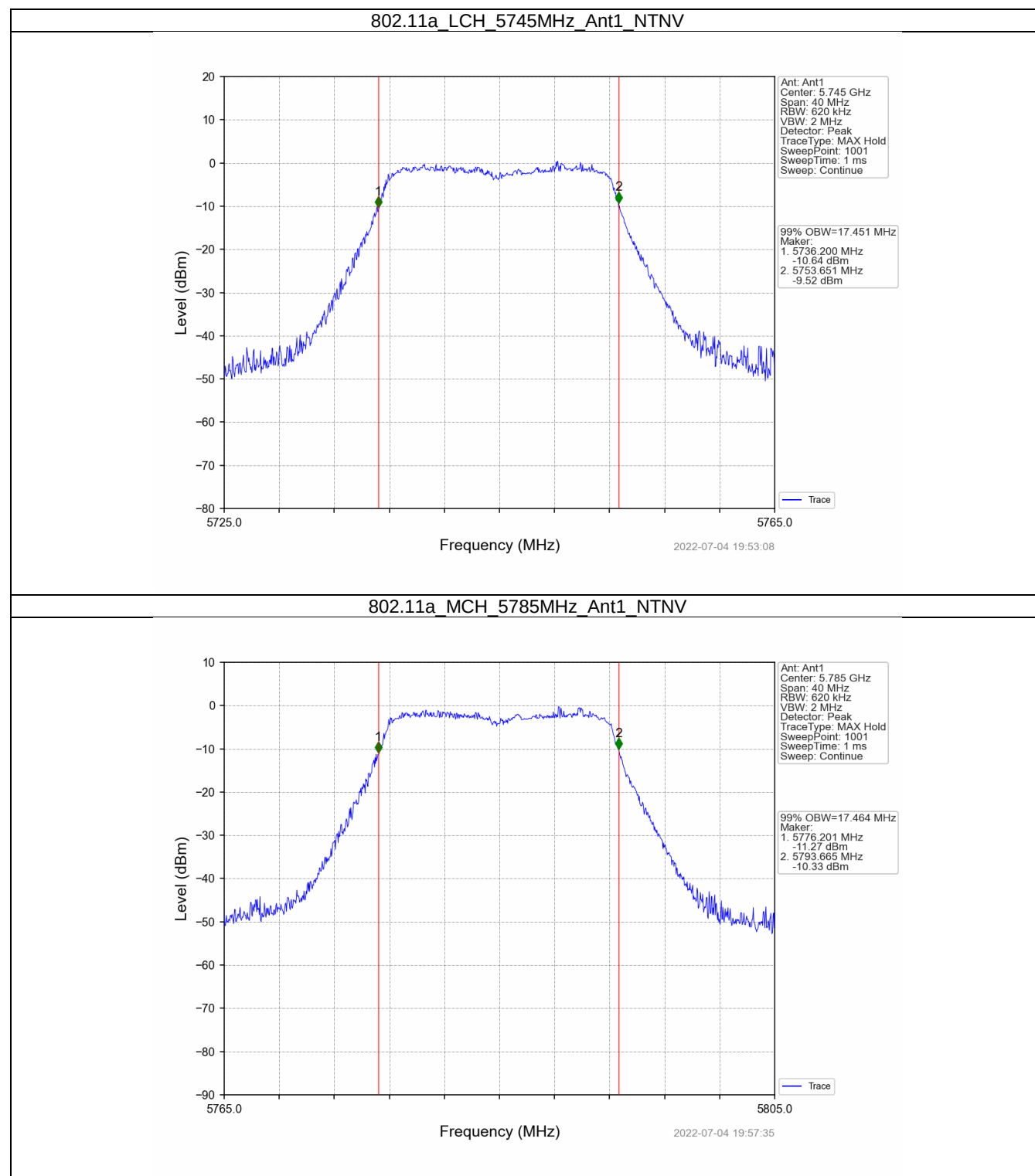


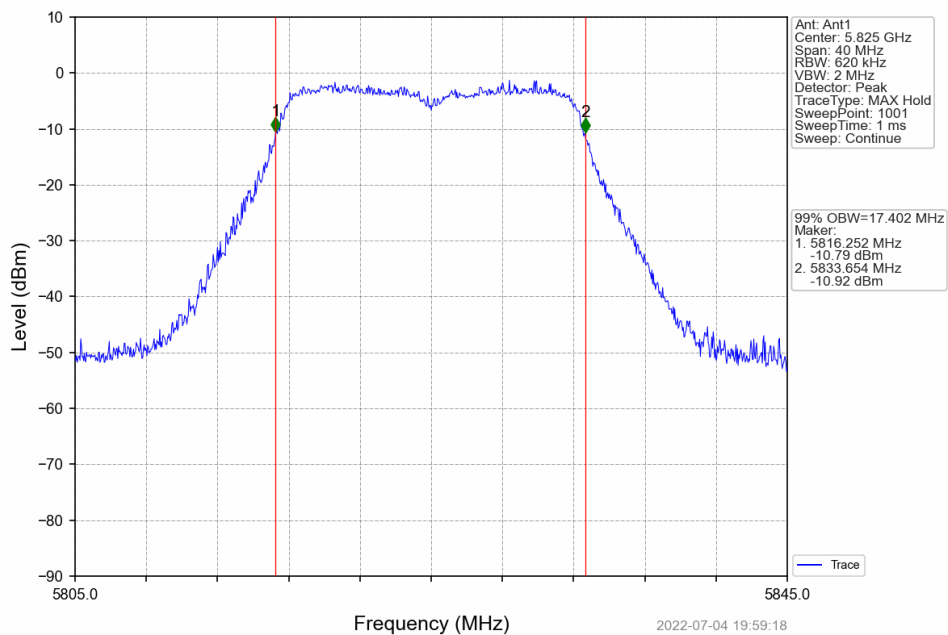
Test Data for 5G_Band 4_WIFI**Product Name: Laser Projector****Test Model: PJ90****1. Bandwidth****1.1 OBW****1.1.1 Test Result**

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)	Verdict
				Result	
802.11a	SISO	5745	1	17.451	Pass
		5785	1	17.464	Pass
		5825	1	17.402	Pass
802.11n (HT20)	SISO	5745	1	18.361	Pass
		5785	1	18.286	Pass
		5825	1	18.330	Pass
802.11n (HT40)	SISO	5755	1	36.722	Pass
		5795	1	36.729	Pass
802.11ac (VHT20)	SISO	5745	1	18.205	Pass
		5785	1	18.236	Pass
		5825	1	18.246	Pass
802.11ac (VHT40)	SISO	5755	1	36.733	Pass
		5795	1	36.665	Pass
802.11ac (VHT80)	SISO	5775	1	76.027	Pass

