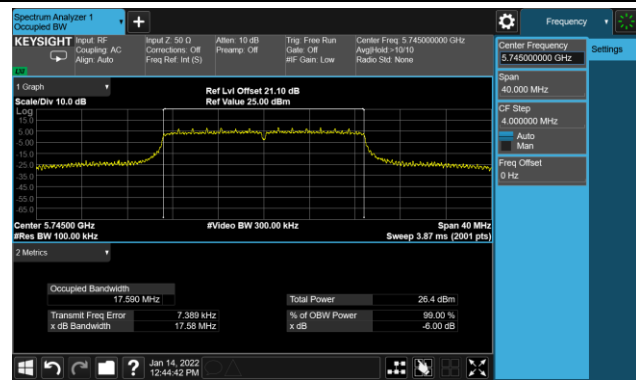
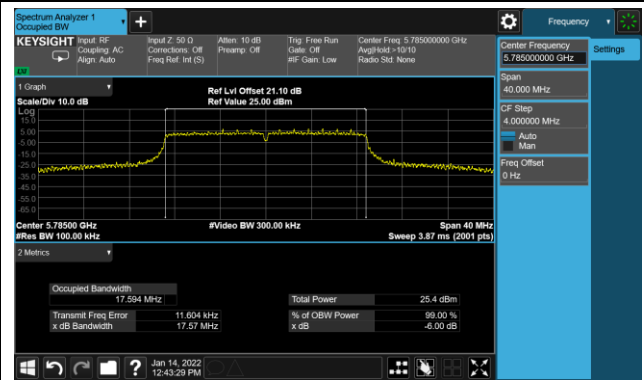


802.11n-HT20 6dB Bandwidth

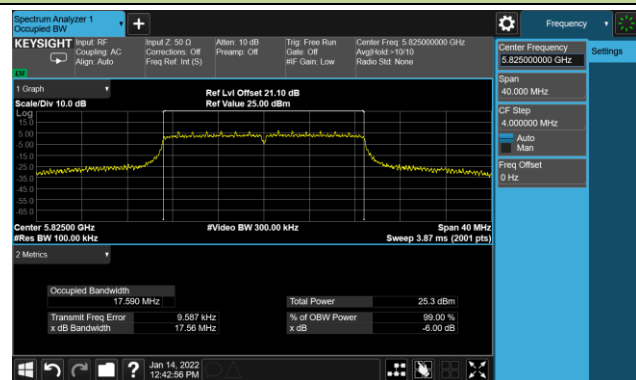
Channel 149 (5745MHz)



Channel 157 (5785MHz)

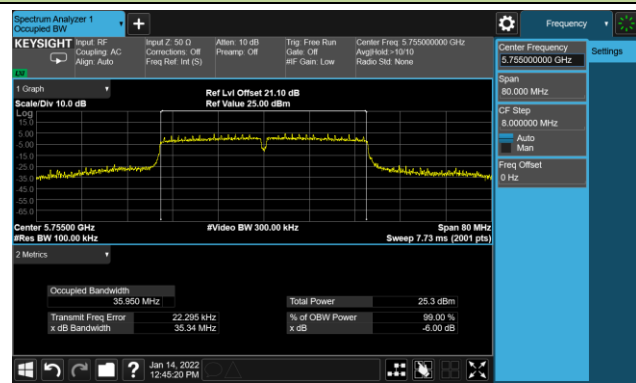


Channel 165 (5825MHz)

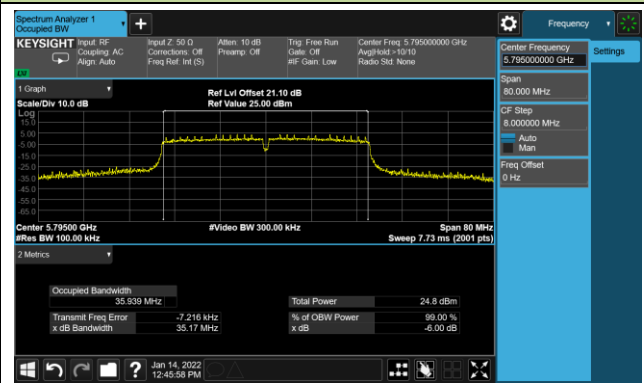


802.11n-HT40 6dB Bandwidth

Channel 151 (5755MHz)

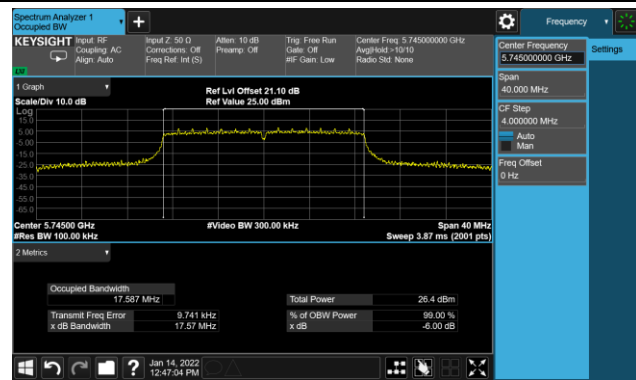


Channel 159 (5795MHz)

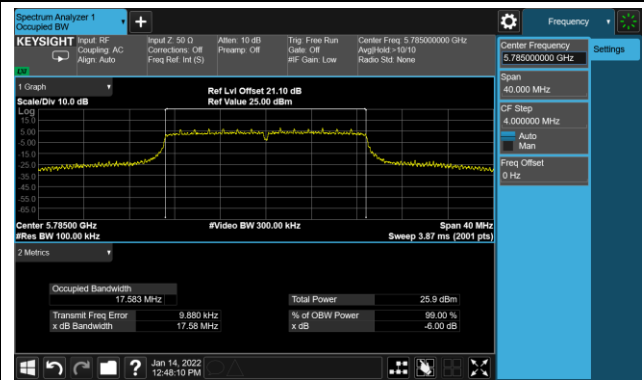


802.11ac-VHT20 6dB Bandwidth

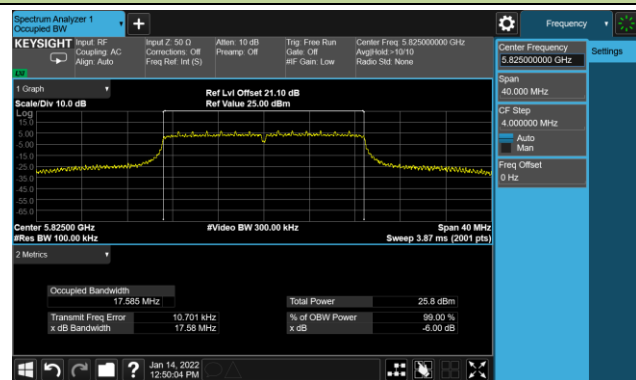
Channel 149 (5745MHz)



Channel 157 (5785MHz)

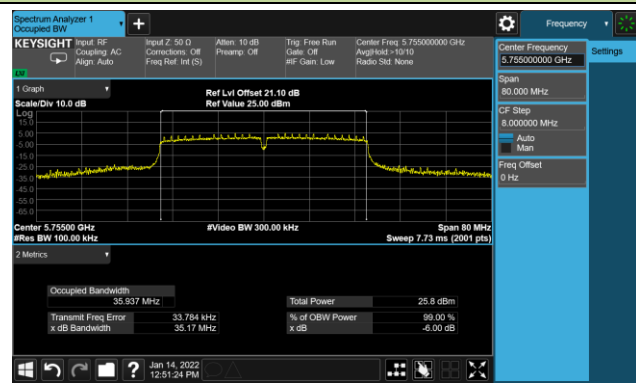


Channel 165 (5825MHz)

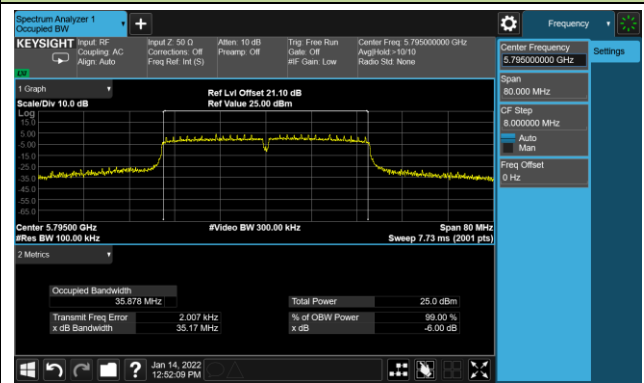


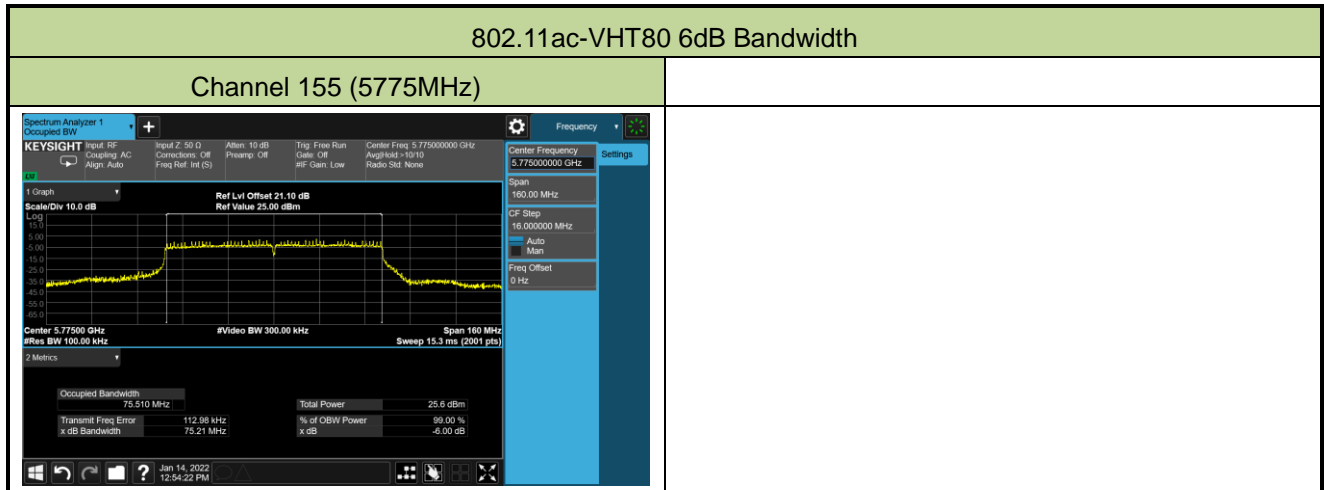
802.11ac-VHT40 6dB Bandwidth

Channel 151 (5755MHz)



