

ANNEX F TEST DATA

For

Project No.:	8331EU011016W
Client:	Autel Intelligent Technology Corp., Ltd.
Product Name:	ADVANCED AUTOMOTIVE DIAGNOSTICS ANALYZER
Model No.:	D1 ProS2
FCC ID:	WQ8-DV2531
Technology:	WiFi 5G
Test Engineer:	<i>Mikoy zhu</i>
Test Date:	2025-06-27

Test Summary

Item	Result
Duty Cycle	Pass
Bandwidth	Pass
Maximum Conducted Output Power	Pass
Maximum Power Spectral Density	Pass
Unwanted Emissions In Non-restricted Frequency Bands	Pass
Frequency Stability	Pass

1. Duty Cycle

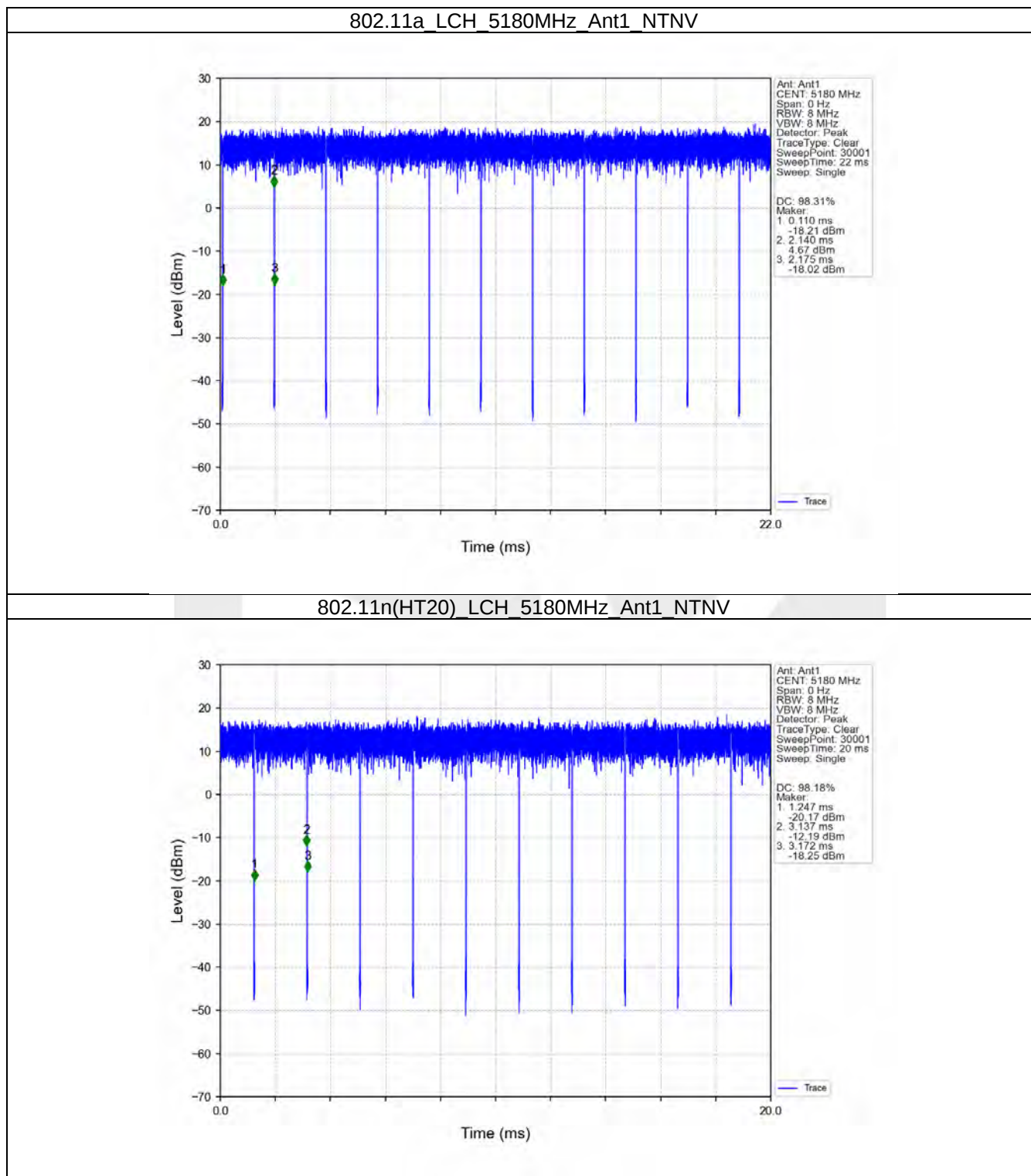
1.1 Test Result

1.1.1 Ant1

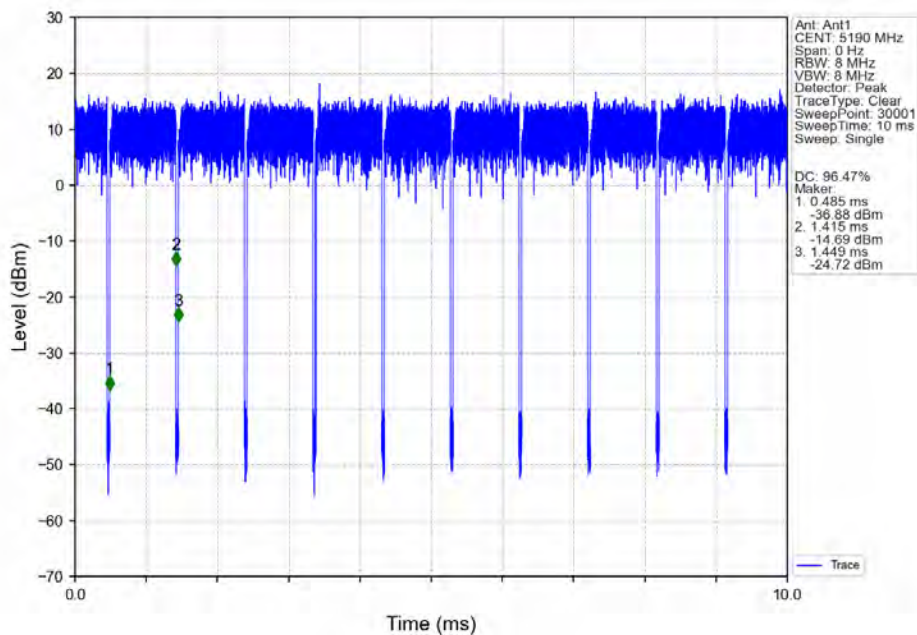
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	2.030	2.065	98.31	0.07	0.03
802.11n (HT20)	SISO	5180	1.890	1.925	98.18	0.08	0.03
802.11n (HT40)	SISO	5190	0.930	0.964	96.47	0.16	0.03
802.11ac (VHT20)	SISO	5180	1.901	1.936	98.19	0.08	0.03
802.11ac (VHT40)	SISO	5190	0.937	0.972	96.40	0.16	0.07
802.11ac (VHT80)	SISO	5210	0.456	0.492	92.68	0.33	0.03

1.2 Test Graph

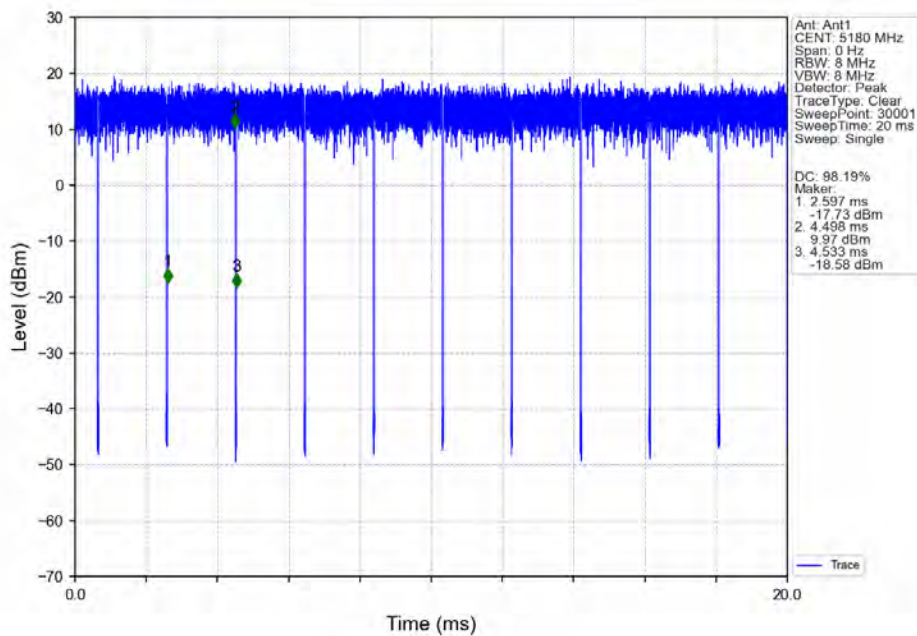
1.2.1 Ant1



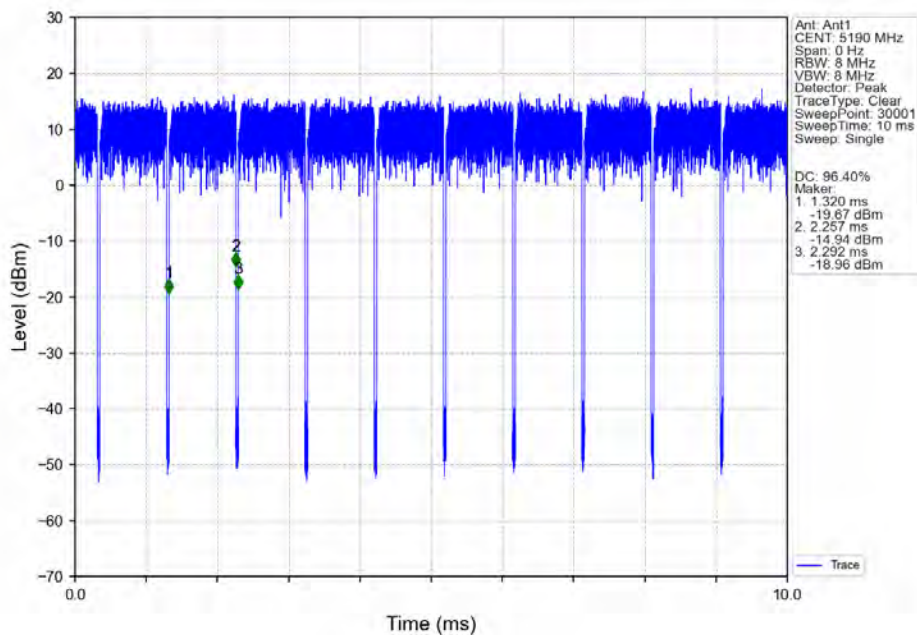
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



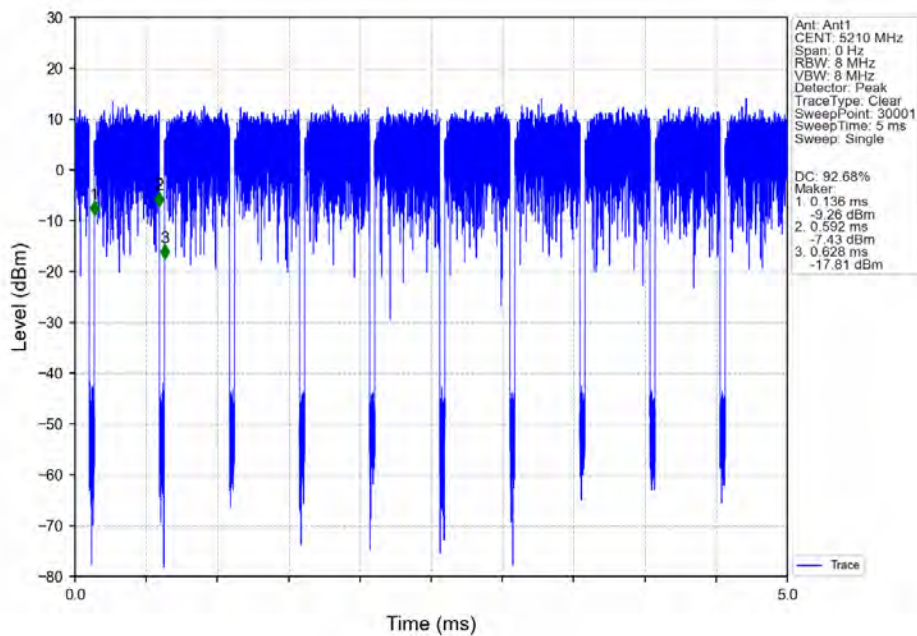
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



2. Bandwidth

2.1 Test Result

2.1.1 OBW

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	17.247	/	Pass
		5200	1	17.255	/	Pass
		5240	1	17.239	/	Pass
		5745	1	17.108	/	Pass
		5785	1	17.199	/	Pass
		5825	1	17.187	/	Pass
802.11n (HT20)	SISO	5180	1	18.283	/	Pass
		5200	1	18.339	/	Pass
		5240	1	18.358	/	Pass
		5745	1	18.270	/	Pass
		5785	1	18.367	/	Pass
		5825	1	18.286	/	Pass
802.11n (HT40)	SISO	5190	1	36.599	/	Pass
		5230	1	36.572	/	Pass
		5755	1	36.592	/	Pass
		5795	1	36.546	/	Pass
802.11ac (VHT20)	SISO	5180	1	18.309	/	Pass
		5200	1	18.390	/	Pass
		5240	1	18.356	/	Pass
		5745	1	18.291	/	Pass
		5785	1	18.291	/	Pass
		5825	1	18.356	/	Pass
802.11ac (VHT40)	SISO	5190	1	36.491	/	Pass
		5230	1	36.587	/	Pass
		5755	1	36.590	/	Pass
		5795	1	36.550	/	Pass
802.11ac (VHT80)	SISO	5210	1	76.663	/	Pass
		5775	1	76.386	/	Pass

2.1.2 26dB BW

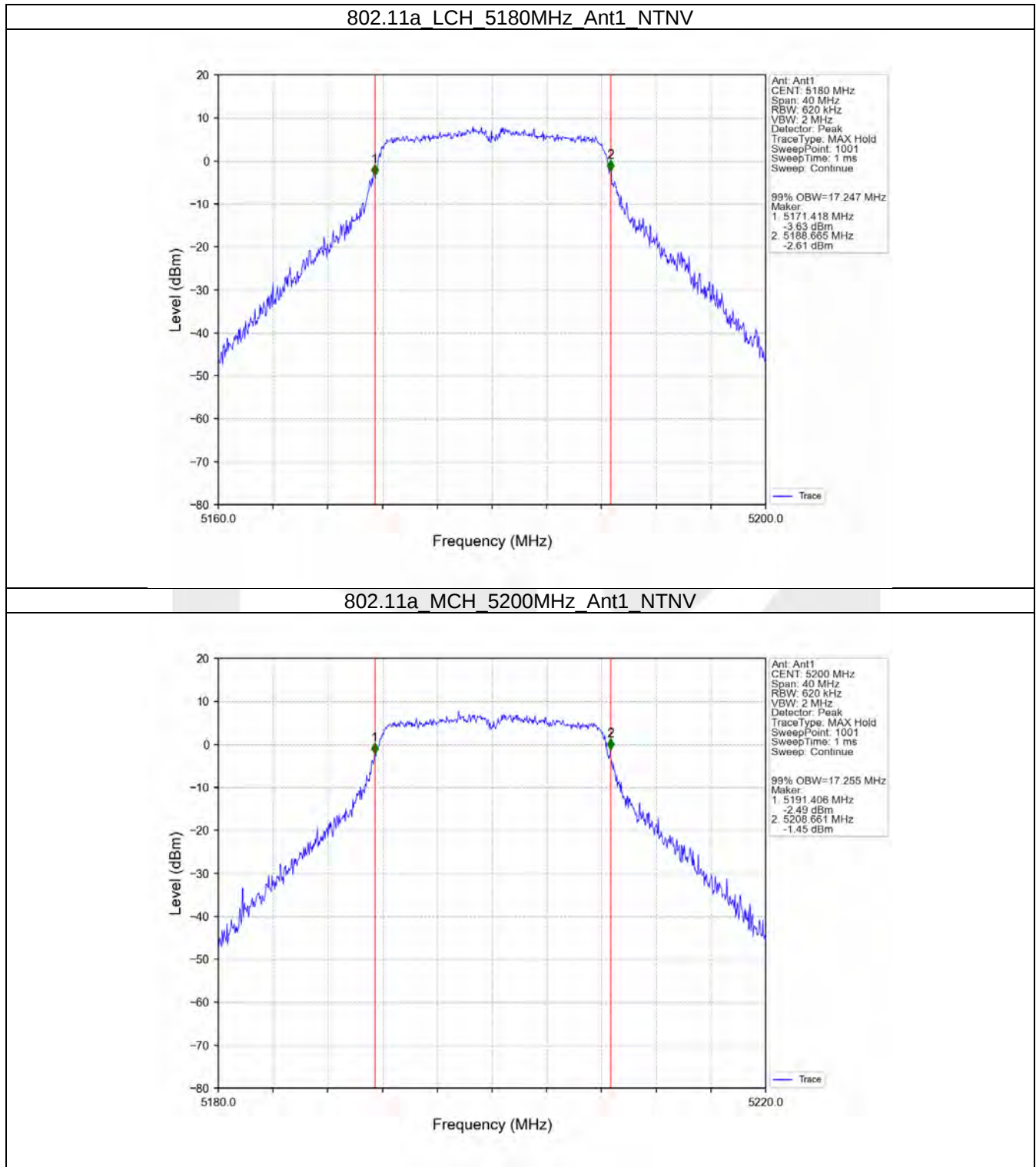
Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	21.653	/	Pass
		5200	1	21.562	/	Pass
		5240	1	21.621	/	Pass
802.11n (HT20)	SISO	5180	1	22.000	/	Pass
		5200	1	21.915	/	Pass
		5240	1	21.579	/	Pass
802.11n (HT40)	SISO	5190	1	43.677	/	Pass
		5230	1	43.365	/	Pass
802.11ac (VHT20)	SISO	5180	1	22.054	/	Pass
		5200	1	22.042	/	Pass
		5240	1	21.825	/	Pass
802.11ac (VHT40)	SISO	5190	1	40.408	/	Pass
		5230	1	40.167	/	Pass
802.11ac (VHT80)	SISO	5210	1	81.522	/	Pass

2.1.3 6dB BW

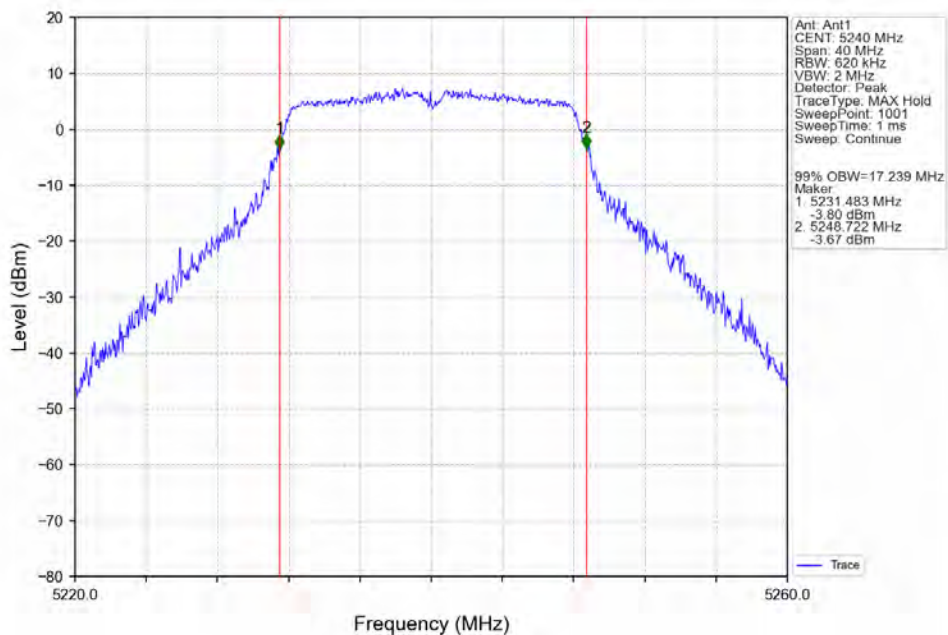
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	15.893	≥ 0.5	Pass
		5785	1	16.309	≥ 0.5	Pass
		5825	1	14.217	≥ 0.5	Pass
802.11n (HT20)	SISO	5745	1	16.787	≥ 0.5	Pass
		5785	1	17.248	≥ 0.5	Pass
		5825	1	16.325	≥ 0.5	Pass
802.11n (HT40)	SISO	5755	1	35.678	≥ 0.5	Pass
		5795	1	36.024	≥ 0.5	Pass
802.11ac (VHT20)	SISO	5745	1	16.981	≥ 0.5	Pass
		5785	1	17.581	≥ 0.5	Pass
		5825	1	17.317	≥ 0.5	Pass
802.11ac (VHT40)	SISO	5755	1	35.822	≥ 0.5	Pass
		5795	1	35.687	≥ 0.5	Pass
802.11ac (VHT80)	SISO	5775	1	75.165	≥ 0.5	Pass

2.2 Test Graph

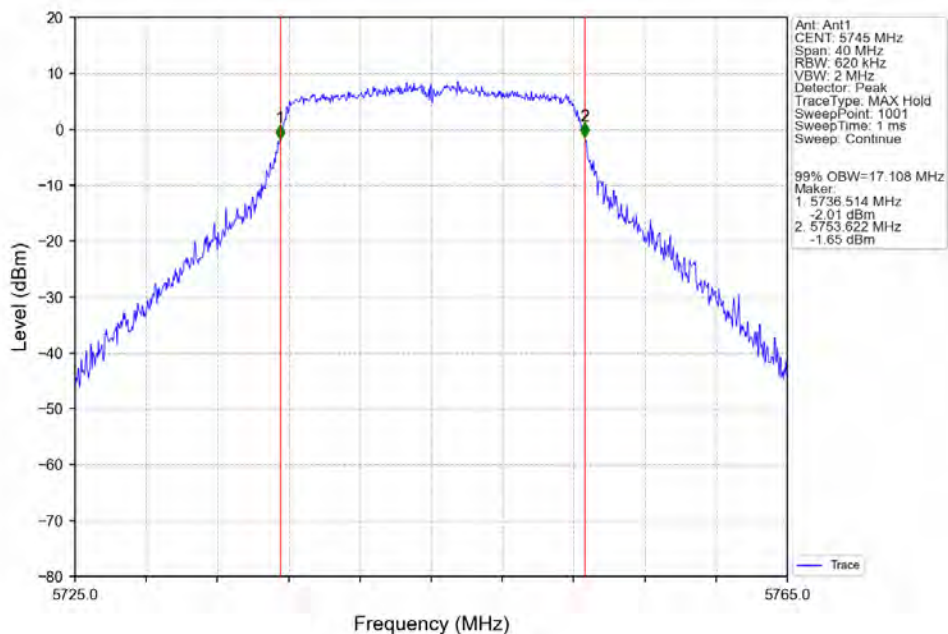
2.2.1 OBW

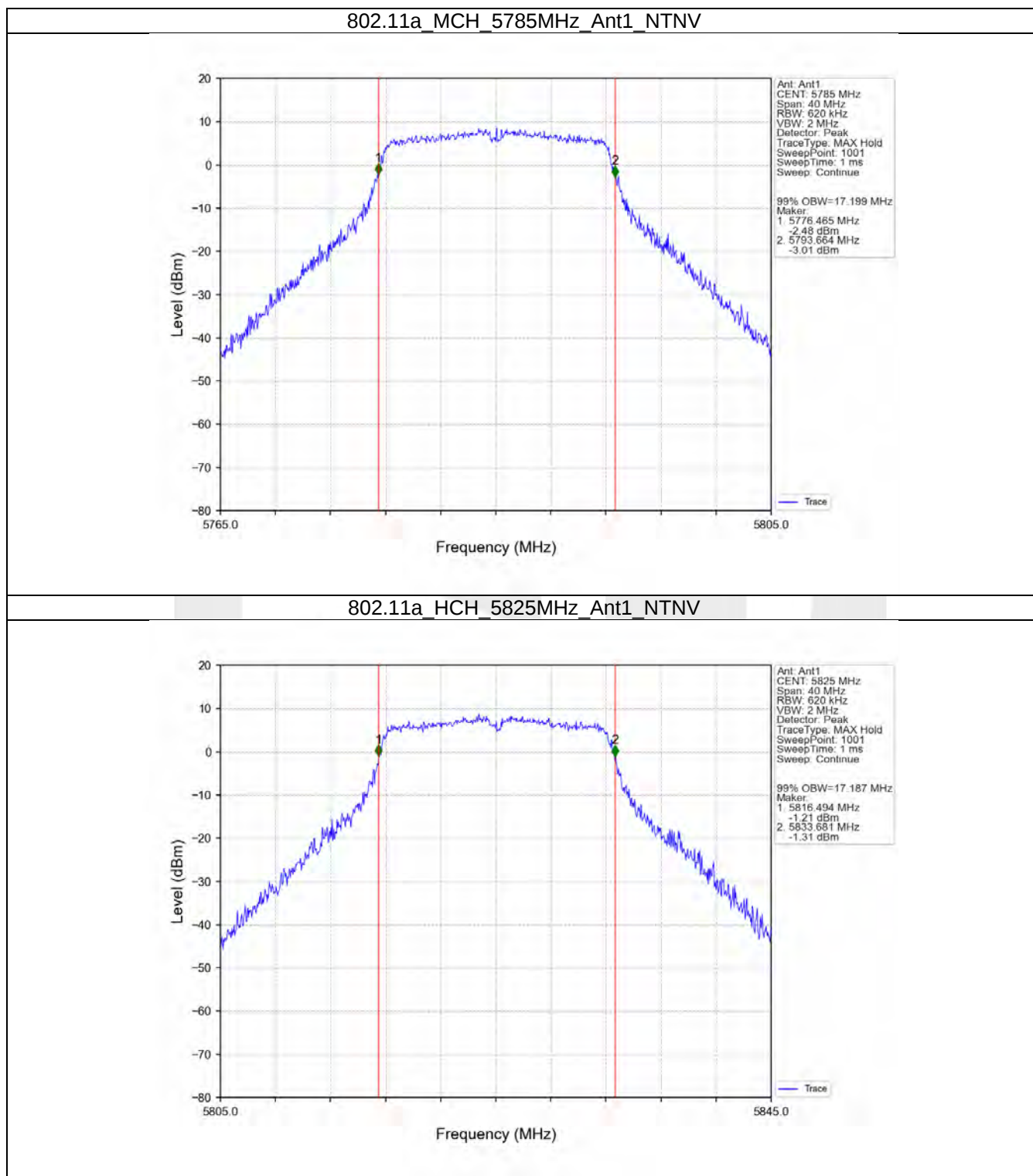


802.11a_HCH_5240MHz_Ant1_NTNV

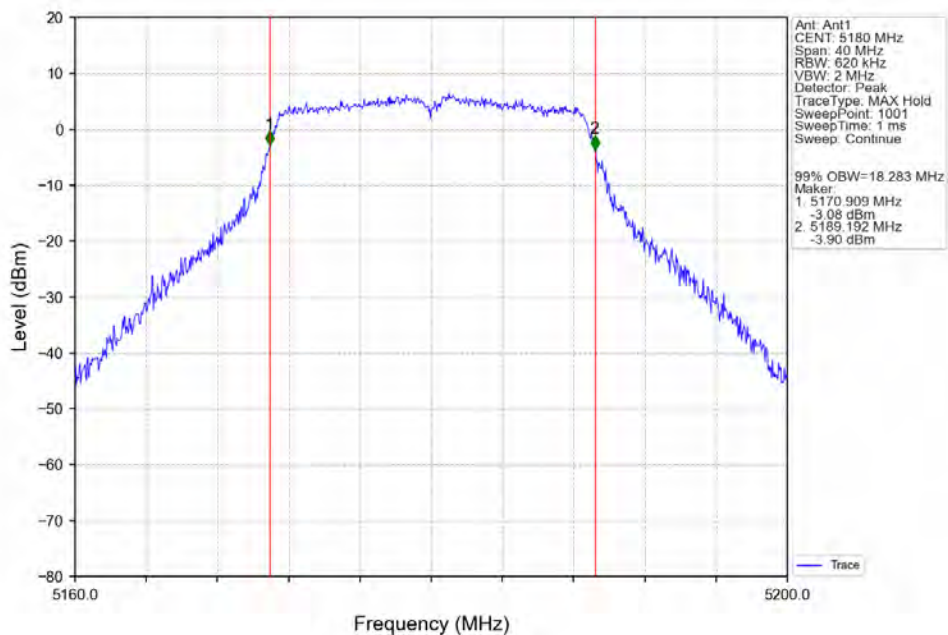


802.11a_LCH_5745MHz_Ant1_NTNV

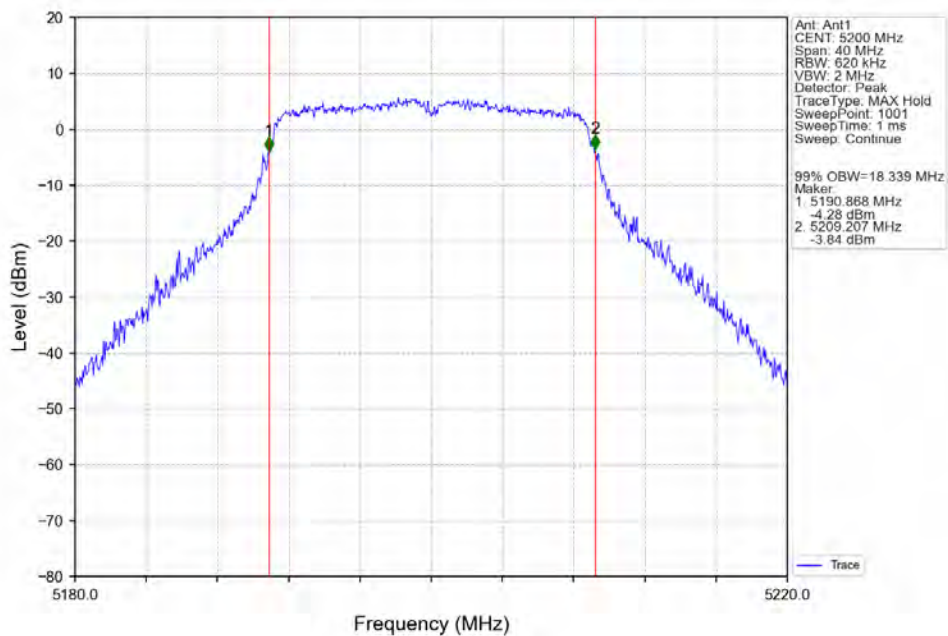




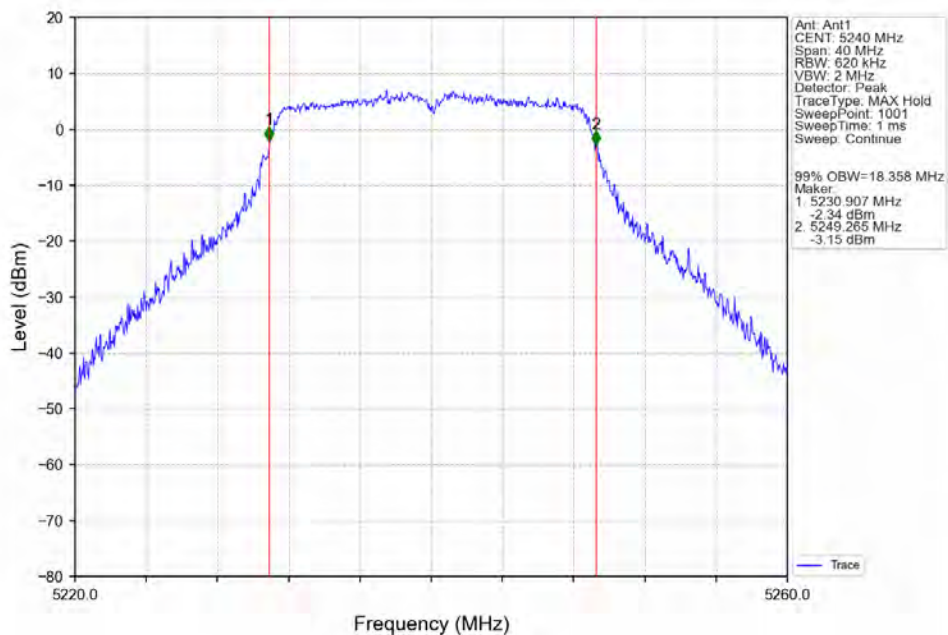
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



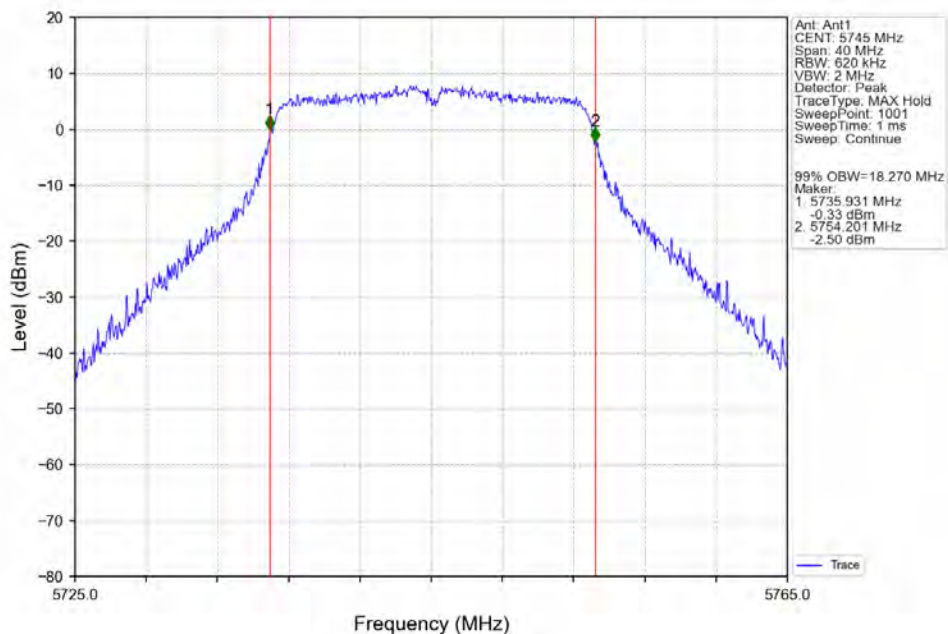
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV

