

1. Duty Cycle

1.1 Test Result

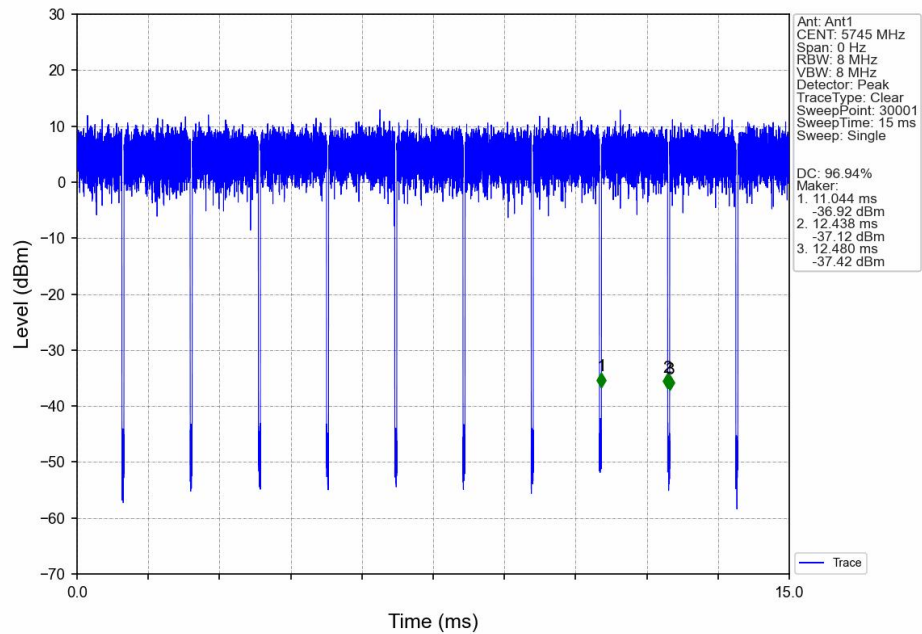
1.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5745	1.393	1.437	96.94	0.14	0.03
		5785	1.393	1.436	97.01	0.13	0.04
		5825	1.392	1.436	96.94	0.14	0.07
802.11n (HT20)	SISO	5745	1.302	1.345	96.80	0.14	0.04
		5785	1.302	1.344	96.88	0.14	0.03
		5825	1.301	1.345	96.73	0.14	0.07
802.11n (HT40)	SISO	5755	0.649	0.692	93.79	0.28	0.03
		5795	0.648	0.692	93.64	0.29	0.07

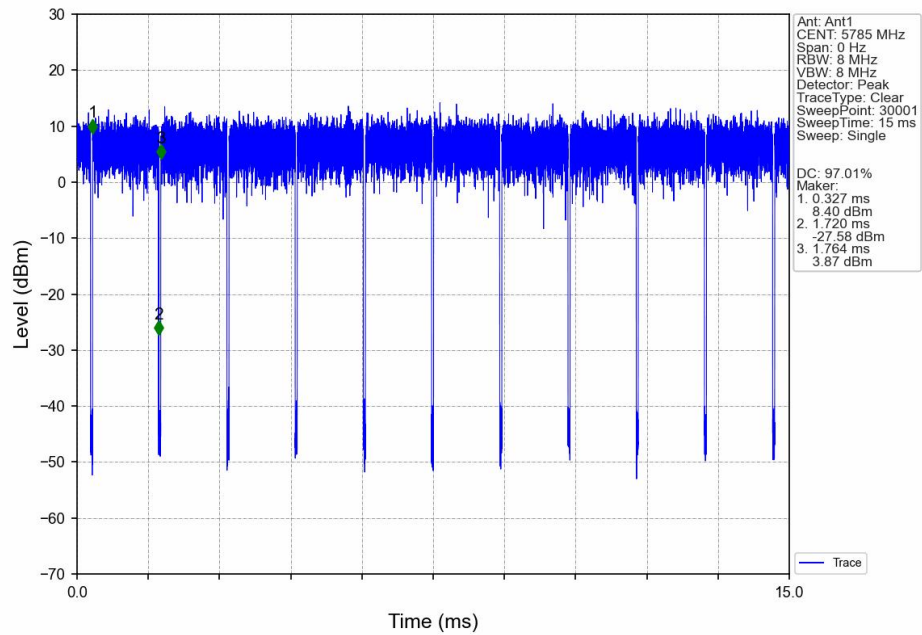
1.2 Test Graph

1.2.1 Ant1

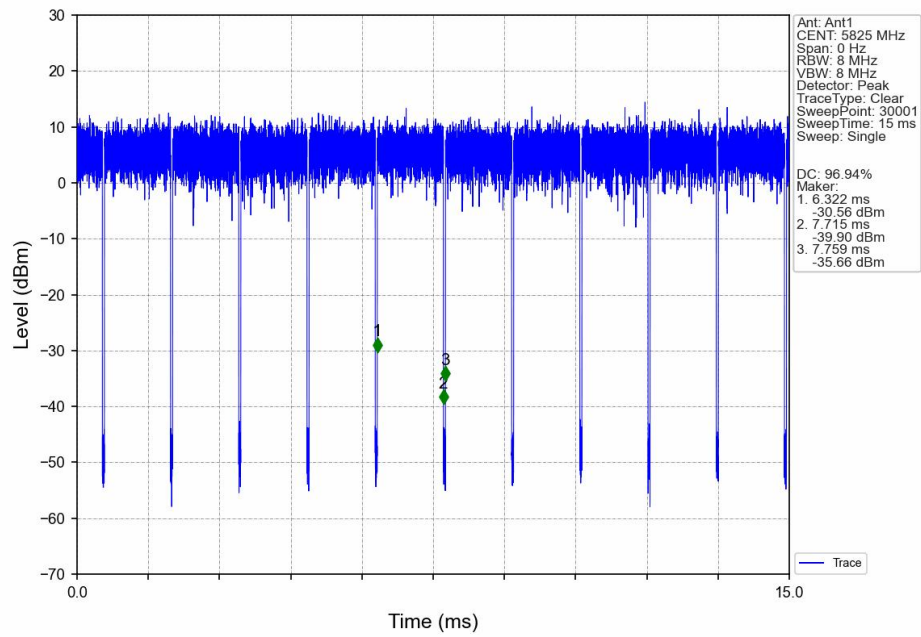
802.11a_LCH_5745MHz_Ant1_NTNV



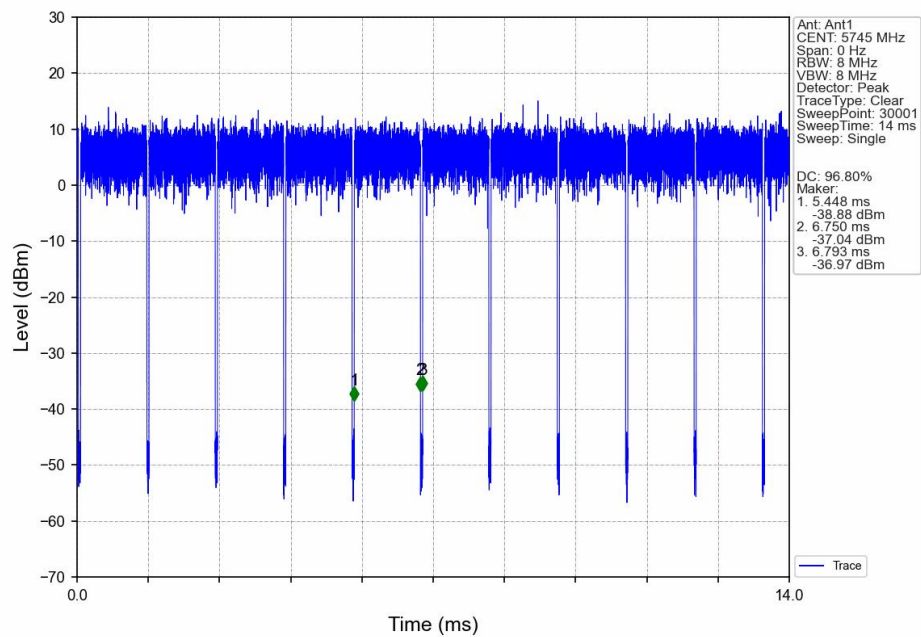
802.11a_MCH_5785MHz_Ant1_NTNV



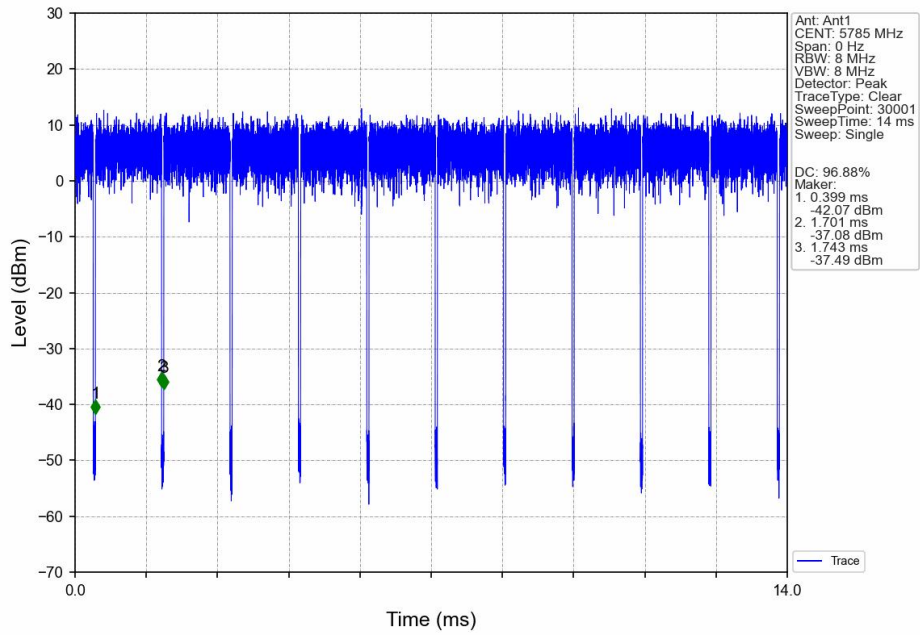
802.11a_HCH_5825MHz_Ant1_NTNV



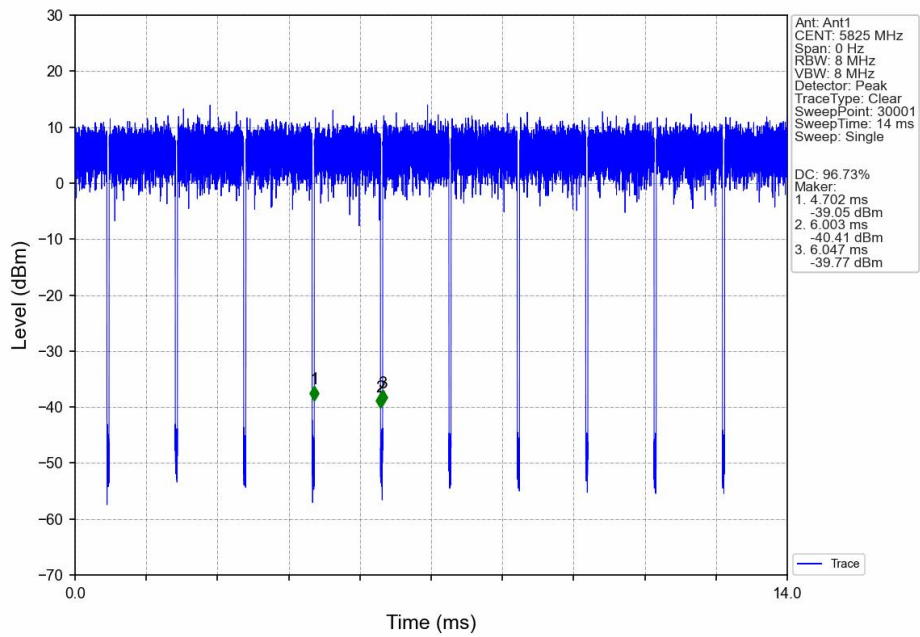
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



