

Appendix B for SHEM210700815402

1. Duty Cycle

1.1 Ant1

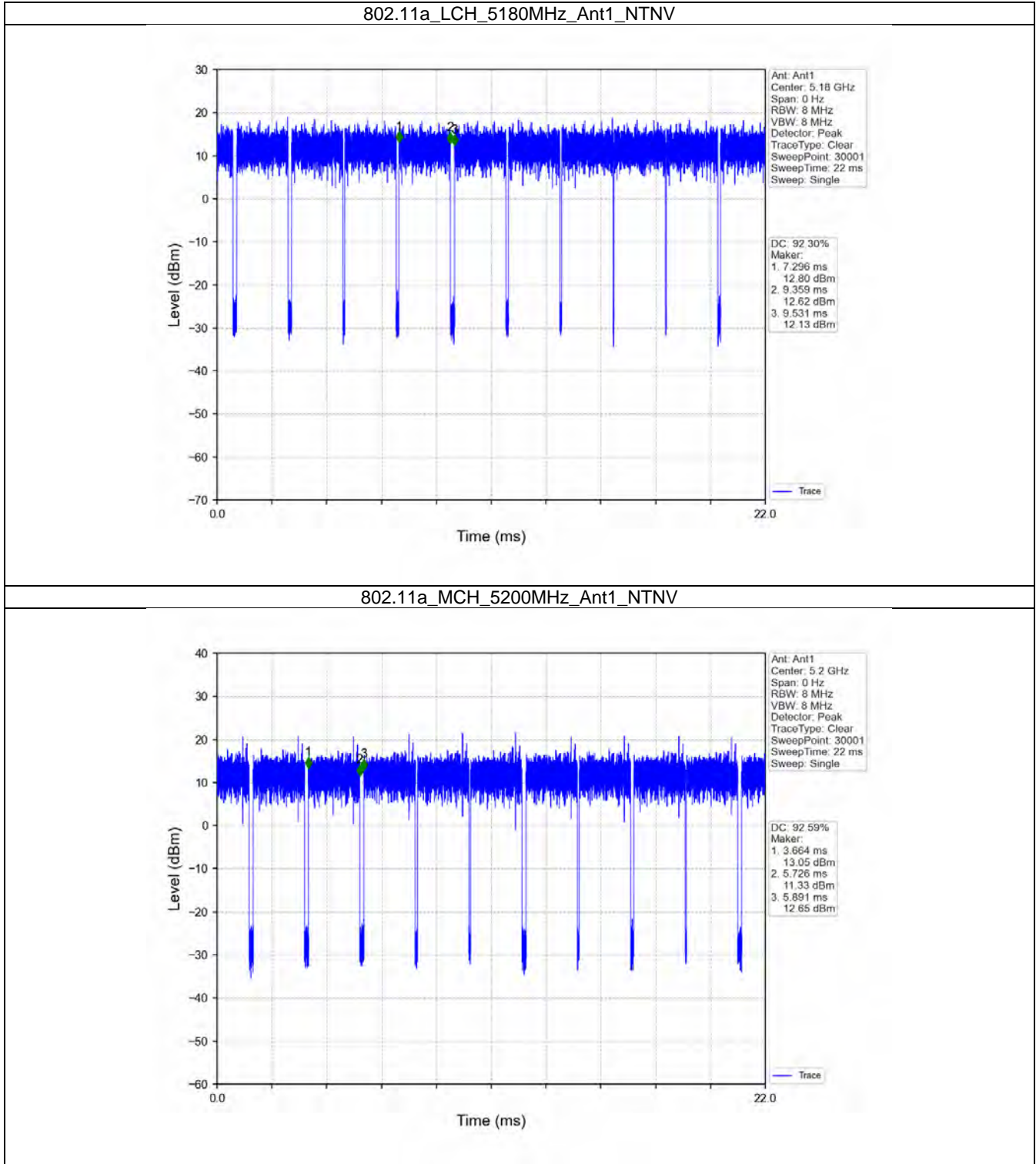
1.1.1 Test Result

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	2.063	2.235	92.30	0.35	5.93
		5200	2.062	2.227	92.59	0.33	5.15
		5240	2.063	2.236	92.26	0.35	5.93
		5260	2.062	2.235	92.26	0.35	5.52
		5300	2.061	2.218	92.92	0.32	3.54
		5320	2.061	2.235	92.21	0.35	5.11
		5500	2.061	2.235	92.21	0.35	4.68
		5580	2.062	2.217	93.01	0.31	3.95
		5700	2.062	2.235	92.26	0.35	3.88
		5745	2.062	2.226	92.63	0.33	5.57
		5785	2.063	2.235	92.30	0.35	5.90
5825	2.062	2.200	93.73	0.28	3.20		
802.11n (HT20)	MIMO	5180	1.918	2.092	91.68	0.38	5.88
		5200	1.916	2.054	93.28	0.30	3.39
		5240	1.917	2.090	91.72	0.38	5.42
		5260	1.917	2.091	91.68	0.38	5.89
		5300	1.918	2.083	92.08	0.36	5.50
		5320	1.919	2.055	93.38	0.30	4.73
		5500	1.919	2.091	91.77	0.37	6.33
		5580	1.918	2.082	92.12	0.36	5.94
		5700	1.918	2.092	91.68	0.38	4.99
		5745	1.919	2.091	91.77	0.37	6.33
		5785	1.917	2.092	91.63	0.38	5.03
5825	1.917	2.091	91.68	0.38	5.02		
802.11n (HT40)	MIMO	5190	0.941	1.106	85.08	0.70	10.10
		5230	0.942	1.079	87.30	0.59	8.86
		5270	0.942	1.115	84.48	0.73	10.78
		5310	0.941	1.114	84.47	0.73	9.87
		5510	0.943	1.098	85.88	0.66	10.29
		5550	0.942	1.115	84.48	0.73	10.78
		5670	0.943	1.097	85.96	0.66	10.33
		5755	0.942	1.115	84.48	0.73	10.74
		5795	0.942	1.115	84.48	0.73	10.78
802.11ac (VHT20)	MIMO	5180	1.931	2.085	92.61	0.33	5.49
		5200	1.931	2.086	92.57	0.34	4.19
		5240	1.931	2.103	91.82	0.37	6.30
		5260	1.931	2.085	92.61	0.33	5.53
		5300	1.930	2.095	92.12	0.36	5.04
		5320	1.928	2.094	92.07	0.36	4.17
		5500	1.930	2.094	92.17	0.35	5.91
		5580	1.931	2.094	92.22	0.35	5.88
5700	1.929	2.094	92.12	0.36	5.04		

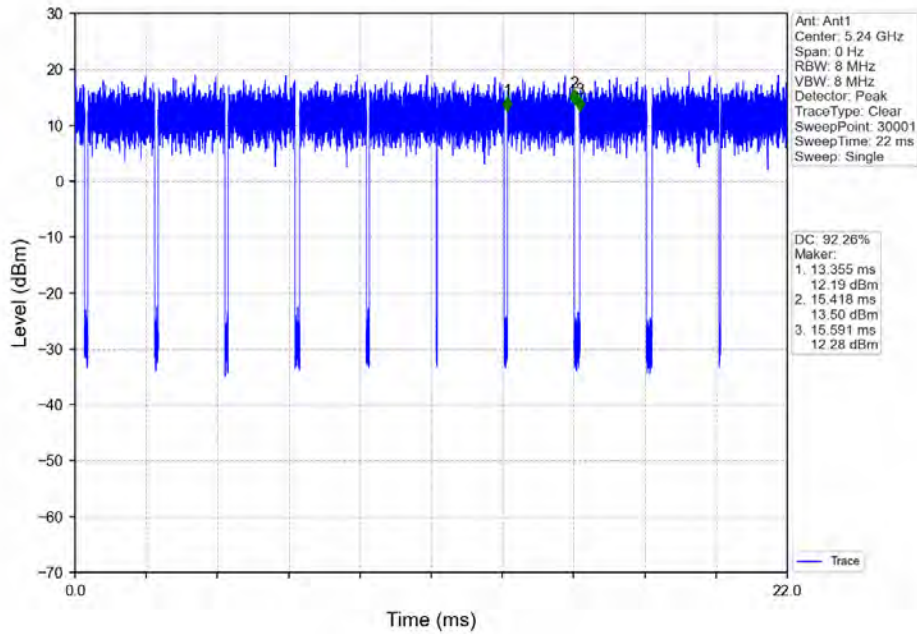


		5745	1.931	2.094	92.22	0.35	5.91
		5785	1.929	2.076	92.92	0.32	4.67
		5825	1.929	2.103	91.73	0.38	5.85
802.11ac (VHT40)	MIMO	5190	0.950	1.114	85.28	0.69	10.89
		5230	0.949	1.114	85.19	0.70	8.31
		5270	0.950	1.096	86.68	0.62	9.50
		5310	0.951	1.124	84.61	0.73	11.56
		5510	0.950	1.123	84.59	0.73	11.56
		5550	0.950	1.096	86.68	0.62	8.57
		5670	0.950	1.123	84.59	0.73	4.27
		5755	0.950	1.114	85.28	0.69	9.14
		5795	0.950	1.114	85.28	0.69	10.90
		802.11ac (VHT80)	MIMO	5210	0.458	0.622	73.63
5290	0.459			0.622	73.79	1.32	18.76
5530	0.458			0.613	74.71	1.27	12.88
5610	0.458			0.631	72.58	1.39	19.79
5775	0.459			0.622	73.79	1.32	18.74

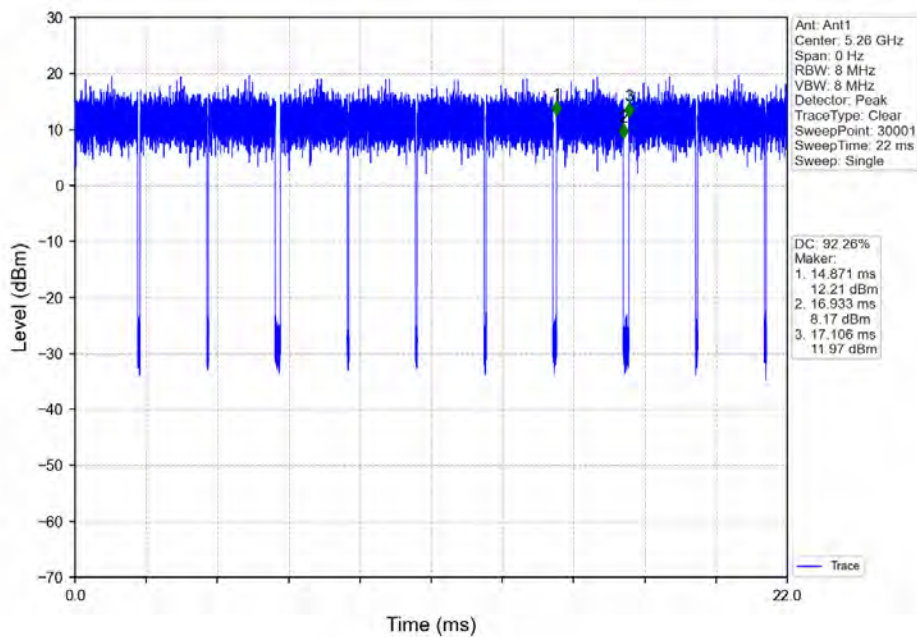
1.1.2 Test Graph

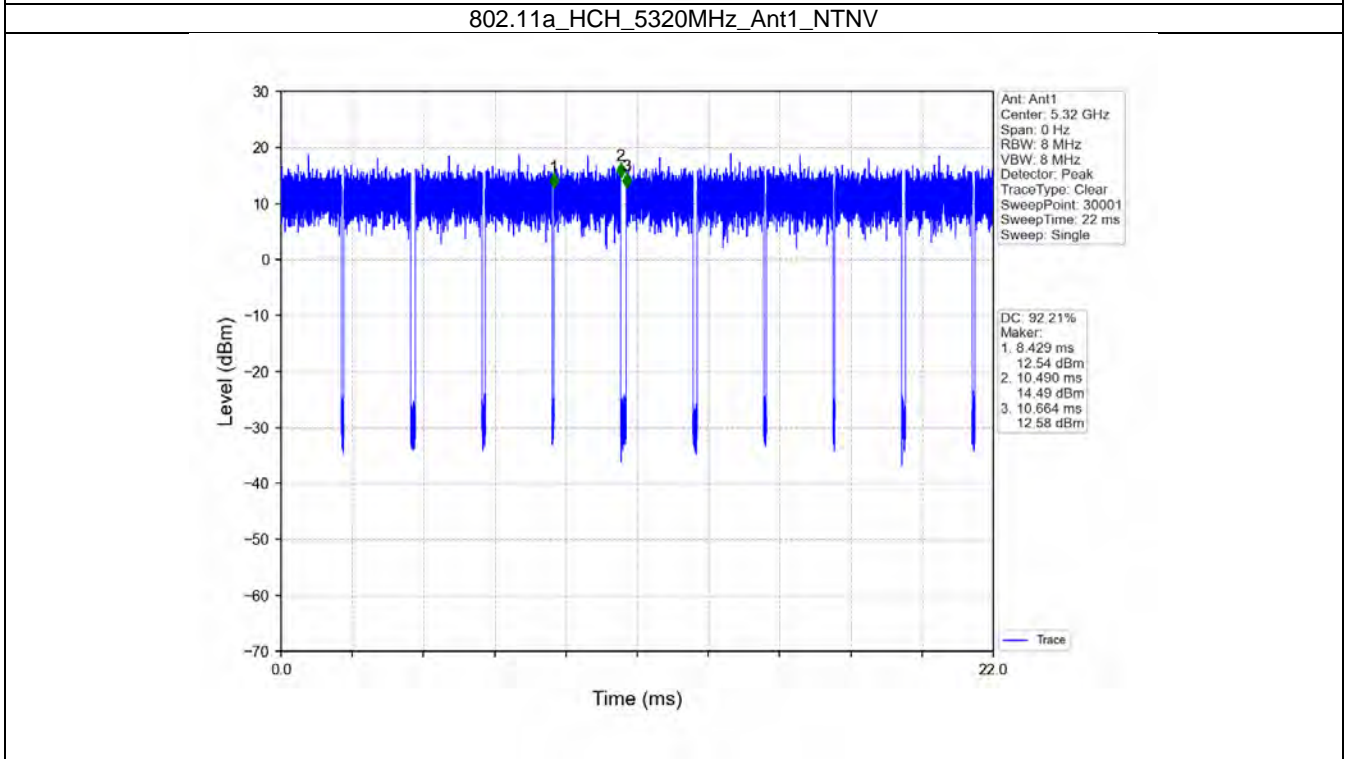
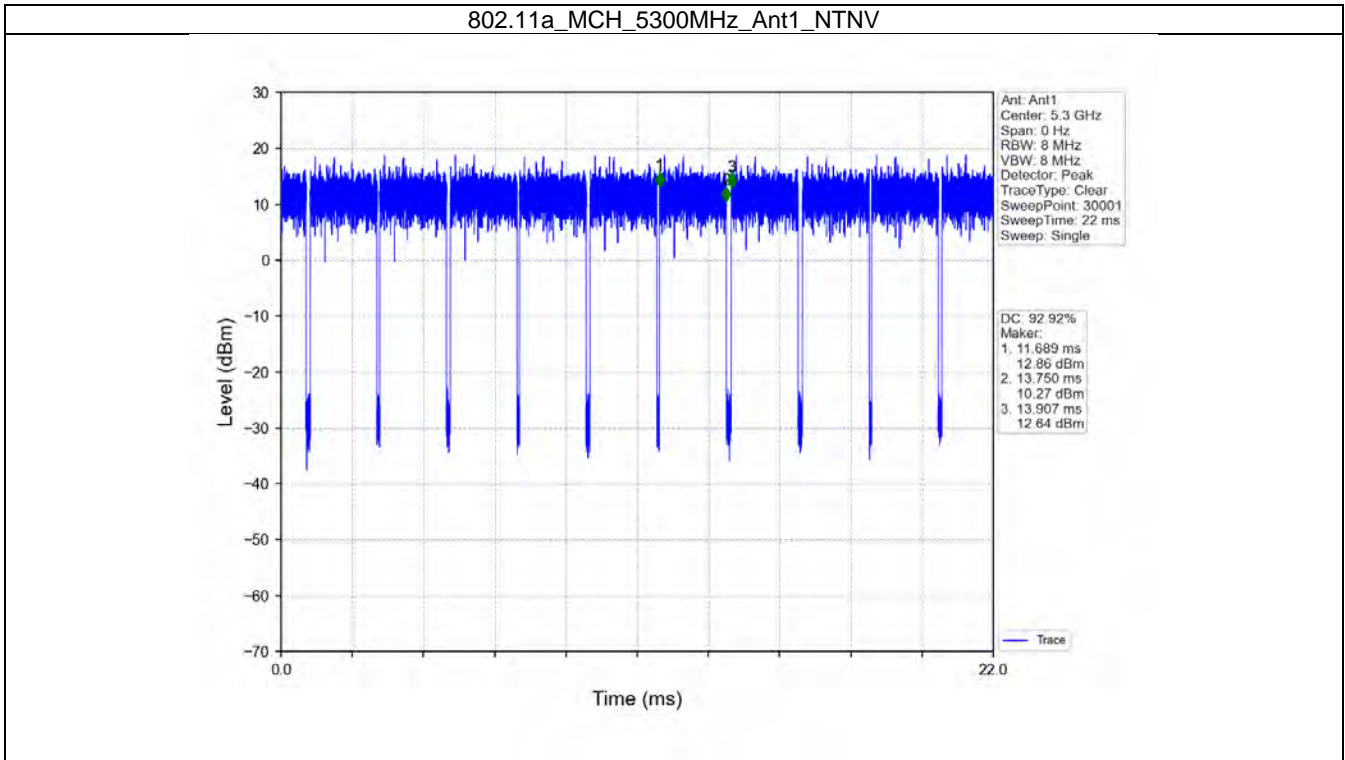


802.11a_HCH_5240MHz_Ant1_NTNV

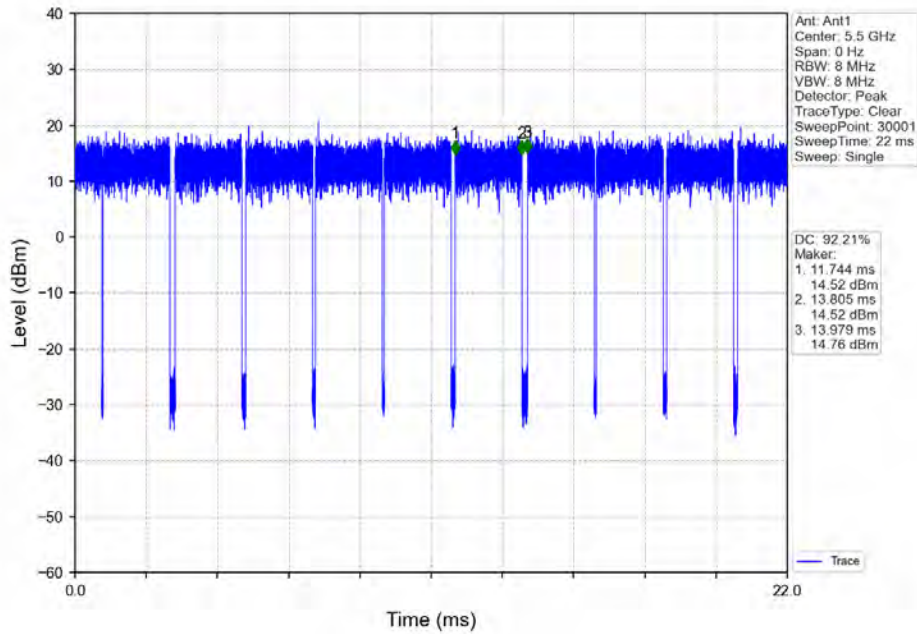


802.11a_LCH_5260MHz_Ant1_NTNV

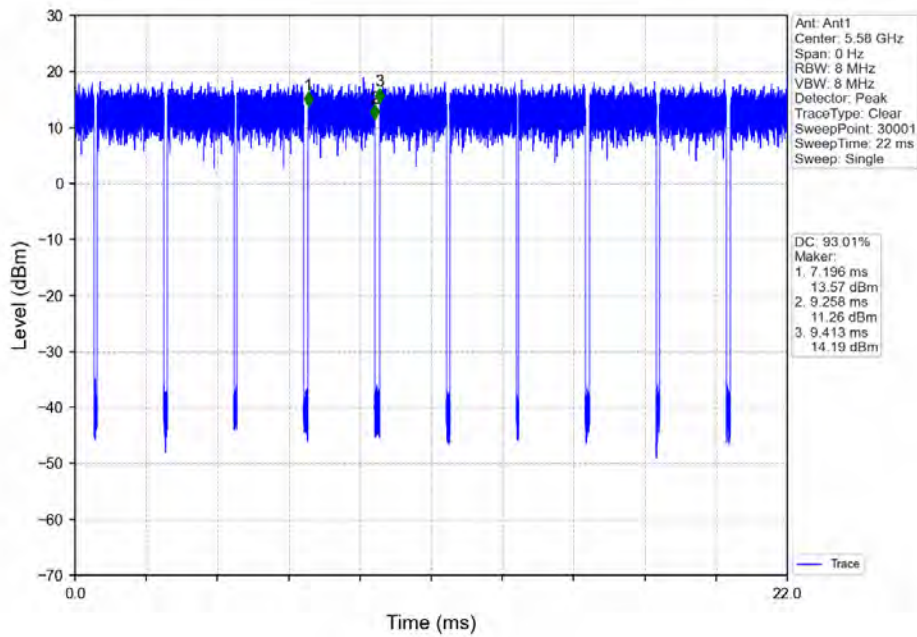




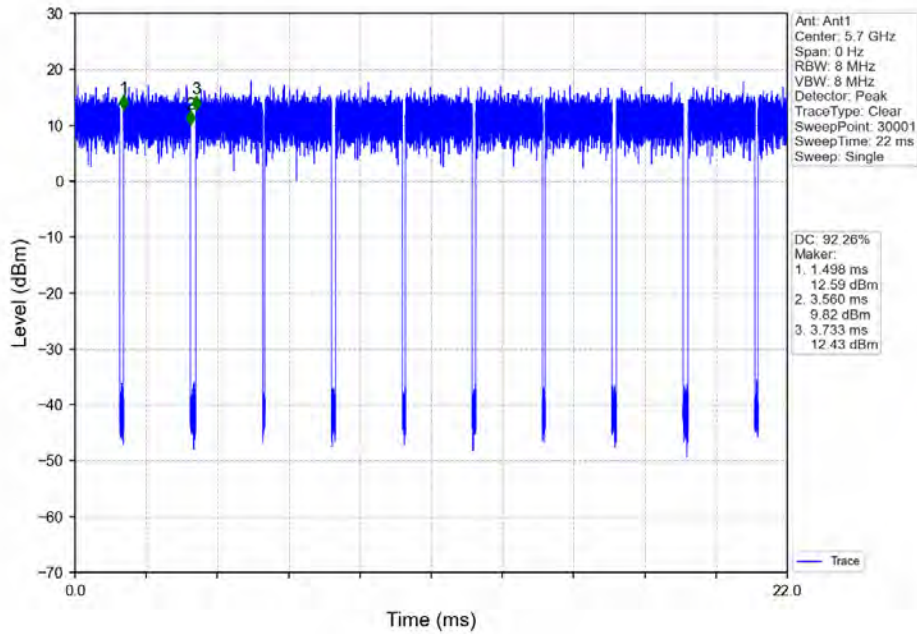
802.11a_LCH_5500MHz_Ant1_NTNV



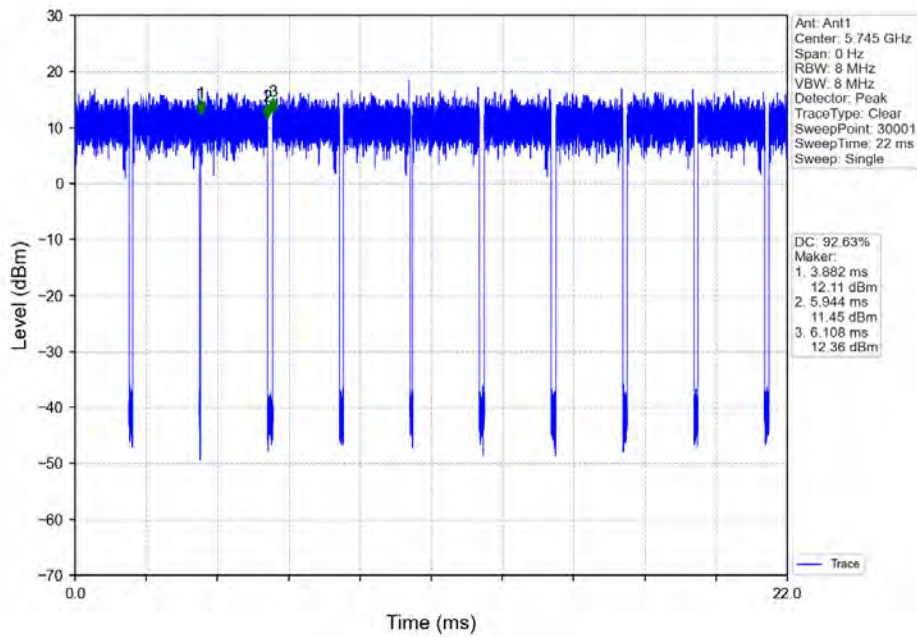
802.11a_MCH_5580MHz_Ant1_NTNV



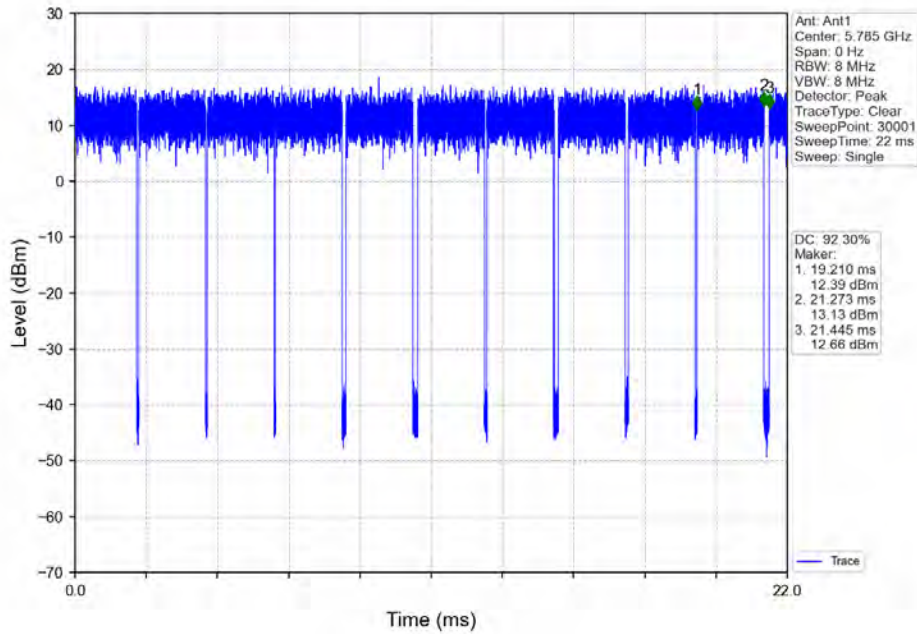
802.11a_HCH_5700MHz_Ant1_NTNV



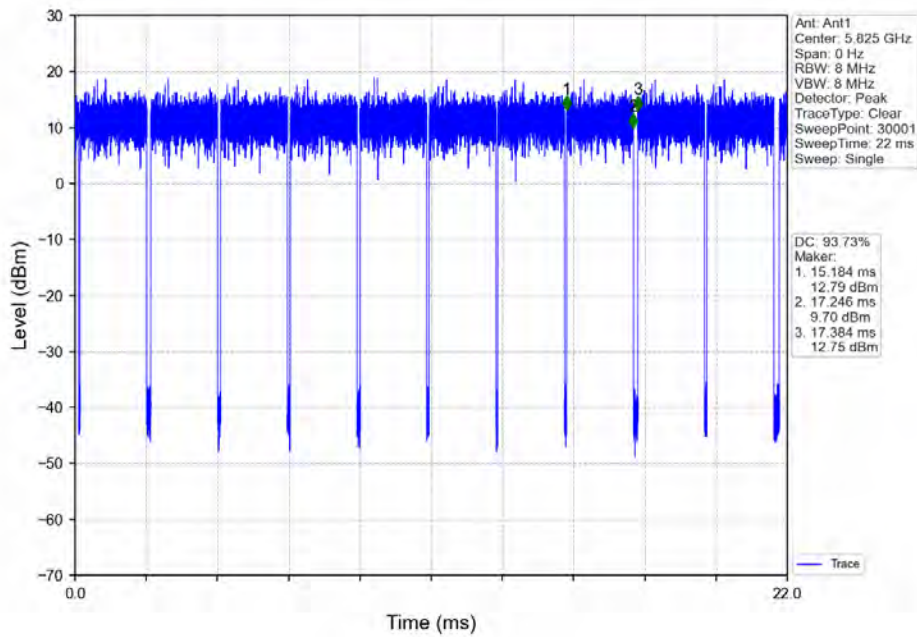
802.11a_LCH_5745MHz_Ant1_NTNV



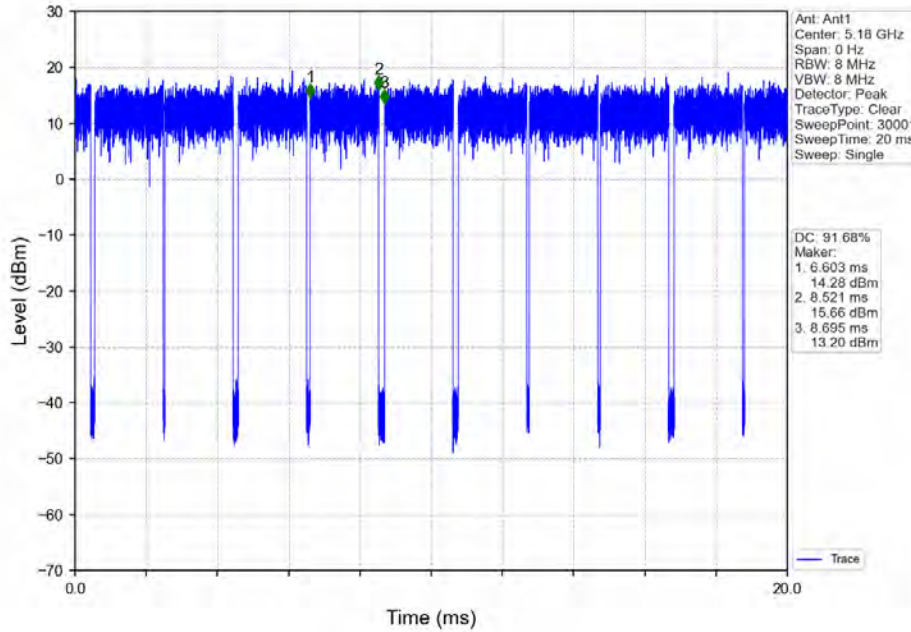
802.11a_MCH_5785MHz_Ant1_NTNV



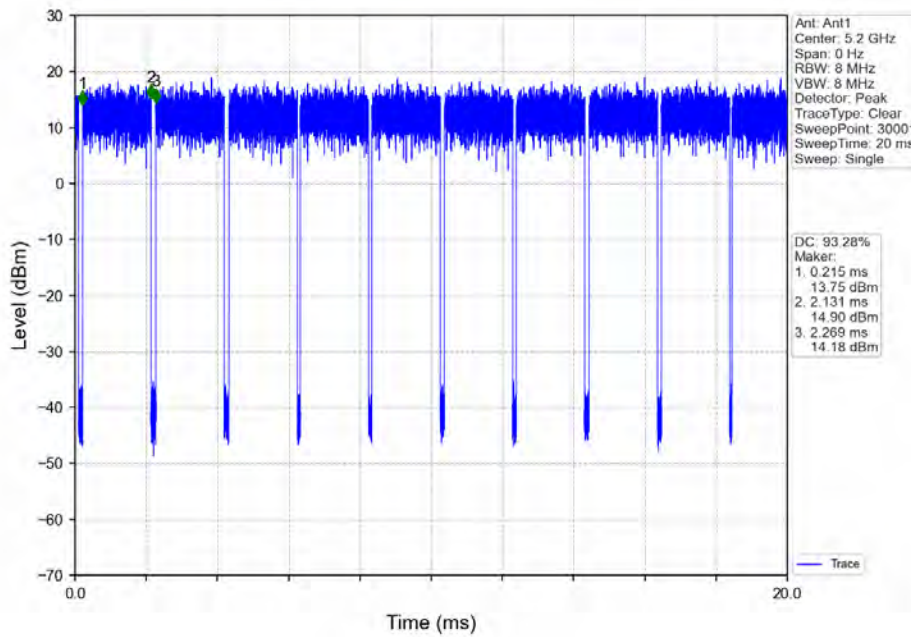
802.11a_HCH_5825MHz_Ant1_NTNV



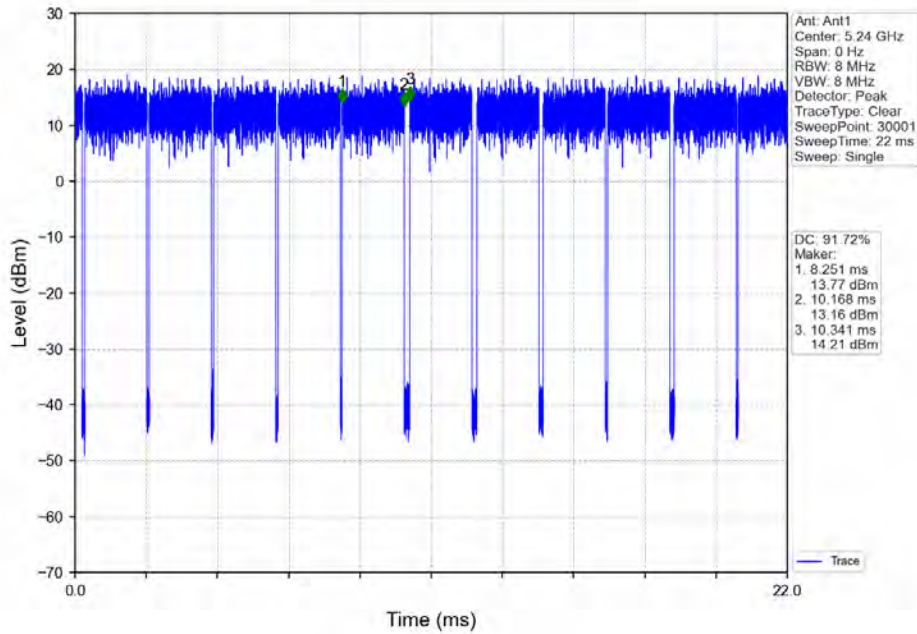
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



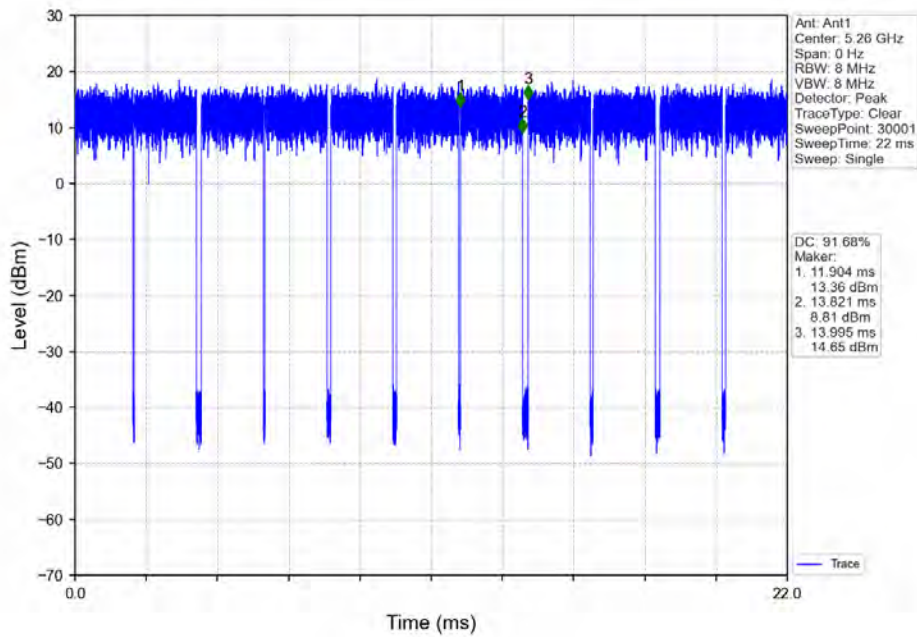
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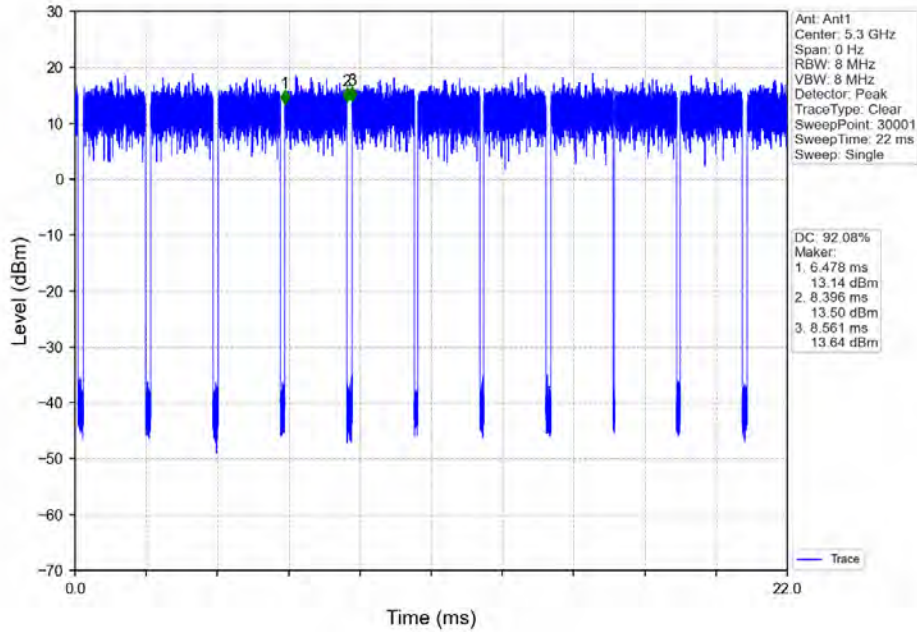
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



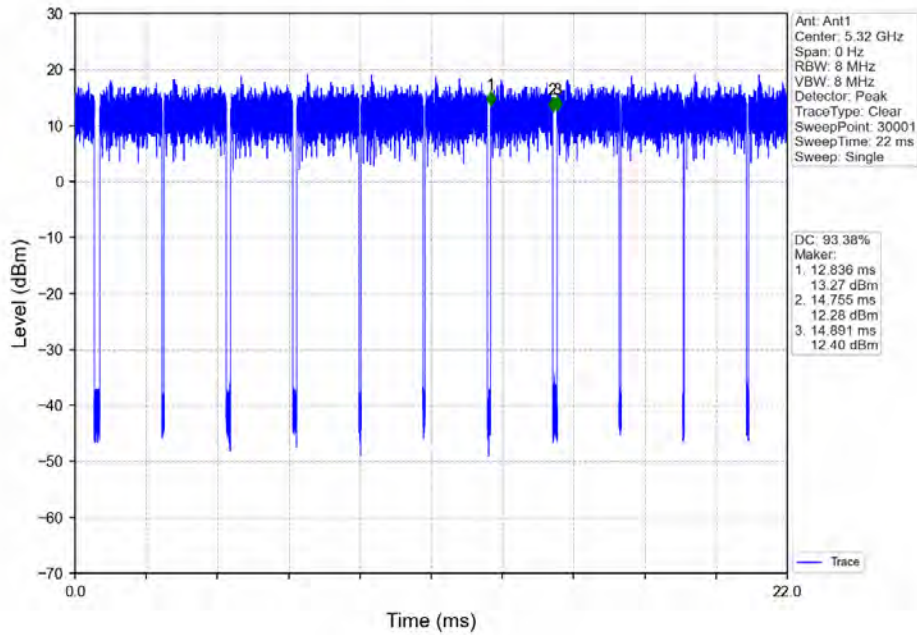
802.11n(HT20)_LCH_5260MHz_Ant1_NTNV

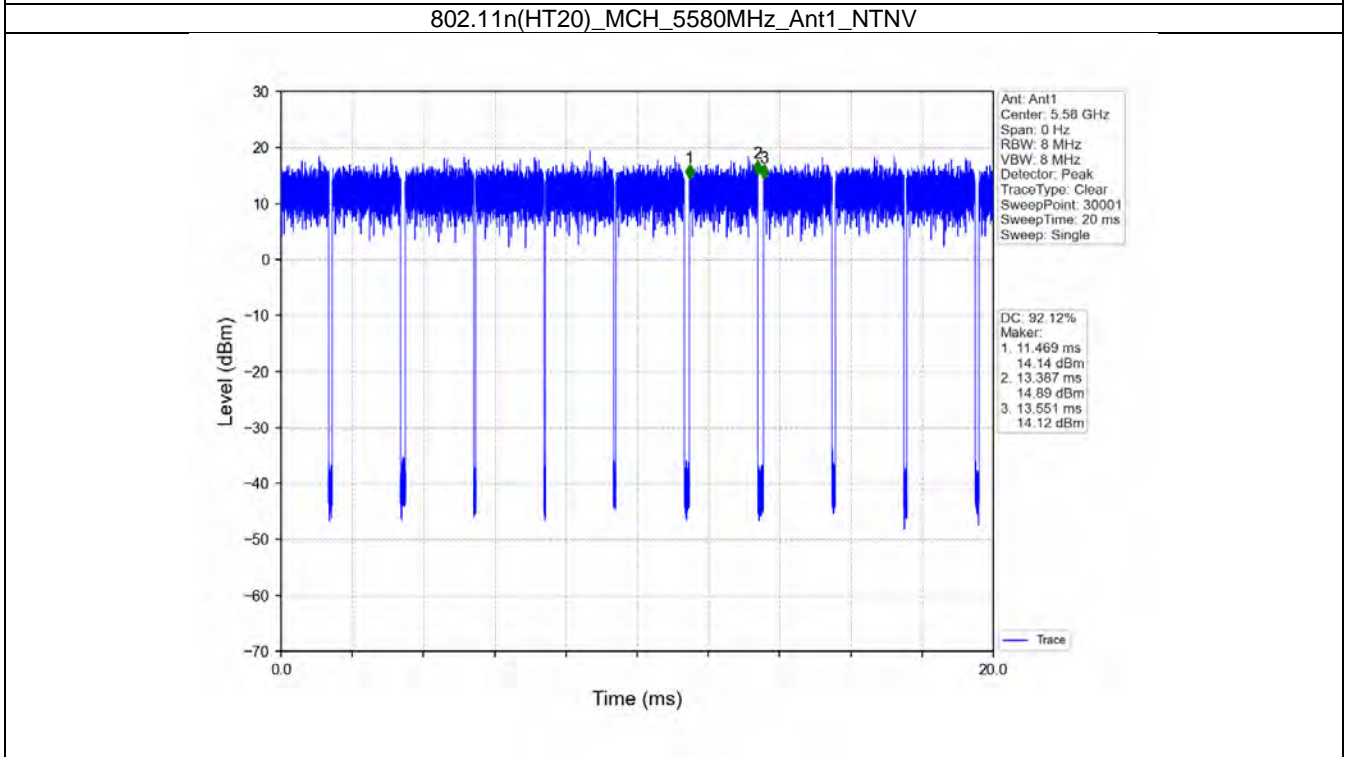
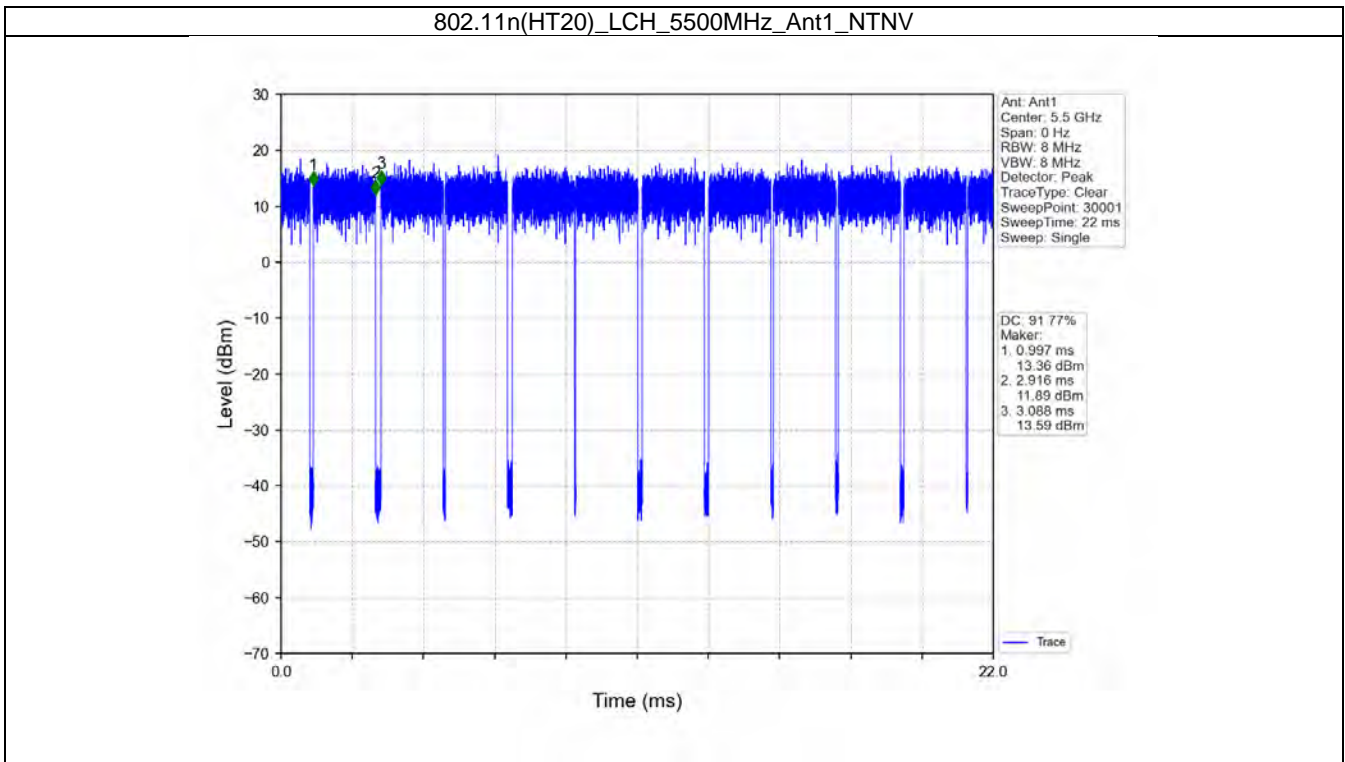


802.11n(HT20)_MCH_5300MHz_Ant1_NTNV

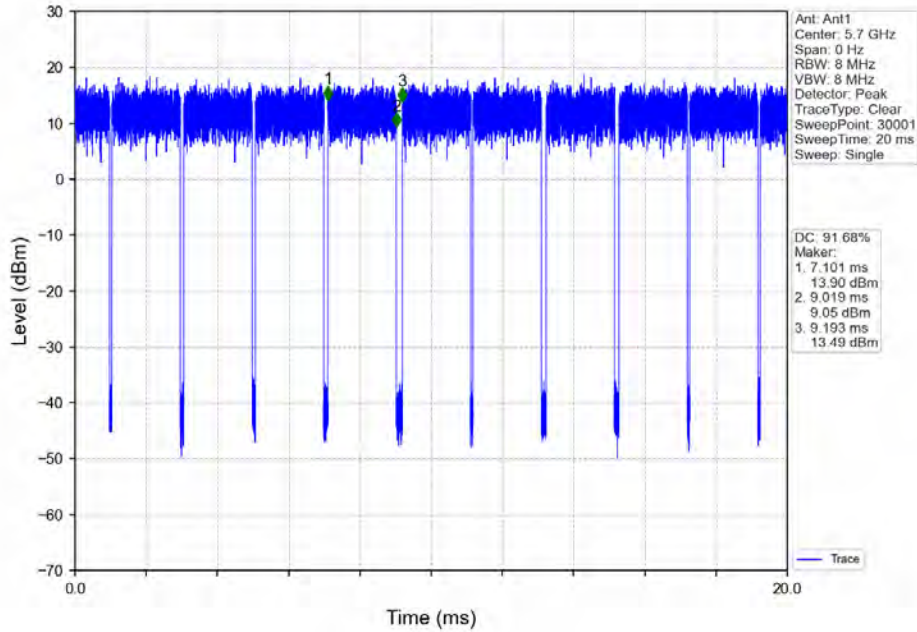


802.11n(HT20)_HCH_5320MHz_Ant1_NTNV

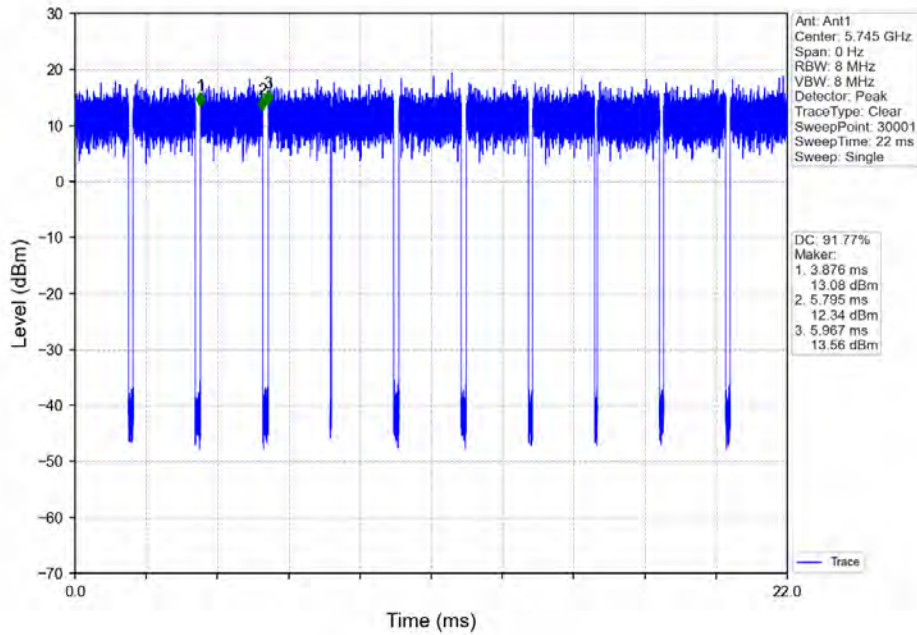




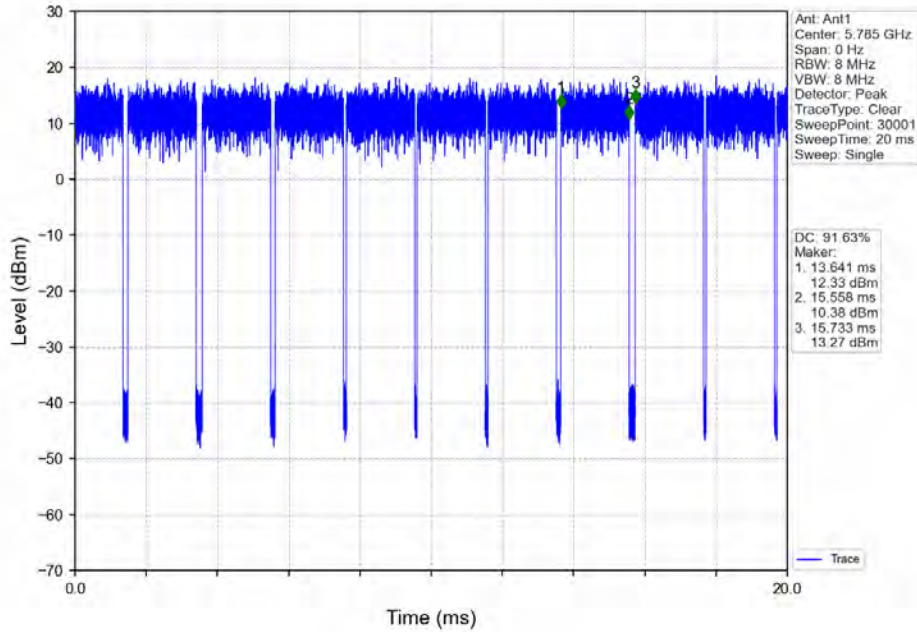
802.11n(HT20)_HCH_5700MHz_Ant1_NTNV



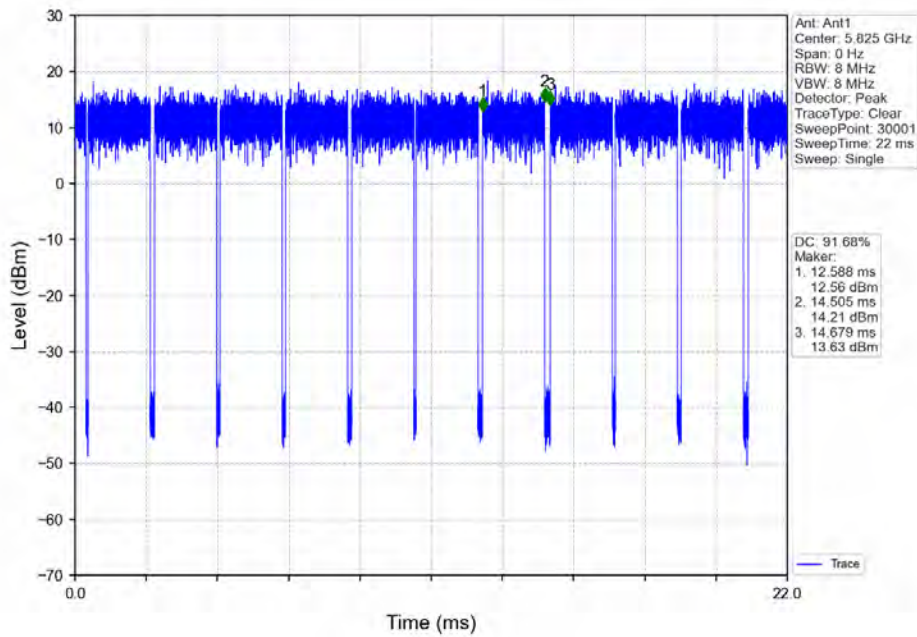
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