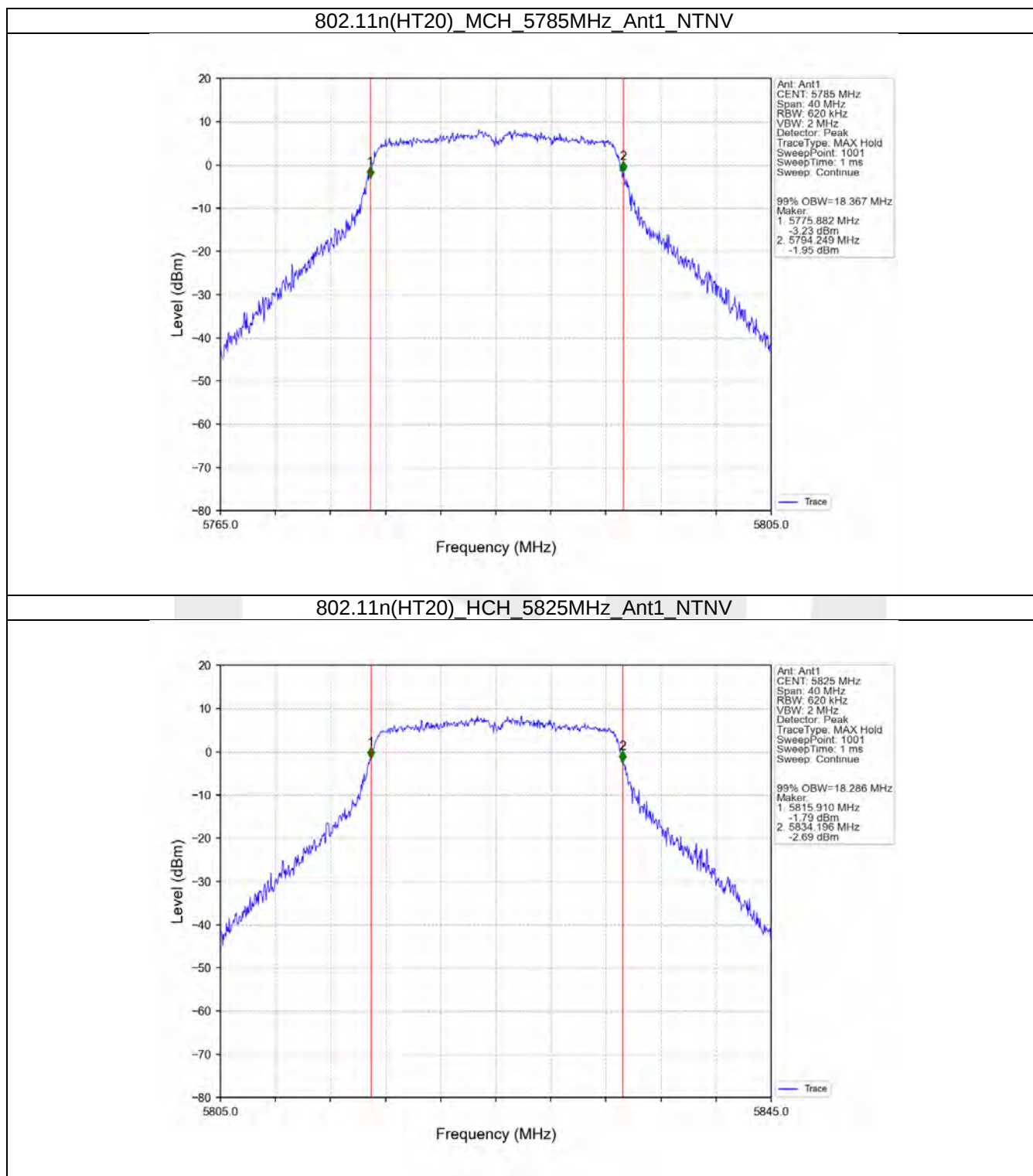


802.11n(HT20)_HCH_5240MHz_Ant1_NTNV

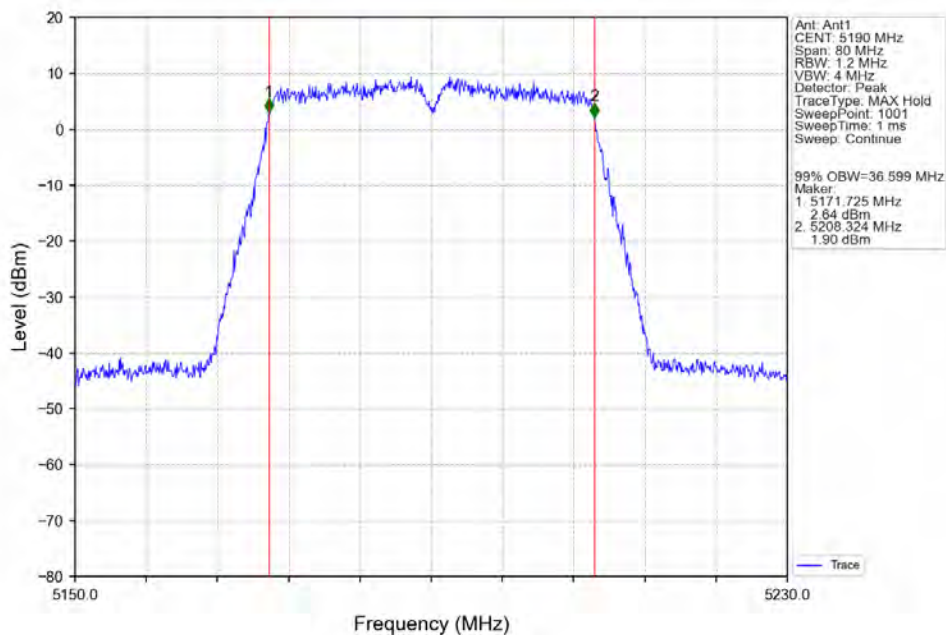


802.11n(HT20)_LCH_5745MHz_Ant1_NTNV

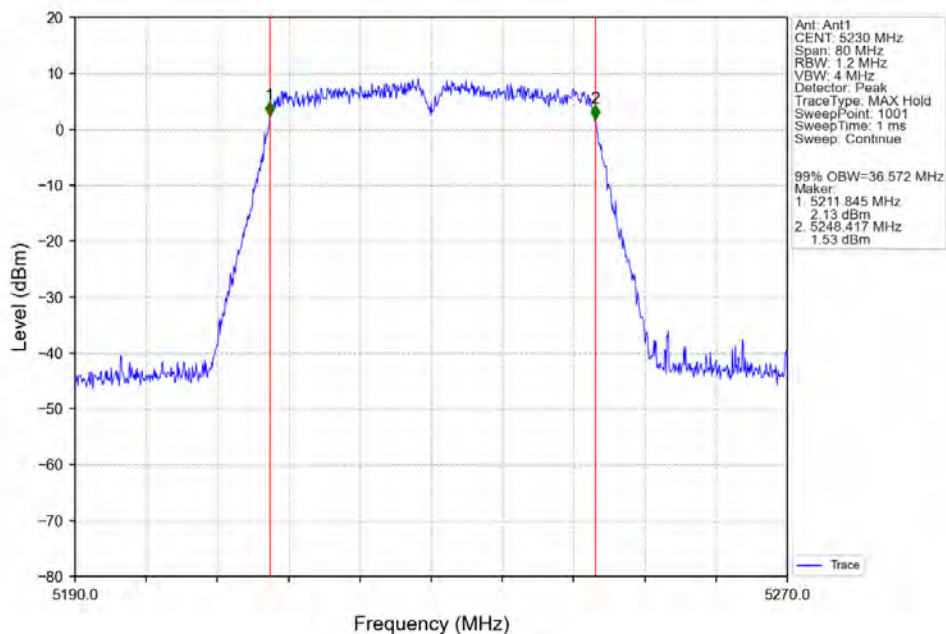




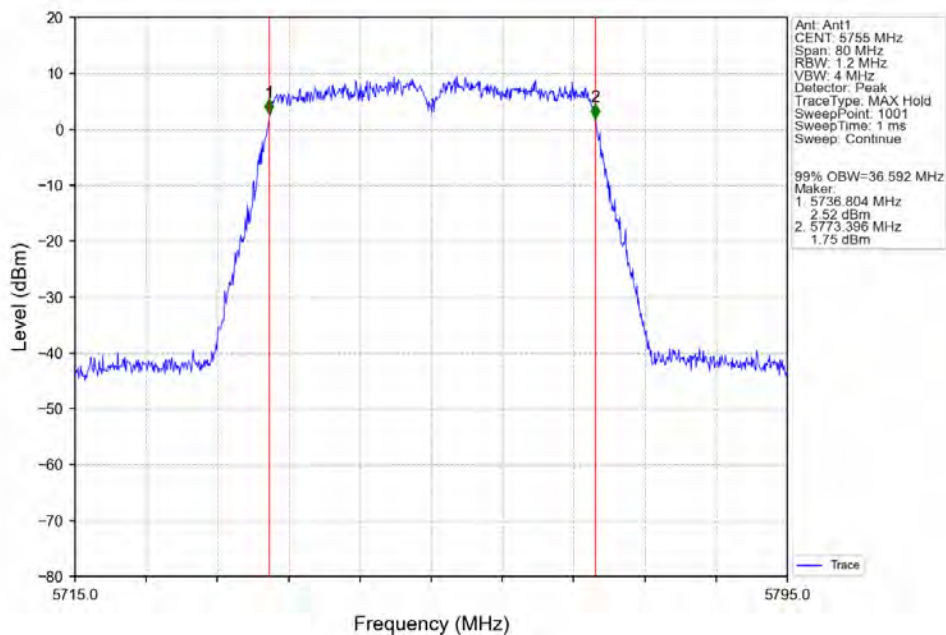
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



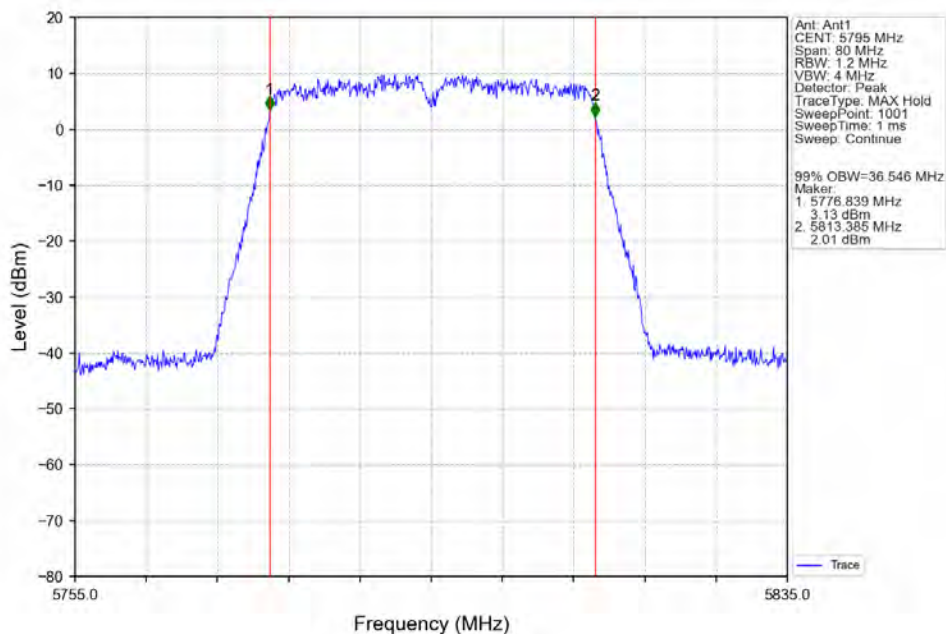
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



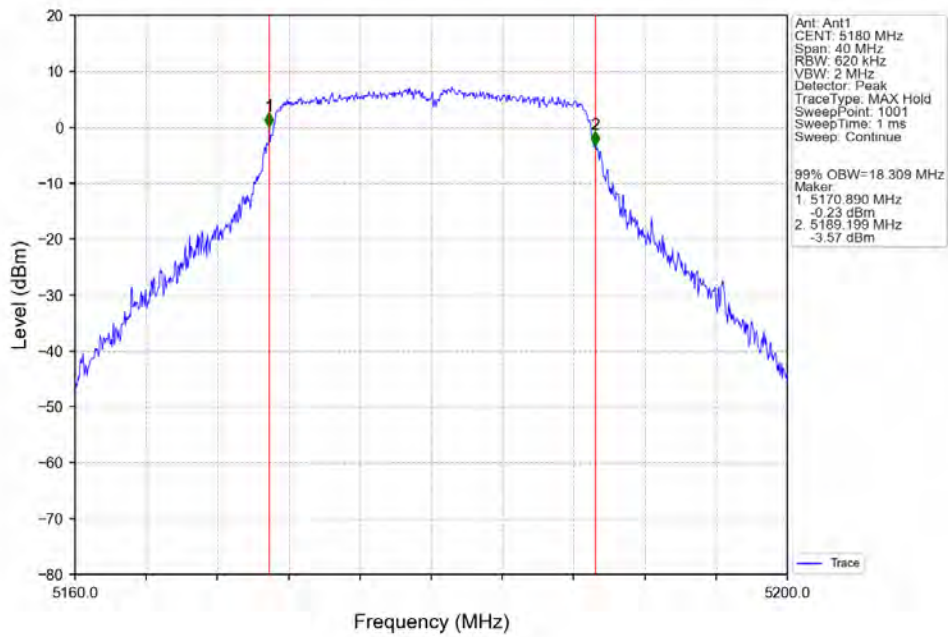
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



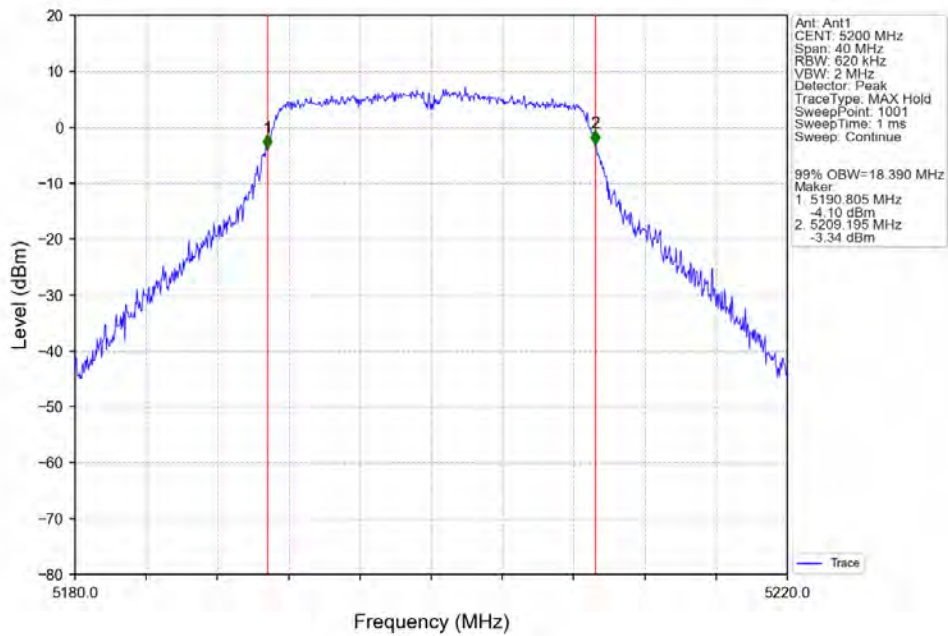
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



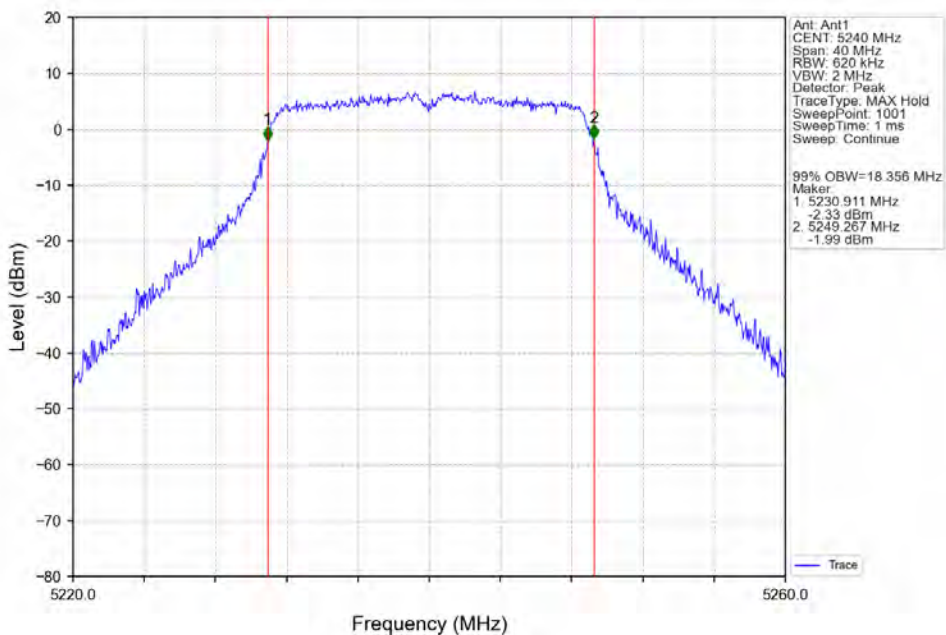
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



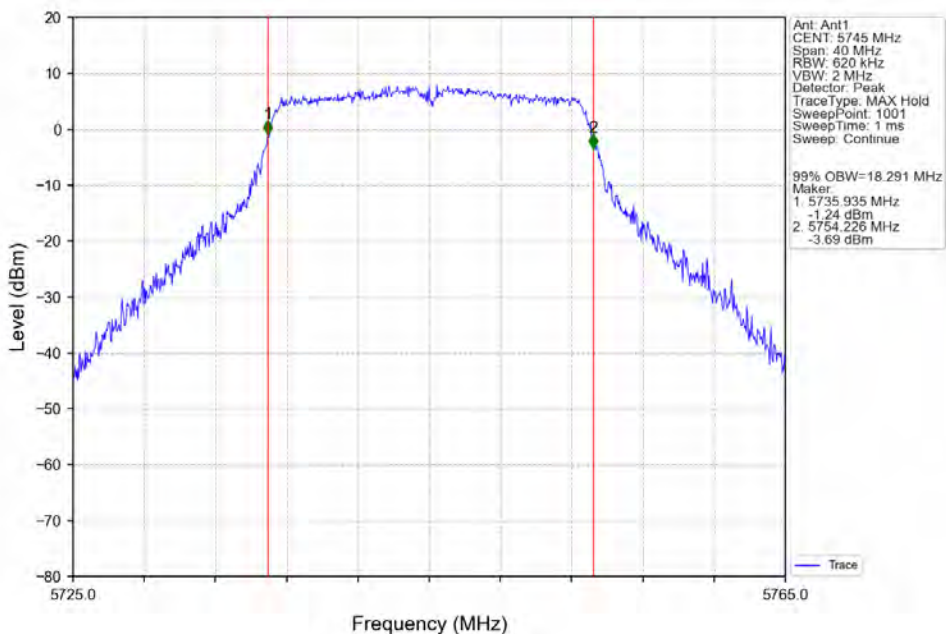
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



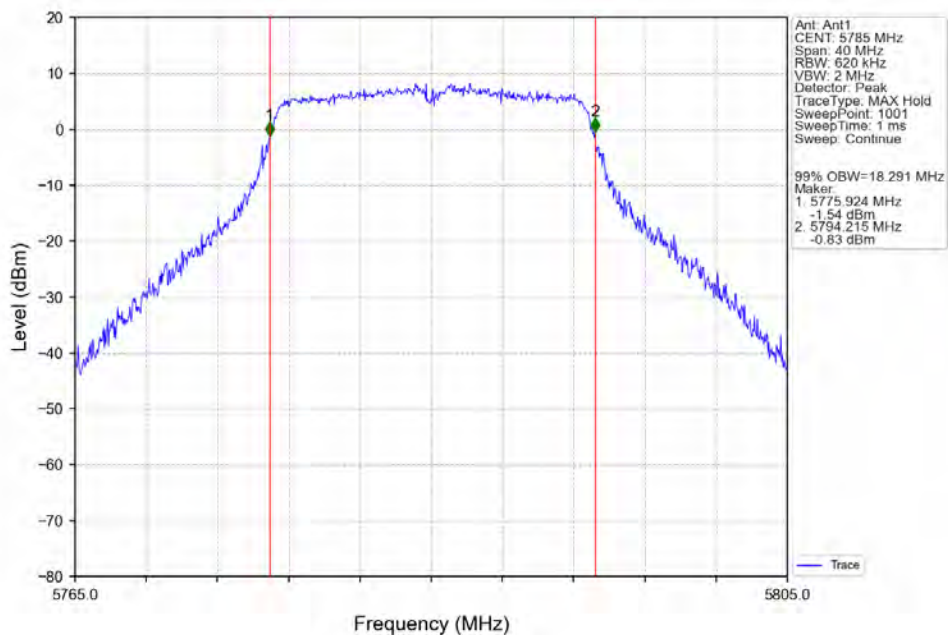
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



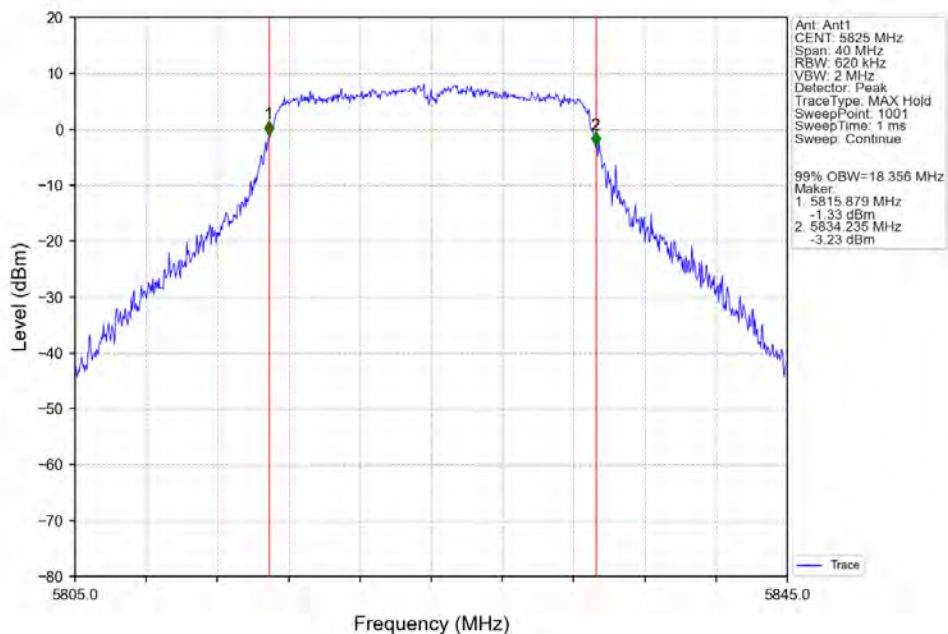
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



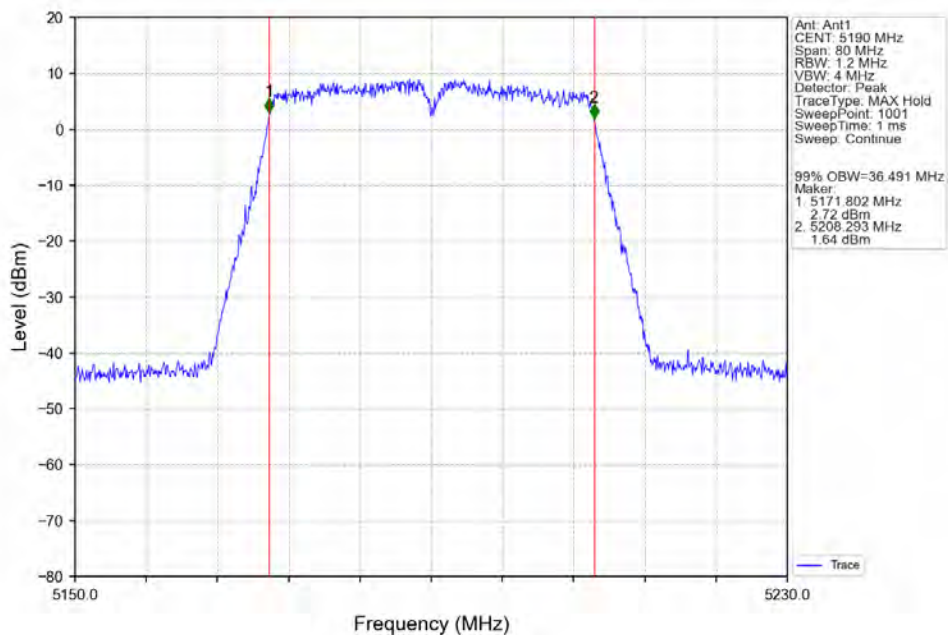
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



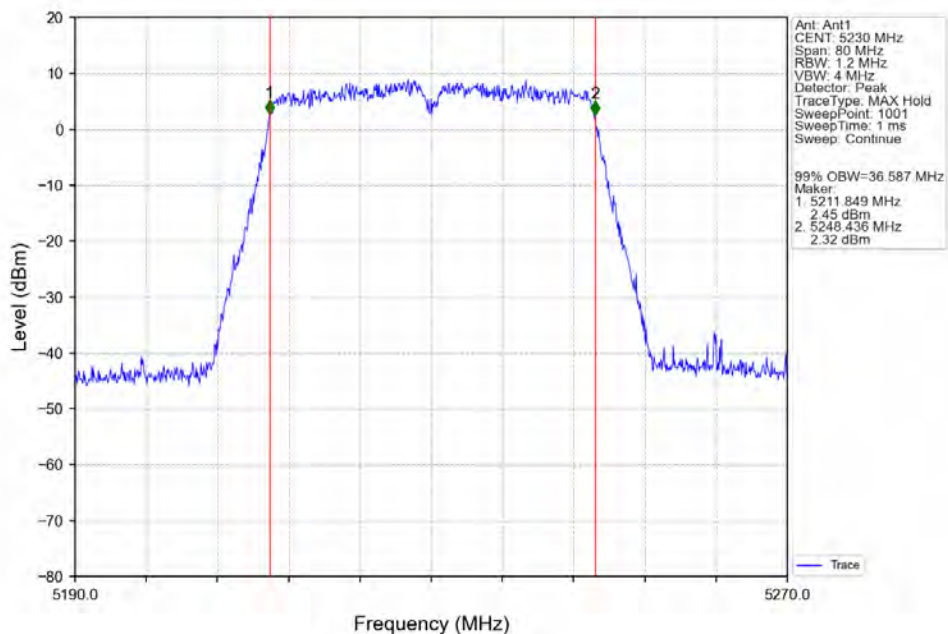
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



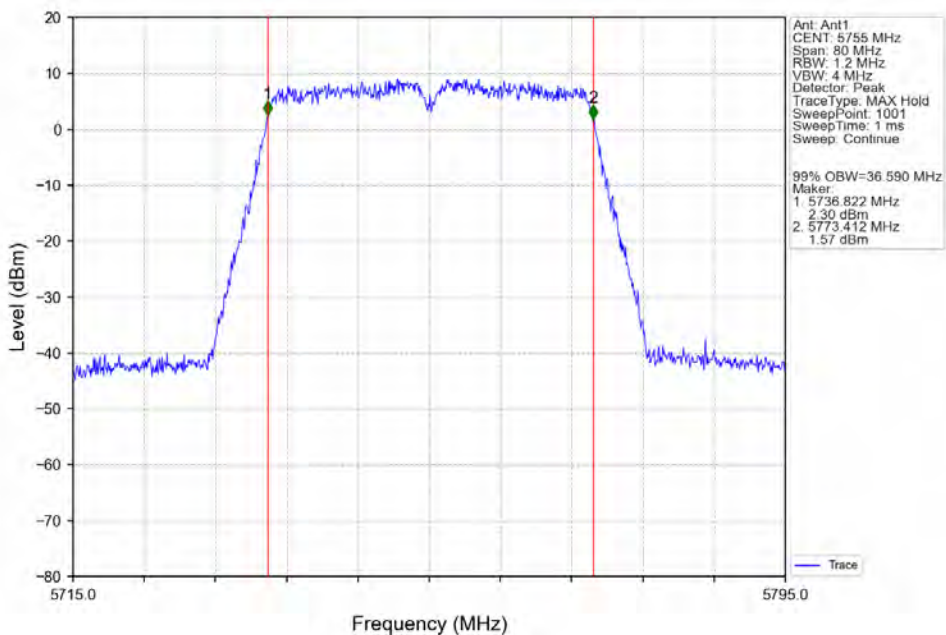
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



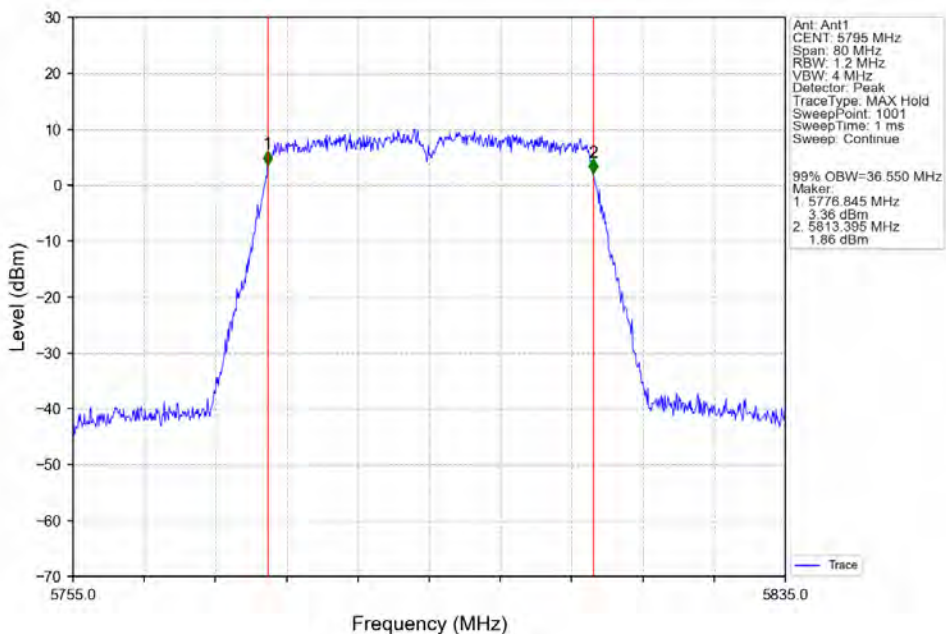
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV

