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Annex for 5G Wi-Fi BAND 3

Test Report No.: CTL2404222135-WF04

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1. Bandwidth

1.1 Test Result

1.1.1 OBW

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	19.071	/	Pass
		5785	1	18.996	/	Pass
		5825	1	19.084	/	Pass
802.11n (HT20)	SISO	5745	1	20.180	/	Pass
		5785	1	20.138	/	Pass
		5825	1	20.193	/	Pass
802.11n (HT40)	SISO	5755	1	38.597	/	Pass
		5795	1	38.323	/	Pass
802.11ac (VHT20)	SISO	5745	1	20.179	/	Pass
		5785	1	20.285	/	Pass
		5825	1	20.309	/	Pass
802.11ac (VHT40)	SISO	5755	1	37.893	/	Pass
		5795	1	37.783	/	Pass

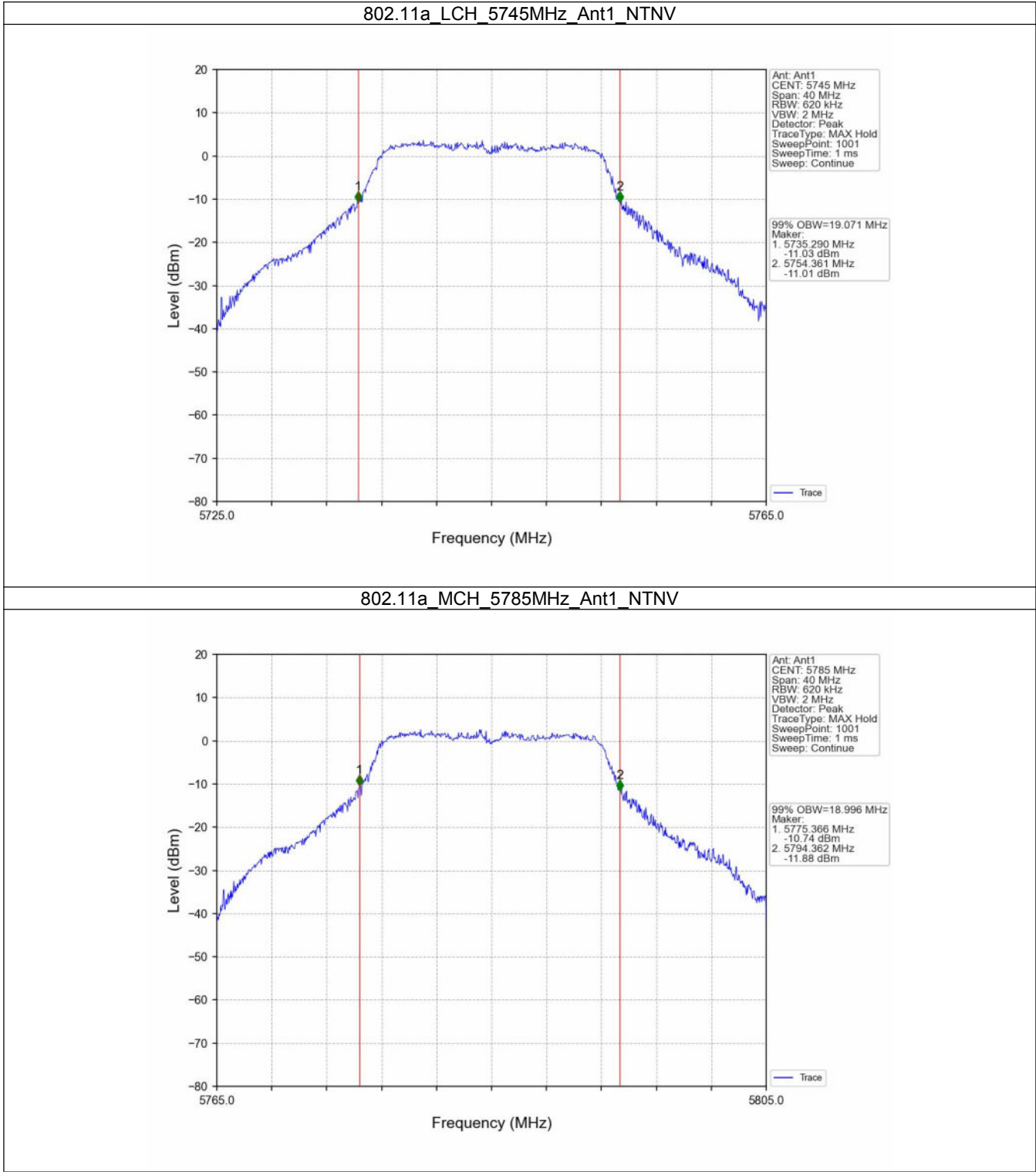
1.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	16.372	>=0.5	Pass
		5785	1	16.371	>=0.5	Pass
		5825	1	16.379	>=0.5	Pass
802.11n (HT20)	SISO	5745	1	17.608	>=0.5	Pass
		5785	1	17.594	>=0.5	Pass
		5825	1	17.613	>=0.5	Pass
802.11n (HT40)	SISO	5755	1	36.381	>=0.5	Pass
		5795	1	36.370	>=0.5	Pass
802.11ac (VHT20)	SISO	5745	1	17.665	>=0.5	Pass
		5785	1	17.679	>=0.5	Pass
		5825	1	17.687	>=0.5	Pass
802.11ac (VHT40)	SISO	5755	1	36.474	>=0.5	Pass
		5795	1	36.501	>=0.5	Pass

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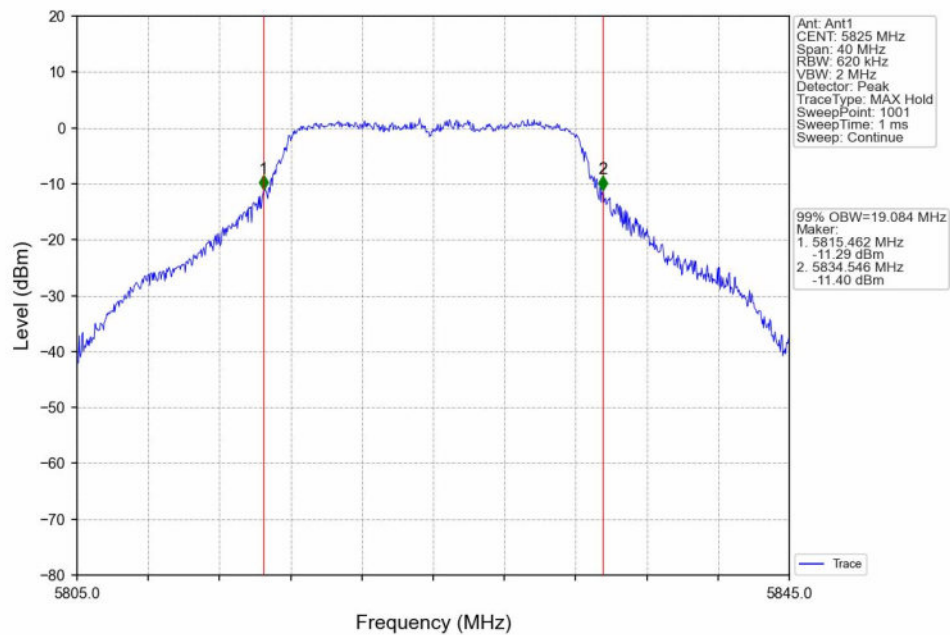
1.2 Test Graph

1.2.1 OBW

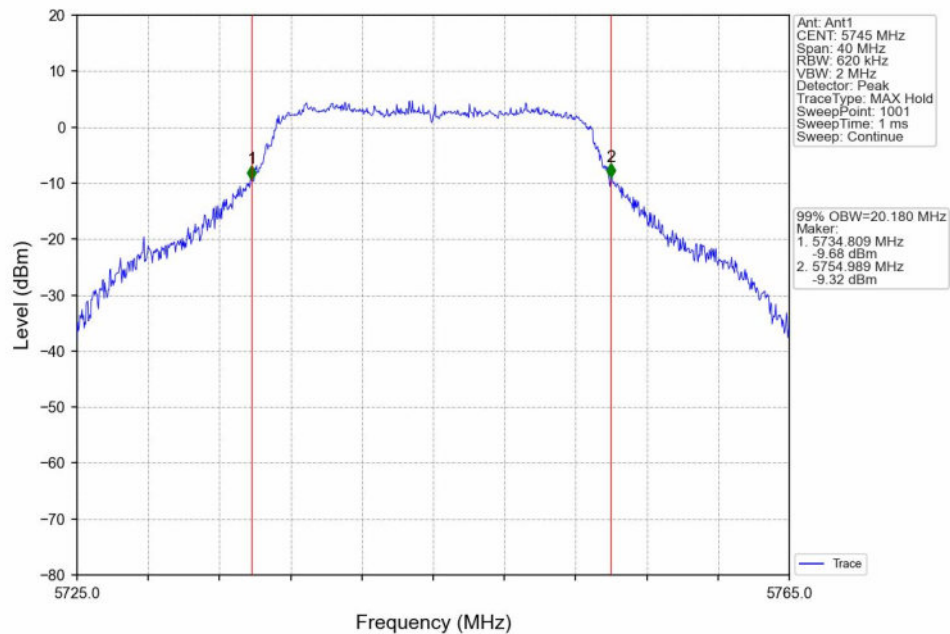


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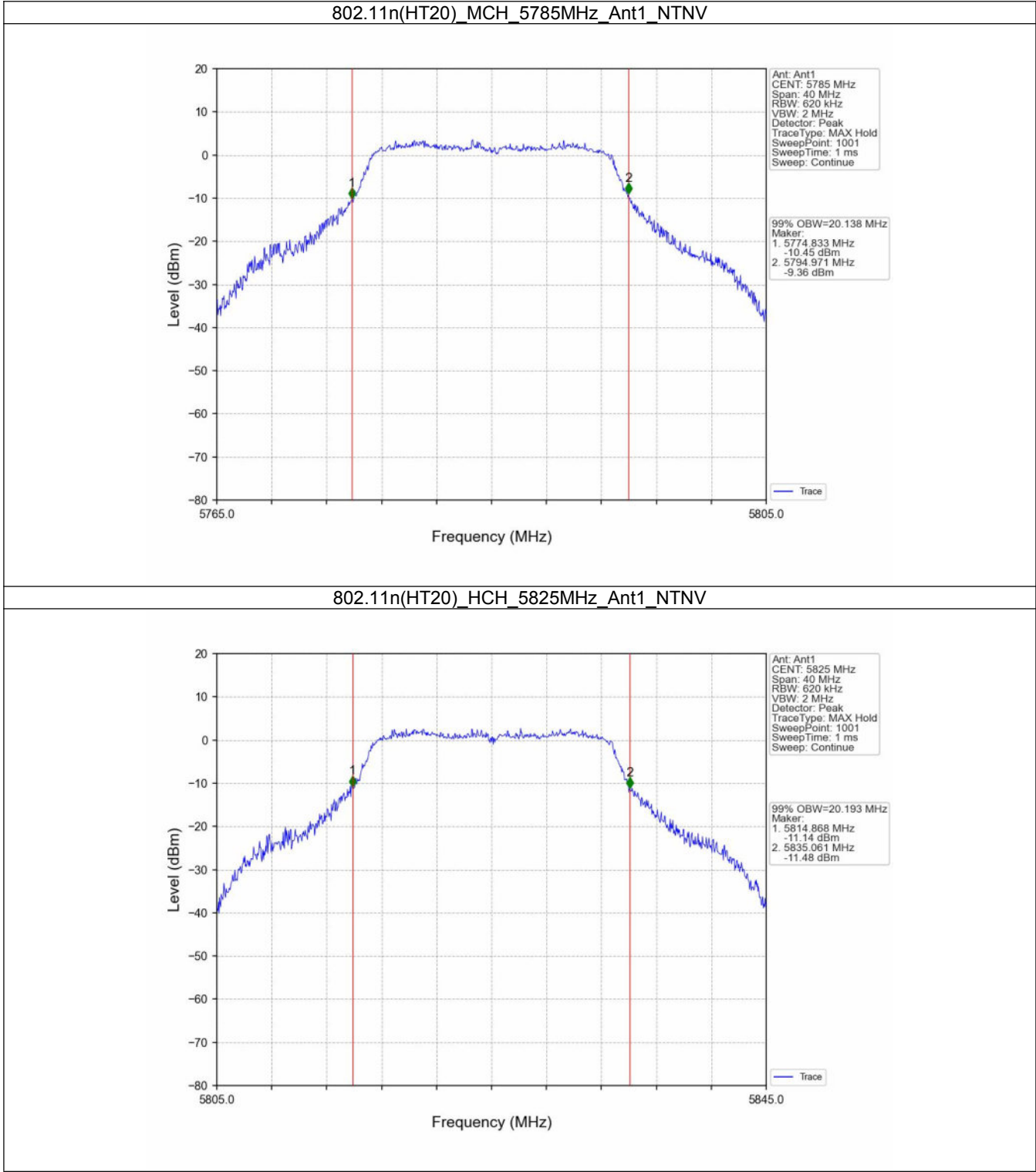
802.11a_HCH_5825MHz_Ant1_NTNV



