

ANNEX F TEST DATA

For

Project No.:	8335EU012118W
Client:	Cheerlux (Shenzhen) Electronic Technology Co., Ltd.
Product Description:	Projector
Model No.:	C10N
FCC ID:	2AYQQ-C10N
Technology:	WiFi 5G
Test Engineer:	<i>Mikoy zhu</i>
Test Date:	2025-11-05

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

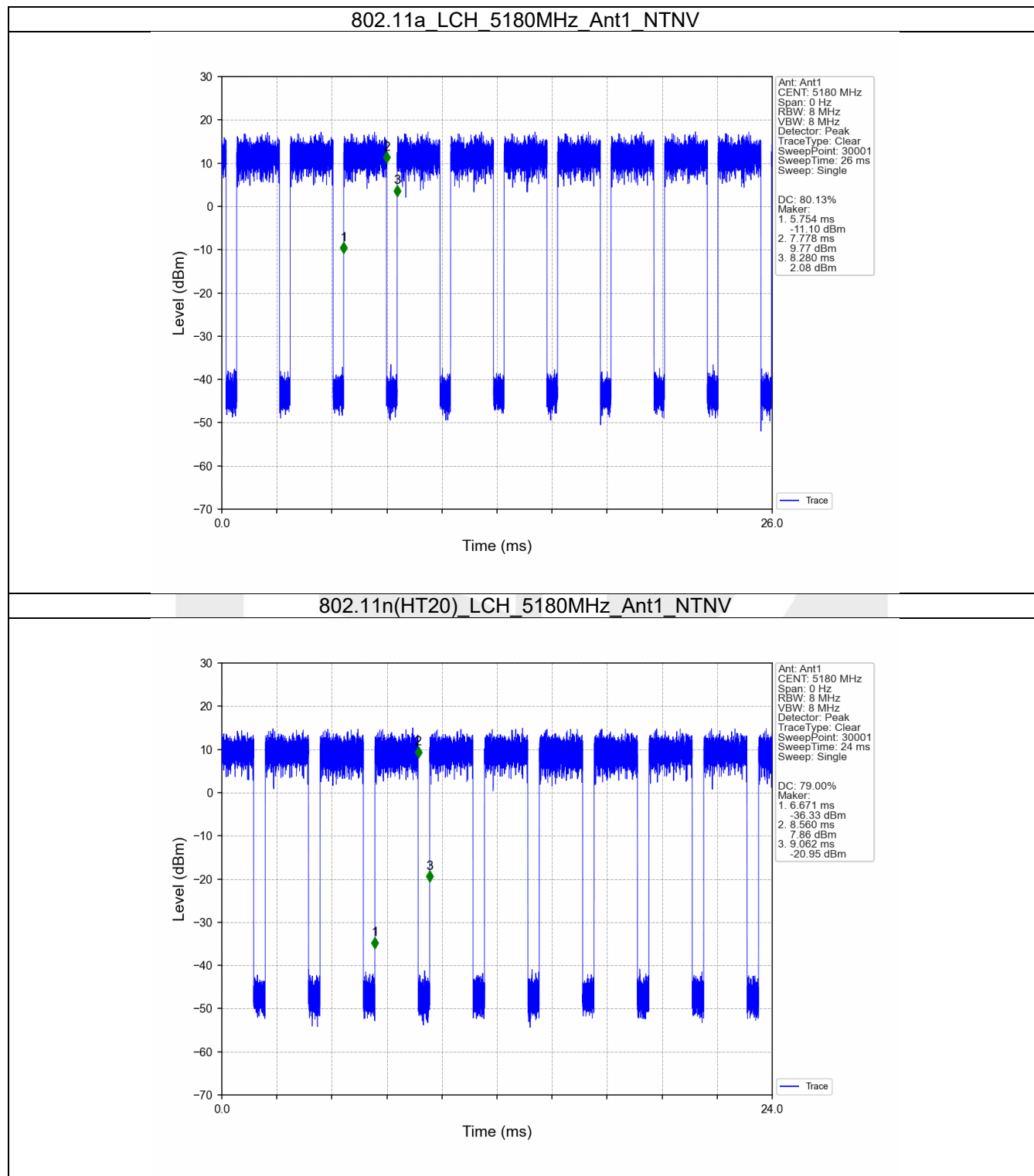
1.1 Test Result

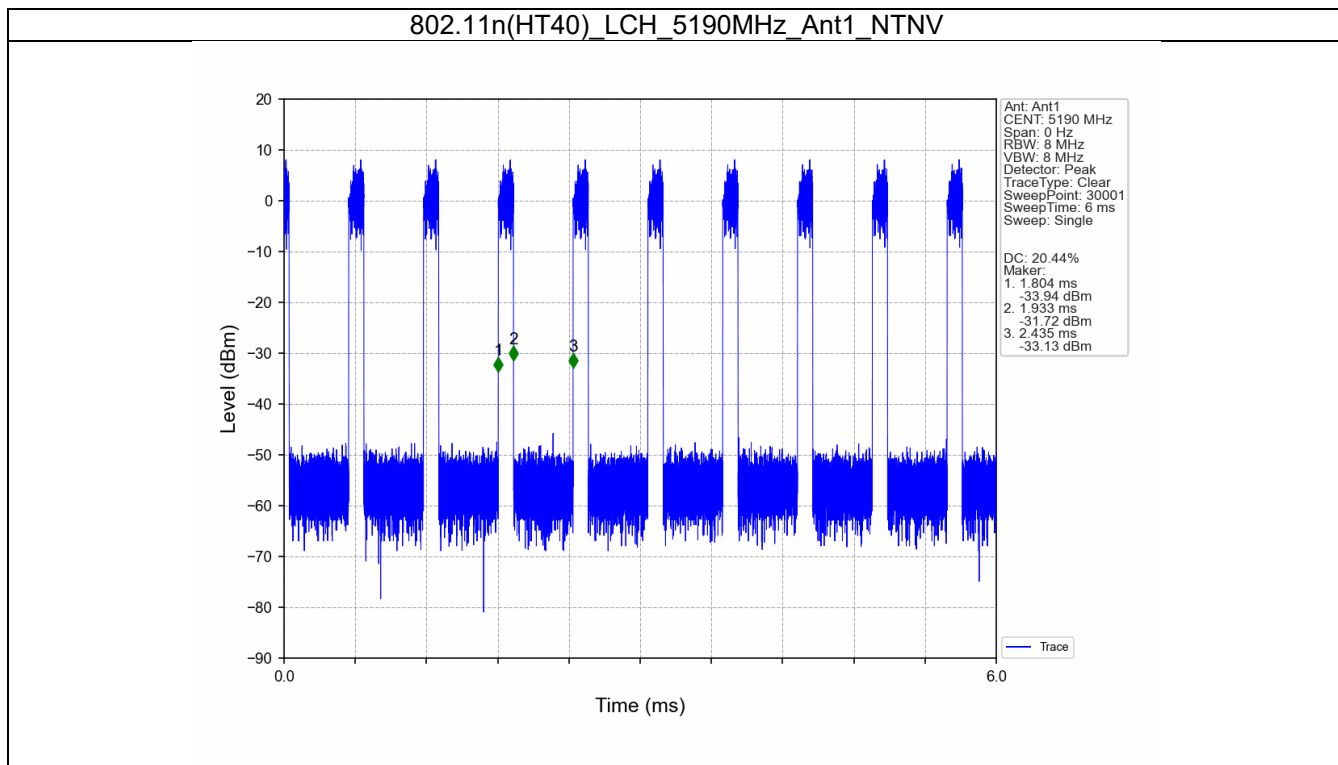
1.1.1 Ant1

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	2.024	2.526	80.13	0.96	0.03
802.11n (HT20)	SISO	5180	1.889	2.391	79.00	1.02	0.03
802.11n (HT40)	SISO	5190	0.129	0.631	20.44	6.89	0.03

1.2 Test Graph

1.2.1 Ant1





2. Bandwidth

2.1 Test Result

2.1.1 OBW

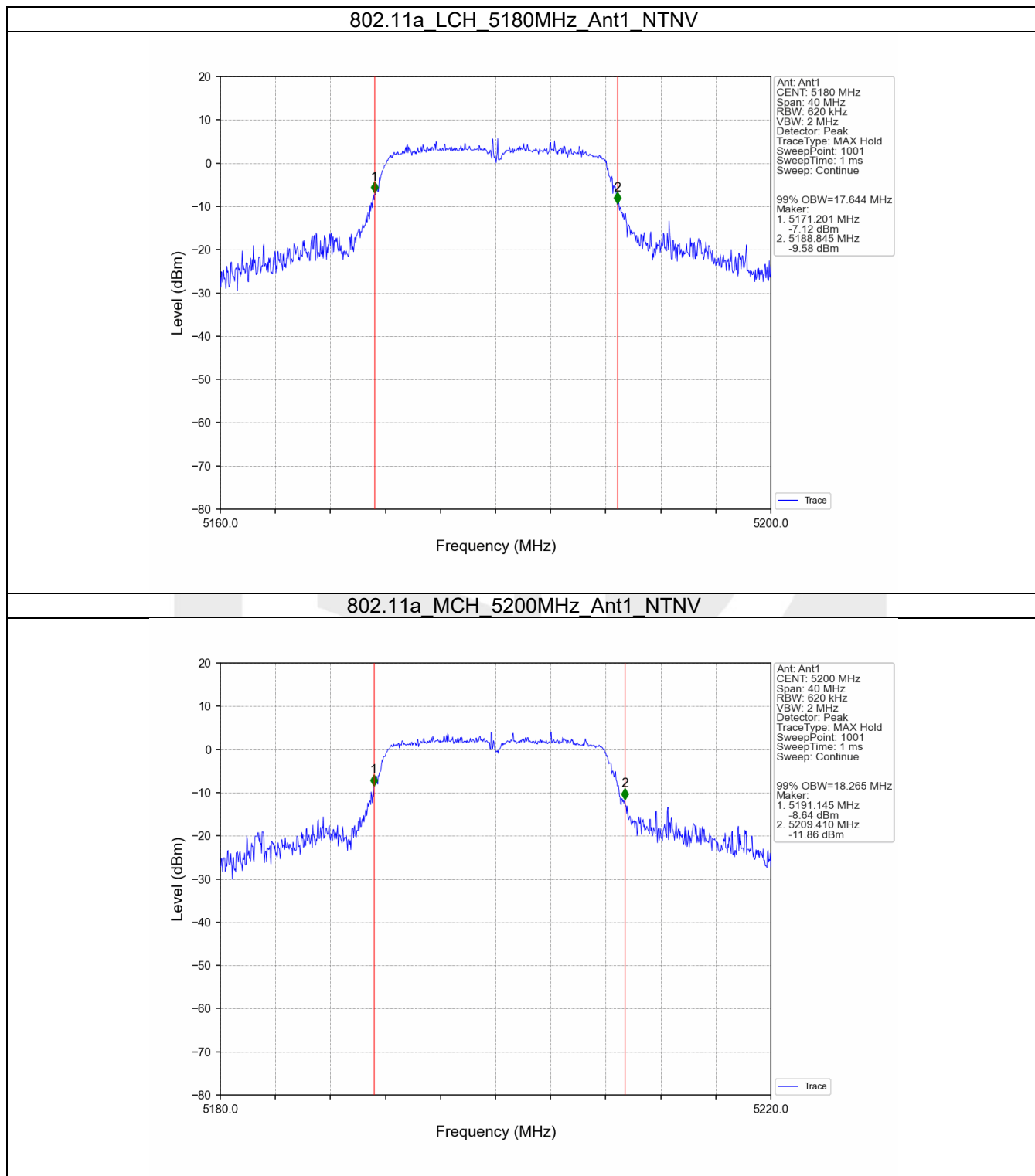
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	17.644	/	Pass
		5200	1	18.265	/	Pass
		5240	1	18.647	/	Pass
802.11n (HT20)	SISO	5180	1	18.277	/	Pass
		5200	1	18.372	/	Pass
		5240	1	18.489	/	Pass
802.11n (HT40)	SISO	5190	1	36.127	/	Pass
		5230	1	36.274	/	Pass

