



RF Test Data

For

Project No.:	DLE-251227023R
Client:	Zhuhai Bigway Electronic Co.,Ltd.
Manufacturer:	Zhuhai Bigway Electronic Co.,Ltd.
Product Description:	Wireless HDMI Transmitter and Receiver
Model No.:	GT-HDWL50UX
Test Engineer:	Alisa Song
Test Date:	2026-01-05

Test Summary

Item	Result
Duty Cycle	Pass
Bandwidth	Pass
Maximum Conducted Output Power	Pass
Maximum Power Spectral Density	Pass
Frequency Stability	Pass



1. Duty Cycle

1.1 Test Result

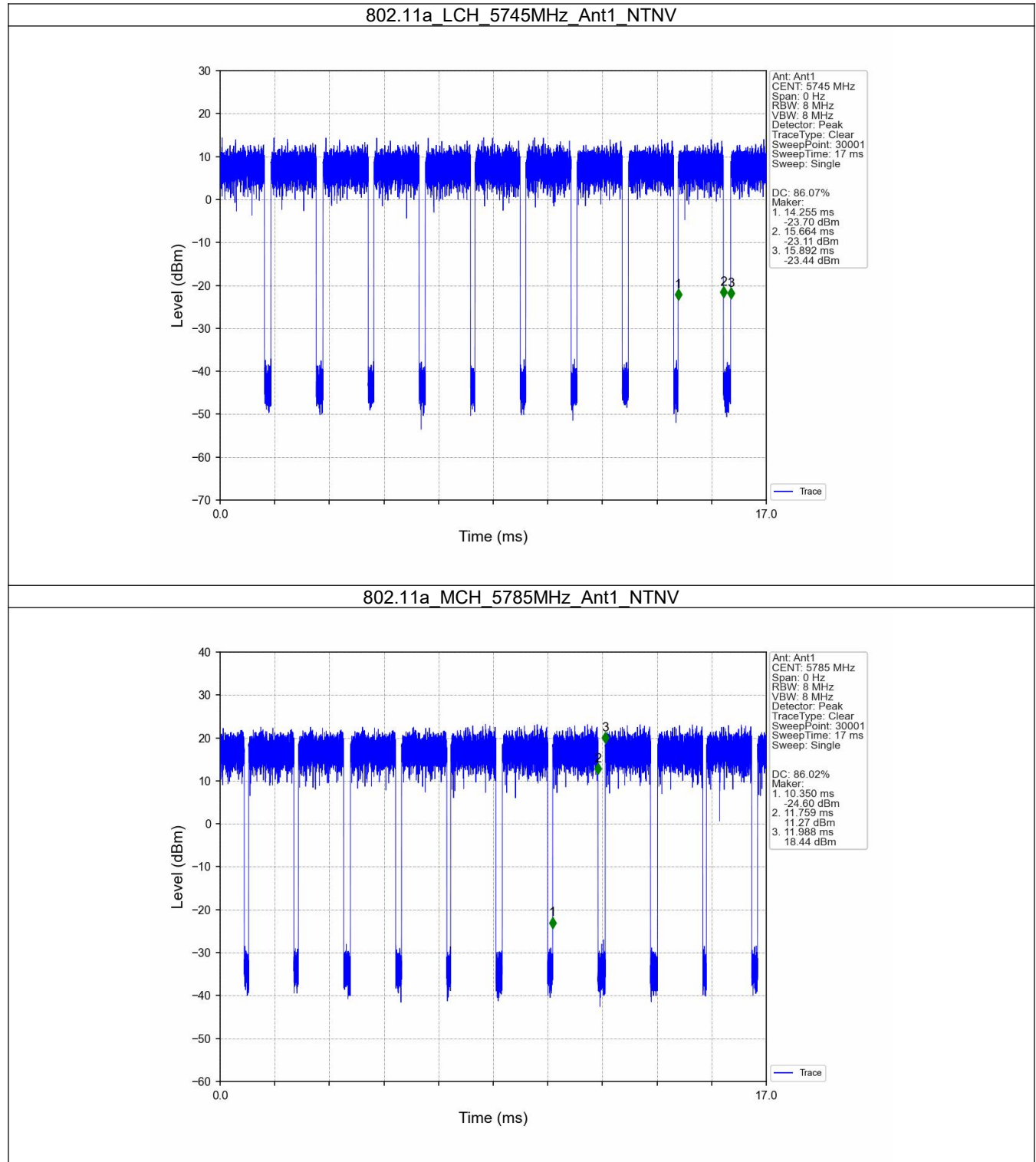
1.1.1 Ant1

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	1.409	1.637	86.07	0.65	5.02
		5785	1.409	1.638	86.02	0.65	6.67
		5825	1.409	1.637	86.07	0.65	7.17
802.11n (HT20)	SISO	5745	1.317	1.536	85.74	0.67	7.07
		5785	1.317	1.528	86.19	0.65	7.19
		5825	1.316	1.535	85.73	0.67	7.63
802.11n (HT40)	SISO	5755	0.652	0.896	72.77	1.38	0.06
		5795	0.653	0.872	74.89	1.26	11.63