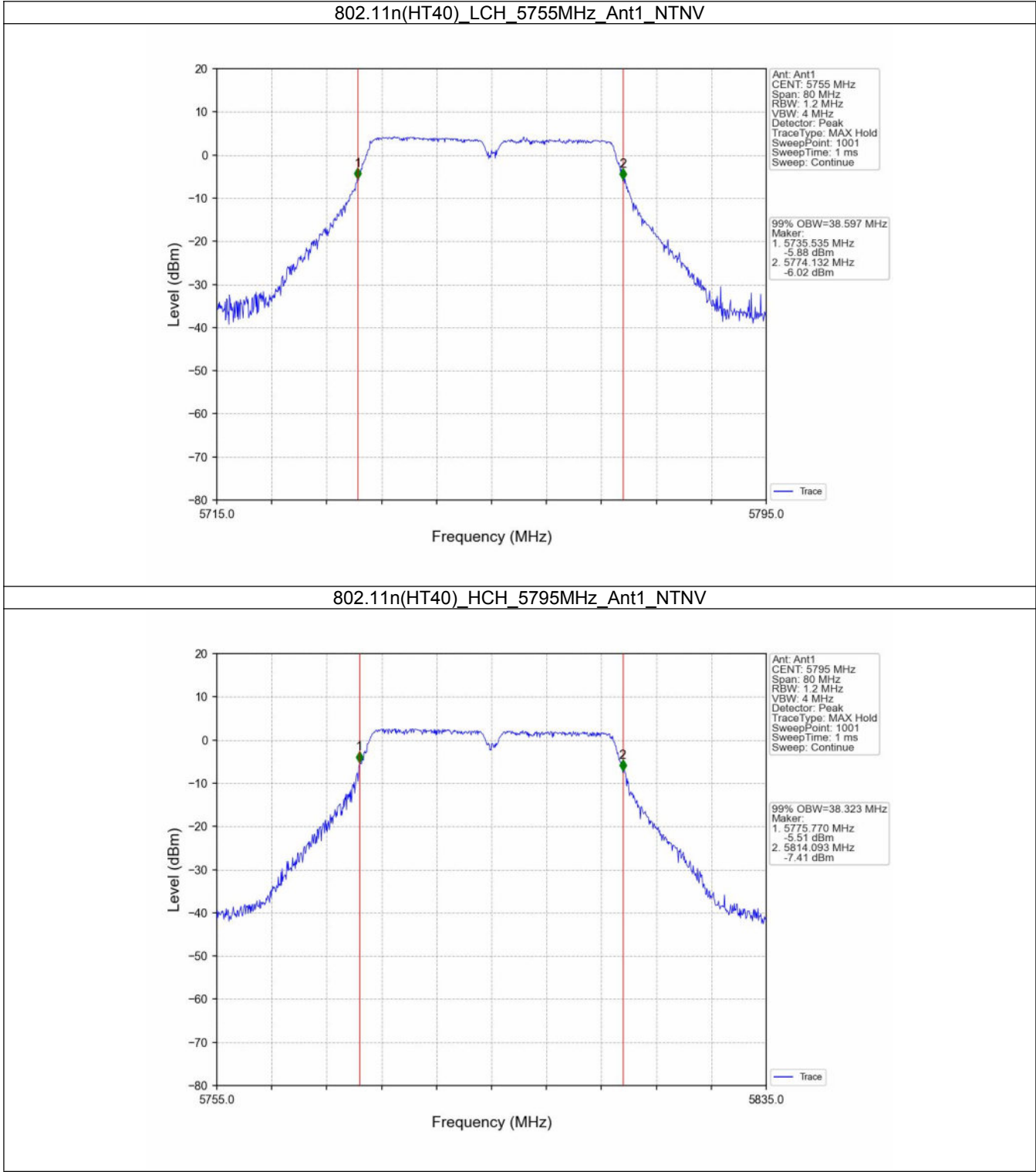
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



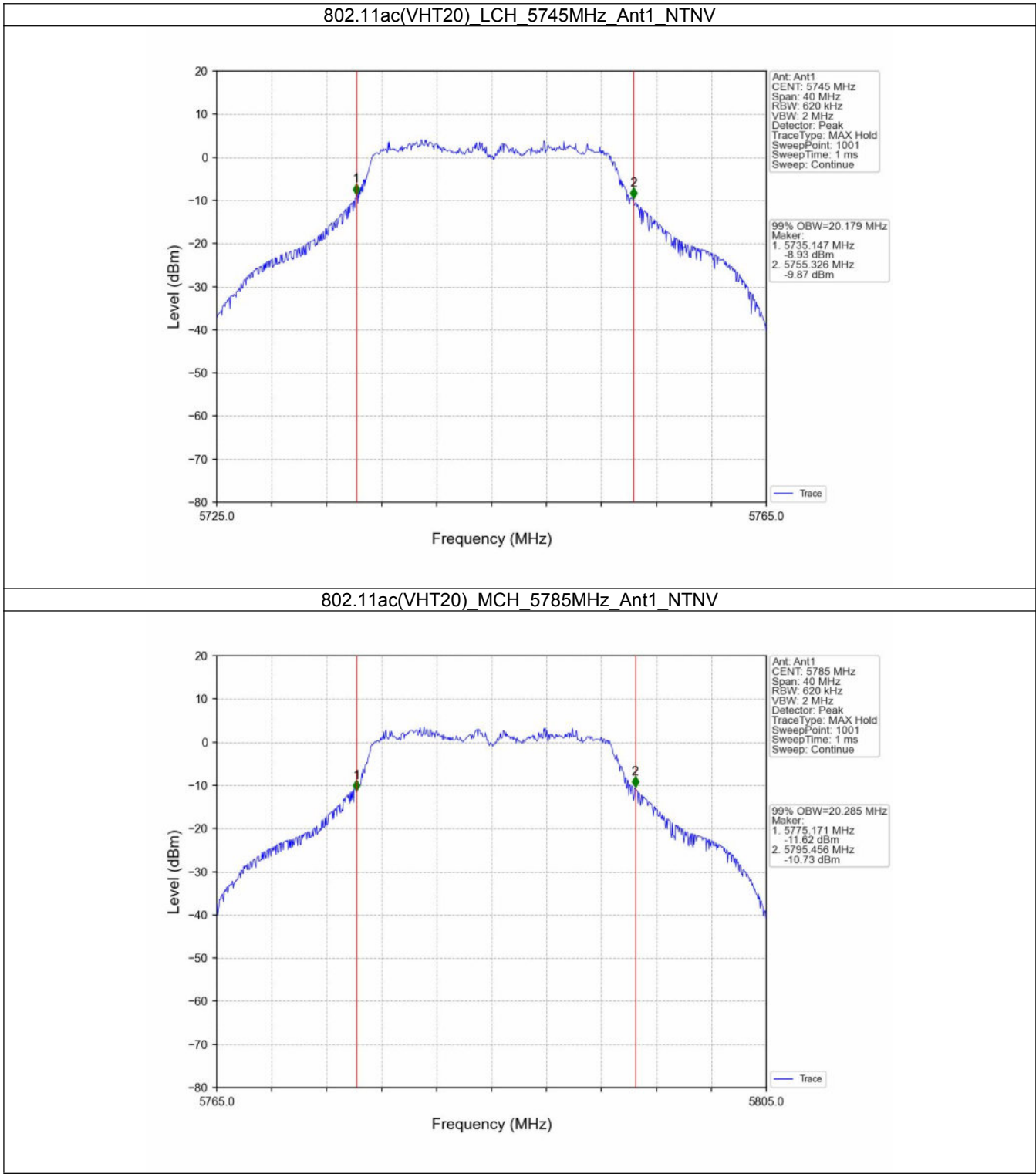
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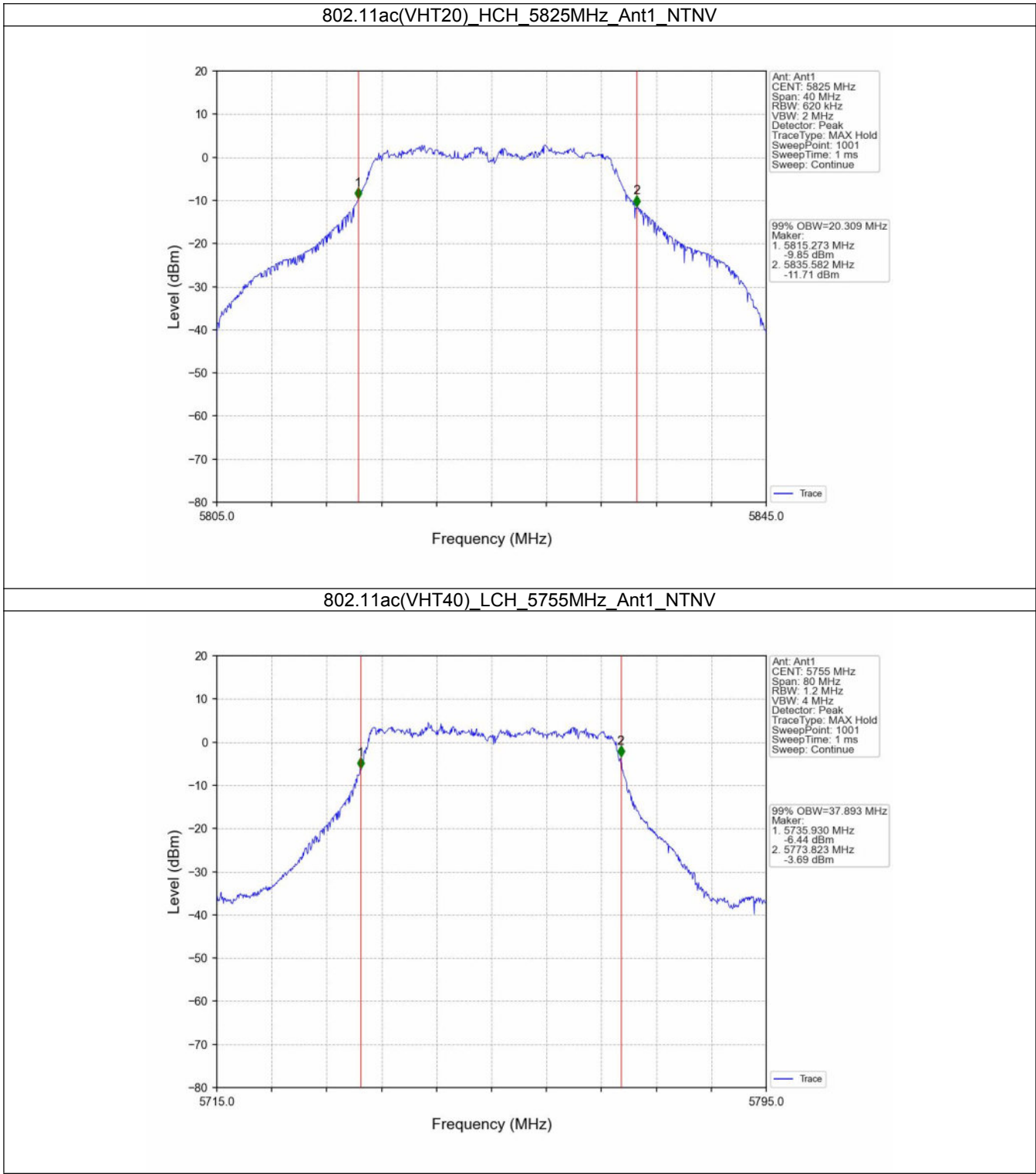
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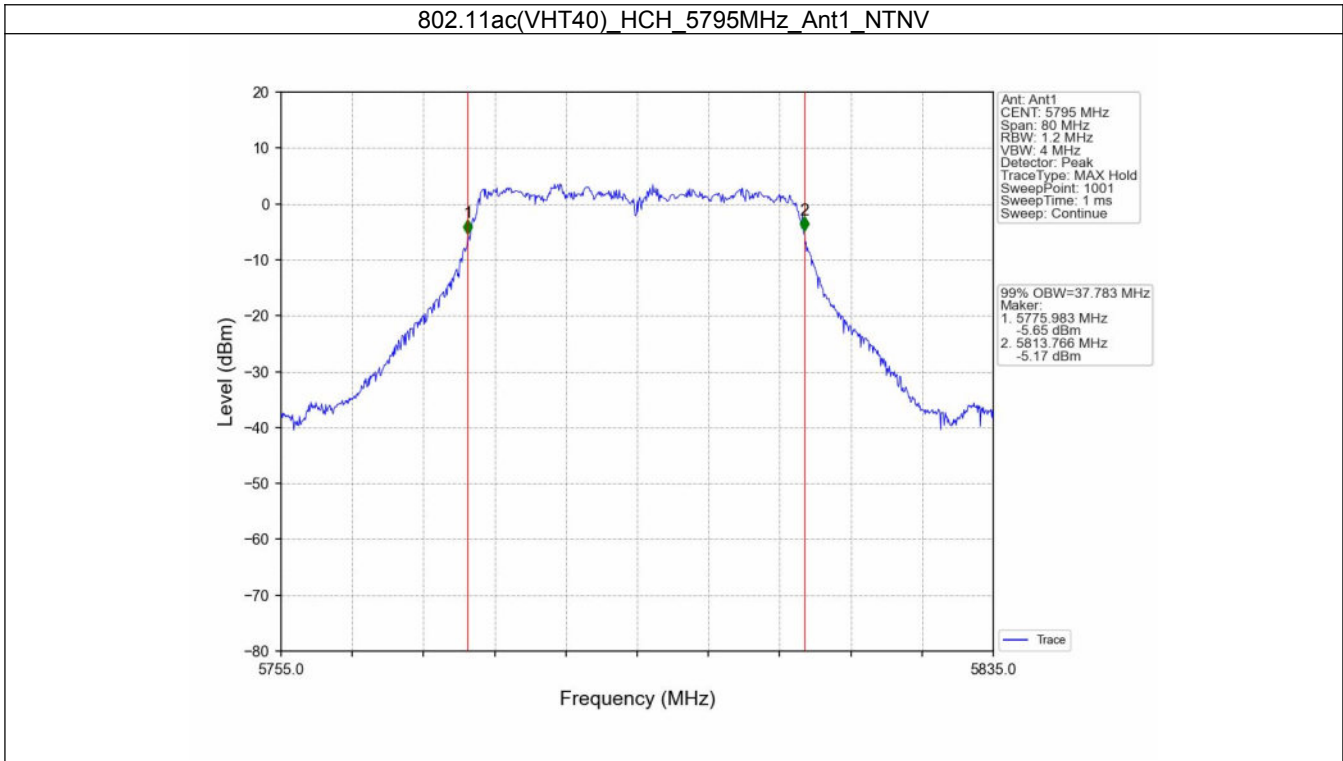
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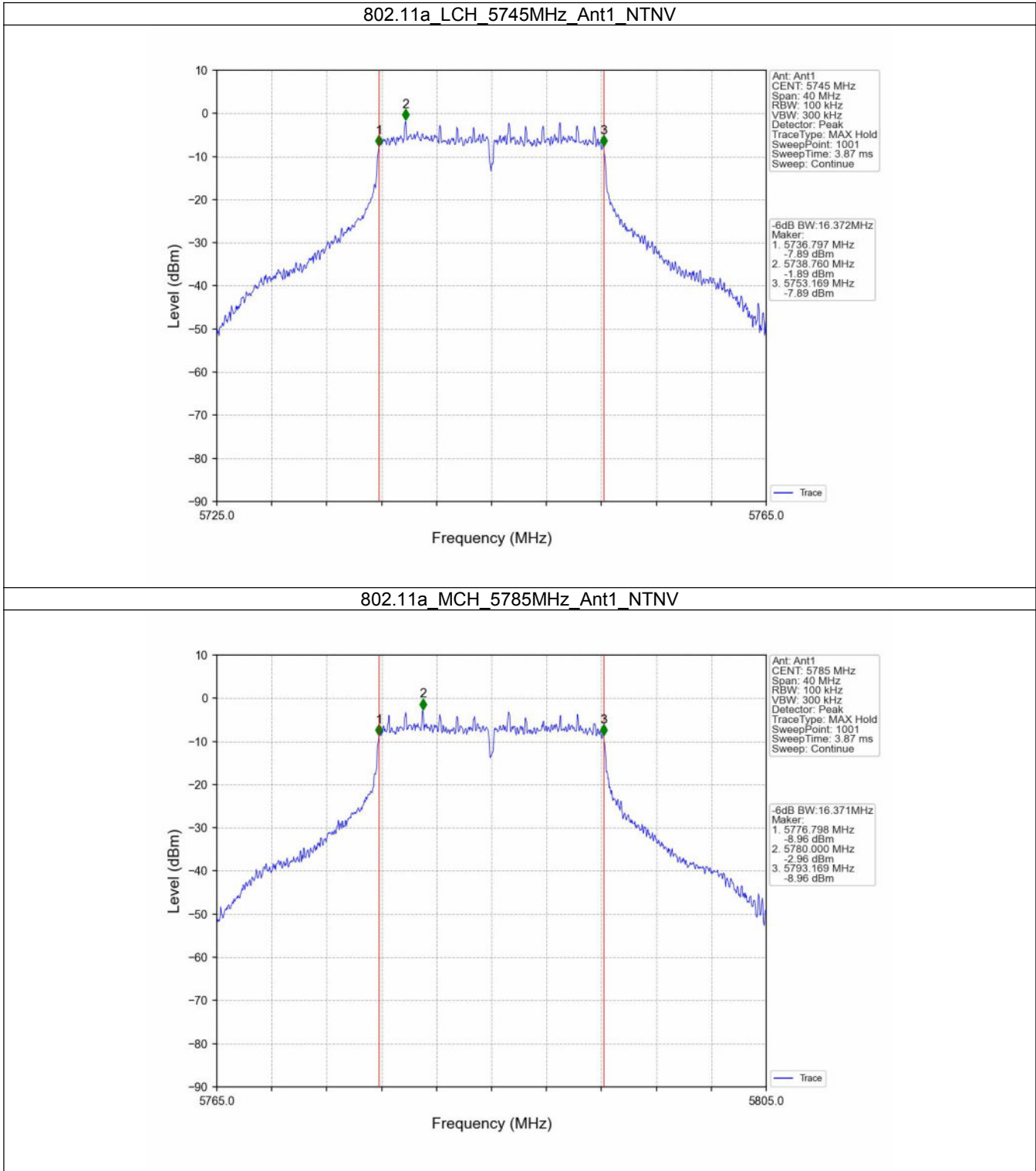


