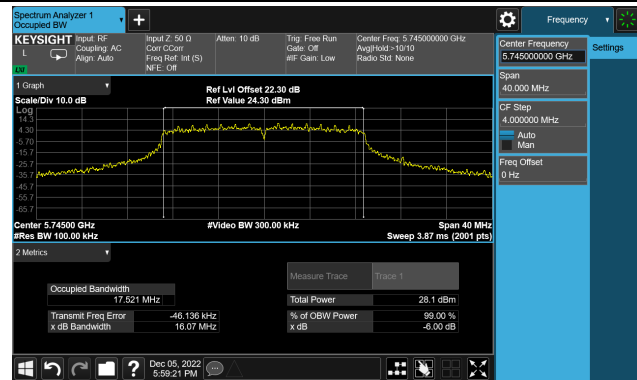
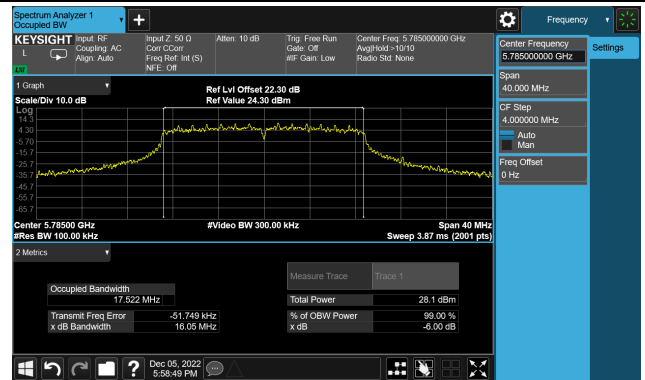


802.11ac-VHT20 6dB Bandwidth

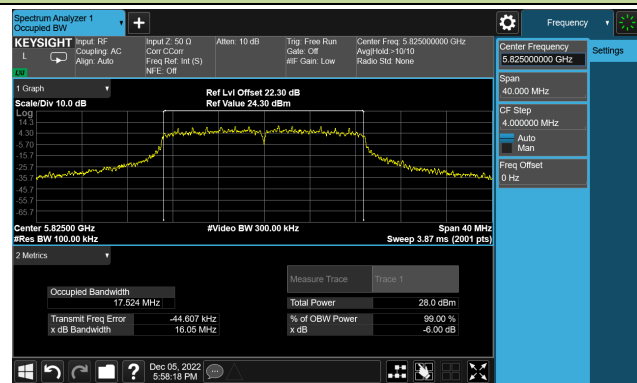
Channel 149 (5745MHz)



Channel 157 (5785MHz)

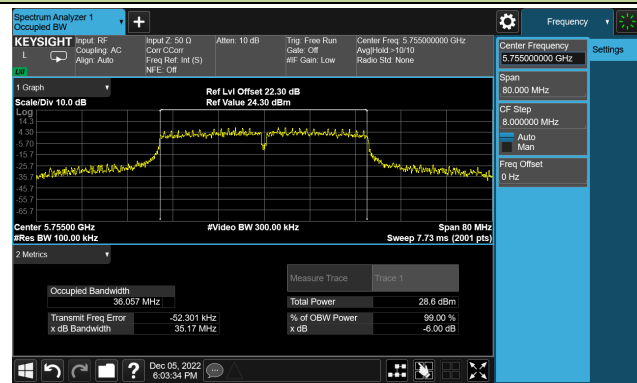


Channel 165 (5825MHz)

