



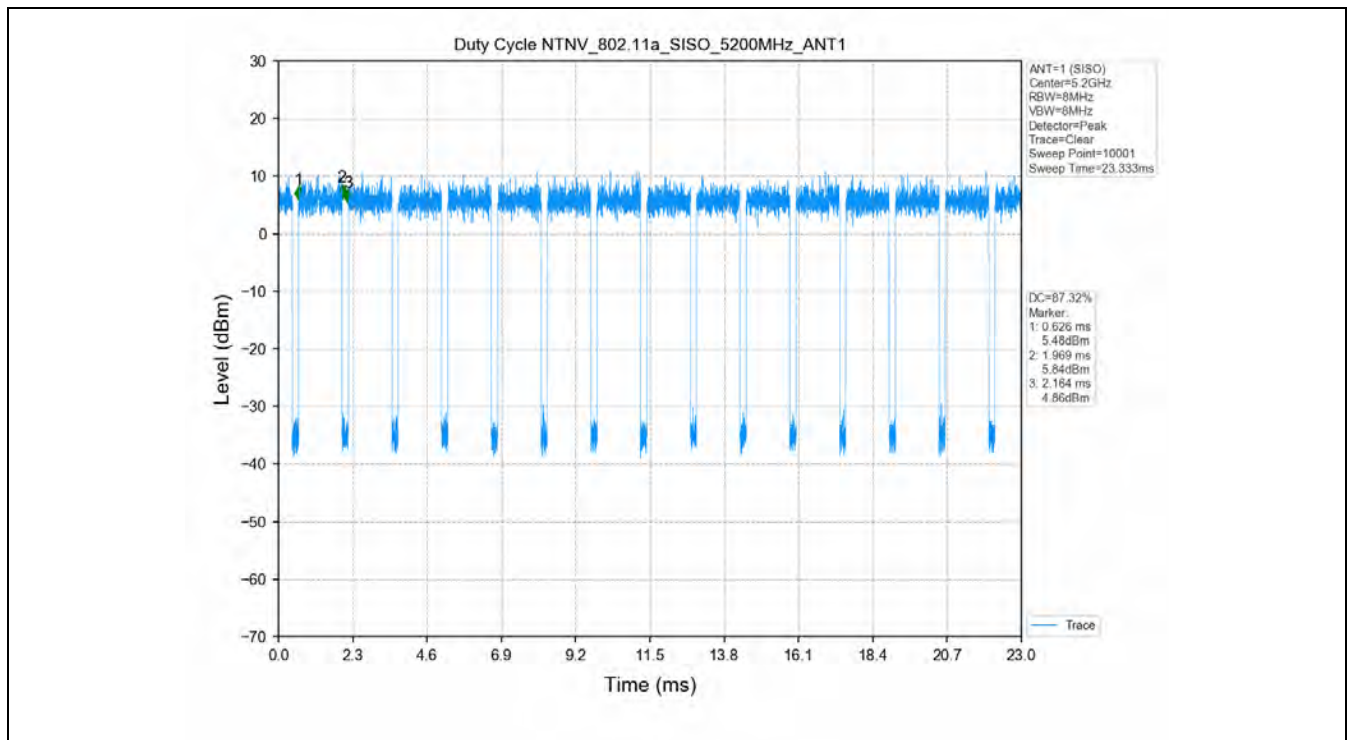
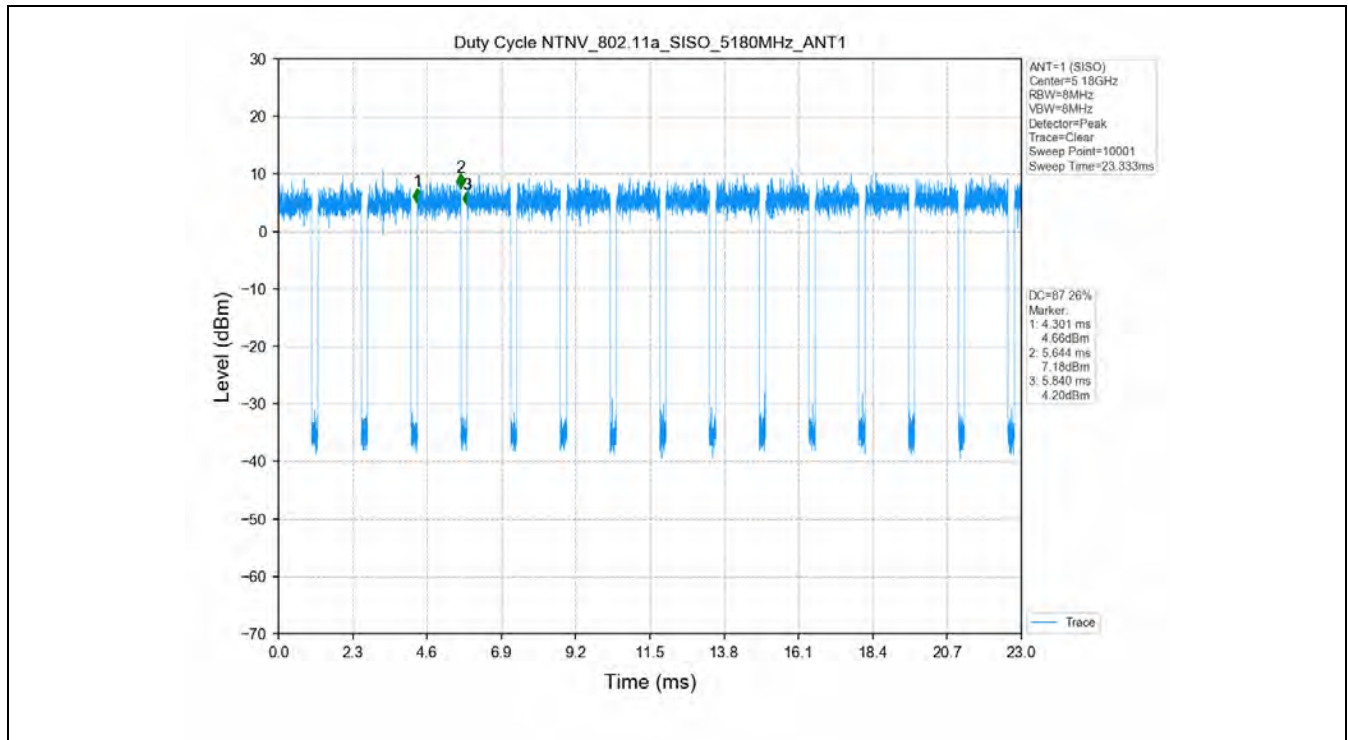
Appendix D for SHEM200300180804

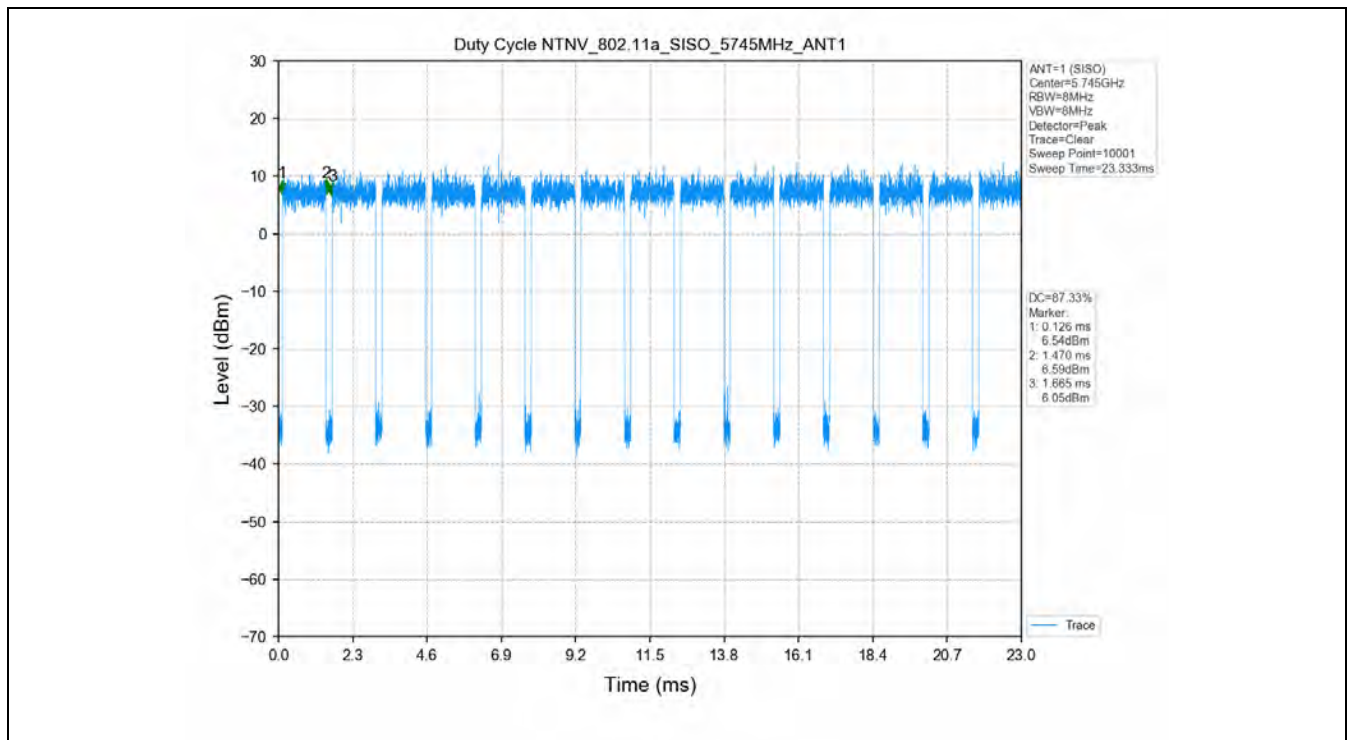
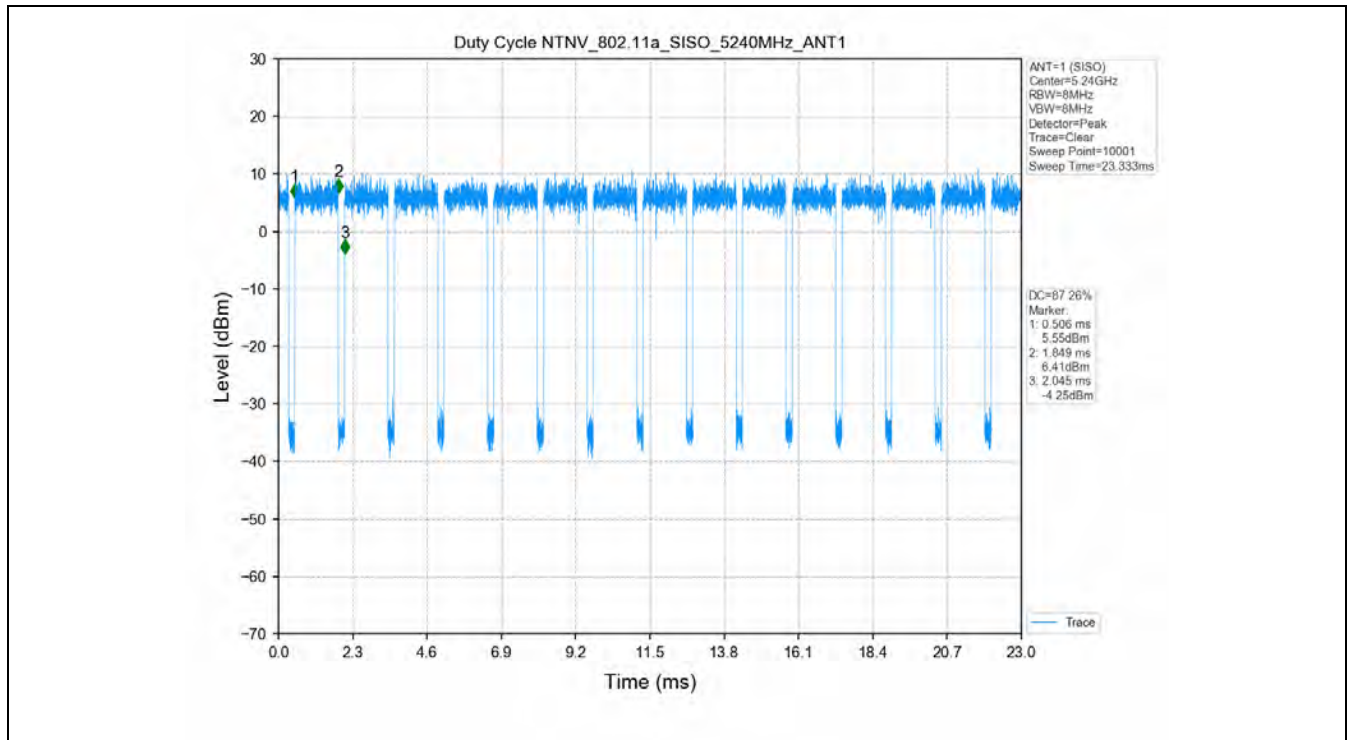
1. Duty Cycle

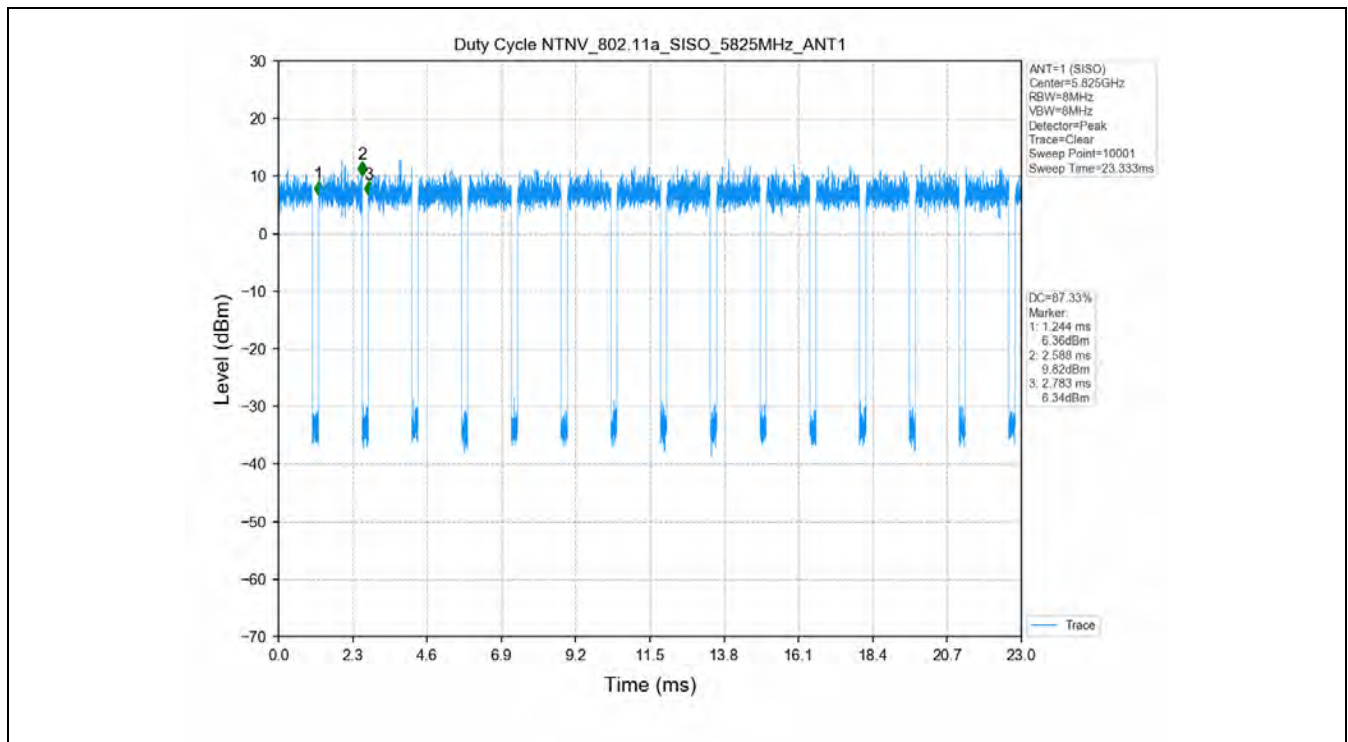
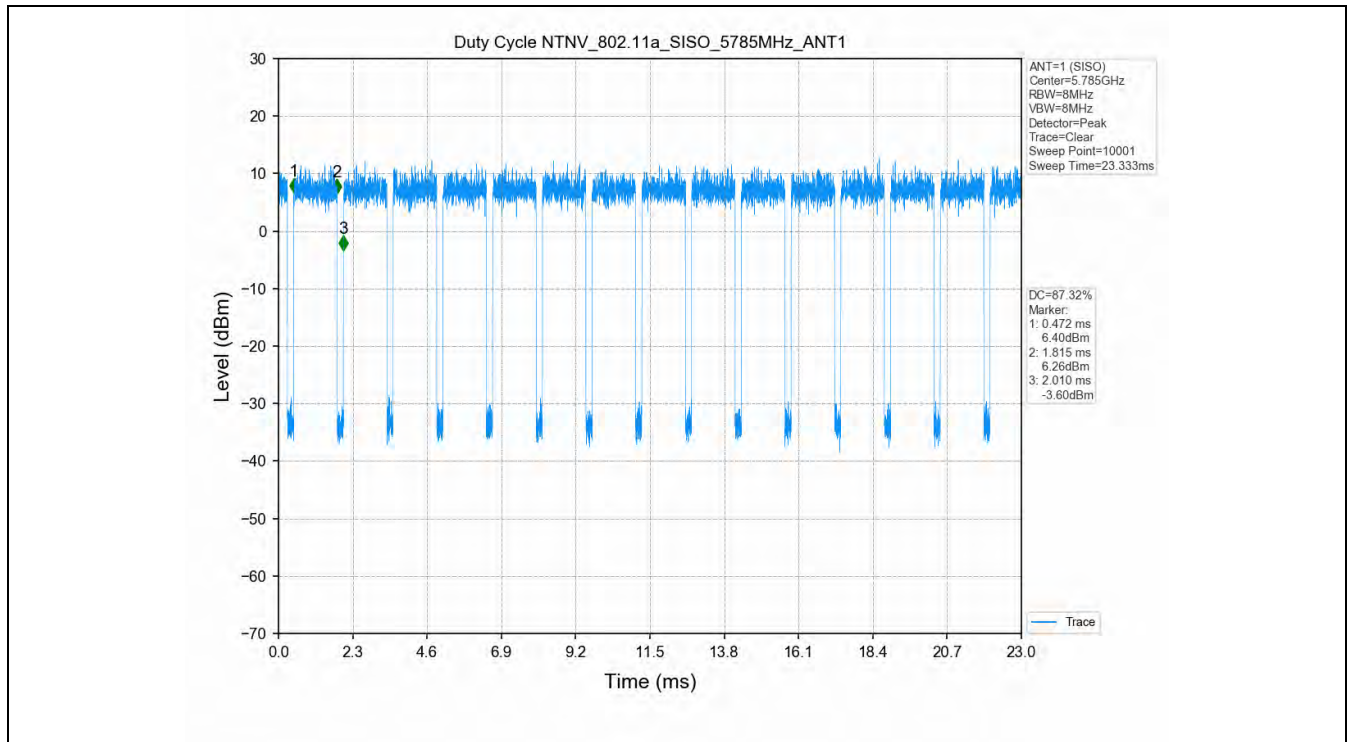
1.1 Test Result

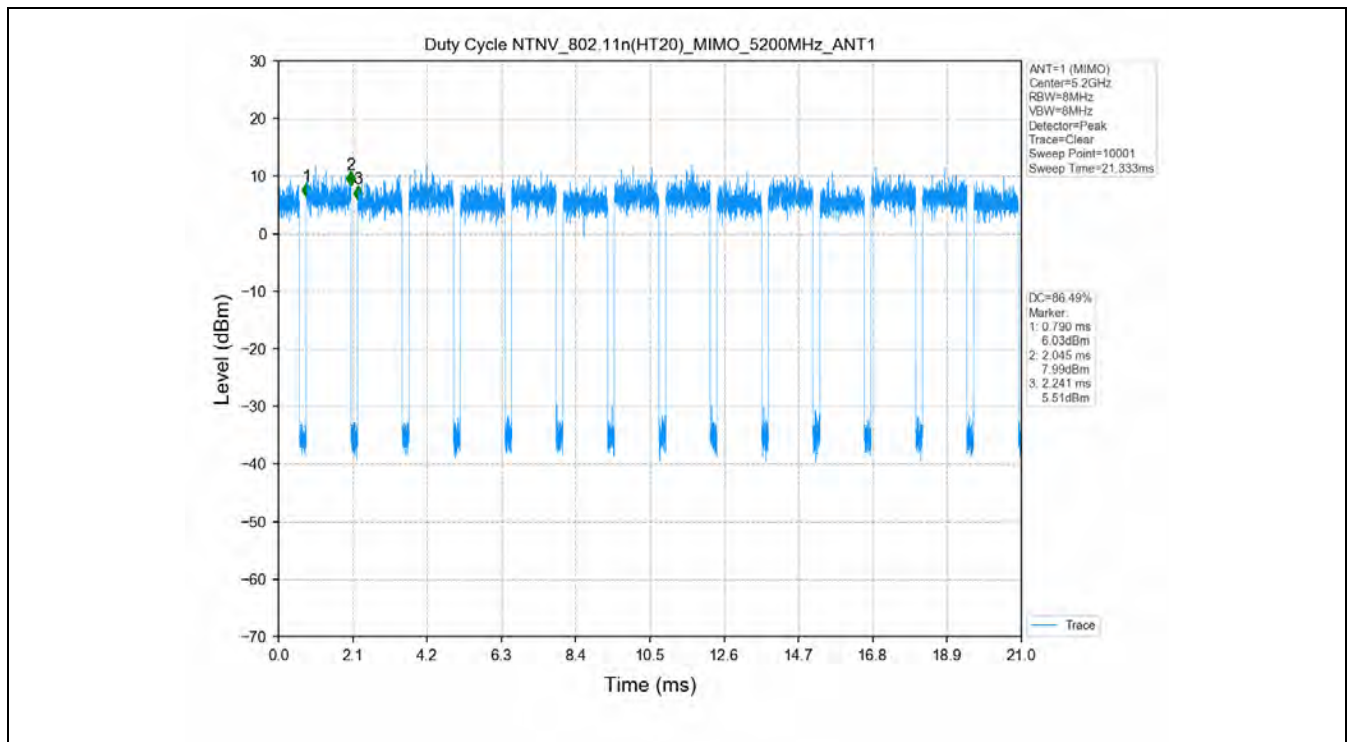
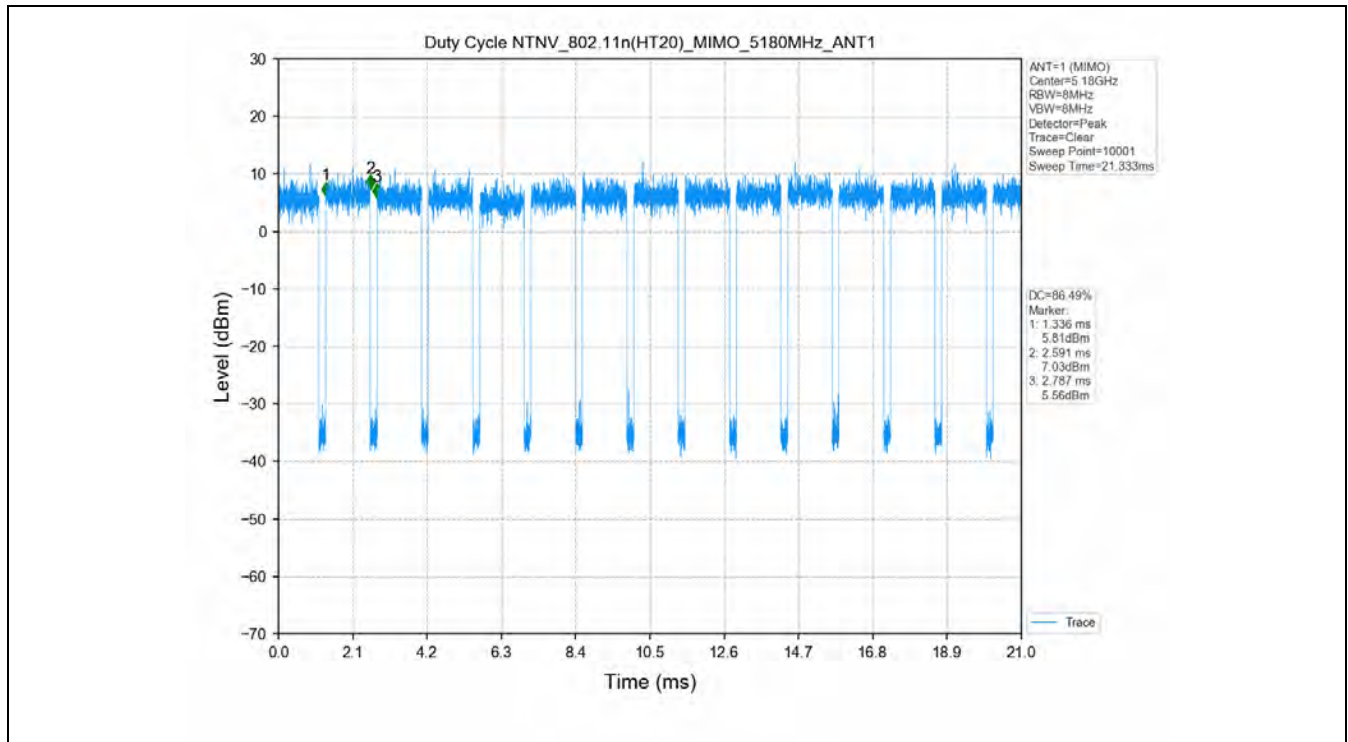
Test Mode	Channel Frequency (MHz)	TX Type	ANT No.	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
802.11a	5180	SISO	1	1.343	1.539	87.26	0.59
	5200	SISO	1	1.343	1.538	87.32	0.59
	5240	SISO	1	1.343	1.539	87.26	0.59
	5745	SISO	1	1.344	1.539	87.33	0.59
	5785	SISO	1	1.343	1.538	87.32	0.59
	5825	SISO	1	1.344	1.539	87.33	0.59
802.11n(HT20)	5180	MIMO	1	1.255	1.451	86.49	0.63
	5200	MIMO	1	1.255	1.451	86.49	0.63
	5240	MIMO	1	1.256	1.451	86.56	0.63
	5745	MIMO	1	1.256	1.451	86.56	0.63
	5785	MIMO	1	1.256	1.451	86.56	0.63
	5825	MIMO	1	1.256	1.451	86.56	0.63
802.11n(HT40)	5190	MIMO	1	0.916	1.087	84.27	0.74
	5230	MIMO	1	0.617	0.812	75.99	1.19
	5755	MIMO	1	0.617	0.811	76.08	1.19
	5795	MIMO	1	0.617	0.810	76.17	1.18
802.11ac(VHT20)	5180	MIMO	1	1.256	1.451	86.56	0.63
	5200	MIMO	1	1.256	1.451	86.56	0.63
	5240	MIMO	1	1.256	1.451	86.56	0.63
	5745	MIMO	1	1.276	1.476	86.45	0.63
	5785	MIMO	1	1.363	1.562	87.26	0.59
	5825	MIMO	1	1.276	1.476	86.45	0.63
802.11ac(VHT40)	5190	MIMO	1	0.636	0.837	75.99	1.19
	5230	MIMO	1	0.617	0.810	76.17	1.18
	5755	MIMO	1	0.617	0.811	76.08	1.19
	5795	MIMO	1	0.636	0.836	76.08	1.19
802.11ac(VHT80)	5210	MIMO	1	0.636	0.836	76.08	1.19
	5775	MIMO	1	0.607	0.797	76.16	1.18

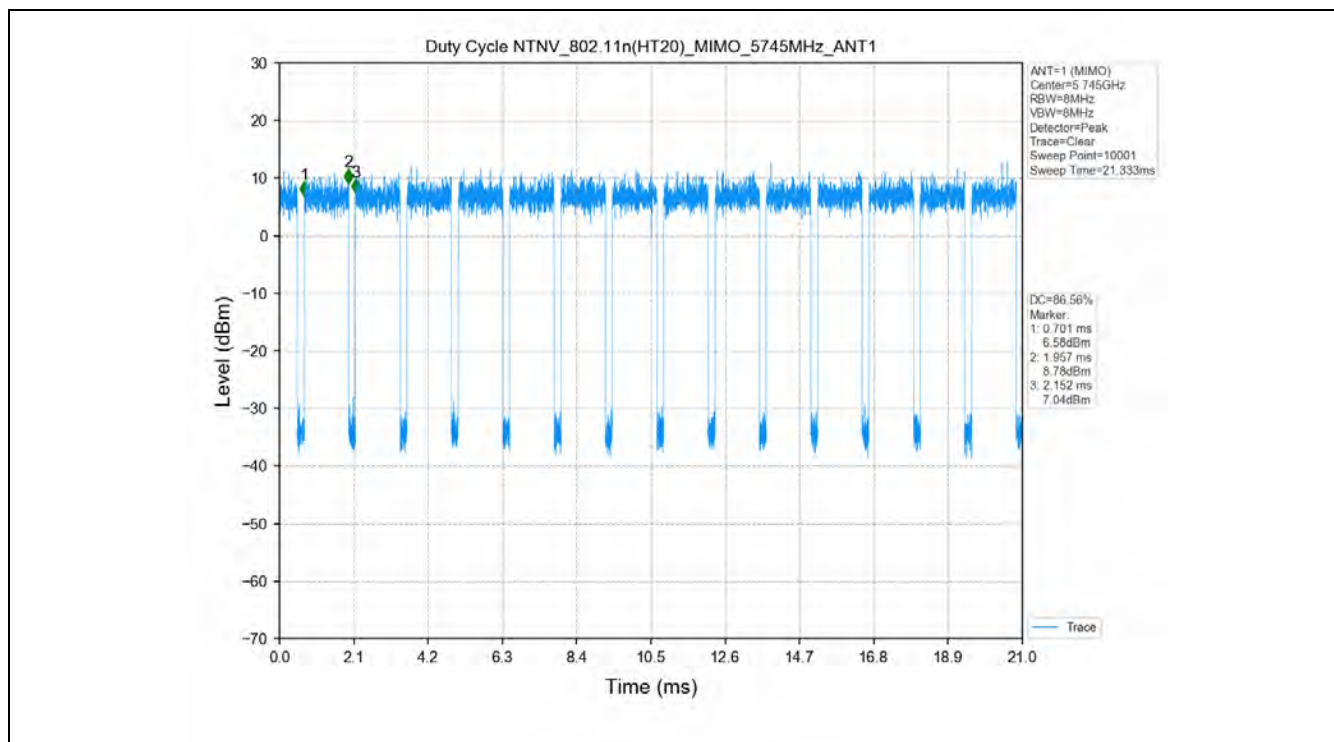
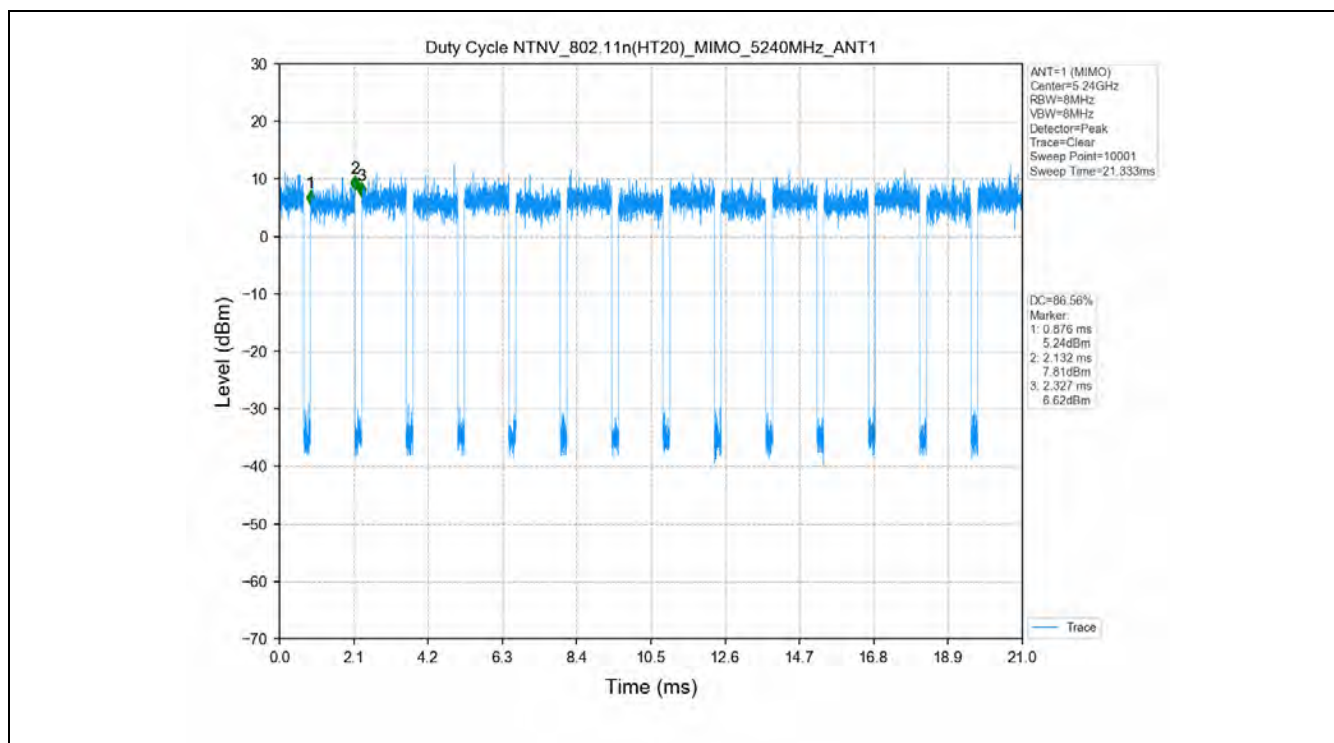
1.2 Test Graph

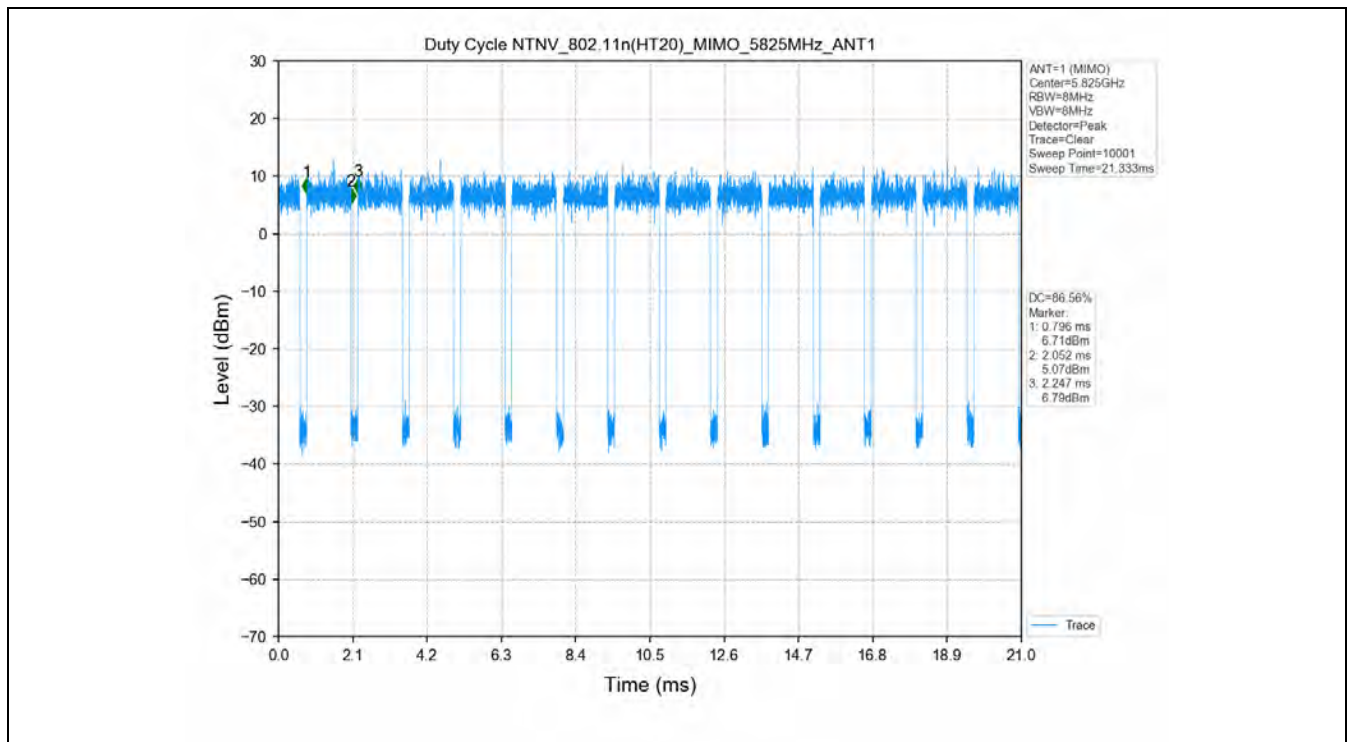
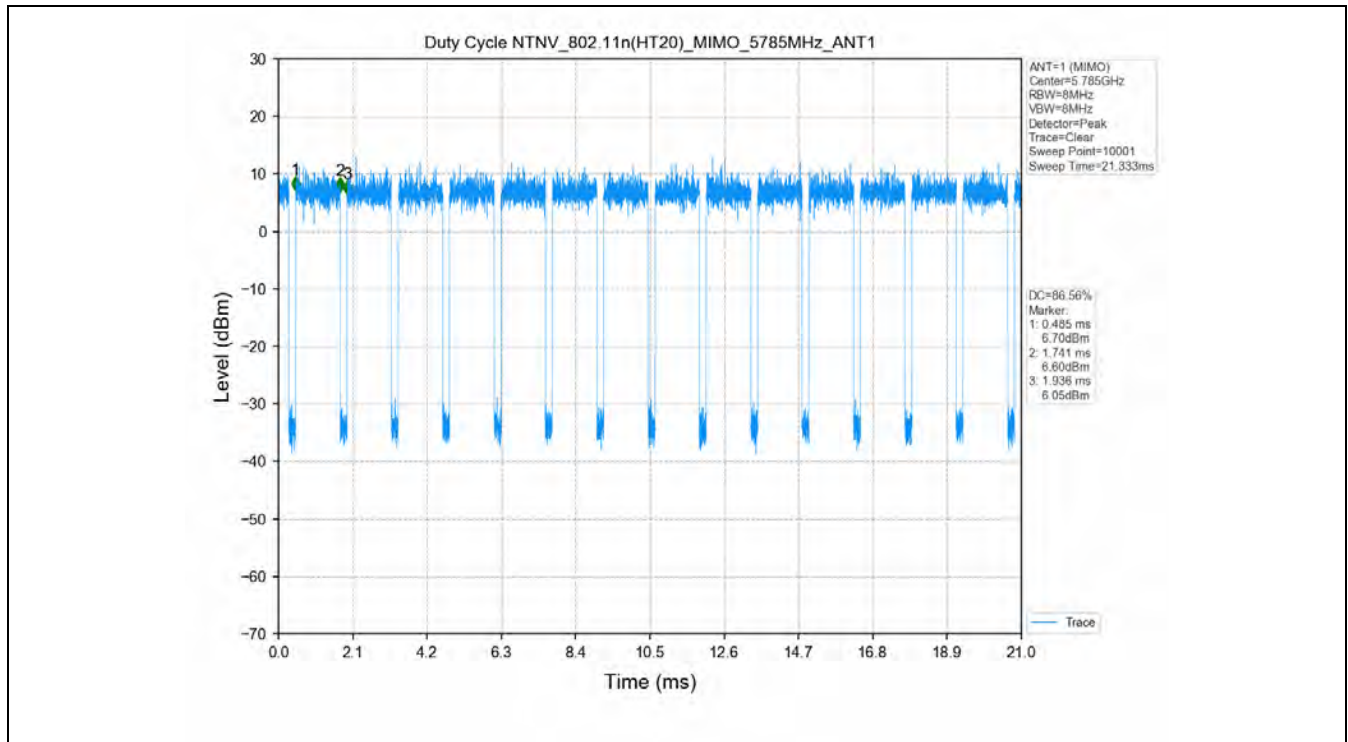


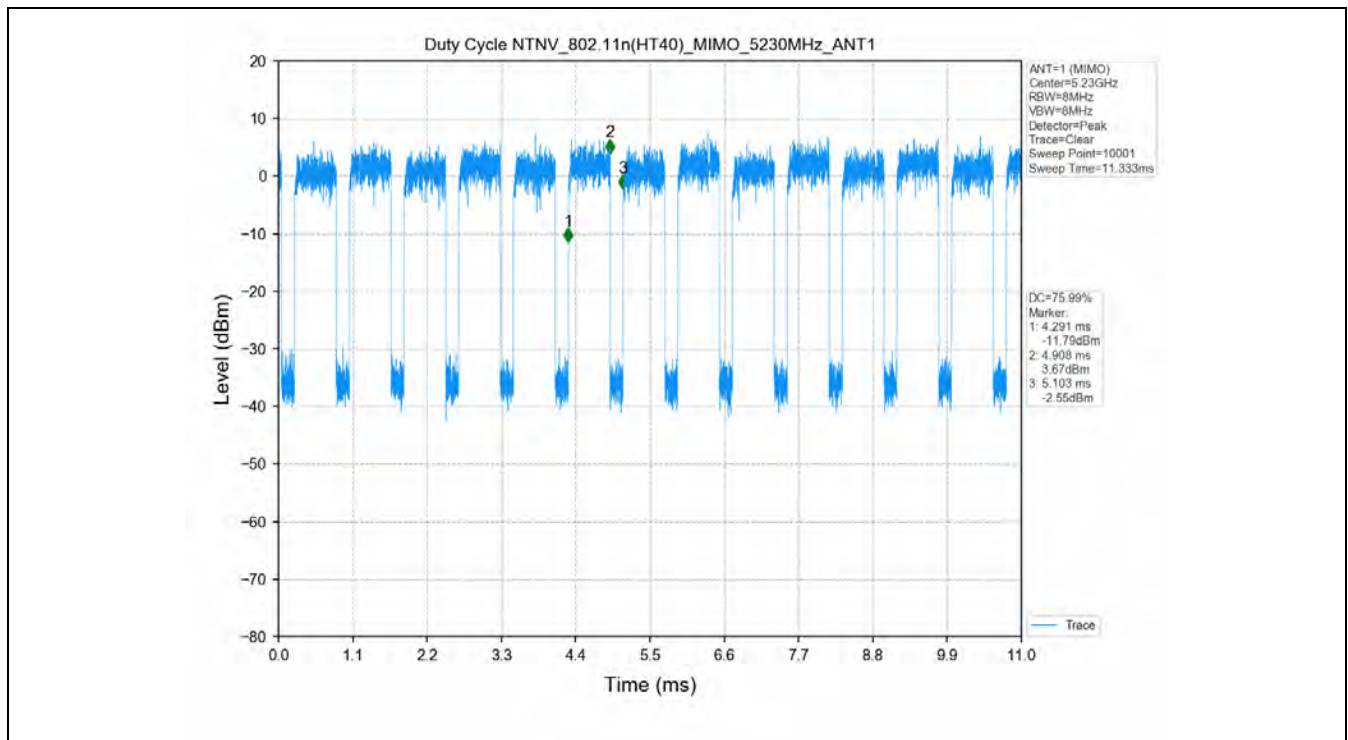
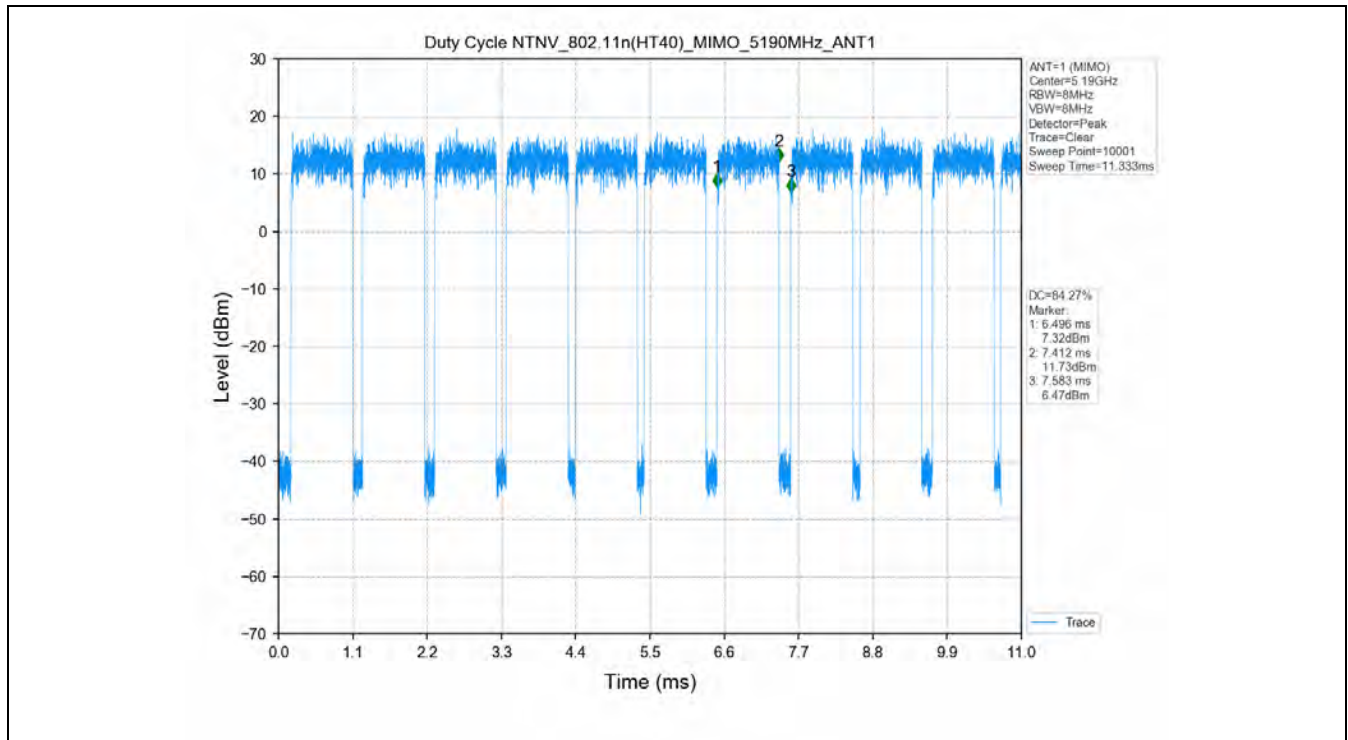