Channel 159 (5795MHz)





A.4 Output Power Test Result

Test Site	SIP-TR2	Test Engineer	Alisa Deng
Test Date	2022/01/12		

Test Mode	Data Rate MCS	Channel No.	Freq. (MHz)	Average Power (dBm)		Total Average Power (dBm)	Average Power Limit (dBm)
				Ant 0	Ant 1		
11a	6Mbps	36	5180	19.54	18.45	22.04	≤ 30.00
11a	6Mbps	44	5220	22.92	21.43	25.25	≤ 30.00
11a	6Mbps	48	5240	22.72	21.09	24.99	≤ 30.00
11a	6Mbps	52	5260	17.39	16.10	19.80	≤ 23.86
11a	6Mbps	60	5300	17.26	15.64	19.54	≤ 23.86
11a	6Mbps	64	5320	17.10	15.34	19.32	≤ 23.86
11a	6Mbps	100	5500	17.47	15.30	19.53	≤ 23.86
11a	6Mbps	116	5580	17.52	15.01	19.45	≤ 23.86
11a	6Mbps	120	5600	16.97	15.80	19.43	≤ 23.86
11a	6Mbps	140	5700	17.09	16.92	20.02	≤ 23.86
11a	6Mbps	144	5720	17.05	16.93	20.00	≤ 22.72
11a	6Mbps	149	5745	19.50	19.39	22.46	≤ 30.00
11a	6Mbps	157	5785	18.91	18.63	21.78	≤ 30.00
11a	6Mbps	165	5825	18.73	18.26	21.51	≤ 30.00
11n-HT20	MCS0	36	5180	20.56	19.16	22.93	≤ 30.00
11n-HT20	MCS0	44	5220	22.93	21.32	25.21	≤ 30.00
11n-HT20	MCS0	48	5240	22.71	21.07	24.98	≤ 30.00
11n-HT20	MCS0	52	5260	17.33	16.01	19.73	≤ 23.98
11n-HT20	MCS0	60	5300	17.18	15.54	19.45	≤ 23.98
11n-HT20	MCS0	64	5320	16.98	15.21	19.19	≤ 23.98
11n-HT20	MCS0	100	5500	17.33	15.27	19.43	≤ 23.98
11n-HT20	MCS0	116	5580	17.37	14.93	19.33	≤ 23.98
11n-HT20	MCS0	120	5600	16.70	15.57	19.18	≤ 23.98
11n-HT20	MCS0	140	5700	17.02	16.78	19.91	≤ 23.98
11n-HT20	MCS0	144	5720	16.97	16.76	19.88	≤ 22.79
11n-HT20	MCS0	149	5745	19.44	19.26	22.36	≤ 30.00
11n-HT20	MCS0	157	5785	18.92	18.51	21.73	≤ 30.00
11n-HT20	MCS0	165	5825	18.54	18.03	21.30	≤ 30.00

Test Mode	Data Rate MCS	Channel No.	Freq. (MHz)	Average Power (dBm)		Total Average Power (dBm)	Average Power Limit (dBm)
				Ant 0	Ant 1		
11n-HT40	MCS0	38	5190	13.27	12.23	15.79	≤ 30.00
11n-HT40	MCS0	46	5230	23.18	20.56	25.07	≤ 30.00
11n-HT40	MCS0	54	5270	18.39	16.98	20.75	≤ 23.98
11n-HT40	MCS0	62	5310	16.21	14.54	18.47	≤ 23.98
11n-HT40	MCS0	102	5510	18.59	16.13	20.54	≤ 23.98
11n-HT40	MCS0	110	5550	18.41	16.17	20.44	≤ 23.98
11n-HT40	MCS0	118	5590	18.56	15.86	20.43	≤ 23.98
11n-HT40	MCS0	134	5670	16.84	15.67	19.30	≤ 23.98
11n-HT40	MCS0	142	5710	16.27	15.86	19.08	≤ 23.98
11n-HT40	MCS0	151	5755	18.58	18.30	21.45	≤ 30.00
11n-HT40	MCS0	159	5795	18.06	17.63	20.86	≤ 30.00
11ac-VHT20	MCS0	36	5180	18.53	17.26	20.95	≤ 30.00
11ac-VHT20	MCS0	44	5220	22.83	21.30	25.14	≤ 30.00
11ac-VHT20	MCS0	48	5240	22.68	21.06	24.96	≤ 30.00
11ac-VHT20	MCS0	52	5260	17.38	15.89	19.71	≤ 23.98
11ac-VHT20	MCS0	60	5300	17.18	15.60	19.47	≤ 23.98
11ac-VHT20	MCS0	64	5320	16.98	15.28	19.22	≤ 23.98
11ac-VHT20	MCS0	100	5500	18.34	16.23	20.42	≤ 23.98
11ac-VHT20	MCS0	116	5580	17.37	14.88	19.31	≤ 23.98
11ac-VHT20	MCS0	120	5600	17.89	16.65	20.32	≤ 23.98
11ac-VHT20	MCS0	140	5700	15.80	15.45	18.64	≤ 23.98
11ac-VHT20	MCS0	144	5720	16.92	16.79	19.87	≤ 22.80
11ac-VHT20	MCS0	149	5745	19.47	19.31	22.40	≤ 30.00
11ac-VHT20	MCS0	157	5785	19.01	18.51	21.78	≤ 30.00
11ac-VHT20	MCS0	165	5825	18.56	18.21	21.40	≤ 30.00

Test Mode	Data Rate MCS	Channel No.	Freq. (MHz)	Average Power (dBm)		Total Average Power (dBm)	Average Power Limit (dBm)
				Ant 0	Ant 1		
11ac-VHT40	MCS0	38	5190	13.56	11.84	15.79	≤ 30.00
11ac-VHT40	MCS0	46	5230	23.03	20.46	24.94	≤ 30.00
11ac-VHT40	MCS0	54	5270	18.32	16.94	20.69	≤ 23.98
11ac-VHT40	MCS0	62	5310	15.10	13.45	17.36	≤ 23.98
11ac-VHT40	MCS0	102	5510	15.42	13.35	17.52	≤ 23.98
11ac-VHT40	MCS0	110	5550	18.48	16.12	20.47	≤ 23.98
11ac-VHT40	MCS0	118	5590	18.40	15.92	20.34	≤ 23.98
11ac-VHT40	MCS0	134	5670	16.67	15.69	19.22	≤ 23.98
11ac-VHT40	MCS0	142	5710	16.21	15.92	19.08	≤ 23.98
11ac-VHT40	MCS0	151	5755	18.48	18.25	21.38	≤ 30.00
11ac-VHT40	MCS0	159	5795	17.97	17.37	20.69	≤ 30.00
11ac-VHT80	MCS0	42	5210	12.22	11.17	14.74	≤ 30.00
11ac-VHT80	MCS0	58	5290	14.33	12.48	16.51	≤ 23.98
11ac-VHT80	MCS0	106	5530	13.63	11.27	15.62	≤ 23.98
11ac-VHT80	MCS0	122	5610	15.07	13.50	17.37	≤ 23.98
11ac-VHT80	MCS0	138	5690	16.19	15.67	18.95	≤ 23.98
11ac-VHT80	MCS0	155	5775	17.91	17.32	20.64	≤ 30.00

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

Note 2:

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

802.11a: $11 + 10 \log_{10} (19.32) = 23.86 < 23.98$ dBm

802.11n-HT20: $11 + 10 \log_{10} (20.03) = 24.02 > 23.98$ dBm

802.11ac-VHT20: $11 + 10 \log_{10} (20.17) = 24.05 > 23.98$ dBm

802.11 n-HT40/ac-VHT40/ac-VHT80: $11 + 10 \log_{10} B > 23.98$ dBm

Note 3: For straddle channel, the conducted power limit is as below.

802.11a CH144: $11 + 10 \log_{10} (B) = 22.72$ dBm, $B = 19.72/2 + 5 = 14.86$ MHz.

802.11n-HT20 CH144: $11 + 10 \log_{10} (B) = 22.79$ dBm, $B = 20.23/2 + 5 = 15.68$ MHz.

802.11ac-VHT20 CH144: $11 + 10 \log_{10} (B) = 22.80$ dBm, $B = 20.29/2 + 5 = 15.89$ MHz.