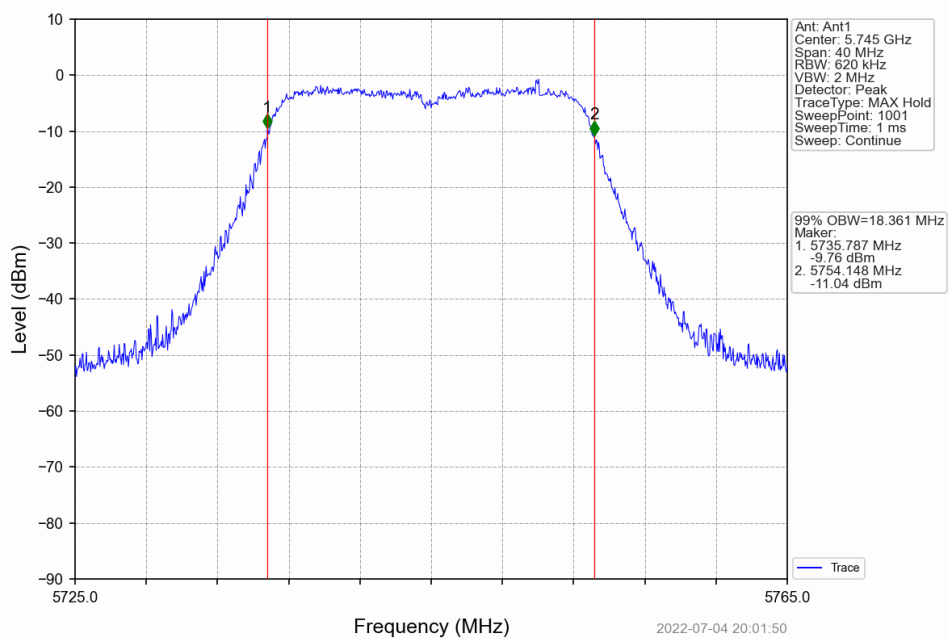
1.1.2 Test Graph



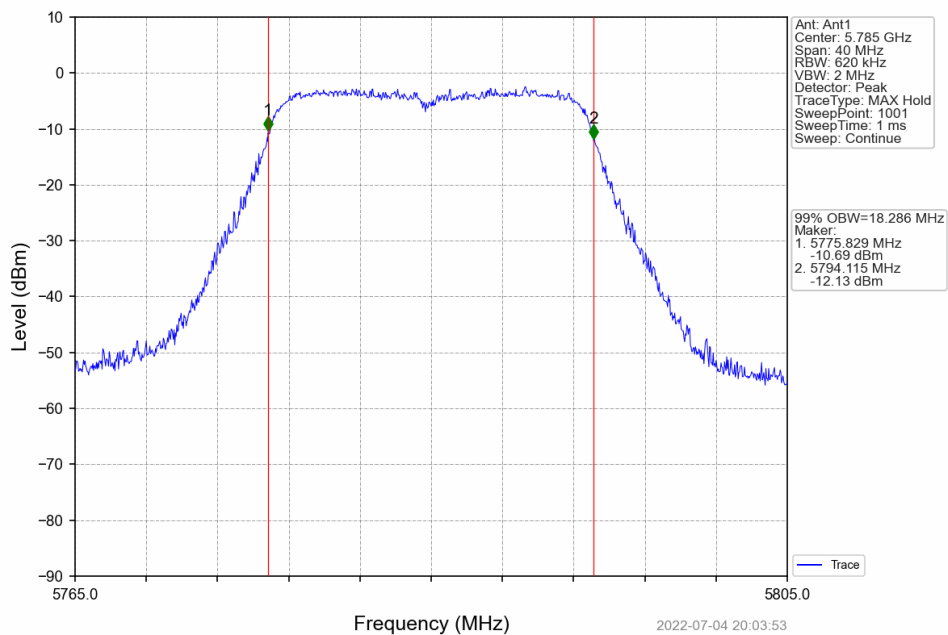
802.11a HCH 5825MHz Ant1 NTN



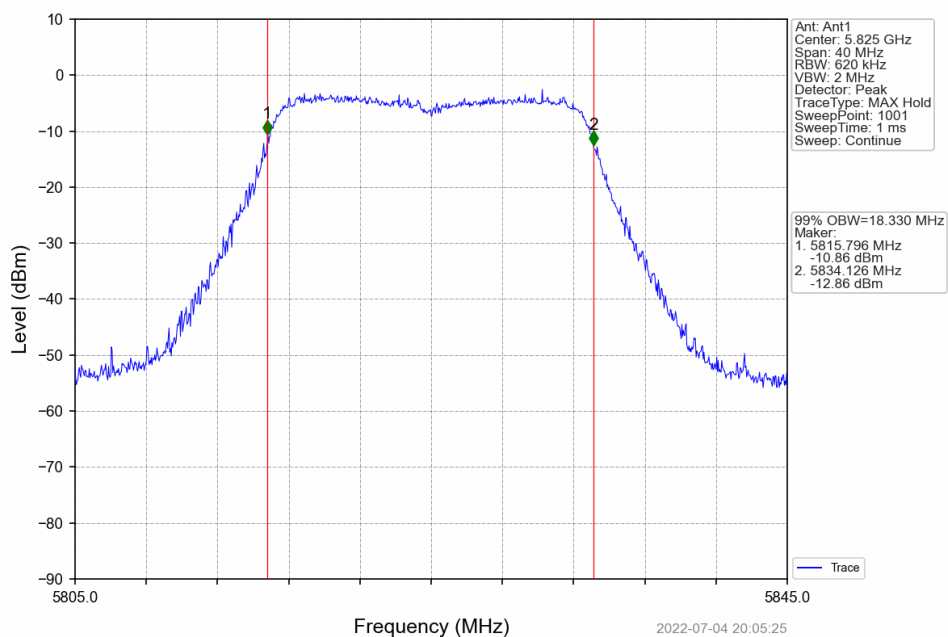
802.11n(HT20) LCH 5745MHz Ant1 NTN



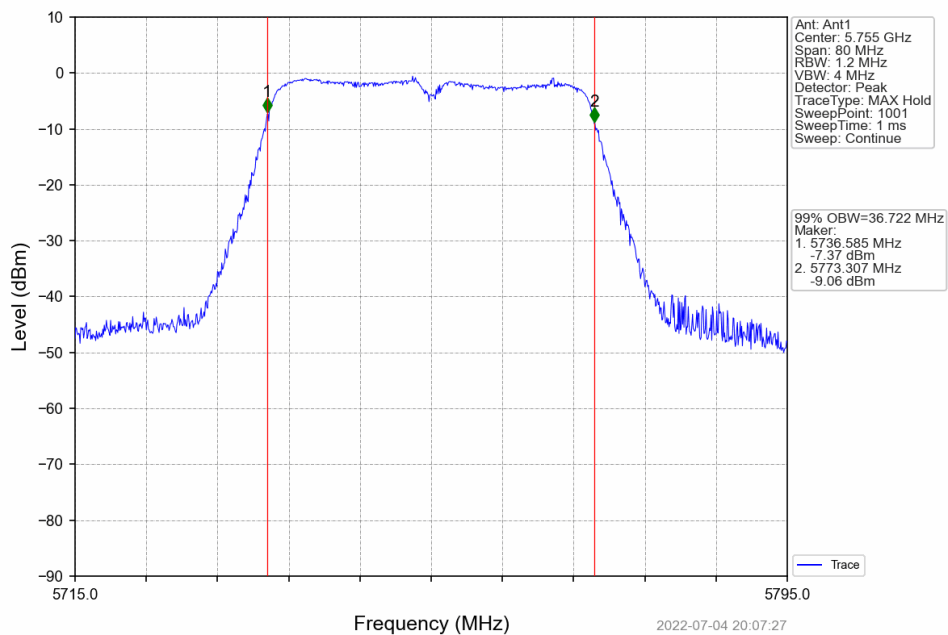
802.11n(HT20) MCH 5785MHz Ant1 NTN



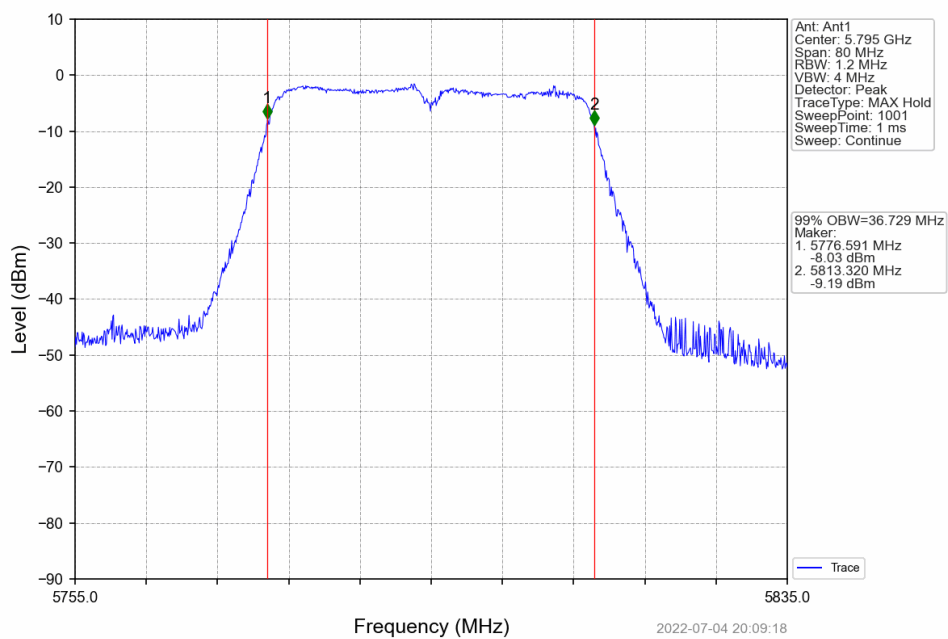
802.11n(HT20)_HCH_5825MHz_Ant1_NTN



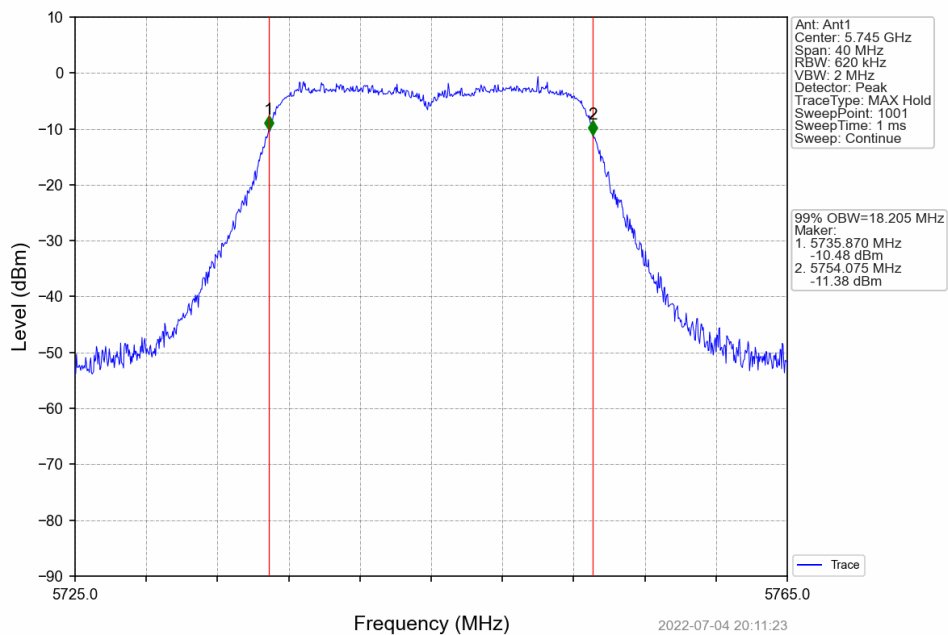
802.11n(HT40) LCH 5755MHz Ant1 NTN



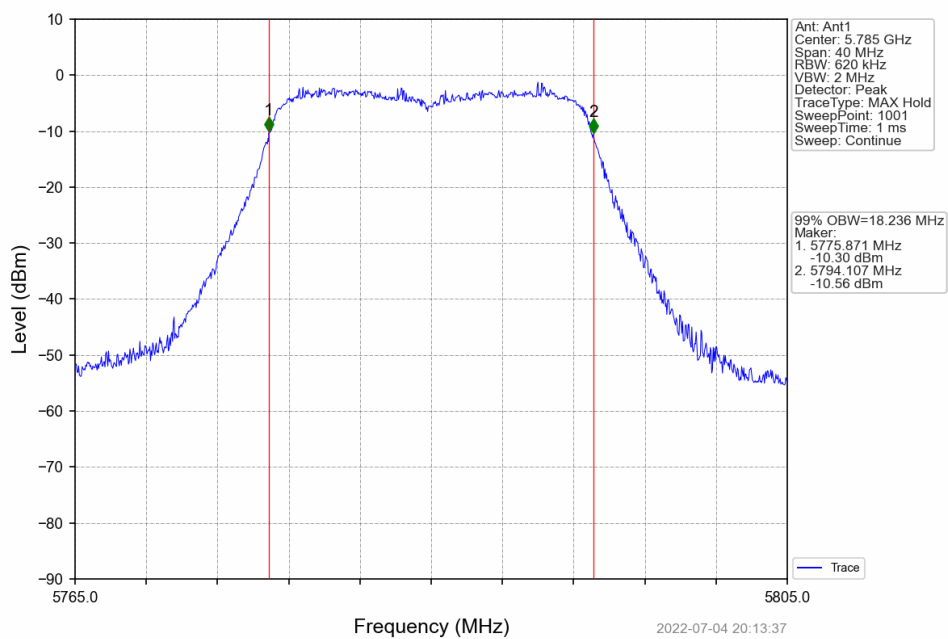
802.11n(HT40)_HCH_5795MHz_Ant1_NTN



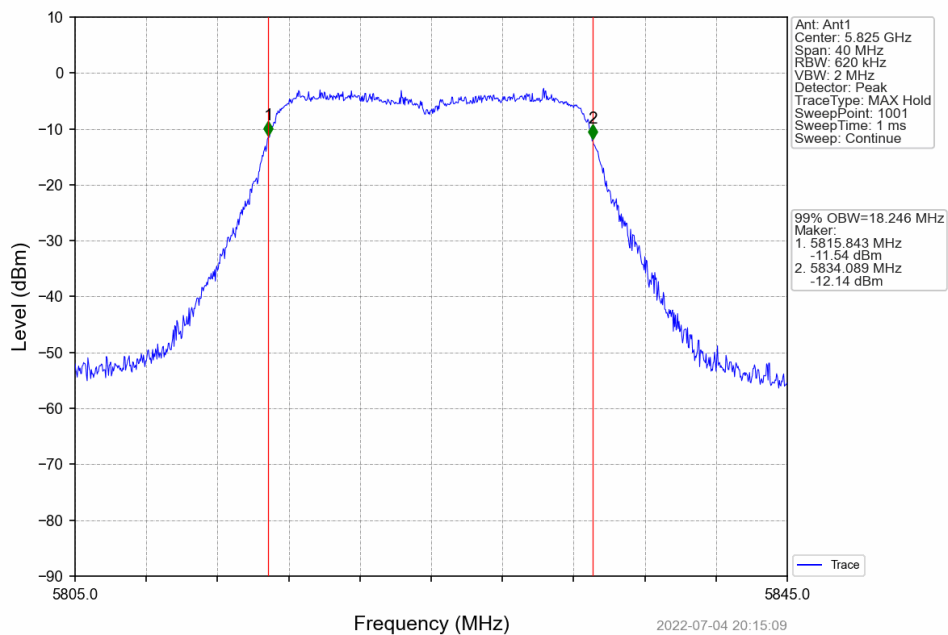
802.11ac(VHT20) LCH 5745MHz Ant1 NTN



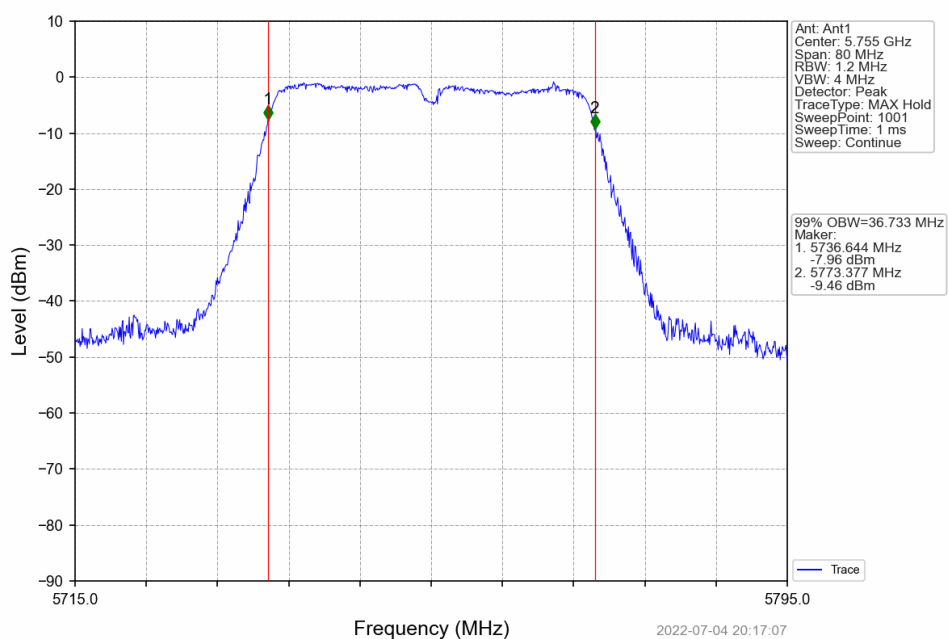
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTN