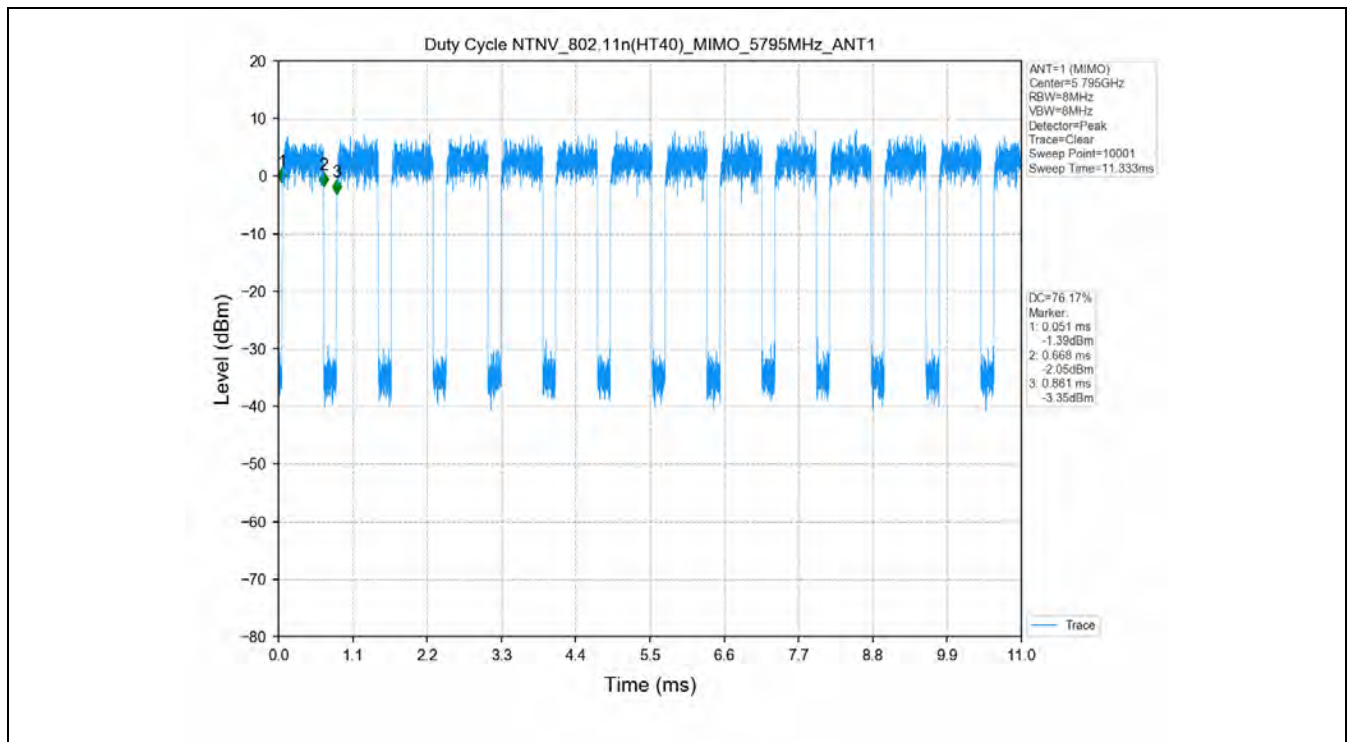
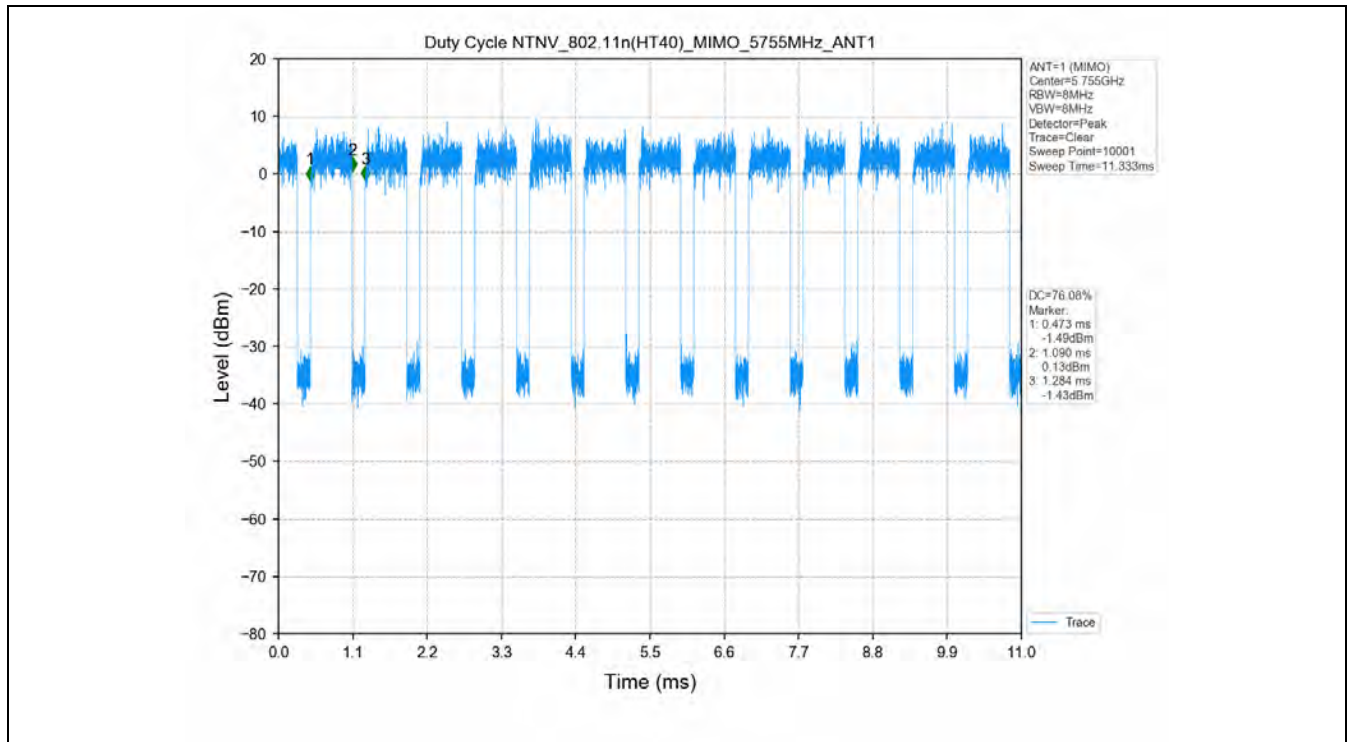


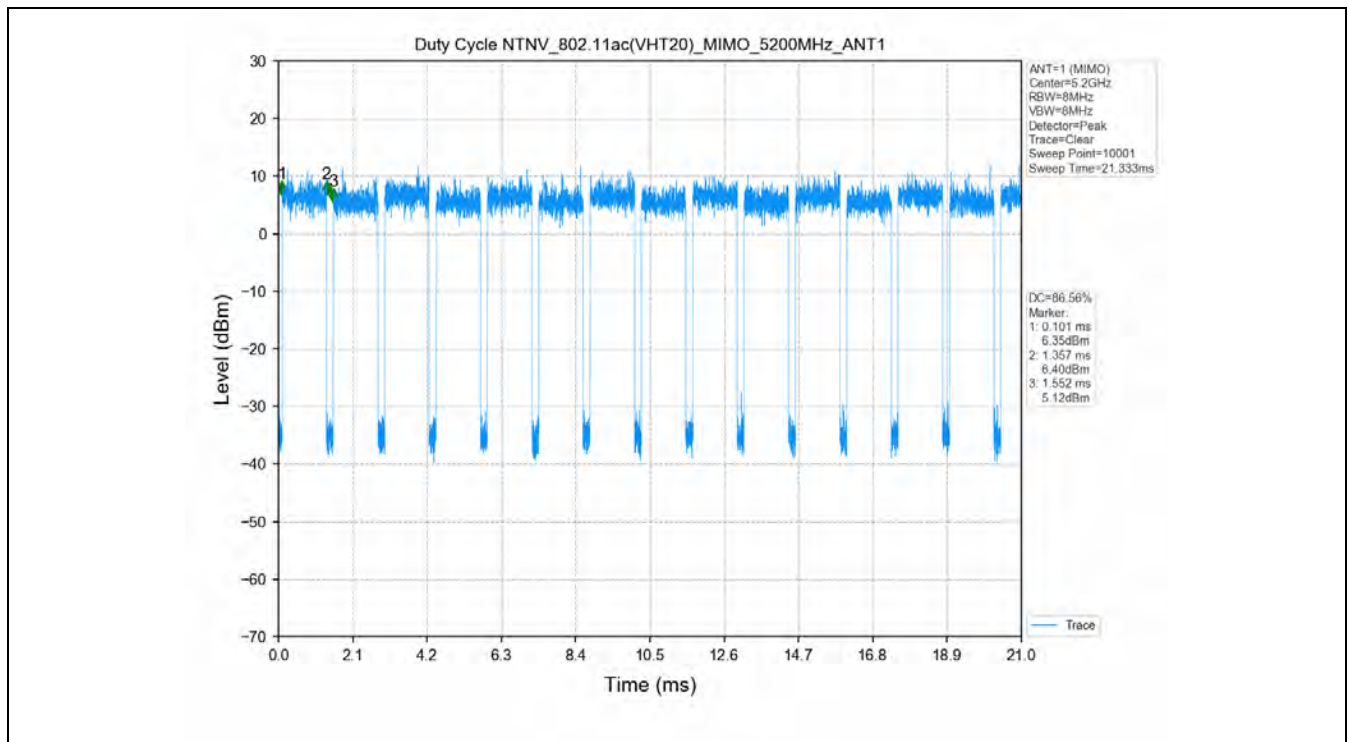
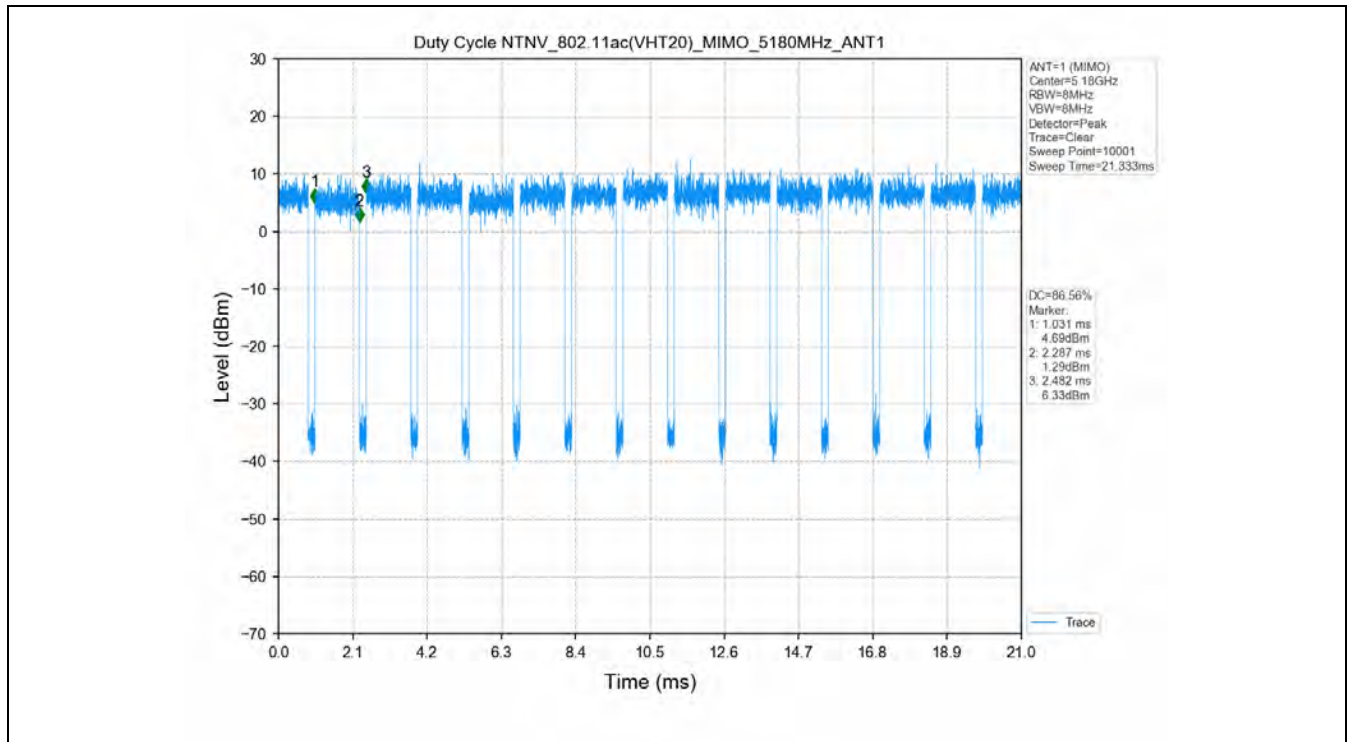


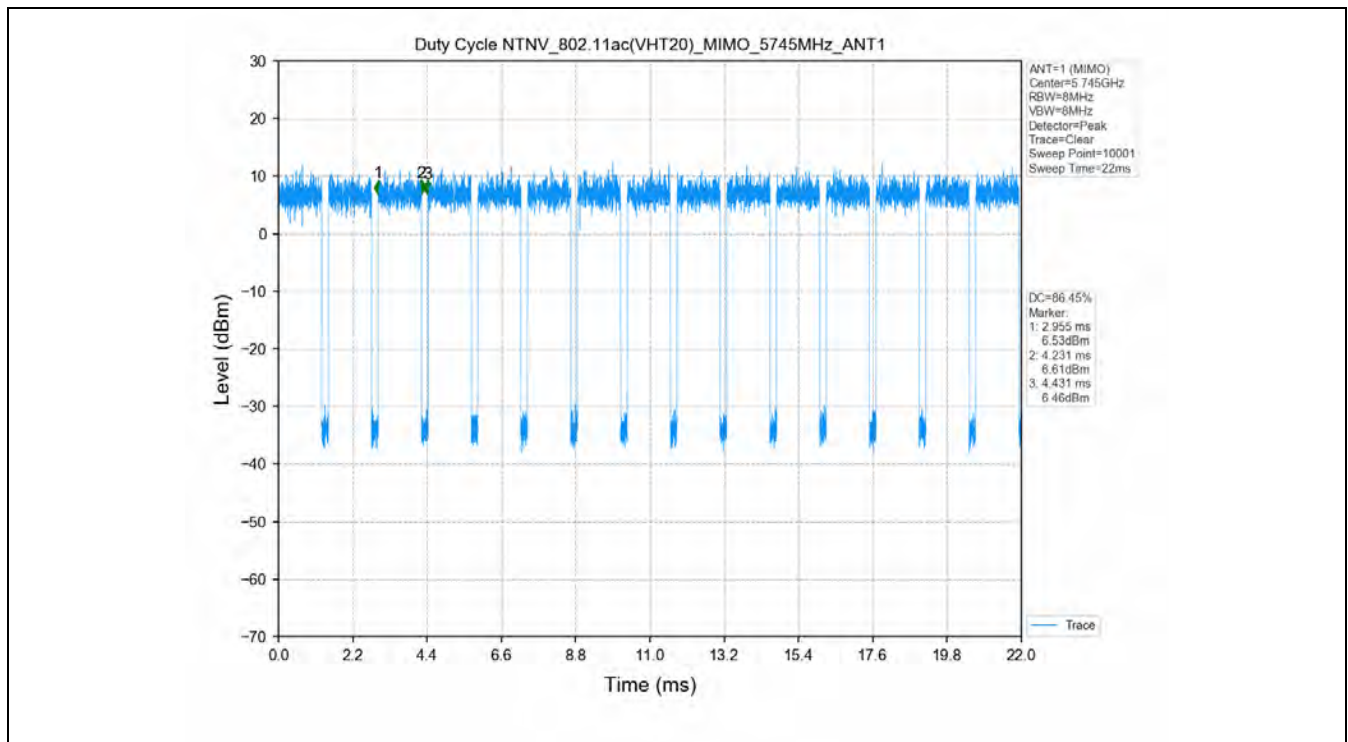
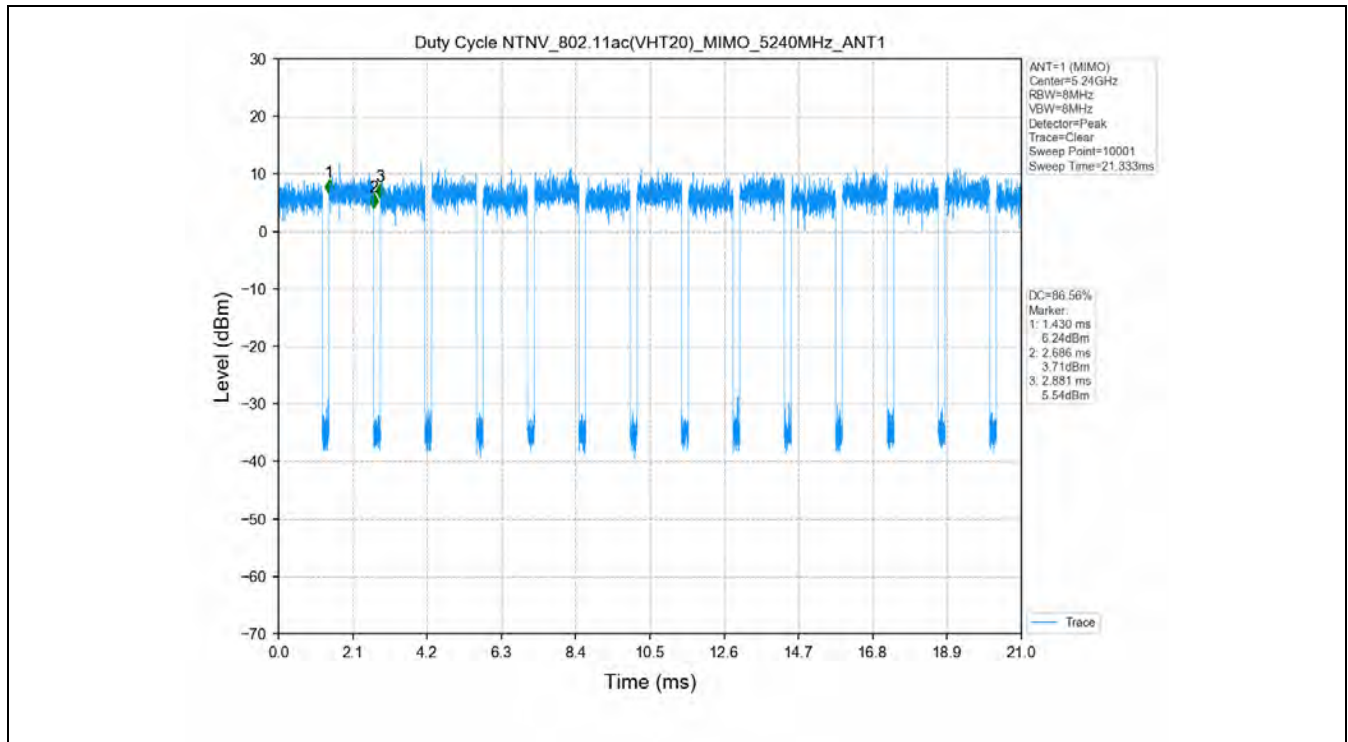


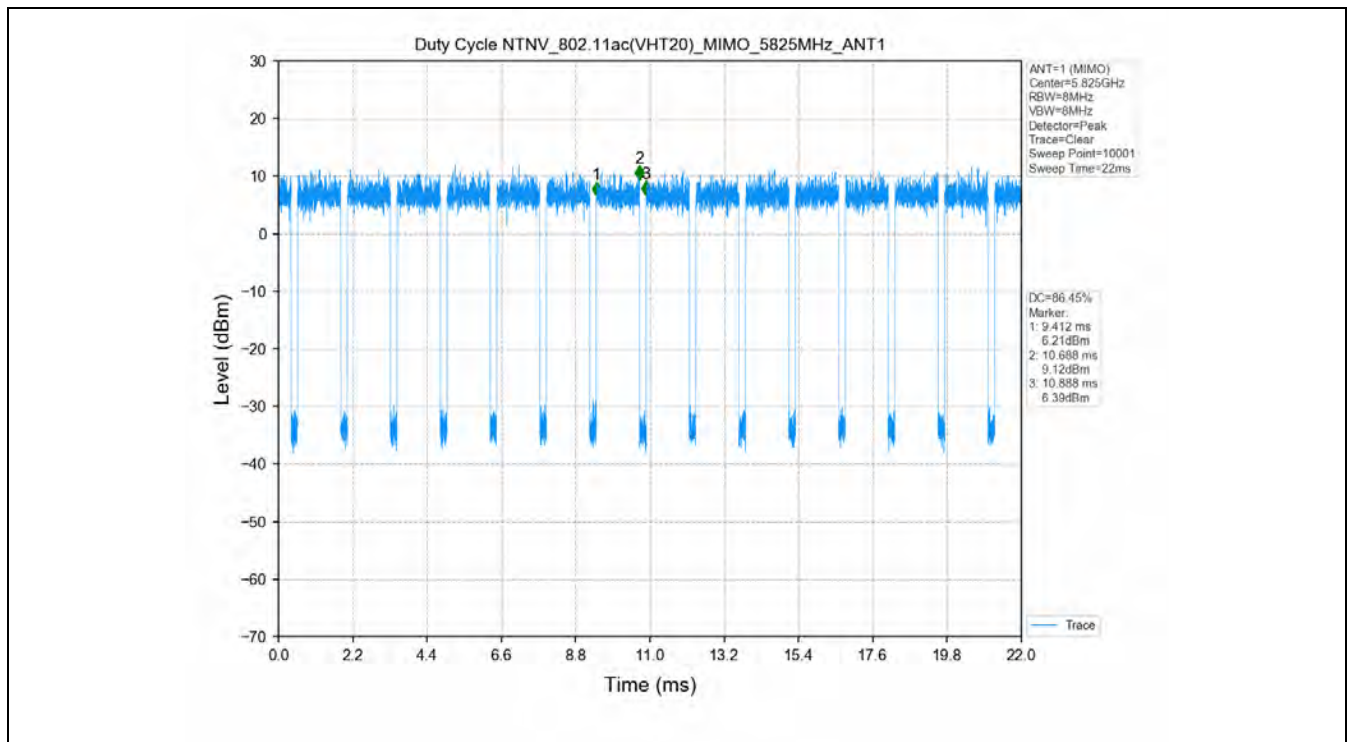
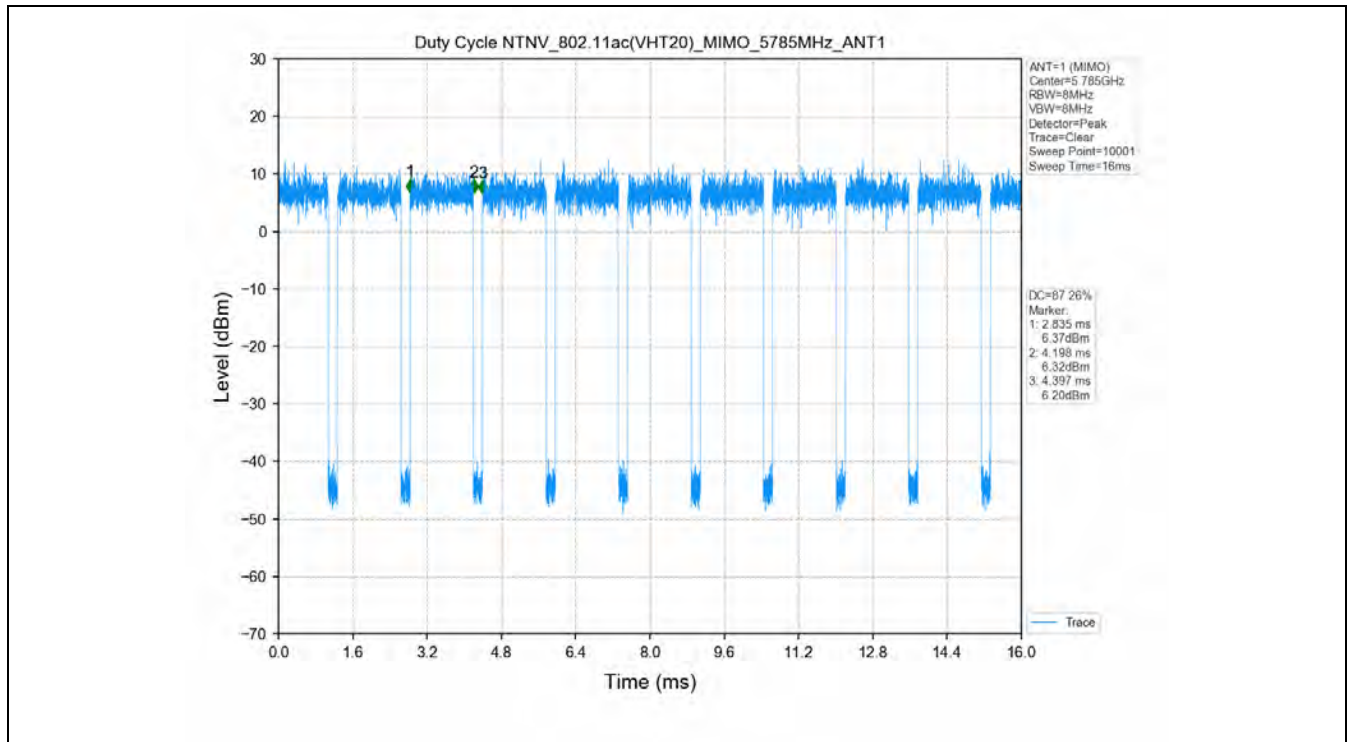


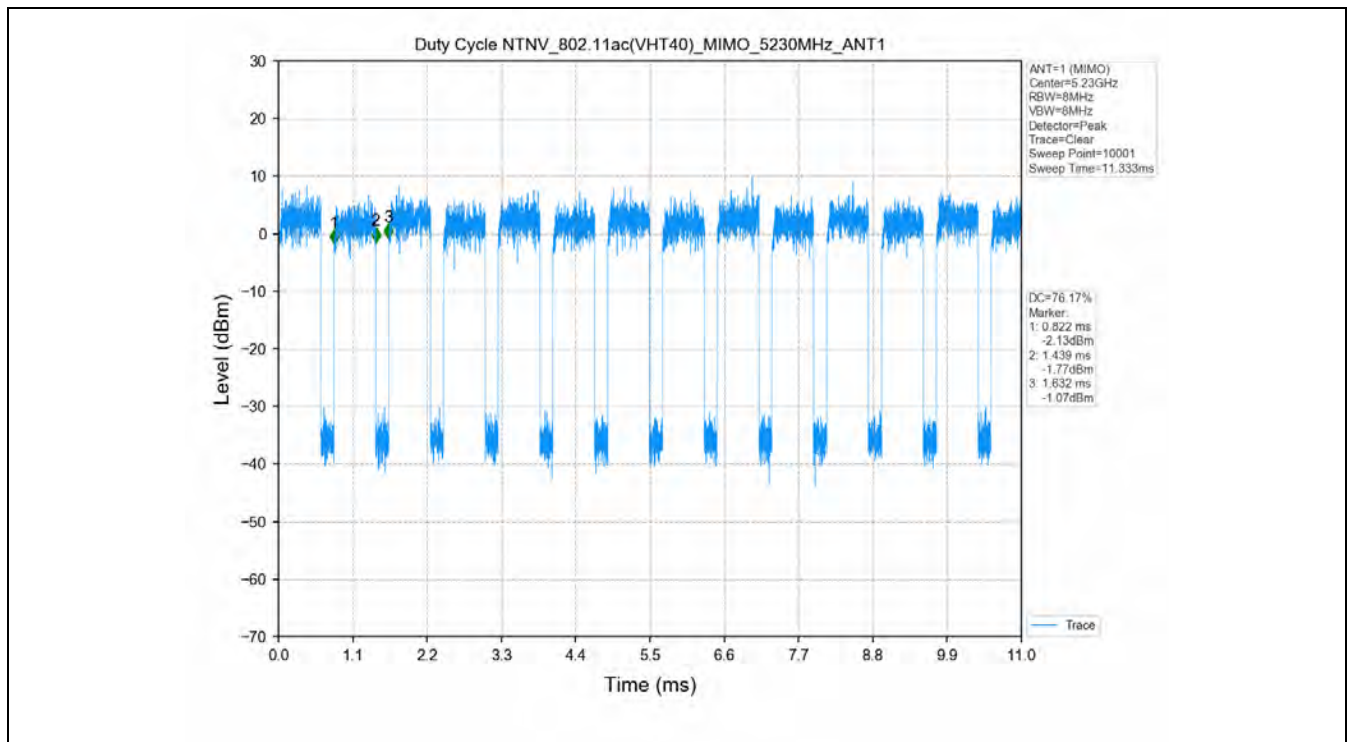
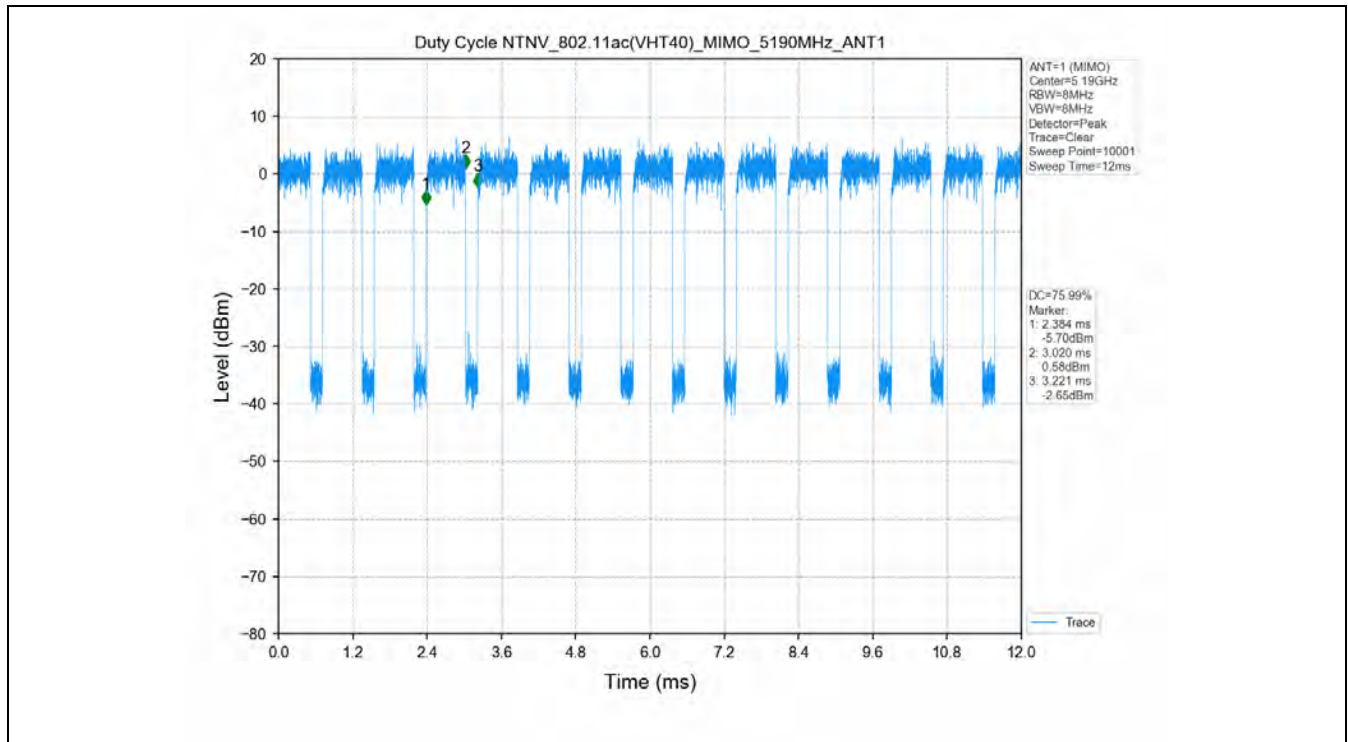


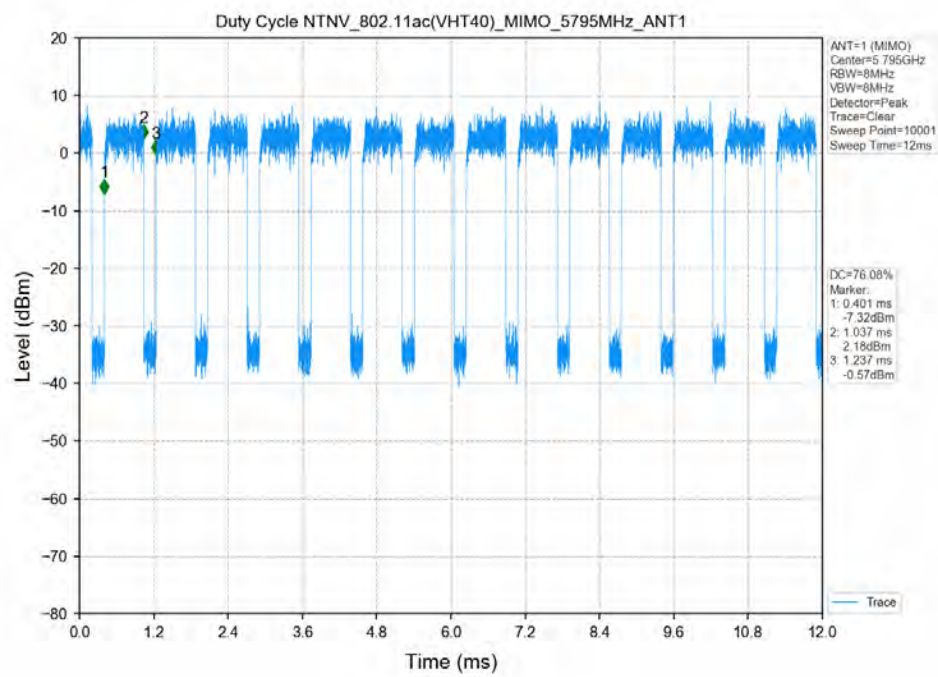
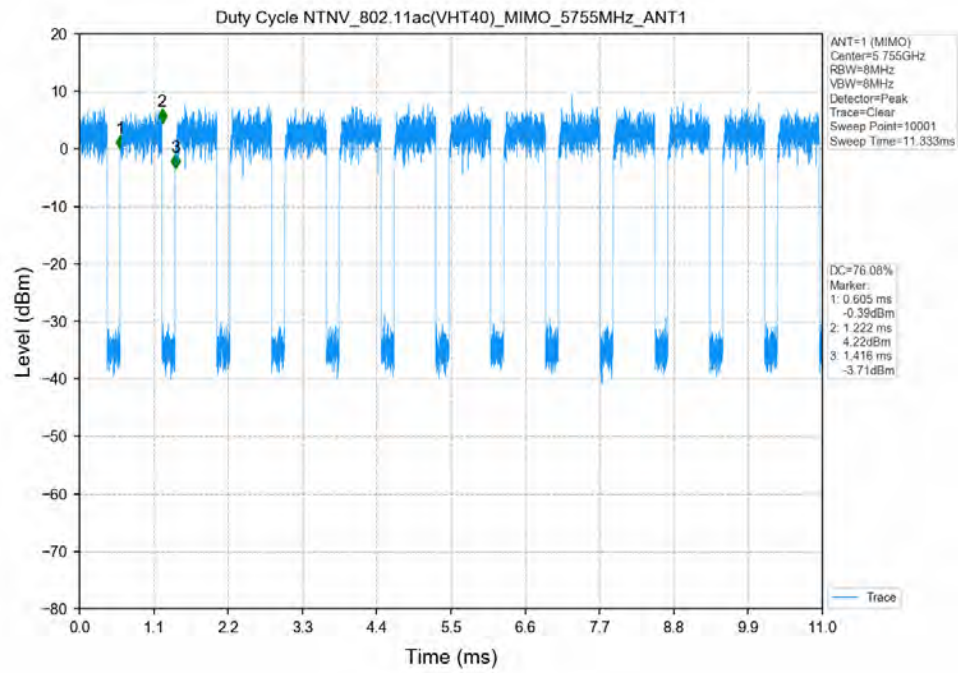


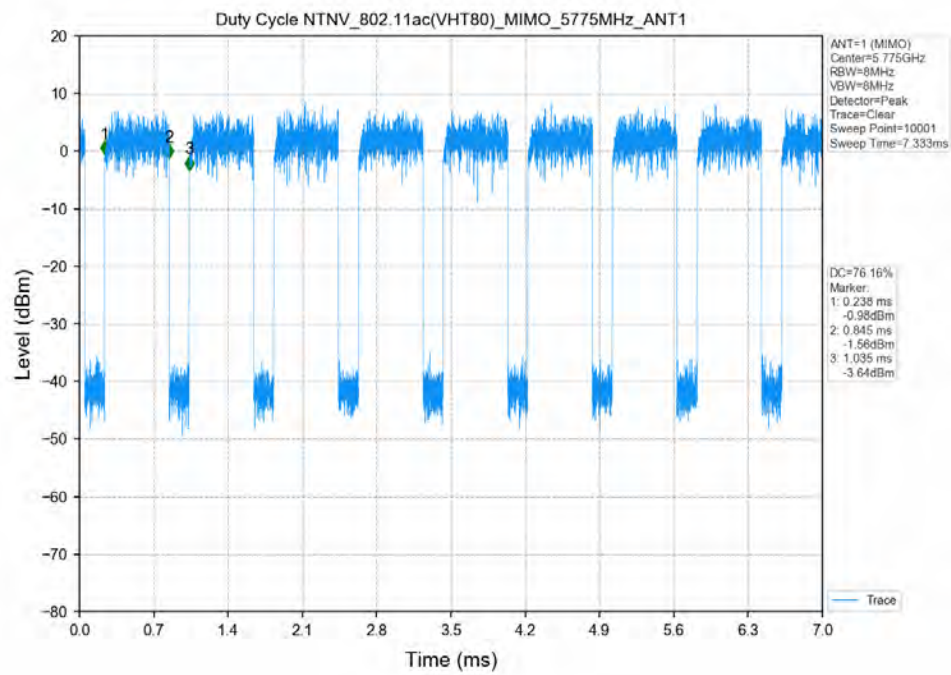
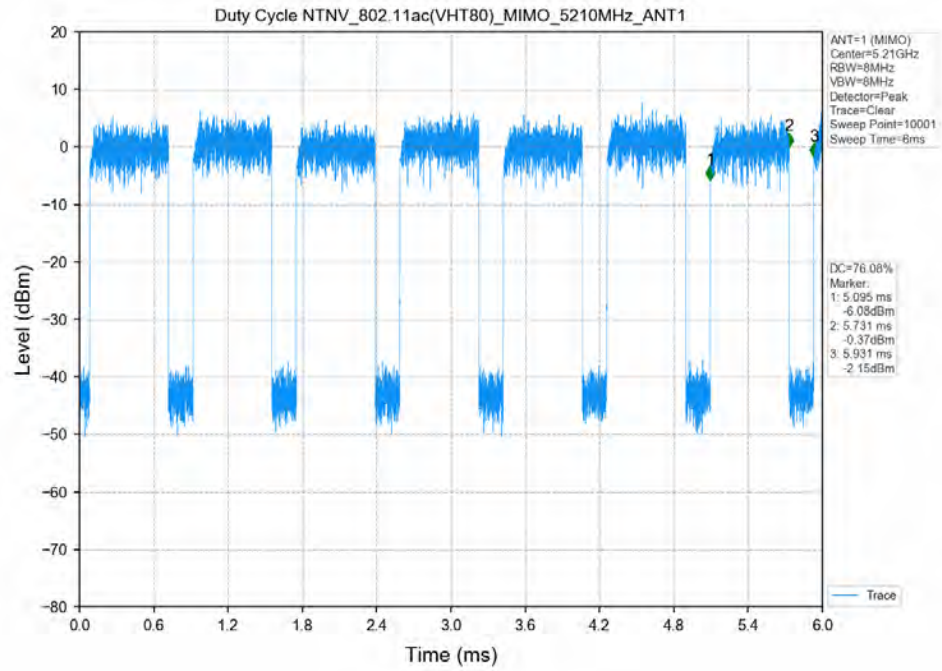














2. Bandwidth

2.1 Test Result

Test Mode	Frequency (MHz)	TX Type	ANT No.	Emission Bandwidth		Verdict
				Test Result (MHz)	Limits (MHz)	
802.11a	5180	SISO	1	20.495	Only for Report Use	PASS
			2	29.880	Only for Report Use	PASS
	5200	SISO	1	22.519	Only for Report Use	PASS
			2	31.281	Only for Report Use	PASS
	5240	SISO	1	22.945	Only for Report Use	PASS
			2	30.760	Only for Report Use	PASS
	5745	SISO	1	16.396	≥0.5	PASS
			2	16.285	≥0.5	PASS
	5785	SISO	1	16.292	≥0.5	PASS
			2	16.061	≥0.5	PASS
802.11n(HT20)	5180	MIMO	1	19.384	Only for Report Use	PASS
			2	27.841	Only for Report Use	PASS
	5200	MIMO	1	19.574	Only for Report Use	PASS
			2	28.536	Only for Report Use	PASS
	5240	MIMO	1	20.973	Only for Report Use	PASS
			2	22.861	Only for Report Use	PASS
	5745	MIMO	1	17.531	≥0.5	PASS
			2	17.378	≥0.5	PASS
	5785	MIMO	1	17.549	≥0.5	PASS
			2	17.548	≥0.5	PASS
802.11n(HT40)	5190	MIMO	1	41.092	Only for Report Use	PASS
			2	66.508	Only for Report Use	PASS
	5230	MIMO	1	41.148	Only for Report Use	PASS
			2	50.220	Only for Report Use	PASS
	5755	MIMO	1	35.214	≥0.5	PASS
			2	35.200	≥0.5	PASS
	5795	MIMO	1	35.285	≥0.5	PASS
			2	34.175	≥0.5	PASS
802.11ac(VHT20)	5180	MIMO	1	22.907	Only for Report Use	PASS
			2	28.334	Only for Report Use	PASS
	5200	MIMO	1	27.336	Only for Report Use	PASS
			2	27.684	Only for Report Use	PASS
	5240	MIMO	1	19.711	Only for Report Use	PASS
			2	23.920	Only for Report Use	PASS
	5745	MIMO	1	17.359	≥0.5	PASS
			2	17.606	≥0.5	PASS
	5785	MIMO	1	16.515	≥0.5	PASS
			2	16.071	≥0.5	PASS
802.11ac(VHT40)	5190	MIMO	1	42.212	Only for Report Use	PASS
			2	60.653	Only for Report Use	PASS
	5230	MIMO	1	41.173	Only for Report Use	PASS
			2	44.418	Only for Report Use	PASS
	5755	MIMO	1	35.158	≥0.5	PASS
			2	35.227	≥0.5	PASS



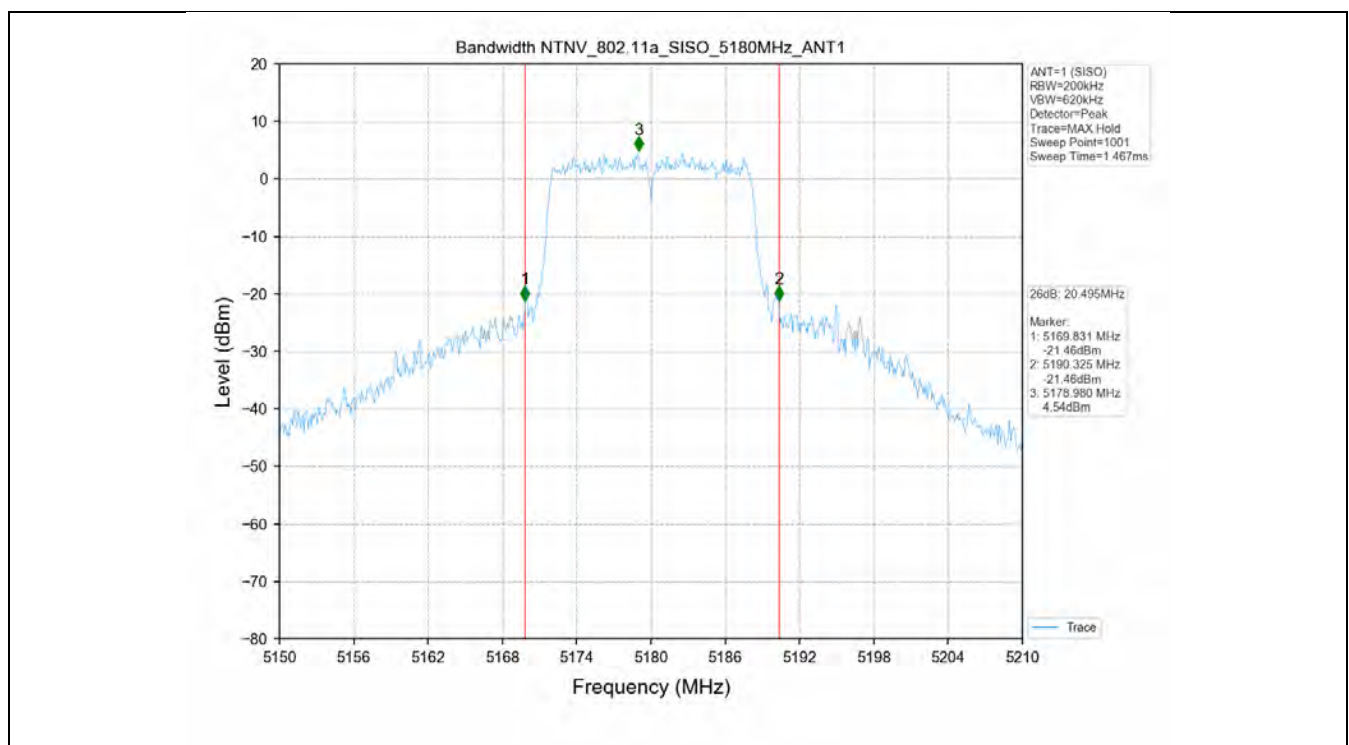
802.11ac(VHT80)	5795	MIMO	1	35.592	≥0.5	PASS
			2	34.098	≥0.5	PASS
	5210	MIMO	1	81.187	Only for Report Use	PASS
			2	87.111	Only for Report Use	PASS
	5775	MIMO	1	73.827	≥0.5	PASS
			2	71.390	≥0.5	PASS

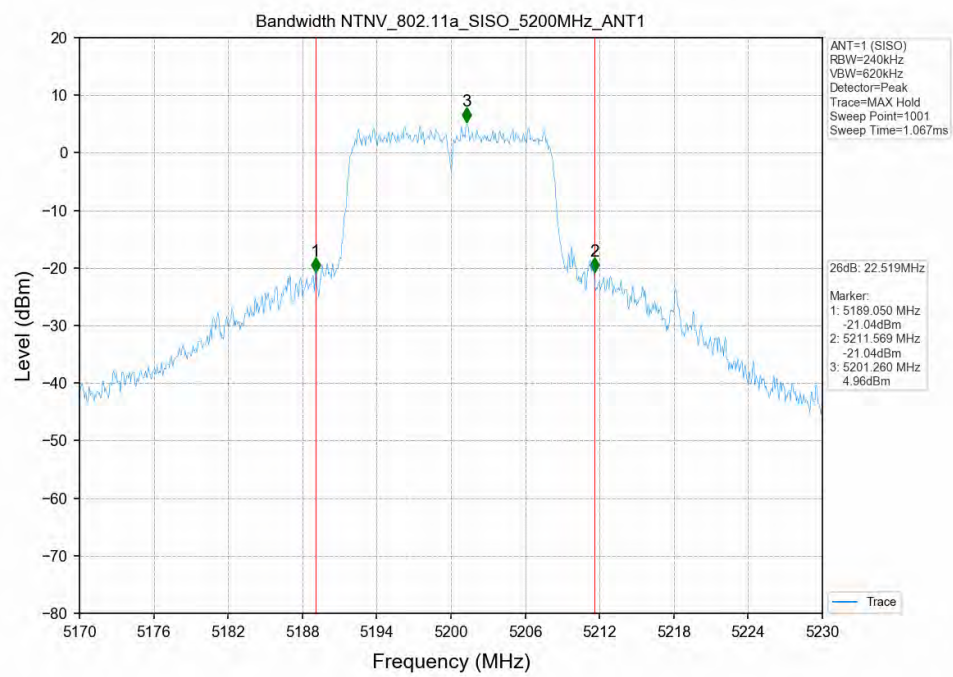
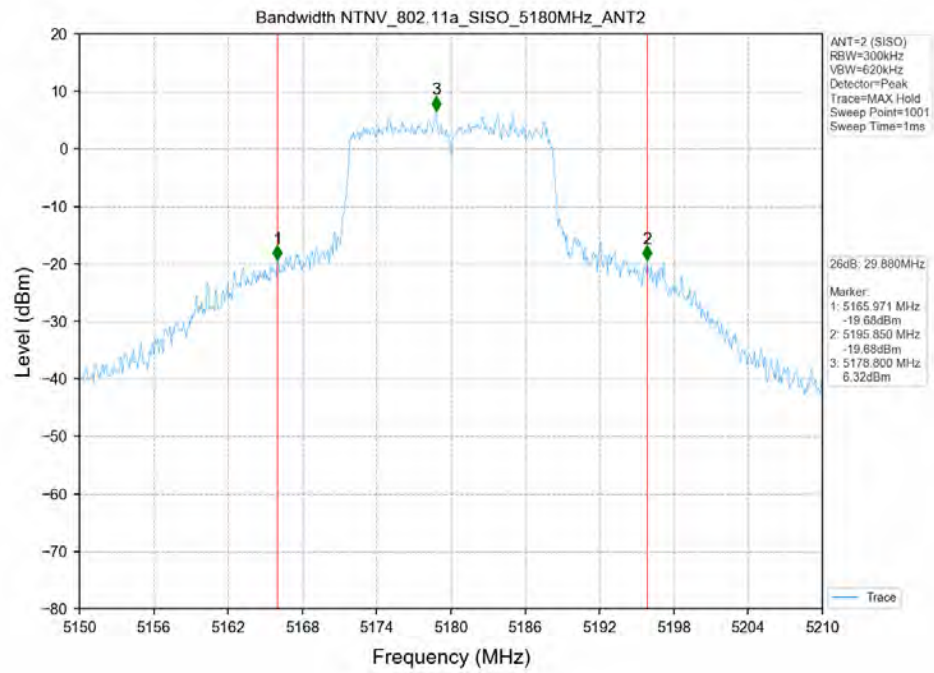
Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
802.11a	5180	SISO	1	16.486	Only for Report Use
			2	16.828	Only for Report Use
	5200	SISO	1	16.530	Only for Report Use
			2	16.931	Only for Report Use
	5240	SISO	1	16.571	Only for Report Use
			2	16.642	Only for Report Use
	5745	SISO	1	23.612	Only for Report Use
			2	26.909	Only for Report Use
	5785	SISO	1	21.657	Only for Report Use
			2	28.409	Only for Report Use
	5825	SISO	1	18.301	Only for Report Use
			2	27.232	Only for Report Use
802.11n(HT20)	5180	MIMO	1	17.612	Only for Report Use
			2	17.827	Only for Report Use
	5200	MIMO	1	17.681	Only for Report Use
			2	17.849	Only for Report Use
	5240	MIMO	1	17.652	Only for Report Use
			2	17.720	Only for Report Use
	5745	MIMO	1	24.075	Only for Report Use
			2	26.942	Only for Report Use
	5785	MIMO	1	20.621	Only for Report Use
			2	28.653	Only for Report Use
	5825	MIMO	1	18.164	Only for Report Use
			2	27.960	Only for Report Use
802.11n(HT40)	5190	MIMO	1	36.486	Only for Report Use
			2	36.922	Only for Report Use
	5230	MIMO	1	36.568	Only for Report Use
			2	36.668	Only for Report Use
	5755	MIMO	1	42.166	Only for Report Use
			2	48.241	Only for Report Use
	5795	MIMO	1	38.492	Only for Report Use
			2	51.255	Only for Report Use
802.11ac(VHT20)	5180	MIMO	1	17.662	Only for Report Use
			2	17.817	Only for Report Use
	5200	MIMO	1	17.664	Only for Report Use
			2	17.832	Only for Report Use
	5240	MIMO	1	17.624	Only for Report Use
			2	17.695	Only for Report Use
	5745	MIMO	1	23.122	Only for Report Use
			2	27.102	Only for Report Use
	5785	MIMO	1	21.563	Only for Report Use
			2	27.906	Only for Report Use
	5825	MIMO	1	18.397	Only for Report Use
			2	27.312	Only for Report Use
802.11ac(VHT40)	5190	MIMO	1	36.428	Only for Report Use
			2	36.786	Only for Report Use