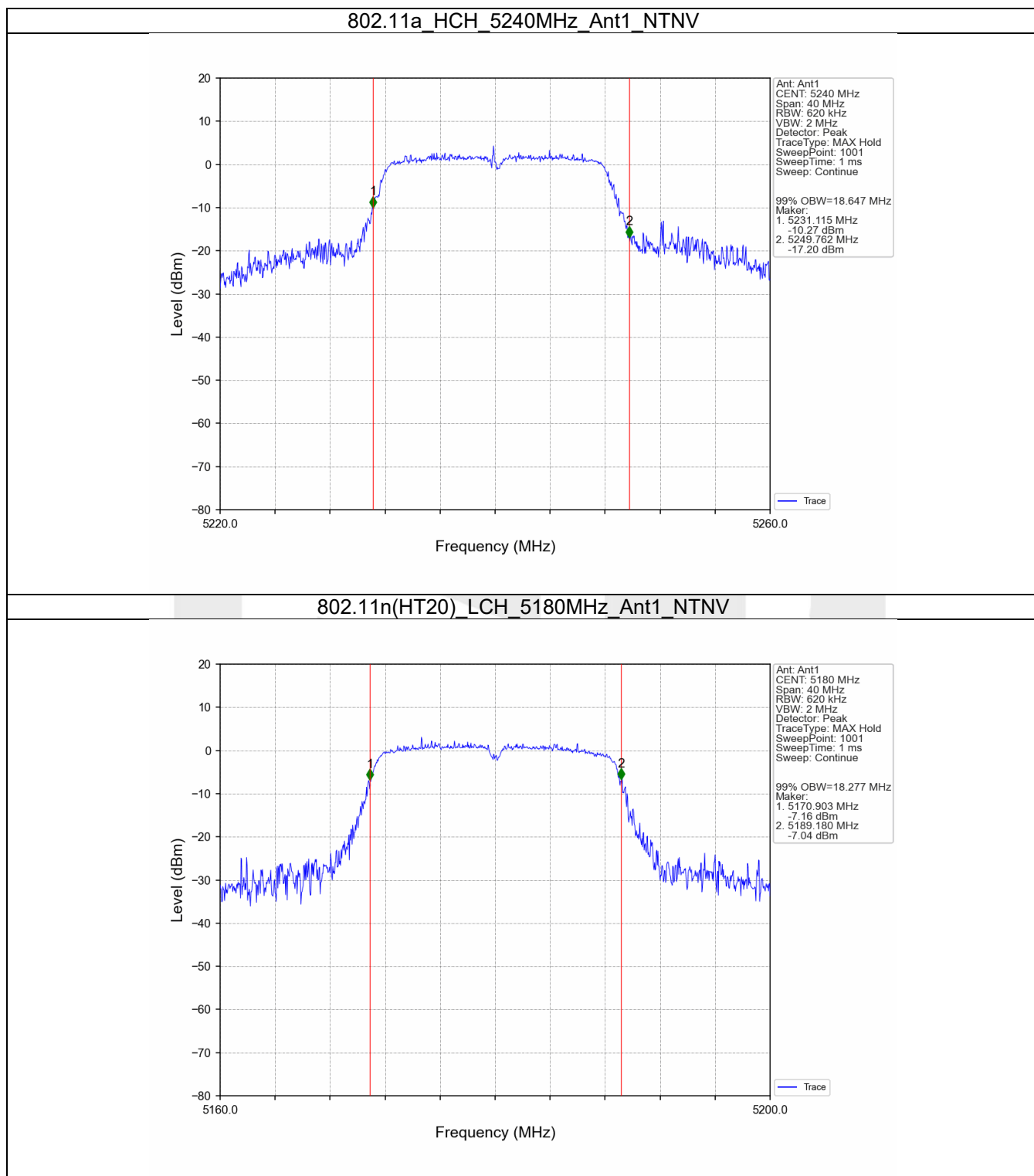
2.1.2 26dB BW

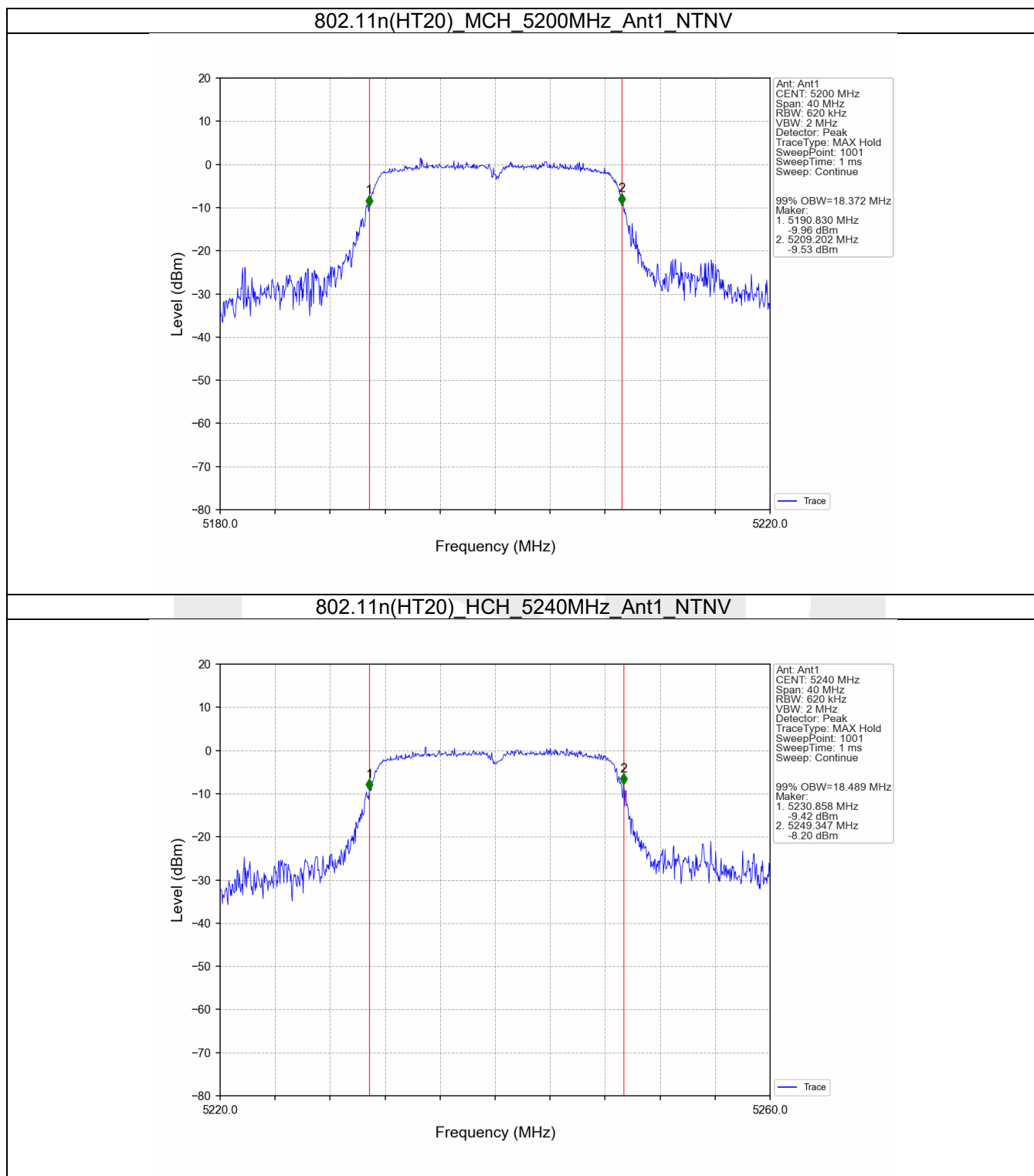
Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	35.602	/	Pass
		5200	1	39.088	/	Pass
		5240	1	36.010	/	Pass
802.11n (HT20)	SISO	5180	1	26.669	/	Pass
		5200	1	28.866	/	Pass
		5240	1	28.759	/	Pass
802.11n (HT40)	SISO	5190	1	38.914	/	Pass
		5230	1	38.969	/	Pass