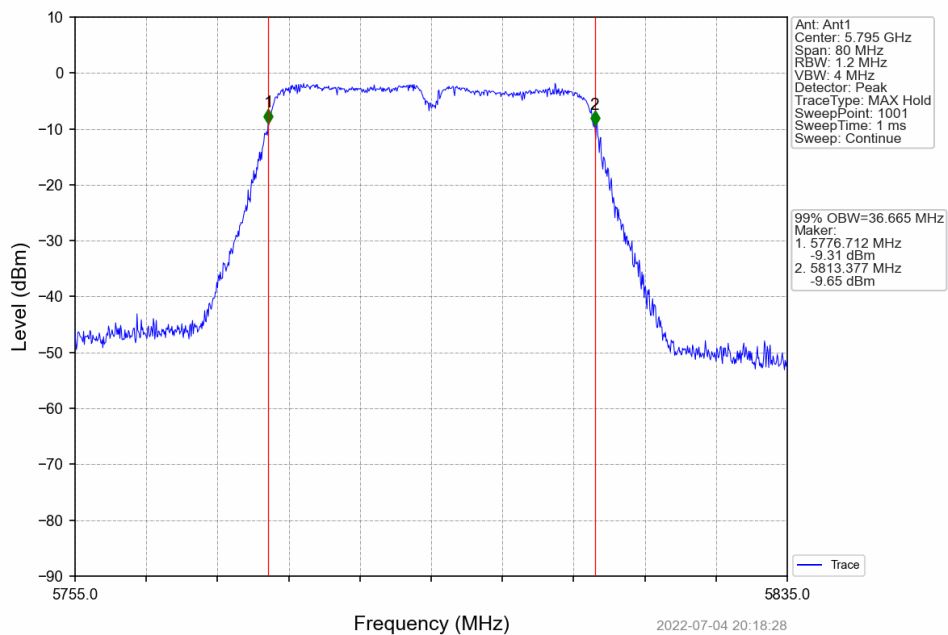
802.11ac(VHT20) HCH 5825MHz Ant1 NTN



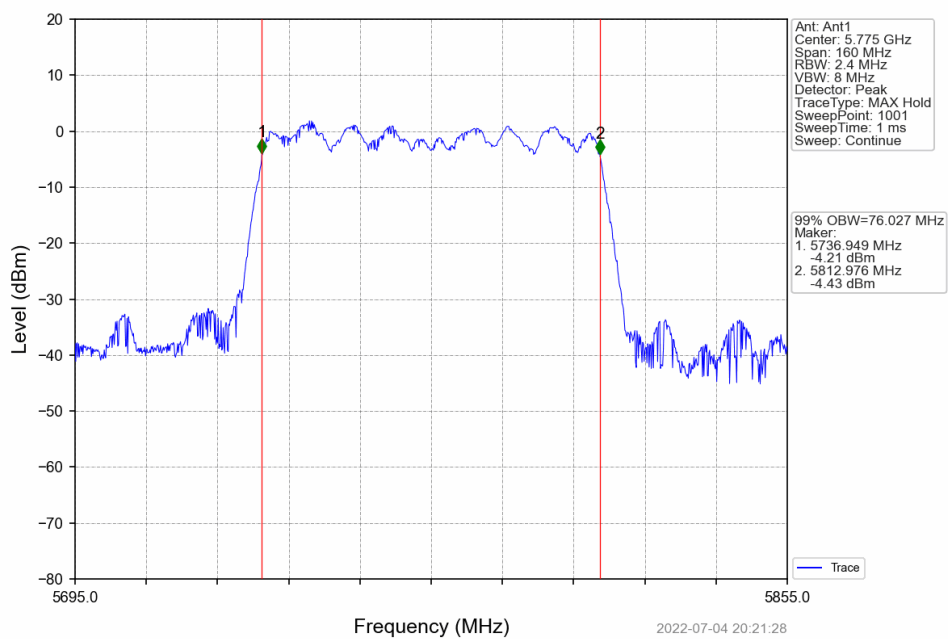
802.11ac(VHT40)_LCH_5755MHz_Ant1_NTN



802.11ac(VHT40) HCH 5795MHz Ant1 NTN



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTN

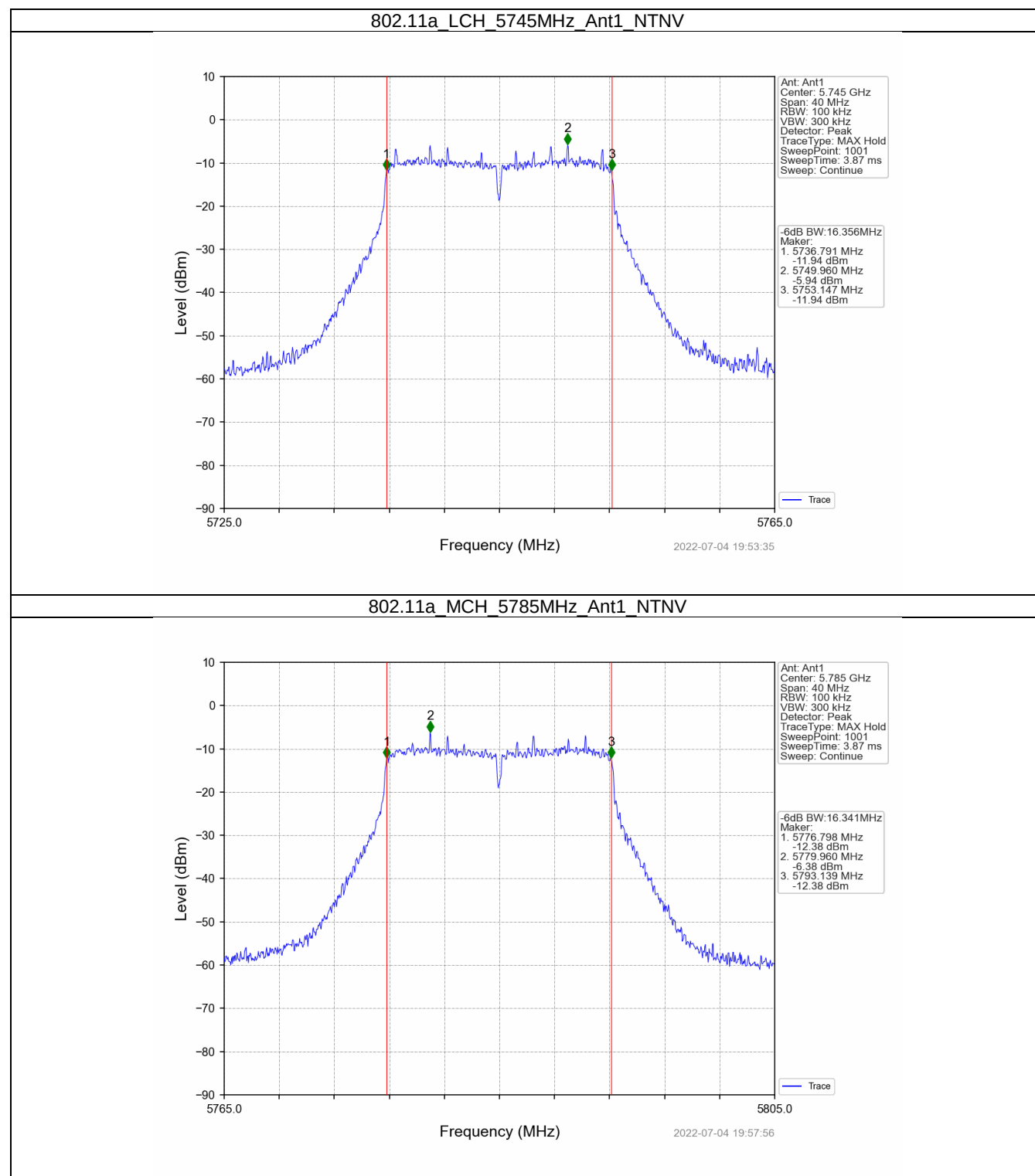


1.2 6dB BW

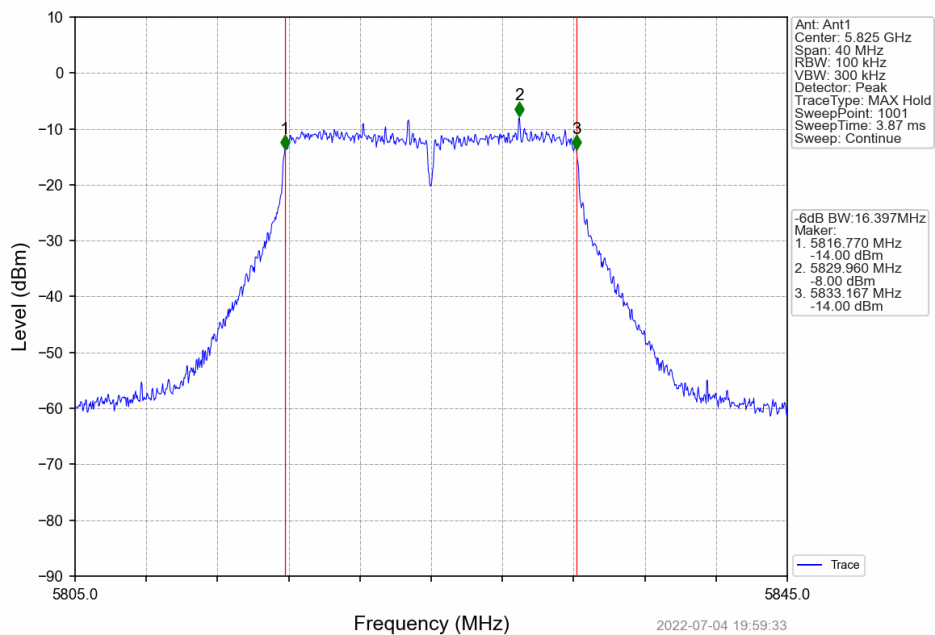
1.2.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	16.356	>=0.5	Pass
		5785	1	16.341	>=0.5	Pass
		5825	1	16.397	>=0.5	Pass
802.11n (HT20)	SISO	5745	1	17.578	>=0.5	Pass
		5785	1	16.948	>=0.5	Pass
		5825	1	16.942	>=0.5	Pass
802.11n (HT40)	SISO	5755	1	35.515	>=0.5	Pass
		5795	1	35.241	>=0.5	Pass
802.11ac (VHT20)	SISO	5745	1	16.925	>=0.5	Pass
		5785	1	16.952	>=0.5	Pass
		5825	1	16.907	>=0.5	Pass
802.11ac (VHT40)	SISO	5755	1	35.135	>=0.5	Pass
		5795	1	35.206	>=0.5	Pass
802.11ac (VHT80)	SISO	5775	1	75.124	>=0.5	Pass

