

802.11n-HT20 6dB Bandwidth - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 149 (5745MHz)



Channel 157 (5785MHz)

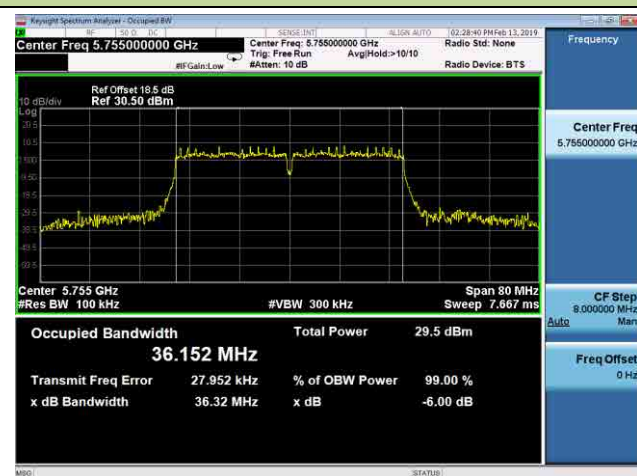


Channel 165 (5825MHz)

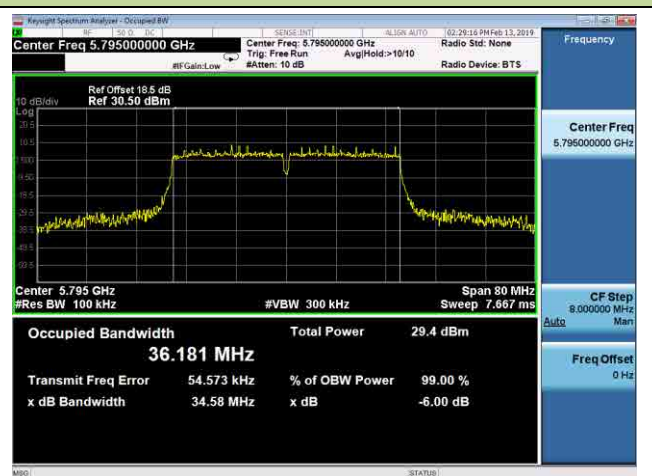


802.11n-HT40 6dB Bandwidth - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 149 (5755MHz)



Channel 157 (5795MHz)



802.11ac-VHT20 6dB Bandwidth - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 149 (5745MHz)



Channel 157 (5785MHz)

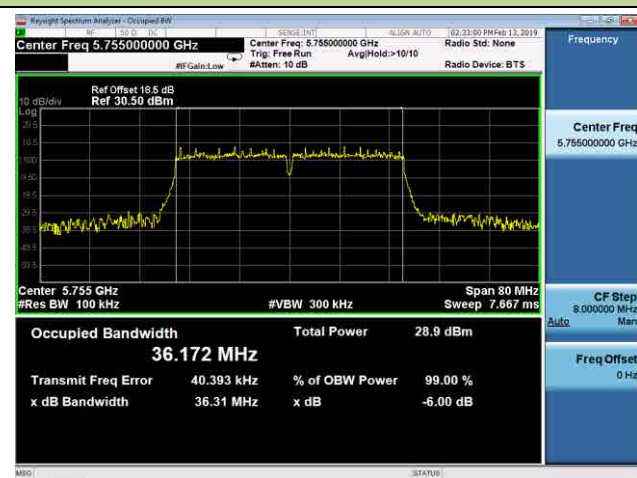


Channel 165 (5825MHz)

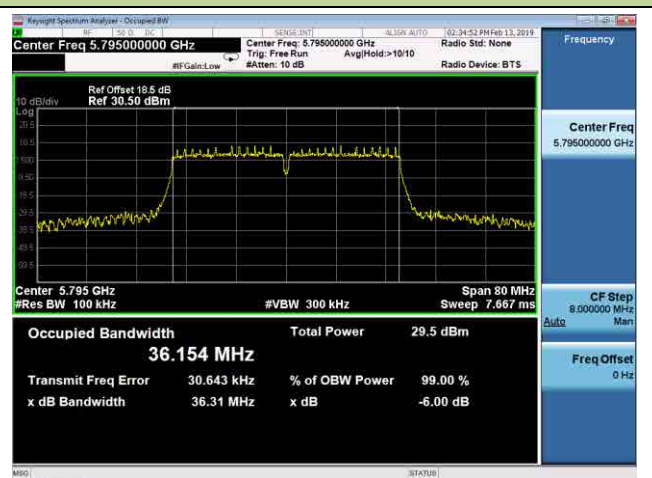


802.11ac-VHT40 6dB Bandwidth - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 151 (5755MHz)



Channel 159 (5795MHz)



802.11ac-VHT80 6dB Bandwidth - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 155 (5775MHz)



802.11ax-HE20 6dB Bandwidth - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 149 (5745MHz)



Channel 157 (5785MHz)

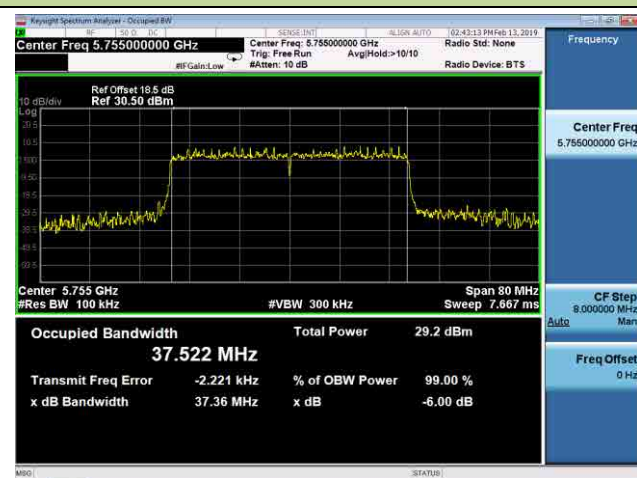


Channel 165 (5825MHz)

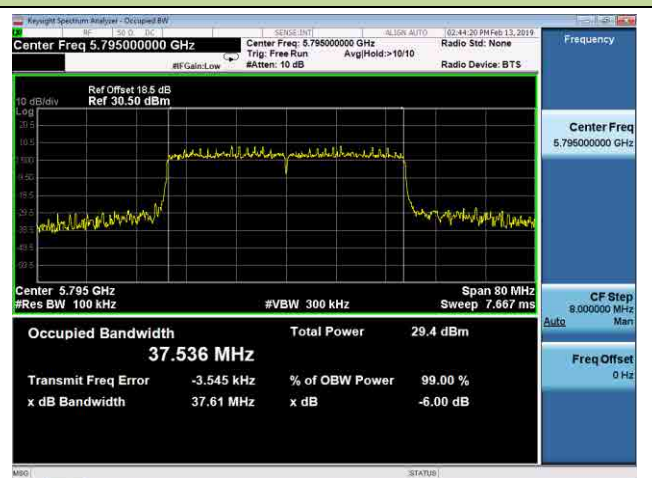


802.11ax-HE40 6dB Bandwidth - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 151 (5755MHz)



Channel 159 (5795MHz)



802.11ax-HE80 6dB Bandwidth - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 155 (5775MHz)



5.6. 最大功率頻譜密度

5.6.1. 適用標準

依據國家通訊傳播委員會低功率射頻電機技術規範之第4.7.2(1)(2)(3)節

使用於5.15 GHz~5.25 GHz 頻段，供室內操作使用，在任何1 MHz 頻帶中最大功率頻譜密度應小於或等於17 dBm。

使用頻率於5.25 GHz~5.35 GHz 與5.470 GHz~5.725 GHz 頻段，最大功率頻譜密度在任何1 MHz 頻帶中應小於或等於11 dBm。

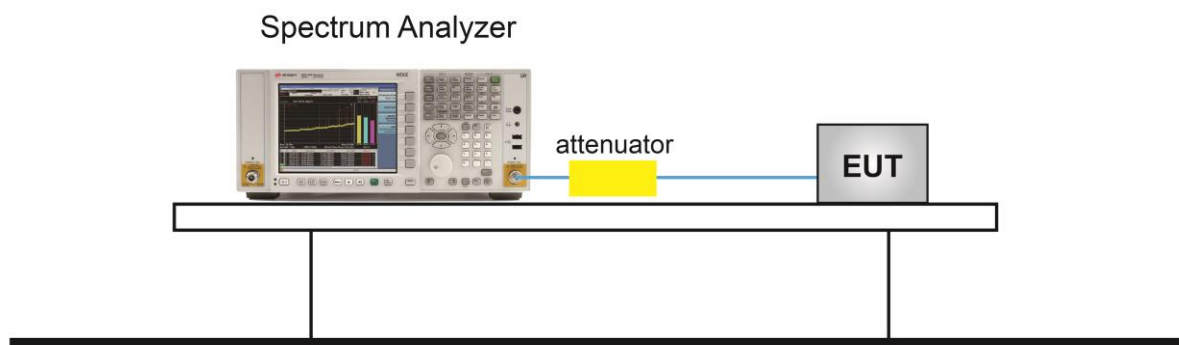
使用頻率於5.725 GHz~5.850 GHz 頻段，在任何500 kHz 頻帶中最大功率頻譜密度應小於或等於30 dBm。

使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大功率頻譜密度。

5.6.2. 量測方法

待測物之天線埠經由適當之衰減直接連至頻譜分析儀RF輸入端，量測定於1MHz/500kHz頻寬。

5.6.3. 測試架構圖



5.6.4. 峰值功率頻譜密度測試結果

待測物名稱	AX6000 次世代 Wi-Fi 路由器	溫度	24°C
測試工程師	Kevin Ker	濕度	56%
測試場地	SR1	測試日期	2019/02/13

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Ant 2 PSD (dBm/MHz)	Ant 3 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
CDD Mode											
11a	6Mbps	36	5180	7.96	8.69	8.46	7.89	94.75	14.52	≤ 14.70	Pass
11a	6Mbps	44	5220	8.55	8.93	8.38	7.54	94.75	14.63	≤ 14.70	Pass
11a	6Mbps	48	5240	7.66	8.98	8.08	7.44	94.75	14.34	≤ 14.70	Pass
11a	6Mbps	52	5260	1.50	1.62	1.57	2.06	94.75	7.95	≤ 8.70	Pass
11a	6Mbps	60	5300	1.88	1.34	1.28	2.02	94.75	7.90	≤ 8.70	Pass
11a	6Mbps	64	5320	2.10	1.99	1.61	2.61	94.75	8.35	≤ 8.70	Pass
11a	6Mbps	100	5500	2.18	1.66	1.97	1.20	94.75	8.02	≤ 8.70	Pass
11a	6Mbps	120	5600	2.42	2.33	2.58	2.05	94.75	8.60	≤ 8.70	Pass
11a	6Mbps	140	5700	2.40	2.32	2.42	2.03	94.75	8.55	≤ 8.70	Pass
11n-HT20	MCS0	36	5180	8.01	8.64	8.57	7.39	94.70	14.44	≤ 14.70	Pass
11n-HT20	MCS0	44	5220	7.99	8.31	7.37	7.52	94.70	14.07	≤ 14.70	Pass
11n-HT20	MCS0	48	5240	7.75	8.40	8.00	7.60	94.70	14.21	≤ 14.70	Pass
11n-HT20	MCS0	52	5260	1.70	1.34	1.50	1.90	94.70	7.87	≤ 8.70	Pass
11n-HT20	MCS0	60	5300	1.41	1.69	2.08	2.43	94.70	8.18	≤ 8.70	Pass
11n-HT20	MCS0	64	5320	1.56	1.55	2.23	2.34	94.70	8.19	≤ 8.70	Pass
11n-HT20	MCS0	100	5500	1.51	1.47	1.53	0.99	94.70	7.64	≤ 8.70	Pass
11n-HT20	MCS0	120	5600	1.93	2.18	2.44	1.57	94.70	8.30	≤ 8.70	Pass
11n-HT20	MCS0	140	5700	2.24	2.40	2.12	2.13	94.70	8.48	≤ 8.70	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Ant 2 PSD (dBm/MHz)	Ant 3 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
CDD Mode											
11n-HT40	MCS0	38	5190	3.52	4.58	3.48	3.52	90.29	10.27	≤ 14.70	Pass
11n-HT40	MCS0	46	5230	7.42	8.24	7.35	7.29	90.29	14.06	≤ 14.70	Pass
11n-HT40	MCS0	54	5270	1.63	1.58	1.35	1.59	90.29	8.00	≤ 8.70	Pass
11n-HT40	MCS0	62	5310	-0.16	0.24	-0.12	-0.20	90.29	6.41	≤ 8.70	Pass
11n-HT40	MCS0	102	5510	1.80	1.48	1.57	1.30	90.29	8.01	≤ 8.70	Pass
11n-HT40	MCS0	118	5590	1.80	1.41	1.43	1.21	90.29	7.93	≤ 8.70	Pass
11n-HT40	MCS0	134	5670	1.30	1.62	1.67	0.69	90.29	7.80	≤ 8.70	Pass
11ac-VHT20	MCS0	36	5180	7.90	8.84	8.13	7.78	98.06	14.20	≤ 14.70	Pass
11ac-VHT20	MCS0	44	5220	7.94	8.72	8.26	7.62	98.06	14.17	≤ 14.70	Pass
11ac-VHT20	MCS0	48	5240	7.89	8.78	7.63	7.74	98.06	14.06	≤ 14.70	Pass
11ac-VHT20	MCS0	52	5260	1.98	1.71	2.05	2.89	98.06	8.20	≤ 8.70	Pass
11ac-VHT20	MCS0	60	5300	2.20	1.96	2.15	2.68	98.06	8.28	≤ 8.70	Pass
11ac-VHT20	MCS0	64	5320	1.79	1.53	1.80	2.18	98.06	7.85	≤ 8.70	Pass
11ac-VHT20	MCS0	100	5500	2.35	1.53	1.48	0.76	98.06	7.59	≤ 8.70	Pass
11ac-VHT20	MCS0	120	5600	2.11	2.04	2.01	1.88	98.06	8.03	≤ 8.70	Pass
11ac-VHT20	MCS0	140	5700	2.34	2.68	3.24	2.33	98.06	8.68	≤ 8.70	Pass
11ac-VHT40	MCS0	38	5190	4.42	5.27	4.53	4.53	96.65	10.87	≤ 14.70	Pass
11ac-VHT40	MCS0	46	5230	7.81	8.50	7.55	7.64	96.65	14.06	≤ 14.70	Pass
11ac-VHT40	MCS0	54	5270	1.87	1.89	2.23	2.03	96.65	8.18	≤ 8.70	Pass
11ac-VHT40	MCS0	62	5310	1.77	2.24	1.82	2.07	96.65	8.15	≤ 8.70	Pass
11ac-VHT40	MCS0	102	5510	1.32	1.56	0.84	1.33	96.65	7.44	≤ 8.70	Pass
11ac-VHT40	MCS0	118	5590	1.39	1.63	1.88	1.60	96.65	7.80	≤ 8.70	Pass
11ac-VHT40	MCS0	134	5670	1.23	1.77	2.28	0.86	96.65	7.74	≤ 8.70	Pass
11ac-VHT80	MCS0	42	5210	0.21	-0.49	-0.21	-0.37	93.94	6.09	≤ 14.70	Pass
11ac-VHT80	MCS0	58	5290	-1.76	-1.88	-1.01	-1.75	93.94	4.71	≤ 8.70	Pass
11ac-VHT80	MCS0	106	5530	-2.20	-2.70	-1.58	-1.46	93.94	4.34	≤ 8.70	Pass
11ac-VHT80	MCS0	122	5610	-1.62	-1.55	-2.03	-1.71	93.94	4.57	≤ 8.70	Pass