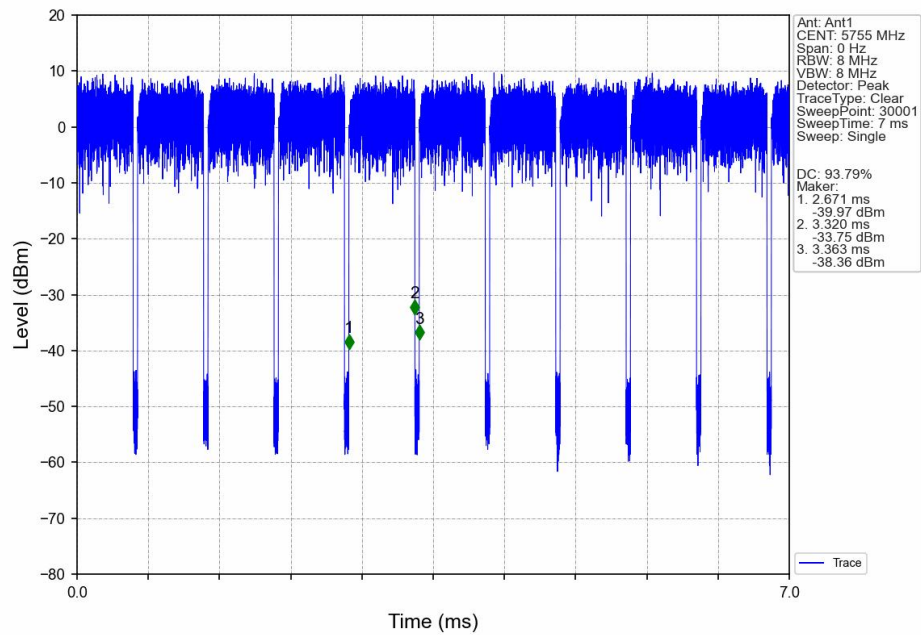
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



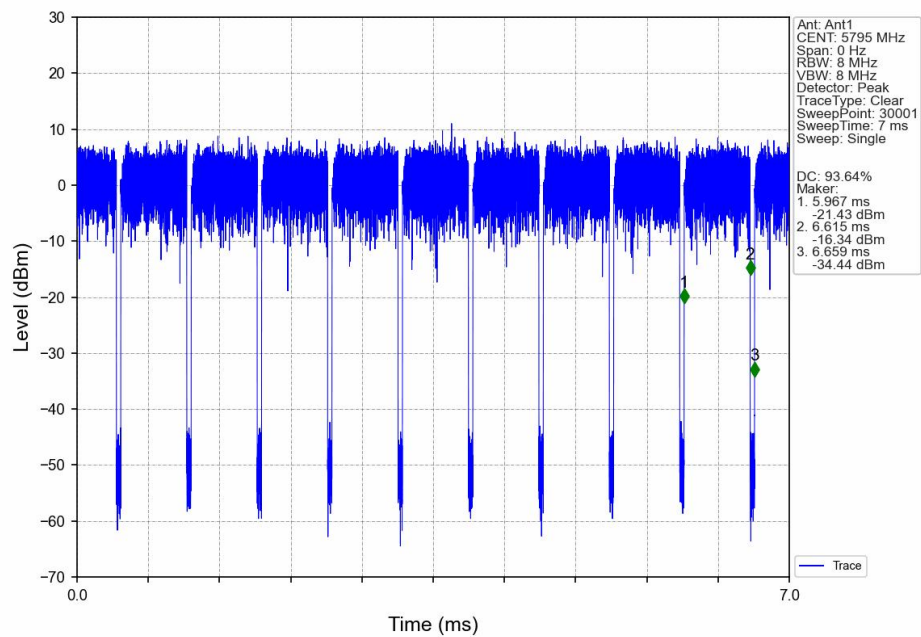
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



2. Bandwidth

2.1 Test Result

2.1.1 OBW

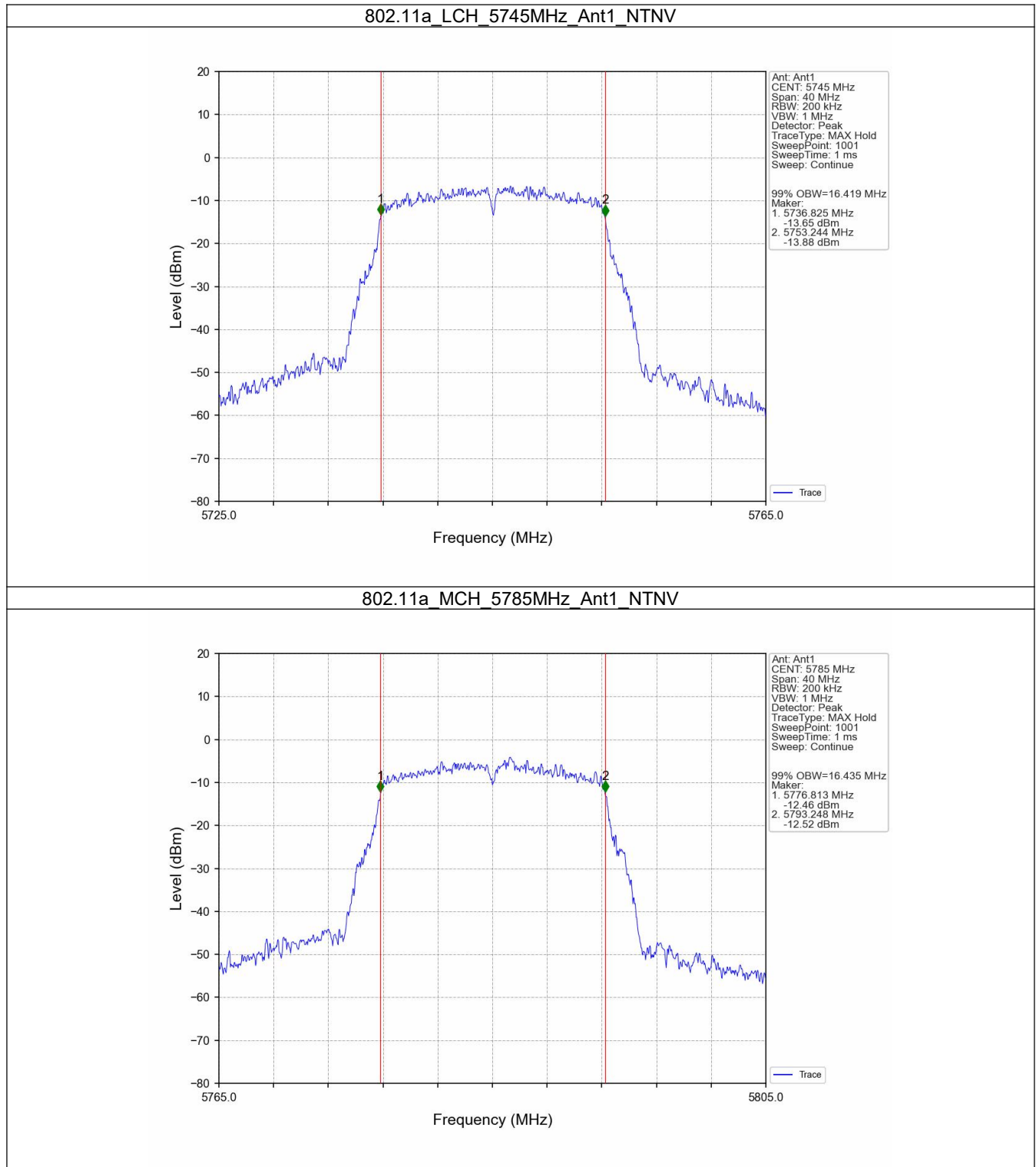
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	16.419	/	Pass
		5785	1	16.435	/	Pass
		5825	1	16.406	/	Pass
802.11n (HT20)	SISO	5745	1	17.527	/	Pass
		5785	1	17.545	/	Pass
		5825	1	17.565	/	Pass
802.11n (HT40)	SISO	5755	1	36.194	/	Pass
		5795	1	36.096	/	Pass

2.1.2 6dB BW

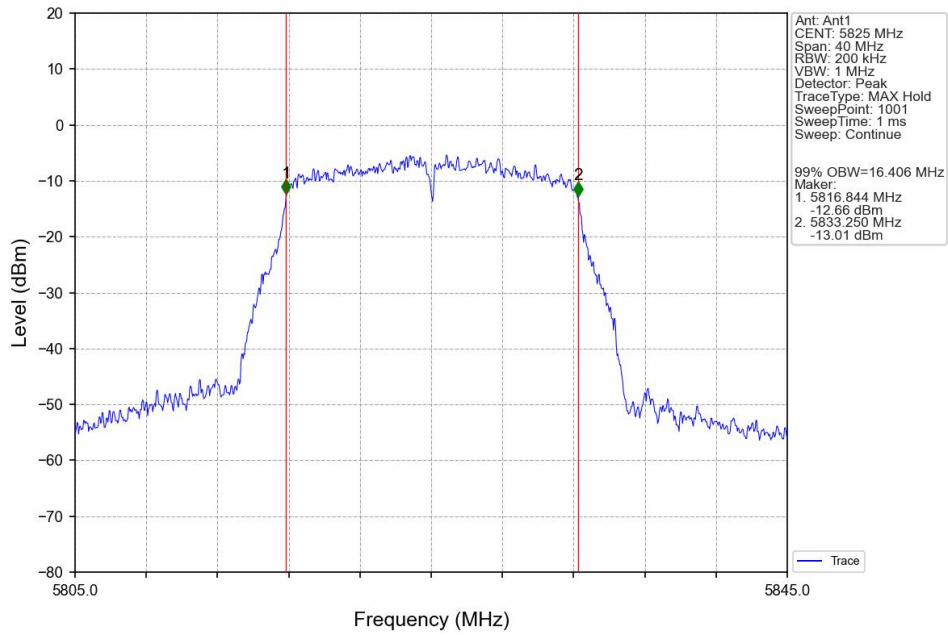
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	15.674	≥ 0.5	Pass
		5785	1	16.044	≥ 0.5	Pass
		5825	1	15.298	≥ 0.5	Pass
802.11n (HT20)	SISO	5745	1	15.110	≥ 0.5	Pass
		5785	1	17.048	≥ 0.5	Pass
		5825	1	15.098	≥ 0.5	Pass
802.11n (HT40)	SISO	5755	1	33.921	≥ 0.5	Pass
		5795	1	35.146	≥ 0.5	Pass