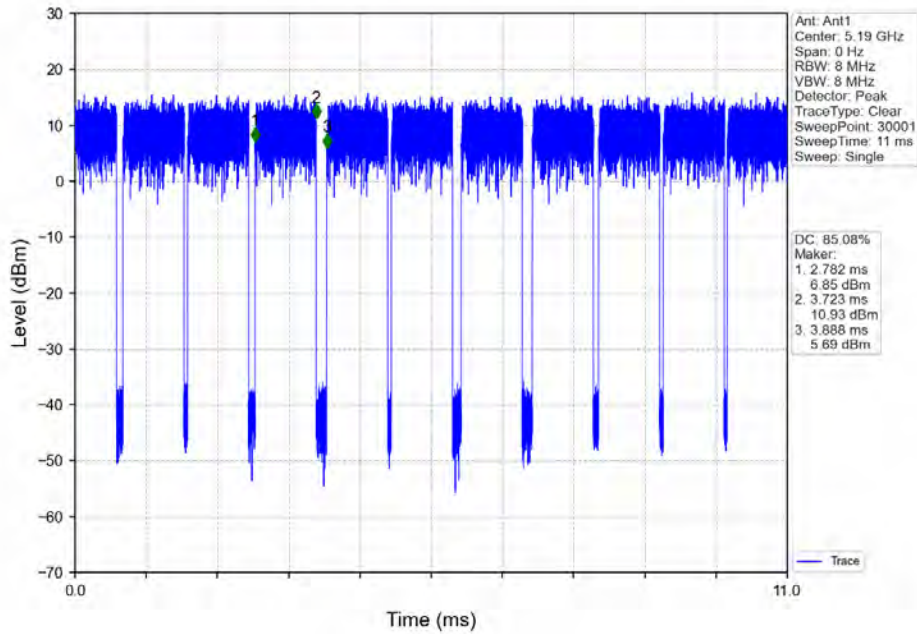
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



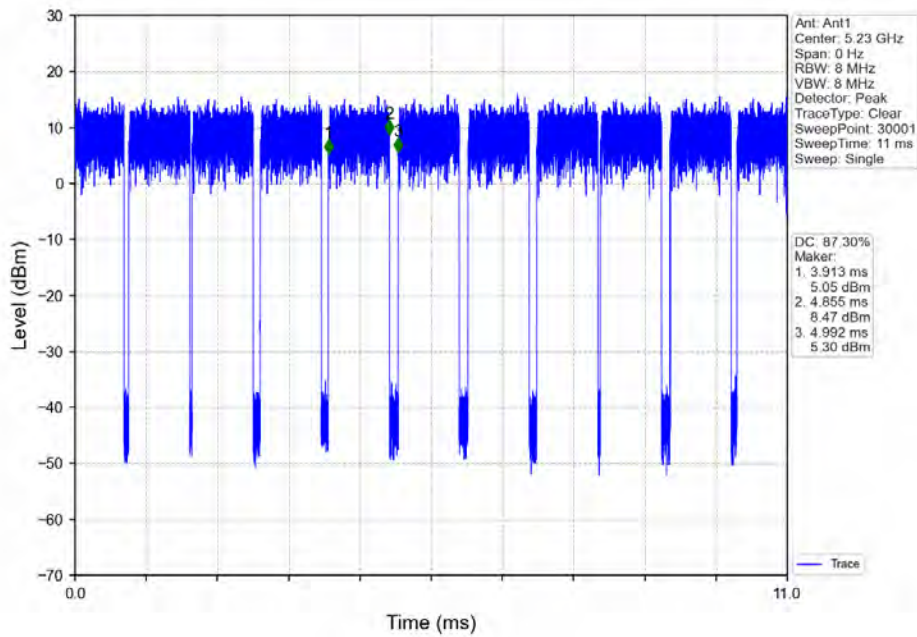
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



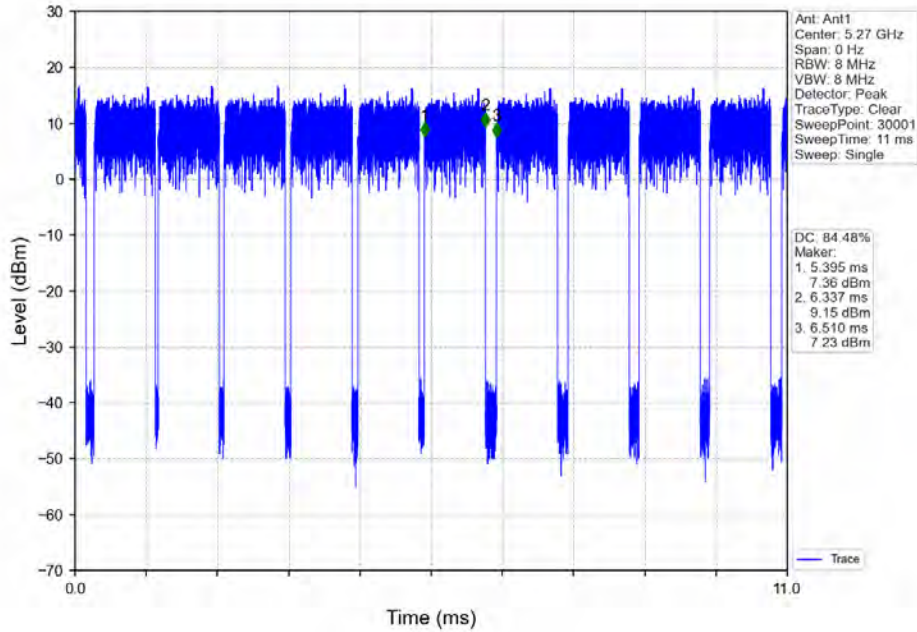
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



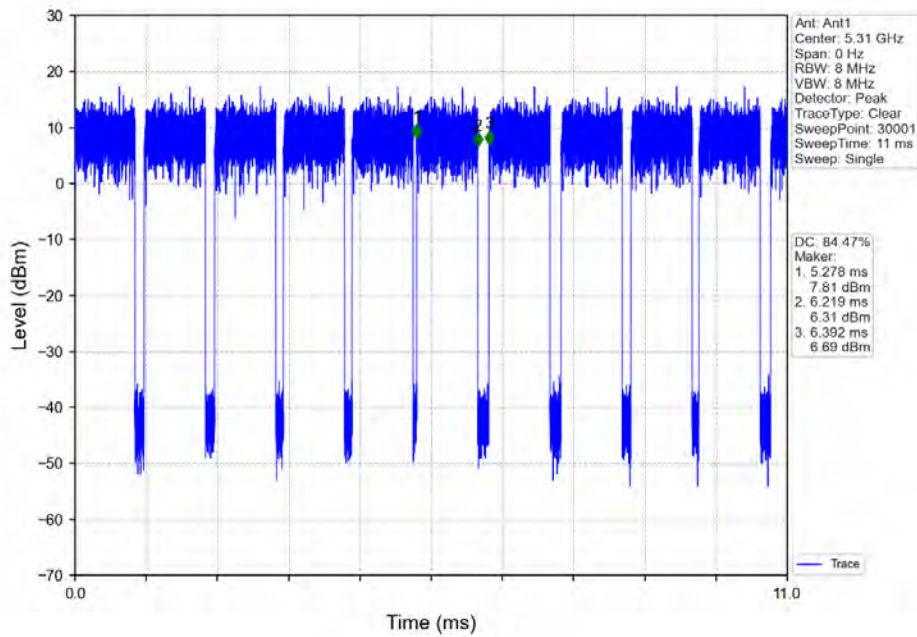
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV

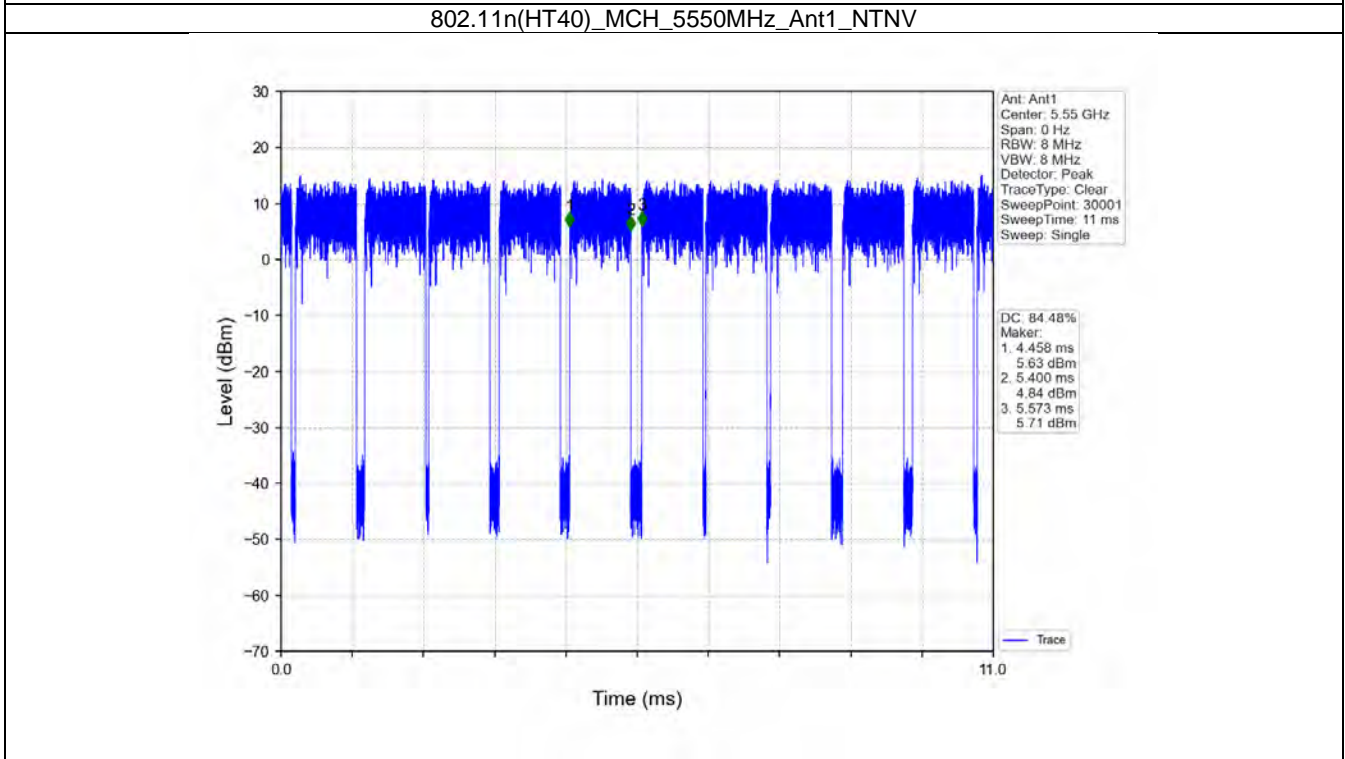
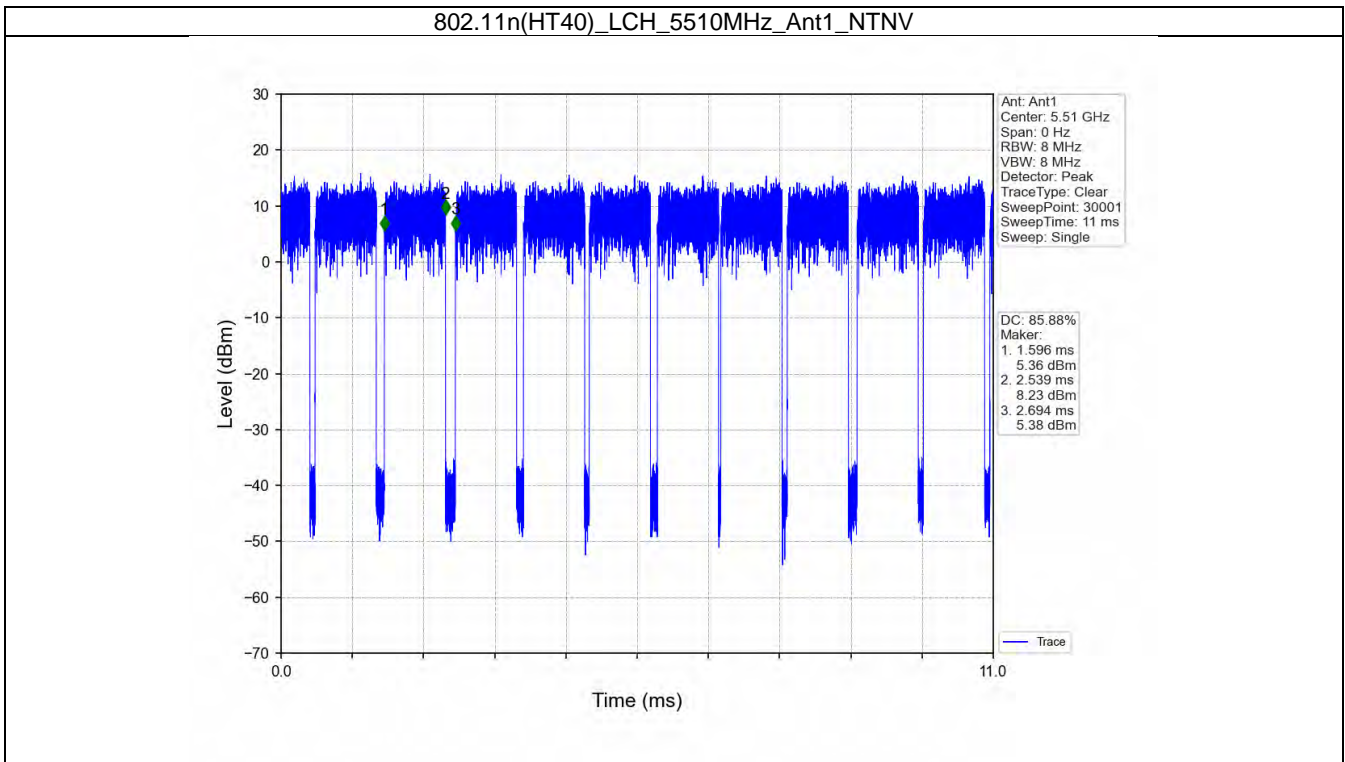


802.11n(HT40)_LCH_5270MHz_Ant1_NTNV

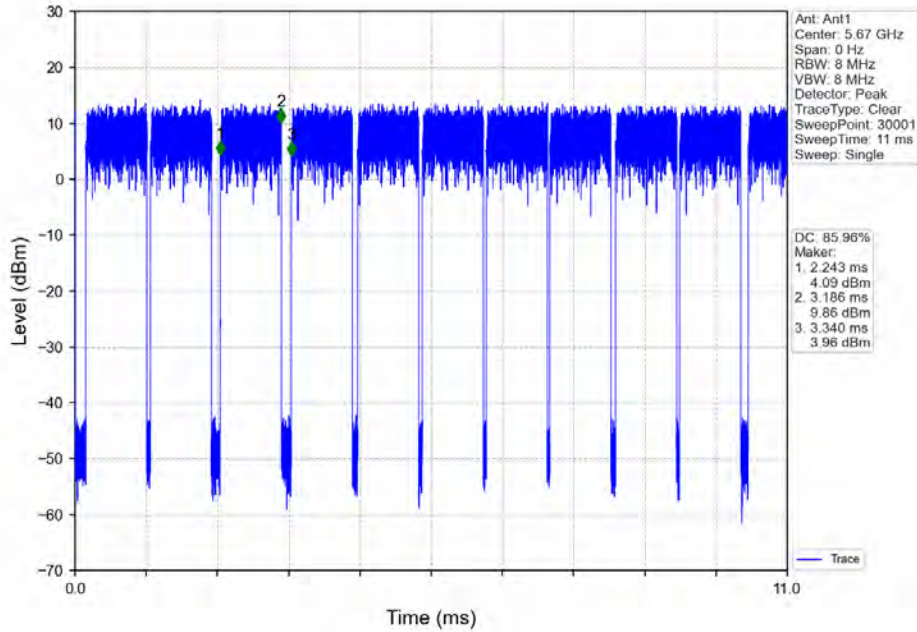


802.11n(HT40)_HCH_5310MHz_Ant1_NTNV

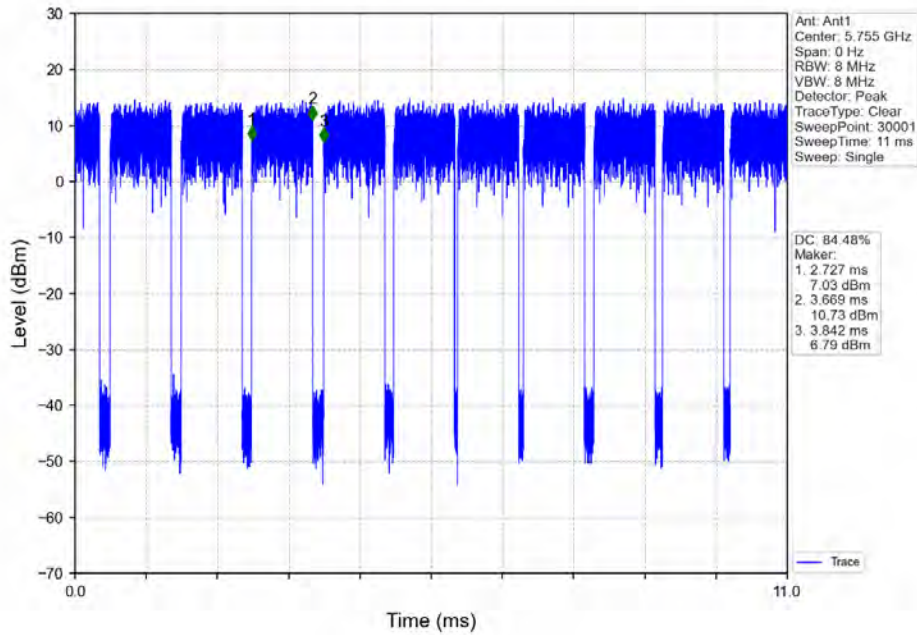




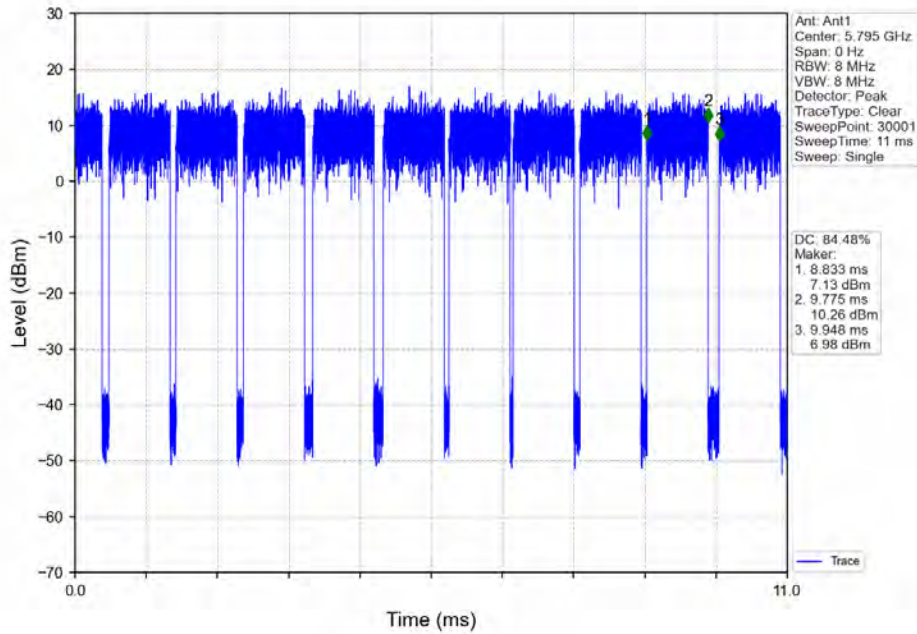
802.11n(HT40)_HCH_5670MHz_Ant1_NTNV



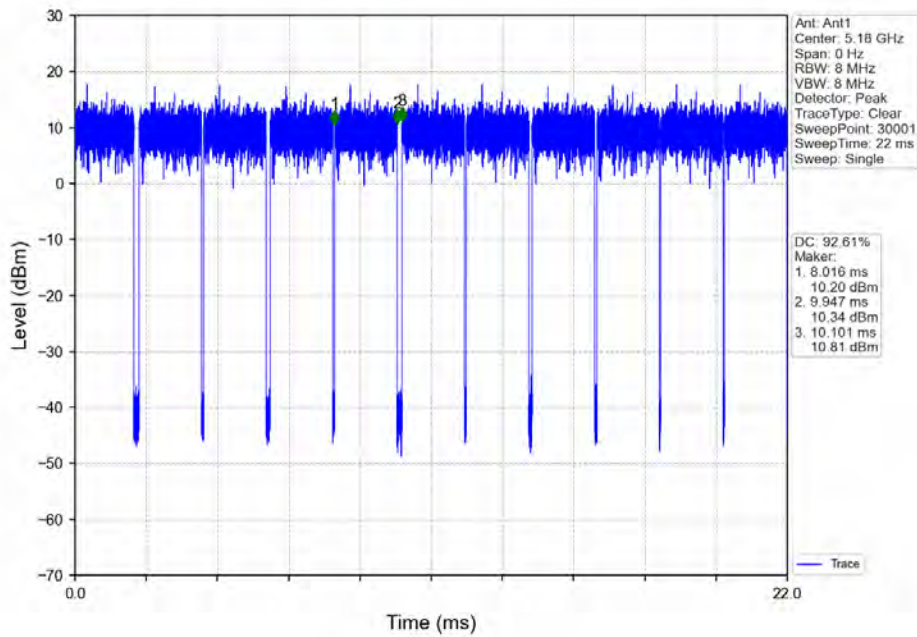
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV

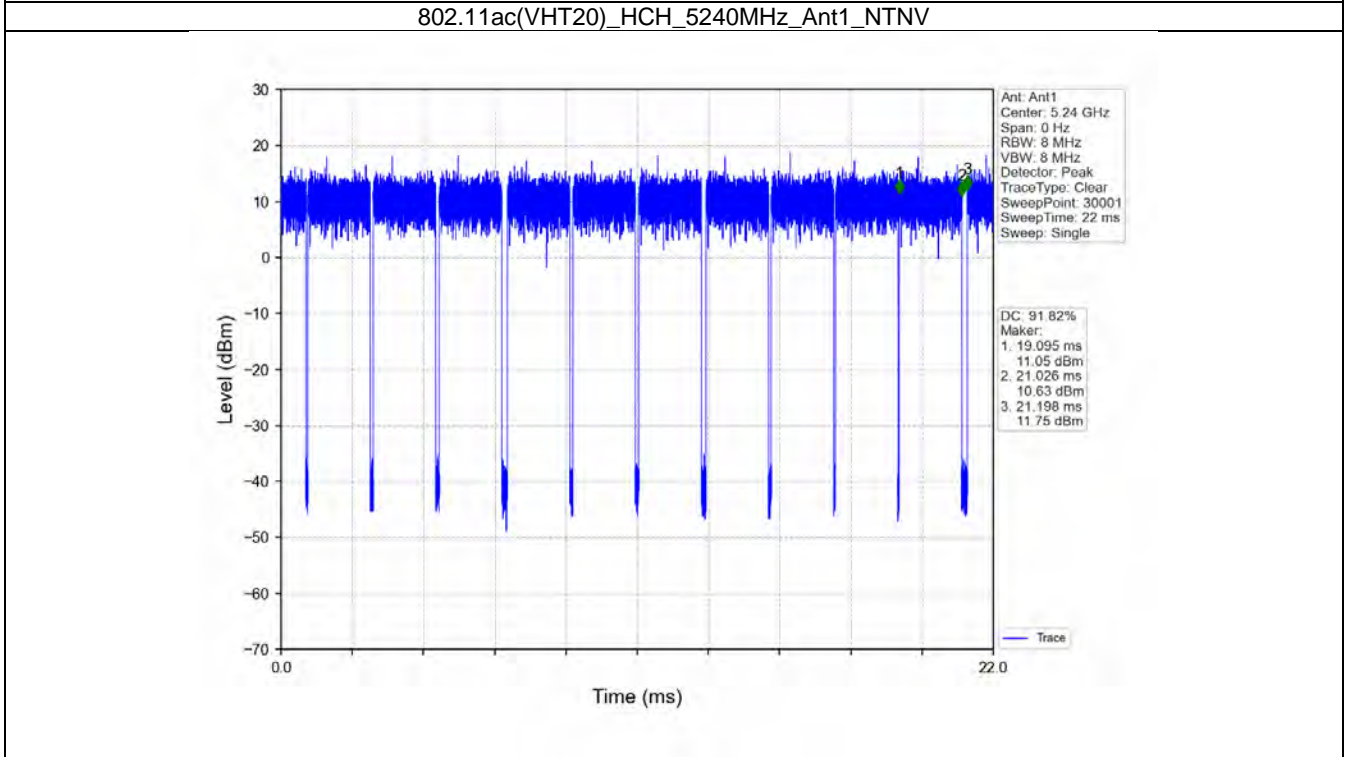
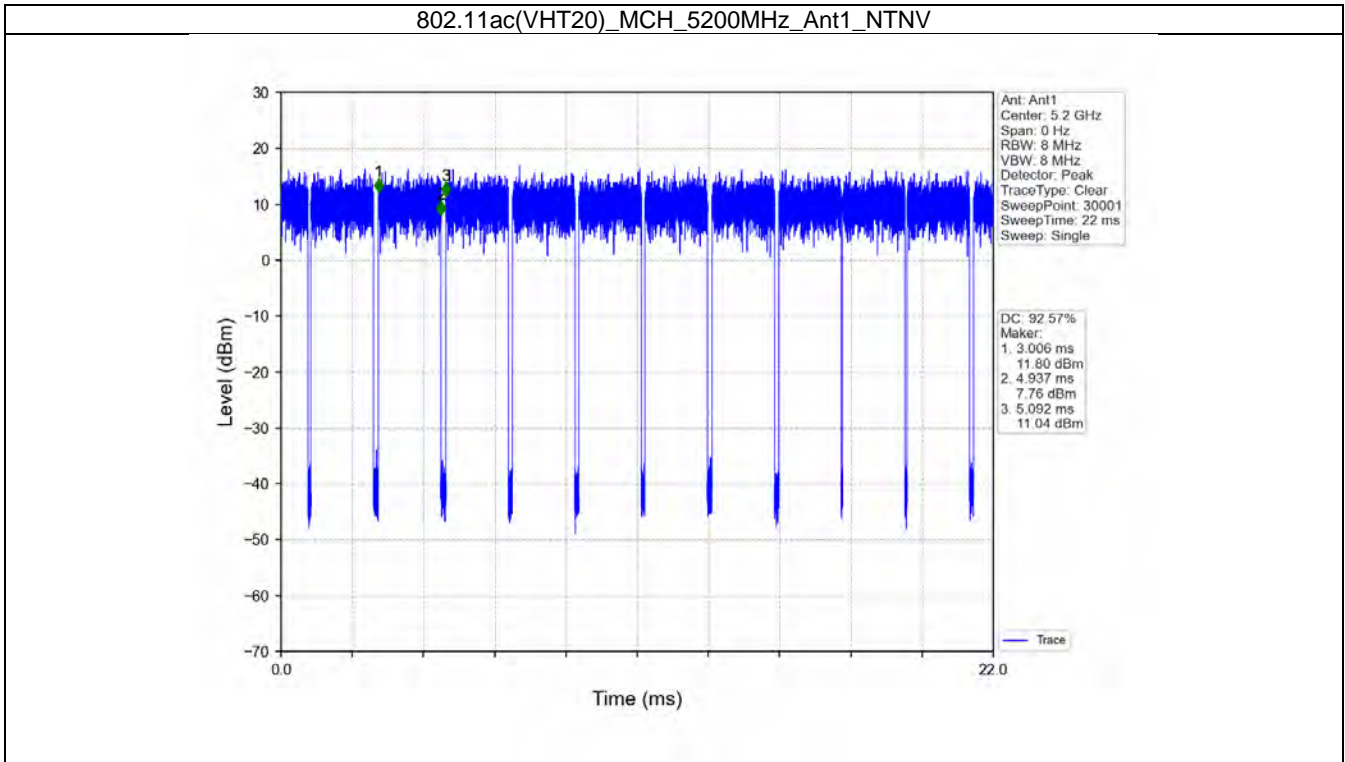


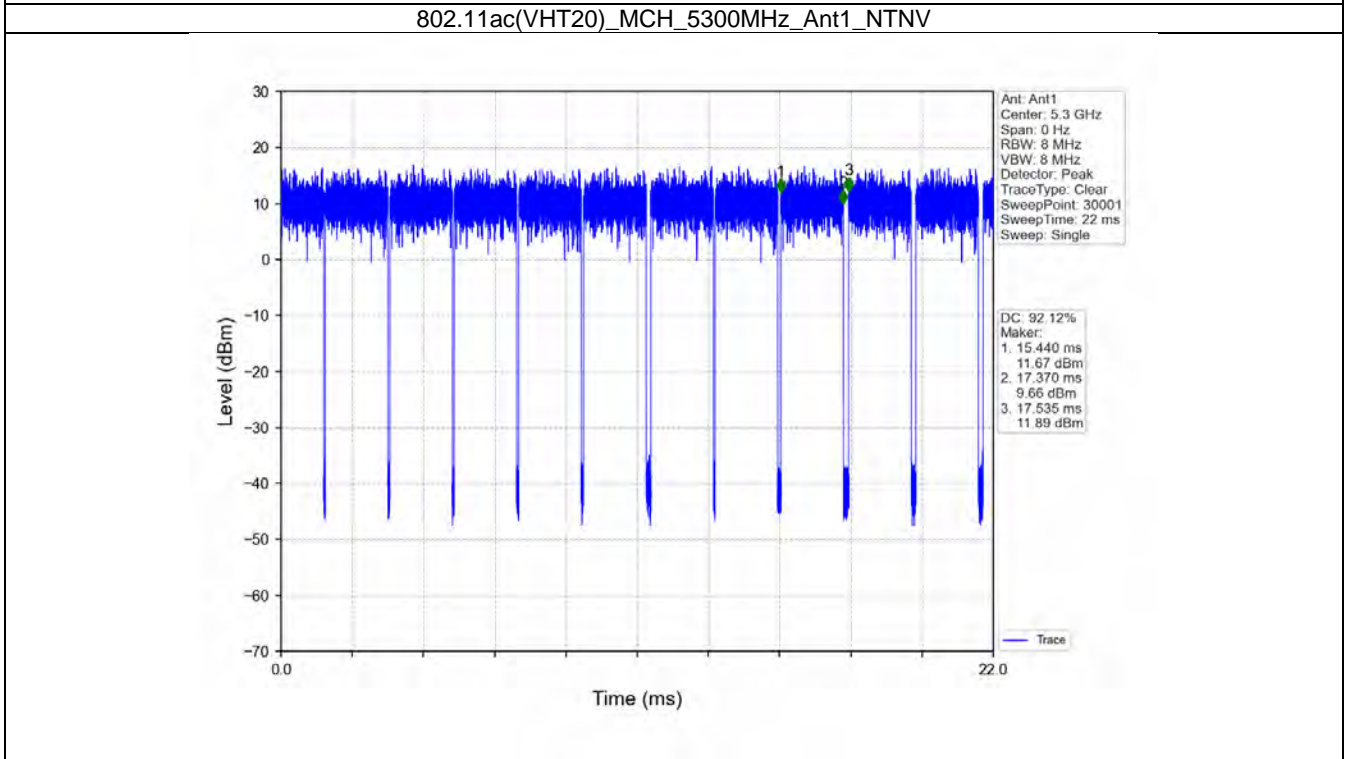
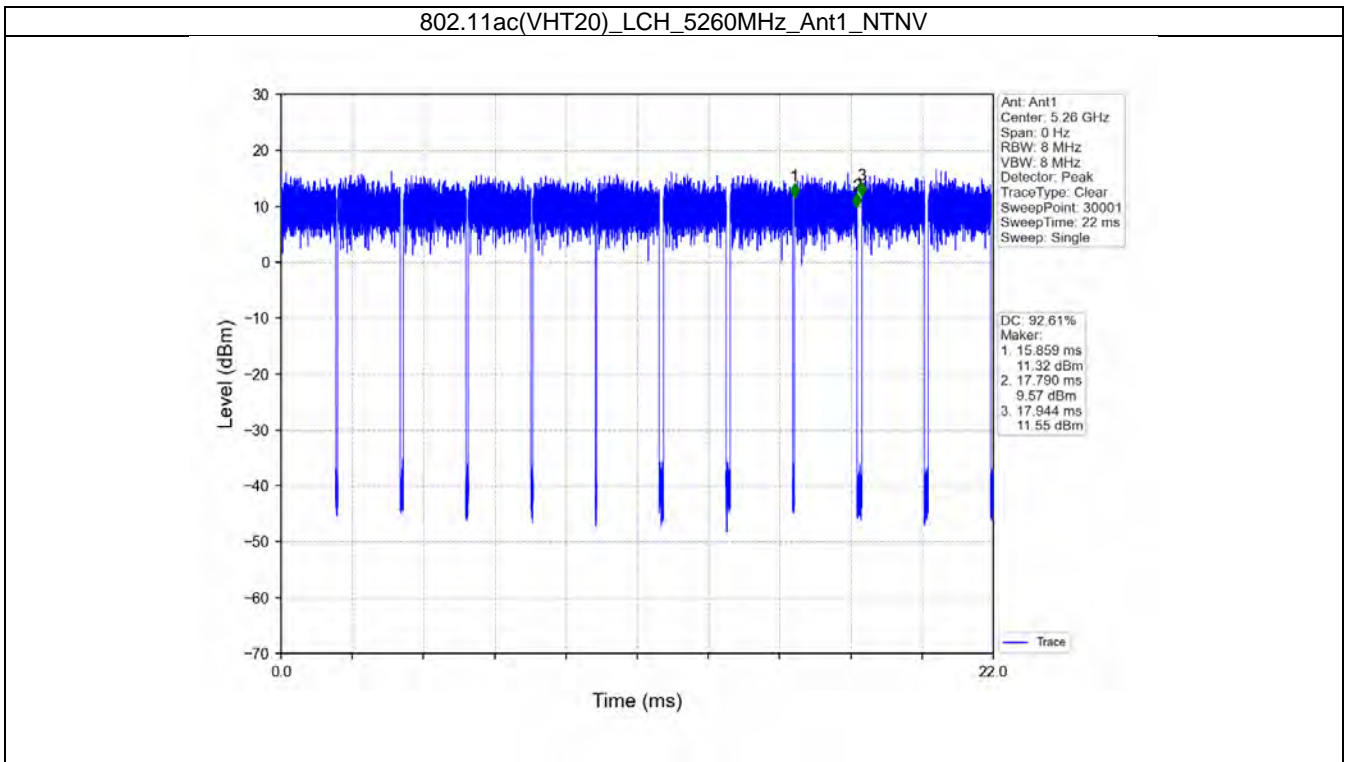
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



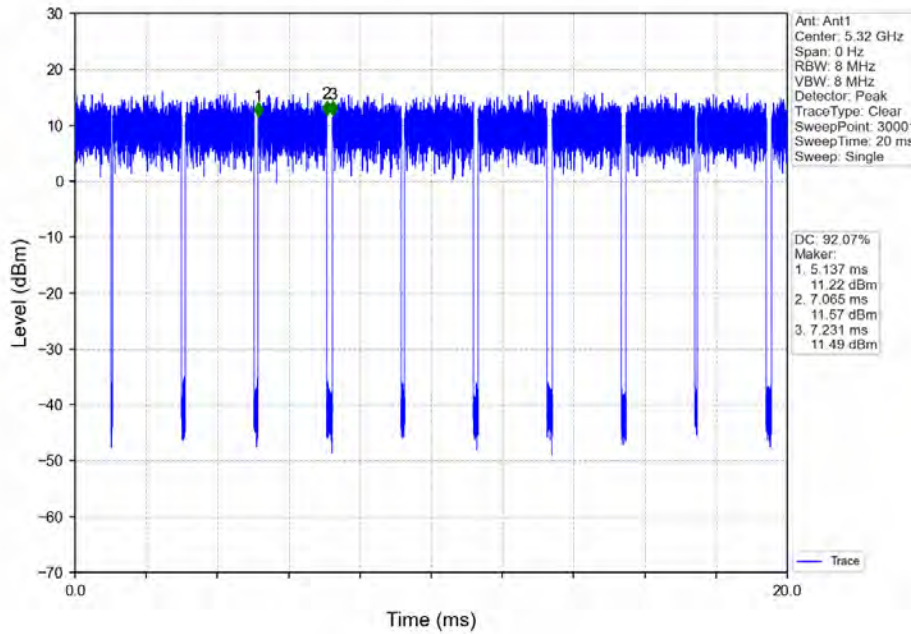
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



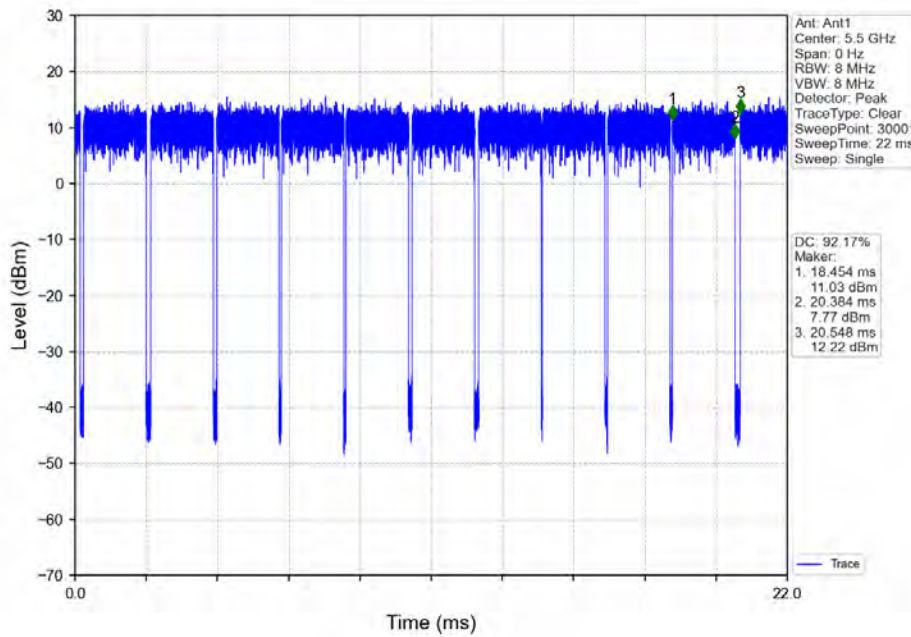




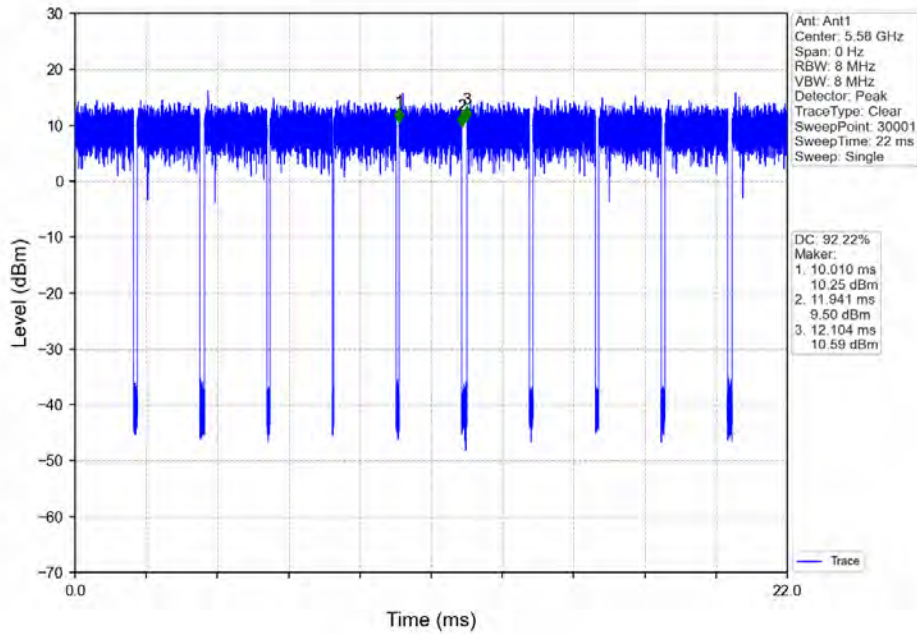
802.11ac(VHT20)_HCH_5320MHz_Ant1_NTNV



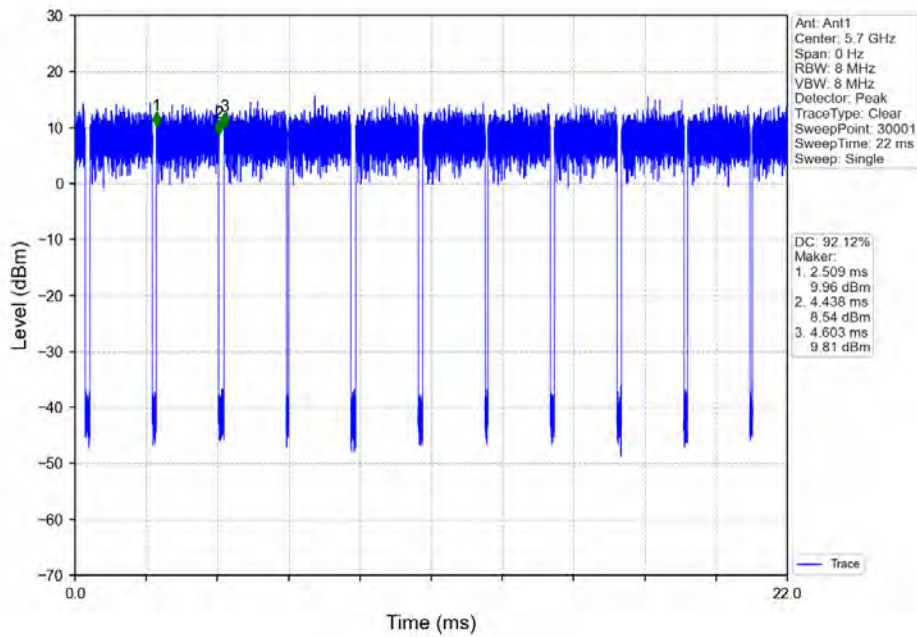
802.11ac(VHT20)_LCH_5500MHz_Ant1_NTNV



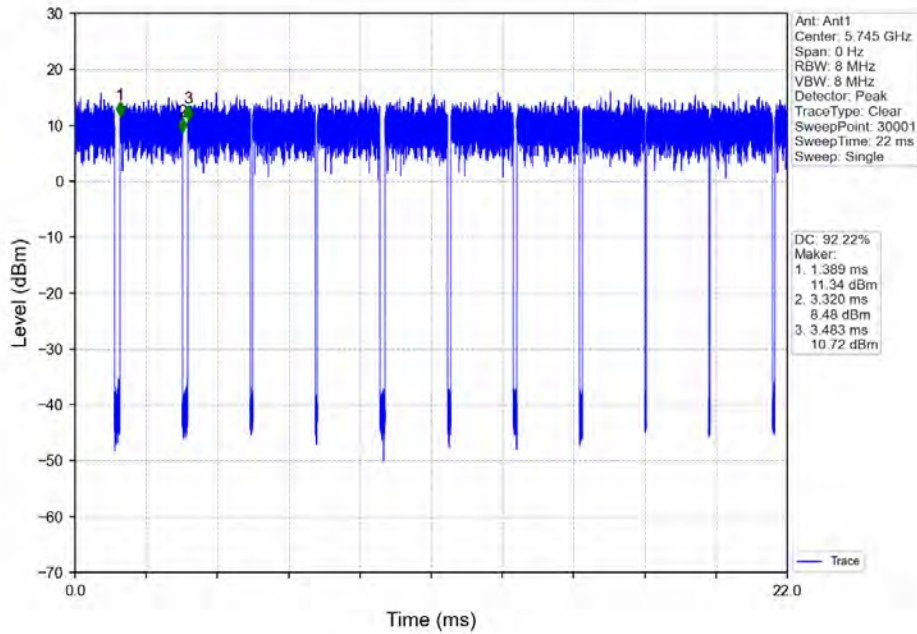
802.11ac(VHT20)_MCH_5580MHz_Ant1_NTNV



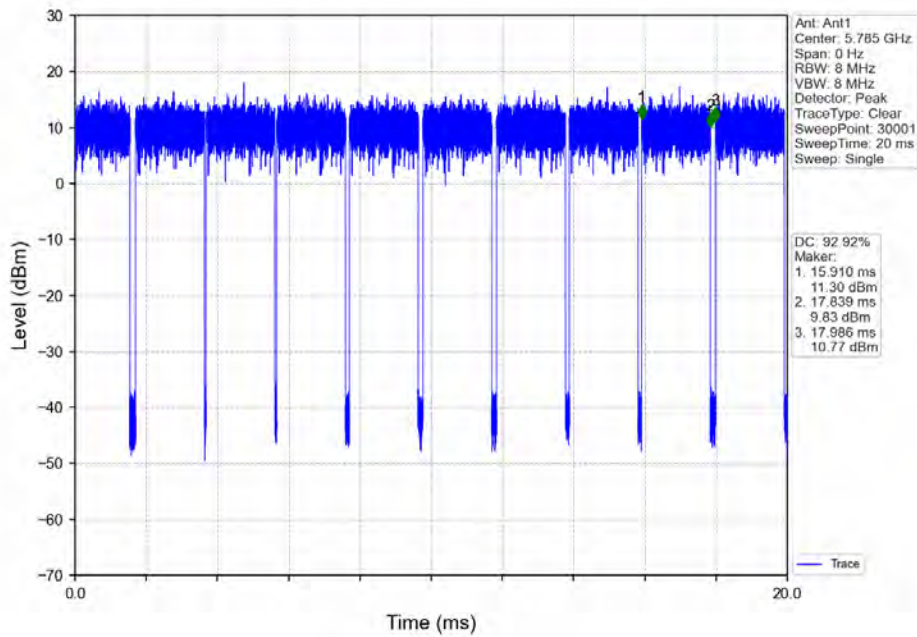
802.11ac(VHT20)_HCH_5700MHz_Ant1_NTNV



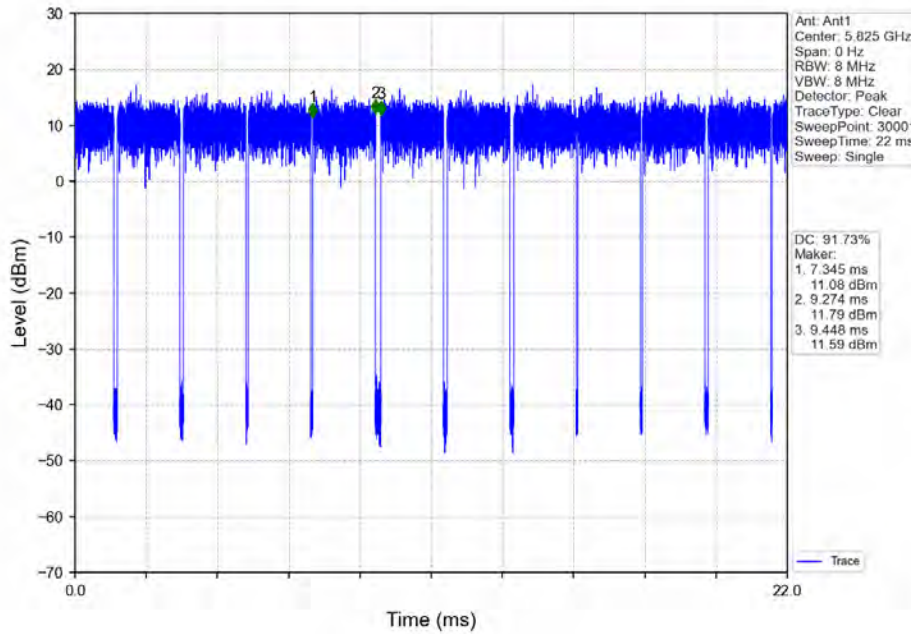
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



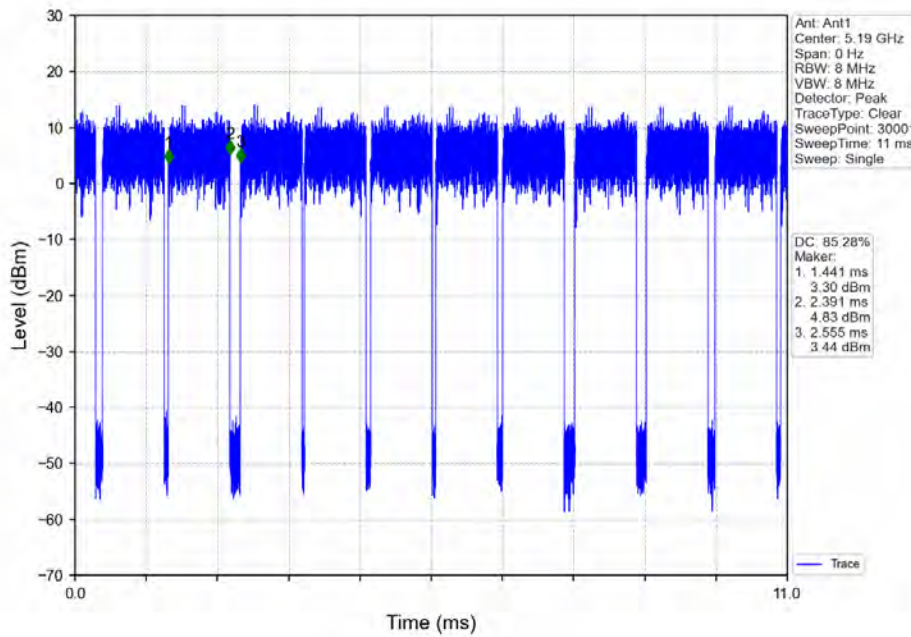
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



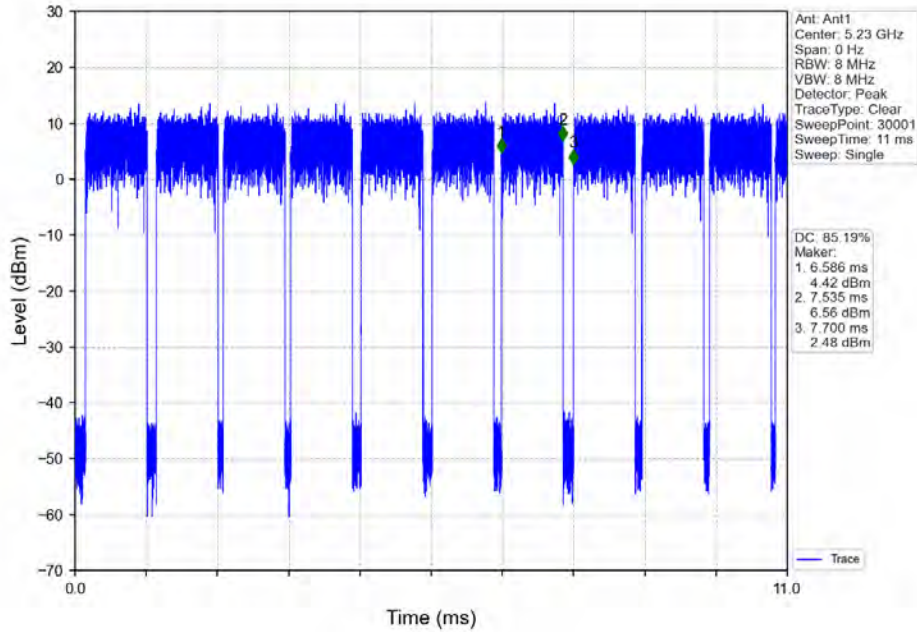
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



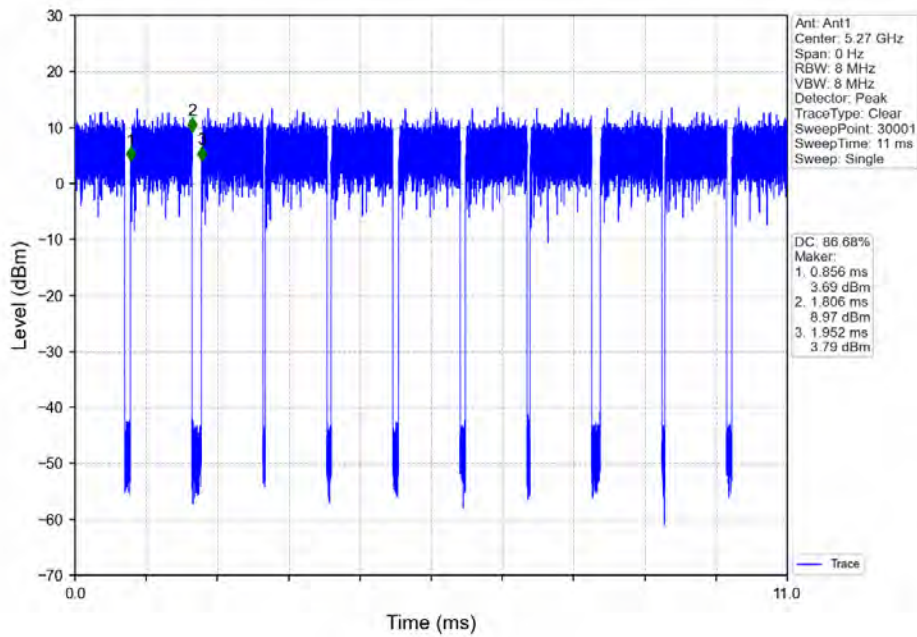
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV

