981	30	Pass
11a	2	6	149	5745	0.952	1.375	95.0	7	11.402	27.49	Pass
11a	2	6	157	5785	-0.359	0.902	95.0	7	10.550	27.49	Pass
11a	2	6	165	5825	0.076	0.507	95.0	7	10.530	27.49	Pass
11n-HT20	2	13	149	5745	0.225	-0.567	94.7	7	10.080	27.49	Pass
11n-HT20	2	13	157	5785	-1.122	-1.302	94.7	7	9.022	27.49	Pass
11n-HT20	2	13	165	5825	-1.890	-1.614	94.7	7	8.483	27.49	Pass
11n-HT40	2	27	151	5755	-6.303	-5.535	89.4	7	4.331	27.49	Pass
11n-HT40	2	27	159	5795	-7.577	-7.045	89.4	7	2.930	27.49	Pass
11ac-VHT20	2	13	149	5745	-0.346	-0.824	94.6	7	9.655	27.49	Pass
11ac-VHT20	2	13	157	5785	-2.183	-1.479	94.6	7	8.430	27.49	Pass
11ac-VHT20	2	13	165	5825	-2.204	-2.315	94.6	7	7.988	27.49	Pass
11ac-VHT40	2	27	151	5755	-6.564	-6.011	89.9	7	3.968	27.49	Pass
11ac-VHT40	2	27	159	5795	-6.704	-7.255	89.9	7	3.276	27.49	Pass
11ac-VHT80	2	58.6	155	5775	-10.827	-11.018	82.1	7	-0.675	27.49	Pass

Note: When EUT duty cycle < 98%, the total PSD =  $10 \cdot \log\{10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)}\} + 10 \cdot \log(1/\text{duty cycle}) + \text{Constant Factor}$ .

**802.11a Power Spectral Density - Ant 1**
**Channel 36 (5180MHz)**

**Channel 44 (5220MHz)**

**Channel 48 (5240MHz)**

**Channel 52 (5260MHz)**

**Channel 60 (5300MHz)**

**Channel 64 (5320MHz)**


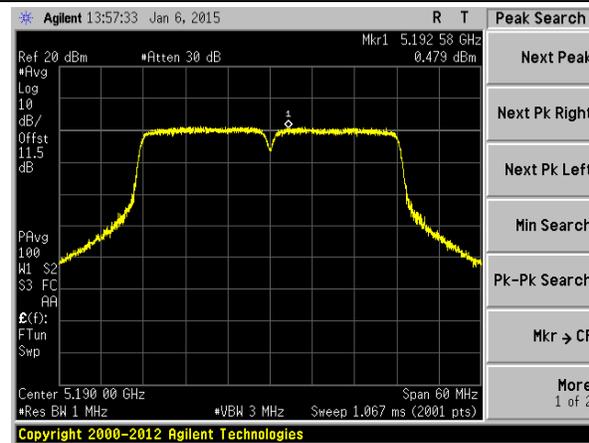


**802.11n-HT20 Power Spectral Density - Ant 1**
**Channel 36 (5180MHz)**

**Channel 44 (5220MHz)**

**Channel 48 (5240MHz)**

**Channel 52 (5260MHz)**

**Channel 60 (5300MHz)**

**Channel 64 (5320MHz)**


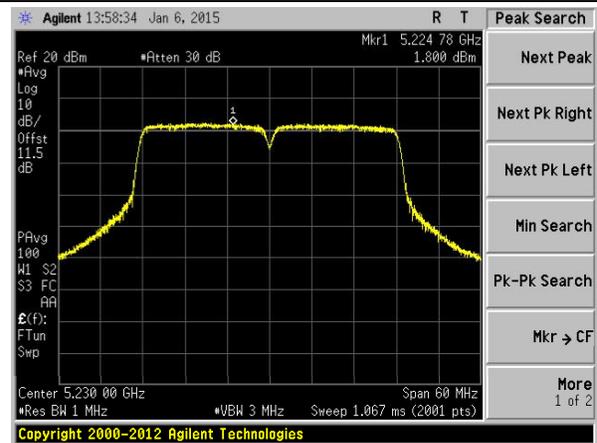


### 802.11n-HT40 Power Spectral Density - Ant 1

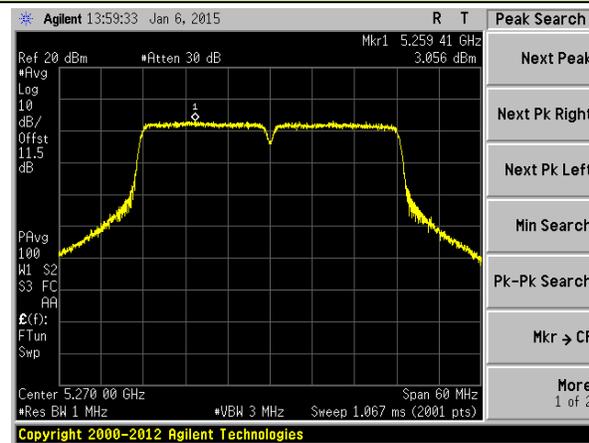
#### Channel 38 (5190MHz)



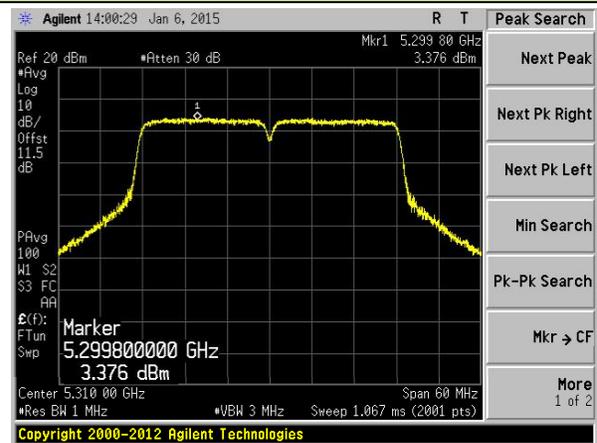
#### Channel 46 (5230MHz)



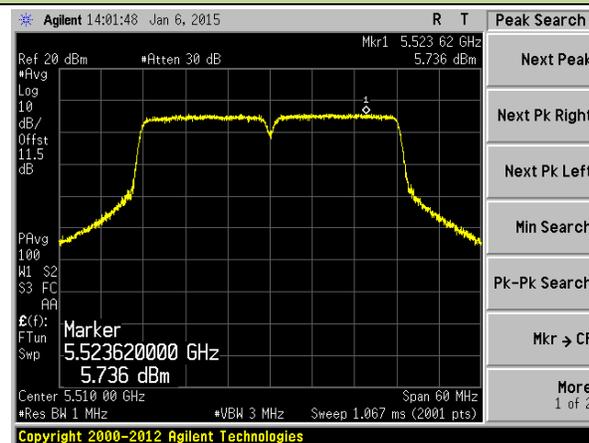
#### Channel 54 (5270MHz)



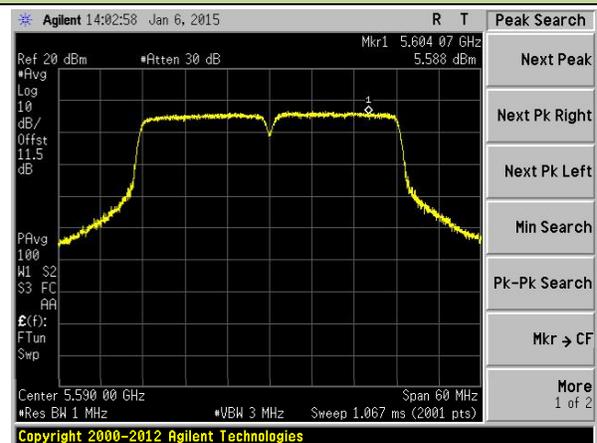
#### Channel 62 (5310MHz)