2.2 Test Graph

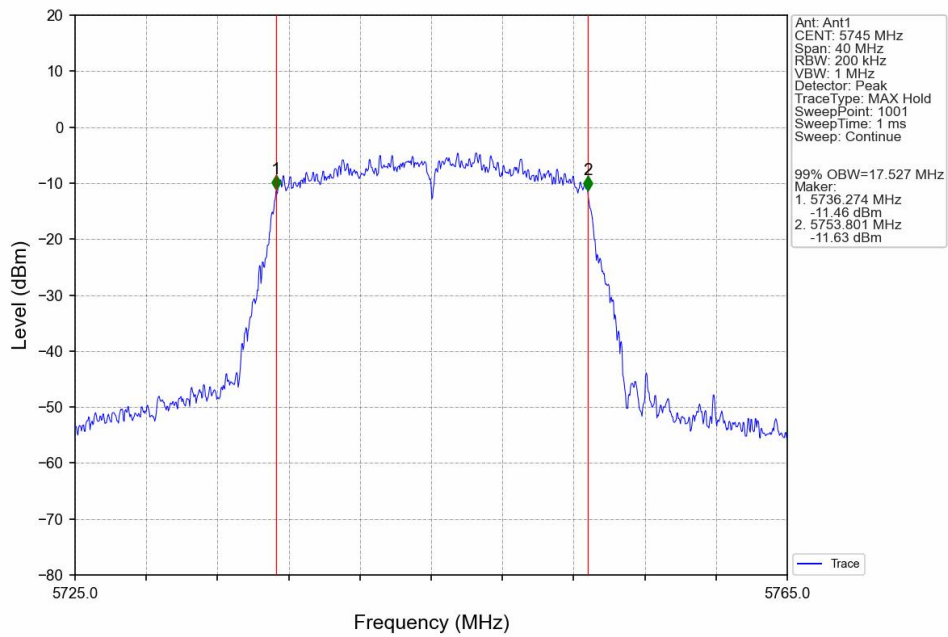
2.2.1 OBW



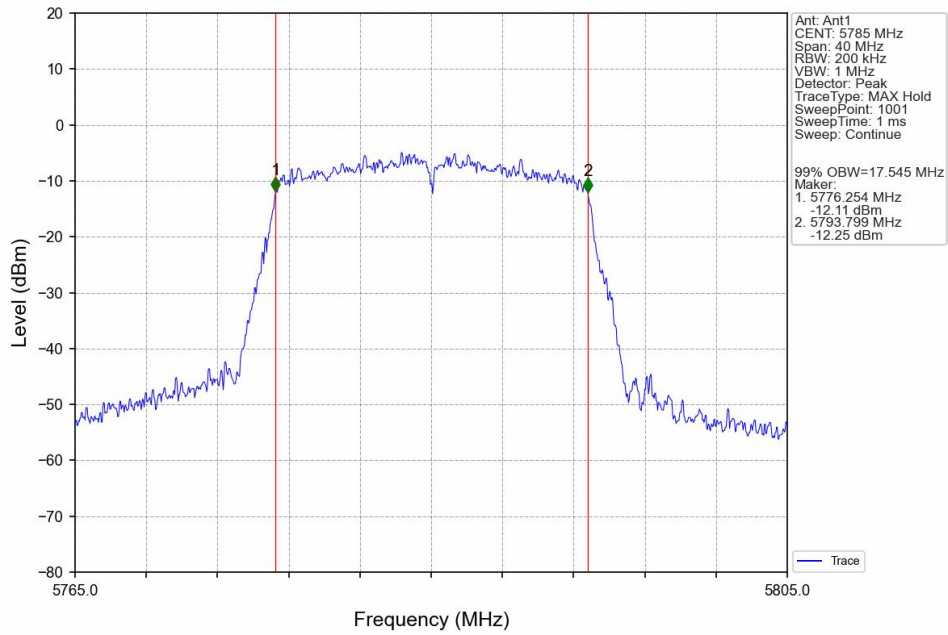
802.11a_HCH_5825MHz_Ant1_NTNV



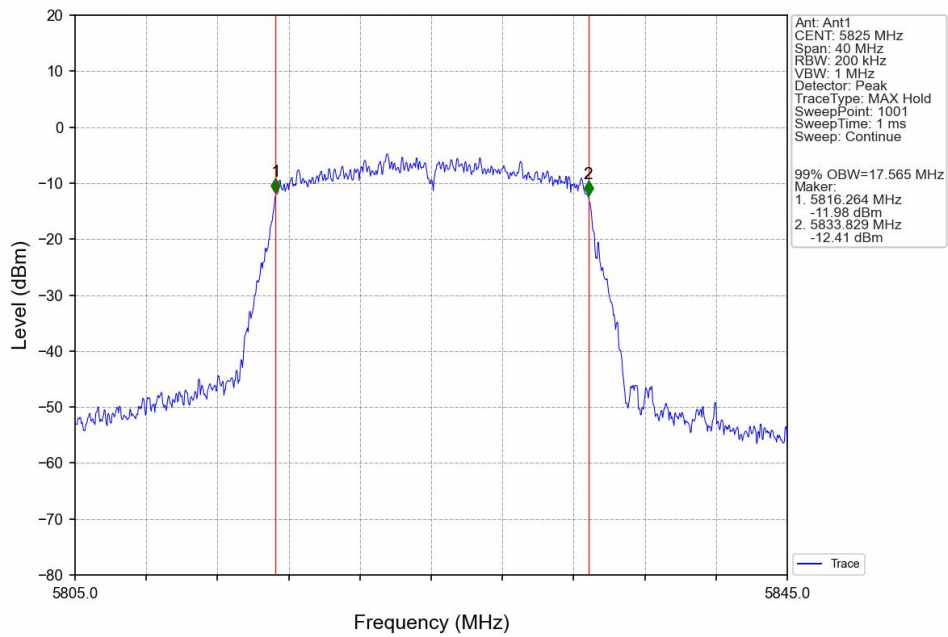
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



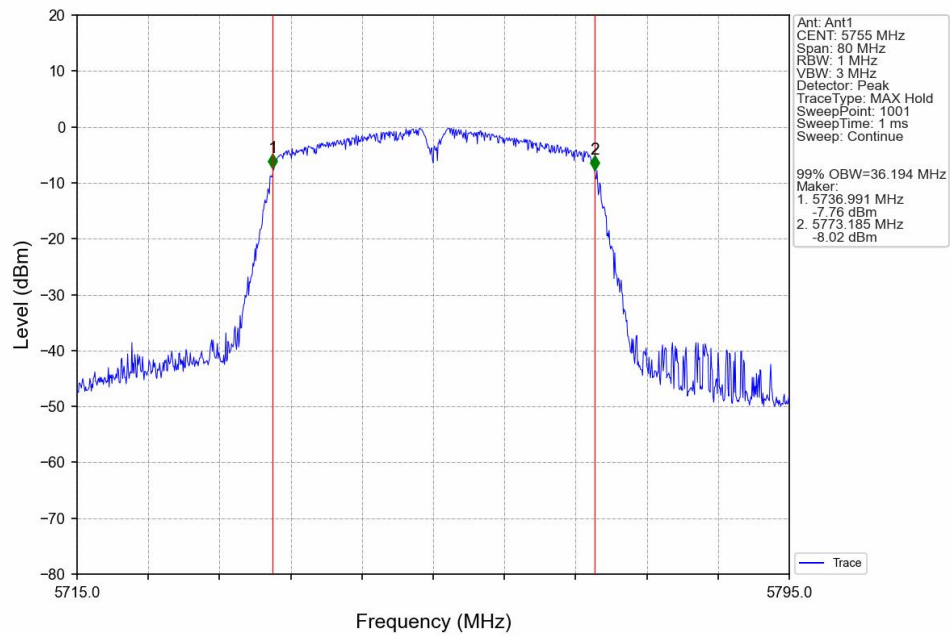
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



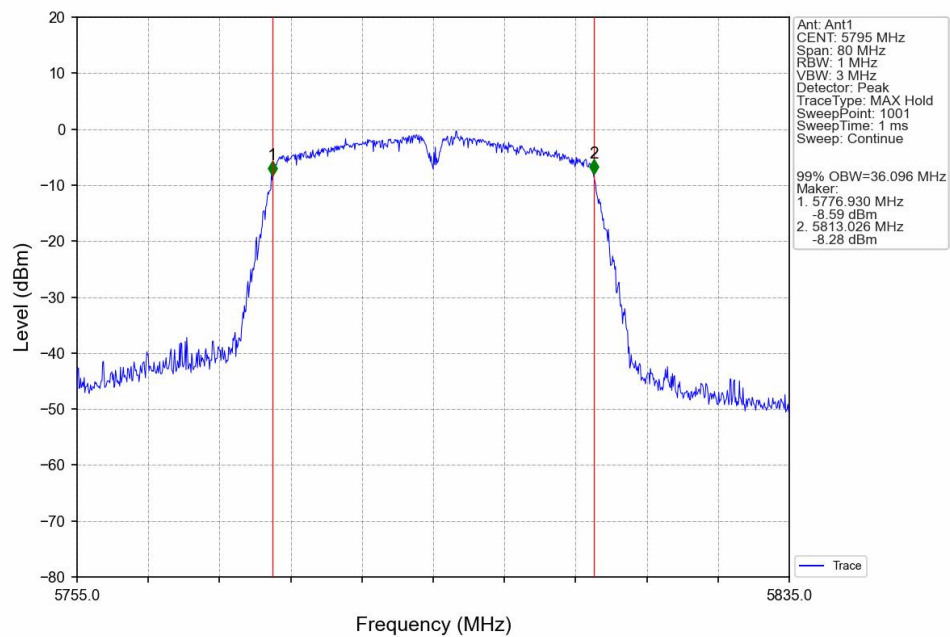
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



