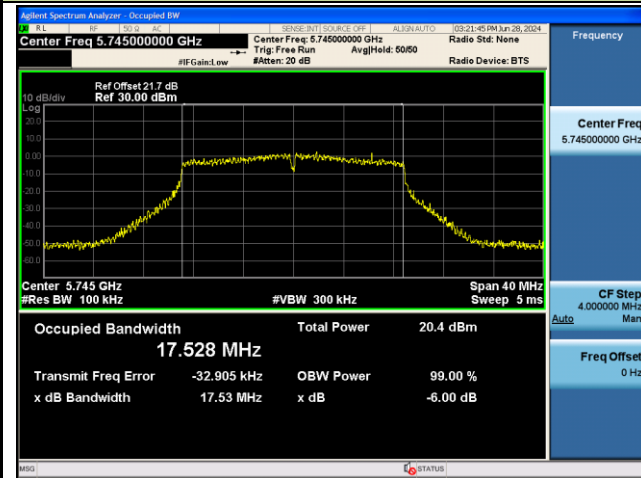
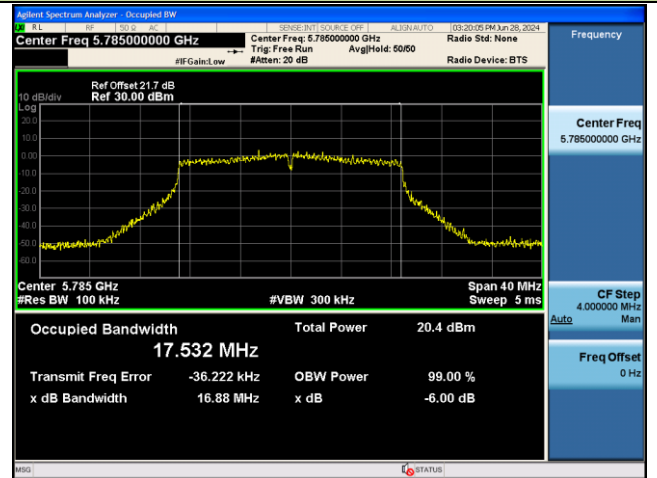


802.11ac-VHT20 6dB Bandwidth

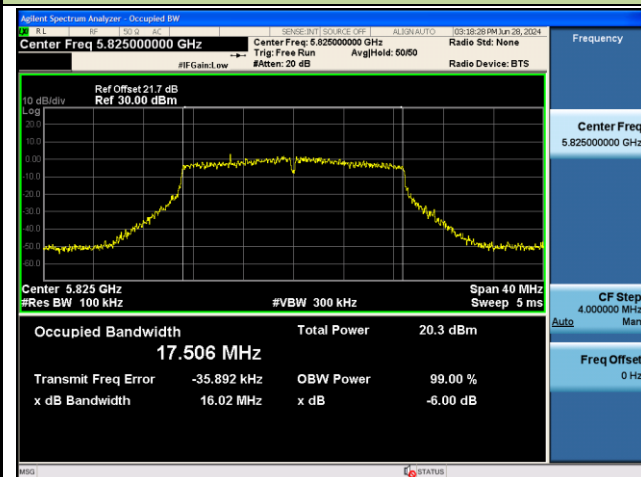
Channel 149 (5745MHz)



Channel 157 (5785MHz)

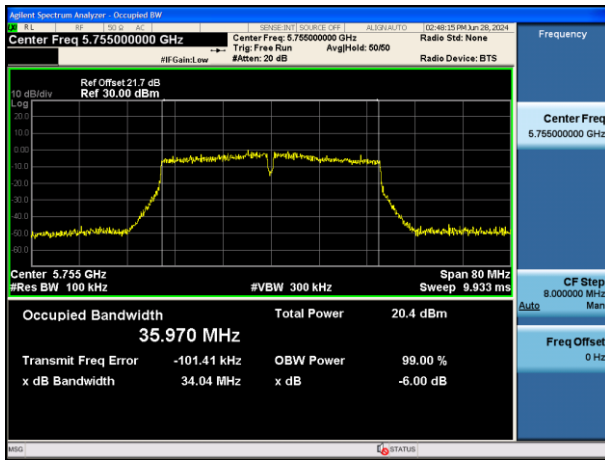


Channel 165 (5825MHz)

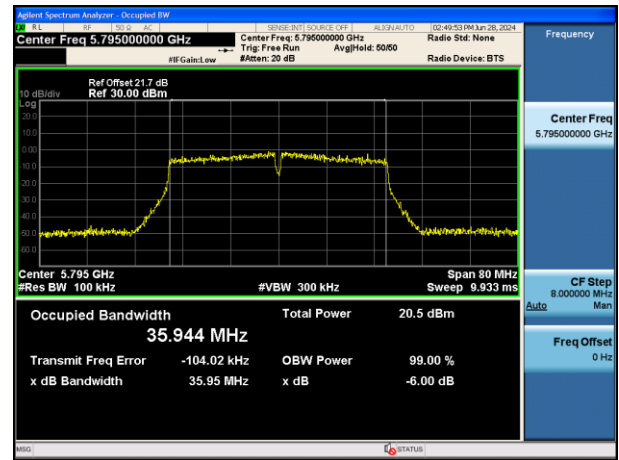


802.11ac-VHT40 6dB Bandwidth

Channel 151 (5755MHz)

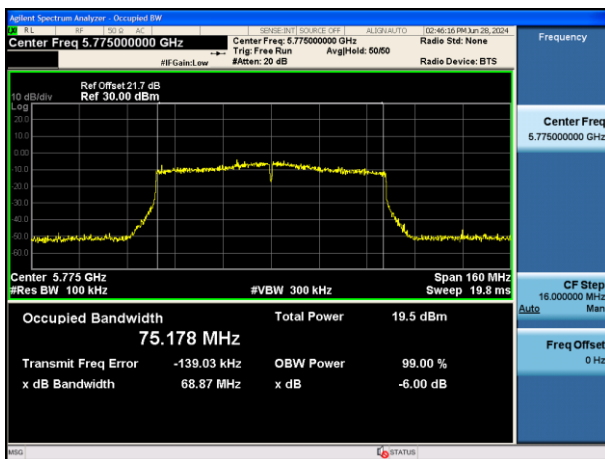


Channel 159 (5795MHz)



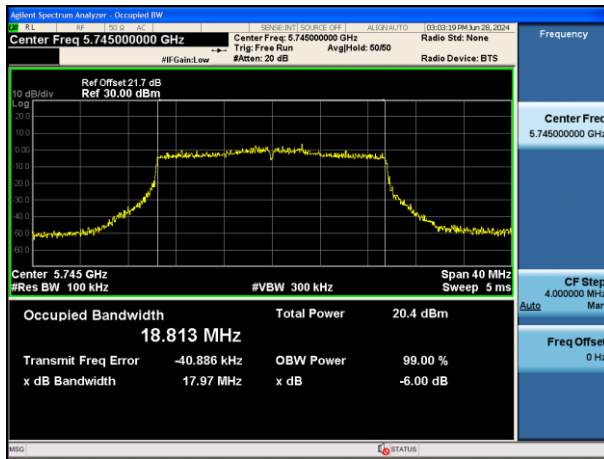
802.11ac-VHT80 6dB Bandwidth

Channel 155 (5775MHz)

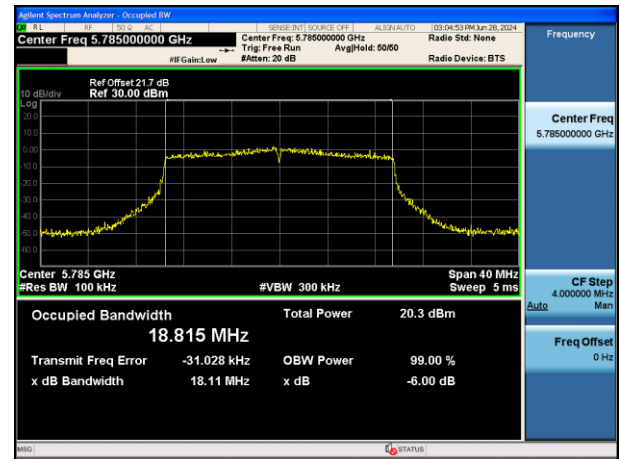


802.11ax-HE20 6dB Bandwidth

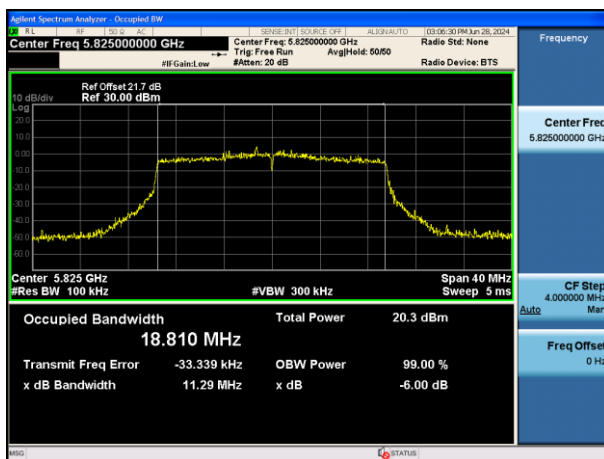
Channel 149 (5745MHz)



Channel 157 (5785MHz)

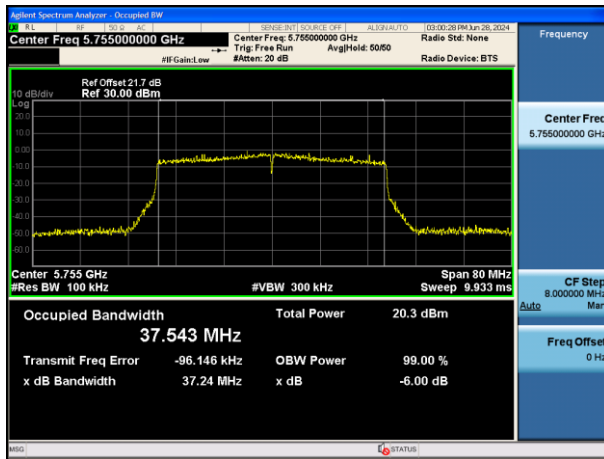


Channel 165 (5825MHz)

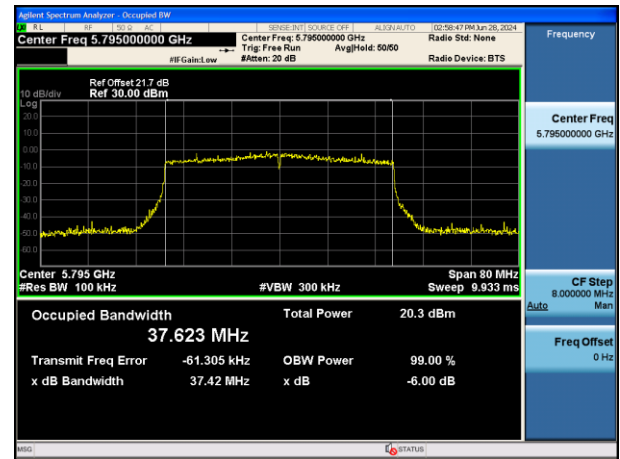


802.11ax-HE40 6dB Bandwidth

Channel 151 (5755MHz)

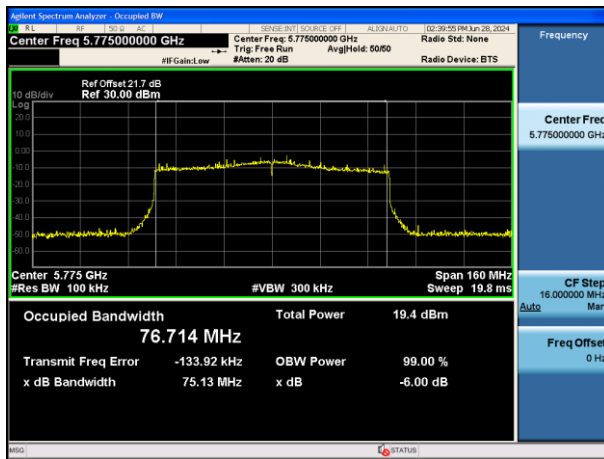


Channel 159 (5795MHz)