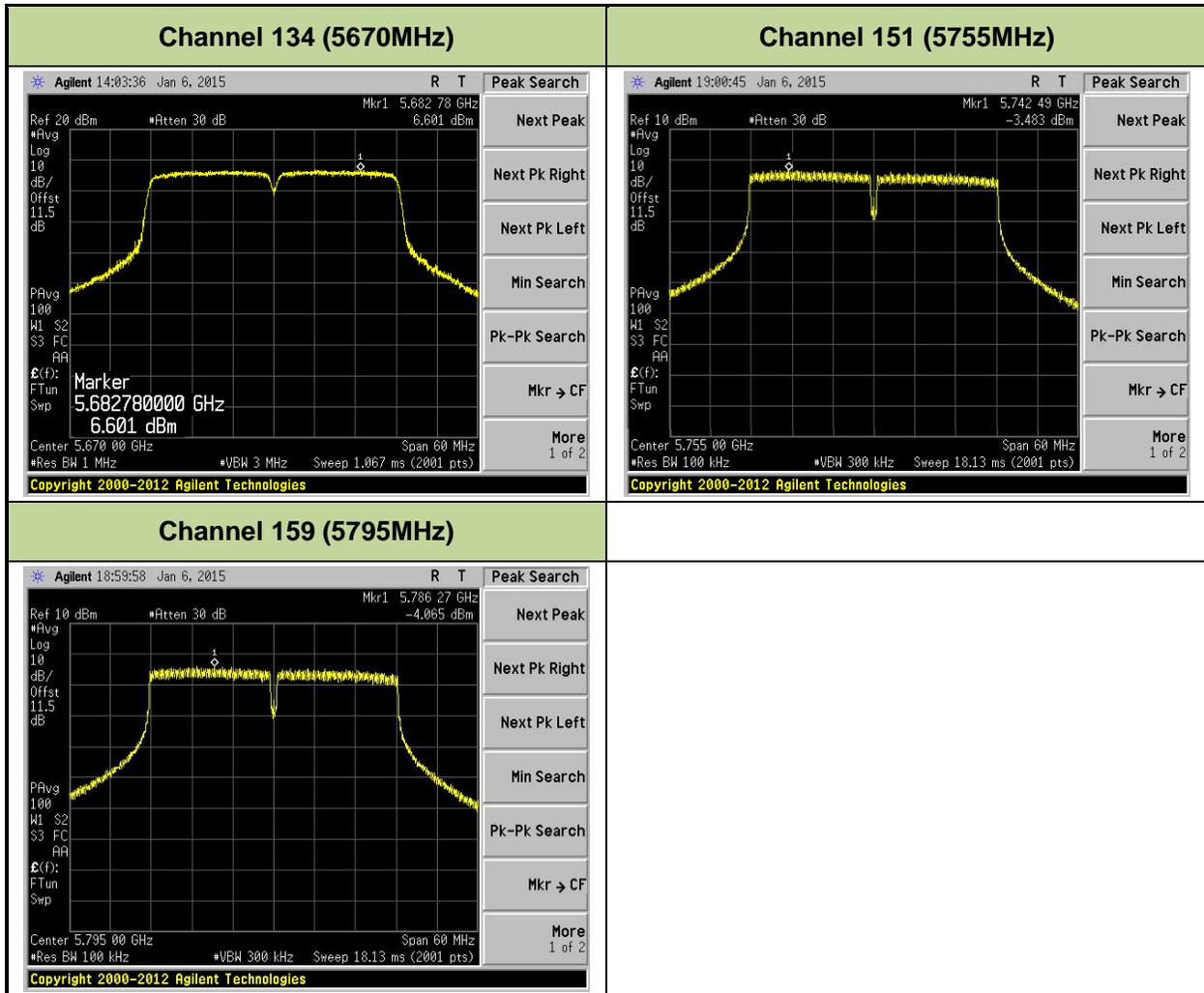


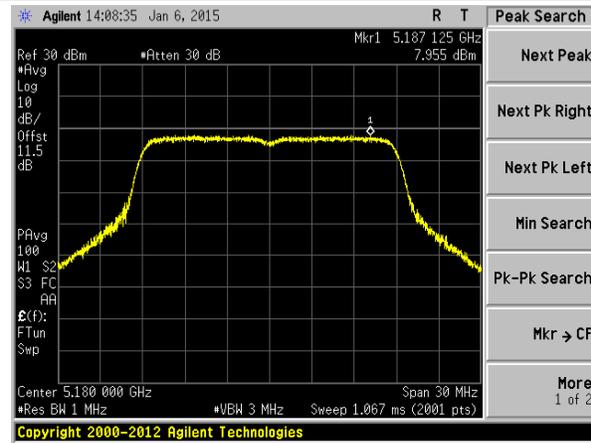
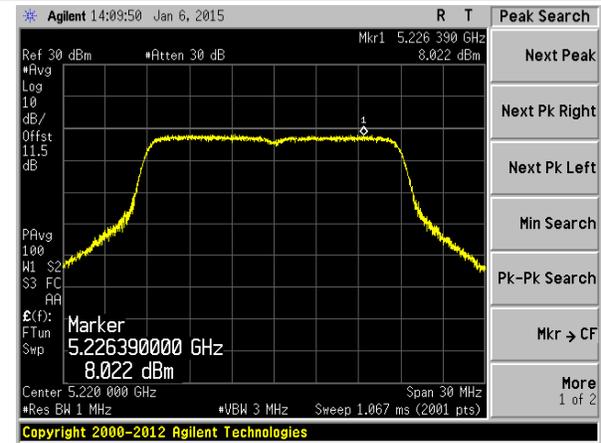
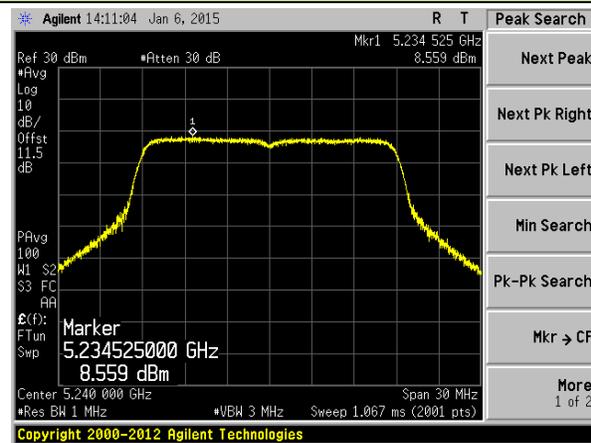
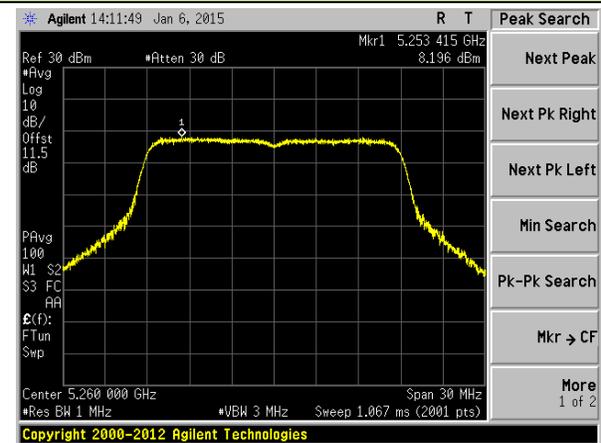
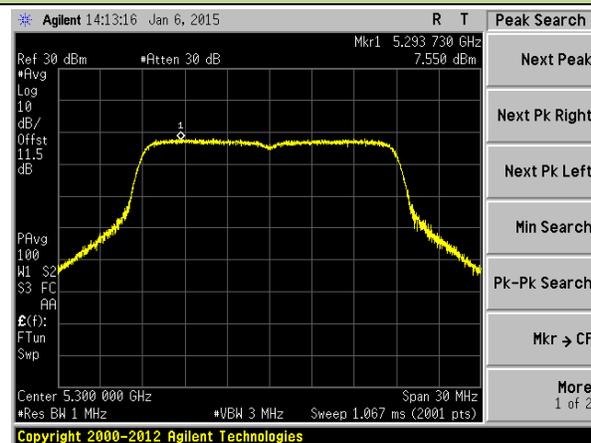
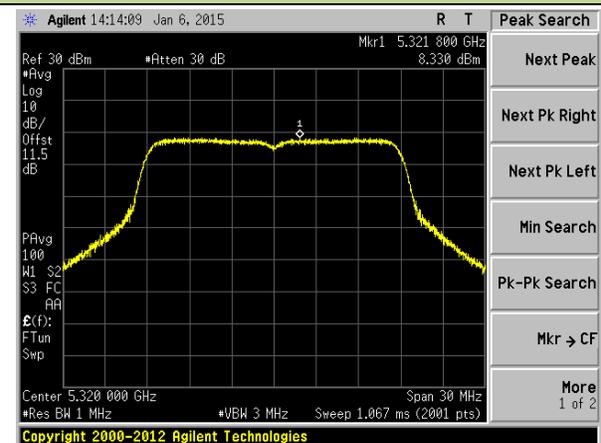
#### Channel 102 (5510MHz)

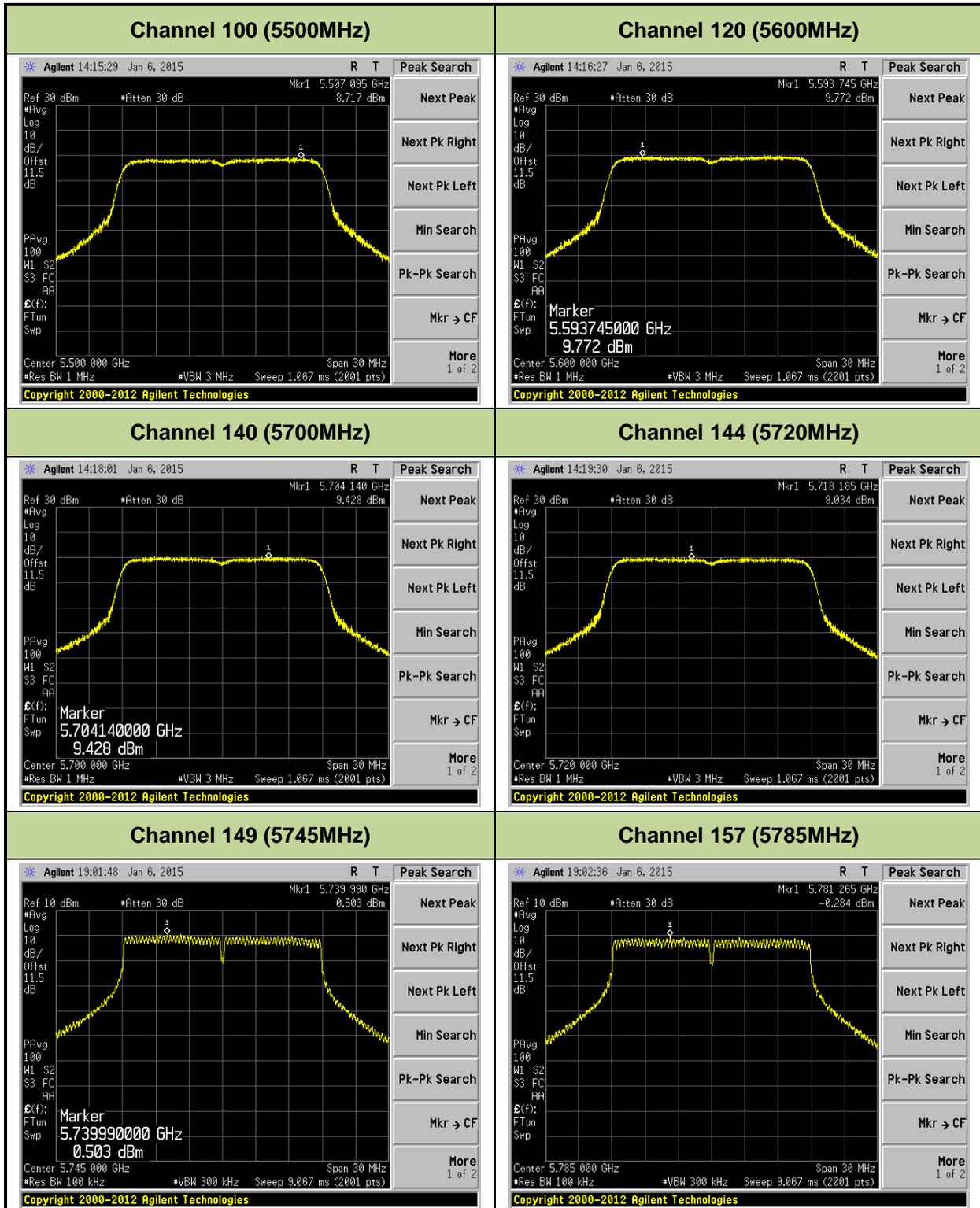


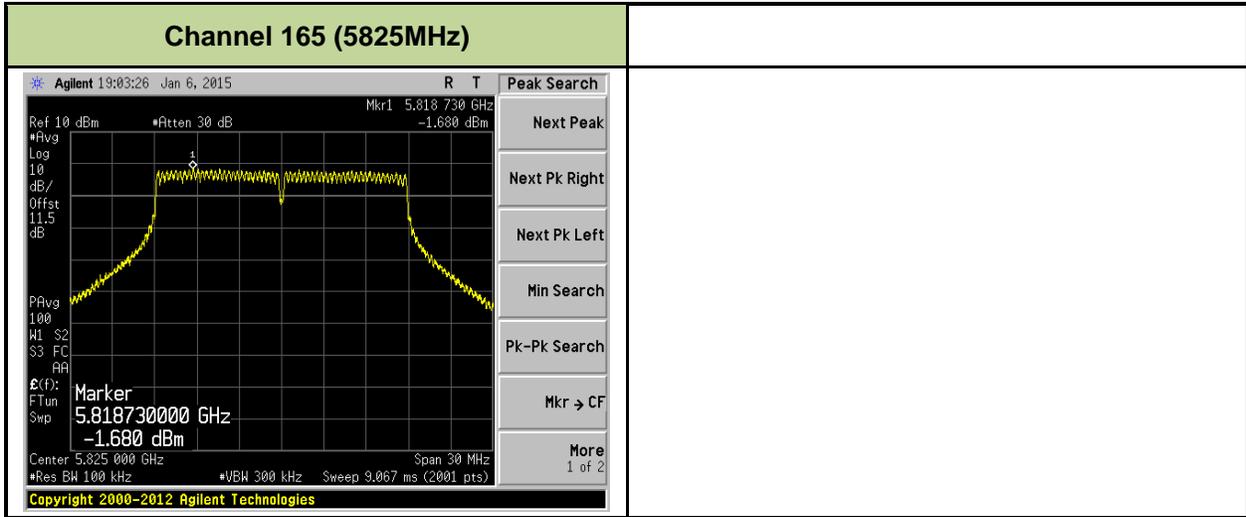
#### Channel 118 (5590MHz)