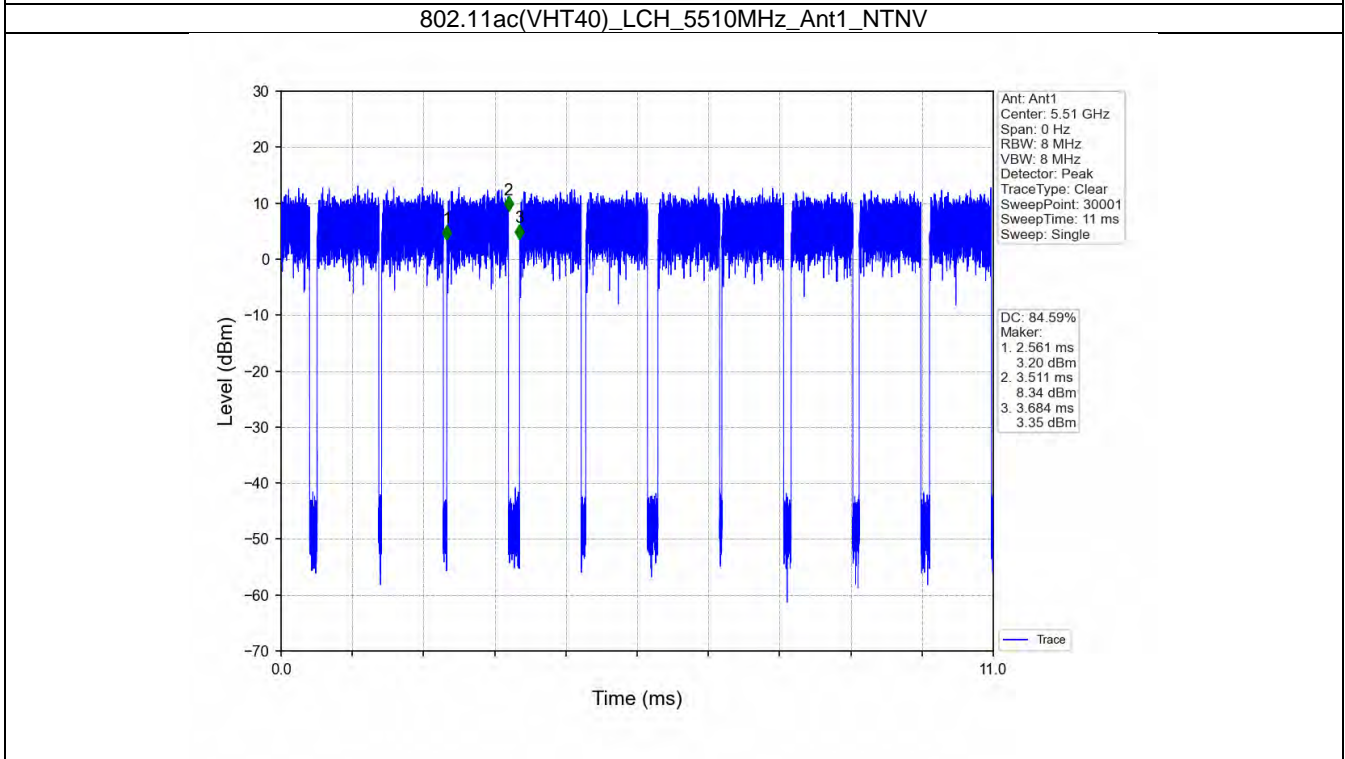
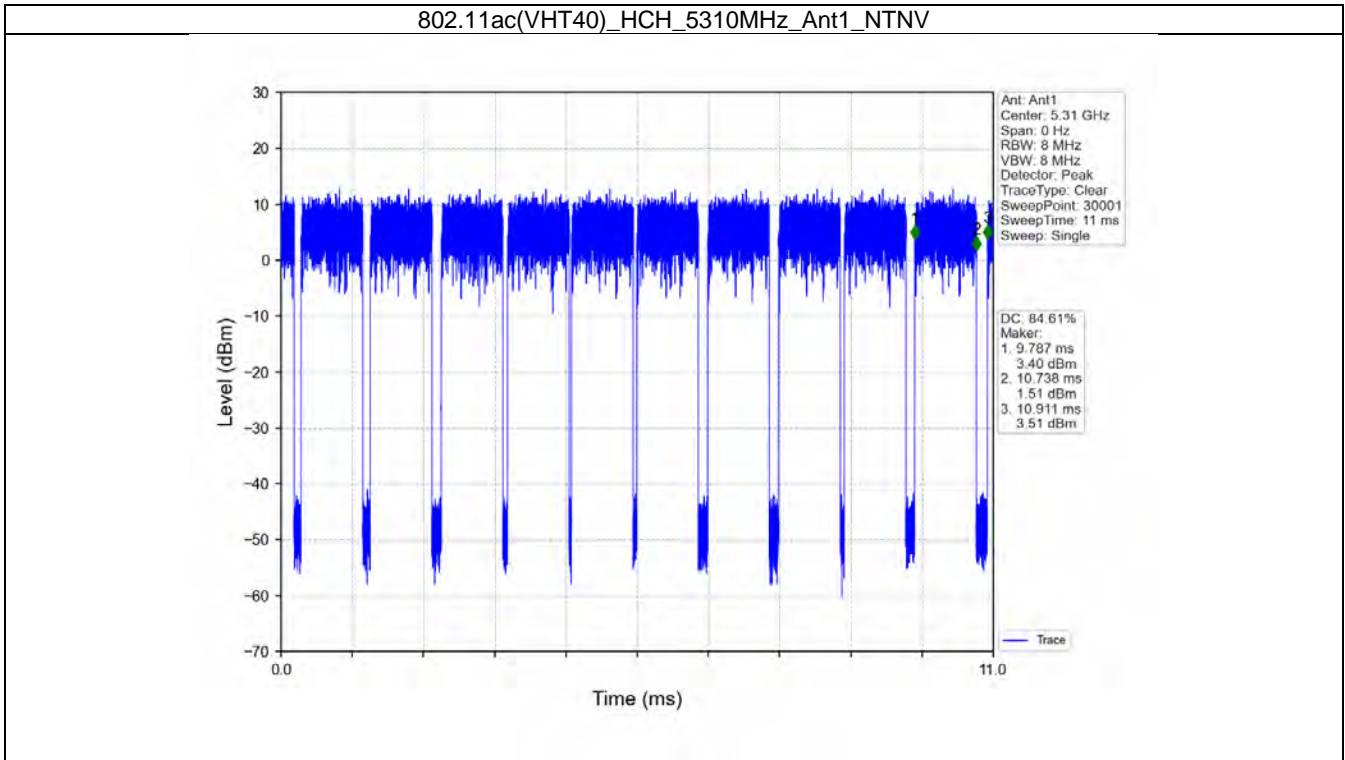


802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV

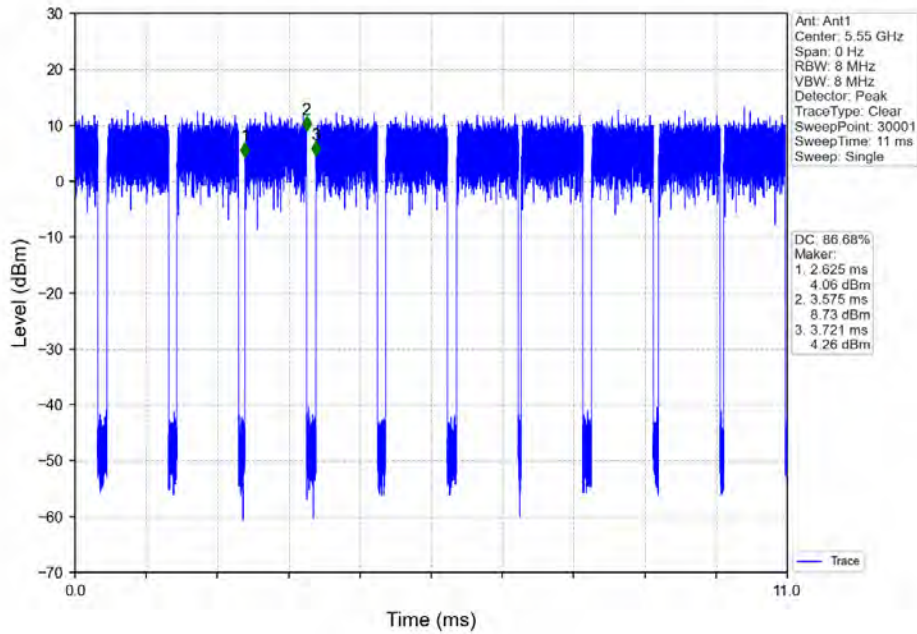


802.11ac(VHT40)_LCH_5270MHz_Ant1_NTNV

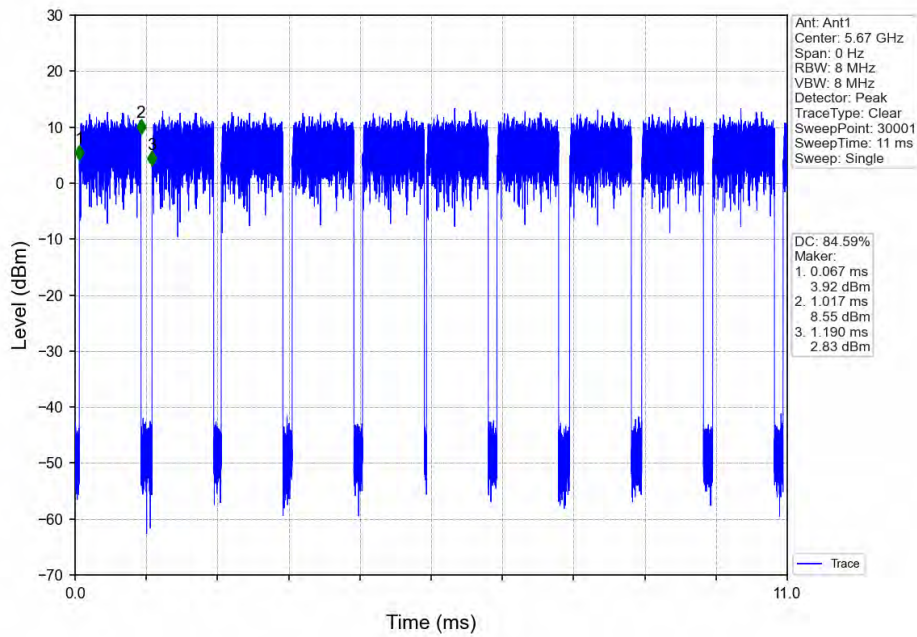


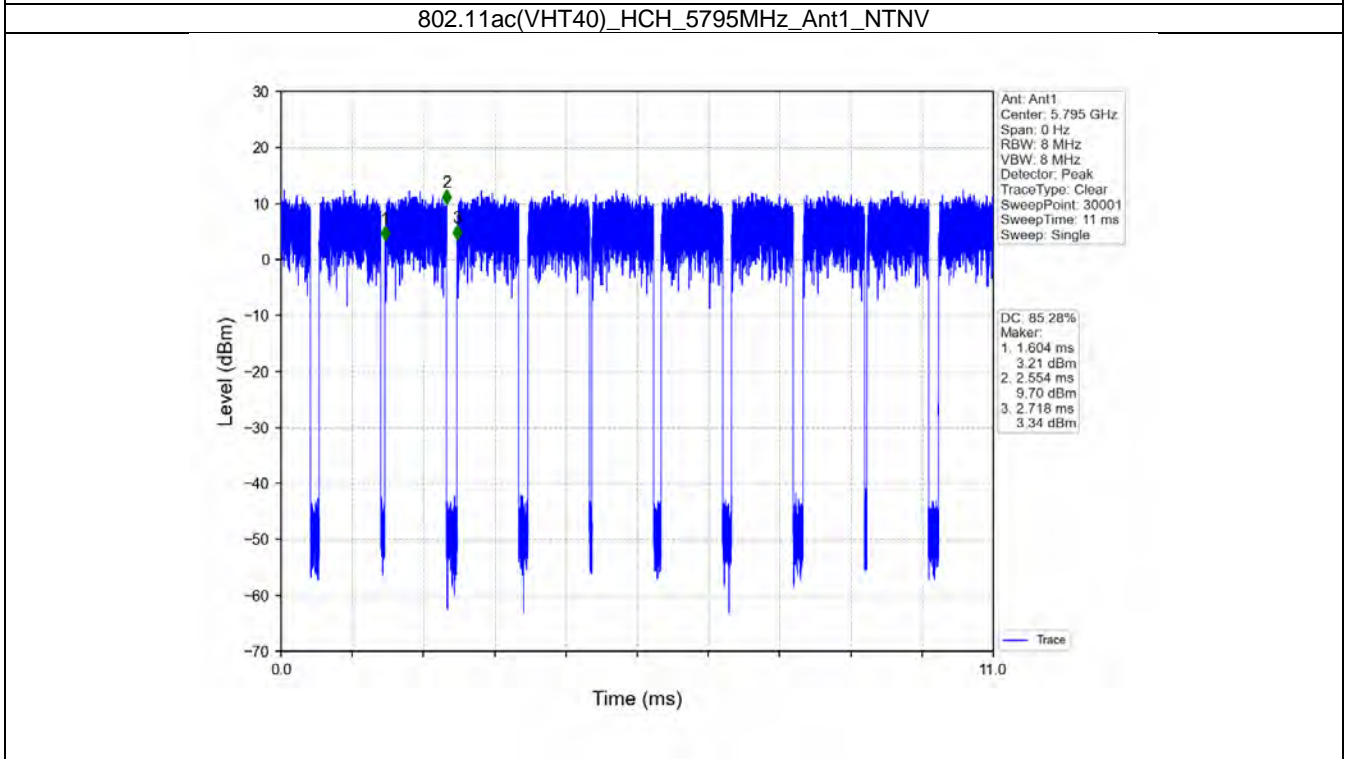
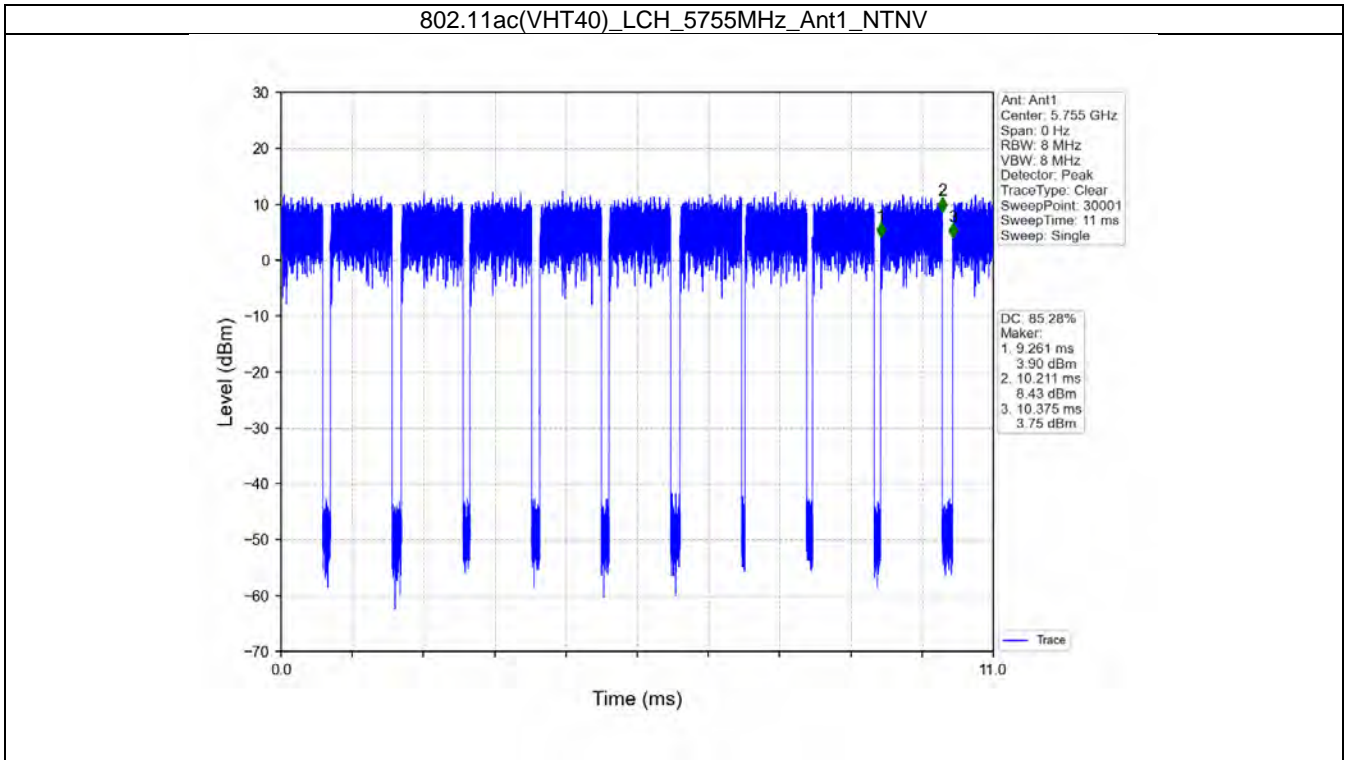


802.11ac(VHT40)_MCH_5550MHz_Ant1_NTNV

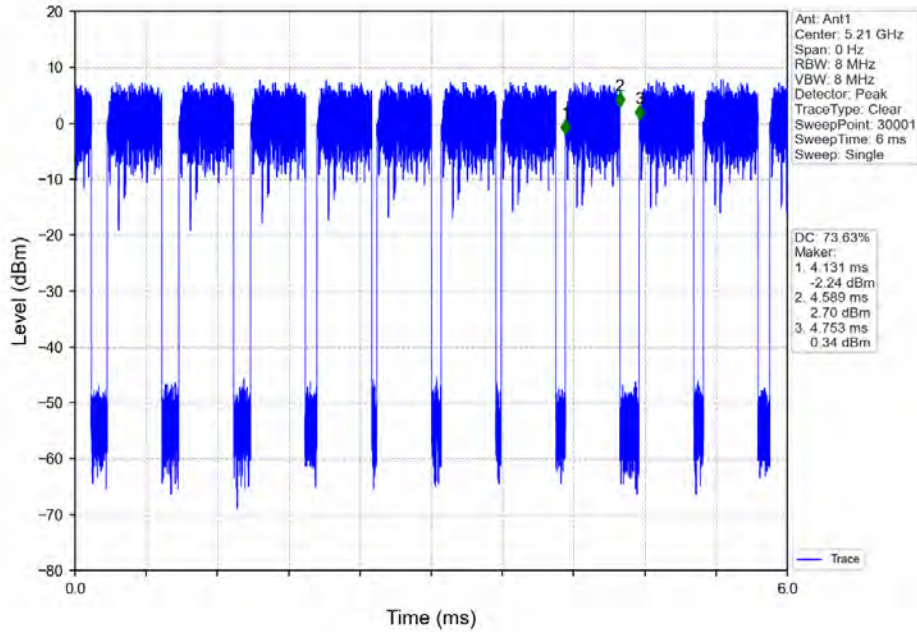


802.11ac(VHT40)_HCH_5670MHz_Ant1_NTNV

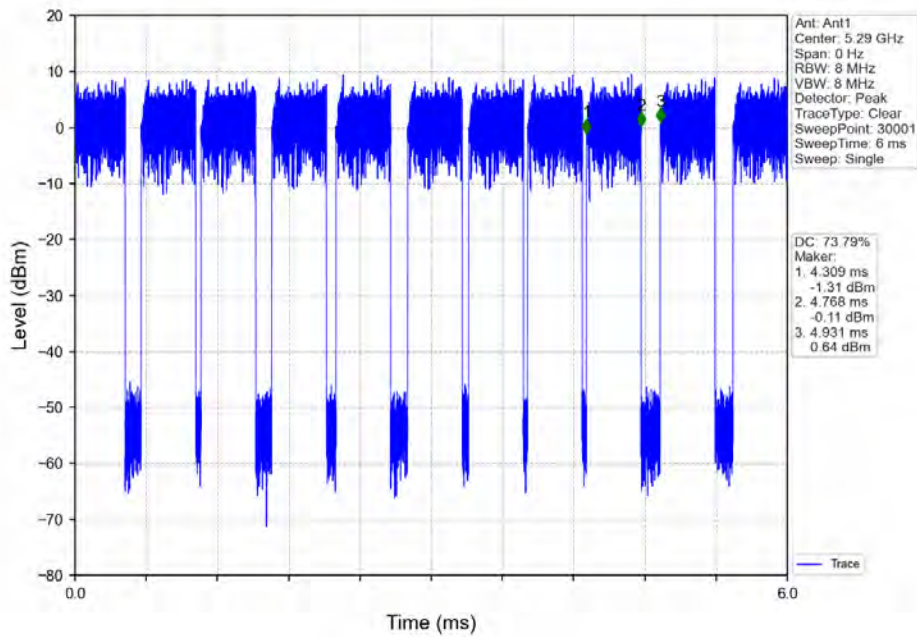




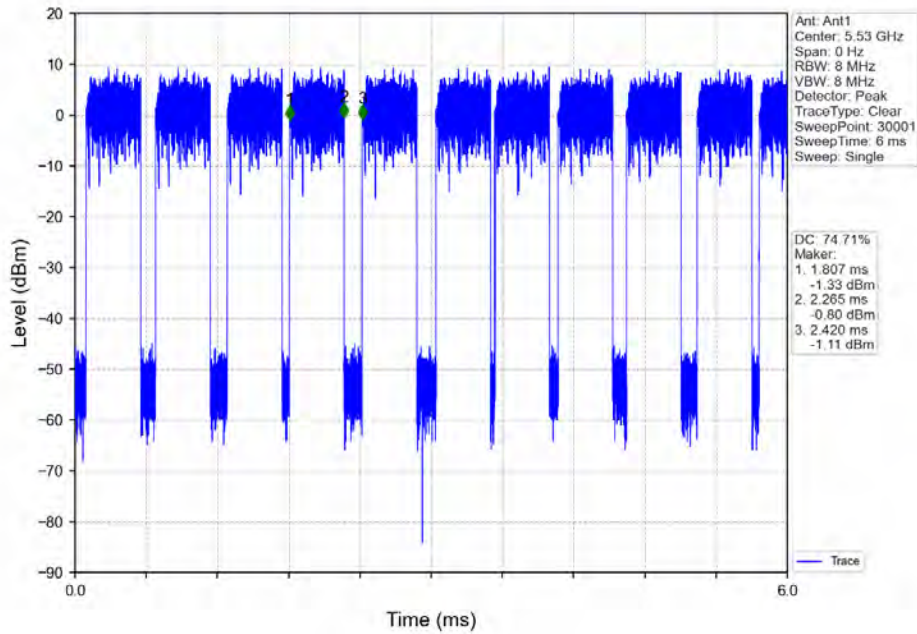
802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



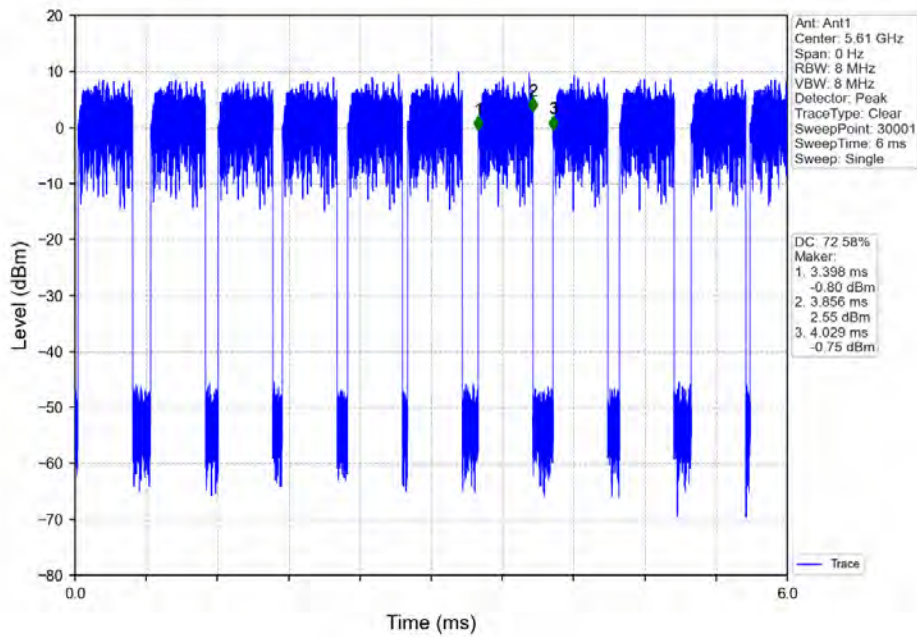
802.11ac(VHT80)_MCH_5290MHz_Ant1_NTNV

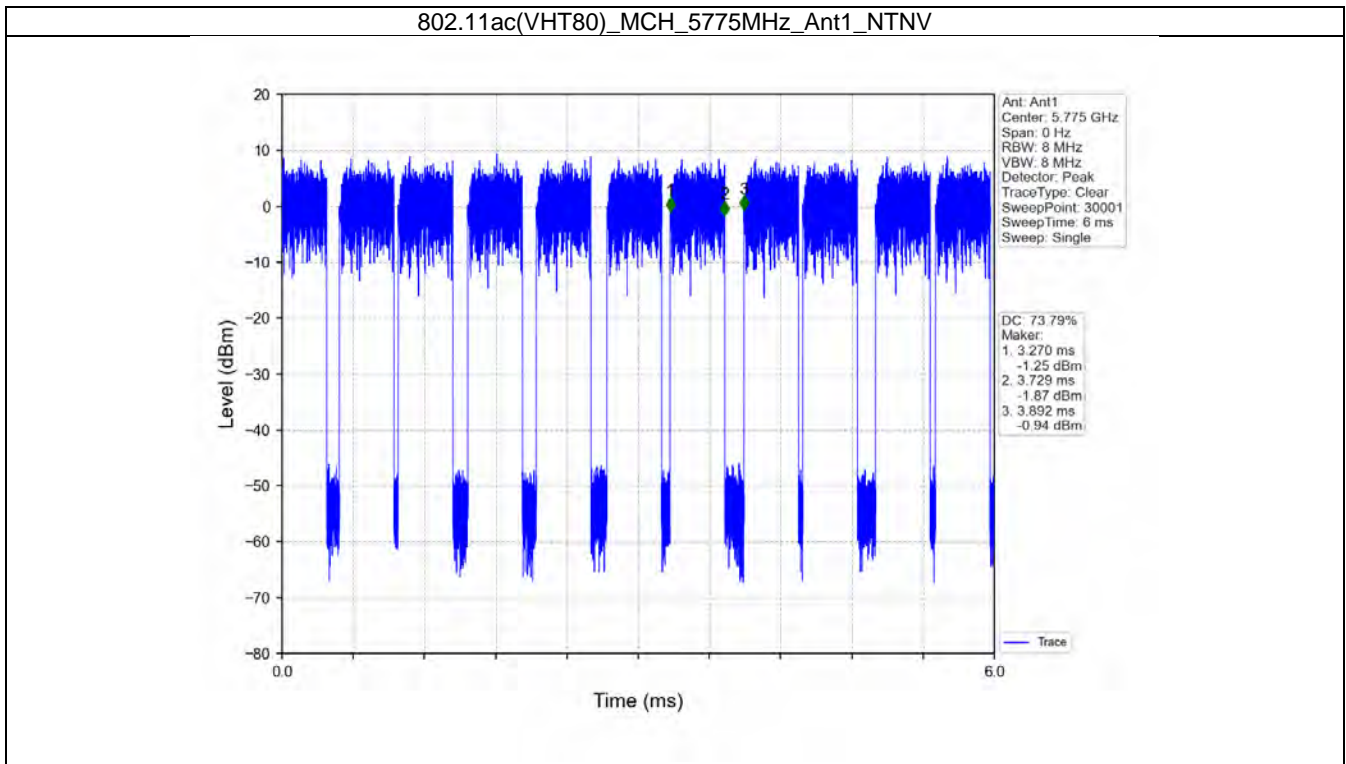


802.11ac(VHT80)_LCH_5530MHz_Ant1_NTNV



802.11ac(VHT80)_HCH_5610MHz_Ant1_NTNV







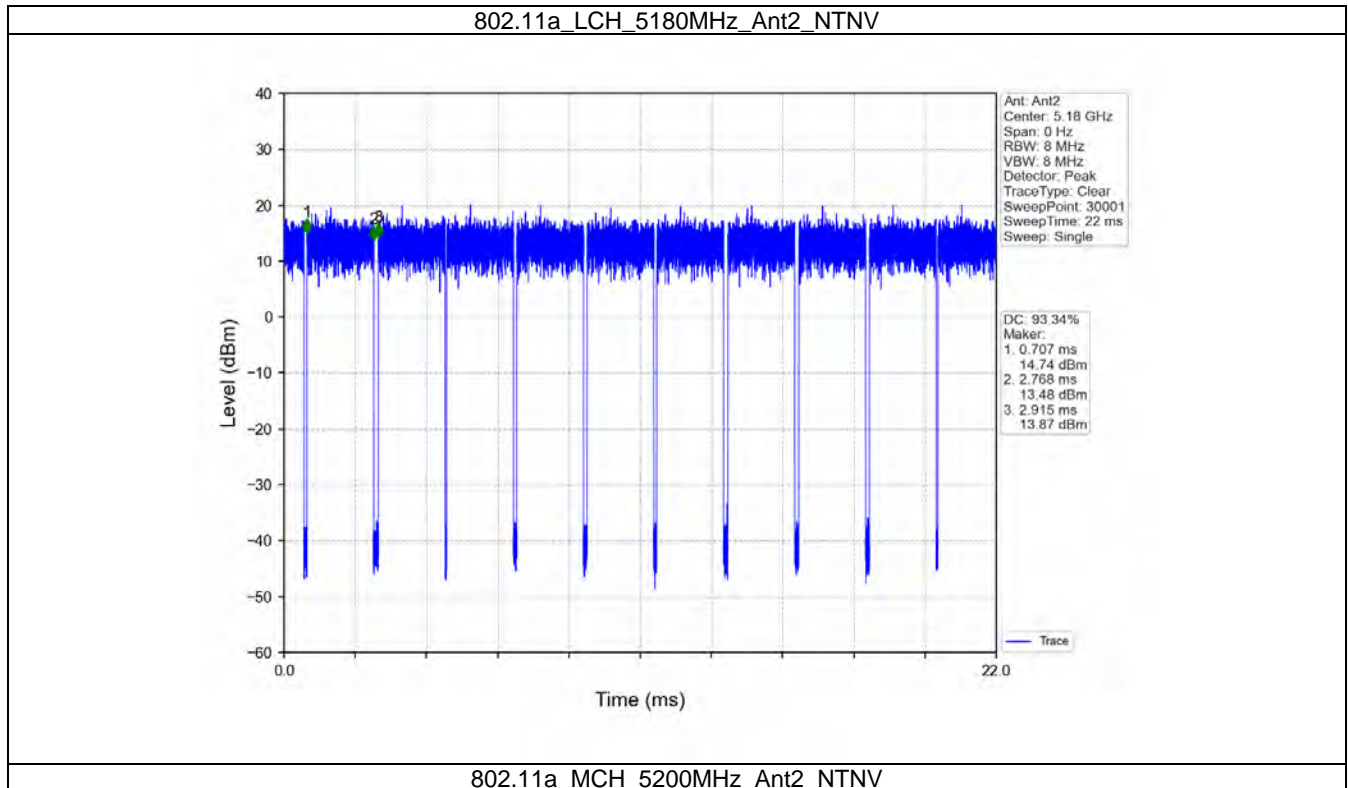
1.2 Ant2

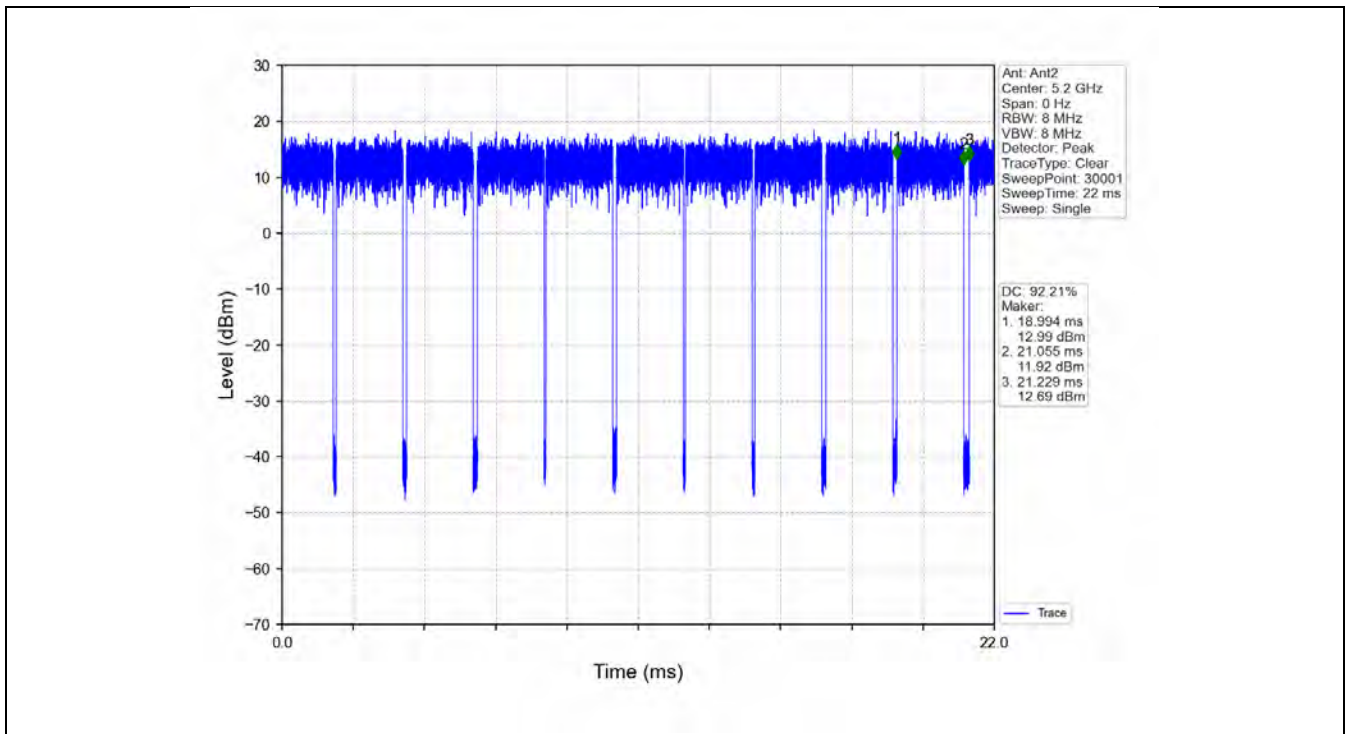
1.2.1 Test Result

		Ant2					
Mode	Tx Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	2.061	2.208	93.34	0.30	4.38
		5200	2.061	2.235	92.21	0.35	5.08
		5240	2.063	2.226	92.68	0.33	5.57
		5260	2.063	2.227	92.64	0.33	5.53
		5300	2.063	2.235	92.30	0.35	5.90
		5320	2.061	2.217	92.96	0.32	3.51
		5500	2.063	2.226	92.68	0.33	5.60
		5580	2.062	2.199	93.77	0.28	4.46
		5700	2.062	2.189	94.20	0.26	4.05
		5745	2.062	2.217	93.01	0.31	4.75
		5785	2.063	2.208	93.43	0.29	4.80
5825	2.061	2.235	92.21	0.35	5.52		
802.11n (HT20)	MIMO	5180	1.917	2.090	91.72	0.38	5.42
		5200	1.919	2.074	92.53	0.34	5.55
		5240	1.917	2.091	91.68	0.38	5.85
		5260	1.918	2.072	92.57	0.34	5.52
		5300	1.917	2.091	91.68	0.38	5.42
		5320	1.917	2.064	92.88	0.32	4.68
		5500	1.919	2.082	92.17	0.35	5.94
		5580	1.917	2.073	92.47	0.34	5.08
		5700	1.917	2.073	92.47	0.34	5.11
		5745	1.917	2.054	93.33	0.30	3.38
		5785	1.918	2.082	92.12	0.36	5.47
5825	1.918	2.082	92.12	0.36	5.47		
802.11n (HT40)	MIMO	5190	0.942	1.097	85.87	0.66	9.36
		5230	0.943	1.079	87.40	0.59	8.83
		5270	0.943	1.097	85.96	0.66	10.29
		5310	0.942	1.115	84.48	0.73	10.74
		5510	0.943	1.115	84.57	0.73	11.64
		5550	1.917	2.073	92.47	0.34	4.20
		5670	0.942	1.115	84.48	0.73	10.74
		5755	0.943	1.079	87.40	0.59	8.83
		5795	0.941	1.106	85.08	0.70	5.15
802.11ac (VHT20)	MIMO	5180	1.929	2.094	92.12	0.36	5.47
		5200	1.930	2.104	91.73	0.37	5.85
		5240	1.930	2.093	92.21	0.35	5.91
		5260	1.929	2.094	92.12	0.36	5.04
		5300	1.929	2.103	91.73	0.38	5.43
		5320	1.931	2.094	92.22	0.35	3.73
		5500	1.930	2.076	92.97	0.32	2.50
		5580	1.930	2.085	92.57	0.34	5.52
		5700	1.930	2.094	92.17	0.35	4.98
		5745	1.931	2.085	92.61	0.33	5.49
		5785	1.929	2.094	92.12	0.36	5.04
5825	1.930	2.094	92.17	0.35	4.61		
802.11ac (VHT40)	MIMO	5190	0.951	1.123	84.68	0.72	11.56
		5230	0.949	1.096	86.59	0.63	7.74

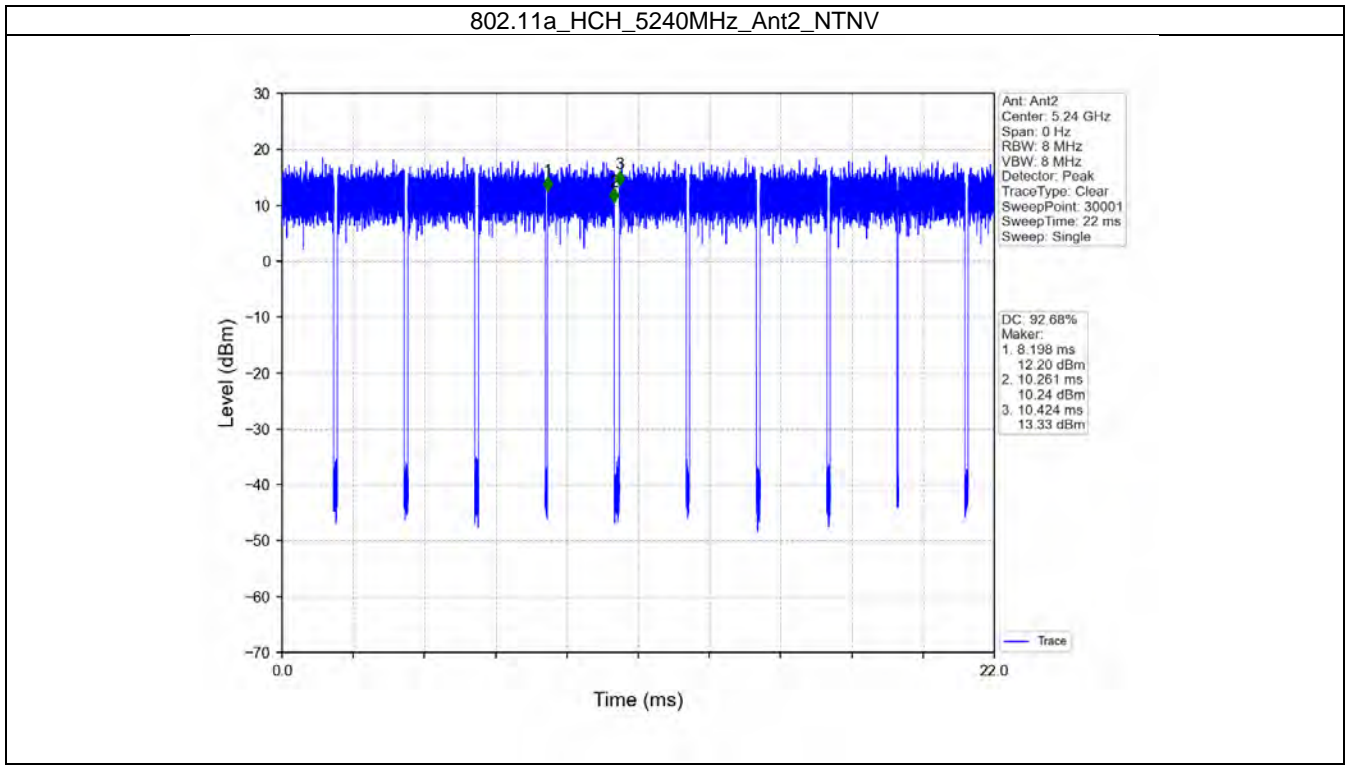
		5270	0.949	1.114	85.19	0.70	10.01
		5310	0.950	1.105	85.97	0.66	9.33
		5510	0.949	1.096	86.59	0.63	6.92
		5550	0.950	1.088	87.32	0.59	8.76
		5670	0.950	1.123	84.59	0.73	11.59
		5755	0.950	1.123	84.59	0.73	11.56
		5795	0.950	1.124	84.52	0.73	8.98
802.11ac (VHT80)	MIMO	5210	0.458	0.631	72.58	1.39	16.51
		5290	0.459	0.631	72.74	1.38	19.79
		5530	0.458	0.586	78.16	1.07	12.51
		5610	0.459	0.568	80.81	0.93	11.74
		5775	0.457	0.604	75.66	1.21	11.73

1.2.2 Test Graph

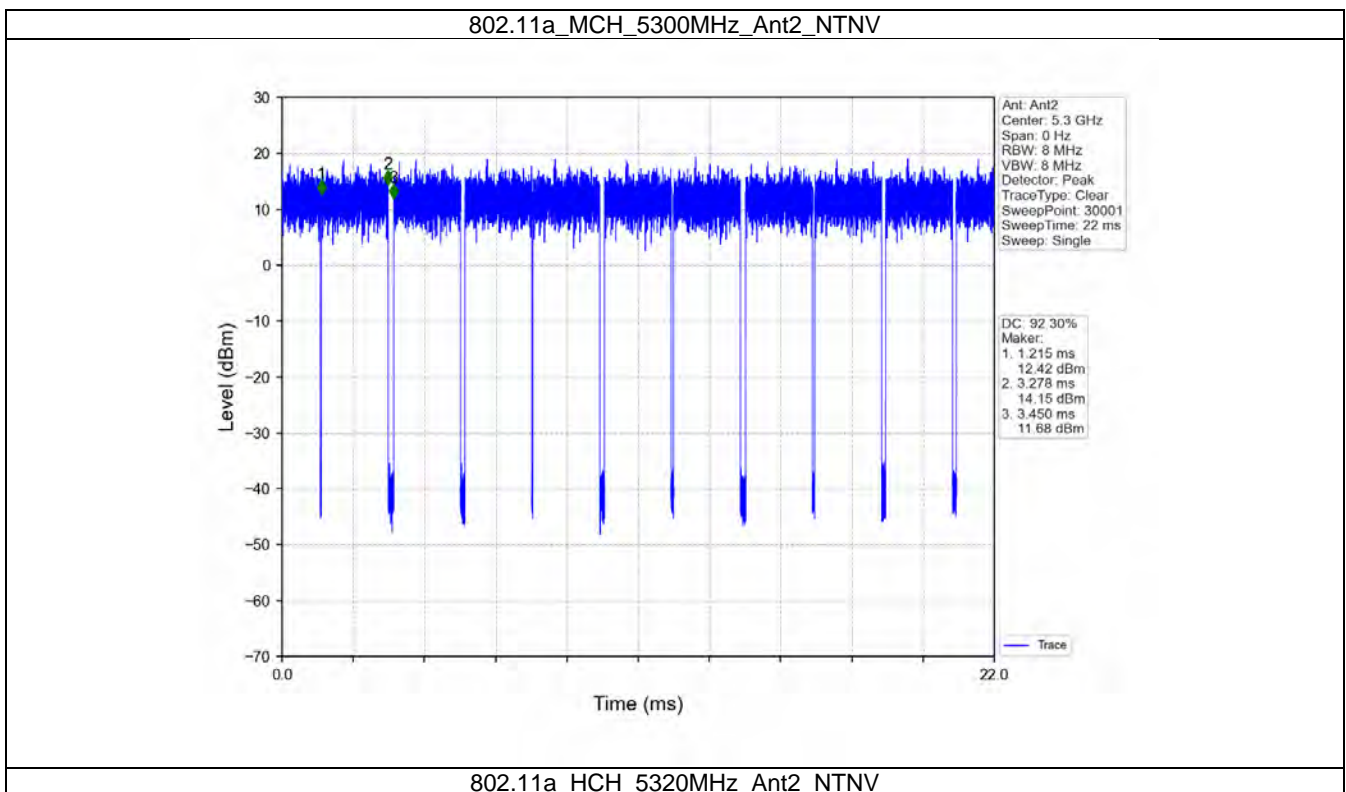
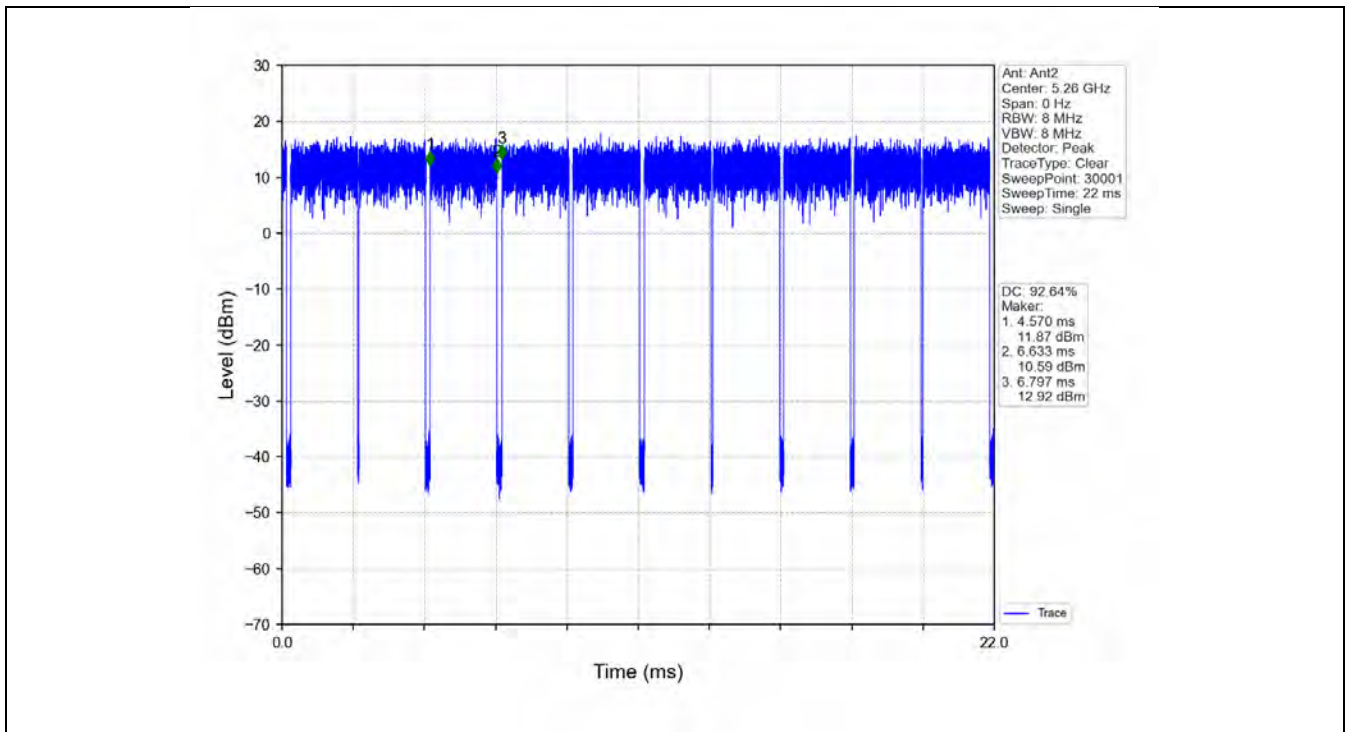


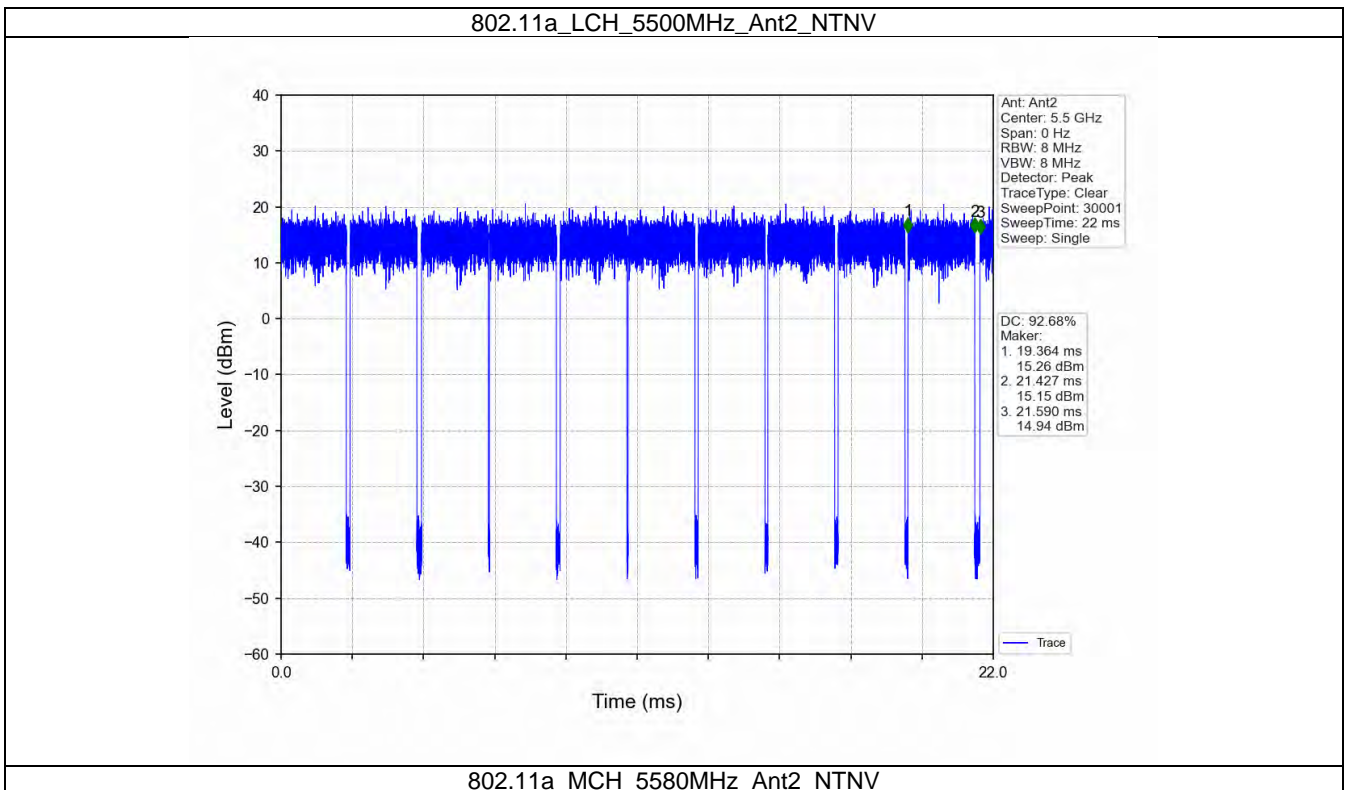
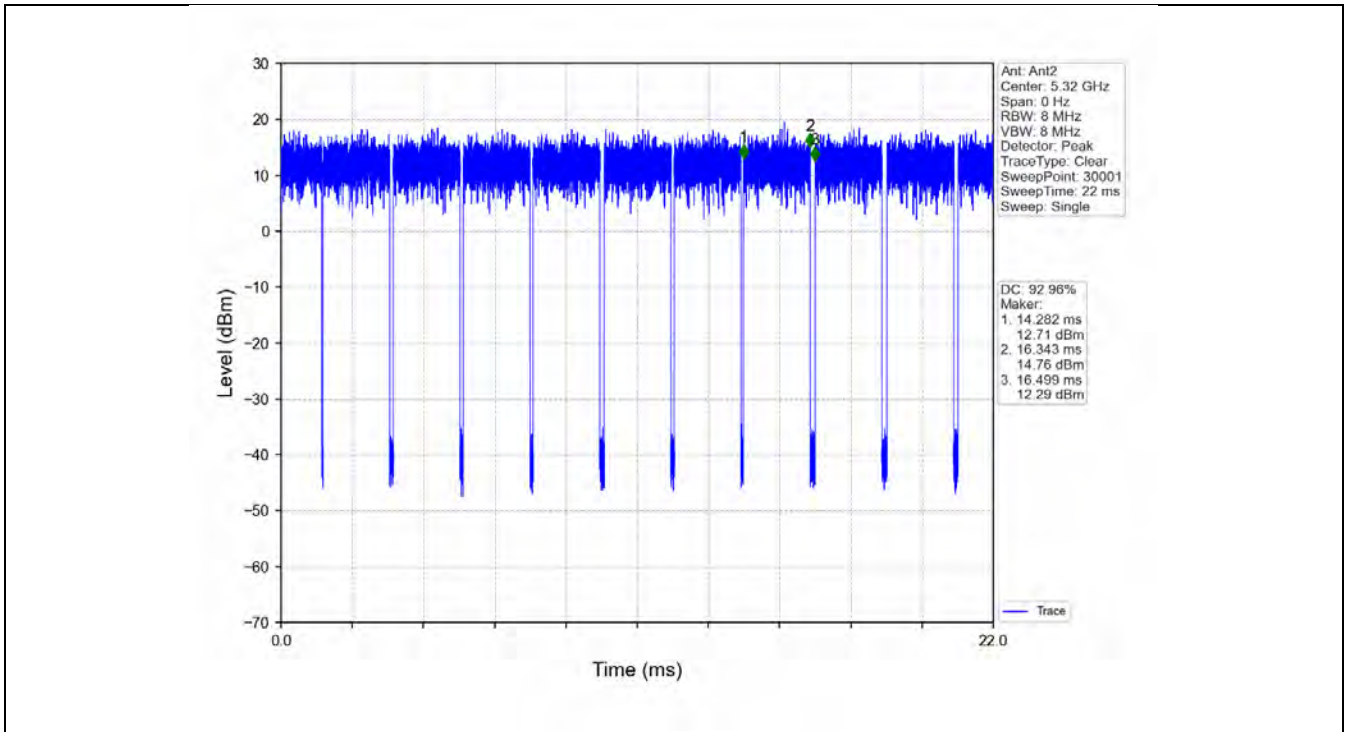