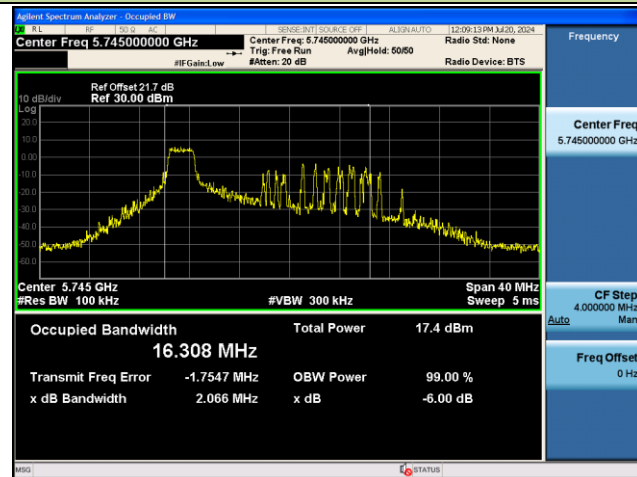
802.11ax-HE80 6dB Bandwidth

Channel 155 (5775MHz)

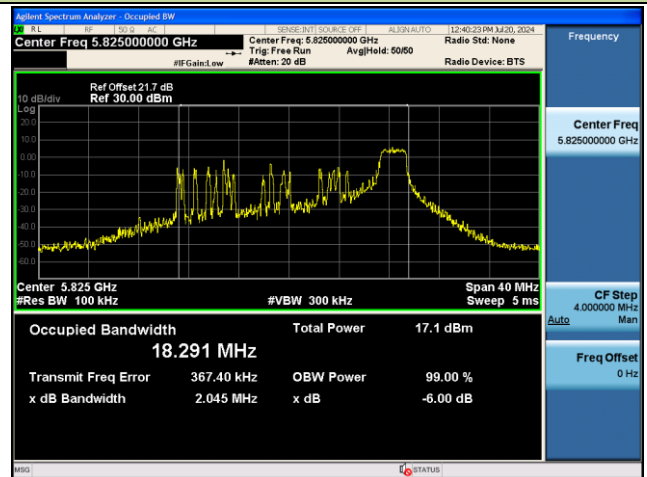


802.11ax-HE20 6dB Bandwidth

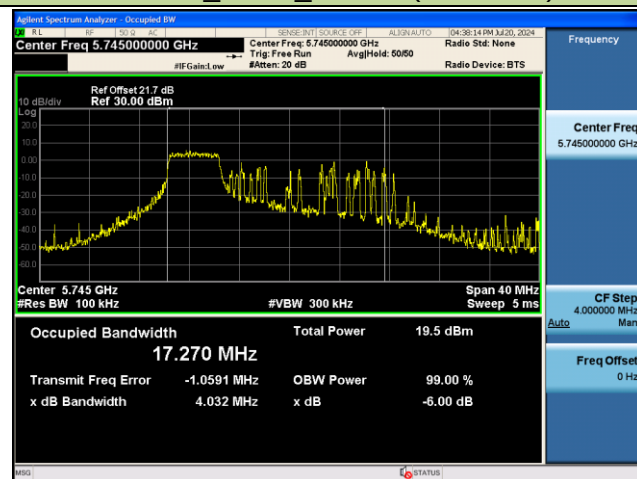
26 Tone_RU0_CH149 (5745MHz)



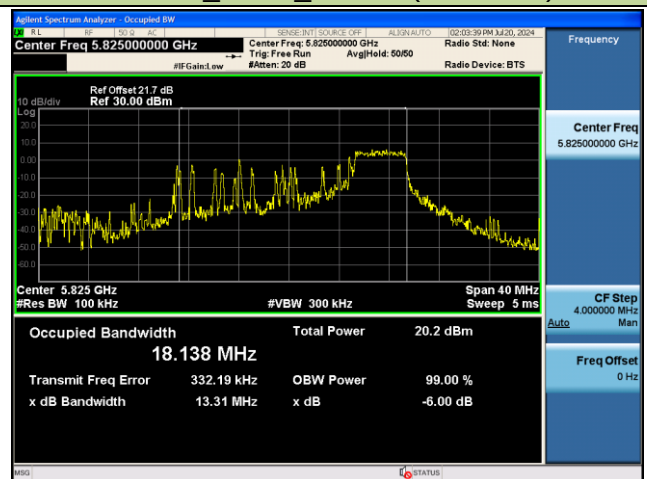
26 Tone_RU8_CH165 (5825MHz)



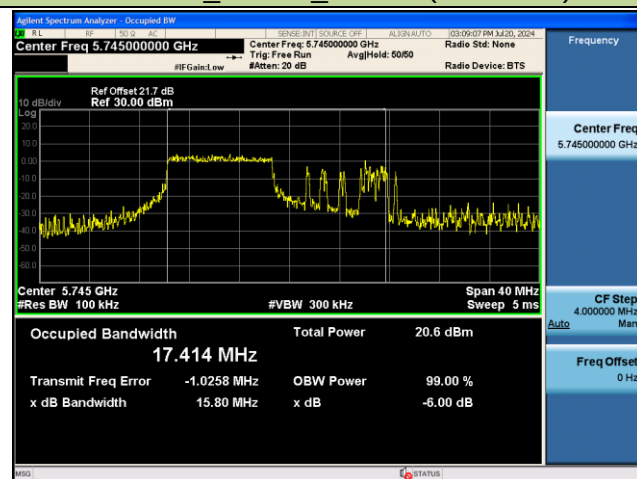
52 Tone_RU74_CH149 (5745MHz)



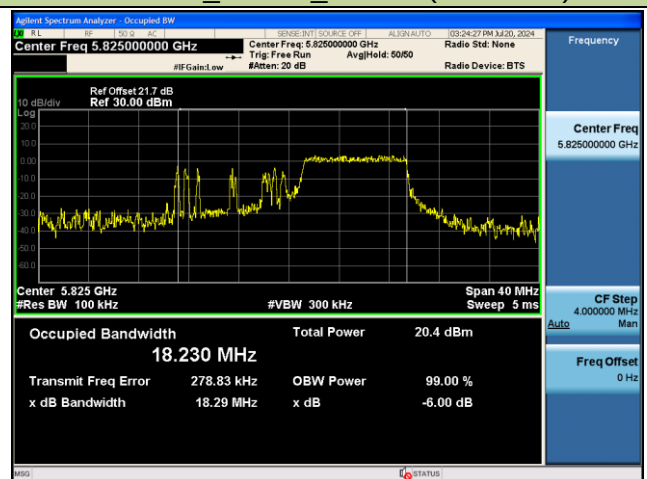
52 Tone_RU77_CH165 (5825MHz)

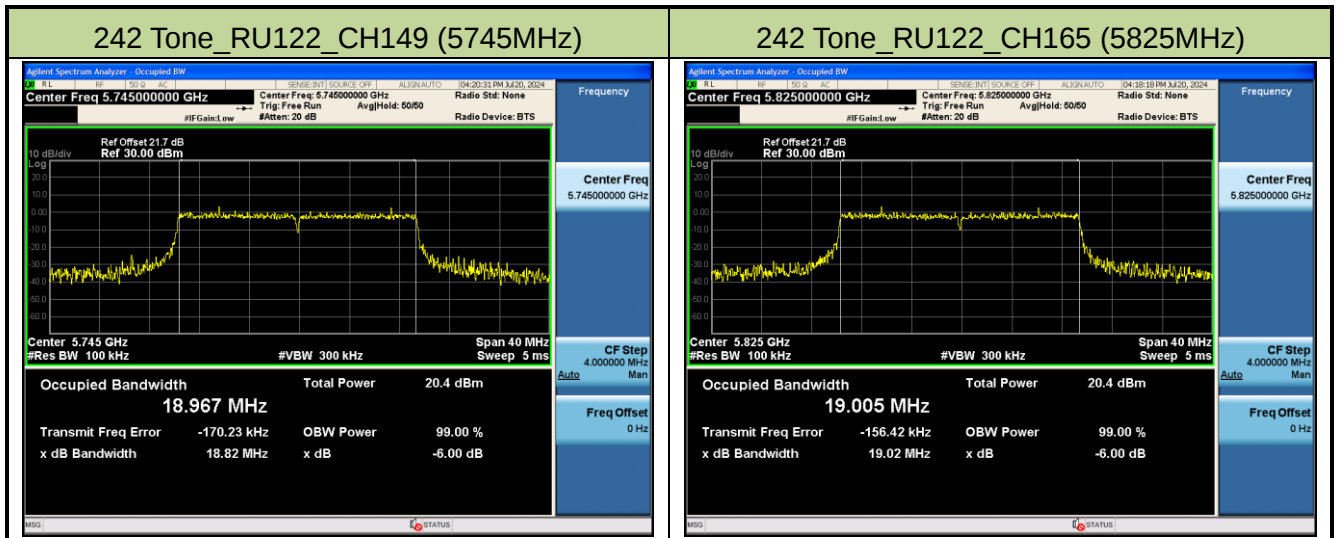


106 Tone_RU106_CH149 (5745MHz)



106 Tone_RU107_CH165 (5825MHz)





7.4. Output Power Measurement

7.4.1. Test Limit

For the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz.