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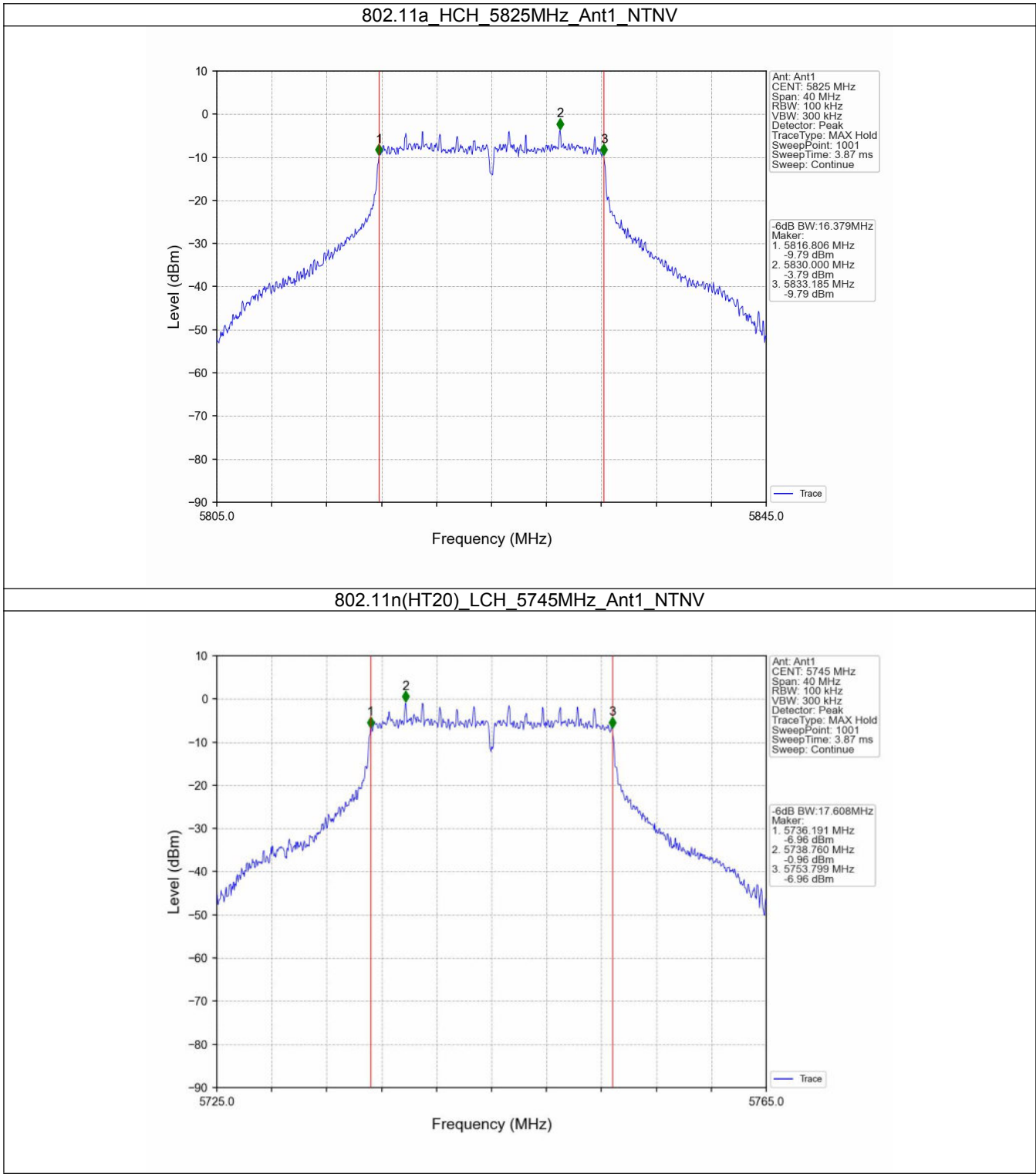


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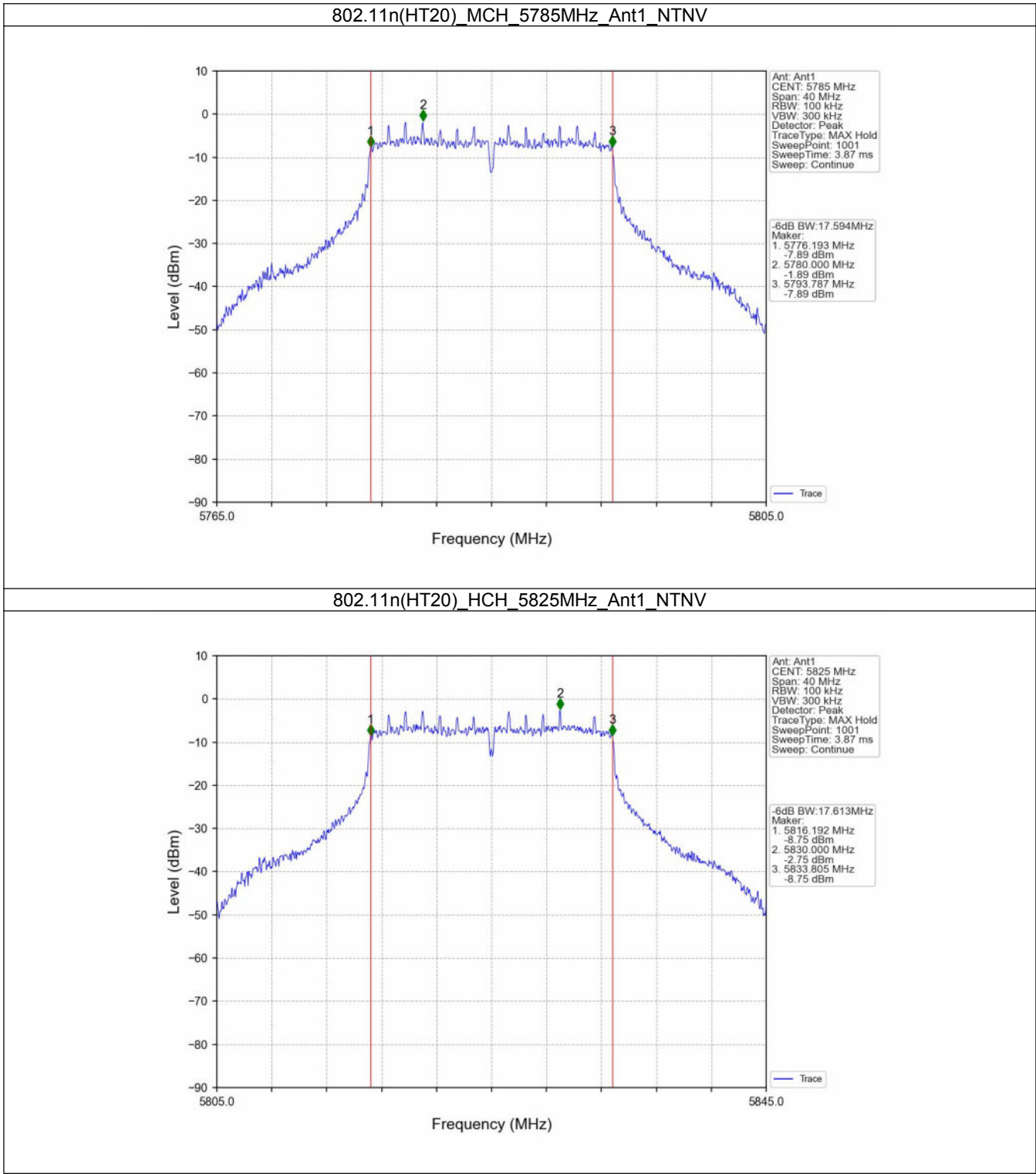
1.2.2 6dB BW



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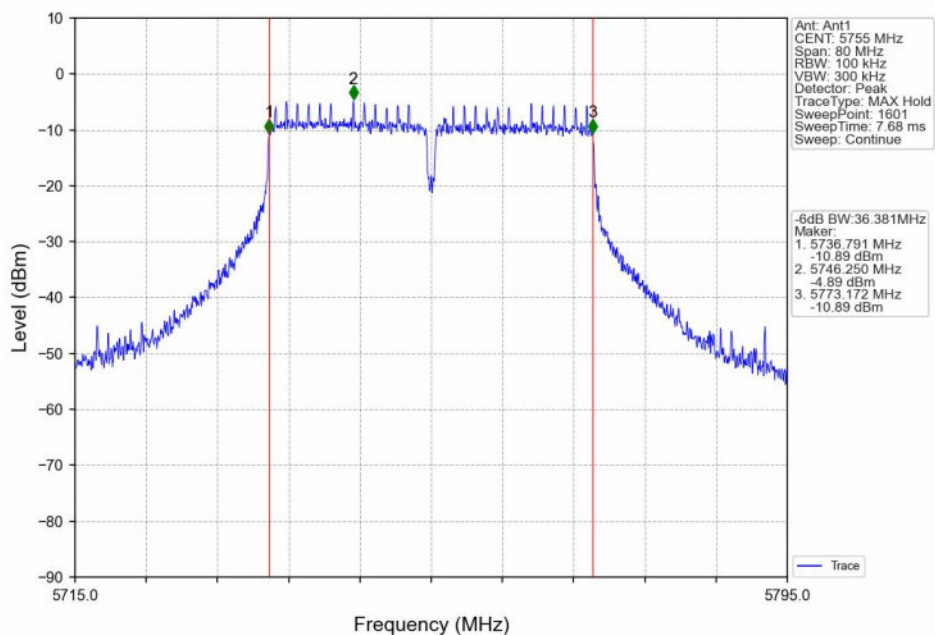


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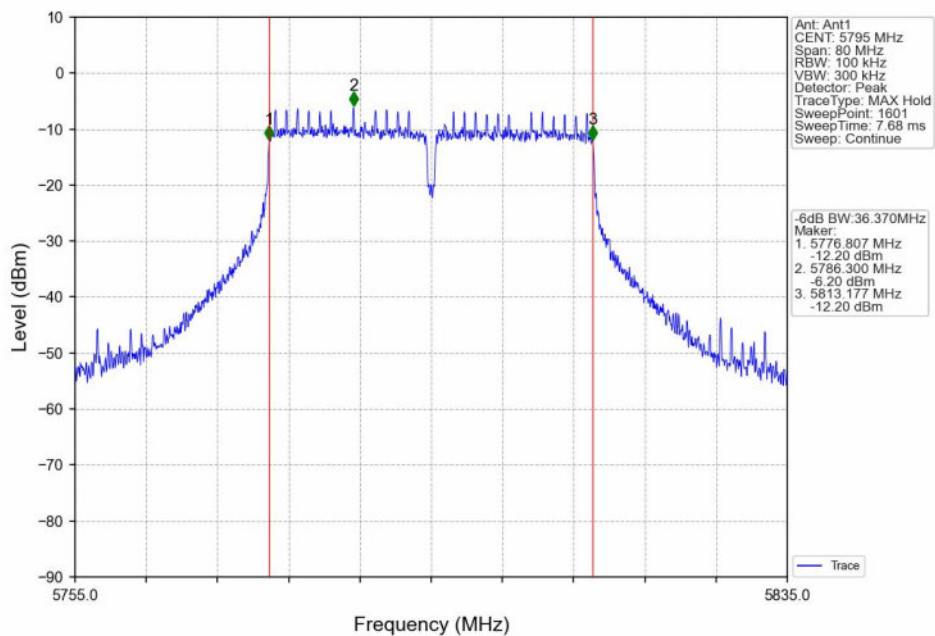