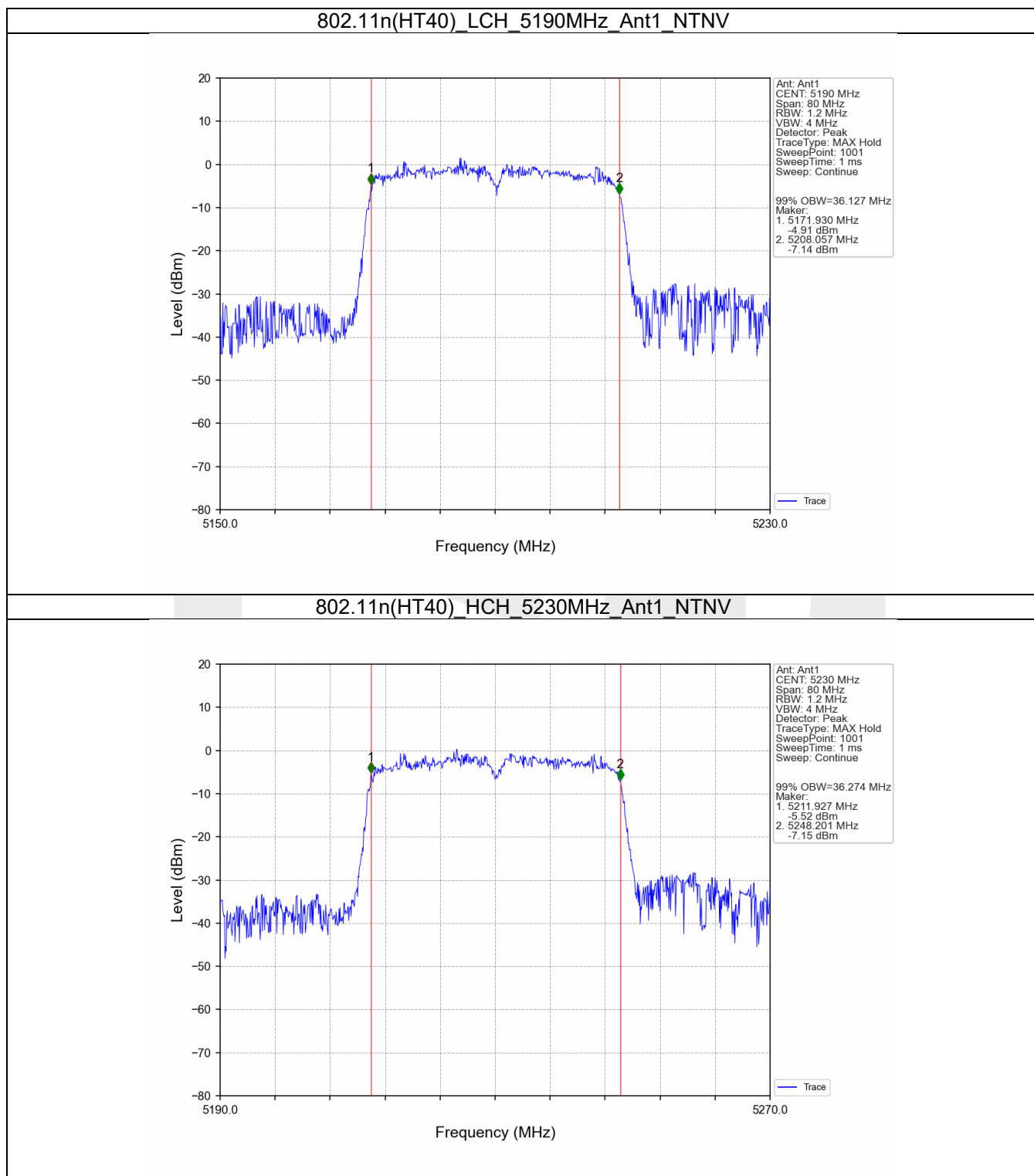
2.2 Test Graph

2.2.1 OBW

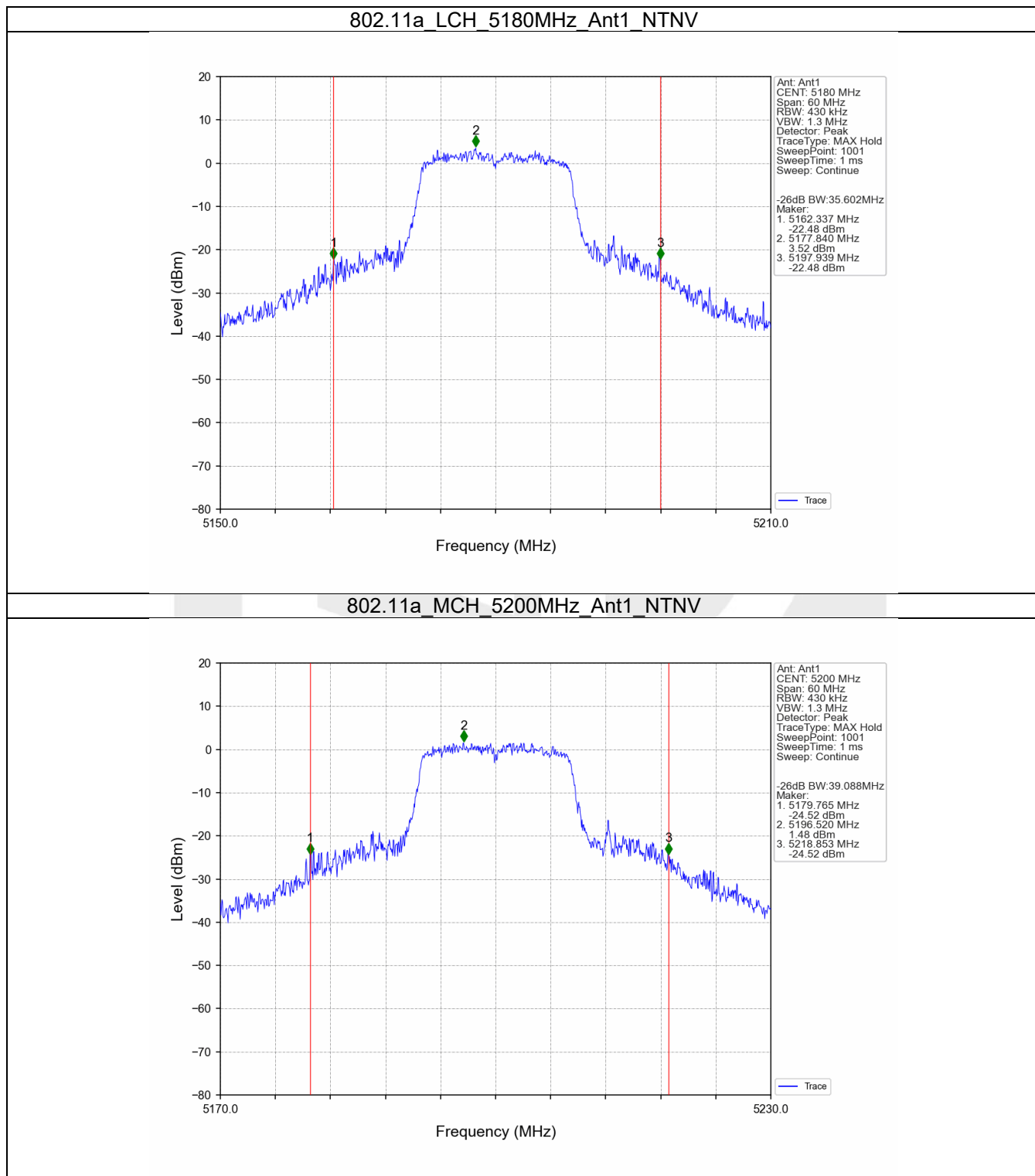


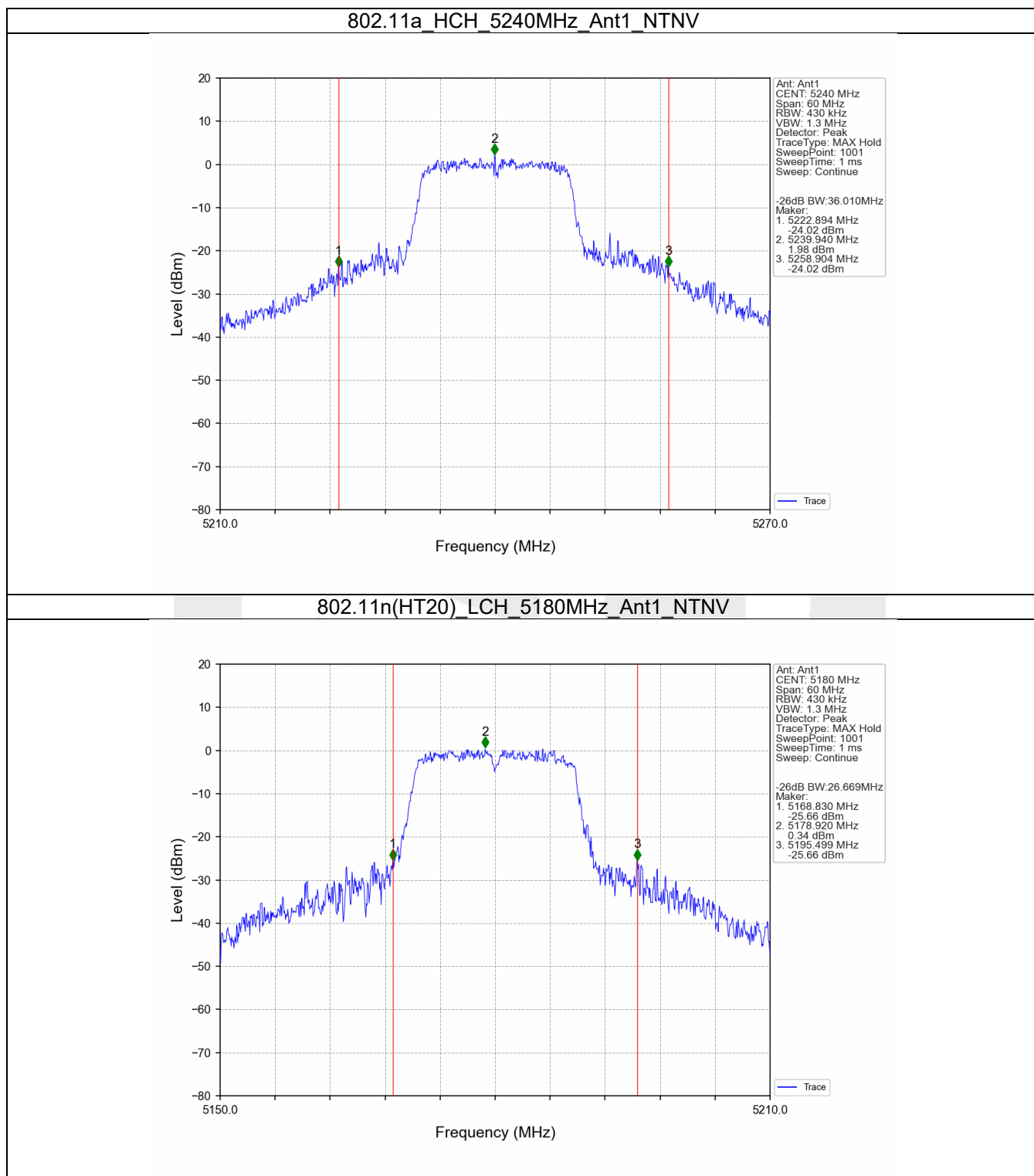


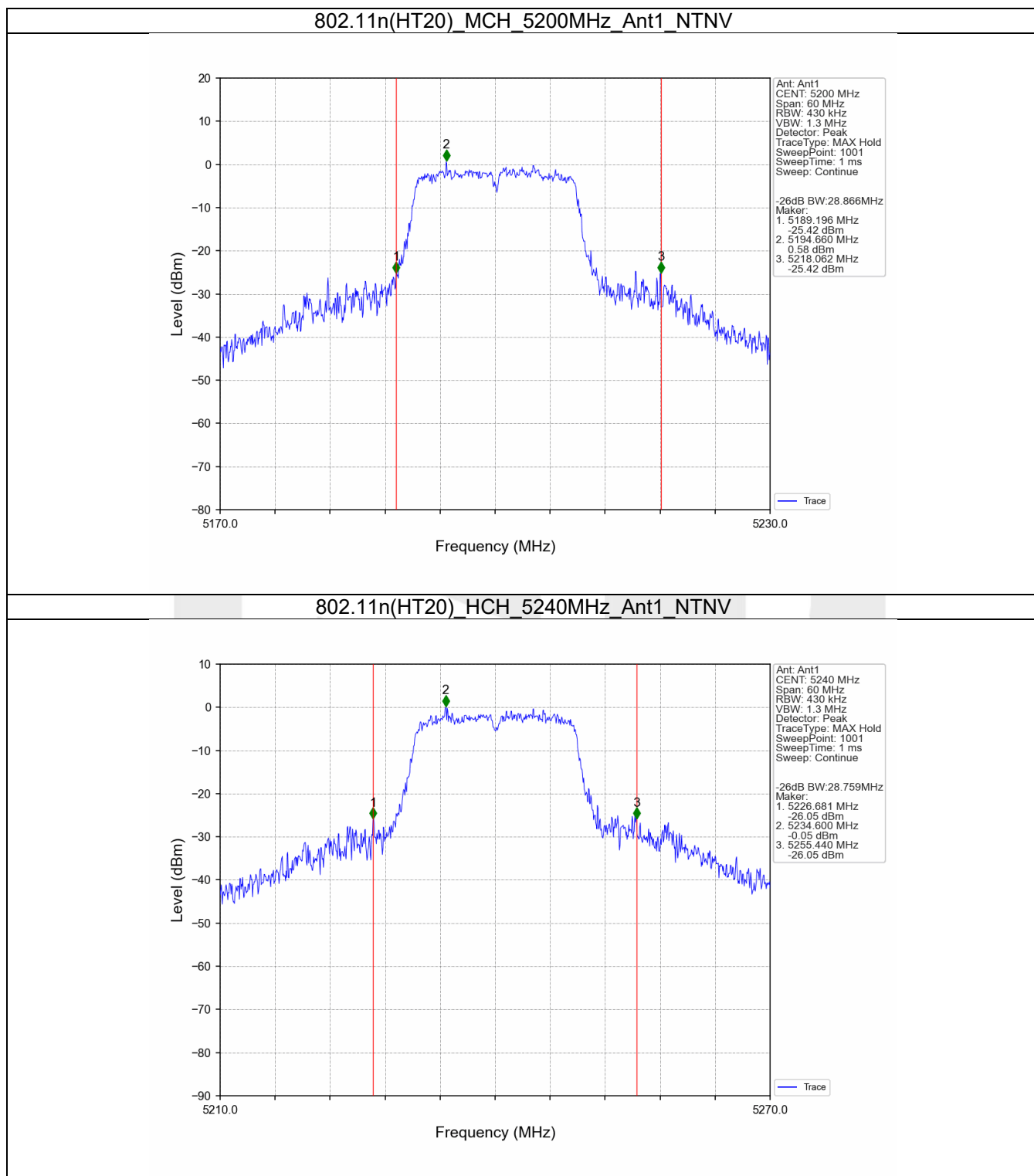


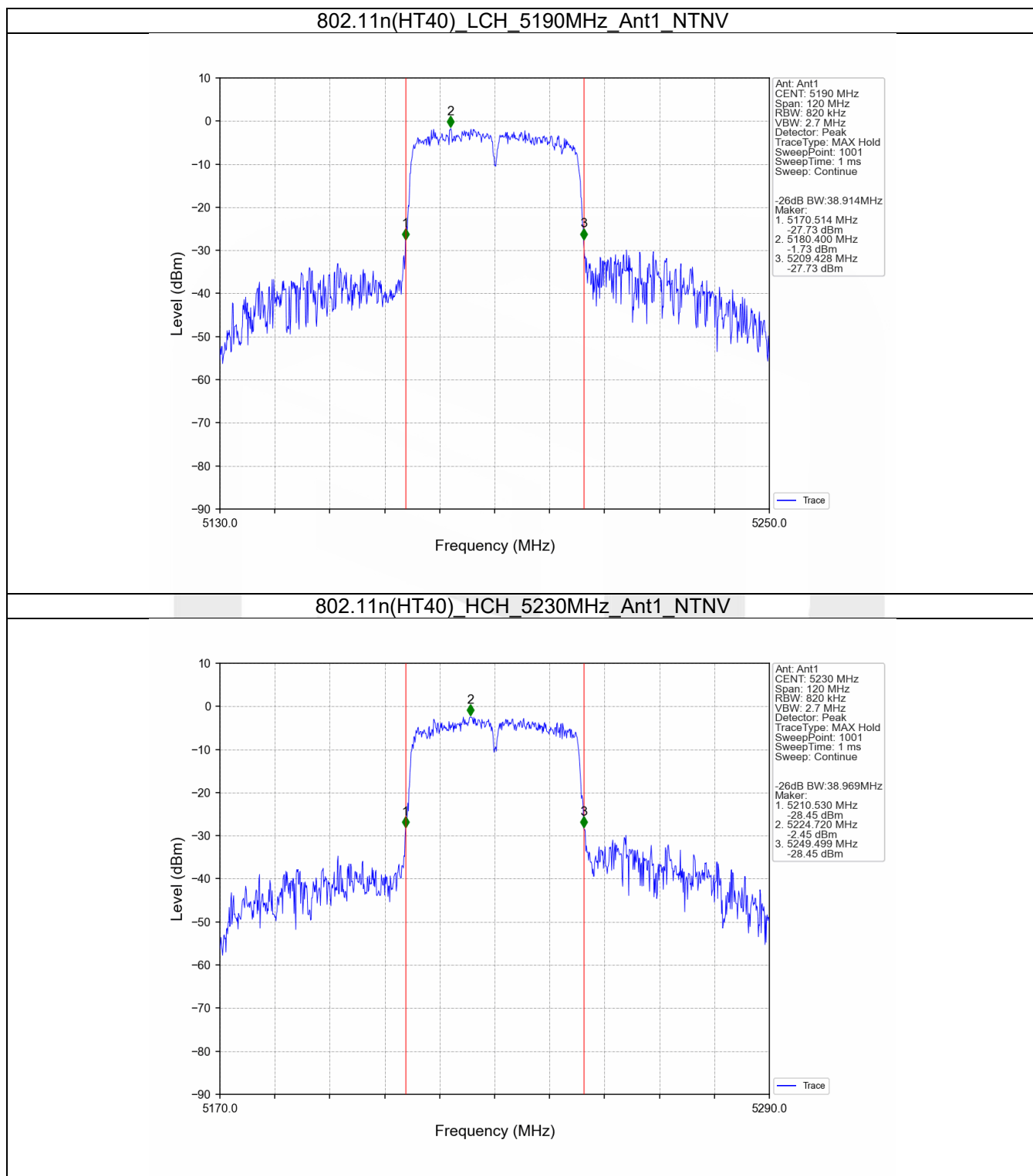


2.2.2 26dB BW