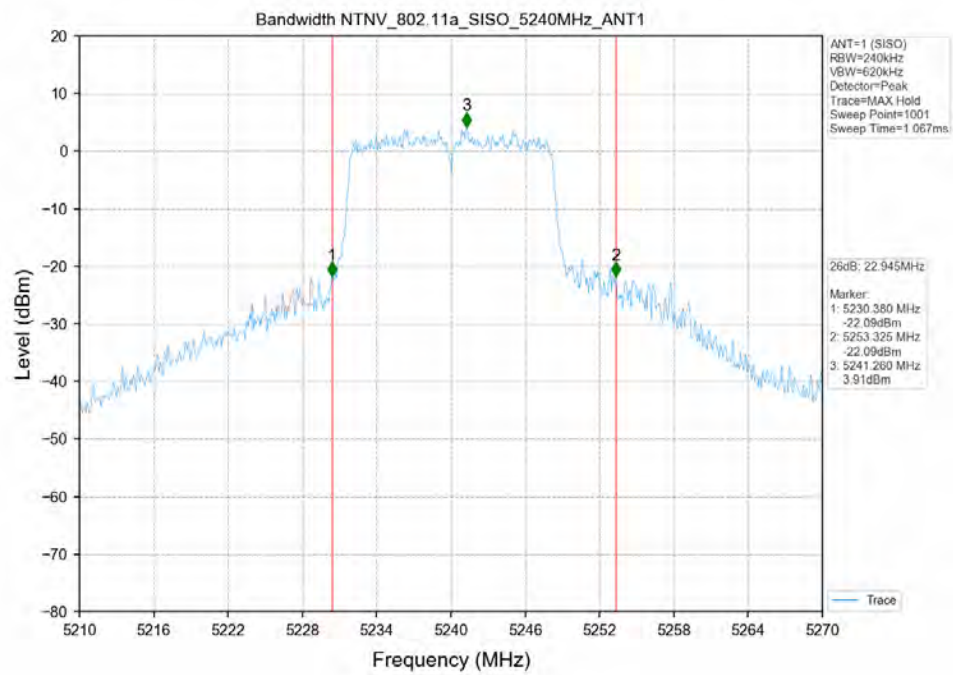
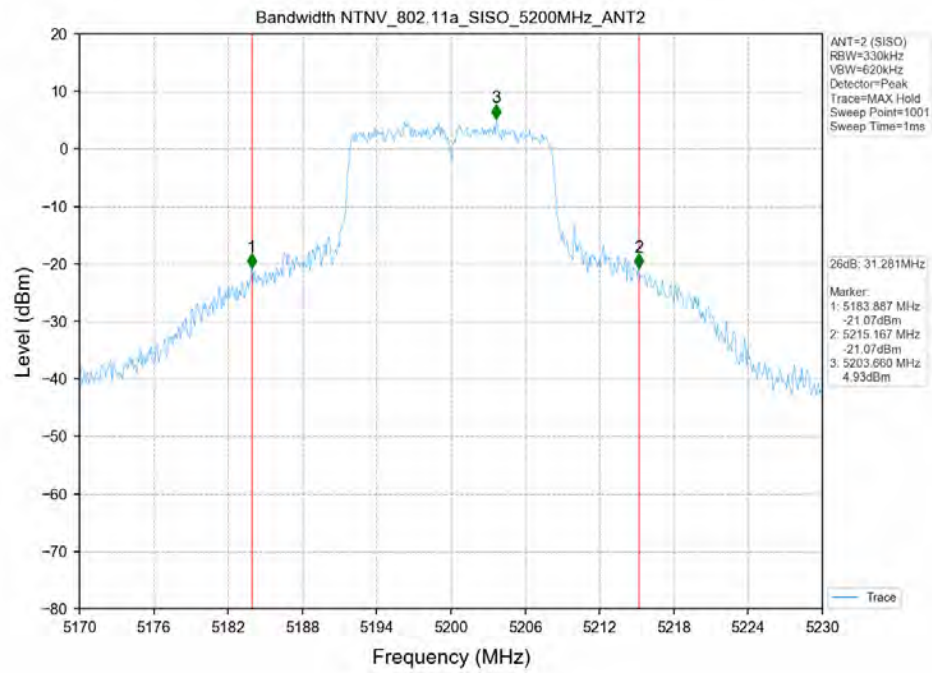


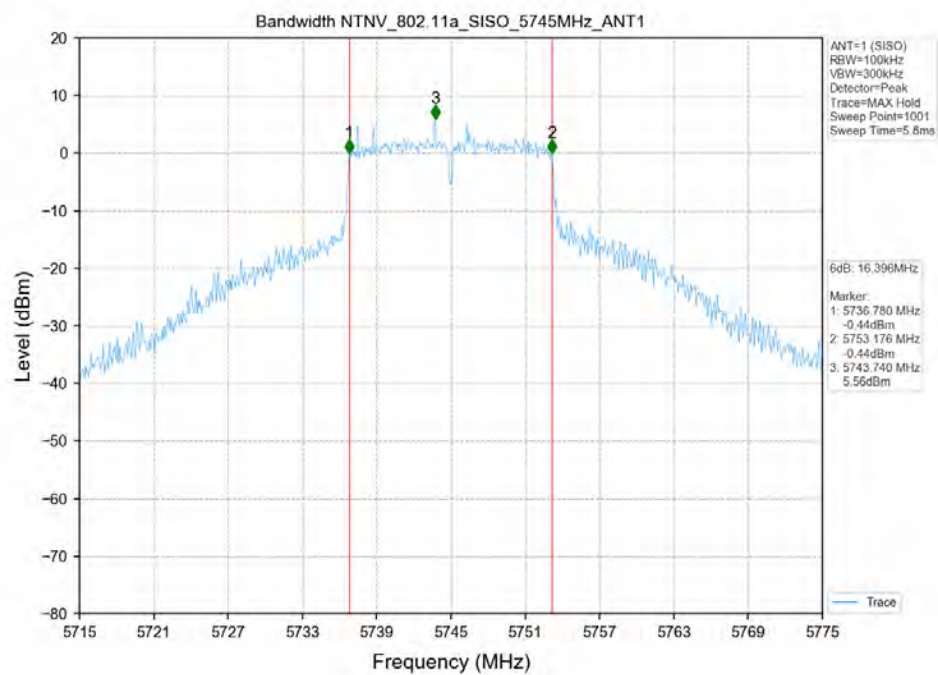
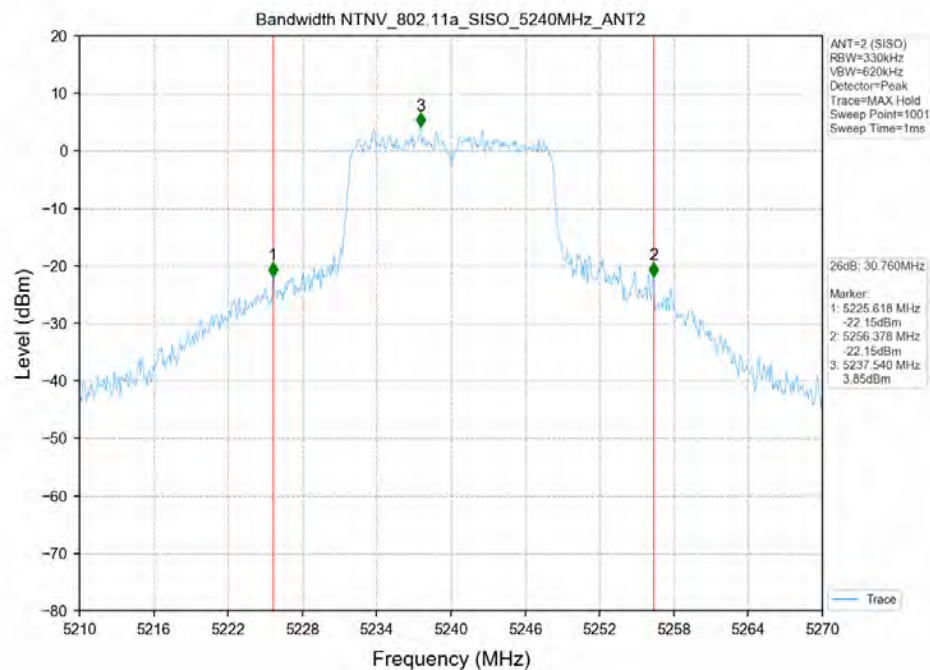
	5230	MIMO	1	36.401	Only for Report Use
			2	36.733	Only for Report Use
	5755	MIMO	1	42.116	Only for Report Use
			2	51.576	Only for Report Use
	5795	MIMO	1	38.366	Only for Report Use
			2	51.986	Only for Report Use
802.11ac(VHT80)	5210	MIMO	1	74.691	Only for Report Use
			2	74.940	Only for Report Use
	5775	MIMO	1	75.920	Only for Report Use
			2	86.093	Only for Report Use

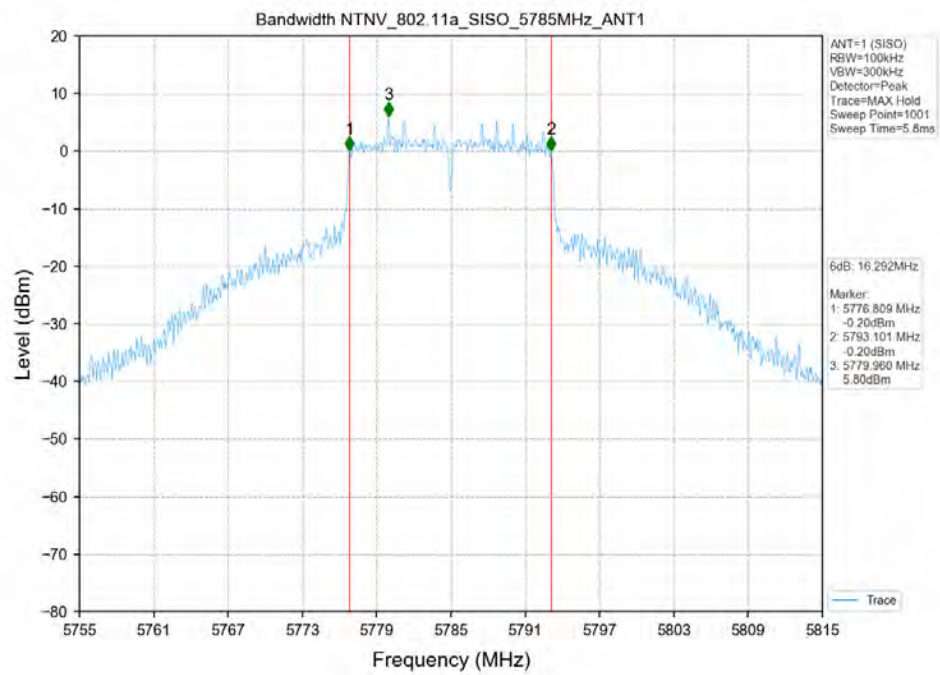
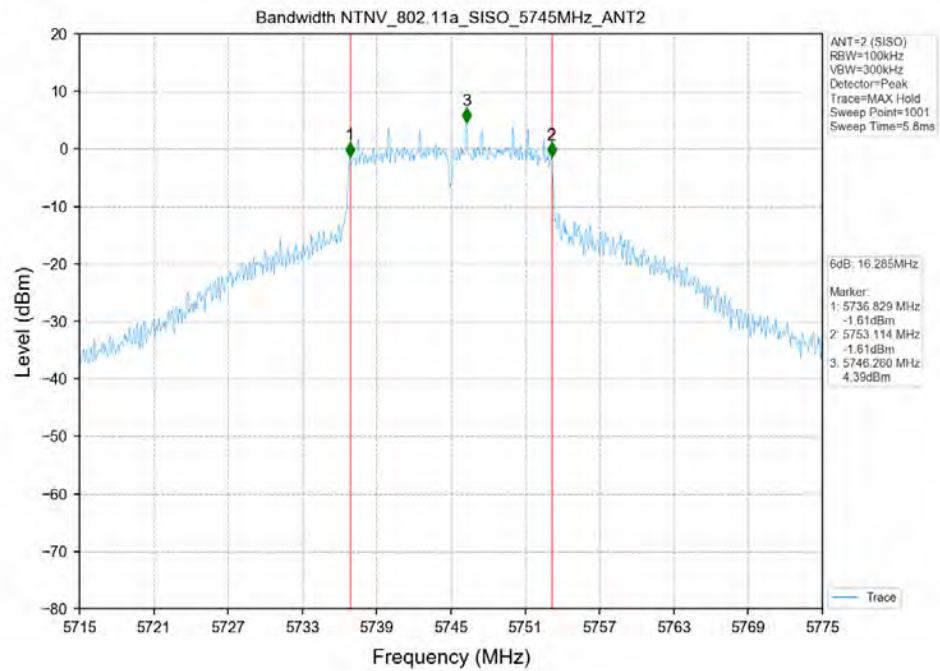
2.2 Test Graph - Emission Bandwidth

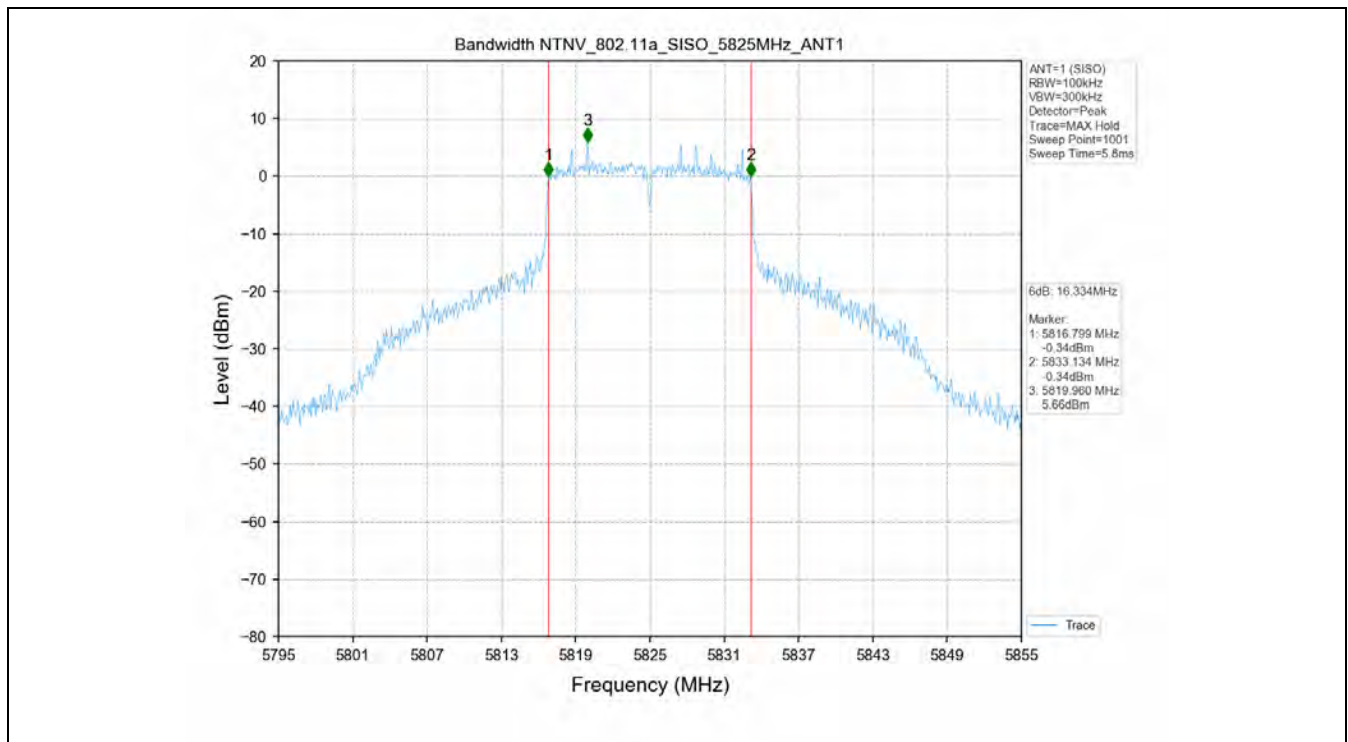
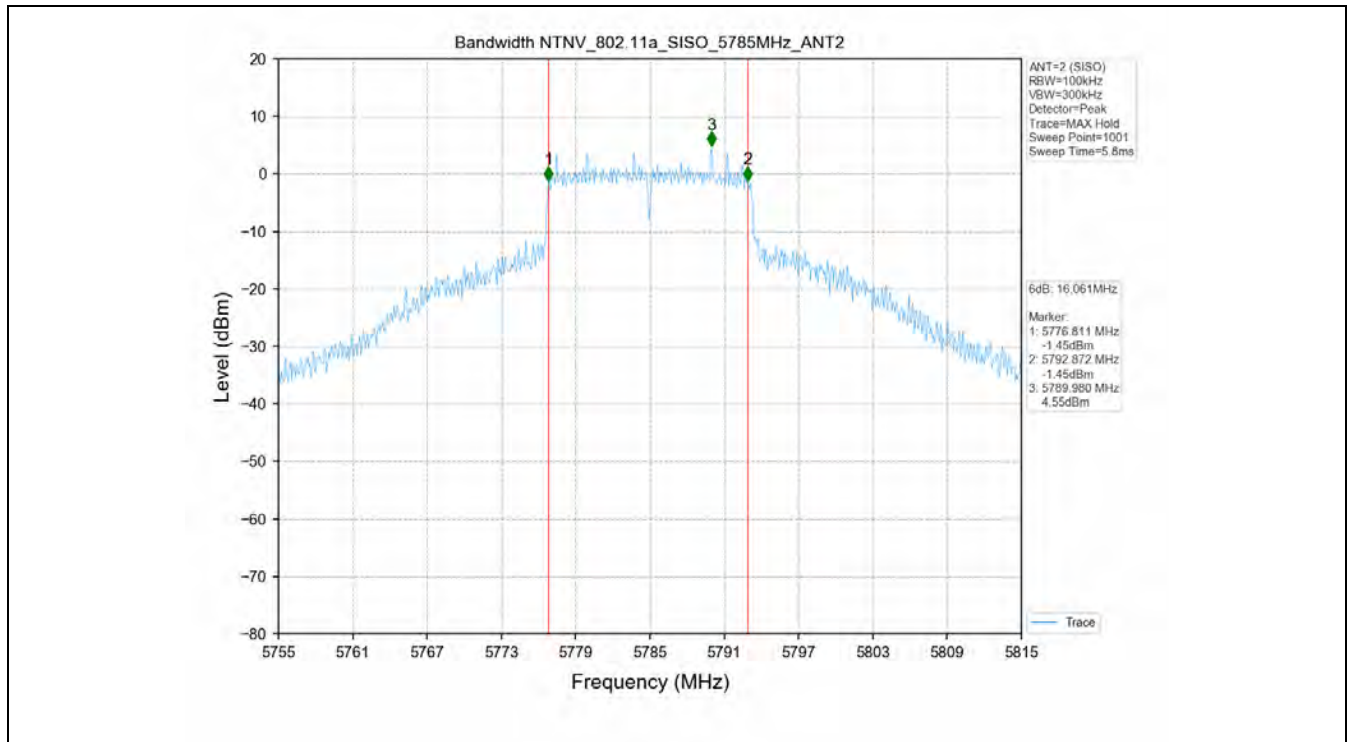


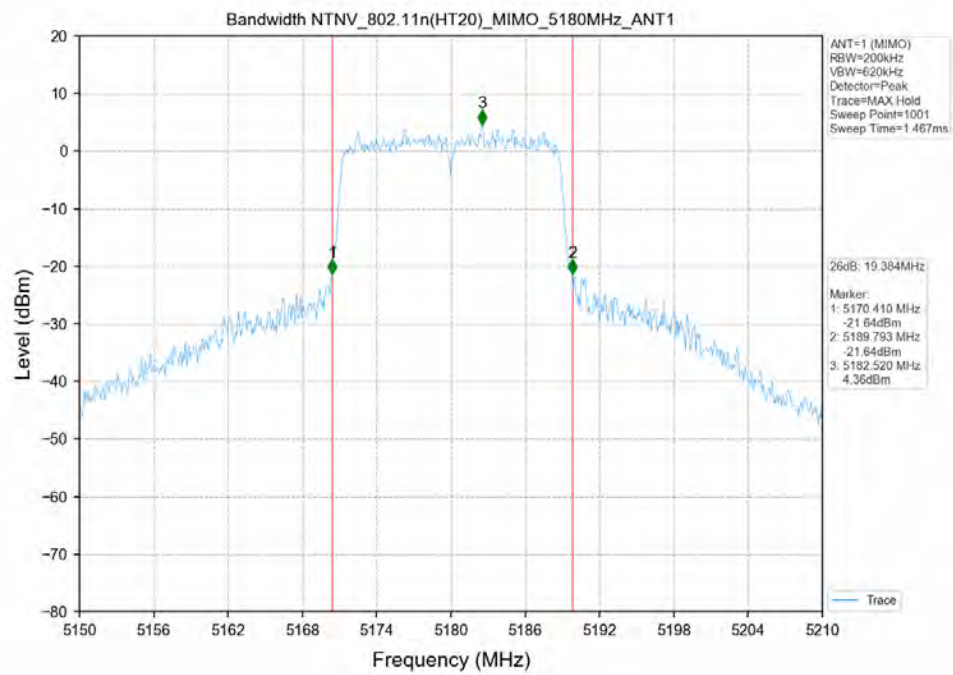
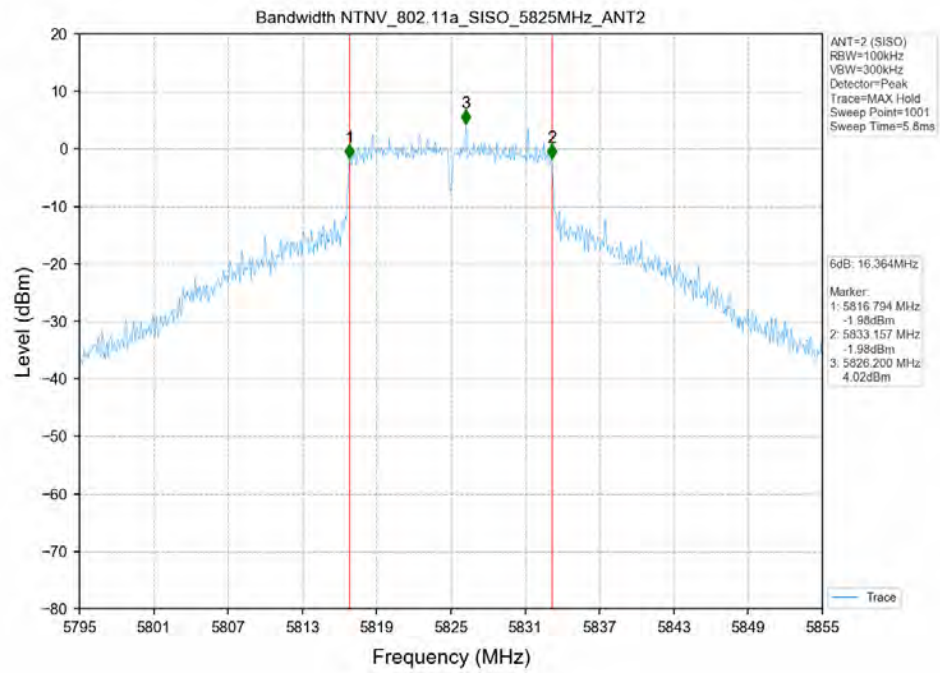


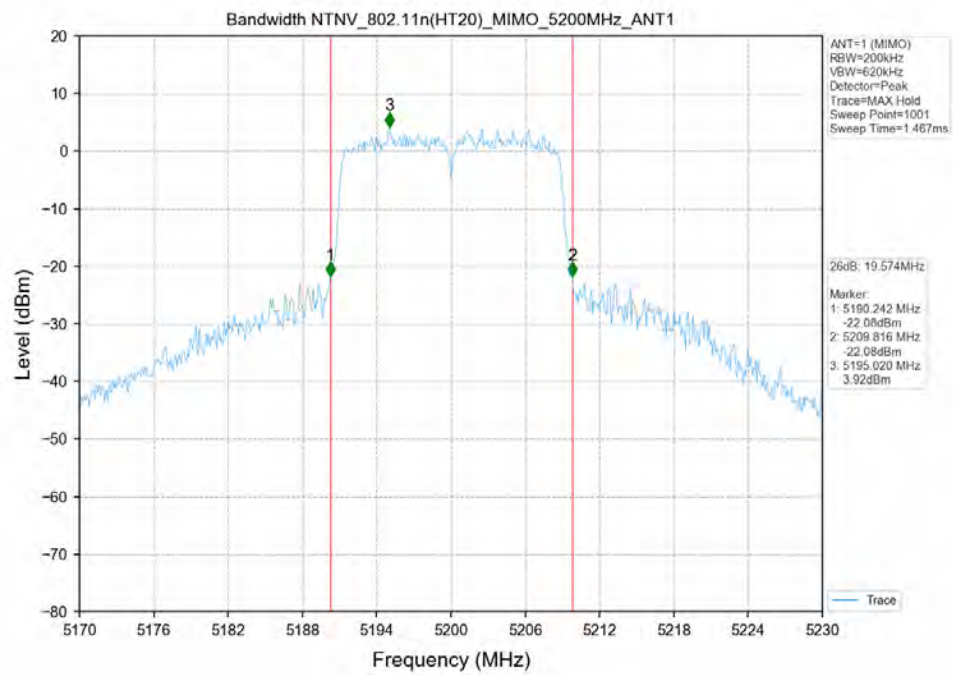
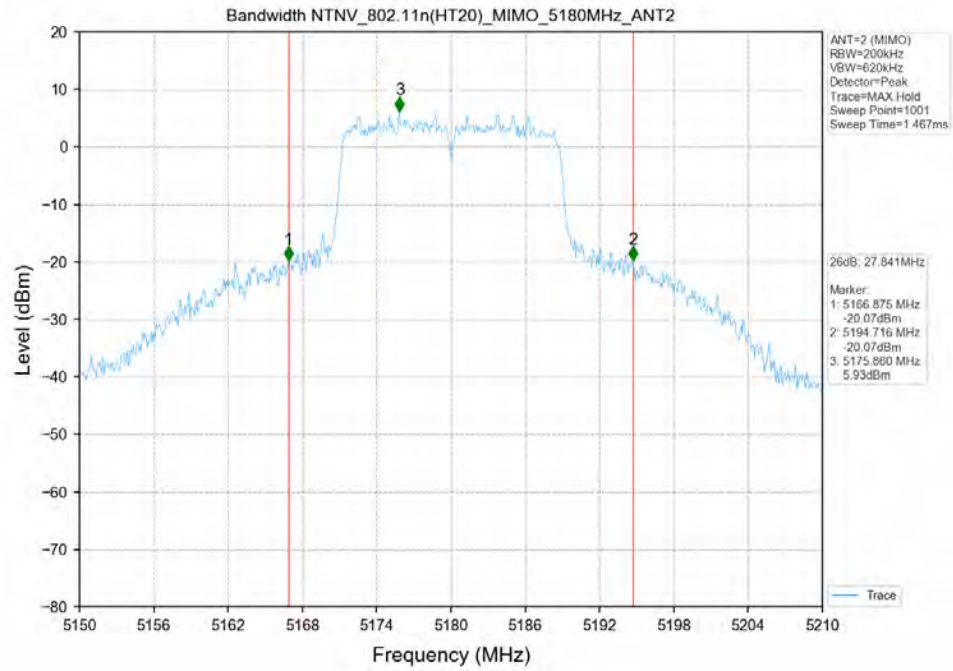


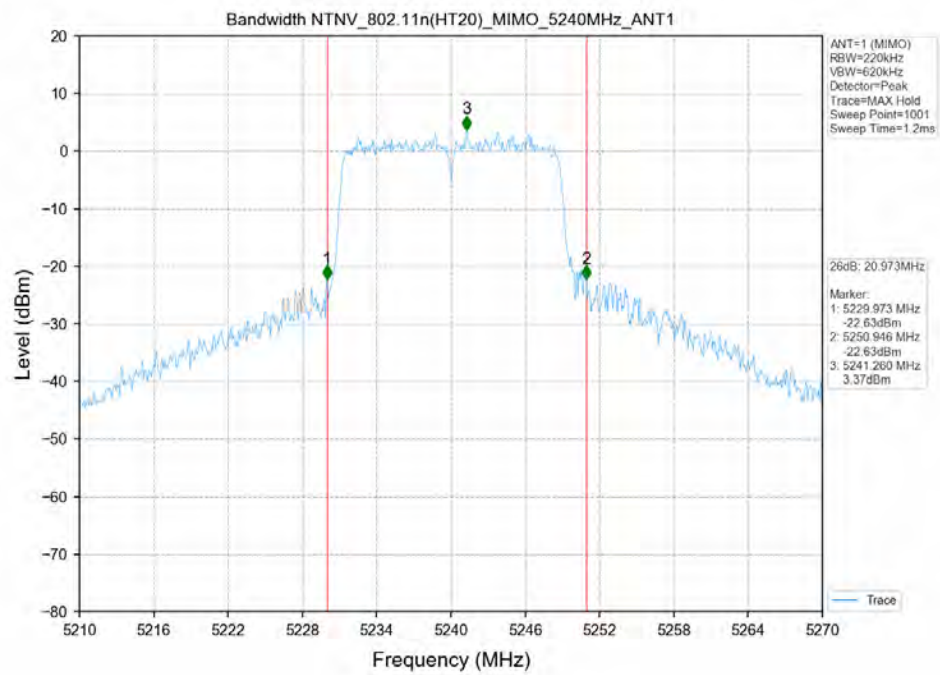
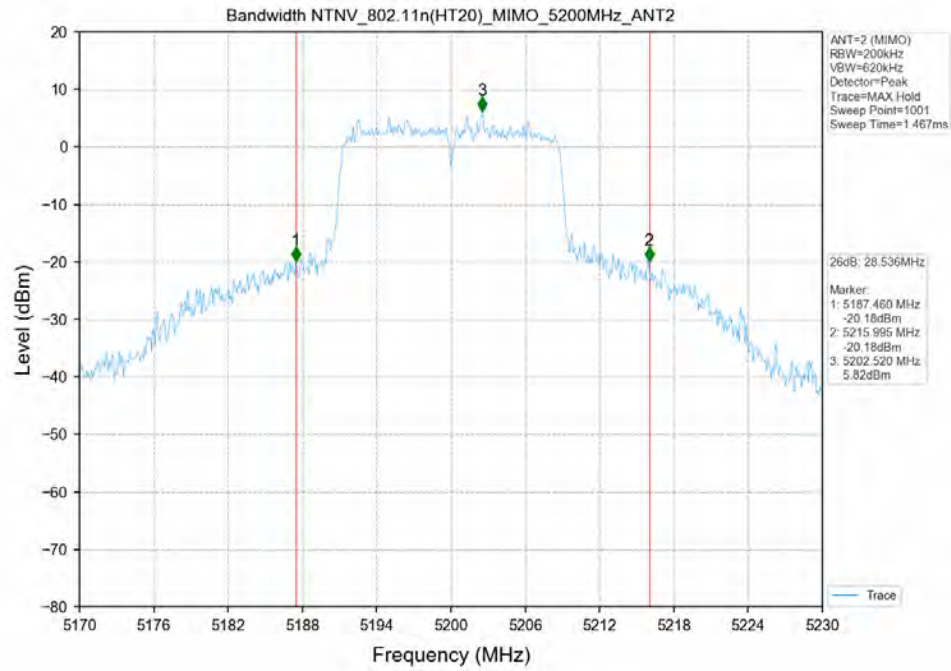


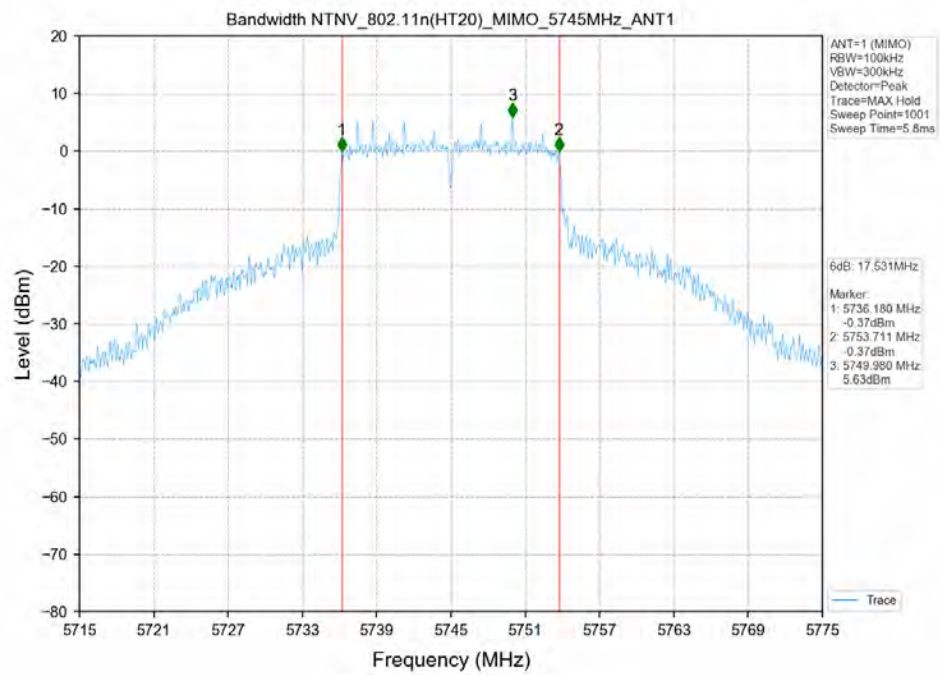
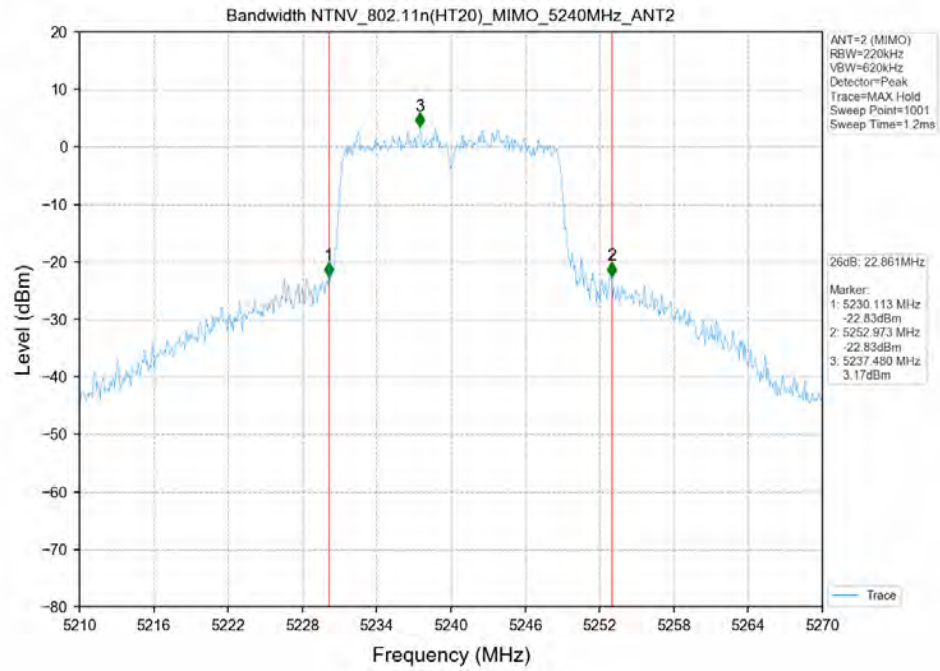


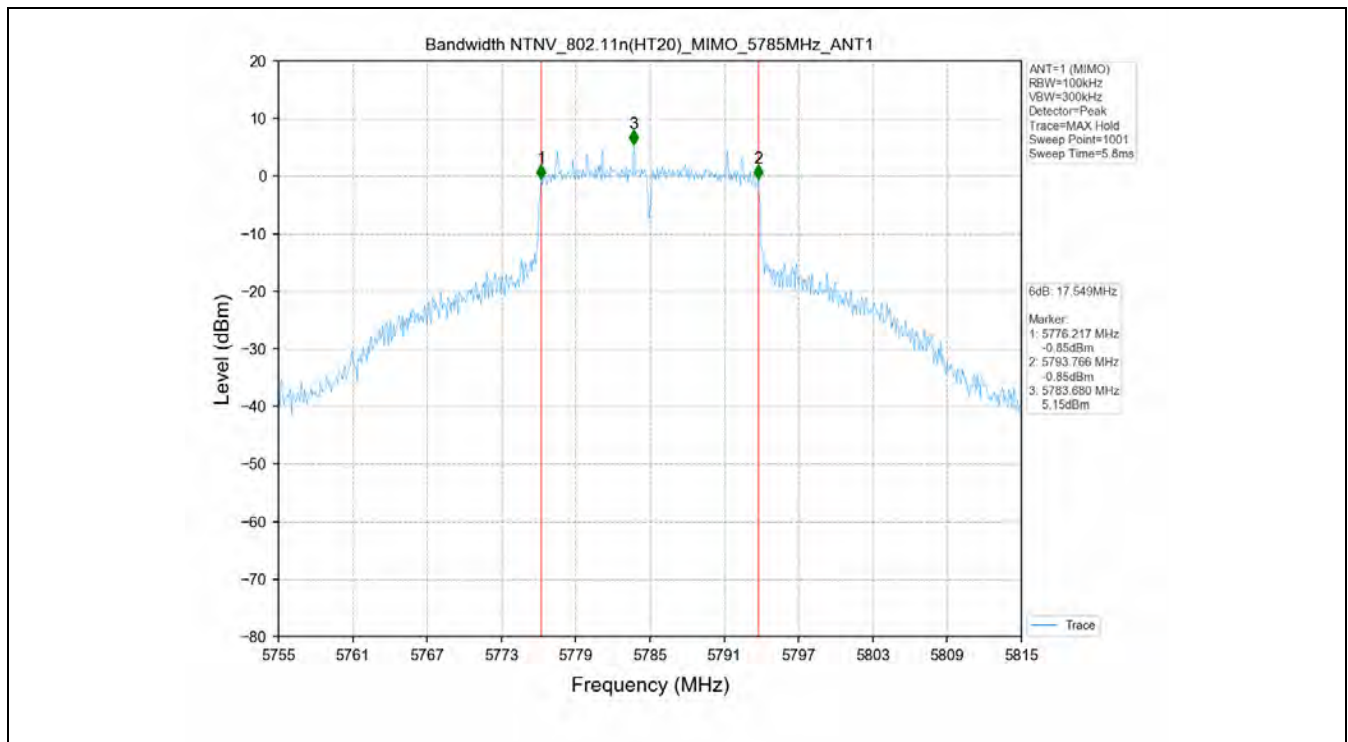
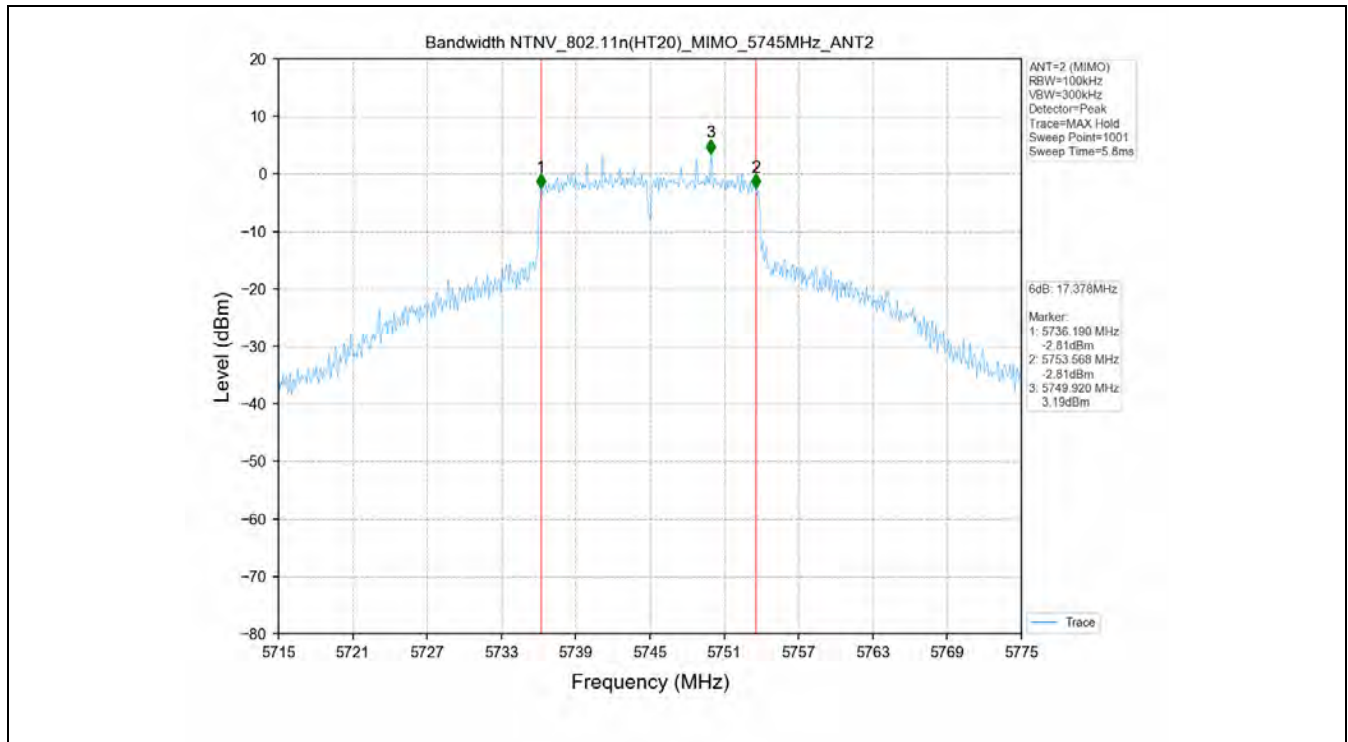


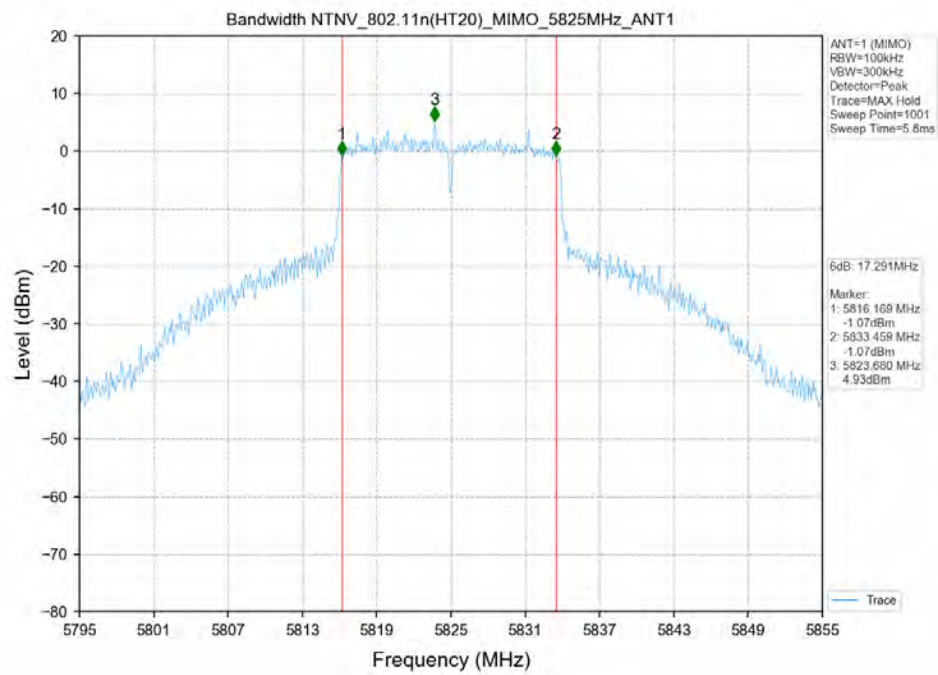
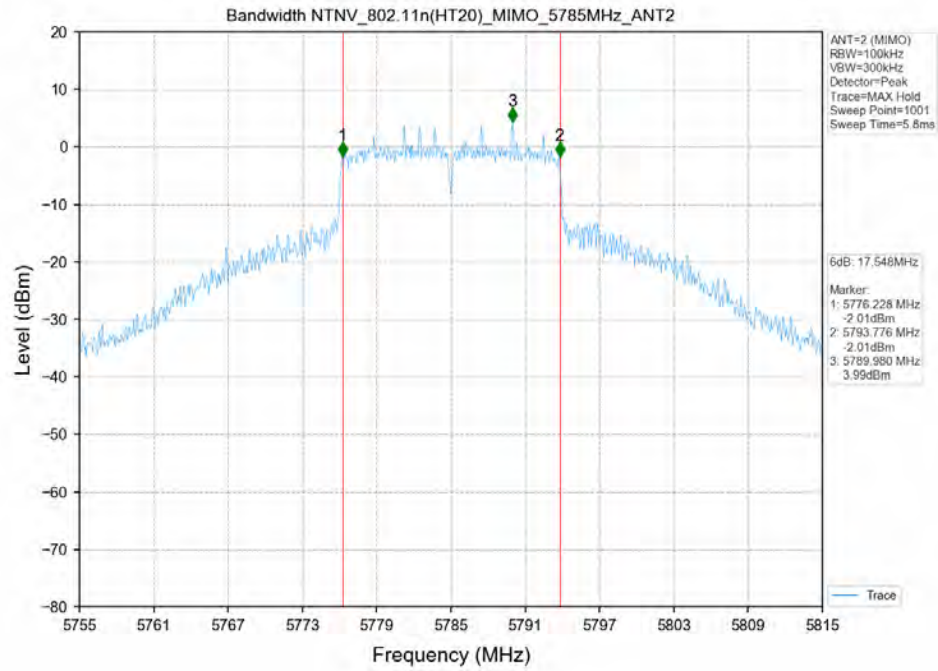