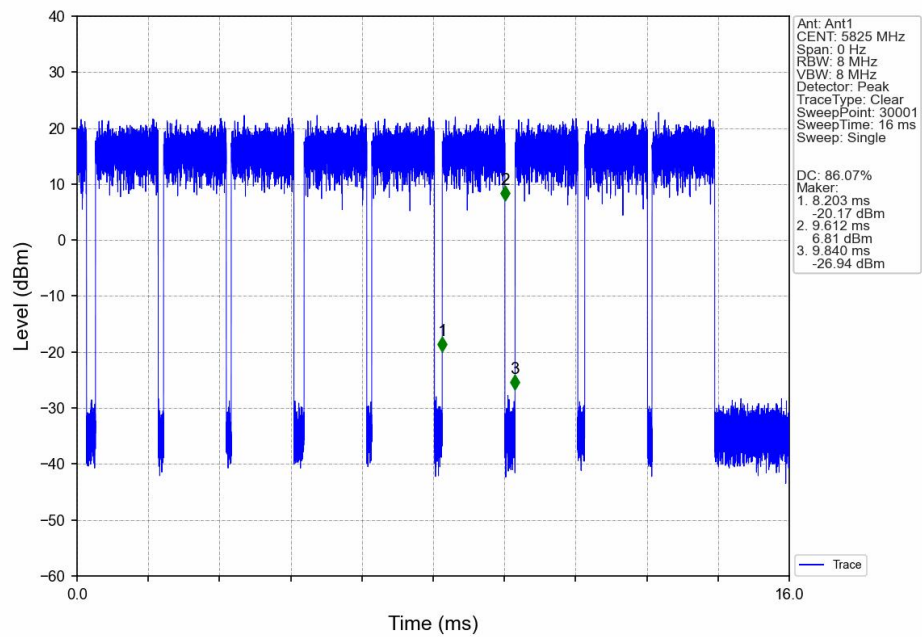
1.2 Test Graph

1.2.1 Ant1

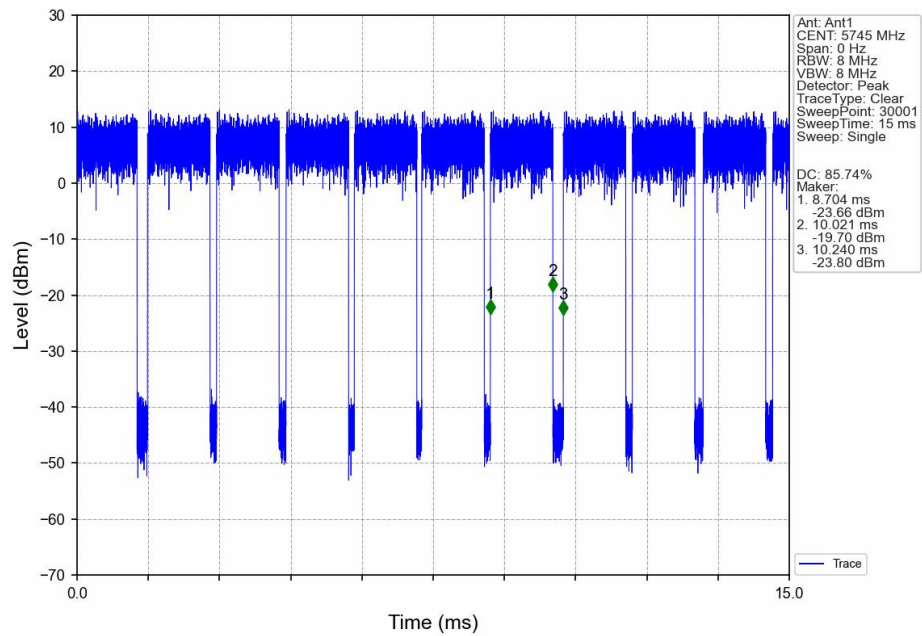




802.11a_HCH_5825MHz_Ant1_NTNV

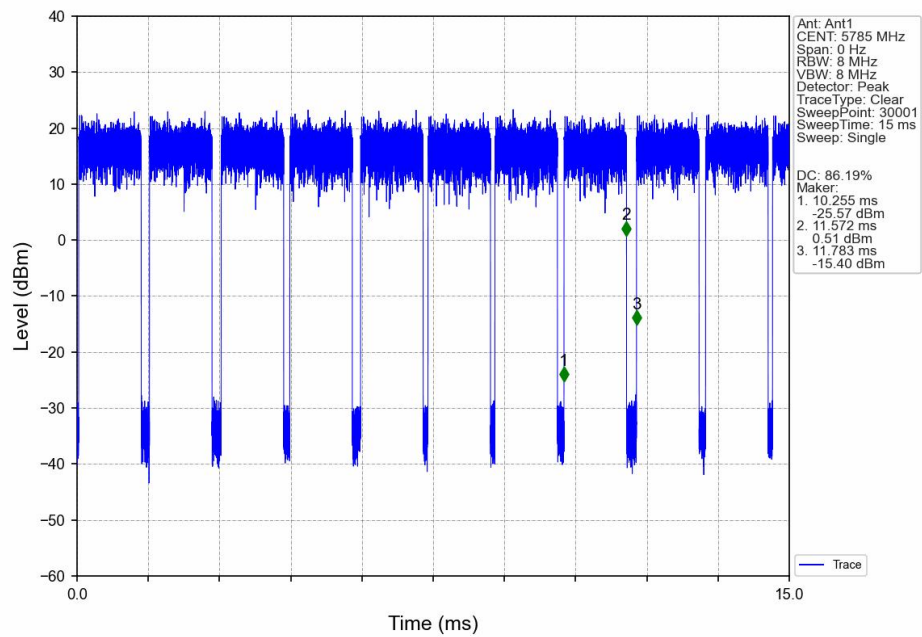


802.11n(HT20)_LCH_5745MHz_Ant1_NTNV

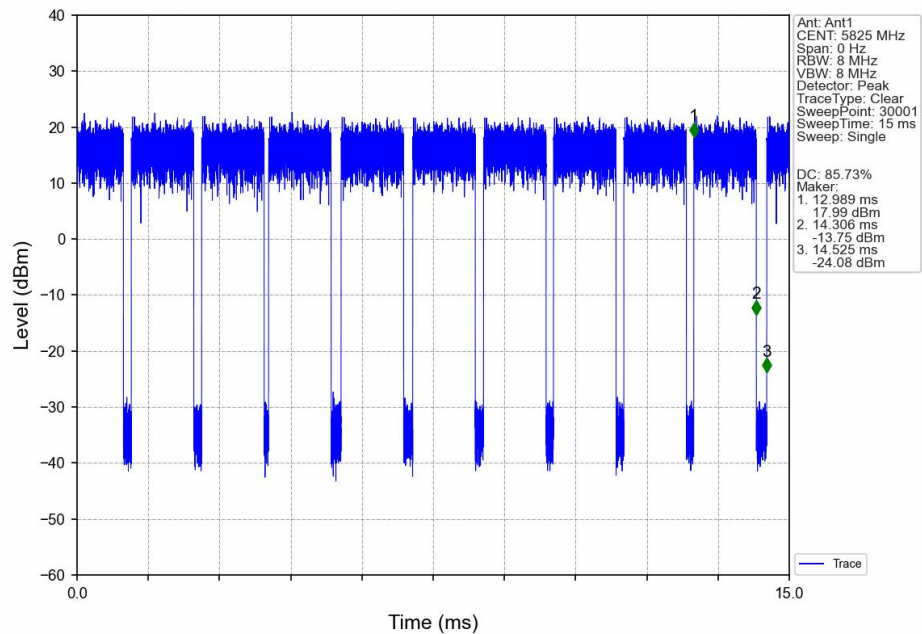




802.11n(HT20)_MCH_5785MHz_Ant1_NTNV

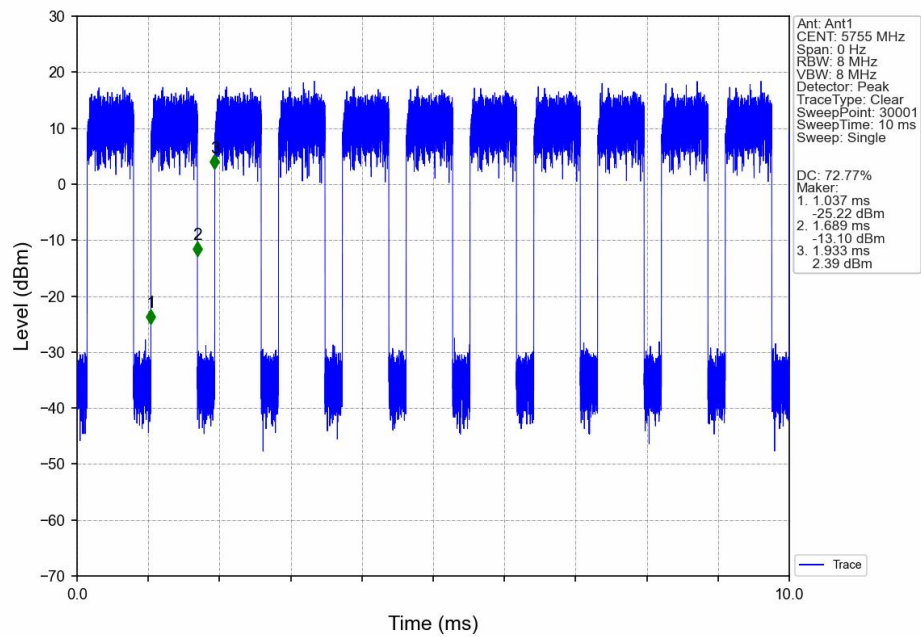


802.11n(HT20)_HCH_5825MHz_Ant1_NTNV

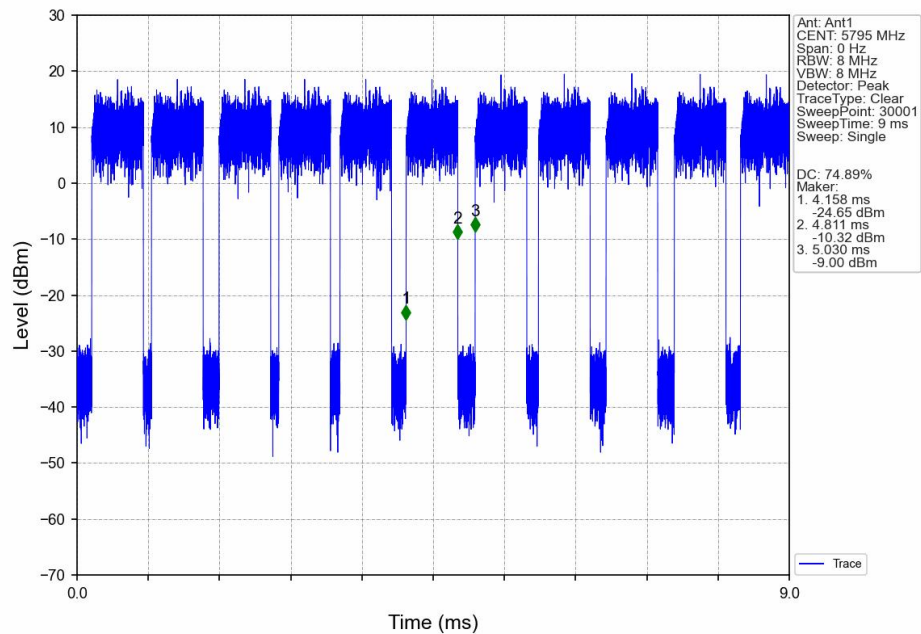




802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



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	17.005	/	Pass
		5785	1	17.034	/	Pass
		5825	1	17.037	/	Pass
802.11n (HT20)	SISO	5745	1	17.938	/	Pass
		5785	1	17.970	/	Pass
		5825	1	17.975	/	Pass
802.11n (HT40)	SISO	5755	1	35.224	/	Pass
		5795	1	35.203	/	Pass

