

# Annex D

## WLAN 5GHz Test Result

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## 1. Output Power Test Result

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

For Ant 0 port

Test Mode	Bandwidth	Channel	Frequency (MHz)	Data Rate/ MCS	Average Power (dBm)
802.11a	20	36	5180	6Mbps	19.64
				24Mbps	19.42
				54Mbps	19.27
802.11ac	20	36	5180	MCS0	19.52
				MCS4	19.35
				MCS8	19.21
802.11ac	40	38	5190	MCS0	18.41
				MCS4	18.29
				MCS9	18.15
802.11ac	80	42	5210	MCS0	19.46
				MCS4	19.28
				MCS9	19.03
802.11ac	80 + 80	42	5210	MCS0	10.58
				MCS4	10.44
				MCS9	10.29
802.11ax	20	36	5180	MCS0	19.73
				MCS5	19.64
				MCS11	19.50
802.11ax	40	38	5190	MCS0	17.73
				MCS5	17.58
				MCS11	17.41
802.11ax	80	42	5210	MCS0	18.95
				MCS5	18.75
				MCS11	18.59
802.11ax	80 + 80	42	5210	MCS0	11.71
				MCS5	11.62
				MCS11	11.58



Product	ACCESS POINT	Temperature	23 ~ 25°C
Test Engineer	Eric Lin	Relative Humidity	46 ~ 56%
Test Site	SR2	Test Date	2021/07/25 ~ 2021/11/18
Model No.	APEX0585 (UNII-1)		

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	30 Degree EIRP (dBm)	EIRP Limit (dBm)	Result
11a	6Mbps	36	5180	19.64	19.33	19.87	19.79	25.68	30.00	20.68	21.00	Pass
11a	6Mbps	44	5220	19.71	19.08	19.66	19.75	25.58	30.00	20.58	21.00	Pass
11a	6Mbps	48	5240	19.56	19.05	19.53	19.94	25.55	30.00	20.55	21.00	Pass
11ac-VHT20	MCS0	36	5180	19.52	19.16	19.54	19.67	25.50	30.00	20.50	21.00	Pass
11ac-VHT20	MCS0	40	5220	20.10	19.39	20.05	19.98	25.91	30.00	20.91	21.00	Pass
11ac-VHT20	MCS0	48	5240	19.93	19.58	19.56	20.15	25.83	30.00	20.83	21.00	Pass
11ac-VHT40	MCS0	38	5190	18.41	18.13	18.45	18.53	24.40	30.00	19.40	21.00	Pass
11ac-VHT40	MCS0	46	5230	19.96	19.52	19.71	19.64	25.73	30.00	20.73	21.00	Pass
11ac-VHT80	MCS0	42	5210	19.46	19.02	19.11	19.13	25.20	30.00	20.20	21.00	Pass
11ax-HE20	MCS0	36	5180	19.73	19.18	19.51	19.86	25.60	30.00	20.60	21.00	Pass
11ax-HE20	MCS0	40	5220	19.79	19.06	19.45	19.78	25.55	30.00	20.55	21.00	Pass
11ax-HE20	MCS0	48	5240	19.67	19.02	19.46	19.83	25.53	30.00	20.53	21.00	Pass
11ax-HE40	MCS0	38	5190	17.73	17.45	17.82	17.72	23.70	30.00	18.70	21.00	Pass
11ax-HE40	MCS0	46	5230	20.09	19.57	19.85	19.84	25.86	30.00	20.86	21.00	Pass
11ax-HE80	MCS0	42	5210	18.95	18.41	18.53	18.60	24.65	30.00	19.65	21.00	Pass

Note 1: Total Average Power (dBm) =  $10 \cdot \log\{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)} + 10^{(\text{Ant 2 Average Power} / 10)} + 10^{(\text{Ant 3 Average Power} / 10)}\}$ .

Note 2: Max EIRP Above 30 Degree Angle (dBm) = Total Average Power (dBm) + 30 Degree Antenna Gain (dBi).



Product	ACCESS POINT	Temperature	23 ~ 25°C
Test Engineer	Eric Lin	Relative Humidity	46 ~ 56%
Test Site	SR2	Test Date	2021/07/25 ~ 2021/11/18
Model No.	APEX0585 (UNII-2A & UNII-2C & UNII-3)		

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11a	6Mbps	52	5260	13.77	13.26	13.62	14.20	19.75	23.68	Pass
11a	6Mbps	60	5300	13.39	13.41	13.46	13.92	19.57	23.68	Pass
11a	6Mbps	64	5320	13.66	13.42	13.26	13.85	19.57	23.68	Pass
11a	6Mbps	100	5500	14.52	14.05	14.09	14.05	20.20	23.68	Pass
11a	6Mbps	116	5580	14.18	13.92	14.15	13.99	20.08	23.68	Pass
11a	6Mbps	140	5700	13.69	13.66	13.79	13.99	19.81	23.68	Pass
11a	6Mbps	144	5720	13.95	13.58	13.98	14.20	19.95	22.63	Pass
11a	6Mbps	149	5745	22.36	22.23	22.19	22.35	28.30	30.00	Pass
11a	6Mbps	157	5785	21.99	22.29	22.18	22.33	28.22	30.00	Pass
11a	6Mbps	165	5825	21.60	21.95	22.03	22.15	27.96	30.00	Pass
11ac-VHT20	MCS0	52	5260	14.13	13.60	14.60	14.42	20.22	23.98	Pass
11ac-VHT20	MCS0	60	5300	14.36	13.86	14.05	14.66	20.26	23.98	Pass
11ac-VHT20	MCS0	64	5320	14.39	14.15	14.68	14.60	20.48	23.98	Pass
11ac-VHT20	MCS0	100	5500	14.87	14.50	14.36	14.23	20.52	23.98	Pass
11ac-VHT20	MCS0	116	5580	14.76	14.49	14.65	13.99	20.50	23.98	Pass
11ac-VHT20	MCS0	140	5700	14.46	14.20	14.96	14.89	20.66	23.98	Pass
11ac-VHT20	MCS0	144	5720	14.21	14.00	14.46	14.60	20.34	22.74	Pass
11ac-VHT20	MCS0	149	5745	21.98	22.03	22.06	22.30	28.11	30.00	Pass
11ac-VHT20	MCS0	157	5785	22.19	22.30	22.01	22.25	28.21	30.00	Pass
11ac-VHT20	MCS0	165	5825	22.23	22.43	22.21	22.41	28.34	30.00	Pass
11ac-VHT40	MCS0	54	5270	17.06	16.98	17.36	17.36	23.21	23.98	Pass
11ac-VHT40	MCS0	62	5310	17.36	16.76	17.36	17.33	23.23	23.98	Pass
11ac-VHT40	MCS0	102	5510	17.42	16.91	17.33	17.12	23.22	23.98	Pass
11ac-VHT40	MCS0	110	5550	17.13	16.90	16.81	17.00	22.98	23.98	Pass
11ac-VHT40	MCS0	134	5670	17.20	16.86	17.28	16.99	23.11	23.98	Pass
11ac-VHT40	MCS0	142	5710	17.06	16.83	17.43	17.04	23.12	23.98	Pass
11ac-VHT40	MCS0	151	5755	20.41	20.43	20.68	20.46	26.52	30.00	Pass
11ac-VHT40	MCS0	159	5795	22.05	22.43	22.49	22.40	28.37	30.00	Pass



Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11ac-VHT80	MCS0	58	5290	15.08	14.88	15.22	15.07	21.08	23.98	Pass
11ac-VHT80	MCS0	106	5530	17.59	17.12	17.70	17.39	23.48	23.98	Pass
11ac-VHT80	MCS0	122	5610	17.67	17.35	17.41	17.16	23.42	23.98	Pass
11ac-VHT80	MCS0	138	5690	17.46	17.33	17.62	17.32	23.45	23.98	Pass
11ac-VHT80	MCS0	155	5775	21.99	22.37	22.30	22.16	28.23	30.00	Pass
11ax-HE20	MCS0	52	5260	13.68	13.16	13.56	14.30	19.72	23.98	Pass
11ax-HE20	MCS0	60	5300	13.45	13.18	13.36	13.99	19.53	23.98	Pass
11ax-HE20	MCS0	64	5320	13.55	13.39	13.50	13.85	19.60	23.98	Pass
11ax-HE20	MCS0	100	5500	14.23	13.95	13.82	13.92	20.00	23.98	Pass
11ax-HE20	MCS0	116	5580	14.15	13.93	14.11	14.20	20.12	23.98	Pass
11ax-HE20	MCS0	140	5700	14.20	13.63	14.16	14.83	20.25	23.98	Pass
11ax-HE20	MCS0	144	5720	14.45	13.94	14.26	14.33	20.27	22.89	Pass
11ax-HE20	MCS0	149	5745	21.85	22.25	22.16	22.28	28.16	30.00	Pass
11ax-HE20	MCS0	157	5785	21.91	22.03	21.75	22.13	27.98	30.00	Pass
11ax-HE20	MCS0	165	5825	21.83	22.25	22.35	22.30	28.21	30.00	Pass
11ax-HE40	MCS0	54	5270	17.26	17.03	17.50	17.65	23.39	23.98	Pass
11ax-HE40	MCS0	62	5310	17.46	16.83	17.52	17.55	23.37	23.98	Pass
11ax-HE40	MCS0	102	5510	17.58	17.00	17.58	17.13	23.35	23.98	Pass
11ax-HE40	MCS0	110	5550	17.39	17.08	17.35	16.80	23.18	23.98	Pass
11ax-HE40	MCS0	134	5670	17.32	16.98	17.60	16.99	23.25	23.98	Pass
11ax-HE40	MCS0	142	5710	17.29	16.99	17.83	17.19	23.36	23.98	Pass
11ax-HE40	MCS0	151	5755	20.20	20.13	20.52	20.08	26.26	30.00	Pass
11ax-HE40	MCS0	159	5795	21.63	22.08	22.33	22.03	28.05	30.00	Pass
11ax-HE80	MCS0	58	5290	17.83	17.33	17.95	17.77	23.75	23.98	Pass
11ax-HE80	MCS0	106	5530	17.88	17.42	17.95	17.72	23.77	23.98	Pass
11ax-HE80	MCS0	122	5610	17.74	17.27	17.61	17.18	23.48	23.98	Pass
11ax-HE80	MCS0	138	5690	17.66	17.42	17.95	17.47	23.65	23.98	Pass
11ax-HE80	MCS0	155	5775	22.33	22.48	22.49	22.35	28.43	30.00	Pass

Test Mode	Data Rate/MCS	Ch. No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	30 Degree EIRP (dBm)	EIRP Limit (dBm)	Result
80+80 MHz mode fall within different UNII bands												
11ac-VHT80+80	MCS0	42	5210	10.58	10.90	--	--	13.75	30.00	8.75	21.00	Pass
		58	5290	--	--	10.81	11.08	13.96	23.98	--	--	Pass
11ax-HE80+80	MCS0	42	5210	11.71	12.51	--	--	15.14	30.00	10.14	21.00	Pass
		58	5290	--	--	12.02	11.89	14.97	23.98	--	--	Pass
80+80 MHz mode fall within same UNII band												
11ac-VHT80+80	MCS0	106	5530	14.11	14.41	--	--	20.10	23.98	--	--	Pass
		122	5610	--	--	14.14	13.64					
11ax-HE80+80	MCS0	106	5530	14.42	14.84	--	--	20.30	23.98	--	--	Pass
		122	5610	--	--	14.01	13.79					

Note 1: Total Average Power (dBm) =  $10 \cdot \log\{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)} + 10^{(\text{Ant 2 Average Power} / 10)} + 10^{(\text{Ant 3 Average Power} / 10)}\}$ .

Note 2: For 5250-5350MHz & 5470-5725MHz, the conducted power limit is as below.

802.11a:  $11 + 10 \log_{10}(18.54) = 23.68 < 23.98\text{dBm}$

802.11ac-VHT20/ac-VHT40/ac-VHT80/ax-HE20/ax-HE40/ax-HE80:  $11 + 10 \log_{10}(B) > 23.98\text{dBm}$ .

For straddle channel 20MHz Bandwidth 5720MHz, the conducted power limit is as below:

802.11a CH144:  $11 + 10 \log_{10}(B) = 22.63\text{dBm}$ ,  $B = 19.14/2 + 5 = 14.57\text{MHz}$ .

802.11ac-HT20 CH144:  $11 + 10 \log_{10}(B) = 22.74\text{dBm}$ ,  $B = 19.87/2 + 5 = 14.94\text{MHz}$ .