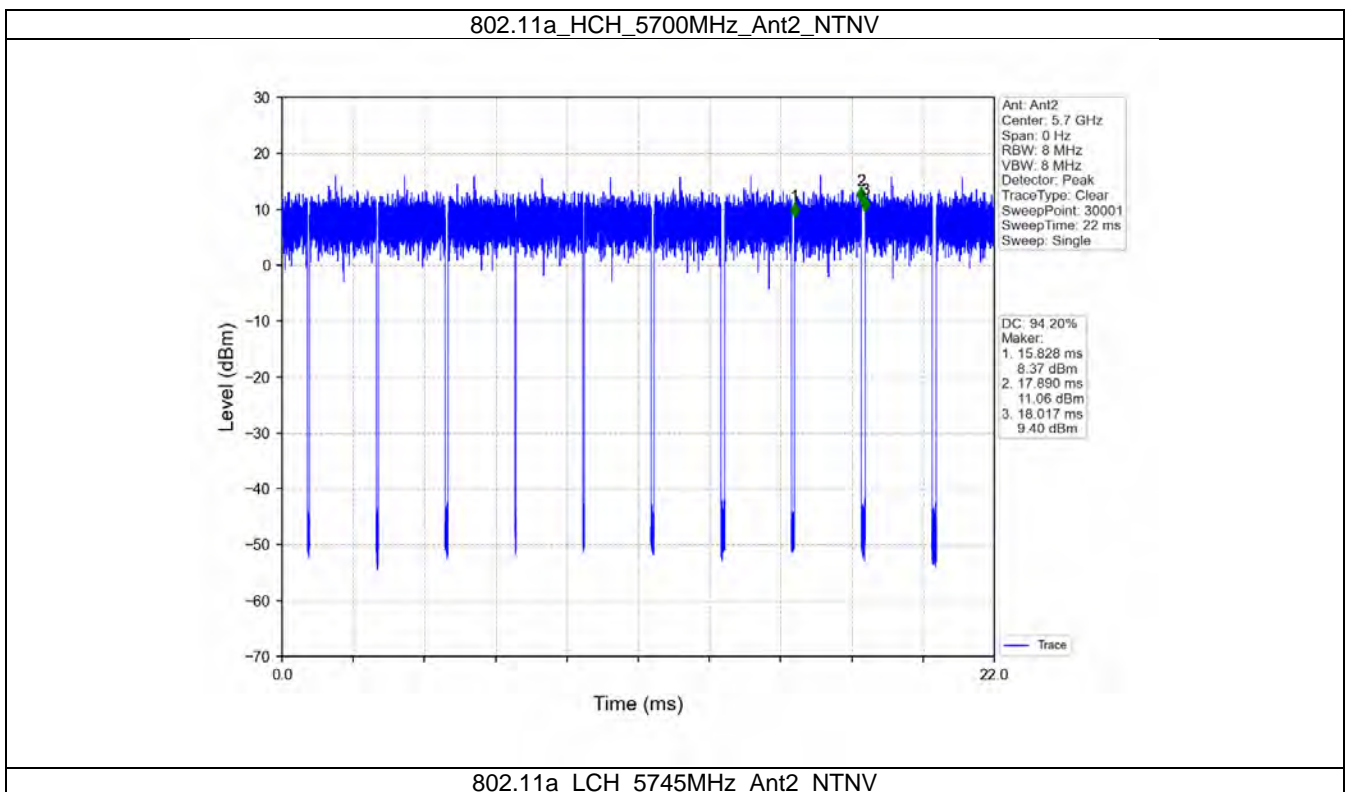
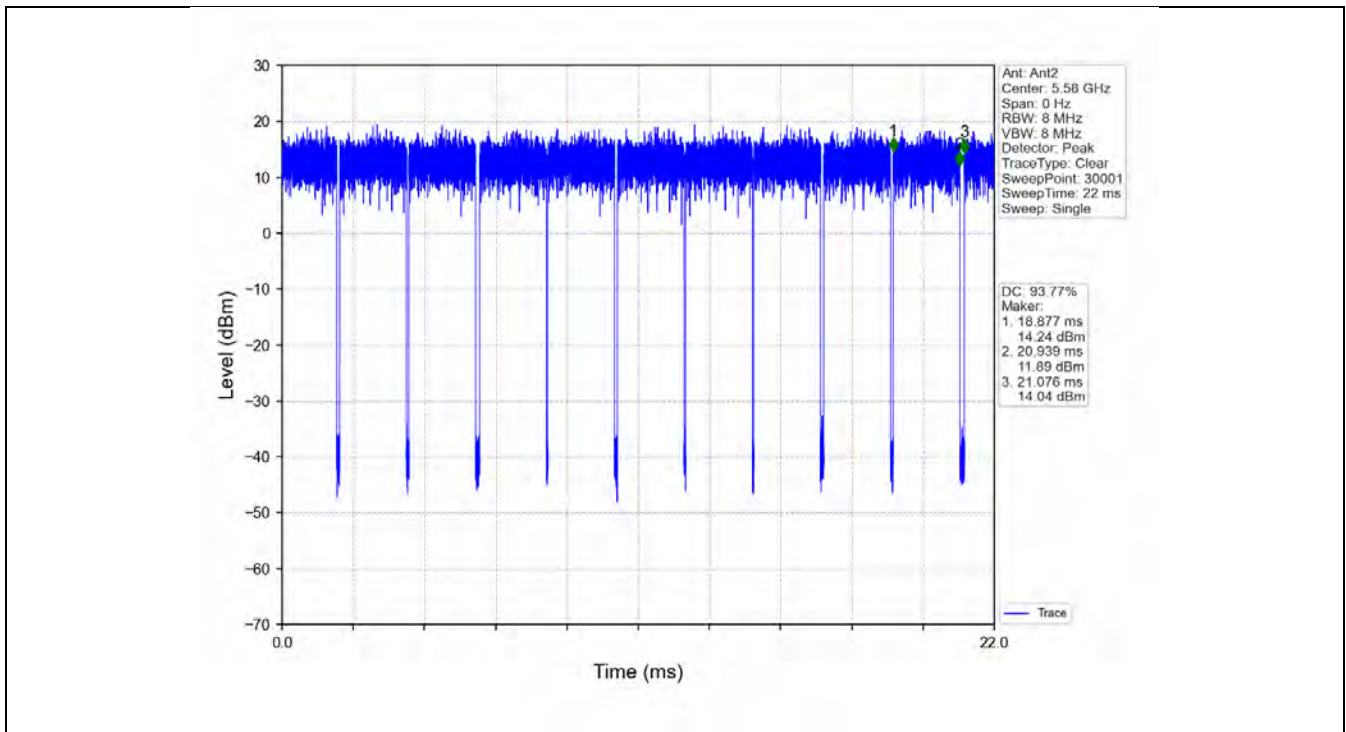
802.11a_HCH_5240MHz_Ant2_NTNV

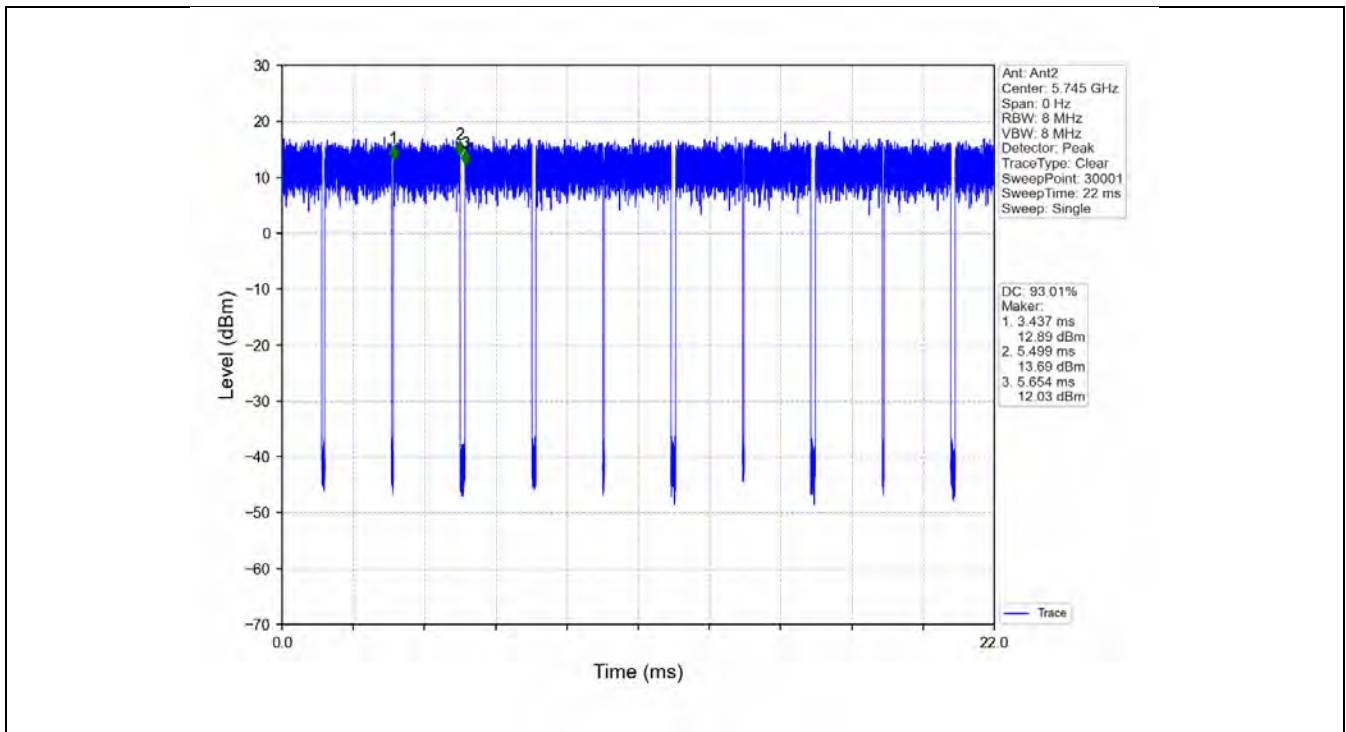


802.11a_LCH_5260MHz_Ant2_NTNV

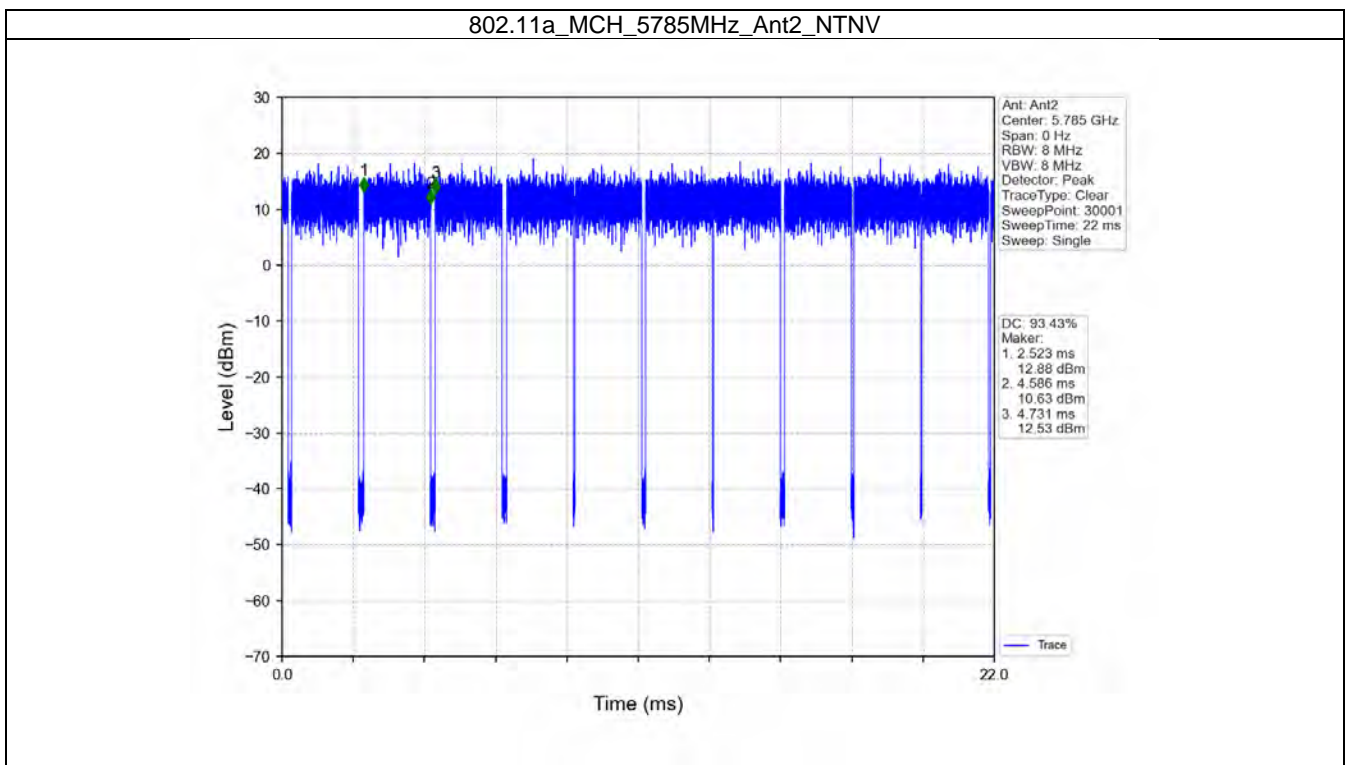




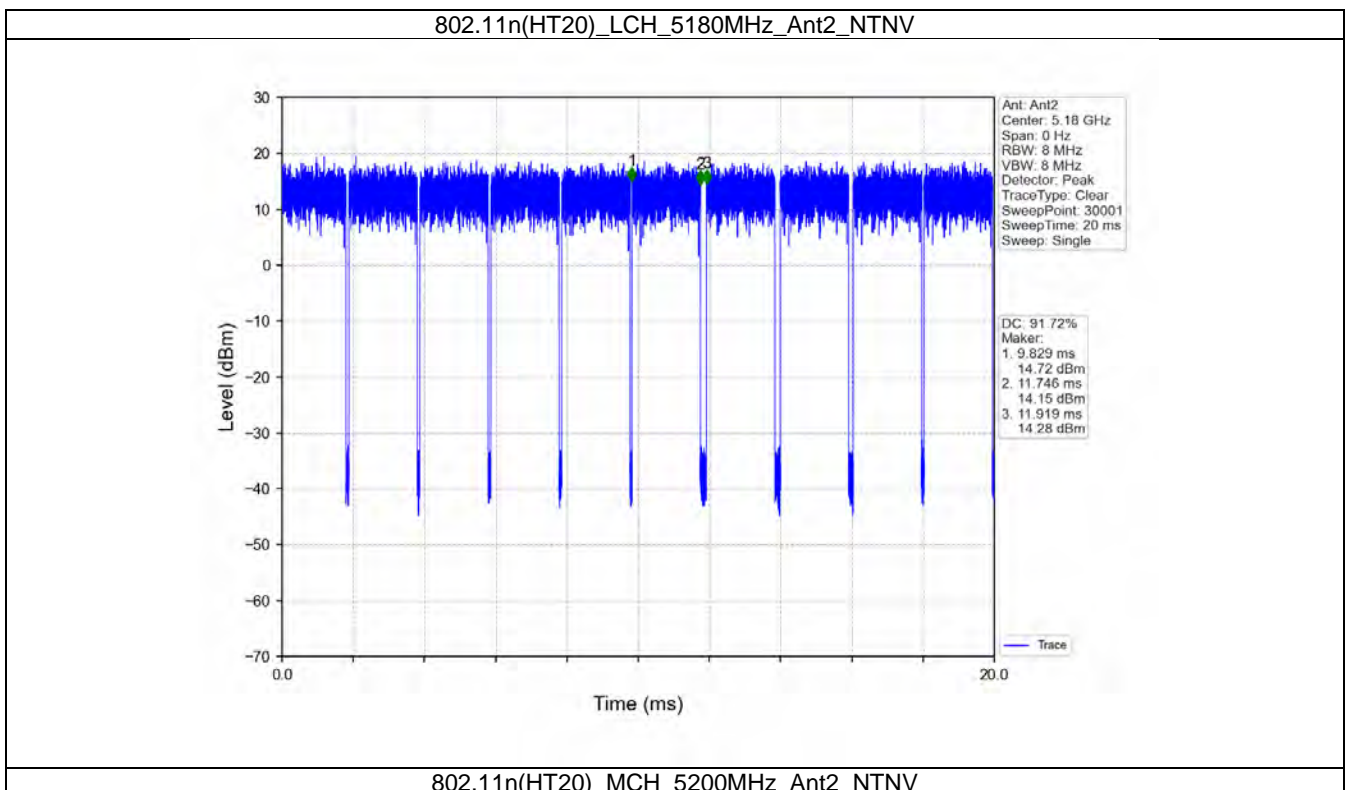
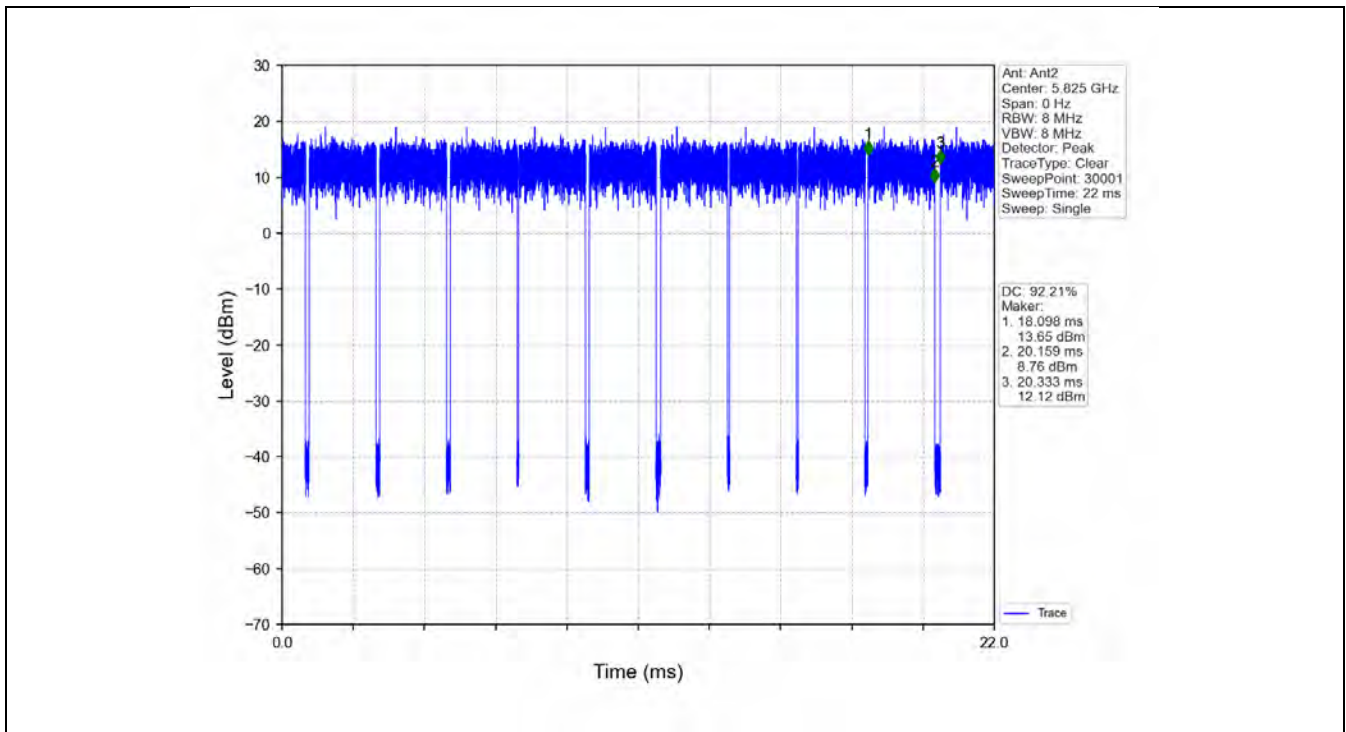


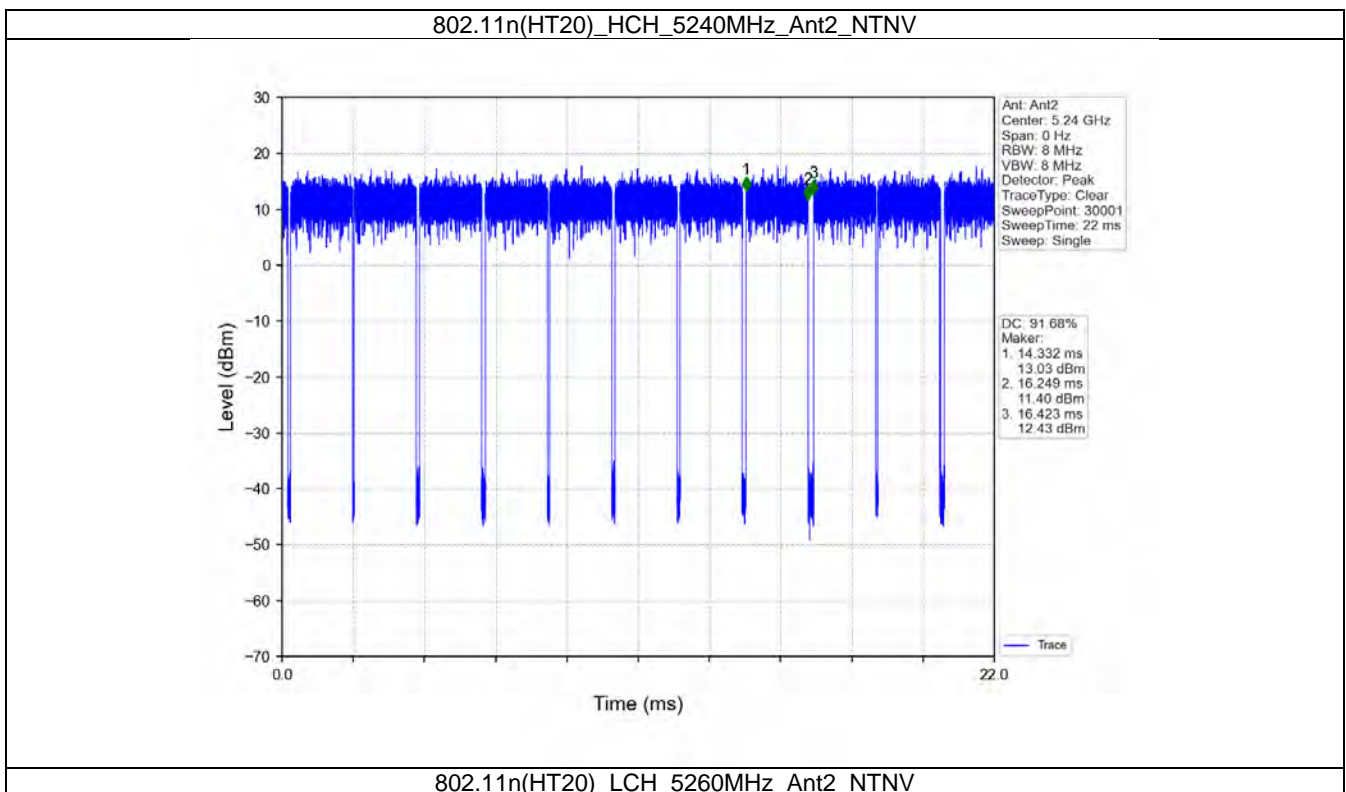
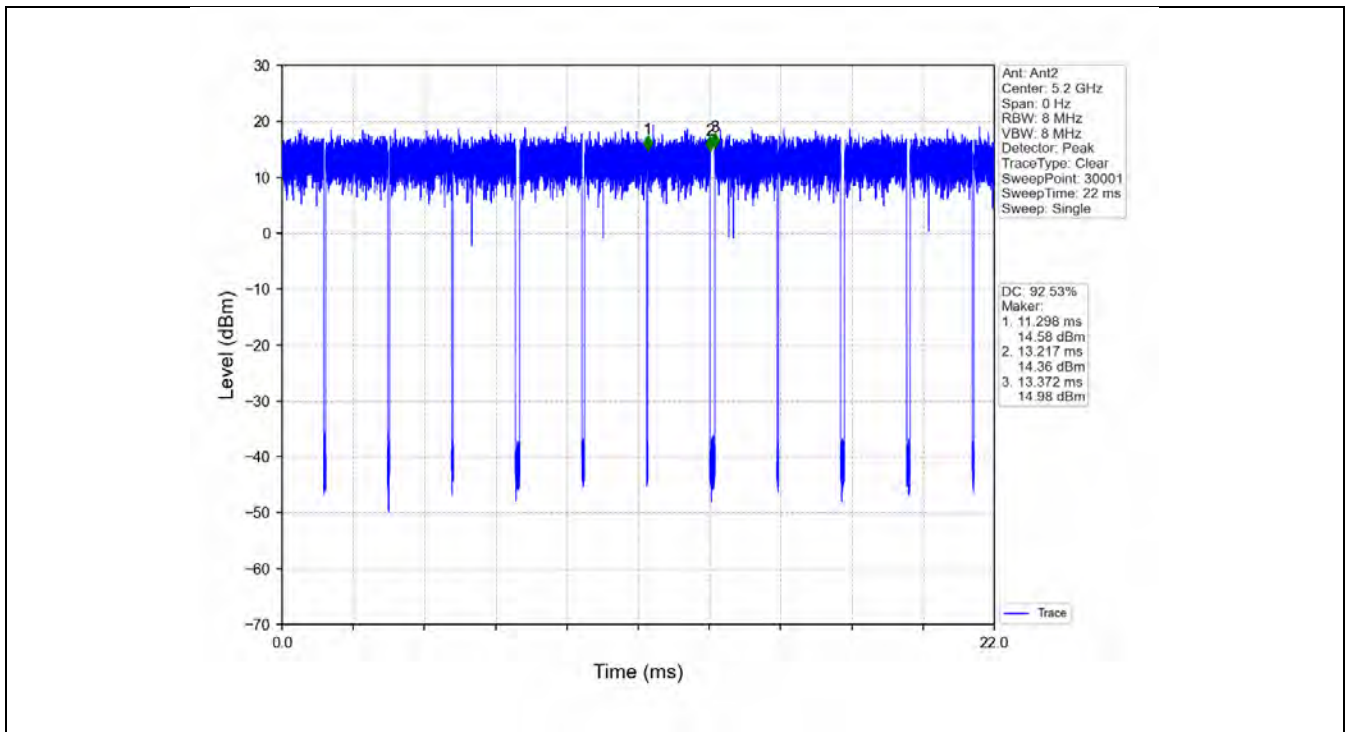


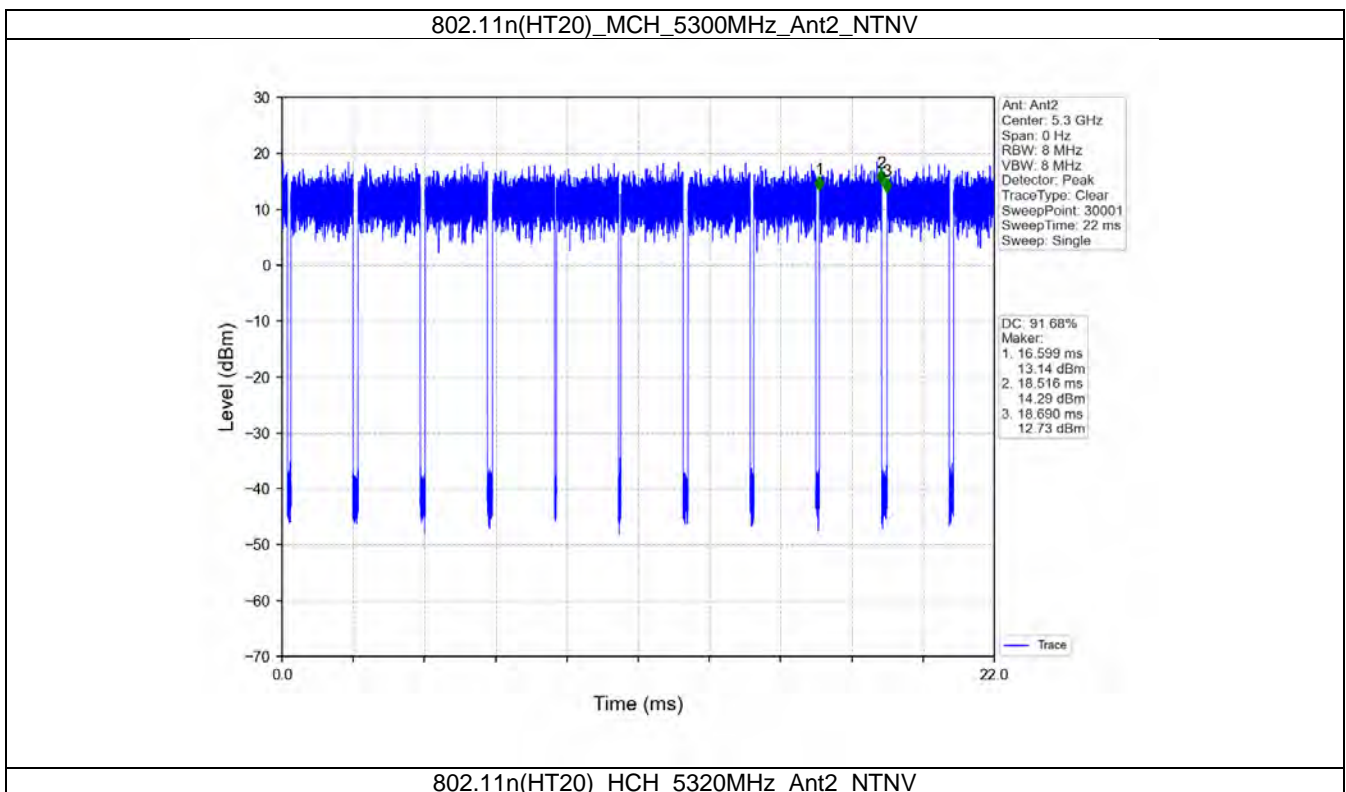
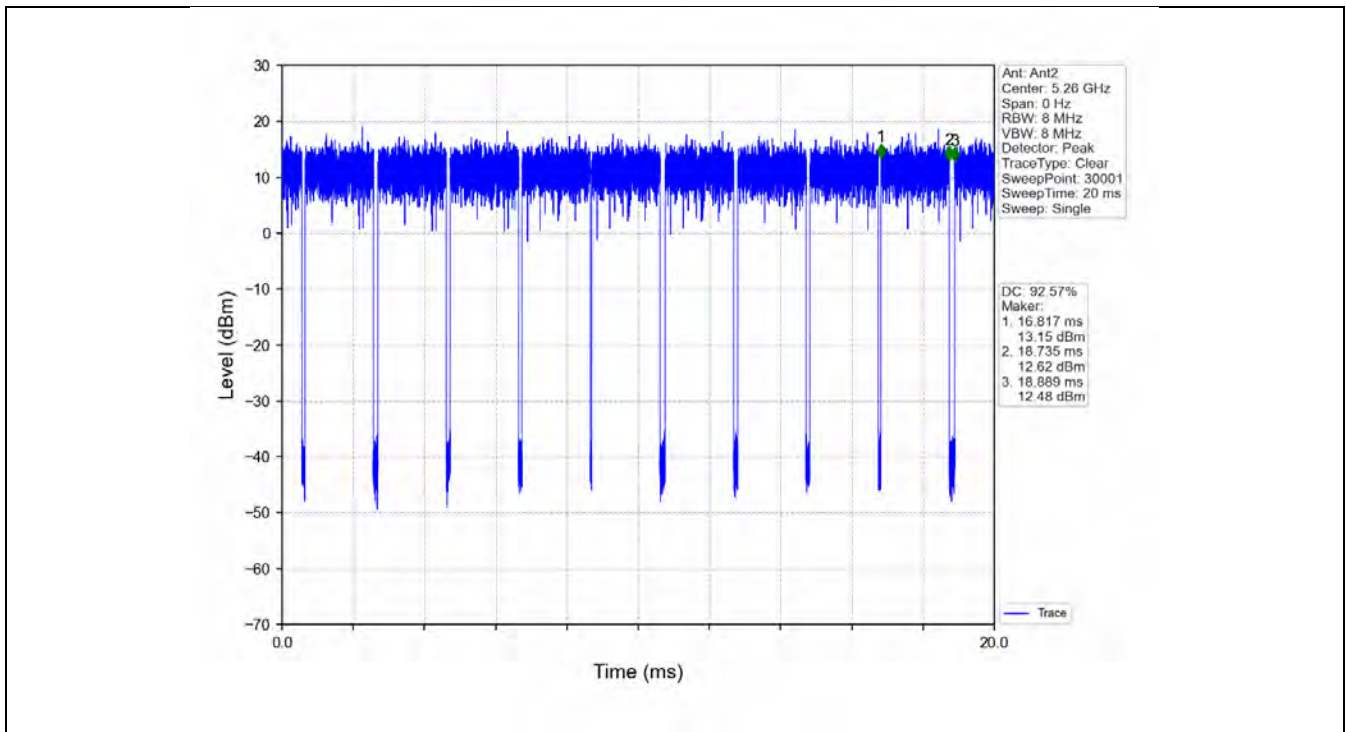
802.11a_MCH_5785MHz_Ant2_NTNV

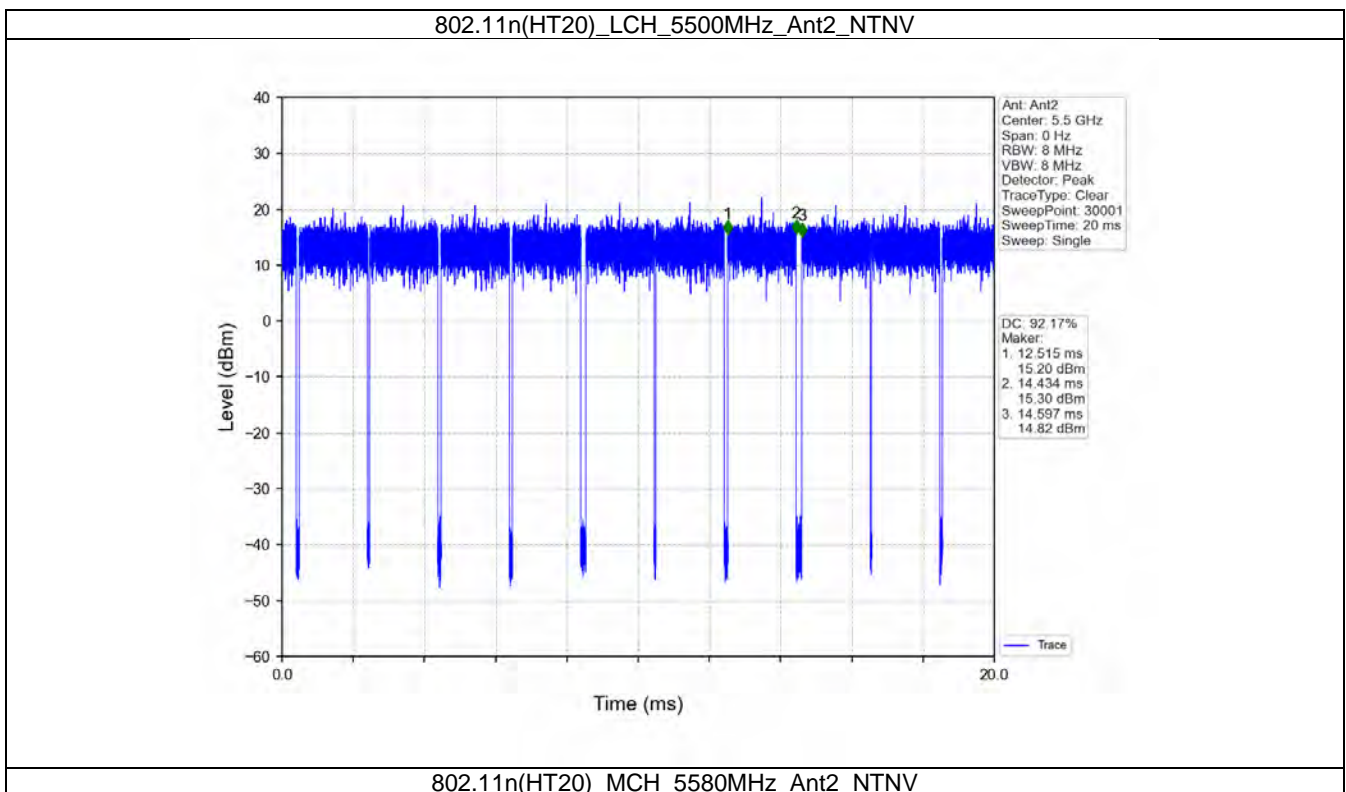
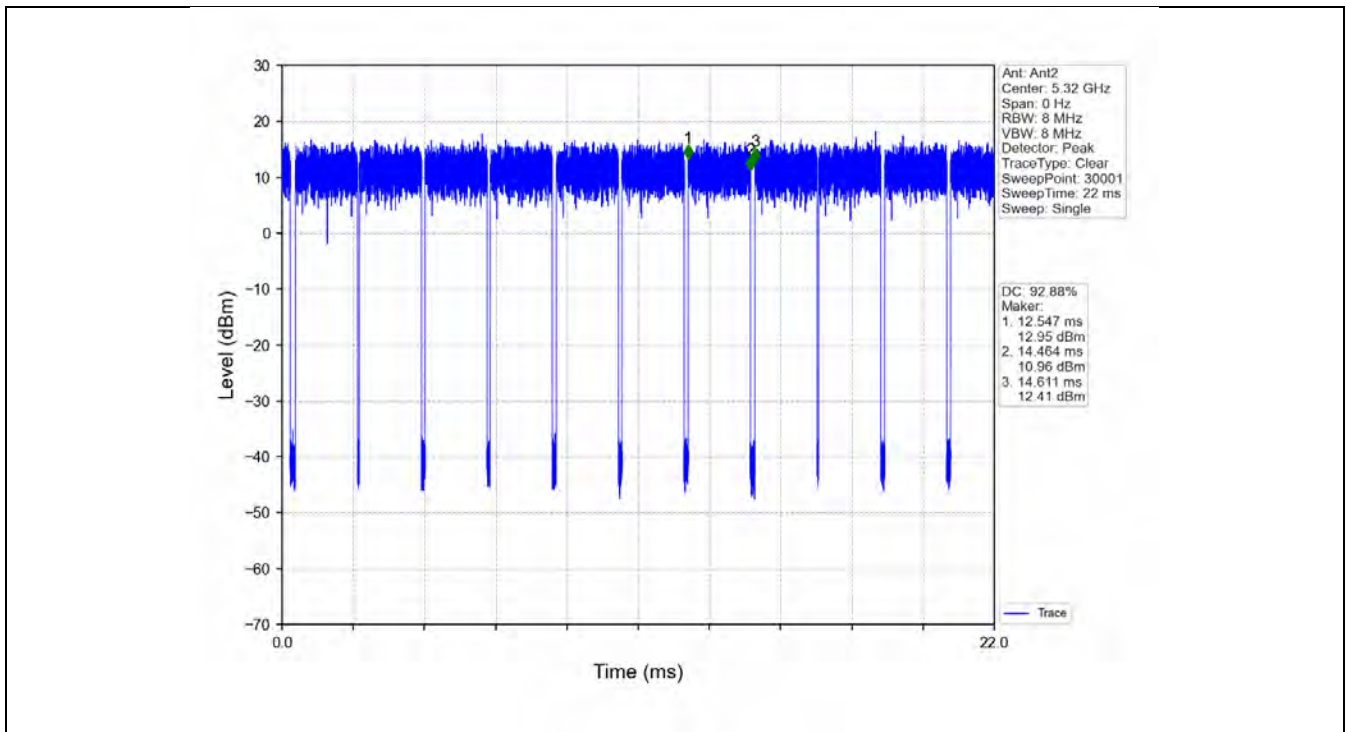


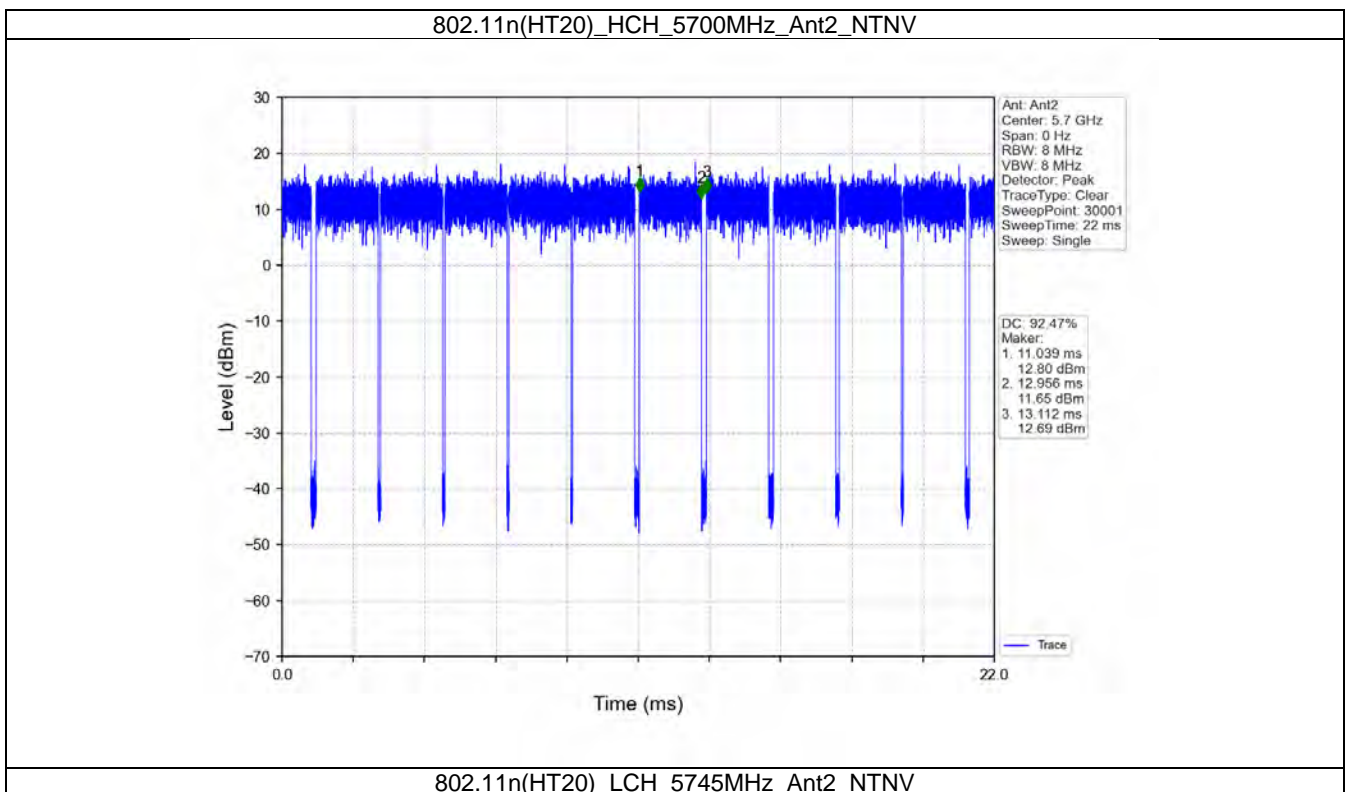
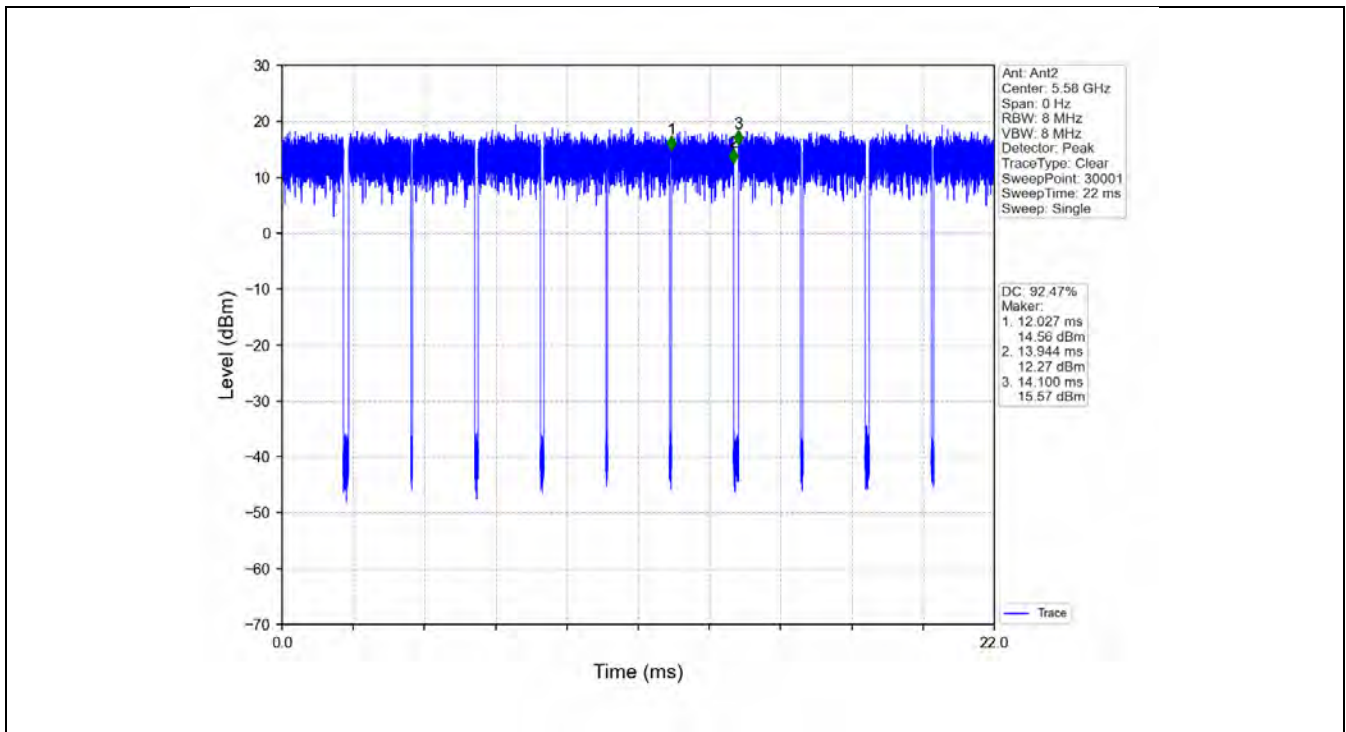
802.11a_HCH_5825MHz_Ant2_NTNV

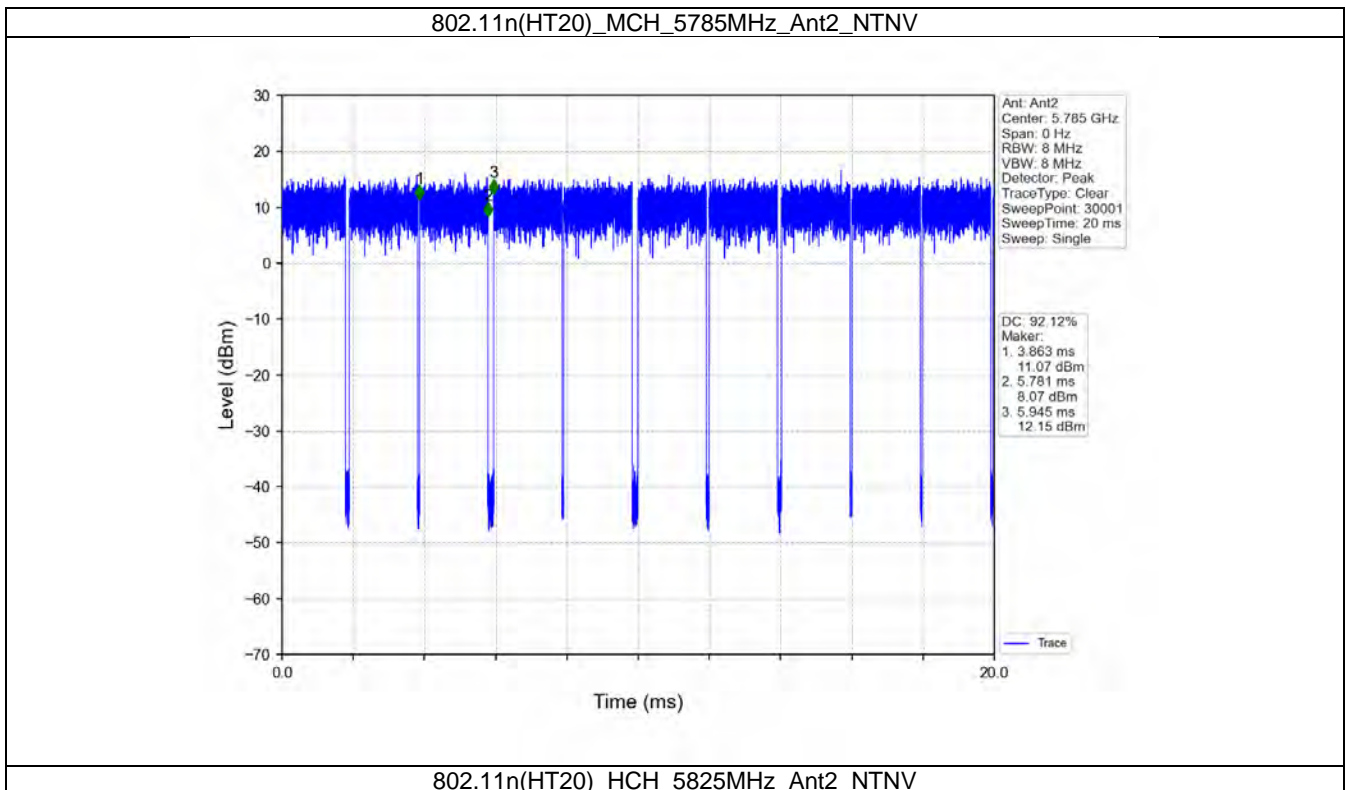
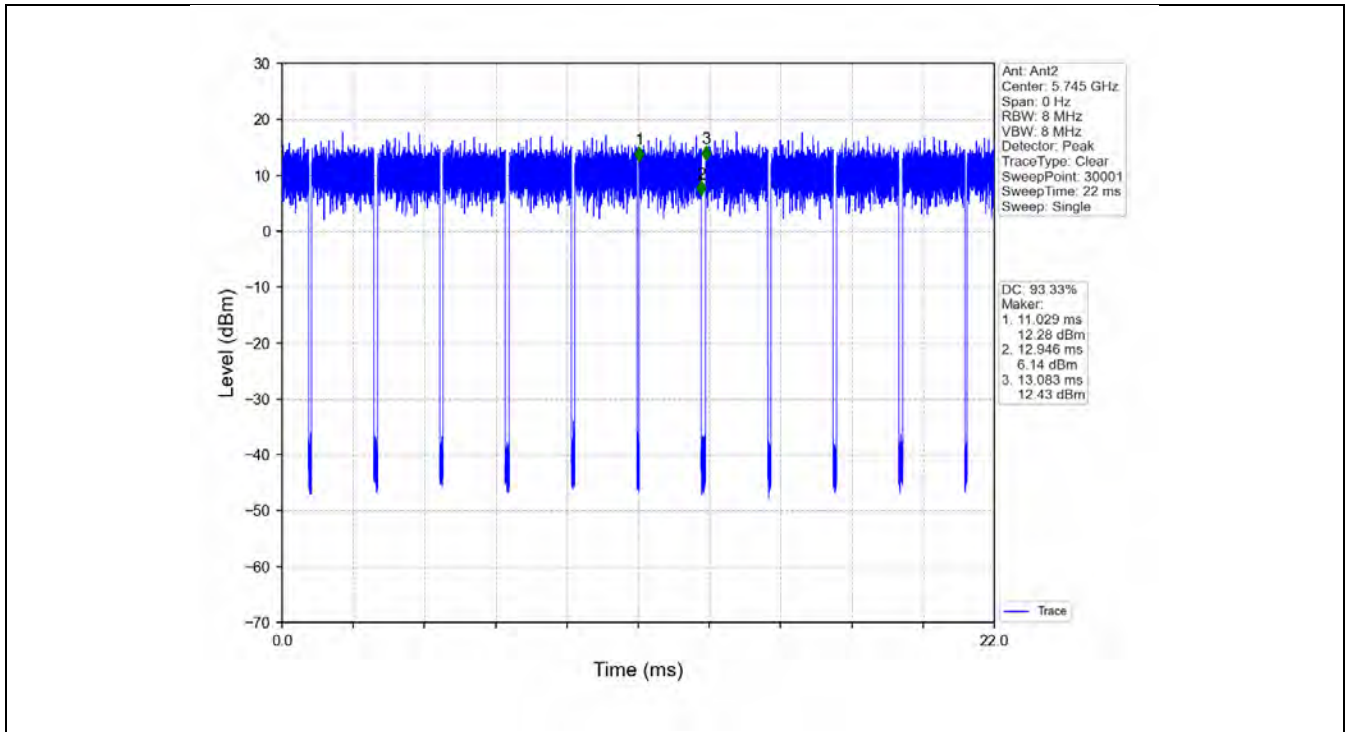