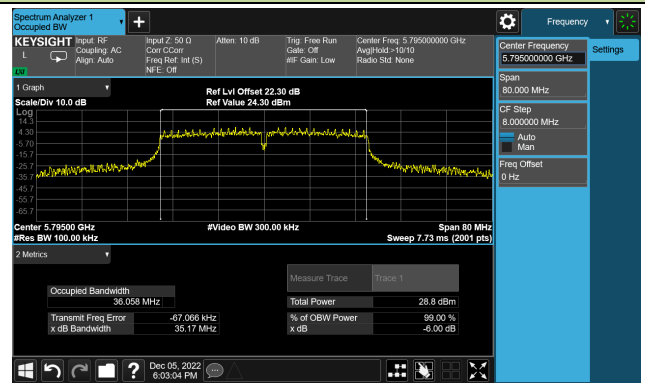


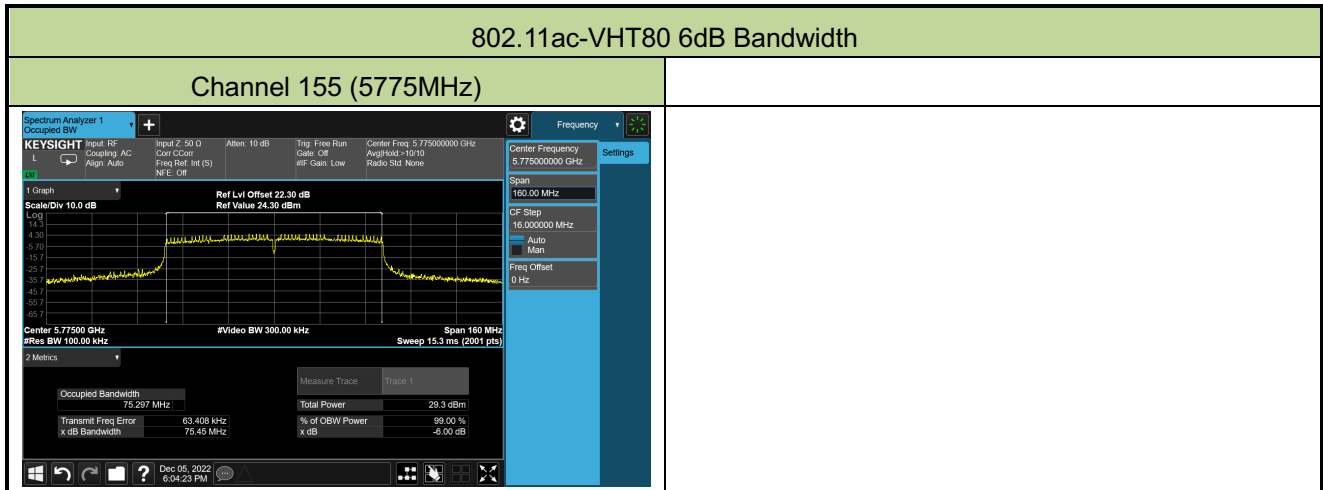
802.11ac-VHT40 6dB Bandwidth

Channel 151 (5755MHz)



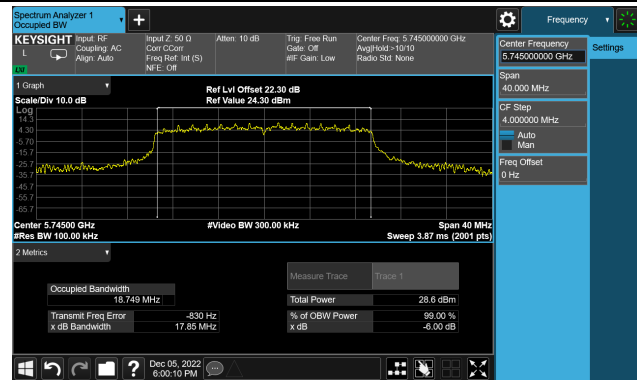
Channel 159 (5795MHz)



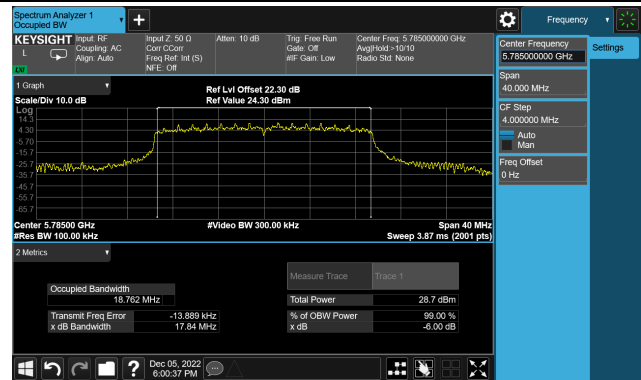


802.11ax-HE20 6dB Bandwidth

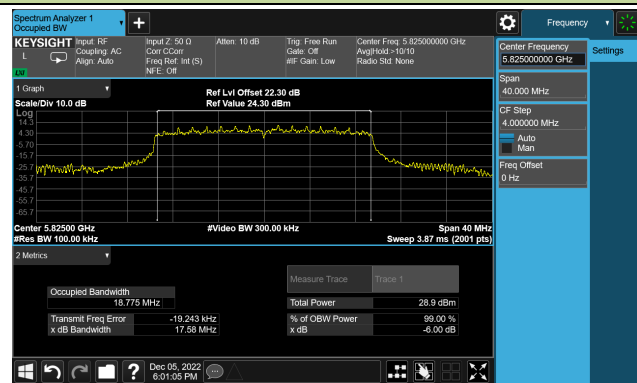
Channel 149 (5745MHz)



Channel 157 (5785MHz)

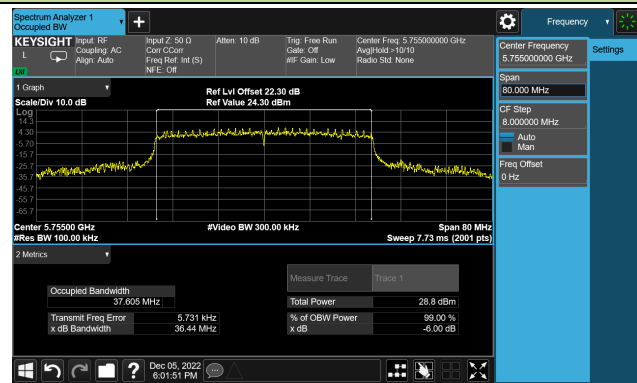


Channel 165 (5825MHz)