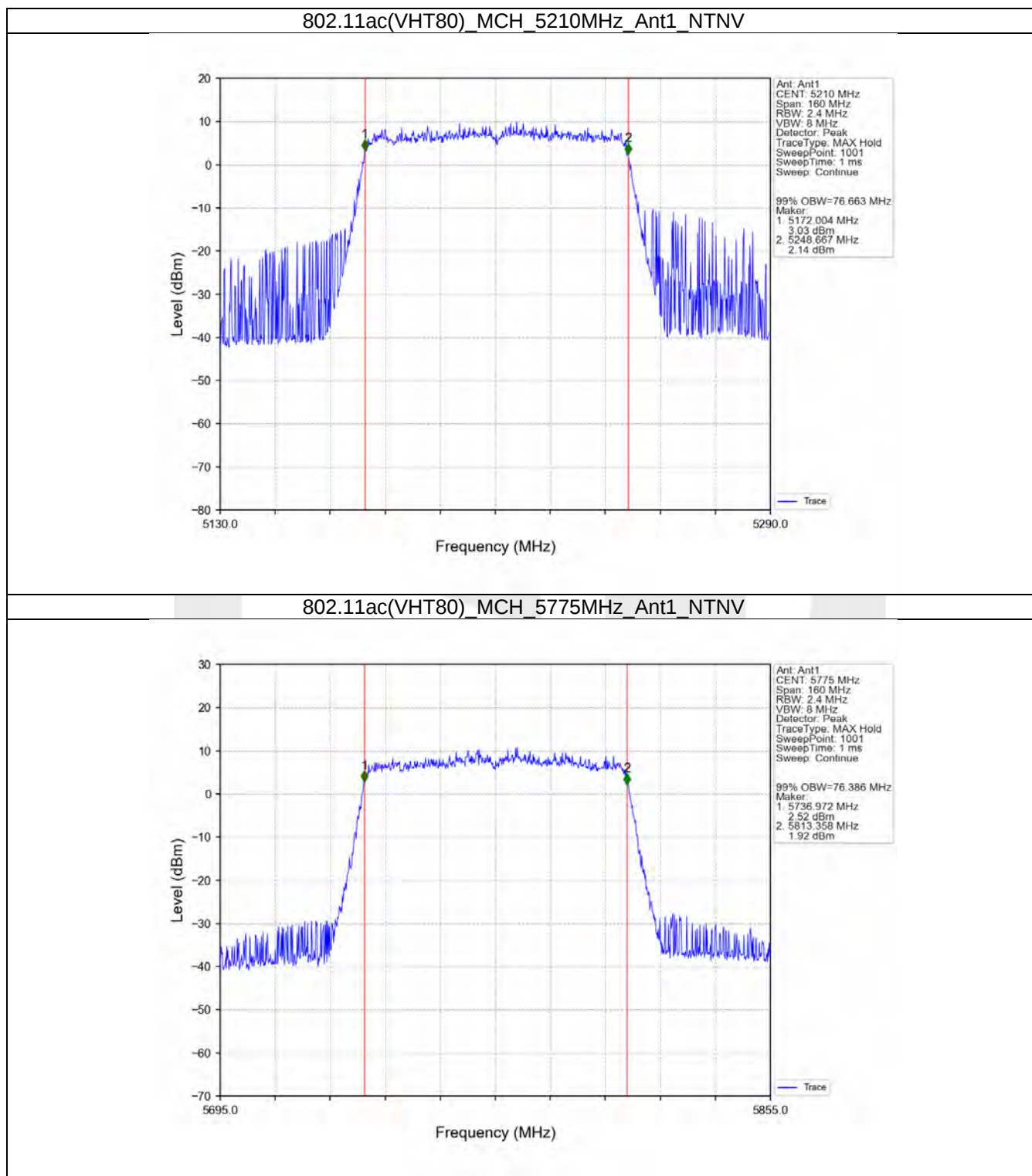


802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV

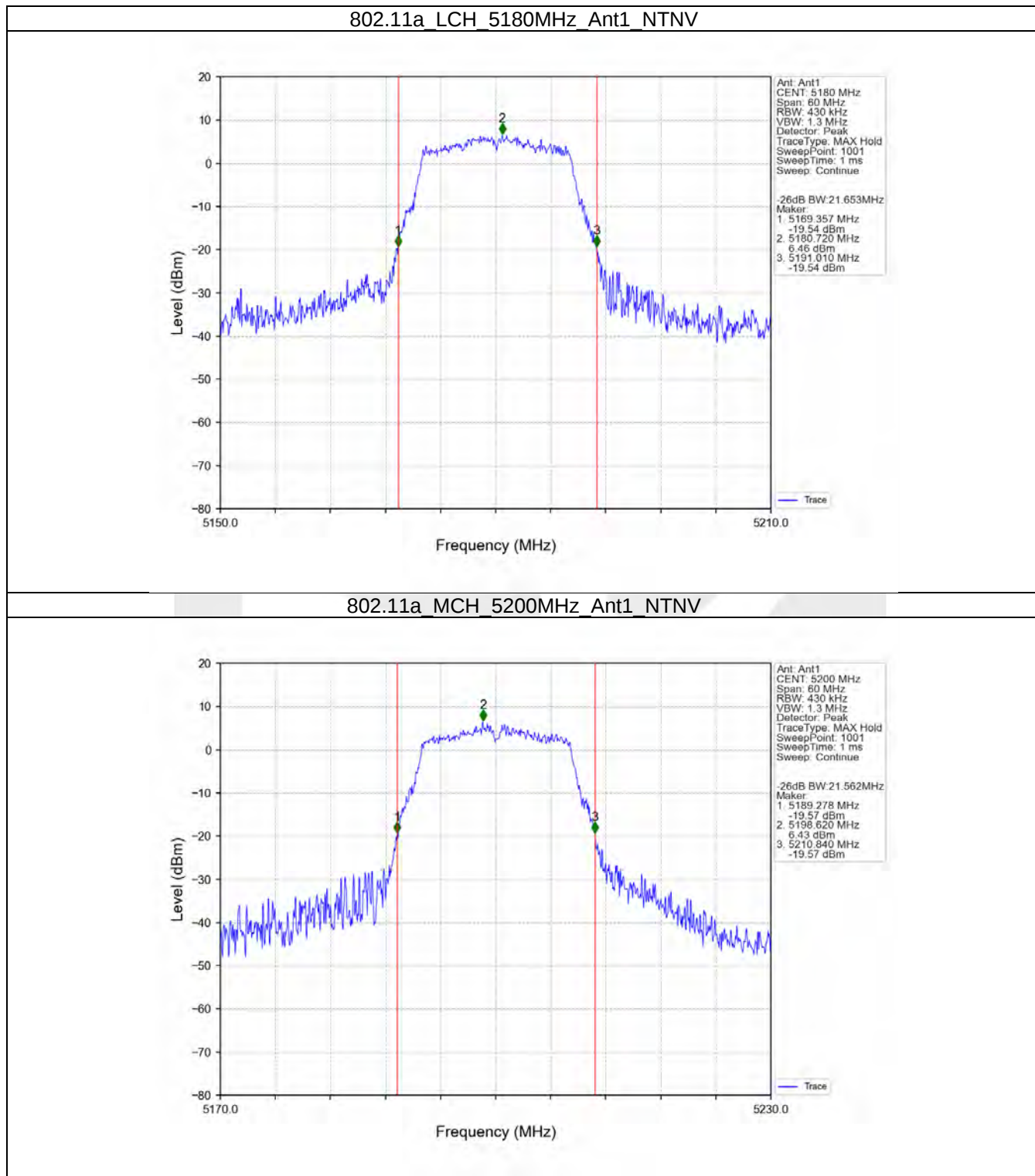


802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV

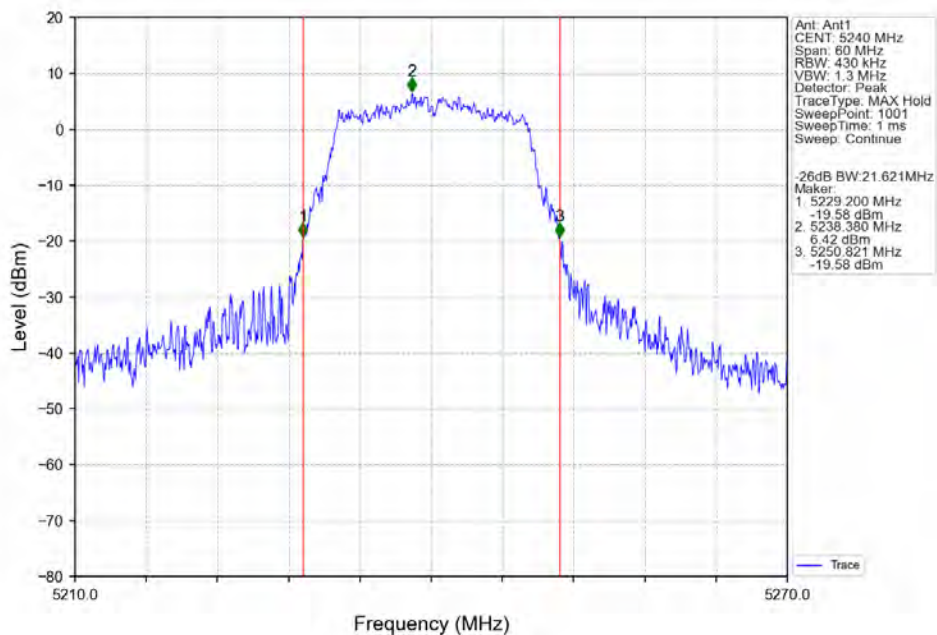




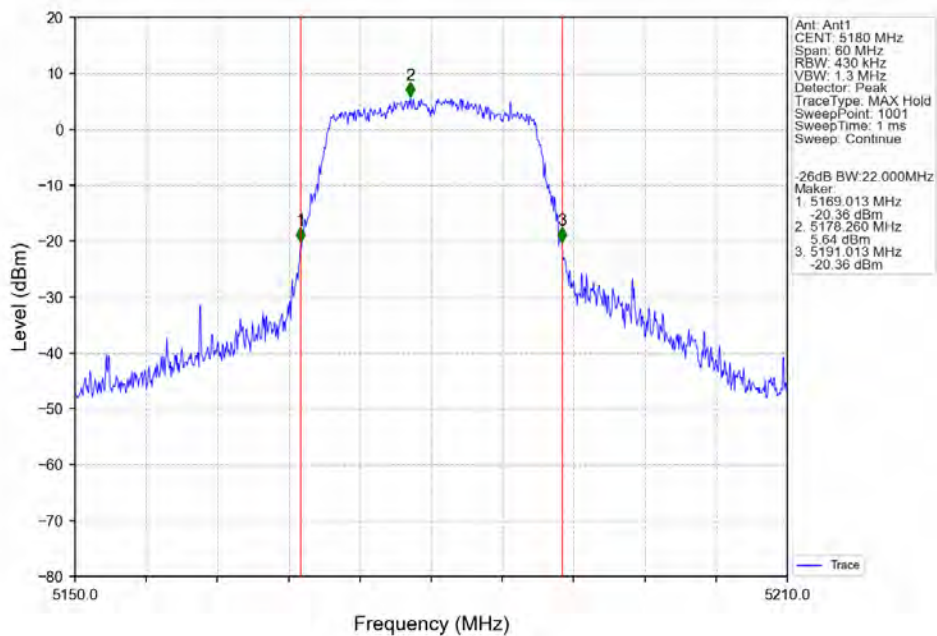
2.2.2 26dB BW



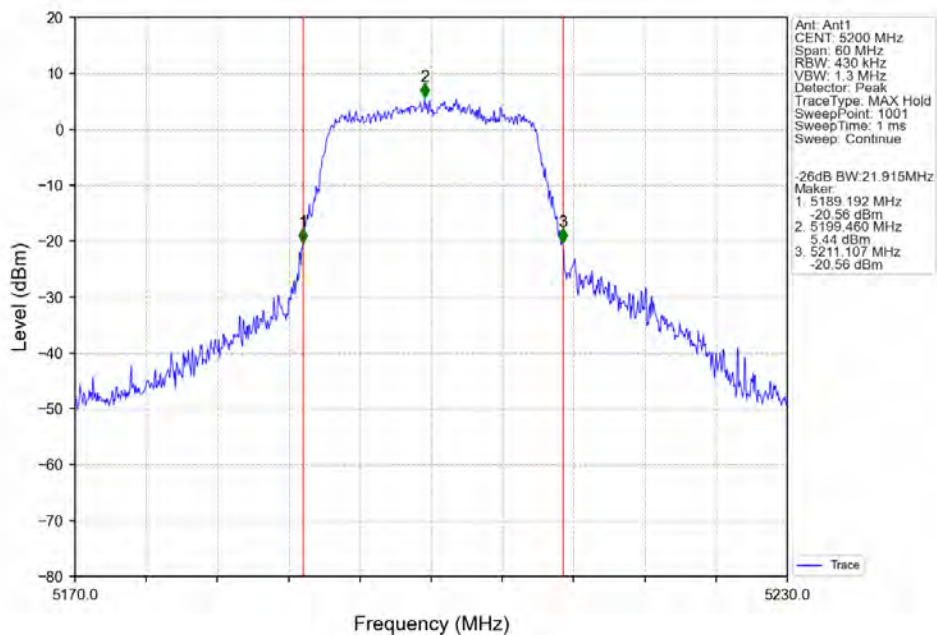
802.11a_HCH_5240MHz_Ant1_NTNV



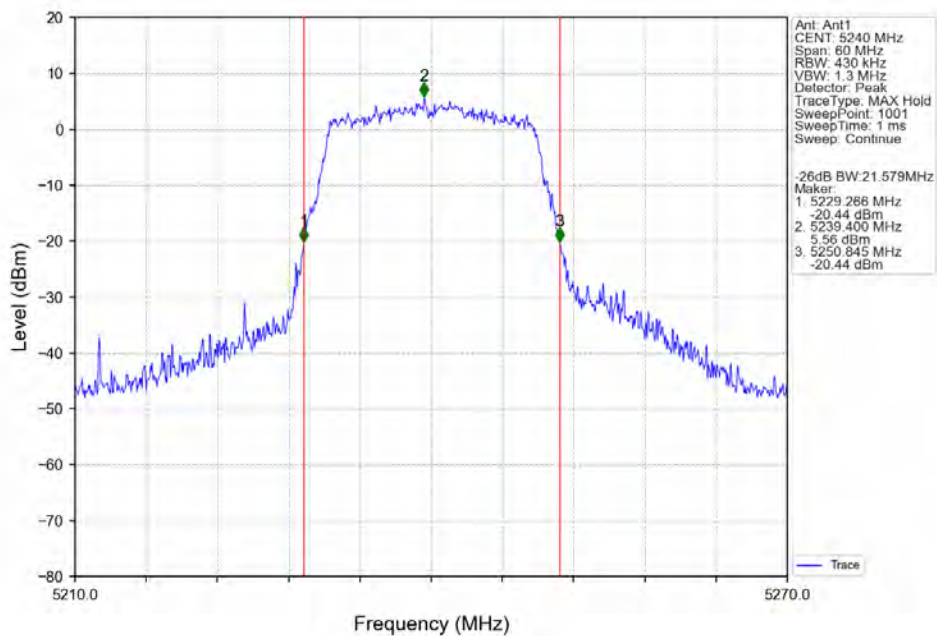
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



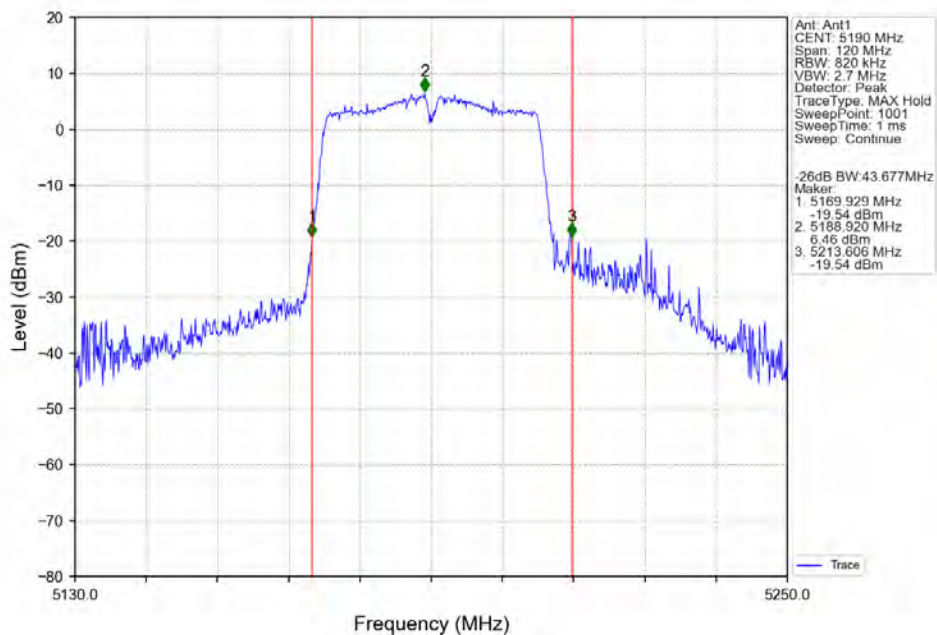
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



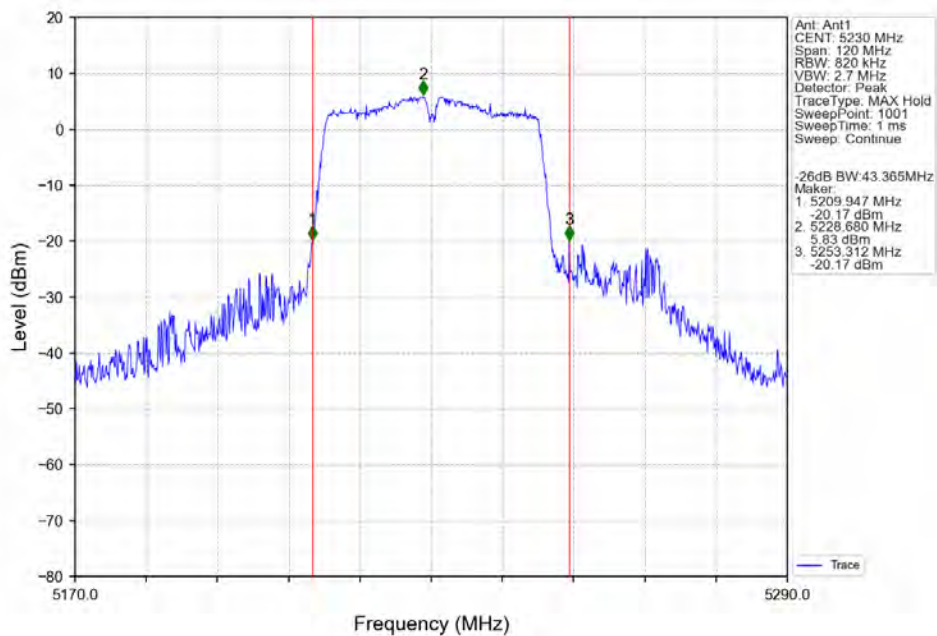
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



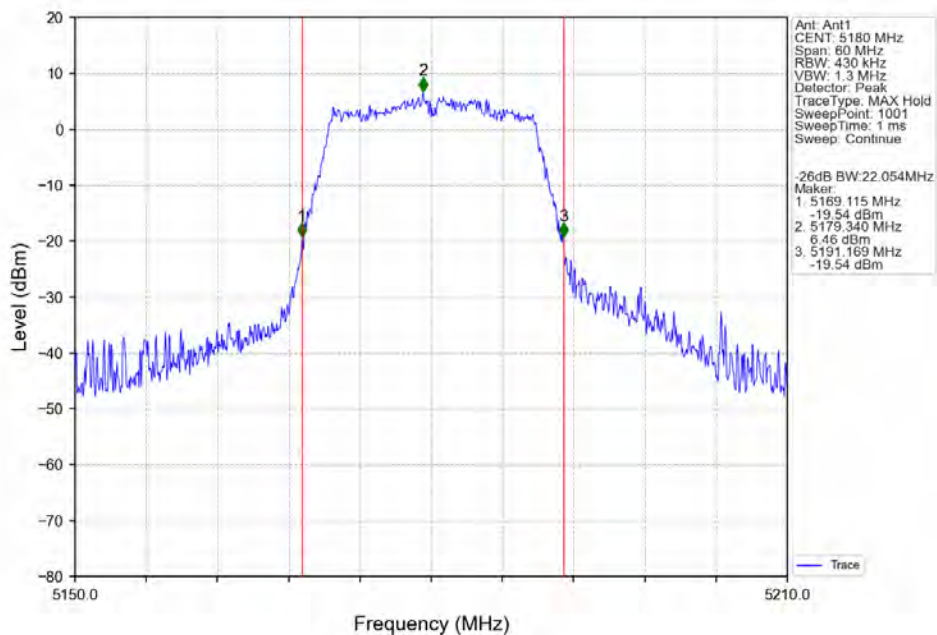
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



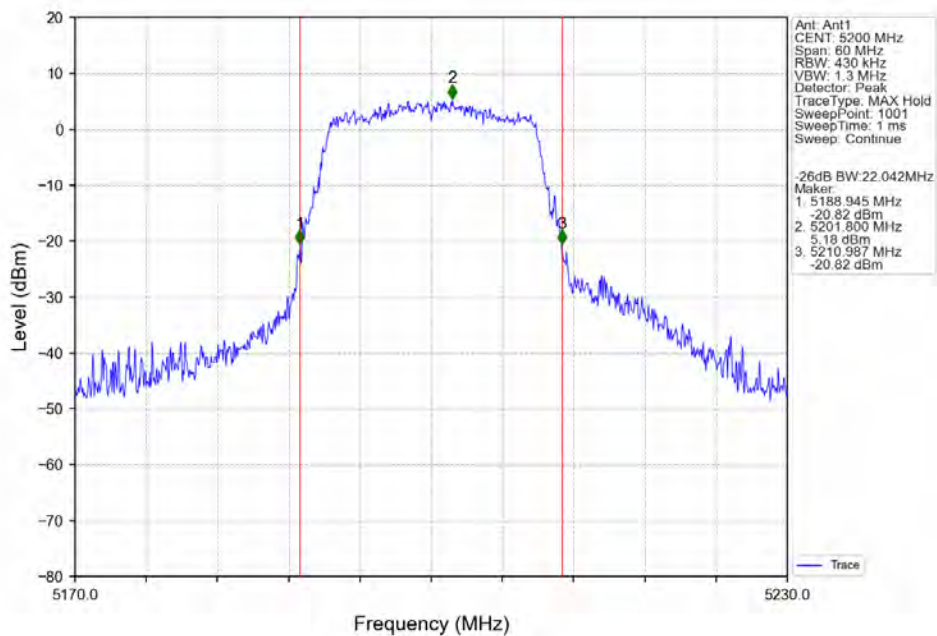
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



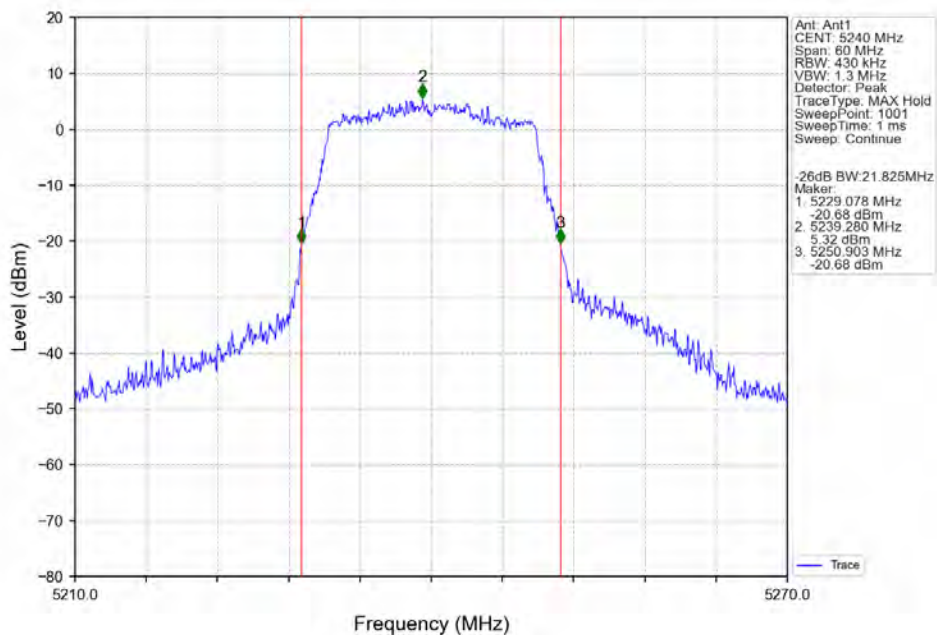
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



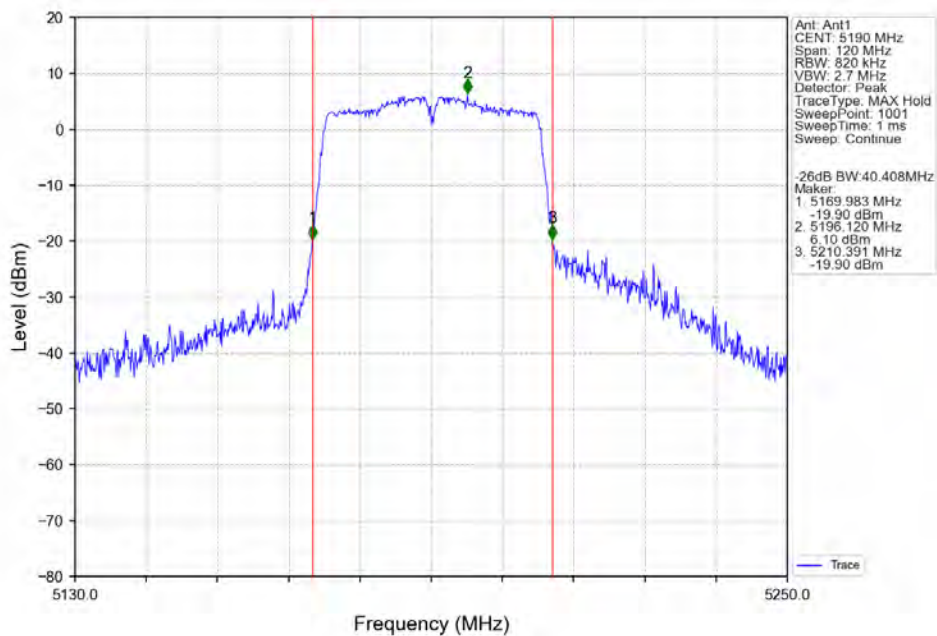
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



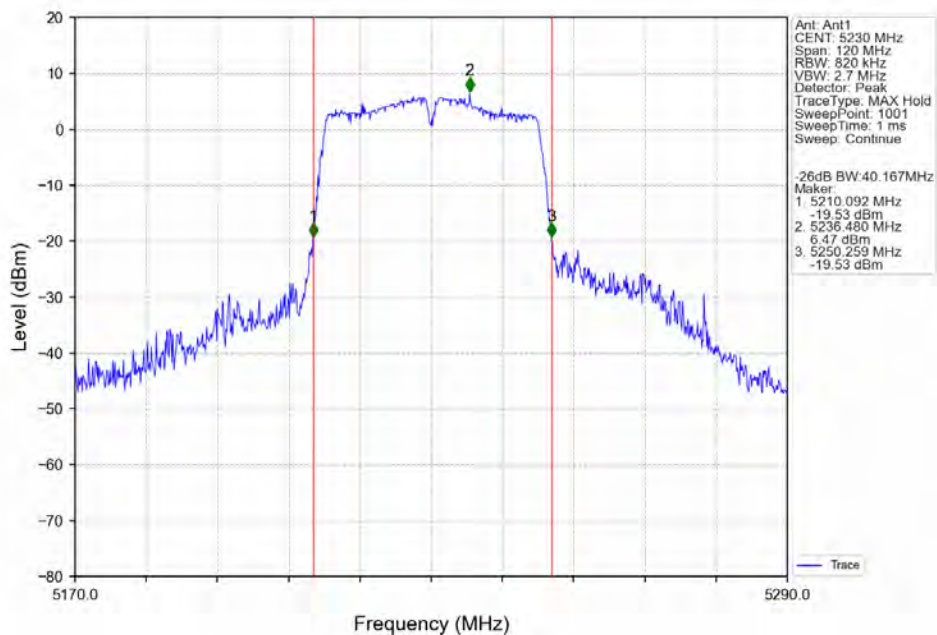
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



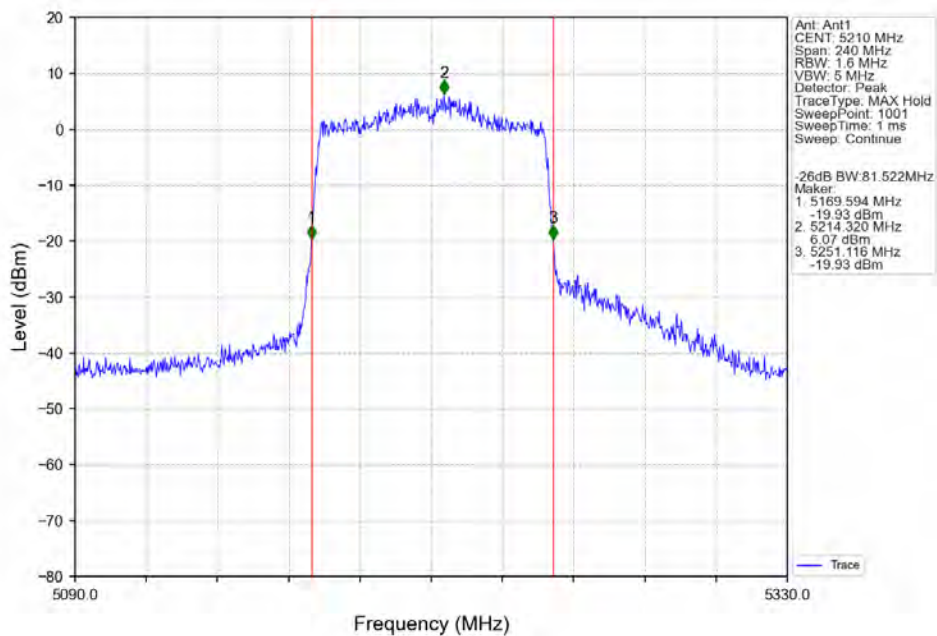
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



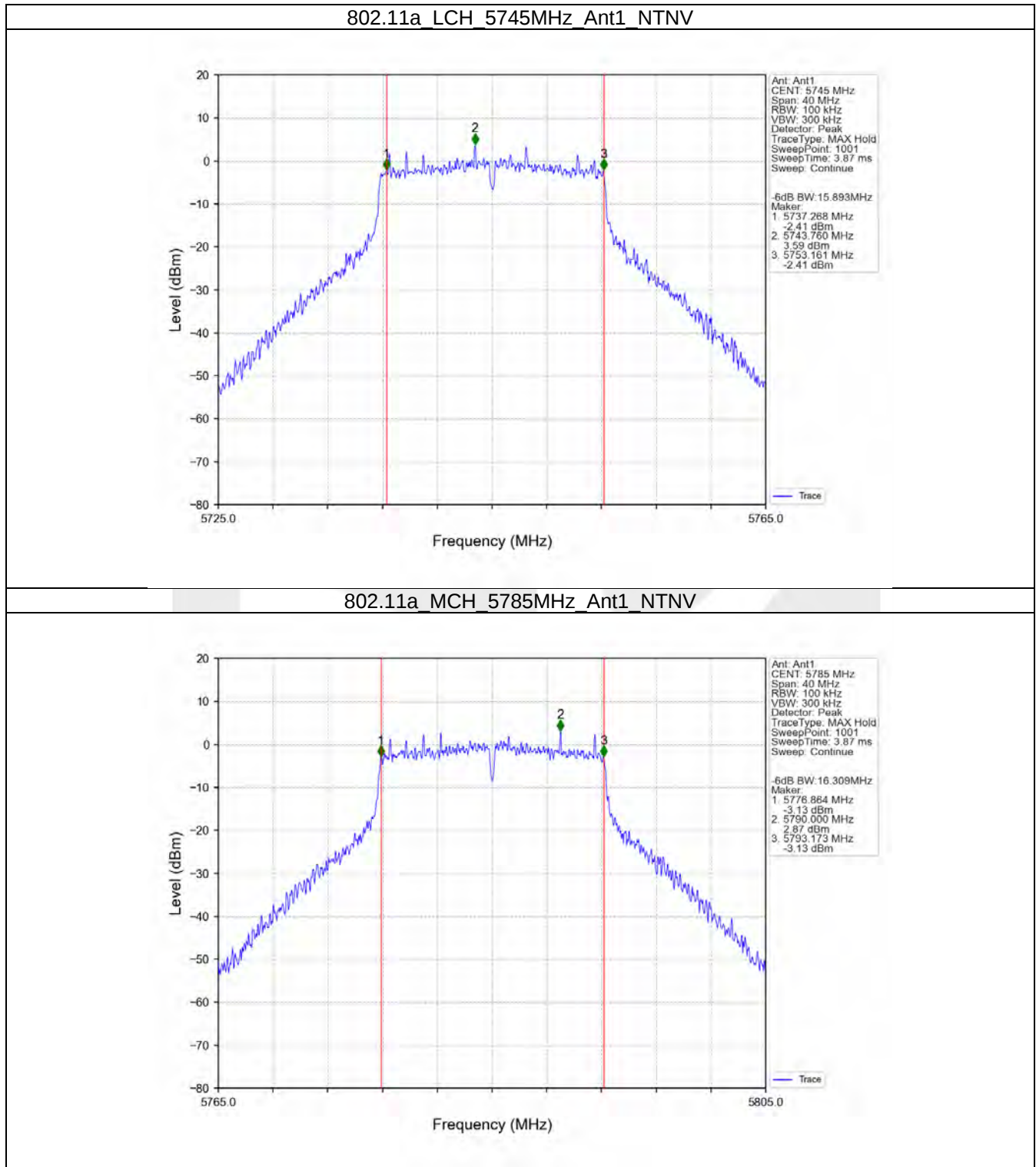
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



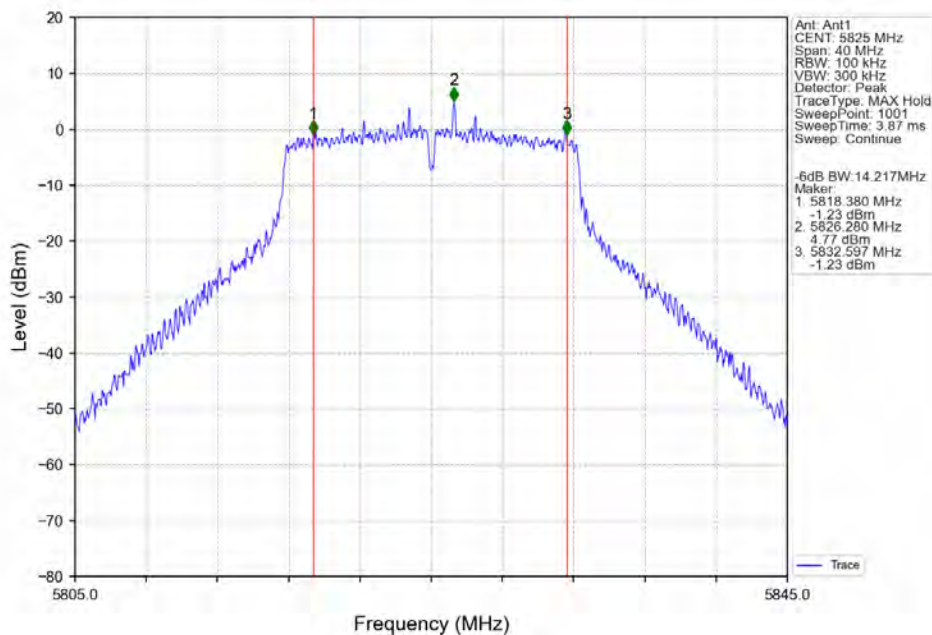
802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



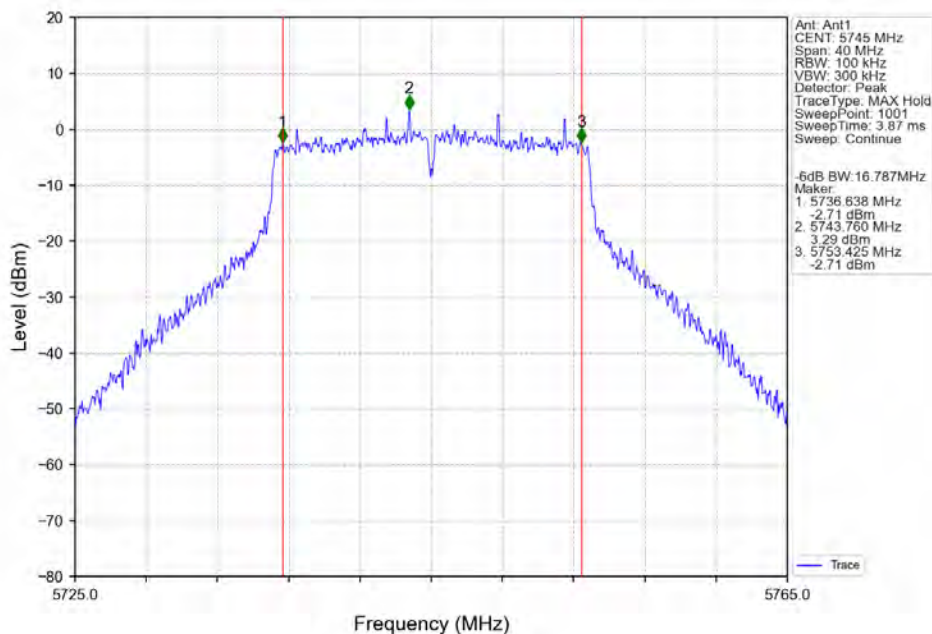
2.2.3 6dB BW



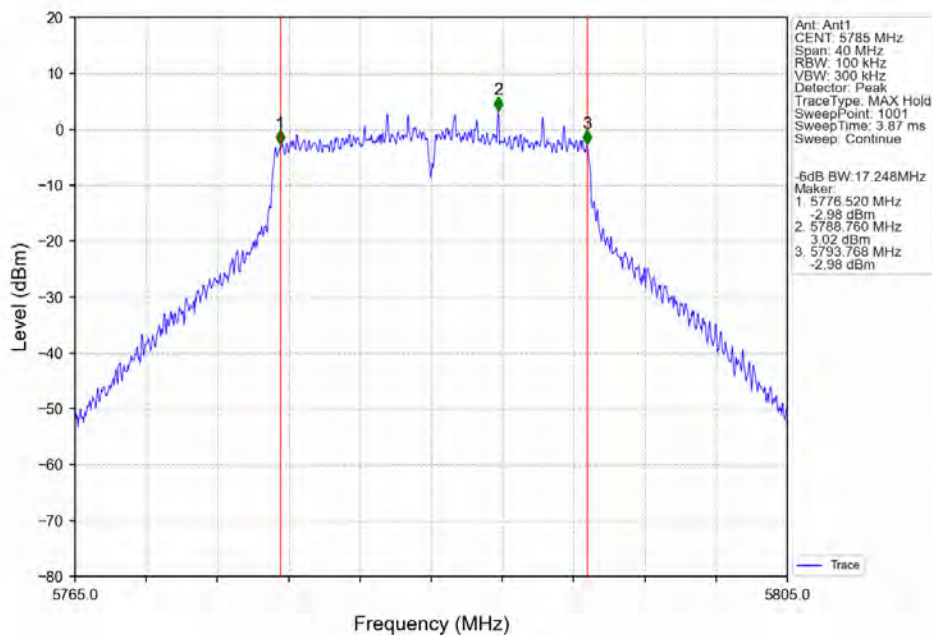
802.11a_HCH_5825MHz_Ant1_NTNV



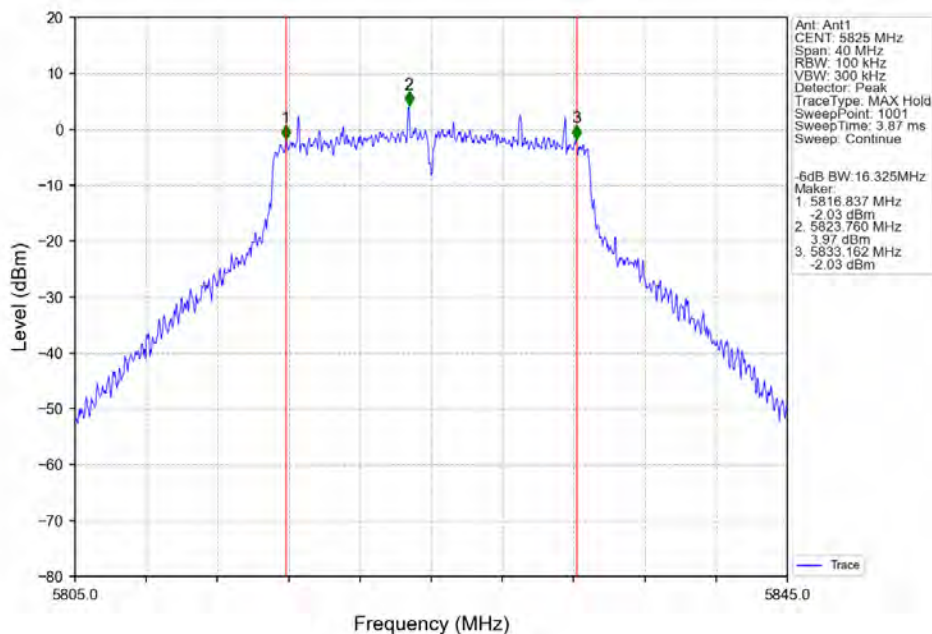
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



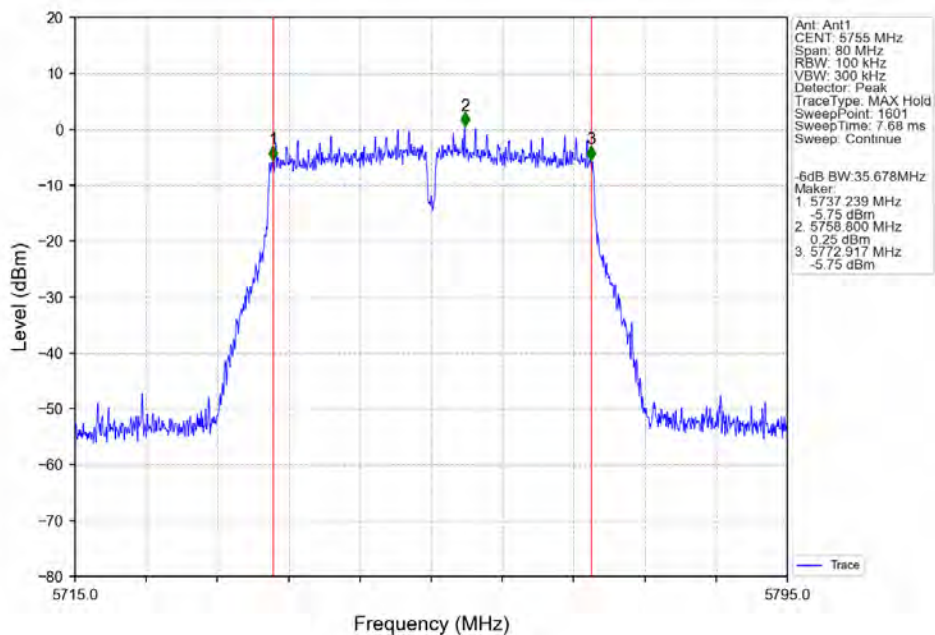
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



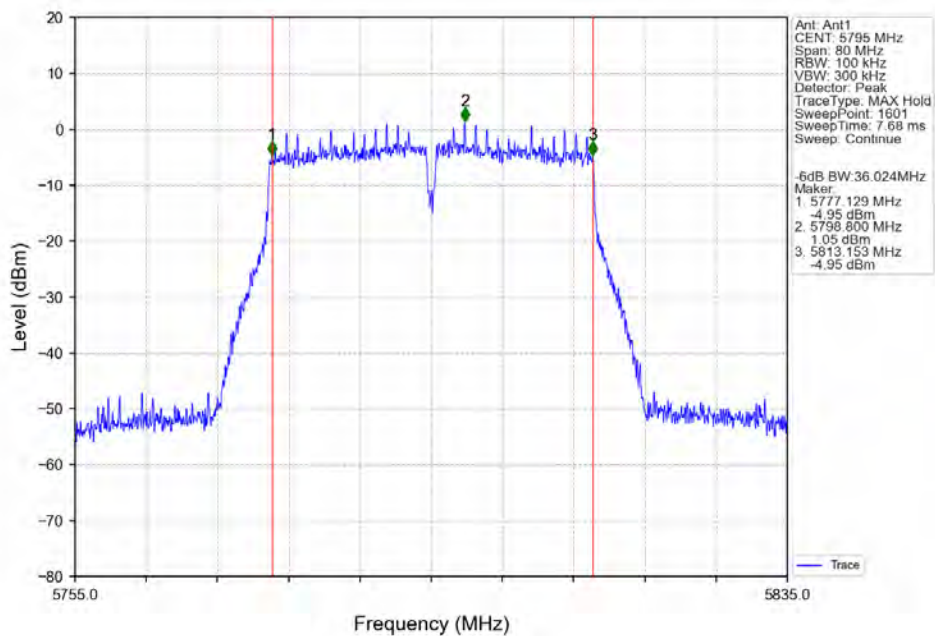
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



