

Test Data for 5G_BAND3

Product Name: RZBoard V2L

Test Model(HVIN): AES-RZB-V2L-SK-G

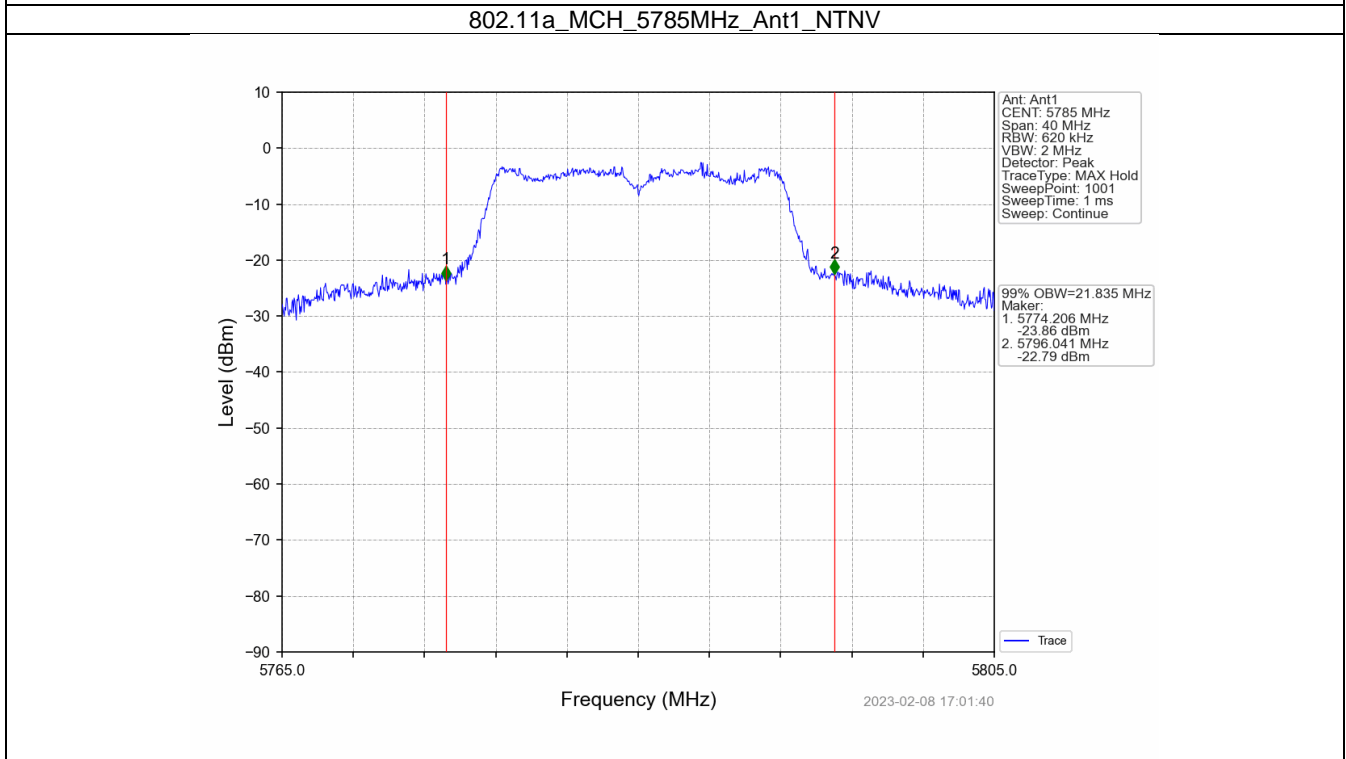
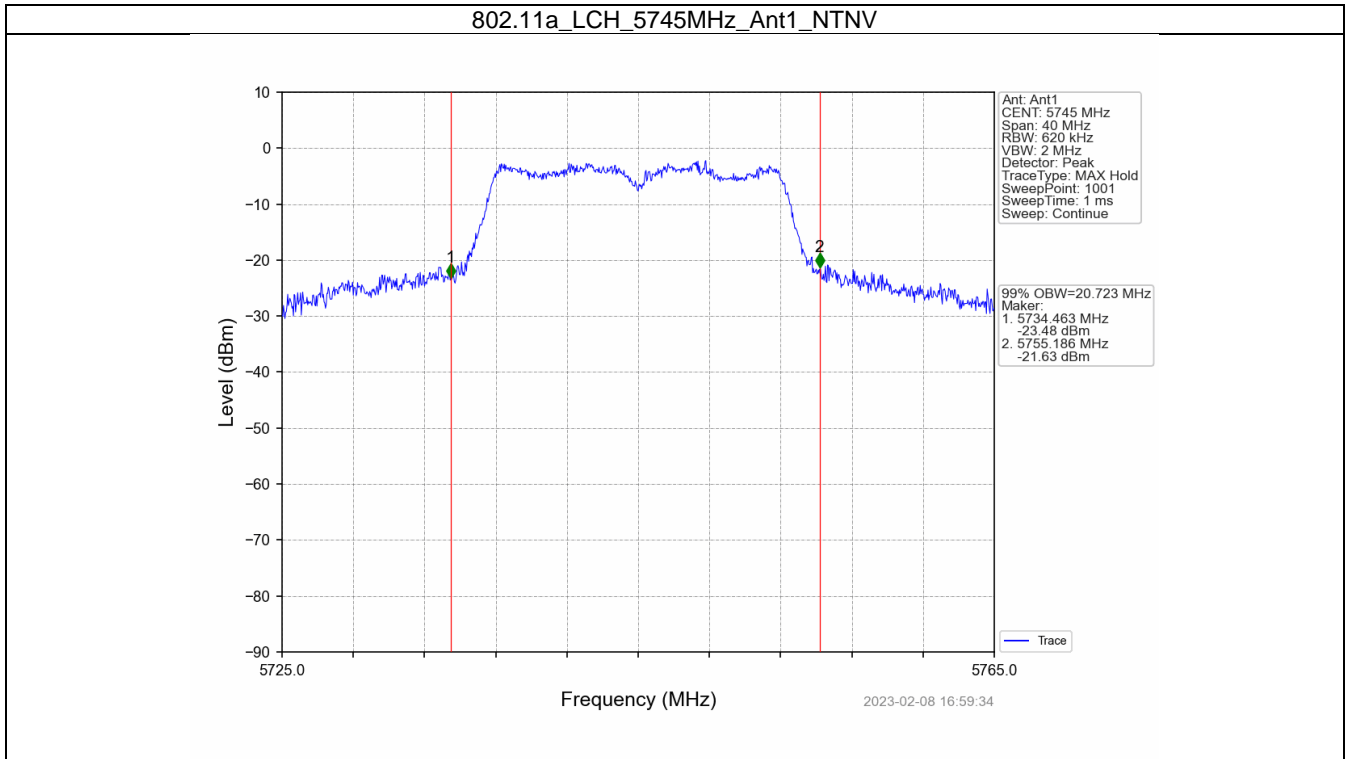
1. Bandwidth

1.1 OBW

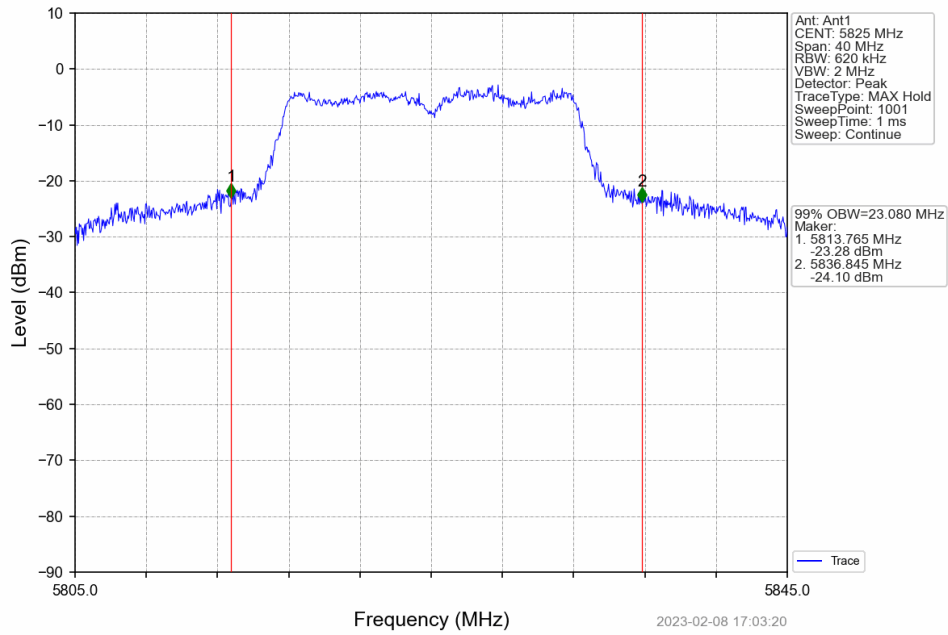
1.1.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)	Verdict
				Result	
802.11a	SISO	5745	1	20.723	Pass
		5785	1	21.835	Pass
		5825	1	23.080	Pass
802.11n (HT20)	SISO	5745	1	21.617	Pass
		5785	1	23.136	Pass
		5825	1	24.357	Pass
802.11n (HT40)	SISO	5755	1	46.821	Pass
		5795	1	48.617	Pass
802.11ac (VHT20)	SISO	5745	1	22.132	Pass
		5785	1	23.341	Pass
		5825	1	24.426	Pass
802.11ac (VHT40)	SISO	5755	1	48.828	Pass
		5795	1	50.677	Pass
802.11ac (VHT80)	SISO	5775	1	103.657	Pass