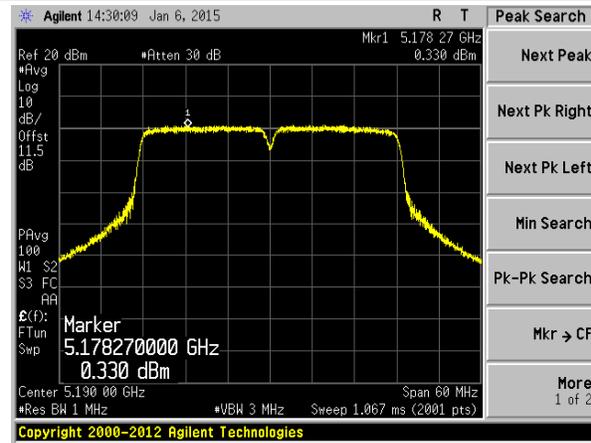
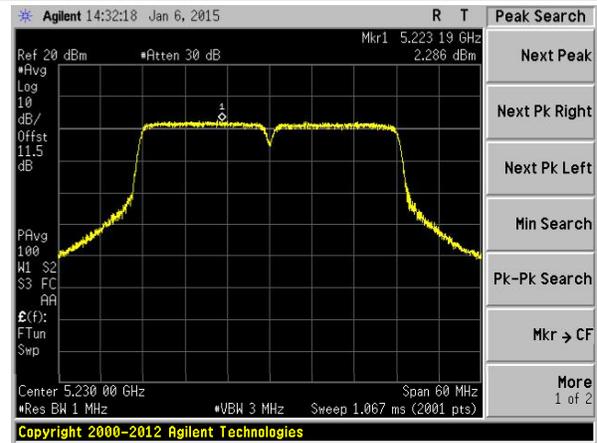
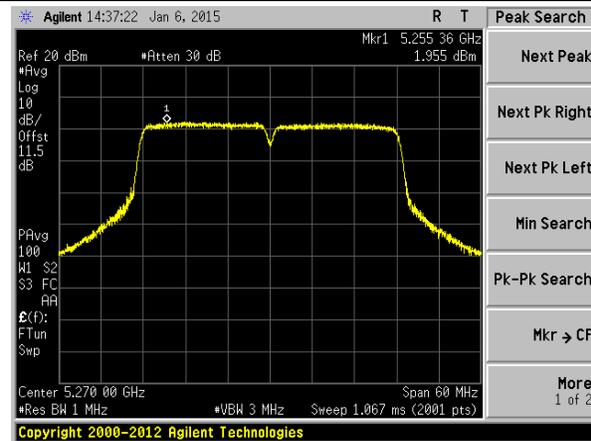
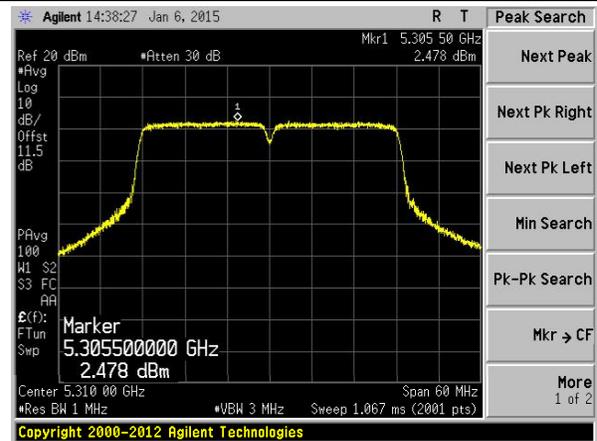
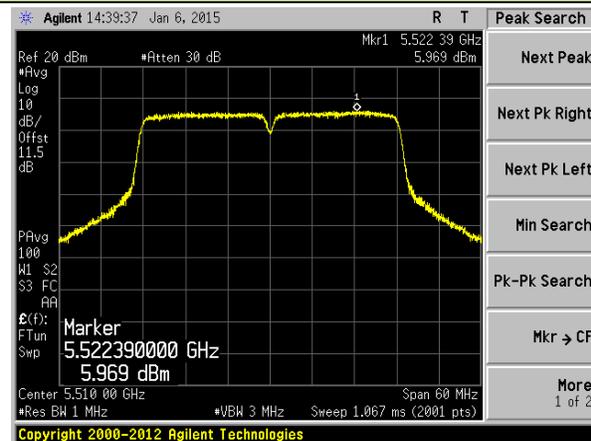
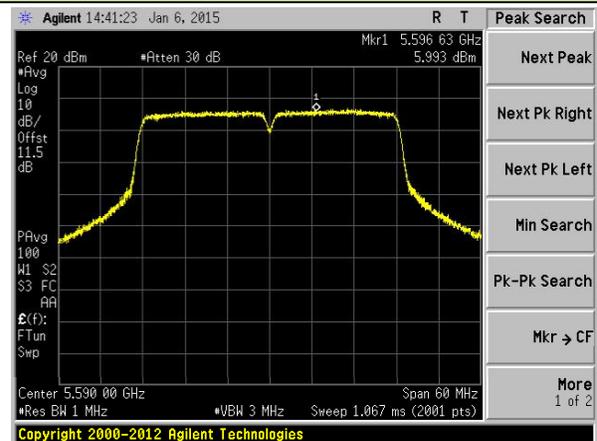