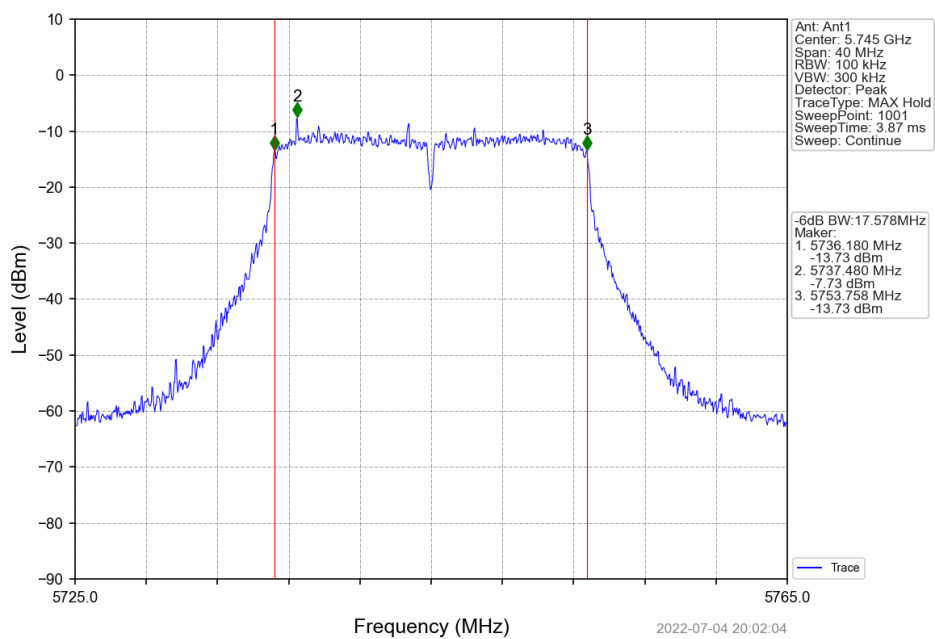
1.2.2 Test Graph



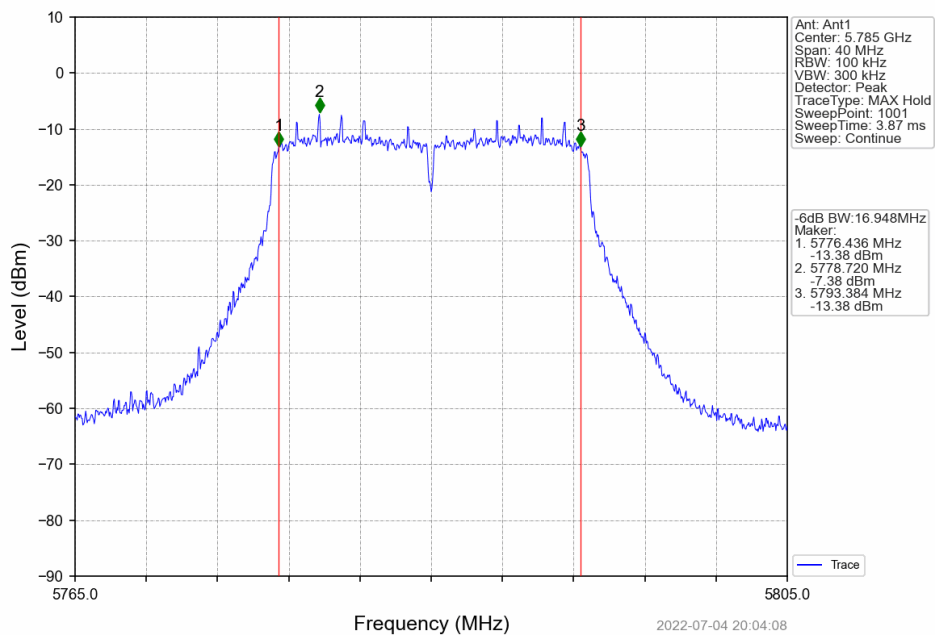
802.11a HCH 5825MHz Ant1 NTV



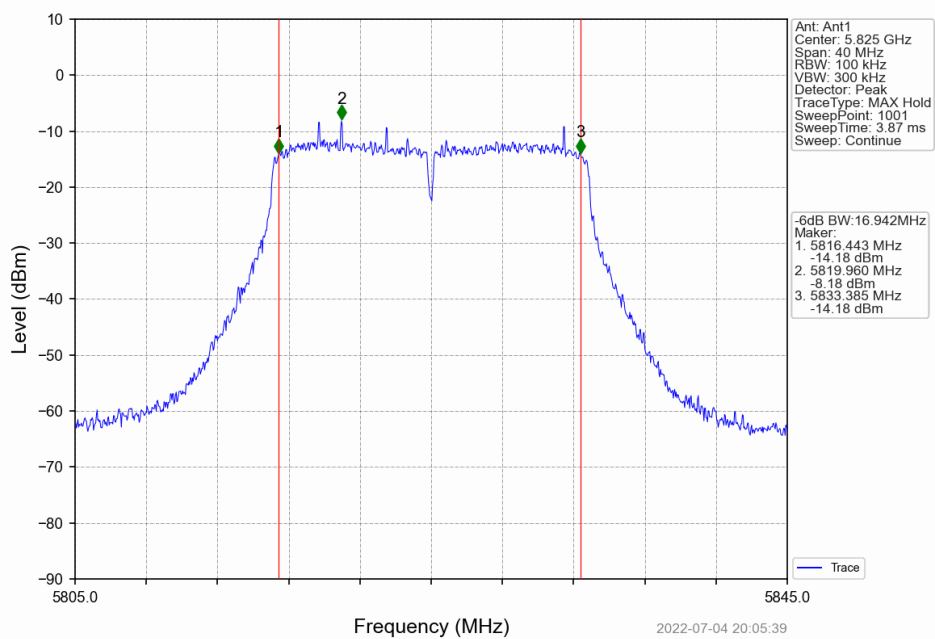
802.11n(HT20) LCH 5745MHz Ant1 NTV



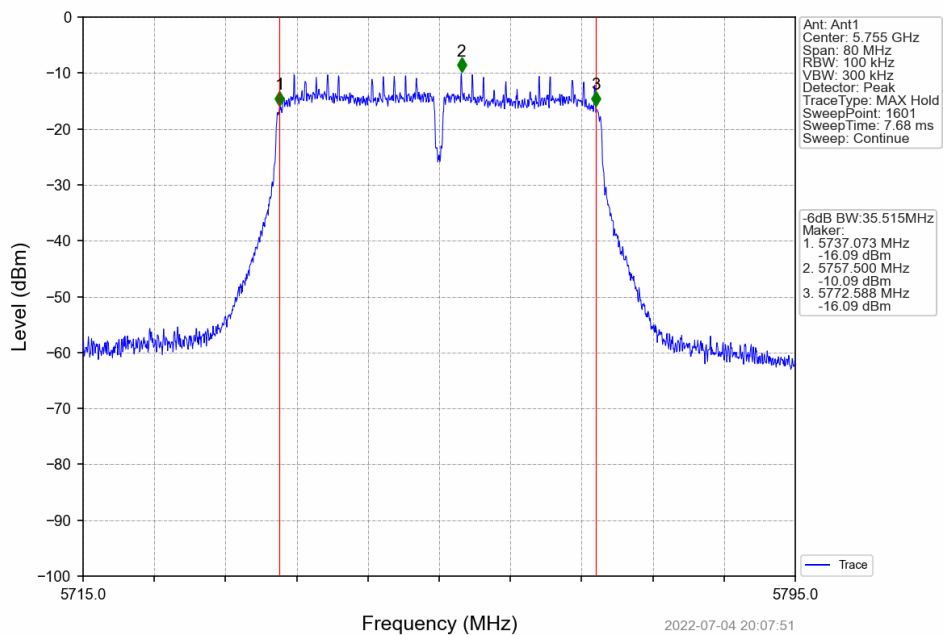
802.11n(HT20) MCH 5785MHz Ant1 NTN



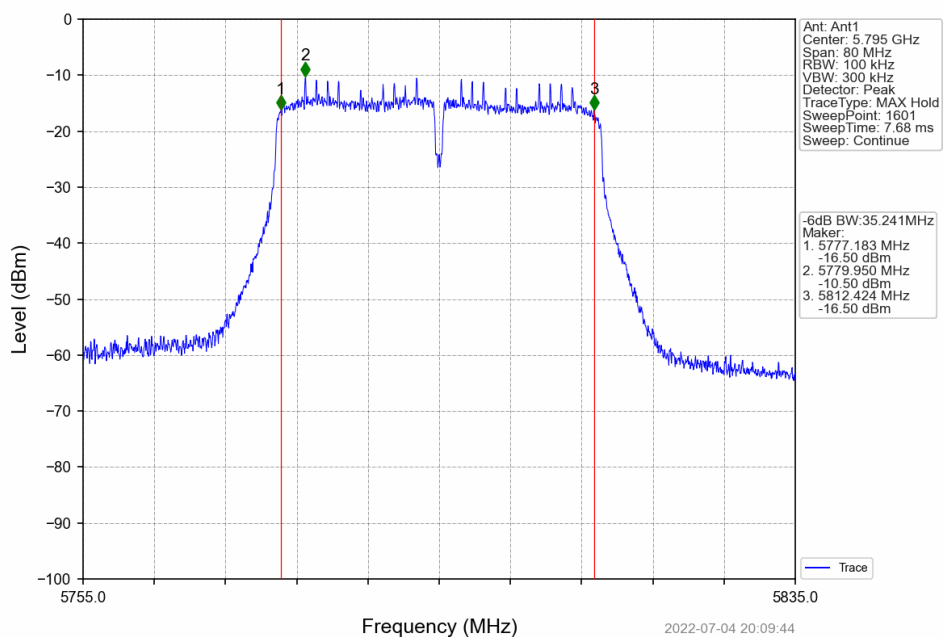
802.11n(HT20)_HCH_5825MHz_Ant1_NTN



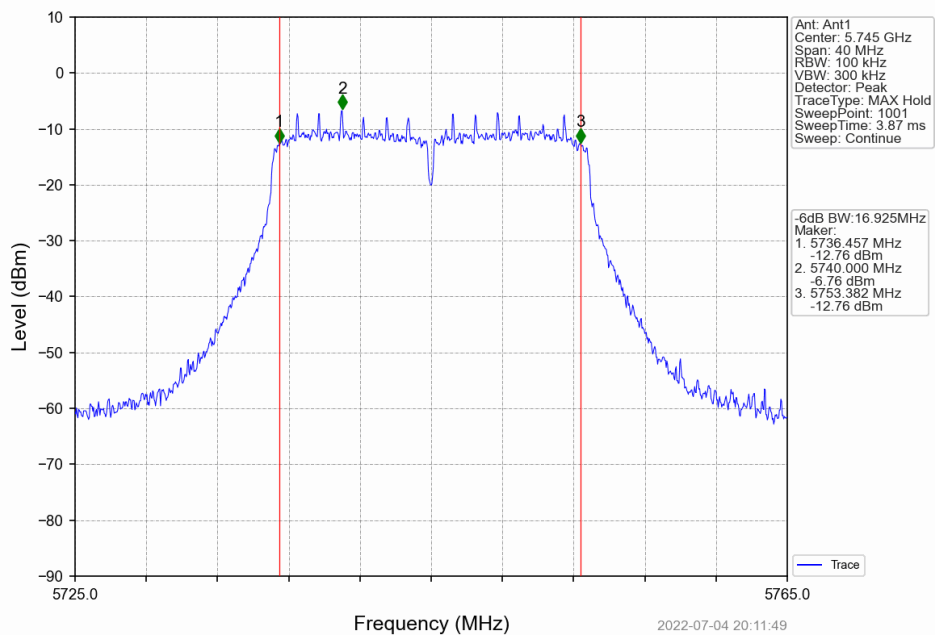
802.11n(HT40) LCH 5755MHz Ant1 NTN



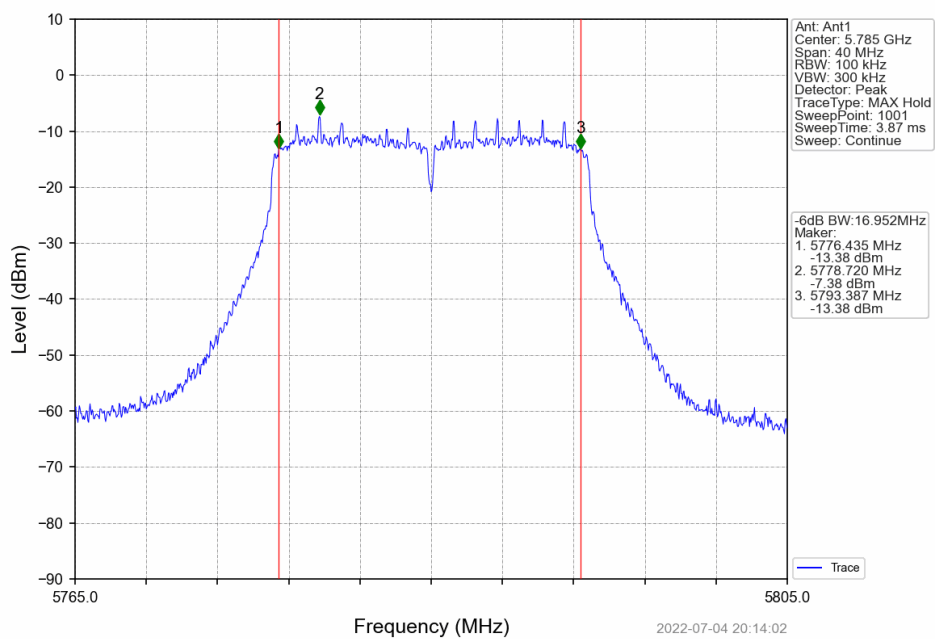
802.11n(HT40)_HCH_5795MHz_Ant1_NTN



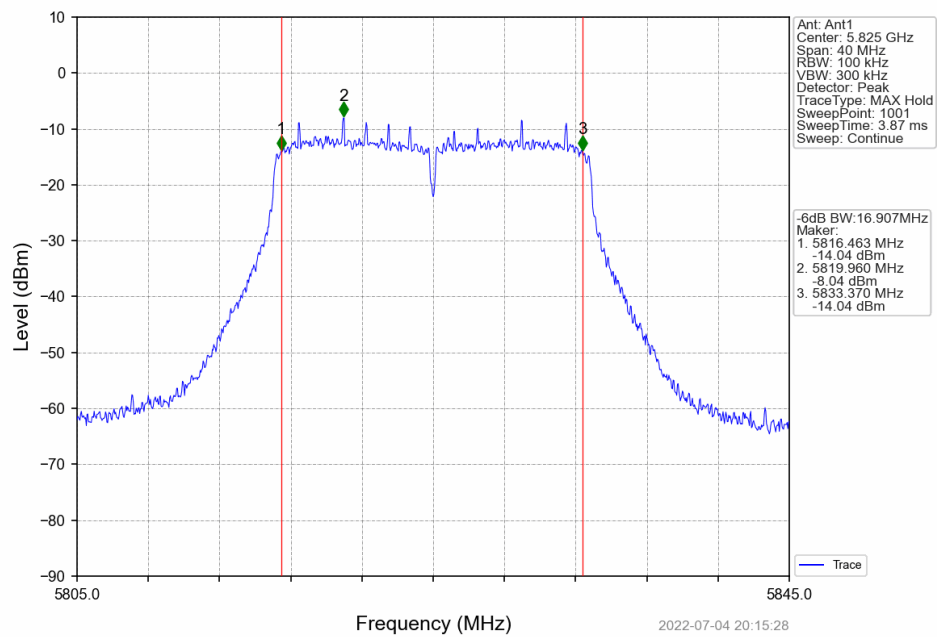
802.11ac(VHT20) LCH 5745MHz Ant1 NTN



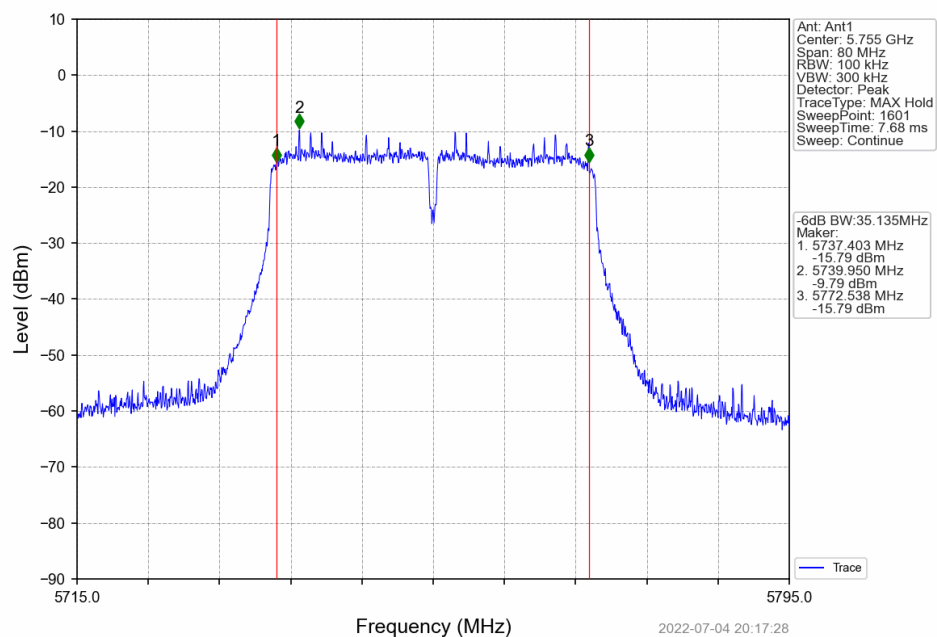
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTN