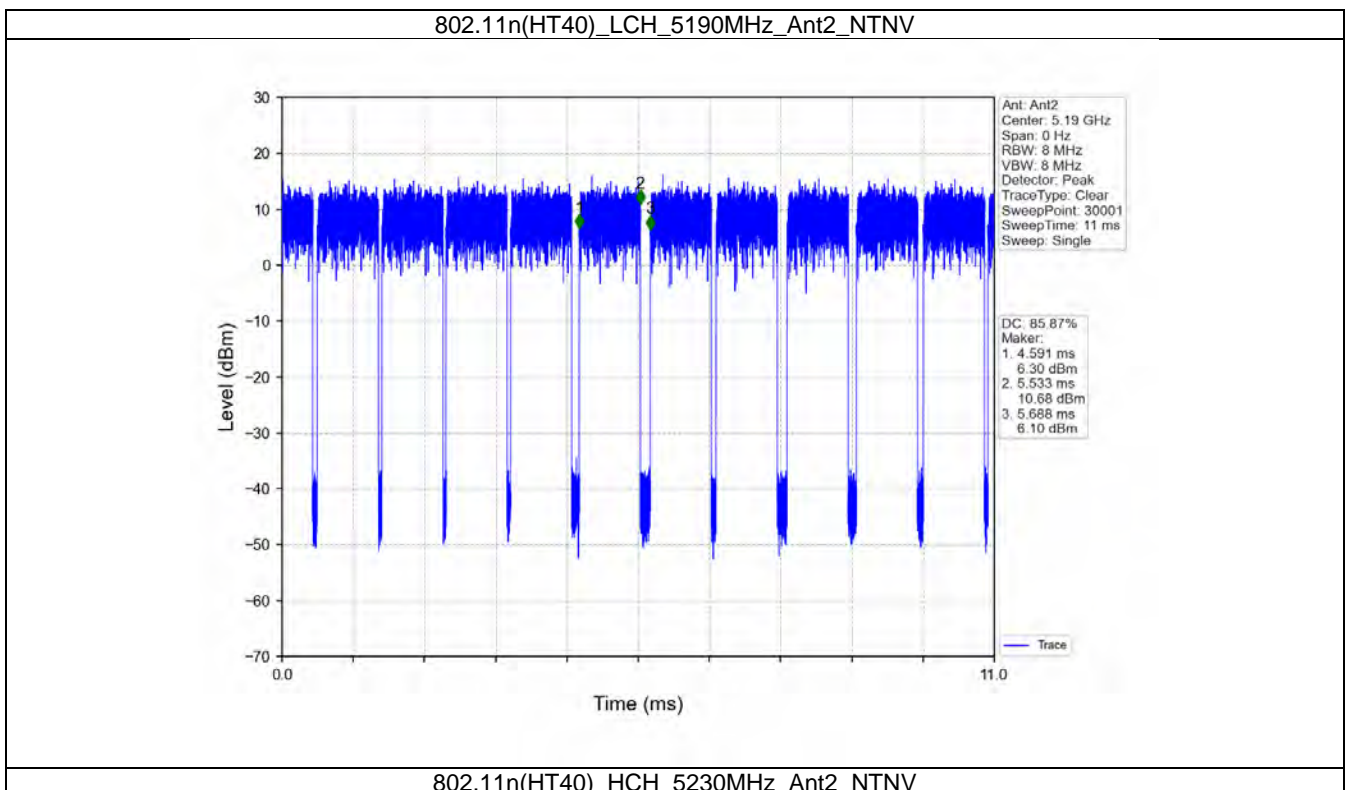
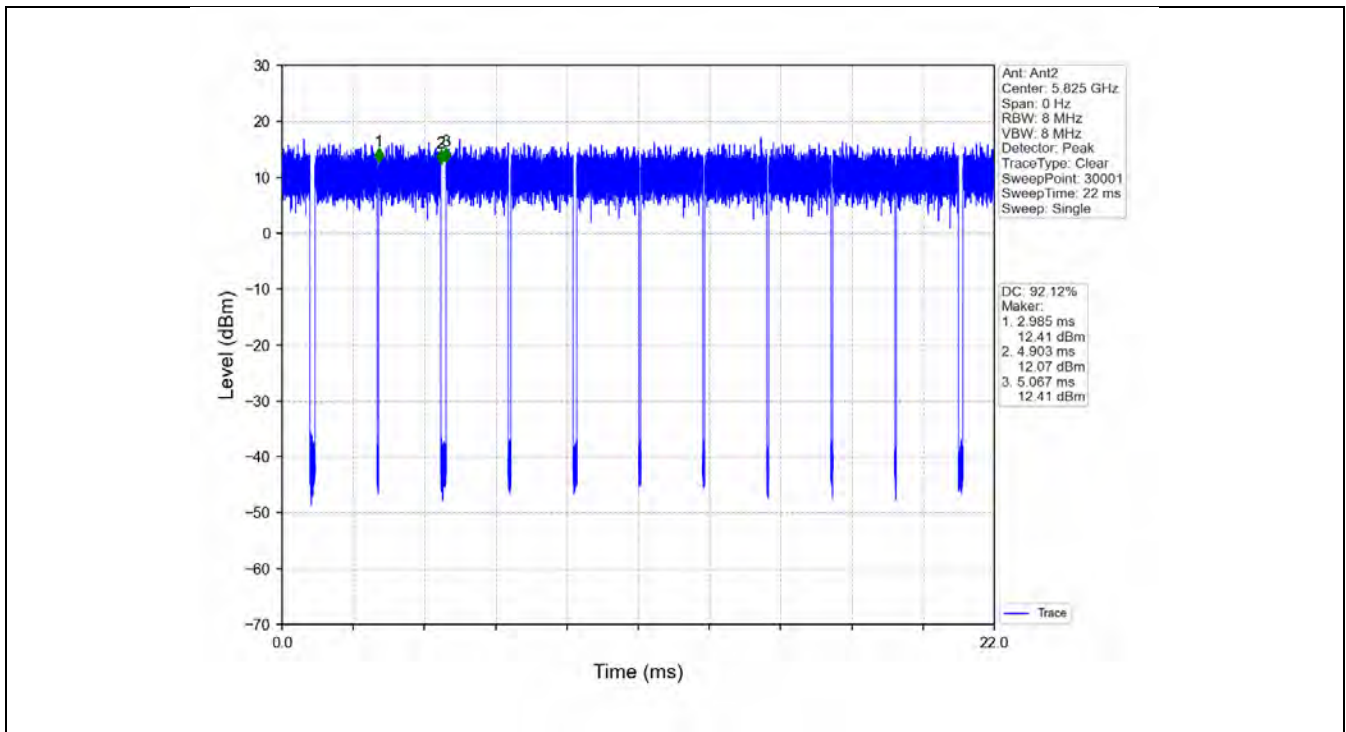


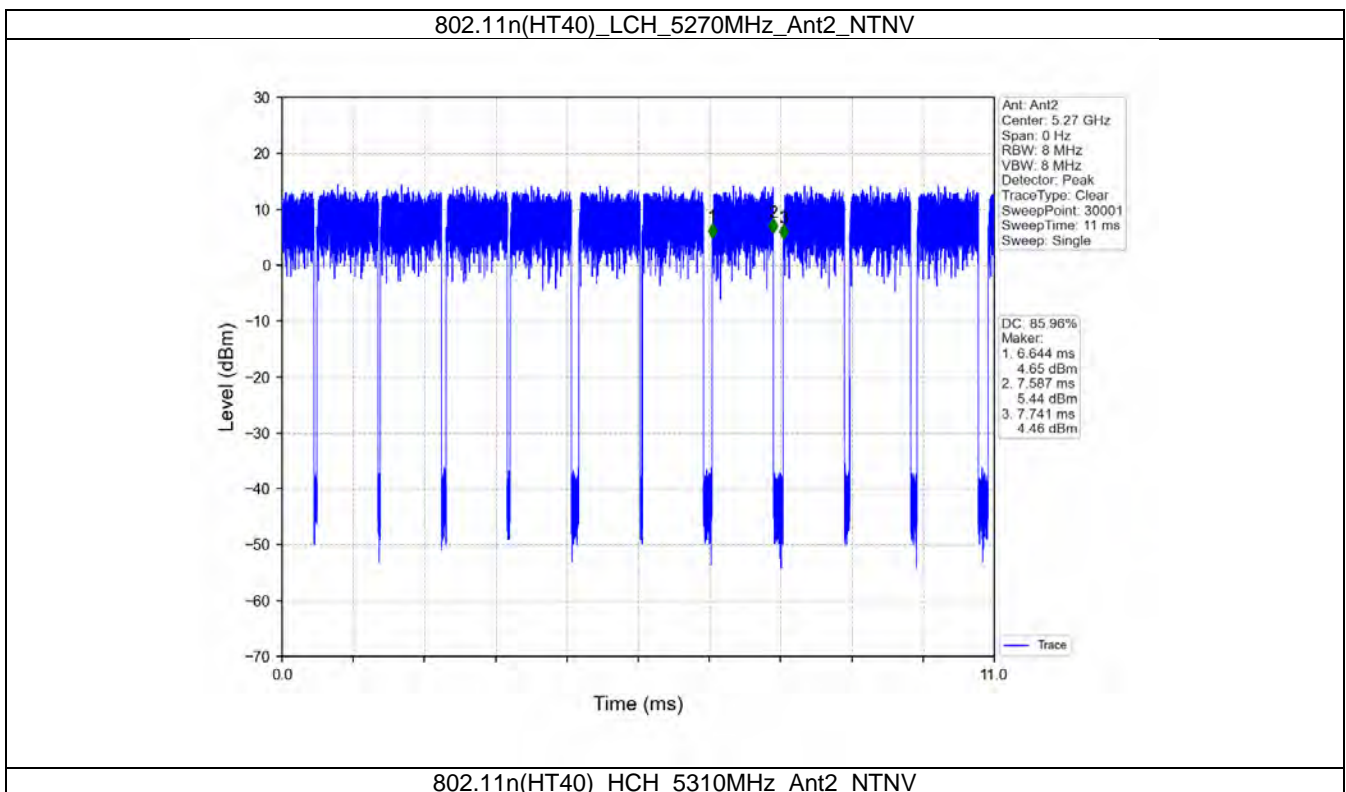
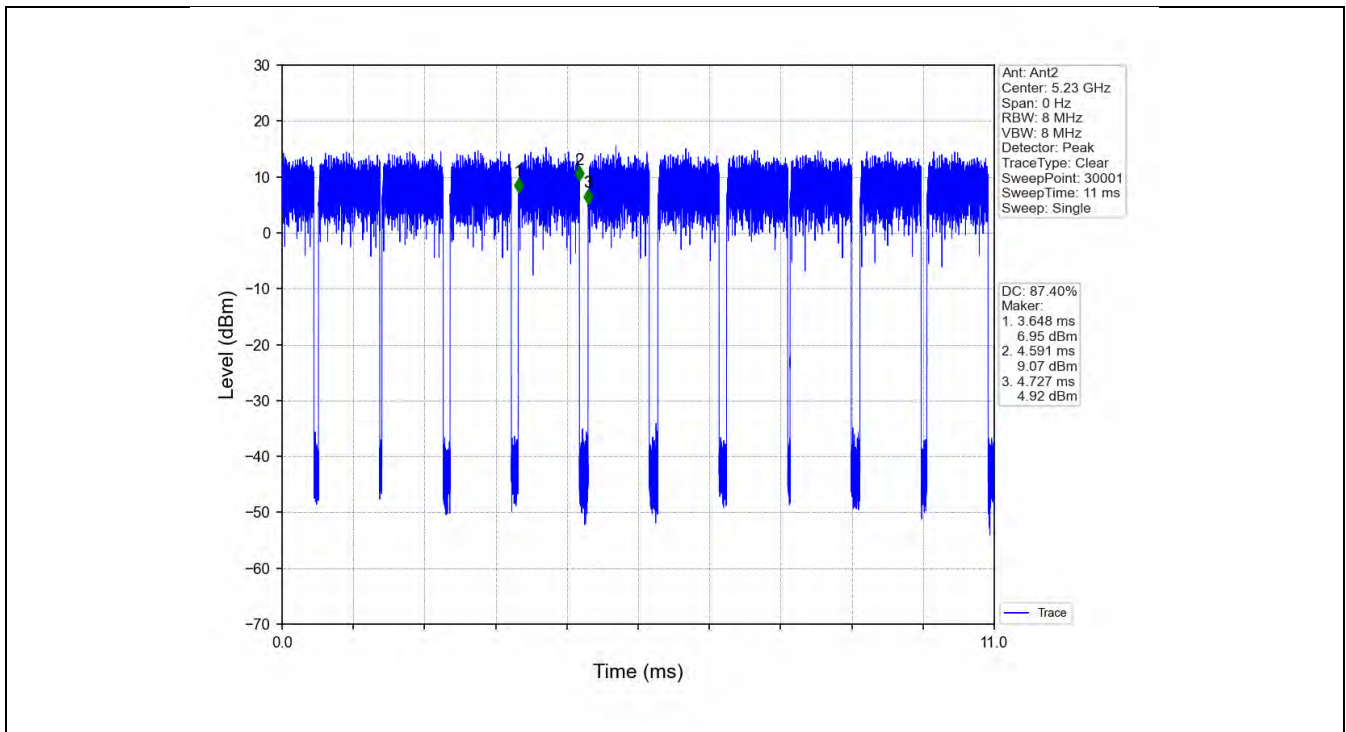


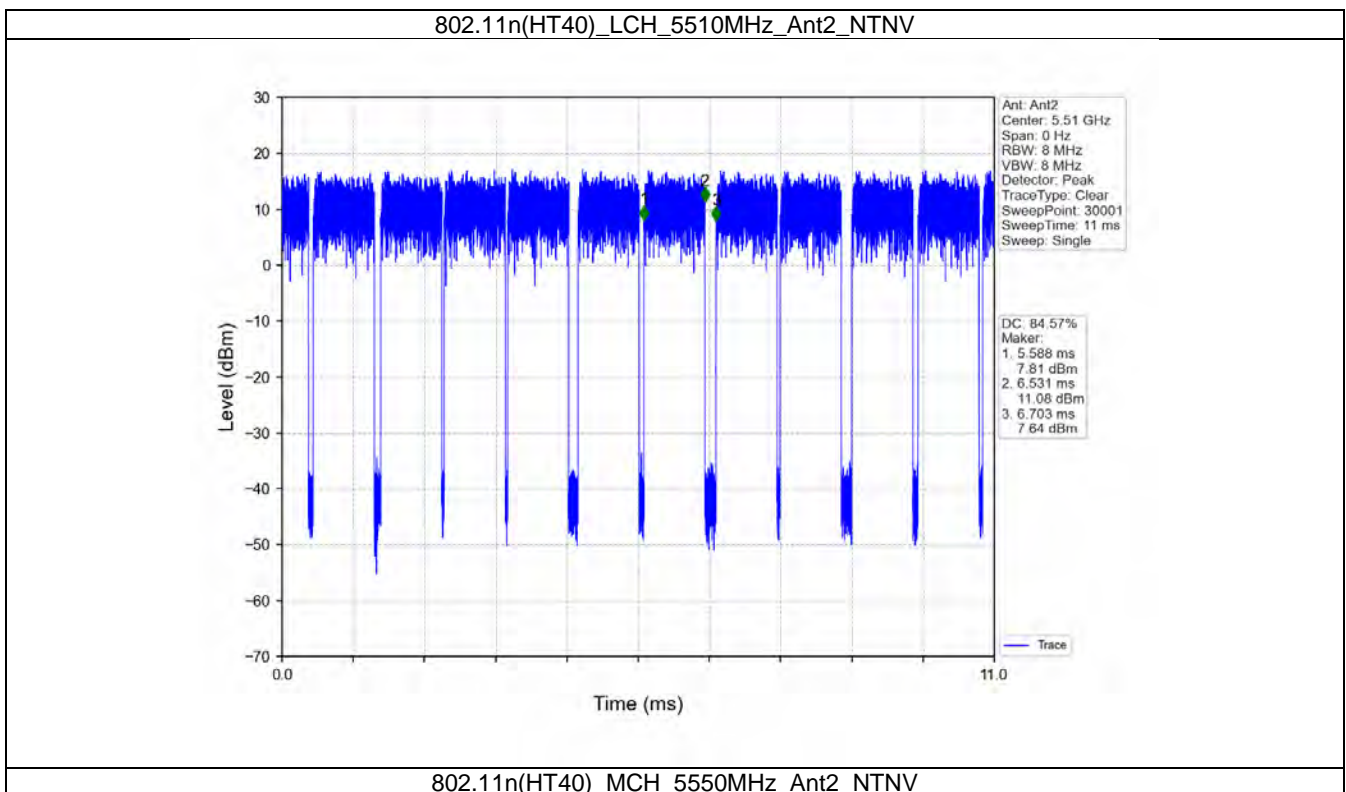
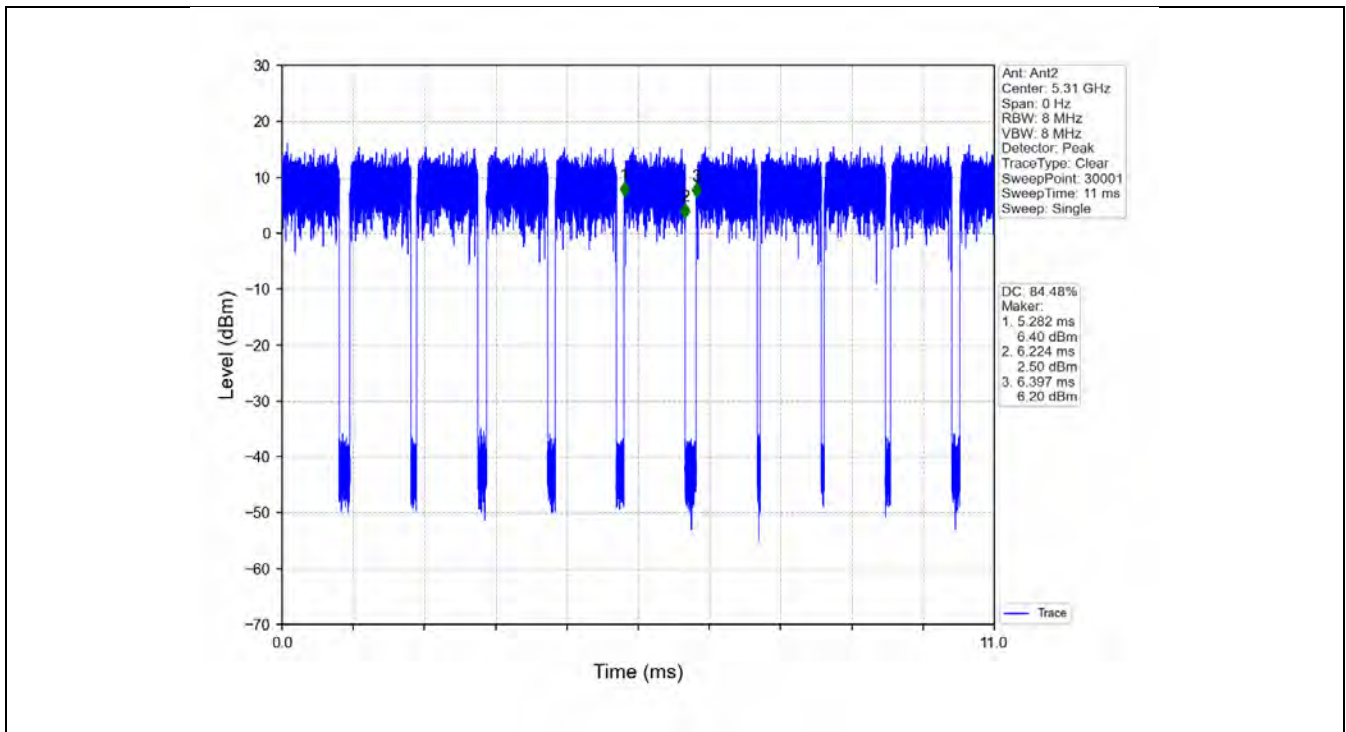


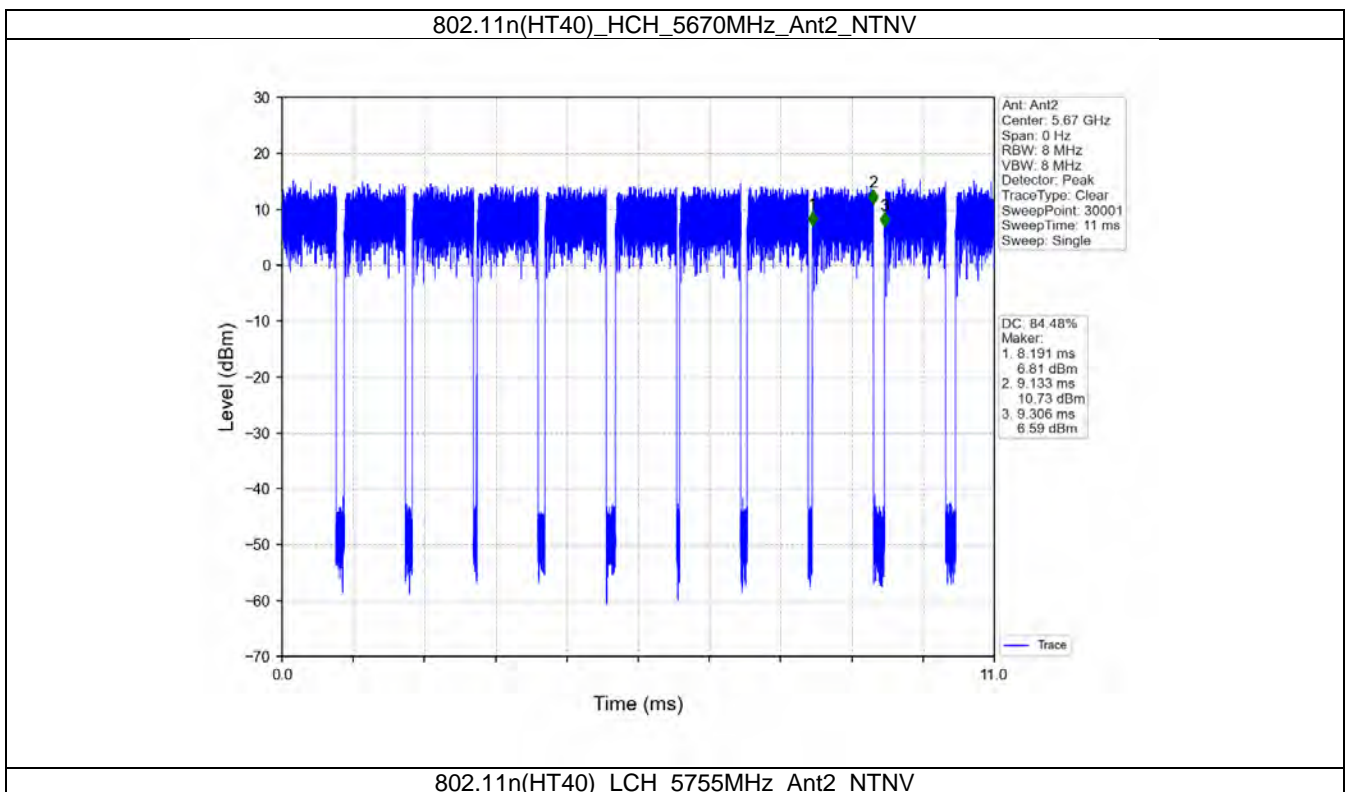
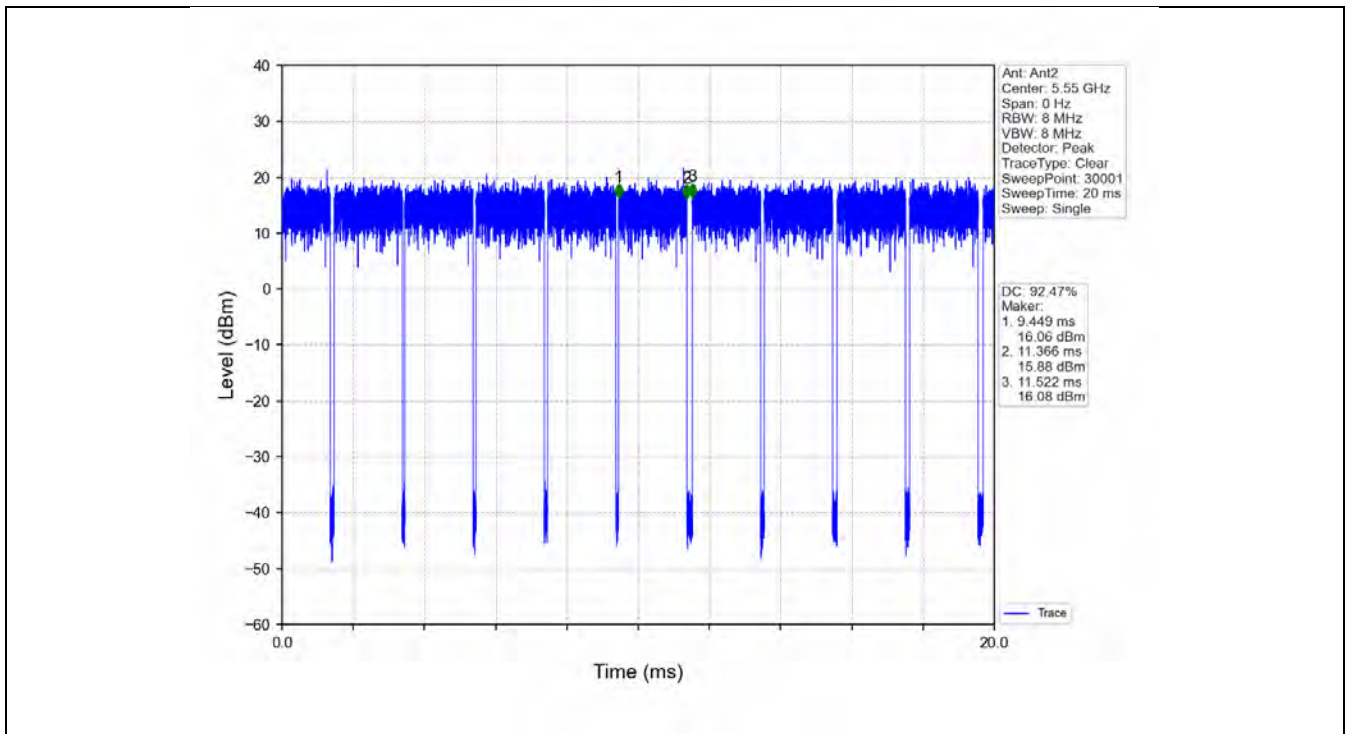


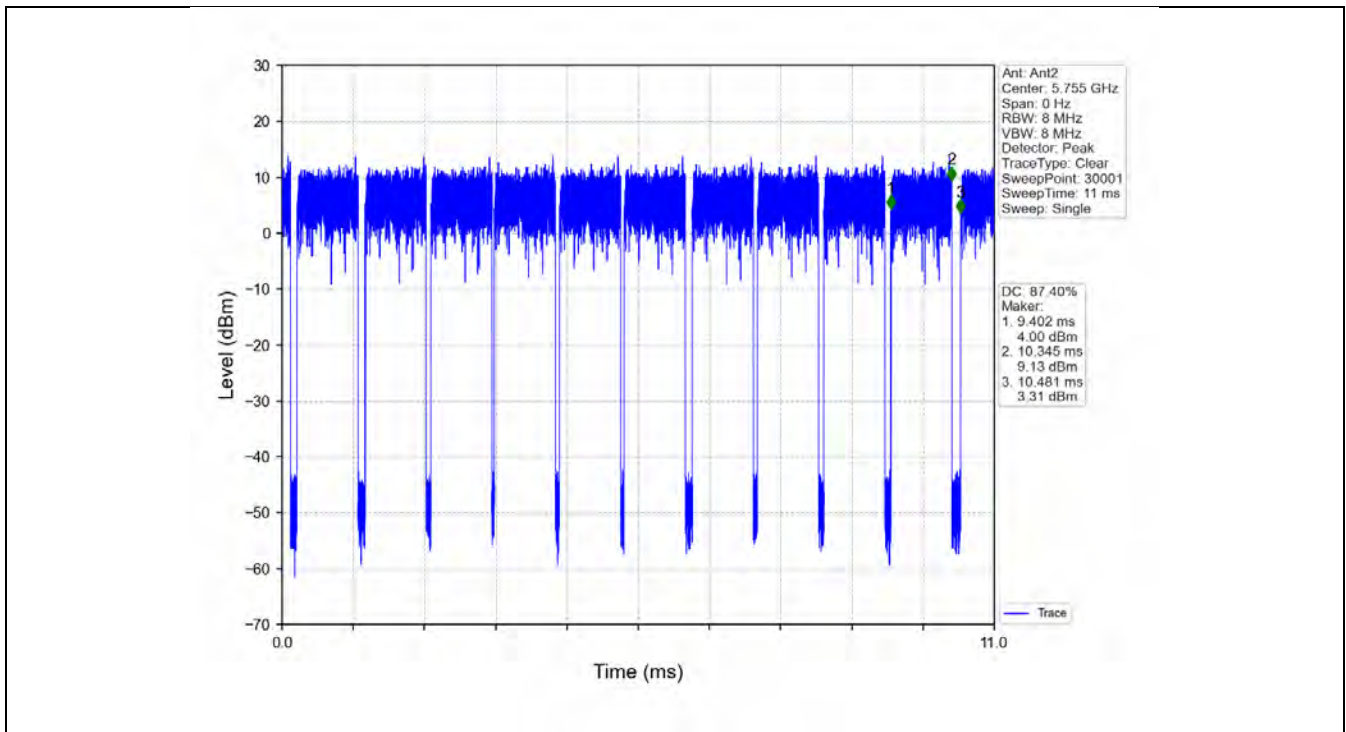




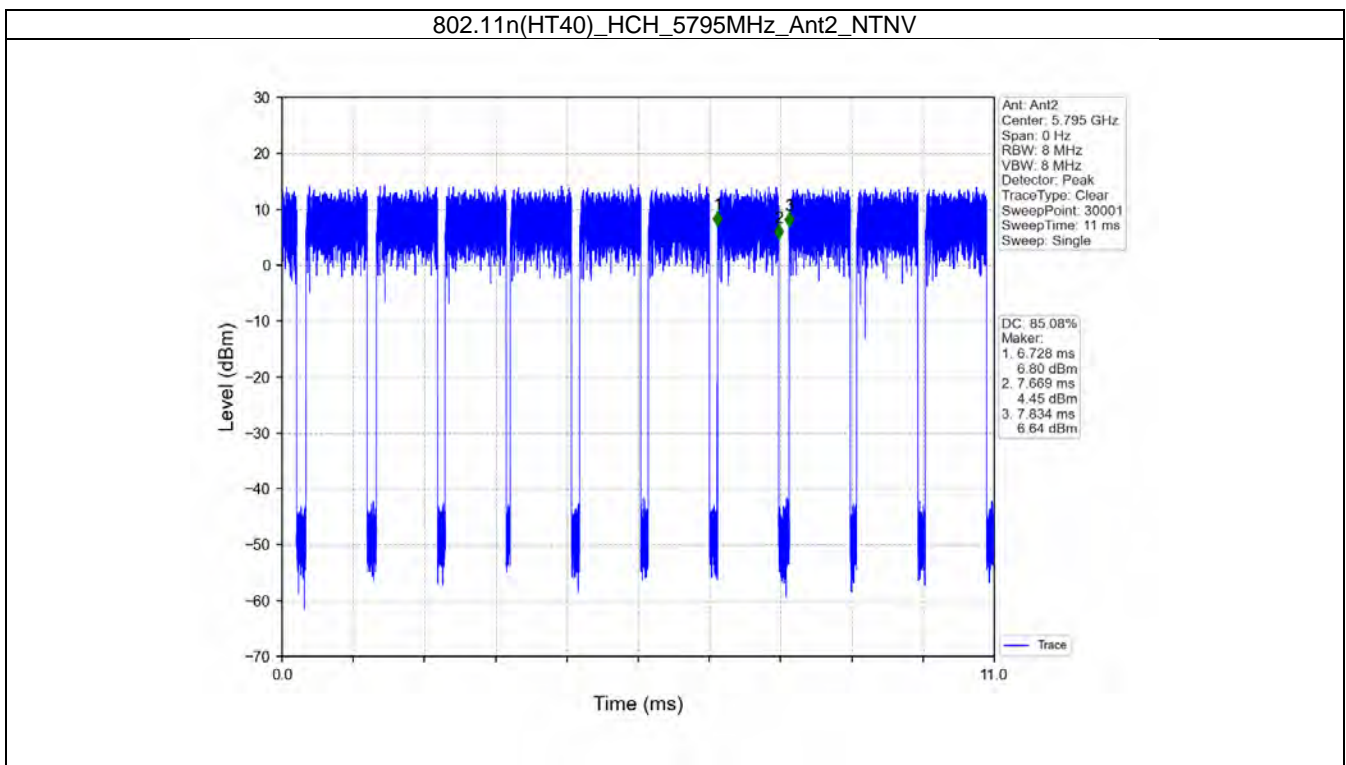




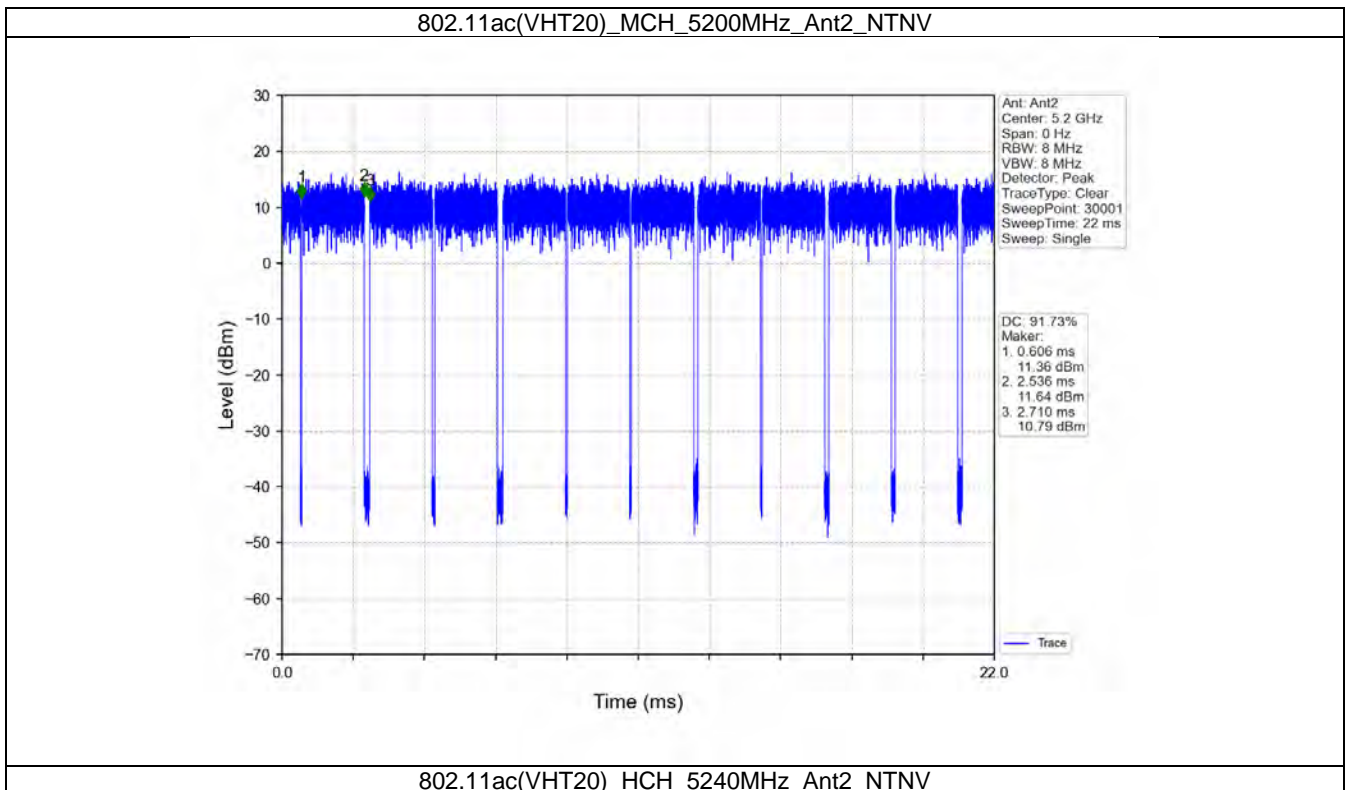
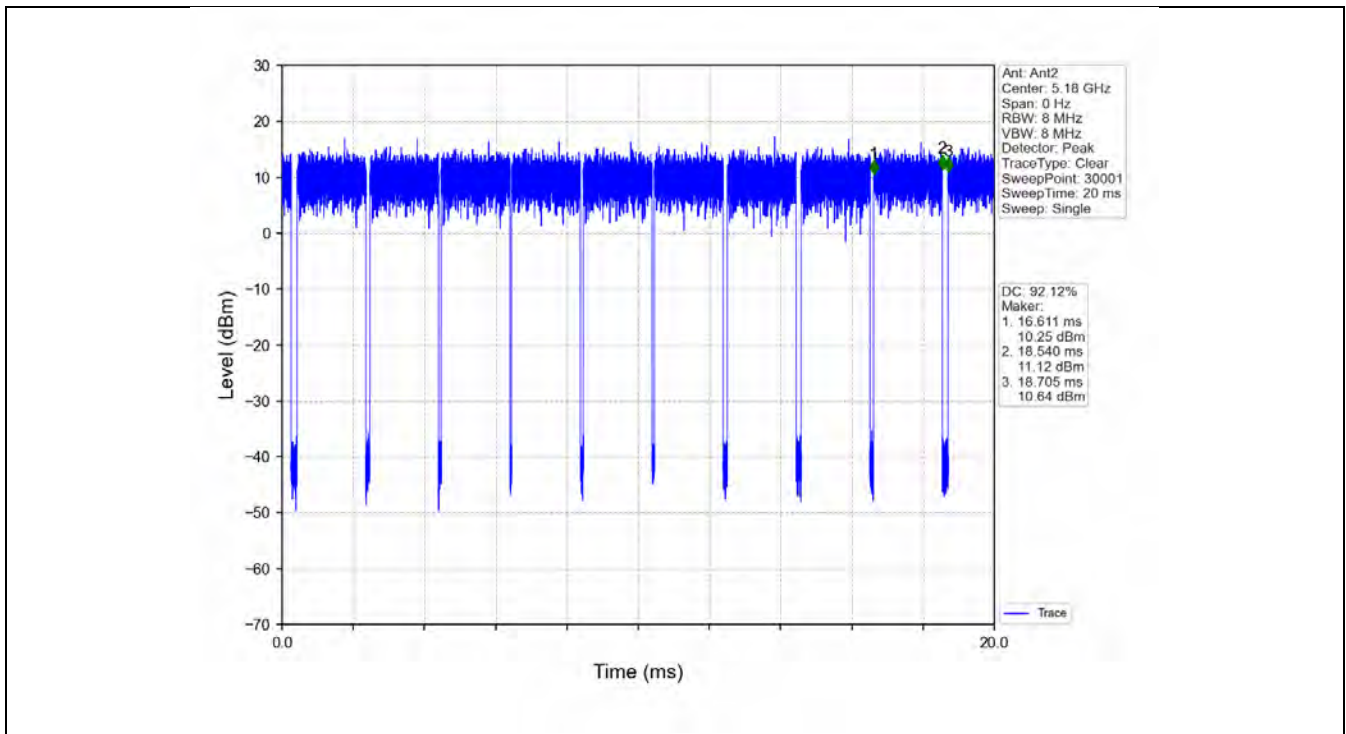


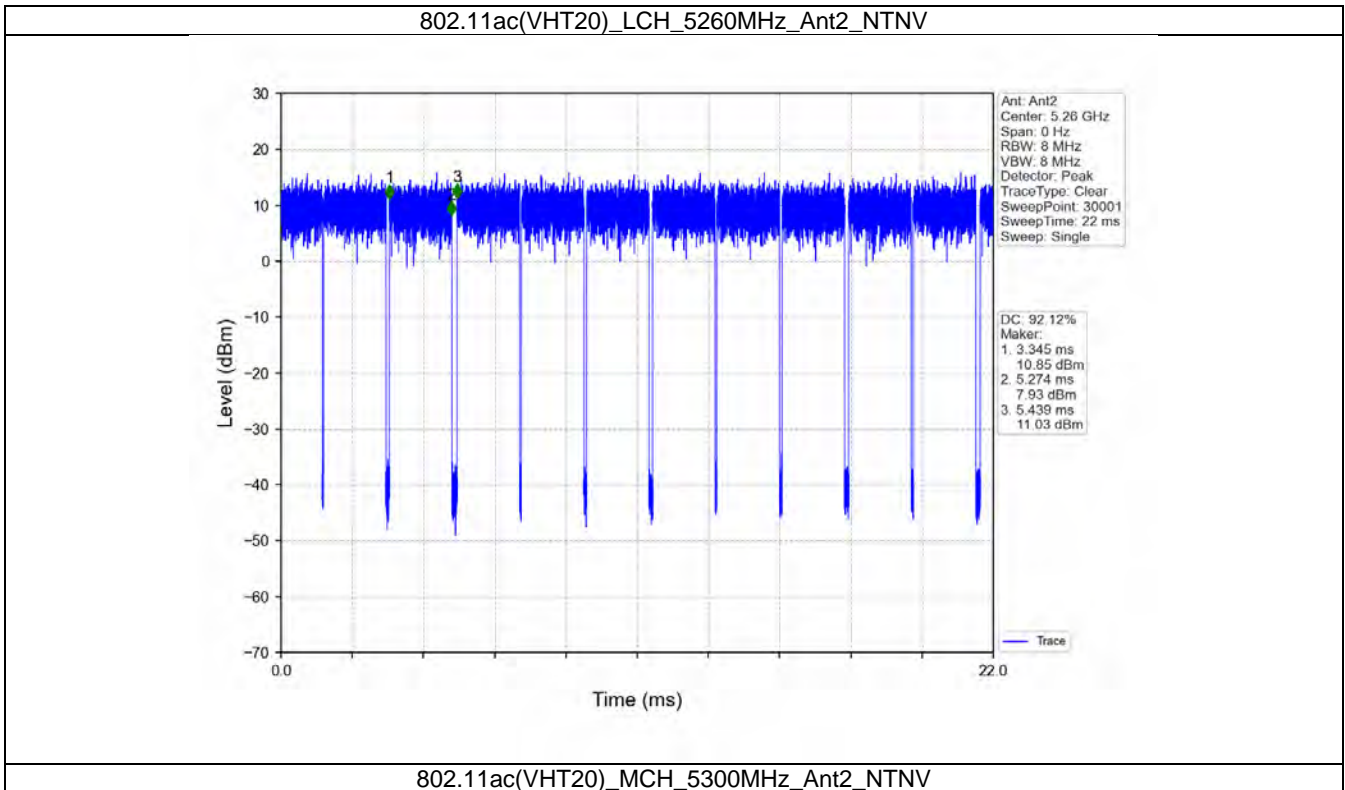
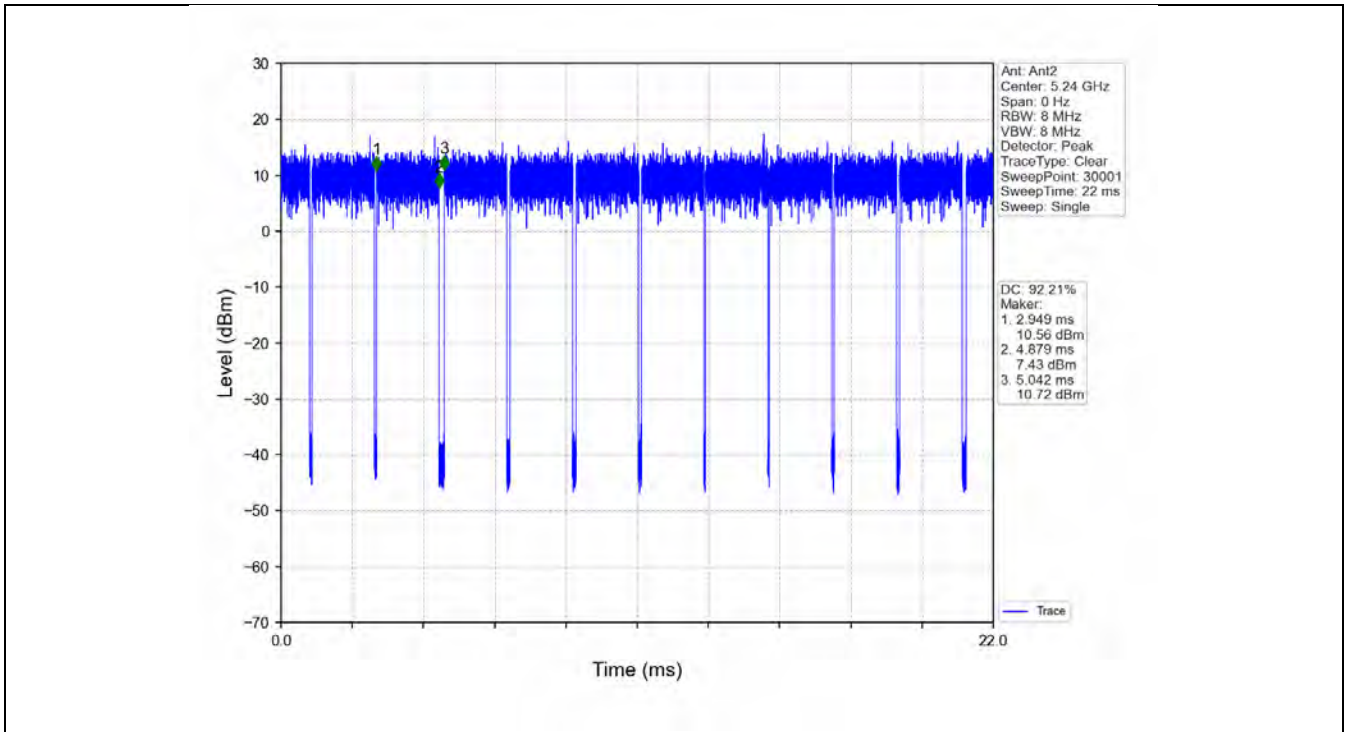


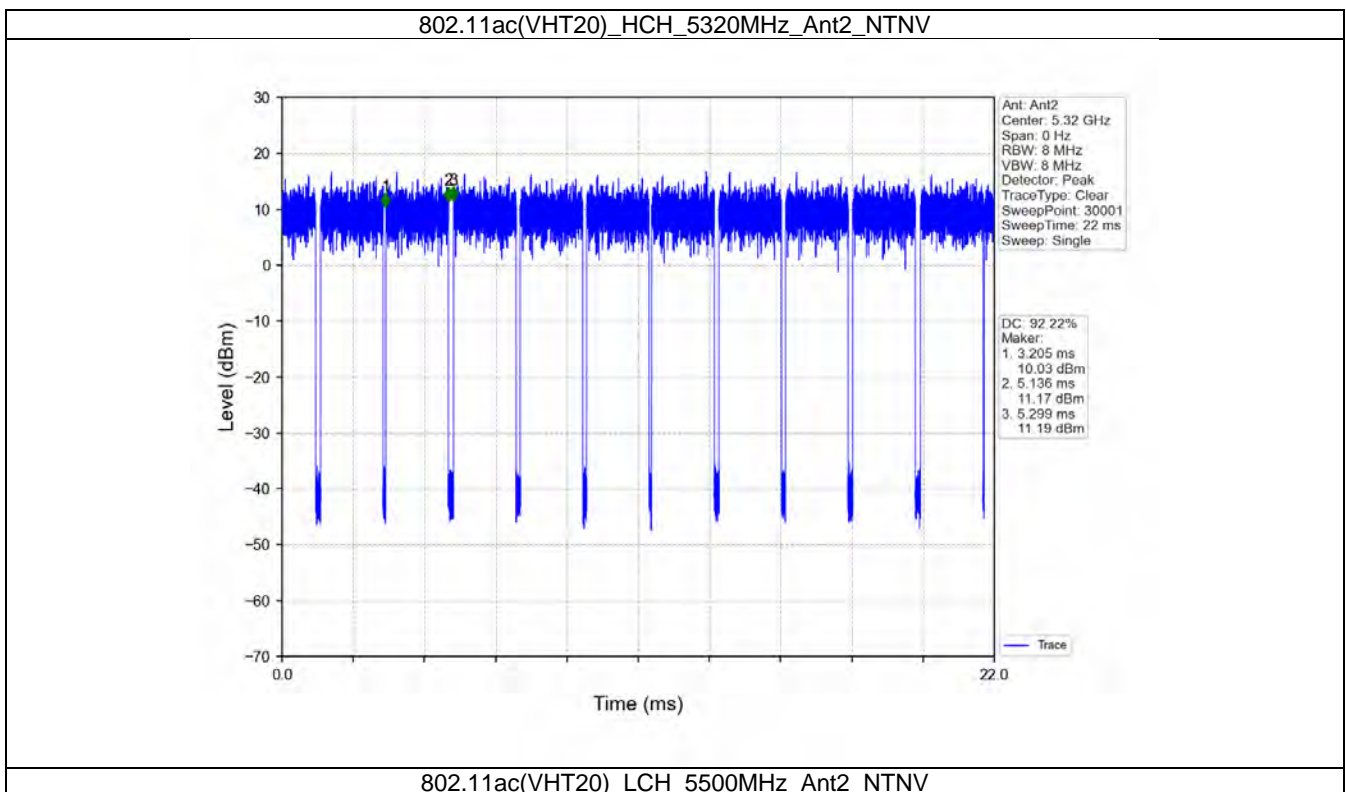
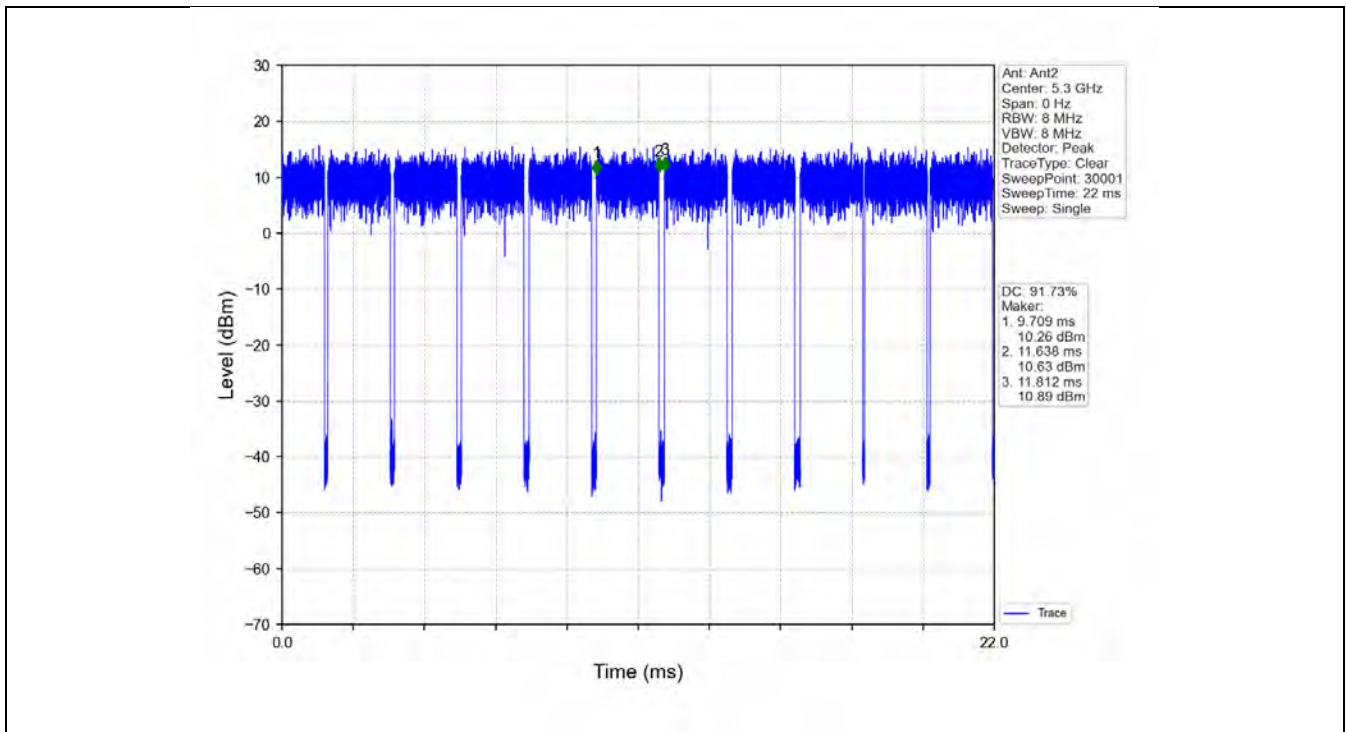
802.11n(HT40)_HCH_5795MHz_Ant2_NTNV

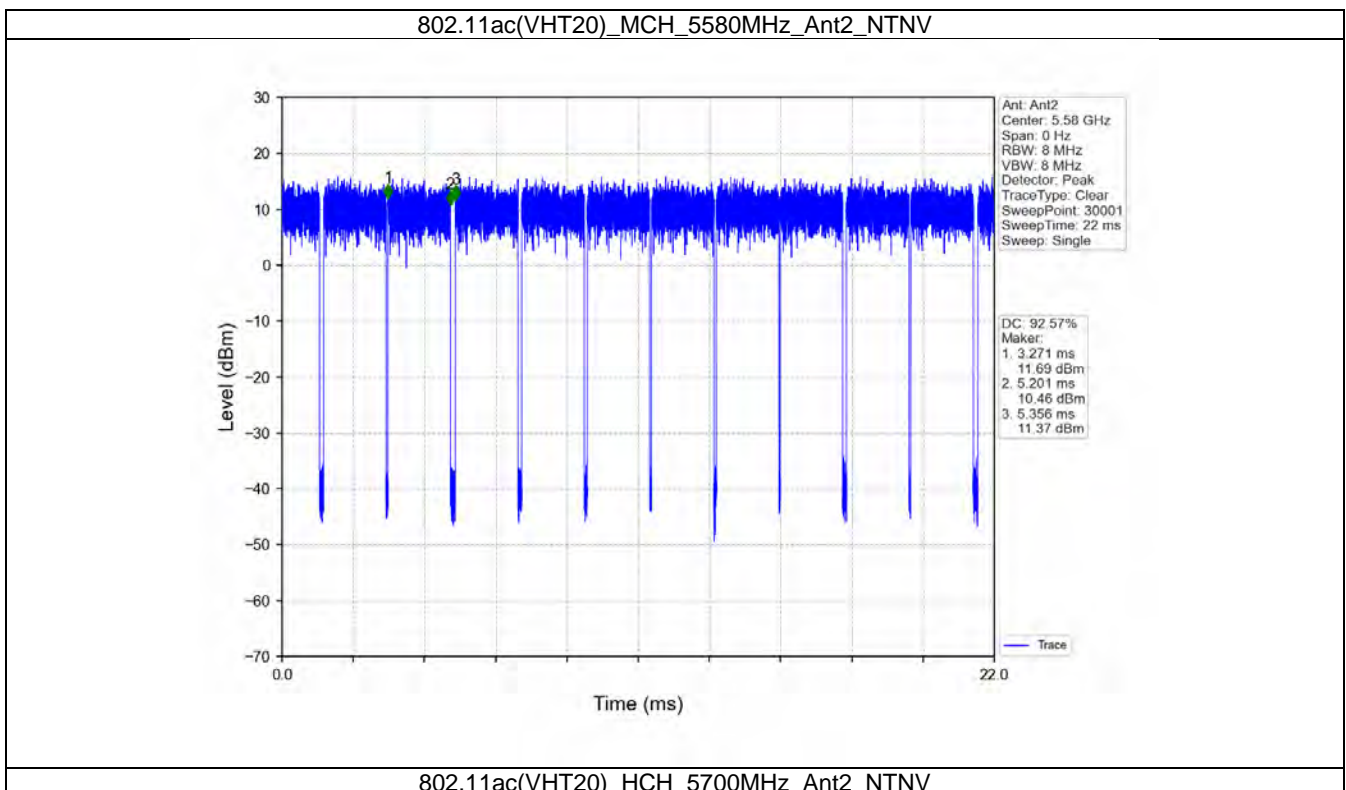
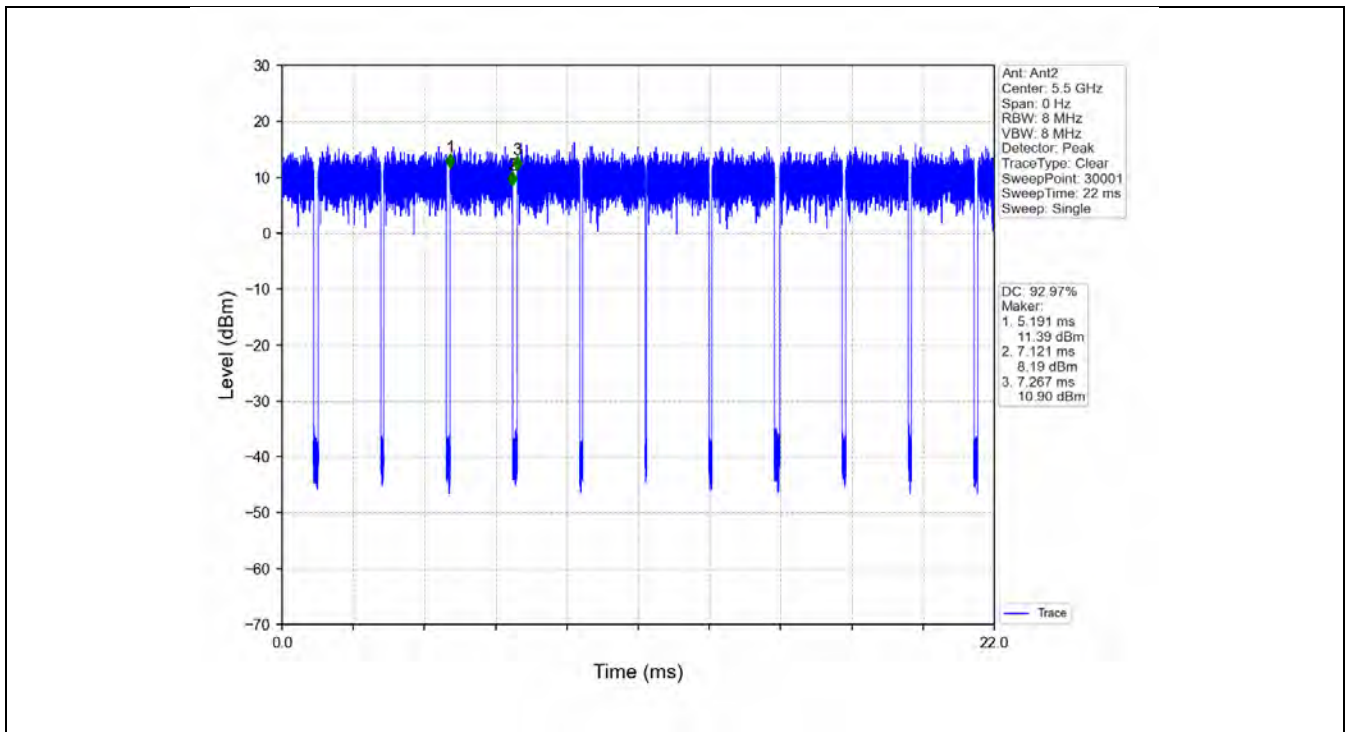