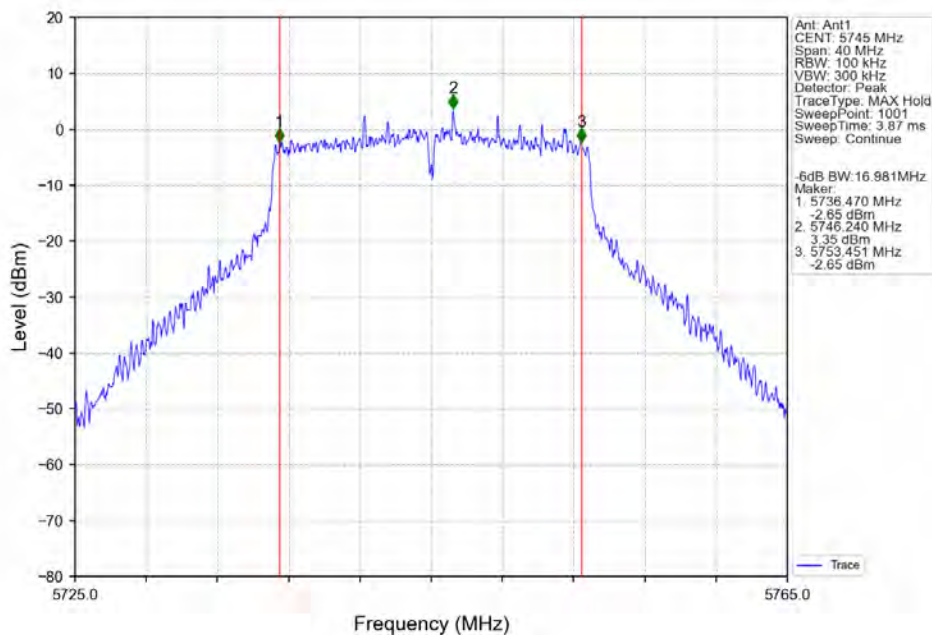
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



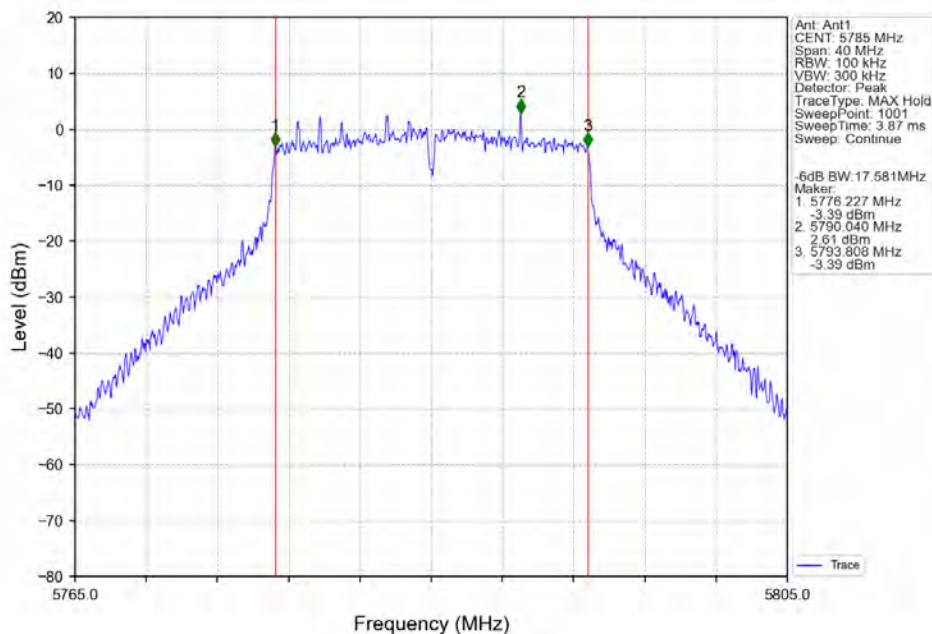
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



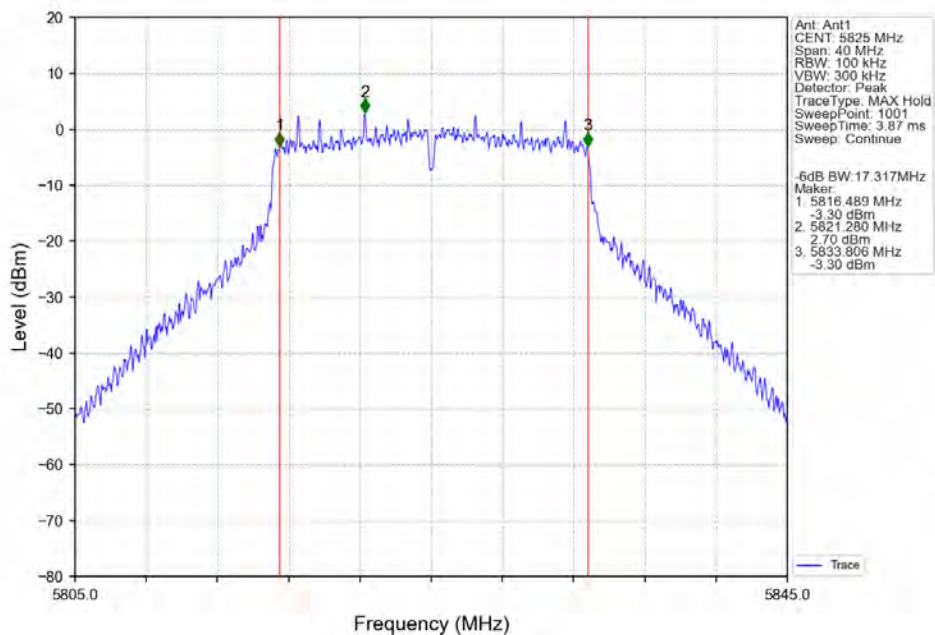
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



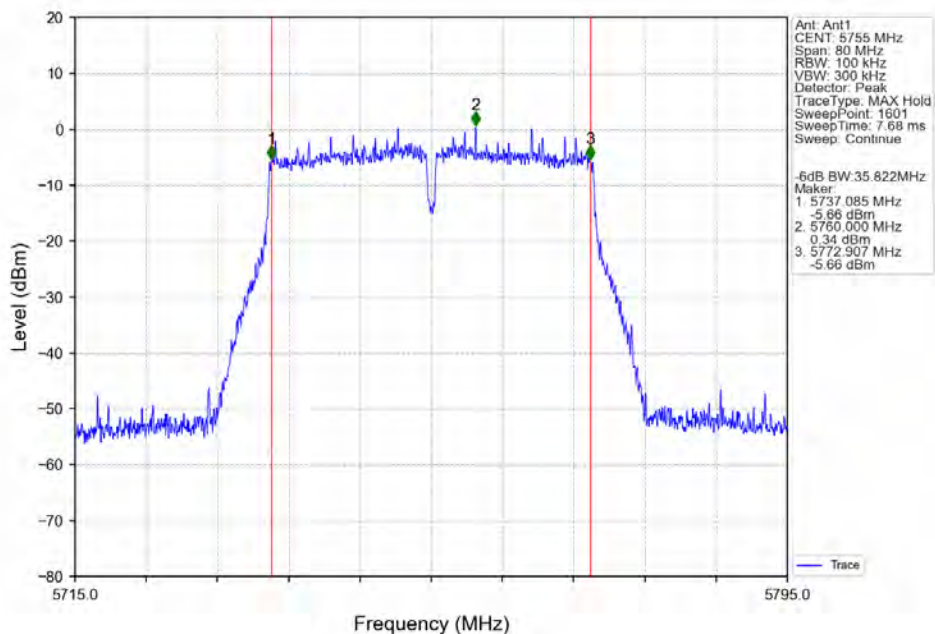
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



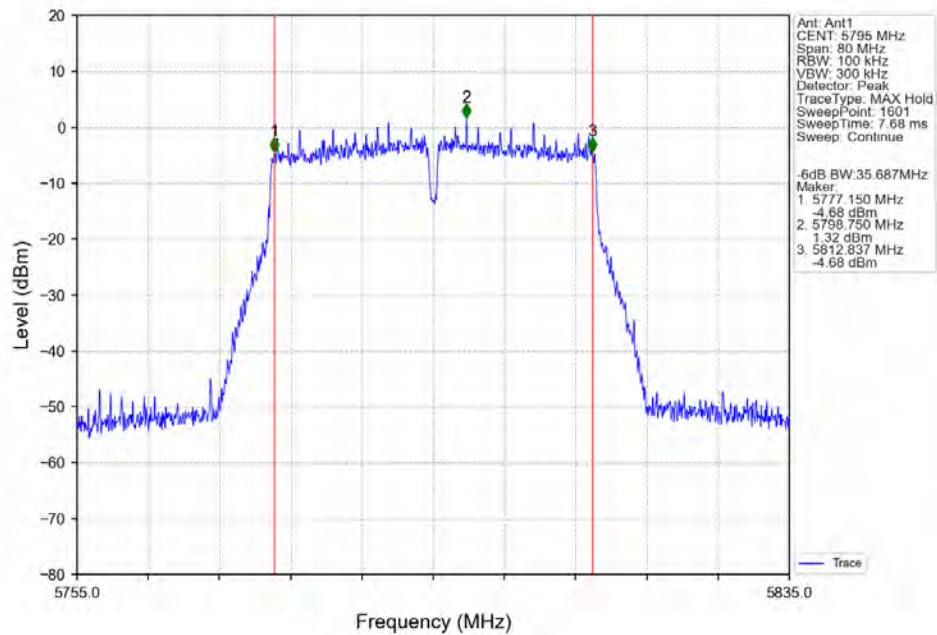
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



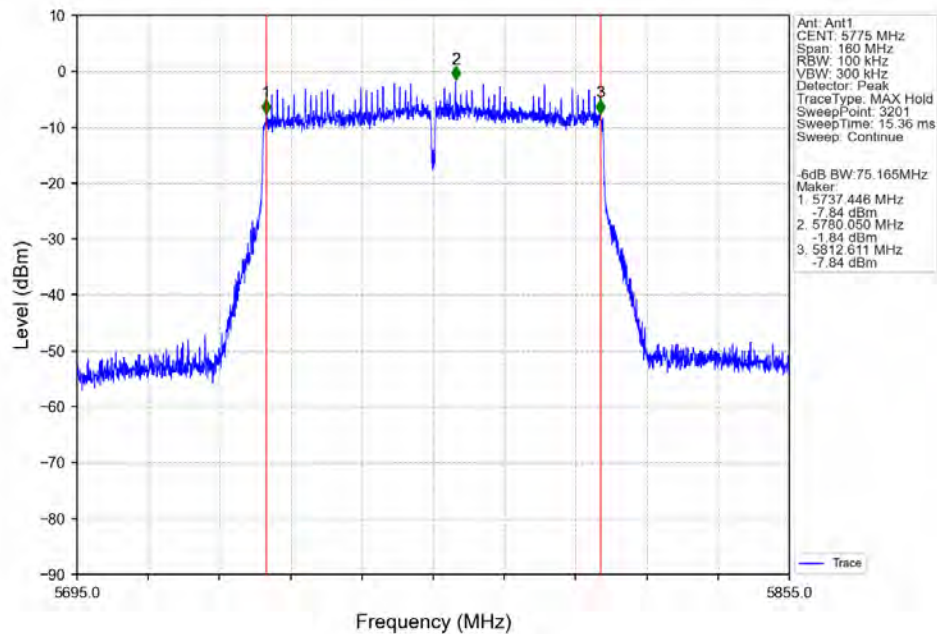
802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



3. Maximum Conducted Output Power

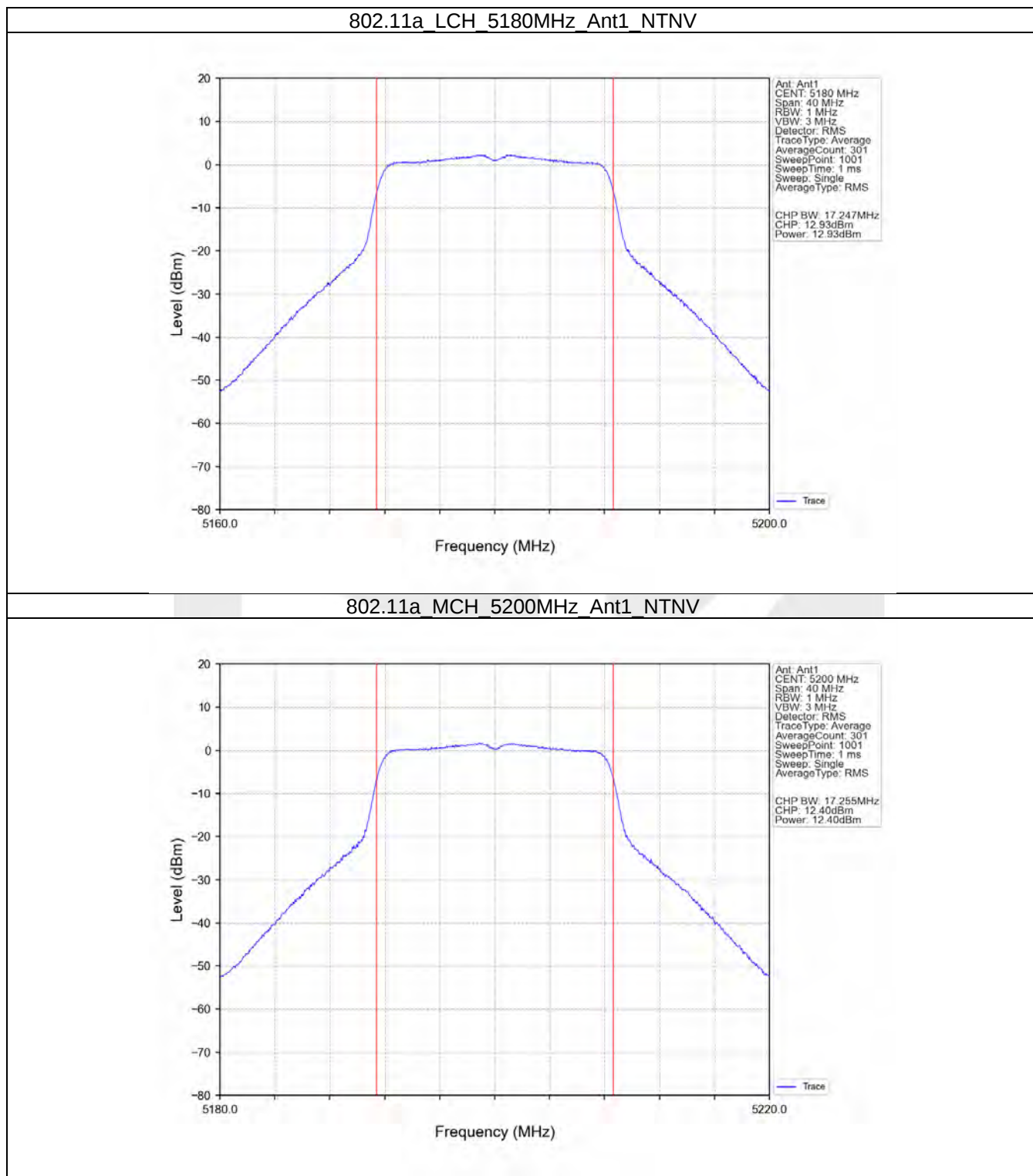
3.1 Test Result

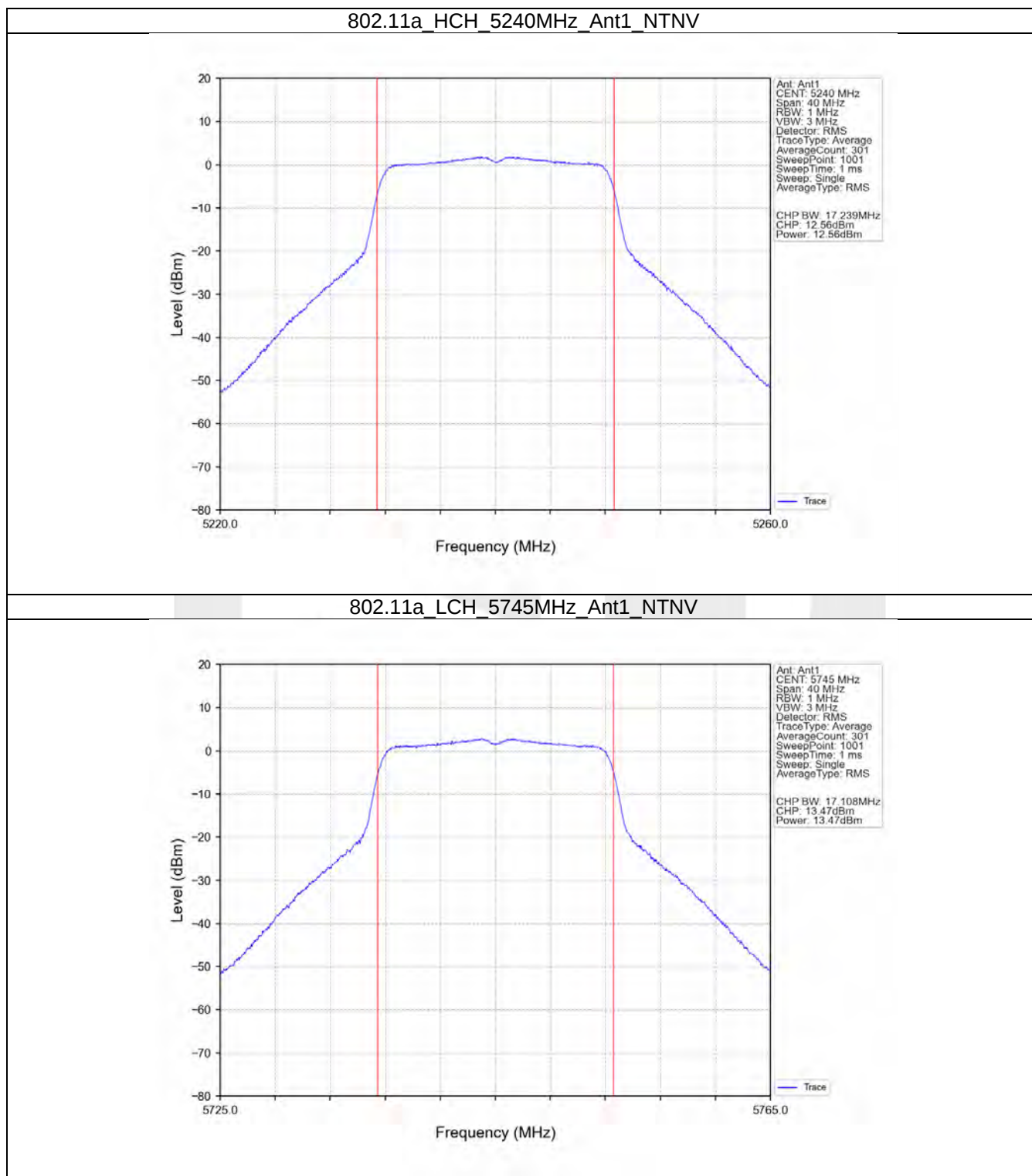
3.1.1 Power

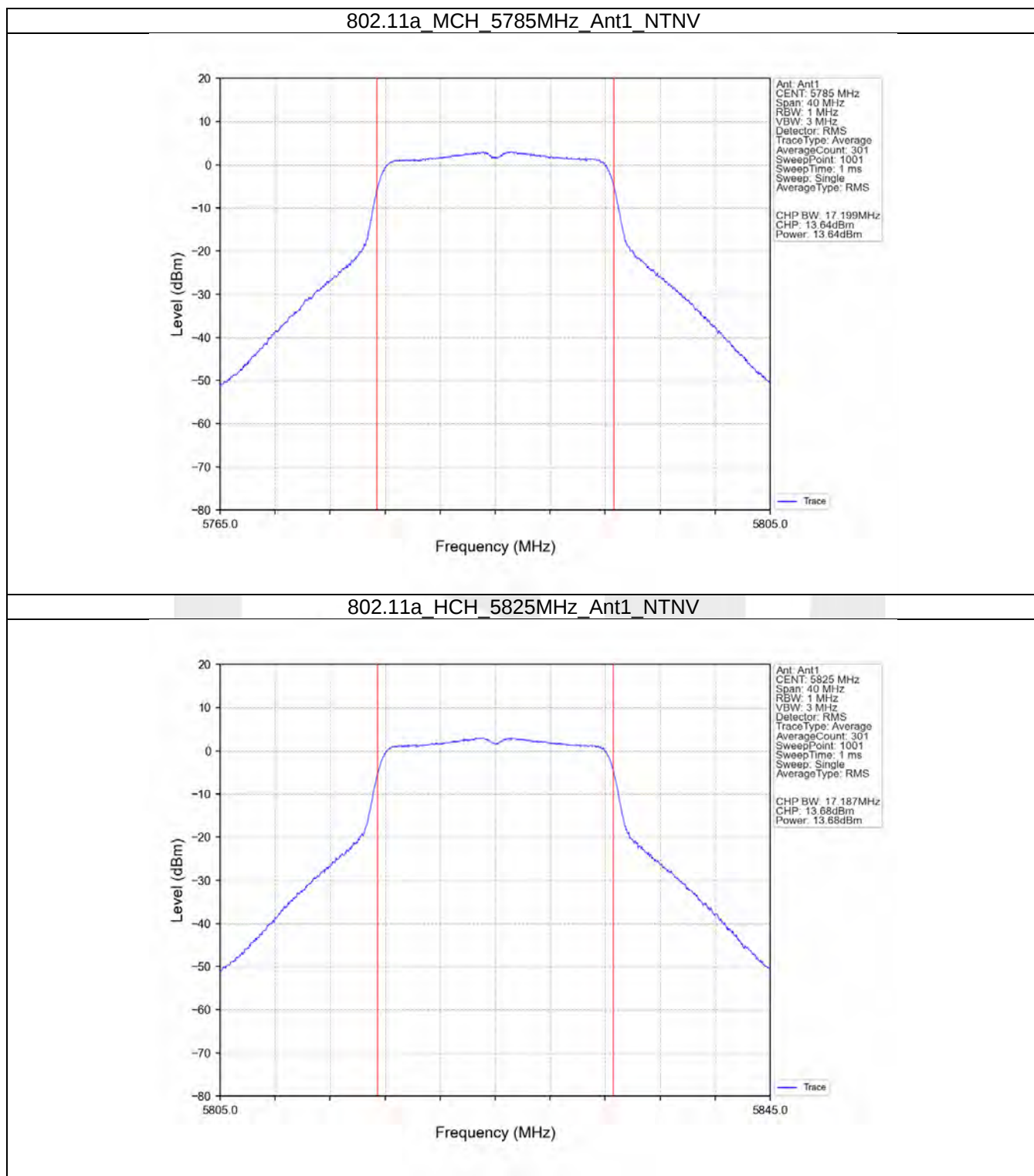
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	12.93	≤ 23.98	Pass
		5200	12.40	≤ 23.98	Pass
		5240	12.56	≤ 23.98	Pass
		5745	13.47	≤ 30	Pass
		5785	13.64	≤ 30	Pass
		5825	13.68	≤ 30	Pass
802.11n (HT20)	SISO	5180	11.73	≤ 23.98	Pass
		5200	11.17	≤ 23.98	Pass
		5240	12.35	≤ 23.98	Pass
		5745	13.23	≤ 30	Pass
		5785	13.47	≤ 30	Pass
		5825	13.53	≤ 30	Pass
802.11n (HT40)	SISO	5190	13.53	≤ 23.98	Pass
		5230	13.14	≤ 23.98	Pass
		5755	13.52	≤ 30	Pass
		5795	14.27	≤ 30	Pass
802.11ac (VHT20)	SISO	5180	12.77	≤ 23.98	Pass
		5200	12.29	≤ 23.98	Pass
		5240	12.29	≤ 23.98	Pass
		5745	13.32	≤ 30	Pass
		5785	13.50	≤ 30	Pass
		5825	13.56	≤ 30	Pass
802.11ac (VHT40)	SISO	5190	13.41	≤ 23.98	Pass
		5230	13.23	≤ 23.98	Pass
		5755	13.60	≤ 30	Pass
		5795	14.37	≤ 30	Pass
802.11ac (VHT80)	SISO	5210	13.05	≤ 23.98	Pass
		5775	13.58	≤ 30	Pass

3.2 Test Graph

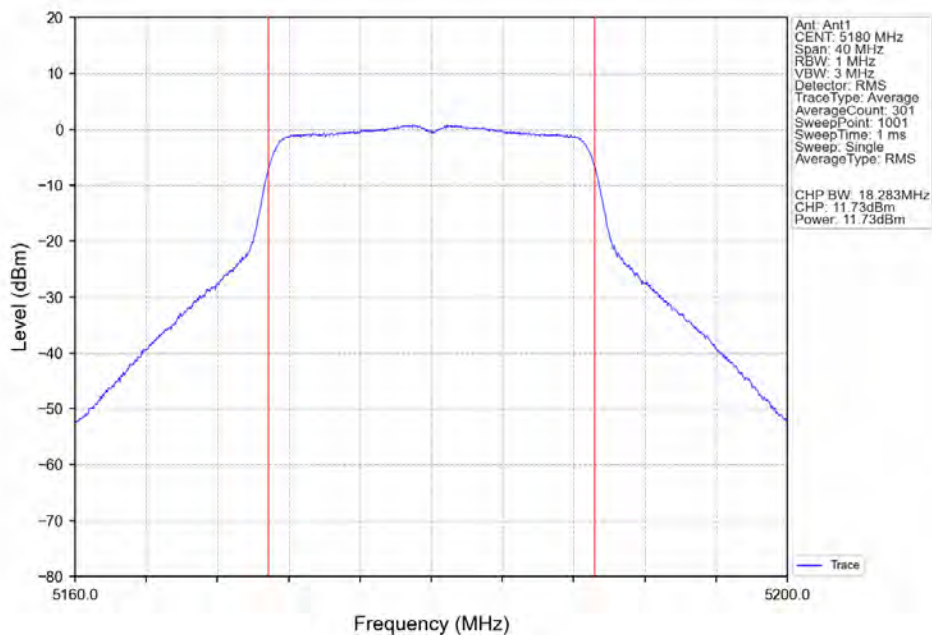
3.2.1 Power



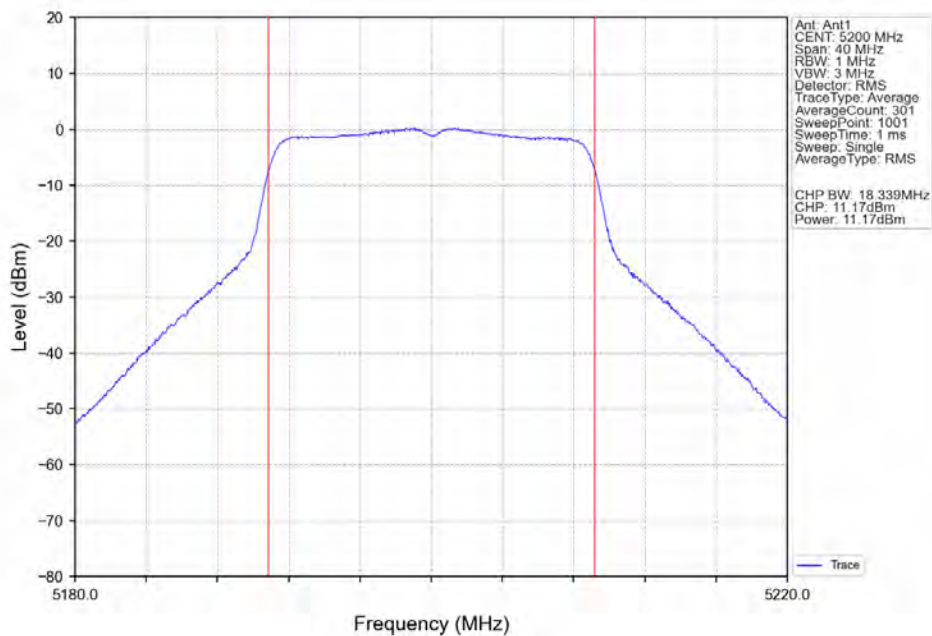




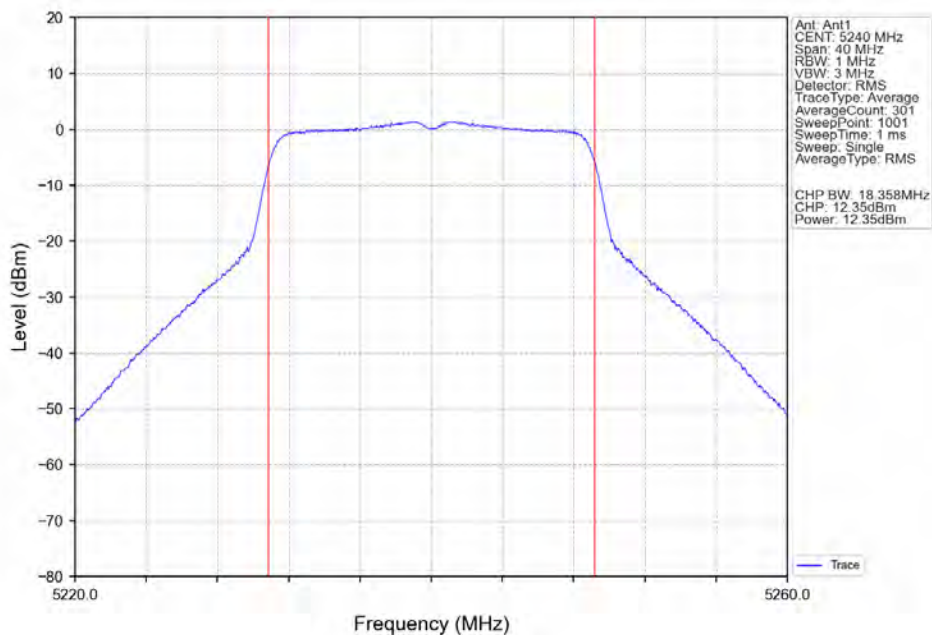
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



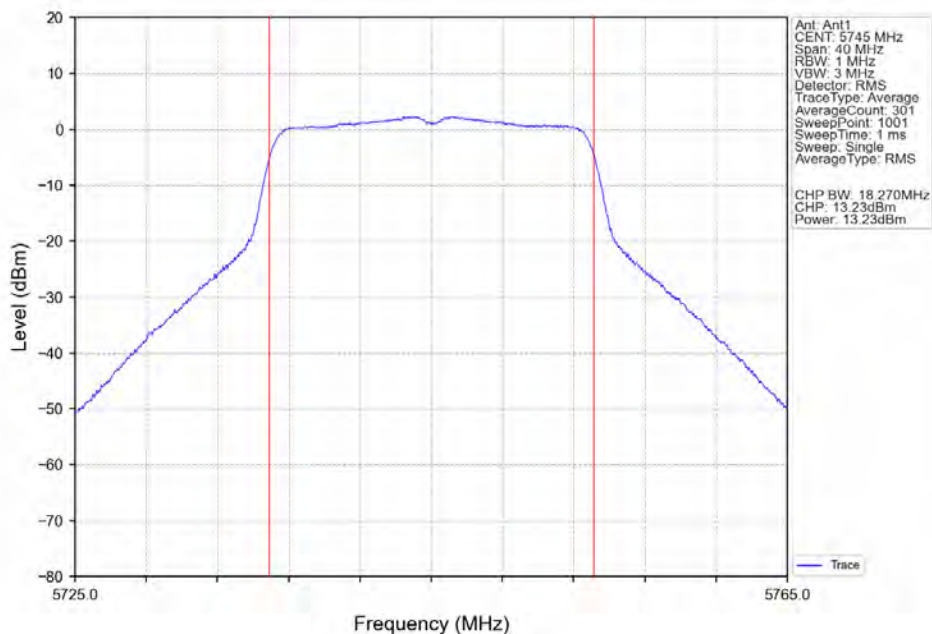
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



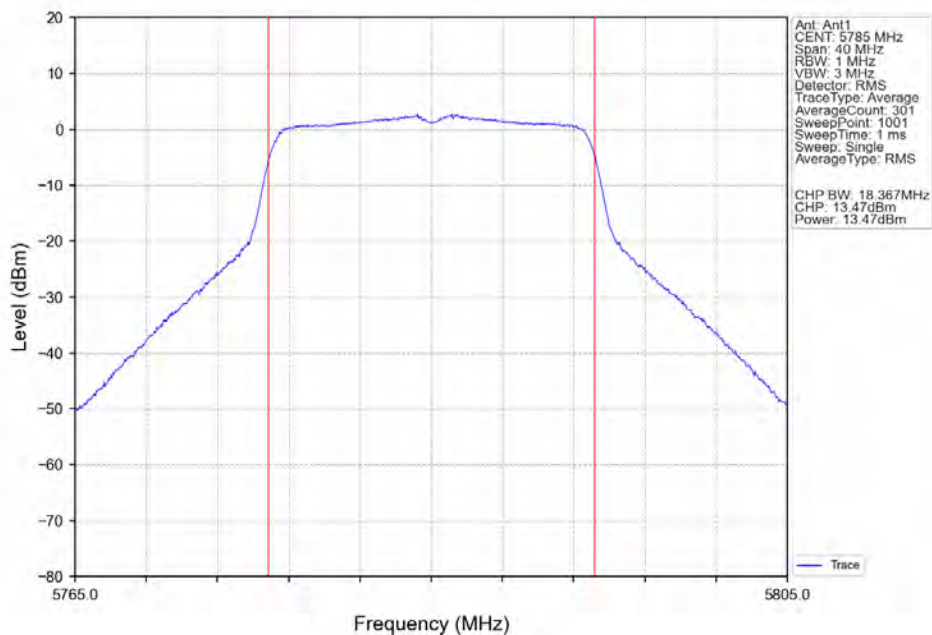
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



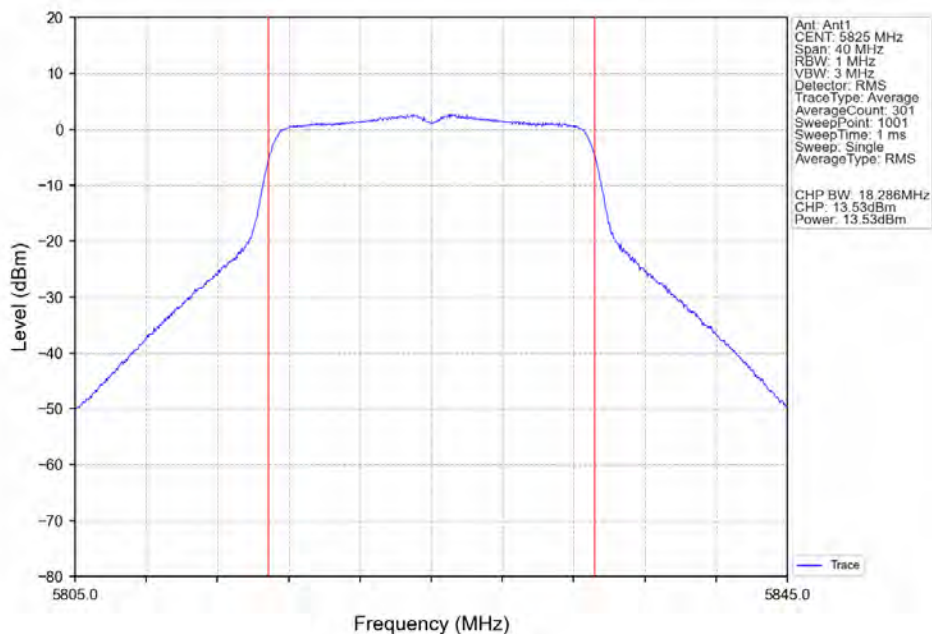
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