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Ant 2 PSD (dBm/MHz)	Ant 3 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
CDD Mode											
11ac-VHT160	MCS0	50	5250	-4.56	-4.25	-5.07	-5.20	89.34	1.76	≤ 8.70	Pass
11ac-VHT160	MCS0	114	5570	-5.39	-5.46	-4.99	-6.05	89.34	1.05	≤ 8.70	Pass
11ax-HE20	MCS0	36	5180	7.18	7.96	8.01	6.64	97.50	13.61	≤ 14.70	Pass
11ax-HE20	MCS0	44	5220	7.80	8.56	8.12	7.60	97.50	14.17	≤ 14.70	Pass
11ax-HE20	MCS0	48	5240	7.99	8.65	8.01	7.57	97.50	14.20	≤ 14.70	Pass
11ax-HE20	MCS0	52	5260	1.84	1.55	0.61	2.14	97.50	7.70	≤ 8.70	Pass
11ax-HE20	MCS0	60	5300	1.86	1.76	1.85	2.12	97.50	8.03	≤ 8.70	Pass
11ax-HE20	MCS0	64	5320	2.25	1.92	1.26	2.59	97.50	8.16	≤ 8.70	Pass
11ax-HE20	MCS0	100	5500	2.30	2.16	2.25	1.48	97.50	8.19	≤ 8.70	Pass
11ax-HE20	MCS0	120	5600	2.37	2.36	2.00	1.90	97.50	8.29	≤ 8.70	Pass
11ax-HE20	MCS0	140	5700	2.40	2.37	2.38	2.01	97.50	8.42	≤ 8.70	Pass
11ax-HE40	MCS0	38	5190	3.53	4.31	3.39	3.34	95.79	9.87	≤ 14.70	Pass
11ax-HE40	MCS0	46	5230	7.93	8.17	7.92	7.47	95.79	14.09	≤ 14.70	Pass
11ax-HE40	MCS0	54	5270	1.55	1.93	1.37	1.55	95.79	7.81	≤ 8.70	Pass
11ax-HE40	MCS0	62	5310	1.83	2.06	1.75	1.89	95.79	8.09	≤ 8.70	Pass
11ax-HE40	MCS0	102	5510	1.83	1.36	1.61	1.44	95.79	7.77	≤ 8.70	Pass
11ax-HE40	MCS0	118	5590	1.69	0.93	1.72	0.79	95.79	7.51	≤ 8.70	Pass
11ax-HE40	MCS0	134	5670	1.30	1.90	1.59	0.72	95.79	7.61	≤ 8.70	Pass
11ax-HE80	MCS0	42	5210	0.87	0.66	0.79	0.47	92.59	7.06	≤ 14.70	Pass
11ax-HE80	MCS0	58	5290	-1.22	-1.03	-0.85	-1.18	92.59	5.29	≤ 8.70	Pass
11ax-HE80	MCS0	106	5530	-1.01	-1.48	-1.21	-0.83	92.59	5.23	≤ 8.70	Pass
11ax-HE80	MCS0	122	5610	-0.35	-0.69	-0.45	-0.67	92.59	5.82	≤ 8.70	Pass
11ax-HE160	MCS0	50	5250	-2.97	-3.14	-3.34	-3.66	88.17	3.30	≤ 8.70	Pass
11ax-HE160	MCS0	114	5570	-3.42	-3.84	-3.47	-4.57	88.17	2.77	≤ 8.70	Pass

Note 1: When EUT duty cycle ≥ 98%, the total PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\}$ (dBm/MHz).

Note 2: When EUT duty cycle < 98%, the total PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\}$ (dBm/MHz) + $10 \cdot \log (1/\text{Duty Cycle})$.

Note 3: For 5150 - 5250MHz Band: PSD Limit (dBm/MHz) = 17dBm/MHz - (8.30dBi - 6.00dBi) = 14.70dBm/MHz.

For 5250 - 5350 and 5470 - 5725MHz Band: PSD Limit (dBm/MHz) = 11dBm/MHz - (8.30dBi - 6.00dBi) = 8.70dBm/MHz.

待測物名稱	AX6000 次世代 Wi-Fi 路由器	溫度	25°C
測試工程師	Kevin Ker	濕度	56%
測試場地	SR1	測試日期	2019/02/13

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 PSD (dBm/100kHz)	Ant 1 PSD (dBm/100kHz)	Ant 2 PSD (dBm/100kHz)	Ant 3 PSD (dBm/100kHz)	Duty Cycle (%)	Constant Factor (dB)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
CDD Mode												
11a	6Mbps	149	5745	2.26	2.46	3.33	2.96	94.75	6.99	16.02	≤ 27.70	Pass
11a	6Mbps	157	5785	2.89	2.78	2.95	2.42	94.75	6.99	16.01	≤ 27.70	Pass
11a	6Mbps	165	5825	1.93	2.97	2.28	2.28	94.75	6.99	15.63	≤ 27.70	Pass
11n-HT20	MCS0	149	5745	2.27	2.25	3.20	2.21	94.70	6.99	15.75	≤ 27.70	Pass
11n-HT20	MCS0	157	5785	2.13	2.70	2.99	2.57	94.70	6.99	15.86	≤ 27.70	Pass
11n-HT20	MCS0	165	5825	2.39	1.86	2.11	1.95	94.70	6.99	15.33	≤ 27.70	Pass
11n-HT40	MCS0	151	5755	-0.45	-0.42	-0.70	-0.36	90.29	6.99	12.97	≤ 27.70	Pass
11n-HT40	MCS0	159	5795	-0.57	-0.53	-0.70	0.23	90.29	6.99	13.08	≤ 27.70	Pass
11ac-VHT20	MCS0	149	5745	2.66	2.74	3.15	2.71	98.06	6.99	15.83	≤ 27.70	Pass
11ac-VHT20	MCS0	157	5785	2.60	2.56	2.22	2.39	98.06	6.99	15.46	≤ 27.70	Pass
11ac-VHT20	MCS0	165	5825	2.16	2.35	2.61	2.57	98.06	6.99	15.44	≤ 27.70	Pass
11ac-VHT40	MCS0	151	5755	-1.07	-0.98	-0.52	-0.84	96.65	6.99	12.31	≤ 27.70	Pass
11ac-VHT40	MCS0	159	5795	-0.78	-0.25	-0.62	-0.92	96.65	6.99	12.52	≤ 27.70	Pass
11ac-VHT80	MCS0	155	5775	-6.84	-6.15	-5.83	-6.38	93.94	6.99	7.00	≤ 27.70	Pass
11ax-HE20	MCS0	149	5745	0.85	1.25	1.55	1.08	97.50	6.99	14.31	≤ 27.70	Pass
11ax-HE20	MCS0	157	5785	0.91	1.01	1.87	1.13	97.50	6.99	14.37	≤ 27.70	Pass
11ax-HE20	MCS0	165	5825	0.60	1.47	1.11	0.92	97.50	6.99	14.16	≤ 27.70	Pass
11ax-HE40	MCS0	151	5755	-0.91	-1.80	-1.97	-1.47	95.79	6.99	11.68	≤ 27.70	Pass
11ax-HE40	MCS0	159	5795	-1.58	-1.64	-1.76	-1.48	95.79	6.99	11.58	≤ 27.70	Pass
11ax-HE80	MCS0	155	5775	-5.82	-5.98	-5.03	-5.99	92.59	6.99	7.66	≤ 27.70	Pass

Note 1: When EUT duty cycle ≥ 98%, the total PSD (dBm/500KHz) = $10 \cdot \log \{ 10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)} \}$ (dBm/100KHz) + Constant Factor.

Note 2: When EUT duty cycle < 98%, the total PSD (dBm/500KHz) = $10 \cdot \log \{ 10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)} \}$ (dBm/100KHz) + Constant Factor + $10 \cdot \log (1/\text{Duty Cycle})$.

Note 3: PSD Limit (dBm/500kHz) = 30dBm/500kHz - (8.30dBi - 6dBi) = 27.70dBm/500kHz.

待測物名稱	AX6000 次世代 Wi-Fi 路由器	溫度	25°C
測試工程師	Kevin Ker	濕度	56%
測試場地	SR1	測試日期	2019/02/13

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Ant 2 PSD (dBm/MHz)	Ant 3 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
Beam-Forming Mode											
11ac-VHT20	MCS0	36	5180	8.04	8.13	8.47	7.64	98.06	14.10	≤ 14.70	Pass
11ac-VHT20	MCS0	44	5220	7.90	8.68	8.22	7.26	98.06	14.07	≤ 14.70	Pass
11ac-VHT20	MCS0	48	5240	7.62	8.88	8.01	7.93	98.06	14.16	≤ 14.70	Pass
11ac-VHT20	MCS0	52	5260	1.36	1.72	1.26	2.14	98.06	7.65	≤ 8.70	Pass
11ac-VHT20	MCS0	60	5300	1.76	1.84	2.12	2.06	98.06	7.97	≤ 8.70	Pass
11ac-VHT20	MCS0	64	5320	1.89	1.78	1.73	2.57	98.06	8.03	≤ 8.70	Pass
11ac-VHT20	MCS0	100	5500	2.30	1.75	1.88	1.50	98.06	7.89	≤ 8.70	Pass
11ac-VHT20	MCS0	120	5600	2.31	2.25	2.09	2.35	98.06	8.27	≤ 8.70	Pass
11ac-VHT20	MCS0	140	5700	2.81	2.84	2.62	2.25	98.06	8.66	≤ 8.70	Pass
11ac-VHT40	MCS0	38	5190	-0.22	1.42	0.18	0.33	96.65	6.64	≤ 14.70	Pass
11ac-VHT40	MCS0	46	5230	5.88	6.91	6.17	6.22	96.65	12.48	≤ 14.70	Pass
11ac-VHT40	MCS0	54	5270	0.21	0.42	0.13	-0.13	96.65	6.33	≤ 8.70	Pass
11ac-VHT40	MCS0	62	5310	-1.64	-1.08	-1.41	-1.42	96.65	4.79	≤ 8.70	Pass
11ac-VHT40	MCS0	102	5510	0.78	0.26	0.34	0.34	96.65	6.60	≤ 8.70	Pass
11ac-VHT40	MCS0	118	5590	0.45	0.36	1.02	0.32	96.65	6.72	≤ 8.70	Pass
11ac-VHT40	MCS0	134	5670	-0.40	0.00	0.13	-0.89	96.65	5.90	≤ 8.70	Pass
11ac-VHT80	MCS0	42	5210	4.25	3.41	4.23	3.68	93.94	10.20	≤ 14.70	Pass
11ac-VHT80	MCS0	58	5290	-4.26	-4.09	-3.39	-4.31	93.94	2.30	≤ 8.70	Pass
11ac-VHT80	MCS0	106	5530	-2.80	-2.87	-2.40	-2.34	93.94	3.70	≤ 8.70	Pass
11ac-VHT80	MCS0	122	5610	-2.70	-2.90	-2.38	-2.59	93.94	3.65	≤ 8.70	Pass
11ac-VHT160	MCS0	50	5250	-5.05	-4.47	-4.67	-5.18	89.34	1.68	≤ 8.70	Pass
11ac-VHT160	MCS0	114	5570	-6.19	-6.25	-6.35	-7.35	89.34	0.00	≤ 8.70	Pass

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Ant 2 PSD (dBm/MHz)	Ant 3 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
Beam-Forming Mode											
11ax-HE20	MCS0	36	5180	7.13	7.76	7.67	6.96	97.50	13.52	≤ 14.70	Pass
11ax-HE20	MCS0	44	5220	7.54	8.51	8.27	7.37	97.50	14.08	≤ 14.70	Pass
11ax-HE20	MCS0	48	5240	7.55	8.19	7.57	7.04	97.50	13.74	≤ 14.70	Pass
11ax-HE20	MCS0	52	5260	1.64	1.45	1.90	2.17	97.50	7.93	≤ 8.70	Pass
11ax-HE20	MCS0	60	5300	1.57	1.93	2.03	1.99	97.50	8.01	≤ 8.70	Pass
11ax-HE20	MCS0	64	5320	2.39	1.88	2.30	2.59	97.50	8.43	≤ 8.70	Pass
11ax-HE20	MCS0	100	5500	2.19	1.80	2.12	1.38	97.50	8.01	≤ 8.70	Pass
11ax-HE20	MCS0	120	5600	2.02	1.78	2.10	1.95	97.50	8.09	≤ 8.70	Pass
11ax-HE20	MCS0	140	5700	2.86	2.80	3.13	2.55	97.50	8.97	≤ 8.70	Pass
11ax-HE40	MCS0	38	5190	-1.36	-0.16	-0.68	-0.78	95.79	5.48	≤ 14.70	Pass
11ax-HE40	MCS0	46	5230	6.05	6.97	6.10	6.33	95.79	12.59	≤ 14.70	Pass
11ax-HE40	MCS0	54	5270	-0.37	-0.02	0.11	-0.30	95.79	6.07	≤ 8.70	Pass
11ax-HE40	MCS0	62	5310	-1.31	-0.99	-1.67	-1.46	95.79	4.86	≤ 8.70	Pass
11ax-HE40	MCS0	102	5510	0.48	0.64	0.58	0.40	95.79	6.73	≤ 8.70	Pass
11ax-HE40	MCS0	118	5590	0.32	0.05	0.39	0.74	95.79	6.59	≤ 8.70	Pass
11ax-HE40	MCS0	134	5670	-0.32	-0.40	-0.57	-0.87	95.79	5.67	≤ 8.70	Pass
11ax-HE80	MCS0	42	5210	-1.65	-1.91	-1.42	-1.94	92.59	4.63	≤ 14.70	Pass
11ax-HE80	MCS0	58	5290	-3.35	-3.25	-2.66	-3.37	92.59	3.21	≤ 8.70	Pass
11ax-HE80	MCS0	106	5530	-3.16	-3.42	-3.61	-2.84	92.59	3.11	≤ 8.70	Pass
11ax-HE80	MCS0	122	5610	-2.18	-2.98	-2.63	-2.77	92.59	3.72	≤ 8.70	Pass
11ax-HE160	MCS0	50	5250	-4.85	-4.74	-5.30	-5.98	88.17	1.38	≤ 8.70	Pass
11ax-HE160	MCS0	114	5570	-6.84	-7.57	-6.69	-7.65	88.17	-0.60	≤ 8.70	Pass

Note 1: When EUT duty cycle ≥ 98%, the total PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\}$ (dBm/MHz).