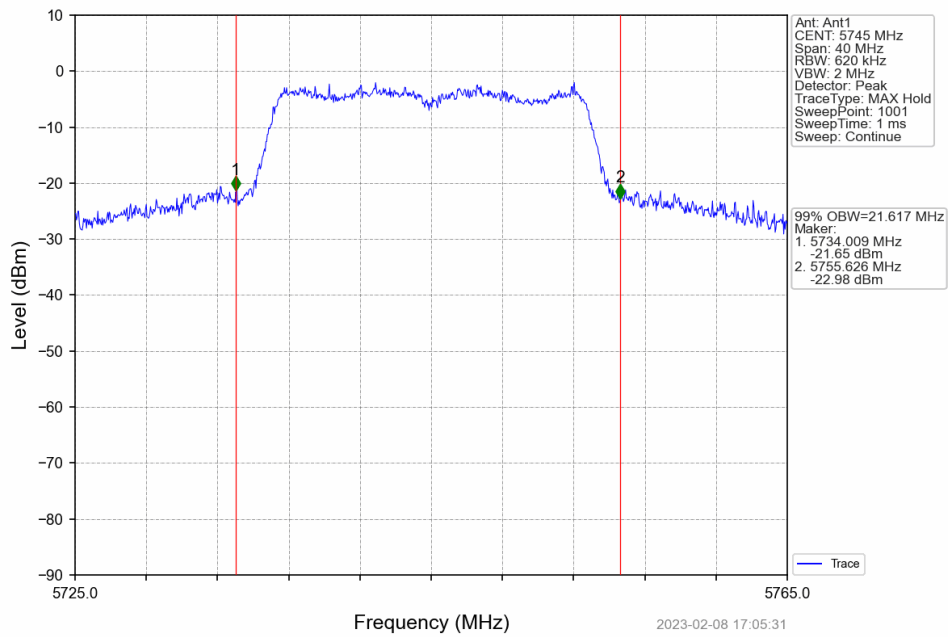
1.1.2 Test Graph



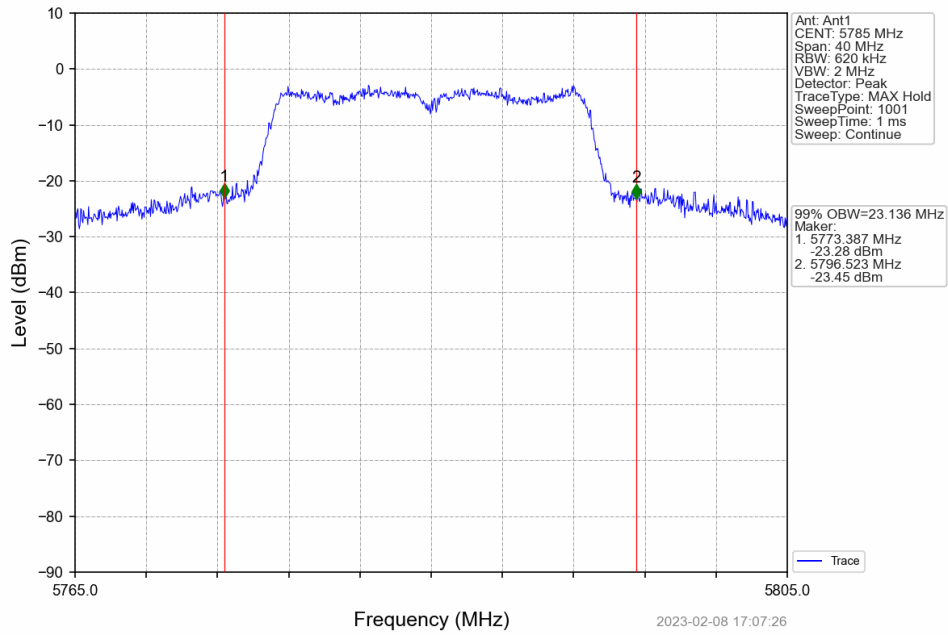
802.11a_HCH_5825MHz_Ant1_NTNV



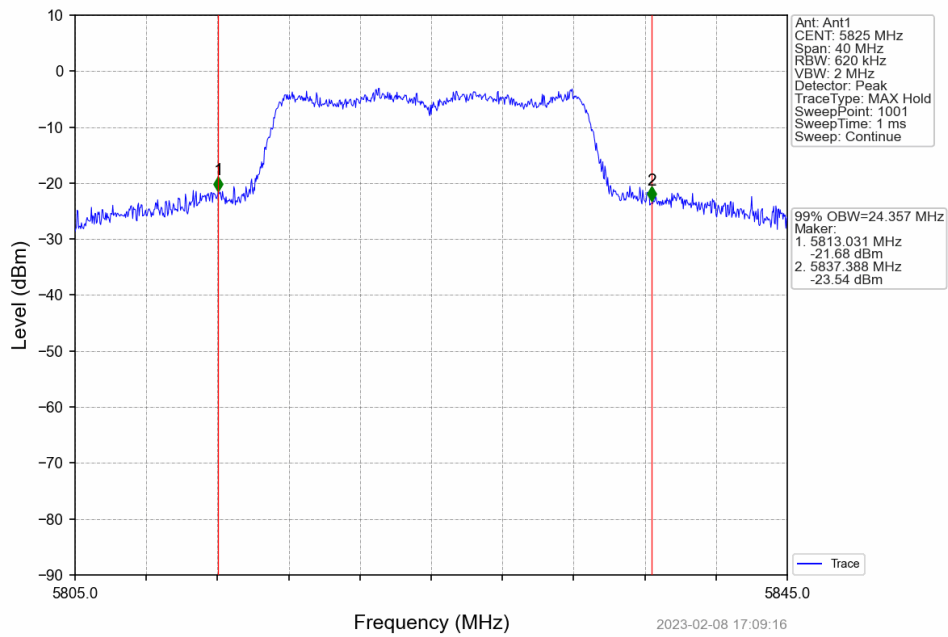
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



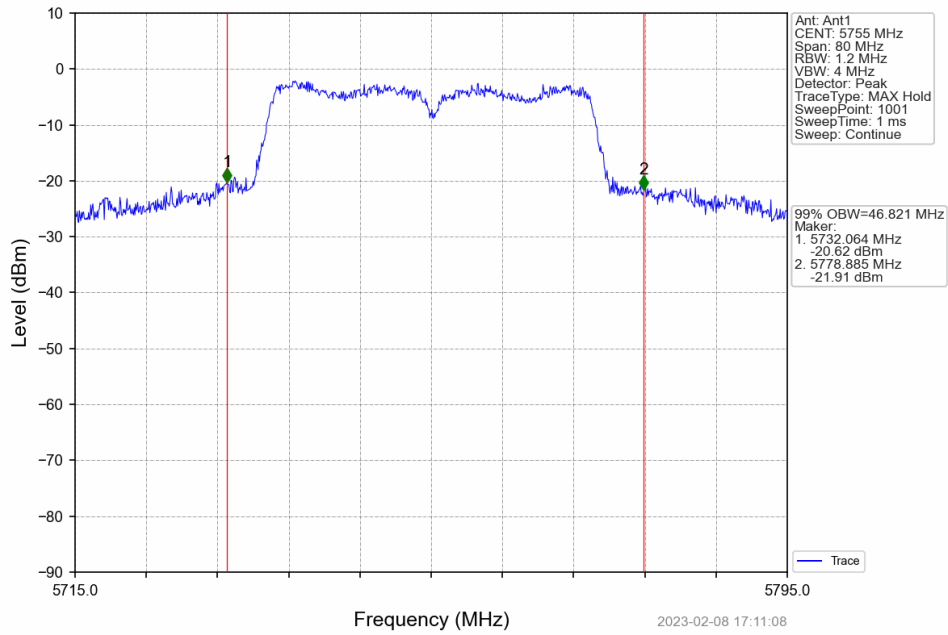
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



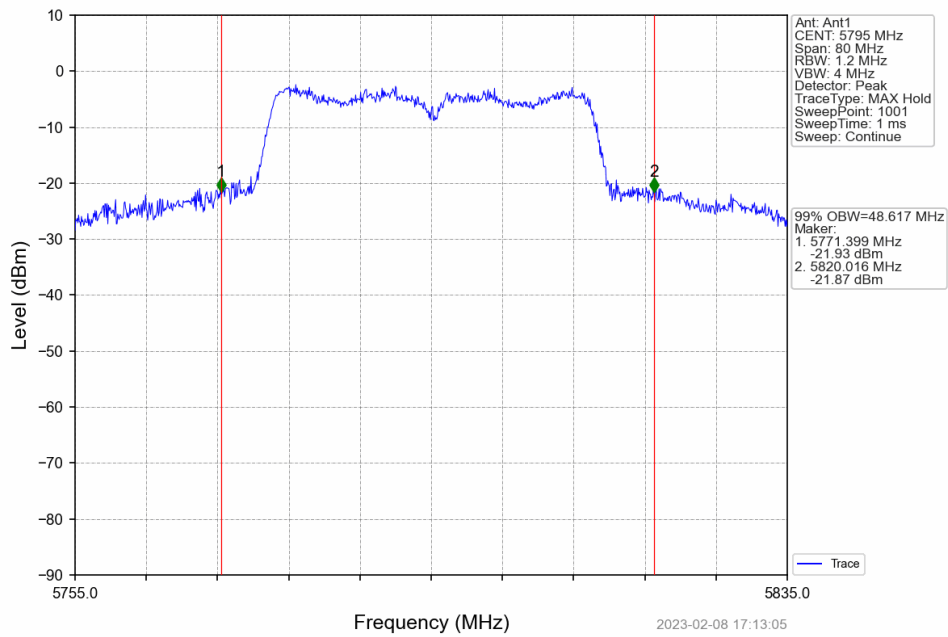
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



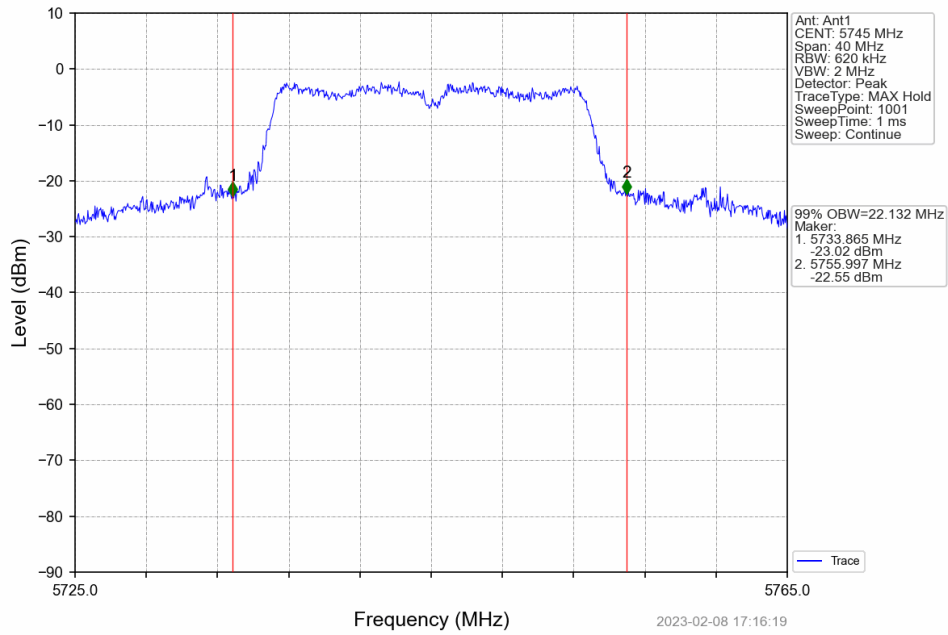
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



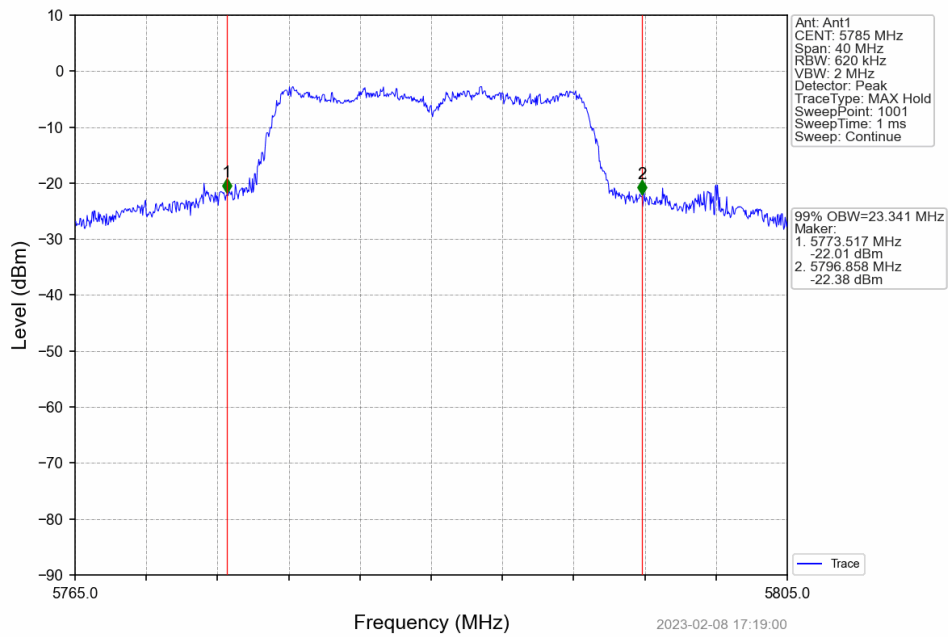
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



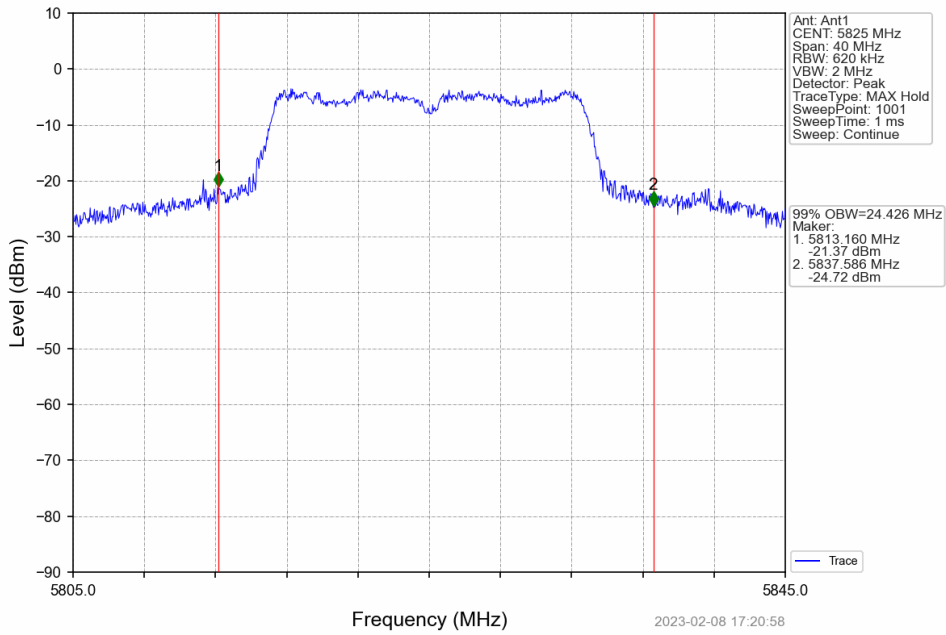
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