802.11n-HT40/ac-VHT40/ac-VHT80: $11 + 10 \log_{10} B > 23.98$ dBm;

A.5 Power Spectral Density Test Result

Test Site	SIP-TR2	Test Engineer	Alisa Deng
Test Date	2022/01/12~2022/01/19		
Test Item	Power Spectral Density (UNII-Band 1 & UNII-2a & UNII-2c)		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	AVG PSD (dBm/ MHz)		Duty Cycle (%)	Total PSD (dBm/ MHz)	PSD Limit (dBm/MHz)
				Ant 0	Ant 1			
11a	6Mbps	36	5180	7.47	6.40	92.60	10.31	14.49
11a	6Mbps	44	5220	10.78	9.37	92.60	13.47	14.49
11a	6Mbps	48	5240	10.71	9.06	92.60	13.31	14.49
11a	6Mbps	52	5260	5.47	4.15	92.60	8.21	8.49
11a	6Mbps	60	5300	5.26	3.61	92.60	7.86	8.49
11a	6Mbps	64	5320	5.21	3.35	92.60	7.72	8.49
11a	6Mbps	100	5500	5.18	3.04	92.60	7.59	8.49
11a	6Mbps	116	5580	5.76	2.99	92.60	7.94	8.49
11a	6Mbps	120	5600	5.41	3.65	92.60	7.96	8.49
11a	6Mbps	140	5700	5.16	4.92	92.60	8.39	8.49
11a	6Mbps	144	5720	4.95	4.93	92.60	8.29	8.49
11n-HT20	MCS0	36	5180	8.26	6.81	91.89	10.97	14.49
11n-HT20	MCS0	44	5220	10.55	8.86	91.89	13.16	14.49
11n-HT20	MCS0	48	5240	10.39	8.62	91.89	12.97	14.49
11n-HT20	MCS0	52	5260	5.36	3.84	91.89	8.04	8.49
11n-HT20	MCS0	60	5300	5.20	3.61	91.89	7.85	8.49
11n-HT20	MCS0	64	5320	5.11	3.32	91.89	7.68	8.49
11n-HT20	MCS0	100	5500	4.92	3.04	91.89	7.46	8.49
11n-HT20	MCS0	116	5580	5.36	3.04	91.89	7.73	8.49
11n-HT20	MCS0	120	5600	4.85	3.70	91.89	7.69	8.49
11n-HT20	MCS0	140	5700	4.98	4.62	91.89	8.18	8.49
11n-HT20	MCS0	144	5720	4.95	4.63	91.89	8.17	8.49

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	AVGPSD (dBm/ MHz)		Duty Cycle (%)	Total PSD (dBm/ MHz)	PSD Limit (dBm/MHz)
				Ant 0	Ant 1			
11n-HT40	MCS0	38	5190	-1.76	-3.04	84.90	1.37	14.49
11n-HT40	MCS0	46	5230	7.99	5.30	84.90	10.57	14.49
11n-HT40	MCS0	54	5270	3.28	1.72	84.90	6.29	8.49
11n-HT40	MCS0	62	5310	1.42	-0.48	84.90	4.29	8.49
11n-HT40	MCS0	102	5510	3.59	0.77	84.90	6.12	8.49
11n-HT40	MCS0	110	5550	3.33	0.91	84.90	6.01	8.49
11n-HT40	MCS0	118	5590	3.61	0.82	84.90	6.15	8.49
11n-HT40	MCS0	134	5670	1.65	0.61	84.90	4.88	8.49
11n-HT40	MCS0	142	5710	1.20	0.60	84.90	4.63	8.49
11ac-VHT20	MCS0	36	5180	6.37	4.95	91.71	9.10	14.49
11ac-VHT20	MCS0	44	5220	10.52	8.87	91.71	13.16	14.49
11ac-VHT20	MCS0	48	5240	10.40	8.64	91.71	12.99	14.49
11ac-VHT20	MCS0	52	5260	5.46	3.85	91.71	8.11	8.49
11ac-VHT20	MCS0	60	5300	5.46	3.55	91.71	7.99	8.49
11ac-VHT20	MCS0	64	5320	4.97	3.16	91.71	7.54	8.49
11ac-VHT20	MCS0	100	5500	5.85	3.83	91.71	8.34	8.49
11ac-VHT20	MCS0	116	5580	5.08	2.66	91.71	7.42	8.49
11ac-VHT20	MCS0	120	5600	4.78	3.88	91.71	7.74	8.49
11ac-VHT20	MCS0	140	5700	3.69	3.23	91.71	6.85	8.49
11ac-VHT20	MCS0	144	5720	5.18	4.83	91.71	8.39	8.49
11ac-VHT40	MCS0	38	5190	-1.58	-2.80	88.03	1.42	14.49
11ac-VHT40	MCS0	46	5230	7.80	5.05	88.03	10.20	14.49
11ac-VHT40	MCS0	54	5270	3.27	1.86	88.03	6.19	8.49
11ac-VHT40	MCS0	62	5310	0.34	-1.48	88.03	3.09	8.49
11ac-VHT40	MCS0	102	5510	0.18	-1.88	88.03	2.83	8.49
11ac-VHT40	MCS0	110	5550	3.35	0.94	88.03	5.87	8.49
11ac-VHT40	MCS0	118	5590	3.67	0.90	88.03	6.06	8.49
11ac-VHT40	MCS0	134	5670	1.55	0.55	88.03	4.64	8.49
11ac-VHT40	MCS0	142	5710	1.20	0.69	88.03	4.51	8.49

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	AVG PSD (dBm/ MHz)		Duty Cycle (%)	Total PSD (dBm/ MHz)	PSD Limit (dBm/MHz)
				Ant 0	Ant 1			
11ac-VHT80	MCS0	42	5210	-6.59	-7.74	75.99	-2.92	14.49
11ac-VHT80	MCS0	58	5290	-4.41	-6.23	75.99	-1.02	8.49
11ac-VHT80	MCS0	106	5530	-4.82	-7.47	75.99	-1.74	8.49
11ac-VHT80	MCS0	122	5610	-3.39	-4.89	75.99	0.13	8.49
11ac-VHT80	MCS0	138	5690	-2.14	-2.93	75.99	1.69	8.49

Note 1:

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

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

Note 2:

For 5150 - 5250MHz Band: PSD Limit (dBm/MHz) = 17 - (8.51 - 6) = 14.49 dBm/MHz.

For 5250 - 5350MHz Band: PSD Limit (dBm/MHz) = 11 - (8.51 - 6) = 8.49 dBm/MHz.

For 5470 - 5725MHz Band: PSD Limit (dBm/MHz) = 11 - (8.51 - 6) = 8.49 dBm/MHz.

Test Site	SIP-TR2	Test Engineer	Alisa Deng
Test Date	2022/01/14		
Test Item	Power Spectral Density (UNII-Band 3)		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	AVGPSD (dBm/ 510KHz)		Duty Cycle (%)	Total PSD (dBm/ 510KHz)	PSD Limit (dBm/ 500KHz)
				Ant 0	Ant 1			
11a	6Mbps	149	5745	4.65	4.34	92.60	7.84	≤ 27.49
11a	6Mbps	157	5785	4.05	3.66	92.60	7.20	≤ 27.49
11a	6Mbps	165	5825	3.87	3.37	92.60	6.97	≤ 27.49
11n-HT20	MCS0	149	5745	4.38	4.22	91.89	7.68	≤ 27.49
11n-HT20	MCS0	157	5785	3.89	3.43	91.89	7.04	≤ 27.49
11n-HT20	MCS0	165	5825	3.48	3.06	91.89	6.65	≤ 27.49
11n-HT40	MCS0	151	5755	0.81	0.23	84.90	4.25	≤ 27.49
11n-HT40	MCS0	159	5795	0.10	-0.70	84.90	3.44	≤ 27.49
11ac-VHT20	MCS0	149	5745	4.35	4.07	91.71	7.60	≤ 27.49
11ac-VHT20	MCS0	157	5785	3.80	3.24	91.71	6.91	≤ 27.49
11ac-VHT20	MCS0	165	5825	3.47	2.97	91.71	6.61	≤ 27.49
11ac-VHT40	MCS0	151	5755	0.81	0.20	88.03	4.08	≤ 27.49
11ac-VHT40	MCS0	159	5795	0.00	-0.70	88.03	3.23	≤ 27.49
11ac-VHT80	MCS0	155	5775	-3.56	-3.80	75.99	0.53	≤ 27.49

Note 1:

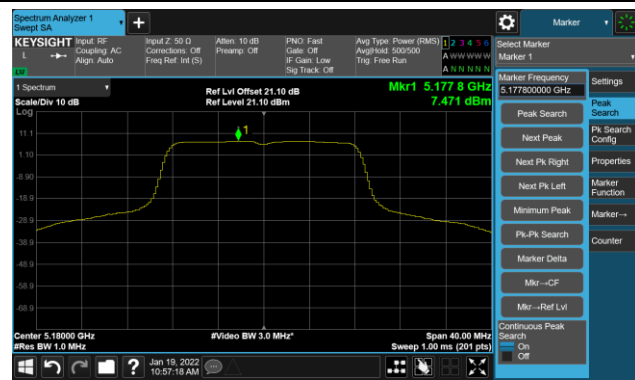
When EUT duty cycle < 98%, the total PSD (dBm/510kHz) = $10 \cdot \log \{10^{(\text{Ant 0 AVGPSD}/10)} + 10^{(\text{Ant 1 AVGPSD}/10)}\} + 10 \cdot \log (1/\text{Duty cycle})$.

When EUT duty cycle ≥ 98%, the total PSD (dBm/510kHz) = $10 \cdot \log \{10^{(\text{Ant 0 AVGPSD}/10)} + 10^{(\text{Ant 1 AVGPSD}/10)}\}$.

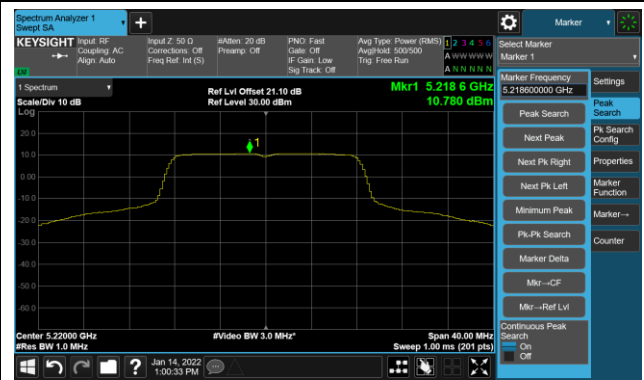
Note 2: PSD Limit (dBm/500KHz) = 30 - (8.51 - 6) = 27.49dBm/MHz.