Note 2: When EUT duty cycle < 98%, the total PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\}$ (dBm/MHz) + $10 \cdot \log (1/\text{Duty Cycle})$.

Note 3: For 5150 - 5250MHz Band: PSD Limit (dBm/MHz) = 17dBm/MHz - (8.30dBi - 6.00dBi) = 14.70dBm/MHz.

For 5150 - 5250MHz and 5470 - 5725MHz Bands: PSD Limit (dBm/MHz) = 11dBm/MHz - (8.30dBi - 6.00dBi) = 8.70dBm/MHz.

待測物名稱	AX6000 次世代 Wi-Fi 路由器	溫度	25°C
測試工程師	Kevin Ker	濕度	56%
測試場地	SR1	測試日期	2019/02/13

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 PSD (dBm/100kHz)	Ant 1 PSD (dBm/100kHz)	Ant 2 PSD (dBm/100kHz)	Ant 3 PSD (dBm/100kHz)	Duty Cycle (%)	Constant Factor (dB)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
Beam-Forming Mode												
11ac-VHT20	MCS0	149	5745	0.03	0.05	-0.44	0.69	98.06	6.99	13.11	≤ 27.70	Pass
11ac-VHT20	MCS0	157	5785	-0.16	-0.03	0.37	0.49	98.06	6.99	13.19	≤ 27.70	Pass
11ac-VHT20	MCS0	165	5825	-1.84	-1.25	-1.83	-2.06	98.06	6.99	11.28	≤ 27.70	Pass
11ac-VHT40	MCS0	151	5755	-2.72	-2.67	-2.50	-2.49	96.65	6.99	10.56	≤ 27.70	Pass
11ac-VHT40	MCS0	159	5795	-2.55	2.43	-2.00	-2.85	96.65	6.99	12.52	≤ 27.70	Pass
11ac-VHT80	MCS0	155	5775	-6.02	-6.10	-5.81	-6.10	93.94	6.99	7.28	≤ 27.70	Pass
11ax-HE20	MCS0	149	5745	-0.73	-1.25	-1.04	-1.17	97.50	6.99	12.08	≤ 27.70	Pass
11ax-HE20	MCS0	157	5785	-1.45	-0.76	-1.27	-1.03	97.50	6.99	12.00	≤ 27.70	Pass
11ax-HE20	MCS0	165	5825	-1.73	-0.48	-1.14	-1.12	97.50	6.99	12.03	≤ 27.70	Pass
11ax-HE40	MCS0	151	5755	-4.08	-3.32	-3.83	-3.71	95.79	6.99	9.47	≤ 27.70	Pass
11ax-HE40	MCS0	159	5795	-3.99	-3.10	-3.05	-3.54	95.79	6.99	9.79	≤ 27.70	Pass
11ax-HE80	MCS0	155	5775	-6.79	-6.88	-6.72	-6.73	92.59	6.99	6.57	≤ 27.70	Pass

Note 1: When EUT duty cycle ≥ 98%, the total PSD (dBm/500KHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\}$ (dBm/100KHz) + Constant Factor.

Note 2: When EUT duty cycle < 98%, the total PSD (dBm/500KHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\}$ (dBm/100KHz) + Constant Factor + $10 \cdot \log (1/\text{Duty Cycle})$.

Note 3: PSD Limit (dBm/500kHz) = 30dBm/500kHz - (8.30dBi - 6dBi) = 27.70dBm/500kHz.

待測物名稱	AX6000 次世代 Wi-Fi 路由器	溫度	25°C
測試工程師	Kevin Ker	測試日期	2019/02/13

802.11a Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3 (CDD Mode)

Channel 36 (5180MHz)



Channel 44 (5220MHz)



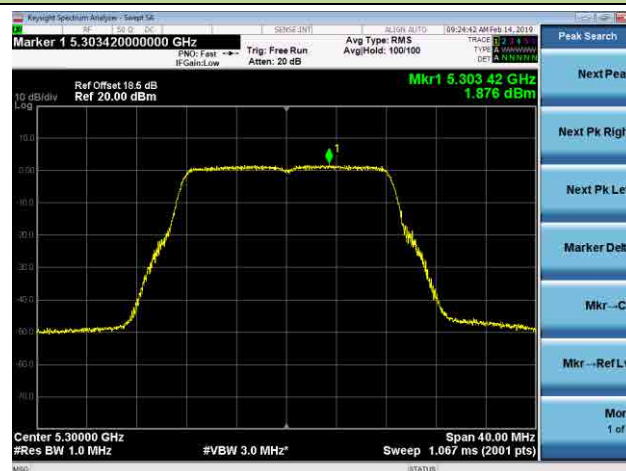
Channel 48 (5240MHz)



Channel 52 (5260MHz)



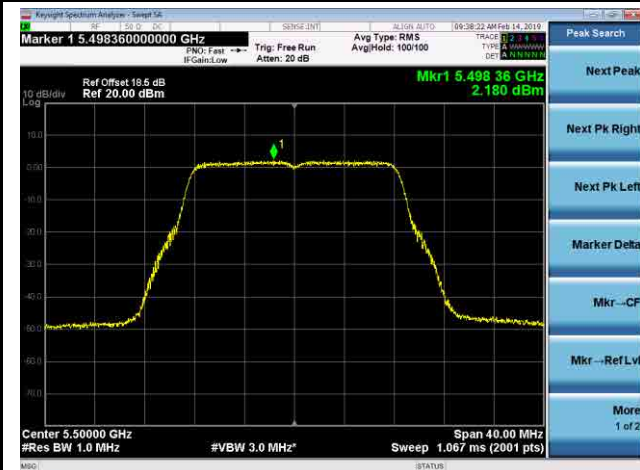
Channel 60 (5300MHz)



Channel 64 (5320MHz)



Channel 100 (5500MHz)



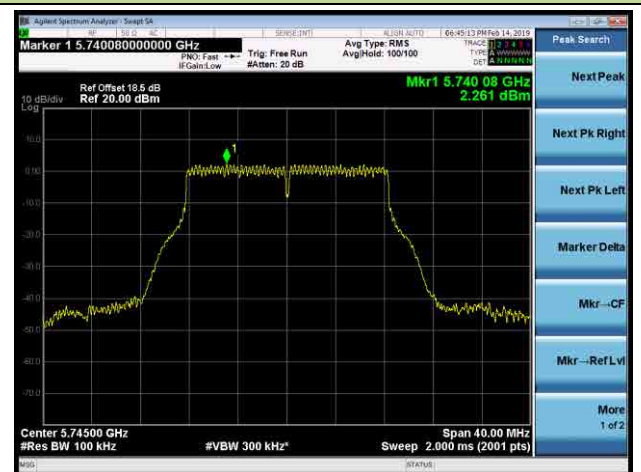
Channel 120 (5600MHz)



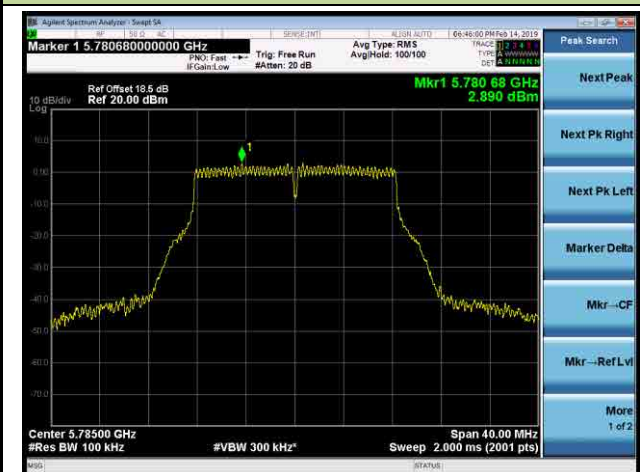
Channel 140 (5700MHz)



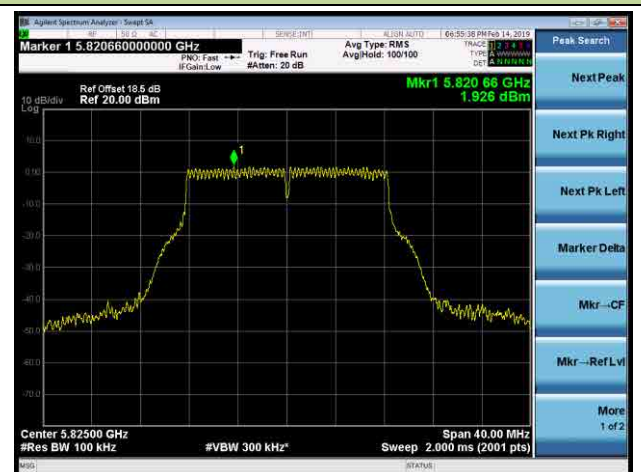
Channel 149 (5745MHz)



Channel 157 (5785MHz)

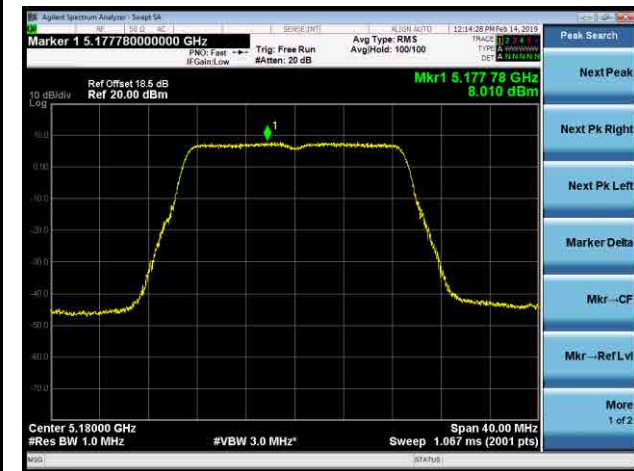


Channel 165 (5825MHz)



802.11n-HT20 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3 (CDD Mode)

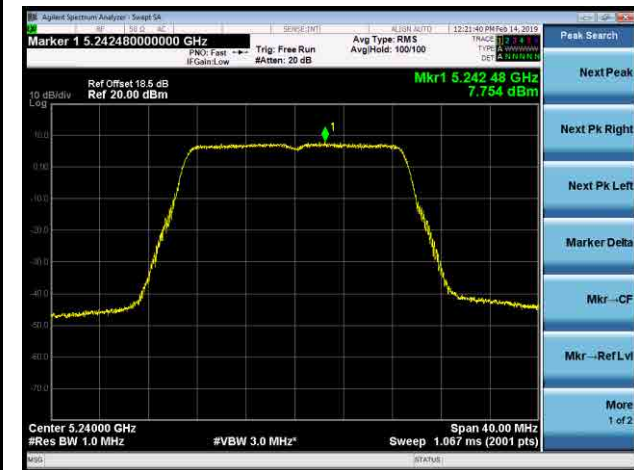
Channel 36 (5180MHz)



Channel 44 (5220MHz)



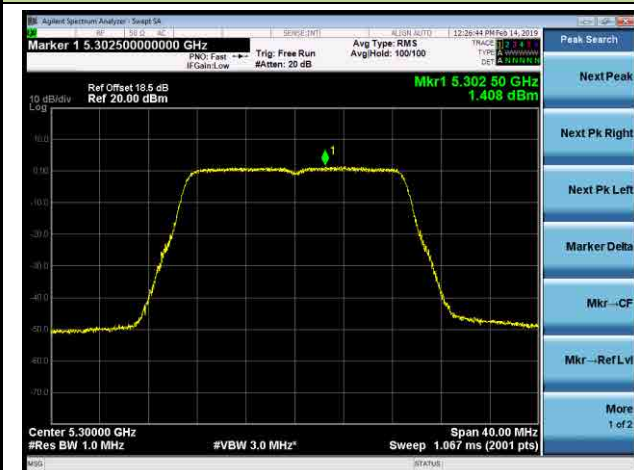
Channel 48 (5240MHz)



Channel 52 (5260MHz)



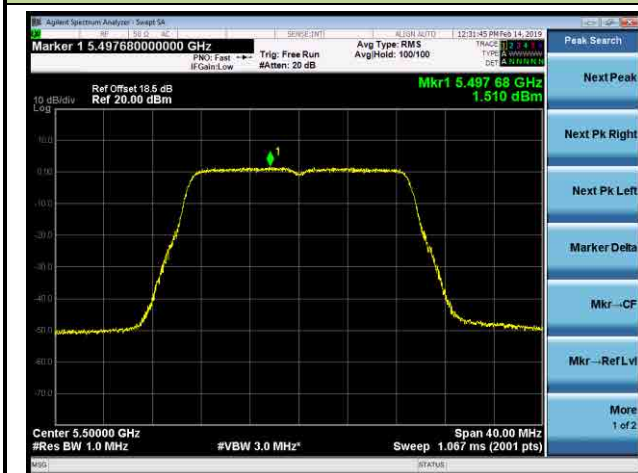
Channel 60 (5300MHz)



Channel 64 (5320MHz)



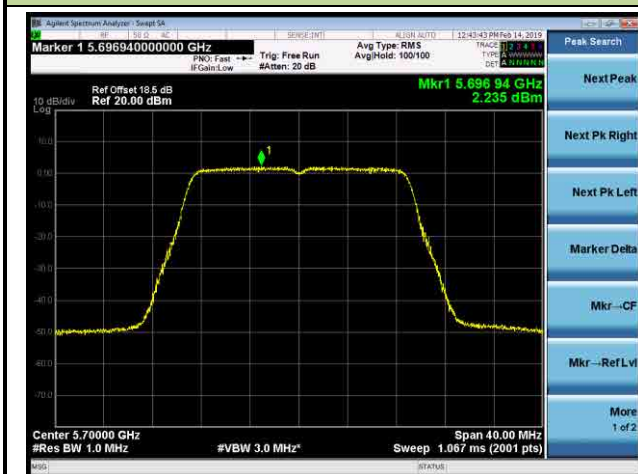
Channel 100 (5500MHz)