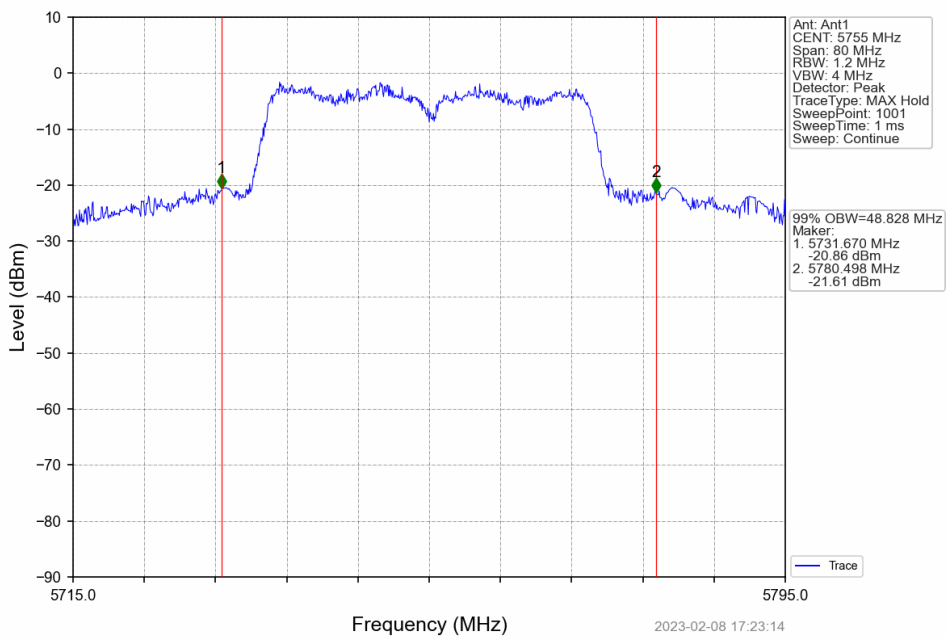
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



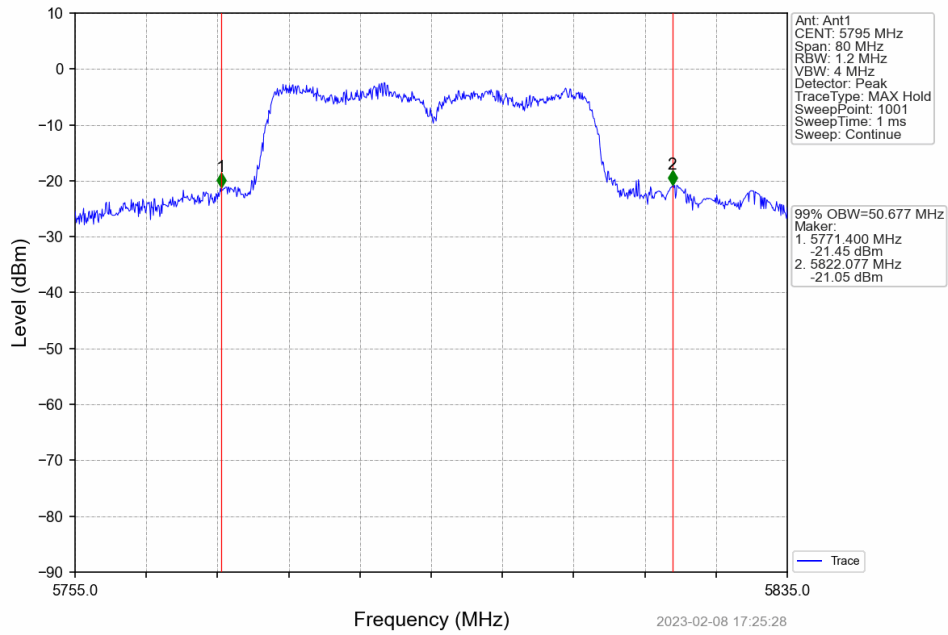
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



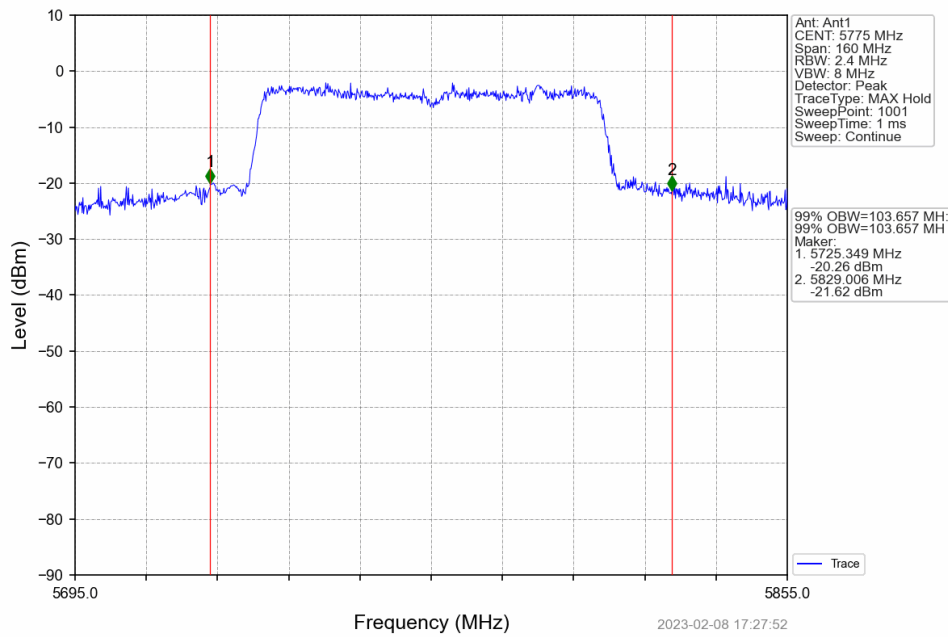
802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV

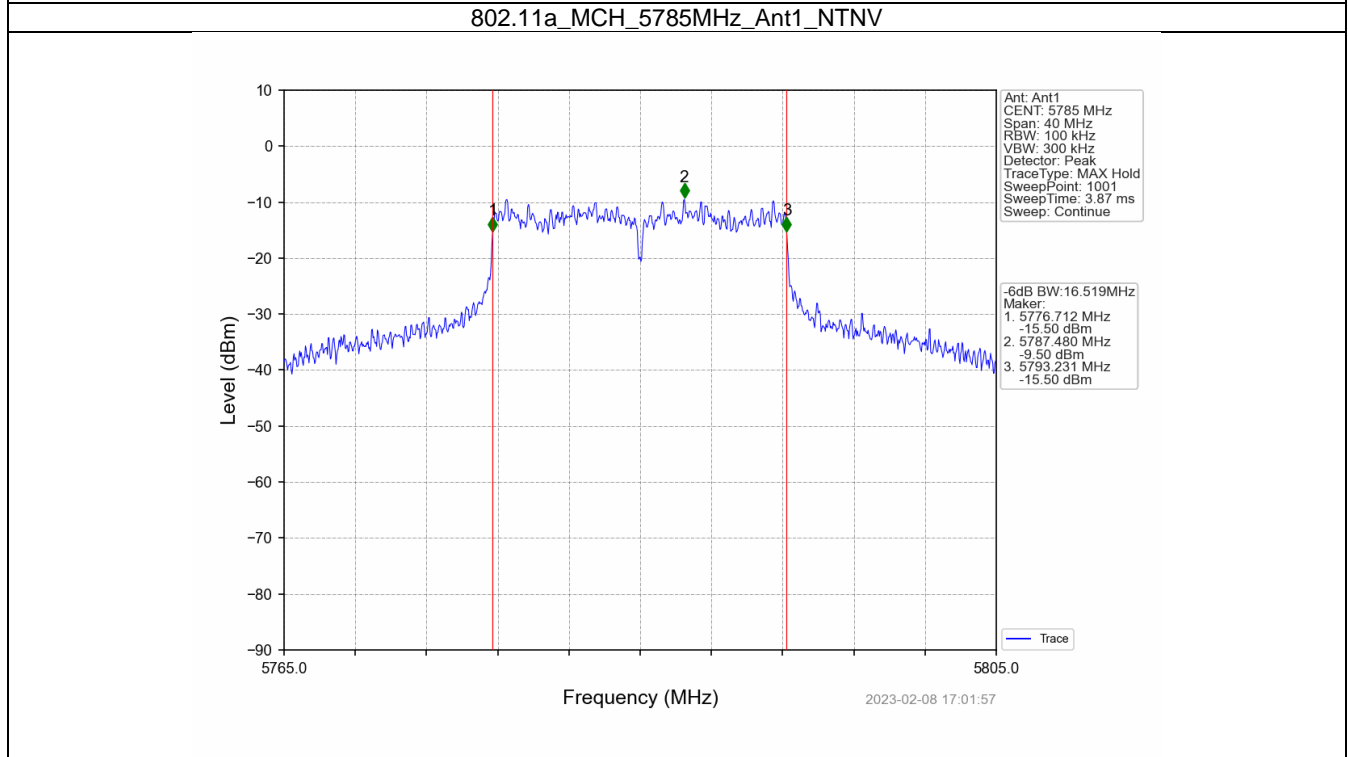
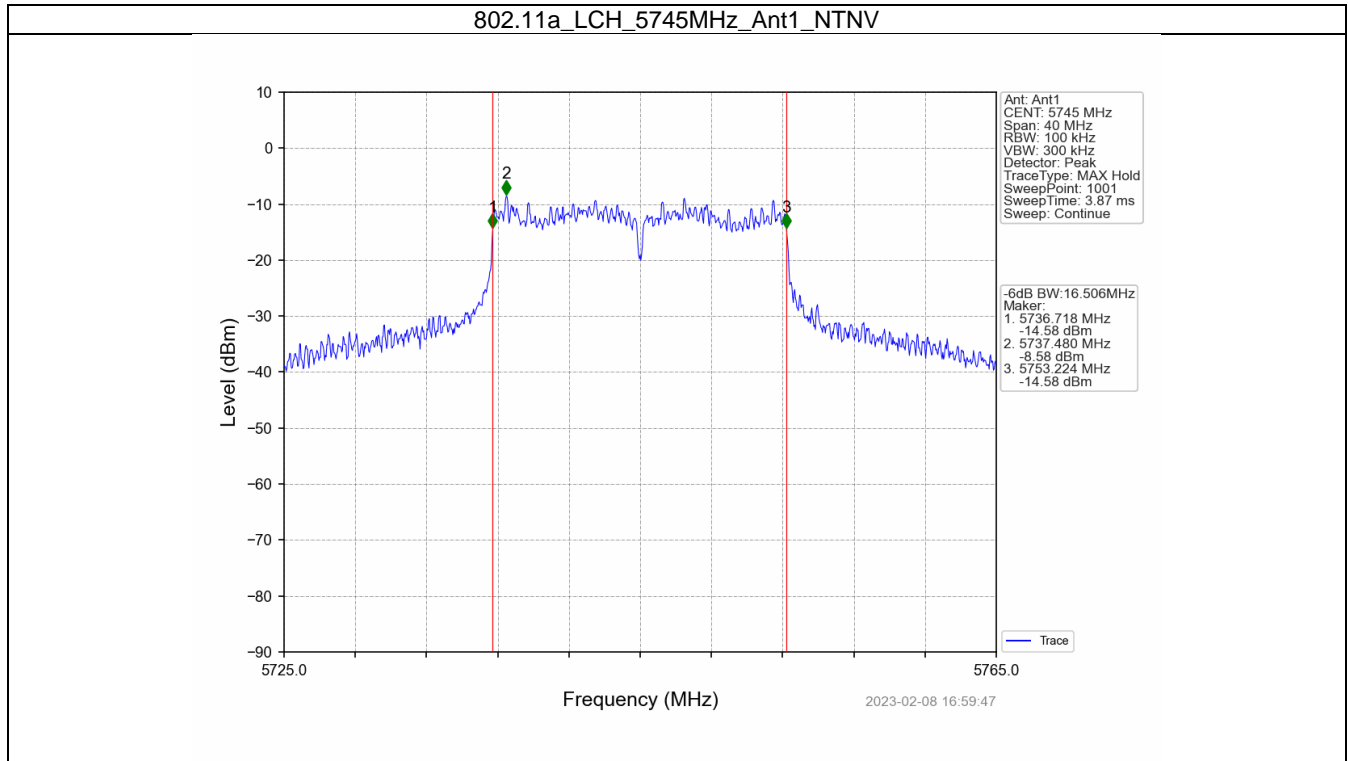