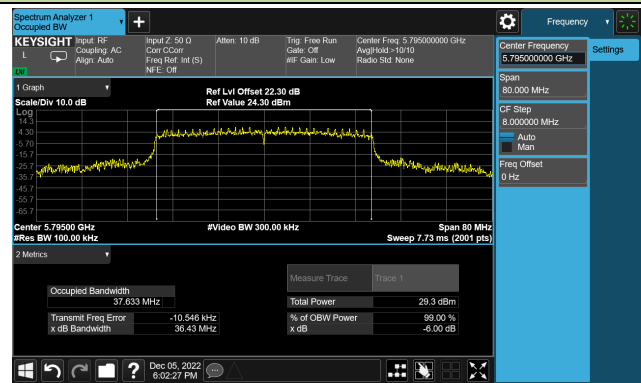


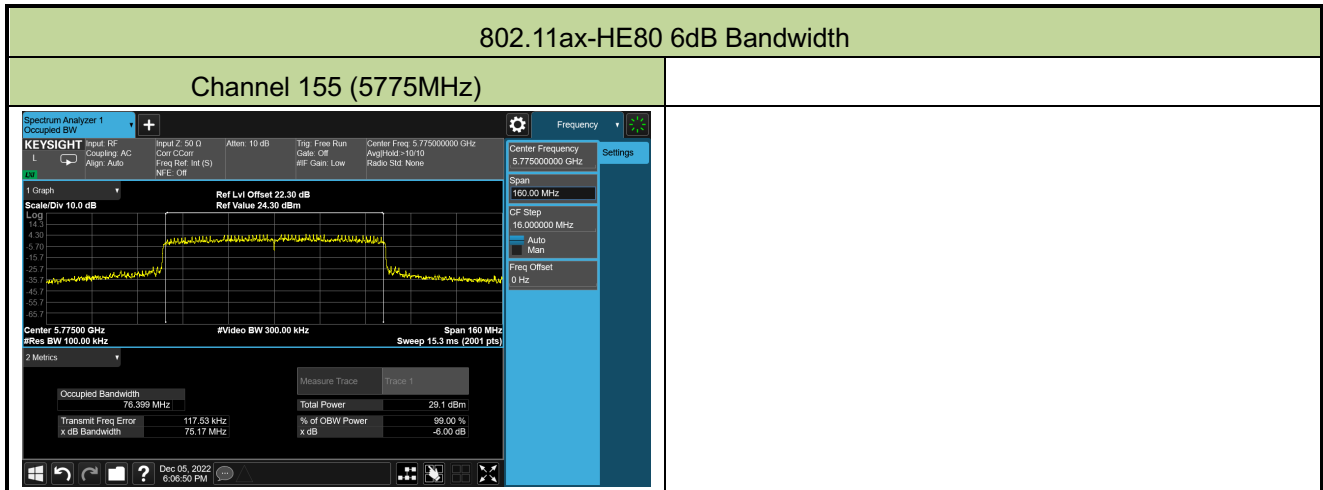
802.11ac-VHT40 6dB Bandwidth

Channel 151 (5755MHz)



Channel 159 (5795MHz)





A.4 Output Power Test Result

Test Site	SIP-TR1	Test Engineer	Alisa Deng
Test Date	2022-11-25 ~ 2022-12-05		

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	20.73	20.84	23.80	≤ 30.00
11a	6Mbps	44	5220	23.25	23.38	26.33	≤ 30.00
11a	6Mbps	48	5240	23.28	23.21	26.26	≤ 30.00
11a	6Mbps	52	5260	18.56	18.32	21.45	≤ 23.98
11a	6Mbps	60	5300	18.21	18.28	21.26	≤ 23.98
11a	6Mbps	64	5320	18.31	18.12	21.23	≤ 23.98
11a	6Mbps	100	5500	18.23	18.16	21.21	≤ 23.98
11a	6Mbps	116	5580	18.14	18.33	21.25	≤ 23.98
11a	6Mbps	140	5700	18.06	18.41	21.25	≤ 23.98
11a	6Mbps	144	5720	18.15	18.34	21.26	≤ 22.78
11a	6Mbps	149	5745	22.48	22.56	25.53	≤ 30.00
11a	6Mbps	157	5785	21.78	22.01	24.91	≤ 30.00
11a	6Mbps	165	5825	21.98	21.83	24.92	≤ 30.00
11ac-VHT20	MCS5	36	5180	20.51	20.37	23.45	≤ 30.00
11ac-VHT20	MCS5	44	5220	23.09	23.23	26.17	≤ 30.00
11ac-VHT20	MCS5	48	5240	23.12	23.22	26.18	≤ 30.00
11ac-VHT20	MCS5	52	5260	18.08	18.15	21.13	≤ 23.98
11ac-VHT20	MCS5	60	5300	18.05	17.93	21.00	≤ 23.98
11ac-VHT20	MCS5	64	5320	17.99	18.02	21.02	≤ 23.98
11ac-VHT20	MCS5	100	5500	18.10	17.98	21.05	≤ 23.98
11ac-VHT20	MCS5	116	5580	17.78	18.24	21.03	≤ 23.98
11ac-VHT20	MCS5	140	5700	17.94	18.23	21.10	≤ 23.98
11ac-VHT20	MCS5	144	5720	17.86	18.21	21.05	≤ 22.85
11ac-VHT20	MCS5	149	5745	22.31	22.56	25.45	≤ 30.00
11ac-VHT20	MCS5	157	5785	21.91	21.84	24.89	≤ 30.00
11ac-VHT20	MCS5	165	5825	21.66	21.74	24.71	≤ 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	MCS5	38	5190	17.51	17.43	20.48	≤ 30.00
11ac-VHT40	MCS5	46	5230	23.10	22.98	26.05	≤ 30.00
11ac-VHT40	MCS5	54	5270	20.84	20.69	23.78	≤ 23.98
11ac-VHT40	MCS5	62	5310	17.73	17.43	20.59	≤ 23.98
11ac-VHT40	MCS5	102	5510	18.13	18.02	21.09	≤ 23.98
11ac-VHT40	MCS5	110	5550	20.62	20.71	23.68	≤ 23.98
11ac-VHT40	MCS5	134	5670	20.75	20.96	23.87	≤ 23.98
11ac-VHT40	MCS5	142	5710	20.64	20.84	23.75	≤ 23.98
11ac-VHT40	MCS5	151	5755	22.38	22.61	25.51	≤ 30.00
11ac-VHT40	MCS5	159	5795	21.87	22.02	24.96	≤ 30.00
11ac-VHT80	MCS0	42	5210	17.12	16.90	20.02	≤ 30.00
11ac-VHT80	MCS0	58	5290	16.42	16.21	19.33	≤ 23.98
11ac-VHT80	MCS0	106	5530	16.49	16.37	19.44	≤ 23.98
11ac-VHT80	MCS0	122	5610	20.53	20.92	23.74	≤ 23.98
11ac-VHT80	MCS0	138	5690	20.81	20.93	23.88	≤ 23.98
11ac-VHT80	MCS0	155	5775	22.38	22.61	25.51	≤ 30.00
11ax-HE20	MCS6	36	5180	20.26	20.33	23.31	≤ 30.00
11ax-HE20	MCS6	44	5220	22.65	22.77	25.72	≤ 30.00
11ax-HE20	MCS6	48	5240	23.03	23.19	26.12	≤ 30.00
11ax-HE20	MCS6	52	5260	18.17	18.08	21.14	≤ 23.98
11ax-HE20	MCS6	60	5300	18.23	18.12	21.19	≤ 23.98
11ax-HE20	MCS6	64	5320	18.09	18.17	21.14	≤ 23.98
11ax-HE20	MCS6	100	5500	18.11	18.01	21.07	≤ 23.98
11ax-HE20	MCS6	116	5580	17.86	18.25	21.07	≤ 23.98
11ax-HE20	MCS6	140	5700	17.91	18.15	21.04	≤ 23.98
11ax-HE20	MCS6	144	5720	17.81	18.19	21.01	≤ 22.96
11ax-HE20	MCS6	149	5745	22.66	23.01	25.85	≤ 30.00
11ax-HE20	MCS6	157	5785	22.22	22.51	25.38	≤ 30.00
11ax-HE20	MCS6	165	5825	22.71	22.94	25.84	≤ 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		
11ax-HE40	MCS6	38	5190	17.64	17.39	20.53	≤ 30.00
11ax-HE40	MCS6	46	5230	22.90	23.04	25.98	≤ 30.00
11ax-HE40	MCS6	54	5270	20.75	20.62	23.70	≤ 23.98
11ax-HE40	MCS6	62	5310	17.29	17.22	20.27	≤ 23.98
11ax-HE40	MCS6	102	5510	19.18	18.91	22.06	≤ 23.98
11ax-HE40	MCS6	110	5550	20.55	20.84	23.71	≤ 23.98
11ax-HE40	MCS6	134	5670	19.36	19.56	22.47	≤ 23.98
11ax-HE40	MCS6	142	5710	20.57	20.77	23.68	≤ 23.98
11ax-HE40	MCS6	151	5755	22.56	22.51	25.55	≤ 30.00
11ax-HE40	MCS6	159	5795	22.62	22.58	25.61	≤ 30.00
11ax-HE80	MCS0	42	5210	16.11	15.96	19.05	≤ 30.00
11ax-HE80	MCS0	58	5290	15.59	15.65	18.63	≤ 23.98
11ax-HE80	MCS0	106	5530	16.45	16.32	19.40	≤ 23.98
11ax-HE80	MCS0	122	5610	20.56	21.04	23.82	≤ 23.98
11ax-HE80	MCS0	138	5690	20.76	20.92	23.85	≤ 23.98
11ax-HE80	MCS0	155	5775	21.22	21.31	24.28	≤ 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: $11 + 10 \log_{10} (20.00) = 24.01 > 23.98$ dBm