802.11ax-HE20 CH144:  $11 + 10 \log_{10}(B) = 22.89\text{dBm}$ ,  $B = 20.92/2 + 5 = 15.46\text{MHz}$ .

Note 3:

For 802.11ac-VHT80+80/ax-HE80+80 mode fall within different UNII band:

Ant 0 & Ant 1: Total Average Power (dBm) =  $10 \cdot \log\{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)}\}$ .

Ant 2 & Ant 3: Total Average Power (dBm) =  $10 \cdot \log\{10^{(\text{Ant 2 Average Power} / 10)} + 10^{(\text{Ant 3 Average Power} / 10)}\}$ .

For 802.11ac-VHT80+80/ax-HE80+80 mode fall within same UNII band:

Total Average Power (dBm) =  $10 \cdot \log\{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)} + 10^{(\text{Ant 2 Average Power} / 10)} + 10^{(\text{Ant 3 Average Power} / 10)}\}$ .



Product	ACCESS POINT	Temperature	23 ~ 25°C
Test Engineer	Eric Lin	Relative Humidity	46 ~ 56%
Test Site	SR2	Test Date	2021/07/25 ~ 2021/11/18
Model No.	APEX0587 (UNII-1)		

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	30 Degree EIRP (dBm)	30 Degree EIRP Limit (dBm)	Result
11a	6Mbps	36	5180	8.94	9.36	9.21	9.23	15.21	30.00	20.41	21.00	Pass
11a	6Mbps	44	5220	9.98	9.25	9.69	9.76	15.70	30.00	20.90	21.00	Pass
11a	6Mbps	48	5240	9.76	9.67	9.50	9.89	15.73	30.00	20.93	21.00	Pass
11ac-VHT20	MCS0	36	5180	9.74	9.60	9.08	9.27	15.45	30.00	20.65	21.00	Pass
11ac-VHT20	MCS0	40	5220	9.55	9.10	9.16	8.96	15.22	30.00	20.42	21.00	Pass
11ac-VHT20	MCS0	48	5240	9.75	9.76	9.27	9.58	15.62	30.00	20.82	21.00	Pass
11ac-VHT40	MCS0	38	5190	9.31	9.46	9.63	10.10	15.66	30.00	20.86	21.00	Pass
11ac-VHT40	MCS0	46	5230	9.42	9.07	9.34	9.50	15.36	30.00	20.56	21.00	Pass
11ac-VHT80	MCS0	42	5210	9.23	9.03	9.42	9.44	15.30	30.00	20.50	21.00	Pass
11ax-HE20	MCS0	36	5180	9.57	9.34	9.34	9.55	15.47	30.00	20.67	21.00	Pass
11ax-HE20	MCS0	40	5220	9.47	9.00	9.64	9.13	15.34	30.00	20.54	21.00	Pass
11ax-HE20	MCS0	48	5240	9.42	9.63	9.12	9.27	15.38	30.00	20.58	21.00	Pass
11ax-HE40	MCS0	38	5190	9.53	9.51	9.16	9.55	15.46	30.00	20.66	21.00	Pass
11ax-HE40	MCS0	46	5230	9.66	9.37	9.63	9.30	15.51	30.00	20.71	21.00	Pass
11ax-HE80	MCS0	42	5210	9.77	9.33	9.73	9.05	15.50	30.00	20.70	21.00	Pass

Note 1: Total Average Power (dBm) =  $10 \cdot \log\{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)} + 10^{(\text{Ant 2 Average Power} / 10)} + 10^{(\text{Ant 3 Average Power} / 10)}\}$ .

Note 2: Max EIRP Above 30 Degree Angle (dBm) = Total Average Power (dBm) + 30 Degree Antenna Gain (dBi).



Product	ACCESS POINT	Temperature	23 ~ 25°C
Test Engineer	Eric Lin	Relative Humidity	46 ~ 56%
Test Site	SR2	Test Date	2021/07/25 ~ 2021/11/18
Model No.	APEX0587 (UNII-2A & UNII-2C & UNII-3)		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11a	6Mbps	52	5260	12.60	12.75	12.26	12.47	18.54	23.68	Pass
11a	6Mbps	60	5300	11.95	12.21	12.18	12.24	18.17	23.68	Pass
11a	6Mbps	64	5320	12.94	13.00	12.32	12.90	18.82	23.68	Pass
11a	6Mbps	100	5500	12.98	12.97	12.23	12.40	18.68	23.68	Pass
11a	6Mbps	116	5580	12.88	12.52	12.46	12.20	18.54	23.68	Pass
11a	6Mbps	140	5700	12.59	12.49	11.72	12.00	18.24	23.68	Pass
11a	6Mbps	144	5720	12.93	12.87	12.67	12.44	18.75	22.63	Pass
11a	6Mbps	149	5745	21.81	22.04	21.96	22.16	28.01	30.00	Pass
11a	6Mbps	157	5785	21.91	22.26	22.07	22.29	28.16	30.00	Pass
11a	6Mbps	165	5825	22.20	22.12	21.72	22.15	28.07	30.00	Pass
11ac-VHT20	MCS0	52	5260	13.06	13.52	12.50	13.03	19.06	23.98	Pass
11ac-VHT20	MCS0	60	5300	13.01	13.40	13.24	13.30	19.26	23.98	Pass
11ac-VHT20	MCS0	64	5320	13.99	13.57	13.06	13.38	19.53	23.98	Pass
11ac-VHT20	MCS0	100	5500	13.20	13.24	12.63	12.78	18.99	23.98	Pass
11ac-VHT20	MCS0	116	5580	13.95	13.42	13.56	13.15	19.55	23.98	Pass
11ac-VHT20	MCS0	140	5700	13.11	12.69	12.70	12.51	18.78	23.98	Pass
11ac-VHT20	MCS0	144	5720	13.49	13.72	13.22	13.41	19.48	22.74	Pass
11ac-VHT20	MCS0	149	5745	21.77	22.27	21.55	21.79	27.87	30.00	Pass
11ac-VHT20	MCS0	157	5785	22.18	22.38	22.23	22.05	28.23	30.00	Pass
11ac-VHT20	MCS0	165	5825	21.83	22.00	22.29	21.99	28.05	30.00	Pass
11ac-VHT40	MCS0	54	5270	16.04	16.20	15.91	16.12	22.09	23.98	Pass
11ac-VHT40	MCS0	62	5310	15.69	15.88	15.86	15.57	21.77	23.98	Pass
11ac-VHT40	MCS0	102	5510	16.55	16.20	15.77	16.11	22.19	23.98	Pass
11ac-VHT40	MCS0	110	5550	17.15	16.71	16.39	16.57	22.73	23.98	Pass
11ac-VHT40	MCS0	134	5670	16.63	16.50	16.04	16.42	22.42	23.98	Pass
11ac-VHT40	MCS0	142	5710	16.89	16.78	16.10	16.19	22.52	23.98	Pass
11ac-VHT40	MCS0	151	5755	22.27	22.35	21.78	21.92	28.11	30.00	Pass
11ac-VHT40	MCS0	159	5795	21.92	22.20	21.96	21.91	28.02	30.00	Pass





Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11ac-VHT80	MCS0	58	5290	17.32	17.60	17.23	17.40	23.41	23.98	Pass
11ac-VHT80	MCS0	106	5530	16.92	16.38	16.57	16.40	22.59	23.98	Pass
11ac-VHT80	MCS0	122	5610	17.99	17.79	17.34	17.30	23.64	23.98	Pass
11ac-VHT80	MCS0	138	5690	18.06	17.96	17.46	17.53	23.78	23.98	Pass
11ac-VHT80	MCS0	155	5775	21.12	21.38	21.22	20.93	27.19	30.00	Pass
11ax-HE20	MCS0	52	5260	12.95	12.81	12.45	12.91	18.81	23.98	Pass
11ax-HE20	MCS0	60	5300	12.72	13.06	12.75	13.09	18.93	23.98	Pass
11ax-HE20	MCS0	64	5320	13.11	13.30	12.71	13.10	19.08	23.98	Pass
11ax-HE20	MCS0	100	5500	13.63	13.80	12.86	13.08	19.38	23.98	Pass
11ax-HE20	MCS0	116	5580	13.00	12.97	12.69	12.72	18.87	23.98	Pass
11ax-HE20	MCS0	140	5700	12.96	12.76	12.08	12.41	18.59	23.98	Pass
11ax-HE20	MCS0	144	5720	13.17	13.35	12.75	12.93	19.08	22.89	Pass
11ax-HE20	MCS0	149	5745	22.32	22.39	21.75	22.27	28.21	30.00	Pass
11ax-HE20	MCS0	157	5785	22.03	22.40	21.98	22.14	28.16	30.00	Pass
11ax-HE20	MCS0	165	5825	22.36	22.14	21.90	22.21	28.18	30.00	Pass
11ax-HE40	MCS0	54	5270	15.73	15.81	15.31	15.75	21.68	23.98	Pass
11ax-HE40	MCS0	62	5310	15.94	15.82	15.78	15.82	21.86	23.98	Pass
11ax-HE40	MCS0	102	5510	16.74	16.28	15.83	16.28	22.32	23.98	Pass
11ax-HE40	MCS0	110	5550	16.74	16.25	15.94	16.13	22.30	23.98	Pass
11ax-HE40	MCS0	134	5670	16.12	16.18	15.72	16.03	22.04	23.98	Pass
11ax-HE40	MCS0	142	5710	16.53	16.33	15.79	16.05	22.20	23.98	Pass
11ax-HE40	MCS0	151	5755	22.31	22.48	21.78	22.03	28.18	30.00	Pass
11ax-HE40	MCS0	159	5795	22.05	22.37	22.32	22.18	28.25	30.00	Pass
11ax-HE80	MCS0	58	5290	17.60	17.77	17.40	17.46	23.58	23.98	Pass
11ax-HE80	MCS0	106	5530	16.45	15.83	16.03	16.11	22.13	23.98	Pass
11ax-HE80	MCS0	122	5610	18.16	18.09	17.54	17.44	23.84	23.98	Pass
11ax-HE80	MCS0	138	5690	17.88	17.75	17.16	17.28	23.55	23.98	Pass
11ax-HE80	MCS0	155	5775	20.94	20.99	20.90	20.76	26.92	30.00	Pass

Test Mode	Data Rate/MCS	Ch. No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	30 Degree EIRP (dBm)	30 Degree EIRP Limit (dBm)	Result
80+80 MHz mode fall within different UNII bands												
11ac-VHT80+80	MCS0	42	5210	10.58	10.90	--	--	13.75	30.00	18.95	21.00	Pass
		58	5290	--	--	10.81	11.08	13.96	23.98	--	--	Pass
11ax-HE80+80	MCS0	42	5210	11.19	12.05	--	--	14.65	30.00	19.85	21.00	Pass
		58	5290	--	--	11.24	11.91	14.60	23.98	--	--	Pass
80+80 MHz mode fall within same UNII band												
11ac-VHT80+80	MCS0	106	5530	15.10	15.33	--	--	21.14	23.98	--	--	Pass
		122	5610	--	--	15.23	14.82					
11ax-HE80+80	MCS0	106	5530	12.89	12.70	--	--	18.91	23.98	--	--	Pass
		122	5610	--	--	13.29	12.66					

Note 1: Total Average Power (dBm) =  $10 \cdot \log\{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)} + 10^{(\text{Ant 2 Average Power} / 10)} + 10^{(\text{Ant 3 Average Power} / 10)}\}$ .

Note 2: For 5250-5350MHz & 5470-5725MHz, the conducted power limit is as below.

802.11a:  $11 + 10 \log_{10}(18.54) = 23.68 < 23.98\text{dBm}$

802.11ac-VHT20/ac-VHT40/ac-VHT80/ax-HE20/ax-HE40/ax-HE80:  $11 + 10 \log_{10}(B) > 23.98\text{dBm}$ .

For straddle channel 20MHz Bandwidth 5720MHz, the conducted power limit is as below:

802.11a CH144:  $11 + 10 \log_{10}(B) = 22.63\text{dBm}$ ,  $B = 19.14/2 + 5 = 14.57\text{MHz}$ .

802.11ac-HT20 CH144:  $11 + 10 \log_{10}(B) = 22.74\text{dBm}$ ,  $B = 19.87/2 + 5 = 14.94\text{MHz}$ .

802.11ax-HE20 CH144:  $11 + 10 \log_{10}(B) = 22.89\text{dBm}$ ,  $B = 20.92/2 + 5 = 15.46\text{MHz}$ .

