7.6.5.Test Result

Product	Mobile Computer	Test Engineer	Gordon Qi
Test Site	TR3	Test Date	2020/07/07~2020/07/15
Test Item	SISO Mode - Power Spectral Density (UNII-Band 1 &UNII-2A & UNII-2C)		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	PSD (dBm/ MHz)	Duty Cycle (%)	Final PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
11a	6Mbps	36	5180	3.73	94.81	3.96	≤17.00	Pass
11a	6Mbps	44	5220	3.72	94.81	3.95	≤17.00	Pass
11a	6Mbps	48	5240	3.30	94.81	3.54	≤17.00	Pass
11a	6Mbps	52	5260	3.25	94.81	3.48	≤11.00	Pass
11a	6Mbps	60	5300	3.11	94.81	3.34	≤11.00	Pass
11a	6Mbps	64	5320	3.04	94.81	3.27	≤11.00	Pass
11a	6Mbps	100	5500	2.90	94.81	3.13	≤11.00	Pass
11a	6Mbps	116	5580	2.72	94.81	2.95	≤11.00	Pass
11a	6Mbps	140	5700	2.51	94.81	2.74	≤11.00	Pass
11a	6Mbps	144	5720	2.35	94.81	2.58	≤11.00	Pass
11ac-VHT20	MCS0	36	5180	3.38	94.47	3.62	≤17.00	Pass
11ac-VHT20	MCS0	44	5220	3.30	94.47	3.55	≤17.00	Pass
11ac-VHT20	MCS0	48	5240	3.26	94.47	3.51	≤17.00	Pass
11ac-VHT20	MCS0	52	5260	2.93	94.47	3.17	≤11.00	Pass
11ac-VHT20	MCS0	60	5300	2.78	94.47	3.02	≤11.00	Pass
11ac-VHT20	MCS0	64	5320	3.03	94.47	3.27	≤11.00	Pass
11ac-VHT20	MCS0	100	5500	2.74	94.47	2.99	≤11.00	Pass
11ac-VHT20	MCS0	116	5580	2.42	94.47	2.66	≤11.00	Pass
11ac-VHT20	MCS0	140	5700	2.36	94.47	2.61	≤11.00	Pass
11ac-VHT20	MCS0	144	5720	2.30	94.47	2.55	≤11.00	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	PSD (dBm/ MHz)	Duty Cycle (%)	Final PSD (dBm/ MHz)	PSD Limit (dBm/MHz)	Result
11ac-VHT40	MCS0	38	5190	-1.64	90.24	-1.20	≤17.00	Pass
11ac-VHT40	MCS0	46	5230	-1.63	90.24	-1.18	≤17.00	Pass
11ac-VHT40	MCS0	54	5270	-1.63	90.24	-1.18	≤11.00	Pass
11ac-VHT40	MCS0	62	5310	-2.24	90.24	-1.80	≤11.00	Pass
11ac-VHT40	MCS0	102	5510	-2.22	90.24	-1.78	≤11.00	Pass
11ac-VHT40	MCS0	110	5550	-2.47	90.24	-2.03	≤11.00	Pass
11ac-VHT40	MCS0	134	5670	-2.69	90.24	-2.24	≤11.00	Pass
11ac-VHT40	MCS0	142	5710	-2.34	90.24	-1.90	≤11.00	Pass
11ac-VHT80	MCS0	42	5210	-7.21	84.75	-6.49	≤17.00	Pass
11ac-VHT80	MCS0	58	5290	-7.81	84.75	-7.09	≤11.00	Pass
11ac-VHT80	MCS0	106	5530	-8.35	84.75	-7.63	≤11.00	Pass
11ac-VHT80	MCS0	122	5610	-8.96	84.75	-8.24	≤11.00	Pass
11ac-VHT80	MCS0	138	5690	-8.82	84.75	-8.10	≤11.00	Pass

Note 1: When EUT duty cycle ≥ 98%, Final PSD (dBm/MHz) = PSD (dBm/MHz)

When EUT duty cycle < 98%, Final PSD (dBm/MHz) = PSD (dBm/MHz) + 10*log (1/Duty Cycle)

Product	Mobile Computer	Test Engineer	Gordon Qi
Test Site	TR3	Test Date	2020/07/07~2020/07/15
Test Item	SISO Mode - Power Spectral Density (UNII-Band 3)		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	PSD (dBm/ 510kHz)	Duty Cycle (%)	Final PSD(dBm/ 510kHz)	Limit (dBm/ 500kHz)	Result
11a	6Mbps	149	5745	-2.98	94.81	-2.75	≤ 30.00	Pass
11a	6Mbps	157	5785	1.27	94.81	1.50	≤ 30.00	Pass
11a	6Mbps	165	5825	1.04	94.81	1.27	≤ 30.00	Pass
11ac-VHT20	MCS0	149	5745	1.30	94.47	1.55	≤ 30.00	Pass
11ac-VHT20	MCS0	157	5785	1.06	94.47	1.30	≤ 30.00	Pass
11ac-VHT20	MCS0	165	5825	0.76	94.47	1.01	≤ 30.00	Pass
11ac-VHT40	MCS0	151	5755	-4.71	90.24	-4.26	≤ 30.00	Pass
11ac-VHT40	MCS0	159	5795	-4.12	90.24	-3.67	≤ 30.00	Pass
11ac-VHT80	MCS0	155	5775	-10.90	84.75	-10.18	≤ 30.00	Pass

Note 1:

When EUT duty cycle > 98%, Final PSD (dBm / 510kHz) = Ant 0 PSD (dBm / 510kHz).

When EUT duty cycle < 98%, Final PSD (dBm / 510kHz) =Ant 0 PSD (dBm / 510kHz) +10*log(1/Duty cycle).

Product	Mobile Computer	Test Engineer	Gordon Qi
Test Site	TR3	Test Date	2020/07/07~2020/07/15
Test Item	MIMO Mode - Power Spectral Density (UNII-Band 1 &UNII-2A & UNII-2C)		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	PSD (dBm/ MHz)		Duty Cycle (%)	Final PSD (dBm/ MHz)	PSD Limit (dBm/MHz)	Result
				Ant 0	Ant 1				
11ac-VHT20	MCS0	36	5180	-0.56	0.12	94.47	2.80	≤ 17.00	Pass
11ac-VHT20	MCS0	44	5220	-0.75	-0.18	94.47	2.55	≤ 17.00	Pass
11ac-VHT20	MCS0	48	5240	0.36	0.54	94.47	3.46	≤ 17.00	Pass
11ac-VHT20	MCS0	52	5260	0.08	0.52	94.47	3.31	≤ 11.00	Pass
11ac-VHT20	MCS0	60	5300	-0.20	0.49	94.47	3.17	≤ 11.00	Pass
11ac-VHT20	MCS0	64	5320	0.16	0.53	94.47	3.35	≤ 11.00	Pass
11ac-VHT20	MCS0	100	5500	-0.20	0.64	94.47	3.25	≤ 11.00	Pass
11ac-VHT20	MCS0	116	5580	-0.57	0.59	94.47	3.06	≤ 11.00	Pass
11ac-VHT20	MCS0	140	5700	-0.58	0.37	94.47	2.93	≤ 11.00	Pass
11ac-VHT20	MCS0	144	5720	-0.71	0.33	94.47	2.85	≤ 11.00	Pass
11ac-VHT40	MCS0	38	5190	-4.89	-4.43	90.24	-1.64	≤ 17.00	Pass
11ac-VHT40	MCS0	46	5230	-5.71	-4.97	90.24	-2.31	≤ 17.00	Pass
11ac-VHT40	MCS0	54	5270	-5.68	-5.05	90.24	-2.34	≤ 11.00	Pass
11ac-VHT40	MCS0	62	5310	-5.09	-4.32	90.24	-1.68	≤ 11.00	Pass
11ac-VHT40	MCS0	102	5510	-5.29	-4.11	90.24	-1.65	≤ 11.00	Pass
11ac-VHT40	MCS0	110	5550	-5.47	-4.00	90.24	-1.66	≤ 11.00	Pass
11ac-VHT40	MCS0	134	5670	-5.60	-4.46	90.24	-1.98	≤ 11.00	Pass
11ac-VHT40	MCS0	142	5710	-5.79	-4.38	90.24	-2.01	≤ 11.00	Pass
11ac-VHT80	MCS0	42	5210	-10.44	-9.37	84.75	-6.86	≤ 17.00	Pass
11ac-VHT80	MCS0	58	5290	-10.77	-9.70	84.75	-7.19	≤ 11.00	Pass
11ac-VHT80	MCS0	106	5530	-12.02	-10.39	84.75	-8.12	≤ 11.00	Pass
11ac-VHT80	MCS0	122	5610	-12.02	-10.36	84.75	-8.10	≤ 11.00	Pass
11ac-VHT80	MCS0	138	5690	-11.84	-9.81	84.75	-7.70	≤ 11.00	Pass

Note 1:

When EUT duty cycle > 98%, Final PSD (dBm / MHz) =10*log{$^{10(\text{Ant 0 AVGPSD}/10)}$+$^{10(\text{Ant 1 AVGPSD}/10)}$}.