802.11ac-VHT20: $11 + 10 \log_{10} (20.49) = 24.12 > 23.98$ dBm

802.11ax-HE20: $11 + 10 \log_{10} (21.45) = 24.31 > 23.98$ dBm

802.11ac-VHT40/ac-VHT80/ax-HE40/ax-HE80: $11 + 10 \log_{10} B > 23.98$ dBm

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

802.11a CH144: $11 + 10 \log_{10} (B) = 22.78$ dBm, $B = 20.11/2 + 5 = 15.055$ MHz.

802.11ac-VHT20 CH144: $11 + 10 \log_{10} (B) = 22.85$ dBm, $B = 20.61/2 + 5 = 15.305$ MHz.

802.11ax-HE20 CH144: $11 + 10 \log_{10} (B) = 22.96$ dBm, $B = 19.62/2 + 5 = 15.705$ MHz.

802.11ac-VHT40/ac-VHT80/ax-HE40/ax-HE80: $11 + 10 \log_{10} B > 23.98$ dBm;

Note 4: Since the measurement using a wideband gated RF power meter is made only during the ON time of the transmitter, no duty cycle correction factor is required

A.5 Power Spectral Density Test Result

Test Site	SIP-TR1	Test Engineer	Alisa Deng
Test Date	2022-11-25~2022-11-29		
Test Item	Power Spectral Density (UNII-Band 1 & UNII-2a & UNII-2c)		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	AVPSD (dBm/ MHz)		Duty Cycle (%)	Total PSD (dBm/ MHz)	PSD Limit (dBm/MHz)
				Ant 0	Ant 1			
11a	6Mbps	36	5180	8.71	9.18	92.89	12.29	16.39
11a	6Mbps	44	5220	11.13	11.46	92.89	14.63	16.39
11a	6Mbps	48	5240	11.27	11.13	92.89	14.53	16.39
11a	6Mbps	52	5260	6.92	6.65	92.89	10.11	10.39
11a	6Mbps	60	5300	6.62	6.76	92.89	10.02	10.39
11a	6Mbps	64	5320	6.69	6.62	92.89	9.98	10.39
11a	6Mbps	100	5500	6.47	6.79	92.89	9.97	10.09
11a	6Mbps	116	5580	6.32	6.52	92.89	9.75	10.09
11a	6Mbps	140	5700	6.25	6.37	92.89	9.64	10.09
11a	6Mbps	144	5720	6.16	6.44	92.89	9.63	10.09
11ac-VHT20	MCS5	36	5180	6.93	7.06	63.88	11.95	16.39
11ac-VHT20	MCS5	44	5220	9.73	10.01	63.88	14.83	16.39
11ac-VHT20	MCS5	48	5240	10.10	9.65	63.88	14.83	16.39
11ac-VHT20	MCS5	52	5260	5.05	5.15	63.88	10.06	10.39
11ac-VHT20	MCS5	60	5300	5.18	5.20	63.88	10.15	10.39
11ac-VHT20	MCS5	64	5320	4.93	5.61	63.88	10.24	10.39
11ac-VHT20	MCS5	100	5500	4.80	5.07	63.88	9.89	10.09
11ac-VHT20	MCS5	116	5580	5.00	4.88	63.88	9.90	10.09
11ac-VHT20	MCS5	140	5700	4.43	4.94	63.88	9.65	10.09
11ac-VHT20	MCS5	144	5720	4.92	4.88	63.88	9.85	10.09
11ac-VHT40	MCS5	38	5190	0.92	0.23	50.83	6.54	16.39
11ac-VHT40	MCS5	46	5230	6.09	6.37	50.83	12.18	16.39
11ac-VHT40	MCS5	54	5270	4.17	4.20	50.83	10.13	10.39
11ac-VHT40	MCS5	62	5310	1.04	1.14	50.83	7.04	10.39
11ac-VHT40	MCS5	102	5510	1.25	1.69	50.83	7.42	10.09
11ac-VHT40	MCS5	110	5550	3.78	3.86	50.83	9.77	10.09
11ac-VHT40	MCS5	134	5670	3.71	4.17	50.83	9.90	10.09
11ac-VHT40	MCS5	142	5710	3.75	3.96	50.83	9.81	10.09