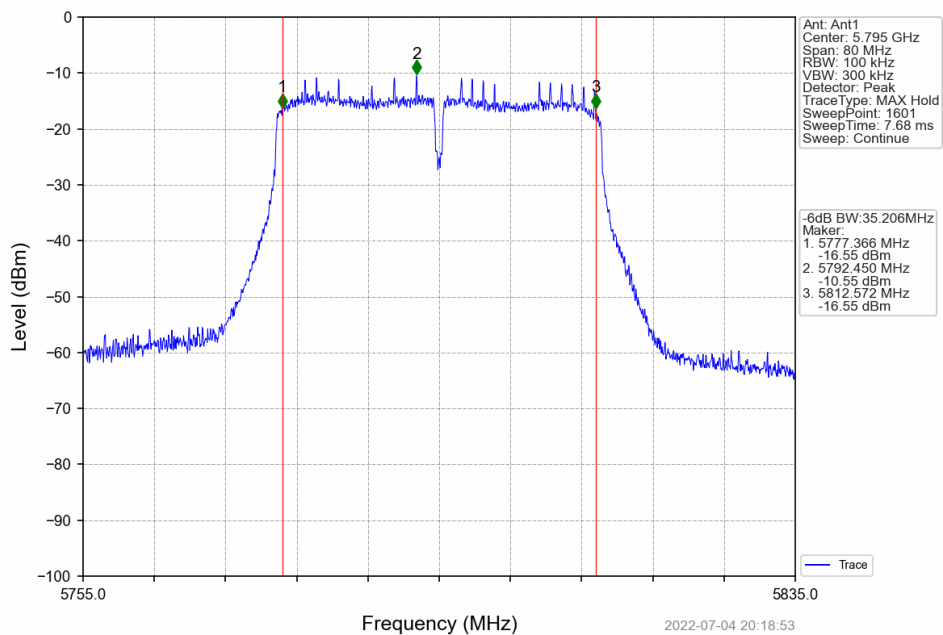
802.11ac(VHT20) HCH 5825MHz Ant1 NTN



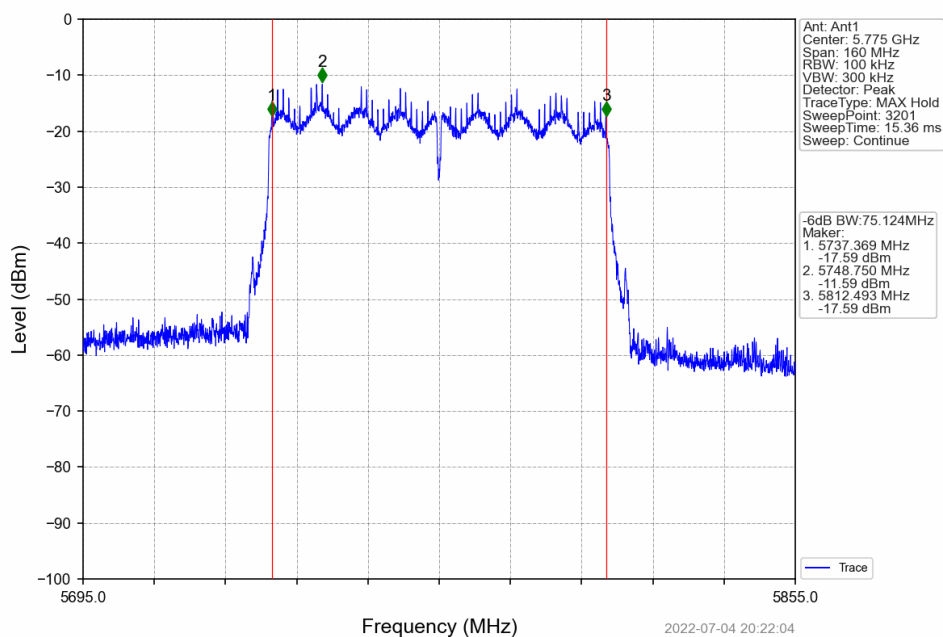
802.11ac(VHT40)_LCH_5755MHz_Ant1_NTN



802.11ac(VHT40) HCH 5795MHz Ant1 NTN



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTN



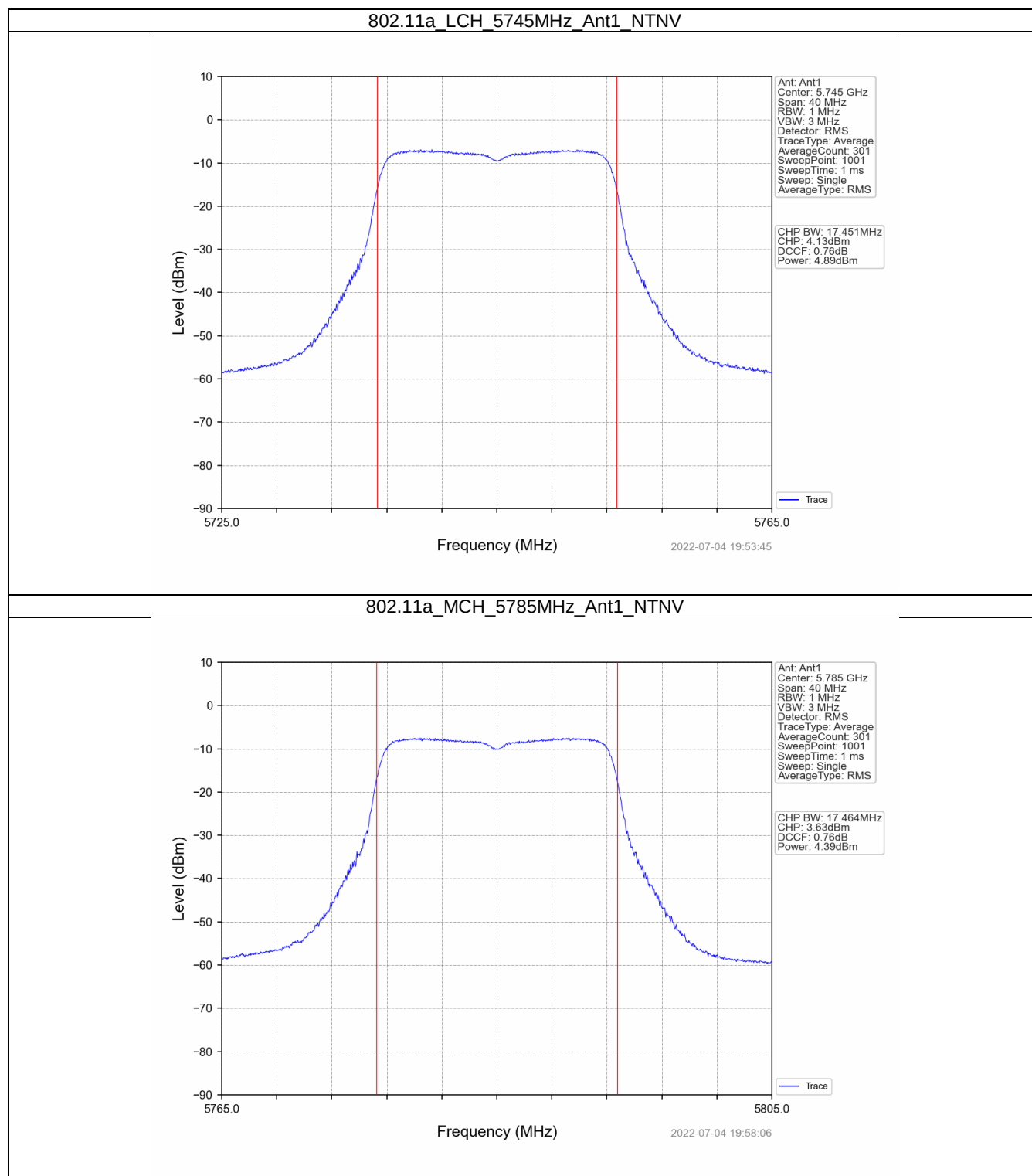
2. Maximum Conducted Output Power

2.1 Power

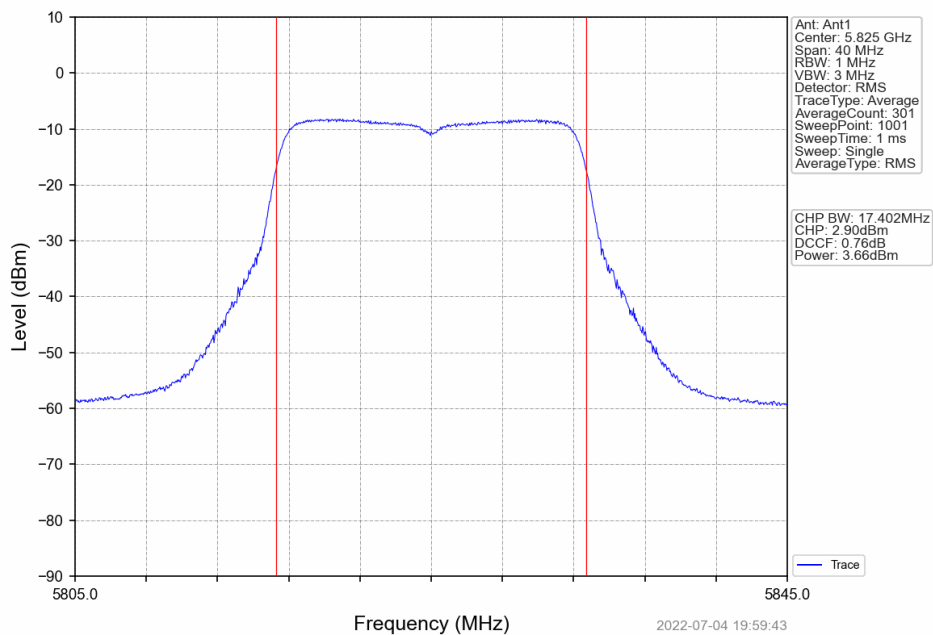
2.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5745	4.89	<=30	Pass
		5785	4.39	<=30	Pass
		5825	3.66	<=30	Pass
802.11n (HT20)	SISO	5745	3.89	<=30	Pass
		5785	3.15	<=30	Pass
		5825	2.43	<=30	Pass
802.11n (HT40)	SISO	5755	3.77	<=30	Pass
		5795	2.71	<=30	Pass
802.11ac (VHT20)	SISO	5745	3.97	<=30	Pass
		5785	3.28	<=30	Pass
		5825	2.48	<=30	Pass
802.11ac (VHT40)	SISO	5755	3.76	<=30	Pass
		5795	2.82	<=30	Pass
802.11ac (VHT80)	SISO	5775	3.45	<=30	Pass
Note1: Antenna Gain: Ant1: 3.48dBi;					