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

Product	Mobile Computer	Test Engineer	Gordon Qi
Test Site	TR3	Test Date	2020/07/07
Test Item	MIMO Mode - Power Spectral Density (UNII-Band 3)		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	PSD (dBm/ 510kHz)		Duty Cycle (%)	Final PSD(dBm/ 510kHz)	Limit (dBm/ 500kHz)	Result
				Ant 0	Ant 1				
11ac-VHT20	MCS0	149	5745	-2.02	-2.05	94.47	0.97	≤ 29.64	Pass
11ac-VHT20	MCS0	157	5785	-1.86	-1.56	94.47	1.30	≤ 29.64	Pass
11ac-VHT20	MCS0	165	5825	-1.89	-1.57	94.47	1.29	≤ 29.64	Pass
11ac-VHT40	MCS0	151	5755	-7.79	-7.70	90.24	-4.74	≤ 29.64	Pass
11ac-VHT40	MCS0	159	5795	-7.20	-6.95	90.24	-4.06	≤ 29.64	Pass
11ac-VHT80	MCS0	155	5775	-13.74	-13.02	84.75	-10.35	≤ 29.64	Pass

Note 1:

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

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

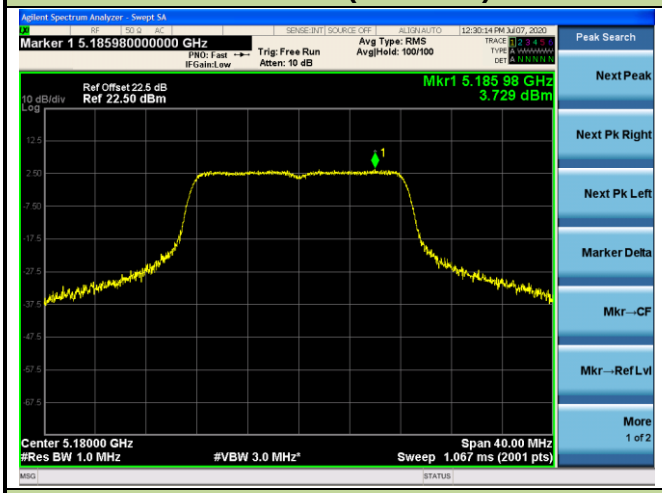
+10*log(1/Duty cycle).

Note 2: PSD Limit Calculation as below:

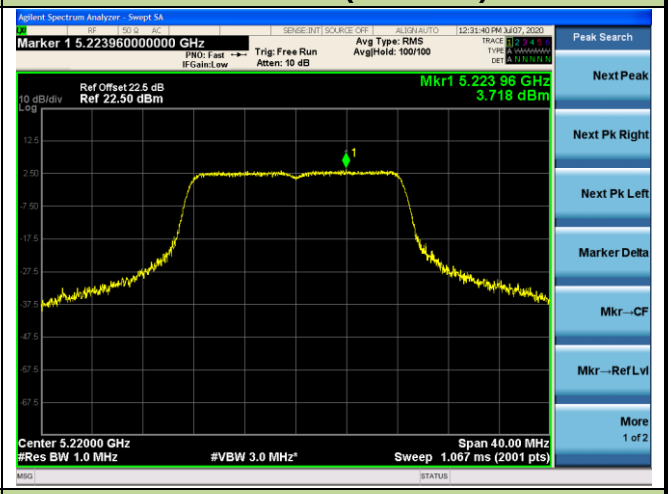
For 5725-5850MHz: PSD Limit = 30– (6.36 - 6) = 29.64dBm/MHz;

SISO Mode - 802.11aPower Spectral Density

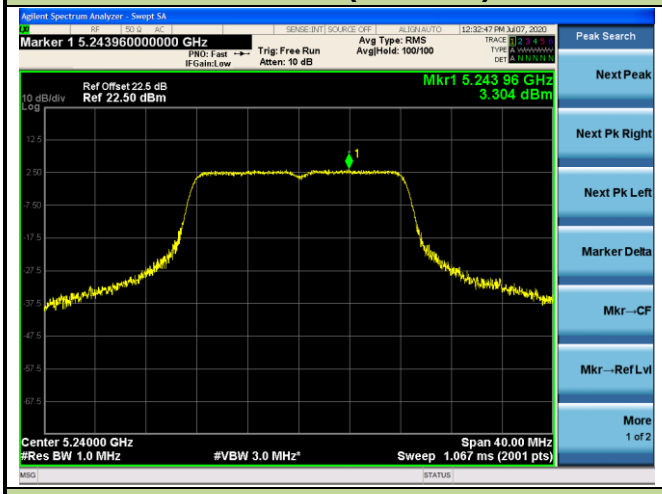
Channel 36 (5180MHz)



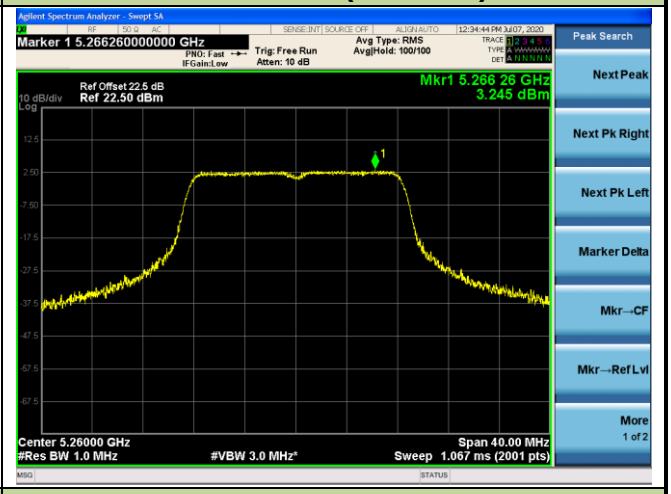
Channel 44 (5220MHz)



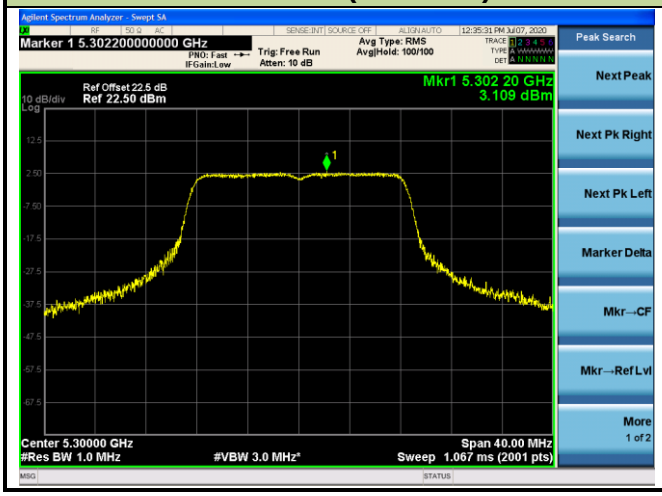
Channel 48 (5240MHz)



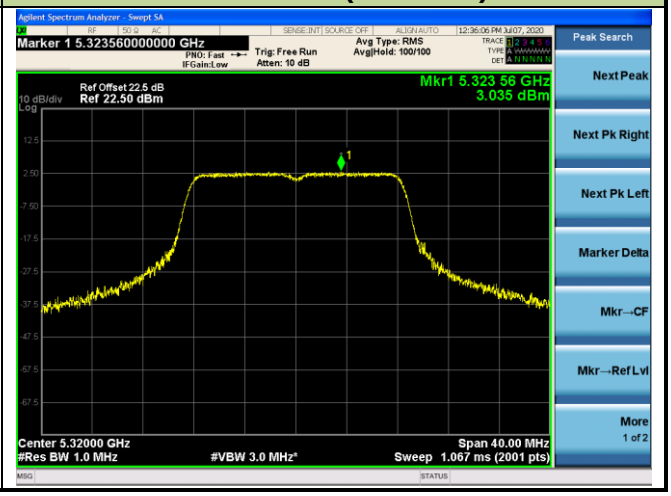
Channel 52 (5260MHz)



Channel 60 (5300MHz)

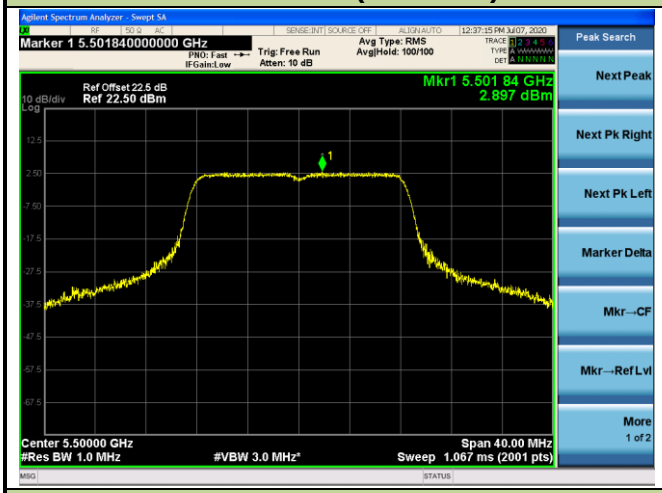


Channel 64 (5320MHz)