802.11a Power Spectral Density- Ant 0

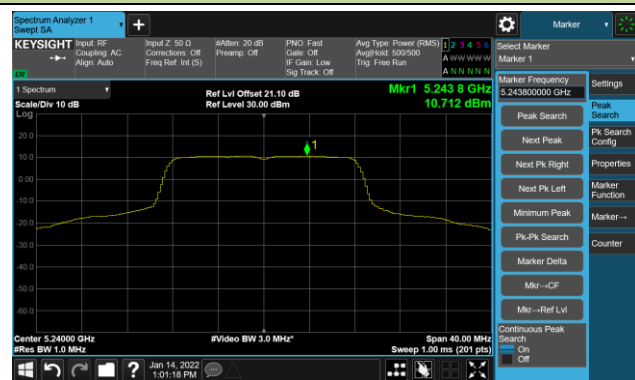
Channel 36 (5180MHz)



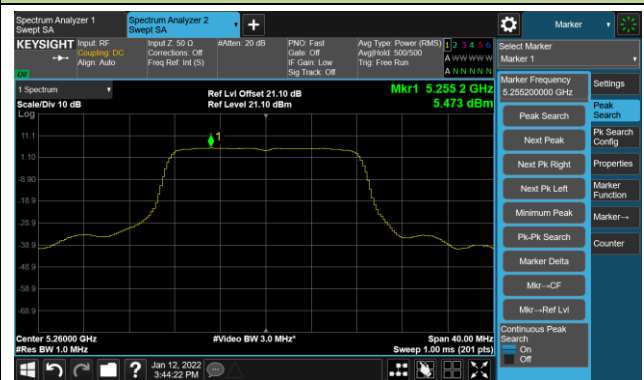
Channel 44 (5220MHz)



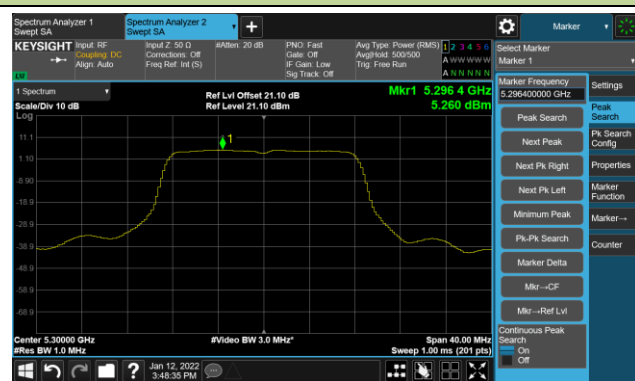
Channel 48 (5240MHz)



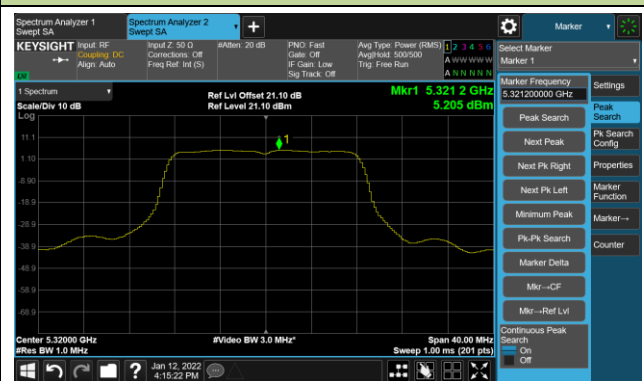
Channel 52 (5260MHz)



Channel 60 (5300MHz)

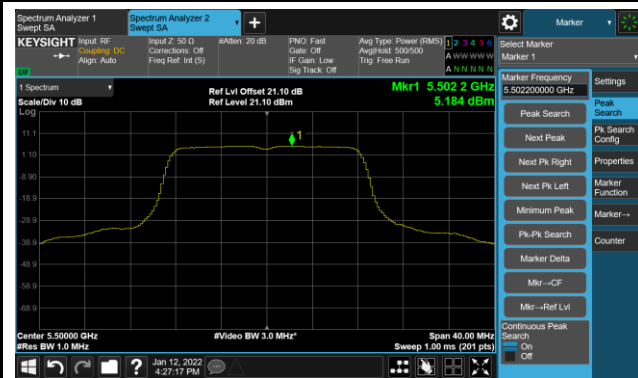


Channel 64 (5320MHz)

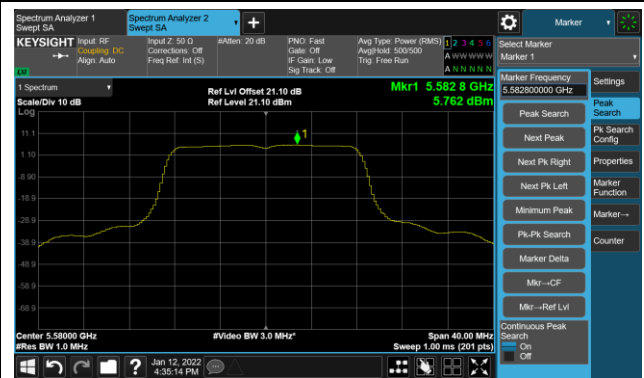


802.11a Power Spectral Density- Ant 0

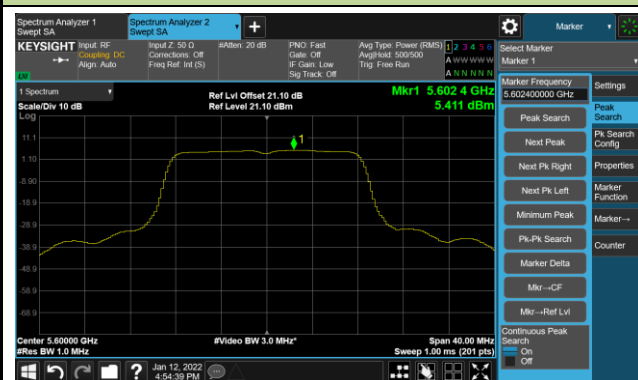
Channel 100 (5500MHz)



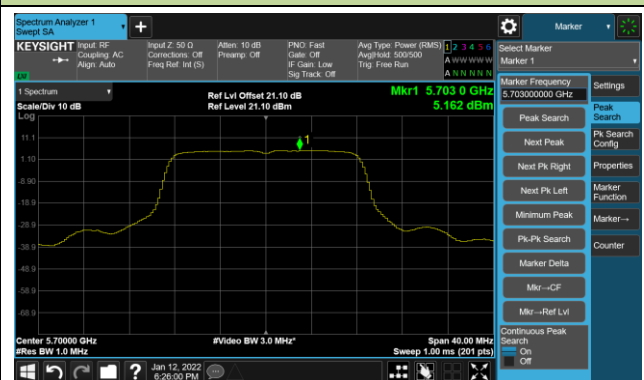
Channel 116 (5580MHz)



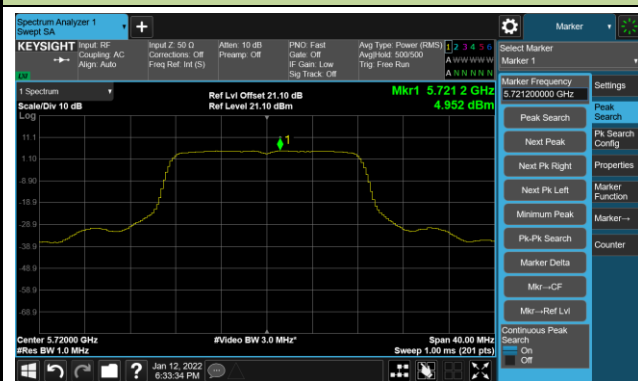
Channel 120 (5600MHz)



Channel 140 (5700MHz)



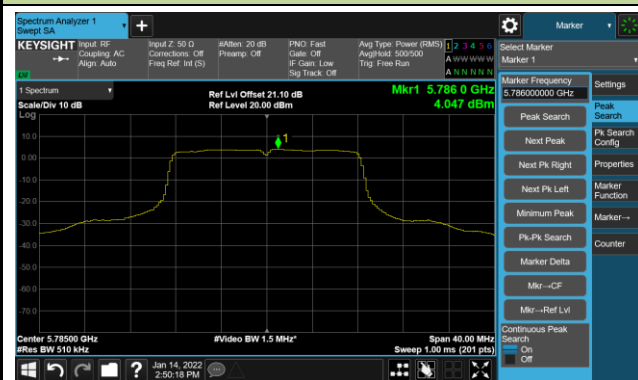
Channel 144(5720MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)

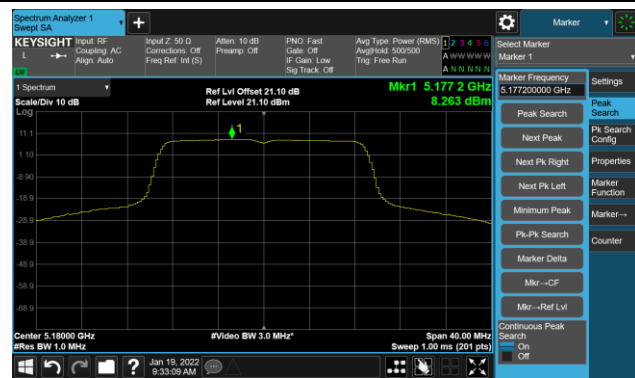


Channel 165 (5825MHz)

