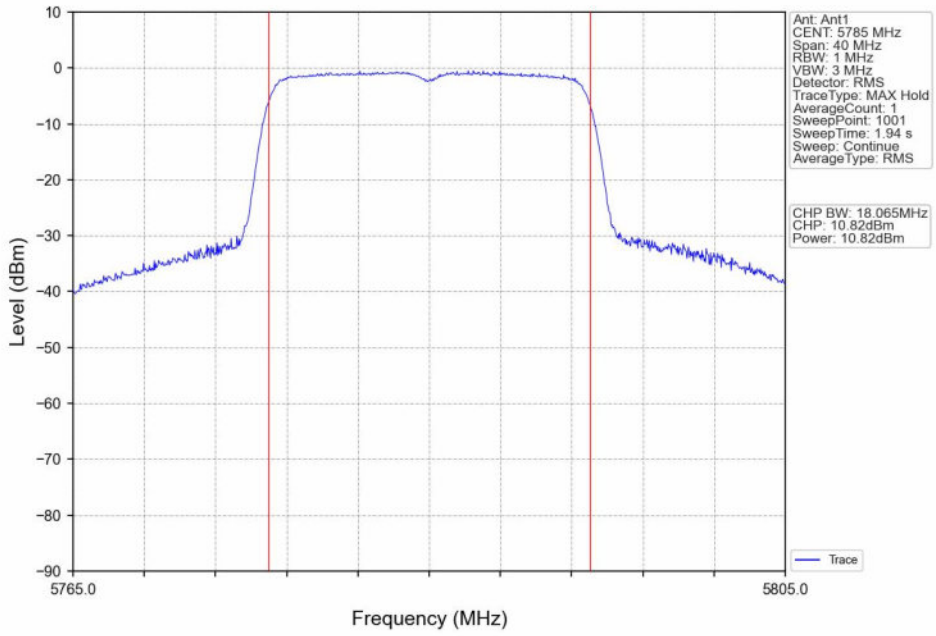
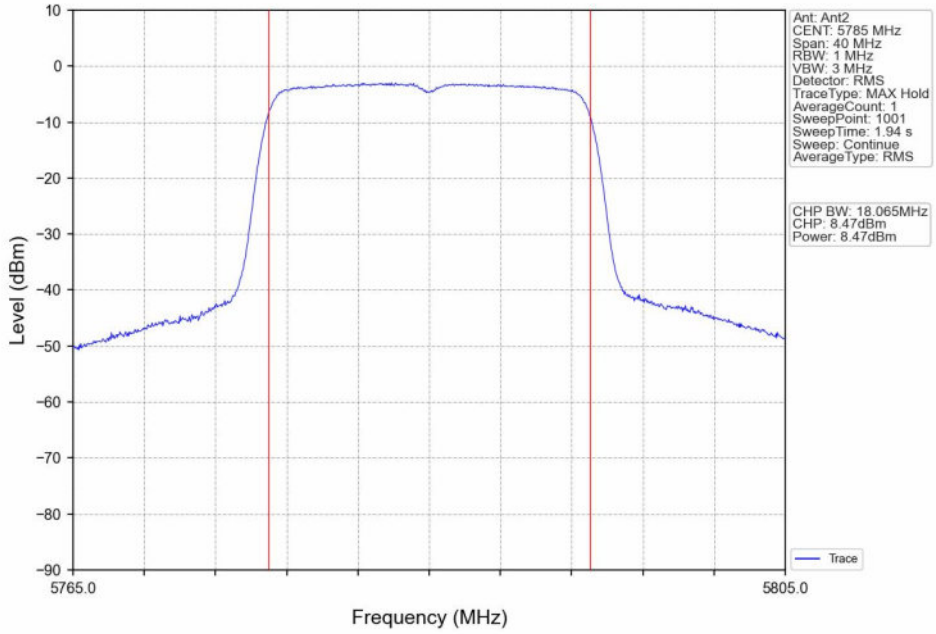
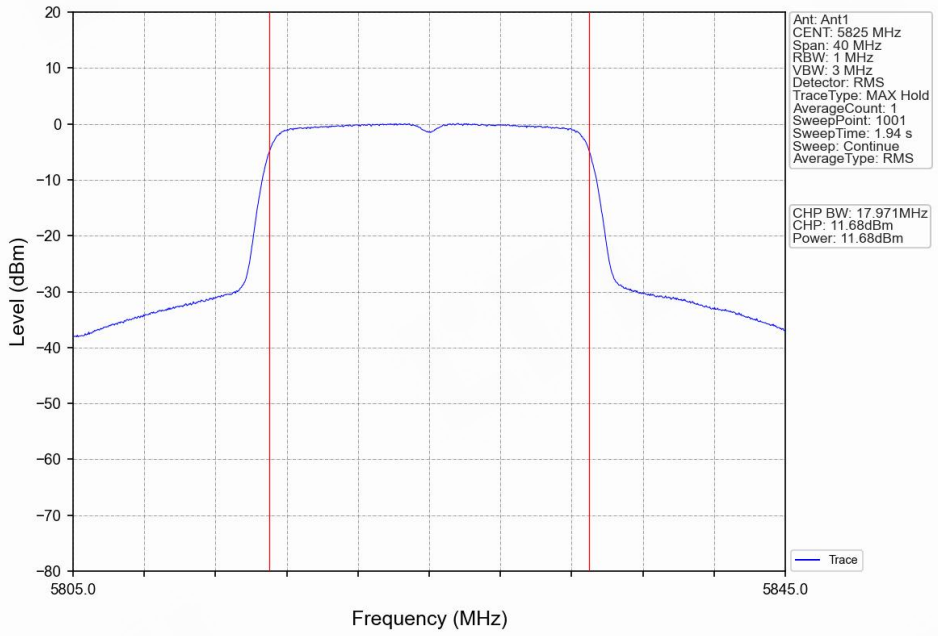
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



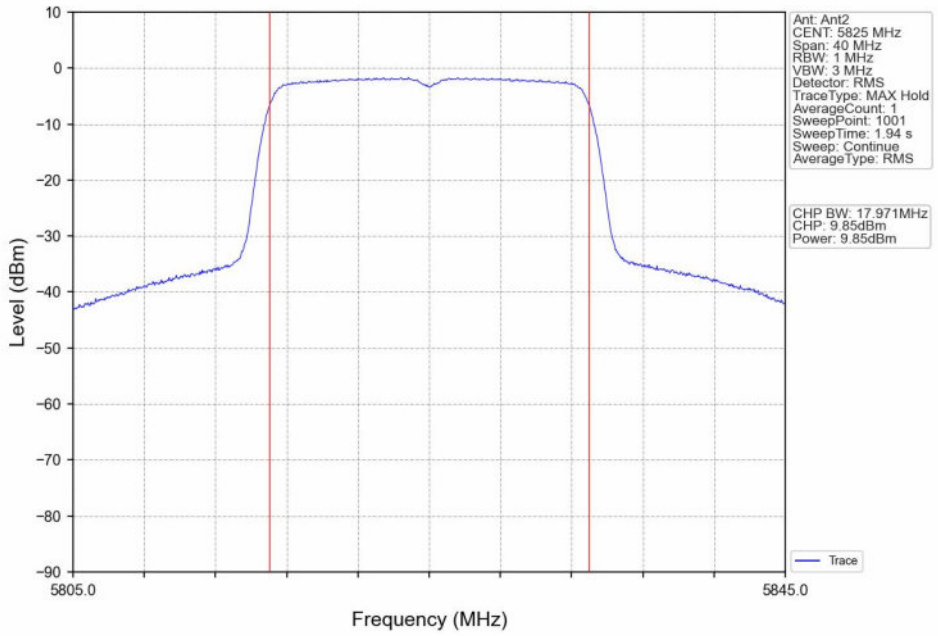
802.11ac(VHT20)_MCH_5785MHz_Ant2_NTNV



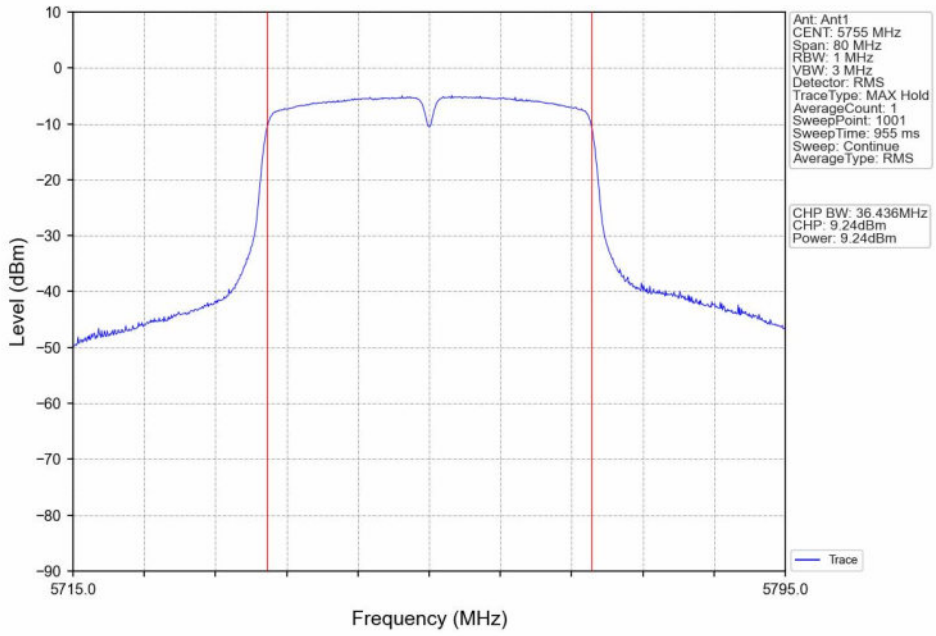
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



802.11ac(VHT20)_HCH_5825MHz_Ant2_NTNV



802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



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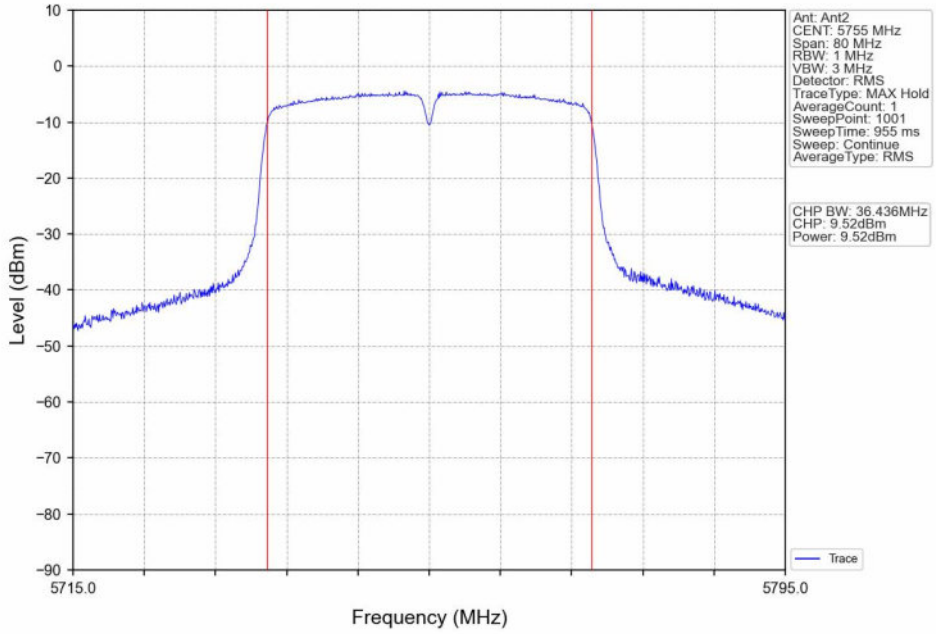
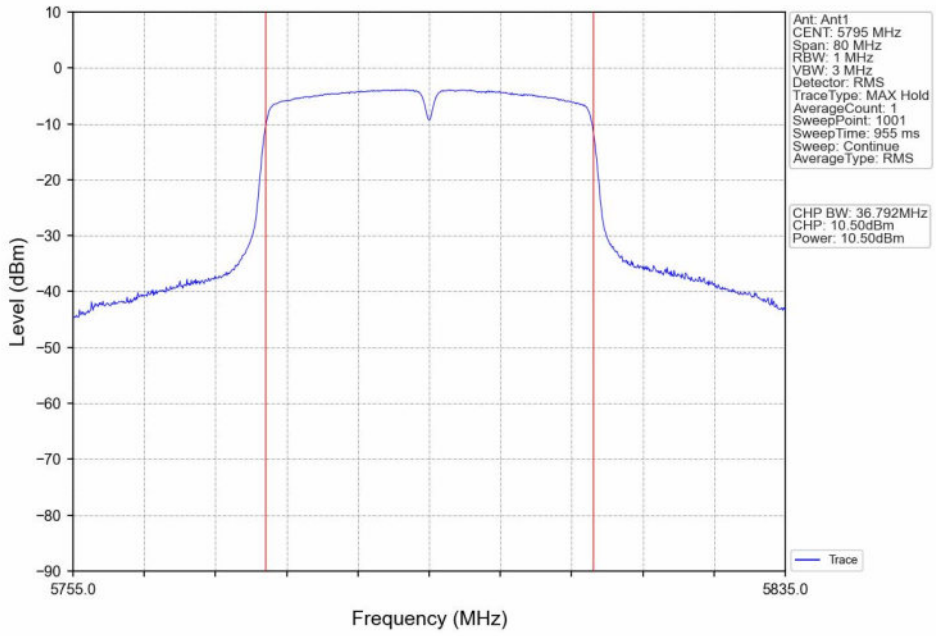
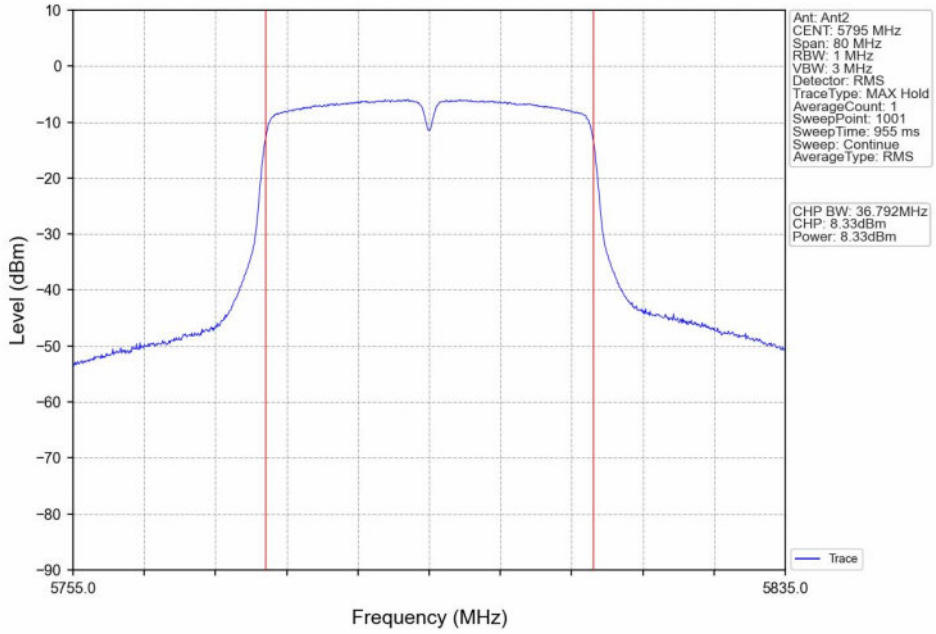


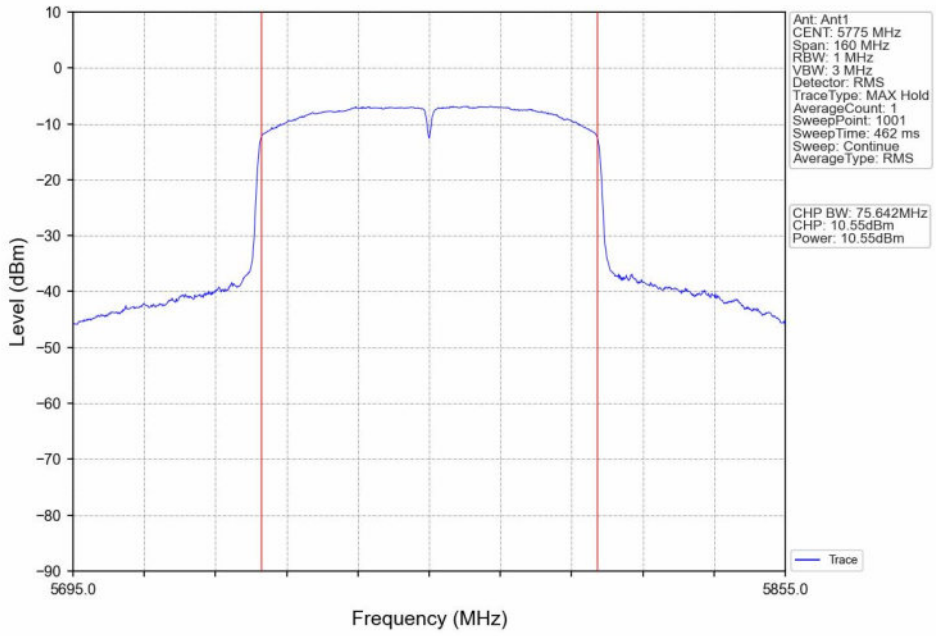
802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5795MHz_Ant2_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