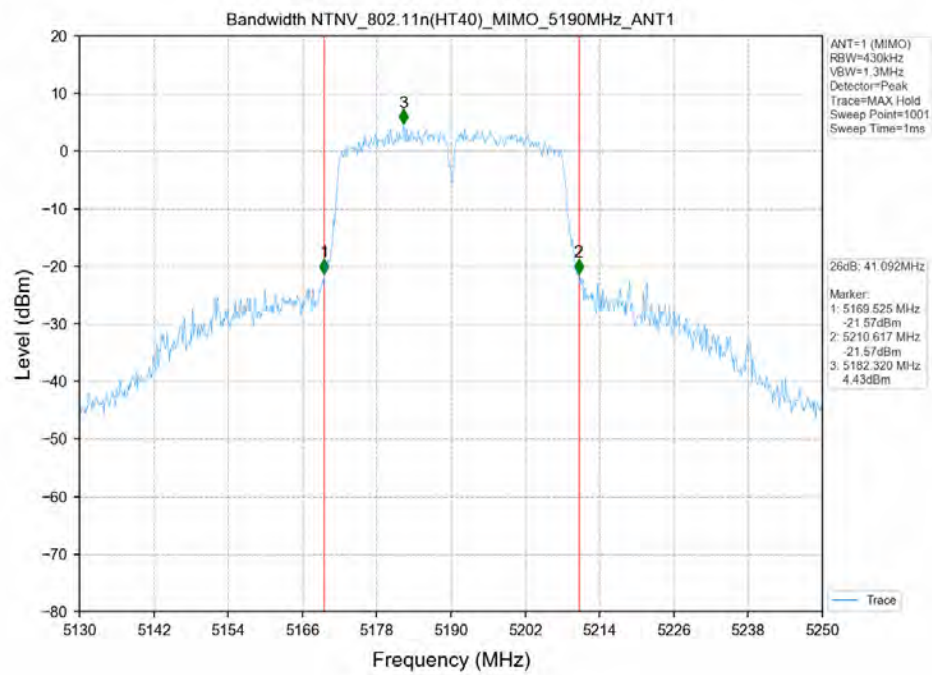
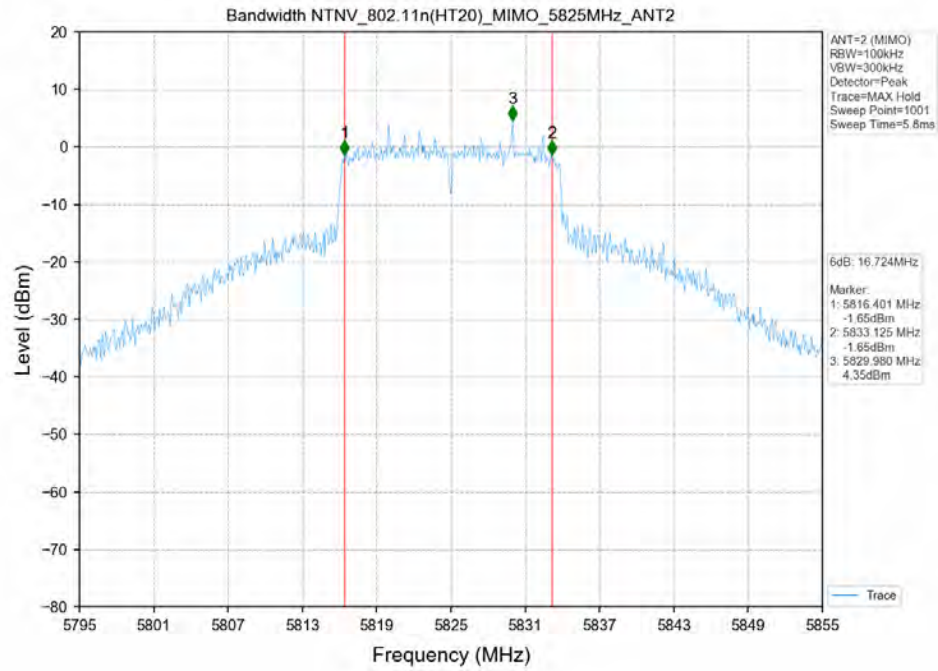


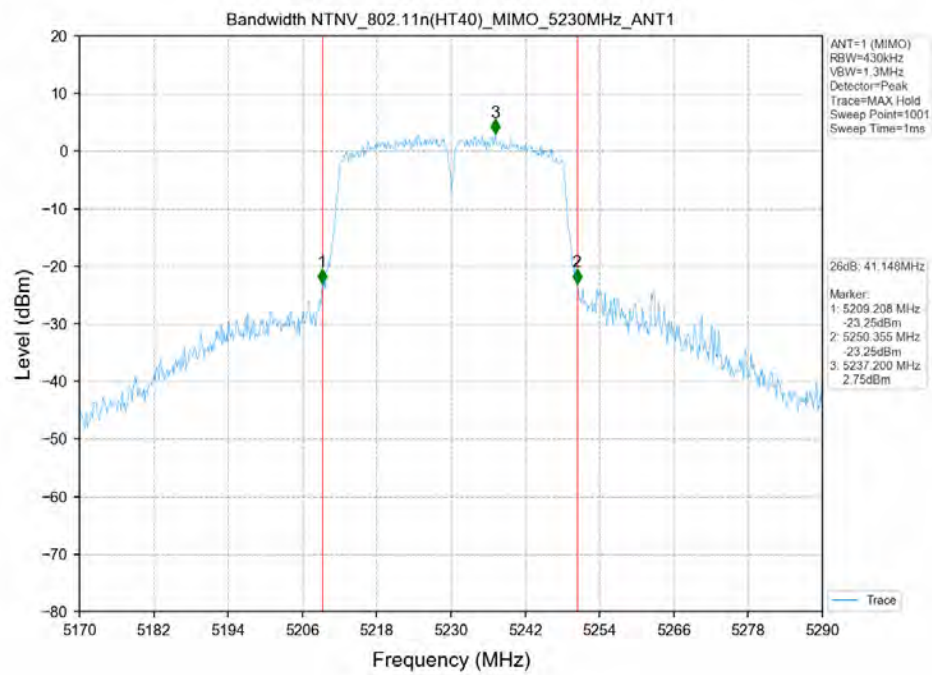
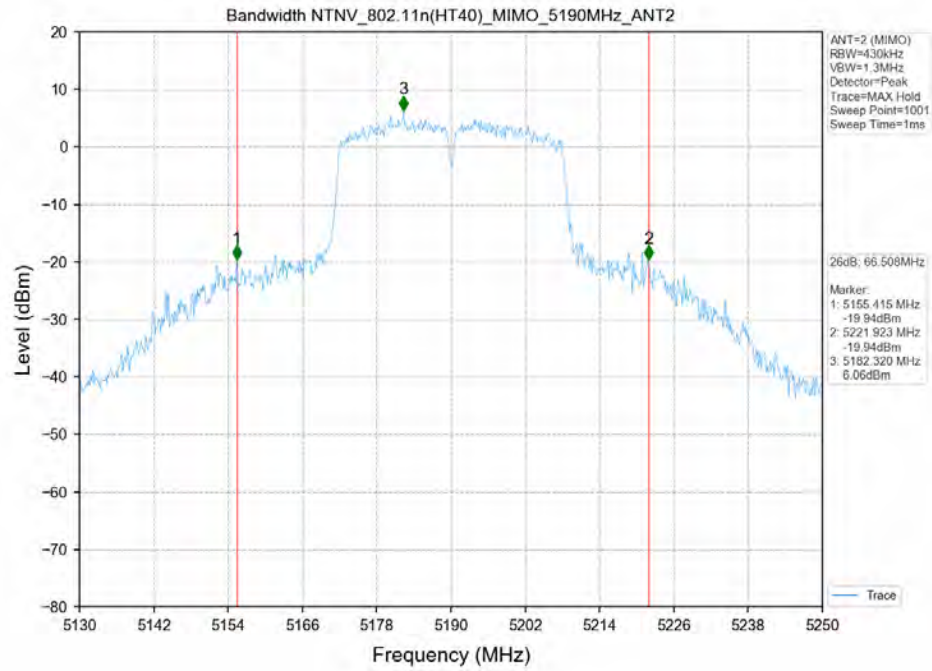


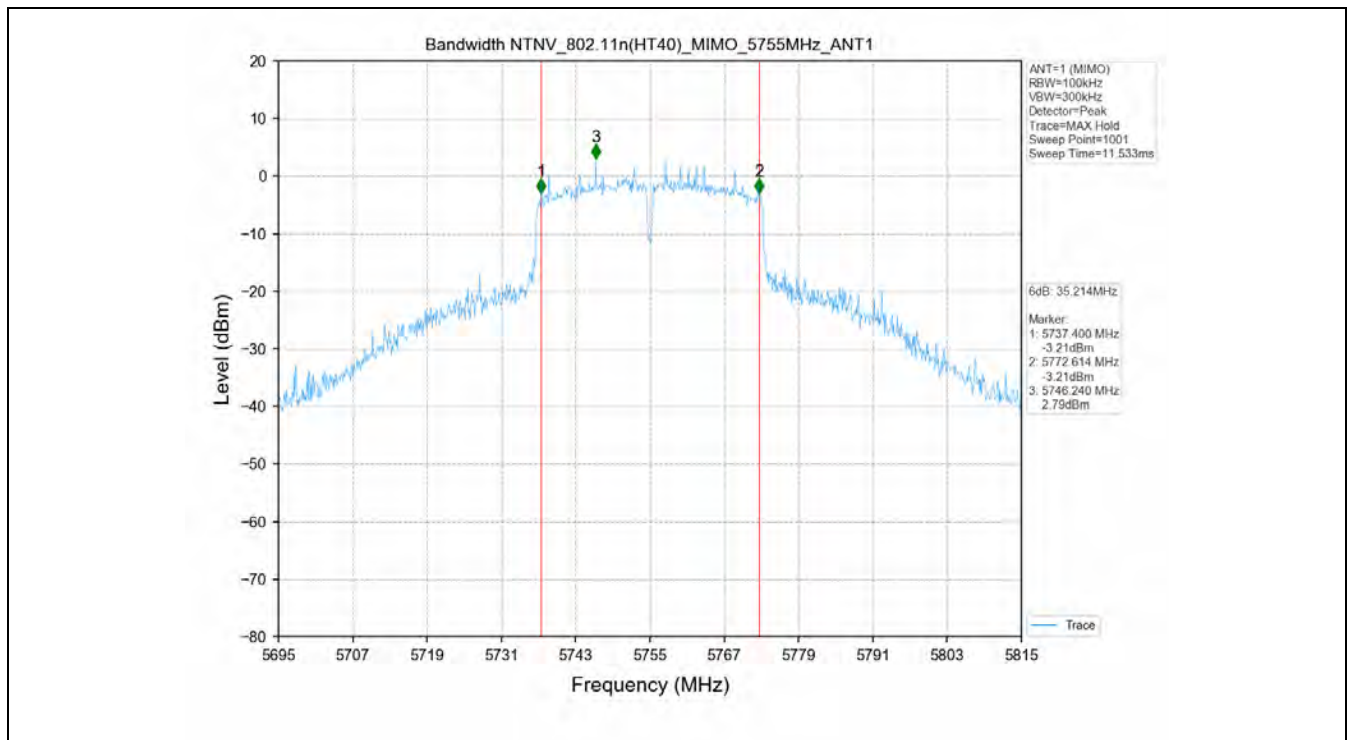
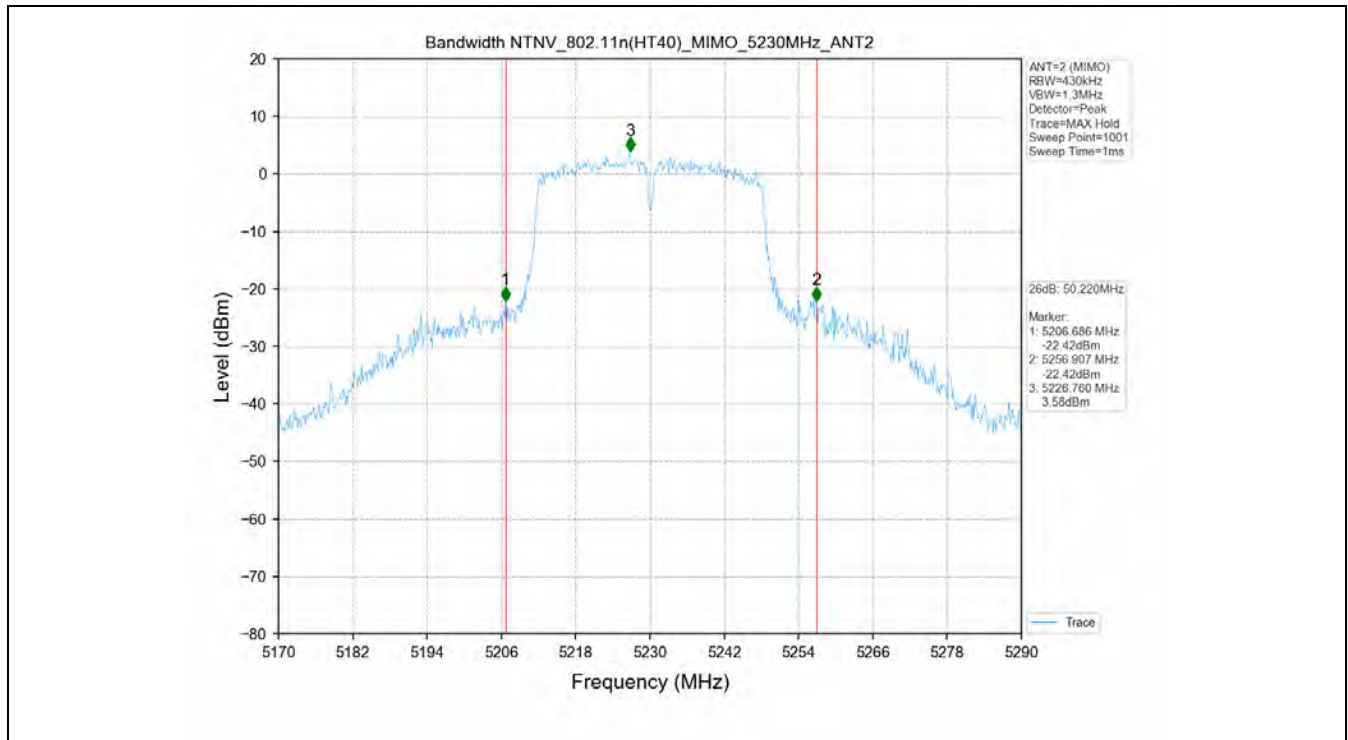


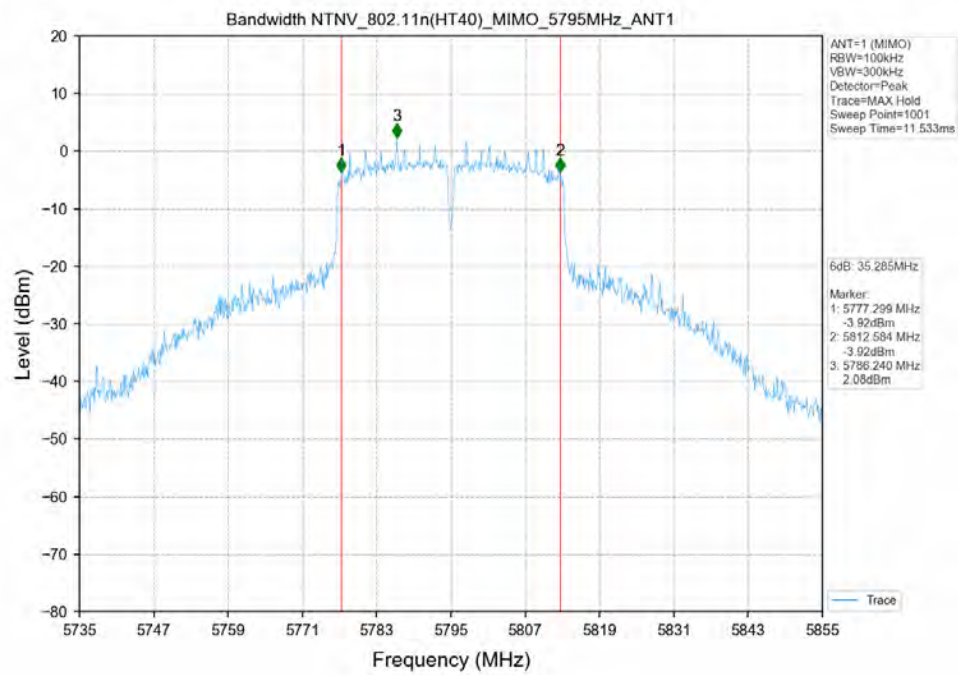
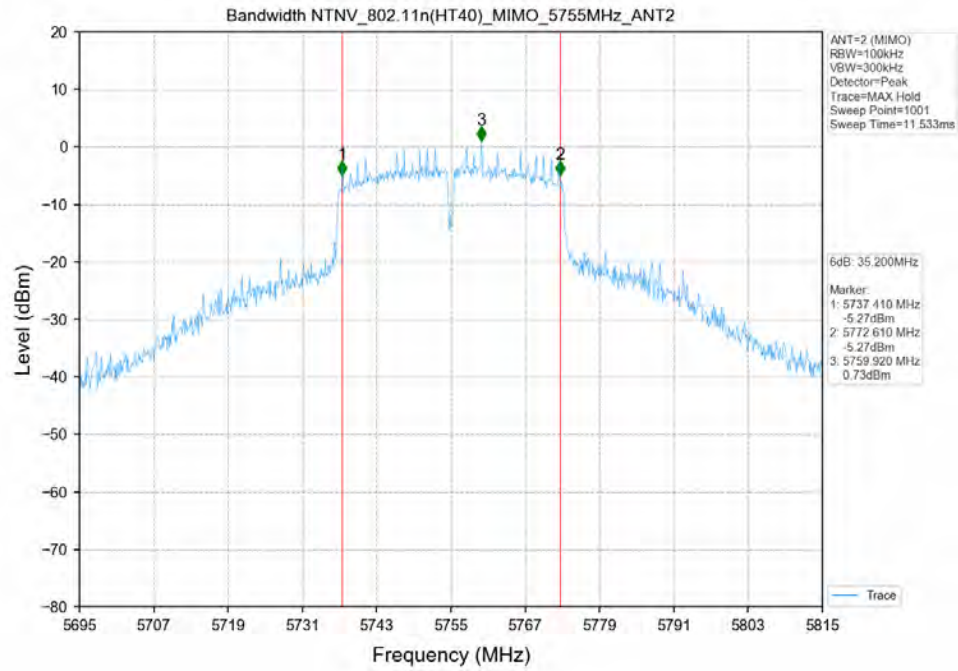


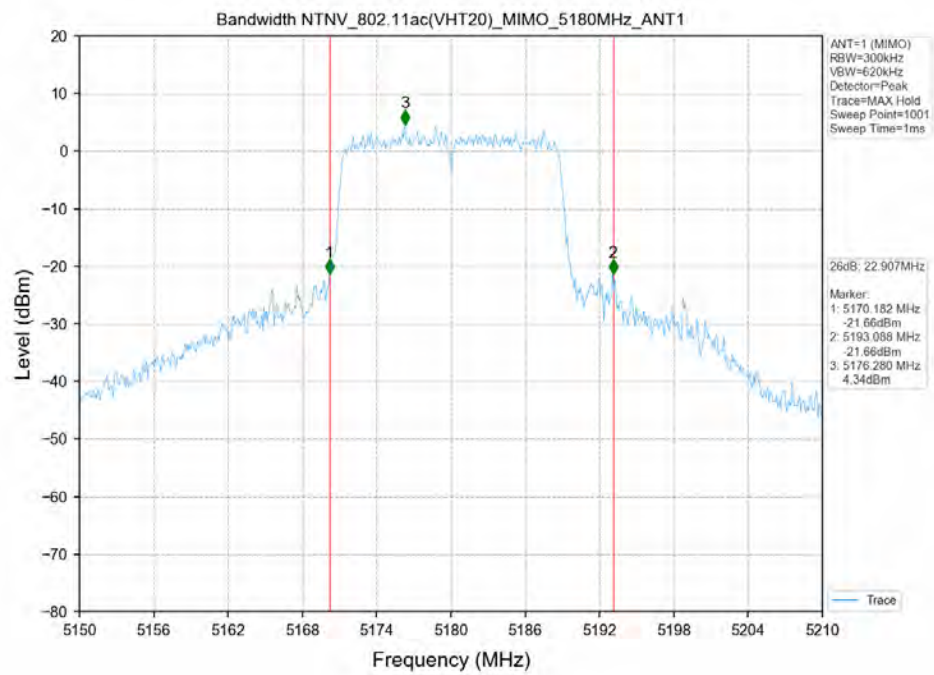
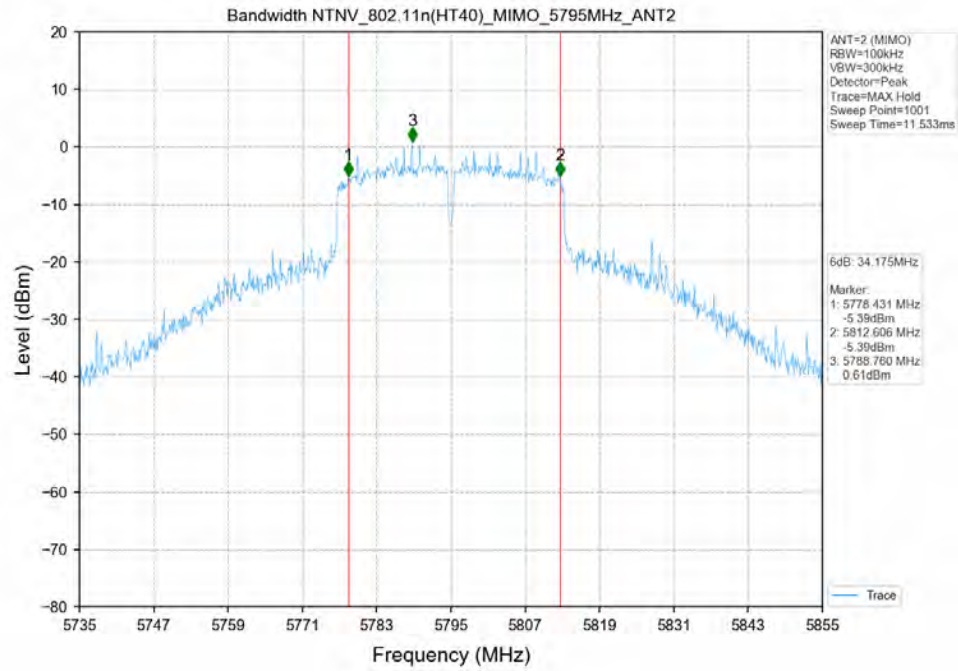


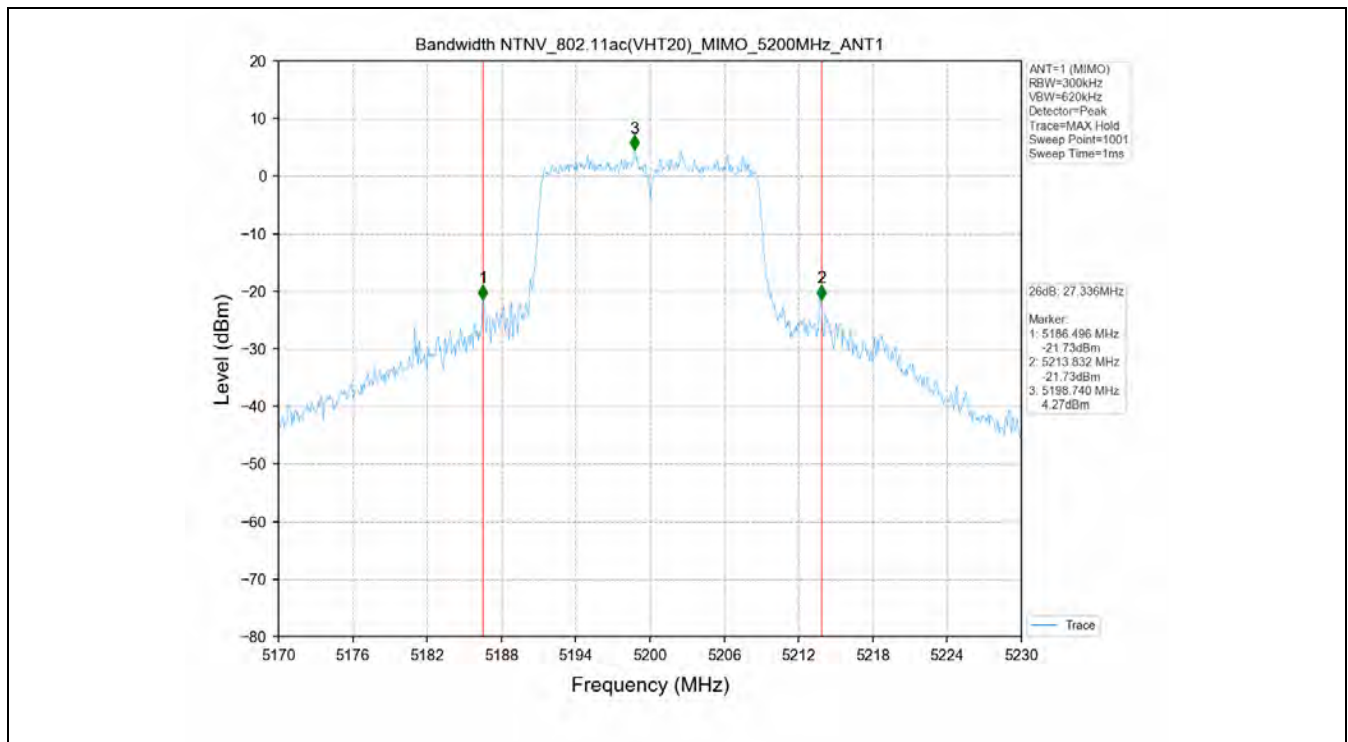
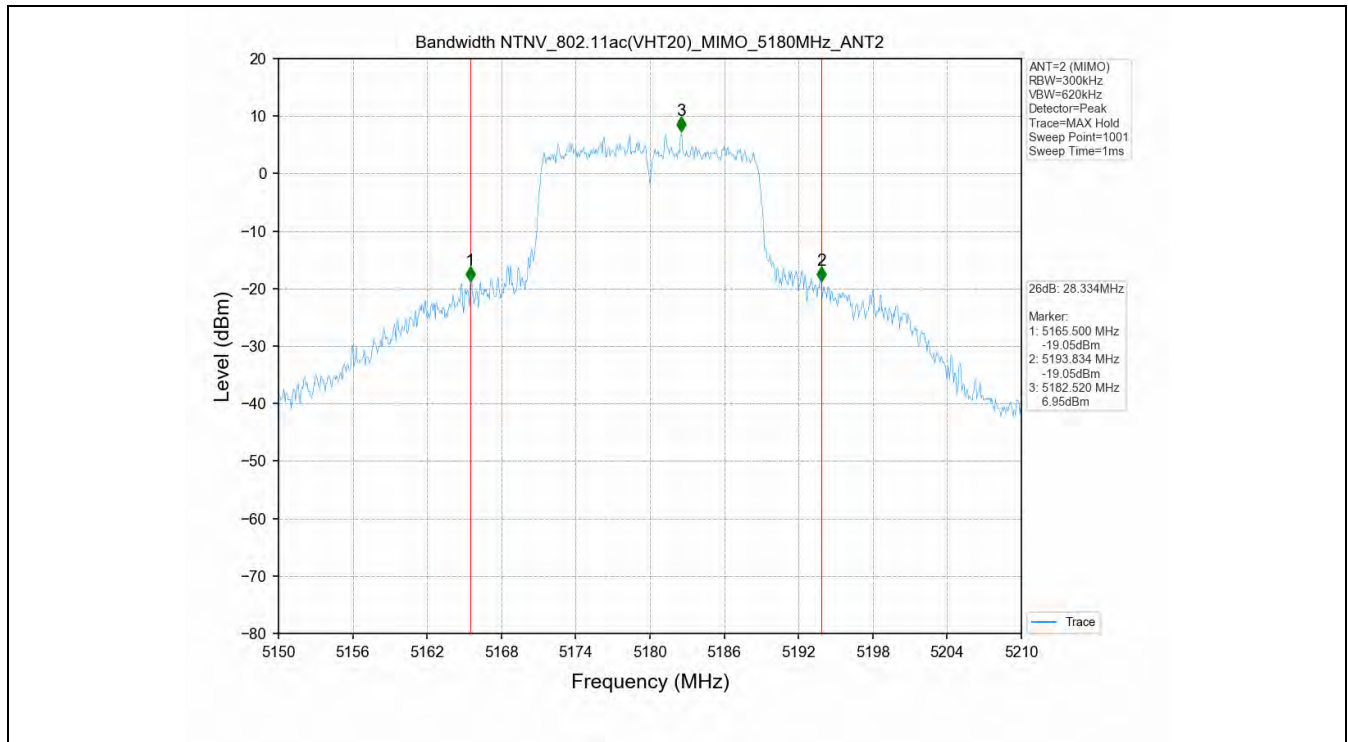


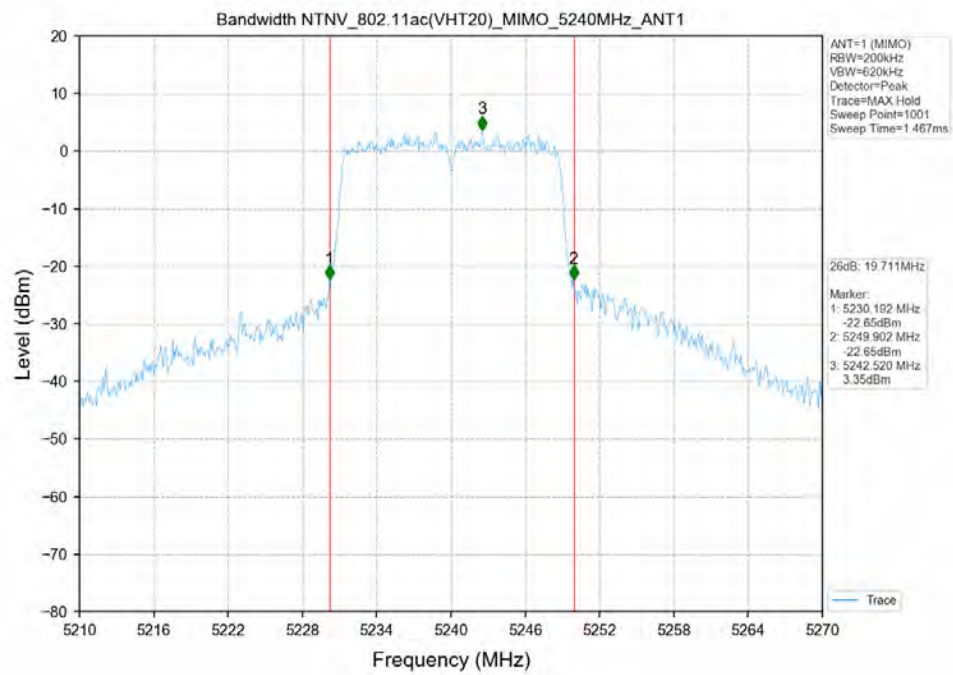
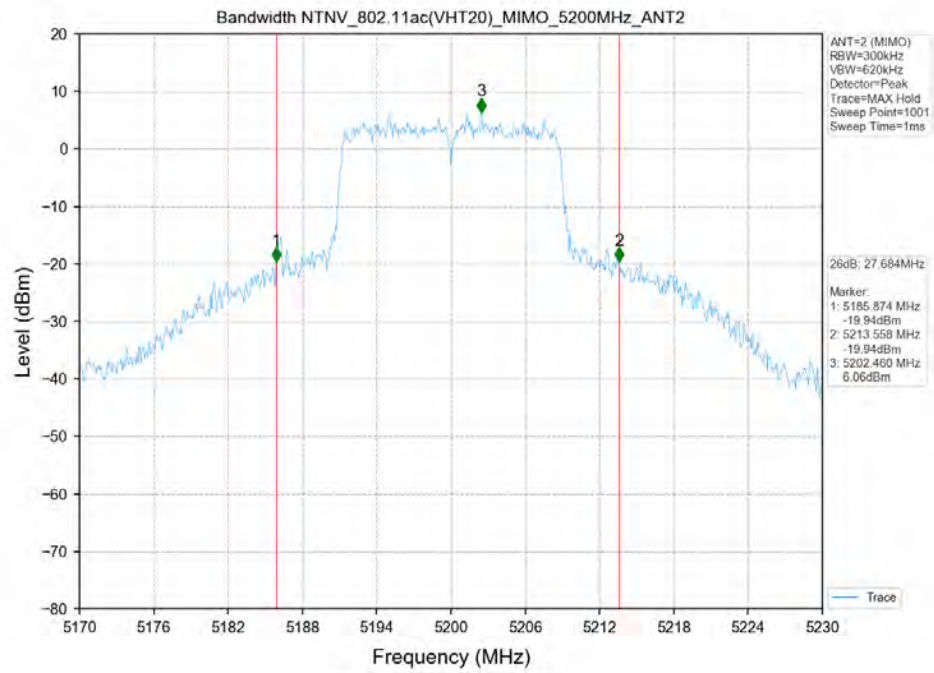


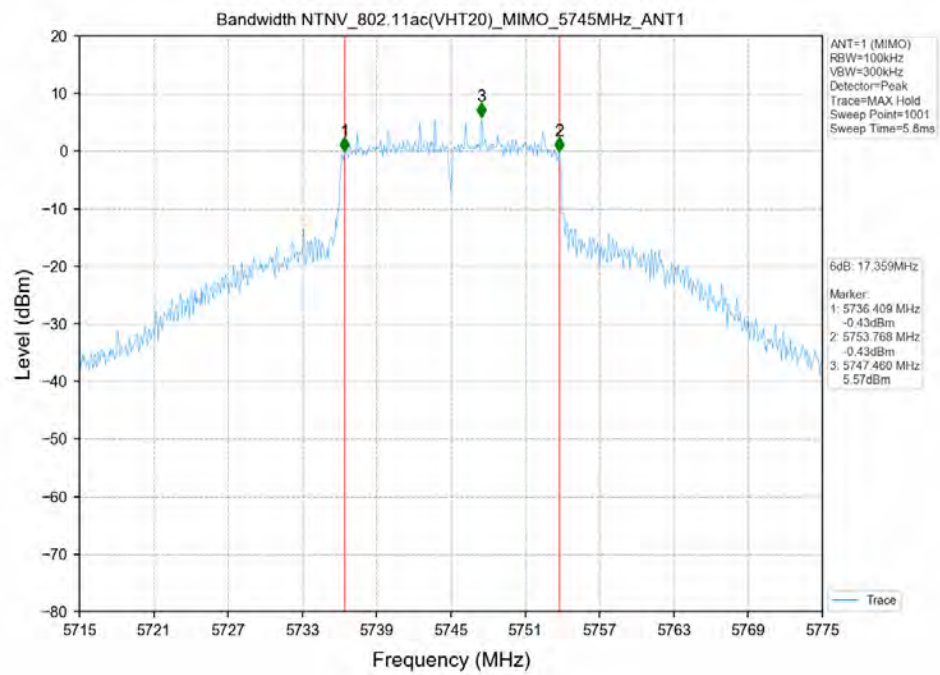
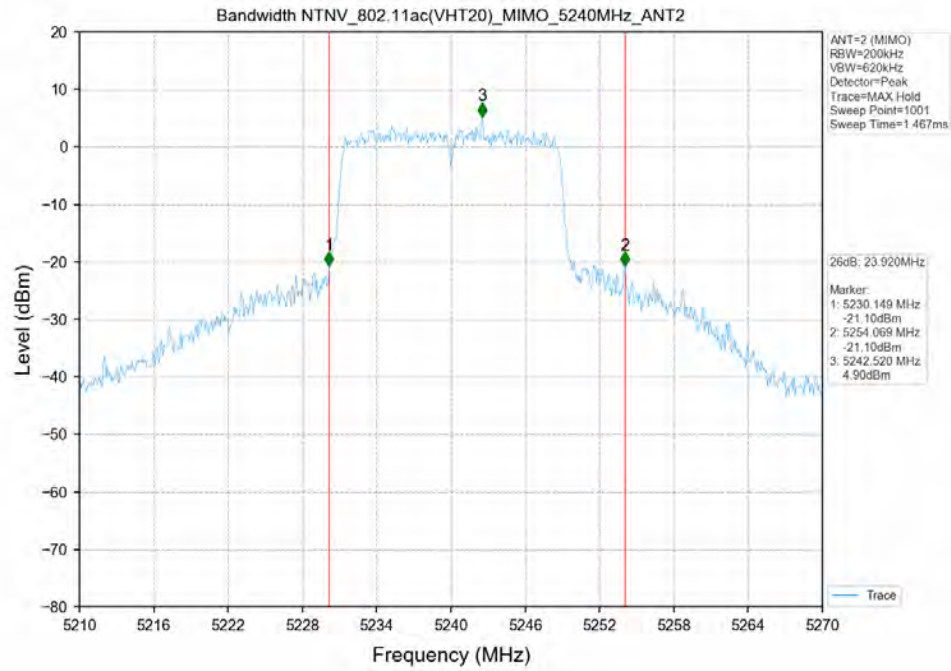


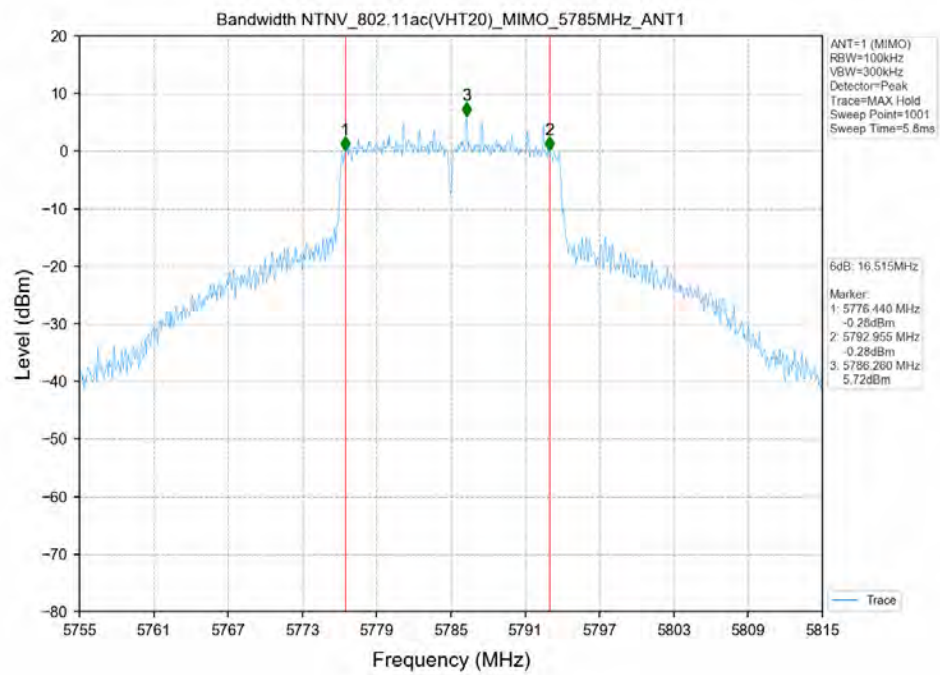
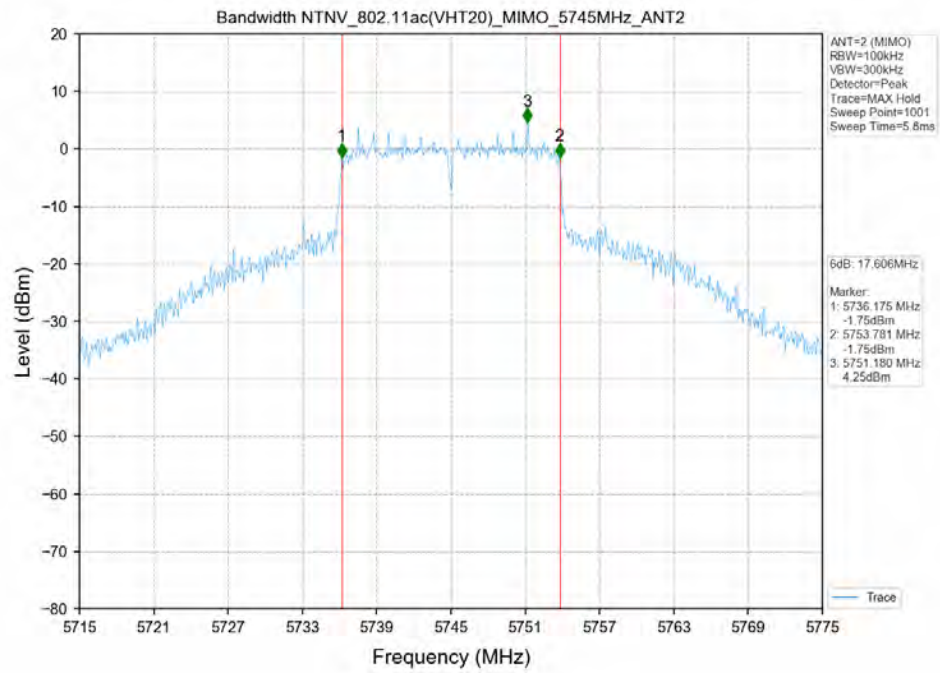


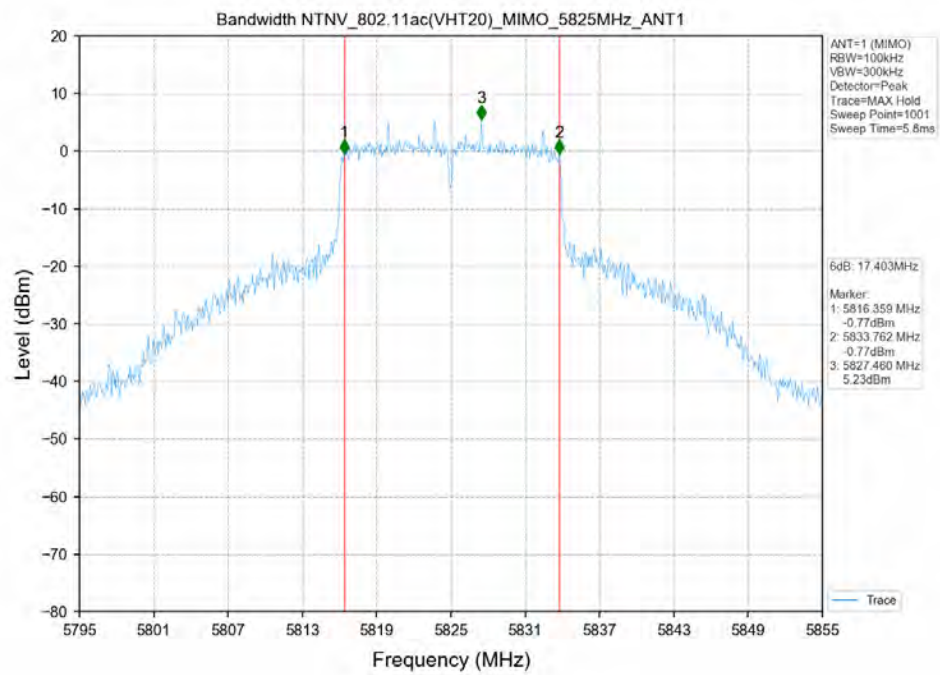
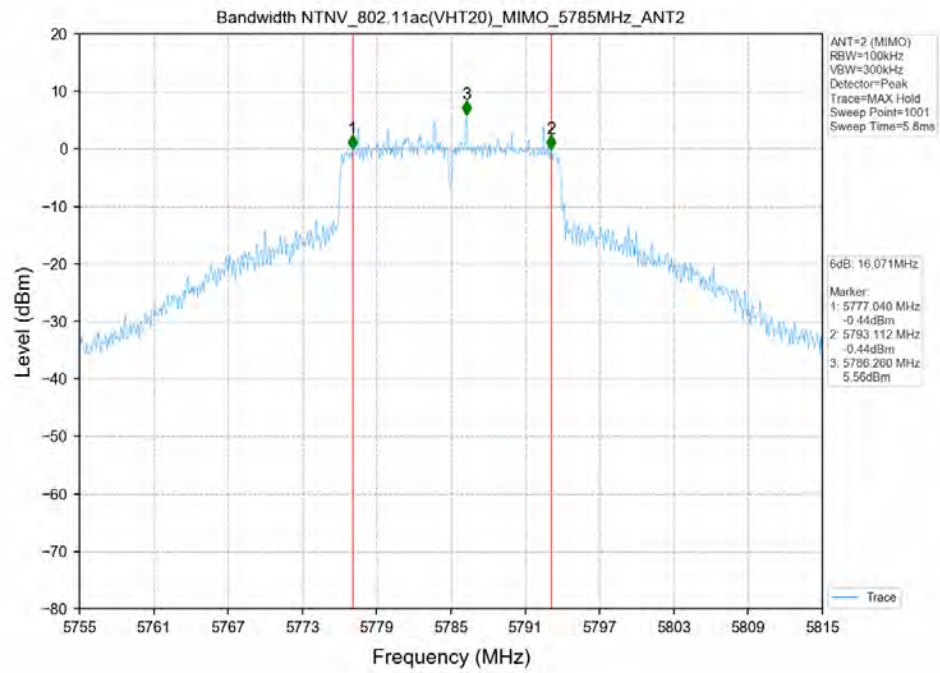


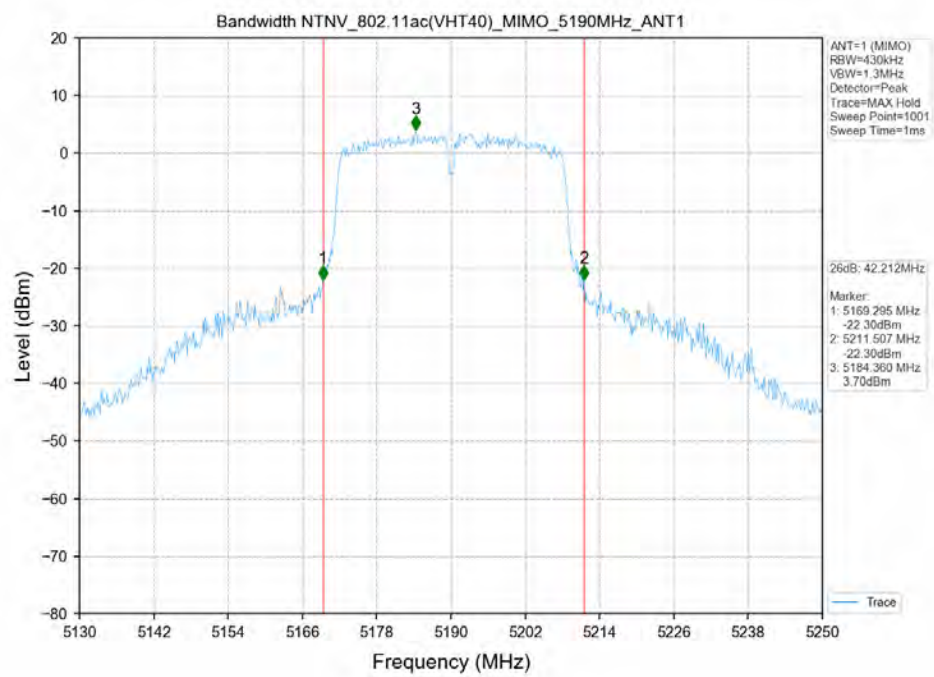
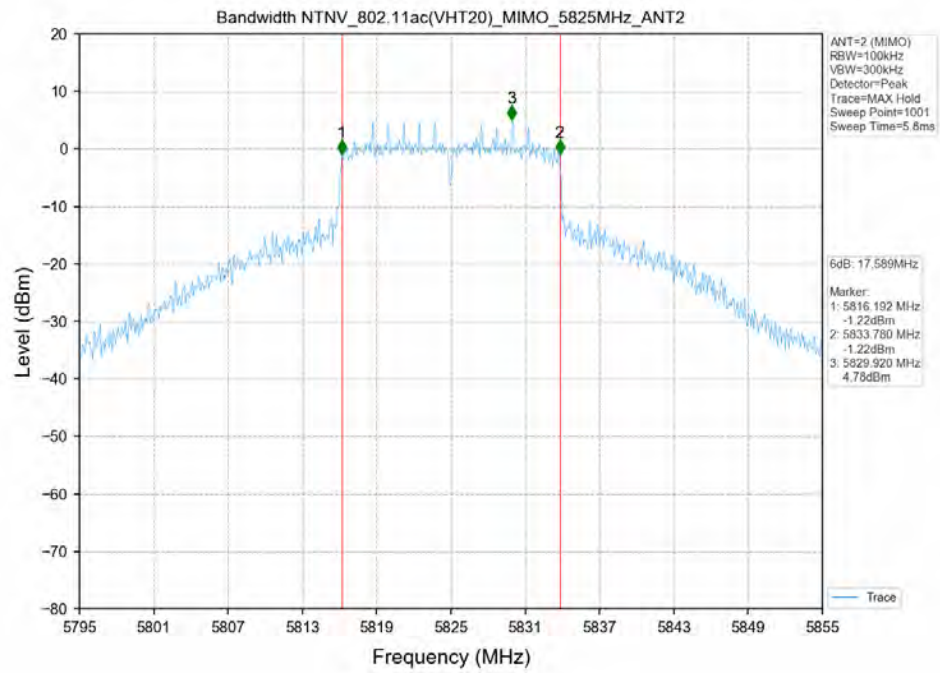