FCC ID: 2ASC7TAB702

802.11n(HT40)_LCH_5755MHz_Ant1_NTNV

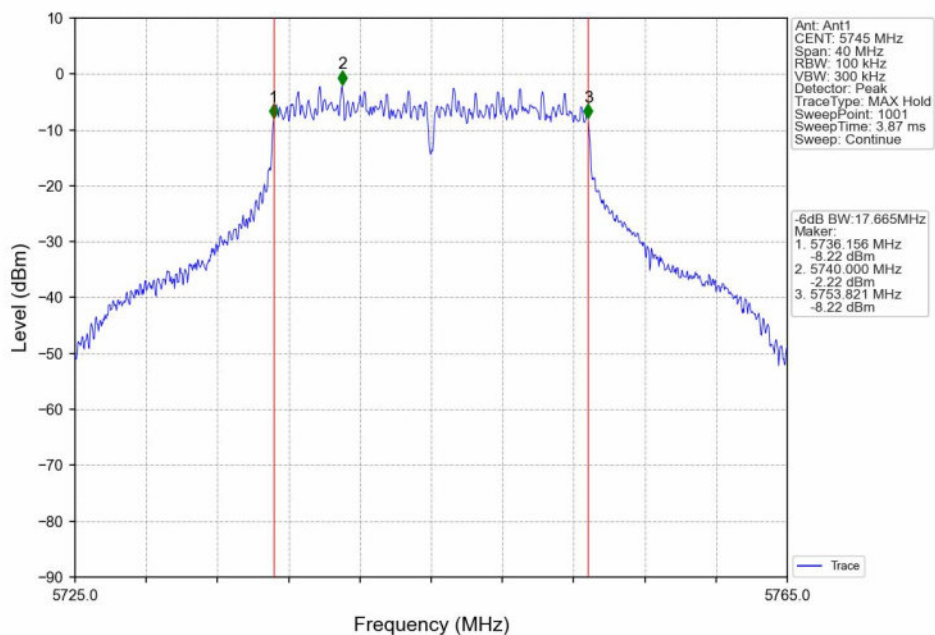


802.11n(HT40)_HCH_5795MHz_Ant1_NTNV

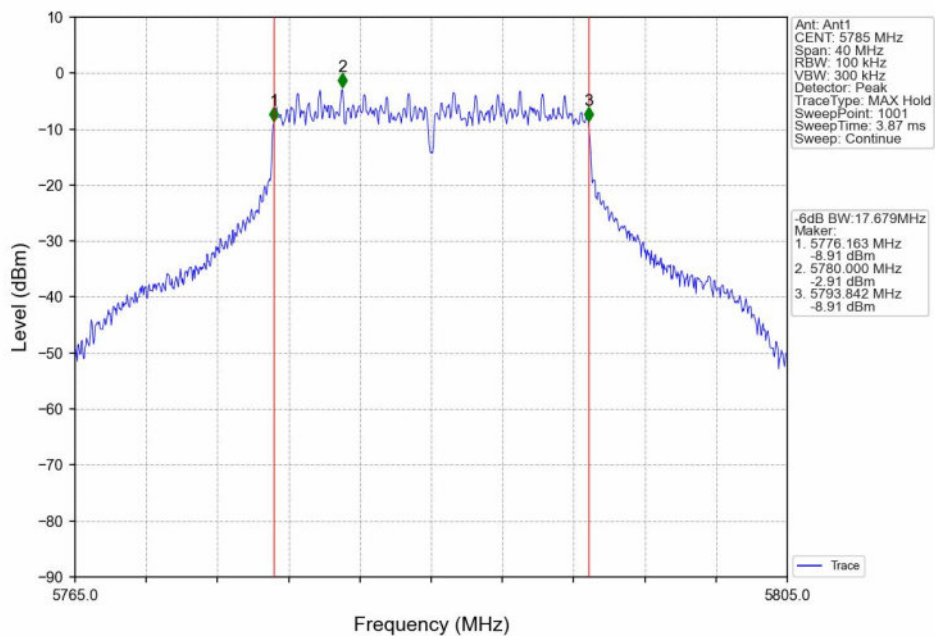


FCC ID: 2ASC7TAB702

802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV

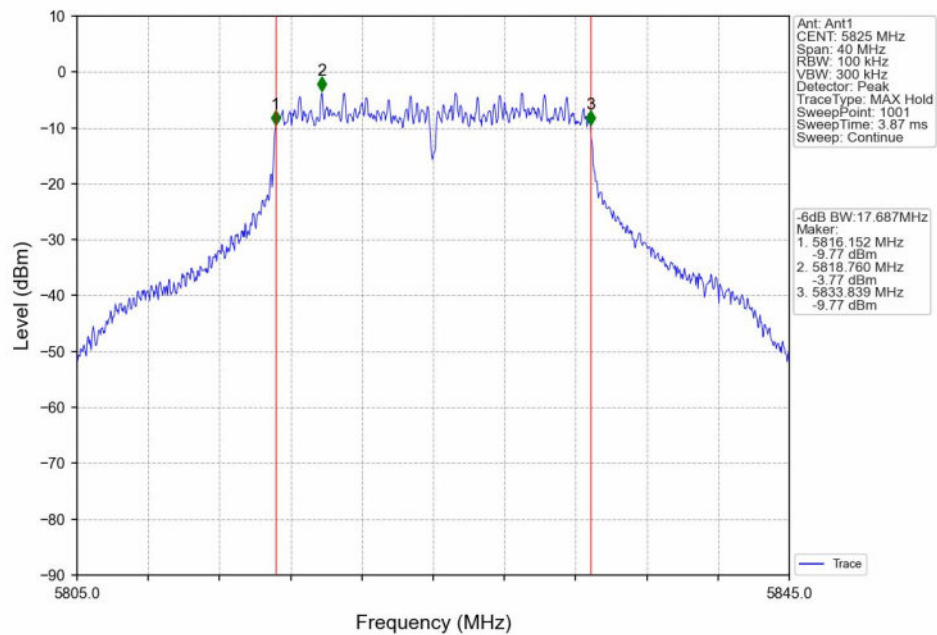


802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV

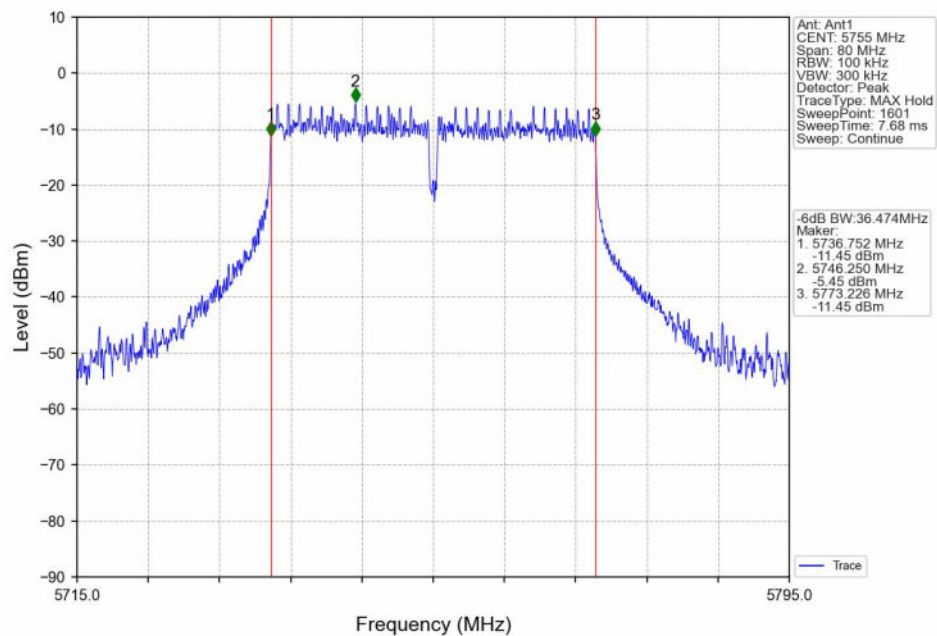


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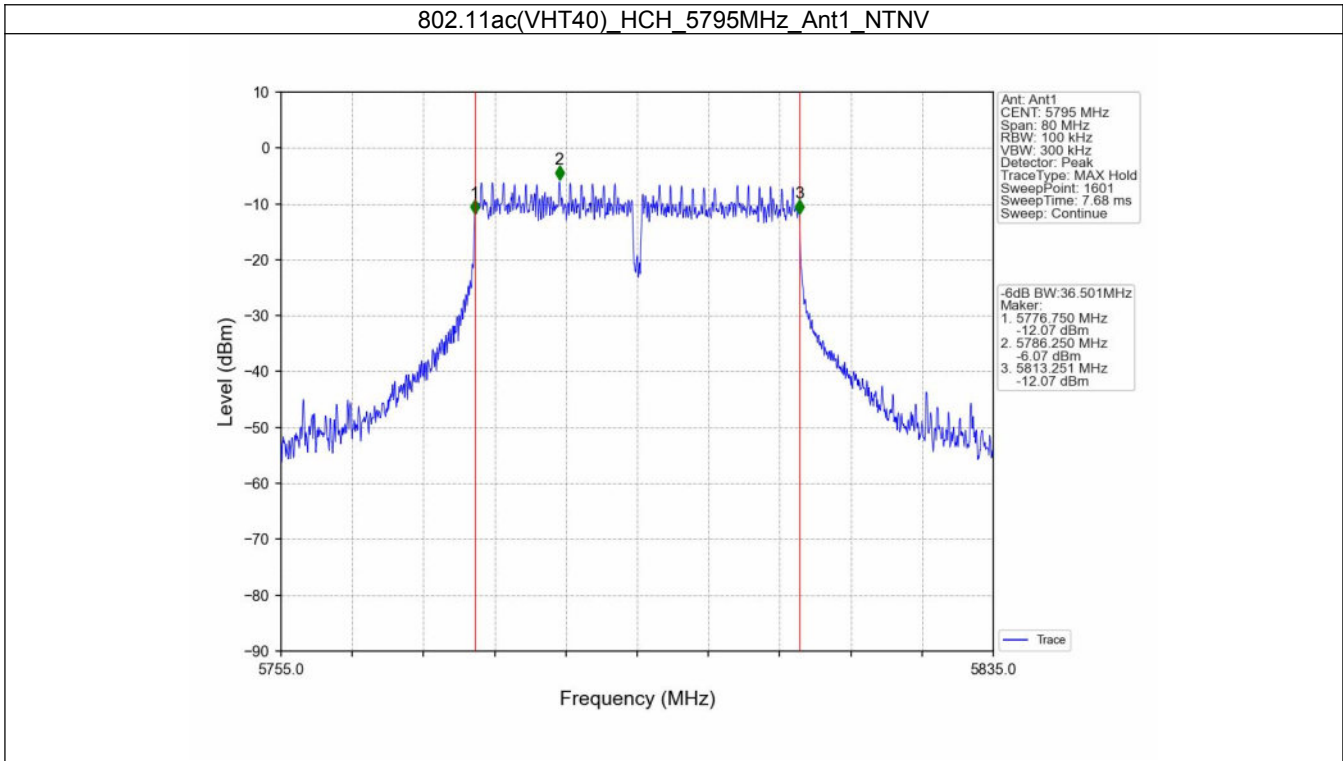
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



FCC ID: 2ASC7TAB702



FCC ID: 2ASC7TAB702

2. Maximum Conducted Output Power

2.1 Test Result

2.1.1 Power

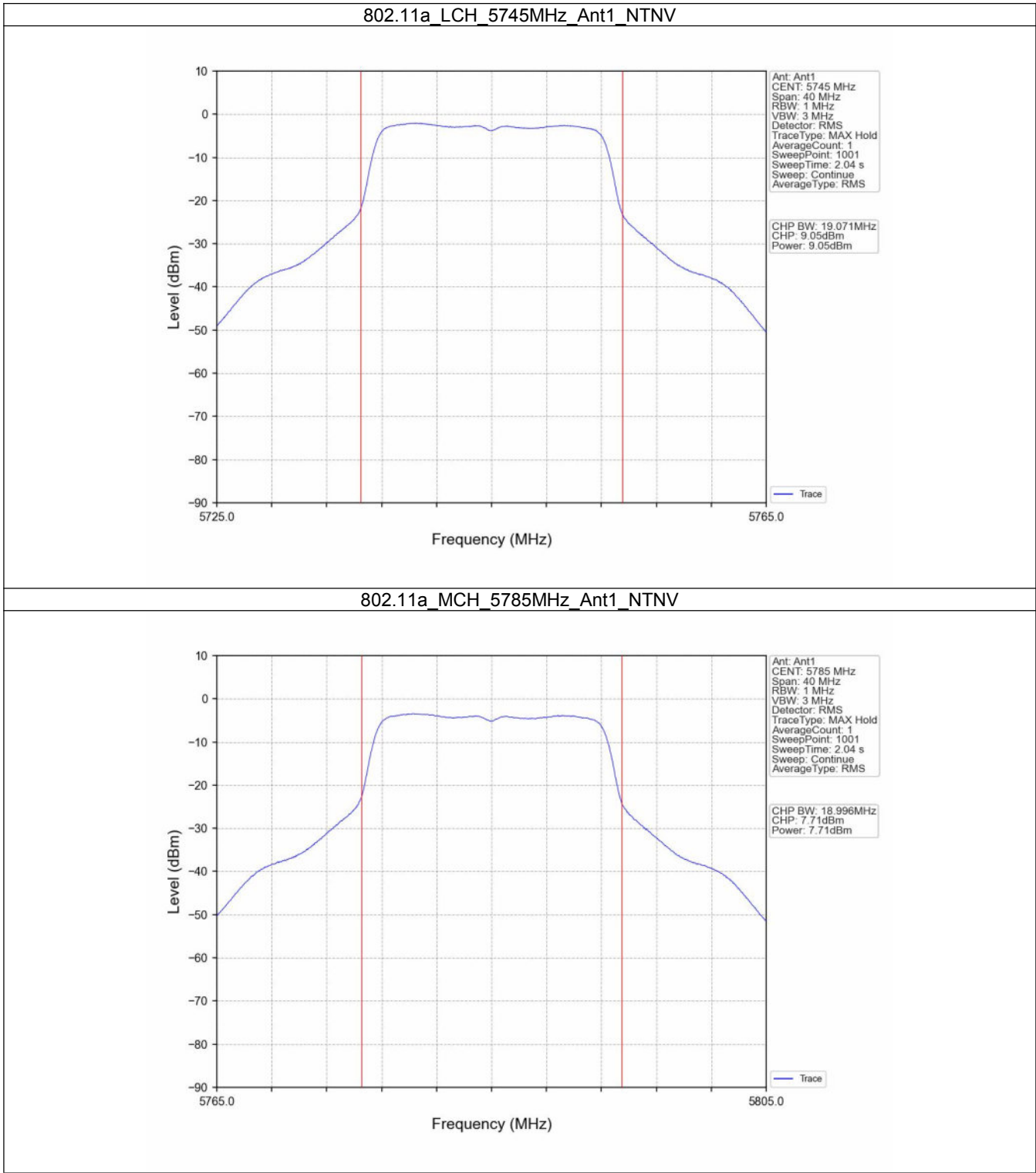
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5745	9.05	<=30	Pass
		5785	7.71	<=30	Pass
		5825	6.95	<=30	Pass
802.11n (HT20)	SISO	5745	9.85	<=30	Pass
		5785	8.68	<=30	Pass
		5825	7.87	<=30	Pass
802.11n (HT40)	SISO	5755	9.02	<=30	Pass
		5795	7.42	<=30	Pass
802.11ac (VHT20)	SISO	5745	8.72	<=30	Pass
		5785	7.93	<=30	Pass
		5825	7.12	<=30	Pass
802.11ac (VHT40)	SISO	5755	8.60	<=30	Pass
		5795	7.80	<=30	Pass