Note 3:

For 802.11ac-VHT80+80/ax-HE80+80 mode fall within different UNII band:

Ant 0 & Ant 1: Total Average Power (dBm) =  $10 \cdot \log\{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)}\}$ .

Ant 2 & Ant 3: Total Average Power (dBm) =  $10 \cdot \log\{10^{(\text{Ant 2 Average Power} / 10)} + 10^{(\text{Ant 3 Average Power} / 10)}\}$ .

For 802.11ac-VHT80+80/ax-HE80+80 mode fall within same UNII band:

Total Average Power (dBm) =  $10 \cdot \log\{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)} + 10^{(\text{Ant 2 Average Power} / 10)} + 10^{(\text{Ant 3 Average Power} / 10)}\}$ .



Product	ACCESS POINT	Temperature	23 ~ 25°C
Test Engineer	Eric Lin	Relative Humidity	46 ~ 56%
Test Site	SR2	Test Date	2021/07/25 ~ 2021/11/18
Model No.	APEX0584 (UNII-1) _ ANT-2x2-5005		

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	30 Degree EIRP (dBm)	30 Degree EIRP Limit (dBm)	Result
11a	6Mbps	36	5180	14.70	14.47	14.38	14.89	20.64	30.00	20.64	21.00	Pass
11a	6Mbps	44	5220	14.83	14.24	14.81	14.32	20.58	30.00	20.58	21.00	Pass
11a	6Mbps	48	5240	14.28	14.48	14.44	14.80	20.52	30.00	20.52	21.00	Pass
11ac-VHT20	MCS0	36	5180	14.90	14.93	14.74	14.75	20.85	30.00	20.85	21.00	Pass
11ac-VHT20	MCS0	40	5220	15.11	14.69	14.64	14.53	20.77	30.00	20.77	21.00	Pass
11ac-VHT20	MCS0	48	5240	14.96	15.09	14.49	15.11	20.94	30.00	20.94	21.00	Pass
11ac-VHT40	MCS0	38	5190	14.91	15.21	14.69	14.95	20.96	30.00	20.96	21.00	Pass
11ac-VHT40	MCS0	46	5230	14.52	14.40	14.43	14.16	20.40	30.00	20.40	21.00	Pass
11ac-VHT80	MCS0	42	5210	15.13	14.83	14.93	14.57	20.89	30.00	20.89	21.00	Pass
11ax-HE20	MCS0	36	5180	14.82	15.14	14.48	14.86	20.85	30.00	20.85	21.00	Pass
11ax-HE20	MCS0	40	5220	15.11	14.52	14.93	14.69	20.84	30.00	20.84	21.00	Pass
11ax-HE20	MCS0	48	5240	14.52	14.89	14.41	14.83	20.69	30.00	20.69	21.00	Pass
11ax-HE40	MCS0	38	5190	14.88	15.09	14.70	15.08	20.96	30.00	20.96	21.00	Pass
11ax-HE40	MCS0	46	5230	15.19	14.82	14.94	14.86	20.98	30.00	20.98	21.00	Pass
11ax-HE80	MCS0	42	5210	14.78	14.41	14.67	14.03	20.50	30.00	20.50	21.00	Pass

Note 1: Total Average Power (dBm) =  $10 \cdot \log\{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)} + 10^{(\text{Ant 2 Average Power} / 10)} + 10^{(\text{Ant 3 Average Power} / 10)}\}$ .

Note 2: Max EIRP Above 30 Degree Angle (dBm) = Total Average Power (dBm) + 30 Degree Antenna Gain (dBi).



Product	ACCESS POINT	Temperature	23 ~ 25°C
Test Engineer	Eric Lin	Relative Humidity	46 ~ 56%
Test Site	SR2	Test Date	2021/07/25 ~ 2021/11/18
Model No.	APEX0584 (UNII-2A & UNII-2C & UNII-3)		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11a	6Mbps	52	5260	12.60	12.75	12.26	12.47	18.54	23.68	Pass
11a	6Mbps	60	5300	11.95	12.21	12.18	12.24	18.17	23.68	Pass
11a	6Mbps	64	5320	12.94	13.00	12.32	12.90	18.82	23.68	Pass
11a	6Mbps	100	5500	12.98	12.97	12.23	12.40	18.68	23.68	Pass
11a	6Mbps	116	5580	12.88	12.52	12.46	12.20	18.54	23.68	Pass
11a	6Mbps	140	5700	12.59	12.49	11.72	12.00	18.24	23.68	Pass
11a	6Mbps	144	5720	12.93	12.87	12.67	12.44	18.75	22.63	Pass
11a	6Mbps	149	5745	21.81	22.04	21.96	22.16	28.01	30.00	Pass
11a	6Mbps	157	5785	21.91	22.26	22.07	22.29	28.16	30.00	Pass
11a	6Mbps	165	5825	22.20	22.12	21.72	22.15	28.07	30.00	Pass
11ac-VHT20	MCS0	52	5260	13.06	13.52	12.50	13.03	19.06	23.98	Pass
11ac-VHT20	MCS0	60	5300	13.01	13.40	13.24	13.30	19.26	23.98	Pass
11ac-VHT20	MCS0	64	5320	13.99	13.57	13.06	13.38	19.53	23.98	Pass
11ac-VHT20	MCS0	100	5500	13.20	13.24	12.63	12.78	18.99	23.98	Pass
11ac-VHT20	MCS0	116	5580	13.95	13.42	13.56	13.15	19.55	23.98	Pass
11ac-VHT20	MCS0	140	5700	13.11	12.69	12.70	12.51	18.78	23.98	Pass
11ac-VHT20	MCS0	144	5720	13.49	13.72	13.22	13.41	19.48	22.74	Pass
11ac-VHT20	MCS0	149	5745	21.77	22.27	21.55	21.79	27.87	30.00	Pass
11ac-VHT20	MCS0	157	5785	22.18	22.38	22.23	22.05	28.23	30.00	Pass
11ac-VHT20	MCS0	165	5825	21.83	22.00	22.29	21.99	28.05	30.00	Pass
11ac-VHT40	MCS0	54	5270	16.04	16.20	15.91	16.12	22.09	23.98	Pass
11ac-VHT40	MCS0	62	5310	15.69	15.88	15.86	15.57	21.77	23.98	Pass
11ac-VHT40	MCS0	102	5510	16.55	16.20	15.77	16.11	22.19	23.98	Pass
11ac-VHT40	MCS0	110	5550	17.15	16.71	16.39	16.57	22.73	23.98	Pass
11ac-VHT40	MCS0	134	5670	16.63	16.50	16.04	16.42	22.42	23.98	Pass
11ac-VHT40	MCS0	142	5710	16.89	16.78	16.10	16.19	22.52	23.98	Pass
11ac-VHT40	MCS0	151	5755	22.27	22.35	21.78	21.92	28.11	30.00	Pass
11ac-VHT40	MCS0	159	5795	21.92	22.20	21.96	21.91	28.02	30.00	Pass



Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11ac-VHT80	MCS0	58	5290	17.32	17.60	17.23	17.40	23.41	23.98	Pass
11ac-VHT80	MCS0	106	5530	16.92	16.38	16.57	16.40	22.59	23.98	Pass
11ac-VHT80	MCS0	122	5610	17.99	17.79	17.34	17.30	23.64	23.98	Pass
11ac-VHT80	MCS0	138	5690	18.06	17.96	17.46	17.53	23.78	23.98	Pass
11ac-VHT80	MCS0	155	5775	21.12	21.38	21.22	20.93	27.19	30.00	Pass
11ax-HE20	MCS0	52	5260	12.95	12.81	12.45	12.91	18.81	23.98	Pass
11ax-HE20	MCS0	60	5300	12.72	13.06	12.75	13.09	18.93	23.98	Pass
11ax-HE20	MCS0	64	5320	13.11	13.30	12.71	13.10	19.08	23.98	Pass
11ax-HE20	MCS0	100	5500	13.63	13.80	12.86	13.08	19.38	23.98	Pass
11ax-HE20	MCS0	116	5580	13.00	12.97	12.69	12.72	18.87	23.98	Pass
11ax-HE20	MCS0	140	5700	12.96	12.76	12.08	12.41	18.59	23.98	Pass
11ax-HE20	MCS0	144	5720	13.17	13.35	12.75	12.93	19.08	22.89	Pass
11ax-HE20	MCS0	149	5745	22.32	22.39	21.75	22.27	28.21	30.00	Pass
11ax-HE20	MCS0	157	5785	22.03	22.40	21.98	22.14	28.16	30.00	Pass
11ax-HE20	MCS0	165	5825	22.36	22.14	21.90	22.21	28.18	30.00	Pass
11ax-HE40	MCS0	54	5270	15.73	15.81	15.31	15.75	21.68	23.98	Pass
11ax-HE40	MCS0	62	5310	15.94	15.82	15.78	15.82	21.86	23.98	Pass
11ax-HE40	MCS0	102	5510	16.74	16.28	15.83	16.28	22.32	23.98	Pass
11ax-HE40	MCS0	110	5550	16.74	16.25	15.94	16.13	22.30	23.98	Pass
11ax-HE40	MCS0	134	5670	16.12	16.18	15.72	16.03	22.04	23.98	Pass
11ax-HE40	MCS0	142	5710	16.53	16.33	15.79	16.05	22.20	23.98	Pass
11ax-HE40	MCS0	151	5755	22.31	22.48	21.78	22.03	28.18	30.00	Pass
11ax-HE40	MCS0	159	5795	22.05	22.37	22.32	22.18	28.25	30.00	Pass
11ax-HE80	MCS0	58	5290	17.60	17.77	17.40	17.46	23.58	23.98	Pass
11ax-HE80	MCS0	106	5530	16.45	15.83	16.03	16.11	22.13	23.98	Pass
11ax-HE80	MCS0	122	5610	18.16	18.09	17.54	17.44	23.84	23.98	Pass
11ax-HE80	MCS0	138	5690	17.88	17.75	17.16	17.28	23.55	23.98	Pass
11ax-HE80	MCS0	155	5775	20.94	20.99	20.90	20.76	26.92	30.00	Pass

Test Mode	Data Rate/MCS	Ch. No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	30 Degree EIRP (dBm)	30 Degree EIRP Limit (dBm)	Result
80+80 MHz mode fall within different UNII bands												
11ac-VHT80+80	MCS0	42	5210	9.32	9.80	--	--	12.58	30.00	12.58	21.00	Pass
		58	5290	--	--	9.78	10.05	12.93	23.98	--	--	Pass
11ax-HE80+80	MCS0	42	5210	14.68	15.43	--	--	18.08	30.00	18.08	21.00	Pass
		58	5290	--	--	15.09	14.95	18.03	23.98	--	--	Pass
80+80 MHz mode fall within same UNII band												
11ac-VHT80+80	MCS0	106	5530	15.10	15.33	--	--	21.14	23.98	--	--	Pass
		122	5610	--	--	15.23	14.82					
11ax-HE80+80	MCS0	106	5530	15.85	16.31	--	--	21.81	23.98	--	--	Pass
		122	5610	--	--	15.55	15.40					

Note 1: Total Average Power (dBm) =  $10 \cdot \log_{10} \{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)} + 10^{(\text{Ant 2 Average Power} / 10)} + 10^{(\text{Ant 3 Average Power} / 10)}\}$ .

Note 2: For 5250-5350MHz & 5470-5725MHz, the conducted power limit is as below.

802.11a:  $11 + 10 \log_{10} (18.54) = 23.68 < 23.98\text{dBm}$

802.11ac-VHT20/ac-VHT40/ac-VHT80/ax-HE20/ax-HE40/ax-HE80:  $11 + 10 \log_{10} (B) > 23.98\text{dBm}$ .

For straddle channel 20MHz Bandwidth 5720MHz, the conducted power limit is as below:

802.11a CH144:  $11 + 10 \log_{10} (B) = 22.63\text{dBm}$ ,  $B = 19.14/2 + 5 = 14.57\text{MHz}$ .

802.11ac-HT20 CH144:  $11 + 10 \log_{10} (B) = 22.74\text{dBm}$ ,  $B = 19.87/2 + 5 = 14.94\text{MHz}$ .

802.11ax-HE20 CH144:  $11 + 10 \log_{10} (B) = 22.89\text{dBm}$ ,  $B = 20.92/2 + 5 = 15.46\text{MHz}$ .

Note 3:

For 802.11ac-VHT80+80/ax-HE80+80 mode fall within different UNII band:

Ant 0 & Ant 1: Total Average Power (dBm) =  $10 \cdot \log_{10} \{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)}\}$ .