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

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

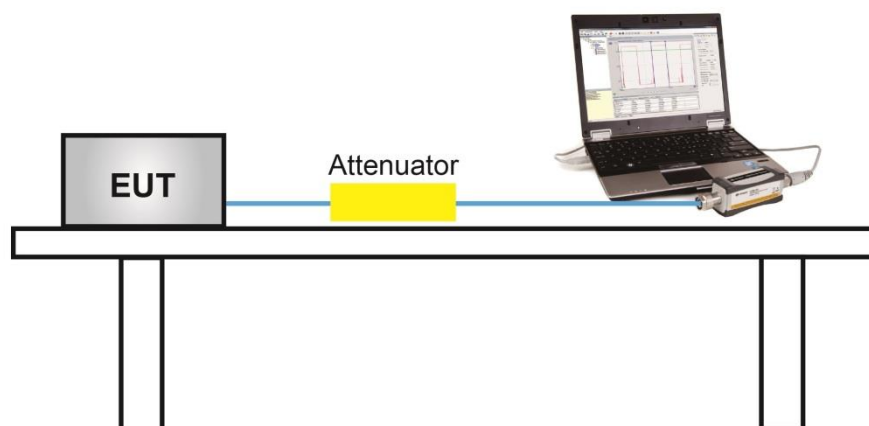
7.4.2. Test Procedure Used

KDB 789033D02v02r01- Section E)3)b) Method PM-G

7.4.3. Test Setting

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

7.4.4. Test Setup



7.4.5. Test Result

Product	Mobile Computer	Test Engineer	Wen
Test Site	SR6	Test Date	2024/6/28~2024/7/1
Test Mode	CDD Mode		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11a	6Mbps	36	5180	16.62	16.69	19.67	≤ 23.98	Pass
11a	6Mbps	40	5200	17.49	17.09	20.30	≤ 23.98	Pass
11a	6Mbps	48	5240	17.41	17.06	20.25	≤ 23.98	Pass
11a	6Mbps	52	5260	17.08	16.14	19.65	≤ 23.98	Pass
11a	6Mbps	60	5300	17.16	16.39	19.80	≤ 23.98	Pass
11a	6Mbps	64	5320	17.19	16.08	19.68	≤ 23.98	Pass
11a	6Mbps	100	5500	16.92	15.74	19.38	≤ 23.98	Pass
11a	6Mbps	116	5580	16.93	16.01	19.50	≤ 23.98	Pass
11a	6Mbps	140	5700	16.69	16.08	19.41	≤ 23.98	Pass
11a	6Mbps	144	5720	16.75	16.67	19.72	≤ 22.52	Pass
11a	6Mbps	149	5745	16.57	16.65	19.62	≤ 30.00	Pass
11a	6Mbps	157	5785	17.00	16.98	20.00	≤ 30.00	Pass
11a	6Mbps	165	5825	16.98	17.00	20.00	≤ 30.00	Pass
11ac-VHT20	MCS0	36	5180	15.69	15.51	18.61	≤ 23.98	Pass
11ac-VHT20	MCS0	40	5200	17.32	16.69	20.03	≤ 23.98	Pass
11ac-VHT20	MCS0	48	5240	17.12	16.51	19.84	≤ 23.98	Pass
11ac-VHT20	MCS0	52	5260	16.95	16.24	19.62	≤ 23.98	Pass
11ac-VHT20	MCS0	60	5300	17.17	16.22	19.73	≤ 23.98	Pass
11ac-VHT20	MCS0	64	5320	16.00	15.08	18.57	≤ 23.98	Pass
11ac-VHT20	MCS0	100	5500	15.79	15.31	18.57	≤ 23.98	Pass
11ac-VHT20	MCS0	116	5580	16.78	15.82	19.34	≤ 23.98	Pass
11ac-VHT20	MCS0	140	5700	15.12	15.04	18.09	≤ 23.98	Pass
11ac-VHT20	MCS0	144	5720	16.95	16.69	19.83	≤ 22.74	Pass
11ac-VHT20	MCS0	149	5745	16.88	16.62	19.76	≤ 30.00	Pass
11ac-VHT20	MCS0	157	5785	16.82	16.72	19.78	≤ 30.00	Pass
11ac-VHT20	MCS0	165	5825	16.81	16.79	19.81	≤ 30.00	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11ac-VHT40	MCS0	38	5190	14.72	14.61	17.68	≤ 23.98	Pass
11ac-VHT40	MCS0	46	5230	16.95	16.01	19.52	≤ 23.98	Pass
11ac-VHT40	MCS0	54	5270	17.25	16.06	19.71	≤ 23.98	Pass
11ac-VHT40	MCS0	62	5310	14.49	14.04	17.28	≤ 23.98	Pass
11ac-VHT40	MCS0	102	5510	14.47	14.01	17.26	≤ 23.98	Pass
11ac-VHT40	MCS0	110	5550	16.99	15.65	19.38	≤ 23.98	Pass
11ac-VHT40	MCS0	134	5670	14.71	14.69	17.71	≤ 23.98	Pass
11ac-VHT40	MCS0	142	5710	16.89	16.67	19.79	≤ 23.98	Pass
11ac-VHT40	MCS0	151	5755	16.77	16.66	19.73	≤ 30.00	Pass
11ac-VHT40	MCS0	159	5795	16.68	16.73	19.72	≤ 30.00	Pass
11ac-VHT80	MCS0	42	5210	13.91	13.42	16.68	≤ 23.98	Pass
11ac-VHT80	MCS0	58	5290	13.98	13.28	16.65	≤ 23.98	Pass
11ac-VHT80	MCS0	106	5530	13.99	13.16	16.61	≤ 23.98	Pass
11ac-VHT80	MCS0	122	5610	16.58	15.83	19.23	≤ 23.98	Pass
11ac-VHT80	MCS0	138	5690	16.57	16.11	19.36	≤ 23.98	Pass
11ac-VHT80	MCS0	155	5775	16.71	16.67	19.70	≤ 30.00	Pass
11ac-VHT160	MCS0	50	5250	10.95	10.36	13.68	≤ 23.98	Pass
11ac-VHT160	MCS0	114	5570	11.93	11.13	14.56	≤ 23.98	Pass
11ax-HE20	MCS0	36	5180	15.78	15.44	18.62	≤ 23.98	Pass
11ax-HE20	MCS0	40	5200	17.49	16.92	20.22	≤ 23.98	Pass
11ax-HE20	MCS0	48	5240	17.36	16.73	20.07	≤ 23.98	Pass
11ax-HE20	MCS0	52	5260	17.19	16.42	19.83	≤ 23.98	Pass
11ax-HE20	MCS0	60	5300	17.42	16.45	19.97	≤ 23.98	Pass
11ax-HE20	MCS0	64	5320	15.99	14.79	18.44	≤ 23.98	Pass
11ax-HE20	MCS0	100	5500	16.00	15.17	18.62	≤ 23.98	Pass
11ax-HE20	MCS0	116	5580	16.70	15.85	19.31	≤ 23.98	Pass
11ax-HE20	MCS0	140	5700	15.20	15.02	18.12	≤ 23.98	Pass
11ax-HE20	MCS0	144	5720	16.98	16.93	19.97	≤ 22.84	Pass
11ax-HE20	MCS0	149	5745	16.99	16.84	19.93	≤ 30.00	Pass
11ax-HE20	MCS0	157	5785	16.98	16.95	19.98	≤ 30.00	Pass
11ax-HE20	MCS0	165	5825	16.99	16.98	20.00	≤ 30.00	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11ax-HE40	MCS0	38	5190	14.81	14.59	17.71	≤ 23.98	Pass
11ax-HE40	MCS0	46	5230	17.13	16.12	19.66	≤ 23.98	Pass
11ax-HE40	MCS0	54	5270	17.45	16.55	20.03	≤ 23.98	Pass
11ax-HE40	MCS0	62	5310	14.48	13.62	17.08	≤ 23.98	Pass
11ax-HE40	MCS0	102	5510	14.49	13.67	17.11	≤ 23.98	Pass
11ax-HE40	MCS0	110	5550	16.99	15.85	19.47	≤ 23.98	Pass
11ax-HE40	MCS0	134	5670	14.99	14.43	17.73	≤ 23.98	Pass
11ax-HE40	MCS0	142	5710	16.98	16.88	19.94	≤ 23.98	Pass
11ax-HE40	MCS0	151	5755	16.93	16.91	19.93	≤ 30.00	Pass
11ax-HE40	MCS0	159	5795	16.88	16.96	19.93	≤ 30.00	Pass
11ax-HE80	MCS0	42	5210	13.81	13.59	16.71	≤ 23.98	Pass
11ax-HE80	MCS0	58	5290	13.92	13.51	16.73	≤ 23.98	Pass
11ax-HE80	MCS0	106	5530	13.98	13.49	16.75	≤ 23.98	Pass
11ax-HE80	MCS0	122	5610	16.98	16.34	19.68	≤ 23.98	Pass
11ax-HE80	MCS0	138	5690	16.94	16.57	19.77	≤ 23.98	Pass
11ax-HE80	MCS0	155	5775	16.99	16.99	20.00	≤ 30.00	Pass
11ax-HE160	MCS0	50	5250	10.93	10.56	13.76	≤ 23.98	Pass
11ax-HE160	MCS0	114	5570	11.97	11.41	14.71	≤ 23.98	Pass

Test Mode	RU Size	RU Index	Channel No.	Frequency (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
802.11ax-HE20	26 Tone	RU 0	36	5180	8.66	11.99	13.65	≤ 23.98	Pass
802.11ax-HE20		RU 8	64	5320	9.28	11.27	13.40	≤ 23.98	Pass
802.11ax-HE20	26 Tone	RU 0	100	5500	11.17	10.98	14.09	≤ 23.98	Pass
802.11ax-HE20		RU 8	140	5700	10.78	10.95	13.88	≤ 23.98	Pass
802.11ax-HE20	26 Tone	RU 0	149	5745	13.61	12.64	16.16	≤ 30.00	Pass
802.11ax-HE20		RU 8	165	5825	13.32	12.88	16.12	≤ 30.00	Pass
802.11ax-HE20	52 Tone	RU 74	36	5180	9.49	13.20	14.74	≤ 23.98	Pass
802.11ax-HE20		RU 77	64	5320	10.57	12.53	14.67	≤ 23.98	Pass
802.11ax-HE20	52 Tone	RU 74	100	5500	11.44	11.26	14.36	≤ 23.98	Pass
802.11ax-HE20		RU 77	140	5700	11.13	11.32	14.24	≤ 23.98	Pass
802.11ax-HE20	52 Tone	RU 74	149	5745	15.30	14.39	17.88	≤ 30.00	Pass
802.11ax-HE20		RU 77	165	5825	16.56	16.24	19.41	≤ 30.00	Pass
802.11ax-HE20	106 Tone	RU 106	36	5180	12.20	12.42	15.32	≤ 23.98	Pass
802.11ax-HE20		RU 107	64	5320	12.72	12.02	15.39	≤ 23.98	Pass
802.11ax-HE20	106 Tone	RU 106	100	5500	13.02	12.58	15.82	≤ 23.98	Pass
802.11ax-HE20		RU 107	140	5700	10.66	10.57	13.63	≤ 23.98	Pass
802.11ax-HE20	106 Tone	RU 106	149	5745	16.76	16.05	19.43	≤ 30.00	Pass
802.11ax-HE20		RU 107	165	5825	16.63	16.21	19.44	≤ 30.00	Pass
802.11ax-HE20	242 Tone	RU 122	36	5180	13.54	13.37	16.47	≤ 23.98	Pass
802.11ax-HE20		RU 122	64	5320	13.89	13.08	16.51	≤ 23.98	Pass
802.11ax-HE20	242 Tone	RU 122	100	5500	13.04	12.61	15.84	≤ 23.98	Pass
802.11ax-HE20		RU 122	140	5700	10.75	10.72	13.75	≤ 23.98	Pass
802.11ax-HE20	242 Tone	RU 122	149	5745	16.69	16.63	19.67	≤ 30.00	Pass
802.11ax-HE20		RU 122	165	5825	16.84	16.84	19.85	≤ 30.00	Pass

Test Mode	RU Size	RU Index	Channel No.	Frequency (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
802.11ax-HE40	26 Tone	RU 0	38	5190	7.71	11.80	13.23	≤ 23.98	Pass
802.11ax-HE40		RU 17	62	5310	9.01	10.94	13.09	≤ 23.98	Pass
802.11ax-HE40	26 Tone	RU 0	102	5510	11.16	10.85	14.02	≤ 23.98	Pass
802.11ax-HE40		RU 17	134	5670	10.67	10.49	13.59	≤ 23.98	Pass
802.11ax-HE40	26 Tone	RU 0	151	5755	13.08	12.17	15.66	≤ 30.00	Pass
802.11ax-HE40		RU 17	159	5795	13.22	12.66	15.96	≤ 30.00	Pass
802.11ax-HE40	52 Tone	RU 74	38	5190	9.29	12.87	14.45	≤ 23.98	Pass
802.11ax-HE40		RU 81	62	5310	10.08	12.08	14.20	≤ 23.98	Pass
802.11ax-HE40	52 Tone	RU 74	102	5510	11.25	10.79	14.04	≤ 23.98	Pass
802.11ax-HE40		RU 81	134	5670	11.12	11.05	14.10	≤ 23.98	Pass
802.11ax-HE40	52 Tone	RU 74	151	5755	15.22	14.22	17.76	≤ 30.00	Pass
802.11ax-HE40		RU 81	159	5795	16.10	15.72	18.92	≤ 30.00	Pass
802.11ax-HE40	106 Tone	RU 106	38	5190	12.18	12.41	15.31	≤ 23.98	Pass
802.11ax-HE40		RU 109	62	5310	12.26	11.77	15.03	≤ 23.98	Pass
802.11ax-HE40	106 Tone	RU 106	102	5510	12.79	12.34	15.58	≤ 23.98	Pass
802.11ax-HE40		RU 109	134	5670	10.64	10.39	13.53	≤ 23.98	Pass
802.11ax-HE40	106 Tone	RU 106	151	5755	16.51	15.86	19.21	≤ 30.00	Pass
802.11ax-HE40		RU 109	159	5795	16.62	16.10	19.38	≤ 30.00	Pass
802.11ax-HE40	242 Tone	RU 122	38	5190	13.15	13.07	16.12	≤ 23.98	Pass
802.11ax-HE40		RU 123	62	5310	13.86	12.91	16.42	≤ 23.98	Pass
802.11ax-HE40	242 Tone	RU 122	102	5510	13.03	12.60	15.83	≤ 23.98	Pass
802.11ax-HE40		RU 123	134	5670	10.70	10.38	13.55	≤ 23.98	Pass
802.11ax-HE40	242 Tone	RU 122	151	5755	16.68	16.63	19.67	≤ 30.00	Pass
802.11ax-HE40		RU 123	159	5795	16.43	16.65	19.55	≤ 30.00	Pass
802.11ax-HE40	484 Tone	RU 130	38	5190	14.78	14.51	17.66	≤ 23.98	Pass
802.11ax-HE40		RU 130	62	5310	14.35	14.17	17.27	≤ 23.98	Pass
802.11ax-HE40	242 Tone	RU 122	102	5510	14.38	14.11	17.26	≤ 23.98	Pass
802.11ax-HE40		RU 123	134	5670	14.75	14.56	17.67	≤ 23.98	Pass
802.11ax-HE40	242 Tone	RU 122	151	5755	16.58	16.74	19.67	≤ 30.00	Pass
802.11ax-HE40		RU 123	159	5795	16.59	16.83	19.72	≤ 30.00	Pass