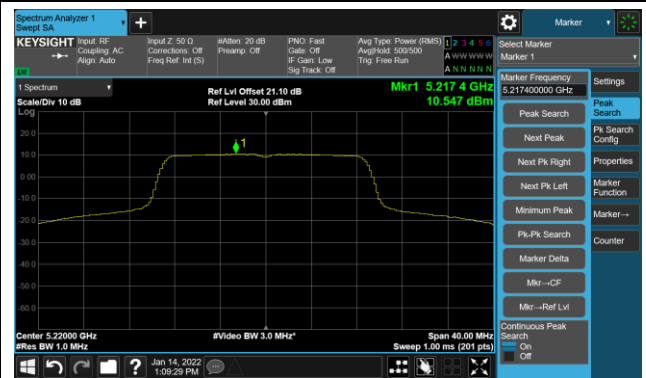


802.11n-HT20 Power Spectral Density- Ant 0

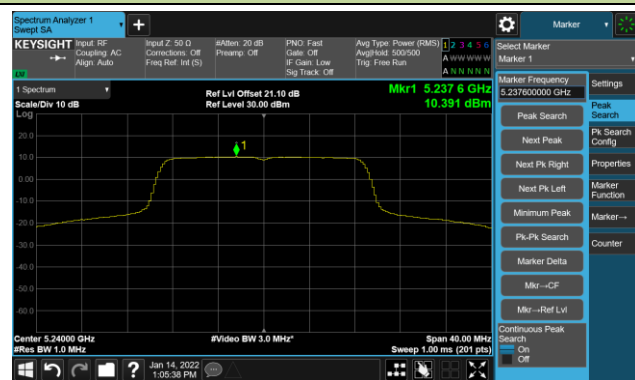
Channel 36 (5180MHz)



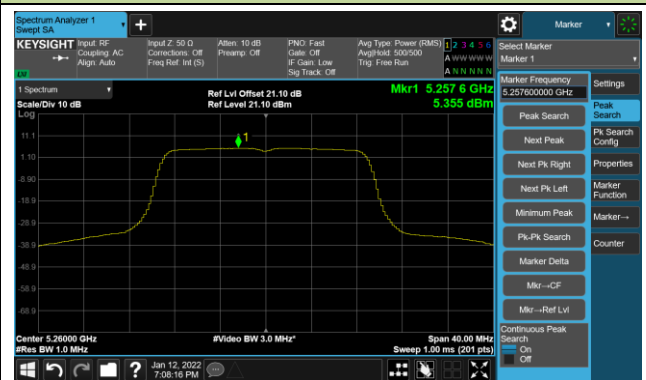
Channel 44 (5220MHz)



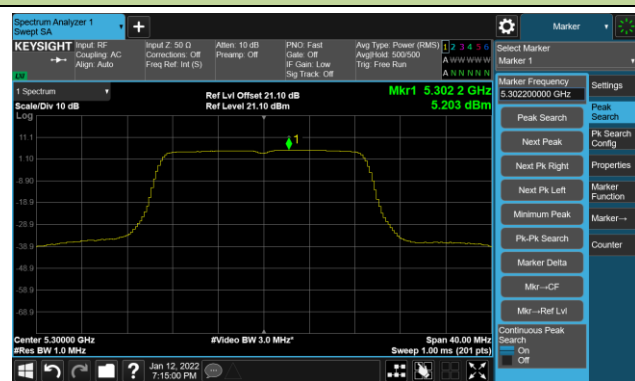
Channel 48 (5240MHz)



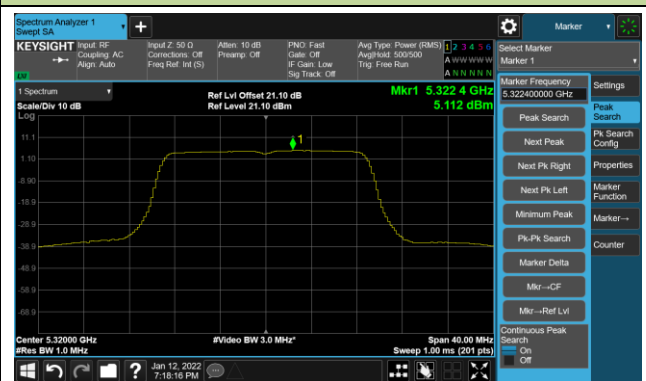
Channel 52 (5260MHz)



Channel 60 (5300MHz)

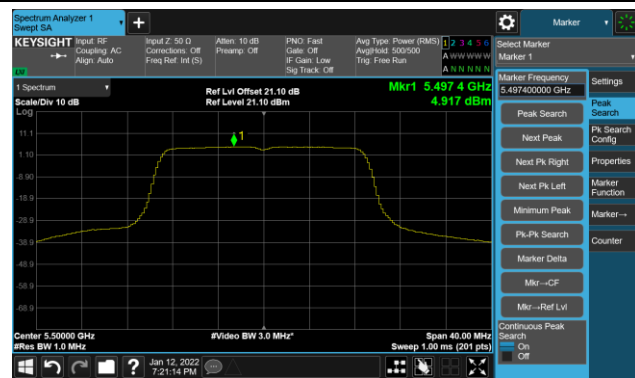


Channel 64 (5320MHz)

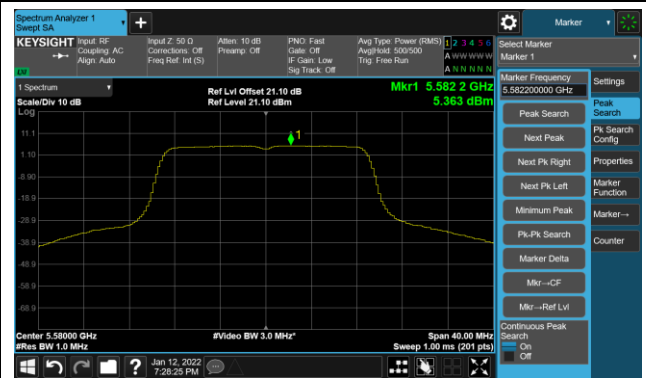


802.11n-HT20 Power Spectral Density- Ant 0

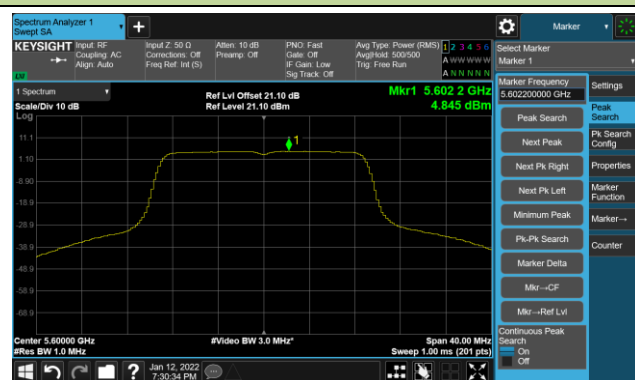
Channel 100 (5500MHz)



Channel 116 (5580MHz)



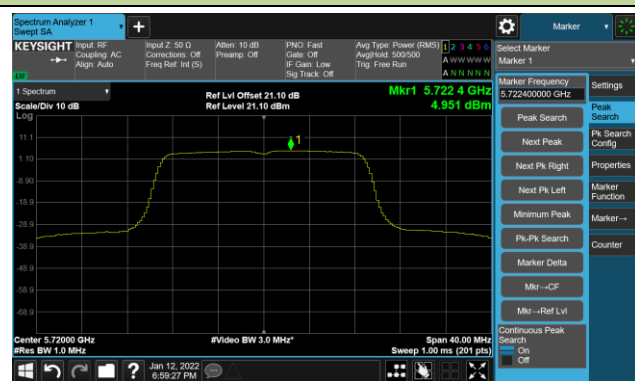
Channel 120 (5600MHz)



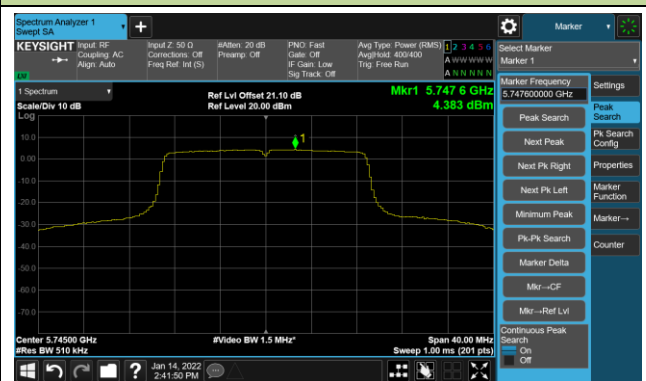
Channel 140 (5700MHz)



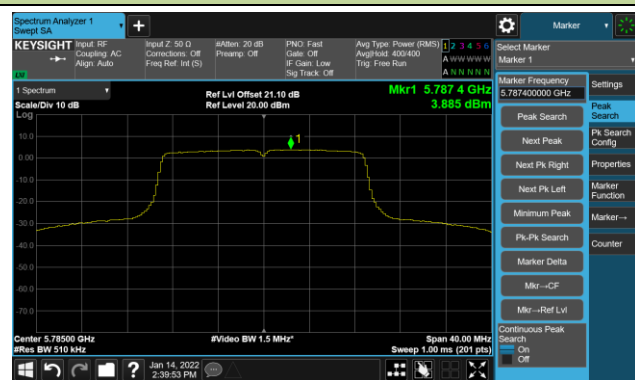
Channel 144 (5720MHz)



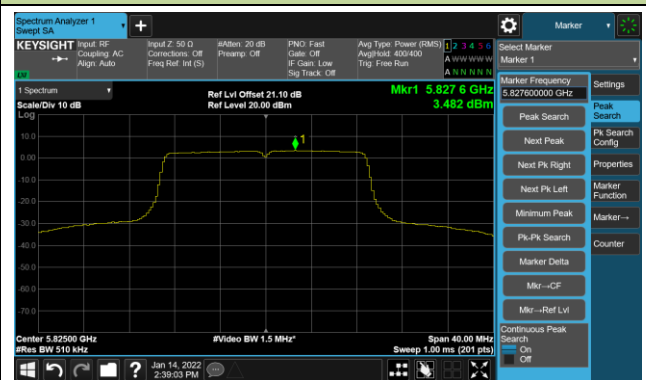
Channel 149 (5745MHz)



Channel 157 (5785MHz)