Ant 2 & Ant 3: Total Average Power (dBm) =  $10 \cdot \log_{10} \{10^{(\text{Ant 2 Average Power} / 10)} + 10^{(\text{Ant 3 Average Power} / 10)}\}$ .

For 802.11ac-VHT80+80/ax-HE80+80 mode fall within same UNII band:

Total Average Power (dBm) =  $10 \cdot \log_{10} \{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)} + 10^{(\text{Ant 2 Average Power} / 10)} + 10^{(\text{Ant 3 Average Power} / 10)}\}$ .



## 2. Power Spectral Density Measurement Test Result

Product	ACCESS POINT	Temperature	23 ~ 25°C
Test Engineer	Eric Lin	Relative Humidity	40 ~ 56%
Test Site	SR2	Test Date	2021/07/25~2021/11/18
Model No.	APEX0585 (UNII-1 & 2A & 2C)		

Test Mode	Data Rate /MCS	Ch. No.	Freq. (MHz)	PSD (dBm/MHz)				Duty Cycle (%)	Total PSD (dBm/ MHz)	PSD Limit (dBm/ MHz)	Result
				Ant 0	Ant 1	Ant 2	Ant 3				
11a	6Mbps	36	5180	8.74	8.63	9.20	8.67	96.34	15.00	≤ 15.49	Pass
11a	6Mbps	44	5220	8.87	8.40	8.70	9.00	96.34	14.93	≤ 15.49	Pass
11a	6Mbps	48	5240	8.92	8.21	8.44	8.74	96.34	14.77	≤ 15.49	Pass
11a	6Mbps	52	5260	3.06	2.27	2.34	3.00	96.34	8.86	≤ 9.49	Pass
11a	6Mbps	60	5300	2.19	2.45	2.97	2.94	96.34	8.83	≤ 9.49	Pass
11a	6Mbps	64	5320	2.54	2.38	2.88	2.90	96.34	8.86	≤ 9.49	Pass
11a	6Mbps	100	5500	3.23	2.80	3.19	2.65	96.34	9.16	≤ 9.49	Pass
11a	6Mbps	116	5580	2.96	2.92	2.79	2.64	96.34	9.01	≤ 9.49	Pass
11a	6Mbps	140	5700	2.68	2.39	3.20	2.99	96.34	9.01	≤ 9.49	Pass
11a	6Mbps	144	5720	2.88	2.94	3.09	3.05	96.34	9.17	≤ 9.49	Pass
11ac-VHT20	MCS0	36	5180	8.41	8.37	8.20	7.78	95.09	14.43	≤ 15.49	Pass
11ac-VHT20	MCS0	44	5220	8.19	7.71	7.93	7.52	95.09	14.08	≤ 15.49	Pass
11ac-VHT20	MCS0	48	5240	8.85	8.28	8.42	8.08	95.09	14.66	≤ 15.49	Pass
11ac-VHT20	MCS0	52	5260	2.95	1.87	3.30	2.82	95.09	9.00	≤ 9.49	Pass
11ac-VHT20	MCS0	60	5300	3.03	2.43	2.81	3.36	95.09	9.16	≤ 9.49	Pass
11ac-VHT20	MCS0	64	5320	2.51	2.57	3.10	3.06	95.09	9.06	≤ 9.49	Pass
11ac-VHT20	MCS0	100	5500	3.02	2.76	2.76	2.74	95.09	9.06	≤ 9.49	Pass
11ac-VHT20	MCS0	116	5580	2.90	3.01	3.03	2.46	95.09	9.09	≤ 9.49	Pass
11ac-VHT20	MCS0	140	5700	3.10	2.41	3.49	3.19	95.09	9.30	≤ 9.49	Pass
11ac-VHT20	MCS0	144	5720	2.81	2.45	3.13	2.88	95.09	9.06	≤ 9.49	Pass
11ac-VHT40	MCS0	38	5190	3.49	3.03	3.71	3.13	86.35	10.01	≤ 15.49	Pass
11ac-VHT40	MCS0	46	5230	5.42	4.60	5.34	4.89	86.35	11.73	≤ 15.49	Pass
11ac-VHT40	MCS0	54	5270	2.50	2.27	2.92	3.14	86.35	9.38	≤ 9.49	Pass
11ac-VHT40	MCS0	62	5310	2.50	2.40	2.87	3.13	86.35	9.39	≤ 9.49	Pass
11ac-VHT40	MCS0	102	5510	2.54	2.42	3.10	2.82	86.35	9.38	≤ 9.49	Pass
11ac-VHT40	MCS0	110	5550	2.48	2.65	3.06	2.72	86.35	9.39	≤ 9.49	Pass
11ac-VHT40	MCS0	134	5670	2.52	1.93	3.24	2.40	86.35	9.20	≤ 9.49	Pass
11ac-VHT40	MCS0	142	5710	2.38	2.01	3.10	2.53	86.35	9.18	≤ 9.49	Pass

Test Mode	Data Rate /MCS	Ch. No.	Freq. (MHz)	PSD (dBm/MHz)				Duty Cycle (%)	Total PSD (dBm/ MHz)	PSD Limit (dBm/ MHz)	Result
				Ant 0	Ant 1	Ant 2	Ant 3				
				11ac-VHT80	MCS0	42	5210				
11ac-VHT80	MCS0	58	5290	-2.42	-2.12	-1.76	-2.12	89.29	4.41	≤ 9.49	Pass
11ac-VHT80	MCS0	106	5530	0.00	-0.36	0.31	-0.62	89.29	6.36	≤ 9.49	Pass
11ac-VHT80	MCS0	122	5610	-0.01	-0.32	-0.42	-0.85	89.29	6.12	≤ 9.49	Pass
11ac-VHT80	MCS0	138	5690	-0.86	-0.50	0.14	0.05	89.29	6.24	≤ 9.49	Pass
11ax-HE20	MCS0	36	5180	8.02	7.07	7.86	7.84	94.04	14.00	≤ 15.49	Pass
11ax-HE20	MCS0	44	5220	7.84	7.48	7.51	8.00	94.04	14.00	≤ 15.49	Pass
11ax-HE20	MCS0	48	5240	7.85	7.16	7.43	7.64	94.04	13.82	≤ 15.49	Pass
11ax-HE20	MCS0	52	5260	2.33	1.53	2.60	3.05	94.04	8.70	≤ 9.49	Pass
11ax-HE20	MCS0	60	5300	2.44	2.00	2.92	2.94	94.04	8.88	≤ 9.49	Pass
11ax-HE20	MCS0	64	5320	2.32	1.69	2.86	2.57	94.04	8.67	≤ 9.49	Pass
11ax-HE20	MCS0	100	5500	2.94	2.12	2.69	2.65	94.04	8.90	≤ 9.49	Pass
11ax-HE20	MCS0	116	5580	2.59	2.63	3.14	2.70	94.04	9.06	≤ 9.49	Pass
11ax-HE20	MCS0	140	5700	2.61	2.17	3.04	3.18	94.04	9.05	≤ 9.49	Pass
11ax-HE20	MCS0	144	5720	2.79	2.35	3.20	2.72	94.04	9.06	≤ 9.49	Pass
11ax-HE40	MCS0	38	5190	3.03	3.29	3.46	3.10	93.77	9.52	≤ 15.49	Pass
11ax-HE40	MCS0	46	5230	5.29	5.20	5.39	5.19	93.77	11.57	≤ 15.49	Pass
11ax-HE40	MCS0	54	5270	2.82	2.98	3.17	3.13	93.77	9.33	≤ 9.49	Pass
11ax-HE40	MCS0	62	5310	2.83	2.98	3.27	3.23	93.77	9.38	≤ 9.49	Pass
11ax-HE40	MCS0	102	5510	3.23	2.57	2.99	2.69	93.77	9.18	≤ 9.49	Pass
11ax-HE40	MCS0	110	5550	3.07	2.76	3.07	2.54	93.77	9.16	≤ 9.49	Pass
11ax-HE40	MCS0	134	5670	2.72	2.30	3.18	2.55	93.77	9.00	≤ 9.49	Pass
11ax-HE40	MCS0	142	5710	2.52	2.45	3.46	2.57	93.77	9.07	≤ 9.49	Pass
11ax-HE80	MCS0	42	5210	1.43	0.83	1.82	1.02	93.97	7.58	≤ 15.49	Pass
11ax-HE80	MCS0	58	5290	0.76	0.71	0.93	0.70	93.97	7.06	≤ 9.49	Pass
11ax-HE80	MCS0	106	5530	0.40	0.36	1.25	0.27	93.97	6.88	≤ 9.49	Pass
11ax-HE80	MCS0	122	5610	0.83	-0.17	0.52	0.09	93.97	6.63	≤ 9.49	Pass
11ax-HE80	MCS0	138	5690	0.60	0.30	1.37	0.23	93.97	6.94	≤ 9.49	Pass



Test Mode	Data Rate /MCS	Ch. No.	Freq. (MHz)	PSD (dBm/MHz)				Duty Cycle (%)	Total PSD (dBm/ MHz)	PSD Limit (dBm/ MHz)	Result
				Ant 0	Ant 1	Ant 2	Ant 3				
80+80 MHz mode fall within different UNII band											
11ac-VHT80+80	MCS0	42	5210	-7.46	-6.80	--	--	86.60	-3.48	≤ 15.49	Pass
		58	5290	--	--	-6.72	-6.63	86.60	-3.04	≤9.49	Pass
11ax-HE80+80	MCS0	42	5210	-5.30	-4.53	--	--	94.78	-1.66	≤ 15.49	Pass
		58	5290	--	--	-5.17	-5.57	94.78	-2.12	≤9.49	Pass
80+80 MHz mode fall within same UNII band											
11ac-VHT80+80	MCS0	106	5530	-3.72	-3.82	--	--	86.60	2.89	≤9.49	Pass
		122	5610	--	--	-3.42	-4.07				
11ax-HE80+80	MCS0	106	5530	-3.42	-3.05	--	--	94.78	3.04	≤9.49	Pass
		122	5610	--	--	-2.87	-3.54				

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

Note 2: For 802.11ac-VHT80+80/ax-HE80+80 mode fall within different UNII band:

Ant 0 & 1: Total PSD (dBm/MHz) =  $10 \cdot \log \{10^{(\text{Ant } 0 \text{ PSD}/10)} + 10^{(\text{Ant } 1 \text{ PSD}/10)}\}$  (dBm/MHz) +  $10 \cdot \log (1/\text{Duty Cycle})$ .

Ant 2 & 3: Total PSD (dBm/MHz) =  $10 \cdot \log \{10^{(\text{Ant } 2 \text{ PSD}/10)} + 10^{(\text{Ant } 3 \text{ PSD}/10)}\}$  (dBm/MHz) +  $10 \cdot \log (1/\text{Duty Cycle})$ .

For 802.11ac-VHT80+80/ax-HE80+80 mode fall within same UNII band:

Total PSD (dBm/MHz) =  $10 \cdot \log \{10^{(\text{Ant } 0 \text{ PSD}/10)} + 10^{(\text{Ant } 1 \text{ PSD}/10)} + 10^{(\text{Ant } 2 \text{ PSD}/10)} + 10^{(\text{Ant } 3 \text{ PSD}/10)}\}$  (dBm/MHz) +  $10 \cdot \log (1/\text{Duty Cycle})$ .