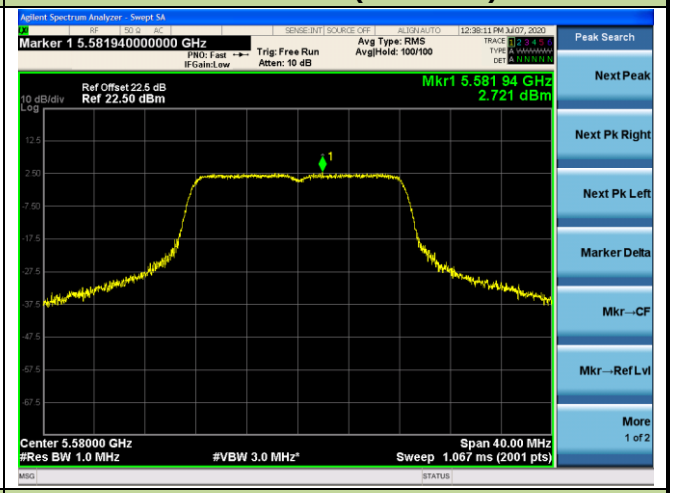


SISO Mode -802.11aPower Spectral Density

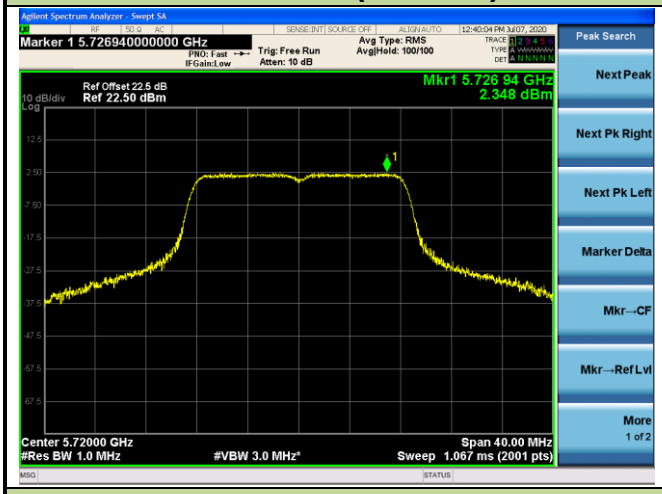
Channel 100 (5500MHz)



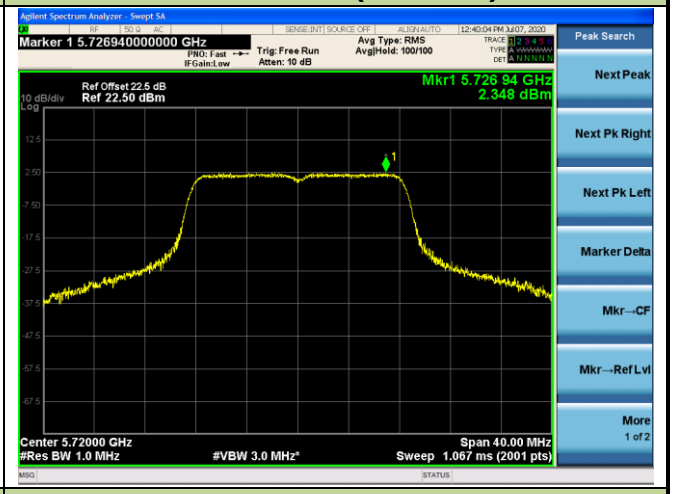
Channel 116 (5580MHz)



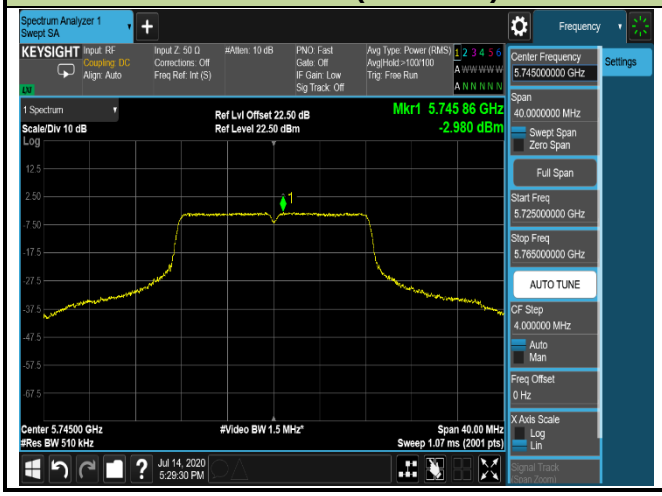
Channel 140 (5700MHz)



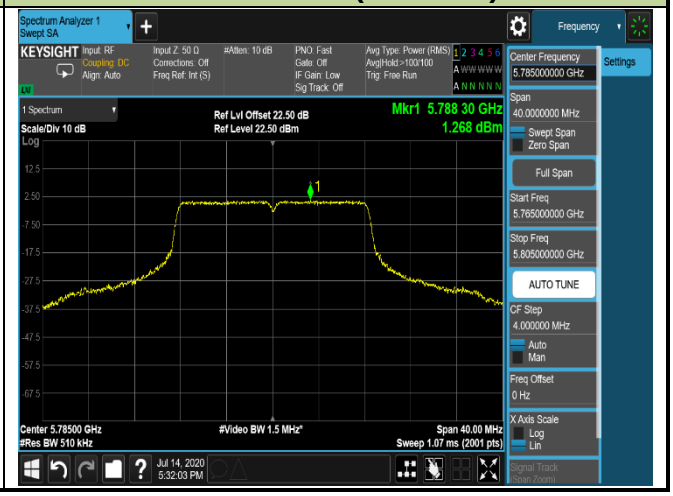
Channel 144 (5720MHz)

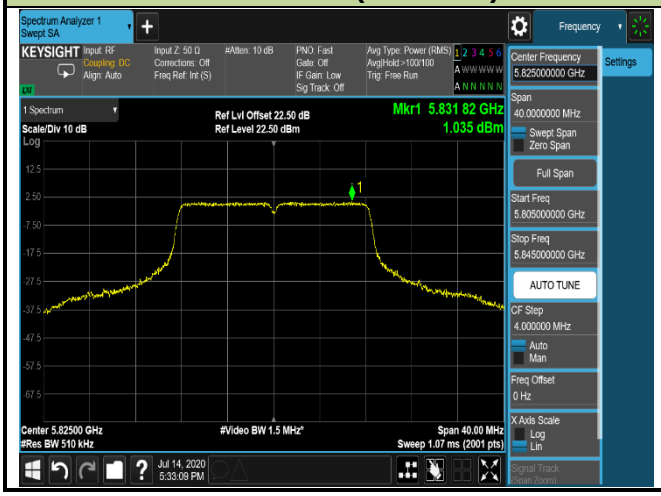


Channel 149 (5745MHz)



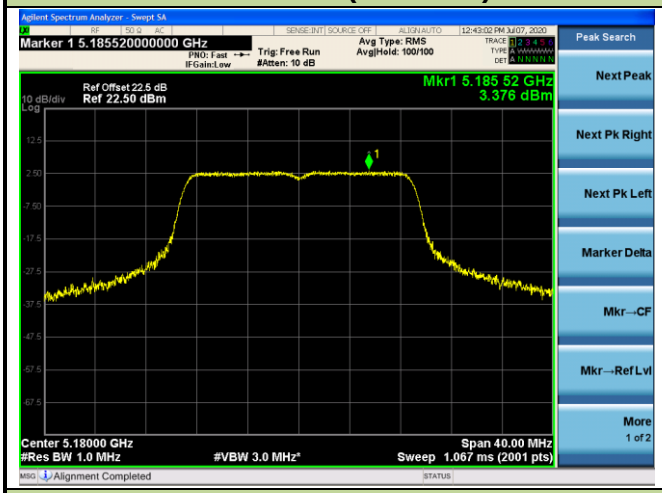
Channel 157 (5785MHz)



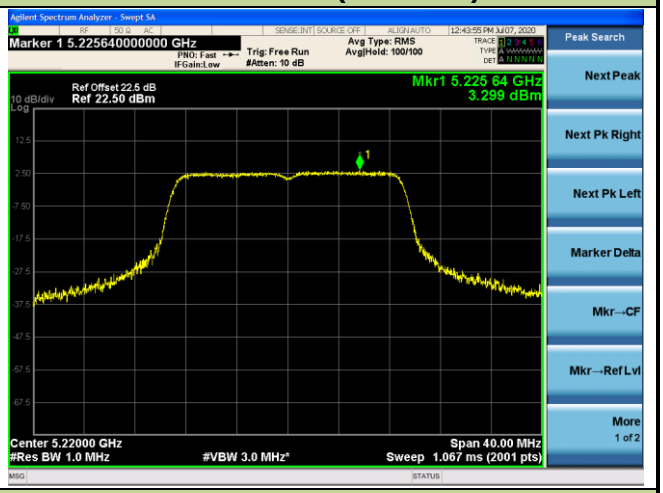
SISO Mode -802.11a Power Spectral Density	
Channel 165 (5825MHz)	
	

SISO Mode -802.11ac-VHT20Power Spectral Density

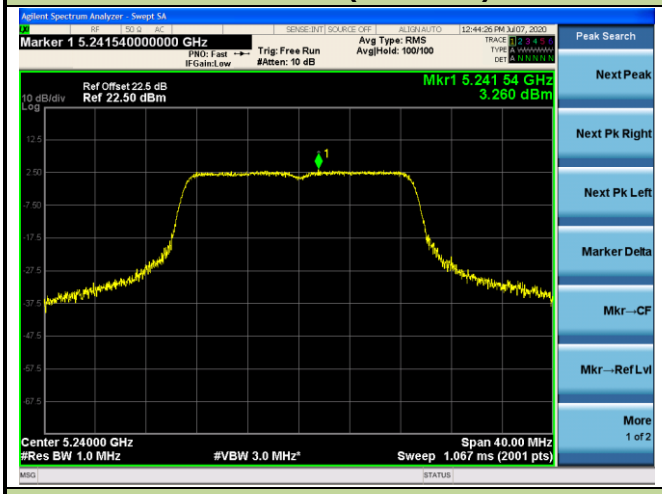
Channel 36 (5180MHz)