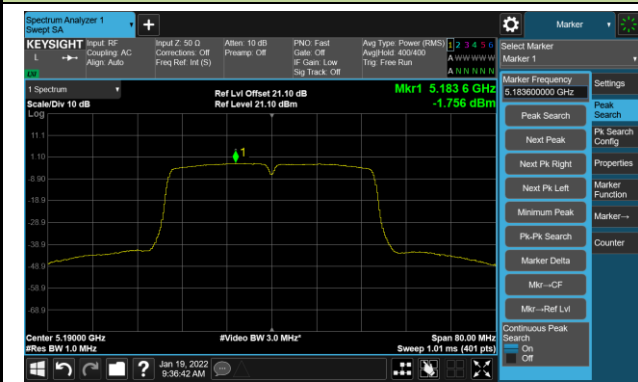


Channel 165 (5825MHz)

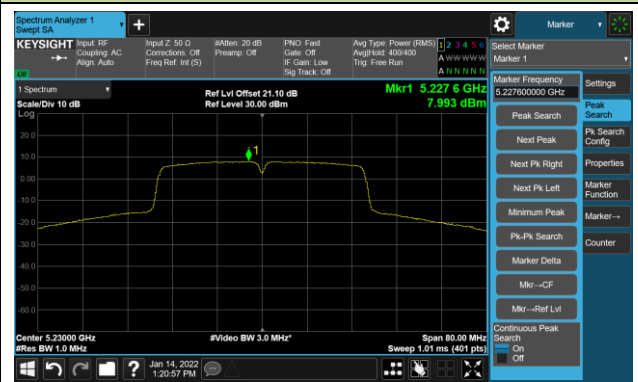


802.11n-HT40 Power Spectral Density- Ant 0

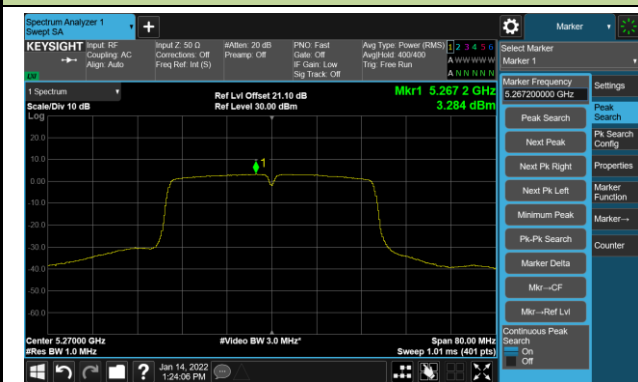
Channel 38 (5190MHz)



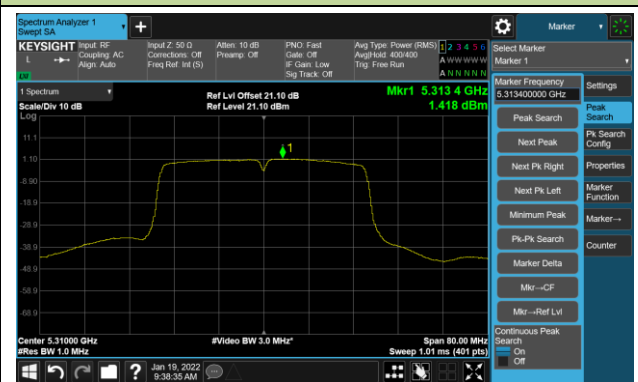
Channel 46 (5230MHz)



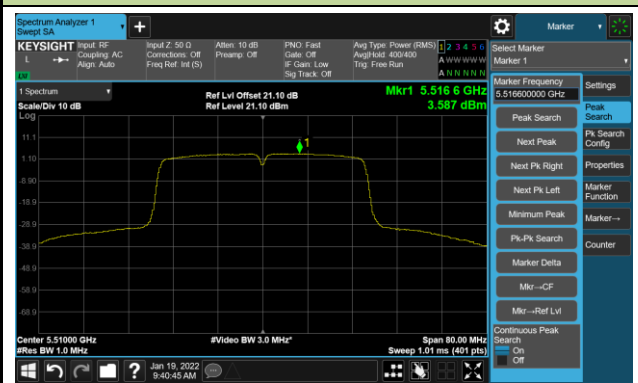
Channel 54 (5270MHz)



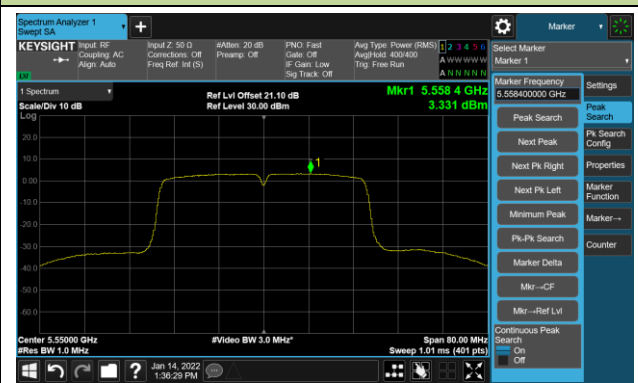
Channel 62 (5310MHz)



Channel 102 (5510MHz)

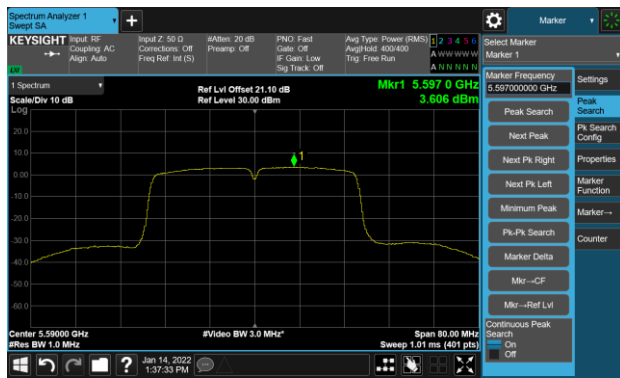


Channel 110 (5550MHz)

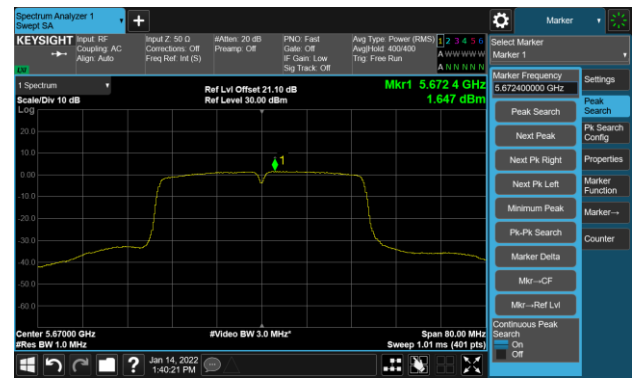


802.11n-HT40 Power Spectral Density- Ant 0

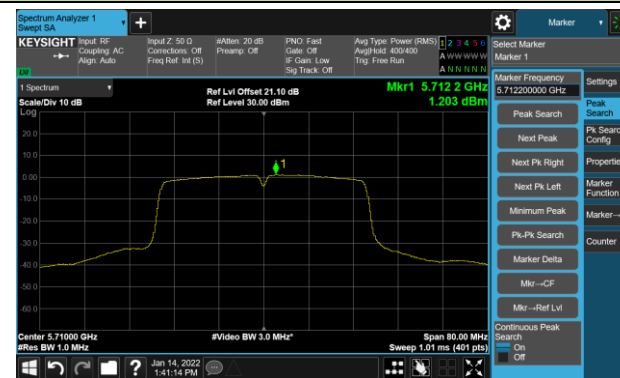
Channel 118 (5590MHz)



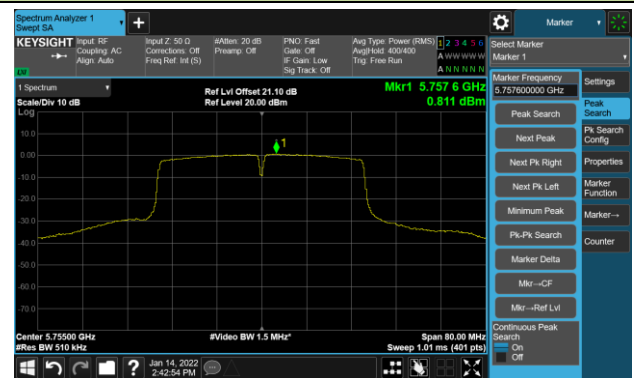
Channel 134 (5670MHz)



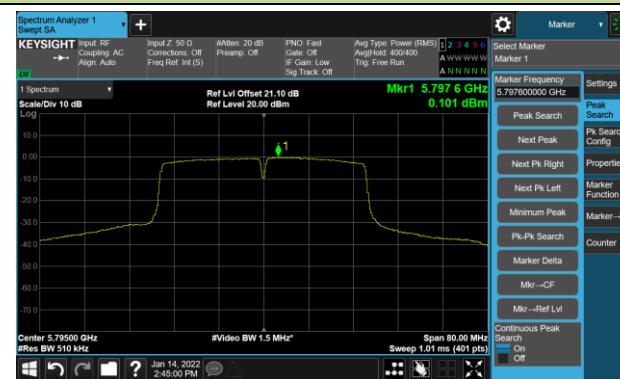
Channel 142(5710MHz)



Channel 151 (5755MHz)

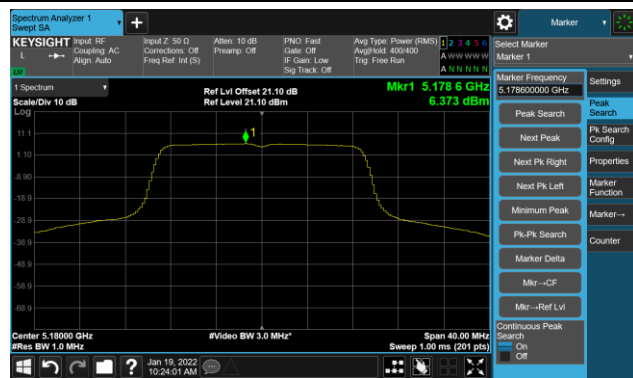


Channel 159 (5795MHz)