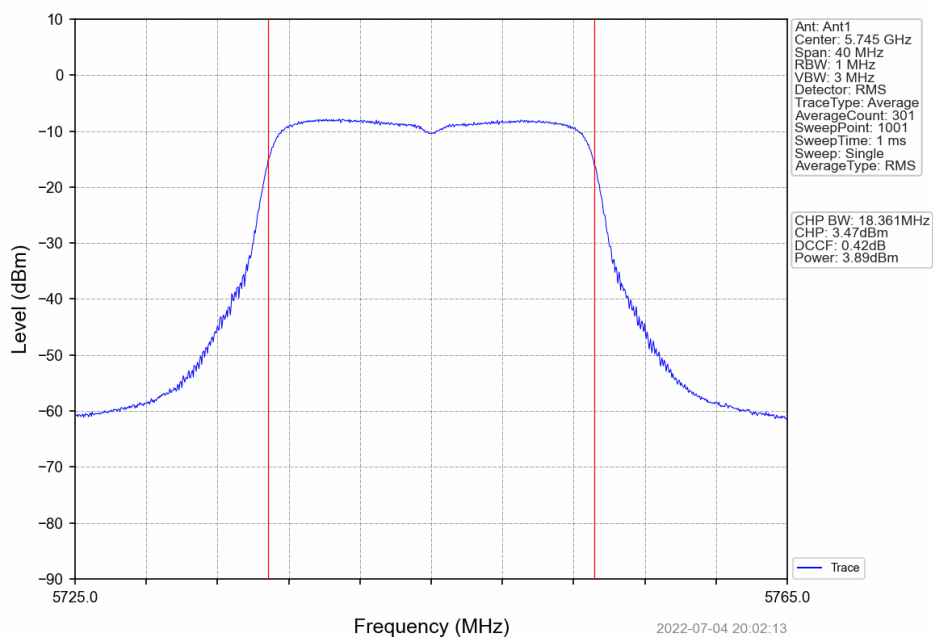
2.1.2 Test Graph



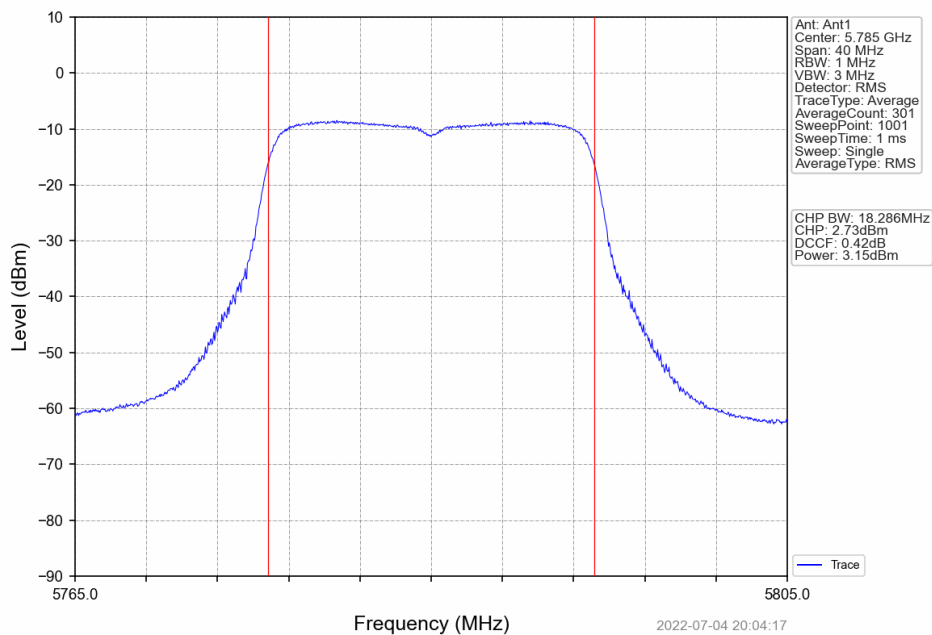
802.11a HCH 5825MHz Ant1 NTN



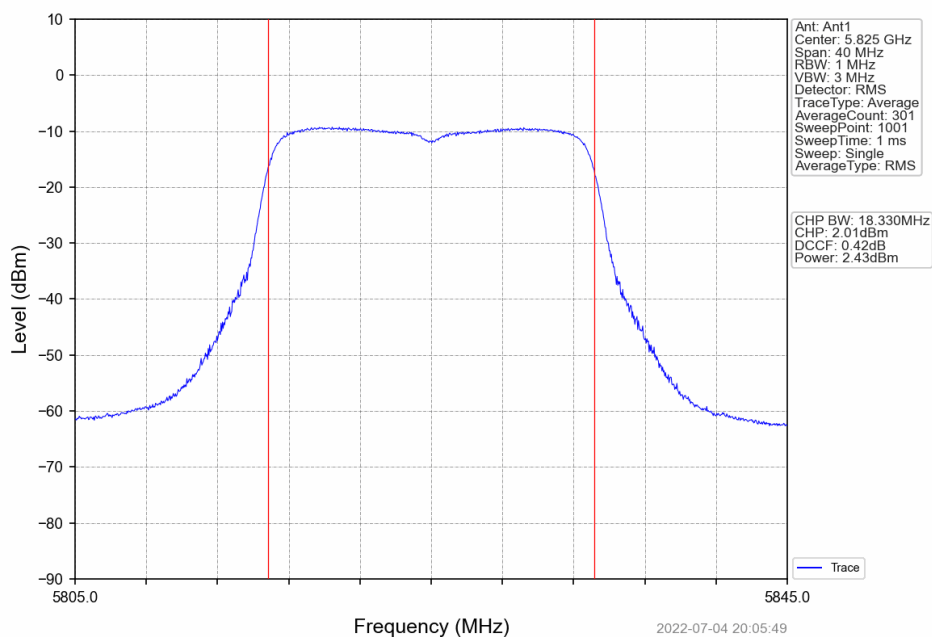
802.11n(HT20)_LCH_5745MHz_Ant1_NTN



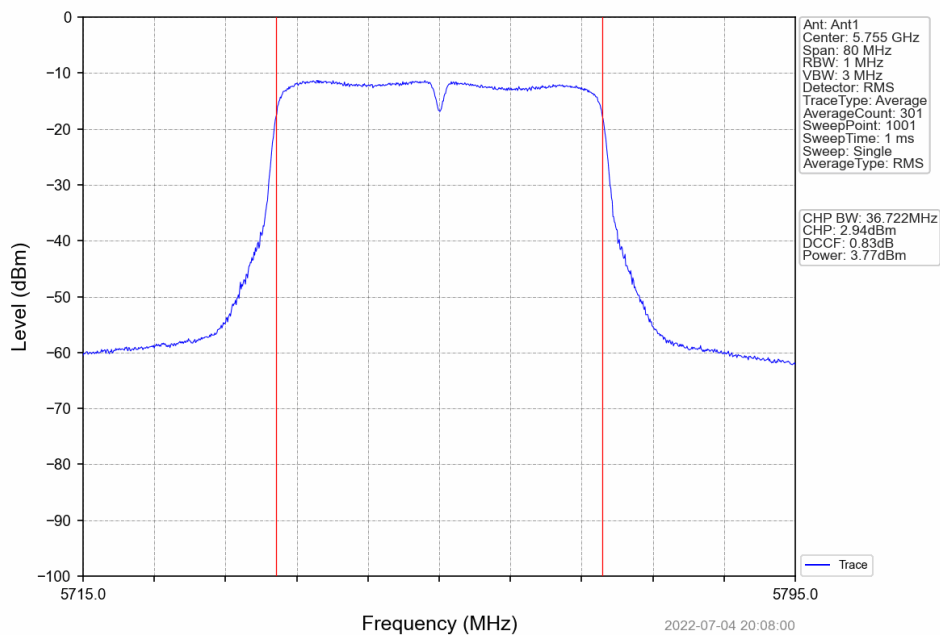
802.11n(HT20) MCH 5785MHz Ant1 NTN



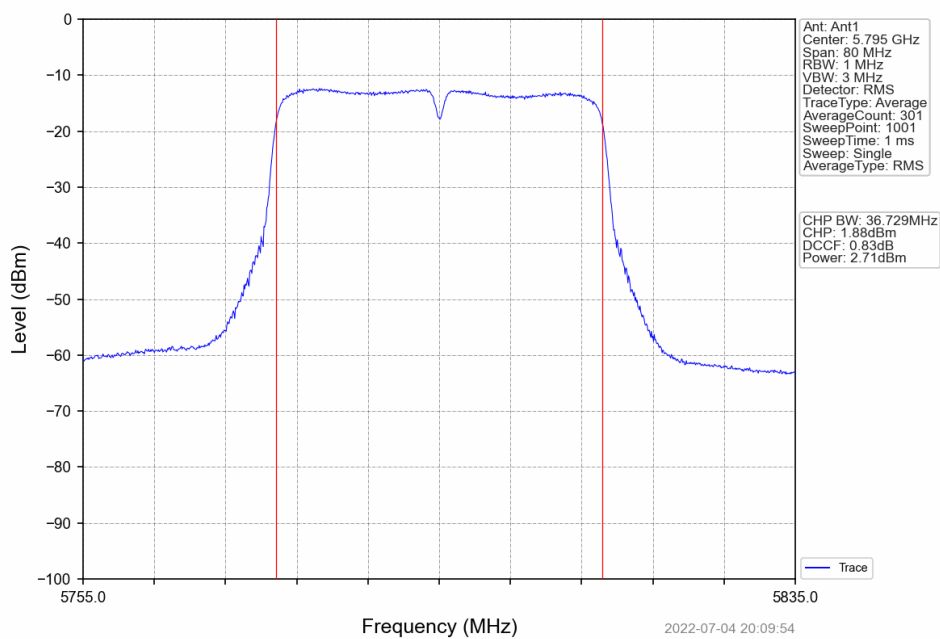
802.11n(HT20)_HCH_5825MHz_Ant1_NTN



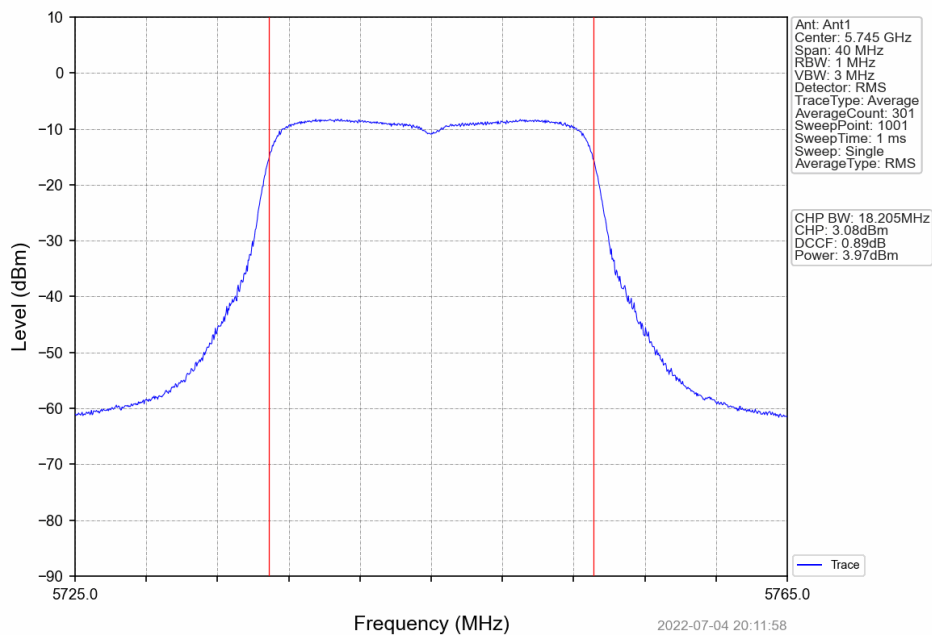
802.11n(HT40) LCH 5755MHz Ant1 NTN



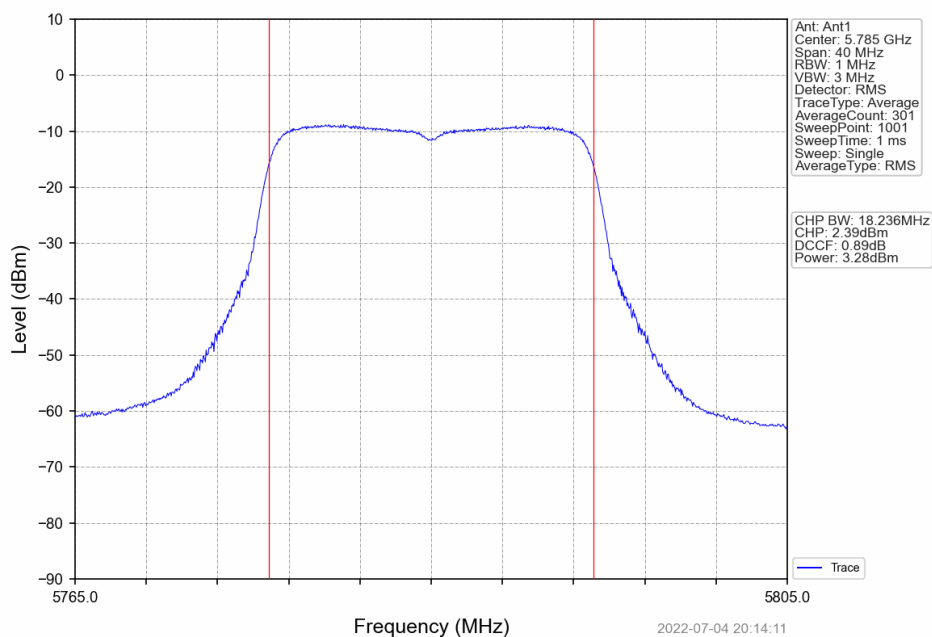
802.11n(HT40)_HCH_5795MHz_Ant1_NTN



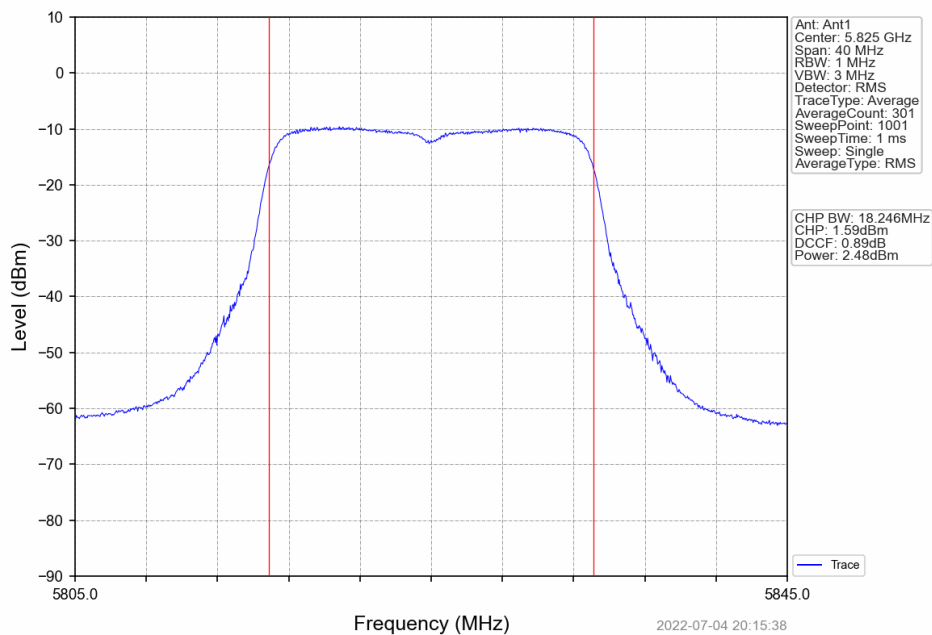
802.11ac(VHT20) LCH 5745MHz Ant1 NTN



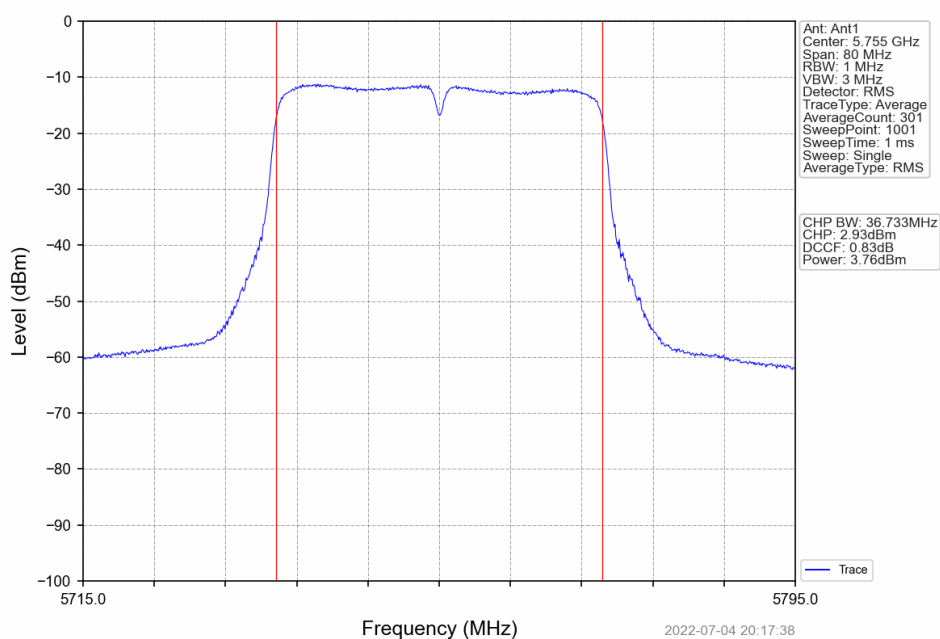
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTN