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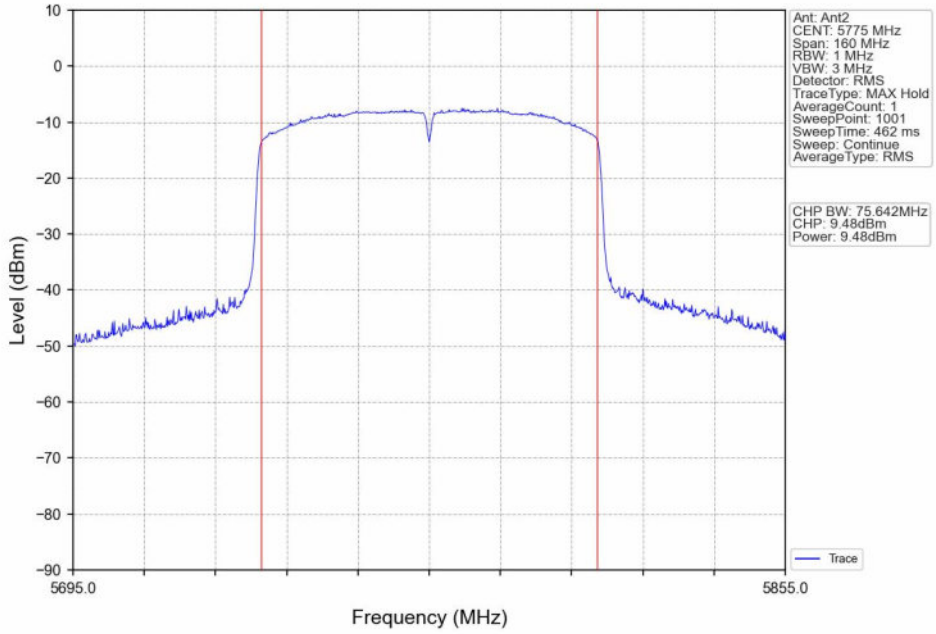


3. Maximum Power Spectral Density

3.1 PSD-Band3

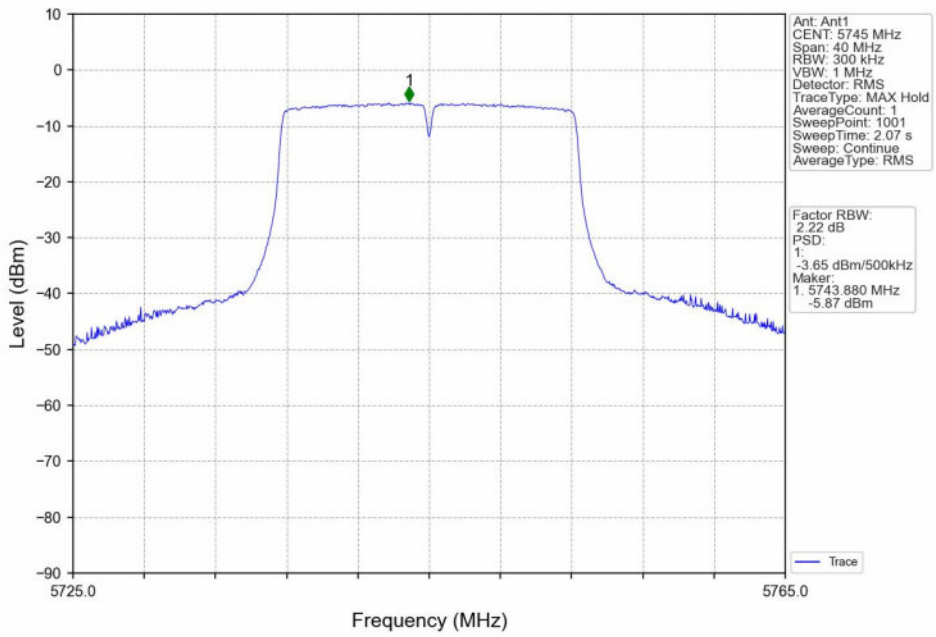
3.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/500kHz)				Verdict
			ANT1	ANT2	MIMO	Limit	
802.11a	SISO	5745	-3.65	-3.11	/	<=30	Pass
		5785	-1.40	-3.85	/	<=30	Pass
		5825	-0.48	-2.26	/	<=30	Pass
802.11n (HT20)	SISO	5745	-3.36	-4.22	/	<=30	Pass
		5785	-2.56	-4.86	/	<=30	Pass
		5825	-1.57	-3.44	/	<=30	Pass
802.11n (HT40)	SISO	5755	-6.70	-6.76	/	<=30	Pass
		5795	-5.70	-7.69	/	<=30	Pass
802.11n (HT20)	MIMO	5745	-5.19	-5.29	-2.37	<=28.16	Pass
		5785	-3.99	-6.32	-2.08	<=28.16	Pass
		5825	-3.07	-4.96	-0.94	<=28.16	Pass
802.11n (HT40)	MIMO	5755	-8.09	-8.17	-5.20	<=28.16	Pass
		5795	-6.94	-9.10	-4.95	<=28.16	Pass
802.11ac (VHT20)	SISO	5745	-4.09	-3.77	/	<=30	Pass
		5785	-2.84	-4.93	/	<=30	Pass
		5825	-1.65	-3.36	/	<=30	Pass
802.11ac (VHT40)	SISO	5755	-6.44	-6.29	/	<=30	Pass
		5795	-5.40	-7.40	/	<=30	Pass
802.11ac (VHT80)	SISO	5775	-8.09	-9.31	/	<=30	Pass
802.11ac (VHT20)	MIMO	5745	-4.85	-5.18	-2.18	<=28.16	Pass
		5785	-3.83	-6.22	-1.90	<=28.16	Pass
		5825	-2.94	-4.78	-0.79	<=28.16	Pass
802.11ac (VHT40)	MIMO	5755	-7.91	-7.81	-4.89	<=28.16	Pass
		5795	-6.68	-8.93	-4.69	<=28.16	Pass
802.11ac (VHT80)	MIMO	5775	-9.31	-10.41	-6.92	<=28.16	Pass

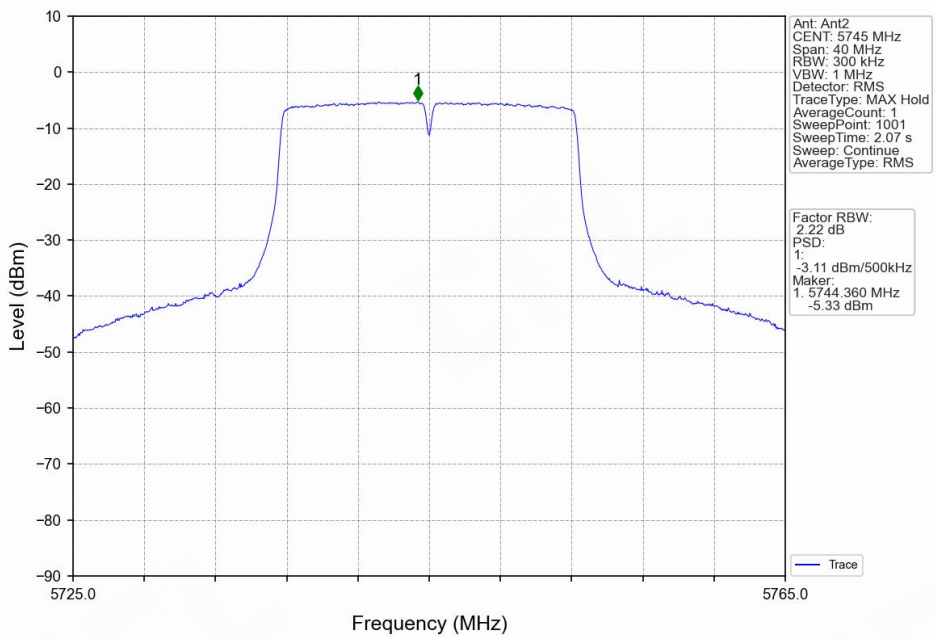
Note1: Antenna Gain: Ant1: 5.39dBi; Ant2: 4.24dBi;
Note2: Directional gain=10log[$(10^{G1/20}+10^{G2/20}+\cdots+10^{GN/20})^2/N_{ANT}$] dBi [Note the “20” s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]

3.1.2 Test Graph

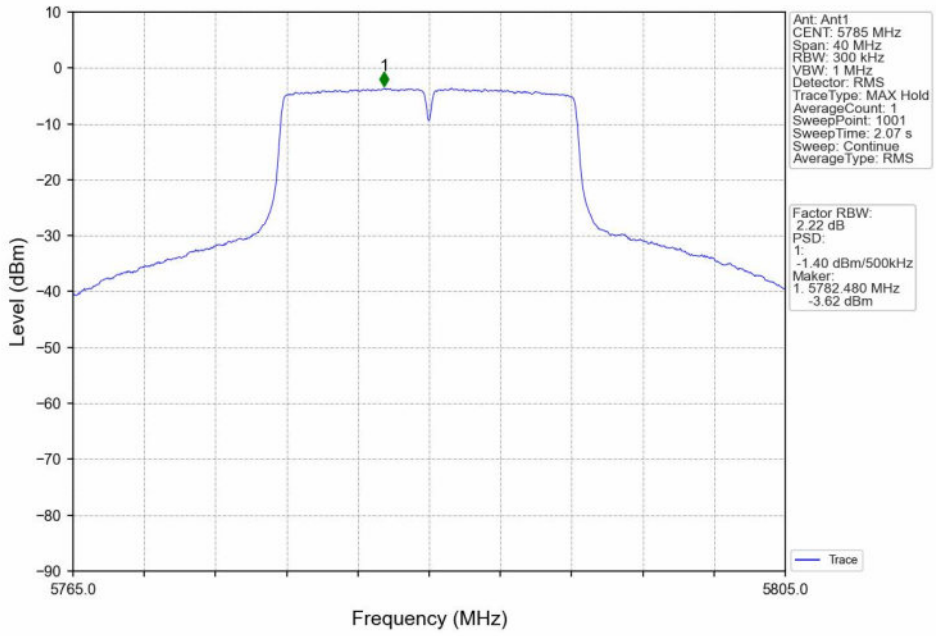
802.11a_LCH_5745MHz_Ant1_NTNV



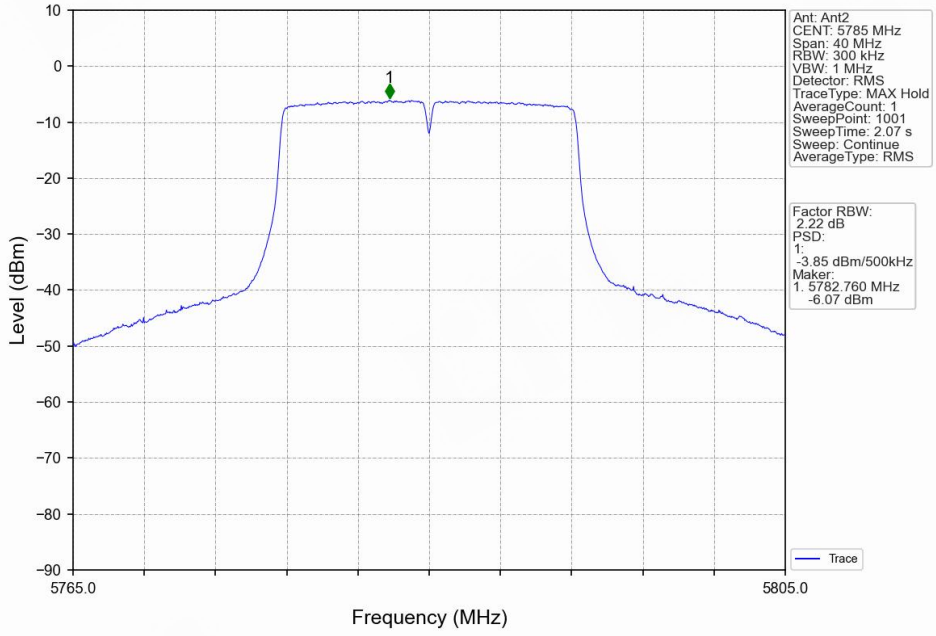
802.11a_LCH_5745MHz_Ant2_NTNV



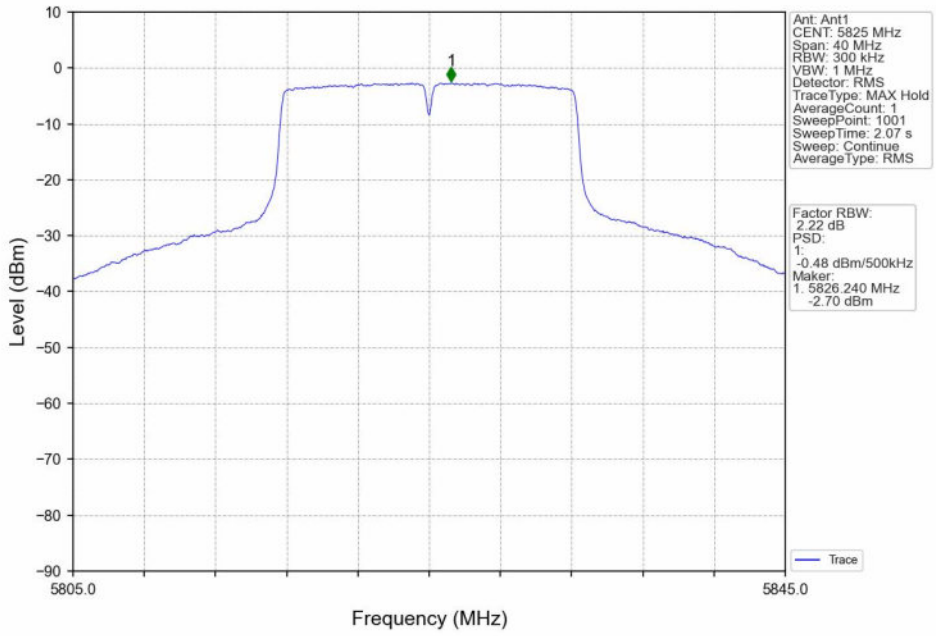
802.11a_MCH_5785MHz_Ant1_NTNV



802.11a_MCH_5785MHz_Ant2_NTNV



802.11a_HCH_5825MHz_Ant1_NTNV



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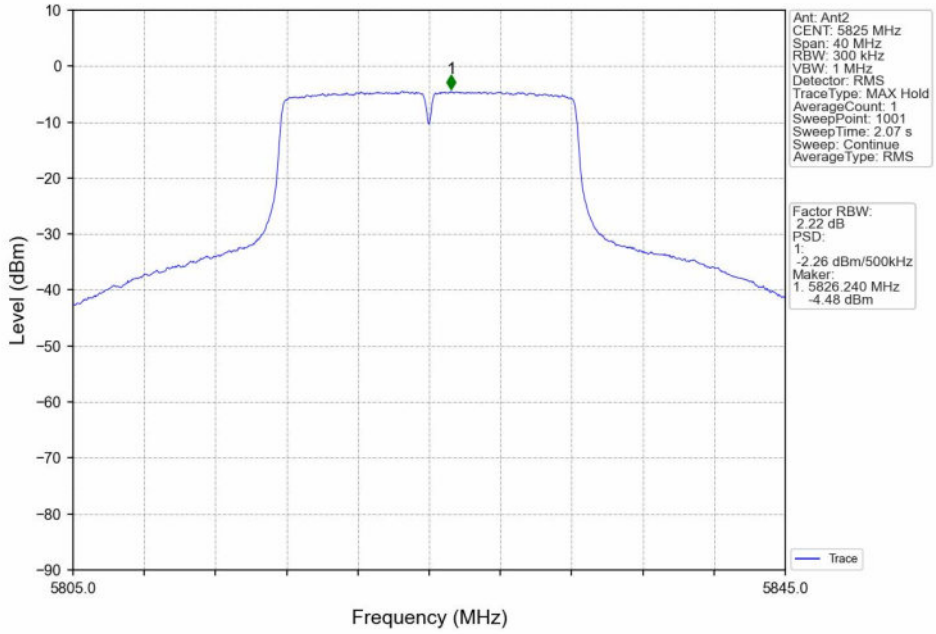
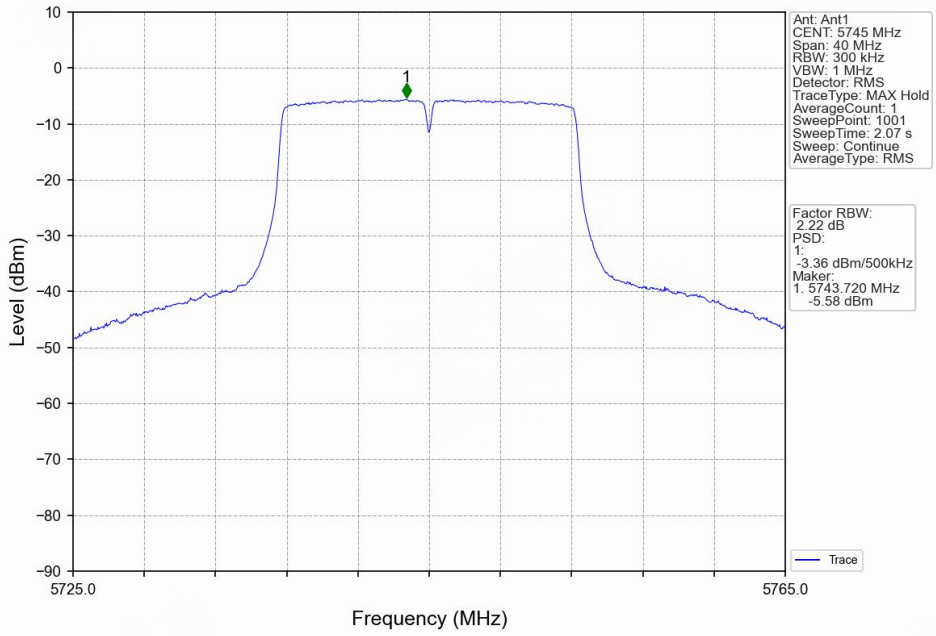