1.2 6dB BW

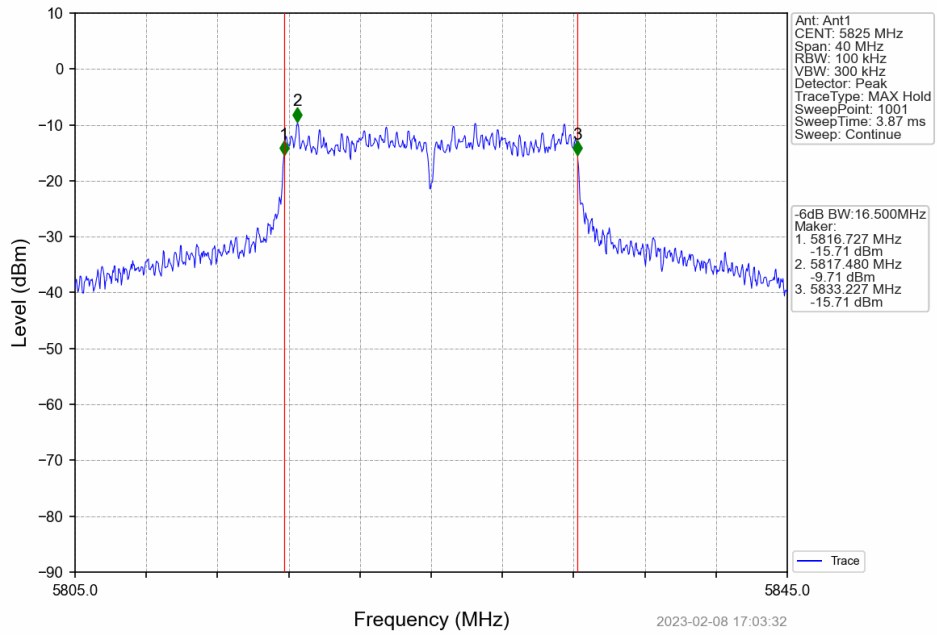
1.2.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	16.506	>=0.5	Pass
		5785	1	16.519	>=0.5	Pass
		5825	1	16.500	>=0.5	Pass
802.11n (HT20)	SISO	5745	1	17.718	>=0.5	Pass
		5785	1	17.711	>=0.5	Pass
		5825	1	17.739	>=0.5	Pass
802.11n (HT40)	SISO	5755	1	36.390	>=0.5	Pass
		5795	1	36.387	>=0.5	Pass
802.11ac (VHT20)	SISO	5745	1	17.725	>=0.5	Pass
		5785	1	17.733	>=0.5	Pass
		5825	1	17.711	>=0.5	Pass
802.11ac (VHT40)	SISO	5755	1	36.394	>=0.5	Pass
		5795	1	36.405	>=0.5	Pass
802.11ac (VHT80)	SISO	5775	1	76.474	>=0.5	Pass

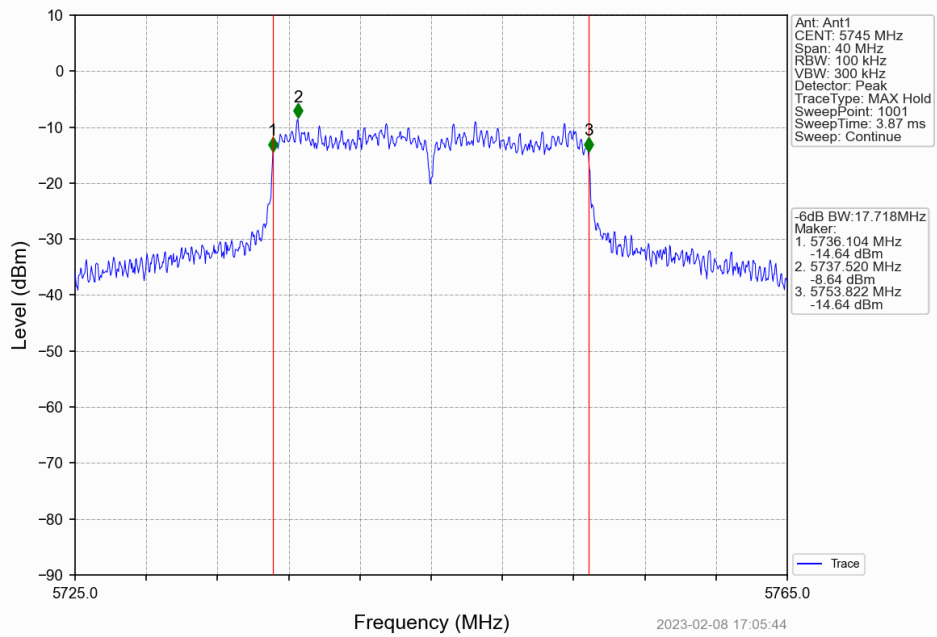
1.2.2 Test Graph



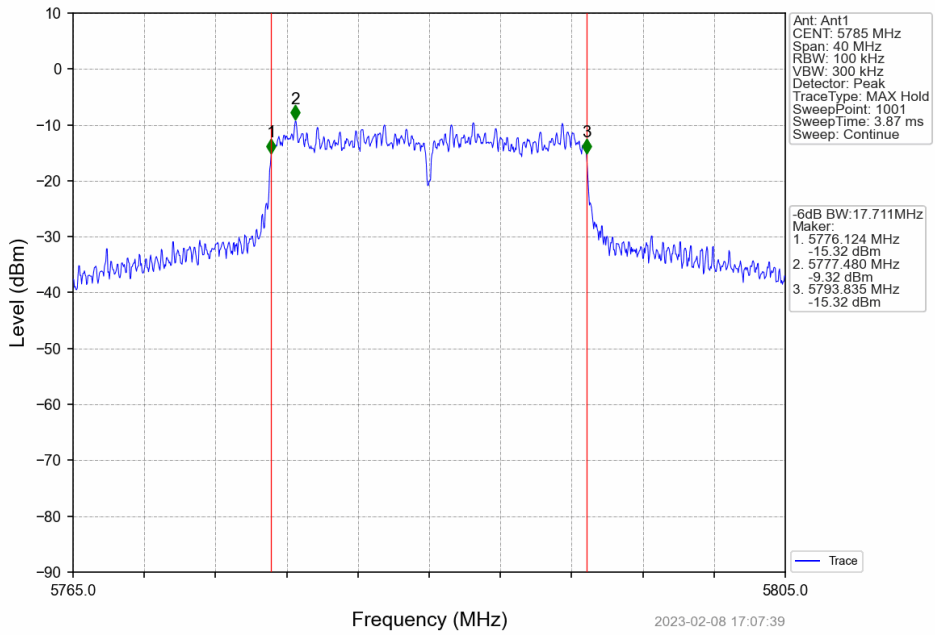
802.11a_HCH_5825MHz_Ant1_NTNV



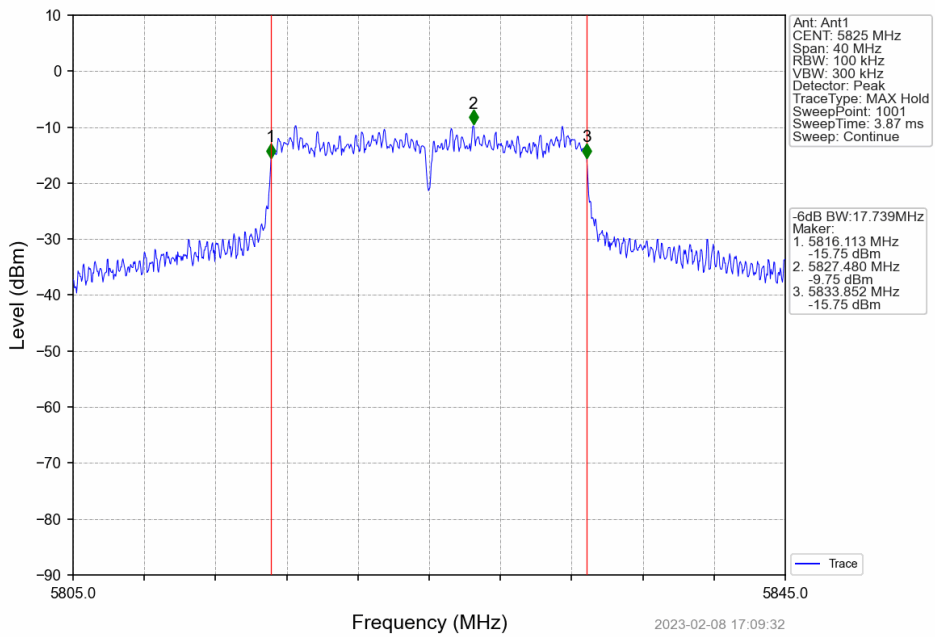
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



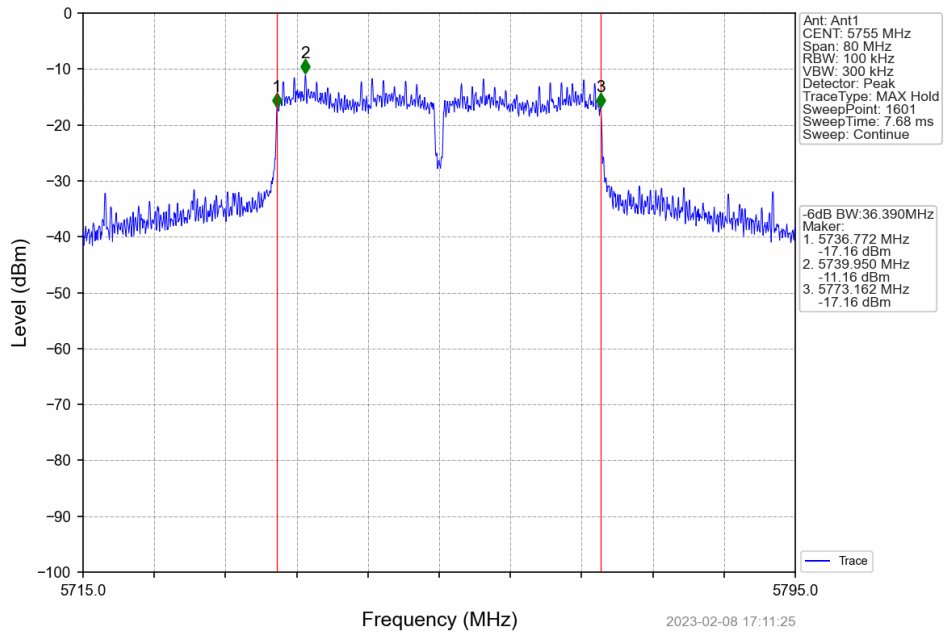
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



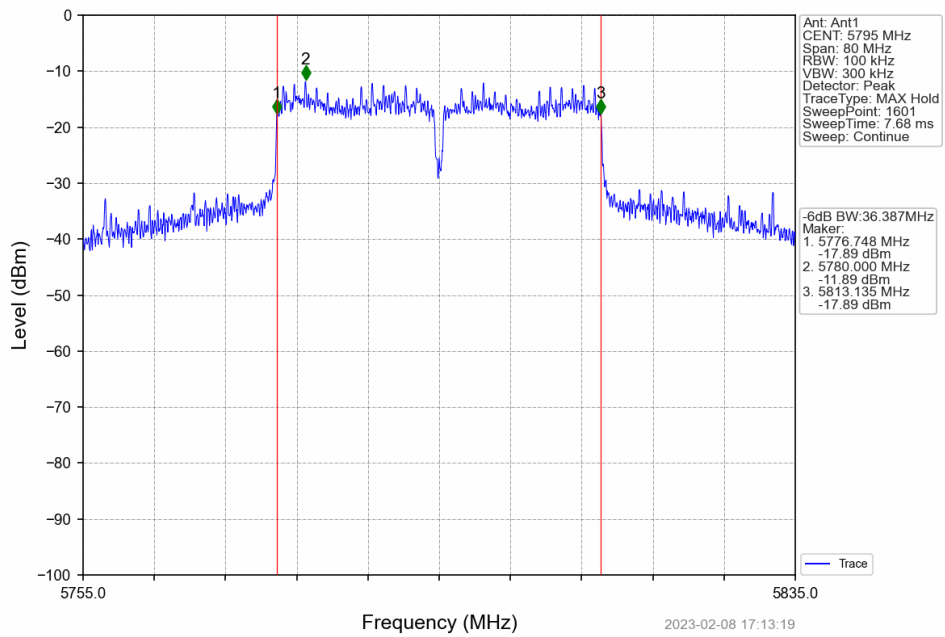
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



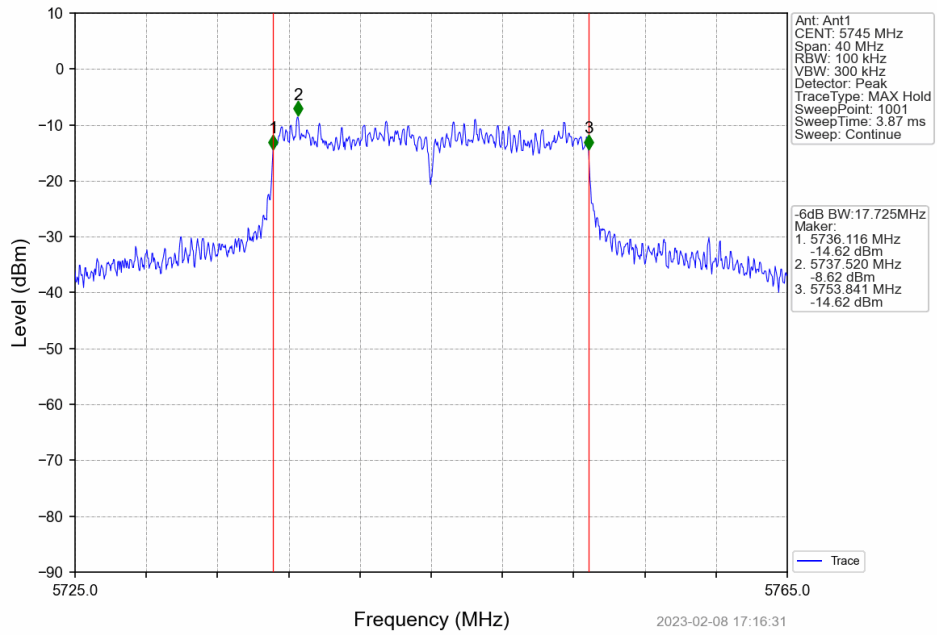
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