Note1: Antenna Gain: Ant1: 1.25dBi;

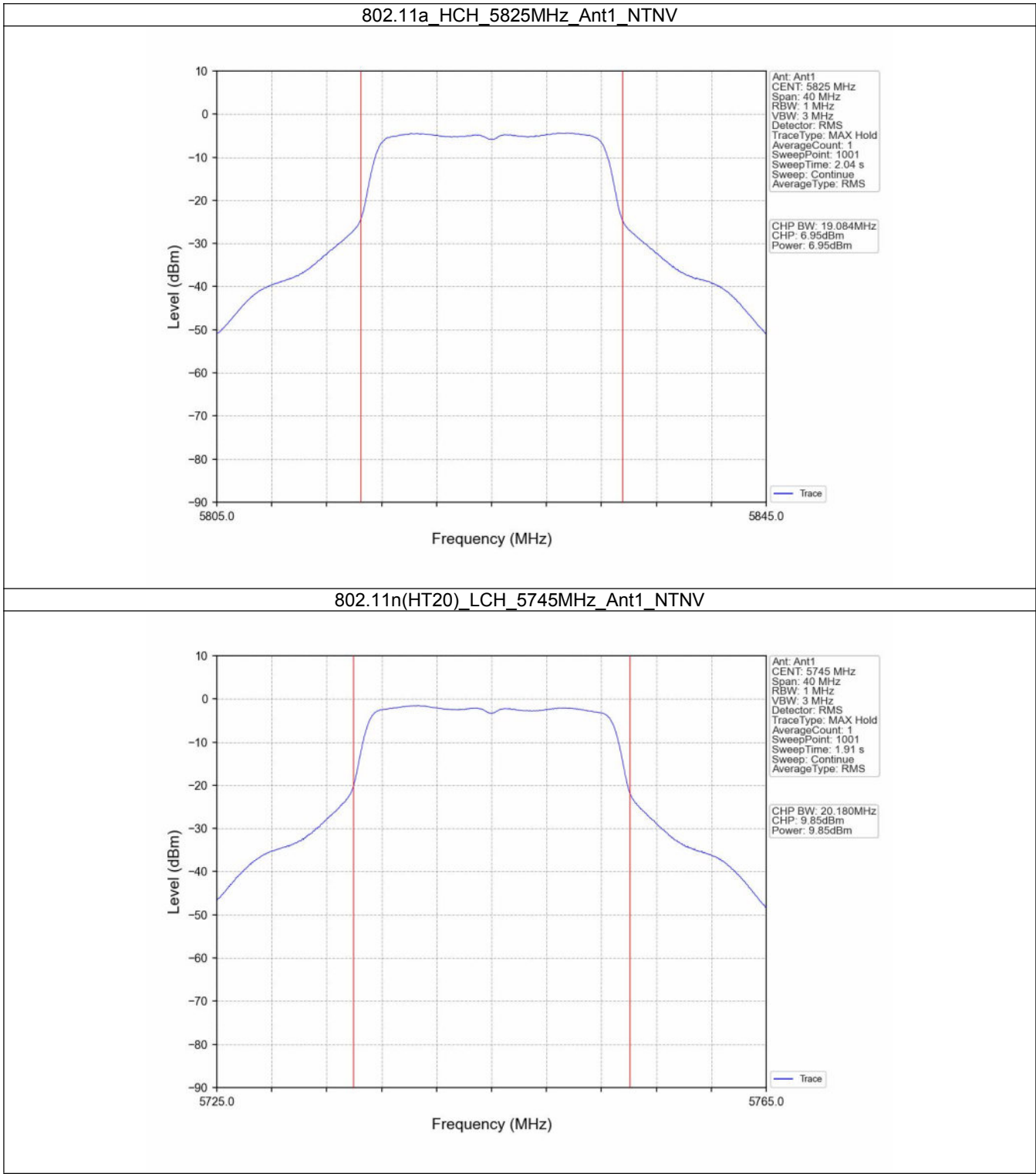
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2.2 Test Graph

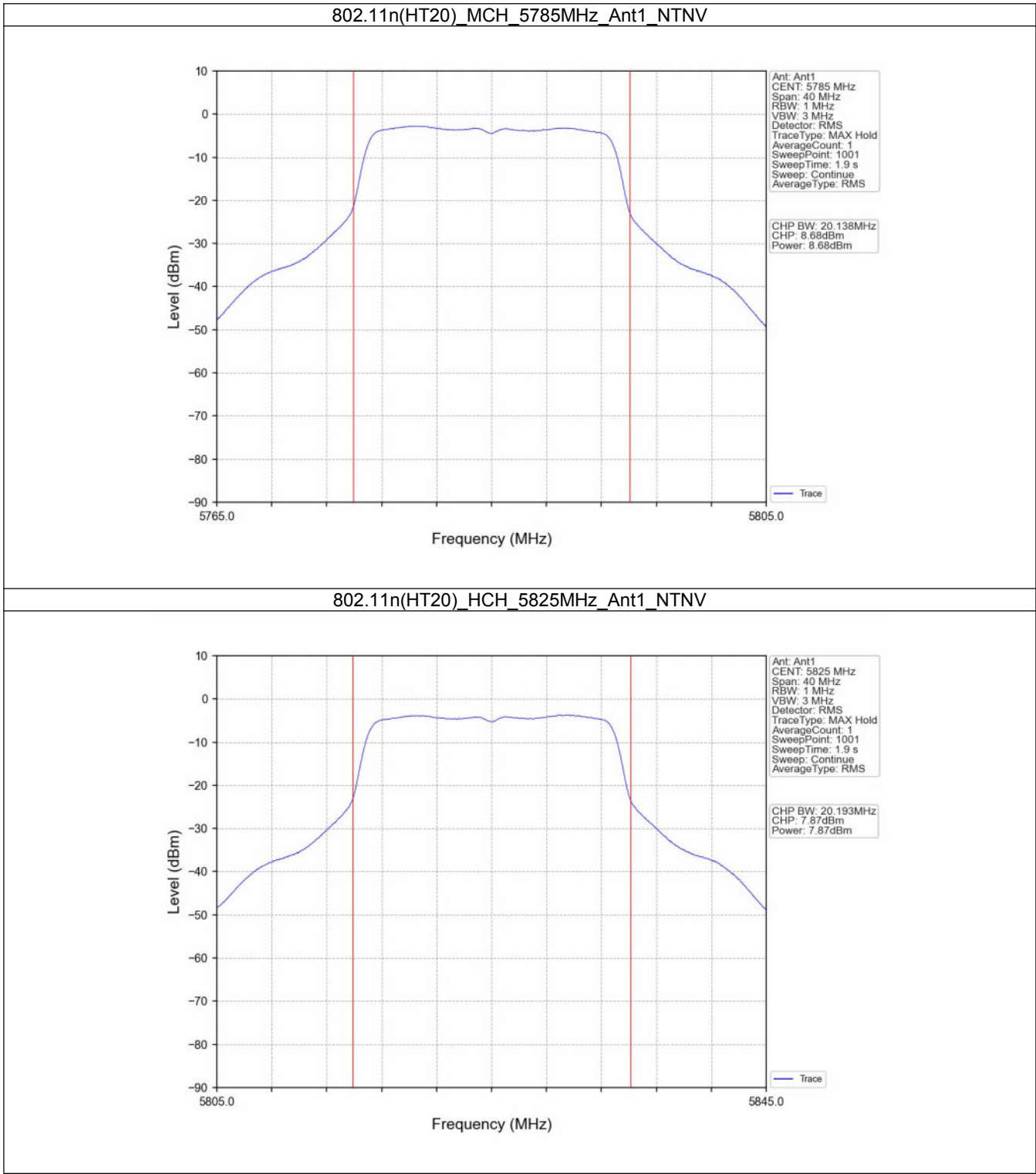
2.2.1 Power



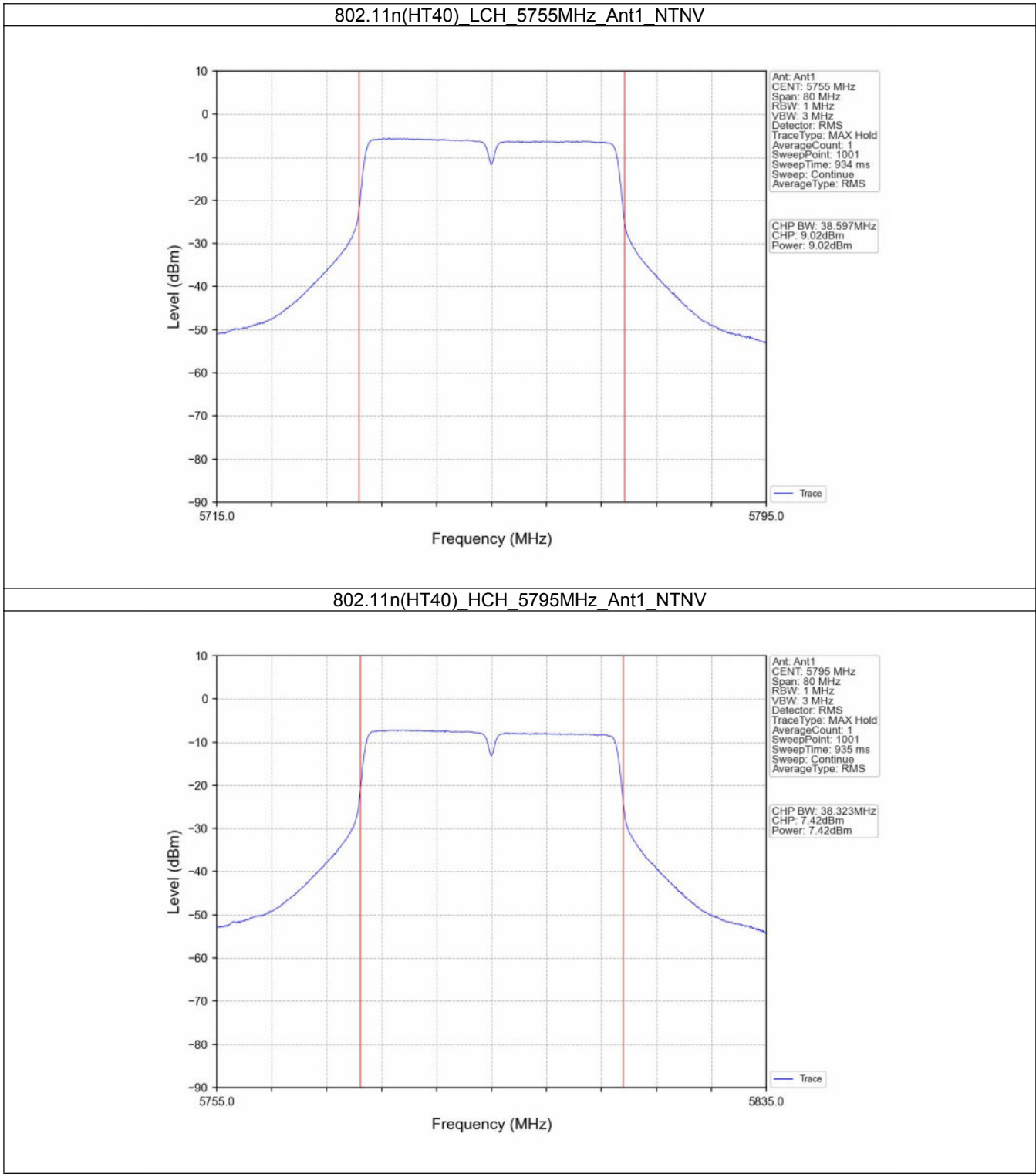
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FCC ID: 2ASC7TAB702

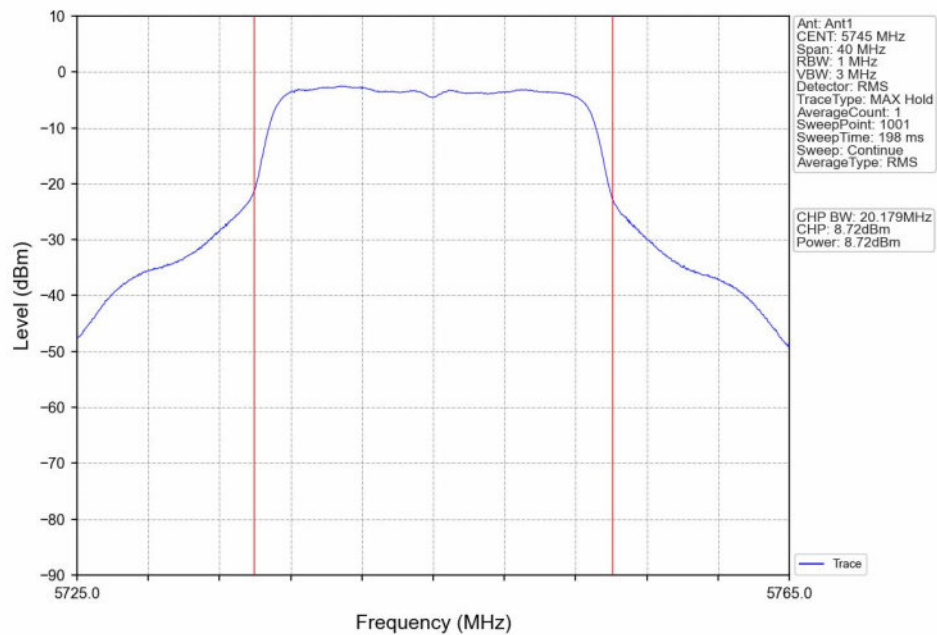


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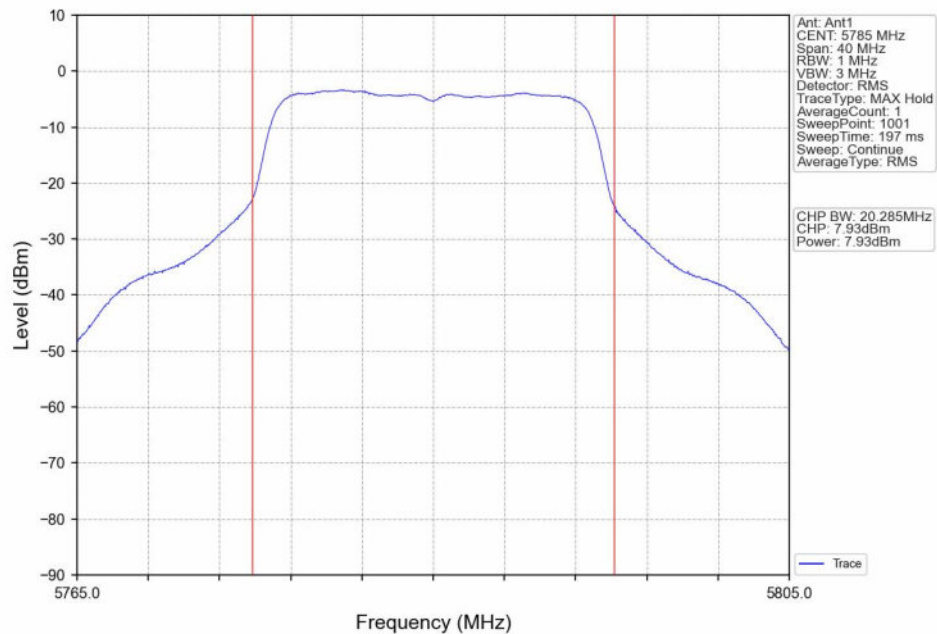