Channel 120 (5600MHz)



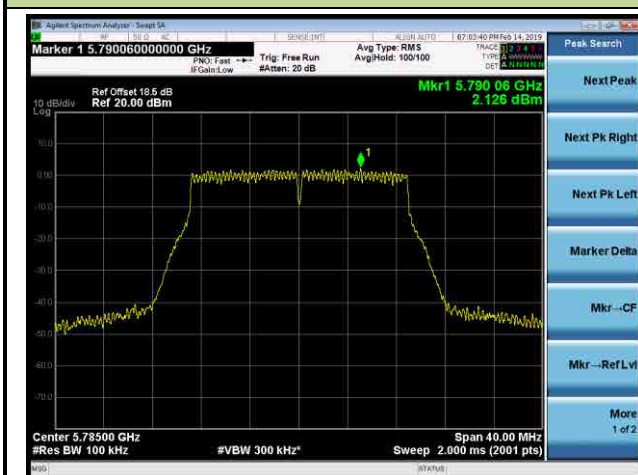
Channel 140 (5700MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)

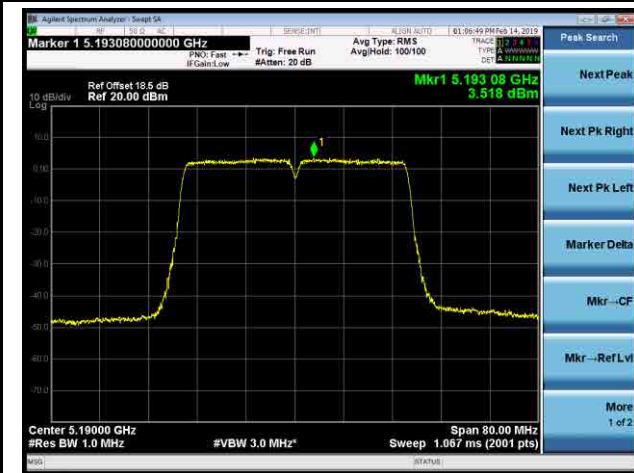


Channel 165 (5825MHz)



802.11n-HT40 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3 (CDD Mode)

Channel 38 (5190MHz)



Channel 46 (5230MHz)



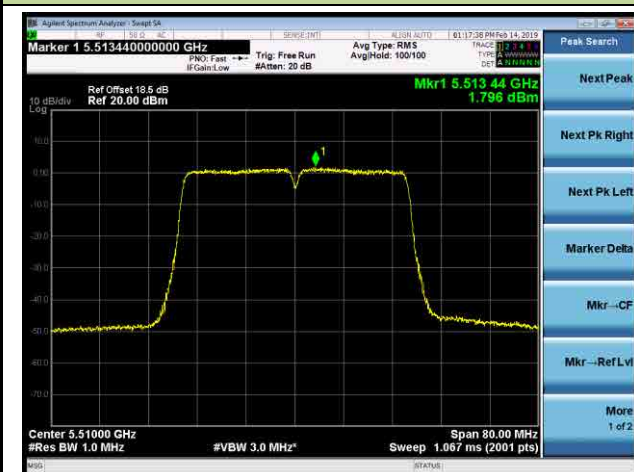
Channel 54 (5270MHz)



Channel 62 (5310MHz)



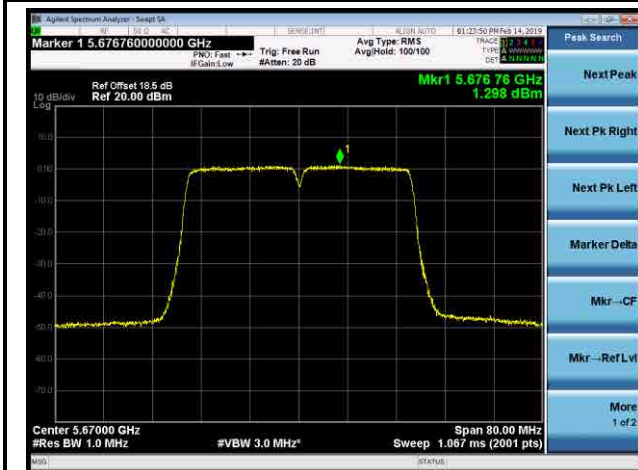
Channel 102 (5510MHz)



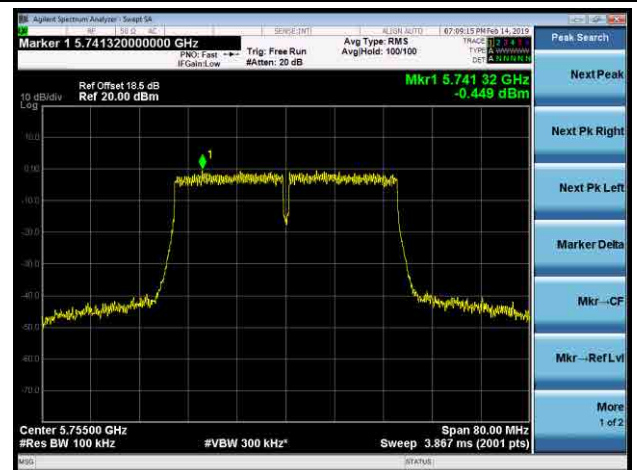
Channel 118 (5590MHz)



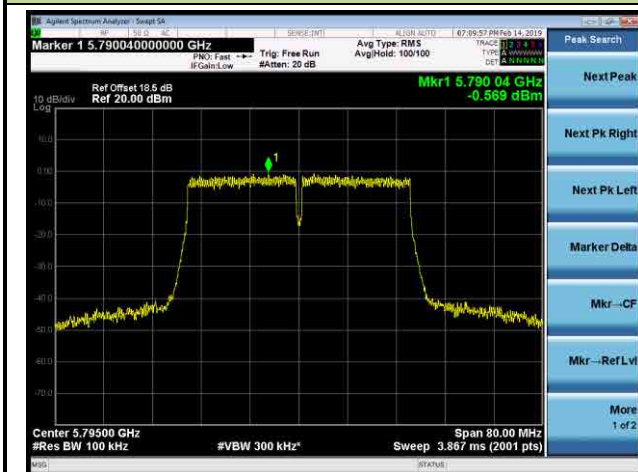
Channel 134 (5670MHz)



Channel 151 (5755MHz)



Channel 159 (5795MHz)



802.11ac-VHT20 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3 (CDD Mode)

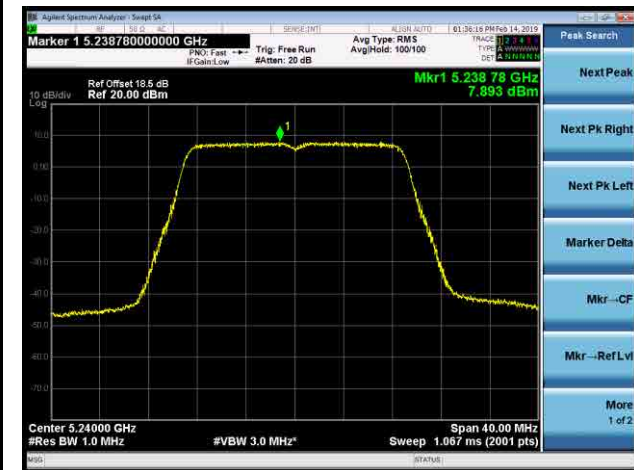
Channel 36 (5180MHz)



Channel 44 (5220MHz)



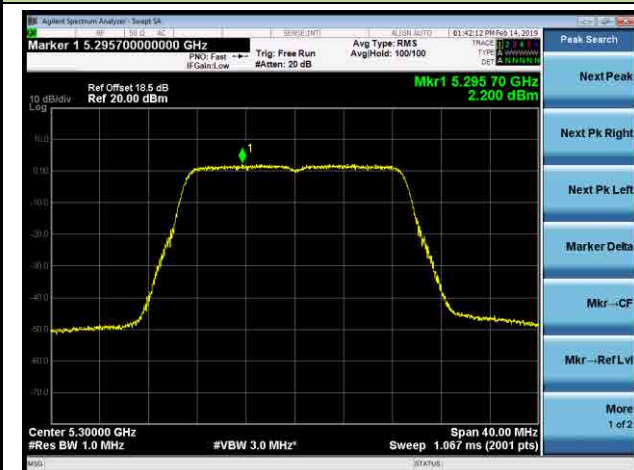
Channel 48 (5240MHz)



Channel 52 (5260MHz)



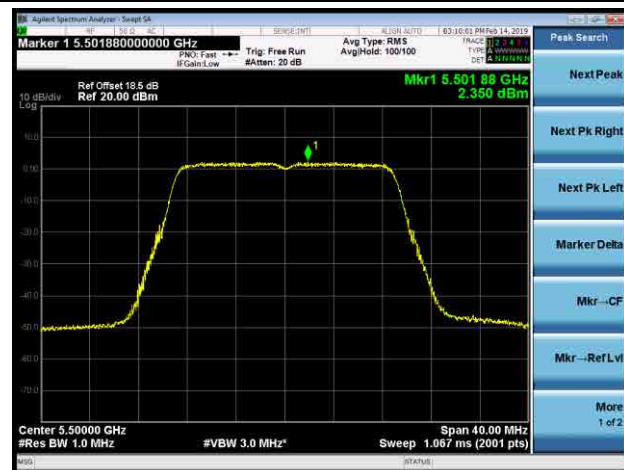
Channel 60 (5300MHz)



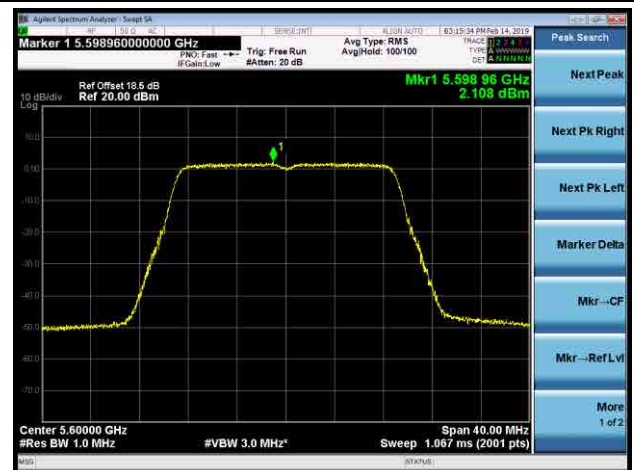
Channel 64 (5320MHz)



Channel 100 (5500MHz)



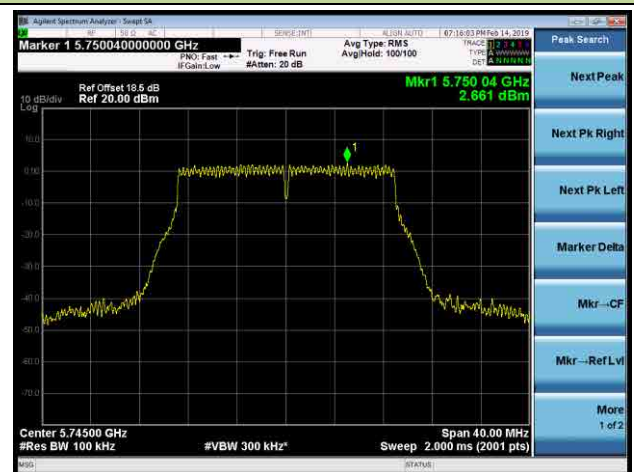
Channel 120 (5600MHz)



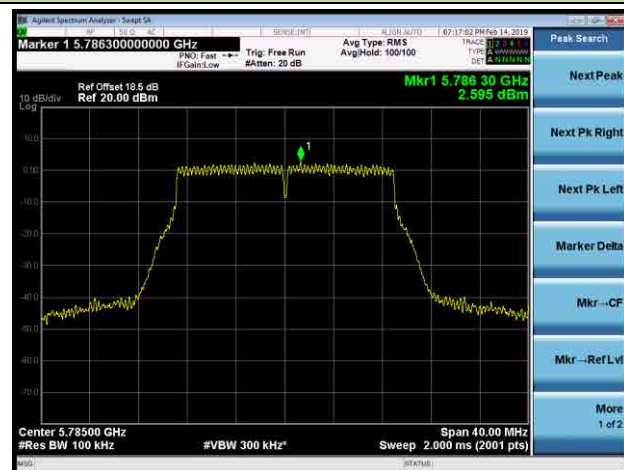
Channel 140 (5700MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)

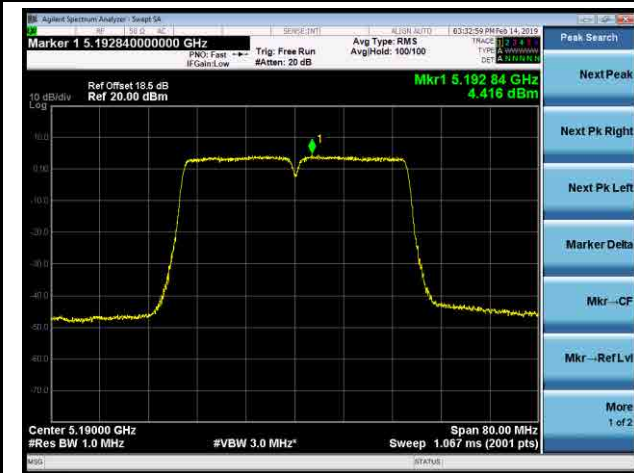


Channel 165 (5825MHz)



802.11ac-VHT40 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3 (CDD Mode)

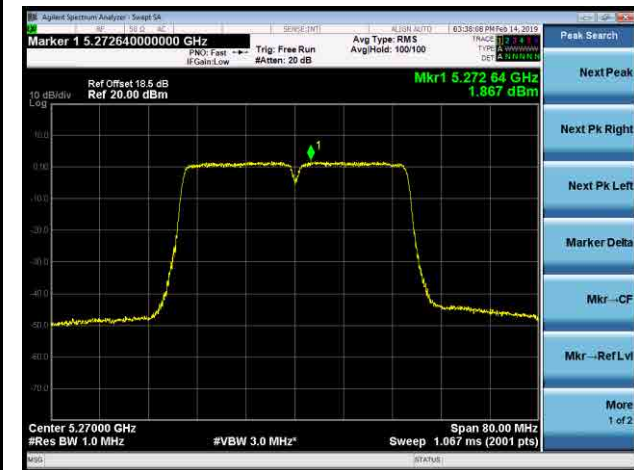
Channel 38 (5190MHz)



Channel 46 (5230MHz)