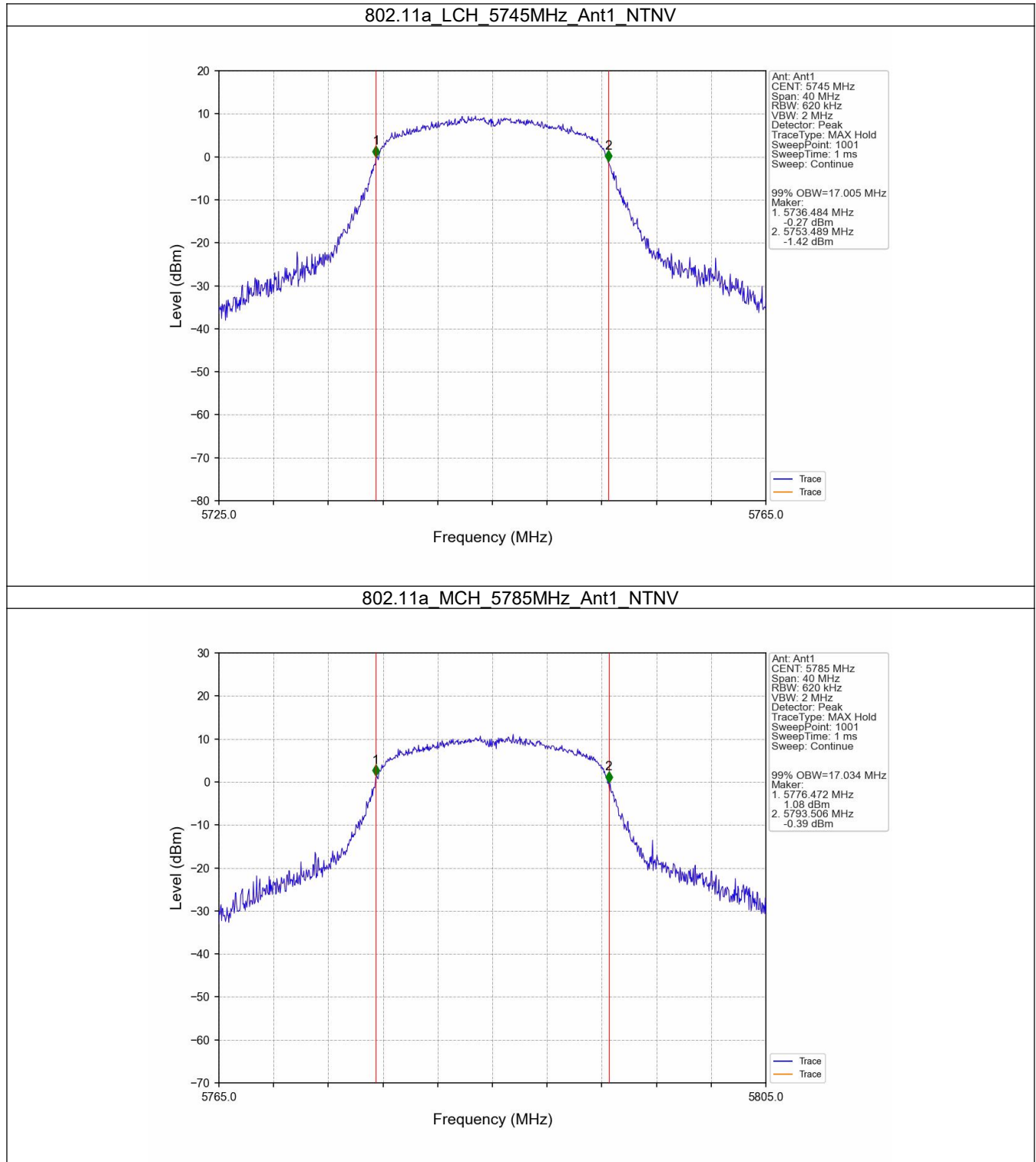
2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	15.119	≥ 0.5	Pass
		5785	1	15.102	≥ 0.5	Pass
		5825	1	15.120	≥ 0.5	Pass
802.11n (HT20)	SISO	5745	1	15.111	≥ 0.5	Pass
		5785	1	15.115	≥ 0.5	Pass
		5825	1	15.110	≥ 0.5	Pass
802.11n (HT40)	SISO	5755	1	32.609	≥ 0.5	Pass
		5795	1	31.330	≥ 0.5	Pass