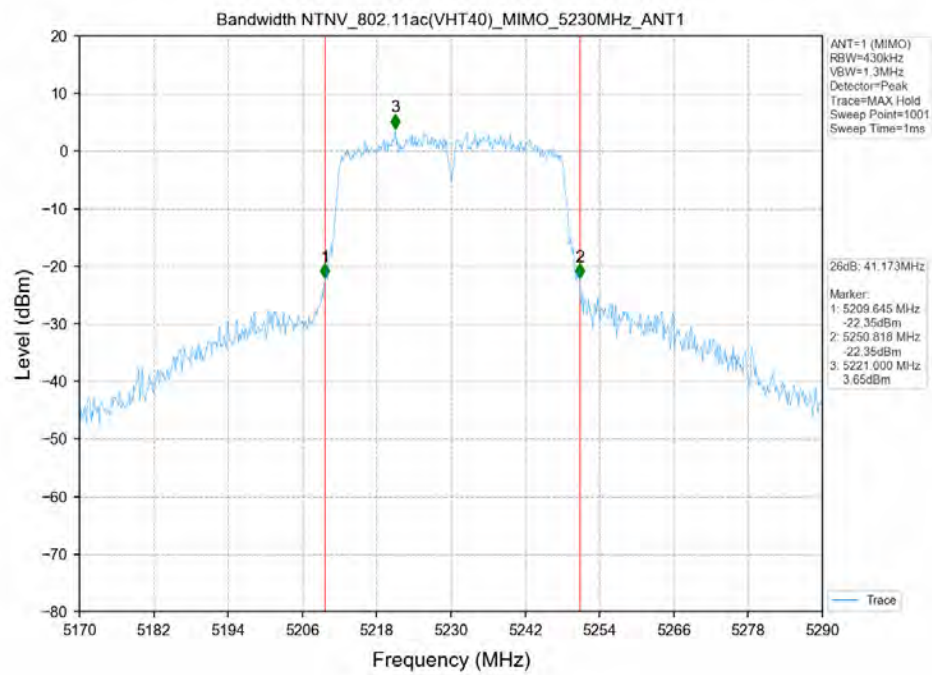
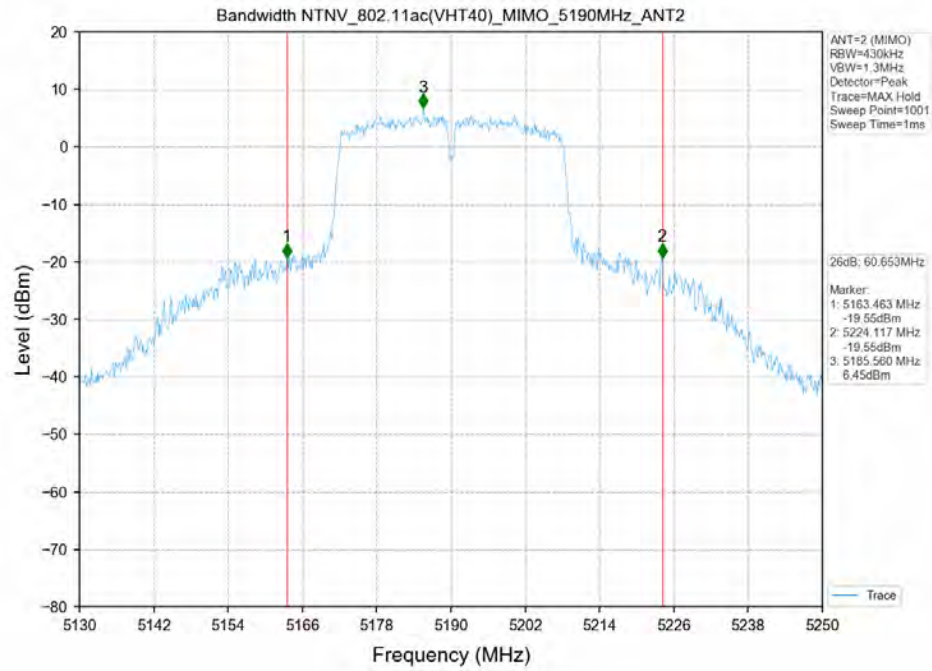


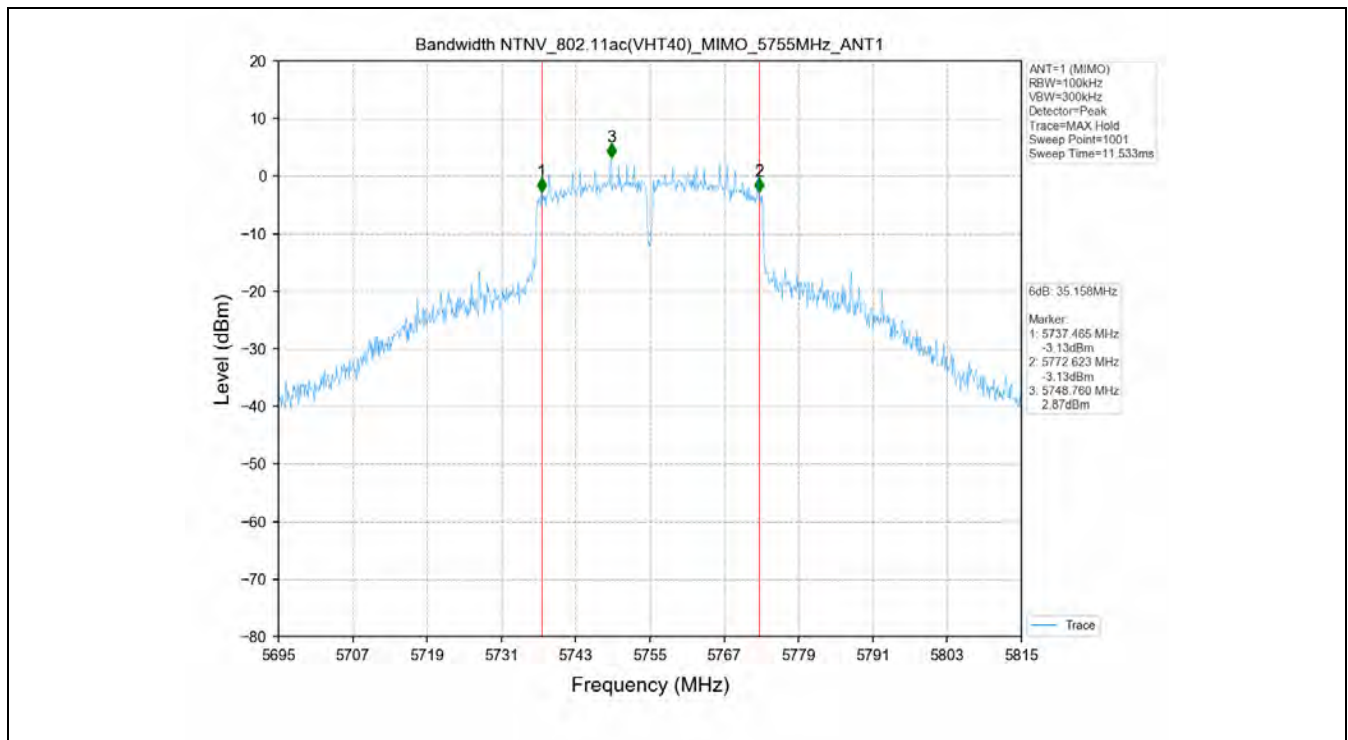
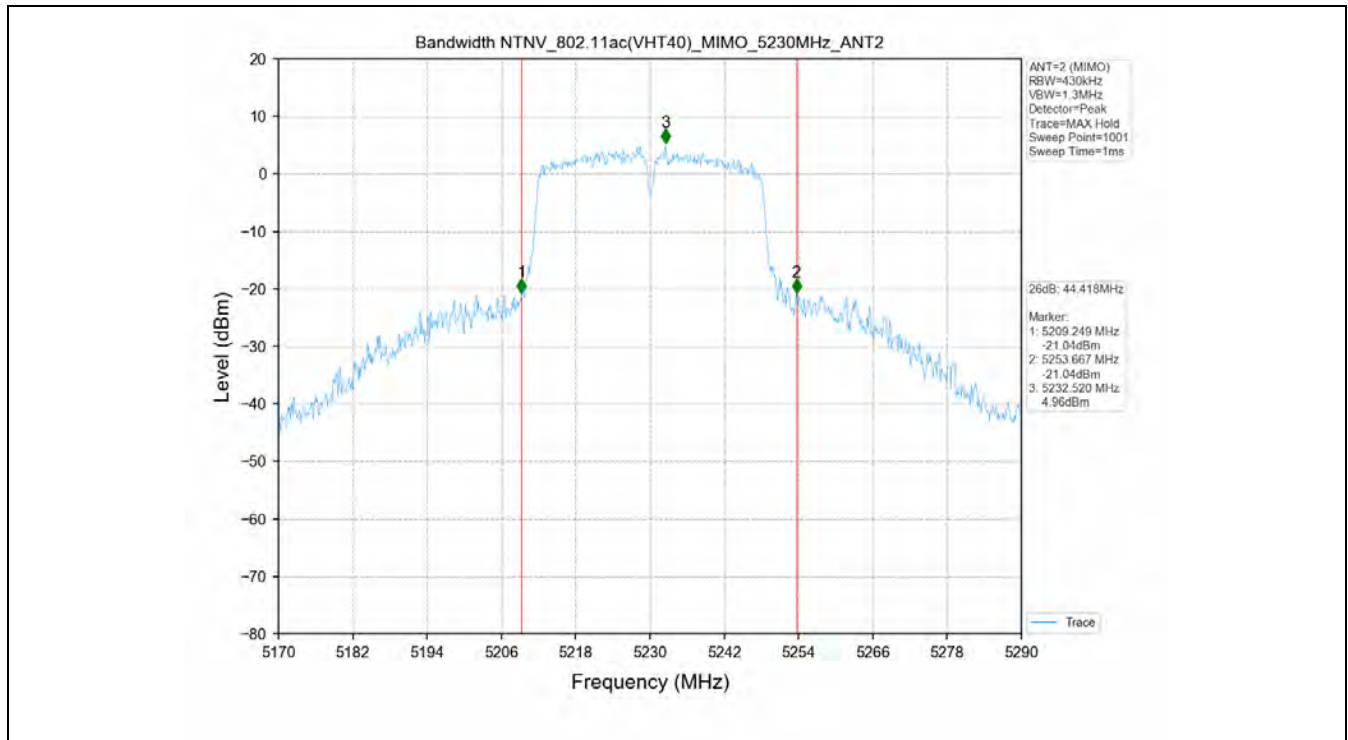


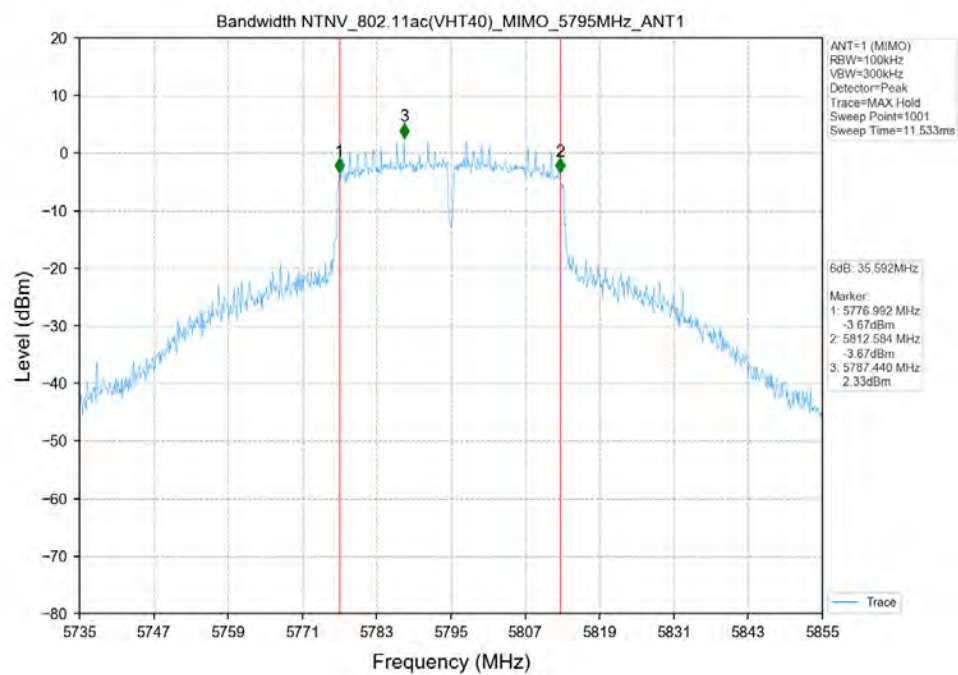
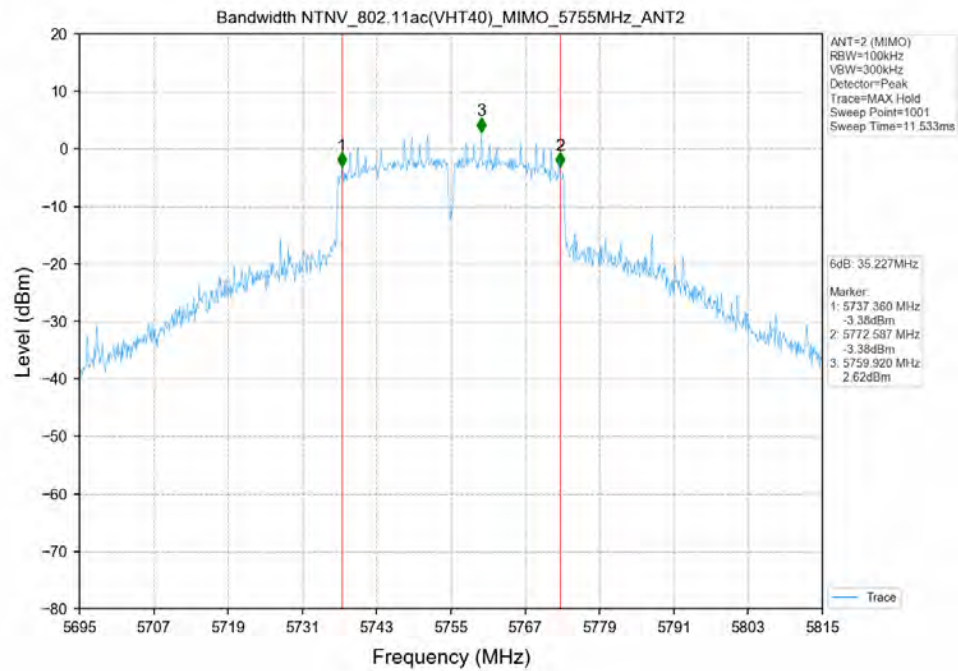


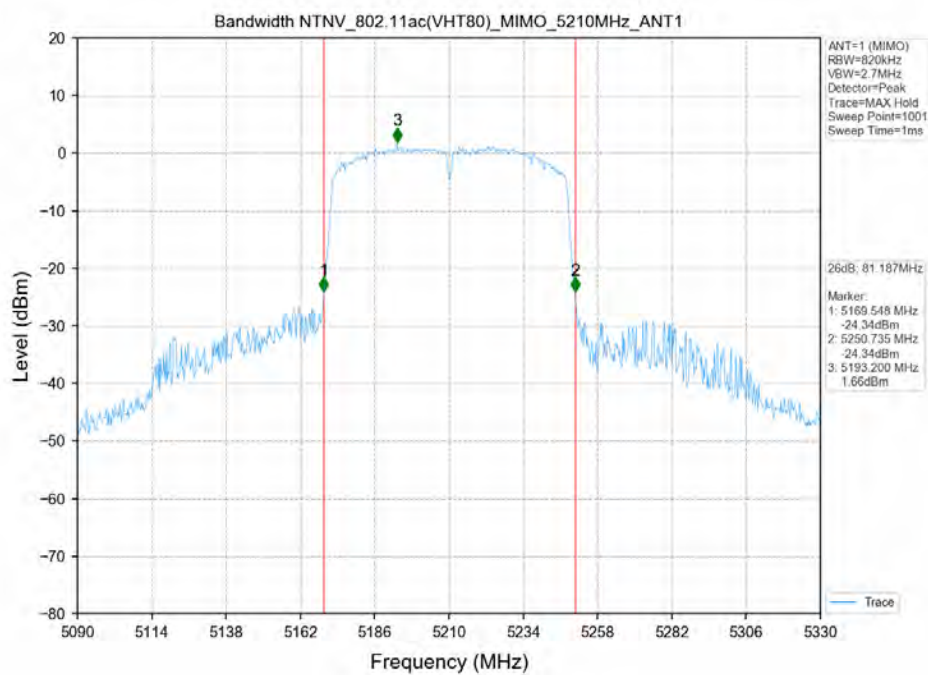
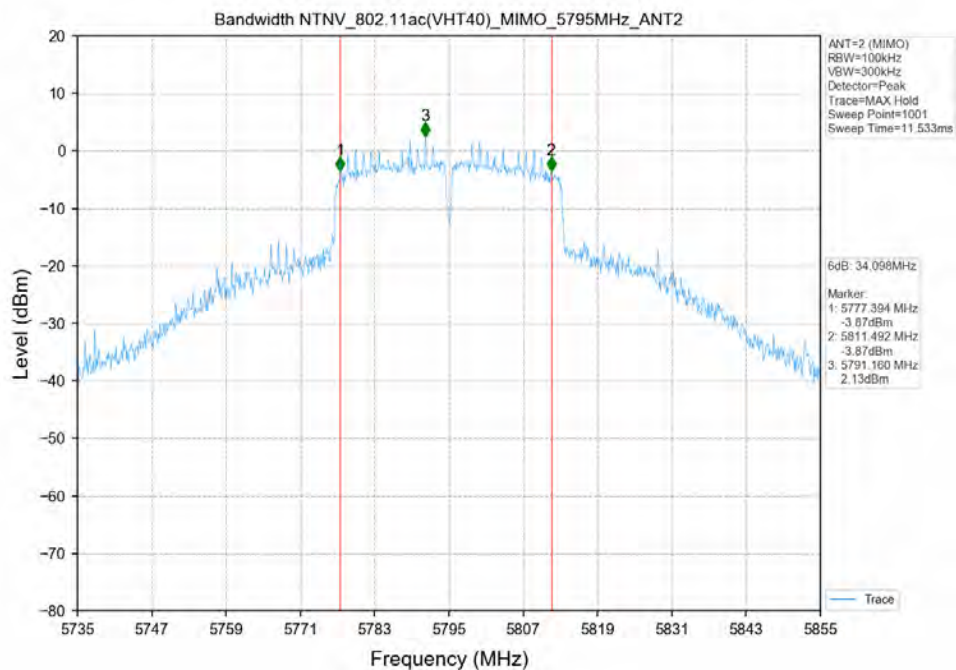


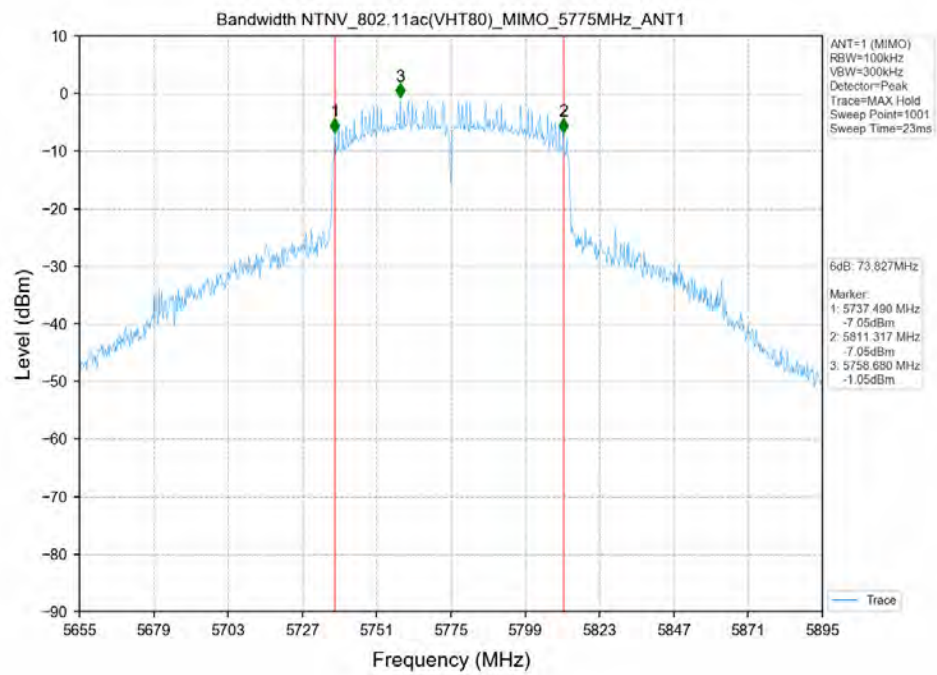
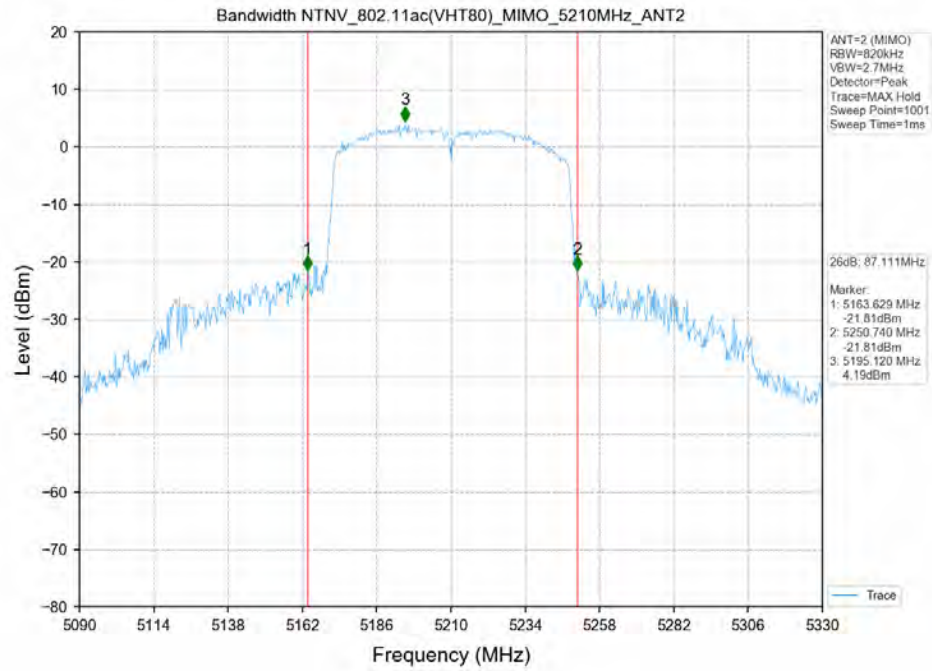


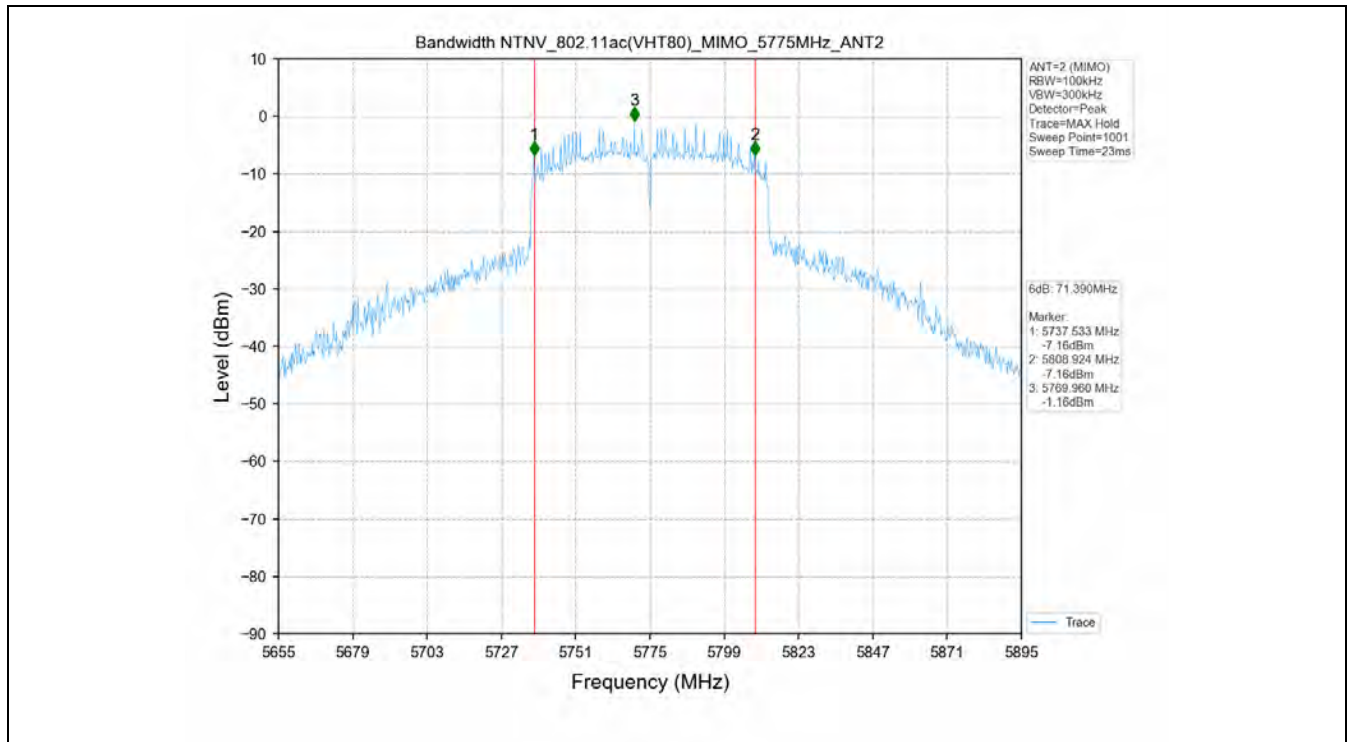




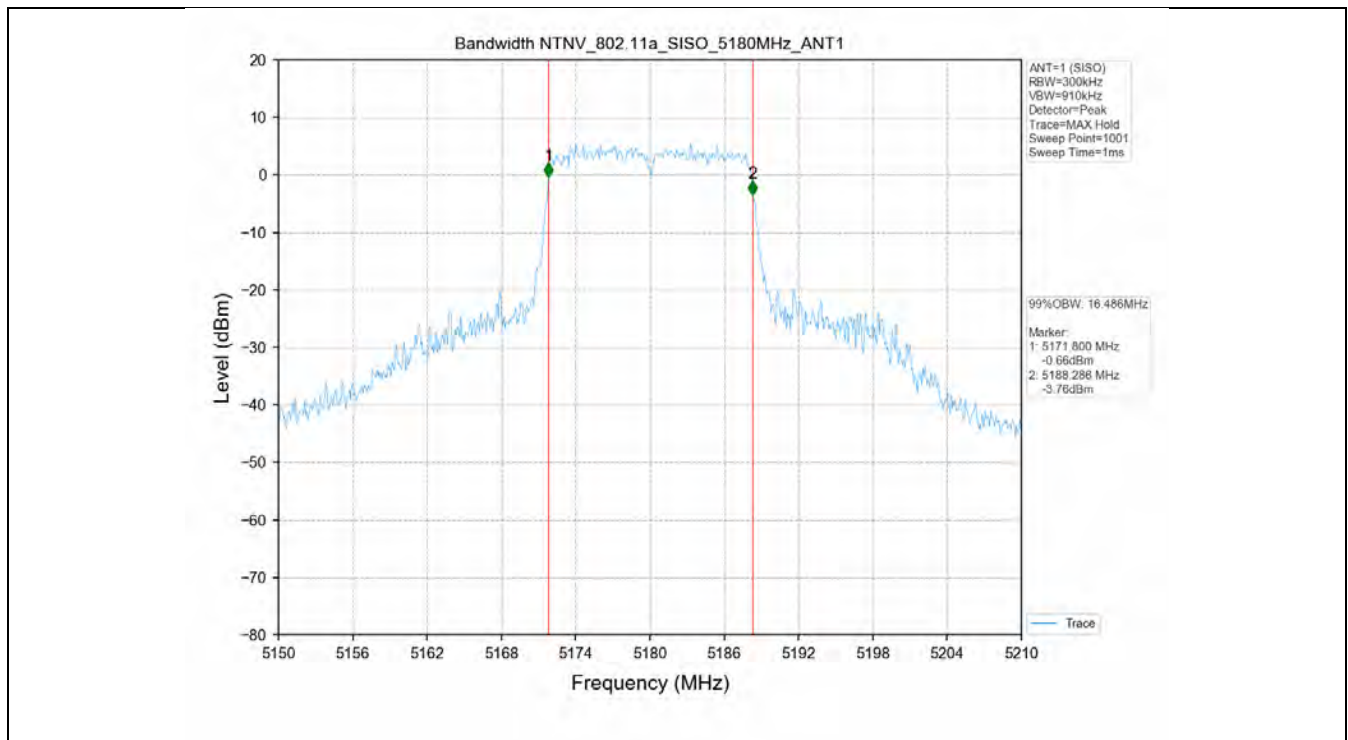


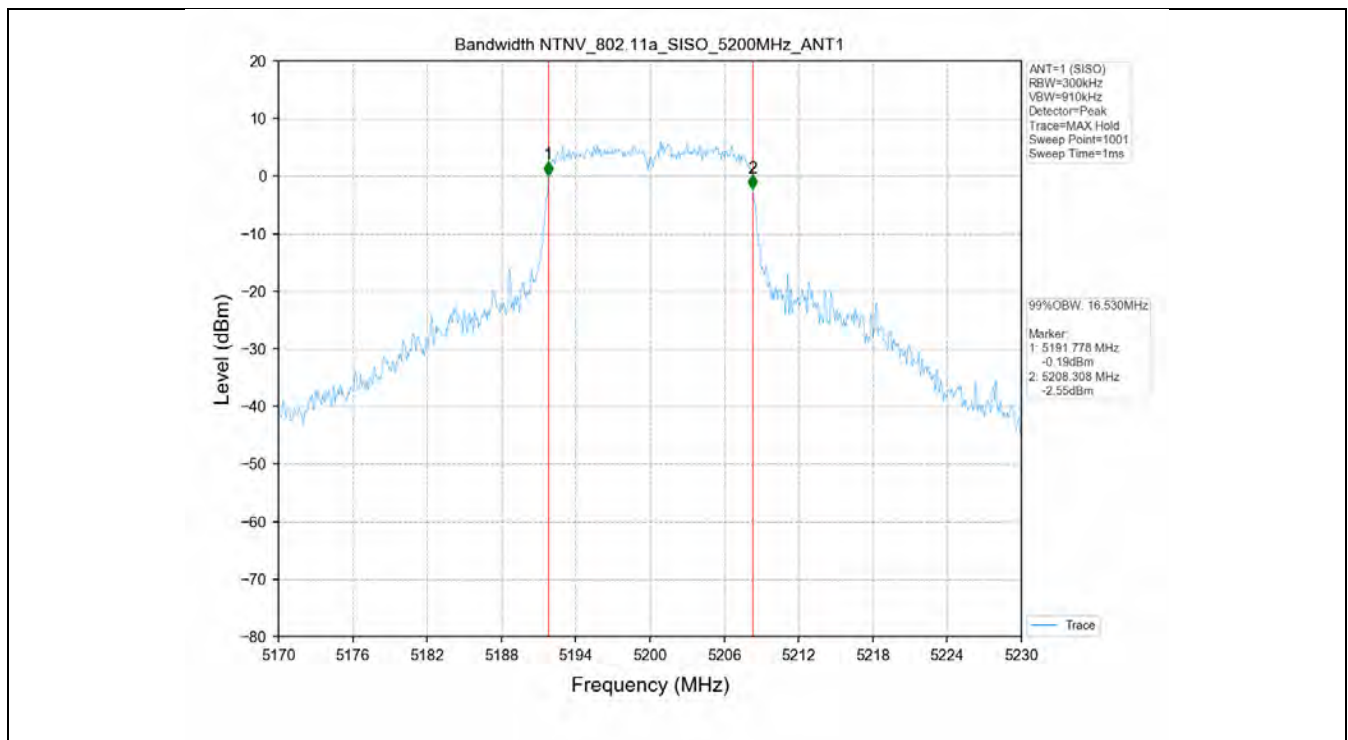
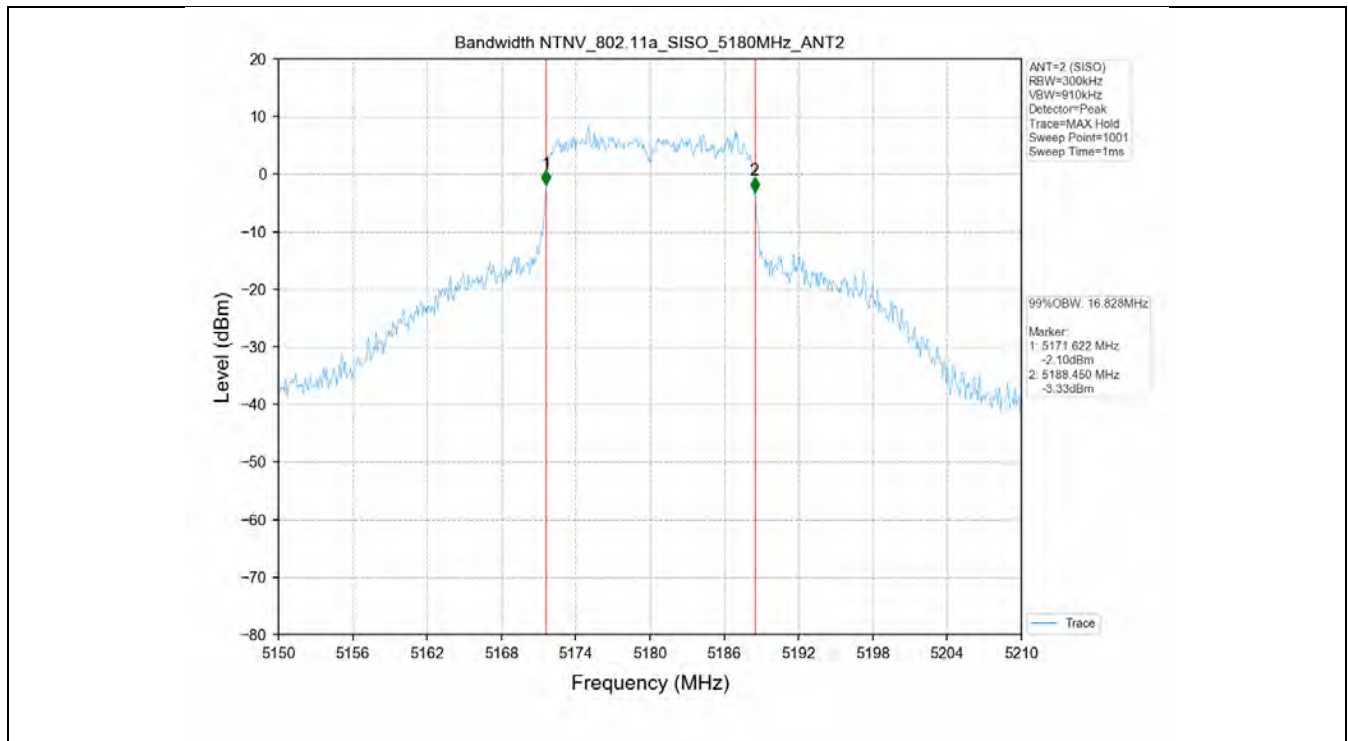


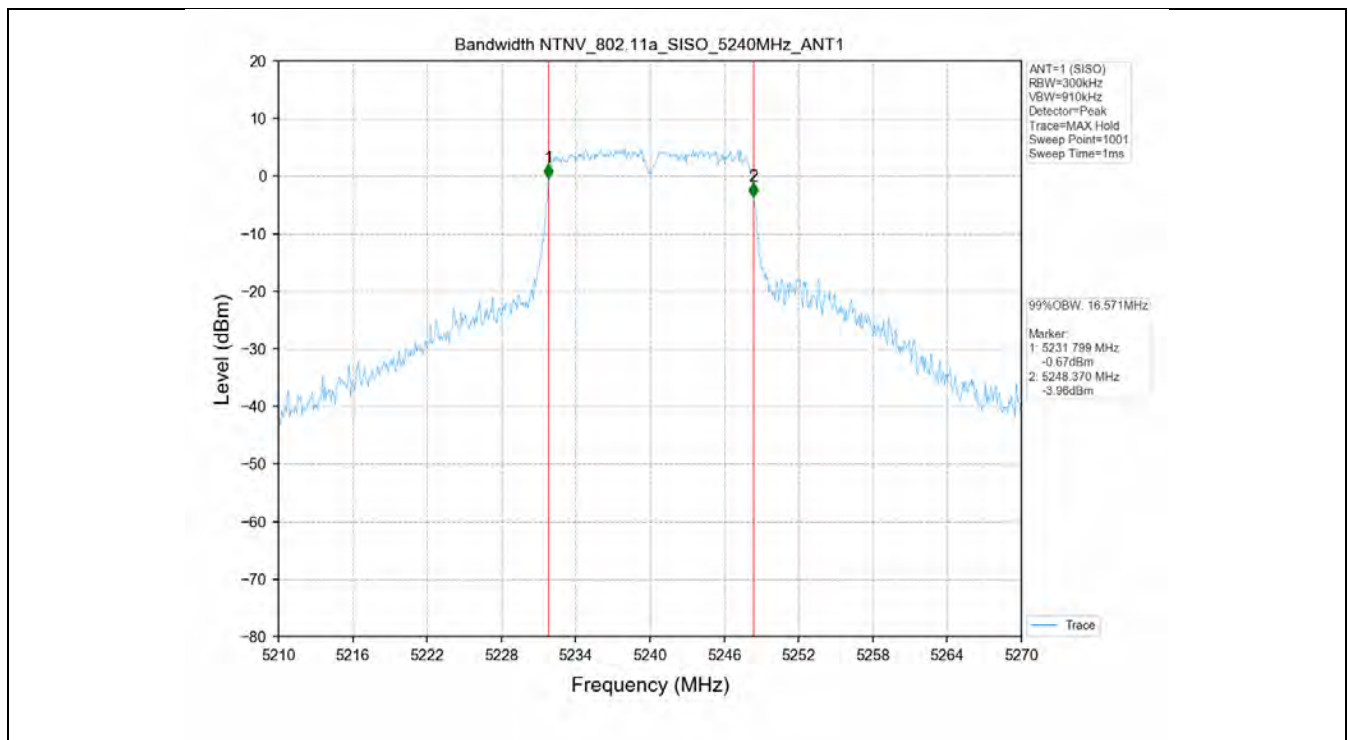
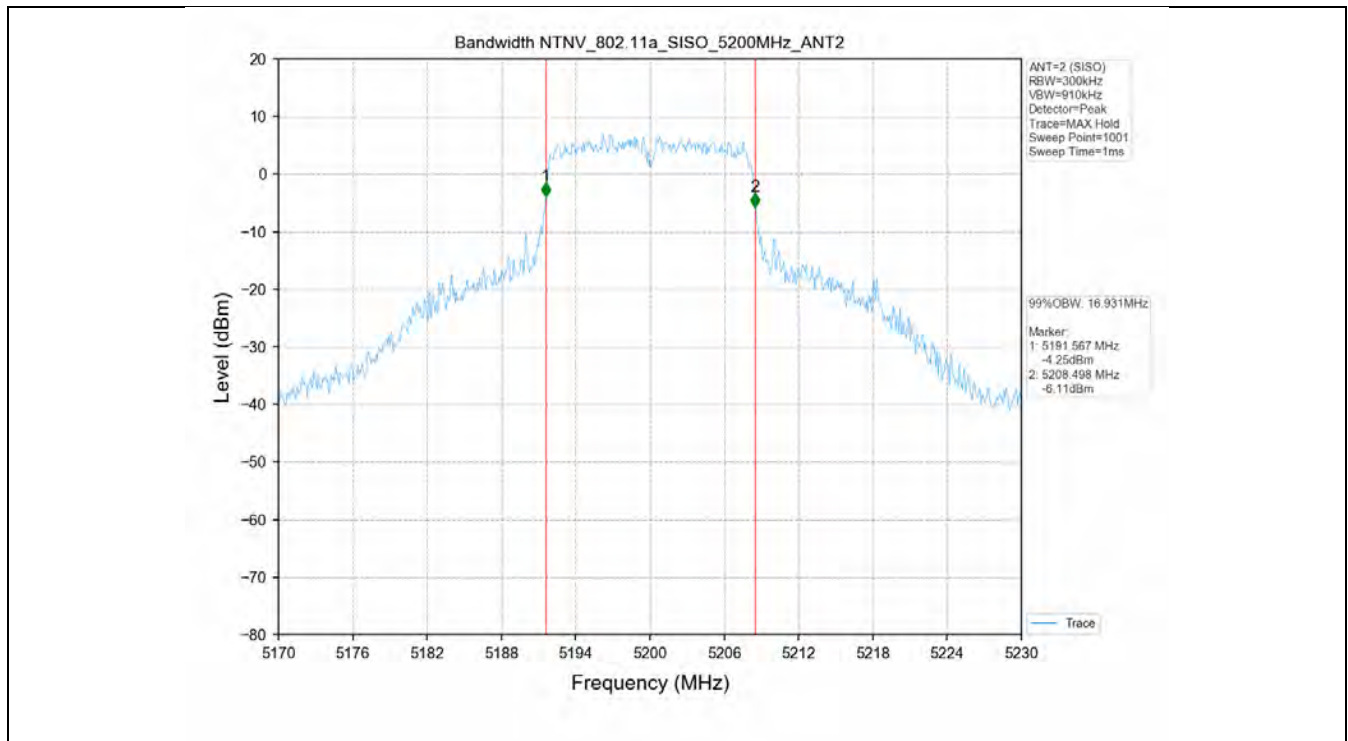


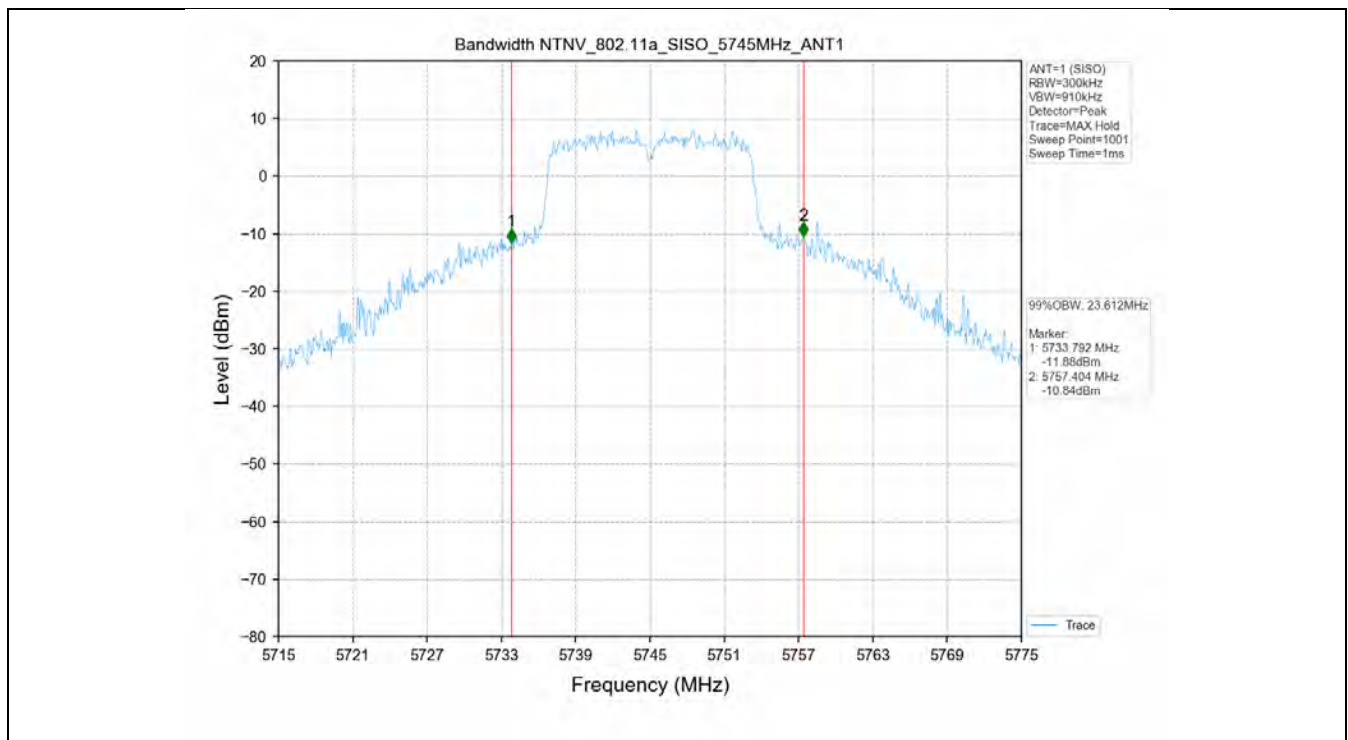
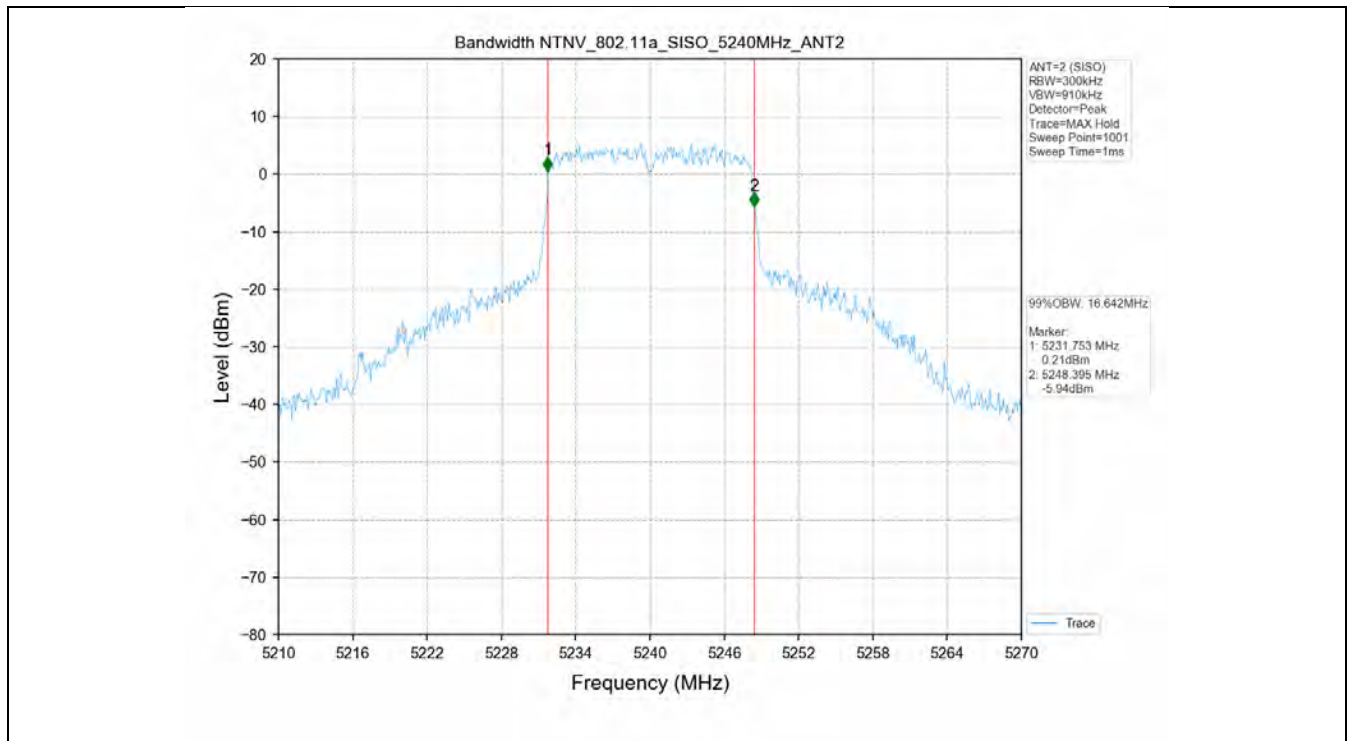