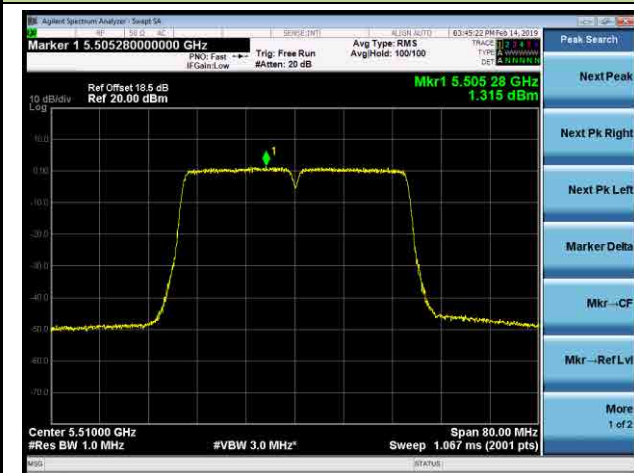
Channel 54 (5270MHz)



Channel 62 (5310MHz)



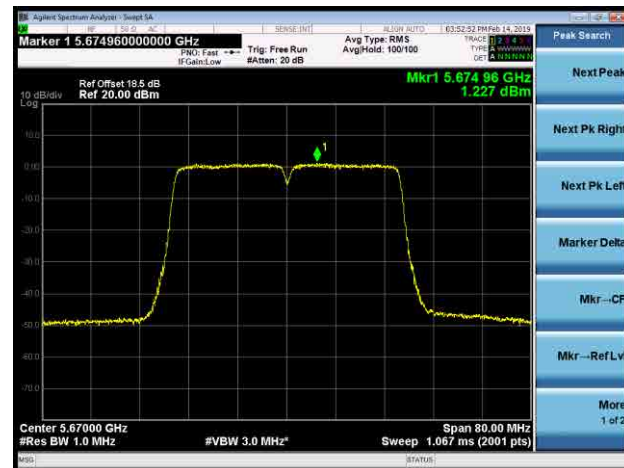
Channel 102 (5510MHz)



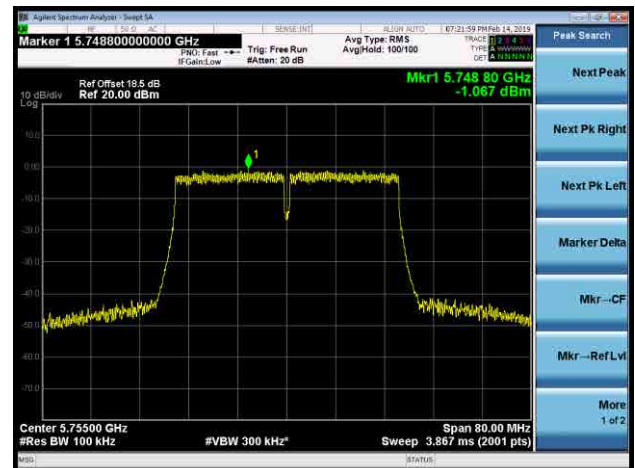
Channel 118 (5590MHz)



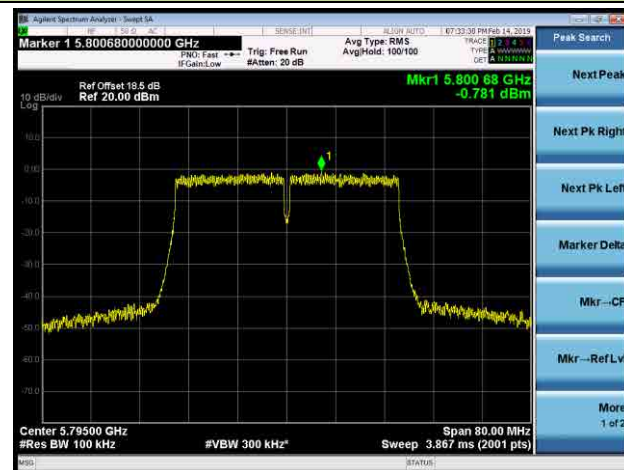
Channel 134 (5670MHz)



Channel 151 (5755MHz)

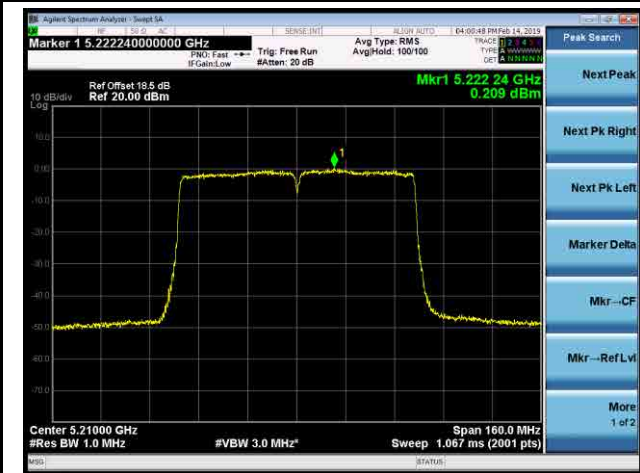


Channel 159 (5795MHz)



802.11ac-VHT80 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3 (CDD Mode)

Channel 42 (5210MHz)



Channel 58 (5290MHz)



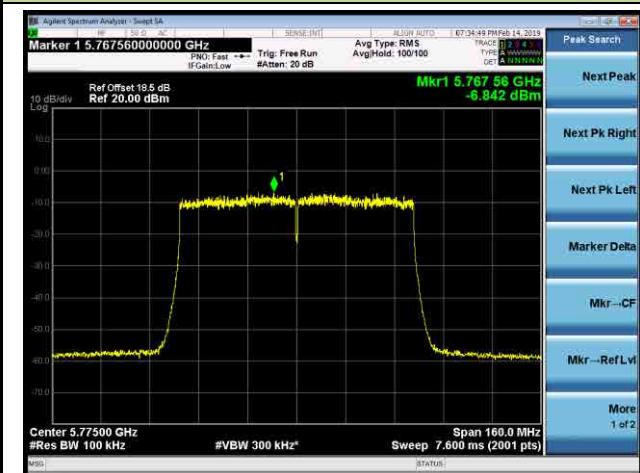
Channel 106 (5530MHz)



Channel 122 (5610MHz)

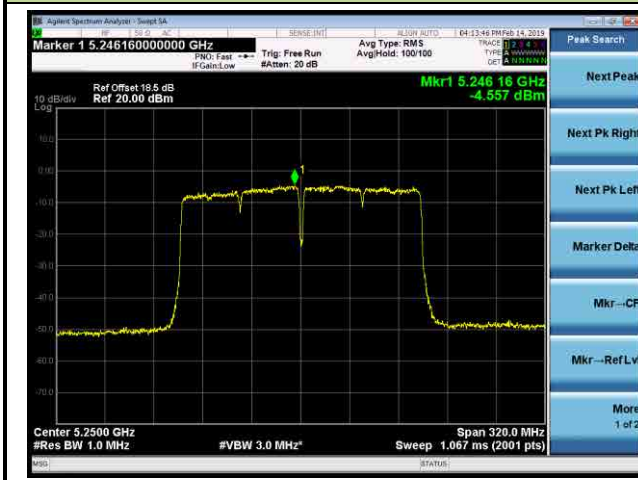


Channel 155 (5775MHz)



802.11ac-VHT160 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3 (CDD Mode)

Channel 50 (5250MHz)

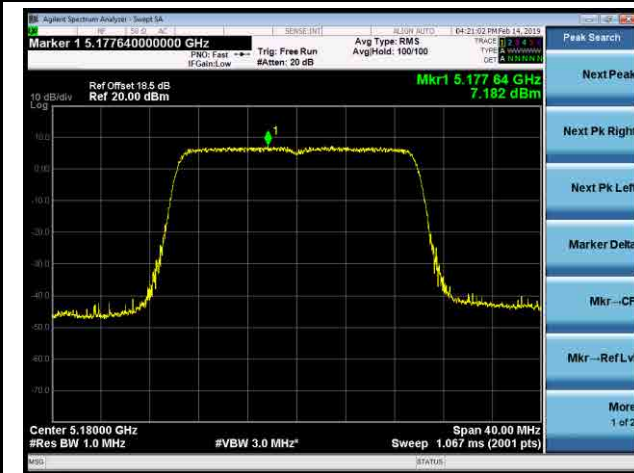


Channel 114 (5570MHz)

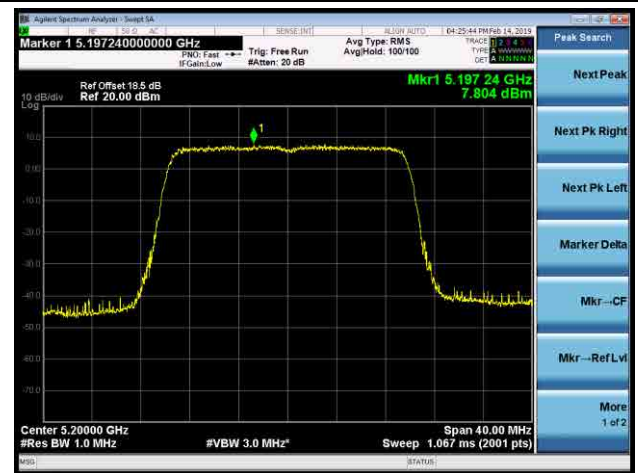


802.11ax-HE20 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3 (CDD Mode)

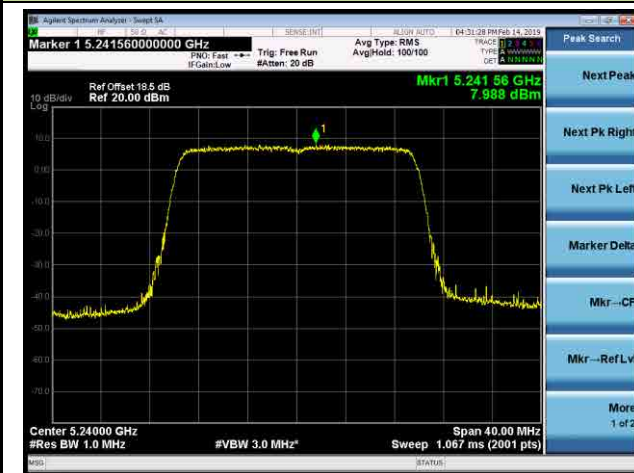
Channel 36 (5180MHz)



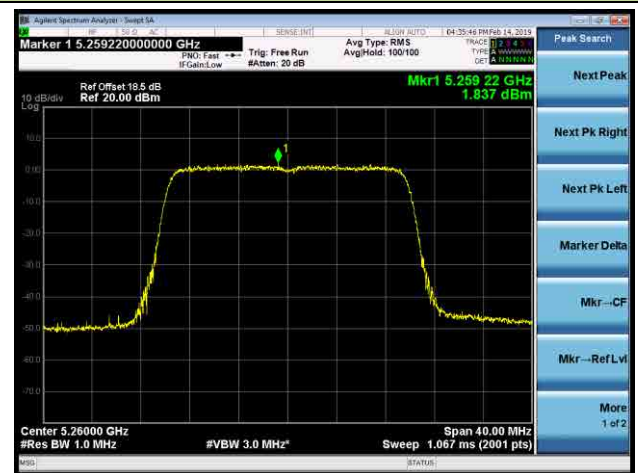
Channel 44 (5220MHz)



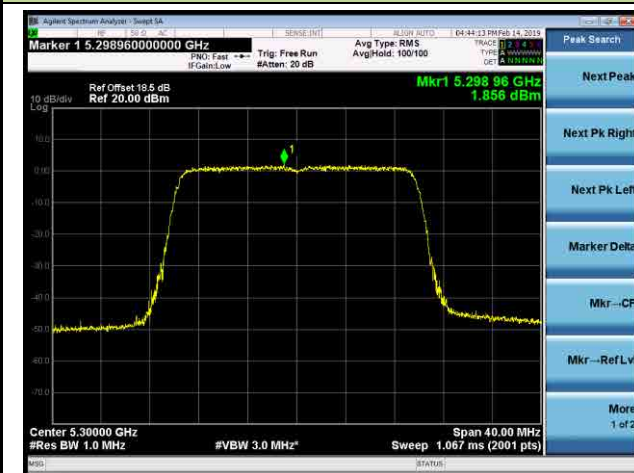
Channel 48 (5240MHz)



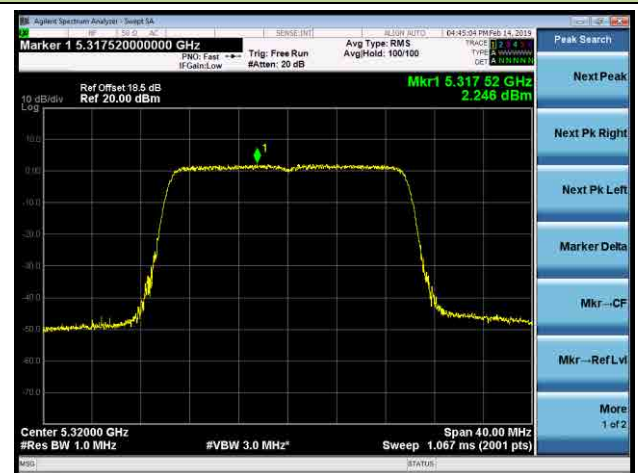
Channel 52 (5260MHz)



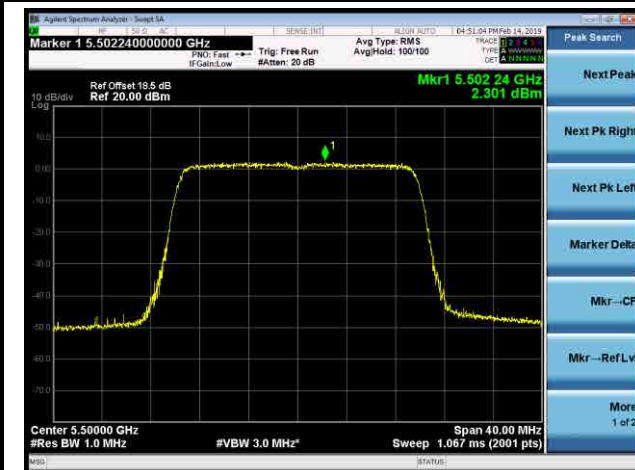
Channel 60 (5300MHz)