802.11n(HT40)_LCH_5755MHz_Ant1_NTNV

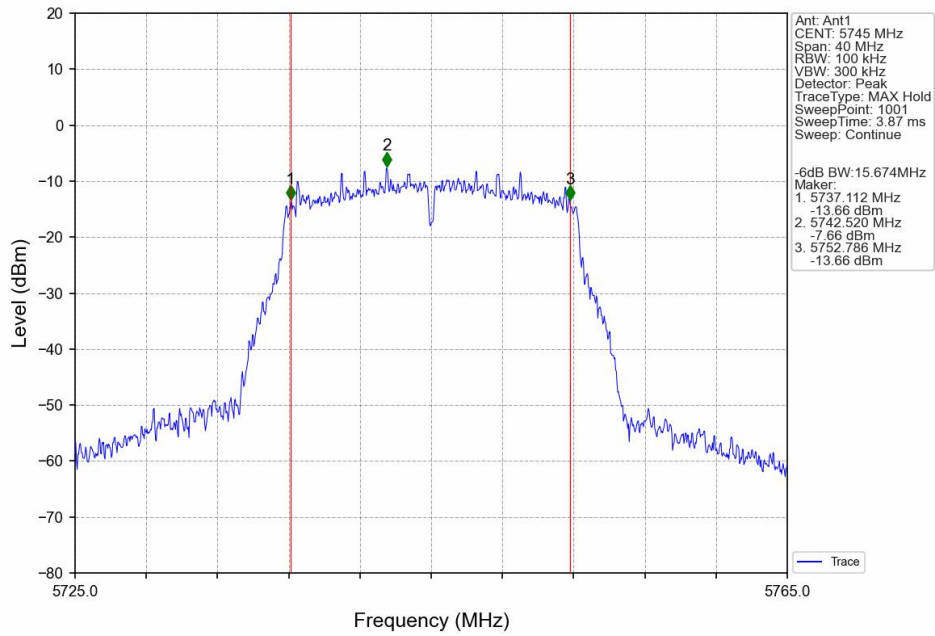


802.11n(HT40)_HCH_5795MHz_Ant1_NTNV

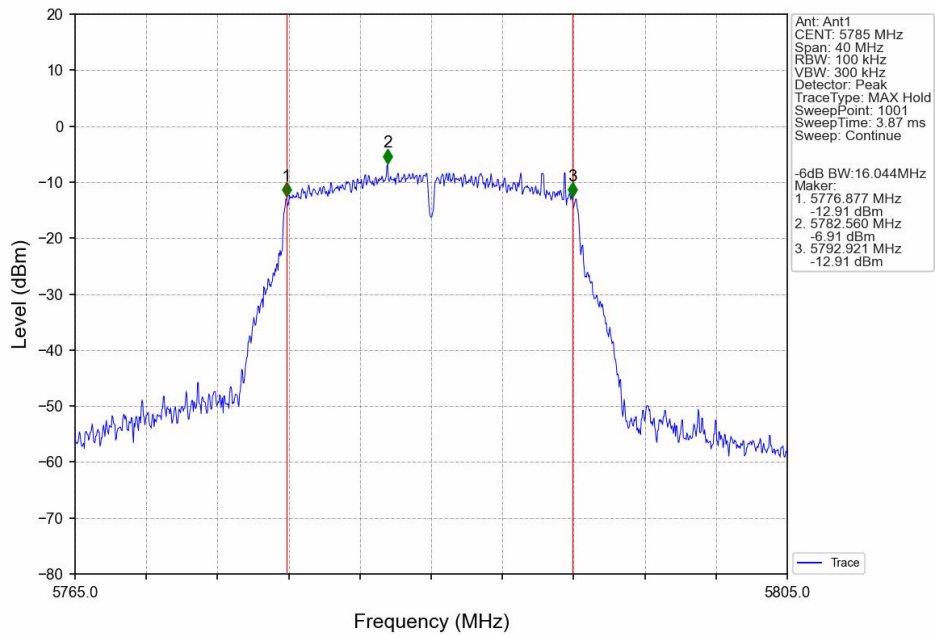


2.2.2 6dB BW

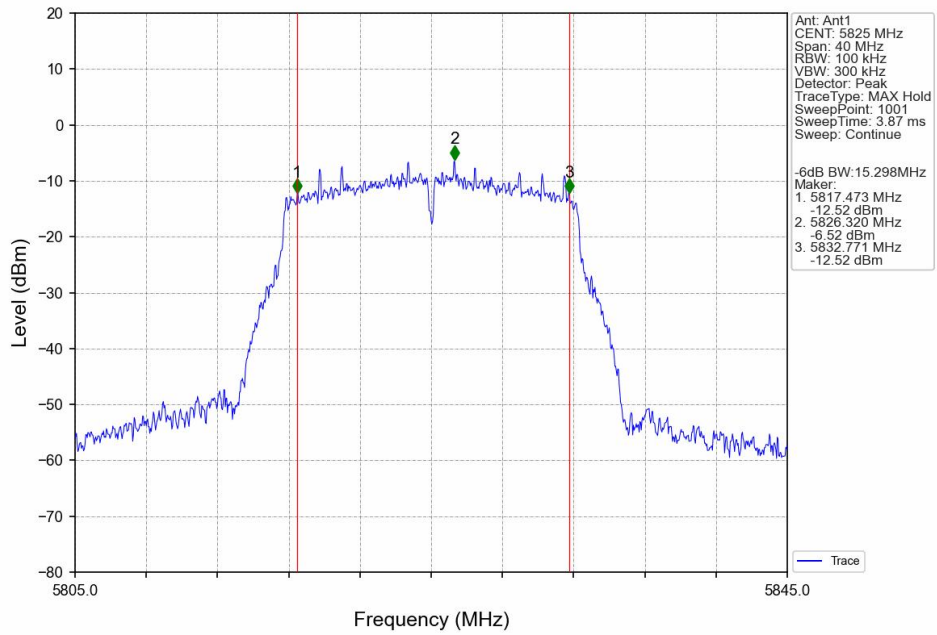
802.11a_LCH_5745MHz_Ant1_NTNV



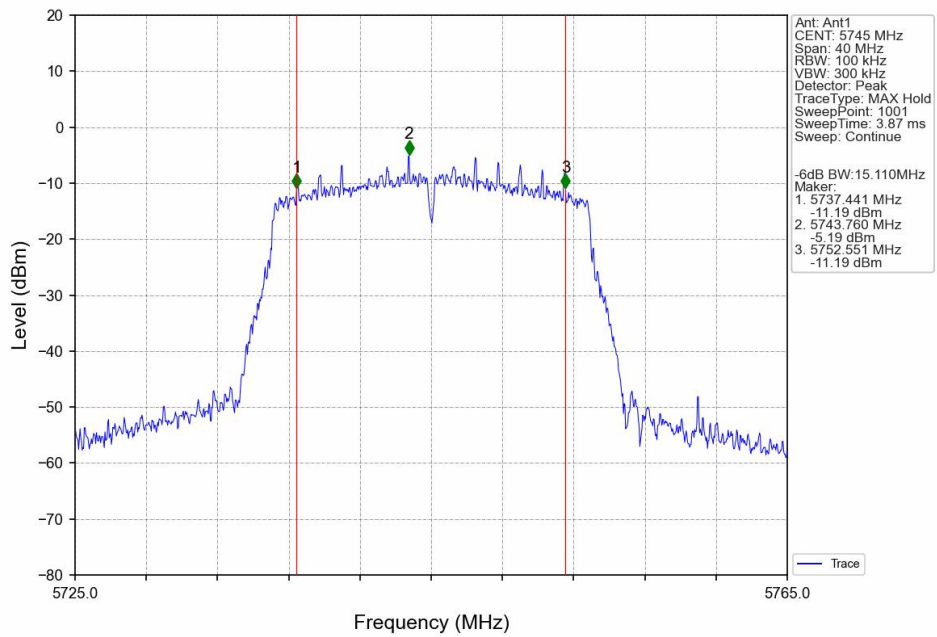
802.11a_MCH_5785MHz_Ant1_NTNV



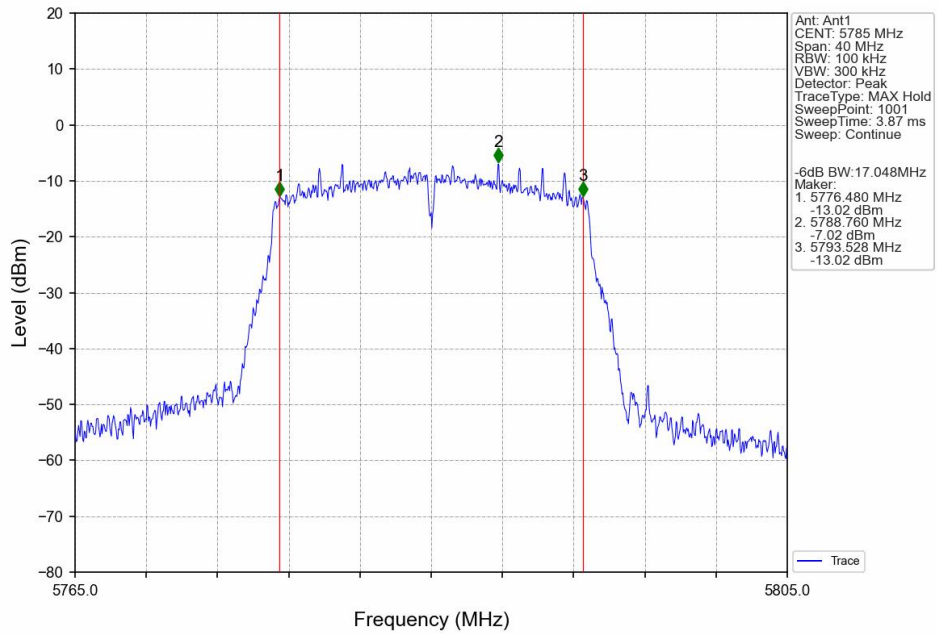
802.11a_HCH_5825MHz_Ant1_NTNV



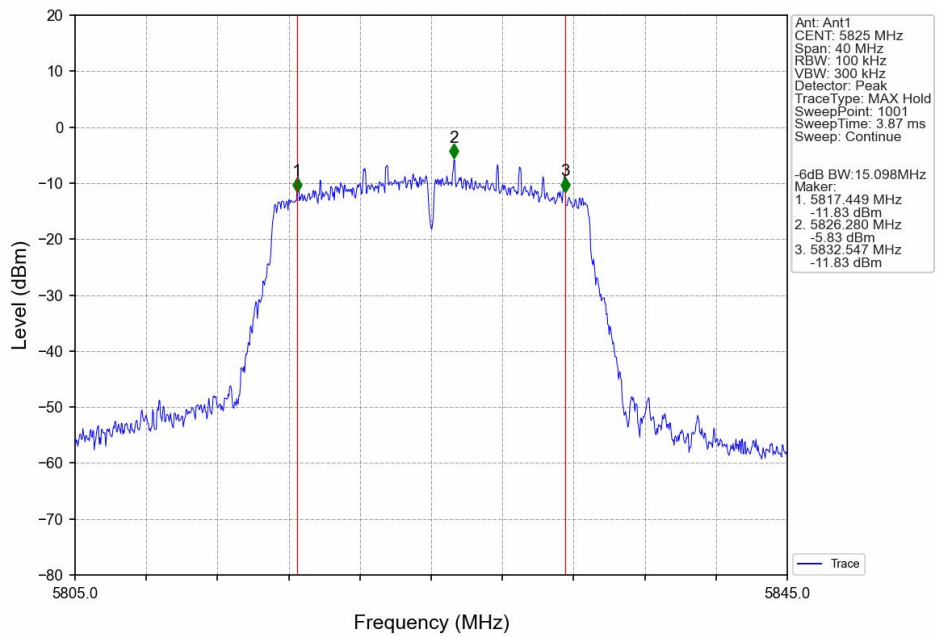
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



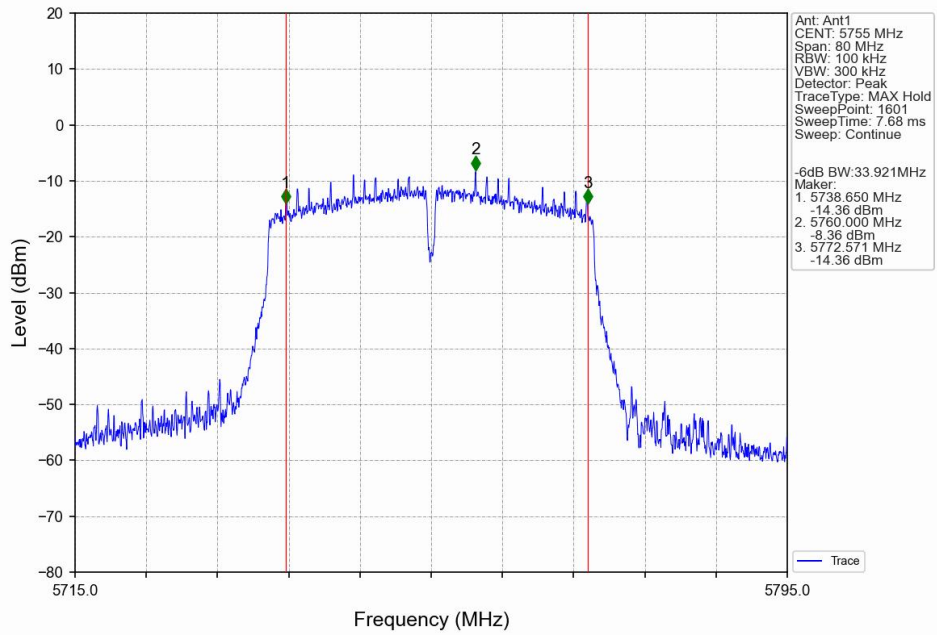
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



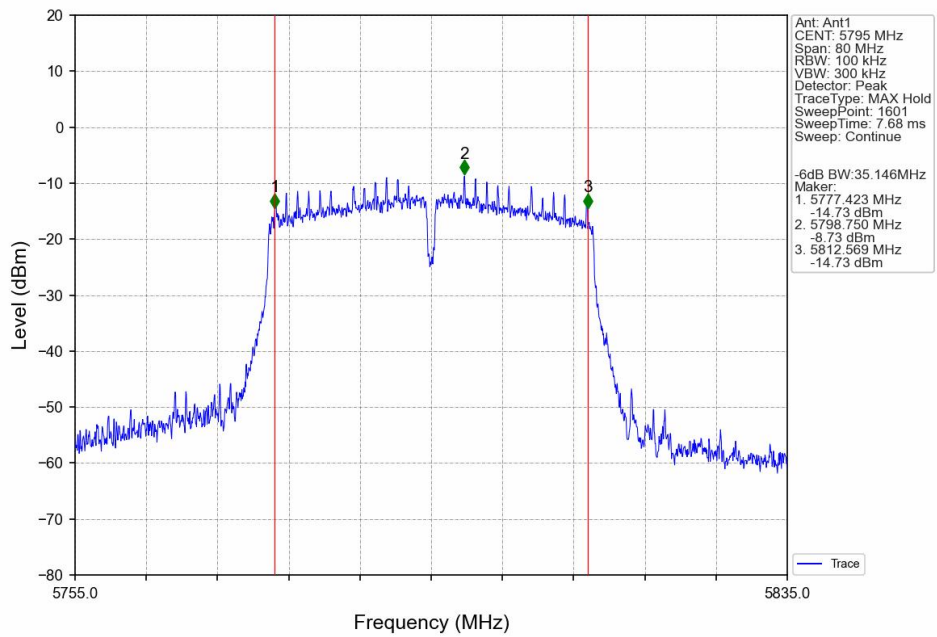
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