Test Mode	RU Size	RU Index	Channel No.	Frequency (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
802.11ax-HE80	26 Tone	RU 0	42	5210	8.11	11.56	13.18	≤ 23.98	Pass
802.11ax-HE80		RU 36	58	5290	8.89	10.99	13.08	≤ 23.98	Pass
802.11ax-HE80	26 Tone	RU 0	106	5530	11.15	10.87	14.02	≤ 23.98	Pass
802.11ax-HE80		RU 36	138	5690	10.63	10.36	13.51	≤ 23.98	Pass
802.11ax-HE80	26 Tone	RU 0	155	5775	13.31	12.07	15.74	≤ 30.00	Pass
802.11ax-HE80		RU 36	155	5775	12.53	11.49	15.05	≤ 30.00	Pass
802.11ax-HE80	52 Tone	RU 74	42	5210	9.40	12.61	14.31	≤ 23.98	Pass
802.11ax-HE80		RU 89	58	5290	10.29	12.46	14.52	≤ 23.98	Pass
802.11ax-HE80	52 Tone	RU 74	106	5530	11.21	10.56	13.91	≤ 23.98	Pass
802.11ax-HE80		RU 89	138	5690	11.07	10.88	13.99	≤ 23.98	Pass
802.11ax-HE80	52 Tone	RU 74	155	5775	15.25	14.21	17.77	≤ 30.00	Pass
802.11ax-HE80		RU 89	155	5775	16.41	16.24	19.34	≤ 30.00	Pass
802.11ax-HE80	106 Tone	RU 106	42	5210	12.64	11.78	15.24	≤ 23.98	Pass
802.11ax-HE80		RU 113	58	5290	12.41	11.64	15.05	≤ 23.98	Pass
802.11ax-HE80	106 Tone	RU 106	106	5530	12.86	12.18	15.54	≤ 23.98	Pass
802.11ax-HE80		RU 113	138	5690	10.51	10.11	13.32	≤ 23.98	Pass
802.11ax-HE80	106 Tone	RU 106	155	5775	16.64	15.80	19.25	≤ 30.00	Pass
802.11ax-HE80		RU 113	155	5775	16.82	15.91	19.40	≤ 30.00	Pass
802.11ax-HE80	242 Tone	RU 122	42	5210	13.34	13.24	16.30	≤ 23.98	Pass
802.11ax-HE80		RU 125	58	5290	13.46	12.46	16.00	≤ 23.98	Pass
802.11ax-HE80	242 Tone	RU 122	106	5530	13.23	12.31	15.80	≤ 23.98	Pass
802.11ax-HE80		RU 125	138	5690	10.46	10.11	13.30	≤ 23.98	Pass
802.11ax-HE80	242 Tone	RU 122	155	5775	16.52	15.68	19.13	≤ 30.00	Pass
802.11ax-HE80		RU 125	155	5775	16.78	16.82	19.81	≤ 30.00	Pass
802.11ax-HE80	484 Tone	RU 130	42	5210	14.98	14.37	17.70	≤ 23.98	Pass
802.11ax-HE80		RU 131	58	5290	14.43	14.16	17.31	≤ 23.98	Pass
802.11ax-HE80	484 Tone	RU 130	106	5530	14.57	14.01	17.31	≤ 23.98	Pass
802.11ax-HE80		RU 131	138	5690	14.89	14.44	17.68	≤ 23.98	Pass
802.11ax-HE80	484 Tone	RU 130	155	5775	16.32	16.16	19.25	≤ 30.00	Pass
802.11ax-HE80		RU 131	155	5775	16.18	16.02	19.11	≤ 30.00	Pass

Test Mode	RU Size	RU Index	Channel No.	Frequency (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
802.11ax-HE80	996 Tone	RU 134	42	5210	13.15	13.07	16.12	≤ 23.98	Pass
802.11ax-HE80		RU 134	58	5290	13.68	12.80	16.27	≤ 23.98	Pass
802.11ax-HE80	996 Tone	RU 134	106	5530	13.96	13.44	16.72	≤ 23.98	Pass
802.11ax-HE80		RU 134	138	5690	16.73	16.47	19.61	≤ 23.98	Pass
802.11ax-HE80	996 Tone	RU 134	155	5775	16.84	16.39	19.63	≤ 30.00	Pass

Test Mode	RU Size	RU Index	Channel No.	Frequency (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
802.11ax-HE160	26	RU 0	50	5250	9.61	11.41	13.61	≤ 23.98	Pass
802.11ax-HE160	Tone	RU 73	114	5570	8.65	10.41	12.63	≤ 23.98	Pass
802.11ax-HE160	52	RU 74	50	5250	8.94	11.13	13.18	≤ 23.98	Pass
802.11ax-HE160	Tone	RU 105	114	5570	8.60	10.33	12.56	≤ 23.98	Pass
802.11ax-HE160	106	RU 106	50	5250	12.12	12.42	15.28	≤ 23.98	Pass
802.11ax-HE160	Tone	RU 121	114	5570	12.49	12.98	15.75	≤ 23.98	Pass
802.11ax-HE160	242	RU 122	50	5250	13.29	13.53	16.42	≤ 23.98	Pass
802.11ax-HE160	Tone	RU 129	114	5570	12.56	12.95	15.77	≤ 23.98	Pass
802.11ax-HE160	1484	RU 130	50	5250	14.37	14.86	17.63	≤ 23.98	Pass
802.11ax-HE160	Tone	RU 133	114	5570	14.19	14.31	17.26	≤ 23.98	Pass
802.11ax-HE160	996	RU 134	50	5250	13.93	13.44	16.70	≤ 23.98	Pass
802.11ax-HE160	Tone	RU 135	114	5570	13.61	13.74	16.69	≤ 23.98	Pass
802.11ax-HE160	1992	RU 136	50	5250	8.34	11.48	13.20	≤ 23.98	Pass
802.11ax-HE160	Tone	RU 136	114	5570	11.89	11.44	14.68	≤ 23.98	Pass

Note 1: The 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 and 5470 - 5725MHz Band: Average Power Limit (dBm) = 23.98 dBm.

For 5150 - 5250MHz and 5725 - 5850MHz Bands: Average Power Limit (dBm) = 30 dBm.

For Channel 144 (5720MHz), Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + BW_{26\text{dBc}}/2)$

7.5. Transmit Power Control

7.5.1. Test Limit

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

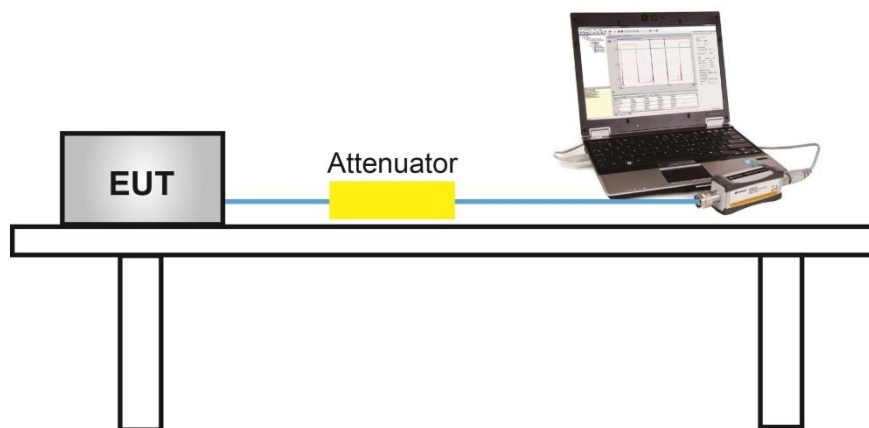
7.5.2. Test Procedure Used

KDB 789033 D02v02r01- Section E)3)b) Method PM-G

7.5.3. Test Setting

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

7.5.4. Test Setup



7.5.5. Test Result

Device supports TPC mechanism, details refer to the operational description.

7.6. Power Spectral Density Measurement

7.6.1. Test Limit

For the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band for master device and the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band for mobile/portable client device.

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

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

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

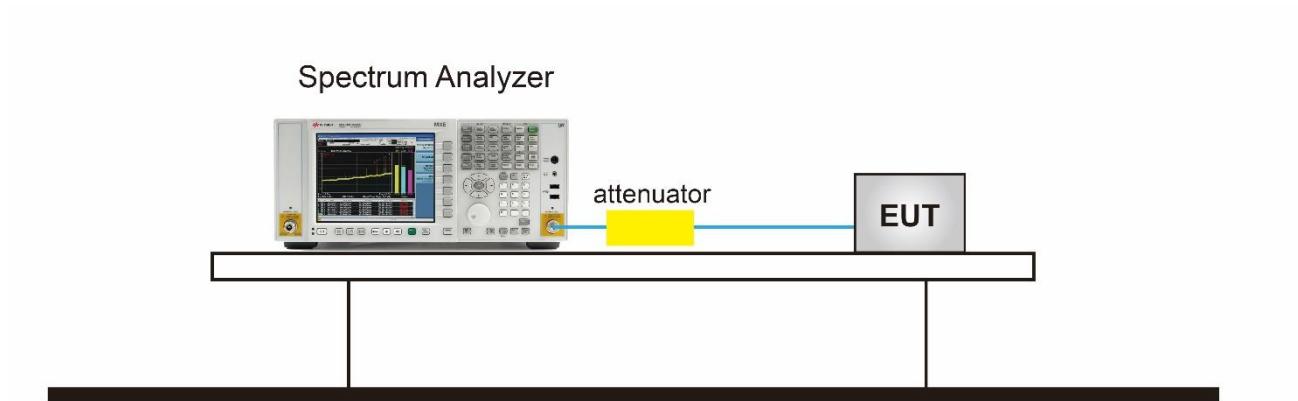
7.6.2. Test Procedure Used

KDB 789033 D02v02r01-Section F

7.6.3. Test Setting

1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire 26dB EBW of the signal.
3. RBW = 1MHz, if measurement bandwidth of Maximum PSD is specified in 500 kHz,
RBW = 510 kHz
4. VBW = 3MHz
5. Number of sweep points $\geq 2 \times (\text{span} / \text{RBW})$
6. Detector = power averaging (Average)
7. Sweep time = auto
8. Trigger = free run
9. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
10. Add $10 \cdot \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add $10 \cdot \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.