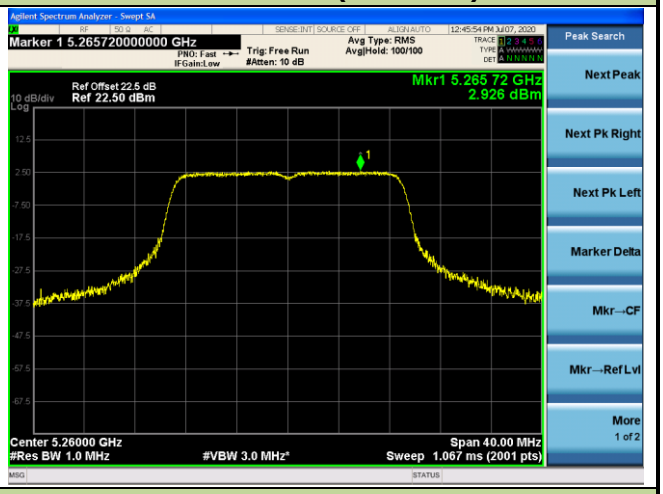
Channel 44 (5220MHz)



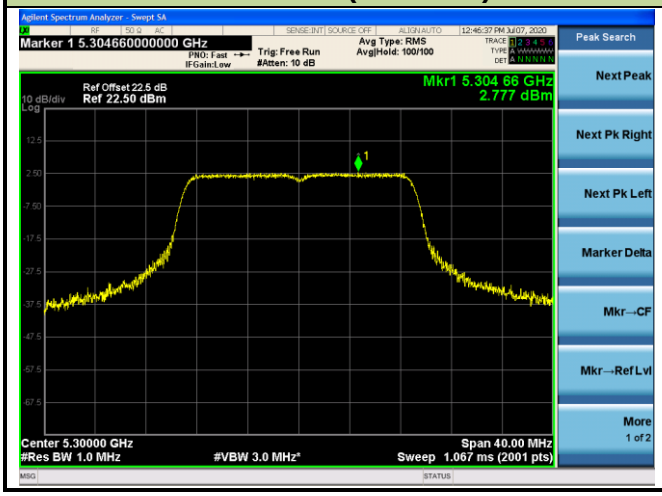
Channel 48 (5240MHz)



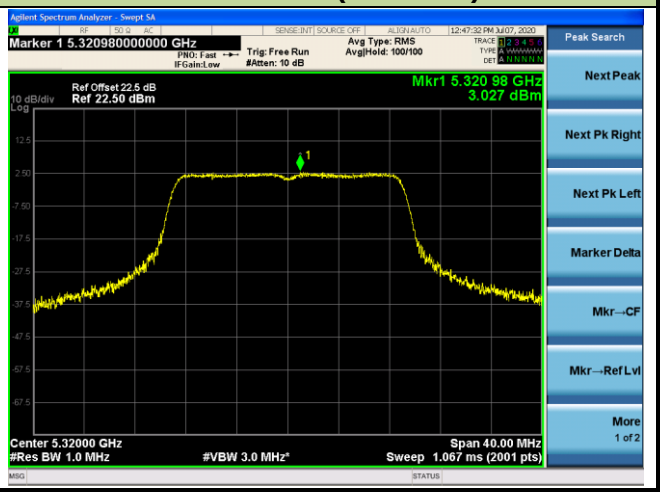
Channel 52 (5260MHz)



Channel 60 (5300MHz)

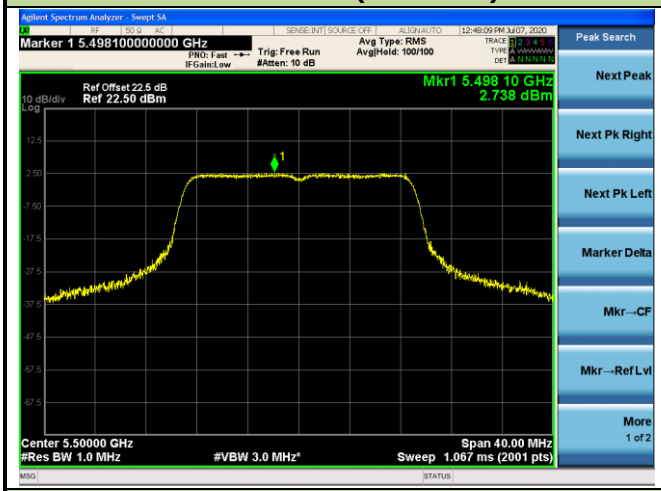


Channel 64 (5320MHz)

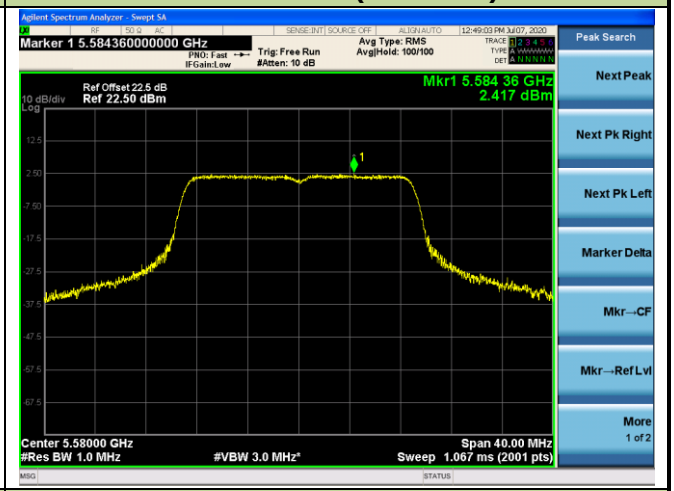


SISO Mode -802.11ac-VHT20Power Spectral Density

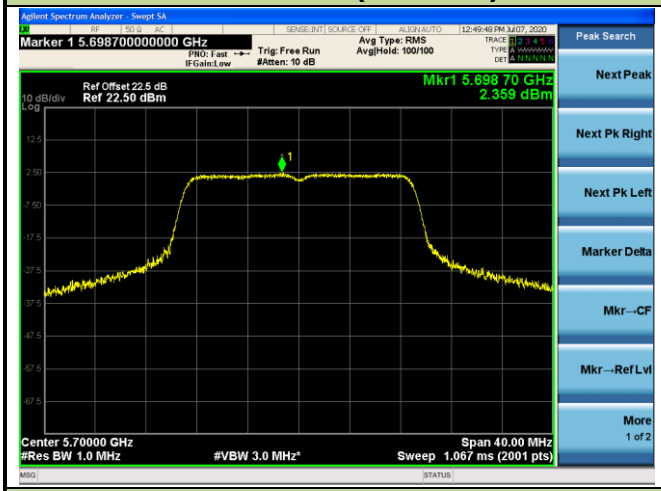
Channel 100 (5500MHz)



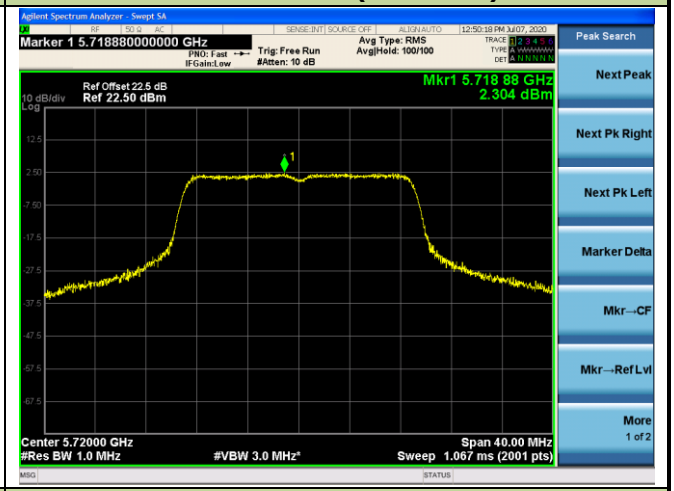
Channel 116 (5580MHz)



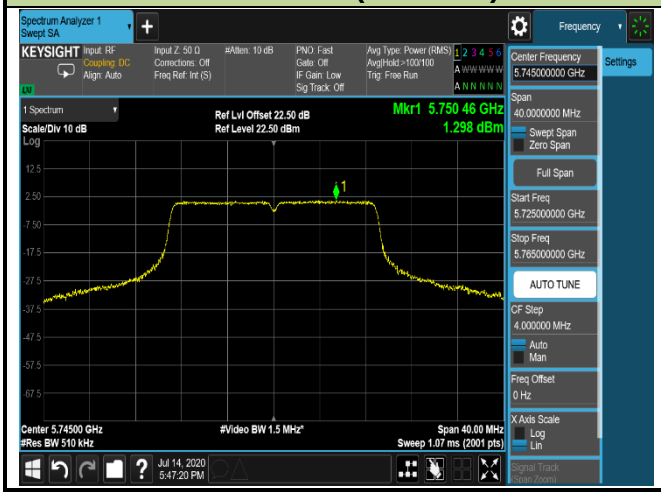
Channel 140 (5700MHz)



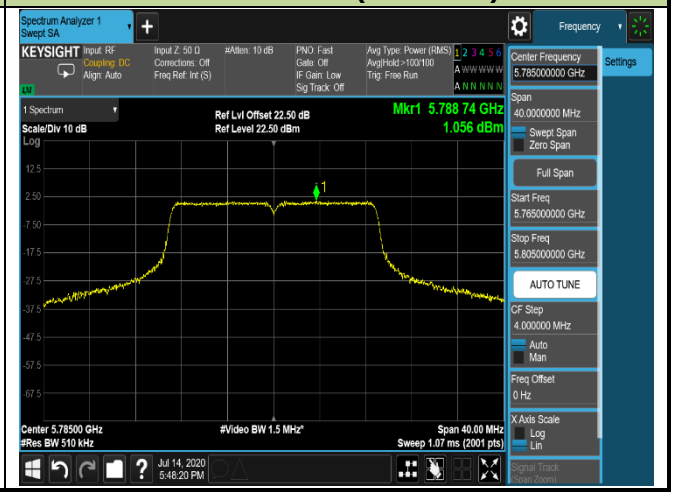
Channel 144 (5720MHz)