3. Maximum Conducted Output Power

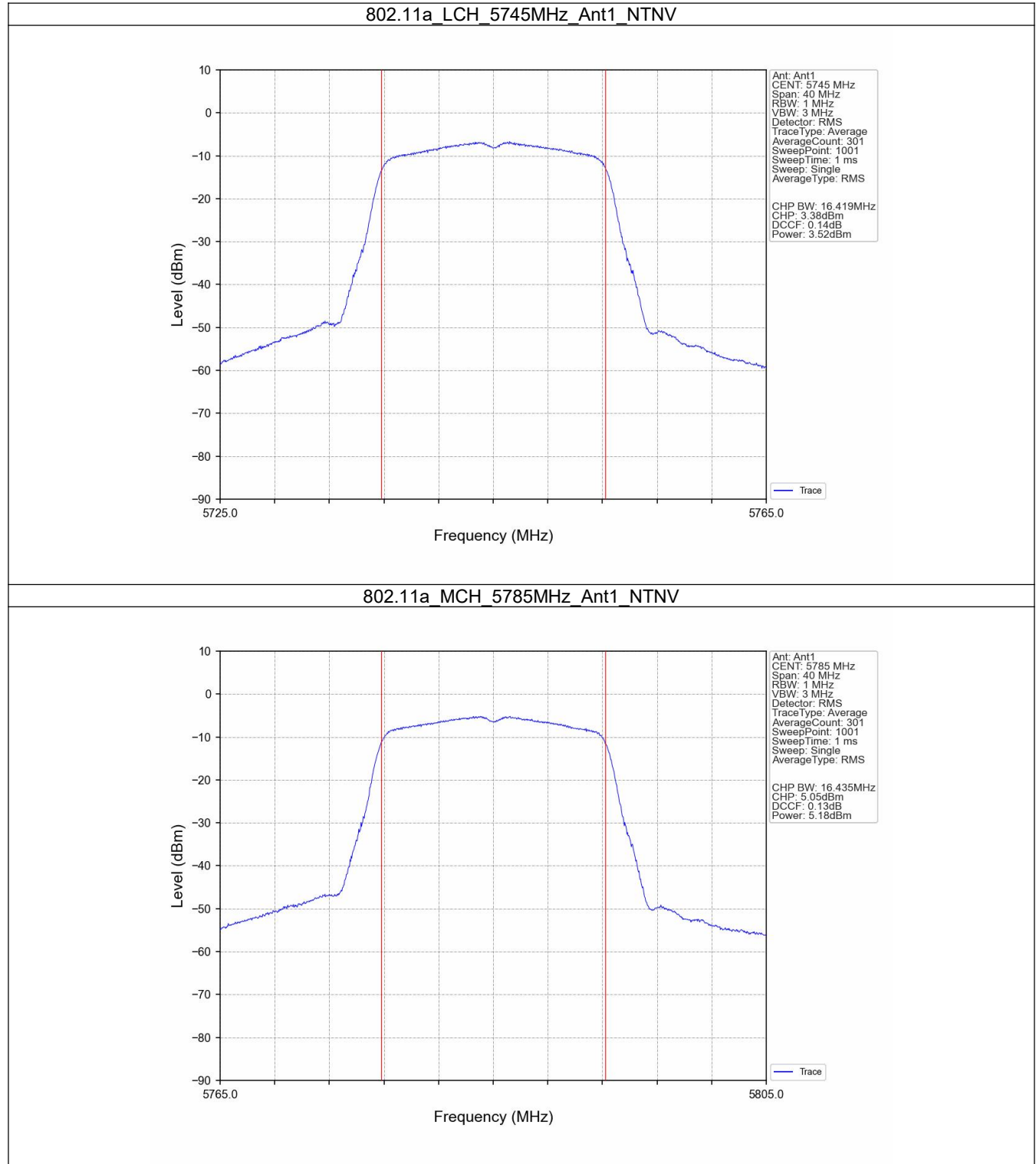
3.1 Test Result

3.1.1 Power

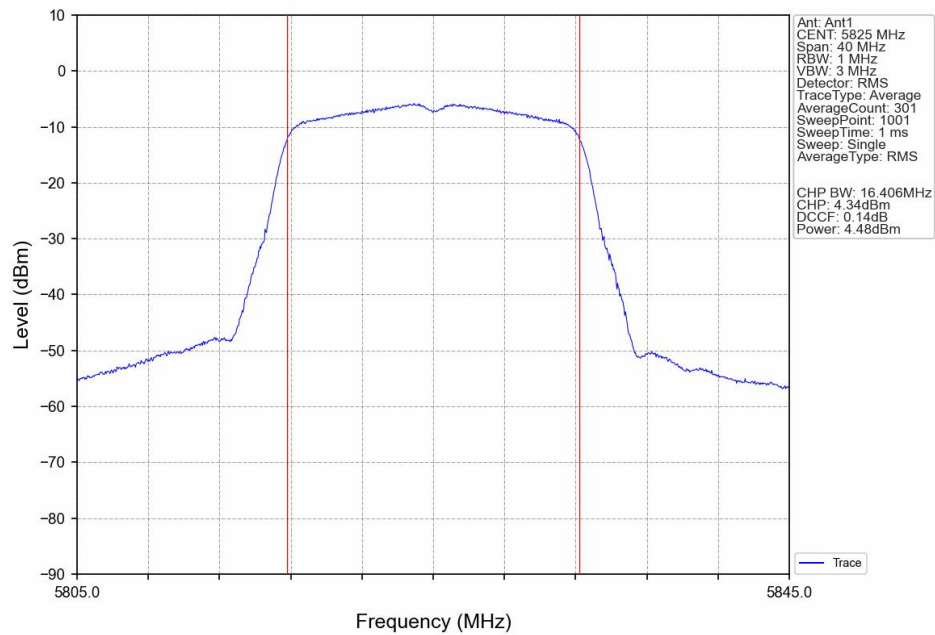
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5745	3.52	<=30	Pass
		5785	5.18	<=30	Pass
		5825	4.48	<=30	Pass
802.11n (HT20)	SISO	5745	5.14	<=30	Pass
		5785	4.91	<=30	Pass
		5825	4.76	<=30	Pass
802.11n (HT40)	SISO	5755	5.27	<=30	Pass
		5795	4.48	<=30	Pass
Note1: Antenna Gain: Ant1: 3.03dBi;					

3.2 Test Graph

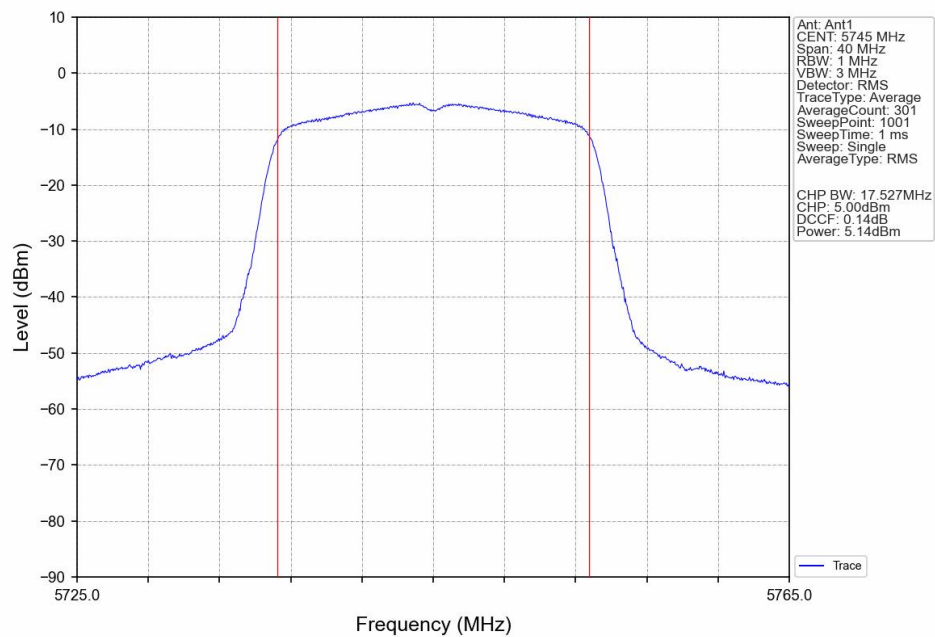
3.2.1 Power



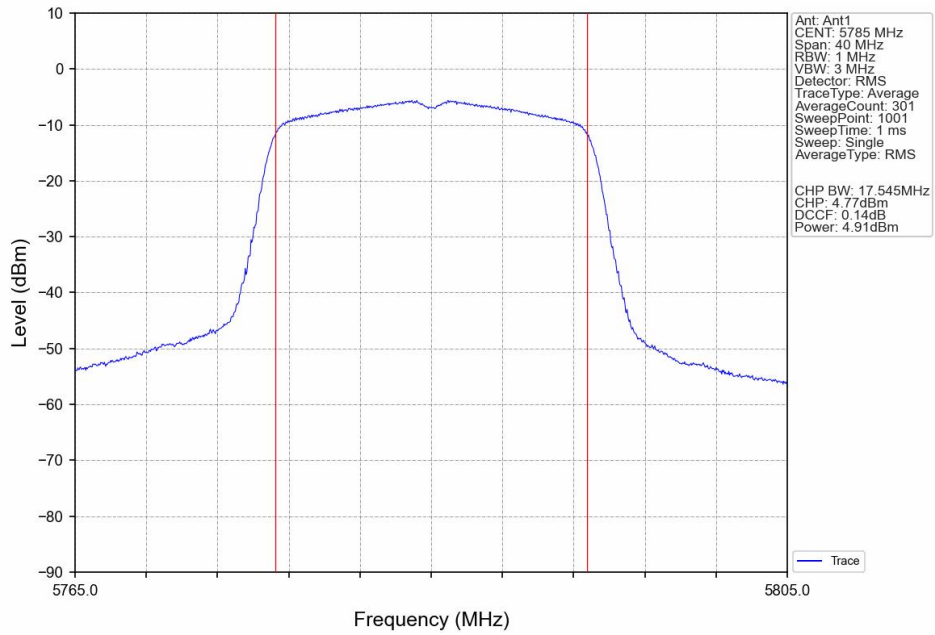
802.11a_HCH_5825MHz_Ant1_NTNV



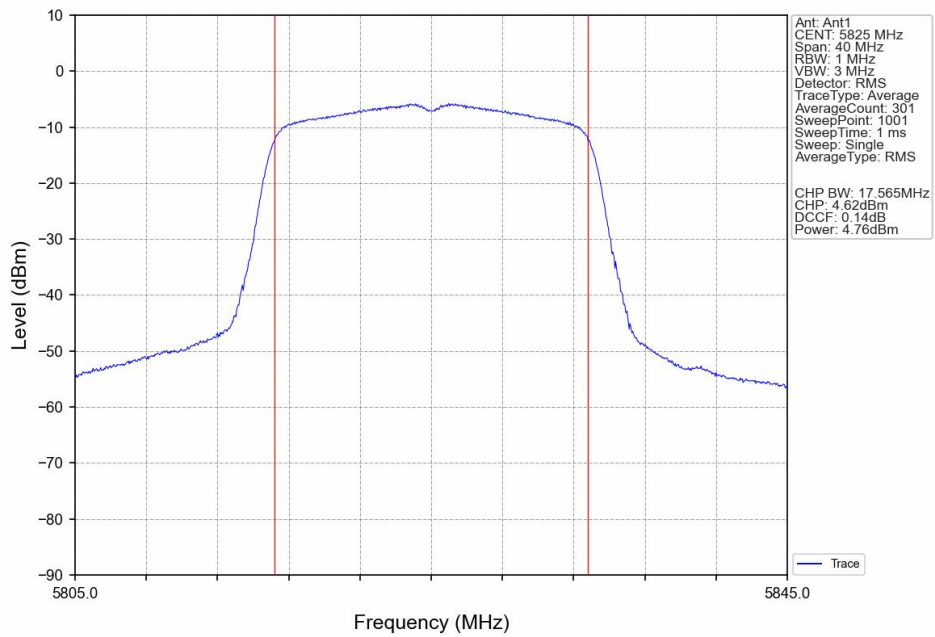
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