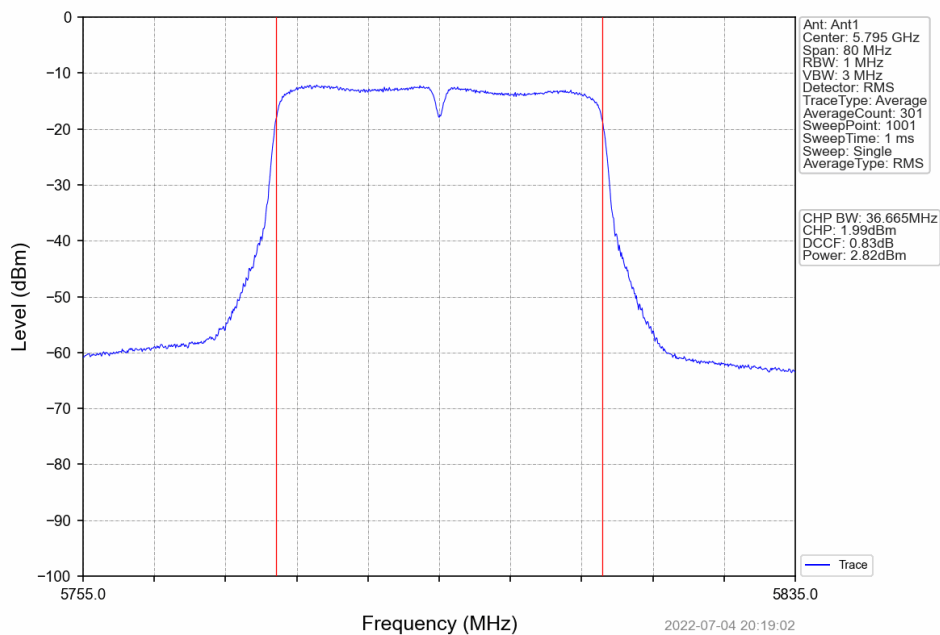
802.11ac(VHT20) HCH 5825MHz Ant1 NTN



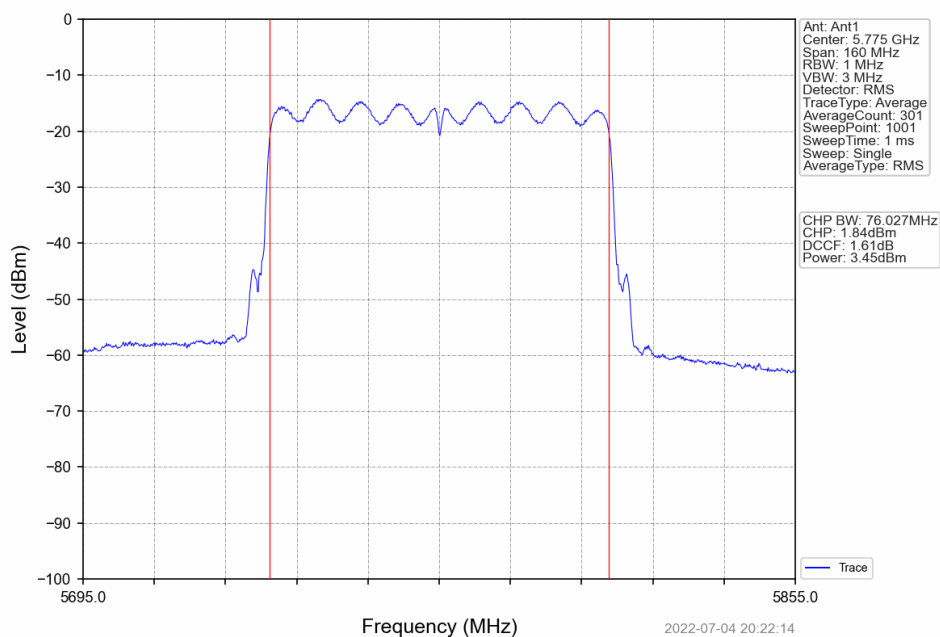
802.11ac(VHT40)_LCH_5755MHz_Ant1_NTN



802.11ac(VHT40) HCH 5795MHz Ant1 NTN



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTN



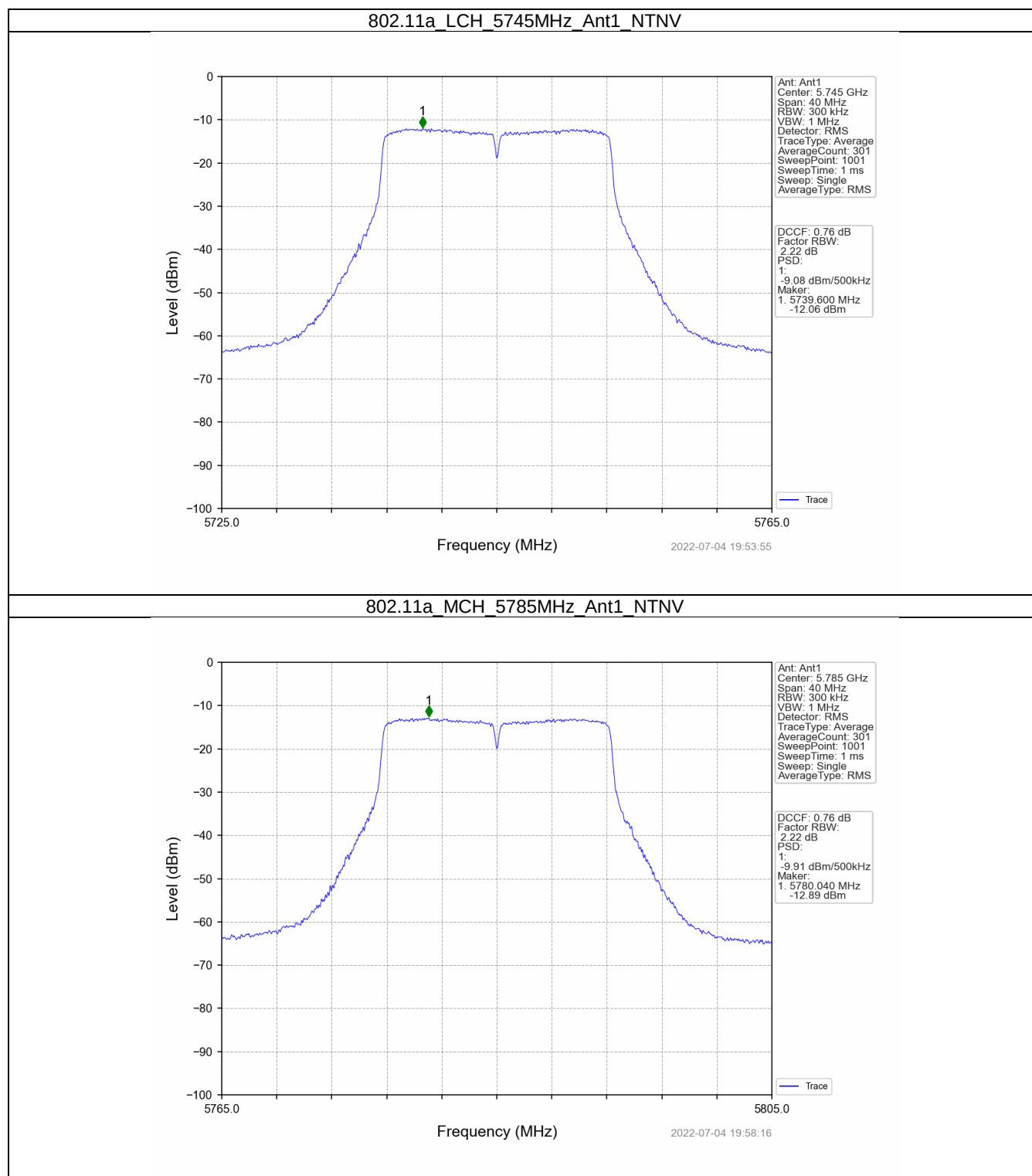
3. Maximum Power Spectral Density

3.1 PSD-Band3

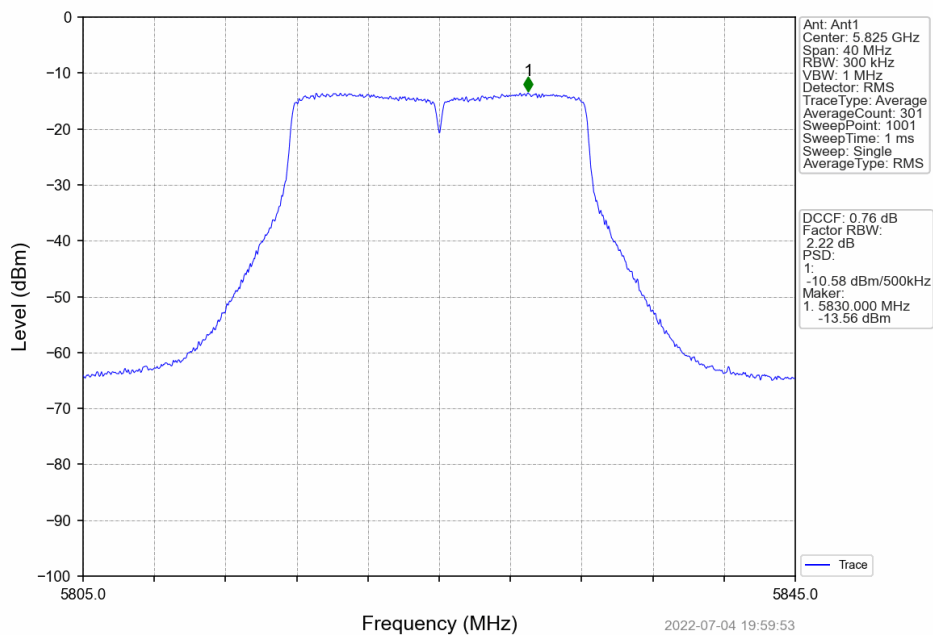
3.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/500kHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5745	-9.08	<=30	Pass
		5785	-9.91	<=30	Pass
		5825	-10.58	<=30	Pass
802.11n (HT20)	SISO	5745	-10.41	<=30	Pass
		5785	-11.27	<=30	Pass
		5825	-11.93	<=30	Pass
802.11n (HT40)	SISO	5755	-13.62	<=30	Pass
		5795	-14.27	<=30	Pass
802.11ac (VHT20)	SISO	5745	-10.47	<=30	Pass
		5785	-10.89	<=30	Pass
		5825	-11.71	<=30	Pass
802.11ac (VHT40)	SISO	5755	-13.56	<=30	Pass
		5795	-14.41	<=30	Pass
802.11ac (VHT80)	SISO	5775	-15.26	<=30	Pass
Note1: Antenna Gain: Ant1: 3.48dBi;					