7.6.4. Test Setup



7.6.5.Test Result

Product	Mobile Computer	Test Engineer	Wen
Test Site	SR6	Test Date	2024/7/16~2024/7/17
Mode	Power Spectral Density (U-NII- 1/-2a / -2c) CDD Mode		

Test Mode	Data Rate /MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
11a	6Mbps	36	5180	7.607	7.011	99.24%	10.363	≤ 11.00	Pass
11a	6Mbps	40	5200	7.717	7.174	99.24%	10.497	≤ 11.00	Pass
11a	6Mbps	48	5240	7.840	7.466	99.24%	10.700	≤ 11.00	Pass
11a	6Mbps	52	5260	7.331	6.591	99.24%	10.020	≤ 11.00	Pass
11a	6Mbps	60	5300	7.334	6.699	99.24%	10.071	≤ 11.00	Pass
11a	6Mbps	64	5320	7.456	6.662	99.24%	10.120	≤ 11.00	Pass
11a	6Mbps	100	5500	6.679	5.435	99.24%	9.145	≤ 11.00	Pass
11a	6Mbps	116	5580	6.284	5.488	99.24%	8.948	≤ 11.00	Pass
11a	6Mbps	140	5700	6.520	6.141	99.24%	9.378	≤ 11.00	Pass
11a	6Mbps	144	5720	6.595	6.555	99.24%	9.618	≤ 11.00	Pass
11ac-VHT20	MCS0	36	5180	6.611	6.258	99.81%	9.456	≤ 11.00	Pass
11ac-VHT20	MCS0	40	5200	6.703	6.206	99.81%	9.480	≤ 11.00	Pass
11ac-VHT20	MCS0	48	5240	6.854	6.797	99.81%	9.844	≤ 11.00	Pass
11ac-VHT20	MCS0	52	5260	6.671	6.524	99.81%	9.616	≤ 11.00	Pass
11ac-VHT20	MCS0	60	5300	7.091	6.758	99.81%	9.946	≤ 11.00	Pass
11ac-VHT20	MCS0	64	5320	7.005	6.746	99.81%	9.896	≤ 11.00	Pass
11ac-VHT20	MCS0	100	5500	6.166	5.306	99.81%	8.776	≤ 11.00	Pass
11ac-VHT20	MCS0	116	5580	3.600	2.471	99.81%	6.090	≤ 11.00	Pass
11ac-VHT20	MCS0	140	5700	6.596	6.150	99.81%	9.397	≤ 11.00	Pass
11ac-VHT20	MCS0	144	5720	6.415	6.673	99.81%	9.564	≤ 11.00	Pass

Test Mode	Data Rate /MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
11ac-VHT40	MCS0	38	5190	3.354	3.292	99.08%	6.374	≤ 11.00	Pass
11ac-VHT40	MCS0	46	5230	3.388	3.428	99.08%	6.459	≤ 11.00	Pass
11ac-VHT40	MCS0	54	5270	3.831	3.707	99.08%	6.820	≤ 11.00	Pass
11ac-VHT40	MCS0	62	5310	4.143	3.471	99.08%	6.871	≤ 11.00	Pass
11ac-VHT40	MCS0	102	5510	2.766	2.254	99.08%	5.568	≤ 11.00	Pass
11ac-VHT40	MCS0	110	5550	2.978	2.359	99.08%	5.730	≤ 11.00	Pass
11ac-VHT40	MCS0	134	5670	3.208	2.768	99.08%	6.044	≤ 11.00	Pass
11ac-VHT40	MCS0	142	5710	3.467	3.801	99.08%	6.688	≤ 11.00	Pass
11ac-VHT80	MCS0	42	5210	1.385	1.236	98.56%	4.384	≤ 11.00	Pass
11ac-VHT80	MCS0	58	5290	1.632	1.559	98.56%	4.669	≤ 11.00	Pass
11ac-VHT80	MCS0	106	5530	0.724	-0.494	98.56%	3.231	≤ 11.00	Pass
11ac-VHT80	MCS0	122	5610	0.708	-0.397	98.56%	3.264	≤ 11.00	Pass
11ac-VHT80	MCS0	138	5690	0.858	0.297	98.56%	3.660	≤ 11.00	Pass
11ac-VHT160	MCS0	50	5250	-5.018	-5.419	99.10%	-2.164	≤ 11.00	Pass
11ac-VHT160	MCS0	114	5570	-5.002	-6.063	99.10%	-2.451	≤ 11.00	Pass
11ax-HE20	MCS0	36	5180	6.662	6.662	99.82%	9.680	≤ 11.00	Pass
11ax-HE20	MCS0	40	5200	6.794	6.382	99.82%	9.611	≤ 11.00	Pass
11ax-HE20	MCS0	48	5240	6.787	6.687	99.82%	9.756	≤ 11.00	Pass
11ax-HE20	MCS0	52	5260	7.052	6.658	99.82%	9.878	≤ 11.00	Pass
11ax-HE20	MCS0	60	5300	7.044	6.998	99.82%	10.039	≤ 11.00	Pass
11ax-HE20	MCS0	64	5320	6.940	6.813	99.82%	9.895	≤ 11.00	Pass
11ax-HE20	MCS0	100	5500	6.404	5.465	99.82%	8.978	≤ 11.00	Pass
11ax-HE20	MCS0	116	5580	3.438	2.302	99.82%	5.925	≤ 11.00	Pass
11ax-HE20	MCS0	140	5700	5.552	4.963	99.82%	8.286	≤ 11.00	Pass
11ax-HE20	MCS0	144	5720	6.800	6.447	99.82%	9.645	≤ 11.00	Pass

Test Mode	Data Rate/MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
11ax-HE40	MCS0	38	5190	3.479	3.057	98.76%	6.338	≤ 11.00	Pass
11ax-HE40	MCS0	46	5230	3.763	3.844	98.76%	6.868	≤ 11.00	Pass
11ax-HE40	MCS0	54	5270	4.445	3.689	98.76%	7.148	≤ 11.00	Pass
11ax-HE40	MCS0	62	5310	3.971	3.443	98.76%	6.779	≤ 11.00	Pass
11ax-HE40	MCS0	102	5510	2.002	0.766	98.76%	4.492	≤ 11.00	Pass
11ax-HE40	MCS0	110	5550	3.083	2.256	98.76%	5.754	≤ 11.00	Pass
11ax-HE40	MCS0	134	5670	2.906	2.166	98.76%	5.616	≤ 11.00	Pass
11ax-HE40	MCS0	142	5710	3.697	3.955	98.76%	6.892	≤ 11.00	Pass
11ax-HE80	MCS0	42	5210	1.268	0.549	98.91%	3.981	≤ 11.00	Pass
11ax-HE80	MCS0	58	5290	1.659	1.212	98.91%	4.499	≤ 11.00	Pass
11ax-HE80	MCS0	106	5530	-0.573	-1.443	98.91%	2.072	≤ 11.00	Pass
11ax-HE80	MCS0	122	5610	0.953	0.270	98.91%	3.683	≤ 11.00	Pass
11ax-HE80	MCS0	122	5690	1.401	0.808	98.91%	4.172	≤ 11.00	Pass
11ax-HE160	MCS0	50	5250	-6.529	-6.489	98.74%	-3.443	≤ 11.00	Pass
11ax-HE160	MCS0	114	5570	-5.684	-6.530	98.74%	-3.021	≤ 11.00	Pass

Note 1: When EUT duty cycle ≥ 98%,

the total PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)}\}$ (dBm/MHz).

When EUT duty cycle < 98%,

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

Note 2:

For 5150 - 5250MHz Band: PSD Limit (dBm/MHz) = 17 - (8.52 - 6) = 14.48dBm/MHz.

For 5250 - 5350MHz and 5470 - 5725MHz Band: PSD Limit (dBm/MHz) = 11 - (8.52 - 6) = 8.48dBm/MHz.

Note 3: The power setting of Beamforming mode is not greater than CDD mode, so only CDD mode result was shown in this section.

Product	Mobile Computer	Test Engineer	Wen
Test Site	SR6	Test Date	2024/7/16~2024/7/17
Test Item	Power Spectral Density (U-NII-3) CDD Mode		

Test Mode	Data Rate/ MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/510KHz)	Ant 1 PSD (dBm/510KHz)	Duty Cycle (%)	Total PSD (dBm/510kHz)	Limit (dBm/500kHz)	Result
11a	6Mbps	149	5745	4.320	3.941	99.24%	7.178	≤ 30.00	Pass
11a	6Mbps	157	5785	4.664	5.013	99.24%	7.885	≤ 30.00	Pass
11a	6Mbps	165	5825	4.481	4.866	99.24%	7.721	≤ 30.00	Pass
11ac-VHT20	MCS0	149	5745	3.763	3.608	99.81%	6.705	≤ 30.00	Pass
11ac-VHT20	MCS0	157	5785	3.614	4.102	99.81%	6.883	≤ 30.00	Pass
11ac-VHT20	MCS0	165	5825	3.750	4.002	99.81%	6.896	≤ 30.00	Pass
11ac-VHT40	MCS0	151	5755	0.869	0.939	99.08%	3.955	≤ 30.00	Pass
11ac-VHT40	MCS0	159	5795	0.726	1.006	99.08%	3.919	≤ 30.00	Pass
11ac-VHT80	MCS0	155	5775	-1.632	-1.843	98.56%	1.337	≤ 30.00	Pass
11ax-HE20	MCS0	149	5745	3.808	4.040	99.82%	6.944	≤ 30.00	Pass
11ax-HE20	MCS0	157	5785	3.730	4.280	99.82%	7.032	≤ 30.00	Pass
11ax-HE20	MCS0	165	5825	3.909	4.023	99.82%	6.985	≤ 30.00	Pass
11ax-HE40	MCS0	151	5755	0.883	1.163	98.76%	4.090	≤ 30.00	Pass
11ax-HE40	MCS0	159	5795	0.984	1.429	98.76%	4.277	≤ 30.00	Pass
11ax-HE80	MCS0	155	5775	-0.927	-1.277	98.91%	1.959	≤ 30.00	Pass

Note 1: When EUT duty cycle ≥ 98%,

the total PSD (dBm/510kHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)}\}$ (dBm/510kHz).

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

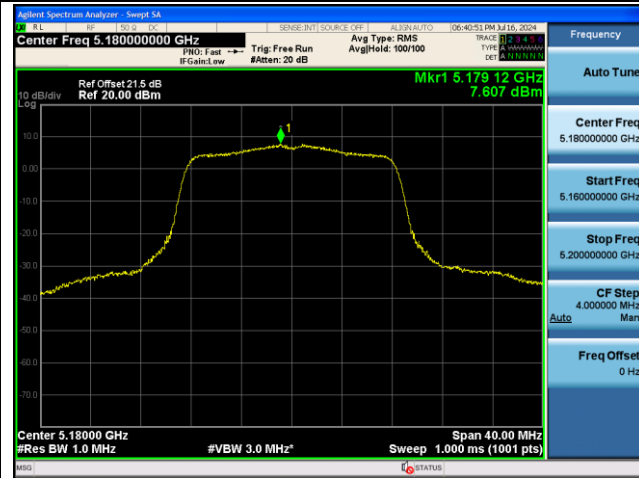
Note 2: PSD Limit (dBm/500kHz) = 30 - (8.52 - 6) = 27.48 (dBm/500kHz).

Note 3: The power setting of Beamforming mode is not greater than CDD mode, so only CDD mode result was shown in this section.