802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



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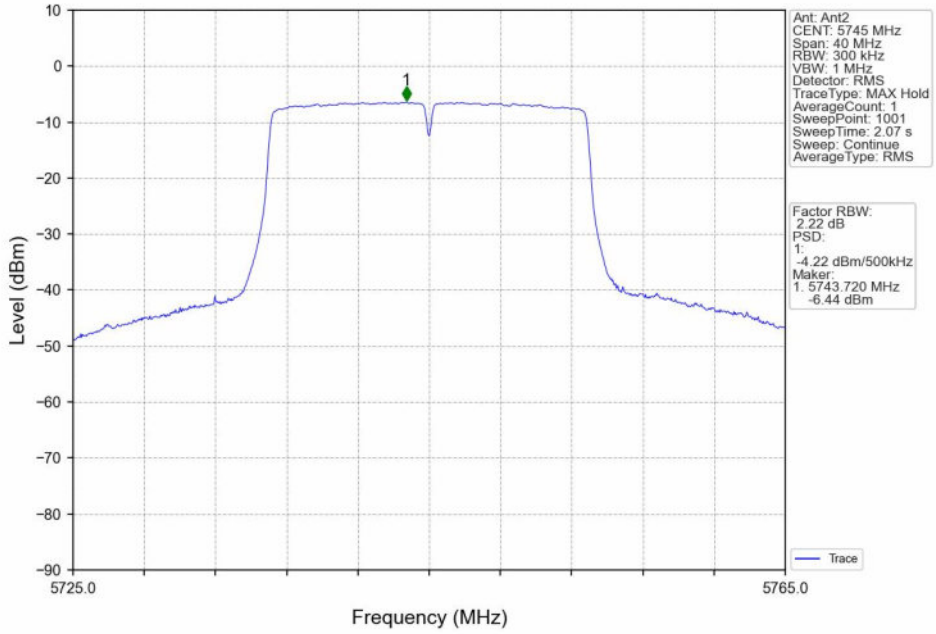
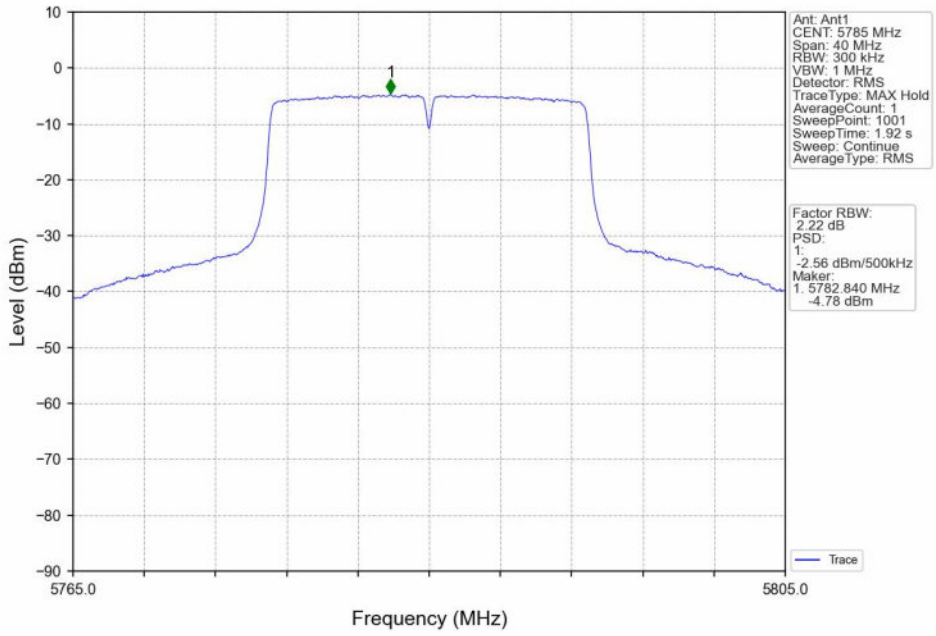


802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



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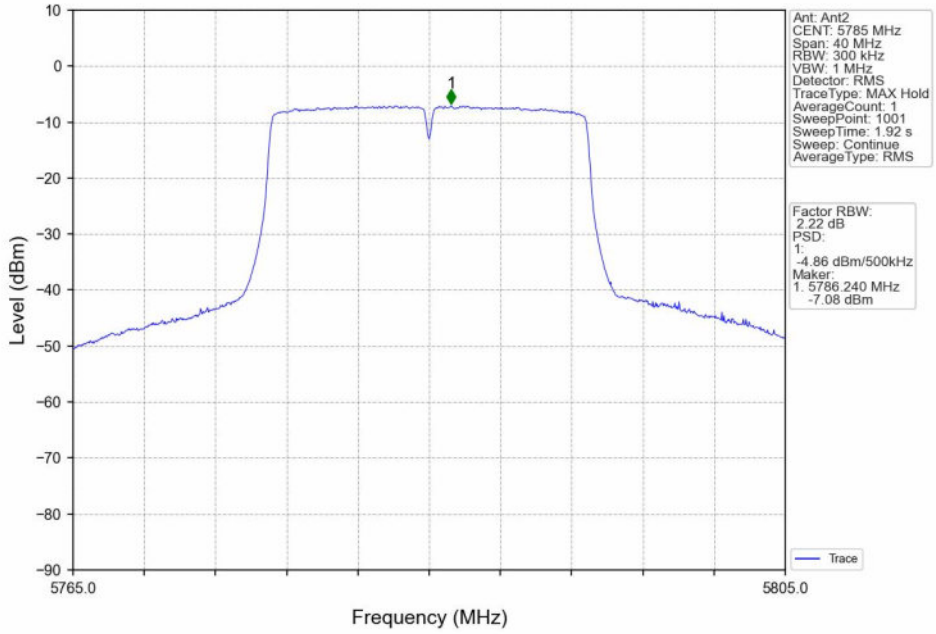

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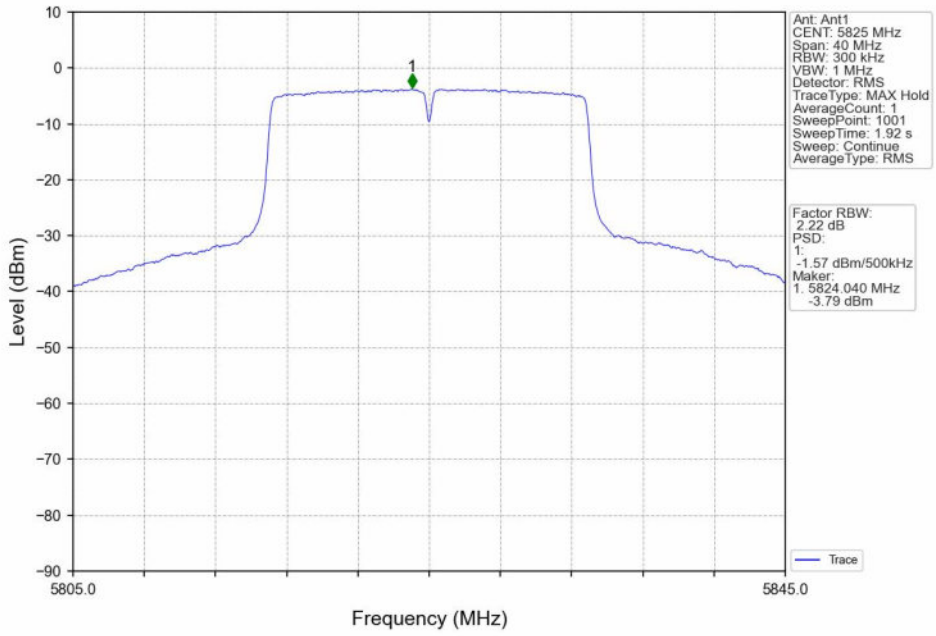

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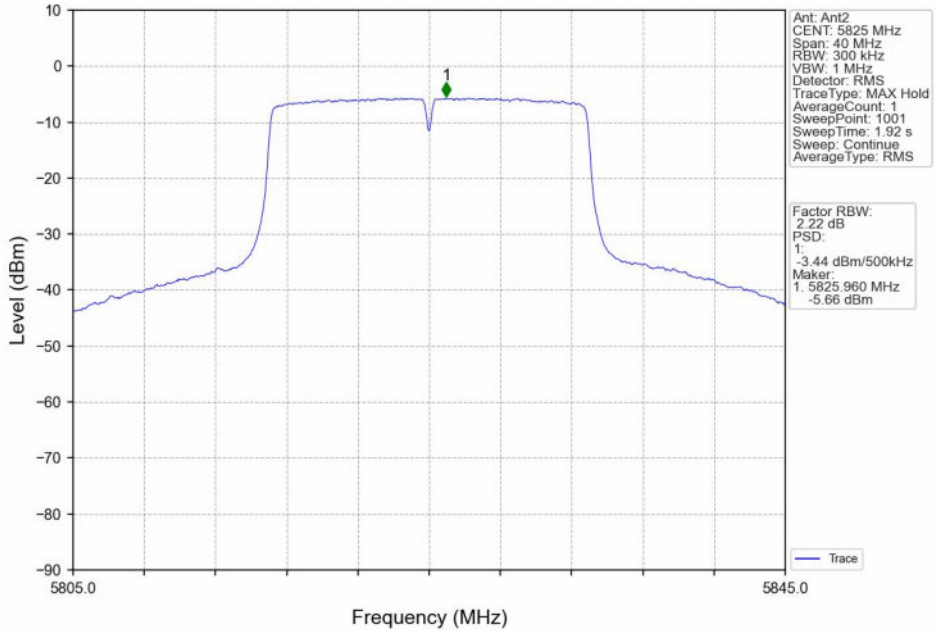
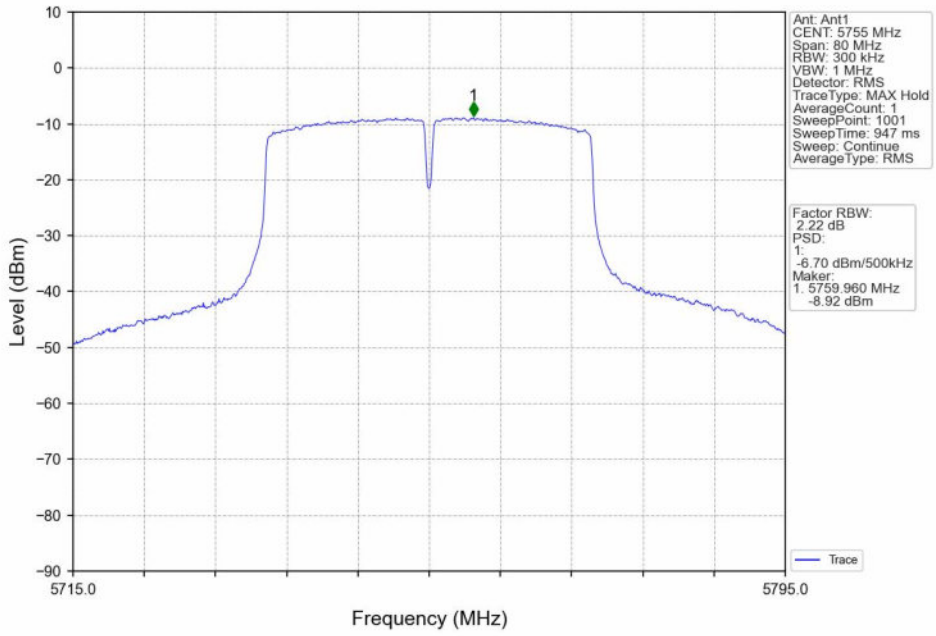
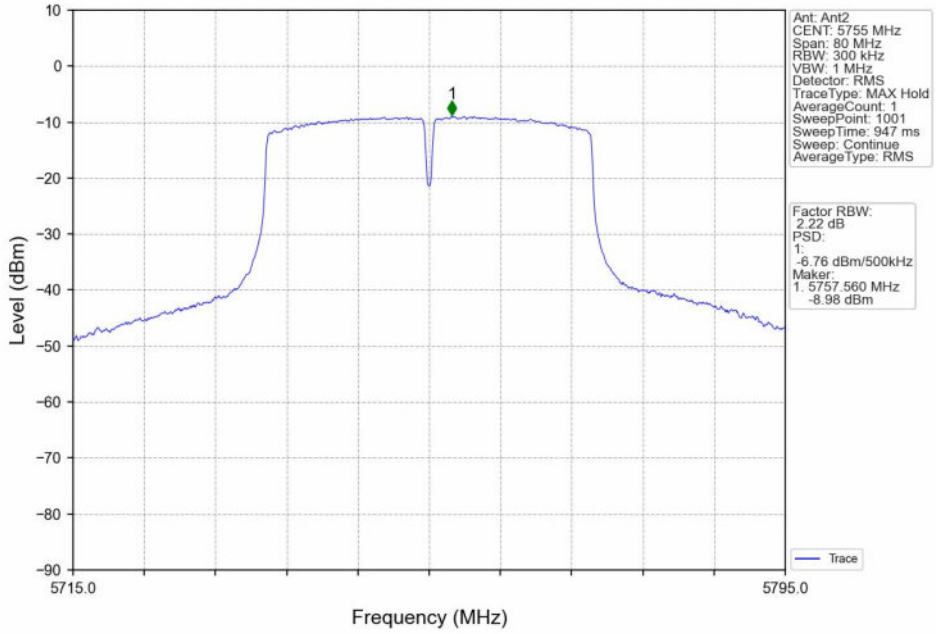


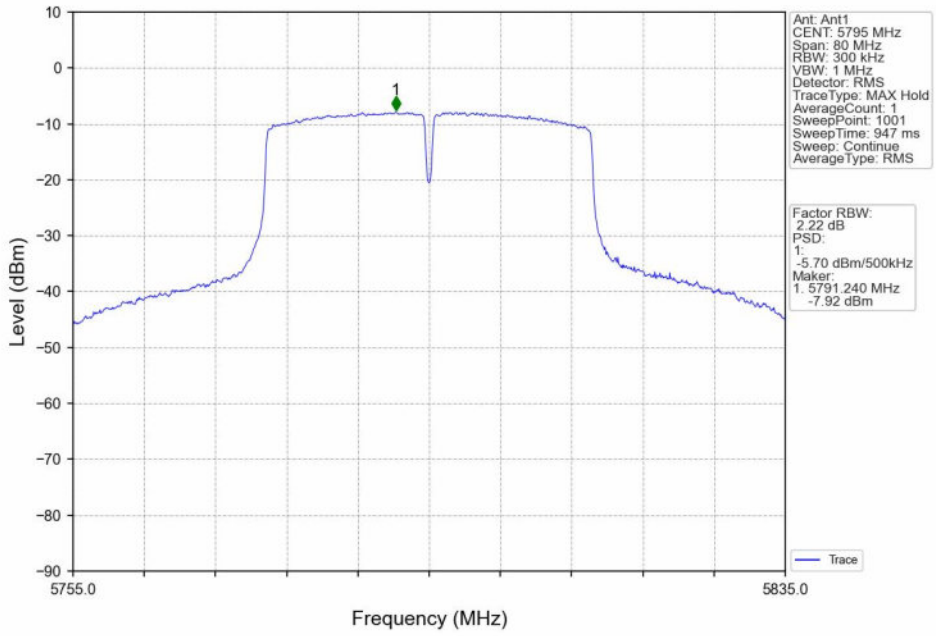
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



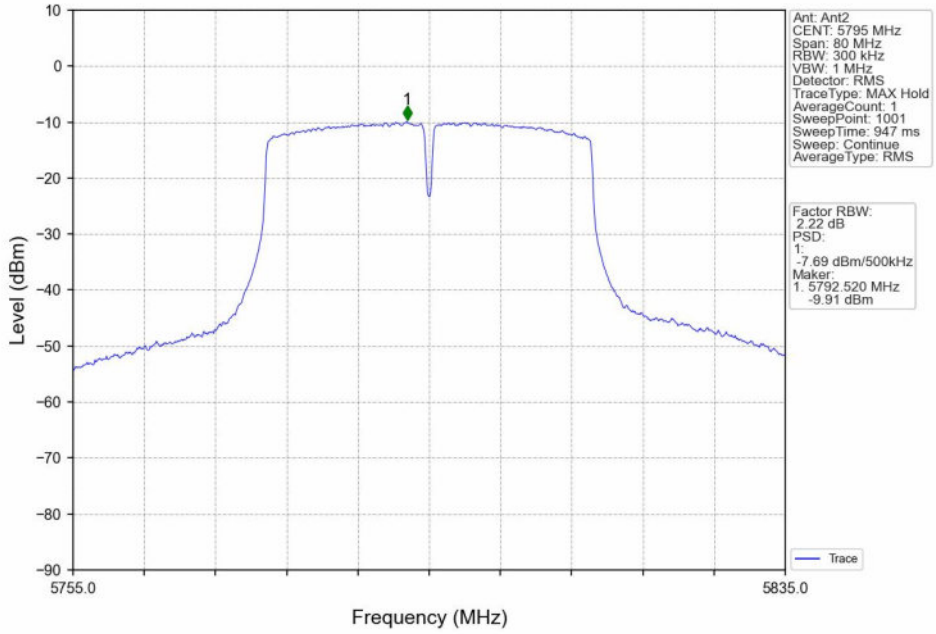
802.11n(HT40)_LCH_5755MHz_Ant2_NTNV



802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



802.11n(HT40)_HCH_5795MHz_Ant2_NTNV



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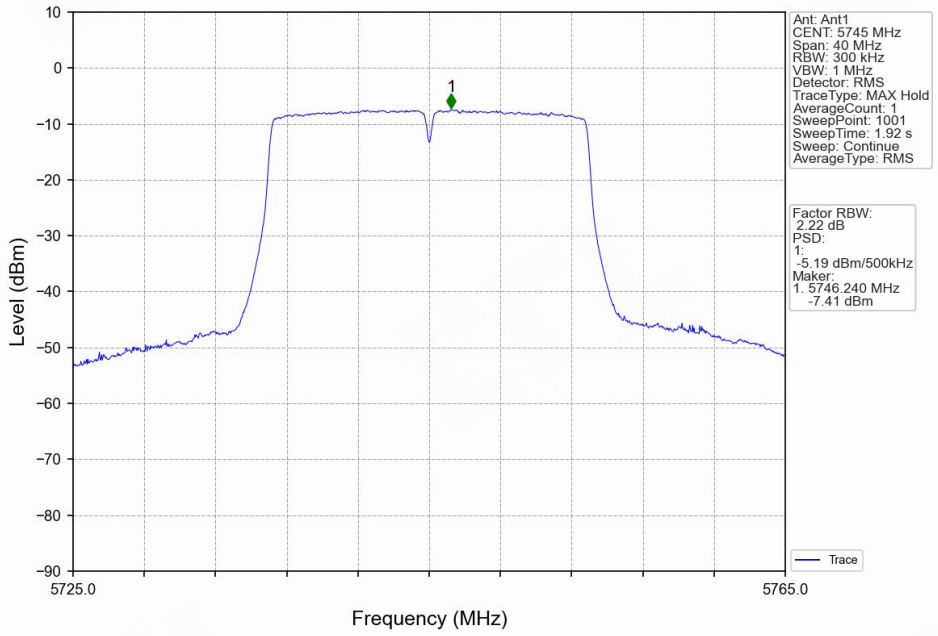