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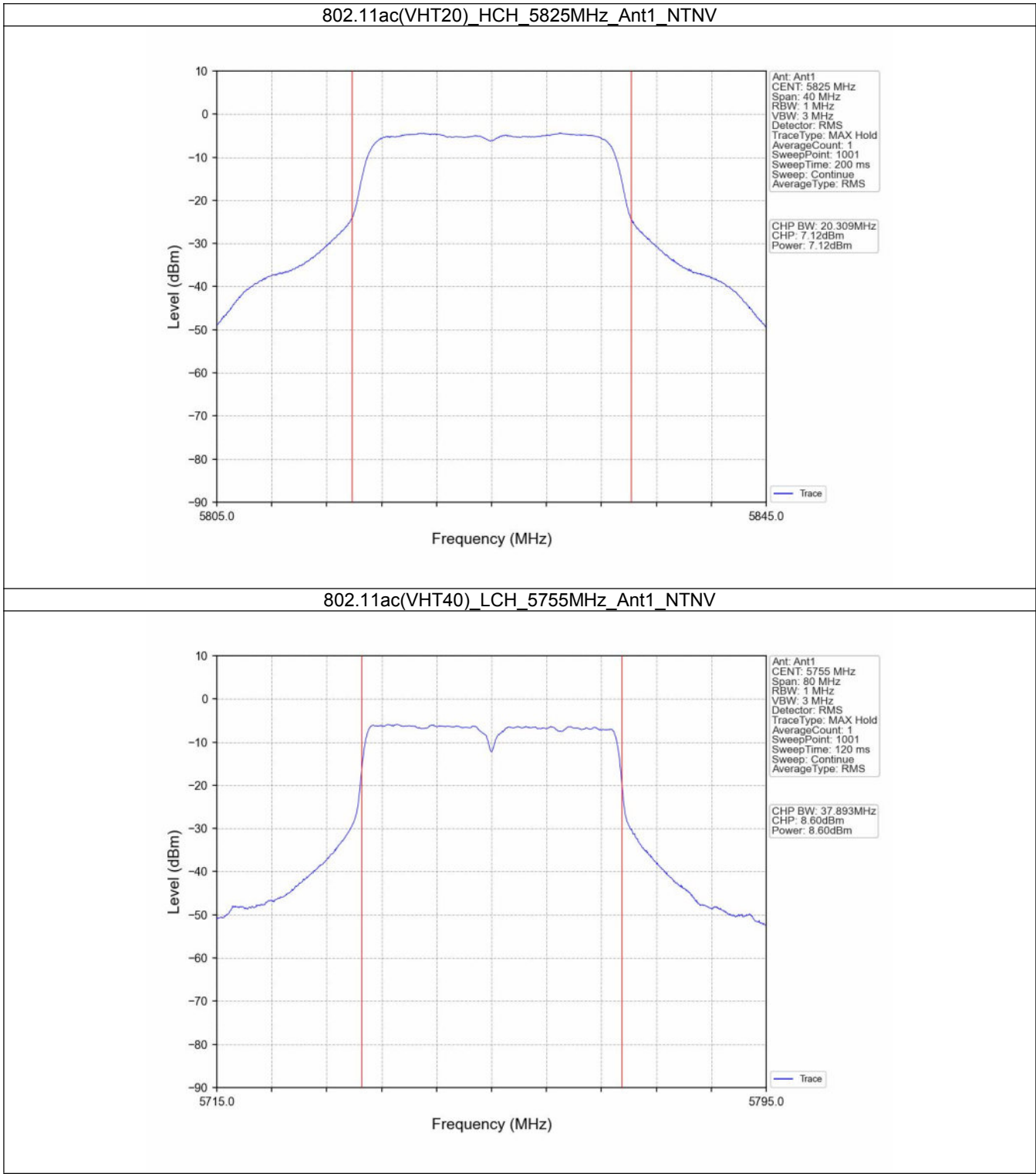
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



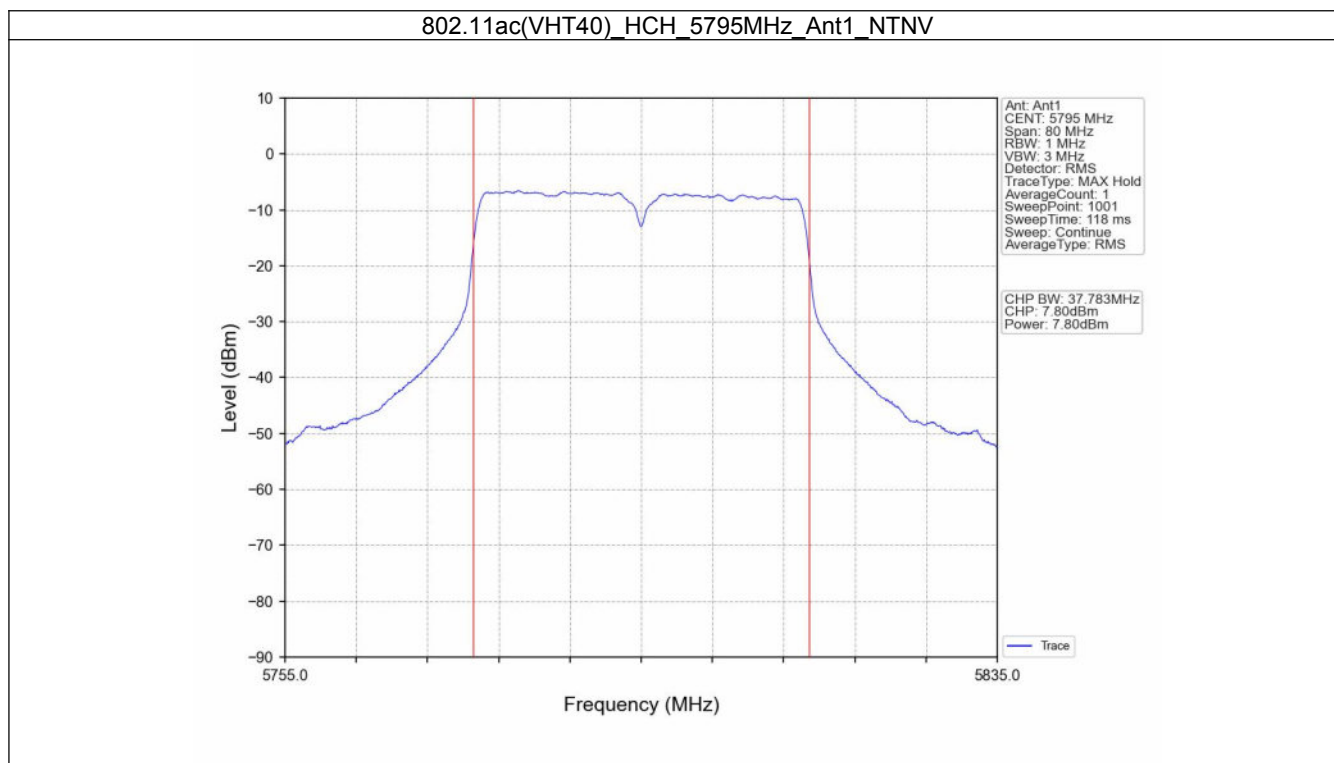
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



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FCC ID: 2ASC7TAB702



FCC ID: 2ASC7TAB702

3. Maximum Power Spectral Density

3.1 Test Result

3.1.1 PSD-Band3

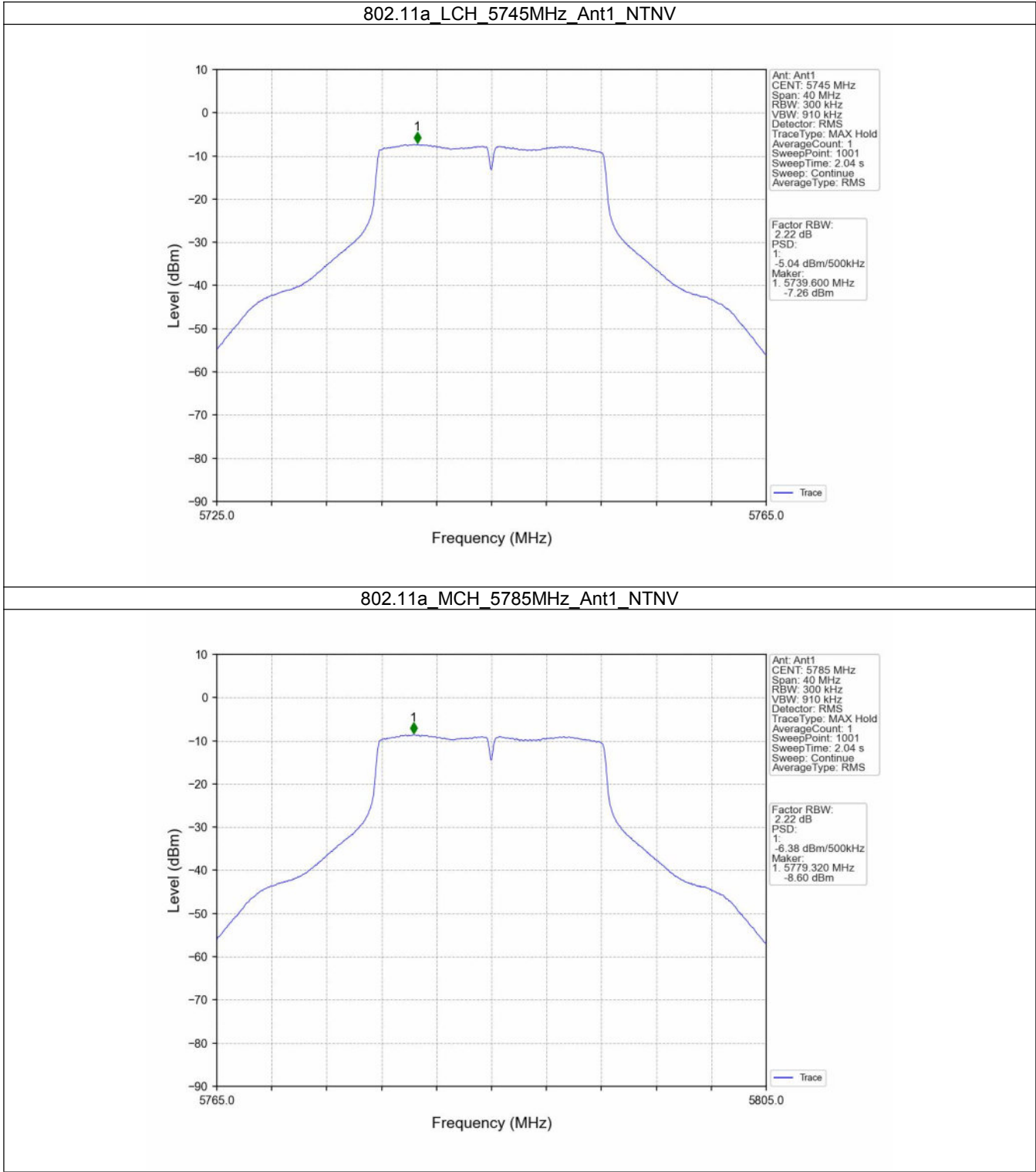
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/500kHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5745	-5.04	<=30	Pass
		5785	-6.38	<=30	Pass
		5825	-5.97	<=30	Pass
802.11n (HT20)	SISO	5745	-4.52	<=30	Pass
		5785	-5.63	<=30	Pass
		5825	-6.63	<=30	Pass
802.11n (HT40)	SISO	5755	-8.51	<=30	Pass
		5795	-10.09	<=30	Pass
802.11ac (VHT20)	SISO	5745	-4.44	<=30	Pass
		5785	-5.40	<=30	Pass
		5825	-6.52	<=30	Pass
802.11ac (VHT40)	SISO	5755	-7.37	<=30	Pass
		5795	-8.45	<=30	Pass

Note1: Antenna Gain: Ant1: 1.25dBi;