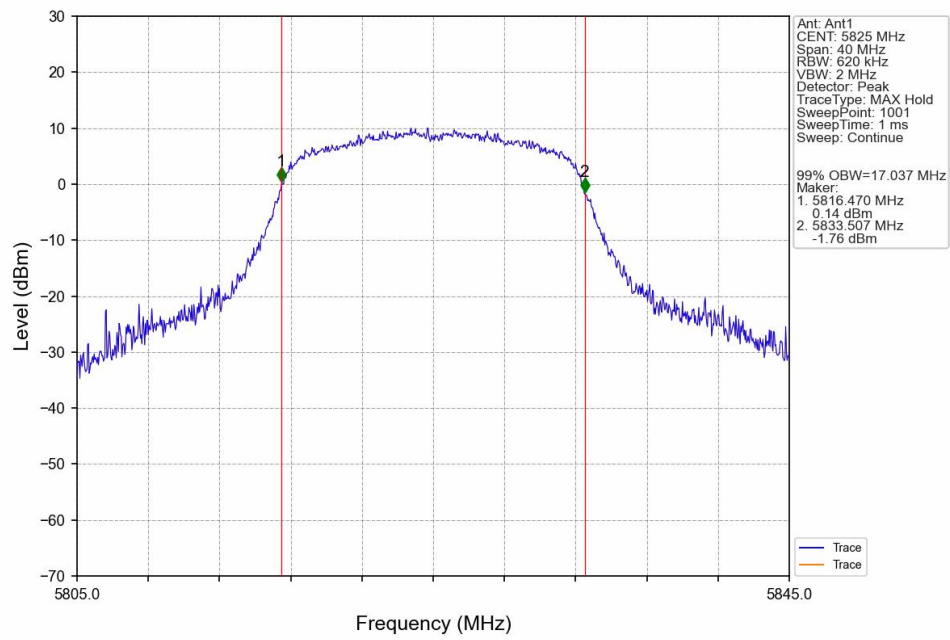
2.2 Test Graph

2.2.1 OBW

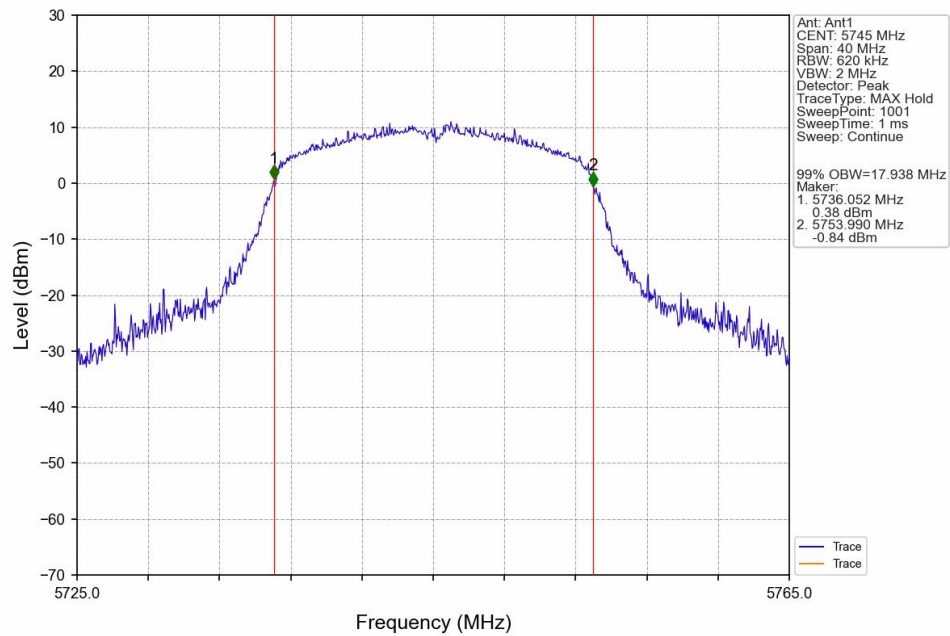




802.11a_HCH_5825MHz_Ant1_NTNV

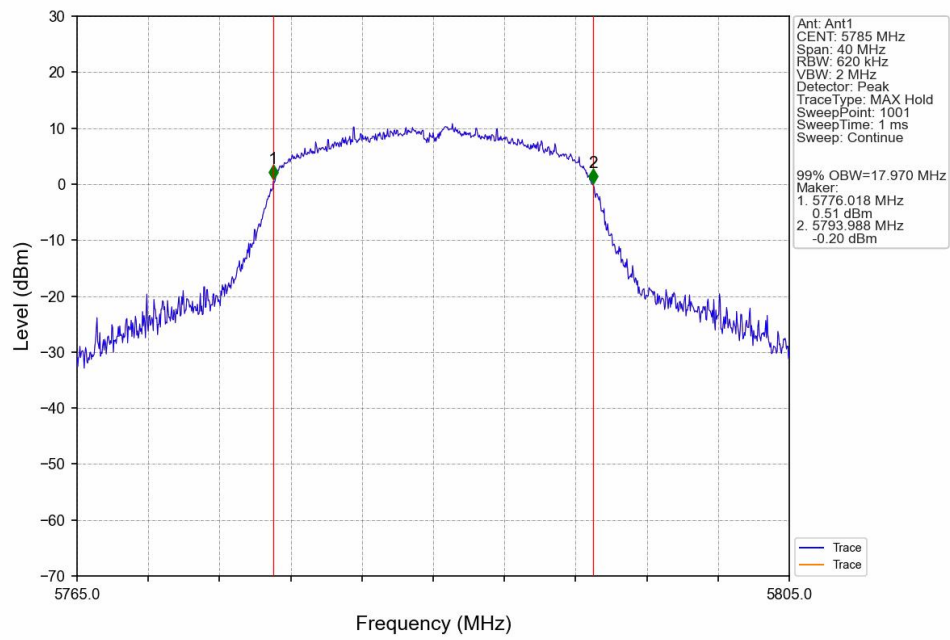


802.11n(HT20)_LCH_5745MHz_Ant1_NTNV

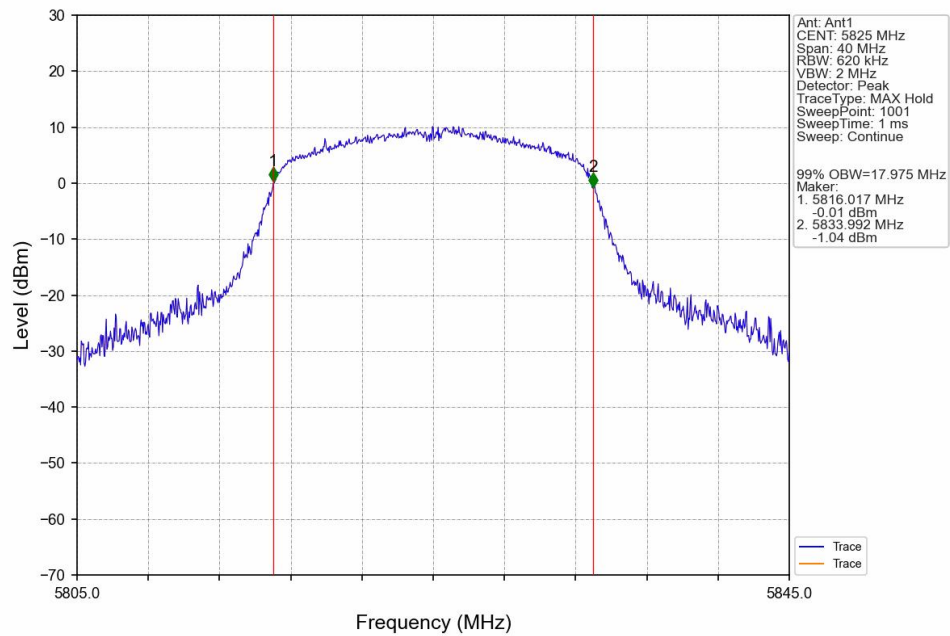




802.11n(HT20)_MCH_5785MHz_Ant1_NTNV

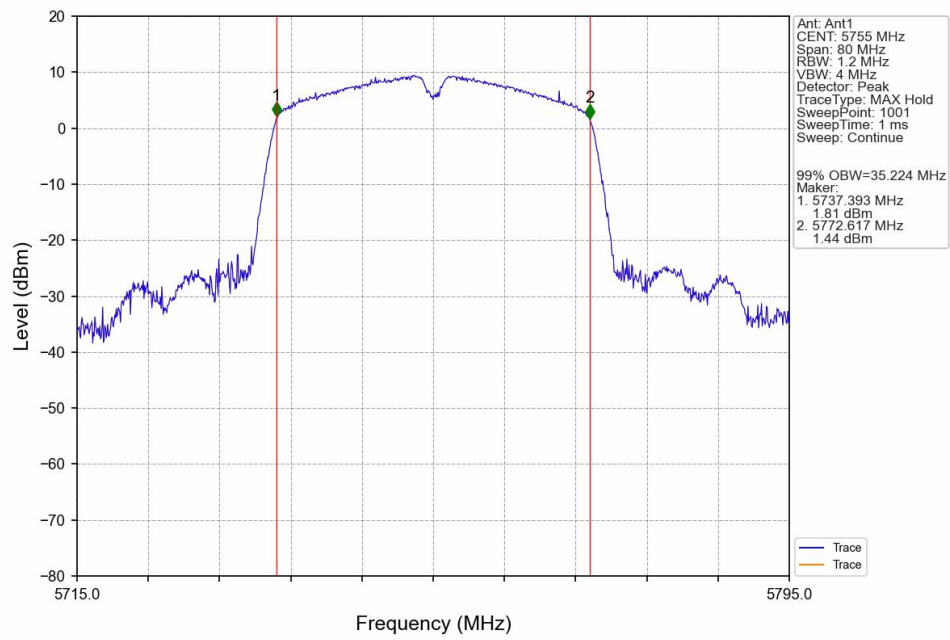


802.11n(HT20)_HCH_5825MHz_Ant1_NTNV

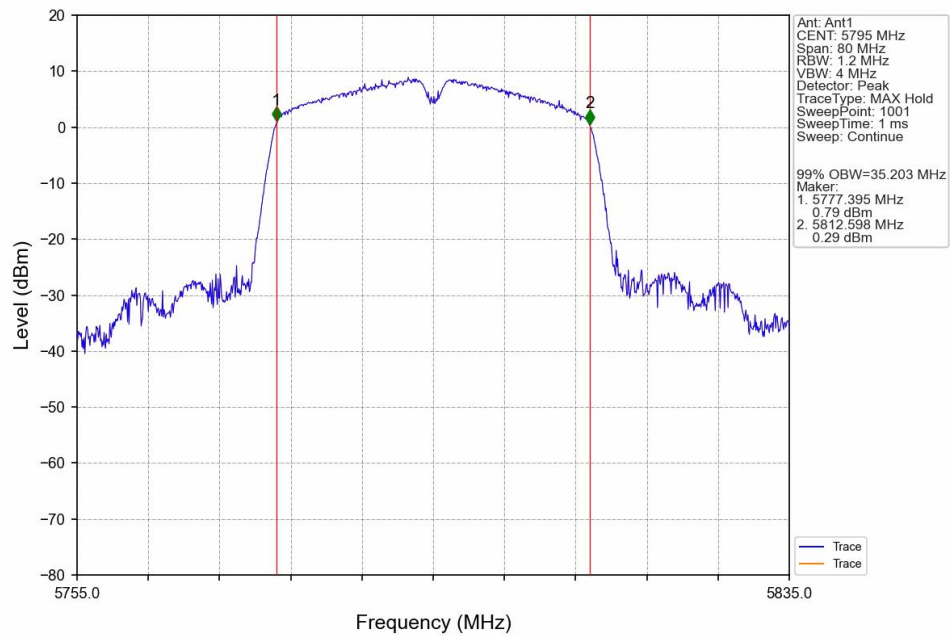




802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



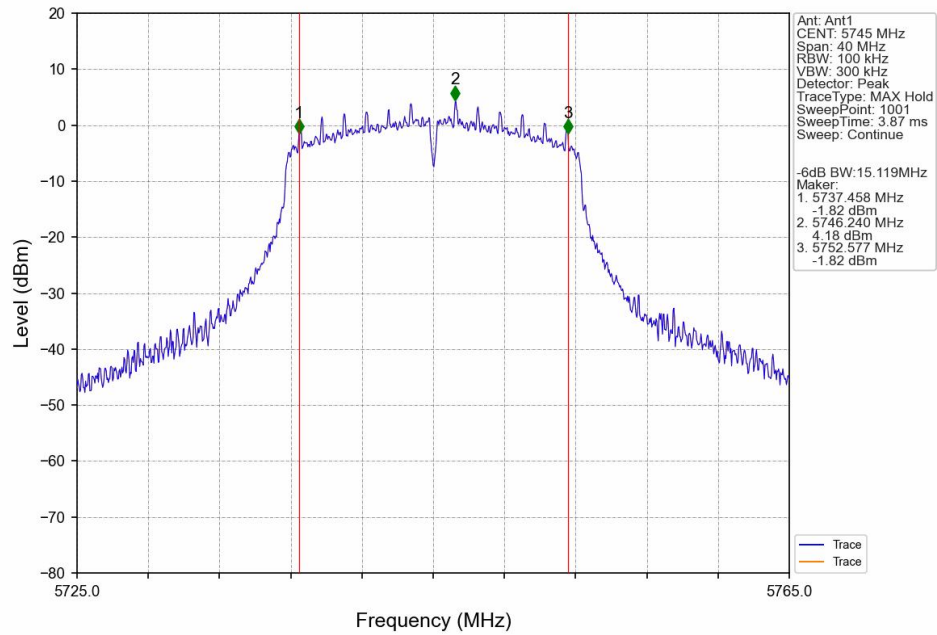
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