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	AVPSD (dBm/ MHz)		Duty Cycle (%)	Total PSD (dBm/ MHz)	PSD Limit (dBm/MHz)
				Ant 0	Ant 1			
11ac-VHT80	MCS0	42	5210	-1.75	-2.00	73.42	2.48	16.39
11ac-VHT80	MCS0	58	5290	-2.39	-2.80	73.42	1.76	10.39
11ac-VHT80	MCS0	106	5530	-2.60	-2.19	73.42	1.97	10.09
11ac-VHT80	MCS0	122	5610	1.97	2.09	73.42	6.38	10.09
11ac-VHT80	MCS0	138	5690	1.63	2.13	73.42	6.24	10.09
11ax-HE20	MCS6	36	5180	6.90	7.12	60.91	12.17	16.39
11ax-HE20	MCS6	44	5220	9.02	9.50	60.91	14.43	16.39
11ax-HE20	MCS6	48	5240	9.42	9.89	60.91	14.82	16.39
11ax-HE20	MCS6	52	5260	4.93	4.82	60.91	10.04	10.39
11ax-HE20	MCS6	60	5300	4.92	5.09	60.91	10.17	10.39
11ax-HE20	MCS6	64	5320	4.43	5.28	60.91	10.04	10.39
11ax-HE20	MCS6	100	5500	4.61	4.68	60.91	9.81	10.09
11ax-HE20	MCS6	116	5580	4.59	4.83	60.91	9.87	10.09
11ax-HE20	MCS6	140	5700	4.16	4.79	60.91	9.65	10.09
11ax-HE20	MCS6	144	5720	4.51	4.56	60.91	9.70	10.09
11ax-HE40	MCS6	38	5190	0.84	0.46	51.64	6.54	16.39
11ax-HE40	MCS6	46	5230	5.76	6.15	51.64	11.84	16.39
11ax-HE40	MCS6	54	5270	3.90	4.14	51.64	9.90	10.39
11ax-HE40	MCS6	62	5310	0.90	0.64	51.64	6.65	10.39
11ax-HE40	MCS6	102	5510	2.58	2.88	51.64	8.61	10.09
11ax-HE40	MCS6	110	5550	3.87	4.10	51.64	9.87	10.09
11ax-HE40	MCS6	134	5670	3.14	3.09	51.64	9.00	10.09
11ax-HE40	MCS6	142	5710	3.86	3.95	51.64	9.79	10.09
11ax-HE80	MCS0	42	5210	-3.25	-3.14	72.96	1.18	16.39
11ax-HE80	MCS0	58	5290	-2.91	-3.48	72.96	1.19	10.39
11ax-HE80	MCS0	106	5530	-2.68	-2.44	72.96	1.83	10.09
11ax-HE80	MCS0	122	5610	1.89	2.01	72.96	6.33	10.09
11ax-HE80	MCS0	138	5690	1.78	1.97	72.96	6.26	10.09

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

Note 2:

For 5150 - 5250MHz Band:

PSD Limit (dBm/MHz) = 17 - (6.61 - 6) = 16.39 dBm/MHz.

For 5250 - 5350MHz Band:

PSD Limit (dBm/MHz) = $11 - (6.61 - 6) = 10.39$ dBm/MHz.

For 5470 - 5725MHz Band:

PSD Limit (dBm/MHz) = $11 - (6.91 - 6) = 10.09$ dBm/MHz.