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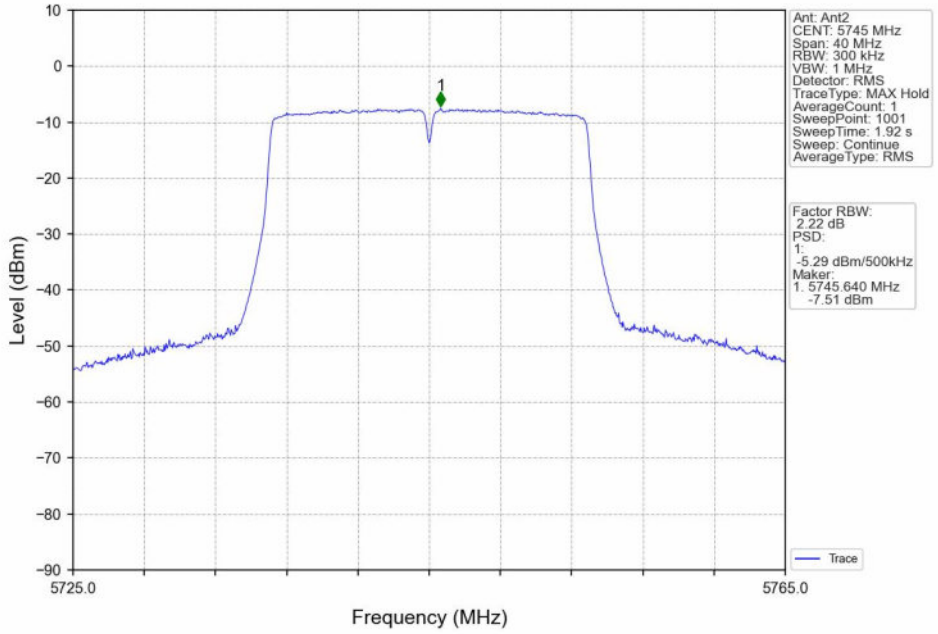
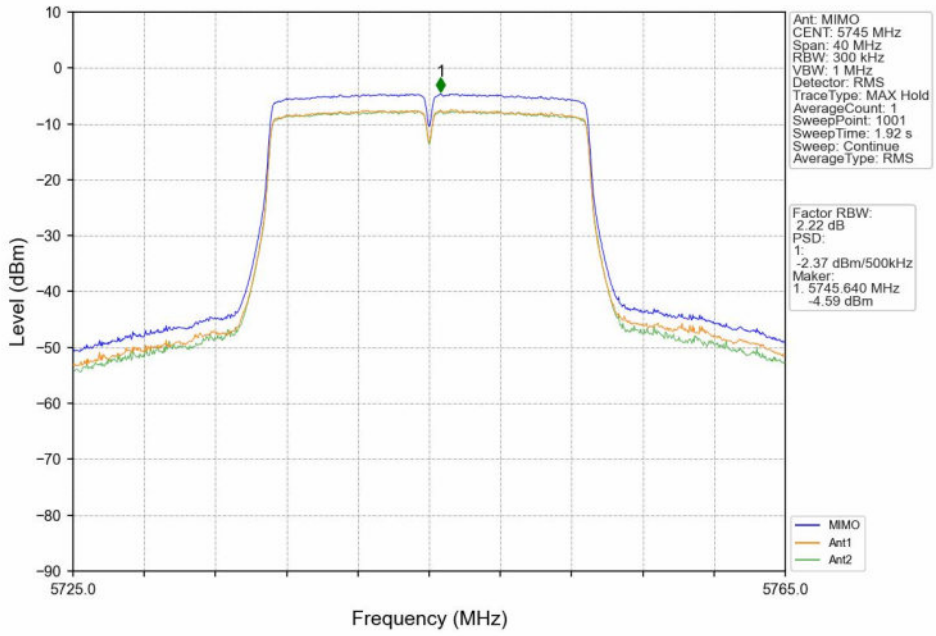


802.11n(HT20)_LCH_5745MHz_MIMO_NTNV



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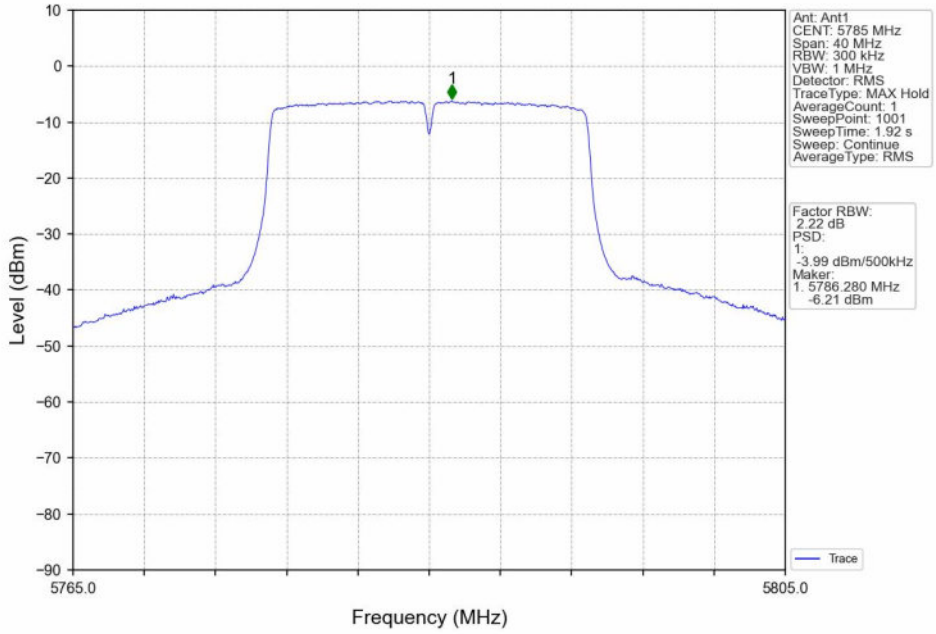

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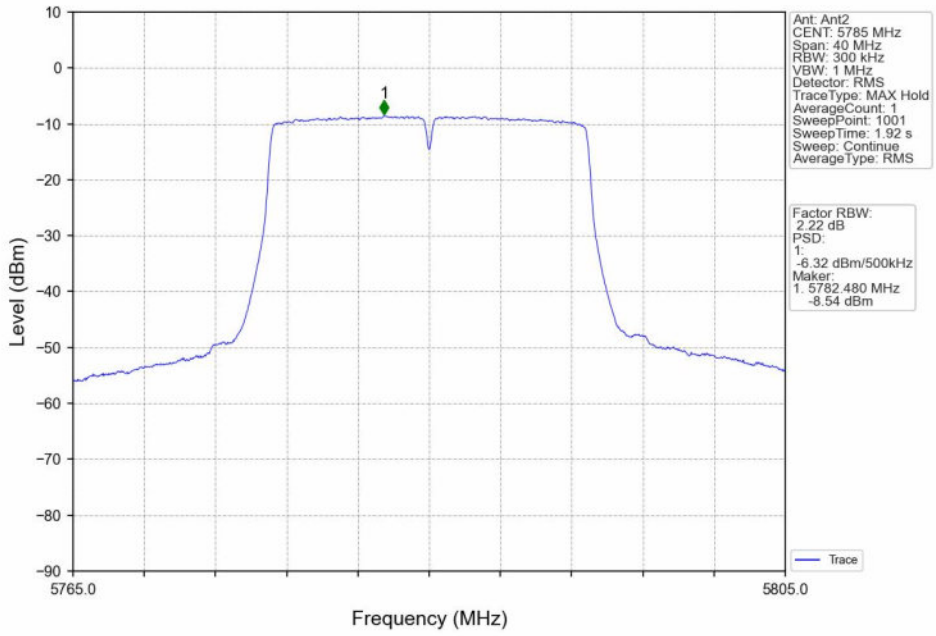
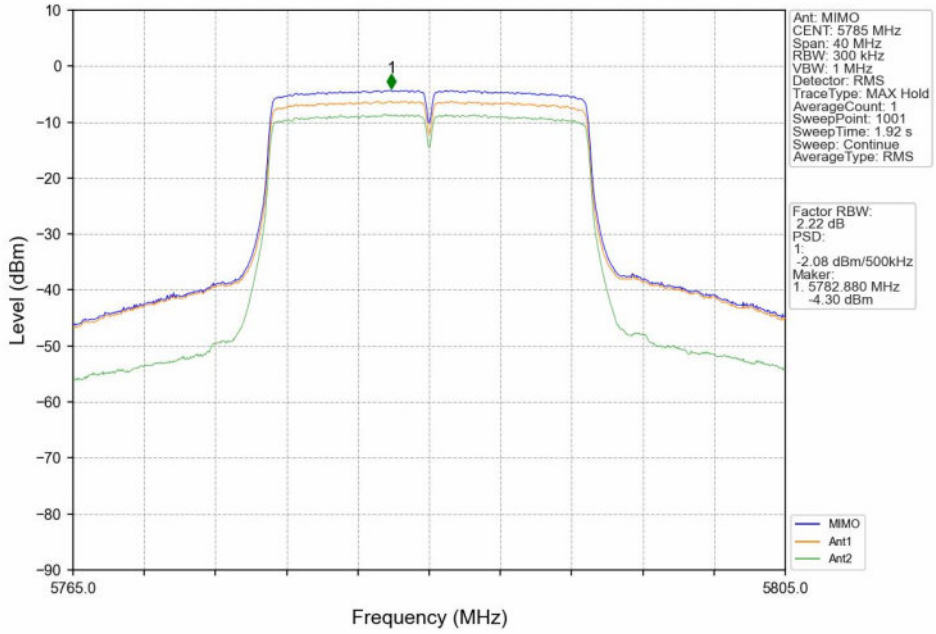
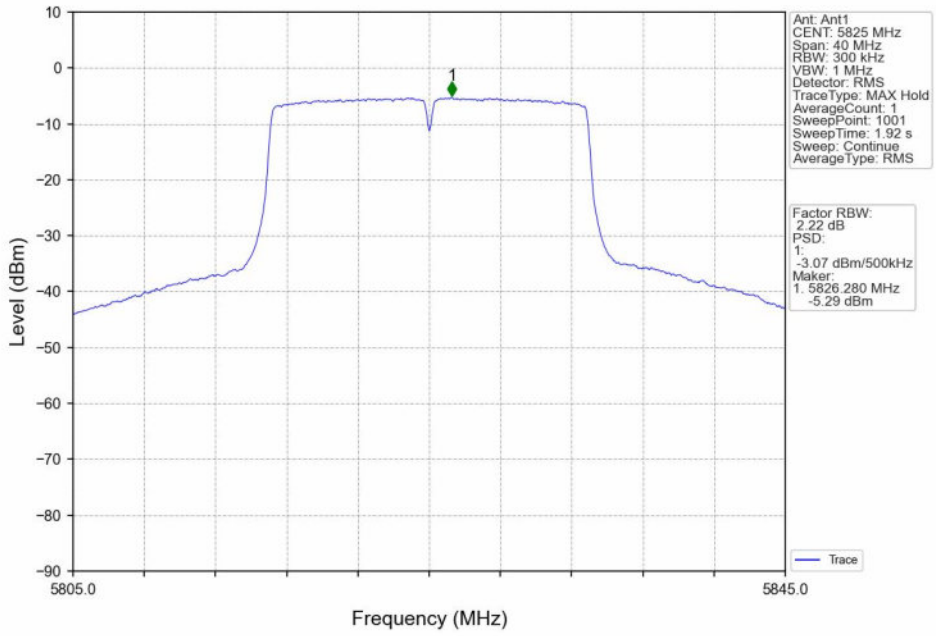


802.11n(HT20)_MCH_5785MHz_MIMO_NTNV



802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



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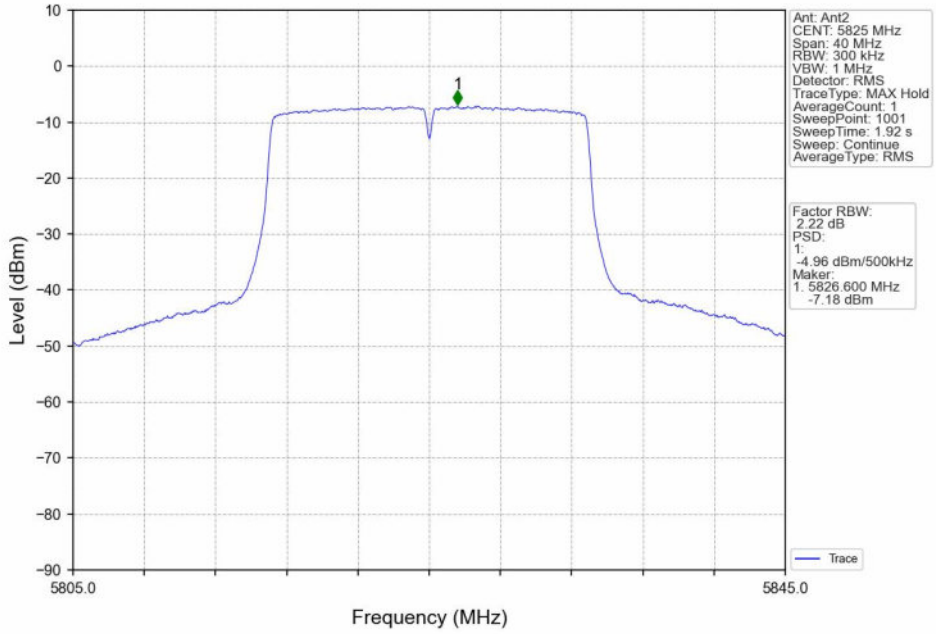

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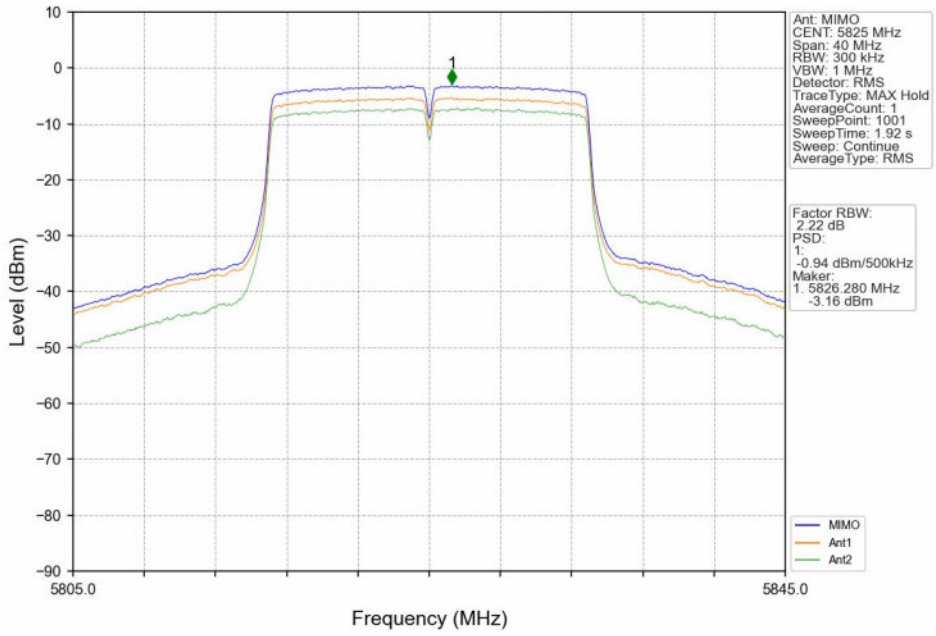
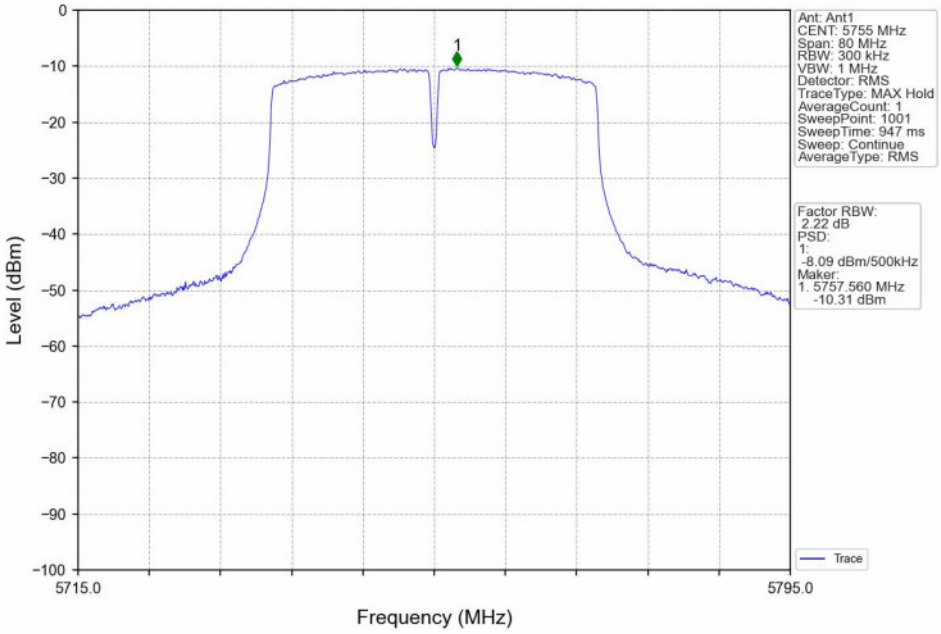