3. Maximum Conducted Output Power

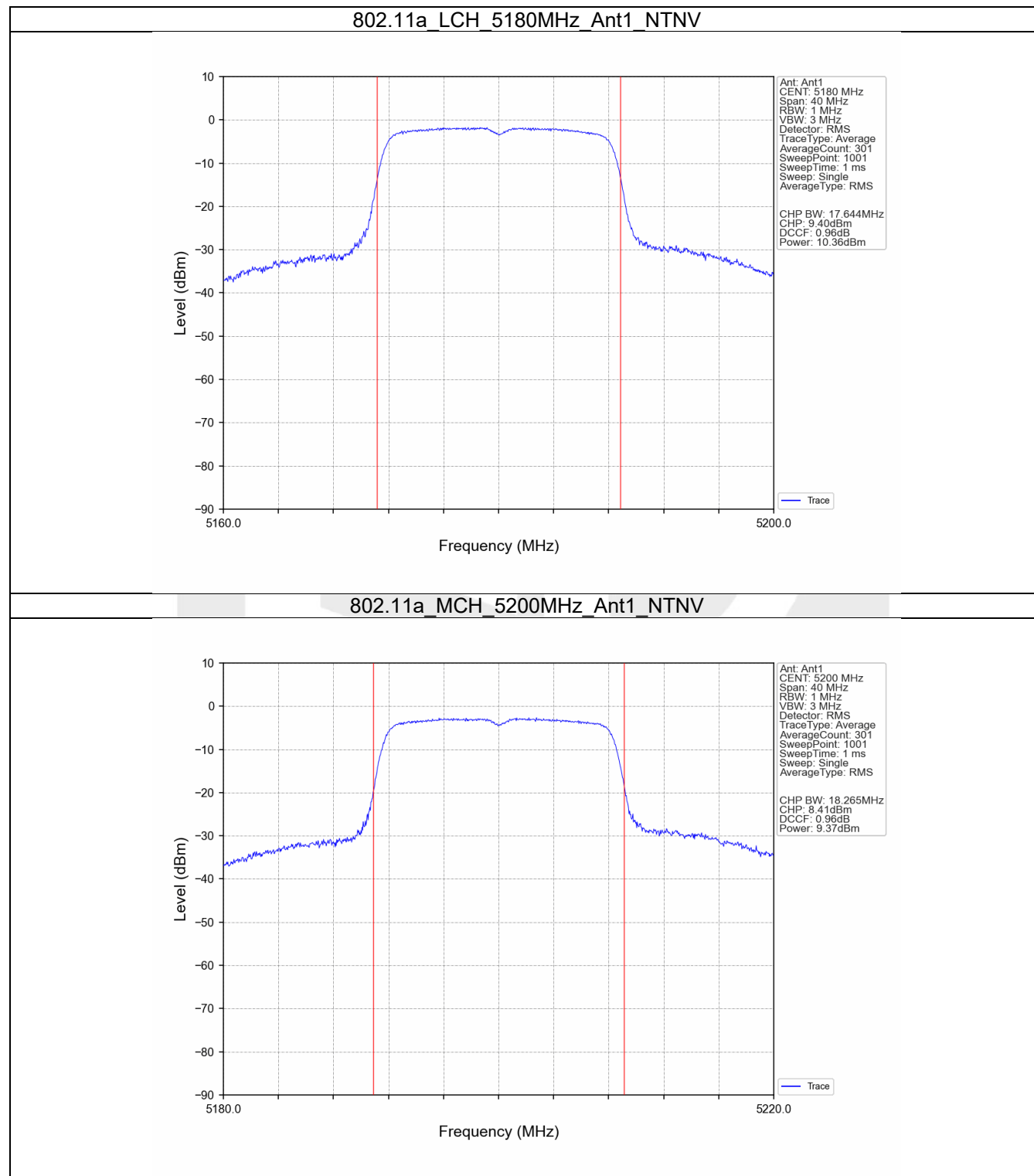
3.1 Test Result

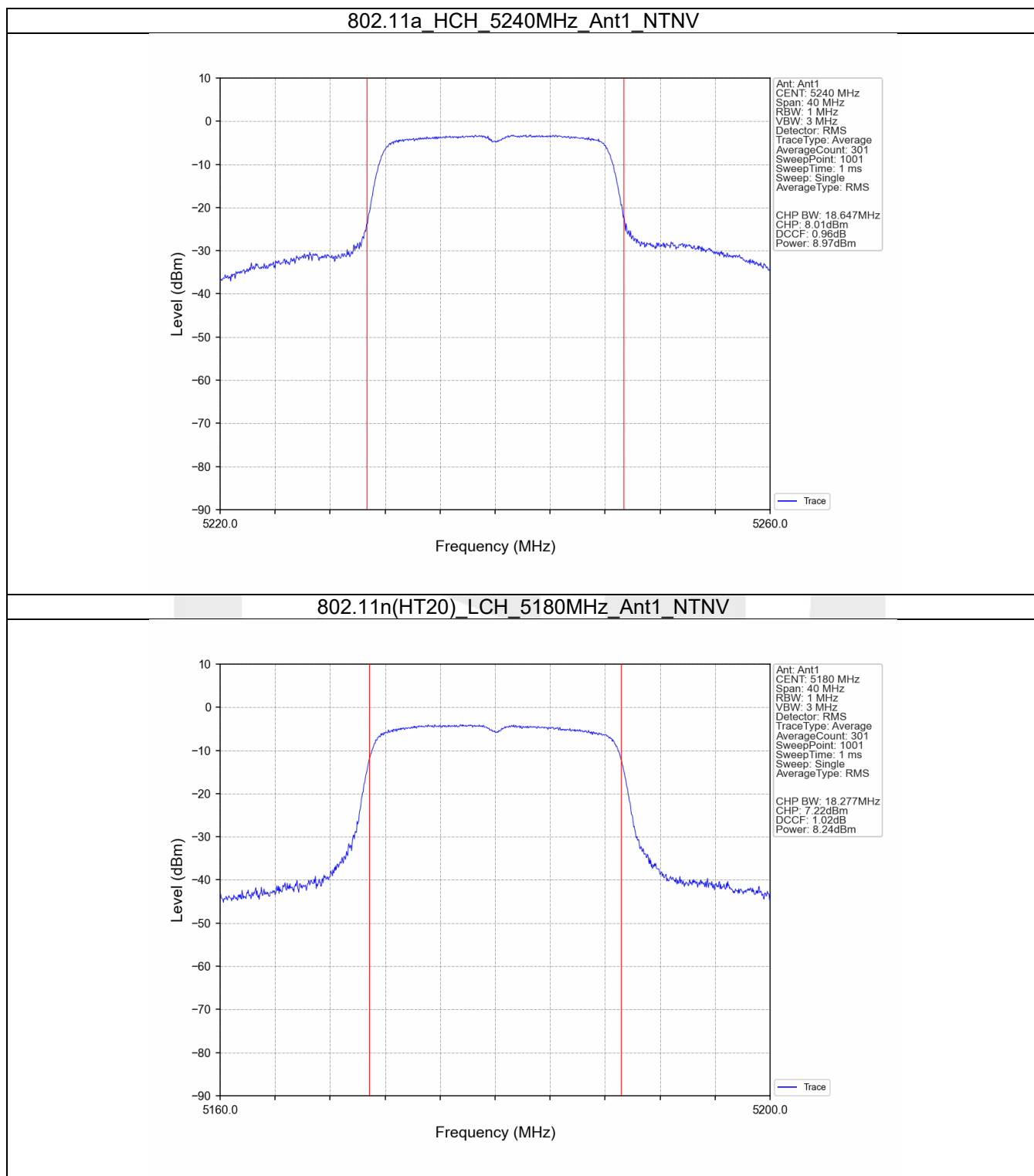
3.1.1 Power

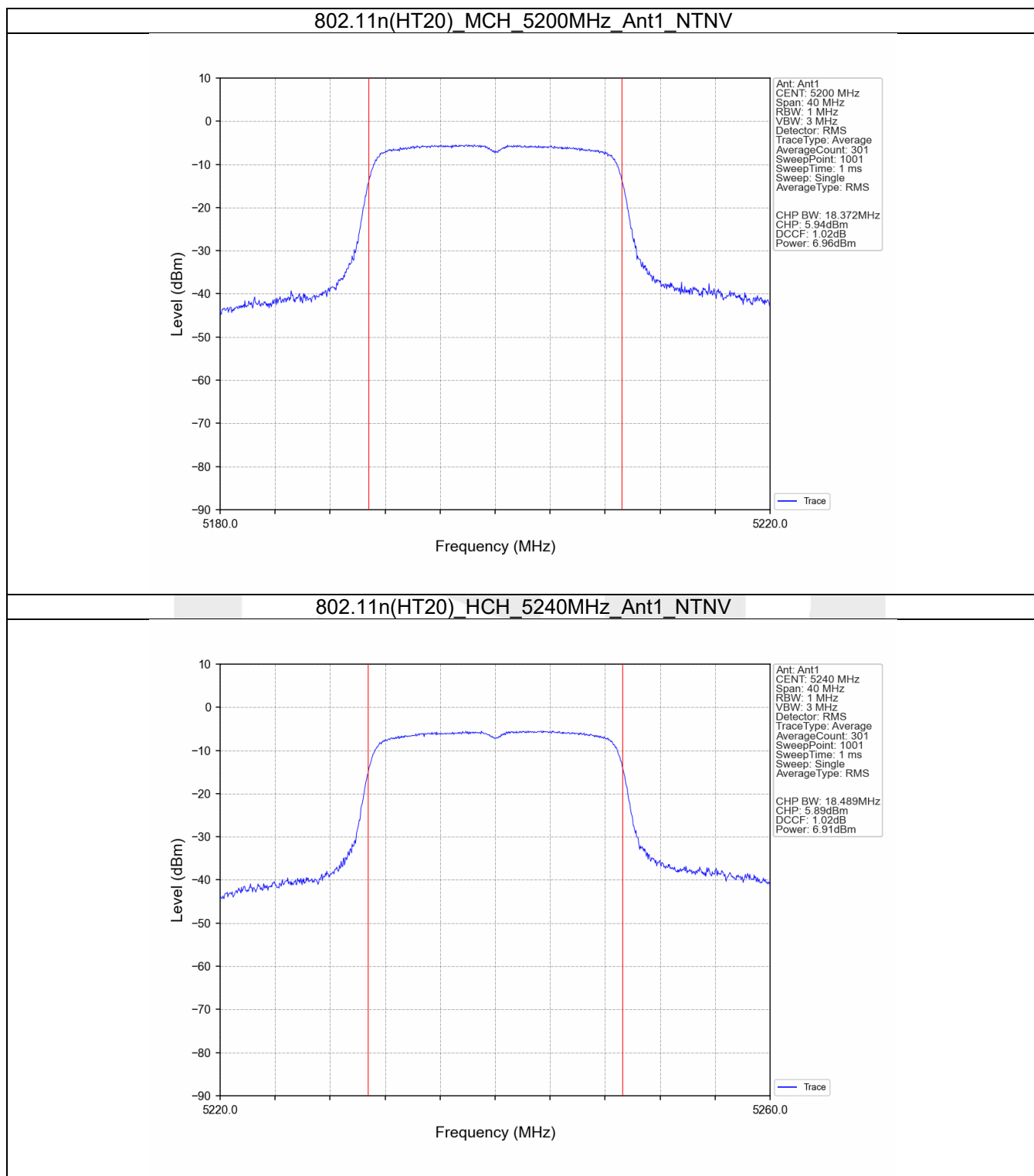
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	10.36	<=23.98	Pass
		5200	9.37	<=23.98	Pass
		5240	8.97	<=23.98	Pass
802.11n (HT20)	SISO	5180	8.24	<=23.98	Pass
		5200	6.96	<=23.98	Pass
		5240	6.91	<=23.98	Pass
802.11n (HT40)	SISO	5190	5.65	<=23.98	Pass
		5230	4.91	<=23.98	Pass
Note1: Antenna Gain: Ant1: 4.16dBi.					