FCC ID: 2ASC7TAB702

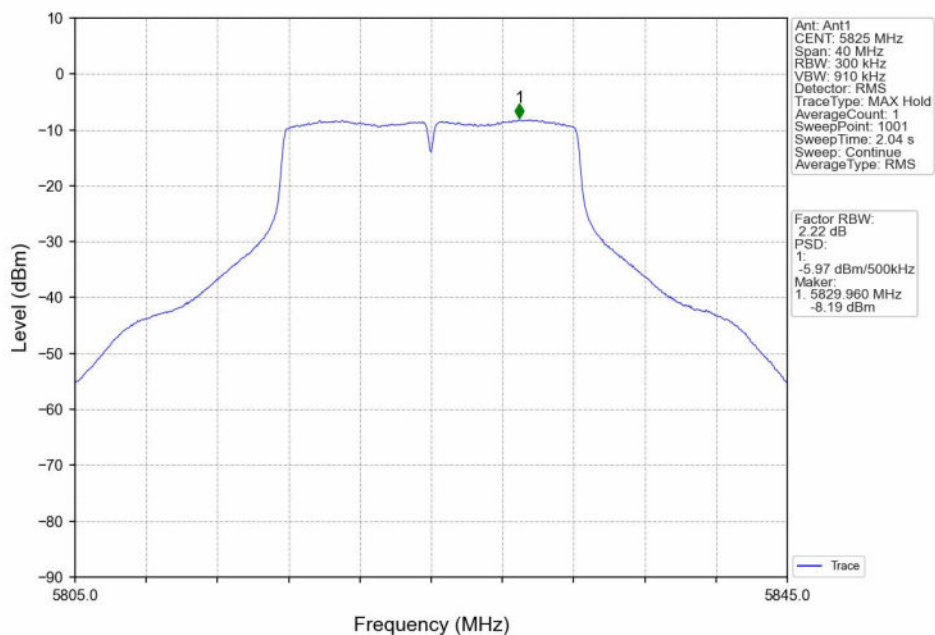
3.2 Test Graph

3.2.1 PSD-Band3

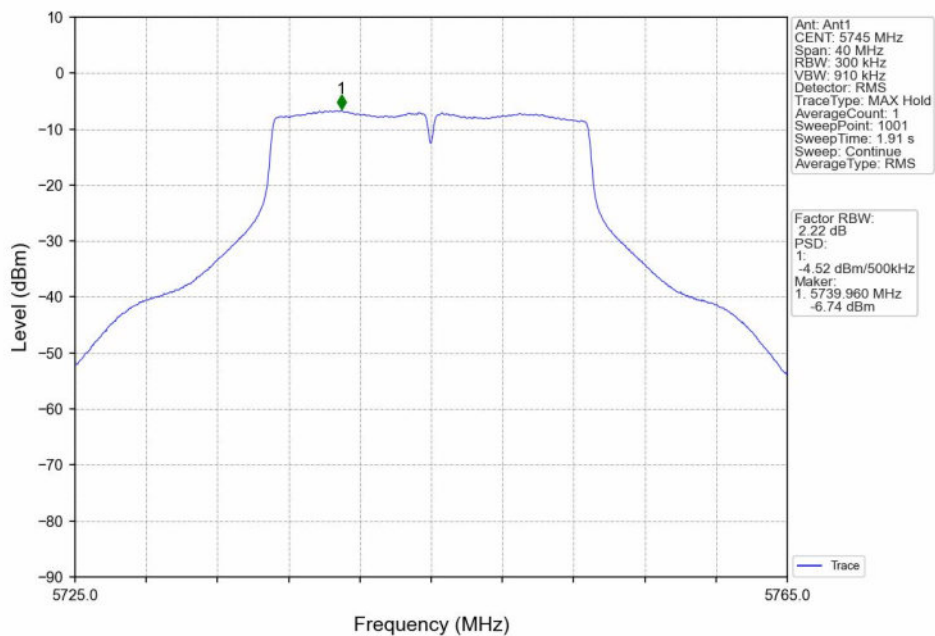


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802.11a_HCH_5825MHz_Ant1_NTNV

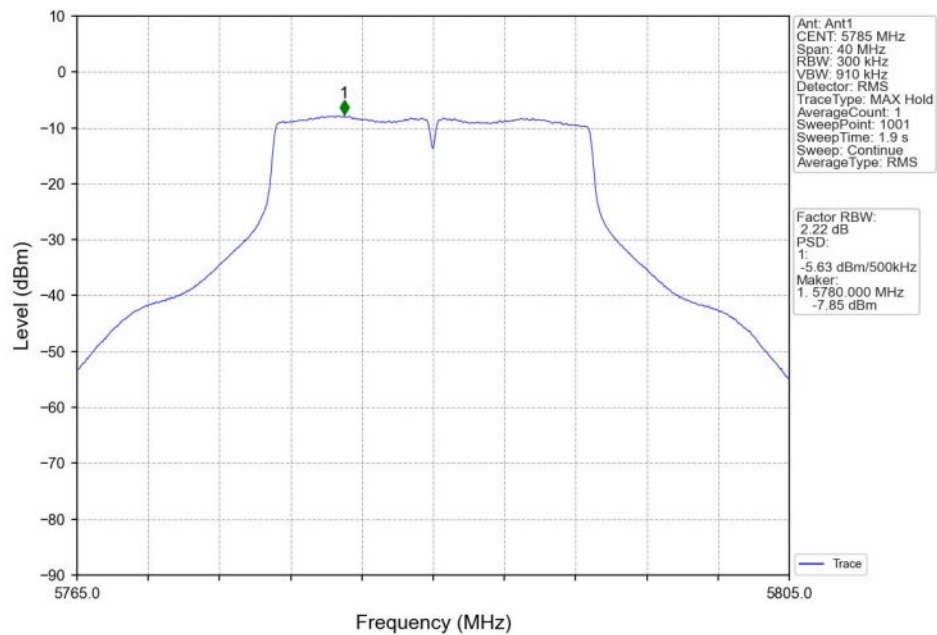


802.11n(HT20)_LCH_5745MHz_Ant1_NTNV

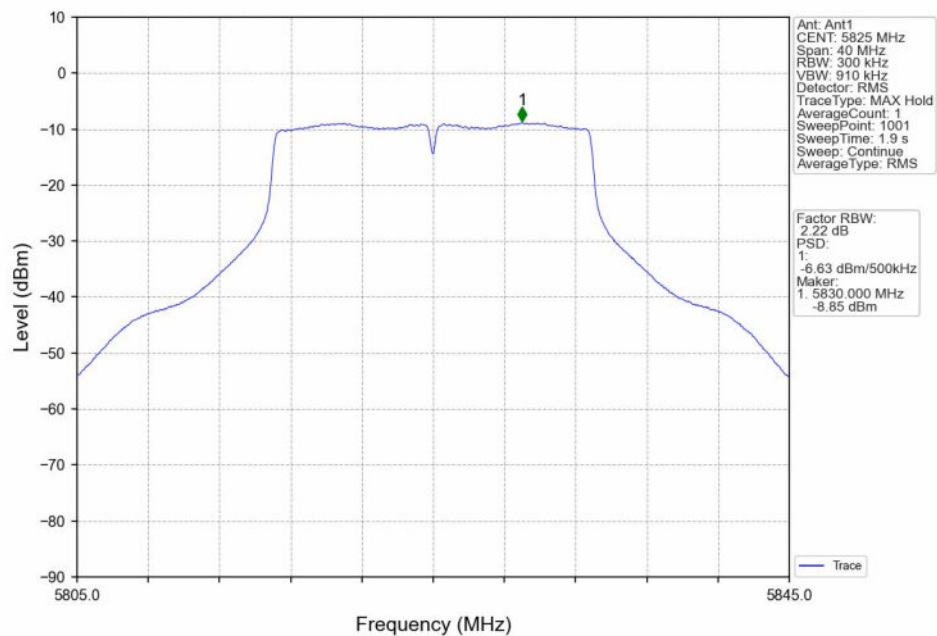


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802.11n(HT20)_MCH_5785MHz_Ant1_NTNV