Product	ACCESS POINT	Temperature	24~27°C
Test Engineer	Eric Lin	Relative Humidity	58~60%
Test Site	SR2	Test Date	2021/07/25~2021/11/18
Model No.	APEX0585 - UNII-3		

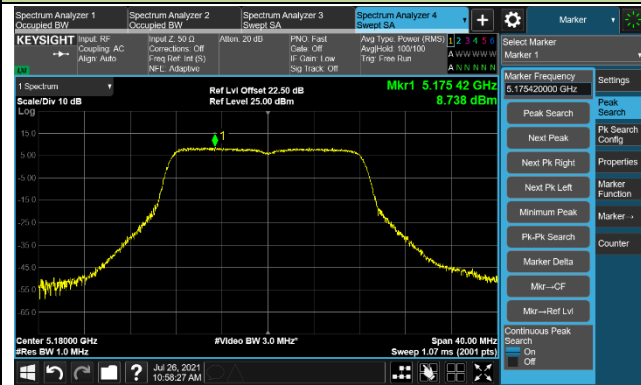
Test Mode	Data Rate/ MCS	Ch. No.	Freq. (MHz)	PSD (dBm/510kHz)				Duty Cycle (%)	Total PSD (dBm/510kHz)	Limit (dBm/500kHz)	Result
				Ant 0	Ant 1	Ant 2	Ant 3				
11a	6Mbps	149	5745	9.68	9.86	9.87	9.47	96.34	15.90	≤ 28.49	Pass
11a	6Mbps	157	5785	9.42	9.98	9.59	10.13	96.34	15.97	≤ 28.49	Pass
11a	6Mbps	165	5825	7.83	8.37	8.24	8.46	96.34	14.41	≤ 28.49	Pass
11ac-VHT20	MCS0	149	5745	9.48	9.52	8.79	9.32	95.09	15.52	≤ 28.49	Pass
11ac-VHT20	MCS0	157	5785	9.30	9.42	9.57	8.94	95.09	15.55	≤ 28.49	Pass
11ac-VHT20	MCS0	165	5825	8.30	9.03	8.88	9.23	95.09	15.11	≤ 28.49	Pass
11ac-VHT40	MCS0	151	5755	2.90	3.11	3.62	2.88	86.35	9.80	≤ 28.49	Pass
11ac-VHT40	MCS0	159	5795	5.96	6.54	6.54	6.51	86.35	13.05	≤ 28.49	Pass
11ac-VHT80	MCS0	155	5775	1.47	1.81	1.92	1.79	89.29	8.26	≤ 28.49	Pass
11ax-HE20	MCS0	149	5745	8.77	8.70	9.23	9.21	87.20	15.27	≤ 28.49	Pass
11ax-HE20	MCS0	157	5785	8.77	8.93	9.56	9.36	87.20	15.46	≤ 28.49	Pass
11ax-HE20	MCS0	165	5825	9.37	9.50	9.66	9.36	87.20	15.76	≤ 28.49	Pass
11ax-HE40	MCS0	151	5755	3.13	3.23	3.81	2.93	93.77	9.59	≤ 28.49	Pass
11ax-HE40	MCS0	159	5795	5.69	6.27	6.32	6.35	93.77	12.47	≤ 28.49	Pass
11ax-HE80	MCS0	155	5775	2.14	2.73	2.41	2.28	93.97	8.68	≤ 28.49	Pass

Note 1: When EUT duty cycle ≥ 98%, 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/500kHz)

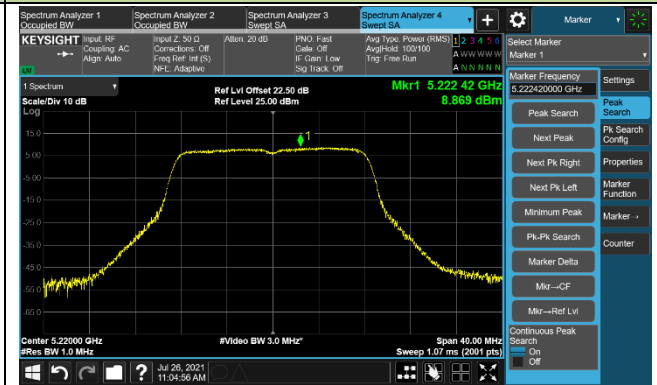
When EUT duty cycle < 98%, Total PSD (dBm/500kHz) =  $10 \cdot \log \{ 10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)} \}$  (dBm/500kHz) +  $10 \cdot \log (1/\text{Duty Cycle})$ .

### 802.11a Power Spectral Density - Ant 0

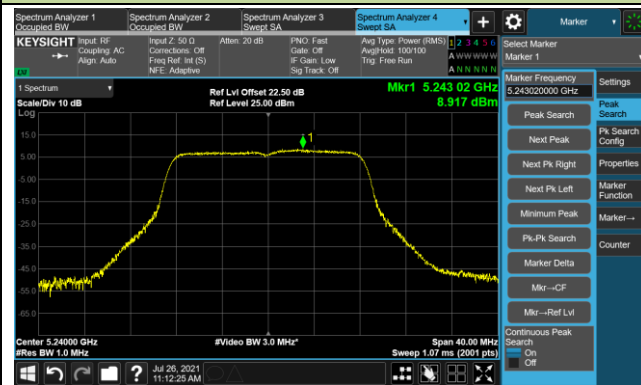
#### Channel 36 (5180MHz)



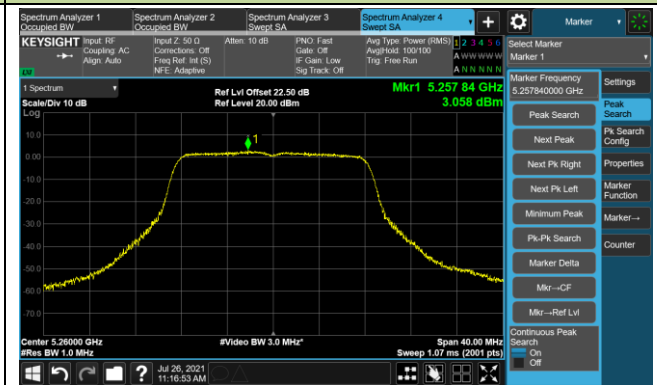
#### Channel 44 (5220MHz)



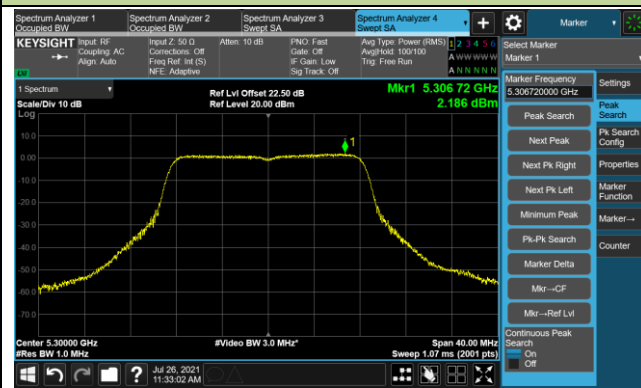
#### Channel 48 (5240MHz)



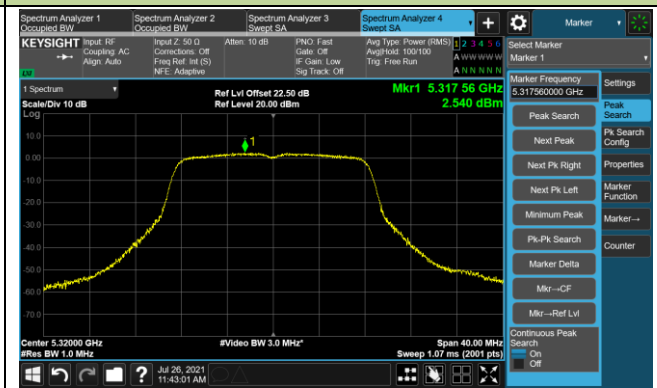
#### Channel 52 (5260MHz)



#### Channel 60 (5300MHz)

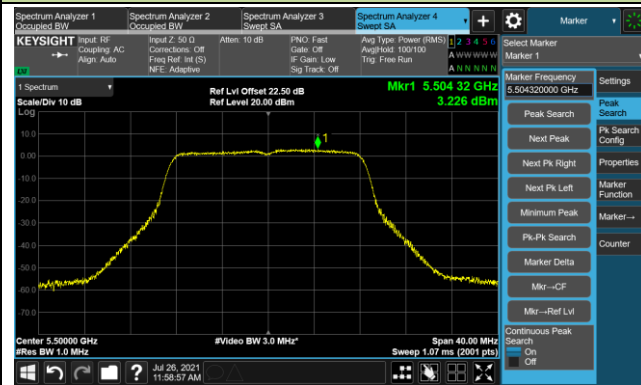


#### Channel 64 (5320MHz)

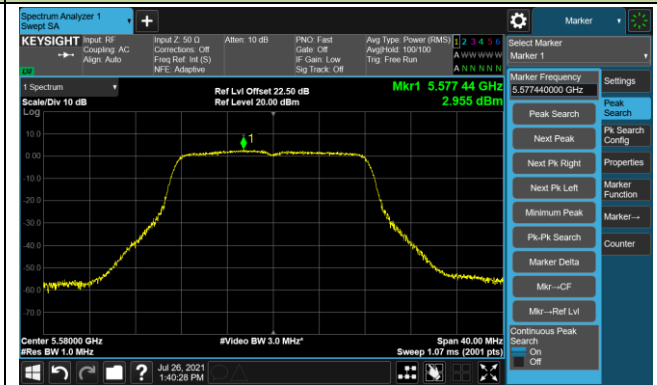


## 802.11a Power Spectral Density - Ant 0

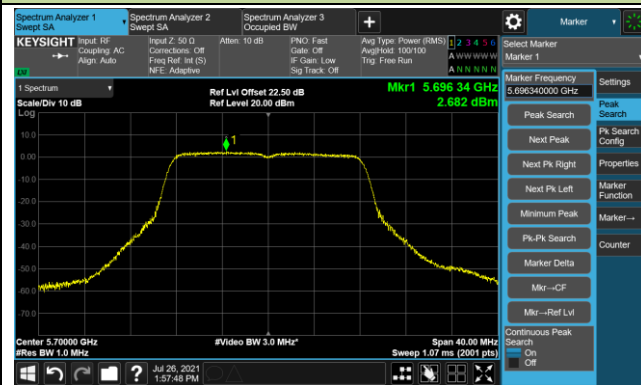
### Channel 100 (5500MHz)



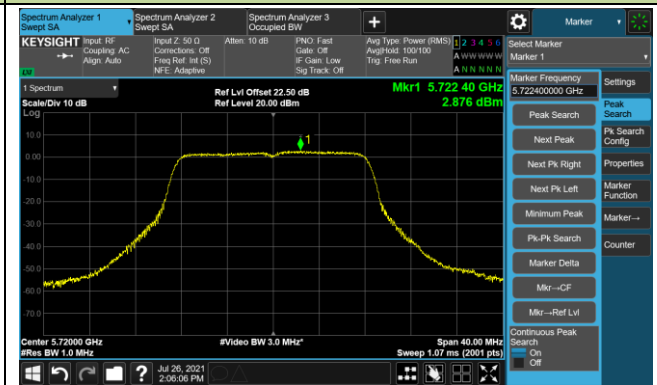
### Channel 116 (5580MHz)



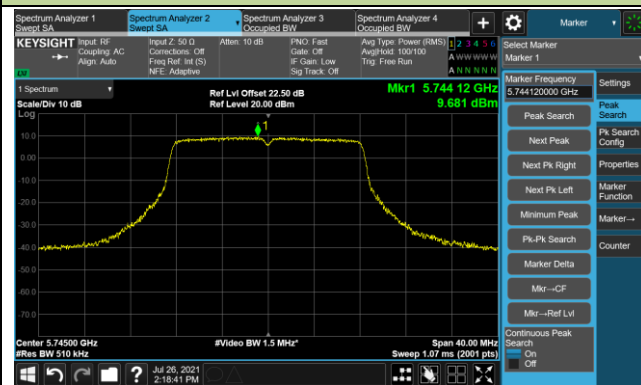
### Channel 140 (5700MHz)



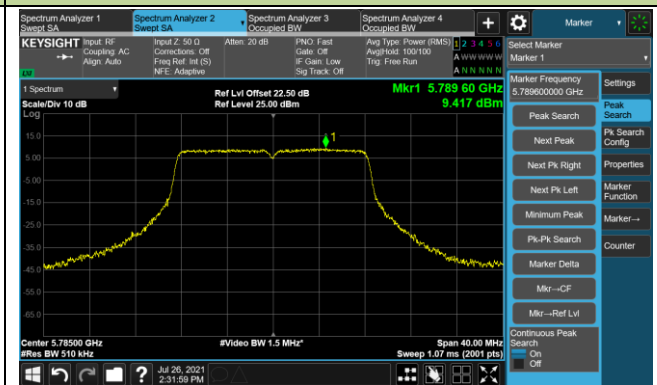
### Channel 144 (5720MHz)



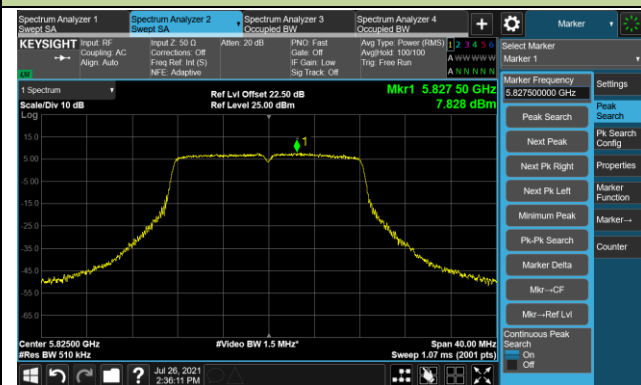
### Channel 149 (5745MHz)