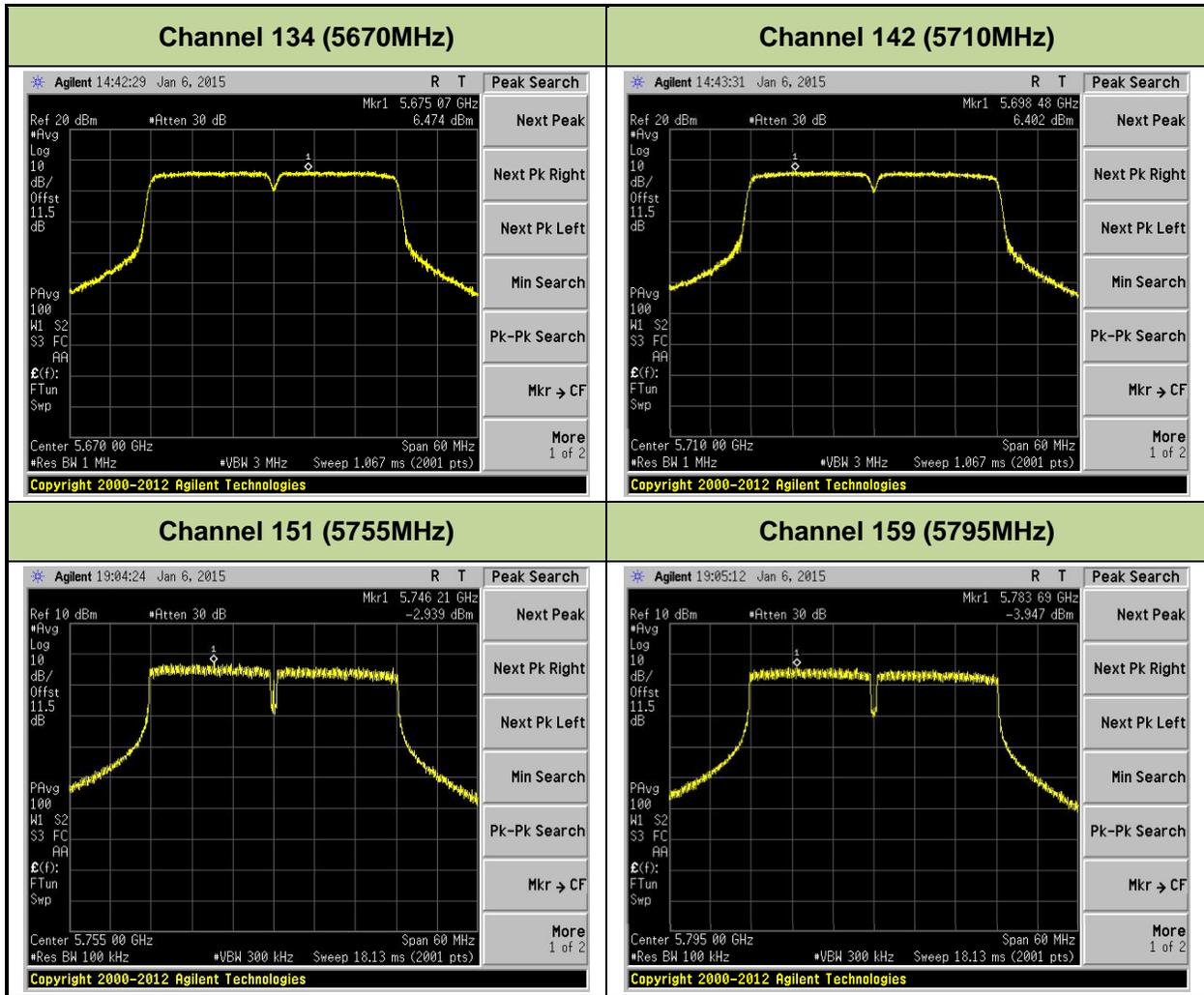


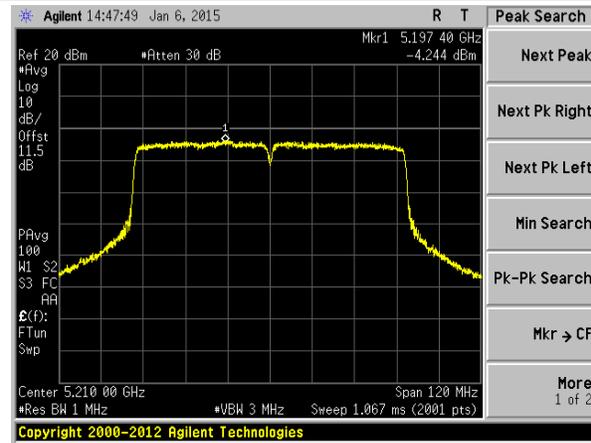
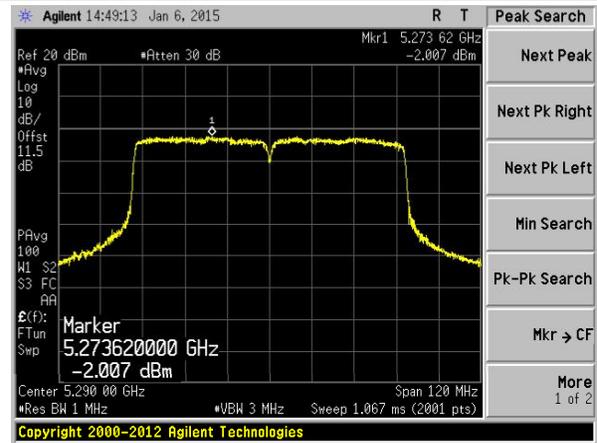
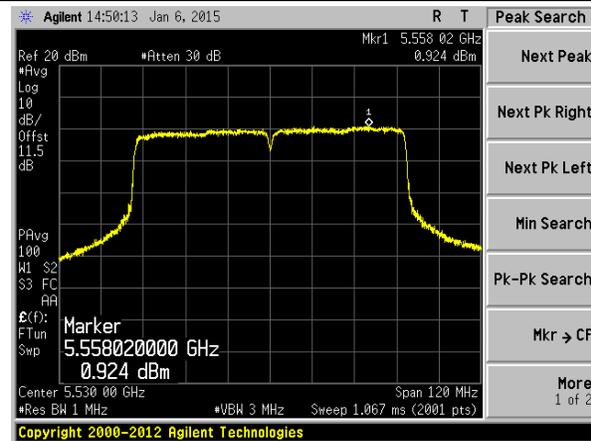
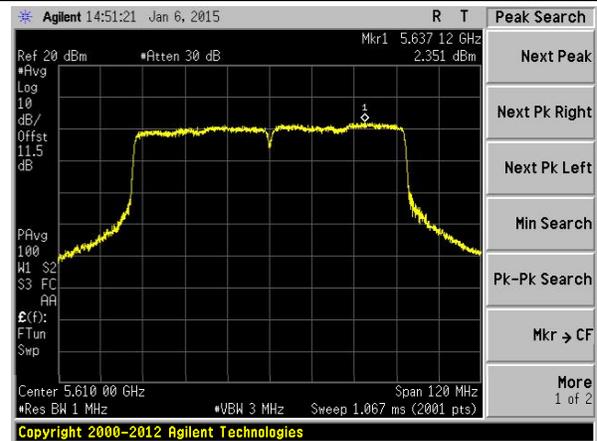
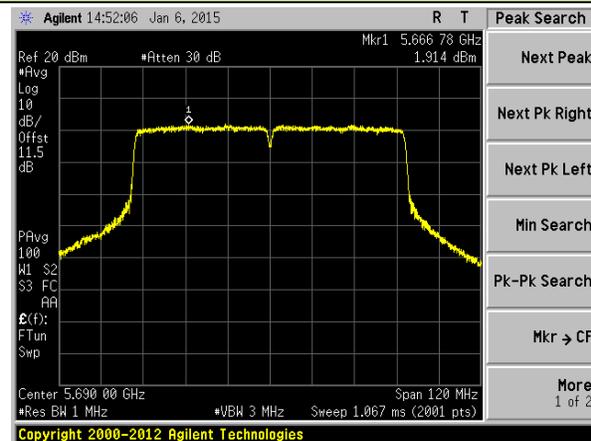
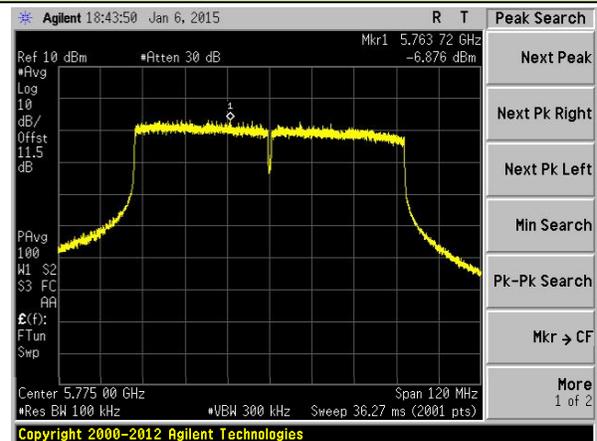
**802.11ac-VHT20 Power Spectral Density - Ant 1**
**Channel 36 (5180MHz)**

**Channel 44 (5220MHz)**

**Channel 48 (5240MHz)**

**Channel 52 (5260MHz)**

**Channel 60 (5300MHz)**

**Channel 64 (5320MHz)**


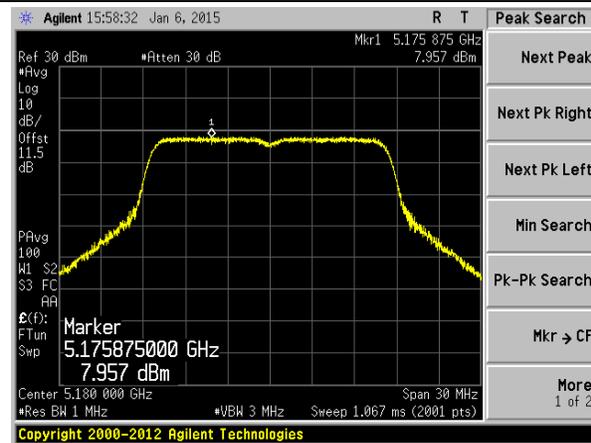
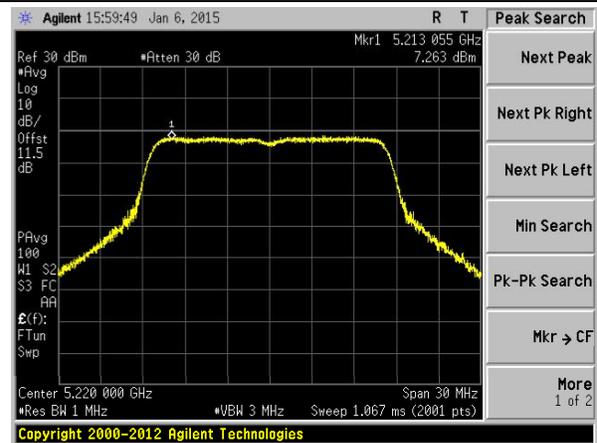
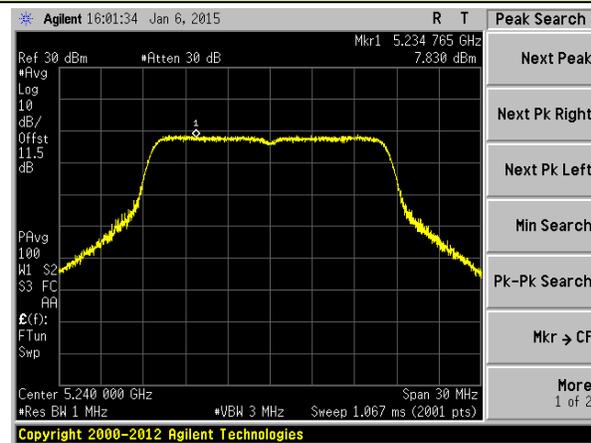
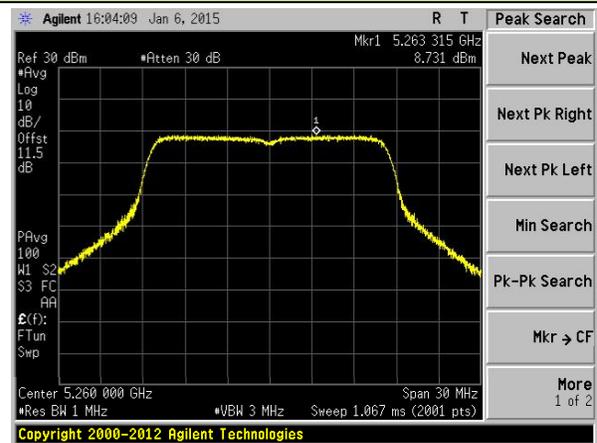
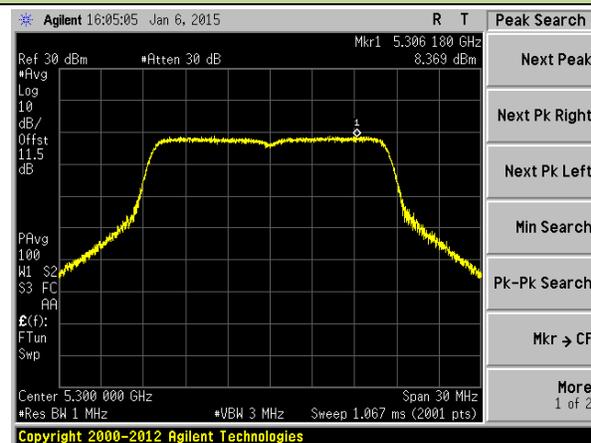
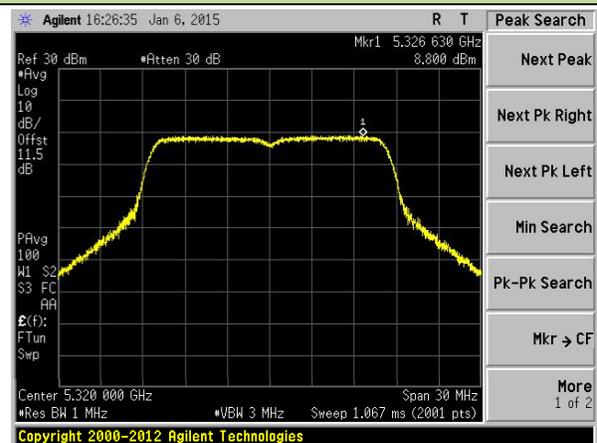