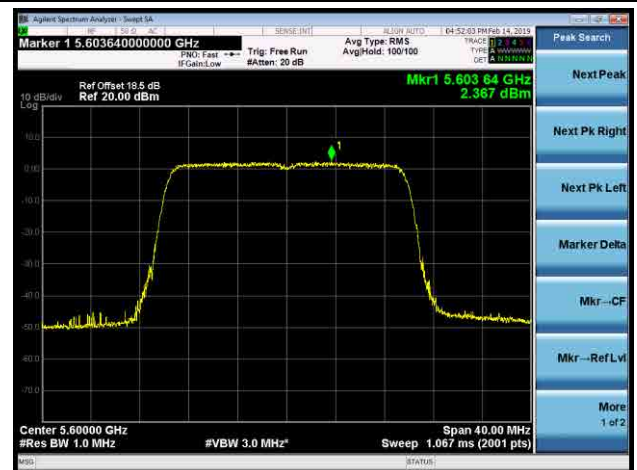
Channel 64 (5320MHz)



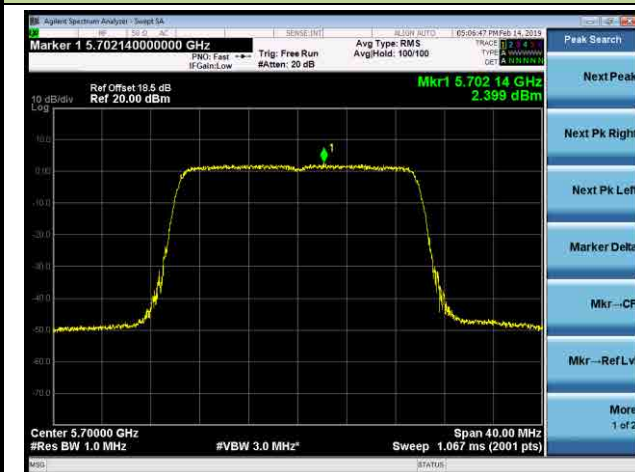
Channel 100 (5500MHz)



Channel 120 (5600MHz)



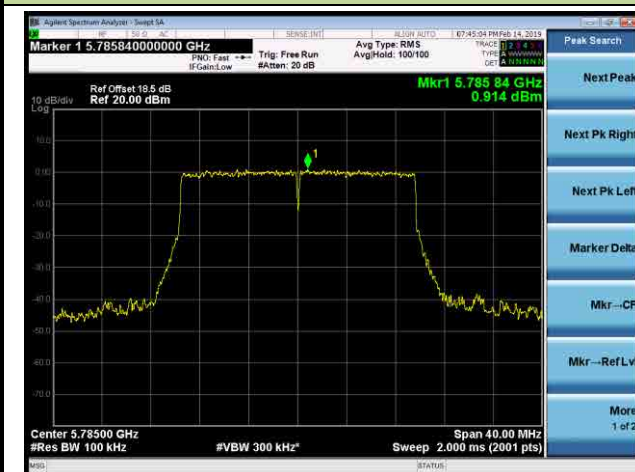
Channel 140 (5700MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)

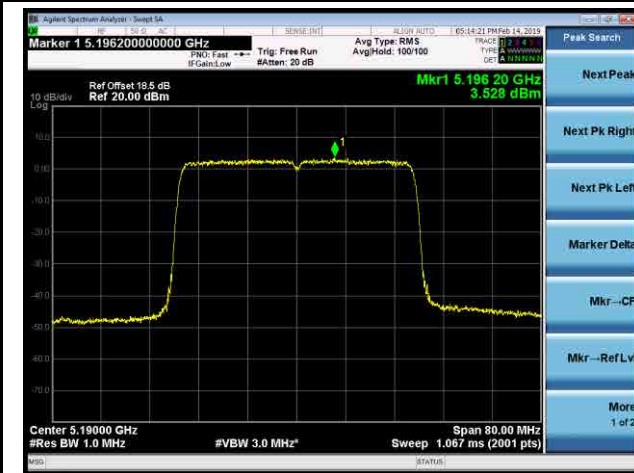


Channel 165 (5825MHz)



802.11ax-HE40 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3 (CDD Mode)

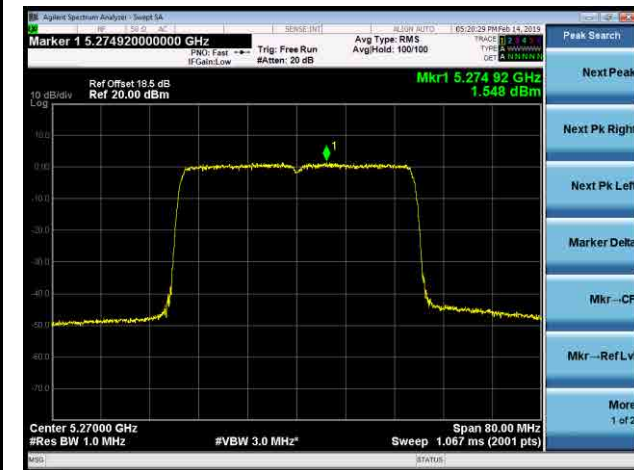
Channel 38 (5190MHz)



Channel 46 (5230MHz)



Channel 54 (5270MHz)



Channel 62 (5310MHz)



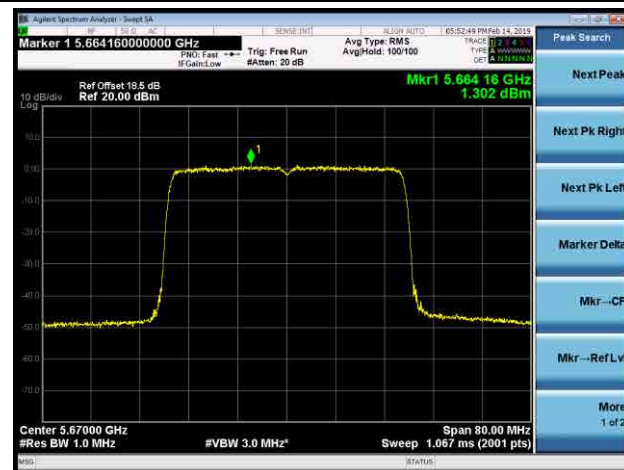
Channel 102 (5510MHz)



Channel 118 (5590MHz)



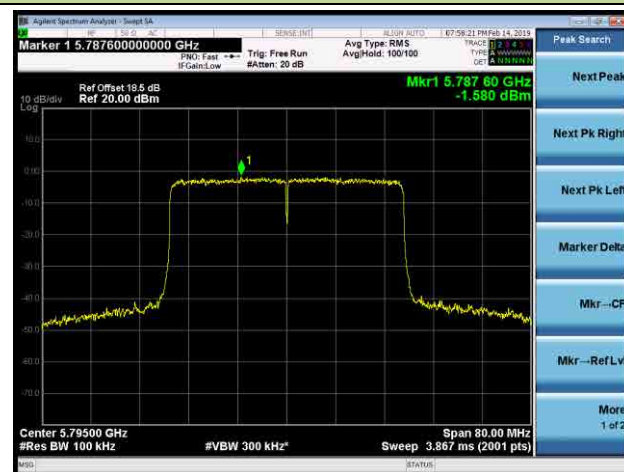
Channel 134 (5670MHz)



Channel 151 (5755MHz)

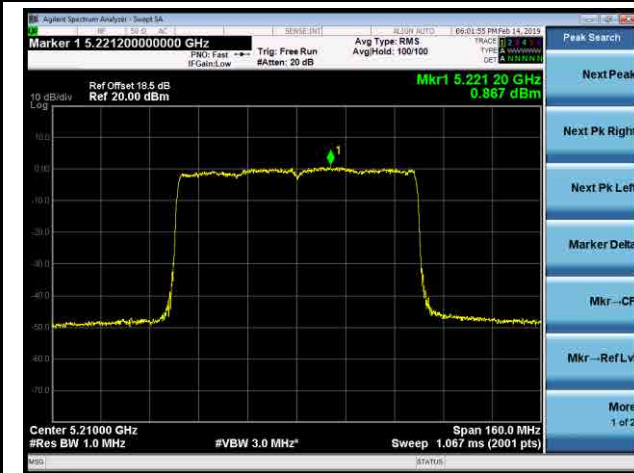


Channel 159 (5795MHz)

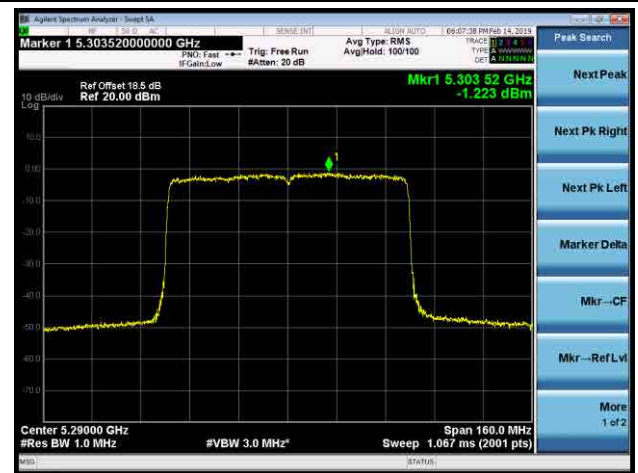


802.11ax-HE80 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3 (CDD Mode)

Channel 42 (5210MHz)



Channel 58 (5290MHz)



Channel 106 (5530MHz)



Channel 122 (5610MHz)

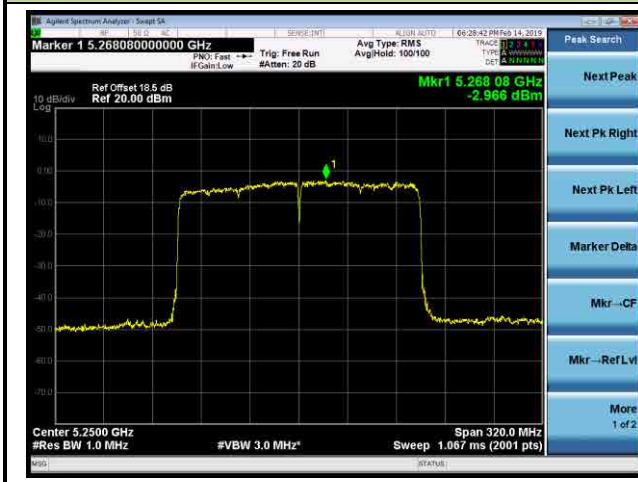


Channel 155 (5775MHz)



802.11ax-HE160 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3 (CDD Mode)

Channel 50 (5250MHz)



Channel 114 (5570MHz)



802.11a Power Spectral Density - Ant 1 / Ant 0 + 1 + 2 + 3 (CDD Mode)

Channel 36 (5180MHz)



Channel 44 (5220MHz)



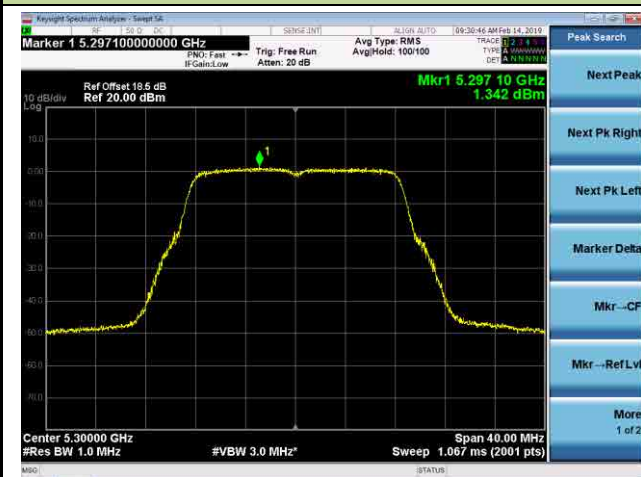
Channel 48 (5240MHz)



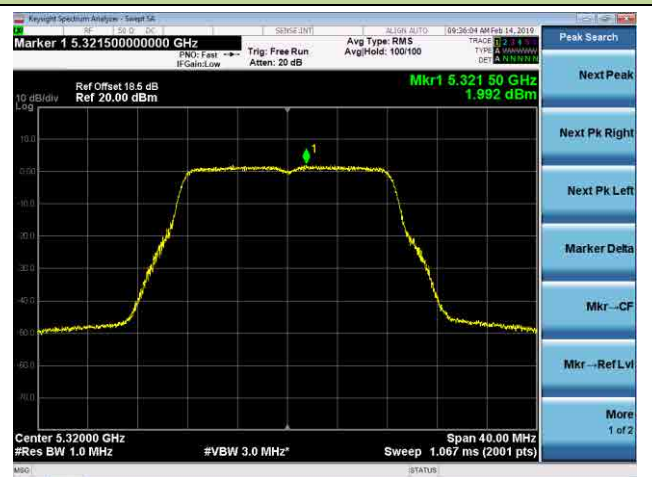
Channel 52 (5260MHz)



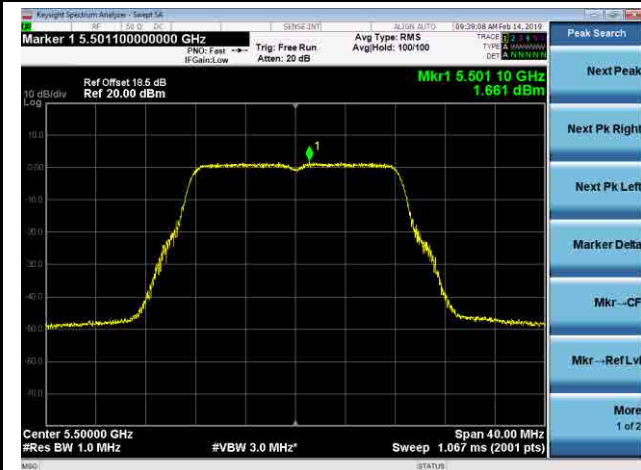
Channel 60 (5300MHz)



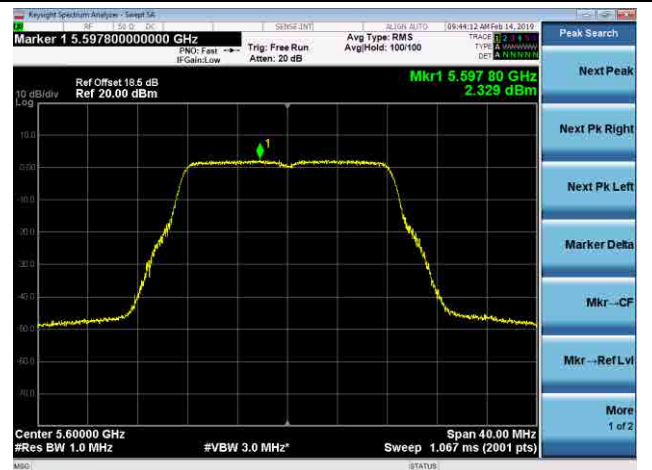
Channel 64 (5320MHz)