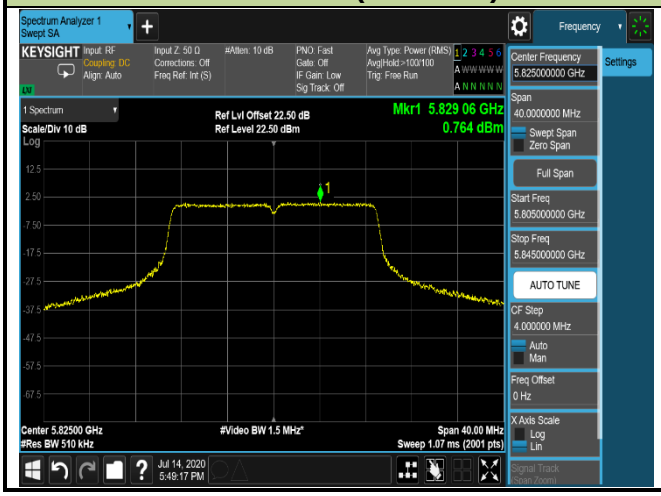


Channel 149 (5745MHz)



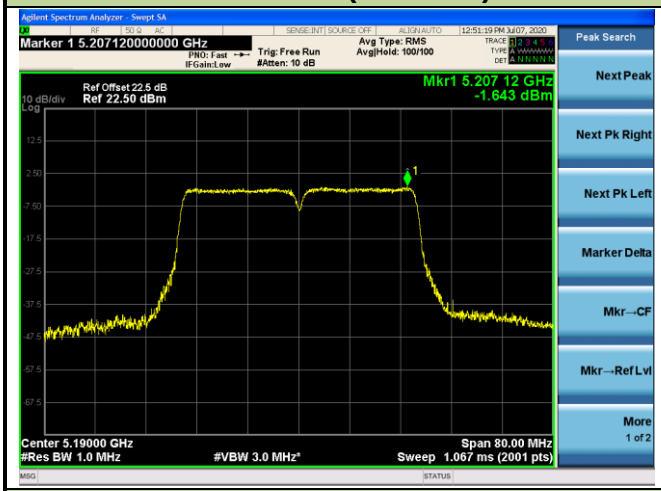
Channel 157 (5785MHz)



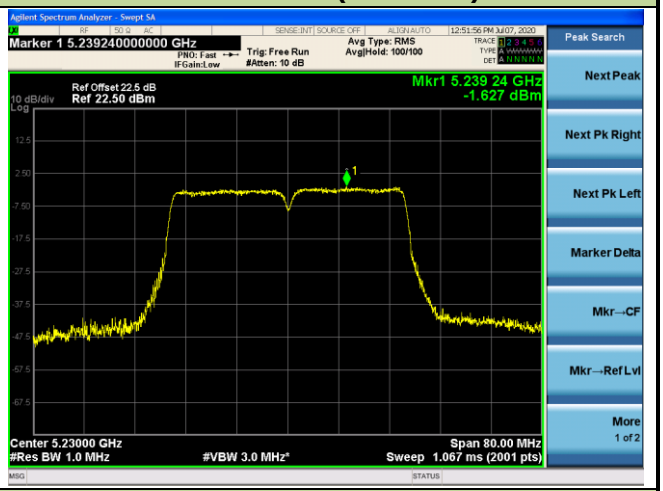
SISO Mode -802.11ac-VHT20Power Spectral Density	
Channel 165 (5825MHz)	
	

SISO Mode -802.11ac-VHT40Power Spectral Density

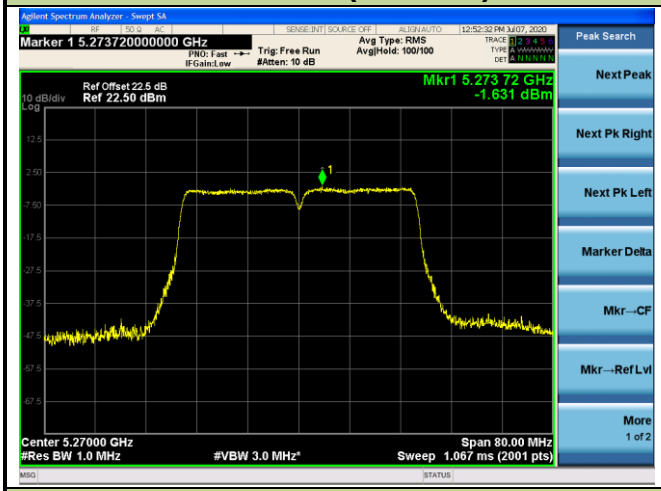
Channel 38 (5190MHz)



Channel 46 (5230MHz)

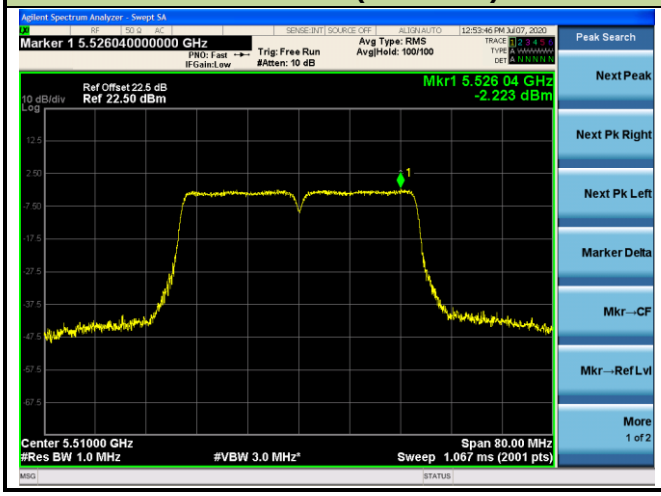


Channel 54 (5270MHz)



Channel 62 (5310MHz)

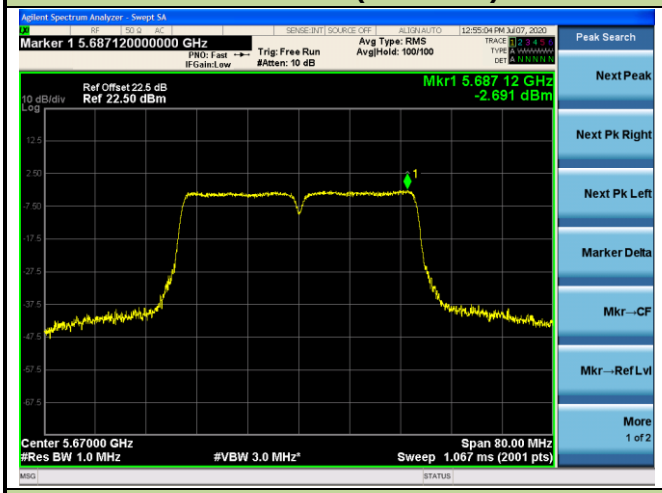
Channel 102 (5510MHz)



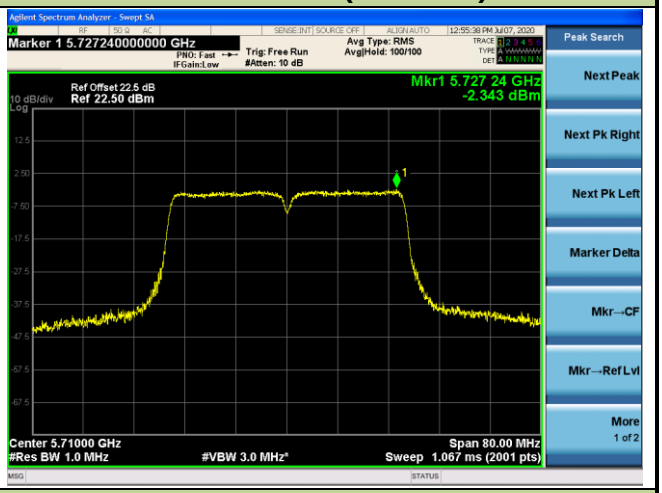
Channel 110 (5550MHz)

SISO Mode -802.11ac-VHT40Power Spectral Density

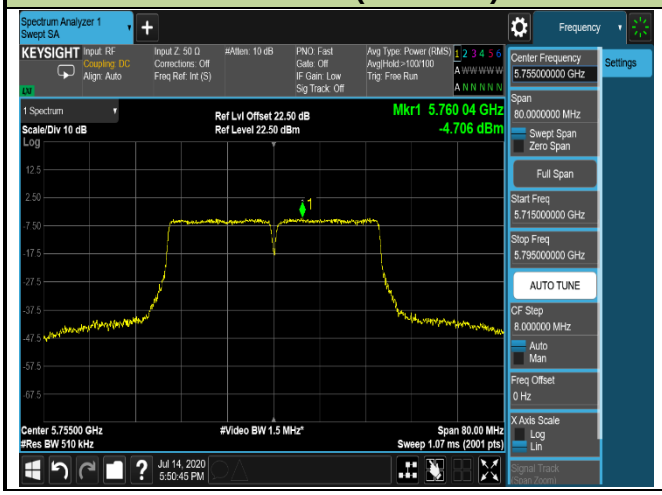
Channel 134 (5670MHz)