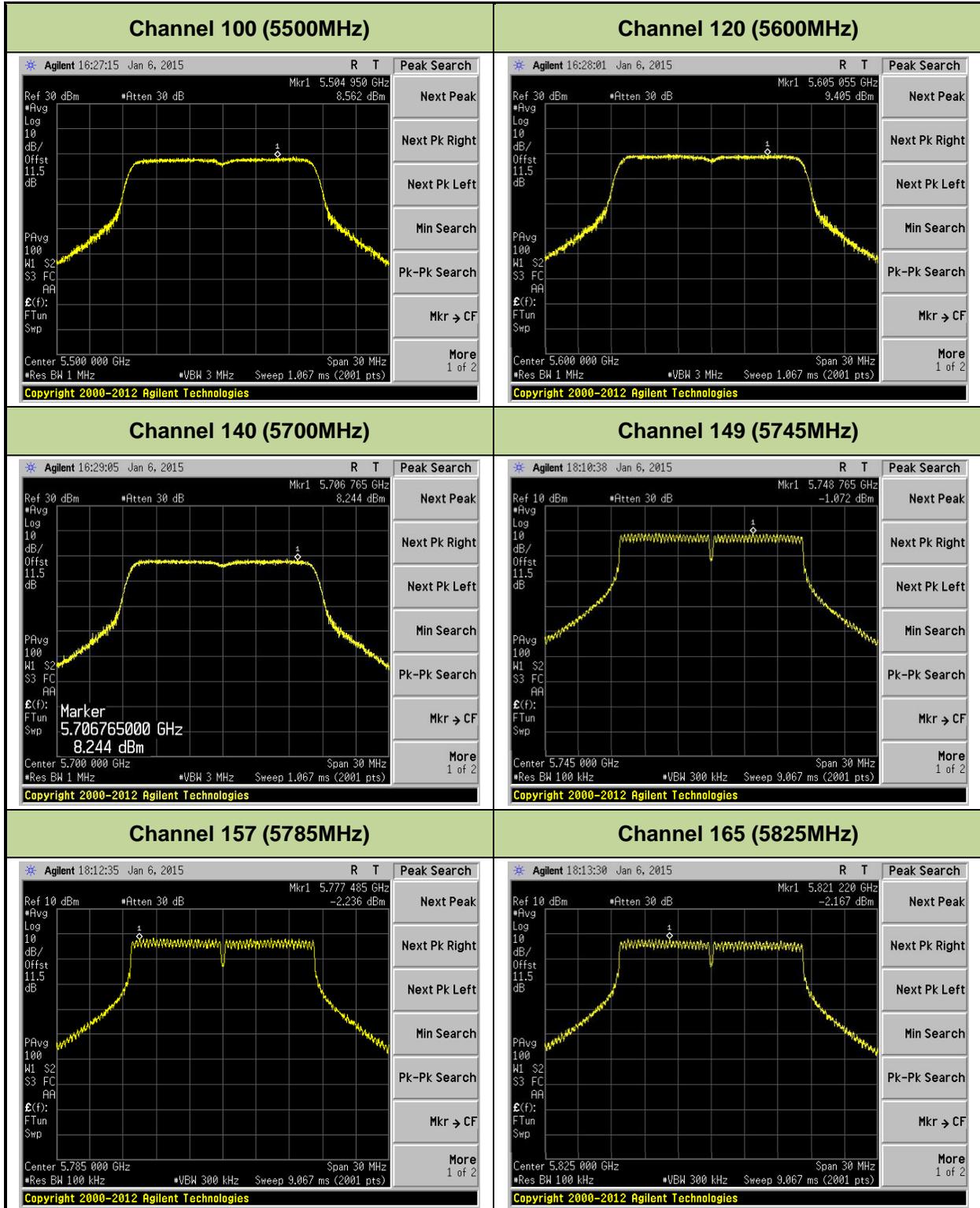


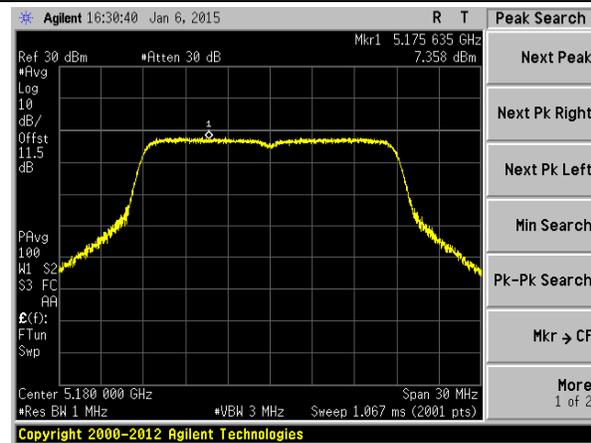
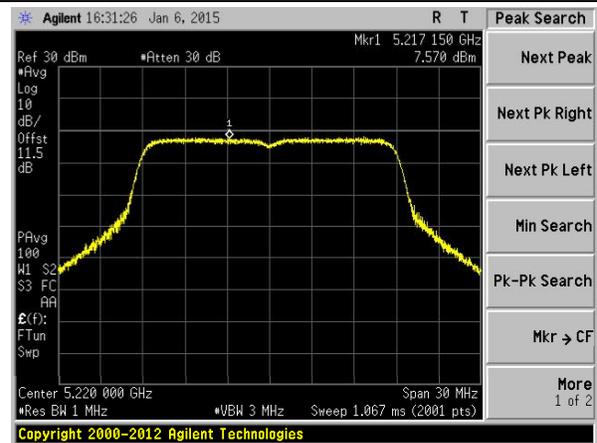
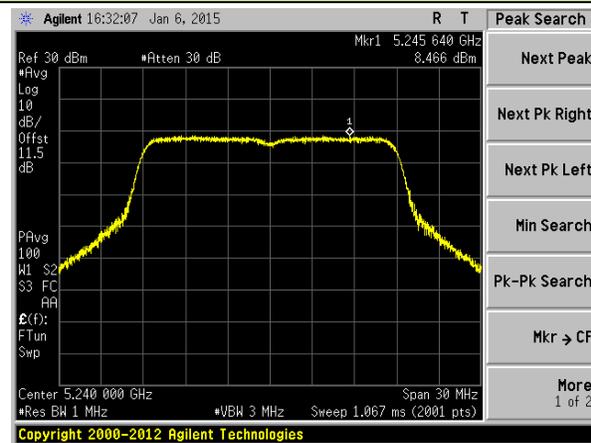
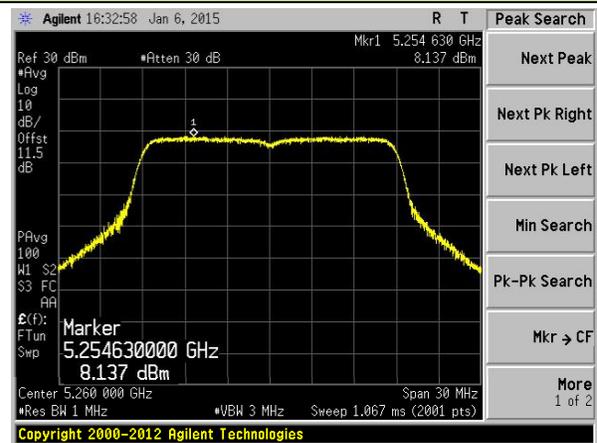
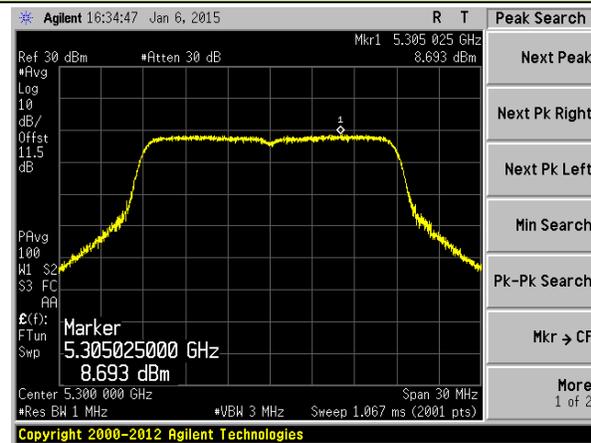
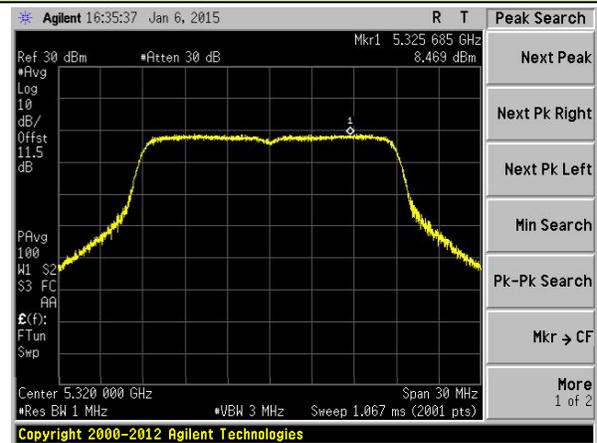
**802.11ac-VHT40 Power Spectral Density - Ant 1**
**Channel 38 (5190MHz)**