802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



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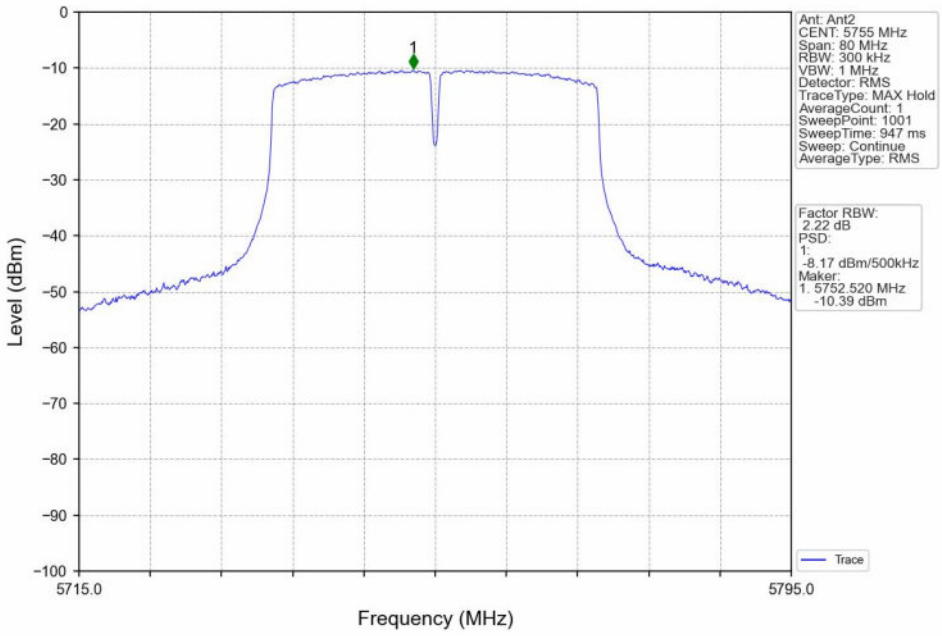
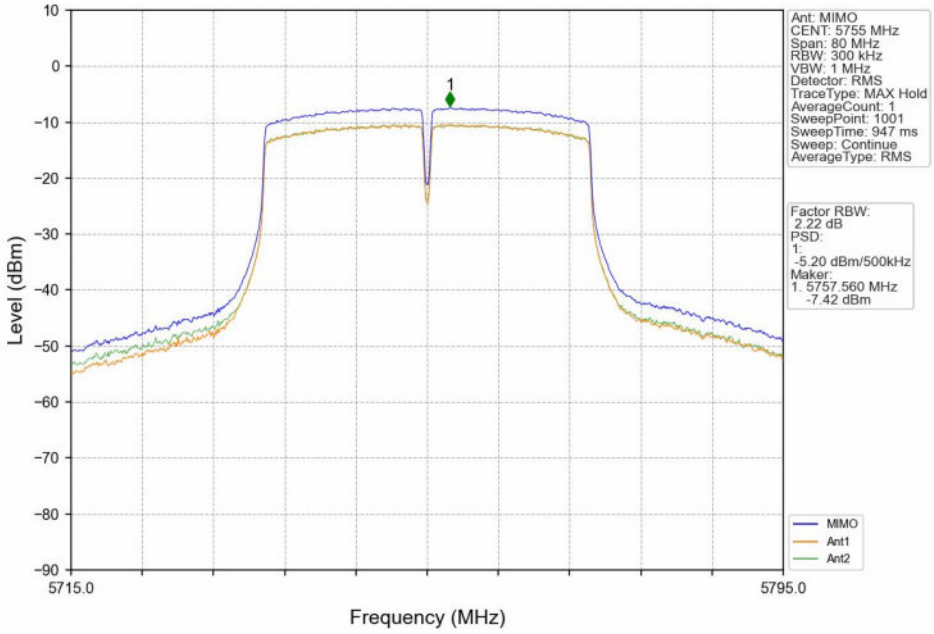
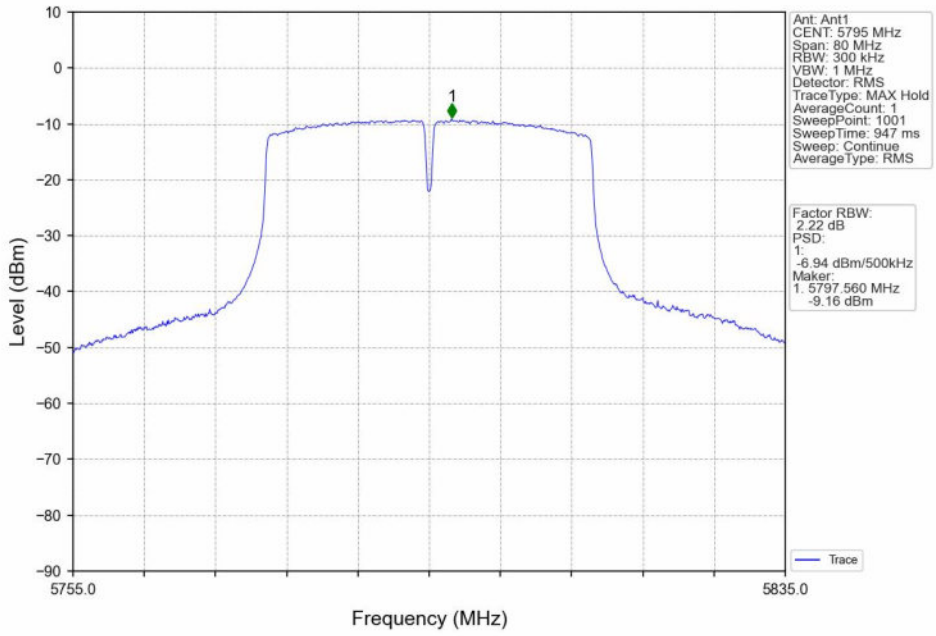


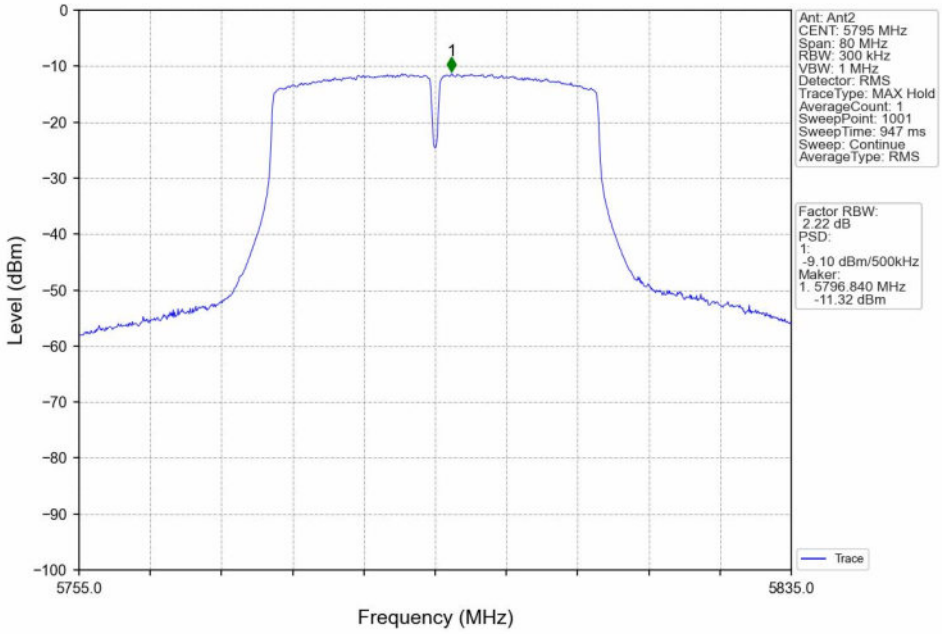
802.11n(HT40)_LCH_5755MHz_MIMO_NTNV



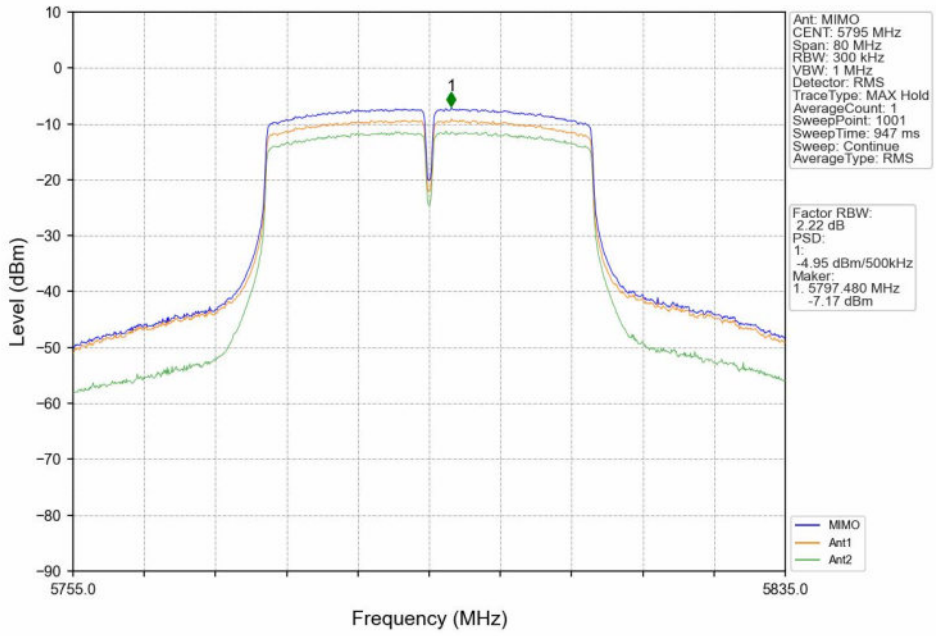
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



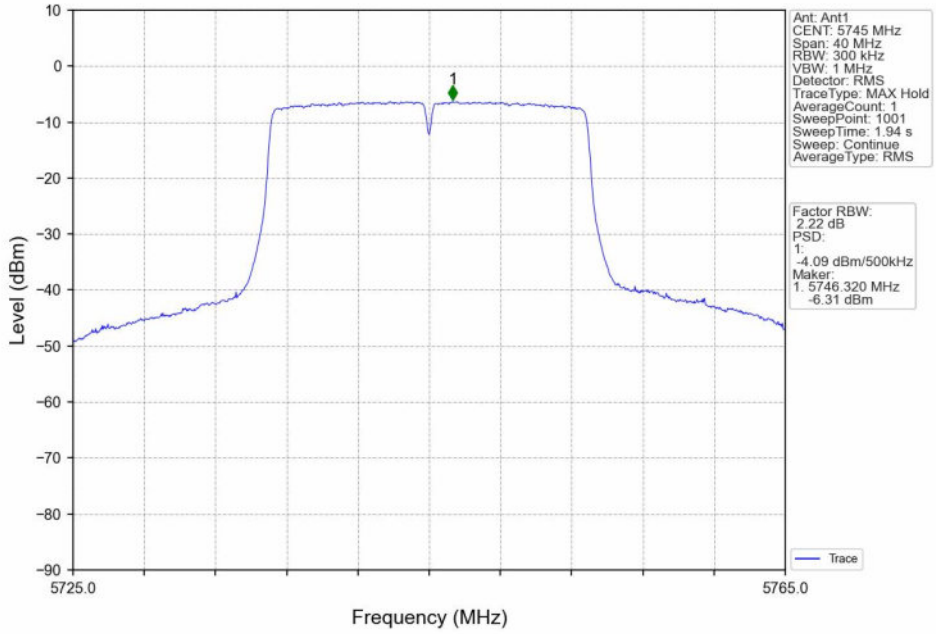
802.11n(HT40)_HCH_5795MHz_Ant2_NTNV



802.11n(HT40)_HCH_5795MHz_MIMO_NTNV



802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



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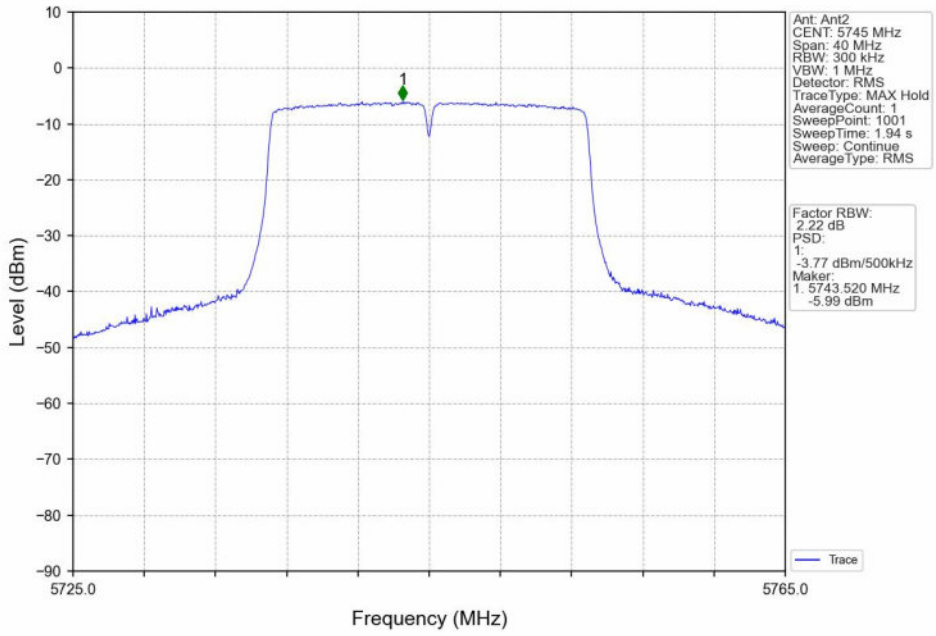

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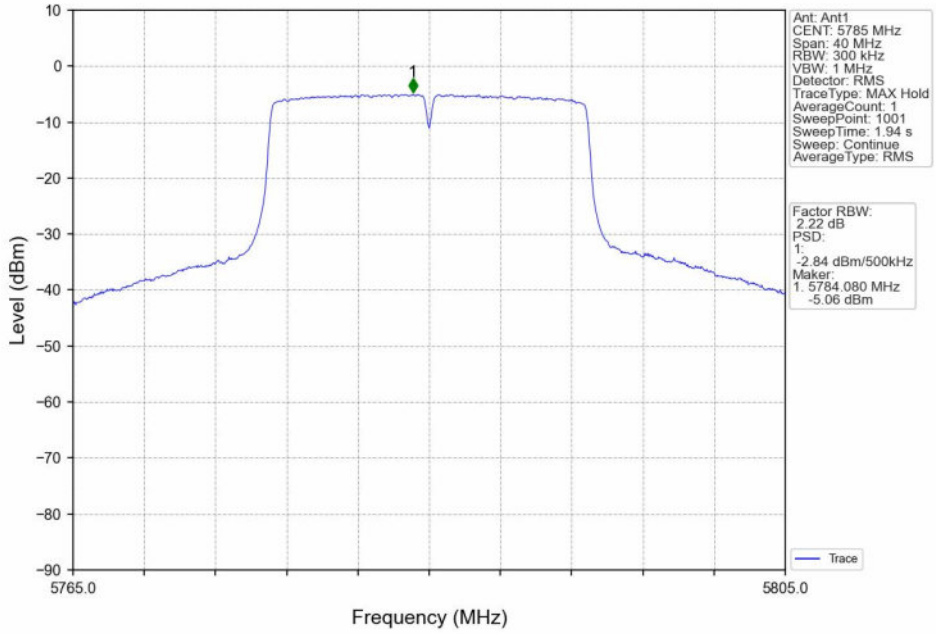
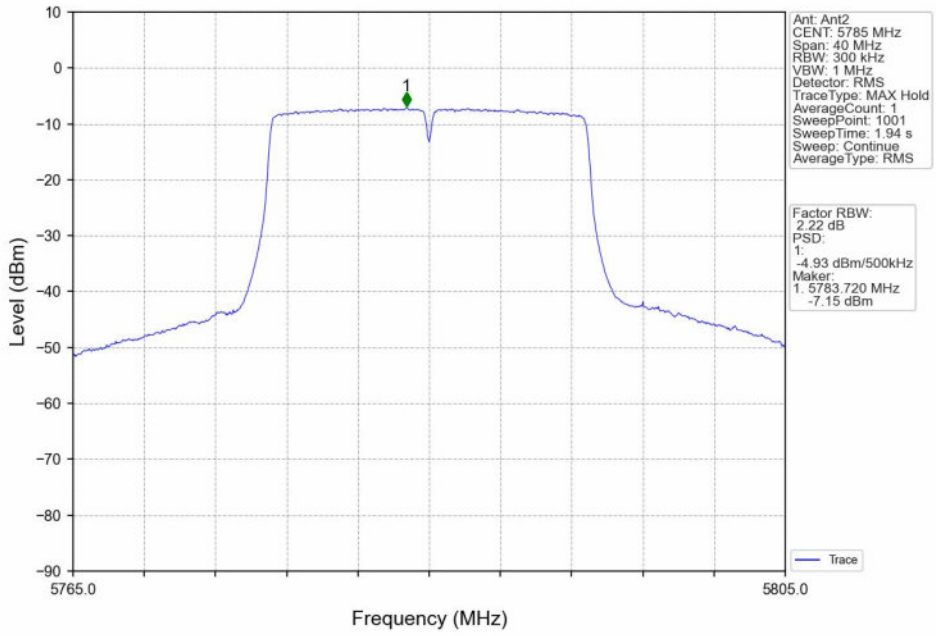
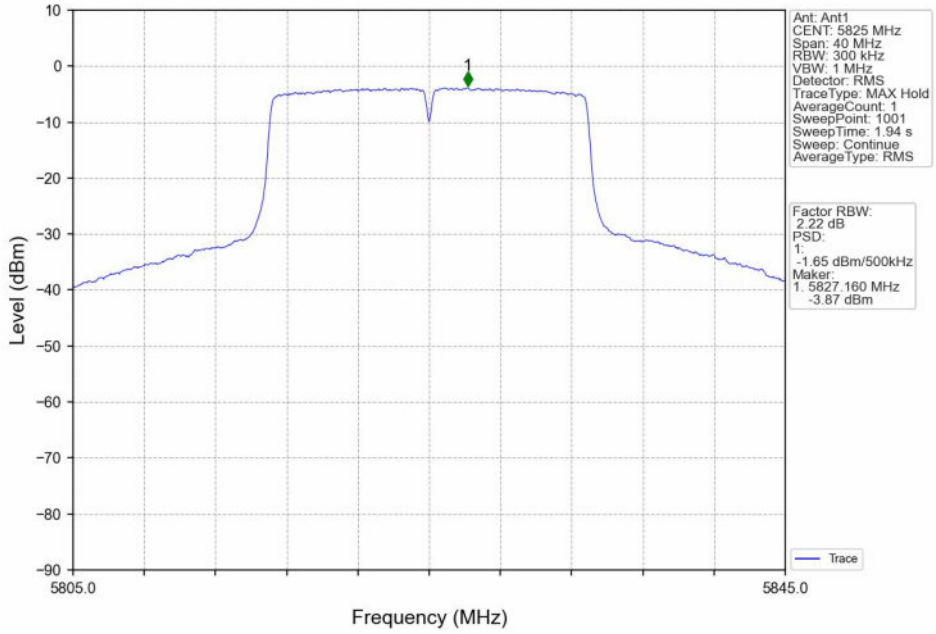