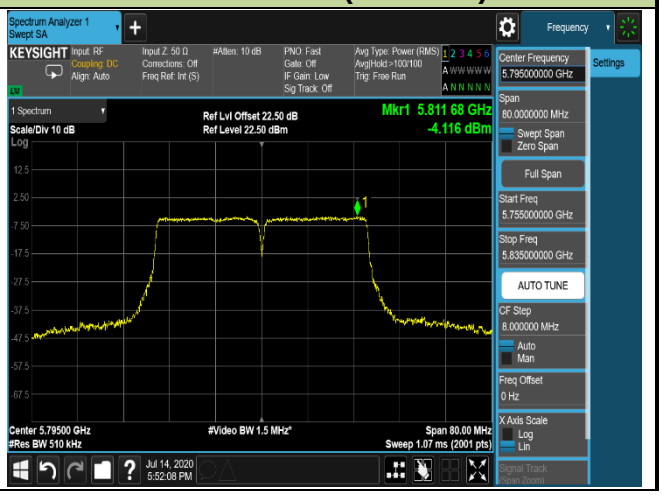
Channel 142 (5710MHz)



Channel 151 (5755MHz)

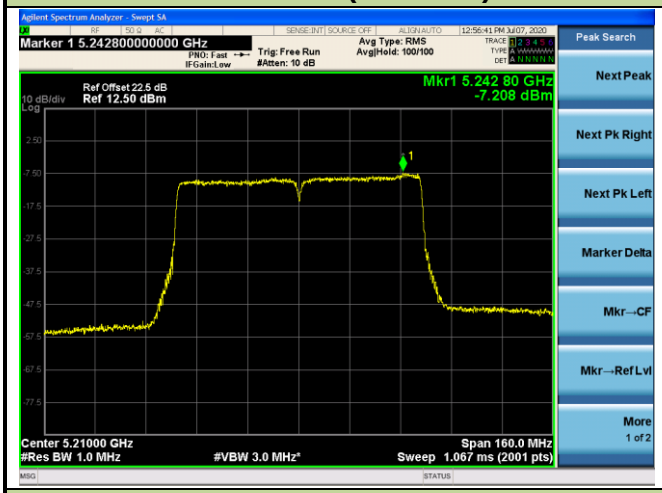


Channel 159 (5795MHz)

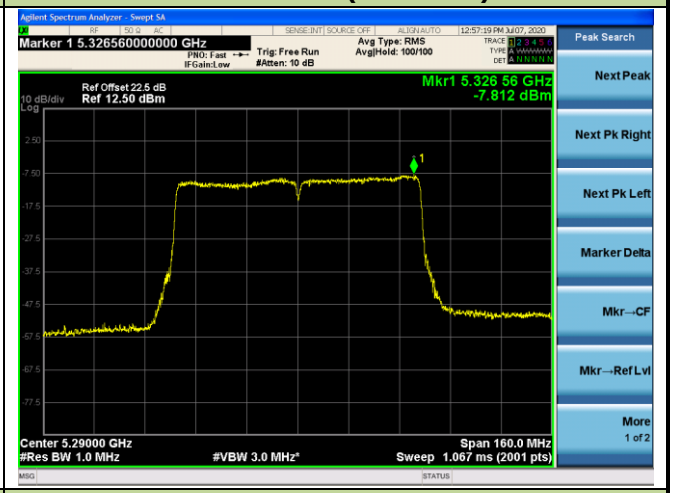


SISO Mode -802.11ac-VHT80 Power Spectral Density

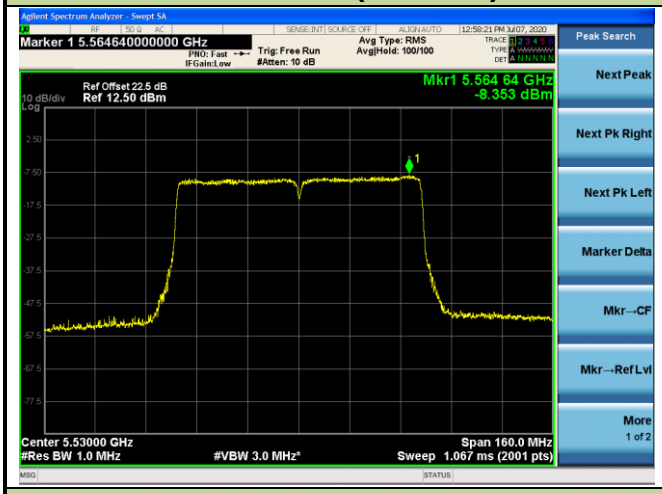
Channel 42 (5210MHz)



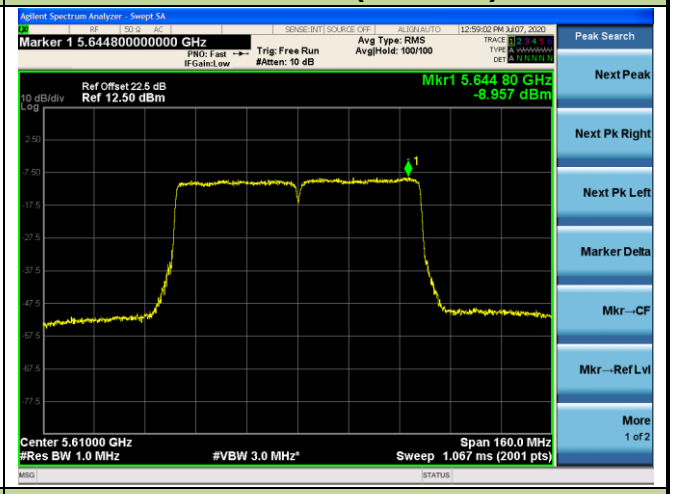
Channel 58 (5290MHz)



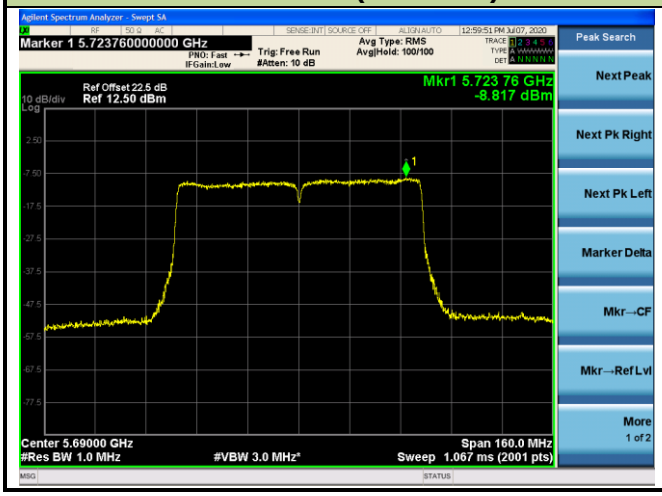
Channel 106 (5530MHz)



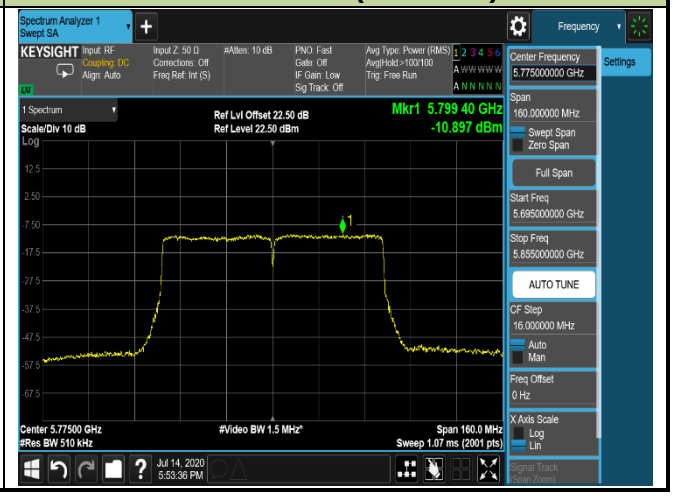
Channel 122 (5610MHz)



Channel 138 (5690MHz)

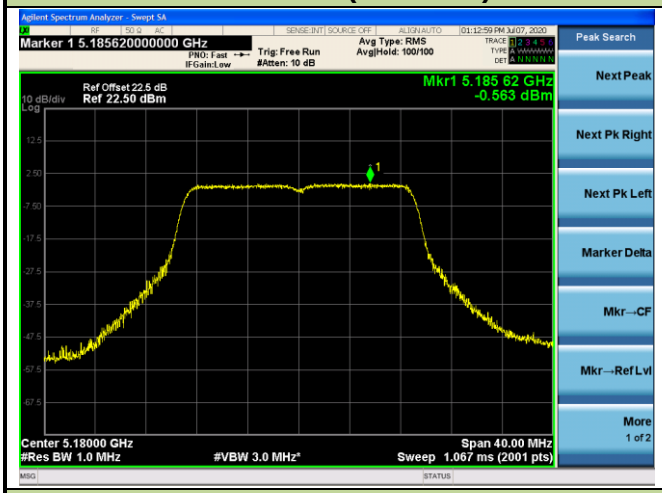


Channel 155 (5775MHz)