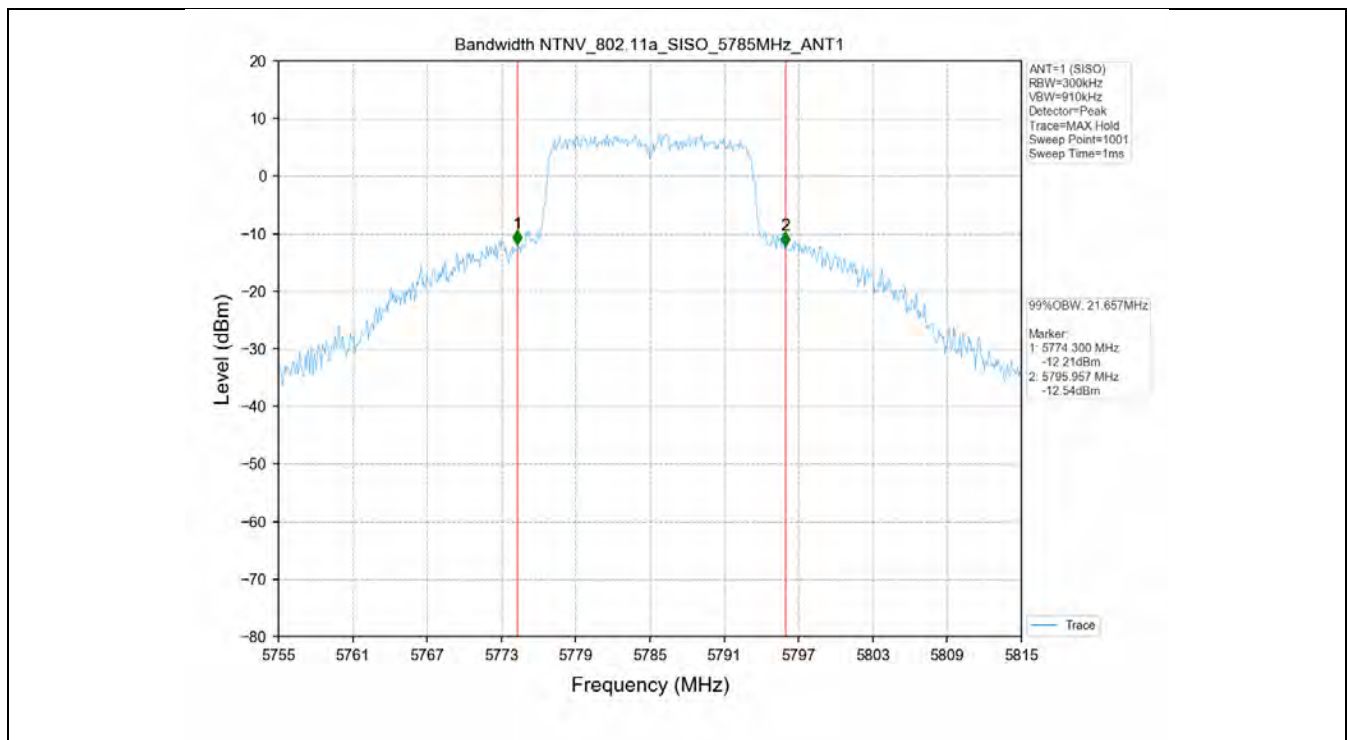
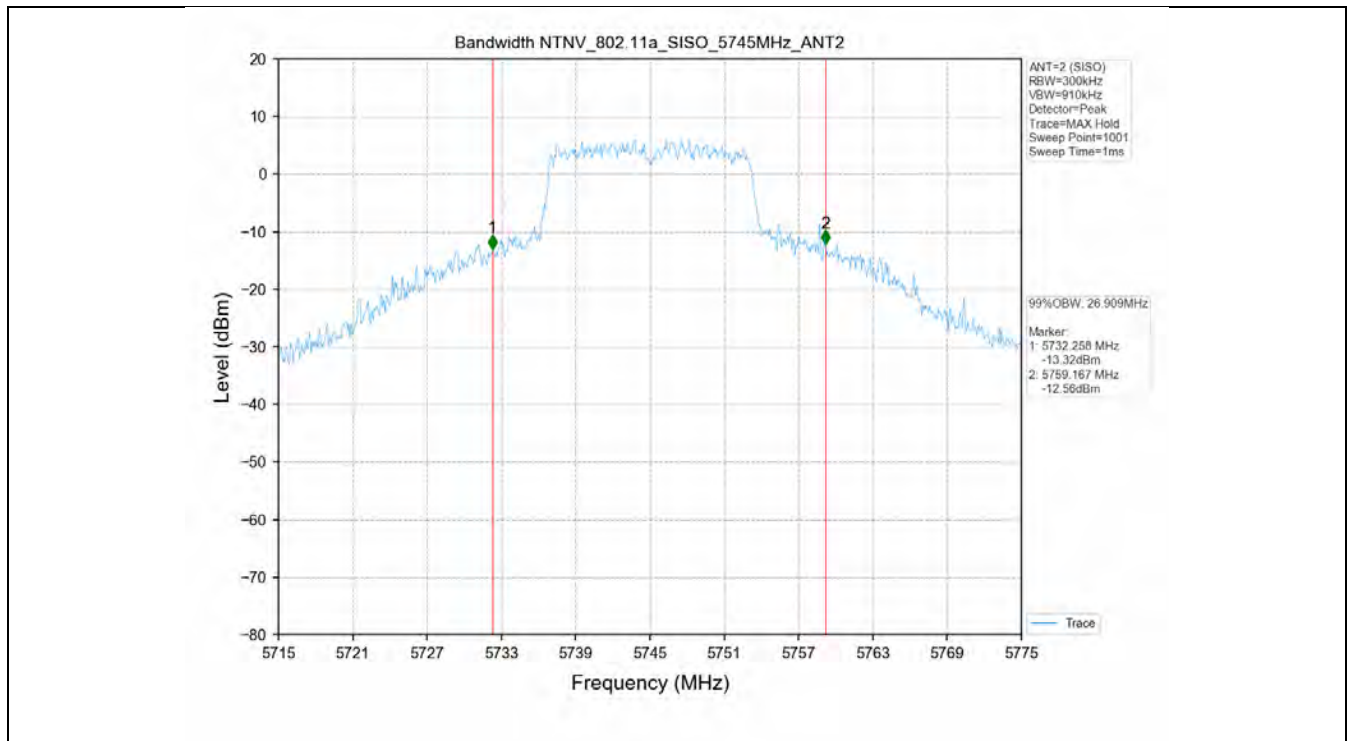
2.3 Test Graph - 99% Occupied Bandwidth

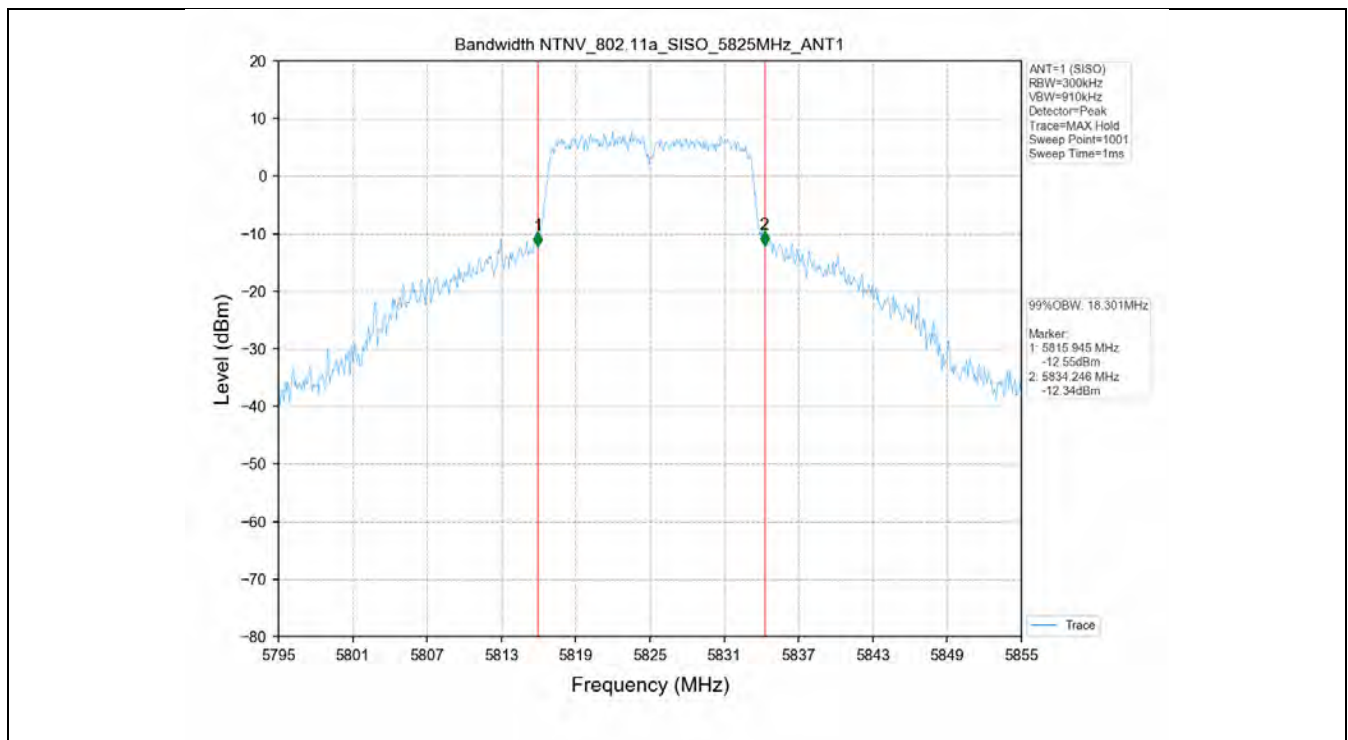
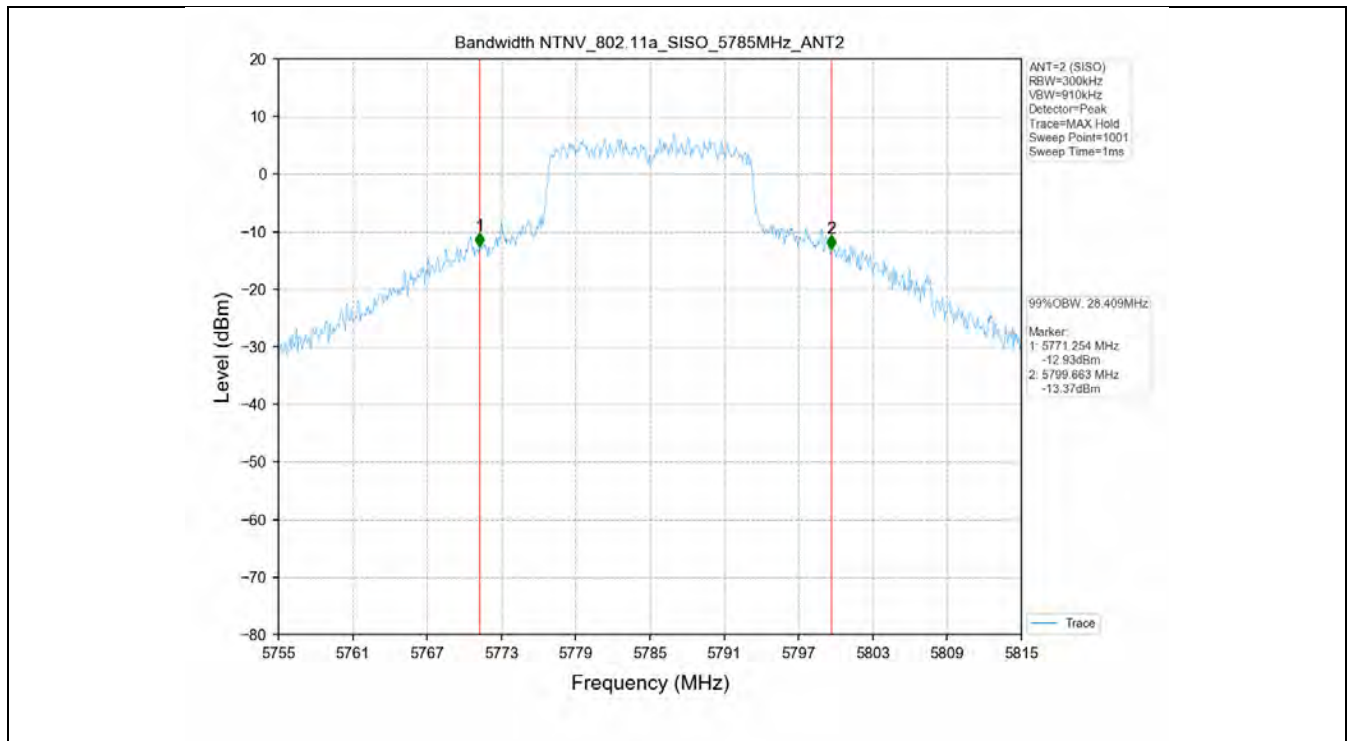


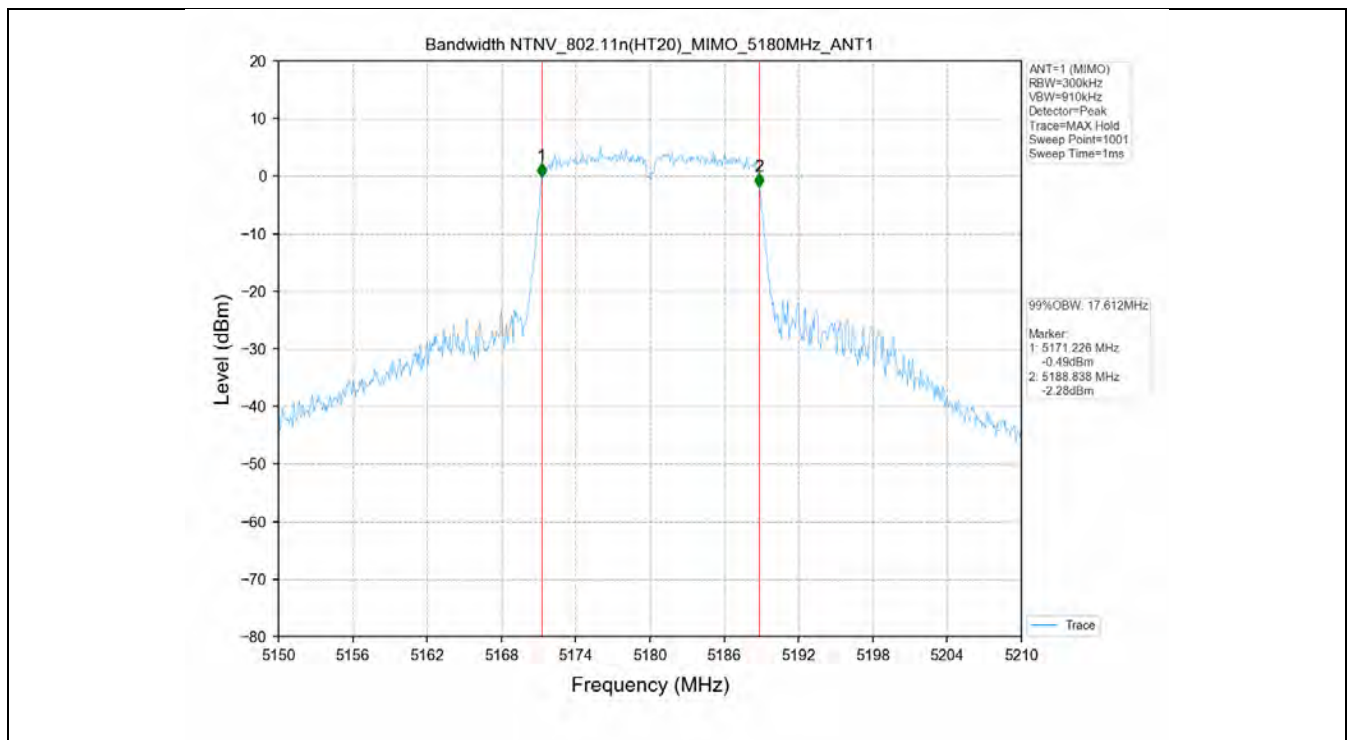
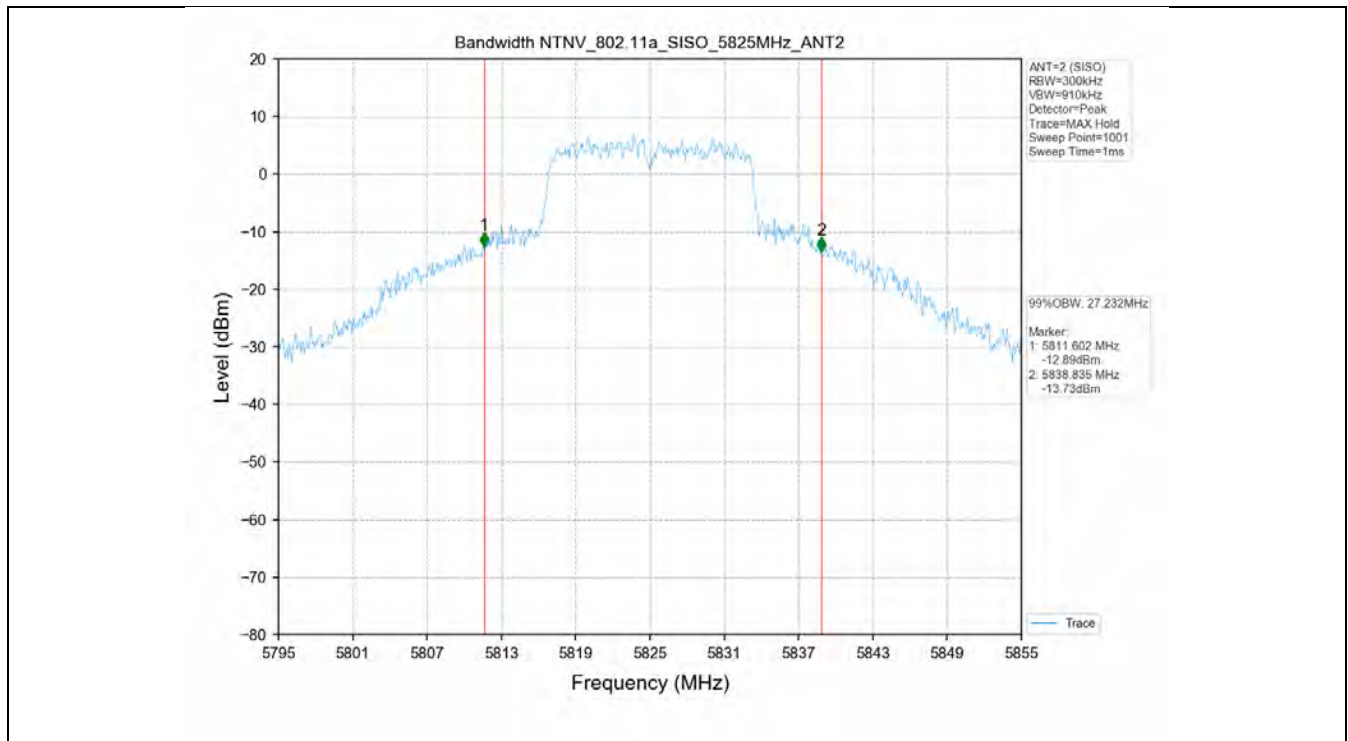


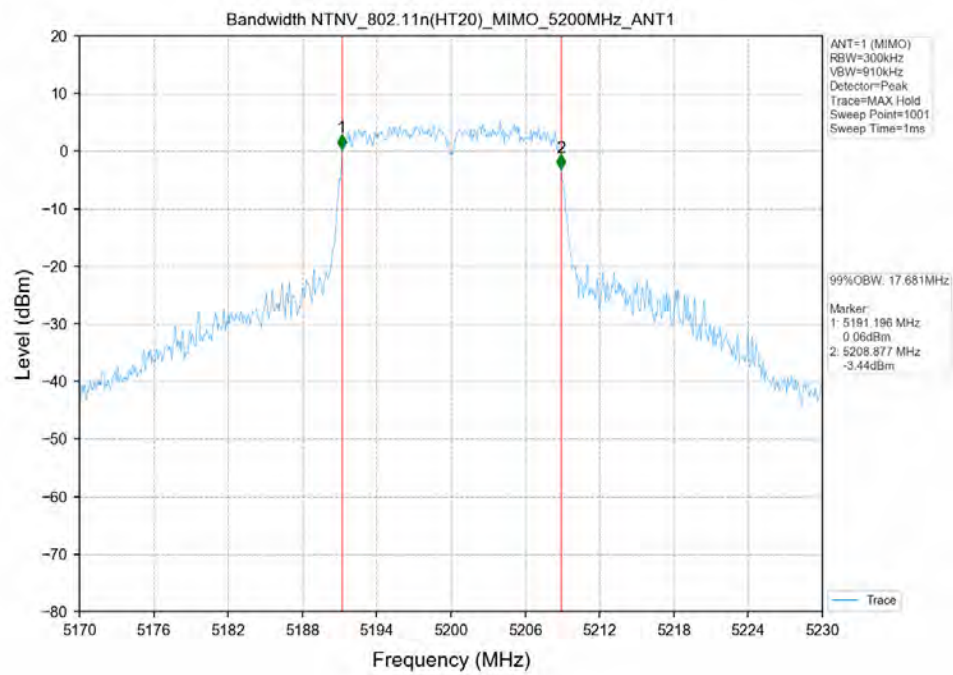
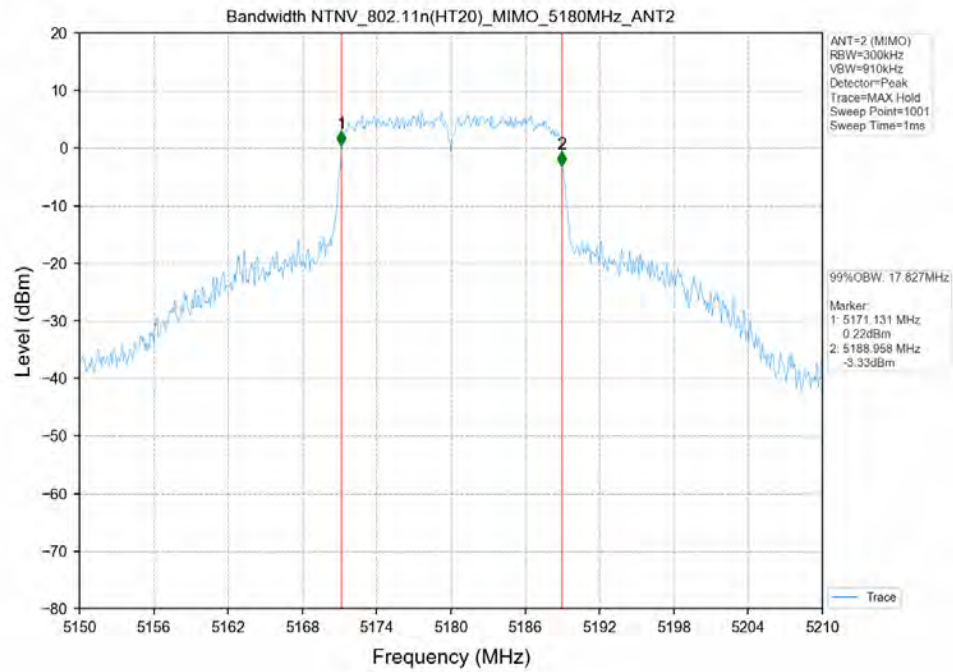


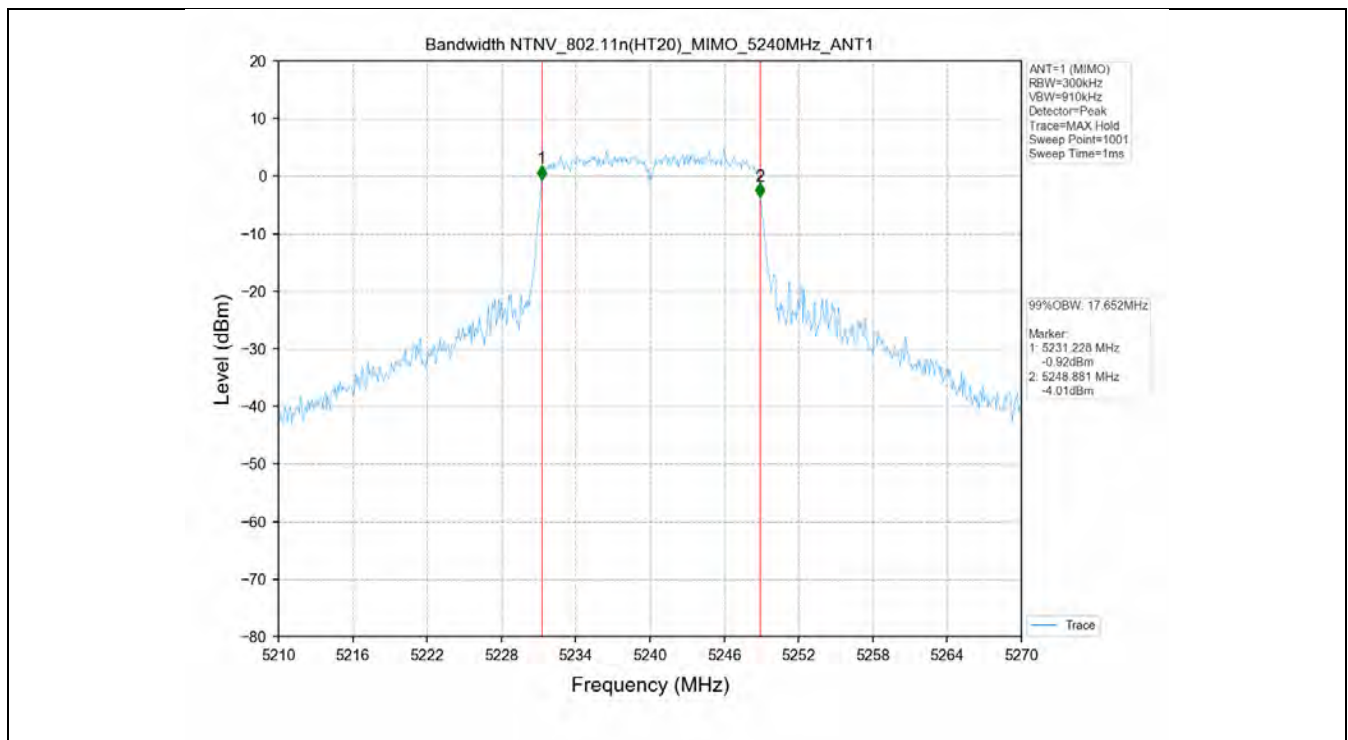
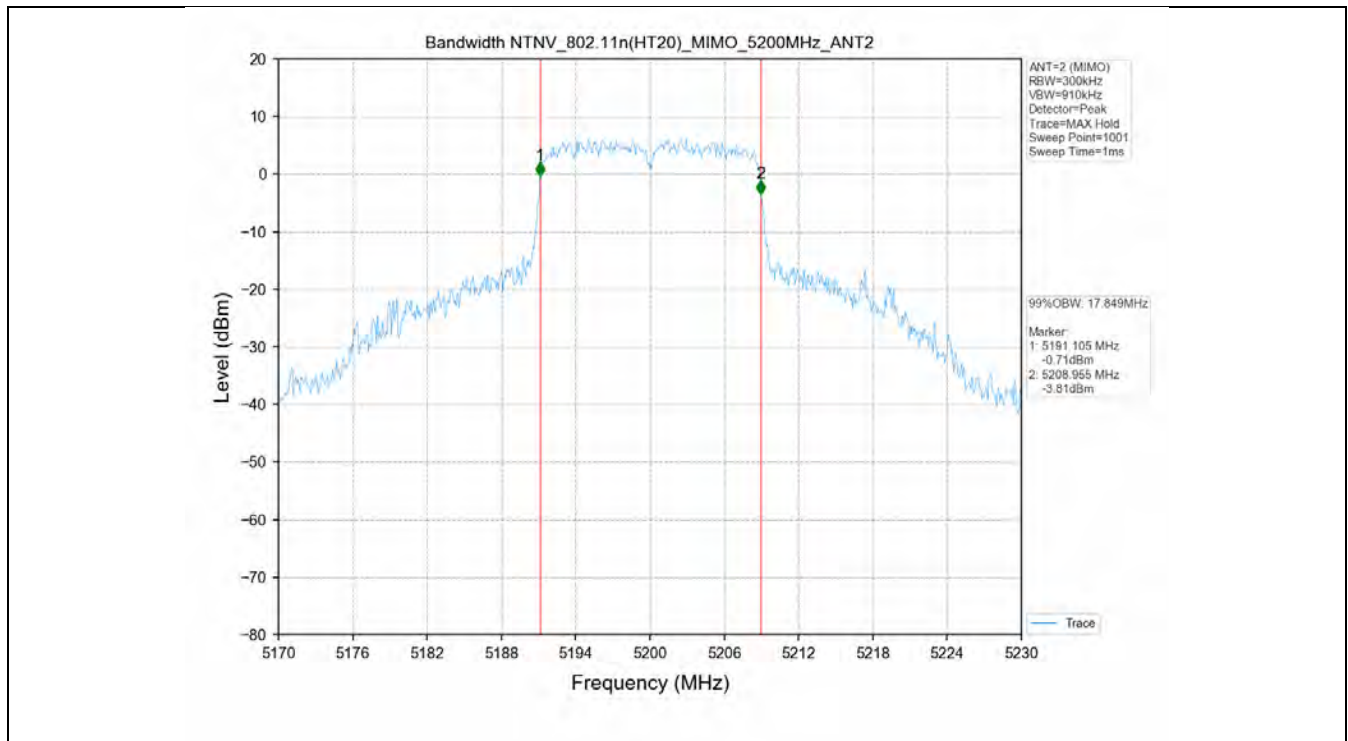


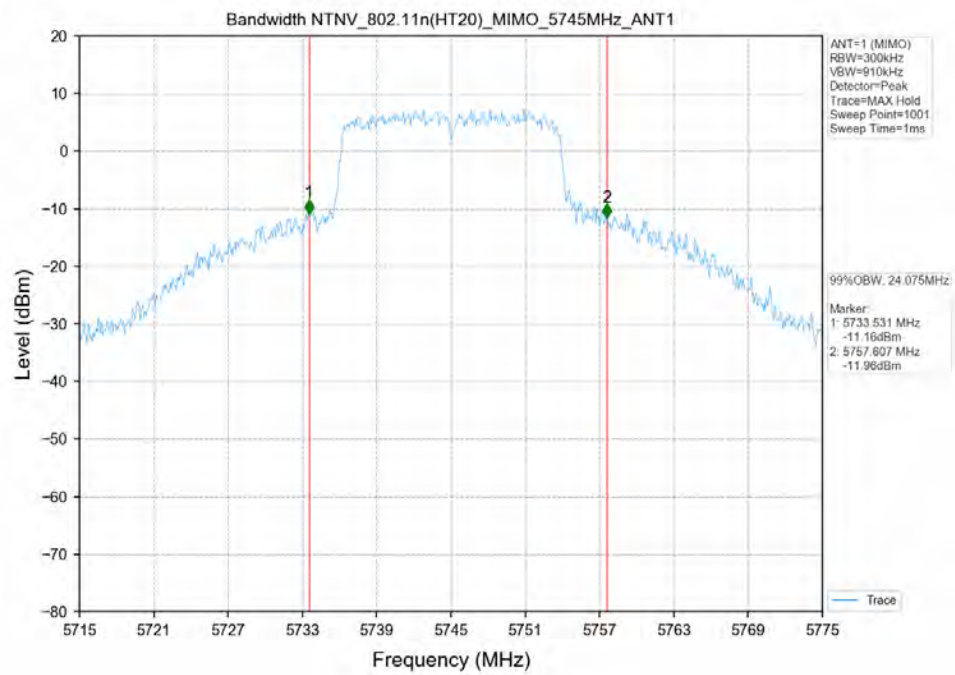
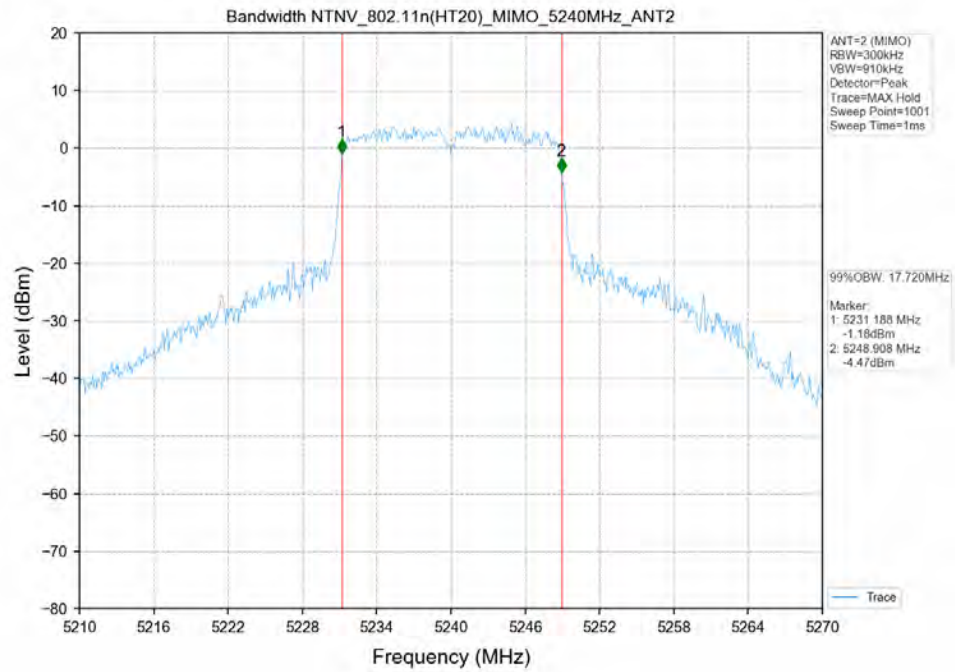


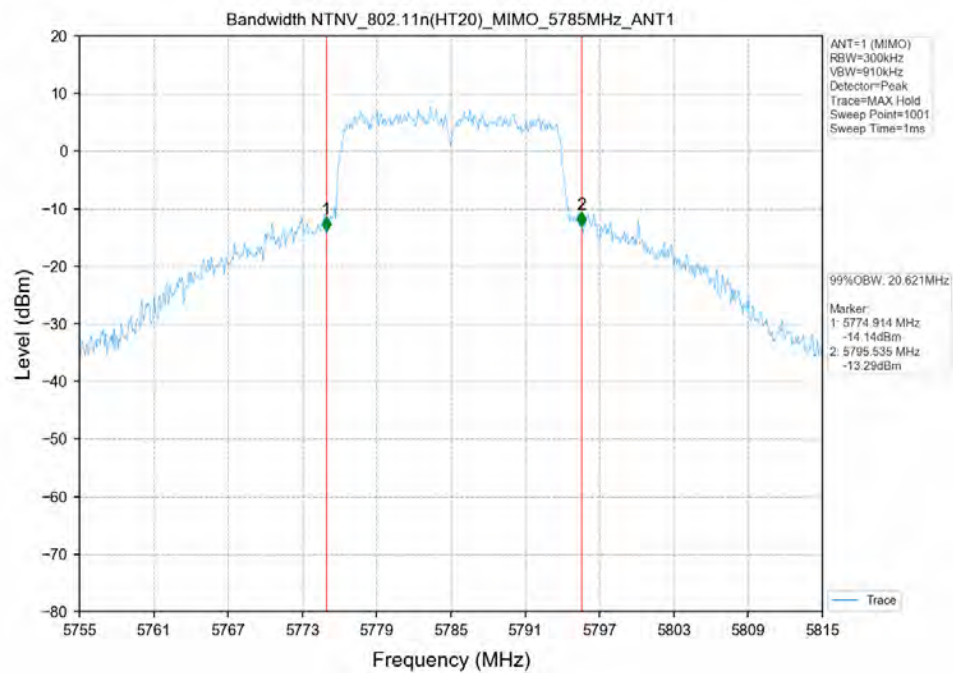
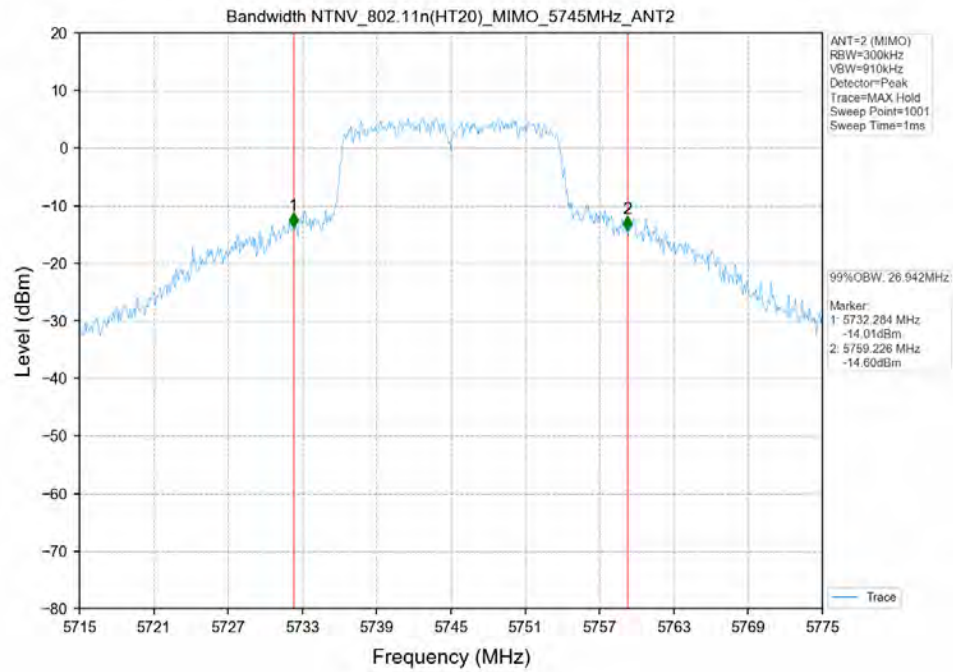


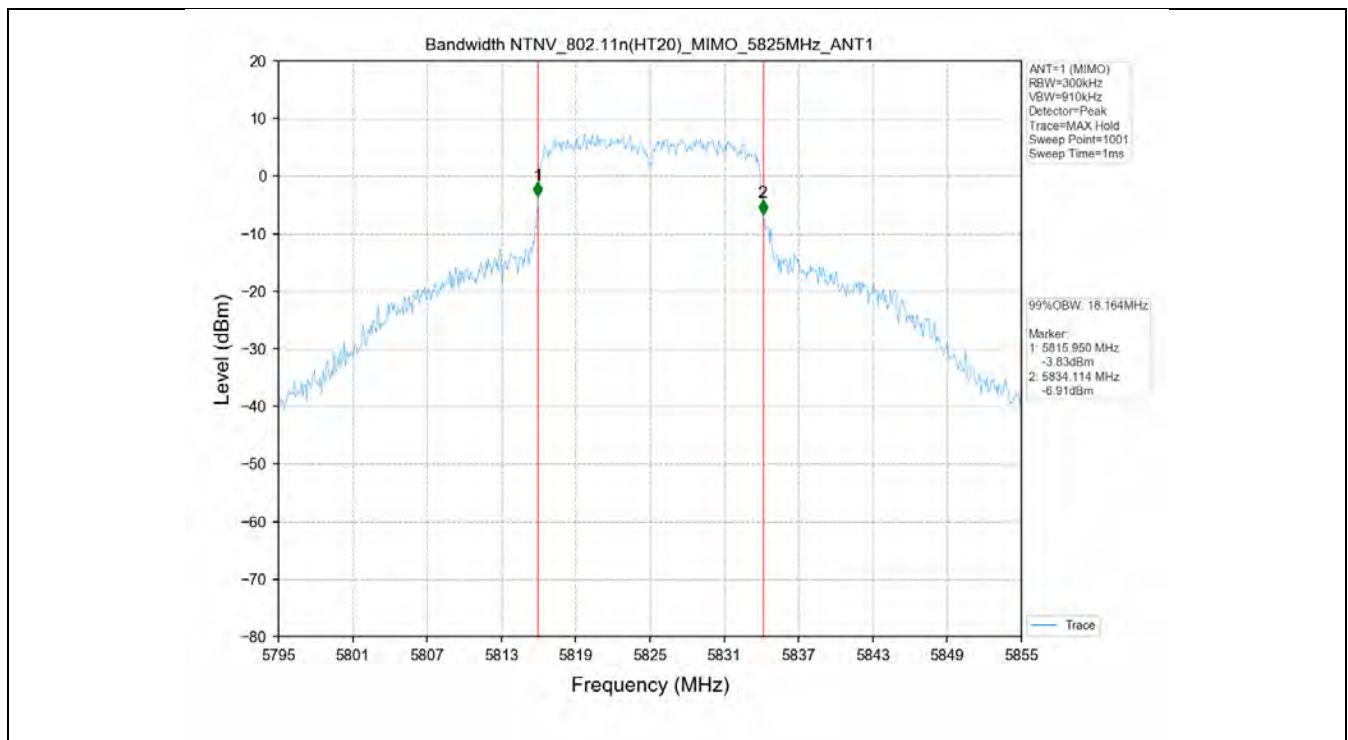
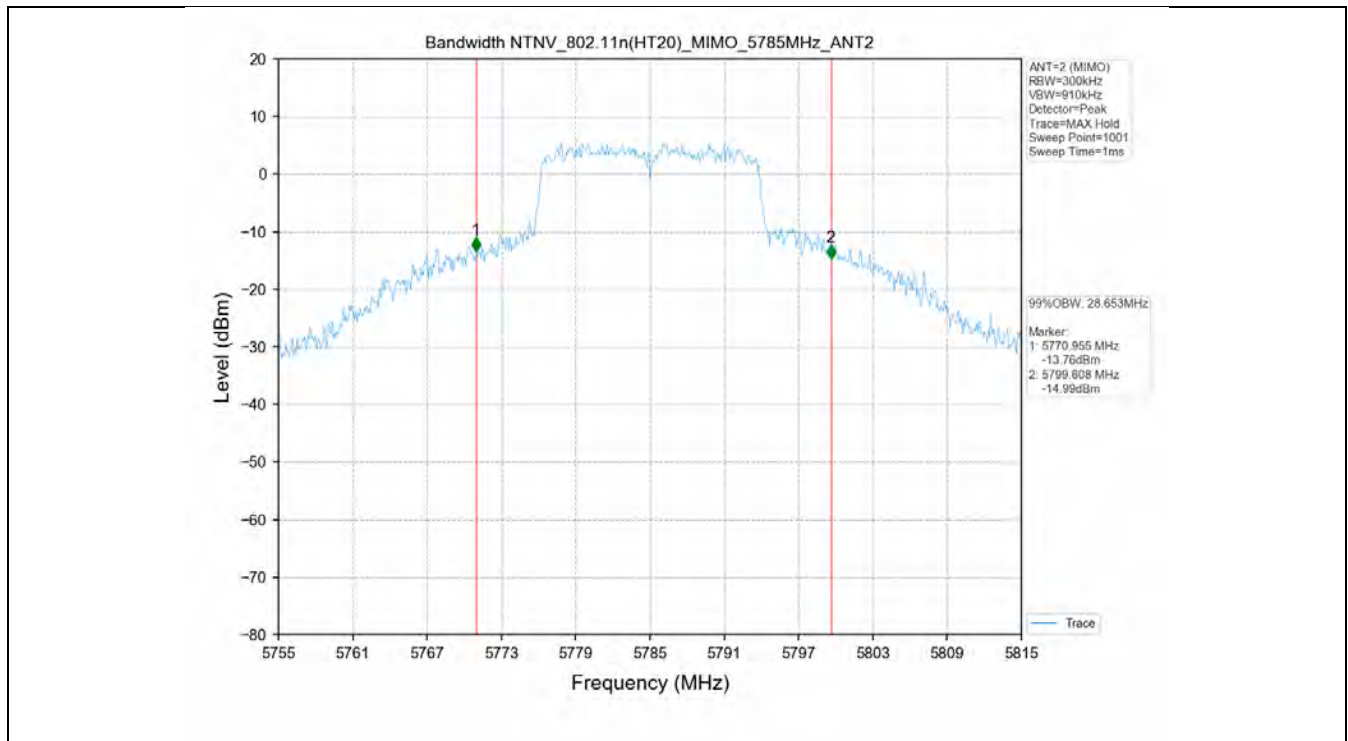


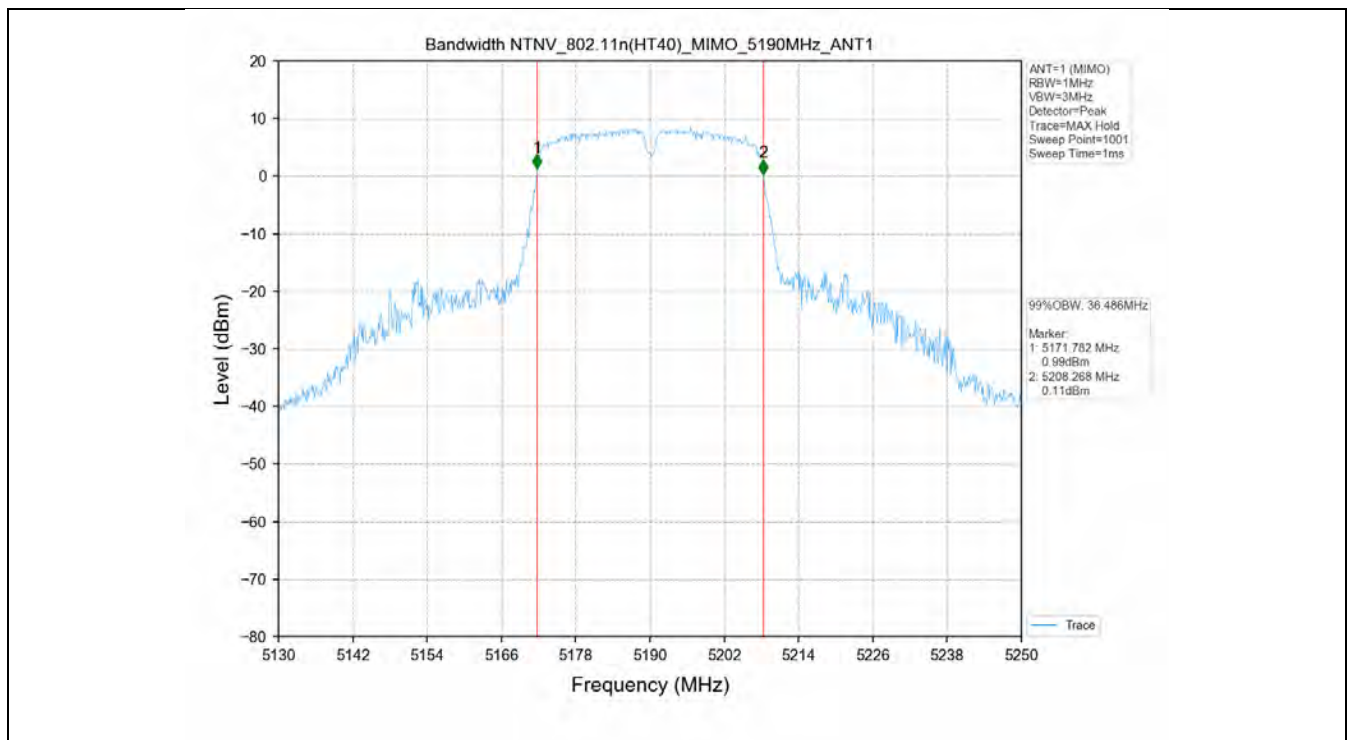
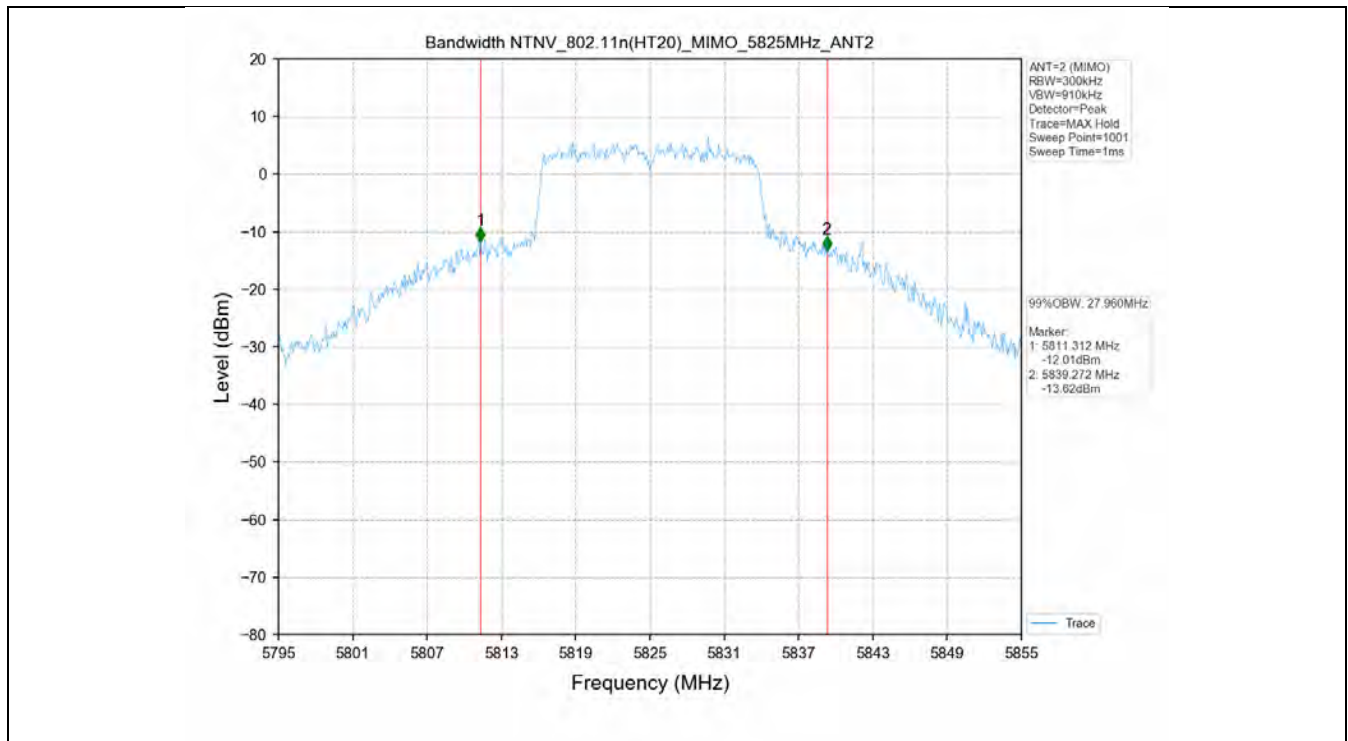