Test Site	SIP-TR1	Test Engineer	Alisa Deng
Test Date	2022-12-05		
Test Item	Power Spectral Density (UNII-Band 3)		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	AVPSD (dBm/ 510KHz)		Duty Cycle (%)	Total PSD (dBm/ 510KHz)	PSD Limit (dBm/ 500KHz)
				Ant 0	Ant 1			
11a	6Mbps	149	5745	7.95	7.80	92.89	11.21	≤ 29.69
11a	6Mbps	157	5785	7.15	7.35	92.89	10.58	≤ 29.69
11a	6Mbps	165	5825	7.31	7.08	92.89	10.53	≤ 29.69
11ac-VHT20	MCS5	149	5745	6.53	6.79	63.88	11.62	≤ 29.69
11ac-VHT20	MCS5	157	5785	6.46	6.22	63.88	11.30	≤ 29.69
11ac-VHT20	MCS5	165	5825	5.85	6.11	63.88	10.94	≤ 29.69
11ac-VHT40	MCS5	151	5755	3.12	3.22	50.83	9.12	≤ 29.69
11ac-VHT40	MCS5	159	5795	2.54	3.21	50.83	8.84	≤ 29.69
11ac-VHT80	MCS0	155	5775	1.09	1.06	73.42	5.42	≤ 29.69
11ax-HE20	MCS6	149	5745	6.95	7.46	60.91	12.37	≤ 29.69
11ax-HE20	MCS6	157	5785	6.78	6.79	60.91	11.95	≤ 29.69
11ax-HE20	MCS6	165	5825	6.63	7.83	60.91	12.43	≤ 29.69
11ax-HE40	MCS6	151	5755	3.49	3.23	51.64	9.24	≤ 29.69
11ax-HE40	MCS6	159	5795	3.97	3.36	51.64	9.55	≤ 29.69
11ax-HE80	MCS0	155	5775	-0.33	0.18	72.96	4.31	≤ 29.69

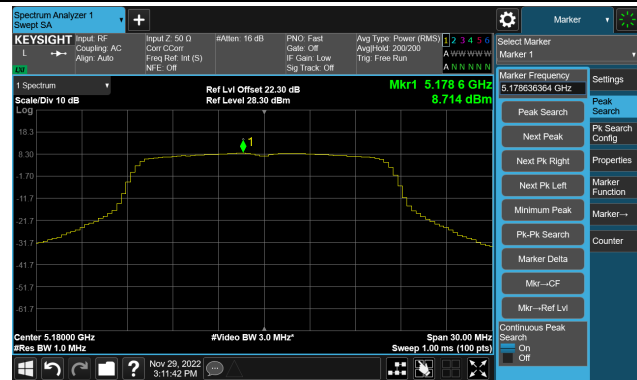
Note 1:

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

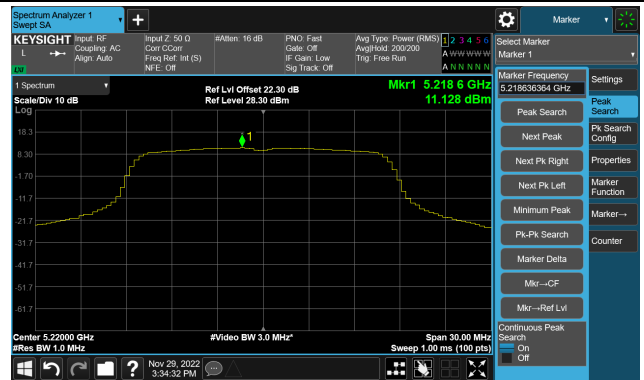
Note 2: PSD Limit (dBm/500KHz) = 30 - (6.31 - 6) = 29.69dBm/MHz.

802.11a Power Spectral Density- Ant 0

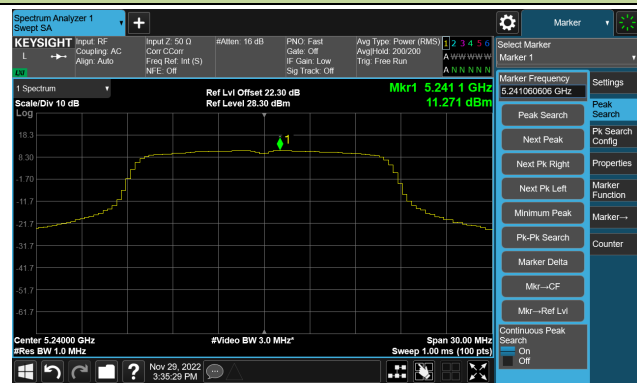
Channel 36 (5180MHz)



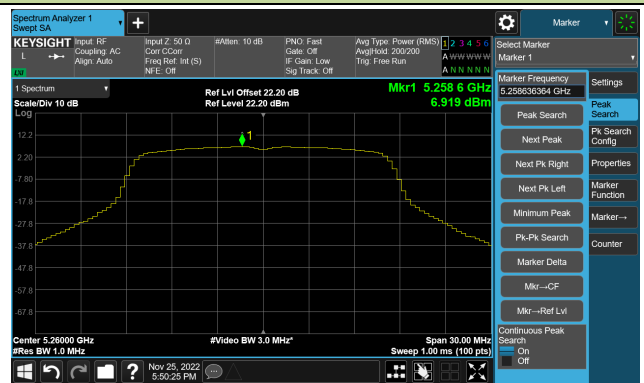
Channel 44 (5220MHz)



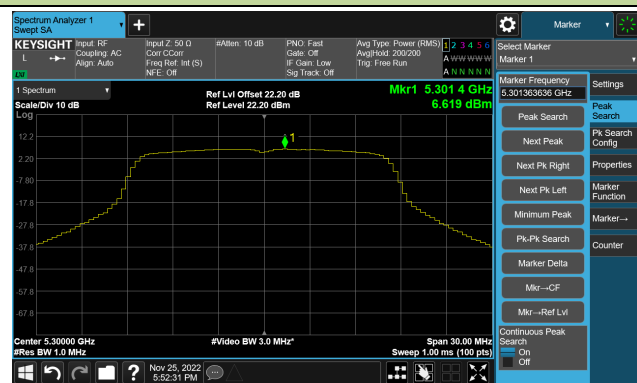
Channel 48 (5240MHz)



Channel 52 (5260MHz)