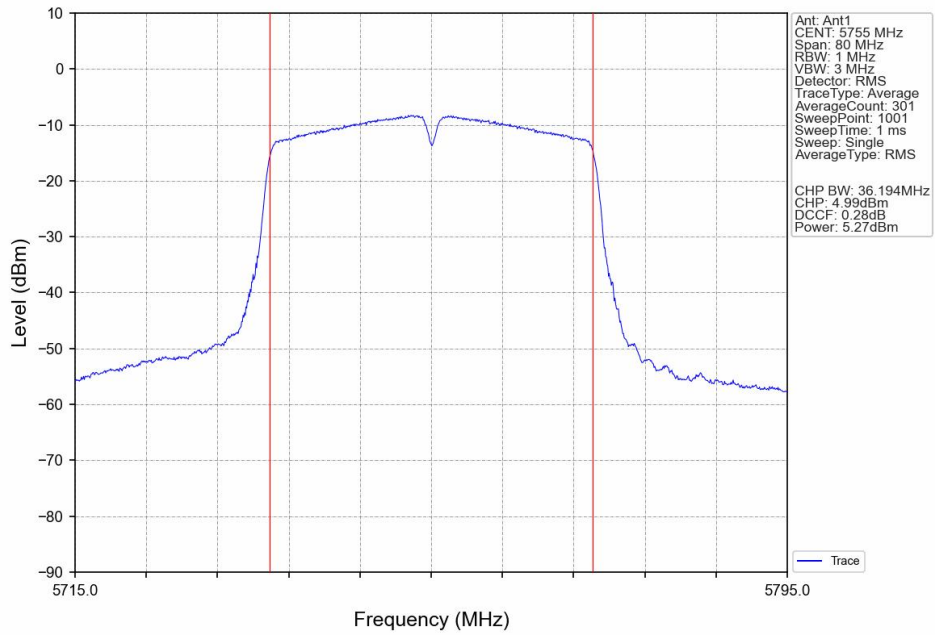
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



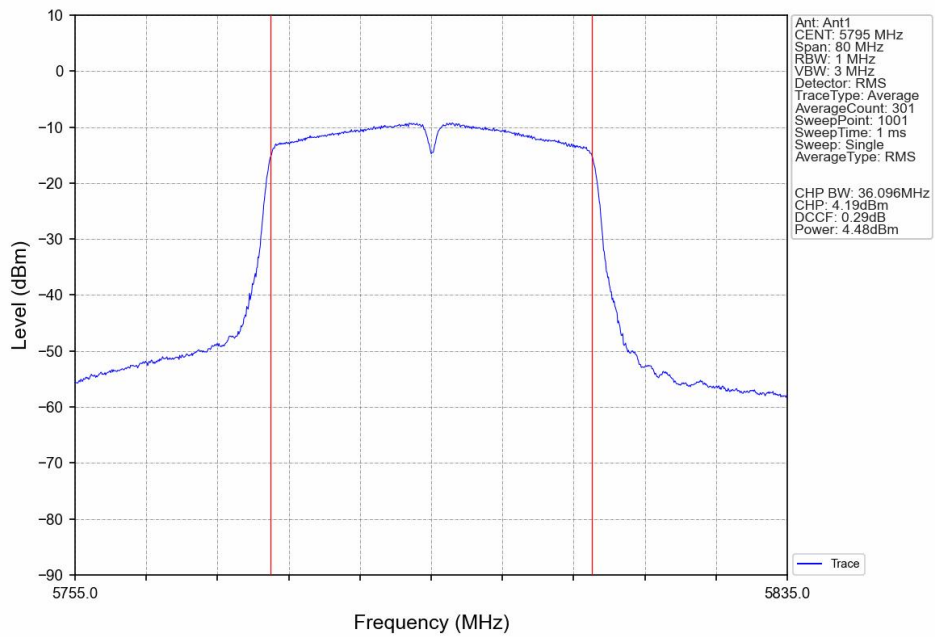
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



4. Maximum Power Spectral Density

4.1 Test Result

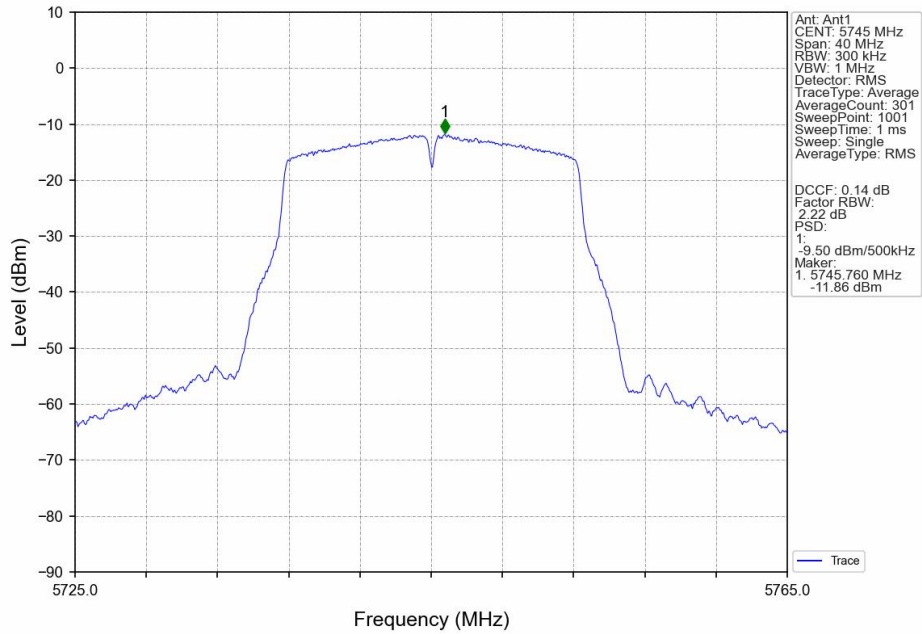
4.1.1 PSD-Band3

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/500kHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5745	-9.50	<=30	Pass
		5785	-8.02	<=30	Pass
		5825	-8.66	<=30	Pass
802.11n (HT20)	SISO	5745	-8.15	<=30	Pass
		5785	-8.40	<=30	Pass
		5825	-8.50	<=30	Pass
802.11n (HT40)	SISO	5755	-11.12	<=30	Pass
		5795	-12.09	<=30	Pass
Note1: Antenna Gain: Ant1: 3.03dBi;					