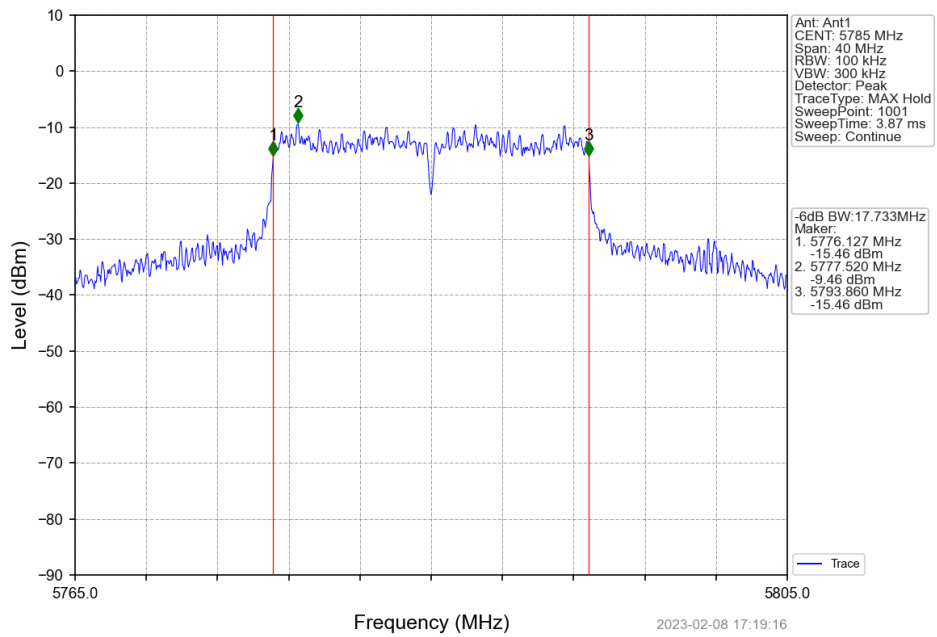
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



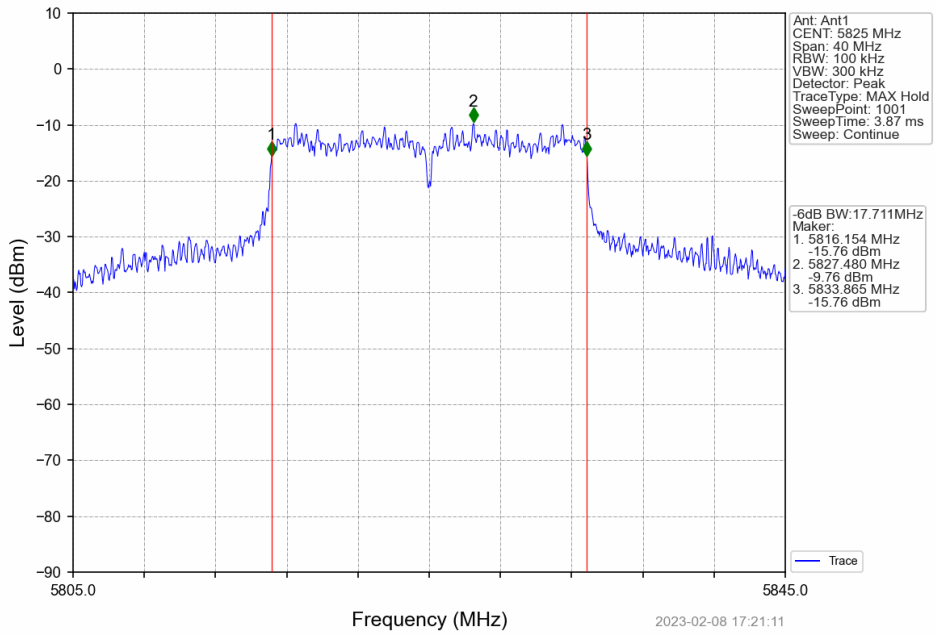
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



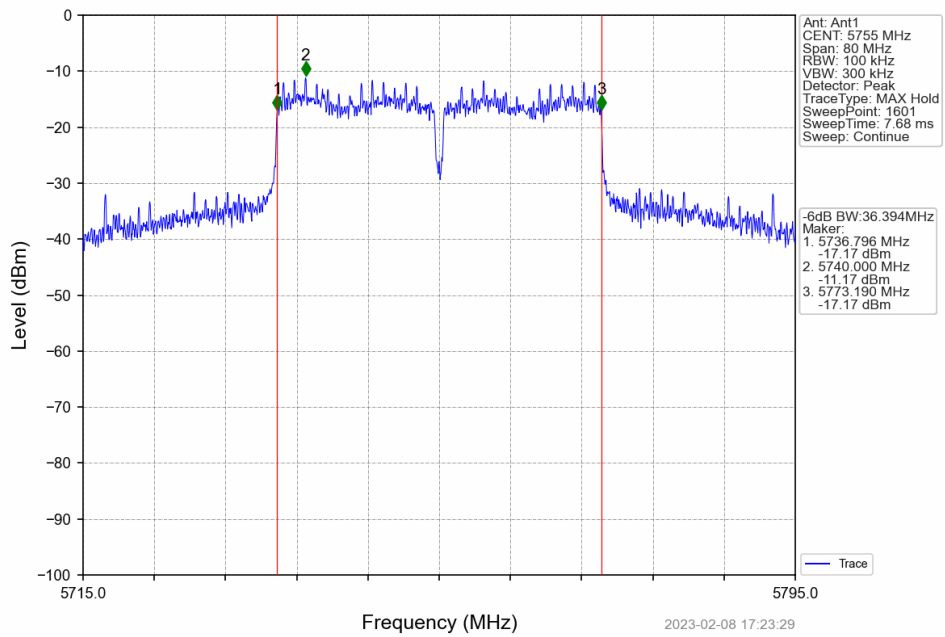
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



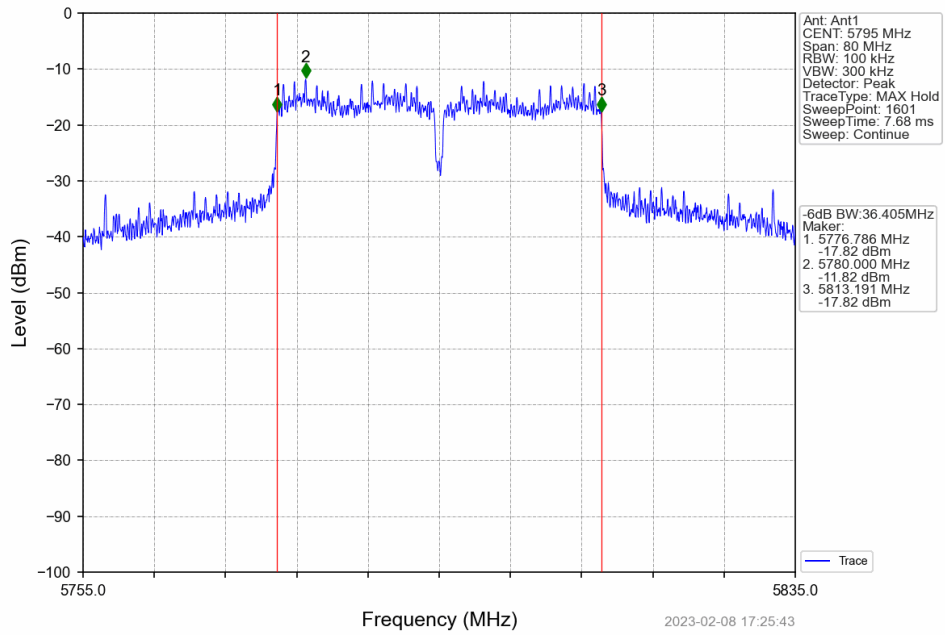
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



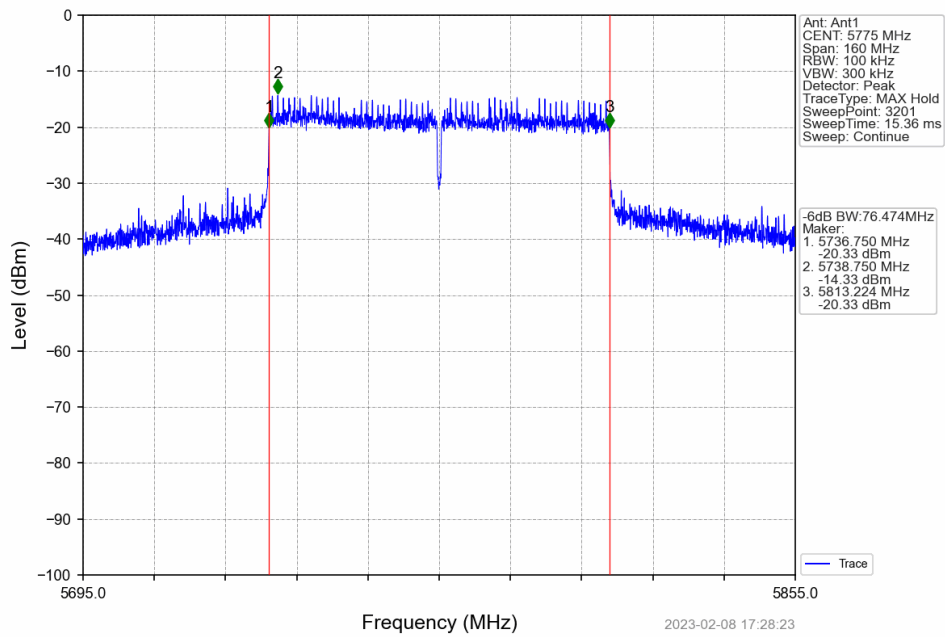
802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



2. Maximum Conducted Output Power

2.1 Power

2.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)				Verdict
			AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	EIRP	Limit	
802.11a	SISO	5745	11.41	0.00	15.66	<=30	Pass
		5785	11.09	0.00	15.34	<=30	Pass
		5825	11.00	0.00	15.25	<=30	Pass
802.11n (HT20)	SISO	5745	11.19	0.00	15.44	<=30	Pass
		5785	10.88	0.00	15.13	<=30	Pass
		5825	10.81	0.00	15.06	<=30	Pass
802.11n (HT40)	SISO	5755	8.93	0.00	13.18	<=30	Pass
		5795	8.64	0.00	12.89	<=30	Pass
802.11ac (VHT20)	SISO	5745	11.16	0.00	15.41	<=30	Pass
		5785	10.86	0.00	15.11	<=30	Pass
		5825	10.77	0.00	15.02	<=30	Pass
802.11ac (VHT40)	SISO	5755	9.35	0.00	13.60	<=30	Pass
		5795	8.86	0.00	13.11	<=30	Pass
802.11ac (VHT80)	SISO	5775	12.11	0.00	16.36	<=30	Pass

Note1: Antenna Gain: Ant1: 4.25dBi;
 Note2: The Duty Cycle Factor and RBW Factor is compensated in the graph.