**Channel 46 (5230MHz)**

**Channel 54 (5270MHz)**

**Channel 62 (5310MHz)**

**Channel 102 (5510MHz)**

**Channel 118 (5590MHz)**


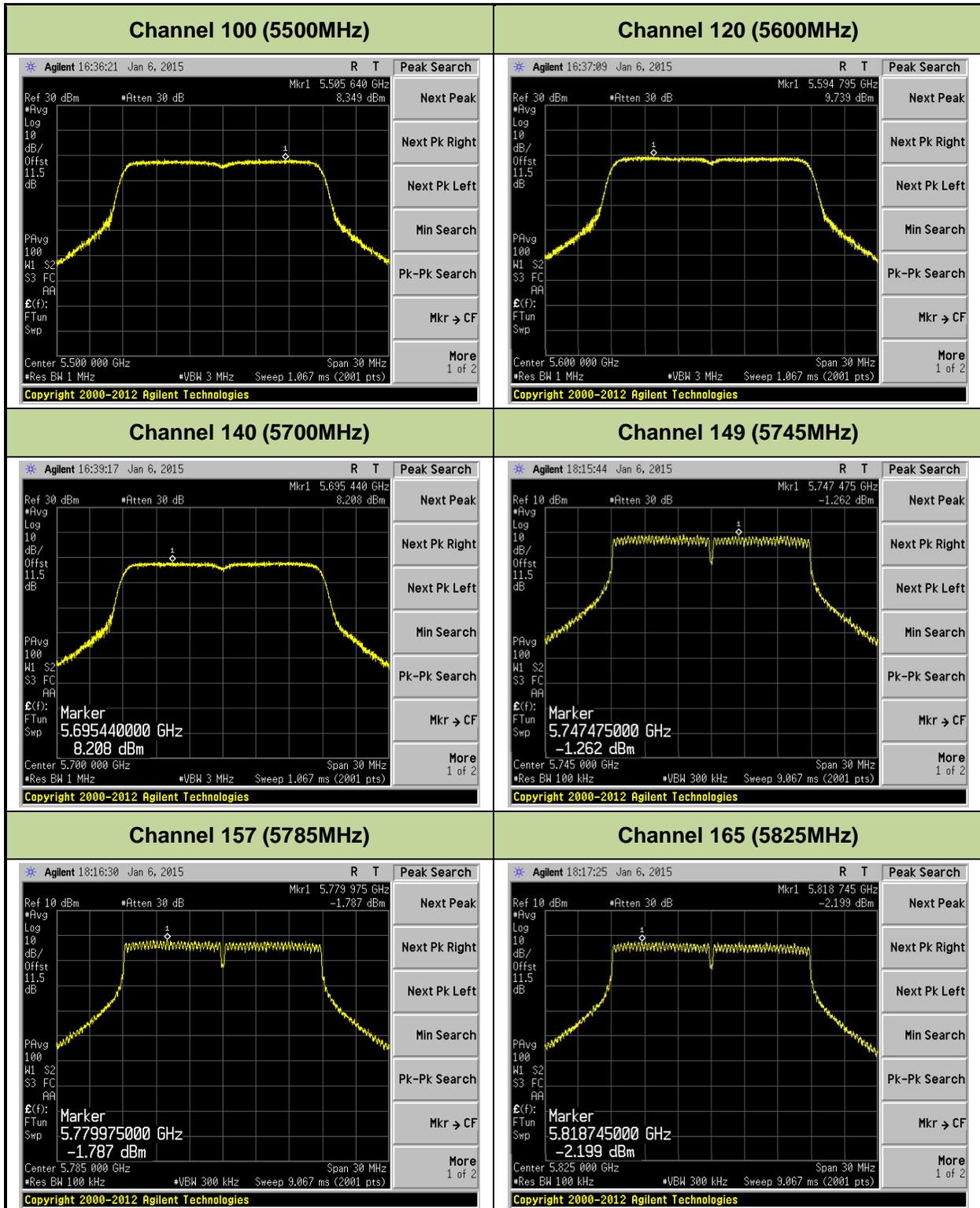


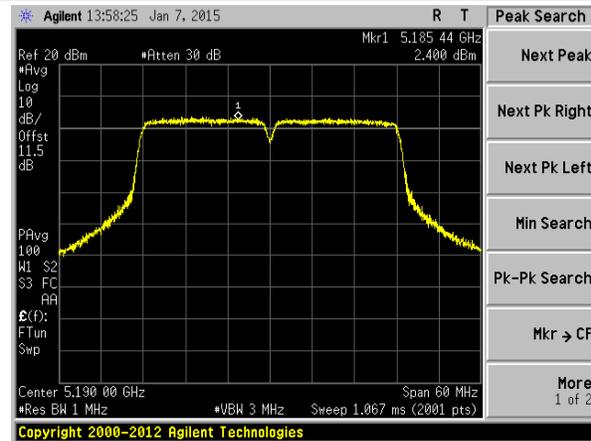
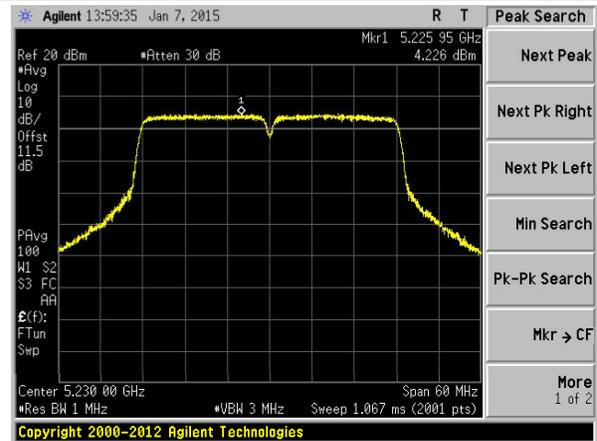
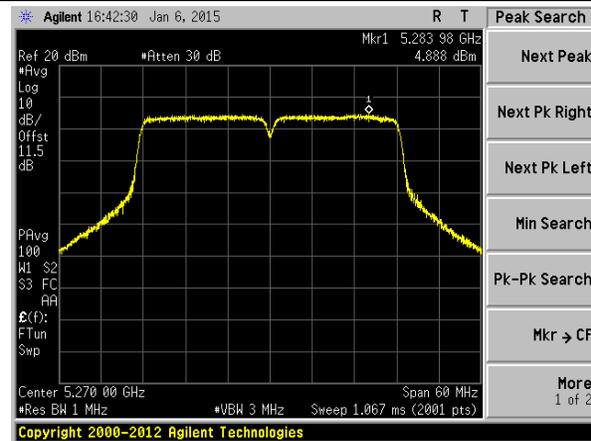
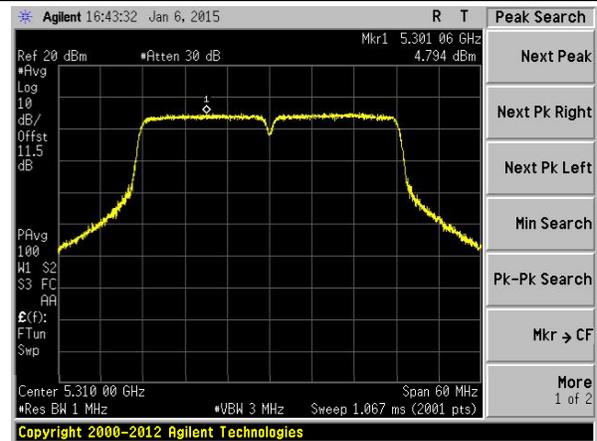
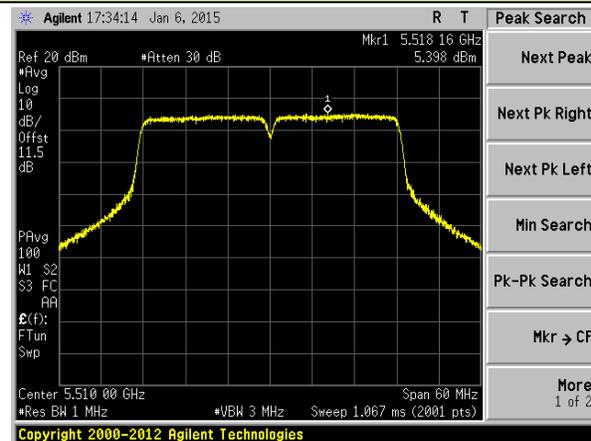
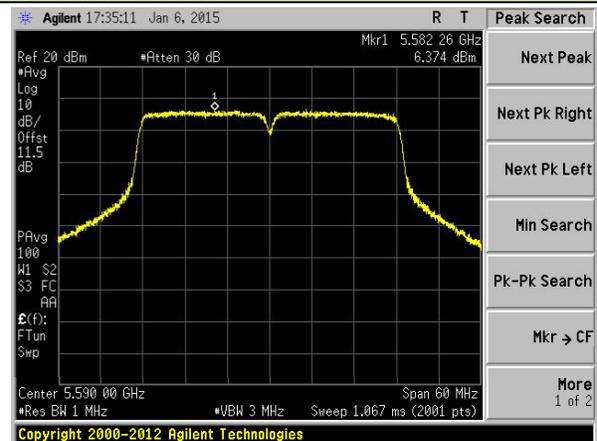
**802.11ac-VHT80 Power Spectral Density - Ant 1**
**Channel 42 (5210MHz)**

**Channel 58 (5290MHz)**

**Channel 106 (5530MHz)**

**Channel 122 (5610MHz)**

**Channel 138 (5690MHz)**

**Channel 155 (5775MHz)**


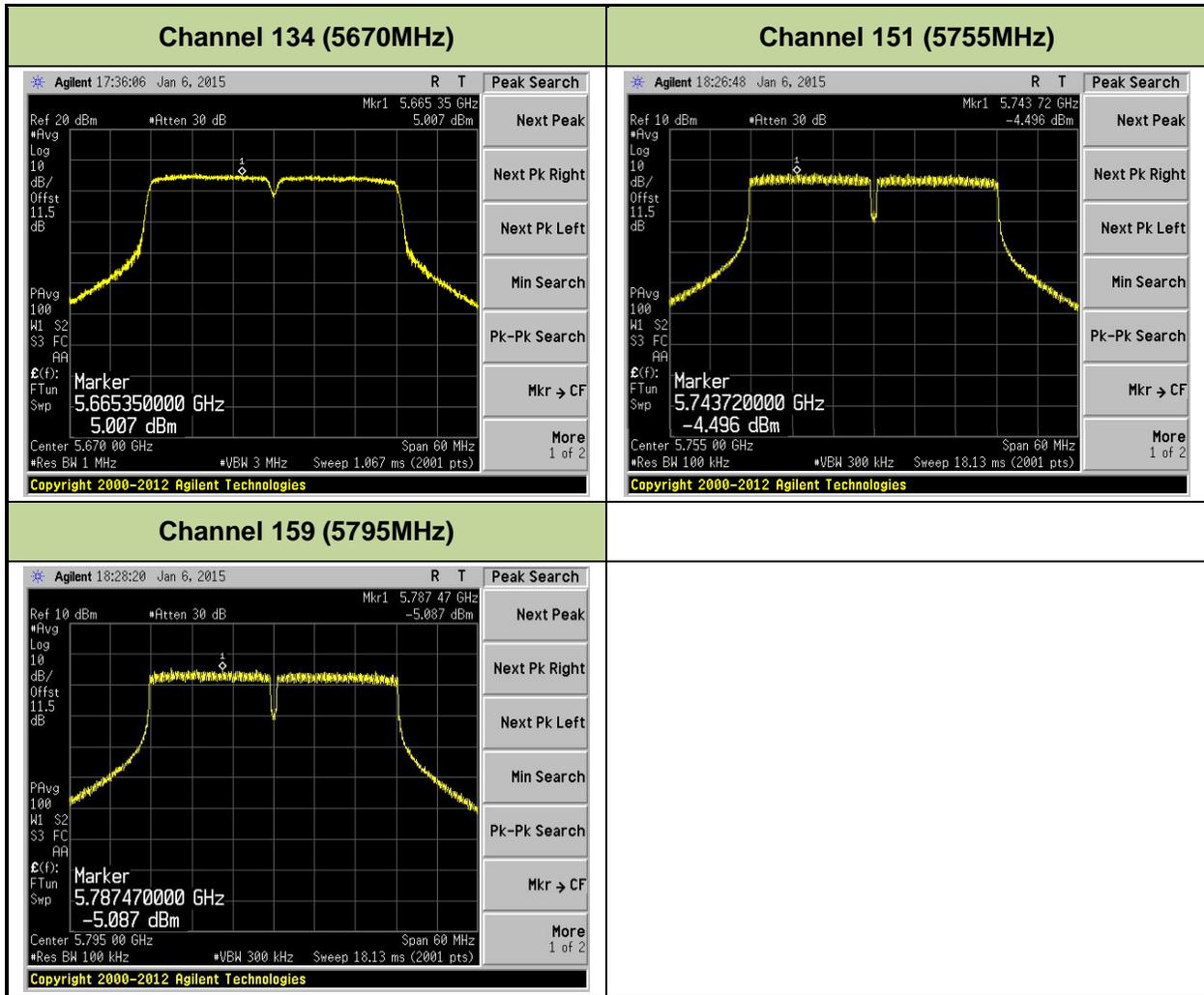
**802.11a Power Spectral Density - Ant 2**
**Channel 36 (5180MHz)**

**Channel 44 (5220MHz)**

**Channel 48 (5240MHz)**

**Channel 52 (5260MHz)**

**Channel 60 (5300MHz)**

**Channel 64 (5320MHz)**


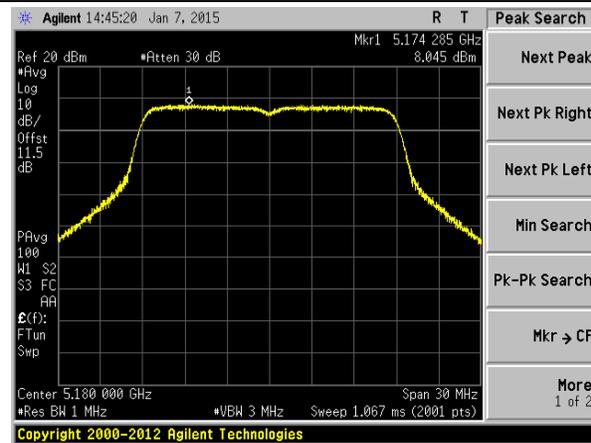
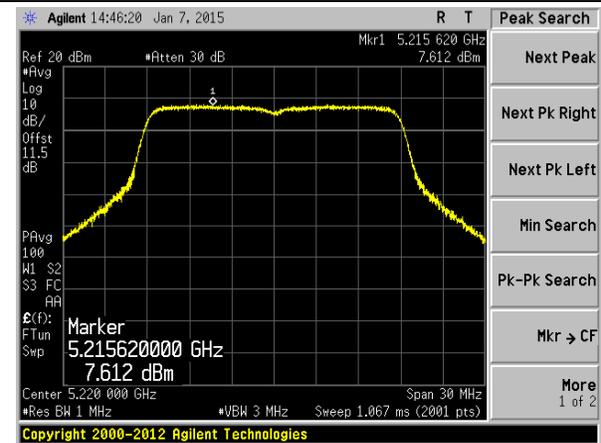
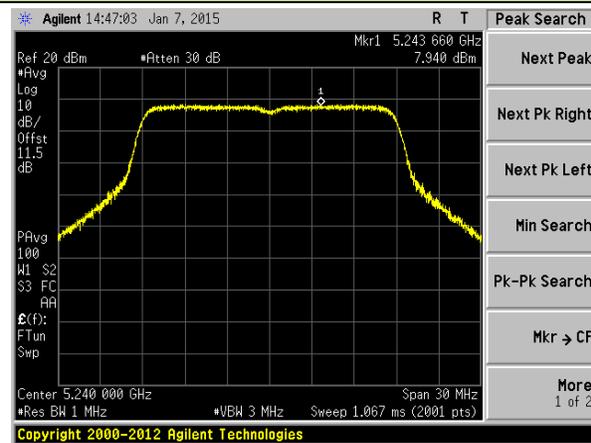
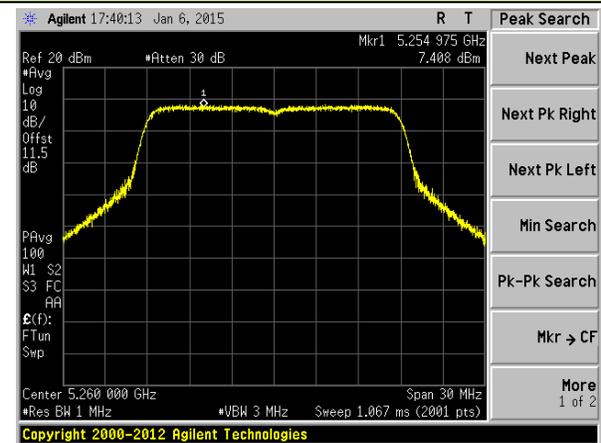
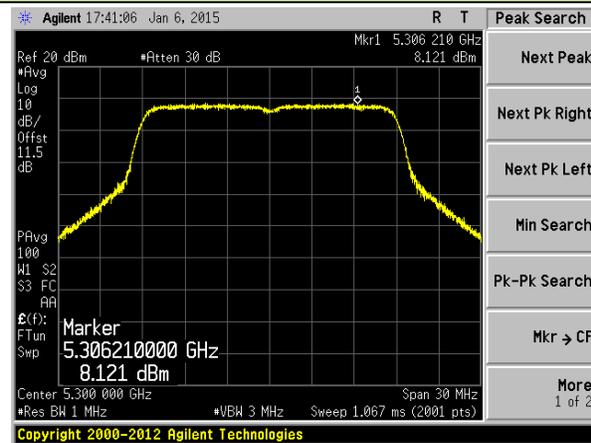
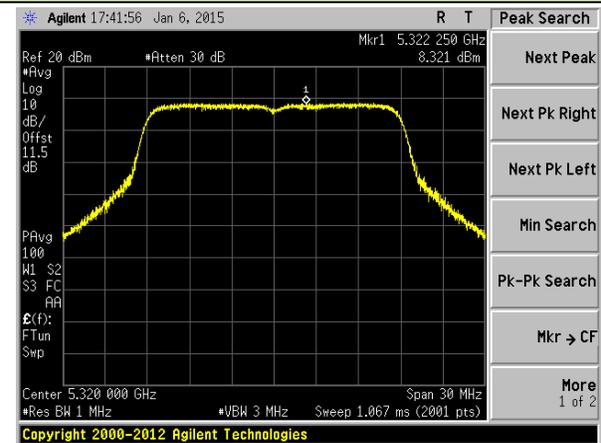