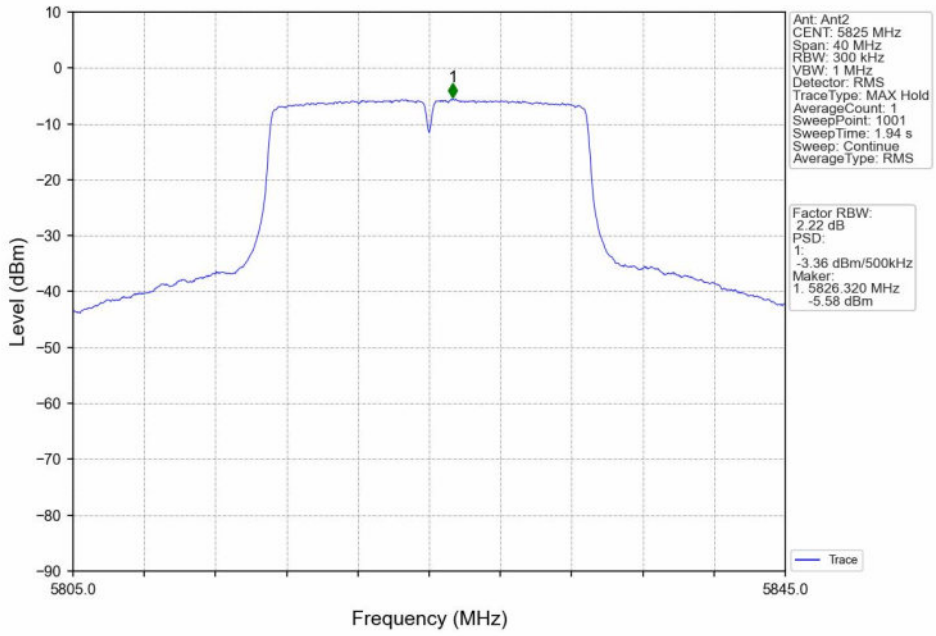
802.11ac(VHT20)_MCH_5785MHz_Ant2_NTNV



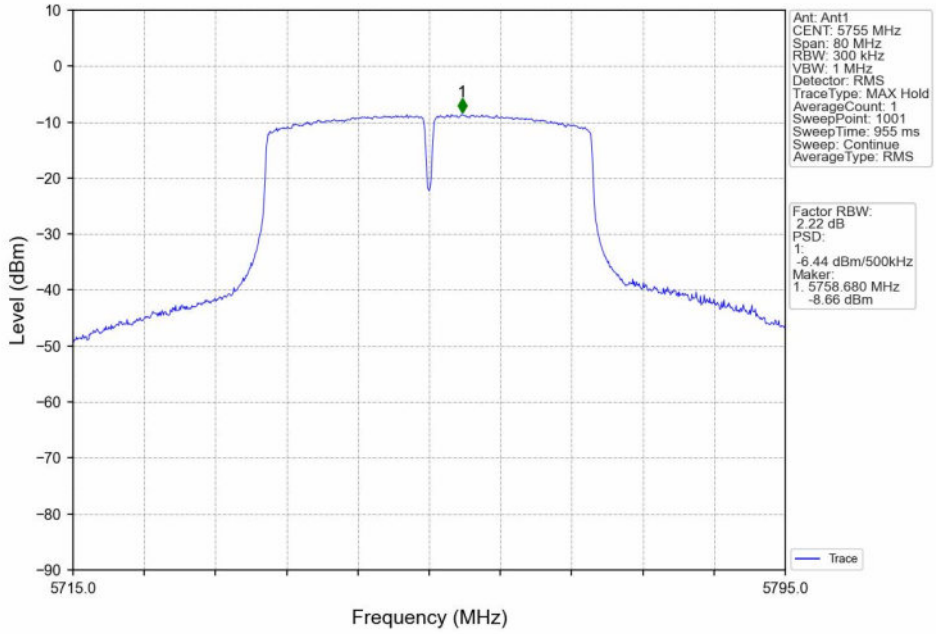
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



802.11ac(VHT20)_HCH_5825MHz_Ant2_NTNV



802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



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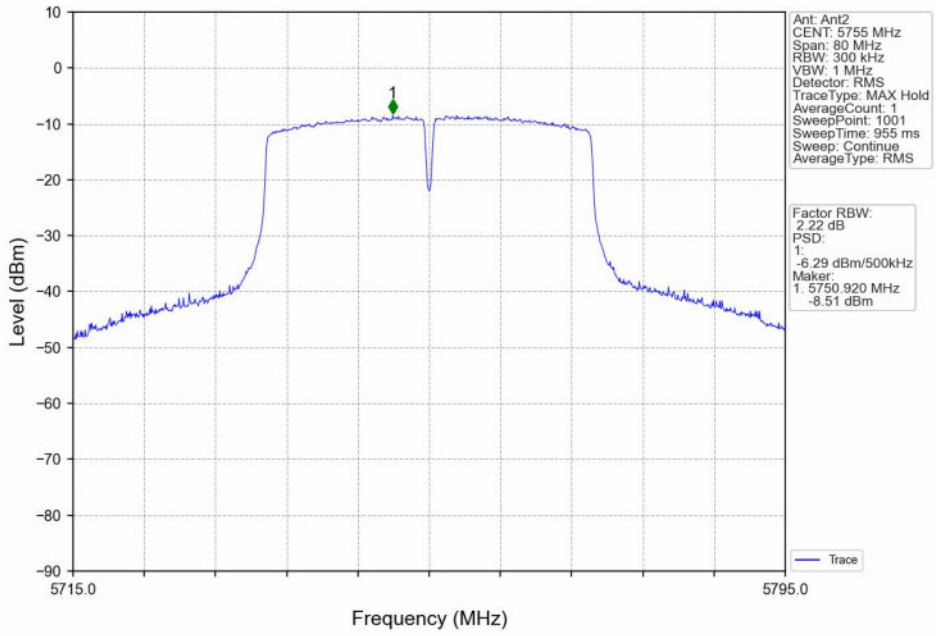
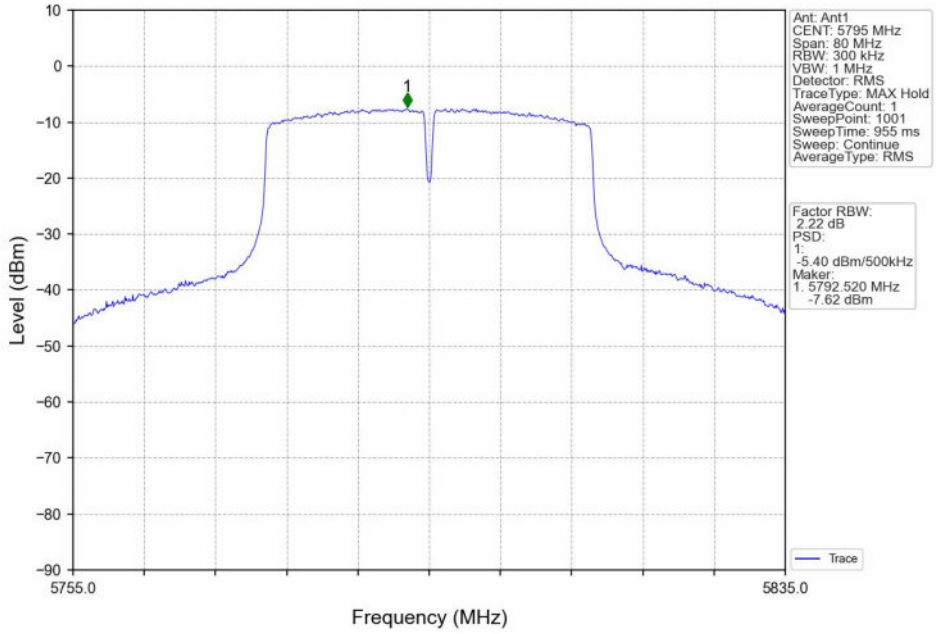


802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV



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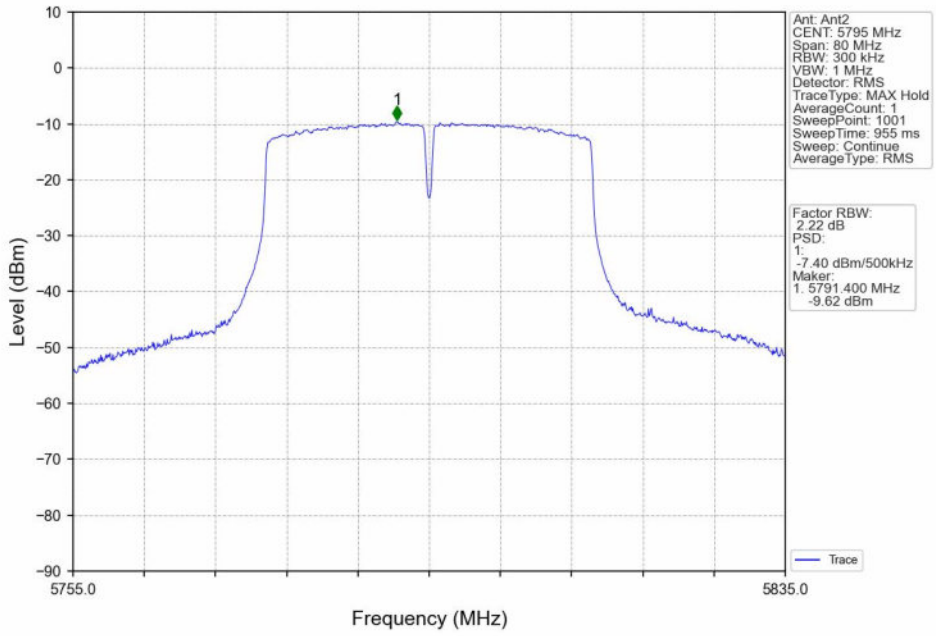
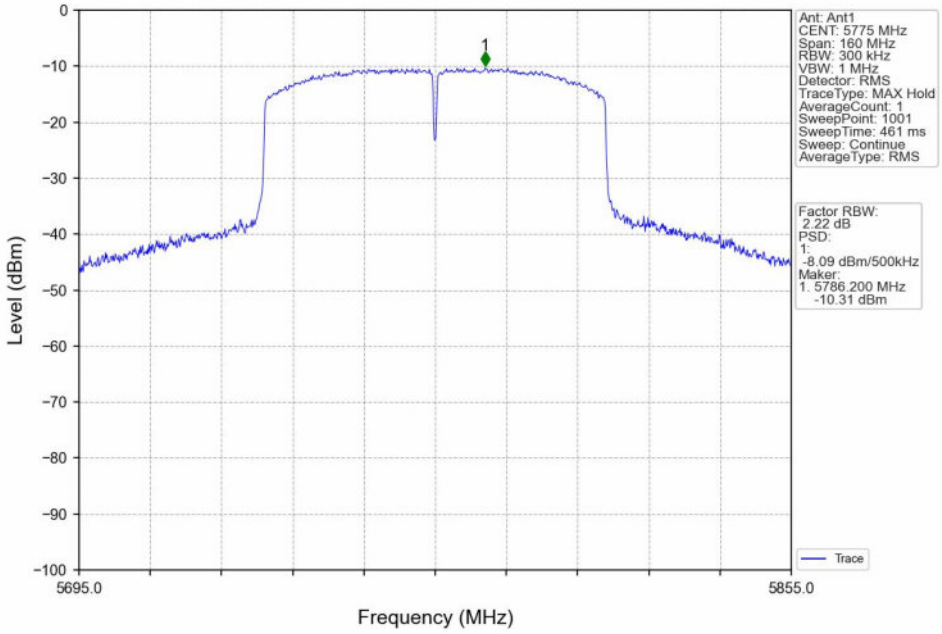


802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



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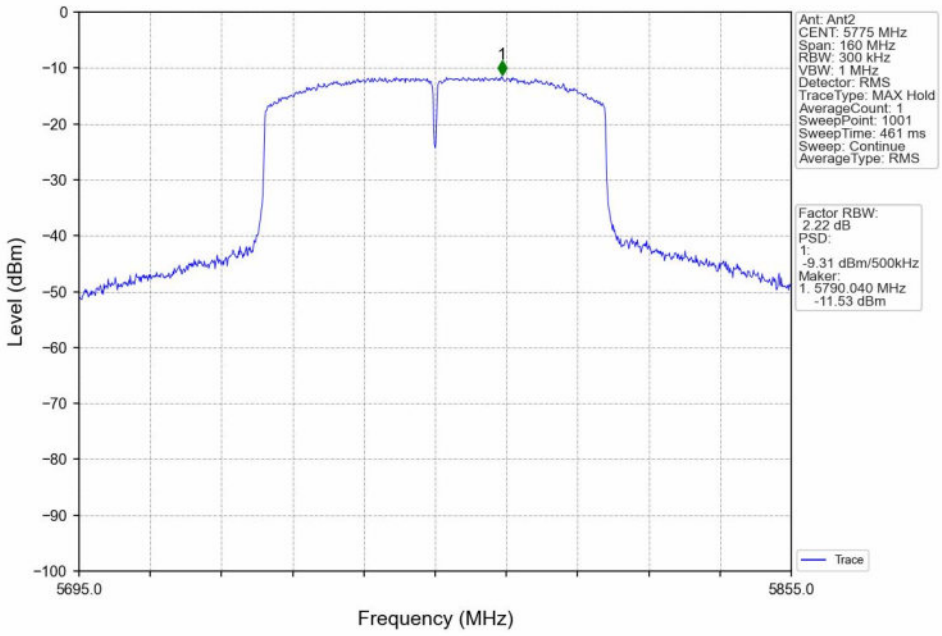

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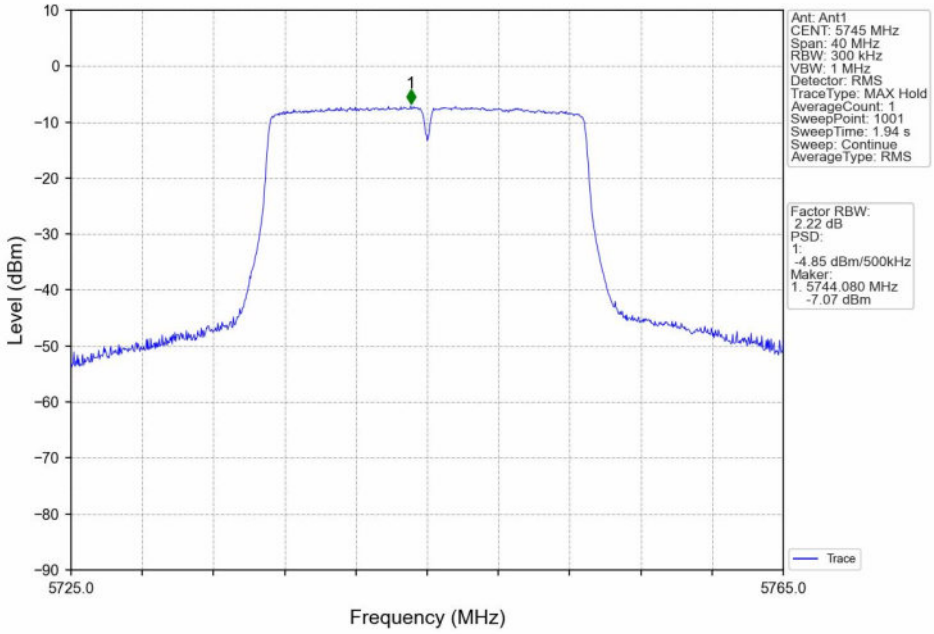