3. Maximum Power Spectral Density

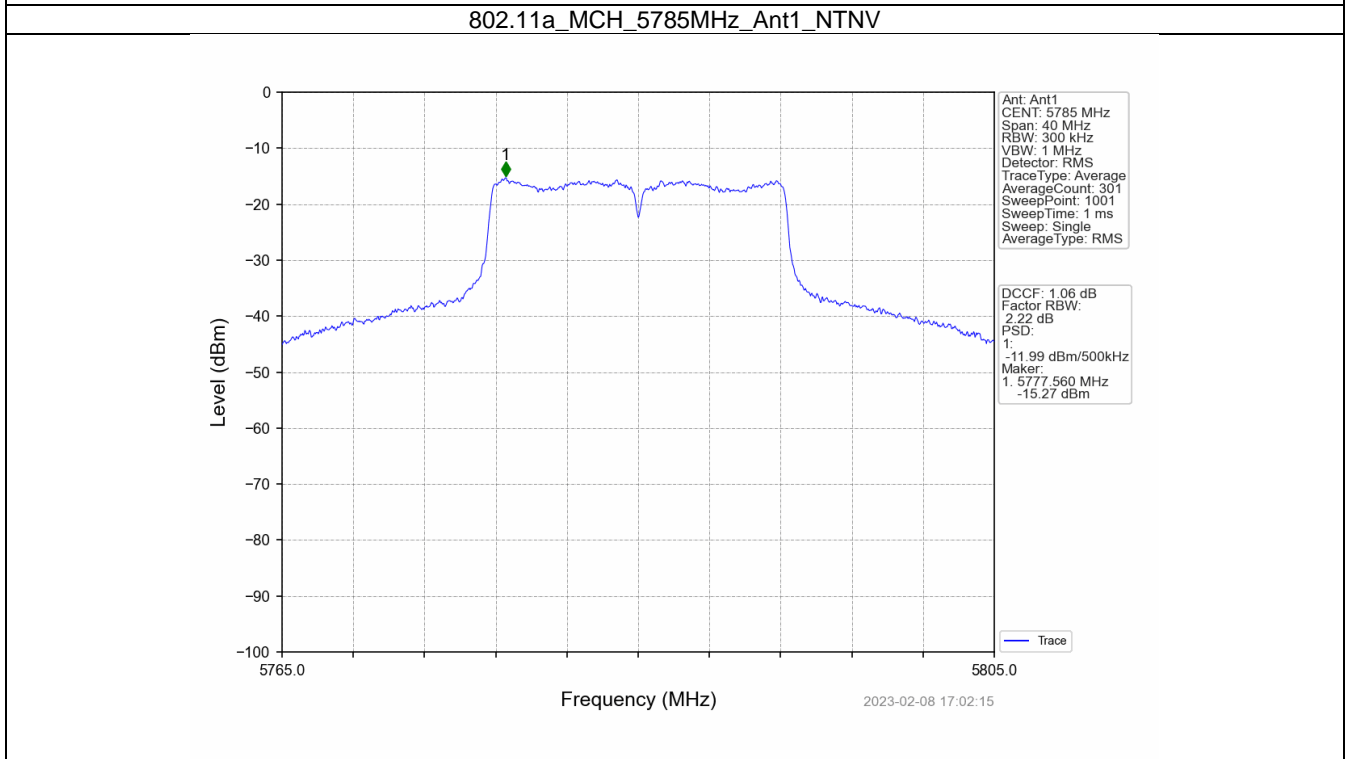
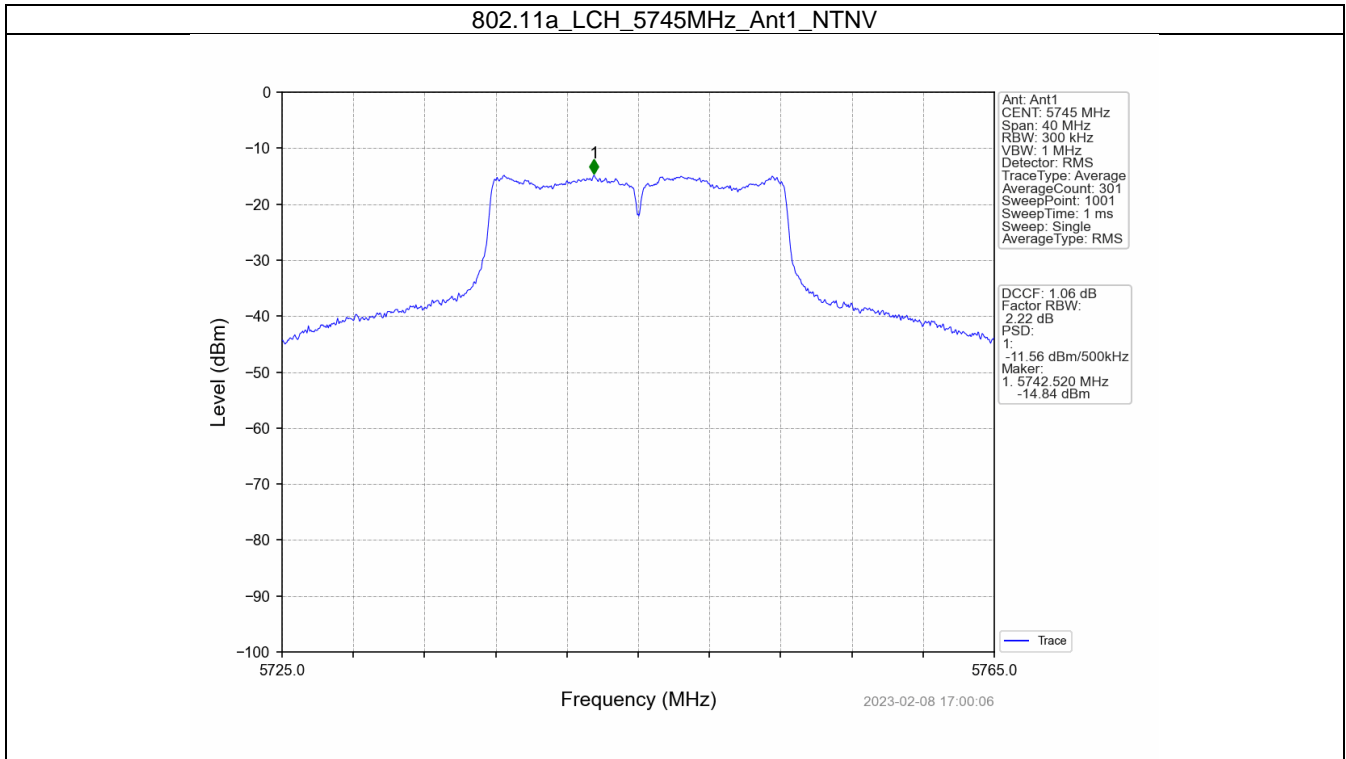
3.1 PSD-Band3

3.1.1 Test Result

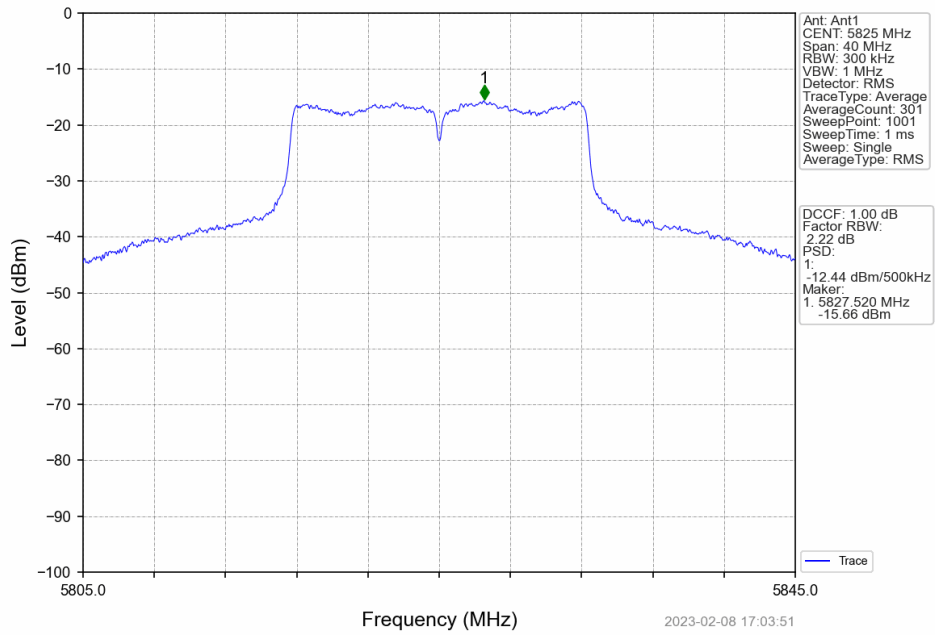
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/500kHz)				Verdict
			Report Power Density [dBm/3KHz]	Duty Cycle Factor(dB)	Report Power Density [dBm/3KHz]	Limit	
802.11a	SISO	5745	-11.56	0.00	-11.56	<=30	Pass
		5785	-11.99	0.00	-11.99	<=30	Pass
		5825	-12.44	0.00	-12.44	<=30	Pass
802.11n (HT20)	SISO	5745	-11.51	0.00	-11.51	<=30	Pass
		5785	-12.40	0.00	-12.40	<=30	Pass
		5825	-12.38	0.00	-12.38	<=30	Pass
802.11n (HT40)	SISO	5755	-14.45	0.00	-14.45	<=30	Pass
		5795	-15.18	0.00	-15.18	<=30	Pass
802.11ac (VHT20)	SISO	5745	-11.58	0.00	-11.58	<=30	Pass
		5785	-12.21	0.00	-12.21	<=30	Pass
		5825	-12.58	0.00	-12.58	<=30	Pass
802.11ac (VHT40)	SISO	5755	-14.20	0.00	-14.20	<=30	Pass
		5795	-14.62	0.00	-14.62	<=30	Pass
802.11ac (VHT80)	SISO	5775	-13.97	0.00	-13.97	<=30	Pass

Note1: Antenna Gain: Ant1: 4.25dBi;
 Note2: The Duty Cycle Factor and RBW Factor is compensated in the result.

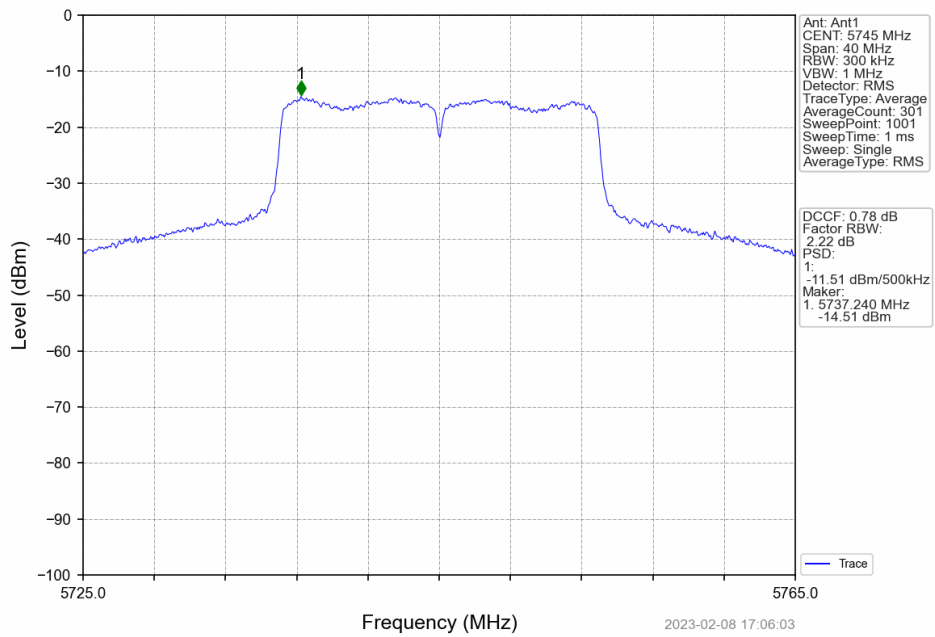
3.1.2 Test Graph



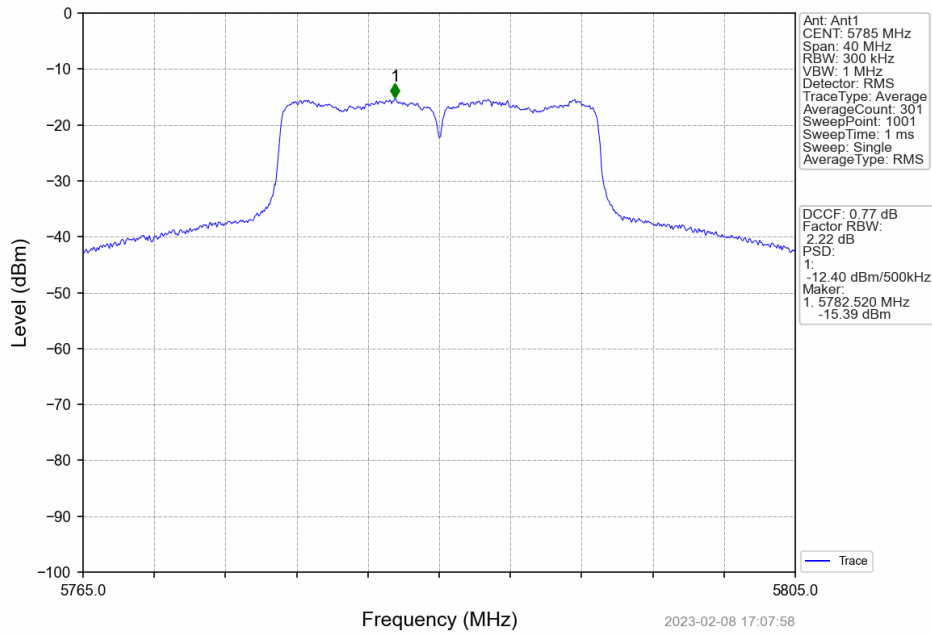
802.11a_HCH_5825MHz_Ant1_NTNV



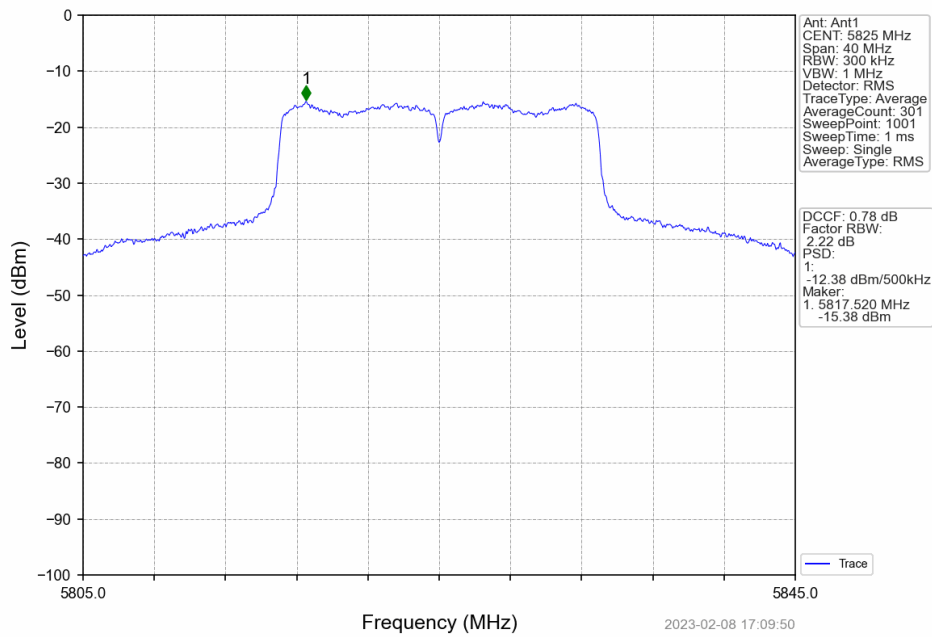
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