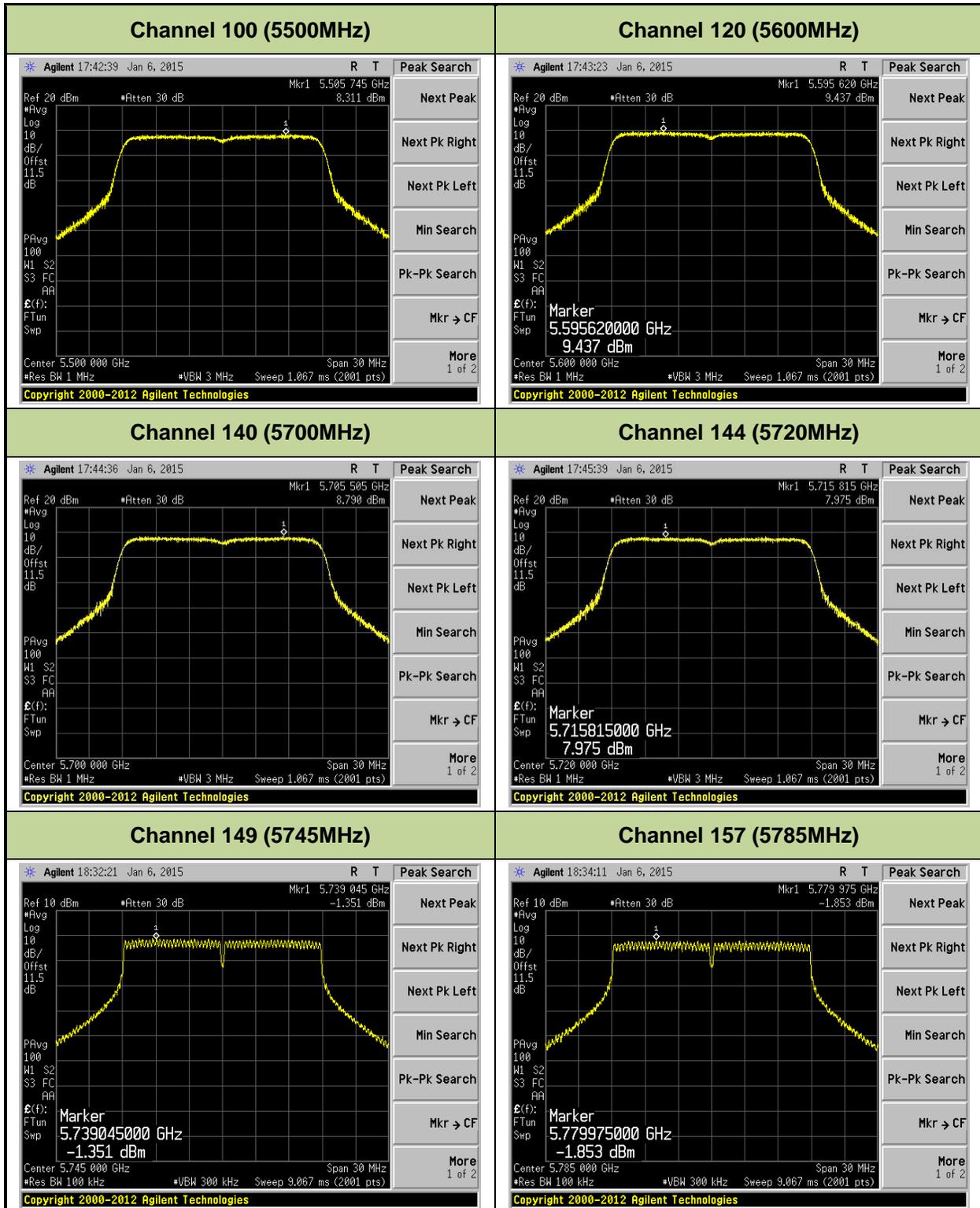
**802.11n-HT20 Power Spectral Density - Ant 2**
**Channel 36 (5180MHz)**

**Channel 44 (5220MHz)**

**Channel 48 (5240MHz)**

**Channel 52 (5260MHz)**

**Channel 60 (5300MHz)**

**Channel 64 (5320MHz)**


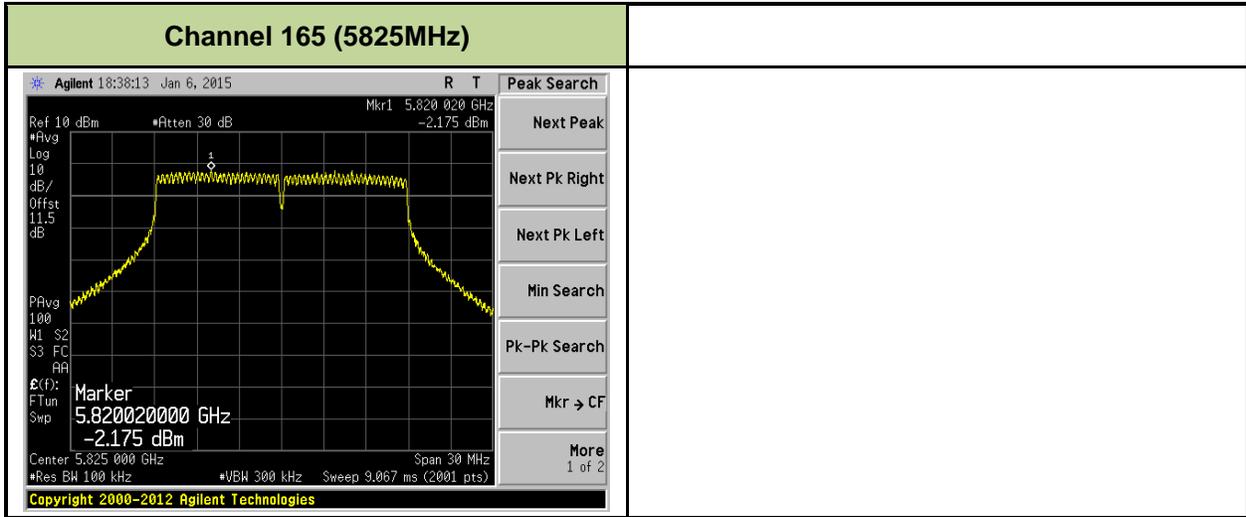


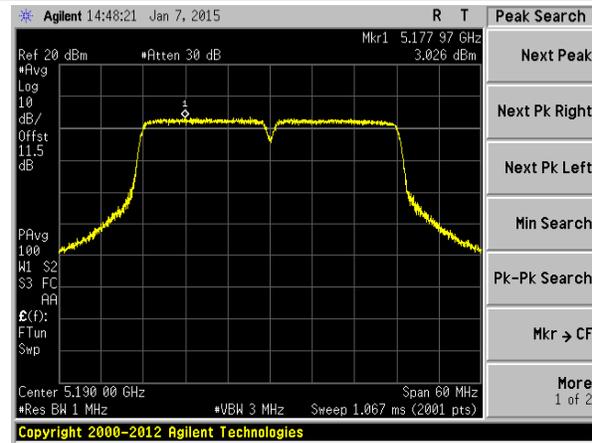
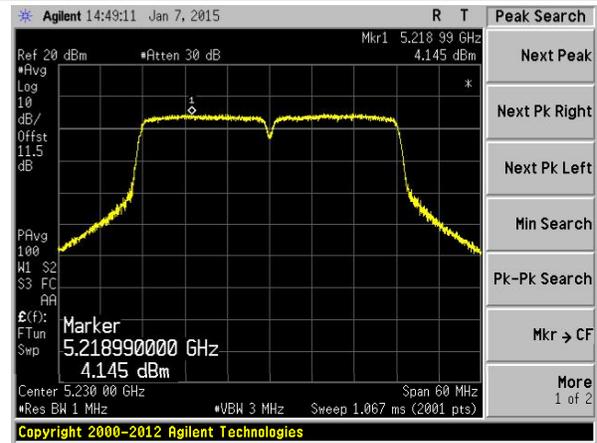
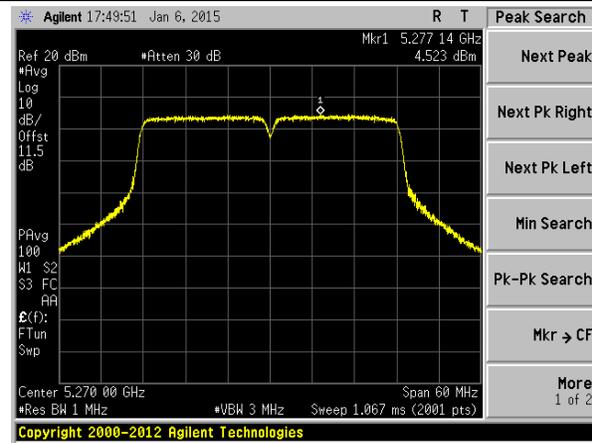
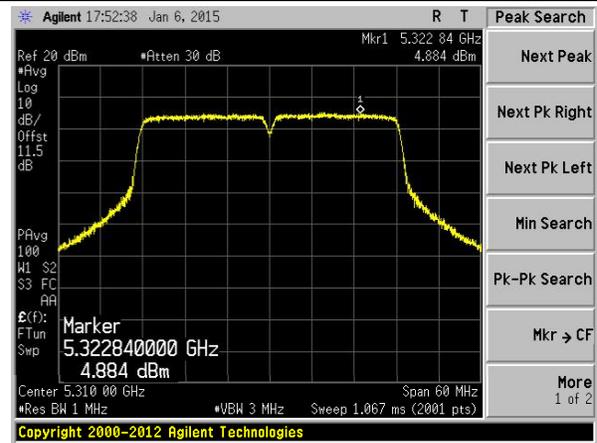
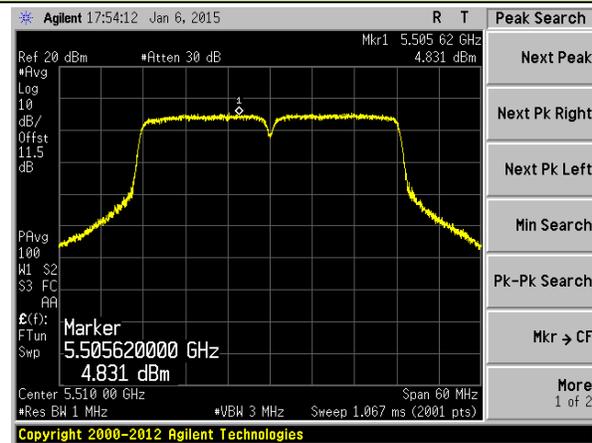
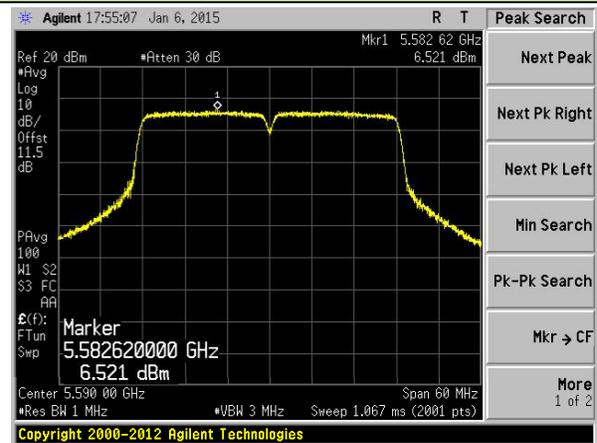
**802.11n-HT40 Power Spectral Density - Ant 2**
**Channel 38 (5190MHz)**