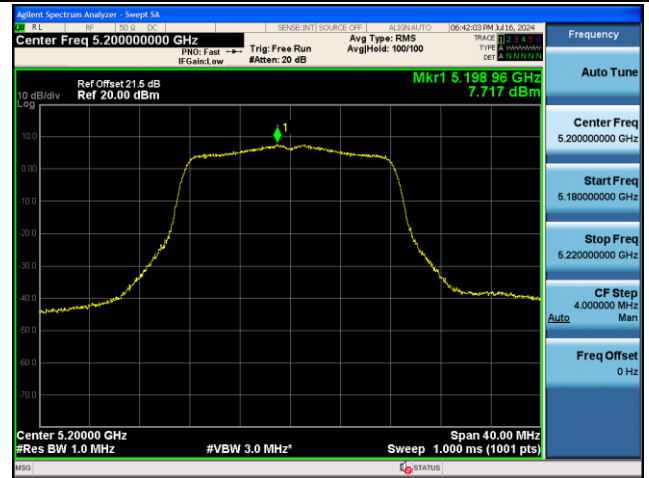
Test Mode	RU Size	RU Index	Channel No.	Frequency (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/ MHz)	PSD Limit (dBm/MHz)	Result
802.11ax-HE20	26 Tone	RU 0	36	5180	5.464	8.856	99.41%	10.519	≤ 11.00	Pass
802.11ax-HE20		RU 8	64	5320	6.676	8.758	99.41%	10.876	≤ 11.00	Pass
802.11ax-HE20	26 Tone	RU 0	100	5500	7.801	7.612	99.41%	10.743	≤ 11.00	Pass
802.11ax-HE20		RU 8	140	5700	8.041	7.673	99.41%	10.897	≤ 11.00	Pass
802.11ax-HE20	26 Tone	RU 0	149	5745	8.144	7.149	99.41%	10.711	≤ 11.00	Pass
802.11ax-HE20		RU 8	165	5825	8.177	7.460	99.41%	10.869	≤ 11.00	Pass
802.11ax-HE20	52 Tone	RU 74	36	5180	3.809	7.479	99.61%	9.048	≤ 11.00	Pass
802.11ax-HE20		RU 77	64	5320	5.599	7.366	99.61%	9.599	≤ 11.00	Pass
802.11ax-HE20	52 Tone	RU 74	100	5500	5.393	5.024	99.61%	8.240	≤ 11.00	Pass
802.11ax-HE20		RU 77	140	5700	5.887	5.792	99.61%	8.867	≤ 11.00	Pass
802.11ax-HE20	52 Tone	RU 74	149	5745	6.769	5.937	99.61%	9.400	≤ 11.00	Pass
802.11ax-HE20		RU 77	165	5825	7.965	7.760	99.61%	10.891	≤ 11.00	Pass
802.11ax-HE20	106 Tone	RU 106	36	5180	3.669	3.668	99.58%	6.697	≤ 11.00	Pass
802.11ax-HE20		RU 107	64	5320	3.335	4.216	99.58%	6.826	≤ 11.00	Pass
802.11ax-HE20	106 Tone	RU 106	100	5500	4.046	3.489	99.58%	6.805	≤ 11.00	Pass
802.11ax-HE20		RU 107	140	5700	2.064	2.258	99.58%	5.191	≤ 11.00	Pass
802.11ax-HE20	106 Tone	RU 106	149	5745	5.659	4.452	99.58%	8.126	≤ 11.00	Pass
802.11ax-HE20		RU 107	165	5825	5.279	5.025	99.58%	8.182	≤ 11.00	Pass
802.11ax-HE20	242 Tone	RU 122	36	5180	1.647	1.574	99.77%	4.631	≤ 11.00	Pass
802.11ax-HE20		RU 122	64	5320	2.481	1.880	99.77%	5.211	≤ 11.00	Pass
802.11ax-HE20	242 Tone	RU 122	100	5500	0.259	0.139	99.77%	3.220	≤ 11.00	Pass
802.11ax-HE20		RU 122	140	5700	-1.293	-1.270	99.77%	1.739	≤ 11.00	Pass
802.11ax-HE20	242 Tone	RU 122	149	5745	2.192	1.653	99.77%	4.951	≤ 11.00	Pass
802.11ax-HE20		RU 122	165	5825	2.064	2.195	99.77%	5.150	≤ 11.00	Pass

802.11a Power Spectral Density - Ant 0

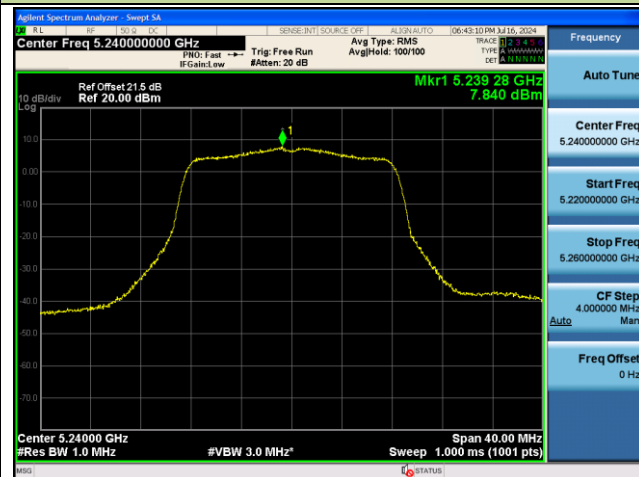
Channel 36 (5180MHz)



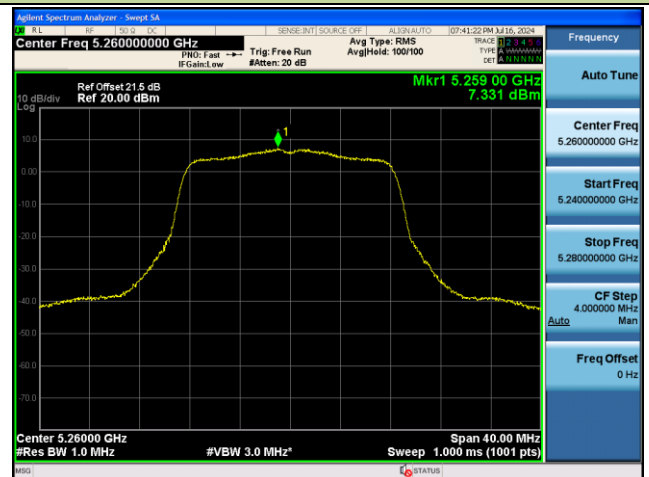
Channel 40 (5200MHz)



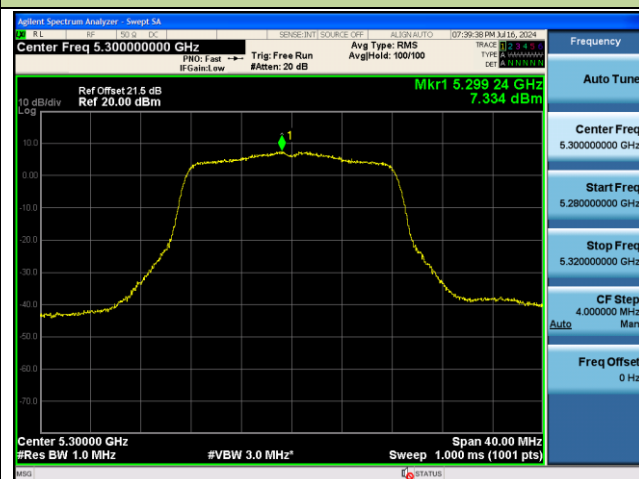
Channel 48 (5240MHz)



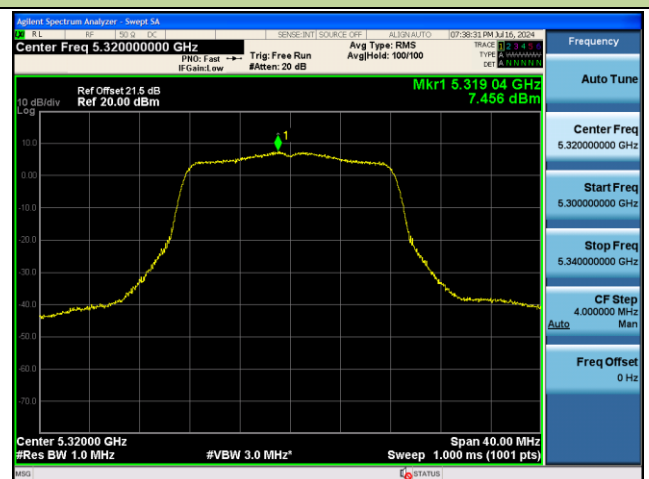
Channel 52 (5260MHz)

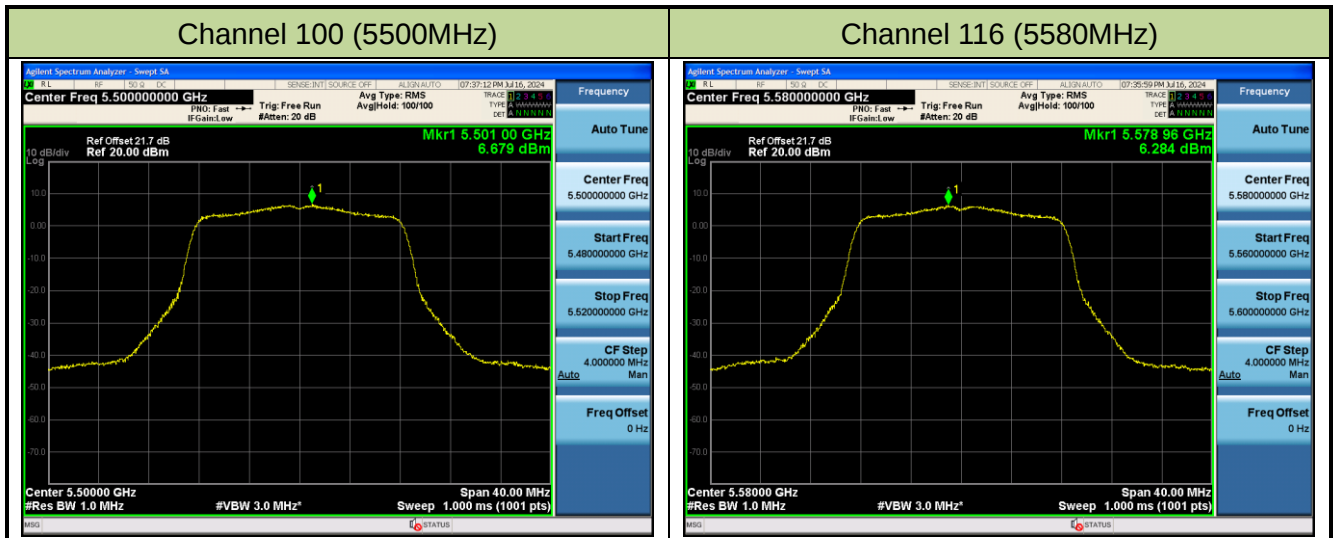


Channel 60 (5300MHz)

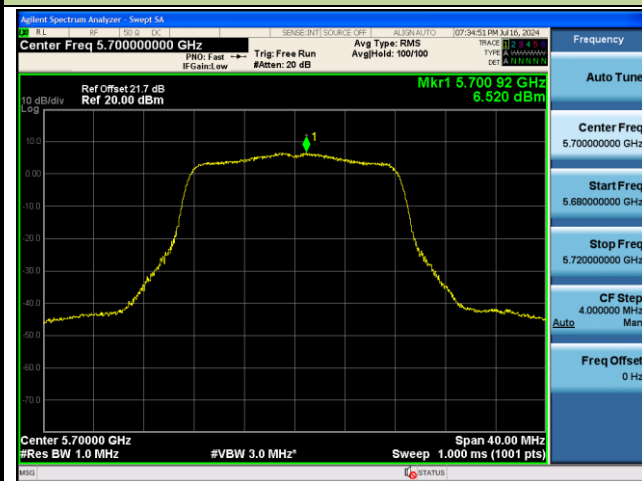


Channel 64 (5320MHz)