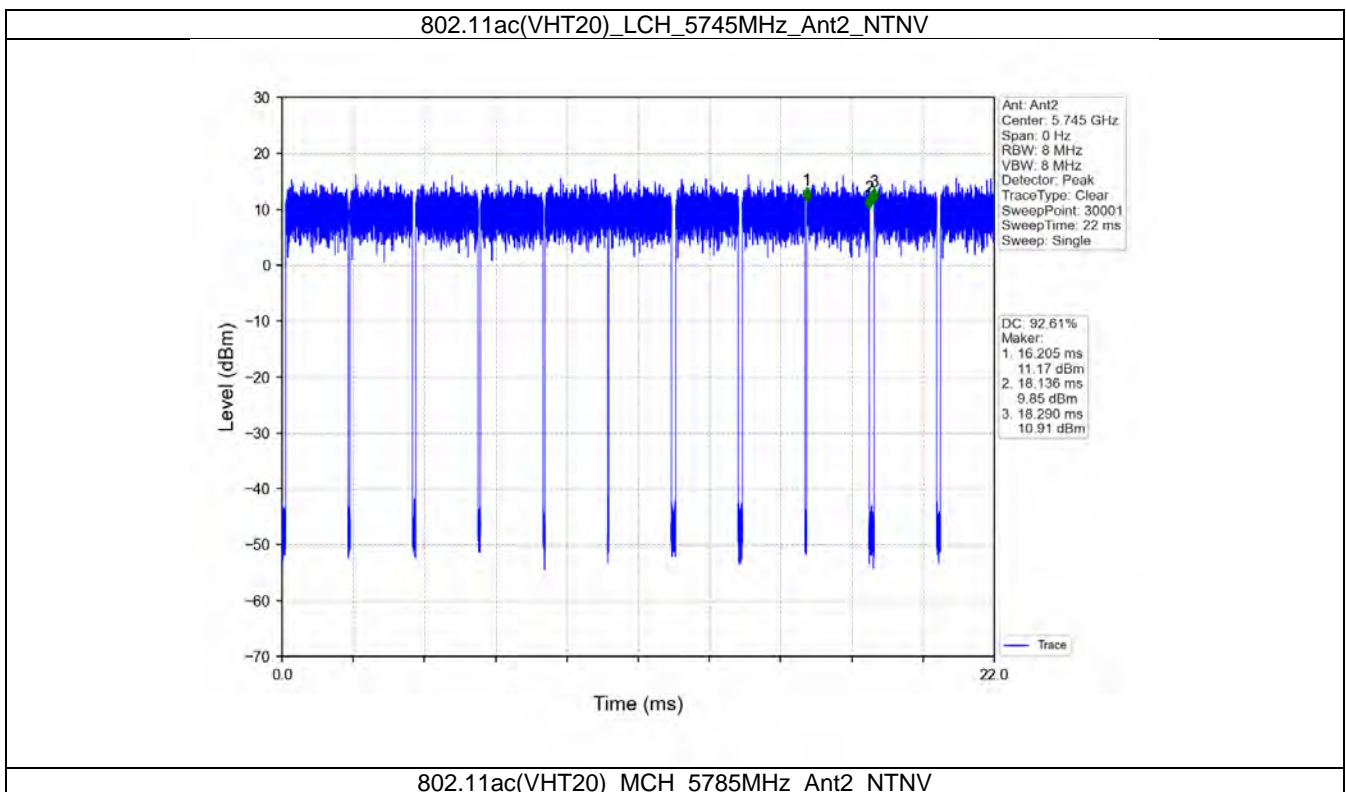
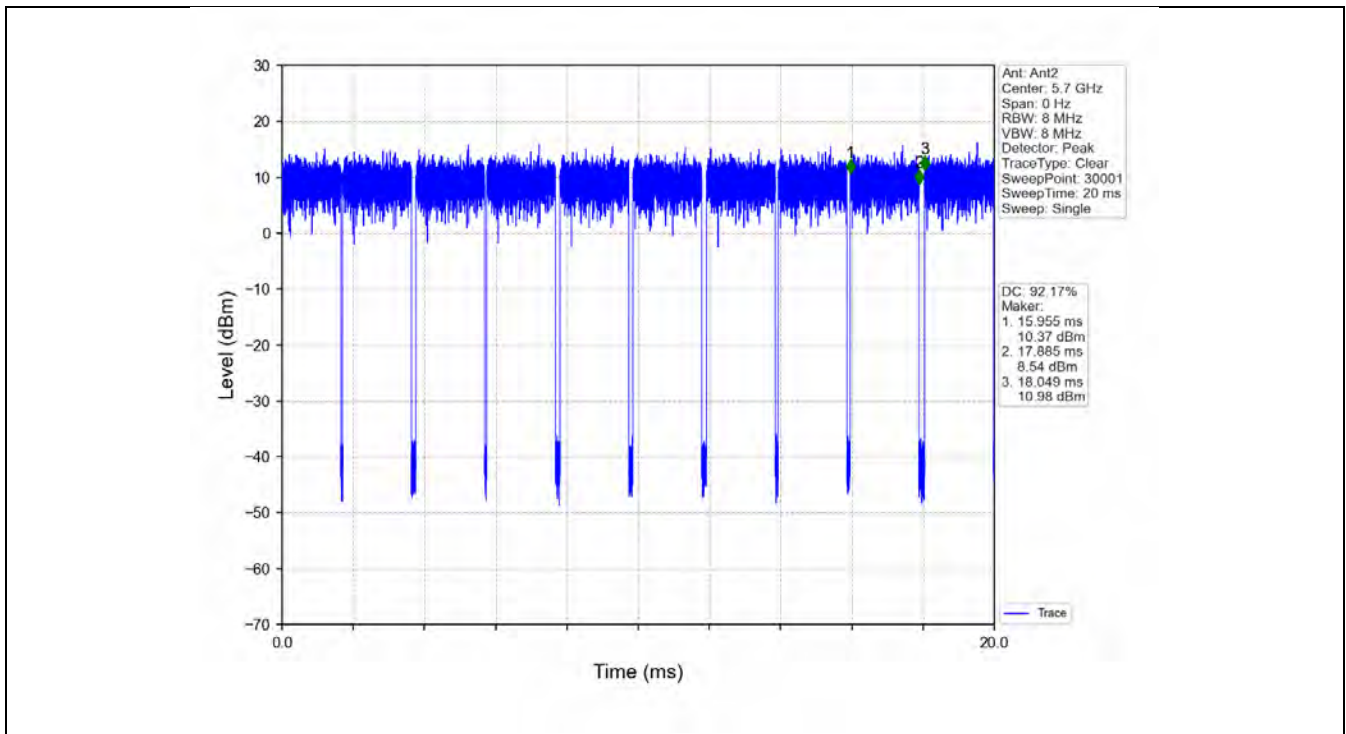
802.11ac(VHT20)_LCH_5180MHz_Ant2_NTNV

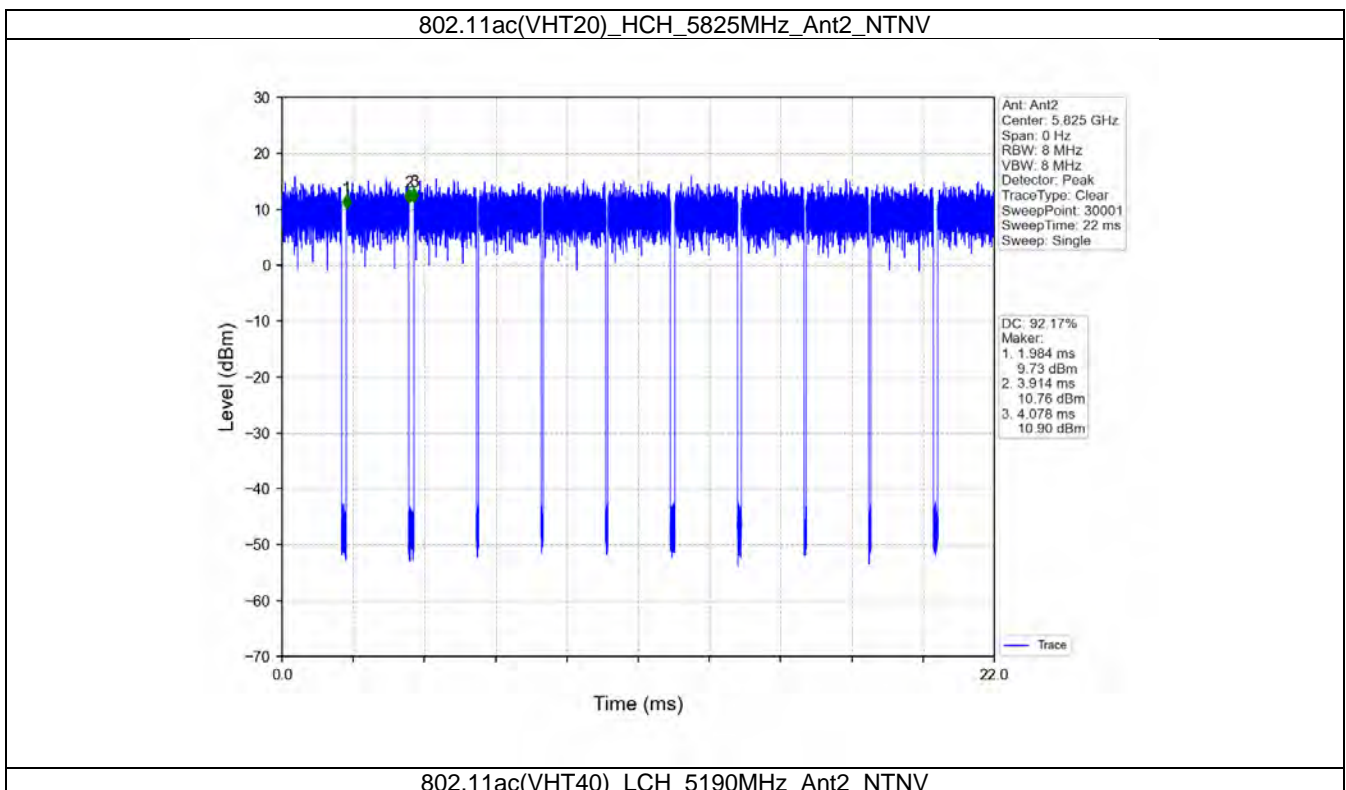
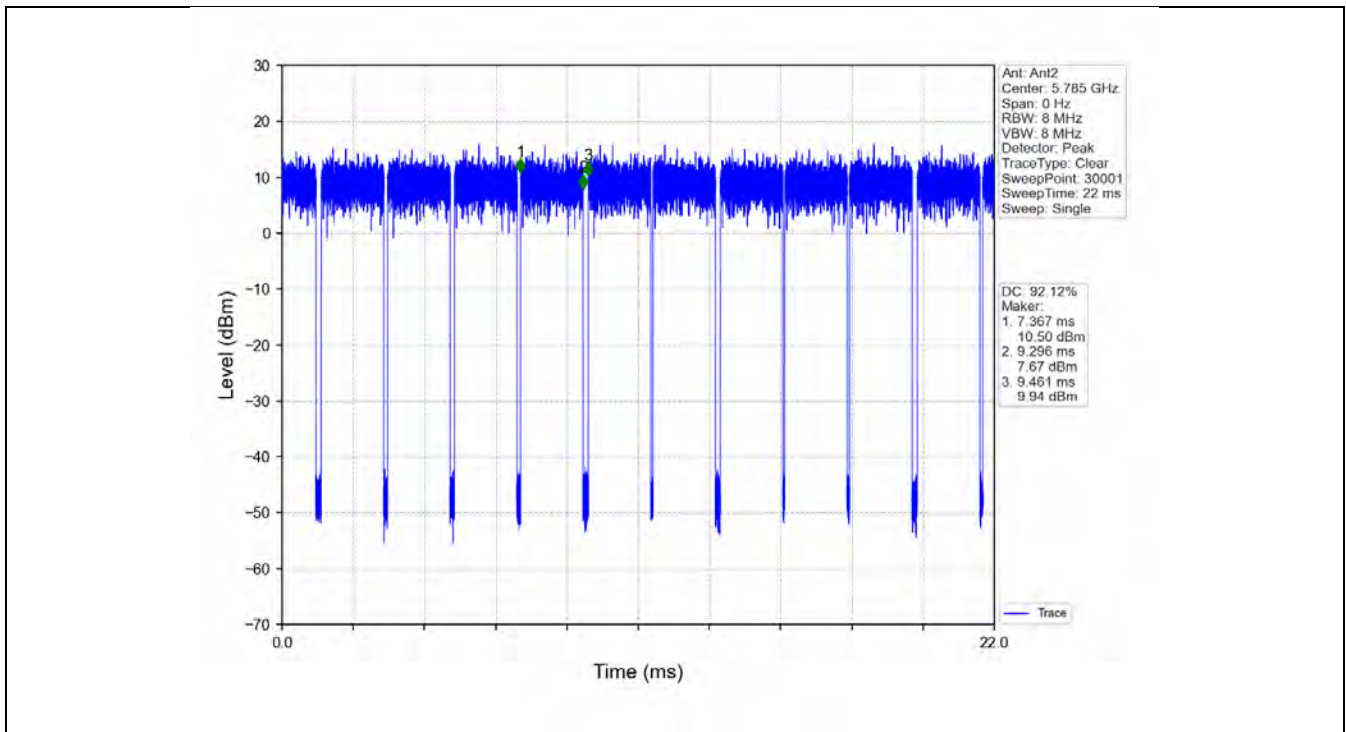


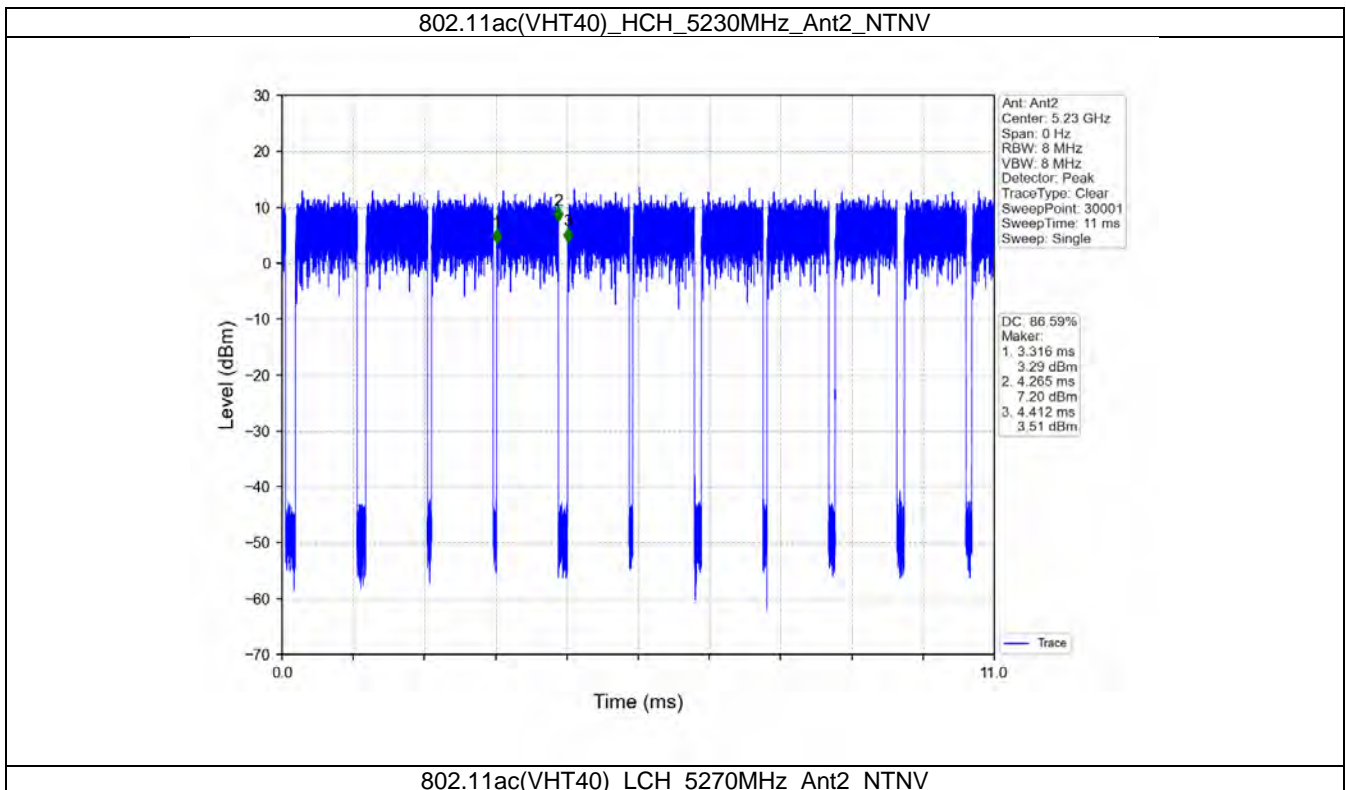
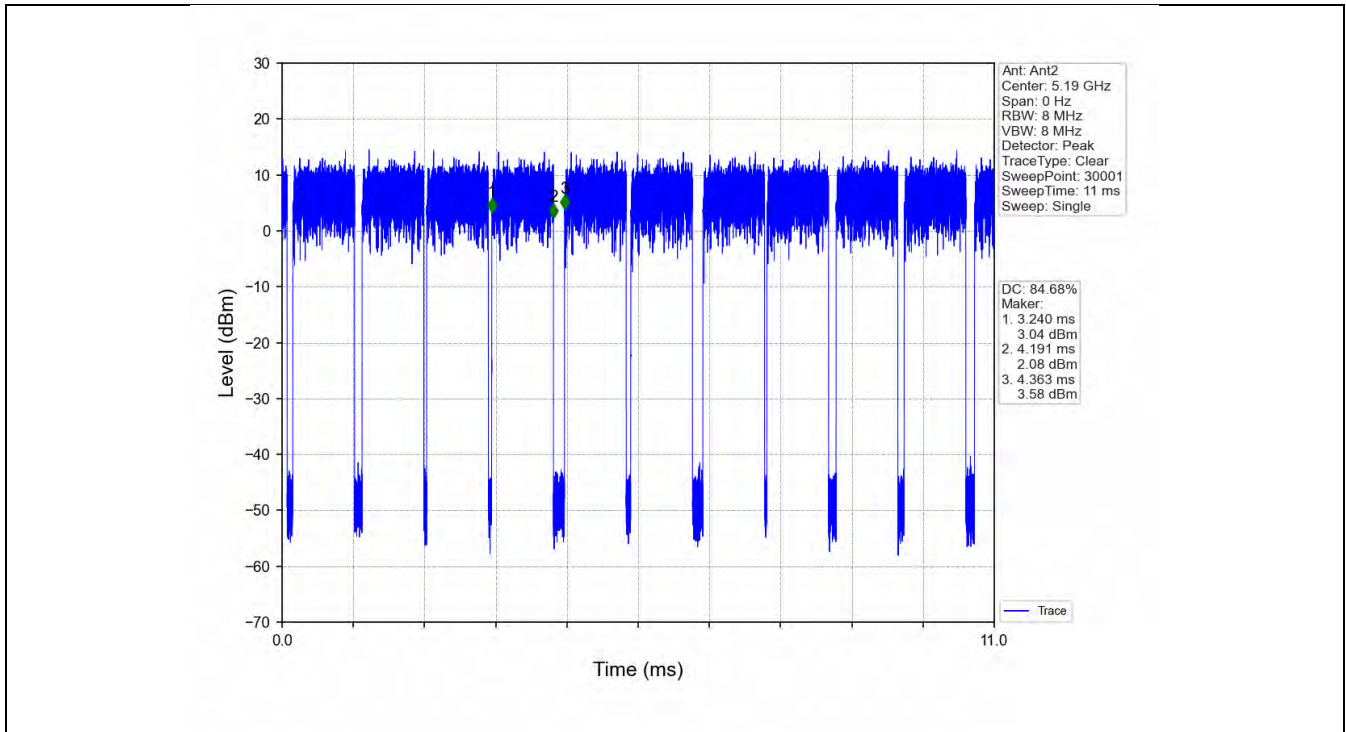


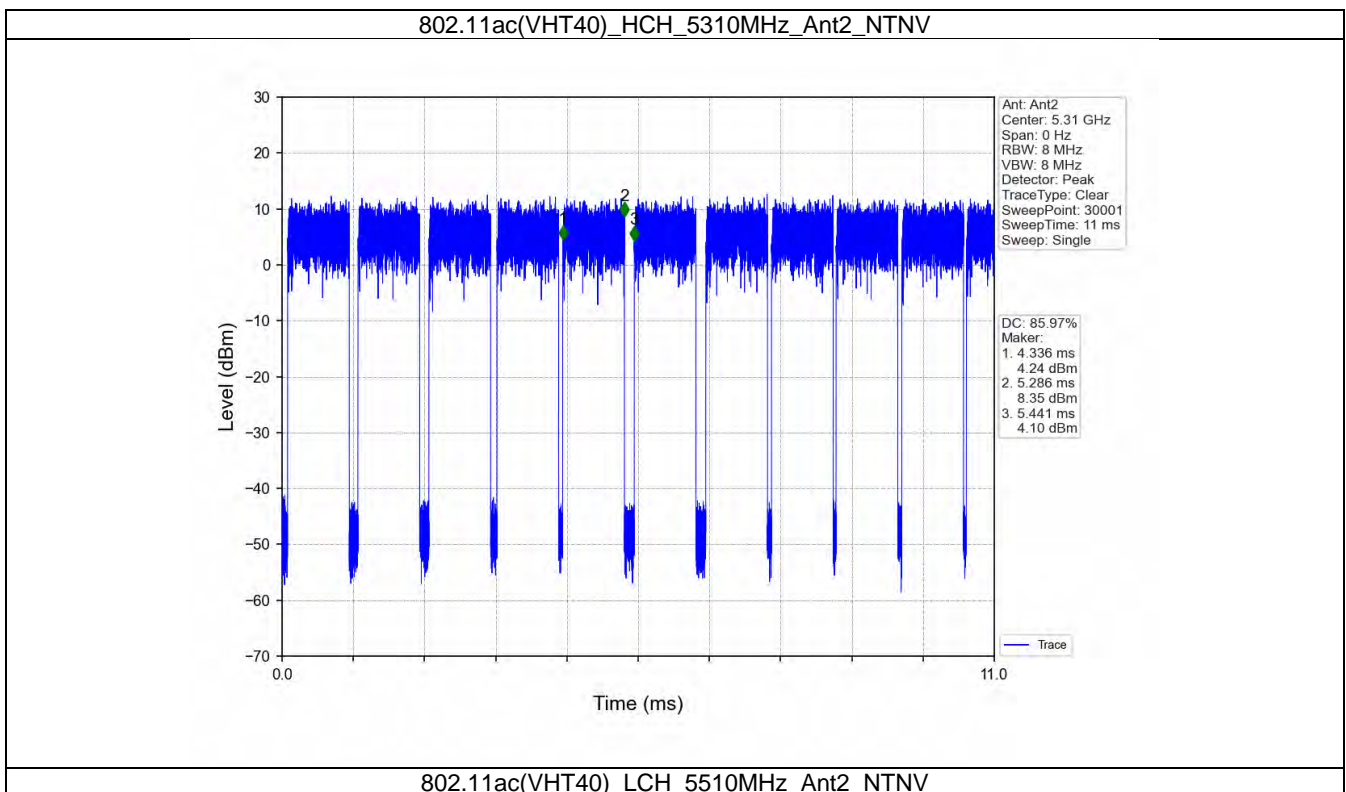
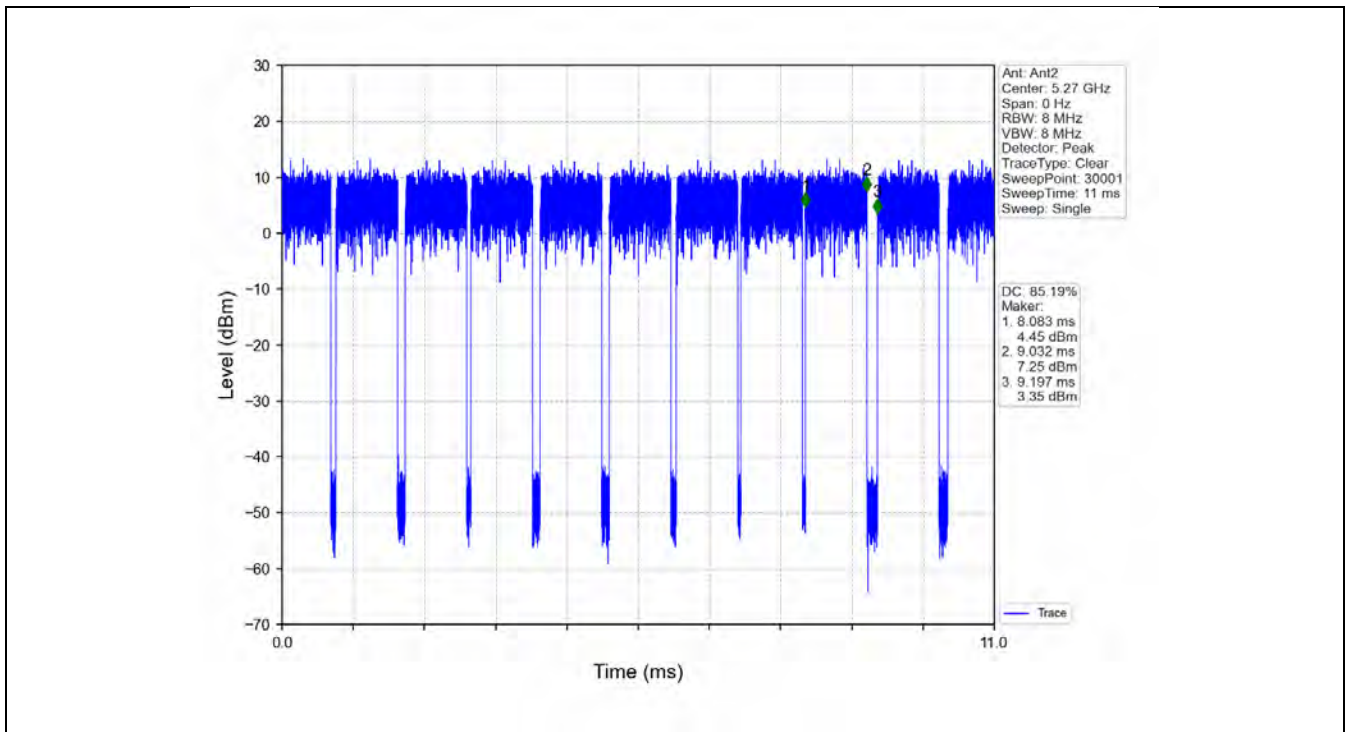


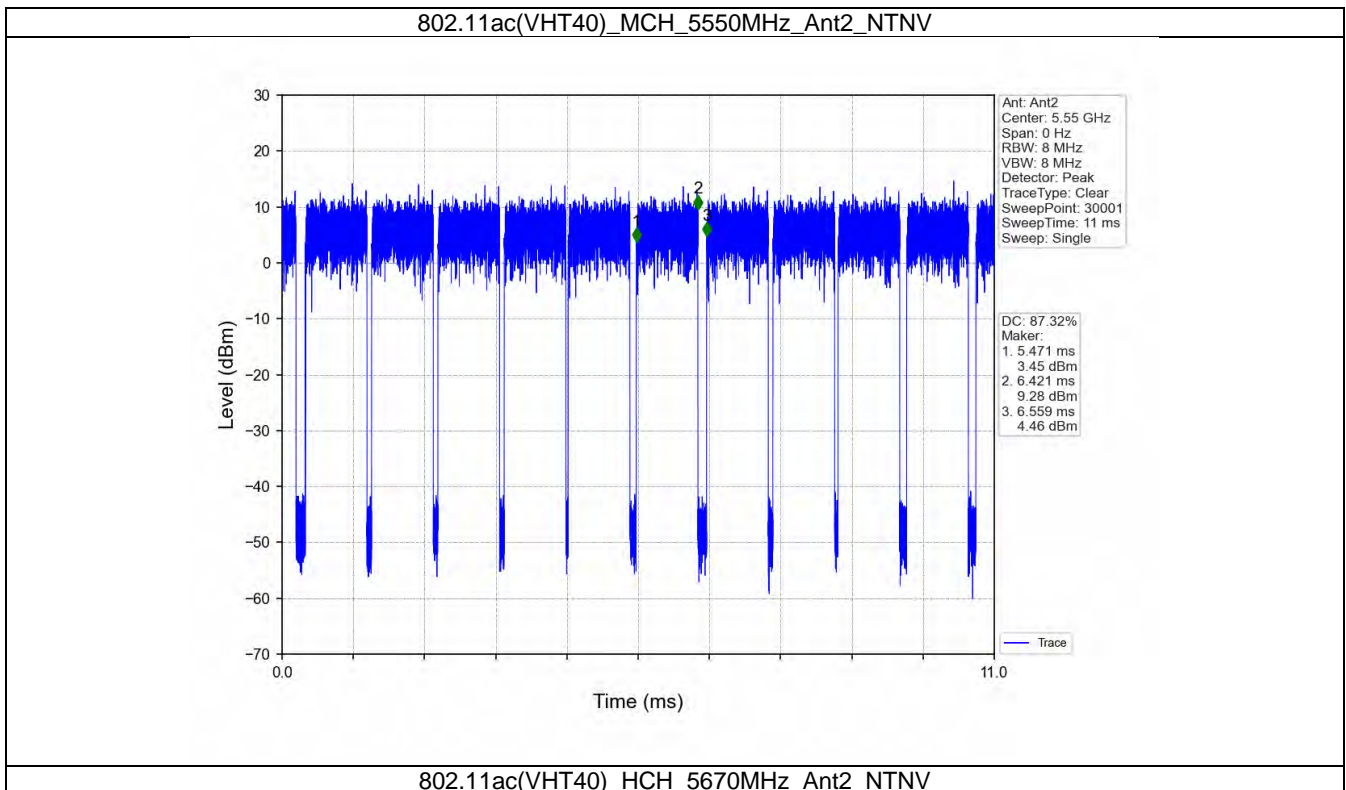
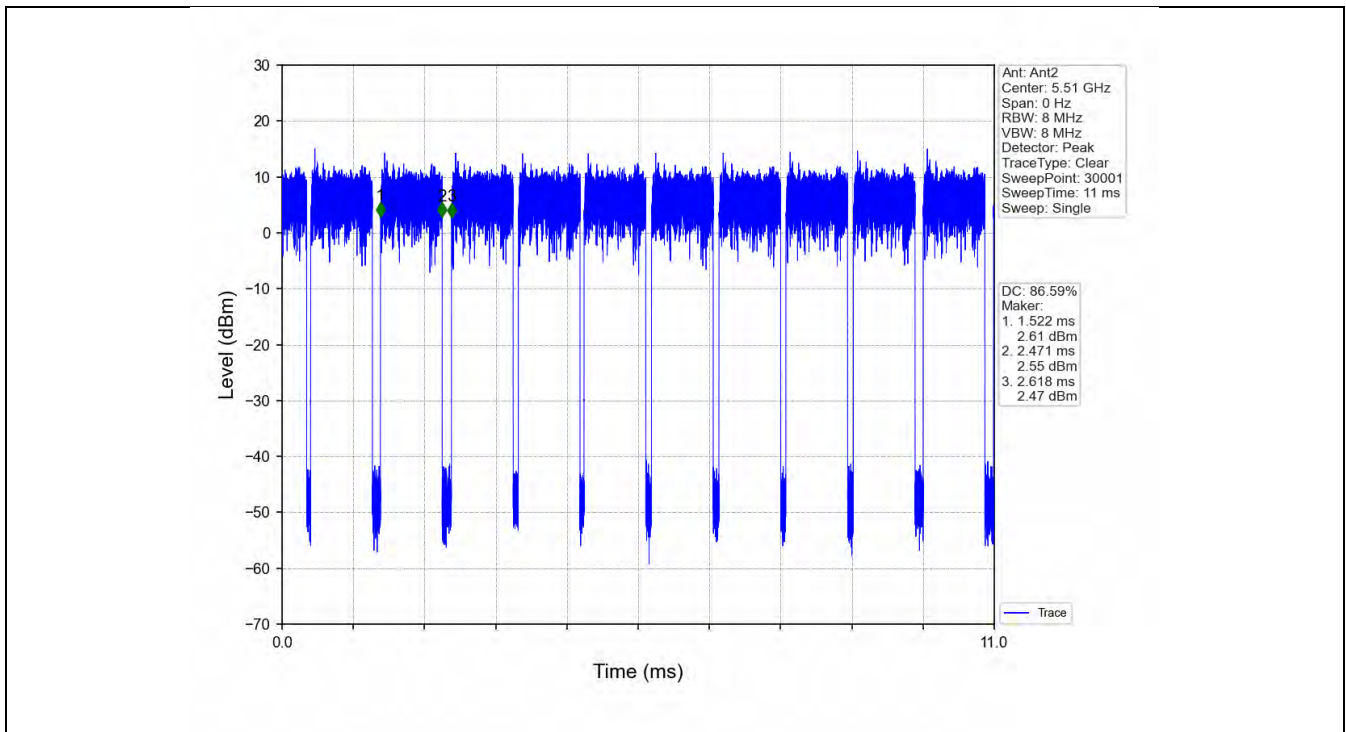


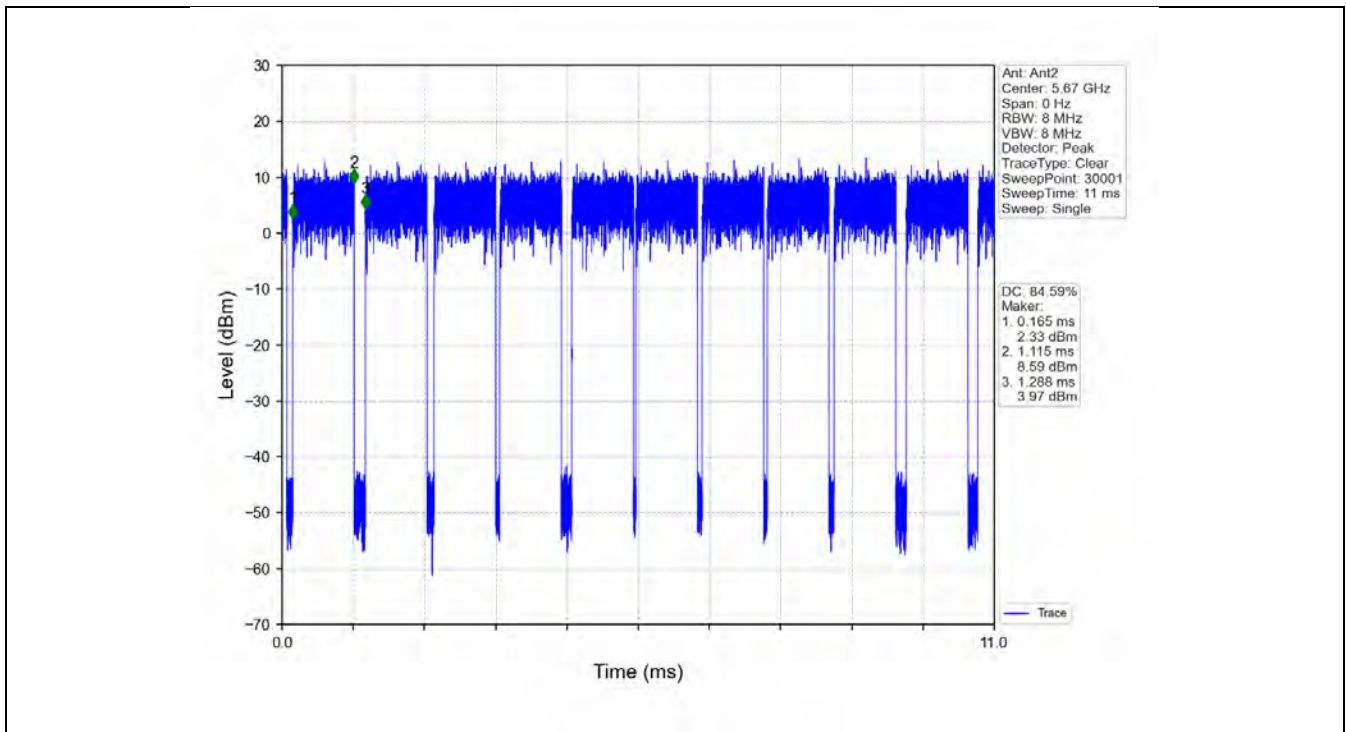




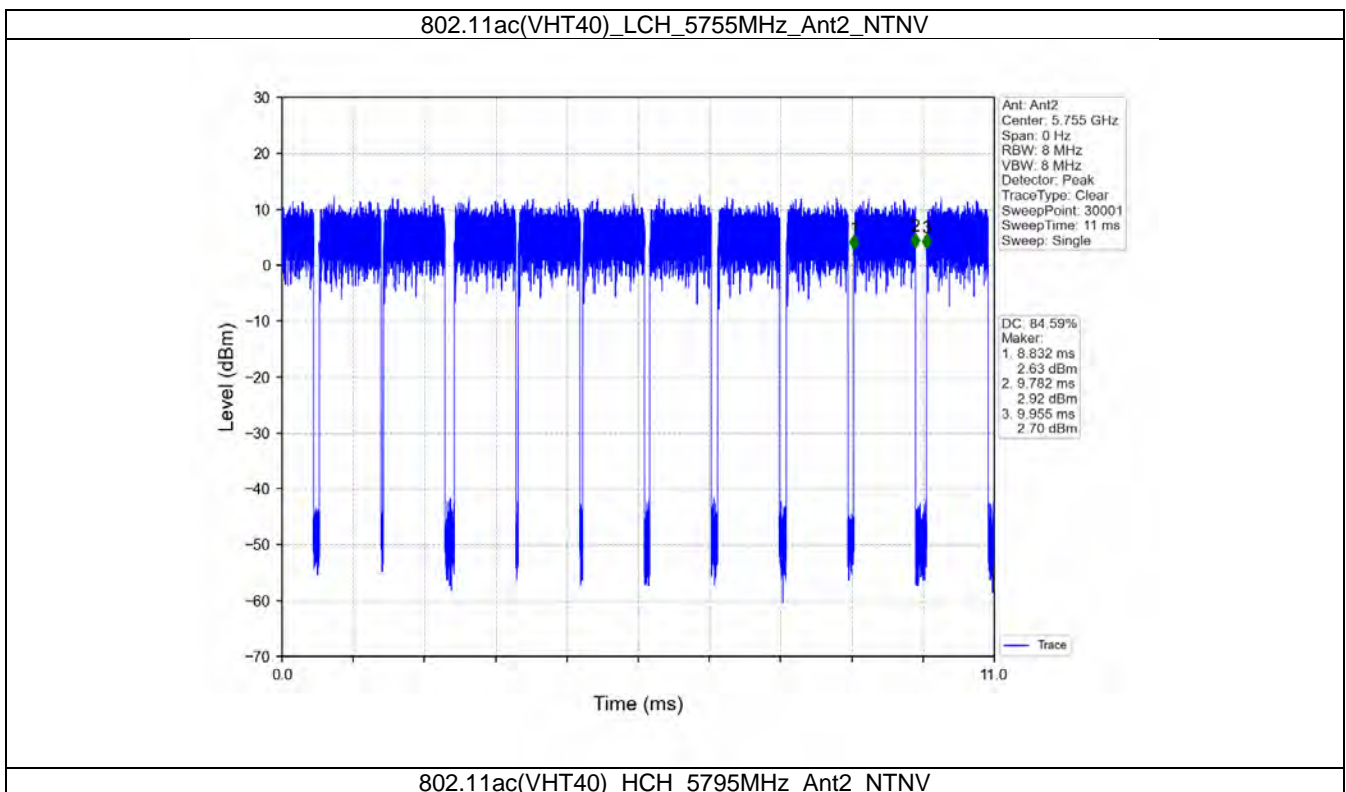




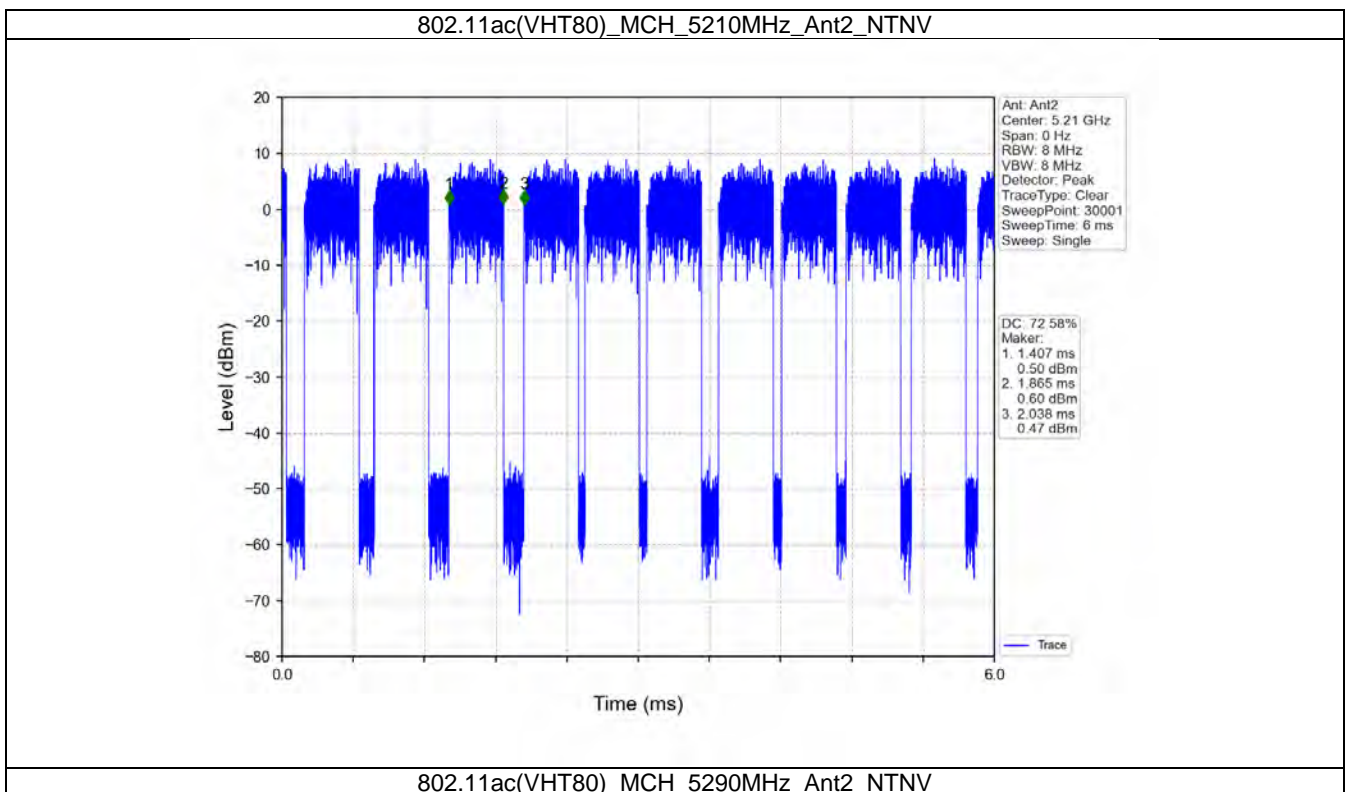
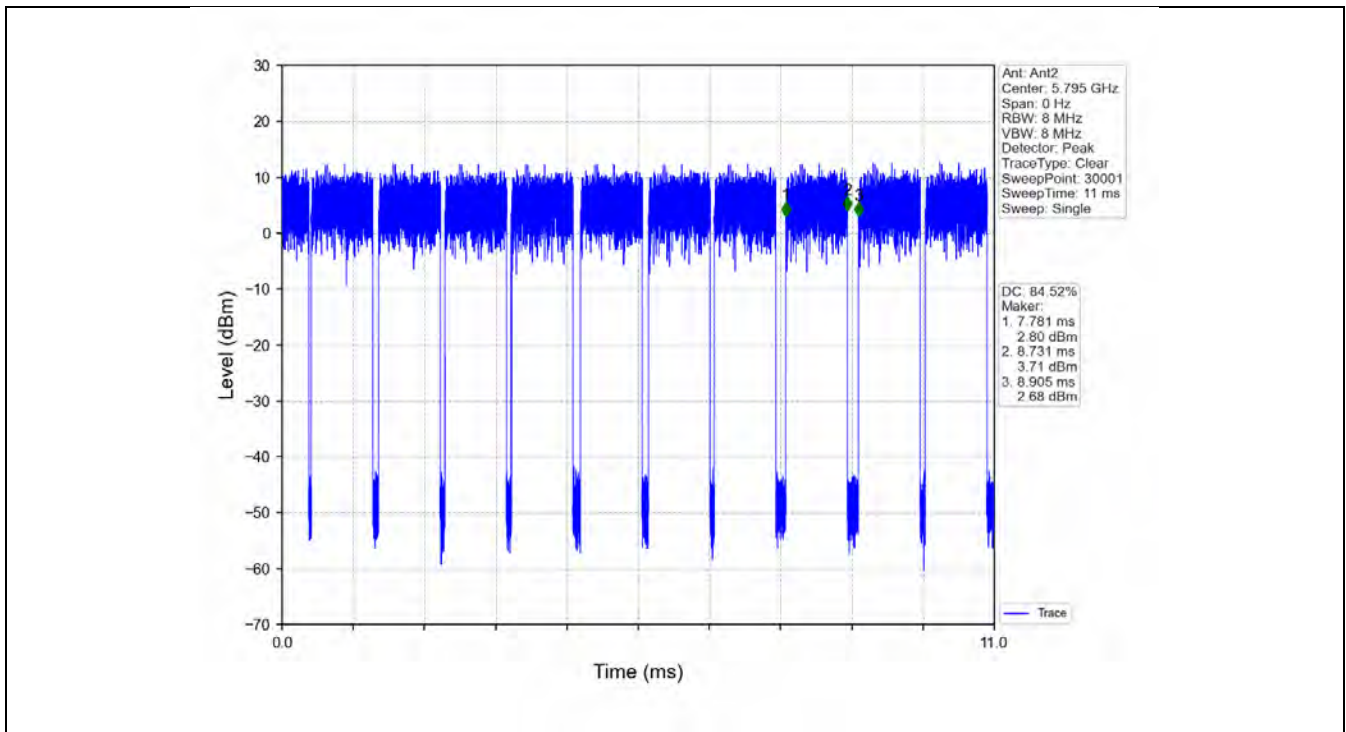


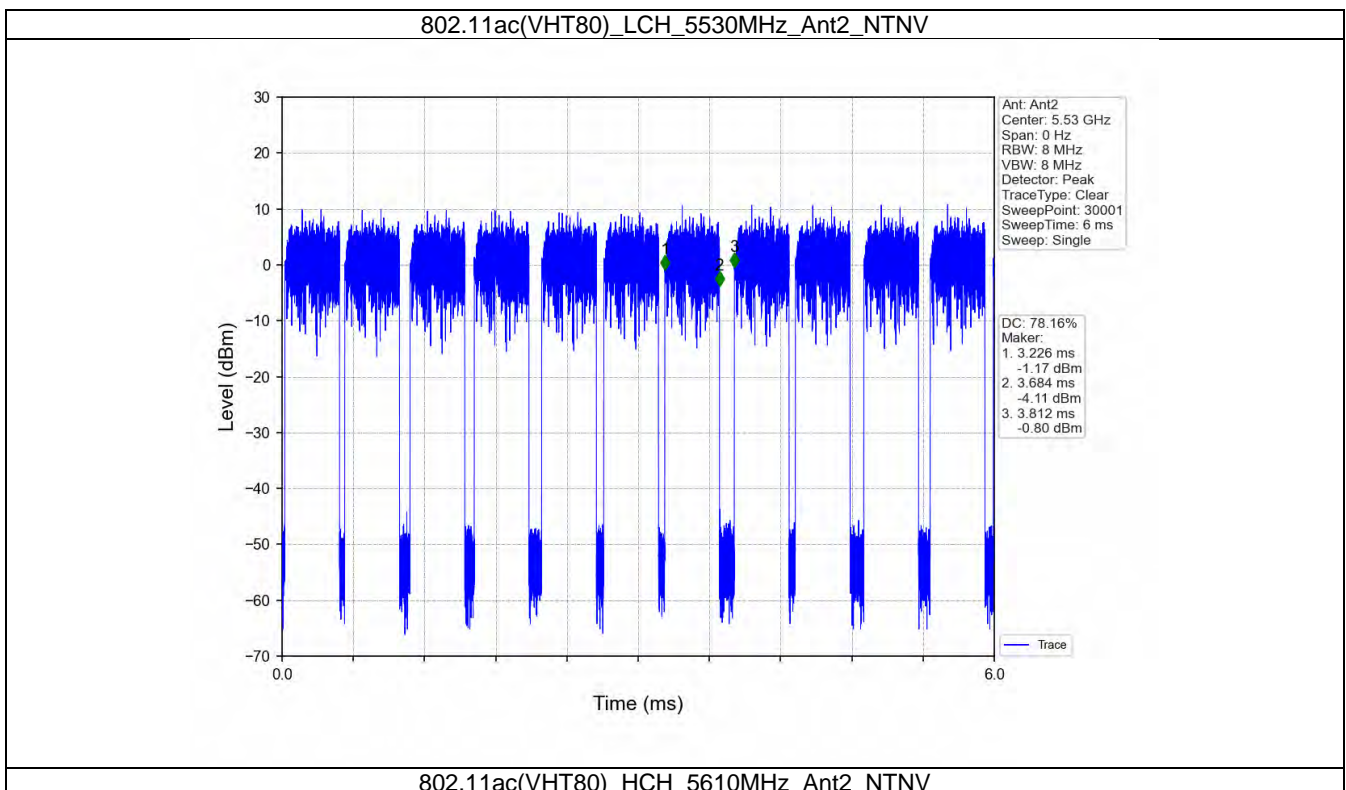
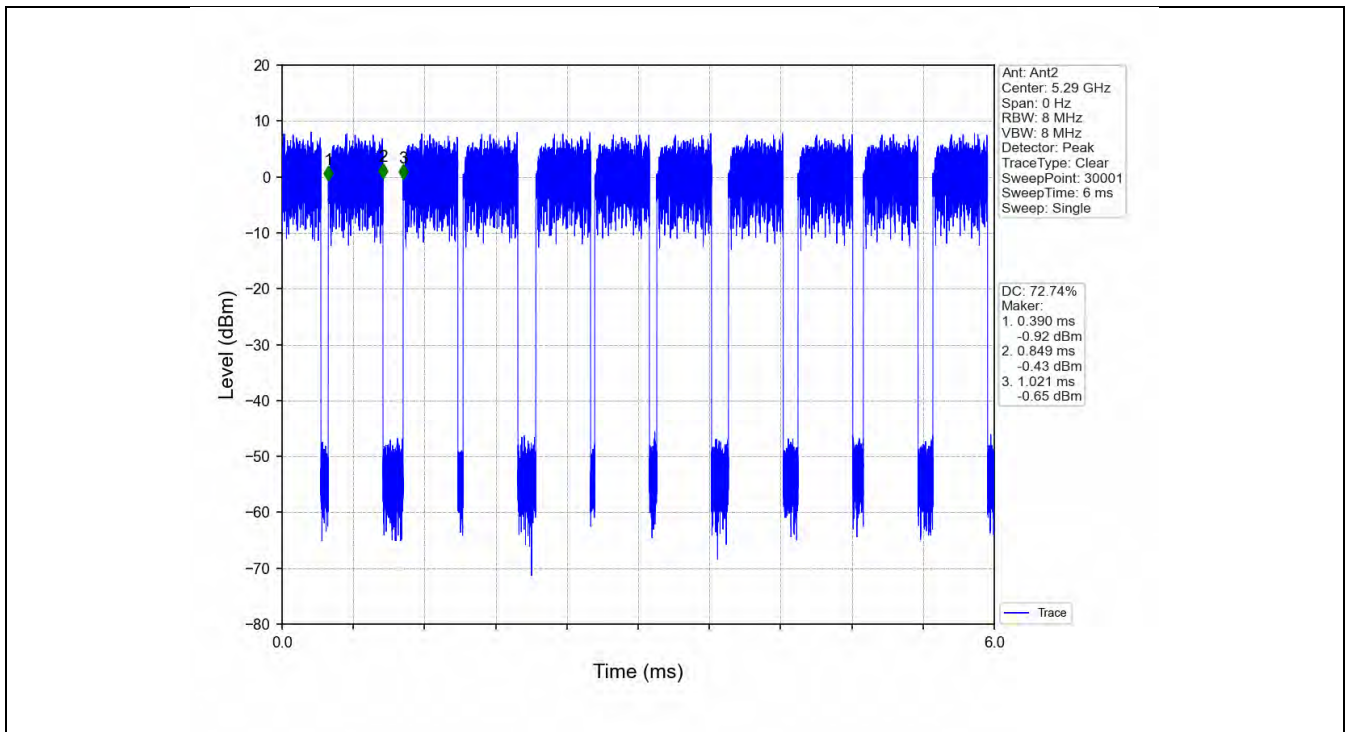