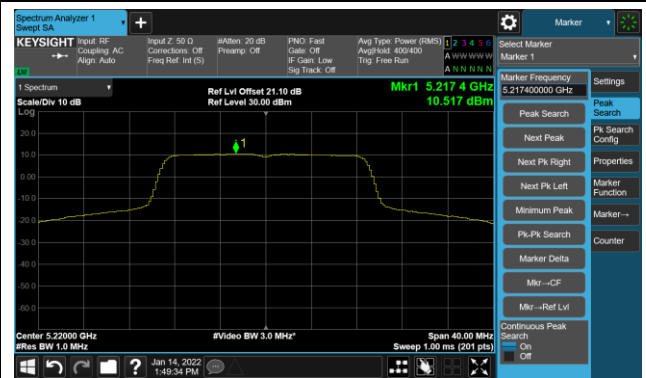


802.11ac-VHT20 Power Spectral Density- Ant 0

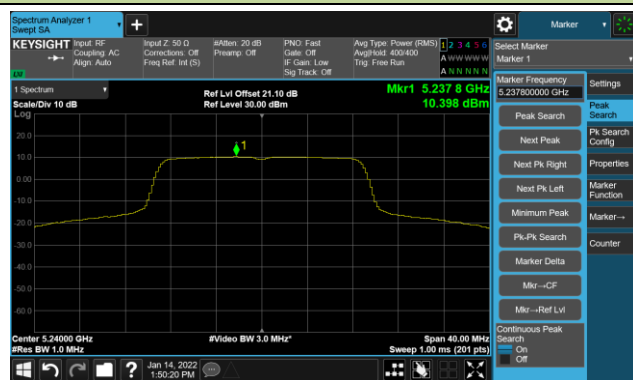
Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)



Channel 52 (5260MHz)



Channel 60 (5300MHz)

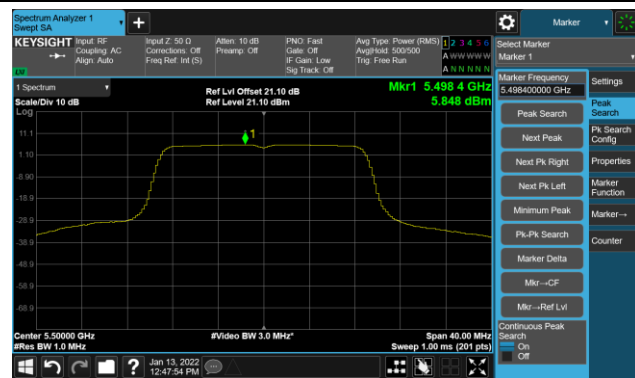


Channel 64 (5320MHz)

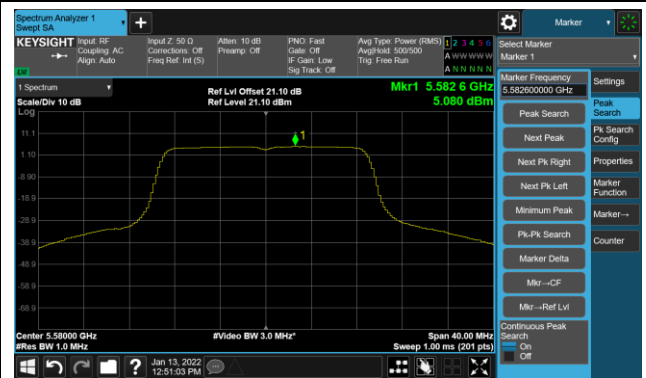


802.11ac-VHT20 Power Spectral Density- Ant 0

Channel 100 (5500MHz)



Channel 116 (5580MHz)



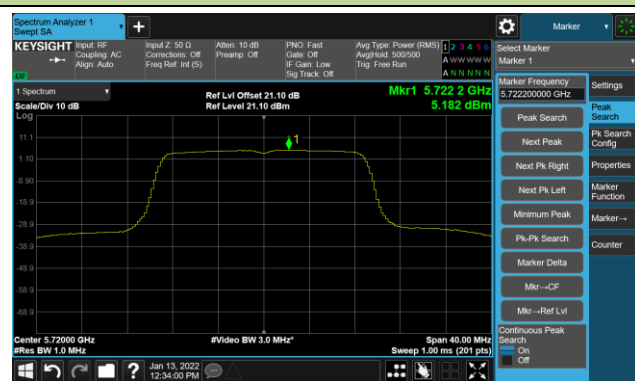
Channel 120 (5600MHz)



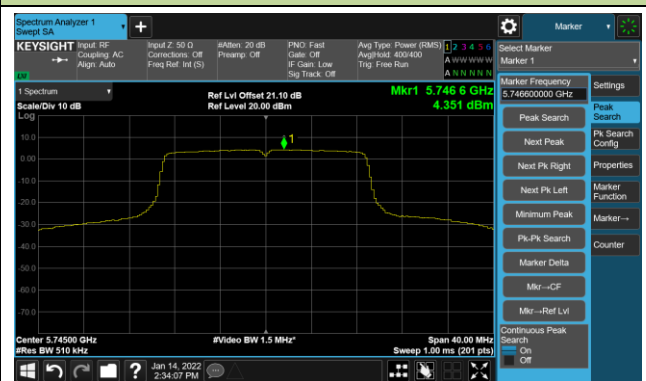
Channel 140 (5700MHz)



Channel 144(5720MHz)



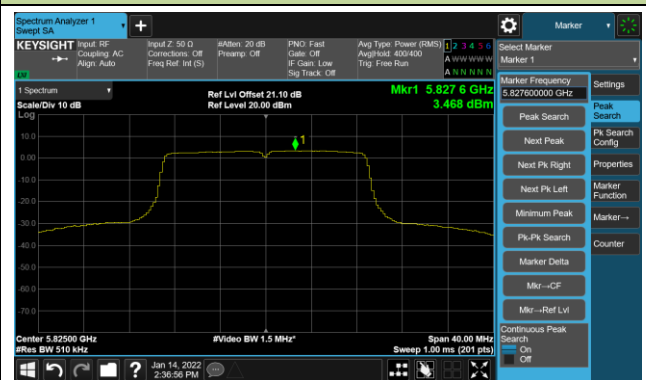
Channel 149 (5745MHz)



Channel 157 (5785MHz)

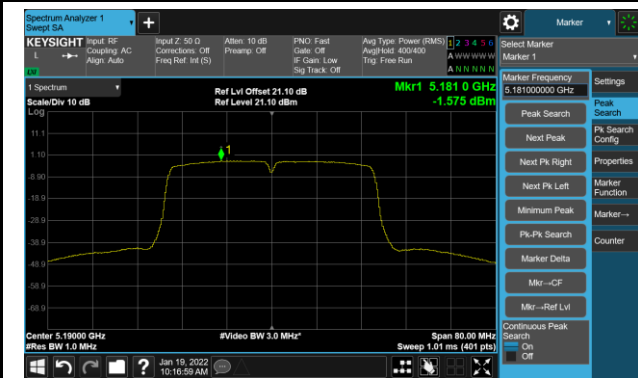


Channel 165 (5825MHz)

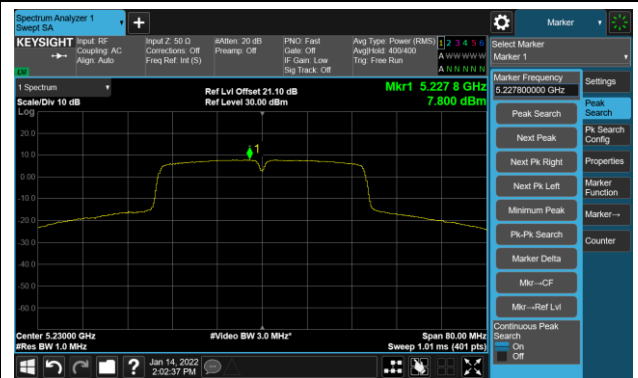


802.11ac-VHT40 Power Spectral Density- Ant 0

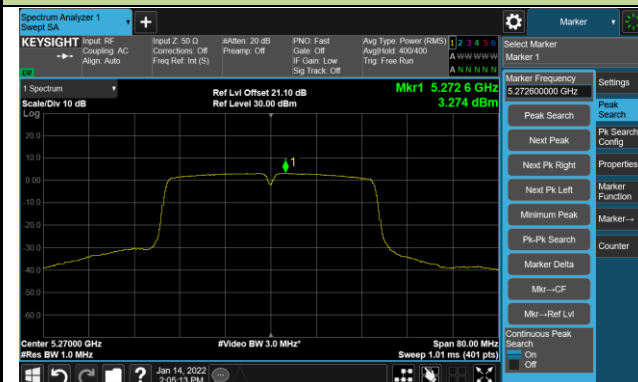
Channel 38 (5190MHz)



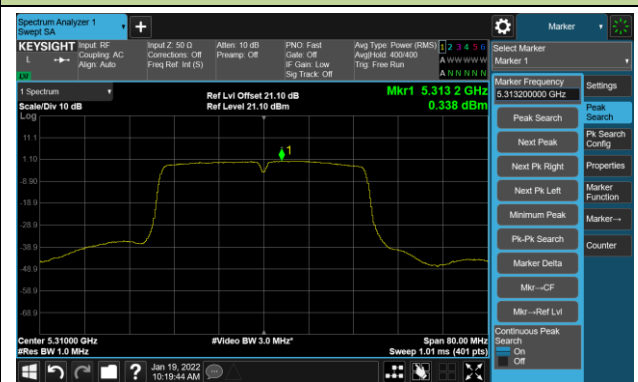
Channel 46 (5230MHz)