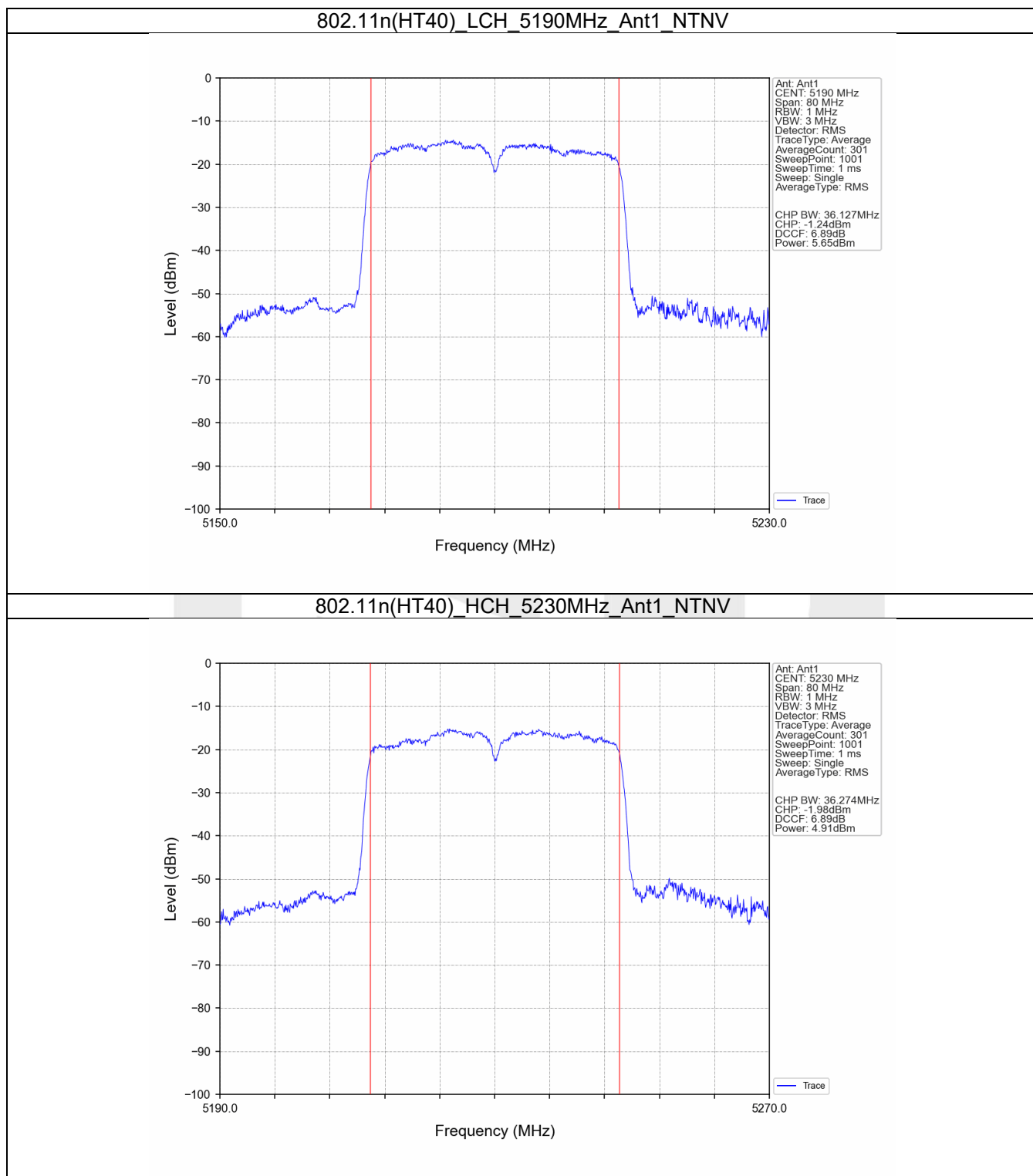
3.2 Test Graph

3.2.1 Power









4. Maximum Power Spectral Density

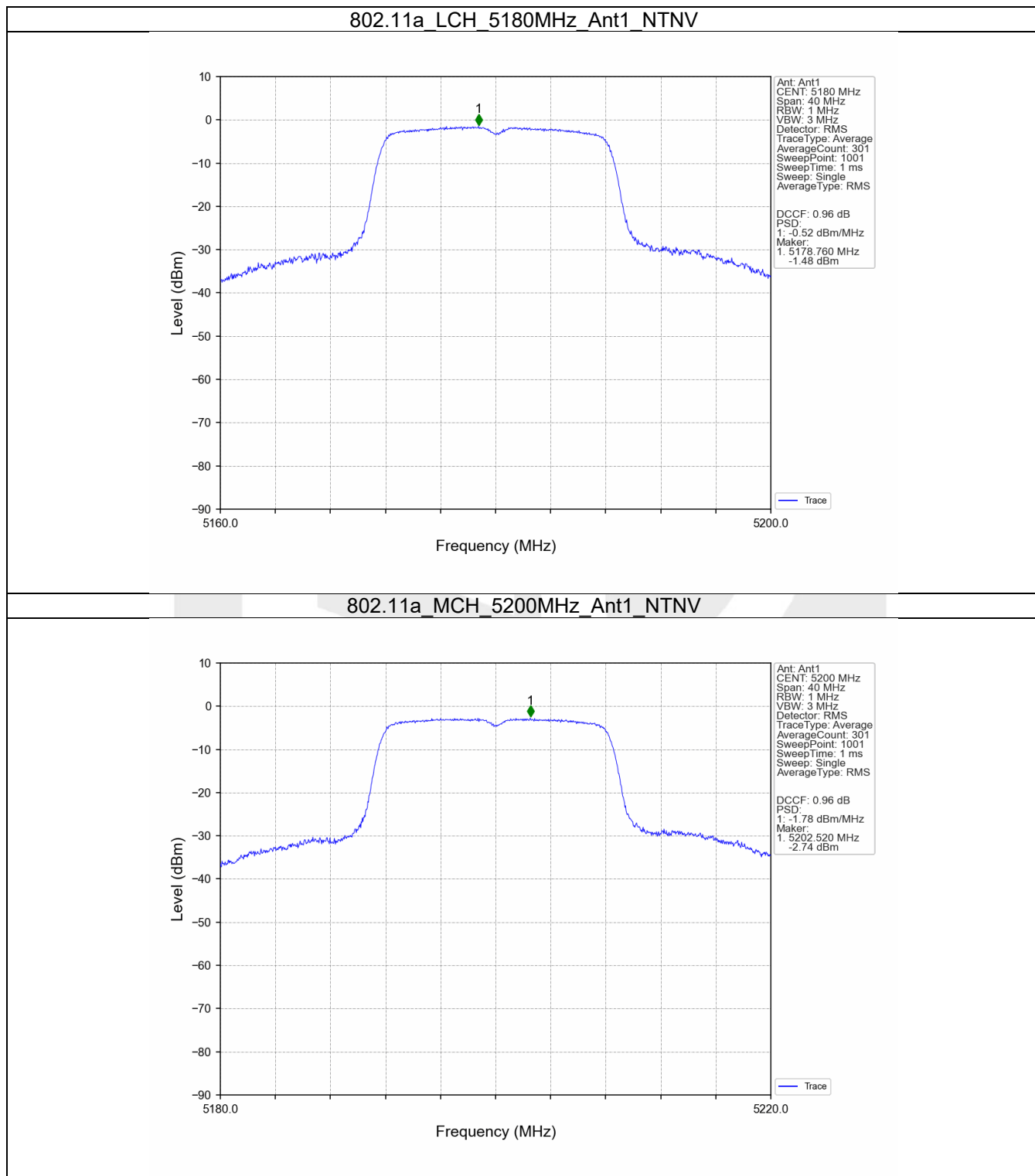
4.1 Test Result

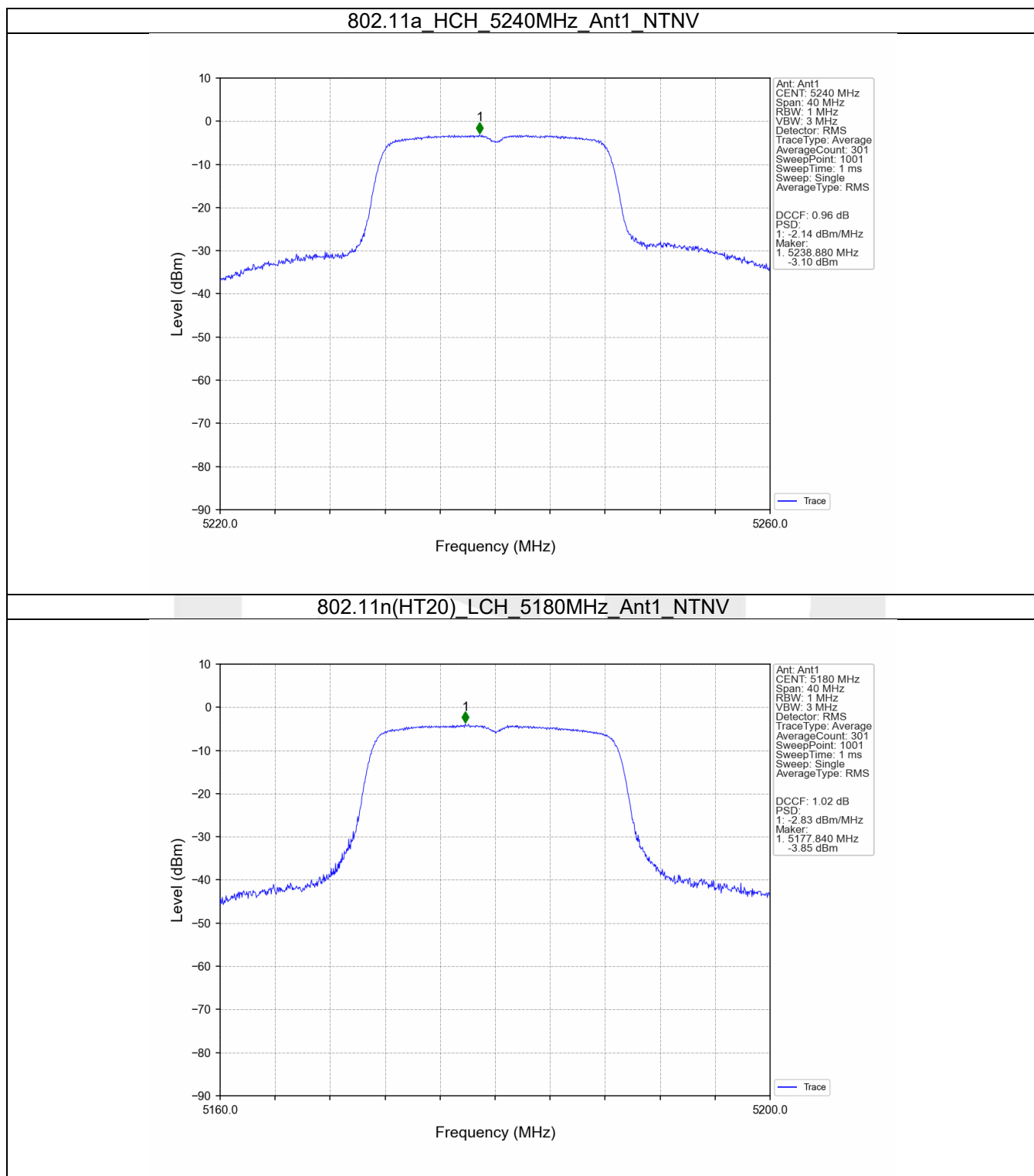
4.1.1 PSD

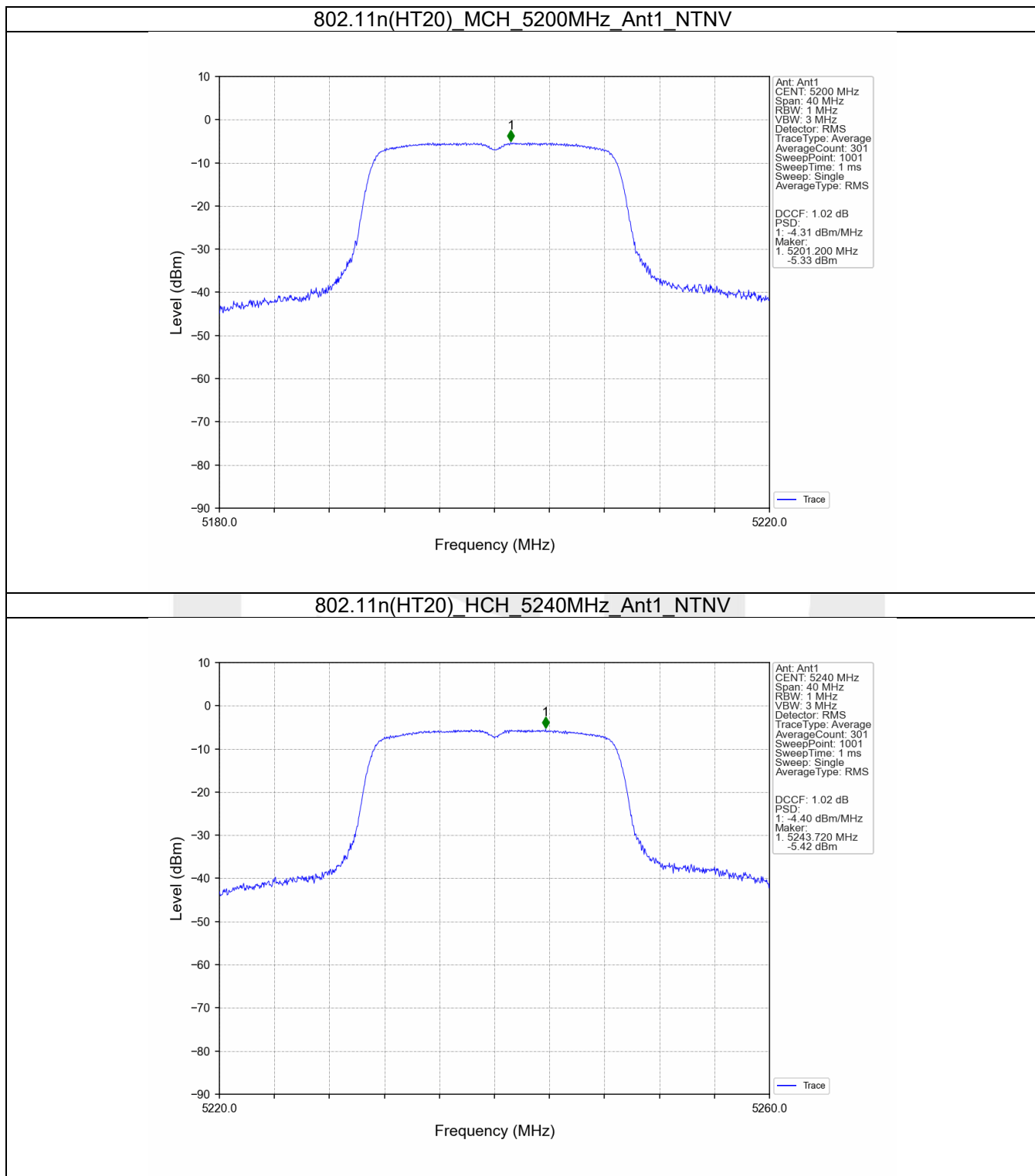
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	-0.52	≤ 11	Pass
		5200	-1.78	≤ 11	Pass
		5240	-2.14	≤ 11	Pass
802.11n (HT20)	SISO	5180	-2.83	≤ 11	Pass
		5200	-4.31	≤ 11	Pass
		5240	-4.40	≤ 11	Pass
802.11n (HT40)	SISO	5190	-7.80	≤ 11	Pass
		5230	-8.16	≤ 11	Pass