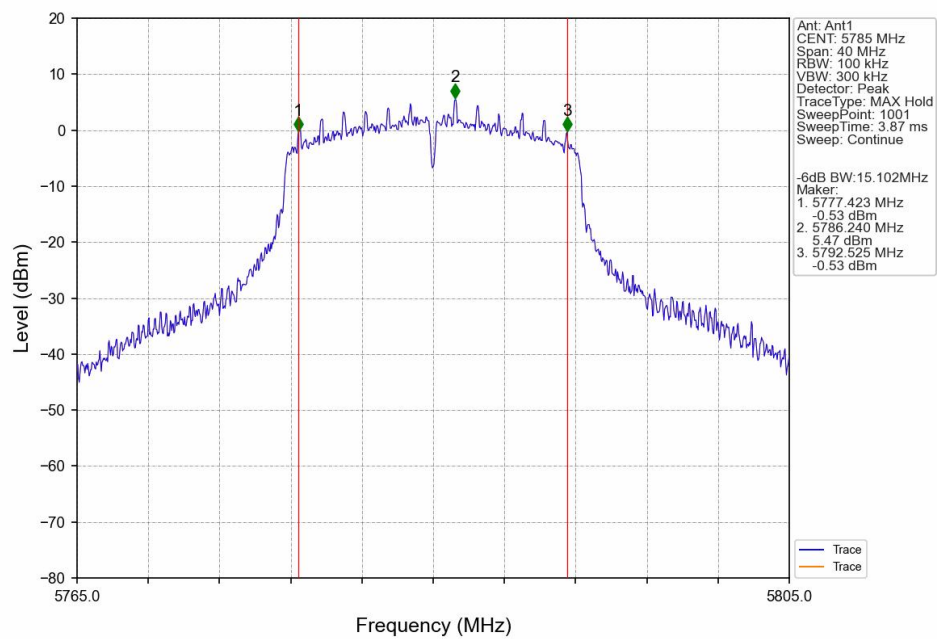


2.2.2 6dB BW

802.11a_LCH_5745MHz_Ant1_NTNV

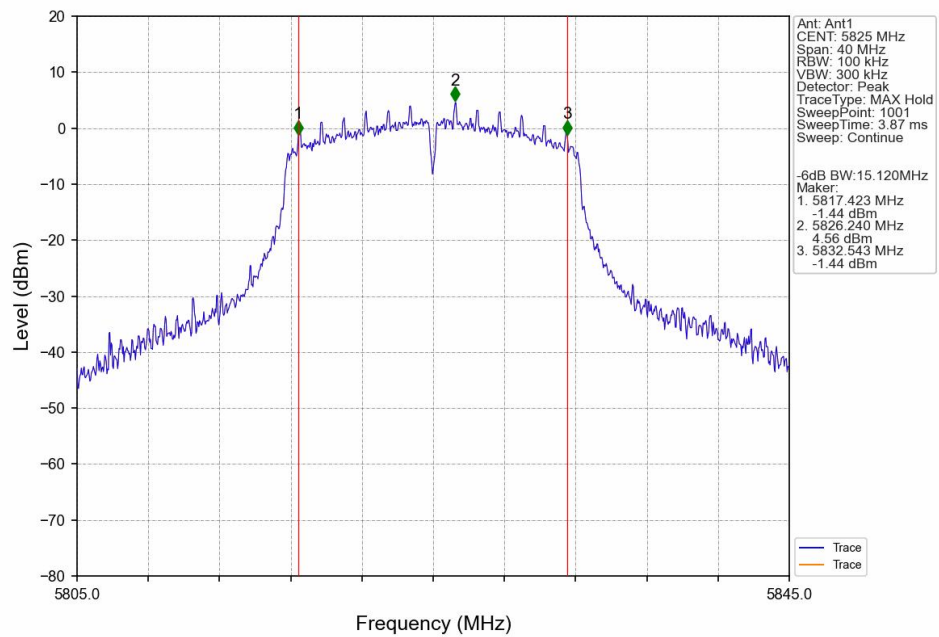


802.11a_MCH_5785MHz_Ant1_NTNV

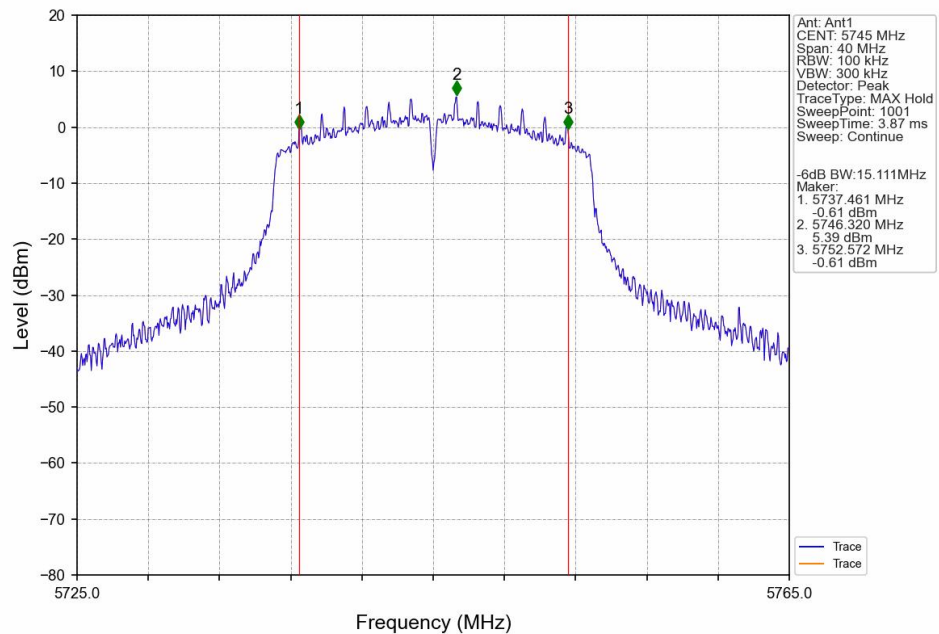




802.11a_HCH_5825MHz_Ant1_NTNV

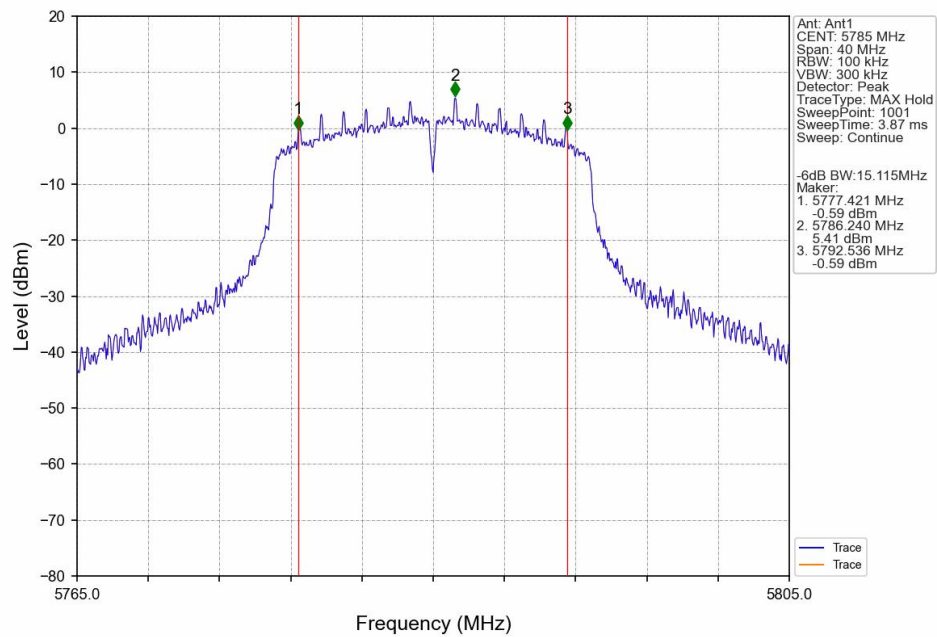


802.11n(HT20)_LCH_5745MHz_Ant1_NTNV

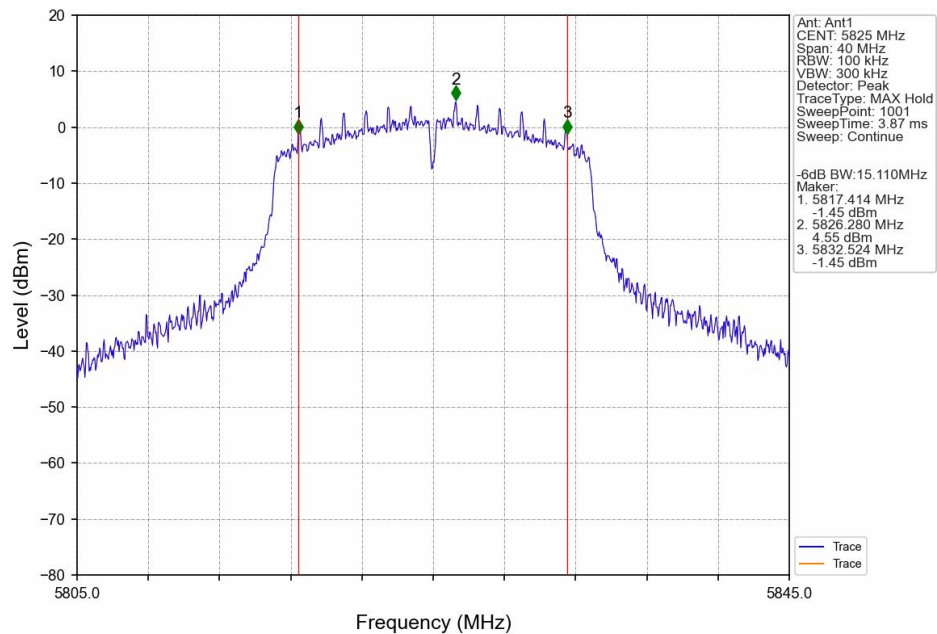




802.11n(HT20)_MCH_5785MHz_Ant1_NTNV

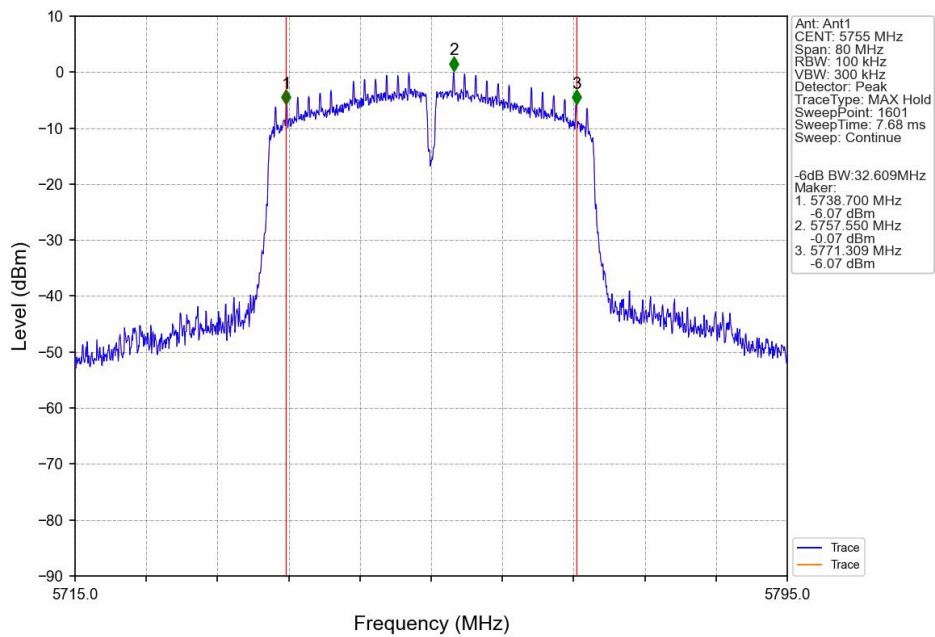


802.11n(HT20)_HCH_5825MHz_Ant1_NTNV

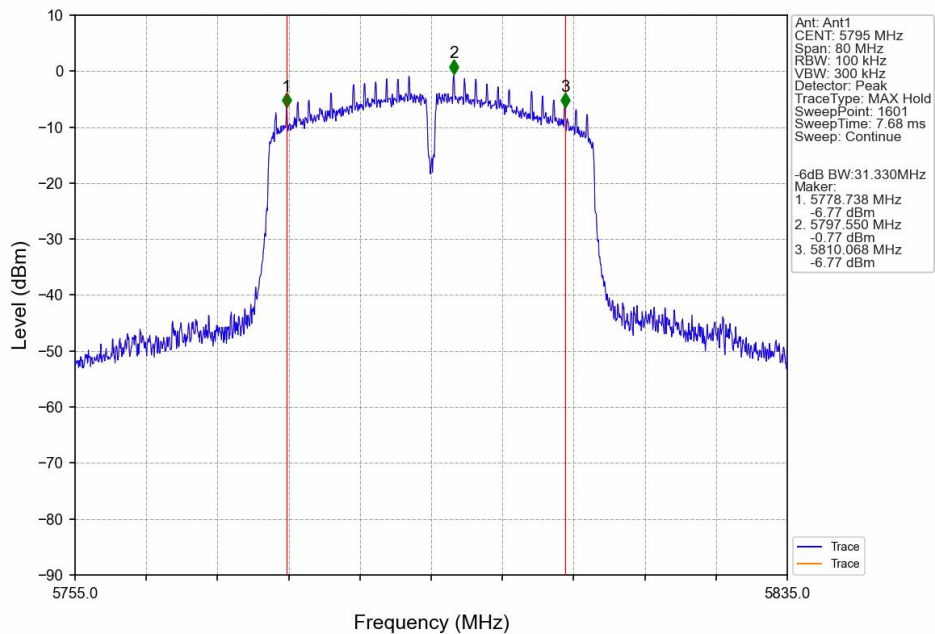




802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



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)	Duty Cycle Correction Factor (dB)	Conducted measurement Output Power (dBm)	Maximum Average Conducted Output Power (dBm)	Limit	Verdict
802.11a	SISO	5745	0.65	5.74	6.39	<=30	Pass
		5785	0.65	5.16	5.81	<=30	Pass
		5825	0.65	4.45	5.10	<=30	Pass
802.11n (HT20)	SISO	5745	0.67	4.97	5.64	<=30	Pass