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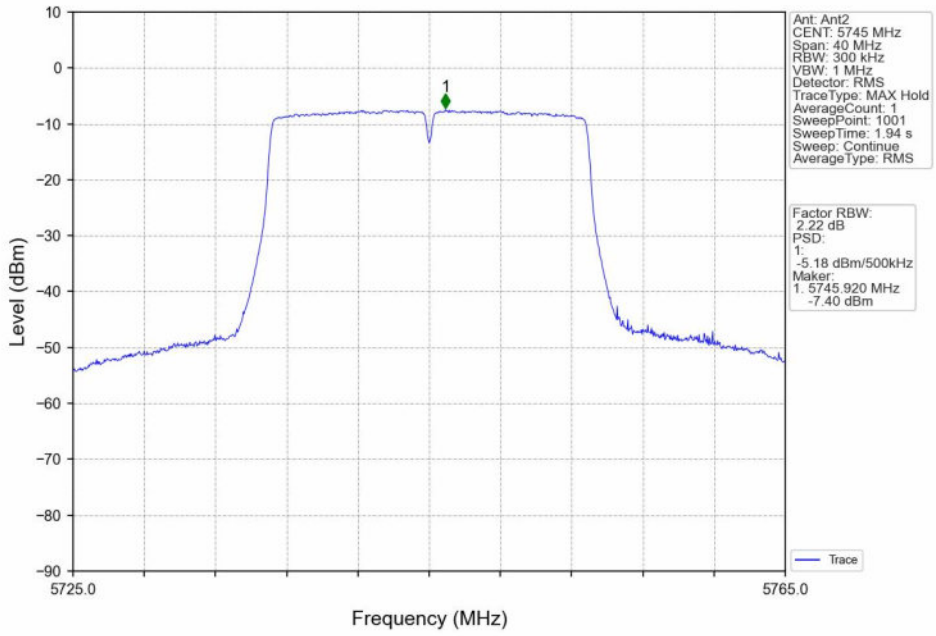
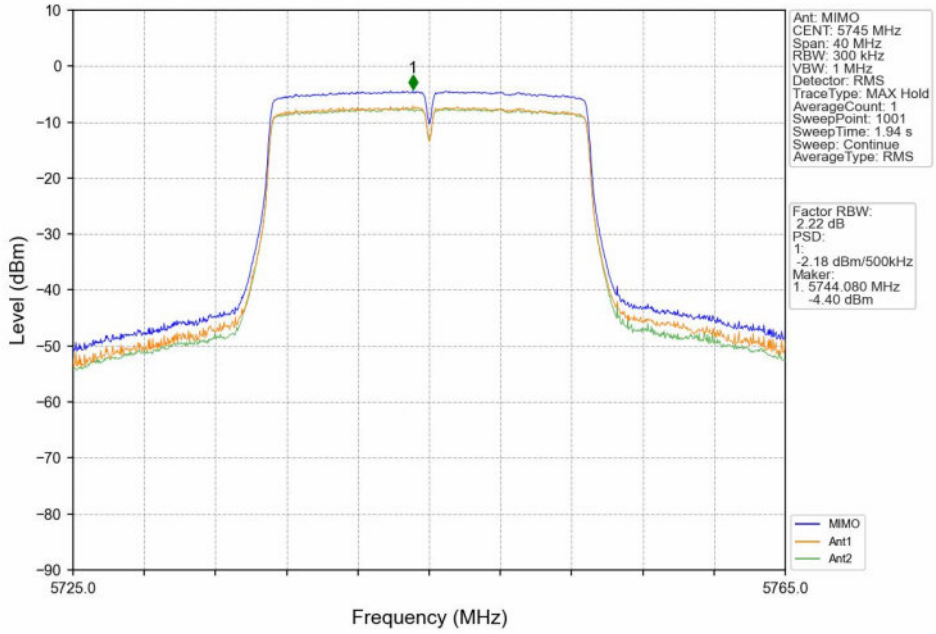
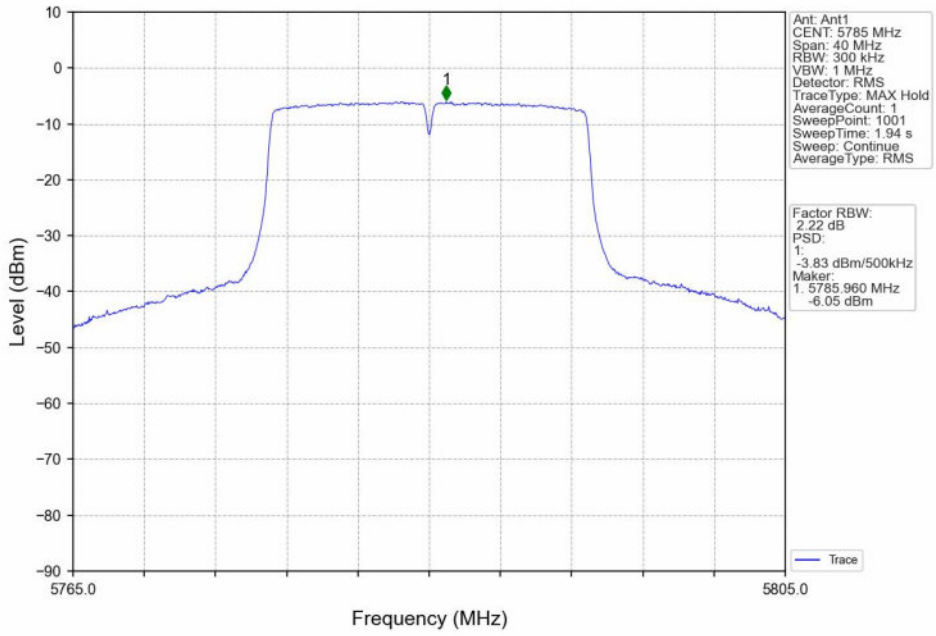


802.11ac(VHT20)_LCH_5745MHz_MIMO_NTNV



802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



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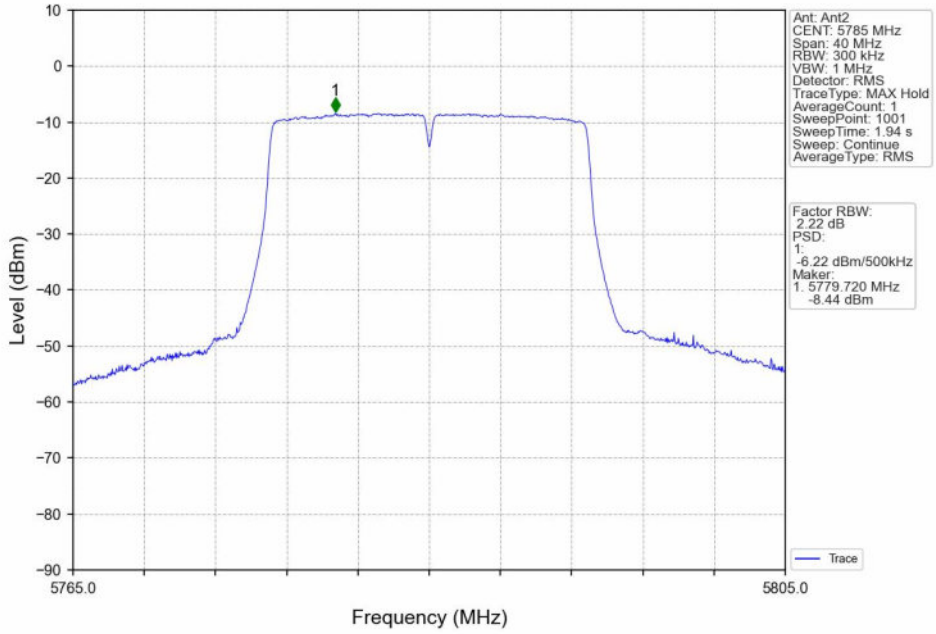
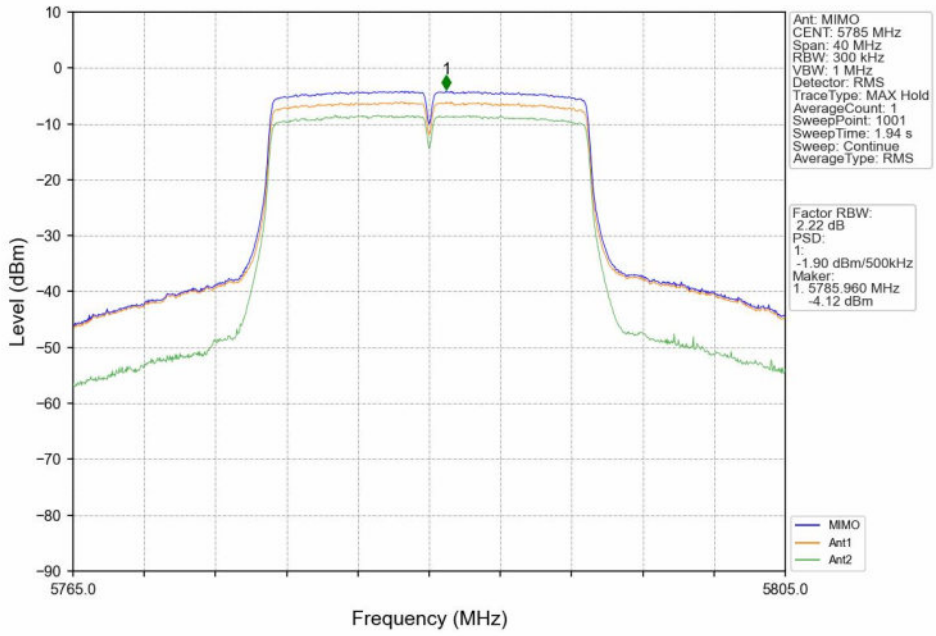
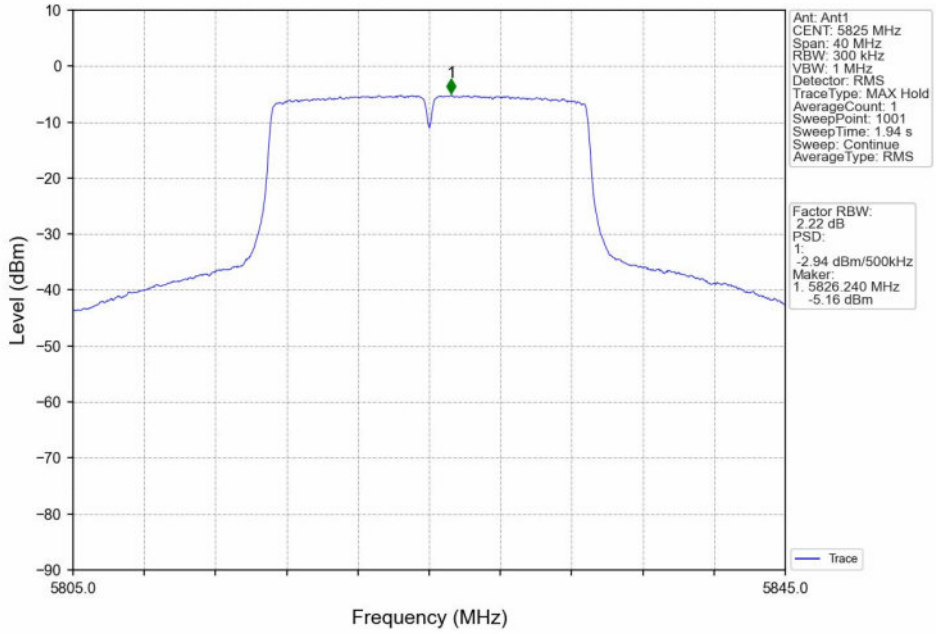


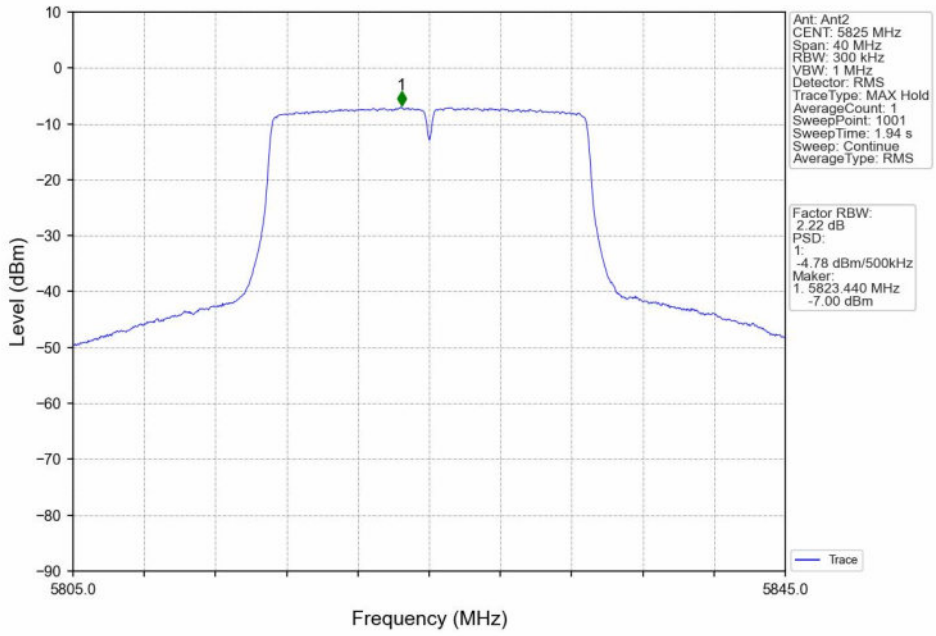
802.11ac(VHT20)_MCH_5785MHz_MIMO_NTNV



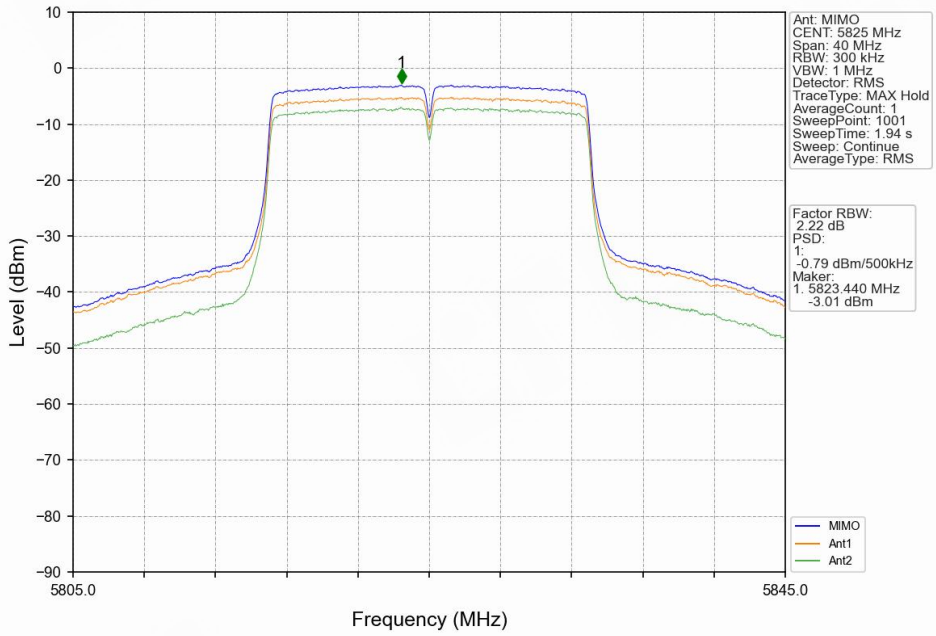
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