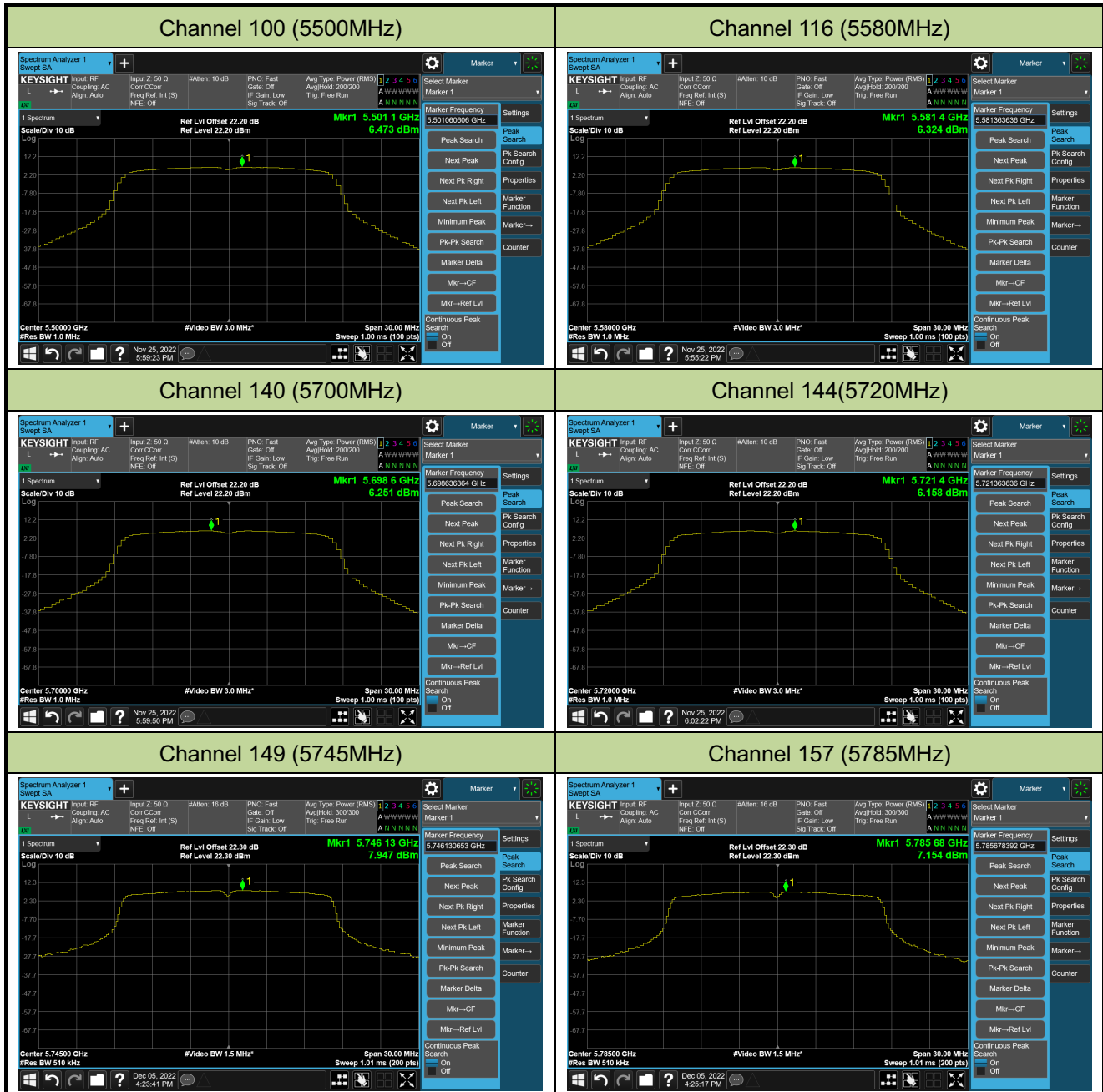


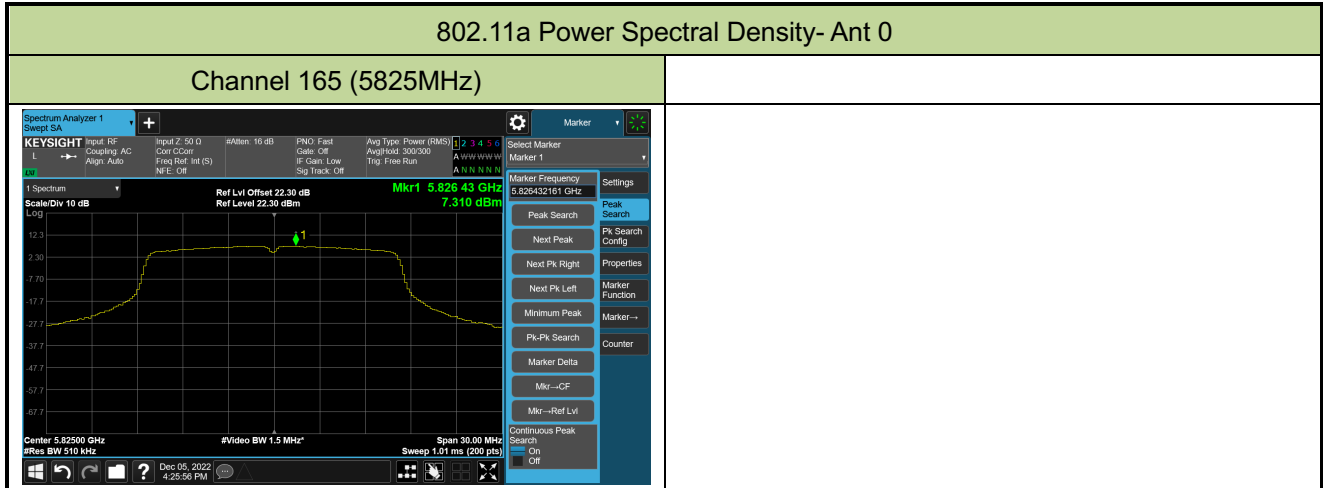
Channel 60 (5300MHz)