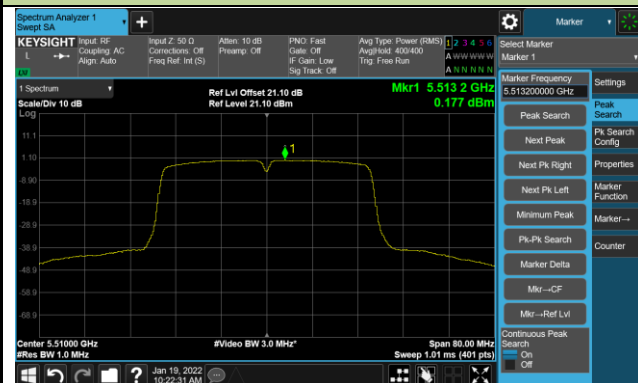
Channel 54 (5270MHz)



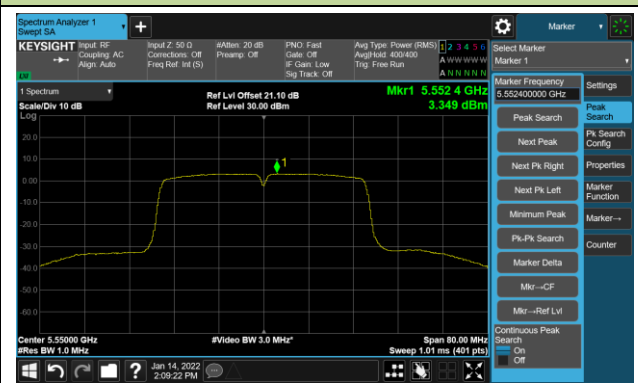
Channel 62 (5310MHz)



Channel 102 (5510MHz)

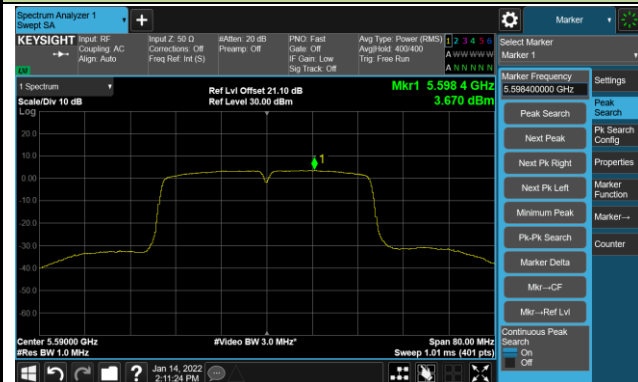


Channel 110 (5550MHz)

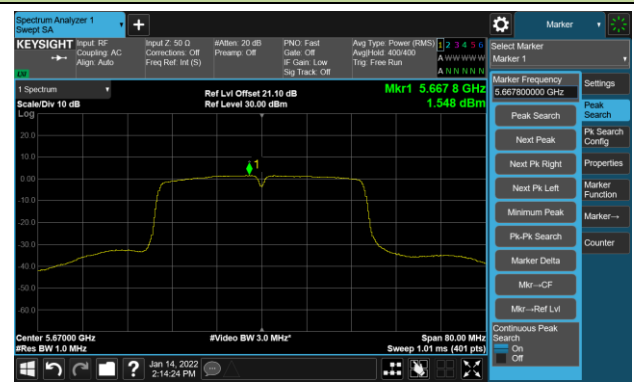


802.11ac-VHT40 Power Spectral Density- Ant 0

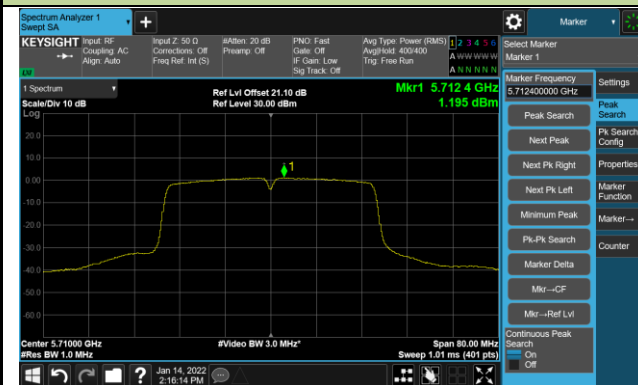
Channel 118 (5590MHz)



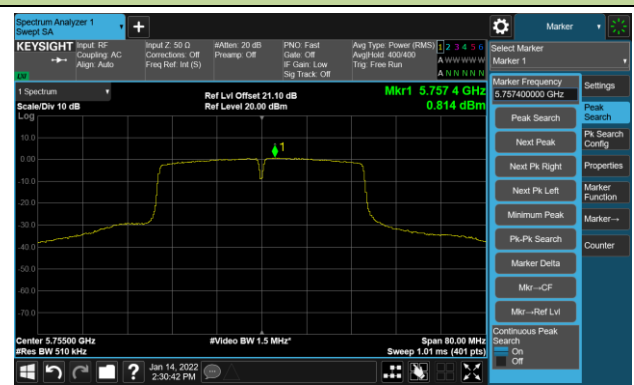
Channel 134 (5670MHz)



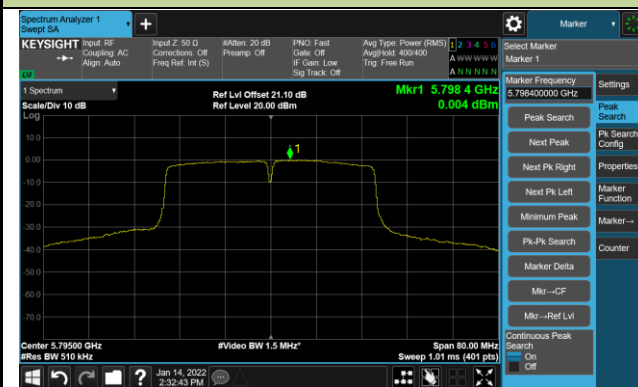
Channel 142(5710MHz)



Channel 151 (5755MHz)

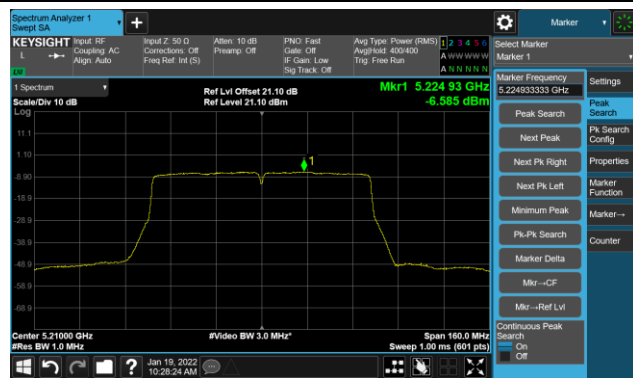


Channel 159 (5795MHz)

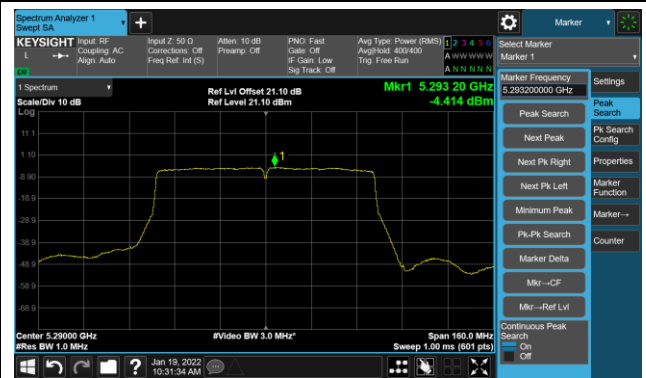


802.11ac-VHT80 Power Spectral Density- Ant 0

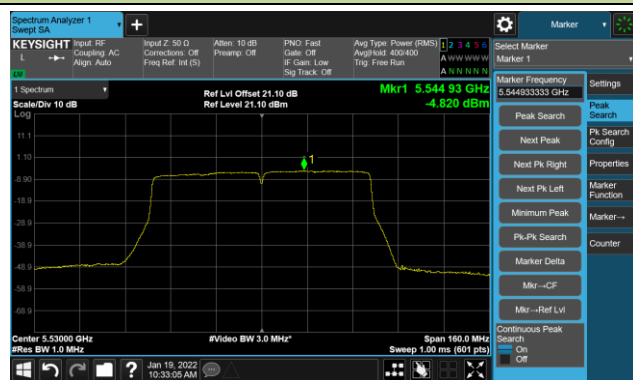
Channel 42 (5210MHz)



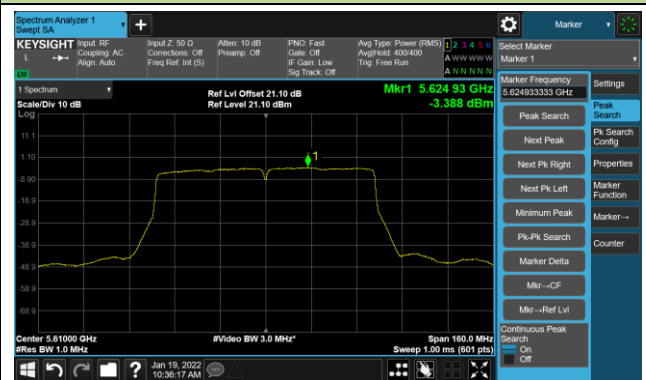
Channel 58 (5290MHz)



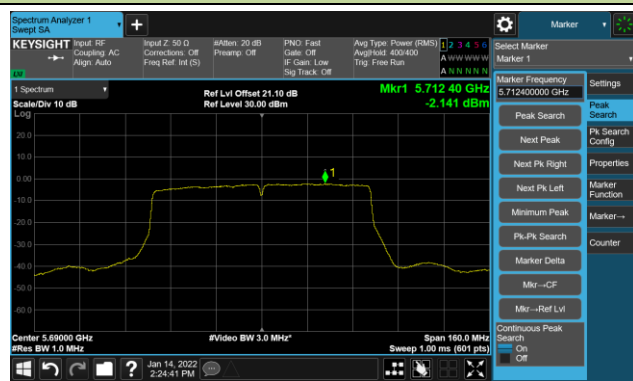
Channel 106 (5530MHz)



Channel 122 (5610MHz)



Channel 138 (5690MHz)



Channel 155 (5775MHz)