### Channel 157 (5785MHz)

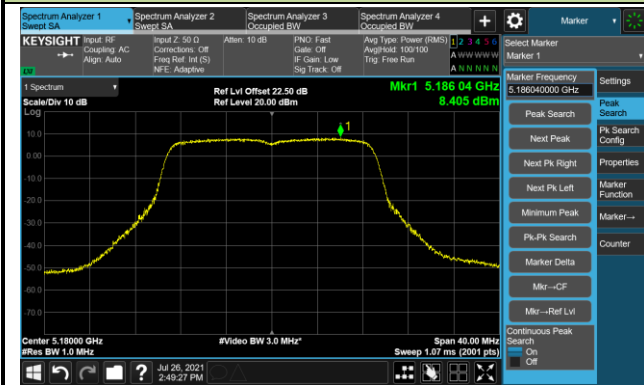


### Channel 165 (5825MHz)

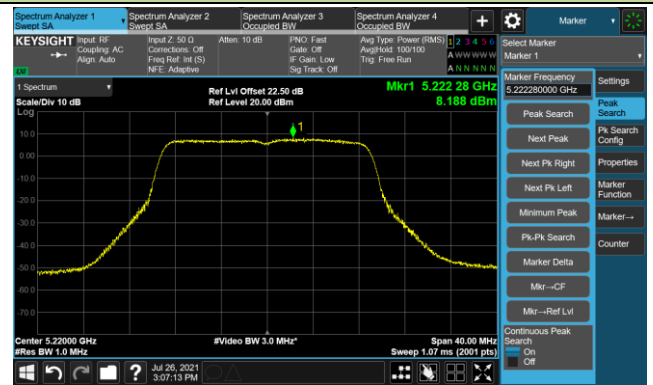


## 802.11ac-VHT20 Power Spectral Density - Ant 0

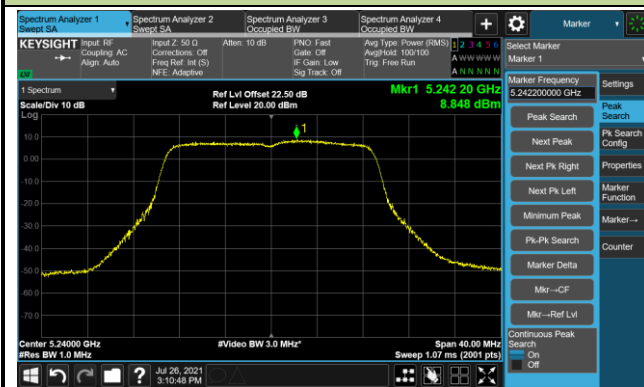
### Channel 36 (5180MHz)



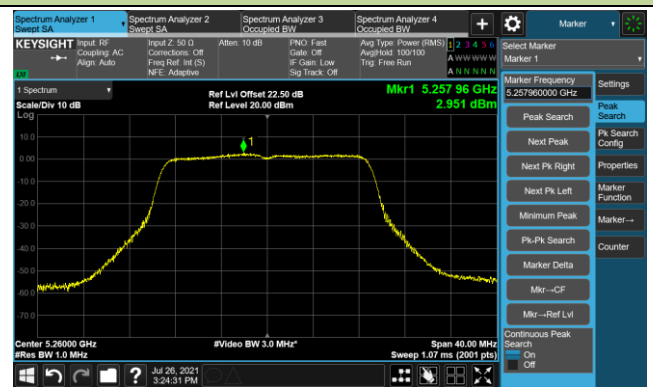
### Channel 44 (5220MHz)



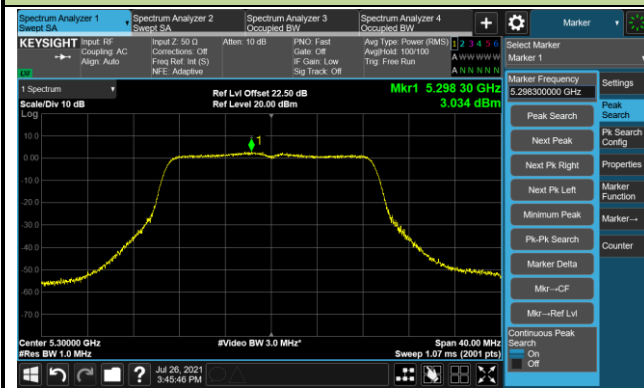
### Channel 48 (5240MHz)



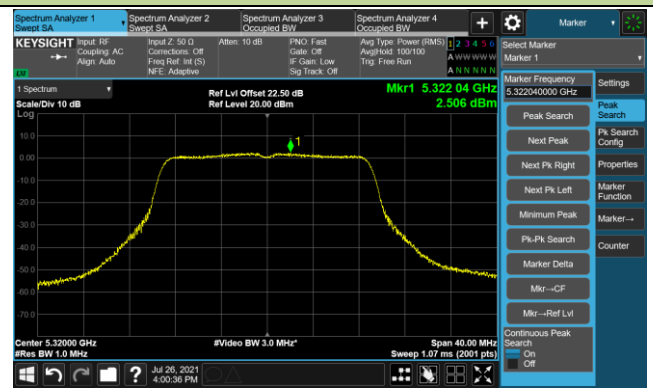
### Channel 52 (5260MHz)



### Channel 60 (5300MHz)



### Channel 64 (5320MHz)

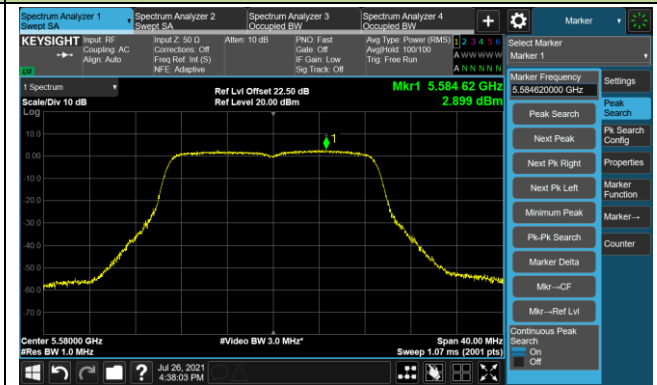


## 802.11ac-VHT20 Power Spectral Density - Ant 0

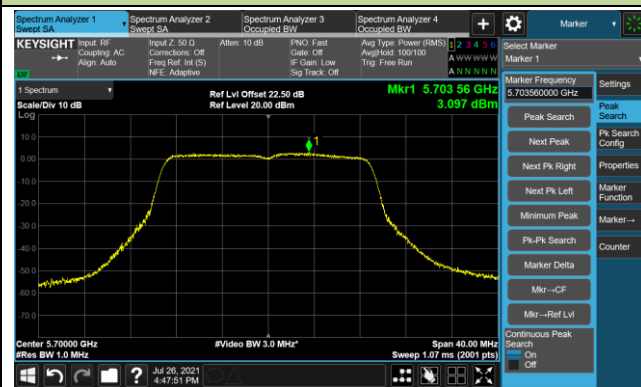
### Channel 100 (5500MHz)



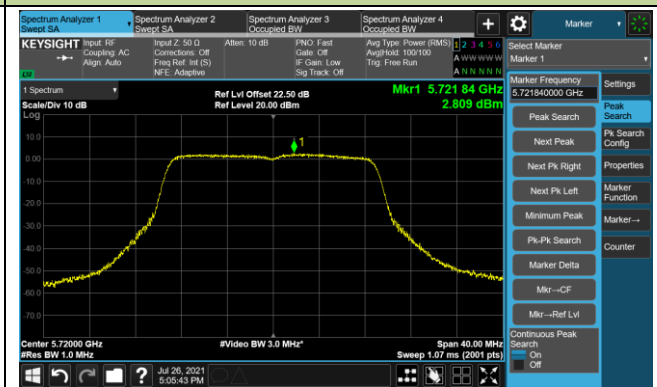
### Channel 116 (5580MHz)



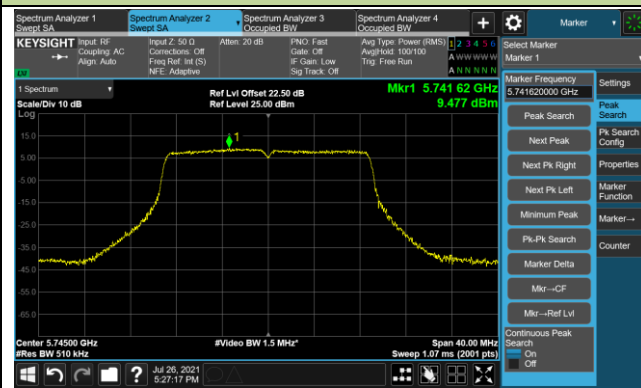
### Channel 140 (5700MHz)



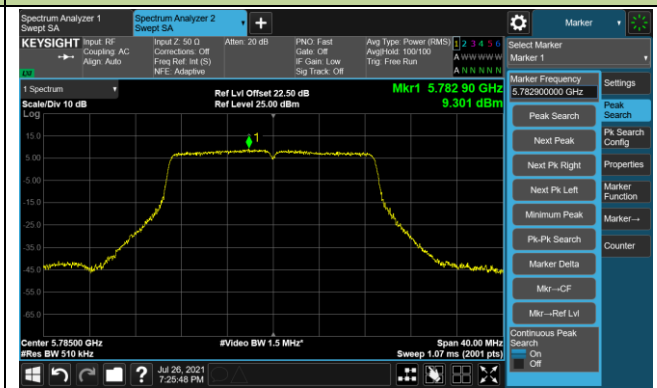
### Channel 144 (5720MHz)



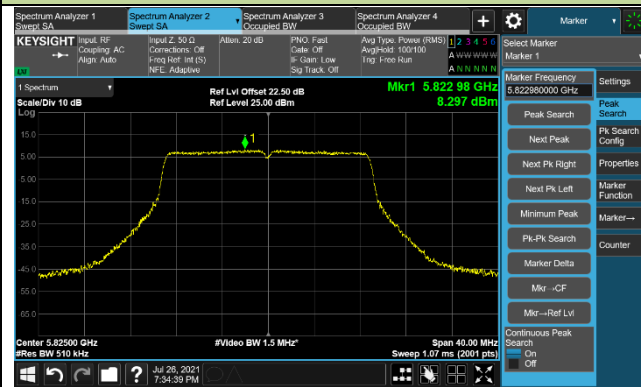
### Channel 149 (5745MHz)



### Channel 157 (5785MHz)

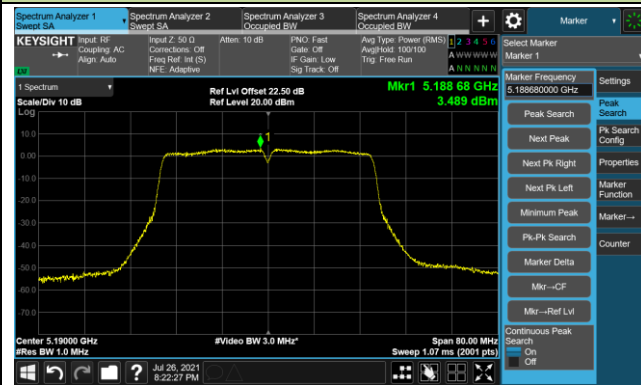


### Channel 165 (5825MHz)

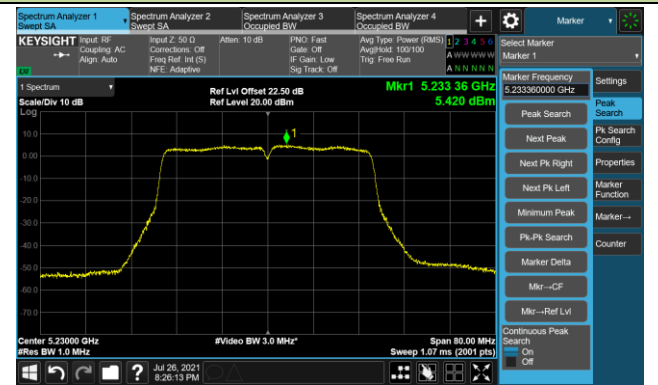


## 802.11ac-VHT40 Power Spectral Density - Ant 0

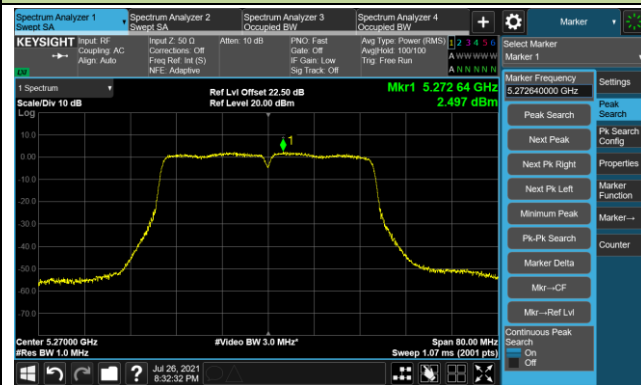
### Channel 38 (5190MHz)