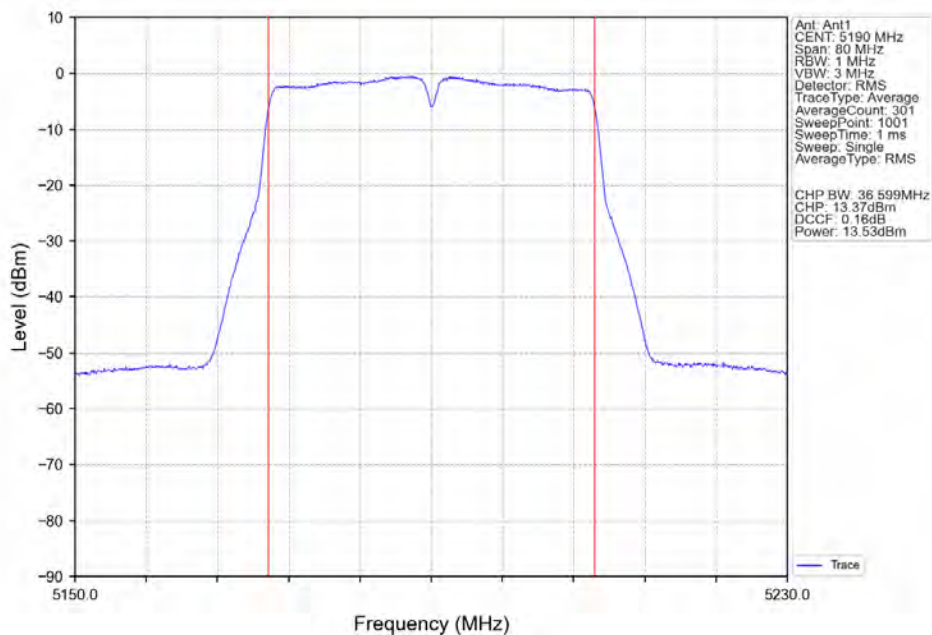
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



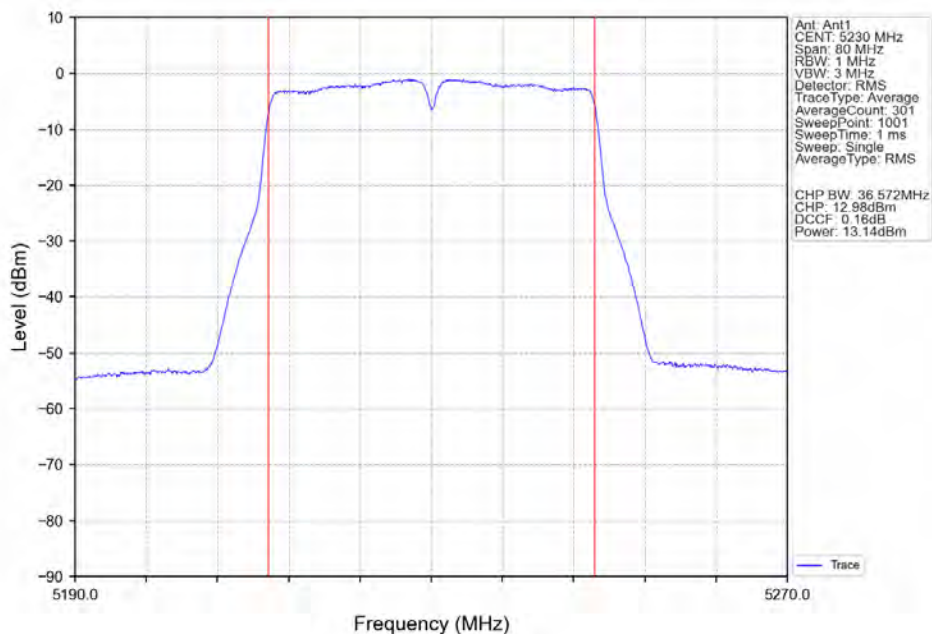
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



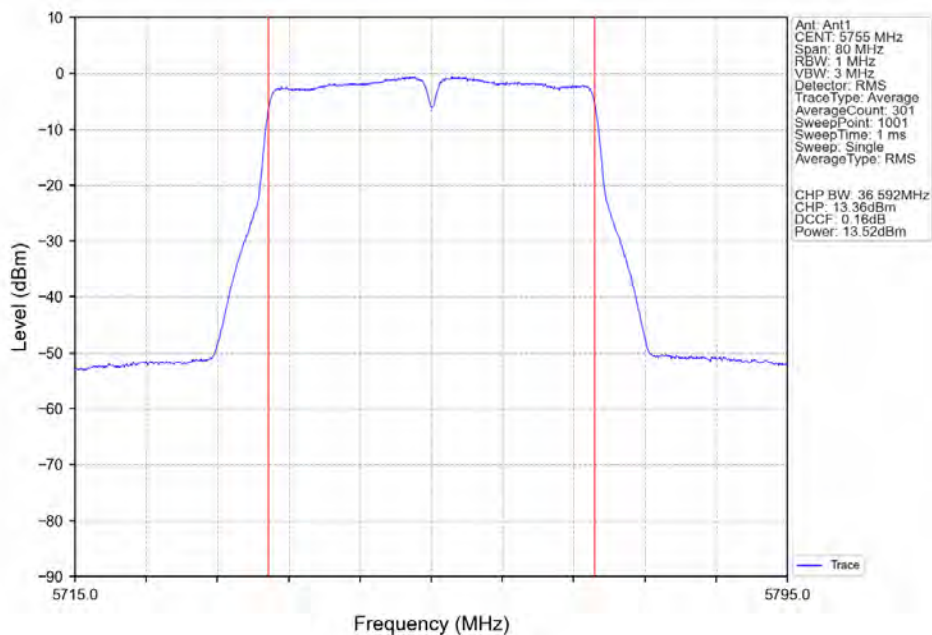
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



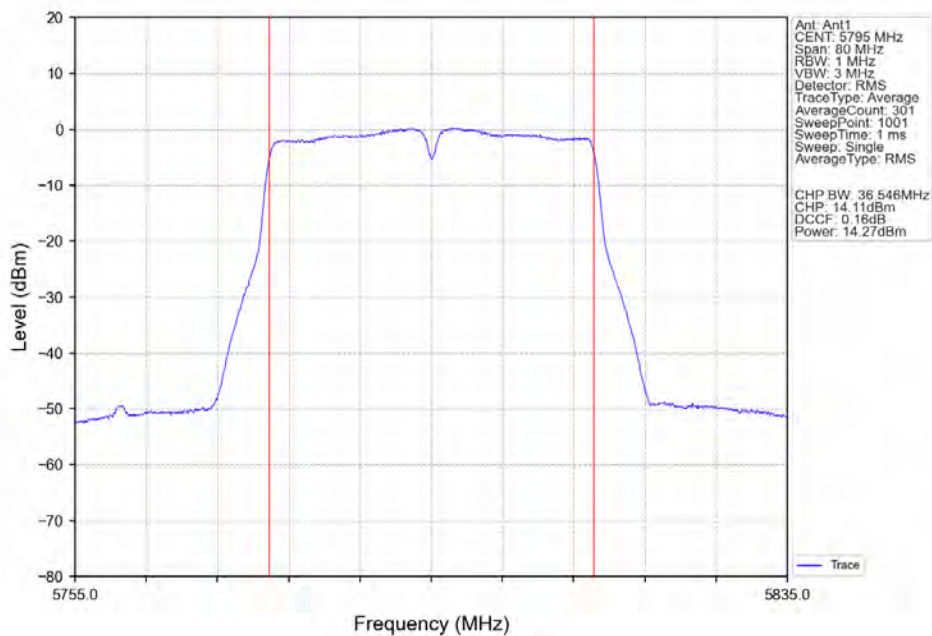
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



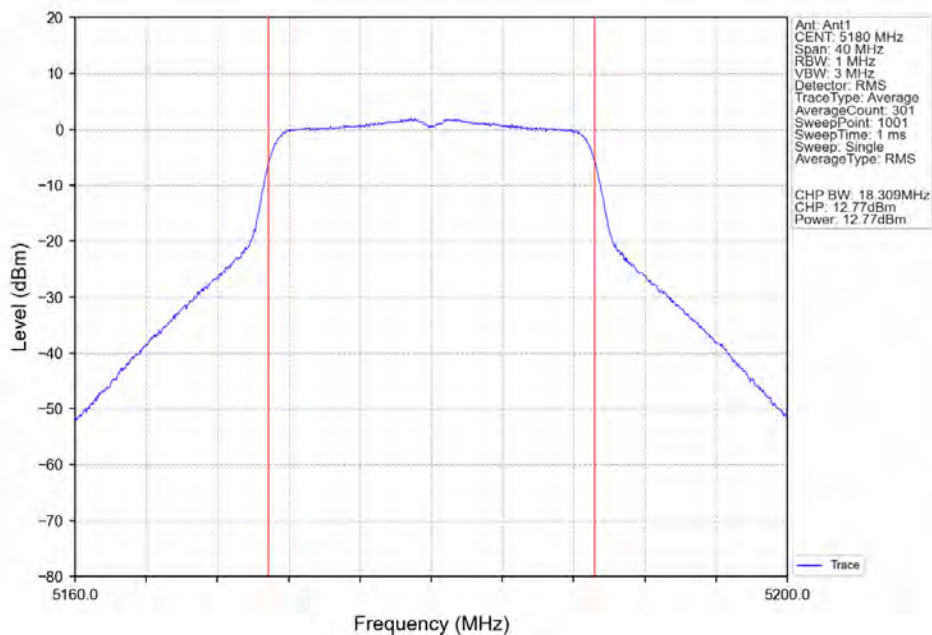
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



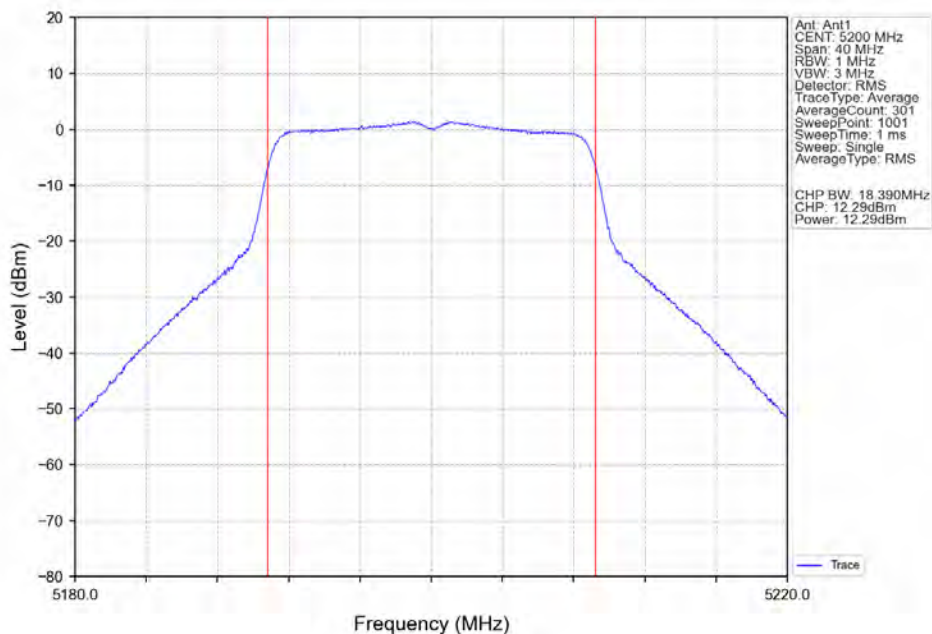
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



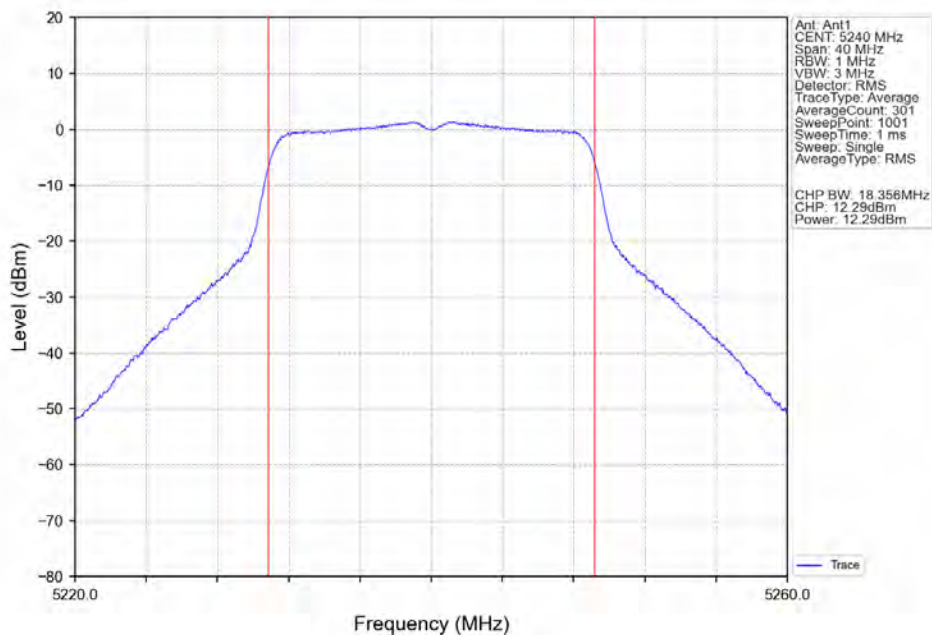
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



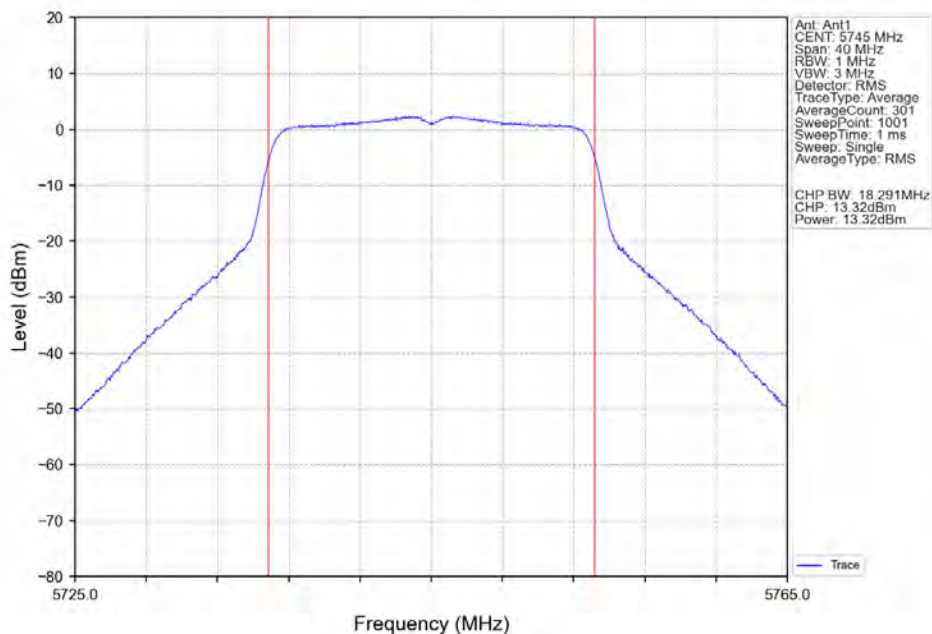
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



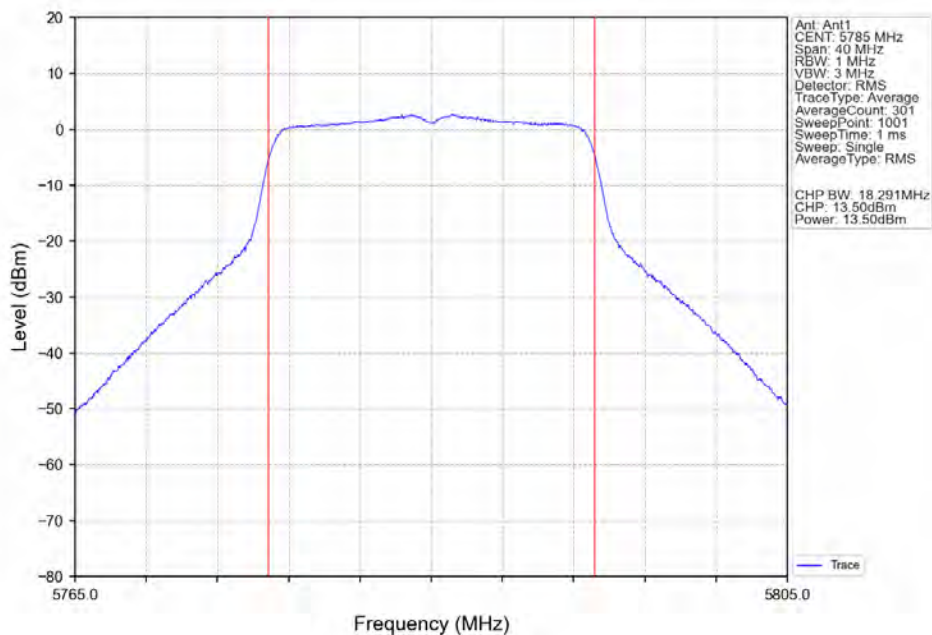
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



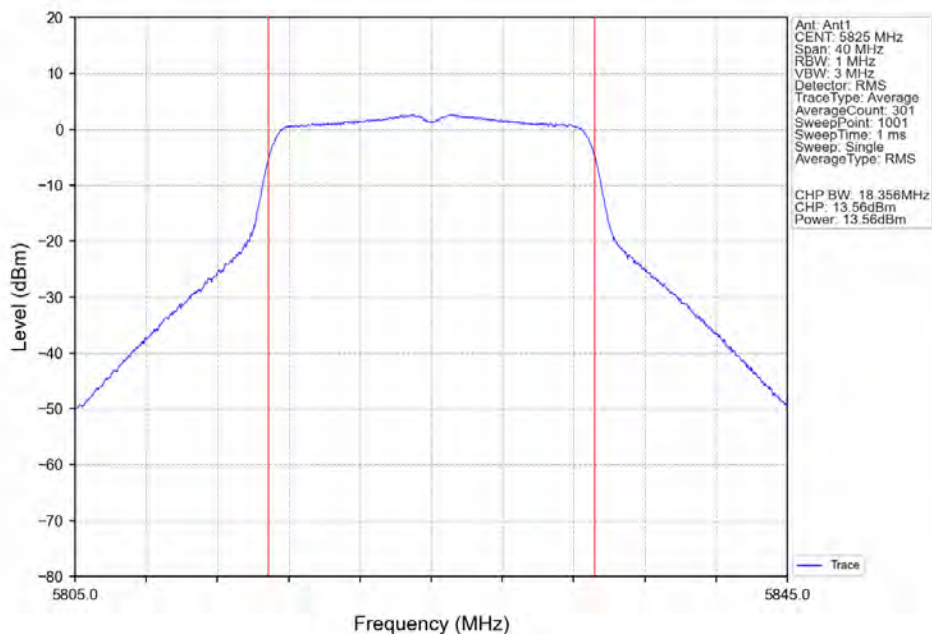
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



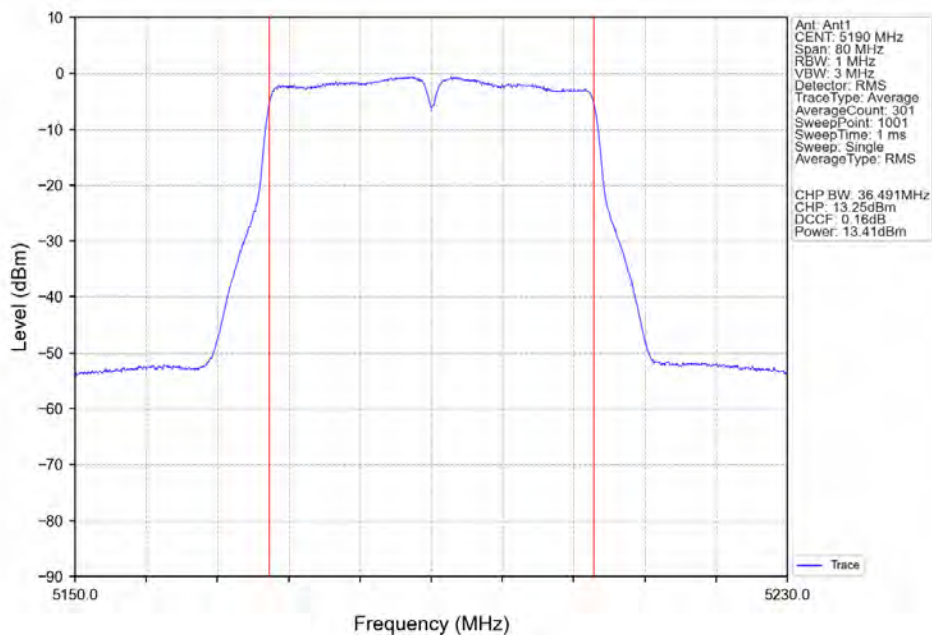
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



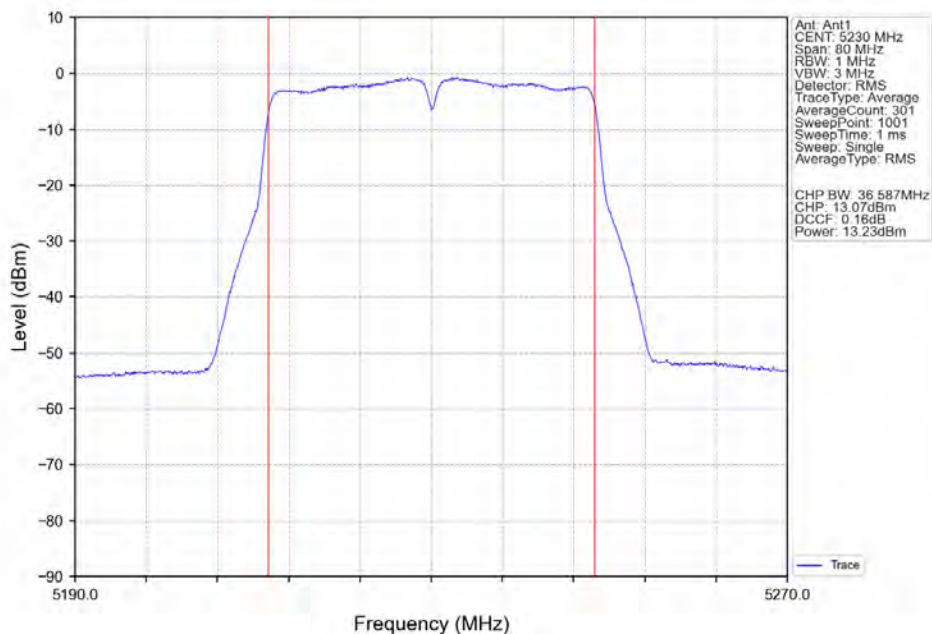
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



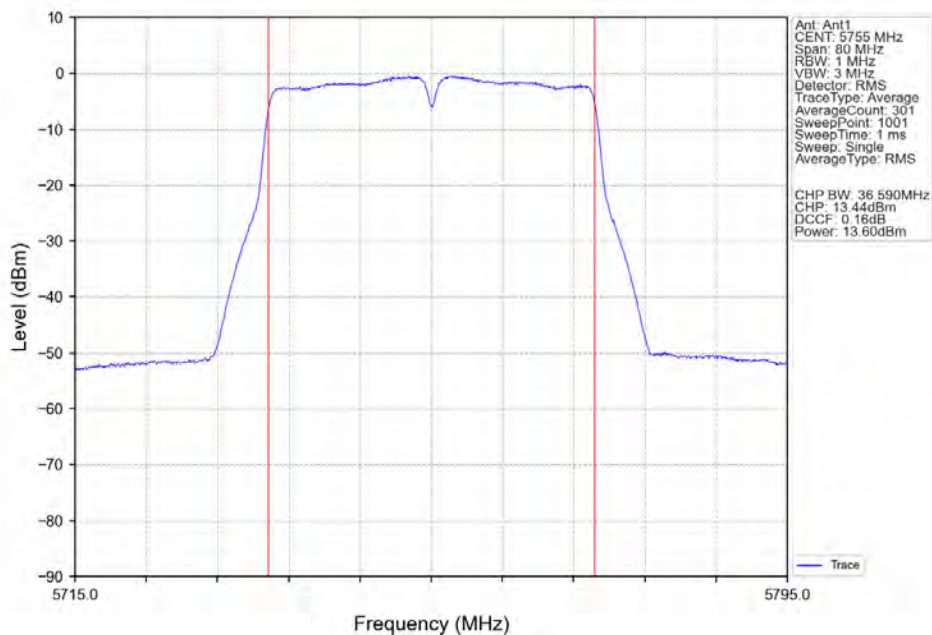
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



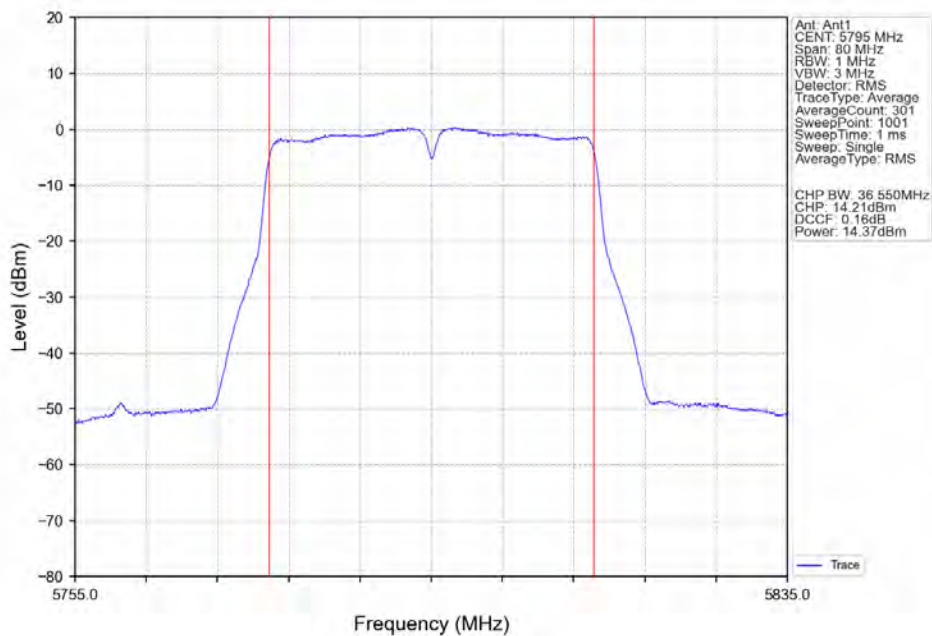
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV

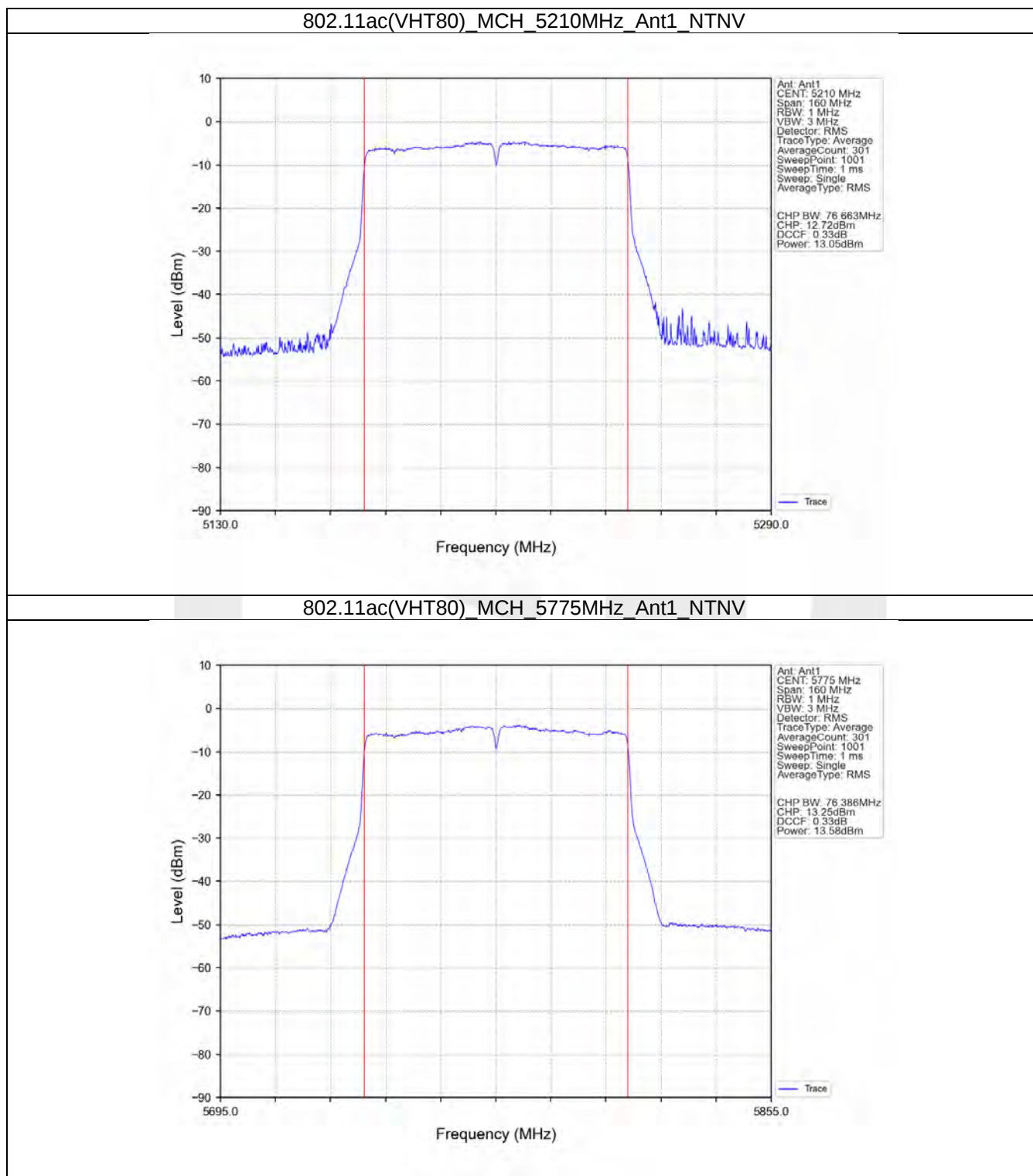


802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV





4. Maximum Power Spectral Density

4.1 Test Result

4.1.1 PSD

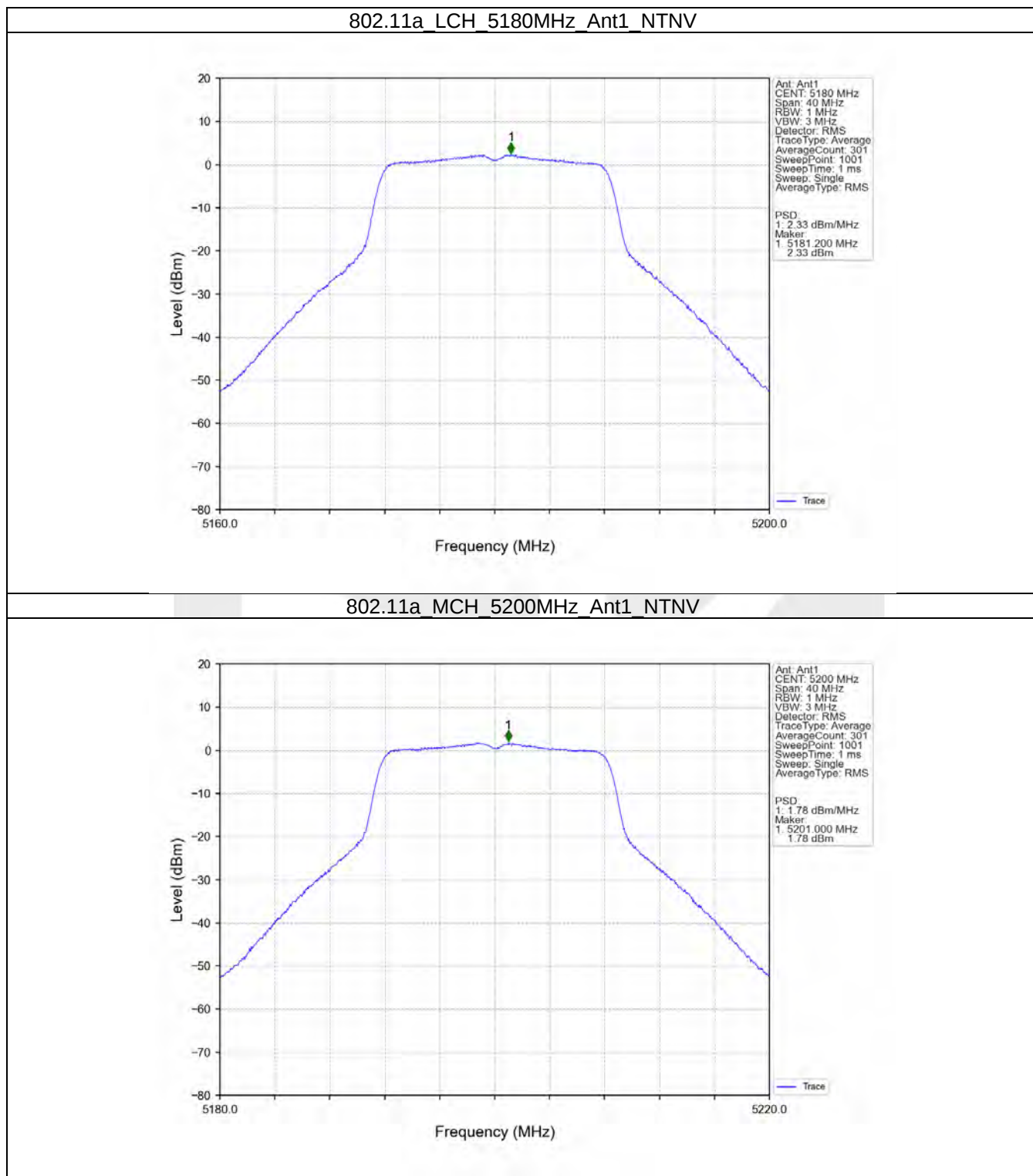
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	2.33	<=11	Pass
		5200	1.78	<=11	Pass
		5240	1.96	<=11	Pass
802.11n (HT20)	SISO	5180	0.98	<=11	Pass
		5200	0.32	<=11	Pass
		5240	1.47	<=11	Pass
802.11n (HT40)	SISO	5190	-0.23	<=11	Pass
		5230	-0.68	<=11	Pass
802.11ac (VHT20)	SISO	5180	1.97	<=11	Pass
		5200	1.42	<=11	Pass
		5240	1.57	<=11	Pass
802.11ac (VHT40)	SISO	5190	-0.27	<=11	Pass
		5230	-0.54	<=11	Pass
802.11ac (VHT80)	SISO	5210	-4.18	<=11	Pass