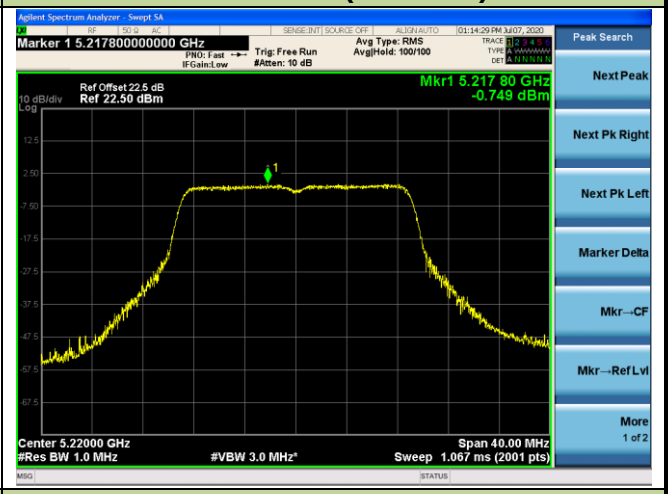


MIMO Mode Ant 0 -802.11ac-VHT20 Power Spectral Density

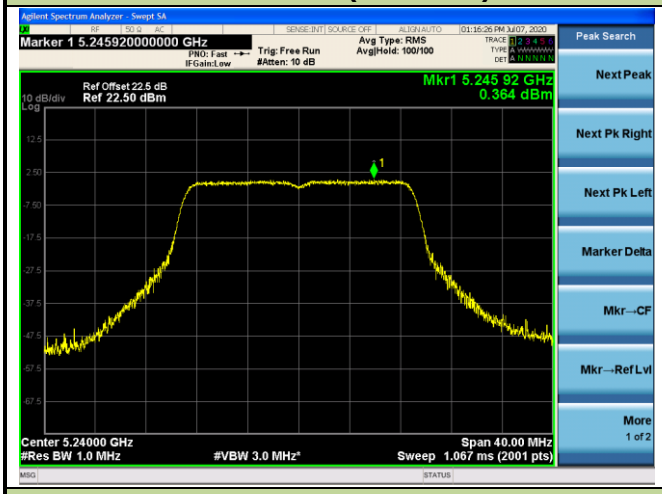
Channel 36 (5180MHz)



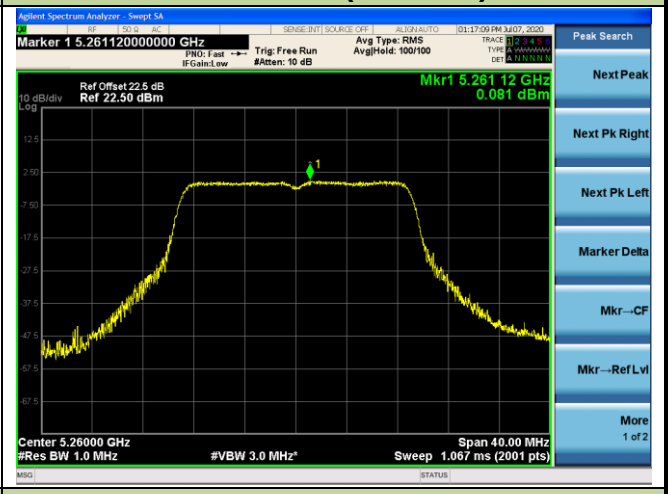
Channel 44 (5220MHz)



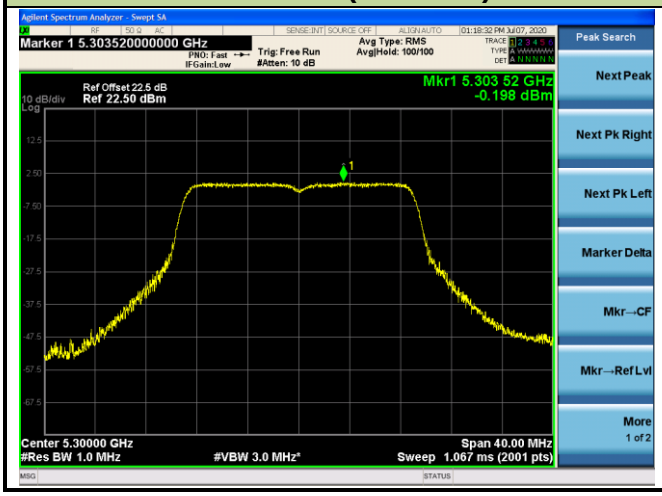
Channel 48 (5240MHz)



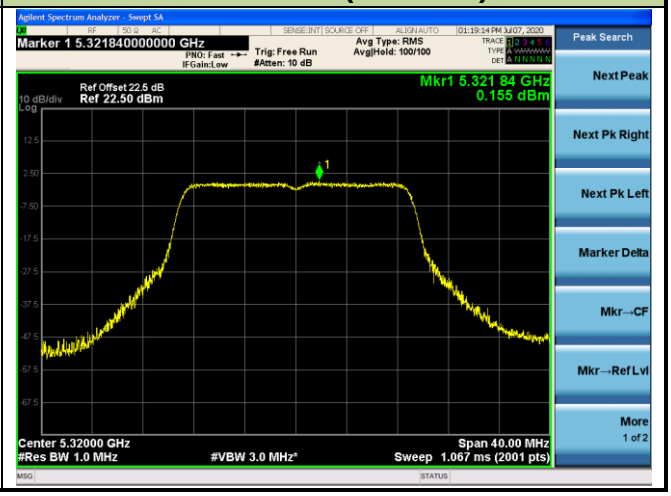
Channel 52 (5260MHz)



Channel 60 (5300MHz)

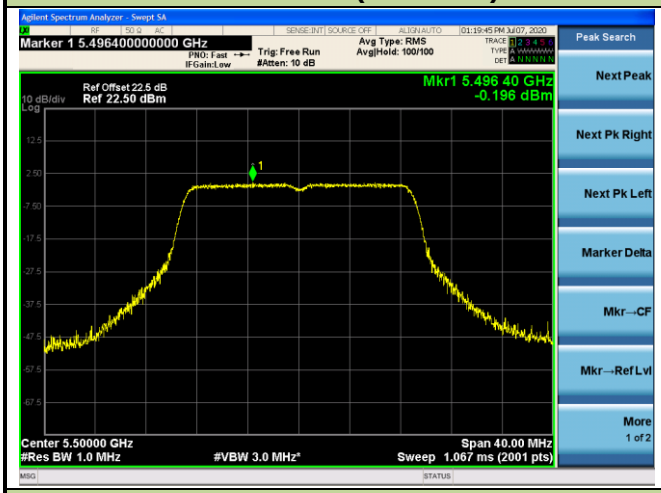


Channel 64 (5320MHz)

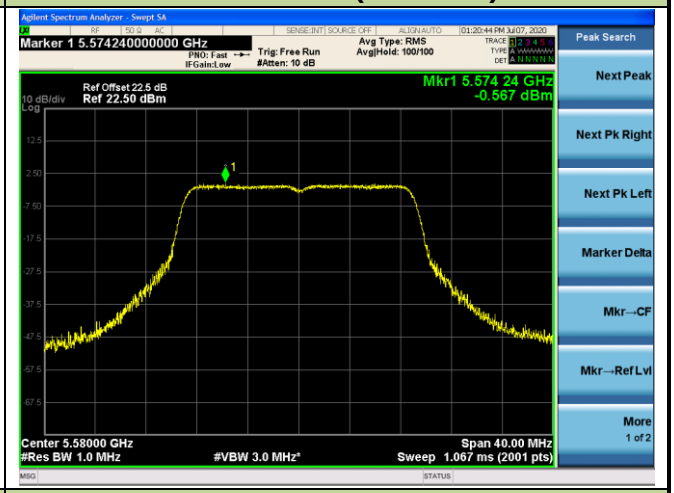


MIMO Mode Ant 0 -802.11ac-VHT20 Power Spectral Density

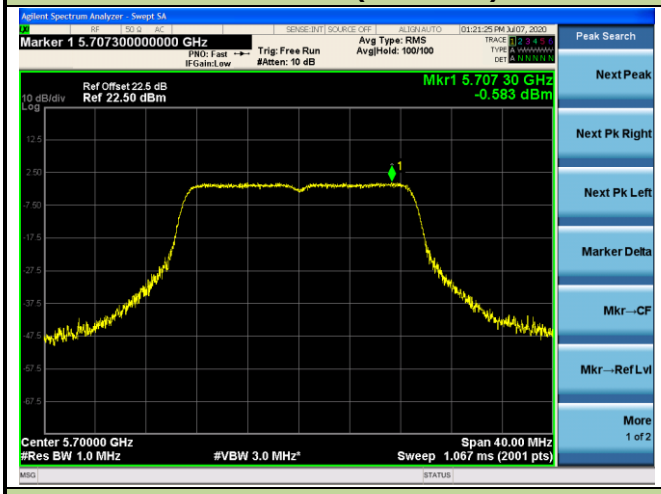
Channel 100 (5500MHz)



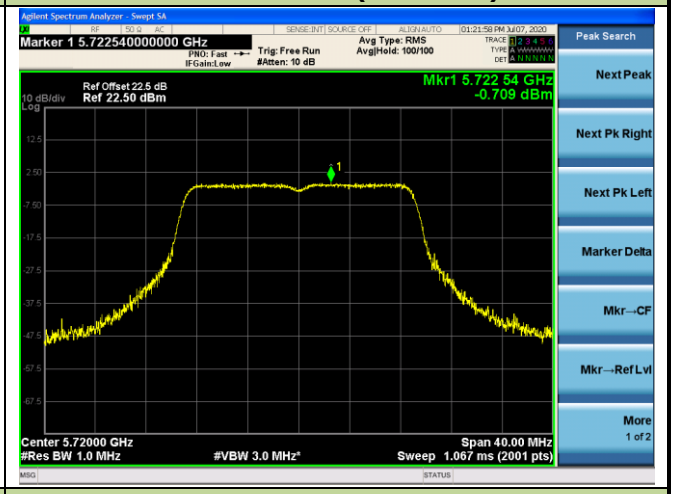
Channel 116 (5580MHz)