		5785	0.65	4.85	5.50	<=30	Pass
		5825	0.67	4.64	5.31	<=30	Pass
802.11n (HT40)	SISO	5755	1.38	3.75	5.13	<=30	Pass
		5795	1.26	4.21	5.47	<=30	Pass

Note1: Antenna Gain: Ant1: 2.12dBi;

Note2:Maximum Average Conducted Output=Duty Cycle Factor +Measurement Average Conducted



4. Maximum Power Spectral Density

4.1 Test Result

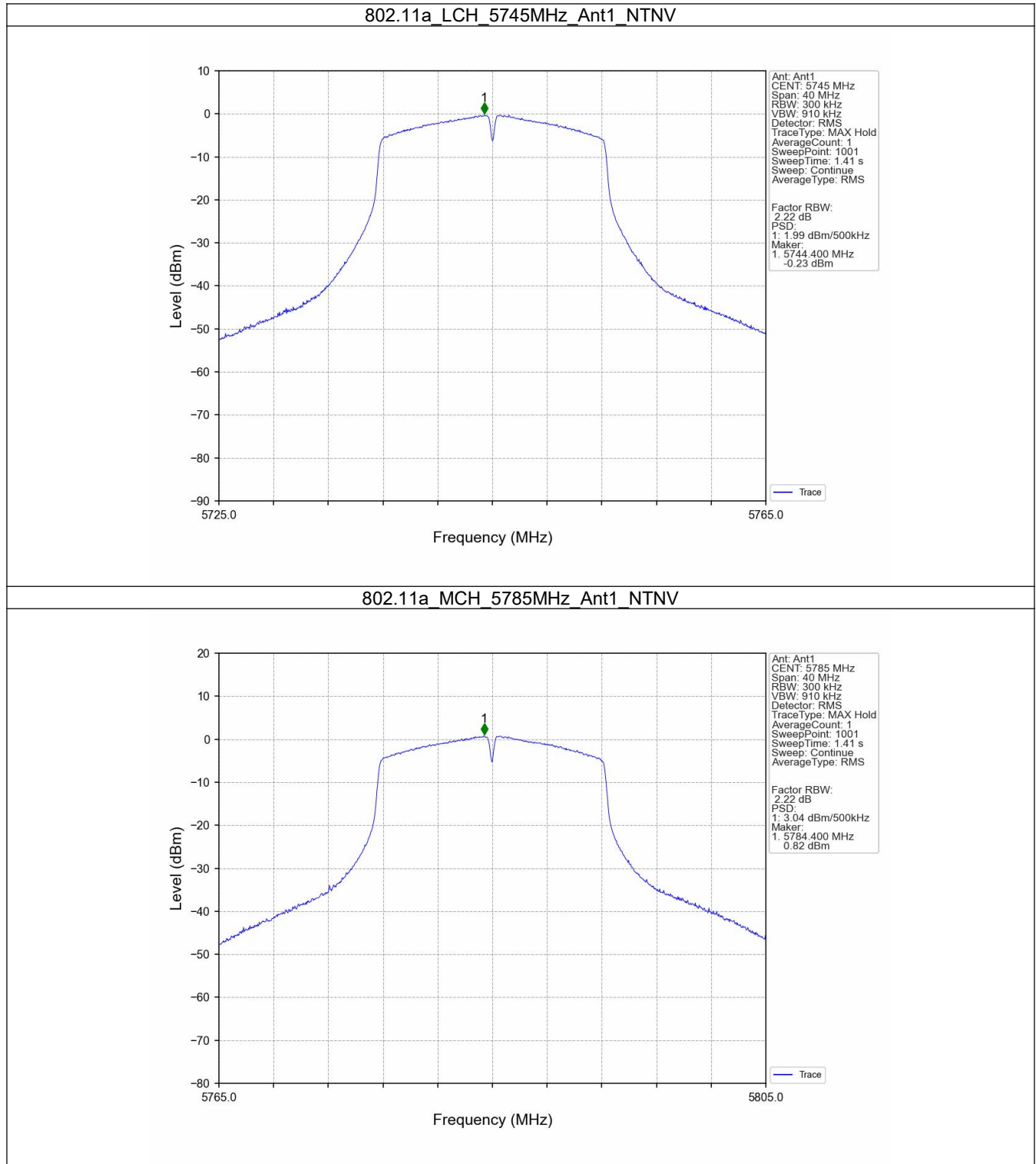
4.1.1 PSD-Band3

Mode	TX Type	Frequency (MHz)	Duty Cycle Correction Factor (dB)	Conducted measurement Output PSD(dBm)	Maximum PSD (dBm/500kHz)	Limit	Verdict
802.11a	SISO	5745	0.65	1.34	1.99	<=30	Pass
		5785	0.65	2.39	3.04	<=30	Pass
		5825	0.65	1.42	2.07	<=30	Pass
802.11n (HT20)	SISO	5745	0.67	2.45	3.12	<=30	Pass
		5785	0.65	2.05	2.70	<=30	Pass
		5825	0.67	1.6	2.27	<=30	Pass
802.11n (HT40)	SISO	5755	1.38	-5.16	-3.78	<=30	Pass
		5795	1.26	-4.77	-3.51	<=30	Pass
Note1: Antenna Gain: Ant1: 2.12dBi; Note2:Maximum Average PSD=Duty Cycle Factor +Measurement Average Conducted							