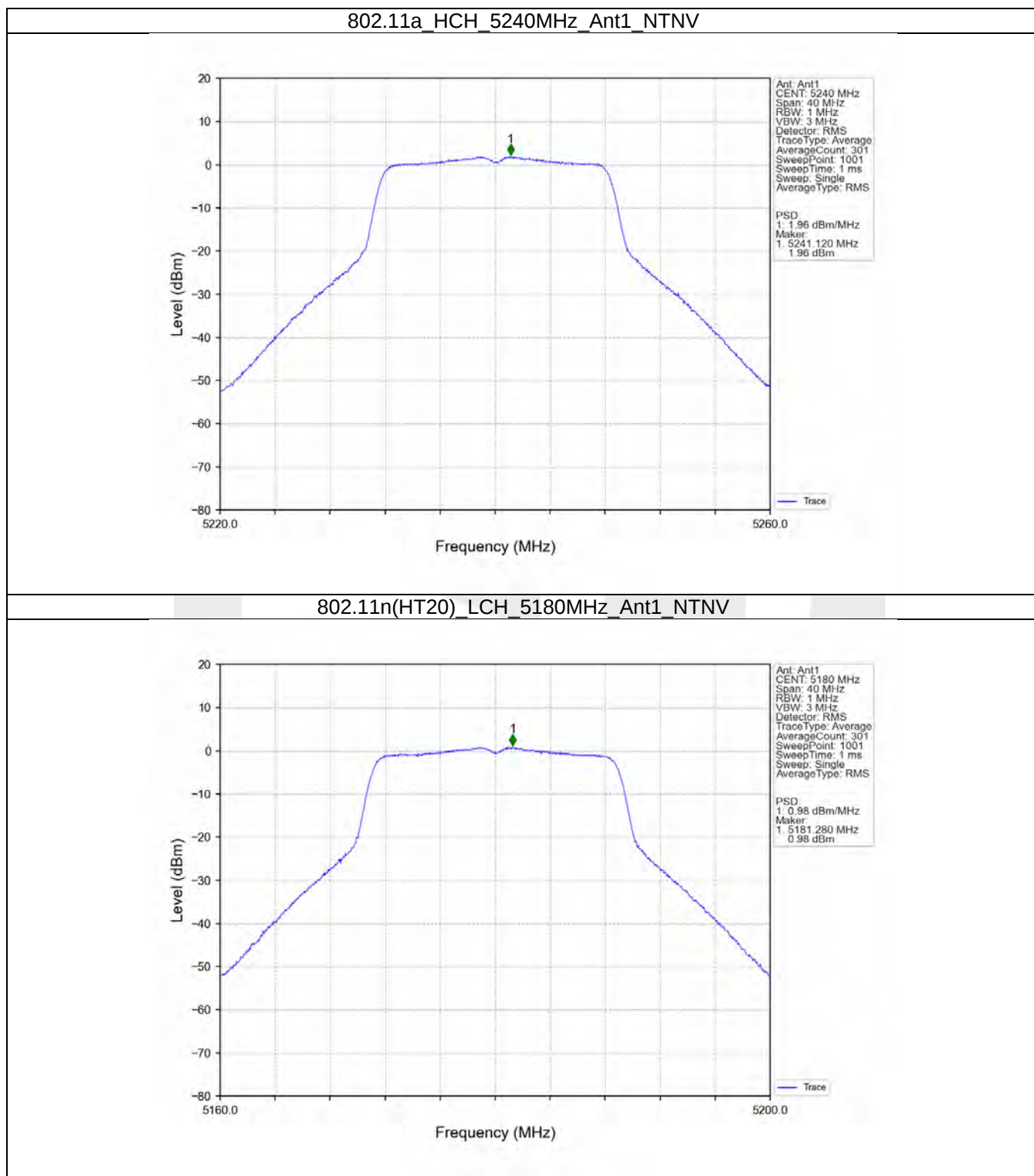
4.1.2 PSD-Band3

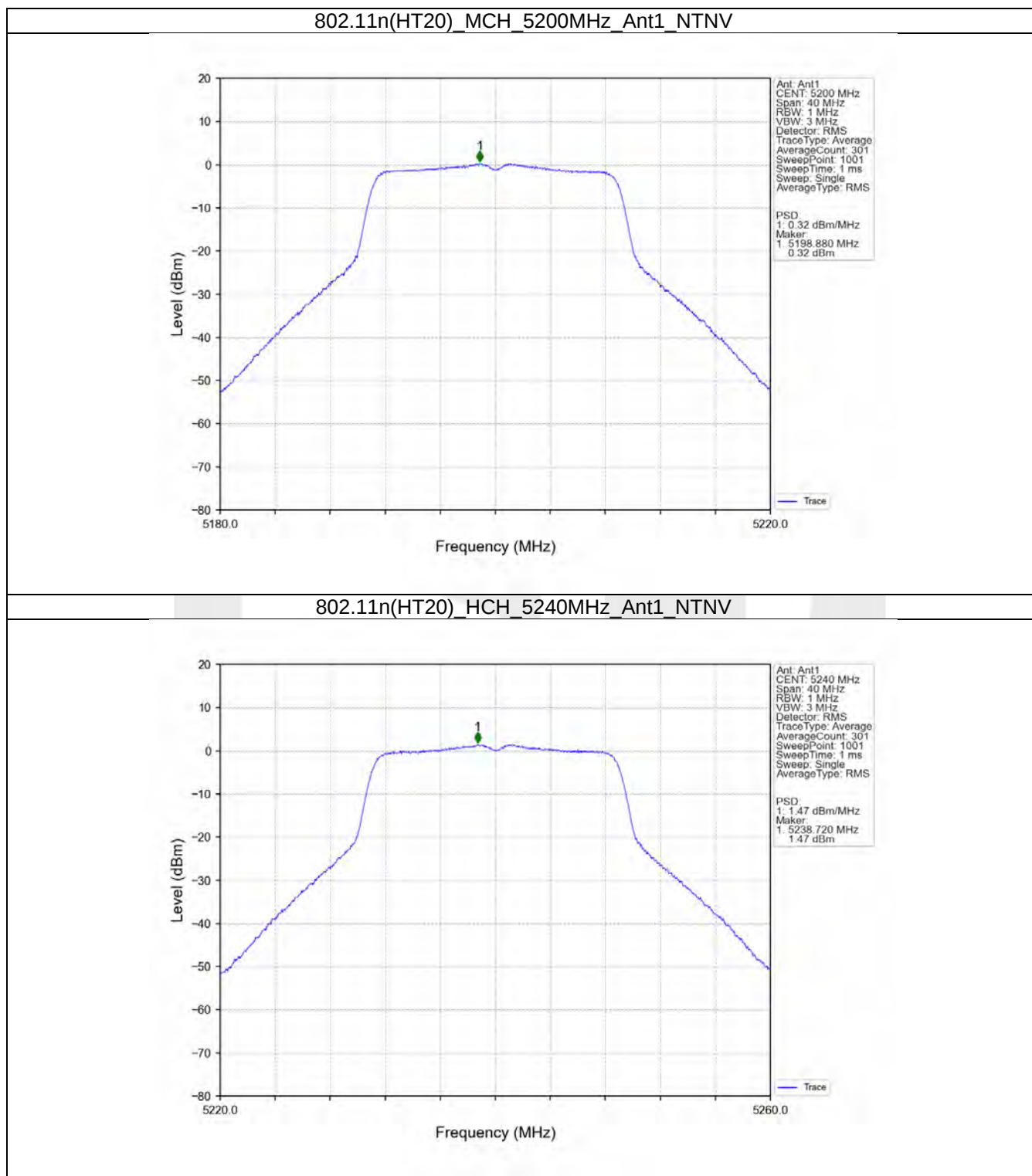
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/500kHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5745	0.08	<=30	Pass
		5785	0.31	<=30	Pass
		5825	0.19	<=30	Pass
802.11n (HT20)	SISO	5745	-0.30	<=30	Pass
		5785	-0.20	<=30	Pass
		5825	-0.09	<=30	Pass
802.11n (HT40)	SISO	5755	-3.34	<=30	Pass
		5795	-2.36	<=30	Pass
802.11ac (VHT20)	SISO	5745	-0.32	<=30	Pass
		5785	-0.07	<=30	Pass
		5825	-0.30	<=30	Pass
802.11ac (VHT40)	SISO	5755	-3.05	<=30	Pass
		5795	-2.25	<=30	Pass
802.11ac (VHT80)	SISO	5775	-6.13	<=30	Pass

4.2 Test Graph

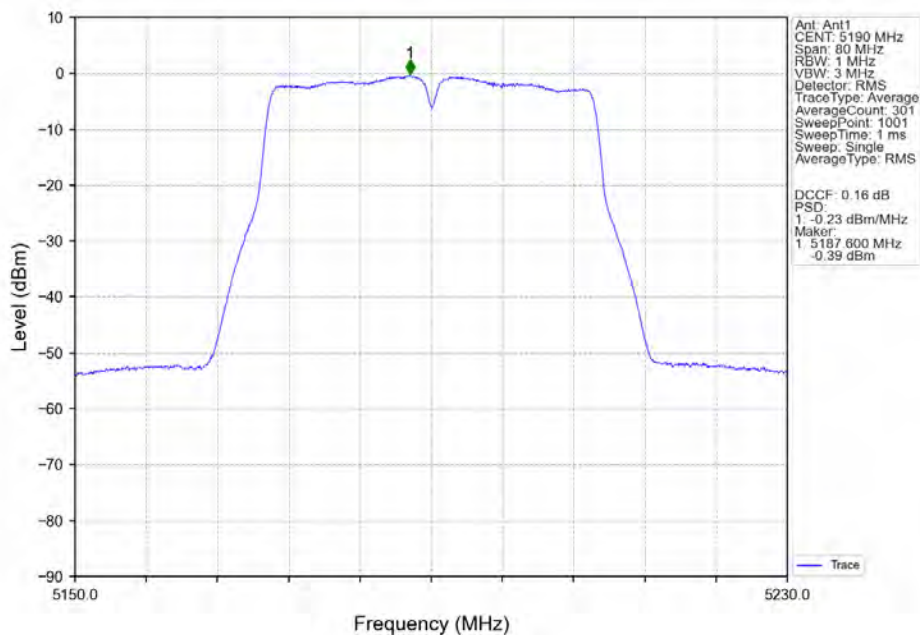
4.2.1 PSD



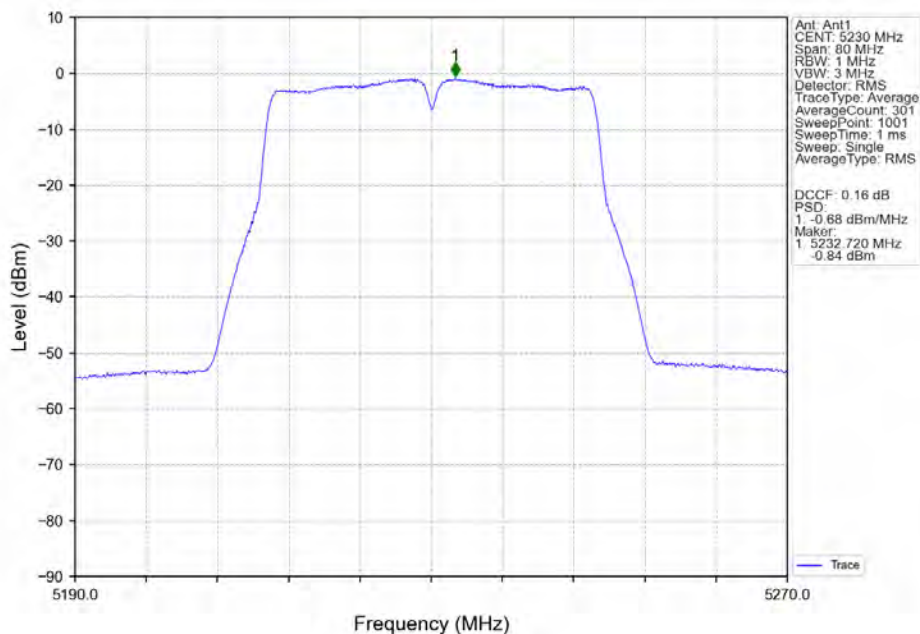




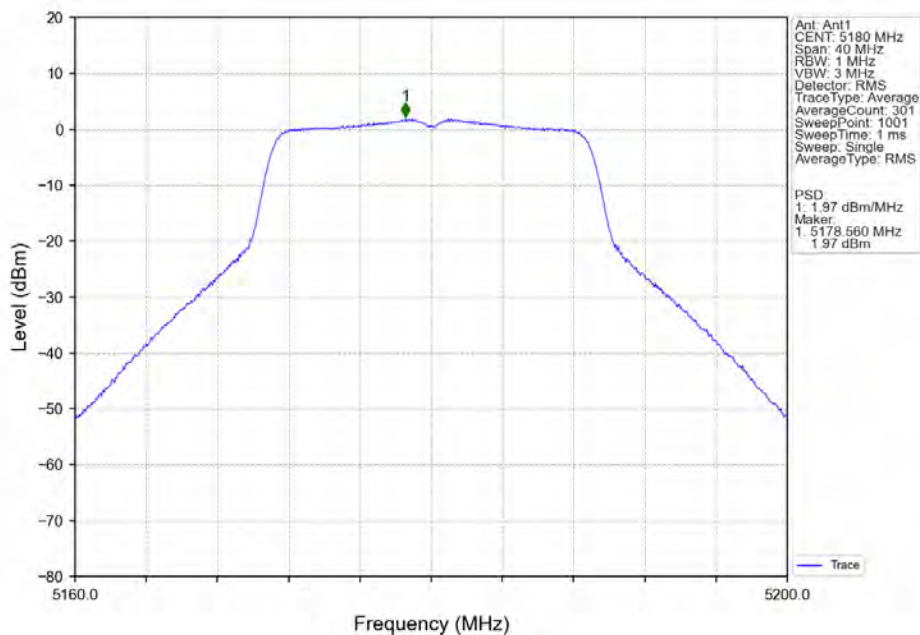
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



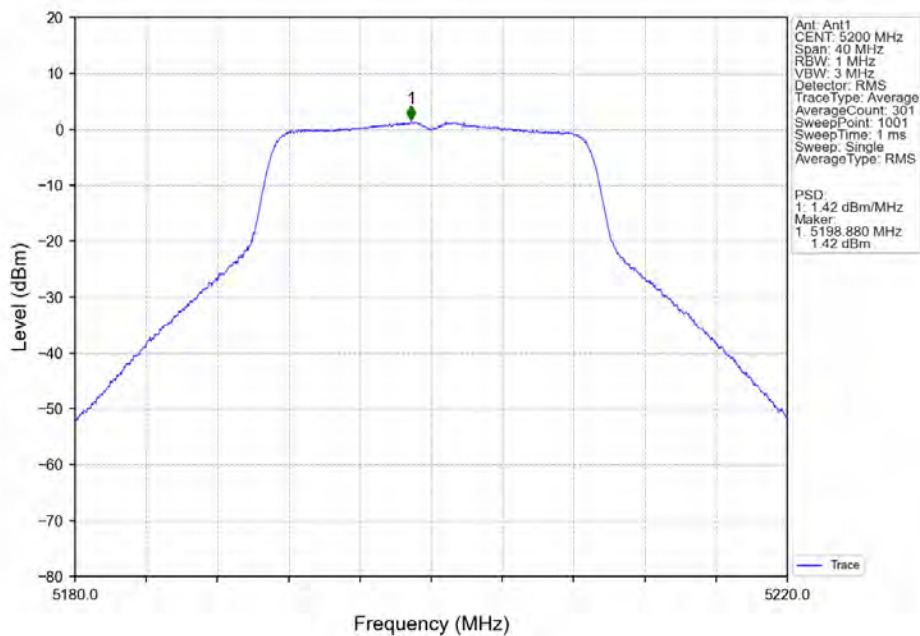
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



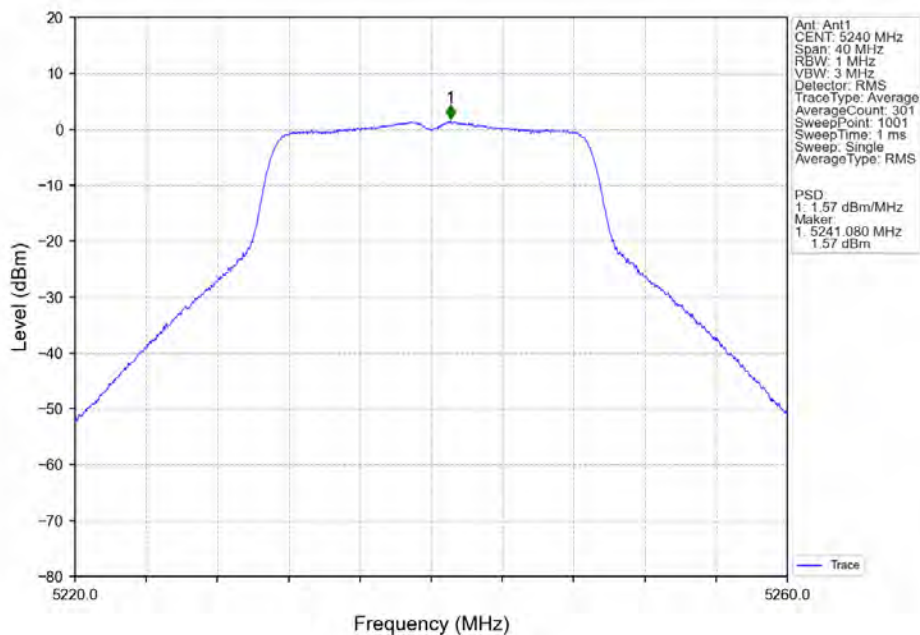
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



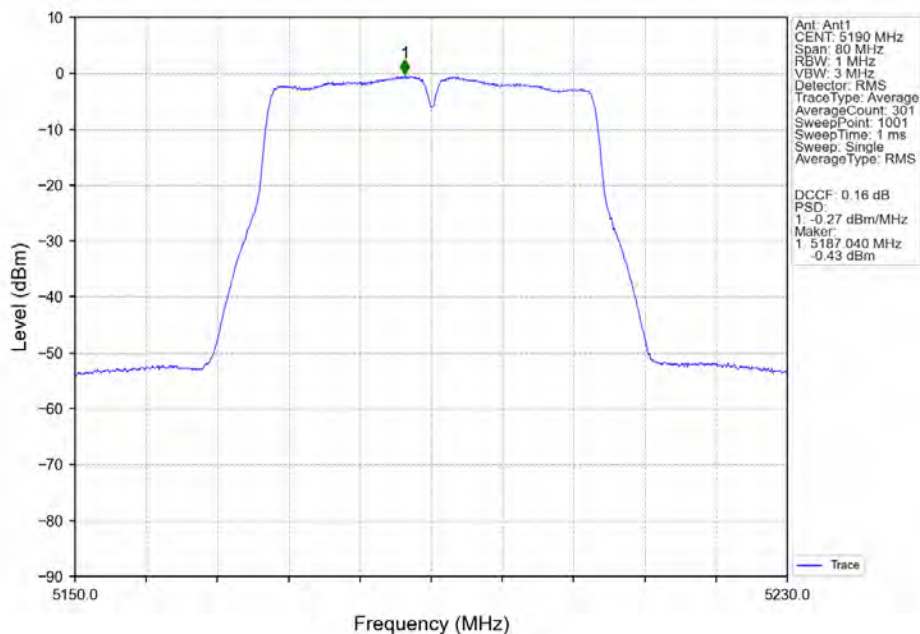
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



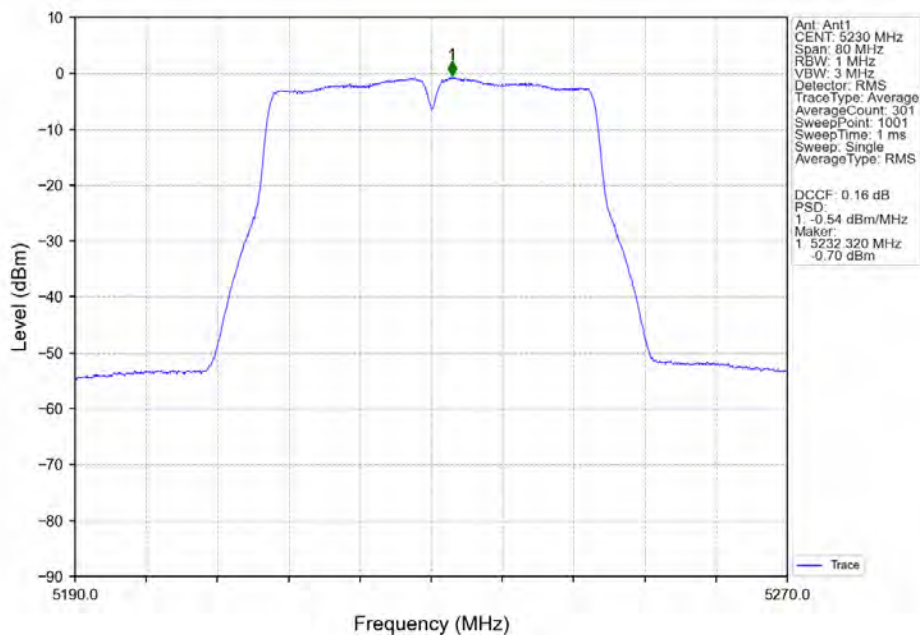
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



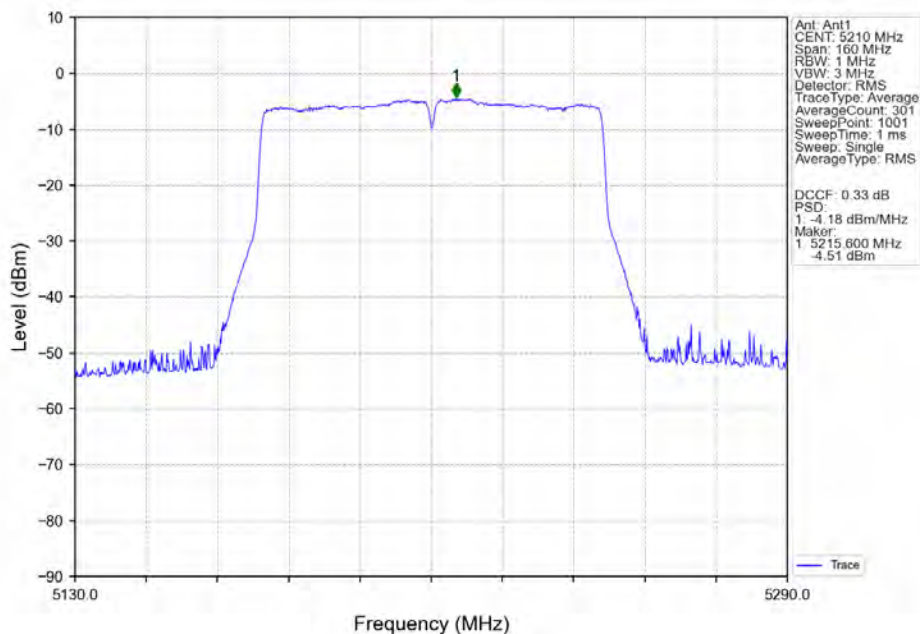
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



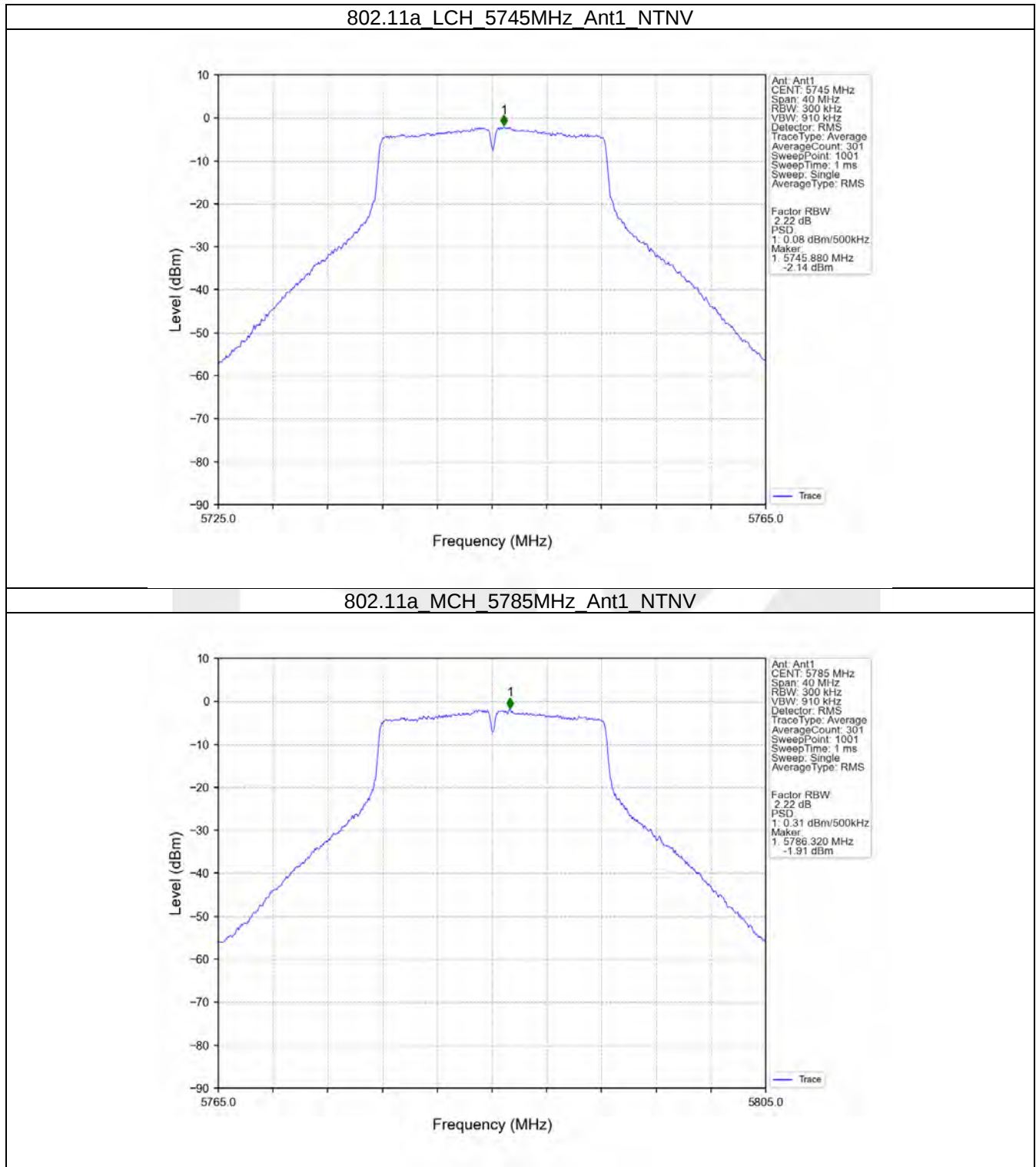
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV

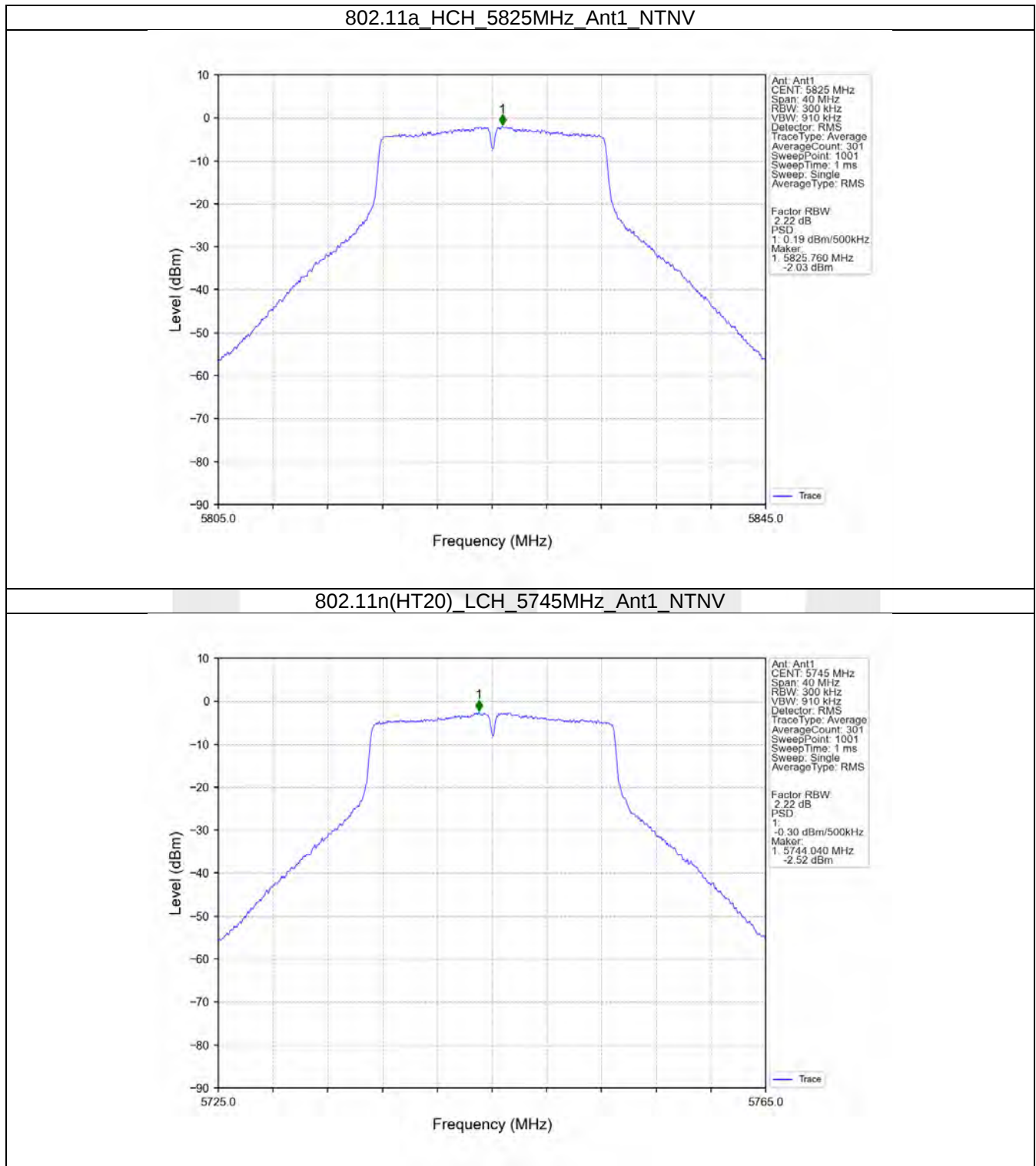


802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV

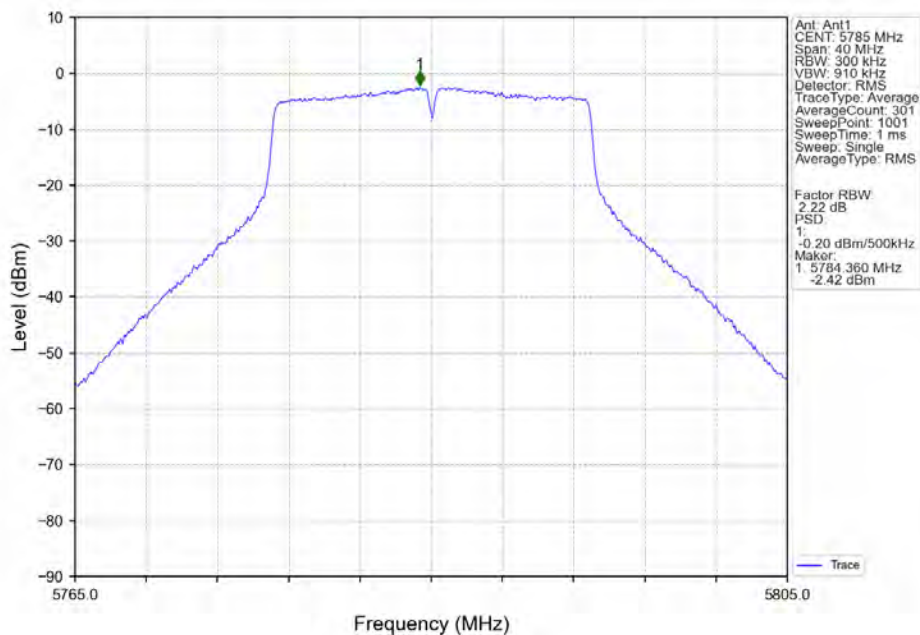


4.2.2 PSD-Band3

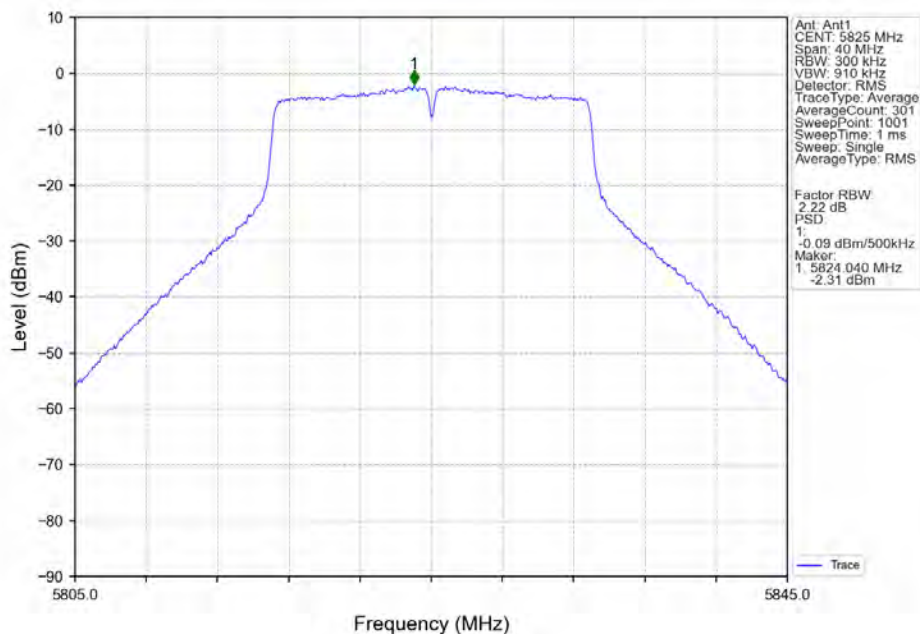




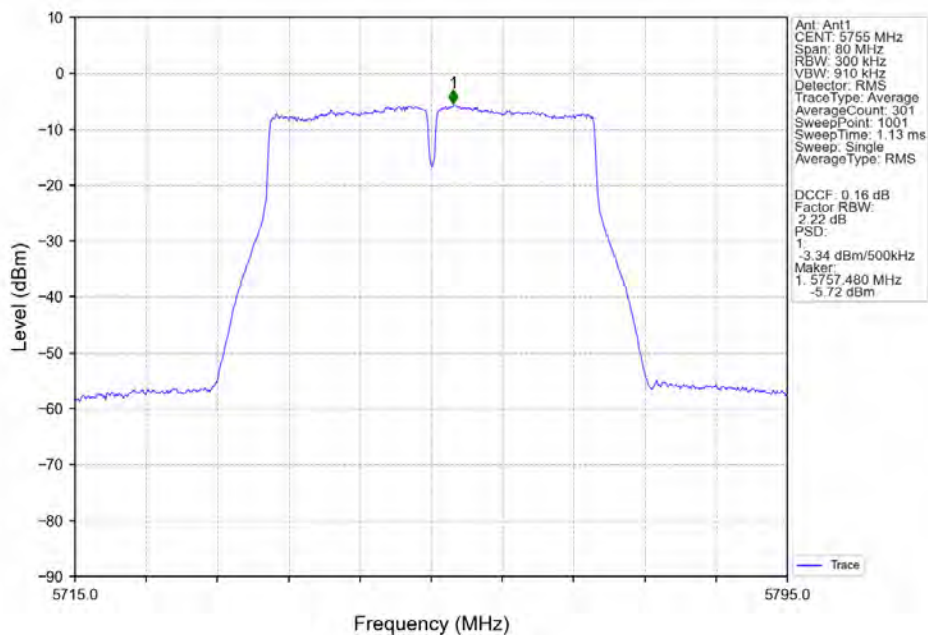
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



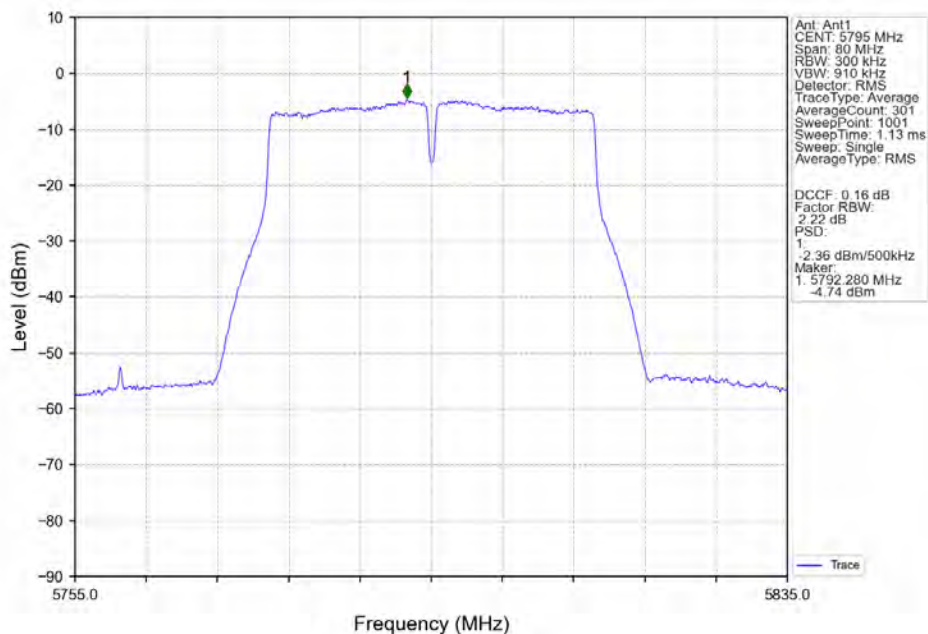
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



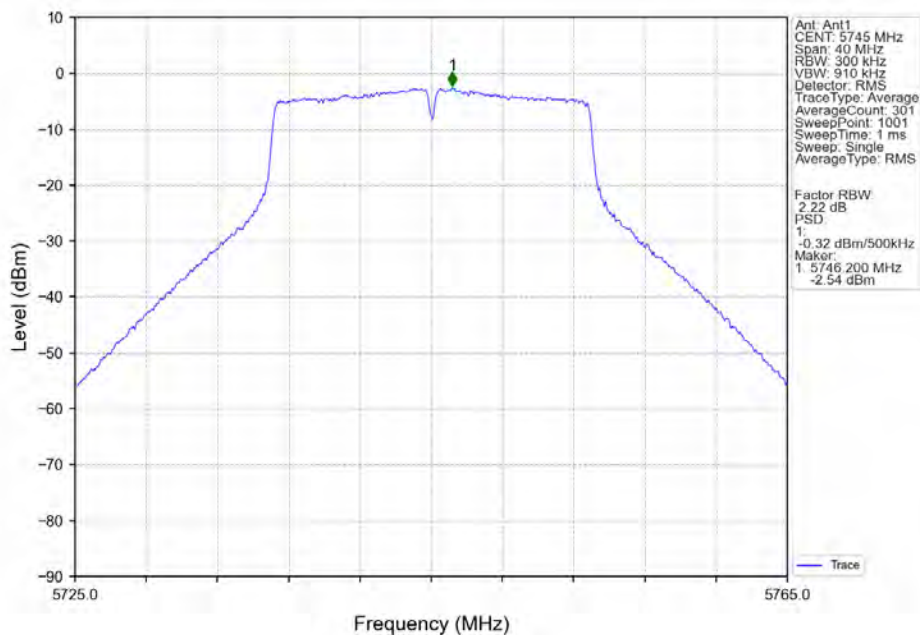
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