Channel 64 (5320MHz)

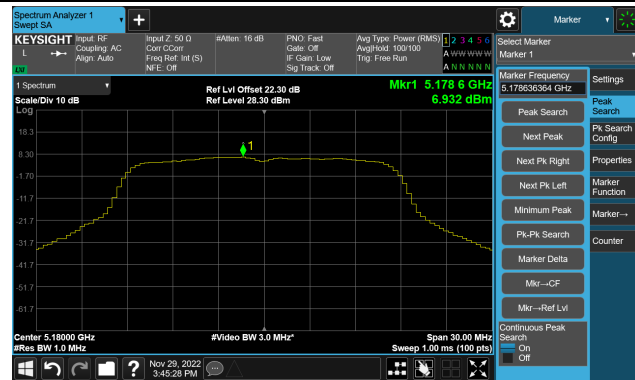






802.11ac-VHT20 Power Spectral Density- Ant 0

Channel 36 (5180MHz)



Channel 44 (5220MHz)



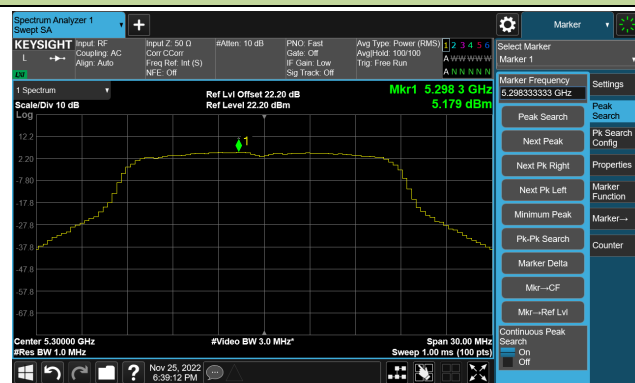
Channel 48 (5240MHz)



Channel 52 (5260MHz)



Channel 60 (5300MHz)



Channel 64 (5320MHz)

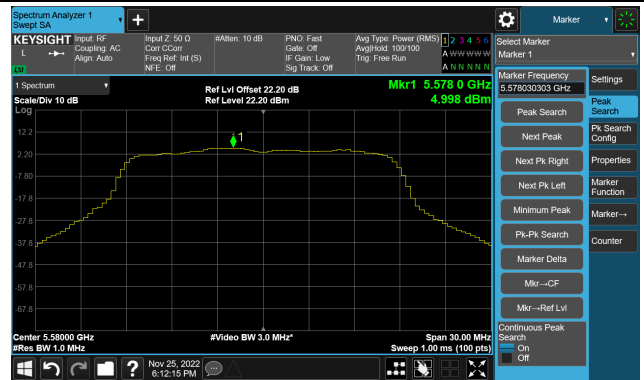


802.11ac-VHT20 Power Spectral Density- Ant 0

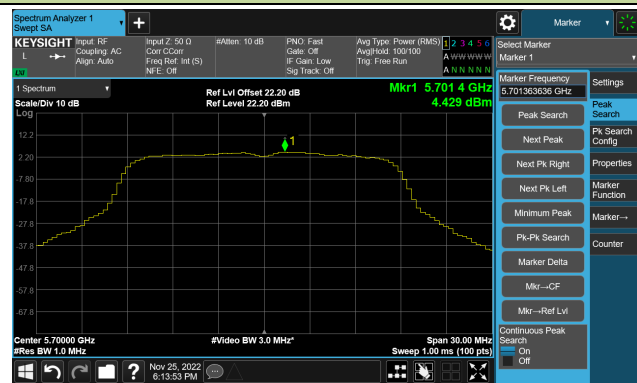
Channel 100 (5500MHz)



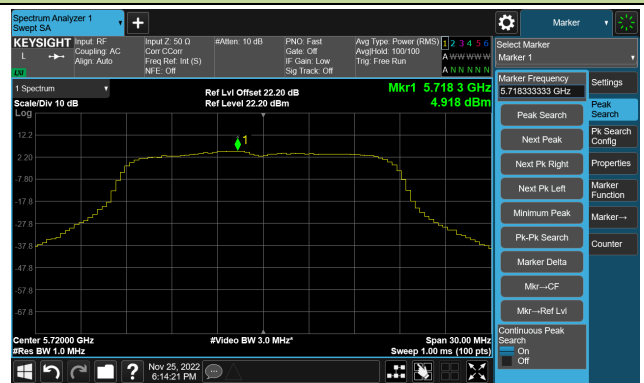
Channel 116 (5580MHz)



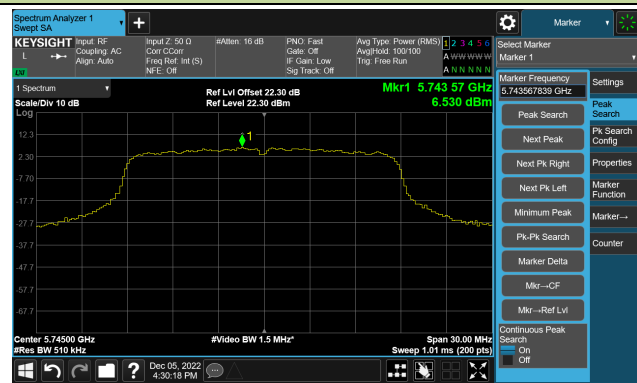
Channel 140 (5700MHz)



Channel 144(5720MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)