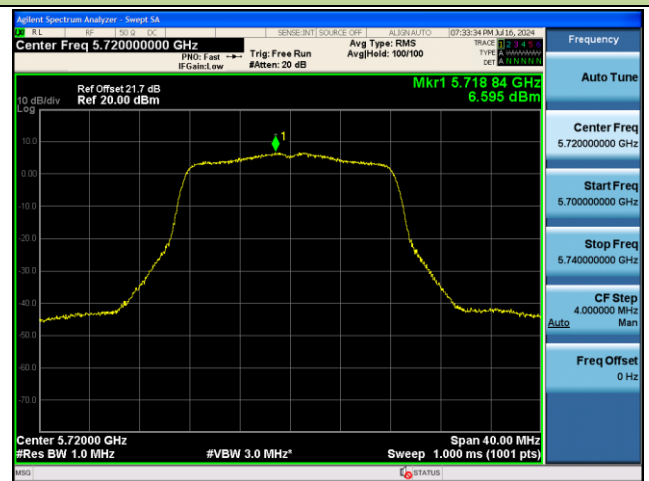




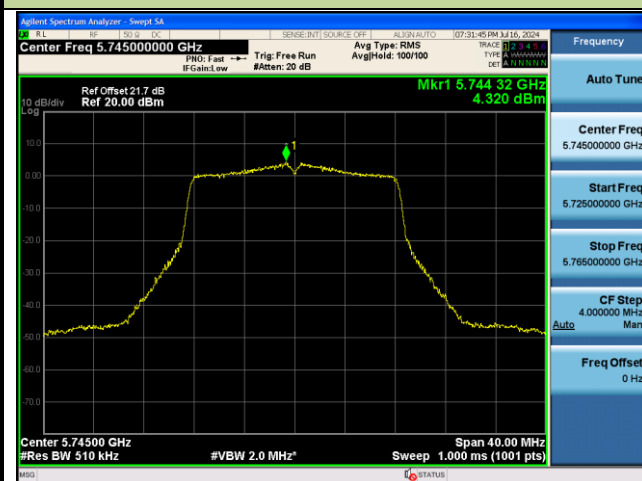
Channel 140 (5700MHz)



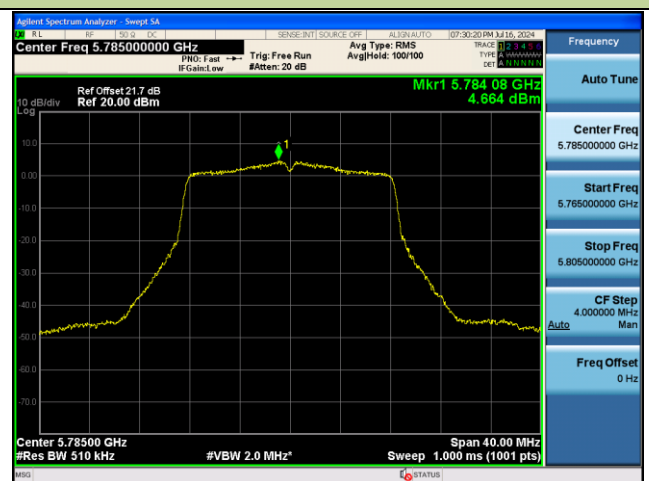
Channel 144 (5720MHz)



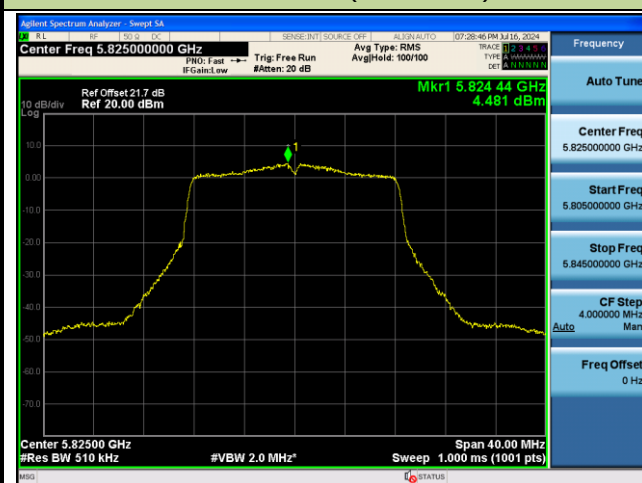
Channel 149 (5745MHz)



Channel 157 (5785MHz)

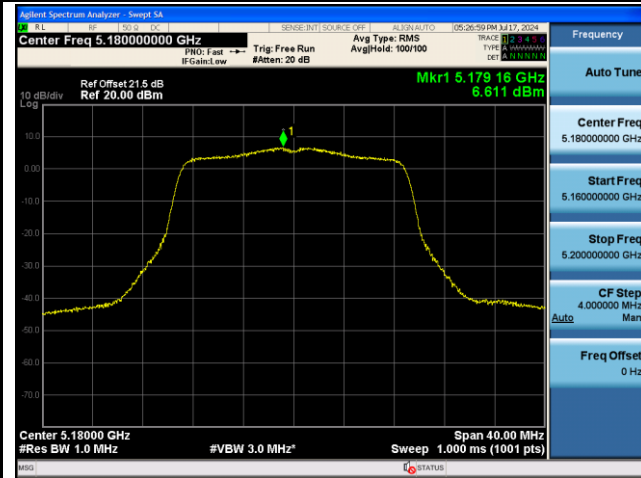


Channel 165 (5825MHz)

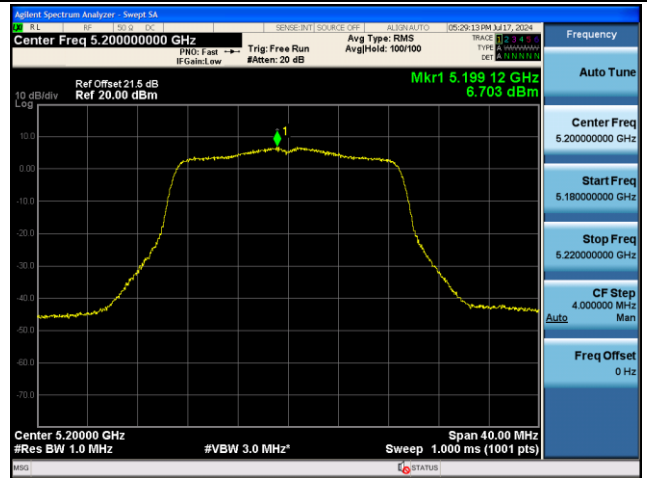


802.11ac-VHT20 Power Spectral Density - Ant 0

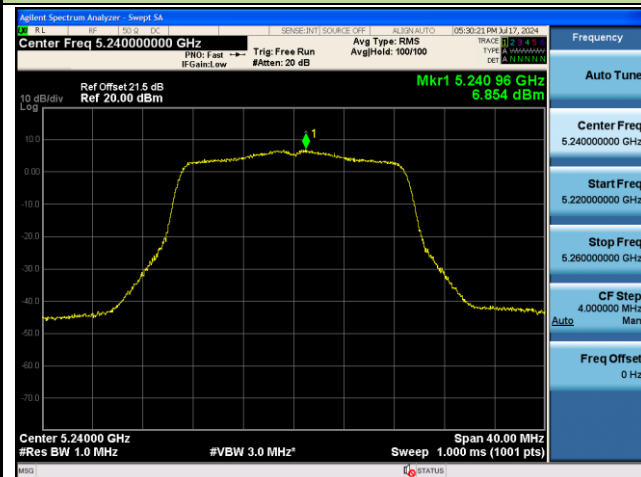
Channel 36 (5180MHz)



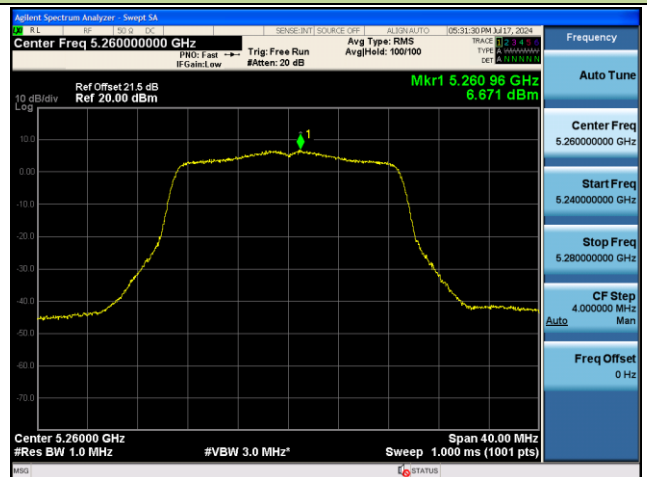
Channel 40 (5200MHz)



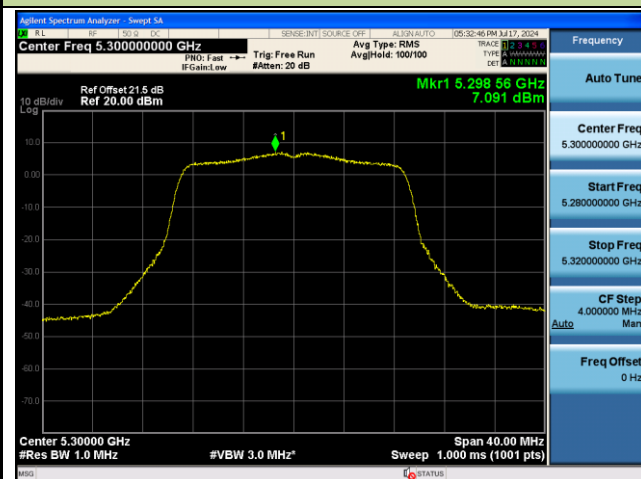
Channel 48 (5240MHz)



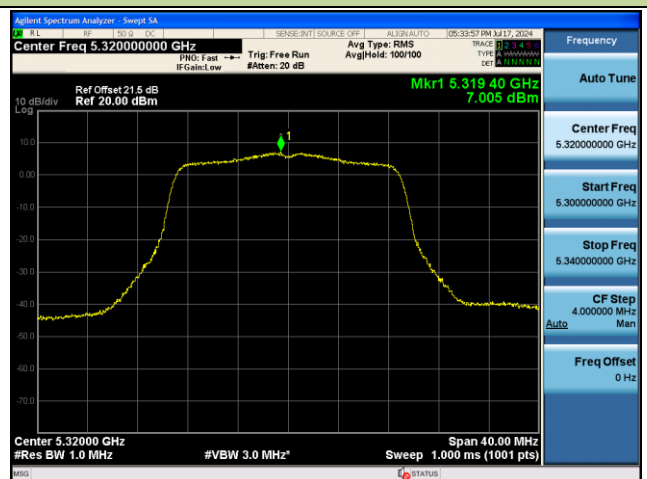
Channel 52 (5260MHz)

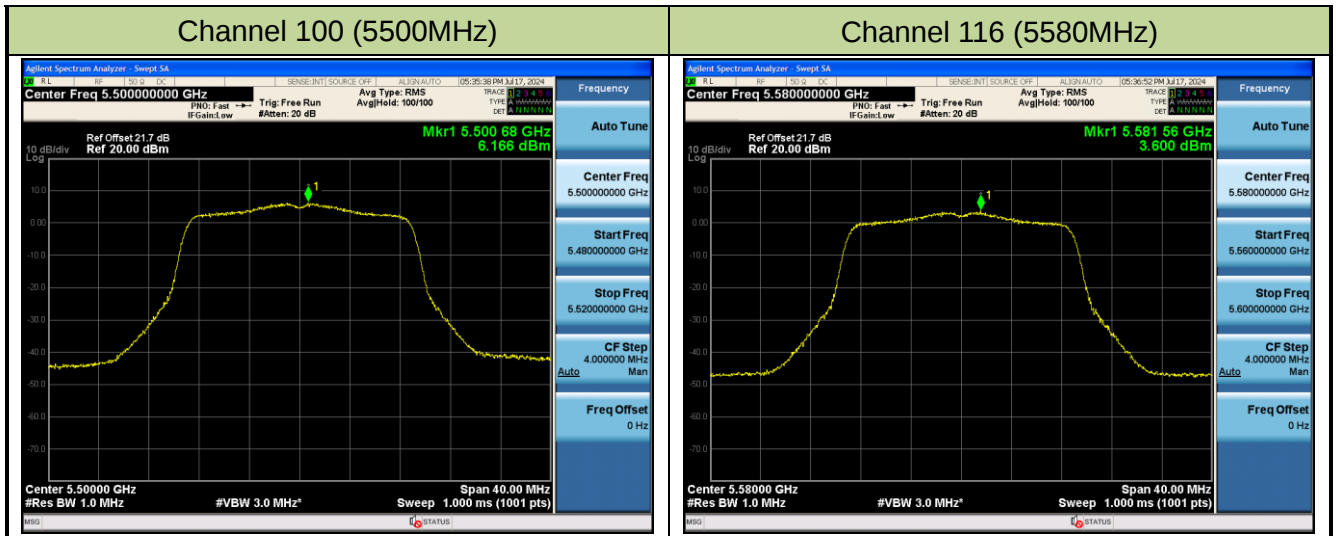


Channel 60 (5300MHz)