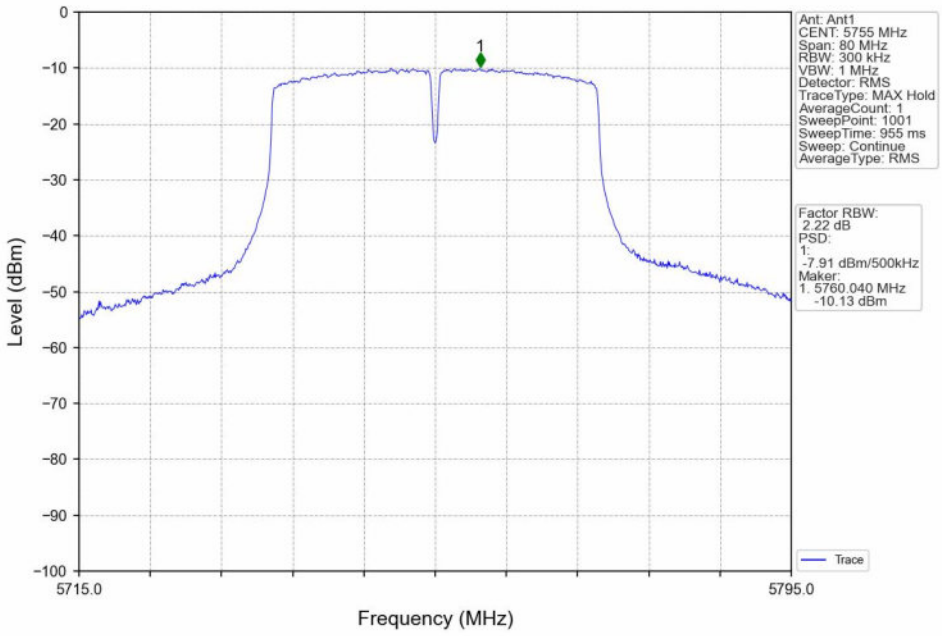
802.11ac(VHT20)_HCH_5825MHz_Ant2_NTNV



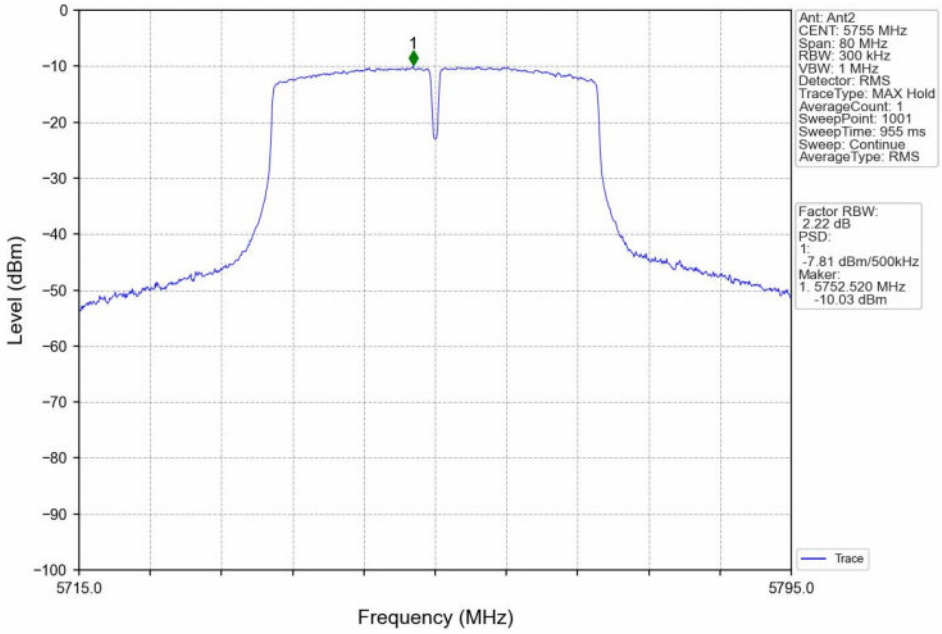
802.11ac(VHT20)_HCH_5825MHz_MIMO_NTNV



802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



802.11ac(VHT40)_LCH_5755MHz_Ant2_NTNV



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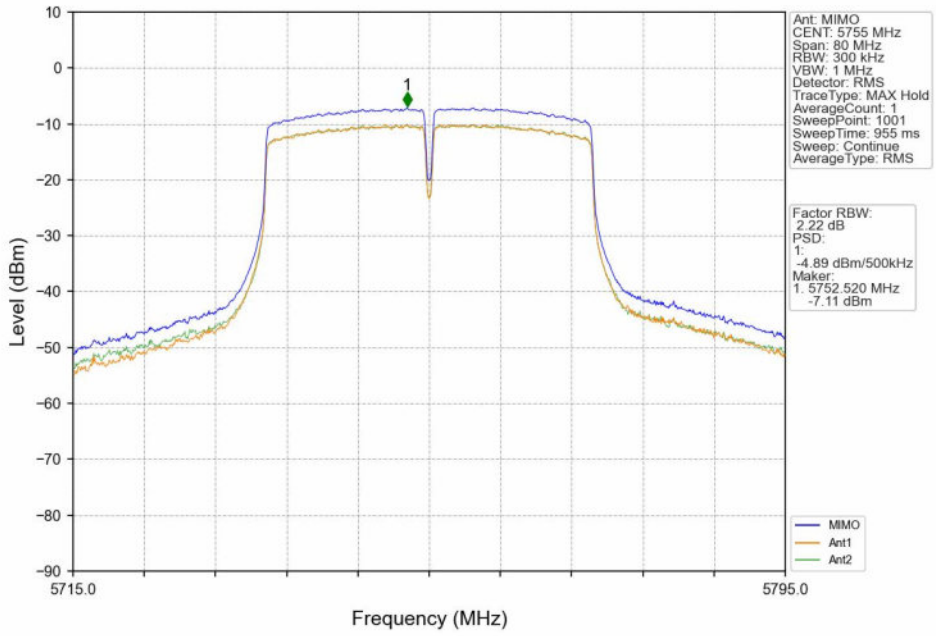
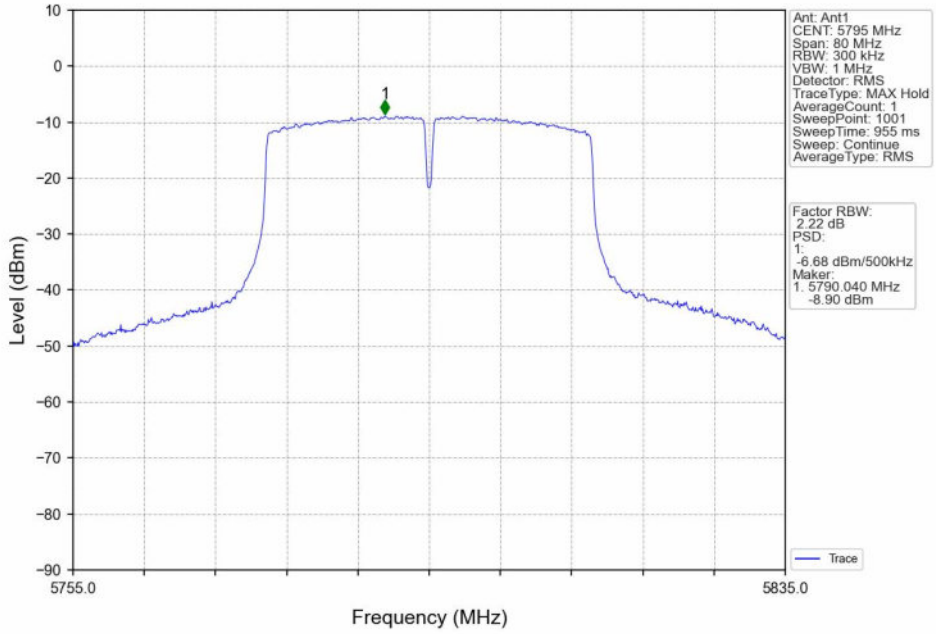


802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV



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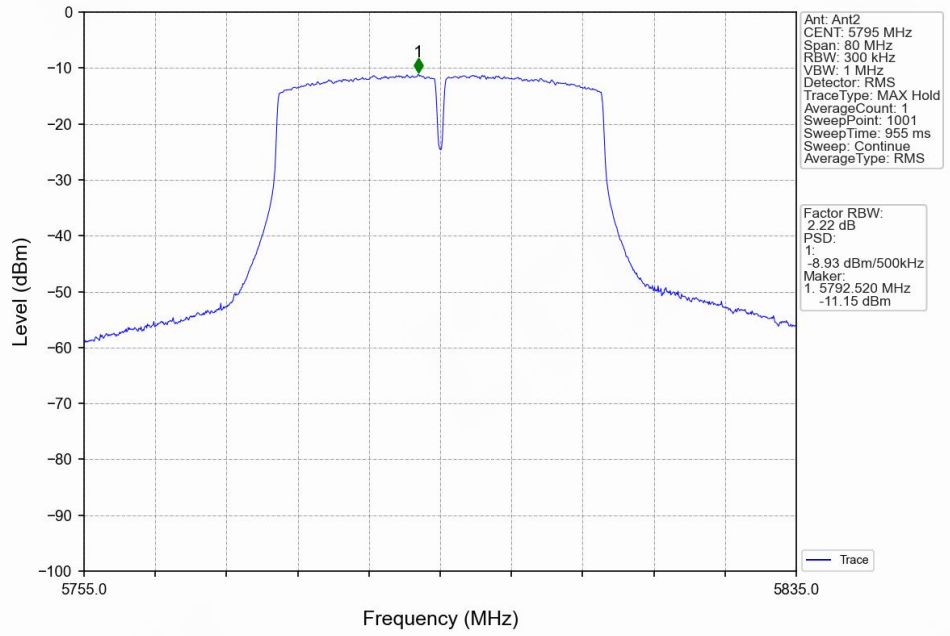

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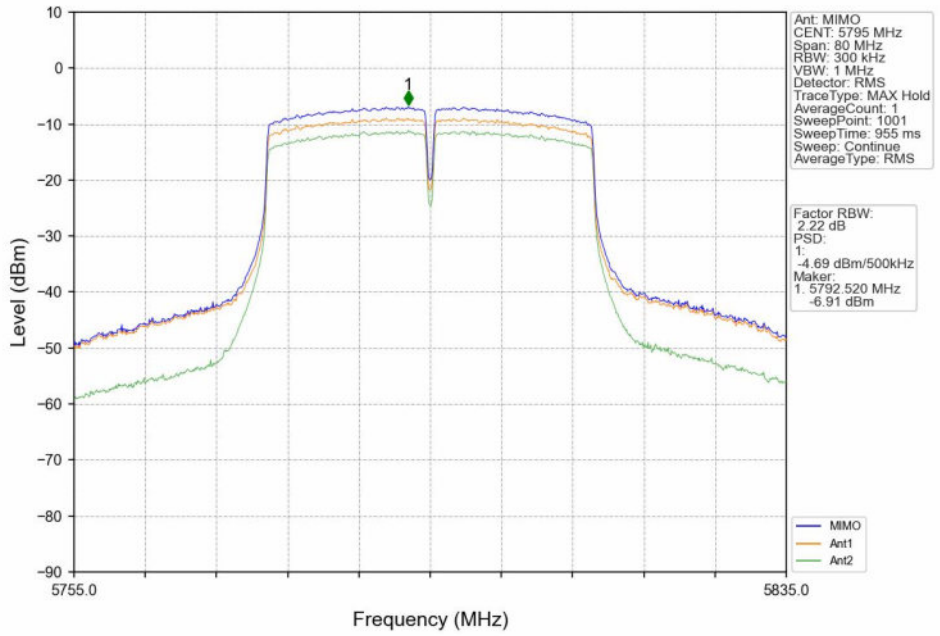
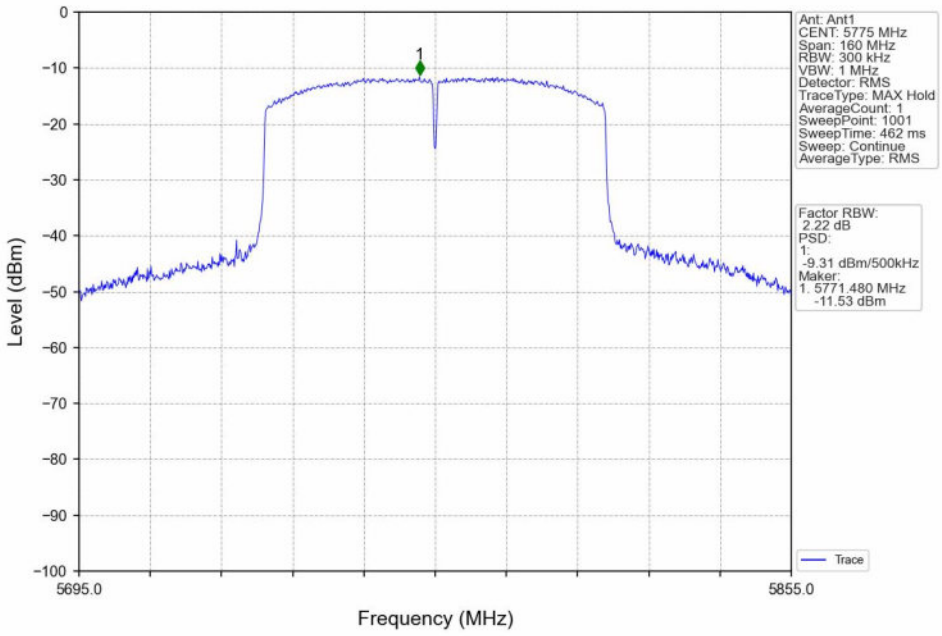


802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



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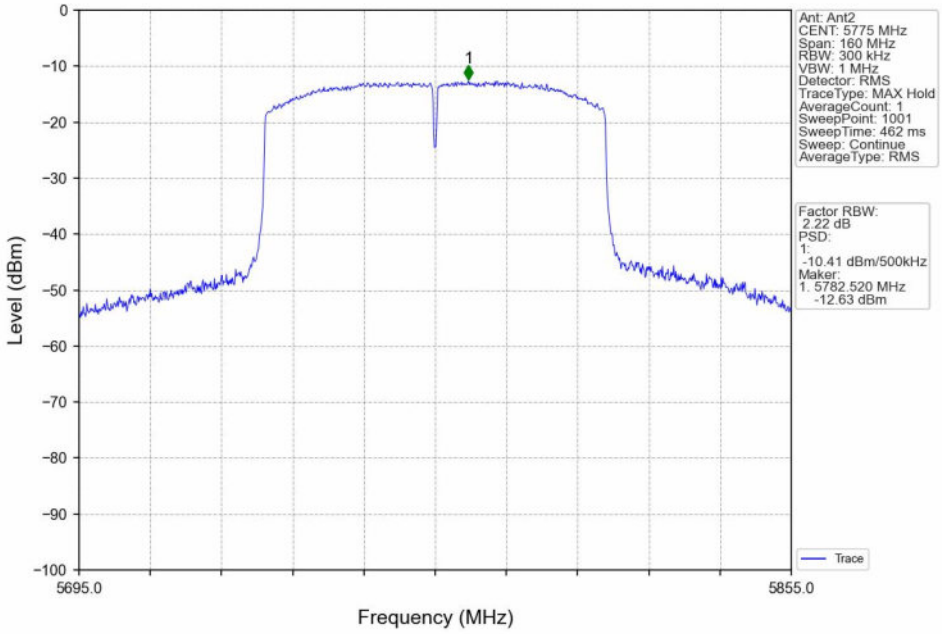

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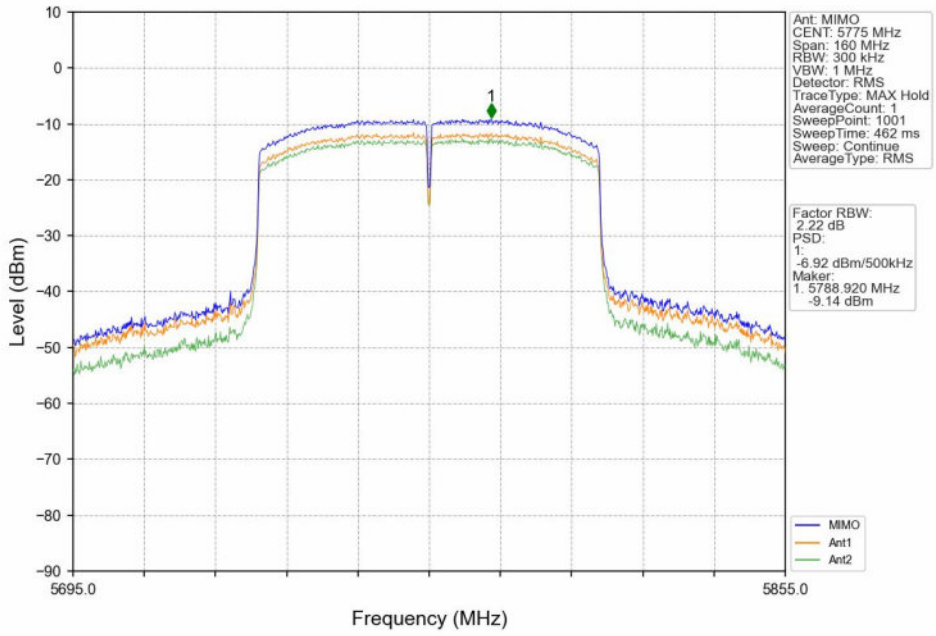

4. Frequency Stability

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	5745.010	5725 to 5850	Pass
				120	5745.011	5725 to 5850	Pass
				138	5745.013	5725 to 5850	Pass
			-30	120	5745.014	5725 to 5850	Pass
			-20	120	5745.015	5725 to 5850	Pass
			-10	120	5745.016	5725 to 5850	Pass
			0	120	5745.017	5725 to 5850	Pass
			10	120	5745.018	5725 to 5850	Pass
			30	120	5745.018	5725 to 5850	Pass
			40	120	5745.018	5725 to 5850	Pass
			50	120	5745.019	5725 to 5850	Pass
		5785	20	102	5785.012	5725 to 5850	Pass
				120	5785.015	5725 to 5850	Pass
				138	5785.016	5725 to 5850	Pass
			-30	120	5785.017	5725 to 5850	Pass
			-20	120	5785.018	5725 to 5850	Pass
			-10	120	5785.018	5725 to 5850	Pass
			0	120	5785.019	5725 to 5850	Pass
			10	120	5785.019	5725 to 5850	Pass
			30	120	5785.019	5725 to 5850	Pass
			40	120	5785.020	5725 to 5850	Pass
			50	120	5785.019	5725 to 5850	Pass
		5825	20	102	5825.014	5725 to 5850	Pass
				120	5825.016	5725 to 5850	Pass
				138	5825.017	5725 to 5850	Pass
			-30	120	5825.017	5725 to 5850	Pass
			-20	120	5825.018	5725 to 5850	Pass
			-10	120	5825.018	5725 to 5850	Pass
			0	120	5825.019	5725 to 5850	Pass
			10	120	5825.019	5725 to 5850	Pass
			30	120	5825.019	5725 to 5850	Pass
			40	120	5825.020	5725 to 5850	Pass
			50	120	5825.020	5725 to 5850	Pass
	MIMO	5755	20	102	5754.500	5725 to 5850	Pass
				120	5755.500	5725 to 5850	Pass
				138	5755.500	5725 to 5850	Pass
			-30	120	5755.500	5725 to 5850	Pass
			-20	120	5755.500	5725 to 5850	Pass
			-10	120	5755.500	5725 to 5850	Pass
			0	120	5755.500	5725 to 5850	Pass
			10	120	5755.500	5725 to 5850	Pass
			30	120	5755.500	5725 to 5850	Pass
			40	120	5755.500	5725 to 5850	Pass
			50	120	5755.500	5725 to 5850	Pass
		5795	20	102	5795.003	5725 to 5850	Pass
				120	5795.006	5725 to 5850	Pass
				138	5795.007	5725 to 5850	Pass
			-30	120	5795.009	5725 to 5850	Pass
			-20	120	5795.009	5725 to 5850	Pass

			-10	120	5795.011	5725 to 5850	Pass
			0	120	5795.012	5725 to 5850	Pass
			10	120	5795.013	5725 to 5850	Pass
			30	120	5795.013	5725 to 5850	Pass
			40	120	5795.014	5725 to 5850	Pass
			50	120	5795.014	5725 to 5850	Pass
		5775	20	102	5775.010	5725 to 5850	Pass
				120	5775.013	5725 to 5850	Pass
				138	5775.013	5725 to 5850	Pass
			-30	120	5775.015	5725 to 5850	Pass
			-20	120	5775.016	5725 to 5850	Pass
			-10	120	5775.017	5725 to 5850	Pass
			0	120	5775.018	5725 to 5850	Pass
			10	120	5775.018	5725 to 5850	Pass
			30	120	5775.019	5725 to 5850	Pass
			40	120	5775.020	5725 to 5850	Pass
			50	120	5775.020	5725 to 5850	Pass