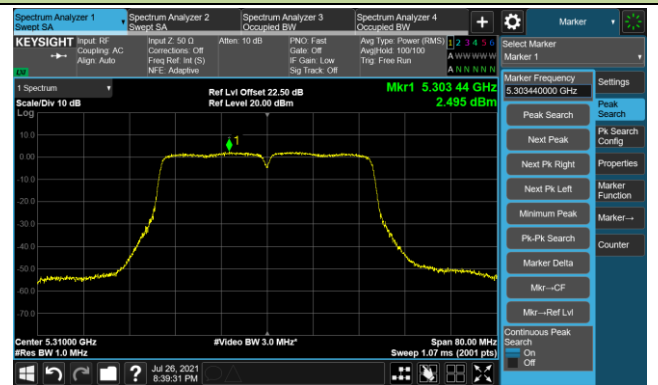
### Channel 46 (5230MHz)



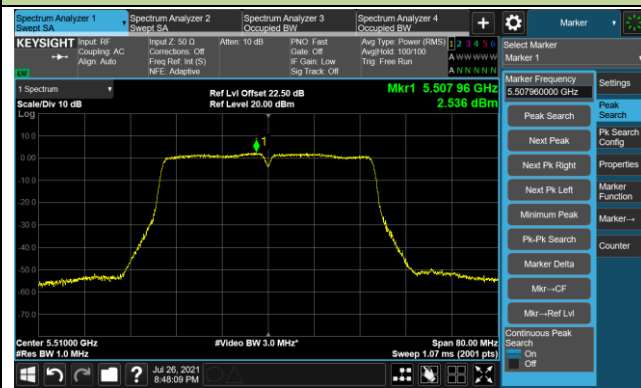
### Channel 54 (5270MHz)



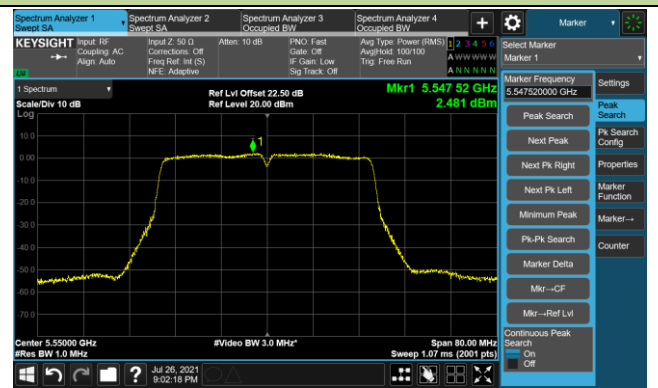
### Channel 62 (5310MHz)



### Channel 102 (5510MHz)



### Channel 110 (5550MHz)



## 802.11ac-VHT40 Power Spectral Density - Ant 0

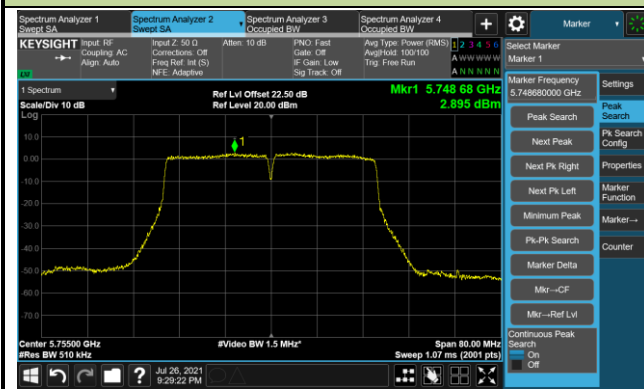
### Channel 134 (5670MHz)



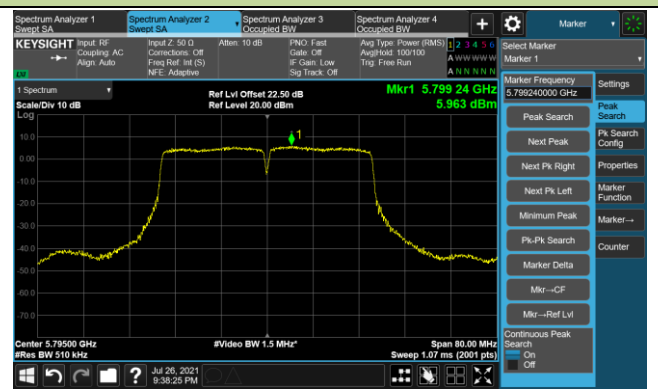
### Channel 142 (5710MHz)



### Channel 151 (5755MHz)



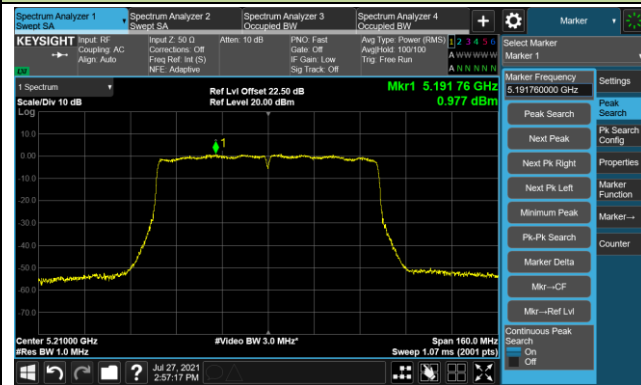
### Channel 159 (5795MHz)



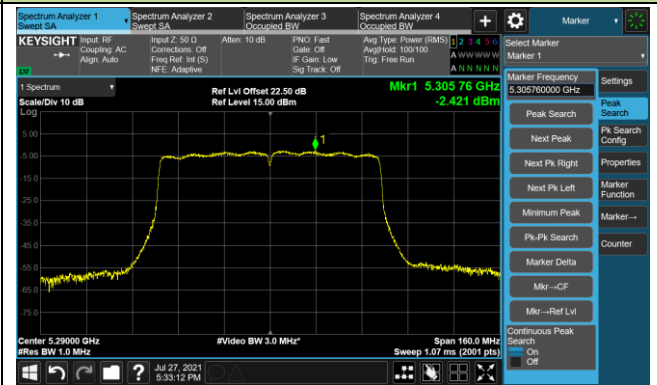


## 802.11ac-VHT80 Power Spectral Density - Ant 0

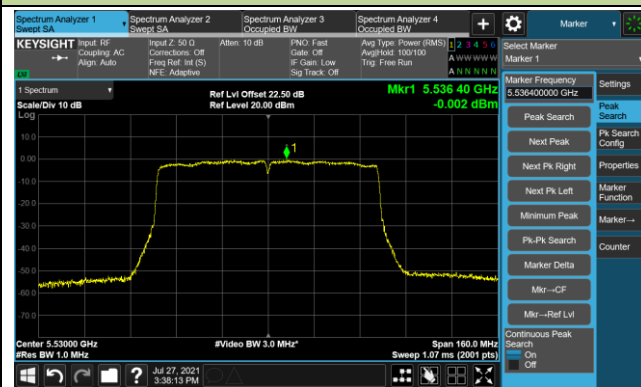
### Channel 42 (5210MHz)



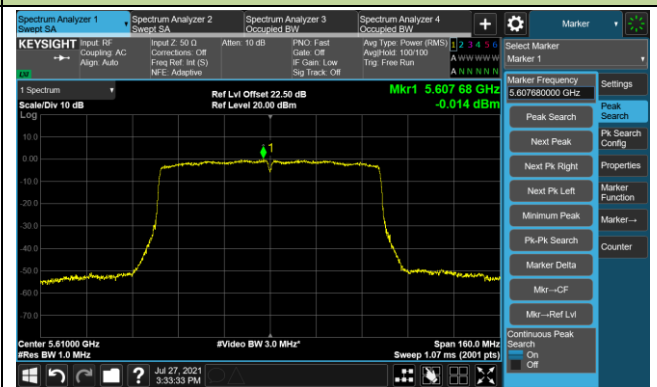
### Channel 58 (5290MHz)



### Channel 106 (5530MHz)



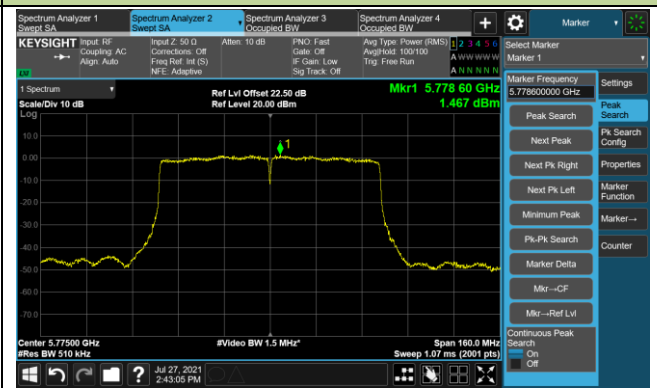
### Channel 122 (5610MHz)



### Channel 138 (5690MHz)

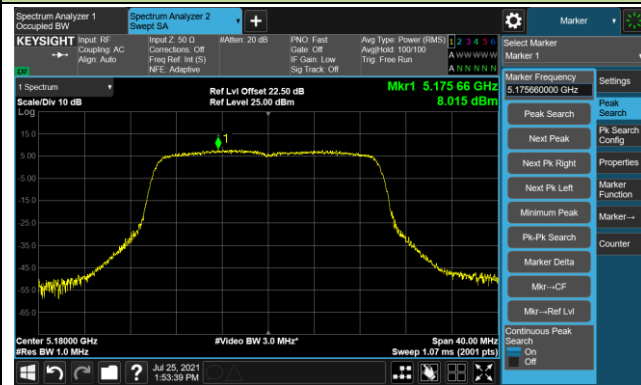


### Channel 155 (5775MHz)

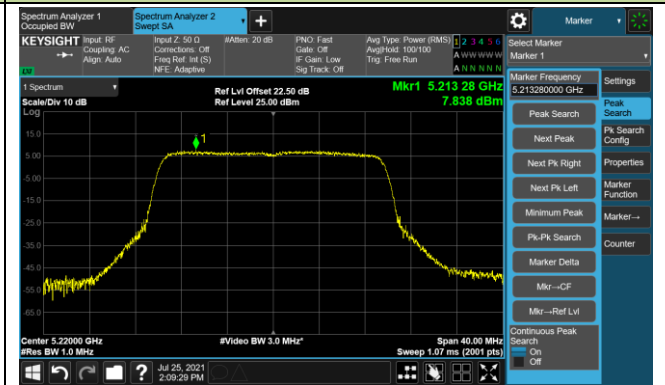


## 802.11ax-HE20 Power Spectral Density - Ant 0

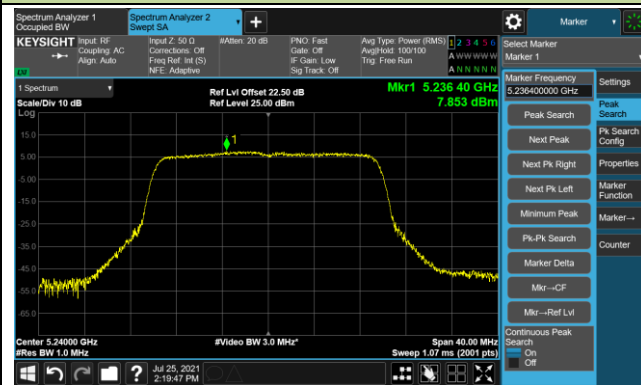
### Channel 36 (5180MHz)



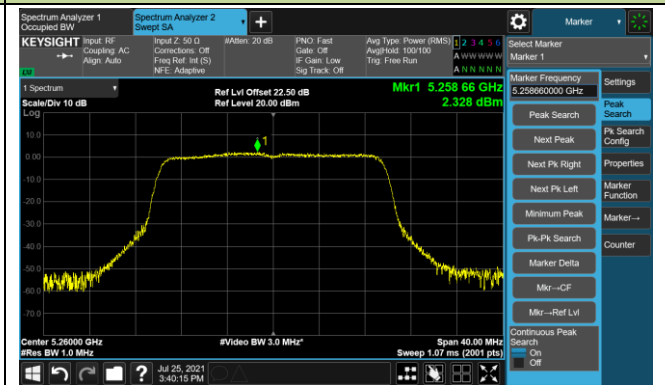
### Channel 44 (5220MHz)