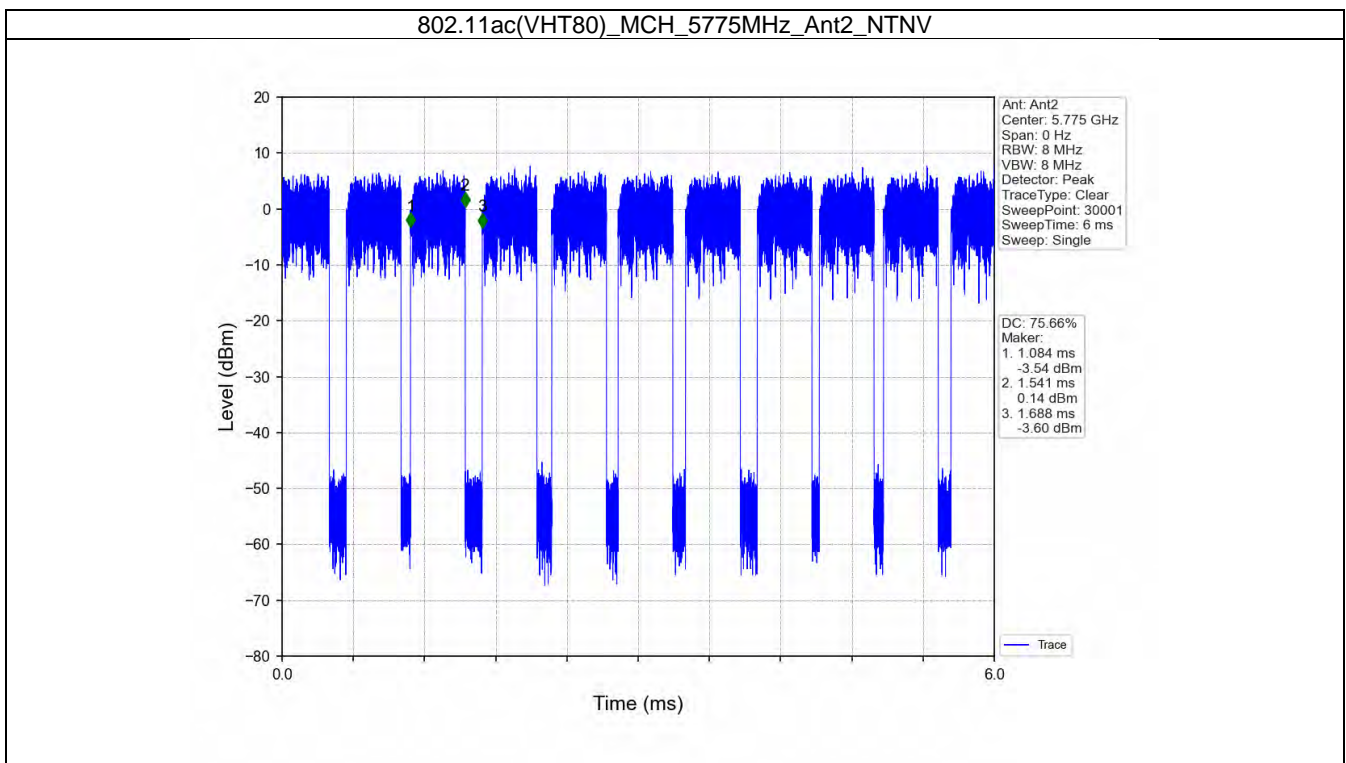
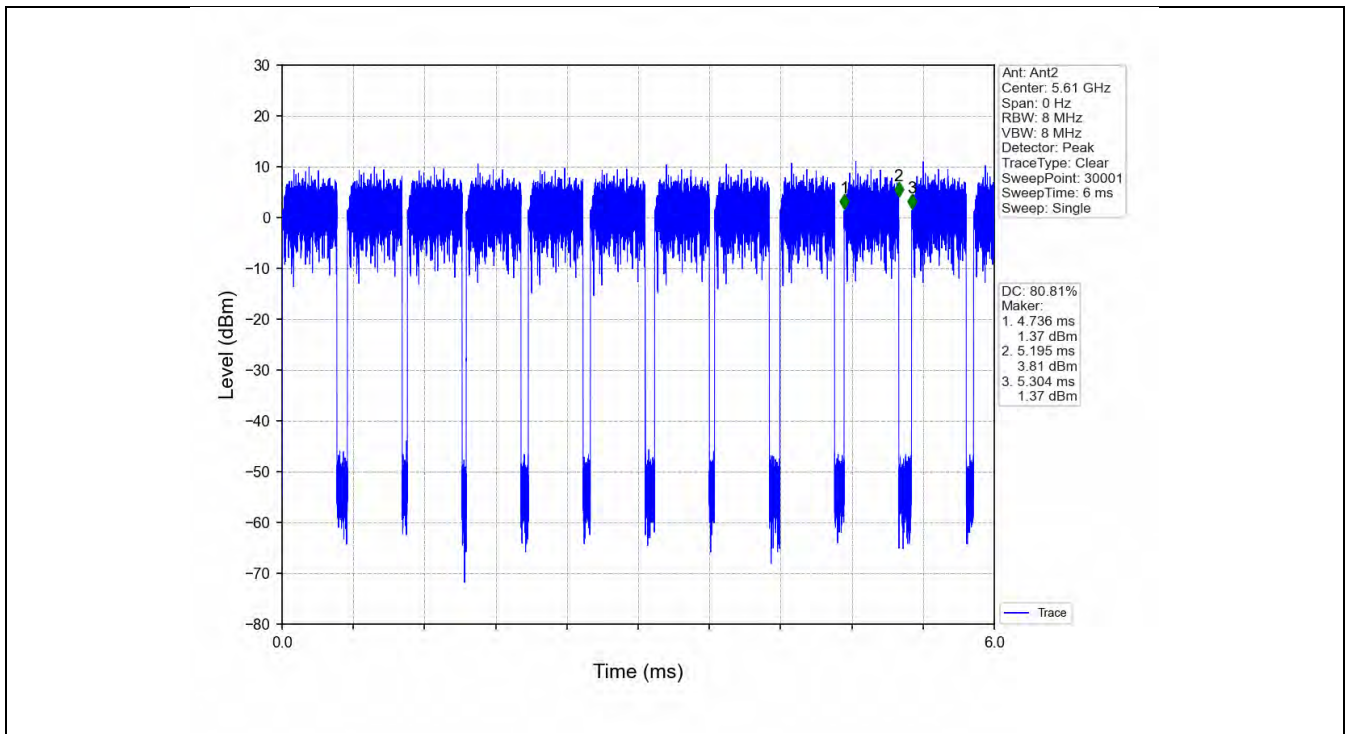
802.11ac(VHT40)_LCH_5755MHz_Ant2_NTNV



802.11ac(VHT40)_HCH_5795MHz_Ant2_NTNV







2. Bandwidth

2.1 OBW

2.1.1 Test Result

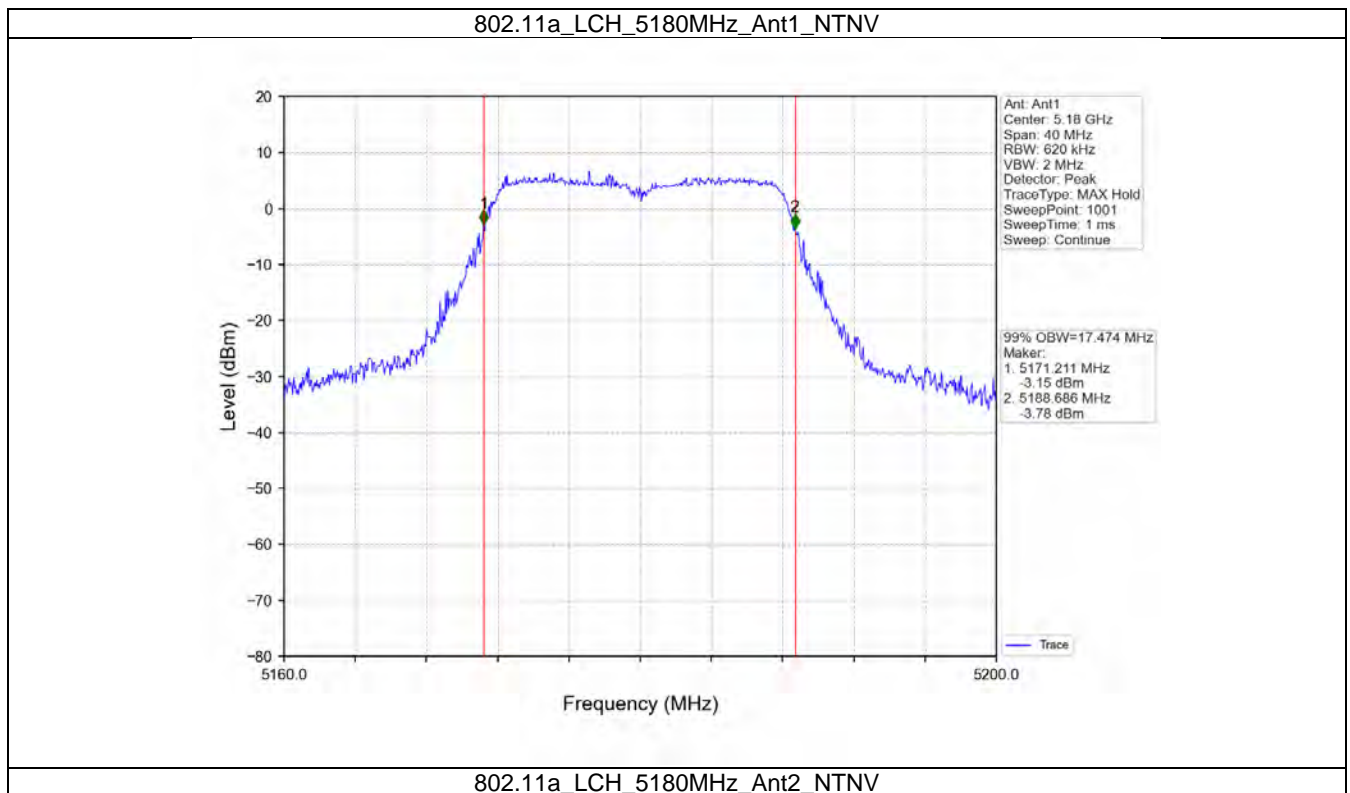
Mode	TX Type	Frequency (MHz)	Ant	99% Occupied Bandwidth (MHz)	Limit (MHz)	Verdict
802.11a	SISO	5180	1	17.474	/	Pass
			2	17.451	/	Pass
		5200	1	17.359	/	Pass
			2	17.437	/	Pass
		5240	1	17.310	/	Pass
			2	17.362	/	Pass
		5260	1	17.523	/	Pass
			2	17.452	/	Pass
		5300	1	17.409	/	Pass
			2	17.485	/	Pass
		5320	1	17.454	/	Pass
			2	17.290	/	Pass
		5500	1	17.438	/	Pass
			2	17.380	/	Pass
		5580	1	17.465	/	Pass
			2	17.500	/	Pass
		5700	1	17.698	/	Pass
			2	17.486	/	Pass
5745	1	17.545	/	Pass		
	2	17.398	/	Pass		
5785	1	17.513	/	Pass		
	2	17.421	/	Pass		
5825	1	17.468	/	Pass		
	2	17.406	/	Pass		
802.11n (HT20)	MIMO	5180	1	18.485	/	Pass
			2	18.390	/	Pass
		5200	1	18.431	/	Pass
			2	18.370	/	Pass
		5240	1	18.476	/	Pass
			2	18.182	/	Pass
		5260	1	18.351	/	Pass
			2	18.161	/	Pass
		5300	1	18.373	/	Pass
			2	18.419	/	Pass
		5320	1	18.439	/	Pass
			2	18.271	/	Pass
		5500	1	18.342	/	Pass
			2	18.382	/	Pass
		5580	1	18.284	/	Pass
			2	18.494	/	Pass
		5700	1	18.392	/	Pass
			2	18.247	/	Pass
5745	1	18.404	/	Pass		
	2	18.230	/	Pass		
5785	1	18.383	/	Pass		
	2	18.254	/	Pass		
5825	1	18.366	/	Pass		

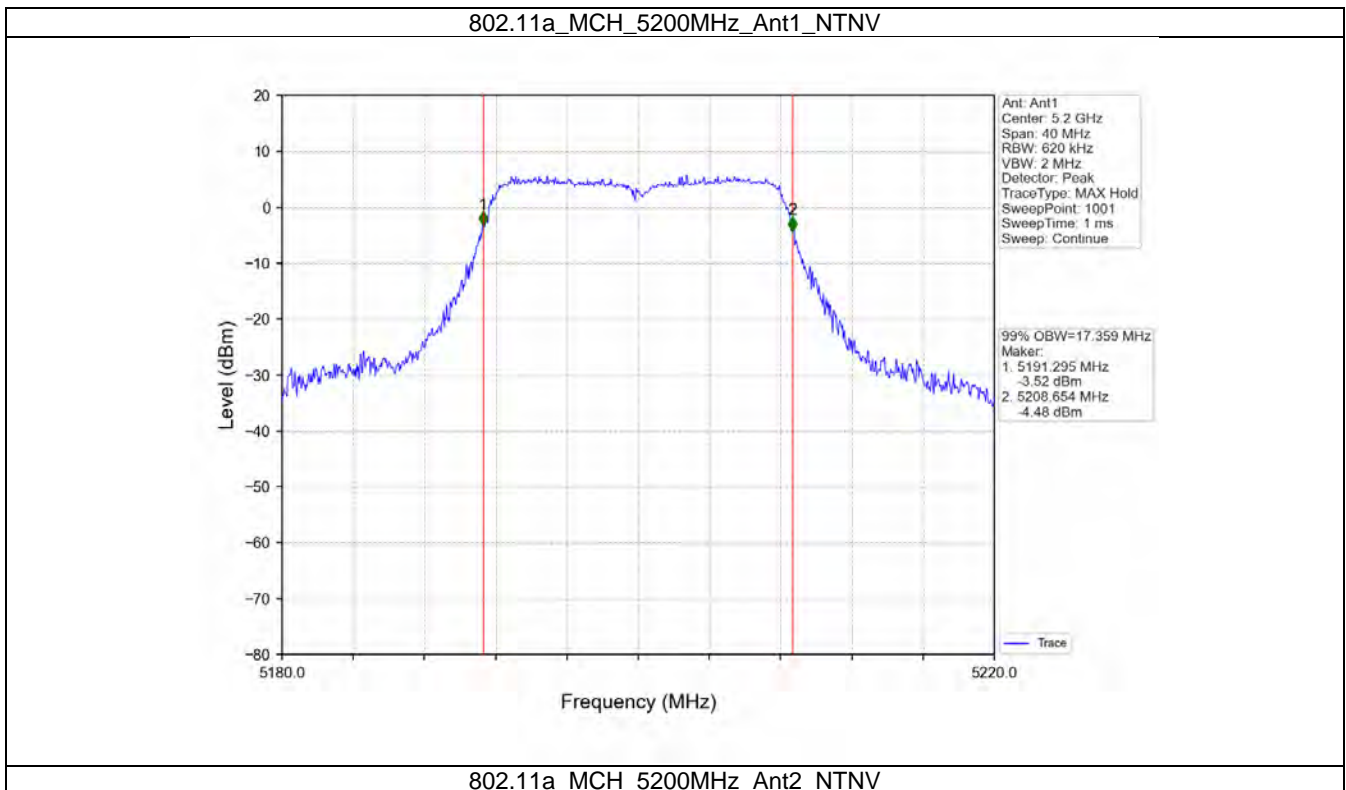
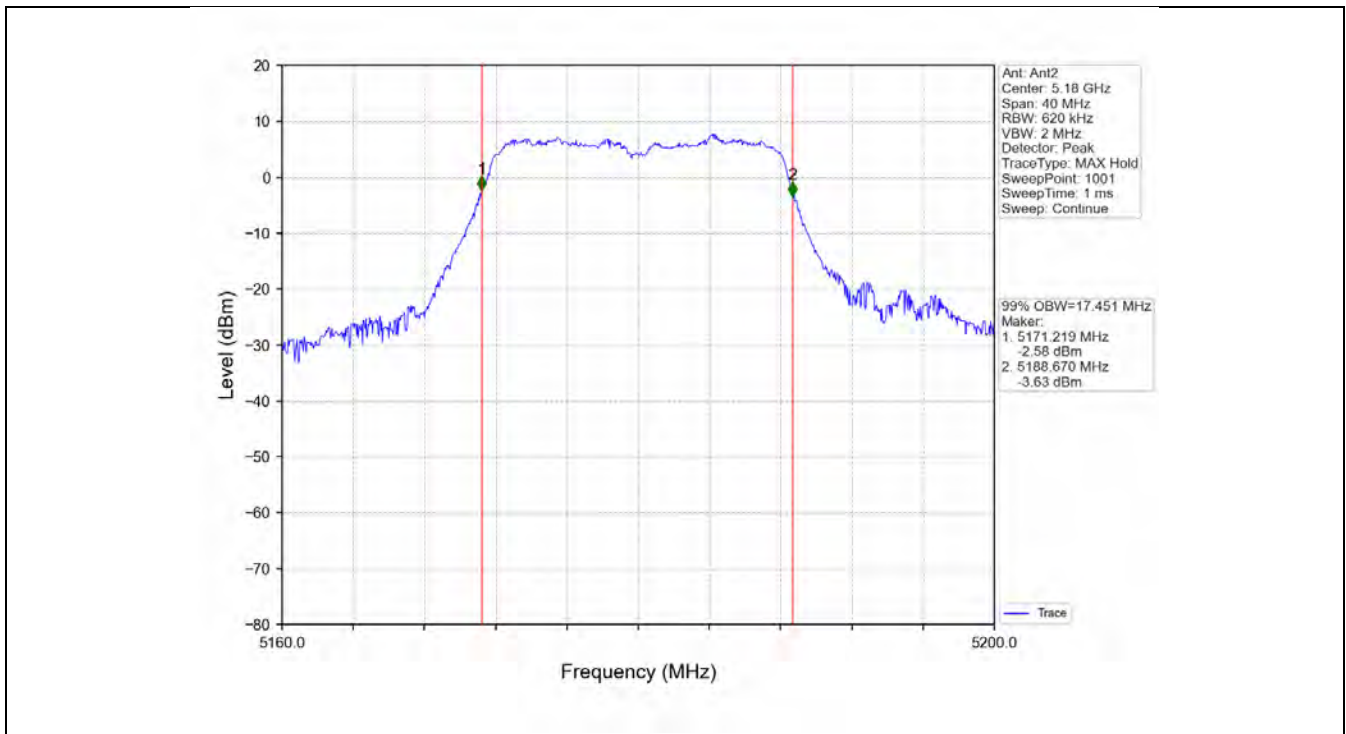


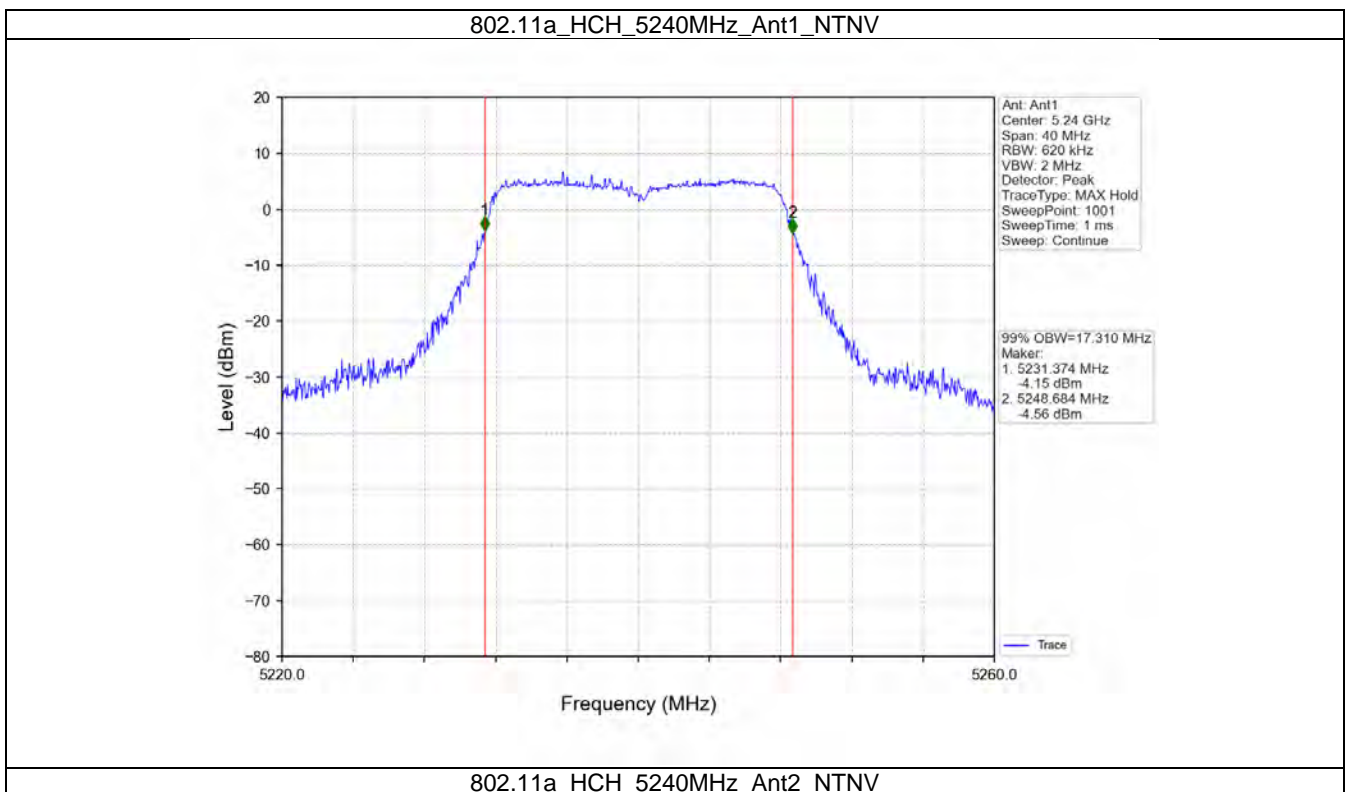
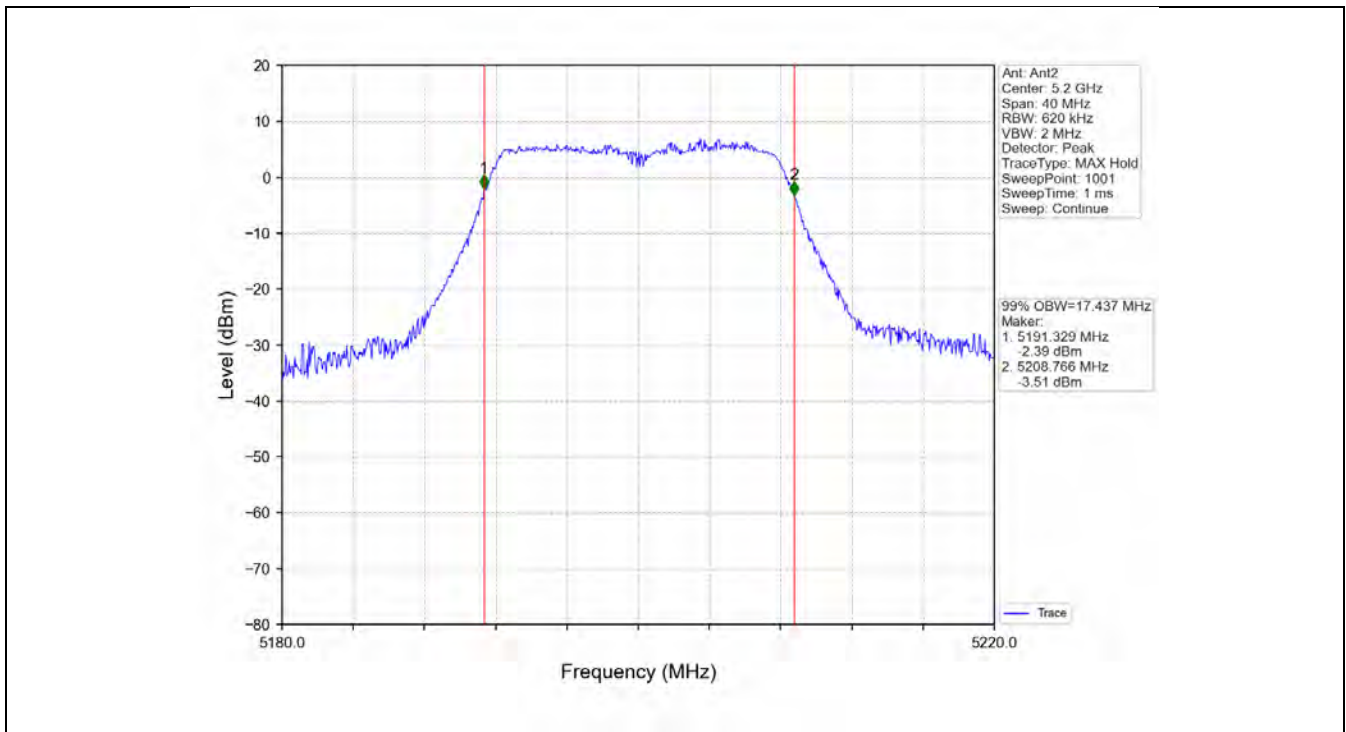
802.11n (HT40)	MIMO	5190	2	18.315	/	Pass	
			1	37.208	/	Pass	
		5230	2	37.334	/	Pass	
			1	37.448	/	Pass	
		5270	2	37.196	/	Pass	
			1	37.419	/	Pass	
		5310	2	37.197	/	Pass	
			1	37.251	/	Pass	
		5510	2	36.950	/	Pass	
			1	37.529	/	Pass	
		5550	2	37.309	/	Pass	
			1	37.447	/	Pass	
		5670	2	37.547	/	Pass	
			1	37.233	/	Pass	
5755	2	36.893	/	Pass			
	1	37.348	/	Pass			
5795	2	37.299	/	Pass			
	1	37.097	/	Pass			
802.11ac (VHT20)	MIMO	5180	2	37.105	/	Pass	
			1	18.430	/	Pass	
		5200	2	18.135	/	Pass	
			1	18.305	/	Pass	
		5240	2	18.514	/	Pass	
			1	18.359	/	Pass	
		5260	2	18.209	/	Pass	
			1	18.300	/	Pass	
		5300	2	18.199	/	Pass	
			1	18.271	/	Pass	
		5320	2	18.279	/	Pass	
			1	18.312	/	Pass	
		5500	2	18.229	/	Pass	
			1	18.506	/	Pass	
		5580	2	18.237	/	Pass	
			1	18.455	/	Pass	
		5700	2	18.206	/	Pass	
			1	18.341	/	Pass	
		5745	2	18.308	/	Pass	
			1	18.304	/	Pass	
5785	2	18.334	/	Pass			
	1	18.320	/	Pass			
5825	2	18.118	/	Pass			
	1	18.325	/	Pass			
802.11ac (VHT40)	MIMO	5190	2	18.229	/	Pass	
			1	37.295	/	Pass	
		5230	2	37.114	/	Pass	
			1	37.443	/	Pass	
		5270	2	36.928	/	Pass	
			1	37.278	/	Pass	
		5310	2	37.061	/	Pass	
			1	37.344	/	Pass	
		5510	2	37.222	/	Pass	
			1	37.182	/	Pass	
		5550	2	36.974	/	Pass	
			1	36.978	/	Pass	
				2	36.965	/	Pass

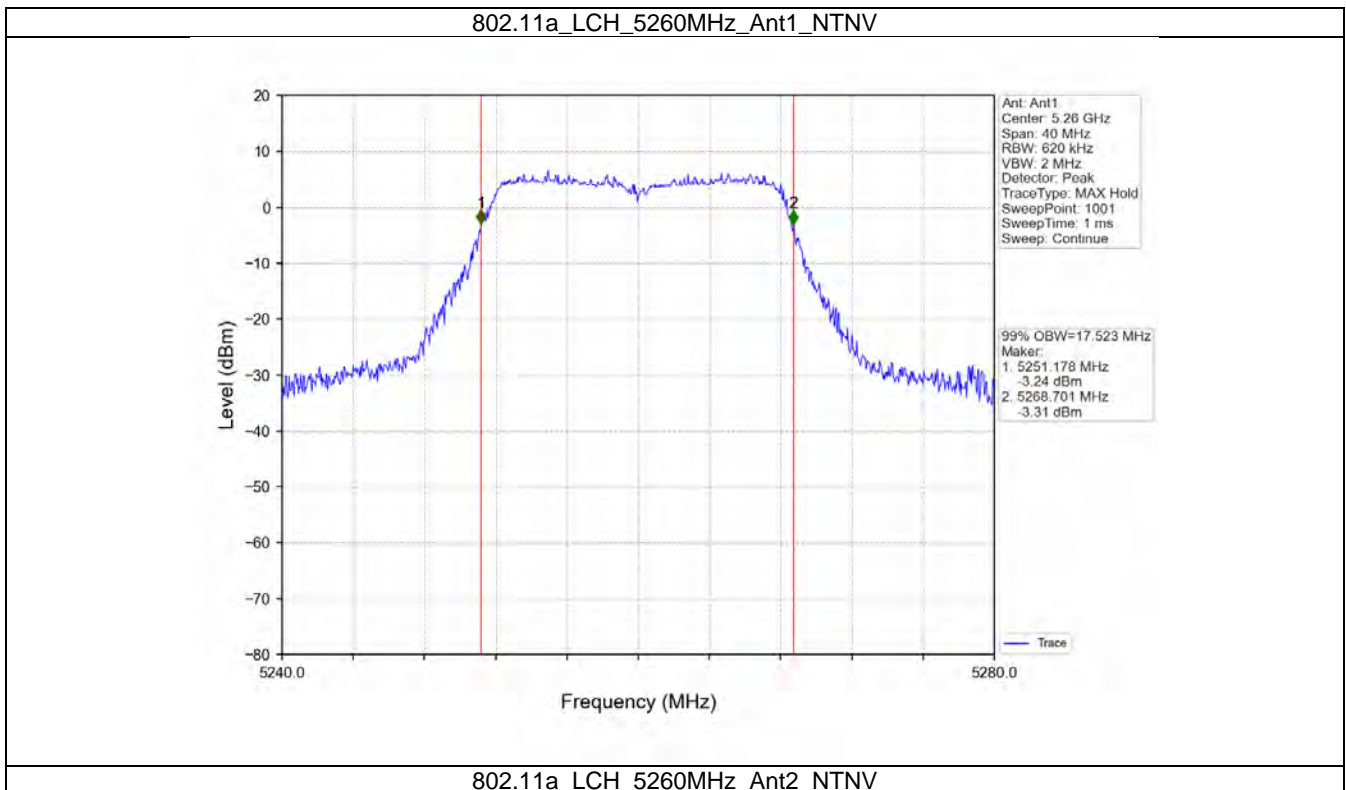
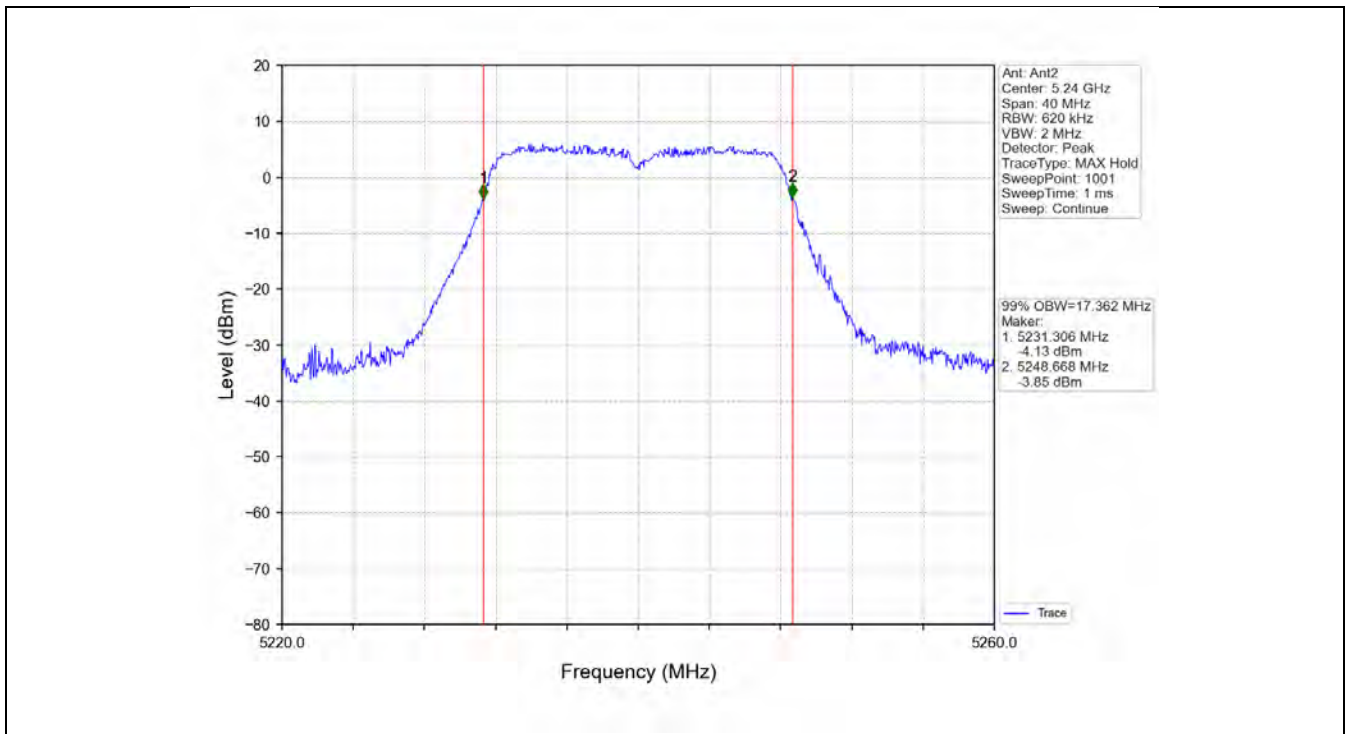
		5670	1	37.133	/	Pass
			2	36.925	/	Pass
		5755	1	37.376	/	Pass
			2	37.016	/	Pass
		5795	1	37.329	/	Pass
			2	36.938	/	Pass
802.11ac (VHT80)	MIMO	5210	1	76.572	/	Pass
			2	75.966	/	Pass
		5290	1	76.069	/	Pass
			2	75.821	/	Pass
		5530	1	76.074	/	Pass
			2	76.121	/	Pass
		5610	1	76.179	/	Pass
			2	76.189	/	Pass
		5775	1	76.482	/	Pass
			2	76.265	/	Pass

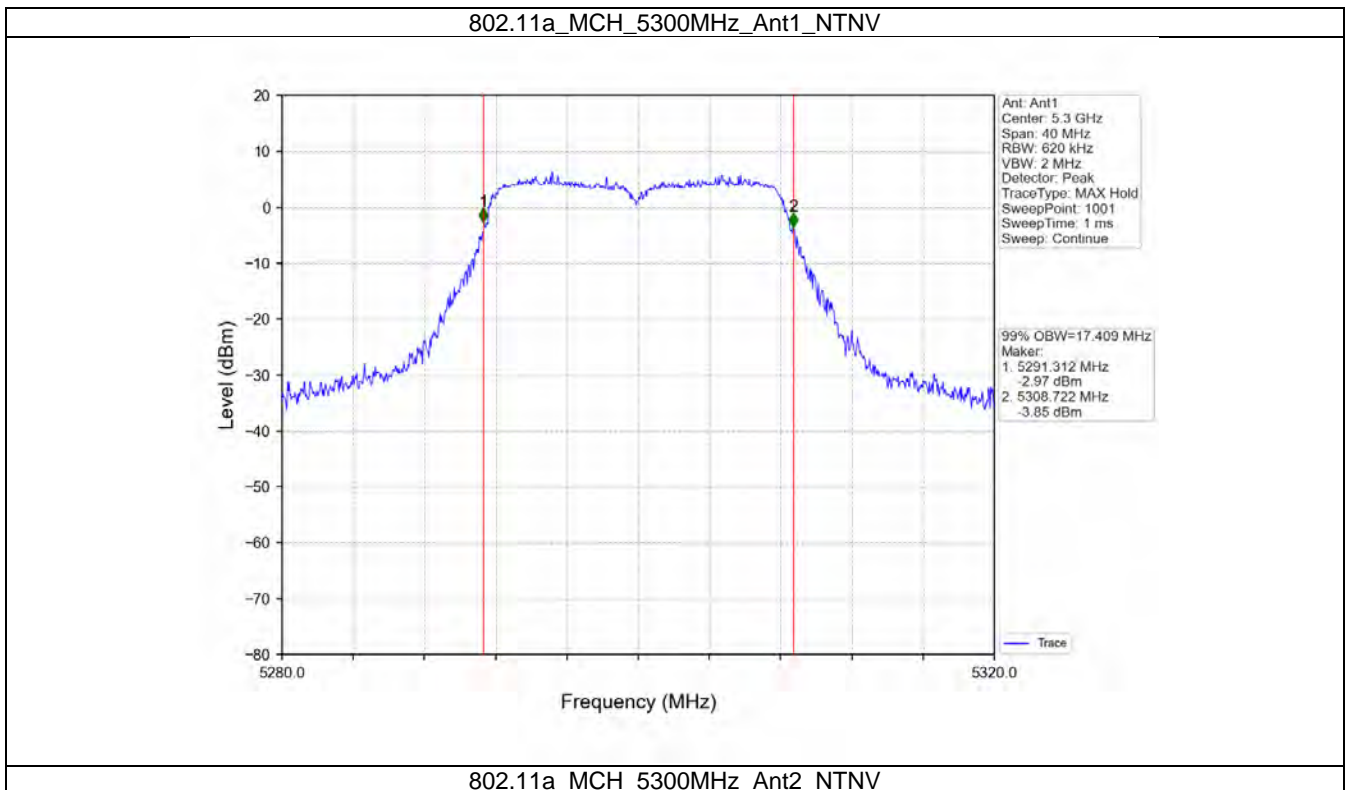
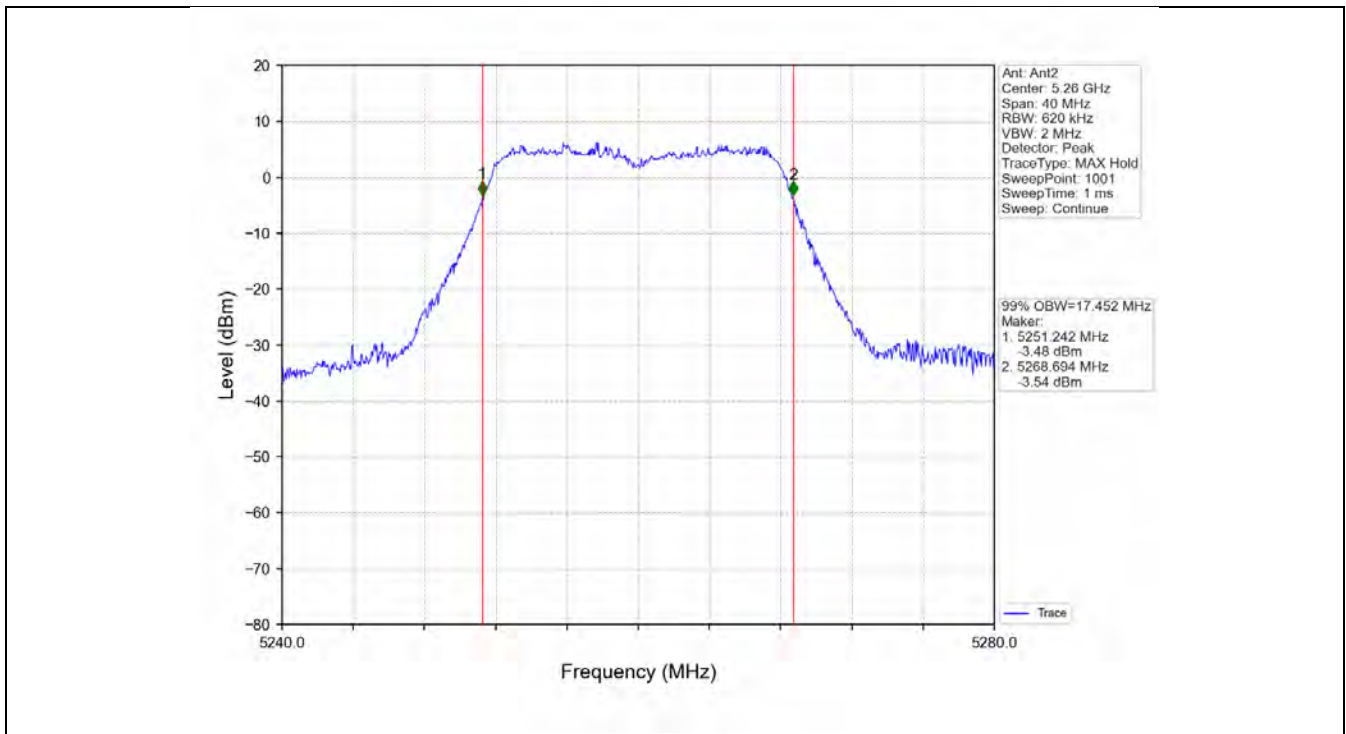
2.1.2 Test Graph

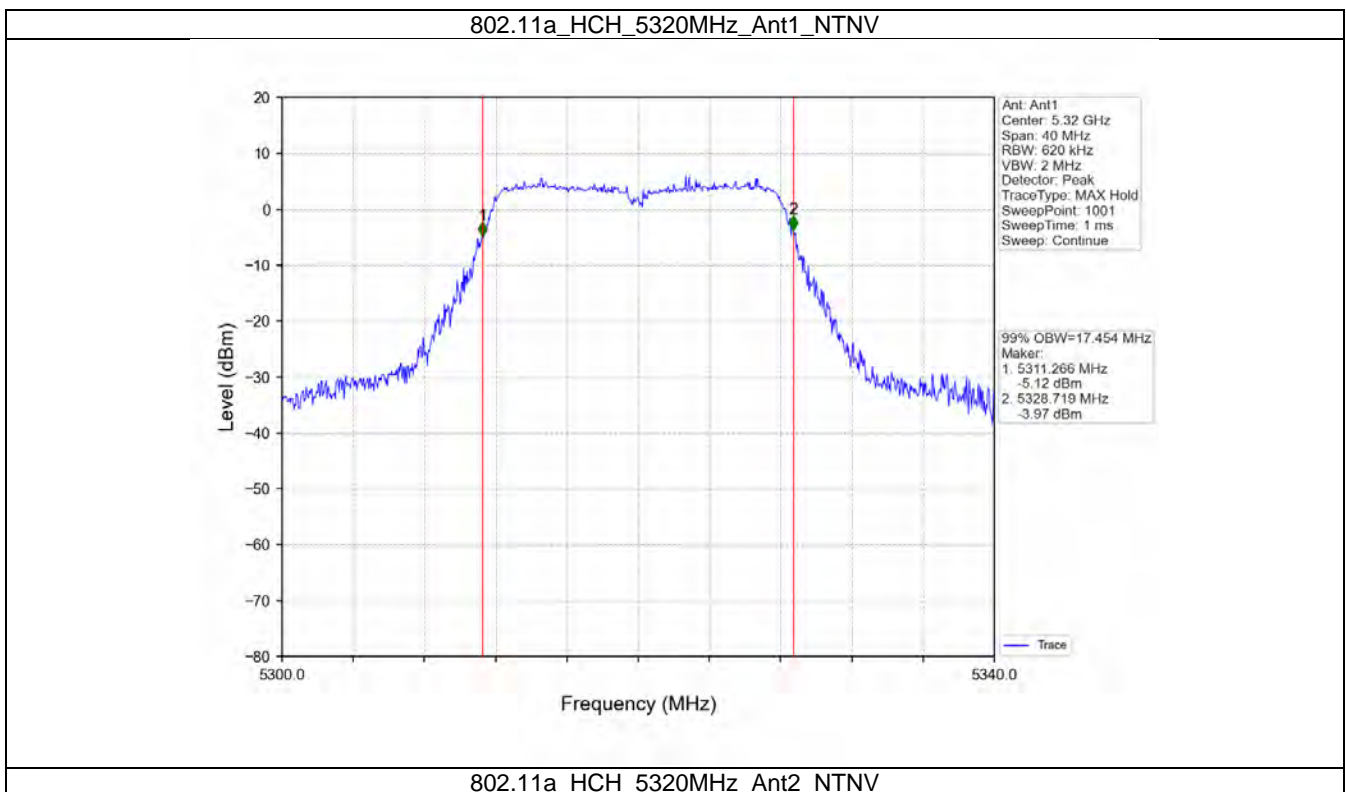
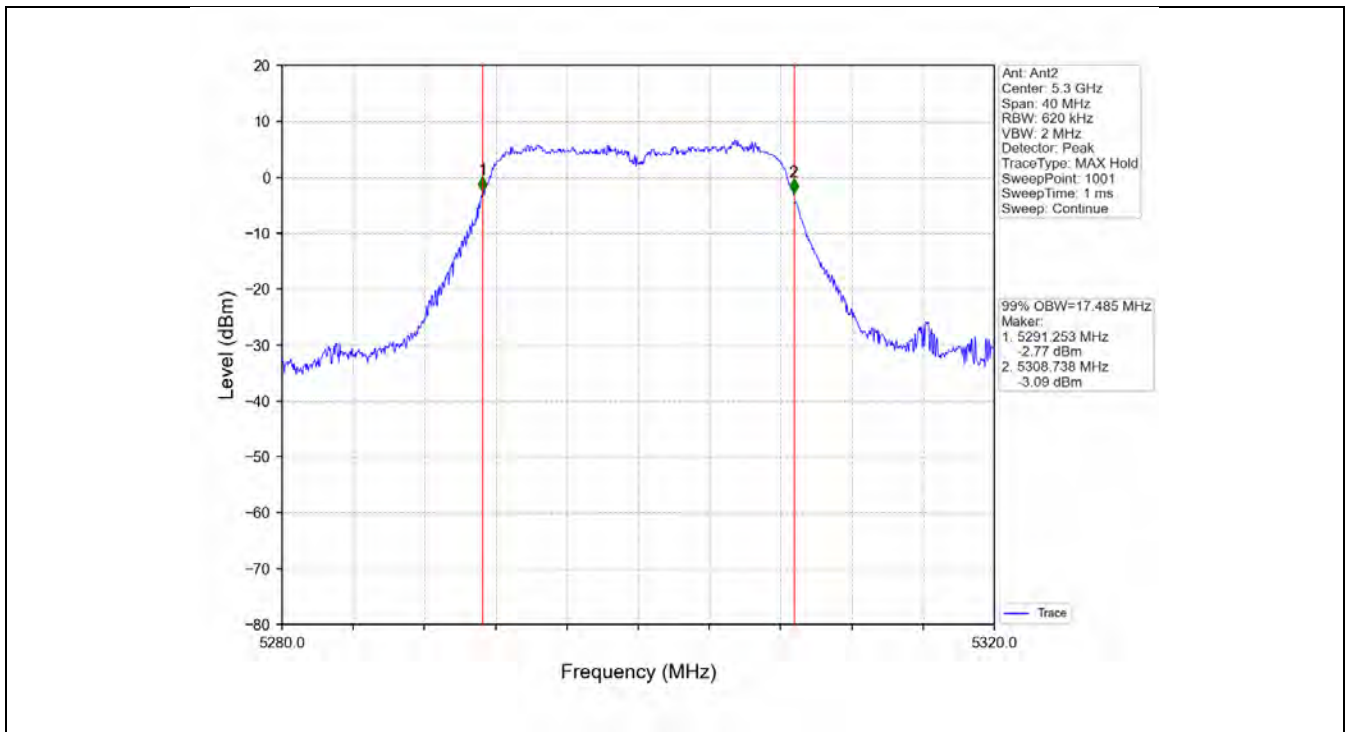


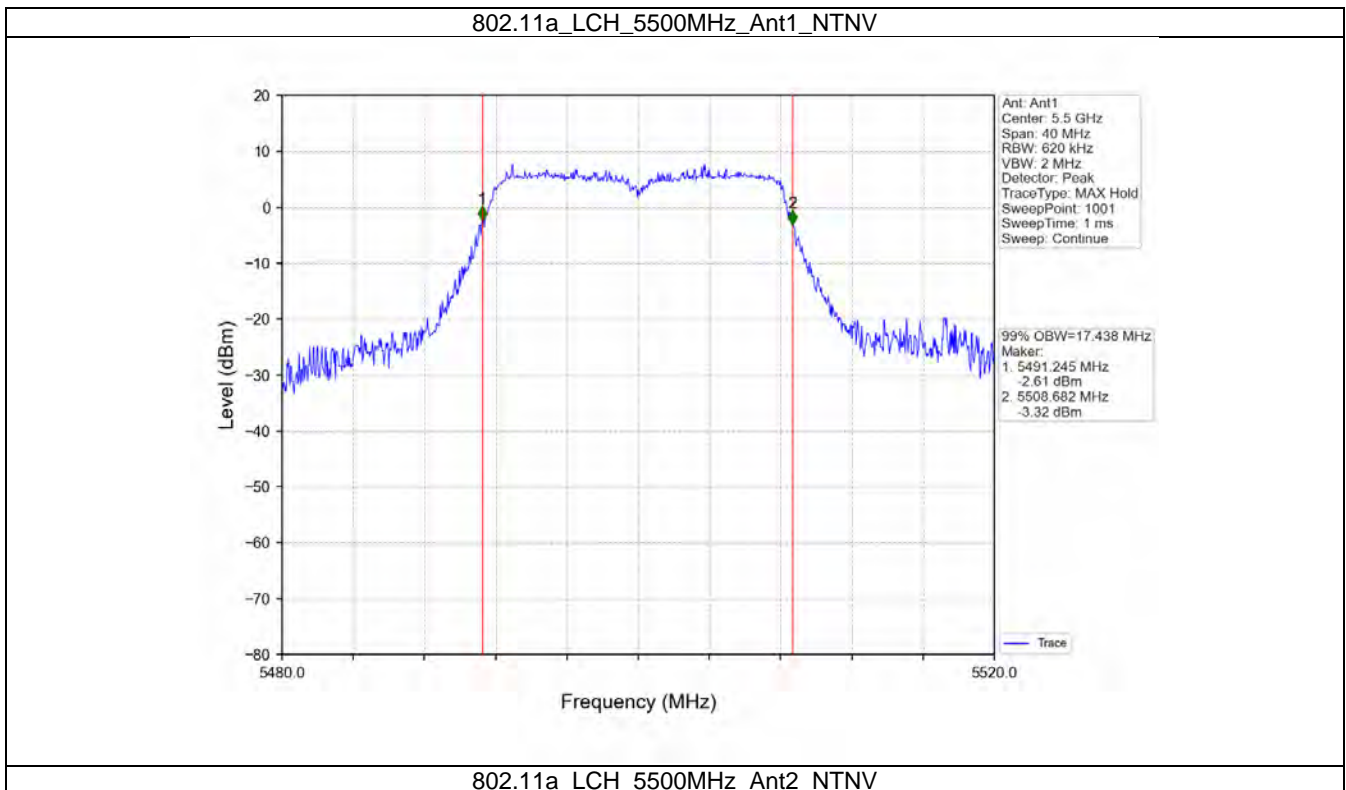
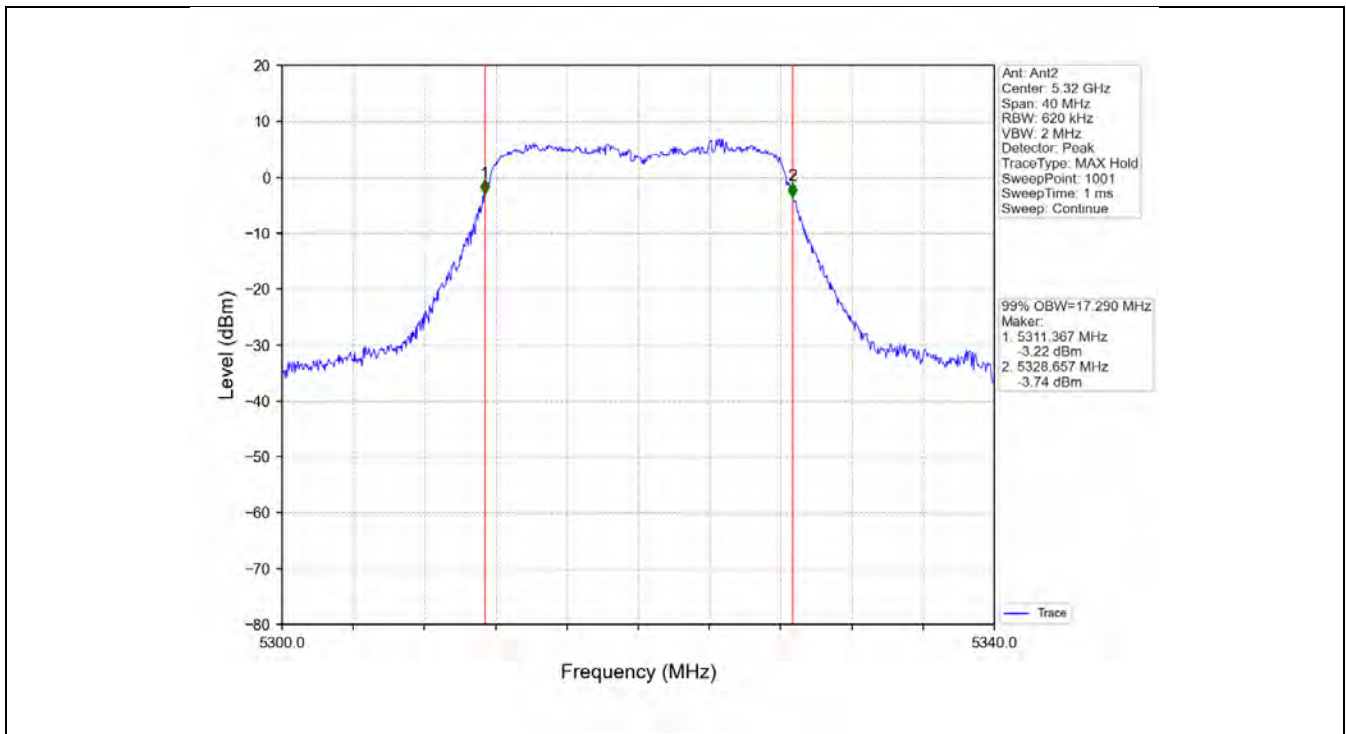