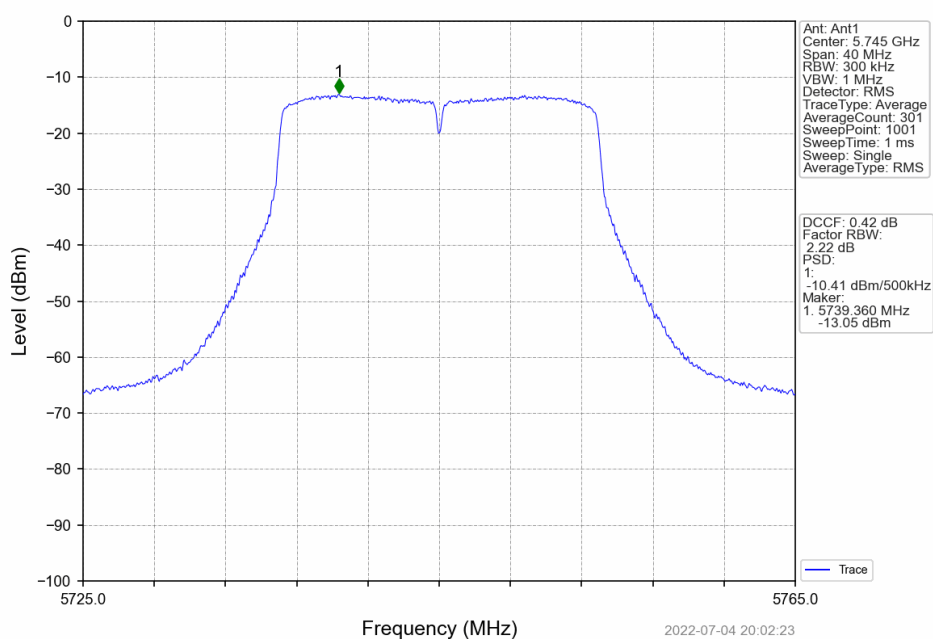
3.1.2 Test Graph



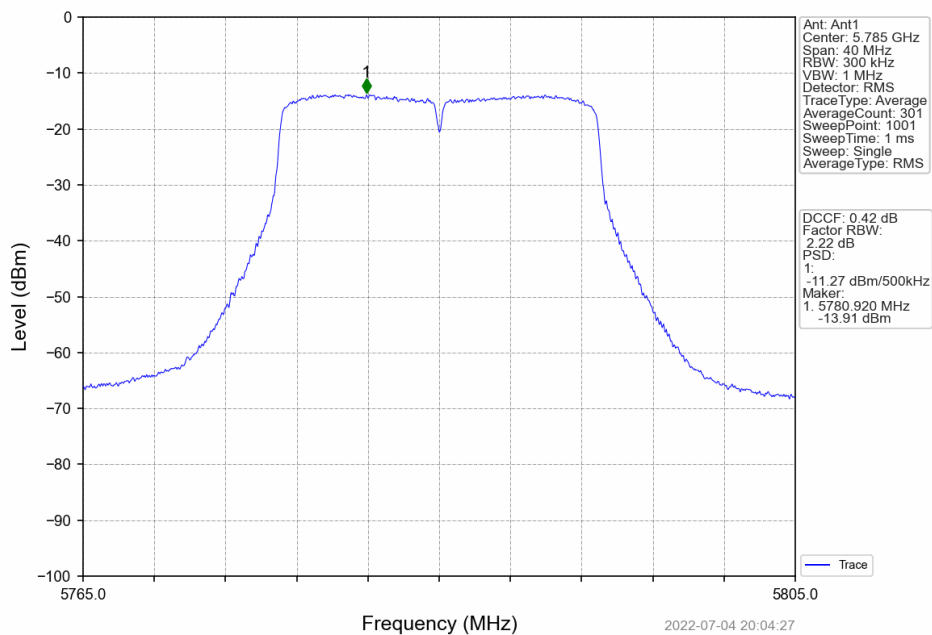
802.11a HCH 5825MHz Ant1 NTN



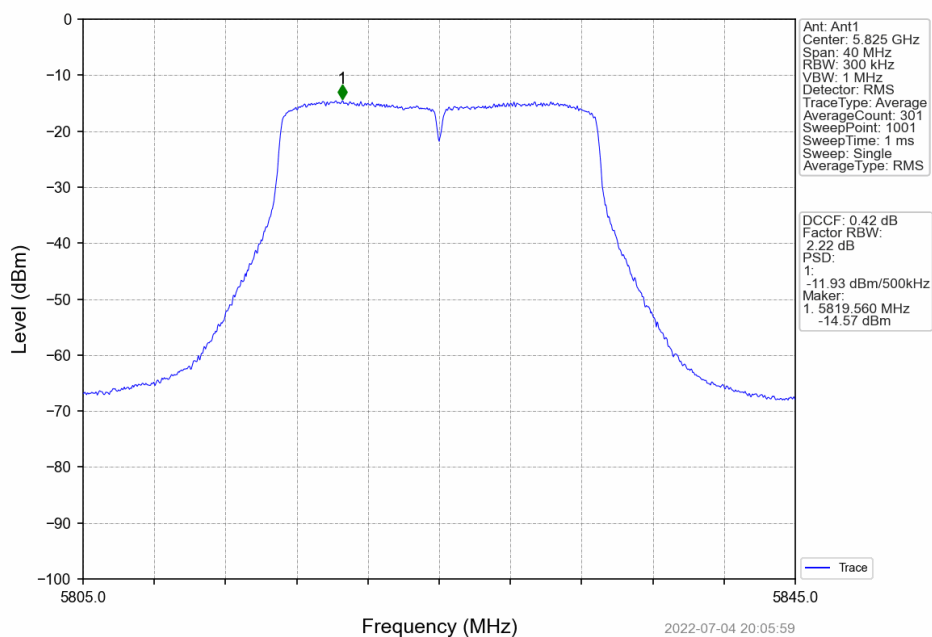
802.11n(HT20) LCH 5745MHz Ant1 NTN



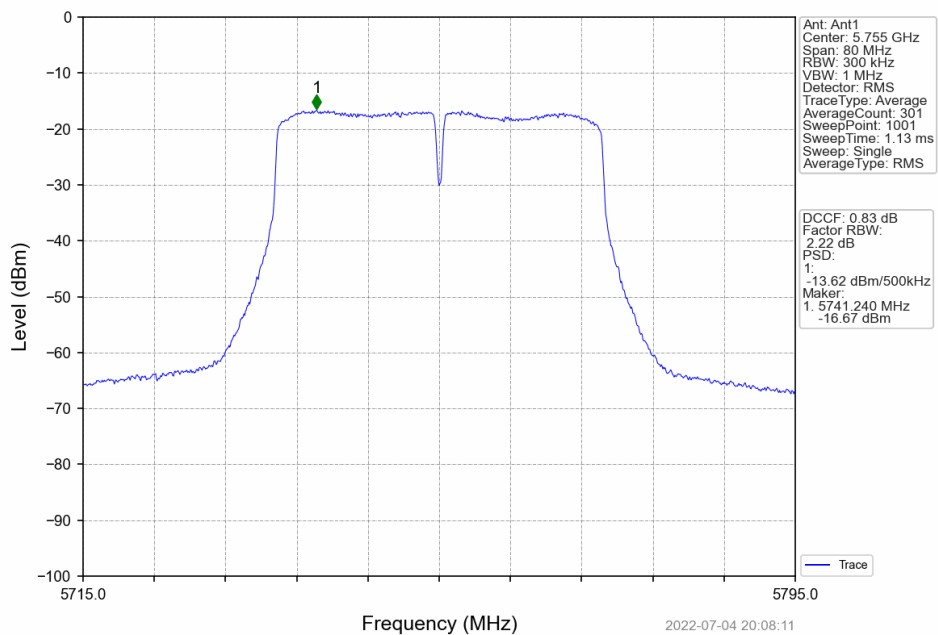
802.11n(HT20) MCH 5785MHz Ant1 NTN



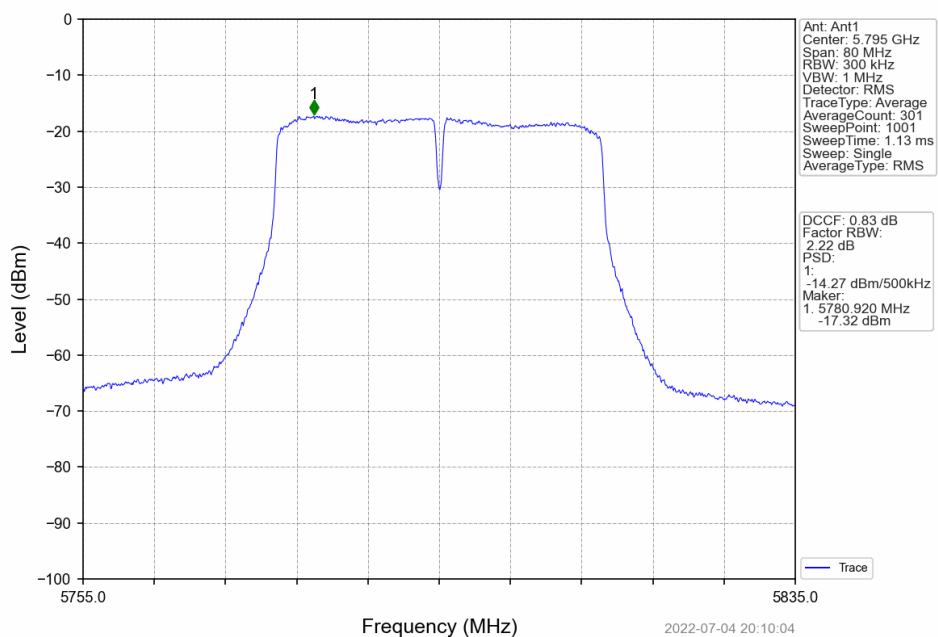
802.11n(HT20)_HCH_5825MHz_Ant1_NTN



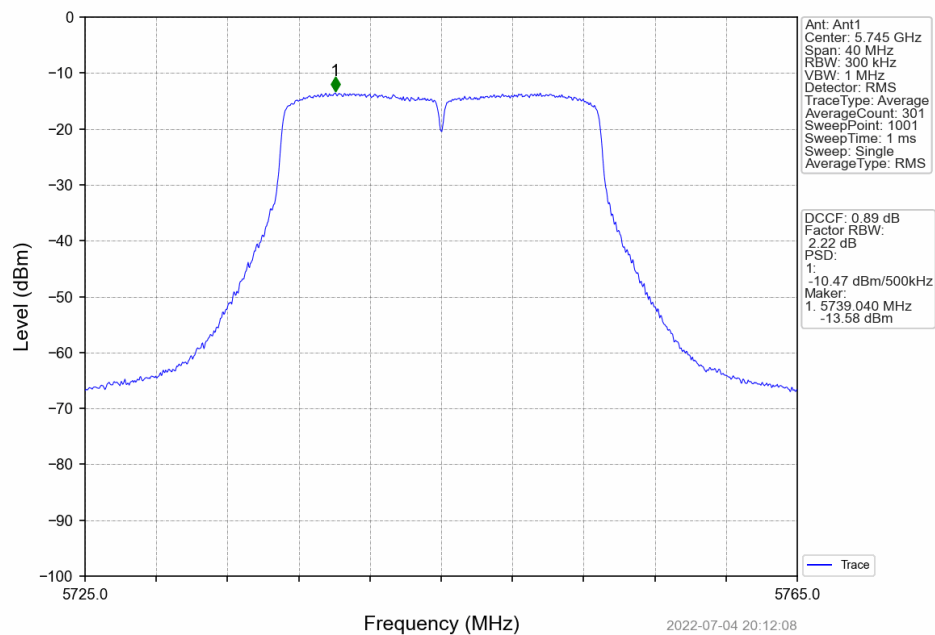
802.11n(HT40) LCH 5755MHz Ant1 NTN



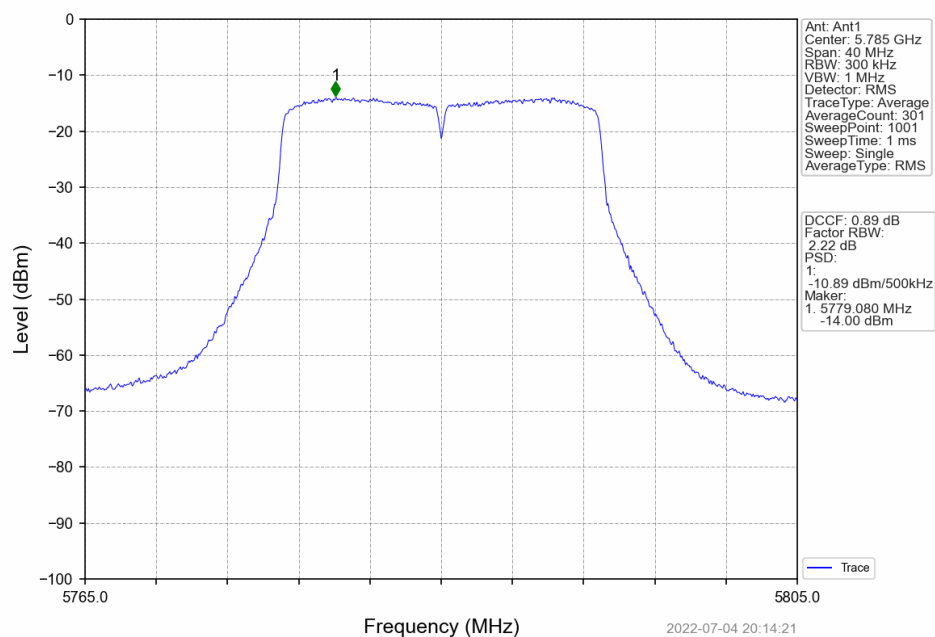
802.11n(HT40)_HCH_5795MHz_Ant1_NTN



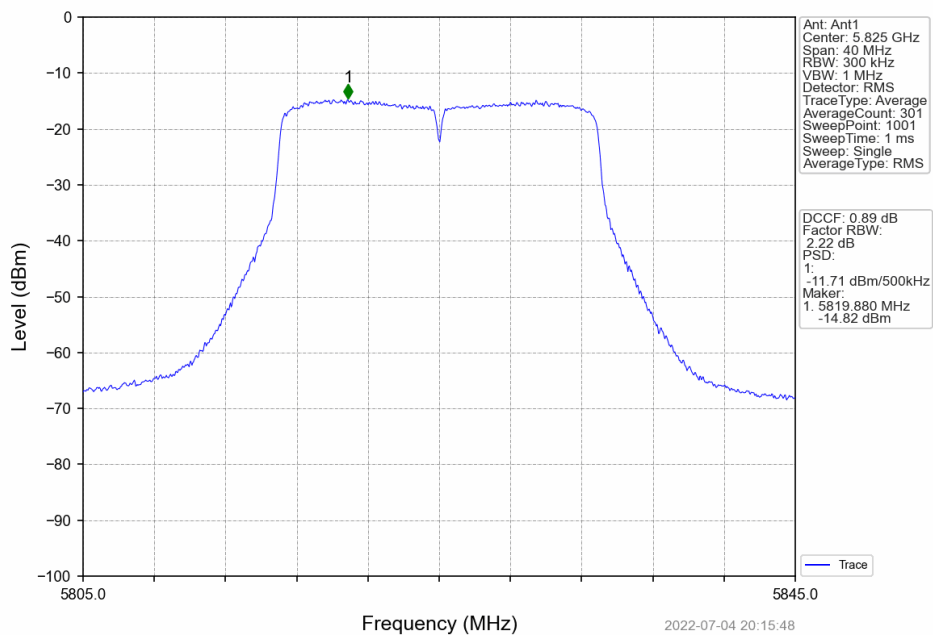
802.11ac(VHT20) LCH 5745MHz Ant1 NTN



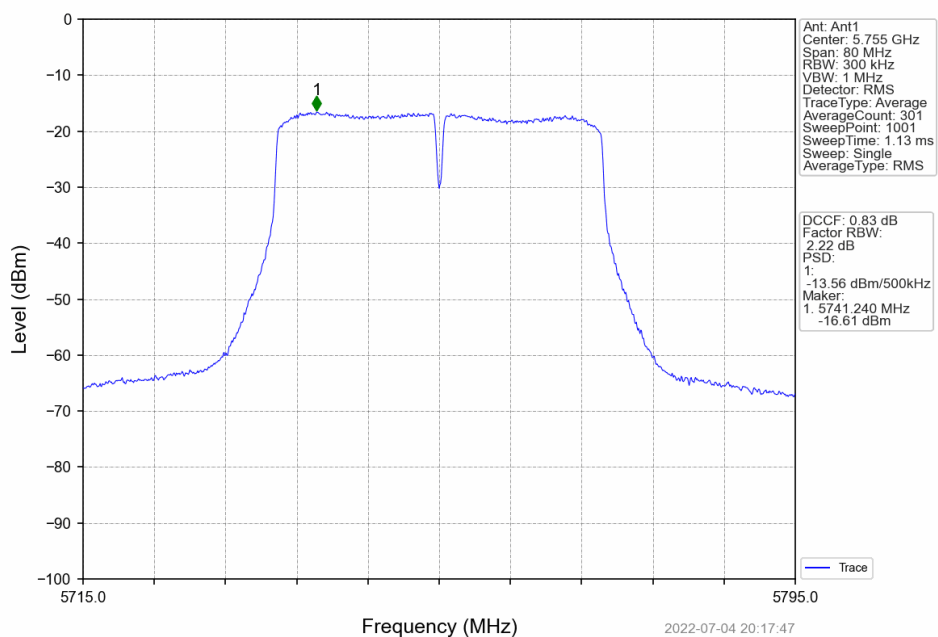
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTN



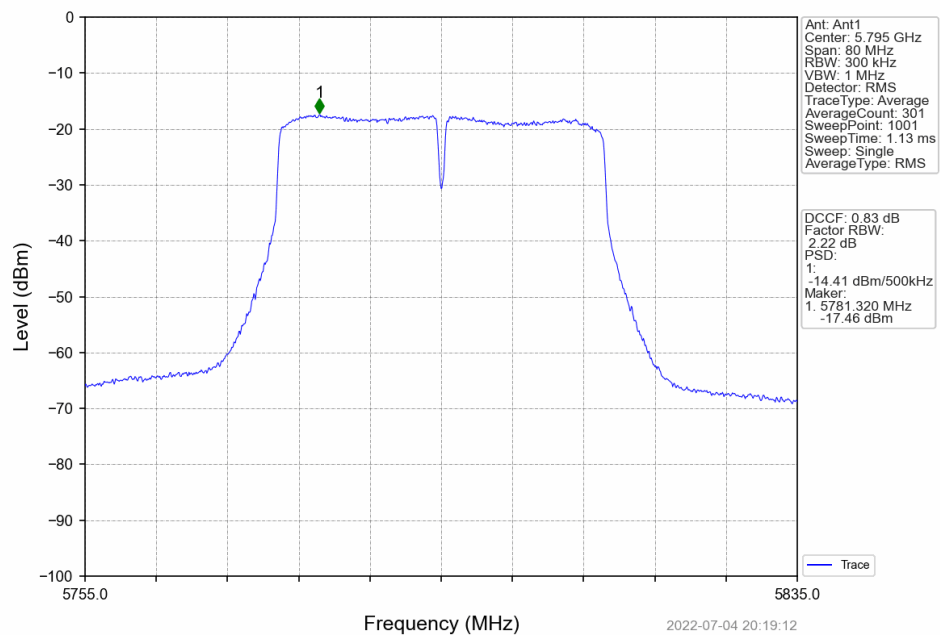
802.11ac(VHT20) HCH 5825MHz Ant1 NTN



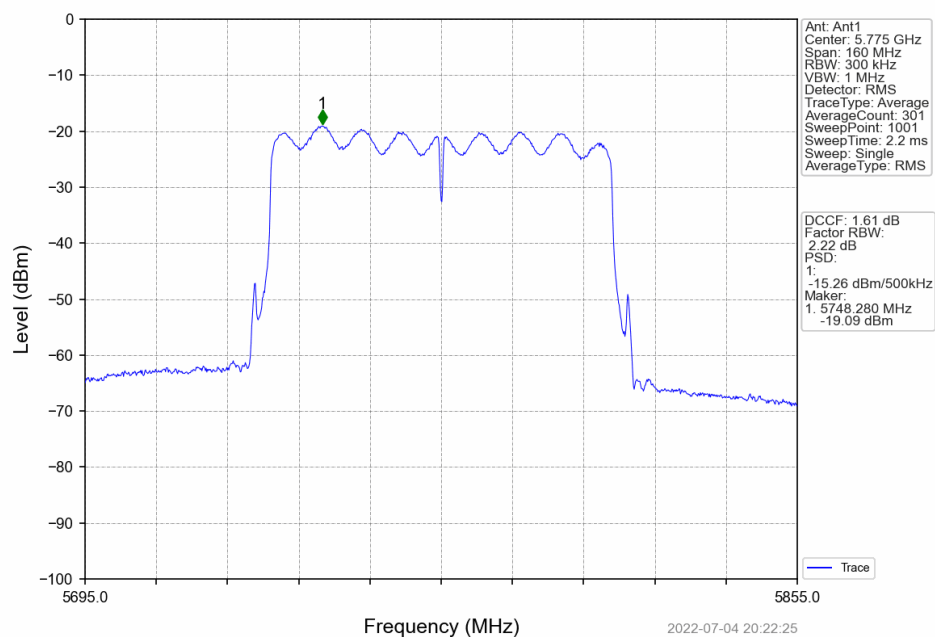
802.11ac(VHT40)_LCH_5755MHz_Ant1_NTN



802.11ac(VHT40) HCH 5795MHz Ant1 NTN



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTN



4. Frequency Stability

4.1 Ant1

4.1.1 Test Result

Ant1							
Mode	TX Type	Frequency (MHz)	Temperature (°C)	Voltage (VAC)	Measured Frequency (MHz)	Limit (MHz)	Verdict
Carrier Wave	SISO	5745	20	102	5744.966	5725 to 5850	Pass
				120	5744.965	5725 to 5850	Pass
				138	5744.964	5725 to 5850	Pass
			-30	120	5744.964	5725 to 5850	Pass
			-20	120	5744.964	5725 to 5850	Pass
			-10	120	5744.964	5725 to 5850	Pass
			0	120	5744.963	5725 to 5850	Pass
			10	120	5744.963	5725 to 5850	Pass
			30	120	5744.963	5725 to 5850	Pass
			40	120	5744.963	5725 to 5850	Pass
			50	120	5744.963	5725 to 5850	Pass
		5785	20	102	5784.964	5725 to 5850	Pass
				120	5784.963	5725 to 5850	Pass
				138	5784.963	5725 to 5850	Pass
			-30	120	5784.963	5725 to 5850	Pass
			-20	120	5784.962	5725 to 5850	Pass
			-10	120	5784.962	5725 to 5850	Pass
			0	120	5784.962	5725 to 5850	Pass
			10	120	5784.962	5725 to 5850	Pass
			30	120	5784.962	5725 to 5850	Pass
			40	120	5784.962	5725 to 5850	Pass
			50	120	5784.962	5725 to 5850	Pass
		5825	20	102	5824.964	5725 to 5850	Pass
				120	5824.963	5725 to 5850	Pass
				138	5824.963	5725 to 5850	Pass
			-30	120	5824.962	5725 to 5850	Pass
			-20	120	5824.962	5725 to 5850	Pass
			-10	120	5824.962	5725 to 5850	Pass
			0	120	5824.962	5725 to 5850	Pass
			10	120	5824.962	5725 to 5850	Pass
			30	120	5824.962	5725 to 5850	Pass
			40	120	5824.962	5725 to 5850	Pass
			50	120	5824.962	5725 to 5850	Pass
		5755	20	102	5754.964	5725 to 5850	Pass
				120	5754.964	5725 to 5850	Pass
				138	5754.963	5725 to 5850	Pass
			-30	120	5754.963	5725 to 5850	Pass
			-20	120	5754.963	5725 to 5850	Pass
			-10	120	5754.963	5725 to 5850	Pass
			0	120	5754.963	5725 to 5850	Pass
			10	120	5754.962	5725 to 5850	Pass
			30	120	5754.962	5725 to 5850	Pass
			40	120	5754.962	5725 to 5850	Pass
			50	120	5754.962	5725 to 5850	Pass
		5795	20	102	5794.964	5725 to 5850	Pass
				120	5794.963	5725 to 5850	Pass
				138	5794.963	5725 to 5850	Pass
			-30	120	5794.962	5725 to 5850	Pass
			-20	120	5794.962	5725 to 5850	Pass

			-10	120	5794.962	5725 to 5850	Pass
			0	120	5794.962	5725 to 5850	Pass
			10	120	5794.962	5725 to 5850	Pass
			30	120	5794.962	5725 to 5850	Pass
			40	120	5794.962	5725 to 5850	Pass
			50	120	5794.962	5725 to 5850	Pass
		5775	20	102	5774.965	5725 to 5850	Pass
				120	5774.964	5725 to 5850	Pass
				138	5774.963	5725 to 5850	Pass
			-30	120	5774.963	5725 to 5850	Pass
			-20	120	5774.963	5725 to 5850	Pass
			-10	120	5774.962	5725 to 5850	Pass
			0	120	5774.962	5725 to 5850	Pass
			10	120	5774.962	5725 to 5850	Pass
			30	120	5774.962	5725 to 5850	Pass
			40	120	5774.962	5725 to 5850	Pass
			50	120	5774.962	5725 to 5850	Pass