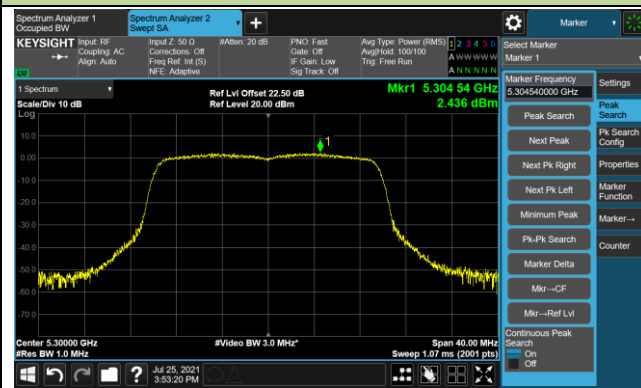
### Channel 48 (5240MHz)



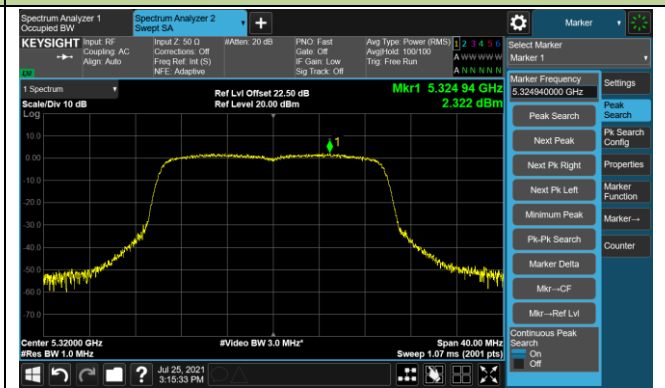
### Channel 52 (5260MHz)



### Channel 60 (5300MHz)

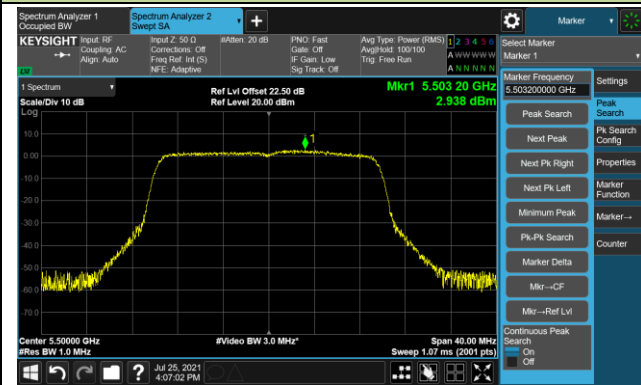


### Channel 64 (5320MHz)

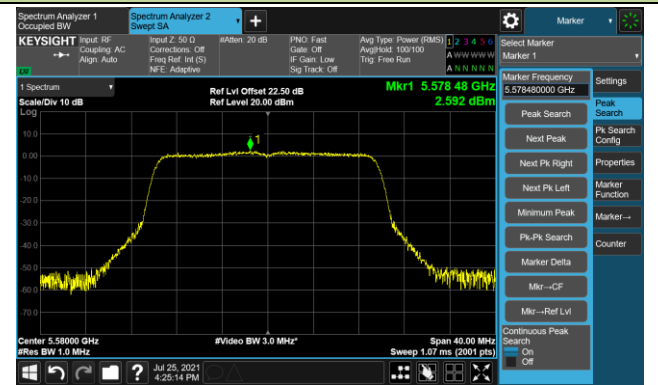


## 802.11ax-HE20 Power Spectral Density - Ant 0

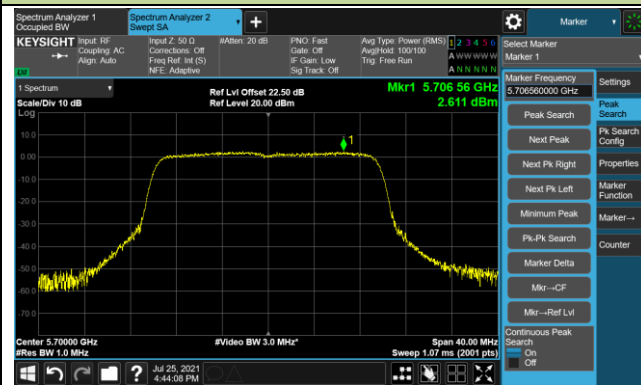
### Channel 100 (5500MHz)



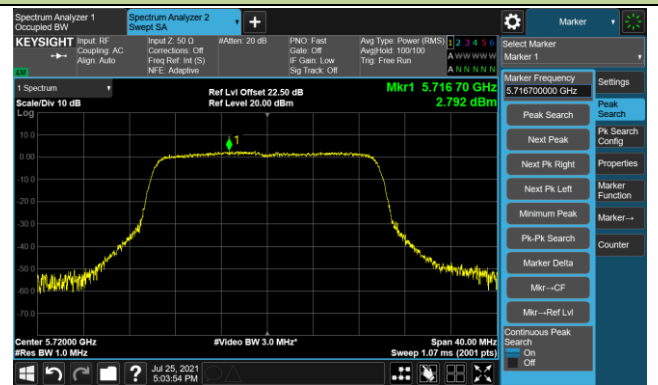
### Channel 116 (5580MHz)



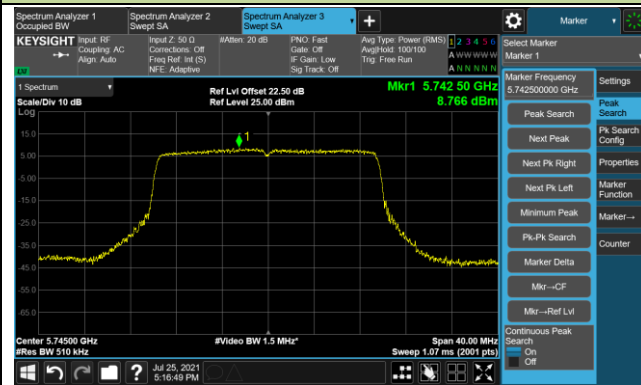
### Channel 140 (5700MHz)



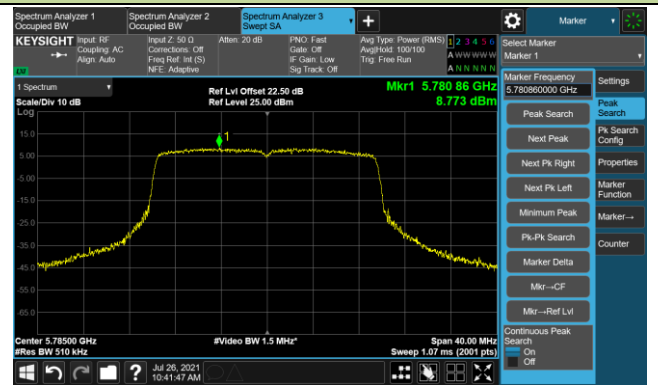
### Channel 144 (5720MHz)



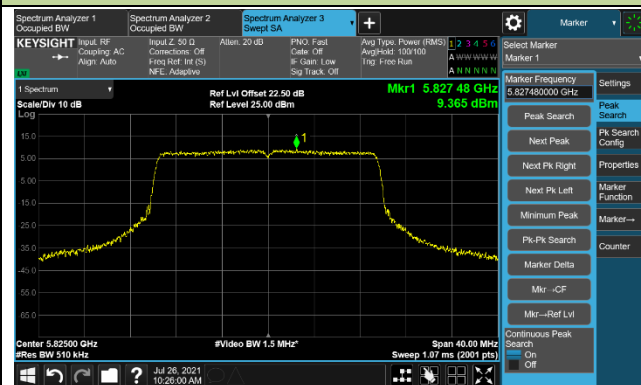
### Channel 149 (5745MHz)



### Channel 157 (5785MHz)

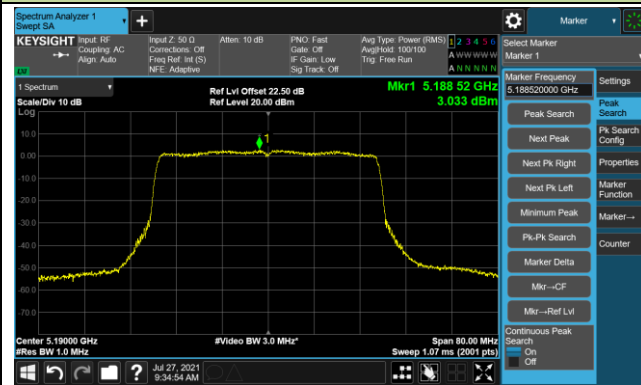


### Channel 165 (5825MHz)

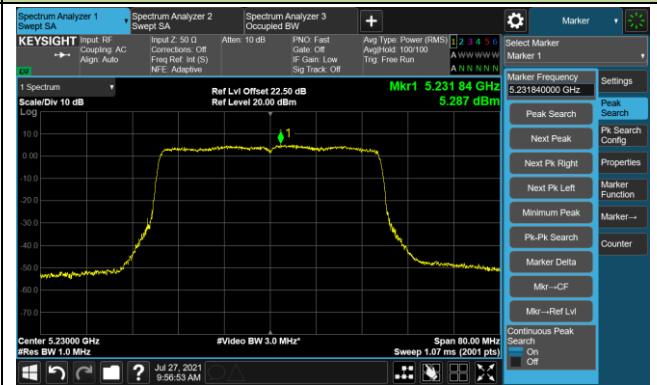


## 802.11ax-HE40 Power Spectral Density - Ant 0

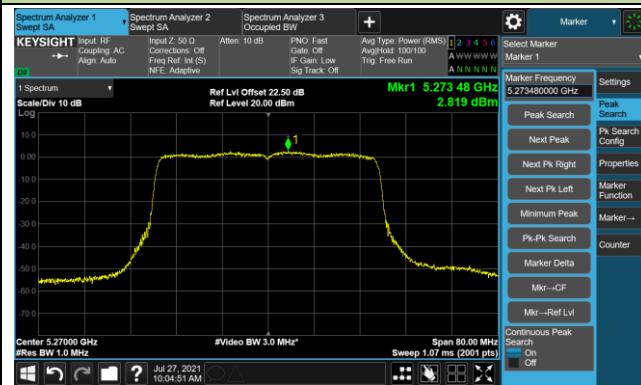
### Channel 38 (5190MHz)



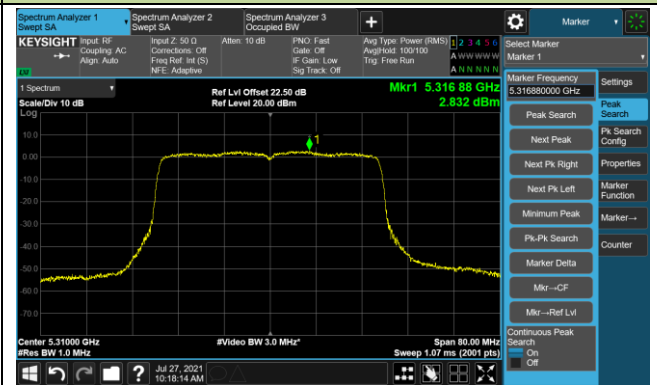
### Channel 46 (5230MHz)



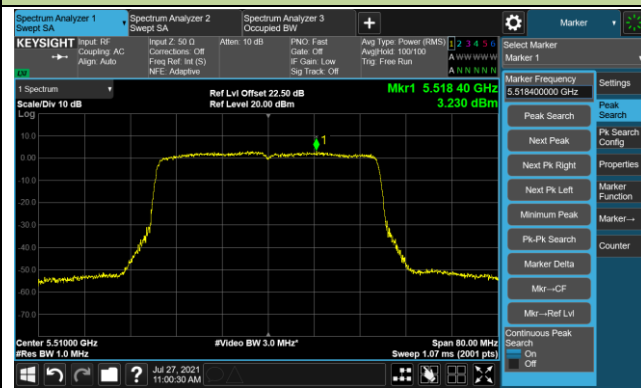
### Channel 54 (5270MHz)



### Channel 62 (5310MHz)



### Channel 102 (5510MHz)



### Channel 110 (5550MHz)