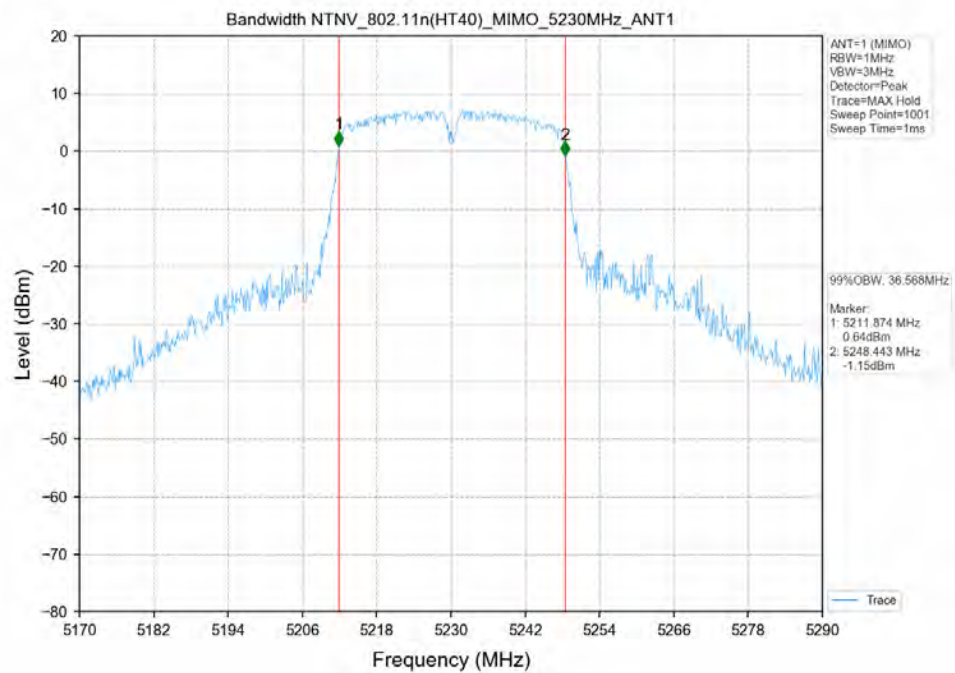
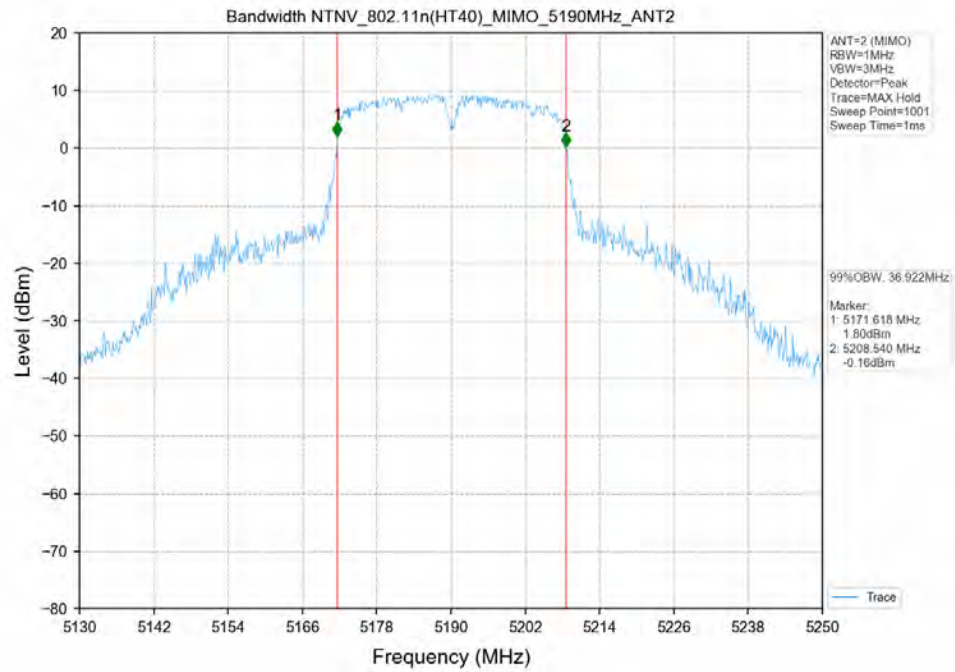


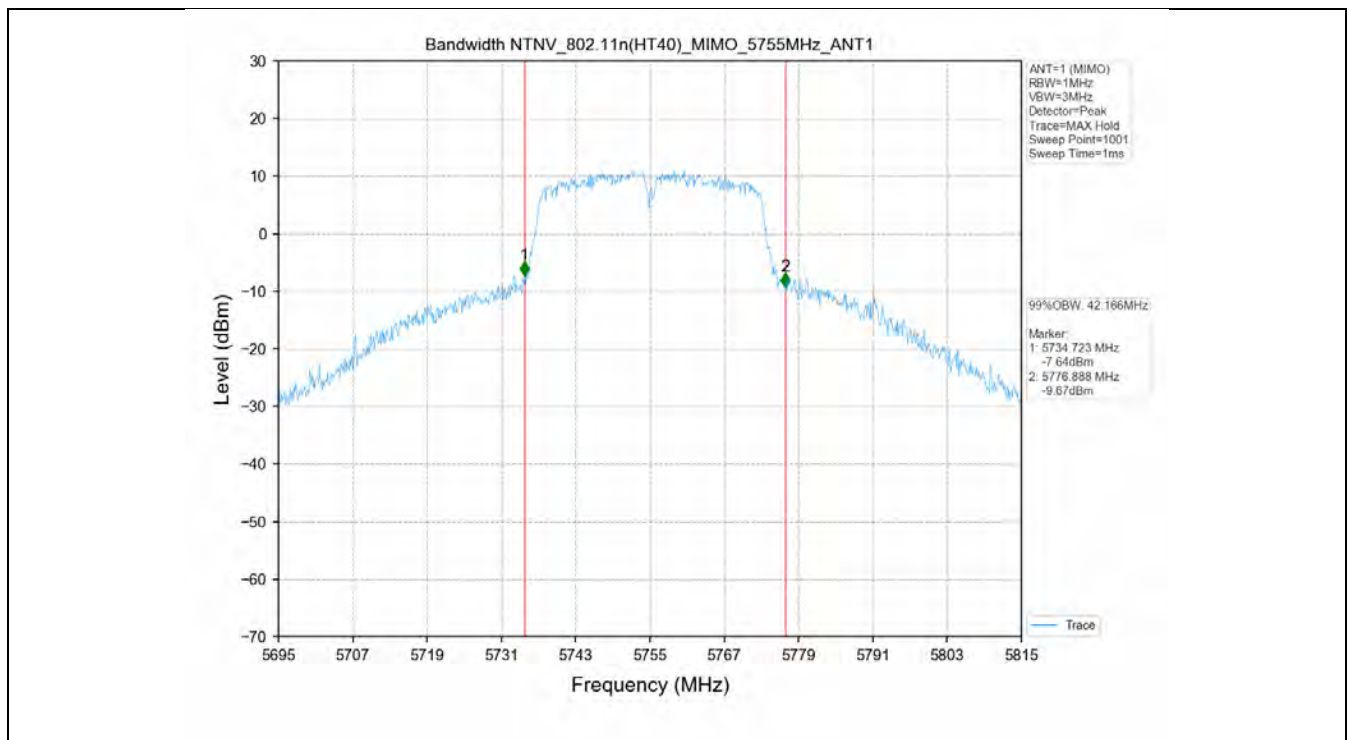
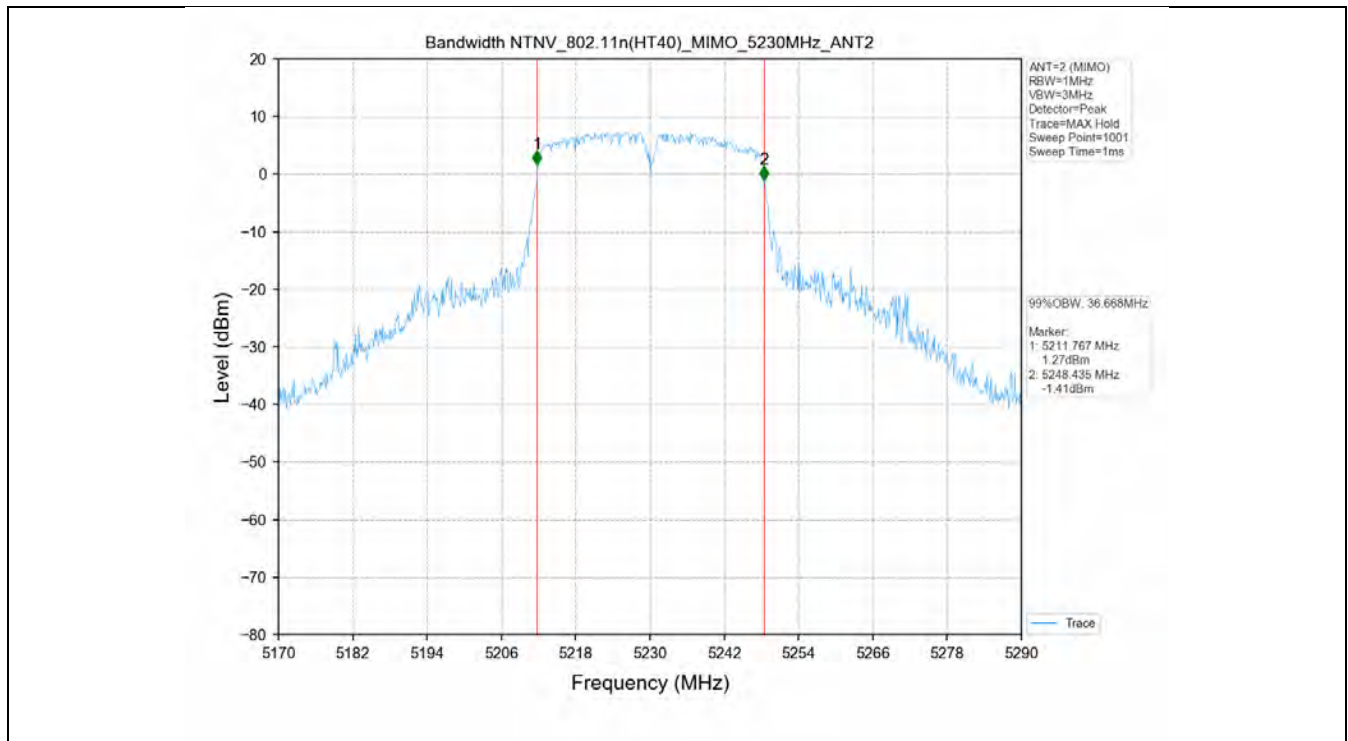


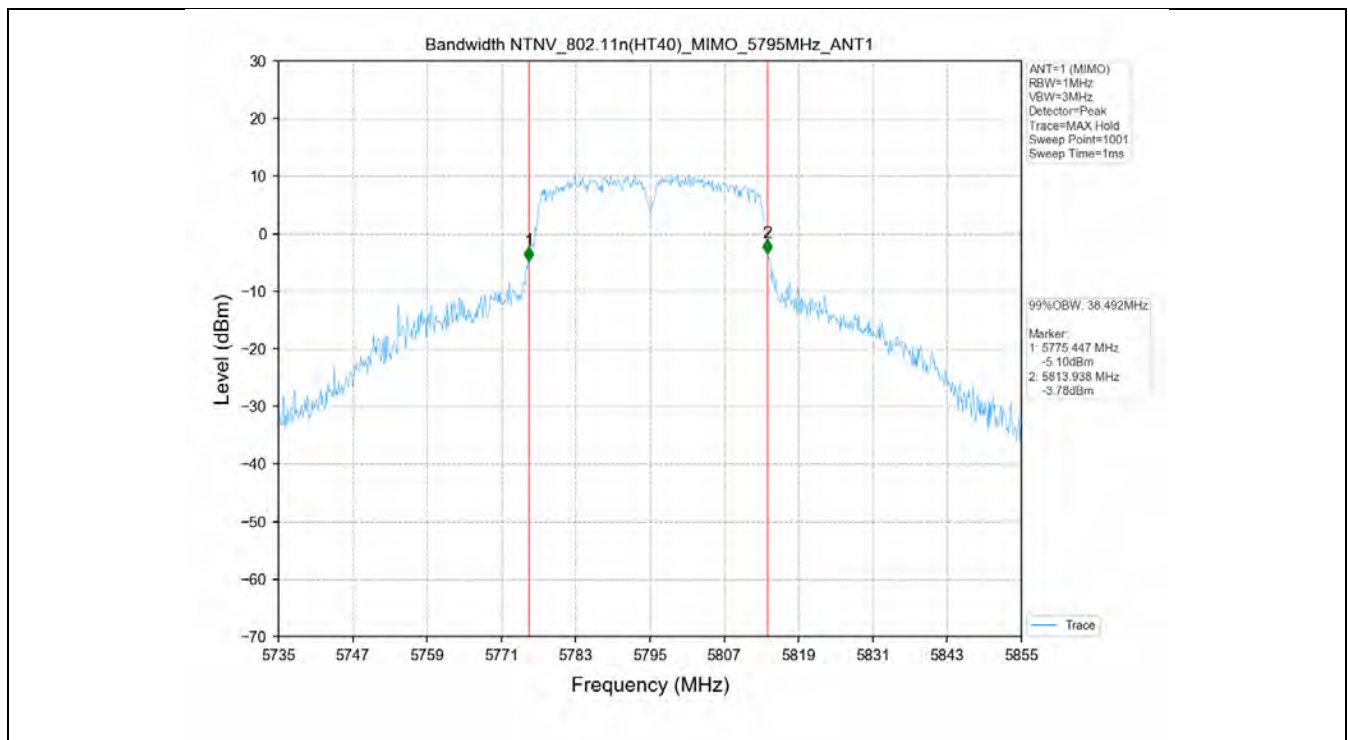
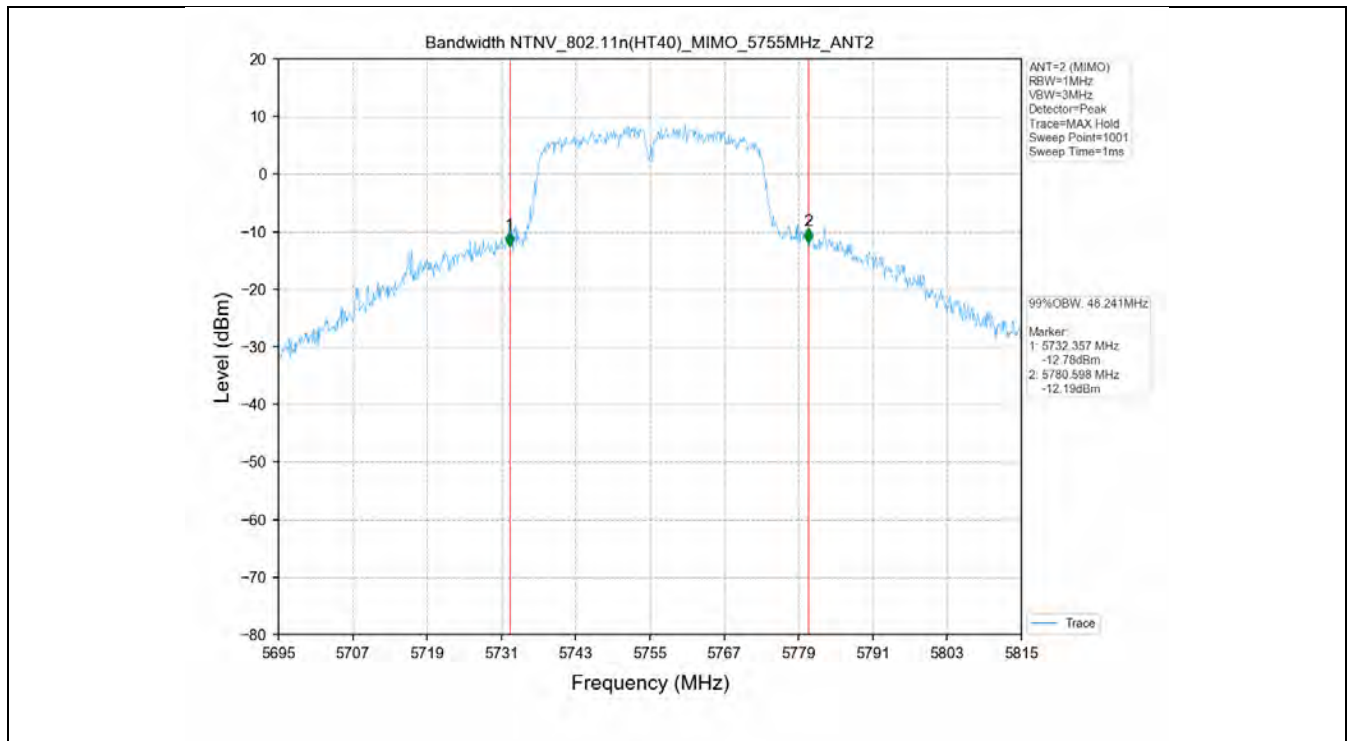


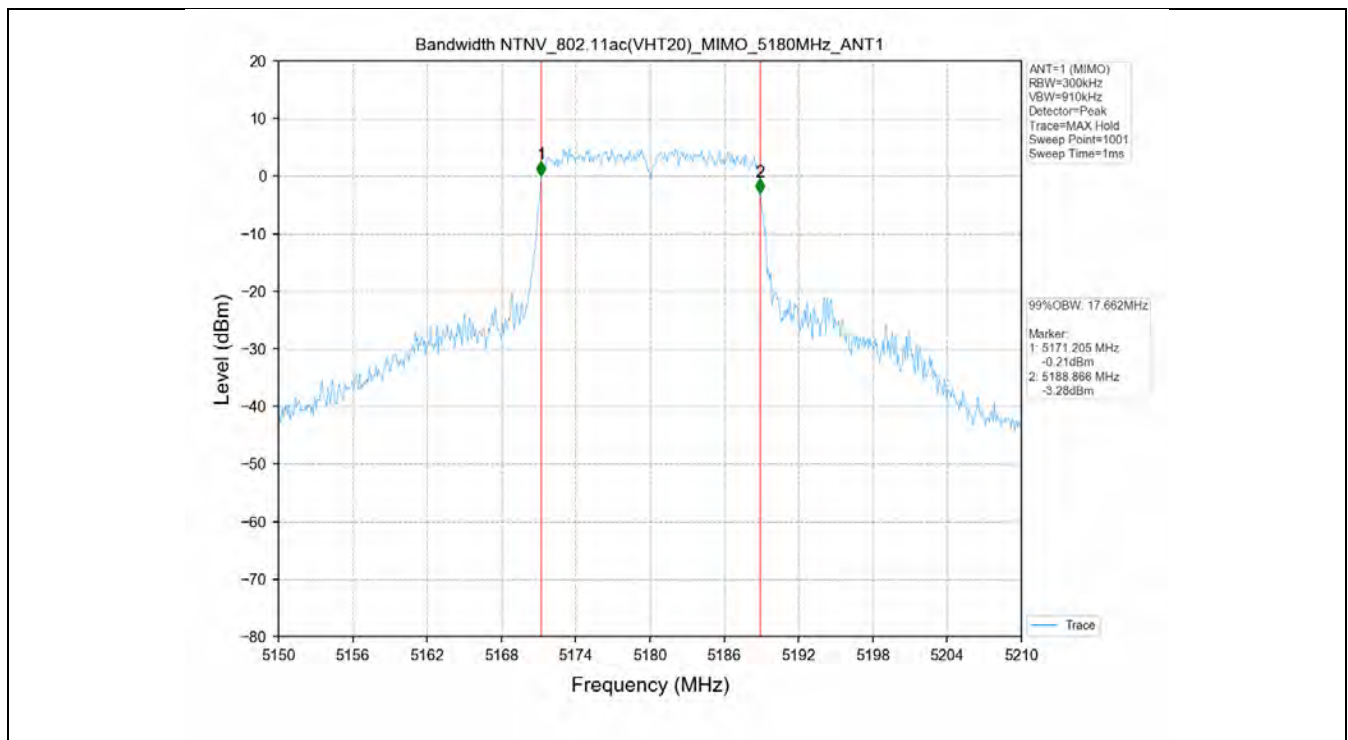
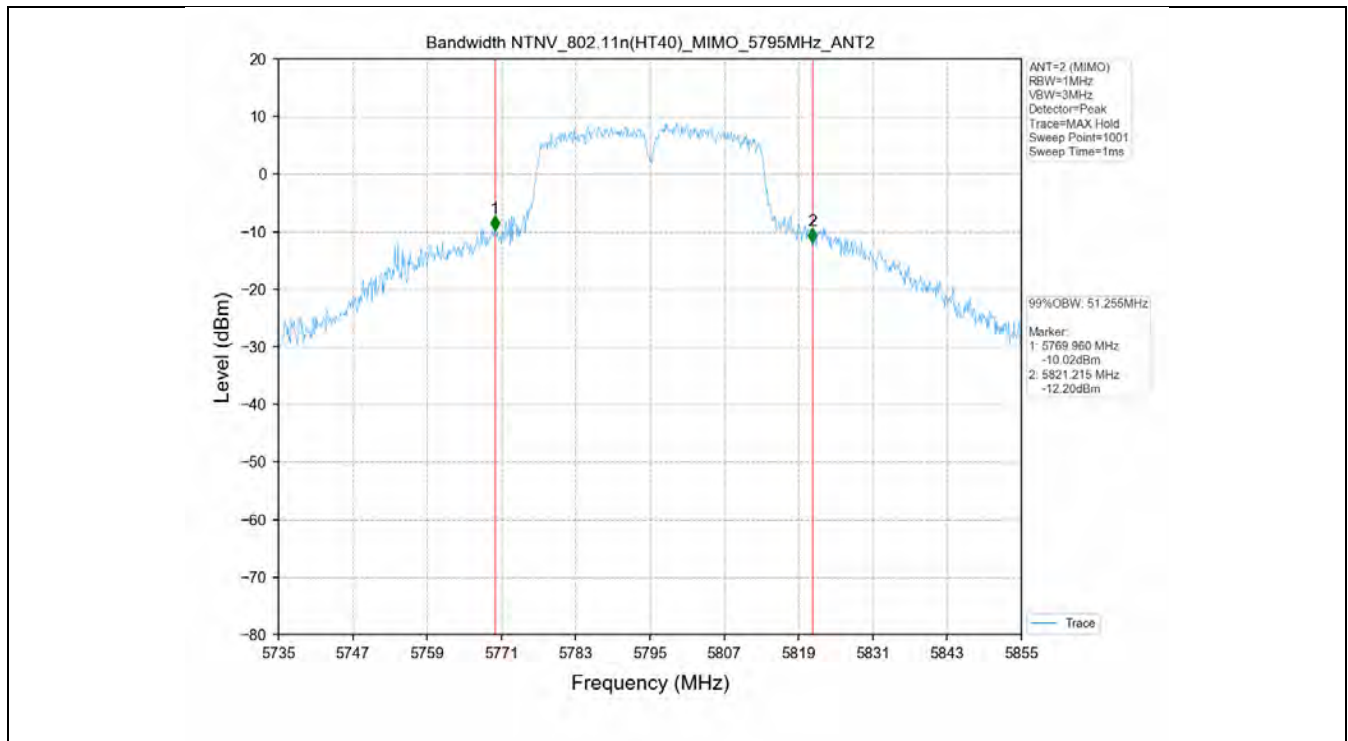


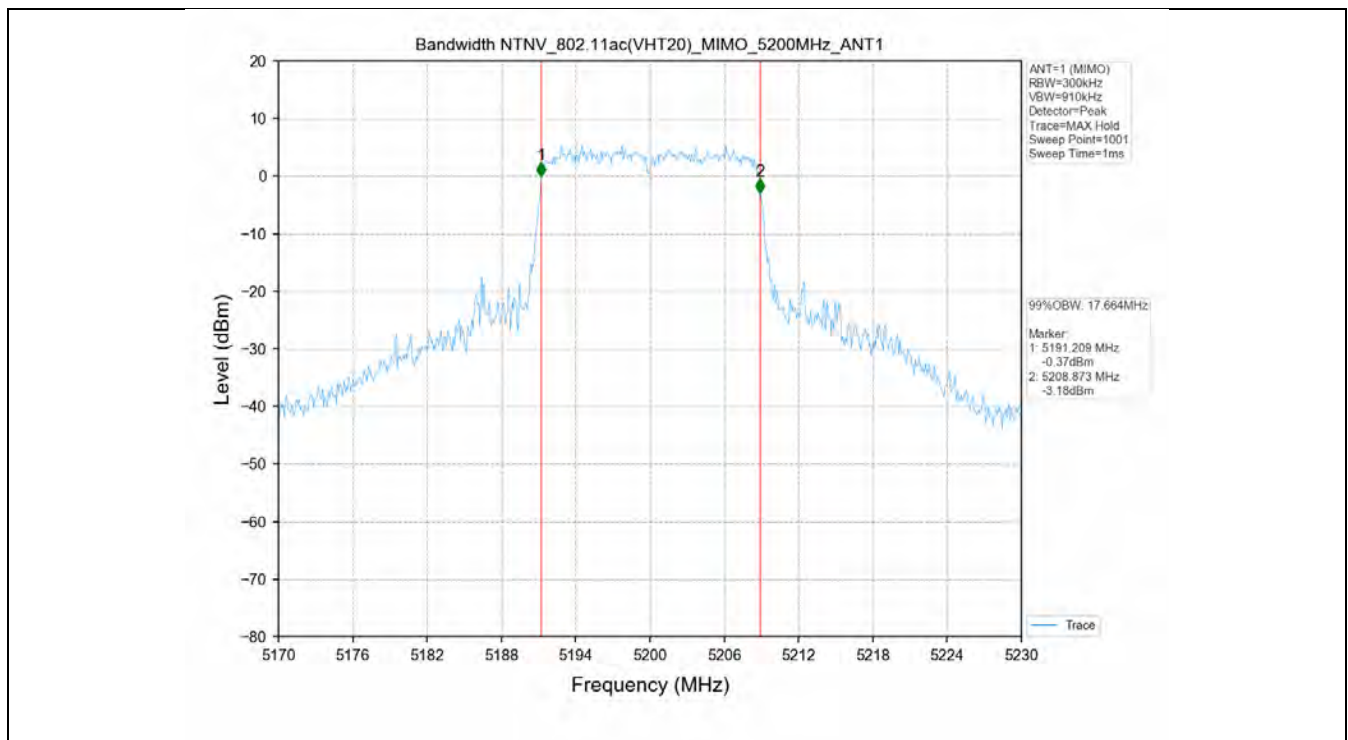
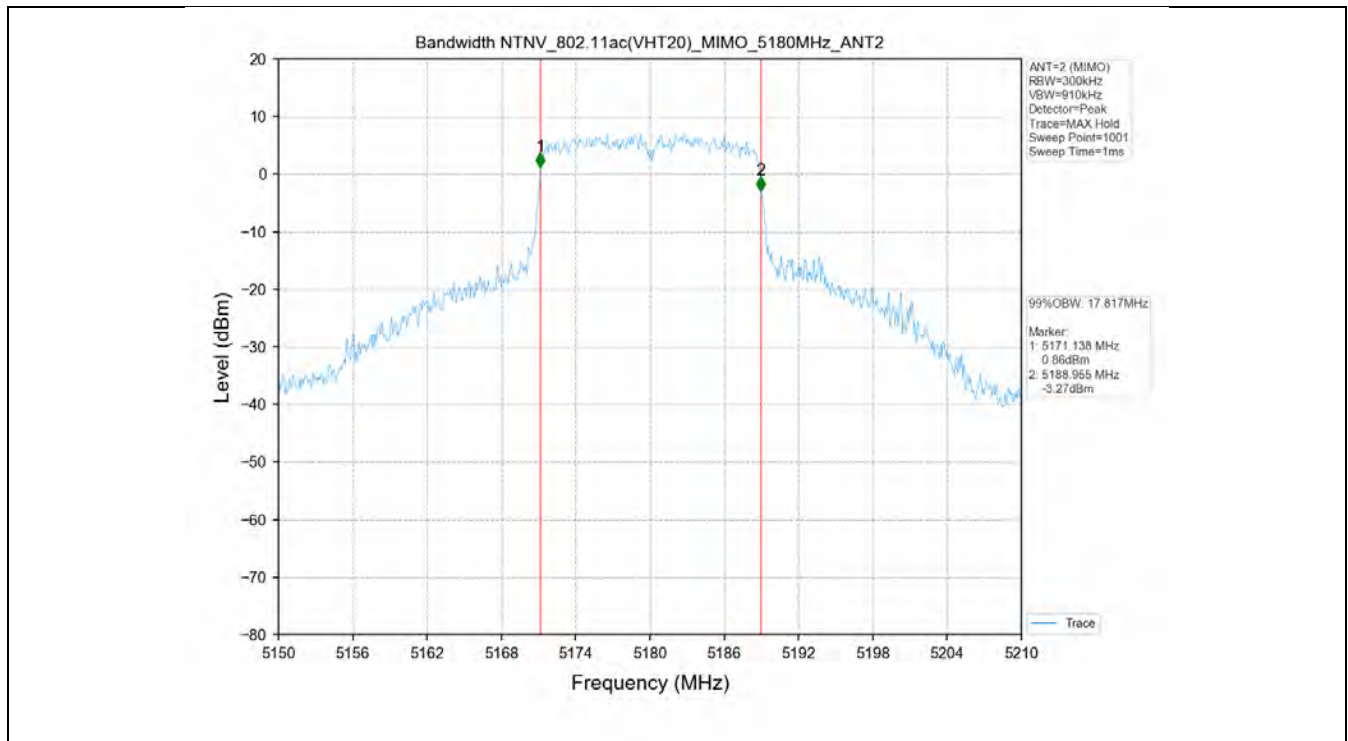


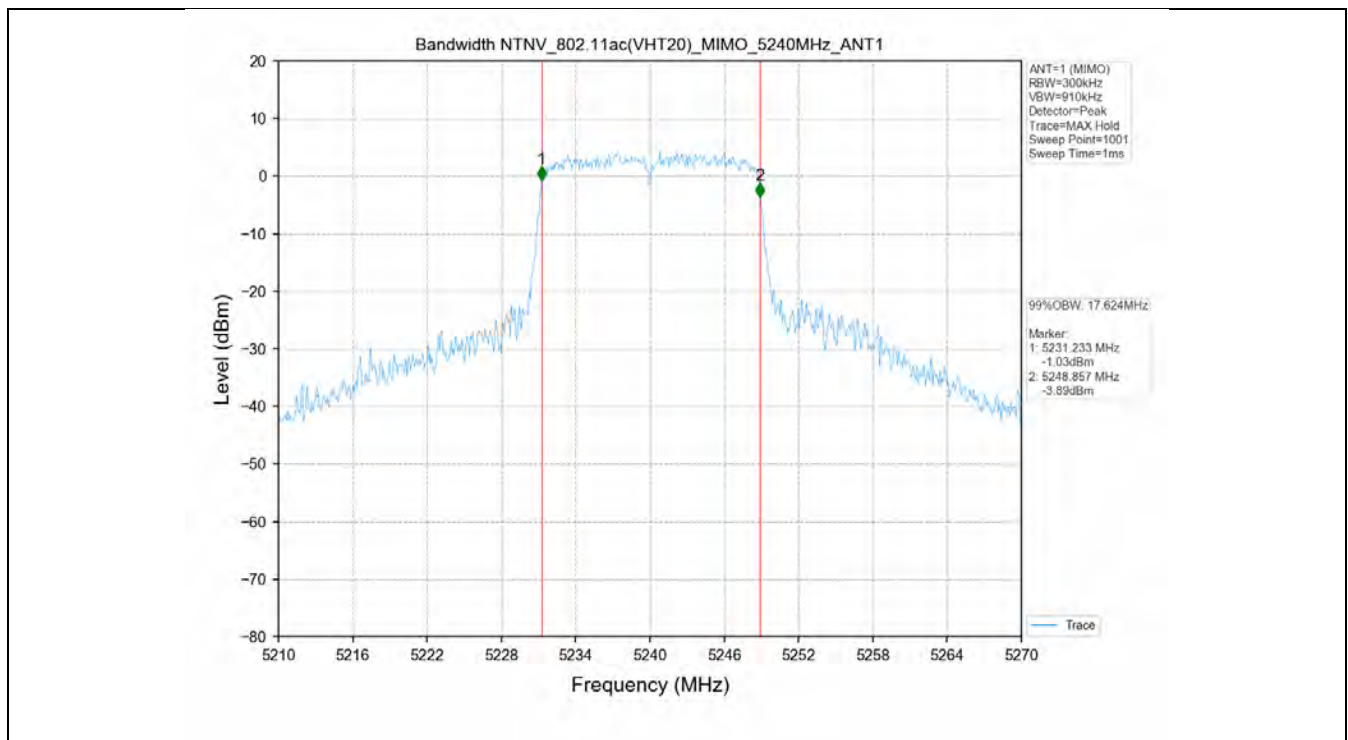
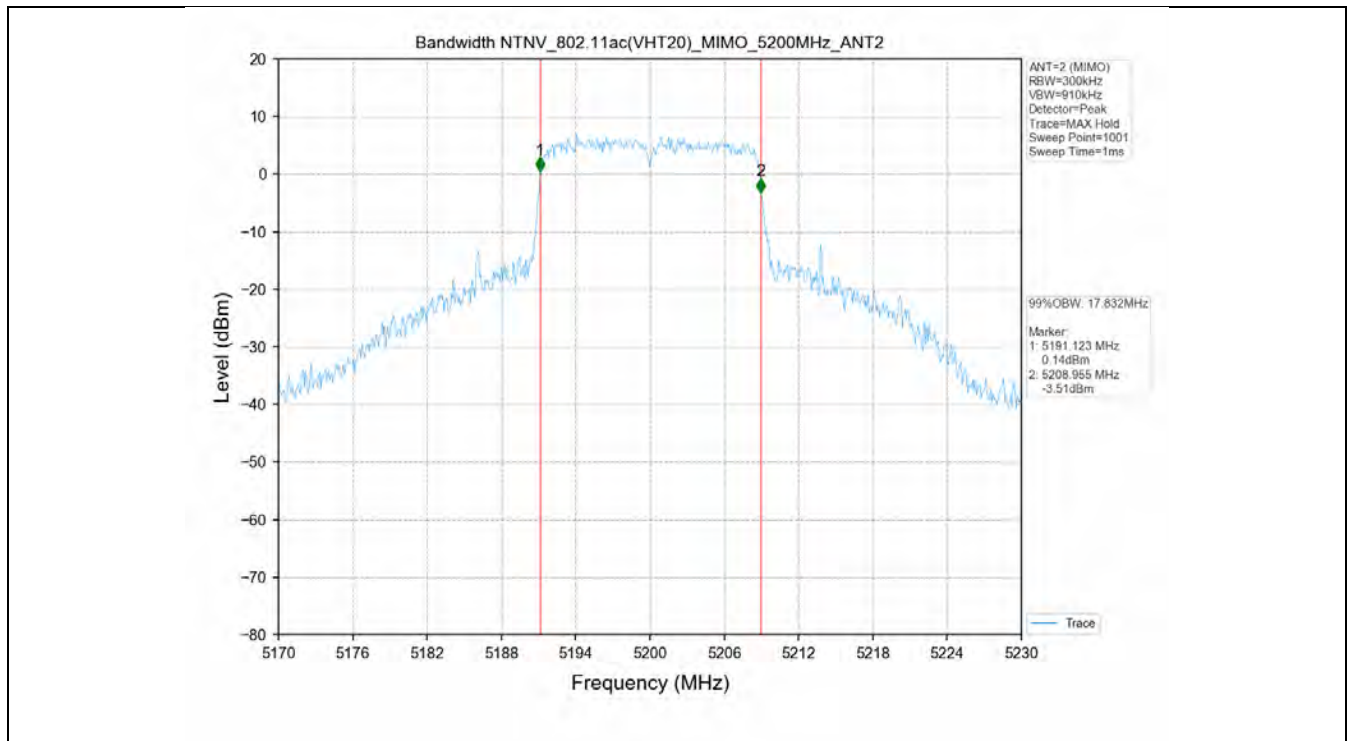


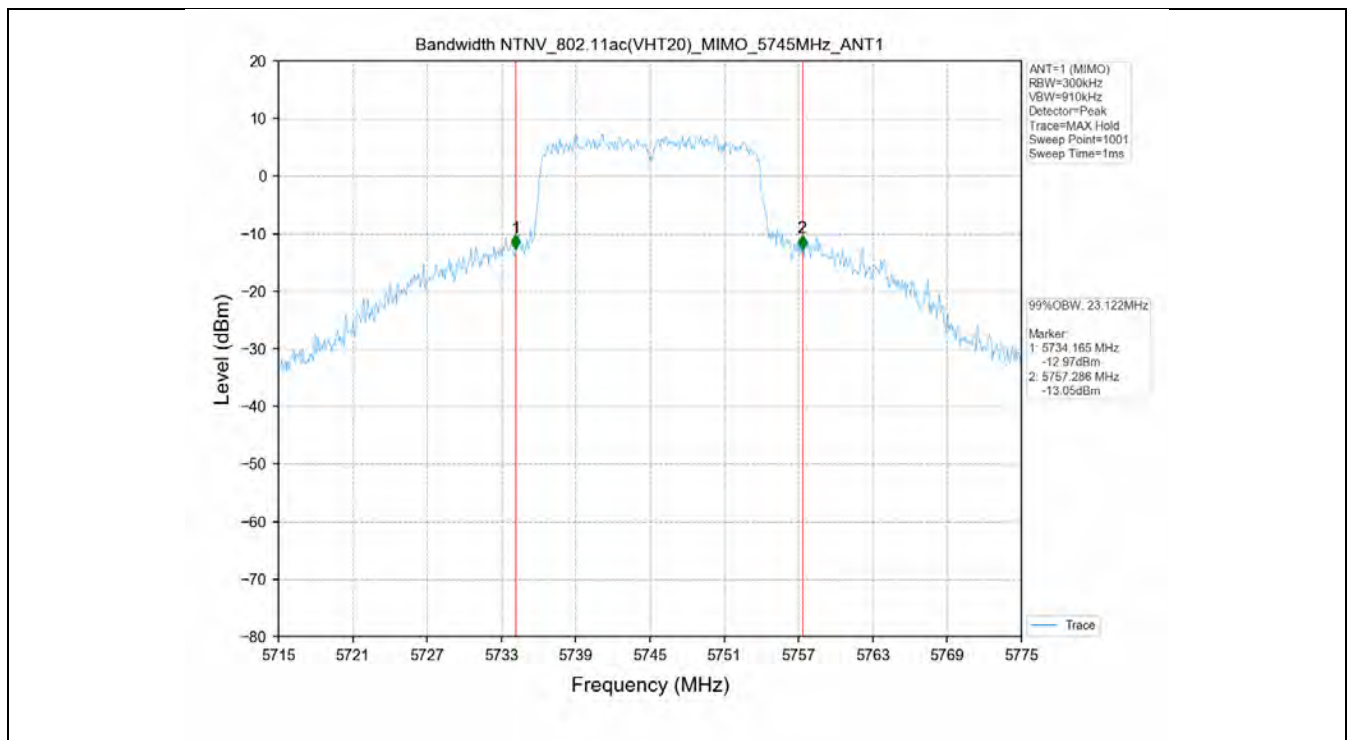
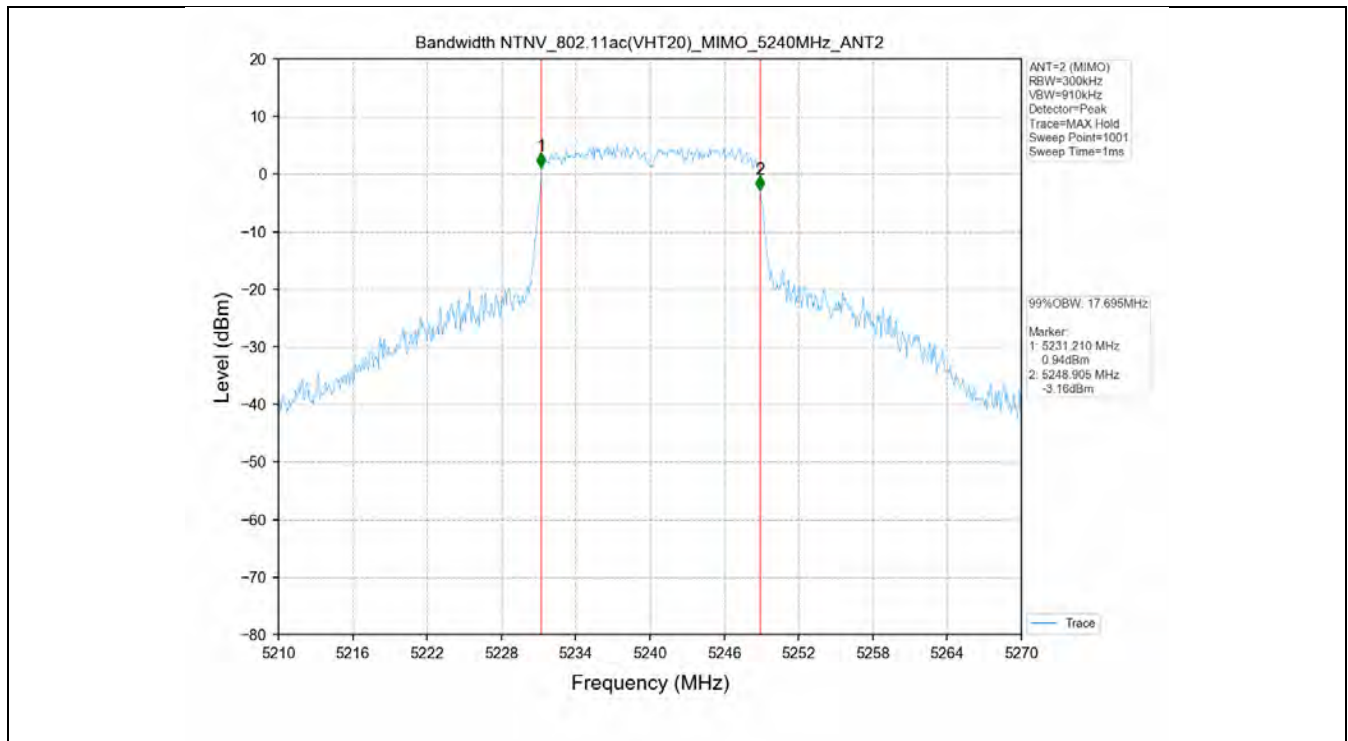


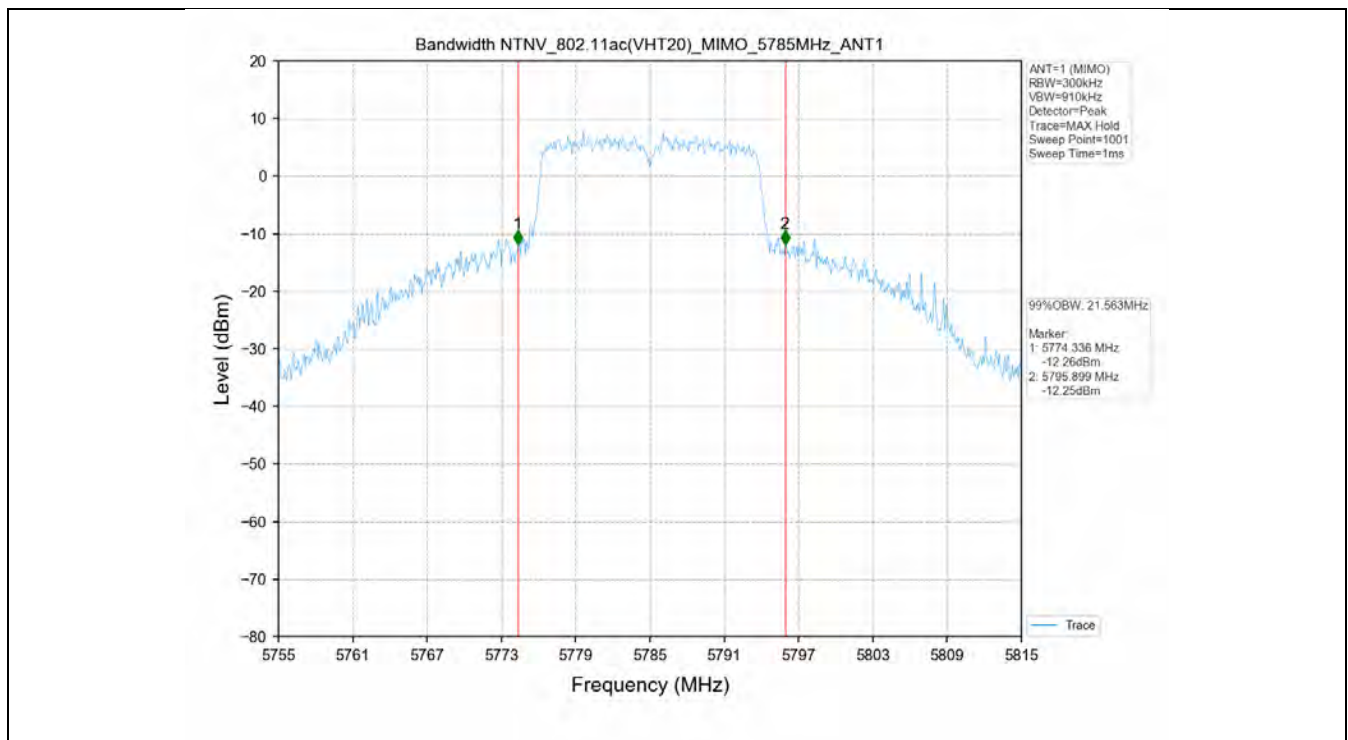
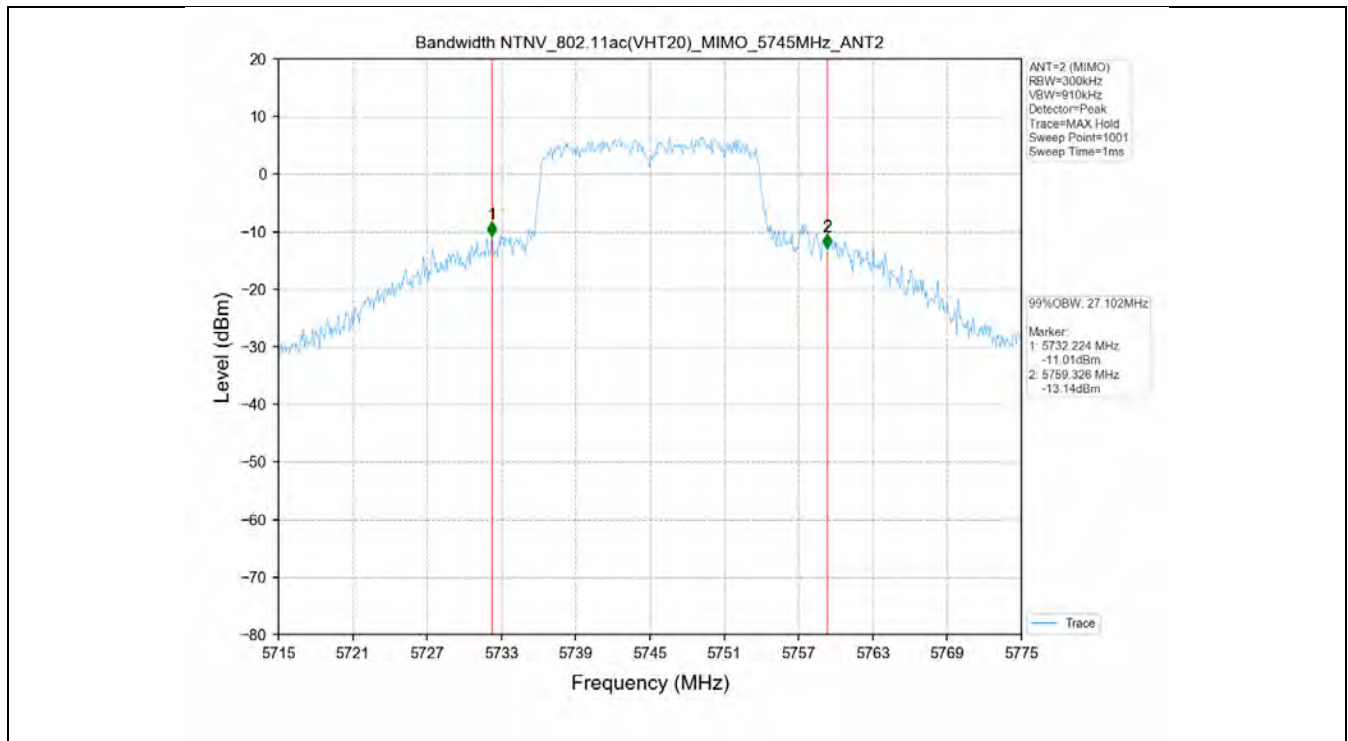