**Channel 46 (5230MHz)**

**Channel 54 (5270MHz)**

**Channel 62 (5310MHz)**

**Channel 102 (5510MHz)**

**Channel 118 (5590MHz)**


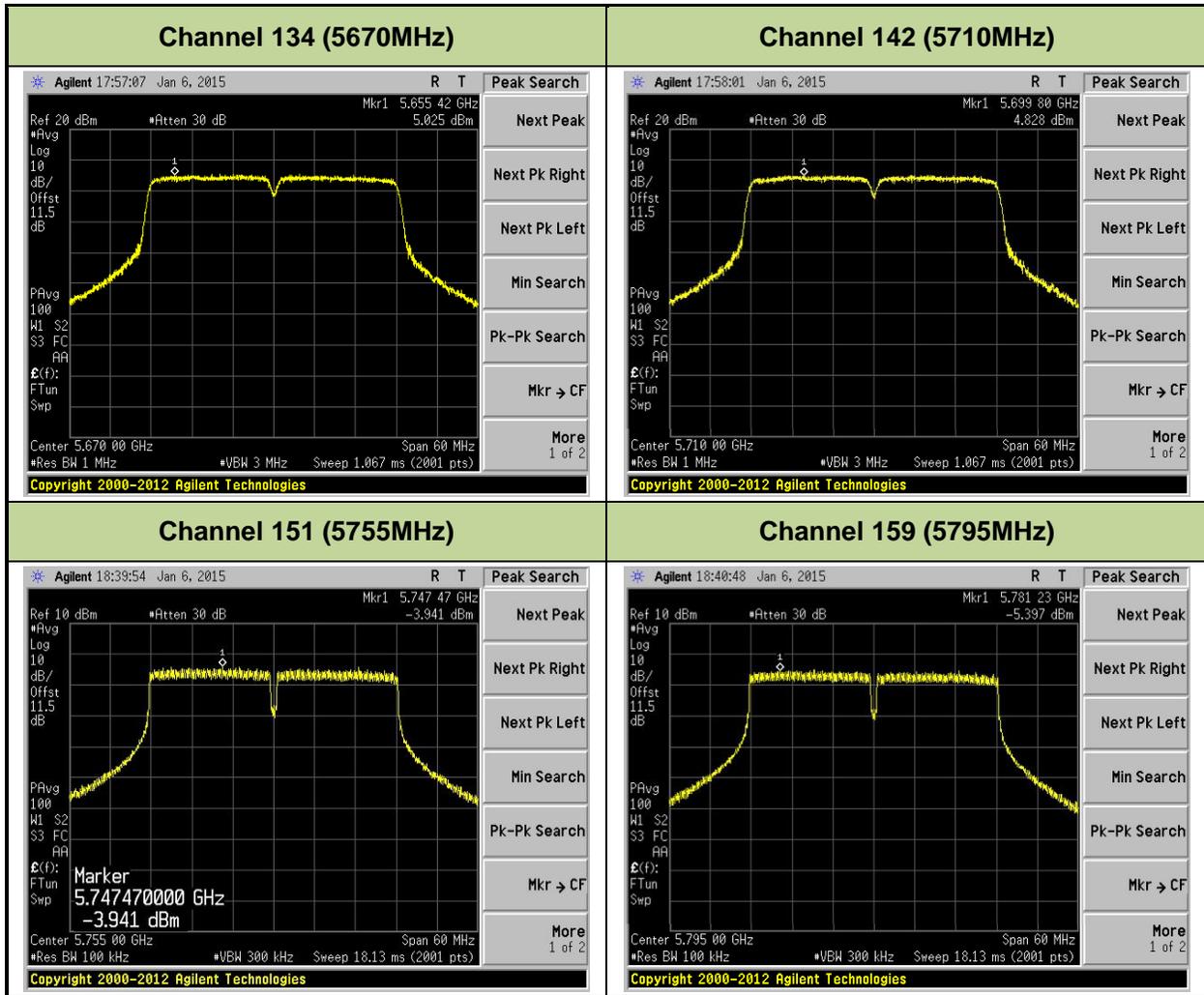


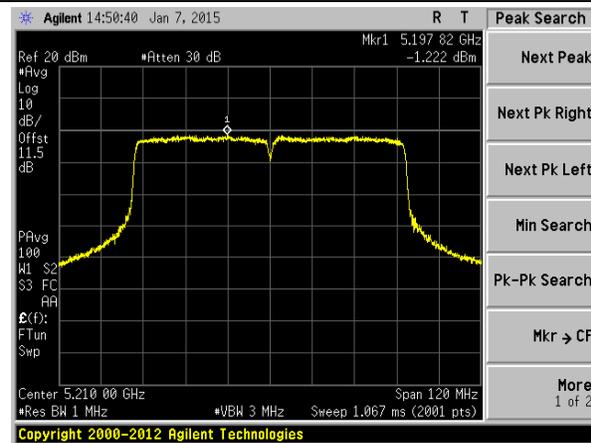
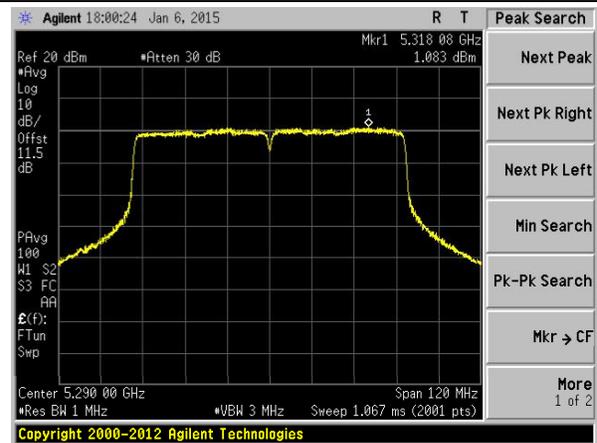
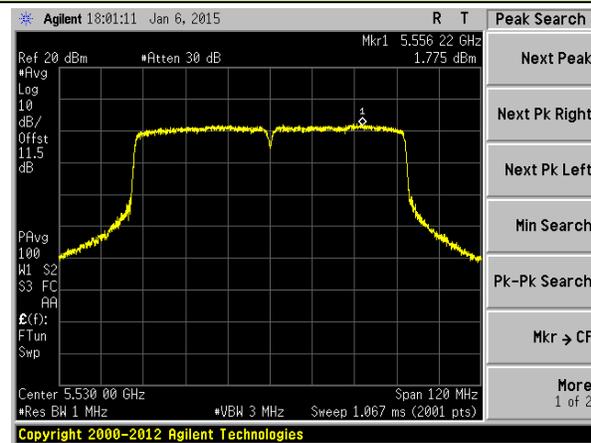
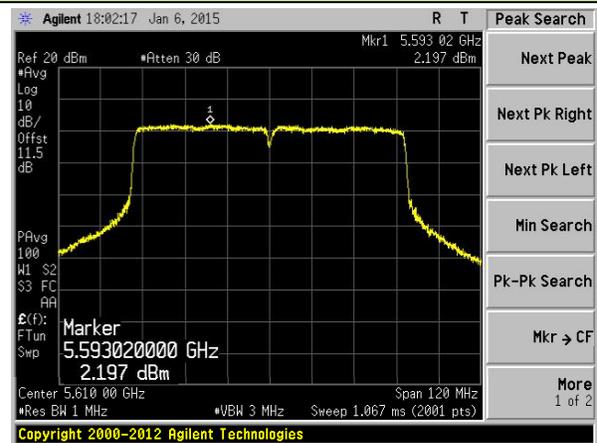
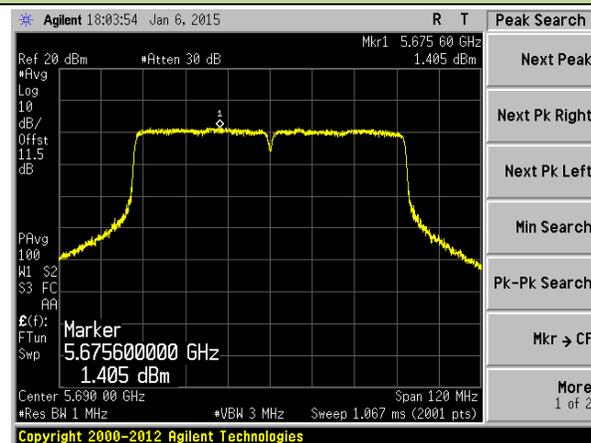
**802.11ac-VHT20 Power Spectral Density - Ant 2**
**Channel 36 (5180MHz)**

**Channel 44 (5220MHz)**

**Channel 48 (5240MHz)**

**Channel 52 (5260MHz)**

**Channel 60 (5300MHz)**

**Channel 64 (5320MHz)**






**802.11ac-VHT40 Power Spectral Density - Ant 2**
**Channel 38 (5190MHz)**

**Channel 46 (5230MHz)**

**Channel 54 (5270MHz)**

**Channel 62 (5310MHz)**

**Channel 102 (5510MHz)**

**Channel 118 (5590MHz)**




**802.11ac-VHT80 Power Spectral Density - Ant 2**
**Channel 42 (5210MHz)**

**Channel 58 (5290MHz)**

**Channel 106 (5530MHz)**

**Channel 122 (5610MHz)**

**Channel 138 (5690MHz)**

**Channel 155 (5775MHz)**