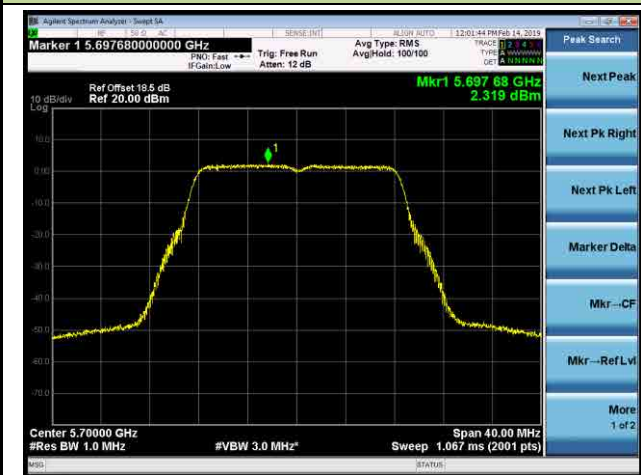
Channel 100 (5500MHz)



Channel 120 (5600MHz)



Channel 140 (5700MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)



802.11n-HT20 Power Spectral Density - Ant 1 / Ant 0 + 1 + 2 + 3 (CDD Mode)

Channel 36 (5180MHz)



Channel 44 (5220MHz)



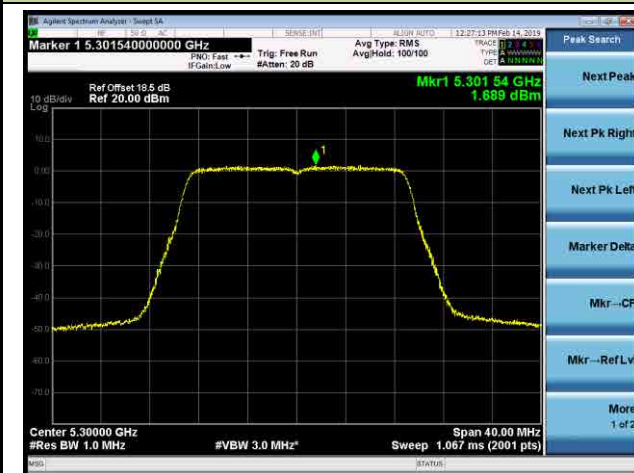
Channel 48 (5240MHz)



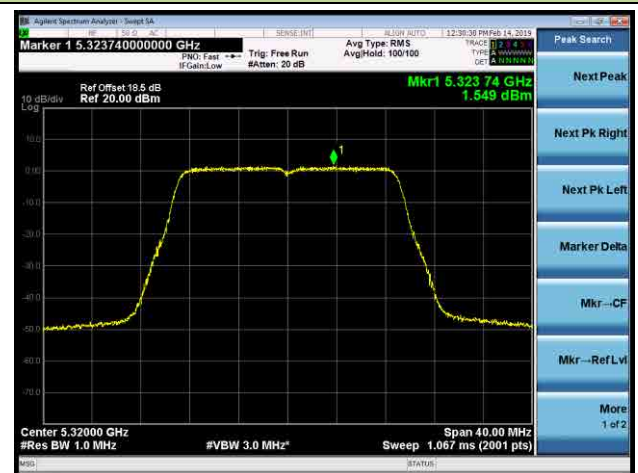
Channel 52 (5260MHz)



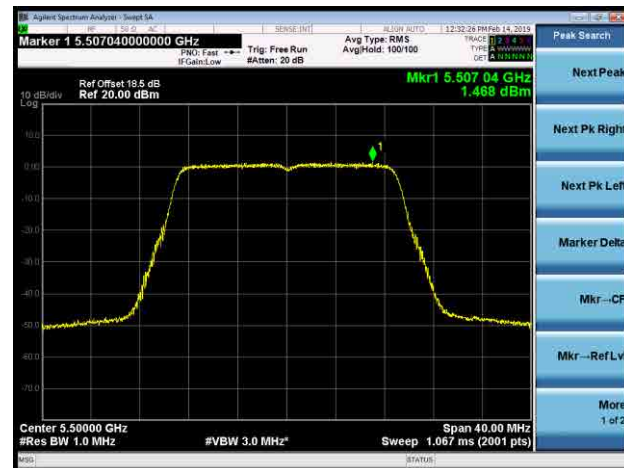
Channel 60 (5300MHz)



Channel 64 (5320MHz)



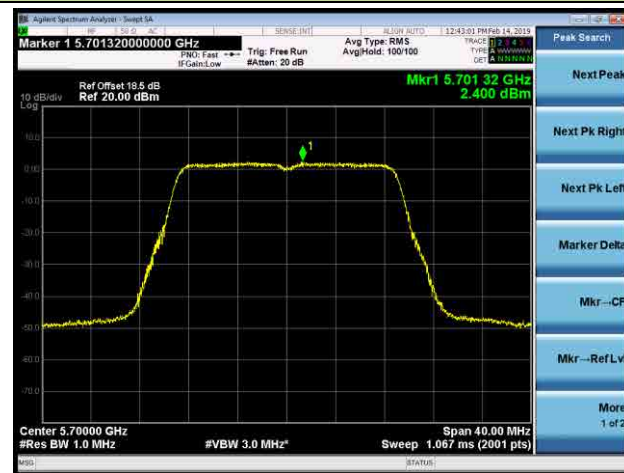
Channel 100 (5500MHz)



Channel 120 (5600MHz)



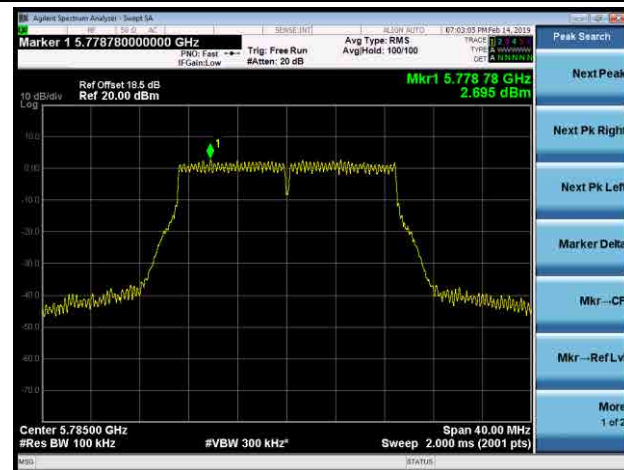
Channel 140 (5700MHz)



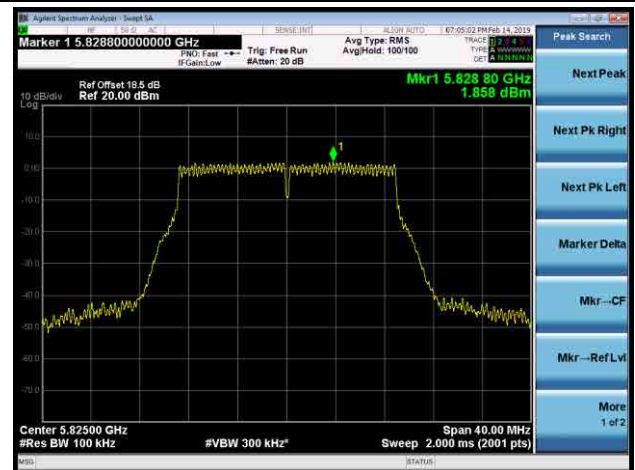
Channel 149 (5745MHz)



Channel 157 (5785MHz)

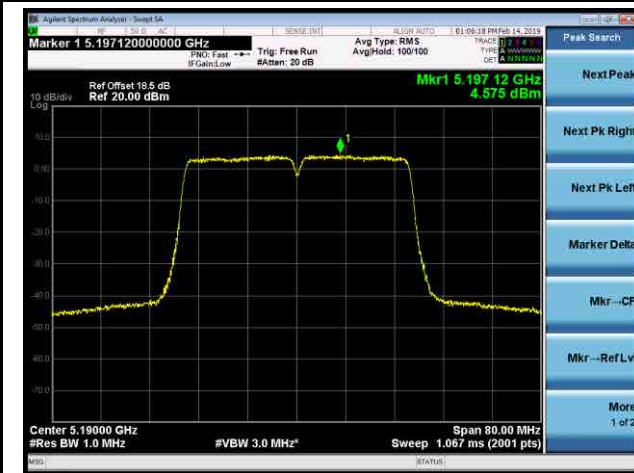


Channel 165 (5825MHz)

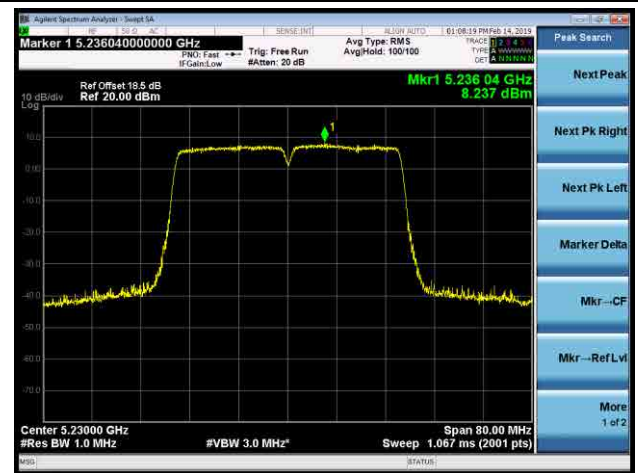


802.11n-HT40 Power Spectral Density - Ant 1 / Ant 0 + 1 + 2 + 3 (CDD Mode)

Channel 38 (5190MHz)



Channel 46 (5230MHz)



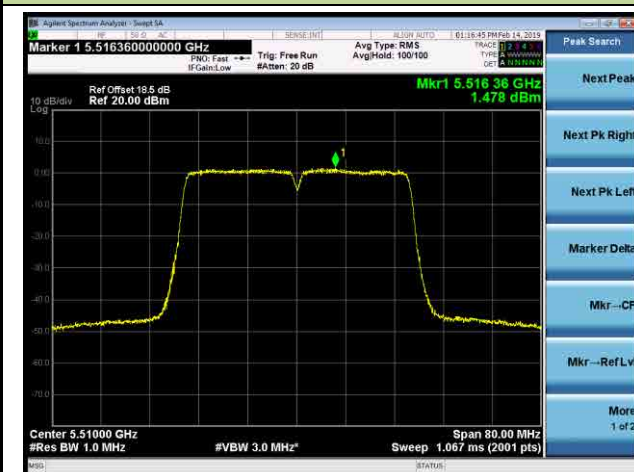
Channel 54 (5270MHz)



Channel 62 (5310MHz)



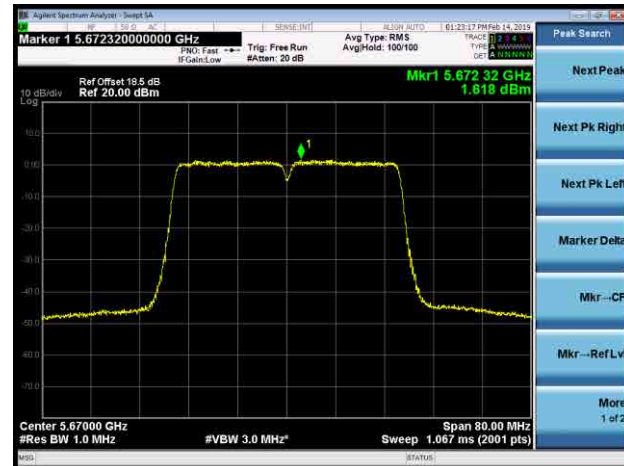
Channel 102 (5510MHz)



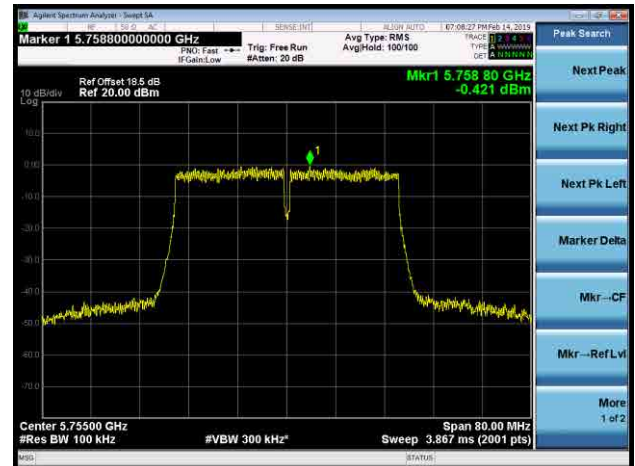
Channel 118 (5590MHz)



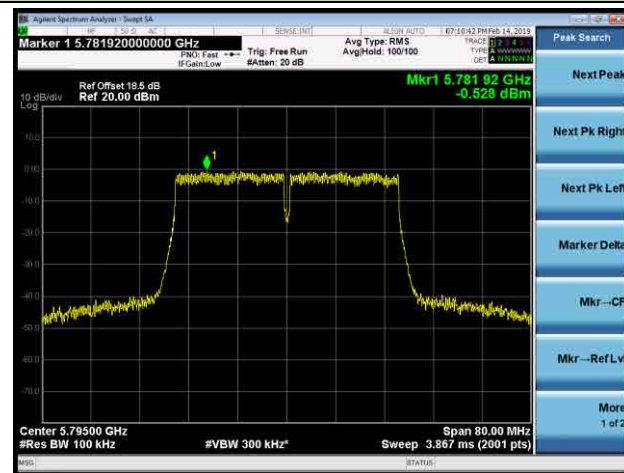
Channel 134 (5670MHz)



Channel 151 (5755MHz)



Channel 159 (5795MHz)



802.11ac-VHT20 Power Spectral Density - Ant 1 / Ant 0 + 1 + 2 + 3 (CDD Mode)

Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)



Channel 52 (5260MHz)



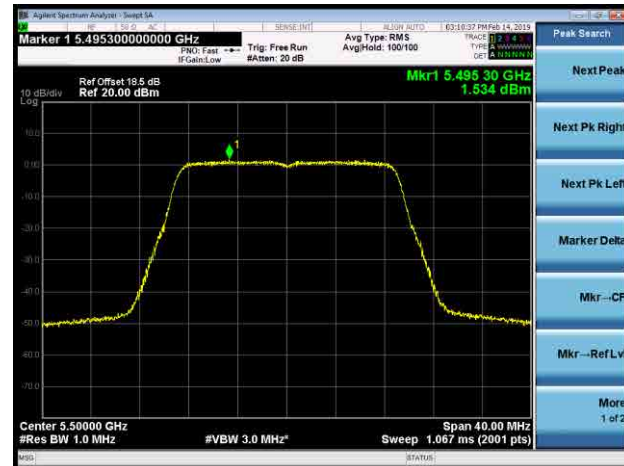
Channel 60 (5300MHz)