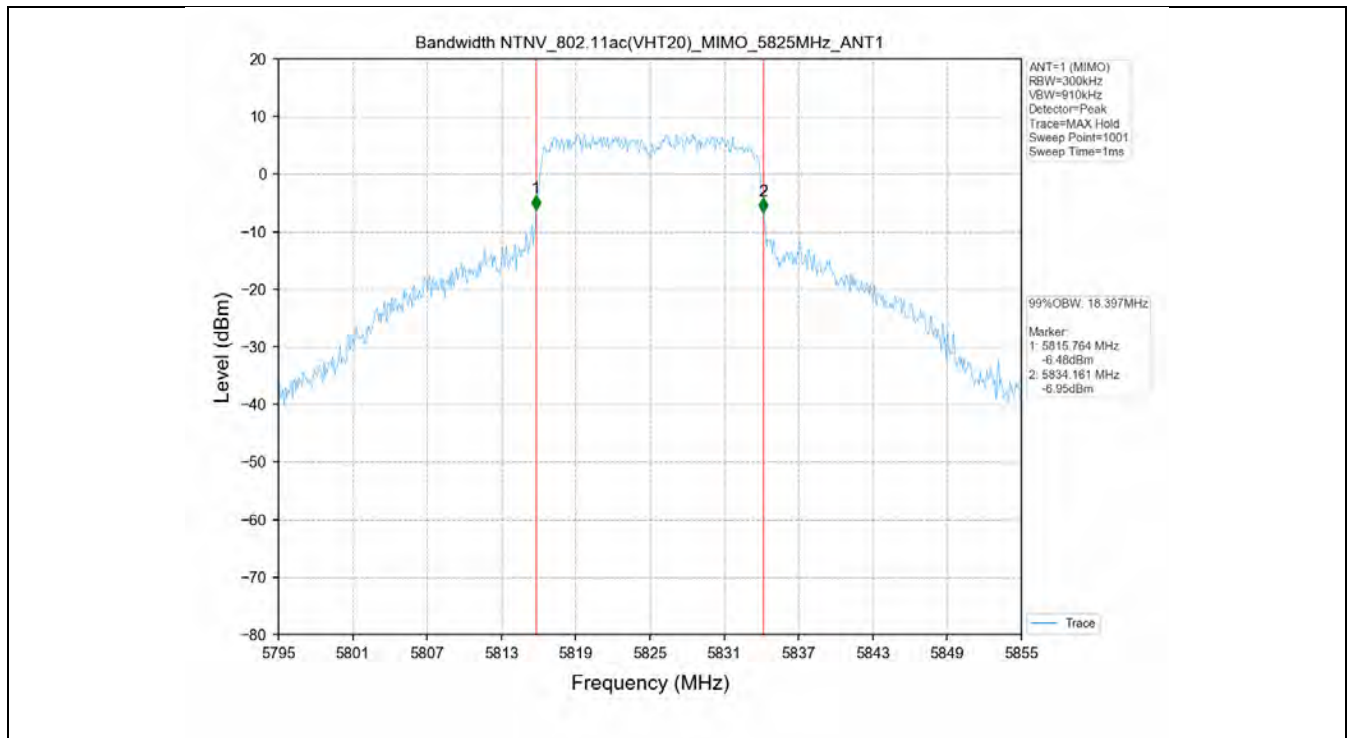
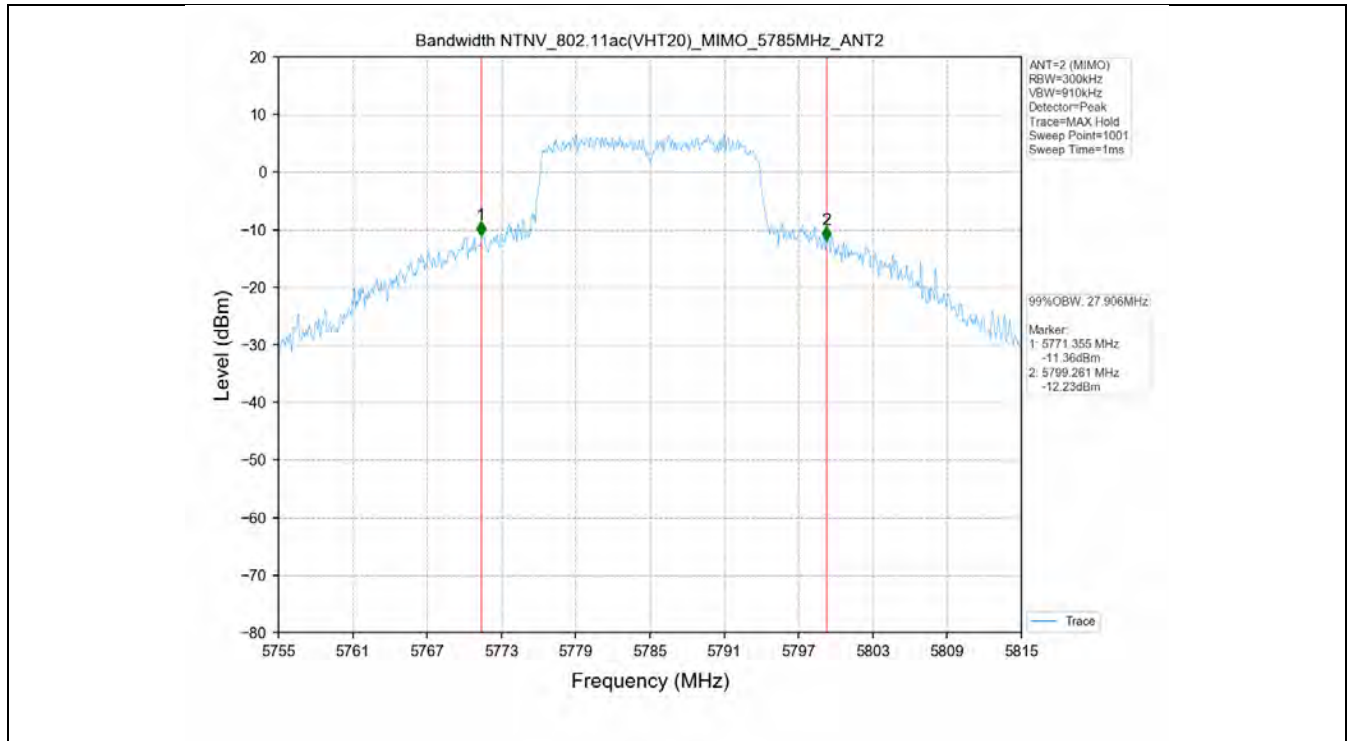


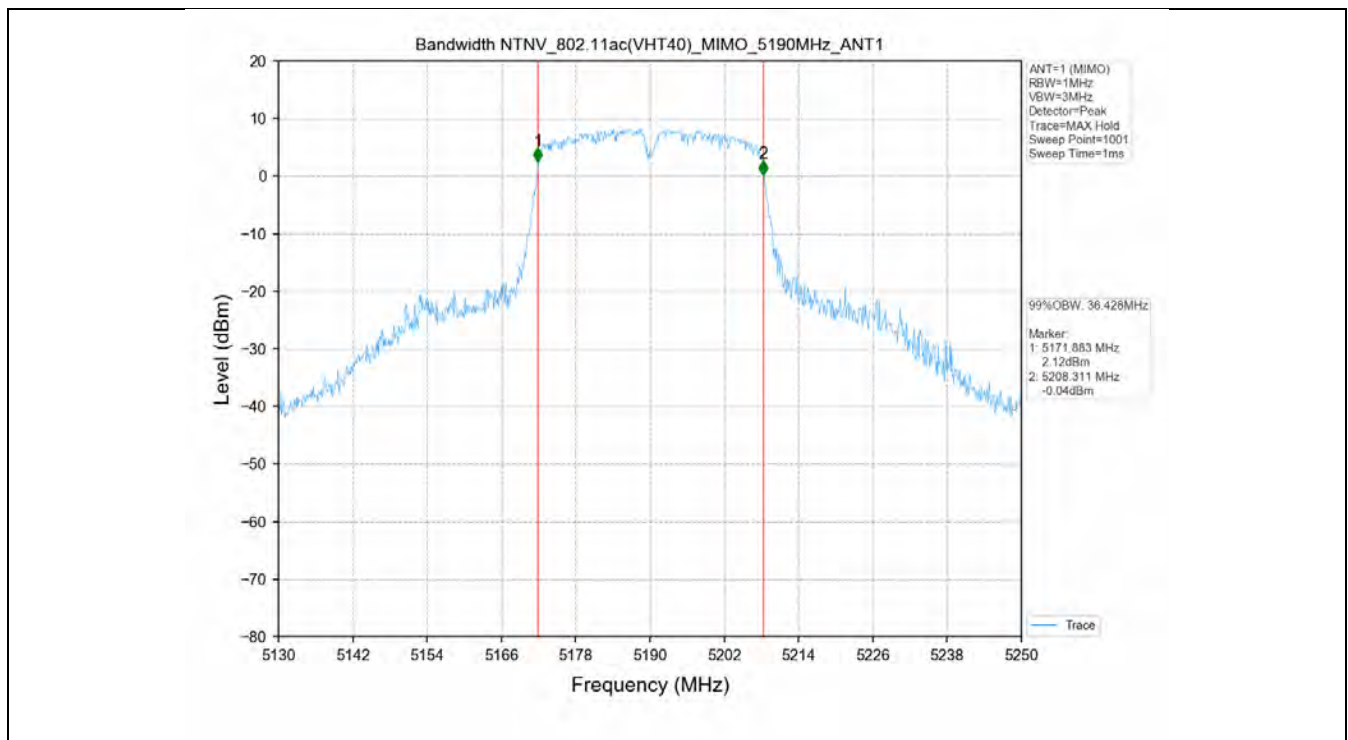
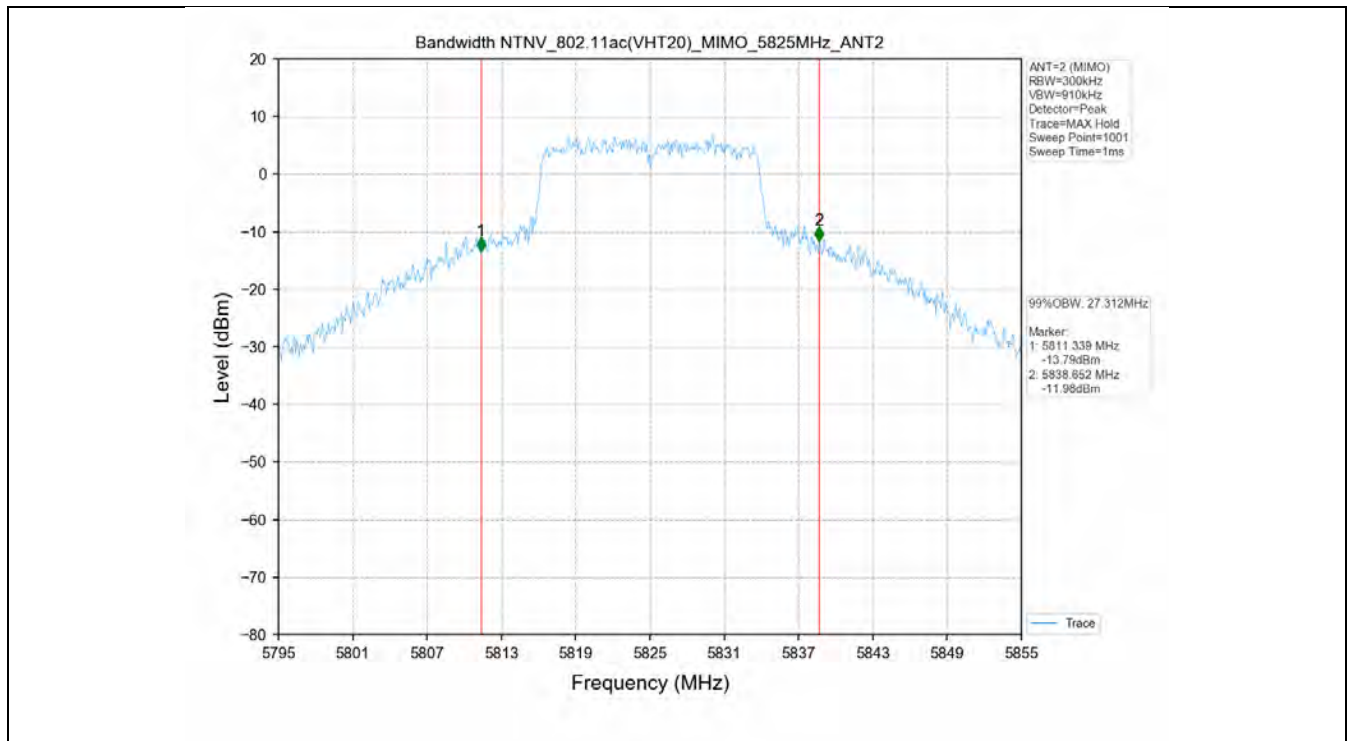


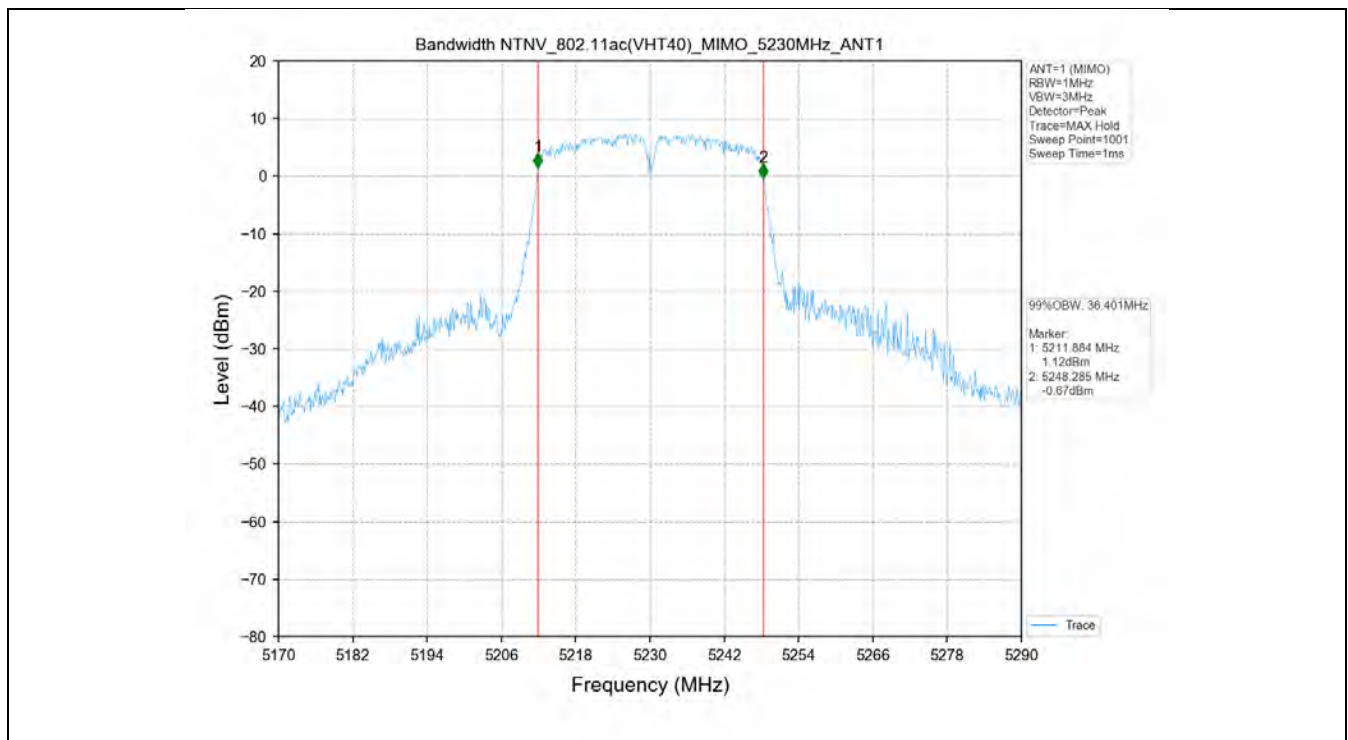
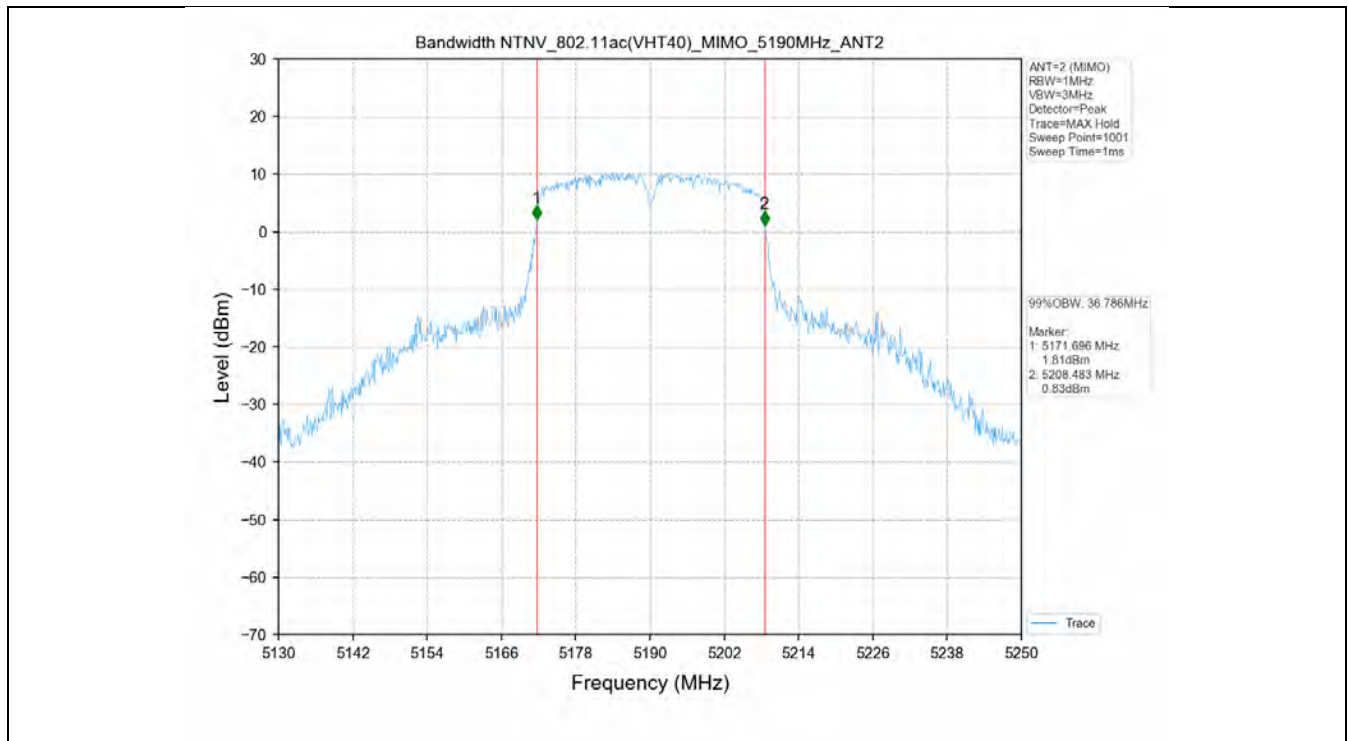


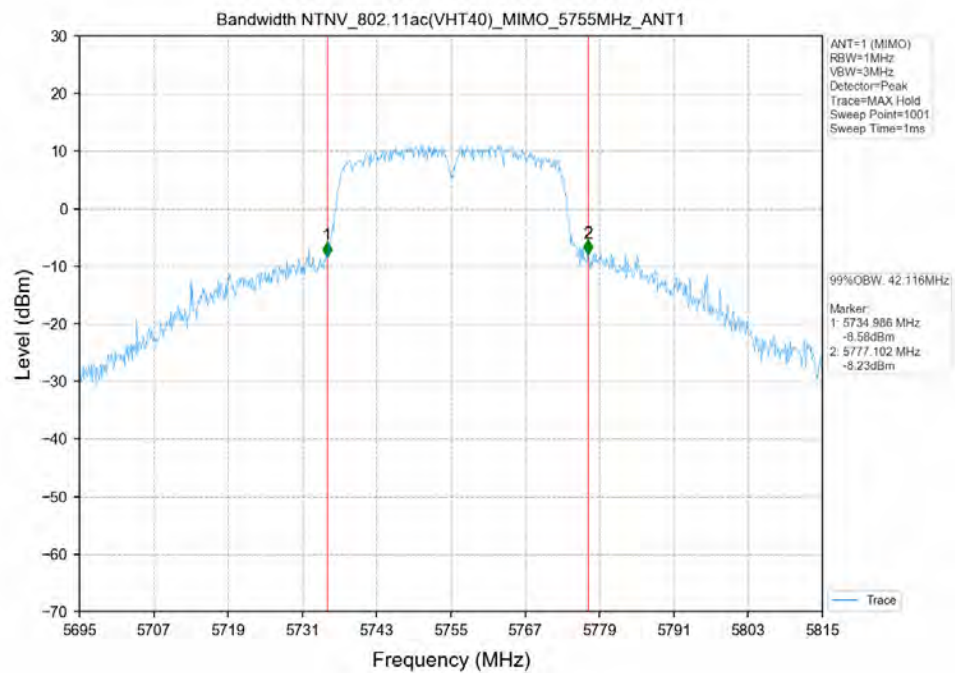
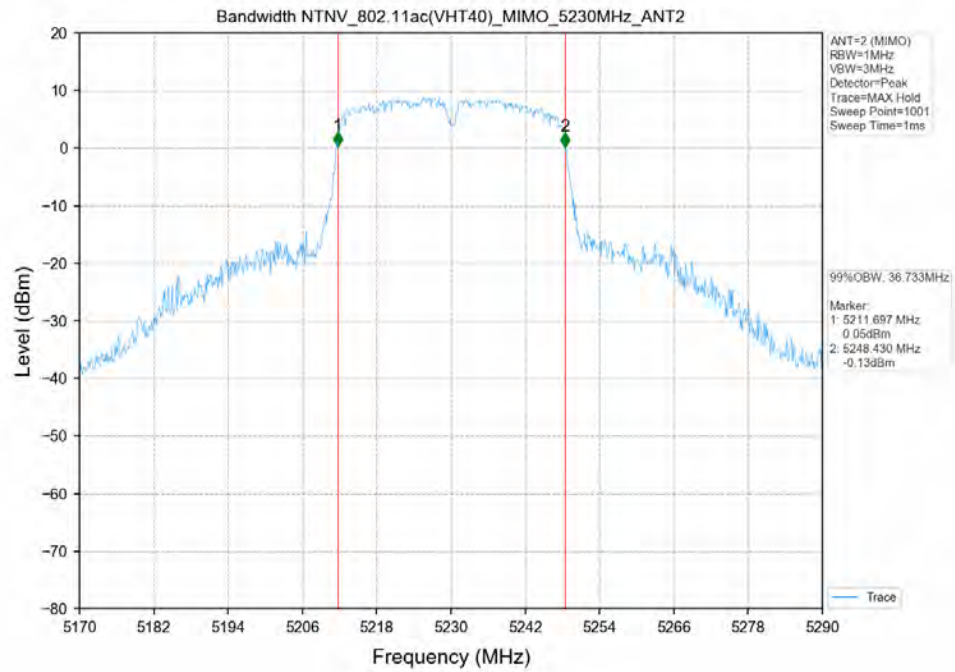


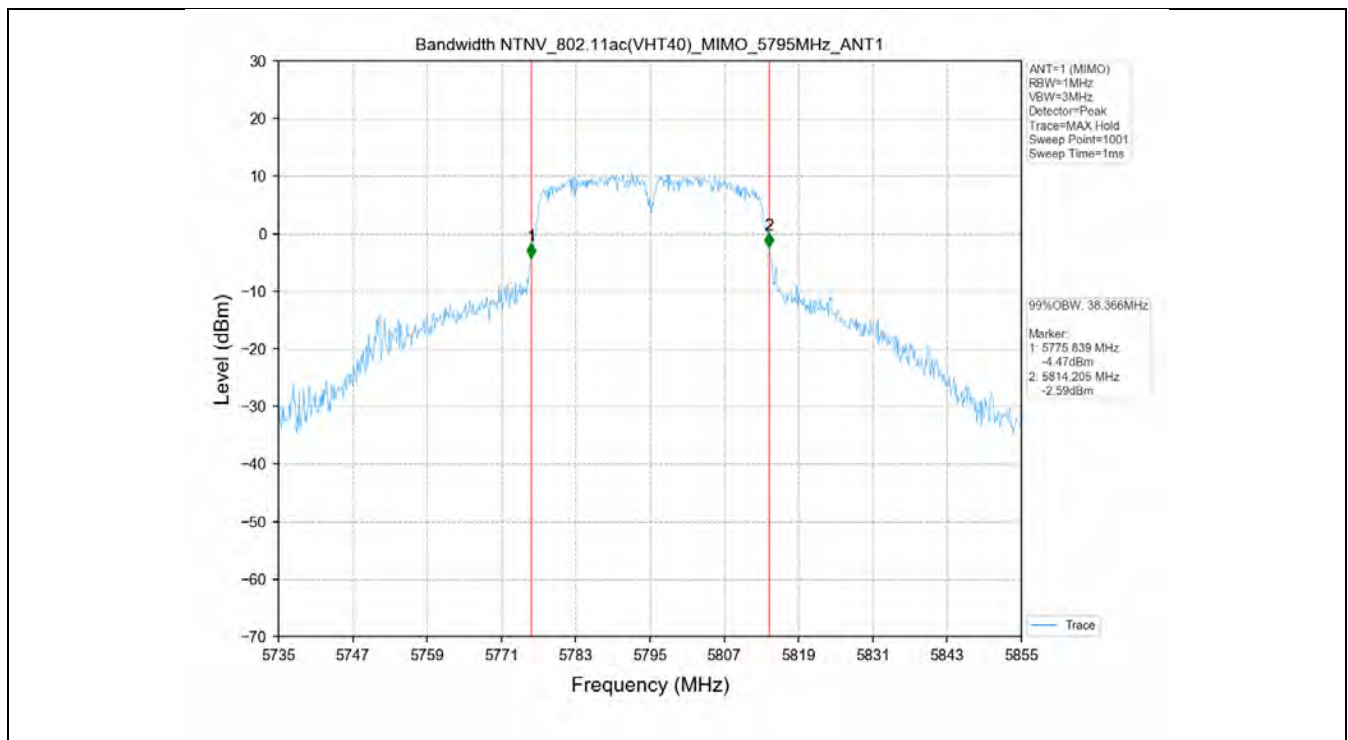
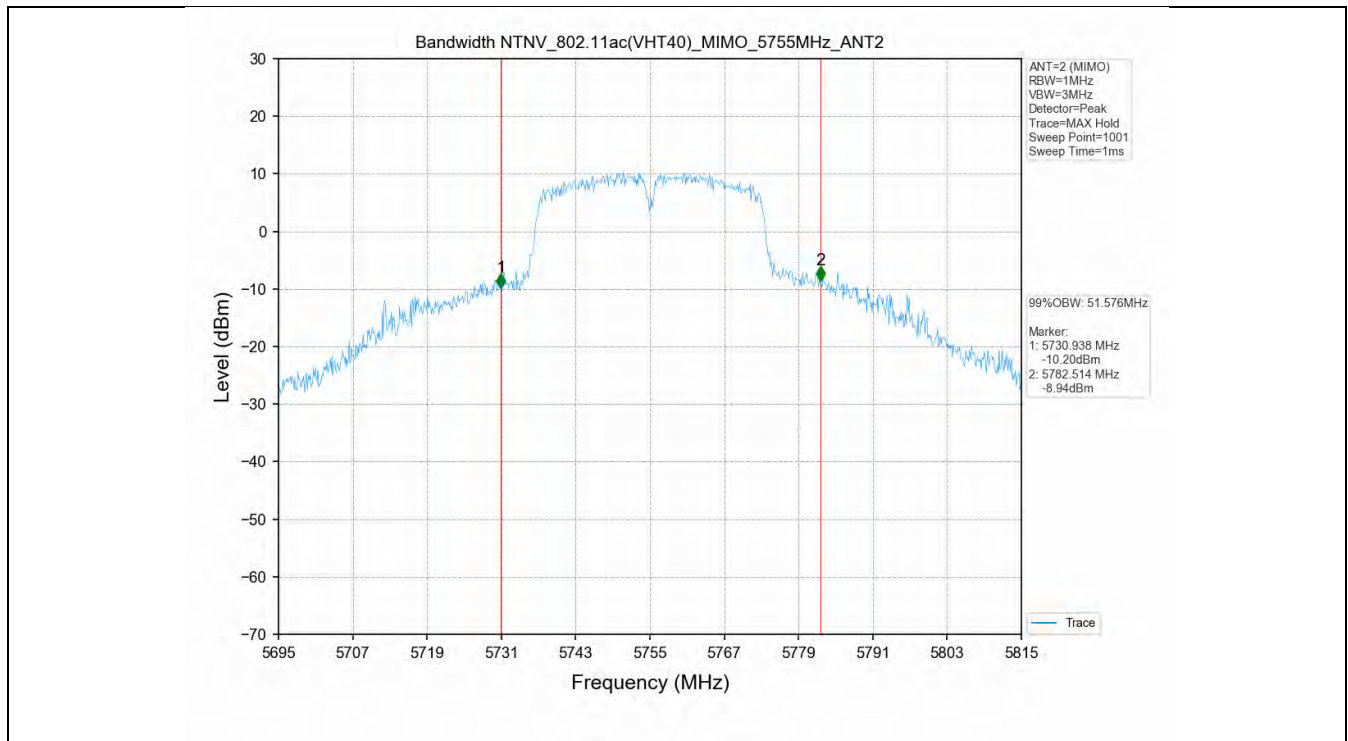


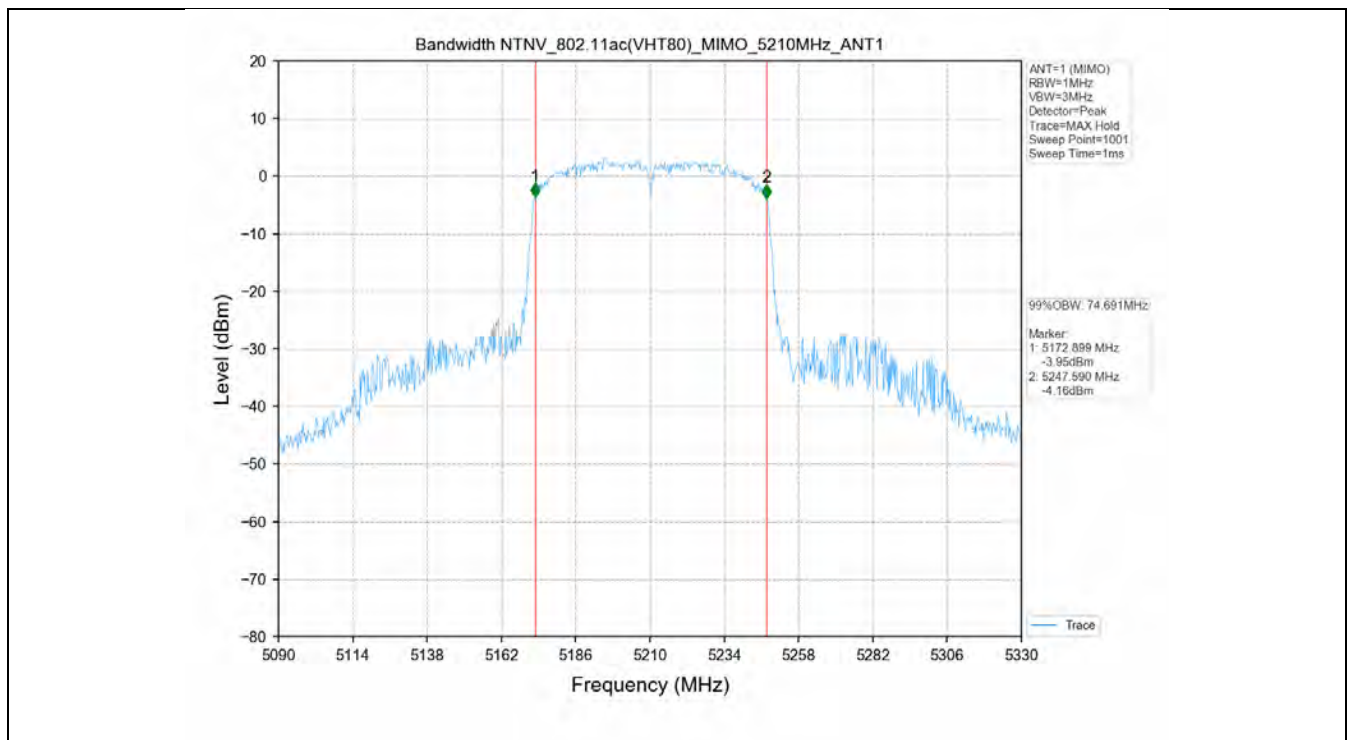
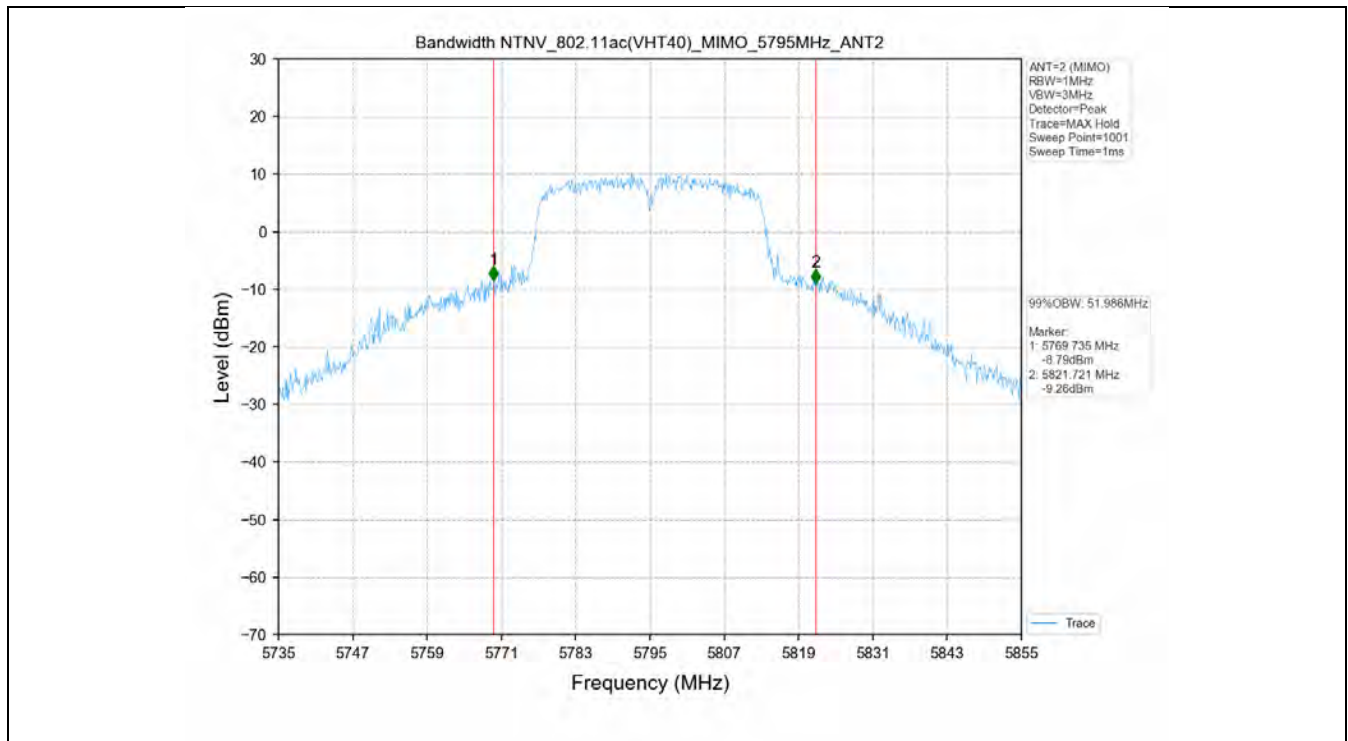


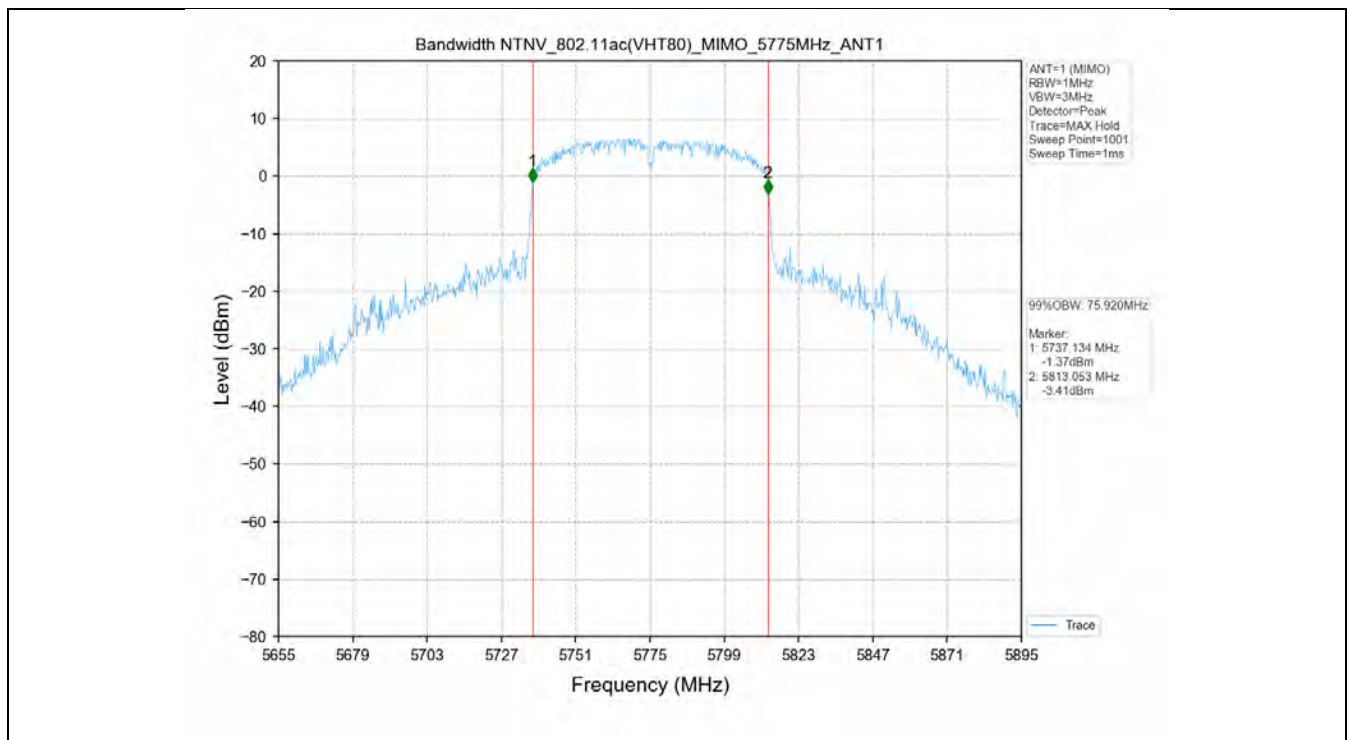
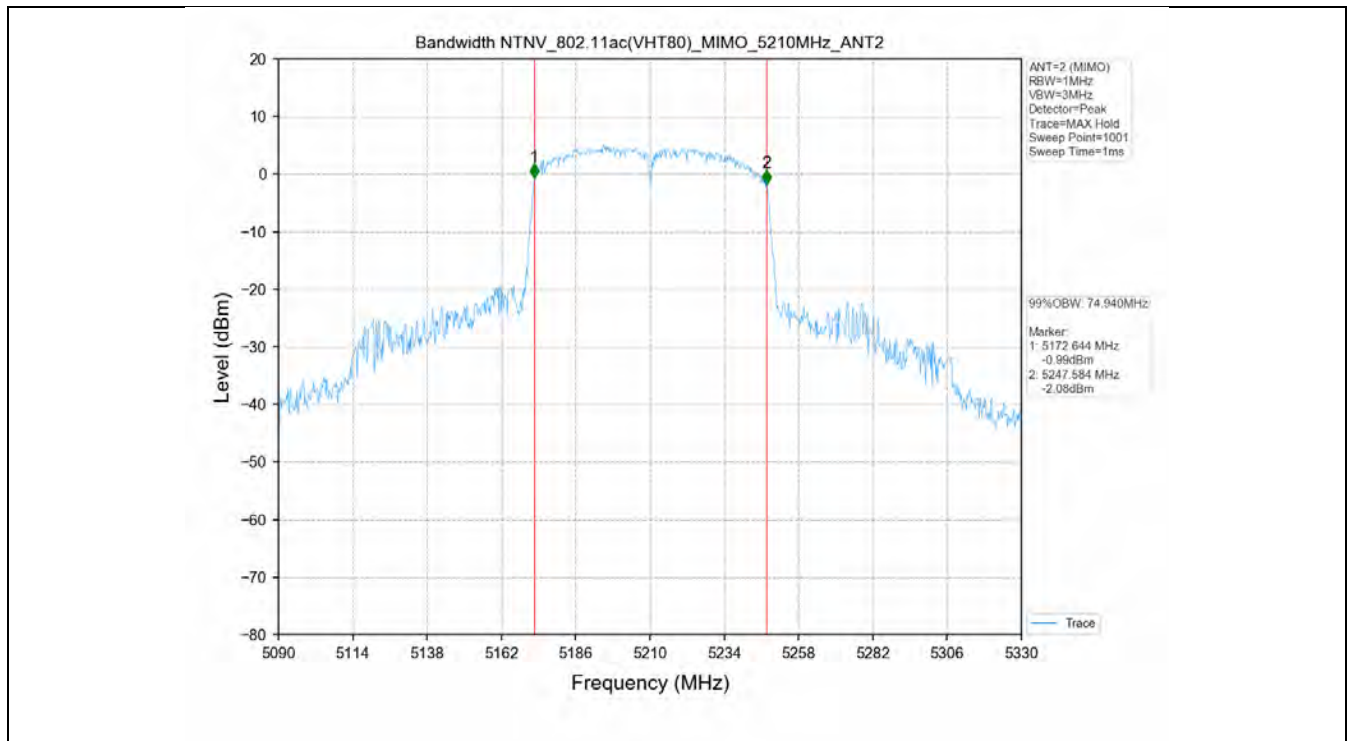


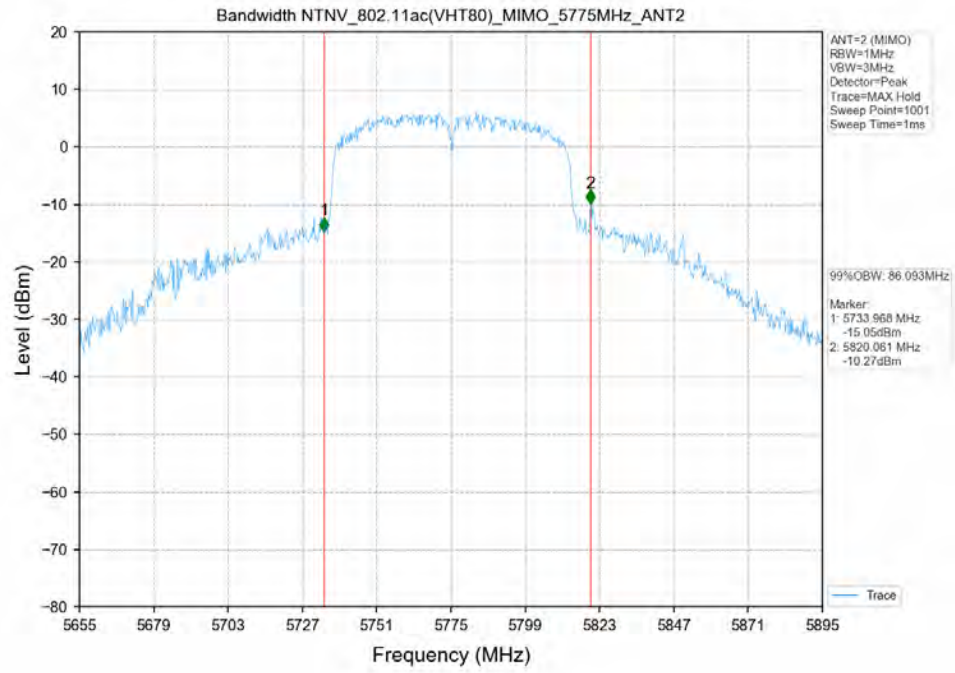














3. Maximum Conducted Output Power

3.1 Maximum Conducted Output Power For FCC

Test Mode	Frequency (MHz)	Tx Type	Measured Output Power (dBm)			Limits (dBm)	Verdict
			Ant 1	Ant 2	Total		
802.11a	5180	SISO	12.67	12.15	/	≤24	PASS
	5200	SISO	12.67	11.78	/	≤24	PASS
	5240	SISO	12.36	11.38	/	≤24	PASS
	5745	SISO	16.99	14.74	/	≤30	PASS
	5785	SISO	16.78	15.01	/	≤30	PASS
	5825	SISO	16.65	15.07	/	≤30	PASS
802.11n	5180	MIMO	11.48	11.14	14.32	≤23.35	PASS
	5190	MIMO	11.17	10.35	13.79	≤23.35	PASS
	5200	MIMO	11.51	10.87	14.21	≤23.35	PASS
	5230	MIMO	11.82	10.65	14.28	≤23.35	PASS
	5240	MIMO	11.35	10.45	13.93	≤23.35	PASS
	5745	MIMO	16.73	14.43	18.74	≤29.35	PASS
	5755	MIMO	17.08	15.04	19.19	≤29.35	PASS
	5785	MIMO	16.30	14.55	18.52	≤29.35	PASS
	5795	MIMO	16.62	14.88	18.85	≤29.35	PASS
802.11ac	5825	MIMO	16.54	14.58	18.68	≤29.35	PASS
	5180	MIMO	11.57	11.17	14.38	≤23.35	PASS
	5190	MIMO	11.95	11.08	14.55	≤23.35	PASS
	5200	MIMO	11.49	10.82	14.18	≤23.35	PASS
	5210	MIMO	11.52	10.63	14.11	≤23.35	PASS
	5230	MIMO	11.64	10.63	14.17	≤23.35	PASS
	5240	MIMO	11.28	10.43	13.89	≤23.35	PASS
	5745	MIMO	16.37	14.44	18.52	≤29.35	PASS
	5755	MIMO	17.15	15.00	19.22	≤29.35	PASS
	5775	MIMO	15.70	13.88	17.89	≤29.35	PASS
	5785	MIMO	16.45	14.52	18.60	≤29.35	PASS
	5795	MIMO	16.53	14.43	18.62	≤29.35	PASS
	5825	MIMO	16.55	14.57	18.68	≤29.35	PASS