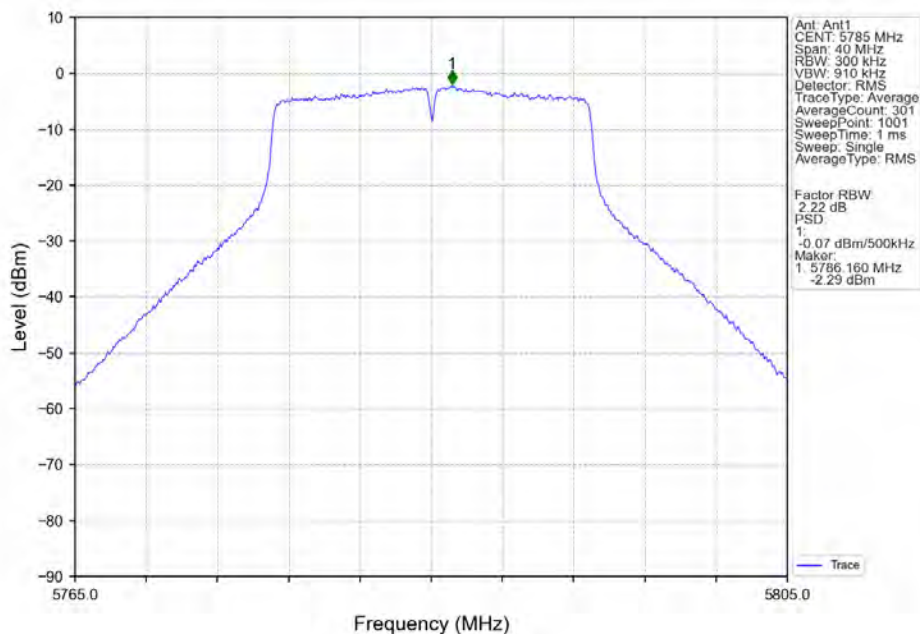
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



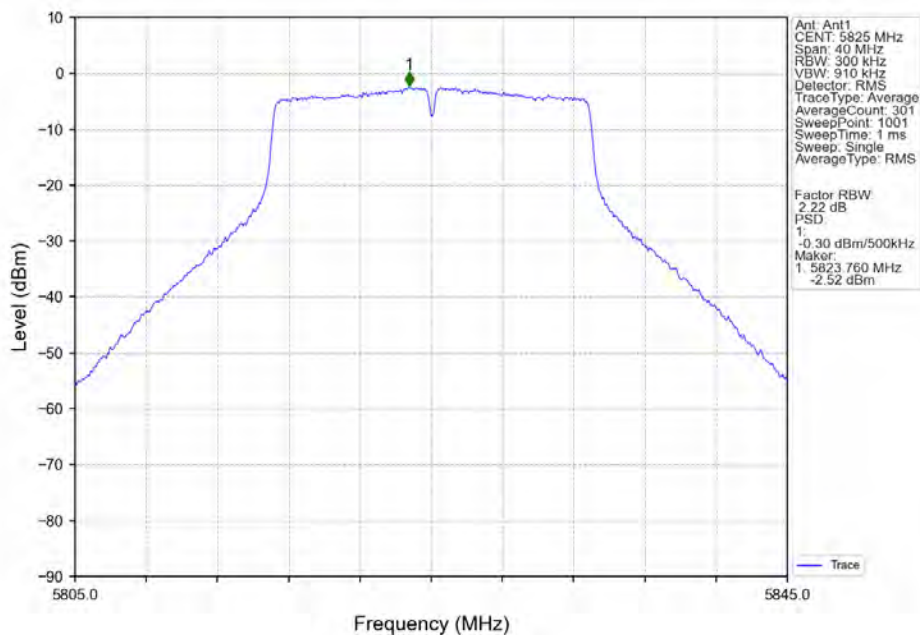
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



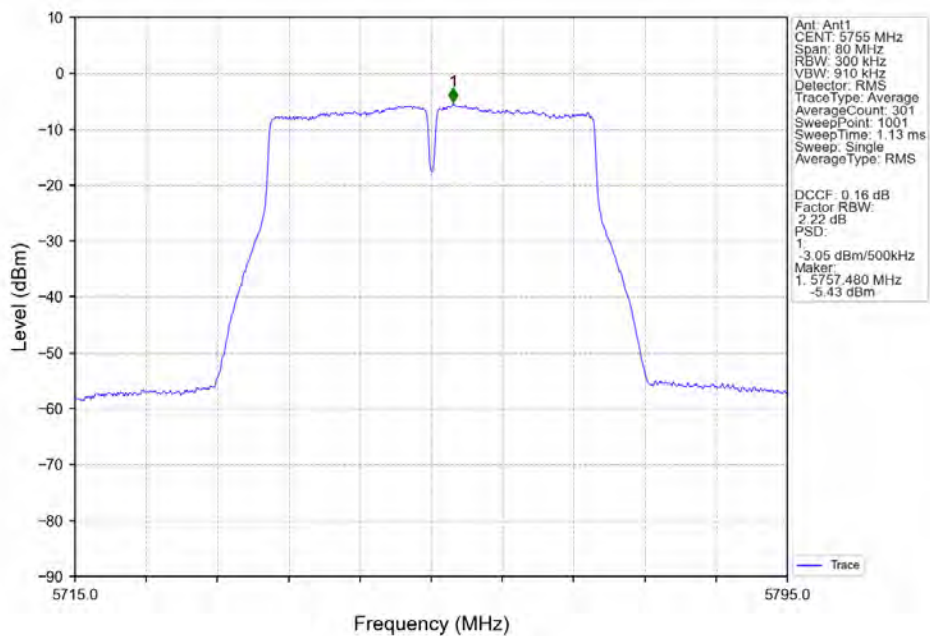
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



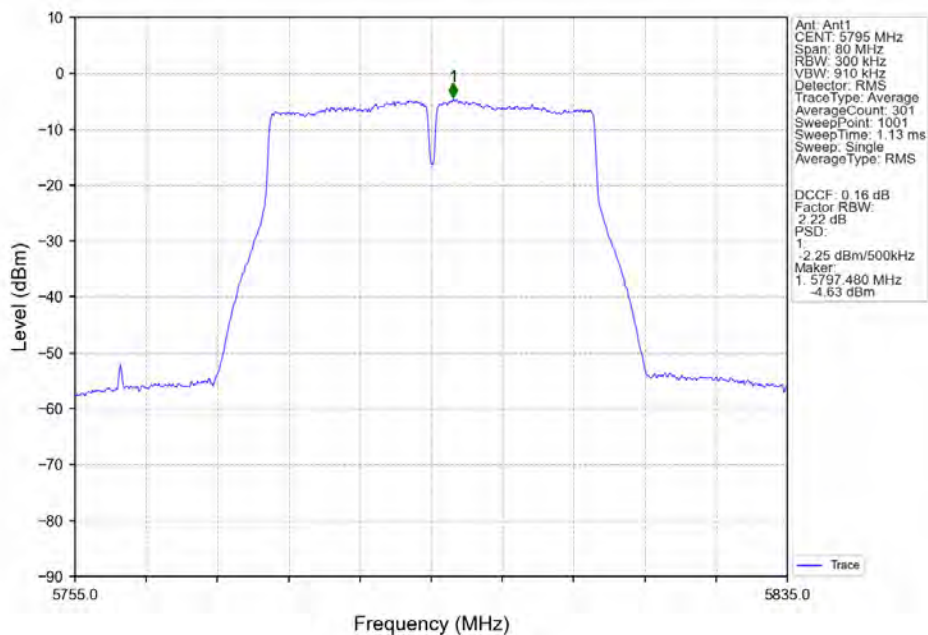
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



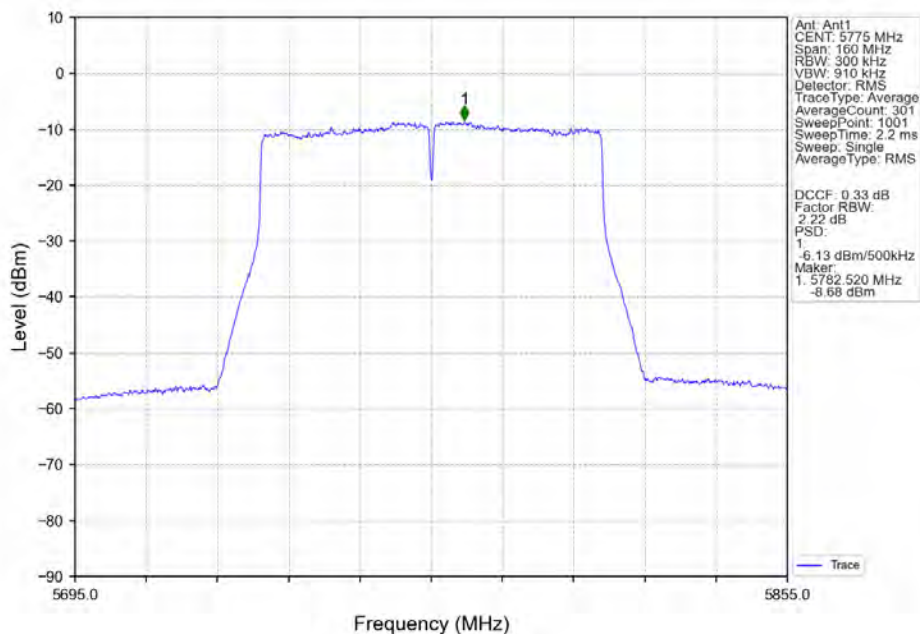
802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



5. Unwanted Emissions In Restricted Frequency Bands

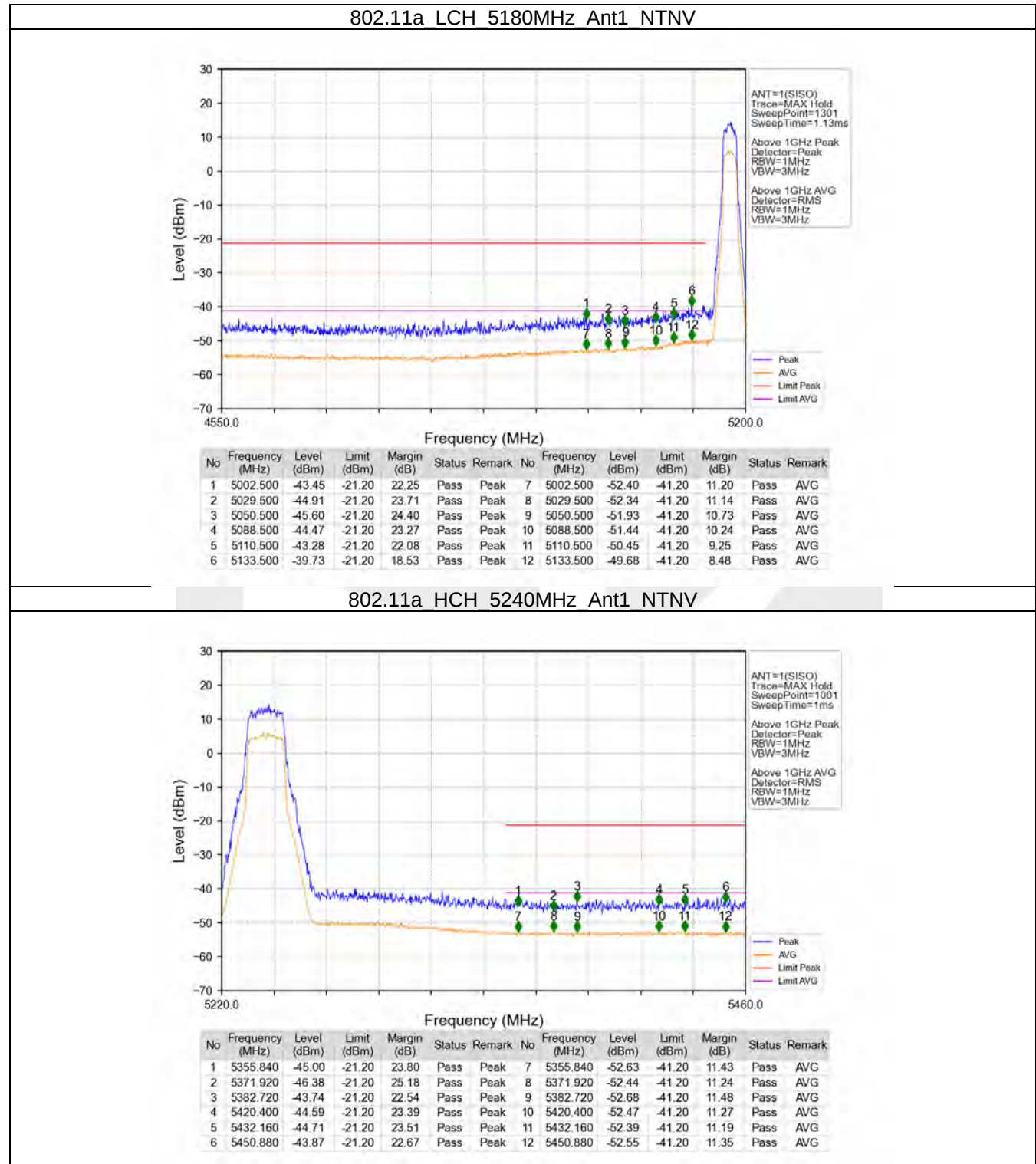
5.1 Test Result

5.1.1 CSE

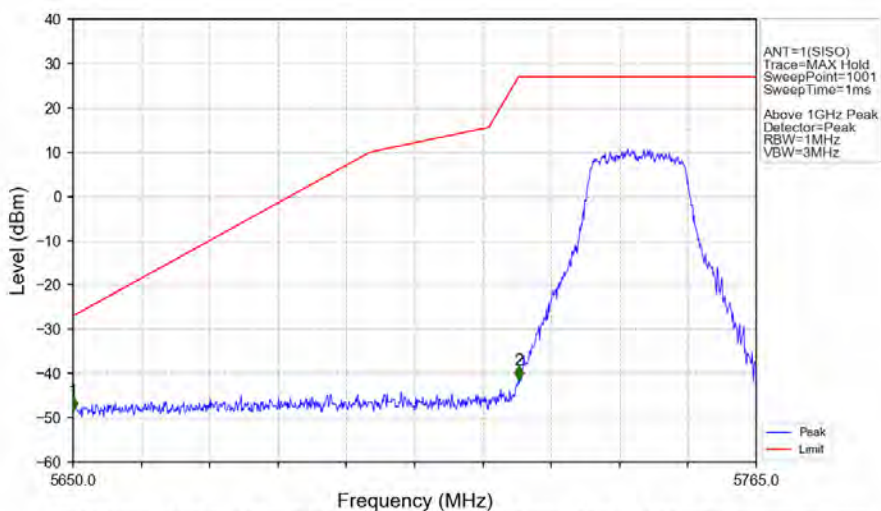
Mode	TX Type	Frequency (MHz)	ANT	Level of Unwanted Emissions (dBm)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	Refer To Test Graph		Pass
		5200	1	Refer To Test Graph		Pass
		5240	1	Refer To Test Graph		Pass
		5745	1	Refer To Test Graph		Pass
		5785	1	Refer To Test Graph		Pass
		5825	1	Refer To Test Graph		Pass
802.11n (HT20)	SISO	5180	1	Refer To Test Graph		Pass
		5200	1	Refer To Test Graph		Pass
		5240	1	Refer To Test Graph		Pass
		5745	1	Refer To Test Graph		Pass
		5785	1	Refer To Test Graph		Pass
		5825	1	Refer To Test Graph		Pass
802.11n (HT40)	SISO	5190	1	Refer To Test Graph		Pass
		5230	1	Refer To Test Graph		Pass
		5755	1	Refer To Test Graph		Pass
		5795	1	Refer To Test Graph		Pass
802.11ac (VHT20)	SISO	5180	1	Refer To Test Graph		Pass
		5200	1	Refer To Test Graph		Pass
		5240	1	Refer To Test Graph		Pass
		5745	1	Refer To Test Graph		Pass
		5785	1	Refer To Test Graph		Pass
		5825	1	Refer To Test Graph		Pass
802.11ac (VHT40)	SISO	5190	1	Refer To Test Graph		Pass
		5230	1	Refer To Test Graph		Pass
		5755	1	Refer To Test Graph		Pass
		5795	1	Refer To Test Graph		Pass
802.11ac (VHT80)	SISO	5210	1	Refer To Test Graph		Pass
		5775	1	Refer To Test Graph		Pass
Note: 1) EIRP[dBm]=E[dBuV/m]- 95.2, for d= 3 m; 2) Level[dBm] results have calculated the antenna gain; 3) Antenna gain= U-NII-1: 5150 MHz to 5250 MHz: 2.0 dBi and U-NII-3: 5725 MHz to 5850 MHz: 4.4 dBi						

5.2 Test Graph

5.2.1 CSE

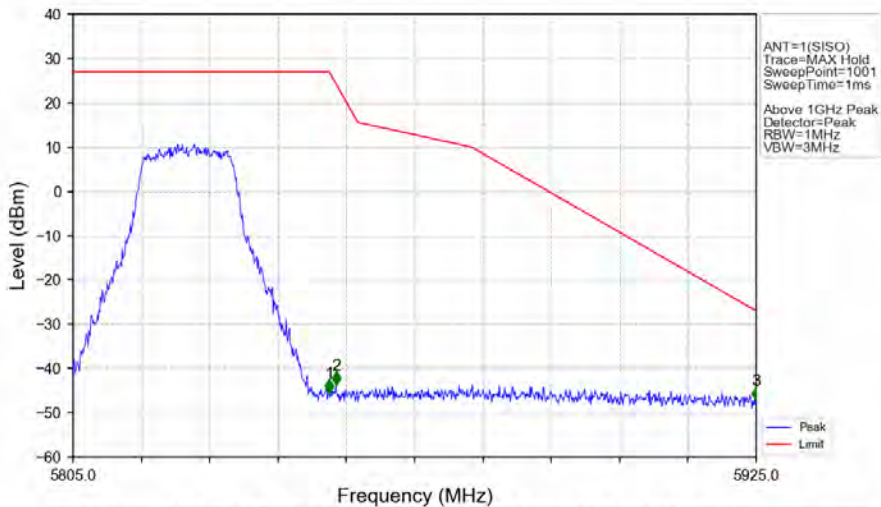


802.11a_LCH_5745MHz_Ant1_NTNV



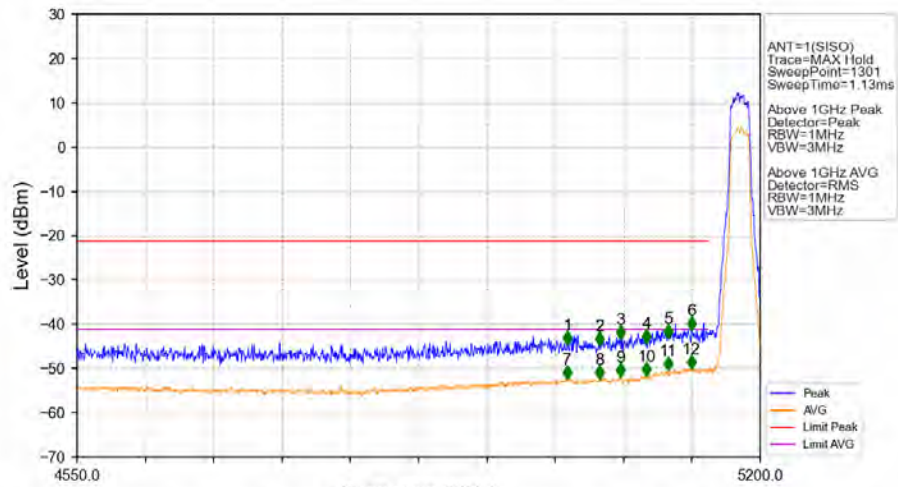
No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	5650.000	-43.89	-27.00	16.89	Pass	Peak	2	5725.000	-36.97	27.00	63.97	Pass	Peak

802.11a_HCH_5825MHz_Ant1_NTNV



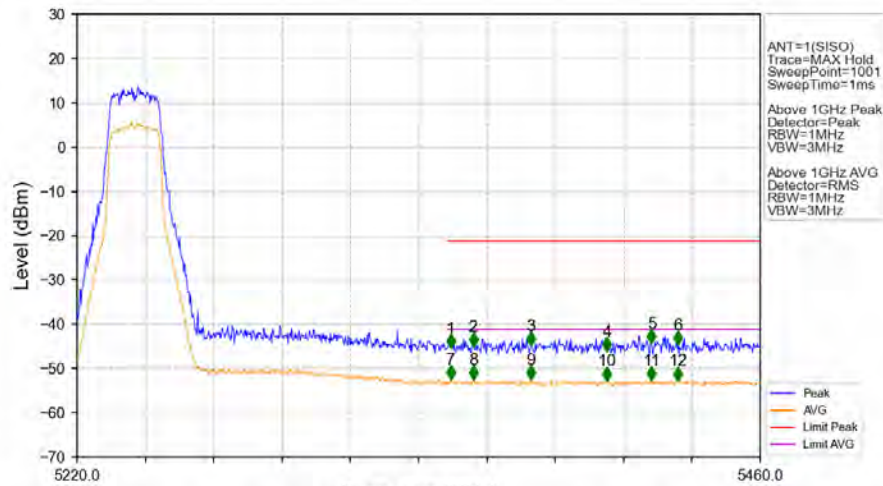
No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	5850.000	-41.22	27.00	68.22	Pass	Peak	3	5925.000	-42.78	-27.00	15.78	Pass	Peak
2	5851.200	-39.37	24.26	63.63	Pass	Peak							

802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



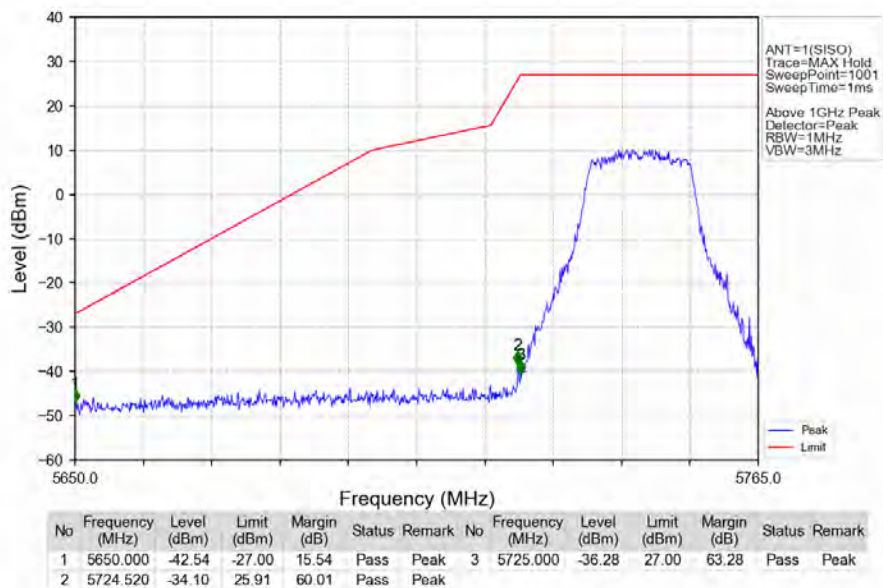
No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	5016.500	-44.56	-21.20	23.36	Pass	Peak	7	5016.500	-52.42	-41.20	11.22	Pass	AVG
2	5047.000	-44.85	-21.20	23.65	Pass	Peak	8	5047.000	-52.46	-41.20	11.26	Pass	AVG
3	5067.000	-43.36	-21.20	22.16	Pass	Peak	9	5067.000	-51.89	-41.20	10.69	Pass	AVG
4	5092.000	-44.23	-21.20	23.03	Pass	Peak	10	5092.000	-51.71	-41.20	10.51	Pass	AVG
5	5112.500	-43.21	-21.20	22.01	Pass	Peak	11	5112.500	-50.50	-41.20	9.30	Pass	AVG
6	5134.500	-41.30	-21.20	20.10	Pass	Peak	12	5134.500	-50.01	-41.20	8.81	Pass	AVG

802.11n(HT20)_HCH_5240MHz_Ant1_NTNV

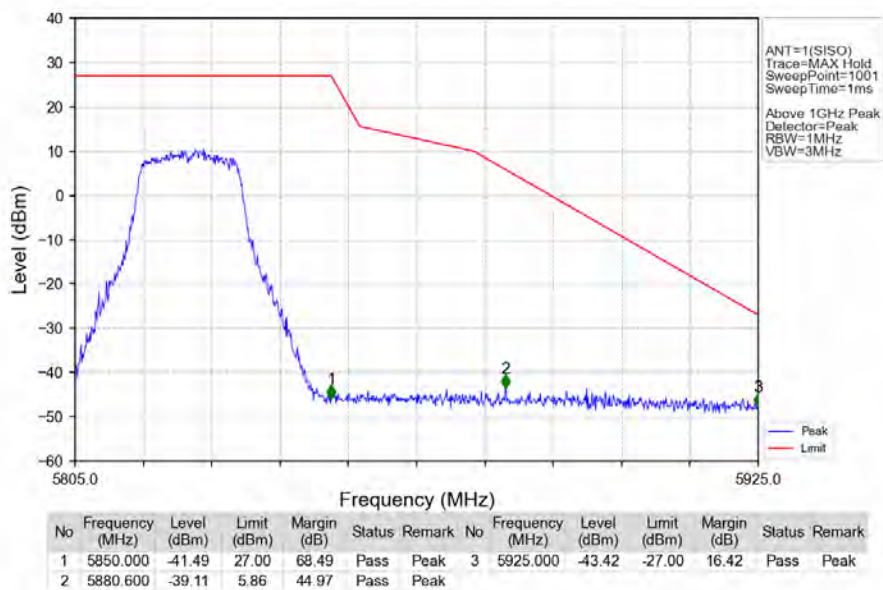


No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	5351.280	-45.34	-21.20	24.14	Pass	Peak	7	5351.280	-52.54	-41.20	11.34	Pass	AVG
2	5359.200	-44.95	-21.20	23.75	Pass	Peak	8	5359.200	-52.51	-41.20	11.31	Pass	AVG
3	5379.360	-44.80	-21.20	23.60	Pass	Peak	9	5379.360	-52.48	-41.20	11.28	Pass	AVG
4	5406.240	-46.11	-21.20	24.91	Pass	Peak	10	5406.240	-52.74	-41.20	11.54	Pass	AVG
5	5421.840	-44.26	-21.20	23.06	Pass	Peak	11	5421.840	-52.64	-41.20	11.44	Pass	AVG
6	5431.200	-44.55	-21.20	23.35	Pass	Peak	12	5431.200	-52.74	-41.20	11.54	Pass	AVG

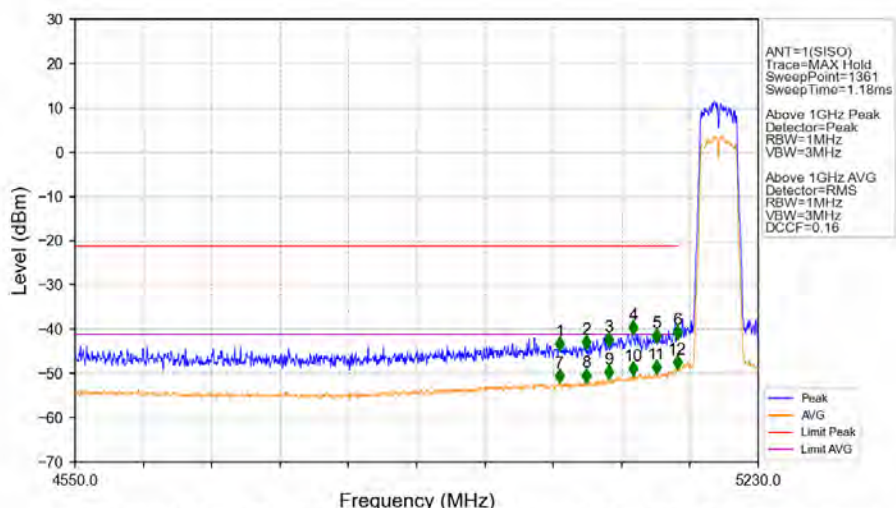
802.11n(HT20) LCH 5745MHz Ant1 NTN



802.11n(HT20) HCH 5825MHz Ant1 NTN

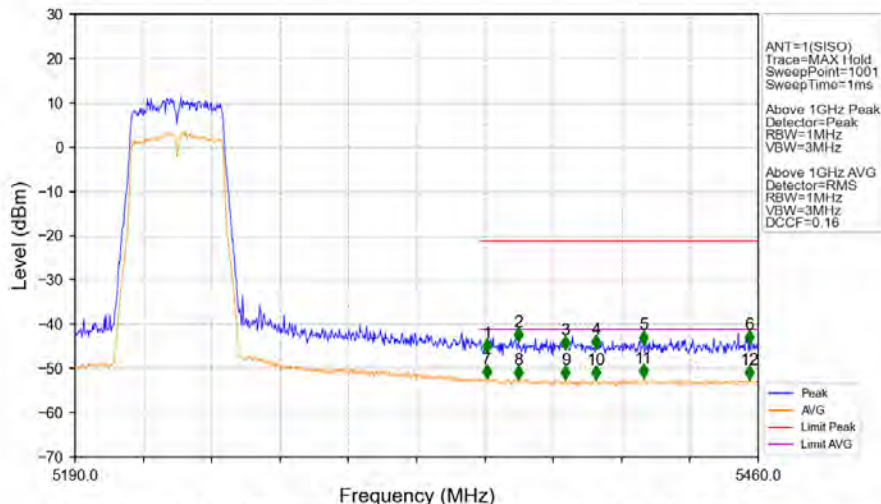


802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



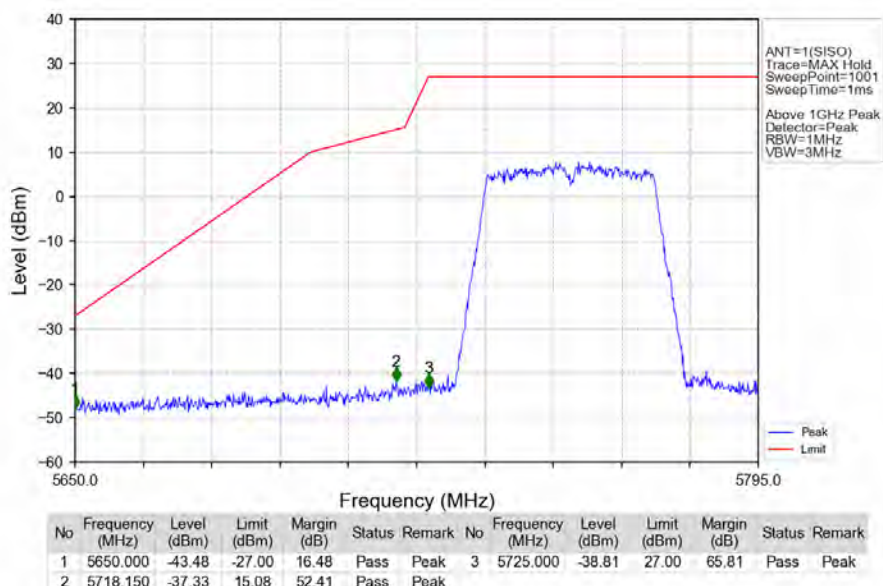
No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	5032.500	-44.88	-21.20	23.68	Pass	Peak	7	5032.500	-52.16	-41.20	10.96	Pass	AVG
2	5059.000	-44.42	-21.20	23.22	Pass	Peak	8	5059.000	-52.00	-41.20	10.80	Pass	AVG
3	5081.000	-43.91	-21.20	22.71	Pass	Peak	9	5081.000	-51.24	-41.20	10.04	Pass	AVG
4	5105.500	-41.09	-21.20	19.89	Pass	Peak	10	5105.500	-50.43	-41.20	9.23	Pass	AVG
5	5128.500	-42.93	-21.20	21.73	Pass	Peak	11	5128.500	-50.14	-41.20	8.94	Pass	AVG
6	5149.500	-42.26	-21.20	21.06	Pass	Peak	12	5149.500	-49.08	-41.20	7.88	Pass	AVG

802.11n(HT40)_HCH_5230MHz_Ant1_NTNV

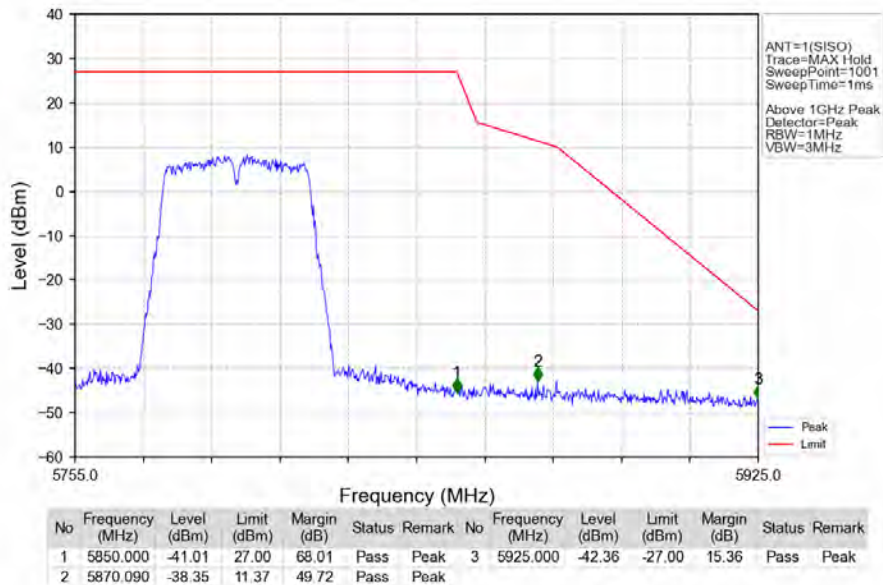


No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	5352.810	-46.38	-21.20	25.18	Pass	Peak	7	5352.810	-52.27	-41.20	11.07	Pass	AVG
2	5365.230	-43.97	-21.20	22.77	Pass	Peak	8	5365.230	-52.49	-41.20	11.29	Pass	AVG
3	5383.860	-45.70	-21.20	24.50	Pass	Peak	9	5383.860	-52.48	-41.20	11.28	Pass	AVG
4	5396.010	-45.45	-21.20	24.25	Pass	Peak	10	5396.010	-52.38	-41.20	11.18	Pass	AVG
5	5414.640	-44.54	-21.20	23.34	Pass	Peak	11	5414.640	-52.14	-41.20	10.94	Pass	AVG
6	5456.490	-44.37	-21.20	23.17	Pass	Peak	12	5456.490	-52.46	-41.20	11.26	Pass	AVG

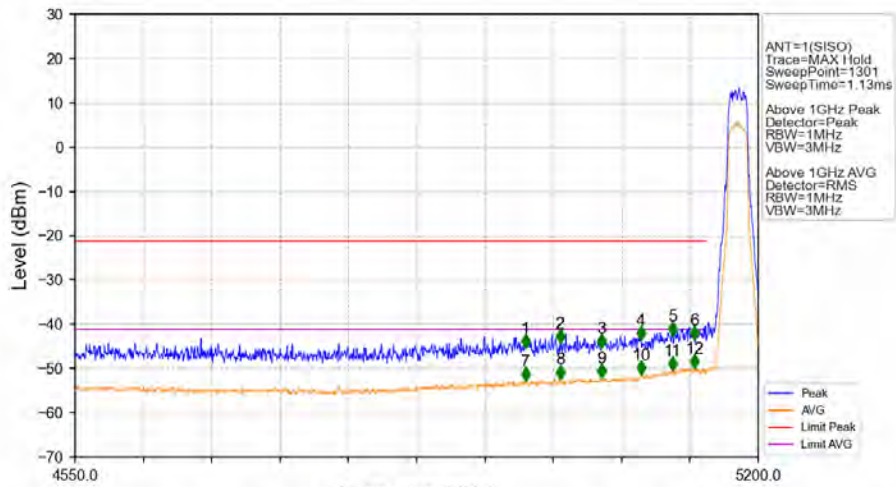
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