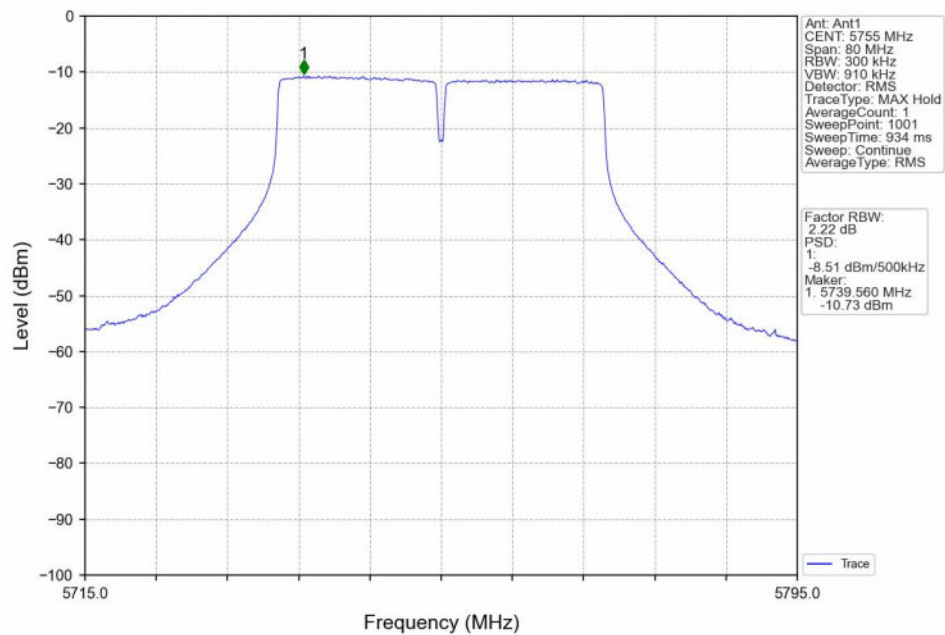


802.11n(HT20)_HCH_5825MHz_Ant1_NTNV

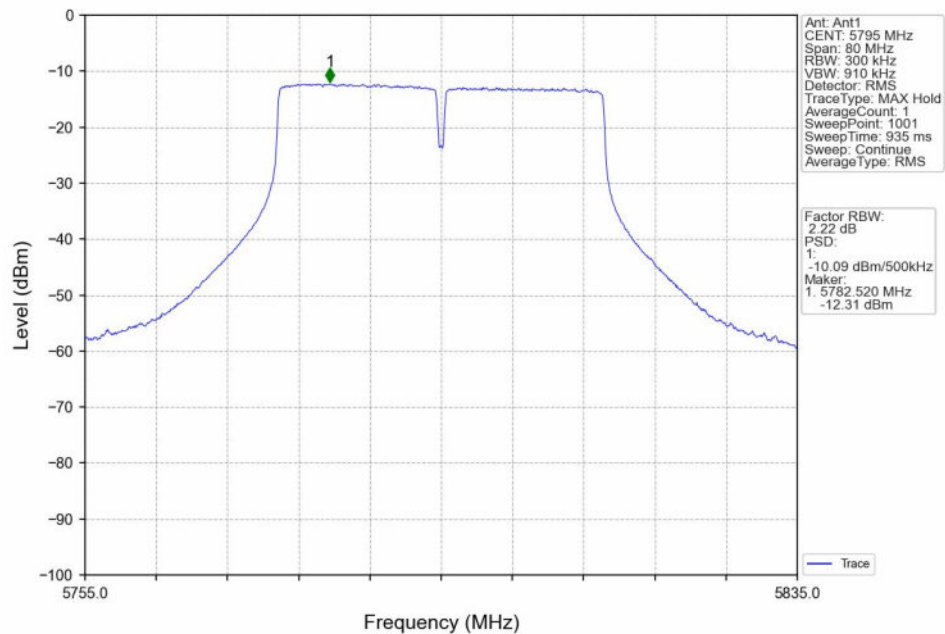


FCC ID: 2ASC7TAB702

802.11n(HT40)_LCH_5755MHz_Ant1_NTNV

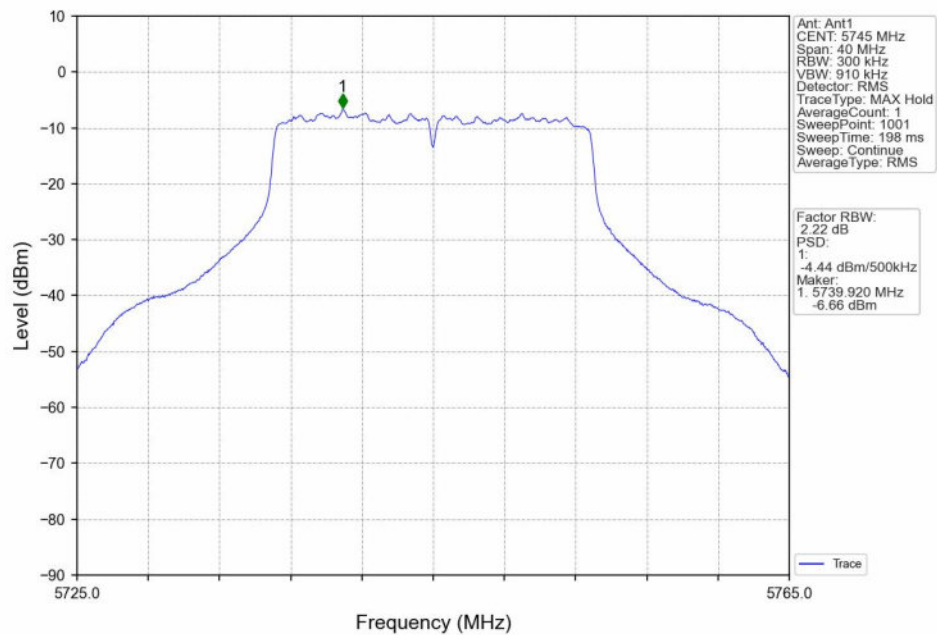


802.11n(HT40)_HCH_5795MHz_Ant1_NTNV

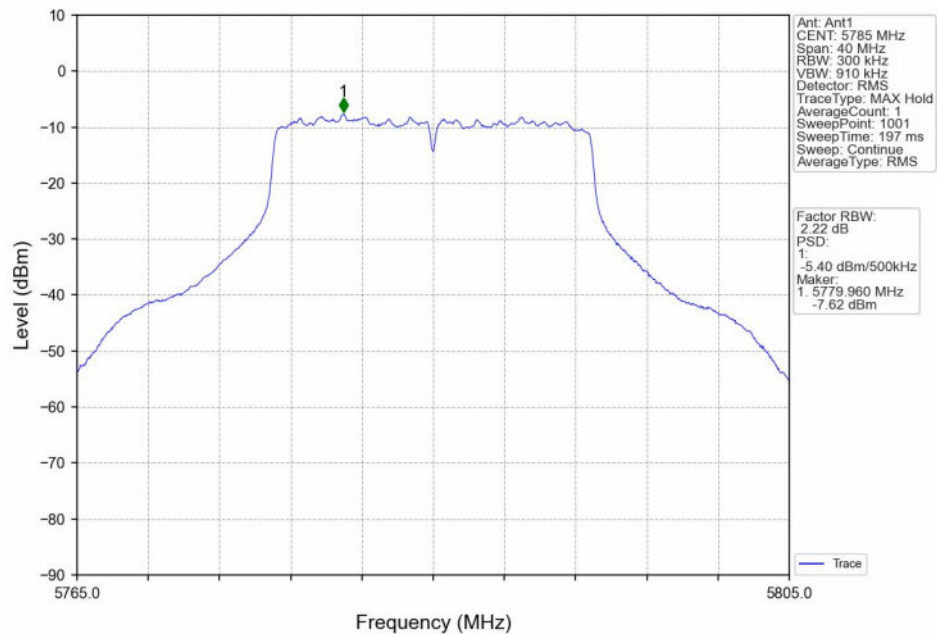


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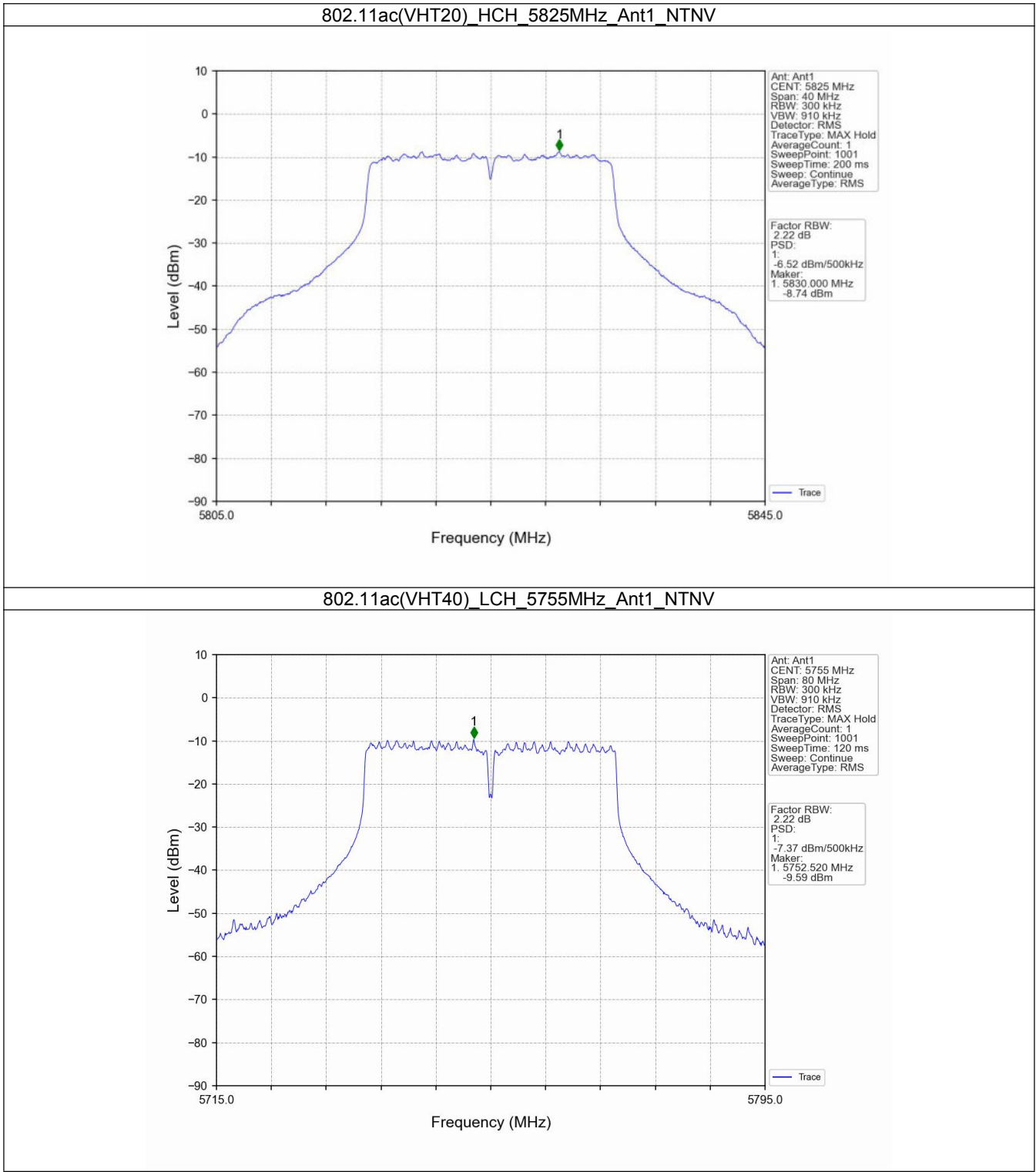
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



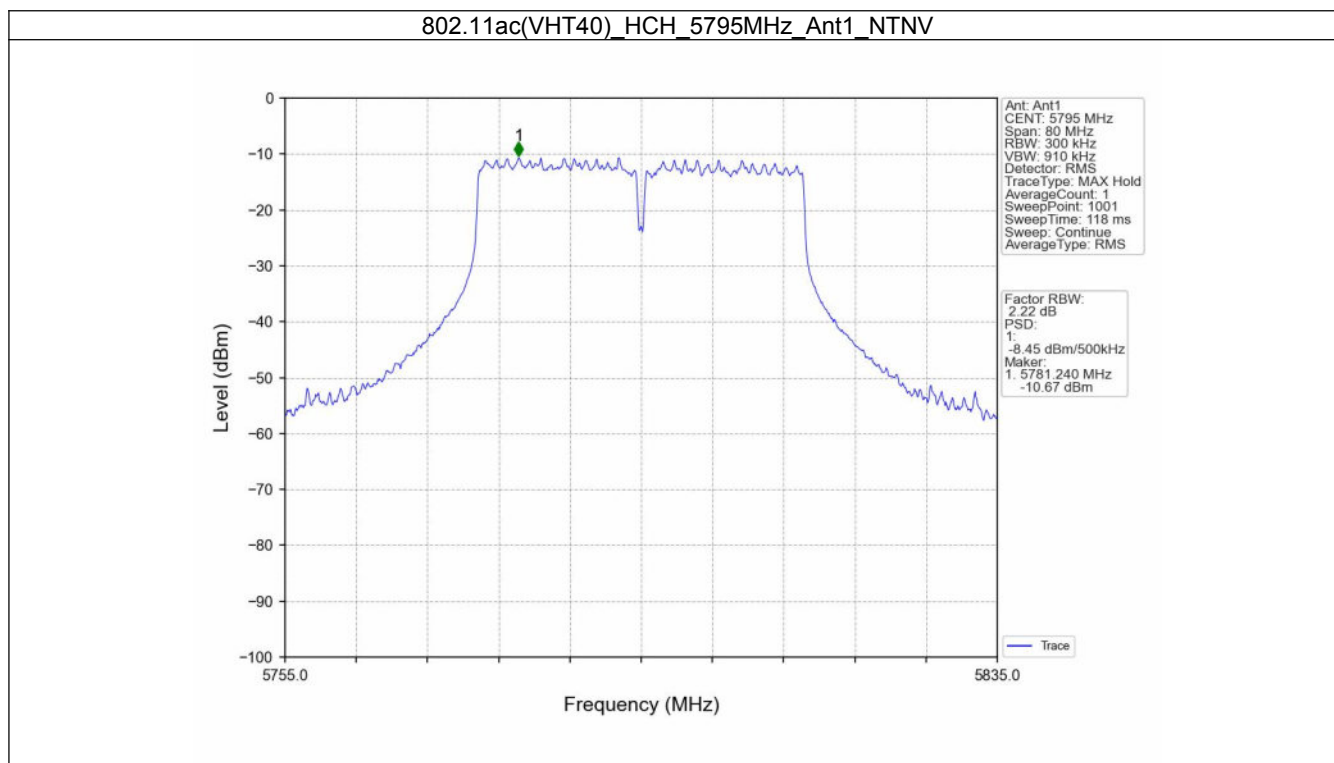
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



FCC ID: 2ASC7TAB702



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4. Frequency Stability

4.1 Test Result

4.1.1 Ant1

Ant1							
Mode	Tx Type	Frequency (MHz)	Temperature (°C)	Voltage (VAC)	Measured Frequency (MHz)	Limit (MHz)	Verdict
802.11a	SISO	5745	20	102	5746.000	5725 to 5850	Pass
				120	5746.000	5725 to 5850	Pass
				138	5746.000	5725 to 5850	Pass
			-30	120	5746.000	5725 to 5850	Pass
			-20	120	5746.000	5725 to 5850	Pass
			-10	120	5746.000	5725 to 5850	Pass
			0	120	5746.000	5725 to 5850	Pass
			10	120	5746.000	5725 to 5850	Pass
			30	120	5746.000	5725 to 5850	Pass
			40	120	5746.000	5725 to 5850	Pass
			50	120	5746.000	5725 to 5850	Pass
		5785	20	102	5786.000	5725 to 5850	Pass
				120	5786.000	5725 to 5850	Pass
				138	5786.000	5725 to 5850	Pass
			-30	120	5786.000	5725 to 5850	Pass
			-20	120	5786.000	5725 to 5850	Pass
			-10	120	5786.000	5725 to 5850	Pass
			0	120	5786.000	5725 to 5850	Pass
			10	120	5786.000	5725 to 5850	Pass
			30	120	5786.000	5725 to 5850	Pass
			40	120	5786.000	5725 to 5850	Pass
			50	120	5786.000	5725 to 5850	Pass
		5825	20	102	5826.000	5725 to 5850	Pass
				120	5826.000	5725 to 5850	Pass
				138	5826.000	5725 to 5850	Pass
			-30	120	5826.000	5725 to 5850	Pass
			-20	120	5826.000	5725 to 5850	Pass
			-10	120	5826.000	5725 to 5850	Pass
			0	120	5826.000	5725 to 5850	Pass
			10	120	5826.000	5725 to 5850	Pass
			30	120	5826.000	5725 to 5850	Pass
			40	120	5826.000	5725 to 5850	Pass
			50	120	5826.000	5725 to 5850	Pass
802.11n (HT20)	SISO	5745	20	102	5746.000	5725 to 5850	Pass
				120	5746.000	5725 to 5850	Pass
				138	5746.000	5725 to 5850	Pass
			-30	120	5746.000	5725 to 5850	Pass
			-20	120	5746.000	5725 to 5850	Pass
			-10	120	5746.000	5725 to 5850	Pass
			0	120	5746.000	5725 to 5850	Pass
			10	120	5746.000	5725 to 5850	Pass
			30	120	5746.000	5725 to 5850	Pass
			40	120	5746.000	5725 to 5850	Pass
			50	120	5746.000	5725 to 5850	Pass
		5785	20	102	5786.000	5725 to 5850	Pass
				120	5786.000	5725 to 5850	Pass
				138	5786.000	5725 to 5850	Pass

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			-30	120	5786.000	5725 to 5850	Pass
			-20	120	5786.000	5725 to 5850	Pass
			-10	120	5786.000	5725 to 5850	Pass
			0	120	5786.000	5725 to 5850	Pass
			10	120	5786.000	5725 to 5850	Pass
			30	120	5786.000	5725 to 5850	Pass
			40	120	5786.000	5725 to 5850	Pass
			50	120	5786.000	5725 to 5850	Pass
		5825	20	102	5826.000	5725 to 5850	Pass
				120	5826.000	5725 to 5850	Pass
				138	5826.000	5725 to 5850	Pass
			-30	120	5826.000	5725 to 5850	Pass
			-20	120	5826.000	5725 to 5850	Pass
			-10	120	5826.000	5725 to 5850	Pass
			0	120	5826.000	5725 to 5850	Pass
			10	120	5826.000	5725 to 5850	Pass
			30	120	5826.000	5725 to 5850	Pass
			40	120	5826.000	5725 to 5850	Pass
			50	120	5826.000	5725 to 5850	Pass
802.11n (HT40)	SISO	5755	20	102	5756.080	5725 to 5850	Pass
				120	5756.080	5725 to 5850	Pass
				138	5756.080	5725 to 5850	Pass
			-30	120	5756.080	5725 to 5850	Pass
			-20	120	5756.080	5725 to 5850	Pass
			-10	120	5756.080	5725 to 5850	Pass
			0	120	5756.080	5725 to 5850	Pass
			10	120	5756.080	5725 to 5850	Pass
			30	120	5756.080	5725 to 5850	Pass
			40	120	5756.080	5725 to 5850	Pass
			50	120	5756.080	5725 to 5850	Pass
		5795	20	102	5796.080	5725 to 5850	Pass
				120	5796.080	5725 to 5850	Pass
				138	5796.080	5725 to 5850	Pass
			-30	120	5796.080	5725 to 5850	Pass
			-20	120	5796.080	5725 to 5850	Pass
			-10	120	5796.080	5725 to 5850	Pass
			0	120	5796.080	5725 to 5850	Pass
			10	120	5796.080	5725 to 5850	Pass
802.11ac (VHT20)	SISO	5745	20	102	5746.000	5725 to 5850	Pass
				120	5746.000	5725 to 5850	Pass
				138	5746.000	5725 to 5850	Pass
			-30	120	5746.000	5725 to 5850	Pass
			-20	120	5746.000	5725 to 5850	Pass
			-10	120	5746.000	5725 to 5850	Pass
			0	120	5746.000	5725 to 5850	Pass
			10	120	5746.000	5725 to 5850	Pass
			30	120	5746.020	5725 to 5850	Pass
			40	120	5746.000	5725 to 5850	Pass
			50	120	5746.000	5725 to 5850	Pass
		5785	20	102	5786.000	5725 to 5850	Pass
				120	5786.000	5725 to 5850	Pass
				138	5786.000	5725 to 5850	Pass
			-30	120	5786.000	5725 to 5850	Pass
			-20	120	5786.000	5725 to 5850	Pass

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			-10	120	5786.000	5725 to 5850	Pass
			0	120	5786.000	5725 to 5850	Pass
			10	120	5786.000	5725 to 5850	Pass
			30	120	5786.000	5725 to 5850	Pass
			40	120	5786.000	5725 to 5850	Pass
			50	120	5786.000	5725 to 5850	Pass
		5825	20	102	5826.000	5725 to 5850	Pass
				120	5826.000	5725 to 5850	Pass
				138	5826.000	5725 to 5850	Pass
			-30	120	5826.000	5725 to 5850	Pass
			-20	120	5826.000	5725 to 5850	Pass
			-10	120	5826.000	5725 to 5850	Pass
			0	120	5826.000	5725 to 5850	Pass
			10	120	5826.000	5725 to 5850	Pass
			30	120	5826.000	5725 to 5850	Pass
			40	120	5826.000	5725 to 5850	Pass
			50	120	5826.000	5725 to 5850	Pass
802.11ac (VHT40)	SISO	5755	20	102	5756.080	5725 to 5850	Pass
				120	5756.080	5725 to 5850	Pass
				138	5756.080	5725 to 5850	Pass
			-30	120	5756.080	5725 to 5850	Pass
			-20	120	5756.080	5725 to 5850	Pass
			-10	120	5756.080	5725 to 5850	Pass
			0	120	5756.080	5725 to 5850	Pass
			10	120	5756.080	5725 to 5850	Pass
			30	120	5756.080	5725 to 5850	Pass
			40	120	5756.080	5725 to 5850	Pass
			50	120	5756.080	5725 to 5850	Pass
		5795	20	102	5796.080	5725 to 5850	Pass
				120	5796.080	5725 to 5850	Pass
				138	5796.080	5725 to 5850	Pass
			-30	120	5796.080	5725 to 5850	Pass
			-20	120	5796.080	5725 to 5850	Pass
			-10	120	5796.080	5725 to 5850	Pass
			0	120	5796.080	5725 to 5850	Pass
			10	120	5796.080	5725 to 5850	Pass
			30	120	5796.080	5725 to 5850	Pass
			40	120	5796.080	5725 to 5850	Pass
			50	120	5796.080	5725 to 5850	Pass