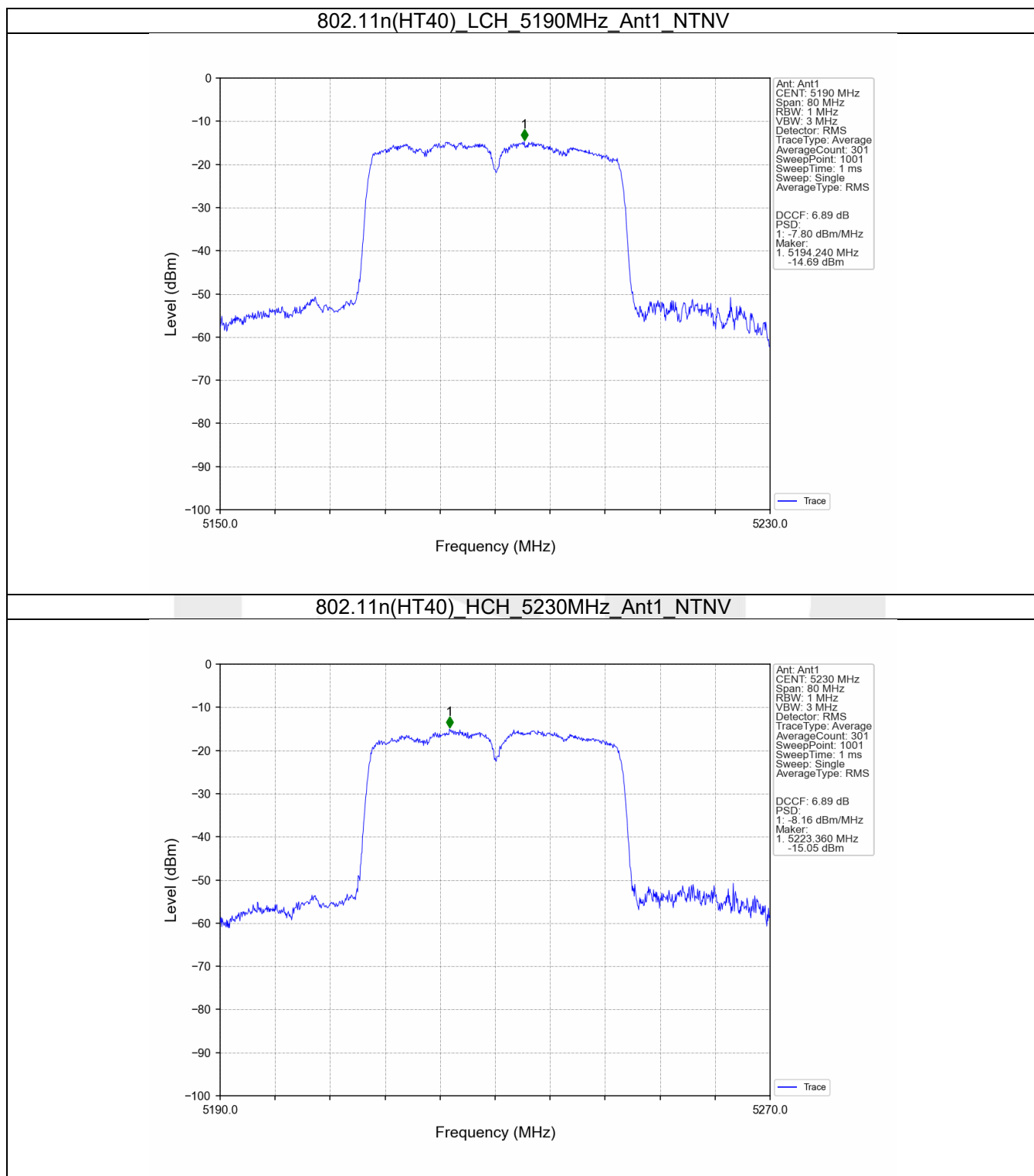
4.2 Test Graph

4.2.1 PSD









5. Unwanted Emissions In Restricted Frequency Bands

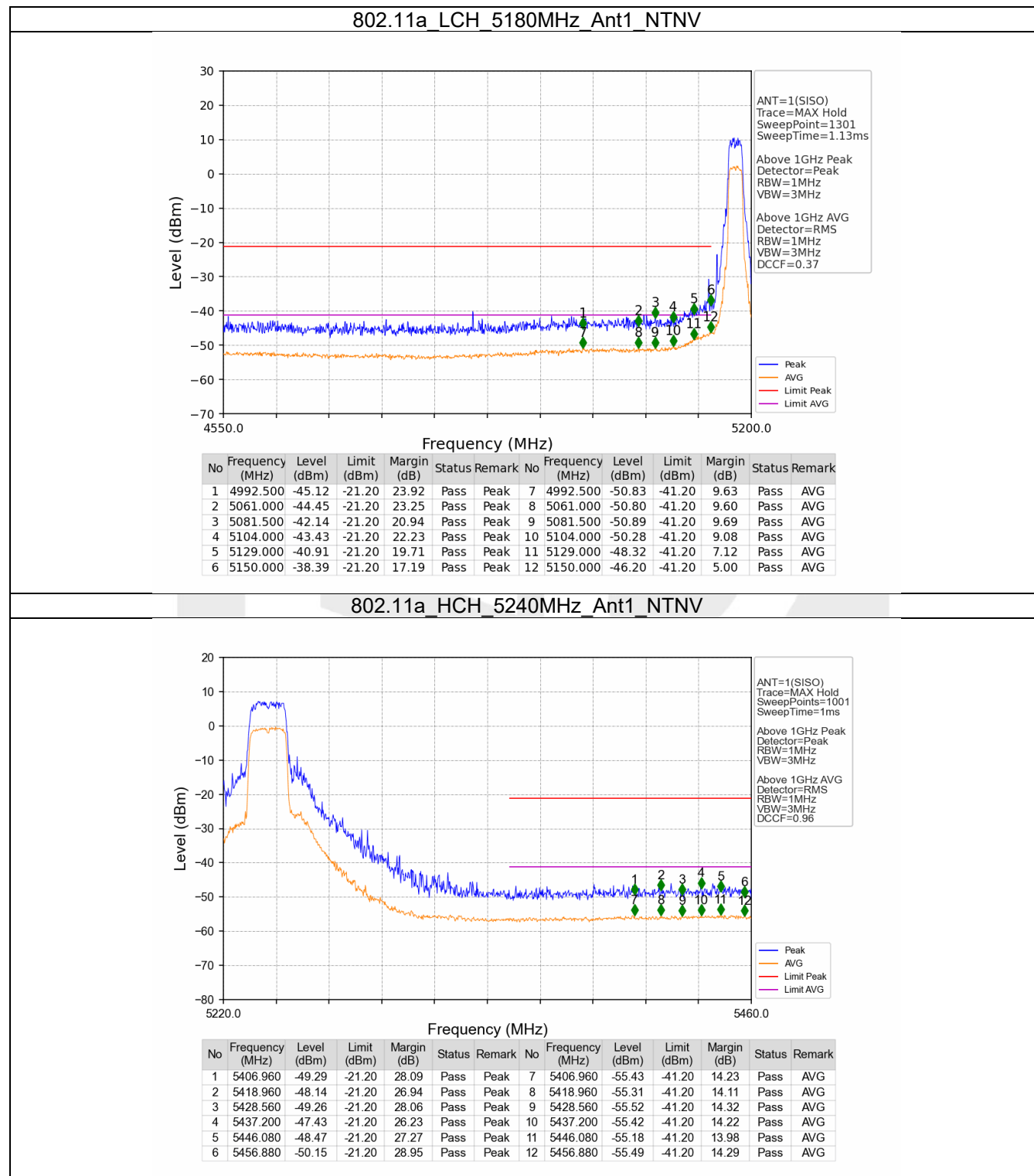
5.1 Test Result

5.1.1 CSE

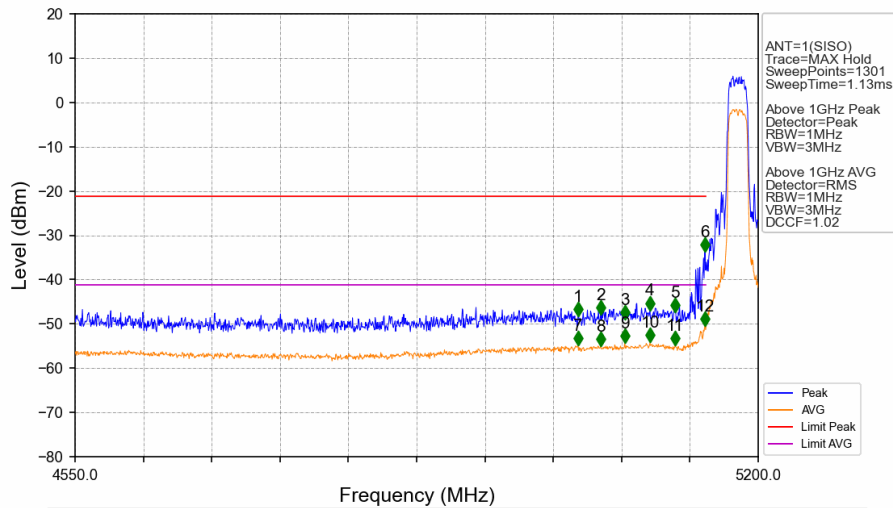
Mode	TX Type	Frequency (MHz)	ANT	Level of Unwanted Emissions (dBm)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	Refer To Test Graph		Pass
		5240	1	Refer To Test Graph		Pass
802.11n (HT20)	SISO	5180	1	Refer To Test Graph		Pass
		5240	1	Refer To Test Graph		Pass
802.11n (HT40)	SISO	5190	1	Refer To Test Graph		Pass
		5230	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: 4.16 dBi.						