Channel 64 (5320MHz)



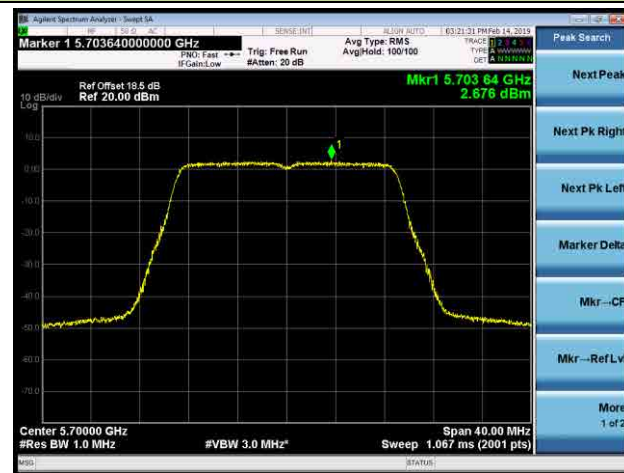
Channel 100 (5500MHz)



Channel 120 (5600MHz)



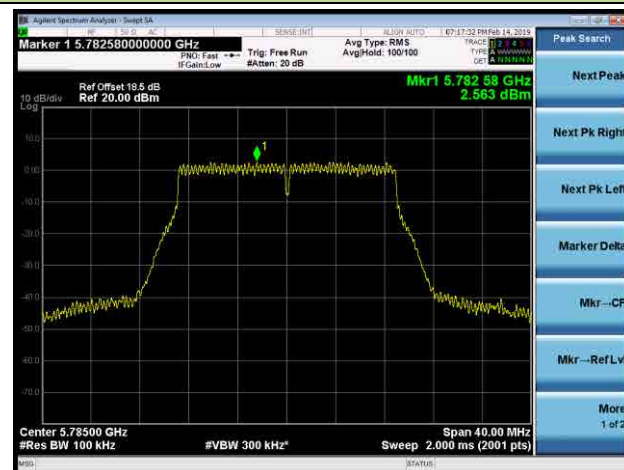
Channel 140 (5700MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)

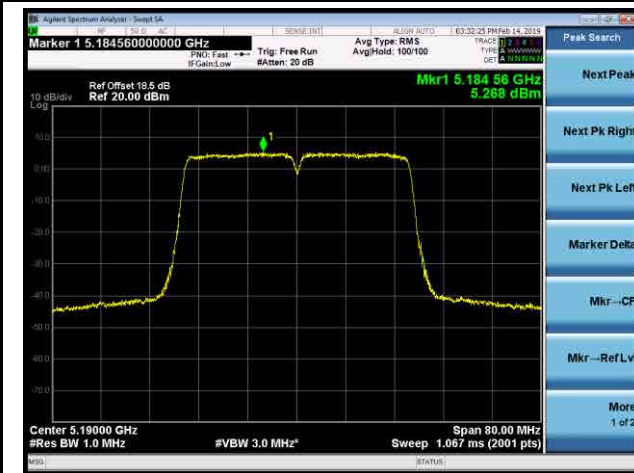


Channel 165 (5825MHz)



802.11ac-VHT40 Power Spectral Density - Ant 1 / Ant 0 + 1 + 2 + 3 (CDD Mode)

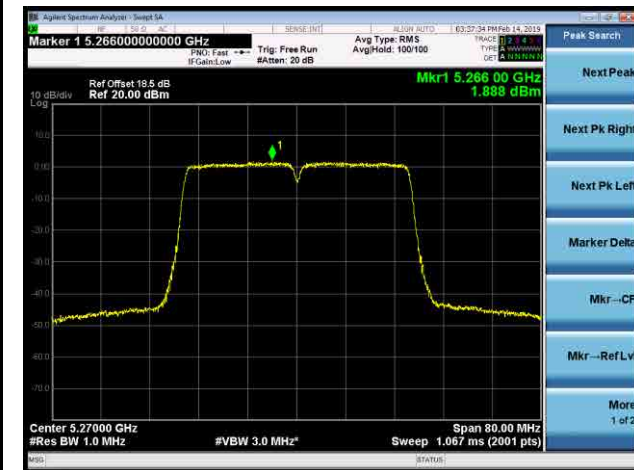
Channel 38 (5190MHz)



Channel 46 (5230MHz)



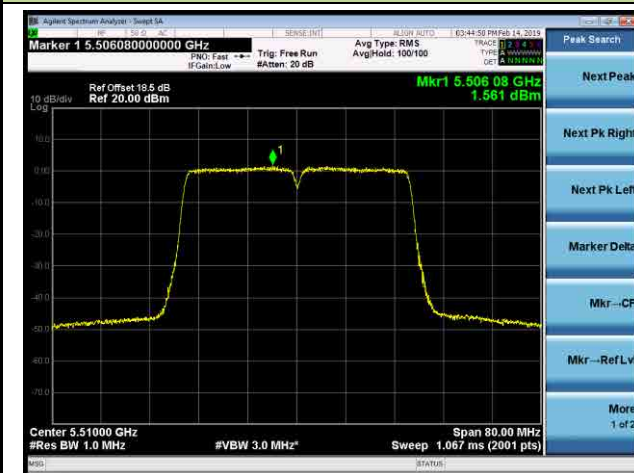
Channel 54 (5270MHz)



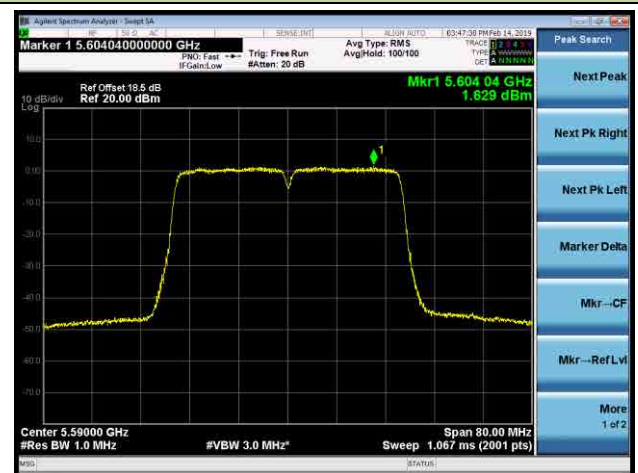
Channel 62 (5310MHz)



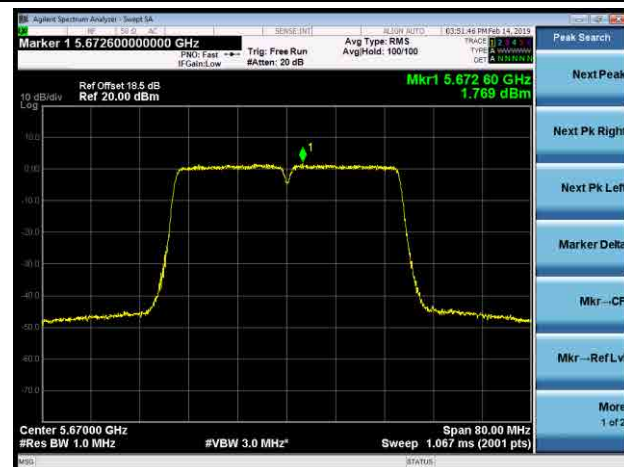
Channel 102 (5510MHz)



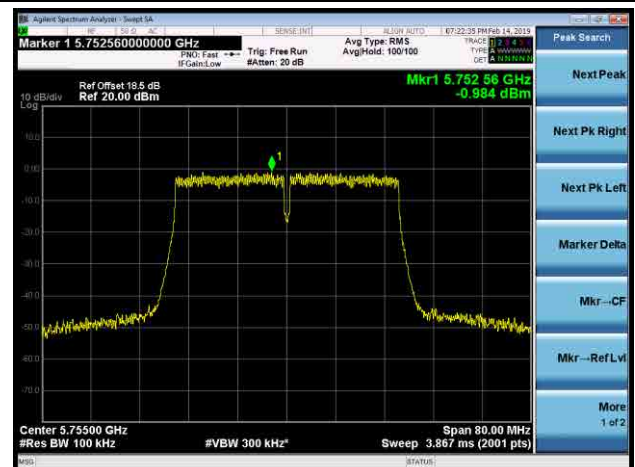
Channel 118 (5590MHz)



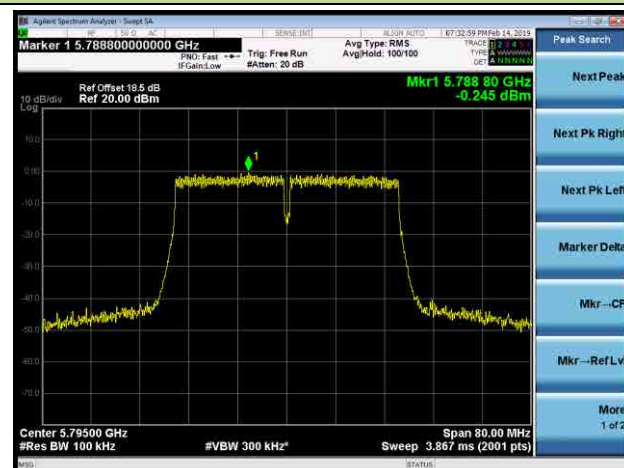
Channel 134 (5670MHz)



Channel 151 (5755MHz)

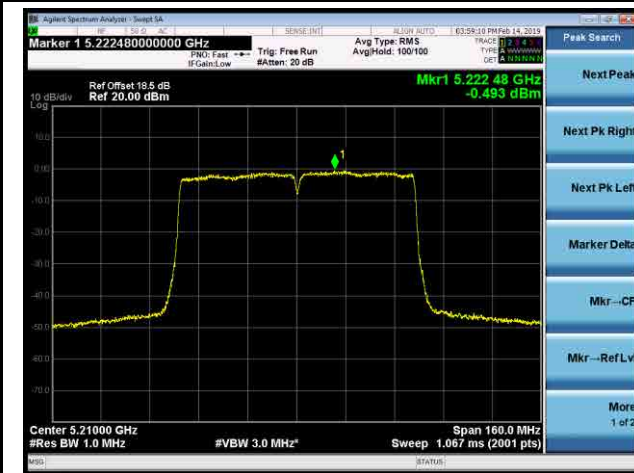


Channel 159 (5795MHz)

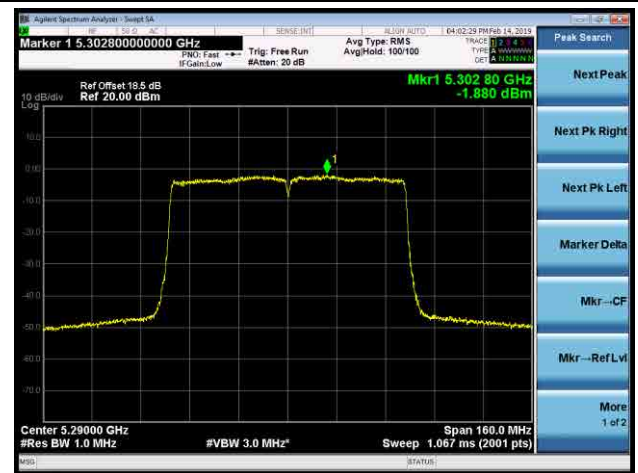


802.11ac-VHT80 Power Spectral Density - Ant 1 / Ant 0 + 1 + 2 + 3 (CDD Mode)

Channel 42 (5210MHz)



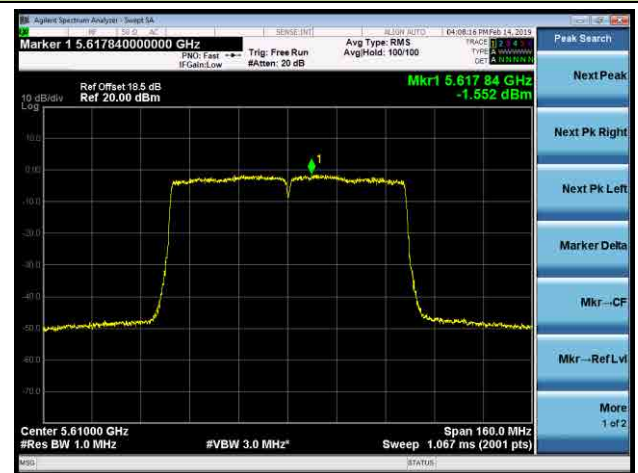
Channel 58 (5290MHz)



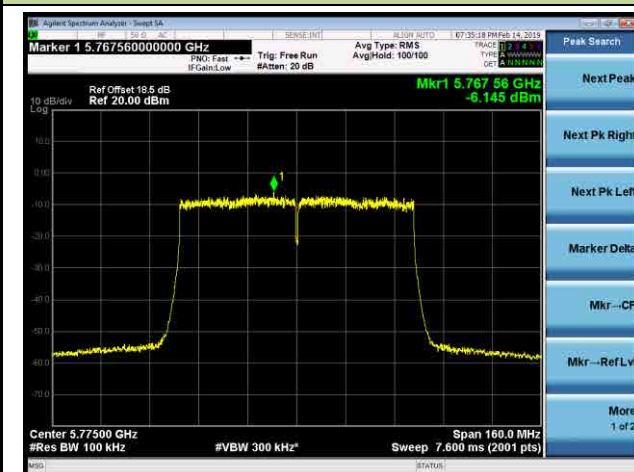
Channel 106 (5530MHz)



Channel 122 (5610MHz)

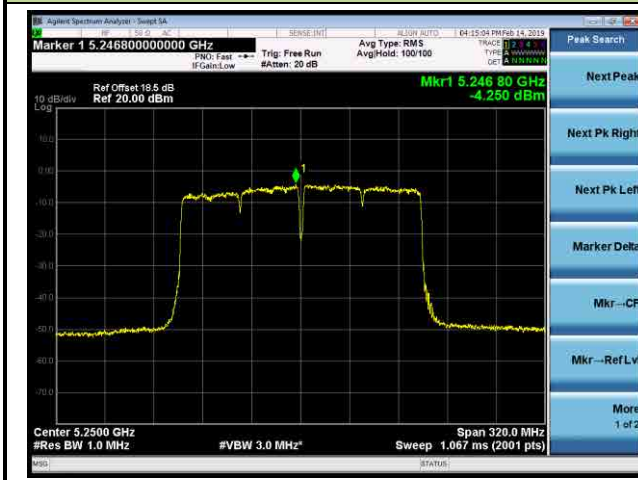


Channel 155 (5775MHz)



802.11ac-VHT160 Power Spectral Density - Ant 0 + 1 + 2 + 3 (CDD Mode)

Channel 50 (5250MHz)



Channel 114 (5570MHz)