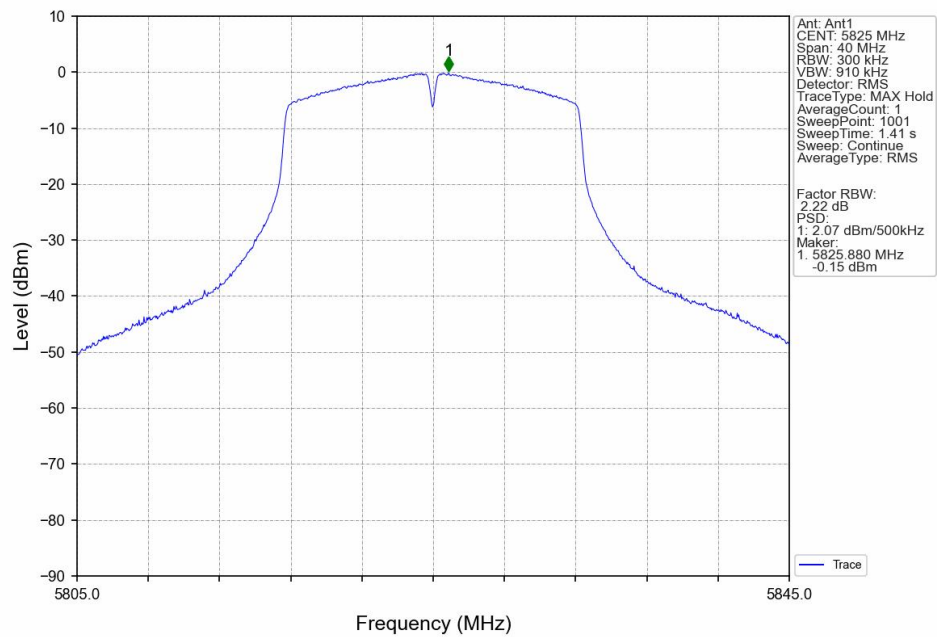
4.2 Test Graph

4.2.1 PSD-Band3

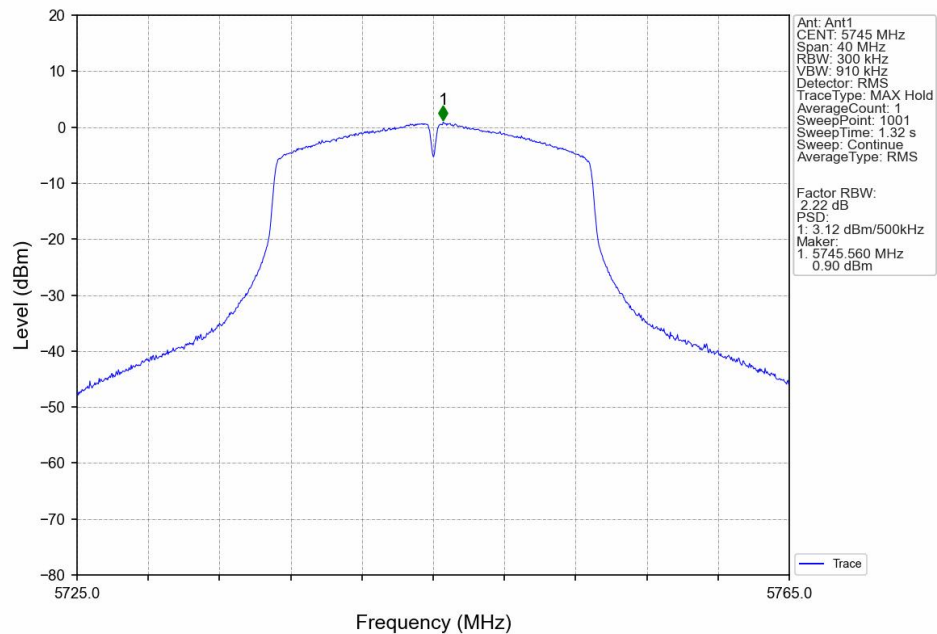




802.11a_HCH_5825MHz_Ant1_NTNV

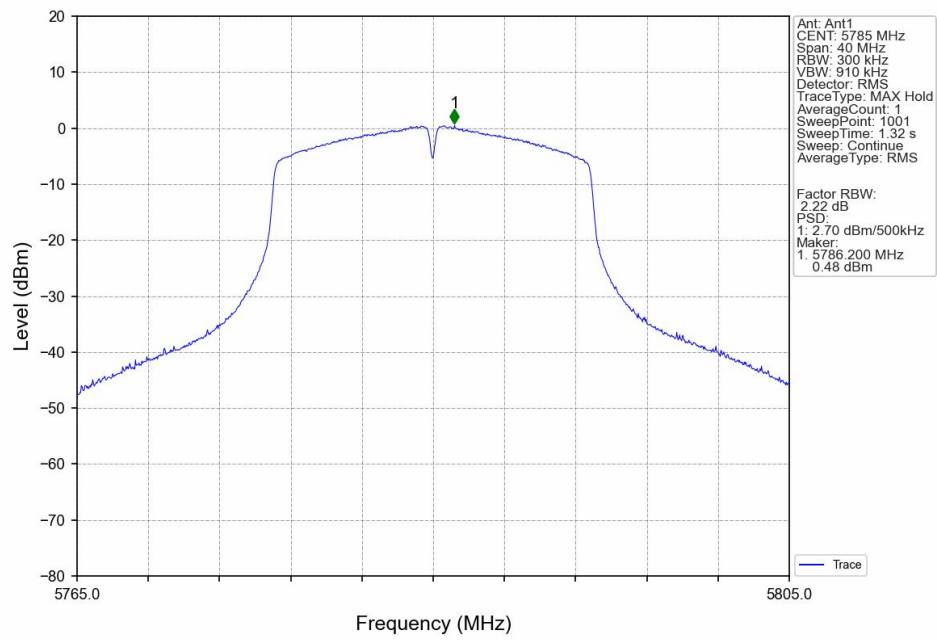


802.11n(HT20)_LCH_5745MHz_Ant1_NTNV

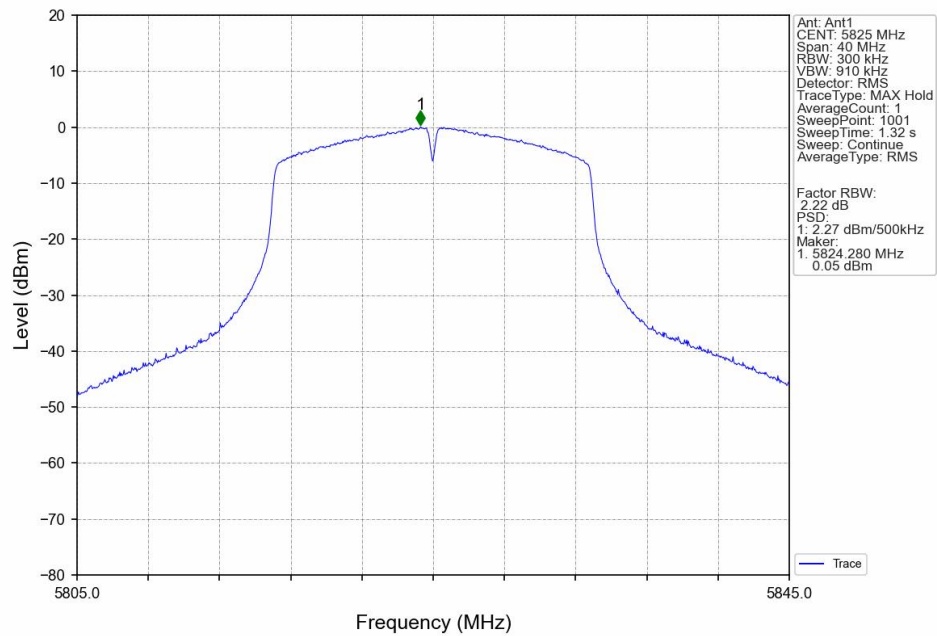




802.11n(HT20)_MCH_5785MHz_Ant1_NTNV

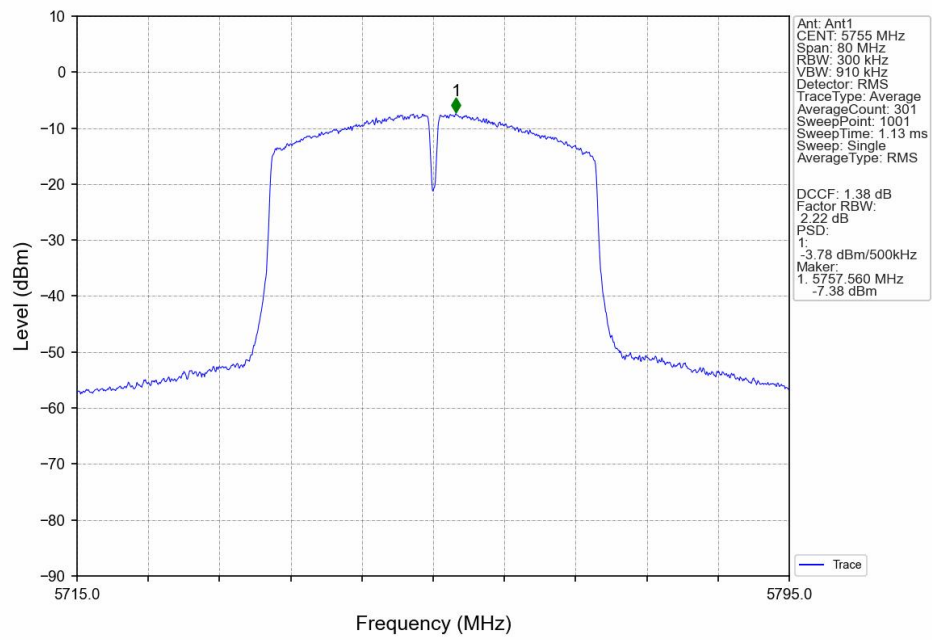


802.11n(HT20)_HCH_5825MHz_Ant1_NTNV

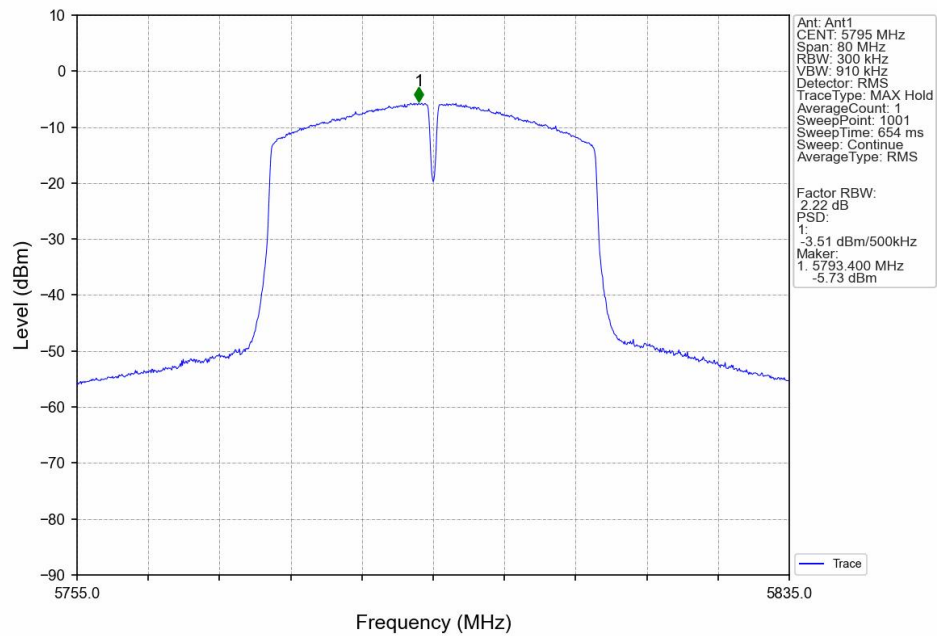




802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



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 (VDC)	Measured Frequency (MHz)	Limit (MHz)	Verdict
802.11a	SISO	5745	20	5.88	5745.000	5725 to 5850	Pass
				5.0	5745.020	5725 to 5850	Pass
				5.75	5745.020	5725 to 5850	Pass
			-30	5.0	5745.020	5725 to 5850	Pass
			-20	5.0	5745.020	5725 to 5850	Pass
			-10	5.0	5745.040	5725 to 5850	Pass
			0	5.0	5745.020	5725 to 5850	Pass
			10	5.0	5745.020	5725 to 5850	Pass
			30	5.0	5745.000	5725 to 5850	Pass
			40	5.0	5744.960	5725 to 5850	Pass
			50	5.0	5745.020	5725 to 5850	Pass
		5785	20	5.88	5785.000	5725 to 5850	Pass
				5.0	5784.980	5725 to 5850	Pass
				5.75	5784.980	5725 to 5850	Pass
			-30	5.0	5784.980	5725 to 5850	Pass
			-20	5.0	5785.000	5725 to 5850	Pass
			-10	5.0	5785.000	5725 to 5850	Pass
			0	5.0	5784.960	5725 to 5850	Pass
			10	5.0	5785.000	5725 to 5850	Pass
			30	5.0	5784.960	5725 to 5850	Pass
			40	5.0	5784.980	5725 to 5850	Pass
			50	5.0	5784.900	5725 to 5850	Pass
		5825	20	5.88	5825.000	5725 to 5850	Pass
				5.0	5824.960	5725 to 5850	Pass
				5.75	5825.000	5725 to 5850	Pass
			-30	5.0	5825.000	5725 to 5850	Pass
			-20	5.0	5824.980	5725 to 5850	Pass
			-10	5.0	5824.980	5725 to 5850	Pass
			0	5.0	5825.000	5725 to 5850	Pass
			10	5.0	5824.960	5725 to 5850	Pass
			30	5.0	5825.040	5725 to 5850	Pass
			40	5.0	5824.980	5725 to 5850	Pass
			50	5.0	5824.960	5725 to 5850	Pass
802.11n (HT20)	SISO	5745	20	5.88	5744.980	5725 to 5850	Pass
				5.0	5745.000	5725 to 5850	Pass
				5.75	5745.000	5725 to 5850	Pass