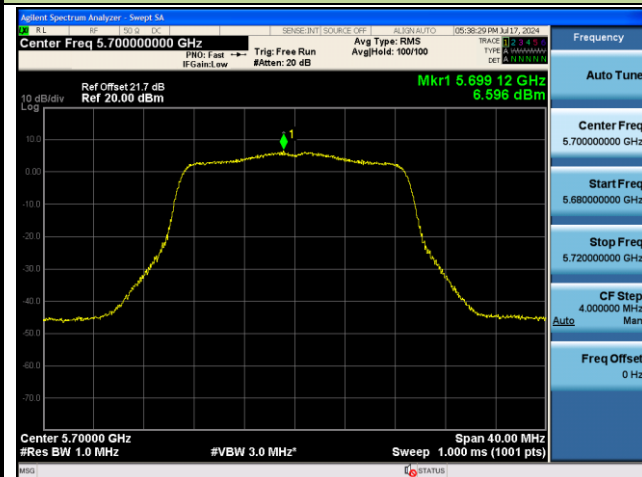


Channel 64 (5320MHz)

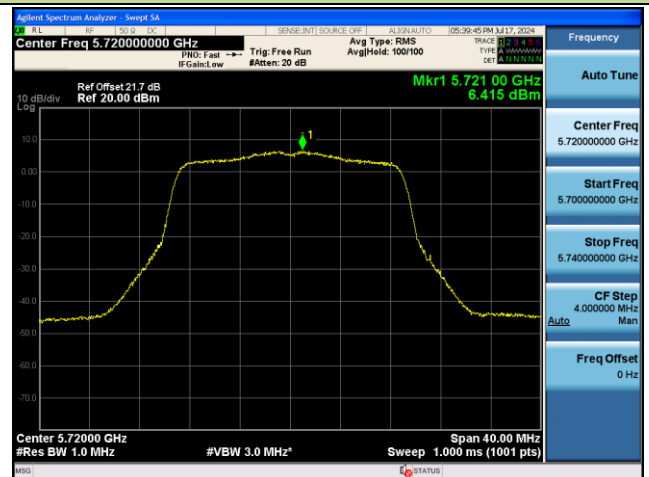




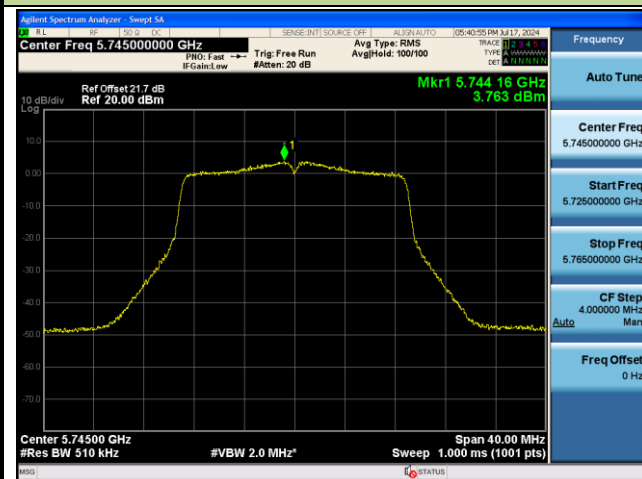
Channel 140 (5700MHz)



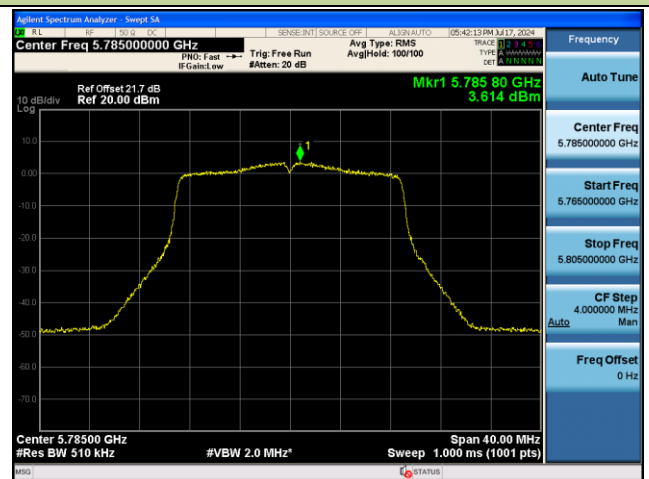
Channel 144 (5720MHz)



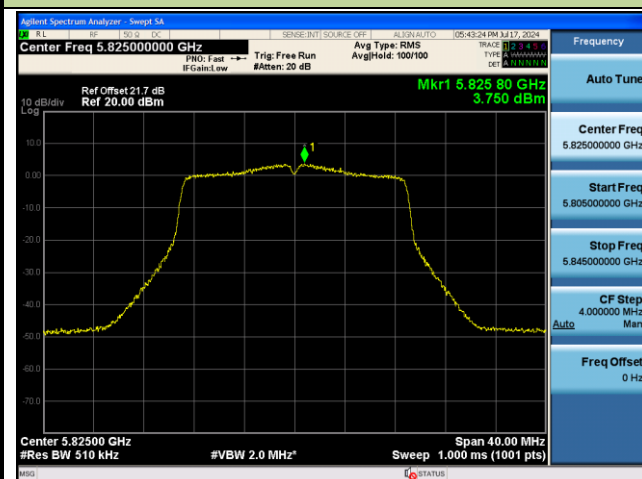
Channel 149 (5745MHz)



Channel 157 (5785MHz)

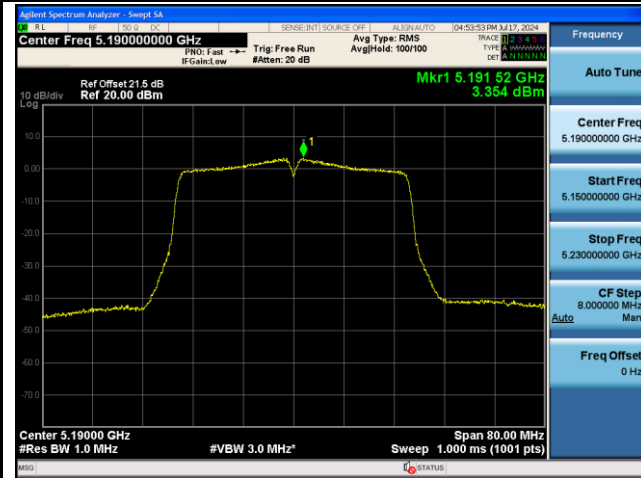


Channel 165 (5825MHz)

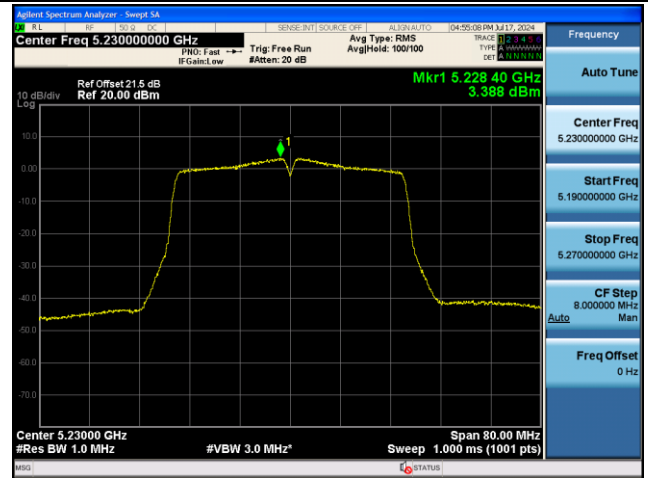


802.11ac-VHT40 Power Spectral Density - Ant 0

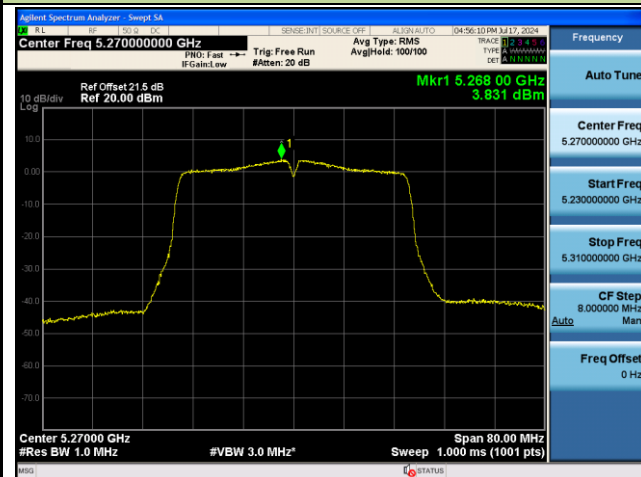
Channel 38 (5190MHz)



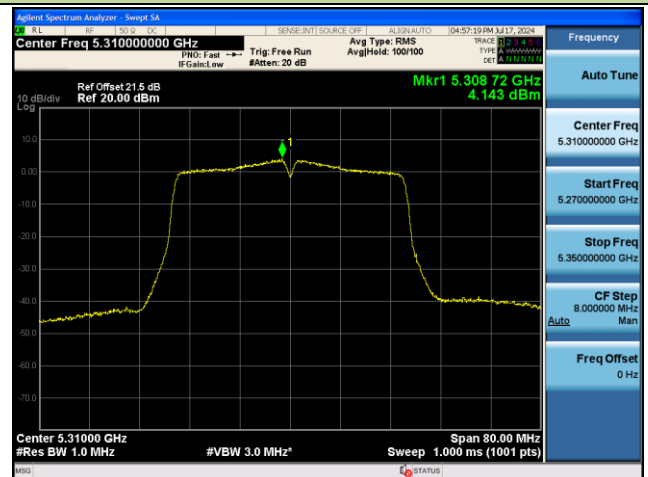
Channel 46 (5230MHz)



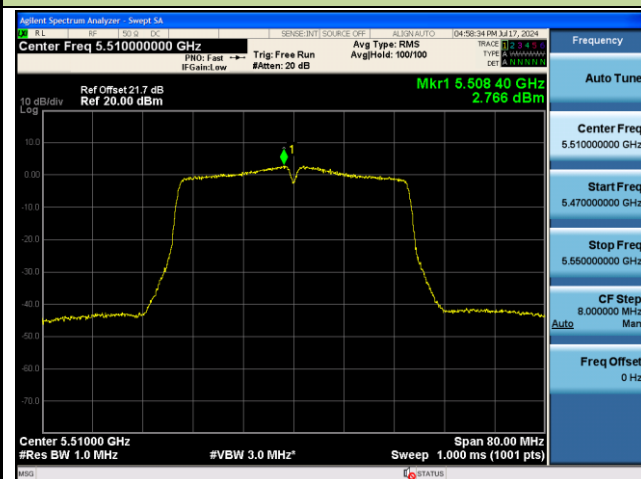
Channel 54 (5270MHz)



Channel 62 (5310MHz)



Channel 102 (5510MHz)



Channel 110 (5550MHz)