5.2 Test Graph

5.2.1 CSE

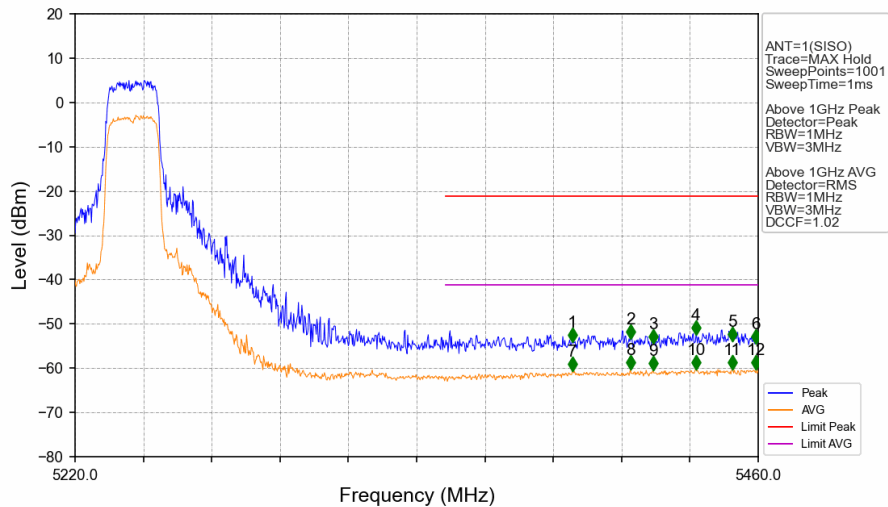


802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



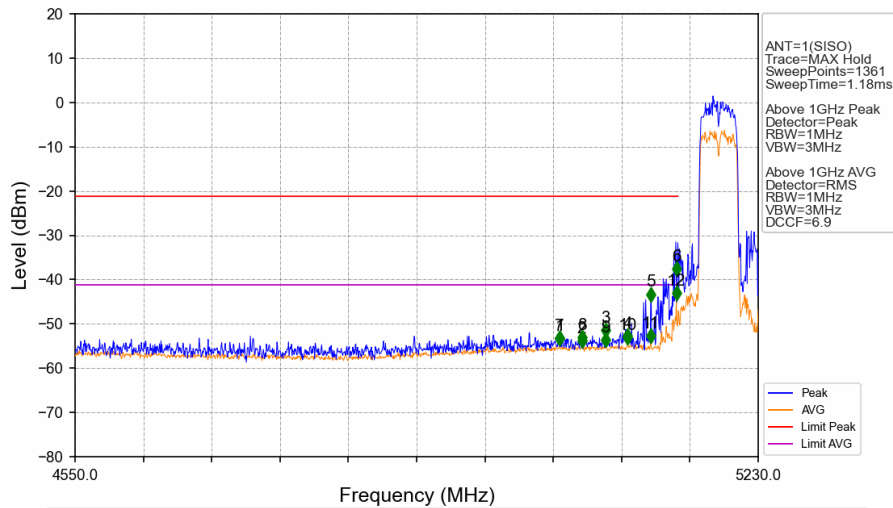
No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	5028.500	-48.33	-21.20	27.13	Pass	Peak	7	5028.500	-54.85	-41.20	13.65	Pass	AVG
2	5050.000	-47.97	-21.20	26.77	Pass	Peak	8	5050.000	-55.07	-41.20	13.87	Pass	AVG
3	5073.000	-48.98	-21.20	27.78	Pass	Peak	9	5073.000	-54.31	-41.20	13.11	Pass	AVG
4	5097.000	-46.88	-21.20	25.68	Pass	Peak	10	5097.000	-54.14	-41.20	12.94	Pass	AVG
5	5121.000	-47.36	-21.20	26.16	Pass	Peak	11	5121.000	-54.76	-41.20	13.56	Pass	AVG
6	5149.500	-33.74	-21.20	12.54	Pass	Peak	12	5149.500	-50.48	-41.20	9.28	Pass	AVG

802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



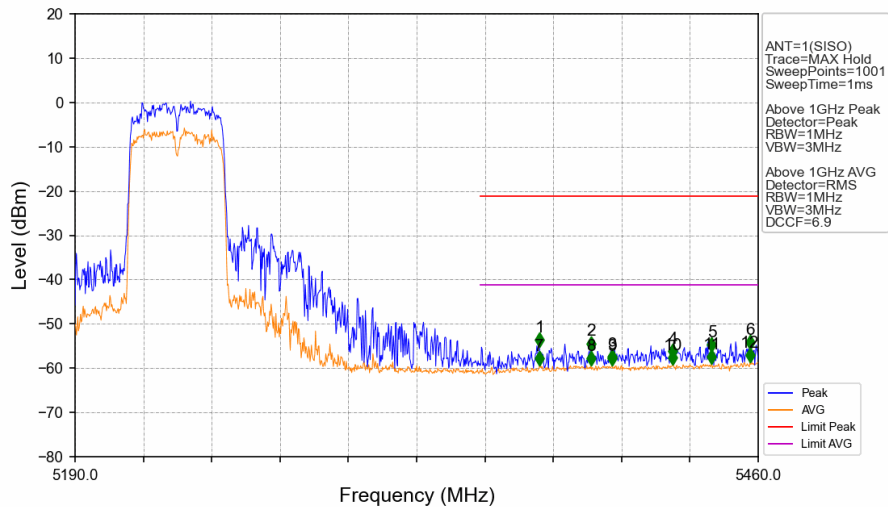
No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	5394.720	-54.13	-21.20	32.93	Pass	Peak	7	5394.720	-60.65	-41.20	19.45	Pass	AVG
2	5415.120	-53.43	-21.20	32.23	Pass	Peak	8	5415.120	-60.25	-41.20	19.05	Pass	AVG
3	5423.040	-54.47	-21.20	33.27	Pass	Peak	9	5423.040	-60.54	-41.20	19.34	Pass	AVG
4	5438.160	-52.41	-21.20	31.21	Pass	Peak	10	5438.160	-60.23	-41.20	19.03	Pass	AVG
5	5450.880	-53.96	-21.20	32.76	Pass	Peak	11	5450.880	-60.30	-41.20	19.10	Pass	AVG
6	5459.280	-54.39	-21.20	33.19	Pass	Peak	12	5459.280	-60.32	-41.20	19.12	Pass	AVG

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	-54.82	-21.20	33.62	Pass	Peak	7	5032.500	-54.82	-41.20	13.62	Pass	AVG
2	5054.500	-55.28	-21.20	34.08	Pass	Peak	8	5054.500	-54.66	-41.20	13.46	Pass	AVG
3	5078.000	-53.02	-21.20	31.82	Pass	Peak	9	5078.000	-55.09	-41.20	13.89	Pass	AVG
4	5100.000	-54.25	-21.20	33.05	Pass	Peak	10	5100.000	-54.59	-41.20	13.39	Pass	AVG
5	5123.000	-44.88	-21.20	23.68	Pass	Peak	11	5123.000	-54.28	-41.20	13.08	Pass	AVG
6	5148.500	-39.13	-21.20	17.93	Pass	Peak	12	5148.500	-44.67	-41.20	3.47	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	5373.600	-55.09	-21.20	33.89	Pass	Peak	7	5373.600	-59.40	-41.20	18.20	Pass	AVG
2	5393.850	-55.99	-21.20	34.79	Pass	Peak	8	5393.850	-59.42	-41.20	18.22	Pass	AVG
3	5402.220	-59.04	-21.20	37.84	Pass	Peak	9	5402.220	-59.42	-41.20	18.22	Pass	AVG
4	5426.250	-57.75	-21.20	36.55	Pass	Peak	10	5426.250	-59.12	-41.20	17.92	Pass	AVG
5	5441.640	-56.25	-21.20	35.05	Pass	Peak	11	5441.640	-58.95	-41.20	17.75	Pass	AVG
6	5456.760	-55.74	-21.20	34.54	Pass	Peak	12	5456.760	-58.68	-41.20	17.48	Pass	AVG

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	5180.020	5150 to 5250	Pass
				120	5180.060	5150 to 5250	Pass
				138	5179.960	5150 to 5250	Pass
			-30	120	5180.040	5150 to 5250	Pass
			-20	120	5180.000	5150 to 5250	Pass
			-10	120	5180.060	5150 to 5250	Pass
			0	120	5180.060	5150 to 5250	Pass
			10	120	5180.020	5150 to 5250	Pass
			30	120	5180.040	5150 to 5250	Pass
			40	120	5180.060	5150 to 5250	Pass
			50	120	5180.000	5150 to 5250	Pass
		5200	20	102	5200.060	5150 to 5250	Pass
				120	5200.060	5150 to 5250	Pass
				138	5200.080	5150 to 5250	Pass
			-30	120	5200.040	5150 to 5250	Pass
			-20	120	5200.020	5150 to 5250	Pass
			-10	120	5200.080	5150 to 5250	Pass
			0	120	5199.980	5150 to 5250	Pass
			10	120	5200.020	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	5240.100	5150 to 5250	Pass
				138	5240.080	5150 to 5250	Pass
			-30	120	5240.080	5150 to 5250	Pass
			-20	120	5240.060	5150 to 5250	Pass
			-10	120	5240.040	5150 to 5250	Pass
			0	120	5240.100	5150 to 5250	Pass
			10	120	5240.040	5150 to 5250	Pass
			30	120	5240.060	5150 to 5250	Pass
			40	120	5240.060	5150 to 5250	Pass
			50	120	5240.040	5150 to 5250	Pass
802.11n (HT20)	SISO	5180	20	102	5179.980	5150 to 5250	Pass
				120	5180.020	5150 to 5250	Pass
				138	5179.940	5150 to 5250	Pass
			-30	120	5180.000	5150 to 5250	Pass
			-20	120	5179.980	5150 to 5250	Pass
			-10	120	5180.060	5150 to 5250	Pass
			0	120	5180.040	5150 to 5250	Pass
			10	120	5180.060	5150 to 5250	Pass

			30	120	5180.040	5150 to 5250	Pass
			40	120	5180.080	5150 to 5250	Pass
			50	120	5179.980	5150 to 5250	Pass
		5200	20	102	5200.000	5150 to 5250	Pass
				120	5200.100	5150 to 5250	Pass
				138	5200.020	5150 to 5250	Pass
			-30	120	5199.960	5150 to 5250	Pass
			-20	120	5200.060	5150 to 5250	Pass
			-10	120	5200.040	5150 to 5250	Pass
			0	120	5200.000	5150 to 5250	Pass
			10	120	5200.020	5150 to 5250	Pass
			30	120	5200.060	5150 to 5250	Pass
			40	120	5199.960	5150 to 5250	Pass
			50	120	5200.040	5150 to 5250	Pass
		5240	20	102	5240.100	5150 to 5250	Pass
				120	5240.100	5150 to 5250	Pass
				138	5239.960	5150 to 5250	Pass
			-30	120	5240.080	5150 to 5250	Pass
			-20	120	5240.060	5150 to 5250	Pass
			-10	120	5240.080	5150 to 5250	Pass
			0	120	5240.060	5150 to 5250	Pass
			10	120	5240.100	5150 to 5250	Pass
			30	120	5240.100	5150 to 5250	Pass
			40	120	5240.040	5150 to 5250	Pass
			50	120	5240.040	5150 to 5250	Pass
802.11n (HT40)	SISO	5190	20	102	5190.040	5150 to 5250	Pass
				120	5190.000	5150 to 5250	Pass
				138	5190.040	5150 to 5250	Pass
			-30	120	5190.080	5150 to 5250	Pass
			-20	120	5190.040	5150 to 5250	Pass
			-10	120	5190.040	5150 to 5250	Pass
			0	120	5190.040	5150 to 5250	Pass
			10	120	5190.040	5150 to 5250	Pass
			30	120	5190.000	5150 to 5250	Pass
			40	120	5190.000	5150 to 5250	Pass
			50	120	5190.080	5150 to 5250	Pass
		5230	20	102	5230.080	5150 to 5250	Pass
				120	5230.120	5150 to 5250	Pass
				138	5230.120	5150 to 5250	Pass
			-30	120	5230.080	5150 to 5250	Pass
			-20	120	5230.080	5150 to 5250	Pass
			-10	120	5230.040	5150 to 5250	Pass
			0	120	5230.080	5150 to 5250	Pass
			10	120	5230.120	5150 to 5250	Pass
			30	120	5230.120	5150 to 5250	Pass
			40	120	5230.080	5150 to 5250	Pass
			50	120	5230.080	5150 to 5250	Pass

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