			-30	5.0	5744.980	5725 to 5850	Pass
			-20	5.0	5744.980	5725 to 5850	Pass
			-10	5.0	5744.980	5725 to 5850	Pass
			0	5.0	5744.960	5725 to 5850	Pass
			10	5.0	5745.000	5725 to 5850	Pass
			30	5.0	5745.000	5725 to 5850	Pass
			40	5.0	5744.960	5725 to 5850	Pass
			50	5.0	5745.000	5725 to 5850	Pass



		5785	20	5.88	5784.940	5725 to 5850	Pass
				5.0	5784.980	5725 to 5850	Pass
				5.75	5784.980	5725 to 5850	Pass
			-30	5.0	5784.980	5725 to 5850	Pass
			-20	5.0	5784.980	5725 to 5850	Pass
			-10	5.0	5784.980	5725 to 5850	Pass
			0	5.0	5785.000	5725 to 5850	Pass
			10	5.0	5784.980	5725 to 5850	Pass
			30	5.0	5784.980	5725 to 5850	Pass
			40	5.0	5784.980	5725 to 5850	Pass
			50	5.0	5785.000	5725 to 5850	Pass
		5825	20	5.88	5824.980	5725 to 5850	Pass
				5.0	5825.000	5725 to 5850	Pass
				5.75	5825.000	5725 to 5850	Pass
			-30	5.0	5824.980	5725 to 5850	Pass
			-20	5.0	5825.000	5725 to 5850	Pass
			-10	5.0	5824.980	5725 to 5850	Pass
			0	5.0	5824.980	5725 to 5850	Pass
			10	5.0	5825.000	5725 to 5850	Pass
			30	5.0	5824.980	5725 to 5850	Pass
			40	5.0	5824.960	5725 to 5850	Pass
			50	5.0	5824.960	5725 to 5850	Pass
802.11n (HT40)	SISO	5755	20	5.88	5754.960	5725 to 5850	Pass
				5.0	5754.960	5725 to 5850	Pass
				5.75	5755.040	5725 to 5850	Pass
			-30	5.0	5754.960	5725 to 5850	Pass
			-20	5.0	5755.000	5725 to 5850	Pass
			-10	5.0	5755.000	5725 to 5850	Pass
			0	5.0	5755.000	5725 to 5850	Pass
			10	5.0	5754.960	5725 to 5850	Pass
			30	5.0	5755.040	5725 to 5850	Pass
			40	5.0	5755.000	5725 to 5850	Pass
			50	5.0	5754.960	5725 to 5850	Pass
		5795	20	5.88	5794.960	5725 to 5850	Pass
				5.0	5794.960	5725 to 5850	Pass
				5.75	5795.000	5725 to 5850	Pass
			-30	5.0	5795.080	5725 to 5850	Pass
			-20	5.0	5795.000	5725 to 5850	Pass
			-10	5.0	5794.920	5725 to 5850	Pass
			0	5.0	5794.920	5725 to 5850	Pass
			10	5.0	5794.960	5725 to 5850	Pass
			30	5.0	5794.960	5725 to 5850	Pass
			40	5.0	5795.000	5725 to 5850	Pass
			50	5.0	5794.960	5725 to 5850	Pass