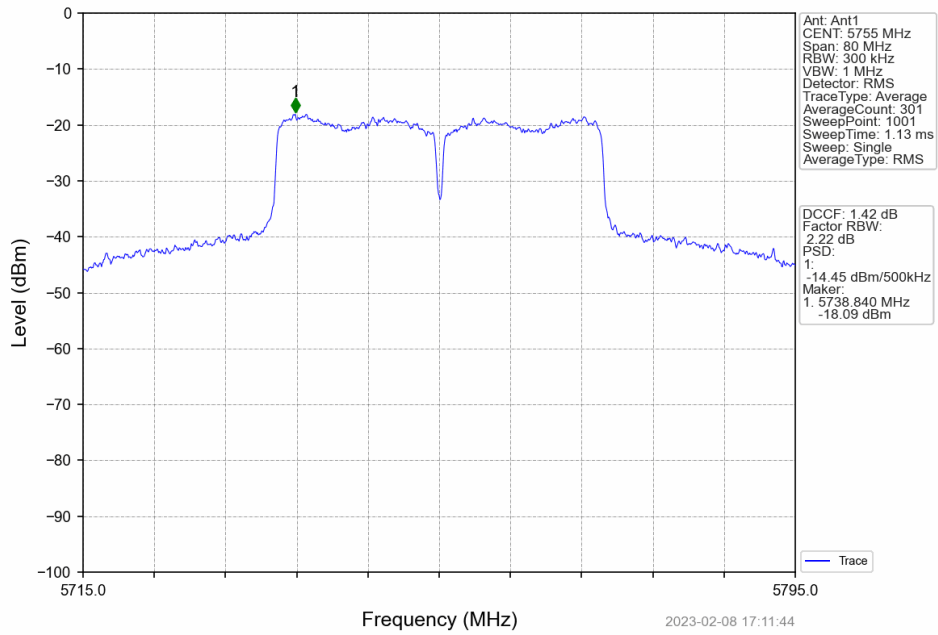
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



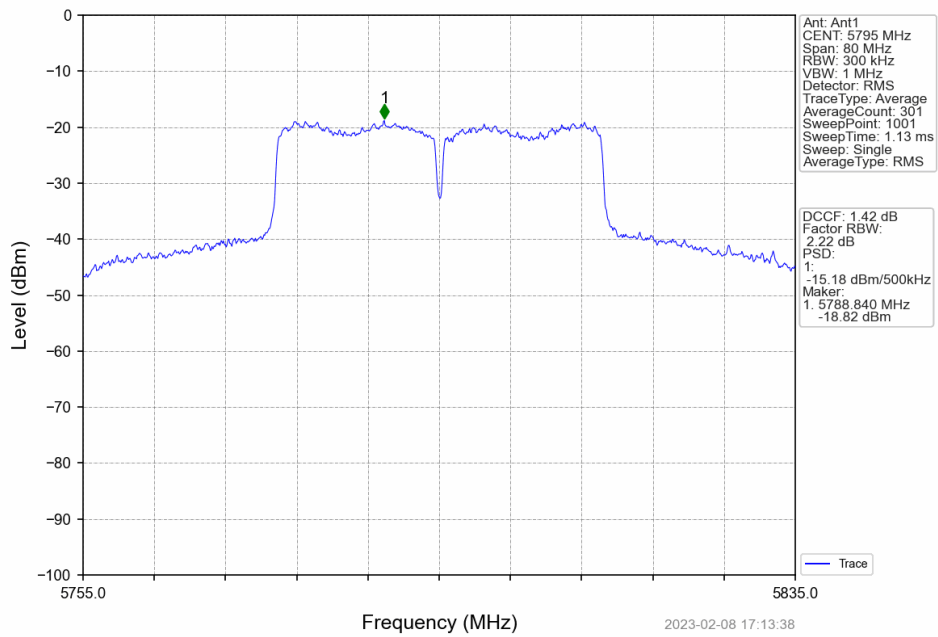
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



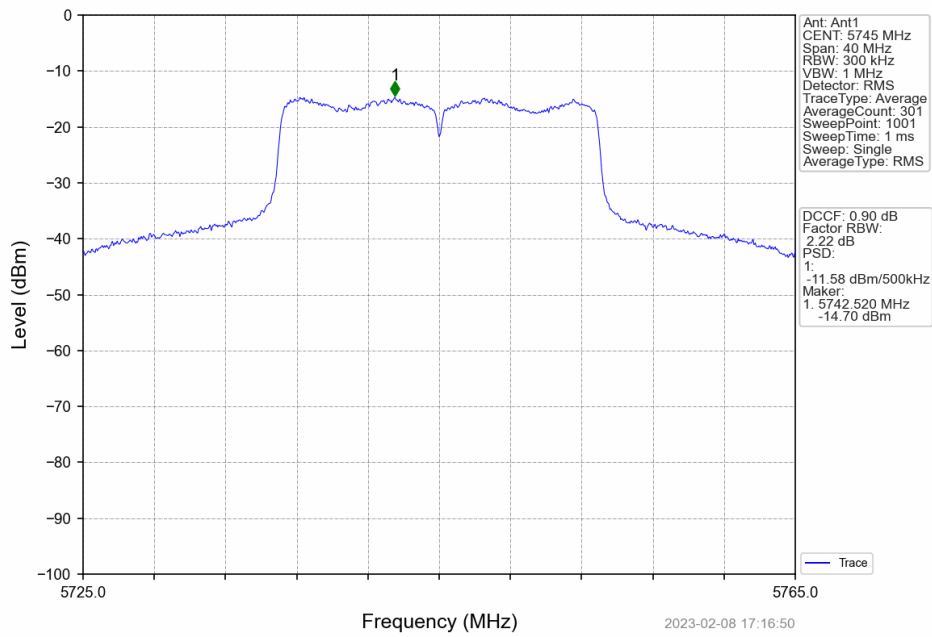
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



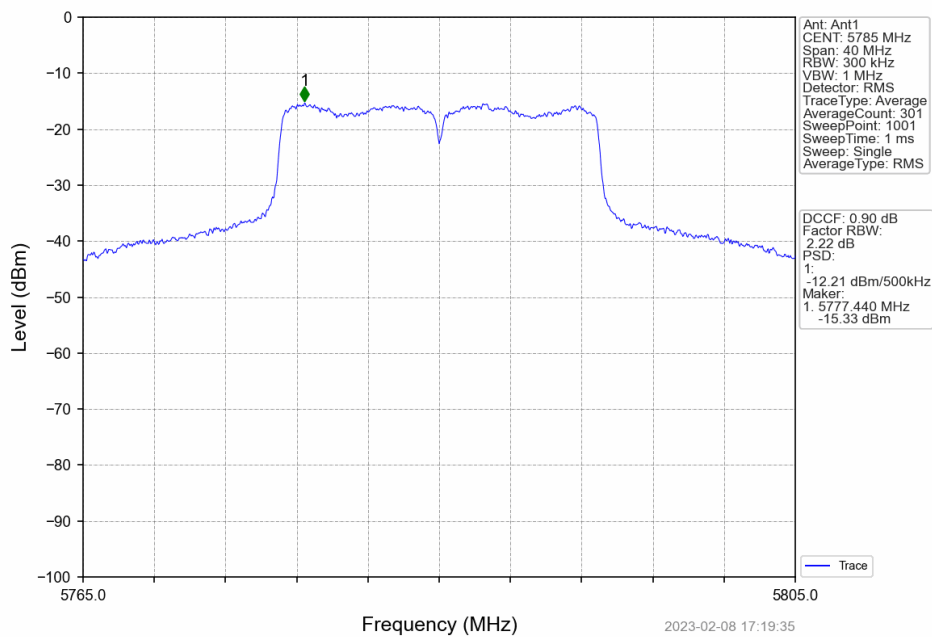
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



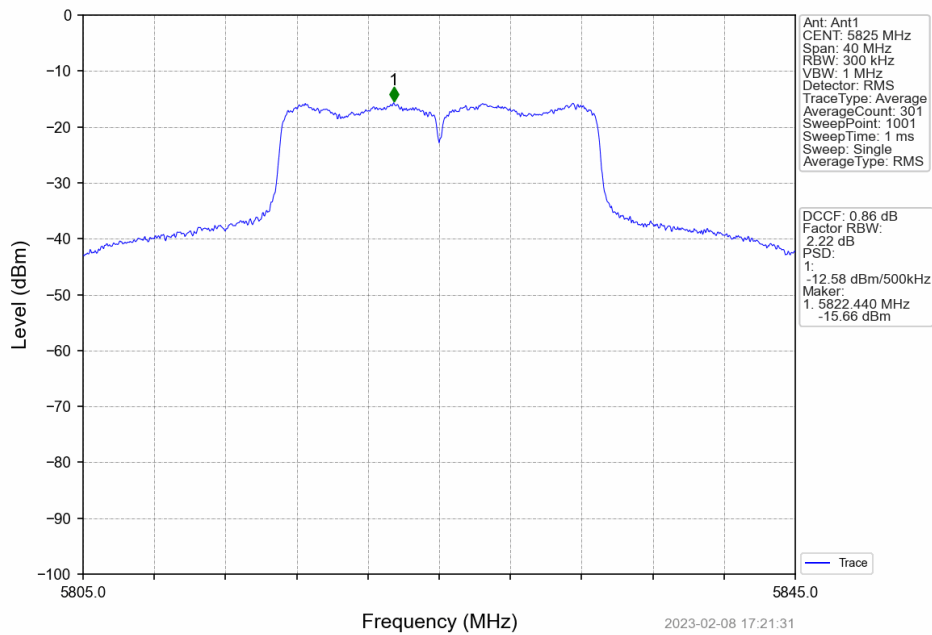
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



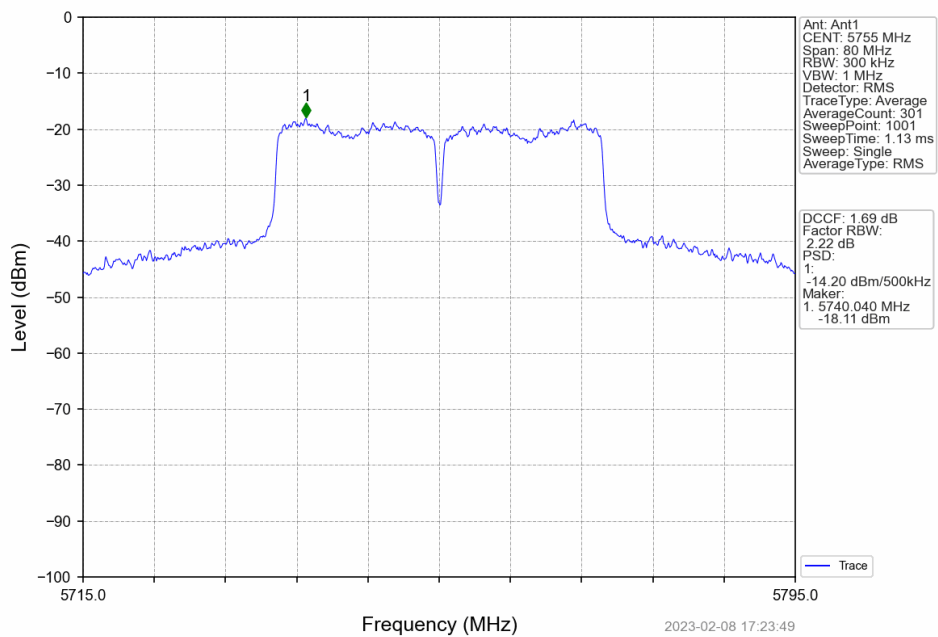
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