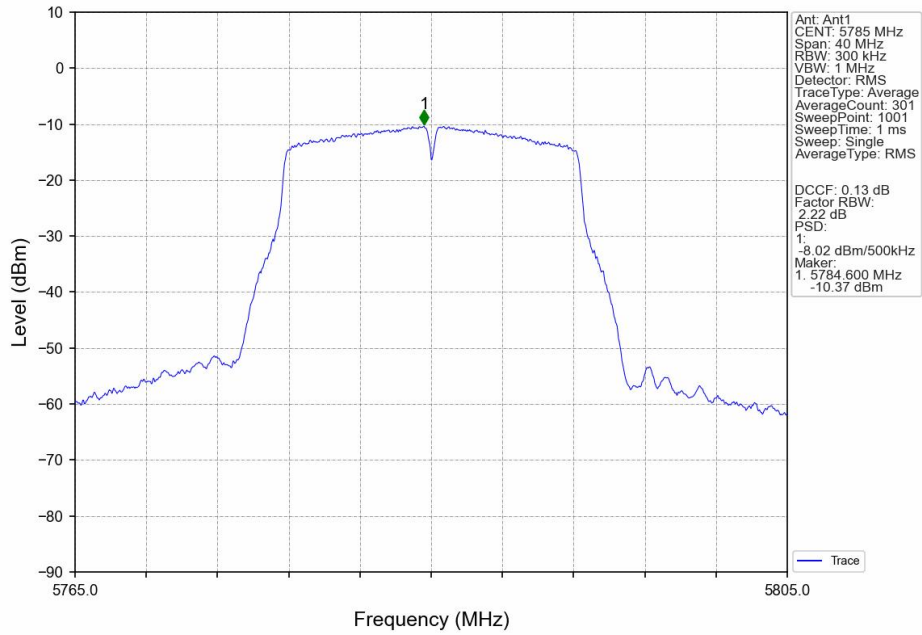
4.2 Test Graph

4.2.1 PSD-Band3

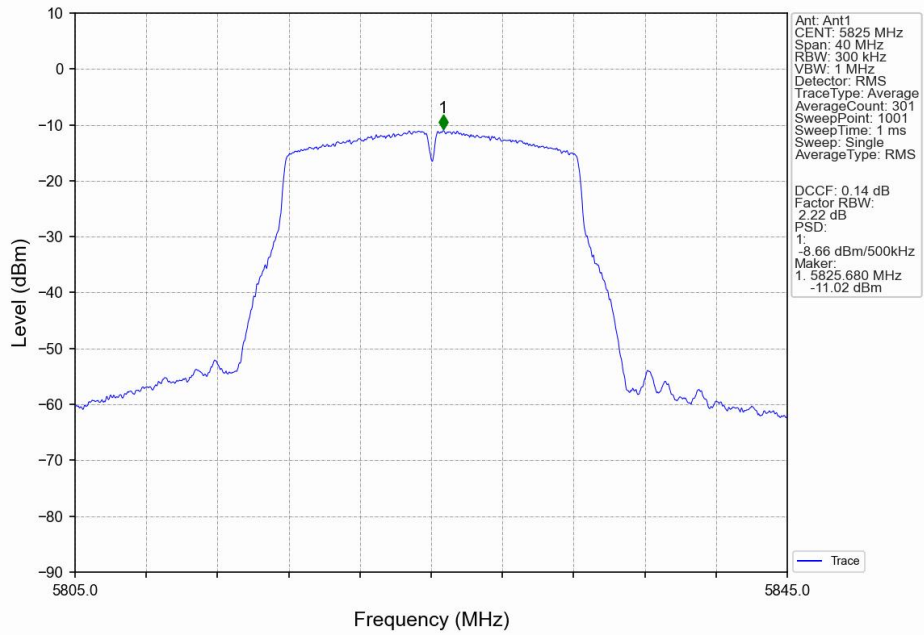
802.11a_LCH_5745MHz_Ant1_NTNV



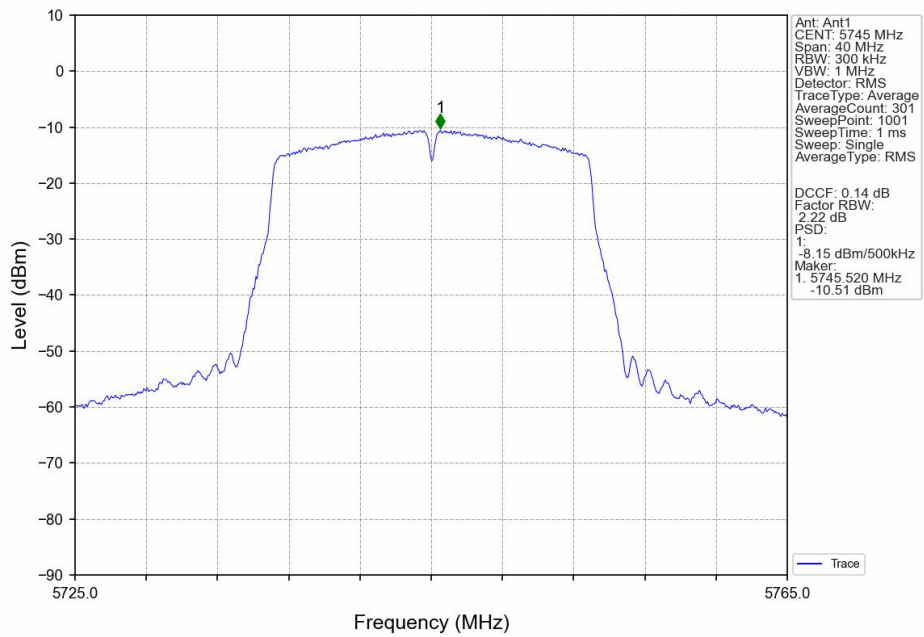
802.11a_MCH_5785MHz_Ant1_NTNV



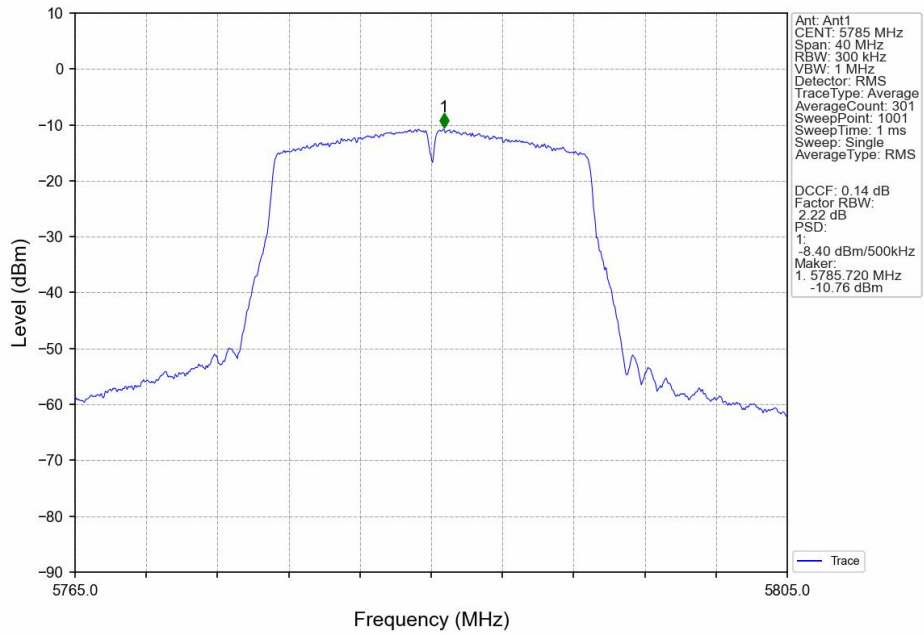
802.11a_HCH_5825MHz_Ant1_NTNV



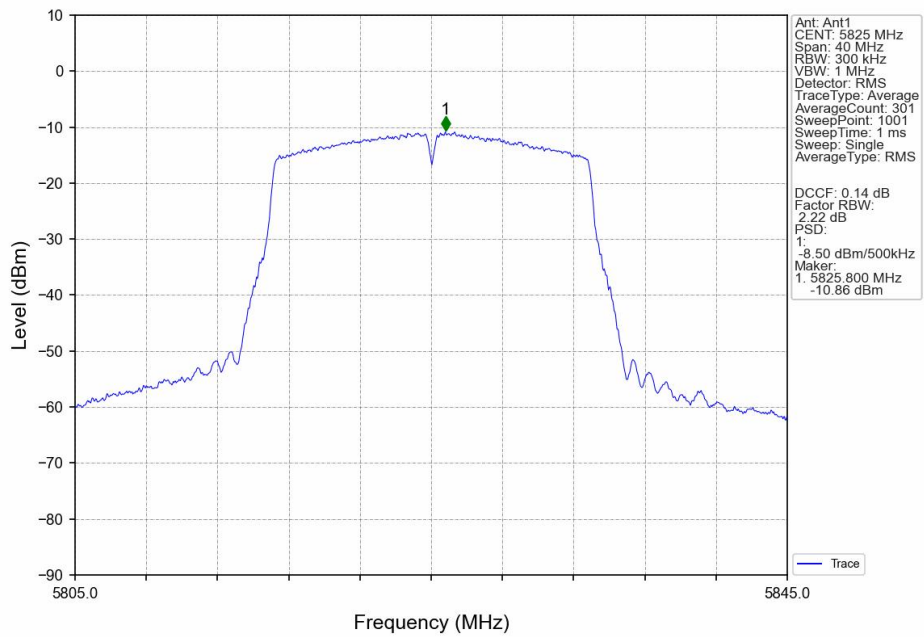
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



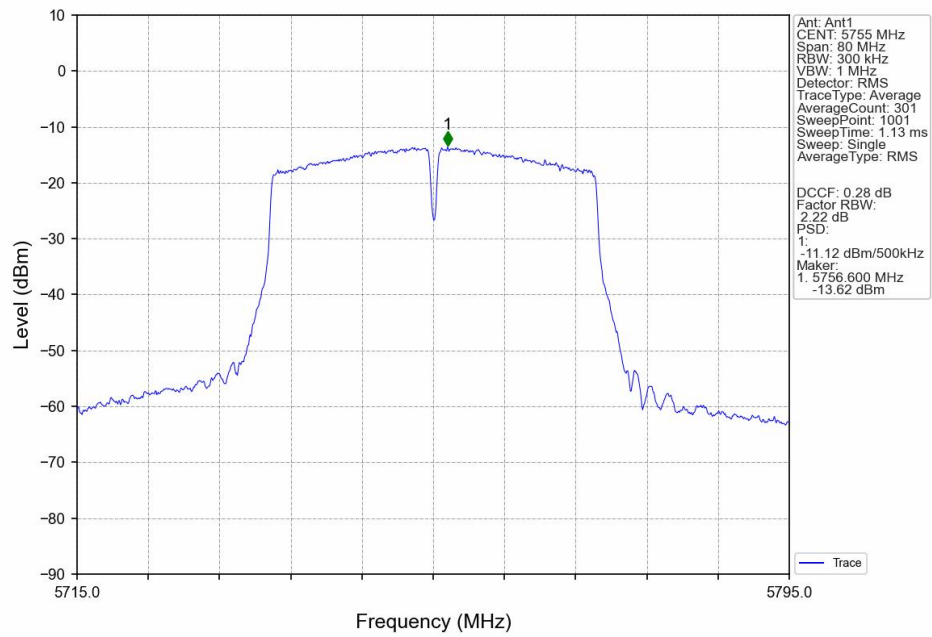
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



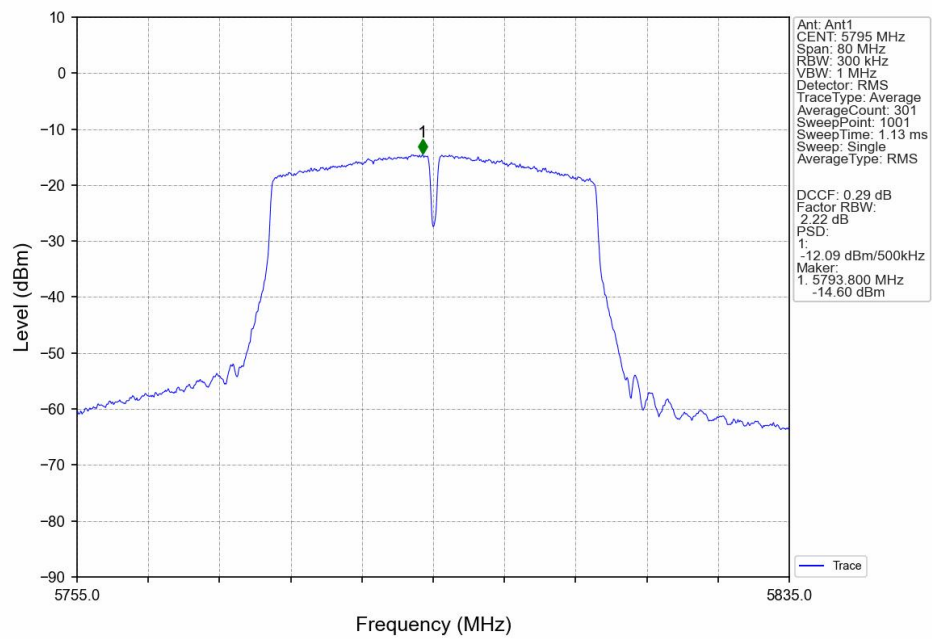
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



5. Frequency Stability

5.1 Test Result

5.1.1 Ant1

Ant1							
Mode	Tx Type	Frequency (MHz)	Temperature (°C)	Voltage	Measured Frequency (MHz)	Limit (MHz)	Verdict
802.11a	SISO	5745	20	LV	5745.100	5725 to 5850	Pass
				NV	5745.040	5725 to 5850	Pass
				HV	5744.980	5725 to 5850	Pass
			-30	NV	5745.040	5725 to 5850	Pass
			-20	NV	5745.120	5725 to 5850	Pass
			-10	NV	5745.040	5725 to 5850	Pass
			0	NV	5745.000	5725 to 5850	Pass
			10	NV	5745.040	5725 to 5850	Pass
			30	NV	5745.020	5725 to 5850	Pass
			40	NV	5744.960	5725 to 5850	Pass
			50	NV	5745.040	5725 to 5850	Pass
		5785	20	LV	5785.040	5725 to 5850	Pass
				NV	5784.940	5725 to 5850	Pass
				HV	5785.060	5725 to 5850	Pass
			-30	NV	5785.020	5725 to 5850	Pass
			-20	NV	5785.000	5725 to 5850	Pass
			-10	NV	5785.020	5725 to 5850	Pass
			0	NV	5785.040	5725 to 5850	Pass
			10	NV	5785.040	5725 to 5850	Pass
			30	NV	5785.060	5725 to 5850	Pass
			40	NV	5784.960	5725 to 5850	Pass
			50	NV	5785.000	5725 to 5850	Pass
		5825	20	LV	5825.040	5725 to 5850	Pass
				NV	5825.100	5725 to 5850	Pass
				HV	5825.040	5725 to 5850	Pass
			-30	NV	5825.020	5725 to 5850	Pass
			-20	NV	5825.020	5725 to 5850	Pass
			-10	NV	5824.980	5725 to 5850	Pass
			0	NV	5825.040	5725 to 5850	Pass
			10	NV	5825.080	5725 to 5850	Pass
			30	NV	5825.020	5725 to 5850	Pass
			40	NV	5825.020	5725 to 5850	Pass
			50	NV	5825.040	5725 to 5850	Pass
802.11n (HT20)	SISO	5745	20	LV	5745.120	5725 to 5850	Pass
				NV	5745.080	5725 to 5850	Pass
				HV	5745.040	5725 to 5850	Pass
			-30	NV	5745.060	5725 to 5850	Pass
			-20	NV	5745.040	5725 to 5850	Pass
			-10	NV	5745.100	5725 to 5850	Pass
			0	NV	5745.040	5725 to 5850	Pass
			10	NV	5745.040	5725 to 5850	Pass
			30	NV	5745.060	5725 to 5850	Pass
			40	NV	5745.080	5725 to 5850	Pass
			50	NV	5745.060	5725 to 5850	Pass
		5785	20	LV	5785.020	5725 to 5850	Pass
				NV	5784.980	5725 to 5850	Pass