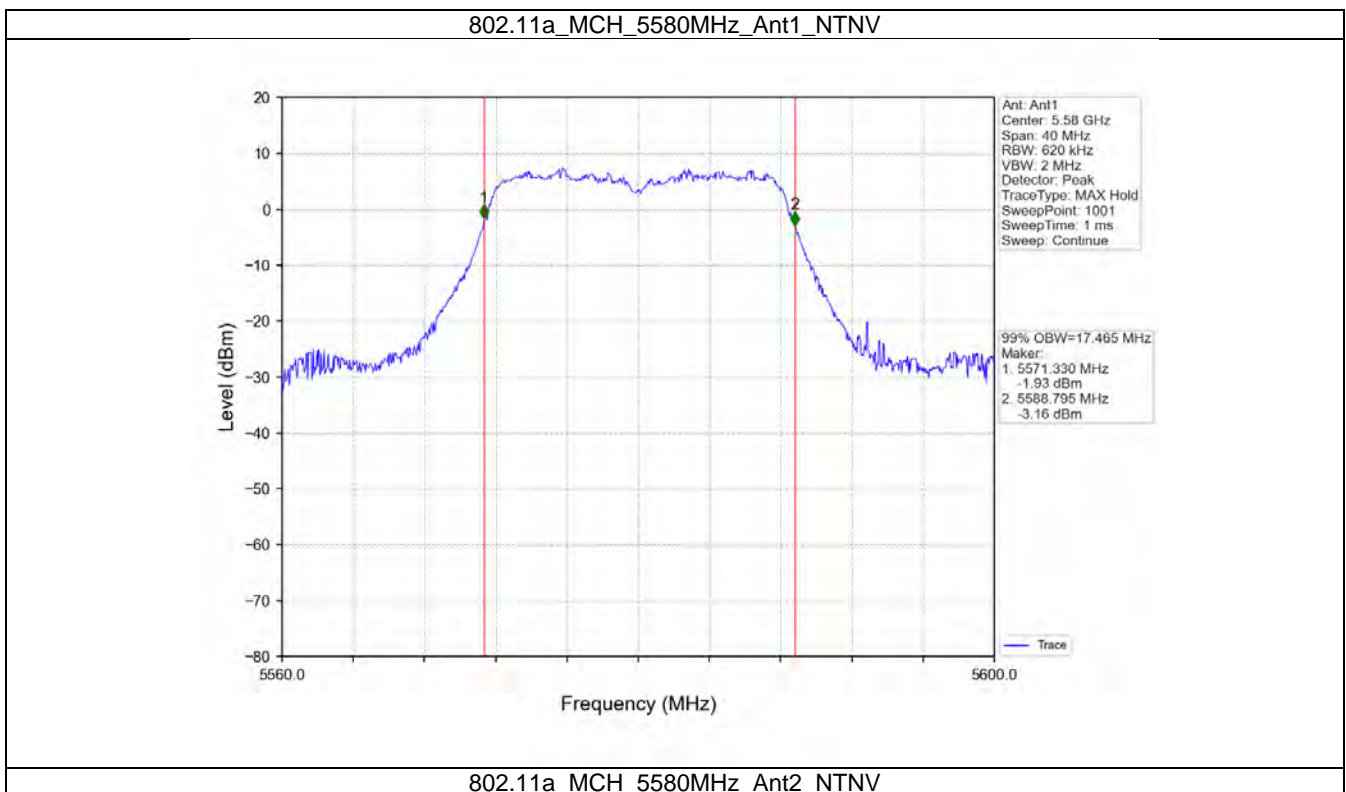
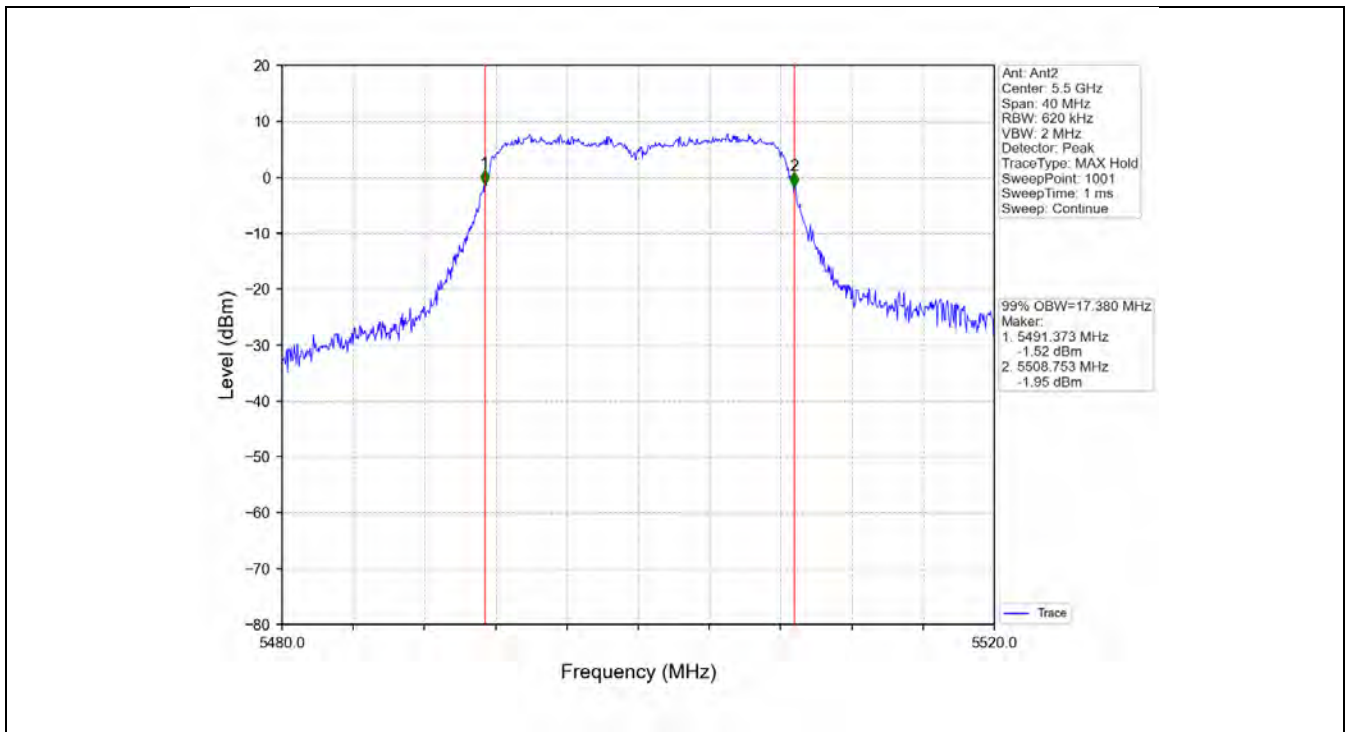


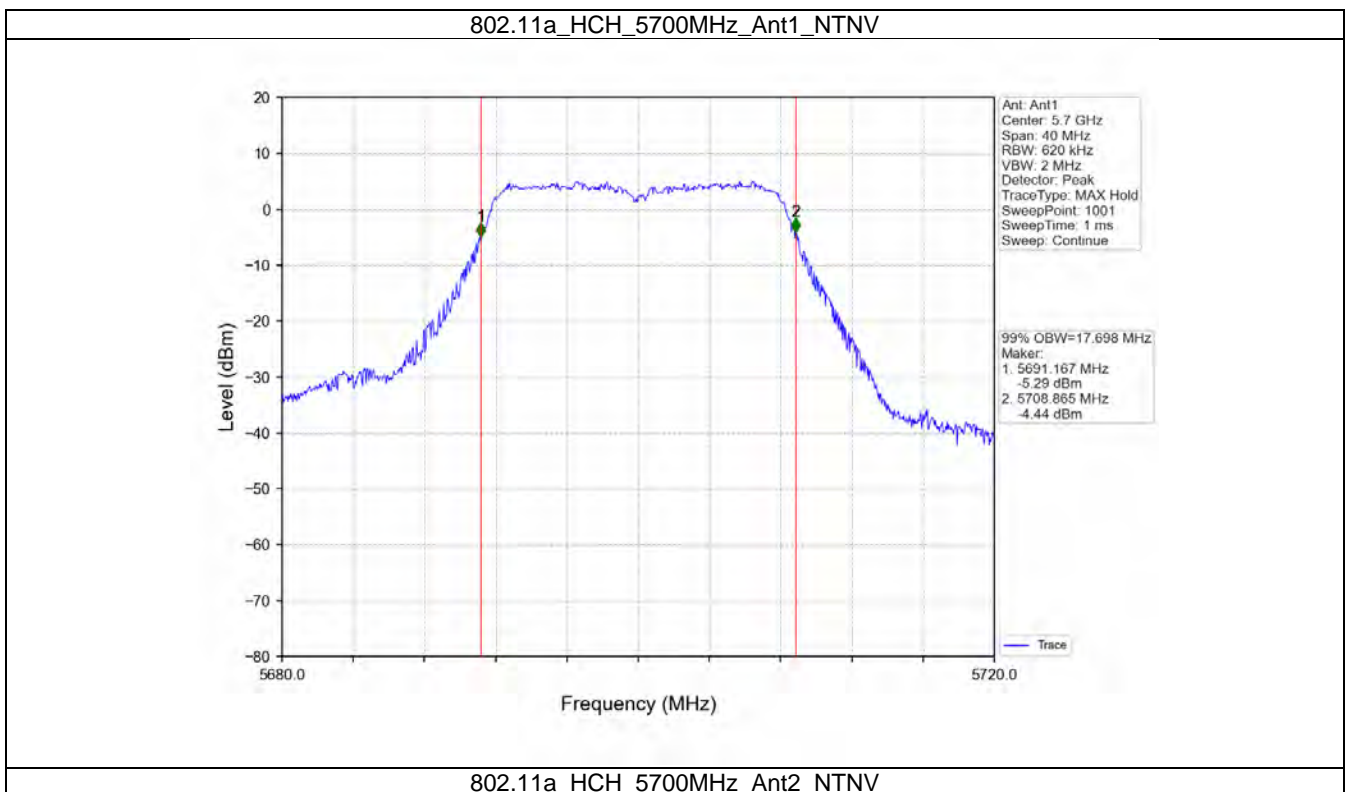
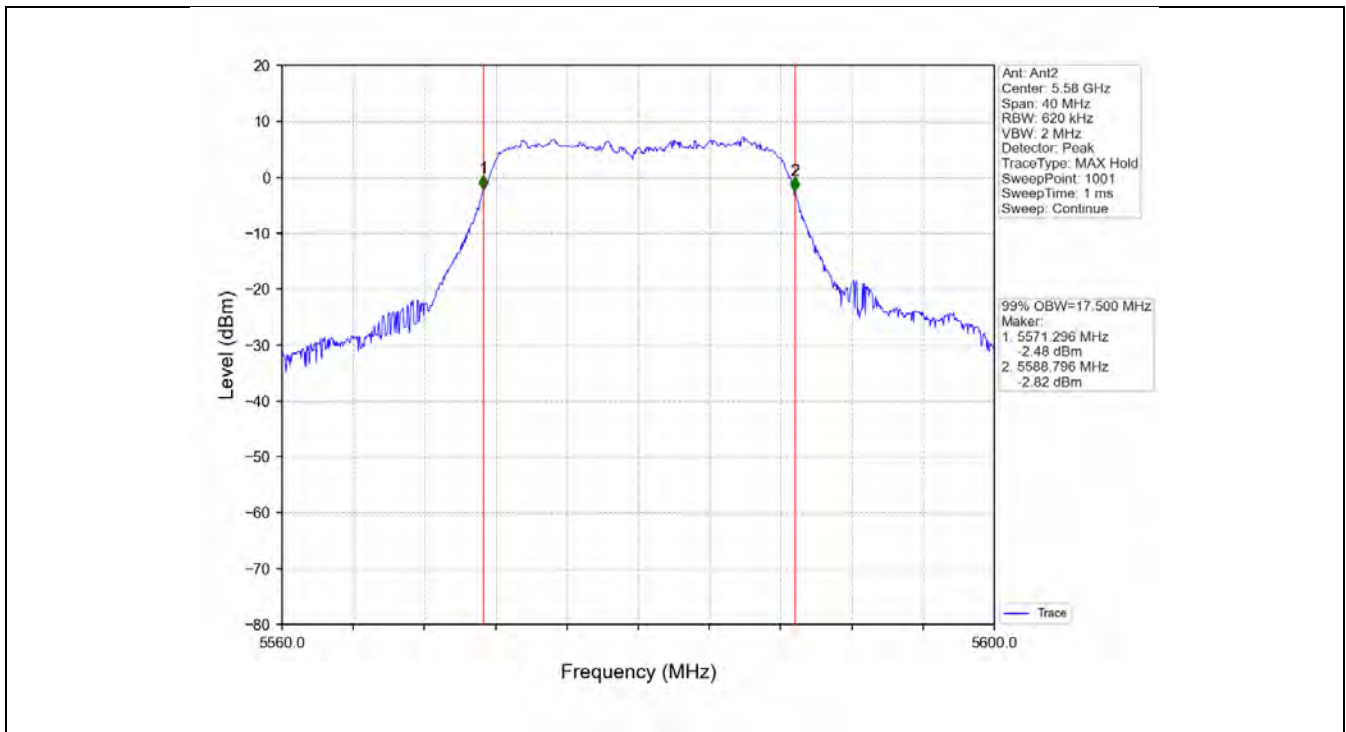


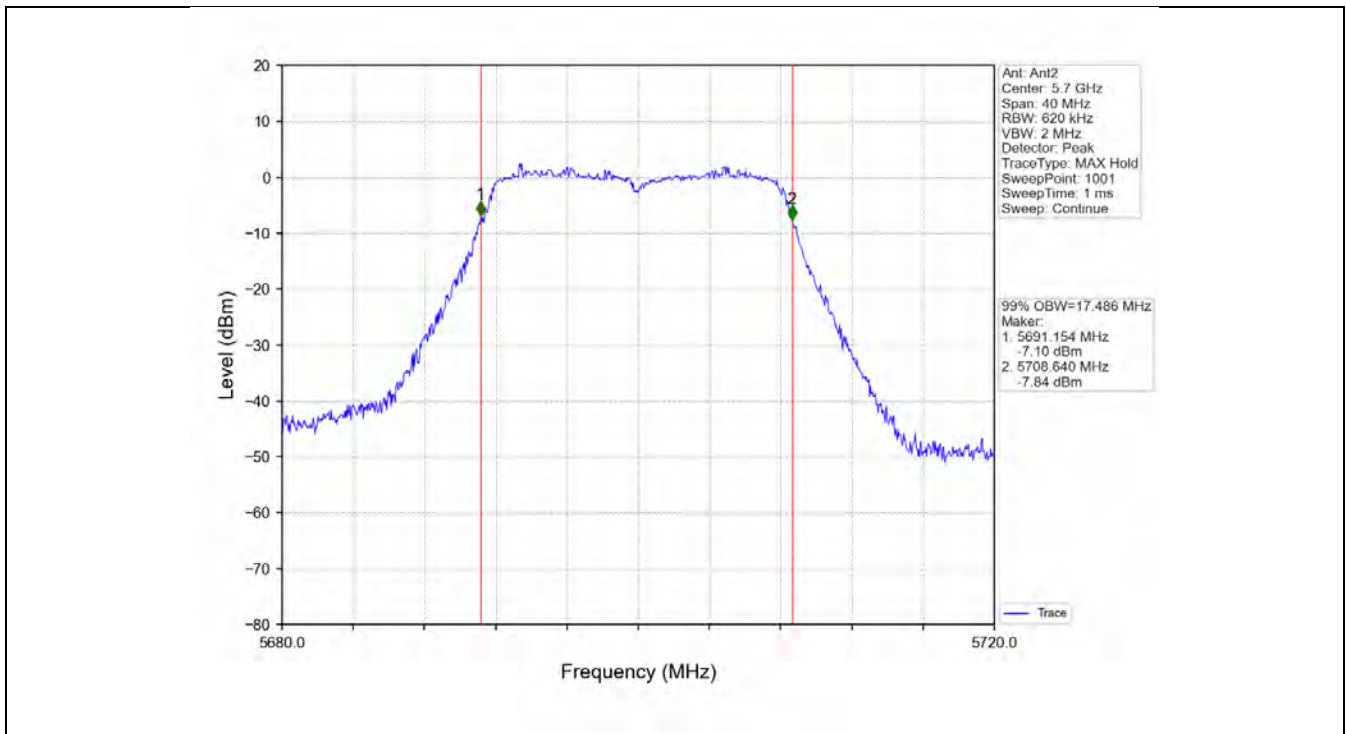




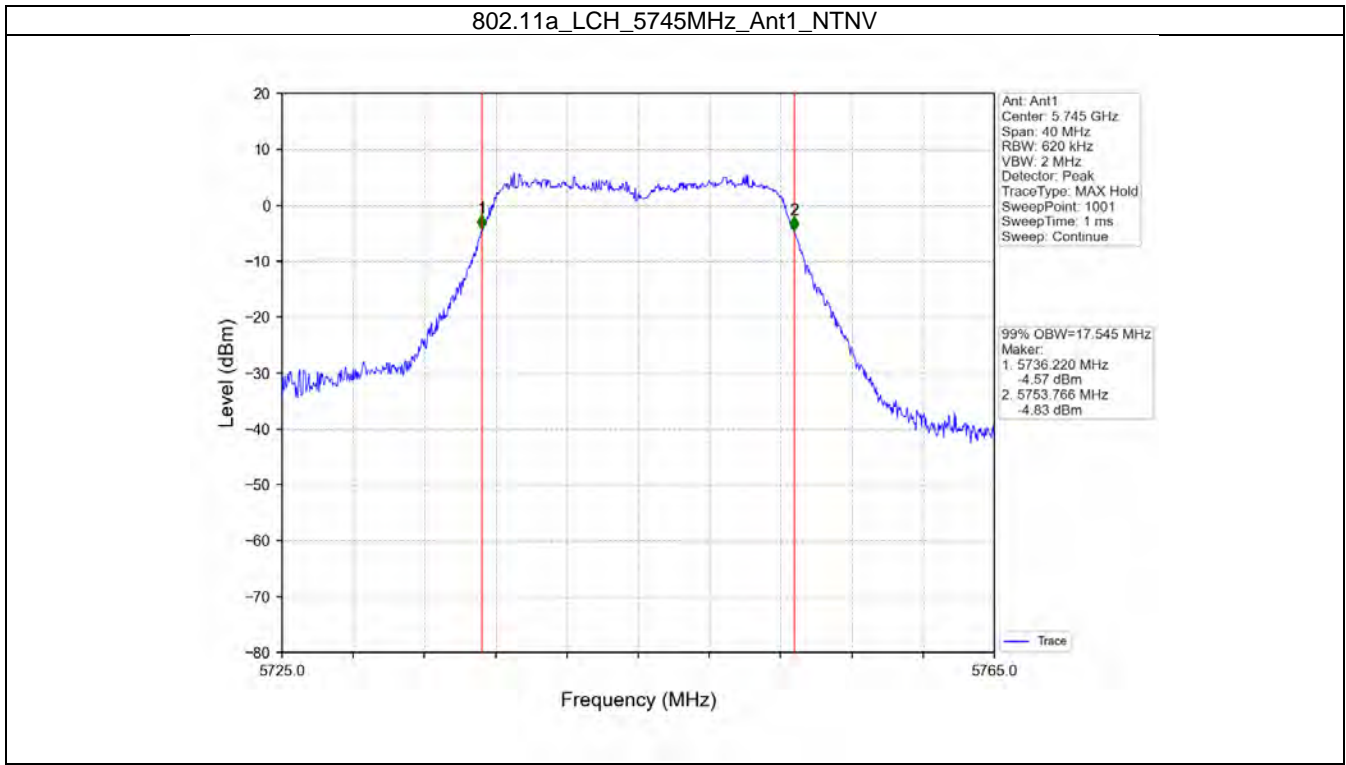




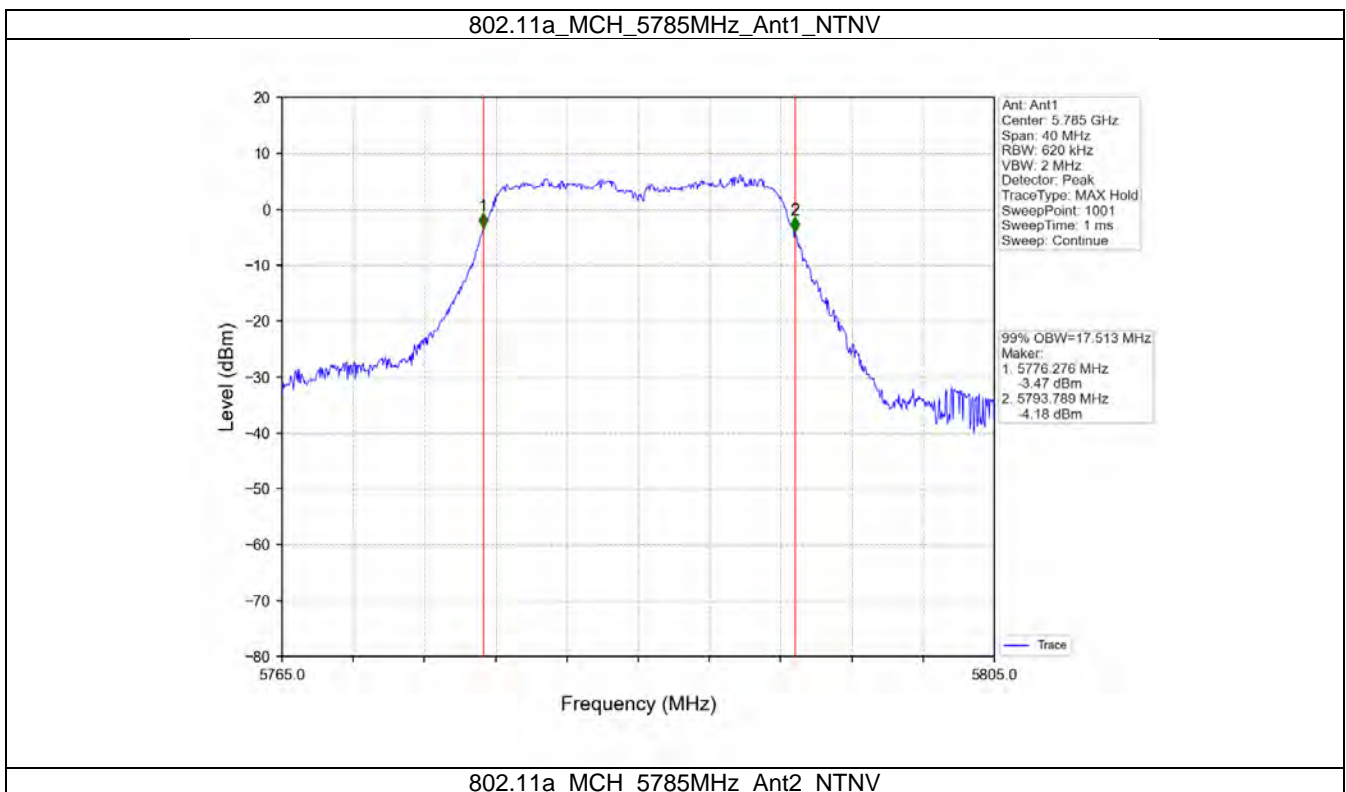
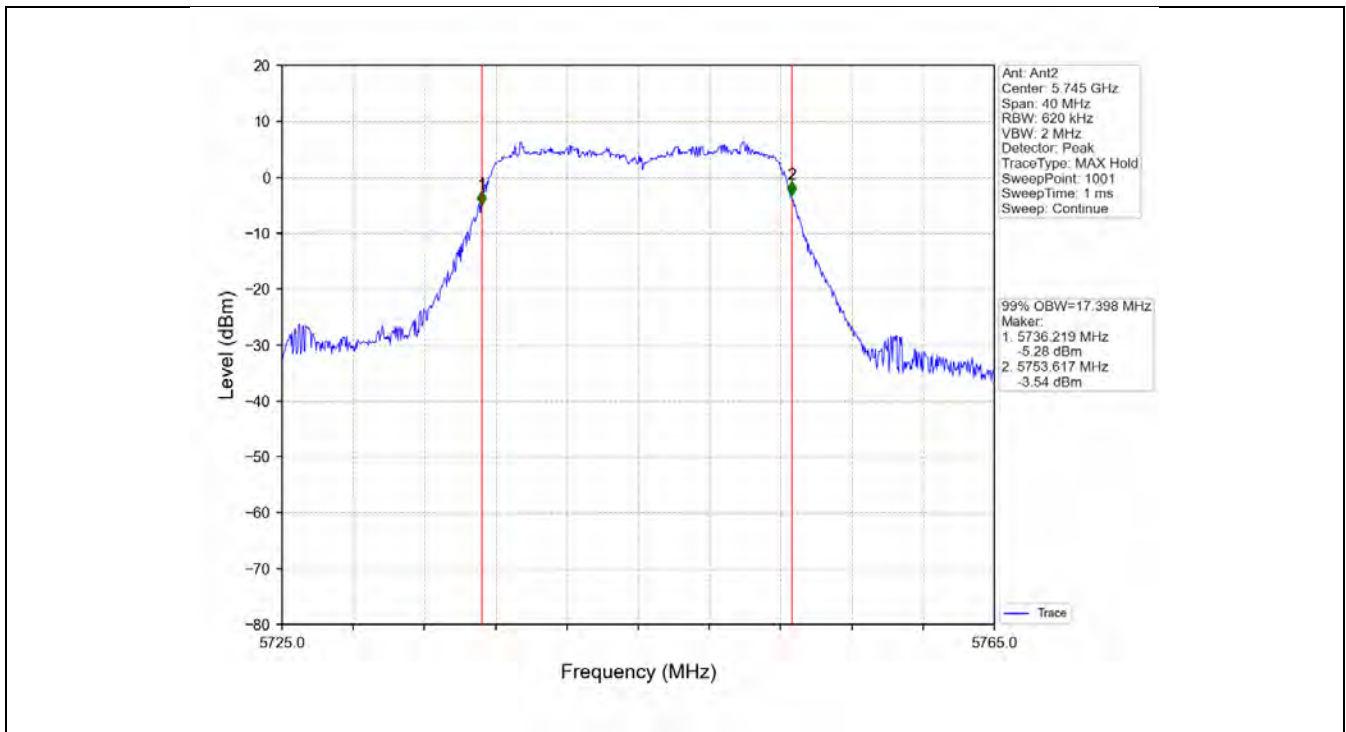


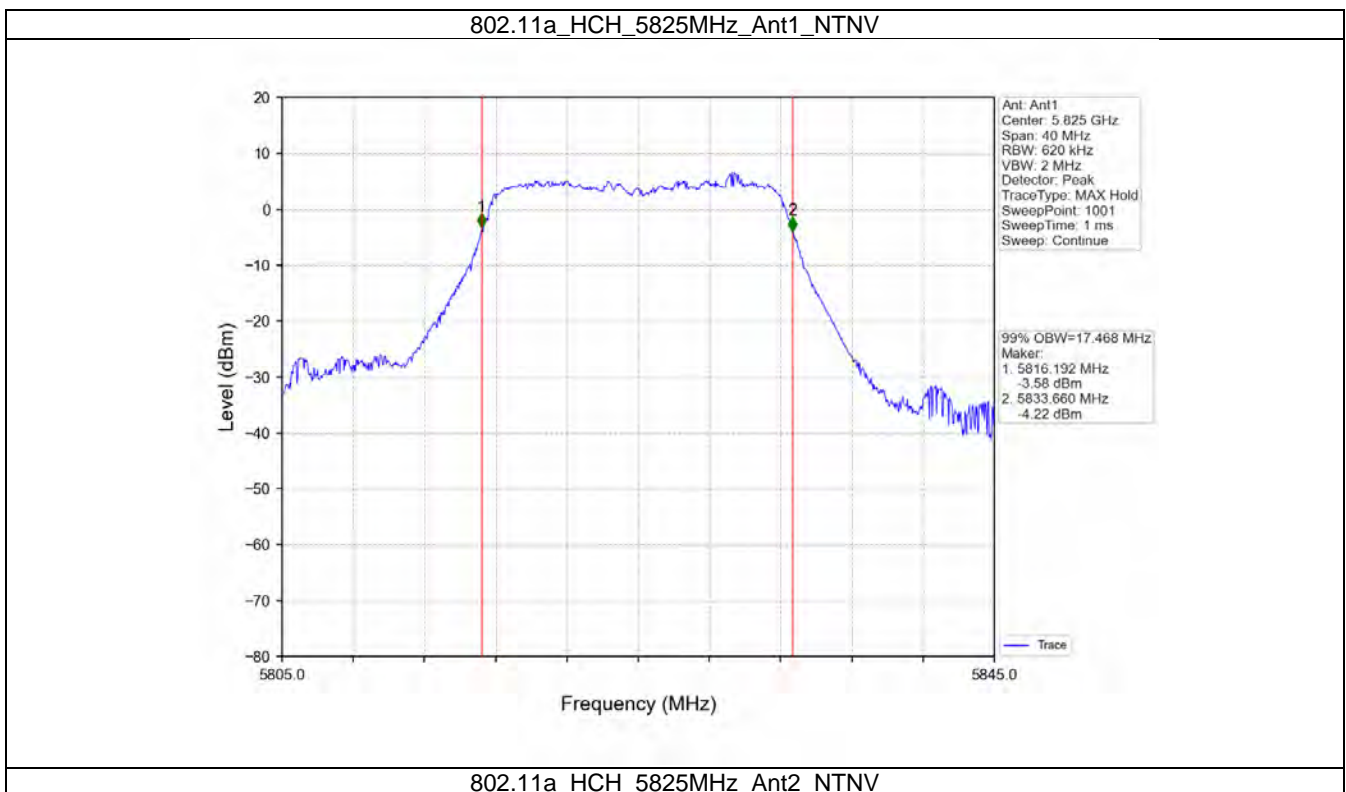
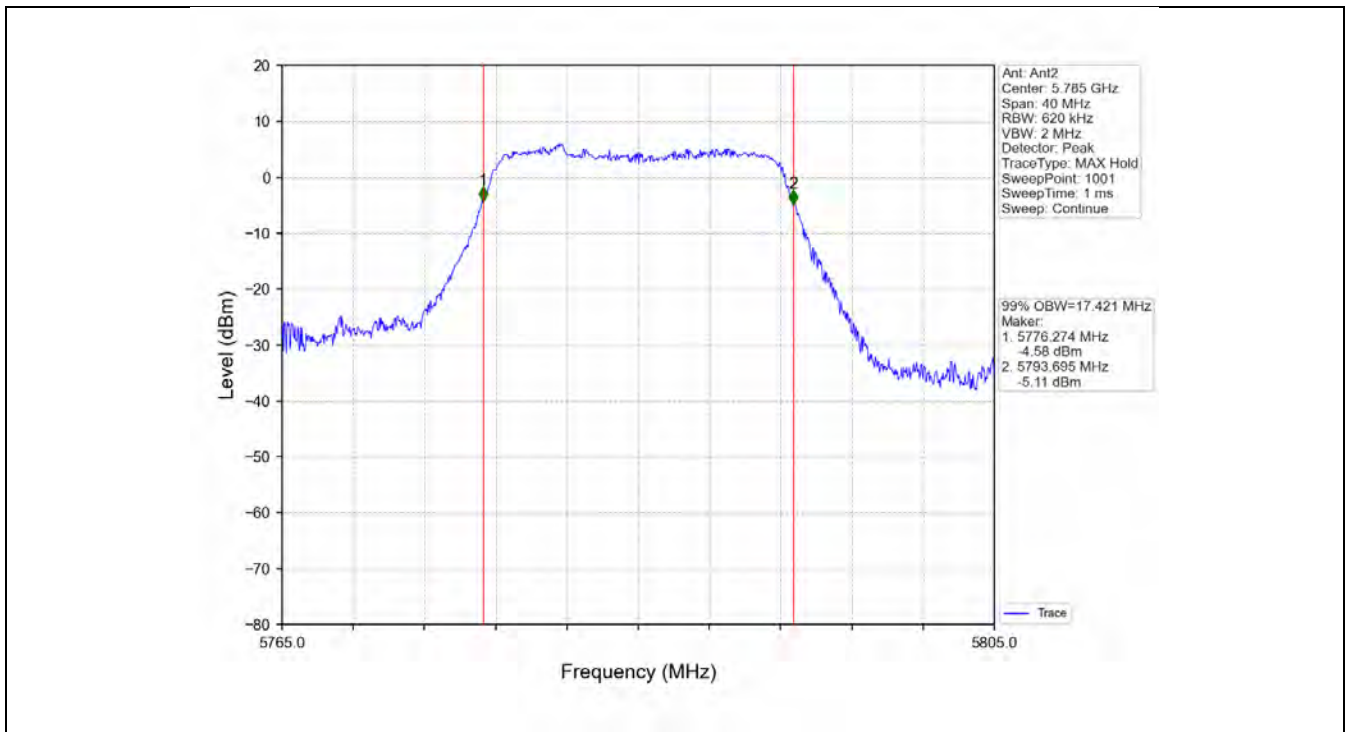


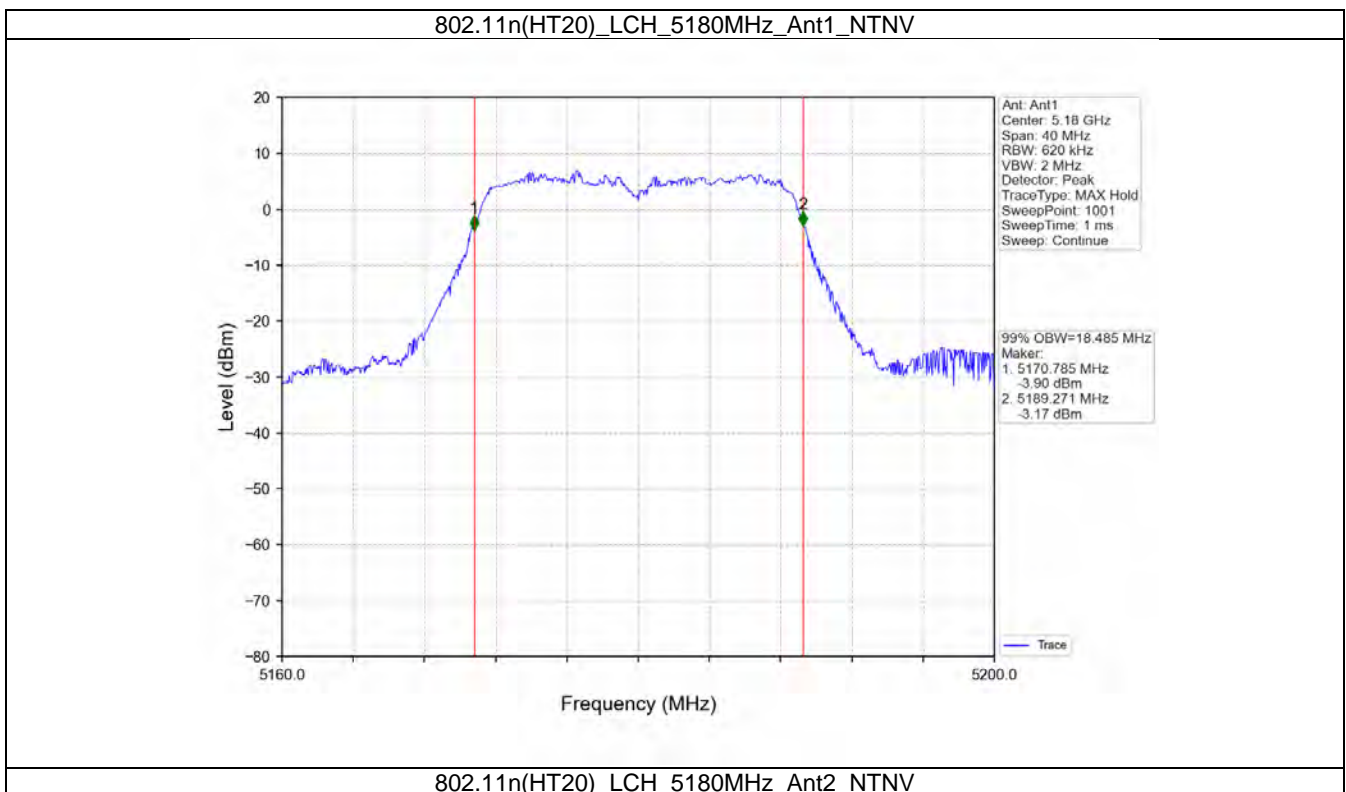
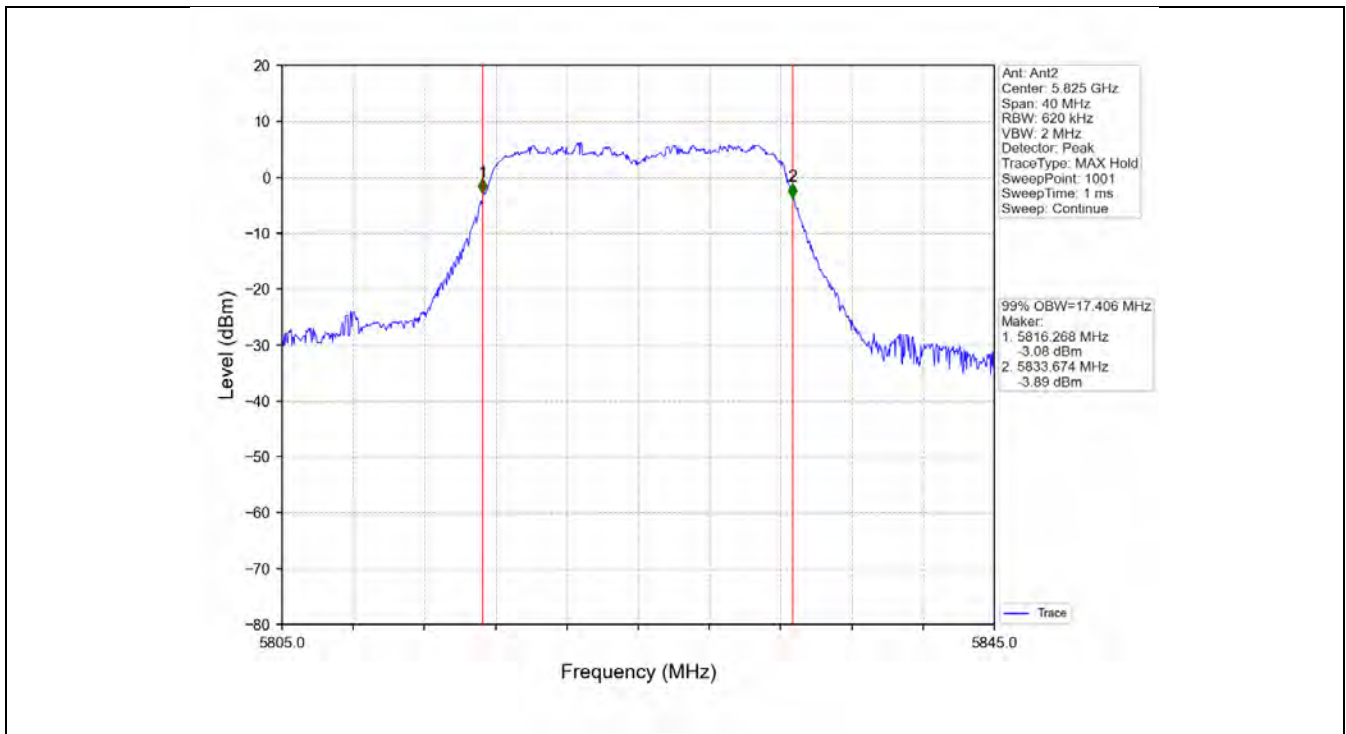
802.11a_LCH_5745MHz_Ant1_NTNV

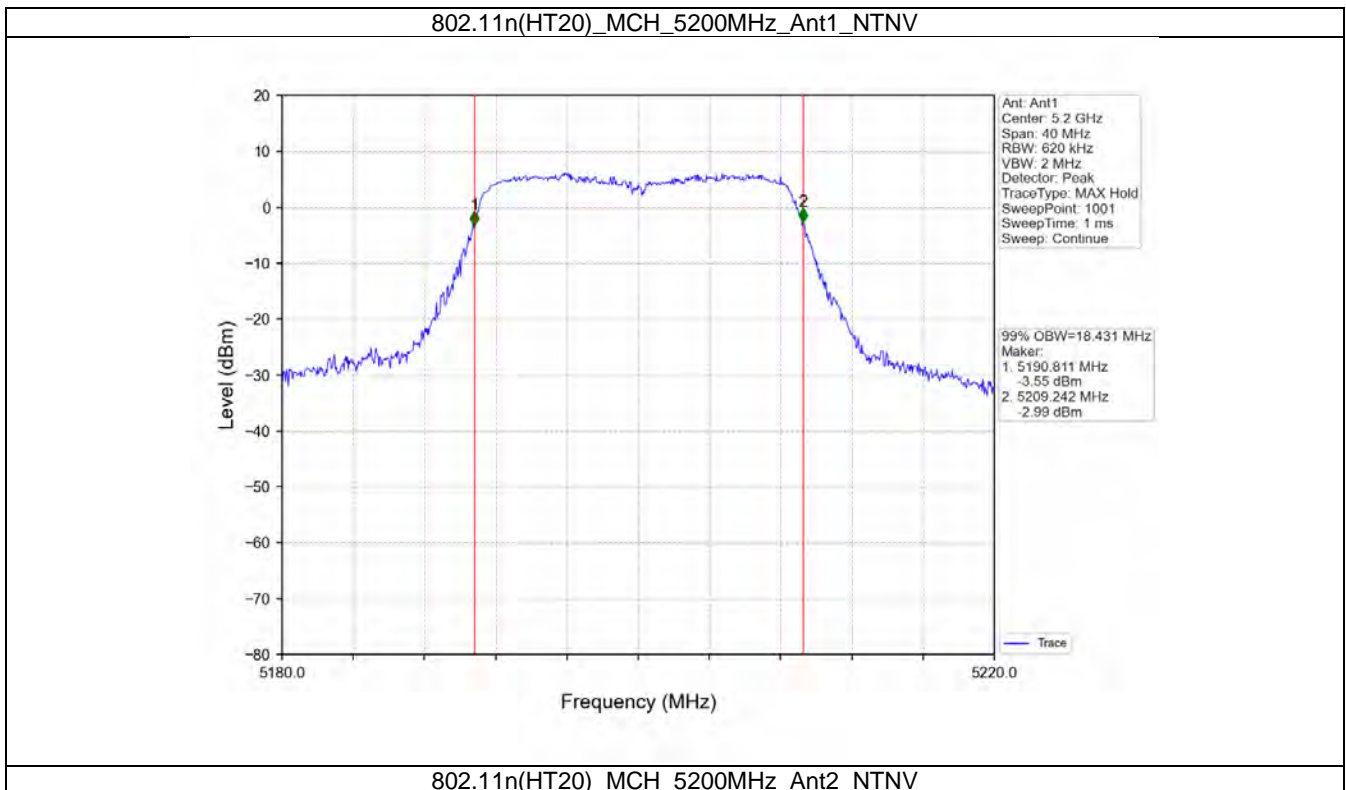
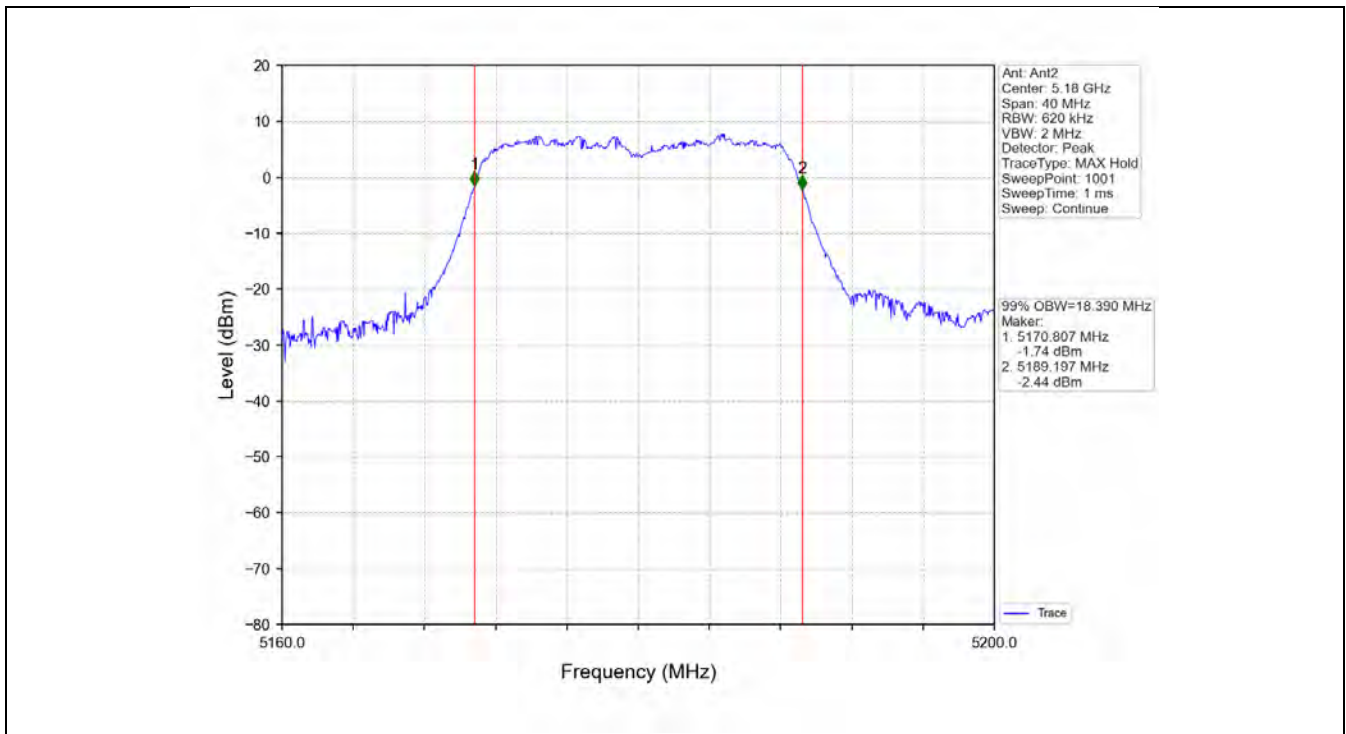


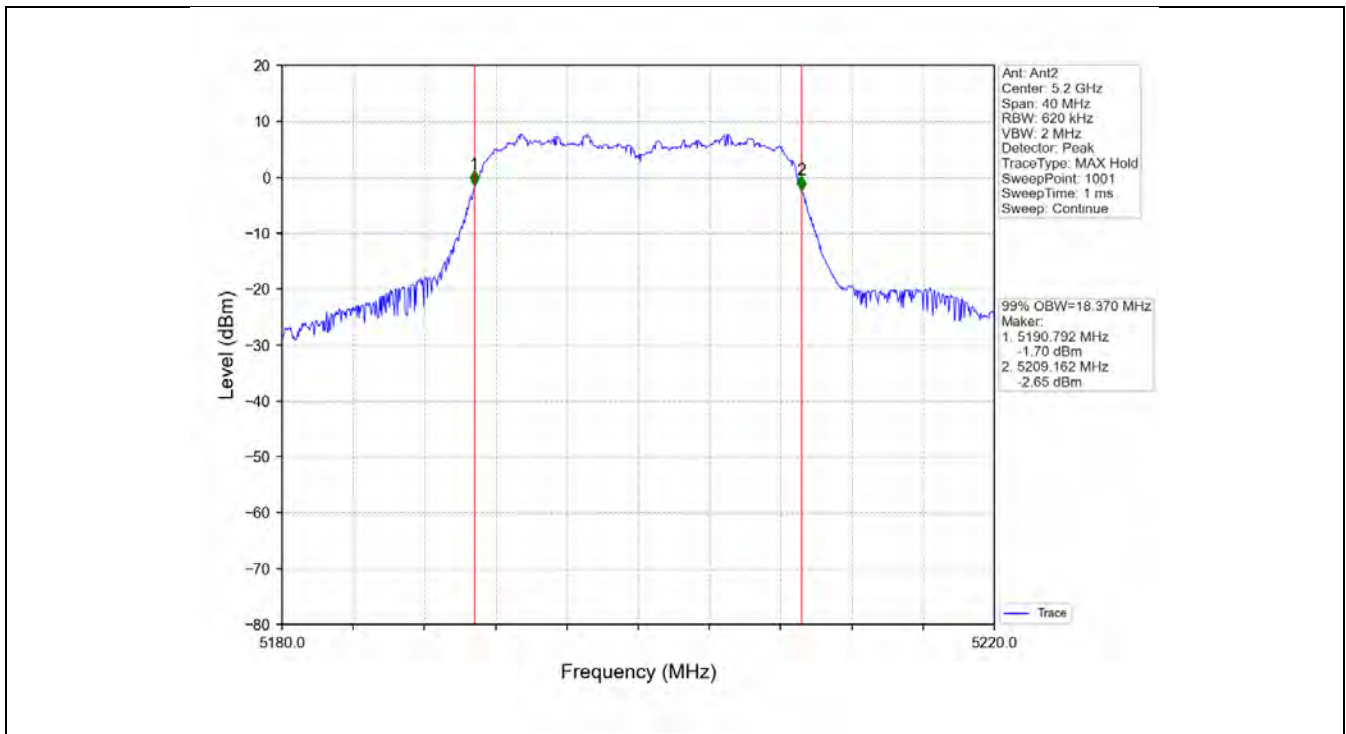
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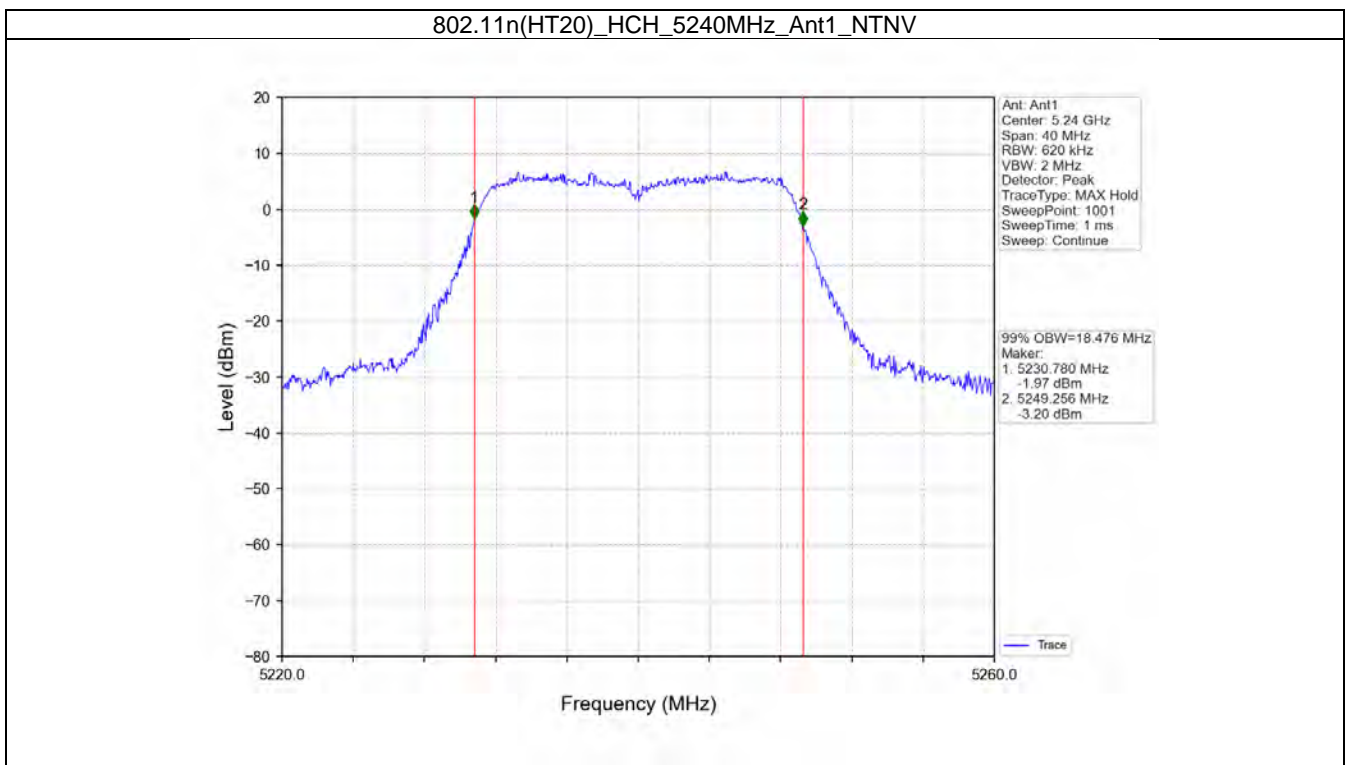








802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



802.11n(HT20)_HCH_5240MHz_Ant2_NTNV