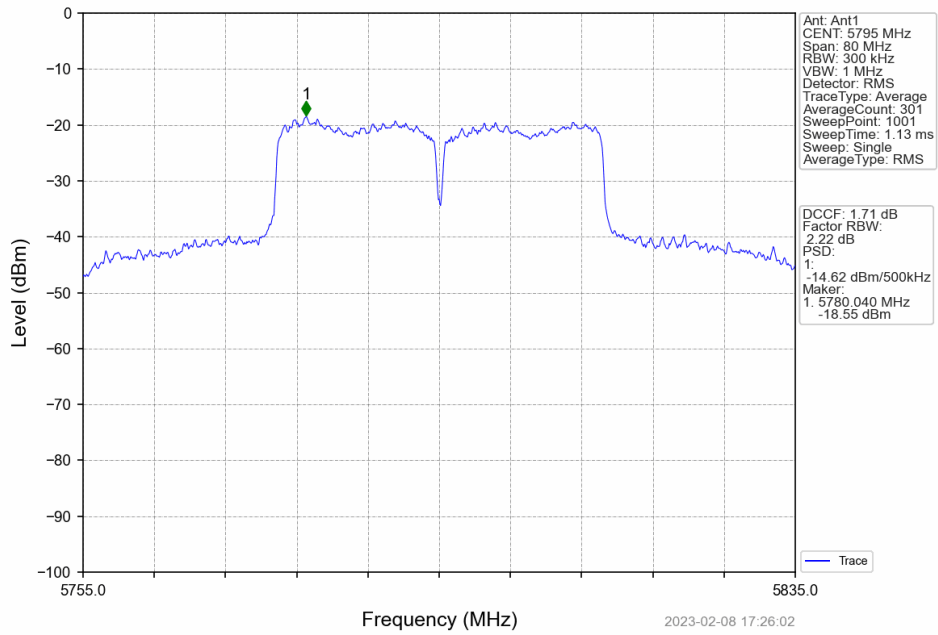
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



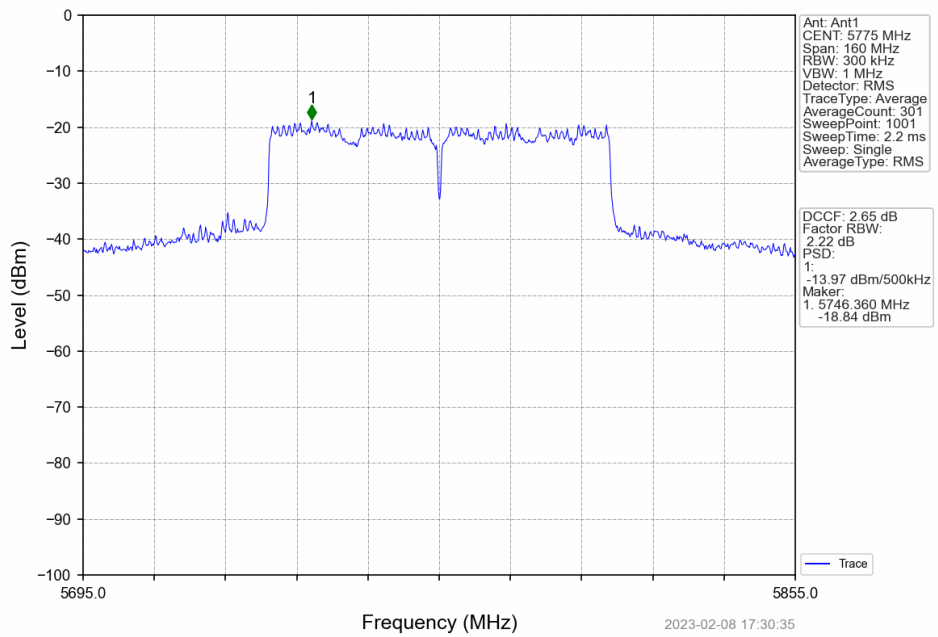
802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



4. Frequency Stability

4.1 Ant1

4.1.1 Test Result

Ant1							
Mode	TX Type	Frequency (MHz)	Temperature (°C)	Voltage (VDC)	Measured Frequency (MHz)	Limit (MHz)	Verdict
802.11a	SISO	5745	20	4.25	5745.000	5725 to 5850	Pass
				5	5744.980	5725 to 5850	Pass
				5.75	5745.020	5725 to 5850	Pass
			-30	5	5745.000	5725 to 5850	Pass
			-20	5	5745.020	5725 to 5850	Pass
			-10	5	5744.980	5725 to 5850	Pass
			0	5	5745.020	5725 to 5850	Pass
			10	5	5745.020	5725 to 5850	Pass
			30	5	5745.080	5725 to 5850	Pass
		40	5	5745.000	5725 to 5850	Pass	
		85	5	5745.040	5725 to 5850	Pass	
		5785	20	4.25	5785.000	5725 to 5850	Pass
				5	5785.000	5725 to 5850	Pass
				5.75	5785.040	5725 to 5850	Pass
			-30	5	5785.000	5725 to 5850	Pass
			-20	5	5785.040	5725 to 5850	Pass
			-10	5	5785.020	5725 to 5850	Pass
			0	5	5785.020	5725 to 5850	Pass
			10	5	5785.020	5725 to 5850	Pass
			30	5	5784.980	5725 to 5850	Pass
		40	5	5785.040	5725 to 5850	Pass	
		85	5	5785.020	5725 to 5850	Pass	
		5825	20	4.25	5824.980	5725 to 5850	Pass
				5	5825.020	5725 to 5850	Pass
				5.75	5825.020	5725 to 5850	Pass
			-30	5	5825.060	5725 to 5850	Pass
			-20	5	5824.980	5725 to 5850	Pass
-10	5		5825.040	5725 to 5850	Pass		
0	5		5825.000	5725 to 5850	Pass		
10	5		5824.980	5725 to 5850	Pass		
30	5		5825.060	5725 to 5850	Pass		
40	5	5825.040	5725 to 5850	Pass			
85	5	5825.020	5725 to 5850	Pass			
802.11n (HT20)	SISO	5745	20	4.25	5745.040	5725 to 5850	Pass
				5	5745.040	5725 to 5850	Pass
				5.75	5745.040	5725 to 5850	Pass
			-30	5	5745.020	5725 to 5850	Pass
			-20	5	5745.040	5725 to 5850	Pass
			-10	5	5745.080	5725 to 5850	Pass
			0	5	5745.040	5725 to 5850	Pass
			10	5	5745.020	5725 to 5850	Pass
			30	5	5745.040	5725 to 5850	Pass
		40	5	5745.060	5725 to 5850	Pass	
		85	5	5745.040	5725 to 5850	Pass	
		5785	20	4.25	5785.060	5725 to 5850	Pass
				5	5785.020	5725 to 5850	Pass
				5.75	5785.040	5725 to 5850	Pass
			-30	5	5785.080	5725 to 5850	Pass
-20	5		5785.060	5725 to 5850	Pass		

			-10	5	5785.020	5725 to 5850	Pass			
			0	5	5785.060	5725 to 5850	Pass			
			10	5	5785.060	5725 to 5850	Pass			
			30	5	5785.060	5725 to 5850	Pass			
			40	5	5785.040	5725 to 5850	Pass			
		85	5	5785.060	5725 to 5850	Pass				
		5825	20	4.25	5825.040	5725 to 5850	Pass			
				5	5825.020	5725 to 5850	Pass			
				5.75	5825.000	5725 to 5850	Pass			
			-30	5	5825.060	5725 to 5850	Pass			
			-20	5	5825.040	5725 to 5850	Pass			
			-10	5	5825.040	5725 to 5850	Pass			
			0	5	5825.020	5725 to 5850	Pass			
			10	5	5825.060	5725 to 5850	Pass			
			30	5	5825.020	5725 to 5850	Pass			
			40	5	5825.040	5725 to 5850	Pass			
			85	5	5825.040	5725 to 5850	Pass			
			802.11n (HT40)	SISO	5755	20	4.25	5755.080	5725 to 5850	Pass
							5	5755.120	5725 to 5850	Pass
5.75	5755.120						5725 to 5850	Pass		
-30	5	5755.080				5725 to 5850	Pass			
-20	5	5755.080				5725 to 5850	Pass			
-10	5	5755.120				5725 to 5850	Pass			
0	5	5755.120				5725 to 5850	Pass			
10	5	5755.120				5725 to 5850	Pass			
30	5	5755.040				5725 to 5850	Pass			
40	5	5755.080			5725 to 5850	Pass				
85	5	5755.120			5725 to 5850	Pass				
5795	20	4.25			5795.120	5725 to 5850	Pass			
		5			5795.080	5725 to 5850	Pass			
		5.75			5795.080	5725 to 5850	Pass			
	-30	5			5795.080	5725 to 5850	Pass			
	-20	5			5794.960	5725 to 5850	Pass			
	-10	5			5795.080	5725 to 5850	Pass			
	0	5			5795.120	5725 to 5850	Pass			
	10	5			5795.080	5725 to 5850	Pass			
	30	5	5795.080	5725 to 5850	Pass					
	40	5	5795.080	5725 to 5850	Pass					
85	5	5795.040	5725 to 5850	Pass						
802.11ac (VHT20)	SISO	5745	20	4.25	5745.040	5725 to 5850	Pass			
				5	5745.040	5725 to 5850	Pass			
				5.75	5745.040	5725 to 5850	Pass			
			-30	5	5745.020	5725 to 5850	Pass			
			-20	5	5745.060	5725 to 5850	Pass			
			-10	5	5745.040	5725 to 5850	Pass			
			0	5	5745.060	5725 to 5850	Pass			
			10	5	5745.040	5725 to 5850	Pass			
			30	5	5745.020	5725 to 5850	Pass			
		40	5	5745.040	5725 to 5850	Pass				
		85	5	5745.060	5725 to 5850	Pass				
		5785	20	4.25	5785.040	5725 to 5850	Pass			
				5	5785.040	5725 to 5850	Pass			
				5.75	5785.060	5725 to 5850	Pass			
			-30	5	5785.060	5725 to 5850	Pass			
			-20	5	5785.040	5725 to 5850	Pass			
			-10	5	5785.020	5725 to 5850	Pass			
			0	5	5785.080	5725 to 5850	Pass			
			10	5	5785.080	5725 to 5850	Pass			
30	5		5785.040	5725 to 5850	Pass					

		5825	40	5	5785.060	5725 to 5850	Pass
			85	5	5785.060	5725 to 5850	Pass
			20	4.25	5825.060	5725 to 5850	Pass
				5	5825.040	5725 to 5850	Pass
				5.75	5825.060	5725 to 5850	Pass
			-30	5	5825.040	5725 to 5850	Pass
			-20	5	5825.060	5725 to 5850	Pass
			-10	5	5825.060	5725 to 5850	Pass
			0	5	5825.020	5725 to 5850	Pass
			10	5	5825.040	5725 to 5850	Pass
			30	5	5825.040	5725 to 5850	Pass
			40	5	5825.060	5725 to 5850	Pass
			85	5	5825.040	5725 to 5850	Pass
			802.11ac (VHT40)	SISO	5755	20	4.25
5	5755.040	5725 to 5850					Pass
5.75	5755.040	5725 to 5850					Pass
-30	5	5755.040				5725 to 5850	Pass
-20	5	5755.120				5725 to 5850	Pass
-10	5	5755.080				5725 to 5850	Pass
0	5	5755.040				5725 to 5850	Pass
10	5	5755.080				5725 to 5850	Pass
30	5	5755.120				5725 to 5850	Pass
40	5	5755.080			5725 to 5850	Pass	
85	5	5755.040			5725 to 5850	Pass	
5795	20	4.25			5795.160	5725 to 5850	Pass
		5			5795.000	5725 to 5850	Pass
		5.75			5795.040	5725 to 5850	Pass
	-30	5			5795.040	5725 to 5850	Pass
	-20	5			5795.000	5725 to 5850	Pass
	-10	5			5795.040	5725 to 5850	Pass
	0	5			5795.000	5725 to 5850	Pass
	10	5	5795.040	5725 to 5850	Pass		
	30	5	5795.040	5725 to 5850	Pass		
40	5	5795.040	5725 to 5850	Pass			
85	5	5795.040	5725 to 5850	Pass			
802.11ac (VHT80)	SISO	5775	20	4.25	5775.075	5725 to 5850	Pass
				5	5775.000	5725 to 5850	Pass
				5.75	5775.075	5725 to 5850	Pass
			-30	5	5775.075	5725 to 5850	Pass
			-20	5	5775.000	5725 to 5850	Pass
			-10	5	5775.075	5725 to 5850	Pass
			0	5	5775.075	5725 to 5850	Pass
			10	5	5775.150	5725 to 5850	Pass
			30	5	5775.075	5725 to 5850	Pass
			40	5	5775.075	5725 to 5850	Pass
85	5	5775.150	5725 to 5850	Pass			