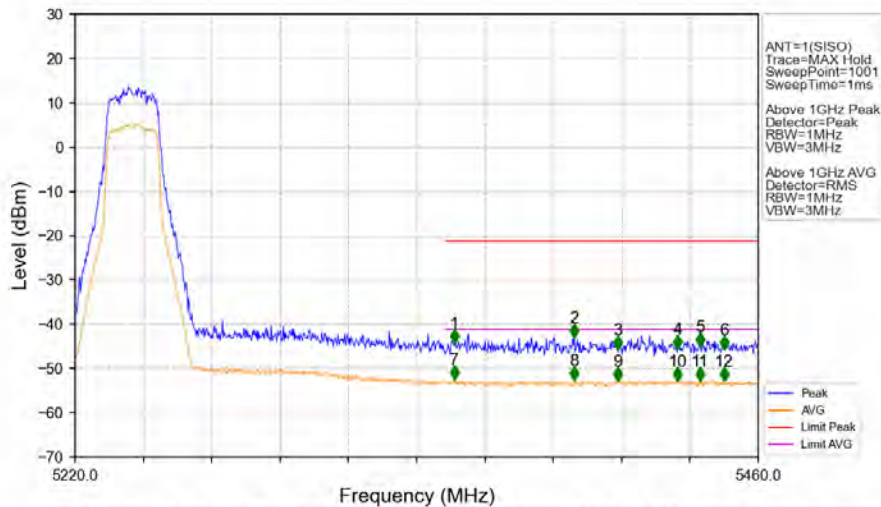
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



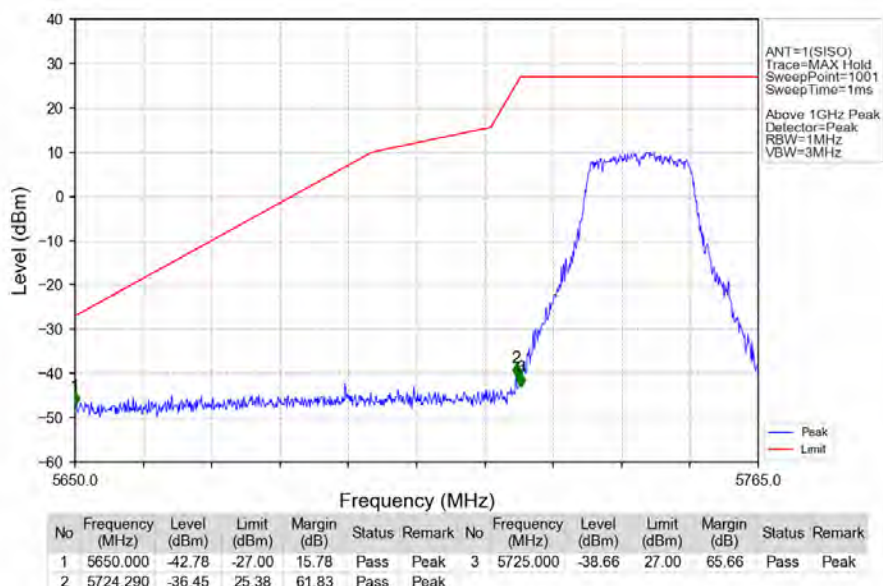
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



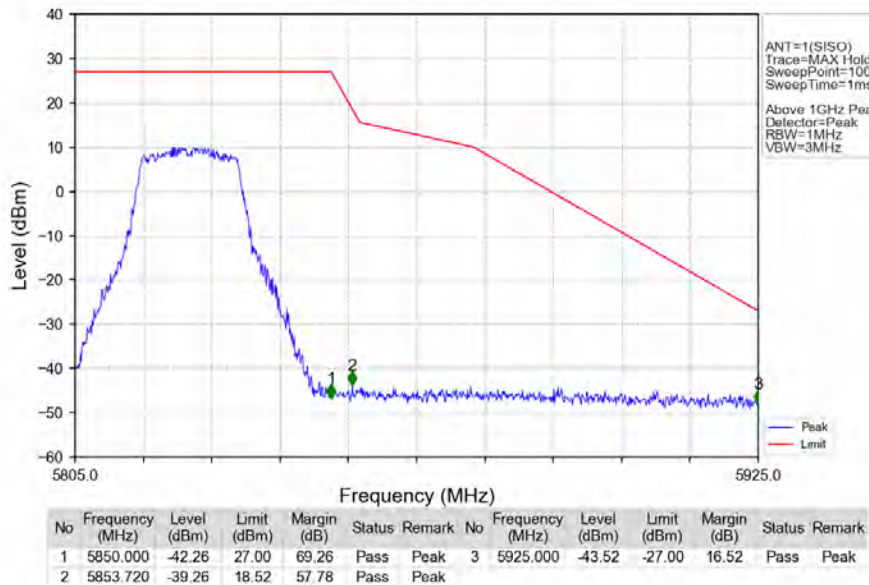
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



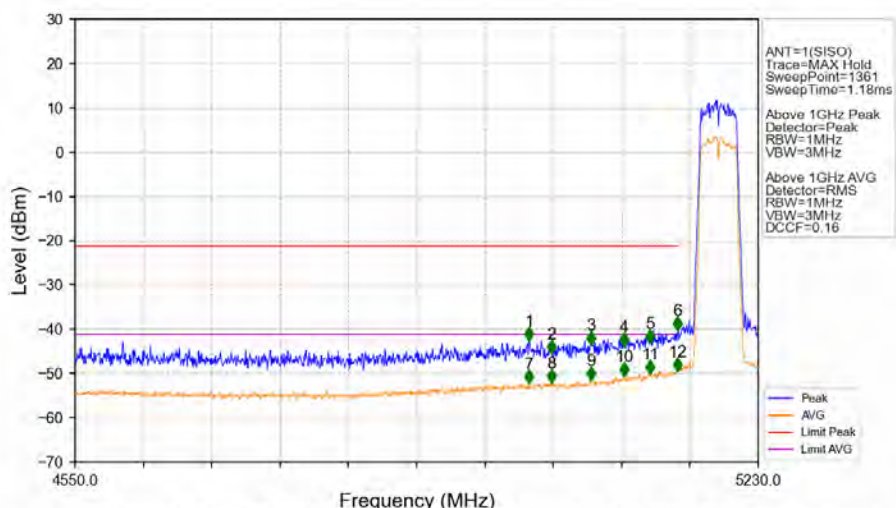
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV

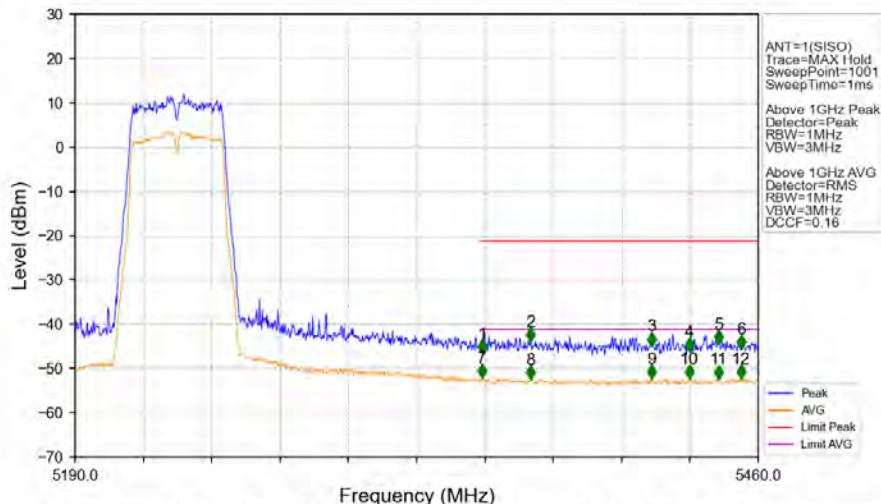


802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



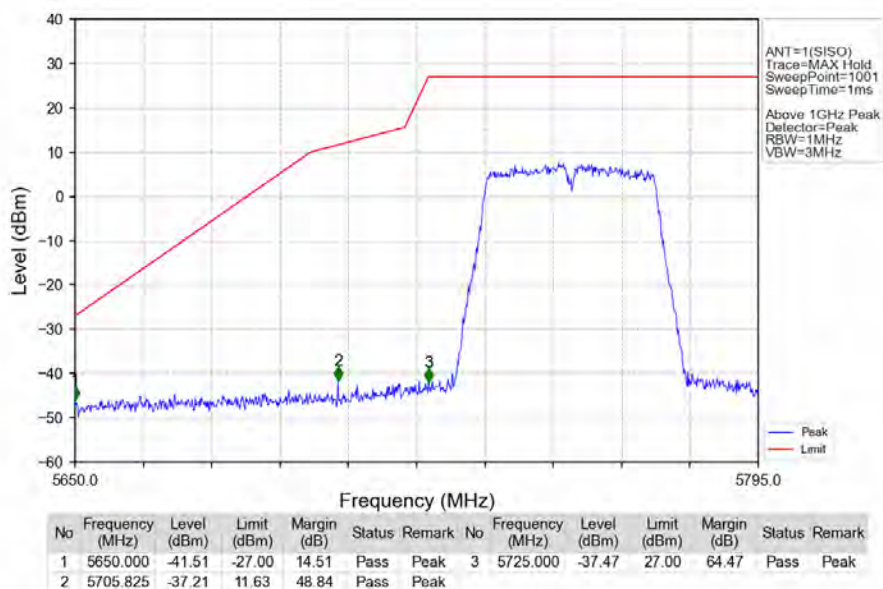
No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	5002.000	-42.62	-21.20	21.42	Pass	Peak	7	5002.000	-52.24	-41.20	11.04	Pass	AVG
2	5024.500	-45.51	-21.20	24.31	Pass	Peak	8	5024.500	-52.10	-41.20	10.90	Pass	AVG
3	5063.500	-43.51	-21.20	22.31	Pass	Peak	9	5063.500	-51.51	-41.20	10.31	Pass	AVG
4	5096.500	-43.88	-21.20	22.68	Pass	Peak	10	5096.500	-50.64	-41.20	9.44	Pass	AVG
5	5122.500	-43.13	-21.20	21.93	Pass	Peak	11	5122.500	-50.01	-41.20	8.81	Pass	AVG
6	5150.000	-40.23	-21.20	19.03	Pass	Peak	12	5150.000	-49.47	-41.20	8.27	Pass	AVG

802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV

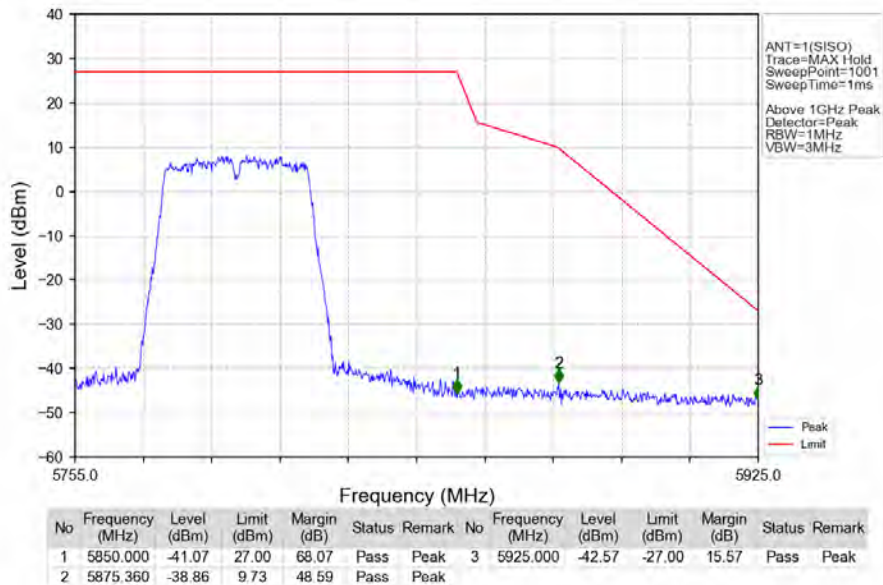


No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	5350.920	-46.57	-21.20	25.37	Pass	Peak	7	5350.920	-52.05	-41.20	10.85	Pass	AVG
2	5370.090	-43.95	-21.20	22.75	Pass	Peak	8	5370.090	-52.42	-41.20	11.22	Pass	AVG
3	5417.880	-44.90	-21.20	23.70	Pass	Peak	9	5417.880	-52.36	-41.20	11.16	Pass	AVG
4	5432.730	-46.11	-21.20	24.91	Pass	Peak	10	5432.730	-52.35	-41.20	11.15	Pass	AVG
5	5444.340	-44.53	-21.20	23.33	Pass	Peak	11	5444.340	-52.36	-41.20	11.16	Pass	AVG
6	5453.250	-45.53	-21.20	24.33	Pass	Peak	12	5453.250	-52.29	-41.20	11.09	Pass	AVG

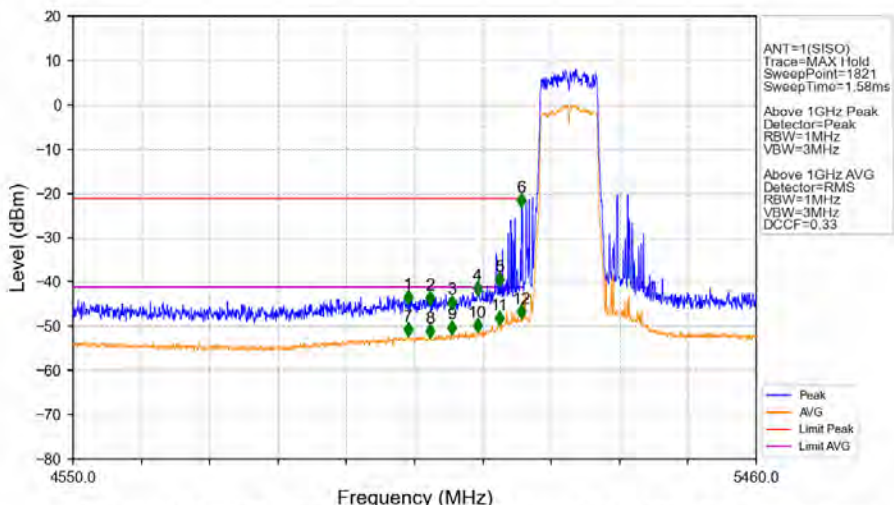
802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV

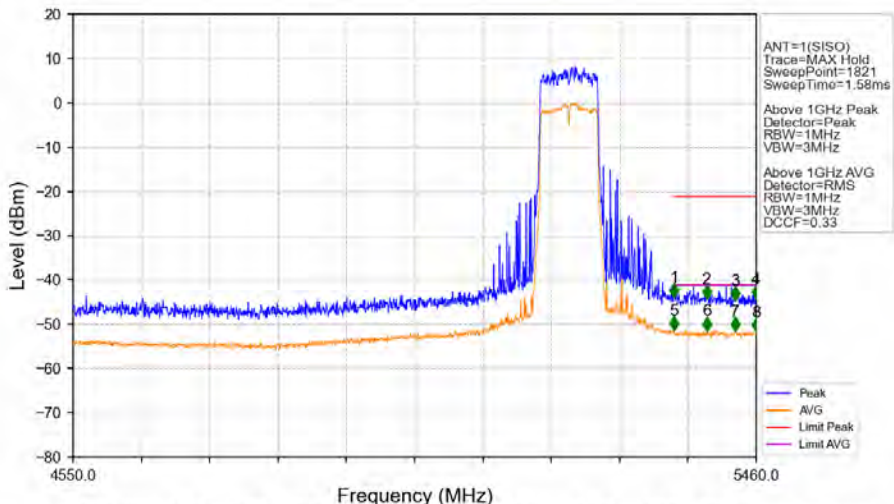


802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



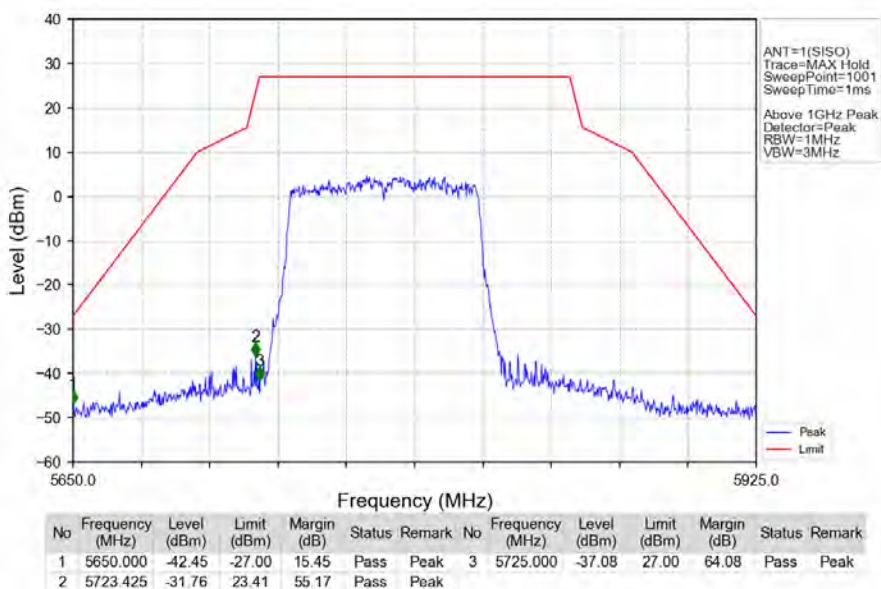
No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	4996.000	-44.99	-21.20	23.79	Pass	Peak	7	4996.000	-52.21	-41.20	11.01	Pass	AVG
2	5025.500	-45.19	-21.20	23.99	Pass	Peak	8	5025.500	-52.69	-41.20	11.49	Pass	AVG
3	5054.500	-46.15	-21.20	24.95	Pass	Peak	9	5054.500	-51.80	-41.20	10.60	Pass	AVG
4	5088.500	-43.00	-21.20	21.80	Pass	Peak	10	5088.500	-51.28	-41.20	10.08	Pass	AVG
5	5117.500	-40.98	-21.20	19.78	Pass	Peak	11	5117.500	-49.64	-41.20	8.44	Pass	AVG
6	5147.500	-23.14	-21.20	1.94	Pass	Peak	12	5147.500	-48.34	-41.20	7.14	Pass	AVG

802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV

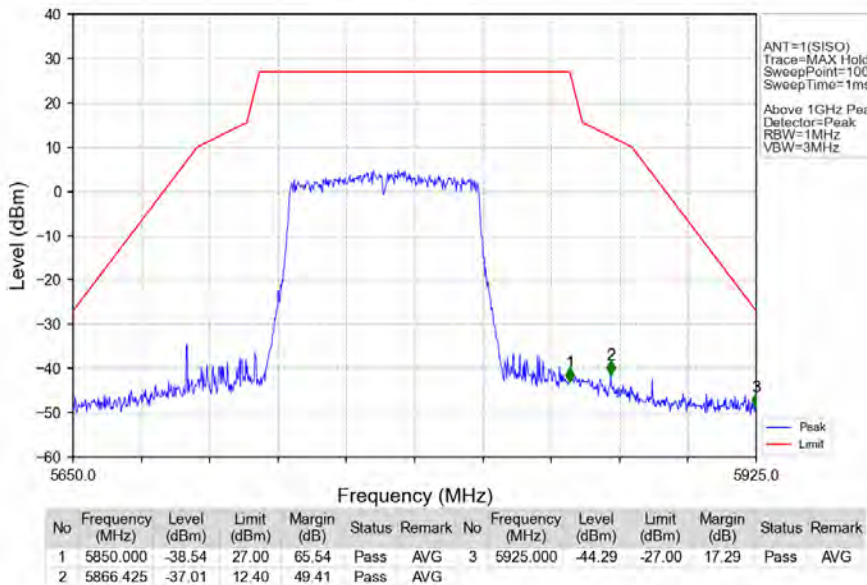


No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	5350.500	-43.85	-21.20	22.65	Pass	Peak	5	5350.500	-51.39	-41.20	10.19	Pass	AVG
2	5394.000	-44.31	-21.20	23.11	Pass	Peak	6	5394.000	-51.44	-41.20	10.24	Pass	AVG
3	5432.000	-44.58	-21.20	23.38	Pass	Peak	7	5432.000	-51.60	-41.20	10.40	Pass	AVG
4	5459.500	-44.17	-21.20	22.97	Pass	Peak	8	5459.500	-51.67	-41.20	10.47	Pass	AVG

802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



6. Frequency Stability

6.1 Test Result

6.1.1 Ant1

Ant1							
Mode	Tx Type	Frequency (MHz)	Temperature (°C)	Voltage (VAC)	Measured Frequency (MHz)	Limit (MHz)	Verdict
802.11a	SISO	5180	20	102	5180.080	5150 to 5250	Pass
				120	5180.060	5150 to 5250	Pass
				138	5180.100	5150 to 5250	Pass
			-30	120	5180.040	5150 to 5250	Pass
			-20	120	5180.080	5150 to 5250	Pass
			-10	120	5180.000	5150 to 5250	Pass
			0	120	5180.040	5150 to 5250	Pass
			10	120	5180.040	5150 to 5250	Pass
			30	120	5180.060	5150 to 5250	Pass
			40	120	5180.000	5150 to 5250	Pass
			50	120	5180.100	5150 to 5250	Pass
		5200	20	102	5200.000	5150 to 5250	Pass
				120	5200.020	5150 to 5250	Pass
				138	5200.020	5150 to 5250	Pass
			-30	120	5200.060	5150 to 5250	Pass
			-20	120	5200.020	5150 to 5250	Pass
			-10	120	5199.980	5150 to 5250	Pass
			0	120	5200.000	5150 to 5250	Pass
			10	120	5200.000	5150 to 5250	Pass
			30	120	5200.060	5150 to 5250	Pass
			40	120	5200.060	5150 to 5250	Pass
			50	120	5200.040	5150 to 5250	Pass
		5240	20	102	5240.080	5150 to 5250	Pass
				120	5240.060	5150 to 5250	Pass
				138	5240.060	5150 to 5250	Pass
			-30	120	5240.060	5150 to 5250	Pass
			-20	120	5240.040	5150 to 5250	Pass
			-10	120	5240.020	5150 to 5250	Pass
			0	120	5240.140	5150 to 5250	Pass
			10	120	5240.080	5150 to 5250	Pass
			30	120	5240.100	5150 to 5250	Pass
			40	120	5240.060	5150 to 5250	Pass
			50	120	5240.080	5150 to 5250	Pass
		5745	20	102	5745.060	5725 to 5850	Pass
				120	5745.060	5725 to 5850	Pass
				138	5745.040	5725 to 5850	Pass
			-30	120	5745.080	5725 to 5850	Pass
			-20	120	5745.060	5725 to 5850	Pass
			-10	120	5745.000	5725 to 5850	Pass
			0	120	5745.120	5725 to 5850	Pass
			10	120	5745.080	5725 to 5850	Pass
			30	120	5745.060	5725 to 5850	Pass

			40	120	5745.000	5725 to 5850	Pass
			50	120	5745.060	5725 to 5850	Pass
		5785	20	102	5785.100	5725 to 5850	Pass
				120	5785.120	5725 to 5850	Pass
				138	5785.040	5725 to 5850	Pass
			-30	120	5785.040	5725 to 5850	Pass
			-20	120	5785.080	5725 to 5850	Pass
			-10	120	5785.100	5725 to 5850	Pass
			0	120	5785.040	5725 to 5850	Pass
			10	120	5785.060	5725 to 5850	Pass
			30	120	5785.140	5725 to 5850	Pass
			40	120	5785.060	5725 to 5850	Pass
			50	120	5785.080	5725 to 5850	Pass
		5825	20	102	5825.020	5725 to 5850	Pass
				120	5825.120	5725 to 5850	Pass
				138	5825.080	5725 to 5850	Pass
			-30	120	5825.000	5725 to 5850	Pass
			-20	120	5825.100	5725 to 5850	Pass
			-10	120	5825.020	5725 to 5850	Pass
			0	120	5825.040	5725 to 5850	Pass
			10	120	5825.040	5725 to 5850	Pass
			30	120	5825.040	5725 to 5850	Pass
			40	120	5825.100	5725 to 5850	Pass
			50	120	5825.060	5725 to 5850	Pass
		5180	20	102	5180.020	5150 to 5250	Pass
				120	5180.060	5150 to 5250	Pass
				138	5179.980	5150 to 5250	Pass
			-30	120	5180.060	5150 to 5250	Pass
			-20	120	5180.080	5150 to 5250	Pass
			-10	120	5180.020	5150 to 5250	Pass
			0	120	5180.080	5150 to 5250	Pass
			10	120	5180.060	5150 to 5250	Pass
			30	120	5180.000	5150 to 5250	Pass
			40	120	5180.020	5150 to 5250	Pass
			50	120	5180.060	5150 to 5250	Pass
		5200	20	102	5200.000	5150 to 5250	Pass
				120	5200.020	5150 to 5250	Pass
				138	5200.060	5150 to 5250	Pass
			-30	120	5200.060	5150 to 5250	Pass
			-20	120	5200.000	5150 to 5250	Pass
			-10	120	5200.080	5150 to 5250	Pass
			0	120	5200.020	5150 to 5250	Pass
			10	120	5199.980	5150 to 5250	Pass
			30	120	5200.020	5150 to 5250	Pass
			40	120	5200.040	5150 to 5250	Pass
			50	120	5200.100	5150 to 5250	Pass
		5240	20	102	5239.980	5150 to 5250	Pass
				120	5240.080	5150 to 5250	Pass
				138	5240.080	5150 to 5250	Pass
			-30	120	5240.080	5150 to 5250	Pass
			-20	120	5240.020	5150 to 5250	Pass
			-10	120	5240.000	5150 to 5250	Pass

			0	120	5240.020	5150 to 5250	Pass
			10	120	5240.060	5150 to 5250	Pass
			30	120	5240.040	5150 to 5250	Pass
			40	120	5240.020	5150 to 5250	Pass
			50	120	5240.060	5150 to 5250	Pass
		5745	20	102	5745.000	5725 to 5850	Pass
				120	5745.120	5725 to 5850	Pass
				138	5745.060	5725 to 5850	Pass
			-30	120	5745.020	5725 to 5850	Pass
			-20	120	5745.060	5725 to 5850	Pass
			-10	120	5745.040	5725 to 5850	Pass
			0	120	5745.020	5725 to 5850	Pass
			10	120	5745.080	5725 to 5850	Pass
			30	120	5745.020	5725 to 5850	Pass
			40	120	5745.060	5725 to 5850	Pass
			50	120	5745.060	5725 to 5850	Pass
		5785	20	102	5785.080	5725 to 5850	Pass
				120	5785.060	5725 to 5850	Pass
				138	5785.060	5725 to 5850	Pass
			-30	120	5785.120	5725 to 5850	Pass
			-20	120	5784.960	5725 to 5850	Pass
			-10	120	5785.080	5725 to 5850	Pass
			0	120	5785.080	5725 to 5850	Pass
			10	120	5785.080	5725 to 5850	Pass
			30	120	5785.060	5725 to 5850	Pass
			40	120	5785.040	5725 to 5850	Pass
			50	120	5785.100	5725 to 5850	Pass
		5825	20	102	5825.040	5725 to 5850	Pass
				120	5825.040	5725 to 5850	Pass
				138	5825.060	5725 to 5850	Pass
			-30	120	5825.020	5725 to 5850	Pass
			-20	120	5825.040	5725 to 5850	Pass
			-10	120	5825.020	5725 to 5850	Pass
			0	120	5825.040	5725 to 5850	Pass
			10	120	5825.100	5725 to 5850	Pass
			30	120	5825.080	5725 to 5850	Pass
			40	120	5825.080	5725 to 5850	Pass
			50	120	5825.060	5725 to 5850	Pass
802.11n (HT40)	SISO	5190	20	102	5190.000	5150 to 5250	Pass
				120	5190.040	5150 to 5250	Pass
				138	5190.040	5150 to 5250	Pass
			-30	120	5190.120	5150 to 5250	Pass
			-20	120	5190.120	5150 to 5250	Pass
			-10	120	5190.000	5150 to 5250	Pass
			0	120	5190.040	5150 to 5250	Pass
			10	120	5190.080	5150 to 5250	Pass
			30	120	5190.120	5150 to 5250	Pass
			40	120	5190.120	5150 to 5250	Pass
			50	120	5190.040	5150 to 5250	Pass
		5230	20	102	5230.120	5150 to 5250	Pass
				120	5230.080	5150 to 5250	Pass
				138	5230.080	5150 to 5250	Pass

802.11ac (VHT20)	SISO		-30	120	5230.160	5150 to 5250	Pass
			-20	120	5230.120	5150 to 5250	Pass
			-10	120	5230.160	5150 to 5250	Pass
			0	120	5230.120	5150 to 5250	Pass
			10	120	5230.080	5150 to 5250	Pass
			30	120	5230.160	5150 to 5250	Pass
			40	120	5230.080	5150 to 5250	Pass
			50	120	5230.080	5150 to 5250	Pass
		5755	20	102	5755.080	5725 to 5850	Pass
				120	5755.160	5725 to 5850	Pass
				138	5755.120	5725 to 5850	Pass
			-30	120	5755.080	5725 to 5850	Pass
			-20	120	5755.120	5725 to 5850	Pass
			-10	120	5755.120	5725 to 5850	Pass
			0	120	5755.040	5725 to 5850	Pass
			10	120	5755.080	5725 to 5850	Pass
			30	120	5755.080	5725 to 5850	Pass
			40	120	5755.080	5725 to 5850	Pass
			50	120	5755.120	5725 to 5850	Pass
		5795	20	102	5795.160	5725 to 5850	Pass
				120	5795.160	5725 to 5850	Pass
				138	5795.120	5725 to 5850	Pass
			-30	120	5795.120	5725 to 5850	Pass
			-20	120	5795.160	5725 to 5850	Pass
			-10	120	5795.080	5725 to 5850	Pass
			0	120	5795.120	5725 to 5850	Pass
			10	120	5795.040	5725 to 5850	Pass
			30	120	5795.120	5725 to 5850	Pass
			40	120	5795.120	5725 to 5850	Pass
			50	120	5795.120	5725 to 5850	Pass
		5180	20	102	5180.040	5150 to 5250	Pass
				120	5180.060	5150 to 5250	Pass
				138	5180.040	5150 to 5250	Pass
			-30	120	5180.040	5150 to 5250	Pass
			-20	120	5180.040	5150 to 5250	Pass
			-10	120	5179.980	5150 to 5250	Pass
			0	120	5180.060	5150 to 5250	Pass
			10	120	5179.980	5150 to 5250	Pass
			30	120	5180.100	5150 to 5250	Pass
			40	120	5179.960	5150 to 5250	Pass
			50	120	5180.040	5150 to 5250	Pass
		5200	20	102	5199.980	5150 to 5250	Pass
				120	5200.060	5150 to 5250	Pass
				138	5200.020	5150 to 5250	Pass
			-30	120	5200.020	5150 to 5250	Pass
			-20	120	5200.040	5150 to 5250	Pass
			-10	120	5200.020	5150 to 5250	Pass
			0	120	5200.020	5150 to 5250	Pass
			10	120	5200.100	5150 to 5250	Pass
			30	120	5200.000	5150 to 5250	Pass
			40	120	5200.000	5150 to 5250	Pass
			50	120	5199.960	5150 to 5250	Pass

		5240	20	102	5240.100	5150 to 5250	Pass
				120	5240.040	5150 to 5250	Pass
				138	5240.060	5150 to 5250	Pass
			-30	120	5240.040	5150 to 5250	Pass
			-20	120	5240.080	5150 to 5250	Pass
			-10	120	5240.060	5150 to 5250	Pass
			0	120	5240.060	5150 to 5250	Pass
			10	120	5240.060	5150 to 5250	Pass
			30	120	5240.140	5150 to 5250	Pass
			40	120	5240.100	5150 to 5250	Pass
			50	120	5240.060	5150 to 5250	Pass
		5745	20	102	5745.100	5725 to 5850	Pass
				120	5745.080	5725 to 5850	Pass
				138	5745.080	5725 to 5850	Pass
			-30	120	5745.040	5725 to 5850	Pass
			-20	120	5745.040	5725 to 5850	Pass
			-10	120	5745.080	5725 to 5850	Pass
			0	120	5745.100	5725 to 5850	Pass
			10	120	5745.040	5725 to 5850	Pass
			30	120	5745.100	5725 to 5850	Pass
			40	120	5745.040	5725 to 5850	Pass
			50	120	5745.060	5725 to 5850	Pass
		5785	20	102	5785.060	5725 to 5850	Pass
				120	5785.020	5725 to 5850	Pass
				138	5785.100	5725 to 5850	Pass
			-30	120	5785.080	5725 to 5850	Pass
			-20	120	5785.100	5725 to 5850	Pass
			-10	120	5785.040	5725 to 5850	Pass
			0	120	5785.020	5725 to 5850	Pass
			10	120	5785.060	5725 to 5850	Pass
			30	120	5785.020	5725 to 5850	Pass
			40	120	5785.020	5725 to 5850	Pass
			50	120	5785.040	5725 to 5850	Pass
		5825	20	102	5825.040	5725 to 5850	Pass
				120	5825.080	5725 to 5850	Pass
				138	5825.040	5725 to 5850	Pass
			-30	120	5825.020	5725 to 5850	Pass
			-20	120	5825.100	5725 to 5850	Pass
			-10	120	5825.040	5725 to 5850	Pass
			0	120	5825.000	5725 to 5850	Pass
			10	120	5825.020	5725 to 5850	Pass
			30	120	5825.060	5725 to 5850	Pass
			40	120	5825.040	5725 to 5850	Pass
			50	120	5825.060	5725 to 5850	Pass
802.11ac (VHT40)	SISO	5190	20	102	5190.040	5150 to 5250	Pass
				120	5190.040	5150 to 5250	Pass
				138	5190.040	5150 to 5250	Pass
			-30	120	5190.040	5150 to 5250	Pass
			-20	120	5190.160	5150 to 5250	Pass
			-10	120	5190.080	5150 to 5250	Pass
			0	120	5190.040	5150 to 5250	Pass
			10	120	5190.080	5150 to 5250	Pass

			30	120	5190.040	5150 to 5250	Pass
			40	120	5190.120	5150 to 5250	Pass
			50	120	5190.040	5150 to 5250	Pass
		5230	20	102	5230.160	5150 to 5250	Pass
				120	5230.120	5150 to 5250	Pass
				138	5230.080	5150 to 5250	Pass
			-30	120	5230.120	5150 to 5250	Pass
			-20	120	5230.080	5150 to 5250	Pass
			-10	120	5230.120	5150 to 5250	Pass
			0	120	5230.080	5150 to 5250	Pass
			10	120	5230.080	5150 to 5250	Pass
			30	120	5230.120	5150 to 5250	Pass
			40	120	5230.160	5150 to 5250	Pass
			50	120	5230.120	5150 to 5250	Pass
		5755	20	102	5755.080	5725 to 5850	Pass
				120	5755.080	5725 to 5850	Pass
				138	5755.080	5725 to 5850	Pass
			-30	120	5755.080	5725 to 5850	Pass
			-20	120	5755.120	5725 to 5850	Pass
			-10	120	5755.080	5725 to 5850	Pass
			0	120	5755.080	5725 to 5850	Pass
			10	120	5755.120	5725 to 5850	Pass
			30	120	5755.120	5725 to 5850	Pass
			40	120	5755.120	5725 to 5850	Pass
			50	120	5755.160	5725 to 5850	Pass
		5795	20	102	5795.080	5725 to 5850	Pass
				120	5795.040	5725 to 5850	Pass
				138	5795.080	5725 to 5850	Pass
			-30	120	5795.080	5725 to 5850	Pass
			-20	120	5795.080	5725 to 5850	Pass
			-10	120	5795.080	5725 to 5850	Pass
			0	120	5795.200	5725 to 5850	Pass
			10	120	5795.080	5725 to 5850	Pass
			30	120	5795.080	5725 to 5850	Pass
			40	120	5795.080	5725 to 5850	Pass
			50	120	5795.120	5725 to 5850	Pass
802.11ac (VHT80)	SISO	5210	20	102	5210.075	5150 to 5250	Pass
				120	5210.150	5150 to 5250	Pass
				138	5210.000	5150 to 5250	Pass
			-30	120	5210.150	5150 to 5250	Pass
			-20	120	5210.075	5150 to 5250	Pass
			-10	120	5210.075	5150 to 5250	Pass
			0	120	5210.225	5150 to 5250	Pass
			10	120	5210.150	5150 to 5250	Pass
			30	120	5210.150	5150 to 5250	Pass
			40	120	5210.075	5150 to 5250	Pass
			50	120	5210.150	5150 to 5250	Pass
		5775	20	102	5775.075	5725 to 5850	Pass
				120	5775.075	5725 to 5850	Pass
				138	5775.075	5725 to 5850	Pass
			-30	120	5775.225	5725 to 5850	Pass
			-20	120	5775.075	5725 to 5850	Pass

			-10	120	5775.150	5725 to 5850	Pass
			0	120	5775.150	5725 to 5850	Pass
			10	120	5775.075	5725 to 5850	Pass
			30	120	5775.150	5725 to 5850	Pass
			40	120	5775.150	5725 to 5850	Pass
			50	120	5775.150	5725 to 5850	Pass

----- End of Report -----