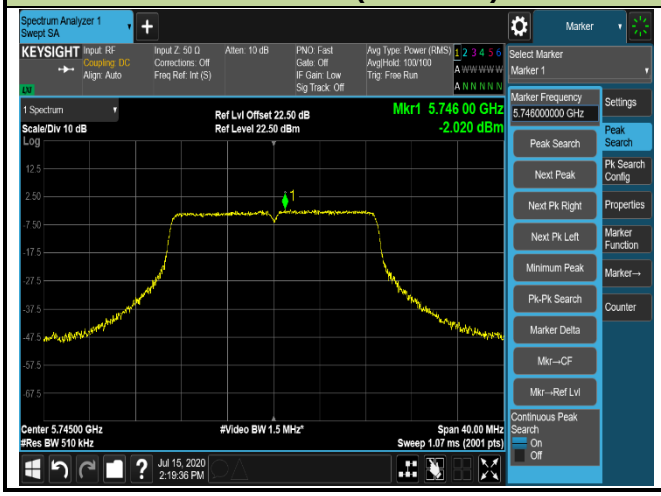
Channel 140 (5700MHz)



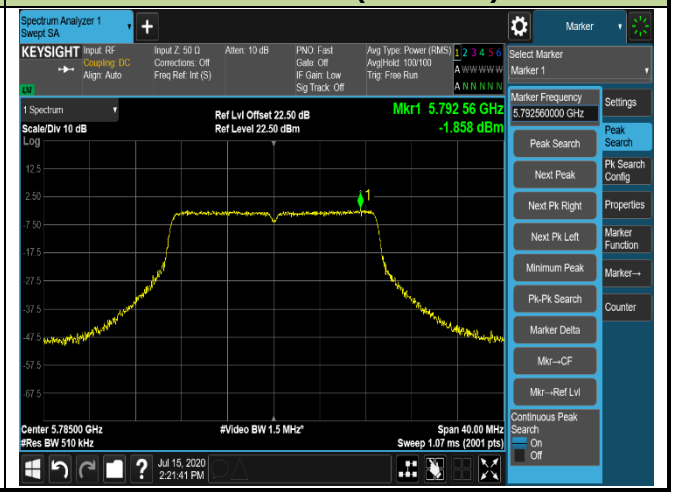
Channel 144 (5720MHz)

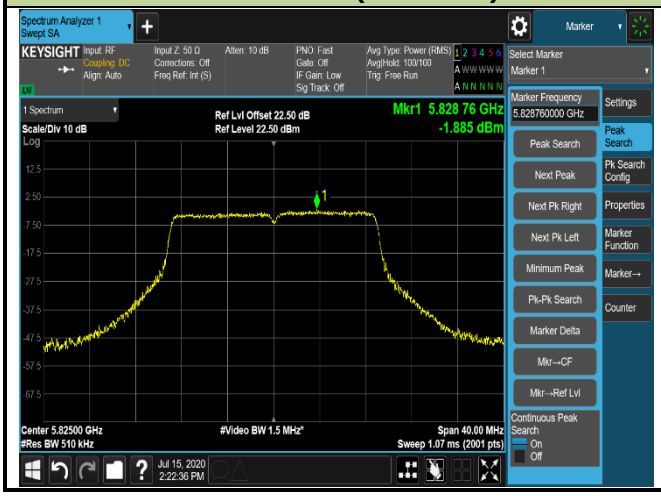


Channel 149 (5745MHz)



Channel 157 (5785MHz)

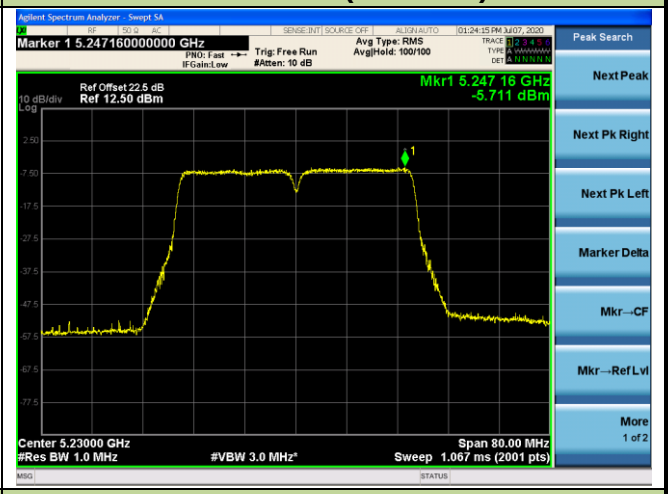


MIMO Mode Ant 0 -802.11ac-VHT20 Power Spectral Density	
Channel 165 (5825MHz)	
	

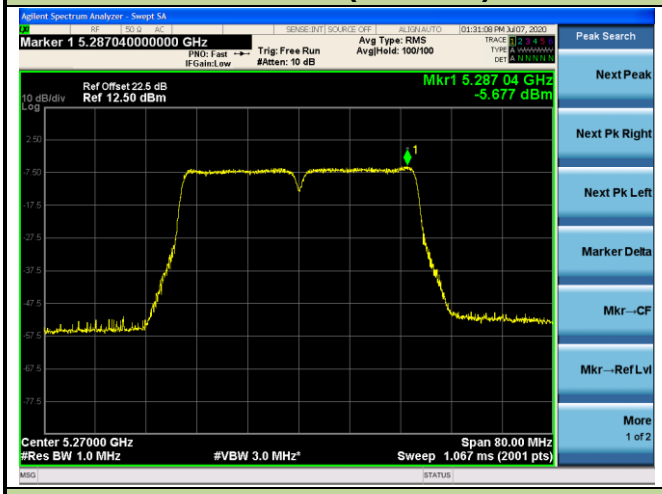
MIMO Mode Ant 0 -802.11ac-VHT40 Power Spectral Density

Channel 38 (5190MHz)

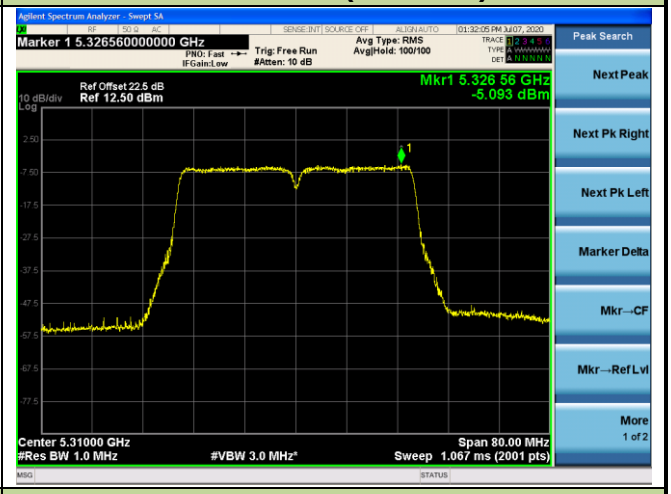
Channel 46 (5230MHz)



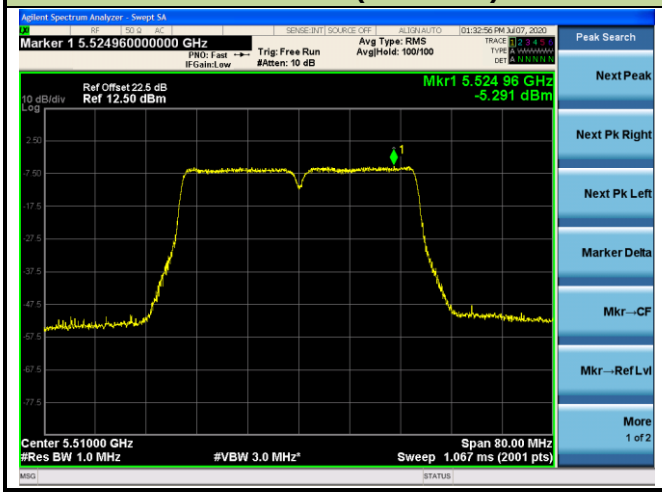
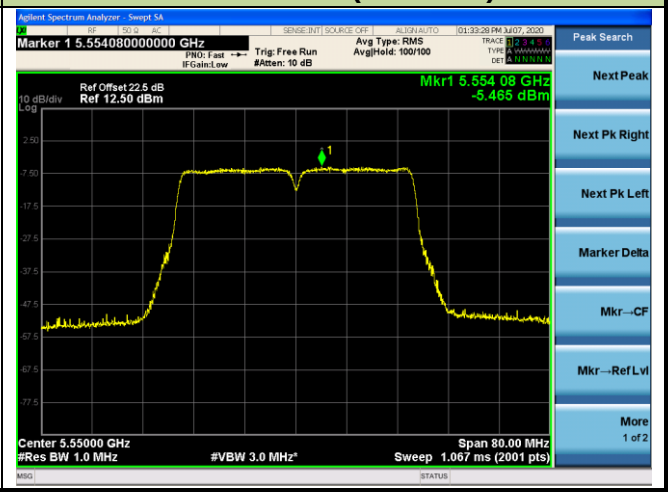
Channel 54 (5270MHz)



Channel 62 (5310MHz)



Channel 102 (5510MHz)



Channel 110 (5550MHz)