				HV	5785.020	5725 to 5850	Pass
			-30	NV	5785.020	5725 to 5850	Pass
			-20	NV	5784.960	5725 to 5850	Pass
			-10	NV	5784.980	5725 to 5850	Pass
			0	NV	5785.020	5725 to 5850	Pass
			10	NV	5785.020	5725 to 5850	Pass
			30	NV	5785.040	5725 to 5850	Pass
			40	NV	5784.980	5725 to 5850	Pass
			50	NV	5785.020	5725 to 5850	Pass
		5825	20	LV	5825.040	5725 to 5850	Pass
				NV	5825.080	5725 to 5850	Pass
				HV	5824.940	5725 to 5850	Pass
			-30	NV	5825.020	5725 to 5850	Pass
			-20	NV	5824.940	5725 to 5850	Pass
			-10	NV	5825.000	5725 to 5850	Pass
			0	NV	5825.060	5725 to 5850	Pass
			10	NV	5825.040	5725 to 5850	Pass
			30	NV	5825.020	5725 to 5850	Pass
			40	NV	5825.120	5725 to 5850	Pass
			50	NV	5825.060	5725 to 5850	Pass
802.11n (HT40)	SISO	5755	20	LV	5755.080	5725 to 5850	Pass
				NV	5755.080	5725 to 5850	Pass
				HV	5755.080	5725 to 5850	Pass
			-30	NV	5755.080	5725 to 5850	Pass
			-20	NV	5755.080	5725 to 5850	Pass
			-10	NV	5755.040	5725 to 5850	Pass
			0	NV	5755.040	5725 to 5850	Pass
			10	NV	5755.080	5725 to 5850	Pass
			30	NV	5755.040	5725 to 5850	Pass
			40	NV	5755.080	5725 to 5850	Pass
			50	NV	5755.080	5725 to 5850	Pass
		5795	20	LV	5795.040	5725 to 5850	Pass
				NV	5795.000	5725 to 5850	Pass
				HV	5795.040	5725 to 5850	Pass
			-30	NV	5795.000	5725 to 5850	Pass
			-20	NV	5795.080	5725 to 5850	Pass
			-10	NV	5795.040	5725 to 5850	Pass
			0	NV	5795.120	5725 to 5850	Pass
			10	NV	5795.080	5725 to 5850	Pass
			30	NV	5795.040	5725 to 5850	Pass
			40	NV	5795.080	5725 to 5850	Pass
			50	NV	5795.040	5725 to 5850	Pass

6. Band Edge

6.1 Test Result

6.1.1 BandEdge

Mode	TX Type	Frequency (MHz)	ANT	Level of Unwanted Emissions (dBm)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	Refer To Test Graph		Pass
		5825	1	Refer To Test Graph		Pass
802.11n (HT20)	SISO	5745	1	Refer To Test Graph		Pass
		5825	1	Refer To Test Graph		Pass
802.11n	SISO	5755	1	Refer To Test Graph		Pass

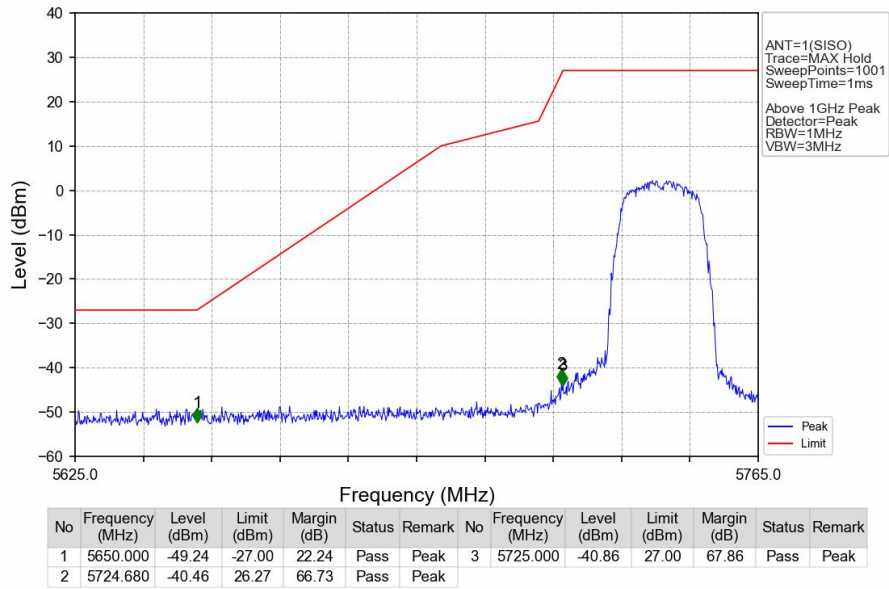
FCC ID: 2BGPD-ZMLH-K57

(HT40)		5795	1	Refer To Test Graph	Pass
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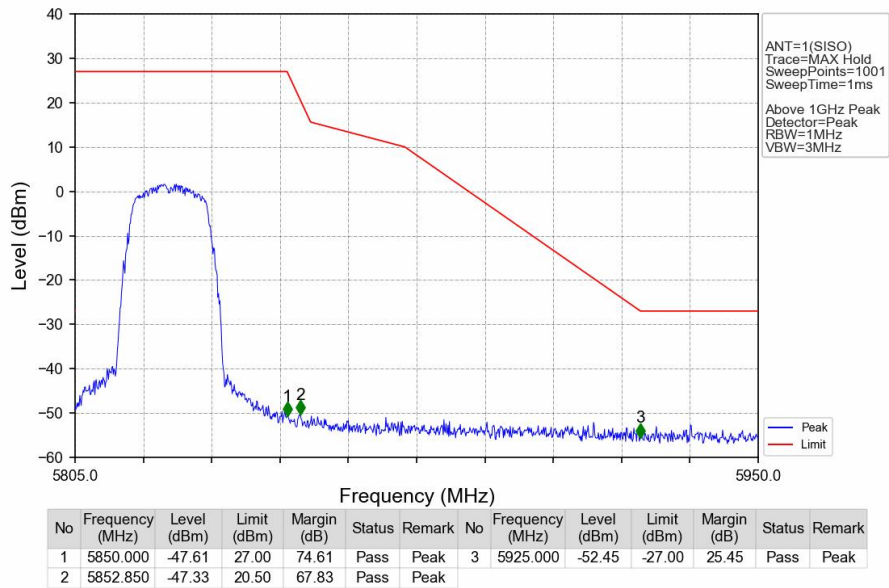
6.2 Test Graph

6.2.1 BandEdge

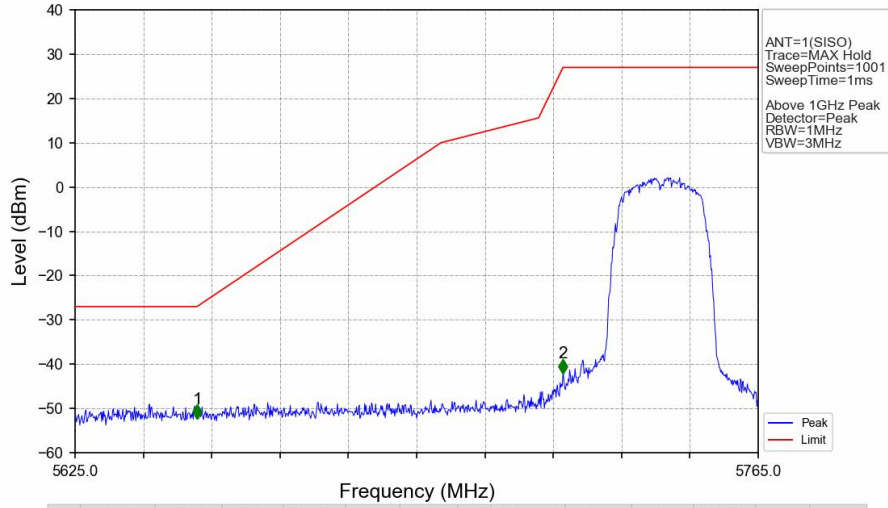
802.11a_LCH_5745MHz_Ant1_NTNV



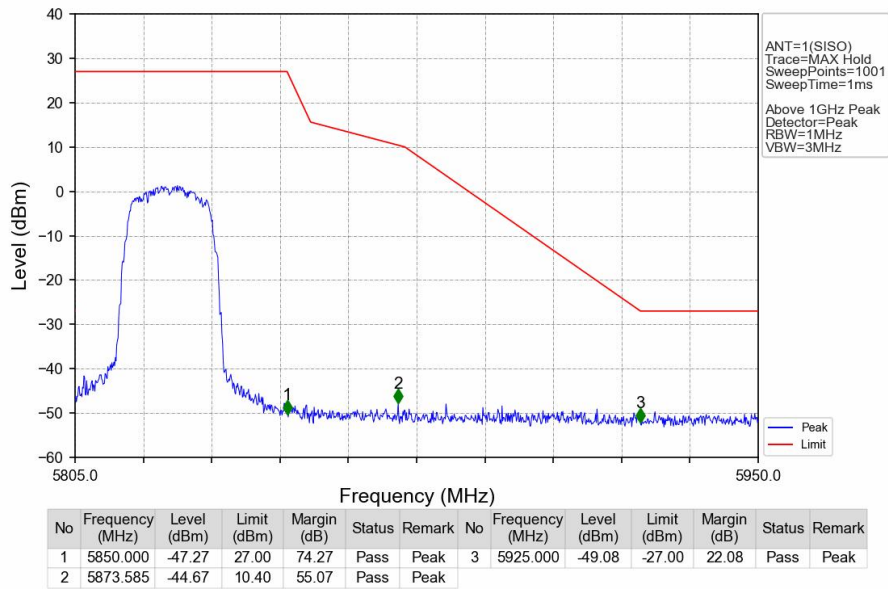
802.11a_HCH_5825MHz_Ant1_NTNV



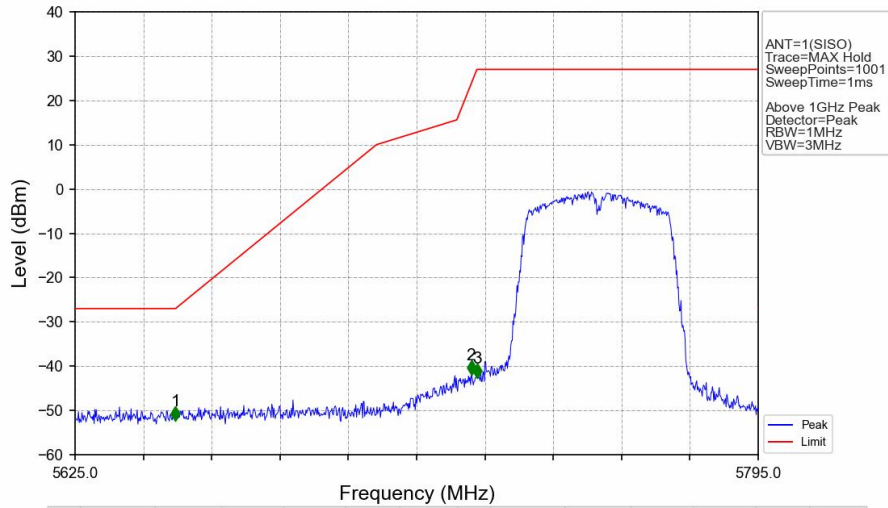
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



802.11n(HT20)_HCH_5825MHz_Ant1_NTNV

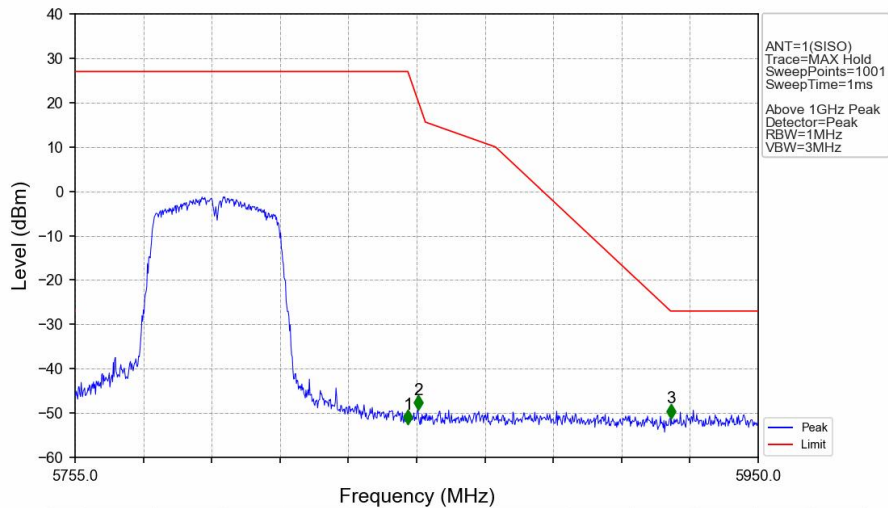


802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
3	5725.000	-39.61	27.00	66.61	Pass	Peak

802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
3	5925.000	-48.09	-27.00	21.09	Pass	Peak

-THE END-